PROTEZIONE CIVILE
Presidenza del Consiglio dei Ministri
Dipartimento della Protezione Civile

RegioneEmiliaRomagna

CONFERENZA DELLE REGIONI E DELLE PROVINCE AUTONOME

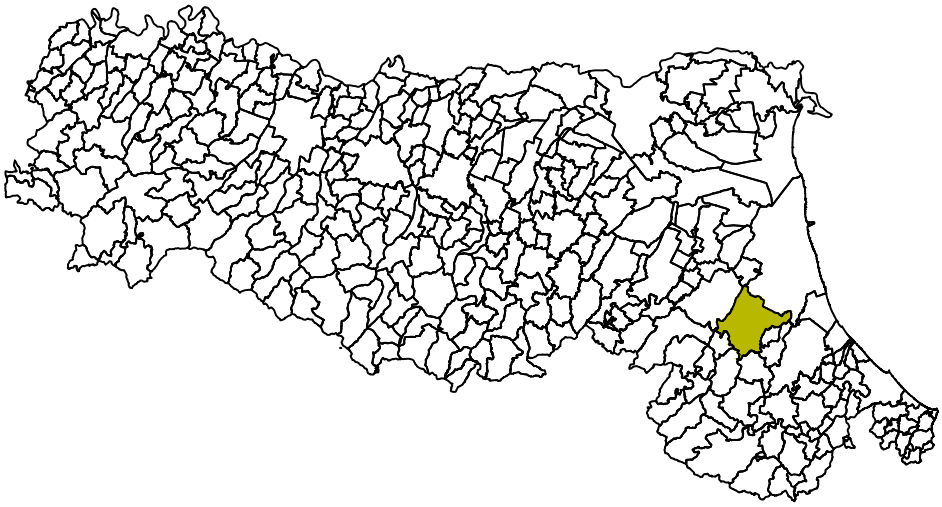
Attuazione dell'articolo 11 della legge 24 giugno 2009, n. 77

MICROZONAZIONE SISMICA

Nuove indagini

Regione Emilia-Romagna

Comune di Forlì



Regione	Soggetto realizzatore	Data
Emilia-Romagna	EN GEO S.r.l. ENGINEERING GEOLOGY www.engeo.it Direzione tecnica Dott. Geol. Carlo Caleffi Dott. Geol. Francesco Cerutti Collaboratori Dott. Geol. Matteo Baisi Dott. Geol. Matteo Bertolotti Dott. Geol. Alessandro Ferrari Dott.ssa Geol. Melinda Raimondo	Dicembre 2024 MS3

PROVE PENETROMETRICHE STATICHE CON PUNTA ELETTRICA E PIEZOCONO

CPTU

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Peterborough - Villafranca (FC)
COMMESSA: C054/24
RDP N°: 222/24
DATA: 25/09/2024

PROVA N°: CPTU 1
PROF. FALDA (m da p.c.): 2.30
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	0.49	21.14	0.43	0.39	2.02	1.32	33.47	25.34	0.74	4.02	0.61	27.48	6.15	1.13	6.02	1.08	57.89	9.35	1.62	8.02	1.22	59.76	44.53	2.03
0.04	0.48	23.94	0.62	0.38	2.04	1.17	30.79	25.83	0.75	4.04	0.62	26.56	6.15	1.12	6.04	1.09	58.38	9.47	1.63	8.04	1.27	58.51	44.90	2.03
0.06	0.55	27.97	0.74	0.38	2.06	1.05	32.01	26.14	0.76	4.06	0.62	25.53	6.27	1.14	6.06	1.11	57.56	9.96	1.63	8.06	1.27	58.42	45.02	2.04
0.08	0.59	31.75	0.86	0.40	2.08	0.88	32.29	26.45	0.78	4.08	0.61	24.46	6.40	1.14	6.08	1.15	56.98	10.46	1.64	8.08	1.27	60.40	44.90	2.05
0.10	0.63	35.47	0.80	0.42	2.10	0.85	29.94	26.39	0.78	4.10	0.64	23.79	6.52	1.14	6.10	1.19	56.49	10.70	1.65	8.10	1.24	59.81	43.49	2.05
0.12	0.58	33.06	1.11	0.42	2.12	0.82	28.05	26.20	0.78	4.12	0.59	27.12	6.09	1.11	6.12	1.20	58.91	14.76	1.65	8.12	1.30	63.80	43.86	2.07
0.14	0.65	19.80	1.60	0.35	2.14	1.11	33.85	25.71	0.69	4.14	0.61	27.73	5.97	1.14	6.14	1.22	60.09	15.01	1.65	8.14	1.25	66.37	43.79	2.06
0.16	0.73	21.44	2.09	0.41	2.16	1.10	36.59	25.65	0.70	4.16	0.63	27.42	5.78	1.14	6.16	1.23	61.53	15.25	1.66	8.16	1.26	68.16	43.79	2.08
0.18	0.79	18.31	22.88	0.34	2.18	1.10	36.44	25.28	0.72	4.18	0.64	27.06	5.66	1.15	6.18	1.27	63.42	15.44	1.66	8.18	1.25	70.82	43.79	2.08
0.20	0.91	20.11	22.08	0.23	2.20	1.14	35.46	25.16	0.72	4.20	0.65	26.27	5.60	1.15	6.20	1.27	66.53	15.68	1.66	8.20	1.26	72.83	43.73	2.09
0.22	1.14	21.30	20.61	0.21	2.22	1.12	34.12	25.16	0.72	4.22	0.68	25.17	5.54	1.16	6.22	1.30	68.93	15.93	1.68	8.22	1.29	74.26	43.92	2.08
0.24	1.66	25.35	14.82	0.23	2.24	1.11	34.21	24.91	0.73	4.24	0.70	24.38	5.35	1.18	6.24	1.32	71.31	16.36	1.67	8.24	1.30	72.68	44.16	2.09
0.26	2.02	28.07	9.29	0.23	2.26	1.20	33.02	24.66	0.73	4.26	0.72	24.53	5.29	1.17	6.26	1.34	73.11	16.91	1.66	8.26	1.31	70.85	44.22	2.09
0.28	2.22	28.34	9.72	0.31	2.28	1.08	31.35	25.10	0.75	4.28	0.70	25.69	5.35	1.18	6.28	1.39	74.36	17.28	1.67	8.28	1.27	70.54	44.22	2.09
0.30	2.13	33.19	10.64	0.33	2.30	0.99	30.77	25.34	0.74	4.30	0.77	25.99	5.17	1.19	6.30	1.43	74.05	17.65	1.67	8.30	1.26	68.99	44.22	2.09
0.32	2.15	39.32	11.07	0.30	2.32	0.82	29.88	25.65	0.76	4.32	0.82	26.24	5.04	1.19	6.32	1.45	75.70	18.08	1.67	8.32	1.23	68.41	44.04	2.09
0.34	2.25	44.66	10.89	0.31	2.34	0.71	29.06	25.83	0.75	4.34	0.79	26.73	4.98	1.20	6.34	1.43	73.53	18.64	1.68	8.34	1.18	67.00	43.86	2.10
0.36	2.50	52.16	7.07	0.32	2.36	0.66	28.02	25.83	0.76	4.36	0.77	27.64	5.04	1.21	6.36	1.41	72.74	19.87	1.67	8.36	1.14	66.21	43.55	2.10
0.38	2.63	56.92	8.43	0.33	2.38	0.73	24.67	25.28	0.77	4.38	0.70	29.87	5.35	1.22	6.38	1.42	71.85	20.24	1.68	8.38	1.07	67.24	43.18	2.10
0.40	2.59	62.53	10.21	0.35	2.40	1.08	20.49	23.00	0.78	4.40	0.62	31.24	5.47	1.21	6.40	1.41	71.00	20.48	1.68	8.40	1.02	66.79	42.81	2.10
0.42	2.39	70.31	11.81	0.33	2.42	1.45	18.66	21.65	0.77	4.42	0.60	31.24	5.47	1.21	6.42	1.45	72.13	20.91	1.68	8.42	0.93	65.57	42.38	2.11
0.44	2.31	77.38	12.67	0.35	2.44	1.65	20.61	21.96	0.77	4.44	0.63	30.60	5.41	1.21	6.44	1.51	75.17	21.34	1.69	8.44	0.88	63.00	42.19	2.12
0.46	2.23	83.76	13.35	0.36	2.46	1.67	19.00	22.45	0.78	4.46	0.66	28.92	5.41	1.23	6.46	1.52	80.66	21.77	1.70	8.46	0.83	59.01	42.13	2.12
0.48	2.08	87.11	13.90	0.38	2.48	1.62	18.14	22.45	0.79	4.48	0.64	29.23	5.41	1.22	6.48	1.52	84.47	22.33	1.70	8.48	0.83	52.46	42.19	2.12
0.50	2.00	88.12	14.21	0.38	2.50	1.64	17.29	22.51	0.79	4.50	0.63	28.50	5.41	1.22	6.50	1.56	87.09	22.45	1.70	8.50	0.85	44.50	42.44	2.12
0.52	1.87	87.44	16.18	0.38	2.52	1.66	17.87	22.51	0.80	4.52	0.64	27.22	5.29	1.22	6.52	1.56	90.23	22.33	1.70	8.52	0.89	38.13	42.87	2.13
0.54	1.78	83.79	16.85	0.42	2.54	1.62	19.30	22.51	0.80	4.54	0.68	26.79	5.11	1.22	6.54	1.51	97.18	22.76	1.71	8.54	0.94	30.26	43.49	2.12
0.56	1.79	78.97	17.16	0.44	2.56	1.51	20.73	22.82	0.81	4.56	0.71	27.01	4.98	1.23	6.56	1.47	99.68	23.07	1.71	8.56	0.97	26.15	43.92	2.13
0.58	1.73	74.47	17.59	0.44	2.58	1.27	24.09	23.25	0.82	4.58	0.74	27.52	4.67	1.23	6.58	1.45	97.05	23.74	1.74	8.58	0.98	22.03	44.35	2.14
0.60	1.59	71.09	18.14	0.47	2.60	1.05	26.28	23.62	0.83	4.60	0.74	28.53	4.74	1.23	6.60	1.49	99.89	24.42	1.70	8.60	0.95	20.02	44.53	2.13
0.62	1.48	70.45	18.58	0.48	2.62	0.85	29.24	24.05	0.83	4.62	0.72	27.53	4.86	1.25	6.62	1.48	99.40	24.91	1.70	8.62	0.97	18.71	45.02	2.14
0.64	1.43	69.39	19.01	0.48	2.64	0.70	31.07	24.23	0.84	4.64	0.70	28.84	5.11	1.25	6.64	1.49	97.35	25.53	1.70	8.64	0.99	18.68	45.21	2.14
0.66	1.43	66.92	19.31	0.47	2.66	0.59	29.49	24.42	0.85	4.66	0.73	30.36	5.11	1.26	6.66	1.53	90.13	25.65	1.70	8.66	0.95	20.02	45.33	2.15
0.68	1.44	64.00	19.62	0.46	2.68	0.51	27.23	24.48	0.86	4.68	0.75	32.13	5.04	1.26	6.68	1.50	86.19	25.59	1.70	8.68	0.93	20.72	45.27	2.16
0.70	1.47	62.54	19.81	0.47	2.70	0.48	29.06	24.36	0.85	4.70	0.75	33.17	4.98	1.27	6.70	1.47	86.07	25.71	1.71	8.70	0.93	23.01	45.64	2.17
0.72	1.53	60.62	19.87	0.48	2.72	0.48	26.22	24.17	0.86	4.72	0.74	34.66	5.04	1.28	6.72	1.44	85.06	25.96	1.72	8.72	0.94	23.25	45.82	2.17
0.74	1.59	58.03	19.99	0.49	2.74	0.48	21.23	23.93	0.86	4.74	0.74	36.13	5.11	1.30	6.74	1.43	82.96	25.89	1.73	8.74	0.97	22.61	46.07	2.18
0.76	1.62	57.85	20.05	0.50	2.76	0.49	17.45	23.50	0.86	4.76	0.77	36.01	5.04	1.31	6.76	1.39	83.38	25.96	1.74	8.76	0.96	23.71	46.19	2.20
0.78	1.66	57.46	20.17	0.50	2.78	0.51	13.70	22.94	0.87	4.78	0.74	35.43	5.11	1.31	6.78	1.37	84.66	26.14	1.74	8.78	0.98	24.26	46.87	2.21
0.80	1.67	57.34	20.30	0.51	2.80	0.53	13.36	22.45	0.88	4.80	0.78	34.27	5.11	1.32	6.80	1.33	87.92	26.51	1.76	8.80	1.02	20.63	47.30	2.21
0.82	1.70	57.68	20.48	0.54	2.82	0.53	11.50	22.20	0.88	4.82	0.82	34.58	5.04	1.33	6.82	1.38	86.73	26.88	1.77	8.82	1.00	20.85	47.48	2.22
0.84	1.70	58.38	20.67	0.53	2.84	0.52	9.71	21.96	0.88	4.84	0.83	35.09	4.92	1.34	6.84	1.42	85.09	27.25	1.77	8.84	0.94	20.33	47.24	2.23
0.86	1.75	59.05	20.85	0.53	2.86	0.51	8.12	21.65	0.89	4.86	0.79	33.81	4.98	1.35	6.86	1.46	83.26	27.43	1.77	8.86	0.84	21.80	46.75	2.23
0.88	1.89	61.40	20.79	0.55	2.88	0.51	9.25	21.22	0.88	4.88	0.79	32.26	5.11	1.35	6.88	1.47	82.01	27.31	1.78	8.88	0.75	23.20	46.25	2.24
0.90	2.11	62.63	20.61	0.56	2.90	0.55	8.92	20.48	0.88	4.90	0.78	32.69	5.17	1.36	6.90	1.47	81.00	27.06	1.79	8.90	0.71	22.53	46.07	2.25
0.92	2.25	57.84	20.67	0.55	2.92	0.60	8.49	19.68	0.90	4.92	0.78	34.70	5.29	1.36	6.92	1.44	83.41	27.00	1.79	8.92	0.68	21.31	46.01	2.24
0.94	2.30	50.62	20.79	0.56	2.94	0.64	8.61	18.64	0.90	4.94	0.80	37.05	5.17	1.38	6.94	1.43	84.99	27.06	1.80	8.94	0.66	20.64	46.07	2.25
0.96	2.30	45.63	20.97	0.57	2.96	0.69	9.25	17.96	0.91	4.96	0.82	37.96	5.11	1.38	6.96	1.41	87.27	27.13	1.80	8.96	0.65	18.51	46.25	2.26
0.98	2.31	40.45	21.16	0.56	2.98	0.74	12.18	16.85	0.92	4.98	0.85	37.05	4.98	1.38	6.98	1.40	87.73	27.31	1.80	8.98	0.68	14.88	46.81	2.27
1.00	2.32	37.28	21.28	0.57	3.00	0.78	12.73	16.12	0.92	5.00	0.80	38.00	5.23	1.38	7.00	1.39	89.50	27.43	1.81	9.00	0.76	12.02	47.91	2.27
1.02	2.36	37.52	21.40	0.59	3.02	0.78	12.86	15.81	0.92	5.02	0.76	39.22	5.29	1.38	7.02	1.37	92.42	27.49	1.82	9.02	1.25	9.49	53.27	2.27
1.04	2.35	38.69	21.53	0.58	3.04	0.82	14.41	15.62	0.94	5.04	0.76	38.42	5.23	1.38	7.04	1.37	93.16	27.49	1.82	9.04	2.30	8.67	60.40	2.27
1.06	2.42	41.19	21.65	0.61	3.06	0.83	19.32	15.44	0.95	5.06	0.73	38.12	5.41	1.39	7.06	1.40	93.52	27.68	1.83	9.06	3.48	11.72	62.49	2.28
1.08	2.50	45.40	21.65	0.61	3.08	0.83	22.74	14.88	0.95	5.08	0.70	37.36	5.41	1.39	7.08	1.39	92.64	27.74	1.83	9.08	4.21	14.55	63.78	2.28
1.10	2.41	46.77	21.96	0.61	3.10	0.88	23.87	14.15	0.95	5.10	0.73	38.27	5.47	1.41	7.10	1.37	85.88	30.51	1.83	9.10	4.66	12.49	60.95	2.27
1.12	2.23	48.05	22.27	0.62	3.12	0.88	25.24	13.65	0.96	5.12	0.73	38.11	1.23	1.39	7.12	1.44	86.25	30.82	1.84	9.12	4.96	11.54	61.57	2.28
1.14	2.36	45.35	24.79	0.54	3.14	0.88	25.11	5.84	0.94	5.14	0.80	36.25	0.92	1.40	7.14	1.45	84.57	31.06	1.85	9.14	5.23	13.46	62.49	2.28
1.16	2.41	47.79	25.10	0.52	3.16	0.82	27.67	5.90	0.97	5.16	0.84	35.06	0.74	1.41	7.16	1.52	82.26	31.37	1.85	9.16	5.42	14.93	63.41	2.29
1.18	2.36	46.48	25.28	0.53	3.18	0.73	28.22	6.03	0.96	5.18	0.86	35.40	0.55	1.41	7.18	1.57	80.31	31.68	1.85	9.18	5.59	17.49	64.40	2.30
1.20	2.27	46.11	25.46	0.56	3.20	0.69	29.07	6.09	0.96	5.20	0.86	35.19	0.37	1.42	7.20	1.61	80.00	31.98	1.85	9.20	5.78	20.14	65.44	2.30
1.22	2.19	48.86	25.65	0.55	3.22	0.66	29.99	6.03	0.97	5.22	0.88	34.73	0.12	1.43	7.22	1.64	79.18	32.23	1.85	9.22	6.08	23.95	66.86	2.31
1.24	2.28	51.20	25.40	0.55	3.24	0.63	30.87	5.84	0.96	5.24	0.92	34.64	0.18	1.43	7.24	1.67	80.30	32.72	1.85	9.24	6.44	26.42	68.83	2.31
1.26	2.42	53.83	25.28	0.55	3.26	0.64	31.64	5.54	0.97	5.26	0.92	35.46	0.68	1.43	7.26	1.69	81.31	33.58	1.86	9.26	6.78	28.34	70.67	2.32
1.28	2.56	54.74	25.16	0.57	3.28	0.64	30.05	5.35	0.96	5.28	0.99	35.76	1.17	1.45	7.28	1.69	82.96	34.01	1.86	9.28	6.90	28.89	71.60	2.33
1.30	2.63	49.71	25.10	0.57	3.30	0.67	28.07	5.11	0.98	5.30	1.04	36.13	1.41	1.45	7.30	1.65	86.92	34.08	1.87	9.30	6.78	29.92	72.09	2.34
1.32	2.64	44.86	25.10	0.56	3.32	0.72	26.27	5.04	0.99	5.32	1.02	38.36	1.60	1.46	7.32	1.61	90.42	35.24	1.87	9.32	6.69	30.41	72.64	2.34
1.34	2.64	42.09	25.10	0.56	3.34	0.75	26.45	4.86	1.00	5.34	1.00	41.22	1.72	1.46	7.34	1.58	94.66	36.17	1.87	9.34	6.74	32.18	73.50	2.35
1.36	2.46	39.22	25.28	0.58	3.36	0.76	26.91	4.67	1.00	5.36	0.97	42.62	1.78	1.45	7.36	1.53	96.73	36.47	1.86	9.36	6.95	33.46	75.16	2.35
1.38	2.24	40.53	25.59	0.57	3.38	0.76	27.49	4.74	0.99	5.38	0.96	43.39	1.66	1.46	7.38	1.50	99.23	37.21	1.86	9.38	7.50	36.81	78.73	2.39
1.40	2.12	43.40	25.77	0.57	3.40	0.75	29.56	4.74	1.02	5.40	0.93	44.91	1.60	1.46	7.40	1.53	99.53	38.07	1.86	9.40	8.30	39.82	82.79	2.39
1.42	1.87	48.70	26.14	0.57	3.42	0.76	32.64	4.86	1.01	5.42	0.90	47.53	1.60	1.47	7.42	1.56	97.64	38.87	1.87	9.42	8.93	43.72	73.69	2.39
1.44	1.77	55.77	26.20	0.60	3.44	0.74	35.29	4.67	1.02	5.44	0.90	48.08	1.60	1.48	7.44	1.57	95.32	39.67	1.86	9.44	8.68	40.43	43.86	2.38
1.46	1.70	60.74	26.26	0.59	3.46	0.74	39.04	4.61	1.02	5.46	0.88	48.51	1.60	1.48	7.46	1.63	91.21	40.23	1.88	9.46	7.98	41.19	43.86	2.37
1.48	1.62	65.37	26.45	0.59	3.48	0.69	40.96	4.31	1.03	5.48	0.87	48.78	1.72	1.49	7.48	1.65	88.31	41.03	1.87	9.48	7.09	39.94	42.93	2.37
1.50	1.53	68.72	26.51	0.59	3.50	0.69	40.90	4.37	1.03	5.50	0.89	48.23	1.97	1.49	7.50	1.61	85.66	41.76	1.89	9.50	6.95	47.13	44.53	2.38
1.52	1.49	69.06	26.45	0.60	3.52	0.69	40.96	4.55	1.03	5.52	0.93	45.76	2.09	1.49	7.52	1.62	79.07	42.63	1.90	9.52	8.35	63.99	51.30	2.42
1.54	1.50	65.82	26.39	0.62	3.54	0.67	40.42	4.74	1.03	5.54	0.93	43.54	2.15	1.50	7.54	1.61	76.08	42.56	1.91	9.54	9.92	75.75	58.31	2.43
1.56	1.52	61.86	26.45	0.59	3.56	0.65	39.29	4.92	1.04	5.56	0.92	43.96	2.15	1.50	7.56	1.59	77.85	42.63	1.91	9.56	10.56	81.94	60.16	2.43
1.58	1.52	60.21	26.51	0.59	3.58	0.62	39.14	5.17	1.06	5.58	0.91	44.45	2.28	1.51	7.58	1.55	81.14	43.24	1.91	9.58	10.69	84.71	61.02	2.44
1.60	1.52	59.48	26.51	0.60	3.60	0.59	39.41	5.29	1.06	5.60	0.90	44.91	2.46	1.50	7.60	1.47	85.80	43.92	1.92	9.60	10.37	79.98	61.14	2.45
1.62	1.60	59.45	26.39	0.64	3.62	0.59	38.71	5.41	1.07	5.62	0.88	45.49	2.64	1.51	7.62	1.46	86.96	44.16	1.93	9.62	9.68	71.23	60.40	2.46
1.64	1.85	59.45	25.77	0.62	3.64	0.59	38.16	5.47	1.07	5.64	0.89	45.97	2.83	1.51	7.64	1.48	87.60	44.10	1.93	9.64	8.83	65.03	59.48	2.48
1.66	2.12	55.70	25.40	0.63	3.66	0.57	37.37	5.47	1.07	5.66	0.92	47.41	3.20	1.53	7.66	1.43	87.41	43.98	1.94	9.66	8.06	58.96	58.37	2.48
1.68	2.23	50.73	25.34	0.64	3.68	0.59	36.49	5.47	1.07	5.68	0.95	47.62	3.81	1.53	7.68	1.40	85.74	43.86	1.93	9.68	6.77	42.07	56.03	2.49
1.70	2.16	43.20	25.46	0.65	3.70	0.56	35.24	5.60	1.08	5.70	0.98	45.64	4.12	1.53	7.70	1.32	84.88	43.61	1.95	9.70	5.42	40.61	52.96	2.50
1.72	1.93	36.74	25.83	0.66	3.72	0.56	33.29	5.78	1.08	5.72	0.99	44.33	4.61	1.53	7.72	1.28	83.30	43.73	1.96	9.72	4.02	43.99	49.51	2.50
1.74	1.65	31.52	26.26	0.67	3.74	0.54	31.27	5.78	1.09	5.74	1.01	43.44	4.98	1.55	7.74	1.29	80.98	43.79	1.98	9.74	2.94	51.27	46.87	2.52
1.76	1.51	31.37	26.51	0.69	3.76	0.52	30.21	5.84	1.08	5.76	1.01	43.84	5.17	1.54	7.76	1.28	80.09	43.98	1.99	9.76	2.31	60.10	45.89	2.53
1.78	1.41	34.45	26.76	0.69	3.78	0.54	29.11	5.90	1.09	5.78	0.99	45.64	5.54	1.55	7.78	1.24	78.08	43.86	1.99	9.78	1.80	73.39	46.07	2.54
1.80	1.40	35.88	26.63	0.70	3.80	0.53	28.59	5.97	1.09	5.80	0.99	47.62	5.90	1.56	7.80	1.21	75.79	43.86	2.00	9.80	1.54	80.76	47.24	2.54
1.82	1.52	36.58	25.77	0.70	3.82	0.55	27.89	5.90	1.09	5.82	1.00	49.51	6.21	1.55	7.82	1.18	72.38	43.79	2.00	9.82	1.28	85.06	51.36	2.56
1.84	1.69	37.92	25.22	0.71	3.84	0.58	26.25	5.72	1.09	5.84	1.04	51.77	6.64	1.57	7.84	1.16	67.84	43.67	2.02	9.84	1.19	80.30	64.58	2.56
1.86	1.62	39.42	25.34	0.72	3.86	0.59	25.06	5.78	1.10	5.86	1.05	54.02	7.01	1.57	7.86	1.14	62.99	43.55	2.02	9.86	1.53	94.35	163.37	2.57
1.89	1.33	40.88	25.96	0.71	3.88	0.59	24.51	5.84	1.10	5.88	1.06	55.70	7.75	1.59	7.88	1.15	61.68	43.55	2.03	9.88	2.33	74.90	197.56	2.57
1.90	1.20	42.28	26.20	0.72	3.90	0.57	24.76	5.97	1.10	5.90	1.09	55.67	8.12	1.58	7.90	1.13	60.34	43.61	2.03	9.90	2.93	56.36	207.59	2.56
1.92	1.07	44.60	26.45	0.73	3.92	0.56	25.15	6.09	1.10	5.92	1.06	55.58	8.37	1.60	7.92	1.08	61.01	43.49	2.03	9.92	3.08	42.85	184.40	2.55
1.94	1.01	44.36	26.51	0.73	3.94	0.59	25.46	6.09	1.10	5.94	1.08	54.57	8.61	1.60	7.94	1.10	59.79	43.73	2.03	9.94	3.15	34.47	158.38	2.55
1.96	1.07	42.44	26.08	0.75	3.96	0.57	27.11	6.15	1.12	5.96	1.08	55.64	8.80	1.60	7.96	1.12	57.81	44.04	2.03	9.96	3.14	33.85	154.02	2.58
1.98	1.22	37.83	25.65	0.75	3.98	0.56	27.54	6.09	1.12	5.98	1.10	55.64	8.92	1.60	7.98	1.14	58.45	44.04	2.04	9.98	3.08	39.16	151.25	2.59
2.00	1.37	34.33	25.22	0.74	4.00	0.57	27.63	6.03	1.12	6.00	1.09	56.25	9.16	1.61	8.00	1.18	60.46	44.35	2.03	10.00	2.91	53.36	146.33	2.61

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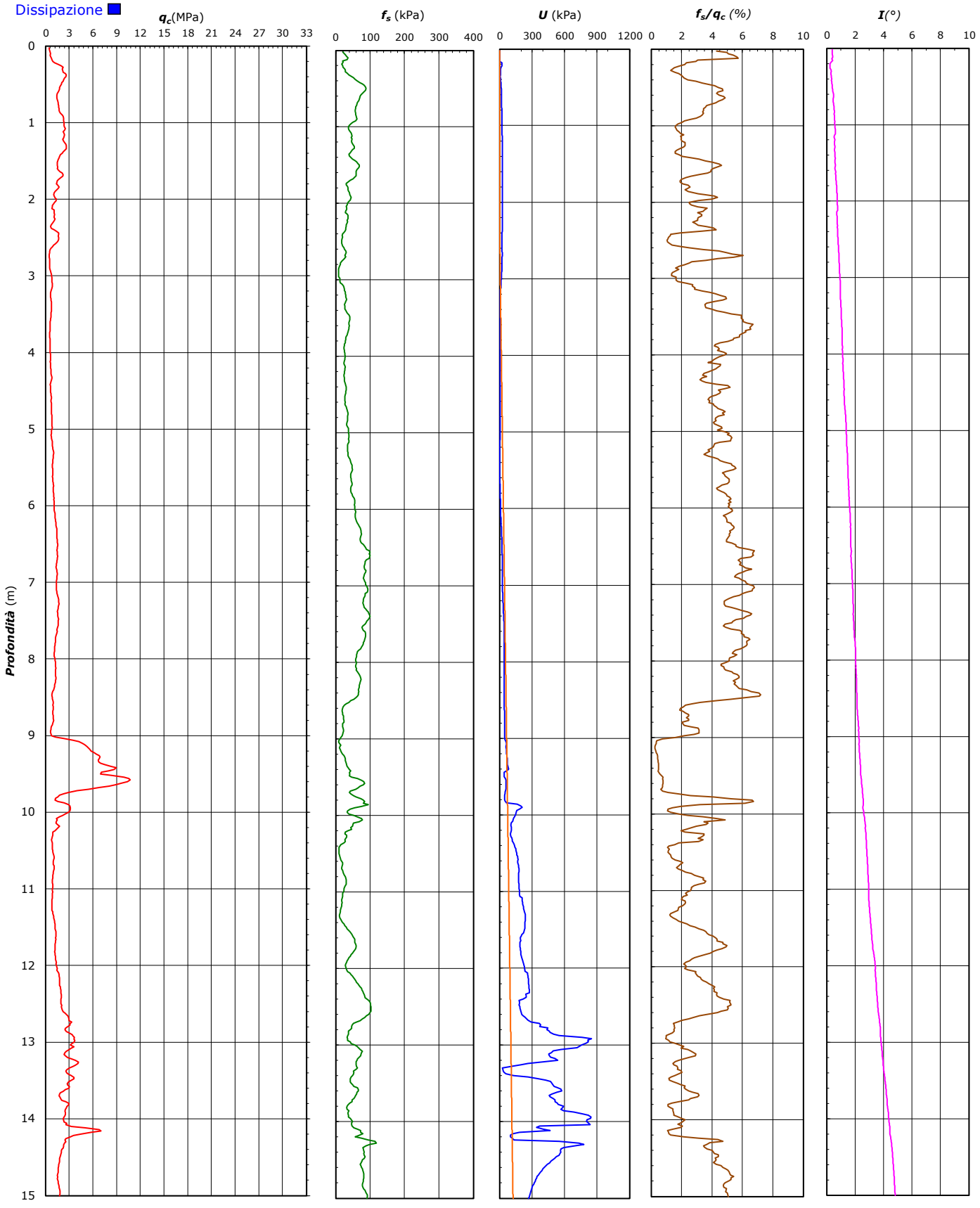
COMMITTENTE:
CANTIERE: Via Peterborough - Villafranca (FC)
COMMESSA: C054/24
RDP N°: 222/24
DATA: 25/09/2024

PROVA N°: CPTU 1
PROF. FALDA (m da p.c.): 2.30
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	2.59	62.72	138.27	2.61	12.02	1.44	31.83	233.55	3.41	14.02	2.26	47.09	818.24	4.38										
10.04	2.20	74.85	131.26	2.64	12.04	1.47	35.16	234.78	3.43	14.04	2.33	45.93	836.39	4.39										
10.06	1.80	78.02	125.85	2.66	12.06	1.42	41.98	259.20	3.41	14.06	2.71	47.94	371.51	4.40										
10.08	1.41	68.35	121.91	2.68	12.08	1.56	45.30	259.44	3.42	14.08	2.59	53.40	341.80	4.41										
10.10	1.50	51.90	108.93	2.68	12.10	1.64	48.87	262.39	3.43	14.10	3.25	64.10	403.31	4.43										
10.12	1.36	51.08	105.92	2.70	12.12	1.69	51.82	264.49	3.43	14.12	5.03	72.12	465.37	4.45										
10.14	1.35	48.80	106.72	2.71	12.14	1.73	55.78	266.88	3.44	14.14	6.79	73.27	185.02	4.46										
10.16	1.49	44.32	109.48	2.72	12.16	1.78	58.47	267.81	3.46	14.16	7.01	78.88	126.83	4.45										
10.18	1.75	46.60	109.73	2.73	12.18	1.79	60.97	268.42	3.46	14.18	5.78	67.36	101.49	4.43										
10.20	1.60	36.63	109.18	2.71	12.20	1.79	64.99	268.85	3.47	14.20	4.45	57.54	103.09	4.45										
10.22	1.41	27.73	103.83	2.73	12.22	1.77	67.31	269.59	3.48	14.22	3.53	75.77	118.40	4.47										
10.24	1.21	26.97	99.70	2.74	12.24	1.78	70.90	271.07	3.48	14.24	3.03	94.61	135.99	4.49										
10.26	0.94	32.70	100.44	2.75	12.26	1.78	74.74	272.91	3.49	14.26	2.59	114.03	550.62	4.52										
10.28	0.92	32.15	106.16	2.76	12.28	1.87	76.72	275.74	3.49	14.28	2.48	117.50	732.44	4.52										
10.30	0.92	30.17	112.93	2.76	12.30	1.91	79.10	275.37	3.50	14.30	2.56	99.09	778.20	4.54										
10.32	0.87	26.91	116.74	2.77	12.32	1.95	80.38	275.68	3.51	14.32	2.40	87.96	695.53	4.56										
10.34	0.83	28.25	119.63	2.77	12.34	1.93	83.64	244.25	3.52	14.34	2.31	79.33	592.63	4.56										
10.36	0.78	24.20	125.54	2.78	12.36	1.95	84.25	246.59	3.53	14.36	2.29	80.15	566.92	4.58										
10.38	0.81	14.81	132.61	2.79	12.38	1.99	86.26	245.42	3.53	14.38	2.23	82.01	562.98	4.59										
10.40	0.84	12.89	137.96	2.79	12.40	2.02	90.49	216.02	3.54	14.40	2.07	82.95	565.57	4.59										
10.42	0.86	9.96	144.79	2.80	12.42	2.02	96.43	178.68	3.55	14.42	2.01	81.85	557.82	4.61										
10.44	0.88	9.47	149.16	2.81	12.44	1.94	100.52	183.79	3.55	14.44	1.99	82.73	549.70	4.62										
10.46	0.89	10.54	152.42	2.81	12.46	1.98	102.04	183.85	3.57	14.46	1.94	85.93	526.69	4.62										
10.48	0.88	10.12	155.86	2.82	12.48	1.95	101.67	180.96	3.57	14.48	1.88	83.06	509.72	4.64										
10.50	0.90	10.03	157.77	2.82	12.50	1.94	102.19	186.74	3.58	14.50	1.84	77.39	490.04	4.64										
10.52	0.91	10.88	161.27	2.83	12.52	2.04	102.13	189.20	3.59	14.52	1.79	76.11	476.38	4.65										
10.54	0.97	12.53	166.07	2.82	12.54	2.03	102.76	191.72	3.60	14.54	1.75	73.67	460.76	4.67										
10.56	1.06	13.81	169.58	2.84	12.56	2.04	102.46	194.80	3.61	14.56	1.76	71.80	442.24	4.67										
10.58	1.09	15.03	170.99	2.84	12.58	2.13	98.28	199.10	3.61	14.58	1.72	73.57	427.30	4.68										
10.60	1.10	17.22	169.46	2.85	12.60	2.21	96.14	205.56	3.63	14.60	1.64	75.89	413.46	4.69										
10.62	1.04	19.79	169.09	2.87	12.62	2.44	90.16	219.46	3.64	14.62	1.64	77.59	400.11	4.69										
10.64	0.98	20.27	171.24	2.86	12.64	2.66	84.58	233.98	3.65	14.64	1.62	79.23	390.76	4.70										
10.66	1.00	19.09	174.13	2.87	12.66	2.83	77.97	252.31	3.67	14.66	1.59	79.96	380.31	4.71										
10.68	1.00	18.36	177.27	2.88	12.68	2.89	71.01	263.75	3.69	14.68	1.60	81.97	367.63	4.72										
10.70	1.07	18.05	180.03	2.88	12.70	2.97	61.04	291.86	3.70	14.70	1.59	82.28	358.59	4.73										
10.72	1.10	19.79	180.34	2.87	12.72	2.98	51.19	365.85	3.72	14.72	1.57	81.76	347.71	4.74										
10.74	1.07	21.65	179.17	2.88	12.74	3.33	48.24	377.78	3.73	14.74	1.51	81.63	341.80	4.74										
10.76	1.01	22.81	175.30	2.89	12.76	3.06	46.31	371.32	3.74	14.76	1.52	80.05	335.40	4.74										
10.78	0.97	25.83	174.44	2.90	12.78	3.06	46.53	445.32	3.75	14.78	1.52	79.92	329.13	4.75										
10.80	0.97	27.69	174.19	2.89	12.80	2.75	42.81	436.28	3.76	14.80	1.54	78.64	321.44	4.76										
10.82	0.94	29.34	174.07	2.91	12.82	2.52	37.81	458.85	3.77	14.82	1.60	77.91	315.29	4.77										
10.84	0.90	31.11	174.93	2.91	12.84	2.44	37.20	465.56	3.78	14.84	1.62	77.54	306.62	4.77										
10.86	0.90	30.80	175.18	2.92	12.86	2.63	37.20	498.34	3.78	14.86	1.69	79.80	299.98	4.77										
10.88	0.87	31.35	176.65	2.93	12.88	2.95	35.16	549.64	3.79	14.88	1.72	82.05	294.44	4.78										
10.90	0.88	30.71	178.25	2.94	12.90	3.40	33.72	760.00	3.79	14.90	1.73	85.50	290.63	4.79										
10.92	0.88	27.60	180.16	2.94	12.92	3.48	34.48	848.32	3.79	14.92	1.77	87.20	286.26	4.79										
10.94	0.91	25.65	181.88	2.94	12.94	3.64	34.91	814.18	3.80	14.94	1.83	89.88	282.63	4.80										
10.96	0.91	24.10	181.33	2.94	12.96	3.63	42.65	819.04	3.81	14.96	1.84	92.38	281.34	4.80										
10.98	0.90	23.85	182.56	2.95	12.98	3.70	45.31	798.38	3.82	14.98	1.84	92.38	275.25	4.81										
11.00	0.88	22.85	184.46	2.94	13.00	3.57	55.49	756.49	3.83	15.00	1.80	91.44	267.25	4.81										
11.02	0.88	20.90	185.45	2.95	13.02	3.32	62.68	738.90	3.83															
11.04	0.89	20.20	186.31	2.94	13.04	3.14	66.83	718.05	3.84															
11.06	0.89	21.05	186.62	2.95	13.06	3.59	70.89	567.78	3.86															
11.08	0.88	18.50	211.16	2.94	13.08	3.26	78.14	495.63	3.87															
11.10	0.88	17.61	211.22	2.95	13.10	2.92	75.40	479.15	3.88															
11.12	0.87	17.37	211.28	2.95	13.12	2.63	73.66	456.02	3.89															
11.14	0.83	18.47	213.00	2.97	13.14	2.45	72.29	456.70	3.90															
11.16	0.81	18.16	214.23	2.97	13.16	2.37	69.24	469.80	3.91															
11.18	0.81	17.95	216.57	2.97	13.18	2.49	63.66	512.24	3.92															
11.20	0.79	16.30	220.45	3.00	13.20	2.80	62.81	535.98	3.93															
11.22	0.81	14.75	223.21	3.00	13.22	3.29	60.28	422.50	3.94															
11.24	0.81	14.41	225.92	3.01	13.24	3.77	59.03	264.30	3.96															
11.26	0.81	14.26	229.92	3.02	13.26	4.14	59.09	196.76	3.96															
11.28	0.84	13.01	234.04	3.02	13.28	4.09	60.88	120.37	3.97															
11.30	0.90	11.52	237.79	3.03	13.30	3.77	64.05	27.25	3.98															
11.32	0.94	11.52	236.81	3.04	13.32	3.41	60.03	30.02	3.99															
11.34	0.98	12.55	237.11	3.05	13.34	3.01	51.55	33.58	4.01															
11.36	1.02	14.90	238.22	3.06	13.36	2.70	52.89	42.01	4.01															
11.38	1.05	17.31	237.91	3.07	13.38	2.57	52.07	59.60	4.02															
11.40	1.10	19.93	235.76	3.07	13.40	2.69	49.11	131.69	4.04															
11.42	1.13	23.74	235.88	3.08	13.42	2.90	44.69	262.95	4.05															
11.44	1.15	26.91	235.58	3.09	13.44	3.28	42.50	357.05	4.06															
11.46	1.18	30.45	232.93	3.10	13.46	3.59	42.22	424.59	4.08															
11.48	1.18	34.14	233.30	3.11	13.48	3.57	42.65	469.86	4.09															
11.50	1.20	37.67	228.20	3.12	13.50	3.22	44.60	482.53	4.10															
11.52	1.21	41.82	224.94	3.14	13.52	2.90	49.69	492.56	4.11															
11.54	1.27	45.45	221.74	3.14	13.54	2.75	53.32	503.38	4.12															
11.56	1.30	47.64	206.54	3.15	13.56	2.83	63.38	536.60	4.15															
11.58	1.33	50.60	201.62	3.15	13.58	3.06	66.36	567.66	4.16															
11.60	1.32	53.43	192.46	3.17	13.60	2.96	66.61	574.06	4.16															
11.62	1.31	55.78	193.87	3.18	13.62	2.55	62.89	530.94	4.17															
11.64	1.29	56.05	195.23	3.18	13.64	2.25	61.30	485.55	4.18															
11.66	1.29	56.11	190.49	3.19	13.66	1.89	58.37	460.20	4.20															
11.68	1.24	58.52	188.03	3.20	13.68	1.76	55.48	467.09	4.20															
11.70	1.25	59.10	189.08	3.21	13.70	1.73	52.73	495.08	4.21															
11.72	1.19	59.43	190.18	3.22	13.72	1.85	48.10	512.79	4.23															
11.74	1.18	58.15	191.97	3.24	13.74	1.94	47.61	512.67	4.25															
11.76	1.18	55.19	193.20	3.24	13.76	2.08	40.81	532.35	4.26															
11.78	1.19	51.63	194.92	3.25	13.78	2.60	35.81	541.15	4.27															
11.80	1.19	48.82	196.52	3.27	13.80	3.00	33.25	590.97	4.26															
11.82	1.17	45.71	198.43	3.30	13.82	2.92	32.27	583.28	4.27															
11.84	1.20	42.94	201.25	3.31	13.84	2.68	33.95	567.72	4.28															
11.86	1.22	38.27	205.87	3.32	13.86	2.66	38.09	592.94	4.30															
11.88	1.24	35.47	210.67	3.34	13.88	2.52	36.11	687.60	4.30															
11.90	1.27	34.12	214.79	3.36	13.90	2.44	35.62	765.53	4.32															
11.92	1.28	32.29	219.34	3.37	13.92	2.52	37.39	818.30	4.34															
11.94	1.31	30.04	223.09	3.39	13.94	2.53	37.73	846.84	4.35															
11.96	1.35	28.79	226.29	3.39	13.96	2.47	42.45	841.74	4.35															
11.98	1.34	30.19	228.99	3.39	13.98	2.32	46.23	809.32	4.36															
12.00	1.35	31.41	231.95	3.41	14.00	2.21	49.16	803.24	4.37															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 1
CANTIERE:	Via Peterborough - Villafranca (FC)	PROF. FALDA (m da p.c.):	2.30
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	222/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	25/09/2024	OPERATORE:	Zanirato



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Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 1
CANTIERE:	Via Peterborough - Villafranca (FC)	PROF. FALDA (m da p.c.):	2.30
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	222/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	25/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Peterborough - Villafranca (FC)
Lat.: 44.294420°
Long.: 12.017820°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
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Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Don Eugenio Servadei - San Giorgio (FC)
COMMESSA: C054/24
RDP N°: 203/24
DATA: 12/09/2024

PROVA N°: CPTU 2
PROF. FALDA (m da p.c.): 2.05
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	0.48	24.29	3.43	0.27	2.02	0.74	31.99	20.81	1.02	4.02	6.42	32.92	22.83	0.96	6.02	1.33	47.46	24.30	1.14	8.02	1.26	44.95	75.72	1.24
0.04	1.08	24.26	5.88	0.34	2.04	0.43	24.29	20.02	1.01	4.04	6.48	32.05	23.32	0.91	6.04	1.34	48.87	24.30	1.10	8.04	1.28	45.82	75.97	1.25
0.06	1.27	26.30	6.79	0.22	2.06	0.68	24.53	21.43	0.96	4.06	6.92	36.34	24.61	0.90	6.06	1.40	48.94	24.55	1.10	8.06	1.32	48.26	77.01	1.25
0.08	1.27	35.29	6.98	0.20	2.08	0.85	26.22	21.36	0.96	4.08	7.19	39.02	25.59	0.90	6.08	1.47	48.91	24.79	1.11	8.08	1.35	47.90	78.11	1.26
0.10	1.17	47.74	6.79	0.18	2.10	0.87	22.97	20.57	0.97	4.10	7.39	38.38	26.63	0.90	6.10	1.60	47.05	32.20	1.10	8.10	1.44	40.13	98.86	1.27
0.12	1.16	51.61	6.73	0.21	2.12	0.82	18.50	7.16	0.98	4.12	7.41	32.08	27.98	0.89	6.12	1.68	46.99	32.44	1.11	8.12	1.39	41.61	98.62	1.27
0.14	1.29	57.03	7.04	0.20	2.14	0.83	13.72	7.47	0.96	4.14	7.66	30.03	28.46	0.89	6.14	1.69	47.26	32.26	1.11	8.14	1.35	41.16	98.43	1.27
0.16	1.17	41.34	28.16	0.18	2.16	0.93	13.36	8.02	0.96	4.16	8.21	27.03	29.69	0.89	6.16	1.67	50.75	32.26	1.12	8.16	1.31	42.60	98.19	1.28
0.18	1.21	44.28	28.16	0.14	2.18	0.99	13.82	8.69	0.97	4.18	8.82	22.28	31.04	0.87	6.18	1.65	52.01	32.26	1.11	8.18	1.30	41.55	98.19	1.28
0.20	1.21	53.84	28.10	0.23	2.20	1.21	18.39	9.73	0.97	4.20	9.72	25.07	32.93	0.86	6.20	1.65	53.48	32.14	1.11	8.20	1.32	42.93	99.05	1.29
0.22	1.27	56.91	28.28	0.27	2.22	1.38	24.73	11.75	0.96	4.22	10.61	29.85	34.95	0.87	6.22	1.63	56.49	32.08	1.13	8.22	1.34	44.43	99.72	1.28
0.24	1.31	63.43	28.28	0.25	2.24	1.45	28.82	12.67	0.97	4.24	10.62	35.71	35.14	0.86	6.24	1.61	58.53	31.89	1.14	8.24	1.34	44.01	100.33	1.28
0.26	1.33	69.03	28.28	0.27	2.26	1.53	34.45	13.10	0.98	4.26	10.17	35.38	34.40	0.86	6.26	1.59	59.43	31.83	1.14	8.26	1.33	41.00	100.94	1.28
0.28	1.41	71.97	28.46	0.22	2.28	1.53	39.14	13.47	0.97	4.28	9.49	28.83	33.18	0.88	6.28	1.57	60.10	31.59	1.15	8.28	1.36	40.40	101.62	1.29
0.30	1.50	72.78	28.83	0.20	2.30	1.55	46.84	13.47	0.97	4.30	8.96	32.53	32.50	0.88	6.30	1.53	61.21	31.22	1.14	8.30	1.41	41.60	101.98	1.30
0.32	1.68	75.63	29.20	0.19	2.32	1.55	50.51	13.47	0.96	4.32	8.51	32.07	32.26	0.87	6.32	1.45	63.10	31.34	1.15	8.32	1.42	42.35	102.17	1.31
0.34	1.72	77.58	29.08	0.20	2.34	1.49	56.04	13.53	0.94	4.34	8.35	32.55	32.57	0.87	6.34	1.47	60.52	31.46	1.15	8.34	1.41	44.55	101.55	1.31
0.36	1.70	76.82	28.89	0.27	2.36	1.47	60.64	13.47	0.96	4.36	8.32	36.58	33.36	0.89	6.36	1.48	57.15	32.20	1.16	8.36	1.31	50.32	99.60	1.32
0.38	1.62	72.21	28.71	0.27	2.38	1.43	61.91	13.34	0.94	4.38	8.55	40.10	34.52	0.89	6.38	1.51	53.48	32.32	1.15	8.38	1.22	54.50	98.68	1.32
0.40	1.62	69.38	28.53	0.24	2.40	1.42	63.41	13.16	0.94	4.40	9.15	42.77	36.73	0.89	6.40	1.50	52.79	32.44	1.15	8.40	1.16	57.59	98.25	1.34
0.42	1.65	65.02	28.40	0.24	2.42	1.41	63.29	13.04	0.93	4.42	9.48	45.21	37.83	0.91	6.42	1.51	51.40	32.69	1.15	8.42	1.07	60.27	97.70	1.35
0.44	1.73	60.75	28.59	0.24	2.44	1.36	60.41	12.86	0.92	4.44	10.14	52.21	39.91	0.89	6.44	1.46	48.73	32.81	1.15	8.44	1.05	60.21	97.64	1.37
0.46	1.88	60.48	28.89	0.23	2.46	1.32	58.22	12.61	0.94	4.46	10.67	57.44	41.63	0.91	6.46	1.45	46.14	32.75	1.16	8.46	3.81	56.18	97.09	1.37
0.48	2.09	61.98	29.38	0.23	2.48	1.31	54.70	12.30	0.92	4.48	10.60	60.66	42.12	0.90	6.48	1.45	46.95	32.81	1.15	8.48	2.84	55.10	96.60	1.38
0.50	2.17	69.88	29.57	0.24	2.50	1.27	52.69	12.12	0.92	4.50	10.09	40.87	41.69	0.89	6.50	1.49	50.44	32.50	1.16	8.50	2.98	50.76	97.45	1.38
0.52	2.33	84.54	30.00	0.24	2.52	1.22	50.97	11.88	0.92	4.52	9.71	29.41	41.56	0.89	6.52	1.44	55.88	31.95	1.17	8.52	2.46	47.10	98.56	1.39
0.54	2.61	96.71	30.73	0.25	2.54	1.19	46.77	11.57	0.93	4.54	9.28	28.81	41.38	0.90	6.54	1.32	60.12	31.77	1.15	8.54	1.70	43.97	98.74	1.40
0.56	3.05	107.09	31.89	0.26	2.56	1.16	44.03	11.39	0.93	4.56	8.81	33.08	41.32	0.91	6.56	1.29	60.36	31.77	1.16	8.56	0.92	43.25	99.96	1.41
0.58	3.36	116.74	32.69	0.25	2.58	1.13	41.60	11.14	0.92	4.58	8.44	39.00	41.32	0.91	6.58	1.22	59.25	31.77	1.16	8.58	0.90	41.95	100.70	1.43
0.60	3.53	116.71	32.87	0.24	2.60	1.11	38.92	10.90	0.93	4.60	8.16	43.09	41.69	0.91	6.60	1.22	56.57	32.08	1.16	8.60	0.87	41.35	101.43	1.43
0.62	3.58	119.93	33.30	0.24	2.62	1.13	35.20	10.77	0.93	4.62	7.99	40.80	42.30	0.91	6.62	1.21	51.49	32.57	1.16	8.62	0.85	39.76	102.35	1.43
0.64	3.53	115.70	33.24	0.26	2.64	1.11	34.00	10.59	0.93	4.64	7.90	38.81	42.85	0.93	6.64	1.15	45.51	32.69	1.17	8.64	0.85	37.38	103.09	1.43
0.66	3.42	107.39	33.06	0.27	2.66	1.10	33.04	10.35	0.93	4.66	7.71	36.05	43.28	0.93	6.66	1.13	38.47	32.81	1.17	8.66	0.87	36.45	104.06	1.43
0.68	3.35	98.68	33.06	0.26	2.68	1.09	30.45	10.16	0.93	4.68	7.48	34.27	43.46	0.93	6.68	1.15	34.05	32.99	1.18	8.68	0.85	34.64	104.86	1.45
0.70	3.33	92.23	33.06	0.27	2.70	1.08	29.97	9.98	0.94	4.70	7.20	32.34	43.46	0.93	6.70	1.12	34.68	33.24	1.18	8.70	0.83	31.91	105.53	1.44
0.72	3.31	80.14	33.42	0.27	2.72	1.09	29.31	9.86	0.94	4.72	7.00	30.54	43.58	0.94	6.72	1.12	33.03	33.79	1.18	8.72	0.83	29.83	106.45	1.47
0.74	3.22	73.44	33.24	0.30	2.74	1.09	29.17	9.73	0.94	4.74	7.01	29.54	44.32	0.94	6.74	1.14	31.07	34.10	1.17	8.74	0.83	28.96	107.25	1.47
0.76	3.05	63.07	33.06	0.31	2.76	1.09	28.90	9.55	0.95	4.76	7.19	30.23	45.36	0.94	6.76	1.11	31.26	34.10	1.17	8.76	0.82	27.49	108.04	1.47
0.78	3.14	51.01	33.18	0.31	2.78	1.09	28.39	9.43	0.94	4.78	7.62	29.96	46.95	0.95	6.78	1.11	32.01	34.40	1.17	8.78	0.83	23.13	109.21	1.47
0.80	2.96	55.39	33.36	0.30	2.80	1.10	28.06	9.30	0.94	4.80	8.03	28.96	48.42	0.96	6.80	1.13	31.68	34.71	1.18	8.80	0.87	19.28	110.31	1.48
0.82	2.90	52.20	33.42	0.32	2.82	1.09	28.54	9.18	0.95	4.82	8.32	27.34	49.58	0.97	6.82	1.14	31.14	35.26	1.18	8.82	0.93	16.15	112.33	1.50
0.84	2.97	52.62	33.79	0.33	2.84	1.09	28.40	9.00	0.95	4.84	8.62	27.25	50.69	0.99	6.84	1.19	31.02	36.24	1.18	8.84	0.99	14.83	113.80	1.51
0.86	3.12	48.29	34.46	0.35	2.86	1.09	27.08	8.81	0.94	4.86	8.55	26.46	50.87	0.98	6.86	1.27	29.69	36.73	1.18	8.86	1.04	14.98	114.90	1.51
0.88	3.22	46.09	35.32	0.33	2.88	1.06	27.50	8.63	0.95	4.88	8.19	23.31	50.32	0.99	6.88	1.32	29.85	36.85	1.17	8.88	1.07	16.51	115.70	1.52
0.90	3.31	45.31	35.81	0.35	2.90	1.07	27.11	8.45	0.96	4.90	7.66	21.86	49.46	0.98	6.90	1.34	32.04	36.85	1.18	8.90	1.11	17.59	116.06	1.52
0.92	3.27	44.31	36.06	0.36	2.92	1.11	26.93	8.39	0.94	4.92	7.27	20.81	48.91	0.99	6.92	1.36	33.52	36.73	1.18	8.92	1.13	21.17	116.12	1.53
0.94	3.28	47.05	36.30	0.37	2.94	1.16	25.91	8.39	0.95	4.94	6.88	17.95	48.48	0.98	6.94	1.30	37.52	36.36	1.17	8.94	1.15	23.82	116.25	1.56
0.96	3.26	53.21	36.48	0.37	2.96	1.15	25.05	8.26	0.95	4.96	6.45	16.60	47.81	0.97	6.96	1.31	40.13	36.24	1.18	8.96	1.12	26.68	116.31	1.54
0.98	3.35	61.48	37.03	0.38	2.98	1.18	25.71	8.20	0.96	4.98	5.37	15.70	45.18	0.98	6.98	1.30	45.43	36.12	1.17	8.98	1.13	29.59	116.19	1.53
1.00	3.36	64.57	37.28	0.38	3.00	1.24	27.46	8.20	0.95	5.00	3.57	16.03	40.77	0.99	7.00	1.27	48.22	36.12	1.19	9.00	1.11	32.45	115.76	1.53
1.02	3.29	62.26	37.34	0.43	3.02	1.25	28.15	8.20	0.98	5.02	2.67	20.42	38.63	0.99	7.02	1.25	47.14	36.12	1.15	9.02	1.09	34.01	115.33	1.54
1.04	3.35	54.47	37.65	0.45	3.04	1.31	28.09	8.14	1.00	5.04	2.15	30.91	37.65	0.98	7.04	1.23	46.36	35.87	1.15	9.04	1.04	35.73	115.14	1.54
1.06	3.40	52.39	37.95	0.45	3.06	1.33	28.61	8.14	0.92	5.06	1.95	42.28	37.34	0.97	7.06	1.22	46.63	35.93	1.15	9.06	1.01	35.25	115.14	1.55
1.08	3.48	53.53	38.26	0.44	3.08	1.38	28.61	8.08	0.92	5.08	1.59	62.78	36.30	0.98	7.08	1.23	46.57	36.12	1.16	9.08	0.94	34.04	130.39	1.54
1.10	3.68	52.09	39.30	0.45	3.10	1.36	30.66	7.90	0.92	5.10	1.72	35.82	18.85	1.00	7.10	1.30	43.49	63.72	1.16	9.10	0.94	33.77	130.45	1.54
1.12	3.71	51.37	39.42	0.46	3.12	1.47	25.97	6.61	0.93	5.12	1.67	43.18	18.85	1.01	7.12	1.29	43.33	63.66	1.17	9.12	0.94	32.42	131.18	1.54
1.14	3.46	45.76	34.89	0.45	3.14	1.45	31.20	6.73	0.91	5.14	1.52	51.21	18.79	0.99	7.14	1.26	42.58	63.54	1.17	9.14	0.93	30.22	131.55	1.53
1.16	3.29	54.56	34.59	0.47	3.16	1.43	33.91	6.79	0.92	5.16	1.44	55.60	18.79	1.01	7.16	1.27	41.41	62.81	1.18	9.16	0.94	28.33	132.04	1.55
1.18	3.22	59.71	34.22	0.48	3.18	1.42	33.43	6.79	0.91	5.18	1.49	56.95	19.10	1.02	7.18	1.23	43.60	61.83	1.19	9.18	0.94	26.01	132.84	1.55
1.20	3.28	59.37	34.34	0.48	3.20	1.38	33.13	6.86	0.92	5.20	1.74	56.38	19.77	1.02	7.20	1.19	47.30	61.70	1.20	9.20	0.94	24.99	133.51	1.55
1.22	3.13	57.93	34.04	0.50	3.22	1.40	34.99	7.10	0.92	5.22	2.19	55.33	20.87	1.03	7.22	1.16	50.70	61.52	1.19	9.22	0.92	24.12	134.18	1.54
1.24	2.90	64.09	33.48	0.52	3.24	1.39	35.08	7.10	0.93	5.24	3.13	50.76	22.77	1.04	7.24	1.14	52.86	61.21	1.20	9.24	0.88	21.14	134.92	1.56
1.26	2.77	56.36	33.18	0.52	3.26	1.41	34.72	7.28	0.92	5.26	3.64	53.88	23.38	1.04	7.26	1.13	54.12	61.03	1.19	9.26	0.89	19.76	135.90	1.55
1.28	2.43	47.19	32.26	0.52	3.28	1.40	30.51	7.28	0.94	5.28	3.84	58.21	23.38	1.03	7.28	1.10	55.03	61.21	1.18	9.28	0.88	17.41	136.57	1.56
1.30	2.08	41.84	31.40	0.52	3.30	1.39	30.78	7.53	0.93	5.30	3.90	62.03	23.14	1.04	7.30	1.07	53.40	61.40	1.18	9.30	0.86	14.62	137.86	1.55
1.32	1.87	39.31	30.91	0.52	3.32	1.45	29.70	7.84	0.94	5.32	3.80	61.16	22.59	1.04	7.32	1.05	48.71	61.83	1.17	9.32	0.87	12.66	138.53	1.56
1.34	1.86	41.02	30.79	0.52	3.34	1.50	29.28	7.96	0.93	5.34	3.51	57.85	21.67	1.04	7.34	1.05	44.98	62.07	1.17	9.34	0.86	11.37	133.57	1.57
1.36	1.87	36.21	30.85	0.54	3.36	1.51	30.00	8.02	0.93	5.36	3.23	60.07	20.75	1.03	7.36	1.06	41.04	62.44	1.17	9.36	0.91	8.82	126.35	1.56
1.38	1.81	32.93	30.67	0.56	3.38	1.46	33.16	8.02	0.92	5.38	3.03	65.63	20.14	1.04	7.38	1.05	37.10	62.81	1.18	9.38	0.94	8.19	124.14	1.57
1.40	1.93	34.01	31.16	0.55	3.40	1.53	30.36	8.33	0.92	5.40	2.76	74.94	19.28	1.05	7.40	1.06	34.81	62.87	1.18	9.40	0.94	8.25	123.41	1.57
1.42	1.61	38.22	30.42	0.56	3.42	1.47	29.88	8.20	0.93	5.42	2.40	77.49	18.30	1.04	7.42	1.05	33.94	63.05	1.18	9.42	0.92	9.21	122.55	1.58
1.44	2.04	40.72	29.51	0.56	3.44	1.48	31.57	8.51	0.93	5.44	2.12	74.36	17.63	1.04	7.44	1.03	33.28	63.17	1.18	9.44	0.89	9.99	122.55	1.58
1.46	2.37	39.39	30.12	0.57	3.46	1.47	28.47	8.51	0.93	5.46	1.90	72.85	17.20	1.05	7.46	1.01	32.32	63.17	1.19	9.46	0.89	10.89	122.92	1.59
1.48	1.79	29.98	30.91	0.57	3.48	1.45	26.67	8.51	0.93	5.48	1.88	71.08	18.24	1.04	7.48	1.02	32.95	63.54	1.19	9.48	0.88	10.38	123.53	1.59
1.50	1.09	39.36	30.18	0.58	3.50	1.41	26.49	8.51	0.93	5.50	1.73	61.85	19.28	1.03	7.50	1.01	33.13	63.60	1.19	9.50	0.90	9.69	124.94	1.59
1.52	1.03	45.61	29.69	0.59	3.52	1.44	24.54	8.69	0.93	5.52	1.61	56.76	20.14	1.05	7.52	1.01	33.40	63.97	1.18	9.52	0.92	9.51	125.98	1.58
1.54	0.91	40.83	28.89	0.59	3.54	1.42	24.51	8.81	0.93	5.54	1.56	51.68	20.69	1.06	7.54	1.02	31.20	64.64	1.20	9.54	0.93	8.58	127.14	1.59
1.56	0.79	35.84	28.16	0.58	3.56	1.52	21.95	9.24	0.93	5.56	1.55	48.49	21.67	1.07	7.56	1.01	30.69	65.32	1.21	9.56	0.94	8.82	128.55	1.59
1.58	0.72	36.44	27.67	0.60	3.58	1.57	21.56	9.37	0.93	5.58	1.55	46.57	23.14	1.09	7.58	1.01	29.28	66.17	1.21	9.58	0.98	9.03	129.41	1.61
1.60	0.68	40.80	27.12	0.61	3.60	1.80	22.55	10.10	0.94	5.60	1.56	40.62	24.12	1.09	7.60	1.05	27.62	66.85	1.23	9.60	0.95	10.96	130.45	1.62
1.62	0.72	36.62	26.75	0.61	3.62	2.74	22.35	12.49	0.94	5.62	1.51	38.15	24.61	1.09	7.62	1.06	24.62	67.58	1.23	9.62	0.93	11.86	131.00	1.61
1.64	0.72	28.42	26.08	0.62	3.64	3.85	27.13	15.00	0.93	5.64	1.46	39.08	25.04	1.08	7.64	1.03	24.41	67.83	1.23	9.64	0.91	12.43	131.18	1.61
1.66	0.88	24.33	26.51	0.63	3.66	4.77	29.77	16.59	0.93	5.66	1.46	39.29	25.40	1.11	7.66	1.00	23.14	67.83	1.23	9.66	0.90	11.98	132.04	1.62
1.68	1.03	19.24	26.32	0.63	3.68	4.97	42.91	16.90	0.92	5.68	1.42	36.44	25.71	1.10	7.68	0.98	21.16	68.07	1.24	9.68	0.92	11.26	133.57	1.64
1.70	1.02	10.59	26.14	0.64	3.70	5.06	50.91	16.83	0.92	5.70	1.40	35.33	25.71	1.11	7.70	0.96	21.16	68.62	1.22	9.70	0.96	9.67	135.65	1.63
1.72	0.99	14.47	24.61	0.66	3.72	5.17	67.54	16.90	0.91	5.72	1.37	33.97	25.34	1.11	7.72	0.96	19.81	69.11	1.24	9.72	1.14	6.99	139.63	1.64
1.74	1.30	10.59	26.02	0.67	3.74	5.08	80.43	16.71	0.91	5.74	1.32	37.91	25.10	1.12	7.74	1.01	20.95	69.60	1.24	9.74	1.35	7.41	143.06	1.64
1.76	1.50	4.49	26.14	0.68	3.76	4.82	94.10	16.22	0.92	5.76	1.28	39.72	24.98	1.12	7.76	1.06	23.21	70.46	1.24	9.76	1.62	10.45	145.32	1.64
1.78	2.36	2.73	27.73	0.69	3.78	4.37	108.83	15.30	0.93	5.78	1.26	41.25	24.85	1.12	7.78	1.14	23.54	71.44	1.24	9.78	1.79	13.49	144.89	1.66
1.80	2.68	0.73	28.22	0.70	3.80	3.79	123.13	14.26	0.94	5.80	1.26	42.85	24.79	1.13	7.80	1.19	24.20	72.05	1.25	9.80	1.79	17.54	138.41	1.66
1.82	2.27	3.86	25.34	0.72	3.82	3.36	131.20	13.59	0.93	5.82	1.30	41.43	24.98	1.13	7.82	1.23	26.18	72.78	1.26	9.82	1.74	18.99	133.02	1.67
1.84	2.00	18.38	27.24	0.73	3.84	3.46	130.38	13.83	0.93	5.84	1.36	41.71	25.04	1.13	7.84	1.29	30.42	73.89	1.26	9.84	1.61	20.43	130.69	1.69
1.86	1.89	17.48	27.79	0.74	3.86	4.48	129.55	16.83	0.93	5.86	1.38	42.07	25.16	1.13	7.86	1.31	30.09	74.56	1.26	9.86	1.40	23.95	128.43	1.69
1.88	1.56	36.25	27.18	0.75	3.88	7.03	121.15	22.65	0.92	5.88	1.39	41.44	25.34	1.14	7.88	1.31	29.10	75.23	1.28	9.88	1.22	25.48	126.96	1.70
1.90	1.43	35.32	26.32	0.75	3.90	8.38	107.09	24.98	0.93	5.90	1.40	41.59	25.16	1.14	7.90	1.32	31.36	75.91	1.28	9.90	1.07	21.87	126.78	1.71
1.92	1.33	35.32	26.14	0.76	3.92	8.51	101.70	25.34	0.95	5.92	1.36	41.59	25.10	1.15	7.92	1.31	33.34	75.78	1.28	9.92	1.07	20.22	130.33	1.72
1.94	1.28	43.11	25.83	0.79	3.94	8.36	98.02	25.28	0.96	5.94	1.36	40.45	25.10	1.16	7.94	1.30	36.41	75.42	1.29	9.94	1.37	17.94	143.24	1.73
1.96	0.85	44.28	22.96	0.80	3.96	7.90	90.16	24.67	0.95	5.96	1.37	42.40	24.79	1.15	7.96	1.27	39.03	75.66	1.29	9.96	1.74	16.46	144.77	1.74
1.98	1.27	46.12	24.42	0.80	3.98	7.17	69.52	23.57	0.94	5.98	1.33	44.03	24.55	1.14	7.98	1.28	40.20	75.84	1.29	9.98	2.10	20.64	137.18	1.74
2.00	1.21	32.95	22.89	0.81	4.00	6.75	46.45	22.96	0.96	6.00	1.35	45.32	24.42	1.13	8.00	1.27	42.72	75.91	1.30	10.00	2.76	24.40	113.61	1.73

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COMMITTENTE:
CANTIERE: Via Don Eugenio Servadei - San Giorgio (FC)
COMMESSA: C054/24
RDP N°: 203/24
DATA: 12/09/2024

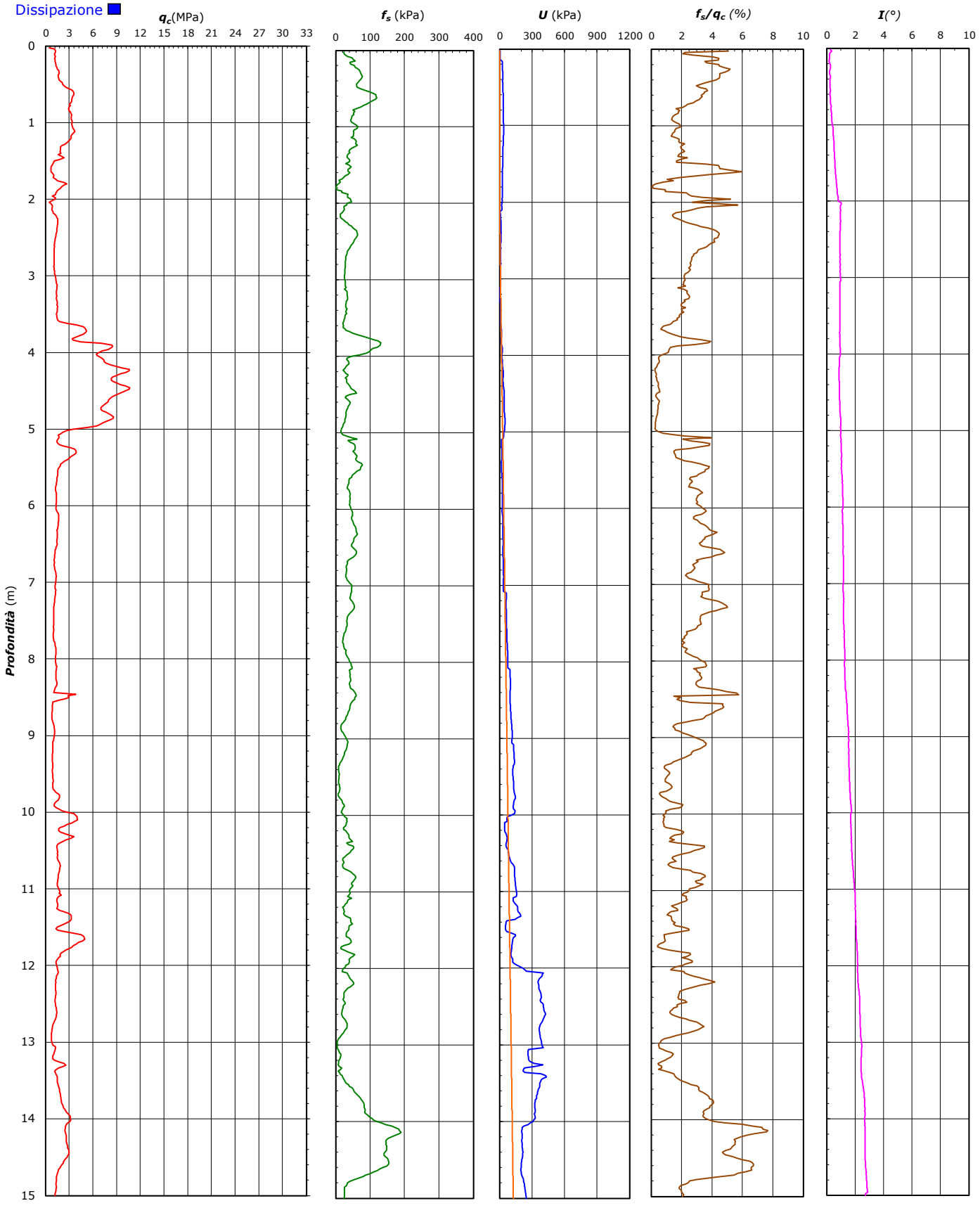
PROVA N°: CPTU 2
PROF. FALDA (m da p.c.): 2.05
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	3.57	27.59	71.31	1.68	12.02	1.47	20.61	233.78	2.17	14.02	3.18	132.36	283.42	2.66										
10.04	3.84	33.93	68.56	1.67	12.04	1.51	19.49	248.47	2.17	14.04	3.01	146.20	262.12	2.68										
10.06	4.01	32.10	67.52	1.67	12.06	1.54	33.20	404.93	2.15	14.06	2.74	163.16	225.33	2.69										
10.08	4.03	34.03	72.91	1.68	12.08	1.63	35.94	396.43	2.17	14.08	2.62	174.03	207.88	2.68										
10.10	4.04	31.32	47.38	1.69	12.10	1.58	38.13	392.38	2.19	14.10	2.53	184.07	208.19	2.69										
10.12	3.74	30.27	45.79	1.68	12.12	1.47	40.60	380.51	2.19	14.12	2.51	184.46	206.48	2.69										
10.14	3.32	27.95	45.85	1.70	12.14	1.41	44.08	366.98	2.18	14.14	2.46	189.15	206.29	2.69										
10.16	2.75	22.90	46.46	1.70	12.16	1.35	47.90	358.53	2.19	14.16	2.45	185.49	207.76	2.69										
10.18	2.34	23.05	46.28	1.69	12.18	1.31	51.39	354.86	2.20	14.18	2.53	172.07	207.15	2.70										
10.20	1.82	29.88	46.46	1.71	12.20	1.27	53.07	358.78	2.20	14.20	2.58	163.08	208.01	2.70										
10.22	1.64	32.52	52.15	1.70	12.22	1.30	48.74	362.94	2.21	14.22	2.61	153.95	207.70	2.70										
10.24	1.67	35.80	58.03	1.71	12.24	1.29	42.10	364.96	2.22	14.24	2.61	147.28	206.72	2.70										
10.26	1.88	38.78	62.26	1.71	12.26	1.25	35.39	364.96	2.22	14.26	2.66	145.42	206.66	2.69										
10.28	2.53	38.11	67.09	1.73	12.28	1.26	31.36	366.12	2.24	14.28	2.64	146.57	207.27	2.70										
10.30	3.05	40.34	70.21	1.73	12.30	1.28	27.60	374.02	2.25	14.30	2.65	146.41	208.62	2.69										
10.32	3.62	44.51	68.38	1.74	12.32	1.29	24.23	379.16	2.26	14.32	2.69	148.05	209.60	2.70										
10.34	3.23	49.05	65.99	1.72	12.34	1.29	24.41	383.75	2.27	14.34	2.75	148.60	210.64	2.70										
10.36	2.66	31.76	63.42	1.74	12.36	1.31	23.90	385.35	2.29	14.36	2.80	148.93	211.80	2.70										
10.38	2.19	36.81	61.34	1.73	12.38	1.30	23.75	386.81	2.30	14.38	2.83	147.37	213.09	2.69										
10.40	1.84	50.31	60.85	1.75	12.40	1.26	21.89	381.37	2.31	14.40	2.92	143.60	216.27	2.70										
10.42	1.53	53.59	64.28	1.75	12.42	1.24	22.61	375.80	2.31	14.42	2.98	140.12	215.35	2.70										
10.44	1.44	50.19	71.87	1.76	12.44	1.21	26.70	378.49	2.33	14.44	2.98	141.28	214.80	2.70										
10.46	1.44	45.89	78.42	1.76	12.46	1.19	28.14	399.55	2.32	14.46	2.95	144.71	211.74	2.69										
10.48	1.49	42.01	82.33	1.77	12.48	1.22	23.12	403.77	2.32	14.48	2.82	151.34	208.56	2.69										
10.50	1.48	37.74	84.41	1.77	12.50	1.29	21.98	406.22	2.32	14.50	2.72	152.74	205.13	2.71										
10.52	1.52	32.47	86.43	1.78	12.52	1.28	22.04	408.24	2.33	14.52	2.56	154.32	203.78	2.71										
10.54	1.50	26.64	88.21	1.78	12.54	1.31	19.30	410.63	2.33	14.54	2.40	155.50	202.01	2.71										
10.56	1.54	22.04	91.64	1.78	12.56	1.35	18.49	414.36	2.33	14.56	2.31	153.19	202.93	2.73										
10.58	1.51	20.65	95.00	1.78	12.58	1.39	17.44	420.18	2.33	14.58	2.21	148.56	201.33	2.73										
10.60	1.48	22.52	100.94	1.79	12.60	1.45	17.53	424.71	2.33	14.60	2.05	137.90	199.19	2.73										
10.62	1.52	24.80	107.80	1.80	12.62	1.44	19.39	417.61	2.33	14.62	1.96	128.98	198.33	2.73										
10.64	1.66	20.86	122.12	1.80	12.64	1.40	21.56	411.73	2.35	14.64	1.83	120.76	197.05	2.74										
10.66	1.80	19.81	131.98	1.81	12.66	1.35	25.47	405.67	2.35	14.66	1.68	111.08	199.50	2.75										
10.68	1.86	21.91	138.41	1.82	12.68	1.30	29.55	398.57	2.34	14.68	1.62	99.91	202.44	2.76										
10.70	1.87	26.81	137.79	1.84	12.70	1.24	30.79	390.73	2.34	14.70	1.54	87.58	205.44	2.78										
10.72	1.84	36.01	137.61	1.84	12.72	1.13	33.92	381.73	2.35	14.72	1.47	80.61	209.84	2.77										
10.74	1.78	45.84	137.73	1.85	12.74	1.08	34.10	376.59	2.35	14.74	1.43	66.28	216.82	2.78										
10.76	1.79	48.55	137.67	1.86	12.76	1.00	33.49	371.08	2.36	14.76	1.40	54.91	219.94	2.80										
10.78	1.71	55.80	138.90	1.87	12.78	0.94	32.62	368.63	2.36	14.78	1.39	41.23	223.31	2.81										
10.80	1.66	58.32	140.12	1.87	12.80	0.87	28.74	367.10	2.37	14.80	1.38	34.71	226.49	2.80										
10.82	1.63	58.14	141.59	1.88	12.82	0.85	26.22	367.59	2.37	14.82	1.36	32.96	228.57	2.81										
10.84	1.61	53.81	143.06	1.89	12.84	0.82	23.03	370.78	2.37	14.84	1.33	30.32	231.27	2.82										
10.86	1.58	51.56	144.47	1.91	12.86	0.78	19.12	371.63	2.38	14.86	1.33	26.29	233.23	2.82										
10.88	1.58	46.02	144.96	1.91	12.88	0.77	15.70	374.02	2.38	14.88	1.37	25.03	236.17	2.83										
10.90	1.56	46.86	145.51	1.92	12.90	0.74	12.24	376.71	2.38	14.90	1.37	25.42	239.23	2.83										
10.92	1.48	50.35	147.65	1.93	12.92	0.75	9.23	379.53	2.39	14.92	1.31	26.15	239.35	2.85										
10.94	1.48	46.92	149.06	1.93	12.94	0.76	6.56	383.33	2.40	14.94	1.29	25.64	240.57	2.85										
10.96	1.49	43.25	151.81	1.94	12.96	0.76	5.14	386.20	2.41	14.96	1.24	25.28	242.04	2.86										
10.98	1.59	40.34	154.20	1.95	12.98	0.77	4.78	389.39	2.45	14.98	1.20	25.61	244.80	2.73										
11.00	1.65	40.79	155.48	1.96	13.00	0.82	4.48	393.24	2.45	15.00	1.19	24.50	246.51	2.74										
11.02	1.75	42.38	157.69	1.98	13.02	0.89	4.36	398.26	2.46															
11.04	1.81	38.80	157.50	1.99	13.04	0.94	4.85	403.22	2.46															
11.06	1.73	34.92	157.02	1.99	13.06	1.29	7.13	268.85	2.46															
11.08	1.99	45.95	126.53	2.00	13.08	1.25	9.66	264.63	2.46															
11.10	1.64	37.68	124.94	2.00	13.10	1.20	11.37	262.00	2.45															
11.12	1.50	35.43	126.78	2.00	13.12	1.13	15.25	261.57	2.44															
11.14	1.44	33.05	134.43	2.01	13.14	1.09	15.73	262.67	2.44															
11.16	1.44	27.82	147.77	2.00	13.16	1.04	14.26	266.16	2.44															
11.18	1.49	25.59	159.59	2.01	13.18	0.95	12.00	269.22	2.43															
11.20	1.56	21.05	166.63	2.01	13.20	0.90	9.93	273.45	2.42															
11.22	1.53	22.89	168.16	2.02	13.22	0.93	8.43	285.75	2.43															
11.24	1.47	24.96	168.71	2.01	13.24	1.15	8.10	323.27	2.41															
11.26	1.44	25.29	173.18	2.02	13.26	1.79	7.95	402.42	2.41															
11.28	1.77	22.71	184.38	2.02	13.28	2.36	11.16	342.92	2.41															
11.30	2.32	26.22	193.81	2.03	13.30	2.56	17.81	230.72	2.41															
11.32	2.95	30.46	196.31	2.02	13.32	2.20	15.31	221.23	2.41															
11.34	3.21	42.10	167.18	2.03	13.34	1.67	7.95	216.88	2.42															
11.36	3.23	43.60	142.45	2.03	13.36	1.30	10.77	232.13	2.43															
11.38	3.24	43.81	67.76	2.04	13.38	1.15	13.96	384.49	2.43															
11.40	3.28	45.59	60.36	2.05	13.40	1.28	19.19	425.38	2.43															
11.42	3.11	49.19	58.21	2.06	13.42	1.35	20.97	430.34	2.44															
11.44	2.73	39.51	56.93	2.05	13.44	1.46	23.64	396.18	2.44															
11.46	2.40	38.58	55.52	2.05	13.46	1.48	25.78	385.41	2.46															
11.48	1.88	39.33	54.24	2.06	13.48	1.48	28.12	378.00	2.48															
11.50	1.51	37.31	54.97	2.06	13.50	1.49	31.43	370.96	2.50															
11.52	1.33	33.11	66.42	2.07	13.52	1.51	36.90	372.49	2.51															
11.54	1.57	31.48	106.88	2.06	13.54	1.55	40.45	373.22	2.53															
11.56	2.42	31.15	147.04	2.06	13.56	1.60	48.32	366.61	2.55															
11.58	3.67	30.52	148.63	2.08	13.58	1.64	51.75	359.64	2.56															
11.60	4.49	38.63	129.53	2.07	13.60	1.70	53.07	355.60	2.58															
11.62	4.83	42.06	123.78	2.08	13.62	1.77	56.17	350.82	2.60															
11.64	4.94	44.65	120.10	2.08	13.64	1.79	60.74	349.41	2.60															
11.66	4.94	45.31	119.49	2.09	13.66	1.84	64.88	340.29	2.63															
11.68	4.70	38.12	117.59	2.10	13.68	1.87	69.54	342.25	2.63															
11.70	4.18	24.26	114.90	2.12	13.70	1.90	72.19	342.50	2.65															
11.72	3.89	16.53	113.86	2.13	13.72	1.98	75.66	330.31	2.65															
11.74	3.56	15.51	112.76	2.14	13.74	1.97	79.71	328.54	2.67															
11.76	3.30	24.92	111.29	2.14	13.76	2.00	81.75	326.70	2.67															
11.78	2.98	34.45	109.33	2.14	13.78	2.01	82.54	326.52	2.67															
11.80	2.56	44.61	106.88	2.14	13.80	2.07	83.05	325.17	2.68															
11.82	2.21	56.16	105.47	2.15	13.82	2.16	83.41	325.17	2.67															
11.84	1.96	50.59	105.41	2.16	13.84	2.23	86.15	329.46	2.68															
11.86	1.84	43.47	113.19	2.17	13.86	2.32	85.14	331.72	2.70															
11.88	1.90	38.93	120.84	2.16	13.88	2.44	84.78	328.05	2.68															
11.90	1.64	39.50	120.47	2.17	13.90	2.56	87.85	322.60	2.68															
11.92	1.48	39.95	123.35	2.18	13.92	2.68	93.05	323.76	2.69															
11.94	1.39	37.66	133.75	2.17	13.94	2.90	99.22	328.23	2.70															
11.96	1.33	30.08	162.34	2.17	13.96	3.09	104.94	329.52	2.70															
11.98	1.35	28.07	190.13	2.18	13.98	3.12	110.88	317.83	2.67															
12.00	1.39	23.37	212.17	2.16	14.00	3.17	119.33	309.13	2.67															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Don Eugenio Servadei - San Giorgio (FC)
COMMESSA: C054/24
RDP N°: 203/24
DATA: 12/09/2024

PROVA N°: CPTU 2
PROF. FALDA (m da p.c.): 2.05
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 2
CANTIERE:	Via Don Eugenio Servadei - San Giorgio (FC)	PROF. FALDA (m da p.c.):	2.05
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	203/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	12/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Don Eugenio Servadei - San Giorgio (FC)
Lat.: 44.252909°
Long.: 12.082235°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Massimiliano Kolbe - Roncadello (FC)
COMMESSA: C054/24
RDP N°: 223/24
DATA: 24/09/2024

PROVA N°: CPTU 3
PROF. FALDA (m da p.c.): 2.55
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.93	32.40	28.42	0.32	2.02	6.18	93.51	26.29	1.47	4.02	1.55	58.78	14.34	2.17	6.02	0.75	51.89	52.45	2.85	8.02	0.60	13.45	144.26	3.30
0.04	1.98	37.81	29.30	0.31	2.04	6.50	86.63	25.53	1.48	4.04	1.53	57.59	14.90	2.19	6.04	0.73	52.97	52.26	2.85	8.04	0.80	12.91	149.92	3.31
0.06	2.13	44.33	31.57	0.20	2.06	6.48	72.09	23.33	1.48	4.06	1.54	56.14	15.16	2.20	6.06	0.67	53.17	51.75	2.86	8.06	1.14	12.43	153.82	3.30
0.08	2.29	51.13	35.91	0.28	2.08	6.22	60.39	20.81	1.49	4.08	1.53	55.12	14.90	2.19	6.08	0.63	52.46	51.38	2.87	8.08	1.47	12.51	151.30	3.30
0.10	2.50	56.03	37.04	0.20	2.10	5.94	51.97	18.49	1.49	4.10	1.51	56.34	15.09	2.19	6.10	0.61	50.96	52.51	2.87	8.10	1.93	25.48	109.04	3.31
0.12	2.58	64.62	35.28	0.10	2.12	5.53	40.35	15.09	1.51	4.12	1.47	55.44	14.84	2.20	6.12	0.59	47.42	69.43	2.90	8.12	1.99	27.63	91.18	3.30
0.14	2.57	69.47	32.57	0.17	2.14	5.23	30.75	13.02	1.52	4.14	0.98	63.54	32.32	2.33	6.14	0.56	45.86	67.48	2.91	8.14	1.90	32.22	77.79	3.31
0.16	2.60	40.14	31.57	0.06	2.16	4.51	25.59	18.05	1.59	4.16	0.91	64.33	29.05	2.34	6.16	0.53	42.15	66.41	2.91	8.16	1.63	32.39	71.00	3.32
0.18	2.78	49.69	32.51	0.22	2.18	3.90	28.29	11.95	1.58	4.18	0.85	64.62	28.17	2.33	6.18	0.49	37.33	66.34	2.91	8.18	1.32	28.79	66.72	3.32
0.20	2.63	53.54	28.17	0.38	2.20	3.38	31.66	8.49	1.60	4.20	0.82	63.34	27.80	2.35	6.20	0.47	34.01	67.79	2.90	8.20	1.00	26.58	65.34	3.34
0.22	2.59	60.96	26.35	0.50	2.22	3.14	35.97	7.29	1.59	4.22	0.80	60.74	27.80	2.37	6.22	0.47	29.93	69.30	2.90	8.22	0.66	25.22	66.47	3.34
0.24	2.50	66.38	23.27	0.29	2.24	2.93	42.12	5.60	1.60	4.24	0.81	57.67	29.18	2.37	6.24	0.46	24.78	69.61	2.92	8.24	0.60	22.08	79.74	3.34
0.26	2.46	70.49	23.14	0.37	2.26	2.68	47.59	3.90	1.60	4.26	0.83	55.12	30.56	2.36	6.26	0.42	20.95	69.55	2.92	8.26	0.82	18.03	104.58	3.35
0.28	2.40	70.88	22.14	0.49	2.28	2.50	52.94	3.65	1.61	4.28	0.83	50.05	31.38	2.38	6.28	0.41	17.95	70.43	2.92	8.28	1.24	16.24	120.24	3.37
0.30	2.33	74.34	17.36	0.49	2.30	2.44	48.29	4.02	1.60	4.30	0.86	45.63	31.76	2.39	6.30	0.42	14.06	73.64	2.91	8.30	1.77	15.25	128.98	3.37
0.32	2.28	75.45	15.03	0.48	2.32	2.30	48.49	2.96	1.62	4.32	0.85	43.70	31.63	2.39	6.32	0.49	10.47	74.90	2.91	8.32	2.28	19.05	112.38	3.38
0.34	2.31	73.35	15.97	0.40	2.34	2.19	50.50	1.51	1.62	4.34	0.84	43.13	30.88	2.40	6.34	0.51	9.02	74.90	2.92	8.34	2.43	29.70	88.92	3.37
0.36	2.39	71.37	17.29	0.50	2.36	2.07	55.15	1.64	1.63	4.36	0.80	43.08	30.44	2.40	6.36	0.51	9.36	74.96	2.92	8.36	2.42	30.95	82.00	3.37
0.38	2.55	68.37	19.75	0.50	2.38	2.03	55.27	3.96	1.62	4.38	0.79	43.19	30.50	2.40	6.38	0.53	10.27	75.53	2.93	8.38	2.29	33.86	76.22	3.37
0.40	2.60	66.28	22.26	0.53	2.40	2.04	48.49	5.60	1.65	4.40	0.79	43.58	31.07	2.42	6.40	0.53	11.20	76.34	2.93	8.40	2.03	35.31	70.05	3.37
0.42	2.79	61.57	23.14	0.48	2.42	1.98	45.38	3.58	1.65	4.42	0.80	44.49	32.01	2.43	6.42	0.57	11.32	77.54	2.93	8.42	1.71	32.84	67.92	3.39
0.44	2.88	61.69	19.87	0.56	2.44	1.88	43.31	3.02	1.65	4.44	0.80	44.43	32.51	2.43	6.44	0.59	11.55	78.23	2.93	8.44	1.47	27.29	66.78	3.40
0.46	3.14	64.04	27.10	0.53	2.46	1.83	39.37	3.71	1.67	4.46	0.82	43.04	33.14	2.45	6.46	0.59	13.39	77.98	2.93	8.46	1.32	29.90	66.41	3.38
0.48	3.51	68.64	24.40	0.58	2.48	1.84	33.87	5.79	1.68	4.48	0.84	42.70	32.95	2.44	6.48	0.61	15.63	78.17	2.93	8.48	1.29	32.42	70.12	3.39
0.50	3.42	71.30	19.62	0.61	2.50	1.84	28.57	7.11	1.67	4.50	0.85	42.87	33.01	2.46	6.50	0.61	17.13	79.24	2.95	8.50	1.25	30.77	76.72	3.40
0.52	3.53	72.95	25.22	0.64	2.52	1.81	27.02	7.92	1.67	4.52	0.85	43.10	33.77	2.46	6.52	0.61	16.87	81.69	2.95	8.52	1.14	31.34	67.35	3.41
0.54	3.52	77.32	18.61	0.66	2.54	1.79	27.10	8.30	1.69	4.54	0.87	42.17	34.59	2.48	6.54	0.69	15.40	82.63	2.95	8.54	0.92	31.91	62.70	3.41
0.56	3.34	84.52	16.04	0.64	2.56	1.78	28.46	9.43	1.70	4.56	0.87	40.97	34.40	2.48	6.56	0.71	15.54	81.37	2.96	8.56	0.73	30.29	64.27	3.42
0.58	3.29	89.68	17.17	0.66	2.58	1.81	28.52	11.00	1.71	4.58	0.85	41.63	33.77	2.48	6.58	0.68	16.17	80.93	2.96	8.58	0.58	26.97	80.43	3.42
0.60	3.28	92.54	14.34	0.65	2.60	1.80	31.86	12.39	1.70	4.60	0.78	43.38	33.01	2.48	6.60	0.69	17.59	82.57	2.97	8.60	0.59	21.11	105.33	3.43
0.62	3.33	93.73	12.77	0.70	2.62	1.84	32.69	13.27	1.71	4.62	0.74	43.72	33.39	2.50	6.62	0.70	18.83	84.71	2.98	8.62	0.82	17.68	122.94	3.43
0.64	3.43	95.47	13.58	0.73	2.64	1.86	35.92	13.39	1.72	4.64	0.72	41.54	33.96	2.50	6.64	0.71	18.27	85.40	2.98	8.64	1.51	14.14	137.72	3.44
0.66	3.71	92.92	15.91	0.74	2.66	1.93	39.72	14.46	1.73	4.66	0.73	40.01	34.59	2.51	6.66	0.70	17.73	84.01	2.99	8.66	2.27	14.90	127.34	3.46
0.68	3.49	81.07	11.70	0.73	2.68	1.97	41.68	15.16	1.73	4.68	0.74	38.42	35.66	2.51	6.68	0.68	18.41	84.52	3.00	8.68	3.07	22.83	104.39	3.46
0.70	3.41	72.46	10.06	0.77	2.70	2.01	42.70	15.16	1.74	4.70	0.76	36.73	35.66	2.53	6.70	0.64	19.23	85.65	3.01	8.70	3.92	30.03	94.83	3.46
0.72	3.58	65.46	12.20	0.79	2.72	1.96	45.05	14.02	1.74	4.72	0.73	35.99	35.34	2.54	6.72	0.64	18.24	86.72	3.01	8.72	4.51	31.99	87.41	3.47
0.74	3.40	57.02	8.74	0.81	2.74	1.93	47.15	13.96	1.74	4.74	0.75	35.28	35.84	2.55	6.74	0.67	17.02	87.10	3.02	8.74	4.76	34.85	84.08	3.47
0.76	3.13	51.56	6.67	0.84	2.76	2.04	50.64	15.28	1.75	4.76	0.75	33.69	37.67	2.55	6.76	0.65	16.34	86.97	3.02	8.76	4.98	40.77	80.37	3.48
0.78	3.21	52.69	4.72	0.81	2.78	2.12	53.73	16.54	1.77	4.78	0.78	30.18	39.11	2.55	6.78	0.71	16.54	88.35	3.03	8.78	5.03	36.55	79.74	3.46
0.80	3.19	51.45	5.97	0.87	2.80	2.21	55.17	15.41	1.77	4.80	0.84	27.43	39.68	2.54	6.80	0.74	18.78	88.35	3.03	8.80	5.08	29.32	80.87	3.46
0.82	3.23	51.19	9.81	0.87	2.82	2.23	57.33	11.32	1.79	4.82	0.87	25.02	40.37	2.55	6.82	0.75	21.73	87.66	3.03	8.82	5.01	19.54	75.27	3.47
0.84	2.99	46.29	5.16	0.87	2.84	2.23	57.84	8.55	1.80	4.84	0.83	21.45	37.54	2.57	6.84	0.69	25.92	86.22	3.05	8.84	4.47	16.96	72.57	3.46
0.86	2.85	54.20	3.96	0.86	2.86	2.31	53.28	8.68	1.80	4.86	0.78	17.80	36.60	2.57	6.86	0.64	28.93	83.20	3.05	8.86	3.69	16.26	69.05	3.47
0.88	2.78	61.63	2.96	0.94	2.88	2.52	46.20	8.74	1.81	4.88	0.74	14.91	35.22	2.58	6.88	0.58	32.07	80.56	3.06	8.88	2.89	13.68	66.34	3.46
0.90	2.66	55.51	1.95	0.89	2.90	2.63	40.96	6.54	1.81	4.90	0.76	12.08	38.23	2.58	6.90	0.51	37.43	79.61	3.07	8.90	2.16	13.11	63.58	3.47
0.92	2.53	51.85	0.63	0.96	2.92	2.68	36.91	5.28	1.82	4.92	0.95	11.12	44.52	2.58	6.92	0.49	39.16	81.62	3.07	8.92	1.61	16.91	62.57	3.49
0.94	2.48	49.53	0.50	0.95	2.94	2.62	34.53	3.46	1.82	4.94	1.36	10.92	47.16	2.60	6.94	0.46	38.48	86.72	3.07	8.94	1.24	29.09	67.41	3.48
0.96	2.43	47.92	0.82	0.94	2.96	2.45	31.38	1.45	1.83	4.96	1.65	14.26	42.89	2.61	6.96	0.47	35.25	89.61	3.08	8.96	1.03	36.80	78.17	3.48
0.98	2.43	45.06	0.82	1.01	2.98	2.02	24.61	2.01	1.83	4.98	1.70	19.87	38.36	2.61	6.98	0.52	31.85	90.62	3.08	8.98	1.48	33.03	112.94	3.50
1.00	2.55	44.41	3.52	0.98	3.00	1.79	20.31	3.65	1.83	5.00	1.62	24.83	31.82	2.60	7.00	0.60	26.72	92.82	3.08	9.00	1.73	30.19	112.38	3.50
1.02	2.92	43.58	5.47	1.04	3.02	1.65	20.57	5.09	1.84	5.02	1.62	25.60	26.91	2.61	7.02	0.60	20.49	93.45	3.08	9.02	1.82	32.34	88.73	3.52
1.04	2.46	43.78	5.85	1.03	3.04	1.49	24.65	6.60	1.84	5.04	1.69	24.04	26.91	2.61	7.04	0.59	15.84	92.38	3.09	9.04	1.60	38.01	76.72	3.54
1.06	2.33	50.50	5.53	1.02	3.06	1.45	27.88	4.59	1.85	5.06	1.86	24.73	26.10	2.62	7.06	0.58	12.32	94.08	3.08	9.06	1.19	38.83	73.95	3.54
1.08	2.35	53.51	4.40	1.02	3.08	1.47	25.47	2.20	1.86	5.08	1.98	28.50	22.26	2.61	7.08	0.62	9.41	97.16	3.09	9.08	0.90	33.79	70.18	3.53
1.10	2.69	54.13	1.82	1.09	3.10	1.58	18.93	2.45	1.87	5.10	2.01	28.02	19.24	2.61	7.10	0.70	7.76	98.16	3.08	9.10	0.88	44.67	95.90	3.54
1.12	3.39	59.06	10.06	1.08	3.12	1.62	16.21	4.40	1.87	5.12	1.85	25.18	16.10	2.61	7.12	0.75	13.42	117.16	3.10	9.12	0.82	47.96	102.00	3.54
1.14	4.00	62.18	15.53	1.12	3.14	1.64	14.97	5.60	1.89	5.14	1.68	18.00	20.44	2.62	7.14	0.76	15.38	117.47	3.11	9.14	0.73	44.56	112.82	3.55
1.16	4.35	63.54	24.71	1.17	3.16	1.53	24.86	9.31	1.92	5.16	1.44	14.35	16.73	2.63	7.16	0.77	19.66	117.97	3.11	9.16	0.69	40.56	112.94	3.55
1.18	4.75	77.62	22.89	1.19	3.18	1.54	30.08	8.55	1.94	5.18	1.18	11.74	13.39	2.64	7.18	0.79	23.85	117.97	3.12	9.18	0.65	35.91	109.61	3.56
1.20	4.82	94.12	21.82	1.19	3.20	1.54	34.84	8.24	1.94	5.20	0.94	11.46	10.56	2.62	7.20	0.76	27.14	117.53	3.14	9.20	0.63	34.33	115.90	3.57
1.22	4.55	110.61	18.74	1.24	3.22	1.54	40.00	8.24	1.96	5.22	0.79	11.97	9.68	2.64	7.22	0.74	30.42	118.29	3.13	9.22	0.64	31.98	122.69	3.56
1.24	4.15	118.71	14.40	1.23	3.24	1.59	44.19	9.12	1.97	5.24	0.68	12.93	10.25	2.65	7.24	0.71	35.67	117.97	3.14	9.24	0.79	30.02	128.91	3.57
1.26	3.74	130.67	10.38	1.26	3.26	1.61	47.96	9.24	1.97	5.26	0.61	12.73	14.27	2.66	7.26	0.68	39.12	117.09	3.15	9.26	1.22	28.89	135.64	3.57
1.28	3.32	132.12	7.42	1.26	3.28	1.61	50.12	8.43	1.98	5.28	0.58	11.74	19.56	2.67	7.28	0.64	40.74	117.16	3.16	9.28	1.92	27.50	127.22	3.58
1.30	3.13	125.74	5.72	1.29	3.30	1.59	52.35	6.92	1.99	5.30	0.58	9.67	24.78	2.67	7.30	0.63	40.65	117.66	3.16	9.30	2.12	27.30	100.62	3.59
1.32	3.03	112.37	5.22	1.32	3.32	1.54	55.30	5.28	2.00	5.32	0.59	8.34	28.05	2.68	7.32	0.59	40.09	118.48	3.17	9.32	2.04	27.50	87.98	3.59
1.34	2.95	97.91	4.40	1.29	3.34	1.48	57.57	3.84	1.99	5.34	0.58	7.12	31.32	2.68	7.34	0.54	38.95	118.98	3.17	9.34	1.75	27.21	85.59	3.61
1.36	2.85	90.46	3.14	1.32	3.36	1.43	57.48	2.33	2.00	5.36	0.64	7.04	35.09	2.70	7.36	0.51	36.97	118.85	3.17	9.36	1.59	22.62	83.01	3.62
1.38	2.63	86.12	0.94	1.34	3.38	1.42	58.36	2.01	2.01	5.38	0.69	8.26	37.48	2.69	7.38	0.47	33.17	119.23	3.18	9.38	1.44	20.61	83.01	3.63
1.40	2.46	80.06	0.31	1.29	3.40	1.40	58.02	2.45	2.01	5.40	0.72	9.62	38.80	2.70	7.40	0.46	30.20	120.43	3.19	9.40	1.51	27.38	88.92	3.64
1.42	2.38	75.66	0.06	1.32	3.42	1.43	56.78	3.08	2.02	5.42	0.74	13.19	40.37	2.71	7.42	0.45	26.91	121.49	3.20	9.42	1.99	32.57	107.28	3.66
1.44	2.36	72.66	0.44	1.33	3.44	1.44	54.71	3.40	2.03	5.44	0.73	16.96	40.56	2.70	7.44	0.43	23.62	122.56	3.19	9.44	2.13	37.13	107.22	3.66
1.46	2.36	69.60	0.63	1.32	3.46	1.46	52.33	4.02	2.02	5.46	0.70	22.00	41.00	2.71	7.46	0.45	19.43	124.01	3.19	9.46	1.79	38.29	87.41	3.66
1.48	2.26	66.71	0.19	1.32	3.48	1.46	48.84	3.71	2.03	5.48	0.68	26.05	41.88	2.72	7.48	0.44	17.67	125.02	3.19	9.48	1.35	34.69	75.65	3.66
1.50	2.23	61.29	0.25	1.34	3.50	1.49	47.40	5.35	2.03	5.50	0.72	30.70	42.82	2.71	7.50	0.47	15.80	125.58	3.21	9.50	1.32	36.45	79.49	3.66
1.52	2.16	55.71	0.19	1.35	3.52	1.50	45.84	5.97	2.03	5.52	0.72	35.12	43.39	2.73	7.52	0.46	14.13	125.90	3.21	9.52	2.90	40.61	136.84	3.67
1.54	2.22	55.59	0.75	1.34	3.54	1.50	44.82	5.53	2.03	5.54	0.74	38.30	44.71	2.74	7.54	0.48	12.48	127.15	3.21	9.54	4.07	36.93	132.18	3.67
1.56	2.36	56.53	3.33	1.34	3.56	1.48	46.83	4.59	2.04	5.56	0.76	39.37	46.28	2.73	7.56	0.49	11.46	127.41	3.21	9.56	4.24	37.95	105.52	3.66
1.58	2.55	57.91	6.85	1.35	3.58	1.47	47.40	4.97	2.04	5.58	0.87	39.74	48.23	2.74	7.58	0.48	10.98	127.85	3.22	9.58	3.76	40.02	93.51	3.64
1.60	2.75	53.18	8.24	1.35	3.60	1.50	47.96	5.35	2.04	5.60	0.98	38.98	50.25	2.76	7.60	0.50	11.04	128.79	3.22	9.60	3.40	38.12	89.49	3.66
1.62	2.68	48.65	6.85	1.35	3.62	1.55	49.98	6.41	2.06	5.62	1.01	37.39	49.62	2.75	7.62	0.53	10.73	130.11	3.23	9.62	3.17	28.65	88.23	3.67
1.64	2.62	46.80	5.66	1.35	3.64	1.61	50.12	8.24	2.08	5.64	1.01	37.51	48.04	2.76	7.64	0.57	10.92	130.36	3.22	9.64	3.19	22.28	89.86	3.68
1.66	2.66	44.37	5.16	1.37	3.66	1.59	51.90	8.05	2.08	5.66	0.96	41.47	44.90	2.75	7.66	0.55	13.02	128.91	3.22	9.66	3.42	25.79	89.36	3.67
1.68	2.64	38.87	4.53	1.37	3.68	1.58	53.75	7.55	2.07	5.68	0.88	47.03	45.09	2.76	7.68	0.54	15.26	129.67	3.23	9.68	3.57	31.40	79.17	3.68
1.70	2.62	34.79	4.34	1.35	3.70	1.55	57.09	6.67	2.07	5.70	0.83	51.48	47.98	2.78	7.70	0.55	17.16	130.86	3.23	9.70	3.81	38.60	81.50	3.68
1.72	2.59	30.88	3.96	1.37	3.72	1.56	60.92	8.24	2.09	5.72	0.87	53.01	49.36	2.78	7.72	0.54	19.17	132.25	3.24	9.72	3.99	38.48	80.81	3.68
1.74	2.56	31.98	3.27	1.40	3.74	1.60	62.70	9.43	2.09	5.74	0.87	54.05	49.49	2.78	7.74	0.53	21.07	132.37	3.25	9.74	3.86	40.44	76.34	3.69
1.76	2.50	31.50	2.58	1.40	3.76	1.63	61.94	10.44	2.10	5.76	0.82	56.60	50.12	2.78	7.76	0.54	21.44	131.49	3.25	9.76	3.57	41.20	72.51	3.69
1.78	2.39	31.61	1.07	1.40	3.78	1.69	60.78	10.94	2.12	5.78	0.83	56.94	50.75	2.78	7.78	0.54	22.68	133.32	3.26	9.78	3.01	39.56	69.43	3.69
1.80	2.36	35.36	0.94	1.43	3.80	1.73	60.78	11.19	2.12	5.80	0.84	54.28	51.38	2.79	7.80	0.53	23.28	134.64	3.27	9.80	2.47	30.75	69.93	3.67
1.82	2.41	31.61	3.65	1.41	3.82	1.72	59.87	11.57	2.12	5.82	0.82	50.77	52.26	2.80	7.82	0.52	22.57	134.51	3.27	9.82	2.33	20.26	74.71	3.66
1.84	2.54	23.85	10.00	1.43	3.84	1.68	58.85	11.82	2.12	5.84	0.84	49.01	53.14	2.80	7.84	0.51	21.33	134.95	3.27	9.84	2.93	37.77	87.66	3.67
1.86	2.75	23.26	13.46	1.43	3.86	1.64	58.06	12.39	2.14	5.86	0.88	47.90	53.89	2.80	7.86	0.49	21.52	135.52	3.27	9.86	3.82	39.95	104.33	3.70
1.88	2.93	28.95	15.53	1.43	3.88	1.63	59.00	12.89	2.15	5.88	0.92	46.57	54.40	2.82	7.88	0.49	21.64	137.59	3.28	9.88	4.88	42.64	111.68	3.72
1.90	3.14	38.25	16.66	1.44	3.90	1.63	59.42	13.02	2.15	5.90	0.93	44.70	54.46	2.82	7.90	0.51	20.36	139.48	3.28	9.90	5.71	47.26	113.00	3.74
1.92	3.22	48.51	16.41	1.46	3.92	1.60	62.96	13.52	2.14	5.92	0.95	43.96	54.58	2.83	7.92	0.51	19.14	139.86	3.28	9.92	6.07	47.52	115.14	3.74
1.94	3.33	61.26	15.78	1.46	3.94	1.58	63.33	13.65	2.15	5.94	0.91	44.73	54.27	2.82	7.94	0.54	18.41	139.79	3.30	9.94	6.43	43.92	116.90	3.75
1.96	3.63	77.24	17.92	1.44	3.96	1.58	62.29	13.77	2.17	5.96	0.88	46.00	54.14	2.83	7.96	0.54	18.52	140.30	3.30	9.96	6.68	34.25	117.03	3.74
1.98	4.17	86.28	21.76	1.45	3.98	1.58	60.36	13.77	2.17	5.98	0.87	48.01	54.08	2.83	7.98	0.53	17.61	141.24	3.30	9.98	6.82	27.85	117.53	3.74
2.00	5.07	92.75	25.28	1.47	4.00	1.56	59.43	14.02	2.17	6.00	0.80	50.36	53.64	2.85	8.00	0.57	14.38	143.32	3.29	10.00	7.06	25.44	119.10	3.75

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COMMITTENTE:
CANTIERE: Via Massimiliano Kolbe - Roncadello (FC)
COMMESSA: C054/24
RDP N°: 223/24
DATA: 24/09/2024

PROVA N°: CPTU 3
PROF. FALDA (m da p.c.): 2.55
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

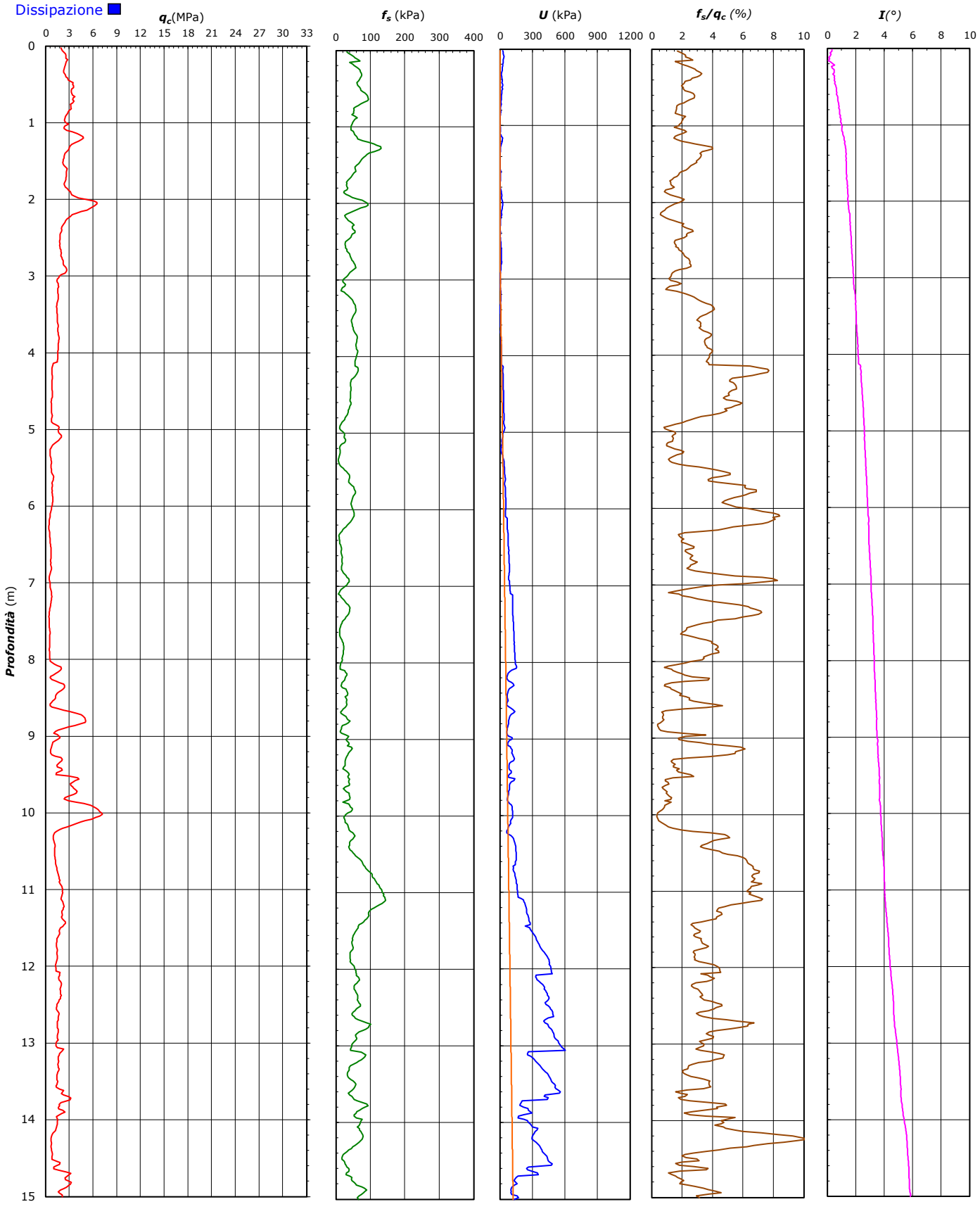
prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	7.14	23.45	117.78	3.75	12.02	1.30	58.24	474.09	4.44	14.02	1.47	69.75	278.46	5.42										
10.04	6.86	25.18	110.80	3.76	12.04	1.31	58.81	476.98	4.45	14.04	1.48	67.76	290.59	5.43										
10.06	6.31	26.48	101.56	3.77	12.06	1.30	58.98	482.83	4.46	14.06	1.49	61.98	300.53	5.45										
10.08	5.82	27.19	96.03	3.77	12.08	1.85	59.95	335.68	4.47	14.08	1.46	68.83	349.52	5.47										
10.10	5.05	31.75	100.87	3.77	12.10	1.77	65.22	327.69	4.48	14.10	1.40	68.38	340.77	5.49										
10.12	4.47	34.73	89.11	3.78	12.12	1.75	67.43	337.44	4.49	14.12	1.32	72.63	327.63	5.51										
10.14	3.84	36.09	81.18	3.79	12.14	1.66	68.62	341.40	4.50	14.14	1.25	75.15	317.44	5.53										
10.16	3.39	37.90	76.47	3.80	12.16	1.66	64.88	364.42	4.51	14.16	1.08	77.98	307.82	5.55										
10.18	2.75	38.92	70.43	3.80	12.18	1.70	61.29	376.43	4.51	14.18	0.95	79.09	301.66	5.55										
10.20	2.17	43.28	65.53	3.80	12.20	1.91	55.56	396.05	4.54	14.20	0.84	77.59	294.62	5.57										
10.22	1.80	48.78	64.58	3.81	12.22	2.00	52.90	406.43	4.55	14.22	0.77	76.51	294.49	5.58										
10.24	1.37	52.86	76.53	3.84	12.24	2.01	52.56	411.71	4.56	14.24	0.70	71.92	317.00	5.59										
10.26	1.15	55.07	100.99	3.85	12.26	1.95	53.52	409.89	4.58	14.26	0.70	67.84	334.93	5.60										
10.28	1.04	51.84	118.10	3.84	12.28	1.88	56.61	421.33	4.58	14.28	0.71	61.40	350.27	5.62										
10.30	0.97	49.77	126.46	3.84	12.30	1.86	58.00	430.01	4.59	14.30	0.73	55.71	361.02	5.61										
10.32	0.97	44.33	132.06	3.86	12.32	1.87	60.35	439.13	4.60	14.32	0.74	49.81	369.83	5.61										
10.34	0.99	40.64	136.34	3.86	12.34	1.92	63.10	436.36	4.61	14.34	0.72	44.77	379.89	5.61										
10.36	1.03	39.71	140.42	3.86	12.36	1.91	64.03	448.94	4.61	14.36	0.72	37.23	386.49	5.62										
10.38	1.10	40.44	144.70	3.87	12.38	2.02	64.03	452.33	4.62	14.38	0.73	32.38	392.66	5.64										
10.40	1.14	37.67	147.09	3.87	12.40	1.90	62.75	446.04	4.63	14.40	0.76	27.56	405.61	5.64										
10.42	1.18	38.06	147.47	3.87	12.42	1.88	64.54	433.22	4.63	14.42	0.81	22.04	418.06	5.64										
10.44	1.19	40.92	147.28	3.87	12.44	1.71	66.92	418.75	4.63	14.44	0.86	18.86	432.34	5.65										
10.46	1.15	46.14	148.41	3.88	12.46	1.67	71.28	424.98	4.65	14.46	0.89	17.79	439.00	5.64										
10.48	1.14	50.75	150.74	3.88	12.48	1.55	71.37	446.17	4.65	14.48	0.82	18.44	440.26	5.66										
10.50	1.15	53.81	149.67	3.89	12.50	1.41	65.42	460.95	4.66	14.50	0.78	23.23	447.18	5.67										
10.52	1.14	57.24	150.11	3.90	12.52	1.41	59.72	466.10	4.66	14.52	0.82	25.75	458.12	5.69										
10.54	1.12	63.39	150.80	3.91	12.54	1.36	55.44	477.61	4.67	14.54	1.36	27.19	482.71	5.70										
10.56	1.14	68.72	152.25	3.92	12.56	1.36	50.82	485.73	4.66	14.56	1.85	29.38	474.78	5.70										
10.58	1.19	73.53	151.30	3.92	12.58	1.47	46.60	487.86	4.66	14.58	1.79	32.58	262.23	5.71										
10.60	1.22	76.39	142.62	3.93	12.60	1.65	48.41	492.96	4.67	14.60	1.36	37.85	245.44	5.72										
10.62	1.25	78.21	143.82	3.95	12.62	1.70	53.05	494.47	4.67	14.62	1.04	38.42	254.06	5.72										
10.64	1.27	80.67	143.25	3.96	12.64	1.68	56.77	448.12	4.68	14.64	1.04	37.37	304.80	5.74										
10.66	1.29	84.61	121.81	3.96	12.66	1.61	64.50	415.29	4.69	14.66	1.67	30.82	345.99	5.75										
10.68	1.31	87.07	124.20	3.97	12.68	1.61	79.38	405.04	4.70	14.68	2.63	29.01	353.35	5.75										
10.70	1.35	90.53	121.87	3.98	12.70	1.61	90.00	415.67	4.70	14.70	3.18	40.55	168.34	5.73										
10.72	1.41	95.48	125.64	3.98	12.72	1.51	101.56	440.45	4.72	14.72	2.98	46.78	150.80	5.73										
10.74	1.44	102.03	133.44	3.99	12.74	1.52	96.41	444.47	4.72	14.74	2.69	45.59	138.72	5.74										
10.76	1.49	104.89	137.53	3.99	12.76	1.50	94.73	453.15	4.73	14.76	2.47	46.95	132.31	5.75										
10.78	1.56	104.80	138.47	4.01	12.78	1.50	87.25	470.26	4.74	14.78	2.53	53.67	148.28	5.77										
10.80	1.62	106.56	142.25	4.01	12.80	1.49	78.10	482.33	4.76	14.80	2.94	57.18	160.92	5.77										
10.82	1.69	112.28	148.41	4.00	12.82	1.59	67.92	489.25	4.77	14.82	3.26	60.21	135.89	5.78										
10.84	1.70	114.94	151.36	4.00	12.84	1.61	60.81	495.72	4.79	14.84	3.17	75.63	111.94	5.77										
10.86	1.75	117.07	151.74	4.01	12.86	1.58	56.81	498.36	4.79	14.86	2.94	83.62	106.15	5.78										
10.88	1.82	119.33	152.43	4.01	12.88	1.54	58.20	501.64	4.82	14.88	2.63	89.88	101.50	5.77										
10.90	1.73	125.14	158.72	4.02	12.90	1.49	60.44	508.30	4.83	14.90	2.27	84.19	104.39	5.78										
10.92	1.81	126.44	159.41	4.02	12.92	1.47	59.36	519.24	4.85	14.92	1.91	80.70	101.81	5.79										
10.94	1.96	128.31	159.85	4.02	12.94	1.50	54.83	537.23	4.85	14.94	1.63	74.35	109.92	5.81										
10.96	2.03	132.33	160.80	4.02	12.96	1.58	50.06	543.33	4.87	14.96	1.78	67.44	160.48	5.83										
10.98	2.10	133.49	162.56	4.03	12.98	1.44	46.97	549.87	4.88	14.98	2.12	62.45	171.87	5.84										
11.00	2.17	135.62	163.56	4.03	13.00	1.34	46.29	561.25	4.89	15.00	2.10	66.28	130.24	5.84										
11.02	2.14	139.70	165.20	4.03	13.02	1.31	44.62	571.19	4.89															
11.04	2.16	138.39	166.52	4.04	13.04	1.32	41.99	588.04	4.91															
11.06	2.10	141.84	168.53	4.06	13.06	1.47	42.95	602.63	4.92															
11.08	2.06	143.81	197.08	4.01	13.08	2.30	73.62	264.05	4.93															
11.10	1.98	144.16	216.20	4.06	13.10	2.11	80.25	254.75	4.95															
11.12	1.95	140.67	222.17	4.06	13.12	1.95	86.62	256.70	4.95															
11.14	2.05	134.35	230.73	4.07	13.14	1.77	84.64	285.44	4.97															
11.16	2.16	126.22	233.30	4.09	13.16	1.70	80.53	303.42	4.98															
11.18	2.25	117.44	238.21	4.08	13.18	1.59	74.64	316.25	5.00															
11.20	2.29	110.18	241.35	4.10	13.20	1.58	66.79	330.65	5.00															
11.22	2.33	103.04	244.62	4.11	13.22	1.58	60.41	343.98	5.02															
11.24	2.25	97.85	247.64	4.11	13.24	1.65	50.75	357.19	5.03															
11.26	2.21	94.48	248.59	4.12	13.26	1.59	42.53	371.78	5.05															
11.28	2.09	95.13	252.04	4.13	13.28	1.57	38.36	381.40	5.06															
11.30	2.07	95.67	257.39	4.15	13.30	1.60	38.53	393.79	5.07															
11.32	2.10	93.63	261.98	4.15	13.32	1.60	38.11	406.05	5.07															
11.34	2.10	89.74	265.38	4.16	13.34	1.70	35.33	421.77	5.09															
11.36	2.00	84.64	268.52	4.18	13.36	1.68	34.08	437.74	5.10															
11.38	2.12	80.33	273.42	4.18	13.38	1.55	32.84	447.43	5.10															
11.40	2.30	74.98	277.83	4.19	13.40	1.51	34.62	454.53	5.11															
11.42	2.51	67.50	281.60	4.20	13.42	1.45	37.71	462.39	5.12															
11.44	2.54	65.26	234.37	4.21	13.44	1.43	43.52	469.63	5.13															
11.46	2.34	64.46	277.39	4.22	13.46	1.45	49.92	474.22	5.13															
11.48	2.17	61.46	280.40	4.23	13.48	1.46	55.84	485.35	5.13															
11.50	1.90	57.80	287.64	4.25	13.50	1.55	58.62	503.33	5.14															
11.52	1.75	56.02	298.89	4.26	13.52	1.52	57.09	511.26	5.14															
11.54	1.70	53.66	308.95	4.26	13.54	1.44	54.51	510.12	5.15															
11.56	1.80	50.63	321.34	4.28	13.56	1.33	51.90	518.30	5.16															
11.58	1.80	49.75	331.34	4.29	13.58	1.36	46.46	538.49	5.16															
11.60	1.65	47.71	333.73	4.29	13.60	1.78	41.36	559.74	5.19															
11.62	1.52	49.73	339.77	4.30	13.62	2.32	36.26	549.93	5.18															
11.64	1.44	46.61	345.62	4.31	13.64	2.14	39.92	415.67	5.17															
11.66	1.43	46.98	355.55	4.32	13.66	2.00	46.83	410.14	5.18															
11.68	1.44	47.77	364.55	4.32	13.68	2.31	50.74	446.55	5.18															
11.70	1.39	48.74	365.99	4.32	13.70	2.98	52.52	439.13	5.18															
11.72	1.36	50.92	373.60	4.31	13.72	3.22	61.88	205.70	5.19															
11.74	1.38	49.42	382.53	4.32	13.74	3.10	78.06	197.15	5.19															
11.76	1.44	45.00	395.61	4.33	13.76	2.53	89.53	186.89	5.20															
11.78	1.49	41.65	407.50	4.33	13.78	1.93	93.47	184.19	5.23															
11.80	1.50	41.09	416.87	4.35	13.80	1.72	84.83	218.71	5.25															
11.82	1.45	41.32	428.69	4.35	13.82	1.78	76.04	257.07	5.27															
11.84	1.45	41.32	436.42	4.35	13.84	1.58	68.65	263.55	5.27															
11.86	1.49	41.60	445.10	4.37	13.86	1.66	60.49	279.78	5.29															
11.88	1.48	42.22	452.96	4.38	13.88	2.15	57.79	294.81	5.31															
11.90	1.49	41.83	456.23	4.38	13.90	2.46	52.89	218.09	5.31															
11.92	1.43	44.35	457.55	4.39	13.92	2.09	52.89	173.69	5.32															
11.94	1.37	48.57	455.48	4.40	13.94	1.67	60.26	169.54	5.34															
11.96	1.30	53.05	465.92	4.41	13.96	1.40	76.63	220.29	5.36															
11.98	1.28	54.67	470.32	4.42	13.98	1.46	72.33	255.06	5.38															
12.00	1.27	56.06	470.19	4.42	14.00	1.55	71.05	264.68	5.39															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Massimiliano Kolbe - Roncadello (FC)
COMMESSA: C054/24
RDP N°: 223/24
DATA: 24/09/2024

PROVA N°: CPTU 3
PROF. FALDA (m da p.c.): 2.55
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 3
CANTIERE:	Via Massimiliano Kolbe - Roncadello (FC)	PROF. FALDA (m da p.c.):	2.55
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	223/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	24/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Massimiliano Kolbe - Roncadello (FC)
Lat.: 44.264587°
Long.: 12.044666°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Thomas Alva Edison - Forlì (FC)
COMMESSA: C054/24
RDP N°: 204/24
DATA: 10/09/2024

PROVA N°: CPTU 4
PROF. FALDA (m da p.c.): 4.50
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.08	21.62	33.97	0.13	2.02	2.59	167.98	2.88	1.57	4.02	0.83	48.76	4.47	2.11	6.02	2.15	110.87	92.62	2.51	8.02	1.67	111.25	116.49	3.17
0.04	1.37	24.60	34.71	0.60	2.04	2.55	167.71	6.73	1.57	4.04	0.82	47.73	5.20	2.11	6.04	2.12	111.63	89.99	2.52	8.04	1.58	112.26	115.70	3.19
0.06	1.54	30.73	34.65	0.13	2.06	2.46	168.20	6.12	1.58	4.06	0.86	46.64	5.20	2.12	6.06	2.10	115.07	92.25	2.51	8.06	1.57	111.46	114.47	3.19
0.08	1.79	37.62	37.59	0.21	2.08	2.37	164.70	4.47	1.59	4.08	0.86	46.30	5.39	2.07	6.08	1.99	119.90	90.78	2.51	8.08	1.48	110.92	112.45	3.21
0.10	2.11	41.53	41.81	0.37	2.10	2.35	160.44	3.86	1.65	4.10	0.88	46.49	5.33	2.07	6.10	1.84	123.04	87.17	2.51	8.10	1.39	99.07	94.64	3.21
0.12	2.77	45.97	47.01	0.47	2.12	2.35	157.82	5.57	1.67	4.12	0.92	45.58	7.71	2.08	6.12	1.81	129.82	79.70	2.52	8.12	1.44	102.57	94.70	3.21
0.14	3.80	45.42	51.30	0.27	2.14	2.43	155.69	10.10	1.68	4.14	1.00	48.60	6.06	2.09	6.14	1.74	132.77	78.97	2.52	8.14	1.43	104.58	93.96	3.23
0.16	4.66	38.49	47.01	0.38	2.16	2.52	154.90	17.87	1.68	4.16	1.05	49.11	4.29	2.10	6.16	1.66	133.29	77.38	2.53	8.16	1.45	101.57	95.07	3.23
0.18	5.37	39.38	34.59	0.46	2.18	2.72	153.32	23.45	1.69	4.18	1.12	50.48	2.51	2.10	6.18	1.56	128.97	75.23	2.53	8.18	1.45	100.93	94.03	3.23
0.20	6.36	42.27	32.32	0.26	2.20	3.06	152.65	26.63	1.69	4.20	1.17	51.25	0.80	2.10	6.20	1.45	120.23	73.40	2.54	8.20	1.47	99.62	94.09	3.24
0.22	6.54	59.43	34.59	0.28	2.22	3.58	145.83	19.34	1.70	4.22	1.19	53.10	1.53	2.10	6.22	1.42	112.14	72.11	2.54	8.22	1.42	98.40	93.17	3.24
0.24	6.86	84.60	26.51	0.36	2.24	3.99	139.89	12.00	1.70	4.24	1.20	55.23	4.35	2.10	6.24	1.38	102.73	70.58	2.55	8.24	1.42	96.48	92.43	3.25
0.26	7.07	96.53	23.02	0.35	2.26	4.27	137.24	8.45	1.70	4.26	1.22	57.61	5.69	2.13	6.26	1.33	93.90	69.91	2.55	8.26	1.47	94.99	92.92	3.26
0.28	6.76	94.74	47.14	0.39	2.28	4.52	139.37	8.02	1.72	4.28	1.27	61.74	10.16	2.13	6.28	1.31	85.74	70.34	2.55	8.28	1.48	96.35	93.47	3.27
0.30	5.46	76.05	30.73	0.35	2.30	4.57	140.77	5.63	1.71	4.30	1.33	65.40	13.47	2.14	6.30	1.35	76.40	72.48	2.55	8.30	1.45	95.04	93.05	3.27
0.32	4.57	84.20	23.69	0.44	2.32	4.53	140.46	1.29	1.73	4.32	1.40	67.62	17.26	2.14	6.32	1.40	69.58	74.87	2.56	8.32	1.46	95.17	92.80	3.28
0.34	4.63	108.63	23.45	0.45	2.34	4.49	135.26	0.31	1.74	4.34	1.49	71.45	21.49	2.15	6.34	1.45	61.54	78.05	2.58	8.34	1.46	95.26	92.31	3.28
0.36	4.34	107.29	19.34	0.45	2.36	4.50	127.43	0.31	1.75	4.36	1.60	73.06	24.49	2.15	6.36	1.51	55.00	80.68	2.58	8.36	1.49	93.95	92.68	3.28
0.38	4.24	103.30	21.00	0.41	2.38	4.51	118.36	0.92	1.74	4.38	1.63	74.16	25.22	2.16	6.38	1.52	52.87	82.46	2.58	8.38	1.50	93.40	93.35	3.30
0.40	4.10	95.78	21.85	0.47	2.40	4.51	106.06	1.10	1.74	4.40	1.62	78.94	28.53	2.16	6.40	1.58	50.04	84.29	2.59	8.40	1.50	94.43	93.78	3.30
0.42	4.28	75.64	23.93	0.48	2.42	4.44	86.80	1.29	1.76	4.42	1.60	83.78	30.00	2.17	6.42	1.64	48.64	85.21	2.58	8.42	1.52	96.07	94.70	3.31
0.44	4.12	65.92	23.63	0.48	2.44	4.45	71.67	1.71	1.76	4.44	1.57	89.44	33.55	2.18	6.44	1.68	50.46	86.56	2.58	8.44	1.55	96.68	95.43	3.32
0.46	4.12	60.22	24.18	0.52	2.46	4.44	61.35	2.08	1.77	4.46	1.58	92.42	34.59	2.17	6.46	1.69	57.43	86.86	2.58	8.46	1.60	95.86	96.35	3.34
0.48	4.23	49.71	19.53	0.52	2.48	4.41	57.30	2.26	1.78	4.48	1.60	94.33	34.83	2.18	6.48	1.70	64.83	88.39	2.59	8.48	1.62	95.77	96.35	3.34
0.50	3.77	41.21	15.67	0.51	2.50	4.40	57.11	2.69	1.78	4.50	1.64	97.74	35.38	2.19	6.50	1.73	74.26	88.94	2.60	8.50	1.62	96.31	96.29	3.36
0.52	3.19	45.62	15.43	0.52	2.52	4.36	59.37	2.94	1.79	4.52	1.65	96.68	35.57	2.21	6.52	1.75	81.38	89.62	2.61	8.52	1.62	96.62	96.29	3.37
0.54	3.13	48.66	16.90	0.55	2.54	4.26	64.02	2.82	1.79	4.54	1.68	95.70	37.28	2.21	6.54	1.75	87.65	90.29	2.60	8.54	1.62	92.84	97.58	3.39
0.56	3.10	50.12	19.28	0.57	2.56	4.04	64.29	2.45	1.80	4.56	1.71	94.70	39.36	2.22	6.56	1.71	95.96	89.86	2.62	8.56	1.69	88.09	99.47	3.40
0.58	3.34	46.61	14.94	0.56	2.58	3.98	62.74	2.51	1.80	4.58	1.79	93.81	39.24	2.23	6.58	1.74	99.31	90.05	2.63	8.58	1.73	84.14	100.09	3.42
0.60	2.75	53.00	10.22	0.59	2.60	3.85	61.98	2.57	1.82	4.60	1.76	95.97	40.28	2.23	6.60	1.71	101.20	90.90	2.63	8.60	1.77	81.64	100.33	3.43
0.62	2.65	53.57	7.53	0.58	2.62	3.77	62.10	2.75	1.82	4.62	1.80	97.34	40.52	2.24	6.62	1.76	101.96	93.96	2.64	8.62	1.77	82.80	100.21	3.45
0.64	2.39	55.61	4.35	0.59	2.64	3.67	62.64	2.69	1.82	4.64	1.78	98.77	40.95	2.24	6.64	1.77	103.18	99.17	2.65	8.64	1.80	86.27	100.58	3.46
0.66	2.90	53.07	11.88	0.60	2.66	3.51	60.75	2.45	1.83	4.66	1.79	101.84	41.81	2.25	6.66	1.85	100.19	100.15	2.66	8.66	1.83	88.03	101.43	3.48
0.68	2.98	46.58	13.90	0.62	2.68	3.41	58.50	2.51	1.83	4.68	1.75	104.89	41.44	2.26	6.68	1.86	99.22	99.17	2.67	8.68	1.91	95.52	103.27	3.49
0.70	3.11	42.14	15.73	0.66	2.70	3.35	59.08	2.63	1.84	4.70	1.72	109.27	41.38	2.26	6.70	1.87	99.28	98.92	2.68	8.70	1.96	106.41	104.19	3.49
0.72	3.28	41.71	18.61	0.67	2.72	3.29	58.74	2.94	1.85	4.72	1.66	111.70	41.69	2.27	6.72	1.88	101.01	98.86	2.70	8.72	2.04	114.20	107.19	3.50
0.74	3.40	44.29	22.77	0.70	2.74	3.18	59.50	2.51	1.87	4.74	1.62	111.76	41.50	2.27	6.74	1.89	102.93	99.53	2.70	8.74	2.16	119.04	110.12	3.51
0.76	3.32	40.36	22.22	0.70	2.76	2.94	61.91	1.22	1.86	4.76	1.62	109.29	42.18	2.27	6.76	1.88	106.76	100.76	2.71	8.76	2.35	121.08	114.53	3.52
0.78	3.23	47.30	21.00	0.73	2.78	2.49	65.53	1.41	1.87	4.78	1.64	106.46	42.42	2.26	6.78	1.87	109.93	101.62	2.71	8.78	2.52	120.14	118.69	3.53
0.80	3.09	57.25	20.08	0.78	2.80	2.04	71.86	4.77	1.88	4.80	1.64	103.11	42.67	2.27	6.80	1.98	112.88	102.35	2.72	8.80	2.61	119.41	121.20	3.54
0.82	2.88	68.17	17.32	0.78	2.82	1.72	80.29	6.55	1.88	4.82	1.63	100.01	43.22	2.28	6.82	1.95	116.53	102.90	2.74	8.82	2.76	115.36	123.71	3.56
0.84	2.86	70.87	18.92	0.80	2.84	1.42	90.79	3.86	1.90	4.84	1.60	100.46	43.10	2.28	6.84	2.01	118.75	104.80	2.74	8.84	2.77	110.24	124.63	3.56
0.86	2.96	71.39	20.38	0.80	2.86	1.34	93.98	0.92	1.90	4.86	1.55	100.04	43.22	2.28	6.86	2.05	119.66	106.21	2.75	8.86	2.89	118.31	128.73	3.56
0.88	2.85	74.43	19.10	0.83	2.88	1.29	94.08	6.92	1.90	4.88	1.53	98.00	42.73	2.28	6.88	2.06	119.30	106.64	2.76	8.88	3.09	122.87	121.69	3.57
0.90	2.99	70.16	21.12	0.89	2.90	1.25	89.94	12.43	1.91	4.90	1.50	97.63	42.18	2.28	6.90	2.06	120.48	106.02	2.77	8.90	3.15	133.25	114.41	3.58
0.92	2.98	64.47	21.61	0.88	2.92	1.24	79.35	13.77	1.92	4.92	1.46	97.32	42.18	2.30	6.92	2.02	125.26	105.96	2.78	8.92	3.27	148.92	116.49	3.59
0.94	2.99	59.99	21.79	0.89	2.94	1.22	67.26	12.73	1.93	4.94	1.47	94.28	43.52	2.30	6.94	2.01	127.81	106.39	2.78	8.94	3.32	159.69	120.41	3.61
0.96	3.12	54.30	23.57	0.93	2.96	1.14	61.97	10.71	1.93	4.96	1.45	90.66	43.46	2.31	6.96	1.97	132.07	106.27	2.80	8.96	3.43	168.34	127.45	3.61
0.98	3.17	47.21	23.81	0.93	2.98	1.04	58.93	9.43	1.94	4.98	1.50	85.18	44.26	2.31	6.98	1.97	133.90	106.21	2.80	8.98	3.49	172.23	129.84	3.62
1.00	3.19	45.17	24.73	0.94	3.00	1.04	55.09	9.92	1.95	5.00	1.56	82.13	44.14	2.32	7.00	1.94	135.88	105.78	2.81	9.00	3.46	181.79	129.35	3.64
1.02	3.14	42.09	23.51	0.95	3.02	1.12	50.93	12.43	1.95	5.02	1.60	82.28	44.32	2.33	7.02	1.91	136.39	107.37	2.82	9.02	3.43	192.83	129.53	3.65
1.04	3.17	49.76	24.00	0.97	3.04	1.18	48.98	18.12	1.95	5.04	1.66	83.32	45.36	2.33	7.04	1.91	133.26	108.23	2.83	9.04	3.31	201.41	129.35	3.65
1.06	3.04	56.57	18.73	0.98	3.06	1.15	48.86	19.40	1.96	5.06	1.70	86.33	46.46	2.31	7.06	1.90	128.35	107.55	2.84	9.06	3.26	204.97	129.53	3.67
1.08	3.30	51.34	19.04	0.99	3.08	1.11	47.68	20.32	1.95	5.08	1.77	92.57	47.87	2.32	7.08	1.89	126.68	107.31	2.84	9.08	3.21	205.67	131.49	3.69
1.10	3.85	46.01	15.67	1.18	3.10	1.09	45.07	19.96	1.95	5.10	1.82	95.49	48.36	2.33	7.10	1.88	123.02	107.13	2.85	9.10	3.07	173.75	146.24	3.70
1.12	3.70	46.10	15.92	1.20	3.12	1.13	45.86	19.71	1.96	5.12	1.89	104.15	41.87	2.33	7.12	1.89	118.99	105.47	2.87	9.12	3.31	189.24	146.79	3.71
1.14	3.66	40.58	13.71	1.22	3.14	1.22	51.76	2.51	1.95	5.14	1.94	106.89	44.07	2.34	7.14	1.88	118.11	104.68	2.87	9.14	3.31	185.01	146.36	3.72
1.16	3.55	44.23	9.06	1.24	3.16	1.20	58.22	5.14	1.96	5.16	1.98	109.08	44.20	2.34	7.16	1.86	118.08	104.13	2.89	9.16	3.34	175.54	147.22	3.73
1.18	3.77	53.24	9.86	1.25	3.18	1.20	61.47	6.00	1.96	5.18	1.96	110.36	44.20	2.34	7.18	1.90	116.95	104.06	2.88	9.18	3.40	171.04	148.69	3.74
1.20	3.71	58.84	9.00	1.27	3.20	1.21	63.00	5.88	1.96	5.20	1.91	113.86	44.75	2.33	7.20	1.91	116.07	105.11	2.90	9.20	3.37	164.37	149.18	3.76
1.22	3.66	65.96	8.45	1.28	3.22	1.22	65.83	6.18	1.98	5.22	1.88	116.08	44.69	2.34	7.22	1.92	115.91	105.29	2.91	9.22	3.34	158.37	148.57	3.76
1.24	3.55	70.19	7.47	1.29	3.24	1.20	67.81	5.57	1.97	5.24	1.87	117.02	44.75	2.35	7.24	1.97	115.55	106.08	2.91	9.24	3.25	157.21	149.42	3.78
1.26	3.66	83.10	7.96	1.30	3.26	1.18	68.81	6.61	1.97	5.26	1.80	119.94	44.56	2.35	7.26	2.00	113.90	107.13	2.91	9.26	3.28	150.94	149.98	3.79
1.28	3.47	100.72	6.24	1.30	3.28	1.20	67.65	7.65	1.97	5.28	1.77	118.93	44.50	2.36	7.28	2.04	113.20	107.06	2.91	9.28	3.25	152.49	151.81	3.79
1.30	3.59	106.56	7.04	1.32	3.30	1.21	65.67	9.18	1.98	5.30	1.79	115.25	44.44	2.37	7.30	2.02	113.72	107.37	2.92	9.30	3.24	153.28	156.71	3.81
1.32	3.50	109.45	6.67	1.33	3.32	1.22	64.31	9.12	1.98	5.32	1.77	115.79	44.93	2.37	7.32	2.01	116.21	107.13	2.93	9.32	3.30	149.26	156.65	3.82
1.34	3.46	119.98	6.43	1.34	3.34	1.20	63.64	8.81	1.99	5.34	1.70	115.67	48.24	2.37	7.34	2.02	118.46	108.04	2.93	9.34	3.33	151.63	157.02	3.82
1.36	3.34	130.14	5.33	1.35	3.36	1.15	62.72	8.14	2.00	5.36	1.69	113.69	47.81	2.38	7.36	2.01	119.16	109.08	2.94	9.36	3.30	156.47	157.26	3.84
1.38	3.25	135.59	4.84	1.36	3.38	1.12	62.30	8.33	2.01	5.38	1.69	109.28	47.26	2.38	7.38	1.99	121.38	109.70	2.94	9.38	3.31	156.01	157.32	3.85
1.40	3.03	143.74	2.57	1.36	3.40	1.09	63.06	9.79	2.00	5.40	1.67	107.78	49.64	2.38	7.40	1.94	122.02	109.21	2.95	9.40	3.30	155.46	158.67	3.86
1.42	3.01	147.15	2.57	1.37	3.42	1.08	64.40	9.67	2.00	5.42	1.67	106.17	51.67	2.38	7.42	1.89	123.33	108.23	2.96	9.42	3.32	156.91	159.16	3.87
1.44	2.95	151.01	0.24	1.38	3.44	1.05	65.74	8.94	2.00	5.44	1.72	97.86	53.20	2.38	7.44	1.84	124.63	110.74	2.97	9.44	3.31	162.54	159.71	3.88
1.46	2.80	154.72	4.71	1.38	3.46	1.07	65.68	8.39	2.01	5.46	1.78	89.06	54.24	2.39	7.46	1.83	119.82	111.23	2.98	9.46	3.27	167.62	159.22	3.89
1.48	2.71	143.42	5.02	1.39	3.48	1.07	65.74	8.08	2.01	5.48	1.81	84.34	53.32	2.39	7.48	1.84	115.65	110.80	2.99	9.48	3.31	161.55	154.81	3.91
1.50	2.61	142.84	5.39	1.40	3.50	1.07	65.74	7.04	2.02	5.50	1.74	87.38	51.54	2.39	7.50	1.79	113.37	110.00	3.00	9.50	3.39	175.13	154.32	3.92
1.52	2.60	136.90	4.84	1.41	3.52	1.07	65.80	6.73	2.02	5.52	1.69	91.06	50.50	2.41	7.52	1.76	111.87	109.94	3.02	9.52	3.26	175.61	152.00	3.92
1.54	2.36	134.68	7.35	1.42	3.54	1.04	65.04	6.24	2.02	5.54	1.59	96.75	48.97	2.41	7.54	1.76	108.34	110.19	3.02	9.54	3.14	173.51	148.20	3.93
1.56	2.23	133.67	8.45	1.43	3.56	1.00	63.13	6.06	2.03	5.56	1.52	106.80	48.73	2.42	7.56	1.72	105.93	110.19	3.03	9.56	2.93	175.45	142.08	3.94
1.58	2.15	131.66	8.94	1.43	3.58	0.96	62.58	5.20	2.04	5.58	1.47	111.82	49.16	2.43	7.58	1.74	102.95	111.10	3.04	9.58	2.83	178.95	140.49	3.94
1.60	2.13	127.51	9.61	1.44	3.60	0.95	62.15	4.53	2.03	5.60	1.42	115.65	49.71	2.42	7.60	1.75	101.12	111.96	3.04	9.60	2.80	181.20	141.41	3.96
1.62	2.06	122.98	10.35	1.45	3.62	0.94	61.73	3.49	2.03	5.62	1.41	111.75	50.20	2.42	7.62	1.76	98.75	113.25	3.05	9.62	2.78	181.29	144.40	3.96
1.64	2.04	118.01	10.59	1.46	3.64	0.92	61.64	2.63	2.04	5.64	1.42	105.18	51.97	2.42	7.64	1.70	96.31	113.86	3.06	9.64	2.88	169.81	150.34	3.97
1.66	1.99	116.43	11.32	1.47	3.66	0.90	62.74	1.78	2.05	5.66	1.43	95.07	53.56	2.42	7.66	1.72	93.39	113.98	3.06	9.66	2.84	161.28	150.71	3.98
1.68	1.95	114.20	12.61	1.47	3.68	0.90	62.52	0.86	2.05	5.68	1.46	84.48	56.38	2.40	7.68	1.73	91.32	114.29	3.06	9.68	2.83	154.70	153.59	3.99
1.70	1.92	111.52	13.59	1.48	3.70	0.88	62.68	0.18	2.05	5.70	1.49	78.39	58.52	2.39	7.70	1.71	89.95	113.86	3.07	9.70	2.77	148.40	154.63	3.99
1.72	1.94	110.25	14.02	1.48	3.72	0.85	62.28	0.61	2.05	5.72	1.56	73.19	62.07	2.39	7.72	1.67	89.49	114.29	3.08	9.72	2.70	145.77	153.95	4.00
1.74	1.89	109.64	14.32	1.48	3.74	0.86	60.76	0.92	2.05	5.74	1.64	71.85	65.81	2.38	7.74	1.68	88.30	114.65	3.08	9.74	2.76	139.17	157.32	4.01
1.76	1.92	109.61	14.20	1.49	3.76	0.88	56.99	1.10	2.05	5.76	1.73	69.35	67.03	2.38	7.76	1.67	87.69	115.02	3.09	9.76	2.84	135.66	159.52	4.02
1.78	1.98	113.53	14.02	1.50	3.78	0.87	54.68	0.80	2.06	5.78	1.79	69.44	67.89	2.39	7.78	1.70	88.06	115.33	3.09	9.78	2.76	143.78	160.50	4.02
1.80	2.04	113.93	13.96	1.50	3.80	0.87	52.97	1.22	2.07	5.80	1.83	74.52	70.03	2.40	7.80	1.71	89.70	116.19	3.11	9.80	2.70	142.68	159.59	4.04
1.82	2.15	116.33	13.34	1.51	3.82	0.88	51.06	1.59	2.07	5.82	1.84	80.46	72.05	2.44	7.82	1.71	88.88	116.06	3.11	9.82	2.72	144.93	160.14	4.05
1.84	2.27	116.82	13.04	1.51	3.84	0.90	50.36	1.22	2.08	5.84	1.89	85.66	73.82	2.45	7.84	1.72	90.98	116.98	3.11	9.84	2.79	151.75	162.65	4.05
1.86	2.51	131.40	11.32	1.51	3.86	0.92	50.48	1.04	2.07	5.86	1.91	89.56	74.99	2.45	7.86	1.77	91.89	117.47	3.12	9.86	2.81	156.37	164.30	4.06
1.88	2.60	132.07	10.47	1.52	3.88	0.89	52.43	0.61	2.08	5.88	1.96	92.76	75.66	2.46	7.88	1.80	95.15	118.51	3.12	9.88	2.75	160.57	163.87	4.08
1.90	2.68	138.77	9.30	1.53	3.90	0.89	53.65	0.98	2.08	5.90	1.99	97.38	76.58	2.46	7.90	1.77	96.49	118.39	3.13	9.90	2.63	159.81	162.46	4.08
1.92	2.73	146.13	8.33	1.53	3.92	0.86	52.95	1.84	2.09	5.92	2.00	100.58	77.44	2.47	7.92	1.78	99.20	118.08	3.11	9.92	2.58	156.06	162.28	4.09
1.94	2.71	154.56	7.22	1.53	3.94	0.83	52.74	2.26	2.10	5.94	2.02	100.06	80.44	2.48	7.94	1.78	102.55	118.14	3.13	9.94	2.56	151.16	162.46	4.10
1.96	2.66	159.62	6.61	1.54	3.96	0.84	51.47	2.57	2.10	5.96	2.04	100.46	80.19	2.49	7.96	1.73	105.26	117.59	3.14	9.96	2.47	149.63	161.30	4.11
1.98	2.62	163.39	4.96	1.56	3.98	0.83	49.98	3.18	2.10	5.98	2.12	103.26	85.70	2.49	7.98	1.68	108.45	117.53	3.15	9.98	2.41	145.24	163.01	4.12
2.00	2.60	167.41	3.92	1.56	4.00	0.81	49.43	3.86	2.11	6.00	2.16	106.03	88.21	2.51	8.00	1.70	111.10	117.23	3.16	10.00	2.47	138.91	164.73	4.13

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COMMITTENTE:
CANTIERE: Via Thomas Alva Edison - Forlì (FC)
COMMESSA: C054/24
RDP N°: 204/24
DATA: 10/09/2024

PROVA N°: CPTU 4
PROF. FALDA (m da p.c.): 4.50
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

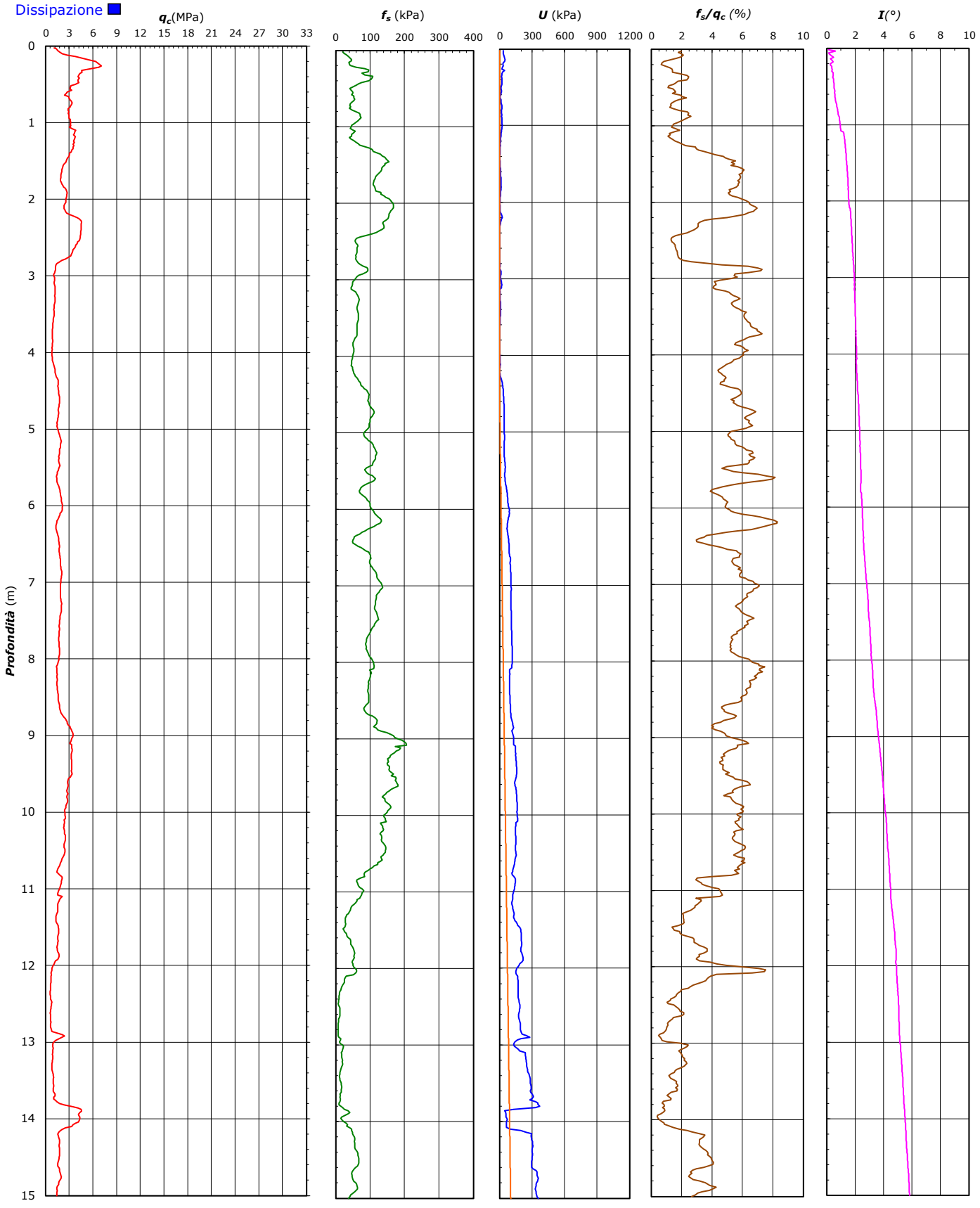
prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	2.47	141.04	165.34	4.15	12.02	0.86	60.98	154.14	4.91	14.02	4.31	30.05	61.77	5.53										
10.04	2.46	145.11	166.01	4.16	12.04	0.81	61.10	152.55	4.92	14.04	4.14	34.47	63.97	5.53										
10.06	2.50	144.38	167.42	4.17	12.06	0.79	58.55	153.04	4.93	14.06	3.75	32.60	62.74	5.54										
10.08	2.55	147.27	169.01	4.18	12.08	0.78	51.58	153.46	4.93	14.08	3.47	40.99	62.44	5.54										
10.10	2.35	129.83	152.85	4.19	12.10	0.70	30.34	166.75	4.92	14.10	3.30	47.20	100.29	5.55										
10.12	2.40	132.93	151.14	4.20	12.12	0.73	28.54	168.89	4.92	14.12	2.52	46.66	197.69	5.55										
10.14	2.41	136.46	149.42	4.21	12.14	0.70	26.26	169.44	4.94	14.14	2.05	48.56	247.99	5.56										
10.16	2.37	136.82	147.83	4.21	12.16	0.71	26.14	170.05	4.96	14.16	1.86	49.44	296.40	5.57										
10.18	2.38	139.08	147.59	4.22	12.18	0.69	25.02	170.91	4.96	14.18	1.64	52.33	291.93	5.57										
10.20	2.29	138.65	146.24	4.23	12.20	0.68	22.83	171.89	4.96	14.20	1.54	54.47	291.78	5.58										
10.22	2.36	132.74	147.77	4.23	12.22	0.67	20.45	172.44	4.96	14.22	1.61	55.33	295.12	5.58										
10.24	2.38	129.27	148.38	4.23	12.24	0.65	17.96	172.44	4.98	14.24	1.67	55.52	298.39	5.59										
10.26	2.41	133.25	148.87	4.23	12.26	0.65	16.58	172.38	4.99	14.26	1.73	54.88	303.29	5.60										
10.28	2.43	133.59	149.91	4.24	12.28	0.63	15.46	172.44	4.99	14.28	1.75	55.80	305.18	5.59										
10.30	2.49	133.77	151.57	4.24	12.30	0.63	12.67	172.75	5.00	14.30	1.78	56.33	306.84	5.60										
10.32	2.49	133.34	152.18	4.25	12.32	0.62	11.89	172.50	4.99	14.32	1.77	55.59	307.05	5.60										
10.34	2.49	134.40	152.24	4.26	12.34	0.60	10.86	172.44	5.00	14.34	1.74	56.06	305.40	5.61										
10.36	2.51	138.66	151.51	4.26	12.36	0.61	10.14	173.30	5.01	14.36	1.74	57.00	302.58	5.61										
10.38	2.49	142.04	150.59	4.27	12.38	0.60	9.87	173.67	5.02	14.38	1.75	60.29	300.53	5.62										
10.40	2.41	144.29	148.93	4.27	12.40	0.62	9.48	176.24	5.03	14.40	1.77	63.42	302.49	5.64										
10.42	2.36	145.65	147.71	4.28	12.42	0.65	8.22	178.75	5.04	14.42	1.75	65.02	304.36	5.65										
10.44	2.34	145.41	147.04	4.30	12.44	0.66	8.16	181.56	5.03	14.44	1.75	65.38	303.53	5.66										
10.46	2.35	144.46	147.96	4.30	12.46	0.74	7.77	185.66	5.03	14.46	1.77	65.64	300.53	5.66										
10.48	2.44	144.31	151.51	4.31	12.48	0.79	8.80	188.54	5.04	14.48	1.75	67.49	299.55	5.68										
10.50	2.46	141.14	152.42	4.32	12.50	0.77	11.41	188.97	5.05	14.50	1.72	67.86	298.63	5.67										
10.52	2.47	137.52	153.16	4.34	12.52	0.75	12.32	188.30	5.06	14.52	1.70	67.62	296.89	5.69										
10.54	2.43	131.67	150.95	4.35	12.54	0.72	12.56	185.91	5.06	14.54	1.65	66.94	294.81	5.68										
10.56	2.32	132.37	146.36	4.35	12.56	0.69	12.80	182.48	5.07	14.56	1.62	66.42	294.56	5.70										
10.58	2.21	135.59	143.92	4.35	12.58	0.65	12.35	178.93	5.08	14.58	1.57	63.91	295.27	5.70										
10.60	2.14	130.78	142.26	4.36	12.60	0.61	13.10	176.79	5.08	14.60	1.53	58.60	298.08	5.71										
10.62	2.06	122.07	139.08	4.37	12.62	0.60	12.80	175.69	5.07	14.62	1.57	54.15	308.06	5.71										
10.64	1.98	122.04	136.69	4.38	12.64	0.58	11.60	176.54	5.08	14.64	1.70	50.38	338.24	5.72										
10.66	1.90	112.00	133.57	4.38	12.66	0.62	9.07	181.32	5.08	14.66	1.75	47.80	344.88	5.73										
10.68	1.84	106.18	131.98	4.39	12.68	0.62	8.59	185.30	5.08	14.68	1.79	46.10	345.13	5.75										
10.70	1.76	99.58	127.75	4.40	12.70	0.64	8.26	188.79	5.09	14.70	1.81	48.44	347.15	5.74										
10.72	1.64	95.22	124.02	4.40	12.72	0.66	7.42	190.62	5.09	14.72	1.89	47.80	350.09	5.76										
10.74	1.56	85.21	120.23	4.42	12.74	0.67	7.18	191.05	5.09	14.74	1.97	48.76	356.76	5.78										
10.76	1.46	82.50	114.90	4.41	12.76	0.66	7.33	191.54	5.09	14.76	1.98	51.08	356.30	5.77										
10.78	1.45	83.39	116.12	4.42	12.78	0.67	6.94	193.38	5.10	14.78	1.95	53.66	348.52	5.76										
10.80	1.59	83.84	130.57	4.43	12.80	0.66	6.73	194.66	5.09	14.80	1.83	58.36	341.64	5.77										
10.82	1.84	72.77	141.96	4.43	12.82	0.68	6.73	195.76	5.09	14.82	1.73	61.58	338.94	5.78										
10.84	2.05	62.09	148.14	4.44	12.84	0.72	6.67	199.56	5.10	14.84	1.68	62.13	337.05	5.79										
10.86	2.10	61.42	148.51	4.44	12.86	0.83	6.71	208.01	5.10	14.86	1.64	63.39	334.54	5.79										
10.88	2.08	63.98	145.75	4.44	12.88	1.35	7.79	247.18	5.11	14.88	1.50	63.98	331.42	5.80										
10.90	1.98	65.14	141.04	4.45	12.90	2.12	9.92	281.77	5.12	14.90	1.46	59.65	334.20	5.79										
10.92	1.98	66.54	141.10	4.46	12.92	2.40	14.64	195.89	5.12	14.92	1.44	55.42	338.45	5.79										
10.94	1.97	70.62	140.49	4.47	12.94	2.06	13.62	162.46	5.13	14.94	1.48	49.44	339.19	5.80										
10.96	1.90	76.01	137.79	4.48	12.96	1.61	11.52	144.22	5.14	14.96	1.46	44.54	341.45	5.81										
10.98	1.83	81.34	134.55	4.49	12.98	1.29	13.63	136.32	5.14	14.98	1.43	41.52	345.95	5.82										
11.00	1.76	79.79	131.55	4.50	13.00	1.05	20.24	130.20	5.15	15.00	1.42	37.52	357.37	5.83										
11.02	1.68	76.63	127.33	4.49	13.02	0.92	22.56	137.30	5.18															
11.04	1.61	74.80	123.84	4.50	13.04	0.92	21.77	156.95	5.19															
11.06	1.57	73.31	123.29	4.51	13.06	0.93	20.18	177.89	5.20															
11.08	1.54	69.54	122.55	4.51	13.08	0.95	18.83	186.28	5.20															
11.10	2.11	62.10	122.31	4.51	13.10	0.90	16.37	238.12	5.21															
11.12	1.90	62.41	115.94	4.51	13.12	0.92	17.84	239.10	5.22															
11.14	1.78	58.82	113.55	4.53	13.14	0.90	17.84	240.27	5.23															
11.16	1.72	54.04	113.86	4.54	13.16	0.89	18.20	241.12	5.22															
11.18	1.58	48.32	118.63	4.55	13.18	0.90	18.74	243.33	5.24															
11.20	1.56	44.66	120.41	4.55	13.20	0.90	19.80	245.59	5.24															
11.22	1.53	43.84	122.00	4.56	13.22	0.91	19.74	248.22	5.25															
11.24	1.55	42.90	126.16	4.58	13.24	0.89	20.37	250.00	5.26															
11.26	1.56	40.34	130.75	4.58	13.26	0.85	20.13	251.16	5.28															
11.28	1.57	36.99	135.65	4.61	13.28	0.81	18.17	251.65	5.28															
11.30	1.56	32.15	135.96	4.62	13.30	0.78	16.94	253.92	5.28															
11.32	1.44	30.43	128.61	4.63	13.32	0.79	15.41	257.10	5.29															
11.34	1.36	28.69	130.20	4.65	13.34	0.80	13.39	260.53	5.30															
11.36	1.35	28.51	136.88	4.65	13.36	0.83	13.15	264.08	5.30															
11.38	1.34	28.66	144.16	4.66	13.38	0.85	13.09	269.77	5.31															
11.40	1.32	28.18	153.77	4.68	13.40	0.91	11.89	275.10	5.32															
11.42	1.34	29.02	162.95	4.69	13.42	0.95	10.99	278.89	5.33															
11.44	1.38	28.54	168.65	4.70	13.44	0.99	12.25	284.95	5.34															
11.46	1.50	26.50	184.01	4.72	13.46	1.02	13.00	284.95	5.35															
11.48	1.63	22.23	194.42	4.72	13.48	0.99	15.20	284.04	5.36															
11.50	1.63	24.06	198.27	4.73	13.50	0.99	16.58	285.87	5.37															
11.52	1.68	25.78	198.82	4.74	13.52	1.00	16.40	288.38	5.37															
11.54	1.66	31.28	200.42	4.76	13.54	0.99	17.15	290.40	5.37															
11.56	1.69	32.33	202.68	4.78	13.56	1.02	18.02	293.89	5.37															
11.58	1.68	33.96	201.21	4.78	13.58	1.03	16.58	292.36	5.37															
11.60	1.63	38.02	200.36	4.79	13.60	0.99	16.97	284.40	5.38															
11.62	1.57	42.82	199.93	4.80	13.62	0.96	16.28	289.30	5.39															
11.64	1.56	43.91	199.31	4.79	13.64	1.00	13.12	300.38	5.39															
11.66	1.56	44.22	203.23	4.79	13.66	1.12	13.33	310.11	5.40															
11.68	1.59	44.58	206.29	4.81	13.68	1.22	12.73	314.34	5.40															
11.70	1.56	46.99	204.15	4.81	13.70	1.18	13.63	298.97	5.41															
11.72	1.55	49.03	201.58	4.83	13.72	1.06	14.05	281.28	5.42															
11.74	1.50	51.61	198.09	4.84	13.74	1.02	13.21	331.84	5.41															
11.76	1.45	53.29	195.03	4.86	13.76	1.24	10.15	353.76	5.43															
11.78	1.48	54.44	196.74	4.87	13.78	1.45	10.36	355.17	5.43															
11.80	1.50	55.21	204.21	4.87	13.80	1.79	14.96	367.65	5.44															
11.82	1.57	54.23	210.21	4.88	13.82	2.32	20.04	334.97	5.45															
11.84	1.67	52.83	215.29	4.89	13.84	3.43	26.05	130.33	5.45															
11.86	1.70	54.17	216.82	4.89	13.86	4.13	35.79	47.38	5.46															
11.88	1.70	51.46	218.11	4.88	13.88	4.51	41.05	53.81	5.47															
11.90	1.65	49.21	215.60	4.87	13.90	4.57	36.66	58.89	5.48															
11.92	1.53	48.42	205.99	4.87	13.92	4.35	27.61	59.07	5.48															
11.94	1.29	50.15	187.01	4.87	13.94	4.15	17.78	61.21	5.49															
11.96	1.17	50.79	178.26	4.86	13.96	4.21	15.80	67.15	5.50															
11.98	1.08	52.95	169.99	4.88	13.98	4.36	19.50	72.85	5.51															
12.00	0.97	56.84	160.63	4.90	14.00	4.31	23.31	63.23	5.51															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Thomas Alva Edison - Forlì (FC)
COMMESSA: C054/24
RDP N°: 204/24
DATA: 10/09/2024

PROVA N°: CPTU 4
PROF. FALDA (m da p.c.): 4.50
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 4
CANTIERE:	Via Thomas Alva Edison - Forlì (FC)	PROF. FALDA (m da p.c.):	4.50
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	204/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	10/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Thomas Alva Edison - Forlì (FC)
Lat.: 44.222501°
Long.: 12.075704°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Olindo Vernocchi - Pievequinta (FC)
COMMESSA: C054/24
RDP N°: 205/24
DATA: 06/09/2024

PROVA N°: CPTU 5
PROF. FALDA (m da p.c.): 4.15
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	0.67	60.79	17.51	0.16	2.02	3.03	221.50	41.56	0.82	4.02	1.51	84.09	28.77	2.00	6.02	1.32	71.21	60.72	2.73	8.02	1.03	56.31	65.56	3.48
0.04	1.43	65.09	21.24	0.09	2.04	2.72	221.11	41.99	0.80	4.04	1.57	81.92	29.87	1.99	6.04	1.32	72.87	61.40	2.77	8.04	1.05	55.38	65.99	3.50
0.06	2.12	73.24	22.89	0.05	2.06	2.57	220.19	42.42	0.85	4.06	1.60	80.06	30.85	2.02	6.06	1.32	72.30	61.40	2.75	8.06	1.09	56.61	66.30	3.50
0.08	2.74	77.81	21.43	0.14	2.08	2.43	213.47	42.48	0.87	4.08	1.64	77.50	33.30	2.03	6.08	1.32	70.70	61.34	2.76	8.08	1.11	57.18	66.36	3.51
0.10	3.68	81.81	21.98	0.02	2.10	2.30	201.93	42.73	0.88	4.10	1.68	77.75	34.10	2.02	6.10	1.31	70.52	60.72	2.76	8.10	1.15	58.34	77.56	3.52
0.12	4.55	88.65	21.06	0.23	2.12	2.21	191.98	42.85	0.88	4.12	1.75	77.49	41.44	2.04	6.12	1.37	67.22	69.11	2.79	8.12	1.15	59.94	74.56	3.53
0.14	5.04	90.11	12.55	0.28	2.14	2.16	165.39	48.36	0.96	4.14	1.75	81.31	44.63	2.12	6.14	1.28	67.37	66.60	2.79	8.14	1.12	62.37	73.27	3.53
0.16	5.76	60.16	2.63	0.08	2.16	2.13	153.74	48.48	0.96	4.16	1.75	86.24	37.83	2.13	6.16	1.19	68.27	64.34	2.81	8.16	1.11	63.66	72.36	3.54
0.18	6.59	49.97	13.10	0.30	2.18	2.07	147.29	47.44	1.01	4.18	1.67	93.18	34.28	2.10	6.18	1.14	67.28	62.99	2.82	8.18	1.10	64.24	71.80	3.55
0.20	5.45	81.96	12.98	0.36	2.20	2.07	143.39	46.65	1.01	4.20	1.65	96.07	34.16	2.11	6.20	1.11	66.53	61.83	2.82	8.20	1.09	65.59	71.38	3.55
0.22	4.47	49.97	13.34	0.42	2.22	2.08	140.19	46.03	1.05	4.22	1.59	97.75	35.26	2.15	6.22	1.08	66.38	61.89	2.84	8.22	1.08	66.22	71.07	3.56
0.24	4.58	72.14	13.10	0.33	2.24	2.04	138.52	45.18	1.06	4.24	1.60	98.30	36.12	2.17	6.24	1.10	63.82	62.81	2.84	8.24	1.06	65.59	70.58	3.57
0.26	4.42	92.83	15.61	0.44	2.26	2.10	134.90	44.93	1.06	4.26	1.58	98.54	38.44	2.17	6.26	1.14	61.81	64.52	2.85	8.26	1.06	65.68	69.60	3.57
0.28	4.14	85.59	15.79	0.52	2.28	2.15	130.27	44.93	1.08	4.28	1.57	95.71	37.34	2.15	6.28	1.17	60.01	65.99	2.84	8.28	1.03	65.98	68.87	3.58
0.30	3.91	86.44	16.53	0.29	2.30	2.19	124.70	44.99	1.09	4.30	1.60	91.96	37.40	2.14	6.30	1.26	57.18	68.50	2.86	8.30	1.00	65.59	68.56	3.59
0.32	3.92	86.29	16.04	0.57	2.32	2.18	115.84	45.18	1.06	4.32	1.59	87.89	38.44	2.16	6.32	1.34	54.80	70.27	2.87	8.32	1.00	65.41	68.13	3.60
0.34	4.34	69.44	14.94	0.33	2.34	2.07	111.55	45.42	1.09	4.34	1.60	86.70	40.22	2.18	6.34	1.42	53.84	71.44	2.87	8.34	0.96	65.44	67.89	3.60
0.36	4.31	79.33	15.61	0.37	2.36	1.94	107.41	45.85	1.12	4.36	1.59	85.63	38.63	2.20	6.36	1.45	55.08	70.52	2.87	8.36	0.95	64.86	67.70	3.62
0.38	4.24	84.80	16.04	0.44	2.38	1.90	104.80	45.97	1.12	4.38	1.62	84.23	38.20	2.21	6.38	1.44	58.95	71.07	2.88	8.38	0.94	63.24	67.76	3.62
0.40	4.38	85.22	15.36	0.37	2.40	1.85	105.93	45.97	1.11	4.40	1.67	81.79	39.30	2.20	6.40	1.46	62.53	71.31	2.89	8.40	0.92	61.44	67.46	3.62
0.42	4.61	75.21	15.06	0.57	2.42	1.75	106.05	45.24	1.15	4.42	1.68	82.90	41.87	2.21	6.42	1.41	67.79	69.42	2.90	8.42	0.89	60.02	67.27	3.65
0.44	4.91	66.31	14.32	0.42	2.44	1.68	103.83	44.14	1.12	4.44	1.69	84.90	41.20	2.23	6.44	1.35	73.96	69.17	2.91	8.44	0.88	59.27	67.15	3.64
0.46	5.58	60.00	13.47	0.52	2.46	1.65	100.97	42.91	1.14	4.46	1.72	86.09	43.46	2.22	6.46	1.31	78.83	68.38	2.92	8.46	0.89	58.97	67.52	3.65
0.48	5.89	57.98	13.28	0.51	2.48	1.64	98.08	41.56	1.17	4.48	1.71	87.67	44.99	2.24	6.48	1.28	82.68	69.36	2.92	8.48	0.89	56.77	68.50	3.66
0.50	6.04	58.61	12.92	0.64	2.50	1.69	94.18	40.52	1.15	4.50	1.72	89.56	42.85	2.25	6.50	1.27	85.53	69.97	2.93	8.50	0.92	54.49	69.42	3.66
0.52	6.26	68.87	12.92	0.50	2.52	1.70	91.14	39.61	1.16	4.52	1.74	91.87	43.16	2.25	6.52	1.28	84.49	70.21	2.95	8.52	0.92	54.16	69.85	3.67
0.54	6.16	67.58	13.65	0.58	2.54	1.60	87.31	39.67	1.14	4.54	1.76	92.63	44.07	2.25	6.54	1.29	79.64	69.23	2.95	8.54	0.93	54.49	70.15	3.68
0.56	5.83	64.12	14.39	0.49	2.56	1.58	86.70	39.48	1.15	4.56	1.73	93.94	44.81	2.28	6.56	1.31	77.42	68.99	2.95	8.56	0.93	55.18	70.21	3.69
0.58	5.86	60.57	14.39	0.55	2.58	1.57	85.70	39.30	1.18	4.58	1.71	96.29	44.26	2.27	6.58	1.31	75.19	66.48	2.96	8.58	0.95	54.19	70.70	3.68
0.60	5.87	56.70	14.69	0.50	2.60	1.51	86.47	39.12	1.19	4.60	1.68	96.53	42.91	2.28	6.60	1.25	74.98	64.52	2.97	8.60	0.95	54.01	71.07	3.69
0.62	5.65	63.46	15.18	0.40	2.62	1.40	84.79	39.54	1.18	4.62	1.66	97.23	42.24	2.28	6.62	1.26	73.99	64.64	2.97	8.62	0.96	54.85	71.38	3.70
0.64	5.23	68.28	16.10	0.49	2.64	1.29	87.02	39.61	1.21	4.64	1.61	97.84	41.93	2.29	6.64	1.25	72.99	64.64	2.97	8.64	0.97	55.93	71.31	3.71
0.66	4.99	69.69	16.41	0.40	2.66	1.25	85.20	39.30	1.24	4.66	1.55	98.24	41.75	2.30	6.66	1.21	72.42	63.79	2.99	8.66	0.97	56.80	70.70	3.72
0.68	4.82	63.80	16.65	0.42	2.68	1.24	79.61	38.63	1.26	4.68	1.48	97.23	40.95	2.29	6.68	1.21	72.90	62.44	3.00	8.68	0.93	57.43	69.78	3.72
0.70	4.67	59.90	16.83	0.41	2.70	1.25	76.40	37.77	1.24	4.70	1.42	96.26	39.85	2.30	6.70	1.13	73.54	60.36	2.99	8.70	0.93	58.28	69.05	3.73
0.72	4.71	56.95	16.90	0.43	2.72	1.23	74.45	37.10	1.24	4.72	1.37	93.73	38.38	2.32	6.72	1.08	73.87	59.68	3.00	8.72	0.89	59.00	68.56	3.74
0.74	4.68	60.77	16.90	0.38	2.74	1.24	73.52	36.73	1.24	4.74	1.27	91.64	36.91	2.34	6.74	1.04	71.34	58.58	3.01	8.74	0.85	59.87	68.25	3.74
0.76	4.87	59.81	16.28	0.36	2.76	1.22	72.65	36.67	1.31	4.76	1.22	89.41	35.93	2.35	6.76	1.00	70.71	57.66	3.03	8.76	0.83	59.36	67.70	3.75
0.78	5.13	59.10	15.92	0.31	2.78	1.20	73.43	36.67	1.28	4.78	1.17	83.84	34.83	2.35	6.78	0.97	70.35	57.66	3.03	8.78	0.80	58.61	67.21	3.76
0.80	5.16	58.74	15.92	0.26	2.80	1.19	76.44	36.79	1.29	4.80	1.11	80.50	33.67	2.37	6.80	0.97	66.65	57.48	3.03	8.80	0.77	57.13	66.72	3.77
0.82	5.28	60.36	16.04	0.29	2.82	1.17	80.21	36.85	1.27	4.82	1.06	76.68	32.69	2.37	6.82	0.96	65.06	57.60	3.03	8.82	0.76	54.76	66.66	3.78
0.84	5.14	59.32	16.65	0.25	2.84	1.17	83.37	36.85	1.33	4.84	1.04	72.36	31.77	2.38	6.84	0.98	60.67	57.97	3.04	8.84	0.75	52.14	67.21	3.78
0.86	5.15	57.18	16.53	0.23	2.86	1.17	85.17	36.73	1.33	4.86	1.01	67.25	31.53	2.38	6.86	1.00	58.65	58.58	3.04	8.86	0.76	49.41	68.07	3.79
0.88	5.25	57.79	16.47	0.29	2.88	1.18	84.63	36.55	1.32	4.88	1.04	62.59	32.02	2.40	6.88	0.99	57.06	58.95	3.05	8.88	0.78	48.11	68.68	3.80
0.90	5.09	61.46	16.71	0.28	2.90	1.21	83.23	36.48	1.32	4.90	1.08	58.41	33.73	2.39	6.90	1.00	53.78	59.13	3.05	8.90	0.77	46.52	68.93	3.81
0.92	5.30	57.22	16.34	0.23	2.92	1.27	81.67	36.24	1.36	4.92	1.15	54.59	36.79	2.40	6.92	0.97	53.84	58.58	3.07	8.92	0.77	45.32	69.36	3.81
0.94	5.47	55.18	15.92	0.24	2.94	1.29	79.84	35.99	1.36	4.94	1.24	52.49	39.79	2.41	6.94	0.93	54.14	57.91	3.08	8.94	0.80	44.72	70.52	3.82
0.96	5.61	54.28	15.98	0.28	2.96	1.37	79.54	35.75	1.34	4.96	1.34	51.95	44.01	2.41	6.96	0.93	54.35	57.30	3.08	8.96	0.84	44.36	72.05	3.82
0.98	5.31	67.27	17.20	0.31	2.98	1.35	78.67	35.81	1.39	4.98	1.44	49.69	46.46	2.41	6.98	0.92	54.83	56.99	3.11	8.98	0.87	44.27	73.21	3.82
1.00	5.23	74.52	17.32	0.23	3.00	1.35	79.22	17.26	1.38	5.00	1.49	51.62	50.50	2.42	7.00	0.93	54.38	57.48	3.11	9.00	0.89	44.69	73.58	3.82
1.02	5.02	83.86	17.94	0.30	3.02	1.38	81.87	12.43	1.37	5.02	1.56	53.73	51.30	2.42	7.02	0.93	54.50	57.79	3.13	9.02	0.92	45.56	73.58	3.77
1.04	4.55	89.40	18.73	0.28	3.04	1.39	83.80	11.08	1.39	5.04	1.57	56.98	53.81	2.43	7.04	0.94	55.14	58.28	3.14	9.04	0.93	46.67	73.27	3.78
1.06	4.37	92.81	18.98	0.36	3.06	1.39	86.64	10.47	1.42	5.06	1.62	61.01	50.81	2.42	7.06	0.95	54.57	58.58	3.15	9.06	0.92	47.61	73.15	3.79
1.08	4.22	91.26	19.34	0.40	3.08	1.38	89.65	9.79	1.41	5.08	1.63	66.48	50.56	2.42	7.08	0.97	53.81	59.07	3.16	9.08	0.90	48.47	79.95	3.80
1.10	3.92	83.93	19.83	0.33	3.10	1.38	91.69	8.51	1.42	5.10	1.61	71.69	51.11	2.44	7.10	1.09	50.42	70.21	3.17	9.10	0.89	50.06	78.05	3.81
1.12	3.75	80.61	20.26	0.40	3.12	1.40	92.40	6.43	1.45	5.12	1.68	79.72	61.70	2.49	7.12	1.13	51.17	69.05	3.18	9.12	0.88	51.47	76.82	3.83
1.14	3.66	83.48	20.38	0.41	3.14	1.42	92.01	9.49	1.56	5.14	1.61	85.37	58.09	2.49	7.14	1.12	52.79	67.52	3.17	9.14	0.88	51.26	76.46	3.84
1.16	3.58	71.49	37.89	0.47	3.16	1.45	96.49	7.59	1.56	5.16	1.56	88.65	56.62	2.50	7.16	1.11	54.09	66.72	3.17	9.16	0.86	50.90	76.27	3.83
1.18	3.53	79.46	38.26	0.39	3.18	1.46	95.91	6.00	1.56	5.18	1.51	91.03	56.56	2.49	7.18	1.13	55.98	66.97	3.18	9.18	0.86	50.33	75.84	3.84
1.20	3.55	89.95	38.32	0.48	3.20	1.47	95.42	2.94	1.60	5.20	1.47	91.57	55.77	2.50	7.20	1.14	57.03	67.27	3.20	9.20	0.86	50.00	75.78	3.85
1.22	3.49	98.84	38.63	0.45	3.22	1.51	94.82	0.86	1.59	5.22	1.40	94.22	55.34	2.51	7.22	1.17	58.00	67.46	3.19	9.22	0.86	49.22	75.78	3.86
1.24	3.37	103.52	38.99	0.47	3.24	1.55	94.24	0.18	1.60	5.24	1.37	93.70	55.34	2.51	7.24	1.19	58.72	67.58	3.19	9.24	0.82	47.92	75.78	3.85
1.26	3.46	107.45	38.93	0.48	3.26	1.57	94.91	0.80	1.63	5.26	1.34	90.99	54.97	2.52	7.26	1.19	59.92	67.34	3.20	9.26	0.84	47.11	76.21	3.87
1.28	3.68	111.80	38.50	0.51	3.28	1.61	96.34	1.59	1.65	5.28	1.35	88.04	55.28	2.52	7.28	1.15	63.32	66.36	3.22	9.28	0.83	48.17	76.76	3.89
1.30	3.93	118.16	38.08	0.44	3.30	1.61	97.55	1.84	1.67	5.30	1.38	87.03	56.93	2.52	7.30	1.10	66.11	65.32	3.21	9.30	0.83	47.20	76.40	3.90
1.32	3.99	125.12	38.08	0.47	3.32	1.58	99.17	2.20	1.65	5.32	1.38	83.93	58.52	2.52	7.32	1.12	67.41	65.07	3.21	9.32	0.80	45.94	76.33	3.89
1.34	4.18	127.86	37.77	0.49	3.34	1.62	103.43	2.75	1.64	5.34	1.39	80.70	58.70	2.52	7.34	1.08	69.75	64.64	3.22	9.34	0.81	45.19	76.21	3.90
1.36	4.32	133.16	37.59	0.50	3.36	1.53	106.44	4.29	1.66	5.36	1.41	76.01	58.28	2.52	7.36	1.05	71.77	64.58	3.22	9.36	0.83	44.41	77.50	3.90
1.38	4.47	146.55	37.34	0.45	3.38	1.54	108.39	5.14	1.69	5.39	1.42	73.85	58.03	2.53	7.38	1.05	71.25	65.01	3.23	9.38	0.87	43.84	78.84	3.91
1.40	4.70	166.27	36.91	0.52	3.40	1.56	107.93	5.51	1.70	5.40	1.43	74.48	58.58	2.53	7.40	1.04	68.70	65.56	3.24	9.40	0.92	44.23	80.25	3.92
1.42	5.02	187.11	36.61	0.50	3.42	1.56	107.57	5.57	1.68	5.42	1.40	74.27	58.83	2.54	7.42	1.05	65.72	65.93	3.25	9.42	0.92	44.62	79.27	3.93
1.44	5.17	201.39	36.67	0.50	3.44	1.57	106.87	5.82	1.70	5.44	1.39	73.37	58.34	2.54	7.44	1.06	62.62	66.36	3.25	9.44	0.87	45.97	76.03	3.95
1.46	5.24	213.22	36.91	0.51	3.46	1.58	106.78	6.06	1.70	5.46	1.38	74.45	58.34	2.53	7.46	1.05	61.72	66.36	3.27	9.46	0.81	45.04	73.52	3.95
1.48	5.28	210.76	37.03	0.51	3.48	1.56	107.17	6.49	1.73	5.48	1.38	74.18	57.17	2.52	7.48	1.01	60.73	65.93	3.27	9.48	0.80	43.90	73.33	3.96
1.50	5.35	214.98	36.97	0.52	3.50	1.58	105.92	7.04	1.74	5.50	1.38	74.12	57.24	2.52	7.50	1.02	58.95	65.74	3.28	9.50	0.94	42.66	77.38	3.97
1.52	5.39	223.63	36.97	0.52	3.52	1.62	106.50	8.26	1.74	5.52	1.35	74.48	56.68	2.54	7.52	1.01	58.08	65.93	3.28	9.52	1.11	42.30	83.19	3.97
1.54	5.49	231.99	37.16	0.58	3.54	1.63	106.96	8.94	1.73	5.54	1.33	72.61	55.64	2.55	7.54	1.03	57.63	66.30	3.29	9.54	1.27	43.33	85.58	3.98
1.56	5.58	233.88	37.03	0.50	3.56	1.63	107.41	9.61	1.75	5.56	1.28	73.18	54.97	2.54	7.56	1.04	57.69	66.60	3.30	9.56	1.21	43.36	79.64	3.98
1.58	5.69	226.94	36.79	0.57	3.58	1.64	105.04	9.67	1.78	5.58	1.23	72.91	55.09	2.54	7.58	1.01	57.54	66.05	3.30	9.58	0.95	42.21	71.68	3.99
1.60	5.78	213.24	36.55	0.57	3.60	1.64	104.13	10.16	1.79	5.60	1.21	72.46	56.50	2.54	7.60	1.00	58.77	65.87	3.32	9.60	0.85	42.33	67.83	4.00
1.62	5.76	204.08	36.61	0.53	3.62	1.65	103.95	10.47	1.80	5.62	1.20	71.17	56.26	2.54	7.62	1.00	59.43	65.87	3.32	9.62	0.81	42.45	68.56	4.01
1.64	5.63	195.82	36.91	0.62	3.64	1.66	103.09	11.20	1.81	5.64	1.18	68.13	55.64	2.54	7.64	0.99	59.16	66.11	3.33	9.64	0.84	41.82	70.40	4.03
1.66	5.29	181.49	37.52	0.55	3.66	1.68	102.39	11.88	1.82	5.66	1.15	67.32	55.22	2.54	7.66	0.97	57.84	66.48	3.34	9.66	0.83	42.21	71.13	4.03
1.68	5.07	172.05	37.89	0.61	3.68	1.69	102.58	12.67	1.82	5.68	1.15	66.93	54.73	2.56	7.68	0.98	57.63	66.48	3.34	9.68	0.82	43.39	71.62	4.05
1.70	4.86	165.53	38.26	0.64	3.70	1.63	104.62	14.20	1.82	5.70	1.11	66.18	54.30	2.56	7.70	0.99	57.78	66.66	3.36	9.70	0.82	44.23	72.11	4.05
1.72	4.64	167.66	38.57	0.59	3.72	1.63	102.55	15.79	1.86	5.72	1.12	64.68	54.24	2.57	7.72	0.98	57.90	66.72	3.37	9.72	0.80	44.80	72.91	4.08
1.74	4.48	174.47	38.81	0.65	3.74	1.63	100.97	15.85	1.88	5.74	1.14	64.35	54.66	2.58	7.74	1.00	56.79	67.34	3.37	9.74	0.80	43.54	73.58	4.08
1.76	4.34	185.15	38.99	0.62	3.76	1.64	99.90	15.92	1.87	5.76	1.13	63.68	55.03	2.58	7.76	1.01	56.22	68.01	3.39	9.76	0.82	42.73	74.93	4.08
1.78	4.32	198.30	38.99	0.64	3.78	1.66	99.11	15.98	1.89	5.78	1.16	63.23	55.83	2.59	7.78	1.02	56.13	68.13	3.39	9.78	0.84	42.07	77.19	4.07
1.80	4.32	211.87	38.93	0.67	3.80	1.67	99.14	16.34	1.90	5.80	1.17	61.22	55.83	2.60	7.80	1.02	57.03	68.19	3.41	9.80	0.88	42.49	77.74	4.06
1.82	4.40	229.00	38.93	0.65	3.82	1.63	99.05	19.04	1.92	5.82	1.16	59.57	56.13	2.61	7.82	1.01	57.69	67.64	3.41	9.82	0.89	43.36	78.29	4.07
1.84	4.52	239.44	38.75	0.72	3.84	1.62	101.92	18.98	1.90	5.84	1.19	57.52	57.24	2.61	7.84	0.99	57.96	66.97	3.42	9.84	0.94	43.45	79.95	4.07
1.86	4.66	242.97	38.57	0.70	3.86	1.54	103.07	19.04	1.90	5.86	1.23	55.63	59.50	2.62	7.86	0.97	57.24	66.48	3.43	9.86	0.98	44.02	80.80	4.08
1.88	4.79	233.17	38.44	0.71	3.88	1.49	102.83	19.22	1.93	5.88	1.26	55.39	60.60	2.64	7.88	0.99	57.21	66.05	3.44	9.88	0.98	44.47	81.11	4.08
1.90	4.71	227.99	38.57	0.76	3.90	1.47	101.71	19.16	1.95	5.90	1.30	55.84	60.42	2.65	7.90	0.96	59.56	65.99	3.45	9.90	1.00	45.76	80.86	4.10
1.92	4.50	221.81	39.12	0.73	3.92	1.41	101.77	19.10	1.97	5.92	1.32	57.71	59.68	2.66	7.92	0.97	60.52	66.72	3.45	9.92	0.98	47.90	80.56	4.11
1.94	4.19	214.99	39.67	0.77	3.94	1.35	102.20	21.36	1.99	5.94	1.32	61.32	58.77	2.66	7.94	0.99	57.84	67.34	3.45	9.94	0.96	49.88	80.07	4.13
1.96	3.85	213.35	40.22	0.78	3.96	1.36	98.91	22.22	1.99	5.96	1.33	64.26	59.32	2.66	7.96	1.00	56.19	67.70	3.47	9.96	0.97	51.27	79.88	4.12
1.98	3.59	212.71	40.65	0.78	3.98	1.37	93.25	23.81	1.99	5.98	1.31	66.13	59.99	2.68	7.98	1.00	56.85	65.99	3.47	9.98	0.96	52.53	79.88	4.13
2.00	3.31	217.73	41.01	0.82	4.00	1.42	89.20	25.83	2.00	6.00	1.32	68.57	60.66	2.69	8.00	0.98	57.24	65.19	3.48	10.00	0.95	53.13	79.76	4.15

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COMMITTENTE:
CANTIERE: Via Olindo Vernocchi - Pievequinta (FC)
COMMESSA: C054/24
RDP N°: 205/24
DATA: 06/09/2024

PROVA N°: CPTU 5
PROF. FALDA (m da p.c.): 4.15
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

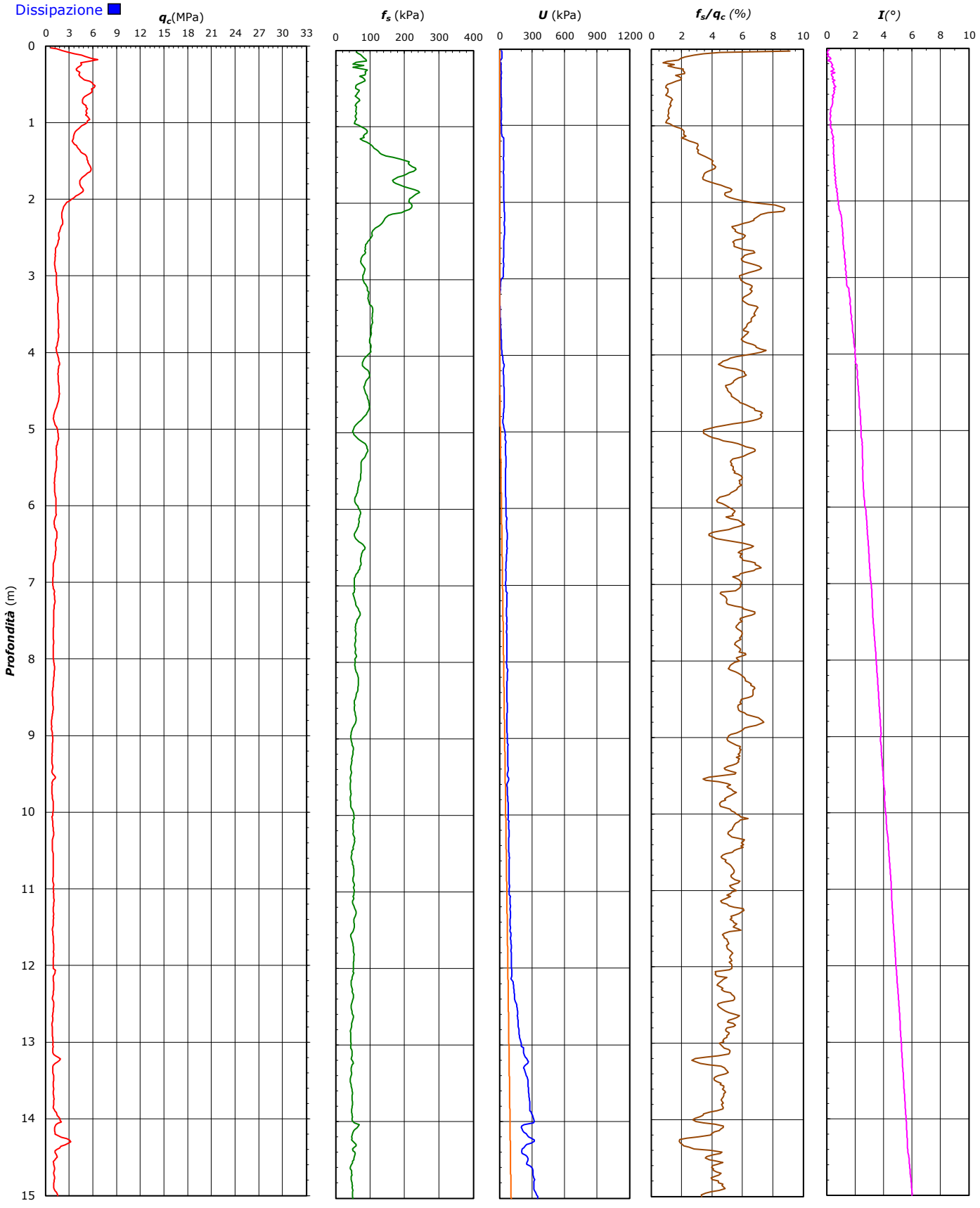
prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	0.92	53.61	79.64	4.16	12.02	0.97	51.48	112.63	4.88	14.02	1.84	53.99	313.54	5.59										
10.04	0.92	53.82	79.52	4.19	12.04	0.98	50.16	112.39	4.89	14.04	1.99	68.58	224.11	5.60										
10.06	0.79	50.52	77.44	4.19	12.06	1.25	52.48	115.45	4.91	14.06	1.57	66.09	203.60	5.61										
10.08	0.88	51.63	89.37	4.19	12.08	1.19	50.41	113.37	4.91	14.08	1.31	62.30	200.60	5.62										
10.10	0.89	51.24	85.58	4.18	12.10	1.18	49.75	111.72	4.93	14.10	1.20	57.00	208.31	5.62										
10.12	0.91	50.82	84.97	4.19	12.12	1.12	48.36	109.70	4.93	14.12	1.15	52.58	215.11	5.62										
10.14	0.93	50.97	85.15	4.20	12.14	0.95	47.49	106.27	4.93	14.14	1.12	50.45	225.94	5.62										
10.16	0.93	50.40	85.21	4.21	12.16	0.96	45.39	117.84	4.93	14.16	1.17	48.59	246.94	5.63										
10.18	0.95	50.67	85.95	4.22	12.18	0.97	45.21	125.98	4.95	14.18	1.19	47.32	255.94	5.64										
10.20	0.97	51.69	86.68	4.22	12.20	1.00	45.60	125.80	4.96	14.20	1.19	46.75	266.47	5.64										
10.22	0.99	51.36	86.99	4.23	12.22	1.03	45.24	128.24	4.96	14.22	1.52	47.32	292.48	5.65										
10.24	0.99	50.28	86.68	4.25	12.24	1.06	45.93	129.59	4.98	14.24	2.02	47.17	320.34	5.66										
10.26	1.02	51.21	87.23	4.26	12.26	1.05	48.09	131.55	4.99	14.26	2.69	50.39	320.34	5.66										
10.28	1.05	54.16	86.74	4.28	12.28	1.04	49.30	134.55	4.99	14.28	3.03	56.19	292.67	5.66										
10.30	1.04	55.21	85.95	4.28	12.30	1.05	48.42	134.67	5.00	14.30	3.18	60.13	251.90	5.67										
10.32	0.95	54.76	83.01	4.30	12.32	1.04	49.78	135.47	5.01	14.32	2.90	59.65	239.35	5.67										
10.34	0.91	55.66	82.52	4.30	12.34	0.99	51.73	137.00	5.02	14.34	2.48	53.40	225.70	5.68										
10.36	0.89	53.89	82.95	4.32	12.36	0.98	51.67	138.53	5.02	14.36	1.96	48.76	209.54	5.69										
10.38	0.89	52.77	83.44	4.32	12.38	0.95	51.52	139.39	5.03	14.38	1.78	50.06	205.80	5.68										
10.40	0.86	52.17	83.50	4.33	12.40	0.92	50.23	139.51	5.04	14.40	1.41	55.26	203.05	5.69										
10.42	0.86	50.91	84.11	4.34	12.42	0.89	48.82	141.59	5.04	14.42	1.23	57.21	208.80	5.71										
10.44	0.85	51.54	84.05	4.35	12.44	0.89	48.27	145.57	5.06	14.44	1.22	55.32	243.82	5.72										
10.46	0.85	48.26	84.66	4.36	12.46	0.98	46.47	155.67	5.07	14.46	1.33	54.23	253.37	5.73										
10.48	0.86	46.91	85.33	4.36	12.48	1.01	44.85	158.42	5.07	14.48	1.46	53.21	261.75	5.75										
10.50	0.88	47.30	87.11	4.37	12.50	1.03	44.88	160.93	5.07	14.50	1.47	52.58	264.14	5.77										
10.52	0.94	46.25	90.05	4.38	12.52	1.03	45.87	162.89	5.09	14.52	1.29	49.60	258.94	5.79										
10.54	0.96	45.20	90.78	4.39	12.54	1.03	47.13	164.61	5.09	14.54	1.13	48.70	252.02	5.80										
10.56	0.99	45.50	91.03	4.39	12.56	1.00	47.55	165.71	5.09	14.56	0.98	46.38	252.08	5.80										
10.58	1.01	47.06	89.80	4.40	12.58	0.99	48.51	166.50	5.10	14.58	1.01	44.01	285.20	5.80										
10.60	0.99	48.80	89.68	4.41	12.60	0.97	49.57	165.83	5.11	14.60	1.06	42.84	295.05	5.82										
10.62	1.00	48.74	89.43	4.42	12.62	0.93	51.40	165.28	5.12	14.62	1.08	43.02	304.60	5.83										
10.64	1.00	49.32	89.01	4.42	12.64	0.90	51.94	165.71	5.13	14.64	1.13	46.02	308.28	5.85										
10.66	1.00	51.33	89.43	4.44	12.66	0.89	49.99	168.46	5.13	14.66	1.13	45.93	309.93	5.85										
10.68	1.00	52.23	89.50	4.43	12.68	0.90	48.63	172.20	5.15	14.68	1.09	46.89	309.01	5.86										
10.70	1.00	53.16	89.68	4.44	12.70	0.92	47.31	173.30	5.15	14.70	1.03	47.52	307.24	5.86										
10.72	0.98	52.86	89.62	4.45	12.72	0.92	45.96	172.69	5.16	14.72	1.03	45.84	312.13	5.88										
10.74	0.96	52.62	89.86	4.46	12.74	0.87	46.83	171.83	5.16	14.74	1.10	45.84	318.81	5.89										
10.76	0.97	52.83	90.54	4.46	12.76	0.84	46.44	171.89	5.17	14.76	1.15	45.30	323.58	5.91										
10.78	0.98	52.71	89.86	4.48	12.78	0.83	44.85	174.03	5.17	14.78	1.15	46.11	317.40	5.93										
10.80	0.98	51.42	89.43	4.49	12.80	0.87	43.55	179.42	5.17	14.80	1.10	48.52	317.64	5.93										
10.82	0.96	50.61	88.45	4.50	12.82	0.88	43.10	181.07	5.18	14.82	1.07	47.40	317.27	5.94										
10.84	0.96	51.09	88.33	4.50	12.84	0.89	43.64	181.26	5.18	14.84	1.05	49.48	317.64	5.95										
10.86	0.92	51.03	87.84	4.51	12.86	0.87	44.48	181.99	5.19	14.86	1.04	48.52	318.93	5.96										
10.88	0.90	52.44	87.72	4.51	12.88	0.87	44.52	183.52	5.20	14.88	1.02	48.97	319.05	5.96										
10.90	0.94	53.76	90.72	4.53	12.90	0.89	44.21	185.54	5.21	14.90	1.04	50.65	323.27	5.96										
10.92	0.99	53.82	92.98	4.52	12.92	0.88	44.12	187.19	5.21	14.92	1.11	49.75	329.27	5.99										
10.94	1.01	52.08	92.56	4.53	12.94	0.91	43.67	191.60	5.22	14.94	1.23	48.55	336.86	5.99										
10.96	1.01	53.16	90.72	4.54	12.96	0.93	43.82	195.52	5.23	14.96	1.37	49.03	341.27	5.99										
10.98	1.00	53.85	89.19	4.53	12.98	0.94	44.73	200.36	5.23	14.98	1.52	49.78	351.25	6.01										
11.00	0.98	55.00	89.50	4.54	13.00	0.97	43.58	202.13	5.24	15.00	1.54	51.07	350.82	6.00										
11.02	1.01	53.70	90.11	4.55	13.02	0.95	43.58	201.64	5.25															
11.04	1.00	52.62	90.35	4.56	13.04	0.95	44.28	223.31	5.25															
11.06	1.02	50.85	103.21	4.55	13.06	0.96	46.27	223.62	5.26															
11.08	1.02	53.17	98.19	4.57	13.08	0.94	47.80	223.68	5.26															
11.10	1.03	51.28	98.07	4.57	13.10	0.93	48.16	223.43	5.27															
11.12	1.05	49.71	98.25	4.58	13.12	0.93	48.25	224.17	5.28															
11.14	1.08	49.38	97.82	4.58	13.14	0.95	48.37	228.94	5.29															
11.16	1.09	50.52	97.45	4.59	13.16	1.05	46.24	237.57	5.29															
11.18	1.06	52.93	100.45	4.59	13.18	1.27	45.40	249.69	5.30															
11.20	1.05	53.92	99.96	4.60	13.20	1.65	47.98	260.47	5.31															
11.22	1.02	55.70	98.31	4.60	13.22	1.90	50.96	267.45	5.32															
11.24	0.97	58.61	97.64	4.61	13.24	1.79	51.89	258.14	5.32															
11.26	0.98	59.81	99.78	4.63	13.26	1.48	47.95	243.27	5.33															
11.28	1.00	59.81	100.64	4.63	13.28	1.22	46.39	230.72	5.32															
11.30	1.00	58.19	101.74	4.63	13.30	0.98	44.88	222.09	5.34															
11.32	1.02	56.72	102.23	4.64	13.32	0.92	44.76	230.17	5.34															
11.34	1.04	54.67	100.51	4.65	13.34	0.93	45.73	234.51	5.35															
11.36	1.01	53.50	98.98	4.65	13.36	0.94	46.93	238.25	5.35															
11.38	1.02	53.11	98.49	4.66	13.38	0.92	46.48	241.49	5.37															
11.40	0.99	53.53	98.13	4.67	13.40	0.93	45.31	245.16	5.37															
11.42	0.99	53.80	97.82	4.67	13.42	1.00	44.25	255.69	5.38															
11.44	0.97	54.40	98.86	4.67	13.44	1.02	42.99	260.59	5.38															
11.46	1.00	54.67	100.33	4.68	13.46	1.03	42.42	261.32	5.38															
11.48	0.99	53.53	100.15	4.70	13.48	1.04	43.05	263.47	5.40															
11.50	0.90	51.60	97.09	4.70	13.50	1.02	43.89	264.14	5.41															
11.52	0.85	49.95	98.49	4.71	13.52	0.99	45.30	263.90	5.42															
11.54	0.89	46.13	104.25	4.71	13.54	1.00	45.64	264.08	5.42															
11.56	0.93	44.54	105.78	4.72	13.56	0.99	47.14	265.79	5.43															
11.58	0.95	44.48	104.37	4.73	13.58	0.99	47.50	267.20	5.43															
11.60	0.95	45.26	102.72	4.73	13.60	1.02	47.80	267.45	5.43															
11.62	0.97	46.97	102.53	4.74	13.62	1.01	48.67	269.10	5.45															
11.64	0.96	47.96	105.11	4.75	13.64	0.99	48.52	270.08	5.46															
11.66	0.98	49.08	105.47	4.76	13.66	1.01	48.07	271.67	5.46															
11.68	0.99	50.49	106.45	4.77	13.68	1.01	48.19	273.26	5.47															
11.70	1.00	51.06	108.04	4.78	13.70	1.01	48.25	275.22	5.47															
11.72	1.04	51.66	109.02	4.79	13.72	1.04	48.31	277.49	5.48															
11.74	1.03	51.45	108.10	4.79	13.74	1.07	48.97	280.36	5.48															
11.76	1.04	52.05	106.94	4.79	13.76	1.05	48.67	280.91	5.49															
11.78	1.01	51.99	106.64	4.80	13.78	1.04	49.21	280.97	5.51															
11.80	1.01	53.14	107.74	4.80	13.80	1.04	48.16	280.91	5.52															
11.82	1.00	53.77	109.21	4.81	13.82	1.02	47.68	280.79	5.51															
11.84	1.01	53.35	108.90	4.81	13.84	0.99	46.96	280.48	5.52															
11.86	1.03	53.23	108.78	4.82	13.86	0.99	46.78	280.91	5.53															
11.88	1.02	52.65	108.41	4.84	13.88	1.08	46.60	290.83	5.54															
11.90	1.00	52.62	107.55	4.84	13.90	1.24	47.83	298.48	5.55															
11.92	0.98	52.26	108.10	4.85	13.92	1.39	47.68	306.07	5.55															
11.94	1.00	51.33	108.47	4.86	13.94	1.42	48.58	310.05	5.56															
11.96	0.98	51.72	110.37	4.86	13.96	1.49	48.34	313.05	5.57															
11.98	0.97	51.75	110.25	4.87	13.98	1.69	48.40	318.13	5.57															
12.00	0.98	51.87	110.43	4.88	14.00	1.85	50.39	319.60	5.58															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Olindo Vernocchi - Pievequinta (FC)
COMMESSA: C054/24
RDP N°: 205/24
DATA: 06/09/2024

PROVA N°: CPTU 5
PROF. FALDA (m da p.c.): 4.15
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 5
CANTIERE:	Via Olindo Vernocchi - Pievequinta (FC)	PROF. FALDA (m da p.c.):	4.15
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	205/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	06/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Olindo Vernocchi - Pievequinta (FC)
Lat.: 44.238213°
Long.: 12.147738°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Costiera - Loc. Marcegaglia (FC)
COMMESSA: C054/24
RDP N°: 206/24
DATA: 06/09/2024

PROVA N°: CPTU 6
PROF. FALDA (m da p.c.): 4.05
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	0.45	14.67	37.16	0.68	2.02	2.69	54.24	30.06	1.12	4.02	1.03	38.76	87.84	1.66	6.02	1.76	97.46	77.07	2.24	8.02	3.91	61.91	41.81	2.70
0.04	0.92	15.15	50.50	0.70	2.04	2.61	51.30	31.46	1.13	4.04	1.02	39.66	88.03	1.67	6.04	1.81	96.82	76.82	2.24	8.04	3.93	67.75	41.75	2.70
0.06	1.14	16.80	52.58	0.89	2.06	2.51	46.34	33.18	1.13	4.06	0.95	42.67	88.33	1.67	6.06	1.87	95.35	76.58	2.24	8.06	3.79	71.80	42.36	2.70
0.08	1.28	24.53	51.79	0.60	2.08	2.49	45.41	33.85	1.14	4.08	0.94	41.26	88.52	1.68	6.08	1.92	94.90	76.46	2.25	8.08	3.52	74.08	43.34	2.70
0.10	1.50	32.07	53.38	0.43	2.10	2.31	45.65	35.87	1.14	4.10	0.95	37.38	88.64	1.69	6.10	1.98	92.62	76.27	2.25	8.10	4.25	60.03	35.81	2.73
0.12	1.64	41.94	53.56	0.23	2.12	1.90	49.25	38.20	1.15	4.12	0.97	34.68	88.70	1.70	6.12	2.03	96.51	77.25	2.26	8.12	3.97	60.00	38.01	2.73
0.14	1.85	46.49	52.22	1.63	2.14	1.66	55.73	39.30	1.15	4.14	0.99	31.82	87.60	1.74	6.14	1.99	97.45	77.38	2.27	8.14	3.64	75.77	40.28	2.73
0.16	1.86	44.37	50.69	0.55	2.16	2.04	54.92	55.58	1.16	4.16	0.94	29.24	87.78	1.74	6.16	2.00	95.32	77.44	2.27	8.16	3.39	85.23	41.32	2.74
0.18	1.83	49.65	48.24	0.03	2.18	2.03	58.75	56.19	1.16	4.18	0.93	26.95	87.97	1.75	6.18	1.99	92.10	77.44	2.28	8.18	3.26	76.68	41.87	2.75
0.20	1.72	45.56	12.49	0.69	2.20	1.90	59.79	57.30	1.17	4.20	0.92	26.05	88.03	1.75	6.20	1.95	93.47	77.56	2.29	8.20	2.74	55.62	43.58	2.75
0.22	1.84	49.16	13.34	0.60	2.22	1.52	56.78	59.38	1.17	4.22	0.91	25.48	88.03	1.76	6.22	1.91	98.27	77.68	2.29	8.22	2.98	53.18	41.14	2.75
0.24	2.12	51.93	12.73	0.56	2.24	1.19	59.79	61.64	1.18	4.24	0.96	24.82	87.97	1.76	6.24	1.89	98.58	77.68	2.30	8.24	2.86	45.38	41.50	2.76
0.26	2.37	52.05	12.37	0.57	2.26	1.01	63.81	62.93	1.18	4.26	0.99	25.72	87.90	1.76	6.26	1.87	93.95	77.68	2.31	8.26	3.32	43.78	38.20	2.77
0.28	2.58	50.59	12.18	0.60	2.28	0.88	64.27	63.48	1.19	4.28	1.07	25.87	87.60	1.76	6.28	1.84	87.89	77.74	2.31	8.28	3.52	48.37	37.34	2.78
0.30	2.80	49.37	11.81	0.63	2.30	0.87	57.93	63.85	1.19	4.30	1.14	27.32	87.35	1.77	6.30	1.78	88.01	77.86	2.33	8.30	3.78	58.60	36.42	2.78
0.32	2.97	49.65	11.75	0.67	2.32	0.89	53.37	63.97	1.20	4.32	1.21	28.37	87.05	1.77	6.32	1.73	89.38	78.05	2.34	8.32	3.86	70.44	36.36	2.78
0.34	3.00	49.62	12.30	0.69	2.34	0.89	46.10	64.28	1.20	4.34	1.29	27.71	86.74	1.78	6.34	1.63	91.09	78.35	2.33	8.34	3.72	76.64	37.22	2.79
0.36	2.98	52.85	13.28	0.69	2.36	0.86	37.71	64.89	1.20	4.36	1.29	29.99	86.74	1.77	6.36	1.54	95.92	78.48	2.35	8.36	3.35	73.90	38.99	2.79
0.38	2.88	55.68	14.45	0.67	2.38	0.85	32.09	65.32	1.21	4.38	1.29	32.34	86.68	1.78	6.38	1.49	97.75	78.60	2.35	8.38	3.04	69.70	39.91	2.80
0.40	2.87	58.63	15.12	0.67	2.40	0.89	26.11	65.44	1.21	4.40	1.30	32.70	86.68	1.78	6.40	1.41	93.85	78.78	2.35	8.40	3.06	68.45	39.05	2.80
0.42	2.87	59.12	15.73	0.66	2.42	0.94	24.91	65.56	1.22	4.42	1.30	34.41	86.74	1.77	6.42	1.33	89.89	79.09	2.36	8.42	2.97	65.53	38.93	2.82
0.44	2.94	59.58	15.73	0.65	2.44	0.97	24.85	65.87	1.22	4.44	1.31	34.69	86.62	1.80	6.44	1.24	81.37	79.40	2.36	8.44	2.77	70.73	39.67	2.83
0.46	3.01	61.50	15.79	0.66	2.46	0.99	23.32	66.30	1.23	4.46	1.36	37.63	86.50	1.79	6.46	1.16	75.13	79.58	2.36	8.46	2.54	72.10	40.52	2.83
0.48	2.99	62.59	16.16	0.70	2.48	1.08	23.26	66.54	1.23	4.48	1.38	39.44	86.13	1.80	6.48	1.13	69.38	79.64	2.38	8.48	2.37	69.42	40.83	2.84
0.50	3.03	63.72	16.53	0.72	2.50	1.14	27.17	66.54	1.24	4.50	1.43	38.87	86.01	1.80	6.50	1.13	66.09	79.52	2.38	8.50	2.37	57.49	39.42	2.84
0.52	3.10	61.41	16.47	0.70	2.52	1.18	28.41	66.66	1.24	4.52	1.46	39.62	85.82	1.80	6.52	1.17	67.37	79.33	2.37	8.52	2.48	52.47	38.20	2.85
0.54	3.32	60.13	15.73	0.67	2.54	1.12	28.38	67.52	1.25	4.54	1.47	41.24	85.70	1.81	6.54	1.22	66.36	79.09	2.38	8.54	2.49	50.58	37.83	2.85
0.56	3.66	58.06	14.32	0.69	2.56	1.01	29.28	68.62	1.25	4.56	1.50	43.71	85.64	1.81	6.56	1.28	64.23	78.78	2.39	8.56	2.30	42.95	38.32	2.85
0.58	3.89	57.61	13.10	0.74	2.58	0.97	29.89	69.36	1.26	4.58	1.51	46.20	85.52	1.82	6.58	1.35	60.06	78.54	2.38	8.58	2.26	39.22	38.08	2.86
0.60	4.14	53.71	12.12	0.74	2.60	0.99	30.61	69.60	1.26	4.60	1.53	48.52	85.27	1.82	6.60	1.38	56.01	78.29	2.39	8.60	2.24	36.24	37.40	2.87
0.62	4.45	46.80	10.71	0.74	2.62	1.11	32.24	69.23	1.27	4.62	1.57	53.08	85.15	1.83	6.62	1.46	52.70	77.93	2.40	8.62	2.50	31.19	33.48	2.88
0.64	4.70	40.39	9.92	0.73	2.64	1.58	27.49	67.58	1.27	4.64	1.57	56.64	85.09	1.83	6.64	1.51	51.54	77.80	2.40	8.64	3.13	26.38	25.40	2.88
0.66	4.96	33.26	8.81	0.74	2.66	1.89	27.62	66.79	1.28	4.66	1.58	59.54	84.97	1.84	6.66	1.53	51.94	77.62	2.41	8.66	3.89	34.47	23.57	2.89
0.68	5.14	28.93	7.96	0.77	2.68	2.01	24.43	67.40	1.28	4.68	1.61	62.24	84.84	1.83	6.68	1.58	54.10	77.56	2.41	8.68	4.32	52.70	23.08	2.91
0.70	5.24	25.50	7.53	0.79	2.70	2.02	21.37	67.95	1.29	4.70	1.60	64.31	84.72	1.84	6.70	1.61	59.21	77.56	2.41	8.70	5.34	68.89	19.59	2.90
0.72	5.25	25.65	7.22	0.76	2.72	1.88	20.05	69.48	1.29	4.72	1.63	65.71	84.54	1.84	6.72	1.66	63.78	77.44	2.42	8.72	6.26	77.54	17.63	2.91
0.74	5.20	27.97	7.35	0.75	2.74	1.75	22.16	70.40	1.30	4.74	1.67	67.33	84.35	1.85	6.74	1.57	67.71	77.80	2.43	8.74	6.77	81.71	16.65	2.91
0.76	5.21	30.47	7.16	0.79	2.76	1.50	24.27	71.68	1.30	4.76	1.68	68.88	84.05	1.85	6.76	1.54	72.55	77.80	2.43	8.76	7.50	95.19	15.06	2.92
0.78	5.28	33.44	6.37	0.81	2.78	1.04	33.14	73.89	1.31	4.78	1.67	71.19	83.99	1.84	6.78	1.52	76.23	77.99	2.44	8.78	7.90	99.18	14.57	2.93
0.80	5.42	40.12	5.75	0.82	2.80	0.82	36.96	74.93	1.31	4.80	1.67	73.26	83.99	1.86	6.80	1.49	78.39	78.11	2.45	8.80	8.17	85.27	14.08	2.93
0.82	5.54	45.32	5.08	0.81	2.82	0.68	39.40	75.36	1.32	4.82	1.70	75.85	83.86	1.85	6.82	1.47	78.91	78.17	2.46	8.82	8.47	74.83	12.73	2.94
0.84	5.62	49.88	4.53	0.82	2.84	0.68	36.31	75.11	1.32	4.84	1.71	77.07	83.62	1.85	6.84	1.47	75.74	78.23	2.45	8.84	8.37	70.02	13.90	2.94
0.86	5.64	52.59	3.67	0.84	2.86	0.72	30.96	75.11	1.33	4.86	1.75	78.68	83.50	1.86	6.86	1.44	74.65	78.35	2.46	8.86	7.99	65.39	15.61	2.95
0.88	5.81	56.21	2.39	0.83	2.88	0.71	24.26	75.54	1.33	4.88	1.75	79.77	83.19	1.86	6.88	1.46	72.73	78.35	2.46	8.88	7.12	66.24	19.53	2.95
0.90	5.90	59.04	1.71	0.83	2.90	0.66	20.60	75.97	1.34	4.90	1.78	80.23	83.01	1.87	6.90	1.48	73.19	78.29	2.47	8.90	5.75	61.01	25.04	2.96
0.92	5.99	61.69	1.22	0.86	2.92	0.65	15.46	76.21	1.34	4.92	1.76	80.78	82.88	1.87	6.92	1.50	71.21	78.17	2.47	8.92	4.63	47.77	29.57	2.96
0.94	6.28	68.45	0.61	0.87	2.94	0.67	12.21	76.33	1.35	4.94	1.80	80.38	82.76	1.87	6.94	1.55	70.54	78.05	2.48	8.94	3.57	60.82	33.36	2.96
0.96	6.58	71.10	2.20	0.85	2.96	0.72	11.16	76.33	1.35	4.96	1.78	80.38	82.70	1.88	6.96	1.59	71.00	77.93	2.48	8.96	2.93	71.26	34.95	2.98
0.98	6.85	70.91	3.61	0.87	2.98	0.78	9.30	76.40	1.36	4.98	1.78	82.45	82.76	1.88	6.98	1.59	72.12	77.93	2.49	8.98	2.56	70.28	33.91	3.00
1.00	7.08	69.88	5.33	0.87	3.00	0.84	9.94	76.64	1.36	5.00	1.74	83.15	82.88	1.90	7.00	1.58	74.16	78.05	2.50	9.00	3.08	65.47	25.71	3.02
1.02	7.45	69.02	6.98	0.87	3.02	0.85	10.81	76.95	1.36	5.02	1.69	82.08	83.01	1.90	7.02	1.57	75.41	78.17	2.49	9.02	4.01	70.16	16.41	3.02
1.04	7.90	70.94	9.67	0.88	3.04	0.86	12.62	77.25	1.37	5.04	1.63	83.21	83.19	1.91	7.04	1.52	78.82	78.35	2.50	9.04	4.20	77.37	15.61	3.04
1.06	8.25	75.08	11.57	0.89	3.06	0.89	14.37	77.44	1.37	5.06	1.59	85.07	83.37	1.91	7.06	1.49	81.74	78.48	2.51	9.06	4.04	69.79	16.10	3.06
1.08	8.48	77.39	13.16	0.89	3.08	0.94	15.43	77.62	1.38	5.08	1.54	85.86	83.44	1.92	7.08	1.47	84.48	78.54	2.52	9.08	3.66	66.83	18.12	3.08
1.10	8.36	79.12	12.73	0.90	3.10	0.96	17.69	77.93	1.38	5.10	1.54	84.18	83.44	1.93	7.10	1.46	86.73	78.66	2.53	9.10	3.89	63.26	17.14	3.08
1.12	7.76	93.28	10.47	0.90	3.12	0.93	21.27	78.48	1.39	5.12	1.58	77.65	80.07	1.97	7.12	1.47	87.42	78.60	2.53	9.12	3.95	74.19	18.67	3.10
1.14	7.33	105.27	9.55	0.91	3.14	0.96	23.09	82.09	1.39	5.14	1.64	72.81	79.40	1.97	7.14	1.47	89.58	78.60	2.53	9.14	4.10	87.40	18.18	3.11
1.16	6.64	116.48	0.24	0.91	3.16	0.87	24.75	82.70	1.40	5.16	1.67	66.36	79.21	1.99	7.16	1.47	90.25	78.60	2.54	9.16	3.82	87.70	20.57	3.11
1.18	6.71	113.78	3.80	0.92	3.18	0.83	25.44	83.19	1.40	5.18	1.70	62.95	79.15	2.00	7.18	1.51	87.97	78.42	2.54	9.18	3.42	85.36	23.26	3.12
1.20	6.31	110.18	6.24	0.92	3.20	0.79	26.28	83.56	1.41	5.20	1.70	61.49	79.09	2.00	7.20	1.51	85.41	78.29	2.54	9.20	2.96	74.86	26.32	3.13
1.22	6.04	109.27	7.90	0.93	3.22	0.77	26.49	83.74	1.41	5.22	1.69	64.35	79.09	2.00	7.22	1.53	81.21	78.23	2.55	9.22	2.55	64.78	28.95	3.14
1.24	5.93	107.41	8.51	0.93	3.24	0.75	25.86	84.05	1.42	5.24	1.69	65.48	78.97	2.02	7.24	1.56	76.28	78.17	2.54	9.24	2.11	49.72	31.40	3.15
1.26	5.99	101.23	8.20	0.94	3.26	0.74	25.32	84.35	1.42	5.26	1.71	66.27	78.97	2.02	7.26	1.56	71.80	78.11	2.55	9.26	2.13	43.09	30.48	3.16
1.28	6.15	98.49	7.47	0.94	3.28	0.71	24.99	84.60	1.43	5.28	1.73	67.70	78.78	2.03	7.28	1.53	64.50	78.23	2.55	9.28	2.42	34.97	27.79	3.16
1.30	6.37	94.47	5.88	0.95	3.30	0.68	24.57	84.90	1.43	5.30	1.73	71.29	78.84	2.03	7.30	1.50	60.18	78.35	2.55	9.30	2.73	35.93	24.98	3.18
1.32	6.56	89.32	5.02	0.95	3.32	0.69	23.88	85.09	1.44	5.32	1.71	75.25	78.91	2.05	7.32	1.40	59.84	78.78	2.55	9.32	3.10	44.38	22.71	3.17
1.34	6.39	83.48	5.26	0.96	3.34	0.71	23.19	85.03	1.44	5.34	1.72	77.74	78.84	2.05	7.34	1.29	58.01	79.21	2.56	9.34	3.07	47.79	23.45	3.18
1.36	6.02	83.93	6.43	0.96	3.36	0.77	22.50	84.97	1.45	5.36	1.69	81.45	78.84	2.06	7.36	1.22	53.57	79.27	2.56	9.36	2.72	38.69	25.71	3.18
1.38	5.84	88.64	6.31	0.97	3.38	0.81	21.20	84.97	1.45	5.38	1.70	85.80	78.78	2.07	7.38	1.27	45.55	79.03	2.56	9.38	2.30	33.10	28.53	3.19
1.40	5.67	98.93	7.10	0.97	3.40	0.88	20.27	84.66	1.46	5.40	1.70	89.97	78.66	2.06	7.40	1.30	40.70	78.72	2.56	9.40	1.96	27.15	30.73	3.20
1.42	5.30	114.66	9.06	0.98	3.42	0.94	20.51	84.60	1.46	5.42	1.76	89.18	78.29	2.07	7.42	1.36	33.49	78.42	2.57	9.42	1.89	24.62	30.79	3.21
1.44	5.03	128.66	10.35	0.98	3.44	0.96	20.79	84.66	1.47	5.44	1.87	88.02	77.99	2.08	7.44	1.37	28.98	78.23	2.57	9.44	2.19	20.95	25.59	3.22
1.46	4.70	130.27	11.45	0.99	3.46	0.93	21.33	85.03	1.47	5.46	1.91	88.15	77.80	2.09	7.46	1.46	25.88	77.62	2.56	9.46	2.49	25.64	23.08	3.23
1.48	4.29	129.17	13.10	0.99	3.48	0.90	24.40	85.46	1.48	5.48	1.94	88.84	77.74	2.08	7.48	1.70	22.43	75.66	2.55	9.48	2.58	31.84	22.83	3.22
1.50	3.88	138.54	15.00	1.00	3.50	0.86	25.33	85.70	1.48	5.50	1.92	91.55	77.74	2.10	7.50	1.91	18.91	62.19	2.56	9.50	2.42	32.32	24.42	3.24
1.52	3.96	138.20	13.65	1.00	3.52	0.89	25.72	85.88	1.49	5.52	1.93	95.05	77.74	2.10	7.52	1.97	15.51	52.34	2.57	9.52	2.14	28.83	26.38	3.24
1.54	3.86	126.78	13.96	1.01	3.54	0.87	24.46	86.07	1.49	5.54	1.92	100.22	77.74	2.11	7.54	1.87	16.68	52.77	2.57	9.54	2.07	26.34	26.81	3.25
1.56	3.79	114.00	13.59	1.01	3.56	0.88	22.57	86.13	1.50	5.56	1.92	106.13	77.68	2.10	7.56	1.77	20.99	51.05	2.58	9.56	2.07	28.65	26.69	3.25
1.58	3.79	98.17	13.41	1.02	3.58	0.88	20.56	86.37	1.50	5.58	1.89	111.70	77.74	2.11	7.58	1.75	21.29	44.50	2.59	9.58	2.19	34.06	25.59	3.26
1.60	3.53	94.54	15.00	1.02	3.60	0.87	20.14	86.68	1.51	5.60	1.88	113.67	77.86	2.12	7.60	1.79	21.11	44.50	2.59	9.60	2.17	36.59	25.53	3.27
1.62	3.15	92.50	17.02	1.03	3.62	0.83	20.23	86.99	1.51	5.62	1.85	115.71	77.86	2.13	7.62	1.78	20.99	45.18	2.60	9.62	1.86	38.18	28.04	3.27
1.64	2.82	91.04	18.92	1.03	3.64	0.77	20.23	87.29	1.52	5.64	1.85	116.44	77.86	2.13	7.64	1.79	20.36	45.85	2.61	9.64	1.56	30.27	30.48	3.27
1.66	2.59	95.66	19.04	1.04	3.66	0.75	20.65	87.48	1.52	5.66	1.83	118.24	77.74	2.13	7.66	1.76	20.42	46.22	2.61	9.66	1.58	24.68	30.00	3.27
1.68	2.71	100.32	16.96	1.04	3.68	0.73	20.44	87.66	1.52	5.68	1.81	118.99	77.74	2.14	7.68	1.72	19.13	46.71	2.62	9.68	2.03	26.88	26.57	3.28
1.70	3.01	103.24	14.75	1.05	3.70	0.74	18.58	87.60	1.53	5.70	1.82	117.01	77.68	2.14	7.70	1.67	17.00	47.26	2.63	9.70	2.64	29.61	22.34	3.30
1.72	3.29	103.61	13.96	1.05	3.72	0.80	16.06	87.35	1.53	5.72	1.81	113.63	77.68	2.14	7.72	1.66	16.52	47.44	2.63	9.72	3.08	33.64	20.63	3.29
1.74	3.15	100.29	15.98	1.05	3.74	0.91	15.49	86.99	1.54	5.74	1.78	110.07	77.68	2.16	7.74	1.74	17.12	47.14	2.64	9.74	2.93	32.56	22.34	3.29
1.76	2.88	93.50	18.18	1.06	3.76	1.03	13.09	86.68	1.54	5.76	1.72	107.91	77.74	2.15	7.76	1.81	17.96	46.83	2.65	9.76	2.69	23.18	24.24	3.30
1.78	2.63	88.45	20.75	1.06	3.78	1.16	12.49	86.25	1.55	5.78	1.64	105.38	77.86	2.16	7.78	1.97	18.47	46.46	2.65	9.78	2.70	23.84	24.67	3.32
1.80	2.32	87.51	22.96	1.07	3.80	1.23	14.56	86.13	1.55	5.80	1.63	101.67	77.74	2.17	7.80	2.22	18.66	45.48	2.65	9.80	2.96	29.74	23.51	3.32
1.82	2.02	90.95	24.91	1.07	3.82	1.22	21.30	86.13	1.56	5.82	1.67	98.53	77.68	2.17	7.82	2.44	22.23	44.81	2.66	9.82	3.48	38.28	21.18	3.33
1.84	1.88	92.96	25.95	1.08	3.84	1.20	26.18	86.13	1.58	5.84	1.62	98.99	77.74	2.17	7.84	2.70	28.25	44.26	2.66	9.84	3.50	41.23	21.73	3.33
1.86	1.77	93.84	26.93	1.08	3.86	1.24	27.08	86.19	1.60	5.86	1.65	97.92	77.68	2.18	7.86	2.84	33.51	44.20	2.66	9.86	3.37	41.77	23.02	3.34
1.88	1.82	90.35	27.36	1.09	3.88	1.22	35.53	86.25	1.61	5.88	1.64	96.88	77.68	2.19	7.88	2.93	37.57	44.26	2.66	9.88	2.95	33.08	25.95	3.35
1.90	2.02	84.99	26.69	1.09	3.90	1.18	40.61	86.74	1.62	5.90	1.66	95.76	77.56	2.19	7.90	3.05	40.25	44.01	2.67	9.90	2.48	31.07	29.08	3.35
1.92	2.16	78.60	27.06	1.10	3.92	1.15	40.16	86.86	1.63	5.92	1.68	95.21	77.50	2.19	7.92	3.31	42.96	43.28	2.68	9.92	1.99	33.77	32.38	3.35
1.94	2.07	67.19	28.59	1.10	3.94	1.15	38.87	87.05	1.64	5.94	1.69	95.79	77.44	2.21	7.94	3.52	46.51	42.61	2.68	9.94	1.66	36.66	34.40	3.35
1.96	2.09	63.55	29.75	1.11	3.96	1.17	40.23	87.05	1.65	5.96	1.69	97.85	77.31	2.23	7.96	3.76	49.64	41.87	2.68	9.96	1.60	33.65	34.40	3.37
1.98	2.27	60.48	29.93	1.11	3.98	1.09	43.72	87.29	1.65	5.98	1.75	97.03	77.13	2.22	7.98	3.86	53.78	41.69	2.70	9.98	1.58	36.24	33.67	3.37
2.00	2.54	56.77	29.51	1.12	4.00	1.06	42.82	87.54	1.65	6.00	1.76	96.67	77.13	2.23	8.00	3.89	57.10	41.81	2.69	10.00	1.69	35.07	32.32	3.39

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COMMITTENTE:
CANTIERE: Via Costiera - Loc. Marcegaglia (FC)
COMMESSA: C054/24
RDP N°: 206/24
DATA: 06/09/2024

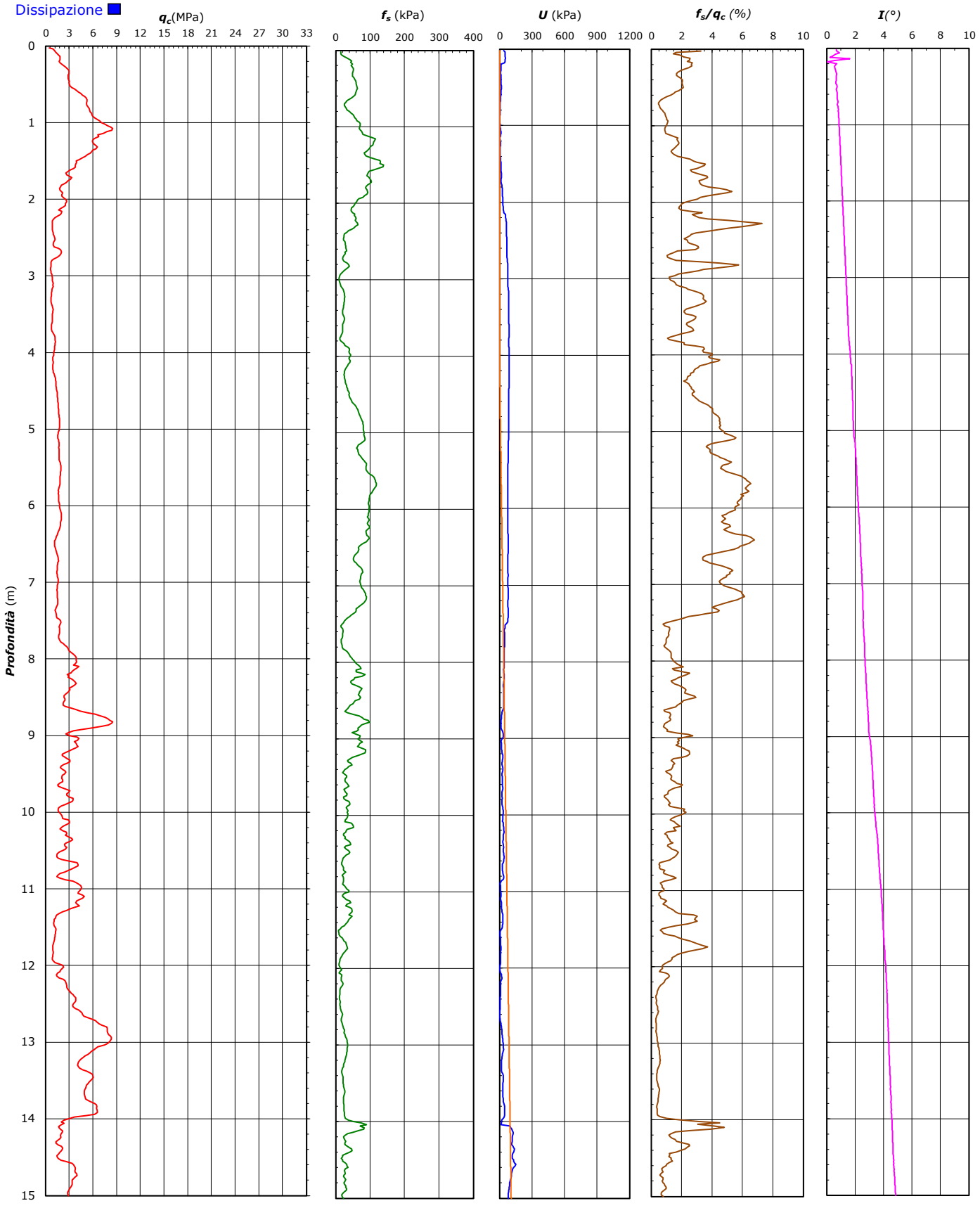
PROVA N°: CPTU 6
PROF. FALDA (m da p.c.): 4.05
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.90	34.77	30.42	3.40	12.02	2.30	17.39	2.57	4.15	14.02	2.33	73.53	16.34	4.59										
10.04	2.03	32.12	29.20	3.41	12.04	2.10	13.15	6.00	4.15	14.04	2.01	90.33	15.43	4.60										
10.06	2.11	28.15	28.77	3.43	12.06	1.90	10.45	8.08	4.15	14.06	2.33	71.16	95.56	4.60										
10.08	2.18	27.04	28.22	3.42	12.08	1.85	17.97	17.08	4.17	14.08	2.01	82.84	101.68	4.60										
10.10	2.94	44.97	34.16	3.44	12.10	1.56	17.82	19.59	4.17	14.10	1.69	81.23	114.84	4.60										
10.12	3.01	48.81	34.34	3.44	12.12	1.38	16.29	20.94	4.18	14.12	1.71	66.86	119.25	4.60										
10.14	3.04	52.13	34.52	3.46	12.14	1.41	16.20	20.26	4.18	14.14	1.94	50.79	124.63	4.61										
10.16	2.68	51.40	36.79	3.46	12.16	1.75	16.86	14.08	4.20	14.16	2.20	35.44	127.82	4.63										
10.18	2.25	33.06	39.48	3.47	12.18	2.22	20.07	10.96	4.19	14.18	2.10	27.29	121.27	4.62										
10.20	2.00	30.98	40.89	3.49	12.20	2.46	21.61	10.59	4.20	14.20	1.98	23.14	117.04	4.62										
10.22	1.83	30.17	41.38	3.50	12.22	2.60	19.80	10.83	4.22	14.22	1.91	23.77	117.10	4.62										
10.24	2.16	22.81	38.20	3.53	12.24	2.64	16.62	11.32	4.22	14.24	1.93	26.71	119.25	4.63										
10.26	2.62	23.53	34.52	3.53	12.26	2.66	14.36	11.69	4.22	14.26	1.86	29.51	117.29	4.64										
10.28	2.69	28.16	34.52	3.55	12.28	2.68	13.01	11.63	4.22	14.28	1.61	26.98	112.08	4.64										
10.30	2.53	27.25	35.75	3.55	12.30	2.77	12.29	11.20	4.22	14.30	1.33	26.86	110.55	4.63										
10.32	2.86	32.16	34.04	3.56	12.32	2.93	11.96	10.28	4.24	14.32	1.31	32.64	120.29	4.65										
10.34	3.30	40.66	31.40	3.58	12.34	3.09	12.17	9.37	4.23	14.34	1.58	40.06	129.53	4.65										
10.36	3.41	42.47	31.34	3.58	12.36	3.26	11.53	8.26	4.24	14.36	1.99	47.14	137.30	4.66										
10.38	3.09	43.82	33.30	3.59	12.38	3.48	11.02	6.67	4.25	14.38	2.16	47.99	134.61	4.65										
10.40	2.63	29.42	35.87	3.60	12.40	3.62	10.93	5.82	4.25	14.40	2.11	41.15	128.86	4.66										
10.42	2.42	25.75	37.10	3.60	12.42	3.82	12.83	4.59	4.26	14.42	1.99	32.52	123.96	4.66										
10.44	2.46	30.35	36.48	3.61	12.44	3.85	13.52	4.65	4.26	14.44	1.78	21.06	119.61	4.67										
10.46	2.69	36.90	34.71	3.61	12.46	3.81	12.89	4.77	4.26	14.46	1.65	20.04	118.51	4.67										
10.48	2.53	41.59	35.81	3.62	12.48	3.69	12.86	5.45	4.27	14.48	1.45	17.03	119.31	4.69										
10.50	2.19	39.10	37.83	3.63	12.50	3.56	13.43	6.12	4.27	14.50	1.50	19.86	131.73	4.70										
10.52	1.78	30.89	40.28	3.63	12.52	3.44	14.33	6.18	4.27	14.52	1.59	20.85	130.63	4.71										
10.54	1.51	25.17	41.50	3.65	12.54	3.50	14.84	5.08	4.27	14.54	1.97	27.80	137.86	4.71										
10.56	1.43	22.29	41.50	3.66	12.56	3.78	16.43	2.57	4.27	14.56	2.66	31.86	148.51	4.71										
10.58	1.44	20.09	40.52	3.66	12.58	4.17	19.59	0.49	4.27	14.58	3.38	33.97	141.10	4.71										
10.60	1.61	19.58	38.44	3.66	12.60	4.47	20.31	2.08	4.28	14.60	3.56	35.65	130.20	4.71										
10.62	2.05	18.41	34.83	3.67	12.62	4.60	19.01	2.51	4.28	14.62	3.65	27.92	122.49	4.73										
10.64	3.13	18.20	27.30	3.67	12.64	4.69	17.30	3.00	4.29	14.64	3.76	25.91	118.63	4.74										
10.66	3.98	19.97	24.73	3.68	12.66	4.88	16.01	4.47	4.30	14.66	3.77	26.72	114.35	4.74										
10.68	4.10	23.16	24.67	3.68	12.68	5.30	16.55	7.59	4.30	14.68	3.71	28.53	110.12	4.74										
10.70	4.10	22.56	24.98	3.69	12.70	5.93	18.32	11.57	4.31	14.70	3.76	24.68	108.72	4.74										
10.72	3.77	22.77	27.55	3.70	12.72	6.34	19.58	13.41	4.31	14.72	3.93	22.70	109.57	4.75										
10.74	3.34	29.77	29.93	3.70	12.74	6.49	20.84	13.96	4.31	14.74	4.00	26.46	106.45	4.76										
10.76	2.91	23.85	32.32	3.71	12.76	6.77	22.11	16.04	4.32	14.76	3.76	28.92	101.55	4.78										
10.78	2.39	19.67	35.20	3.72	12.78	7.13	23.19	18.36	4.32	14.78	3.53	27.57	97.33	4.78										
10.80	1.85	21.33	37.83	3.74	12.80	7.73	26.10	21.85	4.33	14.80	3.39	24.33	94.82	4.79										
10.82	1.58	22.89	37.40	3.74	12.82	7.80	25.65	22.16	4.33	14.82	3.38	25.95	93.41	4.79										
10.84	1.44	23.43	33.42	3.75	12.84	7.84	24.72	22.83	4.33	14.84	3.35	29.23	91.45	4.80										
10.86	1.76	22.53	20.14	3.76	12.86	7.83	26.43	23.38	4.34	14.86	3.36	30.04	90.11	4.80										
10.88	2.50	21.66	11.39	3.78	12.88	7.88	28.62	24.85	4.34	14.88	3.26	31.87	87.66	4.82										
10.90	3.51	20.75	7.28	3.79	12.90	7.99	30.03	26.57	4.34	14.90	3.16	30.73	85.39	4.82										
10.92	3.93	25.87	8.51	3.78	12.92	8.20	31.93	29.32	4.36	14.92	3.02	25.38	82.82	4.82										
10.94	4.21	29.83	9.12	3.80	12.94	8.31	32.86	31.04	4.35	14.94	2.89	21.05	81.11	4.83										
10.96	4.47	32.75	9.30	3.81	12.96	8.32	33.73	32.32	4.36	14.96	2.79	18.04	80.13	4.83										
10.98	4.59	38.10	9.30	3.82	12.98	8.20	35.11	33.24	4.36	14.98	2.80	18.52	80.80	4.85										
11.00	4.54	38.40	10.53	3.83	13.00	8.06	35.34	33.55	4.35	15.00	2.91	23.46	81.35	4.85										
11.02	4.32	25.56	12.06	3.83	13.02	7.82	34.89	33.67	4.37															
11.04	4.14	20.87	12.98	3.83	13.04	7.45	33.93	32.87	4.37															
11.06	4.09	20.72	12.49	3.83	13.06	6.60	34.01	36.91	4.37															
11.08	4.67	27.41	11.14	3.85	13.08	6.40	33.01	33.24	4.37															
11.10	4.88	31.14	11.57	3.85	13.10	6.11	32.56	30.24	4.38															
11.12	4.69	41.10	13.83	3.86	13.12	5.83	31.99	27.79	4.38															
11.14	4.29	44.10	16.47	3.87	13.14	5.64	31.33	26.08	4.38															
11.16	3.96	33.97	18.00	3.87	13.16	5.36	30.10	23.93	4.38															
11.18	3.81	30.09	19.10	3.88	13.18	5.05	28.68	21.73	4.40															
11.20	3.99	40.67	18.06	3.89	13.20	4.72	27.57	19.34	4.40															
11.22	4.26	46.75	16.34	3.89	13.22	4.51	26.84	18.36	4.40															
11.24	3.72	47.84	20.51	3.89	13.24	4.32	24.86	17.63	4.41															
11.26	3.23	48.12	22.89	3.90	13.26	4.19	23.38	17.20	4.41															
11.28	2.69	42.80	25.83	3.91	13.28	4.12	22.78	16.83	4.42															
11.30	2.15	39.23	28.95	3.92	13.30	4.08	20.70	17.20	4.42															
11.32	1.72	48.17	30.79	3.92	13.32	4.17	19.35	18.24	4.43															
11.34	1.43	43.13	31.83	3.92	13.34	4.28	18.12	19.77	4.43															
11.36	1.34	39.07	30.79	3.94	13.36	4.66	17.97	23.75	4.45															
11.38	1.25	35.67	30.06	3.94	13.38	5.19	19.71	28.83	4.46															
11.40	1.12	33.72	29.57	3.95	13.40	5.62	20.31	32.63	4.45															
11.42	1.08	29.66	28.95	3.95	13.42	5.93	21.18	34.71	4.45															
11.44	1.04	24.99	28.04	3.97	13.44	6.02	21.66	35.20	4.46															
11.46	1.06	17.45	25.83	3.97	13.46	6.02	22.29	34.89	4.47															
11.48	1.11	13.27	23.69	3.98	13.48	5.92	22.26	33.79	4.47															
11.50	1.23	8.97	15.67	3.98	13.50	5.71	22.14	32.50	4.48															
11.52	1.31	8.00	3.55	3.98	13.52	5.52	23.01	31.10	4.47															
11.54	1.33	9.39	4.53	3.99	13.54	5.35	23.55	30.55	4.48															
11.56	1.28	10.41	5.69	4.00	13.56	5.22	23.94	30.18	4.48															
11.58	1.28	13.69	6.73	4.00	13.58	5.14	25.60	30.12	4.49															
11.60	1.21	18.65	7.90	4.01	13.60	5.08	26.83	30.24	4.49															
11.62	1.19	21.53	8.45	4.01	13.62	4.99	26.59	30.30	4.49															
11.64	1.18	24.54	8.88	4.02	13.64	4.93	25.53	30.73	4.50															
11.66	1.14	29.17	9.67	4.02	13.66	4.93	24.66	31.34	4.50															
11.68	1.11	31.01	10.41	4.01	13.68	4.93	23.55	32.14	4.51															
11.70	1.05	31.73	11.51	4.03	13.70	4.97	23.28	33.06	4.52															
11.72	0.99	33.32	13.04	4.04	13.72	5.01	23.12	34.04	4.52															
11.74	0.92	34.31	13.22	4.05	13.74	5.10	23.21	35.50	4.53															
11.76	0.92	31.13	12.67	4.06	13.76	5.35	23.51	38.38	4.52															
11.78	0.92	26.71	11.75	4.07	13.78	5.72	23.87	41.81	4.52															
11.80	0.95	23.46	10.65	4.08	13.80	6.24	24.32	45.30	4.53															
11.82	1.00	19.85	9.37	4.08	13.82	6.46	23.72	46.09	4.53															
11.84	1.00	17.30	9.12	4.09	13.84	6.50	24.26	45.91	4.54															
11.86	0.94	14.65	9.67	4.09	13.86	6.47	24.68	45.54	4.54															
11.88	0.91	12.58	10.04	4.10	13.88	6.49	25.07	45.97	4.55															
11.90	0.87	12.07	10.28	4.10	13.90	6.58	25.82	46.83	4.55															
11.92	0.88	11.32	9.98	4.11	13.92	6.55	26.15	46.77	4.55															
11.94	0.97	10.50	8.45	4.11	13.94	6.25	26.88	44.26	4.57															
11.96	1.22	10.60	5.02	4.14	13.96	5.08	28.59	33.91	4.58															
11.98	1.72	12.61	0.06	4.14	13.98	3.66	37.25	23.20	4.58															
12.00	2.19	15.74	0.43	4.14	14.00	2.90	51.65	18.67	4.58															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Costiera - Loc. Marcegaglia (FC)
COMMESSA: C054/24
RDP N°: 206/24
DATA: 06/09/2024

PROVA N°: CPTU 6
PROF. FALDA (m da p.c.): 4.05
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 6
CANTIERE:	Via Costiera - Loc. Marcegaglia (FC)	PROF. FALDA (m da p.c.):	4.05
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	206/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	06/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Costiera - Loc. Marcegaglia (FC)
Lat.: 44.211086°
Long.: 12.109679°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: S.s. N° 9 Via Emilia - Loc. Ronco (FC)
COMMESSA: C054/24
RDP N°: 207/24
DATA: 06/09/2024

PROVA N°: CPTU 7
PROF. FALDA (m da p.c.): 8.10
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.26	21.39	18.30	0.57	2.02	3.87	46.31	27.42	0.95	4.02	2.92	21.90	10.35	1.08	6.02	1.79	86.49	18.12	1.83	8.02	3.22	172.85	78.72	2.73
0.04	1.19	28.94	17.45	0.79	2.04	3.81	47.77	27.18	0.94	4.04	2.80	20.94	11.32	1.07	6.04	1.82	86.95	18.61	1.85	8.04	3.13	162.13	79.40	2.76
0.06	1.19	39.16	14.88	0.49	2.06	3.71	48.14	26.51	0.95	4.06	2.67	20.49	12.06	1.08	6.06	1.89	87.74	19.34	1.84	8.06	3.29	149.14	121.51	2.77
0.08	1.21	46.23	10.04	0.40	2.08	3.53	49.60	25.34	0.93	4.08	2.53	19.63	12.86	1.07	6.08	1.89	92.19	19.59	1.84	8.08	3.29	142.71	122.98	2.79
0.10	1.23	56.03	10.41	0.93	2.10	3.31	51.64	24.12	0.95	4.10	2.45	19.40	22.53	1.09	6.10	1.91	92.53	19.34	1.84	8.10	3.19	139.00	133.51	2.80
0.12	1.26	64.43	10.16	0.72	2.12	3.36	46.36	1.59	0.96	4.12	2.49	18.74	22.71	1.10	6.12	1.85	92.96	19.22	1.88	8.12	3.20	127.31	133.94	2.79
0.14	1.26	63.94	9.92	0.80	2.14	3.53	42.83	1.41	0.97	4.14	2.34	17.72	23.38	1.12	6.14	1.79	93.75	20.08	1.87	8.14	3.25	118.88	134.67	2.80
0.16	1.26	39.73	78.29	0.76	2.16	3.64	39.92	1.47	0.98	4.16	1.96	18.86	24.79	1.12	6.16	1.73	92.47	20.08	1.89	8.16	3.10	122.32	135.47	2.80
0.18	1.33	46.87	80.44	0.82	2.18	3.75	36.04	1.16	0.98	4.18	1.71	24.48	25.71	1.12	6.18	1.66	93.20	20.26	2.00	8.18	3.23	123.02	143.55	2.85
0.20	1.53	49.82	83.74	0.81	2.20	3.68	33.15	0.43	0.99	4.20	1.54	34.58	25.89	1.13	6.20	1.63	93.26	19.89	2.01	8.20	3.18	119.58	144.28	2.83
0.22	1.78	52.04	87.17	0.72	2.22	3.42	34.06	0.67	0.99	4.22	1.59	40.21	24.00	1.15	6.22	1.56	93.50	19.40	2.03	8.22	3.19	116.84	149.12	2.85
0.24	2.30	61.02	98.07	0.60	2.24	3.28	36.49	1.22	1.00	4.24	2.39	36.96	20.75	1.16	6.24	1.51	91.73	19.10	2.05	8.24	3.22	120.00	154.51	2.86
0.26	3.02	66.50	115.76	0.74	2.26	2.93	45.33	1.71	1.01	4.26	3.24	43.21	17.69	1.15	6.26	1.52	88.57	19.04	2.04	8.26	3.29	125.33	164.48	2.86
0.28	3.69	70.55	121.45	0.69	2.28	2.79	62.58	2.51	1.00	4.28	3.65	44.30	17.14	1.18	6.28	1.49	83.73	18.92	2.05	8.28	3.36	119.24	168.22	2.85
0.30	4.35	76.02	115.51	0.62	2.30	3.04	73.48	2.75	0.99	4.30	3.70	43.42	17.32	1.19	6.30	1.47	84.61	18.67	2.05	8.30	3.16	113.15	174.34	2.86
0.32	5.02	79.04	84.23	0.64	2.32	3.28	78.29	3.00	0.97	4.32	3.62	40.78	17.81	1.20	6.32	1.45	85.85	18.49	1.84	8.32	3.05	111.05	172.26	2.87
0.34	5.67	82.54	62.07	0.62	2.34	3.47	78.32	2.94	0.96	4.34	3.49	37.83	18.43	1.22	6.34	1.48	86.40	18.73	1.86	8.34	3.05	109.77	171.83	2.89
0.36	6.27	91.66	51.60	0.59	2.36	3.46	73.72	2.20	0.96	4.36	3.10	34.82	19.65	1.22	6.36	1.48	86.19	18.85	1.86	8.36	2.95	109.46	172.69	2.87
0.38	6.76	96.50	47.56	0.62	2.38	3.39	67.64	1.47	0.96	4.38	2.56	38.55	21.36	1.24	6.38	1.50	87.98	19.10	1.86	8.38	2.95	106.51	179.17	2.86
0.40	7.37	106.94	44.01	0.63	2.40	3.37	53.94	0.86	0.96	4.40	2.15	46.74	22.71	1.25	6.40	1.57	91.24	19.53	1.85	8.40	2.82	102.71	188.91	2.85
0.42	7.57	115.91	40.52	0.62	2.42	3.35	42.18	0.18	0.98	4.42	1.85	61.07	23.45	1.24	6.42	1.63	91.90	20.02	1.88	8.42	2.90	98.57	189.89	2.89
0.44	7.67	123.03	40.59	0.59	2.44	3.34	37.10	0.31	0.94	4.44	1.71	65.67	16.10	1.26	6.44	1.68	91.30	20.38	1.88	8.44	2.85	98.02	192.03	2.87
0.46	7.64	124.21	41.38	0.63	2.46	3.29	31.63	0.98	0.92	4.46	1.74	64.82	10.35	1.27	6.46	1.73	91.96	20.87	1.89	8.46	2.76	96.31	189.95	2.87
0.48	7.78	119.67	42.67	0.63	2.48	3.25	30.18	1.65	0.92	4.48	1.74	54.86	9.30	1.28	6.48	1.77	93.12	20.87	1.89	8.48	2.71	90.80	188.42	2.88
0.50	7.74	110.35	43.40	0.59	2.50	3.22	29.58	2.14	0.90	4.50	1.58	58.76	9.37	1.29	6.50	1.81	94.27	21.12	1.90	8.50	2.63	89.25	187.93	2.90
0.52	7.66	101.82	43.83	0.60	2.52	3.20	29.50	2.82	0.91	4.52	1.45	62.68	9.86	1.28	6.52	1.82	95.95	21.18	1.91	8.52	2.51	90.41	186.34	2.88
0.54	7.54	89.65	44.44	0.60	2.54	3.23	29.17	3.18	0.90	4.54	1.30	64.48	10.53	1.29	6.54	1.87	96.34	21.55	1.91	8.54	2.46	92.45	186.89	2.89
0.56	7.48	73.60	44.93	0.61	2.56	3.26	28.27	3.61	0.89	4.56	1.22	60.01	11.02	1.31	6.56	1.93	98.90	22.22	1.93	8.56	2.46	93.48	188.05	2.90
0.58	7.31	68.97	44.63	0.61	2.58	3.22	27.25	4.16	0.87	4.58	1.19	61.86	11.08	1.31	6.58	1.98	101.15	22.53	1.91	8.58	2.50	92.93	190.07	2.90
0.60	7.19	65.52	44.75	0.64	2.60	3.18	26.50	4.84	0.90	4.60	1.12	63.44	11.26	1.31	6.60	2.00	103.28	23.14	1.94	8.60	2.58	92.38	192.83	2.90
0.62	6.89	61.71	44.69	0.64	2.62	3.21	25.63	5.08	0.87	4.62	1.12	62.44	11.14	1.33	6.62	2.05	103.73	23.14	1.93	8.62	2.70	89.31	194.54	2.91
0.64	6.60	60.76	44.38	0.63	2.64	3.30	25.99	5.20	0.88	4.64	1.10	54.07	11.26	1.33	6.64	2.04	106.56	23.38	1.94	8.64	2.84	85.14	197.54	2.91
0.66	6.11	62.10	43.10	0.63	2.66	3.50	27.13	5.14	0.86	4.66	1.07	48.62	11.32	1.33	6.66	2.03	109.97	24.00	1.94	8.66	2.95	82.80	199.01	2.92
0.68	5.80	64.98	43.16	0.64	2.68	3.68	27.52	5.02	0.84	4.68	1.06	44.17	11.20	1.33	6.68	2.00	113.96	24.18	1.94	8.68	3.06	84.50	201.09	2.93
0.70	5.38	67.59	42.54	0.65	2.70	3.76	27.20	5.20	0.87	4.70	1.11	39.21	10.77	1.34	6.70	1.98	117.30	24.00	1.96	8.70	3.16	87.48	203.11	2.92
0.72	4.95	68.04	41.44	0.65	2.72	3.61	26.90	6.24	0.85	4.72	1.19	36.63	9.37	1.35	6.72	1.97	121.68	24.55	1.96	8.72	3.21	88.58	204.09	2.94
0.74	4.59	68.80	40.71	0.66	2.74	3.01	27.68	8.75	0.85	4.74	1.26	32.90	7.47	1.35	6.74	1.95	126.98	24.55	1.97	8.74	3.23	90.56	205.07	2.94
0.76	4.37	66.21	40.71	0.67	2.76	2.54	30.21	10.53	0.83	4.76	1.20	30.46	7.53	1.35	6.76	1.93	129.47	24.49	1.99	8.76	3.25	96.22	205.93	2.95
0.78	4.25	63.34	40.95	0.66	2.78	2.02	38.36	12.30	0.84	4.78	1.18	31.61	7.41	1.37	6.78	1.93	131.42	24.73	1.99	8.78	3.22	102.85	208.93	2.94
0.80	4.25	60.20	41.63	0.71	2.80	1.80	46.67	13.16	0.84	4.80	1.15	32.36	6.73	1.38	6.80	1.93	134.28	24.91	2.01	8.80	3.19	107.14	207.82	2.95
0.82	4.37	55.69	42.18	0.69	2.82	1.63	53.49	13.77	0.85	4.82	1.14	35.61	6.12	1.38	6.82	1.92	135.86	25.22	2.03	8.82	3.18	110.46	207.27	2.94
0.84	4.60	51.49	43.16	0.68	2.84	1.56	59.55	14.45	0.83	4.84	1.14	36.60	5.45	1.38	6.84	1.90	135.19	25.28	2.02	8.84	3.11	113.90	206.48	2.94
0.86	4.98	46.86	45.05	0.70	2.86	1.58	61.35	14.57	0.82	4.86	1.19	34.80	5.75	1.40	6.86	1.89	132.75	25.22	2.04	8.86	3.07	118.53	206.66	2.95
0.88	5.55	41.43	46.83	0.70	2.88	1.63	57.94	14.63	0.83	4.88	1.15	36.97	6.06	1.40	6.88	1.86	130.50	25.28	2.04	8.88	3.06	119.14	207.58	2.96
0.90	6.17	41.09	48.42	0.73	2.90	1.66	54.41	14.39	0.82	4.90	1.07	41.15	6.92	1.40	6.90	1.88	129.34	25.53	2.06	8.90	3.09	117.40	209.54	2.96
0.92	6.52	49.89	47.93	0.76	2.92	1.72	52.28	14.57	0.79	4.92	1.00	44.94	7.47	1.40	6.92	1.91	123.49	25.89	2.06	8.92	3.07	114.69	212.17	2.99
0.94	6.42	57.65	46.65	0.76	2.94	1.88	50.61	14.26	0.81	4.94	0.97	45.90	7.77	1.41	6.94	1.95	121.06	26.44	2.06	8.94	3.08	111.28	213.82	2.97
0.96	5.94	64.22	44.38	0.74	2.96	1.93	48.88	14.32	0.80	4.96	0.97	45.39	7.90	1.42	6.96	1.97	120.84	26.81	2.09	8.96	3.11	107.42	214.62	2.97
0.98	5.65	68.90	42.97	0.77	2.98	1.76	52.78	14.51	0.80	4.98	0.99	45.81	7.90	1.42	6.98	2.03	120.75	27.49	2.09	8.98	3.03	107.05	212.72	2.98
1.00	5.36	74.95	42.18	0.79	3.00	1.46	60.82	16.16	0.79	5.00	1.02	45.87	7.84	1.44	7.00	2.15	120.08	28.71	2.10	9.00	2.99	107.08	213.82	2.99
1.02	5.21	77.23	41.50	0.78	3.02	1.38	63.25	16.90	0.77	5.02	1.05	42.54	8.08	1.47	7.02	2.32	121.66	30.18	2.10	9.02	3.00	106.78	214.62	2.99
1.04	4.93	75.07	40.83	0.75	3.04	1.33	64.05	17.57	0.79	5.04	1.02	42.90	8.08	1.46	7.04	2.45	122.96	31.89	2.14	9.04	3.02	105.01	215.35	2.99
1.06	4.85	68.18	40.71	0.78	3.06	1.33	62.41	18.12	0.77	5.06	1.01	42.96	8.14	1.47	7.06	2.59	124.73	33.18	2.15	9.06	3.06	97.56	231.02	3.01
1.08	4.87	64.22	40.83	0.76	3.08	1.36	60.92	18.12	0.75	5.08	1.00	42.78	8.20	1.48	7.08	2.71	128.22	39.61	2.16	9.08	2.97	104.71	227.35	3.02
1.10	5.02	63.12	41.26	0.78	3.10	1.02	55.57	20.45	0.79	5.10	1.06	40.51	6.79	1.47	7.10	2.79	129.26	40.59	2.19	9.10	2.87	112.13	224.72	3.03
1.12	5.07	51.08	33.61	0.80	3.12	1.50	55.89	19.28	0.79	5.12	1.11	41.05	6.37	1.50	7.12	2.82	131.39	42.30	2.18	9.12	2.66	116.82	219.21	3.05
1.14	5.25	48.15	32.57	0.79	3.14	1.57	53.91	17.38	0.79	5.14	1.16	41.11	5.14	1.50	7.14	2.82	134.25	43.65	2.19	9.14	2.50	118.28	215.96	3.04
1.16	5.57	42.50	32.50	0.81	3.16	1.53	55.16	16.22	0.80	5.16	1.23	39.85	3.61	1.50	7.16	2.75	139.88	42.91	2.18	9.16	2.34	117.88	212.97	3.05
1.18	5.76	39.56	32.08	0.79	3.18	1.68	51.90	16.41	0.80	5.18	1.27	40.18	2.69	1.51	7.18	2.66	143.31	44.63	2.19	9.18	2.27	117.27	211.80	3.06
1.20	5.88	35.59	31.53	0.81	3.20	1.92	53.33	16.04	0.77	5.20	1.32	42.89	1.35	1.51	7.20	2.65	144.13	45.42	2.19	9.20	2.18	116.24	211.01	3.05
1.22	5.97	32.67	31.34	0.80	3.22	2.00	54.70	16.22	0.80	5.22	1.38	43.73	0.12	1.54	7.22	2.59	144.74	45.18	2.20	9.22	2.15	108.23	213.21	3.06
1.24	6.50	30.62	32.50	0.82	3.24	1.71	53.09	18.00	0.80	5.24	1.41	44.63	0.67	1.54	7.24	2.57	144.22	45.30	2.21	9.24	2.20	92.31	216.09	3.06
1.26	6.88	31.47	33.73	0.81	3.26	1.29	51.75	20.08	0.82	5.26	1.42	46.40	1.16	1.55	7.26	2.50	143.85	45.54	2.22	9.26	2.20	82.60	217.62	3.08
1.28	7.38	33.15	34.40	0.82	3.28	1.07	52.27	21.49	0.84	5.28	1.42	49.39	1.78	1.54	7.28	2.48	144.13	45.67	2.23	9.28	2.22	73.62	219.33	3.07
1.30	7.35	34.80	33.79	0.83	3.30	0.95	52.30	22.22	0.84	5.30	1.40	52.28	2.94	1.56	7.30	2.48	141.32	45.85	2.24	9.30	2.20	68.32	220.19	3.08
1.32	7.23	36.66	32.93	0.85	3.32	1.01	47.10	21.98	0.92	5.32	1.41	53.89	3.80	1.56	7.32	2.47	141.05	45.97	2.25	9.32	2.14	60.65	219.94	3.01
1.34	6.99	38.80	32.20	0.76	3.34	1.03	38.48	20.87	0.91	5.34	1.41	55.84	4.65	1.56	7.34	2.46	140.41	46.58	2.25	9.34	2.10	54.47	219.39	3.04
1.36	6.88	44.93	32.26	0.77	3.36	1.06	33.04	20.38	0.91	5.36	1.41	57.88	5.14	1.58	7.36	2.53	134.86	47.20	2.27	9.36	2.04	56.48	217.56	3.04
1.38	6.90	50.61	32.93	0.78	3.38	0.99	30.01	20.57	0.91	5.38	1.37	60.01	5.45	1.56	7.38	2.56	132.40	47.62	2.28	9.38	2.01	61.31	218.17	3.04
1.40	6.85	55.96	32.81	0.77	3.40	1.00	28.51	20.69	0.93	5.40	1.33	61.68	5.57	1.58	7.40	2.58	129.53	47.81	2.29	9.40	2.10	61.80	222.09	3.04
1.42	6.82	61.90	33.30	0.78	3.42	1.18	27.91	18.73	0.93	5.42	1.32	62.32	5.88	1.59	7.42	2.56	128.25	47.99	2.30	9.42	2.20	62.10	225.21	3.05
1.44	6.62	65.36	32.81	0.78	3.44	1.59	26.98	15.06	0.93	5.44	1.31	63.35	6.00	1.58	7.44	2.54	125.75	48.54	2.31	9.44	2.37	61.80	228.64	3.03
1.46	6.37	74.37	32.02	0.78	3.46	1.87	25.41	15.24	0.93	5.46	1.32	64.45	6.55	1.60	7.46	2.56	124.23	49.03	2.33	9.46	2.40	67.25	228.21	3.04
1.48	6.32	90.35	32.20	0.79	3.48	1.56	21.51	17.26	0.92	5.48	1.31	64.94	6.86	1.61	7.48	2.58	126.11	49.77	2.35	9.48	2.31	68.98	225.39	3.04
1.50	6.43	97.44	33.24	0.79	3.50	1.29	23.88	18.92	0.93	5.50	1.29	65.97	7.53	1.62	7.50	2.62	125.02	51.91	2.35	9.50	2.19	69.44	221.41	3.05
1.52	6.42	109.64	33.36	0.81	3.52	1.01	35.64	20.63	0.95	5.52	1.31	66.00	7.90	1.62	7.52	2.77	119.51	53.93	2.38	9.52	2.11	69.41	218.78	3.06
1.54	6.41	125.25	33.18	0.80	3.54	0.96	43.94	19.47	0.95	5.54	1.33	66.61	8.26	1.64	7.54	2.86	114.12	54.05	2.39	9.54	1.99	73.39	216.76	3.07
1.56	6.36	126.10	33.06	0.81	3.56	1.21	44.79	16.77	0.95	5.56	1.36	68.68	8.57	1.66	7.56	2.87	114.72	54.97	2.37	9.56	1.98	67.73	216.76	3.07
1.58	6.29	124.94	33.18	0.80	3.58	1.34	48.21	12.73	0.95	5.58	1.38	69.95	9.12	1.68	7.58	2.88	115.82	55.28	2.39	9.58	1.95	64.60	216.45	3.07
1.60	6.22	116.47	33.18	0.81	3.60	1.39	46.02	12.30	0.97	5.60	1.41	72.72	9.67	1.67	7.60	2.89	116.94	56.07	2.43	9.60	1.83	62.80	213.21	3.09
1.62	6.07	100.22	32.93	0.82	3.62	1.33	41.61	13.47	0.98	5.62	1.44	73.94	11.26	1.69	7.62	2.87	123.73	58.40	2.41	9.62	1.76	58.30	212.29	3.09
1.64	5.67	82.75	31.53	0.84	3.64	1.21	41.94	14.69	0.98	5.64	1.49	74.00	11.88	1.71	7.64	2.96	129.08	61.89	2.43	9.64	1.77	50.23	212.84	3.09
1.66	5.31	68.53	30.73	0.83	3.66	1.12	38.72	15.67	0.99	5.66	1.52	74.94	13.10	1.72	7.66	3.04	134.77	62.13	2.45	9.66	1.73	48.80	213.15	3.09
1.68	4.92	54.46	29.93	0.84	3.68	1.00	38.97	16.59	0.98	5.68	1.56	75.28	13.22	1.71	7.68	3.14	140.25	63.66	2.46	9.68	1.77	45.79	214.01	3.10
1.70	4.68	50.62	29.44	0.86	3.70	0.94	37.44	17.26	0.98	5.70	1.59	76.77	13.71	1.72	7.70	3.25	141.89	64.46	2.48	9.70	1.82	49.29	215.23	3.11
1.72	4.57	49.07	29.51	0.86	3.72	0.90	31.06	17.87	0.98	5.72	1.62	78.81	14.32	1.74	7.72	3.41	141.68	65.68	2.49	9.72	1.82	47.71	214.19	3.11
1.74	4.59	48.30	30.24	0.88	3.74	0.91	29.08	17.69	0.99	5.74	1.66	80.63	14.39	1.74	7.74	3.48	144.02	66.42	2.50	9.74	1.79	44.68	212.60	3.14
1.76	4.70	46.69	30.97	0.88	3.76	0.98	24.57	16.10	0.99	5.76	1.65	82.98	14.51	1.72	7.76	3.56	146.94	68.38	2.50	9.76	1.77	48.32	211.13	3.14
1.78	4.73	44.84	31.46	0.87	3.78	1.11	20.31	12.55	1.00	5.78	1.63	88.88	15.24	1.75	7.78	3.59	150.90	69.05	2.54	9.78	1.73	51.09	210.21	3.15
1.80	4.89	42.19	32.14	0.88	3.80	1.30	17.06	9.49	1.00	5.80	1.60	90.13	15.24	1.75	7.80	3.53	154.85	69.42	2.53	9.80	1.75	47.40	211.13	3.14
1.82	4.89	40.21	32.32	0.89	3.82	1.39	19.86	7.53	1.02	5.82	1.55	92.26	15.18	1.78	7.82	3.56	161.06	72.72	2.56	9.82	1.73	46.16	209.48	3.14
1.84	4.84	38.79	31.83	0.92	3.84	1.74	24.52	6.61	1.01	5.84	1.50	93.29	15.73	1.76	7.84	3.58	161.69	72.97	2.57	9.84	1.65	46.98	207.27	3.15
1.86	4.73	39.60	31.22	0.90	3.86	2.01	27.29	5.75	1.01	5.86	1.47	94.38	15.55	1.77	7.86	3.72	163.00	74.50	2.60	9.86	1.63	47.28	206.42	3.15
1.88	4.71	40.47	31.16	0.90	3.88	2.59	29.25	5.39	1.03	5.88	1.47	94.96	15.67	1.77	7.88	3.69	168.90	75.17	2.60	9.88	1.67	45.02	207.52	3.16
1.90	4.67	40.38	31.04	0.92	3.90	2.80	31.30	5.82	1.02	5.90	1.50	94.32	15.67	1.78	7.90	3.74	170.76	75.72	2.62	9.90	1.67	45.05	207.64	3.14
1.92	4.61	41.37	30.73	0.93	3.92	2.98	31.39	6.37	1.02	5.92	1.51	95.29	16.28	1.79	7.92	3.67	175.93	76.03	2.64	9.92	1.64	44.60	206.48	3.16
1.94	4.49	42.61	30.12	0.92	3.94	3.01	30.40	7.22	1.05	5.94	1.58	92.16	16.59	1.79	7.94	3.55	176.48	76.76	2.63	9.94	1.62	42.46	205.56	3.17
1.96	4.41	43.30	29.75	0.94	3.96	3.06	27.22	7.77	1.06	5.96	1.61	91.73	16.90	1.82	7.96	3.49	168.59	77.74	2.66	9.96	1.62	39.64	207.09	3.16
1.98	4.24	43.84	28.95	0.93	3.98	3.06	24.42	8.69	1.08	5.98	1.65	90.63	17.51	1.82	7.98	3.53	164.51	78.84	2.66	9.98	1.59	37.50	205.86	3.16
2.00	4.00	44.80	27.91	0.93	4.00	3.01	22.98	9.37	1.06	6.00	1.73	88.32	17.87	1.83	8.00	3.31	168.19	77.25	2.73	10.00	1.60	39.91	206.90	3.16

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COMMITTENTE:
CANTIERE: S.s. N° 9 Via Emilia - Loc. Ronco (FC)
COMMESSA: C054/24
RDP N°: 207/24
DATA: 06/09/2024

PROVA N°: CPTU 7
PROF. FALDA (m da p.c.): 8.10
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

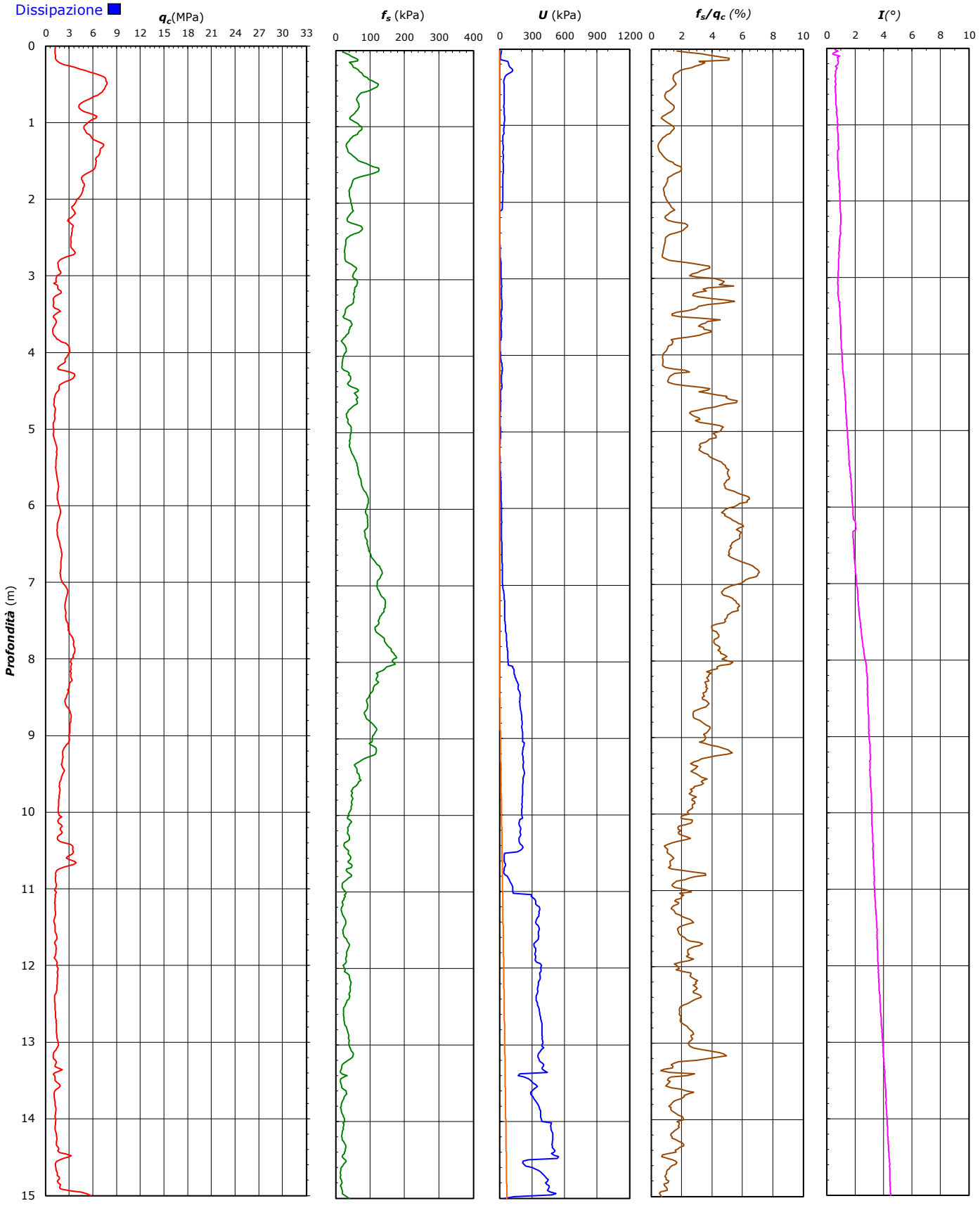
prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.68	35.31	210.33	3.17	12.02	1.51	28.01	384.92	3.63	14.02	1.31	22.18	478.82	4.25										
10.04	1.75	34.53	212.97	3.17	12.04	1.58	26.07	383.45	3.63	14.04	1.29	23.80	474.53	4.26										
10.06	2.04	40.68	188.60	3.17	12.06	1.53	32.72	372.43	3.63	14.06	1.25	23.20	472.27	4.26										
10.08	1.73	46.88	182.91	3.19	12.08	1.48	38.91	371.14	3.63	14.08	1.25	22.21	473.13	4.25										
10.10	1.60	43.57	179.60	3.18	12.10	1.52	39.81	376.35	3.64	14.10	1.22	22.51	476.68	4.28										
10.12	1.53	40.23	179.48	3.18	12.12	1.56	39.84	375.92	3.64	14.12	1.21	20.47	479.37	4.27										
10.14	1.66	38.43	183.77	3.18	12.14	1.55	41.35	374.45	3.64	14.14	1.21	18.69	485.74	4.29										
10.16	1.92	35.09	191.36	3.18	12.16	1.49	42.88	367.23	3.65	14.16	1.29	18.93	490.51	4.28										
10.18	2.09	36.62	195.52	3.20	12.18	1.48	45.34	360.61	3.67	14.18	1.34	17.73	491.98	4.29										
10.20	1.98	35.51	191.79	3.19	12.20	1.50	43.75	357.06	3.66	14.20	1.37	17.70	491.92	4.29										
10.22	1.81	35.36	187.74	3.21	12.22	1.47	43.60	359.94	3.68	14.22	1.38	18.75	491.25	4.29										
10.24	1.95	34.88	191.79	3.21	12.24	1.48	40.68	356.27	3.67	14.24	1.43	19.53	491.31	4.32										
10.26	2.15	39.18	197.66	3.22	12.26	1.42	42.09	351.31	3.67	14.26	1.43	23.02	488.37	4.31										
10.28	1.99	40.14	188.97	3.23	12.28	1.41	42.63	349.35	3.68	14.28	1.41	25.70	487.63	4.31										
10.30	1.69	40.20	181.68	3.22	12.30	1.45	42.54	353.76	3.69	14.30	1.40	28.13	484.70	4.34										
10.32	1.55	40.08	180.09	3.23	12.32	1.45	40.17	352.35	3.69	14.32	1.39	29.88	486.66	4.32										
10.34	1.48	33.55	181.56	3.24	12.34	1.41	39.14	345.31	3.72	14.34	1.39	29.79	487.27	4.34										
10.36	1.52	25.83	183.89	3.23	12.36	1.30	40.83	340.05	3.72	14.36	1.50	28.61	498.41	4.36										
10.38	1.81	24.59	192.95	3.25	12.38	1.23	40.38	336.86	3.74	14.38	1.65	28.70	510.71	4.36										
10.40	2.38	24.95	207.33	3.26	12.40	1.16	38.24	336.80	3.73	14.40	1.66	26.00	502.39	4.36										
10.42	3.17	27.60	219.21	3.26	12.42	1.15	33.94	339.80	3.75	14.42	1.57	25.46	479.49	4.35										
10.44	3.41	31.84	209.41	3.26	12.44	1.16	31.86	344.45	3.75	14.44	1.75	20.52	502.33	4.37										
10.46	3.47	37.07	198.03	3.25	12.46	1.16	29.67	348.49	3.75	14.46	2.56	19.08	543.77	4.37										
10.48	3.43	37.07	165.22	3.25	12.48	1.16	27.86	351.80	3.75	14.48	3.25	22.78	531.53	4.38										
10.50	3.49	36.65	46.22	3.27	12.50	1.18	25.19	357.92	3.76	14.50	2.85	27.92	268.79	4.38										
10.52	3.53	39.87	44.81	3.27	12.52	1.22	23.56	363.00	3.78	14.52	2.25	31.29	218.23	4.41										
10.54	3.42	44.05	43.40	3.26	12.54	1.21	22.78	365.88	3.78	14.54	1.69	27.11	211.86	4.41										
10.56	3.13	43.47	42.30	3.26	12.56	1.23	22.78	368.94	3.79	14.56	1.39	23.53	224.17	4.42										
10.58	2.77	41.19	41.63	3.28	12.58	1.23	22.87	370.71	3.79	14.58	1.27	20.55	243.08	4.42										
10.60	2.63	35.54	42.42	3.28	12.60	1.24	23.05	373.16	3.79	14.60	1.25	16.98	298.60	4.42										
10.62	3.04	37.22	48.42	3.29	12.62	1.24	22.93	375.18	3.80	14.62	1.29	15.59	326.15	4.42										
10.64	3.68	46.18	54.79	3.30	12.64	1.24	23.86	377.75	3.82	14.64	1.30	15.29	361.17	4.45										
10.66	3.88	48.15	53.44	3.30	12.66	1.25	24.56	381.00	3.82	14.66	1.35	14.21	378.55	4.45										
10.68	3.55	45.46	49.09	3.32	12.68	1.29	24.77	384.73	3.83	14.68	1.41	14.36	396.49	4.45										
10.70	2.89	32.68	44.50	3.32	12.70	1.32	25.25	388.10	3.84	14.70	1.48	14.84	408.42	4.46										
10.72	2.28	30.57	41.93	3.33	12.72	1.36	26.27	391.10	3.84	14.72	1.49	14.18	421.22	4.43										
10.74	1.75	35.29	40.22	3.33	12.74	1.35	27.47	390.55	3.84	14.74	1.51	13.52	432.54	4.43										
10.76	1.44	41.00	40.83	3.34	12.76	1.37	30.51	391.71	3.85	14.76	1.69	16.79	449.50	4.45										
10.78	1.30	46.35	53.07	3.32	12.78	1.36	32.22	392.08	3.85	14.78	1.78	17.73	441.23	4.43										
10.80	1.27	45.69	70.09	3.32	12.80	1.38	33.52	393.24	3.86	14.80	1.61	18.84	424.64	4.45										
10.82	1.29	37.27	80.01	3.33	12.82	1.38	35.05	391.83	3.87	14.82	1.52	16.73	434.68	4.45										
10.84	1.28	32.19	88.15	3.35	12.84	1.37	36.55	390.61	3.89	14.84	1.67	13.97	460.27	4.46										
10.86	1.26	27.59	94.88	3.34	12.86	1.37	37.88	391.22	3.88	14.86	1.87	16.40	459.48	4.45										
10.88	1.25	20.85	102.23	3.35	12.88	1.38	38.48	392.75	3.89	14.88	1.86	18.27	449.13	4.47										
10.90	1.24	18.99	110.19	3.35	12.90	1.43	37.13	394.22	3.91	14.90	1.79	18.99	443.38	4.47										
10.92	1.33	18.63	117.35	3.34	12.92	1.42	37.55	391.65	3.89	14.92	1.94	20.13	461.07	4.47										
10.94	1.39	19.08	122.80	3.35	12.94	1.44	39.50	395.63	3.91	14.94	3.12	19.56	520.38	4.47										
10.96	1.36	21.09	120.96	3.35	12.96	1.49	38.99	398.45	3.92	14.96	4.55	24.43	482.62	4.48										
10.98	1.29	25.84	120.96	3.38	12.98	1.55	38.72	400.59	3.92	14.98	5.31	31.62	132.10	4.50										
11.00	1.19	28.97	123.04	3.37	13.00	1.60	38.81	392.63	3.93	15.00	5.74	40.40	49.22	4.49										
11.02	1.16	30.71	127.14	3.38	13.02	1.59	39.80	391.65	3.95															
11.04	1.36	25.27	297.81	3.38	13.04	1.65	42.31	407.93	3.95															
11.06	1.33	28.58	291.32	3.39	13.06	1.57	44.09	388.90	3.95															
11.08	1.23	24.31	309.62	3.38	13.08	1.43	47.10	378.80	3.96															
11.10	1.24	24.61	325.60	3.40	13.10	1.31	49.99	367.10	3.97															
11.12	1.21	19.83	335.64	3.39	13.12	1.16	52.30	358.04	3.98															
11.14	1.22	19.08	332.09	3.41	13.14	1.06	50.33	352.96	3.98															
11.16	1.18	21.30	333.37	3.41	13.16	0.99	48.74	353.57	3.98															
11.18	1.15	20.28	348.07	3.42	13.18	0.96	42.04	361.10	3.97															
11.20	1.18	17.18	366.61	3.43	13.20	0.97	36.33	369.18	4.01															
11.22	1.20	16.58	371.39	3.42	13.22	1.01	30.22	377.39	4.02															
11.24	1.23	16.16	370.41	3.43	13.24	1.24	22.52	399.12	4.01															
11.26	1.21	17.97	361.90	3.44	13.26	1.35	19.61	410.20	4.03															
11.28	1.23	18.90	365.08	3.47	13.28	1.31	17.20	406.04	4.03															
11.30	1.25	19.95	362.63	3.47	13.30	1.22	17.38	391.47	4.04															
11.32	1.25	23.23	362.33	3.47	13.32	1.19	16.72	395.75	4.06															
11.34	1.25	25.09	349.53	3.48	13.34	1.63	13.62	422.50	4.04															
11.36	1.21	27.74	343.41	3.49	13.36	2.13	13.74	443.74	4.07															
11.38	1.14	29.33	338.58	3.50	13.38	1.72	20.87	190.07	4.08															
11.40	1.09	29.30	335.21	3.50	13.40	1.17	33.26	171.40	4.09															
11.42	1.06	29.69	336.13	3.51	13.42	1.01	23.99	225.76	4.07															
11.44	1.11	26.84	352.60	3.51	13.44	1.13	14.89	265.73	4.07															
11.46	1.16	23.71	364.10	3.52	13.46	1.18	13.53	285.63	4.09															
11.48	1.22	22.45	366.00	3.53	13.48	1.19	12.69	297.26	4.10															
11.50	1.21	20.94	365.33	3.54	13.50	1.19	14.86	313.60	4.10															
11.52	1.21	21.39	358.72	3.54	13.52	1.40	16.00	332.64	4.11															
11.54	1.21	21.75	358.10	3.55	13.54	1.69	17.59	352.47	4.12															
11.56	1.23	22.51	360.06	3.54	13.56	1.83	17.62	335.64	4.12															
11.58	1.30	24.64	363.31	3.54	13.58	1.81	23.79	319.17	4.12															
11.60	1.37	27.86	360.61	3.53	13.60	1.58	30.61	302.22	4.14															
11.62	1.43	32.10	357.06	3.55	13.62	1.33	30.82	287.46	4.14															
11.64	1.45	33.30	346.72	3.53	13.64	1.18	32.75	286.85	4.15															
11.66	1.41	35.56	331.23	3.55	13.66	1.12	27.88	297.44	4.15															
11.68	1.26	39.70	318.38	3.57	13.68	1.11	24.15	307.48	4.15															
11.70	1.18	39.85	317.64	3.56	13.70	1.09	23.79	315.50	4.15															
11.72	1.22	38.83	320.34	3.57	13.72	1.11	21.95	325.72	4.16															
11.74	1.31	36.70	332.82	3.57	13.74	1.13	19.34	337.17	4.19															
11.76	1.34	34.14	334.11	3.56	13.76	1.16	17.47	344.45	4.18															
11.78	1.37	32.82	333.74	3.57	13.78	1.21	16.57	354.68	4.16															
11.80	1.33	32.28	328.35	3.59	13.80	1.22	15.85	362.14	4.17															
11.82	1.31	31.68	324.56	3.59	13.82	1.24	14.32	367.78	4.18															
11.84	1.29	32.13	332.15	3.59	13.84	1.25	16.18	372.92	4.20															
11.86	1.26	29.36	334.66	3.59	13.86	1.31	16.81	377.57	4.19															
11.88	1.20	29.96	328.91	3.58	13.88	1.33	18.05	379.41	4.21															
11.90	1.12	31.22	330.44	3.58	13.90	1.31	19.40	379.59	4.21															
11.92	1.24	30.23	343.90	3.59	13.92	1.27	21.11	380.33	4.22															
11.94	1.37	26.56	374.02	3.60	13.94	1.27	22.62	381.55	4.23															
11.96	1.48	22.26	388.34	3.61	13.96	1.23	25.20	382.77	4.23															
11.98	1.43	24.04	382.53	3.61	13.98	1.22	25.89	387.30	4.24															
12.00	1.46	25.57	381.24	3.64	14.00	1.24	26.59	391.96	4.24															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: S.s. N° 9 Via Emilia - Loc. Ronco (FC)
COMMESSA: C054/24
RDP N°: 207/24
DATA: 06/09/2024

PROVA N°: CPTU 7
PROF. FALDA (m da p.c.): 8.10
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 7
CANTIERE:	S.s. N° 9 Via Emilia - Loc. Ronco (FC)	PROF. FALDA (m da p.c.):	8.10
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	207/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	06/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: S.s. N° 9 Via Emilia - Loc. Ronco (FC)
Lat.: 44.200589°
Long.: 12.093340°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Balestra - Loc. Carpena (FC)
COMMESSA: C054/24
RDP N°: 186/24
DATA: 27/08/2024

PROVA N°: CPTU 8
PROF. FALDA (m da p.c.): n.r
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

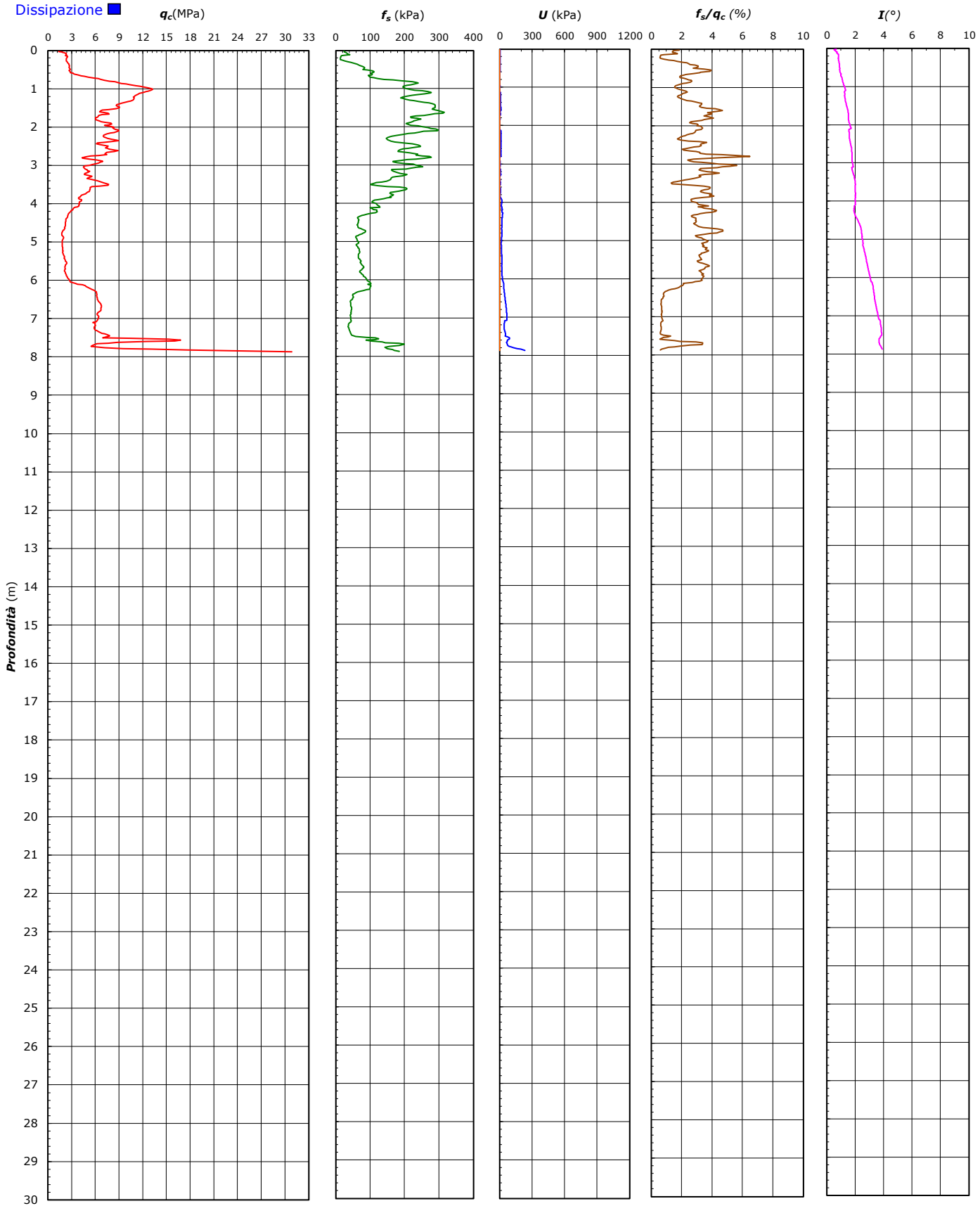
prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.31	24.00	3.86	0.68	2.02	8.21	269.23	0.55	1.64	4.02	3.99	120.09	20.25	2.02	6.02	2.78	91.93	27.70	3.06					
0.04	1.76	25.87	4.41	0.51	2.04	8.30	277.03	0.80	1.65	4.04	3.95	121.03	18.59	2.01	6.04	2.87	96.32	28.68	3.08					
0.06	2.13	30.08	5.33	0.62	2.06	8.57	291.21	0.55	1.67	4.06	3.93	123.11	18.41	2.01	6.06	3.10	98.93	30.40	3.09					
0.08	2.36	33.35	5.33	0.60	2.08	8.89	297.57	0.37	1.70	4.08	3.75	127.32	17.13	2.02	6.08	3.49	101.07	33.33	3.11					
0.10	2.26	36.33	4.65	0.73	2.10	9.02	296.78	0.73	1.72	4.10	3.43	129.25	14.19	2.01	6.10	3.78	102.60	35.23	3.12					
0.12	2.38	40.87	4.77	0.72	2.12	8.70	256.18	11.08	1.57	4.12	3.22	99.57	23.80	1.93	6.12	4.41	93.60	37.01	3.19					
0.14	2.20	18.43	4.90	0.78	2.14	8.38	243.31	12.43	1.56	4.14	3.19	106.55	21.90	1.94	6.14	4.71	101.36	37.50	3.21					
0.16	2.48	15.75	5.14	0.83	2.16	7.90	229.52	13.59	1.57	4.16	3.14	108.89	19.70	1.94	6.16	4.86	103.01	37.25	3.21					
0.18	2.43	14.79	5.69	0.82	2.18	7.44	211.41	14.45	1.57	4.18	2.97	119.30	27.25	1.94	6.18	4.94	101.48	37.19	3.23					
0.20	2.38	14.22	6.00	0.83	2.20	7.18	197.35	14.94	1.59	4.20	2.89	120.20	25.72	1.92	6.20	5.16	100.36	38.05	3.24					
0.22	2.36	13.46	6.18	0.82	2.22	7.06	180.15	15.00	1.58	4.22	2.81	121.22	23.89	1.93	6.22	5.41	100.66	39.15	3.26					
0.24	2.36	14.37	6.37	0.82	2.24	7.02	164.76	15.00	1.58	4.24	2.72	115.78	22.17	1.92	6.24	5.63	98.40	39.95	3.26					
0.26	2.35	19.48	6.37	0.80	2.26	7.10	158.80	14.75	1.59	4.26	2.61	104.95	20.34	1.92	6.26	5.80	90.34	40.62	3.25					
0.28	2.36	27.42	6.37	0.82	2.28	7.27	151.10	14.57	1.60	4.28	2.56	92.81	29.17	1.93	6.28	5.97	80.87	41.72	3.27					
0.30	2.48	37.04	6.12	0.84	2.30	7.58	147.07	14.08	1.59	4.30	2.57	83.46	28.56	1.94	6.30	6.14	68.84	43.07	3.28					
0.32	2.53	43.62	5.94	0.84	2.32	8.10	148.27	13.10	1.60	4.32	2.52	76.81	28.01	1.97	6.32	6.17	63.16	43.37	3.29					
0.34	2.56	53.18	5.88	0.86	2.34	8.73	151.45	12.06	1.60	4.34	2.49	69.50	27.21	1.97	6.34	6.18	58.10	43.68	3.30					
0.36	2.65	61.90	5.69	0.87	2.36	8.93	157.73	11.88	1.60	4.36	2.43	64.63	26.60	2.00	6.36	6.23	54.80	44.84	3.30					
0.38	2.65	65.33	5.51	0.87	2.38	8.01	159.69	13.34	1.61	4.38	2.40	63.88	25.68	2.01	6.38	6.23	50.70	45.46	3.30					
0.40	2.73	69.81	5.33	0.90	2.40	6.99	172.49	14.75	1.62	4.40	2.30	65.35	24.64	2.04	6.40	6.13	49.38	45.15	3.33					
0.42	2.72	78.04	5.39	0.90	2.42	6.28	197.35	15.43	1.62	4.42	2.28	67.22	24.28	2.07	6.42	6.19	50.85	46.37	3.33					
0.44	2.70	83.24	5.14	0.89	2.44	6.13	223.43	15.24	1.65	4.44	2.29	67.13	24.09	2.11	6.44	6.23	51.93	47.60	3.33					
0.46	2.75	84.77	4.96	0.90	2.46	6.66	228.91	13.96	1.65	4.46	2.26	66.11	23.54	2.12	6.46	6.26	51.81	48.52	3.34					
0.48	2.81	82.55	4.65	0.89	2.48	7.30	241.33	12.92	1.67	4.48	2.24	65.54	23.48	2.15	6.48	6.29	49.79	49.37	3.35					
0.50	2.84	78.70	4.41	0.89	2.50	7.63	247.17	12.55	1.68	4.50	2.21	65.93	22.93	2.18	6.50	6.29	49.13	50.05	3.35					
0.52	2.68	92.73	5.45	0.92	2.52	7.49	246.59	12.79	1.69	4.52	2.21	64.88	22.68	2.22	6.52	6.31	48.11	51.03	3.36					
0.54	2.76	108.15	5.02	0.92	2.54	7.27	228.11	13.16	1.69	4.54	2.22	64.37	22.56	2.23	6.54	6.39	44.32	52.01	3.37					
0.56	2.82	111.55	4.77	0.91	2.56	7.50	211.28	12.67	1.71	4.56	2.24	62.87	22.44	2.26	6.56	6.46	42.90	53.23	3.38					
0.58	2.87	110.79	4.47	0.92	2.58	7.83	197.25	12.00	1.72	4.58	2.20	63.51	22.07	2.28	6.58	6.56	43.05	54.52	3.38					
0.60	3.17	102.70	3.80	0.93	2.60	8.48	188.05	11.14	1.74	4.60	2.15	64.29	21.15	2.31	6.60	6.62	43.71	55.37	3.39					
0.62	3.32	106.24	3.43	0.94	2.62	8.91	182.48	10.90	1.74	4.62	2.13	64.26	20.79	2.33	6.62	6.70	43.56	56.35	3.40					
0.64	3.79	105.49	2.69	0.96	2.64	8.42	181.35	11.88	1.74	4.64	2.15	67.93	20.48	2.34	6.64	6.73	43.86	57.02	3.41					
0.66	4.20	95.56	2.08	0.98	2.66	7.44	193.10	13.53	1.75	4.66	2.13	72.44	20.30	2.38	6.66	6.79	43.82	58.13	3.42					
0.68	4.63	97.09	1.59	1.01	2.68	7.30	215.16	13.47	1.75	4.68	2.07	77.83	20.05	2.38	6.68	6.77	44.36	58.86	3.44					
0.70	5.13	99.79	0.98	1.00	2.70	7.22	230.75	12.24	1.76	4.70	1.93	84.17	19.93	2.41	6.70	6.77	45.26	59.41	3.45					
0.72	5.85	110.37	0.24	1.00	2.72	7.44	239.17	10.90	1.77	4.72	1.86	87.00	20.24	2.42	6.72	6.75	45.92	60.39	3.45					
0.74	6.37	121.77	0.06	1.03	2.74	6.43	233.03	12.86	1.77	4.74	1.83	86.43	20.72	2.42	6.74	6.74	46.46	61.00	3.47					
0.76	6.70	141.12	0.12	1.05	2.76	5.44	251.44	14.20	1.77	4.76	1.78	84.03	20.42	2.43	6.76	6.74	46.40	61.74	3.49					
0.78	7.20	166.56	0.80	1.07	2.78	4.81	272.44	14.94	1.78	4.78	1.79	80.54	20.36	2.44	6.78	6.72	46.34	62.47	3.49					
0.80	7.81	192.04	1.47	1.07	2.80	4.30	278.50	12.86	1.78	4.80	1.76	76.27	20.30	2.45	6.80	6.65	45.86	62.72	3.51					
0.82	8.47	223.23	1.41	1.07	2.82	4.41	258.80	5.51	1.79	4.82	1.77	68.54	20.36	2.45	6.82	6.50	45.55	62.96	3.52					
0.84	8.86	236.40	0.73	1.10	2.84	5.22	232.93	3.24	1.77	4.84	1.84	64.52	20.91	2.46	6.84	6.34	44.77	63.21	3.53					
0.86	9.28	239.53	1.16	1.13	2.86	6.22	207.40	2.14	1.78	4.86	1.94	60.01	21.28	2.47	6.86	6.30	44.20	63.82	3.54					
0.88	9.89	230.21	1.84	1.13	2.88	6.80	190.20	1.78	1.78	4.88	2.01	58.39	21.46	2.48	6.88	6.23	44.94	64.98	3.56					
0.90	10.47	217.42	2.57	1.14	2.90	6.97	167.26	2.20	1.78	4.90	1.99	59.26	20.91	2.48	6.90	6.28	44.25	66.02	3.55					
0.92	11.18	207.94	3.12	1.18	2.92	6.62	167.15	3.61	1.78	4.92	1.93	60.61	19.62	2.50	6.92	6.34	43.14	66.82	3.58					
0.94	11.64	197.19	3.43	1.19	2.94	6.37	178.15	4.53	1.78	4.94	1.88	62.63	18.64	2.49	6.94	6.43	43.19	67.80	3.58					
0.96	12.18	196.03	3.86	1.19	2.96	6.15	202.38	5.51	1.79	4.96	1.84	62.57	18.09	2.49	6.96	6.45	43.61	68.17	3.60					
0.98	12.76	198.22	4.22	1.23	2.98	5.66	225.15	6.49	1.80	4.98	1.81	63.87	17.30	2.51	6.98	6.40	43.70	68.10	3.61					
1.00	13.24	203.38	3.98	1.25	3.00	5.23	232.16	7.35	1.81	5.00	1.81	65.43	16.99	2.52	7.00	6.38	43.91	68.35	3.63					
1.02	13.25	215.55	3.18	1.28	3.02	4.71	244.79	8.51	1.82	5.02	1.81	67.69	16.38	2.53	7.02	6.33	44.06	68.59	3.63					
1.04	13.05	229.91	2.33	1.29	3.04	4.50	253.53	7.35	1.83	5.04	1.81	66.55	16.13	2.54	7.04	6.25	44.57	68.35	3.65					
1.06	12.72	251.23	1.53	1.30	3.06	4.56	235.25	5.57	1.85	5.06	1.82	63.00	15.83	2.55	7.06	6.21	45.37	68.35	3.66					
1.08	12.44	268.51	0.86	1.32	3.08	4.65	218.60	3.61	1.86	5.08	1.82	60.18	15.64	2.55	7.08	6.14	45.46	68.29	3.66					
1.10	12.10	278.46	0.12	1.33	3.10	4.73	205.13	2.26	1.88	5.10	1.80	61.23	15.52	2.57	7.10	5.71	44.56	47.78	3.75					
1.12	11.57	275.06	7.04	1.26	3.12	5.02	162.98	2.63	1.76	5.12	1.84	62.42	18.58	2.53	7.12	5.98	40.90	46.62	3.76					
1.14	11.52	257.83	8.57	1.25	3.14	5.03	162.86	9.51	1.77	5.14	1.87	65.00	18.83	2.55	7.14	6.00	39.30	45.27	3.76					
1.16	11.26	235.18	9.61	1.26	3.16	5.32	167.95	9.57	1.78	5.16	1.90	64.31	19.01	2.55	7.16	5.99	38.04	44.23	3.77					
1.18	11.05	223.85	10.04	1.27	3.18	5.12	171.62	10.06	1.79	5.18	1.90	66.87	18.83	2.57	7.18	6.01	37.38	43.68	3.78					
1.20	10.93	208.72	10.28	1.27	3.20	4.86	180.30	10.35	1.82	5.20	1.88	68.88	18.77	2.57	7.20	5.96	37.05	43.07	3.78					
1.22	10.84	195.08	10.22	1.27	3.22	4.65	188.88	10.04	1.82	5.22	1.91	68.25	18.89	2.61	7.22	5.89	36.36	42.27	3.79					
1.24	10.92	189.23	9.79	1.26	3.24	4.64	207.14	2.47	1.84	5.24	1.91	68.13	18.83	2.62	7.24	5.86	36.87	42.09	3.81					
1.26	10.90	195.95	9.30	1.28	3.26	5.07	205.10	13.31	1.85	5.26	1.86	70.05	18.70	2.63	7.26	5.89	38.25	42.21	3.82					
1.28	10.89	203.65	9.06	1.29	3.28	5.58	195.42	13.92	1.88	5.28	1.86	70.47	18.89	2.63	7.28	5.94	38.91	42.58	3.82					
1.30	10.77	214.72	8.88	1.28	3.30	5.54	173.78	8.04	1.88	5.30	1.91	69.15	19.19	2.65	7.30	6.04	39.66	43.56	3.83					
1.32	10.48	226.89	9.06	1.30	3.32	5.17	165.51	3.64	1.91	5.32	1.96	67.50	19.56	2.67	7.32	6.19	40.65	44.78	3.83					
1.34	10.21	241.32	9.12	1.30	3.34	4.94	161.24	2.04	1.93	5.34	2.02	66.32	19.99	2.67	7.34	6.39	41.88	46.37	3.85					
1.36	9.74	258.63	9.49	1.32	3.36	5.26	160.22	2.27	1.93	5.36	2.03	66.71	20.05	2.69	7.36	6.61	42.63	48.09	3.83					
1.38	9.30	271.02	9.92	1.32	3.38	5.74	160.33	2.41	1.94	5.38	2.11	66.65	20.54	2.69	7.38	6.85	43.23	50.05	3.84					
1.40	8.92	281.48	10.28	1.34	3.40	6.27	155.28	4.13	1.95	5.40	2.08	65.57	20.60	2.71	7.40	7.15	44.01	52.19	3.85					
1.42	8.71	288.88	10.35	1.35	3.42	6.60	148.70	5.17	1.97	5.42	2.08	66.02	20.30	2.72	7.42	7.50	44.91	54.70	3.85					
1.44	8.68	289.72	10.35	1.36	3.44	6.79	133.96	4.98	1.97	5.44	2.10	67.61	20.30	2.73	7.44	7.82	46.98	56.78	3.86					
1.46	8.84	287.95	10.16	1.38	3.46	7.13	117.91	6.57	1.99	5.46	2.14	69.90	20.72	2.75	7.46	7.82	50.32	56.96	3.87					
1.48	9.06	289.62	10.28	1.38	3.48	7.50	110.39	8.59	2.00	5.48	2.20	71.79	21.28	2.76	7.48	7.34	58.70	54.27	3.86					
1.50	9.07	288.07	10.96	1.40	3.50	7.71	101.82	8.78	2.00	5.50	2.24	74.35	21.77	2.77	7.50	6.96	89.25	53.29	3.87					
1.52	8.60	282.80	11.88	1.41	3.52	7.63	104.64	6.94	2.01	5.52	2.34	73.72	22.56	2.78	7.52	10.49	115.95	75.70	3.84					
1.54	7.70	280.18	13.28	1.42	3.54	6.56	122.23	9.41	2.01	5.54	2.38	71.88	23.05	2.79	7.54	15.25	125.27	93.63	3.79					
1.56	6.92	291.31	14.02	1.44	3.56	5.56	150.76	1.76	2.02	5.56	2.38	72.93	22.74	2.81	7.56	16.78	114.32	94.86	3.76					
1.58	6.64	297.49	14.20	1.45	3.58	5.34	186.42	2.37	2.01	5.58	2.32	74.53	21.95	2.81	7.58	16.04	88.22	90.69	3.76					
1.60	6.54	307.19	13.90	1.47	3.60	5.36	205.20	3.54	2.01	5.60	2.25	75.55	21.21	2.83	7.60	12.55	102.95	70.12	3.68					
1.62	6.95	314.92	7.71	1.49	3.62	5.35	207.45	6.66	2.01	5.62	2.21	77.68	20.60	2.83	7.62	8.83	134.96	72.82	3.69					
1.64	7.66	311.79	6.18	1.49	3.64	5.28	203.34	8.74	2.01	5.64	2.16	80.18	20.17	2.84	7.64	7.61	144.58	70.74	3.69					
1.66	7.75	288.41	7.65	1.51	3.66	5.27	196.94	10.21	2.02	5.66	2.15	82.16	19.87	2.85	7.66	6.21	183.20	65.04	3.68					
1.68	6.89	273.40	9.79	1.51	3.68	5.26	184.77	11.31	2.01	5.68	2.17	82.22	20.24	2.87	7.68	5.91	199.81	68.23	3.68					
1.70	6.45	256.42	10.35	1.52	3.70	5.08	167.52	10.82	2.00	5.70	2.19	78.19	20.72	2.88	7.70	5.64	190.68	71.04	3.68					
1.72	6.35	233.55	8.45	1.53	3.72	4.89	158.56	9.78	2.01	5.72	2.19	77.38	20.60	2.89	7.72	5.47	184.37	71.53	3.70					
1.74	6.27	218.09	5.63	1.52	3.74	4.81	157.90	8.98	2.01	5.74	2.13	75.31	20.36	2.89	7.74	6.01	155.98	77.84	3.73					
1.76	6.06	218.67	2.75	1.53	3.76	4.62	162.68	7.82	2.01	5.76	2.11	71.73	20.79	2.91	7.76	7.21	143.47	88.00	3.74					
1.78	6.01	234.83	0.43	1.53	3.78	4.28	168.69	5.92	2.02	5.78	2.17	69.83	21.46	2.92	7.78	9.51	146.12	104.77	3.77					
1.80	6.03	247.37	2.75	1.52	3.80	4.14	164.93	5.00	2.02	5.80	2.21	69.71	21.89	2.93	7.80	13.12	150.16	131.28	3.81					
1.82	6.15	237.23	4.10	1.52	3.82	4.13	157.63	5.13	2.03	5.82	2.24	73.65	22.32	2.94	7.82	17.70	165.34	164.40	3.84					
1.84	6.49	226.89	4.04	1.53	3.84	3.90	161.57	5.00	2.01	5.84	2.30	75.67	22.68	2.96	7.84	24.29	170.53	197.51	3.87					
1.86	6.79	225.46	3.24	1.53	3.86	3.89	149.30	6.84	2.03	5.86	2.33	78.16	22.99	2.97	7.86	30.87	185.71	230.63	3.89					
1.88	7.12	219.43	2.20	1.54	3.88	4.01	139.50	9.90	2.02	5.88	2.33	79.90	23.23	2.98										
1.90	7.96	208.78	0.80	1.55	3.90	4.25	123.72	15.17	2.02	5.90	2.42	80.72	23.97	2.99										
1.92	8.11	204.58	0.37	1.56	3.92	4.28	112.96	19.88	2.01	5.92	2.44	83.57	24.28	3.01										
1.94	7.72	210.88	0.80	1.57	3.94	4.14	108.36	22.08	2.01	5.94	2.51	87.18	25.01	3.01										
1.96	7.19	218.70	2.02	1.59	3.96	4.01	105.74	22.14	2.01	5.96	2.59	88.26	25.87	3.03										
1.98	7.78	240.13	0.86	1.61	3.98	4.02	106.44	21.59	2.01	5.98	2.65	89.52	26.42	3.04										
2.00	8.37	252.03	0.31	1.62	4.00	3.95	115.94	21.29	2.01	6.00	2.72	90.88	27.09	3.05										

Studio LZ CPT di Lorenzo Zanirato
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44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Balestra - Loc. Carpena (FC)
COMMESSA: C054/24
RDP N°: 186/24
DATA: 27/08/2024

PROVA N°: CPTU 8
PROF. FALDA (m da p.c.): n.r
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 8
CANTIERE:	Via Balestra - Loc. Carpena (FC)	PROF. FALDA (m da p.c.):	n.r
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	186/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	27/08/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Balestra - Loc. Carpena (FC)
Lat.: 44.175441° N
Long.: 12.070106° E



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
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COMMITTENTE:
CANTIERE: Via Tina Gori - Forlì (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 9
PROF. FALDA (m da p.c.): 7.00
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.47	21.29	83.50	0.34	2.02	5.62	84.30	11.32	1.57	4.02	2.00	122.85	28.89	2.11	6.02	6.73	49.61	104.43	3.19	8.02	2.01	50.94	20.81	4.12
0.04	2.09	26.90	80.19	0.37	2.04	6.97	64.70	10.96	1.56	4.04	1.92	116.55	29.32	2.12	6.04	6.84	42.28	105.66	3.20	8.04	1.64	47.05	24.79	4.12
0.06	2.51	33.20	74.62	0.16	2.06	6.06	41.18	8.75	1.43	4.06	1.89	106.87	26.02	2.13	6.06	6.99	31.20	107.00	3.21	8.06	1.37	38.40	27.73	4.14
0.08	2.74	38.77	70.15	0.22	2.08	5.15	68.24	5.63	1.38	4.08	1.84	100.76	25.71	2.13	6.08	6.59	27.32	90.60	3.25	8.08	1.52	41.45	28.10	4.14
0.10	2.94	41.90	66.11	0.42	2.10	4.99	99.83	4.90	1.33	4.10	1.78	95.07	18.85	2.15	6.10	6.62	22.80	83.62	3.26	8.10	1.30	37.80	30.24	4.15
0.12	3.08	46.62	62.56	0.40	2.12	4.95	116.96	9.24	1.30	4.12	1.81	79.22	18.12	2.23	6.12	5.46	28.54	71.31	3.26	8.12	1.24	40.15	27.91	4.16
0.14	3.24	48.17	63.17	0.63	2.14	4.66	151.33	13.96	1.29	4.14	1.83	72.86	17.75	2.23	6.14	4.69	38.31	63.85	3.28	8.14	1.24	35.28	23.45	4.17
0.16	2.79	30.28	15.00	0.52	2.16	4.56	152.57	6.24	1.30	4.16	1.92	65.86	19.83	2.25	6.16	4.41	55.32	61.89	3.29	8.16	1.29	37.26	18.18	4.19
0.18	2.81	38.14	11.57	0.52	2.18	4.52	154.22	2.51	1.29	4.18	1.73	60.17	19.71	2.26	6.18	4.50	67.34	65.50	3.29	8.18	1.31	36.22	14.51	4.19
0.20	2.63	44.59	9.06	0.57	2.20	4.58	140.49	1.84	1.28	4.20	1.68	58.96	19.96	2.27	6.20	5.27	85.69	75.54	3.31	8.20	1.31	35.46	11.32	4.20
0.22	2.48	55.18	6.86	0.55	2.22	4.66	114.44	1.90	1.25	4.22	1.66	56.49	19.40	2.29	6.22	5.97	97.53	80.80	3.33	8.22	1.36	33.75	8.20	4.20
0.24	2.43	60.39	4.59	0.55	2.24	5.24	104.58	7.84	1.25	4.24	1.61	53.63	20.02	2.30	6.24	6.08	98.32	81.35	3.34	8.24	1.41	30.25	5.51	4.21
0.26	2.34	73.38	3.73	0.57	2.26	5.31	108.69	8.94	1.21	4.26	1.56	53.06	19.22	2.32	6.26	6.04	96.40	79.95	3.33	8.26	1.47	25.88	0.31	4.23
0.28	2.42	87.05	3.43	0.66	2.28	4.06	98.64	17.14	1.18	4.28	1.60	48.92	18.06	2.33	6.28	5.60	82.86	75.11	3.33	8.28	1.49	25.67	1.47	4.24
0.30	2.43	95.82	3.06	0.61	2.30	4.36	95.87	18.92	1.20	4.30	1.56	47.00	18.43	2.34	6.30	5.10	69.86	69.05	3.33	8.30	1.36	22.90	1.04	4.25
0.32	2.59	106.50	3.86	0.70	2.32	4.69	95.44	19.16	1.18	4.32	1.65	42.68	17.08	2.34	6.32	4.33	42.43	61.95	3.34	8.32	1.19	23.14	2.33	4.26
0.34	2.68	112.52	3.00	0.63	2.34	4.84	92.39	1.10	1.16	4.34	1.84	42.19	13.59	2.37	6.34	3.81	23.38	56.99	3.34	8.34	1.17	21.82	5.02	4.26
0.36	2.78	121.32	0.12	0.72	2.36	4.84	91.23	6.06	1.17	4.36	1.84	37.75	9.98	2.38	6.36	3.42	18.63	54.24	3.35	8.36	1.18	24.01	14.14	4.29
0.38	2.87	131.30	7.47	0.71	2.38	3.39	128.88	5.26	1.19	4.38	1.99	35.14	5.51	2.41	6.38	2.98	20.76	49.83	3.37	8.38	1.25	27.03	19.22	4.29
0.40	3.05	134.40	5.45	0.84	2.40	3.59	80.24	5.88	1.20	4.40	2.14	32.43	0.43	2.40	6.40	2.72	23.44	48.48	3.37	8.40	1.28	29.55	21.85	4.31
0.42	3.27	136.01	4.22	0.78	2.42	3.14	61.73	13.04	1.23	4.42	2.21	31.89	0.18	2.42	6.42	2.71	26.08	50.32	3.37	8.42	1.25	33.06	23.14	4.32
0.44	3.79	135.95	1.47	0.90	2.44	3.32	82.15	8.57	1.26	4.44	2.21	32.56	0.61	2.44	6.44	2.87	32.77	55.46	3.37	8.44	1.19	31.47	25.22	4.33
0.46	4.33	137.96	9.06	0.89	2.46	2.84	85.68	16.53	1.29	4.46	2.32	33.75	6.06	2.46	6.46	3.42	38.58	61.52	3.39	8.46	1.20	30.13	30.73	4.35
0.48	4.45	124.14	6.24	0.94	2.48	2.88	82.09	16.04	1.30	4.48	2.24	29.21	9.98	2.48	6.48	4.06	44.55	68.25	3.38	8.48	1.18	29.47	37.28	4.36
0.50	5.46	132.29	13.34	0.99	2.50	2.86	83.92	15.61	1.31	4.50	2.04	29.28	10.53	2.49	6.50	4.29	51.79	68.19	3.39	8.50	1.15	23.17	44.93	4.37
0.52	5.54	129.16	12.61	1.05	2.52	3.31	69.61	19.59	1.33	4.52	1.88	29.98	13.34	2.49	6.52	3.59	54.13	57.17	3.39	8.52	1.17	21.97	53.62	4.39
0.54	5.62	123.81	13.04	1.01	2.54	3.62	63.28	14.81	1.32	4.54	1.78	30.07	21.00	2.51	6.54	2.91	51.79	46.58	3.39	8.54	1.19	23.02	63.23	4.41
0.56	5.26	117.75	9.43	1.09	2.56	4.32	65.45	11.94	1.35	4.56	1.81	27.37	34.95	2.51	6.56	2.70	46.80	43.10	3.41	8.56	1.26	22.45	71.56	4.42
0.58	4.96	110.42	6.06	1.04	2.58	4.00	53.00	13.59	1.34	4.58	1.75	30.35	39.30	2.53	6.58	2.98	54.40	48.48	3.43	8.58	1.28	22.61	79.88	4.42
0.60	4.94	104.48	5.63	1.05	2.60	3.83	67.30	12.30	1.35	4.60	1.69	30.97	42.36	2.54	6.60	3.29	63.23	52.95	3.43	8.60	1.25	23.48	83.44	4.44
0.62	4.93	97.63	5.08	1.13	2.62	3.53	81.03	14.88	1.36	4.62	1.64	31.76	42.36	2.56	6.62	3.34	50.39	51.85	3.43	8.62	1.25	25.76	88.21	4.45
0.64	4.85	87.93	4.96	1.12	2.64	3.04	89.25	20.02	1.38	4.64	1.63	32.83	44.26	2.56	6.64	3.49	50.32	52.71	3.44	8.64	1.24	29.29	95.68	4.45
0.66	4.79	80.50	4.77	1.13	2.66	2.93	91.08	22.16	1.38	4.66	1.60	33.96	47.69	2.58	6.66	3.69	47.95	53.75	3.44	8.66	1.21	30.17	99.96	4.46
0.68	4.97	69.79	6.06	1.13	2.68	2.60	105.36	26.87	1.39	4.68	1.65	31.40	51.79	2.57	6.68	3.97	41.80	55.52	3.45	8.68	1.22	30.96	102.35	4.47
0.70	5.29	76.91	8.81	1.14	2.70	2.56	111.53	28.22	1.41	4.70	1.63	32.62	54.11	2.57	6.70	4.42	34.34	58.95	3.45	8.70	1.20	33.31	103.27	4.49
0.72	5.03	80.41	8.33	1.18	2.72	2.50	115.43	30.00	1.40	4.72	1.62	29.46	54.66	2.58	6.72	4.85	27.13	60.91	3.46	8.72	1.20	33.89	103.51	4.49
0.74	5.04	86.22	9.18	1.18	2.74	2.45	112.78	31.46	1.42	4.74	1.53	29.65	54.17	2.60	6.74	5.21	24.71	61.70	3.47	8.74	1.24	33.73	107.31	4.51
0.76	4.98	94.20	9.61	1.17	2.76	2.40	113.63	32.63	1.44	4.76	1.48	27.12	54.91	2.61	6.76	5.61	27.50	36.79	3.47	8.76	1.27	37.20	111.23	4.51
0.78	5.08	85.13	10.77	1.20	2.78	2.43	115.24	33.12	1.44	4.78	1.42	25.76	56.50	2.61	6.78	5.97	22.76	28.53	3.47	8.78	1.29	37.57	112.51	4.52
0.80	5.54	86.74	15.43	1.21	2.80	2.54	123.55	32.75	1.45	4.80	1.35	23.72	56.93	2.63	6.80	6.38	18.25	24.67	3.47	8.80	1.31	38.03	108.59	4.52
0.82	5.29	81.59	14.08	1.18	2.82	2.63	117.03	32.99	1.48	4.82	1.36	24.38	57.79	2.64	6.82	7.04	16.90	19.10	3.48	8.82	1.26	37.75	104.19	4.53
0.84	5.60	67.93	16.71	1.22	2.84	2.71	116.24	33.18	1.47	4.84	1.47	25.68	62.38	2.65	6.84	7.33	20.99	16.41	3.48	8.84	1.18	40.67	98.86	4.53
0.86	5.96	51.10	24.61	1.20	2.86	2.86	115.51	33.79	1.49	4.86	1.81	29.02	70.03	2.65	6.86	7.35	24.90	14.69	3.48	8.86	1.10	39.00	94.33	4.55
0.88	5.97	72.07	24.06	1.17	2.88	2.82	111.07	35.87	1.51	4.88	2.61	34.87	82.15	2.65	6.88	6.97	21.29	15.24	3.49	8.88	1.11	34.59	98.43	4.56
0.90	6.10	94.53	25.89	1.17	2.90	2.92	105.35	36.30	1.50	4.90	3.35	38.10	81.42	2.67	6.90	6.75	22.85	14.75	3.52	8.90	1.24	33.01	115.76	4.56
0.92	6.22	104.45	27.24	1.15	2.92	3.15	103.16	34.83	1.52	4.92	3.72	38.62	67.21	2.67	6.92	6.90	26.10	11.88	3.53	8.92	1.38	33.31	124.08	4.57
0.94	5.81	119.42	24.12	1.15	2.94	3.30	92.88	35.08	1.54	4.94	4.05	42.24	61.64	2.68	6.94	6.84	28.53	10.77	3.53	8.94	1.38	31.70	119.37	4.58
0.96	5.85	133.33	25.83	1.13	2.96	3.35	84.67	36.06	1.55	4.96	4.31	44.68	61.77	2.69	6.96	6.21	33.34	12.73	3.54	8.96	1.26	26.49	117.04	4.59
0.98	6.05	135.60	28.40	1.11	2.98	3.37	79.22	37.34	1.53	4.98	4.43	42.15	59.68	2.70	6.98	5.72	34.81	14.57	3.55	8.98	1.20	22.97	115.45	4.60
1.00	6.59	132.13	34.83	1.11	3.00	3.32	72.84	38.32	1.53	5.00	4.22	35.98	54.30	2.72	7.00	5.06	35.08	17.02	3.56	9.00	1.12	26.37	115.02	4.61
1.02	6.96	122.99	38.63	1.15	3.02	3.09	66.39	41.38	1.55	5.02	3.87	32.81	47.38	2.73	7.02	4.50	32.95	19.04	3.57	9.02	1.07	25.74	120.29	4.62
1.04	7.11	115.23	41.38	1.11	3.04	2.97	63.75	42.79	1.54	5.04	3.21	35.28	37.65	2.76	7.04	4.04	27.38	20.57	3.59	9.04	1.09	24.93	130.94	4.64
1.06	7.06	131.45	41.01	1.08	3.06	2.92	68.23	43.34	1.56	5.06	2.72	46.79	33.36	2.76	7.06	3.67	15.19	21.36	3.59	9.06	1.55	47.96	120.84	4.64
1.08	7.37	131.27	44.99	1.12	3.08	3.07	71.37	43.40	1.55	5.08	2.30	55.95	29.69	2.77	7.08	3.51	10.41	18.61	3.61	9.08	1.46	49.45	123.10	4.65
1.10	7.39	132.03	46.65	1.12	3.10	3.35	78.31	42.12	1.55	5.10	2.48	60.06	29.51	2.84	7.10	3.69	11.61	18.43	3.64	9.10	1.65	46.50	141.53	4.66
1.12	6.92	144.54	37.77	1.08	3.12	3.68	78.75	35.32	1.61	5.12	2.04	63.92	22.89	2.85	7.12	4.07	13.69	16.47	3.65	9.12	2.23	46.35	162.10	4.68
1.14	6.79	141.09	9.79	1.10	3.14	3.68	82.40	36.06	1.62	5.14	1.82	55.46	20.45	2.85	7.14	4.69	15.91	13.22	3.67	9.14	2.49	47.99	102.53	4.69
1.16	7.50	137.41	17.45	1.14	3.16	3.90	79.51	35.44	1.64	5.16	1.71	51.42	21.36	2.87	7.16	5.08	16.34	11.08	3.69	9.16	2.39	47.14	57.42	4.70
1.18	8.08	117.44	22.04	1.19	3.18	3.68	72.45	36.55	1.65	5.18	1.72	44.72	26.87	2.87	7.18	5.49	15.01	9.18	3.71	9.18	1.90	42.63	45.73	4.71
1.20	8.45	95.10	28.34	1.21	3.20	3.47	74.80	38.08	1.65	5.20	1.83	44.44	33.67	2.88	7.20	5.80	15.07	7.96	3.72	9.20	1.63	40.47	40.71	4.71
1.22	7.11	119.12	25.59	1.23	3.22	3.26	74.25	39.61	1.65	5.22	1.98	43.99	37.46	2.89	7.22	5.74	16.03	8.39	3.74	9.22	1.44	42.32	49.58	4.71
1.24	5.92	150.35	16.90	1.31	3.24	2.91	72.91	42.54	1.66	5.24	2.18	44.54	41.93	2.90	7.24	5.55	18.83	9.49	3.74	9.24	1.36	38.85	97.02	4.73
1.26	4.95	175.06	8.63	1.29	3.26	2.67	82.68	44.63	1.67	5.26	2.42	45.81	45.60	2.89	7.26	5.26	22.41	10.96	3.74	9.26	1.35	38.55	119.92	4.72
1.28	4.58	192.04	6.79	1.33	3.28	2.63	90.47	45.48	1.70	5.28	2.33	47.06	42.42	2.89	7.28	4.97	27.23	12.18	3.75	9.28	1.38	40.68	135.77	4.71
1.30	4.47	189.73	6.67	1.35	3.30	2.56	100.85	46.16	1.70	5.30	2.05	48.67	36.18	2.89	7.30	4.92	28.63	12.18	3.75	9.30	1.44	42.23	149.67	4.72
1.32	4.64	167.81	10.77	1.40	3.32	2.60	106.60	45.05	1.72	5.32	1.87	43.86	34.65	2.91	7.32	4.95	28.57	11.26	3.76	9.32	1.52	39.82	155.97	4.72
1.34	4.79	142.06	14.32	1.44	3.34	2.58	111.84	40.10	1.73	5.34	2.22	40.24	44.01	2.91	7.34	5.01	30.36	10.35	3.78	9.34	1.57	35.93	152.42	4.72
1.36	5.01	110.56	17.94	1.43	3.36	2.50	115.12	45.12	1.75	5.36	2.85	44.99	54.36	2.92	7.36	4.42	33.37	14.32	3.79	9.36	1.54	38.67	144.65	4.74
1.38	5.63	77.77	26.93	1.43	3.38	2.41	114.21	51.91	1.77	5.38	3.17	54.27	50.99	2.93	7.38	3.83	33.65	18.49	3.80	9.38	1.55	42.01	141.10	4.75
1.40	6.34	49.31	37.34	1.45	3.40	2.43	112.05	56.01	1.78	5.40	3.10	57.95	42.97	2.93	7.40	2.73	30.08	26.08	3.81	9.40	1.58	47.19	137.92	4.75
1.42	7.39	41.11	50.13	1.47	3.42	2.44	111.05	51.24	1.80	5.42	2.83	61.21	37.52	2.94	7.42	2.07	23.33	30.24	3.81	9.42	1.51	53.67	137.79	4.76
1.44	7.69	48.59	39.12	1.46	3.44	2.53	110.86	48.36	1.80	5.44	2.49	61.70	32.26	2.93	7.44	1.65	24.78	32.87	3.82	9.44	1.48	56.07	142.45	4.77
1.46	7.44	60.72	28.46	1.46	3.46	2.58	114.91	46.71	1.82	5.46	2.24	62.12	29.38	2.95	7.46	1.33	34.01	36.97	3.83	9.46	1.42	58.45	147.22	4.77
1.48	6.57	96.75	24.79	1.45	3.48	2.65	118.32	44.99	1.84	5.48	2.07	57.01	27.79	2.96	7.48	2.03	42.01	19.65	3.85	9.48	1.36	59.08	149.49	4.78
1.50	6.19	105.84	23.02	1.45	3.50	2.70	115.73	39.61	1.86	5.50	2.11	60.66	32.38	2.98	7.50	3.02	48.80	5.33	3.85	9.50	1.31	58.72	153.16	4.78
1.52	5.96	111.49	22.71	1.44	3.52	2.75	112.24	33.85	1.87	5.52	2.16	64.34	34.04	2.98	7.52	3.65	51.90	1.35	3.86	9.52	1.23	58.26	163.38	4.78
1.54	5.78	122.16	22.16	1.45	3.54	2.80	110.41	27.00	1.88	5.54	2.21	70.37	37.10	2.99	7.54	4.21	49.04	2.08	3.86	9.54	1.23	51.90	168.77	4.79
1.56	5.60	131.98	21.36	1.45	3.56	2.81	116.38	28.16	1.90	5.56	2.37	67.66	38.81	3.00	7.56	4.57	41.70	3.31	3.89	9.56	1.19	46.81	172.26	4.80
1.58	5.27	112.04	18.43	1.47	3.58	2.78	119.33	30.18	1.90	5.58	2.49	67.81	41.01	3.01	7.58	4.93	39.05	3.49	3.88	9.58	1.16	42.64	177.89	4.80
1.60	4.78	101.14	13.04	1.47	3.60	2.78	121.21	31.28	1.92	5.60	2.41	69.09	37.52	3.02	7.60	5.12	37.23	3.73	3.92	9.60	1.15	38.93	182.73	4.81
1.62	4.31	76.58	8.51	1.48	3.62	2.79	126.36	31.65	1.93	5.62	2.11	64.83	34.83	3.03	7.62	5.24	37.26	4.22	3.96	9.62	1.15	33.94	186.95	4.81
1.64	4.07	65.90	6.49	1.49	3.64	2.79	132.32	32.50	1.94	5.64	1.83	58.95	33.85	3.04	7.64	5.66	40.39	6.67	3.98	9.64	1.14	30.80	190.74	4.82
1.66	3.92	61.18	4.59	1.51	3.66	2.86	137.96	32.50	1.95	5.66	1.66	48.30	42.73	3.05	7.66	5.89	46.33	7.47	3.99	9.66	1.13	28.30	193.13	4.84
1.68	3.74	55.52	4.04	1.52	3.68	2.91	138.93	32.69	1.95	5.68	1.69	45.83	57.85	3.05	7.68	5.47	47.30	4.10	4.00	9.68	1.13	27.36	191.48	4.83
1.70	3.73	52.08	3.18	1.52	3.70	2.96	137.68	33.36	1.96	5.70	1.73	40.02	81.97	3.08	7.70	4.84	48.12	0.61	3.99	9.70	1.10	27.82	185.48	4.84
1.72	3.99	45.90	5.82	1.52	3.72	2.98	137.72	35.87	1.97	5.72	1.93	37.31	93.96	3.08	7.72	4.07	51.56	6.73	4.00	9.72	1.05	27.12	179.66	4.85
1.74	4.25	40.00	9.43	1.55	3.74	2.92	138.39	36.06	1.98	5.74	2.40	33.72	113.06	3.08	7.74	3.66	48.09	9.30	3.99	9.74	1.02	28.30	175.01	4.85
1.76	4.23	43.47	8.14	1.56	3.76	2.92	137.81	35.14	1.98	5.76	3.25	37.34	120.78	3.08	7.76	3.65	42.34	8.14	4.00	9.76	0.97	29.73	174.34	4.86
1.78	4.29	47.33	8.20	1.57	3.78	2.88	137.08	33.48	1.99	5.78	4.62	50.52	94.58	3.10	7.78	3.91	51.62	5.26	4.01	9.78	0.96	29.06	175.62	4.87
1.80	4.05	56.22	2.82	1.60	3.80	2.87	140.31	27.61	2.00	5.80	5.45	54.30	76.27	3.09	7.80	3.90	60.87	5.63	4.01	9.80	0.94	28.76	177.15	4.87
1.82	3.88	65.72	0.49	1.63	3.82	2.75	141.19	26.93	2.01	5.82	4.56	52.74	59.44	3.12	7.82	3.66	61.60	7.35	4.03	9.82	0.93	28.33	176.30	4.87
1.84	3.71	74.30	2.57	1.65	3.84	2.72	141.25	26.57	2.01	5.84	3.56	48.51	48.73	3.13	7.84	3.38	64.16	10.16	4.04	9.84	0.93	27.54	177.77	4.87
1.86	3.80	79.60	1.41	1.66	3.86	2.66	138.85	26.32	2.03	5.86	2.88	50.46	43.34	3.14	7.86	3.25	54.24	11.39	4.05	9.86	0.96	25.30	179.24	4.88
1.88	3.93	85.84	0.12	1.66	3.88	2.51	142.65	27.85	2.04	5.88	2.26	63.85	52.46	3.15	7.88	3.17	49.18	10.77	4.06	9.88	0.95	24.91	178.62	4.88
1.90	3.97	89.19	0.49	1.66	3.90	2.44	143.72	28.22	2.05	5.90	2.02	65.44	80.37	3.15	7.90	2.82	57.34	14.26	4.08	9.90	0.96	25.82	182.30	4.89
1.92	3.98	96.07	0.18	1.67	3.92	2.41	140.89	30.00	2.06	5.92	2.15	62.58	170.48	3.15	7.92	2.41	57.46	17.94	4.08	9.92	0.99	25.27	160.20	4.89
1.94	3.99	101.61	1.96	1.70	3.94	2.28	143.02	31.83	2.07	5.94	3.26	55.43	263.53	3.17	7.94	2.21	56.00	19.53	4.08	9.94	0.95	26.66	159.28	4.89
1.96	4.02	106.00	3.55	1.71	3.96	2.15	139.83	32.44	2.07	5.96	4.64	54.33	275.89	3.18	7.96	2.13	57.89	20.63	4.09	9.96	0.99	27.76	160.08	4.90
1.98	3.98	120.36	12.55	1.68	3.98	2.11	136.39	32.87	2.08	5.98	5.97	55.76	122.00	3.18	7.98	2.18	60.62	19.40	4.11	9.98	0.97	29.92	159.04	4.91
2.00	4.52	113.42	3.86	1.63	4.00	2.03	129.48	31.89	2.10	6.00	6.41	56.95	106.64	3.18	8.00	2.19	55.27	18.98	4.12	10.00	0.98	31.72	158.24	4.91

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
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Tel: 3470442799
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COMMITTENTE:
CANTIERE: Via Tina Gori - Forlì (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 9
PROF. FALDA (m da p.c.): 7.00
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

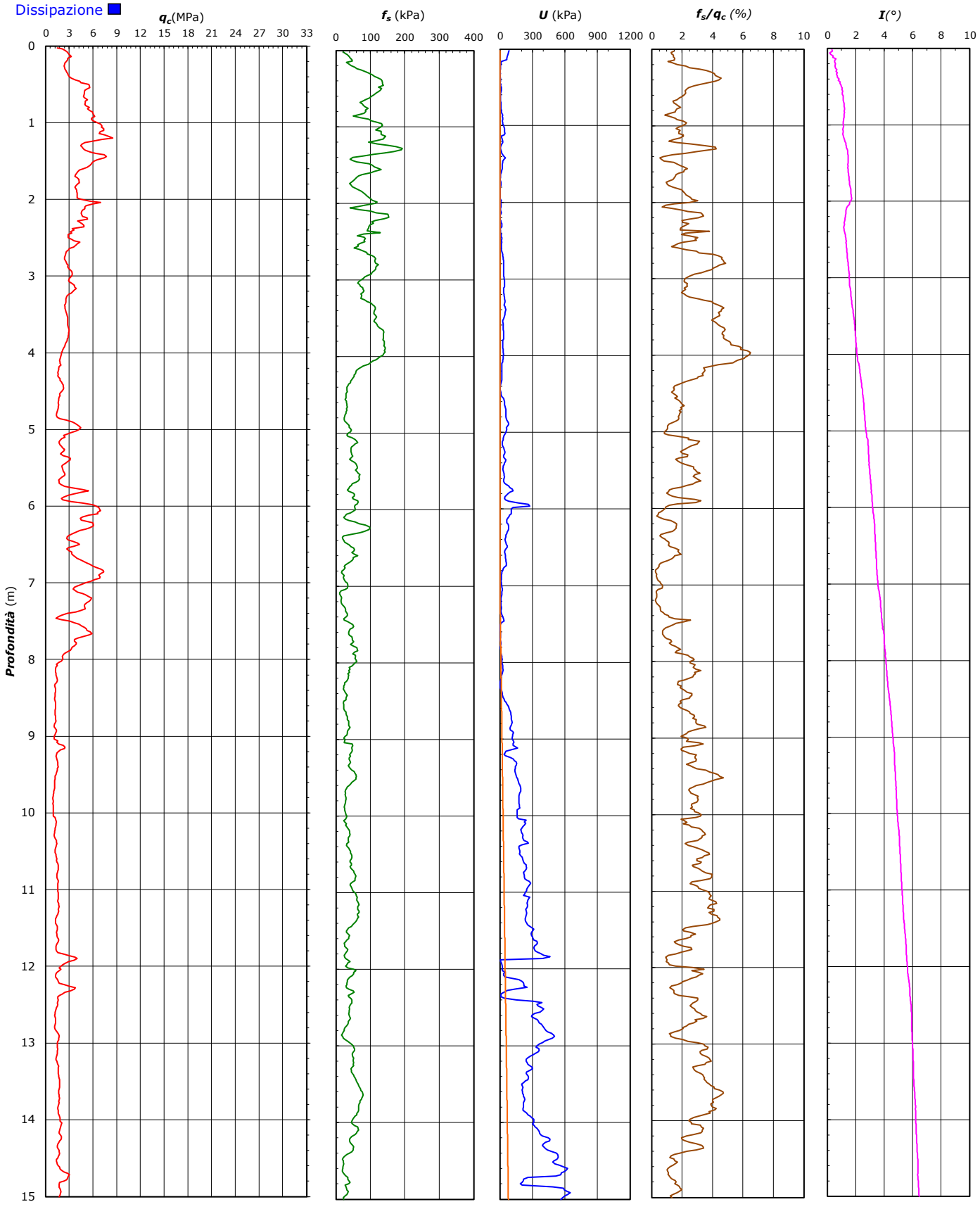
prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	0.95	30.56	160.57	4.93	12.02	1.71	58.75	22.22	5.64	14.02	1.83	47.99	299.46	6.23										
10.04	0.98	28.58	172.38	4.94	12.04	1.97	51.92	46.40	5.64	14.04	2.07	54.36	317.03	6.22										
10.06	1.19	23.02	242.84	4.94	12.06	1.65	51.53	34.83	5.65	14.06	1.99	63.79	327.25	6.23										
10.08	1.27	27.09	226.80	4.95	12.08	1.45	48.52	34.34	5.65	14.08	1.97	64.49	340.41	6.23										
10.10	1.31	30.32	237.76	4.95	12.10	1.34	41.67	47.01	5.67	14.10	1.92	65.74	356.27	6.24										
10.12	1.36	28.25	227.29	4.98	12.12	1.29	37.74	109.64	5.69	14.12	1.86	61.90	364.84	6.23										
10.14	1.33	32.75	211.86	4.98	12.14	1.29	33.72	174.40	5.70	14.14	1.78	59.29	369.12	6.24										
10.16	1.31	34.43	203.91	4.99	12.16	1.41	33.08	206.72	5.72	14.16	1.70	55.09	375.49	6.24										
10.18	1.26	39.33	190.68	5.00	12.18	1.53	31.74	217.56	5.72	14.18	1.71	46.50	392.69	6.25										
10.20	1.23	40.42	196.99	5.02	12.20	1.63	31.93	221.72	5.74	14.20	1.87	42.91	446.56	6.27										
10.22	1.20	40.39	202.38	5.03	12.22	1.73	29.22	223.00	5.76	14.22	2.00	39.53	464.50	6.26										
10.24	1.17	40.73	208.31	5.03	12.24	2.35	31.01	251.35	5.78	14.24	2.01	39.80	459.66	6.27										
10.26	1.13	39.81	212.90	5.04	12.26	3.11	37.07	137.43	5.78	14.26	1.96	41.96	421.03	6.29										
10.28	1.09	36.37	210.27	5.04	12.28	3.75	50.28	66.23	5.79	14.28	1.80	44.95	399.06	6.29										
10.30	1.10	36.25	211.56	5.07	12.30	3.64	53.56	38.01	5.79	14.30	1.67	48.54	392.94	6.29										
10.32	1.16	36.31	222.58	5.07	12.32	3.15	46.44	14.02	5.79	14.32	1.57	51.86	405.61	6.30										
10.34	1.24	37.47	250.43	5.08	12.34	2.47	36.49	7.77	5.80	14.34	1.48	50.15	419.26	6.31										
10.36	1.37	32.50	264.75	5.08	12.36	2.10	37.40	10.71	5.81	14.36	1.48	50.64	439.58	6.31										
10.38	1.40	30.86	202.38	5.08	12.38	1.78	43.97	38.99	5.81	14.38	1.58	46.56	483.53	6.32										
10.40	1.41	34.06	175.69	5.08	12.40	1.55	46.86	149.24	5.82	14.40	1.70	39.59	521.12	6.32										
10.42	1.39	38.04	175.56	5.09	12.42	1.54	46.50	310.42	5.83	14.42	1.74	32.47	534.83	6.32										
10.44	1.33	39.81	178.75	5.09	12.44	1.58	46.62	387.92	5.85	14.44	1.76	26.02	538.26	6.34										
10.46	1.26	42.09	184.93	5.10	12.46	1.57	42.69	341.33	5.86	14.46	1.73	22.32	536.42	6.34										
10.48	1.21	42.61	183.34	5.11	12.48	1.52	39.77	350.45	5.88	14.48	1.63	19.52	523.45	6.35										
10.50	1.19	44.77	178.32	5.11	12.50	1.54	38.70	381.73	5.90	14.50	1.53	22.35	498.10	6.34										
10.52	1.23	46.93	192.83	5.11	12.52	1.51	40.35	403.34	5.89	14.52	1.40	21.42	485.98	6.36										
10.54	1.33	46.01	206.90	5.12	12.54	1.40	39.31	391.04	5.89	14.54	1.38	23.40	508.75	6.36										
10.56	1.34	44.73	209.23	5.13	12.56	1.33	38.64	371.20	5.89	14.56	1.42	22.35	548.73	6.36										
10.58	1.39	41.39	211.92	5.14	12.58	1.26	37.88	322.72	5.91	14.58	1.50	20.96	590.35	6.36										
10.60	1.41	41.90	217.01	5.14	12.60	1.20	38.55	294.87	5.91	14.60	1.62	19.91	626.29	6.36										
10.62	1.38	45.13	224.47	5.13	12.62	1.18	39.46	290.65	5.91	14.62	1.78	19.04	617.23	6.37										
10.64	1.43	45.22	241.06	5.15	12.64	1.18	42.59	314.83	5.92	14.64	1.82	18.56	594.03	6.37										
10.66	1.56	41.69	244.31	5.16	12.66	1.19	40.25	347.02	5.92	14.66	2.01	21.18	567.95	6.38										
10.68	1.60	43.94	245.65	5.16	12.68	1.24	35.68	354.62	5.92	14.68	2.36	26.17	562.38	6.36										
10.70	1.59	48.50	243.39	5.17	12.70	1.24	36.69	362.57	5.93	14.70	2.79	30.03	517.08	6.36										
10.72	1.59	51.21	231.51	5.16	12.72	1.26	34.74	384.49	5.93	14.72	3.06	35.15	257.77	6.36										
10.74	1.59	53.04	218.29	5.17	12.74	1.25	30.63	393.98	5.93	14.74	2.88	35.15	217.74	6.37										
10.76	1.57	56.11	221.54	5.18	12.76	1.21	27.44	404.69	5.94	14.76	2.82	37.25	218.35	6.38										
10.78	1.47	58.70	226.19	5.19	12.78	1.17	24.21	412.95	5.93	14.78	2.68	41.60	204.82	6.38										
10.80	1.45	57.23	226.55	5.19	12.80	1.16	23.72	424.22	5.93	14.80	2.32	37.19	187.07	6.40										
10.82	1.42	55.99	230.60	5.20	12.82	1.21	22.04	443.44	5.94	14.82	1.77	27.11	203.84	6.41										
10.84	1.44	55.25	248.04	5.20	12.84	1.30	19.27	476.92	5.94	14.84	1.71	29.12	487.94	6.41										
10.86	1.51	48.80	271.61	5.20	12.86	1.47	17.14	497.06	5.96	14.86	1.74	31.44	588.58	6.41										
10.88	1.61	42.32	283.91	5.21	12.88	1.61	20.12	502.45	5.96	14.88	1.72	32.20	597.27	6.42										
10.90	1.62	41.01	275.04	5.23	12.90	1.73	21.65	484.82	5.97	14.90	1.82	36.34	622.55	6.42										
10.92	1.57	44.54	262.43	5.23	12.92	1.73	27.25	451.40	5.97	14.92	1.90	34.33	648.38	6.43										
10.94	1.53	46.33	253.55	5.24	12.94	1.69	34.74	417.18	5.97	14.94	1.94	32.32	625.67	6.43										
10.96	1.53	47.46	248.53	5.24	12.96	1.66	39.49	392.45	5.97	14.96	1.89	27.42	601.13	6.43										
10.98	1.52	50.38	245.04	5.25	12.98	1.54	46.37	364.78	5.98	14.98	1.81	22.32	579.64	6.44										
11.00	1.53	55.92	235.68	5.25	13.00	1.50	51.12	341.94	5.99	15.00	1.71	22.74	560.54	6.44										
11.02	1.54	58.51	229.74	5.27	13.02	1.47	51.42	335.09	5.99															
11.04	1.58	60.24	218.72	5.27	13.04	1.47	54.64	357.49	5.99															
11.06	1.59	62.51	276.26	5.28	13.06	1.48	54.18	360.92	6.00															
11.08	1.59	60.81	267.87	5.28	13.08	1.52	50.38	355.17	6.01															
11.10	1.62	60.72	259.55	5.29	13.10	1.52	48.34	325.91	6.01															
11.12	1.58	63.12	252.94	5.30	13.12	1.48	47.70	304.17	6.02															
11.14	1.57	66.13	251.53	5.30	13.14	1.47	49.01	277.98	6.01															
11.16	1.57	67.14	256.67	5.30	13.16	1.41	51.14	256.43	6.02															
11.18	1.65	63.67	254.84	5.31	13.18	1.36	51.08	244.37	6.02															
11.20	1.68	62.96	251.71	5.31	13.20	1.32	50.77	243.33	6.03															
11.22	1.71	63.05	237.14	5.33	13.22	1.33	52.29	250.98	6.03															
11.24	1.65	67.56	242.47	5.32	13.24	1.42	50.95	261.08	6.05															
11.26	1.63	66.86	247.55	5.33	13.26	1.47	51.23	275.77	6.05															
11.28	1.66	62.47	248.10	5.33	13.28	1.55	47.06	298.48	6.06															
11.30	1.62	63.81	241.00	5.35	13.30	1.64	44.10	298.97	6.06															
11.32	1.54	66.34	236.29	5.35	13.32	1.63	45.04	280.36	6.06															
11.34	1.44	62.62	234.64	5.36	13.34	1.62	45.53	247.49	6.06															
11.36	1.35	60.37	235.61	5.37	13.36	1.61	47.66	240.76	6.07															
11.38	1.28	57.14	236.96	5.37	13.38	1.61	51.46	251.22	6.06															
11.40	1.26	52.97	247.86	5.39	13.40	1.60	53.71	262.12	6.07															
11.42	1.24	49.35	255.94	5.40	13.42	1.65	56.30	262.98	6.07															
11.44	1.24	45.48	271.24	5.41	13.44	1.69	58.86	258.26	6.07															
11.46	1.38	37.57	295.79	5.42	13.46	1.74	60.10	235.74	6.07															
11.48	1.50	33.46	312.81	5.43	13.48	1.75	62.60	219.82	6.08															
11.50	1.50	30.78	305.40	5.43	13.50	1.78	64.42	200.29	6.09															
11.52	1.47	31.20	292.91	5.44	13.52	1.75	66.80	205.86	6.09															
11.54	1.44	36.62	286.42	5.46	13.54	1.77	68.87	211.99	6.10															
11.56	1.41	40.64	291.50	5.47	13.56	1.76	72.03	209.78	6.10															
11.58	1.43	37.02	300.87	5.47	13.58	1.77	73.06	205.01	6.11															
11.60	1.43	37.17	304.48	5.49	13.60	1.73	76.90	207.39	6.13															
11.62	1.47	32.66	313.97	5.50	13.62	1.67	78.14	209.90	6.13															
11.64	1.61	28.65	343.11	5.50	13.64	1.66	78.63	217.43	6.14															
11.66	1.66	24.98	347.51	5.51	13.66	1.69	77.38	218.72	6.14															
11.68	1.61	25.13	339.80	5.51	13.68	1.72	75.95	223.98	6.15															
11.70	1.49	26.03	322.36	5.53	13.70	1.73	73.54	230.90	6.15															
11.72	1.40	29.77	314.03	5.54	13.72	1.76	70.32	227.53	6.16															
11.74	1.33	34.37	317.09	5.54	13.74	1.74	69.52	216.52	6.17															
11.76	1.30	34.12	325.29	5.54	13.76	1.68	68.06	219.15	6.18															
11.78	1.30	29.93	344.82	5.55	13.78	1.70	65.81	217.86	6.18															
11.80	1.36	26.73	374.88	5.56	13.80	1.68	65.78	216.33	6.18															
11.82	1.56	24.50	404.63	5.56	13.82	1.63	65.53	214.07	6.20															
11.84	2.25	25.13	460.95	5.56	13.84	1.55	65.77	211.68	6.20															
11.86	3.02	27.61	395.45	5.57	13.86	1.56	64.71	231.76	6.20															
11.88	3.72	35.92	6.98	5.57	13.88	1.61	60.90	247.49	6.20															
11.90	3.99	41.04	6.92	5.58	13.90	1.59	61.42	260.04	6.21															
11.92	3.63	34.71	12.67	5.59	13.92	1.63	55.94	280.61	6.22															
11.94	2.90	31.97	19.16	5.60	13.94	1.70	52.41	295.73	6.22															
11.96	2.47	28.77	21.36	5.61	13.96	1.78	49.27	311.52	6.22															
11.98	2.19	34.71	21.98	5.62	13.98	1.83	46.17	313.66	6.22															
12.00	1.95	52.30	22.28	5.63	14.00	1.86	45.50	311.77	6.23															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Tina Gori - Forlì (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 9
PROF. FALDA (m da p.c.): 7.00
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 9
CANTIERE:	Via Tina Gori - Forlì (FC)	PROF. FALDA (m da p.c.):	7.00
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	196/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	03/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Tina Gori - Forlì (FC)
Lat.: 44.213309°
Long.: 12.038021°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Giovanni Acquaderni - Loc. Quartiere Bussecchio (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 10
PROF. FALDA (m da p.c.): 3.30
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.71	28.60	71.62	0.22	2.02	1.63	46.29	30.97	0.89	4.02	2.78	63.96	127.57	1.57	6.02	4.11	84.38	126.71	2.34	8.02	3.93	40.43	112.27	3.00
0.04	2.80	33.62	73.76	0.21	2.04	1.62	56.40	31.28	0.87	4.04	2.35	65.00	138.34	1.59	6.04	4.47	81.85	55.40	2.34	8.04	3.19	29.05	103.82	3.00
0.06	3.63	39.68	68.50	0.03	2.06	1.64	69.21	31.59	0.91	4.06	2.31	62.23	185.48	1.60	6.06	4.81	78.38	38.26	2.35	8.06	2.78	24.69	99.53	3.01
0.08	4.00	39.80	63.97	0.09	2.08	1.64	80.05	31.04	0.91	4.08	2.31	61.07	200.91	1.61	6.08	4.88	67.64	40.28	2.36	8.08	2.36	27.40	94.70	3.03
0.10	4.23	41.80	59.68	0.08	2.10	1.57	91.13	27.12	0.92	4.10	2.33	63.81	224.29	1.63	6.10	4.62	45.05	40.95	2.37	8.10	2.09	27.01	90.90	3.03
0.12	5.54	31.43	11.08	0.25	2.12	1.56	99.81	24.55	0.95	4.12	2.35	60.16	233.17	1.63	6.12	4.36	31.29	40.89	2.38	8.12	1.76	29.23	85.52	3.04
0.14	5.66	36.97	11.45	0.25	2.14	1.51	106.93	24.61	0.96	4.14	2.47	59.73	239.78	1.64	6.14	4.00	20.00	40.77	2.37	8.14	1.43	23.85	78.66	3.05
0.16	5.63	43.09	11.32	0.33	2.16	1.44	112.92	22.10	0.96	4.16	2.57	60.46	247.55	1.65	6.16	3.54	19.48	39.61	2.37	8.16	1.11	20.42	73.58	3.06
0.18	5.48	47.84	11.08	0.31	2.18	1.37	113.14	18.43	0.95	4.18	2.59	63.11	259.49	1.65	6.18	3.06	24.65	38.14	2.36	8.18	1.10	18.04	79.64	3.06
0.20	5.34	47.65	11.32	0.34	2.20	1.35	110.46	16.16	0.97	4.20	2.61	68.13	272.10	1.66	6.20	2.69	29.28	38.08	2.37	8.20	1.17	20.12	84.84	3.08
0.22	5.25	47.26	11.69	0.34	2.22	1.32	109.58	12.73	1.00	4.22	2.65	68.98	281.83	1.67	6.22	2.51	37.16	41.50	2.39	8.22	1.09	19.94	84.66	3.07
0.24	5.05	45.86	11.81	0.29	2.24	1.33	108.33	8.02	1.01	4.24	2.69	70.29	284.71	1.68	6.24	2.91	35.64	55.71	2.41	8.24	0.99	16.99	93.35	3.08
0.26	5.05	44.52	12.55	0.34	2.26	1.32	106.26	4.16	1.00	4.26	2.69	75.03	289.48	1.68	6.26	3.62	42.88	65.81	2.40	8.26	1.14	15.21	139.63	3.09
0.28	4.98	47.95	12.86	0.31	2.28	1.29	104.40	0.55	1.01	4.28	2.72	76.49	299.09	1.70	6.28	4.29	51.56	64.52	2.41	8.28	1.28	13.62	163.87	3.10
0.30	4.90	51.33	13.22	0.34	2.30	1.27	102.42	2.14	1.00	4.30	2.79	79.32	305.83	1.71	6.30	4.27	49.27	63.72	2.41	8.30	1.27	12.93	164.91	3.09
0.32	4.82	51.24	13.65	0.35	2.32	1.25	98.62	3.92	1.04	4.32	2.89	80.42	307.60	1.72	6.32	4.01	42.73	62.44	2.42	8.32	1.20	14.43	164.30	3.10
0.34	5.04	47.62	15.18	0.37	2.34	1.15	98.19	5.69	1.05	4.34	2.88	85.74	310.24	1.72	6.34	3.73	35.46	61.46	2.42	8.34	1.13	13.35	170.30	3.10
0.36	5.25	42.35	17.20	0.39	2.36	1.08	96.06	5.02	1.07	4.36	2.91	88.88	313.05	1.73	6.36	3.78	37.37	62.50	2.42	8.36	1.15	11.82	182.66	3.11
0.38	5.21	39.12	17.63	0.34	2.38	1.04	94.72	4.04	1.05	4.38	2.96	90.28	313.36	1.74	6.38	3.80	42.24	62.99	2.43	8.38	1.25	9.62	201.95	3.12
0.40	5.03	38.81	17.38	0.37	2.40	1.04	94.03	4.35	1.05	4.40	2.86	94.72	310.97	1.76	6.40	3.67	49.97	62.68	2.44	8.40	1.43	10.67	205.62	3.12
0.42	4.99	38.84	17.81	0.40	2.42	1.19	90.22	9.37	1.07	4.42	2.80	97.61	308.40	1.76	6.42	3.31	59.62	60.11	2.43	8.42	1.31	11.88	198.52	3.14
0.44	4.82	42.06	17.81	0.36	2.44	1.32	86.66	10.71	1.08	4.44	2.76	101.47	306.68	1.78	6.44	2.87	74.87	57.11	2.44	8.44	1.24	10.73	198.33	3.14
0.46	4.48	45.37	16.96	0.38	2.46	1.44	83.95	12.86	1.09	4.46	2.73	109.23	305.22	1.79	6.46	2.54	80.59	54.85	2.43	8.46	1.31	11.03	215.23	3.15
0.48	4.28	48.57	16.71	0.42	2.48	1.56	76.65	13.16	1.09	4.48	2.65	114.98	304.24	1.80	6.48	2.54	71.82	56.99	2.44	8.48	1.39	13.83	223.37	3.16
0.50	4.33	50.33	17.57	0.38	2.50	1.58	73.55	11.81	1.10	4.50	2.61	113.34	302.83	1.81	6.50	2.95	68.57	64.15	2.45	8.50	1.36	12.84	228.88	3.15
0.52	4.76	48.59	20.02	0.39	2.52	1.51	72.70	10.47	1.09	4.52	2.56	109.81	301.54	1.83	6.52	3.44	66.86	68.19	2.44	8.52	1.19	17.26	221.35	3.17
0.54	5.33	44.26	22.65	0.43	2.54	1.46	71.51	10.65	1.07	4.54	2.56	108.65	301.11	1.83	6.54	3.47	65.21	67.58	2.45	8.54	1.08	17.83	219.03	3.18
0.56	5.88	42.01	24.79	0.40	2.56	1.43	69.78	9.92	1.09	4.56	2.51	107.80	300.62	1.85	6.56	3.38	56.17	66.66	2.44	8.56	1.10	16.93	226.00	3.20
0.58	6.19	44.13	25.59	0.44	2.58	1.37	67.14	10.59	1.07	4.58	2.48	102.92	300.69	1.84	6.58	3.18	44.21	64.76	2.45	8.58	1.16	14.70	240.63	3.20
0.60	6.35	44.83	25.83	0.44	2.60	1.31	65.83	12.37	1.06	4.60	2.49	98.02	301.30	1.85	6.60	2.63	40.56	59.99	2.45	8.60	1.17	14.58	242.78	3.20
0.62	6.47	48.54	25.83	0.43	2.62	1.29	63.83	12.00	1.06	4.62	2.52	93.67	302.89	1.86	6.62	2.29	37.64	57.11	2.45	8.62	1.11	14.61	239.23	3.21
0.64	6.52	58.83	26.26	0.46	2.64	1.26	61.30	12.06	1.05	4.64	2.60	91.54	303.87	1.87	6.64	1.95	35.32	54.11	2.47	8.64	1.06	12.99	236.59	3.22
0.66	6.61	69.66	25.89	0.44	2.66	1.23	59.72	12.61	1.05	4.66	2.62	93.03	304.85	1.88	6.66	1.72	31.61	54.66	2.48	8.66	1.02	11.37	236.41	3.22
0.68	6.46	73.10	25.22	0.48	2.68	1.19	55.65	12.37	1.03	4.68	2.74	89.74	306.19	1.88	6.68	1.70	34.10	59.56	2.48	8.68	1.08	7.97	249.57	3.23
0.70	6.18	79.00	24.06	0.52	2.70	1.17	51.36	12.37	1.03	4.70	2.73	90.92	302.89	1.90	6.70	1.60	37.06	58.58	2.48	8.70	1.11	9.39	249.69	3.23
0.72	6.17	91.84	24.73	0.51	2.72	1.17	47.84	13.04	1.04	4.72	2.72	96.07	303.44	1.90	6.72	1.40	37.21	55.71	2.49	8.72	1.11	8.72	253.00	3.24
0.74	6.26	98.78	26.75	0.54	2.74	1.14	45.53	13.41	1.03	4.74	2.78	97.47	302.89	1.91	6.74	1.36	32.28	58.64	2.50	8.74	1.07	10.23	251.71	3.24
0.76	6.33	98.32	39.36	0.56	2.76	1.10	43.64	14.32	1.03	4.76	2.74	105.59	299.95	1.92	6.76	1.48	35.93	63.85	2.50	8.76	1.02	9.81	255.26	3.26
0.78	6.36	90.74	37.46	0.57	2.78	1.09	40.67	14.88	1.05	4.78	2.64	114.57	296.52	1.93	6.78	1.58	35.66	69.48	2.51	8.78	1.04	9.03	263.71	3.27
0.80	6.41	87.11	36.48	0.61	2.80	1.07	37.69	14.69	1.04	4.80	2.54	120.47	293.83	1.94	6.80	1.58	32.31	76.27	2.51	8.80	1.02	9.48	266.59	3.27
0.82	6.32	86.92	34.10	0.63	2.82	1.10	35.90	14.75	1.05	4.82	2.54	121.63	290.95	1.94	6.82	1.47	31.67	73.76	2.53	8.82	0.97	9.60	268.98	3.28
0.84	6.53	78.00	34.89	0.64	2.84	1.08	35.20	16.04	1.06	4.84	2.56	116.73	288.63	1.96	6.84	1.27	25.54	70.83	2.53	8.84	0.99	9.03	276.93	3.29
0.86	6.48	67.89	34.10	0.65	2.86	1.09	32.83	18.85	1.06	4.86	2.52	115.24	284.34	1.96	6.86	1.26	18.68	95.74	2.55	8.86	1.02	8.79	285.81	3.29
0.88	6.37	64.32	33.18	0.70	2.88	1.08	30.25	24.36	1.06	4.88	2.48	118.73	281.53	1.96	6.88	1.52	17.12	151.93	2.56	8.88	1.04	8.85	287.59	3.30
0.90	6.52	60.88	33.18	0.68	2.90	1.11	27.84	27.55	1.07	4.90	2.40	120.83	278.77	1.98	6.90	1.99	18.33	176.48	2.58	8.90	1.04	9.12	288.14	3.31
0.92	6.55	58.93	32.57	0.68	2.92	1.11	26.67	32.50	1.06	4.92	2.35	114.14	278.59	1.99	6.92	2.31	24.61	155.30	2.59	8.92	1.05	10.38	290.28	3.31
0.94	6.70	54.46	32.44	0.70	2.94	1.15	26.19	40.83	1.07	4.94	2.36	111.06	277.91	1.99	6.94	2.73	37.21	91.64	2.62	8.94	1.15	15.64	333.13	3.33
0.96	6.53	45.61	16.96	0.72	2.96	1.22	23.49	46.09	1.07	4.96	2.42	112.86	298.67	2.01	6.96	2.93	38.58	90.54	2.64	8.96	1.12	17.23	322.48	3.33
0.98	6.84	40.22	16.77	0.76	2.98	1.51	24.18	153.10	1.07	4.98	2.44	112.34	299.34	2.01	6.98	2.92	42.41	88.52	2.64	8.98	1.06	18.56	320.21	3.34
1.00	6.78	41.92	16.10	0.73	3.00	1.52	27.73	164.85	1.08	5.00	2.43	110.09	300.44	2.01	7.00	2.65	44.30	83.62	2.66	9.00	1.05	18.01	321.25	3.35
1.02	6.65	49.32	15.12	0.75	3.02	1.54	28.63	168.16	1.08	5.02	2.54	104.70	305.40	2.01	7.02	2.35	43.26	79.33	2.67	9.02	1.01	17.68	322.60	3.34
1.04	6.32	58.94	13.41	0.75	3.04	1.58	32.16	174.71	1.08	5.04	2.71	98.19	309.81	2.02	7.04	2.07	30.02	75.29	2.68	9.04	1.00	17.05	325.36	3.36
1.06	5.94	66.85	11.81	0.76	3.06	1.67	32.43	184.38	1.08	5.06	2.72	97.18	309.75	2.03	7.06	1.80	25.99	72.54	2.69	9.06	0.99	16.27	331.90	3.35
1.08	5.62	73.08	10.47	0.73	3.08	1.74	33.74	189.76	1.09	5.08	2.76	97.48	308.70	2.04	7.08	1.58	24.63	69.05	2.71	9.08	1.00	16.00	338.33	3.36
1.10	5.44	79.08	9.92	0.77	3.10	1.76	35.69	189.21	1.09	5.10	2.77	100.28	307.42	2.05	7.10	1.24	23.67	67.83	2.71	9.10	1.03	14.80	342.56	3.36
1.12	5.32	81.36	9.43	0.78	3.12	1.86	32.26	202.93	1.09	5.12	2.76	100.71	307.05	2.05	7.12	1.25	22.38	102.66	2.72	9.12	1.04	13.38	347.94	3.36
1.14	5.25	81.14	9.55	0.76	3.14	1.71	34.94	198.89	1.10	5.14	2.75	102.20	307.24	2.04	7.14	1.43	23.49	116.31	2.74	9.14	1.09	13.41	355.11	3.37
1.16	5.15	72.74	9.30	0.77	3.16	1.68	33.23	199.56	1.11	5.16	2.72	103.38	308.15	2.04	7.16	1.81	25.59	133.81	2.75	9.16	1.18	13.02	364.90	3.37
1.18	4.96	64.42	9.00	0.78	3.18	1.66	33.48	204.58	1.11	5.18	2.58	104.96	305.71	2.07	7.18	1.89	24.99	120.23	2.76	9.18	1.24	14.50	369.37	3.37
1.20	4.86	60.10	8.69	0.80	3.20	1.66	32.63	210.46	1.11	5.20	2.60	103.23	305.03	2.07	7.20	1.62	24.84	108.84	2.76	9.20	1.26	15.85	364.10	3.37
1.22	4.81	56.78	8.81	0.80	3.22	1.67	30.71	215.72	1.13	5.22	2.59	101.46	304.48	2.07	7.22	1.38	24.27	101.80	2.75	9.22	1.26	19.13	353.70	3.37
1.24	4.91	54.19	9.79	0.79	3.24	1.82	30.41	226.43	1.13	5.24	2.51	100.12	303.01	2.08	7.24	1.56	27.19	114.23	2.74	9.24	1.19	19.31	352.11	3.39
1.26	5.06	50.02	10.77	0.83	3.26	1.90	30.35	234.76	1.15	5.26	2.56	97.99	304.36	2.10	7.26	2.09	28.78	131.67	2.74	9.26	1.20	18.10	355.17	3.39
1.28	4.87	44.72	10.28	0.86	3.28	2.05	28.44	247.43	1.16	5.28	2.56	100.73	304.66	2.11	7.28	2.72	31.72	131.12	2.74	9.28	1.26	19.13	357.55	3.41
1.30	4.76	43.77	10.10	0.83	3.30	2.16	31.02	253.00	1.16	5.30	2.50	98.57	304.24	2.11	7.30	2.87	34.31	115.51	2.74	9.30	1.50	15.91	381.55	3.42
1.32	4.60	43.62	9.37	0.84	3.32	2.31	33.30	263.71	1.15	5.32	2.44	95.49	302.34	2.11	7.32	2.75	32.88	107.00	2.74	9.32	1.94	16.09	360.80	3.42
1.34	3.95	47.48	6.18	0.85	3.34	2.48	37.20	292.30	1.17	5.34	2.46	97.98	301.54	2.11	7.34	2.48	26.01	104.55	2.74	9.34	2.15	18.73	251.78	3.43
1.36	3.16	50.46	4.35	0.87	3.36	2.79	40.85	341.09	1.19	5.36	2.40	101.12	301.48	2.13	7.36	2.60	28.69	104.98	2.76	9.36	2.21	21.23	176.79	3.43
1.38	2.67	52.44	0.12	0.86	3.38	2.97	44.69	344.45	1.21	5.38	2.32	95.40	301.24	2.14	7.38	2.88	37.39	107.49	2.76	9.38	2.13	19.21	171.71	3.44
1.40	2.40	58.56	1.47	0.89	3.40	3.13	49.41	341.33	1.23	5.40	2.25	89.61	300.56	2.15	7.40	3.01	36.81	106.51	2.76	9.40	1.92	18.64	166.56	3.45
1.42	2.18	59.93	0.67	0.89	3.42	3.28	59.72	336.07	1.24	5.42	2.12	86.99	294.50	2.15	7.42	2.96	35.80	104.19	2.75	9.42	1.62	16.75	159.71	3.44
1.44	2.38	61.91	2.02	0.92	3.44	3.25	65.26	322.48	1.24	5.44	1.98	87.94	286.91	2.16	7.44	2.77	30.57	101.55	2.77	9.44	1.35	19.42	163.32	3.45
1.46	2.58	70.16	4.71	0.92	3.46	3.05	69.59	263.28	1.27	5.46	1.74	90.28	273.45	2.17	7.46	2.70	24.99	100.88	2.78	9.46	1.30	24.57	168.95	3.46
1.48	2.45	65.62	4.65	0.93	3.48	2.89	77.96	284.52	1.28	5.48	1.58	90.95	266.65	2.18	7.48	2.70	24.78	100.88	2.79	9.48	1.32	27.84	193.99	3.47
1.50	2.12	72.56	2.63	0.92	3.50	2.66	84.17	247.12	1.28	5.50	1.49	89.12	262.79	2.18	7.50	2.65	25.63	99.78	2.79	9.50	1.73	29.86	226.55	3.48
1.52	1.96	78.01	2.39	0.92	3.52	2.34	88.49	189.03	1.28	5.52	1.53	87.23	268.55	2.19	7.52	2.44	24.75	96.17	2.79	9.52	1.97	31.08	235.92	3.49
1.54	2.04	82.75	4.96	0.92	3.54	2.01	88.85	186.15	1.29	5.54	1.83	76.55	283.55	2.19	7.54	2.14	24.54	91.52	2.80	9.54	2.05	31.93	223.13	3.50
1.56	2.21	82.05	3.61	0.94	3.56	1.77	80.42	204.40	1.29	5.56	2.22	61.94	299.03	2.20	7.56	1.68	22.32	83.86	2.81	9.56	2.02	29.95	211.37	3.51
1.58	2.05	78.64	1.90	0.89	3.58	1.68	74.12	218.84	1.30	5.58	2.29	52.69	295.48	2.22	7.58	1.39	18.23	78.23	2.81	9.58	2.05	24.29	208.13	3.51
1.60	2.13	78.49	2.14	0.90	3.60	1.63	67.64	234.45	1.31	5.60	2.11	46.48	285.20	2.22	7.60	1.13	15.01	75.11	2.82	9.60	2.59	28.05	217.13	3.52
1.62	2.21	73.35	1.10	0.92	3.62	1.62	59.33	247.49	1.32	5.62	2.01	37.23	283.79	2.22	7.62	1.11	15.40	81.35	2.82	9.62	3.32	30.47	225.76	3.52
1.64	2.33	66.96	1.41	0.93	3.64	1.58	51.45	255.75	1.32	5.64	1.99	34.88	287.40	2.23	7.64	1.14	16.45	88.88	2.83	9.64	3.58	30.95	204.58	3.53
1.66	2.14	62.18	0.61	0.90	3.66	1.53	41.52	260.47	1.32	5.66	1.98	29.65	286.48	2.24	7.66	1.21	18.11	97.76	2.84	9.66	3.32	31.74	189.64	3.54
1.68	2.21	57.70	0.31	0.91	3.68	1.46	32.03	258.20	1.32	5.68	1.81	32.91	276.63	2.25	7.68	1.17	18.23	101.31	2.86	9.68	2.85	28.53	177.03	3.55
1.70	2.27	51.37	0.37	0.91	3.70	1.39	28.12	255.63	1.33	5.70	1.87	35.71	280.24	2.26	7.70	1.17	16.39	115.39	2.87	9.70	2.26	26.85	166.07	3.55
1.72	2.37	50.83	0.43	0.93	3.72	1.38	25.50	256.06	1.34	5.72	2.77	28.54	317.70	2.28	7.72	1.16	15.58	127.26	2.88	9.72	1.89	30.04	163.14	3.56
1.74	2.19	58.13	2.57	0.90	3.74	1.41	22.29	275.28	1.35	5.74	3.35	26.86	312.32	2.27	7.74	1.13	14.77	140.18	2.89	9.74	1.45	33.05	159.52	3.56
1.76	2.39	62.45	1.71	0.93	3.76	1.61	19.34	318.01	1.37	5.76	2.95	32.80	206.78	2.27	7.76	1.26	16.30	160.69	2.92	9.76	1.37	35.15	166.50	3.57
1.78	2.36	61.69	2.33	0.92	3.78	1.80	18.77	344.45	1.38	5.78	2.56	34.87	156.83	2.28	7.78	1.43	14.32	190.19	2.92	9.78	1.41	35.03	193.01	3.58
1.80	2.27	63.64	2.75	0.96	3.80	1.91	20.27	365.14	1.40	5.80	2.37	47.68	170.30	2.29	7.80	1.56	15.04	195.95	2.92	9.80	1.52	34.33	228.15	3.58
1.82	2.28	64.13	2.69	0.94	3.82	1.85	21.81	374.76	1.41	5.82	2.36	56.12	214.74	2.28	7.82	1.50	15.40	181.50	2.93	9.82	1.74	31.47	237.14	3.59
1.84	2.32	66.99	2.88	0.92	3.84	1.85	22.41	376.96	1.42	5.84	2.46	49.06	230.84	2.29	7.84	1.56	14.38	186.40	2.95	9.84	1.58	30.46	211.99	3.60
1.86	2.26	63.16	3.98	0.87	3.86	1.87	21.81	379.84	1.44	5.86	2.45	52.04	228.21	2.30	7.86	2.50	15.13	237.39	2.94	9.86	1.42	26.42	211.25	3.61
1.88	2.22	54.91	5.02	0.90	3.88	2.06	21.27	399.18	1.45	5.88	2.29	57.95	222.82	2.29	7.88	3.25	19.85	197.72	2.95	9.88	1.25	23.74	205.25	3.62
1.90	2.15	51.44	6.79	0.88	3.90	2.16	20.86	419.50	1.46	5.90	2.05	53.20	221.05	2.30	7.90	3.37	24.55	164.97	2.96	9.90	1.15	19.59	226.68	3.63
1.92	2.12	51.57	7.71	0.88	3.92	2.34	21.94	368.76	1.48	5.92	2.10	49.61	229.00	2.31	7.92	3.30	24.25	159.22	2.96	9.92	1.24	19.74	266.90	3.63
1.94	2.17	47.92	8.02	0.85	3.94	2.51	25.22	441.91	1.51	5.94	2.18	46.39	247.80	2.30	7.94	3.87	32.70	122.67	2.98	9.94	1.50	34.18	174.22	3.64
1.96	2.13	43.14	8.57	0.87	3.96	3.18	36.72	340.54	1.55	5.96	2.91	73.76	202.19	2.33	7.96	4.36	35.75	124.94	2.99	9.96	1.29	30.14	176.05	3.64
1.98	1.96	35.24	29.38	0.88	3.98	2.85	45.06	196.80	1.57	5.98	3.10	77.29	205.07	2.34	7.98	4.63	37.05	123.90	2.99	9.98	1.20	27.69	198.33	3.65
2.00	1.81	37.71	30.18	0.85	4.00	2.75	51.06	169.56	1.58	6.00	3.67	85.23	186.40	2.34	8.00	4.48	38.97	119.74	3.00	10.00	1.15	23.81	205.13	3.65

Studio LZ CPT di Lorenzo Zanirato
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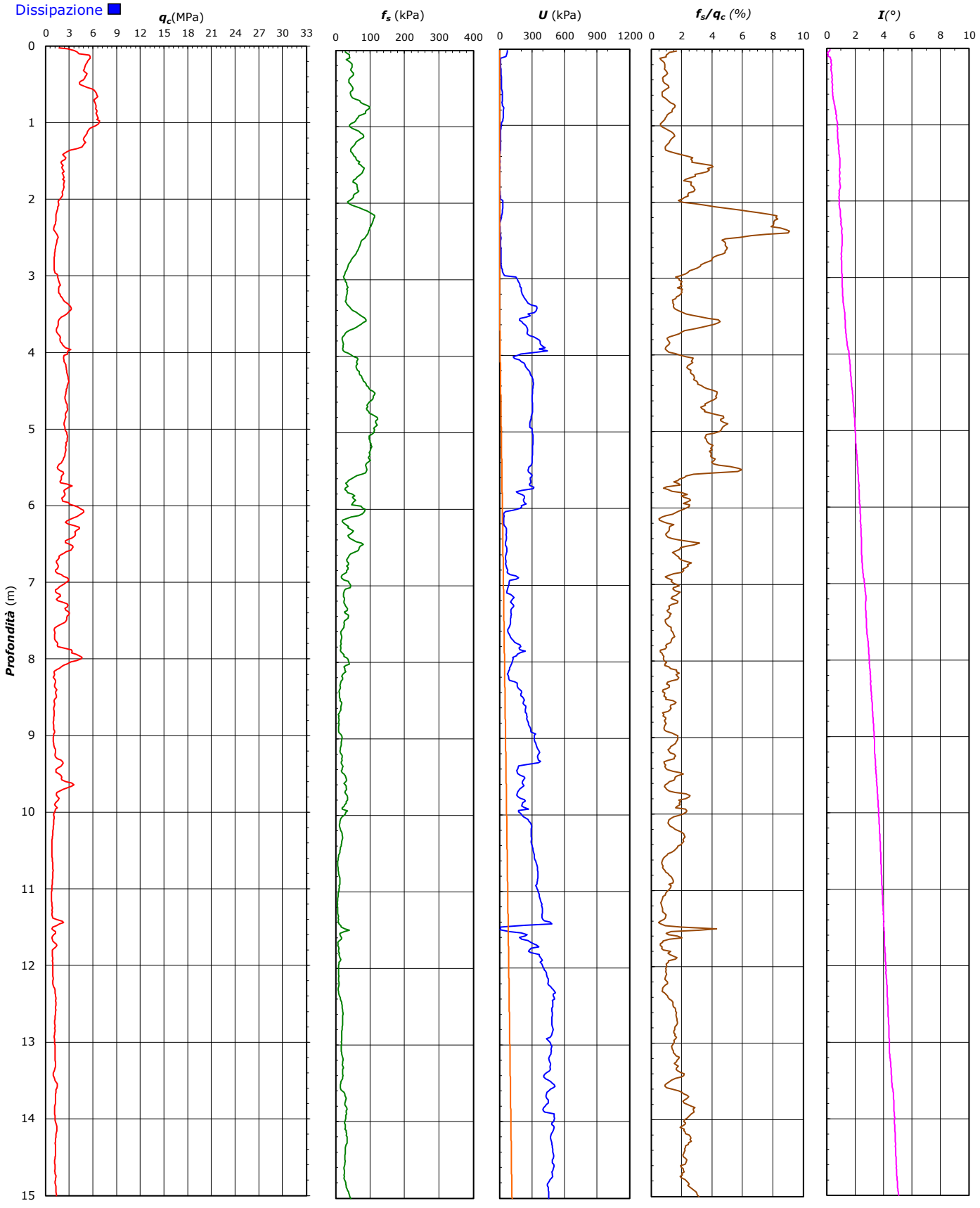
COMMITTENTE:
CANTIERE: Via Giovanni Acquaderni - Loc. Quartiere Bussecchio (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 10
PROF. FALDA (m da p.c.): 3.30
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.06	19.27	221.72	3.66	12.02	0.91	8.72	413.75	4.15	14.02	1.22	26.07	482.55	4.77										
10.04	1.04	15.48	243.08	3.66	12.04	0.93	9.11	423.67	4.15	14.04	1.24	28.08	484.70	4.76										
10.06	1.09	14.10	261.39	3.67	12.06	0.95	8.96	432.48	4.17	14.06	1.29	28.90	498.29	4.77										
10.08	1.07	12.54	273.26	3.67	12.08	0.93	9.02	433.34	4.17	14.08	1.39	28.32	504.96	4.78										
10.10	1.06	11.97	283.18	3.68	12.10	0.92	9.32	435.72	4.17	14.10	1.44	27.30	498.53	4.78										
10.12	1.04	11.51	291.50	3.68	12.12	0.93	9.02	442.21	4.18	14.12	1.41	30.47	494.86	4.79										
10.14	1.03	11.91	295.91	3.69	12.14	0.95	8.87	449.80	4.19	14.14	1.42	30.47	485.61	4.79										
10.16	1.02	12.69	294.81	3.70	12.16	0.97	8.69	452.25	4.20	14.16	1.41	31.53	480.11	4.79										
10.18	1.00	14.40	293.58	3.71	12.18	0.96	9.48	448.89	4.21	14.18	1.39	31.26	473.98	4.81										
10.20	1.00	15.69	293.83	3.71	12.20	0.95	10.05	445.58	4.21	14.20	1.33	33.02	470.98	4.81										
10.22	0.99	17.47	292.36	3.72	12.22	0.91	9.90	455.01	4.22	14.22	1.31	33.81	472.39	4.81										
10.24	0.95	18.97	291.20	3.72	12.24	0.94	8.81	469.33	4.23	14.24	1.30	34.06	476.55	4.82										
10.26	0.92	19.63	292.12	3.73	12.26	0.98	7.94	482.06	4.24	14.26	1.29	32.90	479.74	4.82										
10.28	0.92	19.93	292.91	3.73	12.28	1.06	7.97	495.41	4.24	14.28	1.26	33.17	483.53	4.81										
10.30	0.90	20.05	294.87	3.74	12.30	1.14	8.57	509.24	4.24	14.30	1.26	31.32	485.06	4.83										
10.32	0.88	18.94	296.22	3.75	12.32	1.21	8.81	514.45	4.25	14.32	1.23	30.13	486.17	4.84										
10.34	0.86	17.95	293.77	3.75	12.34	1.22	10.53	495.59	4.26	14.34	1.25	28.32	488.43	4.84										
10.36	0.83	17.77	293.28	3.76	12.36	1.20	11.91	496.08	4.25	14.36	1.26	28.23	490.57	4.84										
10.38	0.83	16.87	296.58	3.77	12.38	1.24	13.35	504.47	4.25	14.38	1.26	27.90	491.19	4.85										
10.40	0.82	16.12	301.42	3.77	12.40	1.28	14.17	510.04	4.26	14.40	1.25	27.81	493.69	4.85										
10.42	0.83	14.46	305.03	3.78	12.42	1.31	15.43	487.51	4.27	14.42	1.27	27.72	497.31	4.86										
10.44	0.82	14.01	307.91	3.79	12.44	1.30	17.41	491.37	4.28	14.44	1.27	27.26	500.43	4.86										
10.46	0.83	13.17	310.30	3.78	12.46	1.28	18.29	491.19	4.30	14.46	1.27	26.33	498.22	4.86										
10.48	0.82	12.36	314.15	3.79	12.48	1.30	18.71	493.63	4.29	14.48	1.26	26.66	494.98	4.85										
10.50	0.82	10.86	317.89	3.79	12.50	1.30	18.71	493.08	4.29	14.50	1.21	27.14	488.49	4.87										
10.52	0.83	9.14	319.48	3.79	12.52	1.30	18.86	485.06	4.30	14.52	1.18	27.89	485.68	4.88										
10.54	0.84	8.63	319.85	3.79	12.54	1.29	20.18	484.88	4.30	14.54	1.17	26.99	488.98	4.89										
10.56	0.83	7.31	321.87	3.80	12.56	1.29	20.54	485.49	4.31	14.56	1.17	26.99	498.41	4.89										
10.58	0.82	6.74	327.56	3.80	12.58	1.30	21.08	487.27	4.31	14.58	1.17	26.21	504.77	4.89										
10.60	0.86	6.38	332.09	3.81	12.60	1.26	21.17	489.65	4.32	14.60	1.23	23.98	500.86	4.90										
10.62	0.85	6.14	336.62	3.81	12.62	1.25	20.48	487.02	4.32	14.62	1.23	24.64	495.23	4.91										
10.64	0.88	6.14	342.74	3.81	12.64	1.25	20.51	484.39	4.31	14.64	1.21	25.61	489.90	4.90										
10.66	0.91	6.53	344.88	3.82	12.66	1.23	20.57	481.64	4.32	14.66	1.19	25.10	484.94	4.91										
10.68	0.91	7.07	348.98	3.83	12.68	1.21	20.57	482.80	4.33	14.68	1.17	25.40	486.17	4.92										
10.70	0.94	7.04	352.35	3.83	12.70	1.20	20.33	482.55	4.35	14.70	1.21	24.52	487.39	4.92										
10.72	0.94	7.55	352.04	3.83	12.72	1.16	19.91	482.62	4.34	14.72	1.23	25.16	493.69	4.92										
10.74	0.93	8.31	353.57	3.85	12.74	1.17	20.12	484.27	4.34	14.74	1.32	24.88	481.21	4.92										
10.76	0.95	9.21	356.02	3.85	12.76	1.16	19.48	487.70	4.36	14.76	1.31	26.27	464.99	4.94										
10.78	0.95	10.47	355.66	3.85	12.78	1.19	18.85	492.23	4.37	14.78	1.28	28.46	458.31	4.95										
10.80	0.94	11.37	354.43	3.85	12.80	1.20	18.61	495.90	4.37	14.80	1.27	29.33	448.76	4.95										
10.82	0.91	11.98	353.27	3.86	12.82	1.17	18.16	491.49	4.37	14.82	1.23	30.15	442.58	4.96										
10.84	0.92	12.64	351.98	3.86	12.84	1.20	18.07	485.98	4.39	14.84	1.23	30.98	442.76	4.97										
10.86	0.90	12.88	348.43	3.87	12.86	1.21	18.10	481.94	4.38	14.86	1.28	30.79	449.44	4.96										
10.88	0.87	12.73	347.39	3.86	12.88	1.16	18.37	478.88	4.39	14.88	1.29	32.92	450.42	4.98										
10.90	0.87	12.46	345.80	3.88	12.90	1.17	18.07	467.74	4.39	14.90	1.30	35.05	451.40	4.99										
10.92	0.88	10.28	333.56	3.87	12.92	1.10	18.23	433.03	4.38	14.92	1.31	37.18	452.38	5.01										
10.94	0.86	11.18	344.21	3.88	12.94	1.11	17.75	447.66	4.38	14.94	1.33	39.31	453.35	5.02										
10.96	0.81	10.37	347.33	3.89	12.96	1.14	16.96	460.70	4.40	14.96	1.34	40.44	454.33	5.04										
10.98	0.79	9.71	353.33	3.90	12.98	1.16	17.51	472.70	4.40	14.98	1.37	41.58	455.31	5.05										
11.00	0.79	8.78	356.64	3.90	13.00	1.14	16.84	475.76	4.41	15.00	1.39	43.71	456.29	5.07										
11.02	0.79	7.99	361.90	3.91	13.02	1.16	16.39	482.37	4.41															
11.04	0.78	7.54	365.51	3.91	13.04	1.21	16.18	480.66	4.41															
11.06	0.77	7.09	367.78	3.91	13.06	1.19	16.27	475.76	4.41															
11.08	0.77	6.07	372.18	3.93	13.08	1.18	16.63	478.02	4.41															
11.10	0.75	5.62	376.35	3.93	13.10	1.18	17.23	473.49	4.42															
11.12	0.76	5.47	379.96	3.94	13.12	1.21	17.81	474.78	4.42															
11.14	0.77	5.26	384.30	3.95	13.14	1.21	18.68	468.29	4.42															
11.16	0.78	4.87	390.30	3.94	13.16	1.22	19.79	458.50	4.43															
11.18	0.79	5.26	388.41	3.94	13.18	1.19	21.89	453.05	4.44															
11.20	0.80	5.53	391.22	3.94	13.20	1.18	21.35	459.84	4.45															
11.22	0.84	5.92	395.20	3.96	13.22	1.22	20.57	463.45	4.46															
11.24	0.84	6.28	397.77	3.97	13.24	1.23	20.39	468.96	4.48															
11.26	0.85	6.28	398.26	3.97	13.26	1.27	19.07	473.00	4.49															
11.28	0.83	6.28	395.94	3.97	13.28	1.29	21.23	465.72	4.49															
11.30	0.85	7.66	393.67	3.98	13.30	1.26	22.73	466.45	4.50															
11.32	0.82	8.09	392.45	3.98	13.32	1.26	21.02	470.07	4.51															
11.34	0.83	7.97	393.79	4.00	13.34	1.21	19.79	459.41	4.52															
11.36	0.85	8.00	399.98	3.99	13.36	1.14	19.79	437.74	4.53															
11.38	0.91	7.49	411.91	4.01	13.38	1.08	20.84	419.81	4.52															
11.40	1.40	8.54	465.29	4.01	13.40	1.01	21.92	410.26	4.53															
11.42	2.11	10.22	482.86	4.02	13.42	0.98	20.87	410.44	4.54															
11.44	2.31	14.55	237.27	4.00	13.44	1.00	19.82	425.75	4.55															
11.46	1.78	16.48	8.94	4.00	13.46	1.09	17.44	451.15	4.56															
11.48	1.40	27.36	7.96	4.01	13.48	1.17	15.79	471.05	4.57															
11.50	0.94	40.33	5.88	4.03	13.50	1.23	14.97	488.74	4.58															
11.52	0.82	25.92	89.31	4.03	13.52	1.33	13.86	503.24	4.58															
11.54	0.98	12.81	202.50	4.04	13.54	1.46	13.62	512.00	4.59															
11.56	1.28	12.57	253.61	4.05	13.56	1.52	13.77	497.31	4.59															
11.58	1.28	14.58	233.72	4.05	13.58	1.51	15.12	472.21	4.60															
11.60	1.06	18.40	185.05	4.05	13.60	1.43	19.66	455.37	4.62															
11.62	0.85	17.14	204.58	4.06	13.62	1.35	24.36	438.91	4.65															
11.64	0.81	9.71	261.51	4.06	13.64	1.33	27.00	433.34	4.66															
11.66	0.84	6.43	289.73	4.07	13.66	1.31	27.54	430.58	4.68															
11.68	0.90	6.85	312.32	4.07	13.68	1.26	30.07	429.48	4.68															
11.70	1.08	6.58	344.03	4.06	13.70	1.25	30.96	439.40	4.69															
11.72	1.38	8.12	362.02	4.07	13.72	1.27	29.98	451.46	4.70															
11.74	1.46	10.31	293.46	4.07	13.74	1.27	27.75	450.23	4.69															
11.76	1.25	8.75	276.20	4.08	13.76	1.29	26.64	448.40	4.71															
11.78	1.02	8.33	269.34	4.08	13.78	1.27	27.51	432.91	4.72															
11.80	0.88	11.33	291.63	4.10	13.80	1.24	29.64	420.24	4.73															
11.82	0.88	9.83	368.39	4.10	13.82	1.20	31.90	408.30	4.73															
11.84	0.88	10.76	367.59	4.11	13.84	1.16	33.48	401.02	4.73															
11.86	0.88	13.05	377.75	4.12	13.86	1.14	31.41	405.61	4.72															
11.88	0.88	14.91	386.81	4.13	13.88	1.13	31.50	416.75	4.73															
11.90	0.90	14.34	395.20	4.12	13.90	1.13	31.78	502.45	4.74															
11.92	0.90	10.29	374.08	4.12	13.92	1.14	30.20	502.82	4.75															
11.94	0.89	10.20	386.88	4.13	13.94	1.16	29.68	504.16	4.75															
11.96	0.92	9.05	397.10	4.15	13.96	1.20	29.35	508.39	4.76															
11.98	0.91	9.29	402.42	4.15	13.98	1.21	28.51	506.00	4.77															
12.00	0.90	9.14	408.24	4.15	14.00	1.23	27.00	501.90	4.77															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
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Tel: 3470442799
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COMMITTENTE:		PROVA N°:	CPTU 10
CANTIERE:	Via Giovanni Acquaderni - Loc. Quartiere Bussecchio (FC)	PROF. FALDA (m da p.c.):	3.30
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	196/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	03/09/2024	OPERATORE:	Zanirato



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
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COMMITTENTE:		PROVA N°:	CPTU 10
CANTIERE:	Via Giovanni Acquaderni - Loc. Quartiere Bussecchio (FC)	PROF. FALDA (m da p.c.):	3.30
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	196/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	03/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Giovanni Acquaderni - Loc. Quartiere Bussecchio (FC)
Lat.: 44.208570°
Long.: 12.063331°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
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COMMITTENTE:
CANTIERE: Via Europa - Quartiere Ospedaletto - Forlì (FC)
COMMESSA: C054/24
RDP N°: 208/24
DATA: 12/09/2024

PROVA N°: CPTU 11
PROF. FALDA (m da p.c.): 2.85
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.38	19.97	3.43	0.67	2.02	1.11	71.62	2.14	0.38	4.02	0.91	34.06	43.34	0.90	6.02	1.62	64.24	161.97	1.29	8.02	1.69	51.99	306.56	1.69
0.04	2.08	22.35	4.65	0.70	2.04	1.07	67.11	0.92	0.41	4.04	0.92	34.66	43.46	0.90	6.04	1.64	63.03	162.16	1.29	8.04	1.69	47.60	313.97	1.69
0.06	2.64	34.08	5.39	0.77	2.06	1.03	63.81	0.31	0.39	4.06	0.93	33.43	43.58	0.94	6.06	1.61	64.90	162.34	1.30	8.06	1.69	45.79	321.56	1.69
0.08	2.87	41.65	5.51	0.81	2.08	1.02	60.02	0.80	0.38	4.08	0.94	33.07	44.50	0.94	6.08	1.56	67.12	163.14	1.30	8.08	1.72	42.27	327.25	1.71
0.10	3.05	45.20	5.75	0.58	2.10	0.97	57.44	1.84	0.41	4.10	1.00	31.36	44.87	0.94	6.10	1.56	64.54	191.36	1.29	8.10	1.98	35.71	518.43	1.70
0.12	3.23	48.54	5.94	0.72	2.12	0.92	53.92	2.69	0.40	4.12	1.06	32.96	46.22	0.94	6.12	1.62	61.44	194.91	1.29	8.12	1.94	39.58	526.08	1.71
0.14	3.35	49.47	6.12	0.64	2.14	0.88	45.75	2.69	0.42	4.14	1.10	33.71	47.87	0.95	6.14	1.65	58.77	196.25	1.33	8.14	1.85	39.28	524.98	1.72
0.16	3.60	30.11	4.35	0.81	2.16	0.86	43.68	0.06	0.40	4.16	1.12	34.56	48.79	0.95	6.16	1.65	58.41	197.66	1.34	8.16	1.75	38.98	519.04	1.72
0.18	4.13	30.98	5.14	0.73	2.18	0.82	41.88	0.73	0.42	4.18	1.13	37.29	50.07	0.95	6.18	1.64	58.77	197.29	1.34	8.18	1.69	38.26	511.02	1.73
0.20	4.79	32.49	5.63	0.70	2.20	0.78	41.10	1.71	0.42	4.20	1.16	38.10	50.62	0.94	6.20	1.66	58.98	197.60	1.35	8.20	1.62	39.22	503.61	1.74
0.22	5.47	35.58	6.24	0.73	2.22	0.72	39.05	2.02	0.40	4.22	1.17	40.84	52.40	0.94	6.22	1.69	60.48	197.97	1.37	8.22	1.51	40.34	498.59	1.76
0.24	6.12	39.49	6.92	0.76	2.24	0.70	38.18	2.26	0.42	4.24	1.15	43.31	53.26	0.95	6.24	1.72	63.91	198.09	1.36	8.24	1.44	37.57	493.94	1.76
0.26	6.65	41.42	7.28	0.82	2.26	0.67	35.36	2.51	0.42	4.26	1.15	45.02	54.97	0.97	6.26	1.68	67.64	198.70	1.35	8.26	1.39	32.52	488.49	1.76
0.28	6.73	47.16	7.35	0.76	2.28	0.64	32.47	2.69	0.44	4.28	1.15	46.31	55.77	0.95	6.28	1.68	70.64	200.42	1.35	8.28	1.31	30.17	482.19	1.76
0.30	6.82	56.51	7.65	0.76	2.30	0.61	29.89	2.75	0.44	4.30	1.16	47.30	56.75	0.97	6.30	1.66	72.93	200.42	1.36	8.30	1.27	28.79	481.45	1.76
0.32	6.97	65.50	7.90	0.68	2.32	0.57	25.83	3.12	0.43	4.32	1.17	47.76	57.91	0.98	6.32	1.64	75.73	200.84	1.35	8.32	1.28	26.12	483.84	1.76
0.34	6.91	67.48	8.02	0.77	2.34	0.57	22.28	3.61	0.45	4.34	1.13	48.15	58.70	0.98	6.34	1.59	77.25	201.21	1.36	8.34	1.33	24.67	488.74	1.76
0.36	7.03	64.11	8.39	0.76	2.36	0.60	19.52	4.35	0.42	4.36	1.15	47.79	60.60	0.97	6.36	1.57	77.21	201.15	1.38	8.36	1.37	22.78	491.86	1.77
0.38	7.24	59.86	8.94	0.74	2.38	0.58	16.57	5.51	0.42	4.38	1.14	46.97	61.46	0.99	6.38	1.57	77.00	201.58	1.38	8.38	1.52	20.13	498.78	1.77
0.40	7.39	56.43	9.30	0.75	2.40	0.60	14.17	6.31	0.45	4.40	1.13	48.21	63.60	0.99	6.40	1.57	78.34	201.64	1.38	8.40	1.58	20.52	501.35	1.78
0.42	7.62	55.86	9.86	0.72	2.42	0.60	13.30	6.92	0.43	4.42	1.15	47.15	65.62	0.99	6.42	1.56	81.62	201.46	1.39	8.42	1.62	20.68	502.20	1.78
0.44	7.76	57.93	10.28	0.73	2.44	0.58	12.82	7.90	0.46	4.44	1.17	45.95	67.34	0.99	6.44	1.57	82.93	201.09	1.40	8.44	1.66	22.24	504.04	1.78
0.46	7.62	65.23	10.28	0.78	2.46	0.60	11.80	8.75	0.45	4.46	1.23	44.39	68.68	0.99	6.46	1.61	84.09	201.09	1.39	8.46	1.65	24.61	502.26	1.78
0.48	7.60	66.73	10.41	0.78	2.48	0.63	11.74	9.79	0.46	4.48	1.27	43.48	69.97	0.98	6.48	1.60	88.41	201.40	1.39	8.48	1.60	29.09	498.41	1.79
0.50	7.49	61.12	11.08	0.74	2.50	0.68	12.23	11.14	0.46	4.50	1.30	43.06	70.46	0.99	6.50	1.61	91.05	202.07	1.39	8.50	1.52	33.18	491.98	1.79
0.52	7.15	61.50	10.77	0.72	2.52	0.74	11.90	12.12	0.43	4.52	1.31	45.05	71.68	0.99	6.52	1.63	92.51	202.31	1.40	8.52	1.43	35.83	486.47	1.81
0.54	6.69	61.68	10.35	0.77	2.54	0.77	11.72	12.37	0.45	4.54	1.32	47.72	74.50	0.98	6.54	1.62	92.06	202.62	1.43	8.54	1.35	36.97	482.13	1.80
0.56	6.20	63.12	10.04	0.74	2.56	0.81	12.50	13.34	0.45	4.56	1.36	50.73	76.76	0.98	6.56	1.64	91.48	203.05	1.41	8.56	1.32	35.17	480.53	1.82
0.58	5.95	64.28	10.22	0.70	2.58	1.00	12.48	16.53	0.46	4.58	1.36	51.18	77.19	0.98	6.58	1.66	91.44	203.72	1.42	8.58	1.33	33.52	482.25	1.82
0.60	5.84	65.87	10.41	0.76	2.60	1.53	13.35	19.40	0.46	4.60	1.42	51.30	77.99	0.99	6.60	1.66	91.47	204.21	1.45	8.60	1.36	31.14	486.53	1.84
0.62	5.71	64.78	10.65	0.69	2.62	2.06	16.75	14.08	0.47	4.62	1.41	53.35	79.03	1.04	6.62	1.70	89.83	204.52	1.44	8.62	1.43	28.35	490.08	1.81
0.64	5.43	62.82	10.65	0.70	2.64	2.29	18.32	10.59	0.46	4.64	1.42	54.13	80.93	1.03	6.64	1.73	90.07	205.50	1.45	8.64	1.44	25.49	489.96	1.81
0.66	5.12	62.45	10.47	0.72	2.66	2.29	20.16	7.22	0.45	4.66	1.44	52.11	81.72	1.03	6.66	1.76	91.47	206.84	1.45	8.66	1.34	22.78	480.78	1.84
0.68	4.71	59.53	10.22	0.69	2.68	1.91	19.68	4.65	0.53	4.68	1.45	52.57	83.62	1.03	6.68	1.77	93.96	208.44	1.47	8.68	1.20	20.89	471.05	1.83
0.70	4.53	55.38	10.35	0.69	2.70	1.60	17.76	2.88	0.52	4.70	1.46	54.40	87.84	1.03	6.70	1.79	94.39	210.03	1.47	8.70	1.15	18.97	467.74	1.83
0.72	4.35	53.12	10.41	0.70	2.72	1.43	19.05	2.20	0.54	4.72	1.54	52.12	88.33	1.03	6.72	1.86	92.68	210.58	1.46	8.72	1.17	19.36	468.60	1.84
0.74	4.26	51.19	10.71	0.71	2.74	1.21	26.96	4.04	0.54	4.74	1.54	52.48	89.56	1.02	6.74	1.90	95.08	212.97	1.46	8.74	1.19	18.07	470.80	1.84
0.76	4.11	48.99	10.65	0.72	2.76	1.20	27.36	13.28	0.55	4.76	1.55	53.26	90.60	1.03	6.76	1.91	96.15	216.76	1.48	8.76	1.22	18.40	472.09	1.83
0.78	4.18	44.56	11.08	0.71	2.78	1.04	25.20	11.02	0.54	4.78	1.52	55.24	91.45	1.02	6.78	1.97	95.69	217.19	1.49	8.78	1.19	17.77	470.62	1.84
0.80	4.18	38.60	11.39	0.71	2.80	0.89	25.20	11.32	0.54	4.80	1.32	54.94	90.35	1.04	6.80	2.07	95.35	218.78	1.50	8.80	1.19	17.13	469.64	1.84
0.82	4.12	37.39	11.45	0.73	2.82	0.85	25.14	13.47	0.55	4.82	1.46	56.75	91.39	1.04	6.82	2.10	97.00	221.54	1.49	8.82	1.20	16.96	470.31	1.85
0.84	4.14	36.31	11.69	0.76	2.84	0.86	26.44	17.69	0.56	4.84	1.34	58.34	90.90	1.06	6.84	2.13	101.65	226.00	1.51	8.84	1.29	15.36	475.09	1.84
0.86	4.11	34.83	11.88	0.73	2.86	0.87	24.06	19.77	0.57	4.86	1.23	60.09	89.92	1.04	6.86	2.13	102.44	229.25	1.50	8.86	1.36	15.36	478.64	1.86
0.88	4.21	32.84	12.12	0.71	2.88	0.86	21.30	20.20	0.55	4.88	1.10	58.19	89.31	1.06	6.88	2.14	103.26	230.41	1.50	8.88	1.39	15.45	479.80	1.86
0.90	4.34	29.77	12.49	0.74	2.90	0.86	21.84	20.75	0.57	4.90	1.04	51.25	89.01	1.06	6.90	2.15	106.94	231.21	1.51	8.90	1.33	14.73	453.17	1.87
0.92	4.41	28.38	12.55	0.72	2.92	0.86	20.52	21.06	0.57	4.92	1.02	47.73	89.01	1.06	6.92	2.18	109.65	233.29	1.51	8.92	1.28	15.33	450.36	1.85
0.94	4.40	28.71	12.61	0.72	2.94	0.86	20.55	21.06	0.55	4.94	1.01	44.06	89.43	1.06	6.94	2.12	112.05	238.06	1.51	8.94	1.24	18.88	444.85	1.86
0.96	4.46	30.97	12.79	0.69	2.96	0.87	22.63	21.18	0.56	4.96	1.00	38.50	90.17	1.06	6.96	2.11	106.00	239.04	1.51	8.96	1.18	22.73	442.40	1.87
0.98	4.54	36.98	12.92	0.67	2.98	0.89	24.11	21.24	0.56	4.98	1.02	32.94	90.96	1.06	6.98	2.18	103.13	239.29	1.52	8.98	1.17	22.94	439.89	1.86
1.00	4.58	42.36	12.92	0.70	3.00	0.90	26.76	21.49	0.57	5.00	1.10	26.96	92.19	1.06	7.00	2.21	104.84	241.86	1.53	9.00	1.12	24.15	436.46	1.85
1.02	4.55	47.92	12.86	0.68	3.02	0.92	28.71	21.36	0.57	5.02	1.14	25.85	93.05	1.06	7.02	2.19	105.54	246.69	1.54	9.02	1.05	24.48	430.71	1.87
1.04	4.53	50.56	12.79	0.68	3.04	0.92	30.52	21.30	0.58	5.04	1.14	24.76	93.66	1.06	7.04	2.23	99.20	247.98	1.54	9.04	1.05	25.29	428.26	1.85
1.06	4.49	51.19	12.79	0.68	3.06	0.90	32.78	21.49	0.57	5.06	1.14	24.46	94.21	1.06	7.06	2.24	94.36	247.55	1.52	9.06	1.02	24.93	424.40	1.85
1.08	4.62	49.20	12.92	0.68	3.08	0.91	35.63	22.16	0.55	5.08	1.18	23.44	95.00	1.07	7.08	2.19	94.42	248.10	1.53	9.08	1.01	25.41	421.77	1.87
1.10	4.68	46.97	12.98	0.70	3.10	0.94	34.82	22.22	0.56	5.10	1.21	25.25	95.86	1.06	7.10	2.21	95.75	264.75	1.55	9.10	1.13	20.78	331.84	1.89
1.12	4.71	46.69	12.98	0.69	3.12	0.95	37.66	20.38	0.56	5.12	1.43	26.76	106.88	1.06	7.12	2.26	96.63	267.87	1.53	9.12	1.14	22.37	334.48	1.87
1.14	4.98	37.05	7.84	0.67	3.14	0.95	38.66	20.63	0.56	5.14	1.31	31.69	102.04	1.07	7.14	2.28	94.87	268.55	1.53	9.14	1.18	23.12	339.07	1.89
1.16	5.22	36.63	7.77	0.67	3.16	0.92	39.92	20.94	0.57	5.16	1.24	30.19	109.51	1.08	7.16	2.32	92.31	268.85	1.53	9.16	1.22	23.15	342.50	1.88
1.18	5.71	32.39	7.96	0.67	3.18	0.91	41.03	21.30	0.57	5.18	1.22	29.64	110.00	1.08	7.18	2.24	93.22	268.06	1.54	9.18	1.30	22.07	344.58	1.91
1.20	5.80	32.75	7.90	0.66	3.20	0.90	40.43	21.73	0.56	5.20	1.14	31.60	110.37	1.10	7.20	2.24	91.85	268.36	1.53	9.20	1.30	24.75	345.00	1.92
1.22	5.49	38.92	7.28	0.65	3.22	0.94	40.31	22.22	0.57	5.22	1.09	33.76	111.17	1.08	7.22	2.21	90.48	267.75	1.56	9.22	1.32	28.23	346.60	1.92
1.24	5.21	44.42	6.73	0.60	3.24	0.92	40.34	22.34	0.57	5.24	1.09	34.61	112.88	1.10	7.24	2.14	87.68	269.22	1.54	9.24	1.37	28.53	349.47	1.91
1.26	4.86	47.48	6.18	0.60	3.26	0.90	39.74	23.02	0.56	5.26	1.14	32.08	116.25	1.10	7.26	2.11	86.34	270.02	1.56	9.26	1.40	29.89	351.98	1.93
1.28	4.49	55.36	5.51	0.60	3.28	0.91	37.87	22.96	0.55	5.28	1.15	31.57	118.63	1.10	7.28	2.09	88.35	270.94	1.56	9.28	1.31	30.82	352.04	1.93
1.30	4.21	57.37	5.08	0.61	3.30	0.90	38.48	23.38	0.53	5.30	1.15	32.74	122.74	1.10	7.30	2.08	87.40	271.61	1.57	9.30	1.29	31.03	350.76	1.94
1.32	3.95	58.69	4.71	0.58	3.32	0.89	38.81	22.89	0.53	5.32	1.18	29.91	126.35	1.08	7.32	2.01	85.42	270.94	1.58	9.32	1.26	32.44	348.62	1.93
1.34	3.60	60.77	4.22	0.57	3.34	0.88	39.32	22.83	0.54	5.34	1.20	26.10	128.31	1.11	7.34	2.02	82.01	272.71	1.56	9.34	1.22	33.07	347.76	1.92
1.36	3.53	61.97	3.92	0.55	3.36	0.87	40.34	23.08	0.54	5.36	1.24	23.36	132.53	1.10	7.36	2.12	77.30	274.42	1.57	9.36	1.17	34.51	346.23	1.92
1.38	3.26	66.11	3.37	0.57	3.38	0.86	40.19	23.32	0.56	5.38	1.28	23.72	138.59	1.11	7.38	2.14	76.75	276.20	1.58	9.38	1.16	36.77	347.21	1.94
1.40	3.19	64.34	3.31	0.52	3.40	0.87	41.51	24.36	0.55	5.40	1.35	26.22	141.96	1.11	7.40	2.18	72.07	277.30	1.59	9.40	1.21	37.64	348.68	1.93
1.42	2.96	66.92	2.75	0.55	3.42	0.87	42.84	24.67	0.56	5.42	1.37	26.19	143.85	1.13	7.42	2.19	70.78	278.16	1.58	9.42	1.32	38.27	352.66	1.94
1.44	2.65	72.81	2.26	0.53	3.44	0.85	41.70	24.79	0.58	5.44	1.40	27.06	144.40	1.13	7.44	2.15	72.28	278.16	1.59	9.44	1.37	38.03	353.76	1.94
1.46	2.66	72.93	2.26	0.54	3.46	0.85	40.70	24.98	0.59	5.46	1.41	28.80	144.47	1.13	7.46	2.16	73.03	278.46	1.59	9.46	1.36	38.42	352.72	1.95
1.48	2.56	74.79	1.96	0.49	3.48	0.87	39.53	25.34	0.56	5.48	1.39	33.52	144.16	1.14	7.48	2.26	76.56	281.59	1.59	9.48	1.33	36.80	348.49	1.95
1.50	2.43	76.16	1.53	0.51	3.50	0.86	38.54	25.95	0.56	5.50	1.36	39.39	143.85	1.12	7.50	2.31	80.18	285.87	1.59	9.50	1.29	35.29	343.17	1.96
1.52	2.27	76.43	0.92	0.48	3.52	0.88	38.27	27.24	0.58	5.52	1.32	44.89	143.92	1.16	7.52	2.45	76.71	287.28	1.61	9.52	1.25	35.05	337.17	1.95
1.54	2.17	83.52	0.80	0.48	3.54	0.92	35.26	27.67	0.59	5.54	1.28	49.70	143.92	1.15	7.54	2.52	82.28	288.99	1.59	9.54	1.13	36.40	331.84	1.96
1.56	2.23	81.66	0.80	0.48	3.56	0.89	34.00	28.28	0.56	5.56	1.25	53.40	143.73	1.15	7.56	2.56	86.48	290.65	1.59	9.56	1.07	34.60	328.42	1.97
1.58	2.13	79.95	0.55	0.47	3.58	0.87	32.65	29.32	0.58	5.58	1.25	54.42	143.92	1.16	7.58	2.56	90.10	292.05	1.58	9.58	0.98	34.15	325.78	1.96
1.60	2.08	84.55	0.37	0.49	3.60	0.88	32.05	30.24	0.58	5.60	1.26	54.57	144.34	1.17	7.60	2.59	93.87	294.93	1.60	9.60	0.96	32.10	325.91	1.98
1.62	2.06	87.35	0.24	0.49	3.62	0.92	31.81	31.77	0.59	5.62	1.26	54.45	145.08	1.19	7.62	2.72	91.41	296.22	1.61	9.62	1.03	26.84	330.86	1.97
1.64	1.96	87.80		0.46	3.64	0.95	31.27	33.42	0.67	5.64	1.30	53.43	146.00	1.20	7.64	2.74	99.02	296.95	1.63	9.64	1.15	23.29	335.95	1.96
1.66	1.89	83.69	0.31	0.48	3.66	0.97	30.88	33.61	0.64	5.66	1.38	51.98	146.98	1.19	7.66	2.67	108.66	296.71	1.62	9.66	1.28	20.68	340.23	1.97
1.68	1.84	79.80	0.43	0.48	3.68	0.97	30.79	33.85	0.66	5.68	1.48	51.77	147.89	1.23	7.68	2.53	113.74	294.99	1.63	9.68	1.33	20.95	338.88	1.98
1.70	1.83	81.53	0.67	0.43	3.70	0.98	33.20	34.16	0.65	5.70	1.58	55.41	149.12	1.24	7.70	2.39	115.42	291.99	1.64	9.70	1.27	24.40	334.41	1.97
1.72	1.80	81.80	0.86	0.48	3.72	0.98	34.58	34.77	0.67	5.72	1.65	57.93	150.16	1.23	7.72	2.26	114.02	290.16	1.63	9.72	1.26	27.77	331.97	1.99
1.74	1.76	81.62	1.04	0.46	3.74	0.97	35.00	34.71	0.67	5.74	1.71	58.93	149.18	1.24	7.74	2.18	117.21	290.34	1.63	9.74	1.20	30.00	328.84	1.99
1.76	1.71	86.12	1.29	0.46	3.76	0.94	36.87	34.40	0.67	5.76	1.72	62.38	153.16	1.25	7.76	2.09	119.71	291.01	1.64	9.76	1.15	30.36	324.93	2.00
1.78	1.72	86.88	1.47	0.45	3.78	0.91	38.85	34.34	0.69	5.78	1.77	63.74	154.38	1.25	7.78	2.03	118.18	290.34	1.65	9.78	1.06	35.23	320.46	1.99
1.80	1.73	86.85	1.59	0.45	3.80	0.87	41.98	34.52	0.71	5.80	1.76	69.48	156.16	1.25	7.80	1.99	114.56	291.81	1.65	9.80	1.01	38.44	318.87	1.99
1.82	1.68	85.73	1.90	0.41	3.82	0.87	42.59	33.12	0.72	5.82	1.72	72.66	156.34	1.26	7.82	1.96	107.10	291.20	1.65	9.82	1.01	35.77	320.15	1.97
1.84	1.63	86.09	2.20	0.42	3.84	0.86	42.17	40.71	0.75	5.84	1.71	73.59	156.59	1.25	7.84	1.87	104.48	292.54	1.66	9.84	1.15	31.08	325.72	1.98
1.86	1.55	87.34	2.45	0.38	3.86	0.89	40.79	41.44	0.75	5.86	1.60	72.66	154.14	1.28	7.86	1.80	100.43	294.63	1.66	9.86	1.25	28.31	329.58	1.99
1.88	1.50	87.47	2.45	0.41	3.88	0.91	40.06	41.63	0.77	5.88	1.58	71.73	157.93	1.28	7.88	1.80	91.85	293.71	1.67	9.88	1.23	25.88	328.60	1.99
1.90	1.46	88.62	2.69	0.39	3.90	0.90	39.80	41.63	0.77	5.90	1.60	68.93	158.85	1.28	7.90	1.70	85.76	295.42	1.68	9.90	1.16	25.36	324.13	1.96
1.92	1.39	88.11	2.94	0.40	3.92	0.87	38.02	41.56	0.80	5.92	1.62	66.20	159.95	1.28	7.92	1.68	78.57	297.44	1.68	9.92	1.09	23.62	318.62	1.96
1.94	1.34	85.49	3.31	0.39	3.94	0.87	37.78	41.81	0.80	5.94	1.65	63.85	160.57	1.26	7.94	1.69	72.67	300.07	1.66	9.94	1.06	23.68	316.48	1.99
1.96	1.26	81.20	3.73	0.39	3.96	0.86	38.06	42.24	0.84	5.96	1.67	61.32	160.75	1.26	7.96	1.70	66.48	301.73	1.68	9.96	1.00	24.61	315.07	2.00
1.98	1.20	78.52	3.92	0.40	3.98	0.87	37.34	42.91	0.85	5.98	1.67	61.29	160.69	1.29	7.98	1.73	57.25	303.56	1.68	9.98	1.01	23.38	314.46	2.02
2.00	1.17	74.84	3.86	0.39	4.00	0.90	35.50	43.16	0.89	6.00	1.65	61.68	161.06	1.28	8.00	1.71	53.94	304.48	1.67	10.00	1.03	22.54	315.32	2.04

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COMMITTENTE:
CANTIERE: Via Europa - Quartiere Ospedaletto - Forlì (FC)
COMMESSA: C054/24
RDP N°: 208/24
DATA: 12/09/2024

PROVA N°: CPTU 11
PROF. FALDA (m da p.c.): 2.85
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

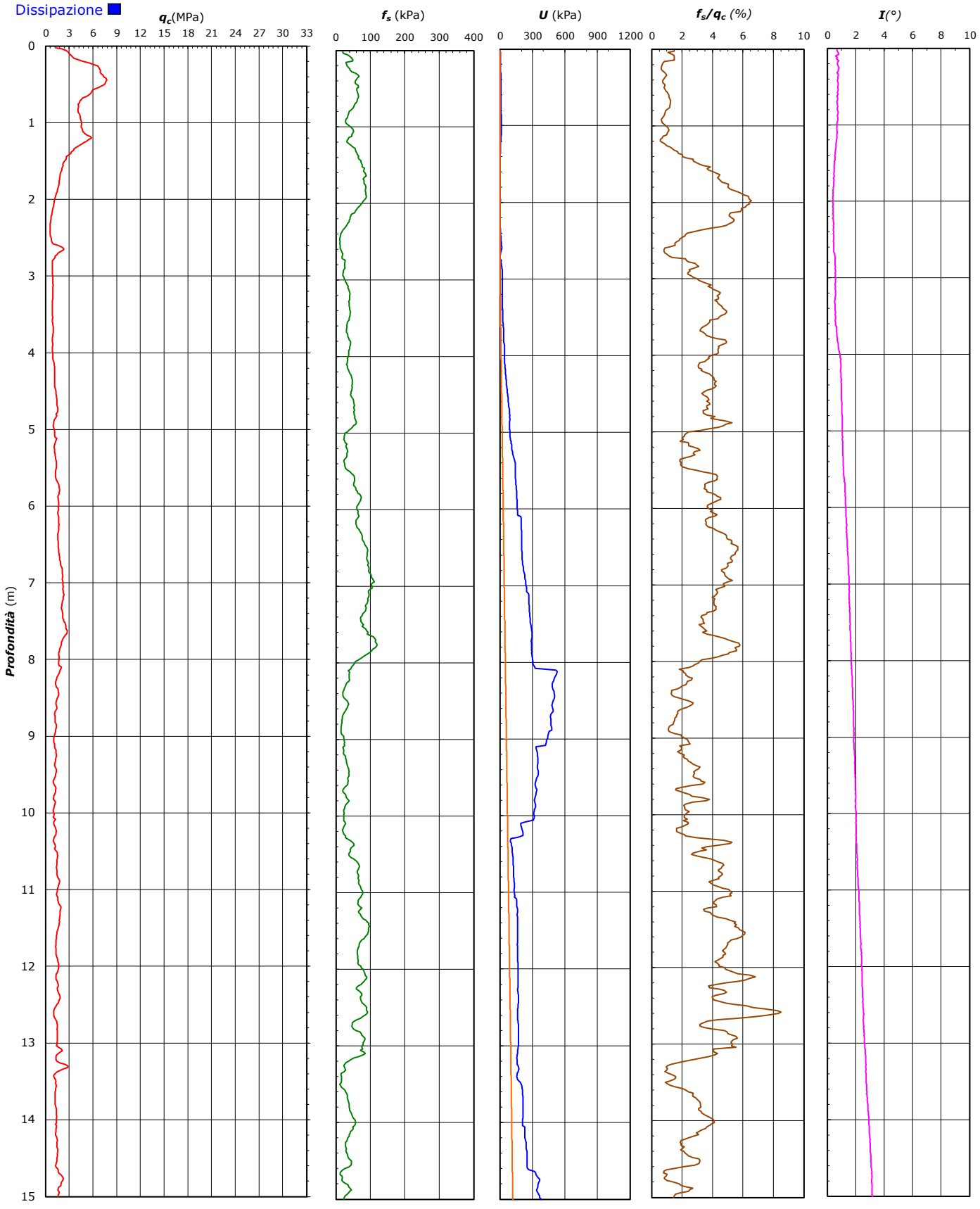
prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.07	22.90	316.42	2.03	12.02	1.66	80.58	168.46	2.44	14.02	1.38	56.79	210.76	2.92										
10.04	1.06	22.81	314.21	2.02	12.04	1.63	83.16	168.34	2.42	14.04	1.38	54.32	210.27	2.93										
10.06	0.97	22.72	310.30	2.02	12.06	1.55	84.14	167.54	2.44	14.06	1.28	49.17	228.21	2.93										
10.08	1.28	26.77	232.43	2.02	12.08	1.52	85.85	168.22	2.44	14.08	1.40	50.88	230.29	2.95										
10.10	1.17	28.21	191.30	2.03	12.10	1.40	90.29	167.97	2.44	14.10	1.36	48.24	229.86	2.95										
10.12	1.05	25.27	193.50	2.02	12.12	1.31	89.50	167.73	2.45	14.12	1.33	43.28	229.37	2.95										
10.14	1.02	22.80	197.17	2.02	12.14	1.31	84.84	167.67	2.44	14.14	1.31	40.99	229.49	2.95										
10.16	1.08	21.18	201.95	2.03	12.16	1.32	81.22	167.73	2.44	14.16	1.31	38.55	229.62	2.96										
10.18	1.18	19.49	205.13	2.03	12.18	1.36	76.99	168.22	2.45	14.18	1.26	38.94	229.49	2.97										
10.20	1.25	20.57	209.29	2.04	12.20	1.47	72.19	169.75	2.45	14.20	1.25	35.04	230.60	2.98										
10.22	1.31	21.42	211.99	2.05	12.22	1.54	64.79	169.56	2.46	14.22	1.36	32.99	234.82	2.98										
10.24	1.36	24.81	212.97	2.05	12.24	1.60	59.74	168.46	2.45	14.24	1.43	31.61	239.59	2.99										
10.26	1.32	28.09	211.68	2.05	12.26	1.59	60.10	164.85	2.46	14.26	1.49	28.84	242.47	3.00										
10.28	1.29	28.84	167.54	2.01	12.28	1.51	66.90	164.18	2.47	14.28	1.48	27.91	242.78	3.00										
10.30	1.18	34.64	99.84	2.03	12.30	1.50	71.56	166.01	2.48	14.30	1.44	27.88	242.84	3.01										
10.32	1.07	41.86	95.43	2.04	12.32	1.53	75.31	168.03	2.46	14.32	1.43	27.73	242.72	3.00										
10.34	1.01	48.32	96.84	2.03	12.34	1.58	75.25	169.81	2.46	14.34	1.41	30.40	243.82	3.01										
10.36	0.98	51.87	104.25	2.03	12.36	1.72	71.97	170.79	2.48	14.36	1.44	29.44	245.90	3.01										
10.38	1.03	52.89	106.94	2.04	12.38	1.79	71.16	171.03	2.49	14.38	1.53	29.17	248.84	3.01										
10.40	1.13	48.41	111.17	2.05	12.40	1.82	72.72	172.93	2.49	14.40	1.55	32.60	250.37	3.02										
10.42	1.22	44.02	112.76	2.05	12.42	1.82	74.23	172.20	2.50	14.42	1.55	33.98	250.61	3.03										
10.44	1.24	40.77	113.12	2.06	12.44	1.73	76.58	169.99	2.51	14.44	1.52	35.00	249.94	3.05										
10.46	1.17	42.04	113.98	2.06	12.46	1.68	81.91	169.32	2.49	14.46	1.51	36.39	249.39	3.05										
10.48	1.22	38.58	115.14	2.07	12.48	1.60	86.84	167.97	2.50	14.48	1.47	39.99	249.02	3.07										
10.50	1.38	37.80	117.78	2.08	12.50	1.44	89.61	166.56	2.51	14.50	1.44	44.68	249.39	3.06										
10.52	1.49	39.09	119.49	2.08	12.52	1.32	87.84	164.30	2.51	14.52	1.44	45.77	250.67	3.07										
10.54	1.51	43.87	120.41	2.09	12.54	1.21	90.30	163.08	2.52	14.54	1.42	44.98	251.65	3.06										
10.56	1.52	52.37	120.71	2.09	12.56	1.11	91.79	162.10	2.54	14.56	1.40	43.60	252.33	3.08										
10.58	1.49	58.18	121.45	2.10	12.58	1.05	89.11	161.85	2.54	14.58	1.31	36.96	251.41	3.08										
10.60	1.48	61.99	122.06	2.12	12.60	1.02	84.85	161.85	2.55	14.60	1.24	26.58	253.24	3.09										
10.62	1.46	64.28	123.16	2.11	12.62	1.03	78.00	162.40	2.56	14.62	1.31	19.88	267.32	3.09										
10.64	1.45	67.40	123.47	2.11	12.64	1.04	71.45	163.38	2.53	14.64	1.52	14.86	322.78	3.10										
10.66	1.45	68.97	124.08	2.11	12.66	1.08	60.35	164.67	2.54	14.66	1.60	13.11	331.78	3.11										
10.68	1.44	66.50	124.63	2.12	12.68	1.19	51.60	166.50	2.53	14.68	1.63	12.78	335.15	3.13										
10.70	1.41	64.24	125.43	2.11	12.70	1.30	47.81	168.28	2.53	14.70	1.74	17.80	340.35	3.11										
10.72	1.40	61.81	125.49	2.11	12.72	1.41	47.54	170.30	2.53	14.72	1.95	18.55	352.17	3.14										
10.74	1.43	62.50	125.92	2.11	12.74	1.45	45.95	170.48	2.55	14.74	2.13	17.89	366.12	3.15										
10.76	1.41	64.96	126.04	2.12	12.76	1.50	47.63	170.54	2.55	14.76	2.21	18.44	367.96	3.13										
10.78	1.42	65.98	127.39	2.13	12.78	1.51	51.63	170.30	2.56	14.78	2.22	22.43	357.80	3.12										
10.80	1.44	65.41	128.06	2.13	12.80	1.49	58.06	169.81	2.55	14.80	2.11	29.74	352.90	3.11										
10.82	1.49	65.23	128.61	2.15	12.82	1.46	69.55	169.81	2.57	14.82	2.02	35.82	351.74	3.12										
10.84	1.52	67.18	129.59	2.15	12.84	1.48	73.52	170.36	2.58	14.84	1.95	37.32	350.58	3.13										
10.86	1.66	66.73	131.73	2.16	12.86	1.51	75.59	170.73	2.59	14.86	1.95	41.74	346.47	3.13										
10.88	1.77	66.76	133.02	2.16	12.88	1.51	79.92	170.36	2.61	14.88	1.69	45.86	339.80	3.13										
10.90	1.76	69.43	133.69	2.17	12.90	1.51	84.02	170.24	2.59	14.90	1.61	40.48	341.27	3.13										
10.92	1.75	70.96	133.51	2.17	12.92	1.50	84.39	170.18	2.60	14.92	1.58	37.77	350.45	3.13										
10.94	1.67	72.22	132.65	2.17	12.94	1.51	81.44	171.16	2.62	14.94	1.69	32.03	360.06	3.13										
10.96	1.60	74.45	131.79	2.20	12.96	1.52	79.58	171.95	2.61	14.96	1.70	26.83	365.21	3.15										
10.98	1.55	78.30	132.10	2.20	12.98	1.51	78.91	171.95	2.60	14.98	1.63	24.33	368.21	3.16										
11.00	1.51	78.39	132.77	2.22	13.00	1.46	77.20	170.60	2.61	15.00	1.63	23.07	383.08	3.16										
11.02	1.49	78.57	134.61	2.21	13.02	1.42	74.72	168.95	2.63															
11.04	1.45	74.44	136.51	2.21	13.04	1.40	77.78	167.42	2.63															
11.06	1.40	72.73	136.39	2.22	13.06	1.74	71.04	161.61	2.63															
11.08	1.43	67.09	151.44	2.23	13.08	2.01	81.66	165.03	2.66															
11.10	1.52	65.44	153.34	2.23	13.10	2.13	86.17	164.67	2.67															
11.12	1.54	64.90	153.46	2.23	13.12	1.84	79.72	159.46	2.66															
11.14	1.55	63.70	153.22	2.23	13.14	1.59	65.77	157.75	2.67															
11.16	1.58	64.42	153.22	2.24	13.16	1.37	51.43	156.95	2.70															
11.18	1.65	69.83	155.91	2.25	13.18	1.32	43.13	157.69	2.69															
11.20	1.77	75.63	159.16	2.25	13.20	1.30	36.82	157.44	2.70															
11.22	1.92	70.94	162.22	2.25	13.22	1.31	28.94	157.99	2.70															
11.24	1.93	65.89	162.83	2.27	13.24	1.43	25.66	161.06	2.70															
11.26	1.90	65.85	161.97	2.26	13.26	1.84	23.50	166.69	2.71															
11.28	1.84	70.87	161.36	2.27	13.28	2.47	25.72	173.36	2.72															
11.30	1.83	72.32	161.42	2.27	13.30	2.86	27.43	177.22	2.72															
11.32	1.83	74.87	162.59	2.27	13.32	2.79	28.88	172.81	2.71															
11.34	1.84	79.18	162.59	2.28	13.34	2.31	22.50	166.75	2.72															
11.36	1.77	87.07	162.10	2.28	13.36	1.78	15.50	160.81	2.71															
11.38	1.78	91.05	161.67	2.28	13.38	1.42	15.80	157.69	2.72															
11.40	1.74	95.62	162.34	2.29	13.40	1.23	16.46	156.71	2.72															
11.42	1.75	95.31	164.12	2.32	13.42	1.04	16.40	157.44	2.72															
11.44	1.74	97.08	164.48	2.29	13.44	1.05	16.55	164.36	2.73															
11.46	1.74	95.31	164.42	2.31	13.46	1.14	16.89	174.09	2.73															
11.48	1.67	95.28	164.05	2.29	13.48	1.26	14.99	187.19	2.73															
11.50	1.63	94.42	163.87	2.31	13.50	1.31	11.81	195.95	2.72															
11.52	1.56	93.29	163.50	2.31	13.52	1.29	13.88	202.38	2.73															
11.54	1.50	92.35	162.95	2.32	13.54	1.34	16.95	205.50	2.75															
11.56	1.45	88.88	162.52	2.32	13.56	1.36	21.07	206.97	2.75															
11.58	1.41	84.43	162.28	2.32	13.58	1.30	26.63	208.37	2.76															
11.60	1.38	81.26	161.97	2.33	13.60	1.26	28.05	209.35	2.77															
11.62	1.35	75.81	162.03	2.33	13.62	1.27	30.42	209.78	2.77															
11.64	1.36	71.06	161.61	2.34	13.64	1.22	33.43	211.19	2.78															
11.66	1.35	68.77	161.55	2.34	13.66	1.22	33.13	211.86	2.78															
11.68	1.34	66.94	161.42	2.34	13.68	1.23	33.40	212.23	2.80															
11.70	1.33	66.84	161.61	2.37	13.70	1.22	34.96	212.35	2.81															
11.72	1.32	64.77	161.61	2.36	13.72	1.20	36.26	212.78	2.81															
11.74	1.29	62.93	161.48	2.36	13.74	1.22	37.73	212.60	2.81															
11.76	1.32	62.36	161.97	2.36	13.76	1.21	38.42	212.29	2.84															
11.78	1.33	61.88	162.22	2.37	13.78	1.20	38.51	212.23	2.84															
11.80	1.31	62.36	162.46	2.38	13.80	1.22	39.20	212.66	2.85															
11.82	1.32	63.98	162.83	2.40	13.82	1.24	40.35	213.03	2.86															
11.84	1.35	63.32	162.95	2.39	13.84	1.30	40.17	213.76	2.85															
11.86	1.37	63.92	164.12	2.41	13.86	1.36	42.21	213.21	2.85															
11.88	1.43	64.94	164.79	2.41	13.88	1.37	44.67	212.72	2.87															
11.90	1.47	64.73	165.40	2.41	13.90	1.40	46.09	212.35	2.87															
11.92	1.54	64.01	166.32	2.41	13.92	1.39	48.43	211.68	2.88															
11.94	1.55	66.69	166.32	2.42	13.94	1.40	50.84	211.43	2.90															
11.96	1.64	72.55	167.97	2.41	13.96	1.41	54.20	211.01	2.91															
11.98	1.67	74.26	167.79	2.39	13.98	1.39	56.49	210.46	2.91															
12.00	1.67	79.33	168.52	2.43	14.00	1.40	57.33	209.90	2.91															

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Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Europa - Quartiere Ospedaletto - Forlì (FC)
COMMESSA: C054/24
RDP N°: 208/24
DATA: 12/09/2024

PROVA N°: CPTU 11
PROF. FALDA (m da p.c.): 2.85
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 11
CANTIERE:	Via Europa - Quartiere Ospedaletto - Forlì (FC)	PROF. FALDA (m da p.c.):	2.85
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	208/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	12/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Europa - Quartiere Ospedaletto - Forlì (FC)
Lat.: 44.232640°
Long.: 12.064170°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Baldassarre Carnaccini, Quartiere Bussecchio-Forlì (FC
COMMESSA: C054/24
RDP N°: 200/24
DATA: 03/09/2024

PROVA N°: CPTU 12
PROF. FALDA (m da p.c.): 4.85
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.67	20.59	46.03	0.71	2.02	1.80	93.34	25.95	0.43	4.02	2.76	86.53	351.25	1.49	6.02	1.70	22.35	340.84	2.45	8.02	1.06	6.07	191.48	3.25
0.04	2.21	25.64	43.89	0.68	2.04	1.63	89.69	27.30	0.43	4.04	2.62	90.76	349.96	1.49	6.04	1.79	21.15	353.02	2.44	8.04	1.03	5.47	185.85	3.25
0.06	2.03	37.36	36.85	0.63	2.06	1.55	78.68	28.46	0.45	4.06	2.81	89.06	388.65	1.50	6.06	1.81	19.41	364.59	2.44	8.06	1.19	12.42	179.30	3.29
0.08	1.99	44.18	34.28	0.62	2.08	1.50	71.77	29.81	0.45	4.08	2.84	89.91	461.99	1.51	6.08	2.07	34.92	260.28	2.48	8.08	1.16	11.97	189.58	3.30
0.10	2.03	54.47	33.24	0.63	2.10	1.41	67.06	31.83	0.34	4.10	3.42	74.88	318.19	1.53	6.10	1.71	37.44	233.47	2.50	8.10	1.19	11.21	197.78	3.30
0.12	2.30	58.58	34.46	0.60	2.12	1.49	68.62	32.26	0.34	4.12	3.00	82.76	221.66	1.53	6.12	1.58	36.68	225.82	2.50	8.12	1.29	13.02	210.46	3.31
0.14	2.46	36.92	2.33	0.26	2.14	1.50	68.53	32.87	0.36	4.14	2.68	79.81	319.72	1.54	6.14	1.42	36.26	217.25	2.52	8.14	1.47	12.36	234.82	3.31
0.16	2.62	30.16	1.96	0.22	2.16	1.47	69.60	33.36	0.36	4.16	2.56	78.13	343.05	1.55	6.16	1.34	36.80	216.15	2.52	8.16	1.59	14.10	230.17	3.32
0.18	2.75	28.58	2.02	0.30	2.18	1.47	69.20	33.85	0.35	4.18	3.07	77.92	410.69	1.56	6.18	1.32	32.94	232.00	2.55	8.18	1.54	14.31	222.51	3.31
0.20	2.84	25.33	2.45	0.25	2.20	1.47	67.80	34.16	0.37	4.20	3.44	77.49	488.74	1.56	6.20	1.53	28.41	269.10	2.55	8.20	1.69	13.02	239.90	3.33
0.22	2.96	25.09	2.02	0.21	2.22	1.47	65.92	34.16	0.36	4.22	3.67	81.81	355.29	1.58	6.22	1.73	24.08	308.03	2.56	8.22	1.72	14.97	229.74	3.33
0.24	3.27	30.57	1.29	0.16	2.24	1.48	67.07	33.73	0.33	4.24	3.14	88.02	133.63	1.59	6.24	1.79	18.79	268.30	2.56	8.24	1.57	15.15	215.05	3.34
0.26	3.50	32.91	0.73	0.19	2.26	1.52	69.88	33.30	0.34	4.26	2.90	93.01	163.63	1.59	6.26	1.79	18.49	280.36	2.58	8.26	1.39	14.97	199.56	3.34
0.28	3.85	36.84	0.86	0.16	2.28	1.55	69.42	31.95	0.33	4.28	3.02	89.94	213.27	1.61	6.28	1.79	21.10	282.26	2.58	8.28	1.18	13.11	183.52	3.35
0.30	4.23	46.73	2.26	0.18	2.30	1.54	70.18	31.22	0.33	4.30	3.09	96.17	232.13	1.62	6.30	1.75	24.77	281.40	2.59	8.30	0.99	11.84	174.22	3.36
0.32	4.60	57.02	0.92	0.21	2.32	1.56	70.82	29.63	0.33	4.32	3.04	99.40	234.57	1.64	6.32	1.70	29.56	277.73	2.58	8.32	0.95	8.33	178.32	3.36
0.34	4.97	67.86	0.73	0.20	2.34	1.57	74.14	29.81	0.32	4.34	3.02	107.07	235.31	1.64	6.34	1.73	34.52	278.04	2.59	8.34	0.92	8.24	184.01	3.36
0.36	5.38	72.88	0.55	0.22	2.36	1.62	76.36	29.51	0.33	4.36	2.82	109.56	227.90	1.64	6.36	1.70	45.14	278.46	2.60	8.36	0.96	8.48	196.07	3.37
0.38	5.82	80.95	1.16	0.23	2.38	1.70	74.66	29.32	0.34	4.38	2.56	104.82	220.68	1.66	6.38	1.73	48.00	281.46	2.60	8.38	0.99	9.29	202.44	3.38
0.40	6.11	83.75	1.59	0.21	2.40	1.75	76.37	29.44	0.36	4.40	2.47	99.67	218.60	1.67	6.40	1.81	50.04	282.87	2.61	8.40	1.00	10.01	206.60	3.38
0.42	6.19	82.30	1.10	0.19	2.42	1.90	80.51	28.89	0.36	4.42	2.72	95.26	244.92	1.68	6.42	1.87	54.00	290.59	2.60	8.42	1.02	11.03	209.78	3.39
0.44	6.36	82.05	1.29	0.20	2.44	2.09	82.73	27.91	0.39	4.44	2.98	88.28	278.71	1.69	6.44	1.94	57.22	294.14	2.61	8.44	1.04	11.21	215.23	3.39
0.46	6.55	81.91	1.71	0.18	2.46	2.26	80.87	26.87	0.42	4.46	2.90	73.37	273.81	1.69	6.46	1.95	58.41	290.40	2.63	8.46	1.06	10.73	217.31	3.40
0.48	6.88	74.51	2.69	0.18	2.48	2.56	84.31	25.47	0.45	4.48	2.67	69.72	290.34	1.71	6.48	1.87	63.83	278.34	2.63	8.48	1.05	11.57	219.64	3.40
0.50	6.97	69.86	2.63	0.18	2.50	2.75	88.24	23.02	0.46	4.50	2.62	66.76	297.69	1.73	6.50	1.77	65.32	280.85	2.65	8.50	1.07	12.42	221.11	3.41
0.52	6.47	69.50		0.18	2.52	2.92	88.94	19.89	0.49	4.52	2.55	66.25	313.30	1.75	6.52	1.70	62.64	275.65	2.65	8.52	1.06	12.99	224.05	3.41
0.54	6.49	63.29	0.18	0.18	2.54	3.09	84.41	18.98	0.51	4.54	2.50	63.14	311.15	1.76	6.54	1.66	63.91	272.47	2.66	8.54	1.06	12.54	226.00	3.41
0.56	6.73	59.58	0.31	0.18	2.56	3.21	84.41	18.55	0.54	4.56	2.29	65.64	297.81	1.77	6.56	1.62	60.96	273.63	2.68	8.56	1.10	12.48	233.23	3.41
0.58	6.48	63.18	1.16	0.17	2.58	3.21	87.46	18.36	0.55	4.58	2.01	72.94	276.14	1.78	6.58	1.54	59.44	271.85	2.68	8.58	1.14	12.06	238.61	3.42
0.60	6.48	59.07	1.35	0.18	2.60	3.29	92.82	16.83	0.59	4.60	1.94	77.23	269.04	1.81	6.60	1.53	52.95	271.36	2.69	8.60	1.24	12.00	245.65	3.41
0.62	6.75	51.59	0.55	0.19	2.62	3.38	93.03	13.16	0.61	4.62	2.19	80.95	286.61	1.82	6.62	1.56	47.75	274.49	2.70	8.62	1.35	10.61	465.05	3.42
0.64	6.73	46.60	1.04	0.19	2.64	3.49	95.53	4.29	0.63	4.64	2.86	79.00	335.27	1.84	6.64	1.61	42.33	280.36	2.70	8.64	1.59	9.65	422.01	3.44
0.66	6.80	40.58	0.49	0.18	2.66	3.59	98.40	5.57	0.65	4.66	3.94	68.96	353.02	1.84	6.66	1.62	39.89	282.08	2.71	8.66	1.66	11.85	401.32	3.45
0.68	7.02	34.01	0.18	0.20	2.68	3.68	99.59	4.59	0.68	4.68	4.40	69.32	216.33	1.85	6.68	1.59	37.55	283.36	2.71	8.68	1.59	18.58	240.27	3.45
0.70	7.47	29.17	2.33	0.21	2.70	3.69	105.59	3.37	0.70	4.70	4.00	65.76	120.65	1.86	6.70	1.63	34.72	287.77	2.72	8.70	1.34	20.02	219.70	3.46
0.72	8.53	26.21	6.61	0.22	2.72	3.71	110.73	4.35	0.72	4.72	3.35	65.37	110.00	1.88	6.72	1.66	34.57	291.32	2.72	8.72	1.26	18.37	228.27	3.47
0.74	9.05	28.72	8.26	0.20	2.74	3.69	117.49	5.14	0.73	4.74	2.73	57.27	114.41	1.88	6.74	1.69	36.61	293.95	2.72	8.74	1.26	16.69	248.65	3.47
0.76	9.20	31.37	9.12	0.21	2.76	3.67	120.93	4.77	0.76	4.76	2.30	60.99	118.21	1.90	6.76	1.67	38.07	293.71	2.73	8.76	1.30	15.00	258.33	3.48
0.78	9.30	38.10	9.67	0.22	2.78	3.63	127.57	4.35	0.78	4.78	2.02	65.64	134.92	1.92	6.78	1.63	41.51	285.20	2.74	8.78	1.22	16.09	262.92	3.49
0.80	9.11	45.10	8.51	0.26	2.80	3.69	139.60	8.02	0.80	4.80	2.00	67.35	143.79	1.93	6.80	1.56	42.33	277.79	2.75	8.80	1.19	15.45	265.36	3.48
0.82	8.89	50.01	7.53	0.27	2.82	3.70	147.82	9.86	0.81	4.82	1.90	71.79	159.71	1.95	6.82	1.52	42.14	273.38	2.77	8.82	1.20	14.22	281.83	3.50
0.84	8.73	55.27	7.10	0.28	2.84	3.69	152.17	18.18	0.83	4.84	1.85	67.23	170.18	1.96	6.84	1.49	42.78	270.63	2.77	8.84	1.26	12.24	292.05	3.50
0.86	8.77	60.15	7.65	0.27	2.86	3.61	149.41	18.61	0.85	4.86	1.76	62.15	174.52	1.97	6.86	1.46	43.42	269.16	2.78	8.86	1.26	11.37	293.40	3.52
0.88	9.05	67.94	9.00	0.27	2.88	3.68	145.54	17.81	0.86	4.88	1.68	53.87	174.89	1.98	6.88	1.48	42.02	270.14	2.79	8.88	1.21	11.97	283.55	3.51
0.90	9.20	64.32	9.98	0.26	2.90	3.76	145.15	16.65	0.88	4.90	1.59	48.67	175.44	2.00	6.90	1.46	41.60	268.49	2.79	8.90	1.07	11.79	265.36	3.53
0.92	9.32	56.08	10.77	0.28	2.92	3.69	144.66	15.00	0.90	4.92	1.56	45.47	174.28	2.01	6.92	1.39	41.90	263.96	2.81	8.92	1.05	10.31	273.14	3.53
0.94	9.29	52.27	11.20	0.27	2.94	3.61	139.37	13.65	0.92	4.94	1.52	44.53	172.20	2.02	6.94	1.37	39.50	262.55	2.83	8.94	1.10	8.90	287.22	3.53
0.96	9.22	53.27	11.32	0.27	2.96	3.34	141.69	11.14	0.93	4.96	1.47	42.80	169.01	2.03	6.96	1.34	34.53	262.06	2.83	8.96	1.18	9.29	299.58	3.55
0.98	9.25	55.37	12.24	0.27	2.98	3.27	147.02	9.79	0.94	4.98	1.42	44.90	166.38	2.04	6.98	1.31	30.18	262.49	2.83	8.98	1.24	10.01	312.62	3.55
1.00	9.34	57.53	13.10	0.26	3.00	3.17	151.31	10.96	0.96	5.00	1.39	44.41	163.93	2.05	7.00	1.36	26.05	266.90	2.84	9.00	1.31	10.92	323.40	3.56
1.02	9.57	63.99	15.06	0.28	3.02	3.04	144.65	15.55	0.98	5.02	1.41	42.25	162.65	2.06	7.02	1.44	23.89	274.36	2.86	9.02	1.34	11.16	321.56	3.56
1.04	9.89	68.37	17.14	0.26	3.04	2.96	135.37	15.98	0.99	5.04	1.37	41.07	160.75	2.06	7.04	1.54	23.83	282.57	2.87	9.04	1.39	12.83	274.18	3.59
1.06	9.96	68.34	18.06	0.27	3.06	2.90	126.15	16.34	1.01	5.06	1.37	39.58	160.20	2.09	7.06	2.23	29.89	243.51	2.97	9.06	1.22	11.59	267.20	3.61
1.08	9.86	70.17	18.98	0.25	3.08	2.79	122.83	15.43	1.03	5.08	1.44	39.79	165.16	2.14	7.08	2.57	37.77	224.11	2.99	9.08	1.19	13.64	271.85	3.62
1.10	8.84	69.64	1.96	0.08	3.10	3.05	84.33	65.25	0.95	5.10	1.45	38.69	166.14	2.16	7.10	3.61	44.35	188.30	3.01	9.10	1.15	13.22	273.38	3.61
1.12	9.63	65.57	3.00	0.08	3.12	2.76	87.04	76.03	0.97	5.12	1.48	38.60	166.93	2.17	7.12	4.17	46.54	119.12	3.01	9.12	1.17	13.73	280.79	3.61
1.14	9.33	65.90	1.22	0.09	3.14	2.63	90.84	78.97	1.00	5.14	1.47	38.82	166.07	2.18	7.14	4.22	43.37	104.74	3.02	9.14	1.17	13.10	287.22	3.62
1.16	8.99	64.11	0.18	0.10	3.16	2.55	93.34	82.46	1.02	5.16	1.47	39.94	166.32	2.18	7.16	4.13	38.59	94.03	3.03	9.16	1.18	12.13	289.54	3.61
1.18	8.54	67.36	1.16	0.12	3.18	2.53	93.06	83.50	1.03	5.18	1.48	39.79	166.69	2.18	7.18	3.95	31.08	91.03	3.03	9.18	1.22	12.64	296.09	3.62
1.20	8.66	66.69	1.65	0.12	3.20	2.55	92.67	86.62	1.05	5.20	1.48	40.89	167.30	2.18	7.20	3.83	27.68	90.78	3.04	9.20	1.23	11.56	300.38	3.62
1.22	8.41	76.49	3.00	0.12	3.22	2.58	91.21	94.64	1.07	5.22	1.47	41.22	167.24	2.20	7.22	3.86	24.26	85.88	3.04	9.22	1.26	11.35	300.75	3.64
1.24	8.29	85.56	4.29	0.14	3.24	2.60	88.01	107.98	1.09	5.24	1.48	40.22	169.75	2.19	7.24	3.87	21.82	76.09	3.04	9.24	1.30	12.85	306.75	3.63
1.26	8.22	96.73	5.02	0.12	3.26	2.52	83.44	108.96	1.10	5.26	1.53	38.82	171.71	2.19	7.26	3.72	23.29	70.34	3.06	9.26	1.30	12.55	307.85	3.65
1.28	8.24	106.01	4.47	0.13	3.28	2.60	80.55	110.86	1.14	5.28	1.54	39.82	172.38	2.20	7.28	3.60	29.46	68.68	3.06	9.28	1.28	13.12	307.30	3.65
1.30	8.05	113.19	5.39	0.14	3.30	2.61	75.96	98.68	1.15	5.30	1.53	38.30	173.91	2.20	7.30	3.38	35.21	65.81	3.07	9.30	1.28	12.64	315.50	3.66
1.32	7.48	118.85	7.71	0.16	3.32	2.54	74.43	77.74	1.17	5.32	1.56	36.96	175.56	2.20	7.32	2.69	25.61	56.07	3.07	9.32	1.30	11.80	319.78	3.67
1.34	7.18	115.07	8.08	0.17	3.34	2.20	70.36	72.29	1.20	5.34	1.56	37.21	175.13	2.21	7.34	2.17	19.68	49.09	3.07	9.34	1.32	12.91	326.21	3.68
1.36	6.99	106.94	8.57	0.17	3.36	2.00	68.35	77.99	1.20	5.36	1.51	38.00	174.64	2.22	7.36	1.68	14.42	43.16	3.07	9.36	1.32	13.64	328.17	3.69
1.38	7.12	106.18	7.84	0.20	3.38	1.94	65.85	94.88	1.22	5.38	1.49	37.75	174.09	2.24	7.38	1.34	22.03	39.79	3.08	9.38	1.28	13.30	322.17	3.68
1.40	7.56	100.97	5.88	0.20	3.40	1.93	57.09	114.10	1.23	5.40	1.46	35.72	170.91	2.23	7.40	1.19	27.23	50.38	3.08	9.40	1.24	14.48	322.60	3.69
1.42	7.87	96.50	4.04	0.19	3.42	2.07	49.24	150.22	1.23	5.42	1.42	34.59	170.67	2.24	7.42	1.21	26.47	70.64	3.10	9.42	1.28	12.40	336.01	3.69
1.44	7.95	90.13	3.80	0.20	3.44	2.44	40.81	253.55	1.25	5.44	1.36	34.32	168.52	2.24	7.44	1.23	24.73	76.09	3.09	9.44	1.25	11.68	331.11	3.71
1.46	7.75	85.99	4.96	0.20	3.46	2.68	34.33	371.51	1.23	5.46	1.30	31.91	166.44	2.25	7.46	1.10	21.75	73.09	3.11	9.46	1.13	12.43	313.72	3.71
1.48	7.53	83.55	5.33	0.23	3.48	2.80	34.21	425.07	1.24	5.48	1.21	29.08	163.32	2.26	7.48	1.02	16.10	75.54	3.12	9.48	1.14	10.81	327.62	3.72
1.50	7.31	76.15	5.69	0.23	3.50	2.90	35.88	470.62	1.25	5.50	1.16	26.38	160.93	2.27	7.50	1.00	12.88	86.37	3.11	9.50	1.21	10.18	342.80	3.71
1.52	7.09	69.30	6.12	0.25	3.52	2.98	39.14	536.61	1.25	5.52	1.12	25.30	159.34	2.28	7.52	1.03	10.27	111.84	3.13	9.52	1.37	10.54	360.00	3.72
1.54	6.72	63.21	8.02	0.25	3.54	2.93	41.52	505.08	1.25	5.54	1.09	23.01	159.40	2.28	7.54	1.06	9.76	125.00	3.12	9.54	1.43	9.97	364.17	3.73
1.56	6.75	72.19	8.26	0.24	3.56	2.81	46.39	473.74	1.27	5.56	1.10	19.62	162.03	2.30	7.56	1.16	12.43	135.04	3.13	9.56	1.36	9.31	349.60	3.73
1.58	6.77	77.48	7.41	0.26	3.58	2.61	54.46	436.03	1.27	5.58	1.11	17.48	166.69	2.31	7.58	1.19	13.06	138.10	3.13	9.58	1.30	8.64	343.66	3.74
1.60	7.02	80.04	6.43	0.26	3.60	2.47	59.66	411.48	1.26	5.60	1.14	13.79	172.87	2.32	7.60	1.25	15.17	141.53	3.13	9.60	1.26	7.92	339.74	3.76
1.62	7.01	80.98	5.88	0.28	3.62	2.41	63.62	396.98	1.28	5.62	1.23	12.49	184.87	2.33	7.62	1.37	15.65	154.02	3.14	9.62	1.23	8.70	334.97	3.75
1.64	6.93	80.00	6.49	0.28	3.64	2.42	69.23	392.14	1.29	5.64	1.30	11.59	203.48	2.33	7.64	1.35	17.93	151.93	3.16	9.64	1.16	9.37	327.68	3.77
1.66	6.73	81.28	7.10	0.30	3.66	2.59	71.54	408.67	1.30	5.66	1.40	10.24	220.13	2.33	7.66	1.24	16.52	144.16	3.14	9.66	1.12	9.67	325.11	3.78
1.68	6.57	80.49	7.53	0.31	3.68	2.85	63.75	437.99	1.31	5.68	1.48	9.70	224.53	2.34	7.68	1.12	13.82	139.08	3.15	9.68	1.15	10.60	329.95	3.78
1.70	6.51	74.71	7.77	0.31	3.70	3.01	57.64	463.52	1.33	5.70	1.53	11.87	233.53	2.35	7.70	1.13	11.62	145.08	3.15	9.70	1.19	11.08	342.43	3.79
1.72	6.40	70.75	8.02	0.33	3.72	2.83	52.89	464.80	1.34	5.72	1.62	16.35	250.06	2.35	7.72	1.22	12.95	155.61	3.16	9.72	1.23	11.92	346.35	3.80
1.74	6.25	68.01	8.57	0.32	3.74	2.68	51.58	453.97	1.34	5.74	1.70	16.89	267.08	2.36	7.74	1.26	14.30	158.67	3.16	9.74	1.19	13.58	347.39	3.80
1.76	5.84	66.18	9.86	0.34	3.76	2.63	50.86	445.52	1.36	5.76	1.76	19.33	285.57	2.36	7.76	1.17	15.20	154.57	3.17	9.76	1.20	14.75	348.92	3.81
1.78	5.57	65.76	10.90	0.33	3.78	2.54	53.48	451.27	1.37	5.78	1.76	22.07	291.20	2.37	7.78	1.13	15.02	152.18	3.18	9.78	1.16	15.83	349.96	3.82
1.80	5.17	69.41	11.94	0.35	3.80	2.50	57.40	473.68	1.37	5.80	1.77	25.26	289.73	2.38	7.80	1.08	13.49	150.59	3.17	9.80	1.13	16.61	350.15	3.82
1.82	4.75	72.63	13.53	0.35	3.82	2.67	54.39	495.16	1.38	5.82	1.74	28.84	285.75	2.39	7.82	1.04	10.63	150.28	3.19	9.82	1.12	16.43	350.82	3.82
1.84	4.20	74.61	15.36	0.36	3.84	2.68	54.33	460.33	1.38	5.84	1.68	31.33	282.87	2.40	7.84	0.96	10.90	148.69	3.18	9.84	1.11	17.00	352.72	3.82
1.86	3.70	76.41	17.14	0.37	3.86	2.78	58.20	490.63	1.40	5.86	1.66	32.49	286.18	2.40	7.86	0.94	9.76	148.32	3.19	9.86	1.09	17.60	354.49	3.84
1.88	3.13	79.33	19.10	0.39	3.88	2.69	61.55	501.59	1.41	5.88	1.64	33.86	290.65	2.41	7.88	0.94	8.11	153.46	3.19	9.88	1.10	17.60	357.62	3.85
1.90	2.75	82.95	20.63	0.39	3.90	2.70	62.01	477.35	1.43	5.90	1.66	33.04	300.87	2.41	7.90	0.99	6.00	161.36	3.19	9.90	1.09	17.39	362.08	3.85
1.92	2.53	87.88	21.67	0.39	3.92	2.75	64.21	424.83	1.44	5.92	1.65	32.10	309.75	2.43	7.92	0.99	6.16	163.63	3.21	9.92	1.11	16.49	365.94	3.86
1.94	2.40	92.08	22.04	0.41	3.94	2.86	71.85	434.81	1.45	5.94	1.68	29.36	323.27	2.42	7.94	1.01	5.25	169.56	3.22	9.94	1.10	15.83	369.37	3.86
1.96	2.30	94.95	21.91	0.41	3.96	3.01	81.31	464.56	1.47	5.96	1.68	26.92	333.56	2.42	7.96	1.02	5.38	175.13	3.22	9.96	1.10	15.23	372.43	3.86
1.98	2.21	98.57	22.59	0.40	3.98	3.09	85.30	430.83	1.48	5.98	1.66	23.37	334.35	2.43	7.98	1.04	5.35	178.44	3.23	9.98	1.11	14.81	376.90	3.87
2.00	1.99	97.78	24.36	0.43	4.00	3.17	86.04	429.17	1.48	6.00	1.67	22.26	336.86	2.43	8.00	1.08	6.25	182.85	3.23	10.00	1.10	14.69	382.22	3.87

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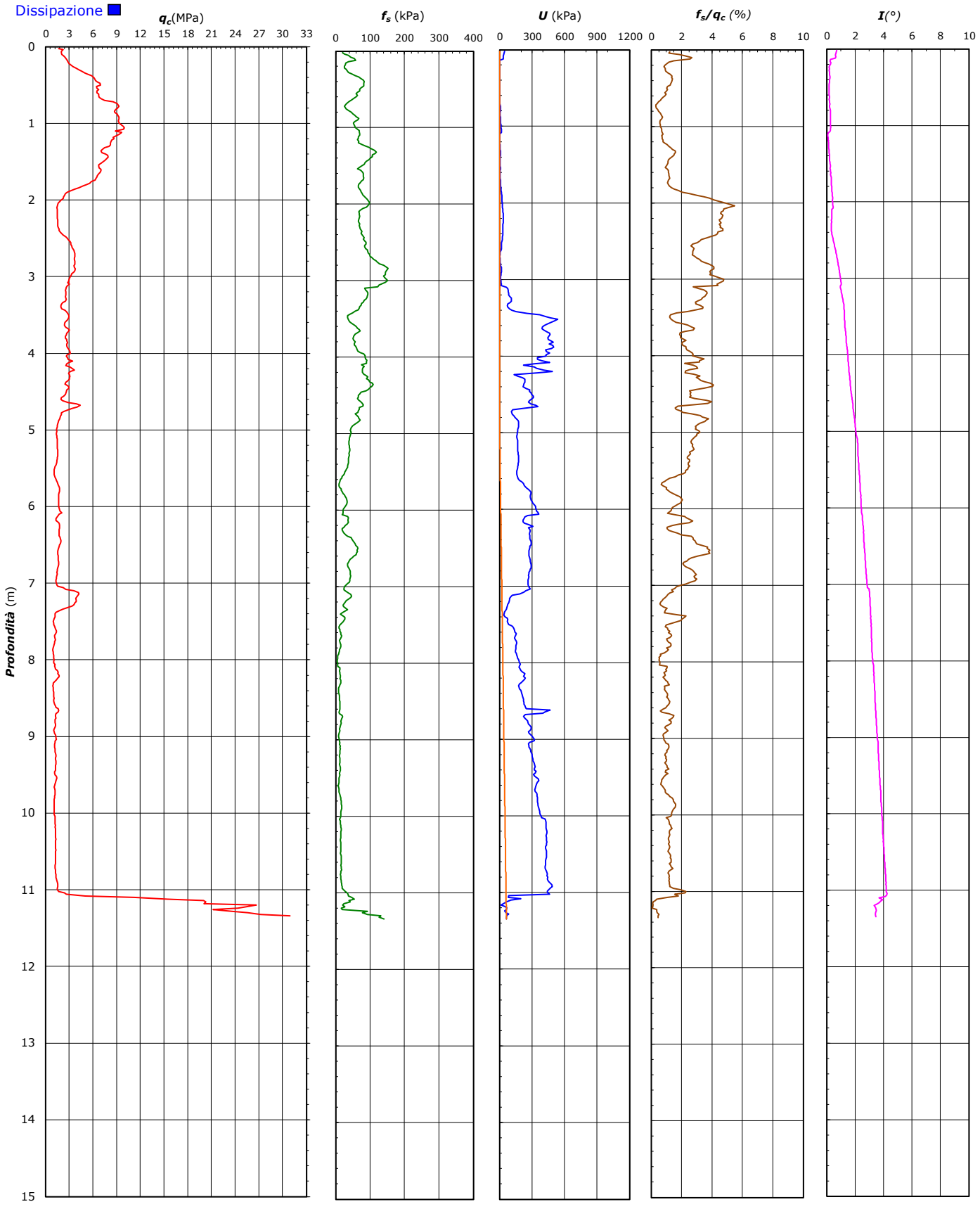
COMMITTENTE:
CANTIERE: Via Baldassarre Carnaccini, Quartiere Bussecchio-Forlì (FC
COMMESSA: C054/24
RDP N°: 200/24
DATA: 03/09/2024

PROVA N°: CPTU 12
PROF. FALDA (m da p.c.): 4.85
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.10	14.09	386.81	3.87																				
10.04	1.20	11.63	419.93	3.90																				
10.06	1.20	13.56	427.15	3.90																				
10.08	1.21	14.10	430.15	3.92																				
10.10	1.21	14.52	430.58	3.93																				
10.12	1.23	14.73	431.19	3.92																				
10.14	1.23	15.66	431.07	3.92																				
10.16	1.24	16.35	431.38	3.93																				
10.18	1.22	16.71	432.42	3.93																				
10.20	1.27	15.39	438.36	3.94																				
10.22	1.29	15.33	435.91	3.95																				
10.24	1.28	15.24	433.95	3.95																				
10.26	1.26	15.33	430.46	3.95																				
10.28	1.26	15.24	432.73	3.96																				
10.30	1.26	14.19	434.19	3.97																				
10.32	1.27	14.40	435.30	3.97																				
10.34	1.30	14.97	435.72	3.98																				
10.36	1.28	15.09	434.07	3.97																				
10.38	1.28	14.61	431.68	3.99																				
10.40	1.25	14.82	427.15	3.99																				
10.42	1.24	15.00	427.15	4.00																				
10.44	1.26	14.91	429.30	4.02																				
10.46	1.29	14.58	433.40	4.02																				
10.48	1.31	14.27	435.60	4.03																				
10.50	1.27	15.15	434.19	4.04																				
10.52	1.29	15.96	432.24	4.04																				
10.54	1.28	16.38	431.99	4.05																				
10.56	1.27	15.99	429.05	4.05																				
10.58	1.26	16.50	426.79	4.06																				
10.60	1.26	16.53	425.01	4.07																				
10.62	1.27	16.62	426.91	4.07																				
10.64	1.29	15.21	425.69	4.08																				
10.66	1.24	15.87	422.75	4.09																				
10.68	1.22	15.99	422.50	4.09																				
10.70	1.20	17.19	426.73	4.10																				
10.72	1.22	15.72	432.05	4.12																				
10.74	1.25	14.72	436.15	4.12																				
10.76	1.26	14.03	441.97	4.12																				
10.78	1.28	14.93	439.70	4.14																				
10.80	1.30	15.63	444.36	4.15																				
10.82	1.31	15.29	442.76	4.16																				
10.84	1.34	15.96	447.97	4.15																				
10.86	1.38	16.05	454.95	4.15																				
10.88	1.44	17.19	472.02	4.17																				
10.90	1.50	17.85	483.35	4.17																				
10.92	1.55	18.87	486.53	4.17																				
10.94	1.54	19.11	472.27	4.18																				
10.96	1.54	22.48	455.37	4.18																				
10.98	1.47	28.37	441.91	4.19																				
11.00	1.48	33.72	443.13	4.19																				
11.02	1.64	36.58	461.13	4.19																				
11.04	2.43	37.62	85.33	4.23																				
11.06	2.64	46.82	78.91	4.22																				
11.08	5.05	54.64	197.91	4.14																				
11.10	11.22	39.30	107.13	3.69																				
11.12	15.45	43.07	62.99	3.95																				
11.14	20.02	23.95	42.91	3.82																				
11.16	20.31	20.83	14.02	3.67																				
11.18	20.05	26.75	48.48	3.51																				
11.20	26.68	16.79	67.76	3.33																				
11.22	25.38	19.16	64.89	3.42																				
11.24	24.35	92.24	48.54	3.46																				
11.26	21.23	78.54	59.62	3.48																				
11.28	23.60	92.15	84.05	3.45																				
11.30	25.58	131.80	69.36	3.43																				
11.32	27.26	126.54	65.62	3.44																				
11.34	30.95	141.27	61.89	3.44																				

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
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Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 12
CANTIERE:	Via Baldassarre Carnaccini, Quartiere Bussecchio-Forlì (FC	PROF. FALDA (m da p.c.):	4.85
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	200/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	03/09/2024	OPERATORE:	Zanirato



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
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Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 12
CANTIERE:	Via Baldassarre Carnaccini, Quartiere Bussecchio-Forlì (FC	PROF. FALDA (m da p.c.):	4.85
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	200/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	03/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Baldassarre Carnaccini, Quartiere Bussecchio-Forlì (FC)
Lat.: 44.200618°
Long.: 12.067558°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Monte Poggiolo - Villagrappa (FC)
COMMESSA: C054/24
RDP N°: 188/24
DATA: 28/08/2024

PROVA N°: CPTU 13
PROF. FALDA (m da p.c.): n.r.
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.37	24.68	35.20	0.18	2.02	2.83	215.29	0.04	0.95	4.02	2.71	183.55	7.97	1.71	6.02	3.73	88.81	50.15	2.27	8.02	2.10	45.66	59.58	3.40
0.04	1.54	28.68	37.65	0.05	2.04	2.71	211.33	4.31	0.94	4.04	2.72	180.33	7.67	1.74	6.04	3.73	105.83	49.48	2.27	8.04	2.96	44.10	69.19	3.39
0.06	1.72	35.77	39.30	0.75	2.06	2.57	204.27	3.39	0.96	4.06	2.74	176.86	7.48	1.75	6.06	3.62	119.30	49.05	2.28	8.06	4.23	49.37	61.78	3.36
0.08	1.89	44.19	39.67	0.62	2.08	2.42	198.55	2.10	0.96	4.08	2.63	151.64	4.79	1.77	6.08	3.83	136.25	55.17	2.23	8.08	4.13	52.47	54.68	3.37
0.10	1.95	53.63	36.36	0.66	2.10	2.18	185.21	4.55	0.88	4.10	2.83	177.30	47.82	1.80	6.10	3.85	141.15	53.88	2.24	8.10	3.23	67.23	45.62	3.38
0.12	1.95	59.88	30.55	0.59	2.12	2.03	182.99	8.00	0.87	4.12	2.84	184.70	45.31	1.80	6.12	3.67	149.24	50.88	2.24	8.12	2.61	91.58	39.99	3.38
0.14	1.97	38.85	1.81	0.81	2.14	1.88	177.09	7.60	0.88	4.14	2.83	185.15	44.21	1.81	6.14	3.54	146.95	49.78	2.24	8.14	2.22	114.88	38.58	3.40
0.16	2.48	51.54	1.93	0.80	2.16	1.83	167.28	5.82	0.90	4.16	2.82	185.64	42.68	1.80	6.16	3.27	141.33	46.35	2.24	8.16	2.68	117.89	45.99	3.40
0.18	2.95	58.46	3.95	0.85	2.18	1.89	160.00	6.86	0.88	4.18	2.84	185.42	41.64	1.82	6.18	3.07	144.42	44.21	2.24	8.18	3.96	101.71	57.80	3.40
0.20	3.48	65.59	6.16	0.82	2.20	2.10	146.26	8.57	0.91	4.20	2.88	183.26	41.03	1.83	6.20	2.97	147.94	44.21	2.24	8.20	3.47	82.38	49.54	3.42
0.22	3.98	68.09	7.44	0.84	2.22	2.33	125.48	9.68	0.89	4.22	2.92	181.68	41.27	1.83	6.22	3.00	149.32	45.01	2.25	8.22	3.15	70.05	47.88	3.42
0.24	4.73	77.65	7.38	0.86	2.24	2.52	111.74	11.39	0.89	4.24	2.85	181.13	39.31	1.84	6.24	2.92	143.48	45.44	2.24	8.24	2.73	67.58	43.35	3.43
0.26	5.72	98.16	11.97	0.84	2.26	2.67	101.13	12.06	0.91	4.26	2.85	180.03	38.52	1.85	6.26	2.89	123.96	46.35	2.24	8.26	2.23	74.98	40.60	3.43
0.28	6.95	105.86	17.79	0.81	2.28	2.79	102.69	11.51	0.88	4.28	2.82	182.28	37.97	1.85	6.28	2.93	118.64	47.95	2.24	8.28	2.08	69.44	41.15	3.45
0.30	7.67	107.49	17.36	0.82	2.30	2.76	106.57	7.84	0.90	4.30	2.81	179.72	37.72	1.87	6.30	3.23	109.95	52.84	2.25	8.30	2.16	63.19	45.01	3.46
0.32	8.03	110.87	15.95	0.83	2.32	2.69	109.09	6.43	0.89	4.32	2.84	181.03	37.78	1.87	6.32	3.46	99.03	55.60	2.25	8.32	2.26	60.42	47.95	3.47
0.34	8.02	125.22	13.81	0.84	2.34	2.71	114.65	5.70	0.89	4.34	2.86	178.65	37.60	1.88	6.34	3.71	87.75	56.94	2.27	8.34	2.32	50.65	50.03	3.47
0.36	7.98	126.27	11.73	0.87	2.36	2.73	114.96	4.90	0.92	4.36	2.91	177.95	37.60	1.89	6.36	3.75	87.81	55.96	2.27	8.36	2.28	45.15	49.54	3.47
0.38	7.76	111.40	7.99	0.85	2.38	2.75	116.04	5.27	0.90	4.38	2.92	173.34	37.23	1.90	6.38	3.91	103.47	57.74	2.28	8.38	2.21	45.54	48.99	3.48
0.40	7.56	84.97	7.69	0.87	2.40	2.87	120.79	5.58	0.92	4.40	2.98	171.41	37.66	1.92	6.40	3.77	112.79	56.70	2.28	8.40	2.07	51.28	47.82	3.49
0.42	6.96	69.82	3.04	0.86	2.42	2.96	123.92	5.76	0.93	4.42	3.09	168.28	38.52	1.91	6.42	3.58	121.30	56.70	2.30	8.42	2.00	54.49	47.52	3.48
0.44	6.71	62.46	3.34	0.89	2.44	3.09	122.75	6.37	0.93	4.44	3.22	166.93	39.38	1.94	6.44	3.52	126.83	56.21	2.32	8.44	1.94	60.69	47.15	3.48
0.46	6.95	63.40	10.44	0.89	2.46	3.14	117.58	5.39	0.96	4.46	3.38	169.21	40.78	1.93	6.46	3.46	141.17	56.52	2.34	8.46	1.86	66.64	47.15	3.49
0.48	7.23	82.42	14.54	0.90	2.48	3.26	112.29	5.88	0.95	4.48	3.60	173.15	42.80	1.96	6.48	3.47	153.77	57.01	2.35	8.48	1.84	69.86	47.33	3.48
0.50	7.20	92.89	14.18	0.90	2.50	3.43	106.15	8.94	0.97	4.50	4.00	182.02	46.90	1.95	6.50	3.79	146.34	61.11	2.37	8.50	1.81	71.09	47.09	3.48
0.52	7.28	102.51	20.18	0.89	2.52	3.51	105.58	9.31	0.97	4.52	4.41	188.84	51.13	1.95	6.52	3.96	141.11	61.17	2.39	8.52	1.77	68.95	46.78	3.49
0.54	7.29	98.64	20.18	0.89	2.54	3.63	107.03	7.35	0.97	4.54	4.56	205.79	51.07	1.97	6.54	4.02	129.86	61.11	2.43	8.54	1.78	64.68	47.21	3.49
0.56	7.99	81.53	30.40	0.88	2.56	3.71	110.52	16.53	1.01	4.56	4.41	238.26	49.23	1.99	6.56	4.05	123.73	60.62	2.45	8.56	1.77	62.28	47.39	3.48
0.58	7.74	100.88	23.11	0.88	2.58	3.73	114.19	13.72	1.01	4.58	4.27	252.66	47.33	1.99	6.58	4.09	119.88	60.19	2.46	8.58	1.77	60.23	47.88	3.49
0.60	7.79	140.77	22.99	0.87	2.60	3.90	115.97	13.53	1.01	4.60	4.16	266.66	47.03	2.03	6.60	3.98	120.49	59.21	2.49	8.60	1.82	58.91	48.74	3.49
0.62	7.63	128.89	30.15	0.86	2.62	4.06	123.97	11.64	1.04	4.62	4.18	267.96	46.97	2.03	6.62	3.54	138.82	53.09	2.52	8.62	1.86	59.66	49.60	3.52
0.64	7.40	133.22	42.40	0.84	2.64	4.10	132.12	9.06	1.06	4.64	4.11	271.01	45.31	2.04	6.64	3.36	139.25	51.07	2.54	8.64	1.92	60.56	50.58	3.50
0.66	5.94	97.13	24.83	0.81	2.66	4.01	142.95	5.45	1.07	4.66	3.97	273.86	44.03	2.05	6.66	3.12	158.40	49.41	2.58	8.66	2.00	60.86	51.43	3.52
0.68	5.46	93.10	28.62	0.80	2.68	3.96	148.30	3.80	1.07	4.68	3.84	277.00	42.74	2.05	6.68	3.05	164.26	49.78	2.61	8.68	2.02	62.99	51.62	3.52
0.70	5.21	112.31	29.79	0.78	2.70	4.06	151.28	3.80	1.09	4.70	3.68	275.05	41.64	2.07	6.70	3.32	165.88	54.43	2.62	8.70	2.09	65.43	52.17	3.51
0.72	4.88	136.56	27.89	0.77	2.72	4.13	153.90	2.33	1.10	4.72	3.57	274.13	40.72	2.08	6.72	3.47	158.36	57.13	2.65	8.72	2.12	67.92	52.72	3.51
0.74	4.46	161.60	28.20	0.74	2.74	4.13	155.04	1.84	1.12	4.74	3.49	278.18	40.05	2.08	6.74	3.48	136.04	57.19	2.66	8.74	2.18	71.17	53.21	3.52
0.76	4.59	159.73	32.91	0.70	2.76	4.18	155.50	1.17	1.12	4.76	3.33	278.93	39.38	2.11	6.76	3.53	120.59	60.00	2.68	8.76	2.20	74.24	53.82	3.51
0.78	4.77	151.18	37.07	0.69	2.78	4.14	158.41	1.22	1.14	4.78	3.20	277.16	38.76	2.10	6.78	3.02	119.90	50.03	2.70	8.78	2.24	77.57	53.70	3.53
0.80	4.88	134.22	37.81	0.69	2.80	4.25	166.14	0.86	1.16	4.80	3.10	267.30	38.40	2.12	6.80	2.87	129.73	49.05	2.72	8.80	2.23	86.35	53.64	3.52
0.82	4.88	112.09	39.15	0.66	2.82	4.69	170.53	5.58	1.15	4.82	3.00	253.11	38.09	2.13	6.82	2.88	133.51	50.39	2.74	8.82	2.24	90.83	53.82	3.55
0.84	4.99	92.12	41.79	0.65	2.84	5.00	171.20	9.55	1.17	4.84	2.95	239.60	37.78	2.13	6.84	2.98	132.55	52.60	2.75	8.84	2.22	94.47	53.76	3.55
0.86	5.07	86.32	42.89	0.66	2.86	4.72	164.79	12.45	1.18	4.86	2.88	220.97	37.54	2.12	6.86	3.09	134.14	54.74	2.76	8.86	2.23	99.16	54.19	3.56
0.88	5.32	91.18	44.54	0.67	2.88	4.10	167.14	15.72	1.20	4.88	2.77	208.85	37.23	2.13	6.88	3.07	136.81	53.88	2.78	8.88	2.23	102.14	54.01	3.55
0.90	5.45	96.08	44.85	0.64	2.90	3.55	168.79	12.29	1.19	4.90	2.71	196.89	37.17	2.14	6.90	2.99	131.10	52.78	2.79	8.90	2.25	105.53	54.56	3.57
0.92	5.62	98.67	47.11	0.66	2.92	3.29	171.83	11.74	1.21	4.92	2.67	183.01	37.29	2.16	6.92	2.83	118.59	50.27	2.80	8.92	2.30	105.35	55.17	3.58
0.94	5.82	95.27	48.46	0.63	2.94	3.11	173.61	11.37	1.22	4.94	2.58	173.19	36.87	2.15	6.94	2.79	110.20	50.70	2.81	8.94	2.37	105.59	55.78	3.57
0.96	5.85	92.69	47.91	0.67	2.96	3.02	179.26	11.62	1.23	4.96	2.49	163.66	36.50	2.16	6.96	2.71	114.77	50.33	2.83	8.96	2.41	106.91	55.78	3.58
0.98	5.67	96.99	45.64	0.66	2.98	2.92	181.51	11.01	1.23	4.98	2.41	147.81	36.07	2.15	6.98	2.72	125.63	51.37	2.82	8.98	2.45	108.77	56.33	3.58
1.00	5.60	101.38	44.48	0.65	3.00	2.91	176.89	10.58	1.25	5.00	2.36	139.48	35.83	2.16	7.00	2.78	128.66	52.78	2.84	9.00	2.49	110.82	56.58	3.57
1.02	5.44	98.89	41.91	0.67	3.02	2.92	164.92	10.58	1.27	5.02	2.29	132.84	35.76	2.16	7.02	2.95	131.40	54.99	2.86	9.02	2.50	114.33	56.58	3.58
1.04	5.16	100.04	39.46	0.69	3.04	2.93	152.95	10.27	1.28	5.04	2.26	125.30	35.76	2.19	7.04	3.11	130.38	57.19	2.85	9.04	2.48	119.53	56.45	3.59
1.06	5.03	97.09	38.66	0.68	3.06	3.05	143.48	10.39	1.30	5.06	2.23	118.29	35.83	2.19	7.06	3.29	132.24	59.15	2.87	9.06	2.33	120.05	62.64	3.65
1.08	4.87	94.29	37.01	0.69	3.08	3.27	135.36	10.70	1.30	5.08	2.32	103.86	47.09	2.22	7.08	3.69	131.62	58.41	2.98	9.08	2.45	130.84	61.47	3.66
1.10	4.83	73.94	15.40	0.63	3.10	3.51	122.15	11.70	1.27	5.10	2.38	103.11	45.74	2.24	7.10	4.00	137.96	60.25	2.98	9.10	2.39	129.16	59.88	3.67
1.12	4.90	69.37	12.46	0.64	3.12	3.54	119.83	10.11	1.27	5.12	2.33	102.93	44.52	2.24	7.12	4.25	139.64	61.54	2.98	9.12	2.36	125.01	49.58	3.68
1.14	4.48	73.19	5.48	0.65	3.14	3.61	118.06	14.01	1.29	5.14	2.32	99.93	43.78	2.25	7.14	4.50	140.09	63.31	3.00	9.14	2.40	116.44	50.62	3.68
1.16	4.18	77.04	2.91	0.63	3.16	3.60	117.64	12.48	1.30	5.16	2.33	95.06	43.35	2.25	7.16	4.55	144.48	61.35	2.99	9.16	2.52	106.87	52.15	3.69
1.18	4.02	79.42	1.26	0.66	3.18	3.66	119.12	14.25	1.31	5.18	2.33	93.76	43.05	2.25	7.18	4.45	157.08	60.92	3.00	9.18	2.57	100.11	52.09	3.70
1.20	4.06	82.69	1.87	0.65	3.20	3.62	124.83	12.17	1.32	5.20	2.32	96.29	42.50	2.25	7.20	4.37	165.61	61.23	3.01	9.20	2.62	97.46	52.70	3.69
1.22	4.10	88.95	1.57	0.66	3.22	3.55	132.74	15.76	1.34	5.22	2.37	93.13	43.11	2.26	7.22	4.33	169.67	60.74	3.00	9.22	2.63	95.54	52.15	3.70
1.24	4.18	97.85	2.12	0.67	3.24	3.23	137.39	15.99	1.34	5.24	2.39	88.83	43.54	2.26	7.24	4.31	170.78	61.47	3.00	9.24	2.63	94.87	51.84	3.69
1.26	4.27	103.95	2.00	0.66	3.26	3.11	143.71	18.91	1.36	5.26	2.41	85.08	43.72	2.27	7.26	4.25	176.52	61.29	3.00	9.26	2.62	96.32	51.78	3.71
1.28	4.26	107.49	1.63	0.68	3.28	2.86	157.30	15.79	1.37	5.28	2.39	88.02	43.11	2.28	7.28	4.13	186.86	60.80	3.01	9.28	2.62	103.23	52.33	3.70
1.30	4.16	116.57	0.89	0.65	3.30	2.79	163.55	14.68	1.37	5.30	2.42	89.23	43.35	2.30	7.30	3.98	191.12	61.29	3.01	9.30	2.69	108.13	53.31	3.70
1.32	4.04	126.76	0.04	0.68	3.32	2.71	167.58	13.70	1.37	5.32	2.57	85.56	45.07	2.30	7.32	4.29	186.34	66.86	3.03	9.32	2.76	113.09	54.17	3.71
1.34	3.97	143.72	0.69	0.67	3.34	2.65	172.48	17.42	1.39	5.34	2.99	83.61	49.11	2.30	7.34	4.31	175.22	67.90	3.03	9.34	2.94	114.74	56.13	3.71
1.36	3.87	152.71	0.93	0.65	3.36	2.63	175.76	18.62	1.39	5.36	3.61	82.89	52.54	2.30	7.36	3.73	156.27	58.05	3.04	9.36	3.03	115.61	55.09	3.70
1.38	3.83	149.82	1.00	0.66	3.38	2.66	173.69	21.26	1.41	5.38	3.97	86.29	53.94	2.31	7.38	3.25	146.89	52.54	3.05	9.38	3.04	117.38	54.41	3.72
1.40	3.75	140.56	1.00	0.67	3.40	2.65	177.09	20.46	1.40	5.40	4.29	85.42	53.82	2.31	7.40	2.95	146.56	51.86	3.07	9.40	3.02	119.34	58.27	3.73
1.42	3.77	129.97	1.36	0.69	3.42	2.60	180.04	19.54	1.42	5.42	4.08	86.86	49.78	2.32	7.42	2.67	144.06	50.52	3.06	9.42	3.12	117.35	58.57	3.72
1.44	3.67	119.99	1.55	0.69	3.44	2.60	184.87	19.48	1.43	5.44	3.43	90.53	42.68	2.33	7.44	2.48	132.81	49.78	3.09	9.44	3.12	115.48	56.00	3.74
1.46	3.63	111.12	2.42	0.70	3.46	2.72	185.66	21.93	1.44	5.46	2.82	104.69	37.48	2.34	7.46	2.32	117.03	49.60	3.11	9.46	3.08	115.42	55.94	3.73
1.48	3.66	98.97	2.59	0.70	3.48	2.56	186.94	17.89	1.43	5.48	2.30	126.79	34.66	2.35	7.48	2.25	107.28	49.72	3.12	9.48	3.16	115.36	56.68	3.74
1.50	3.71	90.43	1.71	0.75	3.50	2.54	188.92	17.95	1.46	5.50	2.06	137.05	34.11	2.36	7.50	2.13	97.75	51.07	3.14	9.50	3.21	116.23	56.98	3.76
1.52	3.90	87.85	4.84	0.75	3.52	2.55	187.24	17.09	1.46	5.52	2.00	131.18	34.42	2.36	7.52	2.08	84.31	54.62	3.15	9.52	3.34	114.60	58.88	3.76
1.54	4.01	94.04	5.88	0.77	3.54	2.49	187.15	16.67	1.49	5.54	1.99	122.10	35.03	2.35	7.54	2.11	64.65	55.54	3.17	9.54	3.28	117.70	56.13	3.78
1.56	4.12	94.70	6.24	0.80	3.56	2.49	186.48	16.18	1.48	5.56	1.96	112.03	35.15	2.35	7.56	2.20	52.71	57.80	3.18	9.56	3.22	123.74	55.88	3.78
1.58	4.08	95.16	5.94	0.79	3.58	2.49	185.78	16.05	1.49	5.58	2.01	98.11	35.76	2.35	7.58	2.28	49.02	59.64	3.20	9.58	3.27	126.47	58.27	3.79
1.60	3.89	105.08	3.31	0.79	3.60	2.53	184.83	15.81	1.49	5.60	2.21	83.98	37.91	2.34	7.60	2.30	49.98	60.74	3.21	9.60	3.25	125.84	58.51	3.79
1.62	3.80	107.51	2.45	0.81	3.62	2.61	182.73	15.81	1.49	5.62	2.50	70.36	41.09	2.34	7.62	2.11	45.03	57.01	3.22	9.62	3.18	125.54	57.11	3.80
1.64	3.76	112.98	3.31	0.79	3.64	2.73	183.83	17.52	1.51	5.64	2.84	65.09	44.03	2.33	7.64	1.93	43.95	53.58	3.23	9.64	3.16	124.39	57.84	3.81
1.66	3.74	122.30	3.12	0.80	3.66	2.57	189.45	14.71	1.52	5.66	3.07	64.19	44.95	2.33	7.66	1.82	45.66	51.68	3.24	9.66	3.28	117.15	58.64	3.82
1.68	3.72	135.32	3.06	0.84	3.68	2.58	193.53	14.71	1.54	5.68	2.91	66.81	41.89	2.31	7.68	1.76	46.23	51.07	3.24	9.68	3.27	110.59	60.78	3.83
1.70	3.68	144.58	2.82	0.82	3.70	2.63	195.94	14.16	1.55	5.70	2.46	70.54	36.62	2.31	7.70	1.86	44.22	52.29	3.26	9.70	3.49	102.32	61.94	3.85
1.72	3.66	149.18	2.51	0.84	3.72	2.64	195.17	14.09	1.56	5.72	2.14	77.84	33.87	2.32	7.72	2.09	44.61	57.31	3.28	9.72	3.50	100.88	61.94	3.86
1.74	3.61	149.66	2.08	0.86	3.74	2.70	192.10	13.54	1.55	5.74	1.95	82.53	33.38	2.32	7.74	2.39	45.42	61.72	3.29	9.74	3.66	100.09	64.21	3.85
1.76	3.59	156.70	1.96	0.83	3.76	2.68	190.58	13.05	1.60	5.76	1.95	82.48	34.23	2.32	7.76	2.47	44.97	60.43	3.31	9.76	3.52	99.19	59.74	3.87
1.78	3.60	170.11	1.78	0.85	3.78	2.72	186.25	12.99	1.58	5.78	2.07	78.66	34.78	2.31	7.78	2.36	48.82	57.50	3.29	9.78	3.47	96.84	58.57	3.88
1.80	3.61	179.16	1.47	0.88	3.80	2.77	176.94	12.56	1.61	5.80	1.96	71.99	32.46	2.29	7.80	2.22	45.52	55.23	3.30	9.80	3.53	97.68	60.41	3.89
1.82	3.59	183.45	1.10	0.87	3.82	2.74	176.91	12.20	1.60	5.82	1.85	59.54	31.91	2.27	7.82	2.18	44.35	54.31	3.33	9.82	3.63	98.68	61.51	3.90
1.84	3.61	186.19	1.22	0.88	3.84	2.75	175.35	11.52	1.61	5.84	1.85	49.98	32.03	2.25	7.84	2.12	47.99	54.86	3.33	9.84	3.75	105.65	62.06	3.92
1.86	3.58	191.00	0.12	0.91	3.86	2.73	176.28	10.91	1.63	5.86	1.90	40.00	32.95	2.26	7.86	2.17	42.58	56.27	3.34	9.86	3.82	116.35	63.96	3.92
1.88	3.57	193.22	0.12	0.89	3.88	2.73	180.11	10.67	1.63	5.88	2.12	36.51	36.38	2.24	7.88	2.29	43.70	60.86	3.36	9.88	3.85	126.30	62.92	3.93
1.90	3.49	197.12	3.71	0.90	3.90	2.73	181.42	10.24	1.63	5.90	2.35	40.27	39.38	2.25	7.90	2.24	41.68	58.05	3.35	9.90	3.84	139.44	62.13	3.94
1.92	3.39	199.55	2.80	0.93	3.92	2.75	185.40	9.93	1.64	5.92	2.41	54.07	40.84	2.26	7.92	2.17	37.27	58.23	3.36	9.92	3.80	142.06	61.33	3.96
1.94	3.28	202.90	2.25	0.92	3.94	2.75	189.39	9.69	1.66	5.94	2.92	65.62	47.52	2.29	7.94	2.12	39.22	58.41	3.38	9.94	3.77	145.30	61.15	3.96
1.96	3.14	208.32	1.69	0.92	3.96	2.74	191.07	9.26	1.67	5.96	3.51	75.45	51.13	2.26	7.96	1.99	40.55	55.66	3.37	9.96	3.98	150.05	64.02	3.97
1.98	3.08	211.70	1.45	0.94	3.98	2.75	187.60	8.83	1.70	5.98	3.67	61.99	50.52	2.26	7.98	1.82	44.79	53.64	3.37	9.98	3.85	155.49	61.57	4.00
2.00	2.96	215.20	0.23	0.95	4.00	2.71	184.68	8.16	1.71	6.00	3.72	72.48	50.27	2.26	8.00	1.83	45.24	53.76	3.40	10.00	3.70	156.54	60.72	3.99

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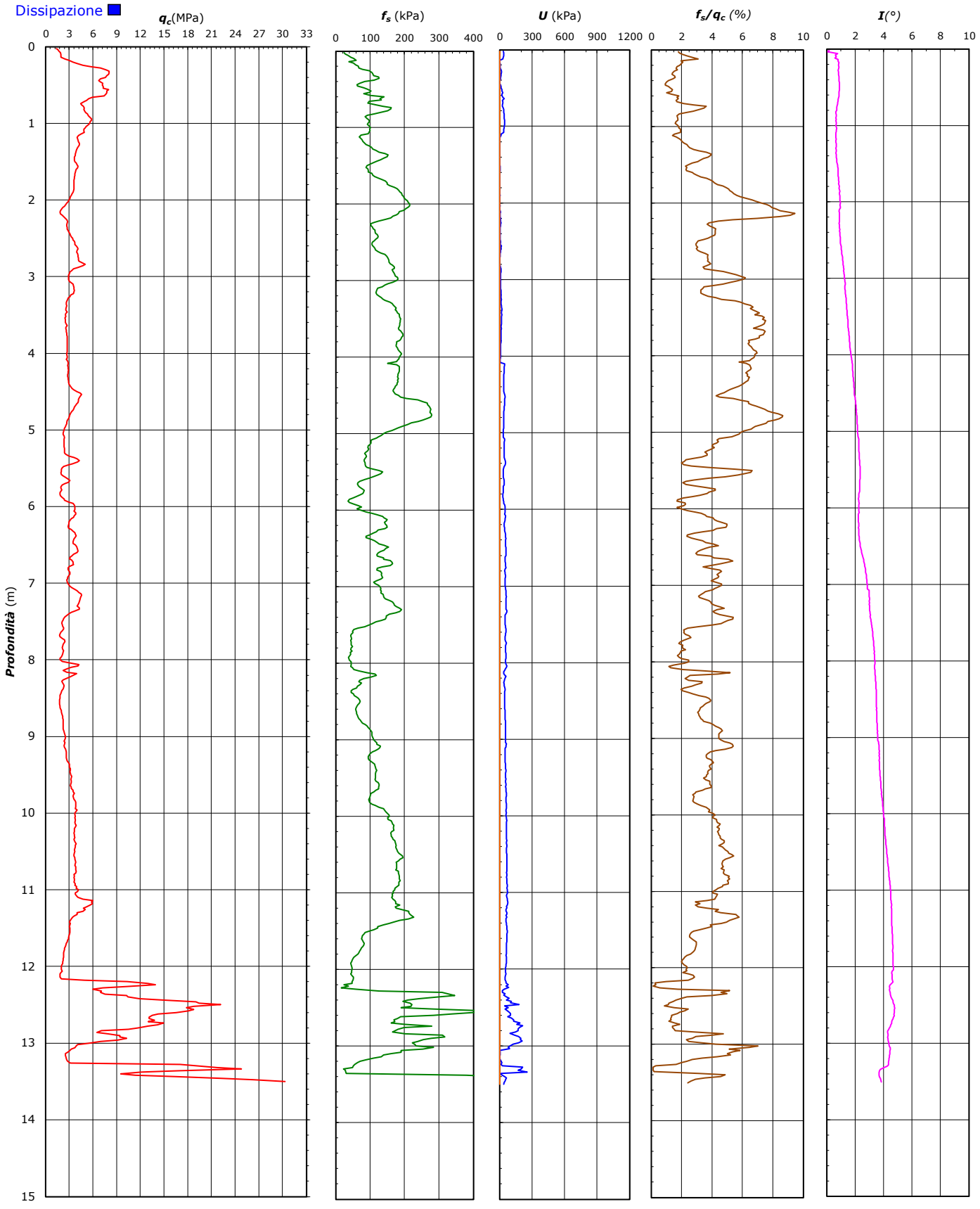
COMMITTENTE:
CANTIERE: Via Monte Poggiolo - Villagrappa (FC)
COMMESSA: C054/24
RDP N°: 188/24
DATA: 28/08/2024

PROVA N°: CPTU 13
PROF. FALDA (m da p.c.): n.r.
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	3.74	151.70	61.88	4.01	12.02	2.01	46.21	56.76	4.69															
10.04	3.77	151.82	63.78	4.01	12.04	1.98	46.72	56.57	4.69															
10.06	3.74	160.97	68.55	4.06	12.06	2.09	43.34	57.80	4.59															
10.08	3.80	163.68	65.86	4.05	12.08	1.97	48.48	54.74	4.58															
10.10	3.78	165.03	64.70	4.06	12.10	1.86	51.55	51.98	4.59															
10.12	3.73	169.36	64.76	4.07	12.12	1.81	51.76	51.19	4.59															
10.14	3.75	167.70	64.08	4.08	12.14	1.85	50.74	53.27	4.60															
10.16	3.88	168.48	65.49	4.07	12.16	2.00	48.51	57.74	4.60															
10.18	3.78	169.02	64.27	4.08	12.18	4.90	47.67	61.10	4.62															
10.20	3.66	163.28	62.68	4.08	12.20	10.30	24.53	82.30	4.66															
10.22	3.66	159.97	63.59	4.10	12.22	12.88	37.69	59.83	4.54															
10.24	3.65	161.26	63.59	4.09	12.24	13.92	15.35	83.89	4.43															
10.26	3.62	161.76	63.29	4.10	12.26	10.29	59.72	44.22	4.41															
10.28	3.64	164.92	64.51	4.11	12.28	7.25	126.50	27.51	4.45															
10.30	3.67	166.54	65.31	4.13	12.30	6.02	309.92	26.96	4.42															
10.32	3.71	171.50	66.47	4.13	12.32	7.08	325.38	50.85	4.44															
10.34	3.61	173.24	64.45	4.15	12.34	6.96	346.38	40.69	4.46															
10.36	3.64	175.10	64.39	4.16	12.36	7.54	300.24	64.09	4.49															
10.38	3.74	175.85	67.14	4.16	12.38	10.29	242.48	86.99	4.50															
10.40	3.91	174.34	68.68	4.17	12.40	10.41	210.58	65.25	4.53															
10.42	3.76	175.54	64.64	4.19	12.42	11.86	195.10	108.35	4.59															
10.44	3.75	179.23	65.68	4.19	12.44	14.82	216.77	101.43	4.65															
10.46	3.69	180.41	64.51	4.21	12.46	19.03	221.72	179.42	4.66															
10.48	3.65	183.97	65.19	4.21	12.48	19.41	219.37	47.99	4.70															
10.50	3.70	188.78	66.78	4.23	12.50	22.15	190.17	81.48	4.75															
10.52	3.66	194.34	66.17	4.22	12.52	18.77	284.21	50.69	4.77															
10.54	3.60	195.56	66.59	4.24	12.54	17.84	434.50	67.52	4.78															
10.56	3.63	187.64	67.33	4.26	12.56	18.76	414.63	90.17	4.77															
10.58	3.74	182.92	69.10	4.27	12.58	18.11	337.36	99.78	4.75															
10.60	3.74	176.41	68.43	4.28	12.60	16.55	285.06	99.35	4.74															
10.62	3.78	176.71	68.86	4.27	12.62	14.23	189.61	75.84	4.73															
10.64	3.81	176.95	69.47	4.29	12.64	13.53	179.72	110.25	4.74															
10.66	3.76	176.95	69.84	4.30	12.66	13.13	168.84	131.67	4.70															
10.68	3.72	176.85	67.39	4.32	12.68	13.13	171.56	128.49	4.65															
10.70	3.80	174.36	67.27	4.34	12.70	13.81	162.19	186.89	4.61															
10.72	3.81	183.00	67.88	4.35	12.72	13.02	200.72	159.40	4.57															
10.74	3.81	182.51	65.55	4.36	12.74	14.95	279.02	212.90	4.56															
10.76	3.88	183.97	69.90	4.37	12.76	14.21	199.33	184.87	4.50															
10.78	3.85	185.64	65.92	4.37	12.78	12.92	181.67	171.09	4.46															
10.80	3.62	185.06	65.43	4.38	12.80	11.66	172.80	170.67	4.41															
10.82	3.65	184.76	66.90	4.39	12.82	10.48	165.36	146.43	4.34															
10.84	3.62	187.31	67.82	4.40	12.84	7.08	201.67	96.17	4.29															
10.86	3.66	184.11	69.17	4.41	12.86	6.53	310.60	139.57	4.29															
10.88	3.64	184.14	69.10	4.43	12.88	7.90	317.17	174.28	4.30															
10.90	3.63	183.96	70.08	4.43	12.90	9.43	278.36	196.13	4.30															
10.92	3.78	177.96	72.53	4.45	12.92	9.44	254.13	190.68	4.30															
10.94	3.69	172.63	68.12	4.46	12.94	10.28	238.55	207.70	4.31															
10.96	3.92	172.30	73.14	4.48	12.96	9.10	223.67	176.30	4.33															
10.98	3.90	166.97	71.25	4.48	12.98	6.97	230.86	126.59	4.34															
11.00	4.16	168.54	75.10	4.49	13.00	5.49	232.87	97.82	4.36															
11.02	4.06	164.27	68.98	4.51	13.02	4.05	284.34	81.72	4.38															
11.04	3.80	165.92	65.61	4.51	13.04	3.90	253.23	94.88	4.41															
11.06	3.78	162.61	68.92	4.50	13.06	3.70	190.31	0.55	4.47															
11.08	3.94	167.33	71.61	4.50	13.08	3.25	189.91	5.06	4.46															
11.10	4.11	171.81	70.82	4.51	13.10	3.01	161.35	6.94	4.45															
11.12	4.73	174.63	75.49	4.51	13.12	2.78	138.89	4.17	4.44															
11.14	5.99	174.48	75.73	4.53	13.14	2.54	132.94	2.21	4.43															
11.16	5.81	186.56	70.16	4.54	13.16	2.55	110.60	1.13	4.41															
11.18	5.93	173.18	65.27	4.55	13.18	2.59	87.02	4.21	4.39															
11.20	5.67	175.82	66.25	4.55	13.20	2.63	71.15	11.86	4.38															
11.22	5.21	191.48	59.82	4.55	13.22	2.69	63.40	22.63	4.37															
11.24	4.81	212.84	60.06	4.55	13.24	2.78	55.79	13.90	4.35															
11.26	5.04	212.02	69.80	4.56	13.26	3.16	51.49	28.04	4.34															
11.28	4.76	216.68	67.41	4.56	13.28	17.02	49.46	212.90	4.35															
11.30	3.99	222.00	57.92	4.56	13.30	19.74	22.53	201.03	4.26															
11.32	4.00	226.38	67.65	4.57	13.32	21.69	28.24	172.69	4.03															
11.34	3.65	211.10	58.29	4.56	13.34	24.78	29.83	253.24	3.77															
11.36	3.43	185.80	59.88	4.56	13.36	16.99	30.76	15.98	3.73															
11.38	3.24	167.71	59.39	4.57	13.38	12.14	380.40	16.41	3.69															
11.40	3.13	155.19	61.78	4.58	13.40	9.53	463.41	46.95	3.67															
11.42	3.03	139.88	62.02	4.58	13.42	11.37	518.10	63.60	3.68															
11.44	3.14	122.38	67.41	4.58	13.44	16.36	575.60	57.42	3.72															
11.46	3.09	122.47	66.86	4.58	13.46	22.34	653.10	51.24	3.76															
11.48	3.05	110.86	68.88	4.59	13.48	26.33	690.60	45.05	3.81															
11.50	3.09	98.08	70.16	4.60	13.50	30.32	728.10	38.87	3.85															
11.52	3.07	85.72	70.04	4.61																				
11.54	3.06	81.24	68.94	4.61																				
11.56	3.07	78.18	68.88	4.61																				
11.58	3.03	76.97	68.39	4.62																				
11.60	2.97	74.78	66.92	4.63																				
11.62	2.91	77.43	66.61	4.63																				
11.64	2.89	81.07	66.55	4.63																				
11.66	2.79	82.78	64.90	4.63																				
11.68	2.74	81.25	64.29	4.65																				
11.70	2.64	78.70	63.80	4.64																				
11.72	2.57	75.85	62.76	4.65																				
11.74	2.49	72.72	62.02	4.65																				
11.76	2.43	70.32	61.78	4.65																				
11.78	2.39	67.65	61.84	4.64																				
11.80	2.35	64.28	62.08	4.64																				
11.82	2.30	59.56	61.53	4.65																				
11.84	2.29	53.46	62.27	4.66																				
11.86	2.27	49.83	63.55	4.65																				
11.88	2.26	48.39	63.68	4.66																				
11.90	2.24	46.04	63.86	4.67																				
11.92	2.22	44.39	62.63	4.67																				
11.94	2.20	45.17	61.53	4.68																				
11.96	2.16	47.13	59.88	4.67																				
11.98	2.07	48.19	57.31	4.67																				
12.00	2.01	47.98	56.57	4.68																				

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 13
CANTIERE:	Via Monte Poggiolo - Villagrappa (FC)	PROF. FALDA (m da p.c.):	n.r.
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	188/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	28/08/2024	OPERATORE:	Zanirato



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 13
CANTIERE:	Via Monte Poggiolo - Villagrappa (FC)	PROF. FALDA (m da p.c.):	n.r.
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	188/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	28/08/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Monte Poggiolo - Villagrappa (FC)
Lat.: 44.208570°
Long.: 12.063331°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Cavallina - Z. A. Quattro (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 14
PROF. FALDA (m da p.c.): n.r.
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.36	25.69	8.75	0.07	2.02	5.80	199.99	2.02	1.51	4.02	1.83	95.72	41.20	1.53	6.02	1.86	36.60	44.87	2.38	8.02	3.11	44.38	40.10	3.19
0.04	2.51	29.01	11.39	0.55	2.04	5.40	200.69	3.24	1.53	4.04	1.85	88.32	41.07	1.53	6.04	1.86	38.06	45.05	2.38	8.04	3.84	51.35	39.42	3.19
0.06	3.28	40.30	12.49	1.24	2.06	5.03	191.11	4.22	1.54	4.06	1.95	76.30	40.83	1.55	6.06	1.85	43.84	45.12	2.37	8.06	4.87	64.48	42.24	3.22
0.08	3.78	47.91	13.22	0.74	2.08	4.79	180.28	5.02	1.55	4.08	1.96	69.42	40.83	1.55	6.08	2.04	36.03	46.71	2.41	8.08	5.41	62.23	41.99	3.22
0.10	4.60	60.93	13.41	-0.16	2.10	4.65	169.29	5.82	1.56	4.10	2.09	49.30	42.85	1.59	6.10	2.11	46.29	46.83	2.39	8.10	5.88	62.02	41.63	3.23
0.12	5.21	72.74	11.63	0.14	2.12	4.37	136.28	25.59	1.36	4.12	1.89	54.97	43.52	1.60	6.12	2.39	52.93	46.40	2.41	8.12	6.44	66.13	41.20	3.23
0.14	6.12	88.81	6.79	0.37	2.14	4.10	120.64	27.24	1.36	4.14	1.71	63.58	43.95	1.61	6.14	2.76	58.40	45.79	2.41	8.14	6.81	66.79	40.89	3.22
0.16	6.96	50.12	8.33	0.30	2.16	3.71	106.46	28.40	1.37	4.16	1.68	67.69	44.14	1.64	6.16	3.39	64.19	45.05	2.41	8.16	7.00	66.95	40.71	3.24
0.18	8.30	48.51	6.12	0.29	2.18	3.45	102.63	29.14	1.37	4.18	1.67	68.00	44.20	1.65	6.18	4.01	65.41	44.32	2.40	8.18	7.05	67.37	40.71	3.24
0.20	10.19	47.14	1.53	0.50	2.20	3.49	109.47	29.26	1.36	4.20	1.67	67.42	44.32	1.65	6.20	4.09	58.01	44.56	2.41	8.20	6.90	65.39	40.83	3.25
0.22	10.36	44.59	6.43	0.45	2.22	3.65	115.19	29.08	1.37	4.22	1.69	67.00	44.44	1.67	6.22	4.00	56.82	44.81	2.41	8.22	6.62	66.03	41.07	3.24
0.24	11.70	87.41	0.67	0.48	2.24	3.75	117.63	29.26	1.37	4.24	1.69	59.18	44.44	1.69	6.24	3.90	56.15	44.99	2.41	8.24	6.38	68.00	41.26	3.26
0.26	13.02	99.07	0.61	0.50	2.26	3.60	121.55	30.00	1.36	4.26	1.69	53.36	44.63	1.70	6.26	3.60	56.82	45.54	2.42	8.26	6.23	68.61	41.07	3.26
0.28	12.54	104.79	3.37	0.57	2.28	3.39	128.64	30.61	1.37	4.28	1.69	49.59	44.69	1.71	6.28	3.13	62.70	46.28	2.44	8.28	6.03	69.13	41.01	3.27
0.30	12.59	116.66	1.22	0.64	2.30	3.20	135.28	31.10	1.37	4.30	1.73	48.40	44.81	1.73	6.30	2.93	70.61	46.28	2.44	8.30	5.75	68.54	41.14	3.27
0.32	13.35	126.71	2.75	0.71	2.32	3.11	138.47	31.28	1.36	4.32	1.72	49.10	44.93	1.74	6.32	2.79	79.68	45.79	2.46	8.32	5.49	66.56	41.07	3.26
0.34	14.04	149.72	4.71	0.76	2.34	3.07	140.42	31.46	1.38	4.34	1.70	53.03	45.18	1.76	6.34	2.65	91.03	45.91	2.46	8.34	5.21	65.50	41.01	3.27
0.36	14.18	137.30	27.91	0.80	2.36	3.12	145.47	29.57	1.38	4.36	1.71	53.15	45.36	1.77	6.36	2.46	103.35	46.03	2.47	8.36	5.03	65.40	40.71	3.27
0.38	12.64	152.76	24.98	0.85	2.38	3.13	146.02	29.63	1.38	4.38	1.64	53.85	45.54	1.77	6.38	2.44	107.80	45.91	2.48	8.38	4.97	66.89	40.28	3.28
0.40	12.23	162.66	27.00	0.88	2.40	3.14	149.01	29.14	1.38	4.40	1.59	54.85	45.73	1.78	6.40	2.54	113.94	45.48	2.48	8.40	4.98	66.06	39.91	3.28
0.42	11.69	203.35	24.36	0.93	2.42	3.04	144.14	28.04	1.38	4.42	1.54	56.16	45.91	1.80	6.42	2.94	108.22	44.50	2.48	8.42	5.09	64.66	39.12	3.30
0.44	10.64	249.49	27.55	0.96	2.44	2.90	139.85	26.75	1.39	4.44	1.54	53.76	46.03	1.82	6.44	2.96	99.12	44.81	2.49	8.44	5.22	63.65	38.57	3.29
0.46	10.53	260.26	30.12	0.98	2.46	2.86	140.61	18.67	1.41	4.46	1.53	51.84	46.16	1.82	6.46	2.62	91.32	45.48	2.51	8.46	5.42	60.30	37.89	3.29
0.48	9.82	258.98	28.28	1.02	2.48	2.83	133.19	17.69	1.39	4.48	1.55	48.04	46.22	1.83	6.48	2.19	88.52	46.34	2.51	8.48	5.74	57.38	37.10	3.30
0.50	9.46	232.25	27.42	1.04	2.50	2.86	139.61	18.12	1.42	4.50	1.56	45.49	46.34	1.84	6.50	1.94	97.56	46.71	2.52	8.50	6.02	55.85	36.48	3.31
0.52	8.90	199.84	27.61	1.06	2.52	3.26	132.61	16.47	1.42	4.52	1.57	42.32	46.40	1.85	6.52	1.85	103.73	46.58	2.52	8.52	6.21	54.45	36.12	3.32
0.54	8.75	172.99	29.32	1.07	2.54	3.68	122.36	16.59	1.43	4.54	1.59	38.37	46.58	1.86	6.54	2.07	100.78	45.91	2.53	8.54	6.37	55.30	35.69	3.32
0.56	8.57	151.37	31.53	1.08	2.56	3.96	112.80	17.14	1.43	4.56	1.60	35.87	46.65	1.88	6.56	2.63	92.01	44.63	2.52	8.56	6.47	56.15	35.38	3.31
0.58	8.79	117.16	32.93	1.09	2.58	4.30	104.38	17.45	1.42	4.58	1.62	35.84	46.77	1.88	6.58	3.09	89.12	43.89	2.53	8.58	6.56	57.15	35.01	3.33
0.60	8.26	118.86	31.83	1.09	2.60	4.33	93.73	18.67	1.43	4.60	1.62	36.21	46.83	1.89	6.60	3.45	78.89	43.40	2.53	8.60	6.68	58.21	34.59	3.33
0.62	8.02	96.18	31.71	1.11	2.62	3.99	90.75	19.96	1.43	4.62	1.65	37.70	46.83	1.91	6.62	3.29	69.76	43.95	2.53	8.62	6.84	59.13	34.22	3.34
0.64	7.60	88.11	31.16	1.12	2.64	3.83	94.28	20.57	1.44	4.64	1.67	39.62	46.95	1.92	6.64	2.71	64.13	45.05	2.54	8.64	7.09	60.92	33.55	3.35
0.66	7.28	72.16	30.91	1.14	2.66	3.43	101.90	21.91	1.44	4.66	1.70	42.64	47.07	1.93	6.66	2.36	70.52	45.60	2.56	8.66	7.56	62.62	32.93	3.35
0.68	7.18	74.05	31.16	1.16	2.68	3.07	110.82	23.32	1.45	4.68	1.74	44.16	47.07	1.94	6.68	2.16	81.78	45.85	2.56	8.68	8.07	63.47	32.32	3.35
0.70	7.04	77.52	30.91	1.15	2.70	3.04	121.35	23.69	1.44	4.70	1.80	46.26	47.14	1.97	6.70	1.99	96.66	46.03	2.57	8.70	8.34	66.91	31.89	3.35
0.72	6.73	75.51	30.73	1.18	2.72	3.00	129.66	24.18	1.44	4.72	1.88	48.67	47.01	1.97	6.72	2.00	100.52	45.79	2.59	8.72	8.22	72.17	31.77	3.35
0.74	6.60	70.22	31.22	1.20	2.74	2.82	130.43	24.98	1.45	4.74	2.07	49.25	46.89	1.99	6.74	2.10	87.89	45.60	2.59	8.74	8.02	72.87	31.71	3.36
0.76	6.55	63.89	31.10	1.22	2.76	2.70	129.12	25.34	1.44	4.76	2.47	51.35	46.28	2.01	6.76	1.93	77.45	46.09	2.58	8.76	7.41	75.45	32.32	3.36
0.78	6.70	57.53	31.65	1.23	2.78	2.59	129.00	25.89	1.44	4.78	3.05	51.57	45.42	2.02	6.78	1.81	81.44	46.16	2.58	8.78	6.21	78.95	33.79	3.36
0.80	6.69	51.36	32.14	1.23	2.80	2.47	122.55	26.38	1.45	4.80	4.05	58.81	44.07	2.02	6.80	1.91	85.61	45.85	2.59	8.80	4.65	88.50	34.89	3.37
0.82	6.84	47.59	32.87	1.22	2.82	2.47	111.57	26.69	1.44	4.82	5.18	63.68	42.91	2.04	6.82	2.32	81.50	44.93	2.59	8.82	3.90	101.71	35.14	3.37
0.84	6.82	42.32	32.81	1.25	2.84	2.42	104.72	27.24	1.44	4.84	6.01	67.09	42.18	2.05	6.84	2.93	73.86	43.83	2.59	8.84	3.24	118.66	35.20	3.39
0.86	7.09	35.33	33.55	1.26	2.86	2.36	103.91	27.85	1.44	4.86	6.62	68.89	41.87	2.06	6.86	3.88	69.05	42.61	2.61	8.86	2.74	133.05	35.38	3.38
0.88	7.06	32.38	32.63	1.26	2.88	2.34	102.11	28.22	1.44	4.88	6.73	69.96	41.99	2.07	6.88	4.38	71.45	42.18	2.60	8.88	2.43	135.94	35.14	3.39
0.90	7.20	31.19	32.87	1.29	2.90	2.41	98.89	28.59	1.44	4.90	6.71	72.97	42.18	2.08	6.90	4.64	63.54	42.12	2.60	8.90	2.42	122.79	34.59	3.39
0.92	7.52	29.77	33.55	1.29	2.92	2.45	96.28	29.14	1.46	4.92	6.58	74.95	42.48	2.08	6.92	4.68	60.74	42.18	2.60	8.92	2.76	108.85	33.55	3.39
0.94	7.78	28.83	33.73	1.28	2.94	2.46	95.21	29.51	1.44	4.94	6.52	72.73	42.61	2.09	6.94	4.43	61.14	42.67	2.60	8.94	3.63	90.25	32.14	3.40
0.96	7.86	34.04	33.18	1.29	2.96	2.52	91.90	29.93	1.44	4.96	6.40	67.49	42.73	2.09	6.96	3.79	64.67	43.83	2.62	8.96	3.89	80.20	32.08	3.40
0.98	7.79	42.75	31.53	1.30	2.98	2.54	90.08	30.36	1.44	4.98	6.25	58.58	42.73	2.11	6.98	3.40	82.47	44.14	2.63	8.98	3.37	81.26	32.87	3.42
1.00	7.95	55.30	32.26	1.30	3.00	2.54	93.86	30.79	1.44	5.00	6.10	56.66	42.73	2.11	7.00	3.48	103.75	43.71	2.63	9.00	3.06	95.60	33.30	3.42
1.02	8.52	60.60	33.97	1.30	3.02	2.55	99.67	31.28	1.44	5.02	5.93	58.94	42.67	2.10	7.02	3.83	110.87	42.91	2.64	9.02	2.70	106.95	33.85	3.41
1.04	9.18	68.12	34.95	1.32	3.04	2.52	105.19	31.77	1.44	5.04	5.74	61.98	42.67	2.12	7.04	4.65	112.14	41.63	2.64	9.04	2.32	115.38	34.28	3.43
1.06	10.14	86.57	36.30	1.34	3.06	2.47	107.93	32.32	1.43	5.06	5.48	66.21	42.73	2.12	7.06	4.90	104.66	41.32	2.65	9.06	2.79	113.89	38.69	3.46
1.08	11.20	102.25	37.89	1.34	3.08	2.45	111.89	32.69	1.43	5.08	5.25	71.29	42.73	2.12	7.08	5.10	81.85	42.97	2.78	9.08	2.55	100.87	39.48	3.46
1.10	11.97	129.16	37.95	1.33	3.10	2.42	100.70	37.95	1.27	5.10	4.79	74.58	40.95	2.21	7.10	5.23	72.09	42.97	2.79	9.10	2.34	86.20	40.10	3.46
1.12	13.14	171.64	6.12	1.12	3.12	2.60	123.11	38.01	1.28	5.12	4.25	76.77	41.93	2.22	7.12	5.32	68.95	42.97	2.80	9.12	2.22	82.21	40.46	3.45
1.14	13.93	188.13	6.24	1.12	3.14	2.55	121.01	38.32	1.28	5.14	3.91	83.46	42.48	2.22	7.14	5.47	69.01	42.79	2.80	9.14	2.03	92.50	40.95	3.47
1.16	14.72	215.04	7.10	1.12	3.16	2.51	119.18	38.63	1.29	5.16	3.67	92.50	42.79	2.23	7.16	5.59	63.86	42.67	2.81	9.16	1.93	83.64	41.14	3.46
1.18	14.63	232.81	6.92	1.12	3.18	2.46	115.50	38.87	1.28	5.18	3.71	105.74	42.54	2.25	7.18	5.60	55.10	42.54	2.82	9.18	1.95	68.54	41.20	3.46
1.20	14.29	245.86	6.18	1.13	3.20	2.37	110.38	39.18	1.29	5.20	4.27	113.04	41.56	2.25	7.20	5.74	54.64	42.24	2.83	9.20	1.85	67.23	41.44	3.45
1.22	13.74	247.46	5.33	1.14	3.22	2.33	108.43	39.36	1.29	5.22	4.74	112.71	40.89	2.24	7.22	6.00	60.27	41.69	2.84	9.22	1.75	62.21	41.69	3.45
1.24	13.20	253.33	4.90	1.14	3.24	2.26	108.04	39.61	1.29	5.24	4.72	106.68	40.95	2.25	7.24	5.97	65.93	41.69	2.83	9.24	1.66	57.16	41.93	3.45
1.26	12.82	263.67	5.02	1.14	3.26	2.14	102.31	39.85	1.29	5.26	4.69	98.52	41.01	2.26	7.26	5.98	69.27	41.38	2.84	9.26	1.60	53.93	42.12	3.46
1.28	12.30	280.56	5.08	1.16	3.28	2.07	91.99	40.10	1.29	5.28	4.34	93.43	41.69	2.26	7.28	6.16	76.94	40.77	2.85	9.28	1.57	46.05	42.30	3.45
1.30	11.65	297.50	5.33	1.16	3.30	1.93	90.41	40.34	1.31	5.30	4.00	85.73	42.12	2.26	7.30	5.91	87.50	41.32	2.85	9.30	1.53	42.39	42.48	3.45
1.32	11.15	304.50	5.02	1.19	3.32	1.83	89.95	40.52	1.30	5.32	3.36	75.99	43.10	2.28	7.32	4.82	89.05	42.79	2.87	9.32	1.51	40.17	42.61	3.46
1.34	10.51	310.12	5.20	1.20	3.34	1.79	91.08	40.59	1.31	5.34	2.66	71.18	43.77	2.29	7.34	3.97	87.70	43.52	2.87	9.34	1.47	38.07	42.91	3.45
1.36	10.18	305.11	5.39	1.21	3.36	1.85	81.89	40.46	1.32	5.36	2.52	72.61	43.65	2.30	7.36	3.45	87.18	43.58	2.87	9.36	1.39	36.73	43.16	3.45
1.38	10.00	294.57	6.12	1.22	3.38	1.89	70.20	40.65	1.32	5.38	2.30	82.50	43.89	2.29	7.38	3.21	89.80	43.40	2.90	9.38	1.33	34.03	43.34	3.46
1.40	9.86	281.17	7.10	1.23	3.40	1.90	67.19	40.71	1.32	5.40	2.08	90.59	43.95	2.28	7.40	3.13	95.03	43.03	2.91	9.40	1.28	32.69	43.52	3.46
1.42	9.83	261.38	8.26	1.23	3.42	1.96	62.07	40.77	1.32	5.42	2.05	93.72	43.89	2.27	7.42	3.17	99.56	42.54	2.92	9.42	1.25	33.45	43.77	3.46
1.44	9.85	245.63	8.75	1.24	3.44	2.07	53.61	40.59	1.33	5.44	2.11	93.11	43.71	2.27	7.44	3.69	89.60	41.14	2.92	9.44	1.20	33.02	43.95	3.46
1.46	9.90	229.49	9.55	1.26	3.46	2.69	49.41	39.30	1.34	5.46	2.13	97.34	43.65	2.26	7.46	3.98	79.49	40.46	2.93	9.46	1.16	31.96	44.20	3.48
1.48	9.90	214.97	10.35	1.26	3.48	3.37	49.14	38.26	1.32	5.48	2.22	97.53	43.16	2.26	7.48	4.09	79.13	40.10	2.93	9.48	1.14	29.53	44.32	3.46
1.50	9.86	205.62	11.20	1.28	3.50	3.44	47.56	38.50	1.33	5.50	2.56	90.95	41.81	2.29	7.50	4.02	79.95	40.16	2.94	9.50	1.13	26.46	44.50	3.46
1.52	9.65	201.35	11.02	1.29	3.52	3.33	64.58	39.18	1.34	5.52	3.23	77.44	40.71	2.30	7.52	3.42	80.61	40.89	2.96	9.52	1.08	24.00	44.69	3.47
1.54	9.01	207.22	9.73	1.29	3.54	3.59	80.71	38.75	1.35	5.54	3.65	73.81	40.34	2.29	7.54	3.09	82.80	41.07	2.98	9.54	1.06	22.13	44.93	3.47
1.56	8.35	216.92	8.94	1.30	3.56	4.20	81.69	37.89	1.35	5.56	3.41	70.04	41.14	2.30	7.56	3.11	85.26	40.77	2.98	9.56	1.05	19.91	45.05	3.46
1.58	7.68	233.32	7.59	1.30	3.58	4.38	89.91	37.83	1.34	5.58	2.72	74.91	42.36	2.32	7.58	3.19	91.50	40.34	2.97	9.58	1.02	18.14	45.24	3.47
1.60	7.24	255.72	6.98	1.31	3.60	4.63	100.17	37.83	1.35	5.60	2.55	82.55	42.67	2.32	7.60	2.76	86.81	41.07	2.99	9.60	1.01	16.85	45.42	3.49
1.62	6.38	286.94	5.33	1.32	3.62	4.26	102.54	38.93	1.33	5.62	2.29	94.39	43.22	2.33	7.62	2.18	87.69	41.81	3.00	9.62	1.02	15.10	45.54	3.48
1.64	6.17	314.33	5.26	1.33	3.64	3.59	100.41	40.16	1.35	5.64	2.25	106.26	43.16	2.35	7.64	1.85	96.82	42.12	3.01	9.64	1.03	15.17	45.73	3.48
1.66	6.19	325.83	5.69	1.33	3.66	2.85	106.23	40.95	1.36	5.66	2.82	104.76	41.93	2.35	7.66	1.60	100.10	42.24	3.02	9.66	1.00	15.41	45.91	3.48
1.68	6.27	316.30	5.88	1.34	3.68	2.46	114.23	41.26	1.35	5.68	3.44	94.08	41.01	2.35	7.68	1.49	88.96	42.18	3.03	9.68	0.97	15.59	46.09	3.48
1.70	6.31	293.65	5.63	1.34	3.70	2.05	119.96	41.56	1.37	5.70	3.74	90.86	40.59	2.37	7.70	1.61	75.87	41.56	3.04	9.70	0.95	15.50	46.28	3.49
1.72	6.30	258.13	5.45	1.37	3.72	2.13	101.79	41.01	1.38	5.72	3.42	83.52	41.50	2.38	7.72	1.92	61.72	40.83	3.05	9.72	0.97	14.72	46.40	3.49
1.74	6.38	214.14	5.33	1.37	3.74	2.50	87.30	40.16	1.38	5.74	2.74	77.31	42.97	2.38	7.74	2.05	45.92	40.71	3.06	9.74	1.01	14.52	46.52	3.49
1.76	6.49	175.64	5.14	1.39	3.76	3.18	78.42	38.93	1.38	5.76	2.21	86.72	44.01	2.40	7.76	2.05	41.99	40.71	3.06	9.76	1.02	15.33	46.65	3.49
1.78	6.57	142.56	5.02	1.39	3.78	3.89	69.74	38.01	1.40	5.78	2.02	94.72	44.14	2.42	7.78	2.21	45.58	40.40	3.06	9.78	1.05	15.99	46.77	3.48
1.80	6.74	117.23	5.08	1.41	3.80	4.20	60.13	37.89	1.41	5.80	1.83	101.72	44.44	2.42	7.80	2.71	42.27	39.79	3.07	9.80	1.07	17.47	46.89	3.48
1.82	6.93	102.68	5.20	1.43	3.82	4.39	59.06	37.77	1.42	5.82	1.66	100.90	44.75	2.41	7.82	2.94	44.95	39.73	3.08	9.82	1.07	17.53	46.95	3.47
1.84	7.30	98.70	5.51	1.44	3.84	4.50	58.30	37.77	1.42	5.84	1.65	90.61	44.69	2.40	7.84	2.62	49.94	40.59	3.09	9.84	1.08	17.35	47.07	3.47
1.86	7.44	101.93	5.39	1.44	3.86	4.52	57.06	38.01	1.44	5.86	1.69	79.69	44.56	2.40	7.86	2.17	60.74	41.50	3.09	9.86	1.08	17.87	47.14	3.47
1.88	7.47	106.95	4.59	1.45	3.88	4.06	55.99	39.18	1.45	5.88	1.70	69.07	44.44	2.40	7.88	1.82	73.95	42.12	3.11	9.88	1.08	18.50	47.26	3.47
1.90	7.29	114.20	3.67	1.45	3.90	3.42	59.52	40.34	1.45	5.90	1.68	57.32	44.50	2.40	7.90	1.54	78.27	42.54	3.12	9.90	1.10	18.83	47.32	3.47
1.92	6.91	127.41	2.51	1.46	3.92	2.79	66.92	41.01	1.46	5.92	1.69	50.04	44.63	2.41	7.92	1.45	74.38	42.73	3.13	9.92	1.10	18.92	47.38	3.48
1.94	6.71	139.77	1.47	1.47	3.94	2.43	77.61	41.26	1.46	5.94	1.69	42.68	44.63	2.40	7.94	1.54	60.84	42.48	3.15	9.94	1.08	19.38	47.50	3.48
1.96	6.51	150.61	0.86	1.47	3.96	2.25	85.83	41.26	1.48	5.96	1.72	39.00	44.63	2.41	7.96	1.70	53.69	42.18	3.16	9.96	1.08	20.10	47.62	3.48
1.98	6.23	171.92		1.49	3.98	1.96	96.05	41.38	1.49	5.98	1.78	38.36	44.69	2.39	7.98	2.02	46.48	41.56	3.18	9.98	1.07	20.25	47.69	3.49
2.00	6.04	189.03	1.04	1.51	4.00	1.87	97.24	41.26	1.51	6.00	1.80	38.21	44.87	2.39	8.00	2.46	44.04	40.89	3.18	10.00	1.07	20.55	47.75	3.48

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COMMITTENTE:
CANTIERE: Via Cavallina - Z. A. Quattro (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 14
PROF. FALDA (m da p.c.): n.r.
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

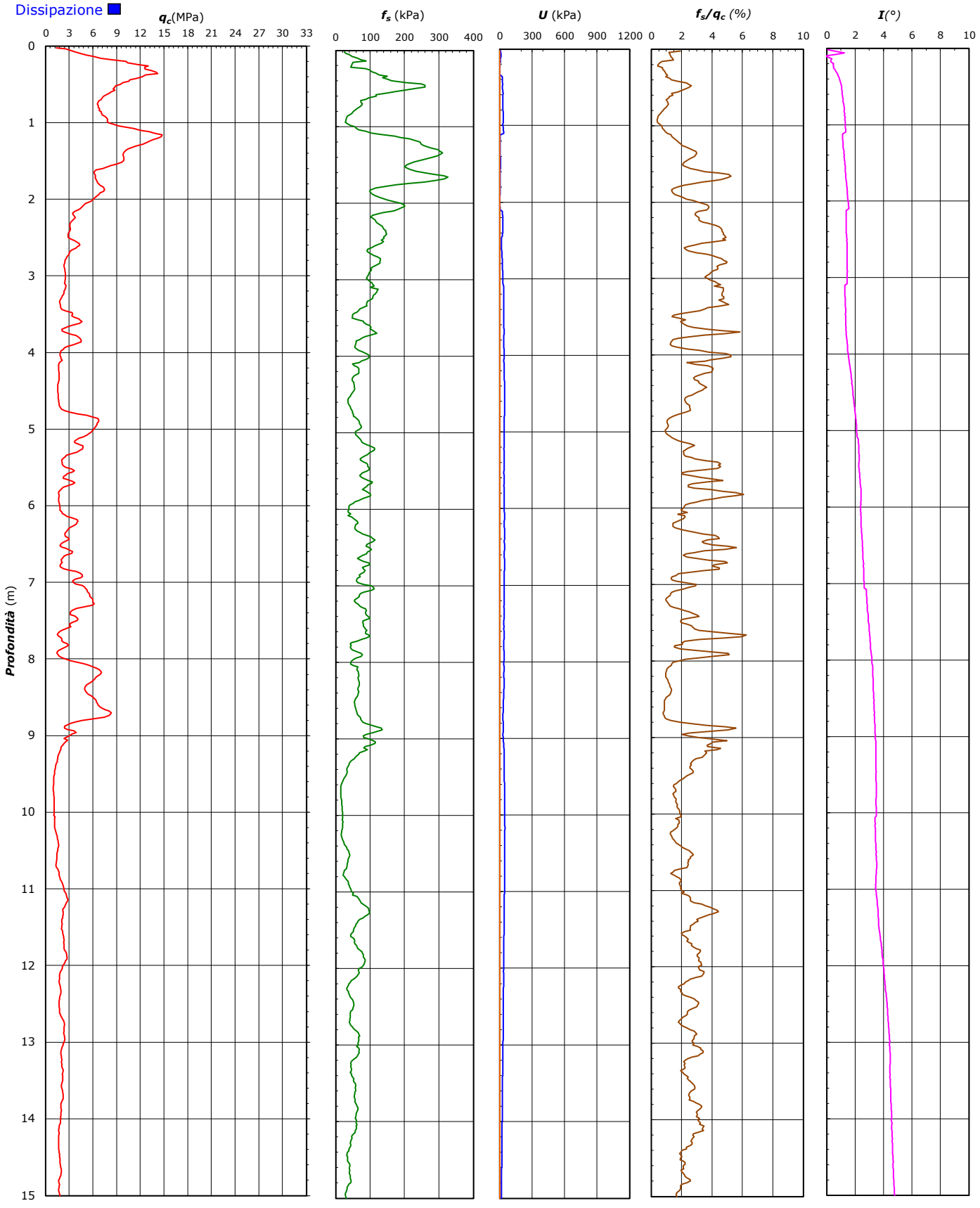
prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.07	20.92	47.87	3.48	12.02	2.11	66.31	37.77	4.00	14.02	1.91	60.03	23.02	4.55										
10.04	1.06	20.68	47.93	3.48	12.04	2.11	67.05	36.73	4.02	14.04	1.91	61.61	23.20	4.56										
10.06	1.21	19.50	47.87	3.39	12.06	2.00	69.30	37.03	4.04	14.06	1.87	59.51	23.45	4.59										
10.08	1.16	21.12	48.05	3.40	12.08	1.88	65.46	37.34	4.04	14.08	1.77	61.16	23.81	4.58										
10.10	1.13	20.94	48.18	3.40	12.10	1.82	61.78	37.52	4.04	14.10	1.73	59.15	23.87	4.57										
10.12	1.13	20.91	48.24	3.41	12.12	1.76	58.40	37.46	4.05	14.12	1.70	57.08	23.87	4.57										
10.14	1.15	20.31	48.24	3.42	12.14	1.76	51.40	37.40	4.06	14.14	1.66	57.08	23.75	4.58										
10.16	1.14	20.01	48.30	3.41	12.16	1.78	45.31	37.34	4.05	14.16	1.68	53.27	23.51	4.58										
10.18	1.16	19.62	48.30	3.40	12.18	1.75	42.60	37.28	4.08	14.18	1.70	47.52	23.32	4.59										
10.20	1.17	18.12	48.24	3.42	12.20	1.73	39.23	37.22	4.08	14.20	1.69	46.21	23.20	4.59										
10.22	1.21	17.40	48.18	3.41	12.22	1.71	37.03	37.16	4.09	14.22	1.67	47.24	23.26	4.61										
10.24	1.28	16.43	48.11	3.42	12.24	1.76	34.60	36.91	4.10	14.24	1.67	45.87	23.08	4.61										
10.26	1.33	16.70	47.99	3.41	12.26	1.85	32.80	36.67	4.11	14.26	1.65	44.14	23.02	4.62										
10.28	1.36	17.82	47.87	3.43	12.28	1.88	33.90	36.55	4.12	14.28	1.65	43.04	22.89	4.61										
10.30	1.41	19.23	47.81	3.43	12.30	1.90	37.25	36.36	4.13	14.30	1.65	44.38	22.77	4.61										
10.32	1.46	20.61	47.75	3.42	12.32	1.93	37.64	36.24	4.13	14.32	1.66	44.38	22.71	4.63										
10.34	1.50	22.42	47.62	3.43	12.34	1.95	39.56	36.12	4.15	14.34	1.66	41.64	22.53	4.62										
10.36	1.54	24.46	47.62	3.44	12.36	1.96	40.99	36.12	4.17	14.36	1.66	38.26	22.59	4.63										
10.38	1.59	26.02	47.50	3.44	12.38	1.90	43.79	36.06	4.18	14.38	1.64	38.08	22.40	4.63										
10.40	1.61	29.08	47.44	3.45	12.40	1.82	47.26	35.93	4.20	14.40	1.69	34.40	22.10	4.63										
10.42	1.64	32.28	47.50	3.45	12.42	1.78	50.70	35.93	4.22	14.42	1.71	33.76	21.98	4.63										
10.44	1.65	33.95	47.50	3.45	12.44	1.77	52.25	35.93	4.22	14.44	1.74	32.54	21.85	4.63										
10.46	1.61	36.78	47.56	3.46	12.46	1.72	53.62	36.06	4.23	14.46	1.77	34.30	21.73	4.64										
10.48	1.54	38.64	47.75	3.46	12.48	1.70	53.20	36.06	4.24	14.48	1.76	35.40	21.61	4.65										
10.50	1.52	39.70	47.75	3.48	12.50	1.70	51.86	35.93	4.25	14.50	1.78	34.52	21.43	4.65										
10.52	1.49	40.86	47.81	3.48	12.52	1.70	50.88	35.93	4.27	14.52	1.83	34.91	21.18	4.66										
10.54	1.46	40.34	47.81	3.47	12.54	1.74	48.66	35.81	4.26	14.54	1.83	38.84	21.24	4.66										
10.56	1.44	37.27	47.87	3.48	12.56	1.77	44.55	35.63	4.27	14.56	1.82	40.70	21.12	4.68										
10.58	1.42	36.72	47.81	3.50	12.58	1.78	42.85	35.57	4.29	14.58	1.85	41.09	20.87	4.67										
10.60	1.46	35.62	47.81	3.49	12.60	1.79	42.39	35.44	4.29	14.60	1.90	40.09	20.57	4.67										
10.62	1.41	34.89	47.87	3.50	12.62	1.80	42.75	35.38	4.30	14.62	1.91	40.06	20.14	4.68										
10.64	1.39	33.40	47.81	3.51	12.64	1.87	42.36	35.20	4.30	14.64	1.94	41.64	19.89	4.68										
10.66	1.36	33.19	47.93	3.51	12.66	1.97	40.68	34.83	4.32	14.66	2.00	39.60	19.53	4.69										
10.68	1.32	31.88	47.99	3.52	12.68	2.04	40.87	34.59	4.32	14.68	2.00	40.58	19.47	4.69										
10.70	1.31	30.84	47.93	3.51	12.70	2.16	40.53	34.28	4.32	14.70	2.00	42.40	19.47	4.70										
10.72	1.40	26.11	47.62	3.51	12.72	2.31	41.29	33.97	4.33	14.72	1.97	43.25	19.53	4.69										
10.74	1.53	23.86	47.26	3.50	12.74	2.36	44.21	33.85	4.33	14.74	1.93	43.13	19.59	4.69										
10.76	1.62	23.13	47.07	3.50	12.76	2.39	47.71	33.73	4.33	14.76	1.85	43.35	19.65	4.70										
10.78	1.72	22.26	46.89	3.50	12.78	2.40	51.58	33.61	4.35	14.78	1.76	44.71	19.83	4.71										
10.80	1.73	26.29	46.95	3.50	12.80	2.36	55.41	33.61	4.35	14.80	1.68	43.56	19.83	4.72										
10.82	1.73	28.68	46.95	3.47	12.82	2.37	60.41	33.55	4.36	14.82	1.66	38.81	19.53	4.72										
10.84	1.77	32.73	46.83	3.46	12.84	2.34	66.28	33.55	4.37	14.84	1.73	35.61	19.16	4.73										
10.86	1.83	36.05	46.71	3.47	12.86	2.33	68.11	33.48	4.39	14.86	1.75	34.12	19.10	4.73										
10.88	1.91	37.72	46.40	3.47	12.88	2.31	69.47	33.30	4.39	14.88	1.74	33.54	18.92	4.73										
10.90	2.03	37.54	46.03	3.45	12.90	2.35	66.77	33.12	4.40	14.90	1.69	32.54	18.92	4.75										
10.92	2.10	39.43	45.85	3.45	12.92	2.38	67.28	32.93	4.41	14.92	1.66	31.17	18.98	4.75										
10.94	2.16	41.19	45.60	3.44	12.94	2.38	66.98	32.81	4.42	14.94	1.65	28.86	18.61	4.75										
10.96	2.23	43.75	45.42	3.45	12.96	2.44	66.25	32.57	4.41	14.96	1.73	28.74	18.00	4.75										
10.98	2.30	44.78	45.30	3.44	12.98	2.41	64.94	32.57	4.43	14.98	1.77	29.16	17.51	4.75										
11.00	2.35	47.82	45.12	3.45	13.00	2.34	65.85	32.57	4.44	15.00	1.81	30.84	17.14	4.76										
11.02	2.36	51.44	45.12	3.45	13.02	2.23	60.94	30.06	4.42															
11.04	2.45	48.69	43.52	3.49	13.04	2.22	67.15	30.36	4.42															
11.06	2.60	62.08	43.34	3.50	13.06	2.11	69.13	30.67	4.45															
11.08	2.64	66.40	43.40	3.50	13.08	2.07	67.70	30.79	4.45															
11.10	2.67	69.26	43.28	3.51	13.10	2.00	68.21	30.91	4.45															
11.12	2.75	71.48	43.10	3.51	13.12	1.95	66.30	30.97	4.45															
11.14	2.87	74.53	42.85	3.54	13.14	1.95	63.01	30.85	4.47															
11.16	2.81	79.64	43.03	3.54	13.16	1.97	60.54	30.73	4.46															
11.18	2.61	87.03	43.46	3.55	13.18	2.01	54.00	30.48	4.47															
11.20	2.56	91.72	43.40	3.57	13.20	2.03	49.19	30.30	4.46															
11.22	2.47	95.67	43.52	3.58	13.22	2.05	45.81	30.12	4.46															
11.24	2.38	96.40	43.46	3.59	13.24	2.06	44.23	30.00	4.46															
11.26	2.25	98.29	43.58	3.60	13.26	2.03	44.99	29.87	4.46															
11.28	2.20	97.47	43.46	3.60	13.28	2.05	44.47	29.69	4.46															
11.30	2.26	92.23	43.22	3.61	13.30	2.07	45.38	29.51	4.44															
11.32	2.25	85.14	42.97	3.60	13.32	2.06	46.14	29.32	4.44															
11.34	2.23	79.02	42.85	3.61	13.34	2.14	45.41	29.02	4.43															
11.36	2.20	70.55	42.73	3.62	13.36	2.22	43.07	28.65	4.44															
11.38	2.19	65.35	42.61	3.64	13.38	2.20	45.93	28.53	4.43															
11.40	2.05	63.21	42.73	3.65	13.40	2.19	46.81	28.53	4.44															
11.42	2.06	59.62	42.48	3.64	13.42	2.14	49.79	28.46	4.46															
11.44	2.06	57.67	42.24	3.64	13.44	2.15	52.65	28.34	4.44															
11.46	2.13	55.48	41.99	3.64	13.46	2.17	51.34	28.22	4.45															
11.48	2.04	52.71	41.99	3.65	13.48	2.15	53.38	28.10	4.47															
11.50	2.04	52.03	41.87	3.67	13.50	2.17	56.36	27.98	4.46															
11.52	2.03	52.40	41.56	3.69	13.52	2.14	57.94	27.98	4.48															
11.54	2.13	46.86	41.26	3.71	13.54	2.07	57.94	28.10	4.48															
11.56	2.19	43.51	41.01	3.71	13.56	2.02	57.46	28.04	4.48															
11.58	2.19	44.02	40.46	3.74	13.58	2.02	58.28	27.85	4.49															
11.60	2.26	49.90	39.73	3.75	13.60	2.06	58.76	27.61	4.50															
11.62	2.30	53.98	39.36	3.77	13.62	2.11	55.93	27.42	4.50															
11.64	2.29	55.77	38.93	3.78	13.64	2.16	55.32	27.18	4.50															
11.66	2.33	54.83	38.69	3.79	13.66	2.19	54.35	26.87	4.50															
11.68	2.35	57.60	38.50	3.81	13.68	2.23	55.02	26.69	4.51															
11.70	2.29	60.91	38.69	3.83	13.70	2.21	56.02	26.63	4.51															
11.72	2.36	62.37	38.44	3.83	13.72	2.23	56.57	26.44	4.51															
11.74	2.36	65.42	38.32	3.85	13.74	2.22	55.53	26.44	4.50															
11.76	2.36	70.34	38.26	3.86	13.76	2.13	58.91	26.57	4.50															
11.78	2.37	76.76	38.14	3.87	13.78	2.04	60.56	26.57	4.51															
11.80	2.42	78.53	37.95	3.89	13.80	1.97	62.53	26.69	4.52															
11.82	2.55	80.05	37.59	3.88	13.82	1.93	64.48	26.44	4.53															
11.84	2.65	80.38	37.22	3.89	13.84	1.96	64.63	26.14	4.53															
11.86	2.69	81.36	37.22	3.91	13.86	1.98	63.41	25.95	4.54															
11.88	2.71	85.34	37.22	3.92	13.88	1.98	60.52	25.89	4.55															
11.90	2.72	85.19	37.22	3.93	13.90	2.00	59.55	25.83	4.56															
11.92	2.71	84.58	37.16	3.95	13.92	1.96	59.43	25.77	4.56															
11.94	2.52	82.78	37.40	3.96	13.94	1.93	58.51	25.77	4.57															
11.96	2.44	80.50	37.34	3.96	13.96	1.92	57.29	25.83	4.57															
11.98	2.33	77.21	37.59	3.97	13.98	1.90	60.49	25.77	4.57															
12.00	2.23	68.93	37.65	3.99	14.00	1.94	59.12	25.59	4.56															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Cavallina - Z. A. Quattro (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 14
PROF. FALDA (m da p.c.): n.r.
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 14
CANTIERE:	Via Cavallina - Z. A. Quattro (FC)	PROF. FALDA (m da p.c.):	n.r.
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	196/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	03/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Cavallina - Z. A. Quattro (FC)
Lat.: 44.222732°
Long.: 11.999726°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Rambaldo Bruschi - Quartiere San Varano - Forlì (FC)
COMMESSA: C054/24
RDP N°: 201/24
DATA: 28/08/2024

PROVA N°: CPTU 15
PROF. FALDA (m da p.c.): 12.00
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.07	20.34	19.71	1.23	2.02	5.75	238.61	9.92	1.05	4.02	3.57	164.72	41.81	1.63	6.02	2.30	127.53	132.53	2.53	8.02	2.64	63.00	391.53	3.31
0.04	1.62	22.59	24.12	1.04	2.04	5.70	247.40	10.59	1.06	4.04	3.57	160.15	39.05	1.64	6.04	2.22	128.04	131.06	2.54	8.04	2.51	65.75	400.89	3.33
0.06	2.19	27.32	27.12	1.21	2.06	5.72	258.48	9.98	1.06	4.06	3.50	160.97	38.14	1.64	6.06	2.21	132.92	112.02	2.56	8.06	2.68	73.17	405.97	3.33
0.08	2.35	32.79	24.55	1.13	2.08	5.51	219.02	32.99	1.09	4.08	3.66	178.87	26.02	1.69	6.08	2.14	128.14	109.88	2.56	8.08	2.99	82.19	385.71	3.34
0.10	2.44	41.87	23.02	1.01	2.10	5.63	227.12	33.30	1.09	4.10	3.66	181.36	41.44	1.70	6.10	2.07	123.00	107.80	2.57	8.10	2.72	86.46	404.20	3.34
0.12	2.33	47.37	2.63	0.95	2.12	5.67	229.31	34.46	1.08	4.12	3.66	181.49	57.66	1.71	6.12	2.06	114.73	107.00	2.57	8.12	2.74	90.55	189.40	3.35
0.14	2.41	28.91	0.86	0.91	2.14	5.47	230.22	33.85	1.08	4.14	3.75	177.47	58.83	1.71	6.14	2.07	106.88	106.33	2.57	8.14	2.69	92.59	184.99	3.35
0.16	2.50	26.23	1.16	0.86	2.16	5.46	236.03	30.55	1.08	4.16	3.77	178.29	61.58	1.71	6.16	2.07	101.80	105.53	2.59	8.16	2.49	94.85	185.54	3.36
0.18	2.65	23.47	1.78	0.83	2.18	5.57	246.83	32.44	1.12	4.18	3.67	179.75	73.27	1.71	6.18	2.11	98.37	105.72	2.58	8.18	2.27	99.39	187.87	3.36
0.20	2.74	21.51	1.59	0.85	2.20	5.51	251.15	30.24	1.10	4.20	3.65	180.54	71.13	1.71	6.20	2.16	92.83	105.90	2.58	8.20	2.14	101.73	187.74	3.36
0.22	2.74	23.05	1.04	0.81	2.22	5.50	260.95	28.46	1.12	4.22	3.60	181.73	69.72	1.71	6.22	2.13	88.62	104.98	2.58	8.22	2.03	96.95	188.48	3.36
0.24	2.96	28.85	2.82	0.87	2.24	5.43	258.79	27.42	1.14	4.24	3.49	185.86	72.91	1.71	6.24	2.11	86.73	104.06	2.59	8.24	1.90	94.06	195.76	3.37
0.26	3.07	34.20	5.39	0.85	2.26	5.42	264.93	26.14	1.14	4.26	3.32	189.70	74.13	1.70	6.26	2.12	85.95	103.76	2.60	8.26	1.89	90.42	199.68	3.36
0.28	3.12	42.92	4.47	0.89	2.28	5.33	267.97	23.75	1.16	4.28	3.29	186.38	72.97	1.71	6.28	2.10	85.52	102.90	2.59	8.28	1.87	87.23	204.33	3.37
0.30	3.17	48.34	2.39	0.89	2.30	5.27	270.28	20.20	1.15	4.30	3.31	185.25	71.38	1.71	6.30	2.10	83.51	102.29	2.61	8.30	1.93	83.77	213.70	3.37
0.32	3.31	48.49	0.73	0.81	2.32	5.27	273.78	18.24	1.16	4.32	3.37	181.90	71.62	1.72	6.32	2.07	83.33	102.04	2.61	8.32	2.01	78.69	220.13	3.37
0.34	3.53	45.42	3.18	0.96	2.34	5.26	273.29	15.00	1.18	4.34	3.42	177.52	73.09	1.73	6.34	2.11	83.12	101.74	2.61	8.34	2.11	69.03	222.09	3.37
0.36	3.51	45.18	3.06	0.91	2.36	5.27	272.61	9.18	1.17	4.36	3.38	170.96	71.74	1.73	6.36	2.06	82.97	100.64	2.61	8.36	2.12	60.70	218.35	3.39
0.38	3.36	44.73	1.22	0.90	2.38	5.31	268.32	9.86	1.19	4.38	3.32	167.20	69.48	1.74	6.38	2.04	80.74	100.39	2.62	8.38	2.02	63.89	217.25	3.40
0.40	3.39	49.51	2.45	0.95	2.40	5.35	265.15	9.00	1.21	4.40	3.28	167.08	70.40	1.75	6.40	2.01	77.68	99.53	2.62	8.40	2.02	66.90	218.35	3.40
0.42	3.41	54.20	3.55	0.88	2.42	5.30	264.35	0.37	1.21	4.42	3.30	169.93	73.03	1.76	6.42	2.00	75.06	99.17	2.62	8.42	2.07	68.49	220.00	3.41
0.44	3.49	57.06	4.96	0.97	2.44	5.24	262.89	4.41	1.23	4.44	3.29	169.66	81.05	1.76	6.44	1.99	72.96	98.49	2.62	8.44	2.04	72.82	219.88	3.41
0.46	3.67	55.49	7.96	0.97	2.46	5.15	262.06	3.67	1.23	4.46	3.28	168.76	83.44	1.77	6.46	1.99	71.00	98.19	2.63	8.46	2.03	75.73	220.56	3.42
0.48	3.66	52.61	7.35	0.90	2.48	5.03	259.72	2.51	1.24	4.48	3.35	164.58	82.46	1.76	6.48	2.01	70.31	98.25	2.64	8.48	2.05	78.50	222.58	3.43
0.50	3.65	45.66	8.20	0.96	2.50	4.87	259.14	8.26	1.25	4.50	3.19	158.68	78.48	1.77	6.50	2.05	68.39	98.68	2.64	8.50	2.11	79.01	227.29	3.44
0.52	3.66	44.25	7.28	0.90	2.52	4.66	259.37	8.26	1.26	4.52	3.00	155.71	75.29	1.78	6.52	2.08	68.09	99.23	2.64	8.52	2.20	79.61	231.70	3.44
0.54	3.81	39.95	10.35	0.92	2.54	4.51	257.27	4.59	1.27	4.54	2.89	151.95	73.64	1.80	6.54	2.09	67.13	98.49	2.66	8.54	2.29	79.30	233.84	3.45
0.56	4.12	30.87	12.73	1.02	2.56	4.42	256.23	0.55	1.29	4.56	2.85	152.70	74.07	1.81	6.56	2.09	68.54	97.82	2.65	8.56	2.28	80.11	234.88	3.45
0.58	4.27	27.05	14.75	0.98	2.58	4.31	259.30	4.84	1.28	4.58	2.82	154.29	83.07	1.82	6.58	2.09	68.60	97.70	2.67	8.58	2.33	80.20	238.74	3.45
0.60	4.18	25.49	13.83	1.04	2.60	4.31	264.11	6.79	1.27	4.60	3.01	153.27	95.74	1.85	6.60	2.12	68.51	98.00	2.68	8.60	2.42	82.13	242.78	3.45
0.62	4.26	30.30	14.88	1.04	2.62	4.26	266.78	9.61	1.29	4.62	3.34	146.48	98.25	1.86	6.62	2.09	69.11	97.39	2.68	8.62	2.46	82.48	244.74	3.45
0.64	4.05	38.53	13.53	0.96	2.64	4.22	266.26	7.41	1.31	4.64	3.56	137.97	104.19	1.87	6.64	2.10	70.29	98.13	2.69	8.64	2.42	85.16	244.61	3.46
0.66	4.02	49.80	15.67	1.03	2.66	4.17	265.74	9.73	1.28	4.66	3.75	130.24	105.47	1.90	6.66	2.11	69.69	97.64	2.70	8.66	2.41	90.69	244.18	3.47
0.68	4.18	51.09	18.00	1.02	2.68	4.16	263.19	12.18	1.32	4.68	3.69	135.80	104.92	1.91	6.68	2.08	73.69	96.54	2.70	8.68	2.37	94.93	244.00	3.48
0.70	4.27	49.02	18.55	1.00	2.70	4.19	259.04	18.30	1.32	4.70	3.57	139.20	104.25	1.91	6.70	2.06	76.42	95.80	2.71	8.70	2.32	94.93	243.08	3.47
0.72	4.38	47.60	20.14	0.99	2.72	4.25	253.53	20.14	1.29	4.72	3.50	145.88	100.58	1.93	6.72	2.05	77.15	96.35	2.72	8.72	2.32	95.47	242.41	3.48
0.74	4.40	44.15	19.89	0.95	2.74	4.25	253.01	21.67	1.32	4.74	3.50	153.99	100.39	1.94	6.74	1.99	78.59	94.88	2.73	8.74	2.21	97.99	239.90	3.48
0.76	4.48	47.66	21.00	1.01	2.76	4.17	250.12	17.08	1.30	4.76	3.45	160.40	98.86	1.96	6.76	1.94	81.39	94.39	2.73	8.76	2.07	98.89	236.10	3.48
0.78	4.50	50.78	20.94	0.96	2.78	4.10	245.83	8.51	1.33	4.78	3.31	171.61	104.49	1.98	6.78	1.90	81.15	93.72	2.75	8.78	2.02	96.85	235.43	3.47
0.80	4.58	51.53	21.73	1.01	2.80	4.09	240.29	7.16	1.34	4.80	3.36	168.22	103.88	2.00	6.80	1.85	81.66	94.52	2.76	8.80	1.92	96.52	233.10	3.48
0.82	4.99	48.19	24.79	1.02	2.82	4.12	239.22	11.81	1.32	4.82	3.34	167.77	103.64	2.01	6.82	1.80	78.89	94.64	2.76	8.82	1.80	97.57	230.11	3.49
0.84	5.24	45.45	23.87	1.05	2.84	4.12	238.01	12.30	1.34	4.84	3.23	169.78	102.41	2.02	6.84	1.76	76.49	93.90	2.77	8.84	1.61	100.15	227.90	3.48
0.86	5.27	48.60	22.28	1.08	2.86	4.11	237.12	12.98	1.35	4.86	3.11	172.25	103.82	2.03	6.86	1.74	74.99	93.84	2.78	8.86	1.50	97.77	229.49	3.49
0.88	5.35	51.01	21.79	1.04	2.88	4.24	238.28	15.79	1.34	4.88	3.12	165.64	106.33	2.04	6.88	1.75	72.34	93.78	2.78	8.88	1.45	90.53	231.08	3.49
0.90	5.44	63.09	23.14	1.09	2.90	4.40	239.92	13.16	1.35	4.90	3.10	160.58	104.06	2.04	6.90	1.73	70.72	93.66	2.80	8.90	1.40	82.95	231.82	3.49
0.92	5.36	75.15	22.71	1.03	2.92	4.40	239.95	9.67	1.33	4.92	3.03	158.09	103.09	2.06	6.92	1.72	69.12	93.66	2.80	8.92	1.35	73.78	233.41	3.50
0.94	5.39	75.87	22.59	1.03	2.94	4.48	240.38	8.20	1.36	4.94	3.08	152.44	103.09	2.07	6.94	1.75	67.50	94.88	2.81	8.94	1.35	65.57	234.64	3.51
0.96	5.25	74.51	21.36	1.06	2.96	4.53	237.76	16.04	1.35	4.96	3.05	148.71	101.92	2.08	6.96	1.81	67.14	97.02	2.82	8.96	1.34	54.81	235.86	3.51
0.98	5.13	70.06	19.34	1.05	2.98	4.49	236.67	31.16	1.33	4.98	2.98	144.05	100.21	2.09	6.98	1.93	67.05	99.47	2.83	8.98	1.30	47.95	237.45	3.51
1.00	5.05	66.72	19.34	1.04	3.00	4.38	240.35	43.40	1.34	5.00	2.87	142.37	98.19	2.10	7.00	1.99	68.56	100.64	2.83	9.00	1.32	41.19	238.68	3.52
1.02	5.05	63.08	19.83	1.03	3.02	4.26	242.06	47.44	1.34	5.02	2.73	137.71	96.35	2.11	7.02	2.07	67.71	102.04	2.83	9.02	1.32	35.50	239.53	3.53
1.04	4.76	61.96	19.71	1.03	3.04	4.14	240.72	45.73	1.35	5.04	2.66	134.64	94.70	2.11	7.04	2.12	69.07	104.31	2.84	9.04	1.32	31.02	251.10	3.53
1.06	4.27	74.53	14.75	1.02	3.06	3.95	241.48	36.36	1.33	5.06	2.59	116.98	78.72	2.16	7.06	2.23	74.43	114.72	2.87	9.06	1.33	32.52	252.88	3.54
1.08	4.03	74.40	0.67	0.98	3.08	3.70	214.82	45.79	1.35	5.08	2.80	144.31	80.74	2.17	7.08	2.26	77.40	119.80	2.88	9.08	1.31	31.41	256.00	3.54
1.10	3.97	71.00	4.59	0.99	3.10	3.79	231.62	49.71	1.35	5.10	2.90	138.09	82.95	2.19	7.10	2.29	76.38	124.33	2.91	9.10	1.30	30.24	258.14	3.54
1.12	3.75	68.60	8.33	1.04	3.12	3.78	226.11	51.05	1.34	5.12	3.09	132.26	86.31	2.19	7.12	2.39	74.01	128.55	2.92	9.12	1.31	28.44	263.10	3.53
1.14	3.53	62.49	10.96	1.01	3.14	3.77	223.56	38.57	1.37	5.14	3.23	129.40	89.92	2.20	7.14	2.50	72.89	134.86	2.94	9.14	1.33	26.93	265.55	3.54
1.16	3.48	56.03	11.88	1.06	3.16	3.71	218.47	35.81	1.37	5.16	3.34	127.18	93.17	2.21	7.16	2.56	72.89	140.79	2.94	9.16	1.34	25.85	267.81	3.54
1.18	3.39	51.55	13.22	1.08	3.18	3.72	217.50	21.91	1.38	5.18	3.46	125.34	96.23	2.21	7.18	2.73	72.38	152.00	2.95	9.18	1.32	25.10	269.65	3.55
1.20	3.30	60.51	14.14	1.08	3.20	3.79	213.87	19.28	1.36	5.20	3.43	124.14	97.21	2.22	7.20	2.89	70.28	155.73	2.96	9.20	1.34	24.41	272.22	3.57
1.22	3.31	71.72	13.83	1.06	3.22	3.84	211.80	8.45	1.37	5.22	3.37	124.83	99.35	2.22	7.22	2.95	74.61	160.87	2.97	9.22	1.34	23.33	275.10	3.57
1.24	3.23	77.74	14.88	1.09	3.24	3.85	214.05	0.55	1.38	5.24	3.43	126.42	99.78	2.23	7.24	3.00	81.88	168.22	2.99	9.24	1.33	22.91	277.30	3.57
1.26	3.19	76.18	14.81	1.07	3.26	3.85	207.08	1.84	1.39	5.26	3.48	137.87	113.25	2.25	7.26	3.07	84.77	172.32	3.00	9.26	1.33	22.91	278.89	3.57
1.28	3.17	77.86	15.18	1.13	3.28	3.88	203.64	6.18	1.38	5.28	3.59	145.00	141.53	2.25	7.28	3.11	86.75	174.52	3.00	9.28	1.34	23.03	281.04	3.59
1.30	3.29	74.85	13.65	1.10	3.30	3.96	204.64	11.02	1.38	5.30	3.77	149.51	151.02	2.26	7.30	3.06	89.06	175.44	3.01	9.30	1.33	22.55	284.59	3.59
1.32	3.22	80.44	15.12	1.14	3.32	3.98	203.15	7.71	1.40	5.32	3.79	150.32	151.20	2.27	7.32	2.87	92.85	172.99	3.02	9.32	1.34	22.34	288.57	3.59
1.34	3.22	83.54	15.00	1.14	3.34	3.88	206.10	9.00	1.39	5.34	3.78	149.78	149.73	2.28	7.34	2.70	94.08	170.30	3.03	9.34	1.36	21.83	293.10	3.60
1.36	3.34	80.62	13.28	1.13	3.36	3.81	205.00	9.73	1.42	5.36	3.69	154.64	148.69	2.30	7.36	2.44	93.45	166.56	3.04	9.36	1.36	21.20	296.22	3.61
1.38	3.40	76.77	12.79	1.12	3.38	3.78	203.79	13.59	1.43	5.38	3.62	155.67	149.61	2.32	7.38	2.27	95.59	163.87	3.04	9.38	1.36	21.56	300.20	3.62
1.40	3.45	75.92	12.55	1.11	3.40	3.65	205.16	10.77	1.43	5.40	3.56	155.91	157.26	2.31	7.40	2.21	95.22	163.50	3.05	9.40	1.37	21.20	302.34	3.63
1.42	3.44	76.13	12.92	1.10	3.42	3.63	206.37	11.75	1.43	5.42	3.53	160.84	157.75	2.33	7.42	2.32	92.07	170.12	3.08	9.42	1.40	21.32	304.73	3.63
1.44	3.70	77.48	10.04	1.13	3.44	3.67	206.89	13.10	1.45	5.44	3.50	162.70	157.81	2.35	7.44	2.40	87.53	173.24	3.07	9.44	1.38	21.95	307.66	3.63
1.46	4.04	72.28	7.59	1.10	3.46	3.52	204.09	12.24	1.45	5.46	3.52	160.65	157.81	2.37	7.46	2.45	80.97	174.28	3.08	9.46	1.36	22.40	310.60	3.64
1.48	4.22	82.23	6.55	1.07	3.48	3.41	200.52	11.14	1.46	5.48	3.49	160.23	156.22	2.37	7.48	2.50	77.54	175.75	3.08	9.48	1.37	22.44	313.23	3.65
1.50	4.38	89.84	5.33	1.06	3.50	3.32	194.71	8.63	1.46	5.50	3.39	156.56	154.51	2.39	7.50	2.60	70.63	177.89	3.10	9.50	1.37	22.98	314.64	3.66
1.52	4.69	104.06	4.16	1.04	3.52	3.24	191.97	7.35	1.47	5.52	3.33	155.90	153.34	2.41	7.52	2.50	64.01	175.32	3.09	9.52	1.35	23.13	316.72	3.66
1.54	4.91	115.63	3.37	1.06	3.54	3.24	190.17	13.16	1.47	5.54	3.13	153.37	151.44	2.42	7.54	2.31	58.87	172.50	3.11	9.54	1.32	23.10	319.97	3.67
1.56	5.12	125.73	3.55	1.02	3.56	3.42	183.93	13.47	1.48	5.56	3.00	150.96	153.65	2.44	7.56	2.15	55.71	170.42	3.11	9.56	1.32	22.86	322.17	3.68
1.58	5.28	138.06	9.55	1.05	3.58	3.60	183.84	18.61	1.47	5.58	2.85	146.33	151.63	2.45	7.58	2.01	51.29	169.69	3.12	9.58	1.32	21.69	323.33	3.68
1.60	5.46	148.46	11.26	1.04	3.60	3.76	184.18	19.22	1.49	5.60	2.67	142.81	148.69	2.47	7.60	1.88	44.04	173.42	3.13	9.60	1.30	20.88	323.64	3.69
1.62	5.67	155.16	12.73	1.04	3.62	3.95	182.93	22.34	1.48	5.62	2.56	138.33	146.12	2.47	7.62	1.84	41.07	182.66	3.14	9.62	1.27	20.85	324.01	3.70
1.64	5.69	160.78	13.41	1.03	3.64	4.03	184.21	23.38	1.49	5.64	2.50	136.46	145.63	2.49	7.64	1.87	37.16	195.89	3.14	9.64	1.26	20.85	325.05	3.71
1.66	5.80	165.86	12.55	1.04	3.66	3.98	184.48	21.12	1.50	5.66	2.43	136.10	145.08	2.50	7.66	1.99	35.14	216.58	3.16	9.66	1.24	20.70	325.97	3.70
1.68	5.80	172.06	13.22	1.00	3.68	3.88	190.36	30.73	1.51	5.68	2.47	133.99	145.57	2.51	7.68	2.01	32.35	227.78	3.17	9.68	1.25	20.31	326.89	3.71
1.70	5.71	188.31	14.57	1.04	3.70	3.70	196.08	31.46	1.50	5.70	2.51	130.59	146.12	2.51	7.70	1.88	29.94	231.51	3.18	9.70	1.25	19.50	327.62	3.72
1.72	5.63	192.17	14.94	1.02	3.72	3.60	197.33	32.26	1.52	5.72	2.57	126.20	146.98	2.52	7.72	1.92	31.03	237.88	3.19	9.72	1.25	19.56	329.52	3.71
1.74	5.59	202.52	14.08	1.02	3.74	3.65	198.43	32.26	1.52	5.74	2.65	121.48	148.08	2.52	7.74	1.85	32.50	237.70	3.19	9.74	1.23	19.47	329.09	3.74
1.76	5.48	205.65	14.26	1.03	3.76	3.79	198.76	32.57	1.52	5.76	2.74	121.09	149.91	2.52	7.76	1.76	33.88	245.16	3.19	9.76	1.23	19.50	329.21	3.74
1.78	5.50	211.95	15.12	1.02	3.78	3.82	200.71	41.75	1.53	5.78	2.66	120.49	146.91	2.53	7.78	1.75	35.30	258.20	3.20	9.78	1.24	20.10	329.40	3.74
1.80	5.50	214.75	16.59	1.02	3.80	3.86	197.76	39.67	1.53	5.80	2.69	117.45	147.65	2.53	7.80	1.77	34.22	274.12	3.21	9.80	1.21	21.27	330.07	3.75
1.82	5.47	224.43	16.22	1.03	3.82	3.75	194.29	35.93	1.54	5.82	2.65	115.35	145.81	2.53	7.82	1.86	33.92	297.50	3.22	9.82	1.18	21.55	330.19	3.75
1.84	5.52	229.57	14.57	1.04	3.84	3.65	194.81	34.65	1.55	5.84	2.70	114.51	146.00	2.52	7.84	2.03	32.93	339.80	3.23	9.84	1.18	21.22	330.31	3.75
1.86	5.52	232.85	14.20	1.05	3.86	3.62	198.92	33.85	1.55	5.86	2.68	113.72	144.16	2.53	7.86	2.23	33.95	356.64	3.24	9.86	1.18	20.68	330.07	3.76
1.88	5.56	239.88	13.47	1.04	3.88	3.55	202.39	36.97	1.55	5.88	2.63	116.82	142.51	2.53	7.88	2.24	35.30	353.64	3.25	9.88	1.17	20.74	330.50	3.78
1.90	5.69	240.55	11.57	1.05	3.90	3.52	197.43	39.73	1.55	5.90	2.56	116.55	141.41	2.52	7.90	2.22	36.48	354.74	3.25	9.90	1.18	19.98	331.05	3.77
1.92	5.86	241.85	9.92	1.04	3.92	3.36	193.60	40.28	1.57	5.92	2.51	117.69	139.51	2.53	7.92	2.28	41.26	358.17	3.27	9.92	1.16	19.44	331.11	3.77
1.94	6.00	234.45	9.06	1.05	3.94	3.19	193.42	40.10	1.58	5.94	2.43	123.71	137.49	2.53	7.94	2.42	46.52	377.02	3.27	9.94	1.23	18.18	333.86	3.77
1.96	5.94	227.97	9.37	1.06	3.96	3.24	183.04	38.01	1.60	5.96	2.44	125.24	137.24	2.53	7.96	2.65	49.74	403.04	3.29	9.96	1.22	17.76	332.88	3.78
1.98	5.84	225.07	10.53	1.07	3.98	3.32	175.57	37.65	1.60	5.98	2.41	123.89	134.92	2.53	7.98	2.76	50.73	410.75	3.29	9.98	1.20	17.13	332.39	3.79
2.00	5.78	231.49	10.77	1.05	4.00	3.46	169.23	38.81	1.63	6.00	2.37	126.38	134.37	2.53	8.00	2.65	54.43	390.61	3.30	10.00	1.19	18.33	332.82	3.80

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COMMITTENTE:
CANTIERE: Via Rambaldo Bruschi - Quartiere San Varano - Forlì (FC)
COMMESSA: C054/24
RDP N°: 201/24
DATA: 28/08/2024

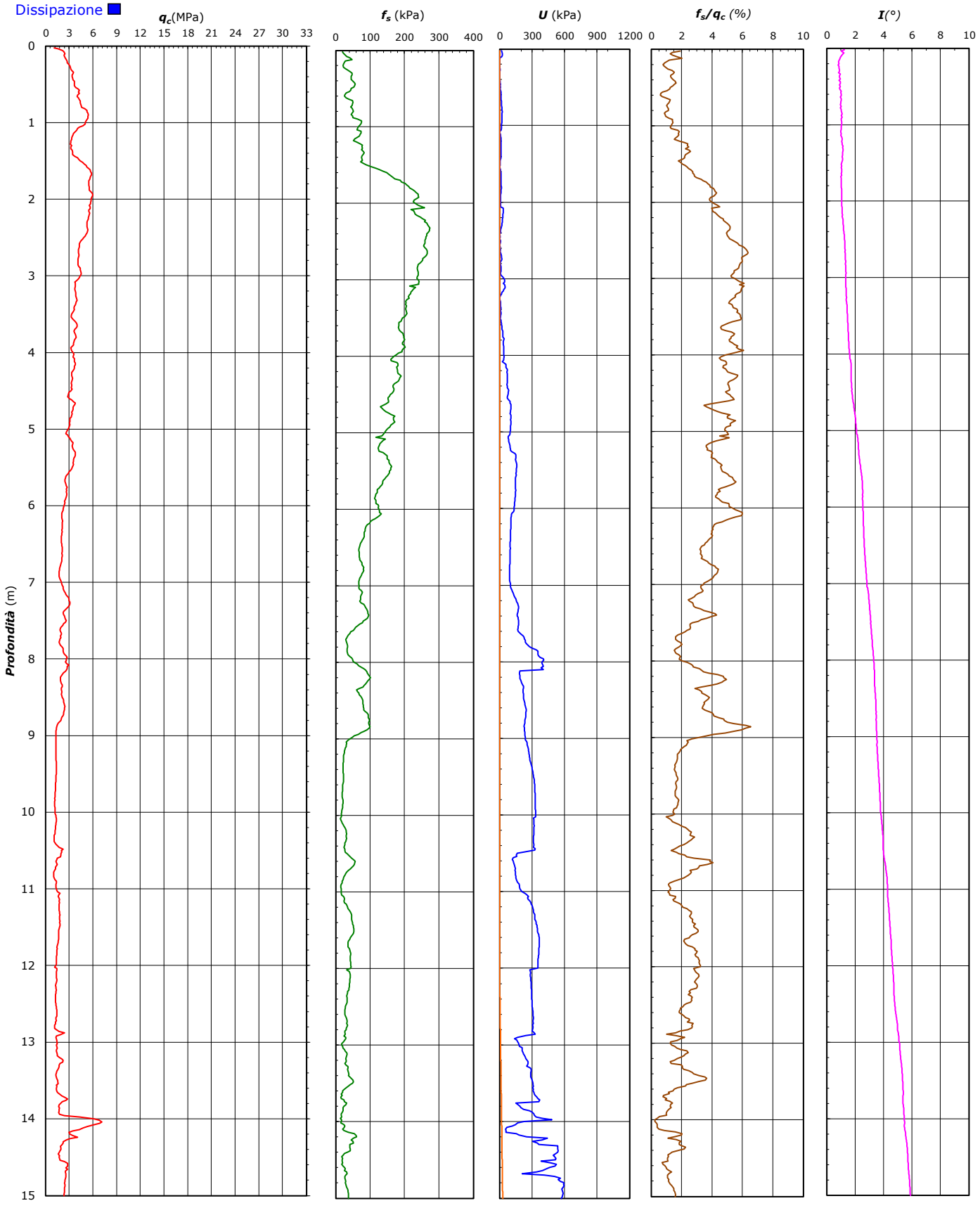
PROVA N°: CPTU 15
PROF. FALDA (m da p.c.): 12.00
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.21	16.92	332.21	3.80	12.02	1.17	32.54	278.65	4.64	14.02	6.77	14.92	168.52	5.46										
10.04	1.30	12.95	315.07	3.83	12.04	1.41	40.15	285.57	4.65	14.04	7.10	24.02	145.94	5.49										
10.06	1.34	15.77	317.89	3.83	12.06	1.42	41.38	286.61	4.65	14.06	6.82	27.05	117.29	5.48										
10.08	1.35	17.67	318.81	3.84	12.08	1.40	42.07	286.06	4.67	14.08	6.14	24.83	66.66	5.45										
10.10	1.37	19.17	318.13	3.86	12.10	1.36	42.28	285.69	4.67	14.10	5.33	20.90	56.07	5.46										
10.12	1.37	21.82	318.81	3.86	12.12	1.35	42.76	286.67	4.68	14.12	4.79	24.26	59.44	5.48										
10.14	1.34	24.25	319.54	3.88	12.14	1.36	41.98	287.83	4.68	14.14	4.30	37.49	58.15	5.48										
10.16	1.32	26.81	317.83	3.89	12.16	1.40	41.62	289.48	4.69	14.16	3.43	53.93	156.04	5.51										
10.18	1.29	28.91	318.44	3.90	12.18	1.41	40.92	291.01	4.70	14.18	2.95	59.31	178.38	5.53										
10.20	1.27	30.66	318.01	3.91	12.20	1.41	40.17	291.56	4.71	14.20	3.08	61.51	250.73	5.55										
10.22	1.26	31.38	318.62	3.91	12.22	1.36	40.44	292.30	4.71	14.22	3.45	52.03	442.95	5.56										
10.24	1.21	32.07	317.83	3.93	12.24	1.32	39.96	291.87	4.72	14.24	4.04	44.90	393.79	5.58										
10.26	1.21	31.17	319.17	3.94	12.26	1.29	39.09	292.97	4.72	14.26	3.08	50.07	303.69	5.59										
10.28	1.21	30.89	311.89	3.95	12.28	1.30	38.42	294.87	4.72	14.28	2.65	52.32	351.19	5.60										
10.30	1.12	32.10	311.15	3.95	12.30	1.35	35.30	296.58	4.72	14.30	2.21	40.72	362.02	5.61										
10.32	1.11	30.30	314.03	3.96	12.32	1.38	34.51	297.75	4.73	14.32	2.22	40.89	535.69	5.63										
10.34	1.11	29.34	312.99	3.96	12.34	1.32	33.97	297.20	4.73	14.34	2.06	41.43	538.99	5.64										
10.36	1.11	27.32	313.23	3.95	12.36	1.32	32.14	296.28	4.74	14.36	1.91	43.14	535.50	5.65										
10.38	1.12	26.30	315.44	3.96	12.38	1.27	33.28	296.03	4.74	14.38	1.93	42.03	539.91	5.66										
10.40	1.18	25.49	317.09	3.95	12.40	1.26	33.94	297.44	4.76	14.40	1.94	35.20	535.93	5.68										
10.42	1.33	24.76	313.91	3.95	12.42	1.24	32.98	299.03	4.75	14.42	1.86	25.49	521.73	5.69										
10.44	1.53	26.48	329.40	3.96	12.44	1.24	33.01	298.60	4.77	14.44	1.73	21.80	497.98	5.68										
10.46	1.74	26.51	326.27	3.96	12.46	1.24	32.17	299.83	4.77	14.46	1.63	17.83	506.73	5.70										
10.48	2.21	28.74	233.10	3.97	12.48	1.28	29.52	301.18	4.79	14.48	1.79	20.14	520.69	5.71										
10.50	1.98	32.97	164.54	3.98	12.50	1.30	28.29	302.64	4.80	14.50	1.70	18.49	517.26	5.71										
10.52	2.06	37.06	153.53	3.99	12.52	1.33	27.66	304.36	4.80	14.52	1.80	19.24	385.65	5.72										
10.54	1.93	42.29	158.73	4.00	12.54	1.39	26.87	306.26	4.82	14.54	1.85	20.41	476.80	5.71										
10.56	1.96	46.38	127.69	4.01	12.56	1.40	26.57	307.60	4.83	14.56	2.38	17.25	524.67	5.72										
10.58	1.89	53.32	116.19	4.03	12.58	1.44	26.36	309.26	4.84	14.58	2.78	21.76	511.51	5.74										
10.60	1.46	56.81	125.12	4.05	12.60	1.46	27.03	310.24	4.86	14.60	2.81	25.43	464.19	5.73										
10.62	1.45	55.72	131.67	4.07	12.62	1.43	28.77	309.32	4.87	14.62	2.78	27.72	434.26	5.74										
10.64	1.32	53.92	133.08	4.09	12.64	1.43	30.84	311.21	4.88	14.64	2.55	26.06	395.45	5.73										
10.66	1.40	51.72	139.75	4.11	12.66	1.42	32.23	312.01	4.89	14.66	2.78	31.69	342.43	5.75										
10.68	1.47	46.46	144.04	4.11	12.68	1.35	33.52	309.50	4.91	14.68	2.52	34.03	210.52	5.77										
10.70	1.39	43.25	145.32	4.15	12.70	1.32	33.49	310.54	4.92	14.70	2.51	30.10	414.42	5.77										
10.72	1.27	37.95	143.79	4.15	12.72	1.36	32.35	312.68	4.94	14.72	2.55	27.21	509.12	5.78										
10.74	1.26	32.15	146.55	4.16	12.74	1.25	34.57	306.50	4.95	14.74	2.57	27.51	561.52	5.81										
10.76	1.13	30.07	147.96	4.19	12.76	1.24	33.19	307.48	4.97	14.76	2.59	27.99	542.36	5.80										
10.78	1.04	26.94	147.77	4.20	12.78	1.15	31.18	306.99	4.97	14.78	2.51	29.02	563.36	5.81										
10.80	1.01	24.48	149.79	4.22	12.80	1.14	30.33	306.07	4.98	14.80	2.49	27.99	594.76	5.82										
10.82	1.01	23.09	150.77	4.21	12.82	1.13	27.39	301.54	4.99	14.82	2.46	29.50	589.56	5.83										
10.84	1.01	21.41	153.65	4.24	12.84	1.40	26.88	317.95	4.99	14.84	2.43	30.73	595.74	5.84										
10.86	1.08	19.45	158.91	4.25	12.86	1.73	27.72	329.40	5.00	14.86	2.45	32.72	588.21	5.85										
10.88	1.21	18.49	167.42	4.25	12.88	2.41	24.80	243.21	5.03	14.88	2.44	34.82	576.70	5.85										
10.90	1.37	16.78	178.75	4.25	12.90	1.87	29.88	168.34	5.04	14.90	2.42	36.11	577.56	5.86										
10.92	1.38	15.54	182.36	4.26	12.92	1.35	29.88	137.12	5.06	14.92	2.40	35.90	583.62	5.87										
10.94	1.35	15.79	184.38	4.27	12.94	1.33	25.76	159.46	5.07	14.94	2.40	36.87	585.95	5.87										
10.96	1.31	16.54	189.34	4.28	12.96	1.35	22.88	169.69	5.09	14.96	2.39	37.51	583.07	5.88										
10.98	1.33	16.99	198.76	4.27	12.98	1.44	18.40	175.81	5.09	14.98	2.35	37.51	579.33	5.88										
11.00	1.35	15.97	203.97	4.27	13.00	1.44	18.22	179.42	5.10	15.00	2.35	37.20	572.23	5.89										
11.02	1.46	16.20	233.23	4.28	13.02	1.48	20.05	182.85	5.12															
11.04	1.53	18.42	248.71	4.28	13.04	1.40	21.75	207.64	5.14															
11.06	1.85	22.72	267.75	4.28	13.06	1.46	25.00	208.62	5.13															
11.08	1.64	26.24	257.04	4.28	13.08	1.48	28.73	208.19	5.14															
11.10	1.63	25.70	262.98	4.29	13.10	1.40	32.64	216.64	5.14															
11.12	1.72	24.47	280.85	4.31	13.12	1.38	33.78	223.68	5.15															
11.14	1.75	26.18	288.69	4.31	13.14	1.44	32.58	229.74	5.16															
11.16	1.74	30.45	293.16	4.31	13.16	1.48	31.49	237.14	5.17															
11.18	1.75	33.88	299.89	4.34	13.18	1.51	29.75	241.37	5.19															
11.20	1.75	35.17	303.62	4.35	13.20	1.77	30.62	254.53	5.20															
11.22	1.73	35.86	308.58	4.35	13.22	2.04	30.80	264.45	5.20															
11.24	1.72	40.55	314.09	4.36	13.24	2.21	27.49	263.41	5.23															
11.26	1.73	43.17	314.76	4.37	13.26	2.20	29.15	260.65	5.24															
11.28	1.73	45.69	318.62	4.39	13.28	1.84	35.94	250.73	5.26															
11.30	1.77	46.71	324.07	4.39	13.30	1.74	35.94	282.14	5.27															
11.32	1.79	46.35	326.33	4.40	13.32	1.70	35.04	291.63	5.28															
11.34	1.83	46.44	327.01	4.40	13.34	1.66	35.46	292.18	5.28															
11.36	1.78	46.83	326.27	4.40	13.36	1.53	37.56	290.22	5.29															
11.38	1.76	47.91	332.39	4.42	13.38	1.43	38.64	287.83	5.29															
11.40	1.80	48.78	337.54	4.42	13.40	1.36	37.89	286.67	5.30															
11.42	1.81	49.32	338.94	4.43	13.42	1.31	41.02	287.59	5.32															
11.44	1.78	51.91	344.88	4.43	13.44	1.32	46.43	294.93	5.33															
11.46	1.86	51.82	348.19	4.45	13.46	1.38	50.46	299.34	5.33															
11.48	1.86	52.78	349.11	4.45	13.48	1.45	51.60	304.66	5.33															
11.50	1.78	53.53	351.31	4.46	13.50	1.57	49.28	310.72	5.33															
11.52	1.73	53.56	352.41	4.46	13.52	1.57	42.40	309.62	5.35															
11.54	1.68	51.72	353.82	4.46	13.54	1.58	36.56	311.58	5.35															
11.56	1.68	49.50	361.10	4.47	13.56	1.39	31.33	306.07	5.35															
11.58	1.68	45.71	364.04	4.48	13.58	1.45	24.90	314.15	5.35															
11.60	1.67	43.18	365.76	4.50	13.60	1.38	20.87	310.36	5.36															
11.62	1.66	41.41	367.23	4.50	13.62	1.40	19.91	316.36	5.37															
11.64	1.68	37.32	368.21	4.52	13.64	1.44	16.12	320.95	5.39															
11.66	1.65	35.57	368.69	4.53	13.66	1.56	18.55	331.54	5.38															
11.68	1.62	35.54	368.39	4.52	13.68	1.79	14.58	342.13	5.38															
11.70	1.59	35.81	366.98	4.52	13.70	2.08	16.06	353.88	5.37															
11.72	1.53	36.68	365.27	4.53	13.72	2.43	24.60	371.20	5.37															
11.74	1.50	40.35	363.74	4.54	13.74	2.78	25.86	360.98	5.36															
11.76	1.46	41.91	363.43	4.54	13.76	2.57	31.69	151.08	5.35															
11.78	1.50	42.87	363.00	4.55	13.78	2.14	30.19	168.40	5.36															
11.80	1.44	43.78	361.23	4.56	13.80	1.89	24.45	188.48	5.37															
11.82	1.45	43.35	361.04	4.56	13.82	1.75	22.11	197.48	5.38															
11.84	1.46	42.09	359.64	4.57	13.84	1.67	21.84	220.13	5.38															
11.86	1.42	42.00	358.17	4.58	13.86	1.78	21.36	275.10	5.41															
11.88	1.39	42.81	356.45	4.58	13.88	1.75	18.59	300.56	5.41															
11.90	1.37	42.87	355.90	4.59	13.90	1.71	17.12	317.27	5.42															
11.92	1.38	43.68	355.53	4.60	13.92	1.66	16.49	320.58	5.43															
11.94	1.38	43.50	354.80	4.61	13.94	1.75	17.66	339.62	5.42															
11.96	1.39	43.92	354.31	4.63	13.96	2.42	13.45	396.06	5.44															
11.98	1.38	44.61	353.45	4.63	13.98	4.33	17.18	484.27	5.44															
12.00	1.34	43.20	352.78	4.63	14.00	6.13	15.88	224.23	5.44															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 15
CANTIERE:	Via Rambaldo Bruschi - Quartiere San Varano - Forlì (FC)	PROF. FALDA (m da p.c.):	12.00
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	201/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	28/08/2024	OPERATORE:	Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 15
CANTIERE:	Via Rambaldo Bruschi - Quartiere San Varano - Forlì (FC)	PROF. FALDA (m da p.c.):	12.00
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	201/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	28/08/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Rambaldo Bruschi - Quartiere San Varano - Forlì (FC)
Lat.: 44.202355°
Long.: 12.019429°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Raffaele Bendandi - Villanova (FC)
COMMESSA: C054/24
RDP N°: 209/24
DATA: 10/09/2024

PROVA N°: CPTU 16
PROF. FALDA (m da p.c.): 3.40
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	0.56	35.72	36.73	0.48	2.02	1.88	59.21	7.84	0.12	4.02	2.22	33.72	40.34	0.59	6.02	1.62	54.28	6.06	1.14	8.02	0.95	22.85	130.02	1.55
0.04	0.89	36.44	51.97	0.48	2.04	1.96	55.62	7.35	0.11	4.04	3.04	40.91	34.89	0.60	6.04	1.69	54.22	2.63	1.15	8.04	0.97	20.45	134.73	1.56
0.06	0.98	45.17	53.69	0.46	2.06	1.93	54.32	4.84	0.12	4.06	3.91	47.00	29.81	0.61	6.06	1.67	51.24	3.18	1.17	8.06	1.47	24.11	152.00	1.55
0.08	1.10	53.02	56.99	0.46	2.08	2.07	53.50	5.39	0.11	4.08	3.83	54.70	33.30	0.63	6.08	1.96	48.51	182.36	1.17	8.08	1.48	30.78	146.24	1.57
0.10	1.21	60.75	60.36	0.45	2.10	2.35	53.50	8.39	0.12	4.10	3.15	43.51	49.28	0.63	6.10	1.70	54.54	171.09	1.17	8.10	1.39	37.13	144.53	1.57
0.12	1.35	66.56	62.93	0.44	2.12	2.94	41.54	9.12	0.10	4.12	2.74	48.10	52.46	0.64	6.12	1.56	53.35	164.30	1.17	8.12	1.37	36.44	145.32	1.58
0.14	1.34	73.35	59.56	0.44	2.14	3.03	42.70	10.53	0.13	4.14	2.38	74.34	54.48	0.63	6.14	1.54	52.71	162.16	1.18	8.14	1.37	35.80	147.04	1.58
0.16	1.23	44.39	14.32	0.42	2.16	3.07	41.91	11.51	0.13	4.16	2.84	78.90	51.79	0.64	6.16	1.50	55.18	160.81	1.18	8.16	1.36	37.19	153.04	1.60
0.18	1.25	49.99	12.49	0.43	2.18	3.05	40.14	12.67	0.13	4.18	3.18	74.25	49.89	0.64	6.18	1.51	54.60	164.30	1.19	8.18	1.35	37.10	155.12	1.58
0.20	1.28	56.53	12.49	0.41	2.20	2.90	37.65	14.81	0.12	4.20	3.00	73.52	51.48	0.64	6.20	1.55	50.61	169.38	1.20	8.20	1.44	35.77	161.06	1.61
0.22	1.35	64.69	12.24	0.41	2.22	2.41	37.08	19.77	0.13	4.22	3.06	75.16	51.48	0.68	6.22	1.57	50.74	173.42	1.20	8.22	1.44	34.78	162.46	1.60
0.24	1.39	70.68	12.92	0.42	2.24	1.99	40.39	24.12	0.14	4.24	3.36	76.10	49.95	0.68	6.24	1.69	46.29	181.07	1.23	8.24	1.44	33.82	160.63	1.62
0.26	1.44	81.12	13.71	0.39	2.26	1.65	48.70	27.79	0.16	4.26	3.61	73.73	48.91	0.69	6.26	1.80	43.58	189.15	1.22	8.26	1.40	34.69	157.08	1.61
0.28	1.54	87.24	19.77	0.41	2.28	1.42	58.56	30.97	0.17	4.28	3.73	65.20	48.60	0.69	6.28	1.82	39.90	186.89	1.24	8.28	1.33	38.03	153.16	1.61
0.30	1.68	88.82	26.57	0.42	2.30	1.28	57.49	32.02	0.17	4.30	3.75	56.38	48.67	0.69	6.30	1.85	39.72	185.97	1.24	8.30	1.25	42.74	149.12	1.63
0.32	1.86	89.25	29.44	0.40	2.32	1.24	50.92	32.93	0.17	4.32	3.91	48.03	47.87	0.70	6.32	1.82	46.38	185.60	1.25	8.32	1.19	45.94	144.65	1.64
0.34	2.06	88.79	30.79	0.41	2.34	1.38	44.38	30.79	0.15	4.34	3.95	41.31	47.81	0.69	6.34	1.80	53.35	186.64	1.27	8.34	1.13	50.23	140.12	1.65
0.36	2.31	91.26	32.32	0.40	2.36	1.89	40.00	22.77	0.14	4.36	3.68	37.87	49.71	0.70	6.36	1.83	56.51	187.68	1.27	8.36	1.11	52.88	143.67	1.66
0.38	2.52	96.98	34.71	0.40	2.38	2.25	34.98	18.67	0.16	4.38	3.32	32.25	51.73	0.70	6.38	1.79	60.77	183.34	1.26	8.38	1.21	49.53	159.65	1.66
0.40	2.71	95.80	36.36	0.38	2.40	2.15	29.57	20.63	0.16	4.40	3.01	24.82	53.01	0.70	6.40	1.73	63.97	178.07	1.27	8.40	1.41	42.32	175.32	1.66
0.42	2.88	102.40	37.71	0.38	2.42	2.65	32.24	16.90	0.17	4.42	2.97	24.16	53.01	0.71	6.42	1.68	67.93	175.81	1.28	8.42	1.52	37.12	180.52	1.66
0.44	3.21	107.48	41.50	0.38	2.44	2.69	45.90	16.47	0.17	4.44	3.08	31.50	52.03	0.72	6.44	1.70	69.54	173.73	1.28	8.44	1.55	36.97	184.26	1.67
0.46	3.60	112.87	45.30	0.37	2.46	3.08	51.26	12.06	0.18	4.46	3.31	37.96	50.87	0.72	6.46	1.66	68.81	171.03	1.29	8.46	1.52	36.25	177.71	1.66
0.48	3.81	112.78	46.65	0.36	2.48	2.94	57.78	14.26	0.18	4.48	3.52	41.28	49.71	0.72	6.48	1.65	67.92	167.97	1.28	8.48	1.48	37.90	178.62	1.67
0.50	3.76	111.14	46.77	0.35	2.50	2.36	72.15	22.77	0.18	4.50	3.78	47.12	47.99	0.72	6.50	1.62	68.96	165.03	1.28	8.50	1.59	37.99	182.91	1.67
0.52	4.17	103.65	51.18	0.34	2.52	2.78	80.79	16.10	0.19	4.52	3.93	49.19	47.20	0.73	6.52	1.62	70.36	162.89	1.29	8.52	1.54	44.20	180.58	1.68
0.54	4.24	100.82	51.05	0.33	2.54	2.98	77.44	14.75	0.21	4.54	3.96	43.01	47.20	0.73	6.54	1.61	71.03	161.24	1.30	8.54	1.48	51.26	179.11	1.70
0.56	4.21	106.66	49.95	0.32	2.56	2.46	70.96	20.20	0.22	4.56	3.81	31.74	48.18	0.72	6.56	1.68	70.93	168.34	1.30	8.56	1.42	54.30	178.50	1.70
0.58	4.26	109.85	50.99	0.34	2.58	1.98	75.80	26.75	0.22	4.58	3.64	19.47	49.16	0.74	6.58	1.80	68.53	174.34	1.31	8.58	1.45	53.24	181.01	1.72
0.60	4.32	113.35	52.15	0.32	2.60	1.74	86.24	30.42	0.23	4.60	3.55	17.13	49.64	0.73	6.60	1.92	67.25	178.01	1.31	8.60	1.47	53.15	186.34	1.70
0.62	4.57	109.73	56.32	0.32	2.62	1.57	94.77	32.20	0.23	4.62	3.42	18.42	50.26	0.73	6.62	1.82	68.74	166.56	1.33	8.62	1.53	47.94	190.68	1.69
0.64	4.66	110.76	57.66	0.31	2.64	1.82	86.76	27.85	0.23	4.64	3.12	18.09	52.15	0.73	6.64	1.74	72.24	158.18	1.33	8.64	1.55	46.36	196.13	1.69
0.66	4.56	116.57	56.38	0.32	2.66	2.76	86.76	17.51	0.22	4.66	2.79	17.52	53.93	0.74	6.66	1.70	78.45	153.95	1.31	8.66	1.57	40.12	197.11	1.70
0.68	4.50	118.76	57.66	0.28	2.68	3.48	76.26	13.28	0.24	4.68	2.41	20.77	55.83	0.74	6.68	1.68	82.13	152.91	1.33	8.68	1.53	36.06	196.44	1.70
0.70	4.51	113.49	59.38	0.29	2.70	3.65	59.37	13.77	0.24	4.70	2.12	27.20	57.24	0.77	6.70	1.65	85.66	152.55	1.33	8.70	1.50	34.11	194.60	1.71
0.72	4.46	111.81	60.24	0.28	2.72	3.76	48.17	13.96	0.26	4.72	1.82	33.25	59.32	0.77	6.72	1.70	86.05	155.00	1.33	8.72	1.44	37.90	188.36	1.70
0.74	4.39	113.97	60.72	0.26	2.74	3.88	36.20	14.14	0.26	4.74	1.79	33.52	59.93	0.78	6.74	1.72	86.14	156.59	1.32	8.74	1.34	45.47	179.42	1.70
0.76	4.55	112.84	65.01	0.28	2.76	3.97	31.24	14.26	0.26	4.76	3.02	36.50	48.36	0.78	6.76	1.71	85.96	158.18	1.33	8.76	1.22	50.52	172.81	1.71
0.78	4.79	112.63	68.87	0.26	2.78	4.03	29.26	14.14	0.27	4.78	4.81	36.26	39.42	0.77	6.78	1.77	80.30	156.59	1.33	8.78	1.15	52.23	169.32	1.71
0.80	4.86	110.46	70.89	0.27	2.80	3.93	32.23	15.85	0.30	4.80	5.62	49.26	36.91	0.79	6.80	1.71	78.35	154.87	1.35	8.80	1.13	53.38	170.30	1.71
0.82	4.87	116.82	73.09	0.25	2.82	3.34	38.20	21.73	0.28	4.82	5.65	51.43	37.83	0.79	6.82	1.69	79.14	153.34	1.37	8.82	1.19	52.14	176.05	1.73
0.84	4.74	124.36	70.40	0.25	2.84	2.72	54.42	26.75	0.28	4.84	5.56	45.13	38.75	0.79	6.84	1.67	81.94	154.20	1.37	8.84	1.38	50.16	193.74	1.74
0.86	4.66	138.27	72.66	0.22	2.86	2.25	70.55	30.36	0.30	4.86	5.24	31.69	40.65	0.82	6.86	1.70	81.20	159.40	1.37	8.86	1.76	43.22	219.52	1.74
0.88	4.69	137.75	74.74	0.24	2.88	1.85	80.54	34.04	0.30	4.88	4.84	22.34	43.22	0.81	6.88	1.75	76.55	161.42	1.38	8.88	2.07	35.70	225.88	1.75
0.90	4.87	125.72	79.40	0.22	2.90	1.54	71.44	35.93	0.30	4.90	4.33	15.16	46.22	0.83	6.90	1.75	75.27	159.77	1.39	8.90	2.07	36.69	200.11	1.74
0.92	5.03	119.09	83.80	0.22	2.92	1.66	57.44	34.16	0.29	4.92	3.95	16.12	47.93	0.82	6.92	1.70	75.18	158.18	1.40	8.92	1.94	36.24	187.56	1.75
0.94	5.34	102.65	88.52	0.21	2.94	2.32	46.91	25.10	0.30	4.94	3.67	18.26	49.16	0.84	6.94	1.76	69.42	159.52	1.40	8.94	2.21	32.90	220.00	1.74
0.96	5.33	98.44	88.39	0.20	2.96	3.31	39.30	16.04	0.30	4.96	3.34	19.82	50.32	0.83	6.96	1.76	68.66	157.75	1.40	8.96	3.39	33.35	255.08	1.75
0.98	5.12	95.52	87.54	0.18	2.98	4.00	37.12	12.61	0.28	4.98	2.97	19.91	52.03	0.85	6.98	1.67	74.02	154.26	1.41	8.98	3.83	40.41	150.95	1.76
1.00	4.93	96.30	86.50	0.20	3.00	4.40	38.39	11.57	0.32	5.00	2.52	23.13	54.17	0.85	7.00	1.70	77.70	158.18	1.43	9.00	3.88	51.34	113.55	1.79
1.02	4.93	97.43	89.99	0.20	3.02	4.48	32.53	12.61	0.32	5.02	2.09	27.07	56.38	0.85	7.02	1.77	76.05	162.89	1.43	9.02	3.65	49.51	108.17	1.79
1.04	4.84	98.55	89.43	0.20	3.04	4.82	28.92	11.32	0.33	5.04	1.80	32.36	58.03	0.88	7.04	1.87	72.10	166.75	1.43	9.04	3.10	43.18	101.74	1.80
1.06	4.63	95.69	87.72	0.19	3.06	5.47	29.65	7.22	0.34	5.06	1.46	39.17	60.66	0.88	7.06	1.91	72.55	166.69	1.43	9.06	3.28	37.89	132.59	1.80
1.08	4.46	90.84	87.17	0.17	3.08	5.85	29.50	5.26	0.33	5.08	1.25	40.21	61.15	0.88	7.08	1.94	76.58	162.16	1.42	9.08	3.28	44.00	133.69	1.81
1.10	4.43	82.53	90.90	0.18	3.10	6.06	21.64	16.96	0.34	5.10	1.57	45.75	18.55	0.89	7.10	1.92	79.50	163.69	1.43	9.10	3.85	73.70	156.95	1.80
1.12	4.38	63.72	61.52	0.18	3.12	6.11	20.71	19.65	0.36	5.12	1.49	46.02	20.45	0.91	7.12	1.91	81.94	162.65	1.44	9.12	5.00	84.72	111.59	1.81
1.14	4.44	56.42	60.11	0.18	3.14	5.94	22.55	22.22	0.37	5.14	1.56	46.97	19.16	0.91	7.14	1.92	84.74	163.50	1.44	9.14	6.12	98.45	103.70	1.81
1.16	4.53	49.63	60.36	0.19	3.16	5.43	24.17	26.20	0.37	5.16	1.68	48.76	16.71	0.91	7.16	2.00	86.71	166.63	1.44	9.16	6.74	93.39	77.56	1.81
1.18	4.52	39.04	57.97	0.20	3.18	4.21	28.71	34.71	0.37	5.18	1.82	48.61	16.41	0.91	7.18	2.11	86.01	171.52	1.43	9.18	6.60	85.42	77.93	1.81
1.20	4.31	33.25	54.60	0.18	3.20	3.16	39.22	40.40	0.39	5.20	1.78	50.37	20.45	0.92	7.20	2.11	85.68	172.75	1.45	9.20	6.21	69.59	74.99	1.86
1.22	3.86	39.53	47.81	0.18	3.22	2.75	52.85	42.12	0.37	5.22	1.63	52.11	22.77	0.92	7.22	2.15	84.09	170.73	1.44	9.22	5.76	48.07	74.99	1.85
1.24	3.20	44.06	38.75	0.18	3.24	2.29	77.05	44.87	0.39	5.24	1.48	50.34	25.34	0.92	7.24	2.11	84.33	169.63	1.44	9.24	5.67	41.80	80.44	1.86
1.26	3.17	50.52	39.61	0.18	3.26	1.91	91.69	47.07	0.39	5.26	1.46	46.29	26.32	0.93	7.26	2.02	87.35	167.24	1.44	9.26	5.97	40.89	93.72	1.86
1.28	3.14	48.69	38.44	0.18	3.28	1.66	99.85	47.99	0.40	5.28	1.47	41.27	23.57	0.94	7.28	1.95	87.22	164.67	1.45	9.28	6.10	49.83	90.90	1.86
1.30	3.11	48.54	38.63	0.17	3.30	1.44	88.83	47.87	0.39	5.30	1.41	38.84	24.42	0.96	7.30	1.86	91.18	158.73	1.44	9.30	5.96	57.26	82.70	1.86
1.32	2.87	51.40	34.77	0.17	3.32	1.53	65.60	45.54	0.41	5.32	1.50	39.78	23.81	0.97	7.32	1.78	93.15	155.18	1.44	9.32	5.53	59.81	73.70	1.86
1.34	2.89	56.20	35.99	0.18	3.34	1.75	53.28	42.05	0.40	5.34	1.65	38.80	21.73	0.96	7.34	1.70	93.58	155.79	1.44	9.34	5.13	57.04	59.62	1.86
1.36	2.75	60.40	33.79	0.18	3.36	2.08	43.02	37.40	0.41	5.36	1.85	45.50	18.98	0.97	7.36	1.63	91.05	155.61	1.44	9.36	4.52	54.27	55.83	1.86
1.38	2.68	63.39	32.50	0.17	3.38	2.76	40.43	31.65	0.41	5.38	1.84	48.94	20.69	0.98	7.38	1.57	82.95	154.14	1.44	9.38	3.63	42.61	46.71	1.84
1.40	2.79	63.66	35.26	0.18	3.40	3.53	41.68	26.57	0.41	5.40	1.66	51.01	23.63	0.98	7.40	1.52	73.76	153.34	1.44	9.40	2.94	39.62	39.61	1.89
1.42	2.86	62.17	35.69	0.17	3.42	4.00	44.33	25.53	0.42	5.42	1.43	49.00	28.53	1.00	7.42	1.43	69.65	149.91	1.45	9.42	2.31	44.09	36.79	1.87
1.44	2.75	68.89	33.55	0.18	3.44	4.28	49.50	24.30	0.42	5.44	1.27	49.73	30.73	1.01	7.44	1.38	64.26	145.45	1.45	9.44	1.79	52.46	35.20	1.89
1.46	2.70	72.64	32.57	0.18	3.46	4.58	54.80	23.02	0.42	5.46	1.28	43.16	28.22	1.01	7.46	1.27	56.86	138.47	1.46	9.46	1.57	63.54	38.08	1.88
1.48	2.63	82.56	31.10	0.17	3.48	4.80	61.46	22.59	0.43	5.48	1.38	36.30	24.49	1.01	7.48	1.20	52.63	134.55	1.45	9.48	1.45	64.21	70.83	1.89
1.50	2.60	87.15	30.12	0.16	3.50	4.84	55.93	23.63	0.42	5.50	1.35	33.47	25.28	1.01	7.50	1.15	49.83	131.37	1.45	9.50	1.30	58.76	84.17	1.92
1.52	2.61	92.93	30.00	0.16	3.52	4.73	52.12	24.91	0.44	5.52	1.31	29.80	24.30	1.03	7.52	1.13	51.72	129.53	1.44	9.52	1.22	51.11	96.23	1.89
1.54	2.76	101.55	32.57	0.16	3.54	4.61	46.55	25.71	0.44	5.54	1.41	25.14	22.59	1.02	7.54	1.10	53.21	131.67	1.44	9.54	1.22	38.85	116.74	1.90
1.56	2.98	114.69	36.36	0.16	3.56	4.59	48.59	26.26	0.44	5.56	1.43	25.78	20.87	1.03	7.56	1.15	45.33	136.57	1.45	9.56	1.26	33.69	125.86	1.90
1.58	2.91	126.01	34.22	0.16	3.58	4.49	51.70	27.36	0.47	5.58	1.44	25.12	21.12	1.05	7.58	1.20	40.40	143.85	1.45	9.58	1.32	28.64	133.39	1.91
1.60	3.01	143.12	35.32	0.16	3.60	4.57	55.81	27.30	0.45	5.60	1.39	26.62	21.24	1.04	7.60	1.31	36.52	157.81	1.47	9.60	1.37	29.27	138.47	1.92
1.62	3.17	156.96	38.26	0.14	3.62	4.60	61.90	26.69	0.47	5.62	1.37	28.21	19.83	1.05	7.62	1.41	32.10	165.16	1.44	9.62	1.37	31.65	141.77	1.92
1.64	3.30	164.72	39.73	0.16	3.64	4.54	65.58	27.36	0.47	5.64	1.30	29.36	21.12	1.07	7.64	1.46	29.72	168.89	1.45	9.64	1.40	33.69	152.24	1.93
1.66	3.34	171.11	38.81	0.14	3.66	4.31	63.48	28.95	0.49	5.66	1.29	31.58	20.14	1.08	7.66	1.45	28.31	169.75	1.43	9.66	1.44	33.18	162.59	1.94
1.68	3.27	169.90	34.95	0.12	3.68	3.97	48.93	30.97	0.49	5.68	1.41	31.07	13.22	1.09	7.68	1.45	31.98	167.12	1.47	9.68	1.44	34.29	172.44	1.93
1.70	2.84	156.62	28.40	0.17	3.70	3.91	43.82	31.04	0.51	5.70	1.57	29.12	11.39	1.10	7.70	1.37	37.33	164.05	1.46	9.70	1.41	34.65	180.52	1.95
1.72	2.73	146.61	28.77	0.16	3.72	3.71	44.09	33.06	0.50	5.72	1.69	29.51	9.61	1.10	7.72	1.36	40.40	162.10	1.46	9.72	1.43	35.52	188.36	1.96
1.74	2.39	137.87	19.47	0.16	3.74	2.85	52.22	38.75	0.50	5.74	1.77	29.93	8.88	1.11	7.74	1.31	43.56	162.34	1.47	9.74	1.45	34.62	191.36	1.96
1.76	2.39	131.30	20.20	0.16	3.76	2.29	58.07	41.93	0.52	5.76	1.79	31.98	7.84	1.15	7.76	1.30	46.12	162.22	1.50	9.76	1.54	35.55	202.68	1.95
1.78	2.46	121.50	23.38	0.16	3.78	1.85	67.17	44.63	0.51	5.78	1.86	32.70	8.14	1.14	7.78	1.26	46.88	160.50	1.48	9.78	1.82	37.51	225.21	1.97
1.80	2.17	112.21	18.61	0.15	3.80	1.61	65.52	45.91	0.55	5.80	1.91	37.63	8.33	1.16	7.80	1.25	45.03	159.22	1.49	9.80	2.64	38.96	269.34	1.96
1.82	2.06	109.14	17.02	0.12	3.82	1.45	72.13	47.26	0.53	5.82	1.87	46.24	10.04	1.17	7.82	1.20	41.35	155.12	1.50	9.82	3.48	41.64	281.77	1.99
1.84	1.85	100.74	13.34	0.17	3.84	1.34	74.69	46.89	0.54	5.84	1.76	55.31	12.67	1.18	7.84	1.16	39.89	152.00	1.51	9.84	4.25	46.72	119.74	1.99
1.86	1.90	94.22	12.12	0.16	3.86	1.40	60.38	47.50	0.54	5.86	1.71	60.12	13.47	1.18	7.86	1.13	38.15	148.26	1.51	9.86	4.92	54.09	90.05	2.01
1.88	2.11	90.60	15.36	0.10	3.88	1.34	52.17	47.44	0.56	5.88	1.72	64.14	13.10	1.17	7.88	1.08	36.89	144.28	1.51	9.88	5.41	57.52	88.15	1.99
1.90	2.20	78.98	14.75	0.16	3.90	1.42	46.50	45.54	0.56	5.90	1.82	66.85	9.06	1.17	7.90	1.01	37.01	139.81	1.53	9.90	5.57	53.75	87.05	2.00
1.92	2.11	73.53	11.20	0.09	3.92	1.55	40.72	44.01	0.56	5.92	1.89	63.66	7.35	1.15	7.92	0.95	35.87	135.53	1.54	9.92	5.45	46.66	67.58	2.00
1.94	1.96	68.39	8.02	0.16	3.94	1.60	37.05	44.63	0.57	5.94	1.84	58.33	8.33	1.17	7.94	0.90	34.01	131.00	1.54	9.94	4.94	44.83	2.69	2.00
1.96	1.86	66.99	5.88	0.09	3.96	1.62	33.65	44.87	0.56	5.96	1.74	56.53	10.10	1.15	7.96	0.92	30.97	132.10	1.55	9.96	4.22	37.03	5.63	2.03
1.98	1.76	64.38	4.22	0.09	3.98	1.69	34.14	45.30	0.58	5.98	1.59	57.39	11.69	1.15	7.98	0.93	27.45	129.41	1.53	9.98	3.22	29.75	8.45	2.01
2.00	1.79	61.09	3.86	0.11	4.00	1.95	37.11	42.85	0.59	6.00	1.60	55.01	10.77	1.15	8.00	0.94	24.69	129.16	1.55	10.00	2.60	33.93	11.51	2.02

Studio LZ CPT di Lorenzo Zanirato
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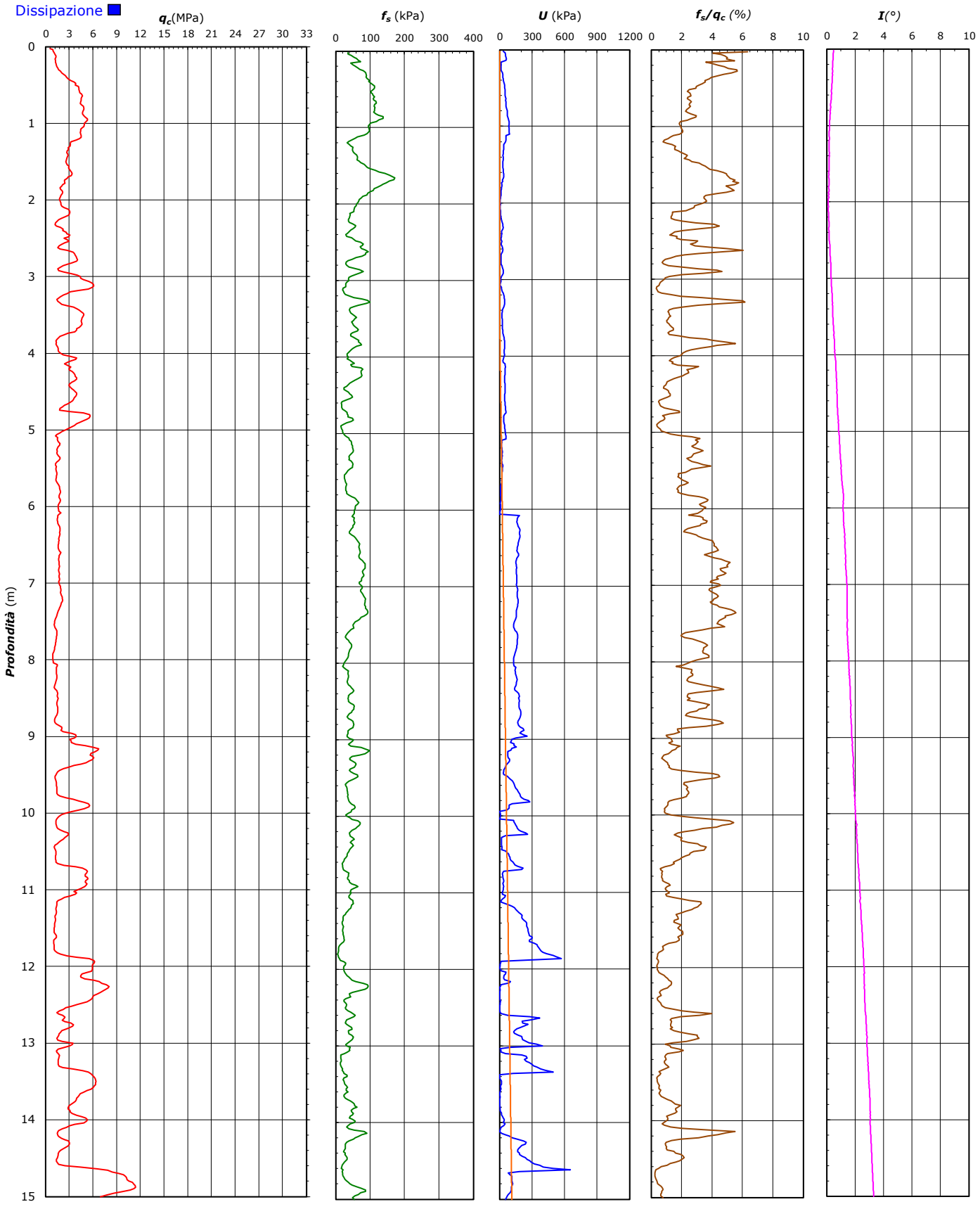
COMMITTENTE:
CANTIERE: Via Raffaele Bendandi - Villanova (FC)
COMMESSA: C054/24
RDP N°: 209/24
DATA: 10/09/2024

PROVA N°: CPTU 16
PROF. FALDA (m da p.c.): 3.40
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	2.05	41.46	5.75	2.04	12.02	5.94	23.93	14.57	2.62	14.02	5.17	43.19	51.36	3.06										
10.04	1.69	48.09	1.41	2.04	12.04	5.94	26.74	59.93	2.63	14.04	4.88	35.52	36.85	3.06										
10.06	1.54	64.52	129.65	2.05	12.06	5.81	29.08	54.05	2.64	14.06	3.72	32.81	17.02	3.06										
10.08	1.38	71.13	132.77	2.03	12.08	5.19	33.74	42.67	2.66	14.08	3.06	39.17	10.53	3.07										
10.10	1.32	71.37	142.51	2.06	12.10	4.65	38.62	36.85	2.62	14.10	2.66	54.11	7.53	3.07										
10.12	1.32	68.87	151.75	2.07	12.12	4.44	42.27	37.65	2.63	14.12	2.10	82.66	0.37	3.07										
10.14	1.35	62.78	159.59	2.12	12.14	4.45	47.26	46.40	2.65	14.14	1.64	90.39	17.32	3.08										
10.16	1.35	58.25	164.79	2.09	12.16	4.97	58.13	101.49	2.64	14.16	1.55	76.42	52.15	3.08										
10.18	1.41	48.32	177.34	2.08	12.18	6.10	80.04	90.23	2.64	14.18	1.50	65.89	88.58	3.09										
10.20	1.55	44.24	197.78	2.10	12.20	6.81	92.03	13.71	2.65	14.20	1.53	57.30	118.57	3.10										
10.22	1.83	40.10	240.82	2.09	12.22	7.15	94.46	9.37	2.65	14.22	1.65	51.37	163.14	3.10										
10.24	2.35	41.44	259.49	2.09	12.24	7.73	92.08	0.80	2.66	14.24	2.02	39.34	219.76	3.11										
10.26	2.84	42.81	53.93	2.10	12.26	8.07	85.72	4.47	2.65	14.26	2.40	32.14	246.08	3.11										
10.28	2.92	50.85	19.59	2.11	12.28	7.94	64.44	3.98	2.65	14.28	2.90	28.68	239.72	3.12										
10.30	2.69	54.31	16.47	2.10	12.30	7.65	48.64	1.65	2.66	14.30	3.05	28.20	205.50	3.12										
10.32	2.46	48.35	16.65	2.10	12.32	7.26	40.36	0.12	2.66	14.32	3.05	28.77	193.13	3.13										
10.34	2.21	43.14	18.85	2.13	12.34	6.96	41.24	1.53	2.67	14.34	2.85	28.65	176.60	3.13										
10.36	1.94	47.40	17.63	2.14	12.36	6.53	43.64	2.08	2.68	14.36	2.57	25.67	167.24	3.14										
10.38	1.68	51.36	19.10	2.12	12.38	6.11	29.47	0.73	2.68	14.38	2.17	22.69	166.14	3.14										
10.40	1.48	47.77	21.36	2.15	12.40	5.97	24.12	4.65	2.67	14.40	1.92	28.44	184.26	3.15										
10.42	1.23	44.45	20.38	2.15	12.42	5.85	24.15	8.14	2.67	14.42	1.70	27.38	185.17	3.15										
10.44	1.12	39.88	18.73	2.15	12.44	5.62	29.08	6.98	2.67	14.44	1.58	31.26	208.13	3.16										
10.46	1.12	39.09	56.26	2.17	12.46	5.26	32.65	4.77	2.66	14.46	1.60	33.16	239.35	3.16										
10.48	1.24	34.36	73.89	2.17	12.48	4.60	30.40	1.47	2.70	14.48	1.54	33.46	256.00	3.17										
10.50	1.32	33.70	83.62	2.15	12.50	3.97	28.32	0.43	2.69	14.50	1.47	30.06	281.34	3.17										
10.52	1.33	33.40	90.78	2.18	12.52	3.26	30.00	1.59	2.70	14.52	1.38	25.70	293.71	3.18										
10.54	1.34	30.15	97.82	2.19	12.54	2.58	36.43	0.49	2.70	14.54	1.36	21.73	320.76	3.19										
10.56	1.28	25.37	97.70	2.19	12.56	2.21	44.50	3.67	2.69	14.56	1.48	18.57	371.51	3.19										
10.58	1.25	23.90	106.88	2.19	12.58	1.80	51.26	15.79	2.71	14.58	1.67	17.49	406.22	3.20										
10.60	1.28	21.13	122.67	2.21	12.60	1.45	57.46	77.31	2.73	14.60	2.47	16.62	494.74	3.20										
10.62	1.32	19.30	132.47	2.20	12.62	1.65	52.65	281.10	2.74	14.62	4.41	21.13	652.18	3.21										
10.64	1.33	20.08	141.53	2.21	12.64	2.18	41.88	371.63	2.75	14.64	6.57	19.27	184.75	3.21										
10.66	1.56	20.17	166.99	2.21	12.66	2.46	32.66	290.89	2.75	14.66	7.86	20.92	80.31	3.22										
10.68	2.35	21.32	216.94	2.22	12.68	2.33	29.50	209.90	2.76	14.68	8.46	19.84	97.45	3.22										
10.70	3.81	22.85	205.93	2.22	12.70	2.10	28.03	214.43	2.76	14.70	9.22	21.71	115.63	3.23										
10.72	4.67	30.13	39.97	2.24	12.72	2.49	32.39	264.20	2.76	14.72	9.88	24.65	111.66	3.23										
10.74	5.13	38.61	29.75	2.25	12.74	3.18	40.41	232.92	2.77	14.74	10.15	26.94	114.78	3.24										
10.76	5.33	37.46	27.06	2.24	12.76	3.56	46.13	193.32	2.79	14.76	10.29	31.36	113.43	3.24										
10.78	5.21	37.76	29.51	2.26	12.78	3.42	47.90	159.83	2.79	14.78	10.32	37.67	116.31	3.25										
10.80	5.03	35.15	29.63	2.28	12.80	2.97	36.80	140.12	2.81	14.80	10.57	41.41	121.69	3.25										
10.82	5.01	35.15	32.99	2.27	12.82	2.51	37.49	128.43	2.79	14.82	11.01	47.90	118.82	3.26										
10.84	5.33	40.41	38.44	2.26	12.84	2.09	38.73	138.22	2.80	14.84	11.18	61.77	108.47	3.26										
10.86	5.39	39.65	37.40	2.28	12.86	1.87	46.19	173.36	2.82	14.86	11.34	73.40	108.10	3.27										
10.88	5.08	46.25	32.14	2.30	12.88	1.73	52.37	205.31	2.81	14.88	11.39	86.49	109.15	3.27										
10.90	5.03	58.31	35.75	2.31	12.90	1.68	50.63	207.15	2.82	14.90	11.16	86.85	104.86	3.28										
10.92	5.24	65.49	40.28	2.31	12.92	1.54	48.29	211.37	2.85	14.92	10.72	73.18	95.80	3.28										
10.94	5.12	53.53	35.63	2.31	12.94	1.46	41.29	237.88	2.82	14.94	9.60	66.15	80.31	3.29										
10.96	4.94	45.46	35.32	2.32	12.96	1.55	35.81	272.10	2.83	14.96	8.68	55.89	71.07	3.29										
10.98	4.52	42.93	30.91	2.31	12.98	2.13	30.19	341.39	2.83	14.98	7.78	49.16	65.32	3.30										
11.00	4.10	44.70	26.75	2.34	13.00	3.46	32.50	398.26	2.83	15.00	6.94	54.09	56.99	3.30										
11.02	3.60	43.21	26.57	2.33	13.02	3.38	42.28	99.78	2.84															
11.04	3.95	38.14	57.36	2.35	13.04	3.05	39.54	7.16	2.83															
11.06	3.79	38.44	47.93	2.36	13.06	2.26	41.40	12.00	2.85															
11.08	3.11	44.29	31.65	2.36	13.08	1.59	33.72	11.75	2.86															
11.10	2.40	50.19	18.24	2.37	13.10	1.36	25.00	55.28	2.85															
11.12	1.98	49.95	9.92	2.35	13.12	1.43	15.38	204.27	2.87															
11.14	1.58	51.47	42.30	2.33	13.14	1.61	15.26	247.31	2.87															
11.16	1.42	46.90	88.27	2.35	13.16	1.76	15.59	255.51	2.87															
11.18	1.43	45.47	119.49	2.37	13.18	1.73	16.76	230.72	2.88															
11.20	1.45	44.31	140.24	2.39	13.20	1.66	16.22	244.92	2.88															
11.22	1.39	39.14	150.59	2.40	13.22	1.60	14.03	275.71	2.89															
11.24	1.32	35.37	163.26	2.39	13.24	1.63	13.94	299.22	2.89															
11.26	1.35	30.31	179.97	2.41	13.26	1.58	14.99	315.01	2.91															
11.28	1.37	27.91	197.91	2.41	13.28	1.63	17.64	345.13	2.90															
11.30	1.40	23.10	208.50	2.41	13.30	1.72	19.92	378.67	2.91															
11.32	1.30	21.98	206.66	2.42	13.32	2.17	19.53	422.20	2.93															
11.34	1.23	21.62	209.23	2.42	13.34	3.43	23.53	494.37	2.92															
11.36	1.23	21.77	225.70	2.42	13.36	4.72	23.77	126.47	2.93															
11.38	1.25	18.89	243.14	2.42	13.38	5.40	33.51	0.18	2.94															
11.40	1.24	18.53	249.27	2.44	13.40	5.78	33.66	0.12	2.96															
11.42	1.20	20.72	251.16	2.44	13.42	5.95	24.64	2.63	2.95															
11.44	1.18	23.10	251.71	2.46	13.44	6.09	22.30	10.96	2.95															
11.46	1.14	21.11	259.61	2.48	13.46	6.28	24.70	17.75	2.95															
11.48	1.13	20.06	265.06	2.48	13.48	6.36	25.49	19.83	2.95															
11.50	1.12	21.05	264.81	2.47	13.50	6.42	27.50	16.59	2.97															
11.52	1.08	22.13	267.14	2.47	13.52	6.31	30.90	11.02	2.97															
11.54	1.08	22.34	269.77	2.49	13.54	6.32	34.93	11.39	2.99															
11.56	1.11	23.01	277.36	2.51	13.56	6.17	31.50	13.28	3.00															
11.58	1.26	24.24	301.48	2.52	13.58	6.04	30.51	10.59	2.99															
11.60	1.40	24.60	300.75	2.52	13.60	5.75	35.80	6.49	3.00															
11.62	1.37	25.17	275.89	2.52	13.62	5.26	29.63	1.96	3.01															
11.64	1.22	22.38	274.12	2.52	13.64	4.82	24.85	2.51	3.01															
11.66	1.06	17.42	319.78	2.52	13.66	4.42	24.88	4.29	3.02															
11.68	1.04	11.98	344.39	2.54	13.68	4.29	28.43	7.16	3.03															
11.70	1.06	10.14	352.17	2.53	13.70	4.14	34.38	3.43	3.02															
11.72	1.07	8.13	363.68	2.56	13.72	3.93	42.73	1.04	3.04															
11.74	1.07	8.43	372.18	2.55	13.74	3.89	50.55	0.06	3.04															
11.76	1.08	8.88	384.43	2.56	13.76	3.78	53.81	0.92	3.04															
11.78	1.10	7.50	399.79	2.57	13.78	3.52	55.48	2.82	3.03															
11.80	1.21	6.30	432.36	2.57	13.80	3.20	61.62	5.33	3.05															
11.82	1.51	6.18	497.98	2.57	13.82	2.96	52.19	4.96	3.04															
11.84	1.91	8.16	524.24	2.57	13.84	2.86	45.79	3.86	3.05															
11.86	2.72	11.11	571.25	2.59	13.86	2.87	46.25	10.16	3.05															
11.88	3.92	14.39	282.38	2.58	13.88	3.10	52.27	18.24	3.06															
11.90	5.56	24.49	15.30	2.61	13.90	3.15	49.81	19.96	3.07															
11.92	6.08	29.40	8.94	2.61	13.92	3.39	42.10	24.36	3.06															
11.94	6.24	28.71	7.35	2.61	13.94	3.94	40.40	34.65	3.07															
11.96	6.10	23.72	5.45	2.60	13.96	4.57	49.01	43.16	3.06															
11.98	5.96	22.42	0.55	2.60	13.98	5.09	56.98	41.63	3.06															
12.00	5.91	24.29	7.10	2.63	14.00	5.33	53.94	34.65	3.07															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
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Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 16
CANTIERE:	Via Raffaele Bendandi - Villanova (FC)	PROF. FALDA (m da p.c.):	3.40
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	209/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	10/09/2024	OPERATORE:	Zanirato



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 16
CANTIERE:	Via Raffaele Bendandi - Villanova (FC)	PROF. FALDA (m da p.c.):	3.40
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	209/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	10/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Raffaele Bendandi - Villanova (FC)
Lat.: 44.245237°
Long.: 12.001868°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
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COMMITTENTE:
CANTIERE: Via Ambrosoli - Loc. San Martino in Strada (FC)
COMMESSA: C054/24
RDP N°: 187/24
DATA: 27/08/2024

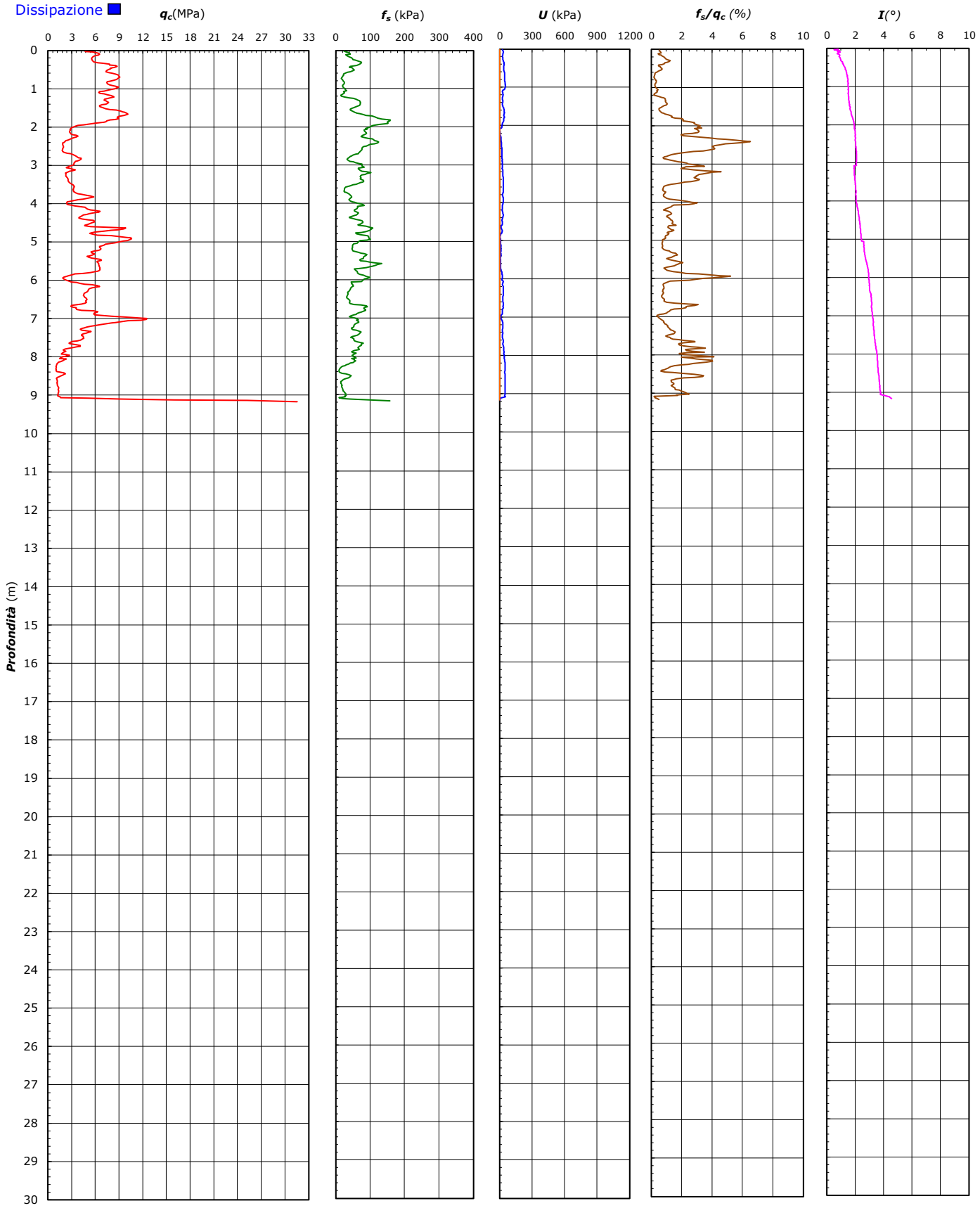
PROVA N°: CPTU 17
PROF. FALDA (m da p.c.): n.r
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	4.70	24.93	26.75	0.80	2.02	2.99	95.00	21.91	1.94	4.02	2.52	76.17	34.10	2.08	6.02	2.68	78.52	22.34	2.95	8.02	1.66	55.34	44.81	3.54
0.04	5.67	30.73	30.36	0.50	2.04	2.88	87.43	20.63	1.95	4.04	2.89	81.70	32.57	2.08	6.04	2.96	74.94	21.73	2.97	8.04	1.45	60.00	45.48	3.54
0.06	6.21	36.50	34.16	0.88	2.06	2.76	91.75	19.28	1.96	4.06	3.39	83.21	30.48	2.10	6.06	3.67	45.84	33.55	2.98	8.06	2.32	46.19	42.30	3.55
0.08	6.45	40.71	33.61	0.74	2.08	2.89	82.51	3.98	1.95	4.08	4.26	63.10	28.34	2.12	6.08	4.02	46.86	32.99	2.98	8.08	2.08	53.94	44.26	3.54
0.10	6.52	42.72	32.99	0.95	2.10	2.78	83.11	1.47	1.95	4.10	4.73	64.30	28.16	2.12	6.10	4.68	47.08	31.22	2.98	8.10	1.85	54.88	45.73	3.55
0.12	6.36	29.28	31.65	0.78	2.12	2.73	84.56	1.35	1.98	4.12	4.85	64.12	28.34	2.13	6.12	5.59	49.24	28.89	2.99	8.12	1.59	58.36	47.26	3.56
0.14	6.04	31.63	30.12	0.73	2.14	2.79	87.72	3.24	1.97	4.14	5.01	61.66	28.34	2.13	6.14	6.27	50.33	27.61	2.98	8.14	1.36	54.33	48.36	3.56
0.16	5.78	37.79	29.14	0.85	2.16	2.86	89.67	4.29	1.99	4.16	5.39	57.51	26.75	2.17	6.16	6.52	51.74	27.79	3.01	8.16	1.24	50.13	49.03	3.56
0.18	5.64	39.77	28.22	0.94	2.18	2.93	89.47	5.51	1.99	4.18	5.93	54.20	25.22	2.17	6.18	6.18	49.30	30.12	3.00	8.18	1.17	42.49	49.34	3.58
0.20	5.58	46.69	28.28	0.88	2.20	3.16	85.62	6.37	2.00	4.20	6.59	54.02	23.87	2.19	6.20	5.57	45.76	33.06	3.00	8.20	1.16	38.64	49.58	3.57
0.22	5.53	48.82	29.14	0.86	2.22	3.60	79.70	5.69	2.00	4.22	6.45	59.46	25.16	2.20	6.22	5.21	43.47	34.46	3.00	8.22	1.09	30.37	49.89	3.59
0.24	5.57	51.05	29.93	0.94	2.24	3.83	75.49	6.12	2.00	4.24	5.91	66.14	28.28	2.20	6.24	5.10	42.78	34.40	3.01	8.24	1.08	26.43	50.07	3.58
0.26	5.65	56.40	30.61	0.95	2.26	3.59	74.53	8.63	2.02	4.26	5.31	66.29	30.06	2.21	6.26	5.11	42.51	34.10	3.00	8.26	1.05	20.78	50.38	3.58
0.28	5.70	65.21	31.34	0.95	2.28	3.38	83.04	11.08	2.01	4.28	4.92	63.43	31.59	2.21	6.28	5.09	40.08	34.34	3.01	8.28	1.06	16.12	50.44	3.59
0.30	5.81	72.69	32.93	0.98	2.30	3.03	95.43	11.94	2.00	4.30	4.52	60.91	32.08	2.22	6.30	4.98	38.09	34.65	3.01	8.30	1.03	13.33	50.75	3.58
0.32	6.31	75.67	36.12	1.00	2.32	2.77	107.28	13.04	2.01	4.32	4.33	56.13	32.69	2.23	6.32	4.83	36.05	34.77	3.02	8.32	1.03	11.94	50.93	3.58
0.34	6.93	73.42	39.05	1.06	2.34	2.52	110.11	13.34	2.02	4.34	4.08	48.01	32.75	2.24	6.34	4.62	34.81	35.01	3.03	8.34	1.03	11.52	51.18	3.60
0.36	7.82	69.54	42.05	1.11	2.36	2.30	112.60	14.26	2.02	4.36	3.91	40.46	32.81	2.25	6.36	4.56	36.52	35.01	3.03	8.36	1.04	10.29	51.24	3.61
0.38	7.79	67.89	38.87	1.11	2.38	2.14	119.46	14.63	2.02	4.38	3.92	40.25	31.71	2.27	6.38	4.54	36.67	34.59	3.05	8.38	1.14	9.78	50.99	3.61
0.40	8.56	60.71	42.54	1.13	2.40	2.03	125.06	15.30	2.01	4.40	4.31	49.89	29.63	2.27	6.40	4.52	35.05	34.04	3.09	8.40	1.48	10.35	49.52	3.61
0.42	8.76	42.26	40.95	1.19	2.42	1.88	122.71	15.30	2.01	4.42	5.10	59.61	26.32	2.28	6.42	4.61	34.06	33.91	3.10	8.42	2.03	12.70	47.26	3.62
0.44	8.47	40.01	39.30	1.18	2.44	1.86	113.09	16.10	2.02	4.44	5.76	72.29	24.49	2.28	6.44	4.68	32.74	33.12	3.11	8.44	2.22	19.71	46.95	3.61
0.46	7.91	47.81	37.77	1.21	2.46	1.89	101.67	16.59	2.03	4.46	5.91	76.53	23.75	2.28	6.46	4.77	32.34	32.57	3.13	8.46	2.07	29.57	48.42	3.63
0.48	7.97	50.88	38.44	1.25	2.48	1.92	94.37	17.63	2.04	4.48	5.85	79.54	24.30	2.29	6.48	4.90	33.91	32.26	3.13	8.48	1.86	38.59	50.01	3.63
0.50	7.66	52.26	37.40	1.28	2.50	1.96	89.29	18.30	2.03	4.50	5.62	78.78	25.04	2.30	6.50	4.93	37.07	31.65	3.12	8.50	1.58	44.67	51.60	3.64
0.52	7.46	53.91	37.89	1.32	2.52	1.97	82.31	18.73	2.03	4.52	5.37	77.07	25.40	2.31	6.52	4.89	39.29	31.53	3.13	8.52	1.35	44.19	52.64	3.65
0.54	7.42	48.62	38.87	1.31	2.54	1.95	77.96	18.85	2.03	4.54	5.09	72.08	26.51	2.33	6.54	4.78	40.89	31.71	3.13	8.54	1.19	41.09	53.13	3.66
0.56	7.37	42.72	40.52	1.31	2.56	1.87	76.76	19.59	2.04	4.56	4.68	64.32	27.24	2.34	6.56	4.85	41.79	31.04	3.14	8.56	1.11	37.52	53.20	3.67
0.58	7.76	34.87	43.58	1.37	2.58	1.86	76.97	20.38	2.06	4.58	4.67	67.87	26.75	2.35	6.58	4.90	40.88	30.79	3.15	8.58	1.12	31.96	53.01	3.67
0.60	8.08	28.41	43.95	1.37	2.60	1.82	76.07	21.12	2.05	4.60	5.42	88.61	22.89	2.34	6.60	4.74	40.67	31.04	3.15	8.60	1.16	24.83	52.83	3.68
0.62	8.54	23.12	45.73	1.38	2.62	1.81	74.21	21.85	2.06	4.62	8.43	98.08	12.55	2.35	6.62	4.25	42.62	32.75	3.15	8.62	1.19	19.93	52.89	3.69
0.64	8.89	22.94	46.71	1.39	2.64	1.91	72.02	21.36	2.07	4.64	9.85	108.30	12.43	2.35	6.64	3.44	53.32	35.32	3.18	8.64	1.18	17.22	53.01	3.69
0.66	9.01	22.52	47.20	1.40	2.66	2.07	70.40	21.18	2.08	4.66	9.60	106.20	14.63	2.35	6.66	2.99	73.53	35.93	3.17	8.66	1.18	15.51	53.13	3.70
0.68	8.99	20.11	47.32	1.41	2.68	2.43	68.03	20.94	2.08	4.68	8.95	103.01	16.77	2.35	6.68	2.91	89.94	35.99	3.17	8.68	1.16	15.39	53.26	3.70
0.70	9.12	19.30	47.44	1.43	2.70	2.93	66.77	20.63	2.09	4.70	8.07	100.63	19.65	2.36	6.70	3.21	92.92	34.34	3.16	8.70	1.17	15.81	53.32	3.70
0.72	8.92	17.83	47.75	1.47	2.72	3.21	58.84	21.36	2.09	4.72	7.12	95.64	22.47	2.37	6.72	3.60	85.58	32.50	3.17	8.72	1.19	16.30	52.77	3.71
0.74	8.83	17.13	48.24	1.45	2.74	3.39	50.91	21.36	2.08	4.74	6.00	88.72	24.91	2.37	6.74	3.58	82.12	32.87	3.15	8.74	1.22	18.10	51.91	3.72
0.76	8.70	18.78	47.93	1.47	2.76	3.52	46.82	21.85	2.09	4.76	5.47	75.70	25.34	2.39	6.76	3.64	83.21	32.69	3.16	8.76	1.26	18.59	51.54	3.72
0.78	8.29	20.31	47.62	1.48	2.78	3.69	42.92	22.40	2.10	4.78	5.32	58.92	23.63	2.39	6.78	4.26	86.57	29.63	3.15	8.78	1.31	17.80	51.30	3.72
0.80	7.88	22.08	46.22	1.50	2.80	3.88	39.65	22.16	2.10	4.80	5.76	60.96	20.20	2.39	6.80	5.79	87.59	25.10	3.16	8.80	1.35	17.60	51.36	3.72
0.82	7.53	24.73	46.52	1.50	2.82	4.19	35.89	21.98	2.10	4.82	6.27	72.29	17.26	2.38	6.82	6.34	81.10	24.73	3.16	8.82	1.34	18.65	51.48	3.73
0.84	7.45	25.66	47.93	1.49	2.84	4.24	33.16	22.65	2.09	4.84	8.02	91.44	10.77	2.39	6.84	6.09	73.91	26.51	3.17	8.84	1.34	20.03	51.48	3.74
0.86	7.49	25.66	49.77	1.47	2.86	4.05	33.47	23.75	2.09	4.86	9.01	95.14	9.30	2.40	6.86	5.87	69.37	27.98	3.17	8.86	1.34	20.76	51.60	3.73
0.88	7.59	24.10	51.36	1.49	2.88	3.76	37.20	24.36	2.09	4.88	9.92	96.16	6.98	2.41	6.88	5.80	62.76	28.16	3.18	8.88	1.37	21.57	51.60	3.74
0.90	7.78	21.78	51.05	1.50	2.90	3.46	41.90	24.85	2.09	4.90	10.52	96.31	6.92	2.41	6.90	5.90	59.33	27.30	3.20	8.90	1.39	21.84	51.60	3.74
0.92	8.27	20.49	53.75	1.51	2.92	3.40	51.19	24.06	2.08	4.92	10.62	97.81	7.10	2.42	6.92	6.58	52.78	24.36	3.20	8.92	1.35	24.76	51.79	3.75
0.94	8.54	19.89	52.03	1.51	2.94	3.28	58.56	24.55	2.09	4.94	10.38	100.81	7.65	2.42	6.94	8.01	45.44	19.77	3.20	8.94	1.33	26.17	51.91	3.76
0.96	8.92	21.48	53.93	1.50	2.96	3.31	68.40	24.61	2.09	4.96	10.08	90.65	8.88	2.43	6.96	9.94	39.85	14.51	3.20	8.96	1.31	28.13	52.03	3.76
0.98	8.71	23.34	53.56	1.49	2.98	3.28	77.00	25.16	2.08	4.98	9.56	71.88	9.79	2.43	6.98	11.65	44.09	11.08	3.21	8.98	1.27	29.00	52.22	3.77
1.00	8.45	25.84	52.64	1.50	3.00	3.12	76.40	25.83	2.07	5.00	9.00	67.01	10.83	2.43	7.00	12.55	55.45	10.10	3.22	9.00	1.26	28.64	52.15	3.77
1.02	8.08	28.10	50.75	1.53	3.02	2.84	77.12	25.10	2.09	5.02	8.49	64.66	11.08	2.44	7.02	12.50	61.62	12.06	3.22	9.02	1.25	30.96	52.40	3.79
1.04	7.59	29.87	49.16	1.53	3.04	2.55	80.01	25.65	2.08	5.04	8.11	61.80	10.22	2.43	7.04	11.81	66.55	15.00	3.23	9.04	1.56	25.80	45.48	3.77
1.06	7.09	32.16	47.44	1.54	3.06	2.35	82.72	26.02	2.09	5.06	7.30	53.32	7.77	2.59	7.06	10.12	60.73	19.28	3.24	9.06	1.61	28.02	45.60	3.77
1.08	6.57	23.50	29.38	1.51	3.08	2.91	66.29	24.61	1.92	5.08	7.10	50.74	10.59	2.59	7.08	9.36	64.21	23.14	3.26	9.08	5.01	9.24	53.62	4.05
1.10	6.45	25.52	26.93	1.52	3.10	3.07	65.75	24.79	1.92	5.10	6.78	49.56	11.69	2.61	7.10	8.63	67.58	25.77	3.26	9.10	9.16	21.99	21.79	4.28
1.12	6.60	25.24	26.51	1.52	3.12	3.48	68.49	24.00	1.92	5.12	6.52	49.53	12.92	2.61	7.12	8.01	66.35	26.93	3.27	9.12	15.99	41.53	11.45	4.42
1.14	7.12	21.12	28.65	1.51	3.14	3.08	70.99	26.93	1.92	5.14	6.57	49.44	12.98	2.61	7.14	7.29	59.13	28.83	3.28	9.14	25.25	99.65	3.92	4.48
1.16	7.53	17.42	30.36	1.52	3.16	2.75	77.15	29.14	1.94	5.16	6.69	49.17	12.00	2.62	7.16	6.57	56.15	30.12	3.29	9.16	31.52	157.77	3.61	4.54
1.18	8.01	15.34	31.40	1.50	3.18	2.52	89.24	30.73	1.94	5.18	6.71	48.09	11.20	2.62	7.18	5.94	54.01	30.85	3.28					
1.20	8.32	16.69	32.93	1.52	3.20	2.23	102.47	32.02	1.93	5.20	6.69	47.96	11.88	2.62	7.20	5.50	53.56	31.22	3.27					
1.22	8.35	25.23	31.40	1.53	3.22	2.28	91.50	32.14	1.94	5.22	6.36	49.23	12.67	2.63	7.22	4.98	52.62	31.53	3.28					
1.24	7.85	40.29	28.89	1.54	3.24	2.30	85.55	32.57	1.94	5.24	5.94	50.49	14.26	2.63	7.24	4.61	50.24	31.77	3.28					
1.26	7.42	51.15	25.89	1.53	3.26	2.29	77.13	32.20	1.95	5.26	5.49	55.21	15.73	2.63	7.26	4.30	46.84	32.26	3.28					
1.28	7.17	59.84	25.89	1.55	3.28	2.28	72.14	32.57	1.95	5.28	5.52	66.15	13.22	2.63	7.28	4.09	46.93	31.71	3.29					
1.30	7.13	65.25	25.89	1.54	3.30	2.34	71.66	32.50	1.95	5.30	5.84	73.72	11.57	2.64	7.30	4.27	50.39	29.63	3.30					
1.32	7.39	68.94	27.49	1.56	3.32	2.45	72.53	32.50	1.95	5.32	5.91	82.95	11.51	2.63	7.32	4.70	59.28	27.24	3.31					
1.34	7.47	71.89	29.38	1.54	3.34	2.48	73.47	33.06	1.97	5.34	5.66	90.35	13.22	2.66	7.34	5.44	67.94	24.79	3.30					
1.36	7.70	71.62	29.63	1.56	3.36	2.54	71.81	33.48	1.96	5.36	5.30	88.87	14.08	2.67	7.36	5.15	74.07	26.14	3.31					
1.38	7.59	72.25	30.30	1.57	3.38	2.54	74.52	33.73	1.98	5.38	4.96	85.24	14.69	2.67	7.38	4.77	72.98	27.73	3.32					
1.40	7.35	72.04	28.65	1.58	3.40	2.54	80.39	34.22	1.97	5.40	5.20	82.05	13.34	2.68	7.40	4.49	70.43	28.71	3.32					
1.42	6.86	71.07	27.00	1.56	3.42	2.61	82.28	34.46	1.98	5.42	5.57	80.75	11.75	2.69	7.42	4.30	66.85	29.14	3.34					
1.44	6.56	69.39	27.18	1.58	3.44	2.68	78.97	34.59	1.99	5.44	5.98	81.02	9.49	2.70	7.44	4.26	63.84	28.95	3.33					
1.46	6.55	64.30	27.30	1.59	3.46	2.79	73.02	34.59	1.99	5.46	6.72	74.05	6.92	2.71	7.46	4.42	59.87	28.16	3.33					
1.48	6.67	57.84	30.06	1.62	3.48	2.99	65.93	34.65	2.00	5.48	6.77	69.57	8.39	2.72	7.48	4.49	49.01	27.61	3.34					
1.50	6.99	51.34	32.14	1.61	3.50	3.10	59.80	34.46	2.00	5.50	6.25	73.17	11.45	2.73	7.50	4.52	43.30	27.18	3.35					
1.52	7.29	47.34	35.26	1.62	3.52	3.26	50.45	34.65	2.01	5.52	6.19	88.54	9.92	2.74	7.52	4.54	48.47	27.30	3.34					
1.54	7.84	43.25	37.40	1.64	3.54	3.31	43.51	34.95	2.02	5.54	6.31	100.38	9.24	2.76	7.54	4.33	52.68	28.10	3.36					
1.56	8.65	43.16	40.52	1.64	3.56	3.34	34.85	35.44	2.01	5.56	6.46	120.20	9.12	2.77	7.56	4.15	53.61	29.38	3.36					
1.58	9.15	45.65	42.42	1.64	3.58	3.32	29.26	35.69	2.03	5.58	6.46	134.15	10.22	2.78	7.58	3.68	52.55	31.65	3.37					
1.60	9.48	51.12	43.34	1.66	3.60	3.26	26.76	36.12	2.03	5.60	6.45	122.57	10.53	2.79	7.60	3.11	56.22	33.79	3.37					
1.62	9.76	55.96	43.52	1.65	3.62	3.23	26.20	36.24	2.04	5.62	6.50	115.42	10.35	2.81	7.62	2.88	63.53	34.10	3.39					
1.64	9.97	61.95	44.63	1.67	3.64	3.22	25.51	36.30	2.04	5.64	6.51	106.46	10.16	2.82	7.64	2.69	76.94	34.71	3.39					
1.66	10.14	70.09	45.18	1.71	3.66	3.22	25.09	35.75	2.04	5.66	6.57	100.20	10.47	2.83	7.66	2.79	80.78	33.97	3.39					
1.68	10.04	80.07	44.81	1.71	3.68	3.27	24.58	35.01	2.05	5.68	6.58	90.19	10.53	2.84	7.68	3.49	74.56	31.16	3.40					
1.70	9.63	88.61	43.40	1.71	3.70	3.37	26.08	34.46	2.05	5.70	6.54	68.39	10.77	2.86	7.70	4.12	74.95	28.95	3.40					
1.72	9.01	104.97	40.34	1.73	3.72	3.56	30.69	33.91	2.05	5.72	6.59	55.04	10.71	2.87	7.72	4.12	74.56	29.93	3.41					
1.74	8.75	113.81	39.85	1.75	3.74	3.79	36.34	32.93	2.05	5.74	6.55	56.99	11.45	2.89	7.74	3.66	68.70	32.69	3.42					
1.76	8.84	120.39	42.97	1.76	3.76	4.22	39.44	31.83	2.06	5.76	6.33	59.79	12.73	2.90	7.76	3.07	65.81	35.69	3.43					
1.78	9.01	121.98	46.65	1.80	3.78	4.78	41.70	29.81	2.06	5.78	5.99	61.92	14.69	2.91	7.78	2.45	65.24	37.89	3.44					
1.80	8.54	133.86	43.83	1.81	3.80	5.43	43.83	27.67	2.05	5.80	5.41	63.16	17.08	2.91	7.80	2.15	67.74	38.57	3.46					
1.82	7.84	157.82	40.65	1.81	3.82	5.79	46.03	26.87	2.05	5.82	4.42	64.18	20.45	2.92	7.82	1.94	69.18	39.48	3.45					
1.84	7.46	157.81	39.24	1.84	3.84	5.60	46.03	28.53	2.05	5.84	3.42	66.92	22.77	2.93	7.84	2.13	55.08	38.50	3.45					
1.86	7.36	153.21	40.34	1.85	3.86	5.00	43.81	31.22	2.05	5.86	3.09	70.46	23.45	2.94	7.86	2.26	51.35	38.20	3.46					
1.88	7.14	149.57	39.79	1.87	3.88	4.43	40.92	33.24	2.06	5.88	2.60	81.20	24.30	2.95	7.88	1.99	46.30	39.85	3.48					
1.90	6.09	153.00	34.34	1.88	3.90	3.90	39.30	34.89	2.06	5.90	2.29	87.54	24.98	2.96	7.90	1.81	49.85	41.20	3.50					
1.92	5.30	150.95	30.73	1.90	3.92	3.28	39.81	35.69	2.06	5.92	2.03	91.30	25.59	2.96	7.92	1.69	59.53	41.50	3.51					
1.94	4.49	126.38	27.91	1.90	3.94	2.81	42.22	36.30	2.07	5.94	1.91	99.60	25.34	2.97	7.94	2.30	54.03	39.05	3.52					
1.96	3.83	110.68	25.95	1.91	3.96	2.47	49.05	35.99	2.06	5.96	2.00	92.29	24.85	2.95	7.96	2.73	50.37	38.20	3.51					
1.98	3.48	105.99	24.55	1.92	3.98	2.38	56.29	35.50	2.07	5.98	2.11	84.02	24.42	2.95	7.98	2.22	48.42	41.81	3.51					
2.00	3.19	103.31	23.26	1.94	4.00	2.41	64.02	34.65	2.07	6.00	2.36	80.86	23.38	2.95	8.00	1.89	49.86	43.77	3.54					

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 17
CANTIERE:	Via Ambrosoli - Loc. San Martino in Strada (FC)	PROF. FALDA (m da p.c.):	n.r
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	187/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	27/08/2024	OPERATORE:	Zanirato

Dissipazione



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 17
CANTIERE:	Via Ambrosoli - Loc. San Martino in Strada (FC)	PROF. FALDA (m da p.c.):	n.r
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	187/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	27/08/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Ambrosoli - Loc. San Martino in Strada (FC)
Lat.: 44.175441° N
Long.: 12.070106° E



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
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Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Scaldarancio - Forlì (FC)
COMMESSA: C054/24
RDP N°: 210/24
DATA: 10/09/2024

PROVA N°: CPTU 18
PROF. FALDA (m da p.c.): 7.10
PREFORO (m da p.c.): 0.70
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.72	0.76	42.59	1.71	0.19	2.72	1.37	55.00	42.24	0.58	4.72	1.14	39.77	1.29	1.58	6.72	1.67	81.06	18.00	2.77	8.72	1.78	41.80	64.09	3.82
0.74	1.80	47.82	18.18	0.13	2.74	1.36	52.38	42.54	0.58	4.74	1.19	41.76	0.92	1.62	6.74	1.81	79.23	19.96	2.80	8.74	1.59	40.09	63.17	3.83
0.76	3.02	55.70	24.06	0.09	2.76	1.36	49.83	42.73	0.59	4.76	1.22	44.10	0.67	1.63	6.76	1.95	77.89	21.49	2.81	8.76	1.60	34.92	68.62	3.83
0.78	4.29	52.66	28.22	0.07	2.78	1.35	48.72	43.10	0.59	4.78	1.28	46.57	0.18	1.65	6.78	1.94	74.79	20.14	2.83	8.78	1.77	32.45	75.66	3.84
0.80	5.47	51.37	31.10	0.09	2.80	1.36	46.26	42.91	0.60	4.80	1.35	49.73	0.43	1.68	6.80	1.83	73.26	19.16	2.85	8.80	1.96	33.59	77.80	3.88
0.82	6.68	50.23	34.77	0.17	2.82	1.35	44.79	43.22	0.60	4.82	1.39	52.86	1.04	1.70	6.82	1.74	71.79	19.04	2.88	8.82	2.30	37.77	83.13	3.88
0.84	7.07	69.39	21.73	0.16	2.84	1.31	45.94	43.95	0.60	4.84	1.47	54.90	1.71	1.71	6.84	1.61	66.47	17.69	2.89	8.84	3.09	47.81	90.23	3.89
0.86	7.96	74.98	40.95	0.12	2.86	1.32	45.77	44.32	0.61	4.86	1.55	56.98	3.24	1.72	6.86	1.57	60.30	18.00	2.90	8.86	3.39	48.87	81.17	3.91
0.88	8.51	88.20	42.12	0.20	2.88	1.30	45.56	44.81	0.61	4.88	1.63	59.11	3.37	1.75	6.88	1.50	54.59	17.81	2.92	8.88	3.17	51.12	72.85	3.93
0.90	8.83	91.25	42.61	0.21	2.90	1.24	45.23	45.30	0.62	4.90	1.67	63.14	3.37	1.77	6.90	1.48	52.04	18.12	2.93	8.90	2.75	48.14	64.40	3.94
0.92	10.39	91.22	60.54	0.16	2.92	1.22	44.67	45.42	0.62	4.92	1.72	66.84	3.31	1.80	6.92	1.44	46.60	18.55	2.94	8.92	2.31	38.31	57.30	3.94
0.94	10.20	88.67	46.22	0.16	2.94	1.19	43.56	44.99	0.63	4.94	1.76	71.59	3.43	1.79	6.94	1.40	42.24	19.28	2.97	8.94	1.93	36.63	51.73	3.95
0.96	10.07	90.46	48.60	0.18	2.96	1.20	42.15	45.36	0.63	4.96	1.75	77.88	3.49	1.82	6.96	1.39	38.15	19.96	2.98	8.96	1.59	34.97	48.05	3.97
0.98	9.67	97.32	51.97	0.18	2.98	1.23	39.33	45.60	0.63	4.98	1.77	81.50	3.37	1.82	6.98	1.35	35.42	20.45	2.99	8.98	1.41	36.36	47.69	3.98
1.00	9.56	109.55	54.97	0.20	3.00	1.25	38.46	45.60	0.64	5.00	1.76	86.70	3.43	1.83	7.00	1.34	32.47	21.24	3.01	9.00	1.39	37.35	53.56	4.00
1.02	10.33	86.40	61.34	0.21	3.02	1.28	37.48	45.54	0.64	5.02	1.75	90.20	3.49	1.84	7.02	1.29	30.13	21.67	3.02	9.02	1.40	32.93	59.50	4.01
1.04	12.67	85.37	77.68	0.21	3.04	1.27	36.40	45.48	0.65	5.04	1.76	92.70	3.92	1.86	7.04	1.30	26.91	23.02	3.04	9.04	1.47	29.98	65.56	4.04
1.06	14.27	152.78	82.82	0.22	3.06	1.26	34.21	45.48	0.65	5.06	1.81	92.85	3.92	1.88	7.06	1.46	19.72	50.01	3.07	9.06	1.67	32.70	223.86	4.10
1.08	11.01	148.07	58.09	0.22	3.08	1.25	33.73	45.91	0.66	5.08	1.84	99.40	0.12	1.88	7.08	1.56	23.62	45.91	3.09	9.08	1.65	31.59	225.33	4.12
1.10	8.39	193.63	71.99	0.22	3.10	1.28	32.92	4.35	0.66	5.10	1.85	102.38	0.49	1.88	7.10	1.52	23.66	44.56	3.11	9.10	1.65	30.15	232.19	4.14
1.12	6.17	418.97	60.11	0.23	3.12	1.23	35.15	4.65	0.67	5.12	1.91	103.63	1.22	1.89	7.12	1.47	23.63	44.20	3.11	9.12	1.63	30.39	227.96	4.15
1.14	5.68	449.96	58.52	0.23	3.14	1.20	36.32	4.53	0.67	5.14	1.94	104.91	1.47	1.90	7.14	1.38	22.57	43.52	3.12	9.14	1.61	31.44	224.53	4.16
1.16	5.76	403.00	54.17	0.24	3.16	1.19	36.75	4.41	0.67	5.16	1.99	106.34	2.20	1.91	7.16	1.33	22.18	43.65	3.14	9.16	1.57	35.68	218.78	4.17
1.18	6.12	346.66	57.48	0.24	3.18	1.16	36.99	4.35	0.68	5.18	2.04	106.06	2.69	1.91	7.18	1.23	22.55	43.89	3.15	9.18	1.51	40.37	211.07	4.18
1.20	6.05	283.72	56.13	0.25	3.20	1.14	36.66	4.10	0.68	5.20	2.07	105.91	3.06	1.92	7.20	1.19	22.04	45.54	3.16	9.20	1.48	46.08	207.46	4.19
1.22	5.83	260.68	55.28	0.25	3.22	1.11	36.75	4.22	0.69	5.22	2.08	106.24	3.18	1.93	7.22	1.20	20.41	46.40	3.17	9.22	1.46	50.56	204.15	4.22
1.24	5.71	244.61	52.03	0.26	3.24	1.06	35.91	4.41	0.69	5.24	2.06	108.95	3.24	1.94	7.24	1.11	20.50	45.85	3.18	9.24	1.42	55.85	194.36	4.24
1.26	6.15	73.46	56.01	0.26	3.26	1.02	33.11	5.33	0.70	5.26	2.01	111.72	3.00	1.95	7.26	1.05	19.15	45.60	3.18	9.26	1.38	59.31	184.19	4.22
1.28	7.80	63.20	71.74	0.26	3.28	0.96	32.00	6.67	0.70	5.28	2.02	113.94	3.06	1.95	7.28	1.00	17.56	45.48	3.18	9.28	1.32	62.68	178.20	4.24
1.30	9.76	64.67	82.76	0.27	3.30	0.89	31.46	7.84	0.70	5.30	1.95	115.94	2.63	1.96	7.30	0.97	16.30	46.40	3.20	9.30	1.28	65.92	174.03	4.25
1.32	17.05	108.79	119.00	0.27	3.32	0.84	31.16	9.55	0.71	5.32	1.87	116.73	2.33	1.97	7.32	0.99	15.79	48.36	3.20	9.32	1.29	66.43	171.16	4.25
1.34	19.64	168.28	118.39	0.28	3.34	0.77	32.03	11.02	0.71	5.34	1.81	113.44	2.08	1.98	7.34	1.03	15.13	49.89	3.20	9.34	1.24	66.40	168.34	4.27
1.36	15.74	140.41	79.09	0.28	3.36	0.73	30.80	11.88	0.72	5.36	1.75	107.17	1.90	1.99	7.36	1.07	14.83	50.81	3.22	9.36	1.24	65.50	166.69	4.27
1.38	13.93	125.06	76.21	0.29	3.38	0.72	29.30	12.24	0.73	5.38	1.68	102.76	1.59	1.99	7.38	1.09	15.19	51.24	3.23	9.38	1.27	62.73	166.44	4.28
1.40	10.15	150.31	40.52	0.29	3.40	0.70	26.63	12.49	0.77	5.40	1.58	95.91	0.80	2.00	7.40	1.09	16.00	50.38	3.24	9.40	1.33	60.86	164.42	4.29
1.42	12.00	121.93	80.19	0.29	3.42	0.72	24.19	12.61	0.80	5.42	1.50	88.27	0.80	2.01	7.42	1.03	17.36	49.16	3.25	9.42	1.36	61.01	163.08	4.30
1.44	8.27	114.59	51.85	0.30	3.44	0.74	21.13	12.06	0.83	5.44	1.44	81.20	0.61	2.02	7.44	1.02	16.91	49.52	3.26	9.44	1.38	61.97	160.44	4.31
1.46	3.98	355.87	51.48	0.30	3.46	0.81	18.97	10.77	0.85	5.46	1.40	71.90	0.92	2.03	7.46	1.01	15.68	50.38	3.26	9.46	1.39	60.62	157.57	4.31
1.48	3.69	350.50	44.93	0.31	3.48	0.91	17.71	9.37	0.85	5.48	1.36	65.83	1.53	2.04	7.48	1.01	15.14	51.60	3.27	9.48	1.38	61.37	157.69	4.31
1.50	3.55	371.85	44.87	0.31	3.50	0.96	17.20	8.75	0.87	5.50	1.37	58.13	2.63	2.04	7.50	1.01	14.26	52.15	3.28	9.50	1.42	62.45	161.06	4.33
1.52	3.57	350.00	44.50	0.32	3.52	1.00	18.07	8.63	0.90	5.52	1.37	49.80	3.24	2.05	7.52	1.06	13.82	54.30	3.28	9.52	1.49	63.20	160.87	4.34
1.54	3.41	270.34	39.05	0.32	3.54	1.01	20.03	9.00	0.91	5.54	1.35	44.18	3.61	2.06	7.54	1.09	13.49	55.64	3.28	9.54	1.47	62.39	156.59	4.34
1.56	3.34	218.60	39.54	0.33	3.56	1.02	21.83	9.79	0.92	5.56	1.34	40.60	4.71	2.07	7.56	1.12	12.71	56.93	3.30	9.56	1.45	63.17	154.14	4.35
1.58	3.30	209.04	37.59	0.33	3.58	1.02	25.11	10.47	0.94	5.58	1.39	35.34	5.82	2.08	7.58	1.16	12.71	57.42	3.29	9.58	1.39	64.31	154.20	4.36
1.60	3.40	148.59	41.99	0.33	3.60	1.00	27.43	11.26	0.93	5.60	1.42	33.02	6.49	2.08	7.60	1.22	12.92	58.34	3.29	9.60	1.42	61.24	154.14	4.36
1.62	3.49	135.11	44.38	0.34	3.62	0.99	29.96	12.00	0.94	5.62	1.48	31.37	7.77	2.09	7.62	1.22	13.67	58.89	3.30	9.62	1.42	60.07	152.36	4.38
1.64	3.73	129.32	46.71	0.34	3.64	0.97	32.52	12.92	0.95	5.64	1.60	30.44	9.30	2.10	7.64	1.25	14.00	59.44	3.33	9.64	1.42	60.97	149.73	4.40
1.66	3.94	122.01	46.16	0.35	3.66	0.95	34.45	13.77	0.98	5.66	1.72	30.32	10.16	2.11	7.66	1.26	14.12	60.30	3.32	9.66	1.43	62.47	151.08	4.40
1.68	3.99	101.99	45.18	0.35	3.68	0.94	34.09	14.32	0.99	5.68	1.79	29.84	10.83	2.12	7.68	1.27	14.64	60.97	3.34	9.68	1.46	61.60	146.61	4.40
1.70	3.91	96.90	41.75	0.36	3.70	0.96	33.58	14.63	1.00	5.70	1.85	30.90	11.51	2.13	7.70	1.32	14.61	61.77	3.35	9.70	1.47	63.19	146.98	4.41
1.72	3.70	95.87	37.77	0.36	3.72	0.93	33.13	15.00	1.01	5.72	1.90	37.21	11.69	2.13	7.72	1.32	17.22	62.32	3.37	9.72	1.52	66.47	144.40	4.43
1.74	3.45	96.90	33.85	0.36	3.74	0.91	33.01	15.43	1.02	5.74	1.93	44.01	11.69	2.14	7.74	1.46	17.89	66.05	3.38	9.74	1.49	70.56	141.83	4.43
1.76	3.13	102.02	29.57	0.37	3.76	0.91	32.35	15.73	1.05	5.76	1.92	55.28	11.32	2.15	7.76	1.42	17.80	64.52	3.39	9.76	1.45	70.83	140.24	4.43
1.78	2.86	111.57	27.42	0.37	3.78	0.91	31.57	16.04	1.05	5.78	1.93	66.32	12.00	2.16	7.78	1.45	18.43	65.32	3.40	9.78	1.44	70.08	140.92	4.44
1.80	2.73	120.68	25.34	0.38	3.80	0.91	31.19	16.10	1.06	5.80	1.99	74.59	11.69	2.17	7.80	1.42	18.28	64.76	3.41	9.80	1.45	69.96	141.47	4.44
1.82	2.59	127.47	22.34	0.38	3.82	0.92	30.83	16.10	1.07	5.82	2.07	85.02	12.06	2.17	7.82	1.44	19.15	64.70	3.42	9.82	1.46	70.14	139.75	4.46
1.84	2.46	128.39	20.32	0.39	3.84	0.93	29.87	16.10	1.08	5.84	2.05	95.68	12.24	2.18	7.84	1.47	19.52	65.93	3.43	9.84	1.43	69.26	138.10	4.48
1.86	2.31	126.05	21.49	0.39	3.86	0.94	29.66	16.22	1.10	5.86	2.12	100.67	12.98	2.19	7.86	1.60	18.98	68.25	3.45	9.86	1.42	68.18	138.53	4.49
1.88	2.23	120.27	24.61	0.39	3.88	0.97	29.27	16.16	1.12	5.88	2.14	101.13	13.47	2.20	7.88	1.72	20.36	69.17	3.46	9.88	1.39	66.56	140.00	4.50
1.90	2.24	115.14	23.69	0.40	3.90	0.97	30.09	16.77	1.11	5.90	2.25	100.34	13.53	2.21	7.90	1.85	23.34	69.05	3.47	9.90	1.41	66.83	140.85	4.51
1.92	2.28	106.07	20.75	0.40	3.92	0.95	30.78	17.02	1.13	5.92	2.28	107.18	13.90	2.21	7.92	1.81	25.02	67.15	3.47	9.92	1.42	68.33	143.67	4.52
1.94	2.36	99.48	17.32	0.41	3.94	0.96	31.05	17.45	1.14	5.94	2.37	107.46	15.18	2.22	7.94	1.79	24.93	66.97	3.47	9.94	1.42	65.95	144.47	4.53
1.96	2.63	92.12	14.57	0.41	3.96	0.95	32.17	17.75	1.17	5.96	2.43	101.80	15.30	2.23	7.96	1.80	25.14	67.89	3.47	9.96	1.38	63.52	141.65	4.55
1.98	2.94	87.56	12.24	0.42	3.98	0.93	33.01	18.30	1.17	5.98	2.50	101.10	14.88	2.24	7.98	1.88	24.30	72.85	3.48	9.98	1.34	60.57	138.77	4.55
2.00	3.08	85.14	8.81	0.42	4.00	0.91	34.19	18.92	1.18	6.00	2.45	103.13	14.94	2.25	8.00	1.80	22.14	70.76	3.49	10.00	1.29	61.80	140.00	4.55
2.02	2.85	80.49	4.22	0.43	4.02	0.90	35.15	19.47	1.18	6.02	2.50	98.57	14.57	2.26	8.02	1.88	23.88	54.30	3.49	10.02	1.32	58.97	144.22	4.56
2.04	2.63	78.59	1.35	0.43	4.04	0.90	34.19	19.71	1.19	6.04	2.44	98.63	14.51	2.26	8.04	1.96	29.99	52.89	3.49	10.04	1.31	55.34	147.10	4.56
2.06	2.40	79.78	1.96	0.43	4.06	0.90	33.53	20.02	1.21	6.06	2.47	103.93	20.57	2.28	8.06	2.45	45.49	69.11	3.48	10.06	1.57	49.08	216.88	4.63
2.08	2.22	84.88	4.22	0.44	4.08	0.93	31.44	9.79	1.21	6.08	2.54	112.27	20.26	2.28	8.08	2.22	49.34	60.30	3.49	10.08	1.53	50.67	208.93	4.64
2.10	2.48	72.01	23.51	0.44	4.10	0.92	33.04	9.67	1.22	6.10	2.52	116.32	19.34	2.32	8.10	1.96	51.26	54.79	3.49	10.10	1.44	50.31	202.44	4.65
2.12	2.35	77.25	22.40	0.45	4.12	0.91	32.53	9.86	1.23	6.12	2.49	121.28	20.02	2.36	8.12	1.73	53.43	51.24	3.51	10.12	1.40	48.36	200.48	4.65
2.14	2.30	79.04	21.61	0.45	4.14	0.89	32.50	9.92	1.23	6.14	2.55	123.53	19.83	2.38	8.14	1.51	52.76	48.73	3.52	10.14	1.40	46.29	200.97	4.67
2.16	2.32	77.52	22.89	0.46	4.16	0.87	33.19	9.98	1.24	6.16	2.60	125.24	19.34	2.41	8.16	1.39	48.86	49.40	3.52	10.16	1.41	46.71	202.50	4.67
2.18	2.24	77.86	25.04	0.46	4.18	0.88	31.84	9.67	1.26	6.18	2.59	129.28	18.92	2.43	8.18	1.33	42.75	55.28	3.56	10.18	1.46	48.15	205.99	4.69
2.20	2.19	78.38	26.38	0.46	4.20	0.88	30.30	9.55	1.27	6.20	2.56	137.98	18.73	2.45	8.20	1.38	40.41	63.91	3.56	10.20	1.49	48.81	207.70	4.69
2.22	2.21	78.11	27.30	0.47	4.22	0.87	29.61	9.67	1.28	6.22	2.56	138.04	18.61	2.46	8.22	1.51	34.42	69.29	3.57	10.22	1.54	51.31	211.43	4.71
2.24	2.20	75.27	28.22	0.47	4.24	0.86	28.71	9.55	1.29	6.24	2.56	138.41	18.92	2.49	8.24	1.58	32.20	69.66	3.59	10.24	1.61	50.49	213.88	4.72
2.26	2.18	73.11	28.28	0.48	4.26	0.86	26.70	8.88	1.31	6.26	2.59	139.84	19.34	2.50	8.26	1.69	30.42	68.74	3.59	10.26	1.61	51.10	210.88	4.73
2.28	2.12	73.75	26.81	0.48	4.28	0.89	25.25	8.45	1.30	6.28	2.58	141.63	18.79	2.50	8.28	1.73	31.32	66.30	3.60	10.28	1.59	54.25	210.03	4.73
2.30	2.07	74.05	24.49	0.49	4.30	0.91	23.42	7.96	1.31	6.30	2.53	139.86	18.85	2.52	8.30	1.69	31.08	66.48	3.61	10.30	1.67	52.84	210.76	4.74
2.32	2.05	72.67	25.47	0.49	4.32	0.92	23.81	7.53	1.34	6.32	2.46	133.10	18.79	2.54	8.32	1.66	30.84	62.99	3.61	10.32	1.67	55.96	207.58	4.75
2.34	2.01	72.16	27.30	0.50	4.34	0.95	23.48	6.61	1.34	6.34	2.44	128.41	18.98	2.55	8.34	1.55	29.64	62.81	3.61	10.34	1.63	60.38	204.33	4.76
2.36	1.96	73.06	28.46	0.50	4.36	0.94	23.00	6.61	1.36	6.36	2.36	126.89	18.67	2.56	8.36	1.50	27.71	64.03	3.63	10.36	1.61	62.07	206.84	4.77
2.38	1.94	72.88	30.18	0.50	4.38	0.97	22.13	5.82	1.36	6.38	2.30	125.79	18.73	2.57	8.38	1.51	27.92	63.72	3.63	10.38	1.65	62.58	205.01	4.77
2.40	1.94	74.33	31.22	0.51	4.40	1.01	22.31	5.14	1.37	6.40	2.24	125.85	18.67	2.59	8.40	1.70	30.30	69.48	3.63	10.40	1.60	65.22	195.15	4.79
2.42	1.91	75.18	32.57	0.51	4.42	1.03	22.79	4.71	1.38	6.42	2.20	124.14	19.16	2.58	8.42	2.14	31.14	77.31	3.65	10.42	1.56	69.13	192.64	4.79
2.44	1.83	77.62	33.91	0.52	4.44	1.06	24.03	4.29	1.38	6.44	2.19	120.49	19.65	2.61	8.44	2.60	36.46	80.44	3.65	10.44	1.52	72.71	192.70	4.81
2.46	1.78	78.23	34.71	0.52	4.46	1.07	24.87	3.80	1.39	6.46	2.17	120.18	20.02	2.63	8.46	3.13	42.77	77.74	3.65	10.46	1.49	75.14	193.68	4.80
2.48	1.73	77.44	35.81	0.53	4.48	1.07	25.35	3.37	1.42	6.48	1.97	116.86	17.87	2.63	8.48	3.43	47.85	75.84	3.66	10.48	1.50	79.00	195.89	4.80
2.50	1.70	75.40	36.61	0.53	4.50	1.09	26.02	3.00	1.42	6.50	2.01	111.54	19.04	2.64	8.50	3.57	46.68	74.01	3.67	10.50	1.54	80.10	198.40	4.80
2.52	1.69	75.43	37.22	0.53	4.52	1.06	27.79	2.63	1.43	6.52	1.92	107.00	18.00	2.65	8.52	3.62	46.02	71.99	3.67	10.52	1.56	79.03	198.70	4.82
2.54	1.66	74.87	37.89	0.54	4.54	1.06	28.72	2.26	1.45	6.54	1.86	101.88	17.81	2.66	8.54	3.50	42.44	68.07	3.68	10.54	1.58	74.81	187.01	4.83
2.56	1.60	74.33	38.63	0.54	4.56	1.05	29.57	2.08	1.46	6.56	1.81	101.09	17.57	2.68	8.56	3.16	38.95	62.56	3.68	10.56	1.55	74.36	177.28	4.83
2.58	1.56	69.55	37.89	0.55	4.58	1.05	29.30	2.08	1.47	6.58	1.75	99.41	17.45	2.70	8.58	2.78	37.81	55.64	3.69	10.58	1.50	77.51	176.85	4.84
2.60	1.52	64.44	38.99	0.55	4.60	1.05	30.29	2.08	1.49	6.60	1.72	94.42	17.51	2.70	8.60	2.37	38.83	50.44	3.71	10.60	1.45	78.75	169.81	4.85
2.62	1.53	62.04	39.67	0.56	4.62	1.04	31.89	2.14	1.49	6.62	1.74	90.46	17.81	2.72	8.62	1.97	38.98	45.91	3.73	10.62	1.37	79.66	164.97	4.84
2.64	1.48	64.60	40.40	0.56	4.64	1.06	33.84	2.14	1.52	6.64	1.71	90.22	17.75	2.73	8.64	1.65	37.78	44.44	3.75	10.64	1.36	81.37	168.83	4.85
2.66	1.43	63.91	41.01	0.57	4.66	1.07	34.90	1.84	1.55	6.66	1.69	89.06	17.63	2.74	8.66	1.62	36.91	49.28	3.77	10.66	1.36	82.31	170.05	4.87
2.68	1.40	61.51	41.56	0.57	4.68	1.09	36.31	1.53	1.56	6.68	1.67	86.32	17.45	2.75	8.68	1.73	38.56	59.62	3.78	10.68	1.36	80.42	166.81	4.87
2.70	1.38	59.62	41.87	0.57	4.70	1.11	38.30	1.53	1.57	6.70	1.65	84.37	17.38	2.77	8.70	1.88	40.54	66.23	3.79	10.70	1.37	76.00	168.28	4.88

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COMMITTENTE:
CANTIERE: Via Scaldarancio - Forlì (FC)
COMMESSA: C054/24
RDP N°: 210/24
DATA: 10/09/2024

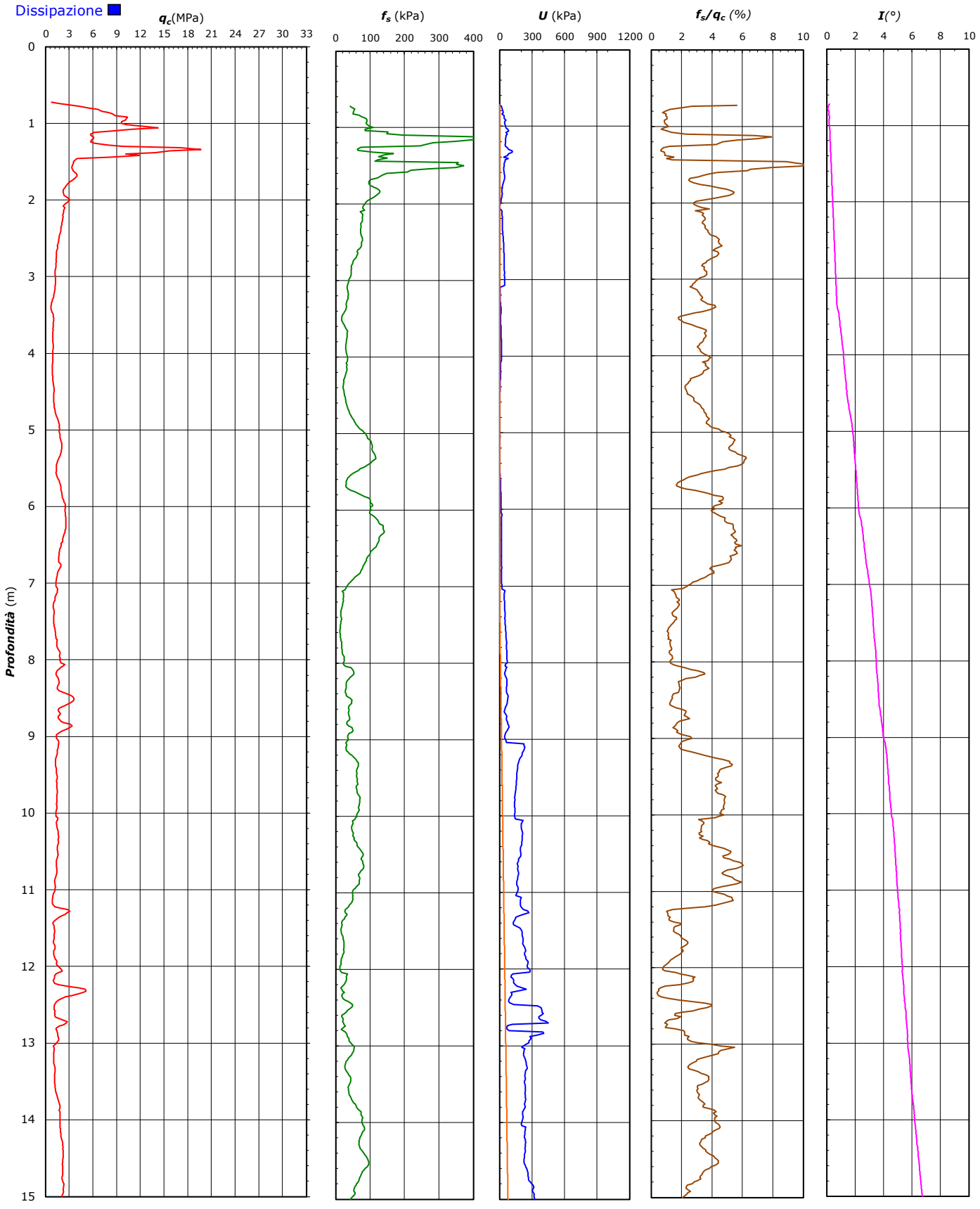
PROVA N°: CPTU 18
PROF. FALDA (m da p.c.): 7.10
PREFORO (m da p.c.): 0.70
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.72	1.43	72.09	173.05	4.88	12.72	2.77	24.91	118.33	5.61	14.72	2.17	70.33	269.16	6.57										
10.74	1.44	69.74	175.38	4.90	12.74	2.62	27.86	70.40	5.62	14.74	2.13	68.17	266.96	6.58										
10.76	1.43	66.53	174.71	4.91	12.76	2.28	22.69	67.15	5.63	14.76	2.07	67.50	269.53	6.60										
10.78	1.43	67.91	172.07	4.90	12.78	1.73	16.04	67.27	5.64	14.78	2.12	64.95	287.10	6.61										
10.80	1.37	69.77	169.44	4.92	12.80	1.37	21.54	86.92	5.66	14.80	2.18	61.49	298.05	6.63										
10.82	1.31	70.40	166.44	4.91	12.82	1.30	27.71	400.89	5.68	14.82	2.21	59.62	309.93	6.63										
10.84	1.28	69.11	163.57	4.92	12.84	1.44	31.86	406.83	5.68	14.84	2.33	55.41	316.30	6.64										
10.86	1.21	68.35	158.55	4.94	12.86	1.49	32.85	347.58	5.68	14.86	2.32	53.94	313.97	6.66										
10.88	1.14	68.23	157.50	4.93	12.88	1.56	34.38	281.10	5.67	14.88	2.30	52.95	306.62	6.67										
10.90	1.16	65.17	160.99	4.95	12.90	1.55	38.53	291.63	5.69	14.90	2.23	53.55	304.91	6.66										
10.92	1.19	61.20	167.05	4.96	12.92	1.61	38.08	285.44	5.68	14.92	2.21	56.83	311.70	6.67										
10.94	1.22	57.20	170.24	4.96	12.94	1.65	39.64	270.20	5.68	14.94	2.29	55.11	321.19	6.70										
10.96	1.25	52.24	172.32	4.97	12.96	1.65	43.85	271.61	5.69	14.96	2.22	52.14	317.52	6.70										
10.98	1.23	49.68	169.69	4.98	12.98	1.54	47.52	246.20	5.70	14.98	2.14	46.79	320.46	6.72										
11.00	1.20	48.99	162.16	4.98	13.00	1.36	53.53	222.02	5.71	15.00	2.07	42.58	326.03	6.75										
11.02	1.12	49.32	156.95	4.99	13.02	1.19	54.46	205.86	5.71															
11.04	1.04	49.89	152.98	5.00	13.04	0.96	52.64	232.19	5.71															
11.06	0.98	49.48	199.87	5.01	13.06	1.08	53.24	224.84	5.72															
11.08	0.94	49.99	196.99	5.02	13.08	1.10	50.51	224.17	5.73															
11.10	0.92	49.09	194.36	5.02	13.10	1.07	47.44	220.62	5.74															
11.12	0.89	47.91	193.32	5.04	13.12	1.04	46.15	221.78	5.76															
11.14	0.88	44.52	194.66	5.04	13.14	1.02	41.79	226.13	5.77															
11.16	0.88	40.49	194.36	5.06	13.16	1.02	37.28	234.88	5.79															
11.18	0.89	37.78	196.25	5.06	13.18	1.04	34.72	240.33	5.80															
11.20	0.96	33.87	206.42	5.07	13.20	1.04	31.41	242.04	5.82															
11.22	1.18	28.31	222.58	5.09	13.22	1.02	30.12	246.14	5.83															
11.24	1.91	26.57	260.28	5.11	13.24	1.03	28.22	248.10	5.84															
11.26	2.79	28.43	273.32	5.13	13.26	1.06	27.05	250.43	5.85															
11.28	3.08	33.39	228.09	5.11	13.28	1.11	27.29	253.92	5.86															
11.30	2.75	30.48	193.19	5.12	13.30	1.15	27.74	253.61	5.85															
11.32	2.48	27.29	151.75	5.12	13.32	1.21	29.97	244.06	5.86															
11.34	2.08	25.97	147.71	5.13	13.34	1.18	33.51	238.06	5.86															
11.36	1.73	20.32	137.61	5.14	13.36	1.18	36.55	238.06	5.87															
11.38	1.46	17.37	132.04	5.15	13.38	1.19	39.23	233.96	5.89															
11.40	1.19	18.09	126.35	5.15	13.40	1.17	42.05	234.70	5.88															
11.42	0.98	19.51	128.31	5.16	13.42	1.16	44.13	238.06	5.90															
11.44	0.95	18.06	155.12	5.15	13.44	1.16	43.77	236.66	5.91															
11.46	1.03	15.84	189.03	5.18	13.46	1.15	43.68	230.53	5.92															
11.48	1.07	15.81	197.85	5.18	13.48	1.13	42.14	230.72	5.92															
11.50	1.11	16.53	203.05	5.18	13.50	1.13	40.07	233.72	5.93															
11.52	1.14	16.47	210.21	5.19	13.52	1.15	38.32	238.00	5.93															
11.54	1.15	18.16	211.01	5.19	13.54	1.19	36.22	240.21	5.95															
11.56	1.13	20.29	211.25	5.18	13.56	1.22	37.00	238.61	5.95															
11.58	1.12	21.80	214.31	5.19	13.58	1.22	37.90	238.98	5.95															
11.60	1.12	21.98	217.07	5.20	13.60	1.27	38.26	236.84	5.97															
11.62	1.11	23.15	216.94	5.20	13.62	1.29	38.89	234.33	5.98															
11.64	1.07	24.11	215.84	5.20	13.64	1.31	40.58	236.90	6.00															
11.66	1.02	24.60	214.37	5.21	13.66	1.35	42.98	239.23	6.00															
11.68	1.00	24.30	217.80	5.23	13.68	1.44	44.82	238.49	6.02															
11.70	1.05	24.42	226.07	5.23	13.70	1.51	46.71	241.43	6.03															
11.72	1.15	24.48	235.68	5.23	13.72	1.56	49.48	238.86	6.04															
11.74	1.21	23.67	239.65	5.24	13.74	1.59	52.30	232.49	6.06															
11.76	1.20	24.75	240.76	5.25	13.76	1.67	56.81	230.29	6.07															
11.78	1.13	23.85	235.98	5.25	13.78	1.71	60.27	234.76	6.08															
11.80	1.06	21.35	231.39	5.27	13.80	1.80	61.29	238.25	6.09															
11.82	1.05	19.97	235.86	5.27	13.82	1.86	63.27	232.06	6.11															
11.84	1.06	18.62	241.92	5.27	13.84	1.81	68.99	222.76	6.11															
11.86	1.11	17.02	244.43	5.27	13.86	1.78	73.50	215.17	6.12															
11.88	1.13	16.30	252.45	5.28	13.88	1.74	74.22	211.99	6.13															
11.90	1.22	15.58	261.20	5.29	13.90	1.81	74.37	213.64	6.14															
11.92	1.38	16.48	264.57	5.29	13.92	1.83	76.47	215.84	6.16															
11.94	1.41	15.67	259.06	5.30	13.94	1.81	78.70	218.23	6.17															
11.96	1.37	13.21	253.86	5.30	13.96	1.84	77.16	213.27	6.16															
11.98	1.44	11.97	259.43	5.31	13.98	1.84	76.65	207.21	6.18															
12.00	1.61	12.43	274.06	5.31	14.00	1.85	76.95	203.60	6.17															
12.02	1.81	13.66	282.02	5.33	14.02	1.83	77.82	199.56	6.18															
12.04	1.98	17.84	281.10	5.33	14.04	1.83	80.37	205.37	6.21															
12.06	2.09	34.52	121.82	5.30	14.06	1.85	82.63	242.29	6.22															
12.08	1.66	31.66	110.74	5.32	14.08	1.85	84.16	239.23	6.24															
12.10	1.30	30.70	103.70	5.32	14.10	1.85	82.97	237.57	6.26															
12.12	1.14	32.77	123.90	5.34	14.12	1.87	78.80	236.04	6.25															
12.14	1.12	30.73	130.26	5.35	14.14	1.88	76.50	232.19	6.27															
12.16	1.07	29.89	130.75	5.36	14.16	1.88	75.63	232.98	6.28															
12.18	1.00	27.30	131.49	5.38	14.18	1.94	72.83	231.02	6.28															
12.20	1.01	24.63	145.75	5.38	14.20	1.96	70.25	231.76	6.29															
12.22	1.13	20.96	159.10	5.39	14.22	1.96	69.70	236.35	6.30															
12.24	1.67	15.27	198.46	5.41	14.24	2.02	67.24	239.90	6.31															
12.26	2.97	17.80	246.20	5.41	14.26	2.07	68.14	240.51	6.33															
12.28	4.20	20.51	186.89	5.41	14.28	2.10	68.05	240.39	6.34															
12.30	5.03	25.92	107.37	5.43	14.30	2.15	68.38	237.82	6.34															
12.32	5.12	20.72	114.53	5.42	14.32	2.16	70.12	237.08	6.35															
12.34	4.81	18.01	111.66	5.43	14.34	2.16	71.80	236.17	6.37															
12.36	4.02	19.45	100.94	5.44	14.36	2.22	75.59	237.33	6.39															
12.38	3.37	22.31	91.94	5.44	14.38	2.20	78.94	237.57	6.39															
12.40	2.54	26.97	83.44	5.45	14.40	2.25	81.31	235.25	6.40															
12.42	2.00	36.20	83.31	5.48	14.42	2.26	84.44	228.27	6.42															
12.44	1.68	43.41	90.96	5.46	14.44	2.26	88.16	228.82	6.43															
12.46	1.39	49.58	129.41	5.48	14.46	2.22	91.02	228.94	6.43															
12.48	1.24	49.46	349.23	5.50	14.48	2.22	93.14	224.66	6.44															
12.50	1.14	45.61	383.14	5.51	14.50	2.21	95.00	224.47	6.46															
12.52	1.09	39.77	388.22	5.51	14.52	2.17	96.37	225.88	6.47															
12.54	1.07	34.00	390.30	5.52	14.54	2.18	96.52	230.29	6.48															
12.56	1.09	30.24	392.51	5.55	14.56	2.15	94.33	238.61	6.49															
12.58	1.18	24.49	405.12	5.57	14.58	2.14	90.43	244.00	6.49															
12.60	1.17	18.42	383.02	5.57	14.60	2.17	85.59	249.20	6.52															
12.62	1.18	18.18	363.80	5.57	14.62	2.17	83.09	255.39	6.52															
12.64	1.15	22.18	364.90	5.57	14.64	2.18	78.49	261.08	6.53															
12.66	1.25	21.43	379.35	5.58	14.66	2.19	76.38	263.10	6.53															
12.68	1.74	20.19	423.60	5.58	14.68	2.17	73.52	261.45	6.55															
12.70	2.27	22.93	447.97	5.60	14.70	2.17	72.44	264.69	6.56															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Scaldarancio - Forlì (FC)
COMMESSA: C054/24
RDP N°: 210/24
DATA: 10/09/2024

PROVA N°: CPTU 18
PROF. FALDA (m da p.c.): 7.10
PREFORO (m da p.c.): 0.70
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 18
CANTIERE:	Via Scaldarancio - Forlì (FC)	PROF. FALDA (m da p.c.):	7.10
COMMESSA:	C054/24	PREFORO (m da p.c.):	0.70
RDP N°:	210/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	10/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Scaldarancio - Forlì (FC)
Lat.: 44.234369°
Long.: 12.039458°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Vincenzo Ugolini - Forlì (FC)
COMMESSA: C054/24
RDP N°: 202/24
DATA: 29/08/2024

PROVA N°: CPTU 19
PROF. FALDA (m da p.c.): 5.00
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.05	20.20	28.28	0.12	2.02	3.57	132.89	40.89	1.37	4.02	4.21	54.90	139.75	2.48	6.02	1.27	32.25	123.16	3.23	8.02	0.92	14.28	25.71	3.95
0.04	1.89	24.74	41.69	0.10	2.04	3.59	130.25	36.73	1.39	4.04	3.53	59.83	102.53	2.49	6.04	1.17	33.01	125.37	3.23	8.04	0.98	14.98	25.28	3.97
0.06	3.01	32.75	51.79	0.19	2.06	3.48	129.16	33.48	1.39	4.06	3.12	77.12	90.78	2.50	6.06	1.18	35.08	146.91	3.24	8.06	0.98	17.81	20.87	3.98
0.08	3.31	34.76	48.48	0.13	2.08	3.35	128.25	28.89	1.41	4.08	3.08	93.71	100.39	2.50	6.08	1.20	35.60	167.61	3.25	8.08	1.08	24.83	44.32	4.01
0.10	3.55	40.60	44.44	0.07	2.10	3.22	128.49	2.51	1.44	4.10	5.22	71.34	113.80	2.55	6.10	1.58	51.21	129.22	3.31	8.10	0.97	26.34	39.97	4.01
0.12	3.99	42.89	43.89	0.18	2.12	3.08	123.27	4.84	1.47	4.12	5.34	68.88	77.80	2.56	6.12	1.45	48.60	127.33	3.31	8.12	0.90	26.82	34.22	4.01
0.14	4.21	42.12	42.48	0.15	2.14	2.89	125.50	2.14	1.47	4.14	4.94	69.58	60.30	2.57	6.14	1.42	45.89	131.12	3.32	8.14	0.79	29.22	35.93	4.01
0.16	4.33	26.77	35.87	0.14	2.16	2.73	123.00	3.55	1.49	4.16	4.17	72.11	44.20	2.58	6.16	1.43	46.77	142.20	3.33	8.16	0.81	30.81	43.16	4.02
0.18	4.25	30.36	29.93	0.17	2.18	2.58	119.59	0.86	1.50	4.18	3.34	83.18	28.83	2.58	6.18	1.62	43.48	159.16	3.33	8.18	0.85	31.66	48.11	4.01
0.20	4.16	33.13	26.08	0.08	2.20	2.44	116.00	0.55	1.52	4.20	2.76	101.44	22.59	2.59	6.20	1.77	42.78	171.40	3.33	8.20	0.89	28.80	55.46	4.03
0.22	4.33	36.36	26.75	0.10	2.22	2.43	114.81	3.55	1.52	4.22	2.38	111.46	18.36	2.58	6.22	1.94	42.05	173.97	3.34	8.22	0.94	22.67	60.17	4.04
0.24	5.09	42.51	34.46	0.10	2.24	2.55	112.74	22.53	1.53	4.24	1.98	99.74	32.38	2.58	6.24	2.06	45.67	157.38	3.35	8.24	0.99	19.51	67.09	4.05
0.26	5.59	47.80	37.28	0.16	2.26	2.64	107.47	24.55	1.53	4.26	2.01	79.95	107.80	2.59	6.26	1.94	52.43	107.31	3.35	8.26	1.08	19.27	78.23	4.05
0.28	6.12	49.11	38.50	0.15	2.28	2.76	101.14	29.08	1.56	4.28	2.28	64.49	189.40	2.59	6.28	1.72	53.50	71.44	3.36	8.28	1.20	18.46	87.66	4.04
0.30	6.39	51.94	37.10	0.14	2.30	2.86	98.95	30.85	1.56	4.30	3.60	47.81	423.85	2.60	6.30	1.49	48.47	67.76	3.36	8.30	1.30	20.56	94.27	4.03
0.32	6.56	57.18	36.85	0.14	2.32	2.94	101.29	31.10	1.58	4.32	5.15	48.90	253.18	2.60	6.32	1.40	45.43	75.11	3.37	8.32	1.31	27.67	98.80	4.05
0.34	7.11	55.90	38.14	0.14	2.34	2.97	99.65	33.18	1.60	4.34	5.38	53.80	153.28	2.61	6.34	1.40	40.87	105.23	3.36	8.34	1.25	31.93	99.84	4.05
0.36	7.61	63.11	36.36	0.15	2.36	3.00	98.67	31.77	1.61	4.36	5.16	45.22	133.02	2.61	6.36	1.37	35.30	134.37	3.37	8.36	1.18	33.03	106.88	4.05
0.38	7.92	68.37	36.18	0.15	2.38	2.94	98.28	31.53	1.62	4.38	4.82	43.39	121.94	2.62	6.38	1.32	35.20	135.90	3.38	8.38	1.20	31.44	124.63	4.07
0.40	7.88	76.68	33.06	0.15	2.40	2.88	101.81	29.26	1.63	4.40	4.30	44.70	107.43	2.62	6.40	1.30	34.93	140.67	3.39	8.40	1.34	29.37	149.30	4.08
0.42	7.66	86.17	28.04	0.16	2.42	2.81	104.54	25.34	1.63	4.42	3.90	48.56	97.88	2.63	6.42	1.33	34.63	145.69	3.39	8.42	1.46	29.95	169.93	4.08
0.44	7.27	92.32	25.40	0.18	2.44	2.60	107.86	24.98	1.65	4.44	3.44	54.47	87.97	2.63	6.44	1.34	36.54	147.10	3.39	8.44	1.46	29.68	170.91	4.07
0.46	7.05	92.10	24.42	0.21	2.46	2.47	109.17	25.65	1.66	4.46	2.93	59.40	74.74	2.65	6.46	1.29	41.29	147.89	3.41	8.46	1.36	29.46	165.40	4.08
0.48	7.46	83.09	29.44	0.23	2.48	2.36	113.37	29.32	1.67	4.48	2.56	62.11	65.87	2.65	6.48	1.28	40.56	151.26	3.40	8.48	1.26	27.15	168.52	4.09
0.50	7.30	80.59	28.34	0.25	2.50	2.38	114.83	33.18	1.69	4.50	2.12	72.85	56.13	2.67	6.50	1.31	38.83	159.59	3.41	8.50	1.27	24.86	177.83	4.11
0.52	6.98	76.45	27.42	0.25	2.52	2.34	112.25	32.81	1.70	4.52	1.75	70.87	49.77	2.68	6.52	1.43	36.57	180.40	3.42	8.52	1.27	23.36	186.52	4.11
0.54	6.97	61.68	29.32	0.26	2.54	2.37	106.52	44.81	1.72	4.54	1.64	57.39	86.07	2.69	6.54	1.62	36.60	199.38	3.42	8.54	1.26	23.51	205.62	4.13
0.56	6.96	47.98	29.81	0.29	2.56	2.50	101.53	53.75	1.73	4.56	2.19	44.79	224.41	2.71	6.56	1.90	36.54	230.78	3.42	8.56	1.28	23.99	225.21	4.13
0.58	7.22	40.10	32.69	0.31	2.58	2.84	98.22	77.86	1.74	4.58	3.27	43.78	247.55	2.73	6.58	2.27	38.06	247.37	3.41	8.58	1.32	25.31	242.10	4.14
0.60	7.49	34.86	34.28	0.33	2.60	3.24	102.45	99.17	1.75	4.60	3.44	45.03	139.69	2.72	6.60	2.93	41.14	168.77	3.40	8.60	1.40	30.31	262.24	4.14
0.62	7.66	30.32	34.77	0.33	2.62	4.07	107.01	157.99	1.77	4.62	3.28	44.15	116.74	2.74	6.62	3.30	46.83	100.02	3.40	8.62	1.44	33.91	262.73	4.13
0.64	7.22	33.36	30.48	0.34	2.64	4.48	103.06	196.62	1.77	4.64	3.39	45.24	109.64	2.75	6.64	3.77	56.20	103.45	3.40	8.64	1.43	34.79	253.55	4.14
0.66	7.18	34.51	30.79	0.33	2.66	4.70	97.67	197.05	1.77	4.66	3.69	45.70	115.33	2.76	6.66	4.81	69.11	120.16	3.42	8.66	1.41	34.61	240.14	4.14
0.68	6.95	37.79	28.65	0.33	2.68	4.62	97.98	171.34	1.76	4.68	4.08	50.96	126.53	2.77	6.68	5.52	75.71	114.29	3.42	8.68	1.65	32.17	332.76	4.15
0.70	6.82	36.30	28.71	0.32	2.70	4.26	104.74	144.34	1.77	4.70	4.38	56.81	130.57	2.78	6.70	6.25	73.34	108.96	3.44	8.70	1.98	30.62	366.86	4.15
0.72	6.72	38.82	27.24	0.34	2.72	3.97	124.00	126.22	1.78	4.72	4.69	56.57	128.37	2.79	6.72	6.76	67.50	111.35	3.44	8.72	2.25	30.98	168.22	4.15
0.74	6.48	47.00	26.08	0.34	2.74	3.82	152.86	136.63	1.79	4.74	4.71	54.86	117.72	2.80	6.74	6.84	57.06	108.84	3.44	8.74	1.93	38.75	82.15	4.17
0.76	6.35	60.78	25.16	0.33	2.76	3.88	164.21	151.81	1.81	4.76	4.50	54.53	104.98	2.81	6.76	6.71	45.61	105.29	3.45	8.76	1.76	33.85	83.80	4.19
0.78	6.33	71.07	24.98	0.33	2.78	3.80	174.13	153.10	1.82	4.78	4.20	55.08	95.92	2.81	6.78	6.50	38.40	101.37	3.45	8.78	1.67	35.46	105.60	4.19
0.80	6.19	91.27	24.42	0.31	2.80	3.73	174.65	157.08	1.83	4.80	3.96	52.89	90.05	2.81	6.80	6.29	31.21	98.62	3.46	8.80	1.88	39.60	162.59	4.20
0.82	6.16	113.03	24.30	0.32	2.82	3.95	171.61	169.50	1.85	4.82	3.72	48.20	85.03	2.82	6.82	5.93	29.20	94.15	3.45	8.82	2.27	44.59	180.22	4.21
0.84	6.18	129.55	24.30	0.33	2.84	4.58	164.73	185.91	1.88	4.84	3.59	49.11	82.70	2.83	6.84	5.66	31.52	90.78	3.45	8.84	2.65	52.78	173.97	4.22
0.86	6.15	145.49	22.22	0.31	2.86	5.12	156.42	189.34	1.89	4.86	3.64	52.80	84.66	2.83	6.86	5.32	31.88	87.17	3.45	8.86	2.53	60.20	139.51	4.20
0.88	6.20	154.47	21.61	0.31	2.88	5.53	139.77	179.05	1.91	4.88	3.80	59.71	88.82	2.84	6.88	5.21	32.52	87.90	3.46	8.88	2.17	55.88	105.29	4.22
0.90	6.19	157.36	19.22	0.32	2.90	5.70	131.16	163.32	1.92	4.90	3.90	64.33	90.17	2.83	6.90	5.18	32.58	89.86	3.47	8.90	1.79	44.74	83.99	4.24
0.92	6.08	159.54	14.88	0.31	2.92	6.08	119.65	123.47	1.92	4.92	4.05	68.11	92.92	2.84	6.92	4.97	32.79	88.39	3.47	8.92	1.49	46.44	76.70	4.27
0.94	6.05	164.83	13.22	0.34	2.94	6.32	109.67	109.39	1.94	4.94	4.23	73.89	97.02	2.86	6.94	4.46	38.06	80.01	3.47	8.94	1.27	53.17	145.08	4.28
0.96	6.08	164.00	11.63	0.36	2.96	6.44	101.73	101.43	1.95	4.96	4.29	73.10	96.66	2.87	6.96	4.13	51.54	77.86	3.48	8.96	1.34	57.00	302.15	4.29
0.98	6.02	167.80	10.71	0.37	2.98	6.60	93.84	94.82	1.96	4.98	4.16	70.88	90.54	2.87	6.98	4.41	71.17	119.12	3.49	8.98	1.64	46.84	383.51	4.31
1.00	5.90	179.45	10.10	0.40	3.00	6.69	85.56	80.19	1.98	5.00	3.92	67.83	87.05	2.88	7.00	5.71	93.54	206.11	3.51	9.00	2.18	43.89	446.93	4.32
1.02	5.76	181.97	8.75	0.42	3.02	6.72	77.99	15.55	1.98	5.02	3.57	64.09	77.62	2.87	7.02	7.53	93.90	201.03	3.52	9.02	2.91	37.68	244.25	4.33
1.04	5.67	187.20	5.02	0.45	3.04	6.79	72.11	18.30	1.99	5.04	3.32	62.96	70.76	2.88	7.04	8.62	87.69	178.75	3.53	9.04	3.13	37.77	104.31	4.33
1.06	5.63	195.04	5.39	0.48	3.06	6.72	71.50	19.22	2.00	5.06	3.30	64.45	71.07	2.90	7.06	8.88	80.75	158.30	3.53	9.06	3.24	46.07	75.97	4.36
1.08	5.58	201.67	5.39	0.50	3.08	6.51	73.18	19.04	2.01	5.08	3.39	71.18	73.46	2.90	7.08	8.61	52.64	159.59	3.53	9.08	3.40	39.64	68.56	4.38
1.10	5.55	204.22	5.63	0.52	3.10	6.06	76.16	16.83	2.01	5.10	3.49	42.95	39.54	2.95	7.10	8.46	39.46	139.94	3.53	9.10	3.68	42.81	64.40	4.39
1.12	5.33	174.50	2.20	0.56	3.12	5.56	75.74	1.71	2.08	5.12	3.63	45.54	40.52	2.95	7.12	8.13	32.76	126.65	3.53	9.12	3.88	54.25	71.01	4.39
1.14	5.45	168.81	4.65	0.58	3.14	4.24	84.78	10.10	2.10	5.14	3.66	48.76	38.99	2.97	7.14	7.84	30.21	118.57	3.52	9.14	4.25	60.16	75.54	4.39
1.16	5.57	167.53	6.86	0.63	3.16	3.68	97.93	11.75	2.11	5.16	3.65	50.13	36.85	2.98	7.16	7.59	34.13	112.70	3.53	9.16	4.38	58.54	75.48	4.38
1.18	5.75	168.32	8.57	0.68	3.18	3.32	112.60	12.73	2.11	5.18	3.57	51.50	34.95	2.99	7.18	7.37	40.53	109.27	3.53	9.18	4.01	51.91	67.70	4.37
1.20	5.86	171.70	10.28	0.70	3.20	2.91	130.16	11.08	2.12	5.20	3.43	50.74	32.69	3.00	7.20	7.06	43.05	105.72	3.54	9.20	3.73	39.67	60.05	4.39
1.22	5.90	174.28	12.00	0.73	3.22	2.49	142.24	3.73	2.13	5.22	3.13	47.03	27.91	3.00	7.22	6.79	43.45	101.37	3.55	9.22	3.47	35.44	49.77	4.44
1.24	5.88	179.06	14.14	0.78	3.24	2.33	137.06	1.10	2.15	5.24	2.82	48.88	21.79	3.01	7.24	6.22	42.90	91.82	3.56	9.24	3.51	47.55	54.73	4.46
1.26	5.88	192.27	15.55	0.81	3.26	2.13	133.68	4.10	2.16	5.26	2.46	56.10	15.67	3.02	7.26	5.59	44.27	82.03	3.59	9.26	3.83	63.44	74.07	4.49
1.28	5.97	204.29	15.67	0.83	3.28	2.05	118.74	5.20	2.16	5.28	2.08	66.90	7.22	3.02	7.28	5.33	43.23	82.27	3.59	9.28	4.82	82.73	97.88	4.49
1.30	6.11	214.23	15.18	0.87	3.30	2.00	105.01	12.12	2.17	5.30	2.11	72.32	11.14	3.04	7.30	5.31	43.23	88.33	3.57	9.30	5.66	89.70	109.33	4.51
1.32	6.21	217.88	15.43	0.90	3.32	1.94	90.67	31.71	2.18	5.32	2.42	70.46	17.81	3.04	7.32	5.11	48.82	77.68	3.55	9.32	5.95	95.03	110.86	4.51
1.34	6.26	218.55	15.36	0.92	3.34	1.92	74.51	65.07	2.19	5.34	2.24	64.77	13.90	3.05	7.34	4.45	42.34	58.40	3.55	9.34	5.87	98.62	107.49	4.53
1.36	6.25	217.93	14.81	0.94	3.36	1.85	59.90	77.07	2.20	5.36	2.05	64.13	8.26	3.07	7.36	3.58	42.98	39.48	3.57	9.36	5.56	93.93	101.25	4.55
1.38	6.18	218.66	14.69	0.96	3.38	1.79	52.53	80.19	2.20	5.38	1.69	64.95	2.51	3.09	7.38	2.84	39.72	22.77	3.58	9.38	5.15	75.60	94.03	4.54
1.40	5.88	218.77	15.85	0.97	3.40	1.76	47.11	82.52	2.22	5.40	1.45	55.94	0.49	3.09	7.40	2.21	41.00	10.96	3.59	9.40	4.65	39.57	84.90	4.56
1.42	5.73	213.14	16.77	0.99	3.42	1.71	43.80	87.11	2.23	5.42	1.29	53.41	4.35	3.09	7.42	1.86	40.87	6.49	3.60	9.42	4.27	26.21	77.80	4.57
1.44	5.63	207.38	16.71	1.00	3.44	1.60	45.83	93.90	2.24	5.44	1.28	47.27	1.78	3.10	7.44	1.54	43.85	2.08	3.60	9.44	4.04	25.67	74.74	4.58
1.46	5.40	209.65	17.75	1.00	3.46	1.56	42.03	98.13	2.24	5.46	1.60	41.94	19.83	3.11	7.46	1.28	43.97	2.63	3.61	9.46	4.00	28.63	78.72	4.60
1.48	5.18	216.44	18.55	1.00	3.48	1.55	37.56	101.62	2.24	5.48	2.51	44.65	59.56	3.13	7.48	1.04	40.47	5.39	3.62	9.48	4.33	33.59	89.92	4.61
1.50	5.05	226.14	18.92	1.02	3.50	1.59	34.91	103.70	2.26	5.50	2.95	46.17	69.05	3.12	7.50	0.94	38.92	5.63	3.63	9.50	4.42	38.88	87.60	4.63
1.52	4.89	234.63	19.40	1.02	3.52	1.65	31.32	103.64	2.26	5.52	3.15	48.60	53.13	3.14	7.52	0.83	37.43	5.57	3.64	9.52	4.35	38.76	77.56	4.64
1.54	4.70	241.38	20.26	1.02	3.54	1.64	32.36	103.15	2.27	5.54	2.86	43.00	44.63	3.14	7.54	0.76	32.59	7.96	3.64	9.54	4.22	32.46	73.21	4.64
1.56	4.50	245.15	19.71	1.05	3.56	1.59	33.43	98.92	2.27	5.56	2.28	33.08	29.93	3.14	7.56	0.71	27.75	10.53	3.66	9.56	3.91	27.74	69.48	4.63
1.58	4.39	248.46	17.69	1.04	3.58	1.47	39.27	90.66	2.28	5.58	1.95	34.66	21.85	3.15	7.58	0.65	24.88	11.57	3.67	9.58	3.78	23.63	68.74	4.61
1.60	4.31	245.08	19.34	1.07	3.60	1.43	40.86	87.97	2.30	5.60	1.56	43.03	13.83	3.15	7.60	0.61	22.89	11.20	3.67	9.60	3.55	20.51	65.50	4.63
1.62	4.19	238.71	21.55	1.08	3.62	1.44	37.52	88.82	2.29	5.62	1.27	46.96	11.81	3.15	7.62	0.58	21.99	14.08	3.67	9.62	3.42	23.39	65.19	4.62
1.64	4.19	234.51	21.91	1.09	3.64	1.62	36.42	98.74	2.31	5.64	1.24	44.92	17.57	3.17	7.64	0.53	20.88	16.53	3.69	9.64	3.36	29.04	64.58	4.62
1.66	4.18	228.08	21.49	1.12	3.66	2.11	37.46	123.96	2.32	5.66	1.24	45.68	30.00	3.17	7.66	0.47	21.06	18.49	3.70	9.66	3.39	33.66	66.54	4.64
1.68	4.22	217.18	21.06	1.14	3.68	2.83	42.18	151.14	2.33	5.68	1.23	44.41	37.28	3.18	7.68	0.44	20.28	19.28	3.70	9.68	3.63	42.85	72.97	4.66
1.70	4.23	211.31	21.18	1.15	3.70	3.34	46.36	156.77	2.33	5.70	1.20	40.11	39.91	3.18	7.70	0.45	19.91	19.10	3.71	9.70	4.10	51.47	83.44	4.68
1.72	4.21	208.62	20.75	1.17	3.72	3.57	46.18	144.34	2.34	5.72	1.18	34.06	40.46	3.19	7.72	0.43	19.07	19.28	3.73	9.72	4.39	51.74	89.07	4.68
1.74	4.22	202.17	19.89	1.19	3.74	3.34	43.26	119.55	2.36	5.74	1.14	31.41	42.54	3.20	7.74	0.43	18.23	19.65	3.75	9.74	4.76	54.23	94.45	4.69
1.76	4.17	196.63	20.02	1.22	3.76	2.97	48.19	96.96	2.37	5.76	1.11	27.15	43.65	3.19	7.76	0.44	17.15	19.16	3.76	9.76	5.07	54.78	99.96	4.70
1.78	4.01	192.30	21.36	1.24	3.78	2.78	55.44	87.84	2.39	5.78	1.10	27.76	44.99	3.19	7.78	0.42	16.04	18.30	3.76	9.78	5.47	41.60	107.92	4.71
1.80	3.82	190.81	21.55	1.24	3.80	2.49	73.83	79.52	2.40	5.80	1.11	32.14	52.40	3.20	7.80	0.44	13.70	17.02	3.78	9.80	5.73	32.87	111.17	4.71
1.82	3.71	190.87	18.92	1.25	3.82	2.17	88.32	72.85	2.40	5.82	1.16	29.28	57.30	3.19	7.82	0.44	11.59	14.02	3.79	9.82	5.75	31.92	108.90	4.71
1.84	3.60	192.39	12.55	1.27	3.84	1.91	93.80	73.95	2.41	5.84	1.13	30.14	59.38	3.19	7.84	0.45	10.54	10.65	3.82	9.84	5.46	32.59	103.51	4.72
1.86	3.55	187.79	8.57	1.28	3.86	1.77	87.05	75.78	2.42	5.86	1.12	31.11	62.62	3.20	7.86	0.46	9.85	8.14	3.83	9.86	4.83	33.14	89.31	4.74
1.88	3.53	179.21	5.63	1.29	3.88	1.70	80.20	83.13	2.43	5.88	1.11	31.69	67.70	3.19	7.88	0.49	9.82	5.39	3.85	9.88	3.75	35.27	65.25	4.76
1.90	3.50	171.30	4.84	1.30	3.90	1.66	66.75	110.68	2.44	5.90	1.07	29.93	72.23	3.20	7.90	0.52	9.82	2.45	3.85	9.90	3.08	48.17	52.52	4.77
1.92	3.49	161.65	5.51	1.31	3.92	1.77	56.47	158.91	2.43	5.92	1.16	26.82	95.56	3.19	7.92	0.63	9.46	5.20	3.87	9.92	2.97	66.55	53.93	4.76
1.94	3.47	152.18	11.08	1.32	3.94	2.09	47.82	208.31	2.44	5.94	1.38	27.16	115.57	3.21	7.94	0.69	9.89	13.10	3.89	9.94	3.50	90.32	77.19	4.77
1.96	3.51	143.69	15.00	1.33	3.96	2.98	42.29	260.83	2.46	5.96	1.54	27.34	112.08	3.23	7.96	0.71	10.22	15.61	3.91	9.96	4.61	93.43	126.22	4.78
1.98	3.51	137.88	38.81	1.35	3.98	4.27	50.05	288.81	2.46	5.98	1.33	35.50	104.49	3.23	7.98	0.74	11.27	17.87	3.93	9.98	4.78	86.85	114.10	4.78
2.00	3.56	132.71	37.46	1.37	4.00	4.95	55.17	220.56	2.46	6.00	1.28	33.40	119.92	3.23	8.00	0.79	12.42	20.81	3.93	10.00	3.99	70.47	91.45	4.78

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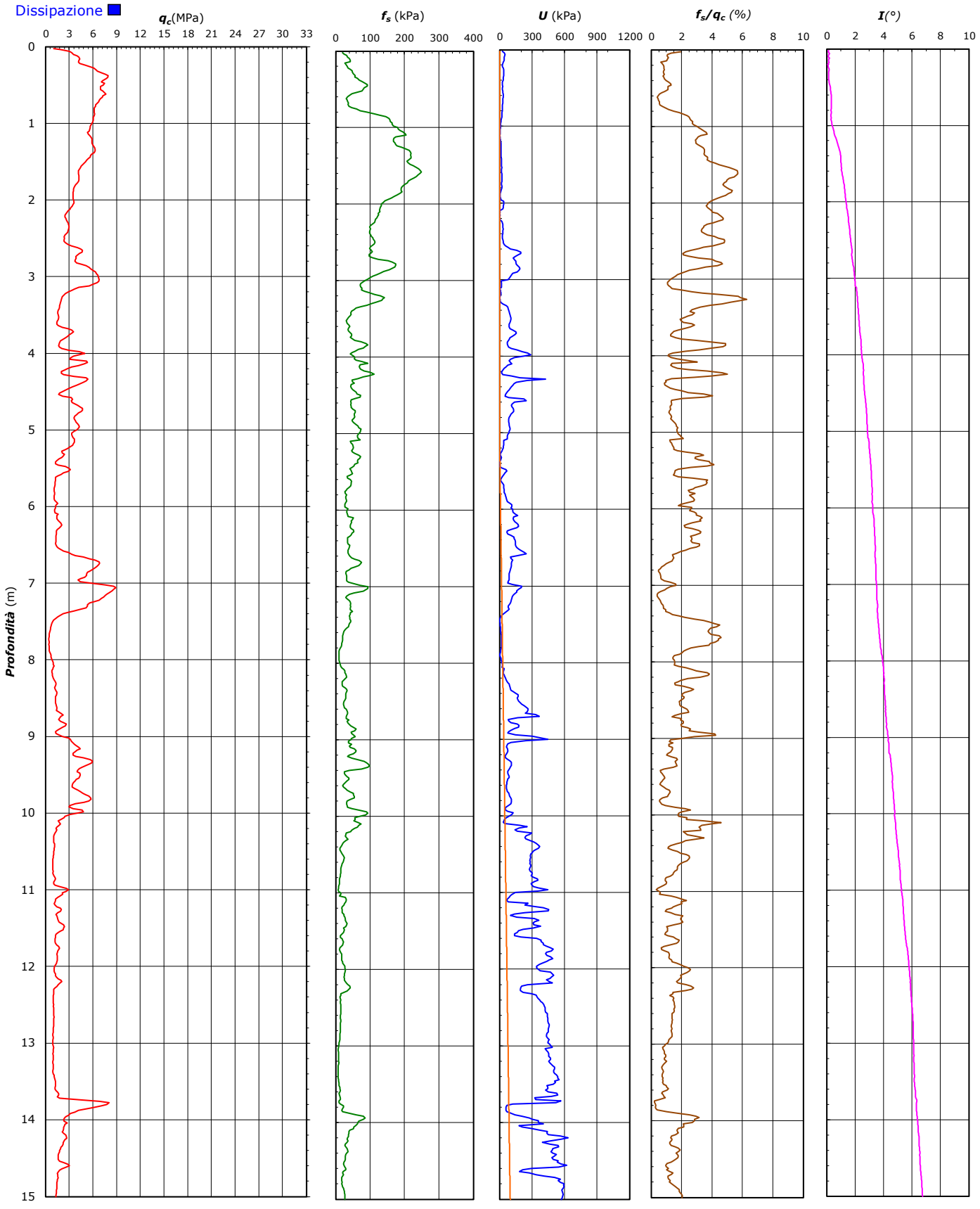
COMMITTENTE:
CANTIERE: Via Vincenzo Ugolini - Forlì (FC)
COMMESSA: C054/24
RDP N°: 202/24
DATA: 29/08/2024

PROVA N°: CPTU 19
PROF. FALDA (m da p.c.): 5.00
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	3.09	56.32	65.32	4.77	12.02	1.10	28.51	377.51	5.79	14.02	2.35	63.33	404.44	6.40										
10.04	2.45	57.17	47.99	4.79	12.04	1.07	26.98	469.58	5.81	14.04	2.73	58.01	178.20	6.41										
10.06	2.33	53.72	42.61	4.80	12.06	1.10	25.71	489.41	5.82	14.06	2.46	52.59	208.74	6.42										
10.08	1.92	66.45	34.16	4.81	12.08	1.18	25.11	498.29	5.82	14.08	2.40	51.13	288.75	6.43										
10.10	1.61	73.84	48.24	4.83	12.10	1.26	24.33	480.66	5.84	14.10	2.31	40.97	371.82	6.43										
10.12	1.73	68.03	190.38	4.84	12.12	1.29	25.83	464.92	5.84	14.12	2.28	38.56	440.07	6.44										
10.14	1.90	63.34	254.90	4.85	12.14	1.35	25.80	434.87	5.85	14.14	2.22	38.26	438.36	6.44										
10.16	1.73	54.76	179.91	4.86	12.16	1.62	28.86	457.70	5.87	14.16	2.14	37.98	448.40	6.45										
10.18	1.45	47.06	143.30	4.86	12.18	1.95	32.33	487.33	5.88	14.18	2.30	36.95	561.03	6.46										
10.20	1.35	43.92	165.10	4.86	12.20	2.07	36.11	259.24	5.88	14.20	2.55	34.15	633.08	6.47										
10.22	1.44	30.44	297.62	4.88	12.22	1.80	41.89	203.78	5.89	14.22	2.65	34.05	571.80	6.48										
10.24	1.32	29.46	280.48	4.89	12.24	1.62	42.40	197.78	5.89	14.24	2.69	36.58	466.21	6.49										
10.26	1.19	28.37	246.94	4.89	12.26	1.41	39.36	193.99	5.89	14.26	2.46	33.29	397.77	6.50										
10.28	1.11	31.78	234.21	4.91	12.28	1.23	33.06	194.42	5.91	14.28	2.33	28.54	460.64	6.50										
10.30	1.03	35.73	243.88	4.91	12.30	1.06	24.14	219.27	5.90	14.30	2.22	26.99	543.40	6.50										
10.32	1.01	29.13	284.22	4.92	12.32	1.05	15.09	298.42	5.92	14.32	2.24	29.30	547.38	6.51										
10.34	1.03	23.24	318.62	4.94	12.34	1.02	14.61	338.52	5.93	14.34	2.13	33.71	493.39	6.51										
10.36	1.02	20.50	337.78	4.95	12.36	1.03	12.60	346.78	5.94	14.36	1.96	35.18	487.51	6.52										
10.38	1.05	17.58	358.84	4.96	12.38	0.98	13.89	353.70	5.94	14.38	1.91	36.64	473.62	6.54										
10.40	1.14	14.61	371.69	4.98	12.40	0.99	14.61	371.33	5.95	14.40	1.79	32.53	493.69	6.54										
10.42	1.16	13.13	360.43	4.99	12.42	0.99	14.10	381.12	5.96	14.42	1.77	29.12	525.47	6.55										
10.44	1.15	12.68	331.90	5.00	12.44	0.98	14.46	396.12	5.96	14.44	1.68	28.87	504.71	6.55										
10.46	1.12	15.51	313.30	5.02	12.46	1.00	15.09	408.30	5.97	14.46	1.60	28.57	481.76	6.54										
10.48	1.07	18.40	300.56	5.03	12.48	0.99	14.97	413.69	5.99	14.48	1.60	28.11	494.55	6.55										
10.50	1.06	20.53	289.24	5.03	12.50	1.02	15.75	422.07	5.99	14.50	1.61	26.47	541.56	6.56										
10.52	1.02	23.57	284.46	5.05	12.52	0.99	15.36	419.07	6.00	14.52	1.63	24.04	531.34	6.56										
10.54	1.01	25.10	287.52	5.05	12.54	1.03	15.36	422.87	6.01	14.54	1.79	23.64	567.21	6.57										
10.56	0.98	24.56	283.97	5.06	12.56	1.02	15.36	427.09	6.03	14.56	2.30	23.92	622.43	6.57										
10.58	0.96	23.66	281.77	5.07	12.58	1.03	15.24	441.17	6.02	14.58	2.86	27.08	544.44	6.57										
10.60	0.94	22.07	283.79	5.08	12.60	1.05	14.49	441.72	6.04	14.60	3.03	29.81	298.18	6.58										
10.62	0.93	19.61	280.79	5.09	12.62	1.05	14.49	443.93	6.04	14.62	2.64	30.03	213.21	6.60										
10.64	0.93	18.01	286.91	5.10	12.64	1.05	14.46	446.99	6.05	14.64	2.08	21.45	182.24	6.60										
10.66	0.93	16.39	288.93	5.12	12.66	1.07	14.61	444.91	6.06	14.66	1.75	20.16	277.42	6.61										
10.68	0.91	15.73	281.77	5.12	12.68	1.05	14.79	446.93	6.07	14.68	1.59	22.47	338.94	6.62										
10.70	0.91	15.64	276.63	5.14	12.70	1.06	14.43	451.58	6.07	14.70	1.51	20.10	414.42	6.62										
10.72	0.92	15.55	285.50	5.15	12.72	1.04	14.22	457.76	6.08	14.72	1.55	17.21	509.12	6.63										
10.74	0.95	14.74	298.91	5.17	12.74	1.04	13.95	460.33	6.08	14.74	1.57	17.51	561.52	6.66										
10.76	0.96	13.99	301.42	5.16	12.76	1.04	13.68	456.23	6.08	14.76	1.59	17.99	542.36	6.65										
10.78	0.93	13.33	293.34	5.17	12.78	1.03	13.83	452.13	6.08	14.78	1.51	19.02	563.36	6.66										
10.80	0.98	12.34	310.05	5.17	12.80	1.01	13.80	450.05	6.08	14.80	1.49	17.99	594.76	6.67										
10.82	1.12	11.14	351.74	5.18	12.82	1.00	13.23	449.44	6.08	14.82	1.46	19.50	589.56	6.68										
10.84	1.21	11.05	356.45	5.18	12.84	0.97	12.99	438.91	6.09	14.84	1.43	20.73	595.74	6.69										
10.86	1.24	11.41	321.80	5.18	12.86	0.96	13.14	434.62	6.09	14.86	1.45	22.72	588.21	6.70										
10.88	1.17	11.71	290.77	5.19	12.88	0.94	12.81	435.36	6.09	14.88	1.44	24.82	576.70	6.70										
10.90	1.06	10.36	295.48	5.20	12.90	0.92	12.78	444.11	6.10	14.90	1.42	26.11	577.56	6.71										
10.92	1.05	8.74	311.09	5.22	12.92	0.97	12.00	460.39	6.10	14.92	1.40	25.90	583.62	6.72										
10.94	1.23	8.26	358.72	5.24	12.94	0.96	11.10	452.13	6.10	14.94	1.40	26.87	585.95	6.72										
10.96	1.78	7.54	447.54	5.24	12.96	0.93	10.56	444.05	6.11	14.96	1.39	27.51	583.07	6.73										
10.98	2.60	8.38	354.25	5.26	12.98	0.92	10.08	463.88	6.11	14.98	1.35	27.51	579.33	6.73										
11.00	2.92	15.75	148.38	5.26	13.00	0.92	8.94	475.51	6.11	15.00	1.35	27.20	572.23	6.74										
11.02	2.60	15.33	116.61	5.27	13.02	0.94	8.12	486.90	6.11															
11.04	2.14	11.60	99.96	5.28	13.04	0.99	7.39	422.01	6.11															
11.06	2.15	28.37	89.74	5.30	13.06	1.01	7.84	434.99	6.11															
11.08	1.86	31.05	77.07	5.31	13.08	1.01	8.38	445.58	6.12															
11.10	1.54	31.14	65.81	5.33	13.10	1.00	8.62	452.38	6.12															
11.12	1.24	28.95	79.58	5.35	13.12	0.98	8.50	455.80	6.13															
11.14	1.28	25.20	261.26	5.35	13.14	0.93	8.89	455.74	6.12															
11.16	1.20	24.11	235.31	5.36	13.16	0.96	9.22	472.21	6.14															
11.18	1.12	19.75	312.13	5.37	13.18	1.00	8.71	470.43	6.12															
11.20	1.23	18.04	406.53	5.37	13.20	1.00	8.80	455.93	6.13															
11.22	1.42	19.06	453.35	5.38	13.22	0.98	9.86	463.09	6.13															
11.24	1.88	19.21	451.58	5.38	13.24	0.95	8.68	479.06	6.13															
11.26	2.01	18.94	235.19	5.39	13.26	0.95	7.66	493.51	6.14															
11.28	1.92	24.32	138.28	5.40	13.28	0.97	7.24	506.43	6.15															
11.30	1.54	24.47	100.09	5.40	13.30	0.99	6.91	509.92	6.15															
11.32	1.30	26.97	157.44	5.41	13.32	0.96	7.06	499.33	6.15															
11.34	1.42	28.22	321.68	5.41	13.34	0.96	7.45	501.35	6.15															
11.36	1.48	28.58	365.02	5.42	13.36	0.95	7.63	510.35	6.15															
11.38	1.52	30.32	326.64	5.43	13.38	0.95	7.15	523.38	6.15															
11.40	1.59	33.21	307.66	5.44	13.40	1.00	7.12	537.34	6.16															
11.42	1.71	32.66	316.54	5.46	13.42	1.07	7.66	537.83	6.17															
11.44	1.99	29.58	381.18	5.47	13.44	1.11	8.65	548.30	6.17															
11.46	2.28	23.17	314.70	5.47	13.46	1.18	8.81	507.90	6.16															
11.48	2.39	25.37	216.76	5.48	13.48	1.20	9.50	515.61	6.16															
11.50	2.30	24.56	177.64	5.48	13.50	1.24	9.44	497.80	6.16															
11.52	2.21	23.56	162.22	5.48	13.52	1.28	10.52	438.36	6.18															
11.54	1.89	18.15	138.34	5.51	13.54	1.25	12.26	444.66	6.18															
11.56	1.59	14.03	138.96	5.52	13.56	1.24	12.56	444.05	6.18															
11.58	1.33	14.15	197.42	5.52	13.58	1.21	13.71	425.75	6.20															
11.60	1.27	18.60	343.35	5.54	13.60	1.20	12.62	452.19	6.21															
11.62	1.28	20.80	384.55	5.55	13.62	1.34	10.22	530.24	6.24															
11.64	1.22	22.54	384.86	5.56	13.64	1.55	10.88	538.38	6.25															
11.66	1.22	21.82	404.57	5.57	13.66	1.65	12.99	480.72	6.25															
11.68	1.23	20.59	404.75	5.58	13.68	1.64	13.65	327.56	6.24															
11.70	1.29	16.98	429.24	5.60	13.70	1.47	13.56	332.46	6.25															
11.72	1.45	12.11	472.88	5.62	13.72	1.78	9.74	565.74	6.28															
11.74	1.64	10.75	496.33	5.64	13.74	4.63	10.52	522.71	6.35															
11.76	1.75	12.14	478.21	5.66	13.76	6.83	13.98	120.04	6.33															
11.78	1.65	14.78	432.36	5.68	13.78	8.06	22.55	68.62	6.31															
11.80	1.56	17.58	425.93	5.70	13.80	7.74	23.15	60.66	6.30															
11.82	1.47	17.37	439.15	5.70	13.82	7.09	20.20	57.79	6.30															
11.84	1.46	17.19	471.17	5.72	13.84	6.02	17.92	60.36	6.31															
11.86	1.49	17.52	490.70	5.73	13.86	5.10	19.78	66.85	6.30															
11.88	1.50	18.12	456.66	5.73	13.88	4.18	42.46	101.13	6.32															
11.90	1.49	19.89	435.91	5.74	13.90	3.71	60.14	142.14	6.33															
11.92	1.51	20.92	397.77	5.76	13.92	3.17	80.29	207.09	6.34															
11.94	1.45	24.16	365.21	5.77	13.94	2.91	85.80	274.67	6.35															
11.96	1.36	26.90	341.70	5.77	13.96	2.55	80.53	305.83	6.36															
11.98	1.25	26.96	343.84	5.78	13.98	2.38	67.84	359.76	6.37															
12.00	1.15	27.81	354.06	5.79	14.00	2.28	65.13	358.23	6.38															

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 19
CANTIERE:	Via Vincenzo Ugolini - Forlì (FC)	PROF. FALDA (m da p.c.):	5.00
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	202/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	29/08/2024	OPERATORE:	Zanirato



Studio LZ CPT di Lorenzo Zanirato
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Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 19
CANTIERE:	Via Vincenzo Ugolini - Forlì (FC)	PROF. FALDA (m da p.c.):	5.00
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	202/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	29/08/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Vincenzo Ugolini - Forlì (FC)
Lat.: 44.204107°
Long.: 12.040267°



NOTE: Utilizzato 1 anello allargatore da inizio prova

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:
CANTIERE: Via Ettore Nadiani -Quartiere Bussecchio (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 20
PROF. FALDA (m da p.c.): 4.80
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	1.69	30.25	73.89	0.24	2.02	6.91	65.22	64.09	0.69	4.02	1.36	37.25	60.91	1.12	6.02	1.33	20.85	68.32	1.77	8.02	1.14	18.86	109.08	2.55
0.04	2.20	39.26	79.09	2.70	2.04	6.95	65.74	64.52	0.68	4.04	1.32	41.09	61.40	1.13	6.04	1.34	16.76	72.72	1.77	8.04	1.09	16.39	116.74	2.55
0.06	2.52	50.37	82.21	1.68	2.06	6.94	65.59	65.07	0.70	4.06	1.29	43.28	61.40	1.14	6.06	1.36	14.51	76.58	1.79	8.06	1.07	10.98	119.80	2.54
0.08	2.81	58.65	84.05	0.06	2.08	6.94	66.69	65.32	0.70	4.08	1.32	42.13	61.34	1.15	6.08	1.28	21.63	158.97	1.89	8.08	1.11	20.51	181.99	2.63
0.10	3.00	68.27	84.72	0.24	2.10	7.03	66.42	65.44	0.71	4.10	1.38	36.24	50.87	1.11	6.10	1.46	27.71	162.10	1.90	8.10	1.09	15.91	186.34	2.63
0.12	3.32	82.02	88.88	0.31	2.12	7.25	58.28	55.71	0.63	4.12	1.31	40.83	51.60	1.13	6.12	1.57	31.24	169.32	1.91	8.12	1.12	14.20	193.25	2.64
0.14	3.26	82.59	48.11	0.35	2.14	7.31	57.95	57.17	0.65	4.14	1.26	43.18	52.03	1.13	6.14	1.69	33.58	175.38	1.90	8.14	1.18	13.53	203.17	2.64
0.16	4.06	69.23	45.73	0.25	2.16	6.98	60.81	58.46	0.66	4.16	1.26	41.50	52.28	1.13	6.16	1.75	36.44	178.01	1.93	8.16	1.29	12.30	207.95	2.64
0.18	3.14	64.97	51.85	0.22	2.18	5.97	69.12	61.09	0.67	4.18	1.30	37.24	52.34	1.15	6.18	1.74	38.03	176.42	1.93	8.18	1.28	13.62	204.82	2.64
0.20	2.55	79.18	55.09	0.19	2.20	5.65	82.51	61.64	0.66	4.20	1.29	37.73	52.22	1.15	6.20	1.66	42.65	172.20	1.93	8.20	1.23	15.49	199.56	2.63
0.22	2.60	76.38	54.54	0.19	2.22	6.12	103.11	61.70	0.67	4.22	1.26	37.40	51.67	1.16	6.22	1.61	43.54	171.09	1.94	8.22	1.19	16.15	196.19	2.64
0.24	2.70	72.06	53.32	0.24	2.24	6.68	116.84	66.48	0.67	4.24	1.27	33.47	50.99	1.18	6.24	1.64	44.69	174.03	1.94	8.24	1.21	17.23	196.93	2.64
0.26	2.73	76.54	52.40	0.26	2.26	7.02	119.76	71.13	0.69	4.26	1.30	31.31	50.44	1.19	6.26	1.77	46.30	184.93	1.95	8.26	1.24	17.68	198.64	2.64
0.28	2.76	81.44	52.95	0.23	2.28	7.22	117.57	69.54	0.69	4.28	1.30	33.04	49.64	1.20	6.28	1.83	45.88	190.50	1.96	8.28	1.25	18.74	198.27	2.64
0.30	2.87	72.76	53.44	0.30	2.30	7.08	112.18	69.42	0.71	4.30	1.33	32.77	49.16	1.20	6.30	1.79	43.38	192.40	1.98	8.30	1.19	22.37	195.95	2.64
0.32	3.08	76.42	52.52	0.32	2.32	6.78	102.04	69.91	0.71	4.32	1.32	34.66	48.54	1.22	6.32	1.75	44.02	194.17	1.98	8.32	1.14	22.55	193.50	2.63
0.34	3.25	70.91	53.56	0.34	2.34	6.77	91.02	69.48	0.72	4.34	1.24	34.26	48.48	1.22	6.34	1.69	42.95	193.87	1.98	8.34	1.08	20.66	195.09	2.64
0.36	3.41	66.50	54.73	0.34	2.36	7.01	74.49	68.68	0.73	4.36	1.19	31.34	48.54	1.24	6.36	1.58	43.23	192.21	1.99	8.36	1.12	16.90	212.72	2.65
0.38	3.60	65.52	60.30	0.33	2.38	7.01	60.73	68.68	0.73	4.38	1.13	34.51	48.91	1.25	6.38	1.48	38.42	191.48	2.00	8.38	1.15	14.77	219.21	2.64
0.40	3.68	67.93	60.24	0.35	2.40	7.01	57.90	68.62	0.73	4.40	1.14	36.64	48.54	1.25	6.40	1.42	38.72	192.64	2.01	8.40	1.16	12.18	225.09	2.64
0.42	3.65	78.68	64.95	0.37	2.42	7.03	60.00	68.56	0.74	4.42	1.16	37.70	47.81	1.25	6.42	1.45	37.63	196.01	2.01	8.42	1.21	11.49	228.82	2.64
0.44	3.67	87.48	62.81	0.37	2.44	7.06	60.85	68.38	0.75	4.44	1.15	33.75	46.83	1.26	6.44	1.47	40.36	196.80	2.03	8.44	1.25	9.81	226.92	2.65
0.46	4.06	88.21	57.66	0.44	2.46	7.13	58.63	67.95	0.74	4.46	1.17	30.28	46.46	1.27	6.46	1.46	35.55	195.64	2.03	8.46	1.22	9.96	224.05	2.65
0.48	4.00	86.33	59.50	0.42	2.48	7.24	55.95	67.58	0.75	4.48	1.18	30.86	46.34	1.27	6.48	1.42	36.68	189.03	2.04	8.48	1.25	8.60	229.31	2.65
0.50	4.05	89.59	57.17	0.42	2.50	7.47	53.42	66.85	0.75	4.50	1.20	27.63	45.54	1.28	6.50	1.37	40.94	187.87	2.05	8.50	1.39	7.34	246.45	2.65
0.52	4.17	83.39	58.70	0.45	2.52	7.80	50.84	65.99	0.77	4.52	1.18	26.12	45.18	1.27	6.52	1.35	34.27	186.77	2.05	8.52	1.51	7.46	256.12	2.65
0.54	4.38	73.47	59.68	0.46	2.54	8.00	49.22	65.38	0.76	4.54	1.19	26.84	44.69	1.27	6.54	1.32	33.60	188.91	2.06	8.54	1.67	9.69	253.61	2.66
0.56	4.45	80.53	59.50	0.45	2.56	8.08	50.90	65.01	0.77	4.56	1.23	27.79	44.14	1.27	6.56	1.26	27.67	191.72	2.08	8.56	1.57	11.58	242.10	2.66
0.58	4.28	94.63	60.36	0.47	2.58	7.87	52.82	65.38	0.77	4.58	1.22	26.31	43.40	1.26	6.58	1.26	24.50	193.87	2.09	8.58	1.79	11.07	257.84	2.68
0.60	4.42	100.90	62.26	0.53	2.60	6.77	61.09	67.95	0.77	4.60	1.13	25.46	43.22	1.27	6.60	1.31	22.46	197.17	2.09	8.60	2.11	13.45	263.90	2.66
0.62	4.45	97.59	64.34	0.49	2.62	5.36	74.15	70.58	0.78	4.62	1.10	26.40	43.16	1.27	6.62	1.31	21.56	200.36	2.10	8.62	2.19	17.99	248.16	2.66
0.64	4.30	94.13	67.21	0.49	2.64	4.51	91.32	71.80	0.79	4.64	1.09	27.79	42.73	1.27	6.64	1.33	20.20	200.72	2.11	8.64	1.95	15.49	229.74	2.67
0.66	4.20	97.72	67.03	0.52	2.66	3.84	125.25	73.03	0.80	4.66	1.13	24.63	41.99	1.27	6.66	1.36	22.34	200.97	2.11	8.66	1.82	14.02	221.29	2.68
0.68	4.25	94.68	67.52	0.57	2.68	3.32	156.36	73.58	0.80	4.68	1.19	20.06	40.65	1.27	6.68	1.34	22.28	204.03	2.13	8.68	1.91	18.23	226.80	2.69
0.70	4.23	88.87	67.21	0.53	2.70	2.94	172.98	74.07	0.81	4.70	1.23	19.91	39.85	1.28	6.70	1.33	21.02	204.58	2.14	8.70	1.95	21.96	225.15	2.68
0.72	4.36	90.52	66.72	0.54	2.72	2.70	174.37	73.70	0.82	4.72	1.16	18.47	39.73	1.27	6.72	1.29	22.34	204.88	2.14	8.72	1.76	23.52	209.78	2.69
0.74	4.51	103.98	68.01	0.56	2.74	2.50	156.54	74.13	0.83	4.74	1.14	19.07	39.24	1.28	6.74	1.23	19.81	204.21	2.14	8.74	1.47	20.88	195.89	2.70
0.76	4.56	111.37	68.81	0.56	2.76	2.34	137.15	73.89	0.84	4.76	1.14	17.96	38.26	1.28	6.76	1.25	18.34	204.70	2.15	8.76	1.28	18.95	191.54	2.71
0.78	4.46	123.31	70.76	0.55	2.78	2.28	121.38	73.52	0.85	4.78	1.16	16.25	37.65	1.28	6.78	1.30	16.66	210.88	2.16	8.78	1.24	17.96	204.88	2.71
0.80	4.34	134.57	71.80	0.55	2.80	2.25	112.86	73.15	0.85	4.80	1.17	16.01	36.12	1.28	6.80	1.36	14.67	216.70	2.17	8.80	1.27	17.60	216.03	2.73
0.82	4.33	144.62	73.15	0.57	2.82	2.28	97.67	72.97	0.87	4.82	1.19	15.59	34.77	1.28	6.82	1.36	15.85	216.94	2.18	8.82	1.29	14.35	238.80	2.73
0.84	4.37	158.02	73.76	0.57	2.84	2.22	80.36	73.33	0.88	4.84	1.23	15.74	33.79	1.29	6.84	1.39	16.84	218.05	2.18	8.84	1.36	14.41	247.49	2.73
0.86	4.45	173.24	74.38	0.59	2.86	2.26	71.77	73.40	0.90	4.86	1.27	16.86	32.75	1.30	6.86	1.39	18.01	219.15	2.18	8.86	1.40	15.35	249.14	2.74
0.88	4.62	181.15	74.19	0.58	2.88	2.24	72.23	73.70	0.91	4.88	1.29	21.73	31.89	1.31	6.88	1.50	17.83	222.45	2.19	8.88	1.83	14.48	267.63	2.74
0.90	4.93	189.59	74.01	0.60	2.90	2.17	74.79	74.07	0.92	4.90	1.33	25.07	31.28	1.30	6.90	1.63	18.59	225.39	2.21	8.90	2.86	12.88	318.81	2.71
0.92	5.76	199.30	71.50	0.61	2.92	2.10	72.63	74.56	0.94	4.92	1.34	28.64	30.79	1.31	6.92	1.65	19.58	224.23	2.23	8.92	3.98	14.33	279.38	2.71
0.94	7.01	220.12	67.15	0.59	2.94	2.03	69.16	75.42	0.94	4.94	1.36	31.59	30.18	1.32	6.94	1.58	19.43	216.33	2.23	8.94	4.63	19.32	176.91	2.72
0.96	7.95	244.07	64.76	0.59	2.96	1.92	67.22	76.33	0.95	4.96	1.39	34.39	29.69	1.33	6.96	1.43	18.74	206.72	2.23	8.96	4.74	19.56	51.67	2.72
0.98	7.84	252.41	67.27	0.59	2.98	1.82	67.37	76.52	0.94	4.98	1.39	36.83	29.38	1.33	6.98	1.38	16.30	206.54	2.25	8.98	4.31	22.62	45.54	2.73
1.00	7.69	245.81	68.99	0.58	3.00	1.75	69.87	76.52	0.97	5.00	1.39	37.53	29.14	1.34	7.00	1.38	18.41	205.19	2.25	9.00	3.81	24.31	42.18	2.74
1.02	7.28	225.45	68.87	0.57	3.02	1.72	69.91	77.07	0.97	5.02	1.34	38.81	29.38	1.34	7.02	1.57	19.40	221.60	2.27	9.02	3.52	19.92	41.01	2.74
1.04	7.22	213.64	70.09	0.57	3.04	1.75	62.03	76.70	0.99	5.04	1.29	42.19	29.32	1.35	7.04	1.78	19.97	234.70	2.26	9.04	3.20	21.81	38.93	2.74
1.06	7.14	192.98	71.87	0.58	3.06	1.82	55.79	76.33	0.97	5.06	1.32	41.10	28.34	1.36	7.06	1.83	22.05	232.49	2.28	9.06	2.92	24.77	32.87	2.75
1.08	6.94	176.36	73.09	0.57	3.08	1.83	54.49	76.21	0.99	5.08	1.33	39.79	27.79	1.37	7.08	2.12	38.70	118.82	2.35	9.08	2.46	28.19	25.71	2.75
1.10	7.54	141.36	70.34	0.56	3.10	1.44	41.26	78.35	1.00	5.10	1.42	37.35	10.53	1.45	7.10	1.93	36.45	115.14	2.36	9.10	2.12	34.12	22.71	2.76
1.12	8.12	136.04	53.99	0.18	3.12	1.99	46.79	65.07	0.97	5.12	1.42	38.87	11.20	1.44	7.12	2.26	36.33	125.00	2.36	9.12	1.78	38.29	19.22	2.78
1.14	8.24	110.87	56.07	0.18	3.14	1.97	50.26	65.62	0.97	5.14	1.44	37.96	12.43	1.46	7.14	2.85	39.43	137.61	2.38	9.14	1.67	31.84	30.18	2.77
1.16	8.13	112.34	57.54	0.20	3.16	1.92	51.99	66.05	0.98	5.16	1.46	36.80	13.71	1.45	7.16	3.56	43.84	144.47	2.37	9.16	2.55	27.43	171.95	2.77
1.18	8.15	118.55	57.91	0.22	3.18	1.79	57.32	66.91	0.97	5.18	1.44	37.47	14.57	1.47	7.18	3.73	40.16	135.04	2.38	9.18	3.86	23.66	248.59	2.78
1.20	7.63	128.80	60.24	0.22	3.20	1.68	62.77	67.70	0.98	5.20	1.38	37.87	15.12	1.48	7.20	3.86	30.82	130.88	2.40	9.20	4.38	24.11	175.32	2.81
1.22	7.35	146.18	60.91	0.24	3.22	1.57	64.29	67.76	0.99	5.22	1.31	39.51	15.61	1.50	7.22	3.95	28.50	129.29	2.41	9.22	4.26	22.01	154.69	2.81
1.24	7.21	169.43	61.64	0.27	3.24	1.49	63.84	68.32	0.98	5.24	1.30	35.80	17.32	1.50	7.24	4.11	30.69	128.55	2.41	9.24	3.72	16.59	140.18	2.80
1.26	7.12	191.22	62.13	0.27	3.26	1.51	61.68	68.68	0.98	5.26	1.26	33.12	18.61	1.50	7.26	4.11	32.61	124.88	2.42	9.26	3.14	16.65	103.82	2.81
1.28	7.09	226.10	61.89	0.29	3.28	1.48	59.76	69.60	0.98	5.28	1.25	31.54	19.16	1.51	7.28	4.07	31.82	121.94	2.43	9.28	2.76	17.61	37.28	2.81
1.30	7.21	236.66	60.85	0.30	3.30	1.43	54.28	69.78	0.98	5.30	1.21	30.08	20.14	1.51	7.30	3.99	25.29	118.08	2.41	9.30	2.27	24.14	28.83	2.82
1.32	7.47	227.31	60.05	0.31	3.32	1.45	49.08	69.23	0.99	5.32	1.28	29.92	23.69	1.52	7.32	3.96	21.05	116.25	2.42	9.32	2.01	29.70	26.38	2.83
1.34	7.64	216.57	58.83	0.33	3.34	1.41	46.25	68.93	1.00	5.34	1.41	25.68	28.04	1.52	7.34	4.05	20.06	115.02	2.43	9.34	1.82	36.46	30.55	2.83
1.36	7.79	214.19	58.03	0.34	3.36	1.42	36.42	68.87	0.99	5.36	1.48	20.81	30.97	1.52	7.36	4.21	22.23	113.61	2.45	9.36	1.72	33.87	41.01	2.84
1.38	7.83	225.96	57.66	0.35	3.38	1.47	29.33	68.19	0.99	5.38	1.50	21.38	32.63	1.53	7.38	4.38	26.16	113.06	2.43	9.38	1.65	31.40	42.12	2.86
1.40	7.66	223.64	59.75	0.37	3.40	1.48	28.05	67.70	1.00	5.40	1.50	23.78	34.22	1.54	7.40	4.45	27.28	112.39	2.44	9.40	1.49	25.67	42.61	2.86
1.42	7.35	216.85	61.40	0.37	3.42	1.45	28.15	67.46	1.00	5.42	1.47	28.71	35.32	1.55	7.42	4.47	24.03	108.96	2.44	9.42	1.42	21.31	50.32	2.88
1.44	7.25	207.57	62.26	0.41	3.44	1.39	26.48	67.46	0.99	5.44	1.46	31.93	36.61	1.56	7.44	4.45	19.01	105.53	2.45	9.44	1.36	19.47	56.87	2.86
1.46	6.90	200.47	63.60	0.43	3.46	1.33	28.67	67.70	1.01	5.46	1.46	34.89	37.34	1.56	7.46	4.43	15.58	79.33	2.45	9.46	1.22	14.81	68.44	2.87
1.48	6.93	200.04	62.44	0.45	3.48	1.27	31.93	67.40	1.01	5.48	1.46	38.23	38.08	1.56	7.48	4.48	16.45	76.40	2.46	9.48	1.27	12.43	111.59	2.88
1.50	6.92	195.26	62.19	0.47	3.50	1.23	32.57	66.85	1.02	5.50	1.43	41.40	38.81	1.56	7.50	4.51	17.86	77.68	2.47	9.50	1.39	11.56	150.34	2.88
1.52	6.78	179.56	62.32	0.50	3.52	1.27	28.46	65.68	1.01	5.52	1.45	40.76	40.16	1.57	7.52	4.29	17.83	76.40	2.47	9.52	1.47	11.71	167.24	2.88
1.54	6.80	155.27	62.01	0.51	3.54	1.25	26.70	65.19	1.03	5.54	1.44	39.57	39.85	1.58	7.54	3.93	18.40	73.03	2.47	9.54	1.44	13.58	171.03	2.88
1.56	6.37	140.57	64.34	0.53	3.56	1.30	23.22	64.21	1.02	5.56	1.37	40.15	38.99	1.58	7.56	3.61	19.60	70.76	2.47	9.56	1.33	12.97	165.52	2.89
1.58	6.01	127.45	64.64	0.55	3.58	1.26	23.37	63.30	1.03	5.58	1.36	39.70	38.81	1.61	7.58	3.56	24.71	70.89	2.47	9.58	1.16	9.73	169.38	2.89
1.60	6.38	107.57	62.68	0.56	3.60	1.27	21.57	62.62	1.03	5.60	1.29	41.55	37.65	1.60	7.60	3.64	30.34	72.36	2.49	9.60	1.21	6.03	220.49	2.89
1.62	6.57	93.08	61.70	0.58	3.62	1.31	19.26	62.07	1.02	5.62	1.25	41.83	36.85	1.62	7.62	3.74	34.33	73.52	2.49	9.62	1.24	5.10	249.27	2.89
1.64	6.53	87.57	62.07	0.58	3.64	1.30	21.79	61.89	1.03	5.64	1.21	42.22	36.55	1.62	7.64	3.71	36.89	72.29	2.49	9.64	1.27	6.63	255.57	2.90
1.66	5.94	85.35	64.58	0.58	3.66	1.32	23.20	61.28	1.03	5.66	1.18	43.26	35.93	1.63	7.66	3.69	39.75	71.62	2.49	9.66	1.24	10.18	252.33	2.90
1.68	6.08	85.93	63.54	0.58	3.68	1.31	25.04	61.34	1.04	5.68	1.12	42.44	35.93	1.63	7.68	3.82	36.94	73.33	2.49	9.68	1.18	12.43	253.00	2.91
1.70	6.42	83.77	61.83	0.59	3.70	1.31	26.01	61.34	1.05	5.70	1.10	40.91	36.36	1.64	7.70	3.91	30.22	73.27	2.50	9.70	1.16	12.94	251.53	2.90
1.72	7.27	77.32	58.95	0.57	3.72	1.32	26.58	61.15	1.05	5.72	1.08	38.39	37.34	1.66	7.72	3.98	34.81	73.27	2.50	9.72	1.11	13.97	250.06	2.92
1.74	7.80	74.12	57.85	0.57	3.74	1.33	29.78	61.09	1.05	5.74	1.11	34.10	39.91	1.66	7.74	3.70	38.65	69.05	2.50	9.74	1.08	15.17	251.96	2.92
1.76	7.68	74.31	58.52	0.59	3.76	1.30	32.06	61.21	1.05	5.76	1.13	30.02	42.73	1.68	7.76	3.54	33.84	65.87	2.50	9.76	1.09	15.92	255.20	2.91
1.78	7.36	72.12	59.99	0.59	3.78	1.29	32.43	61.34	1.06	5.78	1.21	25.68	46.95	1.69	7.78	3.44	28.11	64.34	2.51	9.78	1.08	16.28	259.67	2.92
1.80	7.05	70.32	61.09	0.59	3.80	1.27	33.35	61.64	1.06	5.80	1.47	21.20	52.15	1.68	7.80	3.41	28.72	63.79	2.51	9.80	1.07	16.40	259.06	2.92
1.82	6.83	74.50	62.19	0.61	3.82	1.24	34.17	61.89	1.07	5.82	1.75	20.27	57.54	1.69	7.82	3.43	30.36	62.93	2.52	9.82	1.02	16.52	259.37	2.91
1.84	6.62	86.10	63.23	0.62	3.84	1.23	35.58	61.64	1.08	5.84	2.11	20.15	63.17	1.70	7.84	3.42	29.66	62.32	2.52	9.84	1.01	15.56	260.71	2.92
1.86	6.45	95.72	63.72	0.62	3.86	1.21	35.40	61.15	1.09	5.86	2.01	20.54	56.38	1.71	7.86	3.22	30.63	58.70	2.53	9.86	1.00	14.24	260.28	2.91
1.88	6.36	97.70	64.15	0.63	3.88	1.21	34.55	60.85	1.08	5.88	1.74	21.99	48.67	1.71	7.88	2.63	31.70	50.38	2.54	9.88	0.97	13.43	261.45	2.91
1.90	6.34	96.52	64.34	0.63	3.90	1.25	33.06	60.72	1.09	5.90	1.48	22.50	44.56	1.73	7.90	2.11	31.45	44.50	2.54	9.90	0.99	12.08	268.24	2.92
1.92	6.33	95.64	64.52	0.64	3.92	1.34	32.30	60.42	1.10	5.92	1.35	23.04	43.46	1.75	7.92	1.62	22.11	38.99	2.53	9.92	0.97	11.11	276.63	2.93
1.94	6.34	91.68	64.64	0.65	3.94	1.41	34.07	60.24	1.10	5.94	1.23	26.35	44.14	1.76	7.94	1.23	25.51	35.44	2.53	9.94	0.99	9.43	284.16	2.93
1.96	6.42	83.80	64.70	0.66	3.96	1.46	34.01	59.99	1.10	5.96	1.22	26.02	52.89	1.75	7.96	1.11	27.95	42.05	2.53	9.96	1.02	7.93	292.05	2.93
1.98	6.57	74.46	64.52	0.66	3.98	1.42	34.87	60.24	1.11	5.98	1.26	24.70	59.38	1.76	7.98	1.09	23.76	69.17	2.53	9.98	1.16	6.94	309.62	2.93
2.00	6.77	67.16	64.09	0.67	4.00	1.42	34.72	60.30	1.12	6.00	1.31	21.72	64.28	1.77	8.00	1.11	21.89	96.78	2.54	10.00	1.45	6.73	331.29	2.95

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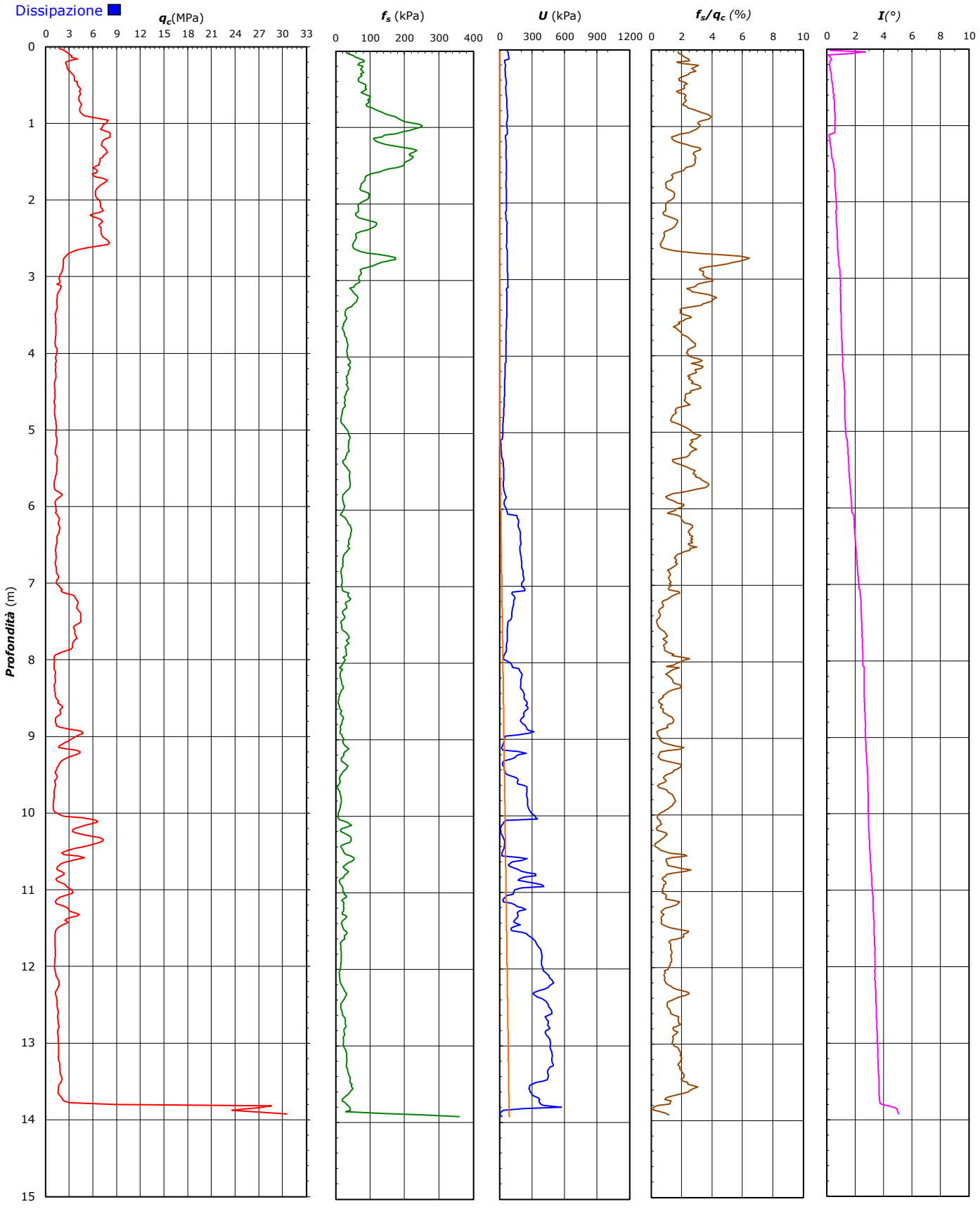
COMMITTENTE:
CANTIERE: Via Ettore Nadiani -Quartiere Bussecchio (FC)
COMMESSA: C054/24
RDP N°: 196/24
DATA: 03/09/2024

PROVA N°: CPTU 20
PROF. FALDA (m da p.c.): 4.80
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI231029[a=0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.78	7.66	335.64	2.94	12.02	1.17	12.89	406.40	3.41															
10.04	2.33	9.37	349.78	2.93	12.04	1.21	10.36	422.56	3.38															
10.06	4.58	21.85	60.60	2.94	12.06	1.23	11.41	437.74	3.38															
10.08	6.02	35.72	38.87	2.94	12.08	1.26	10.96	452.68	3.39															
10.10	6.59	40.44	33.61	2.95	12.10	1.29	10.75	460.21	3.38															
10.12	6.58	46.07	17.57	2.96	12.12	1.34	12.19	468.41	3.39															
10.14	5.74	32.19	13.34	2.95	12.14	1.42	12.65	483.59	3.38															
10.16	4.98	19.29	10.53	2.96	12.16	1.52	13.07	493.69	3.38															
10.18	4.31	13.91	9.12	2.95	12.18	1.64	14.96	500.12	3.41															
10.20	3.71	15.02	10.16	2.96	12.20	1.72	16.49	476.62	3.42															
10.22	3.43	24.79	13.53	2.96	12.22	1.73	19.17	457.21	3.43															
10.24	3.44	33.62	19.28	2.97	12.24	1.70	21.73	451.52	3.42															
10.26	3.91	40.68	28.10	2.98	12.26	1.64	23.74	413.69	3.43															
10.28	4.86	45.30	36.12	2.98	12.28	1.57	25.57	368.14	3.44															
10.30	5.76	45.88	40.89	3.00	12.30	1.47	29.51	320.15	3.45															
10.32	6.77	45.09	45.54	2.99	12.32	1.32	32.43	309.75	3.46															
10.34	7.28	40.89	46.77	3.01	12.34	1.26	31.40	327.50	3.44															
10.36	7.29	28.41	46.58	3.00	12.36	1.29	28.60	347.82	3.46															
10.38	6.84	16.90	45.24	3.01	12.38	1.34	25.21	382.71	3.45															
10.40	6.24	15.76	43.46	3.01	12.40	1.40	23.05	414.61	3.47															
10.42	5.62	17.44	41.20	3.01	12.42	1.43	19.89	429.36	3.47															
10.44	4.70	22.04	35.99	3.02	12.44	1.46	17.12	438.66	3.47															
10.46	3.77	23.15	29.38	3.02	12.46	1.47	15.26	448.40	3.47															
10.48	2.89	25.04	23.14	3.04	12.49	1.44	15.14	455.86	3.47															
10.50	2.46	31.04	21.79	3.05	12.50	1.45	15.38	463.70	3.48															
10.52	2.06	44.34	23.75	3.05	12.52	1.48	16.37	470.68	3.48															
10.54	2.27	53.20	164.79	3.07	12.54	1.50	17.93	478.15	3.48															
10.56	4.13	53.99	255.82	3.08	12.56	1.55	19.38	485.31	3.48															
10.58	4.93	49.11	204.95	3.06	12.58	1.61	20.55	481.64	3.48															
10.60	4.13	40.50	116.67	3.07	12.60	1.63	20.97	450.42	3.48															
10.62	3.35	33.80	95.31	3.07	12.62	1.61	24.25	422.69	3.49															
10.64	2.47	26.68	80.56	3.08	12.64	1.55	28.29	431.50	3.50															
10.66	1.99	21.48	91.82	3.10	12.66	1.56	28.08	438.17	3.50															
10.68	1.74	25.95	137.00	3.10	12.68	1.56	28.05	449.07	3.51															
10.70	1.56	31.45	170.85	3.10	12.70	1.60	28.35	450.97	3.52															
10.72	1.41	36.83	201.52	3.11	12.72	1.59	28.81	446.80	3.53															
10.74	1.51	34.61	253.92	3.12	12.74	1.58	30.42	447.29	3.53															
10.76	1.92	28.34	333.37	3.14	12.76	1.65	28.66	464.13	3.53															
10.78	2.32	23.69	333.50	3.14	12.78	1.71	24.91	460.70	3.52															
10.80	2.34	22.67	227.41	3.14	12.80	1.69	24.22	428.20	3.53															
10.82	1.88	14.43	183.21	3.16	12.82	1.63	24.91	419.38	3.53															
10.84	1.54	11.00	171.77	3.16	12.84	1.56	27.16	425.44	3.54															
10.86	1.31	11.12	237.76	3.17	12.86	1.53	25.00	434.26	3.55															
10.88	1.43	13.56	335.15	3.17	12.88	1.56	23.52	446.80	3.56															
10.90	1.75	16.59	393.49	3.17	12.90	1.58	22.29	456.72	3.56															
10.92	2.36	18.76	410.32	3.18	12.92	1.60	23.43	467.01	3.57															
10.94	2.59	21.67	200.84	3.17	12.94	1.63	23.22	467.56	3.56															
10.96	2.71	20.86	144.71	3.19	12.96	1.62	23.31	471.29	3.56															
10.98	2.97	21.49	134.98	3.20	12.98	1.62	22.26	469.82	3.57															
11.00	3.29	26.99	129.22	3.20	13.00	1.64	23.70	468.66	3.57															
11.02	3.44	24.86	124.08	3.21	13.02	1.64	24.88	465.54	3.58															
11.04	3.51	32.08	68.56	3.24	13.04	1.64	28.22	470.86	3.59															
11.06	3.03	31.04	53.38	3.25	13.06	1.65	29.77	476.80	3.59															
11.08	2.28	21.88	38.99	3.27	13.08	1.66	30.96	481.88	3.60															
11.10	1.75	17.40	32.32	3.26	13.10	1.67	31.96	483.78	3.60															
11.12	1.47	22.42	35.01	3.26	13.12	1.65	32.42	486.84	3.61															
11.14	1.31	24.47	111.47	3.26	13.14	1.65	31.66	486.66	3.60															
11.16	1.29	22.73	145.81	3.27	13.16	1.64	32.29	482.55	3.60															
11.18	1.38	22.63	159.16	3.27	13.18	1.62	32.96	483.47	3.60															
11.20	1.89	24.20	209.17	3.26	13.20	1.64	32.08	484.39	3.61															
11.22	2.51	23.29	241.98	3.27	13.22	1.66	32.26	489.23	3.61															
11.24	2.88	23.05	183.03	3.27	13.24	1.69	31.99	496.76	3.62															
11.26	2.91	19.32	165.34	3.27	13.26	1.77	31.26	494.00	3.62															
11.28	3.10	20.74	167.12	3.28	13.28	1.81	32.69	465.23	3.63															
11.30	3.63	30.40	172.26	3.29	13.30	1.80	34.18	455.01	3.62															
11.32	4.27	31.89	169.14	3.30	13.32	1.84	34.48	445.03	3.63															
11.34	4.06	26.63	153.46	3.29	13.34	1.84	36.06	441.11	3.63															
11.36	3.28	21.76	137.12	3.30	13.36	1.85	37.49	445.27	3.64															
11.38	2.61	18.06	129.96	3.30	13.38	1.84	38.25	448.52	3.65															
11.40	2.47	16.35	145.69	3.33	13.40	1.88	40.96	448.46	3.65															
11.42	2.88	18.99	193.01	3.34	13.42	1.97	42.72	448.09	3.66															
11.44	2.64	20.25	144.89	3.33	13.44	2.03	42.82	441.85	3.67															
11.46	2.15	22.33	111.10	3.33	13.46	2.10	41.35	403.16	3.67															
11.48	1.80	23.83	105.23	3.33	13.48	2.08	43.15	338.52	3.67															
11.50	1.56	29.97	112.57	3.32	13.50	2.00	47.90	301.30	3.68															
11.52	1.38	34.08	216.58	3.33	13.52	1.89	45.55	279.81	3.68															
11.54	1.25	30.27	249.33	3.34	13.54	1.74	47.56	274.06	3.69															
11.56	1.24	26.15	267.75	3.34	13.56	1.64	50.54	273.45	3.68															
11.58	1.22	26.11	287.46	3.34	13.58	1.64	45.34	278.53	3.67															
11.60	1.22	26.32	305.71	3.36	13.60	1.63	42.26	285.75	3.69															
11.62	1.23	21.72	319.36	3.36	13.62	1.59	38.91	294.44	3.69															
11.64	1.22	15.74	332.03	3.37	13.64	1.60	34.23	299.77	3.69															
11.66	1.20	14.02	338.76	3.36	13.66	1.62	28.62	325.36	3.69															
11.68	1.19	15.05	344.45	3.36	13.68	1.77	22.56	354.13	3.69															
11.70	1.19	15.23	353.57	3.36	13.70	1.94	18.98	373.16	3.70															
11.72	1.19	15.23	368.69	3.38	13.72	2.10	19.13	363.31	3.72															
11.74	1.21	15.35	379.47	3.38	13.74	2.19	28.47	369.31	3.71															
11.76	1.23	15.92	383.81	3.38	13.76	2.44	30.60	381.49	3.73															
11.78	1.25	16.82	387.49	3.38	13.78	3.04	37.11	402.73	3.76															
11.80	1.24	17.12	388.83	3.39	13.80	8.83	39.75	566.97	3.89															
11.82	1.23	16.43	391.65	3.37	13.82	28.62	42.80	229.74	4.34															
11.84	1.24	16.13	392.51	3.39	13.84	27.15	42.46	35.14	4.80															
11.86	1.24	16.22	391.71	3.40	13.86	25.13	29.59	19.96	4.94															
11.88	1.21	16.22	387.73	3.40	13.88	23.59	139.16	5.91	4.98															
11.90	1.19	15.98	386.75	3.40	13.90	27.05	248.73	4.13	5.02															
11.92	1.17	15.80	388.04	3.39	13.92	30.51	358.30	22.18	5.06															
11.94	1.18	14.90	388.71	3.40																				
11.96	1.17	14.66	393.24	3.39																				
11.98	1.17	13.88	399.30	3.40																				
12.00	1.16	13.46	401.14	3.40																				

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 20
CANTIERE:	Via Ettore Nadiani -Quartiere Bussecchio (FC)	PROF. FALDA (m da p.c.):	4.80
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	196/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	03/09/2024	OPERATORE:	Zanirato



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Email: zanirato12@gmail.com

COMMITTENTE:		PROVA N°:	CPTU 20
CANTIERE:	Via Ettore Nadiani -Quartiere Bussecchio (FC)	PROF. FALDA (m da p.c.):	4.80
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	196/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI231029[a=0.66]
DATA:	03/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Ettore Nadiani -Quartiere Bussecchio (FC)
Lat.: 44.207547°
Long.: 12.051427°



NOTE: Utilizzato 1 anello allargatore da inizio prova

PROVE PENETROMETRICHE STATICHE CON PUNTA ELETTRICA E CONO SISMICO

SCPTU

Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com
PEC: lorenzozanirato@pec.it

COMMITTENTE:
CANTIERE: Via Sapinia - Forlì (FC)
COMMESSA: C054/24
RDP N°: 211/24
DATA: 09/09/2024

PROVA N°: SCPTU 1
PROF. FALDA (m da p.c.): n.r.
PREFORO (m da p.c.): 0.50
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.52	6.38	80.64	27.91	0.52	2.52	6.13	310.50	21.73	0.42	4.52	2.06	79.04	58.58	1.42	6.52	1.21	34.66	29.20	1.98	8.52	2.42	29.38	101.37	2.30
0.54	5.77	111.81	23.75	0.50	2.54	6.00	306.85	21.67	0.42	4.54	2.01	75.91	57.30	1.42	6.54	1.19	38.67	28.71	1.99	8.54	2.06	28.71	95.98	2.31
0.56	5.15	115.25	16.59	0.47	2.56	6.06	297.68	20.87	0.44	4.56	1.97	75.30	56.26	1.43	6.56	1.13	44.36	28.16	1.99	8.56	1.71	28.92	91.58	2.30
0.58	4.84	101.86	17.14	0.45	2.58	6.03	287.84	20.63	0.45	4.58	1.93	76.40	55.15	1.45	6.58	1.07	48.35	27.55	1.99	8.58	1.65	33.31	92.01	2.30
0.60	4.75	74.40	16.10	0.43	2.60	5.90	280.38	20.94	0.60	4.60	1.82	77.71	54.05	1.45	6.60	0.98	52.85	26.57	2.01	8.60	1.59	37.37	93.35	2.31
0.62	4.71	50.85	14.45	0.44	2.62	5.77	277.70	21.73	0.60	4.62	1.77	77.04	53.01	1.44	6.62	0.91	57.78	25.77	2.01	8.62	1.48	36.05	94.09	2.31
0.64	4.42	52.34	14.26	0.50	2.64	5.50	271.24	22.83	0.62	4.64	1.62	76.83	51.48	1.46	6.64	0.86	56.14	25.59	2.00	8.64	1.40	33.98	93.96	2.31
0.66	4.43	46.04	13.53	0.38	2.66	5.11	264.66	23.02	0.61	4.66	1.57	73.42	51.91	1.46	6.66	0.86	52.12	25.34	2.01	8.66	1.45	34.55	95.92	2.32
0.68	4.90	53.07	18.79	0.40	2.68	4.82	260.61	22.16	0.63	4.68	1.57	71.56	52.46	1.45	6.68	0.84	43.39	25.22	2.00	8.68	1.58	34.85	99.78	2.33
0.70	5.28	37.97	4.04	0.40	2.70	4.49	261.67	19.83	0.63	4.70	1.60	68.01	52.77	1.46	6.70	0.83	37.16	25.34	2.01	8.70	1.52	31.69	99.90	2.34
0.72	5.17	3.36	28.10	0.40	2.72	4.16	259.36	19.65	0.64	4.72	1.62	67.12	52.40	1.46	6.72	0.83	29.28	25.59	2.02	8.72	1.44	31.36	98.56	2.35
0.74	5.52	30.60	31.04	0.36	2.74	3.95	252.51	19.16	0.64	4.74	1.57	60.28	52.03	1.46	6.74	0.83	24.65	26.02	2.02	8.74	1.87	28.53	107.43	2.34
0.76	6.02	34.05	32.63	0.41	2.76	3.69	246.88	19.47	0.65	4.76	1.55	55.41	51.05	1.48	6.76	0.85	20.98	26.57	2.02	8.76	2.95	28.26	125.55	2.34
0.78	5.51	63.63	26.08	0.41	2.78	3.50	234.64	17.94	0.65	4.78	1.51	55.84	50.32	1.49	6.78	0.85	19.21	27.00	2.03	8.78	4.20	32.92	117.72	2.35
0.80	5.54	70.29	25.59	0.43	2.80	3.38	222.74	18.18	0.67	4.80	1.49	53.19	49.89	1.48	6.80	0.86	18.37	27.30	2.02	8.80	4.89	36.65	91.09	2.36
0.82	5.45	65.09	24.00	0.39	2.82	3.23	209.44	18.61	0.67	4.82	1.59	53.92	50.32	1.49	6.82	0.83	18.28	27.49	2.03	8.82	5.05	36.47	89.43	2.36
0.84	5.24	62.17	24.12	0.41	2.84	3.11	197.69	14.51	0.68	4.84	1.69	56.64	51.48	1.49	6.84	0.87	18.04	27.79	2.03	8.84	4.49	27.93	83.37	2.38
0.86	5.37	61.35	25.40	0.37	2.86	3.02	186.52	14.08	0.69	4.86	1.76	56.15	52.64	1.49	6.86	0.86	18.43	27.85	2.05	8.86	3.75	20.63	77.99	2.37
0.88	5.45	56.14	27.49	0.27	2.88	2.87	179.61	16.83	0.69	4.88	1.80	56.64	52.03	1.50	6.88	0.85	17.56	28.22	2.05	8.88	3.32	24.56	76.33	2.38
0.90	5.55	60.37	22.47	0.22	2.90	2.86	177.21	14.88	0.70	4.90	1.76	58.96	50.81	1.50	6.90	0.85	17.02	28.22	2.05	8.90	3.36	33.28	78.17	2.38
0.92	4.87	77.93	17.81	0.19	2.92	2.76	170.52	14.69	0.70	4.92	1.71	60.33	50.20	1.50	6.92	0.82	16.66	28.22	2.06	8.92	3.54	49.93	82.82	2.39
0.94	4.65	84.17	17.75	0.17	2.94	2.73	166.14	14.14	0.71	4.94	1.64	65.05	49.03	1.52	6.94	0.79	17.02	28.10	2.06	8.94	3.89	52.49	87.35	2.40
0.96	4.64	86.30	17.87	0.21	2.96	2.73	157.93	14.51	0.72	4.96	1.59	65.96	48.18	1.52	6.96	0.78	16.09	28.10	2.06	8.96	4.07	43.37	89.13	2.39
0.98	4.64	80.79	19.04	0.14	2.98	2.71	157.60	13.90	0.72	4.98	1.54	68.58	46.46	1.53	6.98	0.87	11.72	39.12	2.08	8.98	4.65	42.27	85.52	2.40
1.00	3.42	73.45	12.12	0.14	3.00	2.82	148.37	23.75	0.73	5.00	1.54	73.65	39.79	1.53	7.00	0.86	14.03	39.30	2.09	9.00	5.34	46.99	71.25	2.41
1.02	4.23	69.89	1.90	0.17	3.02	2.98	149.41	21.43	0.73	5.02	1.56	74.93	39.97	1.54	7.02	0.90	13.67	39.48	2.09	9.02	5.80	50.18	55.77	2.42
1.04	4.12	55.13	2.63	0.13	3.04	3.09	142.69	18.49	0.74	5.04	1.54	74.08	39.91	1.55	7.04	0.89	14.45	39.61	2.09	9.04	5.90	53.71	49.52	2.41
1.06	3.98	43.23	2.69	0.10	3.06	3.27	144.57	14.32	0.75	5.06	1.54	71.13	39.85	1.56	7.06	0.84	15.33	39.12	2.10	9.06	5.68	55.36	47.26	2.42
1.08	3.80	42.74	3.24	0.13	3.08	3.37	144.42	12.37	0.74	5.08	1.52	69.91	39.61	1.55	7.08	0.82	14.78	38.87	2.10	9.08	5.28	55.05	44.93	2.42
1.10	3.56	51.17	4.77	0.11	3.10	3.45	141.87	9.00	0.74	5.10	1.49	72.04	39.24	1.56	7.10	0.81	13.73	38.93	2.11	9.10	4.73	40.29	42.48	2.42
1.12	3.34	56.25	5.02	0.07	3.12	3.61	139.92	5.08	0.75	5.12	1.42	73.47	38.50	1.57	7.12	0.82	12.62	39.54	2.11	9.12	4.42	32.20	42.79	2.42
1.14	3.41	54.03	5.75	0.13	3.14	3.82	136.48	2.02	0.76	5.14	1.39	72.95	38.08	1.58	7.14	0.82	10.73	40.03	2.11	9.14	4.32	41.38	43.58	2.43
1.16	3.46	55.55	5.39	0.11	3.16	3.79	131.98	1.96	0.77	5.16	1.40	70.88	38.01	1.58	7.16	0.82	10.49	40.40	2.11	9.16	4.21	53.68	44.93	2.43
1.18	3.62	51.54	4.84	0.08	3.18	3.60	134.41	2.75	0.77	5.18	1.40	70.79	37.83	1.59	7.18	0.81	10.40	40.65	2.12	9.18	3.55	61.59	41.38	2.45
1.20	3.48	47.18	3.43	0.07	3.20	3.59	133.59	2.82	0.76	5.20	1.48	71.97	38.26	1.60	7.20	0.83	9.71	41.20	2.13	9.20	2.81	70.54	37.03	2.46
1.22	3.21	39.14	4.77	0.08	3.22	3.33	135.14	3.24	0.78	5.22	1.53	70.72	39.05	1.60	7.22	0.87	9.56	41.99	2.13	9.22	2.28	64.60	34.16	2.46
1.24	3.32	38.59	5.02	0.06	3.24	3.29	132.16	2.51	0.79	5.24	1.56	68.07	39.05	1.60	7.24	0.87	9.56	43.22	2.12	9.24	2.86	63.38	46.28	2.47
1.26	3.78	30.85	3.00	0.06	3.26	3.23	124.83	0.43	0.80	5.26	1.55	69.32	38.44	1.61	7.26	0.91	9.59	44.07	2.13	9.26	4.63	75.37	66.54	2.47
1.28	4.01	25.80	2.14	0.07	3.28	3.33	117.16	3.61	0.80	5.28	1.50	72.42	37.22	1.62	7.28	0.95	9.62	44.44	2.13	9.28	5.93	89.52	75.42	2.49
1.30	4.40	29.04	0.92	0.06	3.30	3.39	109.09	7.96	0.82	5.30	1.42	76.90	36.36	1.61	7.30	1.01	9.17	45.30	2.12	9.30	6.55	87.18	79.21	2.49
1.32	4.51	32.47	0.61	0.06	3.32	3.44	99.08	9.37	0.81	5.32	1.33	80.31	35.38	1.61	7.32	1.01	9.56	46.22	2.13	9.32	6.69	79.11	80.44	2.50
1.34	4.60	38.01	0.43	0.05	3.34	3.51	93.15	9.98	0.83	5.34	1.30	79.24	34.95	1.62	7.34	1.01	10.37	46.40	2.13	9.34	6.67	57.29	81.66	2.51
1.36	4.66	40.75	0.43	0.05	3.36	3.66	91.75	12.30	0.84	5.36	1.27	79.73	34.34	1.62	7.36	1.01	11.69	46.46	2.13	9.36	6.79	41.85	84.41	2.51
1.38	4.58	43.70	1.04	0.03	3.38	3.77	88.56	12.55	0.85	5.38	1.27	76.84	34.04	1.62	7.38	1.01	11.69	46.83	2.13	9.38	7.30	37.36	90.35	2.54
1.40	4.45	46.83	1.35	0.05	3.40	3.83	89.90	12.37	0.86	5.40	1.25	73.37	33.67	1.62	7.40	1.01	12.15	47.32	2.14	9.40	7.65	39.32	93.35	2.54
1.42	4.38	48.90	1.71	0.05	3.42	3.75	90.05	12.61	0.86	5.42	1.20	69.16	32.93	1.63	7.42	1.03	12.69	47.38	2.15	9.42	8.14	47.48	99.11	2.56
1.44	4.30	56.72	2.14	0.06	3.44	3.54	94.80	12.06	0.85	5.44	1.13	63.08	32.14	1.64	7.44	1.06	14.46	48.30	2.14	9.44	8.59	59.16	103.70	2.56
1.46	4.20	67.31	3.12	0.05	3.46	3.56	97.76	12.92	0.88	5.46	1.10	55.74	31.53	1.66	7.46	1.11	15.91	48.91	2.14	9.46	8.60	66.16	104.49	2.57
1.48	4.08	80.28	3.80	0.06	3.48	3.61	95.42	14.02	0.88	5.48	1.04	53.67	30.91	1.66	7.48	1.14	16.18	49.64	2.14	9.48	8.29	58.82	103.88	2.57
1.50	4.01	93.55	4.29	0.05	3.50	3.79	92.38	14.45	0.90	5.50	1.04	50.30	30.55	1.68	7.50	1.12	17.29	49.16	2.14	9.50	8.08	44.46	103.39	2.58
1.52	4.00	102.07	4.65	0.06	3.52	3.68	93.02	13.34	0.90	5.52	1.05	45.82	30.30	1.68	7.52	1.11	19.76	49.09	2.14	9.52	7.76	34.57	102.60	2.60
1.54	3.87	118.39	5.26	0.07	3.54	3.77	95.30	13.59	0.92	5.54	1.00	40.04	29.87	1.69	7.54	1.16	19.25	50.32	2.14	9.54	7.63	34.78	104.49	2.60
1.56	3.75	132.51	6.00	0.06	3.56	3.87	95.73	13.34	0.93	5.56	1.00	35.41	29.57	1.70	7.56	1.21	19.67	51.24	2.10	9.56	7.66	39.18	107.55	2.62
1.58	3.70	142.46	6.31	0.06	3.58	3.91	97.75	13.04	0.96	5.58	0.96	33.31	28.95	1.73	7.58	1.27	19.52	52.71	2.12	9.58	7.63	42.10	110.12	2.62
1.60	3.66	146.23	7.04	0.02	3.60	4.07	100.40	13.22	0.97	5.60	0.97	29.40	28.77	1.73	7.60	1.33	20.06	54.17	2.11	9.60	7.46	43.90	111.10	2.63
1.62	3.68	150.22	7.35	0.03	3.62	4.09	104.75	13.04	0.99	5.62	0.97	25.56	29.38	1.73	7.62	1.36	23.28	54.42	2.12	9.62	7.15	42.86	108.84	2.62
1.64	3.50	151.83	8.26	0.04	3.64	4.18	110.78	12.98	0.97	5.64	1.02	21.68	29.57	1.73	7.64	1.46	25.14	55.22	2.11	9.64	6.45	41.70	103.45	2.62
1.66	3.34	157.12	9.00	0.04	3.66	4.60	117.48	14.02	0.98	5.66	1.08	21.38	29.75	1.74	7.66	1.55	27.94	56.44	2.13	9.66	5.99	42.25	101.19	2.64
1.68	3.31	152.98	9.18	0.05	3.68	4.93	122.50	15.06	0.97	5.68	1.09	21.35	30.85	1.74	7.68	1.67	30.34	58.52	2.14	9.68	5.86	44.89	104.98	2.64
1.70	3.23	160.13	9.86	0.05	3.70	5.05	125.58	15.43	0.99	5.70	1.15	23.34	30.85	1.74	7.70	1.76	35.00	59.26	2.14	9.70	6.10	56.43	109.94	2.65
1.72	3.11	160.04	10.59	0.05	3.72	4.59	128.96	13.10	1.00	5.72	1.15	26.77	30.12	1.74	7.72	1.88	41.20	60.17	2.15	9.72	6.06	66.65	110.68	2.64
1.74	3.03	156.14	11.14	0.06	3.74	4.33	132.95	11.57	1.01	5.74	1.16	30.74	30.12	1.76	7.74	1.95	45.25	60.79	2.15	9.74	5.58	75.53	105.11	2.65
1.76	2.82	144.82	12.06	0.06	3.76	4.11	137.12	10.22	1.01	5.76	1.09	35.25	29.44	1.76	7.76	1.92	50.06	60.54	2.16	9.76	5.08	81.83	99.41	2.65
1.78	2.93	134.20	12.00	0.08	3.78	3.83	142.63	9.06	1.03	5.78	1.01	37.75	28.59	1.76	7.78	1.98	56.48	60.54	2.16	9.78	4.52	84.99	95.13	2.64
1.80	3.00	128.17	12.06	0.07	3.80	3.91	143.12	9.30	1.03	5.80	0.97	38.87	27.73	1.77	7.80	2.00	67.80	60.30	2.17	9.80	3.85	79.30	89.56	2.64
1.82	2.99	127.84	12.49	0.08	3.82	3.84	140.72	8.94	1.04	5.82	0.96	44.72	27.30	1.77	7.82	2.00	73.95	60.48	2.18	9.82	3.40	83.01	87.41	2.62
1.84	2.88	136.33	12.98	0.10	3.84	3.87	140.96	9.00	1.04	5.84	1.04	45.08	27.73	1.77	7.84	1.94	71.24	60.11	2.18	9.84	3.04	103.03	83.31	2.63
1.86	2.93	132.07	13.28	0.09	3.86	3.95	140.26	9.18	1.06	5.86	1.11	40.06	28.22	1.78	7.86	1.70	62.81	57.73	2.19	9.86	3.15	116.48	92.43	2.63
1.88	3.03	128.14	13.47	0.09	3.88	3.90	136.55	8.94	1.07	5.88	1.14	37.42	28.16	1.77	7.88	1.57	57.24	55.89	2.19	9.88	3.40	105.98	96.84	2.62
1.90	3.15	128.30	13.28	0.10	3.90	3.96	137.46	9.06	1.08	5.90	1.12	38.36	27.67	1.77	7.90	1.51	50.60	56.44	2.19	9.90	3.54	108.20	98.68	2.63
1.92	3.18	130.79	13.90	0.11	3.92	3.77	135.70	8.14	1.09	5.92	1.08	39.34	26.93	1.78	7.92	1.55	40.98	57.30	2.21	9.92	3.58	99.71	98.25	2.62
1.94	3.23	133.84	13.96	0.12	3.94	3.37	136.86	6.06	1.10	5.94	1.04	39.55	26.26	1.77	7.94	1.64	36.05	59.75	2.20	9.94	3.64	89.96	99.96	2.62
1.96	3.46	125.71	13.65	0.11	3.96	3.09	141.03	5.02	1.11	5.96	1.03	42.35	25.71	1.77	7.96	1.71	33.58	61.70	2.20	9.96	3.68	72.44	72.91	2.63
1.98	3.69	126.23	13.28	0.12	3.98	2.85	141.09	4.16	1.12	5.98	1.10	45.79	25.10	1.76	7.98	2.07	45.37	69.97	2.20	9.98	3.61	58.50	70.15	2.64
2.00	3.07	102.28	15.85	0.13	4.00	2.83	111.70	62.62	1.12	6.00	1.15	46.95	26.02	1.76	8.00	1.90	51.40	67.52	2.21	10.00	3.16	46.20	64.76	2.63
2.02	4.20	137.17	26.32	0.14	4.02	2.70	113.92	67.83	1.15	6.02	1.14	47.22	26.51	1.77	8.02	1.64	50.52	64.40	2.23	10.02	2.70	49.28	59.62	2.63
2.04	4.52	148.01	26.63	0.15	4.04	2.58	116.35	70.58	1.17	6.04	1.14	45.85	26.87	1.77	8.04	1.49	41.60	63.11	2.23	10.04	2.16	53.39	53.81	2.63
2.06	4.71	154.58	27.24	0.17	4.06	2.53	118.12	70.89	1.17	6.06	1.13	47.16	26.93	1.78	8.06	1.51	38.43	63.79	2.22	10.06	1.82	56.64	50.93	2.64
2.08	4.85	163.62	28.22	0.17	4.08	2.53	113.74	71.31	1.19	6.08	1.15	48.32	26.81	1.79	8.08	1.51	37.38	64.15	2.23	10.08	1.64	51.83	49.89	2.64
2.10	5.03	171.14	28.40	0.19	4.10	2.55	113.25	71.01	1.20	6.10	1.11	49.41	26.57	1.80	8.10	1.43	37.53	63.97	2.23	10.10	1.49	43.43	50.07	2.65
2.12	5.15	186.05	28.04	0.20	4.12	2.54	111.66	70.15	1.21	6.12	1.12	49.20	26.63	1.80	8.12	1.39	36.59	63.54	2.23	10.12	1.51	39.72	56.32	2.65
2.14	5.28	206.29	27.73	0.21	4.14	2.46	113.43	69.42	1.22	6.14	1.08	50.30	26.44	1.82	8.14	1.35	35.30	63.97	2.24	10.14	1.49	33.83	65.44	2.66
2.16	5.47	226.31	27.24	0.22	4.16	2.46	106.43	68.56	1.23	6.16	1.03	51.45	26.08	1.82	8.16	1.33	28.36	65.07	2.25	10.16	1.47	28.30	68.93	2.65
2.18	5.62	245.72	26.63	0.21	4.18	2.40	101.31	67.70	1.24	6.18	1.00	51.76	25.77	1.83	8.18	1.43	24.54	67.70	2.24	10.18	1.50	29.26	74.25	2.65
2.20	5.76	265.14	26.26	0.23	4.20	2.43	98.94	66.91	1.25	6.20	0.98	49.66	25.65	1.84	8.20	1.52	23.24	70.34	2.25	10.20	1.66	27.01	84.90	2.67
2.22	5.92	283.61	24.61	0.24	4.22	2.40	100.16	66.42	1.26	6.22	0.97	47.74	25.53	1.85	8.22	1.73	22.19	73.89	2.24	10.22	1.80	27.82	90.35	2.67
2.24	6.00	296.32	24.24	0.24	4.24	2.36	100.95	65.50	1.28	6.24	0.95	46.67	25.22	1.86	8.24	1.92	25.50	76.40	2.24	10.24	1.95	29.65	94.94	2.67
2.26	6.04	314.28	22.71	0.27	4.26	2.38	96.90	65.74	1.30	6.26	0.93	44.21	25.04	1.86	8.26	1.92	25.92	75.60	2.25	10.26	1.94	33.68	93.11	2.68
2.28	6.10	319.26	23.02	0.28	4.28	2.40	94.49	65.56	1.31	6.28	0.92	41.28	24.85	1.87	8.28	1.78	25.50	73.40	2.24	10.28	1.70	37.65	87.60	2.68
2.30	6.07	321.11	23.51	0.29	4.30	2.30	98.30	63.54	1.32	6.30	0.91	39.85	24.79	1.89	8.30	1.52	28.99	69.72	2.26	10.30	1.52	42.64	83.07	2.69
2.32	6.13	326.67	22.22	0.29	4.32	2.20	99.73	62.81	1.33	6.32	0.89	37.76	24.67	1.88	8.32	1.43	26.70	69.42	2.25	10.32	1.37	45.44	78.17	2.69
2.34	6.10	334.88	23.20	0.31	4.34	2.20	94.65	62.19	1.34	6.34	0.91	35.53	24.55	1.91	8.34	1.47	26.97	71.19	2.26	10.34	1.26	45.07	79.70	2.70
2.36	6.00	337.01	23.63	0.32	4.36	2.10	93.80	60.85	1.35	6.36	0.86	34.78	24.30	1.93	8.36	1.45	25.20	72.42	2.25	10.36	2.37	43.01	100.15	2.70
2.38	6.09	341.87	23.38	0.33	4.38	2.07	90.87	59.87	1.37	6.38	0.85	33.58	24.85	1.93	8.38	1.36	25.74	71.44	2.26	10.38	3.57	44.07	114.84	2.70
2.40	6.16	342.84	23.45	0.34	4.40	2.05	91.24	59.81	1.36	6.40	0.89	32.82	25.77	1.93	8.40	1.32	25.59	72.11	2.26	10.40	5.37	39.20	129.71	2.69
2.42	6.20	340.88	23.14	0.35	4.42	2.09	86.40	60.54	1.37	6.42	0.95	32.01	26.44	1.94	8.42	1.35	23.84	73.58	2.27	10.42	6.99	39.35	72.66	2.68
2.44	6.18	342.12	21.85	0.36	4.44	2.14	80.56	61.28	1.39	6.44	1.01	31.95	26.93	1.94	8.44	1.53	20.84	91.15	2.28	10.44	6.38	56.00	61.21	2.69
2.46	6.09	337.15	21.79	0.37	4.46	2.13	77.42	61.58	1.41	6.46	1.11	31.50	28.10	1.96	8.46	2.23	21.14	120.29	2.28	10.46	6.40	46.14	56.26	2.68
2.48	6.12	328.05	21.36	0.39	4.48	2.20	73.62	61.64	1.41	6.48	1.15	33.25	28.71	1.96	8.48	2.74	20.75	116.92	2.28	10.48	5.40	46.11	53.20	2.70
2.50	6.14	316.48	21.61	0.40	4.50	2.19	73.93	60.60	1.42	6.50	1.18	33.61	29.20	1.97	8.50	2.80	30.16	108.17	2.30	10.50	4.23	45.60	47.62	2.69

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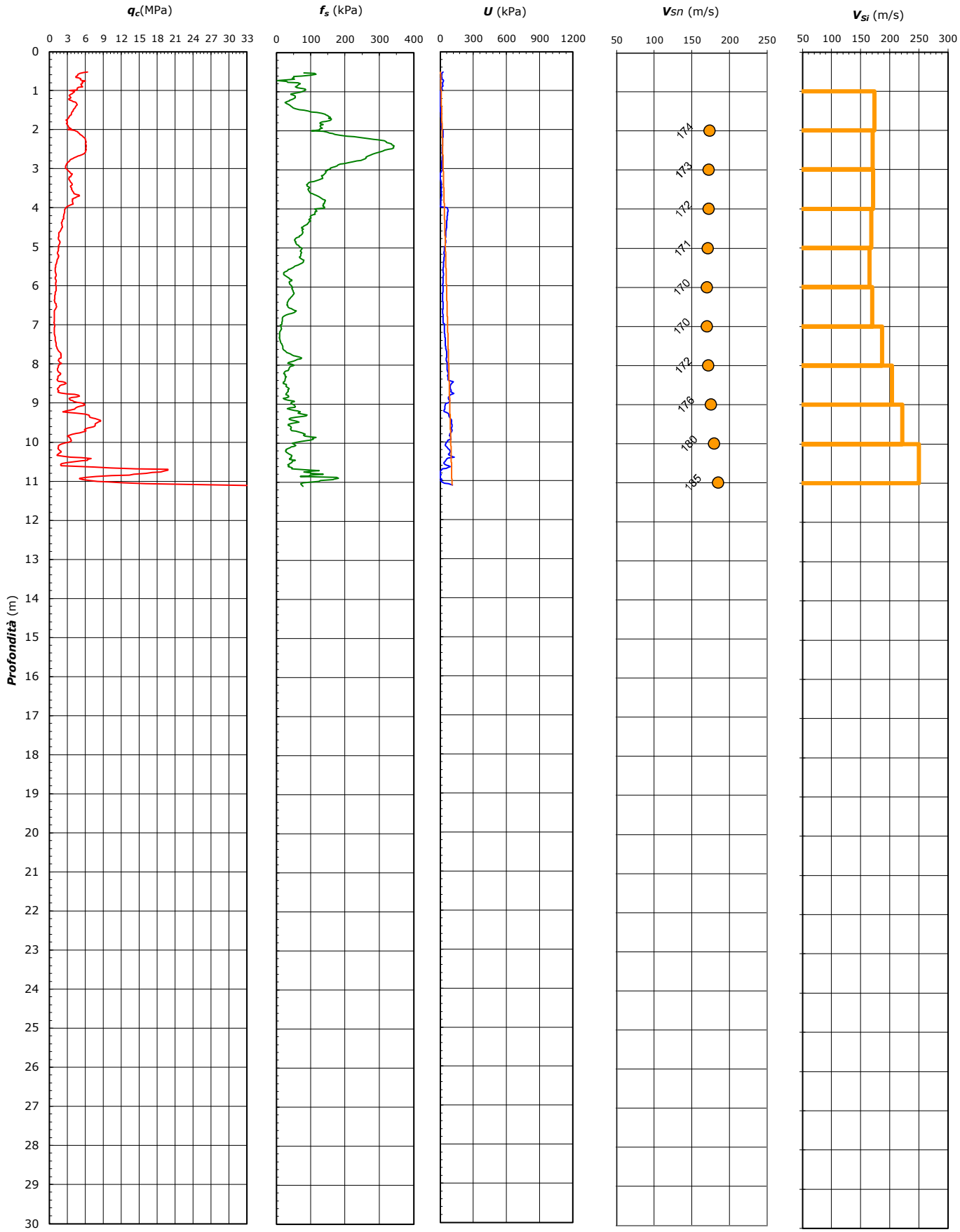
COMMITTENTE:
CANTIERE: Via Sapinia - Forlì (FC)
COMMESSA: C054/24
RDP N°: 211/24
DATA: 09/09/2024

PROVA N°: SCPTU 1
PROF. FALDA (m da p.c.): n.r.
PREFORO (m da p.c.): 0.50
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.52	3.04	40.42	39.97	2.71																				
10.54	2.22	36.42	36.30	2.67																				
10.56	1.95	32.94	36.67	2.66																				
10.58	1.91	37.57	43.65	2.67																				
10.60	2.00	34.50	59.32	2.68																				
10.62	3.80	43.47	75.48	2.69																				
10.64	7.48	46.14	94.70	2.69																				
10.66	10.25	45.78	74.01	2.70																				
10.68	14.46	82.12	56.56	2.70																				
10.70	19.82	124.49	20.51	2.71																				
10.72	19.78	107.05	15.73	2.72																				
10.74	19.10	80.36	8.08	2.72																				
10.76	18.60	99.96	4.29	2.74																				
10.78	17.18	99.84	3.55	2.74																				
10.80	16.18	136.18	1.78	2.75																				
10.82	14.08	98.63	1.10	2.76																				
10.84	13.40	94.62	11.08	2.75																				
10.86	10.46	70.66	1.71	2.76																				
10.88	7.78	175.74	4.59	2.75																				
10.90	6.17	181.12	1.41	2.75																				
10.92	5.14	168.49	0.98	2.76																				
10.94	5.02	165.17	4.65	2.78																				
10.96	5.65	128.60	16.65	2.78																				
10.98	6.77	123.55	14.94	2.78																				
11.00	8.06	93.45	4.84	2.79																				
11.02	9.80	79.60	11.63	2.78																				
11.04	12.23	72.01	22.53	2.79																				
11.06	16.15	72.10	40.59	2.80																				
11.08	24.55	75.14	77.31	2.79																				
11.10	32.95	78.18	114.04	2.80																				

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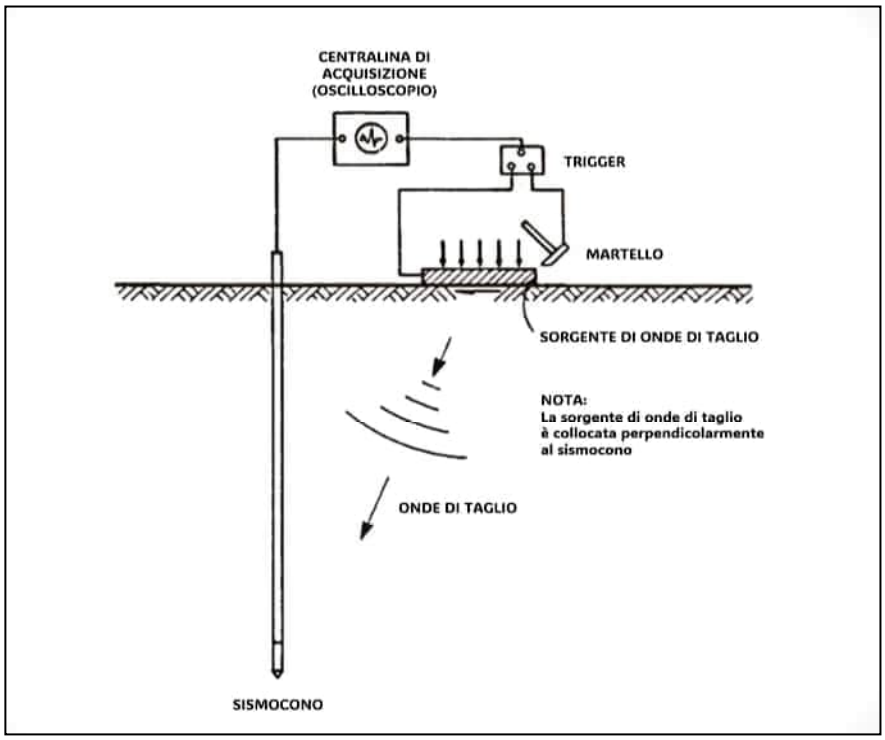
COMMITTENTE:		PROVA N°:	SCPTU 1
CANTIERE:	Via Sapinia - Forlì (FC)	PROF. FALDA (m da p.c.):	n.r.
COMMESSA:	C054/24	PREFORO (m da p.c.):	0.50
RDP N°:	211/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	09/09/2024	OPERATORE:	Zanirato



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COMMITTENTE:		PROVA N°:	SCPTU 1
CANTIERE:	Via Sapinia - Forlì (FC)	PROF. FALDA (m da p.c.):	n.r.
COMMESSA:	C054/24	PREFORO (m da p.c.):	0.50
RDP N°:	211/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	09/09/2024	OPERATORE:	Zanirato

Prova Down Hole ASTM D 7400



Profondità (m)	Ts (ms)	L (m)	Vs (m/s)	Vis (m/s)
1.0	T0	1.00	-	-
2.0	5.74	2.00	174	174
3.0	11.59	3.00	173	171
4.0	17.41	4.00	172	172
5.0	23.34	5.00	171	169
6.0	29.40	6.00	170	165
7.0	35.29	7.00	170	170
8.0	40.64	8.00	172	187
9.0	45.56	9.00	176	204
10.0	50.07	10.00	180	222
11.0	54.07	11.00	185	250

CATEGORIA SOTTOSUOLO
$V_{s,30}$ = m/s

D = Distanza centro trave generatrice ond
Profondità = Profondità punta da piano campagna
Ts = Tempo percorrenza onda di taglio
L = Lunghezza percorso onda di taglio
Vs = Velocità onde di taglio da piano campagna alla profondità indicata = 1.00 m
Vis = Velocità onde di taglio nello strato di terreno compreso fra le due profondità indicate

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COMMITTENTE:		PROVA N°:	SCPTU 1
CANTIERE:	Via Sapinia - Forlì (FC)	PROF. FALDA (m da p.c.):	n.r.
COMMESSA:	C054/24	PREFORO (m da p.c.):	0.50
RDP N°:	211/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	09/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Sapinia - Forlì (FC)

LAT. (WGS 84): 44.226224°
LONG. (WGS 84): 12.024323°



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COMMITTENTE:
CANTIERE: Via Pandolfa - Foro boario - Forlì (FC)
COMMESSA: C054/24
RDP N°: 212/24
DATA: 09/09/2024

PROVA N°: SCPTU 2
PROF. FALDA (m da p.c.): 2.75
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof.	qc	fs	U	incl.	prof.	qc	fs	U	incl.	prof.	qc	fs	U	incl.	prof.	qc	fs	U	incl.	prof.	qc	fs	U	incl.
m	Mpa	kPa	kPa	gradi	m	Mpa	kPa	kPa	gradi	m	Mpa	kPa	kPa	gradi	m	Mpa	kPa	kPa	gradi	m	Mpa	kPa	kPa	gradi
0.02	0.63	20.62	0.31	0.02	2.02	1.86	68.06	22.77	0.84	4.02	1.22	41.82	14.20	1.05	6.02	2.26	100.54	64.34	1.44	8.02	2.22	88.27	45.73	1.93
0.04	0.78	27.56	1.16	0.04	2.04	1.75	68.43	23.38	0.86	4.04	1.24	43.49	12.67	1.06	6.04	2.25	105.23	64.34	1.46	8.04	2.27	90.62	49.03	1.94
0.06	0.80	34.47	1.10	0.15	2.06	1.62	68.71	24.18	0.86	4.06	1.26	45.59	12.55	1.05	6.06	2.30	107.18	64.46	1.45	8.06	2.54	92.50	54.24	1.95
0.08	0.84	41.30	1.10	0.07	2.08	1.56	67.53	24.67	0.86	4.08	1.29	48.11	11.94	1.06	6.08	2.36	108.12	67.15	1.46	8.08	3.47	104.32	57.30	1.96
0.10	0.91	46.62	0.92	0.10	2.10	1.53	64.61	24.91	0.86	4.10	1.28	49.58	11.75	1.07	6.10	2.30	113.69	67.21	1.46	8.10	3.32	103.26	28.59	1.95
0.12	0.97	52.61	0.80	0.17	2.12	1.54	61.05	24.85	0.87	4.12	1.41	53.13	8.02	1.07	6.12	2.36	110.19	65.87	1.47	8.12	3.04	109.29	22.34	1.95
0.14	1.03	56.05	0.37	0.13	2.14	1.70	49.04	30.42	0.88	4.14	1.43	53.31	7.96	1.08	6.14	2.22	111.26	62.38	1.47	8.14	2.66	109.25	20.08	1.95
0.16	1.27	30.38	9.06	0.12	2.16	1.65	51.99	31.28	0.88	4.16	1.42	54.10	7.16	1.07	6.16	2.16	108.09	61.52	1.48	8.16	2.33	93.25	18.85	1.95
0.18	1.86	32.09	6.86	0.06	2.18	1.66	51.99	31.65	0.86	4.18	1.43	54.74	6.73	1.08	6.18	2.08	106.48	61.15	1.48	8.18	2.07	74.40	18.43	1.97
0.20	2.27	37.39	6.00	0.09	2.20	1.65	52.48	31.83	0.87	4.20	1.41	55.96	6.73	1.08	6.20	2.00	104.23	60.36	1.48	8.20	1.94	66.61	18.79	1.96
0.22	2.82	39.61	4.77	0.12	2.22	1.61	53.49	32.08	0.87	4.22	1.39	57.57	6.24	1.09	6.22	1.93	100.18	59.99	1.48	8.22	1.87	65.24	20.81	1.97
0.24	2.95	47.95	4.59	0.11	2.24	1.60	54.73	32.14	0.88	4.24	1.37	59.43	5.33	1.10	6.24	1.90	98.17	60.30	1.49	8.24	1.86	68.56	22.53	1.98
0.26	2.88	65.39	5.39	0.13	2.26	1.58	55.40	32.26	0.89	4.26	1.35	60.13	4.22	1.10	6.26	1.88	94.60	61.28	1.49	8.26	1.83	73.37	22.89	1.98
0.28	2.78	77.75	6.00	0.14	2.28	1.52	55.40	32.63	0.90	4.28	1.39	57.91	3.67	1.10	6.28	1.85	90.16	62.13	1.50	8.28	1.76	75.07	23.02	1.99
0.30	2.84	85.06	5.94	0.15	2.30	1.45	54.03	32.93	0.91	4.30	1.41	55.99	2.39	1.10	6.30	1.84	84.68	62.07	1.49	8.30	1.61	69.68	23.26	1.99
0.32	2.91	87.52	5.51	0.12	2.32	1.36	53.70	33.36	0.92	4.32	1.45	57.45	1.22	1.10	6.32	1.80	80.39	62.01	1.50	8.32	1.55	65.12	23.57	1.99
0.34	2.73	92.76	6.55	0.17	2.34	1.29	53.24	33.67	0.92	4.34	1.47	55.36	0.92	1.12	6.34	1.79	77.83	61.95	1.51	8.34	1.50	58.54	24.00	2.00
0.36	2.94	93.34	6.92	0.17	2.36	1.25	52.51	33.97	0.93	4.36	1.46	54.05	0.80	1.12	6.36	1.77	74.39	62.01	1.51	8.36	1.43	49.71	25.34	1.99
0.38	2.78	86.82	7.22	0.17	2.38	1.19	52.39	34.34	0.94	4.38	1.49	51.49	0.67	1.13	6.38	1.74	72.44	62.93	1.52	8.38	1.48	45.27	29.69	1.99
0.40	2.74	71.79	6.79	0.20	2.40	1.15	50.63	34.52	0.93	4.40	1.48	51.79	2.08	1.13	6.40	1.74	70.22	63.36	1.52	8.40	1.58	45.88	32.57	2.00
0.42	2.85	60.07	7.10	0.18	2.42	1.11	47.34	34.22	0.93	4.42	1.49	53.13	3.43	1.13	6.42	1.80	67.38	63.97	1.53	8.42	1.78	48.98	35.38	1.99
0.44	2.99	57.51	7.16	0.21	2.44	1.06	44.94	33.79	0.92	4.44	1.45	54.66	4.41	1.13	6.44	1.87	65.80	64.70	1.53	8.44	1.95	52.63	36.79	2.01
0.46	3.61	54.22	4.47	0.20	2.46	1.04	42.32	33.79	0.92	4.46	1.44	55.05	5.45	1.13	6.46	1.92	65.01	65.93	1.54	8.46	2.08	52.63	37.40	2.02
0.48	5.80	38.97	2.26	0.23	2.48	1.08	39.08	33.73	0.92	4.48	1.47	55.05	6.43	1.14	6.48	1.95	64.28	67.52	1.55	8.48	2.09	51.60	36.42	2.03
0.50	11.12	38.97	13.96	0.21	2.50	1.11	35.65	33.73	0.92	4.50	1.48	55.39	8.02	1.15	6.50	2.00	62.27	68.19	1.55	8.50	1.92	48.19	34.28	2.03
0.52	18.93	42.80	25.22	0.26	2.52	1.12	33.40	33.67	0.92	4.52	1.47	55.66	9.30	1.15	6.52	2.01	61.17	68.62	1.55	8.52	1.74	42.08	32.02	2.03
0.54	22.08	36.65	26.69	0.26	2.54	1.15	30.63	33.12	0.94	4.54	1.50	55.75	9.49	1.16	6.54	2.04	61.26	69.48	1.56	8.54	1.57	36.85	30.18	2.04
0.56	24.17	63.07	30.06	0.28	2.56	1.15	28.95	32.87	0.94	4.56	1.53	54.99	10.10	1.16	6.56	2.11	62.45	69.23	1.56	8.56	1.55	34.99	30.42	2.05
0.58	23.68	58.96	24.55	0.29	2.58	1.14	29.53	31.89	0.93	4.58	1.55	54.53	11.88	1.17	6.58	2.16	63.24	71.25	1.56	8.58	1.53	40.37	31.77	2.06
0.60	23.53	62.73	25.77	0.30	2.60	1.12	29.86	31.77	0.92	4.60	1.58	55.51	13.96	1.16	6.60	2.09	59.07	80.68	1.57	8.60	1.55	48.65	32.20	2.07
0.62	23.96	77.55	31.46	0.30	2.62	1.09	31.04	32.38	0.93	4.62	1.62	55.72	14.02	1.18	6.62	2.02	59.41	81.97	1.58	8.62	1.47	54.49	32.38	2.07
0.64	22.92	70.40	27.85	0.30	2.64	1.08	32.60	32.08	0.93	4.64	1.68	55.32	14.45	1.18	6.64	1.87	59.47	77.74	1.58	8.64	1.45	58.08	33.42	2.08
0.66	20.94	123.05	20.38	0.33	2.66	1.15	33.00	30.85	0.94	4.66	1.74	56.02	13.65	1.18	6.66	1.62	57.52	73.70	1.59	8.66	1.40	54.43	33.97	2.09
0.68	19.19	193.29	20.87	0.32	2.68	1.33	33.84	30.36	0.95	4.68	1.75	59.16	13.16	1.19	6.68	1.43	52.01	73.46	1.60	8.68	1.33	48.04	34.40	2.09
0.70	17.11	252.45	17.32	0.33	2.70	1.43	34.84	30.24	0.96	4.70	1.73	63.24	13.16	1.19	6.70	1.34	46.62	73.46	1.60	8.70	1.35	43.81	35.50	2.10
0.72	15.24	279.44	16.71	0.34	2.72	1.53	34.48	29.81	0.94	4.72	1.71	66.04	13.83	1.20	6.72	1.25	38.97	74.01	1.60	8.72	1.30	45.58	35.75	2.11
0.74	13.84	359.29	21.30	0.35	2.74	1.58	34.09	30.97	0.94	4.74	1.70	68.62	13.83	1.20	6.74	1.18	32.18	74.62	1.61	8.74	1.26	42.51	35.93	2.12
0.76	12.64	346.65	20.38	0.36	2.76	1.64	39.02	31.83	0.94	4.76	1.73	69.11	13.65	1.20	6.76	1.14	29.65	74.93	1.62	8.76	1.26	43.24	36.30	2.13
0.78	13.28	302.30	24.42	0.36	2.78	1.64	43.40	32.38	0.94	4.78	1.74	71.85	13.04	1.20	6.78	1.12	26.82	74.93	1.62	8.78	1.24	43.60	36.97	2.14
0.80	12.64	242.39	22.83	0.36	2.80	1.64	46.23	32.87	0.93	4.80	1.70	73.92	12.12	1.21	6.80	1.09	24.24	74.56	1.64	8.80	1.21	42.33	37.46	2.14
0.82	12.35	200.35	28.16	0.38	2.82	1.61	48.97	33.48	0.94	4.82	1.64	75.96	11.81	1.22	6.82	1.06	22.77	73.15	1.65	8.82	1.20	38.84	37.71	2.14
0.84	11.43	206.73	21.79	0.42	2.84	1.49	53.27	34.34	0.96	4.84	1.60	77.51	11.51	1.21	6.84	0.99	21.87	73.15	1.67	8.84	1.19	37.85	38.20	2.16
0.86	10.35	224.95	21.98	0.41	2.86	1.36	56.31	34.59	0.95	4.86	1.58	76.29	12.06	1.22	6.86	0.96	20.63	73.21	1.66	8.86	1.22	37.04	38.93	2.17
0.88	9.51	213.19	21.43	0.43	2.88	1.29	53.70	33.42	0.97	4.88	1.60	74.43	12.30	1.23	6.88	0.94	18.77	73.58	1.67	8.88	1.21	36.02	39.24	2.17
0.90	8.80	224.28	19.34	0.44	2.90	1.23	51.94	31.46	0.97	4.90	1.62	71.11	12.37	1.23	6.90	0.94	17.66	73.76	1.68	8.90	1.18	34.10	39.67	2.17
0.92	7.98	223.66	16.41	0.43	2.92	1.22	49.53	28.71	0.95	4.92	1.63	65.45	13.10	1.23	6.92	0.96	16.22	75.36	1.69	8.92	1.18	33.37	39.85	2.17
0.94	7.56	199.89	17.20	0.46	2.94	1.23	46.77	26.75	0.95	4.94	1.65	59.61	13.47	1.24	6.94	1.05	15.98	78.17	1.72	8.94	1.17	32.11	40.40	2.17
0.96	7.16	183.58	17.94	0.46	2.96	1.21	45.25	25.95	0.95	4.96	1.69	56.60	13.53	1.24	6.96	1.36	16.70	82.70	1.73	8.96	1.18	32.20	41.20	2.18
0.98	6.81	172.51	17.38	0.48	2.98	1.22	41.85	24.85	0.88	4.98	1.72	55.32	13.96	1.24	6.98	1.92	16.98	89.74	1.74	8.98	1.20	34.70	41.87	2.19
1.00	6.43	165.64	16.04	0.47	3.00	1.22	39.41	23.93	0.90	5.00	1.72	56.02	14.69	1.24	7.00	2.52	18.03	94.15	1.75	9.00	1.21	34.76	42.54	2.20
1.02	6.00	160.06	14.75	0.63	3.02	1.22	39.87	23.81	0.89	5.02	1.71	56.17	15.49	1.25	7.02	3.13	24.11	93.17	1.76	9.02	1.27	36.15	42.73	2.20
1.04	5.65	157.15	14.08	0.63	3.04	1.21	40.53	21.43	0.91	5.04	1.72	56.60	16.10	1.25	7.04	3.52	31.95	43.40	1.75	9.04	1.25	38.01	42.36	2.21
1.06	5.44	147.04	13.83	0.66	3.06	1.21	40.83	20.69	0.91	5.06	1.73	56.90	16.77	1.25	7.06	3.86	41.49	8.02	1.75	9.06	1.19	36.96	41.56	2.21
1.08	5.32	133.68	13.77	0.65	3.08	1.19	41.14	21.00	0.92	5.08	1.73	57.72	16.59	1.26	7.08	4.15	50.42	7.53	1.76	9.08	1.45	43.42	69.72	2.22
1.10	5.15	122.75	13.41	0.65	3.10	1.17	42.04	21.55	0.94	5.10	1.71	58.39	16.53	1.26	7.10	4.43	43.63	20.32	1.77	9.10	1.37	47.13	64.95	2.23
1.12	4.99	111.91	12.86	0.65	3.12	1.25	60.34	28.95	0.91	5.12	1.80	64.65	20.69	1.26	7.12	4.79	41.21	18.98	1.77	9.12	1.34	46.19	65.50	2.23
1.14	4.80	99.05	0.86	0.67	3.14	1.21	56.72	32.81	0.93	5.14	1.78	65.78	20.02	1.26	7.14	5.02	38.90	16.47	1.78	9.14	1.34	47.98	67.58	2.24
1.16	4.58	88.58	0.92	0.68	3.16	1.14	57.27	32.38	0.95	5.16	1.75	67.18	20.63	1.26	7.16	5.24	38.69	15.00	1.79	9.16	1.44	48.47	68.74	2.26
1.18	4.36	80.79	2.33	0.68	3.18	1.13	56.45	32.08	0.94	5.18	1.77	67.24	21.85	1.27	7.18	5.38	42.18	14.26	1.79	9.18	1.43	49.99	67.46	2.27
1.20	4.13	77.87	3.98	0.68	3.20	1.12	53.40	31.10	0.95	5.20	1.77	65.41	21.98	1.27	7.20	5.40	44.39	13.22	1.80	9.20	1.39	49.17	65.32	2.28
1.22	3.91	75.19	5.26	0.70	3.22	1.13	50.54	30.42	0.95	5.22	1.79	64.74	22.10	1.28	7.22	5.36	48.93	11.69	1.81	9.22	1.40	45.61	63.17	2.28
1.24	3.71	73.36	6.31	0.71	3.24	1.14	47.50	29.81	0.97	5.24	1.78	65.68	22.77	1.28	7.24	5.34	51.97	11.57	1.81	9.24	1.69	45.67	68.93	2.29
1.26	3.48	69.74	7.47	0.70	3.26	1.17	45.09	29.20	0.97	5.26	1.77	64.65	23.02	1.29	7.26	5.28	54.74	11.63	1.81	9.26	1.99	45.18	74.74	2.29
1.28	3.29	67.91	8.45	0.73	3.28	1.17	43.93	28.95	0.96	5.28	1.76	63.58	23.32	1.29	7.28	5.25	55.71	12.43	1.82	9.28	2.36	46.28	72.23	2.30
1.30	3.16	64.26	8.94	0.72	3.30	1.18	43.44	28.65	0.97	5.30	1.81	62.82	24.06	1.29	7.30	5.29	53.73	13.47	1.82	9.30	2.26	51.36	52.64	2.32
1.32	3.16	59.06	9.30	0.75	3.32	1.16	43.05	28.40	0.97	5.32	1.85	62.85	24.85	1.29	7.32	5.31	52.57	14.02	1.83	9.32	1.91	46.18	48.48	2.33
1.34	3.15	55.71	9.49	0.72	3.34	1.19	43.63	28.28	0.98	5.34	1.86	63.34	25.53	1.28	7.34	5.36	52.82	15.24	1.84	9.34	1.56	37.18	45.18	2.34
1.36	3.18	53.09	9.61	0.76	3.36	1.18	45.03	27.85	0.99	5.36	1.93	63.09	25.47	1.29	7.36	5.37	52.39	16.22	1.84	9.36	1.31	35.41	43.16	2.35
1.38	3.08	52.33	10.35	0.75	3.38	1.19	44.48	27.36	1.00	5.38	1.95	66.14	25.77	1.30	7.38	5.41	45.69	17.14	1.85	9.38	1.21	38.26	43.10	2.35
1.40	2.96	52.24	10.77	0.75	3.40	1.19	45.42	27.00	1.00	5.40	2.00	67.99	27.30	1.32	7.40	5.58	41.17	19.04	1.85	9.40	1.12	40.34	43.16	2.36
1.42	2.73	54.34	11.45	0.78	3.42	1.18	47.03	26.44	1.00	5.42	2.08	70.37	28.46	1.32	7.42	5.78	43.37	20.63	1.85	9.42	1.14	39.44	47.44	2.37
1.44	2.39	58.76	12.37	0.78	3.44	1.14	48.22	26.57	1.01	5.44	2.00	76.76	27.91	1.32	7.44	5.94	47.48	21.79	1.86	9.44	1.12	38.93	48.11	2.38
1.46	2.27	60.98	12.79	0.78	3.46	1.12	49.31	26.26	1.01	5.46	1.94	80.53	30.24	1.33	7.46	6.27	50.04	24.00	1.87	9.46	1.09	36.82	51.24	2.38
1.48	2.36	64.36	12.49	0.79	3.48	1.10	50.11	25.95	1.01	5.48	1.97	79.95	30.67	1.34	7.48	6.56	51.46	24.49	1.88	9.48	1.14	33.60	54.42	2.39
1.50	2.39	65.30	12.86	0.77	3.50	1.07	50.87	25.40	1.02	5.50	1.98	79.22	31.77	1.34	7.50	6.43	53.04	22.77	1.88	9.50	1.17	30.23	57.73	2.39
1.52	2.26	63.91	14.14	0.80	3.52	1.07	50.93	25.22	1.02	5.52	1.96	77.06	31.28	1.34	7.52	5.58	62.20	18.73	1.88	9.52	1.16	27.77	58.58	2.39
1.54	2.06	62.20	15.00	0.79	3.54	1.05	49.83	24.55	1.03	5.54	1.96	77.60	31.53	1.35	7.54	4.74	64.12	14.02	1.88	9.54	1.11	27.59	58.34	2.40
1.56	2.06	60.04	14.81	0.79	3.56	1.05	48.19	24.49	1.02	5.56	1.89	77.33	31.10	1.34	7.56	4.30	71.54	13.04	1.89	9.56	0.98	29.15	56.93	2.41
1.58	1.99	60.41	15.06	0.81	3.58	1.04	46.21	24.36	1.03	5.58	1.85	77.36	32.50	1.35	7.58	4.75	79.24	18.06	1.89	9.58	0.92	29.78	56.56	2.43
1.60	1.93	60.20	15.43	0.80	3.60	1.03	44.78	23.45	1.02	5.60	1.83	74.41	35.38	1.36	7.60	5.40	94.97	25.16	1.89	9.60	0.88	31.68	56.68	2.44
1.62	1.85	60.08	15.79	0.82	3.62	1.02	42.74	22.59	1.04	5.62	1.87	71.30	36.48	1.37	7.62	5.81	110.19	28.04	1.89	9.62	0.84	31.92	57.42	2.45
1.64	1.69	59.41	16.41	0.81	3.64	1.01	40.21	22.40	1.05	5.64	1.90	70.42	38.01	1.38	7.64	6.00	118.59	30.42	1.89	9.64	0.85	32.85	58.89	2.47
1.66	1.75	58.44	16.53	0.82	3.66	1.03	38.95	22.16	1.04	5.66	1.96	66.55	39.97	1.38	7.66	5.99	118.43	31.22	1.90	9.66	0.87	33.33	59.99	2.47
1.68	1.75	55.52	16.77	0.84	3.68	1.03	37.27	21.73	1.03	5.68	2.00	63.93	42.67	1.38	7.68	5.30	108.20	28.34	1.91	9.68	0.86	34.95	60.66	2.48
1.70	1.78	52.67	17.20	0.81	3.70	1.04	35.85	21.43	1.07	5.70	1.92	61.89	43.77	1.38	7.70	4.21	93.92	22.59	1.92	9.70	0.87	35.83	61.77	2.50
1.72	1.91	48.38	17.14	0.83	3.72	1.04	34.80	20.94	1.06	5.72	1.81	62.65	45.48	1.38	7.72	3.58	97.82	19.89	1.93	9.72	0.87	36.10	63.30	2.50
1.74	1.91	48.23	17.51	0.82	3.74	1.04	35.31	21.00	1.06	5.74	1.80	62.17	51.24	1.39	7.74	3.19	95.93	19.04	1.93	9.74	0.92	34.11	64.03	2.51
1.76	1.91	48.29	17.81	0.85	3.76	1.03	35.80	21.24	1.07	5.76	1.80	60.58	56.32	1.39	7.76	3.00	95.68	22.47	1.94	9.76	0.91	34.71	64.76	2.52
1.78	1.89	49.79	18.36	0.84	3.78	1.03	37.03	20.81	1.08	5.78	1.84	58.73	57.54	1.39	7.78	2.91	102.95	34.10	1.94	9.78	0.97	33.30	65.81	2.53
1.80	1.91	50.34	18.55	0.83	3.80	1.03	38.17	20.45	1.06	5.80	1.95	57.60	60.17	1.39	7.80	3.06	112.38	55.22	1.95	9.80	0.99	32.04	66.42	2.54
1.82	1.96	51.96	18.73	0.86	3.82	1.03	39.38	20.20	1.07	5.82	2.04	55.01	61.89	1.40	7.82	3.11	111.07	54.17	1.95	9.82	1.05	30.17	67.34	2.55
1.84	1.99	56.28	18.98	0.86	3.84	1.05	39.92	19.89	1.09	5.84	2.10	52.43	62.32	1.40	7.84	3.29	115.42	55.71	1.96	9.84	1.04	32.61	67.40	2.56
1.86	2.04	59.48	19.40	0.87	3.86	1.08	40.07	19.22	1.08	5.86	2.18	53.37	63.11	1.41	7.86	3.24	107.68	52.22	1.96	9.86	1.05	35.95	67.34	2.58
1.88	2.11	60.73	19.65	0.87	3.88	1.09	39.38	18.55	1.09	5.88	2.26	55.01	63.23	1.41	7.88	3.24	98.55	53.50	1.96	9.88	1.04	40.01	66.79	2.58
1.90	2.14	61.25	19.83	0.87	3.90	1.11	39.29	18.18	1.09	5.90	2.34	58.12	63.66	1.41	7.90	3.52	101.77	57.97	1.96	9.90	1.06	43.05	67.09	2.60
1.92	2.17	62.26	19.53	0.88	3.92	1.10	38.99	17.94	1.09	5.92	2.34	63.05	63.17	1.42	7.92	3.80	112.06	59.44	1.96	9.92	1.09	45.66	67.40	2.57
1.94	2.14	64.18	20.26	0.88	3.94	1.11	39.14	17.38	1.10	5.94	2.32	69.83	63.79	1.42	7.94	3.45	111.87	54.11	1.93	9.94	1.13	49.10	67.64	2.58
1.96	2.11	65.22	20.94	0.89	3.96	1.13	39.71	15.79	1.10	5.96	2.30	80.30	63.05	1.43	7.96	2.97	104.66	49.40	1.93	9.96	1.16	50.50	67.27	2.59
1.98	2.05	66.99	21.61	0.90	3.98	1.20	39.08	15.06	1.05	5.98	2.29	87.49	62.26	1.43	7.98	2.53	76.93	45.85	1.93	9.98	1.13	50.66	67.40	2.59
2.00	1.94	67.24	22.34	0.85	4.00	1.21	39.74	14.39	1.05	6.00	2.26	95.98	61.46	1.44	8.00	2.34	78.20	44.50	1.93	10.00	1.15	49.32	66.66	2.60

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COMMITTENTE:
CANTIERE: Via Pandolfa - Foro boario - Forlì (FC)
COMMESSA: C054/24
RDP N°: 212/24
DATA: 09/09/2024

PROVA N°: SCPTU 2
PROF. FALDA (m da p.c.): 2.75
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	1.14	51.78	65.93	2.61	12.02	1.04	48.49	117.41	3.56	14.02	1.38	25.12	359.33	4.43	16.02	1.31	32.69	278.53	5.13	18.02	2.75	22.88	673.05	5.85
10.04	1.14	50.68	65.74	2.62	12.04	0.98	46.79	115.70	3.56	14.04	1.44	28.91	356.21	4.43	16.04	1.28	29.56	297.20	5.14	18.04	3.60	58.41	146.67	5.86
10.06	1.18	51.14	67.21	2.64	12.06	0.99	39.22	134.37	3.58	14.06	1.43	38.28	367.90	4.44	16.06	1.50	45.27	322.60	5.15	18.06	3.65	56.03	102.66	5.87
10.08	1.26	53.60	71.87	2.65	12.08	1.02	40.66	130.20	3.59	14.08	1.56	42.34	369.43	4.45	16.08	1.36	42.14	323.76	5.15	18.08	2.96	58.47	77.19	5.87
10.10	1.28	54.60	71.62	2.65	12.10	0.99	37.35	129.65	3.60	14.10	1.64	46.17	370.71	4.47	16.10	1.30	39.17	333.80	5.15	18.10	2.26	49.95	70.40	5.88
10.12	1.32	54.60	70.64	2.66	12.12	1.09	33.21	132.71	3.61	14.12	1.70	50.04	366.00	4.48	16.12	1.37	36.97	352.78	5.15	18.12	1.73	41.44	80.25	5.88
10.14	1.29	53.90	70.40	2.66	12.14	1.11	31.73	133.69	3.63	14.14	1.75	56.12	366.49	4.48	16.14	1.42	34.60	372.37	5.15	18.14	1.57	31.55	208.25	5.89
10.16	1.31	54.08	70.15	2.67	12.16	1.08	31.04	132.28	3.64	14.16	1.80	60.32	363.19	4.49	16.16	1.41	31.71	379.47	5.15	18.16	1.86	25.38	422.56	5.89
10.18	1.27	55.45	70.27	2.69	12.18	0.99	30.08	129.65	3.65	14.18	1.82	65.71	354.37	4.49	16.18	1.39	30.09	378.06	5.15	18.18	2.08	26.29	416.69	5.91
10.20	1.30	55.72	71.99	2.69	12.20	0.91	28.73	127.20	3.65	14.20	1.84	73.89	352.96	4.49	16.20	1.35	31.44	379.22	5.15	18.20	1.99	32.15	389.08	5.91
10.22	1.28	55.72	73.52	2.70	12.22	0.88	24.40	128.86	3.67	14.22	1.86	77.67	355.41	4.50	16.22	1.50	31.02	394.83	5.17	18.22	1.75	33.92	365.39	5.91
10.24	1.26	52.25	74.25	2.72	12.24	0.88	21.33	130.94	3.68	14.24	1.91	79.43	357.19	4.50	16.24	2.71	36.22	450.23	5.17	18.24	1.48	29.32	397.47	5.92
10.26	1.26	49.18	74.44	2.73	12.26	0.88	18.77	133.57	3.69	14.26	1.98	80.92	364.10	4.51	16.26	3.73	38.14	182.48	5.18	18.26	1.43	27.01	441.05	5.93
10.28	1.22	46.47	74.07	2.73	12.28	0.97	17.27	137.73	3.69	14.28	2.02	83.69	367.59	4.51	16.28	4.29	43.93	114.96	5.19	18.28	1.45	28.15	471.11	5.93
10.30	1.16	46.74	75.05	2.74	12.30	1.03	16.40	140.85	3.70	14.30	2.11	84.78	370.84	4.52	16.30	4.41	47.37	108.90	5.19	18.30	1.55	30.58	500.49	5.94
10.32	1.19	43.88	76.27	2.76	12.32	1.11	16.34	143.30	3.71	14.32	2.11	83.44	371.39	4.52	16.32	4.23	39.41	107.19	5.20	18.32	1.77	32.75	523.38	5.96
10.34	1.23	41.49	78.84	2.76	12.34	1.15	16.40	144.77	3.70	14.34	2.07	81.71	366.98	4.53	16.34	4.10	29.67	102.66	5.21	18.34	1.92	31.24	515.92	5.96
10.36	1.24	41.67	82.64	2.77	12.37	1.14	16.19	144.47	3.71	14.36	2.03	84.57	359.27	4.54	16.36	4.03	33.18	105.60	5.22	18.36	1.97	29.50	483.72	5.96
10.38	1.26	39.90	83.68	2.78	12.38	1.12	18.44	144.40	3.71	14.38	1.97	91.41	352.23	4.56	16.38	3.98	35.47	106.82	5.24	18.38	1.80	26.46	442.89	5.97
10.40	1.33	39.12	85.58	2.78	12.40	1.08	21.84	144.28	3.72	14.40	1.99	94.24	354.62	4.59	16.40	3.56	37.12	102.41	5.24	18.40	1.55	22.07	450.42	5.97
10.42	1.35	38.54	85.82	2.80	12.42	1.05	24.40	144.10	3.74	14.42	1.95	96.06	358.10	4.58	16.42	3.03	39.83	96.96	5.23	18.42	2.43	20.33	636.08	5.97
10.44	1.36	40.80	85.33	2.81	12.44	0.98	28.07	143.92	3.75	14.44	1.99	95.76	357.13	4.59	16.44	2.58	43.99	93.05	5.22	18.44	4.22	23.51	701.70	5.97
10.46	1.33	44.85	84.78	2.81	12.46	0.96	28.55	144.83	3.76	14.46	2.03	94.90	351.68	4.60	16.46	2.34	48.83	91.15	5.23	18.46	5.58	24.96	192.52	5.97
10.48	1.29	49.26	84.23	2.83	12.48	1.03	29.72	149.00	3.77	14.48	2.04	94.99	350.09	4.60	16.48	2.18	55.80	123.35	5.24	18.48	5.65	30.13	93.96	5.98
10.50	1.28	52.03	84.41	2.83	12.50	1.41	29.81	160.93	3.78	14.50	2.00	91.03	347.88	4.61	16.50	2.33	45.36	127.69	5.24	18.50	5.11	30.22	79.03	5.98
10.52	1.29	54.65	85.27	2.84	12.52	2.10	29.75	176.79	3.78	14.52	1.96	89.48	343.11	4.62	16.52	3.11	51.08	152.98	5.25	18.52	4.63	32.20	78.29	5.98
10.54	1.30	55.08	85.58	2.84	12.54	2.87	28.49	178.93	3.79	14.54	1.88	88.90	337.97	4.62	16.54	4.82	56.04	160.75	5.26	18.54	3.82	35.15	71.19	5.97
10.56	1.27	54.16	83.68	2.86	12.56	2.71	29.63	130.63	3.80	14.56	1.85	89.23	336.80	4.64	16.56	5.75	62.13	164.24	5.26	18.56	3.09	37.43	65.87	5.98
10.58	1.25	53.10	82.09	2.87	12.58	2.10	25.18	123.84	3.81	14.58	1.83	90.87	339.13	4.64	16.58	6.50	62.34	162.95	5.26	18.58	2.38	42.54	74.99	5.97
10.60	1.19	54.71	80.93	2.88	12.60	1.62	30.27	119.25	3.81	14.60	1.82	90.62	342.92	4.65	16.60	6.95	56.04	119.31	5.27	18.60	1.97	46.74	178.87	5.98
10.62	1.18	56.35	80.74	2.89	12.62	1.47	33.81	119.74	3.82	14.62	1.82	88.43	348.80	4.66	16.62	6.85	42.19	115.51	5.26	18.62	1.72	50.39	420.48	5.98
10.64	1.17	57.81	80.37	2.90	12.64	1.37	33.63	122.00	3.83	14.64	1.87	85.90	353.70	4.67	16.64	6.03	31.16	108.66	5.27	18.64	1.72	45.61	627.51	5.98
10.66	1.10	62.65	80.31	2.90	12.66	1.32	33.27	133.26	3.84	14.66	1.91	82.49	357.98	4.68	16.66	5.42	25.27	106.08	5.29	18.66	2.28	46.31	727.29	5.98
10.68	1.11	64.99	80.93	2.92	12.68	1.33	32.34	140.67	3.84	14.68	1.95	79.41	355.11	4.69	16.68	5.36	30.98	115.94	5.31	18.68	4.82	42.42	780.61	5.99
10.70	1.16	63.59	81.23	2.92	12.70	1.36	29.97	148.38	3.85	14.70	1.88	79.08	353.94	4.70	16.70	5.92	37.68	133.33	5.32	18.70	8.64	48.14	451.58	5.99
10.72	1.19	62.71	82.64	2.92	12.72	1.41	27.53	183.70	3.86	14.72	1.82	77.04	348.00	4.70	16.72	6.27	46.44	141.10	5.31	18.72	8.63	46.89	213.09	5.99
10.74	1.17	59.54	81.72	2.92	12.74	1.50	24.07	187.01	3.87	14.74	1.81	79.62	347.39	4.72	16.74	6.69	56.03	102.29	5.33	18.74	6.69	41.84	134.92	6.00
10.76	1.07	57.44	79.88	2.92	12.76	1.55	22.99	188.85	3.88	14.76	1.75	83.73	344.64	4.72	16.76	5.96	61.05	95.31	5.33	18.76	4.81	33.85	113.92	6.00
10.78	1.07	54.64	79.40	2.92	12.78	1.65	22.12	191.72	3.89	14.78	1.68	84.88	339.25	4.73	16.78	4.36	58.15	84.17	5.34	18.78	3.62	37.33	114.53	6.00
10.80	1.05	54.58	79.40	2.93	12.80	1.73	24.79	195.64	3.90	14.80	1.55	86.98	330.37	4.74	16.80	3.43	57.30	83.44	5.34	18.80	3.11	60.49	141.53	6.00
10.82	1.03	56.31	80.44	2.94	12.82	1.77	25.79	198.33	3.91	14.82	1.45	87.35	326.15	4.76	16.82	2.81	66.15	85.09	5.36	18.82	2.67	94.70	156.34	6.01
10.84	0.97	54.34	80.37	2.94	12.84	1.81	27.56	199.80	3.92	14.84	1.40	86.95	323.52	4.77	16.84	2.21	86.06	87.11	5.38	18.84	2.32	111.68	179.42	6.01
10.86	0.95	49.95	80.01	2.95	12.86	1.83	31.02	201.27	3.92	14.86	1.34	85.03	322.60	4.78	16.86	1.90	95.22	98.31	5.39	18.86	2.30	124.58	280.00	6.02
10.88	0.88	47.88	79.15	2.96	12.88	1.81	33.96	201.46	3.93	14.88	1.31	82.11	323.03	4.78	16.88	1.83	91.26	133.94	5.40	18.88	2.29	101.97	352.53	6.02
10.90	0.86	45.51	80.50	2.96	12.90	1.81	35.41	203.48	3.95	14.90	1.30	78.82	327.13	4.77	16.90	2.23	82.92	186.95	5.41	18.90	2.11	95.45	307.30	6.03
10.92	0.84	38.53	81.97	2.98	12.93	1.83	36.67	204.88	3.96	14.92	1.31	73.07	326.46	4.78	16.92	2.67	77.65	237.45	5.41	18.92	1.65	75.36	291.14	6.03
10.94	0.89	33.15	84.54	2.99	12.94	1.87	36.79	204.76	3.96	14.94	1.26	66.86	318.32	4.78	16.94	2.54	68.18	187.13	5.42	18.94	1.37	60.69	381.37	6.03
10.96	1.06	28.85	89.74	2.99	12.96	1.91	39.20	202.50	3.97	14.96	1.22	62.26	317.70	4.79	16.96	2.08	56.80	172.01	5.43	18.96	1.29	46.68	455.74	6.05
10.98	1.22	27.04	92.13	3.01	12.98	1.90	40.46	200.91	3.98	14.98	1.23	58.70	323.70	4.81	16.98	1.65	45.62	167.05	5.44	18.98	1.30	36.44	503.00	6.06
11.00	1.25	27.58	91.70	3.02	13.00	1.86	42.89	199.93	3.99	15.00	1.22	51.97	331.66	4.82	17.00	1.34	40.14	204.46	5.45	19.00	1.33	33.73	528.95	6.06
11.02	1.26	29.39	90.78	3.03	13.02	1.76	47.18	200.97	4.00	15.02	1.23	45.40	332.76	4.82	17.02	1.31	34.40	305.28	5.46	19.02	1.33	35.57	479.25	6.08
11.04	1.24	34.56	90.96	3.05	13.04	1.77	48.74	199.99	4.01	15.04	1.20	41.46	332.64	4.83	17.04	1.48	65.95	366.37	5.47	19.04	1.90	52.03	302.15	6.09
11.06	1.23	38.17	91.09	3.05	13.06	1.75	58.58	222.82	4.01	15.06	1.29	34.38	363.31	4.84	17.06	2.43	52.65	327.07	5.48	19.06	2.01	51.17	269.65	6.09
11.08	1.27	48.58	106.64	3.06	13.08	1.76	62.56	216.64	4.02	15.08	1.32	34.80	365.33	4.84	17.08	2.98	57.89	315.32	5.49	19.08	1.91	41.84	286.36	6.11
11.10	1.34	51.20	107.55	3.07	13.10	1.73	64.17	213.21	4.03	15.10	1.33	34.71	363.80	4.85	17.10	3.14	62.30	229.74	5.49	19.10	1.80	38.96	276.26	6.11
11.12	1.39	53.60	108.84	3.09	13.12	1.69	63.63	211.01	4.05	15.12	1.34	36.16	360.92	4.86	17.12	2.80	56.22	194.17	5.50	19.12	1.52	34.27	262.30	6.13
11.14	1.44	55.43	109.88	3.11	13.14	1.65	61.59	207.70	4.05	15.14	1.34	38.32	360.55	4.86	17.14	2.50	48.91	179.54	5.51	19.14	1.29	30.21	293.46	6.14
11.16	1.44	55.31	110.49	3.13	13.16	1.62	58.27	204.64	4.06	15.16	1.34	41.84	357.31	4.87	17.16	2.28	48.03	181.99	5.53	19.16	1.19	24.46	387.30	6.15
11.18	1.46	56.58	110.25	3.14	13.18	1.60	55.62	201.03	4.06	15.18	1.30	43.96	354.25	4.88	17.18	2.10	45.96	184.87	5.54	19.18	1.17	21.28	496.39	6.15
11.20	1.44	57.74	109.39	3.16	13.20	1.58	54.07	199.38	4.08	15.20	1.27	46.91	348.43	4.88	17.20	2.25	36.42	216.03	5.55	19.20	1.19	19.65	538.93	6.17
11.22	1.36	61.06	107.68	3.16	13.22	1.59	51.51	192.03	4.09	15.22	1.19	49.68	343.47	4.90	17.22	2.81	35.66	249.45	5.56	19.22	1.24	20.44	560.17	6.18
11.24	1.32	63.95	107.74	3.17	13.24	1.52	51.51	178.75	4.10	15.24	1.14	50.07	343.60	4.91	17.24	3.32	39.63	252.75	5.56	19.24	1.39	22.27	580.86	6.18
11.26	1.29	65.44	108.59	3.18	13.26	1.45	54.73	181.93	4.12	15.26	1.14	47.15	349.41	4.92	17.26	3.70	43.58	244.43	5.57	19.26	1.62	24.31	567.95	6.20
11.28	1.27	66.02	109.15	3.19	13.28	1.38	57.69	180.58	4.12	15.28	1.15	44.11	358.72	4.93	17.28	3.69	42.73	222.33	5.59	19.28	1.85	25.55	566.42	6.21
11.30	1.22	65.59	109.64	3.20	13.30	1.31	58.36	179.73	4.14	15.30	1.17	40.85	364.65	4.93	17.30	3.30	41.38	201.27	5.59	19.30	1.81	26.42	549.09	6.21
11.32	1.23	64.07	110.25	3.22	13.32	1.26	55.92	181.50	4.16	15.32	1.21	36.85	370.29	4.95	17.32	2.92	30.13	194.60	5.60	19.32	1.63	26.45	428.75	6.23
11.34	1.25	61.27	111.29	3.23	13.34	1.22	54.25	180.89	4.17	15.34	1.25	33.87	376.90	4.96	17.34	2.65	28.30	190.32	5.61	19.34	1.38	29.25	382.90	6.24
11.36	1.29	57.67	111.90	3.24	13.36	1.16	53.24	179.42	4.18	15.36	1.36	31.16	387.43	4.96	17.36	2.56	41.20	200.66	5.61	19.36	1.23	25.82	453.54	6.24
11.38	1.28	55.27	111.66	3.26	13.38	1.12	51.29	181.07	4.19	15.38	1.58	27.53	400.47	4.97	17.38	2.38	43.06	194.48	5.63	19.38	1.22	22.42	495.35	6.24
11.40	1.30	55.45	111.41	3.26	13.40	1.08	47.94	183.40	4.20	15.40	1.63	27.04	379.71	4.97	17.40	2.00	36.87	182.24	5.64	19.40	1.19	21.88	512.55	6.26
11.42	1.24	56.97	111.04	3.27	13.42	1.07	44.20	187.93	4.21	15.42	1.63	30.38	369.67	4.98	17.42	1.68	33.41	186.09	5.64	19.42	1.20	22.81	542.54	6.27
11.44	1.22	57.42	111.59	3.27	13.44	1.06	39.85	194.17	4.22	15.44	1.65	33.06	373.16	4.99	17.44	1.62	32.87	218.66	5.65	19.44	1.20	23.17	566.17	6.28
11.46	1.21	59.04	112.51	3.29	13.46	1.04	36.63	201.40	4.23	15.46	2.01	33.48	392.38	4.99	17.46	1.75	29.77	289.30	5.66	19.46	1.20	22.99	578.60	6.29
11.48	1.19	60.50	112.51	3.30	13.48	1.05	32.99	207.33	4.24	15.48	2.41	37.27	277.91	5.00	17.48	1.90	30.40	306.68	5.66	19.48	1.23	21.76	591.45	6.29
11.50	1.16	61.29	112.70	3.30	13.50	1.10	28.27	214.62	4.25	15.50	2.69	40.75	77.50	5.00	17.50	2.02	33.08	310.36	5.67	19.50	1.20	20.41	587.66	6.31
11.52	1.10	60.86	112.76	3.31	13.52	1.17	25.62	222.15	4.25	15.52	2.72	41.69	63.85	5.01	17.52	2.45	29.74	364.90	5.68	19.52	1.18	20.17	582.15	6.31
11.54	1.10	58.39	112.76	3.32	13.54	1.22	24.15	232.80	4.25	15.54	2.74	43.32	68.19	5.01	17.54	2.49	31.06	322.11	5.68	19.54	1.18	20.59	590.72	6.32
11.56	1.07	55.99	112.27	3.33	13.56	1.36	21.23	247.86	4.27	15.56	2.98	40.09	77.19	5.02	17.56	2.61	36.89	309.99	5.70	19.56	1.17	19.87	596.35	6.33
11.58	1.05	54.59	112.45	3.34	13.58	1.51	19.73	277.24	4.26	15.58	3.19	42.08	80.99	5.02	17.58	3.22	39.90	373.41	5.71	19.58	1.18	19.93	599.41	6.34
11.60	1.06	52.18	113.37	3.34	13.60	1.55	20.99	297.07	4.28	15.60	2.77	42.80	73.70	5.03	17.60	3.32	47.69	298.36	5.72	19.60	1.18	20.14	602.47	6.35
11.62	1.03	49.56	114.72	3.35	13.62	1.49	22.89	295.18	4.28	15.62	2.23	44.23	68.81	5.04	17.62	2.85	49.91	254.29	5.72	19.62	1.18	20.35	608.53	6.36
11.64	1.07	46.61	116.49	3.36	13.64	1.45	24.39	300.20	4.29	15.64	1.99	40.57	70.46	5.05	17.64	2.34	40.62	232.62	5.73	19.64	1.21	20.80	612.82	6.36
11.66	1.09	44.72	116.67	3.37	13.66	1.40	27.34	304.91	4.29	15.66	1.91	39.10	94.27	5.05	17.66	1.88	35.36	225.64	5.73	19.66	1.22	20.74	616.61	6.36
11.68	1.07	43.41	116.74	3.38	13.68	1.34	29.05	306.62	4.30	15.68	2.14	34.23	180.03	5.04	17.68	1.50	37.01	285.44	5.73	19.68	1.21	19.96	607.80	6.38
11.70	1.07	41.30	117.41	3.39	13.70	1.30	31.28	312.50	4.31	15.70	2.32	34.47	241.43	5.05	17.70	1.45	35.96	318.44	5.74	19.70	1.21	19.75	614.47	6.38
11.72	1.10	40.25	118.82	3.40	13.72	1.31	30.29	316.66	4.33	15.72	3.32	38.20	269.71	5.05	17.72	1.46	35.36	409.89	5.75	19.72	1.21	18.85	630.75	6.39
11.74	1.12	38.32	120.35	3.40	13.74	1.27	29.11	319.05	4.33	15.74	5.41	44.32	308.64	5.05	17.74	1.52	36.38	465.66	5.76	19.74	1.22	18.16	637.24	6.40
11.76	1.14	36.64	120.96	3.41	13.76	1.25	26.74	323.33	4.34	15.76	6.19	44.05	255.33	5.05	17.76	1.53	35.75	495.35	5.75	19.76	1.25	18.22	633.20	6.41
11.78	1.16	37.75	120.53	3.41	13.78	1.27	25.48	328.11	4.34	15.78	6.12	42.20	238.80	5.05	17.78	1.55	32.17	517.51	5.77	19.78	1.24	19.30	620.59	6.41
11.80	1.14	39.61	120.35	3.42	13.80	1.28	22.50	334.84	4.35	15.80	5.75	42.92	230.66	5.05	17.80	1.59	26.85	543.46	5.78	19.80	1.22	20.12	601.49	6.42
11.82	1.15	41.18	120.29	3.43	13.82	1.31	21.18	345.31	4.36	15.82	5.26	37.75	185.54	5.06	17.82	1.65	22.28	568.50	5.79	19.82	1.20	20.81	616.86	6.43
11.84	1.15	42.92	120.04	3.45	13.84	1.29	21.45	346.11	4.37	15.84	4.50	41.42	168.22	5.07	17.84	1.67	21.50	559.01	5.81	19.84	1.25	20.54	638.96	6.44
11.86	1.14	45.14	119.92	3.45	13.86	1.25	21.39	339.56	4.37	15.86	3.56	38.83	153.10	5.07	17.86	1.64	24.75	552.83	5.82	19.86	1.29	20.96	644.89	6.45
11.88	1.16	48.01	120.29	3.46	13.88	1.27	20.97	338.76	4.38	15.88	2.93	40.42	147.77	5.08	17.88	1.65	25.56	558.77	5.79	19.88	1.31	20.72	640.67	6.46
11.90	1.17	49.10	120.04	3.46	13.90	1.29	20.91	343.66	4.38	15.90	2.35	49.19	145.57	5.10	17.90	1.73	22.49	593.96	5.80	19.90	1.34	21.83	639.81	6.48
11.92	1.15	49.50	119.43	3.51	13.92	1.30	21.15	347.45	4.39	15.92	1.92	55.43	146.36	5.11	17.92	1.79	23.54	565.81	5.81	19.92	1.34	22.68	641.96	6.47
11.94	1.13	49.65	117.90	3.52	13.94	1.33	20.25	349.53	4.39	15.94	1.60	55.91	152.73	5.11	17.94	1.63	24.69	560.11	5.83	19.94	1.38	23.79	615.33	6.47
11.96	1.09	50.65	116.37	3.53	13.96	1.34	21.78	350.70	4.41	15.96	1.37	50.95	173.30	5.11	17.96	1.64	24.99	564.34	5.83	19.96	1.38	24.99	613.37	6.47
11.98	1.07	51.08	116.00	3.54	13.98	1.34	23.59	353.94	4.42	15.98	1.31	44.35	204.76	5.11	17.98	1.71	22.91	592.43	5.84	19.98	1.41	26.38	608.41	6.48
12.00	1.03	51.11	117.35	3.55	14.00	1.36	23.80	358.78	4.42	16.00	1.31	36.99	254.41	5.12	18.00	2.12	22.16	644.40	5.85	20.00	1.43	28.06	602.66	6.48

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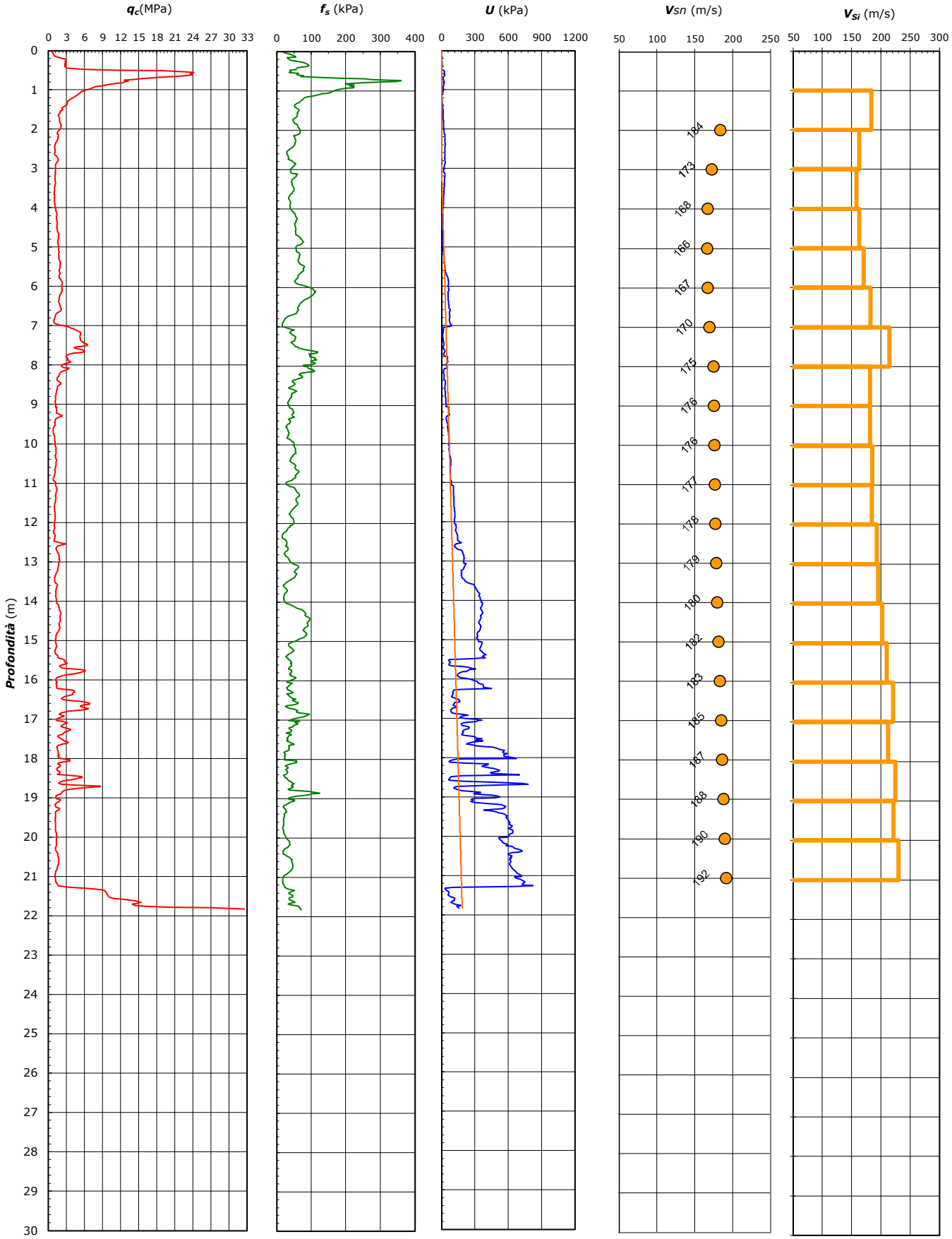
COMMITTENTE:
CANTIERE: Via Pandolfa - Foro boario - Forlì (FC)
COMMESSA: C054/24
RDP N°: 212/24
DATA: 09/09/2024

PROVA N°: SCPTU 2
PROF. FALDA (m da p.c.): 2.75
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
20.02	1.43	30.04	596.90	6.48																				
20.04	1.38	31.42	515.79	6.48																				
20.06	1.39	34.73	520.57	6.49																				
20.08	1.37	36.02	526.44	6.48																				
20.10	1.39	36.95	535.32	6.49																				
20.12	1.38	37.58	543.77	6.50																				
20.14	1.40	37.79	546.77	6.50																				
20.16	1.38	38.63	551.48	6.51																				
20.18	1.43	38.42	570.40	6.50																				
20.20	1.40	36.53	586.86	6.49																				
20.22	1.38	33.01	598.00	6.50																				
20.24	1.28	31.72	580.56	6.50																				
20.26	1.25	27.84	625.55	6.50																				
20.28	1.22	23.03	650.59	6.51																				
20.30	1.21	21.07	652.49	6.51																				
20.32	1.20	20.20	678.62	6.51																				
20.34	1.24	18.03	692.46	6.51																				
20.36	1.36	19.12	720.13	6.51																				
20.38	1.46	18.66	728.15	6.51																				
20.40	1.50	18.81	700.48	6.51																				
20.42	1.57	21.28	639.08	6.51																				
20.44	1.56	26.57	610.68	6.52																				
20.46	1.56	29.64	600.09	6.52																				
20.48	1.61	34.09	617.16	6.54																				
20.50	1.69	37.64	633.94	6.52																				
20.52	1.75	39.92	632.10	6.53																				
20.54	1.77	43.48	618.02	6.54																				
20.56	1.74	45.39	630.26	6.54																				
20.58	1.75	43.05	616.98	6.55																				
20.60	1.73	43.93	614.10	6.55																				
20.62	1.73	44.63	620.29	6.55																				
20.64	1.76	44.91	626.47	6.56																				
20.66	1.74	46.09	624.82	6.57																				
20.68	1.70	46.49	618.21	6.57																				
20.70	1.66	46.94	612.82	6.57																				
20.72	1.62	47.46	612.27	6.58																				
20.74	1.57	47.00	616.98	6.58																				
20.76	1.54	45.91	624.51	6.58																				
20.78	1.50	44.63	629.47	6.59																				
20.80	1.45	43.50	632.59	6.58																				
20.82	1.42	42.29	636.08	6.59																				
20.84	1.34	40.06	645.20	6.60																				
20.86	1.29	36.94	653.59	6.61																				
20.88	1.25	34.68	660.93	6.60																				
20.90	1.21	31.79	671.58	6.59																				
20.92	1.19	29.30	675.87	6.61																				
20.94	1.14	25.99	683.95	6.59																				
20.96	1.11	22.92	695.64	6.62																				
20.98	1.13	20.67	708.56	6.62																				
21.00	1.15	19.31	717.19	6.62																				
21.02	1.16	18.62	723.25	6.62																				
21.04	1.19	17.80	658.91	6.62																				
21.06	1.21	18.16	670.05	6.63																				
21.08	1.19	18.04	690.62	6.63																				
21.10	1.21	17.74	711.13	6.64																				
21.12	1.24	17.74	722.88	6.64																				
21.14	1.30	18.43	739.72	6.63																				
21.16	1.36	18.46	752.69	6.63																				
21.18	1.45	19.34	751.16	6.63																				
21.20	1.53	21.08	736.78	6.63																				
21.22	1.59	22.40	728.51	6.64																				
21.24	1.73	23.43	738.80	6.64																				
21.26	2.35	24.84	820.95	6.65																				
21.28	3.72	28.69	679.85	6.64																				
21.30	6.17	34.55	106.02	6.66																				
21.32	7.87	44.80	30.55	6.67																				
21.34	8.75	51.25	34.16	6.67																				
21.36	9.33	45.37	38.99	6.67																				
21.38	9.51	36.83	47.50	6.67																				
21.40	9.62	35.06	60.79	6.68																				
21.42	9.71	37.68	68.93	6.68																				
21.44	9.71	40.86	67.83	6.70																				
21.46	9.84	46.83	65.01	6.69																				
21.48	9.88	47.44	58.70	6.70																				
21.50	9.92	46.04	60.79	6.71																				
21.52	10.08	38.06	71.62	6.72																				
21.54	10.38	35.56	84.90	6.71																				
21.56	11.05	36.46	102.72	6.70																				
21.58	12.23	38.29	123.35	6.71																				
21.60	13.42	44.90	118.27	6.71																				
21.62	14.57	51.50	116.12	6.72																				
21.64	15.06	53.30	118.57	6.72																				
21.66	15.36	41.74	97.88	6.73																				
21.68	14.82	32.84	86.37	6.74																				
21.70	13.99	42.49	103.82	6.74																				
21.72	14.04	51.76	109.70	6.74																				
21.74	14.42	64.54	135.59	6.76																				
21.76	16.13	65.09	173.79	6.77																				
21.78	20.33	67.76	137.39	6.78																				
21.80	26.92	69.30	147.76	6.76																				
21.82	32.50	70.84	158.13	6.76																				

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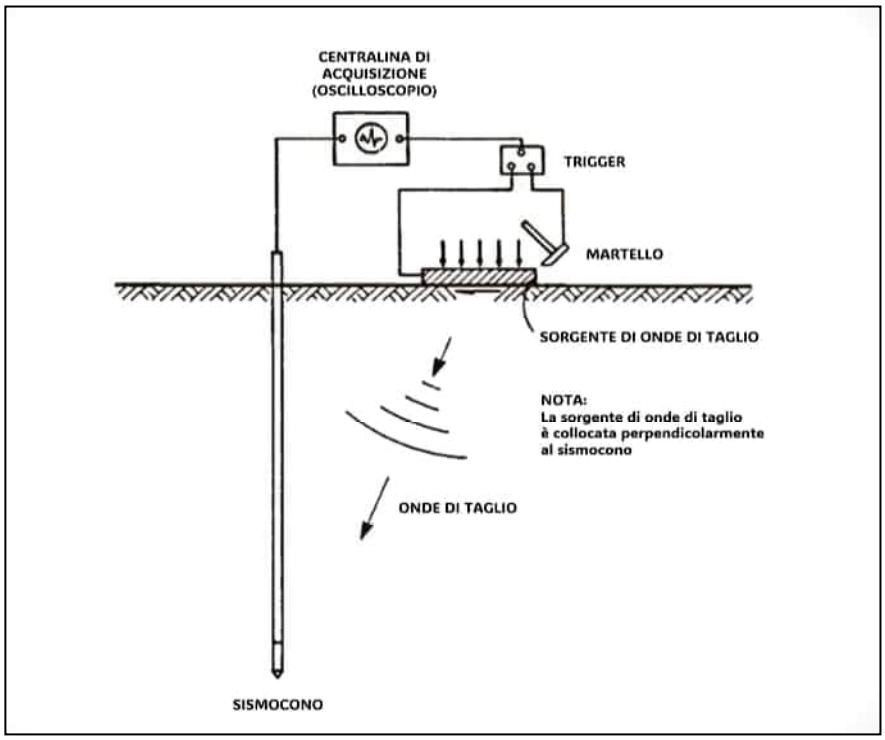
COMMITTENTE:		PROVA N°:	SCPTU 2
CANTIERE:	Via Pandolfa - Foro boario - Forlì (FC)	PROF. FALDA (m da p.c.):	2.75
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	212/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	09/09/2024	OPERATORE:	Zanirato



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COMMITTENTE:		PROVA N°:	SCPTU 2
CANTIERE:	Via Pandolfa - Foro boario - Forlì (FC)	PROF. FALDA (m da p.c.):	2.75
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	212/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	09/09/2024	OPERATORE:	Zanirato

Prova Down Hole ASTM D 7400



Profondità (m)	Ts (ms)	L (m)	Vs (m/s)	Vis (m/s)
1.0	T0	1.00	-	-
2.0	5.44	2.00	184	184
3.0	11.59	3.00	173	163
4.0	17.91	4.00	168	158
5.0	24.04	5.00	166	163
6.0	29.90	6.00	167	171
7.0	35.39	7.00	170	182
8.0	40.04	8.00	175	215
9.0	45.56	9.00	176	181
10.0	51.07	10.00	176	181
11.0	56.47	11.00	177	185
12.0	61.90	12.00	178	184
13.0	67.07	13.00	179	193
14.0	72.19	14.00	180	195
15.0	77.13	15.00	182	203
16.0	81.88	16.00	183	210
17.0	86.41	17.00	185	221
18.0	91.12	18.00	187	213
19.0	95.56	19.00	188	225
20.0	100.08	20.00	190	222
21.0	104.43	21.00	192	230

CATEGORIA SOTTOSUOLO
$V_{s,30}$ = m/s

D = Distanza centro trave generatrice ond
Profondità = Profondità punta da piano campagna
Ts = Tempo percorrenza onda di taglio
L = Lunghezza percorso onda di taglio
Vs = Velocità onde di taglio da piano campagna alla profondità indicata = 1.00 m
Vis = Velocità onde di taglio nello strato di terreno compreso fra le due profondità indicate

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COMMITTENTE:		PROVA N°:	SCPTU 2
CANTIERE:	Via Pandolfa - Foro boario - Forlì (FC)	PROF. FALDA (m da p.c.):	2.75
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	212/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	09/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Pandolfa - Foro boario - Forlì (FC)

LAT. (WGS 84): 44.227610°
LONG. (WGS 84): 12.055817°



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COMMITTENTE:
CANTIERE: Via Lughese - Villafranca (FC)
COMMESSA: C054/24
RDP N°: 224/24
DATA: 25/09/2024

PROVA N°: SCPTU 3
PROF. FALDA (m da p.c.): 3.50
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
0.02	0.88	29.56	54.50	0.99	2.02	3.67	35.20	7.13	0.20	4.02	1.09	58.92	42.56	0.40	6.02	1.06	64.18	27.56	1.05	8.02	1.11	57.85	25.16	1.62
0.04	0.76	37.09	52.04	1.01	2.04	3.55	36.24	7.32	0.21	4.04	0.99	62.04	43.06	0.41	6.04	1.08	67.44	27.25	1.05	8.04	1.12	62.98	26.76	1.61
0.06	0.73	42.09	49.27	0.85	2.06	3.41	37.24	7.13	0.19	4.06	0.93	63.20	43.55	0.41	6.06	1.13	66.96	26.76	1.03	8.06	1.14	68.43	27.31	1.61
0.08	0.72	45.23	47.79	0.75	2.08	3.20	37.73	6.64	0.20	4.08	0.91	66.31	43.98	0.43	6.08	1.16	63.48	26.02	1.08	8.08	1.18	68.59	27.86	1.63
0.10	0.77	50.23	47.05	0.75	2.10	2.90	37.76	5.54	0.18	4.10	0.91	70.03	44.04	0.51	6.10	1.20	57.32	25.28	1.10	8.10	1.29	55.11	36.90	1.64
0.12	0.94	56.41	41.15	0.85	2.12	2.62	40.66	4.92	0.16	4.12	0.88	60.78	48.65	0.53	6.12	1.27	55.23	20.42	1.09	8.12	1.28	53.61	36.60	1.65
0.14	1.06	35.62	41.83	0.78	2.14	2.63	39.46	3.81	0.05	4.14	0.94	66.63	48.35	0.53	6.14	1.23	57.00	19.62	1.10	8.14	1.27	53.13	36.23	1.65
0.16	0.90	29.13	41.33	0.66	2.16	2.38	40.13	5.60	0.06	4.16	0.96	59.65	48.41	0.54	6.16	1.23	59.07	19.31	1.10	8.16	1.25	54.56	35.67	1.64
0.18	0.85	16.88	0.18	0.49	2.18	2.09	45.71	6.83	0.04	4.18	0.92	58.22	48.59	0.55	6.18	1.24	60.50	18.39	1.11	8.18	1.21	55.26	35.00	1.65
0.20	1.01	21.76	0.80	0.47	2.20	1.75	55.41	8.43	0.06	4.20	0.90	59.10	48.78	0.54	6.20	1.30	62.73	17.28	1.10	8.20	1.14	56.30	34.69	1.64
0.22	1.19	25.97	0.98	0.45	2.22	1.75	60.25	8.00	0.05	4.22	0.84	62.09	49.08	0.55	6.22	1.32	64.56	16.61	1.11	8.22	1.11	56.85	34.32	1.65
0.24	1.54	28.47	2.28	0.71	2.24	1.88	59.83	6.64	0.06	4.24	0.80	62.58	49.27	0.56	6.24	1.33	67.73	16.24	1.12	8.24	1.06	58.09	33.77	1.64
0.26	1.81	30.05	2.03	0.66	2.26	1.93	58.00	6.52	0.03	4.26	0.81	60.14	49.39	0.56	6.26	1.34	69.92	15.32	1.12	8.26	1.01	57.91	33.64	1.64
0.28	1.97	34.35	1.78	0.62	2.28	1.60	56.41	8.80	0.04	4.28	0.85	57.18	49.27	0.60	6.28	1.41	70.99	14.33	1.11	8.28	0.99	56.94	33.46	1.64
0.30	1.92	41.06	2.09	0.61	2.30	1.40	55.04	10.03	0.05	4.30	0.88	55.75	49.08	0.59	6.30	1.45	77.11	12.86	1.12	8.30	0.97	54.34	33.34	1.63
0.32	1.77	49.84	4.98	0.55	2.32	1.32	56.20	10.64	0.05	4.32	0.93	51.21	48.71	0.62	6.32	1.50	80.86	11.01	1.12	8.32	0.94	50.81	33.52	1.63
0.34	1.67	56.79	5.97	0.57	2.34	1.34	56.07	10.09	0.04	4.34	0.92	47.06	48.78	0.63	6.34	1.52	83.64	8.98	1.12	8.34	0.95	47.85	34.14	1.63
0.36	1.56	66.97	6.40	0.57	2.36	1.57	51.29	7.87	0.04	4.36	0.94	45.72	48.59	0.65	6.36	1.55	85.07	8.18	1.13	8.36	0.95	44.22	34.88	1.64
0.38	1.44	78.77	6.21	0.62	2.38	1.75	48.67	7.01	0.06	4.38	0.89	46.30	48.59	0.66	6.38	1.56	86.04	6.64	1.13	8.38	0.98	40.23	35.98	1.65
0.40	1.49	79.81	4.00	0.62	2.40	1.89	50.31	6.46	0.04	4.40	0.85	46.94	48.78	0.68	6.40	1.58	87.14	6.09	1.13	8.40	1.04	36.69	36.60	1.64
0.42	1.55	81.64	3.75	0.56	2.42	1.76	46.84	7.50	0.03	4.42	0.87	47.43	48.84	0.68	6.42	1.58	87.90	4.80	1.15	8.42	1.07	34.35	37.27	1.64
0.44	1.75	77.65	1.91	0.56	2.44	1.72	49.70	8.43	0.04	4.44	0.88	47.67	48.78	0.68	6.44	1.59	87.41	4.12	1.15	8.44	1.07	34.19	37.34	1.65
0.46	1.99	74.57	0.92	0.57	2.46	1.82	52.66	7.69	0.03	4.46	0.91	47.67	48.65	0.69	6.46	1.58	86.41	3.63	1.16	8.46	1.10	34.07	38.14	1.65
0.48	2.13	70.12	0.06	0.57	2.48	1.90	49.64	6.89	0.05	4.48	0.87	47.46	48.90	0.69	6.48	1.55	87.87	2.40	1.15	8.48	1.07	33.61	37.46	1.65
0.50	2.12	68.11	1.60	0.53	2.50	1.83	49.98	8.18	0.07	4.50	0.83	47.46	49.33	0.71	6.50	1.55	87.44	1.97	1.15	8.50	1.09	35.60	37.58	1.66
0.52	2.45	72.04	1.35	0.52	2.52	1.92	56.35	8.43	0.06	4.52	0.83	48.47	49.51	0.71	6.52	1.51	85.97	1.72	1.15	8.52	1.10	38.13	38.38	1.67
0.54	2.56	72.04	2.52	0.52	2.54	2.13	57.87	5.90	0.07	4.54	0.83	50.66	49.58	0.73	6.54	1.52	83.56	1.35	1.15	8.54	1.14	39.71	39.18	1.67
0.56	1.79	88.57	9.10	0.52	2.56	2.16	49.21	7.01	0.08	4.56	0.86	52.00	49.33	0.72	6.56	1.52	81.58	1.17	1.17	8.56	1.16	40.90	39.92	1.67
0.58	1.66	91.43	9.96	0.54	2.58	1.94	43.12	8.37	0.07	4.58	0.93	52.83	48.84	0.73	6.58	1.51	81.03	0.62	1.17	8.58	1.21	41.94	40.23	1.69
0.60	1.50	95.98	11.26	0.57	2.60	1.80	41.87	9.60	0.08	4.60	0.98	52.34	48.10	0.73	6.60	1.49	80.91	0.18	1.18	8.60	1.21	44.68	40.41	1.69
0.62	1.44	98.81	10.89	0.56	2.62	1.57	42.05	11.26	0.08	4.62	1.02	50.45	47.98	0.74	6.62	1.50	80.88	0.98	1.19	8.62	1.18	46.69	40.41	1.70
0.64	1.47	98.11	8.00	0.54	2.64	1.35	43.73	12.67	0.10	4.64	1.04	48.87	47.91	0.74	6.64	1.50	81.30	0.86	1.20	8.64	1.19	47.55	40.47	1.72
0.66	1.51	92.72	8.43	0.59	2.66	1.18	46.14	13.96	0.09	4.66	1.10	46.98	47.79	0.76	6.66	1.49	81.94	0.92	1.20	8.66	1.18	50.17	40.66	1.72
0.68	1.44	84.79	9.96	0.56	2.68	1.08	47.11	14.45	0.10	4.68	1.13	48.26	47.48	0.77	6.68	1.51	84.14	1.72	1.20	8.68	1.20	51.79	41.03	1.72
0.70	1.37	70.10	11.26	0.57	2.70	1.09	48.49	14.27	0.08	4.70	1.19	50.42	47.12	0.79	6.70	1.54	85.75	3.01	1.21	8.70	1.23	53.95	41.76	1.71
0.72	1.30	67.72	12.30	0.57	2.72	1.20	47.91	13.41	0.09	4.72	1.18	52.53	46.56	0.80	6.72	1.59	84.99	3.14	1.22	8.72	1.27	55.35	42.75	1.72
0.74	1.22	65.49	13.35	0.58	2.74	1.26	45.25	12.86	0.11	4.74	1.15	50.27	46.44	0.80	6.74	1.65	84.19	4.37	1.23	8.74	1.29	57.46	43.49	1.73
0.76	1.14	63.33	14.39	0.58	2.76	1.31	42.45	12.79	0.11	4.76	1.13	47.41	46.68	0.79	6.76	1.68	85.47	4.55	1.23	8.76	1.29	58.46	44.29	1.74
0.78	1.11	62.96	15.62	0.55	2.78	1.33	42.42	13.10	0.12	4.78	1.15	48.93	46.87	0.81	6.78	1.69	87.61	5.17	1.24	8.78	1.33	56.54	44.65	1.73
0.80	1.00	64.43	17.41	0.56	2.80	1.35	45.04	13.47	0.10	4.80	1.10	51.07	47.05	0.82	6.80	1.69	88.37	5.66	1.24	8.80	1.32	54.99	44.29	1.73
0.82	0.99	62.78	18.39	0.58	2.82	1.32	50.71	14.09	0.12	4.82	1.09	50.21	47.30	0.84	6.82	1.74	88.21	5.60	1.24	8.82	1.26	57.27	43.86	1.75
0.84	0.97	59.46	19.19	0.59	2.84	1.25	55.87	15.07	0.15	4.84	1.09	48.60	47.36	0.84	6.84	1.71	92.15	5.90	1.24	8.84	1.19	59.65	43.18	1.76
0.86	0.93	57.12	19.99	0.55	2.86	1.19	65.56	15.93	0.14	4.86	1.03	48.02	47.67	0.82	6.86	1.70	93.30	6.15	1.24	8.86	1.14	60.96	42.69	1.77
0.88	0.92	52.79	20.73	0.54	2.88	1.22	73.18	15.99	0.15	4.88	0.98	49.76	47.98	0.82	6.88	1.73	94.67	6.52	1.24	8.88	1.08	59.74	41.52	1.76
0.90	0.90	50.57	21.40	0.54	2.90	1.20	79.52	16.18	0.16	4.90	0.94	51.35	48.35	0.84	6.90	1.74	93.76	7.26	1.27	8.90	1.01	61.51	40.96	1.76
0.92	0.87	48.83	21.59	0.58	2.92	1.07	83.06	16.67	0.14	4.92	0.88	48.63	48.47	0.84	6.92	1.72	94.00	7.32	1.26	8.92	0.92	61.81	39.61	1.75
0.94	0.85	45.69	22.45	0.58	2.94	1.09	80.81	16.79	0.14	4.94	0.84	48.15	48.71	0.86	6.94	1.71	95.16	7.50	1.27	8.94	0.86	58.25	38.87	1.76
0.96	0.82	42.40	23.25	0.53	2.96	1.08	77.54	17.04	0.13	4.96	0.83	46.96	48.84	0.87	6.96	1.64	93.94	7.07	1.27	8.96	0.82	52.97	38.81	1.75
0.98	0.81	40.15	24.05	0.54	2.98	1.07	75.29	17.53	0.12	4.98	0.83	46.75	48.59	0.88	6.98	1.53	96.13	7.63	1.28	8.98	0.81	45.84	39.55	1.77
1.00	0.79	38.01	24.79	0.54	3.00	1.12	70.81	17.53	0.15	5.00	0.85	44.13	48.53	0.88	7.00	1.47	95.10	7.01	1.29	9.00	0.82	38.92	39.98	1.77
1.02	0.81	37.96	25.22	0.57	3.02	1.13	66.57	17.84	0.15	5.02	0.81	41.05	48.78	0.88	7.02	1.47	95.31	6.95	1.29	9.02	0.80	33.95	40.66	1.78
1.04	0.86	38.08	25.59	0.55	3.04	1.19	63.34	18.08	0.13	5.04	0.76	39.46	49.02	0.90	7.04	1.47	94.97	7.57	1.31	9.04	0.78	26.67	41.03	1.78
1.06	0.87	38.36	26.08	0.57	3.06	1.23	61.33	18.21	0.14	5.06	0.74	37.61	49.33	0.90	7.06	1.48	95.61	8.24	1.31	9.06	0.74	21.06	40.96	1.83
1.08	0.87	37.96	26.57	0.55	3.08	1.27	61.57	18.51	0.15	5.08	0.74	38.89	49.39	0.90	7.08	1.50	97.29	8.86	1.39	9.08	1.10	23.72	41.70	1.83
1.10	0.84	38.15	27.06	0.57	3.10	1.28	62.15	18.94	0.16	5.10	0.75	37.55	48.96	0.94	7.10	1.49	92.21	13.41	1.40	9.10	0.97	23.81	39.86	1.83
1.12	0.84	36.38	27.43	0.54	3.12	1.26	64.74	19.56	0.17	5.12	0.79	36.12	38.14	0.96	7.12	1.47	91.33	13.22	1.39	9.12	0.90	21.19	39.43	1.82
1.14	0.93	35.07	27.49	0.31	3.14	1.25	74.55	34.44	0.17	5.14	0.83	35.27	37.09	0.96	7.14	1.46	87.12	12.67	1.41	9.14	0.87	19.48	40.47	1.81
1.16	1.15	26.35	30.57	0.33	3.16	1.25	74.85	34.44	0.19	5.16	0.80	34.87	36.78	0.97	7.16	1.48	85.47	12.49	1.40	9.16	0.92	17.28	41.95	1.83
1.18	1.32	25.77	29.95	0.32	3.18	1.13	78.73	35.18	0.19	5.18	0.74	35.54	36.72	0.98	7.18	1.46	83.83	12.12	1.41	9.18	0.95	15.33	42.69	1.83
1.20	1.43	25.83	29.40	0.28	3.20	1.10	81.01	35.49	0.20	5.20	0.73	34.78	36.78	0.98	7.20	1.45	83.31	12.12	1.42	9.20	1.08	15.91	45.21	1.83
1.22	1.58	24.52	29.03	0.28	3.22	1.09	83.02	35.80	0.21	5.22	0.70	37.10	36.60	0.98	7.22	1.44	83.58	11.93	1.43	9.22	1.37	19.30	49.82	1.84
1.24	1.69	22.57	28.60	0.28	3.24	1.10	83.36	35.80	0.22	5.24	0.67	39.17	36.47	1.00	7.24	1.44	84.77	11.93	1.42	9.24	1.52	19.94	49.70	1.84
1.26	1.84	21.44	27.92	0.30	3.26	1.14	79.34	35.86	0.22	5.26	0.68	38.62	36.23	1.00	7.26	1.42	85.59	11.99	1.43	9.26	1.24	25.76	44.72	1.84
1.28	2.03	19.82	27.13	0.29	3.28	1.12	79.64	36.17	0.23	5.28	0.67	35.91	36.11	1.00	7.28	1.41	87.63	12.18	1.43	9.28	1.07	26.98	42.07	1.85
1.30	2.20	17.57	26.51	0.28	3.30	1.15	76.32	35.49	0.22	5.30	0.68	33.44	35.92	0.99	7.30	1.41	88.15	12.42	1.44	9.30	0.96	27.90	43.30	1.84
1.32	2.42	15.56	25.53	0.29	3.32	1.17	71.93	35.55	0.24	5.32	0.70	32.44	35.80	1.00	7.32	1.43	87.91	12.86	1.44	9.32	1.00	24.91	47.12	1.85
1.34	2.61	14.19	24.66	0.29	3.34	1.02	68.02	36.17	0.24	5.34	0.67	33.90	35.31	1.00	7.34	1.45	84.89	13.04	1.45	9.34	1.05	23.35	48.65	1.85
1.36	2.83	13.82	23.50	0.28	3.36	0.96	64.00	36.84	0.24	5.36	0.69	32.31	35.18	1.02	7.36	1.43	82.87	13.72	1.46	9.36	1.10	23.51	50.93	1.86
1.38	3.03	14.58	22.57	0.30	3.38	0.91	62.72	37.21	0.23	5.38	0.74	32.74	34.32	1.02	7.38	1.48	80.07	14.39	1.46	9.38	1.15	26.98	53.27	1.87
1.40	3.21	15.83	21.59	0.30	3.40	0.91	59.88	37.40	0.23	5.40	0.80	32.92	33.40	1.03	7.40	1.59	75.74	14.95	1.47	9.40	1.18	27.32	54.25	1.85
1.42	3.35	17.87	20.67	0.29	3.42	0.93	58.54	37.58	0.25	5.42	0.90	31.19	32.91	1.04	7.42	1.58	76.07	16.24	1.47	9.42	1.22	25.52	55.05	1.88
1.44	3.46	19.15	19.81	0.31	3.44	0.92	57.32	37.70	0.23	5.44	0.99	28.81	32.66	1.05	7.44	1.59	75.71	18.14	1.48	9.44	1.25	28.72	55.66	1.86
1.46	3.58	21.01	18.82	0.28	3.46	0.96	54.03	37.83	0.24	5.46	0.99	29.57	32.66	1.04	7.46	1.56	76.53	17.41	1.49	9.46	1.23	33.23	57.63	1.87
1.48	3.74	22.48	17.65	0.29	3.48	0.93	52.81	38.14	0.23	5.48	0.94	32.41	32.60	1.05	7.48	1.58	79.49	17.84	1.50	9.48	1.21	42.44	58.99	1.87
1.50	3.90	23.66	16.48	0.28	3.50	0.90	53.17	38.57	0.25	5.50	0.91	35.46	32.66	1.05	7.50	1.58	84.52	18.45	1.49	9.50	1.24	48.38	60.03	1.89
1.52	4.00	24.37	15.38	0.28	3.52	0.85	55.61	39.00	0.26	5.52	0.99	37.68	32.23	1.05	7.52	1.58	89.61	19.44	1.50	9.52	1.25	52.10	60.95	1.88
1.54	4.13	25.03	14.09	0.33	3.54	0.82	55.15	39.37	0.25	5.54	1.01	38.20	32.17	1.04	7.54	1.57	91.43	19.19	1.51	9.54	1.24	56.13	61.82	1.88
1.56	4.18	26.04	13.10	0.27	3.56	0.83	54.73	39.49	0.26	5.56	1.04	41.71	31.80	1.05	7.56	1.54	91.19	19.56	1.51	9.56	1.25	59.08	61.75	1.87
1.58	4.15	27.14	12.30	0.28	3.58	0.86	55.76	39.55	0.27	5.58	1.07	42.32	31.98	1.06	7.58	1.49	92.56	19.25	1.51	9.58	1.26	60.88	62.31	1.87
1.60	4.06	27.96	11.87	0.30	3.60	0.85	55.19	39.67	0.26	5.60	1.04	45.58	32.05	1.05	7.60	1.45	94.88	18.82	1.50	9.60	1.22	61.03	62.62	1.86
1.62	3.89	29.33	11.38	0.30	3.62	0.83	53.72	39.86	0.27	5.62	1.01	47.32	32.35	1.05	7.62	1.42	97.34	18.94	1.50	9.62	1.24	60.88	63.41	1.87
1.64	3.76	30.73	10.89	0.29	3.64	0.78	51.13	40.23	0.25	5.64	0.98	48.87	32.54	1.07	7.64	1.46	100.03	19.50	1.51	9.64	1.22	58.65	64.34	1.89
1.66	3.69	32.19	9.96	0.28	3.66	0.81	47.14	40.41	0.28	5.66	0.95	50.67	32.91	1.08	7.66	1.44	102.01	19.31	1.51	9.66	1.21	55.48	65.81	1.89
1.68	3.73	32.77	8.86	0.29	3.68	0.81	45.22	40.66	0.28	5.68	0.89	52.78	33.40	1.07	7.68	1.41	102.10	19.62	1.50	9.68	1.21	50.97	67.17	1.91
1.70	3.74	33.16	7.57	0.30	3.70	0.83	45.04	40.72	0.28	5.70	0.87	54.33	33.71	1.07	7.70	1.49	99.20	20.85	1.51	9.70	1.21	45.57	67.78	1.92
1.72	3.73	32.79	6.40	0.28	3.72	0.85	44.73	40.78	0.32	5.72	0.85	54.39	33.77	1.09	7.72	1.48	91.82	21.59	1.50	9.72	1.19	40.15	68.83	1.92
1.74	3.74	32.70	5.47	0.26	3.74	0.92	43.27	40.84	0.33	5.74	0.86	53.84	33.64	1.09	7.74	1.53	86.67	22.08	1.52	9.74	1.16	37.22	70.30	1.93
1.76	3.77	33.16	4.37	0.27	3.76	0.94	44.64	40.84	0.31	5.76	0.85	51.92	33.21	1.08	7.76	1.51	78.96	21.34	1.51	9.76	1.17	35.39	70.80	1.92
1.78	3.85	34.01	3.08	0.26	3.78	1.04	45.32	40.60	0.31	5.78	0.82	47.99	32.72	1.09	7.78	1.43	76.30	20.73	1.53	9.78	1.16	35.48	70.98	1.93
1.80	3.93	34.22	1.72	0.25	3.80	1.16	43.91	40.35	0.31	5.80	0.81	43.54	32.48	1.09	7.80	1.34	76.24	20.11	1.52	9.80	1.12	37.86	70.49	1.94
1.82	3.97	34.25	0.68	0.26	3.82	1.22	44.68	40.35	0.32	5.82	0.82	40.16	31.98	1.08	7.82	1.27	76.27	19.68	1.56	9.82	1.05	44.14	69.44	1.93
1.84	4.00	33.70	0.37	0.24	3.84	1.21	49.04	40.47	0.33	5.84	0.86	37.51	31.18	1.08	7.84	1.20	79.32	19.81	1.57	9.84	1.02	46.70	68.89	1.94
1.86	4.04	33.15	1.60	0.23	3.86	1.15	51.75	41.03	0.32	5.86	0.94	34.70	29.46	1.08	7.86	1.21	80.78	21.34	1.57	9.86	0.97	49.62	68.58	1.93
1.88	4.04	32.32	2.71	0.19	3.88	1.09	55.29	41.58	0.33	5.88	1.04	33.48	27.99	1.06	7.88	1.27	79.87	24.42	1.57	9.88	0.95	50.45	68.58	1.93
1.90	4.03	31.22	3.63	0.19	3.90	1.08	55.14	41.46	0.36	5.90	1.14	33.33	27.19	1.05	7.90	1.23	77.15	25.59	1.59	9.90	0.93	50.72	69.63	1.93
1.92	3.97	31.19	4.43	0.21	3.92	1.07	58.03	41.76	0.36	5.92	1.18	38.33	26.88	1.06	7.92	1.23	64.04	24.97	1.57	9.92	1.03	48.04	74.67	1.95
1.94	3.91	31.22	5.04	0.21	3.94	1.19	59.74	41.33	0.36	5.94	1.18	43.18	27.13	1.06	7.94	1.22	55.26	24.73	1.59	9.94	1.27	44.50	81.62	1.95
1.96	3.85	31.70	5.60	0.20	3.96	1.29	58.98	40.96	0.37	5.96	1.13	48.24	27.43	1.05	7.96	1.16	51.60	23.74	1.58	9.96	1.78	39.35	129.91	1.95
1.98	3.80	32.74	6.21	0.19	3.98	1.25	56.67	41.27	0.38	5.98	1.07	53.85	27.56	1.05	7.98	1.10	52.52	23.56	1.60	9.98	2.47	34.56	184.52	1.96
2.00	3.74	33.35	6.77	0.21	4.00	1.22	54.26	41.70	0.39	6.00	1.06	60.55	27.56	1.05	8.00	1.10	56.54	24.48	1.60	10.00	2.63	30.81	140.79	1.96

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COMMITTENTE:
CANTIERE: Via Lughese - Villafranca (FC)
COMMESSA: C054/24
RDP N°: 224/24
DATA: 25/09/2024

PROVA N°: SCPTU 3
PROF. FALDA (m da p.c.): 3.50
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	2.24	23.92	91.77	1.97	12.02	4.24	70.67	68.34	2.42	14.02	2.35	103.30	98.11	2.72	16.02	2.19	146.06	446.08	3.19	18.02	2.40	98.21	822.85	3.58
10.04	1.91	22.49	77.32	1.98	12.04	5.08	77.41	81.38	2.38	14.04	2.08	83.79	130.70	2.75	16.04	2.09	110.29	508.21	3.20	18.04	2.44	98.03	847.70	3.58
10.06	1.50	26.91	78.42	1.96	12.06	5.54	58.03	112.25	2.37	14.06	2.04	84.65	165.70	2.75	16.06	2.18	109.93	497.87	3.21	18.06	2.57	96.77	885.41	3.59
10.08	1.27	37.70	71.66	1.97	12.08	5.65	52.42	109.24	2.39	14.08	1.87	76.02	185.02	2.75	16.08	2.31	117.15	491.78	3.21	18.08	2.63	93.88	871.14	3.57
10.10	1.14	37.06	70.61	1.97	12.10	5.55	51.78	104.26	2.40	14.10	1.72	75.23	194.30	2.75	16.10	2.27	115.93	486.92	3.23	18.10	2.56	95.87	838.76	3.57
10.12	0.97	39.04	95.03	1.97	12.12	5.40	51.81	104.26	2.40	14.12	1.55	70.60	205.19	2.75	16.12	2.28	113.71	483.79	3.22	18.12	2.50	99.89	830.68	3.59
10.14	0.93	32.52	100.20	1.98	12.14	5.14	37.02	100.50	2.40	14.14	1.48	59.62	228.44	2.75	16.14	2.33	111.73	477.94	3.22	18.14	2.48	100.13	825.17	3.58
10.16	0.91	30.56	104.19	1.97	12.16	5.13	24.71	102.29	2.40	14.16	1.52	66.27	276.73	2.74	16.16	2.28	117.03	474.44	3.23	18.16	2.59	108.94	753.98	3.59
10.18	0.84	30.81	105.67	1.98	12.18	5.32	25.16	106.72	2.41	14.18	1.61	58.04	311.23	2.75	16.18	2.24	122.12	470.93	3.23	18.18	2.61	110.86	757.16	3.59
10.20	0.79	29.38	107.33	1.98	12.20	5.67	32.63	100.20	2.40	14.20	1.69	48.01	329.38	2.75	16.20	2.20	126.75	469.09	3.24	18.20	2.51	110.02	745.90	3.60
10.22	0.75	26.36	108.75	1.98	12.22	6.00	42.54	87.28	2.40	14.22	1.69	44.56	329.56	2.75	16.22	2.19	126.41	467.24	3.25	18.22	2.44	106.99	742.47	3.59
10.24	0.78	24.56	111.27	1.98	12.24	6.24	50.55	94.85	2.40	14.24	1.60	45.84	325.56	2.76	16.24	2.11	127.08	465.89	3.25	18.24	2.43	103.86	747.12	3.59
10.26	0.75	24.28	112.93	1.98	12.26	6.42	52.29	99.52	2.40	14.26	1.53	46.36	316.52	2.76	16.26	2.10	126.20	466.44	3.26	18.26	2.44	104.34	766.22	3.60
10.28	0.74	25.53	115.64	1.97	12.28	6.48	43.63	103.46	2.40	14.28	1.48	49.35	311.97	2.75	16.28	2.07	126.41	471.05	3.27	18.28	2.53	103.01	796.09	3.60
10.30	0.71	25.05	116.93	1.96	12.30	6.35	25.52	104.01	2.41	14.30	1.42	53.58	319.23	2.75	16.30	2.12	122.78	476.47	3.28	18.30	2.58	101.00	807.91	3.61
10.32	0.71	23.86	118.22	1.99	12.32	6.22	18.57	104.38	2.40	14.32	1.45	56.60	347.21	2.73	16.32	2.20	116.53	486.25	3.28	18.32	2.64	100.55	816.91	3.61
10.34	0.71	23.07	122.16	2.00	12.34	6.21	18.42	107.45	2.40	14.34	1.55	54.68	384.55	2.73	16.34	2.13	91.96	479.67	3.28	18.34	2.70	98.84	825.60	3.62
10.36	0.68	22.30	125.66	2.00	12.36	6.25	23.45	112.62	2.41	14.36	1.71	48.22	419.85	2.73	16.36	2.27	111.68	480.65	3.28	18.36	2.72	100.31	824.56	3.61
10.38	0.64	21.54	128.31	2.00	12.38	6.39	29.24	119.51	2.40	14.38	1.76	43.68	415.24	2.71	16.38	2.21	108.17	477.02	3.29	18.38	2.73	102.92	825.91	3.63
10.40	0.62	19.71	132.18	2.01	12.40	6.69	32.84	128.55	2.41	14.40	1.75	43.40	399.31	2.71	16.40	2.14	104.88	475.79	3.31	18.40	2.78	106.14	826.46	3.63
10.42	0.62	18.77	140.85	2.02	12.42	7.37	34.30	144.11	2.41	14.42	1.73	44.53	373.85	2.70	16.42	2.08	101.71	473.82	3.30	18.42	2.87	109.84	838.82	3.63
10.44	0.63	17.39	149.96	2.02	12.44	7.72	34.08	151.62	2.42	14.44	1.72	49.14	350.41	2.70	16.44	2.07	99.12	474.19	3.31	18.44	2.87	113.18	851.98	3.65
10.46	0.65	15.20	158.01	2.04	12.46	7.13	37.95	144.67	2.41	14.46	1.68	55.26	334.67	2.70	16.46	2.08	100.03	473.51	3.31	18.46	2.81	113.87	836.92	3.65
10.48	0.69	12.91	166.87	2.04	12.48	6.08	47.13	133.10	2.41	14.48	1.68	63.31	320.21	2.66	16.48	2.13	101.31	472.78	3.32	18.48	2.72	112.66	838.09	3.65
10.50	0.71	11.85	172.41	2.04	12.50	5.48	56.82	122.46	2.42	14.50	1.69	73.13	312.58	2.66	16.50	2.16	101.59	475.85	3.31	18.50	2.68	108.72	858.53	3.65
10.52	0.73	11.57	177.94	2.04	12.52	4.67	77.91	112.44	2.42	14.52	1.74	77.58	297.82	2.65	16.52	2.15	99.97	474.19	3.31	18.52	2.71	106.50	880.57	3.64
10.54	0.72	11.27	179.42	2.06	12.54	3.98	114.98	96.63	2.44	14.54	1.75	81.17	287.24	2.66	16.54	2.12	100.73	471.55	3.31	18.54	2.77	103.04	899.00	3.66
10.56	0.71	10.99	180.83	2.06	12.56	3.19	137.26	99.40	2.41	14.56	1.76	83.67	275.37	2.68	16.56	2.12	100.58	468.47	3.32	18.56	2.86	99.31	903.59	3.66
10.58	0.72	11.18	181.26	2.07	12.58	2.68	130.49	105.30	2.42	14.58	1.79	84.38	264.92	2.69	16.58	2.07	104.81	468.04	3.33	18.58	2.80	100.75	818.56	3.65
10.60	0.69	12.64	181.02	2.04	12.60	2.39	102.72	121.17	2.42	14.60	1.81	85.93	258.40	2.70	16.60	2.06	105.51	465.95	3.34	18.60	2.68	104.93	791.07	3.66
10.62	0.69	14.71	180.59	2.05	12.62	2.20	102.68	156.48	2.42	14.62	1.76	85.75	249.91	2.70	16.62	2.05	106.15	467.92	3.33	18.62	2.64	105.47	807.73	3.65
10.64	0.66	16.54	180.77	2.06	12.64	2.13	94.54	172.90	2.43	14.64	1.76	84.68	248.12	2.69	16.64	2.08	104.90	472.84	3.33	18.64	2.66	104.30	823.89	3.67
10.66	0.65	17.09	181.63	2.07	12.66	2.21	83.11	182.13	2.44	14.66	1.78	84.89	239.70	2.69	16.66	2.09	91.53	474.93	3.33	18.66	2.63	103.91	821.44	3.67
10.68	0.62	16.45	182.80	2.09	12.68	2.27	84.42	189.81	2.43	14.68	1.78	84.59	230.78	2.69	16.68	2.13	92.99	476.96	3.34	18.68	2.59	105.74	794.69	3.67
10.70	0.62	15.08	184.71	2.10	12.70	2.27	87.95	199.78	2.44	14.70	1.77	85.74	224.07	2.71	16.70	2.17	90.19	469.76	3.33	18.70	2.57	107.73	788.81	3.68
10.72	0.63	13.38	187.97	2.10	12.72	2.16	82.09	212.88	2.43	14.72	1.72	86.14	211.22	2.70	16.72	2.24	88.39	462.75	3.32	18.72	2.54	107.33	784.52	3.68
10.74	0.68	11.39	192.21	2.10	12.74	2.21	79.44	236.81	2.45	14.74	1.70	87.39	203.35	2.71	16.74	2.19	89.16	449.65	3.33	18.74	2.55	106.34	780.24	3.70
10.76	0.76	9.57	196.52	2.09	12.76	2.17	77.61	254.09	2.44	14.76	1.68	91.75	204.82	2.70	16.76	2.21	92.94	435.50	3.33	18.76	2.56	107.06	782.44	3.70
10.78	0.82	8.77	197.44	2.09	12.78	2.03	81.78	248.86	2.45	14.78	1.71	93.91	208.21	2.72	16.78	2.25	95.81	422.16	3.35	18.78	2.50	107.15	769.16	3.71
10.80	0.72	8.99	195.23	2.09	12.80	1.93	81.11	242.83	2.45	14.80	1.71	95.40	215.03	2.72	16.80	2.19	102.64	430.58	3.35	18.80	2.42	108.84	755.82	3.72
10.82	0.68	8.62	196.33	2.09	12.82	1.86	81.75	235.08	2.45	14.82	1.79	90.62	216.14	2.71	16.82	2.26	99.96	452.23	3.34	18.82	2.39	109.35	743.08	3.71
10.84	0.68	7.07	199.53	2.11	12.84	1.83	86.41	227.40	2.45	14.84	1.80	89.30	212.45	2.72	16.84	2.37	94.96	461.58	3.35	18.84	2.32	107.45	733.47	3.71
10.86	0.70	6.43	201.75	2.12	12.86	1.76	95.58	228.13	2.46	14.86	1.78	89.18	212.26	2.73	16.86	2.41	94.97	457.83	3.35	18.86	2.26	106.70	717.13	3.72
10.88	0.69	6.70	203.72	2.11	12.88	1.78	99.05	232.13	2.45	14.88	1.81	86.80	211.71	2.73	16.88	2.45	92.62	453.03	3.35	18.88	2.19	106.19	709.72	3.73
10.90	0.66	6.52	204.88	2.13	12.90	1.85	92.37	234.28	2.46	14.90	1.82	86.28	209.07	2.74	16.90	2.27	96.11	416.69	3.36	18.90	2.20	106.88	720.56	3.72
10.93	0.66	6.95	205.31	2.13	12.92	1.84	88.47	232.01	2.46	14.92	1.82	85.64	206.67	2.74	16.92	2.31	94.78	439.46	3.36	18.92	2.24	105.13	749.39	3.72
10.94	0.64	7.68	205.50	2.13	12.94	1.84	89.78	231.76	2.45	14.94	1.84	88.75	205.38	2.75	16.94	2.42	93.28	461.62	3.35	18.94	2.50	102.79	797.01	3.72
10.96	0.63	8.93	205.01	2.13	12.96	1.81	86.33	229.92	2.47	14.96	1.89	93.14	203.28	2.75	16.96	2.59	92.62	480.17	3.37	18.96	2.95	102.04	870.29	3.72
10.98	0.62	10.55	205.31	2.13	12.98	1.70	84.04	230.23	2.47	14.98	1.89	94.85	207.77	2.75	16.98	2.61	96.83	484.88	3.38	18.98	3.27	102.85	904.38	3.73
11.00	0.63	11.28	206.05	2.13	13.00	1.65	77.28	235.88	2.48	15.00	1.98	91.58	206.54	2.77	17.00	2.54	102.15	482.62	3.40	19.00	3.51	107.96	921.34	3.74
11.02	0.62	12.38	207.10	2.14	13.02	1.72	75.14	261.96	2.48	15.02	2.09	91.86	204.88	2.77	17.02	2.48	108.16	490.08	3.24	19.02	3.72	116.77	957.70	3.70
11.04	0.63	12.13	209.31	2.14	13.04	1.92	77.09	321.01	2.49	15.04	2.10	96.91	210.61	2.78	17.04	2.47	109.04	518.18	3.25	19.04	4.01	106.36	720.02	3.70
11.06	0.64	11.77	211.65	2.17	13.06	3.14	65.88	270.08	2.49	15.06	2.29	106.18	227.35	2.80	17.06	2.52	106.63	539.42	3.27	19.06	3.88	95.32	623.69	3.71
11.08	0.72	10.84	226.90	2.18	13.08	2.94	73.38	277.16	2.50	15.08	2.36	110.72	287.17	2.80	17.08	2.51	104.74	556.13	3.27	19.08	3.72	96.48	638.27	3.73
11.10	0.74	10.84	228.50	2.18	13.10	2.69	75.09	280.11	2.50	15.10	2.40	118.25	285.02	2.81	17.10	2.52	104.92	567.76	3.28	19.10	3.51	95.75	736.80	3.73
11.12	0.74	10.88	229.73	2.19	13.12	2.39	73.84	309.57	2.52	15.12	2.46	123.71	293.23	2.83	17.12	2.51	104.86	570.70	3.29	19.12	3.17	105.27	844.58	3.72
11.14	0.76	11.12	231.33	2.20	13.14	2.28	76.77	345.49	2.51	15.14	2.48	128.46	302.68	2.84	17.14	2.47	105.43	576.09	3.28	19.14	3.15	118.19	857.74	3.73
11.16	0.75	11.27	233.36	2.20	13.16	2.43	71.37	426.19	2.50	15.16	2.46	137.70	311.98	2.83	17.16	2.47	102.49	730.17	3.30	19.16	2.86	126.26	866.06	3.73
11.18	0.75	11.58	235.70	2.20	13.18	3.13	68.35	487.82	2.52	15.18	2.35	148.52	334.17	2.84	17.18	2.47	106.76	735.86	3.31	19.18	2.82	139.41	869.43	3.71
11.20	0.76	11.64	239.02	2.20	13.20	3.89	78.81	439.84	2.52	15.20	2.25	154.10	360.47	2.85	17.20	2.50	107.76	750.06	3.32	19.20	2.81	132.58	869.37	3.72
11.22	0.76	12.03	241.85	2.21	13.22	4.34	83.93	279.43	2.53	15.22	2.19	157.17	368.75	2.85	17.22	2.56	109.41	748.04	3.32	19.22	2.79	119.71	899.98	3.73
11.24	0.78	11.27	244.25	2.21	13.24	4.84	95.91	57.57	2.53	15.24	2.12	157.81	379.37	2.85	17.24	2.61	112.36	740.82	3.33	19.24	2.81	105.54	896.85	3.75
11.26	0.78	11.30	246.65	2.21	13.26	5.07	107.31	46.75	2.54	15.26	2.11	156.77	382.50	2.84	17.26	2.62	114.04	724.96	3.35	19.26	2.83	92.49	905.48	3.76
11.28	0.79	10.94	249.17	2.23	13.28	4.89	117.28	37.70	2.54	15.28	2.10	150.73	395.09	2.85	17.28	2.64	116.77	711.62	3.36	19.28	2.82	80.13	879.29	3.77
11.30	0.77	11.12	251.14	2.24	13.30	4.22	124.35	36.54	2.55	15.30	2.08	143.11	407.43	2.86	17.30	2.67	119.48	702.01	3.36	19.30	2.64	70.24	883.20	3.77
11.32	0.79	11.12	253.72	2.25	13.32	3.68	123.34	34.44	2.56	15.32	2.05	134.94	419.89	2.86	17.32	2.66	119.21	691.91	3.36	19.32	2.62	64.04	747.55	3.77
11.34	0.80	11.00	257.72	2.25	13.34	3.04	112.58	34.32	2.58	15.34	1.99	127.43	420.50	2.86	17.34	2.69	120.38	678.69	3.36	19.34	2.57	61.01	655.42	3.78
11.36	0.79	10.91	259.38	2.26	13.36	2.49	104.26	36.66	2.58	15.36	1.93	120.33	429.89	2.87	17.36	2.68	122.33	662.77	3.36	19.36	2.53	61.06	690.87	3.78
11.38	0.82	10.51	261.90	2.26	13.38	2.39	99.41	53.88	2.59	15.38	1.91	111.66	440.81	2.88	17.38	2.61	123.69	639.02	3.37	19.38	2.51	57.36	701.82	3.80
11.40	0.81	11.21	262.95	2.26	13.40	2.87	86.54	112.99	2.61	15.40	1.87	110.32	460.87	2.88	17.40	2.53	125.22	625.67	3.38	19.40	2.51	54.69	707.27	3.81
11.42	0.79	11.58	264.49	2.26	13.42	3.71	88.89	193.57	2.59	15.42	1.85	107.06	468.53	2.89	17.42	2.48	125.01	636.08	3.38	19.42	2.52	53.36	704.40	3.80
11.44	0.80	11.70	265.84	2.26	13.44	4.65	84.83	183.36	2.59	15.44	1.82	103.82	469.21	2.89	17.44	2.49	122.84	657.44	3.38	19.44	2.50	54.29	704.03	3.81
11.46	0.78	11.85	266.95	2.29	13.46	5.11	90.08	157.46	2.58	15.46	1.84	99.61	467.61	2.89	17.46	2.54	119.14	679.73	3.38	19.46	2.48	56.67	720.80	3.82
11.48	0.76	12.06	267.19	2.29	13.48	5.35	98.55	153.65	2.59	15.48	1.87	95.65	467.36	2.90	17.48	2.52	117.39	694.66	3.40	19.48	2.46	56.22	724.84	3.82
11.50	0.75	12.31	267.19	2.29	13.50	5.53	103.88	128.12	2.60	15.50	1.94	94.30	467.55	2.89	17.50	2.44	114.87	698.95	3.42	19.50	2.50	52.67	723.92	3.83
11.52	0.73	13.01	267.68	2.31	13.52	5.51	106.01	119.57	2.59	15.52	1.97	95.64	467.79	2.90	17.52	2.42	111.86	709.48	3.41	19.52	2.52	53.84	719.15	3.83
11.54	0.75	12.80	269.04	2.31	13.54	5.49	105.07	116.93	2.59	15.54	2.00	96.92	470.13	2.91	17.54	2.35	106.69	741.80	3.42	19.54	2.52	53.57	717.37	3.85
11.56	0.76	12.28	269.71	2.33	13.56	5.43	99.64	118.16	2.59	15.56	2.05	96.03	472.04	2.92	17.56	2.36	101.34	763.65	3.42	19.56	2.48	53.45	716.64	3.88
11.58	0.75	12.40	271.74	2.32	13.58	5.37	87.05	118.71	2.59	15.58	2.10	96.49	472.96	2.92	17.58	2.35	99.08	772.83	3.44	19.58	2.50	50.44	717.68	3.89
11.60	0.82	12.64	278.39	2.34	13.60	5.28	79.06	118.28	2.59	15.60	2.17	98.44	472.53	2.93	17.60	2.37	98.27	790.34	3.43	19.60	2.50	47.73	725.45	3.89
11.62	0.95	11.76	287.92	2.34	13.62	4.88	83.42	112.19	2.59	15.62	2.21	103.68	472.41	2.93	17.62	2.43	96.61	804.30	3.44	19.62	2.56	45.00	726.98	3.89
11.64	1.14	10.97	299.36	2.34	13.64	4.30	90.28	104.07	2.60	15.64	2.27	106.00	472.16	2.95	17.64	2.48	96.43	824.74	3.43	19.64	2.53	46.89	714.50	3.89
11.66	1.38	11.67	312.03	2.34	13.66	3.62	103.14	95.65	2.59	15.66	2.32	108.16	471.67	2.96	17.66	2.59	95.32	849.17	3.44	19.66	2.49	47.82	710.21	3.88
11.68	1.83	11.97	332.70	2.35	13.68	2.93	115.94	89.92	2.61	15.68	2.33	111.14	467.12	2.96	17.68	2.58	96.49	835.76	3.46	19.68	2.55	47.40	714.13	3.88
11.70	2.46	12.64	344.38	2.35	13.70	2.38	105.97	87.03	2.62	15.70	2.32	119.13	463.49	2.97	17.70	2.59	100.67	827.38	3.47	19.70	2.60	46.77	716.82	3.89
11.72	3.56	20.57	153.95	2.36	13.72	1.93	100.70	89.80	2.62	15.72	2.34	124.62	461.34	2.99	17.72	2.62	102.90	817.09	3.47	19.72	2.61	47.16	708.31	3.90
11.74	4.23	26.73	50.25	2.35	13.74	1.74	99.75	124.98	2.63	15.74	2.31	130.41	458.88	2.99	17.74	2.68	105.21	818.07	3.47	19.74	2.53	49.11	695.15	3.91
11.76	4.63	35.17	41.27	2.36	13.76	2.06	71.67	253.97	2.62	15.76	2.29	133.94	457.03	3.01	17.76	2.74	107.80	821.50	3.49	19.76	2.48	51.28	681.56	3.91
11.78	4.84	42.79	41.46	2.36	13.78	3.12	68.04	396.11	2.65	15.78	2.30	137.11	455.00	3.03	17.78	2.81	108.64	811.21	3.48	19.78	2.44	51.52	681.62	3.92
11.80	4.73	48.83	41.89	2.38	13.80	4.67	72.37	415.49	2.63	15.80	2.34	140.10	454.63	3.04	17.80	2.82	113.06	819.60	3.49	19.80	2.44	49.87	685.05	3.92
11.82	4.54	50.08	41.89	2.38	13.82	6.71	76.79	170.13	2.63	15.82	2.37	142.93	455.49	3.05	17.82	2.88	112.73	817.40	3.49	19.82	2.52	47.04	689.64	3.92
11.84	4.43	51.57	41.46	2.38	13.84	8.61	84.50	100.93	2.64	15.84	2.37	143.48	456.72	3.06	17.84	2.84	112.85	791.38	3.52	19.84	2.50	48.24	694.36	3.93
11.86	4.45	56.81	49.64	2.40	13.86	9.52	92.73	107.89	2.65	15.86	2.36	141.01	453.71	3.07	17.86	2.75	114.84	753.00	3.52	19.86	2.47	50.29	722.51	3.93
11.88	5.04	67.42	59.72	2.41	13.88	9.74	86.91	110.53	2.67	15.88	2.35	137.38	449.71	3.09	17.88	2.66	116.64	735.98	3.52	19.88	2.43	48.75	718.54	3.95
11.90	5.42	75.96	60.95	2.39	13.90	9.21	65.26	104.75	2.69	15.90	2.30	140.24	445.04	3.11	17.90	2.54	117.60	749.33	3.53	19.90	2.39	47.25	714.25	3.96
11.92	5.55	81.84	63.91	2.41	13.92	8.02	43.40	92.82	2.68	15.92	2.21	144.17	441.16	3.13	17.92	2.43	114.17	767.51	3.54	19.92	2.37	62.50	99.53	3.97
11.94	5.21	80.10	60.65	2.42	13.94	6.17	35.08	77.25	2.70	15.94	2.16	145.64	438.70	3.13	17.94	2.45	109.30	799.77	3.54	19.94	2.07	57.42	95.00	3.97
11.96	4.49	70.10	54.00	2.41	13.96	4.49	39.90	63.85	2.72	15.96	2.15	146.37	438.45	3.15	17.96	2.55	108.10	833.56	3.54	19.96	1.73	55.02	97.27	3.97
11.98	4.04	60.89	51.85	2.40	13.98	3.14	61.30	58.00	2.72	15.98	2.11	150.39	438.52	3.16	17.98	2.56	102.15	842.80	3.54	19.98	1.49	52.28	103.09	3.99
12.00	3.90	57.99	53.70	2.42	14.00	2.60	85.13	77.07	2.72	16.00	2.14	152.22	442.76	3.16	18.00	2.49	99.98	830.68	3.56	20.00	1.50	46.39	114.65	4.03

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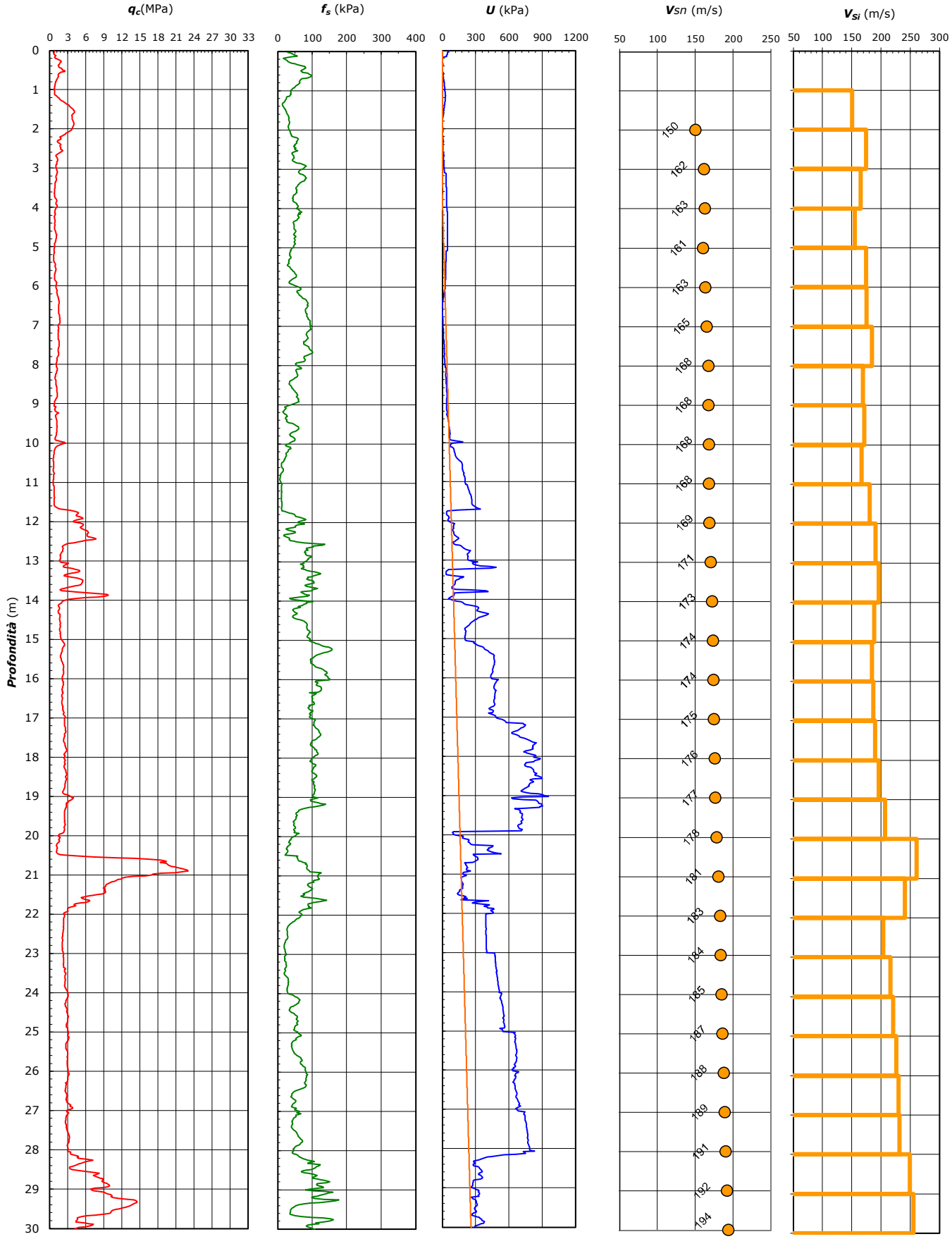
COMMITTENTE:
CANTIERE: Via Lughese - Villafranca (FC)
COMMESSA: C054/24
RDP N°: 224/24
DATA: 25/09/2024

PROVA N°: SCPTU 3
PROF. FALDA (m da p.c.): 3.50
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
20.02	1.55	43.60	156.10	4.04	22.02	2.51	67.21	393.77	4.48	24.02	3.05	34.60	512.61	4.95	26.02	3.07	83.79	638.79	5.68	28.02	3.03	44.70	786.93	6.21
20.04	1.78	40.23	189.03	4.05	22.04	2.49	66.43	392.95	4.48	24.04	3.10	43.39	534.59	4.95	26.04	3.14	83.58	689.25	5.69	28.04	3.08	42.81	792.63	6.21
20.06	1.74	38.55	185.66	4.05	22.06	2.46	63.88	392.14	4.48	24.06	3.10	48.28	534.59	4.96	26.06	3.25	87.36	681.11	5.69	28.06	3.58	42.72	831.70	6.21
20.08	1.58	39.21	180.71	4.08	22.08	2.43	60.77	392.95	4.48	24.08	3.10	51.73	533.78	4.95	26.08	3.22	85.80	665.65	5.71	28.08	3.45	46.72	732.39	6.20
20.10	1.52	35.42	211.01	4.08	22.10	2.38	55.44	392.95	4.47	24.10	3.07	55.61	526.45	4.97	26.10	3.17	83.36	659.95	5.70	28.10	3.43	52.61	743.79	6.21
20.12	1.56	34.49	235.86	4.08	22.12	2.38	53.10	392.95	4.48	24.12	2.99	59.84	526.45	4.96	26.12	3.12	84.47	656.69	5.72	28.12	3.61	57.83	752.75	6.20
20.14	1.65	32.57	244.80	4.10	22.14	2.38	50.44	393.77	4.49	24.14	2.96	62.28	525.64	4.96	26.14	3.06	83.35	652.62	5.73	28.14	4.13	61.50	666.58	6.22
20.16	1.58	33.93	233.84	4.11	22.16	2.38	47.99	393.77	4.49	24.16	2.86	64.61	521.57	4.97	26.16	3.04	82.02	664.83	5.73	28.16	4.77	63.38	559.25	6.22
20.18	1.43	37.93	235.74	4.12	22.18	2.35	44.44	393.77	4.48	24.18	2.81	63.72	526.45	4.98	26.18	3.04	82.47	661.57	5.73	28.18	4.81	67.05	502.03	6.21
20.20	1.32	36.94	247.61	4.12	22.20	2.33	41.44	394.59	4.50	24.20	2.75	62.16	526.45	4.98	26.20	3.06	82.91	662.39	5.74	28.20	4.59	71.27	445.05	6.22
20.22	1.25	34.08	252.69	4.13	22.22	2.35	37.21	394.59	4.50	24.22	2.72	61.50	532.97	4.99	26.22	3.04	81.91	656.69	5.75	28.22	4.81	78.83	405.17	6.22
20.24	1.15	30.87	260.77	4.15	22.24	2.35	35.21	394.59	4.51	24.24	2.70	60.50	537.03	4.99	26.24	2.99	80.24	650.99	5.75	28.24	6.21	87.60	381.22	6.21
20.26	1.13	28.55	276.08	4.14	22.26	2.35	33.66	395.40	4.50	24.26	2.64	57.60	537.03	4.99	26.26	2.96	79.24	648.55	5.76	28.26	7.21	95.05	357.26	6.22
20.28	1.23	28.19	457.39	4.15	22.28	2.35	30.88	395.40	4.51	24.28	2.57	54.27	537.85	5.01	26.28	2.91	78.46	645.29	5.75	28.28	6.91	106.60	334.81	6.23
20.30	1.30	25.66	452.99	4.16	22.30	2.33	29.33	395.40	4.51	24.30	2.57	49.82	540.29	5.00	26.30	2.67	79.57	638.79	5.76	28.30	6.16	91.83	319.93	6.23
20.32	1.30	25.66	436.95	4.18	22.32	2.28	28.11	394.59	4.53	24.32	2.64	45.49	541.92	5.01	26.32	2.87	83.59	642.62	5.77	28.32	5.67	87.49	284.81	6.25
20.34	1.25	28.70	418.03	4.19	22.34	2.32	27.99	395.40	4.52	24.34	2.65	40.60	543.55	5.02	26.34	2.81	83.70	652.62	5.78	28.34	5.26	98.71	285.98	6.25
20.36	1.23	29.03	420.54	4.20	22.36	2.33	26.99	395.40	4.53	24.36	2.72	36.60	545.99	5.01	26.36	2.73	82.37	651.81	5.78	28.36	4.92	123.49	297.03	6.27
20.38	1.19	29.06	404.69	4.21	22.38	2.32	27.33	396.21	4.53	24.38	2.83	35.71	546.8	5.02	26.38	2.70	79.92	652.62	5.79	28.38	4.62	121.04	300.28	6.27
20.40	1.14	28.31	415.34	4.21	22.40	2.28	28.44	397.03	4.54	24.40	2.86	34.27	548.43	5.02	26.40	2.68	75.14	655.88	5.78	28.40	4.24	114.04	280.75	6.28
20.42	1.14	26.81	427.64	4.22	22.42	2.27	28.44	396.21	4.56	24.42	2.92	33.04	550.06	5.02	26.42	2.68	71.70	658.32	5.79	28.42	3.74	111.59	279.93	6.29
20.44	1.18	23.89	446.80	4.22	22.44	2.26	27.78	394.59	4.55	24.44	2.92	34.82	549.25	5.03	26.44	2.68	64.70	658.32	5.79	28.44	3.38	109.70	289.70	6.30
20.46	1.34	22.75	481.64	4.23	22.46	2.24	28.11	394.6	4.55	24.46	2.90	37.82	549.25	5.01	26.46	2.65	57.14	659.13	5.81	28.46	3.30	103.48	319.01	6.30
20.48	1.81	22.21	530.24	4.24	22.48	2.21	28.44	394.59	4.57	24.48	2.90	41.04	550.06	5.02	26.48	2.63	51.03	659.13	5.81	28.48	3.41	97.14	333.65	6.30
20.50	2.61	57.89	278.89	4.26	22.50	2.19	27.67	394.59	4.58	24.50	2.90	45.15	550.87	5.03	26.50	2.60	47.36	661.57	5.82	28.50	3.79	82.70	338.54	6.30
20.52	4.87	56.20	284.77	4.27	22.52	2.18	27.78	395.40	4.57	24.52	2.95	48.70	552.50	5.04	26.52	2.61	45.25	664.02	5.83	28.52	4.31	70.91	344.24	6.31
20.54	7.35	56.98	296.28	4.28	22.54	2.16	29.11	395.40	4.59	24.54	2.98	50.82	553.31	5.05	26.54	2.71	42.25	667.27	5.83	28.54	5.44	68.91	349.93	6.33
20.56	11.19	58.64	311.28	4.29	22.56	2.16	29.89	396.21	4.60	24.56	2.98	53.70	554.13	5.05	26.56	2.82	40.80	670.53	5.85	28.56	6.64	78.46	356.45	6.34
20.58	14.04	58.69	318.68	4.31	22.58	2.15	29.56	396.21	4.60	24.58	3.05	57.15	556.57	5.07	26.58	2.85	41.58	672.16	5.85	28.58	7.71	88.57	361.33	6.35
20.60	16.54	59.05	321.87	4.31	22.60	2.15	28.01	397.03	4.62	24.60	3.14	57.15	557.39	5.06	26.60	2.90	41.58	673.79	5.86	28.60	8.26	103.24	360.52	6.35
20.62	18.52	62.78	324.62	4.32	22.62	2.15	26.45	397.03	4.62	24.62	3.12	57.48	559.83	5.07	26.62	2.91	39.02	672.97	5.87	28.62	7.96	110.24	339.35	6.36
20.64	19.20	69.09	315.81	4.33	22.64	2.16	24.67	397.84	4.63	24.64	3.12	54.81	554.94	5.08	26.64	2.90	38.69	670.53	5.87	28.64	7.42	114.56	327.96	6.35
20.66	19.42	73.81	306.07	4.33	22.66	2.16	23.45	397.84	4.63	24.66	3.05	54.37	549.25	5.08	26.66	2.87	42.25	667.27	5.87	28.66	7.27	108.90	330.4	6.35
20.68	18.37	82.74	296.65	4.35	22.68	2.16	22.56	397.84	4.65	24.68	3.00	57.48	548.43	5.10	26.68	2.80	45.69	665.65	5.89	28.68	7.67	100.89	345.9	6.36
20.70	19.33	80.12	276.75	4.36	22.70	2.15	21.56	397.84	4.66	24.70	2.98	59.15	554.94	5.09	26.70	2.77	49.58	667.27	5.90	28.70	8.03	101.78	354.8	6.38
20.72	19.50	84.09	201.64	4.37	22.72	2.12	21.01	397.84	4.65	24.72	3.00	58.48	558.20	5.10	26.72	2.74	52.36	673.79	5.89	28.72	8.41	111.11	363.0	6.39
20.74	19.67	85.83	216.52	4.39	22.74	2.15	19.90	397.84	4.65	24.74	2.98	55.37	557.39	5.11	26.74	2.79	53.03	677.85	5.90	28.74	8.83	122.78	366.2	6.39
20.76	19.91	85.89	212.54	4.40	22.76	2.15	19.46	397.84	4.66	24.76	2.92	55.48	554.13	5.11	26.76	2.87	51.70	681.11	5.91	28.76	8.95	136.88	359.71	6.41
20.78	20.22	84.74	220.19	4.40	22.78	2.12	18.79	397.84	4.67	24.78	2.85	58.81	552.50	5.11	26.78	2.90	49.14	683.55	5.91	28.78	8.81	147.10	346.68	6.41
20.80	20.75	84.56	224.05	4.41	22.80	2.12	18.57	397.84	4.69	24.80	2.82	56.36	556.57	5.11	26.80	2.98	46.47	686.0	5.92	28.80	8.71	151.66	288.1	6.41
20.82	21.40	84.17	223.92	4.41	22.82	2.12	18.68	397.84	4.68	24.82	2.82	52.36	559.01	5.12	26.82	3.09	44.25	689.3	5.93	28.82	8.77	141.88	279.9	6.43
20.84	22.04	86.57	231.15	4.42	22.84	2.12	19.35	397.84	4.69	24.84	2.82	50.36	559.83	5.13	26.84	3.35	43.14	694.13	5.93	28.84	9.15	114.87	279.1	6.43
20.86	22.59	90.83	220.31	4.43	22.86	2.15	20.91	398.65	4.69	24.86	2.82	49.36	559.01	5.13	26.86	3.50	40.70	696.58	5.95	28.86	9.61	113.87	278.3	6.44
20.88	22.91	92.27	219.52	4.42	22.88	2.17	21.24	398.65	4.71	24.88	2.90	49.80	563.08	5.14	26.88	3.42	40.36	689.25	5.93	28.88	9.79	113.31	275.9	6.46
20.90	23.01	93.44	219.33	4.43	22.90	2.15	21.69	398.65	4.72	24.90	2.99	49.47	563.08	5.14	26.90	3.44	44.25	693.32	5.93	28.90	9.89	119.41	275.0	6.47
20.92	21.96	126.69	254.29	4.44	22.92	2.15	22.35	398.65	4.73	24.92	3.03	46.69	562.27	5.15	26.92	3.85	54.36	707.16	5.93	28.92	9.97	130.96	275.9	6.46
20.94	20.88	125.28	223.02	4.44	22.94	2.18	22.47	400.28	4.73	24.94	2.99	48.80	518.31	5.17	26.94	3.82	51.25	688.44	5.94	28.94	9.67	132.74	274.2	6.48
20.96	18.56	120.03	194.96	4.45	22.96	2.26	22.91	400.28	4.75	24.96	3.04	51.91	541.92	5.17	26.96	3.55	49.14	672.16	5.95	28.96	8.79	118.62	268.5	6.41
20.98	17.19	117.14	185.14	4.45	22.98	2.28	23.58	400.28	4.79	24.98	3.12	57.91	545.99	5.18	26.98	3.14	56.25	662.39	5.89	28.98	7.52	96.51	265.3	6.43
21.00	16.97	116.49	188.20	4.37	23.00	2.26	26.47	398.65	4.79	25.00	3.17	59.69	550.06	5.20	27.00	2.90	63.25	668.09	5.88	29.00	6.82	81.17	268.53	6.44
21.02	15.97	116.37	207.72	4.37	23.02	2.34	24.93	472.73	4.81	25.02	3.12	60.35	547.61	5.20	27.02	2.87	60.59	677.85	5.89	29.02	6.96	103.72	297.0	6.42
21.04	13.92	117.76	218.65	4.38	23.04	2.34	21.93	473.54	4.82	25.04	3.16	63.49	656.69	5.21	27.04	2.87	55.70	685.99	5.90	29.04	7.34	132.83	305.98	6.44
21.06	12.51	119.01	195.22	4.38	23.06	2.29	20.71	475.17	4.81	25.06	3.08	68.93	646.93	5.23	27.06	3.16	68.05	746.23	5.91	29.06	8.06	160.60	324.70	6.45
21.08	12.07	120.71	174.08	4.38	23.08	2.30	20.05	478.43	4.83	25.08	3.05	67.15	651.81	5.24	27.08	3.07	59.16	739.72	5.92	29.08	9.10	146.52	331.21	6.45
21.10	11.92	119.27	171.82	4.37	23.10	2.34	20.05	476.80	4.84	25.10	3.10	61.04	655.88	5.25	27.10	3.00	53.05	738.09	5.93	29.10	9.34	142.74	325.51	6.46
21.12	11.31	104.95	174.39	4.38	23.12	2.30	21.16	479.24	4.84	25.12	3.18	57.38	659.9	5.27	27.12	2.89	52.49	734.02	5.93	29.12	9.70	132.85	332.84	6.46
21.14	11.11	102.46	173.85	4.38	23.14	2.34	20.71	479.24	4.85	25.14	3.21	52.93	659.13	5.28	27.14	2.81	52.49	743.79	5.95	29.14	10.05	122.30	336.10	6.47
21.16	10.79	105.18	172.95	4.39	23.16	2.34	20.71	480.05	4.85	25.16	3.16	52.93	655.07	5.29	27.16	2.78	48.38	746.23	5.96	29.16	10.37	113.97	336.10	6.47
21.18	10.40	97.54	173.82	4.40	23.18	2.34	22.16	480.05	4.86	25.18	3.14	53.93	659.95	5.31	27.18	2.75	46.16	747.05	5.97	29.18	10.39	102.74	327.15	6.47
21.20	10.04	89.39	179.47	4.41	23.20	2.34	23.71	480.87	4.87	25.20	3.10	48.15	659.95	5.32	27.20	2.72	44.94	747.86	5.97	29.20	10.24	98.63	325.51	6.48
21.22	9.75	86.72	181.64	4.42	23.22	2.30	24.27	480.87	4.87	25.22	3.06	44.49	658.32	5.33	27.22	2.70	43.94	747.05	5.98	29.22	10.56	108.29	334.47	6.49
21.24	9.47	87.41	184.90	4.42	23.24	2.30	24.27	481.68	4.86	25.24	2.95	42.82	658.32	5.34	27.24	2.69	42.16	747.86	5.98	29.24	11.56	135.74	265.28	6.49
21.26	9.39	89.52	188.64	4.43	23.26	2.30	24.94	480.87	4.85	25.26	2.86	40.70	655.88	5.35	27.26	2.64	41.05	747.05	5.98	29.26	13.14	176.18	270.98	6.51
21.28	9.34	91.34	186.54	4.43	23.28	2.29	25.27	482.49	4.87	25.28	2.81	40.37	653.43	5.37	27.28	2.61	42.16	746.23	5.99	29.28	14.00	168.18	278.31	6.50
21.30	9.29	96.96	186.50	4.44	23.30	2.30	25.38	483.31	4.87	25.30	2.74	41.04	658.32	5.37	27.30	2.62	42.27	749.49	6.00	29.30	14.41	147.73	297.84	6.52
21.32	9.01	101.08	183.76	4.44	23.32	2.30	24.27	483.31	4.88	25.32	2.74	41.26	662.39	5.39	27.32	2.65	43.82	753.56	6.01	29.32	14.54	123.95	305.98	6.53
21.34	8.93	98.99	182.40	4.44	23.34	2.34	23.71	484.94	4.88	25.34	2.74	40.26	662.39	5.40	27.34	2.73	42.60	756.81	6.02	29.34	14.49	96.50	310.05	6.55
21.36	9.21	99.04	184.71	4.44	23.36	2.35	22.27	484.94	4.88	25.36	2.74	40.70	661.57	5.40	27.36	2.80	41.49	759.25	6.03	29.36	14.28	75.05	310.05	6.57
21.38	9.21	93.74	179.59	4.45	23.38	2.64	19.94	489.01	4.89	25.38	2.74	41.93	664.02	5.41	27.38	2.81	40.16	759.25	6.05	29.38	13.93	61.04	308.4	6.57
21.40	9.09	90.08	156.17	4.45	23.40	2.62	22.60	487.38	4.90	25.40	2.74	42.26	664.83	5.41	27.40	2.81	40.15	757.63	6.04	29.40	13.66	52.82	314.1	6.58
21.42	9.34	85.59	159.88	4.45	23.42	2.53	22.38	487.38	4.91	25.42	2.74	42.26	664.83	5.41	27.42	2.81	41.60	758.44	6.06	29.42	13.47	49.93	317.4	6.59
21.44	9.32	79.17	158.90	4.46	23.44	2.46	21.16	492.27	4.92	25.44	2.79	43.37	667.27	5.42	27.44	2.83	42.71	759.25	6.06	29.44	13.20	47.37	316.6	6.61
21.46	9.18	74.20	149.59	4.46	23.46	2.48	20.05	492.27	4.92	25.46	2.86	45.70	669.71	5.41	27.46	2.86	44.71	760.89	6.06	29.46	12.75	42.92	310.9	6.62
21.48	8.78	78.57	143.48	4.45	23.48	2.57	19.49	493.89	4.92	25.48	2.92	47.15	672.16	5.43	27.48	2.87	47.60	761.70	6.05	29.48	12.08	40.58	301.1	6.62
21.50	8.13	76.07	137.53	4.47	23.50	2.72	19.38	489.01	4.93	25.50	2.98	47.37	671.35	5.43	27.50	2.91	50.04	764.14	6.06	29.50	11.53	38.58	296.2	6.63
21.52	7.24	66.89	140.94	4.48	23.52	2.69	21.05	489.82	4.93	25.52	3.05	48.15	672.97	5.45	27.52	2.95	52.71	764.95	6.08	29.52	11.00	36.80	293.8	6.63
21.54	6.24	75.67	161.07	4.48	23.54	2.64	22.60	491.45	4.95	25.54	3.05	52.37	673.79	5.44	27.54	3.00	55.38	766.58	6.08	29.54	10.54	36.80	293.8	6.64
21.56	5.65	89.88	191.18	4.49	23.56	2.57	24.27	491.45	4.94	25.56	3.05	53.59	671.35	5.47	27.56	3.06	56.27	767.39	6.08	29.56	10.27	37.36	296.2	6.67
21.58	5.28	112.99	214.88	4.49	23.58	2.56	26.49	494.71	4.95	25.58	3.03	55.92	669.71	5.47	27.58	3.10	56.82	768.21	6.10	29.58	10.18	35.91	304.4	6.66
21.60	5.51	127.75	199.74	4.49	23.60	2.56	29.05	496.33	4.95	25.60	2.98	61.14	665.65	5.48	27.60	3.16	58.38	769.03	6.10	29.60	10.18	36.58	309.2	6.68
21.62	5.84	141.44	228.33	4.50	23.62	2.56	30.94	497.15	4.96	25.62	2.97	65.14	663.21	5.48	27.62	3.22	59.37	770.65	6.12	29.62	9.95	35.69	306.8	6.69
21.64	6.63	135.00	177.25	4.50	23.64	2.57	31.38	497.96	4.96	25.64	2.95	68.03	664.02	5.49	27.64	3.25	59.70	770.65	6.13	29.64	8.87	41.80	282.4	6.70
21.66	6.71	122.92	169.45	4.50	23.66	2.61	31.16	498.77	4.95	25.66	2.97	67.59	670.53	5.51	27.66	3.30	61.82	770.65	6.13	29.66	7.52	50.46	272.6	6.71
21.68	6.48	103.42	417.38	4.50	23.68	2.61	31.49	500.41	4.95	25.68	2.98	70.25	673.79	5.52	27.68	3.32	64.26	771.47	6.13	29.68	6.32	69.13	266.9	6.72
21.70	5.94	94.67	329.72	4.51	23.70	2.57	31.60	500.41	4.96	25.70	3.00	70.81	673.79	5.53	27.70	3.30	66.15	770.65	6.13	29.70	5.32	99.57	268.5	6.72
21.72	5.07	88.42	298.04	4.50	23.72	2.57	31.05	501.22	4.96	25.72	2.96	69.47	671.35	5.54	27.72	3.27	68.93	768.21	6.14	29.72	4.79	131.02	293.0	6.72
21.74	4.25	88.46	272.22	4.51	23.74	2.56	30.38	502.03	4.94	25.74	2.95	66.59	668.90	5.55	27.74	3.25	71.03	771.47	6.15	29.74	4.57	153.24	321.4	6.71
21.76	4.03	88.32	339.24	4.51	23.76	2.54	30.60	502.85	4.96	25.76	2.91	66.47	668.09	5.57	27.76	3.25	72.26	773.09	6.16	29.76	4.66	161.35	336.9	6.71
21.78	4.34	92.74	425.11	4.53	23.78	2.54	30.27	502.85	4.98	25.78	2.91	66.36	665.65	5.58	27.78	3.24	71.26	774.72	6.17	29.78	4.65	155.46	342.6	6.70
21.80	4.14	90.32	423.83	4.52	23.80	2.53	29.83	504.47	4.97	25.80	2.96	67.58	666.46	5.60	27.80	3.20	68.59	773.91	6.16	29.80	4.47	149.23	356.4	6.70
21.82	3.52	98.00	378.51	4.51	23.82	2.53	29.05	505.29	4.98	25.82	2.96	70.80	655.88	5.59	27.82	3.16	66.03	771.47	6.17	29.82	4.47	133.23	357.3	6.70
21.84	3.09	85.07	406.75	4.52	23.84	2.54	28.49	506.91	4.97	25.84	2.96	72.80	655.07	5.61	27.84	3.06	64.37	770.65	6.20	29.84	4.34	110.78	359.7	6.69
21.86	2.99	73.22	409.85	4.51	23.86	2.57	28.05	507.73	4.99	25.86	2.99	77.24	648.55	5.62	27.86	3.00	60.48	772.28	6.18	29.86	5.75	120.00	380.87	6.69
21.88	3.03	70.96	461.34	4.52	23.88	2.62	27.49	509.36	4.98	25.88	2.98	79.57	656.69	5.63	27.88	2.96	55.92	774.7	6.20	29.88	6.52	103.22	377.61	6.70
21.90	3.04	66.49	465.12	4.51	23.90	2.72	27.83	510.99	4.98	25.90	2.99	80.46	659.95	5.66	27.90	2.96	51.14	778.0	6.20	29.90	7.28	86.44	374.35	6.69
21.92	3.09	62.66	437.94	4.51	23.92	2.80	27.49	512.61	4.99	25.92	3.04	80.13	653.43	5.66	27.92	3.00	48.70	781.23	6.21	29.92	7.10	83.45	348.31	6.69
21.94	2.80	62.03	440.72	4.51	23.94	2.86	27.71	513.43	4.99	25.94	3.07	78.91	642.85	5.67	27.94	3.04	47.59	783.67	6.22	29.94	6.60	86.89	333.65	6.69
21.96	2.57	68.11	453.08	4.50	23.96	2.96	28.71	515.87	5.00	25.96	3.07	80.46	645.29	5.67	27.96	3.08	45.70	786.12	6.21	29.96	5.79	92.90	306.8	6.69
21.98	2.36	70.65	461.83	4.53	23.98	3.05	29.38	516.69	4.93	25.98	3.07	81.24	629.8	5.67	27.98	3.08	45.92	786.12	6.19	29.98	4.87	98.57	297.8	6.69
22.00	2.45	72.00	448.89	4.47	24.00	3.10	30.94	515.05	4.94	26.00	3.05	81.90	631.46	5.67	28.00	3.06	45.70	786.93	6.19	30.00	4.22	107.46	294.6	6.70

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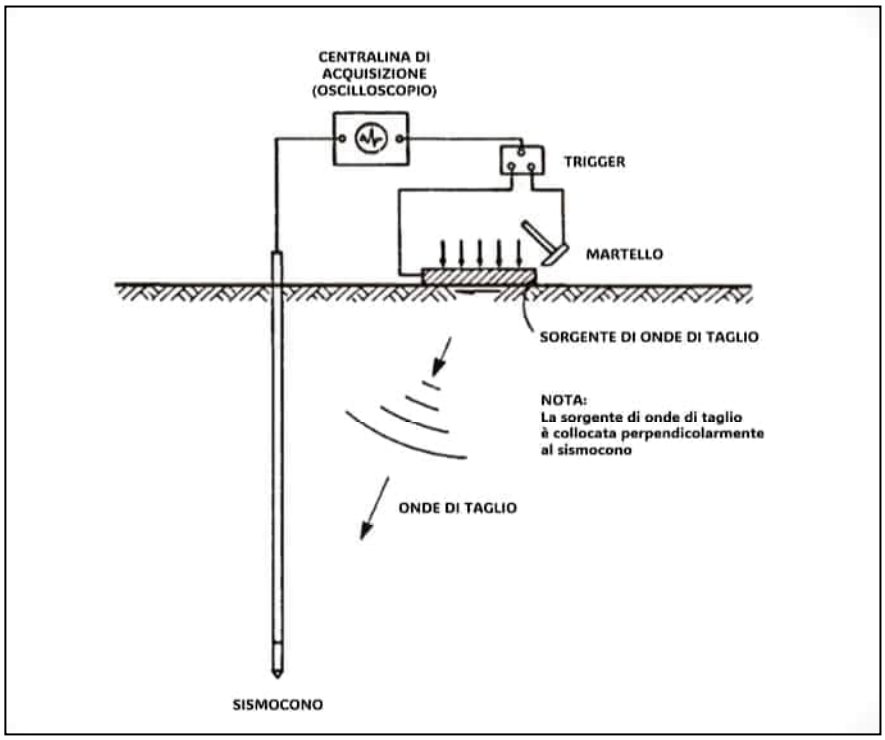
COMMITTENTE:		PROVA N°:	SCPTU 3
CANTIERE:	Via Lughese - Villafranca (FC)	PROF. FALDA (m da p.c.):	3.50
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	224/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	25/09/2024	OPERATORE:	Zanirato



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CANTIERE:	Via Lughese - Villafranca (FC)	PROF. FALDA (m da p.c.):	3.50
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	224/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	25/09/2024	OPERATORE:	Zanirato

Prova Down Hole ASTM D 7400



Profondità (m)	Ts (ms)	L (m)	Vs (m/s)	Vis (m/s)
1.0	T0	1.00	-	-
2.0	6.65	2.00	150	150
3.0	12.37	3.00	162	175
4.0	18.43	4.00	163	165
5.0	24.85	5.00	161	156
6.0	30.59	6.00	163	174
7.0	36.29	7.00	165	175
8.0	41.72	8.00	168	184
9.0	47.61	9.00	168	170
10.0	53.44	10.00	168	172
11.0	59.42	11.00	168	167
12.0	64.94	12.00	169	181
13.0	70.19	13.00	171	191
14.0	75.29	14.00	173	196
15.0	80.59	15.00	174	189
16.0	86.01	16.00	174	185
17.0	91.35	17.00	175	187
18.0	96.61	18.00	176	190
19.0	101.71	19.00	177	196
20.0	106.54	20.00	178	207
21.0	110.38	21.00	181	260
22.0	114.52	22.00	183	241
23.0	119.43	23.00	184	204
24.0	124.06	24.00	185	216
25.0	128.58	25.00	187	221
26.0	133.01	26.00	188	226
27.0	137.35	27.00	189	230
28.0	141.66	28.00	191	232
29.0	145.67	29.00	192	250
30.0	149.58	30.00	194	256

CATEGORIA SOTTOSUOLO
C
$V_{s,30}$ = 194 m/s

D = Distanza centro trave generatrice ond
Profondità = Profondità punta da piano campagna
Ts = Tempo percorrenza onda di taglio
L = Lunghezza percorso onda di taglio
Vs = Velocità onde di taglio da piano campagna alla profondità indicata = 1.00 m
Vis = Velocità onde di taglio nello strato di terreno compreso fra le due profondità indicate

Studio LZ CPT di Lorenzo Zanirato
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COMMITTENTE:		PROVA N°:	SCPTU 3
CANTIERE:	Via Lughese - Villafranca (FC)	PROF. FALDA (m da p.c.):	3.50
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	224/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	25/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Lughese - Villafranca (FC)

LAT. (WGS 84): 44.289979°
LONG. (WGS 84): 12.012417°



Studio LZ CPT di Lorenzo Zanirato
Via Argine Volano, 55
44034 - Copparo (FE)
Tel: 3470442799
Email: zanirato12@gmail.com
PEC: lorenzozanirato@pec.it

COMMITTENTE:
CANTIERE: Via Correcchio - Loc. Coriano (FC)
COMMESSA: C054/24
RDP N°: 225/24
DATA: 24/09/2024

PROVA N°: SCPTU 4
PROF. FALDA (m da p.c.): 3.30
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof.	qc	fs	U	incl.	prof.	qc	fs	U	incl.	prof.	qc	fs	U	incl.	prof.	qc	fs	U	incl.	prof.	qc	fs	U	incl.
m	Mpa	kPa	kPa	gradi	m	Mpa	kPa	kPa	gradi	m	Mpa	kPa	kPa	gradi	m	Mpa	kPa	kPa	gradi	m	Mpa	kPa	kPa	gradi
0.02	0.90	26.72	16.85	0.37	2.02	2.40	36.20	51.00	0.75	4.02	1.28	28.13	8.93	1.33	6.02	4.11	26.54	31.82	2.29	8.02	5.53	24.23	36.66	3.05
0.04	1.01	30.54	20.06	0.02	2.04	2.30	38.38	49.99	0.76	4.04	1.45	25.95	11.38	1.34	6.04	3.56	24.98	29.49	2.29	8.04	5.57	25.02	37.17	3.06
0.06	1.20	34.74	23.96	0.34	2.06	2.12	44.27	45.21	0.76	4.06	1.98	22.69	21.95	1.36	6.06	3.26	26.96	28.86	2.30	8.06	5.59	27.12	35.40	3.07
0.08	1.32	40.80	24.90	0.31	2.08	1.97	56.29	42.64	0.77	4.08	2.44	21.27	25.85	1.37	6.08	3.38	33.26	28.05	2.33	8.08	5.78	25.96	34.08	3.06
0.10	1.45	47.54	24.90	0.14	2.10	1.82	73.09	40.37	0.78	4.10	2.47	26.34	20.75	1.39	6.10	3.37	37.65	23.39	2.33	8.10	5.79	26.55	33.33	3.07
0.12	1.57	59.47	22.89	0.11	2.12	2.27	85.18	50.50	0.79	4.12	2.08	24.89	16.41	1.39	6.12	3.50	41.56	23.46	2.37	8.12	5.84	26.64	32.70	3.08
0.14	1.57	64.66	20.31	0.20	2.14	2.04	86.83	46.98	0.81	4.14	1.78	25.80	13.08	1.41	6.14	3.89	47.94	25.85	2.38	8.14	5.86	27.29	32.01	3.07
0.16	1.47	59.05	33.71	0.26	2.16	2.02	84.81	45.34	0.81	4.16	1.59	26.25	10.82	1.41	6.16	4.66	49.69	29.93	2.39	8.16	5.83	26.89	31.76	3.08
0.18	1.47	69.08	24.71	0.15	2.18	1.92	79.43	43.39	0.80	4.18	1.37	25.60	8.55	1.42	6.18	5.14	45.44	31.44	2.41	8.18	5.81	27.23	31.19	3.08
0.20	1.44	74.52	21.26	0.14	2.20	1.87	72.97	43.83	0.80	4.20	1.19	19.85	5.66	1.41	6.20	5.43	47.85	31.57	2.41	8.20	5.83	27.54	31.51	3.09
0.22	1.52	74.52	18.11	0.06	2.22	1.90	68.29	44.21	0.83	4.22	1.11	14.78	6.60	1.41	6.22	5.69	50.91	32.45	2.41	8.22	5.98	28.08	32.13	3.10
0.24	1.57	74.58	17.17	0.21	2.24	1.90	60.64	45.59	0.83	4.24	1.07	14.58	7.29	1.42	6.24	5.94	39.98	33.08	2.41	8.24	6.35	29.27	34.40	3.11
0.26	1.69	75.46	17.29	0.14	2.26	1.88	49.62	46.66	0.84	4.26	1.01	15.32	7.80	1.43	6.26	6.17	27.25	34.27	2.42	8.26	6.96	29.73	37.10	3.13
0.28	1.69	74.38	19.43	0.03	2.28	1.90	42.14	46.79	0.84	4.28	1.01	13.67	10.19	1.47	6.28	6.74	19.86	36.85	2.41	8.28	7.80	30.60	40.75	3.14
0.30	1.69	74.24	18.68	0.22	2.30	1.99	39.33	47.54	0.84	4.30	1.10	11.61	14.09	1.47	6.30	7.38	16.06	39.11	2.42	8.30	8.66	30.60	42.70	3.16
0.32	1.70	73.56	20.19	0.17	2.32	2.04	39.93	48.30	0.85	4.32	1.21	10.59	20.94	1.49	6.32	7.58	16.17	38.80	2.45	8.32	8.98	31.82	43.08	3.16
0.34	1.68	76.48	22.95	0.11	2.34	1.99	43.53	48.04	0.85	4.34	1.48	9.96	28.24	1.50	6.34	7.11	17.45	35.78	2.45	8.34	8.69	32.53	40.25	3.17
0.36	1.67	78.97	23.39	0.19	2.36	1.95	46.90	47.29	0.86	4.36	1.72	9.37	28.30	1.50	6.36	6.33	22.01	32.20	2.43	8.36	8.01	34.68	37.86	3.19
0.38	1.69	84.18	21.57	0.18	2.38	1.91	52.90	46.85	0.86	4.38	1.64	11.81	24.53	1.50	6.38	5.41	28.61	27.92	2.42	8.38	7.50	36.01	35.53	3.17
0.40	1.59	89.91	20.88	0.24	2.40	1.84	59.51	46.41	0.87	4.40	1.48	16.14	20.81	1.50	6.40	4.98	29.72	26.35	2.41	8.40	7.09	37.20	34.96	3.20
0.42	1.51	91.24	24.09	0.23	2.42	1.79	65.49	46.22	0.87	4.42	1.31	18.86	18.05	1.51	6.42	5.07	35.95	28.17	2.45	8.42	7.04	38.85	34.96	3.21
0.44	1.46	91.52	25.66	0.24	2.44	1.77	66.56	46.22	0.88	4.44	1.20	20.03	17.54	1.52	6.44	5.29	45.50	30.88	2.47	8.44	6.95	38.19	35.53	3.21
0.46	1.54	83.95	25.59	0.23	2.46	1.74	69.20	45.53	0.89	4.46	1.21	20.17	22.76	1.53	6.46	5.93	55.36	36.91	2.47	8.46	6.97	37.43	36.35	3.23
0.48	1.54	79.90	27.29	0.16	2.48	1.71	71.01	45.28	0.89	4.48	1.43	18.98	28.99	1.54	6.48	6.66	57.43	38.80	2.46	8.48	6.98	35.90	37.10	3.22
0.50	1.58	79.50	27.67	0.27	2.50	1.67	72.46	44.90	0.89	4.50	2.03	18.92	35.91	1.55	6.50	6.64	59.39	37.29	2.48	8.50	6.97	33.29	37.86	3.24
0.52	1.60	77.86	25.91	0.23	2.52	1.61	73.08	44.71	0.88	4.52	2.35	20.94	33.45	1.54	6.52	6.45	66.24	36.10	2.49	8.52	6.94	32.10	38.42	3.25
0.54	1.67	80.07	26.10	0.20	2.54	1.62	70.19	45.53	0.89	4.54	2.37	23.09	28.99	1.54	6.54	6.30	57.63	35.28	2.49	8.54	6.96	30.37	39.18	3.25
0.56	1.74	84.00	28.24	0.30	2.56	1.65	65.94	45.91	0.89	4.56	2.25	23.66	25.22	1.53	6.56	6.12	49.01	34.90	2.51	8.56	6.97	28.84	39.55	3.26
0.58	1.77	91.06	29.18	0.18	2.58	1.65	63.30	46.28	0.90	4.58	2.11	21.59	22.76	1.53	6.58	6.10	38.47	35.15	2.52	8.58	6.93	28.75	39.81	3.25
0.60	1.81	98.14	29.74	0.24	2.60	1.63	59.53	46.22	0.89	4.60	2.00	20.26	21.07	1.54	6.60	6.14	24.08	36.28	2.52	8.60	6.87	28.81	39.68	3.28
0.62	1.89	104.12	29.62	0.24	2.62	1.62	57.41	45.78	0.89	4.62	1.90	22.02	19.75	1.55	6.62	6.33	20.53	37.67	2.53	8.62	6.61	29.17	39.05	3.27
0.64	1.93	110.46	28.99	0.25	2.64	1.60	56.27	45.59	0.91	4.64	1.91	20.52	20.06	1.57	6.64	6.37	22.32	37.92	2.54	8.64	6.42	28.72	38.93	3.30
0.66	1.97	112.02	30.18	0.24	2.66	1.58	56.47	45.15	0.91	4.66	2.08	20.69	22.76	1.59	6.66	6.65	31.61	40.06	2.56	8.66	6.43	29.09	38.99	3.30
0.68	2.02	117.01	31.44	0.29	2.68	1.57	56.76	44.96	0.91	4.68	2.27	19.98	24.97	1.58	6.68	7.13	42.18	42.07	2.58	8.68	6.42	29.03	40.06	3.32
0.70	2.13	119.10	32.32	0.28	2.70	1.53	56.05	44.65	0.91	4.70	2.34	19.79	23.83	1.60	6.70	7.57	41.75	43.58	2.60	8.70	6.68	29.37	41.38	3.32
0.72	2.26	122.39	33.33	0.29	2.72	1.49	56.25	44.15	0.91	4.72	2.36	21.57	22.64	1.62	6.72	7.91	39.40	44.21	2.62	8.72	7.09	28.80	43.58	3.31
0.74	2.35	123.69	33.20	0.29	2.74	1.44	56.61	42.26	0.92	4.74	2.51	26.96	22.64	1.63	6.74	8.32	34.72	45.97	2.64	8.74	8.03	28.34	47.42	3.34
0.76	2.46	126.55	33.71	0.31	2.76	1.40	56.61	41.69	0.93	4.76	2.79	33.53	24.59	1.64	6.76	8.61	33.39	46.22	2.66	8.76	9.44	28.12	51.63	3.36
0.78	2.55	129.92	34.02	0.31	2.78	1.37	55.48	41.25	0.93	4.78	3.38	37.24	29.05	1.67	6.78	8.62	30.44	46.16	2.66	8.78	9.72	31.27	32.64	3.42
0.80	2.65	132.58	34.65	0.31	2.80	1.34	55.03	40.56	0.92	4.80	4.34	41.24	34.34	1.69	6.80	8.64	25.88	46.35	2.64	8.80	10.16	29.74	31.07	3.45
0.82	2.69	134.96	34.59	0.31	2.82	1.29	53.58	39.93	0.92	4.82	4.56	45.78	34.15	1.70	6.82	8.69	25.68	46.66	2.64	8.82	9.94	28.16	29.18	3.44
0.84	2.74	138.95	36.10	0.35	2.84	1.24	49.70	38.93	0.93	4.84	4.30	42.15	30.88	1.71	6.84	8.45	25.54	45.65	2.63	8.84	9.22	26.94	25.78	3.45
0.86	2.84	142.29	36.54	0.35	2.86	1.19	46.27	38.42	0.94	4.86	3.83	40.53	27.29	1.70	6.86	8.20	26.99	44.90	2.63	8.86	8.32	27.93	22.83	3.45
0.88	2.88	144.90	36.47	0.39	2.88	1.18	42.22	38.23	0.96	4.88	3.39	34.78	24.53	1.72	6.88	7.89	27.86	44.08	2.63	8.88	7.78	27.96	21.19	3.45
0.90	2.92	147.87	35.59	0.38	2.90	1.20	36.21	38.11	0.96	4.90	3.11	27.08	22.45	1.71	6.90	7.42	28.91	42.32	2.63	8.90	7.33	27.53	20.69	3.46
0.92	2.87	150.90	35.28	0.37	2.92	1.26	29.27	41.06	0.96	4.92	2.98	23.08	21.95	1.72	6.92	6.86	28.12	39.87	2.64	8.92	7.07	27.19	20.75	3.47
0.94	2.87	152.54	34.78	0.40	2.94	1.28	22.30	42.70	0.96	4.94	3.08	24.07	22.58	1.74	6.94	6.46	28.00	38.74	2.63	8.94	6.87	26.68	21.07	3.48
0.96	2.91	151.23	34.65	0.39	2.96	1.28	18.48	41.82	0.96	4.96	3.24	24.24	23.39	1.75	6.96	6.00	28.23	37.17	2.64	8.96	6.72	29.06	21.57	3.48
0.98	2.92	147.32	34.78	0.43	2.98	1.24	18.14	39.68	0.99	4.98	3.27	24.50	23.90	1.78	6.98	5.69	28.57	36.54	2.64	8.98	6.45	28.83	21.63	3.49
1.00	2.95	142.92	34.52	0.44	3.00	1.18	17.63	39.18	0.99	5.00	2.94	29.09	20.94	1.78	7.00	5.51	31.29	36.41	2.63	9.00	6.21	29.29	21.38	3.50
1.02	3.07	132.92	34.90	0.44	3.02	1.21	14.83	39.93	0.99	5.02	2.43	35.15	16.92	1.77	7.02	5.24	31.68	35.40	2.64	9.02	5.98	30.36	21.76	3.49
1.04	3.25	115.46	36.03	0.45	3.04	1.16	13.38	39.68	0.97	5.04	2.23	37.34	15.60	1.79	7.04	4.91	29.36	34.02	2.65	9.04	5.94	31.13	23.14	3.52
1.06	3.37	96.93	36.22	0.48	3.06	1.21	14.12	39.81	0.99	5.06	2.44	39.07	17.42	1.79	7.06	4.63	28.25	32.95	2.66	9.06	6.01	33.26	35.15	3.53
1.08	3.51	78.42	36.41	0.48	3.08	1.34	15.23	42.01	1.01	5.08	2.74	47.54	28.74	1.81	7.08	4.27	30.49	36.10	2.68	9.08	6.41	33.00	35.40	3.53
1.10	3.61	65.30	36.91	0.48	3.10	1.58	15.66	47.48	1.02	5.10	3.40	51.00	26.66	1.85	7.10	4.13	26.15	33.64	2.67	9.10	6.97	32.41	36.72	3.54
1.12	3.76	44.73	43.58	0.49	3.12	2.02	26.19	23.08	1.05	5.12	3.01	56.81	18.17	1.87	7.12	4.05	24.03	32.64	2.69	9.12	7.40	30.40	37.35	3.55
1.14	3.98	30.22	41.19	0.50	3.14	1.80	32.31	19.37	1.08	5.14	2.61	64.75	15.85	1.87	7.14	4.12	23.58	32.20	2.70	9.14	7.21	28.24	35.28	3.55
1.16	4.12	21.24	40.12	0.50	3.16	1.60	35.57	17.73	1.08	5.16	2.15	79.11	12.01	1.89	7.16	4.19	24.29	31.95	2.71	9.16	6.98	27.54	33.58	3.52
1.18	4.25	21.04	39.93	0.51	3.18	1.55	36.88	17.23	1.08	5.18	1.99	92.32	25.59	1.92	7.18	4.13	25.53	31.07	2.70	9.18	6.53	25.78	31.69	3.55
1.20	4.35	21.21	39.81	0.49	3.20	1.71	37.61	23.08	1.10	5.20	2.22	85.40	47.16	1.92	7.20	4.09	25.96	29.87	2.72	9.20	6.12	23.14	30.06	3.55
1.22	4.23	24.04	39.68	0.53	3.22	2.03	31.61	27.42	1.10	5.22	2.82	79.51	57.41	1.93	7.22	3.90	24.20	28.42	2.71	9.22	5.75	21.13	28.99	3.55
1.24	3.95	32.09	40.62	0.51	3.24	2.20	25.23	22.58	1.10	5.24	3.08	69.31	57.16	1.96	7.24	3.69	20.38	26.73	2.72	9.24	5.52	19.51	28.55	3.54
1.26	3.55	41.41	38.42	0.52	3.26	2.06	21.66	16.41	1.09	5.26	3.15	50.92	34.65	1.97	7.26	3.52	16.41	25.28	2.72	9.26	5.48	17.42	28.80	3.54
1.28	3.18	55.16	36.60	0.55	3.28	1.79	19.62	13.33	1.10	5.28	3.16	49.87	27.36	1.98	7.28	3.40	14.45	24.21	2.72	9.28	5.74	16.40	31.51	3.56
1.30	2.85	74.74	35.66	0.53	3.30	1.54	18.91	11.63	1.10	5.30	3.21	51.79	23.83	2.01	7.30	3.29	13.89	23.33	2.74	9.30	6.82	15.43	36.98	3.53
1.32	2.61	89.16	34.84	0.56	3.32	1.34	20.28	10.69	1.11	5.32	3.27	54.51	22.26	2.02	7.32	3.28	14.71	23.14	2.75	9.32	7.80	15.34	40.69	3.52
1.34	2.45	99.34	33.77	0.56	3.34	1.19	20.53	10.50	1.11	5.34	3.65	60.80	23.39	2.03	7.34	3.35	16.41	23.52	2.77	9.34	9.75	18.15	46.35	3.52
1.36	2.44	109.82	34.15	0.57	3.36	1.09	16.76	11.13	1.11	5.36	4.52	67.75	28.05	2.06	7.36	3.49	18.42	24.27	2.79	9.36	11.09	19.39	48.11	3.49
1.38	2.52	110.81	35.84	0.60	3.38	1.10	10.30	13.71	1.12	5.38	5.60	71.00	32.57	2.04	7.38	3.75	21.00	25.41	2.81	9.38	11.25	18.01	46.41	3.51
1.40	2.60	108.46	37.17	0.59	3.40	1.22	8.63	18.74	1.12	5.40	6.10	74.49	33.96	2.04	7.40	3.94	23.92	26.79	2.83	9.40	10.69	18.97	43.71	3.51
1.42	2.65	103.30	37.17	0.61	3.42	1.42	8.32	24.71	1.13	5.42	6.55	76.67	34.96	2.06	7.42	4.33	29.56	28.80	2.86	9.42	10.02	20.19	41.38	3.51
1.44	2.54	98.91	36.22	0.62	3.44	1.97	8.97	31.51	1.14	5.44	6.60	70.46	33.33	2.03	7.44	4.75	32.05	31.44	2.90	9.44	9.43	21.88	40.31	3.50
1.46	2.58	97.43	36.47	0.61	3.46	2.37	11.81	29.12	1.14	5.46	6.47	54.20	31.69	2.05	7.46	5.65	30.15	36.60	2.92	9.46	9.08	22.59	40.37	3.51
1.48	2.73	95.36	37.92	0.64	3.48	2.47	16.14	25.15	1.13	5.48	6.48	37.65	31.38	2.04	7.48	6.96	29.50	42.32	2.94	9.48	9.07	22.31	41.06	3.50
1.50	3.09	87.20	39.68	0.64	3.50	2.47	19.18	22.26	1.15	5.50	6.59	26.48	32.39	2.06	7.50	8.14	26.07	45.21	2.95	9.50	9.01	24.54	42.26	3.50
1.52	3.28	82.92	39.81	0.66	3.52	2.53	20.42	21.51	1.15	5.52	6.76	23.48	33.77	2.07	7.52	8.69	23.69	45.09	2.97	9.52	8.83	22.59	42.70	3.51
1.54	3.34	74.05	39.30	0.65	3.54	2.62	20.03	21.00	1.17	5.54	7.17	24.30	36.85	2.10	7.54	8.84	24.52	44.65	2.98	9.54	8.49	21.79	41.69	3.50
1.56	3.37	70.34	39.18	0.67	3.56	2.64	20.46	18.87	1.16	5.56	7.71	24.72	39.81	2.10	7.56	8.68	25.39	42.95	2.97	9.56	8.06	23.24	40.06	3.50
1.58	3.36	69.06	39.93	0.67	3.58	2.45	21.67	15.85	1.14	5.58	8.85	25.23	45.47	2.12	7.58	8.22	28.40	40.75	2.97	9.58	7.55	23.60	38.74	3.53
1.60	3.22	68.77	39.11	0.68	3.60	2.20	25.25	14.46	1.14	5.60	9.75	24.30	48.11	2.13	7.60	7.85	32.05	38.99	2.97	9.60	6.91	25.05	37.17	3.54
1.62	3.15	67.41	39.30	0.68	3.62	1.88	24.68	12.70	1.14	5.62	10.24	26.25	48.17	2.14	7.62	7.39	34.55	36.79	2.98	9.62	6.29	26.55	35.78	3.55
1.64	3.16	68.74	40.31	0.69	3.64	1.74	22.33	10.25	1.17	5.64	10.13	28.18	47.48	2.16	7.64	6.96	34.29	35.53	2.98	9.64	5.71	23.51	33.96	3.57
1.66	2.94	71.52	38.67	0.69	3.66	1.93	19.19	17.23	1.19	5.66	9.68	30.16	45.65	2.15	7.66	6.75	34.04	34.65	3.00	9.66	5.06	22.26	32.07	3.58
1.68	2.63	72.03	37.23	0.69	3.68	2.76	18.73	26.73	1.21	5.68	9.07	33.70	43.71	2.16	7.68	6.46	34.27	34.15	3.00	9.68	4.55	20.48	31.07	3.58
1.70	2.33	74.41	35.40	0.71	3.70	3.28	19.53	27.67	1.22	5.70	8.63	35.17	42.70	2.18	7.70	6.34	32.48	33.71	3.01	9.70	4.35	20.33	31.07	3.61
1.72	2.23	72.87	35.40	0.70	3.72	3.45	24.35	24.46	1.23	5.72	8.30	37.16	42.26	2.18	7.72	6.19	30.69	34.08	3.01	9.72	4.02	20.81	30.25	3.58
1.74	2.19	66.02	36.54	0.71	3.74	3.44	25.71	22.83	1.24	5.74	7.86	37.16	40.94	2.20	7.74	6.11	29.33	33.77	3.02	9.74	3.79	23.11	30.25	3.59
1.76	2.16	61.54	37.04	0.71	3.76	3.42	25.94	21.76	1.24	5.76	7.22	38.37	38.49	2.21	7.76	5.71	27.94	31.88	3.01	9.76	3.79	25.51	31.07	3.57
1.78	2.16	60.91	37.29	0.71	3.78	3.30	27.44	21.32	1.27	5.78	6.55	37.78	36.54	2.21	7.78	5.13	26.98	29.18	3.01	9.78	3.86	27.69	32.76	3.57
1.80	2.17	58.73	37.29	0.73	3.80	3.17	24.83	20.19	1.27	5.80	6.17	37.18	35.66	2.22	7.80	4.77	25.48	28.05	3.01	9.80	4.25	27.58	36.28	3.56
1.82	2.40	53.94	41.44	0.72	3.82	2.86	19.62	17.99	1.27	5.82	6.01	35.54	36.16	2.24	7.82	4.64	24.57	27.92	3.02	9.82	4.87	25.73	40.31	3.54
1.84	2.59	48.02	42.51	0.73	3.84	2.45	18.60	14.97	1.25	5.84	5.97	33.61	36.91	2.24	7.84	4.64	23.64	28.61	3.02	9.84	5.96	24.63	44.77	3.55
1.86	2.79	46.03	42.01	0.74	3.86	2.10	18.60	13.02	1.26	5.86	5.97	33.35	38.05	2.25	7.86	4.88	23.15	30.75	3.03	9.86	6.39	22.10	45.34	3.56
1.88	2.79	48.58	41.94	0.73	3.88	1.94	20.87	13.83	1.25	5.88	6.03	32.33	39.37	2.26	7.88	5.25	22.39	33.08	3.03	9.88	5.86	20.15	41.44	3.58
1.90	2.67	52.83	40.50	0.74	3.90	1.87	25.04	14.21	1.26	5.90	6.12	30.83	40.37	2.26	7.90	5.54	22.78	35.09	3.02	9.90	4.59	19.52	34.84	3.59
1.92	2.48	55.18	39.24	0.75	3.92	1.89	31.58	16.04	1.25	5.92	6.06	30.20	40.94	2.27	7.92	5.74	22.41	36.10	3.05	9.92	3.66	23.04	31.19	3.59
1.94	2.35	58.87	38.61	0.77	3.94	1.82	25.89	15.53	1.27	5.94	5.98	29.32	40.88	2.28	7.94	5.65	22.75	36.35	3.05	9.94	3.25	34.65	30.69	3.60
1.96	2.20	54.42	40.50	0.75	3.96	1.62	25.92	11.82	1.29	5.96	5.63	29.12	39.55	2.27	7.96	5.63	23.12	36.28	3.05	9.96	3.00	54.06	32.32	3.61
1.98	2.20	47.73	45.03	0.74	3.98	1.46	26.20	9.37	1.31	5.98	5.08	28.84	36.72	2.27	7.98	5.58	24.25	36.22	3.05	9.98	2.64	61.97	33.64	3.63
2.00	2.32	39.80	51.82	0.76	4.00	1.35	27.48	8.99	1.33	6.00	4.64	28.05	34.59	2.28	8.00	5.56	23.49	36.47	3.06	10.00	2.30	60.18	41.06	3.62

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COMMITTENTE:
CANTIERE: Via Correcchio - Loc. Coriano (FC)
COMMESSA: C054/24
RDP N°: 225/24
DATA: 24/09/2024

PROVA N°: SCPTU 4
PROF. FALDA (m da p.c.): 3.30
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
10.02	2.06	65.90	55.53	3.63	12.02	2.19	108.63	129.10	3.91	14.02	1.24	71.69	407.18	4.51	16.02	2.94	80.18	119.92	5.10	18.02	1.57	37.46	202.30	5.70
10.04	2.13	79.75	70.18	3.61	12.04	2.34	114.97	183.12	3.90	14.04	1.24	71.72	404.04	4.53	16.04	2.22	79.58	121.49	5.12	18.04	1.30	36.47	240.60	5.71
10.06	2.27	87.77	69.55	3.63	12.06	2.34	112.96	190.42	3.90	14.06	1.22	71.36	413.53	4.53	16.06	1.92	79.22	146.71	5.12	18.06	1.15	31.71	267.70	5.72
10.08	2.35	94.60	69.61	3.62	12.08	2.41	114.58	202.11	3.91	14.08	1.28	70.51	414.48	4.54	16.08	1.96	64.20	190.10	5.13	18.08	1.14	24.80	280.09	5.73
10.10	2.37	112.51	70.37	3.64	12.10	2.38	111.91	205.82	3.91	14.10	1.32	70.45	410.45	4.54	16.10	1.89	51.53	206.20	5.14	18.10	1.11	27.18	291.91	5.74
10.12	2.41	128.71	69.05	3.62	12.12	2.23	105.96	204.63	3.91	14.12	1.34	70.82	409.63	4.55	16.12	1.91	46.68	216.77	5.16	18.12	1.15	31.09	305.81	5.75
10.14	2.42	138.89	68.61	3.63	12.14	1.98	101.14	198.15	3.91	14.14	1.38	71.81	404.98	4.56	16.14	1.94	47.93	225.69	5.16	18.14	1.18	32.08	318.32	5.75
10.16	2.35	133.81	67.29	3.64	12.16	1.73	99.95	198.53	3.92	14.16	1.40	73.73	406.93	4.57	16.16	2.10	50.17	238.65	5.17	18.16	1.19	32.56	323.42	5.75
10.18	2.26	136.73	68.99	3.64	12.18	1.64	98.76	205.63	3.93	14.18	1.47	74.24	405.92	4.57	16.18	1.95	53.43	250.03	5.18	18.18	1.04	32.64	333.61	5.76
10.20	2.26	132.08	69.87	3.64	12.20	1.59	96.30	215.26	3.93	14.20	1.55	74.87	392.97	4.57	16.20	1.82	54.90	257.07	5.18	18.20	0.93	26.35	347.31	5.76
10.22	2.27	133.58	71.94	3.63	12.22	1.70	90.26	225.13	3.93	14.22	1.58	77.53	409.70	4.57	16.22	1.71	57.42	260.47	5.18	18.22	0.91	20.88	362.60	5.76
10.24	2.26	136.67	76.47	3.64	12.24	1.79	85.42	235.88	3.94	14.24	1.65	79.40	412.97	4.57	16.24	1.64	64.76	272.54	5.20	18.24	0.94	15.27	383.85	5.78
10.26	2.29	133.07	79.36	3.64	12.26	1.81	76.86	243.55	3.94	14.26	1.75	79.51	421.33	4.58	16.26	1.71	58.78	292.35	5.20	18.26	0.94	11.22	397.43	5.78
10.28	2.37	127.83	81.31	3.64	12.28	1.75	68.72	250.72	3.95	14.28	1.82	79.62	396.99	4.58	16.28	1.73	54.05	308.64	5.21	18.28	0.92	10.54	406.55	5.79
10.30	2.42	124.79	80.87	3.63	12.30	1.93	55.29	266.44	3.95	14.30	1.82	82.66	378.57	4.58	16.30	1.63	53.06	320.78	5.22	18.30	0.88	10.68	422.97	5.80
10.32	2.40	120.37	75.97	3.63	12.32	2.10	43.22	281.47	3.96	14.32	1.76	89.45	364.67	4.60	16.32	1.56	48.75	333.48	5.23	18.32	0.88	9.60	440.20	5.81
10.34	2.36	122.38	72.70	3.62	12.34	2.19	39.17	288.96	3.97	14.34	1.74	94.33	352.85	4.61	16.34	1.53	50.19	344.04	5.23	18.34	0.90	8.75	454.35	5.82
10.36	2.37	126.00	68.73	3.64	12.36	2.16	44.52	294.93	3.99	14.36	1.70	98.95	343.10	4.61	16.36	1.50	47.27	359.14	5.24	18.36	0.94	8.87	469.50	5.81
10.38	2.28	137.31	79.49	3.64	12.38	2.10	53.08	300.09	4.00	14.38	1.64	102.97	333.48	4.62	16.38	1.58	42.74	374.48	5.26	18.38	0.99	10.00	486.92	5.82
10.40	2.35	141.21	85.52	3.64	12.40	2.05	60.62	316.50	4.01	14.40	1.58	109.03	323.17	4.63	16.40	1.78	45.09	398.00	5.26	18.40	1.02	10.48	502.83	5.83
10.42	2.39	142.83	82.44	3.66	12.42	2.00	62.69	327.19	4.02	14.42	1.51	114.70	315.24	4.63	16.42	1.89	45.54	415.73	5.26	18.42	1.02	10.31	515.09	5.83
10.44	2.28	149.09	81.50	3.64	12.44	1.96	65.01	333.29	4.03	14.44	1.44	116.03	308.58	4.63	16.44	1.96	45.06	434.28	5.27	18.44	0.98	11.79	516.66	5.83
10.46	2.24	149.03	85.84	3.65	12.46	1.92	67.62	338.89	4.03	14.46	1.34	114.35	318.64	4.64	16.46	2.01	45.26	444.85	5.26	18.46	0.93	16.38	527.98	5.84
10.48	2.28	143.81	81.37	3.67	12.48	1.93	68.67	354.67	4.06	14.48	1.38	107.55	344.11	4.66	16.48	2.01	46.05	454.22	5.27	18.48	1.01	19.75	543.89	5.85
10.50	2.22	143.13	85.21	3.67	12.50	1.97	63.40	366.31	4.07	14.50	1.43	99.47	363.29	4.66	16.50	1.97	51.09	466.04	5.26	18.50	1.05	19.89	555.78	5.85
10.52	2.22	133.89	87.98	3.68	12.52	1.96	62.01	377.12	4.07	14.52	1.41	90.26	373.60	4.67	16.52	1.89	56.73	467.55	5.28	18.52	1.04	20.68	547.10	5.85
10.54	2.22	132.64	86.15	3.68	12.54	1.95	63.26	388.50	4.08	14.54	1.34	81.79	372.97	4.66	16.54	1.76	62.97	465.29	5.27	18.54	0.97	22.61	543.08	5.85
10.56	2.17	132.80	86.03	3.68	12.56	1.92	64.70	399.76	4.09	14.56	1.31	74.87	372.28	4.67	16.56	1.64	74.67	460.38	5.29	18.56	0.95	21.93	568.54	5.85
10.58	2.17	127.96	87.98	3.69	12.58	1.90	63.74	410.95	4.09	14.58	1.31	69.46	384.67	4.68	16.58	1.54	82.57	465.48	5.29	18.58	1.07	17.54	587.85	5.86
10.60	2.25	127.13	89.55	3.69	12.60	1.91	61.02	421.52	4.09	14.60	1.33	66.08	398.50	4.69	16.60	1.44	88.13	473.40	5.30	18.60	1.06	14.45	586.34	5.86
10.62	2.32	128.23	96.65	3.70	12.62	1.92	60.65	431.52	4.09	14.62	1.35	59.59	397.87	4.69	16.62	1.40	88.67	472.64	5.31	18.62	1.00	15.07	570.68	5.88
10.64	2.40	118.09	96.53	3.71	12.64	1.95	59.21	440.26	4.10	14.64	1.35	62.88	402.53	4.69	16.64	1.36	88.44	471.89	5.30	18.64	0.95	18.11	593.07	5.88
10.66	2.39	116.21	95.96	3.70	12.66	1.98	58.02	454.72	4.09	14.66	1.34	69.56	402.91	4.69	16.66	1.38	86.06	470.70	5.32	18.66	0.99	19.66	604.70	5.89
10.68	2.31	117.20	91.12	3.72	12.68	1.88	51.61	472.20	4.11	14.68	1.35	71.86	401.52	4.71	16.68	1.36	83.56	470.88	5.32	18.68	0.99	21.22	614.89	5.89
10.70	2.27	117.43	90.18	3.73	12.70	1.89	49.74	480.88	4.11	14.70	1.36	71.04	402.28	4.71	16.70	1.35	81.15	480.82	5.33	18.70	1.01	22.38	603.76	5.90
10.72	2.24	118.62	95.71	3.72	12.72	1.90	48.39	500.94	4.12	14.72	1.35	71.46	402.40	4.72	16.72	1.37	76.19	484.22	5.34	18.72	1.09	26.69	608.54	5.91
10.74	2.30	116.26	97.79	3.73	12.74	2.20	50.06	524.78	4.13	14.74	1.36	74.52	399.82	4.73	16.74	1.37	73.78	475.47	5.35	18.74	1.29	29.92	625.27	5.92
10.76	2.34	117.99	98.23	3.74	12.76	2.48	50.06	544.84	4.13	14.76	1.39	80.13	405.04	4.73	16.76	1.38	73.58	469.88	5.34	18.76	1.60	30.89	594.20	5.92
10.78	2.36	127.14	93.20	3.74	12.78	2.54	51.33	484.66	4.13	14.78	1.43	81.46	411.90	4.74	16.78	1.35	72.11	475.29	5.34	18.78	1.88	31.68	551.44	5.91
10.80	2.36	134.17	89.80	3.75	12.80	2.13	53.21	454.60	4.14	14.80	1.46	80.81	415.73	4.75	16.80	1.34	69.30	471.64	5.35	18.80	2.18	33.86	500.44	5.91
10.82	2.37	141.02	80.49	3.74	12.82	1.89	48.96	459.50	4.15	14.82	1.48	79.45	411.65	4.76	16.82	1.31	66.04	475.73	5.35	18.82	2.42	36.95	467.30	5.91
10.84	2.37	146.77	74.83	3.76	12.84	1.80	46.07	489.18	4.16	14.84	1.48	78.00	408.38	4.77	16.84	1.30	62.50	477.68	5.36	18.84	2.56	40.63	423.47	5.90
10.86	2.35	149.92	76.15	3.76	12.86	1.81	50.09	518.17	4.18	14.86	1.45	77.18	396.18	4.77	16.86	1.26	60.68	476.80	5.37	18.86	2.34	37.86	386.24	5.91
10.88	2.36	154.11	71.50	3.76	12.88	1.94	54.63	516.85	4.19	14.88	1.38	77.89	393.91	4.77	16.88	1.19	60.54	475.16	5.38	18.88	2.04	33.21	369.70	5.92
10.90	2.34	159.27	67.10	3.76	12.90	3.11	63.92	574.39	4.21	14.90	1.34	77.94	407.87	4.78	16.90	1.13	59.55	472.96	5.39	18.90	1.67	28.42	366.24	5.94
10.92	2.37	159.69	65.78	3.76	12.92	4.45	65.96	581.81	4.21	14.92	1.30	76.70	410.77	4.79	16.92	1.04	58.73	476.10	5.38	18.92	1.52	28.36	403.85	5.95
10.94	2.34	160.11	65.40	3.77	12.94	4.41	65.74	167.65	4.21	14.94	1.24	75.96	422.46	4.78	16.94	0.97	57.05	484.72	5.40	18.94	1.41	33.72	398.31	5.96
10.96	2.30	161.81	60.81	3.77	12.96	3.40	64.40	153.00	4.22	14.96	1.24	74.71	429.51	4.80	16.96	0.95	51.64	487.30	5.41	18.96	1.16	38.28	407.56	5.98
10.98	2.24	164.90	61.94	3.77	12.98	2.90	71.23	164.00	4.23	14.98	1.24	71.59	438.50	4.79	16.98	0.88	47.76	490.57	5.41	18.98	1.05	39.67	437.62	5.98
11.00	2.26	164.16	62.76	3.78	13.00	2.44	93.82	165.70	4.24	15.00	1.30	66.69	448.12	4.80	17.00	0.96	40.82	495.09	5.41	19.00	1.31	62.51	291.60	5.99
11.02	2.36	161.75	62.89	3.78	13.02	2.24	120.36	172.87	4.25	15.02	1.44	57.38	513.46	4.80	17.02	0.96	40.31	493.90	5.42	19.02	1.19	48.29	314.74	6.01
11.04	2.39	169.88	98.54	3.76	13.04	2.04	87.51	193.06	4.27	15.04	1.45	55.14	519.37	4.81	17.04	0.94	35.38	508.36	5.44	19.04	1.06	41.74	336.37	6.01
11.06	2.39	171.13	94.45	3.77	13.06	1.91	77.14	205.82	4.29	15.06	1.49	52.79	525.41	4.81	17.06	0.92	29.85	524.27	5.45	19.06	1.01	39.36	350.96	6.03
11.08	2.33	169.00	92.88	3.77	13.08	1.85	74.79	215.44	4.29	15.08	1.58	51.04	524.34	4.82	17.08	0.92	25.09	530.12	5.46	19.08	1.00	33.18	369.39	6.04
11.10	2.33	167.16	96.15	3.78	13.10	1.78	70.77	223.81	4.30	15.10	1.61	52.23	520.25	4.82	17.10	0.89	21.18	534.78	5.46	19.10	1.08	28.11	392.97	6.05
11.12	2.34	159.99	97.35	3.80	13.12	1.72	66.35	230.73	4.30	15.12	1.64	55.80	529.49	4.84	17.12	0.87	17.41	541.06	5.48	19.12	1.11	26.01	406.93	6.05
11.14	2.31	153.19	99.48	3.81	13.14	1.61	59.46	240.16	4.31	15.14	1.64	59.34	525.15	4.84	17.14	0.86	14.98	548.99	5.48	19.14	1.10	25.22	419.38	6.05
11.16	2.25	146.73	103.26	3.82	13.16	1.58	57.33	245.69	4.30	15.16	1.66	62.65	503.58	4.84	17.16	0.87	12.68	552.13	5.49	19.16	1.07	26.69	428.63	6.06
11.18	2.22	135.62	100.30	3.83	13.18	1.51	62.23	252.36	4.32	15.18	1.61	67.81	487.42	4.85	17.18	0.91	11.10	556.97	5.50	19.18	1.00	28.59	440.07	6.07
11.20	2.19	131.73	94.33	3.82	13.20	1.46	60.65	261.54	4.31	15.20	1.53	73.82	511.38	4.86	17.20	0.95	10.84	564.52	5.50	19.20	1.01	31.11	453.72	6.07
11.22	2.20	130.57	89.55	3.81	13.22	1.47	58.89	266.57	4.31	15.22	1.58	73.51	522.95	4.86	17.22	0.99	11.10	558.55	5.51	19.22	1.04	32.87	466.48	6.08
11.24	2.24	131.59	91.25	3.82	13.24	1.44	59.74	276.38	4.31	15.24	1.57	74.02	516.79	4.86	17.24	0.99	12.57	547.42	5.51	19.24	1.11	33.07	489.62	6.09
11.26	2.23	134.90	92.50	3.81	13.26	1.45	57.67	287.20	4.32	15.26	1.56	74.30	517.42	4.87	17.26	0.94	14.84	530.18	5.50	19.26	1.19	32.93	504.91	6.10
11.28	2.25	138.30	90.62	3.80	13.28	1.47	55.15	290.15	4.33	15.28	1.52	73.79	500.00	4.87	17.28	0.89	17.59	529.37	5.50	19.28	1.20	33.89	516.85	6.09
11.30	2.20	143.14	86.59	3.80	13.30	1.36	55.88	292.04	4.33	15.30	1.49	73.22	488.18	4.87	17.30	0.89	18.47	544.33	5.50	19.30	1.20	32.61	530.25	6.11
11.32	2.12	144.28	83.01	3.80	13.32	1.30	56.00	291.66	4.33	15.32	1.58	70.93	517.23	4.88	17.32	0.89	17.79	555.15	5.51	19.32	1.16	32.61	531.63	6.11
11.34	2.04	144.13	81.25	3.81	13.34	1.21	57.38	294.49	4.34	15.34	1.70	68.91	547.92	4.89	17.34	0.92	16.06	563.39	5.50	19.34	1.10	34.65	533.90	6.13
11.36	2.02	142.21	79.49	3.81	13.36	1.20	58.54	301.35	4.34	15.36	1.85	67.10	559.05	4.90	17.36	0.91	16.29	546.79	5.51	19.36	1.09	38.45	536.22	6.14
11.38	1.93	148.09	88.61	3.80	13.38	1.24	60.44	305.50	4.35	15.38	1.97	67.72	561.00	4.90	17.38	0.85	15.10	562.70	5.52	19.38	1.05	43.15	560.75	6.15
11.40	1.88	146.56	85.71	3.81	13.40	1.32	60.98	313.04	4.35	15.40	2.03	70.87	546.91	4.91	17.40	0.93	12.07	583.64	5.53	19.40	1.07	42.78	575.46	6.15
11.42	1.94	141.86	94.26	3.81	13.42	1.42	60.87	322.85	4.35	15.42	2.07	74.07	538.05	4.92	17.42	0.97	9.94	582.00	5.54	19.42	1.10	40.40	591.50	6.17
11.44	2.03	136.22	98.98	3.81	13.44	1.49	58.15	327.82	4.34	15.44	2.15	76.42	534.40	4.93	17.44	0.97	9.58	556.53	5.53	19.44	1.14	38.76	605.90	6.16
11.46	2.01	131.94	95.08	3.81	13.46	1.56	56.61	331.85	4.36	15.46	2.14	79.76	518.68	4.94	17.46	0.89	11.14	556.85	5.53	19.46	1.23	35.19	613.76	6.17
11.48	1.95	128.68	92.50	3.82	13.48	1.56	57.80	332.54	4.37	15.48	2.07	88.83	499.87	4.95	17.48	0.84	9.78	581.94	5.54	19.48	1.30	33.86	620.68	6.18
11.50	1.94	127.72	84.71	3.81	13.50	1.57	59.93	327.13	4.39	15.50	2.00	96.79	500.38	4.96	17.50	0.83	9.38	597.53	5.54	19.50	1.38	33.63	626.65	6.19
11.52	1.89	130.92	82.25	3.80	13.52	1.48	64.35	328.58	4.39	15.52	1.93	101.44	512.51	4.97	17.52	0.94	9.04	611.50	5.54	19.52	1.57	36.58	630.05	6.20
11.54	1.82	130.86	85.78	3.83	13.54	1.45	67.24	330.46	4.40	15.54	1.87	100.56	541.25	4.97	17.54	1.03	8.28	619.23	5.54	19.54	1.70	41.53	618.98	6.20
11.56	1.82	132.30	96.59	3.81	13.56	1.45	70.81	320.53	4.40	15.56	1.81	95.12	552.01	4.98	17.56	1.03	8.70	569.36	5.56	19.56	1.73	50.80	585.02	6.21
11.58	1.94	129.75	101.94	3.83	13.58	1.40	76.02	320.65	4.40	15.58	1.75	88.00	556.35	4.98	17.58	0.99	12.41	540.12	5.57	19.58	1.72	59.87	570.37	6.21
11.60	2.05	134.03	106.40	3.83	13.60	1.33	77.72	335.30	4.41	15.60	1.77	82.45	574.08	4.98	17.60	0.95	13.69	552.95	5.58	19.60	1.70	67.23	546.66	6.21
11.62	2.17	136.21	107.53	3.83	13.62	1.28	74.55	329.77	4.41	15.62	1.83	75.62	581.25	4.99	17.62	0.98	12.53	582.57	5.60	19.62	1.64	75.31	530.75	6.21
11.64	2.28	134.99	107.53	3.84	13.64	1.23	72.17	334.05	4.42	15.64	1.84	70.06	581.44	5.00	17.64	1.03	11.85	590.81	5.59	19.64	1.58	83.53	558.73	6.21
11.66	2.38	128.84	100.18	3.84	13.66	1.23	70.58	340.52	4.42	15.66	1.89	66.24	578.23	5.01	17.66	1.15	12.22	587.79	5.60	19.66	1.62	88.91	583.13	6.22
11.68	2.37	128.25	94.58	3.85	13.68	1.28	68.54	349.77	4.40	15.68	1.85	66.66	573.58	5.02	17.68	1.22	14.32	569.43	5.61	19.68	1.76	88.74	587.16	6.22
11.70	2.32	130.15	97.47	3.85	13.70	1.31	65.79	353.35	4.41	15.70	1.76	69.95	574.46	5.02	17.70	1.37	13.78	598.79	5.63	19.70	1.81	88.74	590.55	6.24
11.72	2.37	128.02	100.87	3.86	13.72	1.32	63.47	355.49	4.42	15.72	1.66	70.54	565.59	5.02	17.72	1.62	13.24	479.06	5.63	19.72	1.76	85.82	580.81	6.25
11.74	2.48	126.69	99.36	3.86	13.74	1.32	62.02	356.24	4.42	15.74	1.61	71.13	587.98	5.03	17.74	1.49	18.12	430.95	5.63	19.74	1.61	83.89	568.73	6.26
11.76	2.46	128.67	92.57	3.85	13.76	1.33	60.80	364.48	4.43	15.76	1.68	72.55	613.00	5.03	17.76	1.21	20.44	412.02	5.62	19.76	1.49	80.89	555.34	6.26
11.78	2.43	133.09	91.56	3.87	13.78	1.40	59.04	370.21	4.43	15.78	1.73	70.00	626.02	5.04	17.78	0.99	19.11	452.96	5.62	19.78	1.42	79.44	558.23	6.27
11.80	2.37	139.86	104.83	3.87	13.80	1.44	59.72	370.46	4.42	15.80	1.66	64.67	631.24	5.05	17.80	0.98	16.33	492.20	5.62	19.80	1.33	77.74	565.02	6.28
11.82	2.39	142.58	95.40	3.87	13.82	1.42	61.25	371.53	4.44	15.82	1.65	59.34	635.08	5.05	17.82	0.97	14.52	508.74	5.63	19.82	1.31	77.51	564.46	6.28
11.84	2.31	149.19	97.22	3.87	13.84	1.38	62.42	376.68	4.44	15.84	1.64	53.70	640.30	5.05	17.84	0.95	15.09	520.81	5.64	19.84	1.22	77.05	586.22	6.29
11.86	2.21	154.94	107.53	3.87	13.86	1.36	62.30	379.07	4.45	15.86	1.63	49.93	648.53	5.06	17.86	0.93	18.29	533.83	5.64	19.86	1.22	74.56	605.77	6.29
11.88	2.12	153.61	109.36	3.88	13.88	1.34	63.29	374.98	4.45	15.88	1.72	46.70	653.63	5.07	17.88	0.95	20.13	546.91	5.65	19.88	1.21	66.28	618.48	6.30
11.90	2.08	149.44	109.99	3.89	13.90	1.30	63.52	374.54	4.46	15.90	1.85	47.30	666.46	5.08	17.90	1.07	19.34	565.78	5.64	19.90	1.22	60.50	623.95	6.30
11.92	2.13	143.38	115.83	3.89	13.92	1.26	64.99	382.34	4.46	15.92	1.96	49.90	675.45	5.07	17.92	1.29	17.38	584.83	5.64	19.92	1.22	54.32	626.97	6.31
11.94	2.15	141.42	121.05	3.89	13.94	1.28	66.01	378.13	4.46	15.94	2.36	50.73	648.91	5.08	17.94	1.64	17.44	550.37	5.65	19.94	1.27	51.18	641.11	6.32
11.96	2.16	131.59	124.20	3.90	13.96	1.28	65.93	370.58	4.47	15.96	2.68	60.22	664.63	5.08	17.96	1.83	22.91	471.70	5.65	19.96	1.34	49.28	653.57	6.31
11.98	2.20	117.98	127.34	3.91	13.98	1.27	65.87	371.09	4.48	15.98	3.18	66.25	552.82	5.08	17.98	1.75	26.60	440.51	5.65	19.98	1.33	46.72	664.63	6.33
12.00	2.20	112.06	128.73	3.91	14.00	1.25	67.85	375.61	4.48	16.00	3.25	79.21	152.69	5.09	18.00	1.89	46.64	206.26	5.68	20.00	1.34	43.85	627.47	6.31

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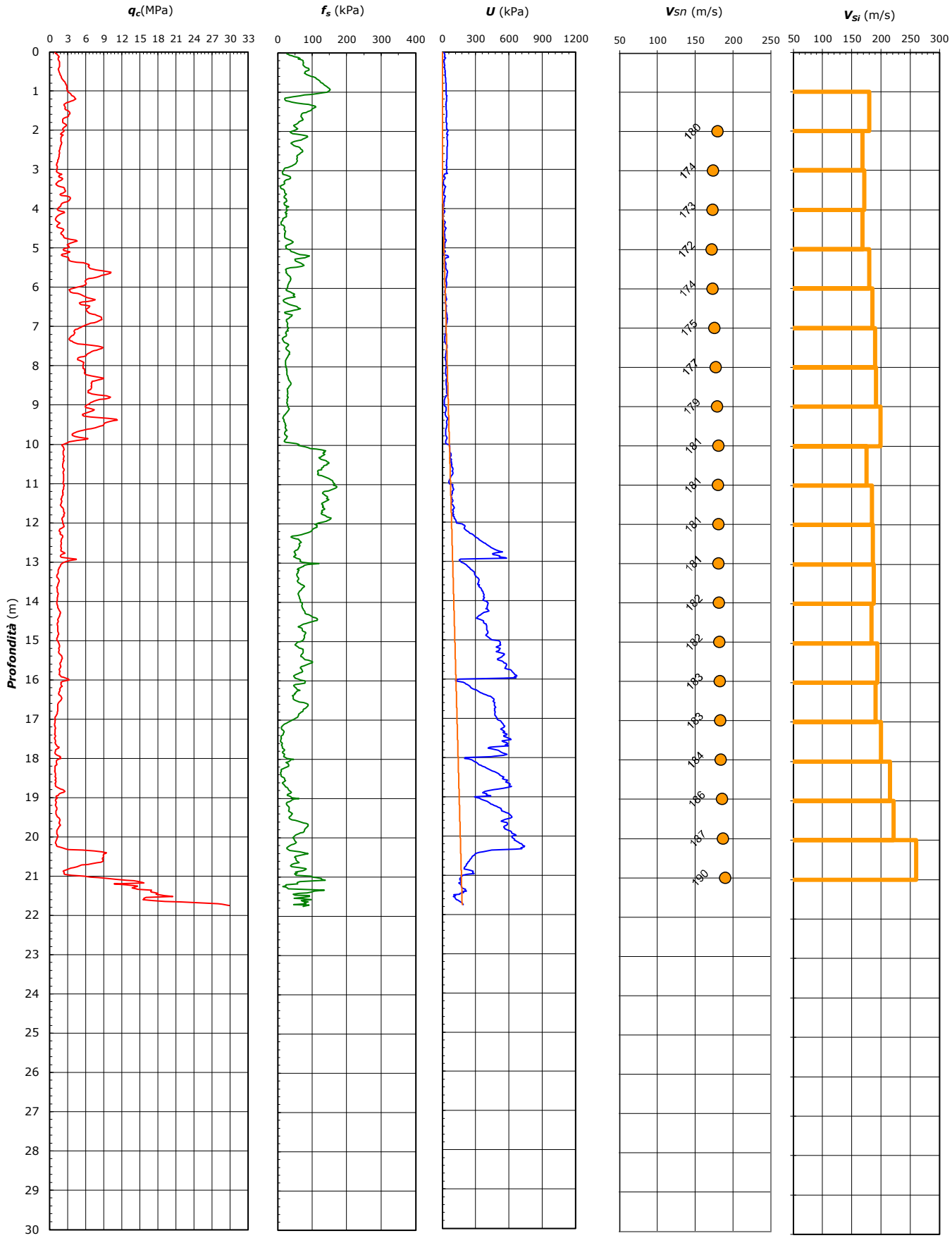
COMMITTENTE:
CANTIERE: Via Correcchio - Loc. Coriano (FC)
COMMESSA: C054/24
RDP N°: 225/24
DATA: 24/09/2024

PROVA N°: SCPTU 4
PROF. FALDA (m da p.c.): 3.30
PREFORO (m da p.c.):
PIEZOCONO: TECNOPENTA G1-CPLSTI 231029[a = 0.66]
OPERATORE: Zanirato

prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi	prof. m	qc Mpa	fs kPa	U kPa	incl. gradi
20.02	1.29	46.71	627.78	6.32																				
20.04	1.24	48.02	627.72	6.33																				
20.06	1.19	49.58	640.86	6.34																				
20.08	1.16	50.99	655.20	6.34																				
20.10	1.09	52.35	649.79	6.35																				
20.12	1.04	53.94	661.36	6.36																				
20.14	1.02	51.79	673.63	6.36																				
20.16	1.03	46.71	689.91	6.36																				
20.18	1.07	41.16	700.10	6.37																				
20.20	1.14	36.40	712.68	6.38																				
20.22	1.17	32.09	722.61	6.38																				
20.24	1.30	28.55	725.95	6.38																				
20.26	1.59	26.37	742.49	6.39																				
20.28	2.09	26.59	738.46	6.37																				
20.30	2.55	31.49	712.36	6.38																				
20.32	3.10	34.47	720.66	6.40																				
20.34	5.49	45.69	663.88	6.41																				
20.36	7.41	65.02	445.79	6.40																				
20.38	8.73	76.95	407.56	6.39																				
20.40	9.44	87.83	364.36	6.40																				
20.42	9.36	81.45	337.13	6.39																				
20.44	9.05	69.61	308.33	6.40																				
20.46	8.95	58.13	297.01	6.40																				
20.48	8.93	51.95	292.67	6.42																				
20.50	8.99	48.86	283.42	6.43																				
20.52	8.91	53.34	273.11	6.42																				
20.54	8.82	53.51	267.89	6.43																				
20.56	8.79	52.72	262.42	6.43																				
20.58	8.86	53.76	259.21	6.44																				
20.60	8.97	56.71	253.05	6.45																				
20.62	8.87	61.27	246.57	6.45																				
20.64	8.58	61.64	242.11	6.46																				
20.66	7.94	48.20	236.13	6.47																				
20.68	7.16	41.63	230.22	6.47																				
20.70	6.39	38.68	225.25	6.48																				
20.72	5.35	37.43	220.48	6.48																				
20.74	4.93	41.39	219.34	6.49																				
20.76	4.63	63.83	214.00	6.48																				
20.78	4.02	80.49	207.02	6.49																				
20.80	3.51	83.64	204.00	6.52																				
20.82	3.18	79.64	200.35	6.53																				
20.84	2.76	72.38	199.16	6.55																				
20.86	2.35	56.48	239.03	6.55																				
20.88	2.28	51.69	256.76	6.55																				
20.90	2.40	56.56	278.77	6.56																				
20.92	2.43	48.65	276.82	6.56																				
20.94	2.44	53.27	275.50	6.57																				
20.96	2.58	53.64	289.77	6.58																				
20.98	3.66	97.66	220.92	6.57																				
21.00	5.84	101.06	186.14	6.58																				
21.02	6.76	112.20	176.39	6.58																				
21.04	8.08	126.65	170.67	6.60																				
21.06	9.67	127.76	165.64	6.62																				
21.08	11.14	138.38	162.43	6.63																				
21.10	12.76	110.58	158.66	6.64																				
21.12	14.02	65.04	161.36	6.67																				
21.14	14.83	57.05	167.90	6.68																				
21.16	15.49	57.27	171.74	6.69																				
21.18	15.70	58.01	171.74	6.69																				
21.20	10.73	24.22	148.26	5.66																				
21.22	12.60	23.70	161.18	5.66																				
21.24	14.14	14.95	169.38	5.65																				
21.26	14.61	22.97	171.65	5.68																				
21.28	14.22	27.78	174.64	5.71																				
21.30	13.74	30.40	174.89	5.75																				
21.32	14.38	101.17	183.77	5.74																				
21.34	14.66	136.00	185.30	5.61																				
21.36	16.98	106.39	212.05	5.61																				
21.38	16.79	98.66	207.33	5.62																				
21.40	16.85	86.10	218.72	5.62																				
21.42	17.37	62.12	180.77	5.65																				
21.44	18.00	44.65	193.62	5.68																				
21.46	17.72	50.78	163.32	5.81																				
21.48	18.61	91.68	156.65	5.87																				
21.50	19.02	91.86	105.84	5.84																				
21.52	20.47	72.13	121.88	5.85																				
21.54	16.03	47.84	101.43	5.84																				
21.56	15.72	74.27	112.94	5.91																				
21.58	15.73	97.33	119.43	5.99																				
21.60	15.51	69.43	120.59	6.03																				
21.62	17.11	73.54	130.82	6.06																				
21.64	19.21	88.75	140.85	6.08																				
21.66	21.82	77.76	152.91	6.14																				
21.68	24.92	81.93	166.38	6.16																				
21.70	28.01	46.69	179.73	6.19																				
21.72	28.66	90.95	182.17	6.06																				
21.74	29.79	74.48	190.81	5.91																				

Studio LZ CPT di Lorenzo Zanirato
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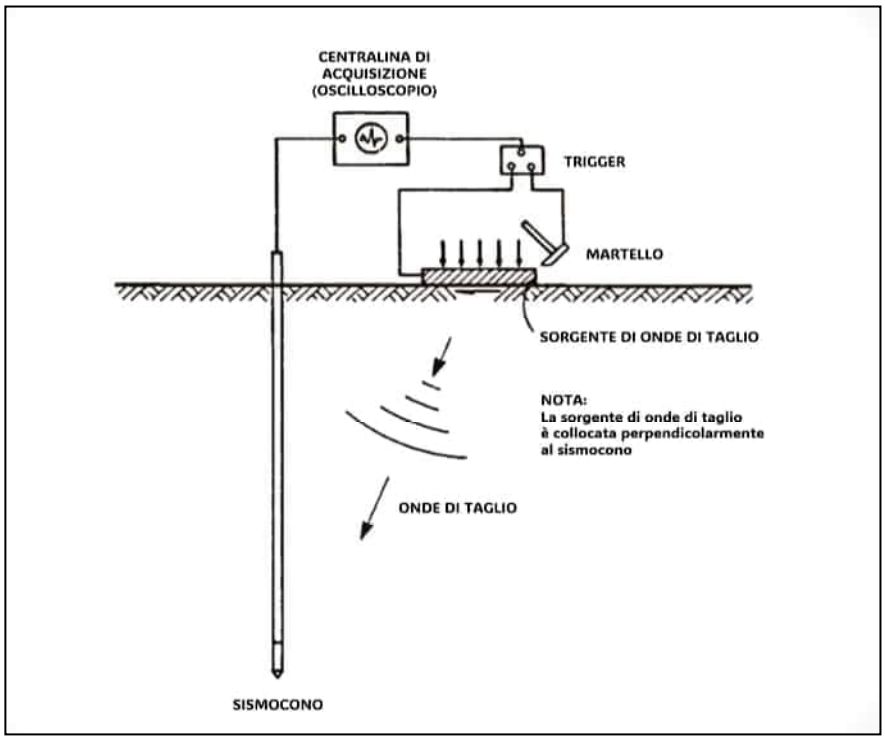
COMMITTENTE:		PROVA N°:	SCPTU 4
CANTIERE:	Via Correcchio - Loc. Coriano (FC)	PROF. FALDA (m da p.c.):	3.30
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	225/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	24/09/2024	OPERATORE:	Zanirato



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COMMITTENTE:		PROVA N°:	SCPTU 4
CANTIERE:	Via Correcchio - Loc. Coriano (FC)	PROF. FALDA (m da p.c.):	3.30
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	225/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	24/09/2024	OPERATORE:	Zanirato

Prova Down Hole ASTM D 7400



Profondità (m)	Ts (ms)	L (m)	Vs (m/s)	Vis (m/s)
1.0	T0	1.00	-	-
2.0	5.56	2.00	180	180
3.0	11.51	3.00	174	168
4.0	17.32	4.00	173	172
5.0	23.26	5.00	172	169
6.0	28.82	6.00	174	180
7.0	34.20	7.00	175	186
8.0	39.46	8.00	177	190
9.0	44.67	9.00	179	192
10.0	49.69	10.00	181	200
11.0	55.39	11.00	181	175
12.0	60.82	12.00	181	184
13.0	66.19	13.00	181	186
14.0	71.51	14.00	182	188
15.0	76.95	15.00	182	184
16.0	82.10	16.00	183	194
17.0	87.33	17.00	183	191
18.0	92.33	18.00	184	200
19.0	96.98	19.00	186	215
20.0	101.49	20.00	187	222
21.0	105.35	21.00	190	260

CATEGORIA SOTTOSUOLO
$V_{s,30}$ = m/s

D = Distanza centro trave generatrice ond
Profondità = Profondità punta da piano campagna
Ts = Tempo percorrenza onda di taglio
L = Lunghezza percorso onda di taglio
Vs = Velocità onde di taglio da piano campagna alla profondità indicata = 1.00 m
Vis = Velocità onde di taglio nello strato di terreno compreso fra le due profondità indicate

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COMMITTENTE:		PROVA N°:	SCPTU 4
CANTIERE:	Via Correcchio - Loc. Coriano (FC)	PROF. FALDA (m da p.c.):	3.30
COMMESSA:	C054/24	PREFORO (m da p.c.):	
RDP N°:	225/24	PIEZOCONO:	TECNOPENTA G1-CPLSTI 231029[a = 0.66]
DATA:	24/09/2024	OPERATORE:	Zanirato

UBICAZIONE

Località: Via Correcchio - Loc. Coriano (FC)

LAT. (WGS 84): 44.232971°
LONG. (WGS 84): 12.073439°



SONDAGGIO A CAROTAGGIO CONTINUO

Studio LZ CPT di Lorenzo Zanirato
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COMMITTENTE:
CANTIERE: Via Repubblica Cispadana - Loc. Ospedaletto - Forlì (FC)

PERFORAZIONE:	S1DH	RDP N°:	006/24	PROFONDITA':	30 m	Indisturbato	S S.P.T
ESECUZIONE:	02-03/09/2024	OPERATORE:		RIVESTIMENTO:	30 m	Rimaneggiato	L Lefranc
COMMESSA:	C054/24	RESPONSABILE:	Zanirato	QUOTA:	22 m	Ambientale	V Vane Test

METRI	METRI da P.C.	DESCRIZIONE STRATIGRAFICA	CAMPIONI TIPO	CAMPIONI NUM.	CAMPIONI PROF.	P.P Kg/cm2	T.V Kg/cm2	PROVE TIPO	PROVE NUM.	PROVE PROF.	METODO E UTENSILE	FALDA	DOWN HOLE
	0,10	Terreno vegetale											
	0.60	Riporto costituito da limo con sabbia, marrone, con frammenti di laterizi e radici											
1	1.70	Limo con sabbia, sovraconsolidato per essicazione, marrone, con presenza di concrezioni carbonatiche											
2	2.30	Argilla limosa marrone chiaro, con frustoli brunastri				2.30	0.87						
						2.25	0.88						
	2.70	Limo argilloso marrone chiaro con frustoli brunastri e screziature giallo ocra				1.35	0.65						
						1.30	0.68						
3	3.10	Argilla limosa marrone chiaro con frustoli brunastri e ricca di concrezioni carbonatiche				2.85	0.78						
	3.70	Limo argilloso marrone chiaro con frustoli brunastri e ricco di concrezioni carbonatiche				1.10	0.33						
						1.70	0.73						
						2.10	0.56						
						2.80	0.82						
4	4.20	Argilla limosa grigia scura con frustoli brunastri e nerastri				1.50	0.51					4.00	
	4.35	Limo sabbioso marrone chiaro con concrezioni carbonatiche											
5	5.00	Sabbia fine limosa marrone chiaro con screziature giallo ocra passante a medio-grossa al letto											
	5.30	Argilla limosa marrone chiaro con screziature brunastre				1.40	0.65						
6	6.10	Sabbia fine debolmente limosa, giallo ocra											
	6.60	Argilla limosa, a tratti debolmente limosa, con sottili livelli sabbiosi tra 6.55 e 6.60, marrone chiara, con screziature giallo ocra				1.60	0.64						
						1.50	0.60						
						2.05	0.55						
7		Argilla debolmente limosa marrone chiaro con frustoli brunastri, nerastri e bande marrone chiaro				1.30	0.50						
						1.75	67.00						
			SH1		7.50								
8					8.20								
						1.10	0.40						
	8.80					1.50	0.48						
						1.55	0.73						
9	9.00	Argilla debolmente limosa, nerastra				1.50	0.56						
	9.60	Argilla debolmente limosa marrone chiaro alternato a bande grigio chiaro				1.35	0.73						
						2.15	0.85						
						1.70	0.63						
10		Limo argilloso grigio chiaro con bande marrone chiaro				0.90	0.40						

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COMMITTENTE:
CANTIERE: Via Repubblica Cispadana - Loc. Ospedaletto - Forlì (FC)

PERFORAZIONE:	S1DH	RDP N°:	006/24	PROFONDITA':	30 m	Indisturbato	S S.P.T
ESECUZIONE:	02-03/09/2024	OPERATORE:		RIVESTIMENTO:	30 m	Rimaneggiato	L Lefranc
COMMESSA:	C054/24	RESPONSABILE:	Zanirato	QUOTA:	22 m	Ambientale	V Vane Test

METRI	METRI da P.C.	LITOLOGIA	DESCRIZIONE STRATIGRAFICA	CAMPIONI TIPO	CAMPIONI NUM.	CAMPIONI PROF.	P.P. kPa	T.V. kPa	PROVE TIPO	PROVE NUM.	PROVE PROF.	METODO E UTENSILE	FALDA
	10.10						1.85	0.73					
			Argilla debolmente limosa, compatta, grigia, con bande marrone chiaro				3.25	>1					
							2.70	>1					
							2.85	>1					
11							1.90	0.95					
	11.20						3.10	>1					
			Argilla limosa marrone chiaro con bande grigie chiare				2.00	0.80					
12							2.20	0.68					
							3.05	0.88					
	12.50						2.10	0.80					
	12.70		Alternanze di sabbia fine limosa e limo sabbioso grigio scuro										
13			Alternanze di sabbia fine limosa e limo argilloso marrone chiaro con screziature giallo ocra										
	13.30												
			Sabbia fine limosa marrone chiaro/giallo ocra										
	13.80												
14			Argilla debolmente limosa gigio chiaro con screziature giallo ocra				1.15	0.30					
	14.10		Argilla debolmente limosa, compatta, grigia, con bande grigio scuro				1.30	0.68					
	14.40						1.90	0.83					
			Argilla debolmente limosa grigio chiaro con screziature giallo ocra				2.55	0.90					
15							3.00	>1					
	15.30						2.35	0.87					
	15.60		Argillo debolmente limosa grigio scuro				0.95	0.46					
			Argilla debolmente limosa grgio chiaro con bande giallo ocra				1.80	0.67					
16							1.06	0.44					
							3.00	0.93					
							2.70	0.97					
							3.35	0.81					
							1.50	0.69					
17	17.00						2.10	0.92					
			Limo argilloso marrone chiaro con bande grigie chiare				1.50	0.57					
	17.40						0.85	0.27					
	17.50		Sabbia fine limosa marrone chiaro/giallo ocra										
			Limo argilloso marrone chiaro con bande grigie chiare				1.70	0.68					
18	18.00						1.80	0.59					
			Argilla limosa grigio chiaro con bande giallo ocra				1.90	0.62					
							1.70	0.43					
							1.60	0.66					
19	18.00						1.15	0.54					
			Argilla debolmente limosa grigio chiaro				1.10	0.38					
							1.15	0.40					
20	20.00												

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COMMITTENTE:
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PERFORAZIONE:	S1DH	RDP N°:	006/24	PROFONDITA':	30 m	Indisturbato	S S.P.T
ESECUZIONE:	02-03/09/2024	OPERATORE:		RIVESTIMENTO:	30 m	Rimaneggiato	L Lefranc
COMMESSA:	C054/24	RESPONSABILE:	Zanirato	QUOTA:	22 m	Ambientale	V Vane Test

METRI	METRI da P.C.	LITOLOGIA	DESCRIZIONE STRATIGRAFICA	CAMPIONI TIPO	CAMPIONI NUM.	CAMPIONI PROF.	P.P. kPa	T.V. kPa	PROVE TIPO	PROVE NUM.	PROVE PROF.	METODO E UTENSILE	FALDA
			Argilla debolmente limosa grigio scuro				1.30	0.56					
							1.90	0.65					
	20.50												
			Argilla debolmente limosa grigio chiaro				1.80	0.68					
21							1.80	0.72					
							0.70	0.35					
	21.40						1.05	0.42					
			Limo argilloso debolmente sabbioso grigio chiaro										
	21.80												
22			Argilla debolmente limosa a bande grigio chiaro, grigio scuro e giallo ocra				1.90	0.80					
							1.60	0.67					
							1.95	0.64					
							1.50	0.57					
	22.90						1.25	0.45					
23			Argilla debolmente limosa grigio scuro con frustoli brunastri e presenza di concrezioni carbonatiche				1.10	0.44					
							1.40	0.38					
							1.35	0.50					
	23.90						1.35	0.45					
24	24.00		Sabbia fine limosa grigia										
			Argilla debolmente limosa grigio chiaro										
	24.35												
			Sabbia fine limosa grigia										
	24.80												
25			Limo sabbioso grigio										
	25.10												
			Sabbia fine limosa grigia										
	25.40												
			Argilla debolmente limosa a tratti limosa grigio chiaro, con screziature giallo ocra				1.70	0.57					
26							1.50	0.53					
							1.95	0.66					
	26.40						1.20	0.57					
			Argilla debolmente limosa grigio scuro				1.70	0.57					
	26.80						3.60	> 1					
27			Argilla debolmente limosa grigio con screziature nerastre				0.70	0.31					
							0.80	0.40					
							0.70	0.23					
	27.80						1.60	0.78					
28			Argilla debolmente limosa a bande giallo ocra, nerastre e grigio chiaro				3.80	> 1					
							2.95	> 1					
							0.90	0.55					
							2.40	0.63					
29	29.00						2.60	0.83					
			Argilla debolmente limosa grigia				2.60	> 1					
							1.95	0.96					
	29.95						2.50	0.95					
30	30.00		Torba										

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COMMITTENTE:
CANTIERE: Via Repubblica Cispadana - Loc. Ospedaletto - Forlì (FC)

PERFORAZIONE:	S1DH	RDP N°:	006/24	PROFONDITA':	30 m	▦ Indisturbato	S S.P.T
ESECUZIONE:	02-03/09/2024	OPERATORE:		RIVESTIMENTO:	30 m	☒ Rimaneggiato	L Lefranc
COMMESSA:	C054/24	RESPONSABILE:	Zanirato	QUOTA:	22 m	☐ Ambientale	V Vane Test

LOCALITA': Via Repubblica Cispadana - Loc. Ospedaletto - Forlì (FC) UBICAZIONE: Lat.:
Long.:





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COMMITTENTE:
CANTIERE: Via Repubblica Cispadana - Loc. Ospedaletto - Forlì (FC)

PERFORAZIONE:	S1DH	RDP N°:	006/24	PROFONDITA':	30 m	▦ Indisturbato	S S.P.T
ESECUZIONE:	02-03/09/2024	OPERATORE:		RIVESTIMENTO:	30 m	☒ Rimaneggiato	L Lefranc
COMMESSA:	C054/24	RESPONSABILE:	Zanirato	QUOTA:	22 m	☐ Ambientale	V Vane Test



S1 - Cassa 1 - Da P.C. a 5.00 m

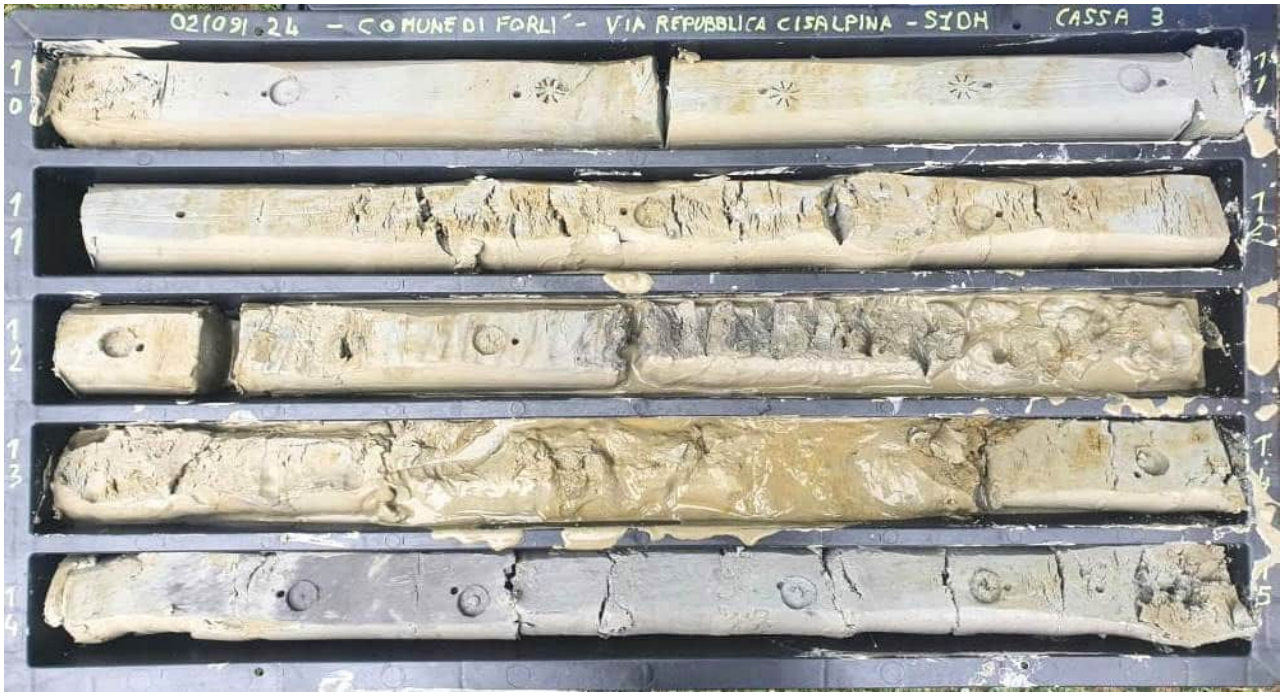


S1 - Cassa 2 - Da 5.00. a 10.00 m

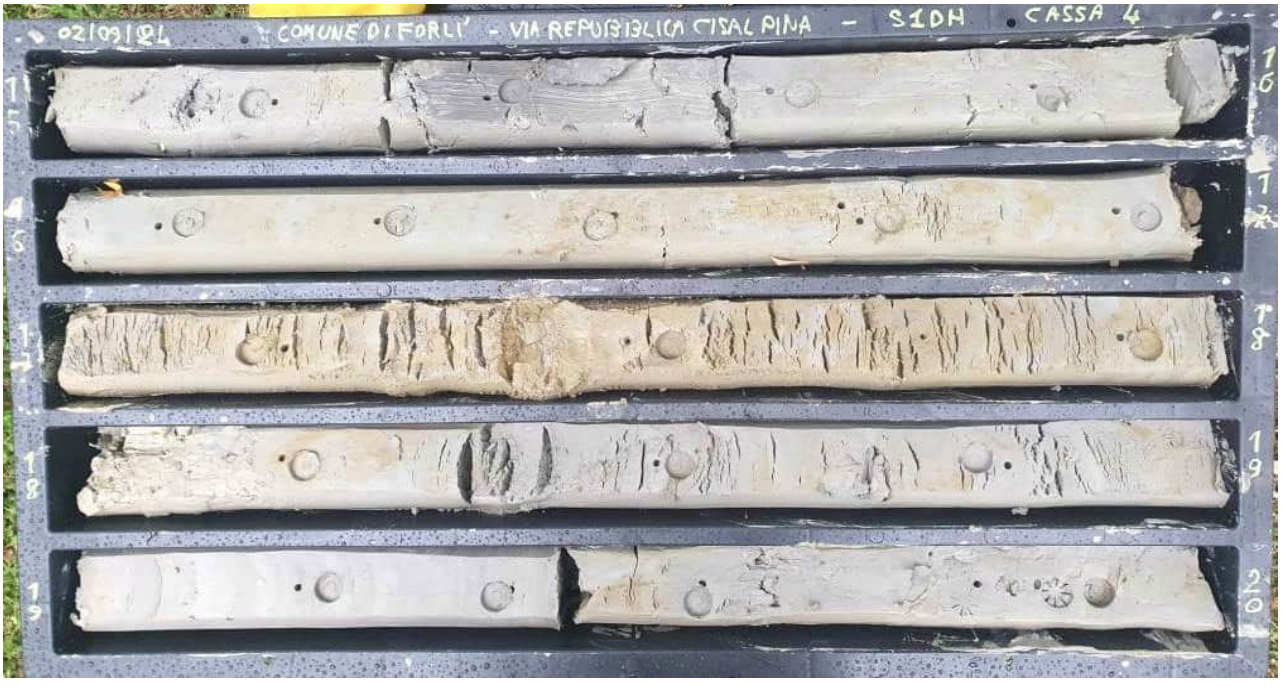
Studio LZ CPT di Lorenzo Zanirato
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COMMITTENTE:
CANTIERE: Via Repubblica Cispadana - Loc. Ospedaletto - Forlì (FC)

PERFORAZIONE:	S1DH	RDP N°:	006/24	PROFONDITA':	30 m	Indisturbato	S S.P.T
ESECUZIONE:	02-03/09/2024	OPERATORE:		RIVESTIMENTO:	30 m	Rimaneggiato	L Lefranc
COMMESSA:	C054/24	RESPONSABILE:	Zanirato	QUOTA:	22 m	Ambientale	V Vane Test



S1 - Cassa 3 - Da 10.00 a 15.00 m



S1 - Cassa 4 - Da 15.00 a 20.00 m

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COMMITTENTE:
CANTIERE: Via Repubblica Cispadana - Loc. Ospedaletto - Forlì (FC)

PERFORAZIONE:	S1DH	RDP N°:	006/24	PROFONDITA':	30 m	Indisturbato	S S.P.T
ESECUZIONE:	02-03/09/2024	OPERATORE:		RIVESTIMENTO:	30 m	Rimaneggiato	L Lefranc
COMMESSA:	C054/24	RESPONSABILE:	Zanirato	QUOTA:	22 m	Ambientale	V Vane Test



S1 - Cassa 5 - Da 20.00 a 25.00 m



S1 - Cassa 6 - Da 25.00. a 30.00 m

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COMMITTENTE:
CANTIERE: Via Repubblica Cispadana - Loc. Ospedaletto - Forlì (FC)

PERFORAZIONE:	S1DH	RDP N°:	006/24	PROFONDITA':	30 m	Indisturbato	S S.P.T
ESECUZIONE:	02-03/09/2024	OPERATORE:		RIVESTIMENTO:	30 m	Rimaneggiato	L Lefranc
COMMESSA:	C054/24	RESPONSABILE:	Zanirato	QUOTA:	22 m	Ambientale	V Vane Test



Pozzetto carrabile a protezione del tubo per prova Down-hole

PROVE DI LABORATORIO

PROVA IN COLONNA RISONANTE

FERRARA DEPARTMENT
Via Annibale Zucchini, 69 – 44122 Ferrara (FE)
Tel.: +39 0532 56771 - Fax.: +39 0532 56119

SOCOTEC ITALIA Srl – P.Iva 01872430648
Headquarters: Via Bariola, 101-103 - 20020 Lainate (MI)
Tel.: +39 02 9375 0000 - Fax: +39 02 9375 0099
www.socotec.it

Laboratorio Geotecnico autorizzato con Dec. n. 486 del 20/09/2019 , art. 59 del D.P.R. 380/2001, Circolari Ministeriali 7618/STC

PROVA DI COLONNA RISONANTE (ASTM D 4015)

Committente:	**Studio LZ CPT - Via Argine Volano - Copparo (FE)**
Località:	**Forlì (FC)**
Cantiere:	**Microzonazione Sismica - Forlì (FC) - Via Repubblica Cisalpina**
Sondaggio:	**S1DH**
Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

Certificato di prova N°:	**G2409515**
Verbale di accettazione N°:	**475/24**
Commessa:	**SI_2024_0967**
Data ricevimento campione:	**05/09/2024**
Data prova:	**23 - 26/09/24**
Data emissione certificato:	**27/09/24**

DATI INIZIALI		
Altezza:	**100.00**	mm
Diametro:	**50.00**	mm
Raggio eq.:	**17.675**	mm
Massa:	**368.4**	g
W:	**30.6**	%
γ:	**18.40**	kN/m^3
γ_d:	**14.10**	kN/m^3
e:	**0.88**	-

DATI DI PROVA		
Tipo di campione:	**Limo argilloso grigio con screziature marrone chiaro**	
Fattore Raggio Eq.:	**0,707**	-
Coefficiente B:	**0.95**	%
Pressione cella:	**460**	kPa
Contropressione:	**350**	kPa

DATI FINALI		
Altezza:	**99.58**	mm
Diametro:	**49.79**	mm
Raggio eq.:	**17.602**	mm
Massa:	**365.9**	g
W:	**29.6**	%
γ:	**18.87**	kN/m^3
γ_d:	**14.56**	kN/m^3
e:	**0.85**	-

	Frequenza Risonanza (Hz)	*Momento Torcente (Nm)*	*Def. Taglio max (%)*	*Vel. Onde Taglio V_s (m/s)*	*Modulo Taglio G (MPa)*	*G/G_0*	*Rapporto Smorz. D (%)*	*$\Delta U/\sigma^3$*
Test 1* *	99.00	0.0001	8.68E-05	179.11	60.18	1.000	0.56	0.000
Test 2	99.00	0.0002	2.31E-04	179.11	60.18	1.000	0.59	0.000
Test 3	98.60	0.0005	6.29E-04	178.39	59.70	0.992	0.72	0.000
Test 4	98.60	0.0008	1.07E-03	178.39	59.70	0.992	0.75	0.000
Test 5	98.20	0.0025	2.33E-03	177.66	59.21	0.984	0.78	0.000
Test 6	95.00	0.0040	4.76E-03	171.87	55.42	0.921	0.84	0.000
Test 7	94.20	0.0055	6.88E-03	170.43	54.49	0.905	0.97	0.000
Test 8	92.00	0.0080	9.00E-03	166.45	51.97	0.864	1.09	0.000
Test 9	84.80	0.0200	1.89E-02	153.42	44.16	0.734	2.61	0.000
Test 10	80.20	0.0300	2.67E-02	145.10	39.50	0.656	3.53	0.000
Test 11	70.20	0.0600	4.94E-02	127.01	30.26	0.503	4.27	0.001
Test 12	61.40	0.0900	7.96E-02	111.08	23.15	0.385	5.63	0.011
Test 13	53.80	0.1200	1.20E-01	97.33	17.77	0.295	7.60	0.041
Test 14	45.00	0.1700	2.07E-01	81.41	12.43	0.207	9.95	0.084
Test 15	35.90	0.2300	3.85E-01	64.95	7.91	0.131	12.61	0.181
Test 16	26.70	0.2999	7.38E-01	48.31	4.38	0.073	15.05	0.344
Test 17								
Test 18								
Test 19								
Test 20								

** Test 1 corrispondente al valore G_0*

lo Sperimentatore:
dott. Roberto Bellanova

Il Direttore del Laboratorio Terre:
dott. geol. Luciano Rossi

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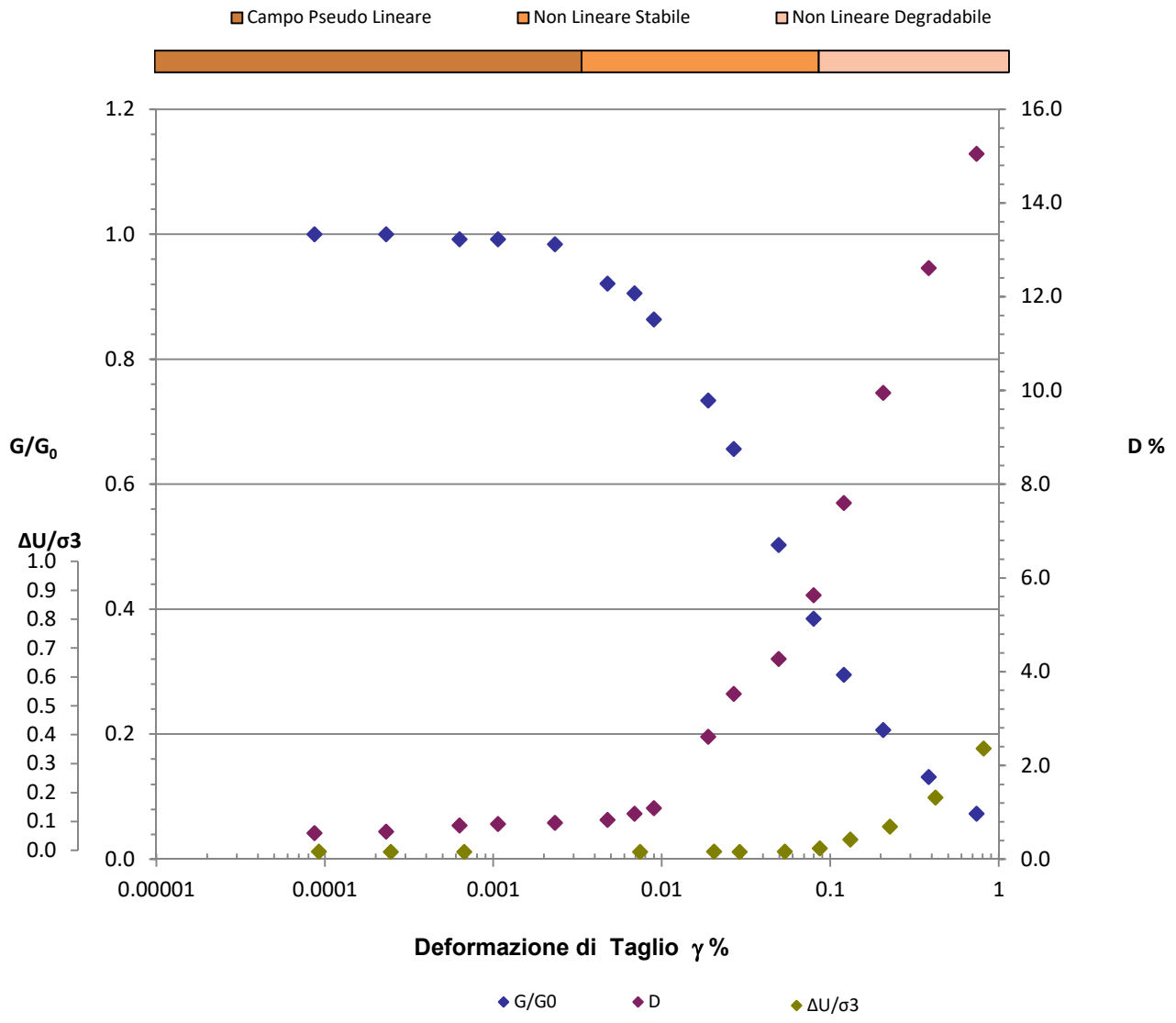
PROVA DI COLONNA RISONANTE (ASTM D 4015)

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Località:	**Forlì (FC)**
Cantiere:	**Microzonazione Sismica - Forlì (FC) - Via Repubblica Cisalpina**
Sondaggio:	**S1DH**
Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

Certificato di prova N°:	**G2409515**
Verbale di accettazione N°:	**475/24**

Commessa:	**SI_2024_0967**
Data ricevimento campione:	**05/09/2024**
Data prova:	**23 - 26/09/24**
Data emissione certificato:	**27/09/24**

Legge Costitutiva del Terreno



lo Sperimentatore:
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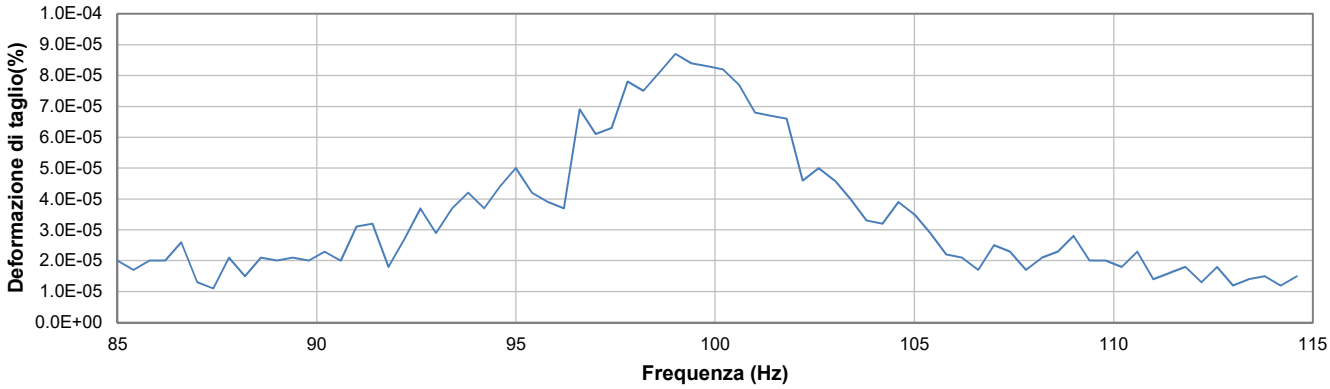
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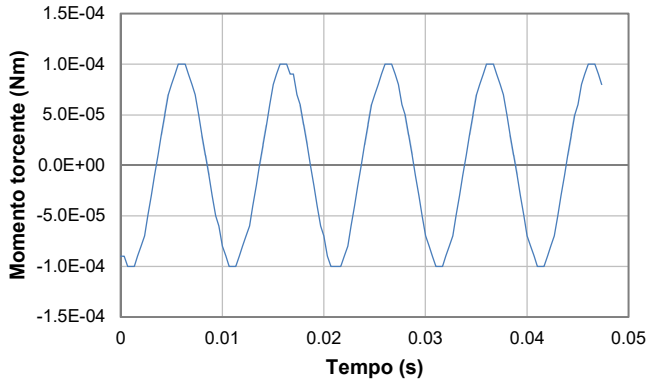
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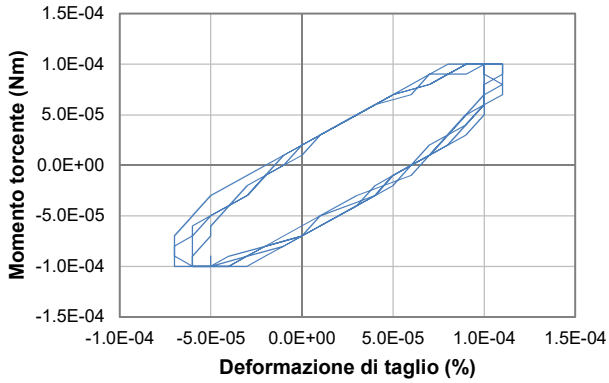
Test 1



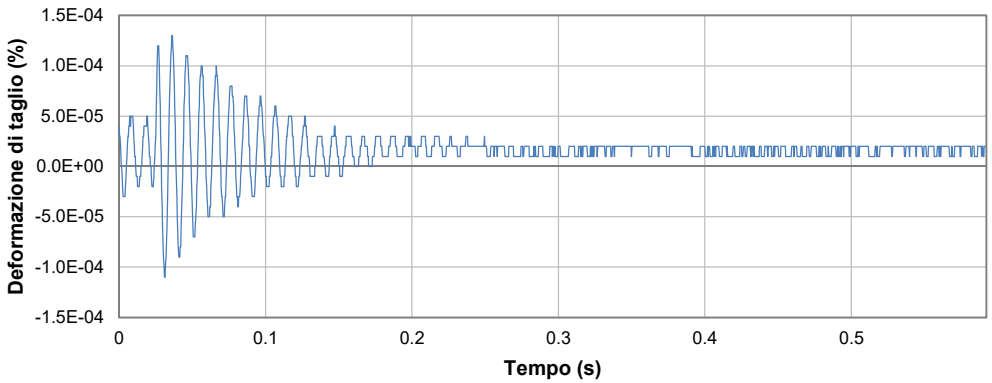
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2



3



4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
4	Smorzamento per oscillazioni libere

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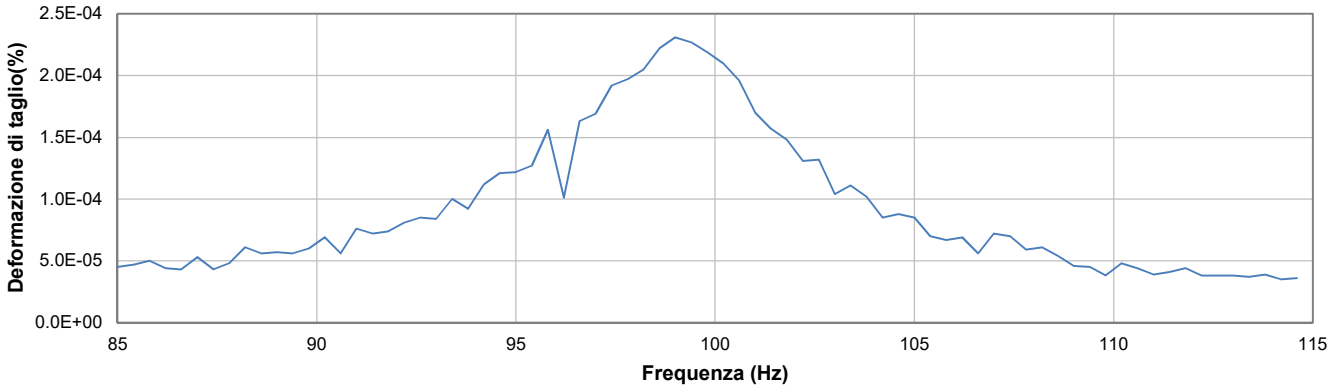
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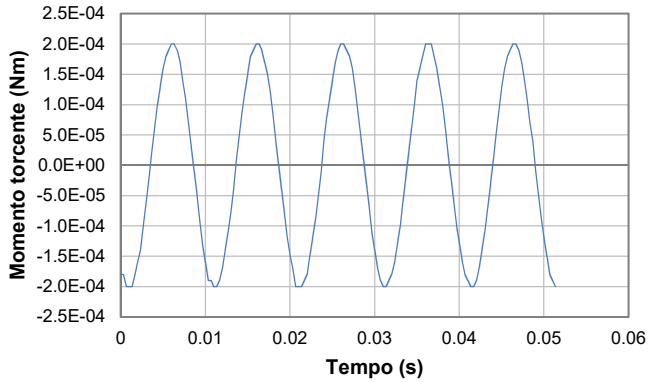
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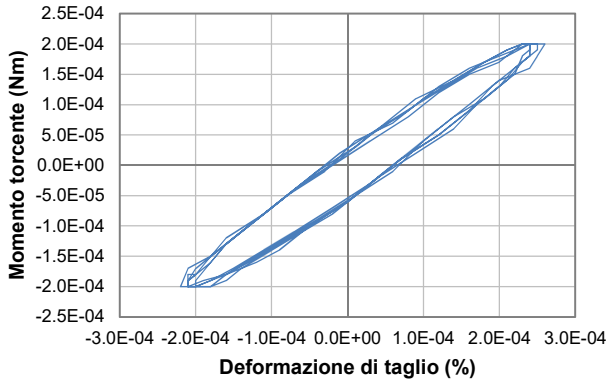
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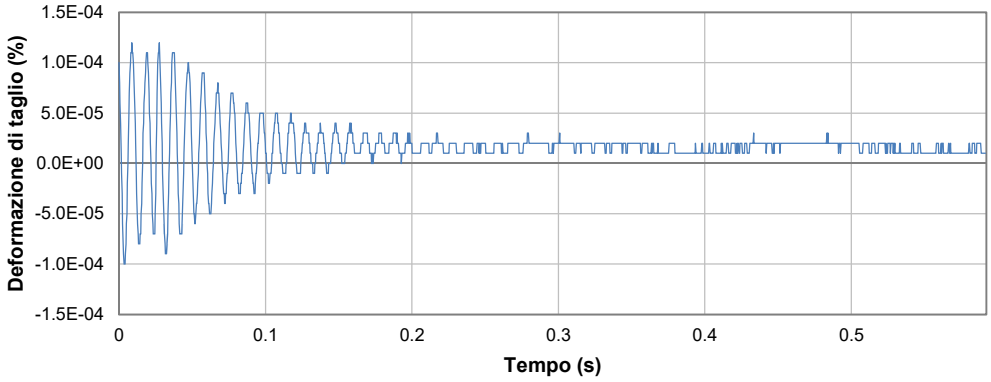
1



2



3



4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
4	Smorzamento per oscillazioni libere

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Il Direttore del Laboratorio Terre:
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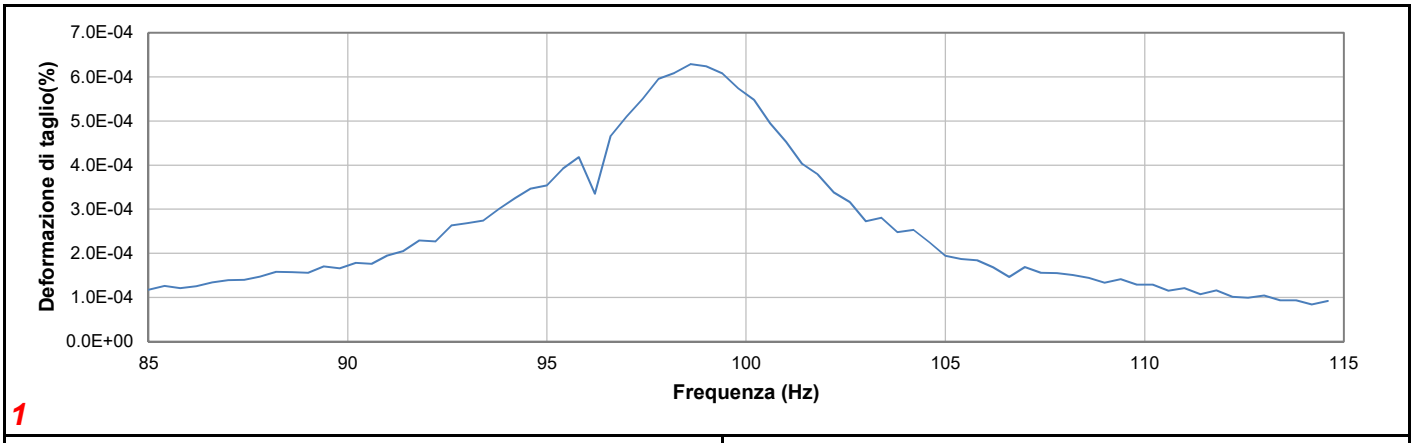
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Sondaggio:	**S1DH**
Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

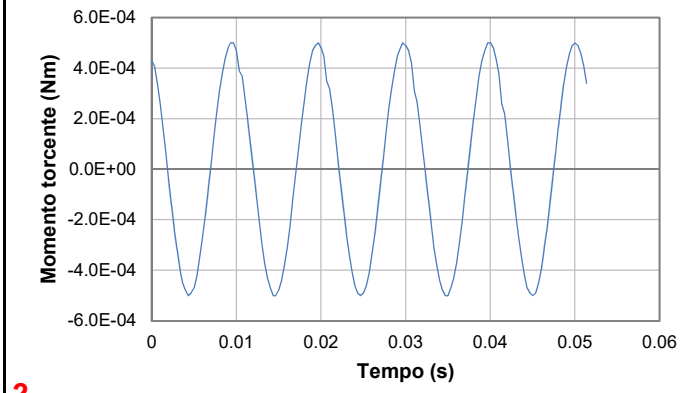
Certificato di prova N°:	**G2409515**
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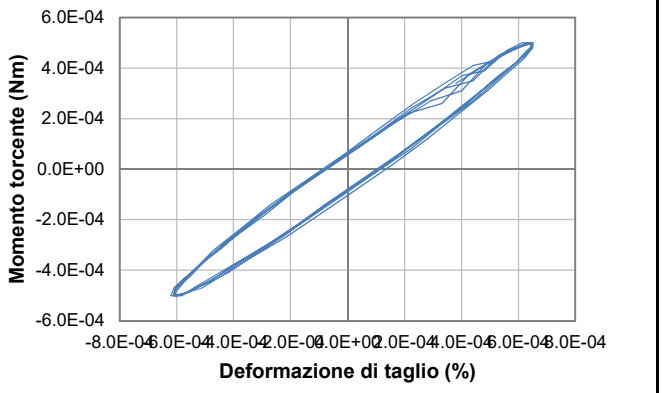
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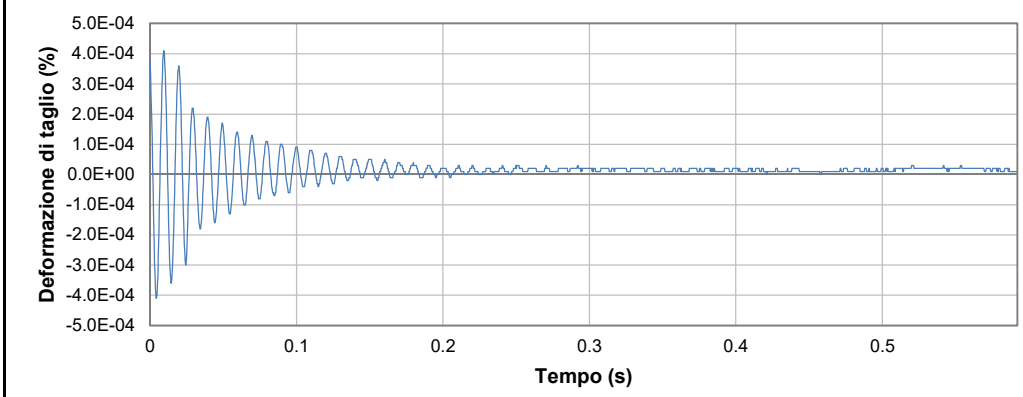
1



2



3



4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
4	Smorzamento per oscillazioni libere

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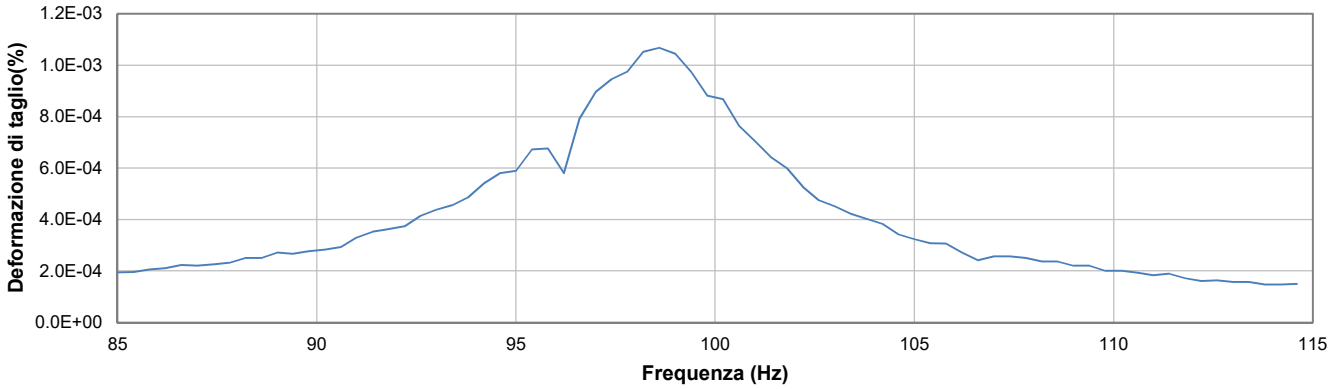
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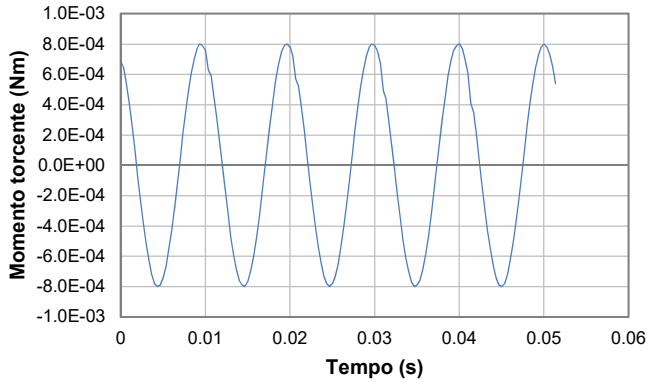
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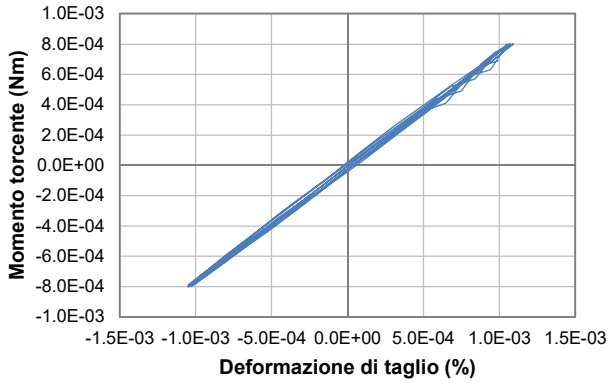
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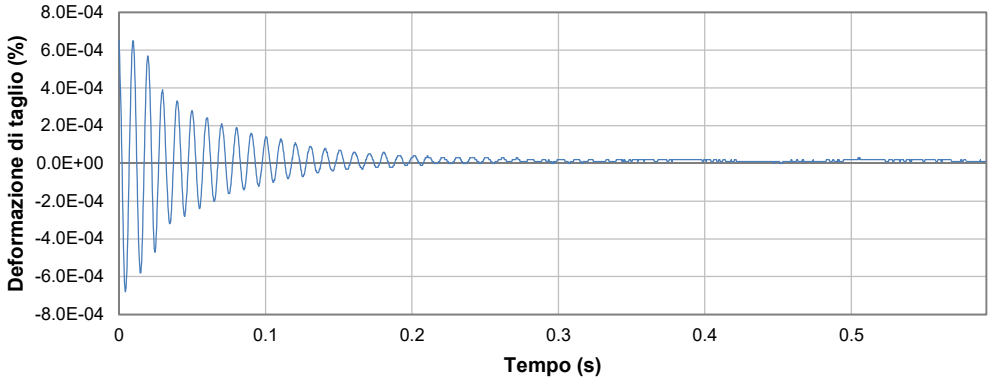
1



2



3



4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
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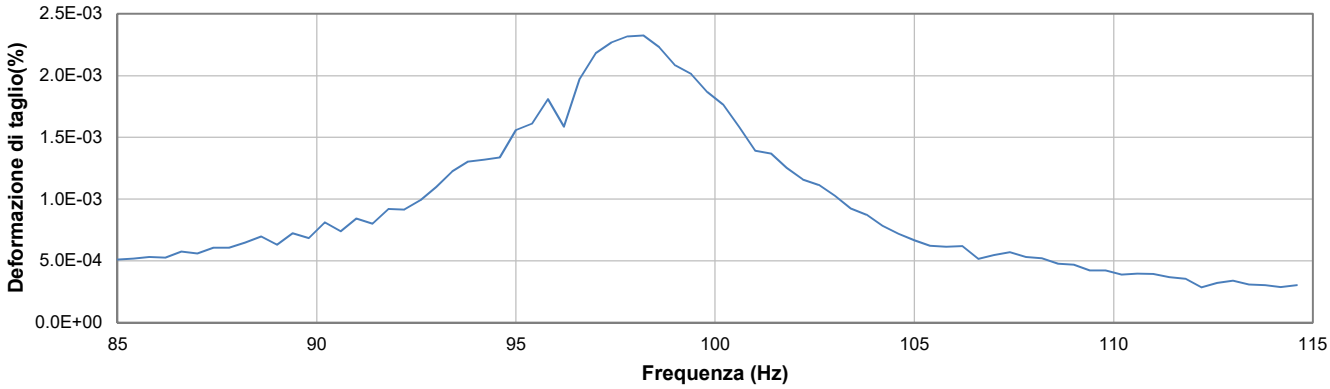
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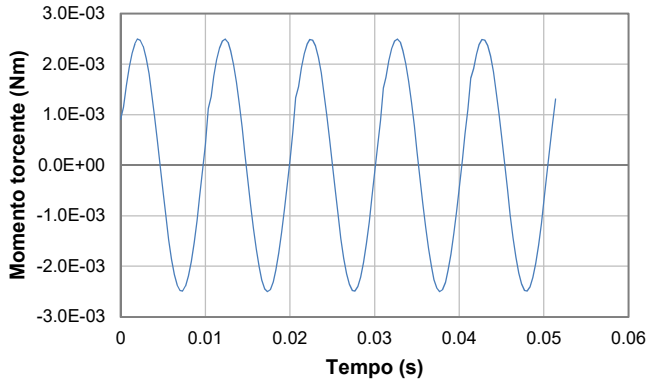
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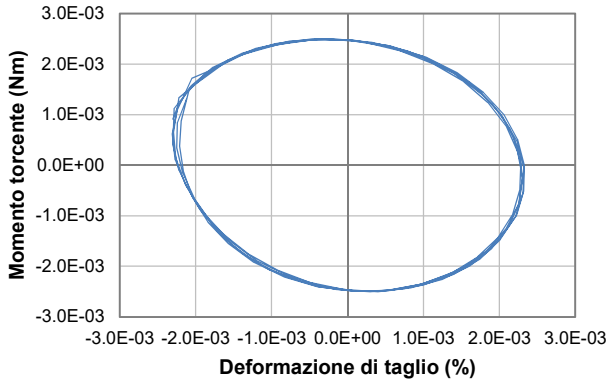
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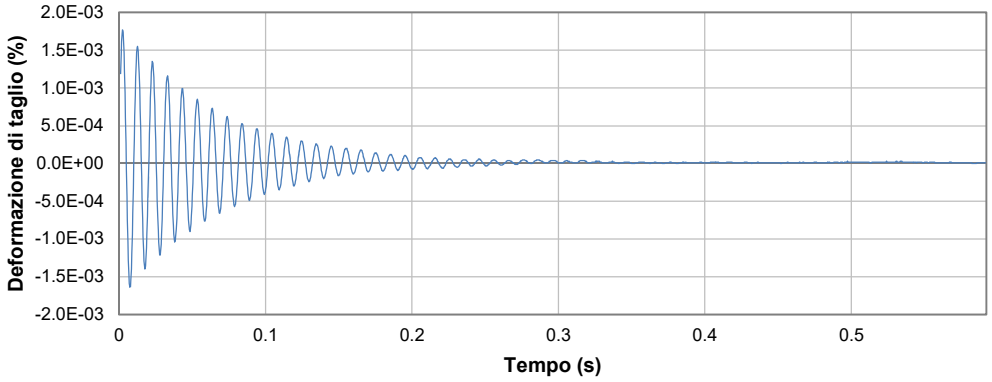
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2



3



4

1	Campo delle frequenze indagate
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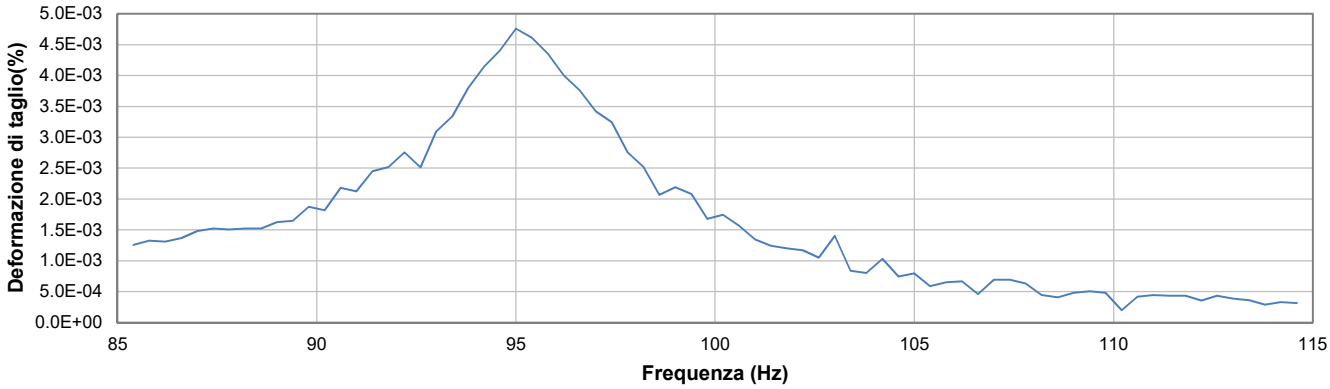
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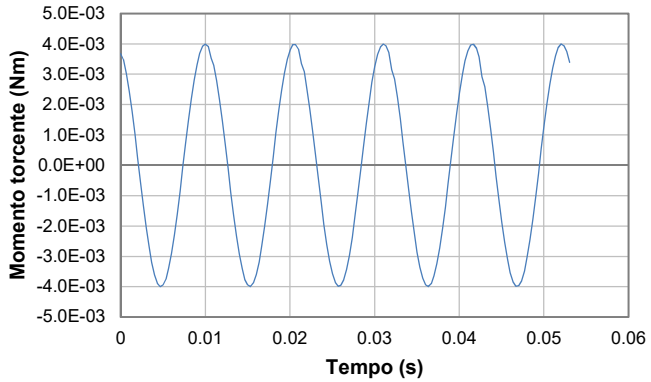
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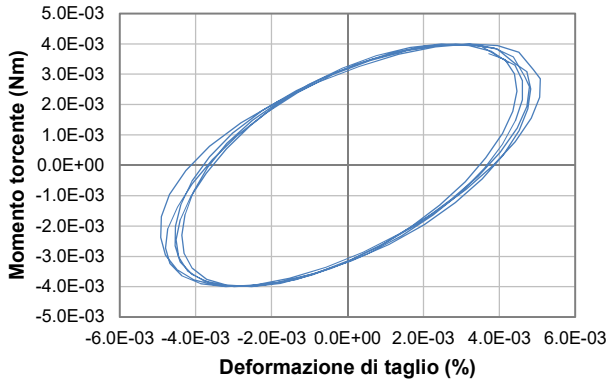
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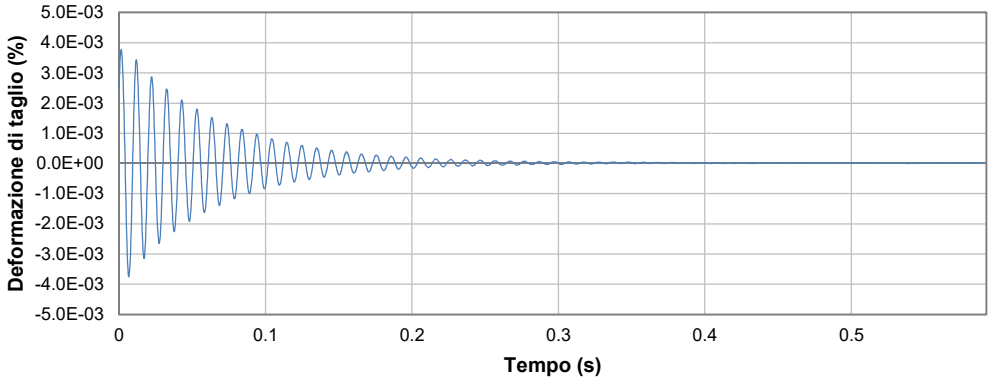
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2



3



4

1	Campo delle frequenze indagate
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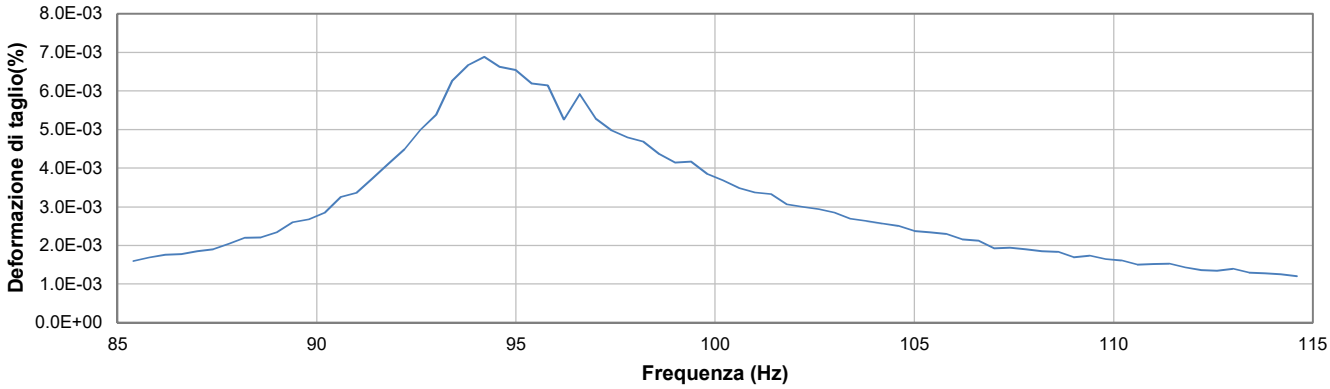
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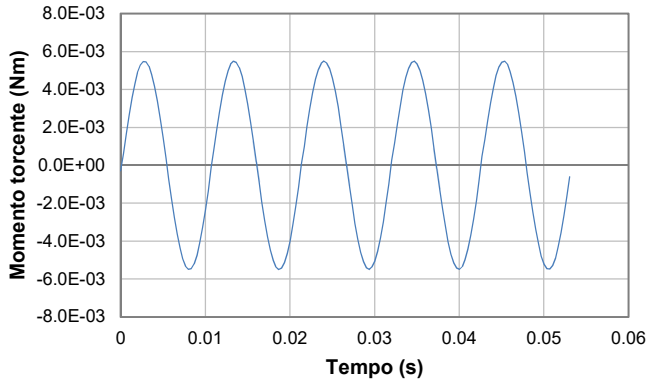
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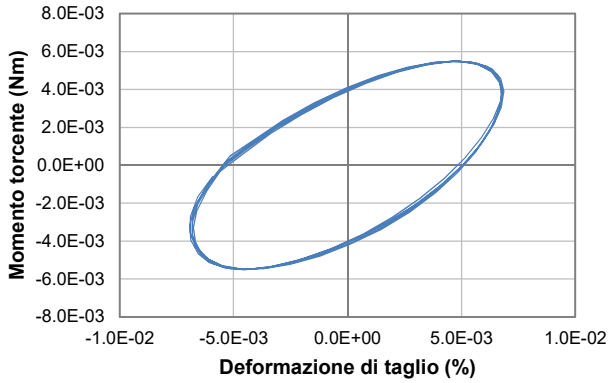
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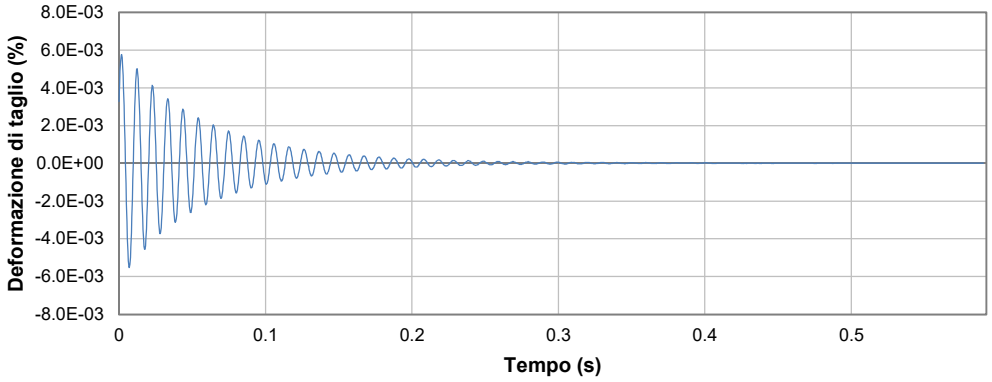
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4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
4	Smorzamento per oscillazioni libere

Io Sperimentatore:
dott. Roberto Bellanova

Il Direttore del Laboratorio Terre:
dott. geol. Luciano Rossi

FERRARA DEPARTMENT
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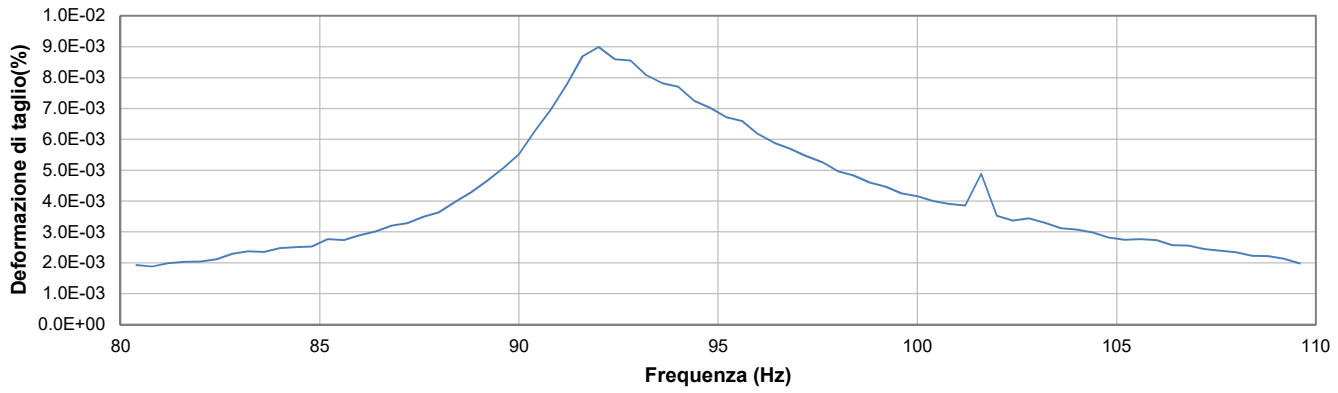
PROVA DI COLONNA RISONANTE (ASTM D 4015)

Committente:	**Studio LZ CPT - Via Argine Volano - Copparo (FE)**
Località:	**Forlì (FC)**
Cantiere:	**Microzonazione Sismica - Forlì (FC) - Via Repubblica Cisalpina**
Sondaggio:	**S1DH**
Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

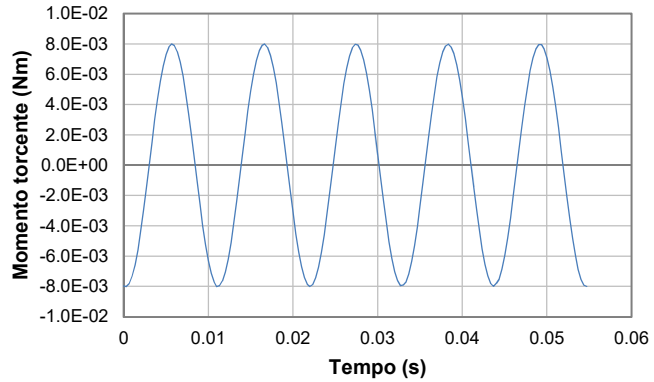
Certificato di prova N°:	**G2409515**
Verbale di accettazione N°:	**475/24**

Commessa:	**SI_2024_0967**
Data ricevimento campione:	**05/09/2024**
Data prova:	**23 - 26/09/24**
Data emissione certificato:	**27/09/24**

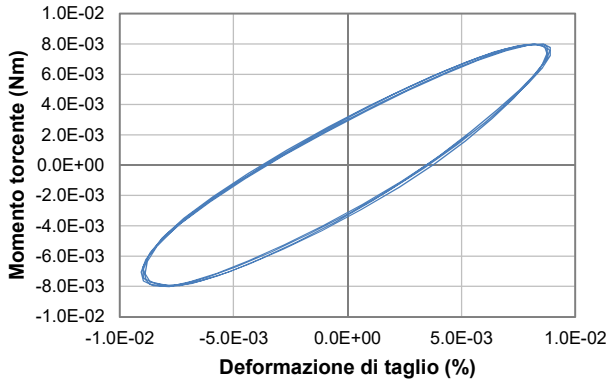
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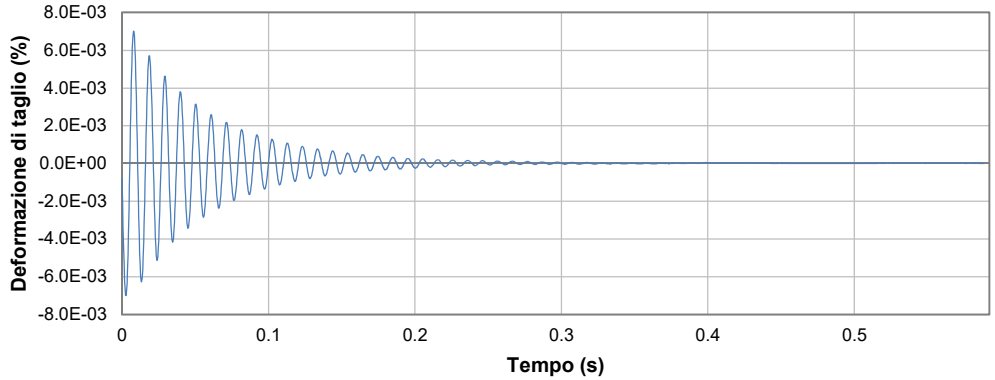
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4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
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Io Sperimentatore:
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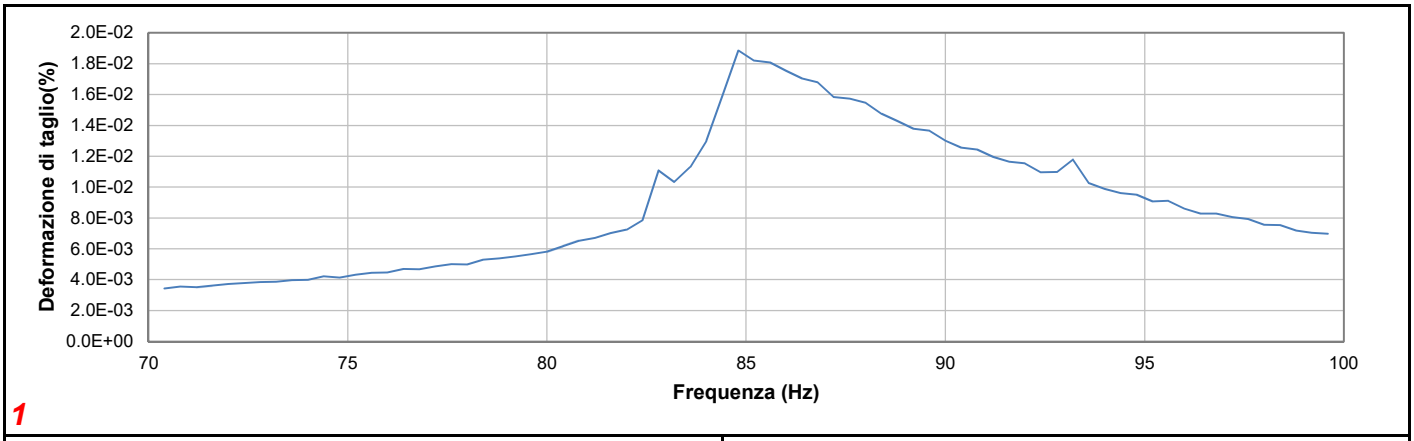
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Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

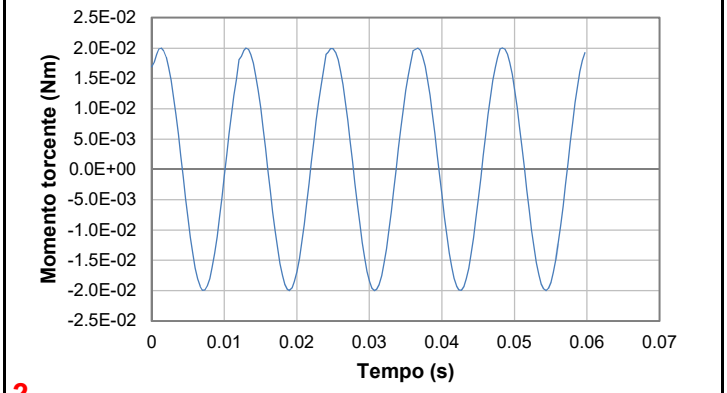
Certificato di prova N°:	**G2409515**
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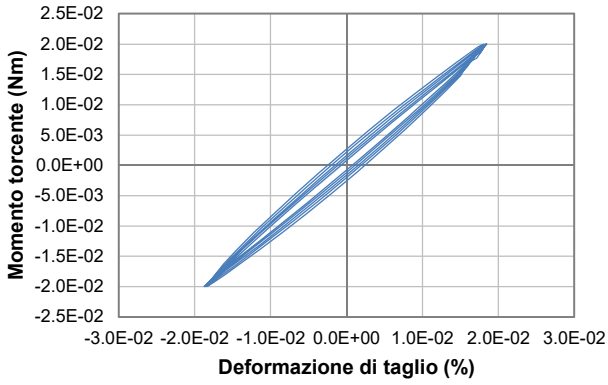
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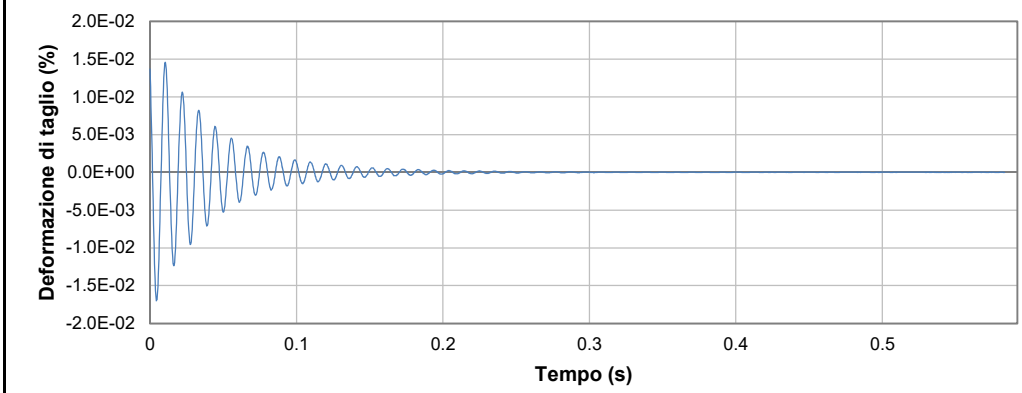
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4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
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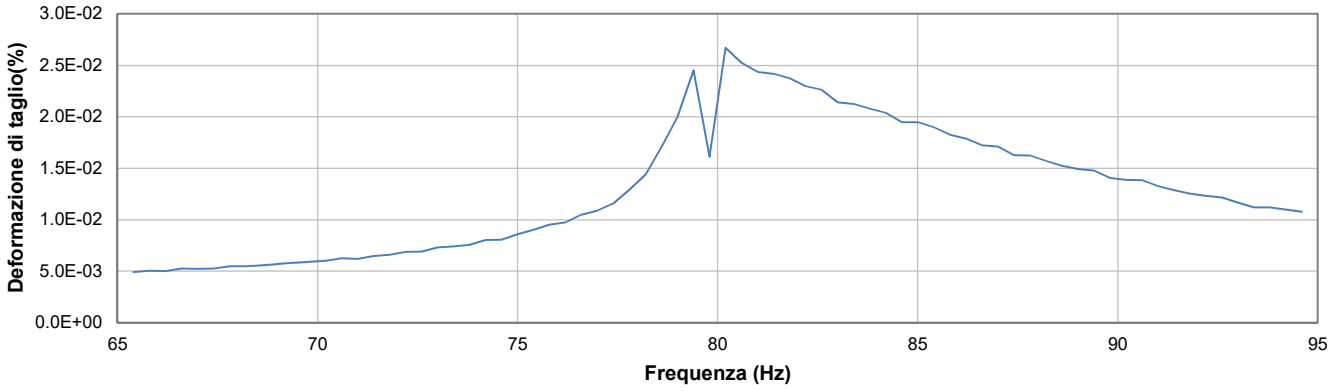
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Profondità (m):	**7.50 - 8.20**

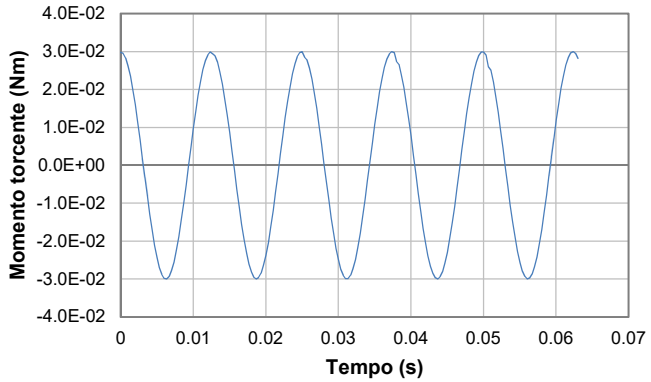
Certificato di prova N°:	**G2409515**
Verbale di accettazione N°:	**475/24**

Commessa:	**SI_2024_0967**
Data ricevimento campione:	**05/09/2024**
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Data emissione certificato:	**27/09/24**

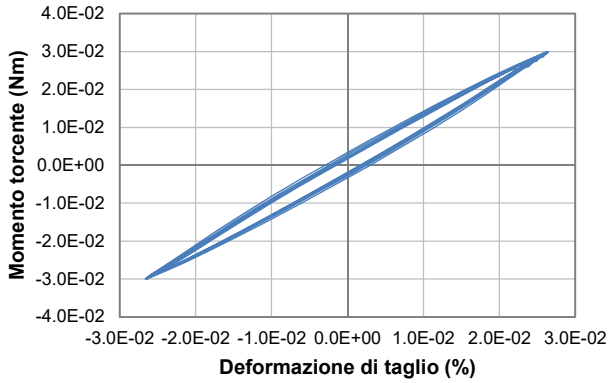
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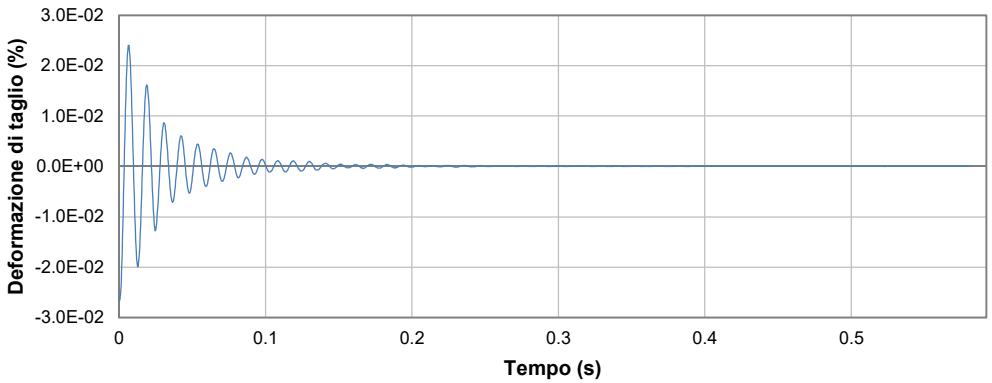
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4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
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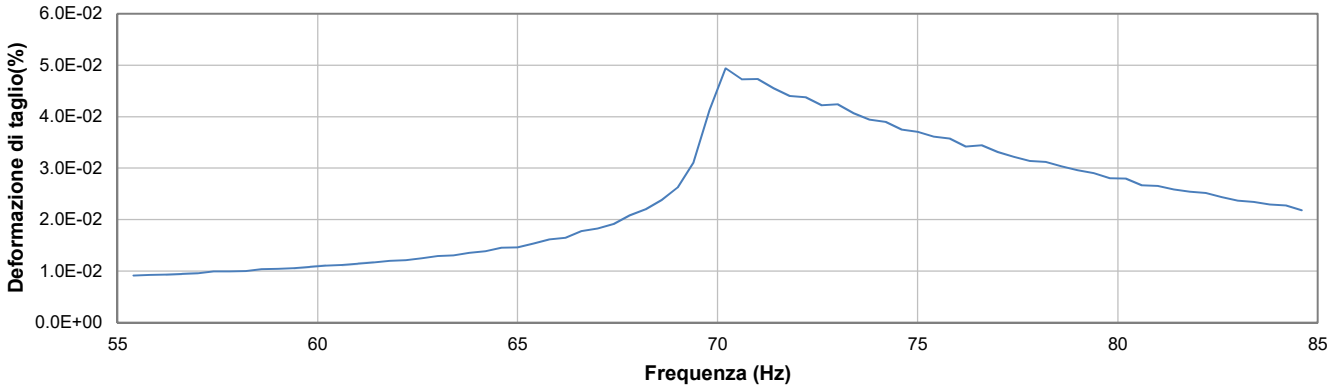
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Sondaggio:	**S1DH**
Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

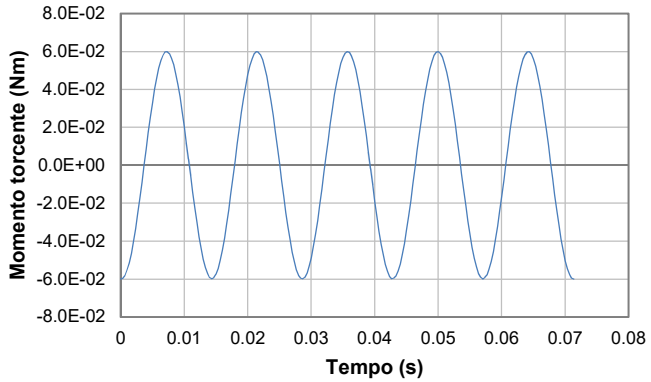
Certificato di prova N°:	**G2409515**
Verbale di accettazione N°:	**475/24**

Commessa:	**SI_2024_0967**
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Data prova:	**23 - 26/09/24**
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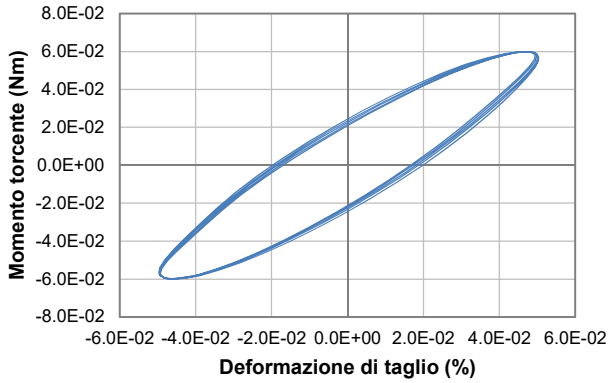
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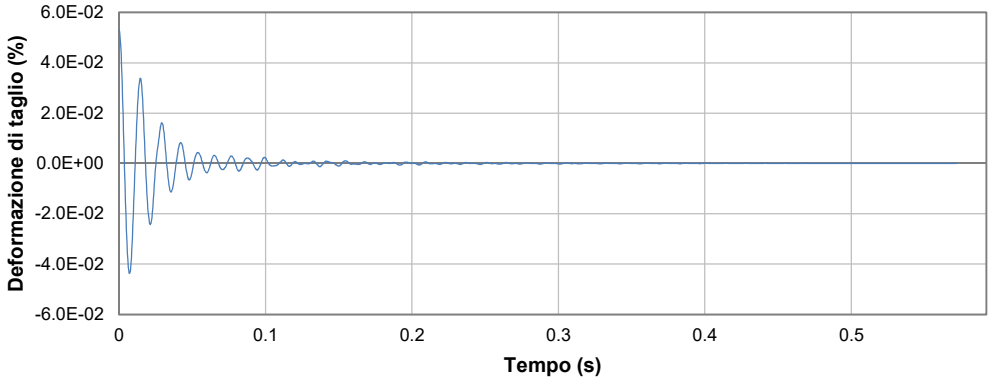
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4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
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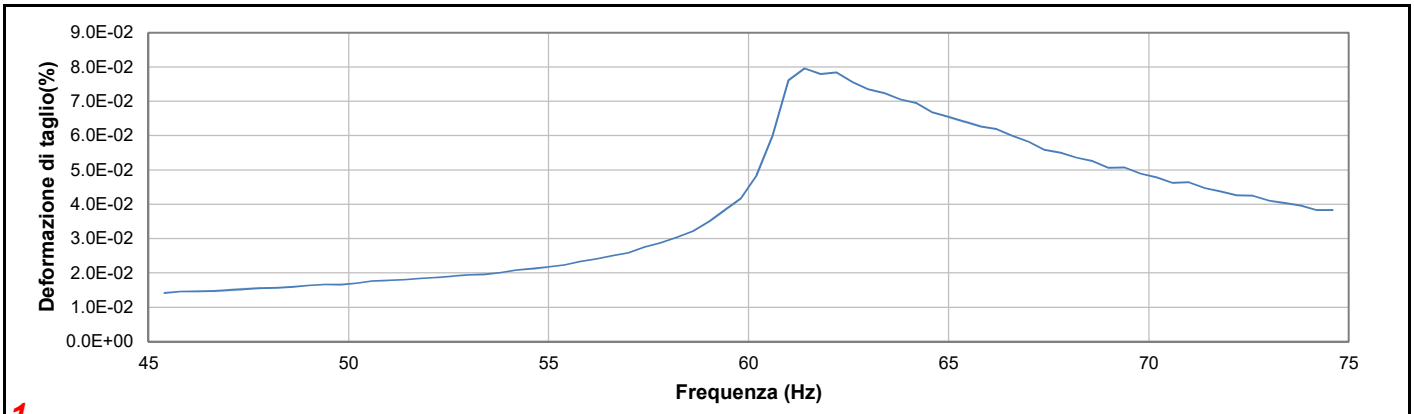
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Cantiere:	**Microzonazione Sismica - Forlì (FC) - Via Repubblica Cisalpina**
Sondaggio:	**S1DH**
Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

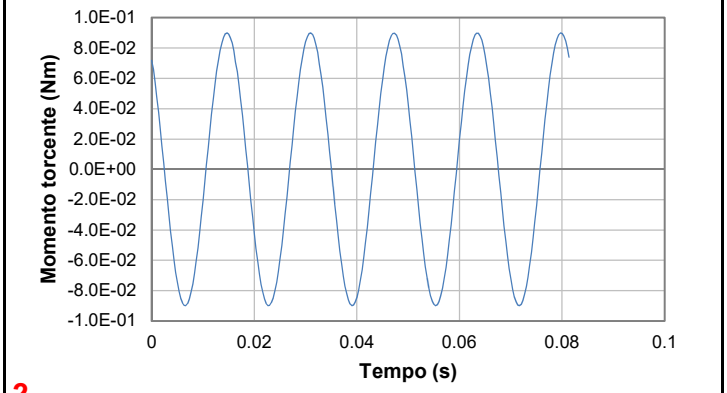
Certificato di prova N°:	**G2409515**
Verbale di accettazione N°:	**475/24**

Commessa:	**SI_2024_0967**
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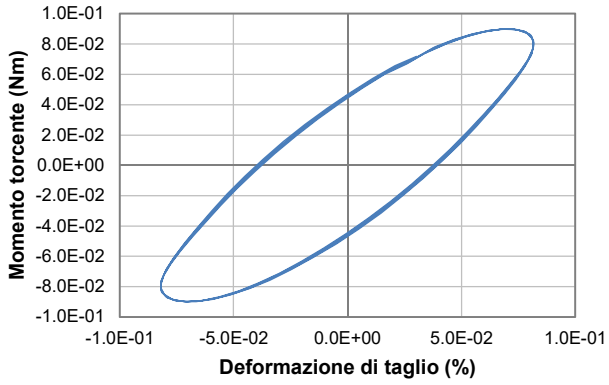
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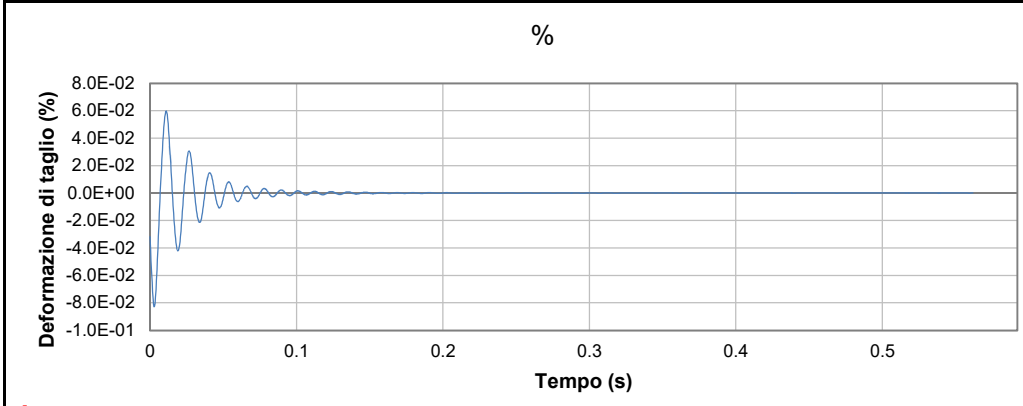
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4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
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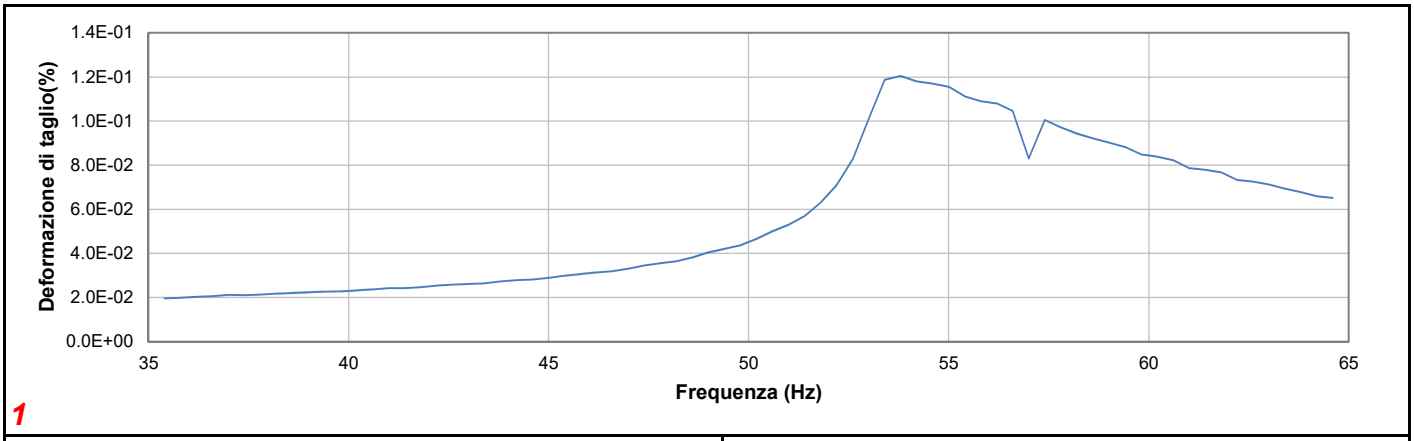
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Profondità (m):	**7.50 - 8.20**

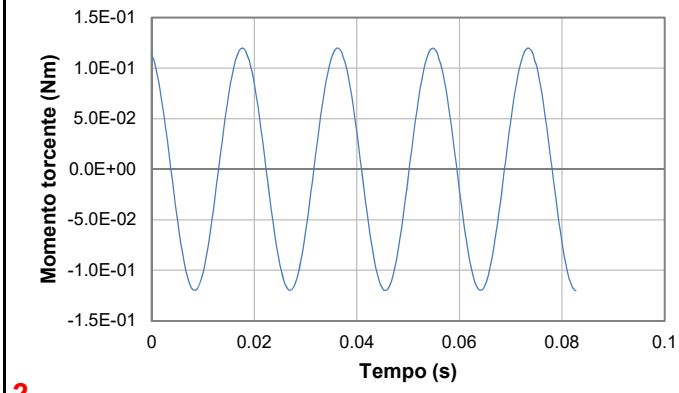
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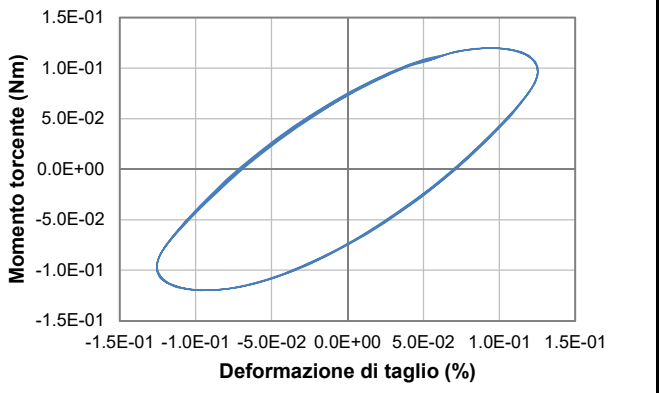
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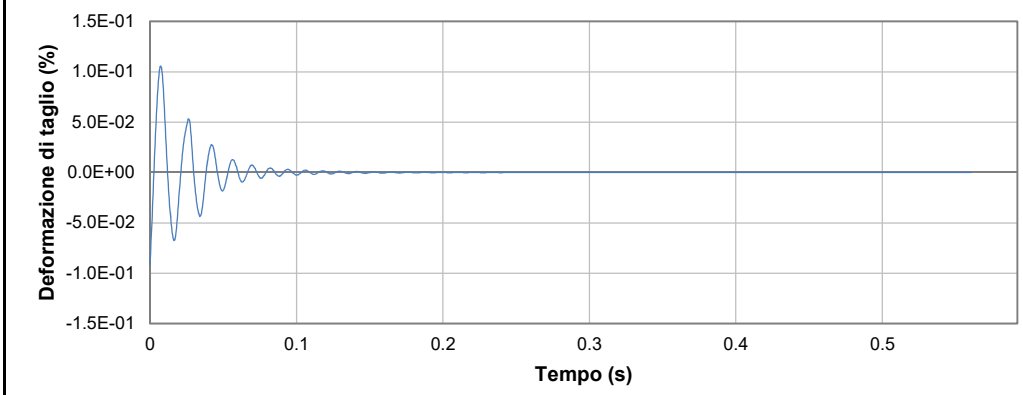
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4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
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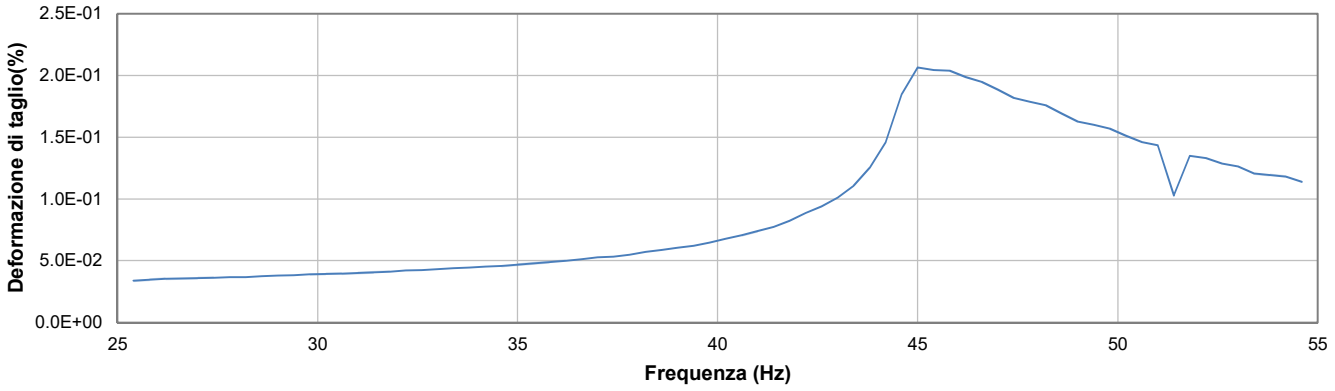
PROVA DI COLONNA RISONANTE (ASTM D 4015)

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Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

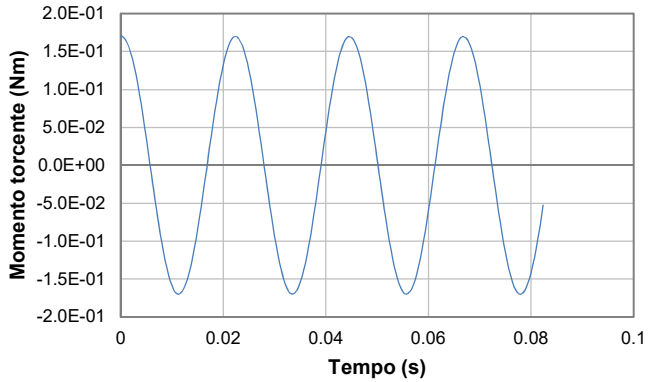
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Data prova:	**23 - 26/09/24**
Data emissione certificato:	**27/09/24**

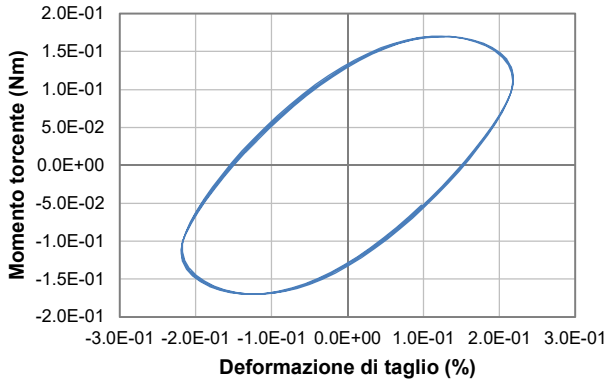
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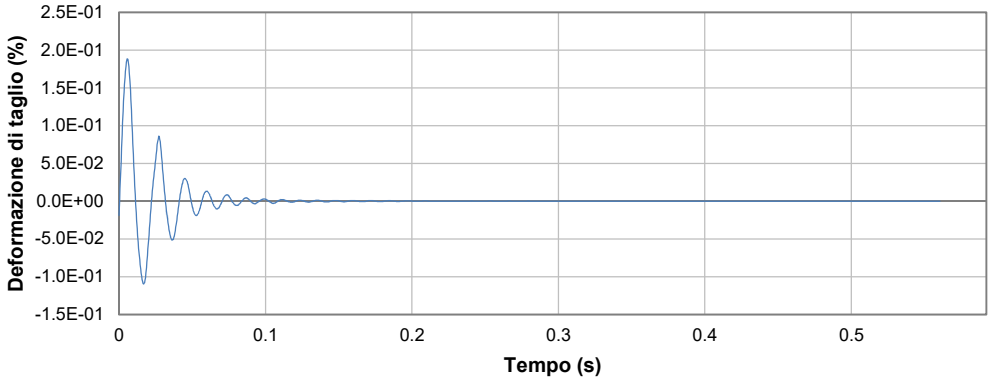
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4

1	Campo delle frequenze indagate
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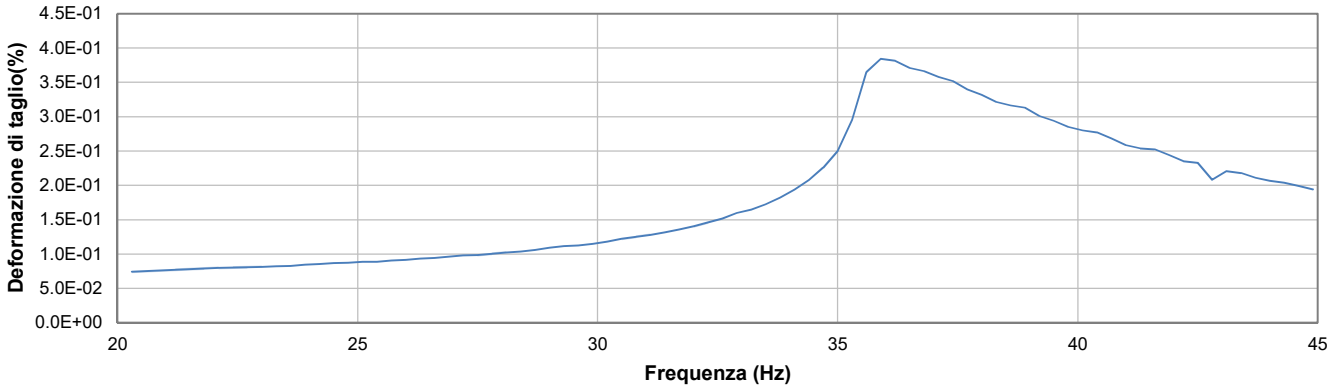
PROVA DI COLONNA RISONANTE (ASTM D 4015)

Committente:	**Studio LZ CPT - Via Argine Volano - Copparo (FE)**
Località:	**Forlì (FC)**
Cantiere:	**Microzonazione Sismica - Forlì (FC) - Via Repubblica Cisalpina**
Sondaggio:	**S1DH**
Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

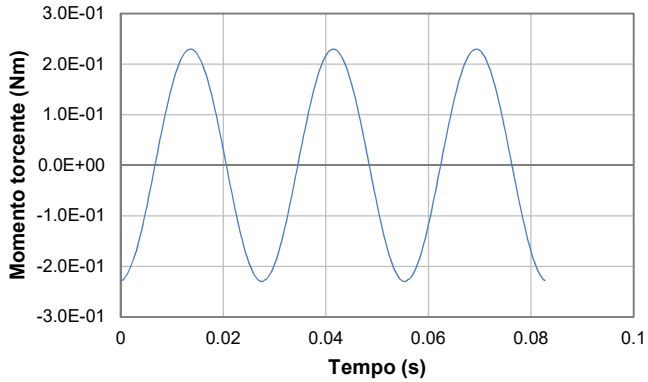
Certificato di prova N°:	**G2409515**
Verbale di accettazione N°:	**475/24**

Commessa:	**SI_2024_0967**
Data ricevimento campione:	**05/09/2024**
Data prova:	**23 - 26/09/24**
Data emissione certificato:	**27/09/24**

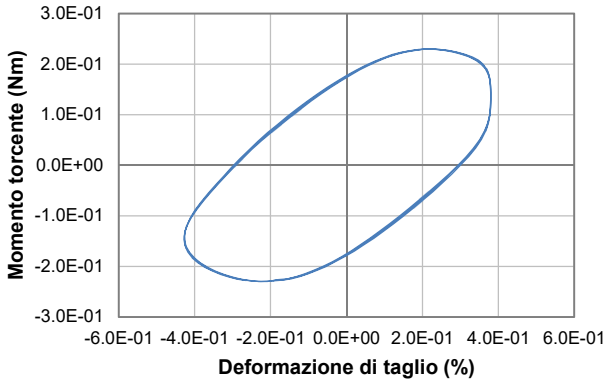
Test 15



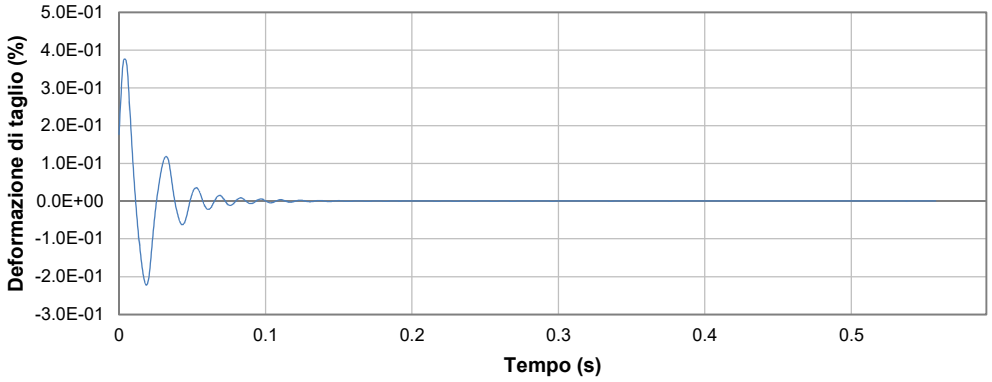
1



2



3



4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
4	Smorzamento per oscillazioni libere

Io Sperimentatore:
dott. Roberto Bellanova

Il Direttore del Laboratorio Terre:
dott. geol. Luciano Rossi

FERRARA DEPARTMENT
Via Annibale Zucchini, 69 – 44122 Ferrara (FE)
Tel.: +39 0532 56771 - Fax.: +39 0532 56119

SOCOTEC ITALIA Srl – P.Iva 01872430648
Headquarters: Via Bariola, 101-103 - 20020 Lainate (MI)
Tel.: +39 02 9375 0000 - Fax: +39 02 9375 0099
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Laboratorio Geotecnico autorizzato con Dec. n. 486 del 20/09/2019 , art. 59 del D.P.R. 380/2001, Circolari Ministeriali 7618/STC

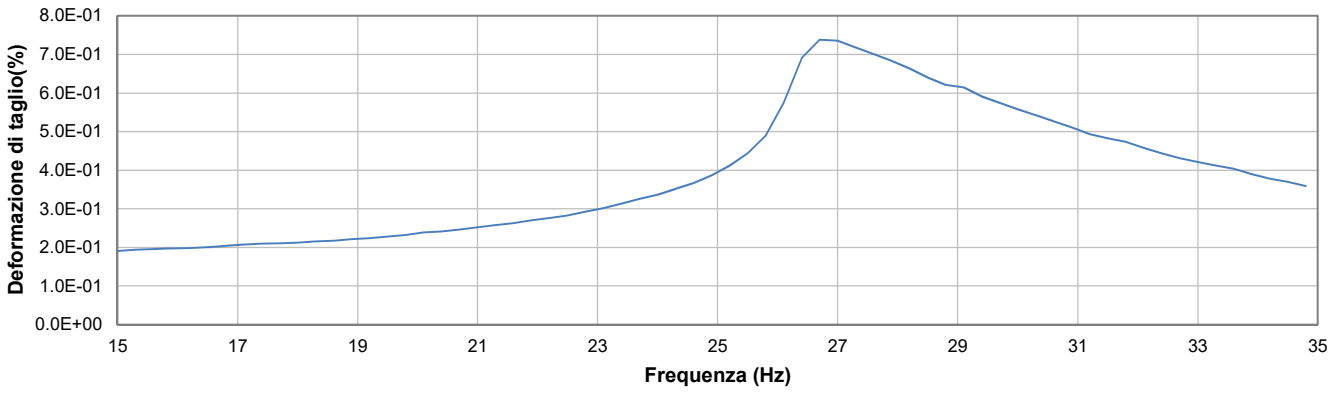
PROVA DI COLONNA RISONANTE (ASTM D 4015)

Committente:	**Studio LZ CPT - Via Argine Volano - Copparo (FE)**
Località:	**Forlì (FC)**
Cantiere:	**Microzonazione Sismica - Forlì (FC) - Via Repubblica Cisalpina**
Sondaggio:	**S1DH**
Campione:	**S1DH - 7.50 - 8.20**
Profondità (m):	**7.50 - 8.20**

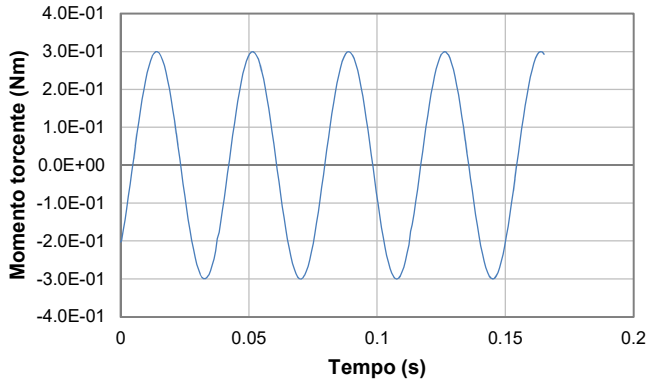
Certificato di prova N°:	**G2409515**
Verbale di accettazione N°:	**475/24**

Commessa:	**SI_2024_0967**
Data ricevimento campione:	**05/09/2024**
Data prova:	**23 - 26/09/24**
Data emissione certificato:	**27/09/24**

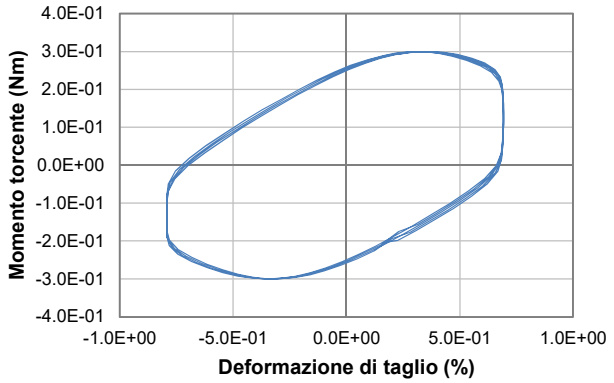
Test 16



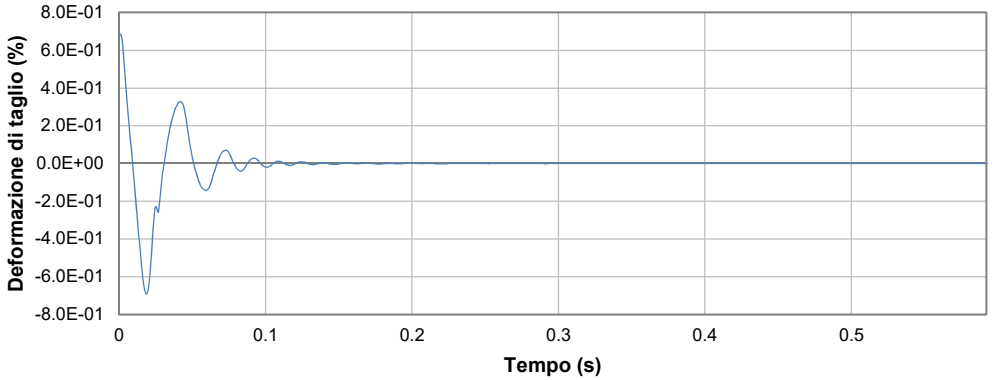
1



2



3



4

1	Campo delle frequenze indagate
2	Ampiezza momento torcente in condizioni di oscillazioni forzate
3	Cicli di isteresi alla frequenza di risonanza
4	Smorzamento per oscillazioni libere

Io Sperimentatore:
dott. Roberto Bellanova

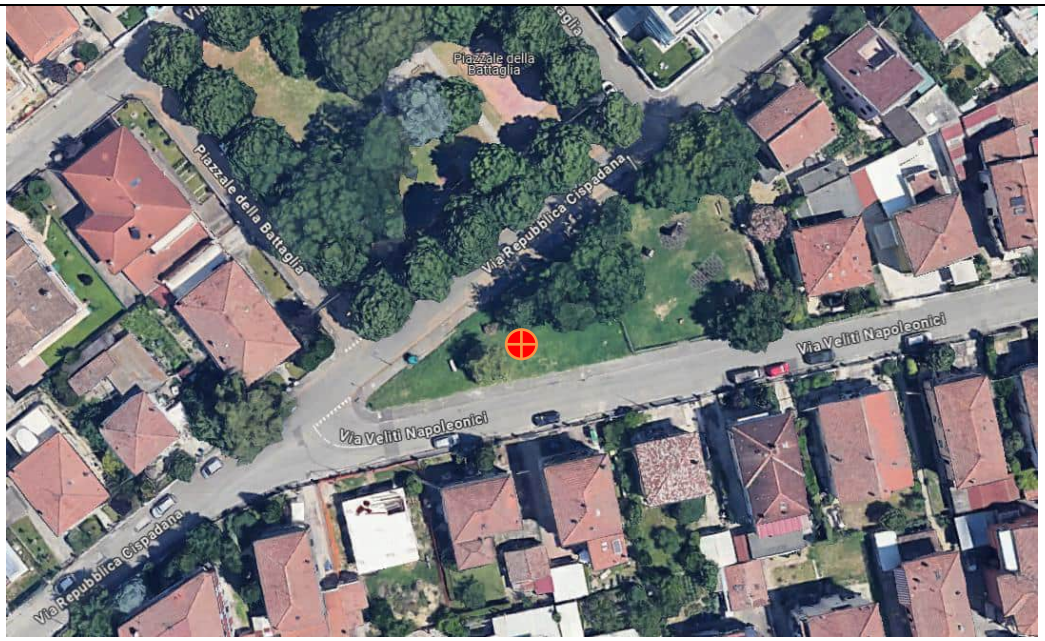
Il Direttore del Laboratorio Terre:
dott. geol. Luciano Rossi

PROVA SISMICA

DOWNHOLE

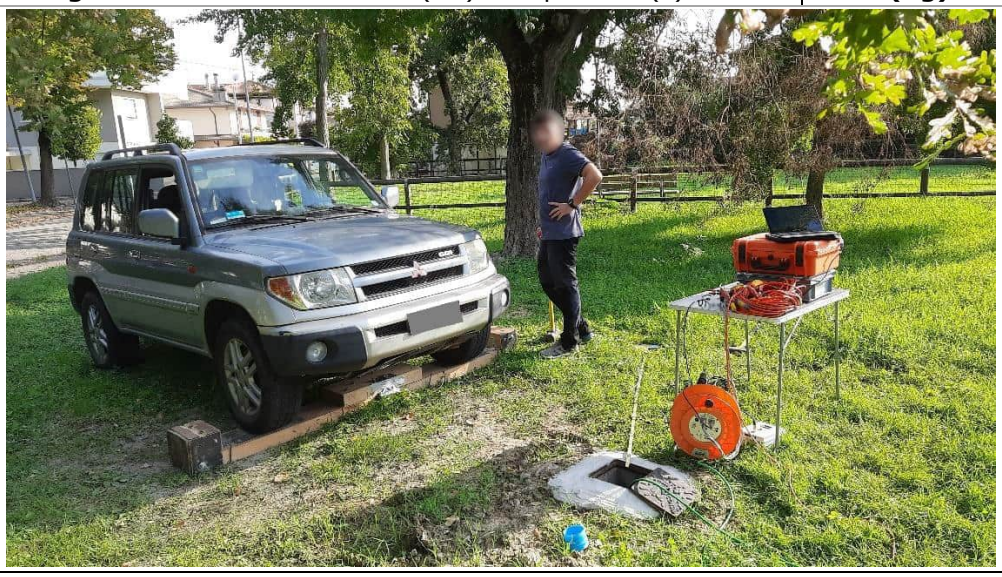
Comune: Forlì (FC)		**Località:** SP15	
Codice lavoro: FRLI.00.2423	**Cantiere:** MS III Livello	**Committente:** Comune di Forlì	
Codice Prova: S1-DH	**File:** 2024-09-26_09-08-16.cdh	**Data:** 26/09/2024	**Ora inizio prova:** 9.10
Operatore: Dott. Geol. Alessandro Ferrari			

Ubicazione:



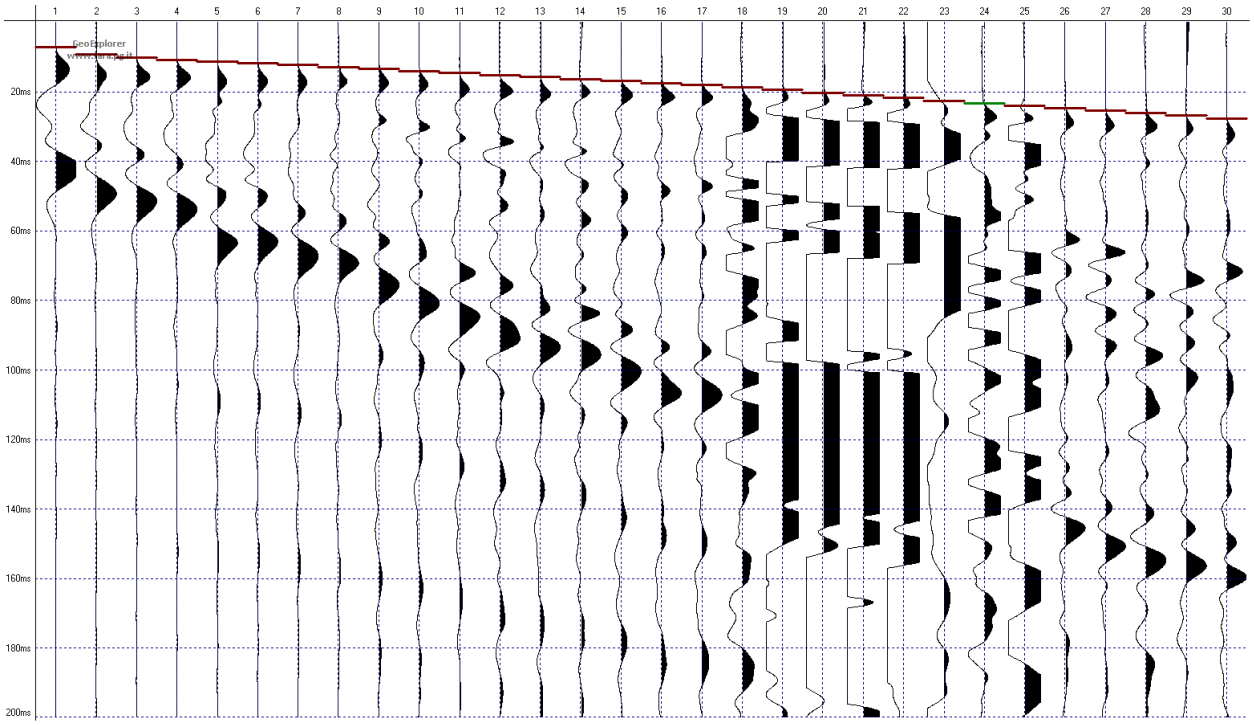
STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Geofono: Sara SS-BH a 5 canali (1 verticale + 4 orizzontali)		**Frequenza (Hz):** 10

SPECIFICHE INDAGINE		
Tipo: Down-Hole	**Onde:** ☒ P ☒ SH	**N°canali**: 5
Profondità indagine (m): 30	**Spaziatura (m):** 1	**Offset foro-sorgente (m):** 2
Durata registrazioni (sec): 0.20	**Frequenza di campionamento (Hz):** 5000	
Tipologia energizzazione: mazza su trave (SH) e su piattello (P)		**Peso (Kg):** 9

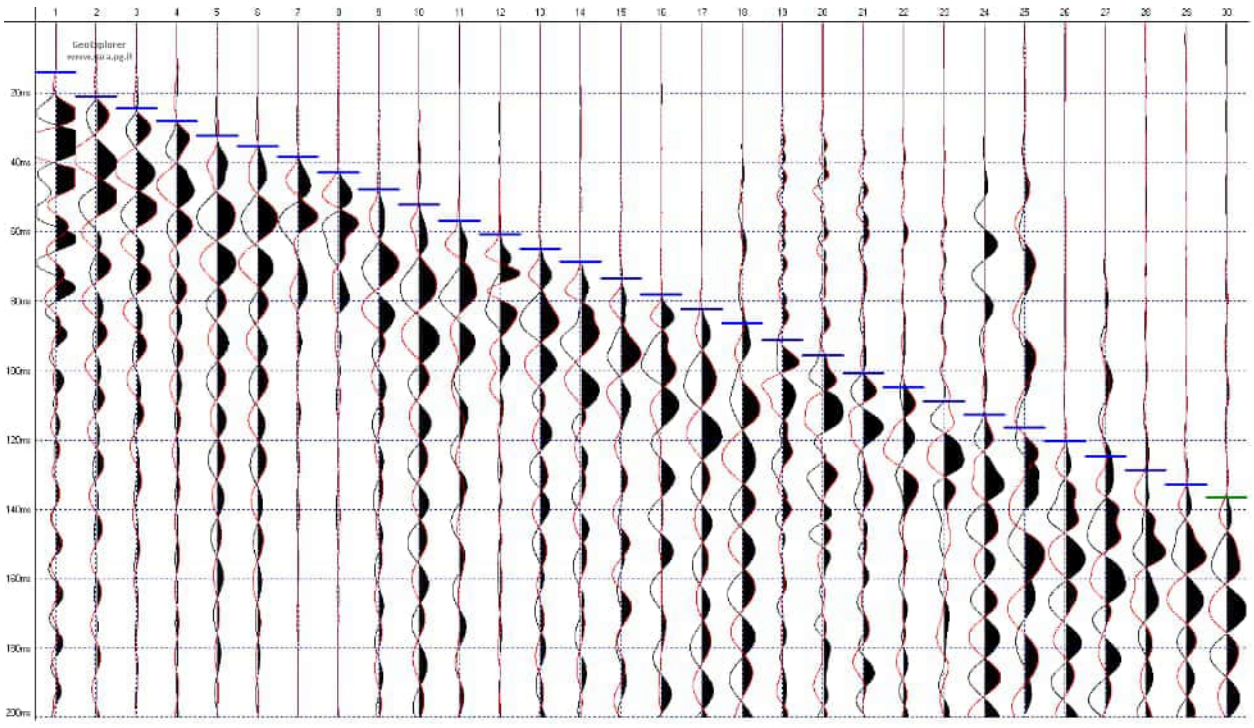


OSSERVAZIONI: Cantiere a 50 m

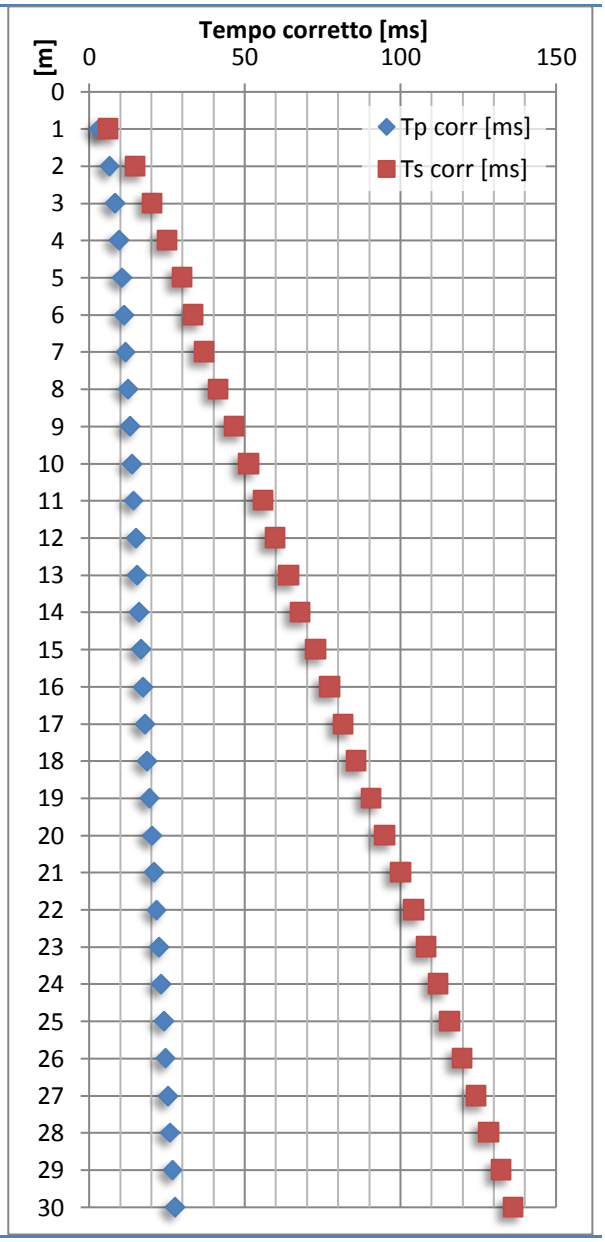
Sismogramma onde P



Sismogramma onde SH

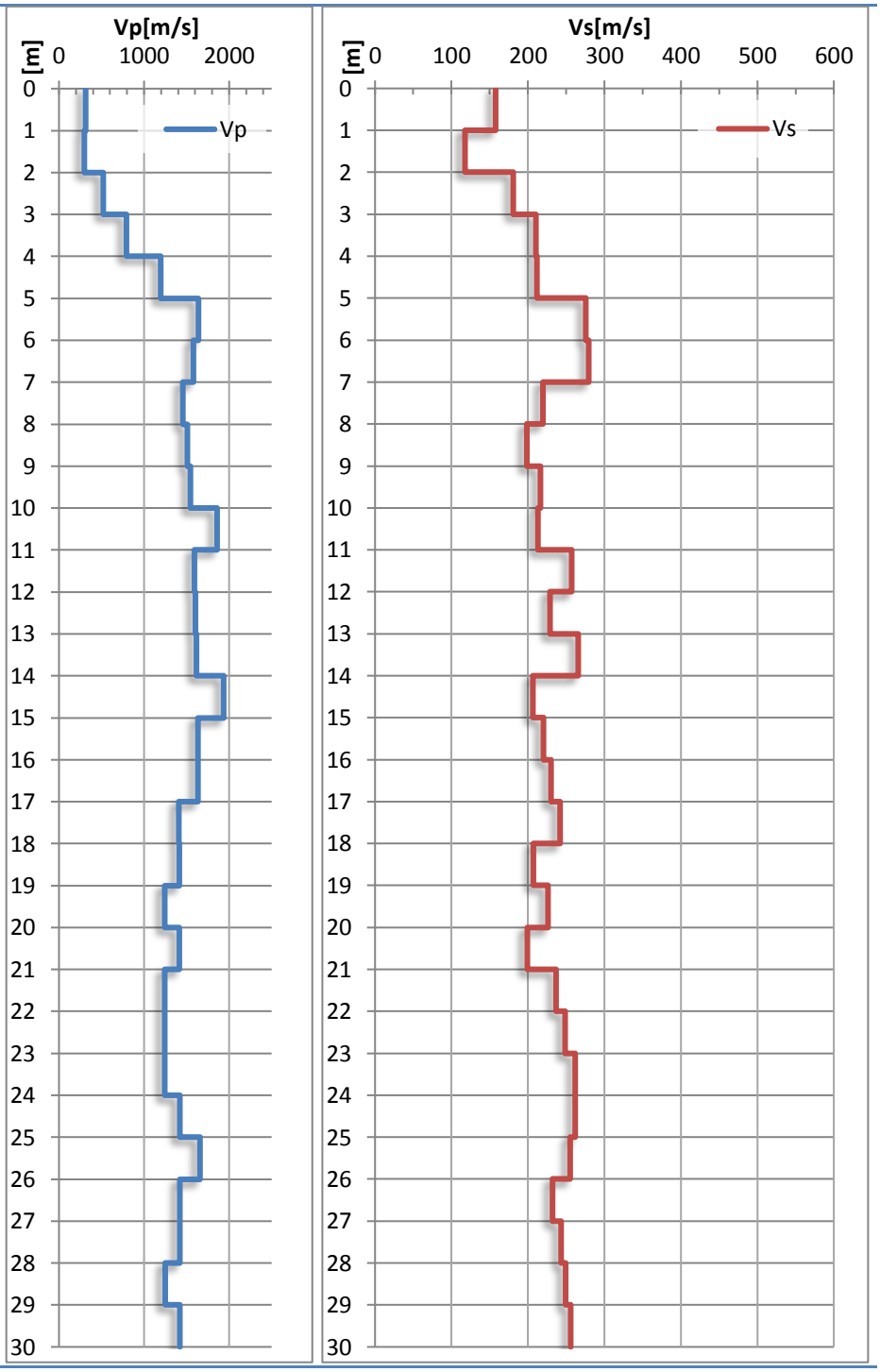


Shot n	Prof. [m]	Tp [ms]	Ts [ms]	Tp corr. [ms]	Ts corr. [ms]
30	1	7.20	14.20	3.22	6.35
29	2	9.30	21.00	6.58	14.85
28	3	10.20	24.50	8.49	20.39
27	4	10.90	28.10	9.75	25.13
26	5	11.40	32.16	10.58	29.86
25	6	11.80	35.30	11.19	33.49
24	7	12.30	38.55	11.83	37.07
23	8	12.90	42.90	12.51	41.62
22	9	13.50	47.80	13.18	46.66
21	10	14.10	52.30	13.83	51.28
20	11	14.60	56.90	14.36	55.98
19	12	15.20	60.70	14.99	59.87
18	13	15.80	65.00	15.62	64.24
17	14	16.40	68.70	16.24	68.01
16	15	16.90	73.50	16.75	72.86
15	16	17.50	78.00	17.36	77.40
14	17	18.10	82.30	17.98	81.74
13	18	18.80	86.40	18.69	85.87
12	19	19.50	91.20	19.39	90.70
11	20	20.30	95.60	20.20	95.13
10	21	21.00	100.60	20.91	100.15
9	22	21.80	104.80	21.71	104.37
8	23	22.60	108.80	22.52	108.39
7	24	23.40	112.60	23.32	112.21
6	25	24.10	116.40	24.02	116.03
5	26	24.70	120.30	24.63	119.95
4	27	25.40	124.60	25.33	124.26
3	28	26.10	128.70	26.03	128.37
2	29	26.90	132.70	26.84	132.39
1	30	27.60	136.60	27.54	136.30



Interpretazione con METODO DELL'INTERVALLO

Prof. [m]	*Vp [m/s]*	*Vs [m/s]*
1	310.6	157.5
2	298.0	117.7
3	523.3	180.6
4	792.2	210.6
5	1197.1	211.6
6	1639.8	275.6
7	1581.6	279.5
8	1453.3	219.7
9	1506.7	198.3
10	1544.0	216.3
11	1857.7	212.9
12	1590.6	256.9
13	1604.9	228.8
14	1615.8	265.6
15	1935.8	206.4
16	1631.0	220.1
17	1636.2	230.5
18	1410.5	241.8
19	1412.7	207.2
20	1240.1	225.9
21	1416.1	199.2
22	1242.1	236.8
23	1242.9	248.7
24	1243.6	261.8
25	1420.3	261.9
26	1655.6	255.3
27	1421.8	231.8
28	1422.3	243.1
29	1246.0	249.2
30	1423.3	255.6



Valore V_{s30}: 220.1 m/s

STENDIMENTI SISMICI

MASW E REMI

(Elaborazione congiunta)

Località: Via Pietro Nenni, Forlì	**Comune:** Forlì (FC)	
Cantiere: MS III Livello	**Data:** 03/09/2024	**Ora:** 10.24
Codice lavoro: FRLI.00.2423		
Codice Prova: ERT1	**File:** ERT1.tsv	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE	
Marca: MAE	**Modello:** X612EM+ (48)
Potenza max: 250 W	**Risoluzione:** 24 bit

SPECIFICHE INDAGINE



Tipo: Tomografia elettrica 2D

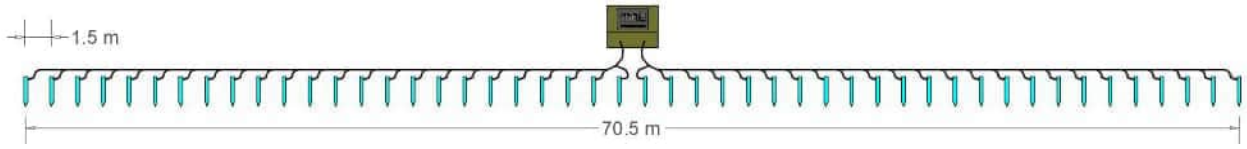
N° picchetti: 48	**Lunghezza stendimento:** 70.5 m
Tensione massima: 200 V	**Corrente minima:** 150 mA

Misura di:
☒ Resistività ☐ Caricabilità ☐ Potenziali spontanei

Geometria di acquisizione:	**N° musure:**
☒ Wenner alfa	360
☐ Wenner - Schlumerger	-
☐ Dipolo-Dipolo	-
☐ Polo-Dipolo	-
☐ Gradient	-

NOTE:

Geometria stendimento:



TERRENO INDAGATO

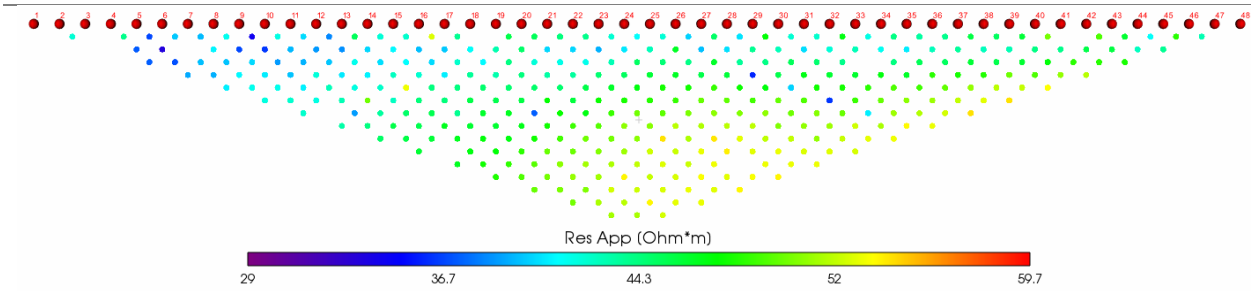
Superficie:	☒ argillosa	☐ ghiaiosa	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato	☐ saturo	

OSSERVAZIONI:

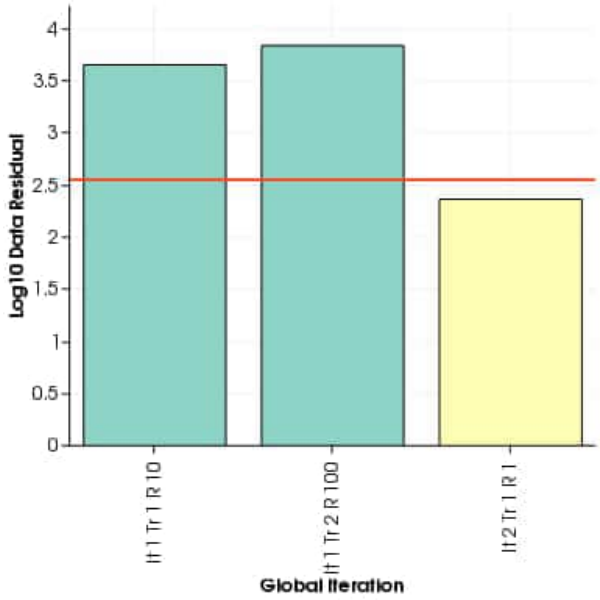
Elaborazione Tomografica

Tipo di elaborazione: tomografica (Wenner alfa) eseguita mediante software ERTLab64
N° totale di dati acquisiti: 360
N° totale di dati utilizzati: 349
N° max Iterazioni: 15
Errore minimo: < 2%

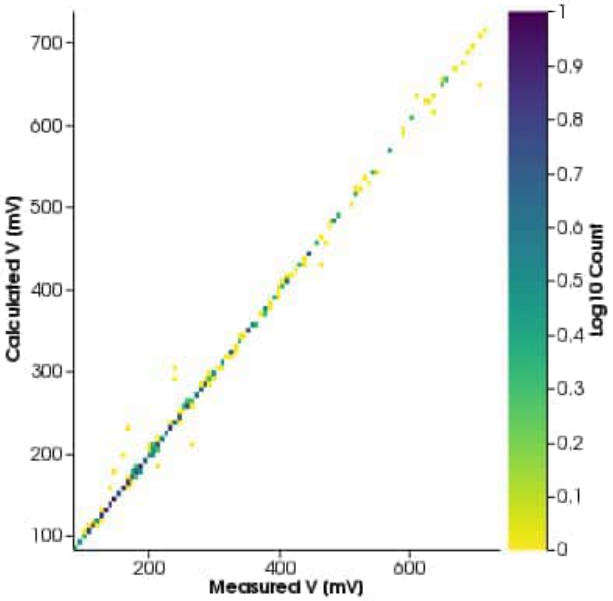
Insieme dei punti acquisiti



Iterazioni e relativo scarto residuale

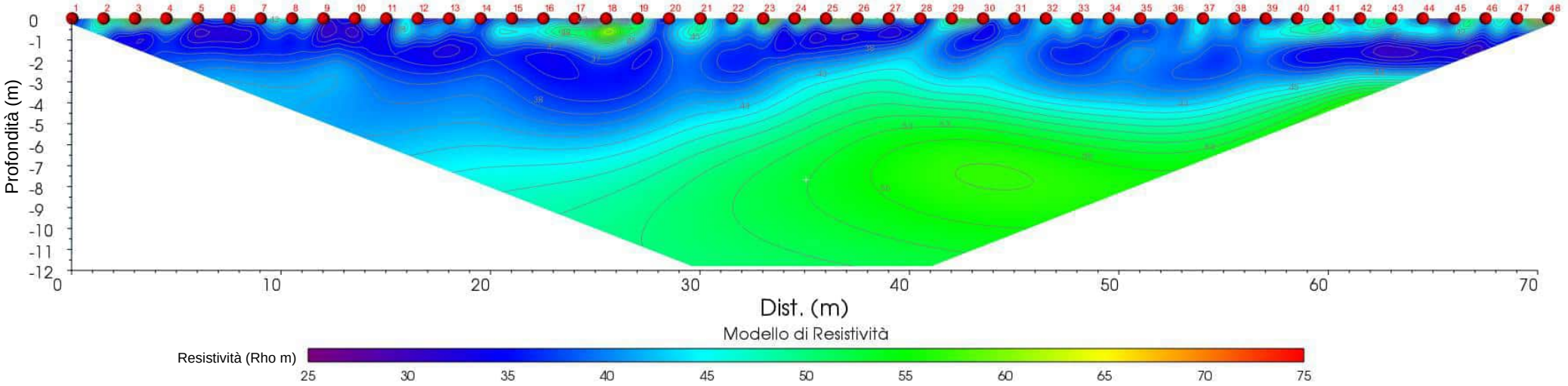


Distribuzione della deviazione standard all'ultima iterazione



Risultato inversione tomografica

Tomografia elettrica



Località: Via Vittorio Bachelet, San Lorenzo in Noceto	**Comune:** Forlì (FC)	
Cantiere: MS III Livello	**Data:** 03/09/2024	**Ora:** 13.10
Codice lavoro: FRLI.00.2423		
Codice Prova: ERT2	**File:** FOR_ERT2.tsv	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE	
Marca: MAE	**Modello:** X612EM+ (48)
Potenza max: 250 W	**Risoluzione:** 24 bit

SPECIFICHE INDAGINE



Tipo: Tomografia elettrica 2D

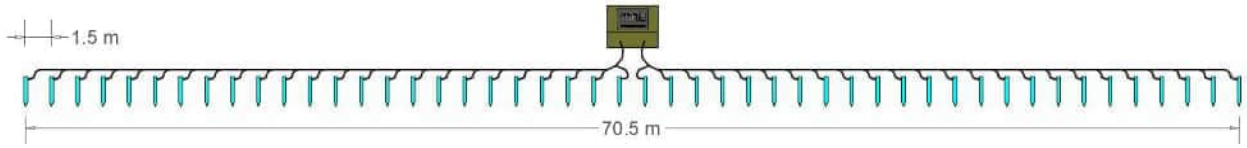
N° picchetti: 48	**Lunghezza stendimento:** 70.5 m
Tensione massima: 200 V	**Corrente minima:** 150 mA

Misura di:
☒ Resistività ☐ Caricabilità ☐ Potenziali spontanei

Geometria di acquisizione:	**N° musure:**
☒ Wenner alfa	360
☐ Wenner - Schlumerger	-
☐ Dipolo-Dipolo	-
☐ Polo-Dipolo	-
☐ Gradient	-

NOTE:

Geometria stendimento:



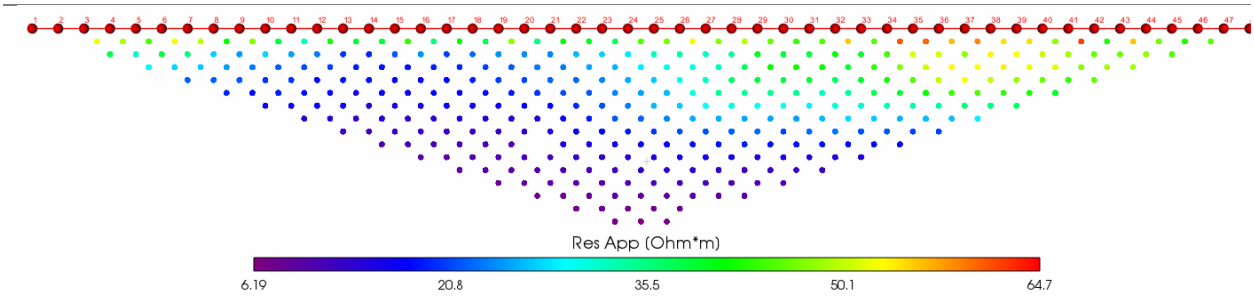
TERRENO INDAGATO				
Superficie:	☒ argillosa	☐ ghiaiosa	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato	☐ saturo	

OSSERVAZIONI:

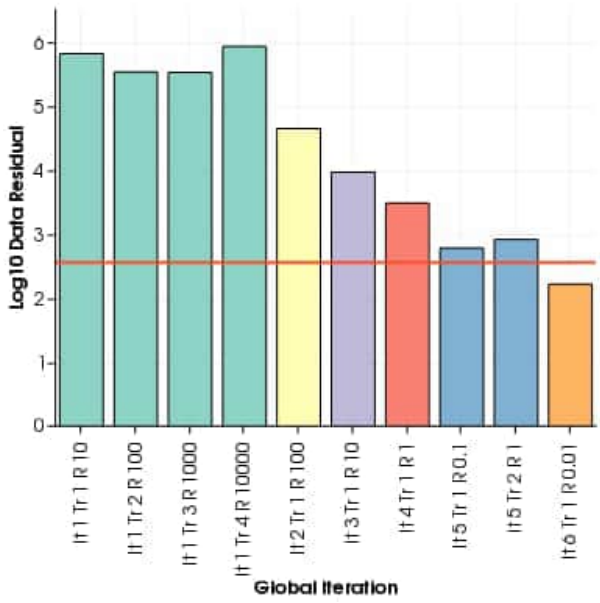
Elaborazione Tomografica

Tipo di elaborazione: tomografica (Wenner alfa) eseguita mediante software ERTLab64
N° totale di dati acquisiti: 360
N° totale di dati utilizzati: 355
N° max Iterazioni: 15
Errore minimo: < 2%

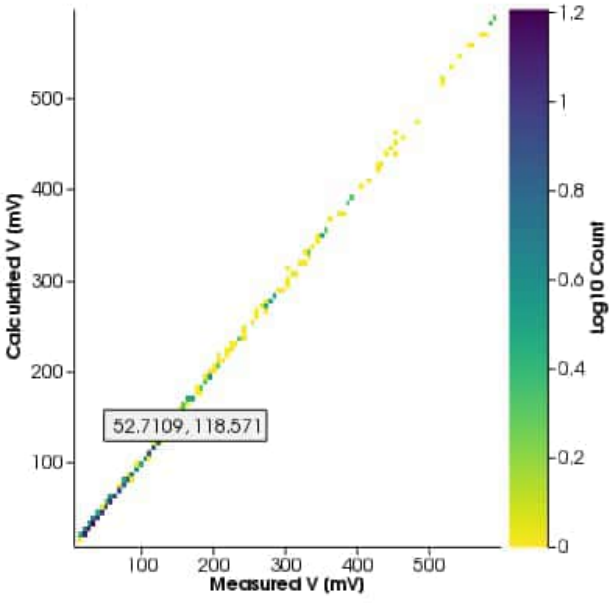
Insieme dei punti acquisiti



Iterazioni e relativo scarto residuale

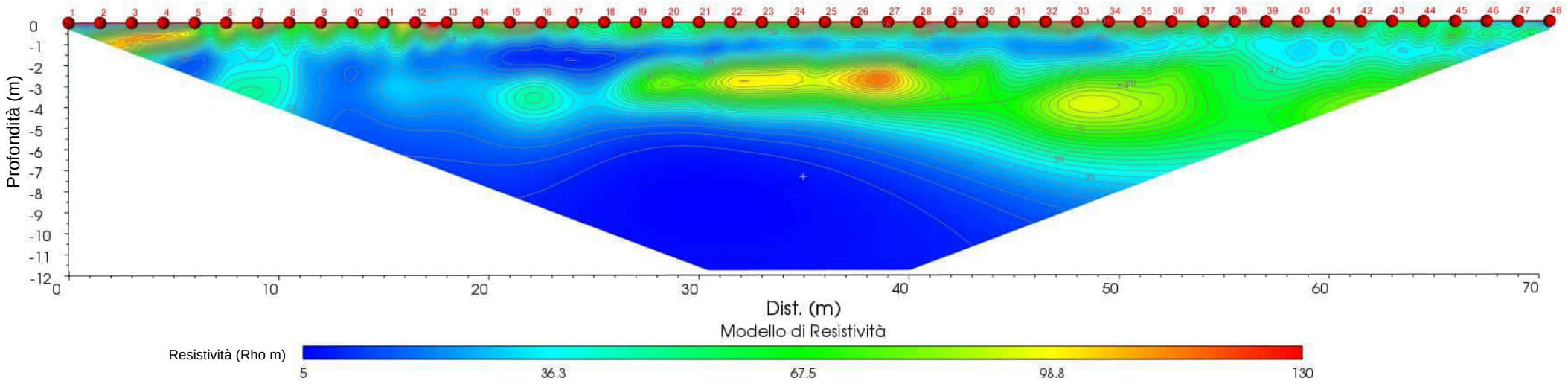


Distribuzione della deviazione standard all'ultima iterazione



Risultato inversione tomografica

Tomografia elettrica



Località: Via Correcchio, Forlì	**Comune:** Forlì (FC)	
Cantiere: MS III Livello	**Data:** 03/09/2024	**Ora:** 8.30
Codice lavoro: FRLI.00.2423		
Codice Prova: ERT3	**File:** FOR_ERT3.tsv	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE	
Marca: MAE	**Modello:** X612EM+ (48)
Potenza max: 250 W	**Risoluzione:** 24 bit

SPECIFICHE INDAGINE



Tipo: Tomografia elettrica 2D

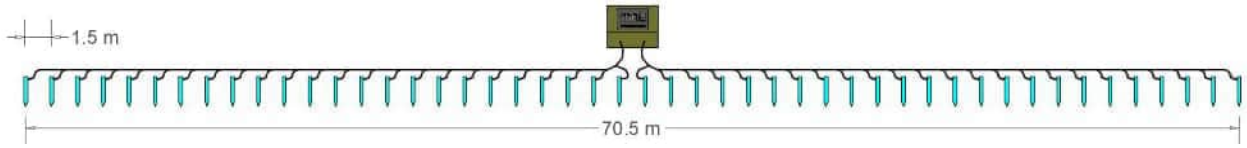
N° picchetti: 48	**Lunghezza stendimento:** 70.5 m
Tensione massima: 200 V	**Corrente minima:** 150 mA

Misura di:
☒ Resistività ☐ Caricabilità ☐ Potenziali spontanei

Geometria di acquisizione:	**N° musure:**
☒ Wenner alfa	360
☐ Wenner - Schlumerger	-
☐ Dipolo-Dipolo	-
☐ Polo-Dipolo	-
☐ Gradient	-

NOTE:

Geometria stendimento:



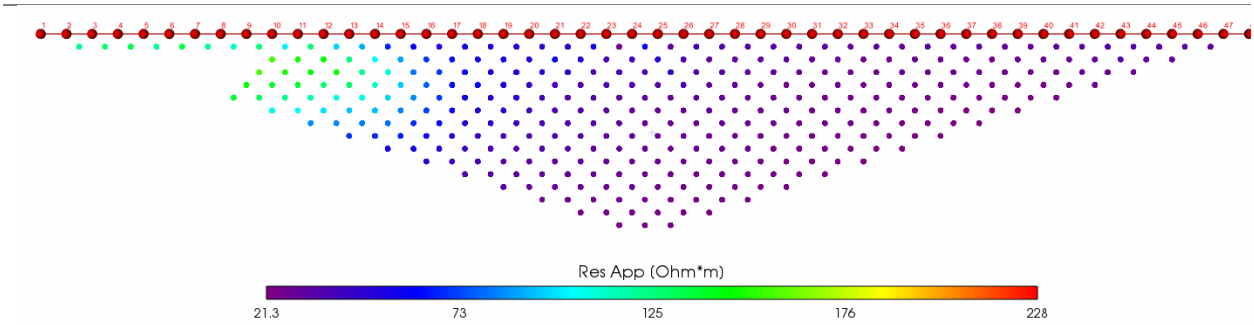
TERRENO INDAGATO				
Superficie:	☒ argillosa	☐ ghiaiosa	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato	☐ saturo	

OSSERVAZIONI:

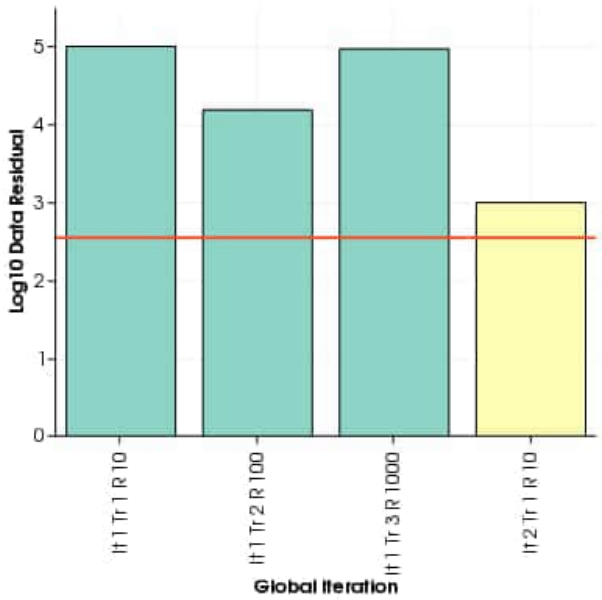
Elaborazione Tomografica

Tipo di elaborazione: tomografica (Wenner alfa) eseguita mediante software ERTLab64
N° totale di dati acquisiti: 360
N° totale di dati utilizzati: 355
N° max Iterazioni: 15
Errore minimo: < 2%

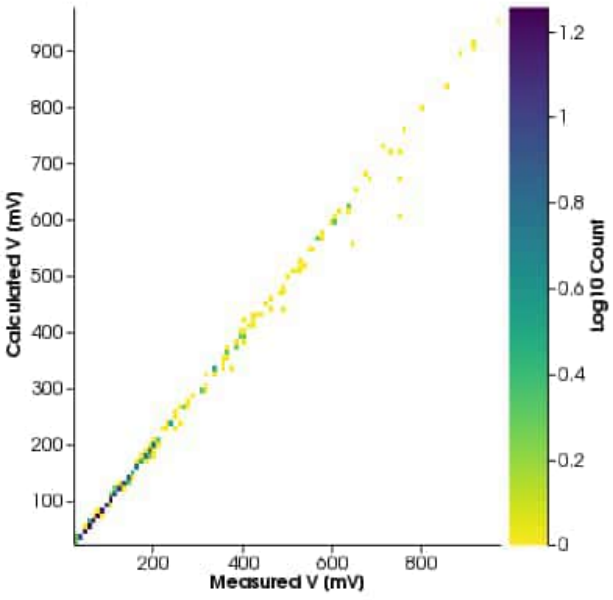
Insieme dei punti acquisiti



Iterazioni e relativo scarto residuale

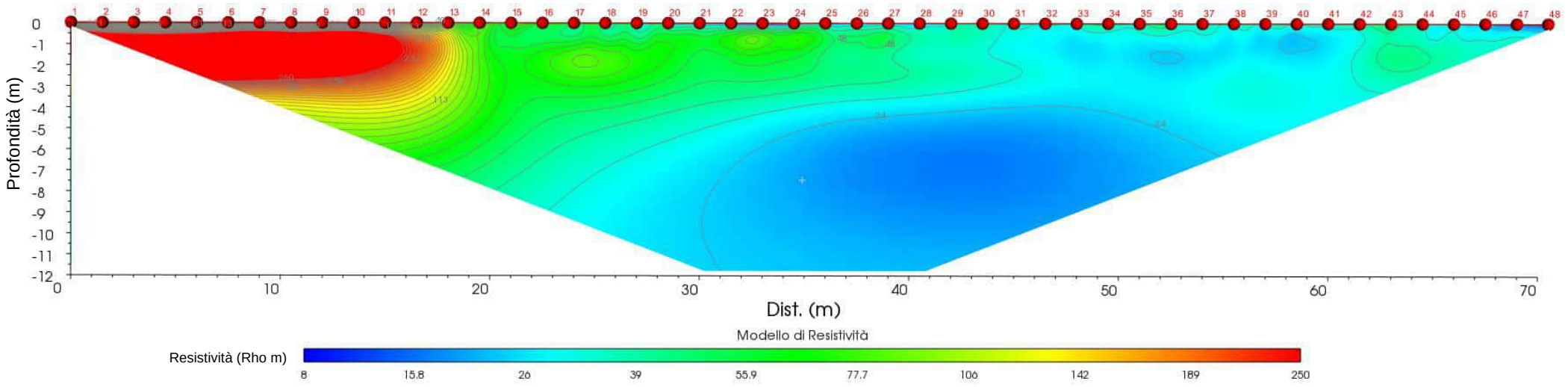


Distribuzione della deviazione standard all'ultima iterazione



Risultato inversione tomografica

Tomografia elettrica



Località: Parco delle Stagioni, Forlì	**Comune:** Forlì (FC)	
Cantiere: MS III Livello	**Data:** 03/09/2024	**Ora:** 9.45
Codice lavoro: FRLI.00.2423		
Codice Prova: ERT4	**File:** FOR_ERT4.tsv	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE	
Marca: MAE	**Modello:** X612EM+ (48)
Potenza max: 250 W	**Risoluzione:** 24 bit

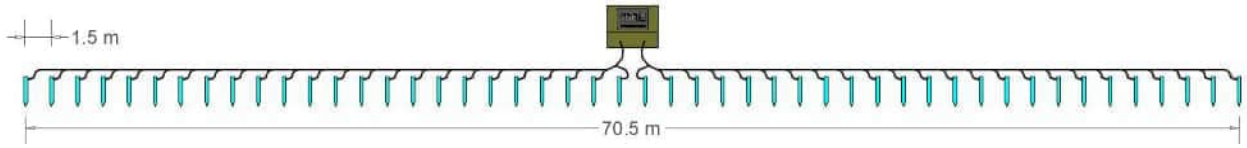
SPECIFICHE INDAGINE



Tipo: Tomografia elettrica 2D	
N° picchetti: 48	**Lunghezza stendimento:** 70.5 m
Tensione massima: 200 V	**Corrente minima:** 150 mA
Misura di: ☒ Resistività ☐ Caricabilità ☐ Potenziali spontanei	
Geometria di acquisizione:	**N° musure:**
☒ Wenner alfa	360
☐ Wenner - Schlumerger	-
☐ Dipolo-Dipolo	-
☐ Polo-Dipolo	-
☐ Gradient	-

NOTE:

Geometria stendimento:



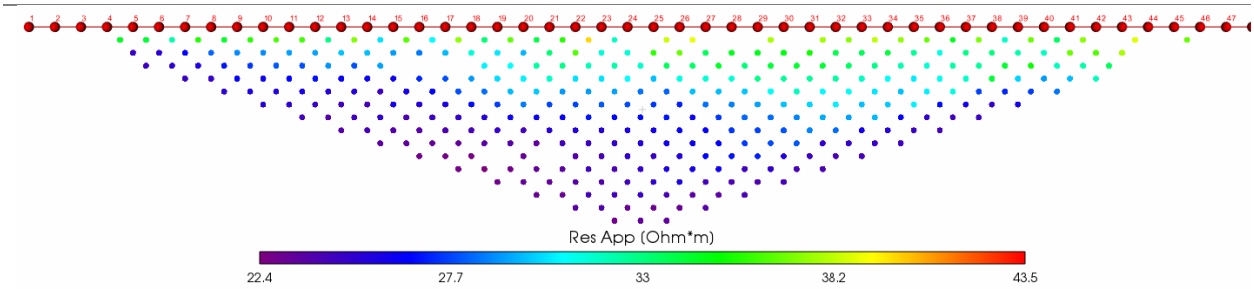
TERRENO INDAGATO				
Superficie:	☒ argillosa	☐ ghiaiosa	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato	☐ saturo	

OSSERVAZIONI:

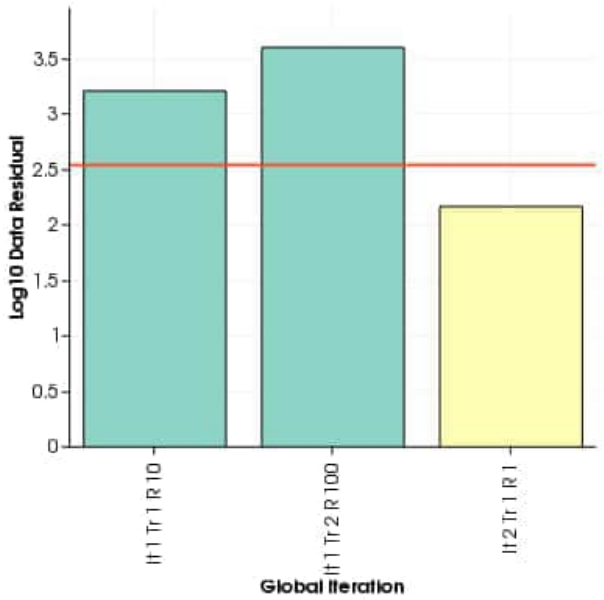
Elaborazione Tomografica

Tipo di elaborazione: tomografica (Wenner alfa) eseguita mediante software ERTLab64
N° totale di dati acquisiti: 360
N° totale di dati utilizzati: 352
N° max Iterazioni: 15
Errore minimo: < 2%

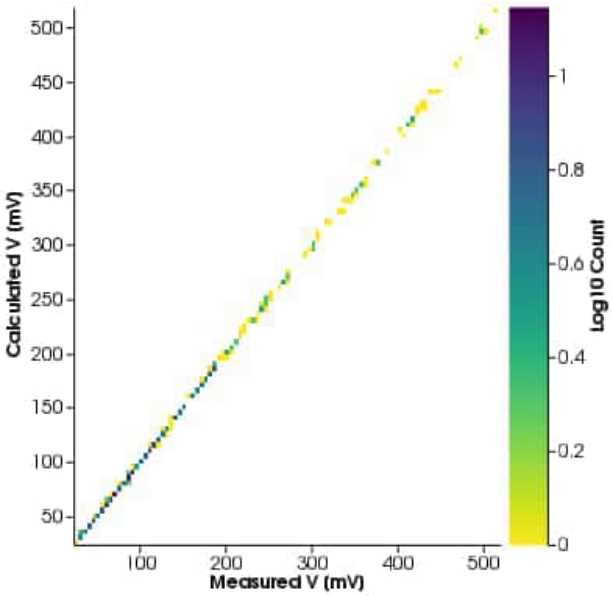
Insieme dei punti acquisiti



Iterazioni e relativo scarto residuale

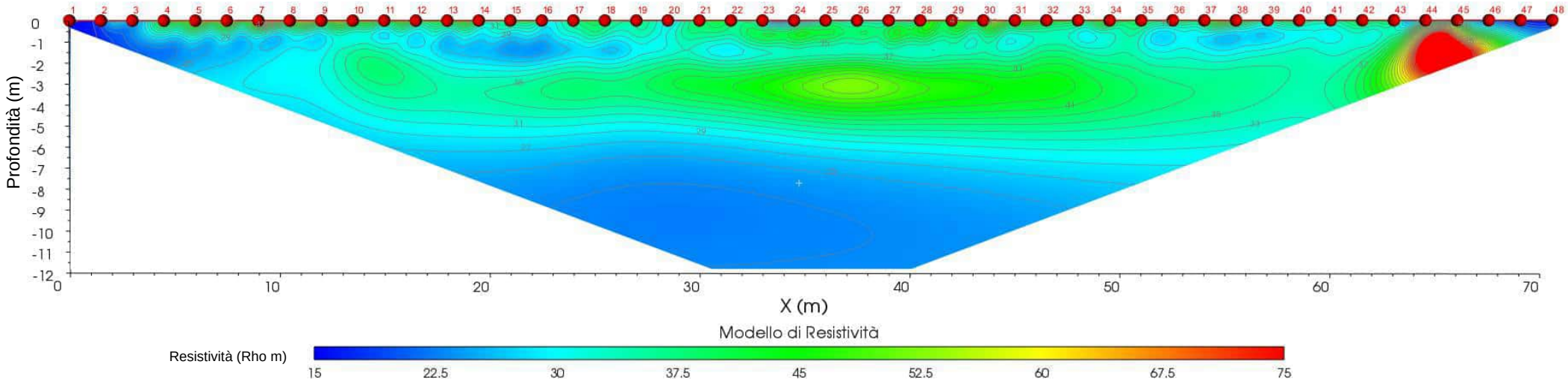


Distribuzione della deviazione standard all'ultima iterazione



Risultato inversione tomografica

Tomografia elettrica



Località: Via Marco Briganti, Forlì	**Comune:** Forlì (FC)	
Cantiere: MS III Livello	**Data:** 03/09/2024	**Ora:** 12.10
Codice lavoro: FRLI.00.2423		
Codice Prova: ERT5	**File:** FOR_ERT5.tsv	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE	
Marca: MAE	**Modello:** X612EM+ (48)
Potenza max: 250 W	**Risoluzione:** 24 bit

SPECIFICHE INDAGINE



Tipo: Tomografia elettrica 2D

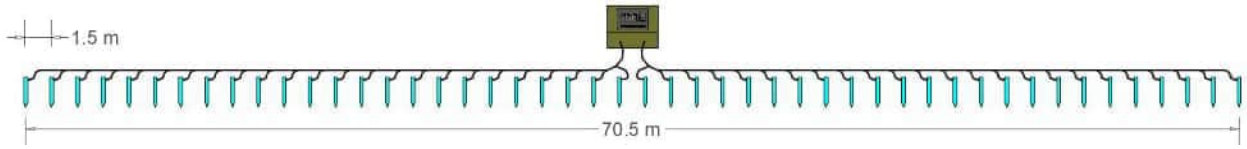
N° picchetti: 48	**Lunghezza stendimento:** 70.5 m
Tensione massima: 200 V	**Corrente minima:** 150 mA

Misura di:
☒ Resistività ☐ Caricabilità ☐ Potenziali spontanei

Geometria di acquisizione:	**N° musure:**
☒ Wenner alfa	360
☐ Wenner - Schlumerger	-
☐ Dipolo-Dipolo	-
☐ Polo-Dipolo	-
☐ Gradient	-

NOTE:

Geometria stendimento:



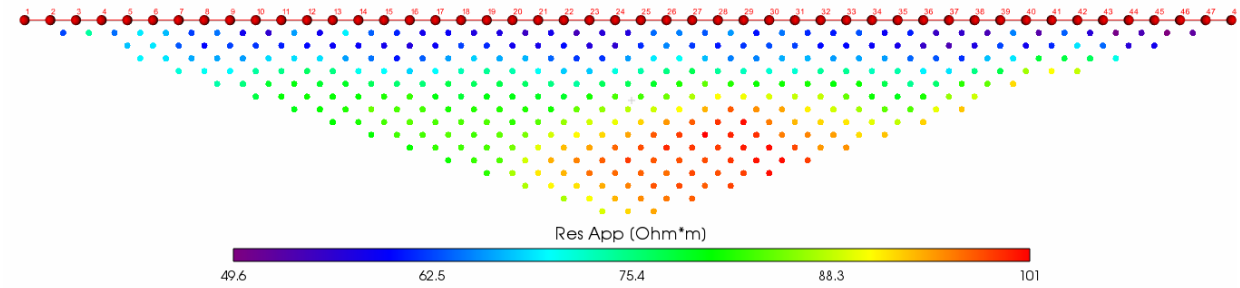
TERRENO INDAGATO				
Superficie:	☒ argillosa	☐ ghiaiosa	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato	☐ saturo	

OSSERVAZIONI:

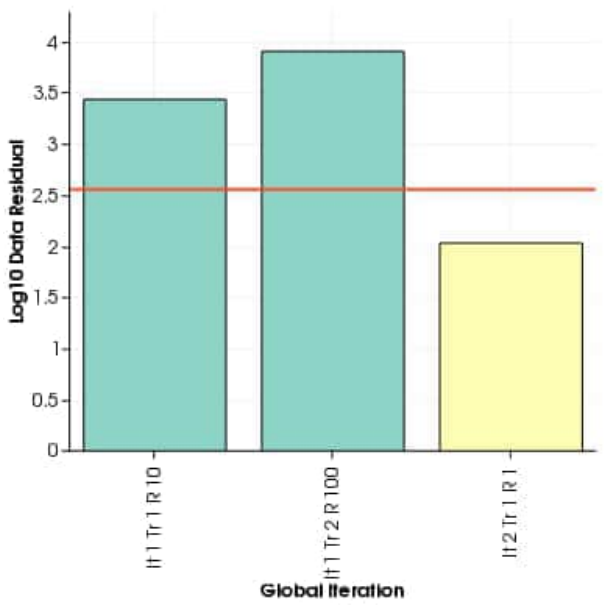
Elaborazione Tomografica

Tipo di elaborazione: tomografica (Wenner alfa) eseguita mediante software ERTLab64
N° totale di dati acquisiti: 360
N° totale di dati utilizzati: 354
N° max Iterazioni: 15
Errore minimo: < 2%

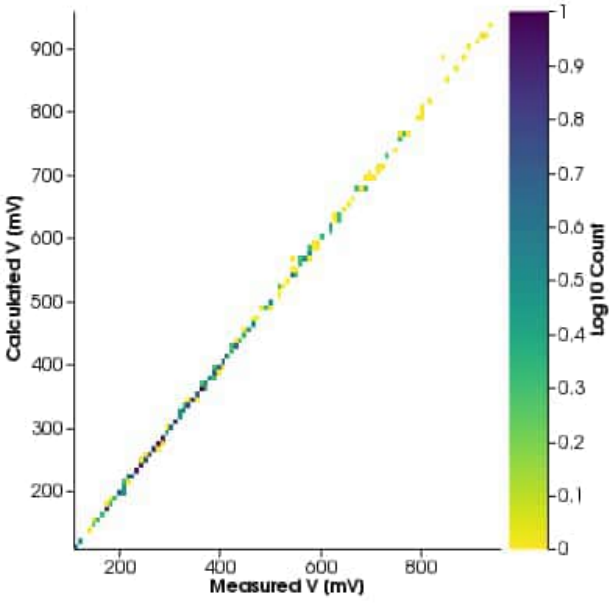
Insieme dei punti acquisiti



Iterazioni e relativo scarto residuale

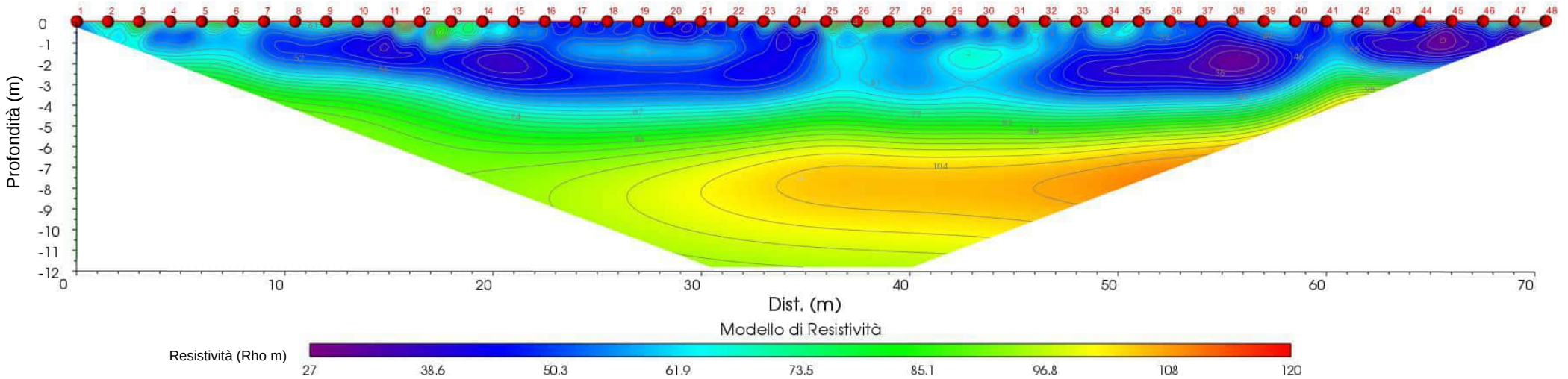


Distribuzione della deviazione standard all'ultima iterazione



Risultato inversione tomografica

Tomografia elettrica



STENDIMENTI SISMICI
MASW E REMI
(Elaborazione congiunta)

INDAGINE MASW + REMI

Località Via Peterborough Loc. Villafranca	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 11.20
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 1	**File** FOR MASW1b_STK.dat; FOR REMI1.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW

Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

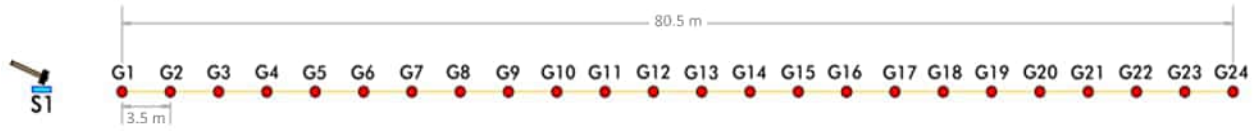
Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW1b _0103.drm
☒ FOR MASW1b _0203.drm
☒ FOR MASW1b _0303.drm

MISURA REMI

N°canali: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

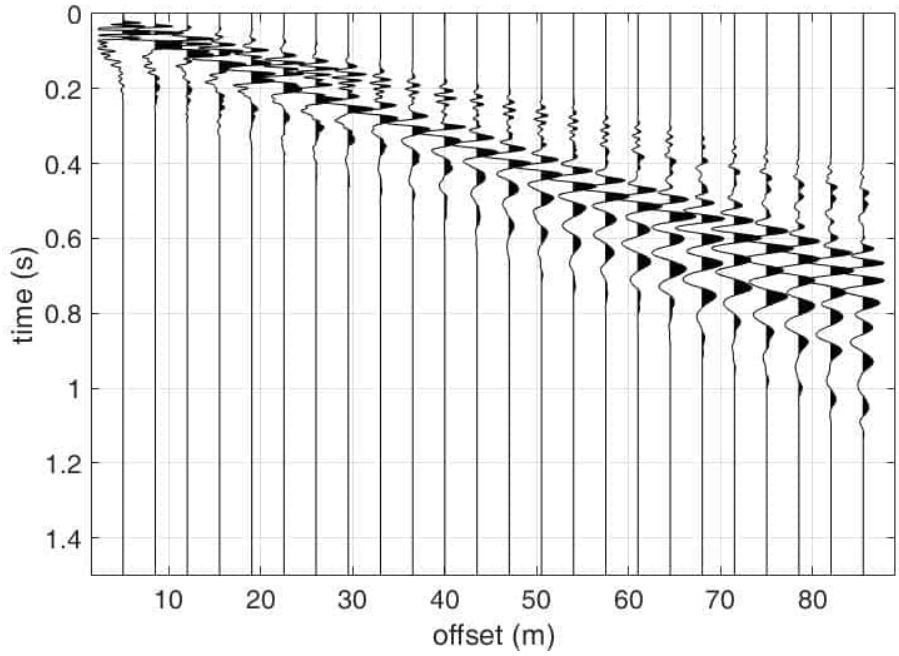
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

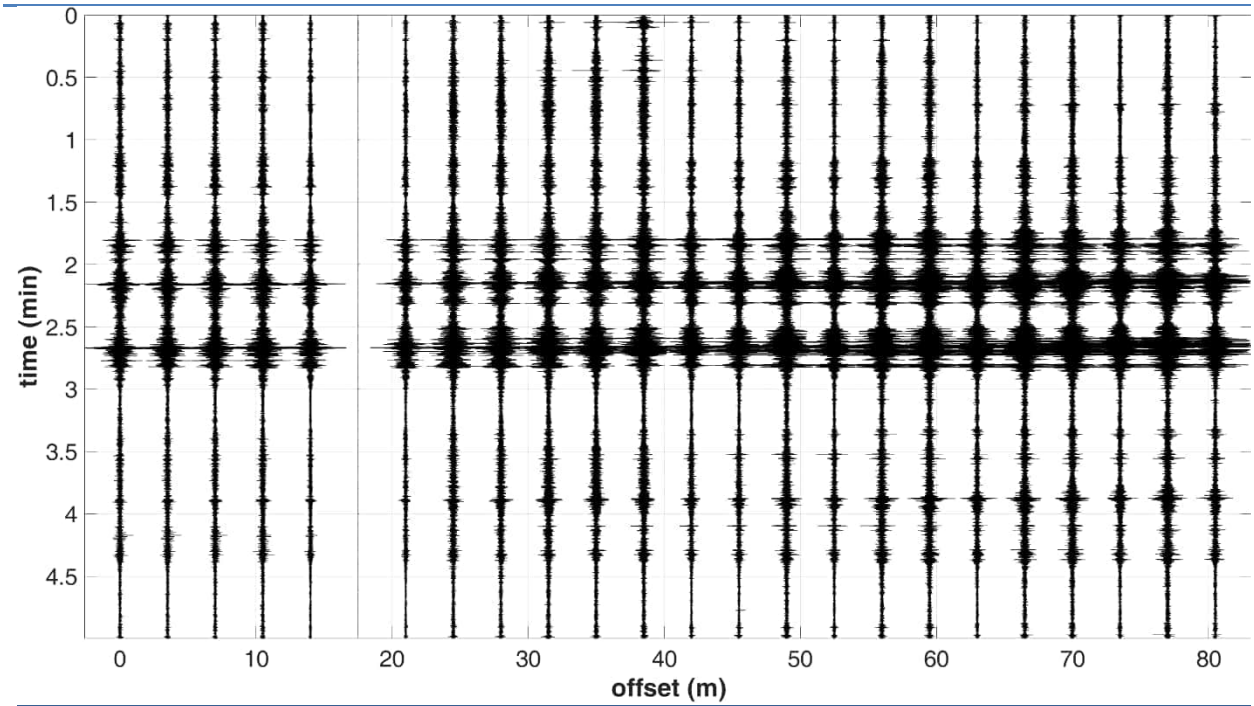
Sismogrammi MASW



REMI

Numero tracce: 23

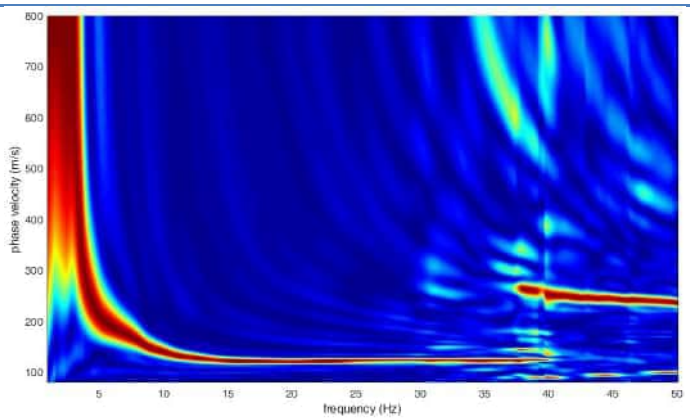
Sismogrammi REMI



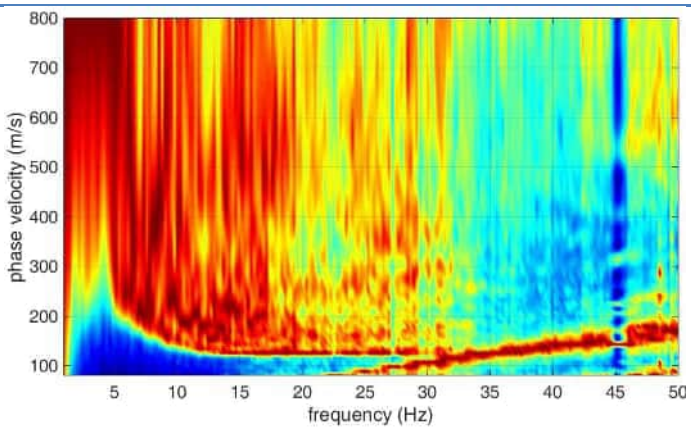
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

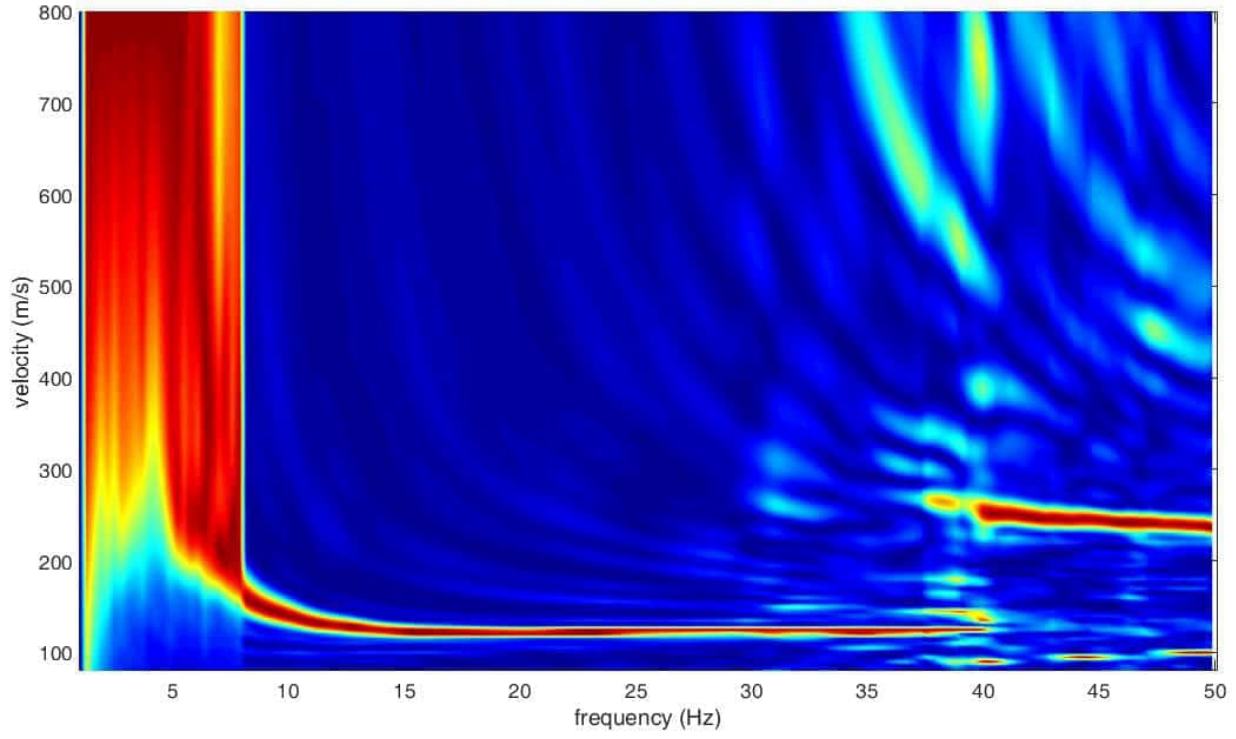


Spettro REMI



Frequenza di unione spettri: 8 Hz

Unione spettro REMI + MASW

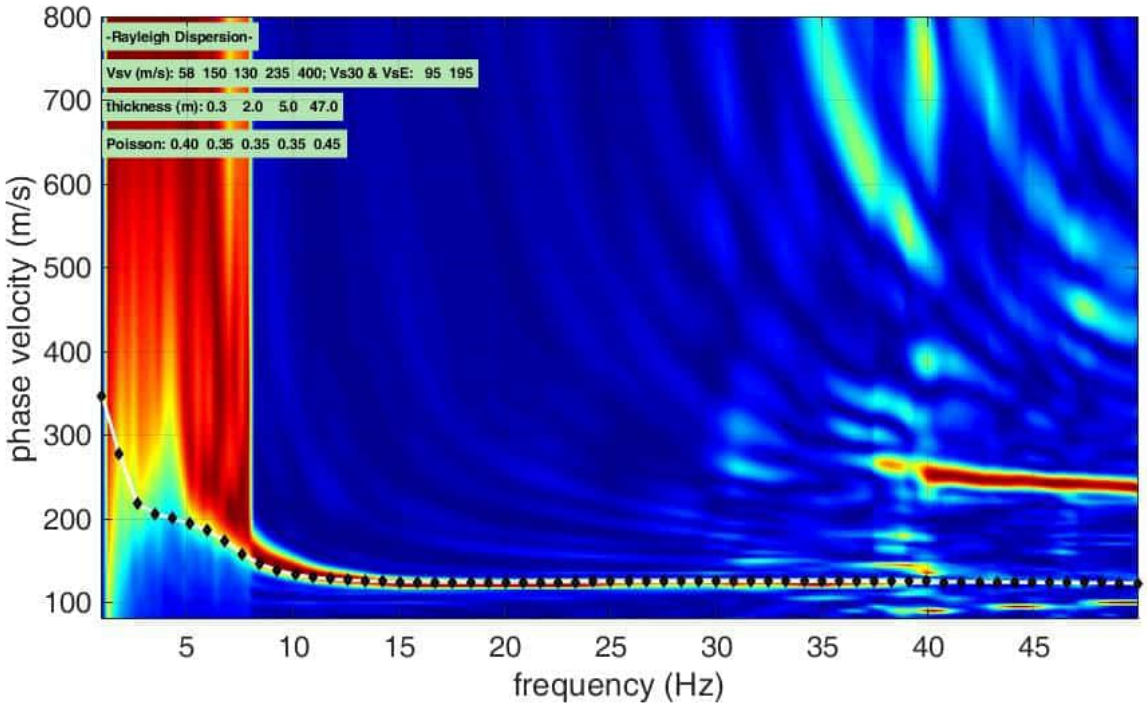


Inversione:

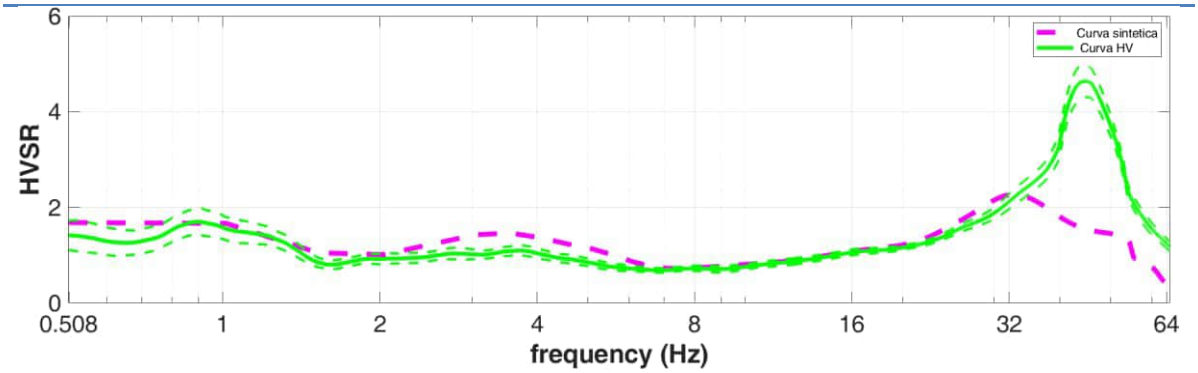
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



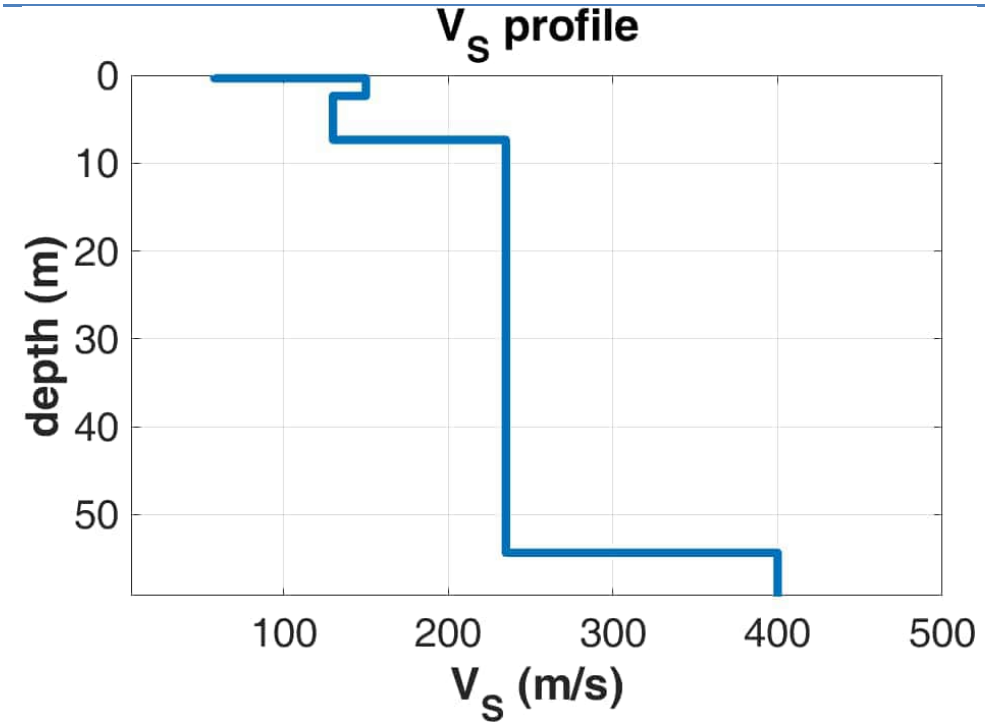
Modello sintetico su spettro HVSR



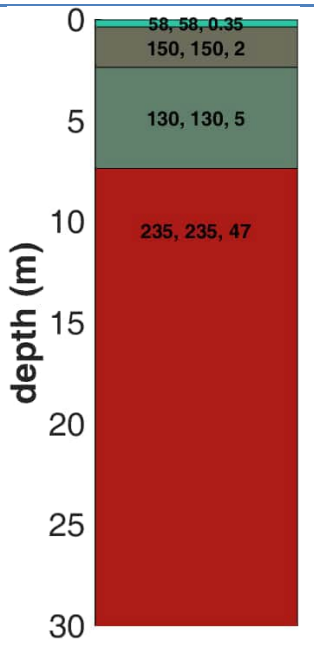
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.3	0.3	142	58
2	2.0	2.3	312	150
3	5.0	7.3	271	130
4	47.0	54.3	489	235
5	∞	∞	1327	400

Modello sismostratigrafico Vs (m/s)



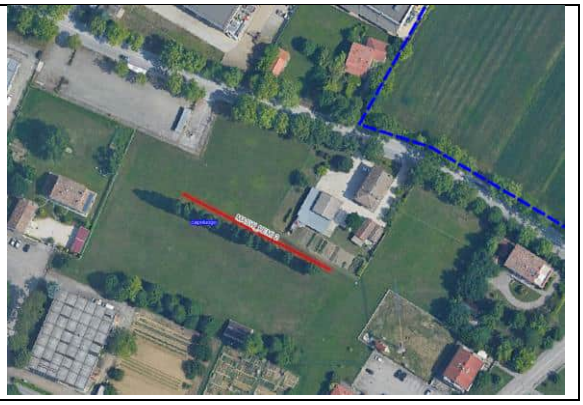
Dettaglio primi 30 m



Valore Vs_{30} = 195 m/s

INDAGINE MASW + REMI

Località Parco Antica Pieve Forlì	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 29/08/2024	**Ora** 15.35
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 2	**File** FOR MASW2a_STK.dat; FOR REMI2.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

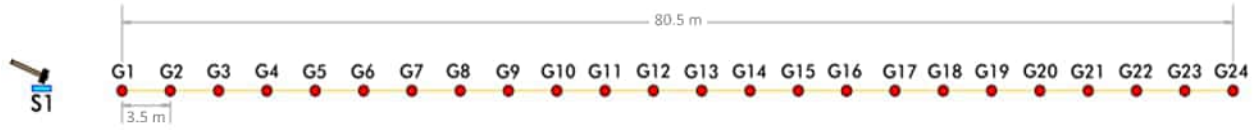
☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW2a _0103.drm
☒ FOR MASW2a _0203.drm
☒ FOR MASW2a _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

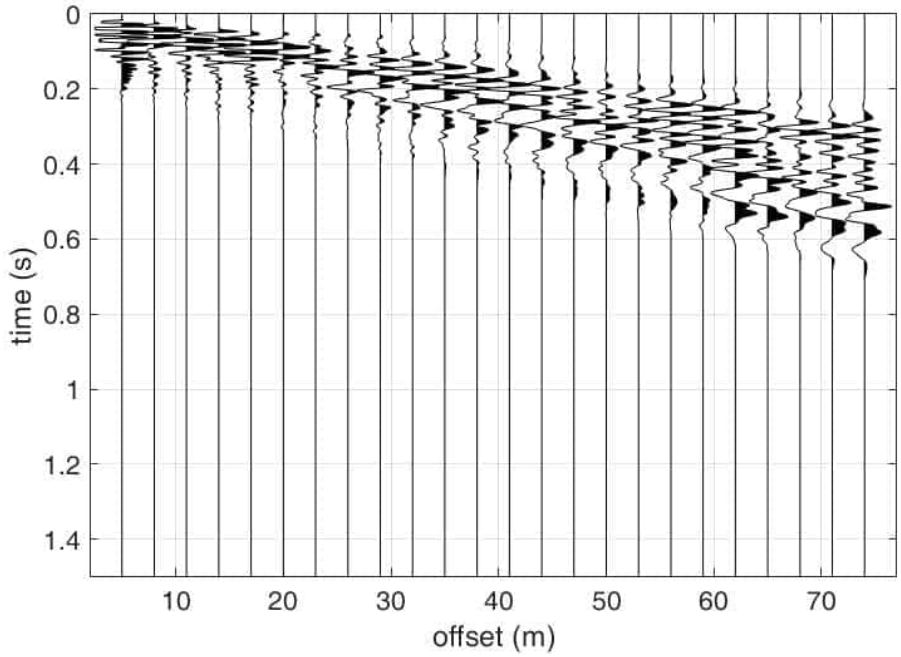
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

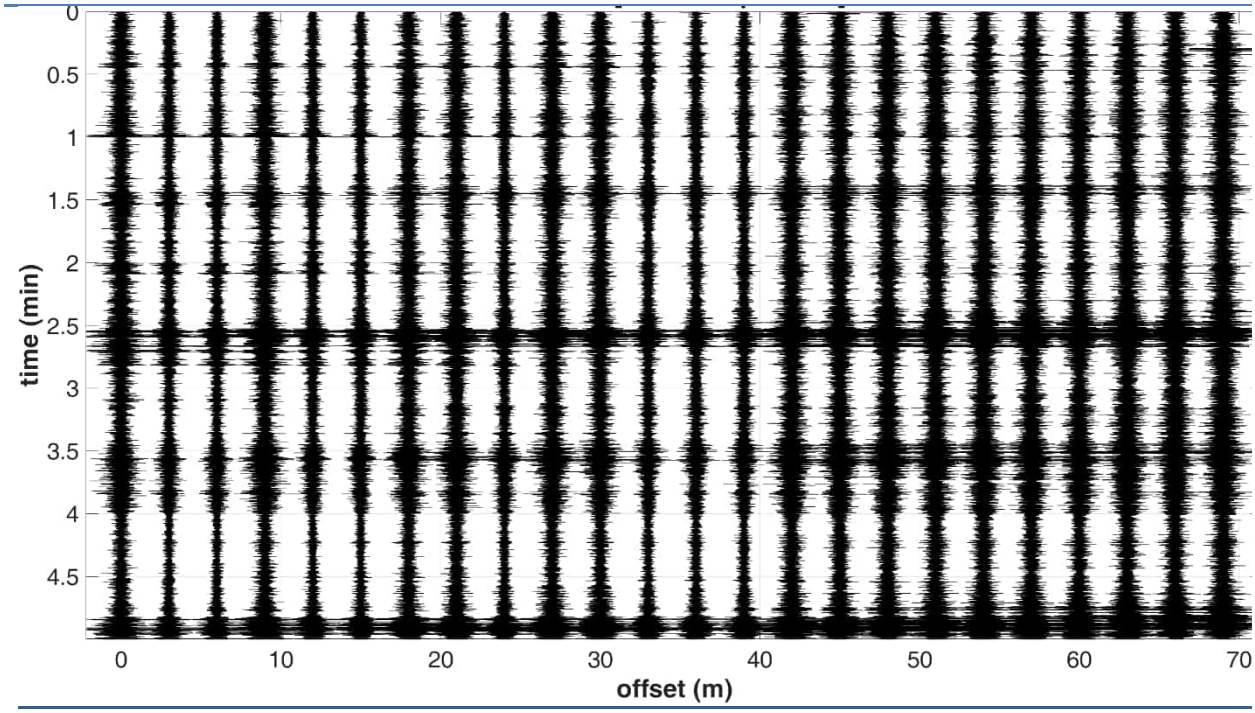
Sismogrammi MASW



REMI

Numero tracce: 24

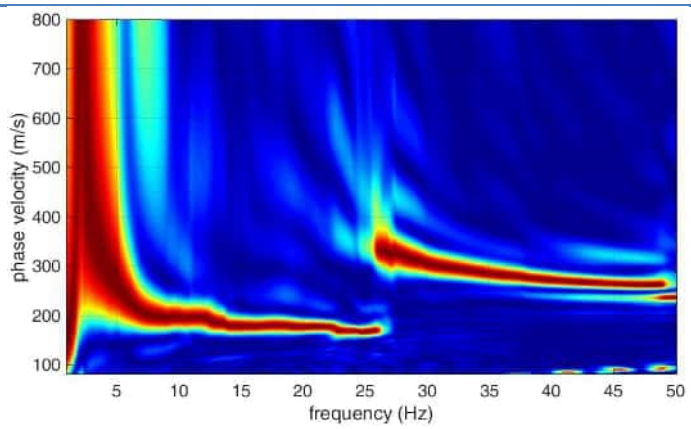
Sismogrammi REMI



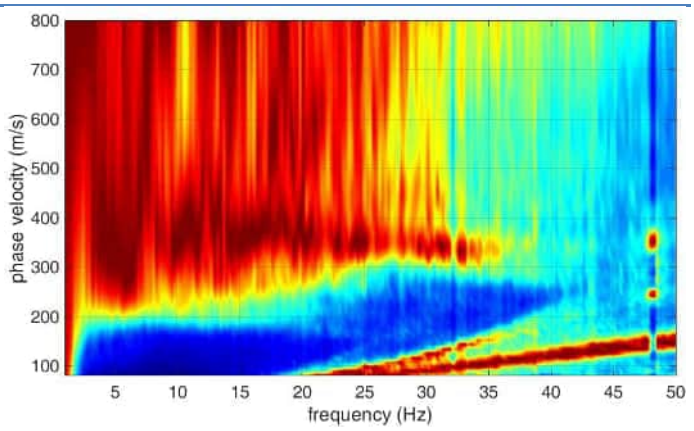
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 40 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

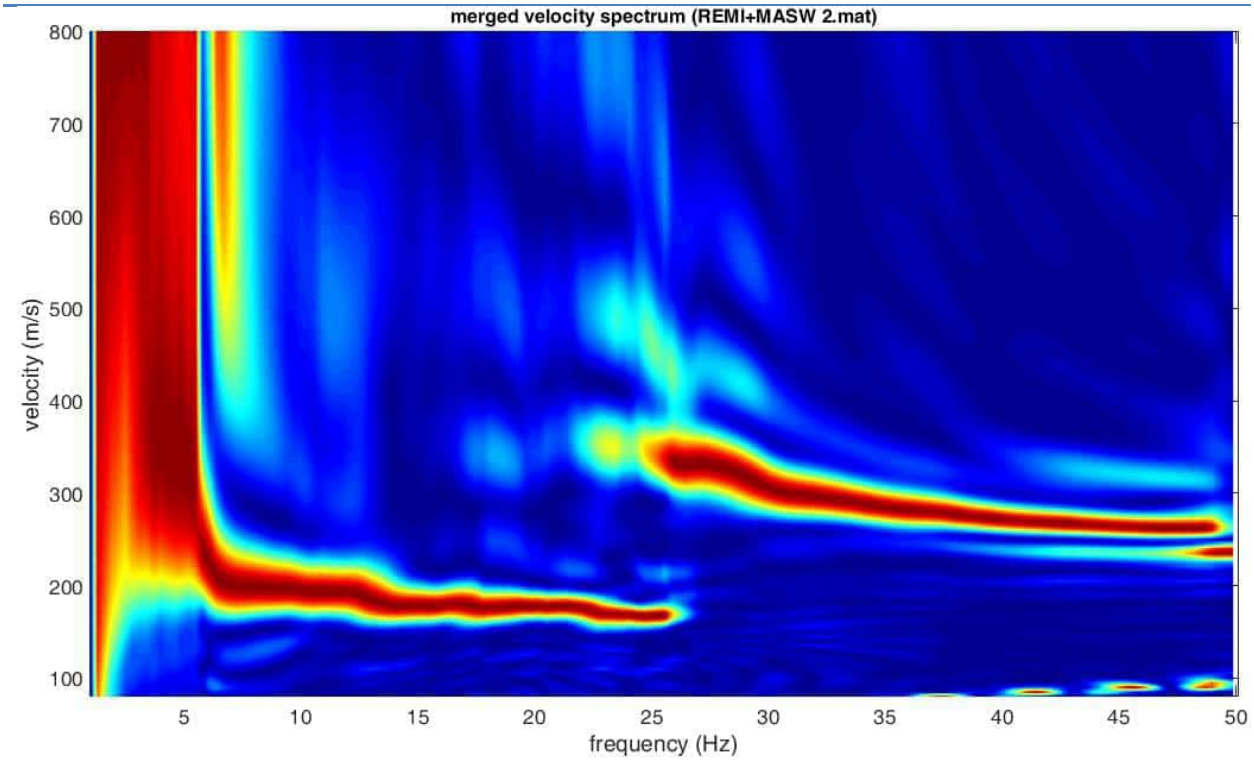


Spettro REMI



Frequenza di unione spettri: 6 Hz

Unione spettro REMI + MASW

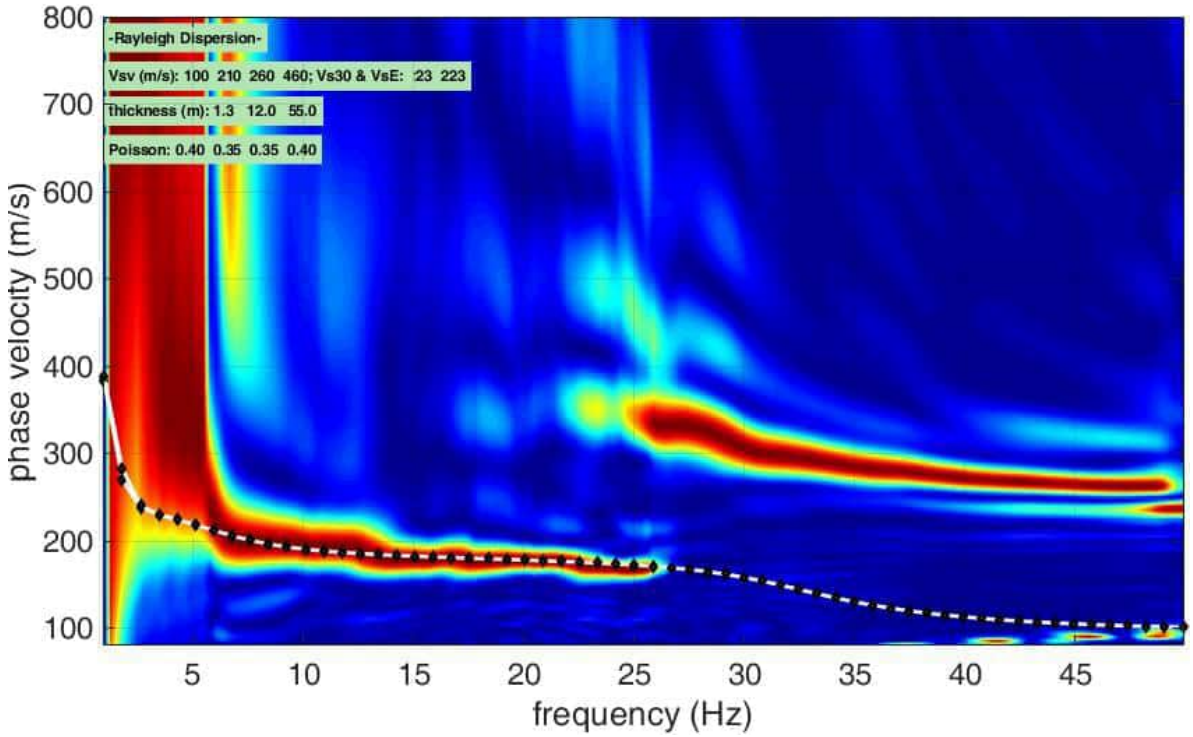


Inversione:

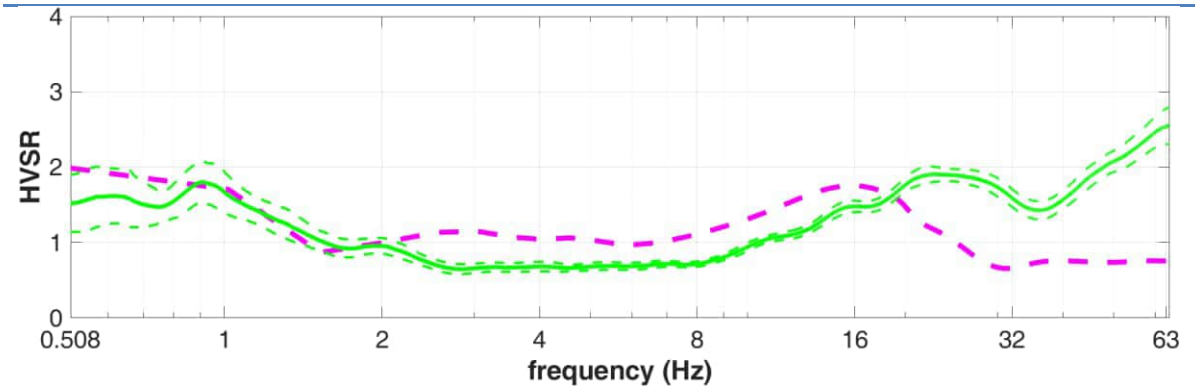
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



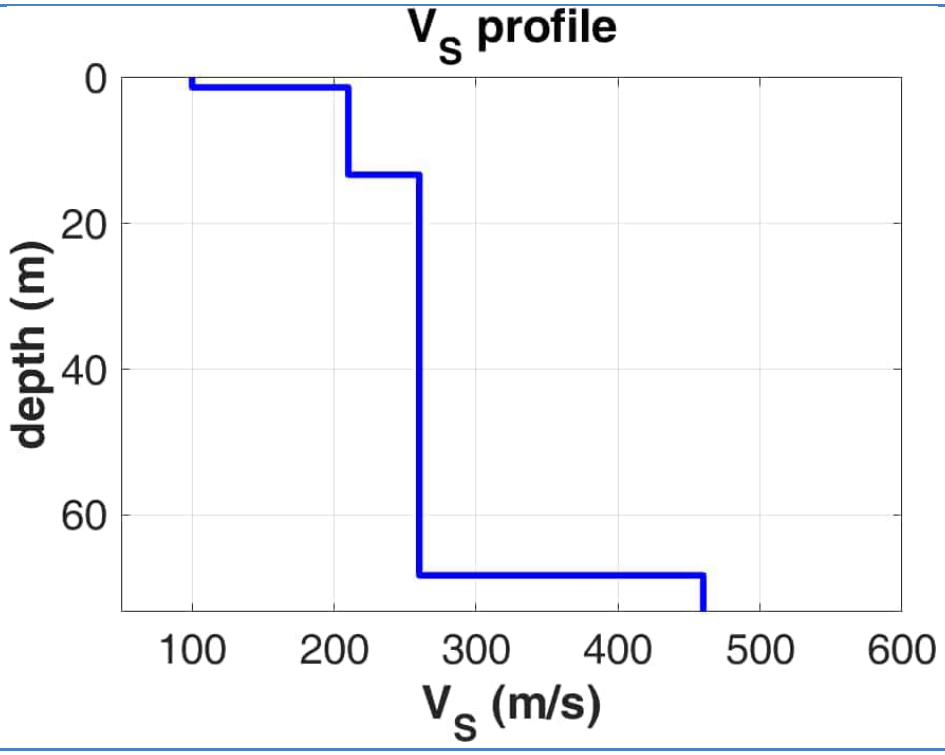
Modello sintetico su spettro HVSR



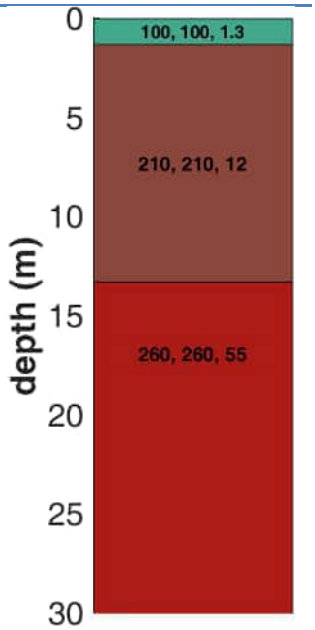
Modello sismostratigrafico:
N° di strati: 4

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	1.3	1.3	245	100
2	12.0	13.3	437	210
3	55.0	67.3	541	260
4	∞	∞	1127	460

Modello sismostratigrafico Vs (m/s)



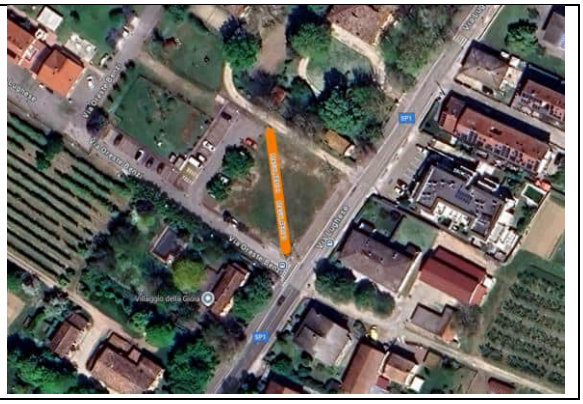
Dettaglio primi 30 m



Valore Vs_{30} = 223 m/s

INDAGINE MASW + REMI

Località Via Oreste Benzi Loc. Villafranca	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 12.10
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 3	**File** FOR MASW3b_STK.dat; FOR REMI3.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 2 m
Lunghezza stendimento (m): 46 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	
Tipologia energizzazione:		
☐ Fucile sismico	Modello:	
☒ Mazza	Kg: 5	
☐ Grave	Kg:	
☐ Mazza su trave	Kg:	

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW3b _0103.drm
☒ FOR MASW3b _0203.drm
☒ FOR MASW3b _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 2 m
Lunghezza stendimento (m): 46	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

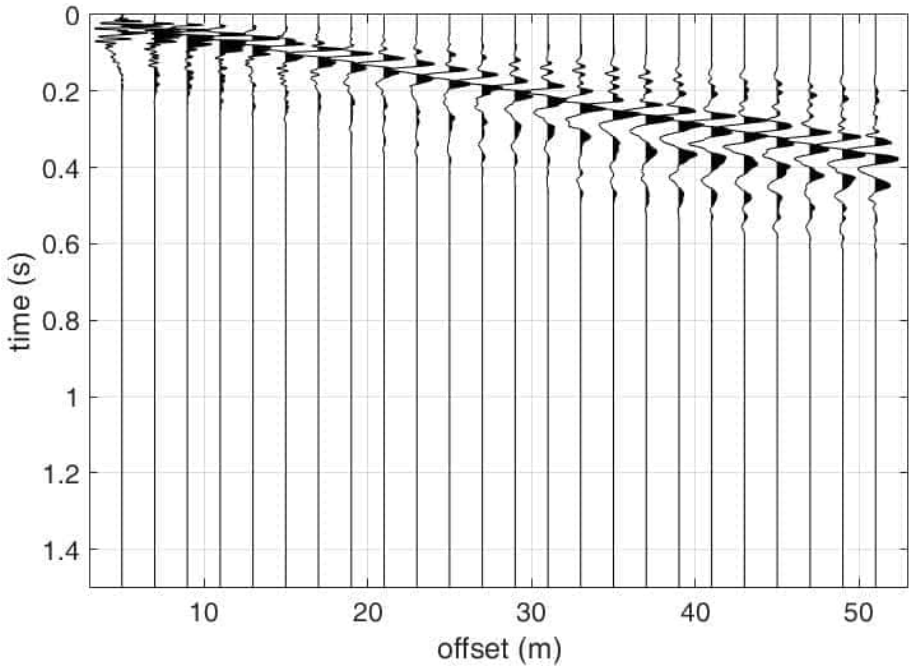
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

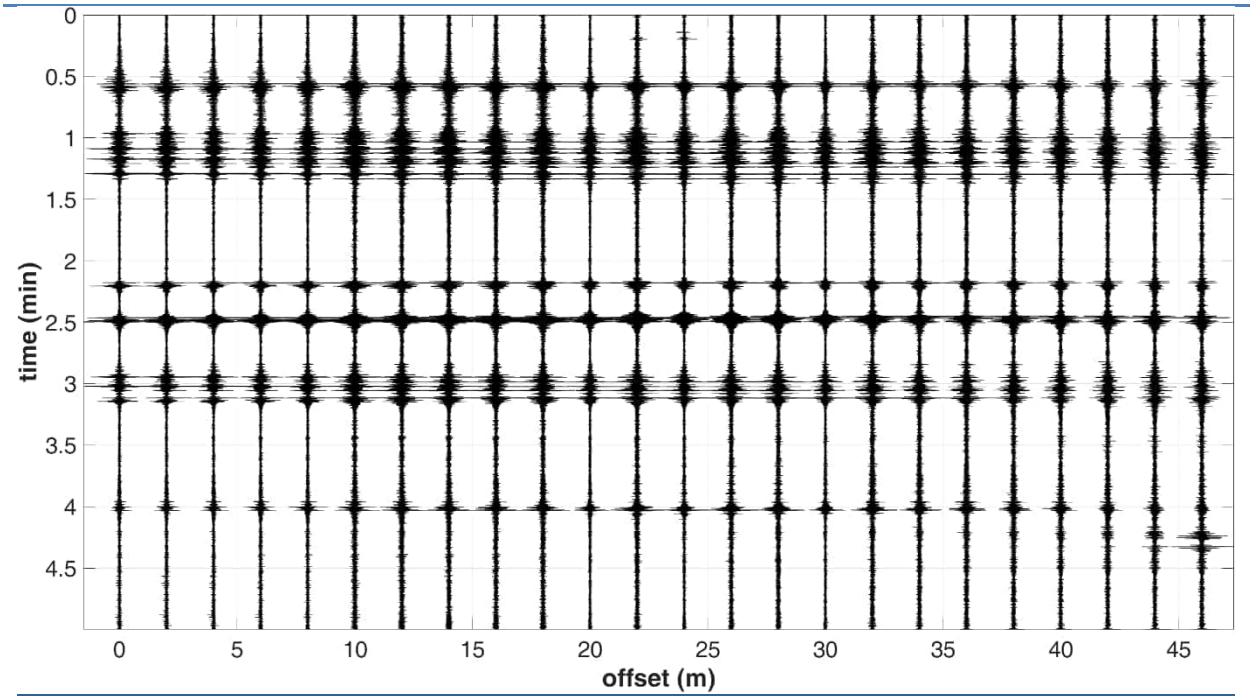
Sismogrammi MASW



REMI

Numero tracce: 24

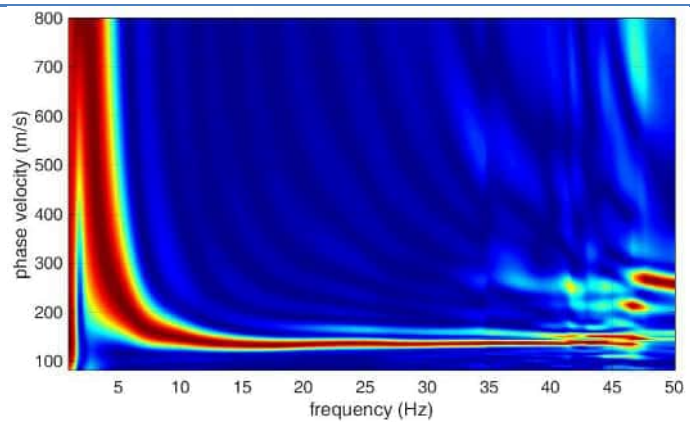
Sismogrammi REMI



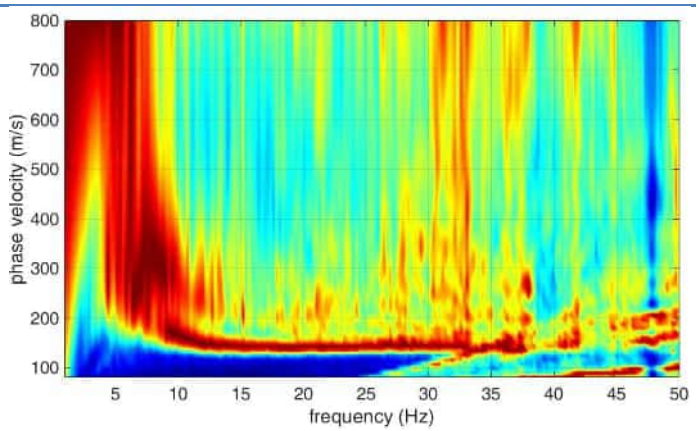
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

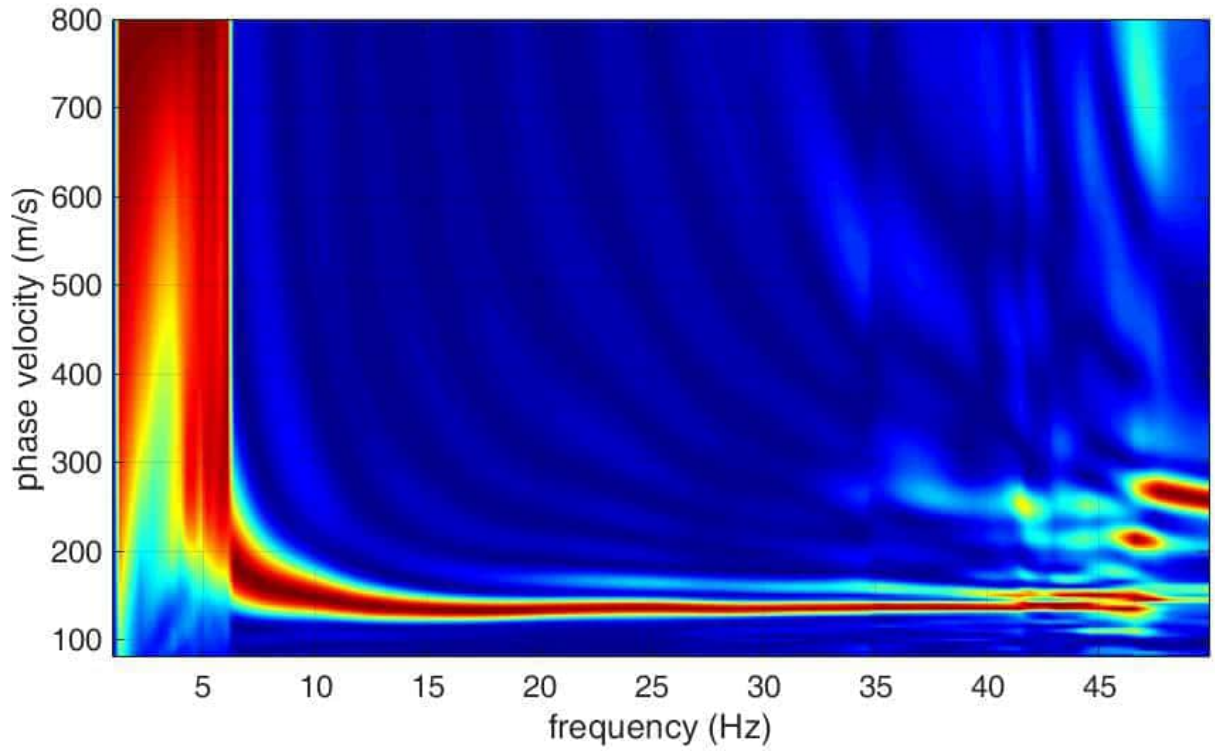


Spettro REMI



Frequenza di unione spettri: 6 Hz

Unione spettro REMI + MASW

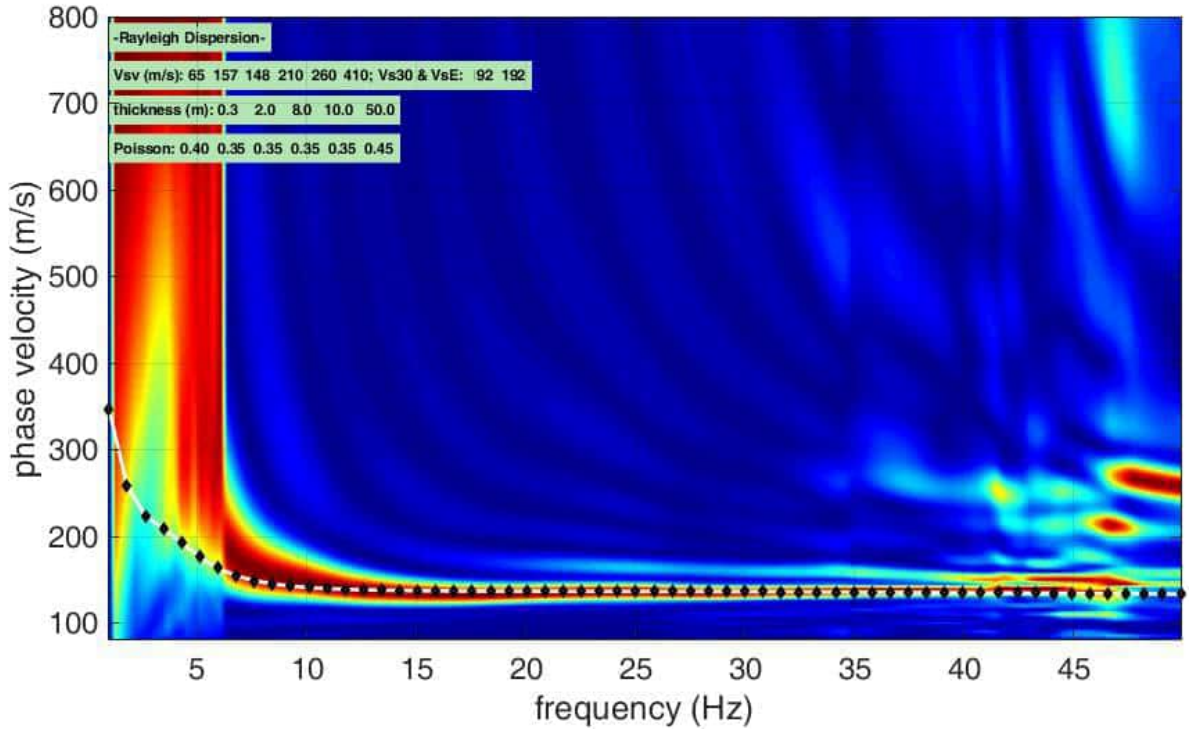


Inversione:

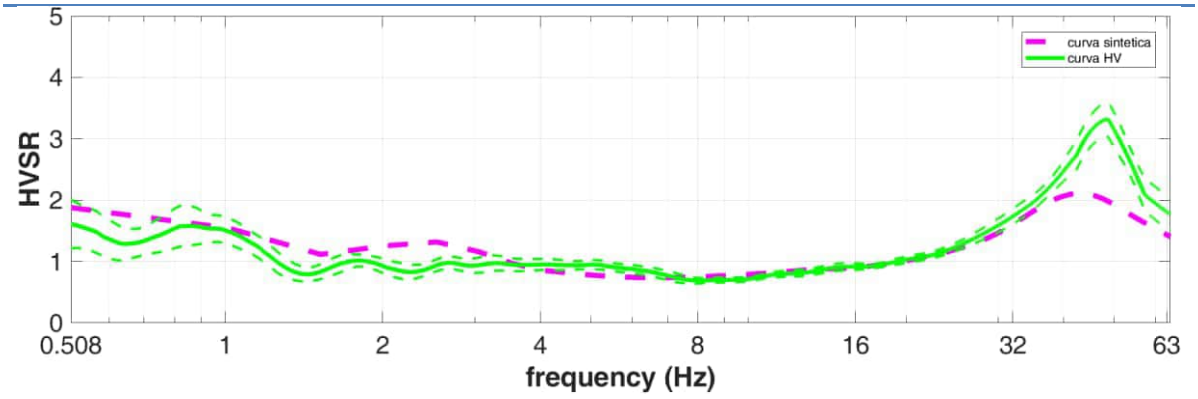
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



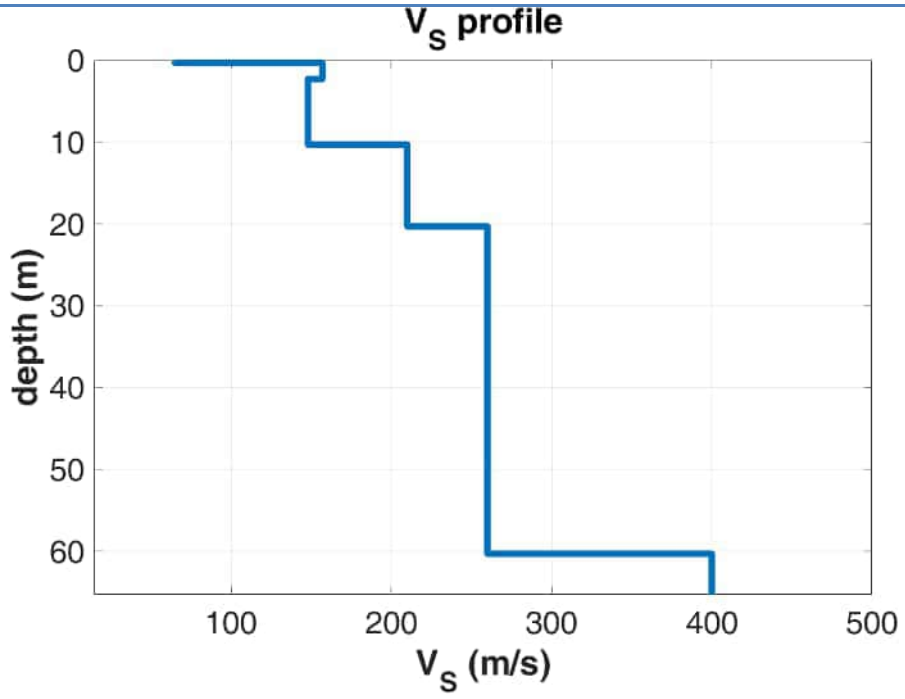
Modello sintetico su spettro HVSR



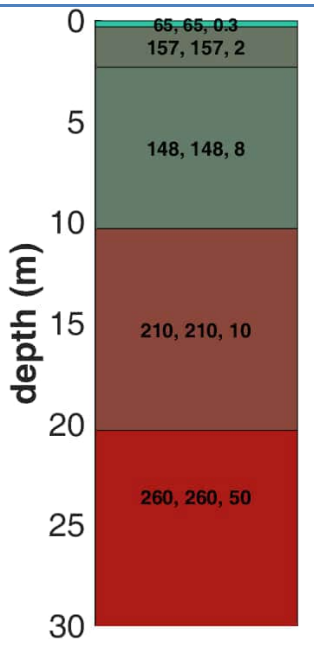
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.3	0.3	159	65
2	2.0	2.3	327	157
3	8.0	10.3	30.8	148
4	10.0	20.3	437	210
5	40	60.3	541	260
6	∞	∞	1327	400

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 192 m/s

INDAGINE MASW + REMI

Località Via Del Canale Loc. Roncadello	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 10.25
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 4	**File** FOR MASW4b_STK.dat; FOR REMI4.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 2.5 m
Lunghezza stendimento (m): 57.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:	
☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW4b _0103.drm
☒ FOR MASW4b _0203.drm
☒ FOR MASW4b _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 2.5 m
Lunghezza stendimento (m): 57.5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

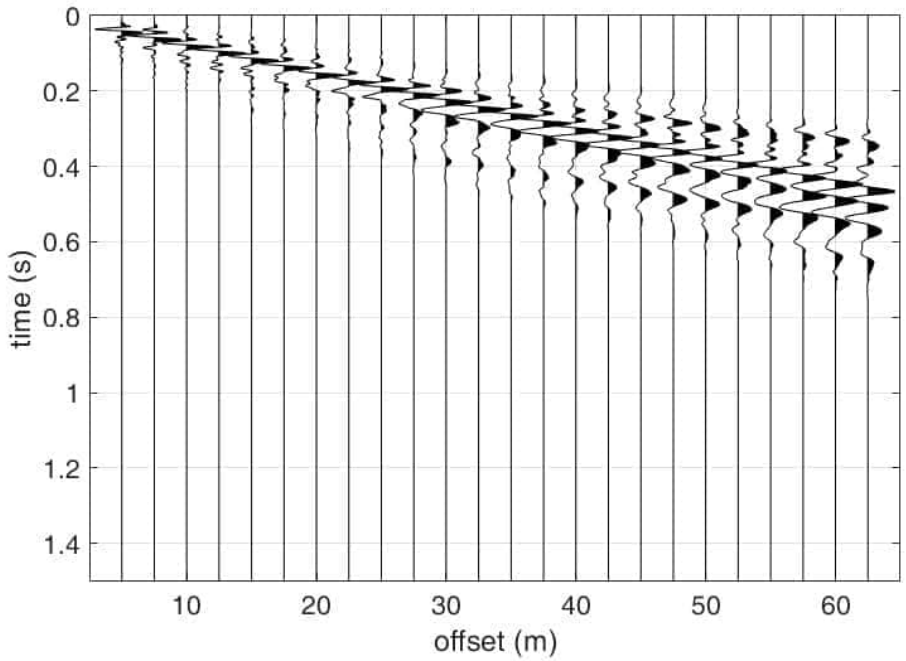
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

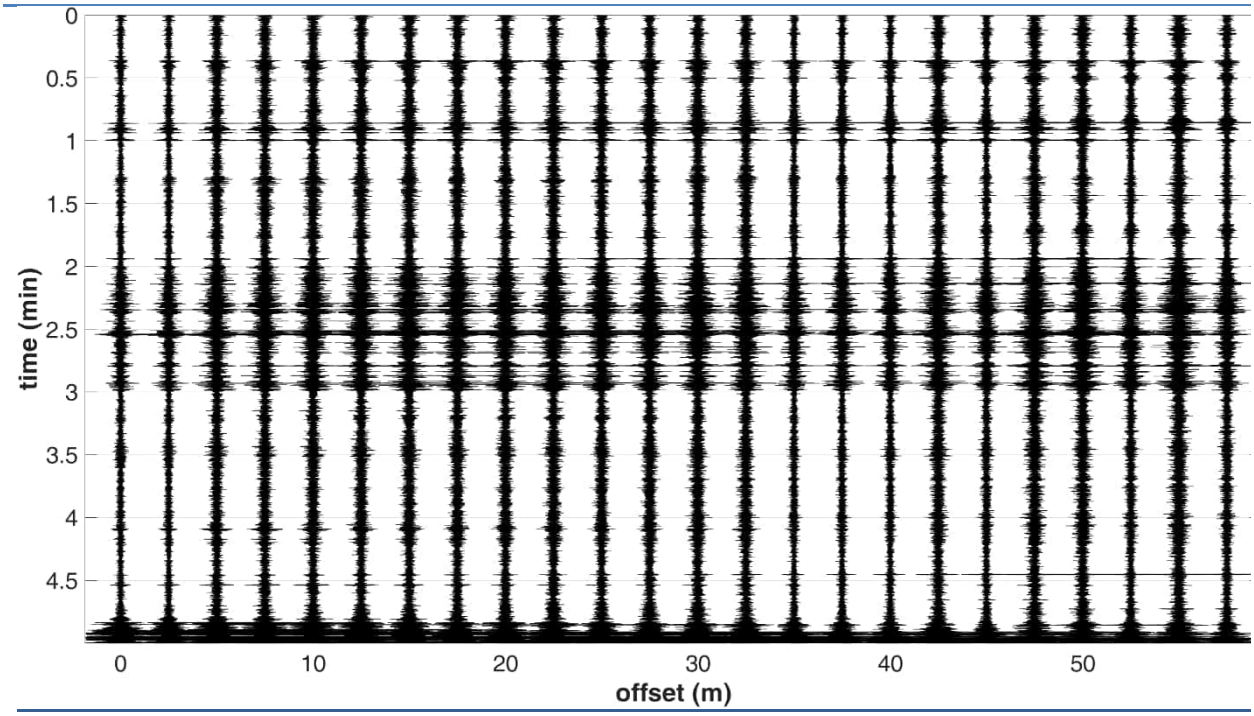
Sismogrammi MASW



REMI

Numero tracce: 24

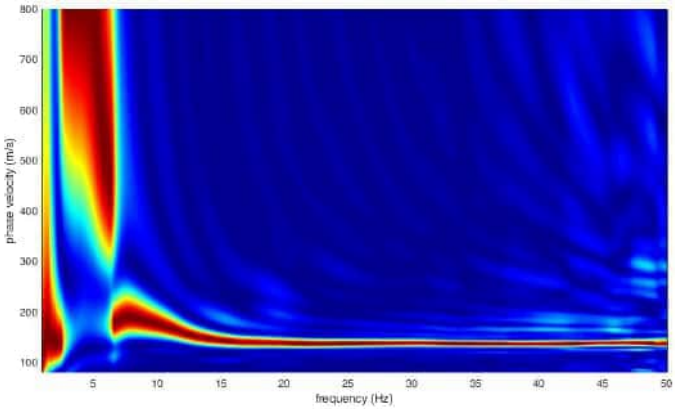
Sismogrammi REMI



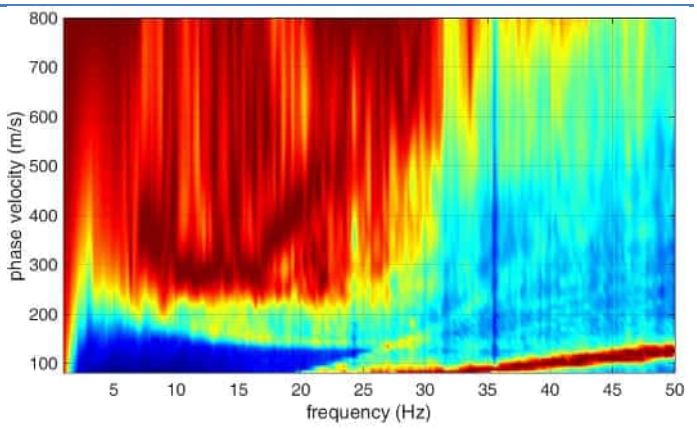
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

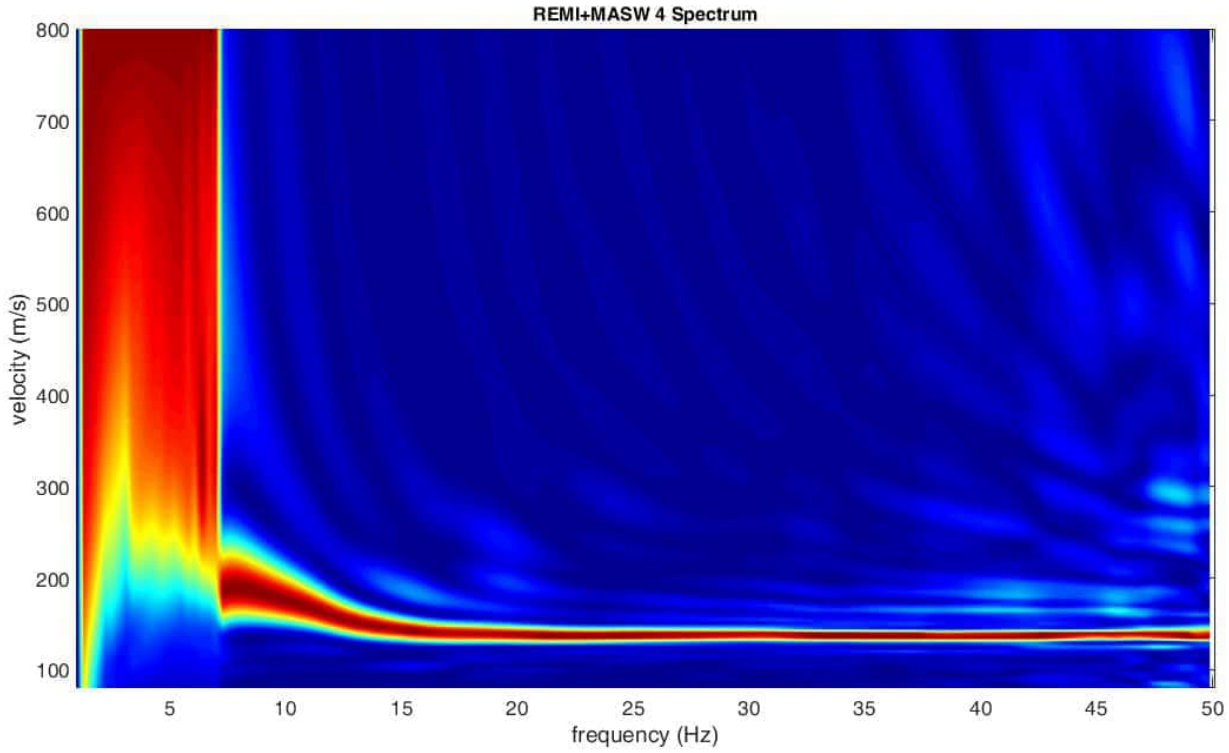


Spettro REMI



Frequenza di unione spettri: 7 Hz

Unione spettro REMI + MASW

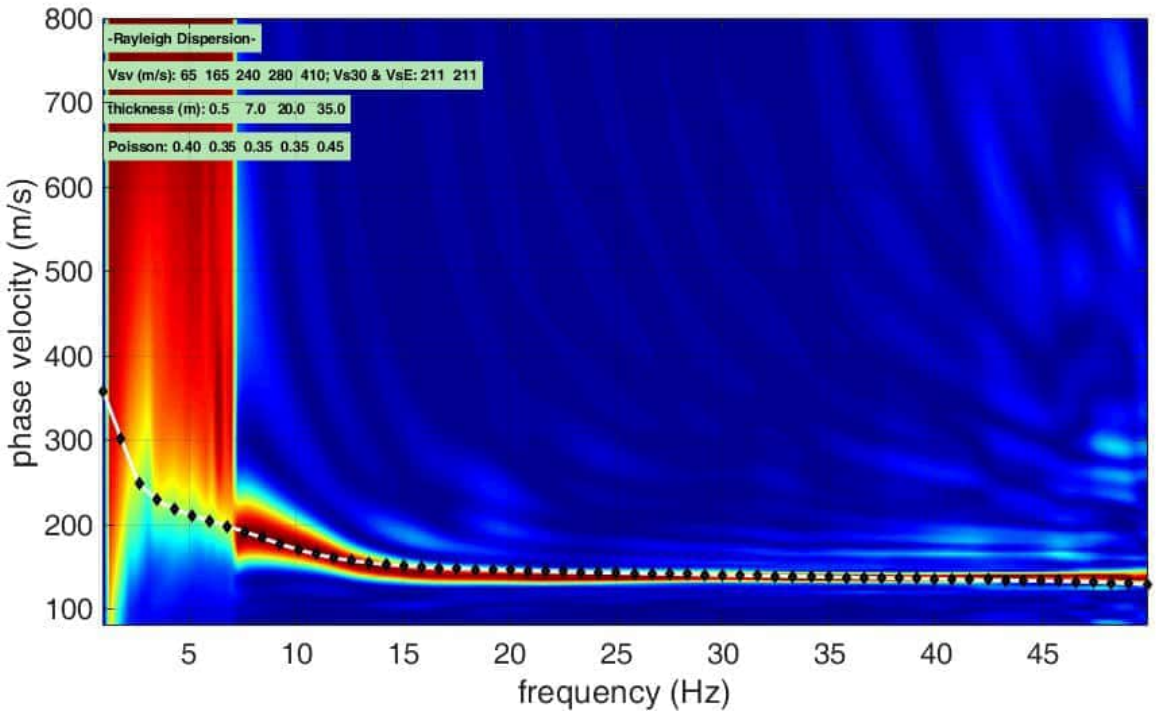


Inversione:

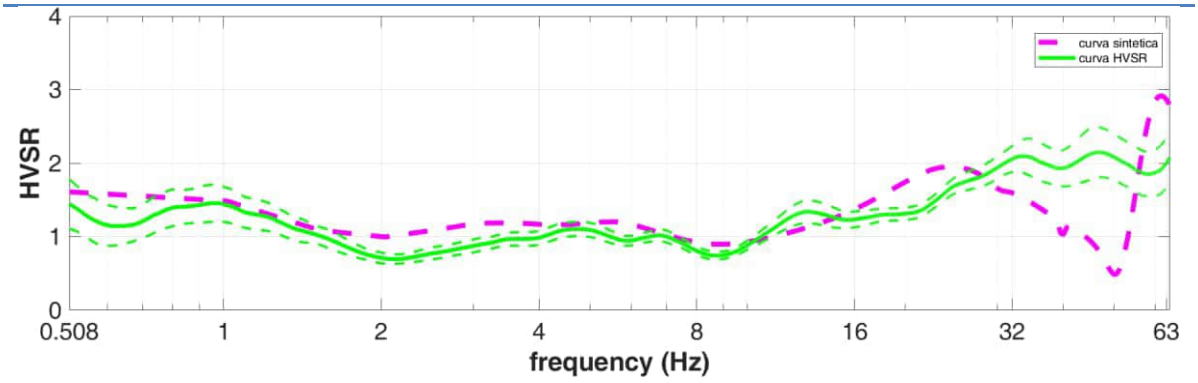
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



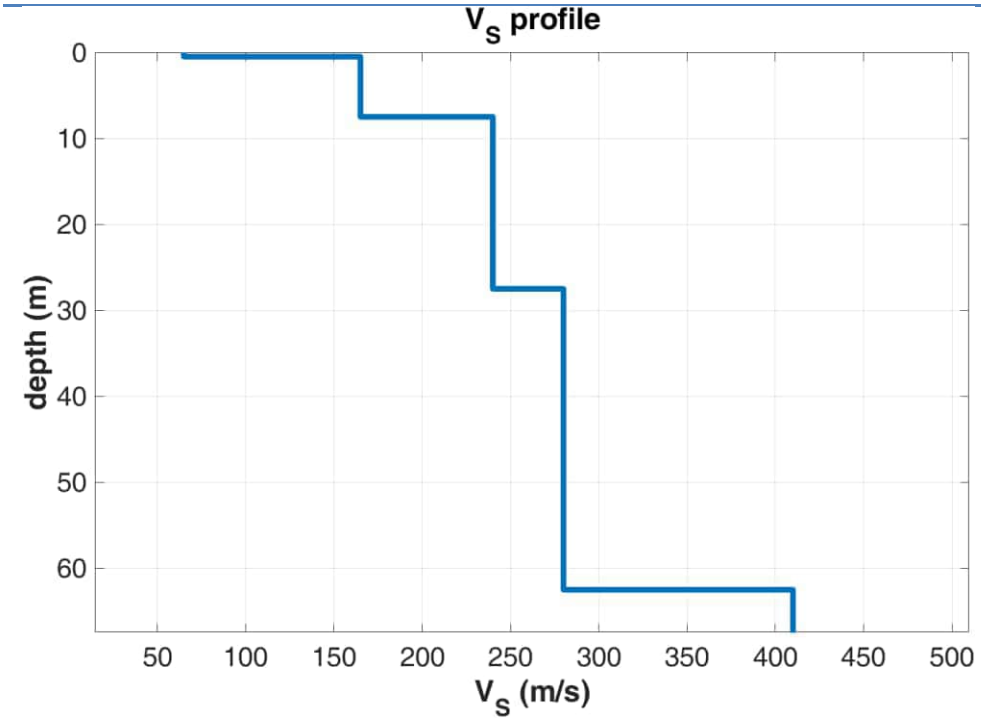
Modello sintetico su spettro HVSR



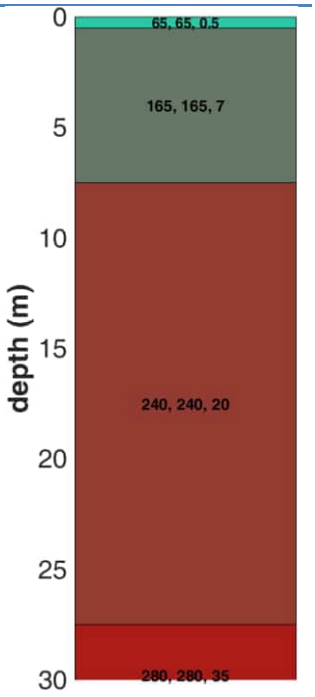
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.5	0.5	159	65
2	7.0	7.5	343	165
3	20.0	27.5	500	240
4	35.0	62.5	583	280
5	∞	∞	1360	410

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 211 m/s

INDAGINE MASW + REMI

Località Foro Boario	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 29/08/2024	**Ora** 9.15
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI5	**File** FOR MASW5a_STK.dat; FOR REMI5.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW

Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW5a_0103.drm
☒ FOR MASW5a_0203.drm
☒ FOR MASW5a_0303.drm

MISURA REMI

N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

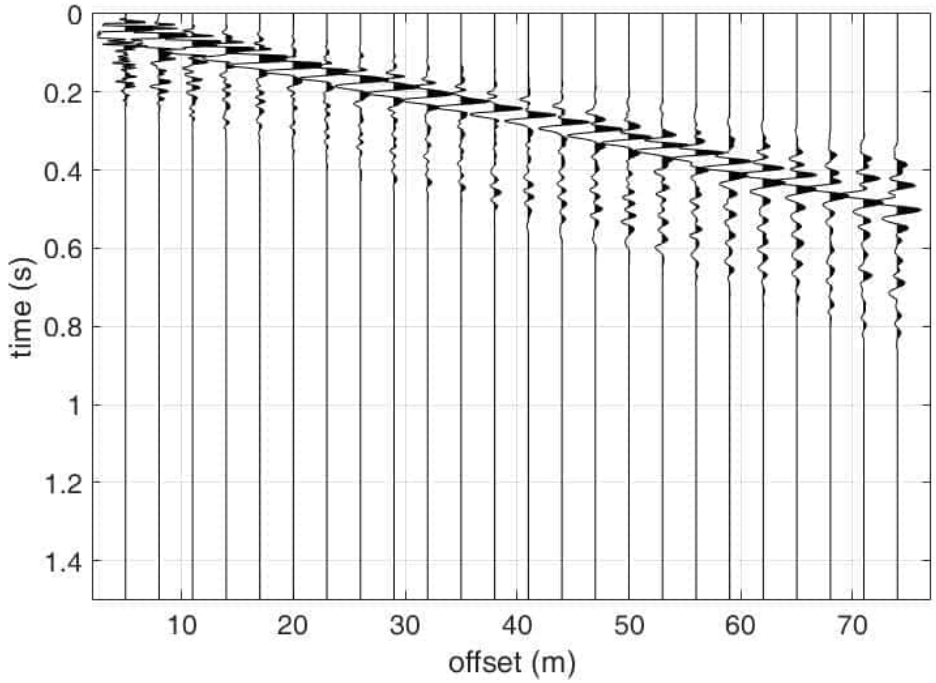
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

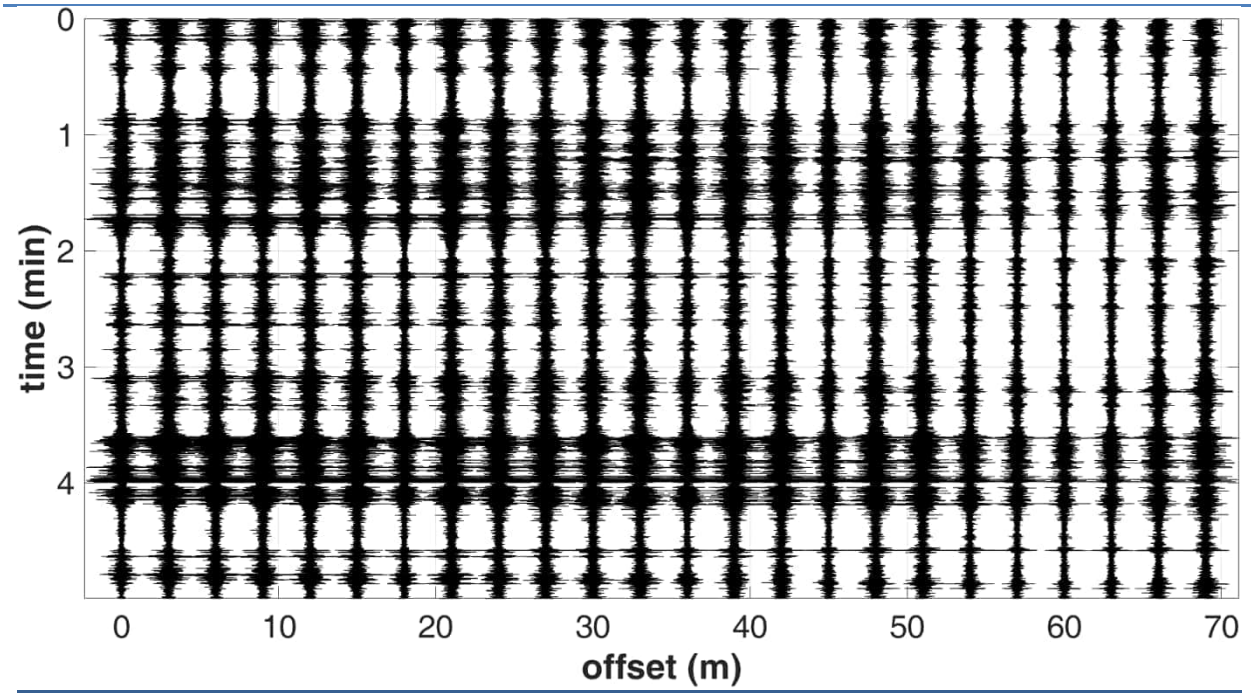
Sismogrammi MASW



REMI

Numero tracce: 24

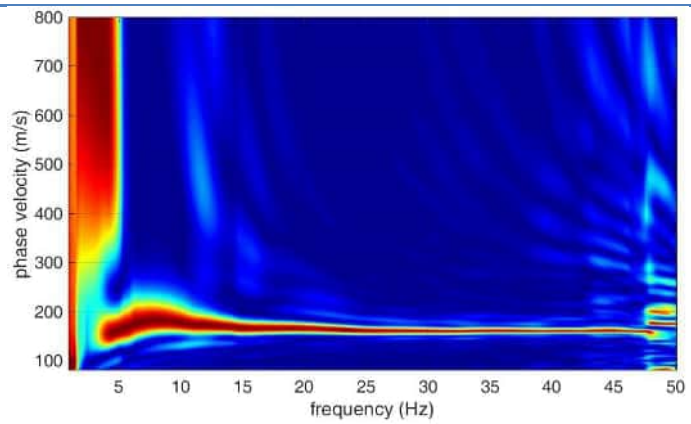
Sismogrammi REMI



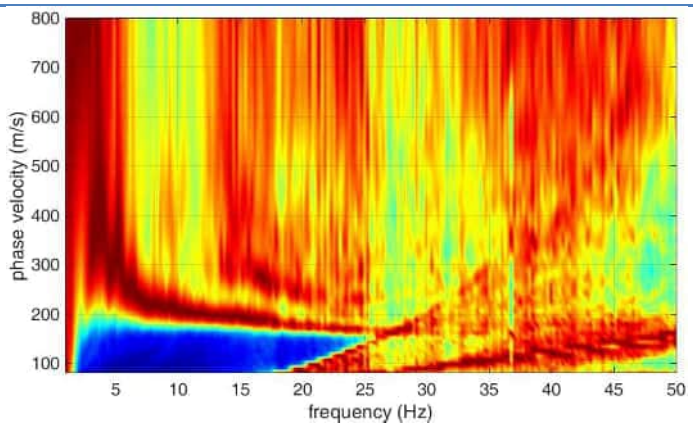
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

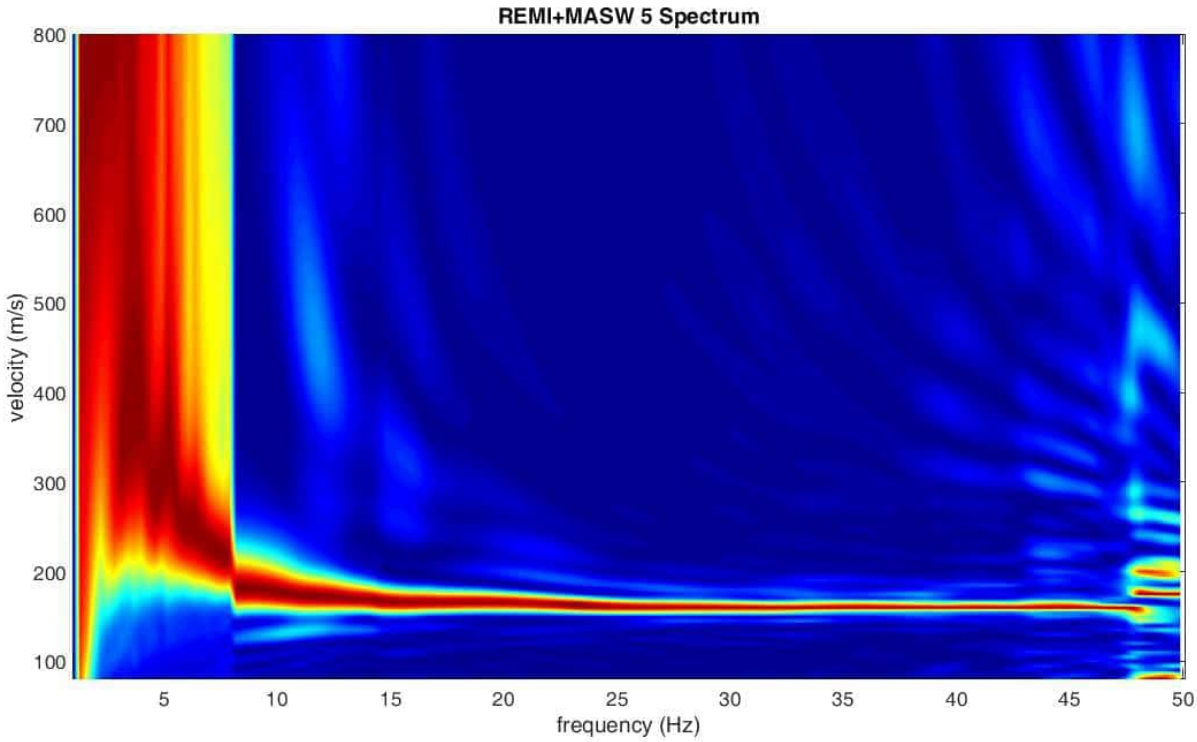


Spettro REMI



Frequenza di unione spettri: 8 Hz

Unione spettro REMI + MASW

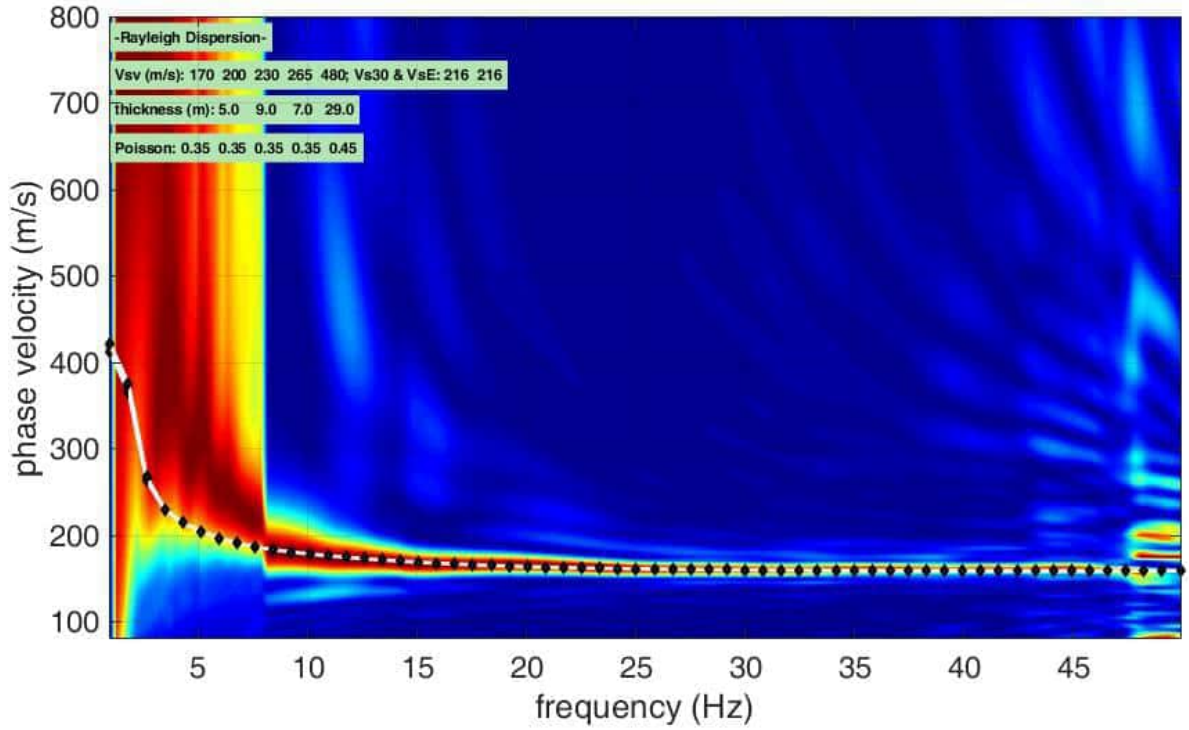


Inversione:

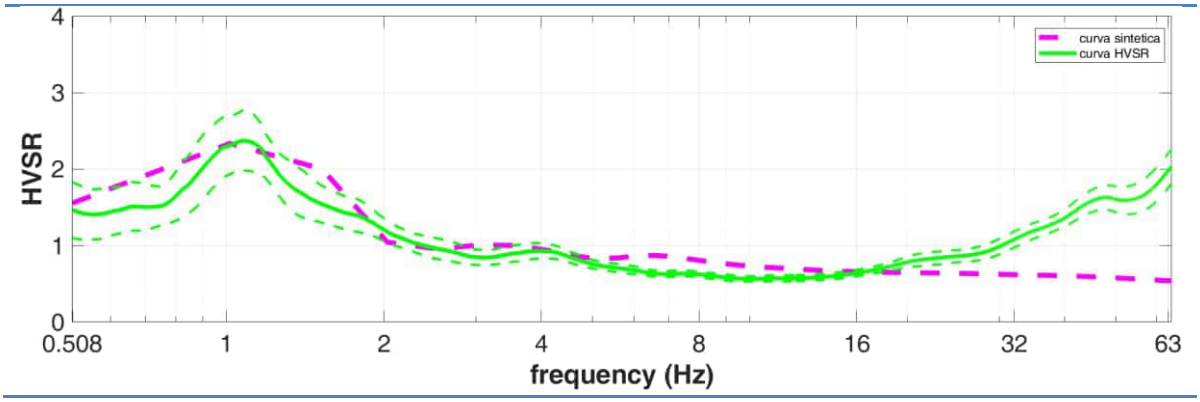
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



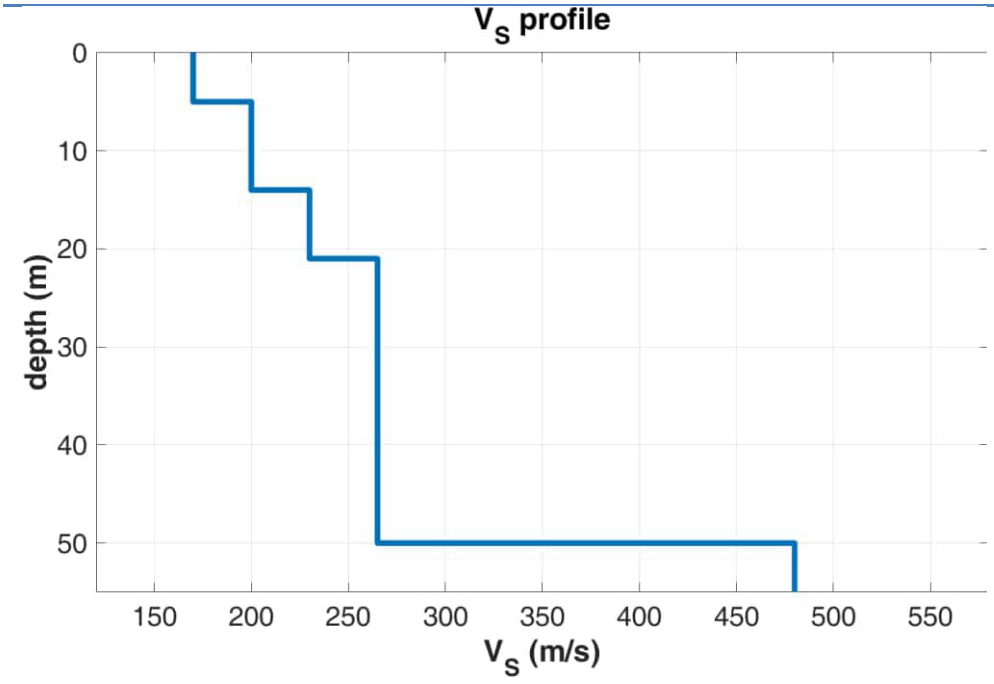
Modello sintetico su spettro HVSR



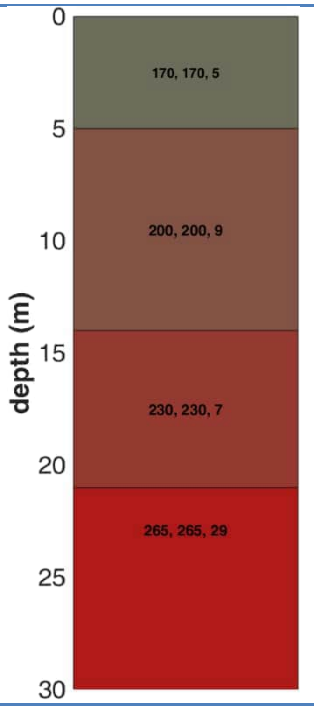
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	5.0	5.0	354	170
2	9.0	14.0	416	200
3	7.0	21.0	479	230
4	29.0	50.0	552	365
5	∞	∞	1592	480

Modello sismostratigrafico Vs (m/s)



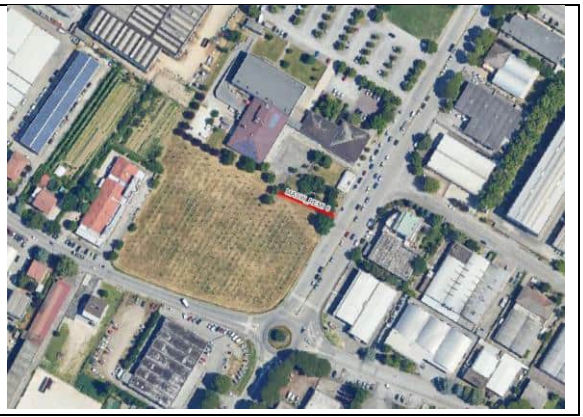
Dettaglio primi 30 m



Valore Vs_{30} = 216 m/s

INDAGINE MASW + REMI

Località Via Edison	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 29/08/2024	**Ora** 12.00
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI6	**File** FOR MASW6b_STK.dat; FOR REMI6.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 2 m
Lunghezza stendimento (m): 46 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:	
☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW6b_0103.drm
☒ FOR MASW6b_0203.drm
☒ FOR MASW6b_0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 2 m
Lunghezza stendimento (m): 46	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI: traffico intenso

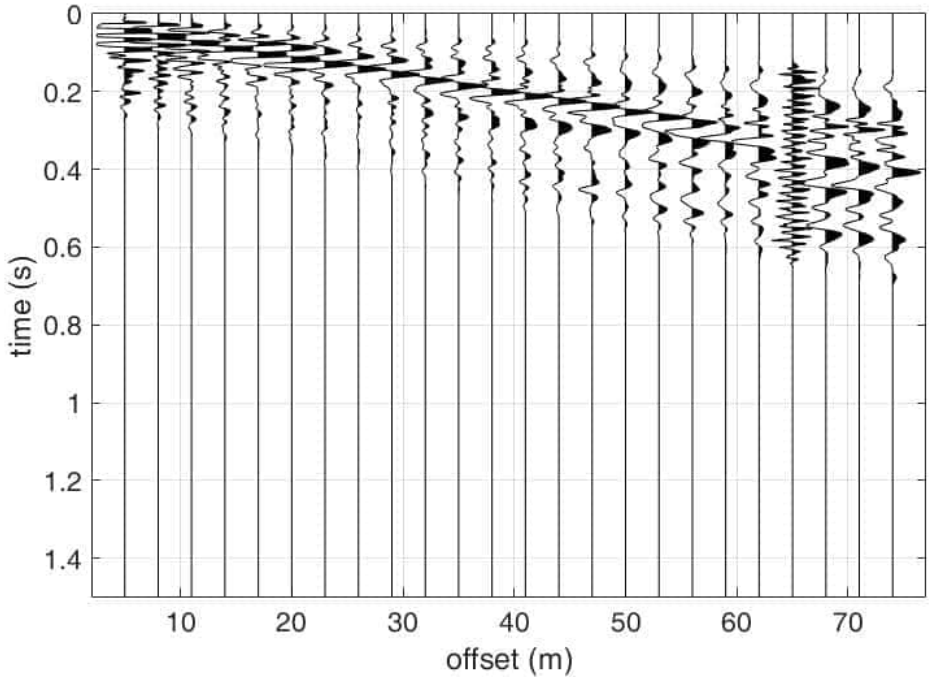
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

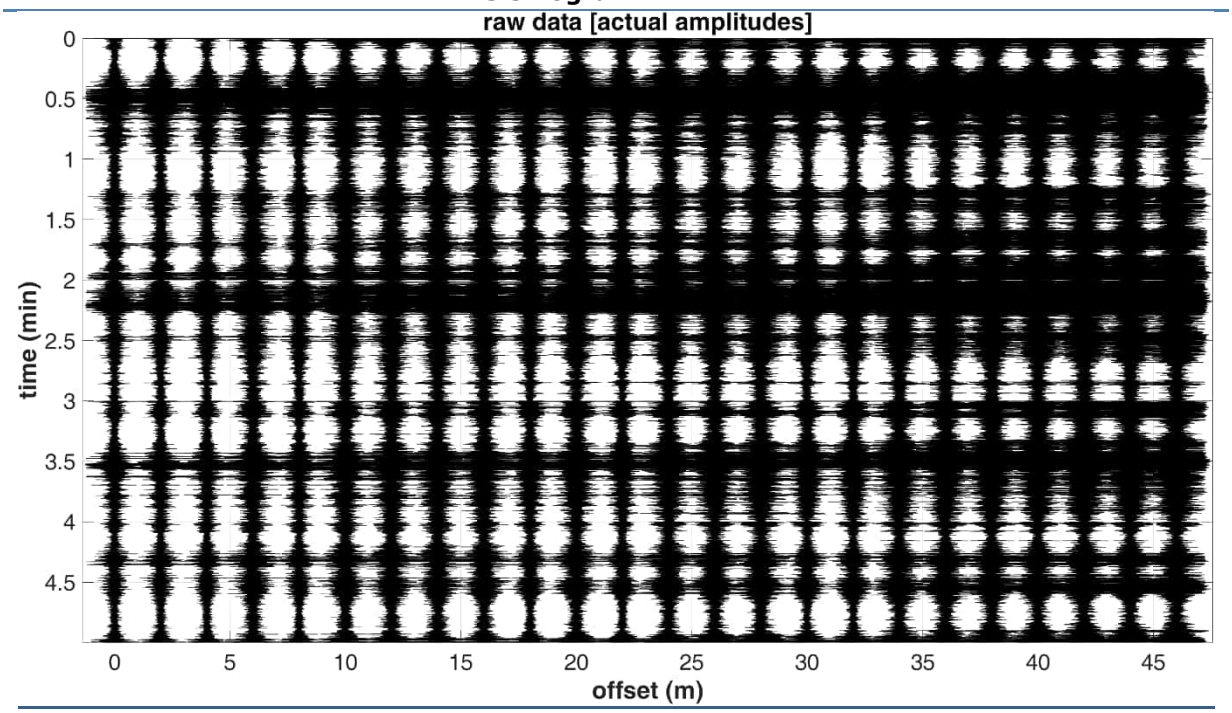
Sismogrammi MASW



REMI

Numero tracce: 24

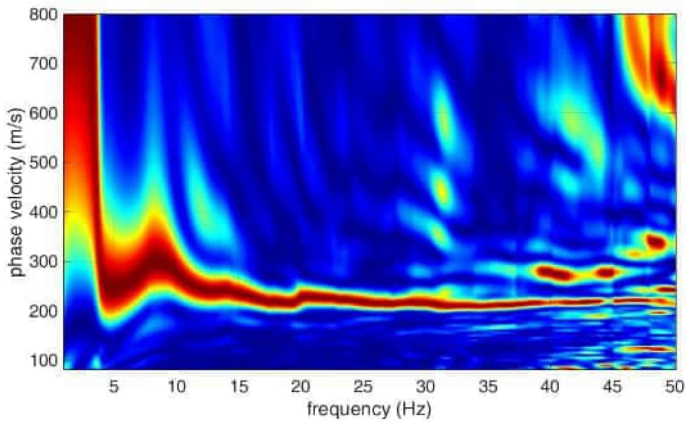
Sismogrammi REMI



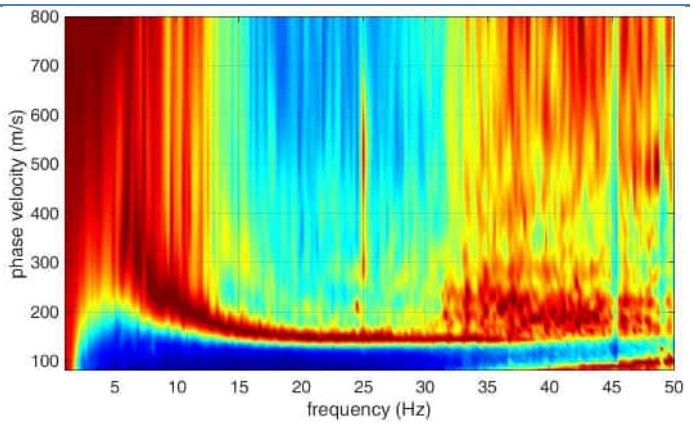
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

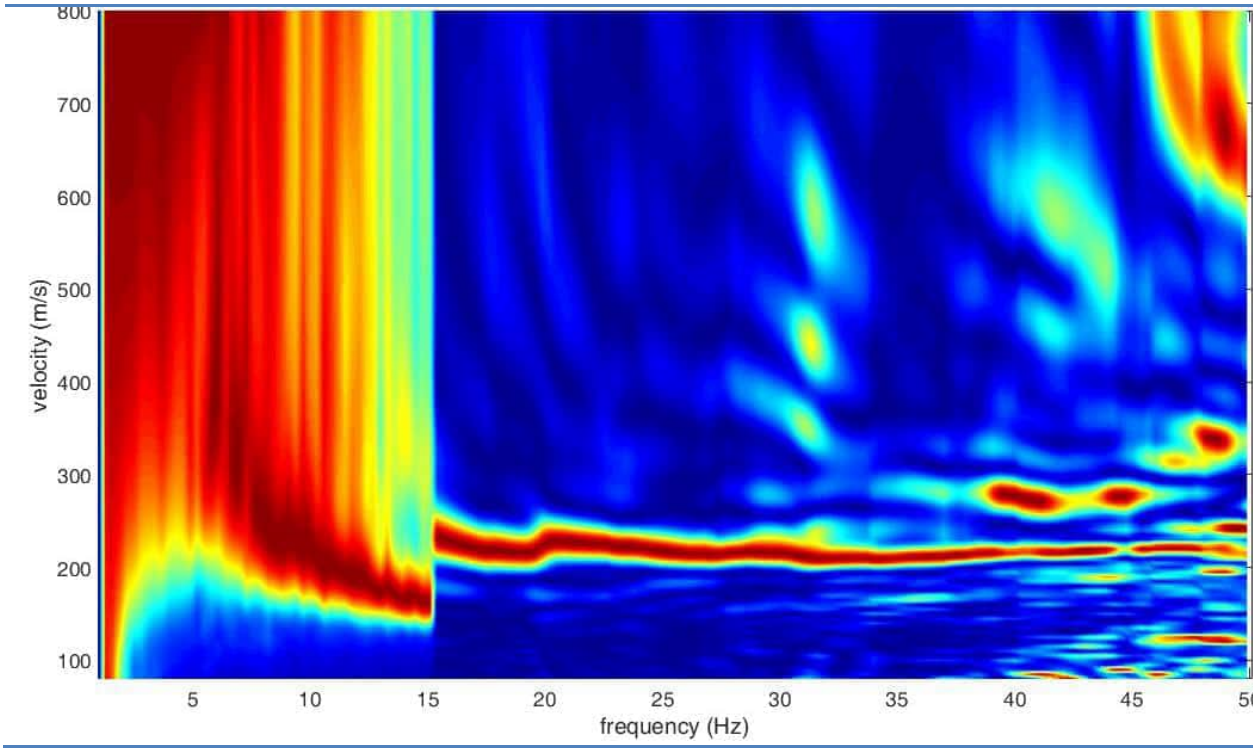


Spettro REMI



Frequenza di unione spettri: 15 Hz

Unione spettro REMI + MASW

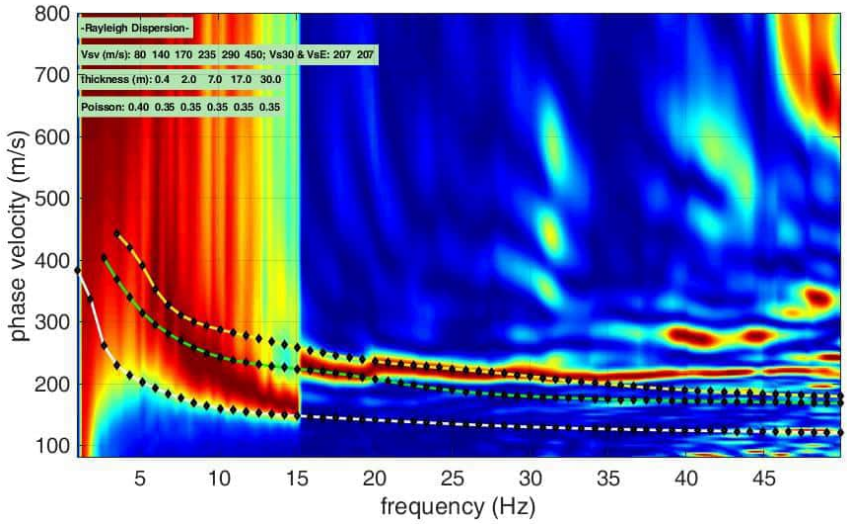


Inversione:

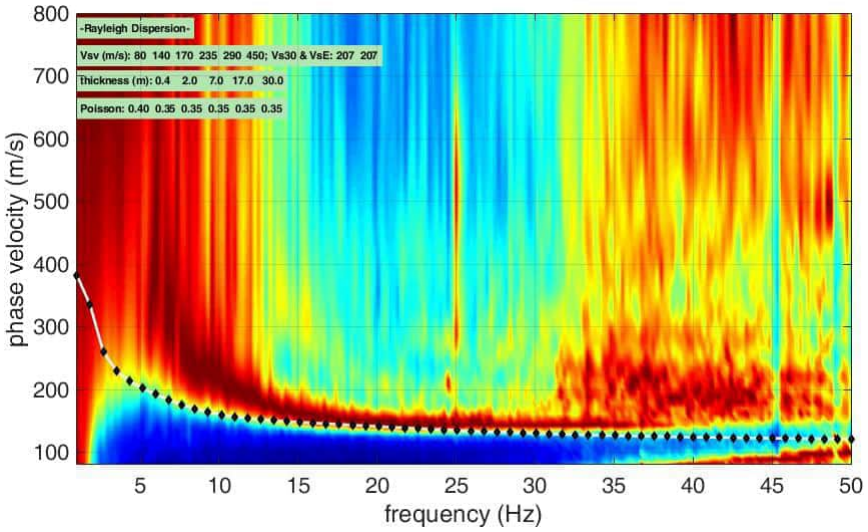
Inversione congiunta MASW + REMI + HVSR – **Durante l'inversione si ha dato maggiore peso alla traccia REMI in quanto meglio definita**

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

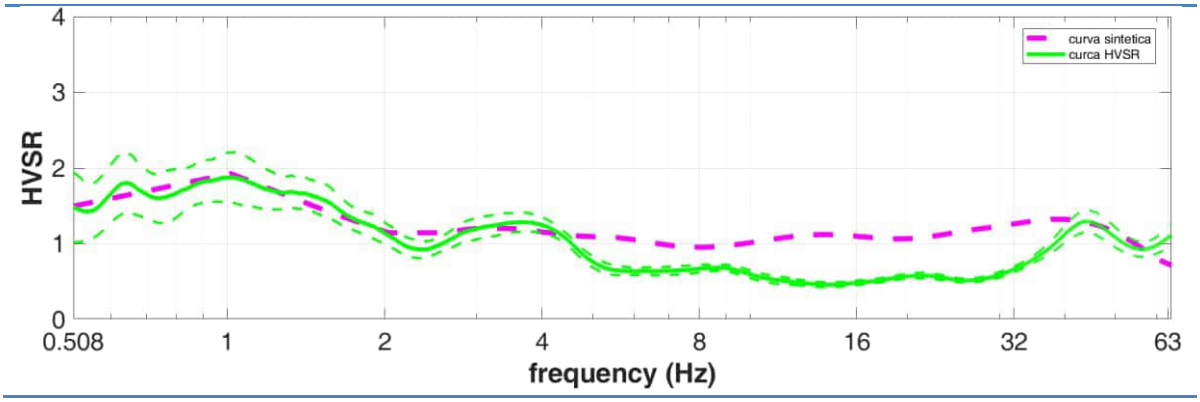
Modello sintetico su spettro REMI + MASW



Modello sintetico su spettro REMI



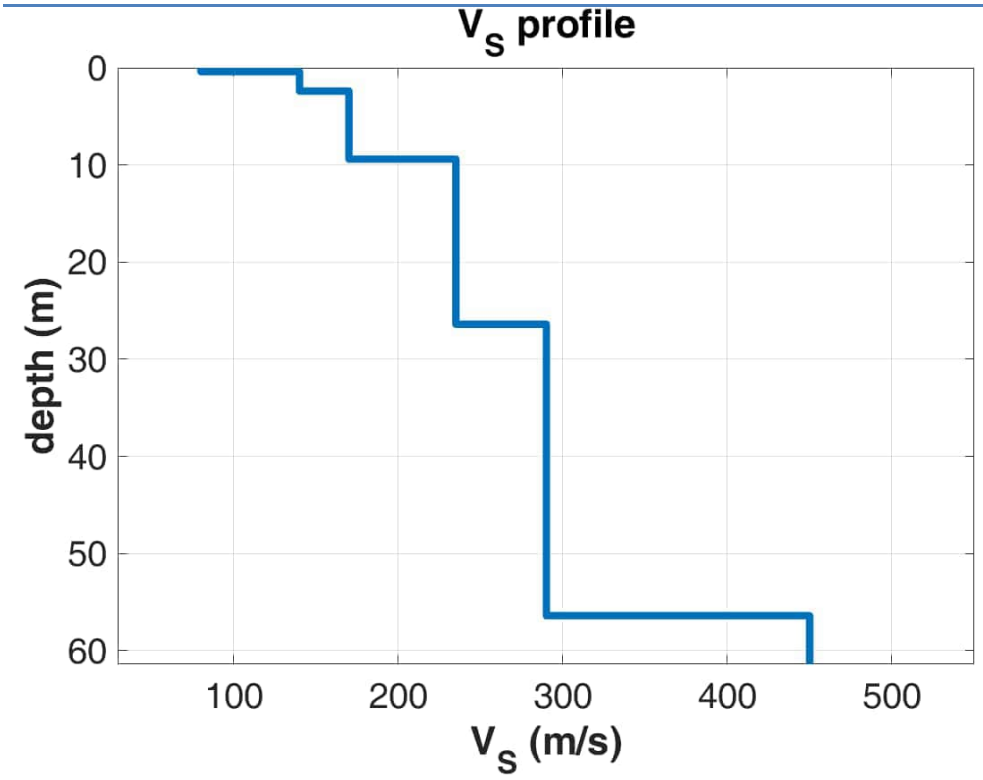
Modello sintetico su spettro HVSR



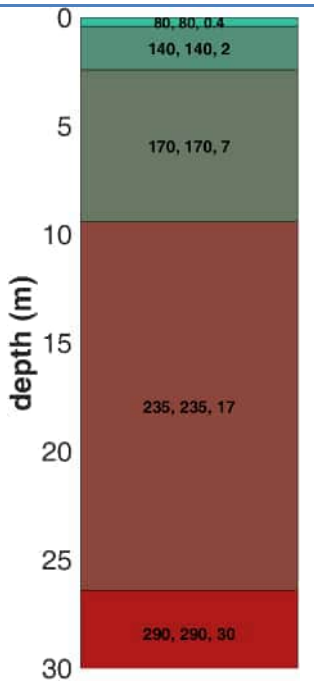
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.4	0.4	196	80
2	2.0	2.4	291	140
3	7.0	9.4	354	170
4	17.0	26.4	489	235
5	30.0	56.4	604	290
6	∞	∞	1150	450

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 207 m/s

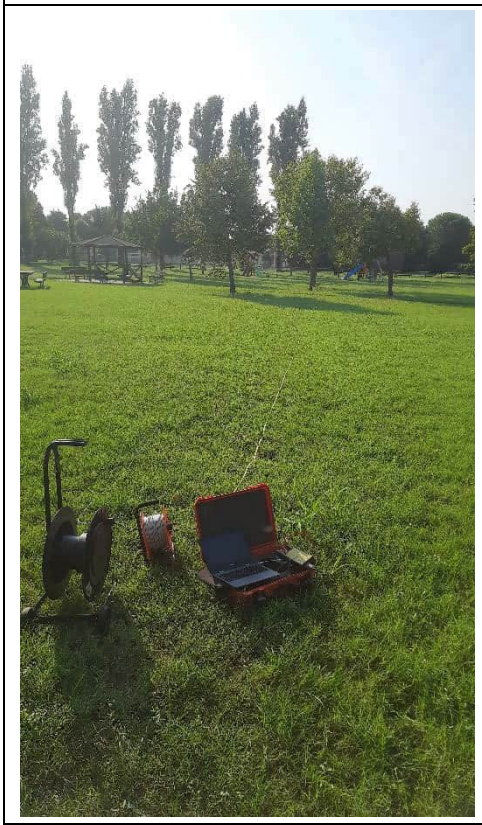
INDAGINE MASW + REMI

Località Parco Tobia Aldini Loc. Pievequinta	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 9.00
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 7	**File** FOR MASW7a_STK.dat; FOR REMI7.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

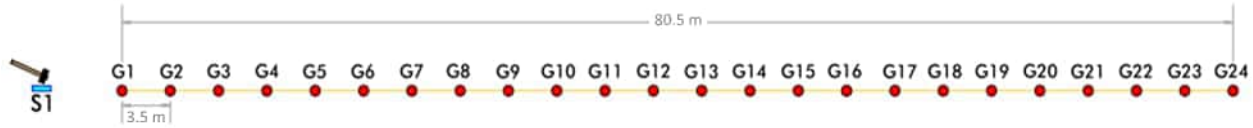
SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	
Tipologia energizzazione:		
☐ Fucile sismico	Modello:	
☒ Mazza	Kg: 5	
☐ Grave	Kg:	
☐ Mazza su trave	Kg:	
Stacking: usate 3 acquisizioni su 3: ☒ FOR MASW7a _0103.drm ☒ FOR MASW7a _0203.drm ☒ FOR MASW7a _0303.drm		

MISURA REMI	
N°canali: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz
Acquisizione: acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti	

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

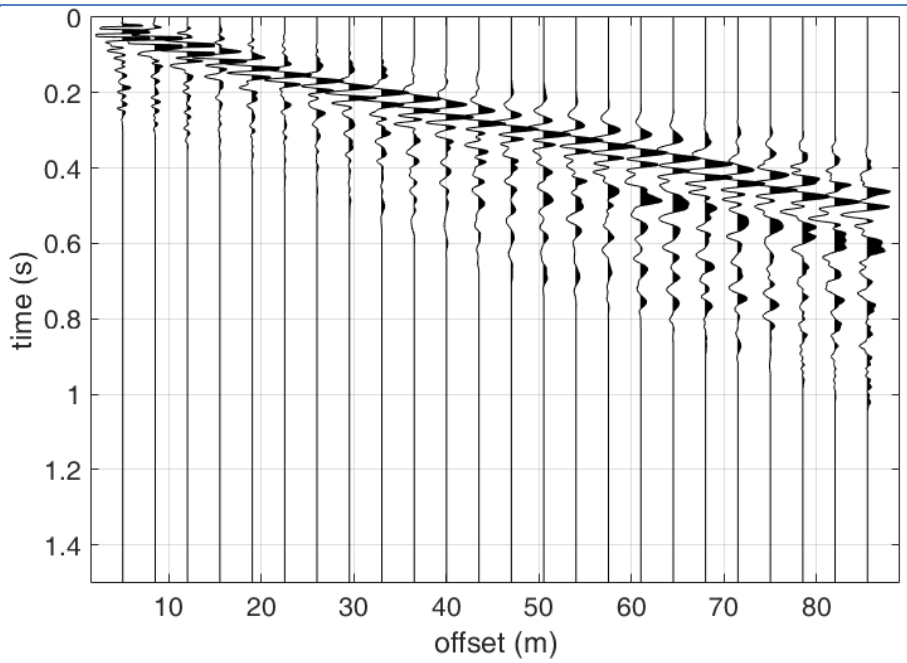
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

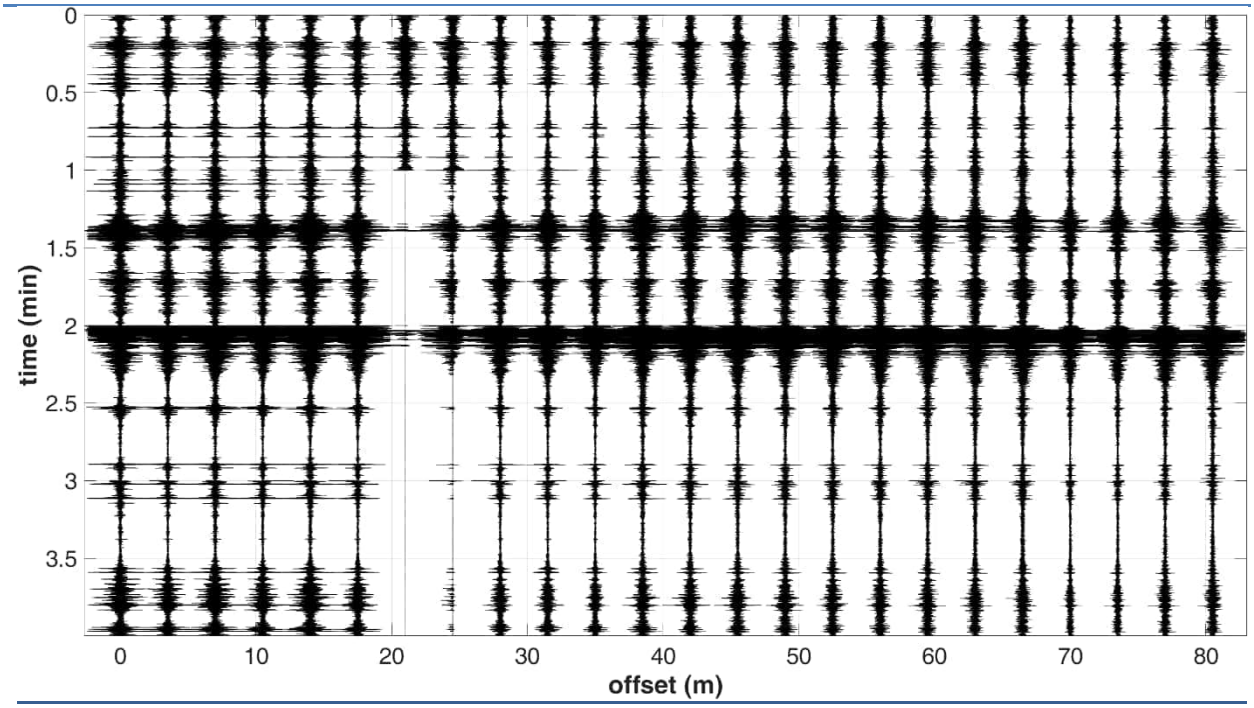
Sismogrammi MASW



REMI

Numero tracce: 24

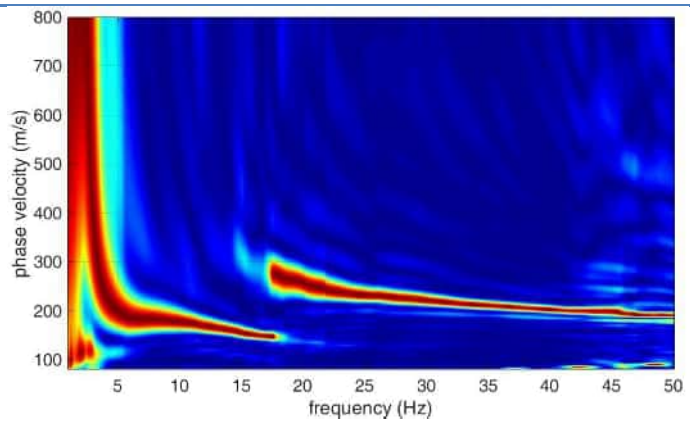
Sismogrammi REMI



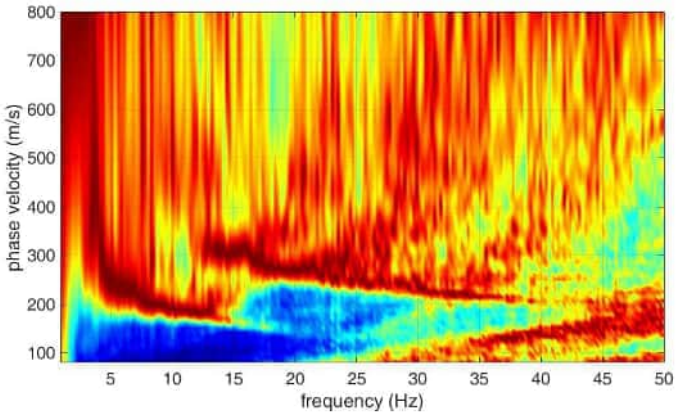
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

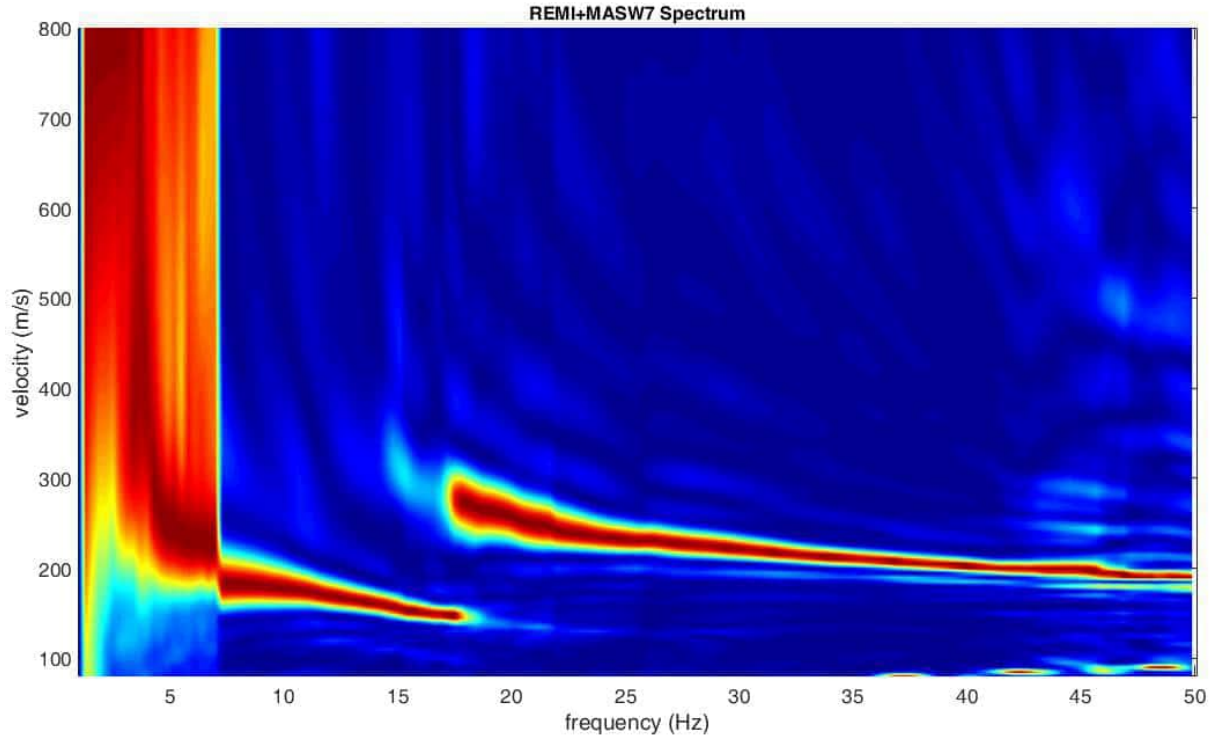


Spettro REMI



Frequenza di unione spettri: 7 Hz

Unione spettro REMI + MASW

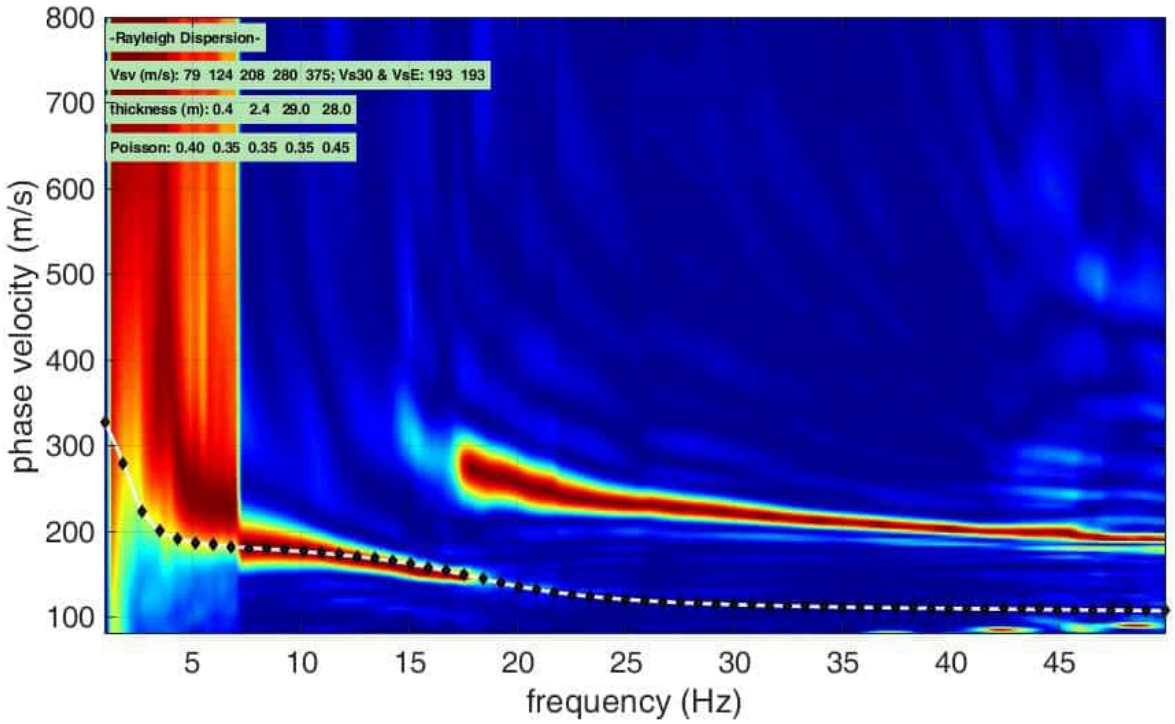


Inversione:

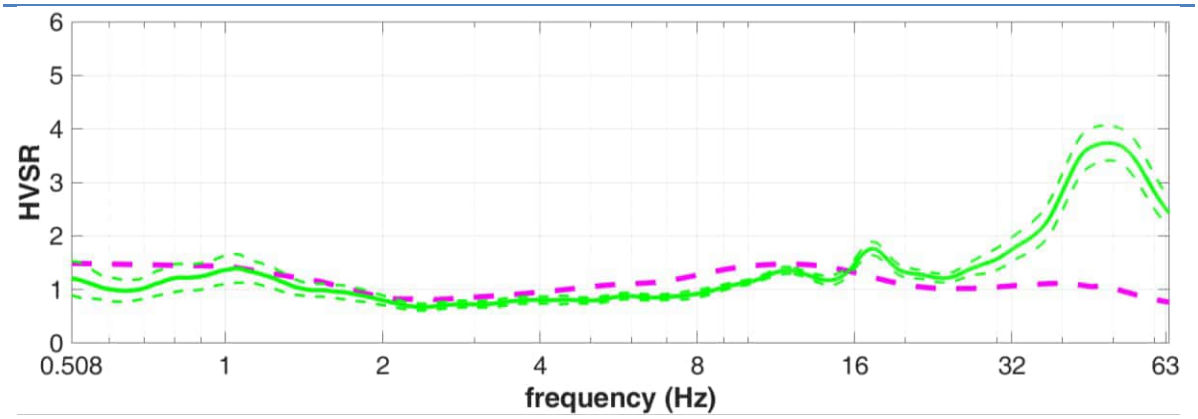
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



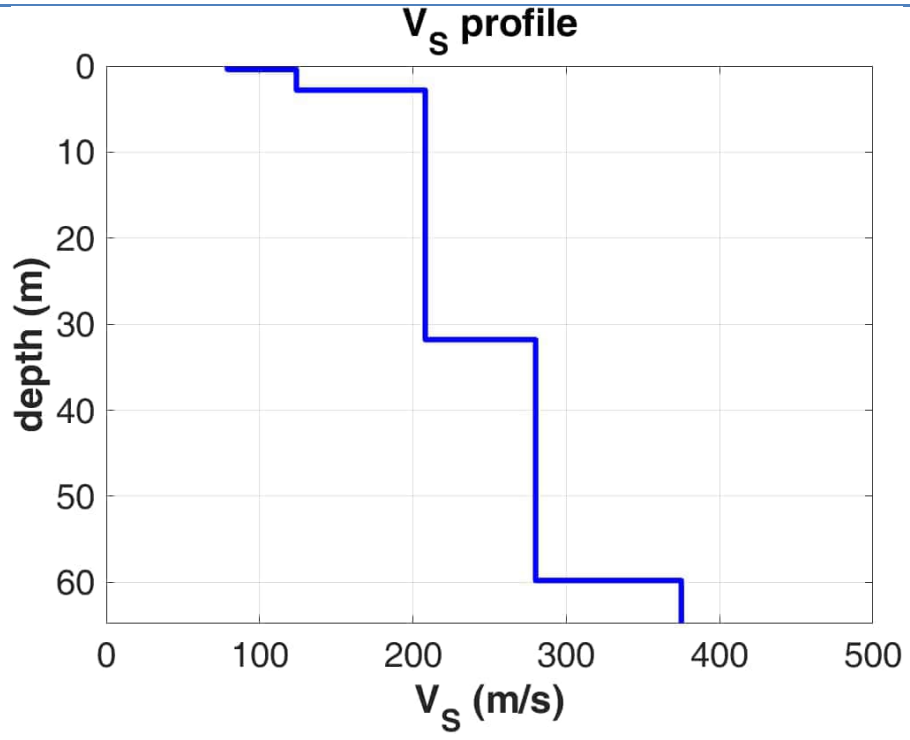
Modello sintetico su spettro HVSR



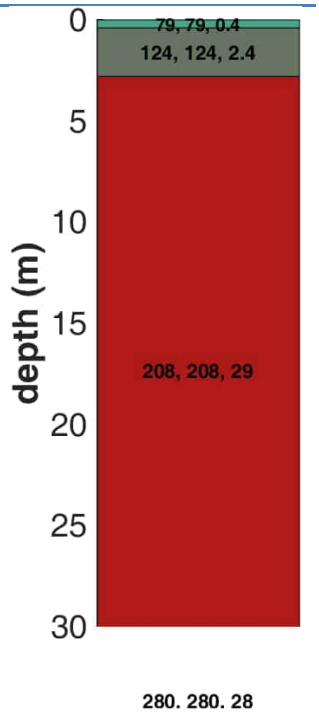
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.4	0.4	194	79
2	2.4	2.8	258	124
3	29.0	31.8	433	208
4	28.0	59.8	583	280
5	∞	∞	1244	375

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 193 m/s

INDAGINE MASW + REMI

Località Via Costiera Loc. La Selva	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 29/08/2024	**Ora** 14.20
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI8	**File** FOR MASW8b_STK.dat; FOR REMI8.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW8b_0103.drm
☒ FOR MASW8b_0203.drm
☒ FOR MASW8b_0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

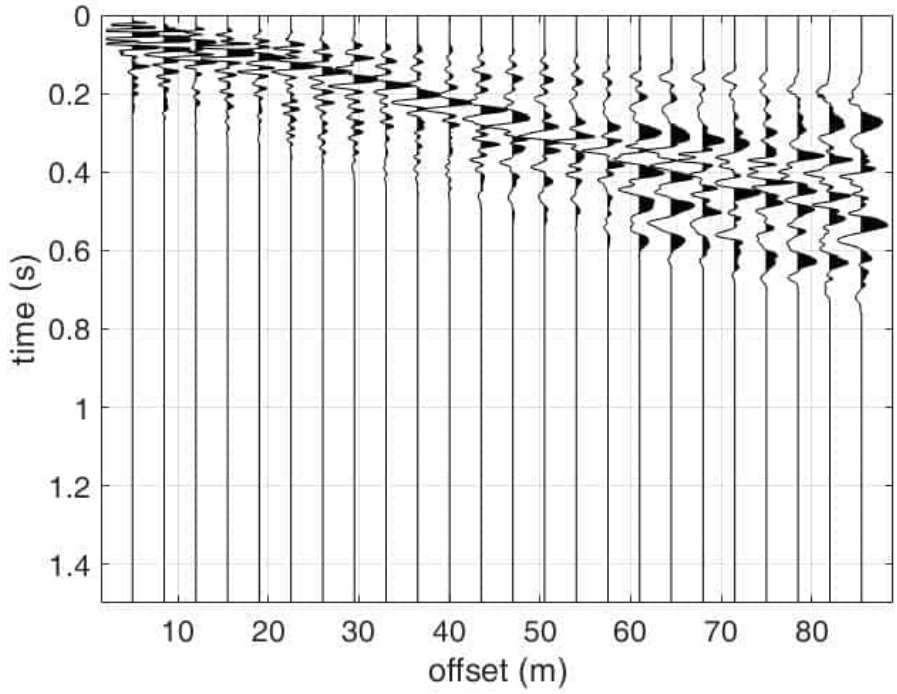
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

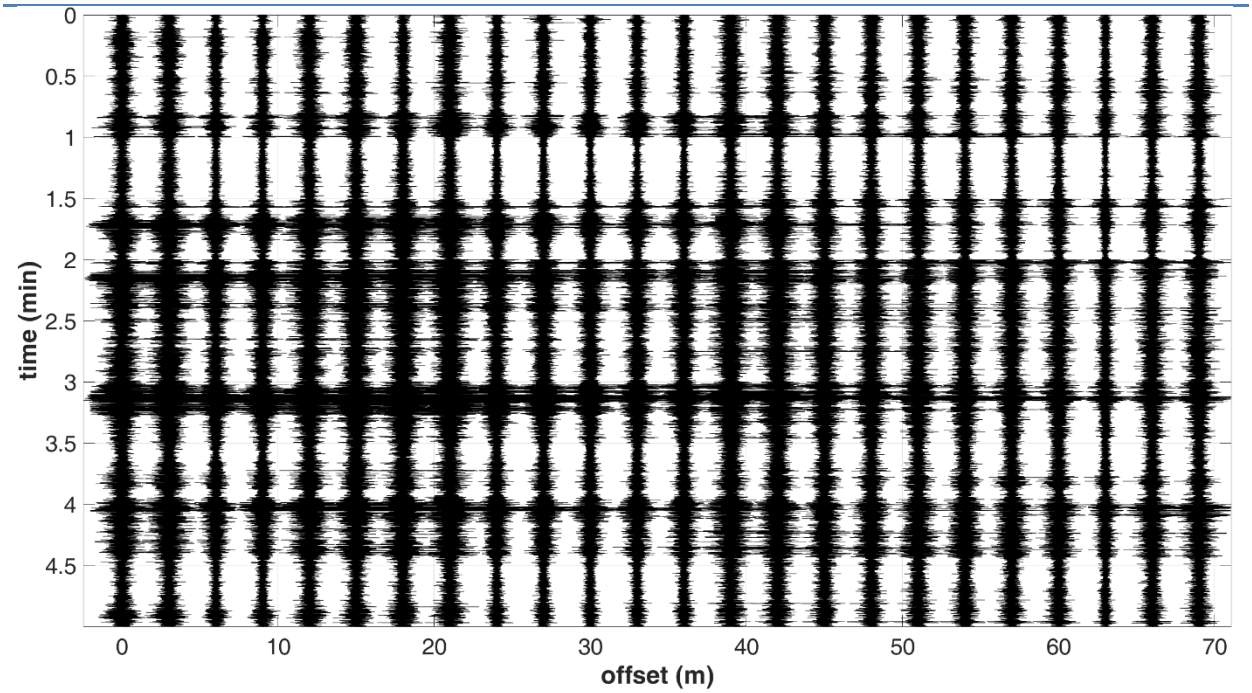
Sismogrammi MASW



REMI

Numero tracce: 24

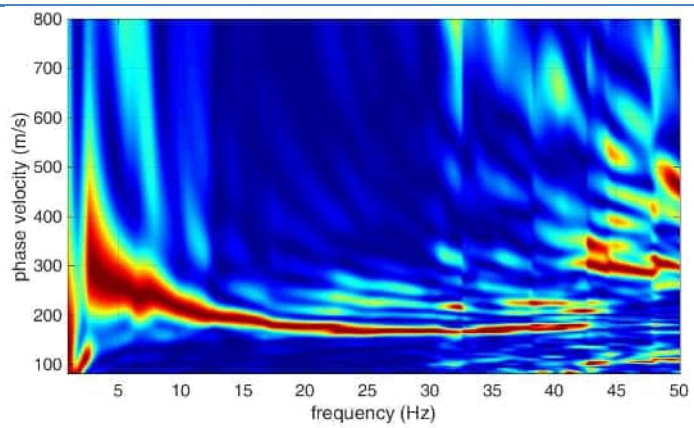
Sismogrammi REMI



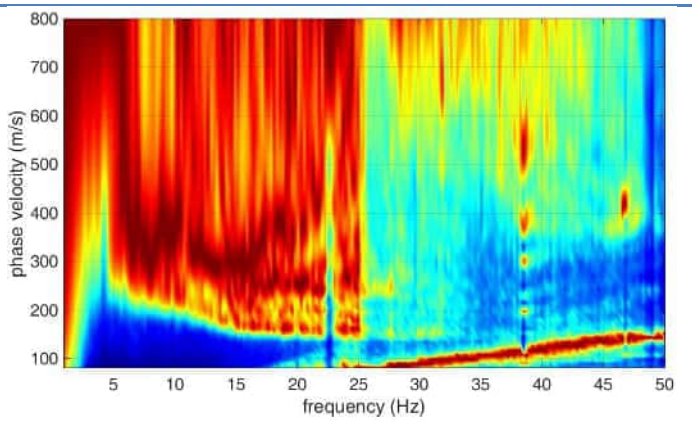
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

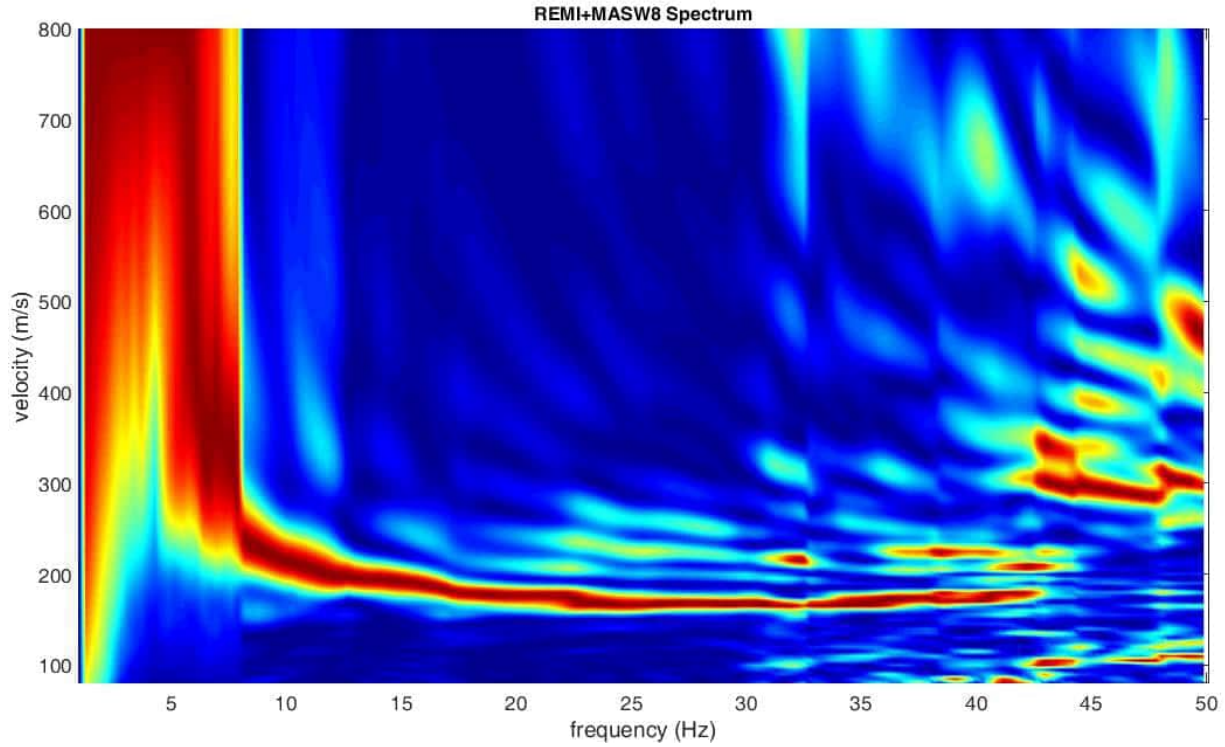


Spettro REMI



Frequenza di unione spettri: 8 Hz

Unione spettro REMI + MASW

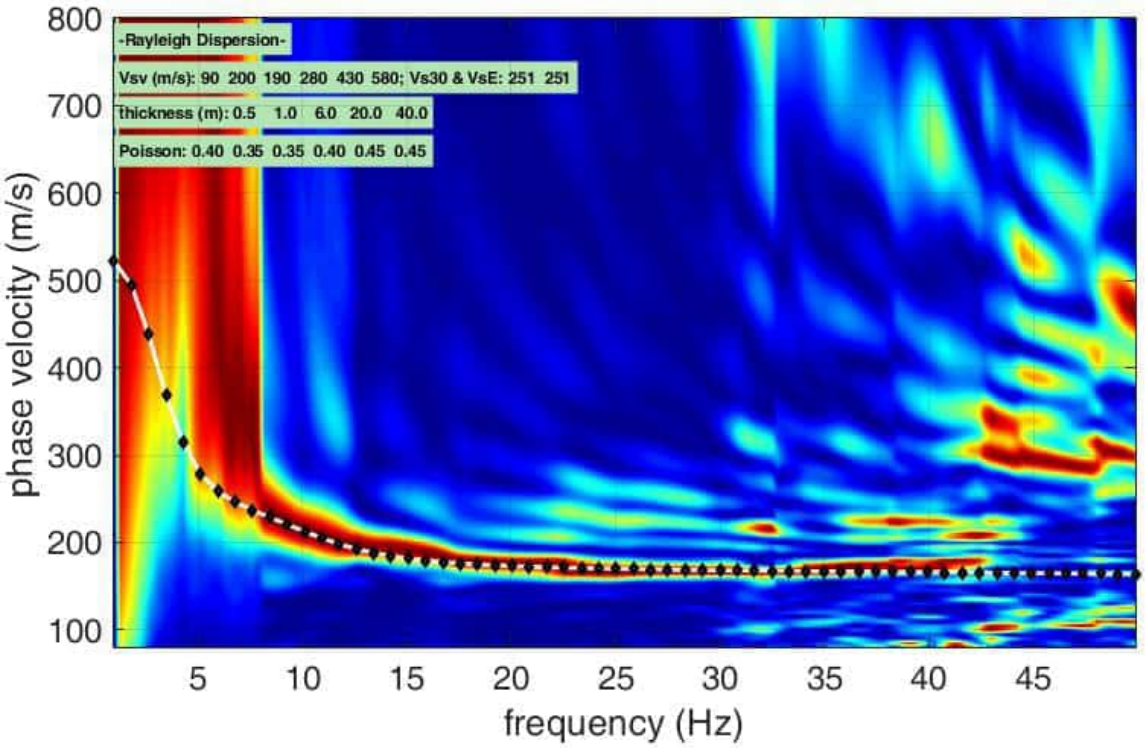


Inversione:

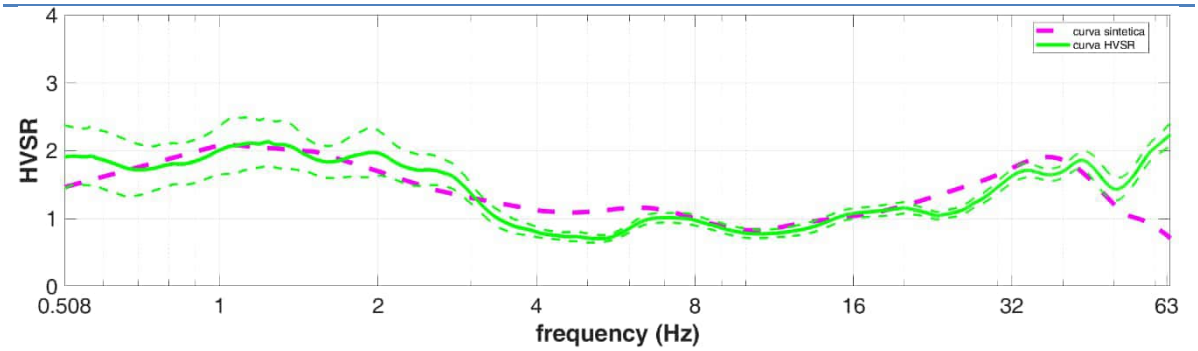
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



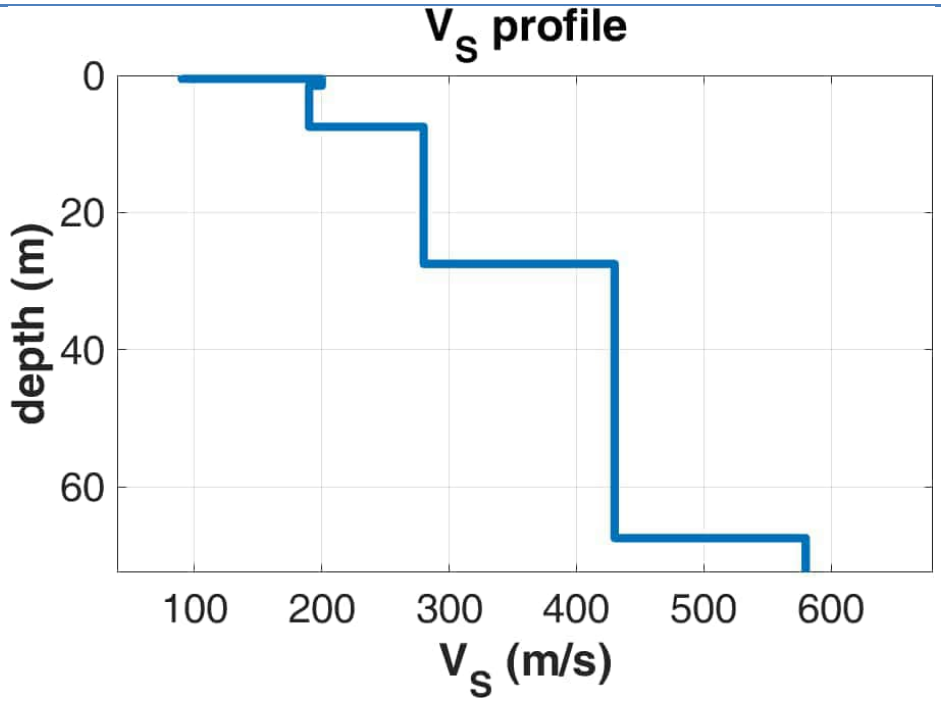
Modello sintetico su spettro HVSR



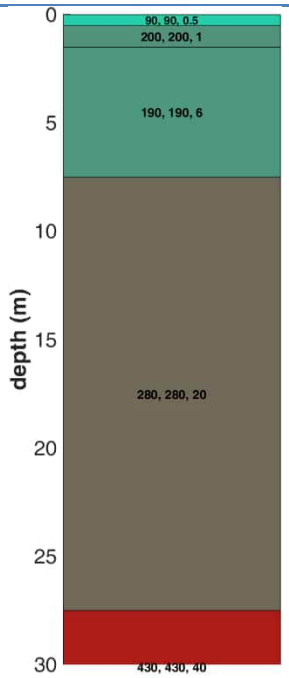
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.5	0.5	221	90
2	1.0	1.5	416	200
3	6.0	7.5	396	190
4	20.0	27.5	686	280
5	40.0	67.5	1426	430
6	∞	∞	1924	580

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 251 m/s

INDAGINE MASW + REMI

Località Via Emilia Loc. Ronco	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 29/08/2024	**Ora** 14.20
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 9	**File** FOR MASW9a_STK.dat; FOR REMI9.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



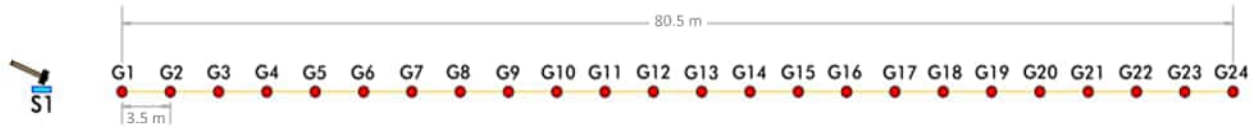
MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	
Tipologia energizzazione:		
☐ Fucile sismico	Modello:	
☒ Mazza	Kg: 5	
☐ Grave	Kg:	
☐ Mazza su trave	Kg:	

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW9a _0103.drm
☒ FOR MASW9a _0203.drm
☒ FOR MASW9a _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

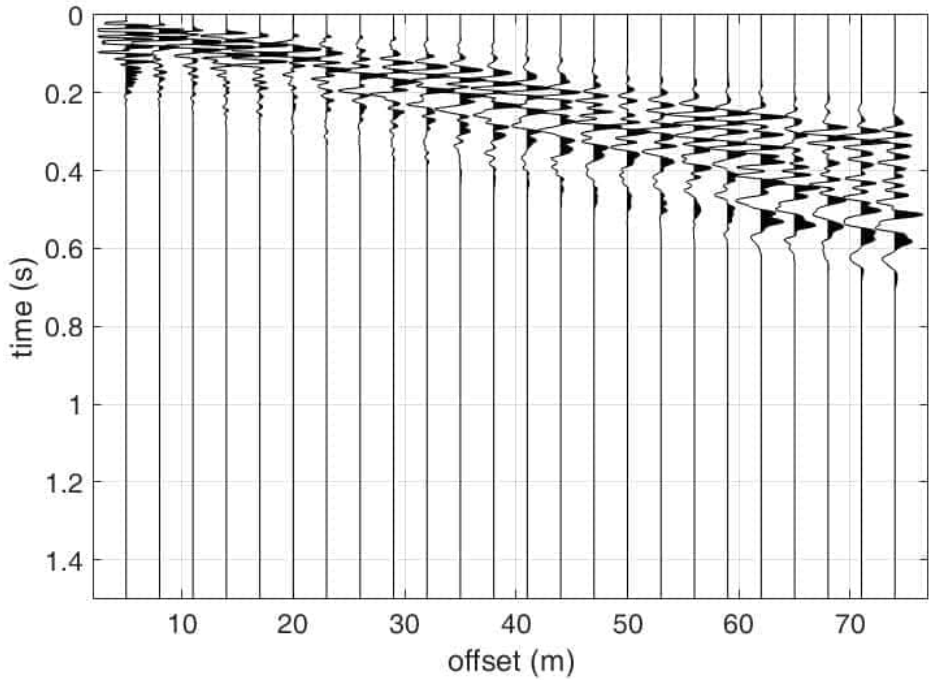
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

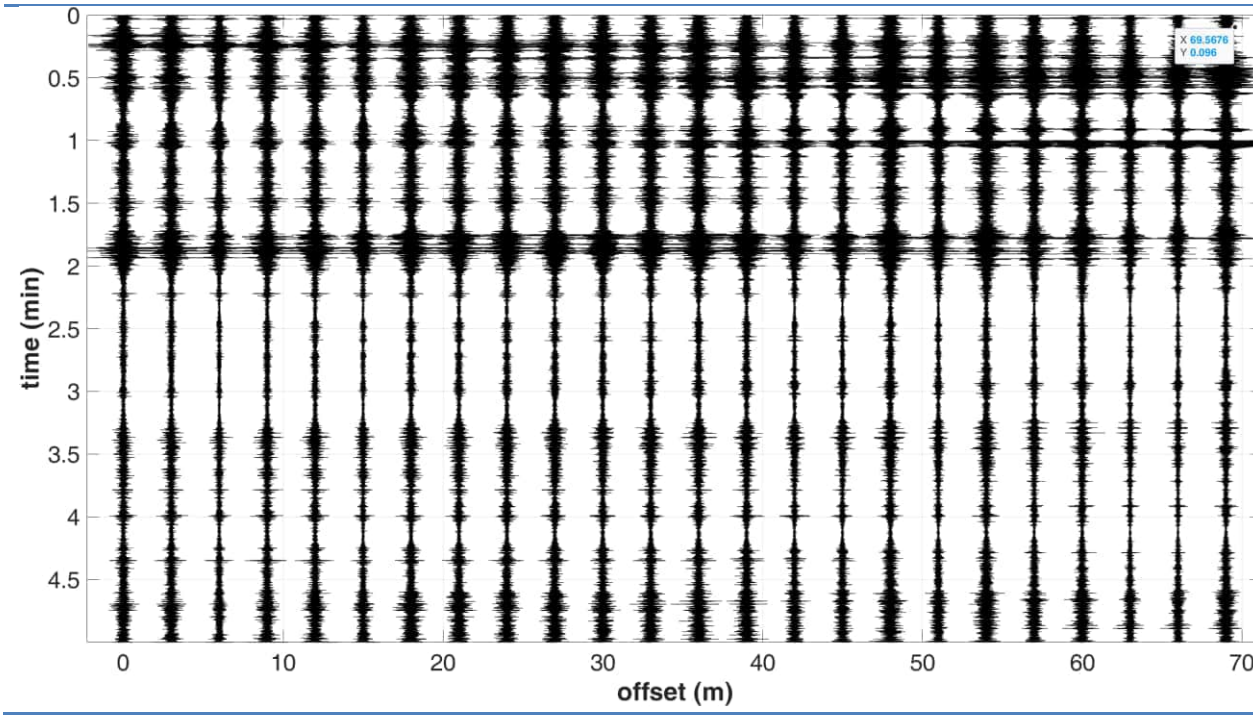
Sismogrammi MASW



REMI

Numero tracce: 24

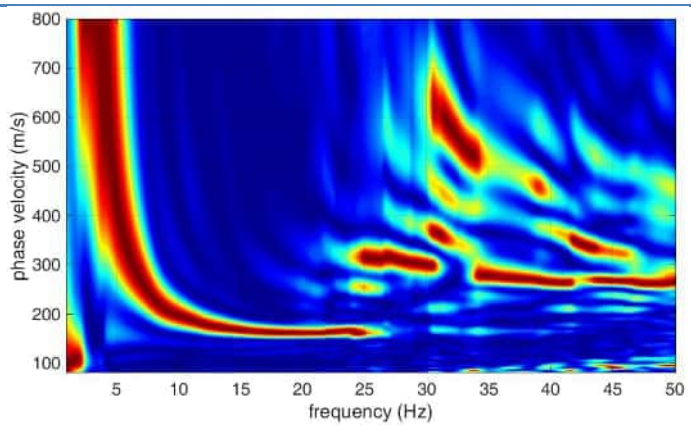
Sismogrammi REMI



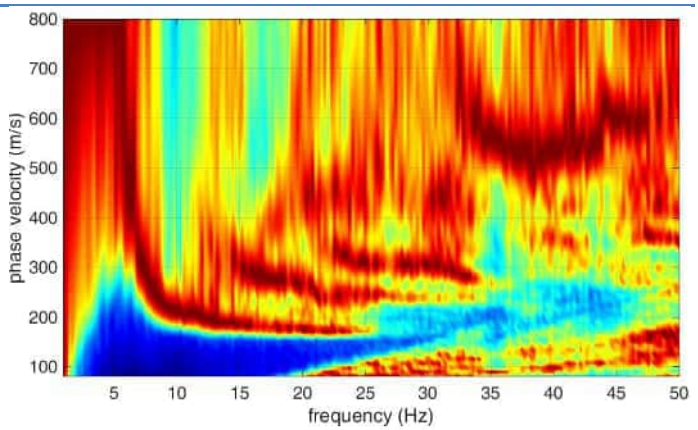
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

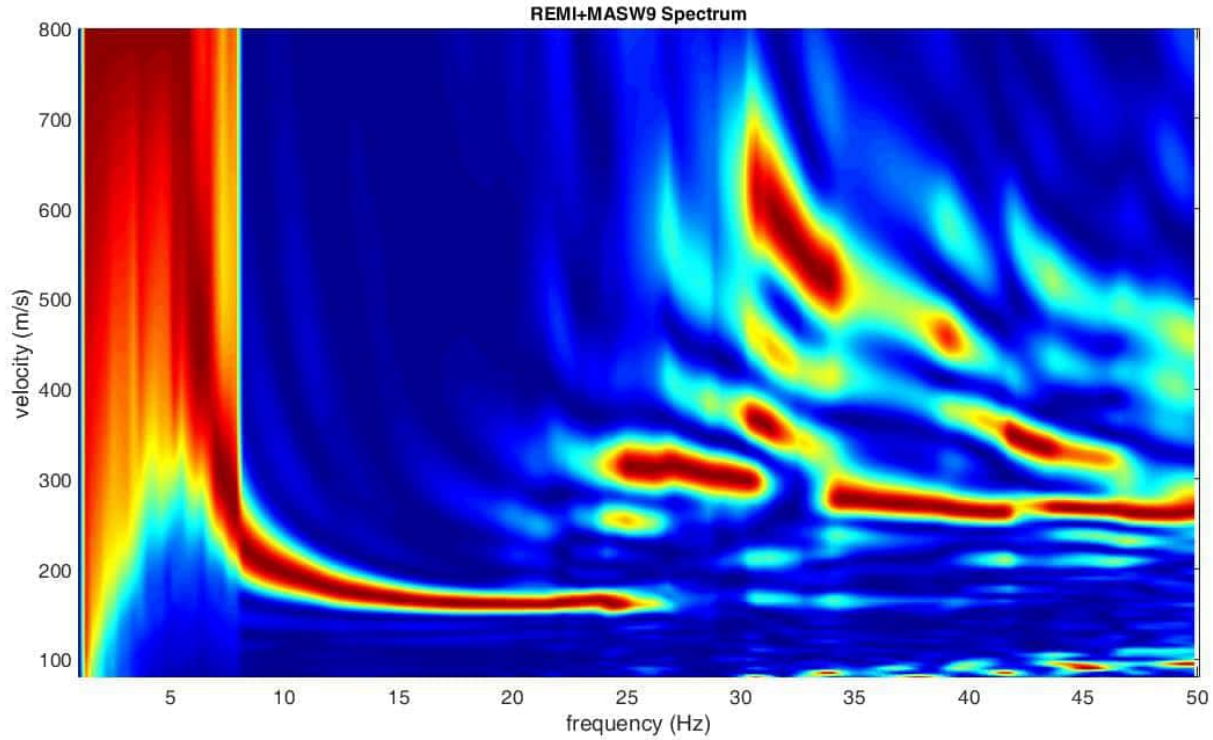


Spettro REMI



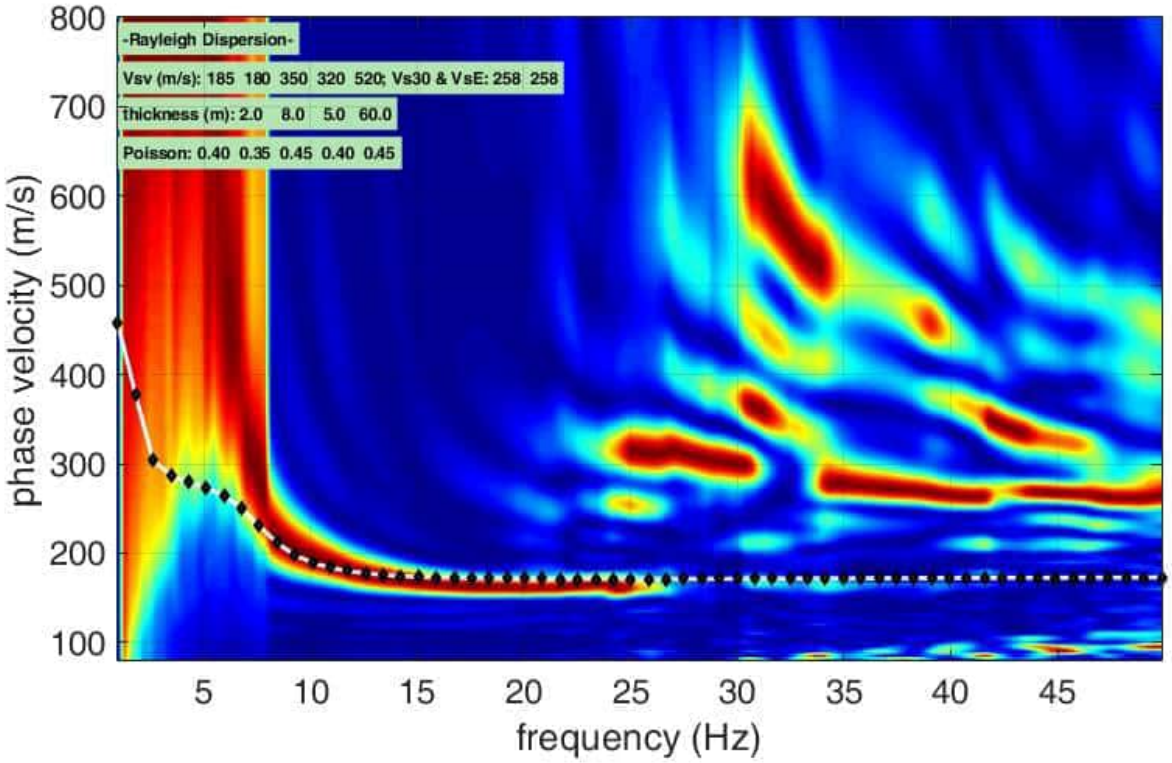
Frequenza di unione spettri: 8 Hz

Unione spettro REMI + MASW

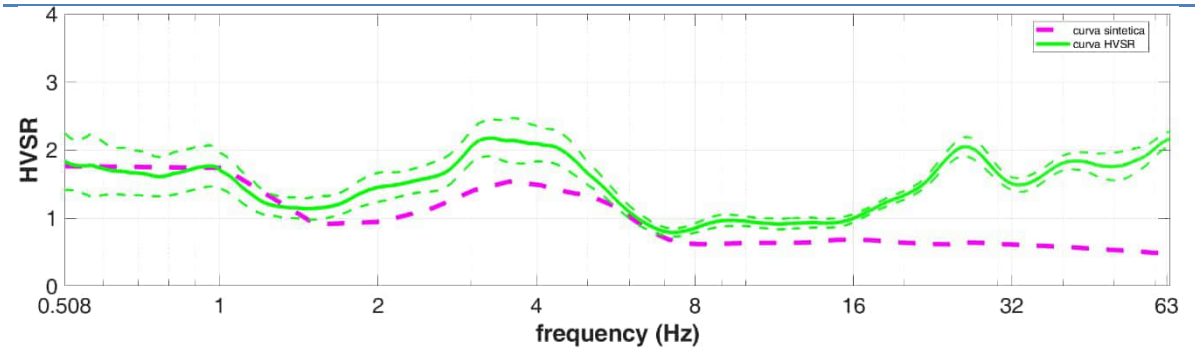


Inversione:
Inversione congiunta MASW + REMI + HVSR

Modello sintetico su spettro REMI + MASW



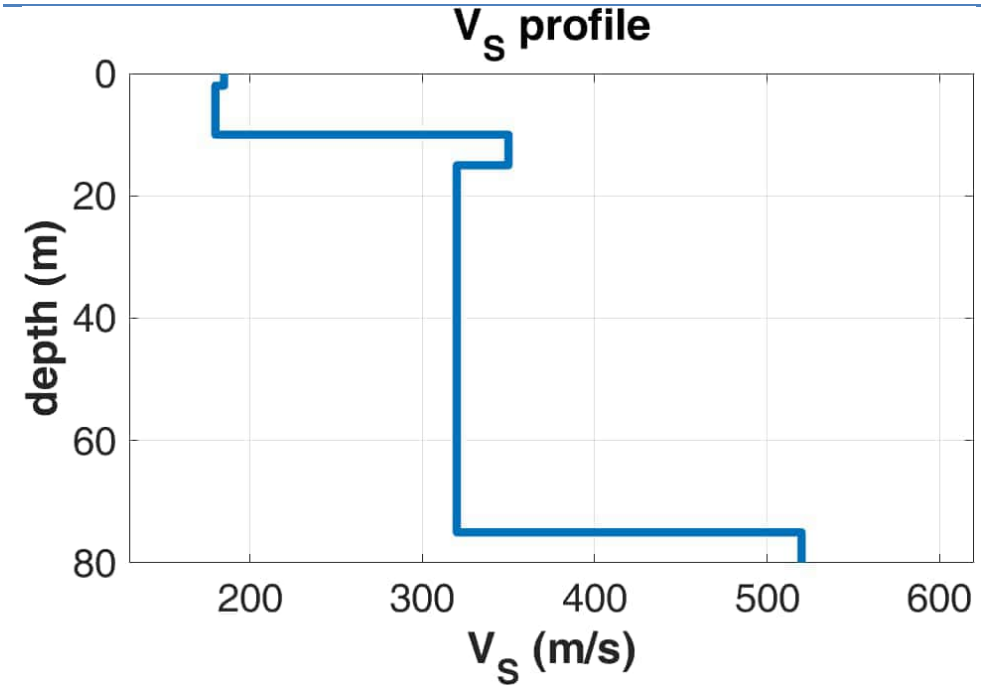
Modello sintetico su spettro HVSR



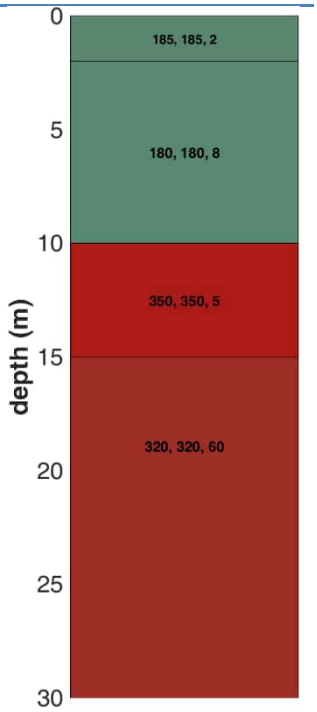
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	2.0	2.0	454	185
2	8.0	10.0	375	180
3	5.0	15.0	1161	350
4	60.0	75.0	784	320
5	∞	∞	1725	520

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 258 m/s

INDAGINE MASW + REMI

Località Via Balestra Loc. Carpena	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 03/09/2024	**Ora** 16.00
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 10	**File** FOR MASW10a_STK.dat; FOR REMI10.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



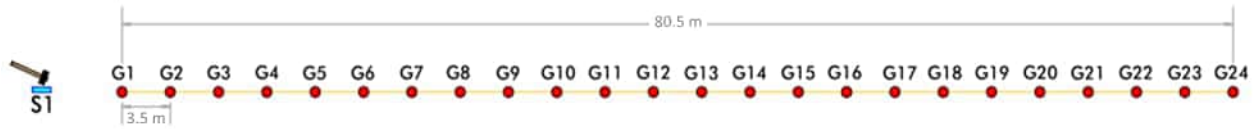
MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	
Tipologia energizzazione:		
☐ Fucile sismico	Modello:	
☒ Mazza	Kg: 5	
☐ Grave	Kg:	
☐ Mazza su trave	Kg:	

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW10a _0103.drm
☒ FOR MASW10a _0203.drm
☒ FOR MASW10a _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

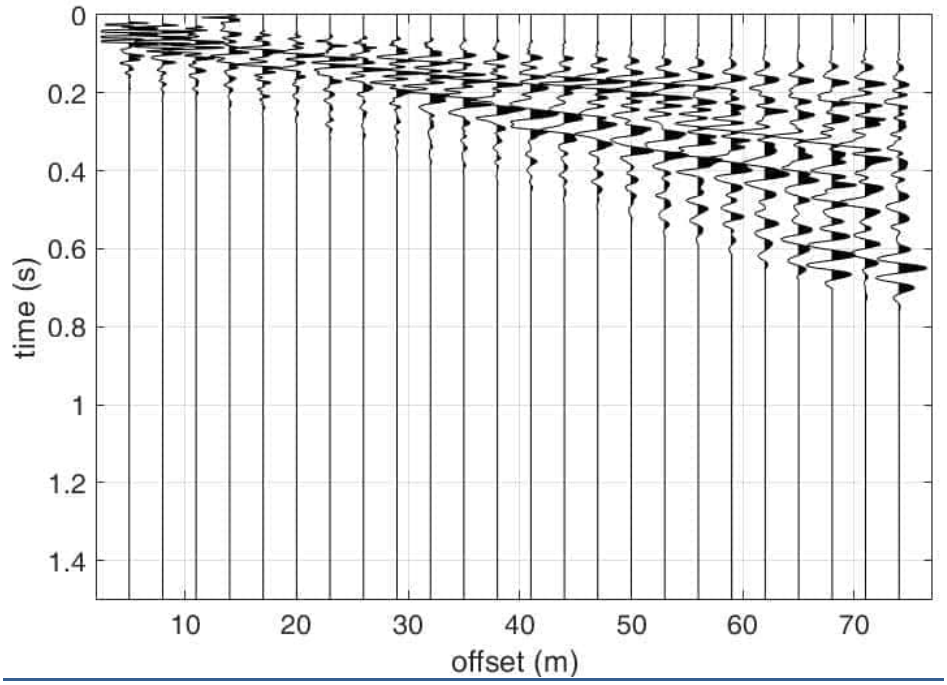
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

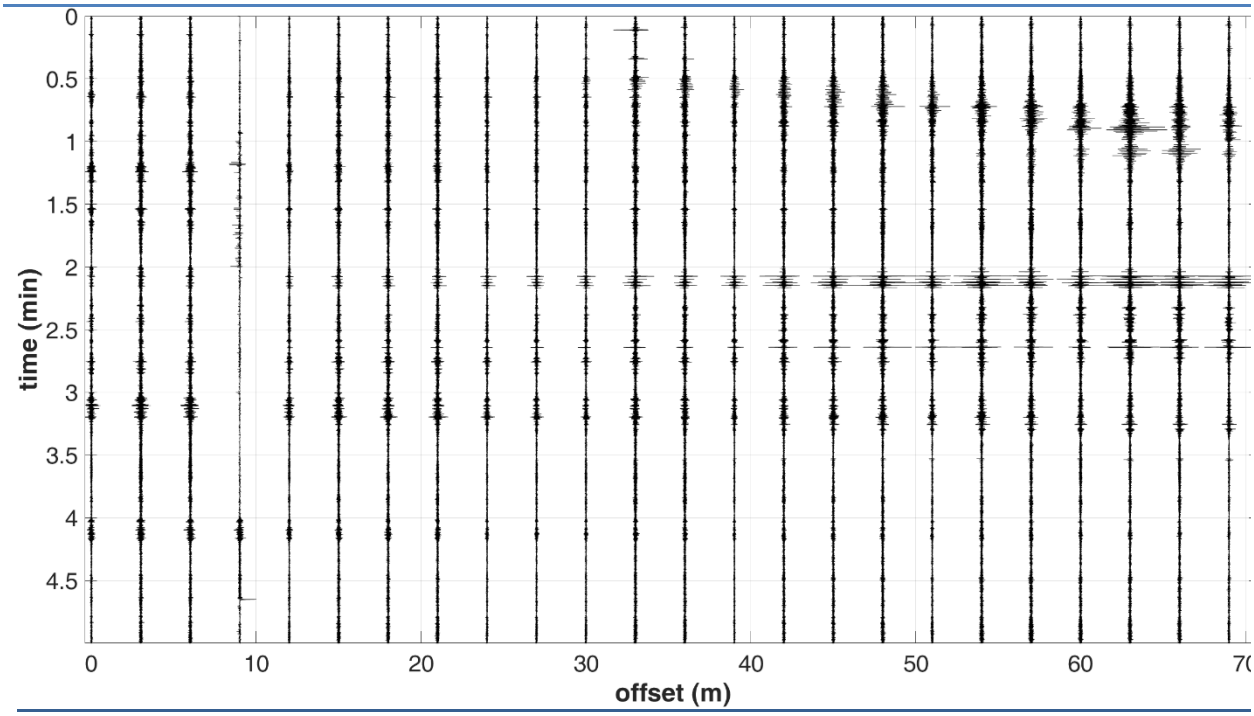
Sismogrammi MASW



REMI

Numero tracce: 24

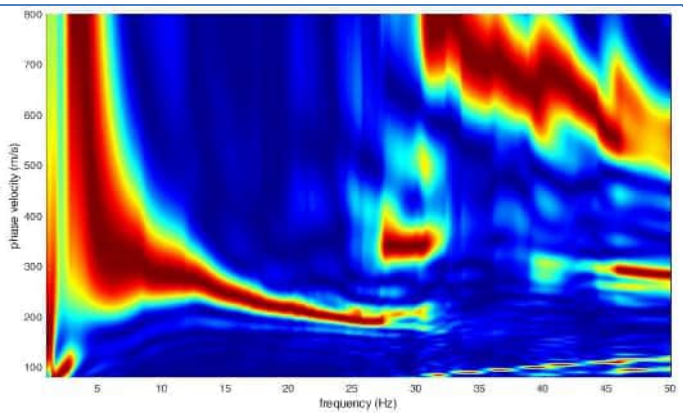
Sismogrammi REMI



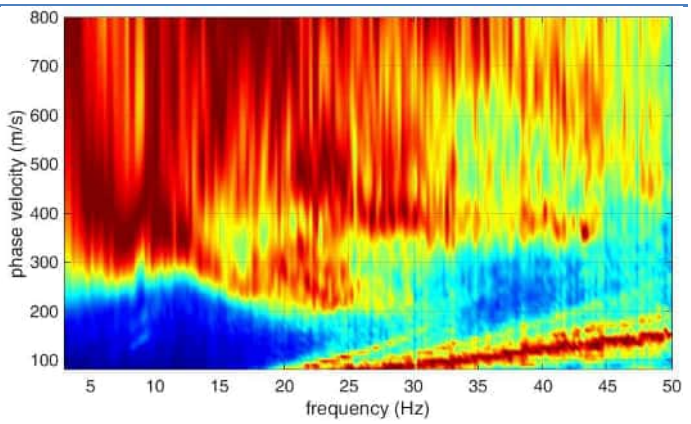
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

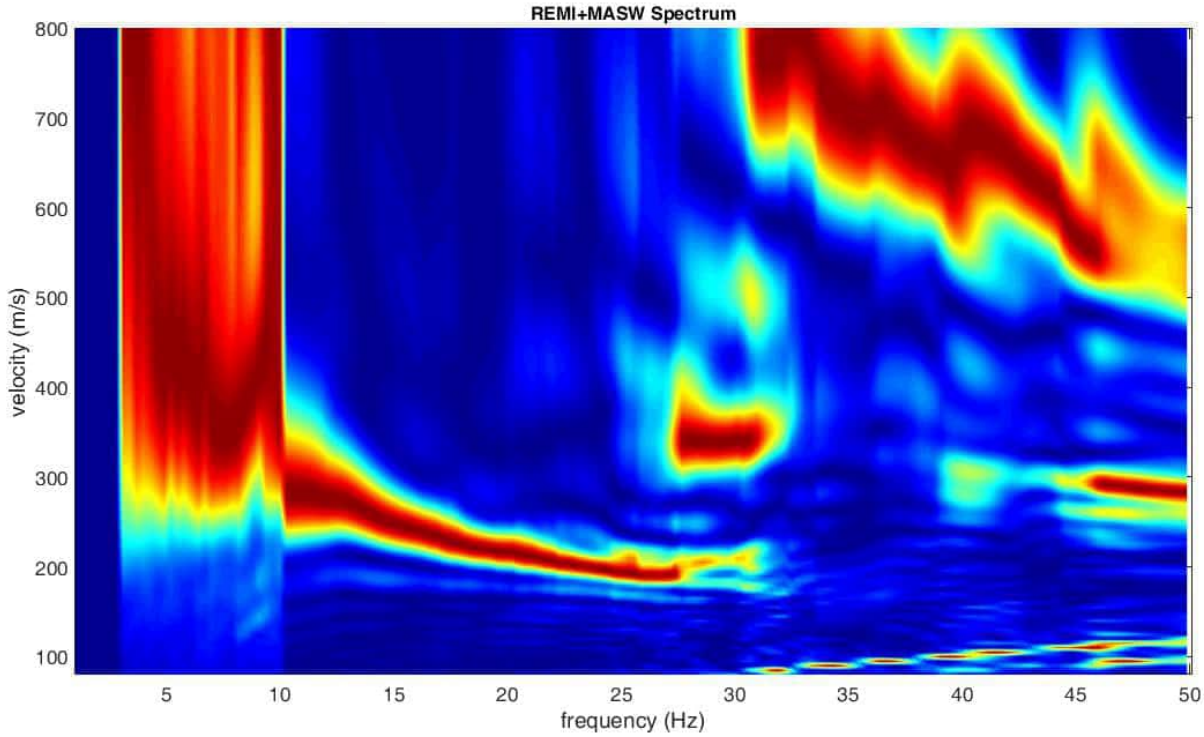


Spettro REMI



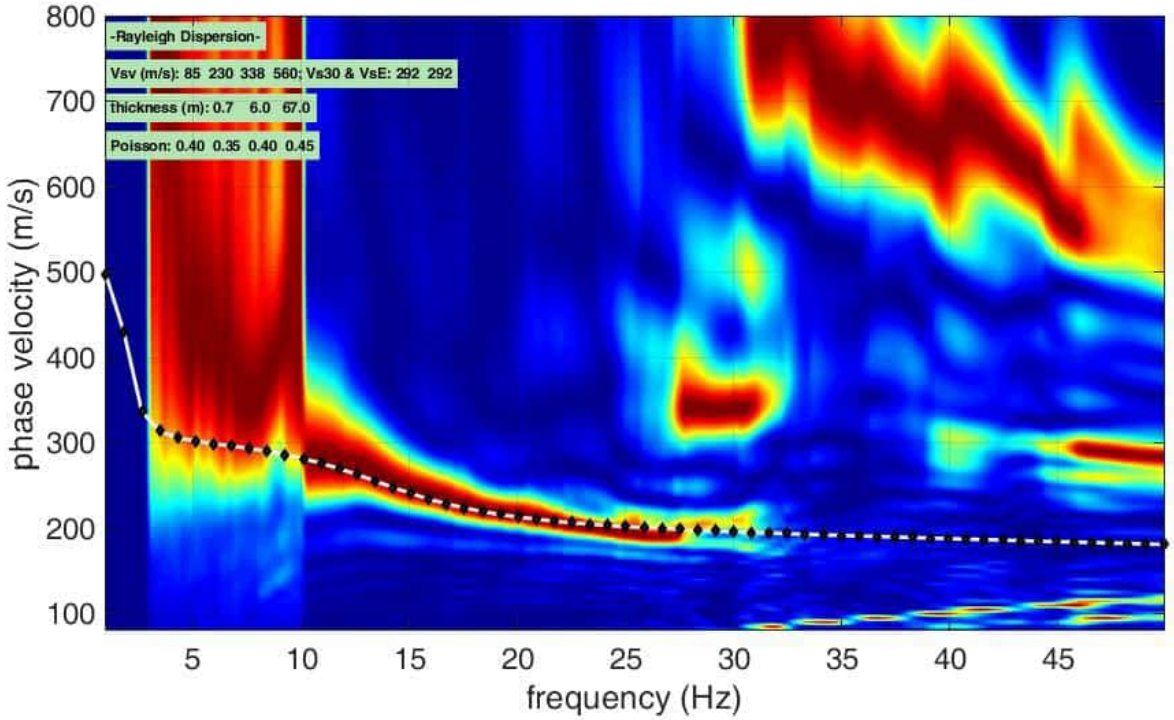
Frequenza di unione spettri: 10 Hz

Unione spettro REMI + MASW

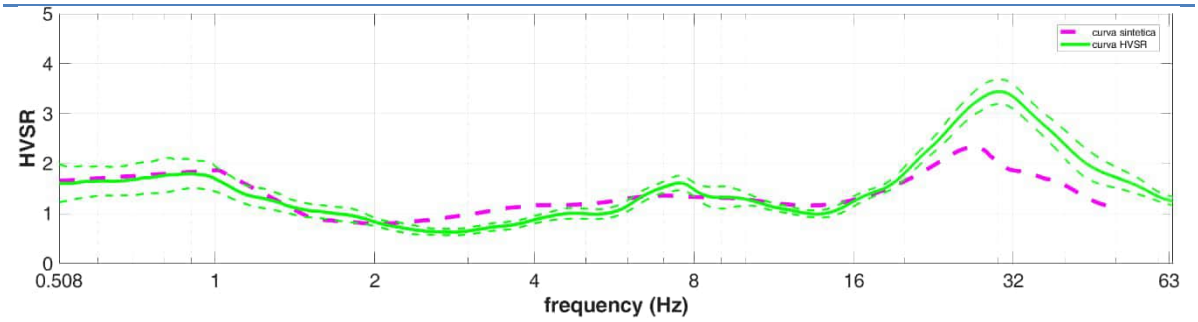


Inversione:
Inversione congiunta MASW + REMI + HVSR

Modello sintetico su spettro REMI + MASW



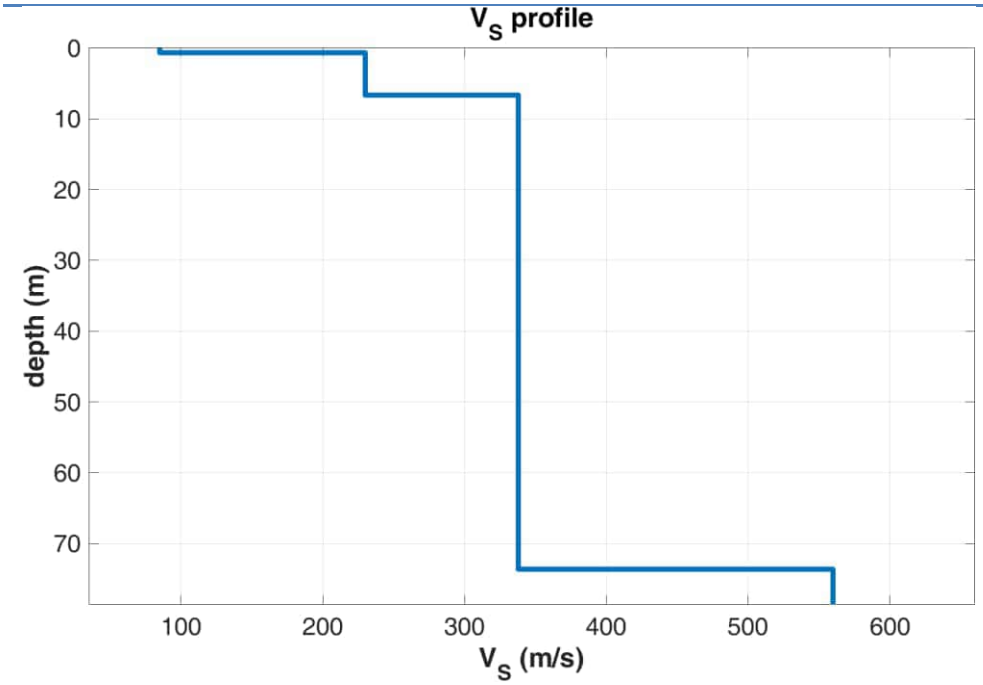
Modello sintetico su spettro HVSR



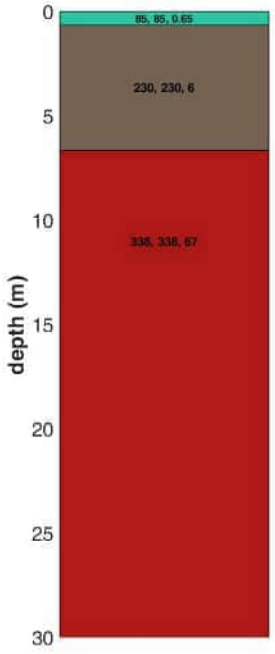
Modello sismostratigrafico:
N° di strati: 4

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.7	0.7	208	85
2	6.0	6.7	479	230
3	67.0	73.7	828	338
4	∞	∞	1857	560

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 292 m/s

INDAGINE MASW + REMI

Località Parco Natale Puglisi	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 12.30
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 11	**File** FOR MASW11b_STK.dat; FOR REMI11.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 2 m
Lunghezza stendimento (m): 46 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	
Tipologia energizzazione:		
☐ Fucile sismico	Modello:	
☒ Mazza	Kg: 5	
☐ Grave	Kg:	
☐ Mazza su trave	Kg:	

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW11b _0103.drm
☒ FOR MASW11b _0203.drm
☒ FOR MASW11b _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 2 m
Lunghezza stendimento (m): 46	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

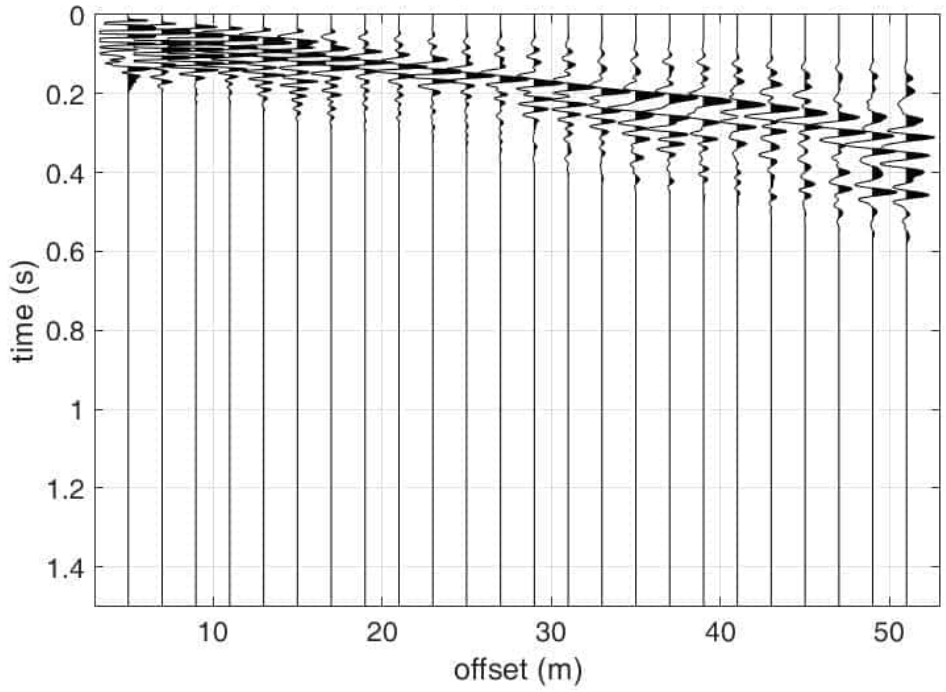
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

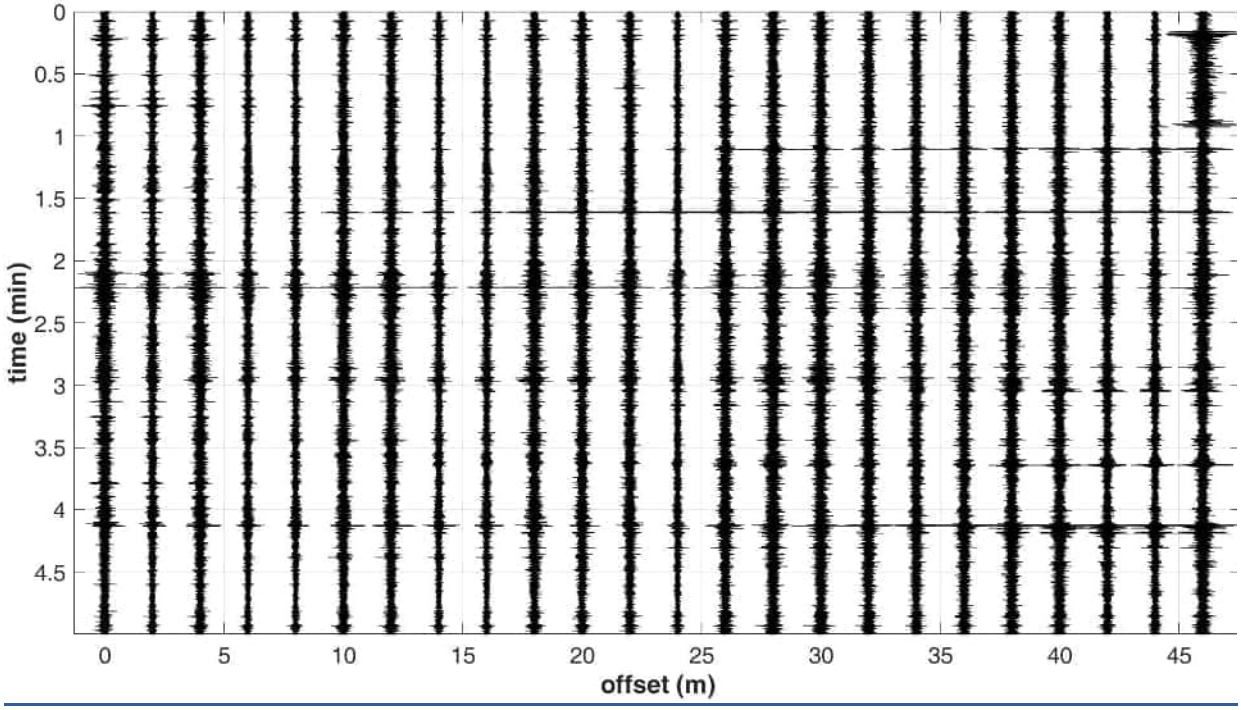
Sismogrammi MASW



REMI

Numero tracce: 24

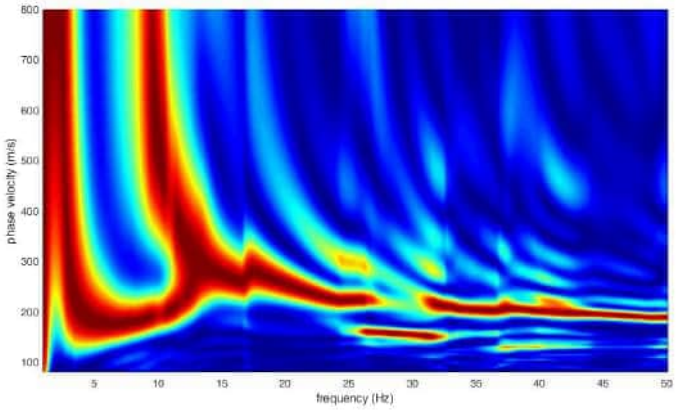
Sismogrammi REMI



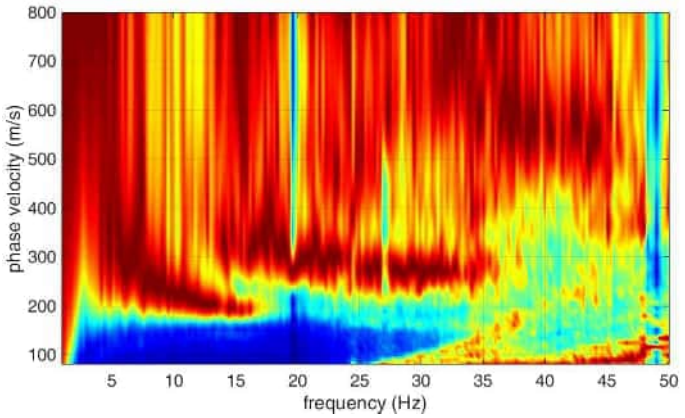
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

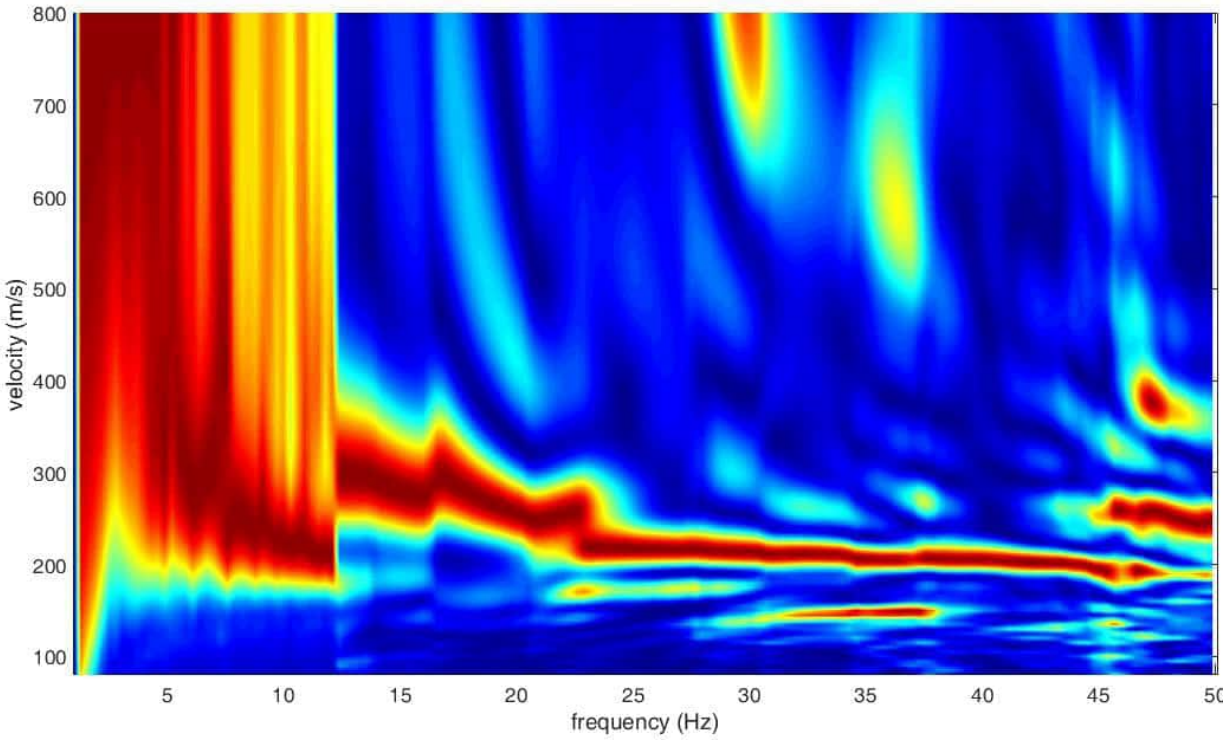


Spettro REMI



Frequenza di unione spettri: 12 Hz

Unione spettro REMI + MASW

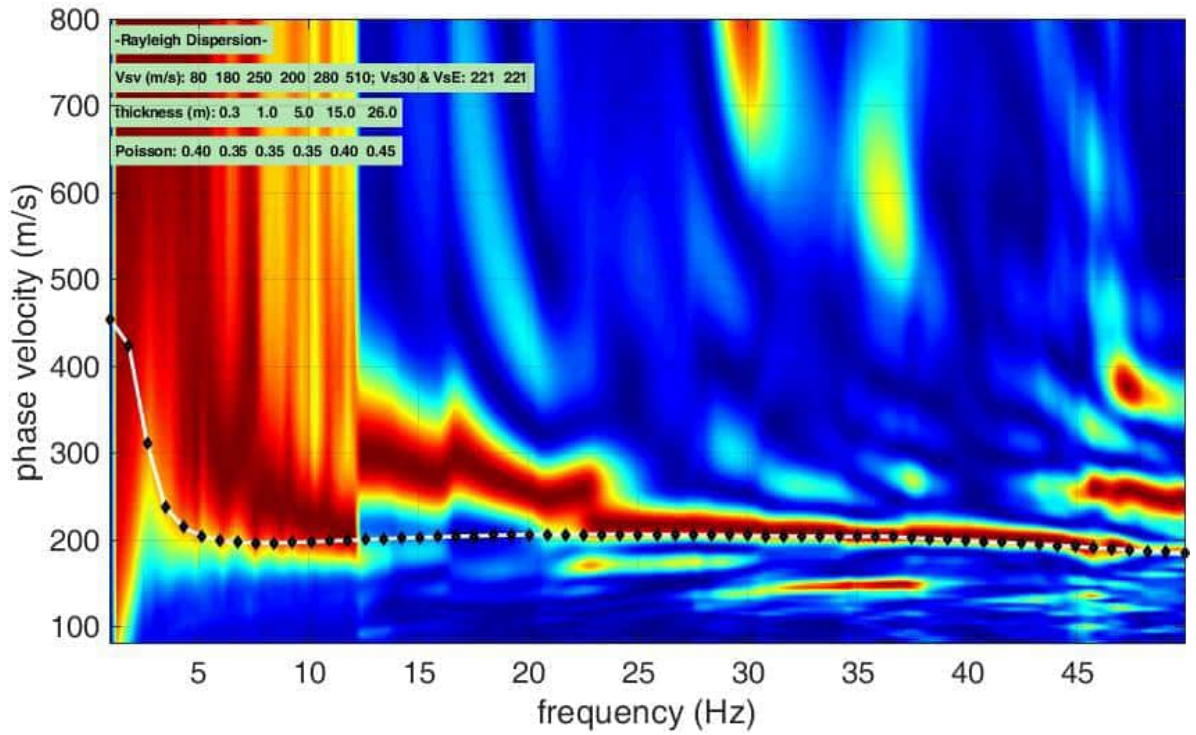


Inversione:

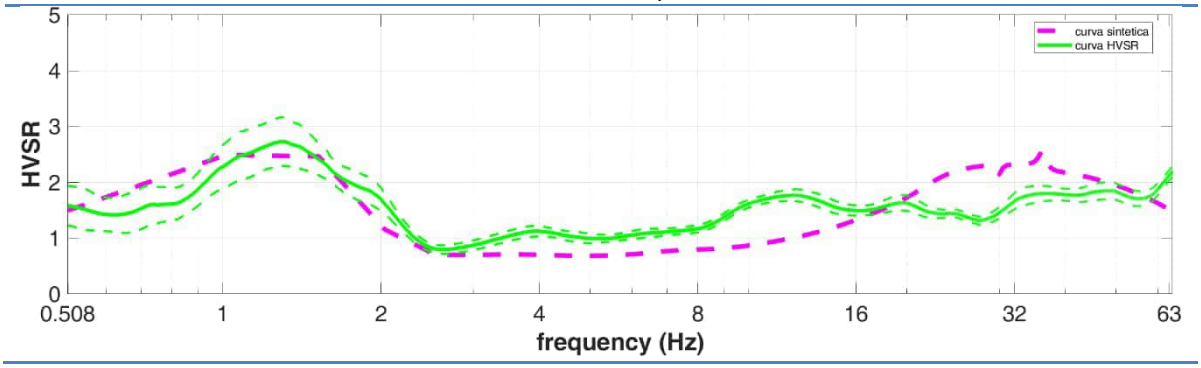
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



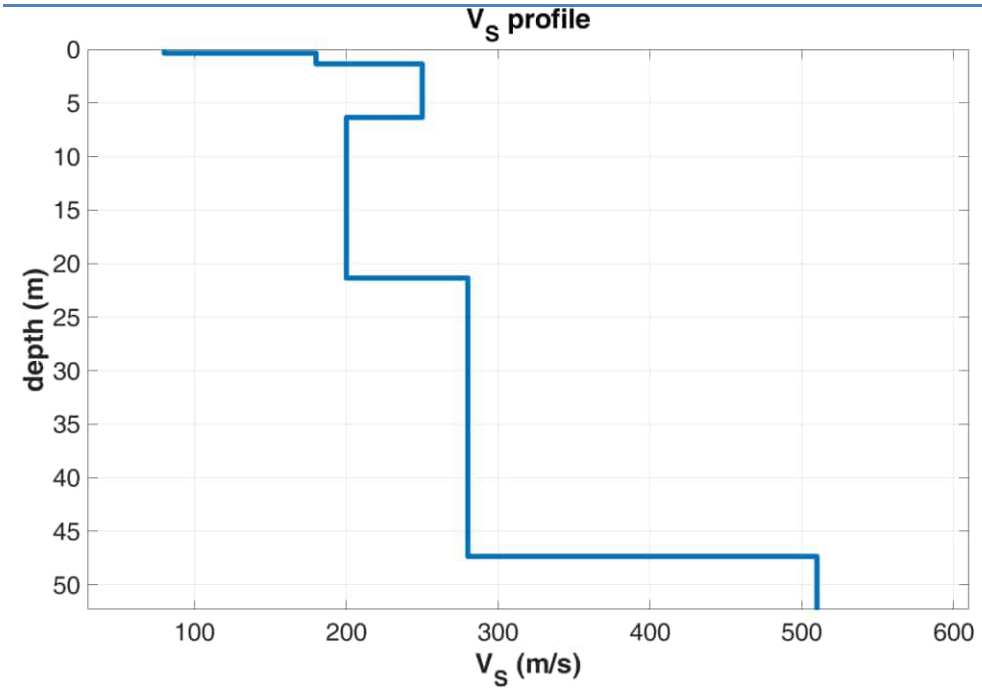
Modello sintetico su spettro HVSR



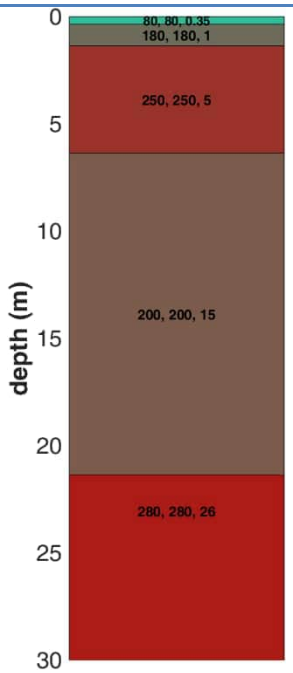
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.3	0.3	196	80
2	1.0	1.3	375	180
3	5.0	6.3	520	250
4	15.0	21.3	416	200
5	26.0	47.3	686	280
6	∞	∞	1691	510

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 221 m/s

INDAGINE MASW + REMI

Località Via Vittorio Bachelet San Lorenzo in Noceto	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 03/09/2024	**Ora** 14.10
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI12	**File** FOR MASW12b_STK.dat; FOR REMI12.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW12b_0103.drm
☒ FOR MASW12b_0203.drm
☒ FOR MASW12b_0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

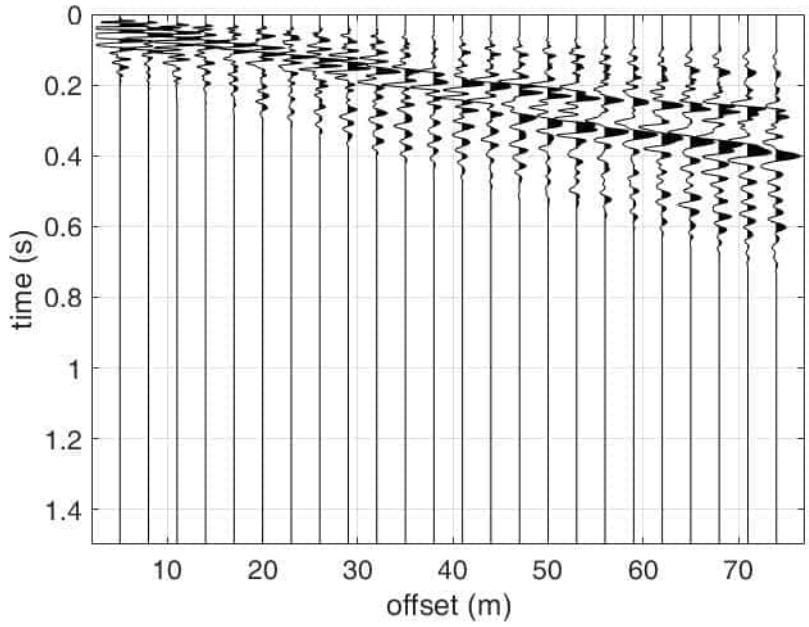
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

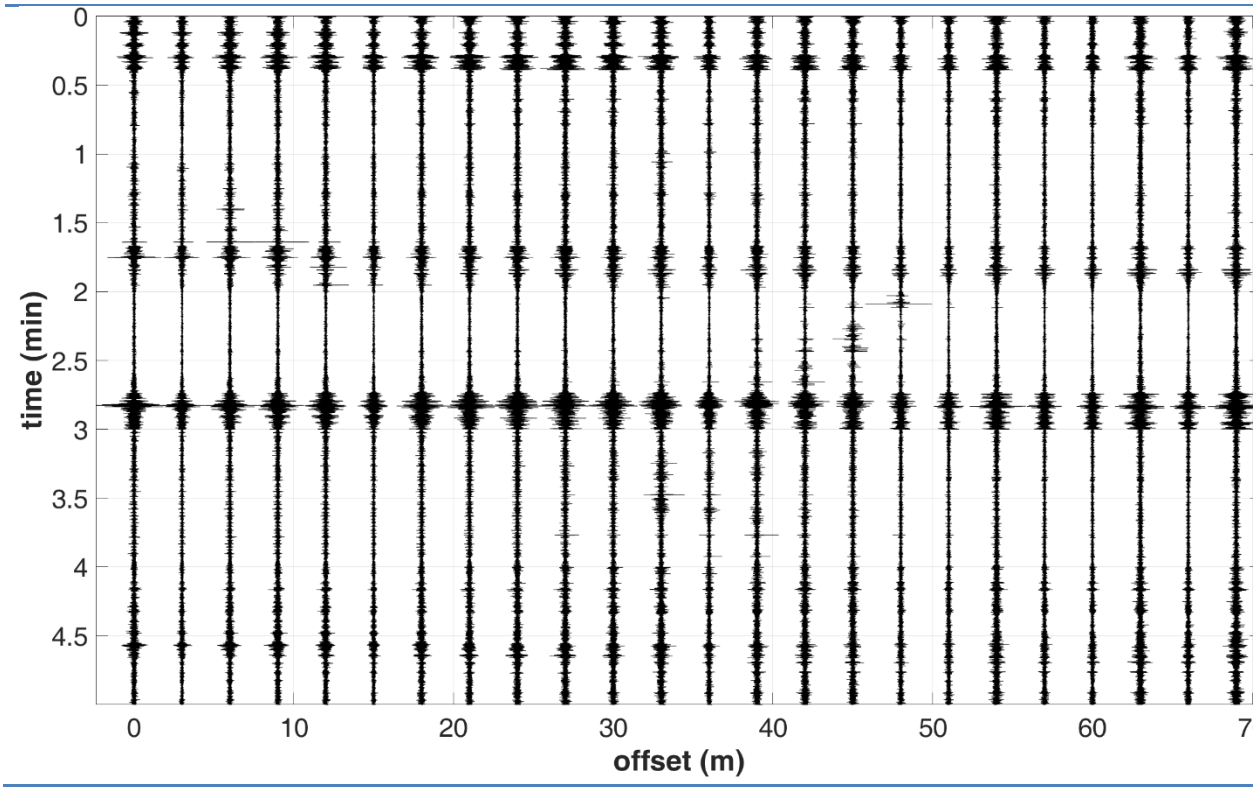
Sismogrammi MASW



REMI

Numero tracce: 24

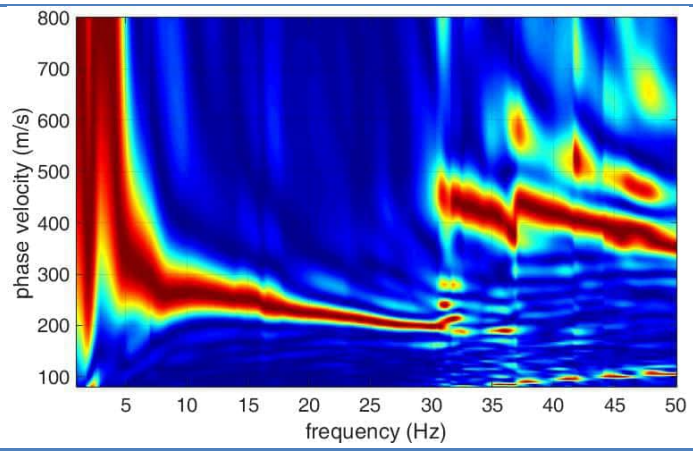
Sismogrammi REMI



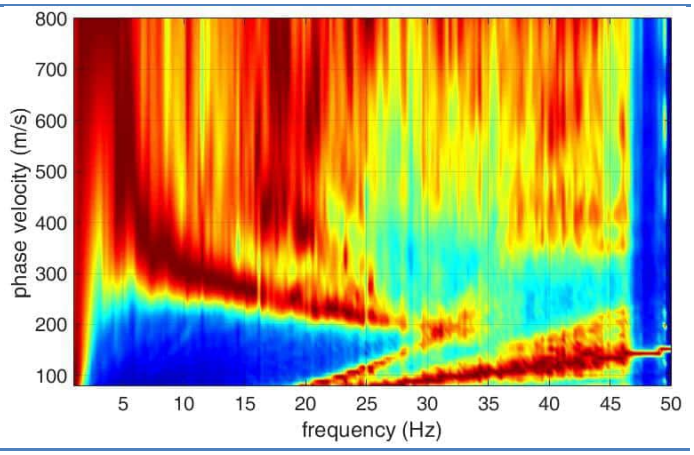
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

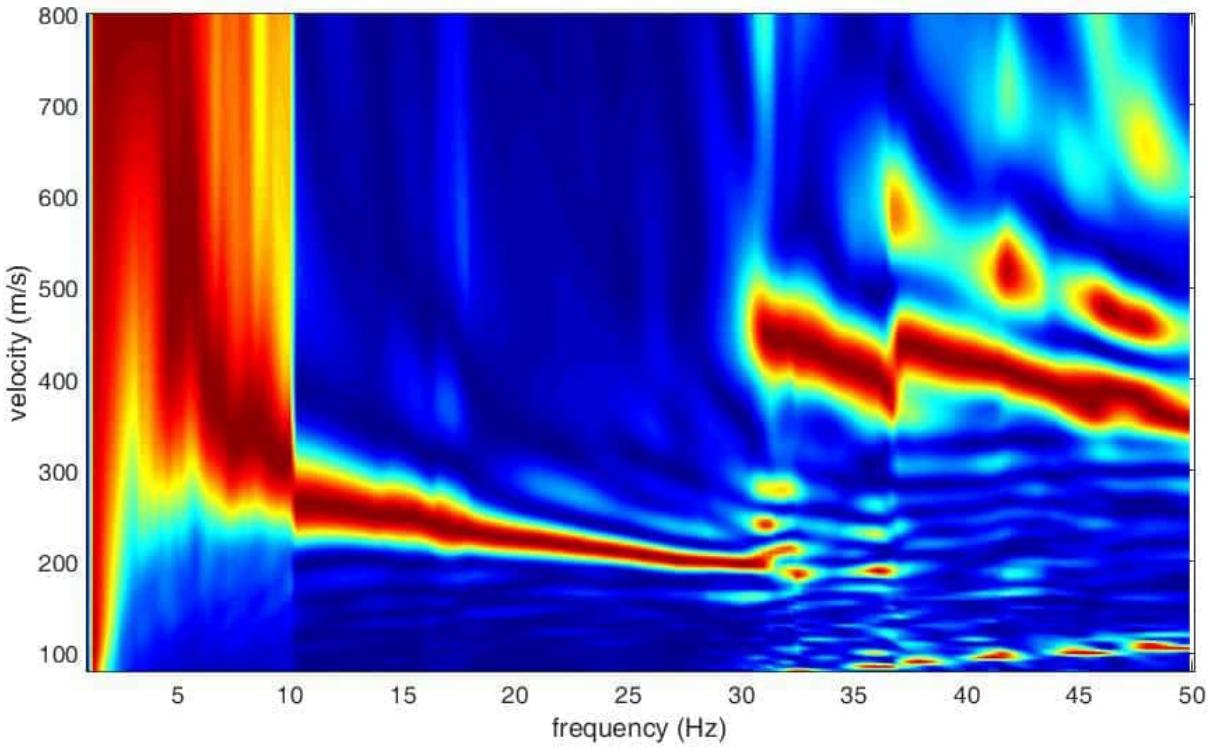


Spettro REMI



Frequenza di unione spettri: 10 Hz

Unione spettro REMI + MASW

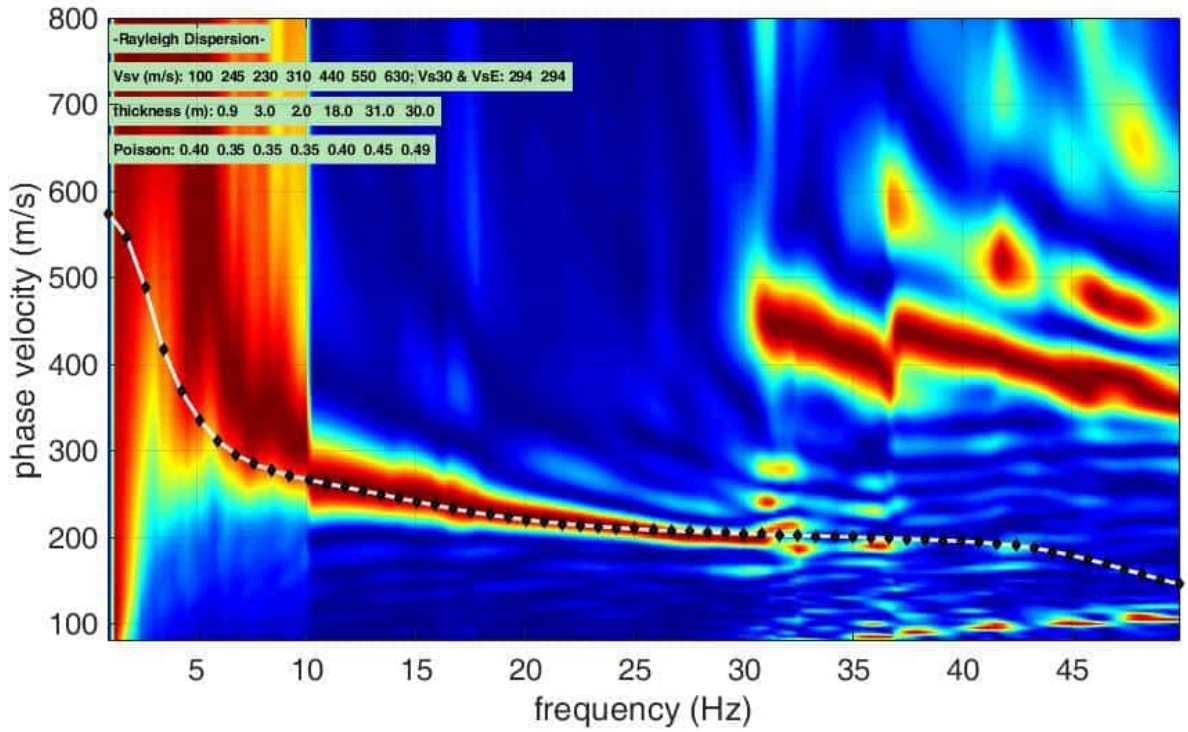


Inversione:

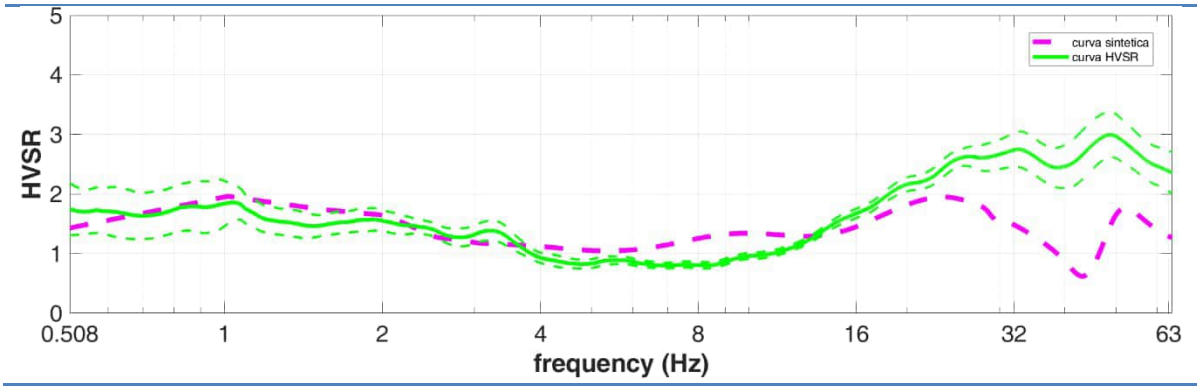
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



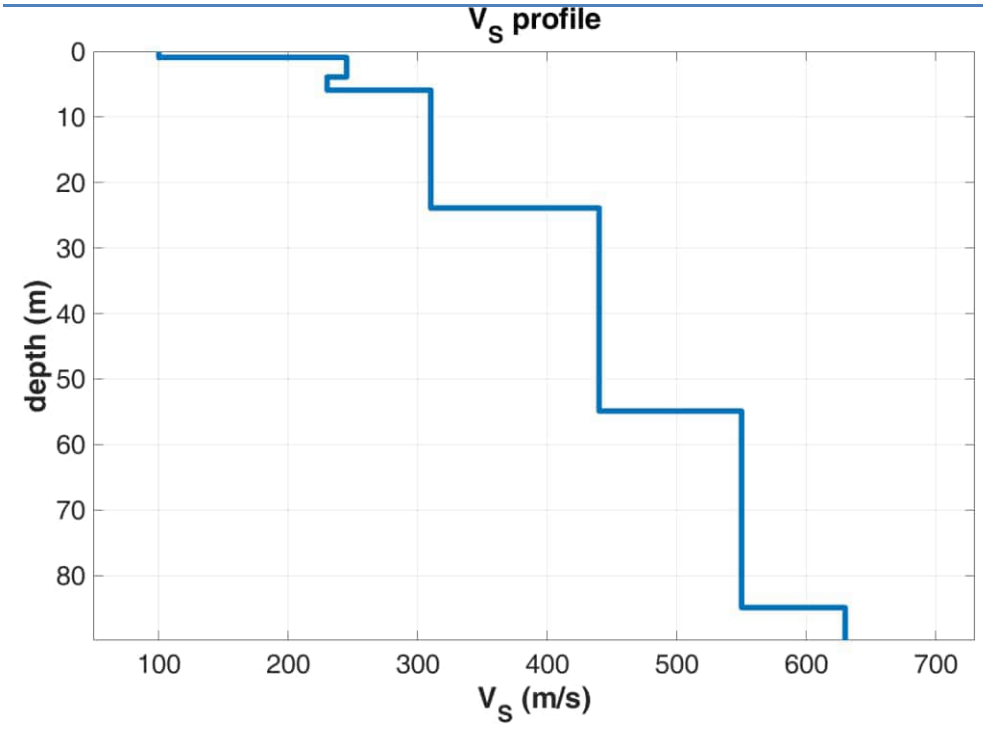
Modello sintetico su spettro HVSR



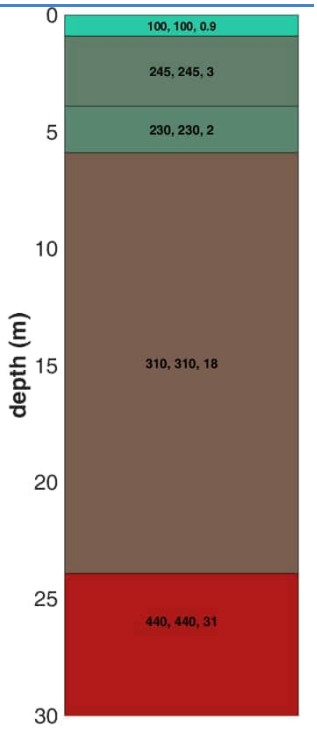
Modello sismostratigrafico:
N° di strati: 7

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.9	0.9	245	100
2	3.0	3.9	510	245
3	2.0	5.9	479	230
4	18.0	23.9	645	310
5	31.0	54.9	1078	440
6	30.0	84.9	1824	550
7	∞	∞	2679	630

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 294 m/s

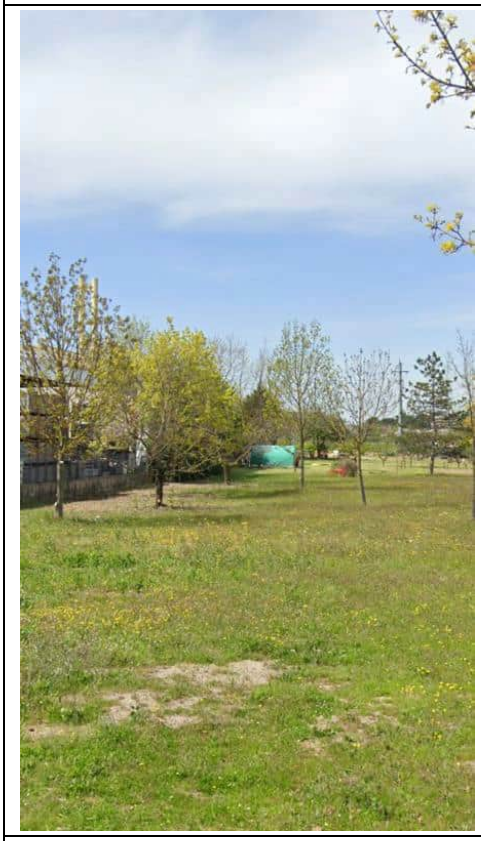
INDAGINE MASW + REMI

Località Via Gandhi Zona artigianale S. Martino	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 03/09/2024	**Ora** 15.10
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 13	**File** FOR MASW13a_STK.dat; FOR REMI13a.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 2.5 m
Lunghezza stendimento (m): 57.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

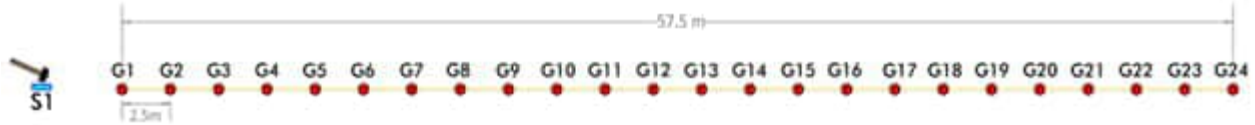
Tipologia energizzazione:	
☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW13a _0103.drm
☒ FOR MASW13a _0203.drm
☒ FOR MASW13a _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 2.5 m
Lunghezza stendimento (m): 57.5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI: forte disturbo industriale

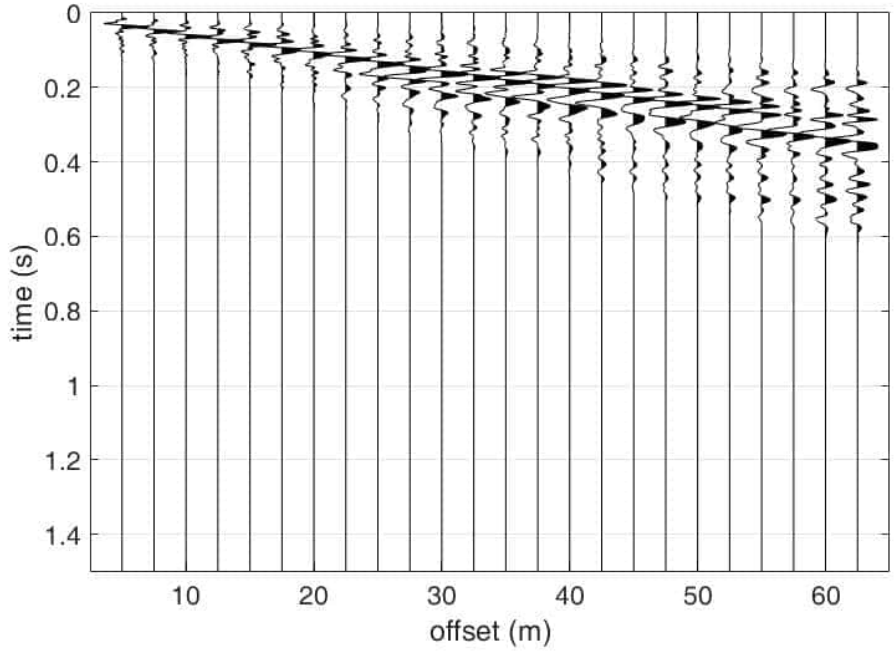
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

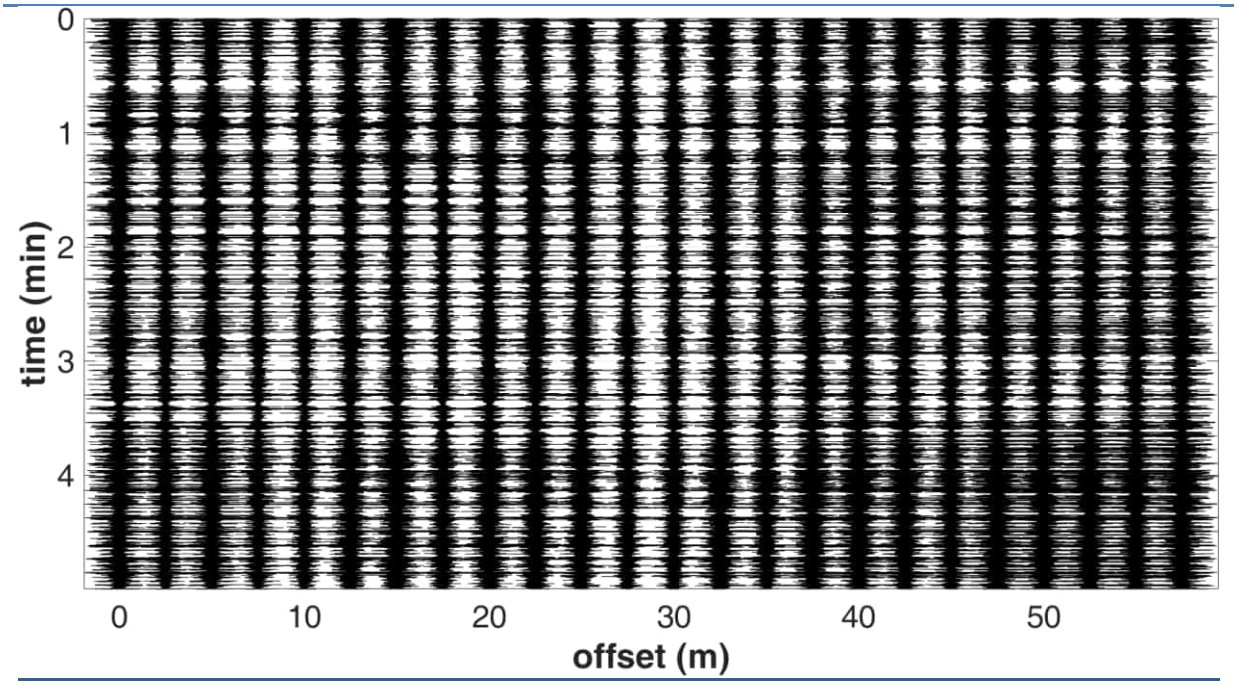
Sismogrammi MASW



REMI

Numero tracce: 24

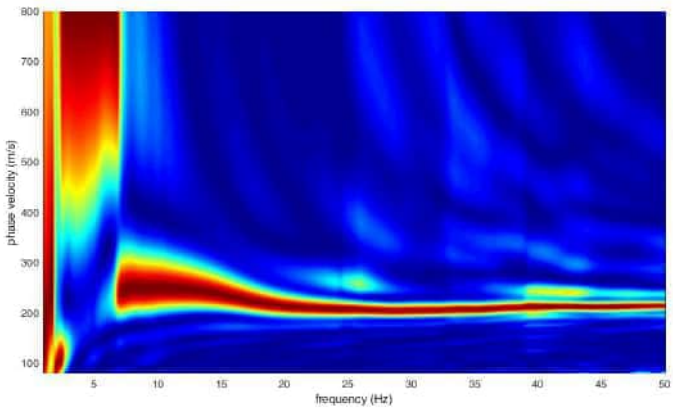
Sismogrammi REMI



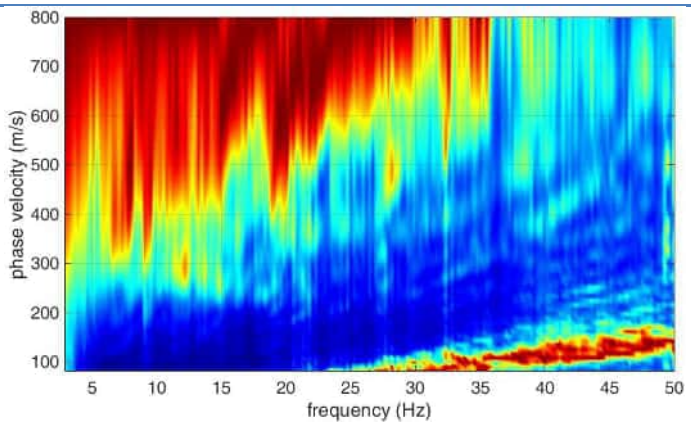
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

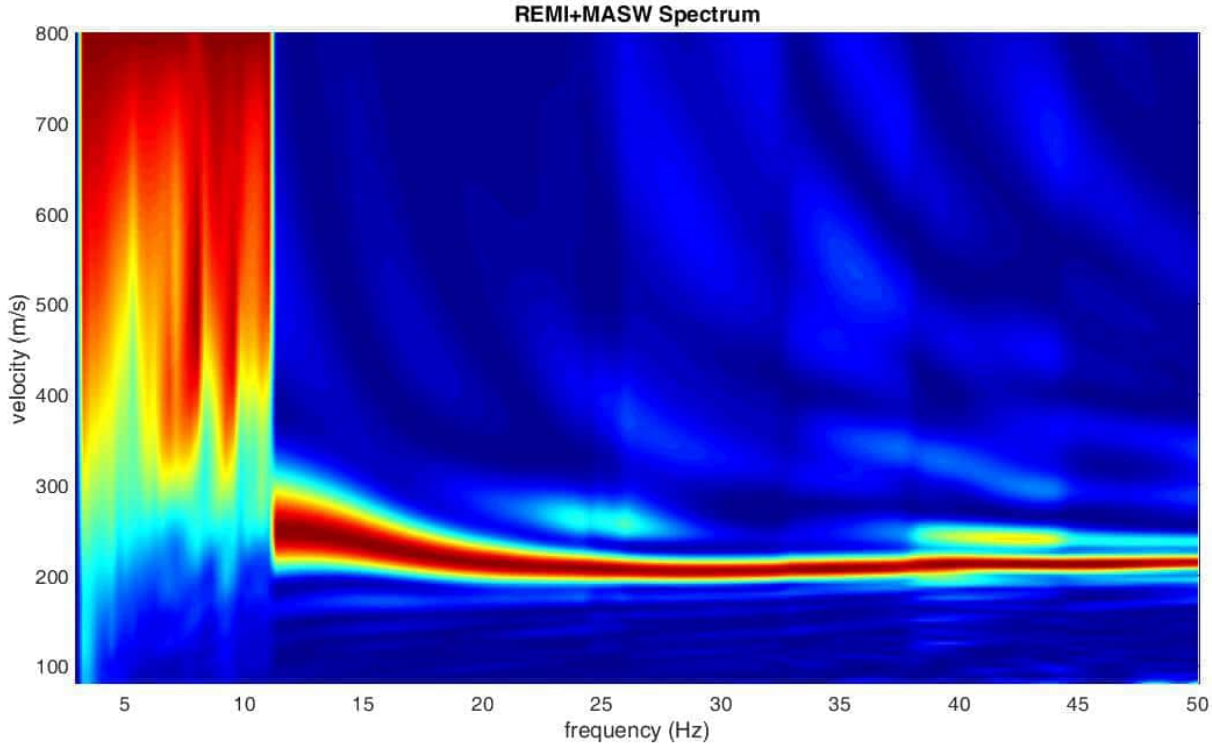


Spettro REMI



Frequenza di unione spettri: 11 Hz

Unione spettro REMI + MASW

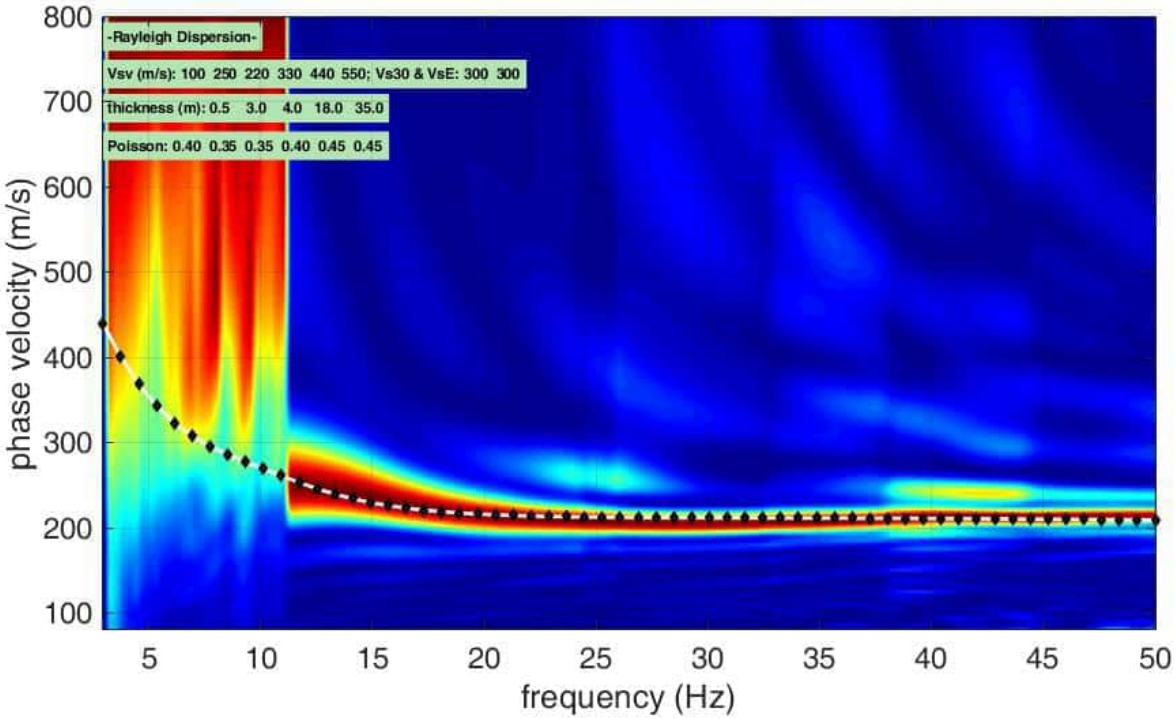


Inversione:

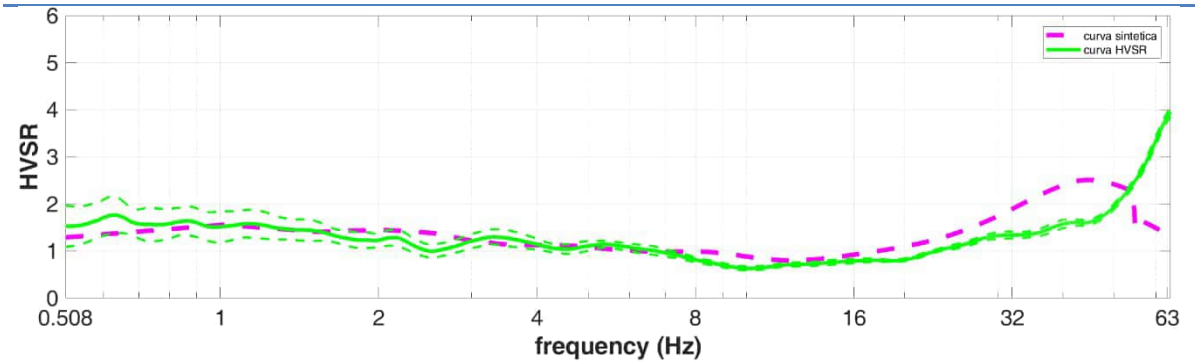
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



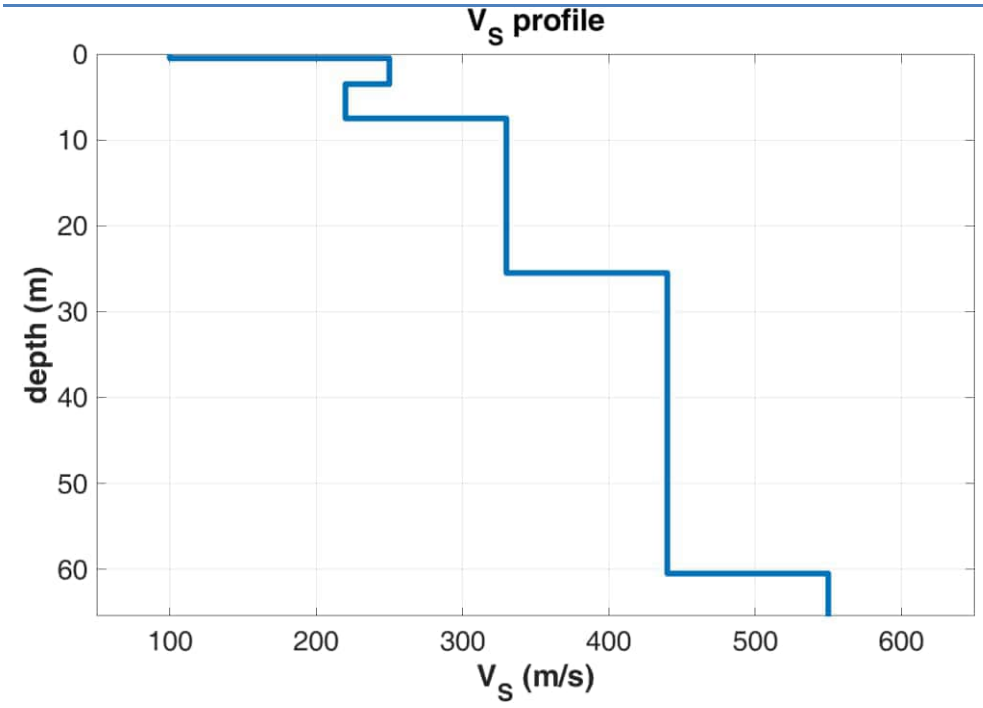
Modello sintetico su spettro HVSR



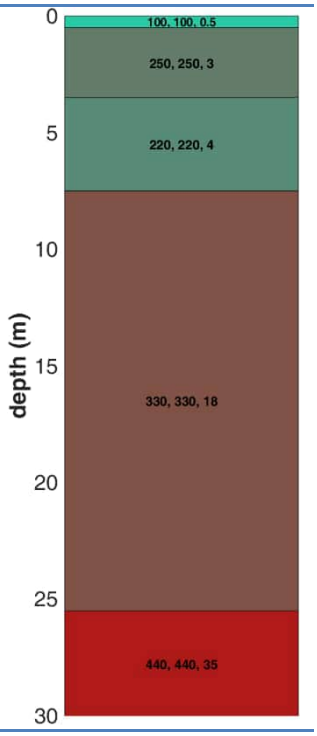
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.5	0.5	245	100
2	3.0	3.5	520	250
3	4.0	7.5	458	220
4	18.0	25.5	808	330
5	35.0	60.5	1459	440
6	∞	∞	1824	550

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 300 m/s

INDAGINE MASW + REMI

Località Parco delle Crocerossine	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 26/09/2024	**Ora** 15.45
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI14	**File** FOR MASW14a_STK.dat; FOR REMI14.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



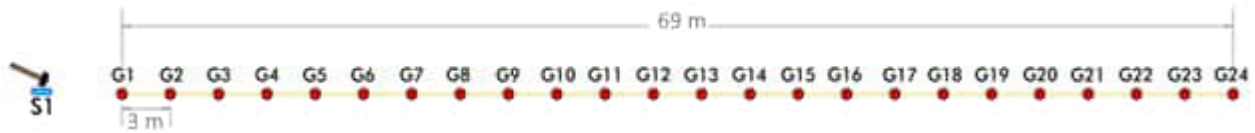
STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	
Tipologia energizzazione:		
☐ Fucile sismico	Modello:	
☒ Mazza	Kg: 5	
☐ Grave	Kg:	
☐ Mazza su trave	Kg:	
Stacking: usate 3 acquisizioni su 3: ☒ FOR MASW14a_0103.drm ☒ FOR MASW14a _0203.drm ☒ FOR MASW14a _0303.drm		
MISURA REMI		
N°canali: 24	**Spaziatura**: 3 m	
Lunghezza stendimento (m): 69		
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz	
Acquisizione: acquisite 2 tracce da 1 min successivamente unite in unica traccia da 2 minuti		

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

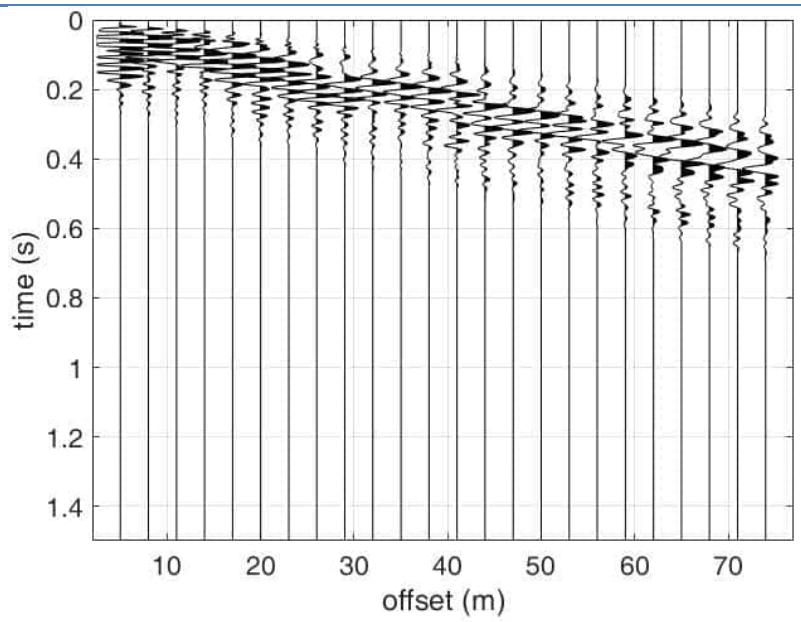
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

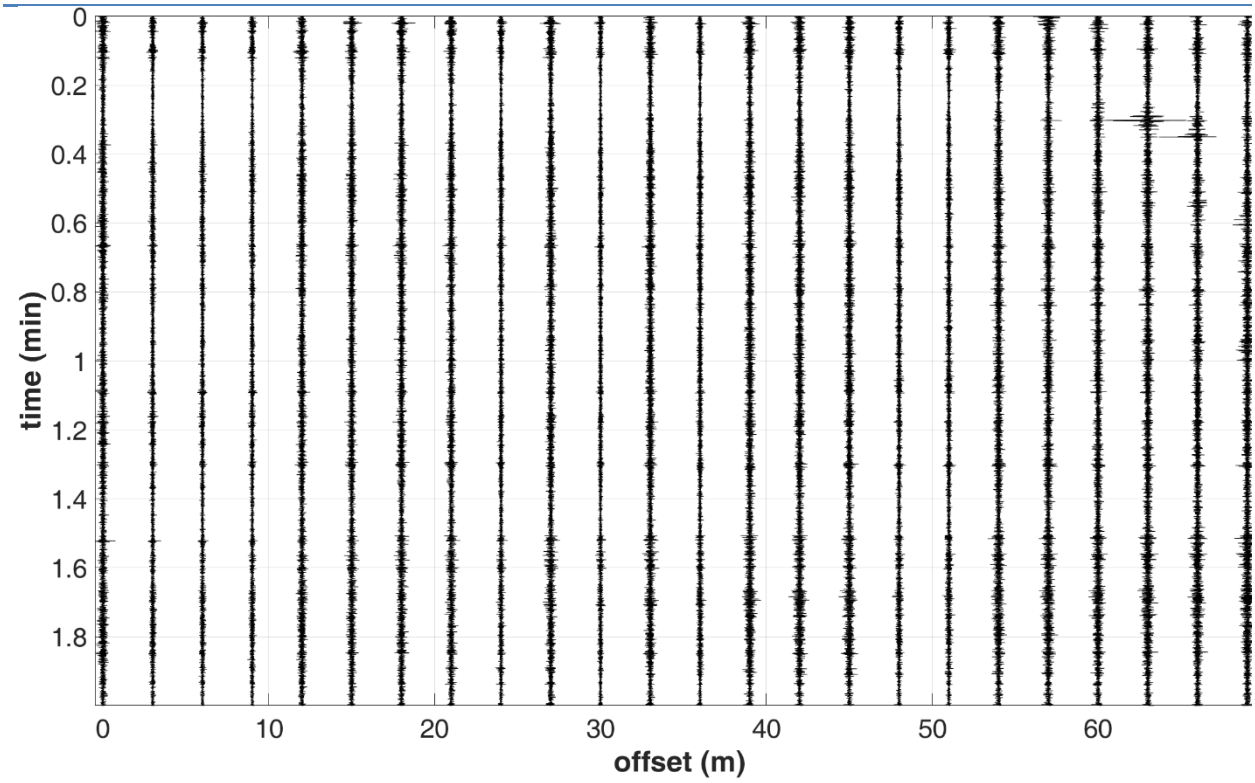
Sismogrammi MASW



REMI

Numero tracce: 24

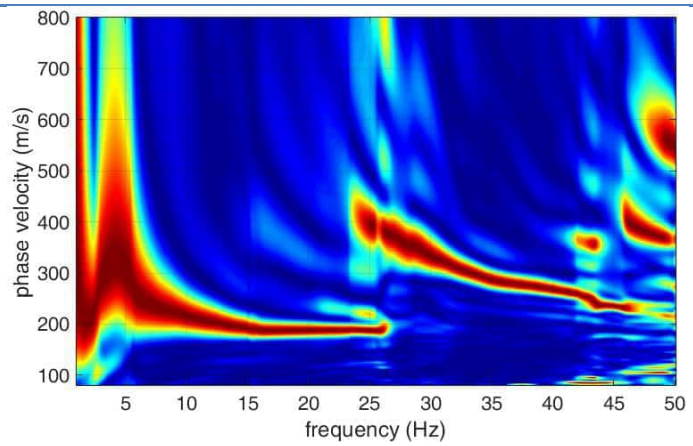
Sismogrammi REMI



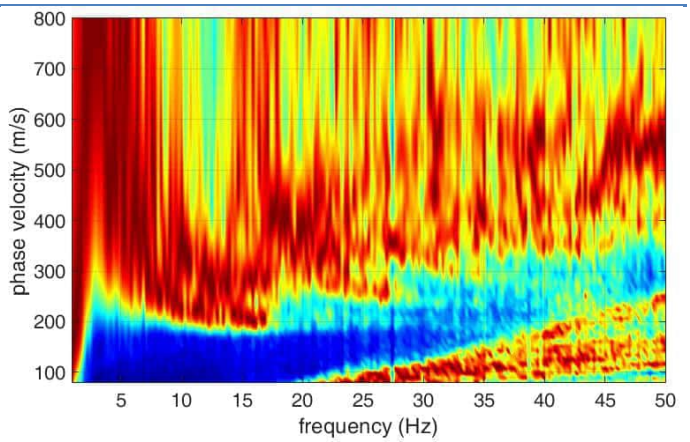
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

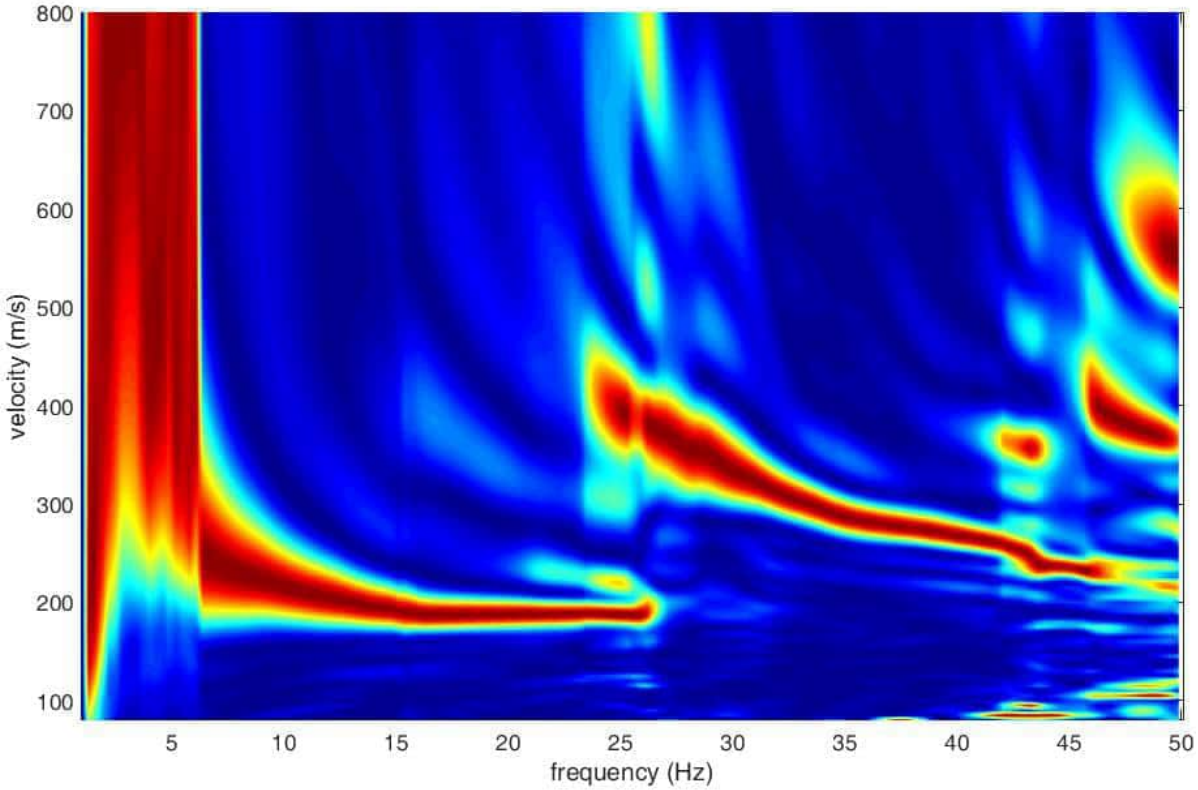


Spettro REMI



Frequenza di unione spettri: 6 Hz

Unione spettro REMI + MASW

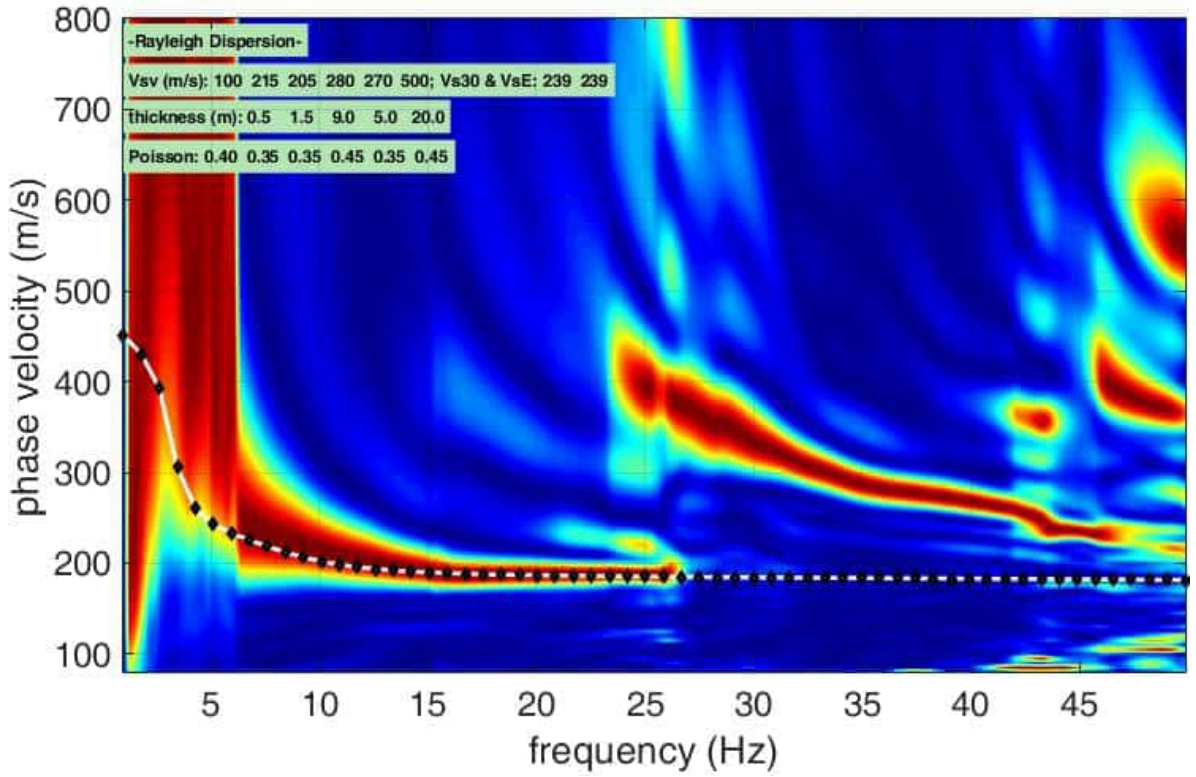


Inversione:

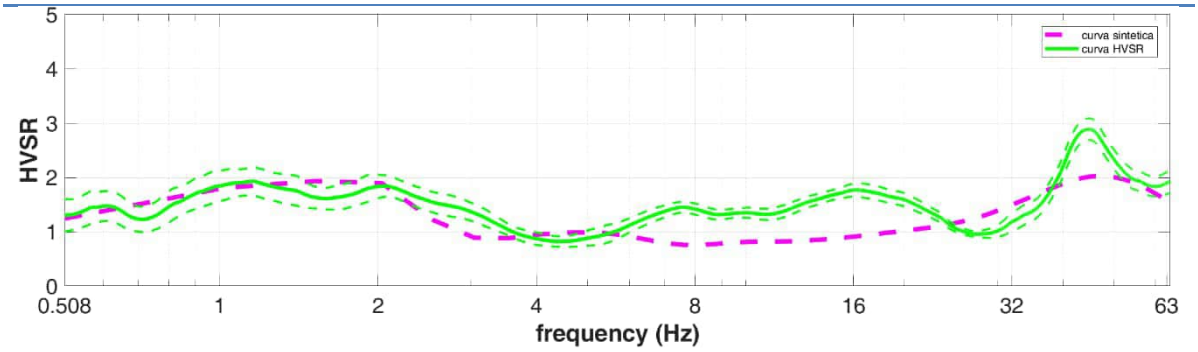
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



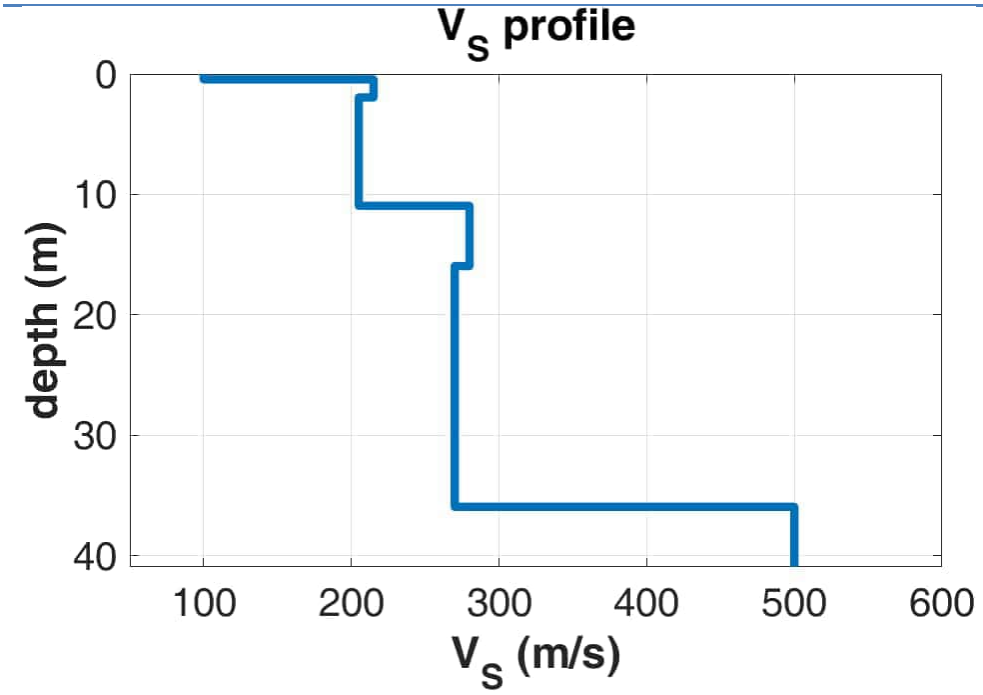
Modello sintetico su spettro HVSR



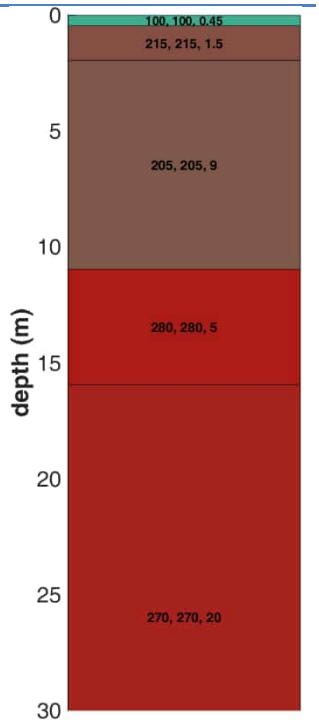
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.5	0.5	245	100
2	1.5	2.0	448	215
3	9.0	11.0	427	205
4	5.0	16.0	929	280
5	20.0	36.0	562	270
6	∞	∞	1658	500

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 239 m/s

INDAGINE MASW + REMI

Località Via Monte Poggiolo Villagrappa	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 14.10
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI15	**File** FOR MASW15b_STK.dat; FOR REMI15.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW

Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW15b_0103.drm
☒ FOR MASW15b_0203.drm
☒ FOR MASW15b_0303.drm

MISURA REMI

N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

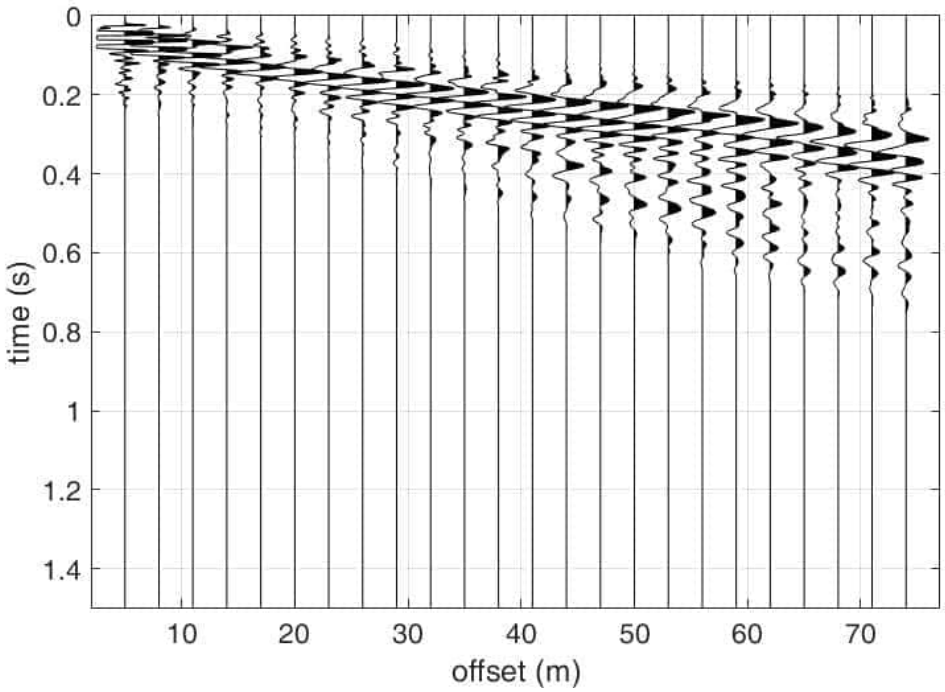
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

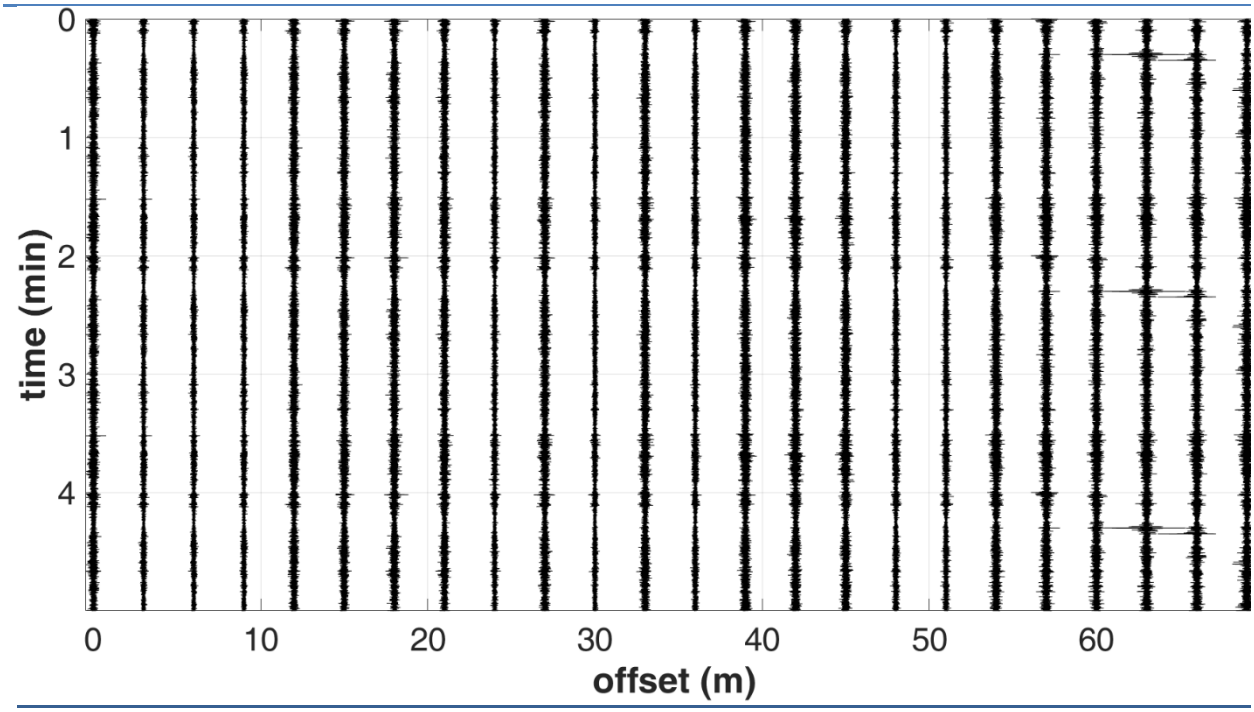
Sismogrammi MASW



REMI

Numero tracce: 24

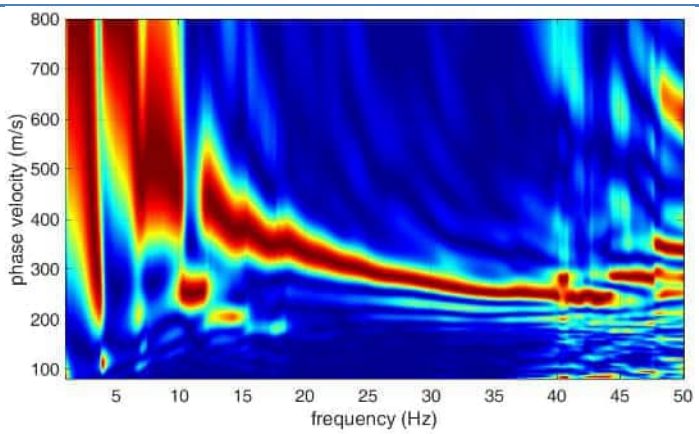
Sismogrammi REMI



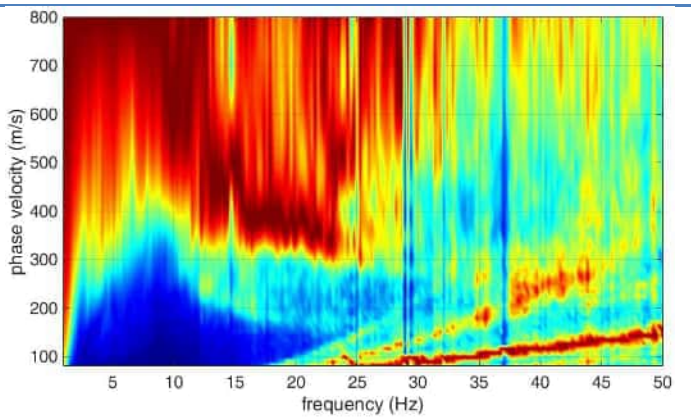
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

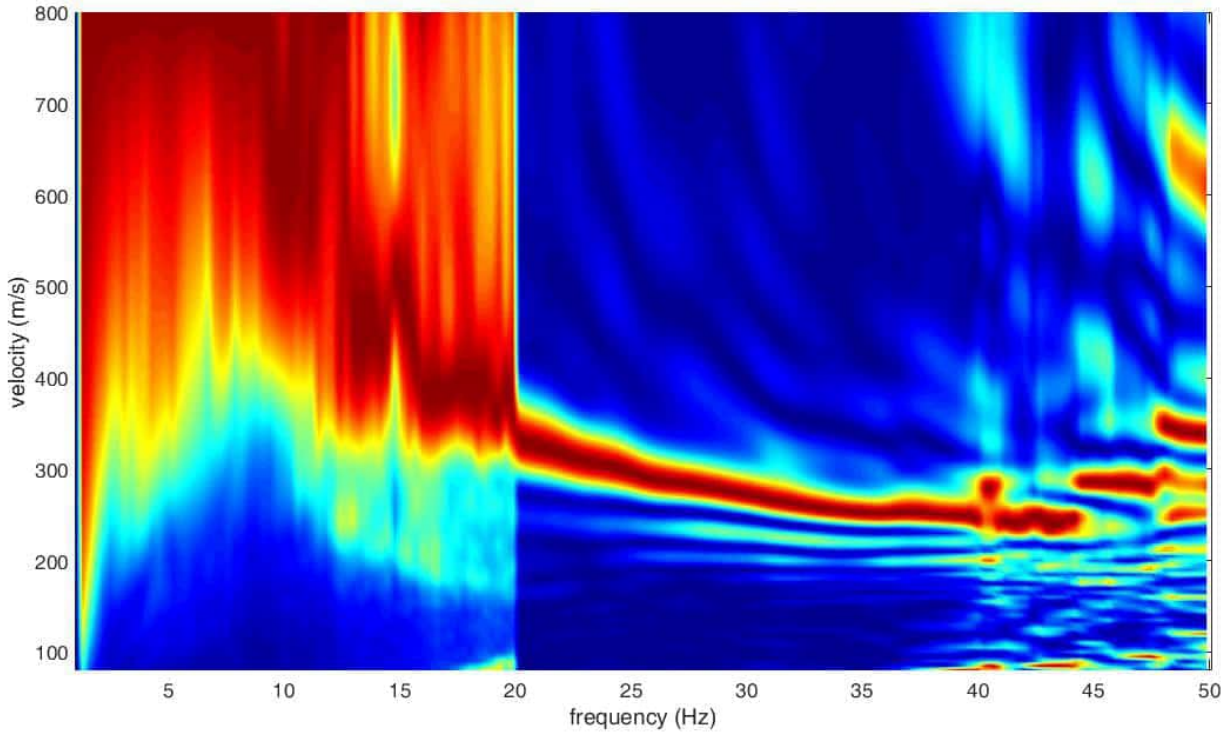


Spettro REMI



Frequenza di unione spettri: 20 Hz

Unione spettro REMI + MASW

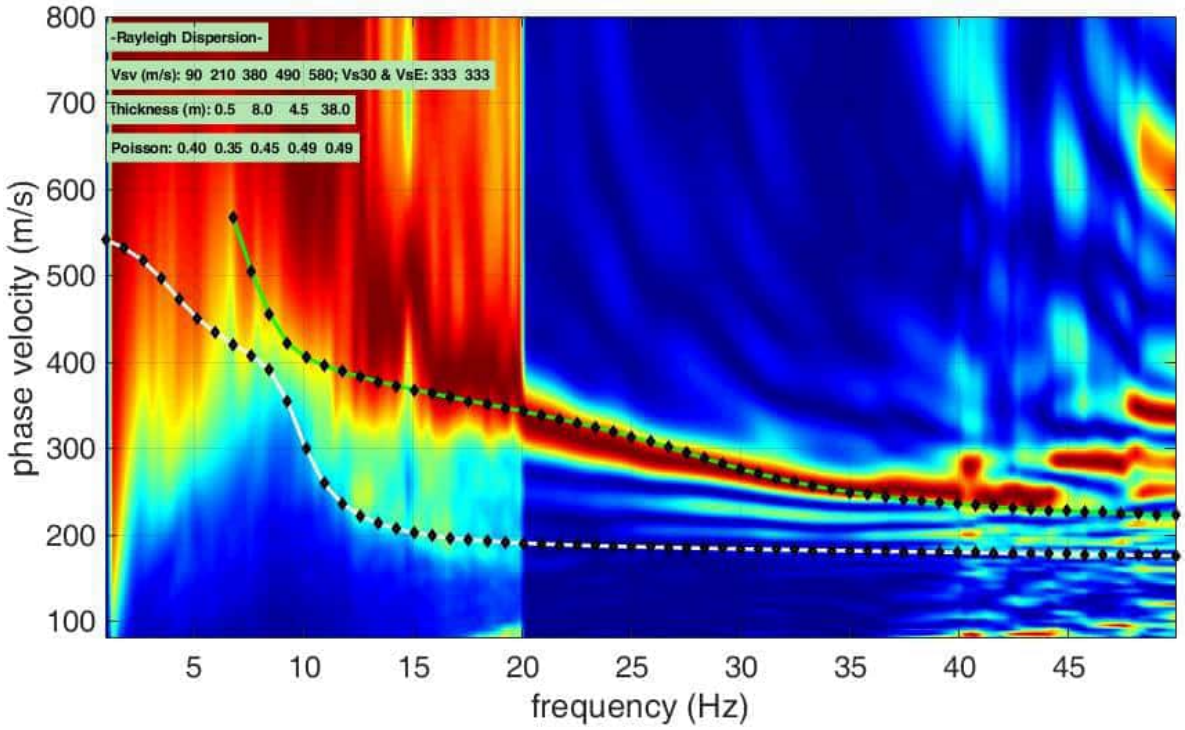


Inversione:

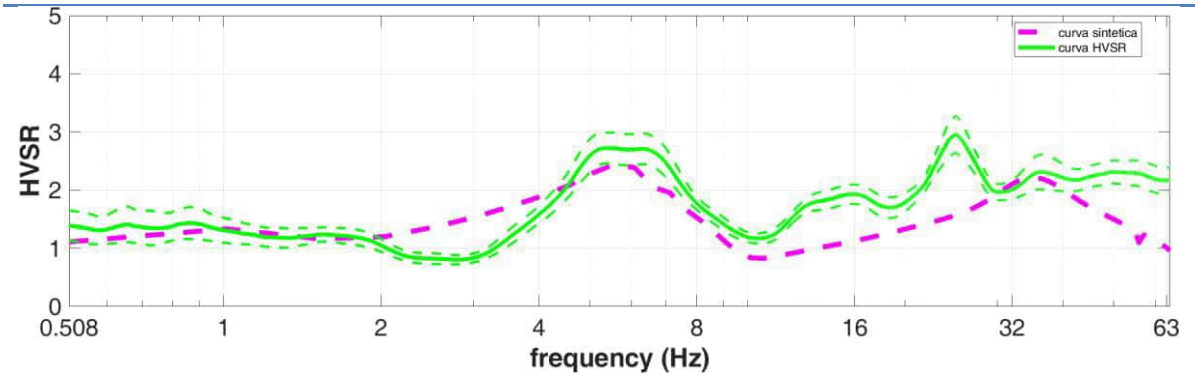
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



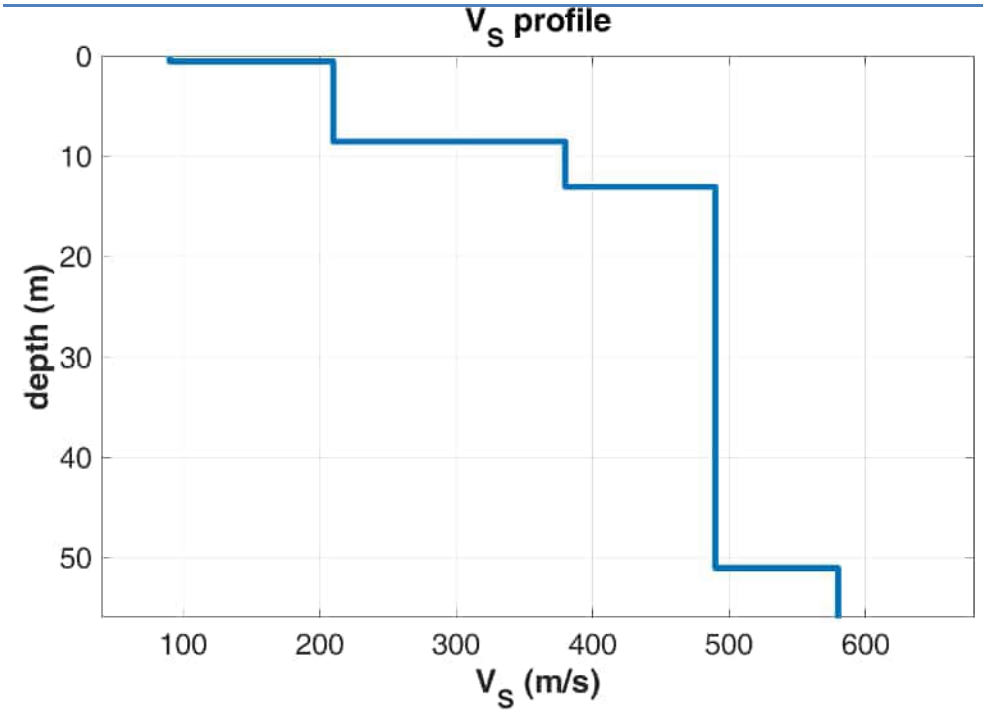
Modello sintetico su spettro HVSR



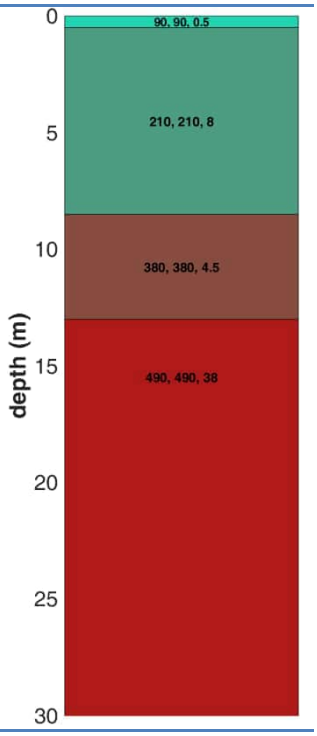
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.5	0.5		90
2	8.0	8.5		210
3	4.5	13.0		380
4	38.0	41.0		490
5	∞	∞		580

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 333 m/s

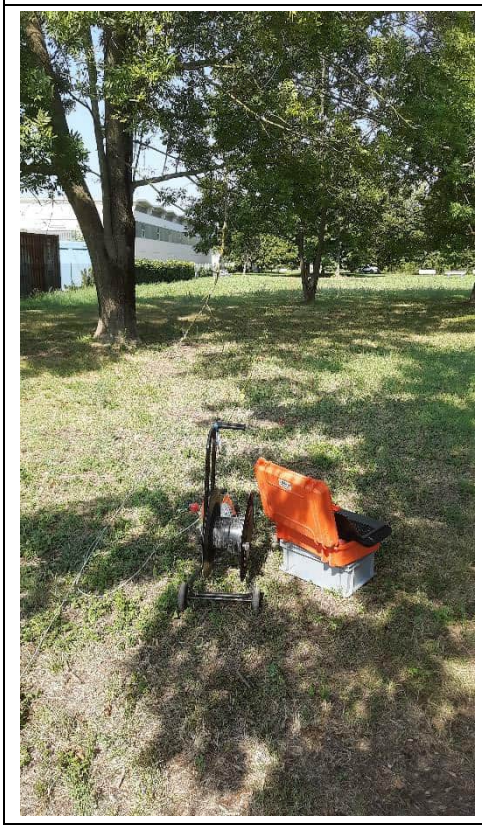
INDAGINE MASW + REMI

Località Via Pitagora Zona Artigianale Quattro	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 5.20
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI16	**File** FOR MASW16b_STK.dat; FOR REMI16.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:	
☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW16b_0103.drm
☒ FOR MASW16b _0203.drm
☒ FOR MASW16b _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

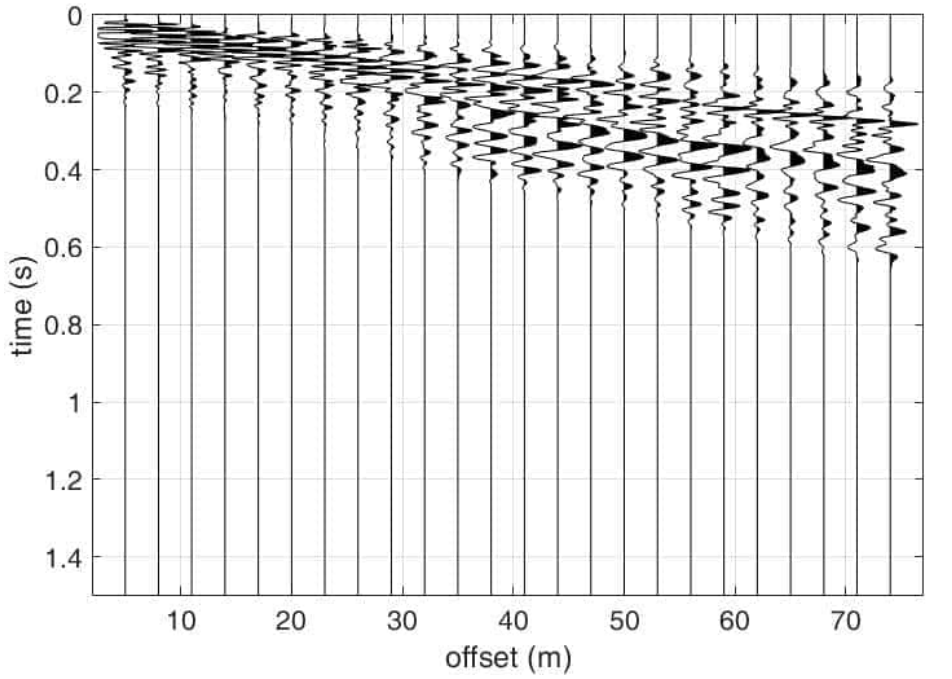
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

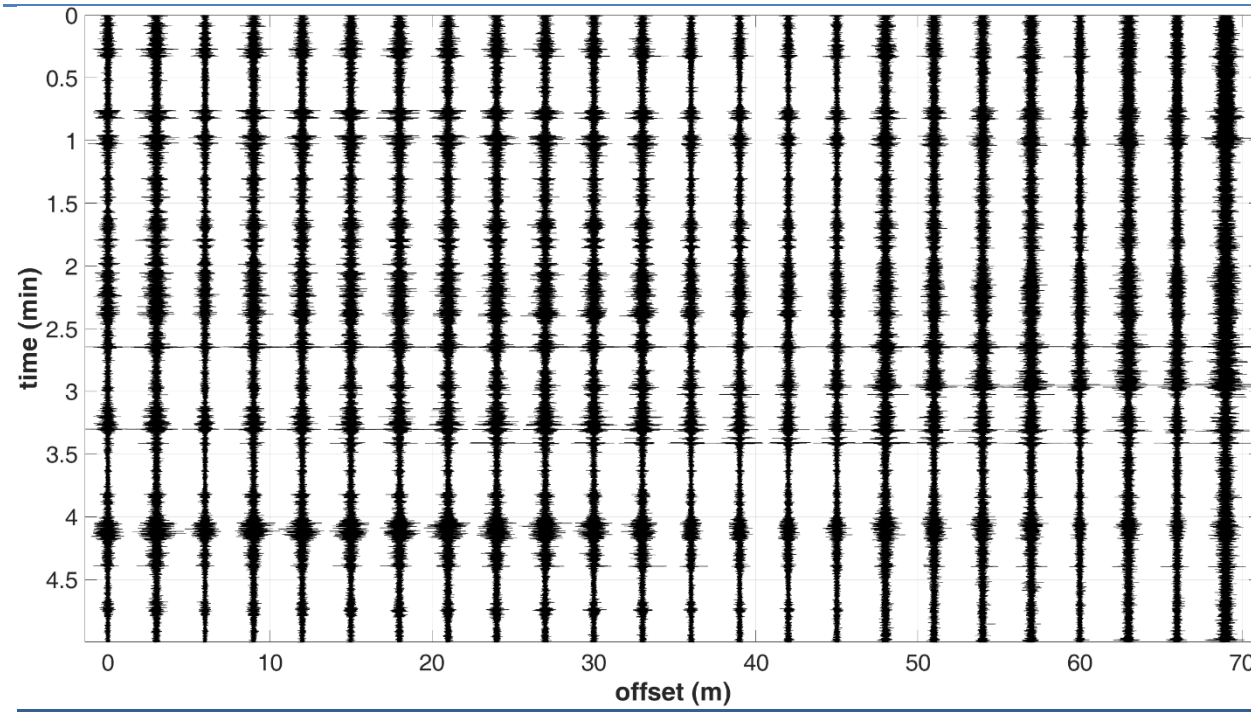
Sismogrammi MASW



REMI

Numero tracce: 24

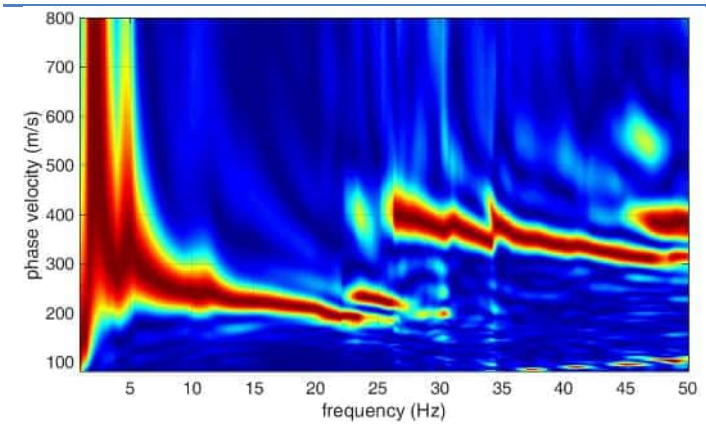
Sismogrammi REMI



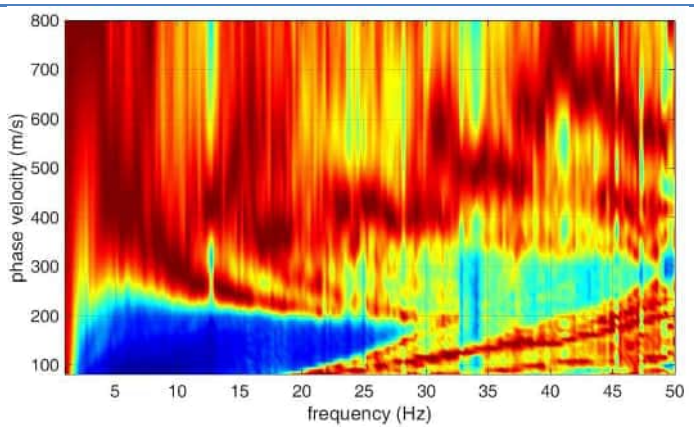
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

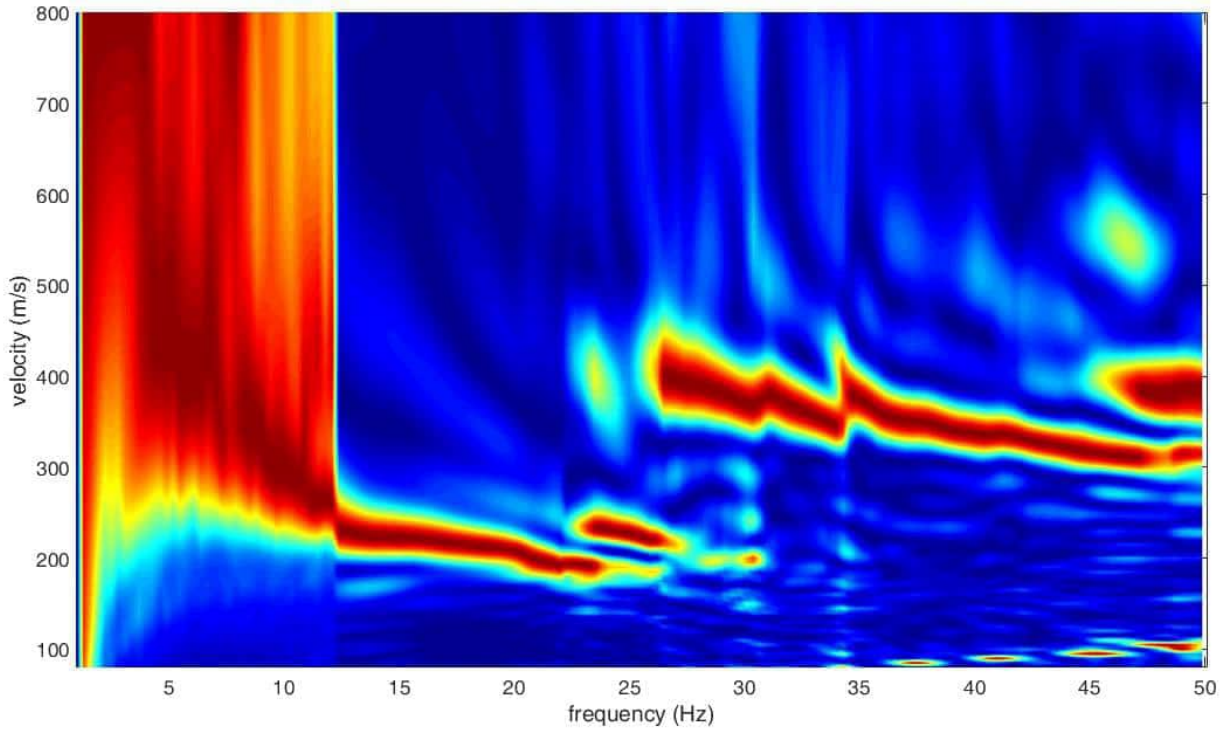


Spettro REMI



Frequenza di unione spettri: 12 Hz

Unione spettro REMI + MASW

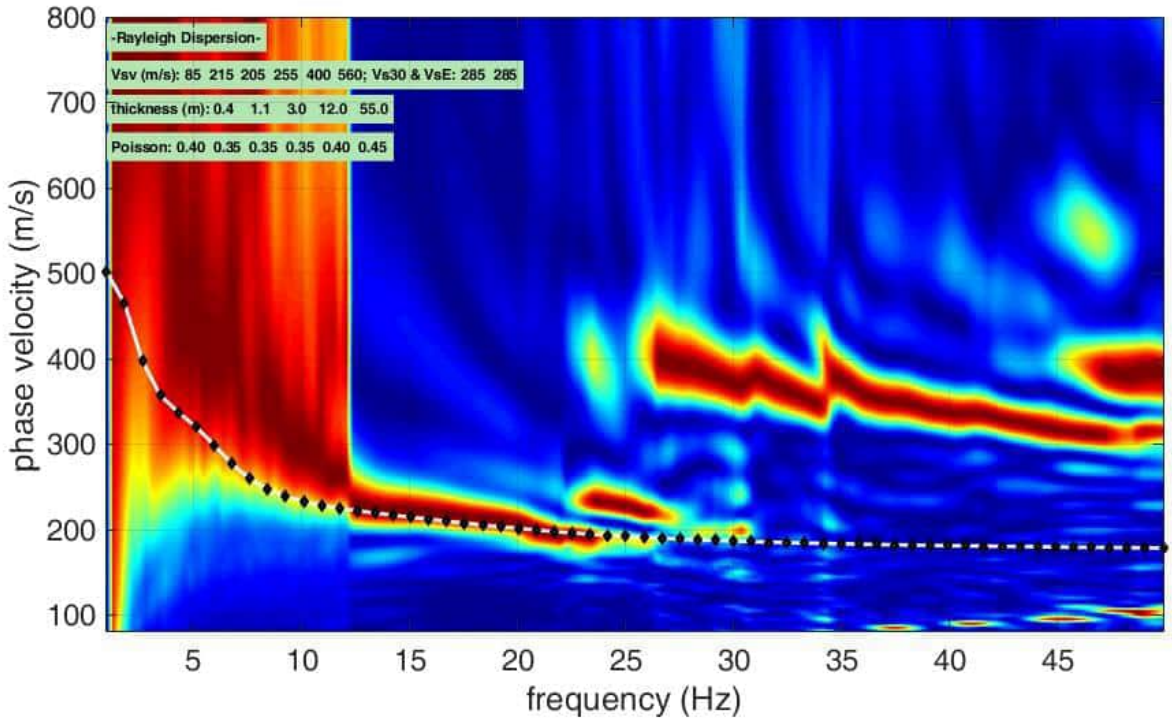


Inversione:

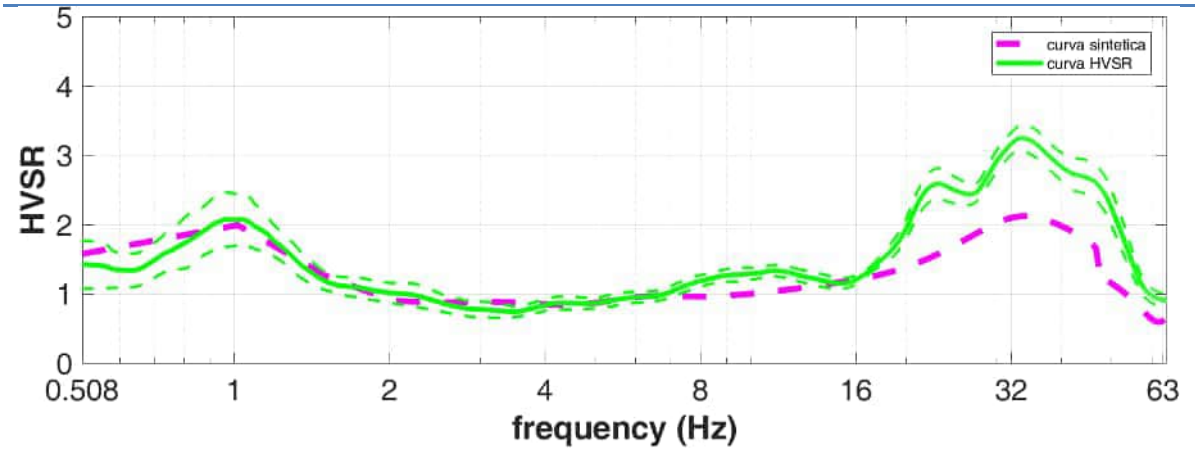
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



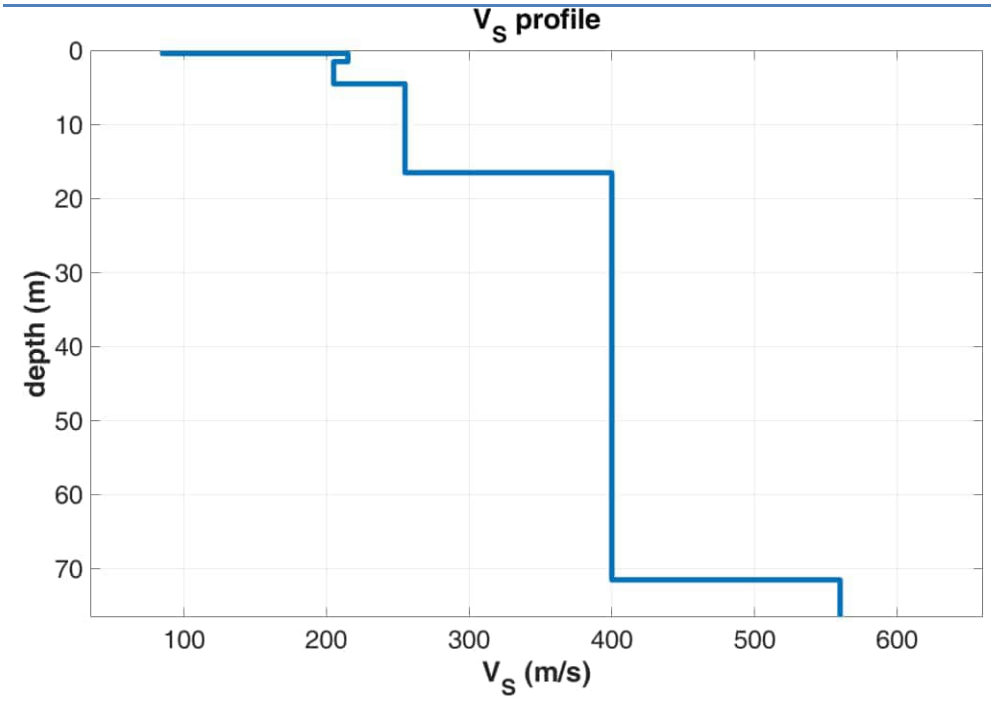
Modello sintetico su spettro HVSR



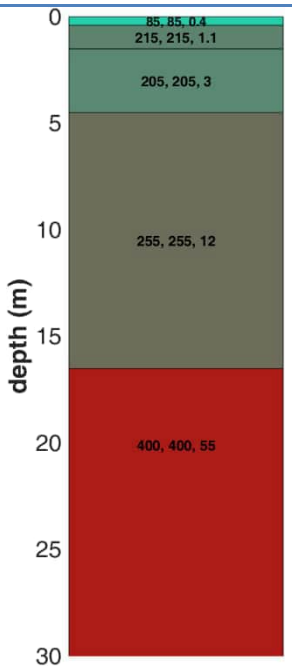
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.4	0.4	208	85
2	1.1	1.5	448	215
3	3.0	4.5	427	205
4	12.0	16.5	531	255
5	55.0	71.5	980	400
6	∞	∞	1857	560

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 285 m/s

INDAGINE MASW + REMI

Località Via Rombaldo Bruschi Quartiere San Varano	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 26/09/2024	**Ora** 11.20
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI17	**File** FOR MASW17a_STK.dat; FOR REMI17.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW17a_0103.drm
☒ FOR MASW17a _0203.drm
☒ FOR MASW17a _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

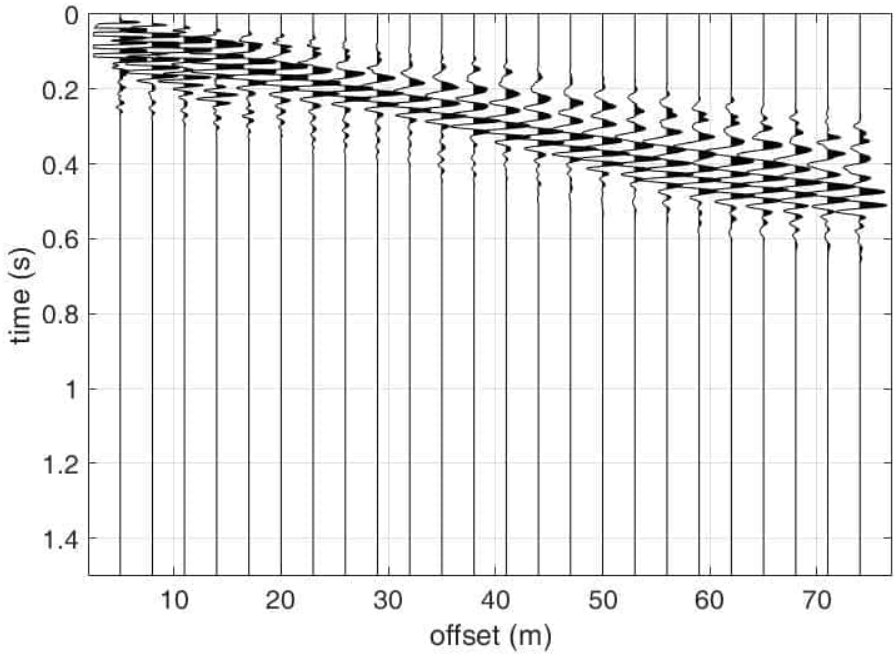
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

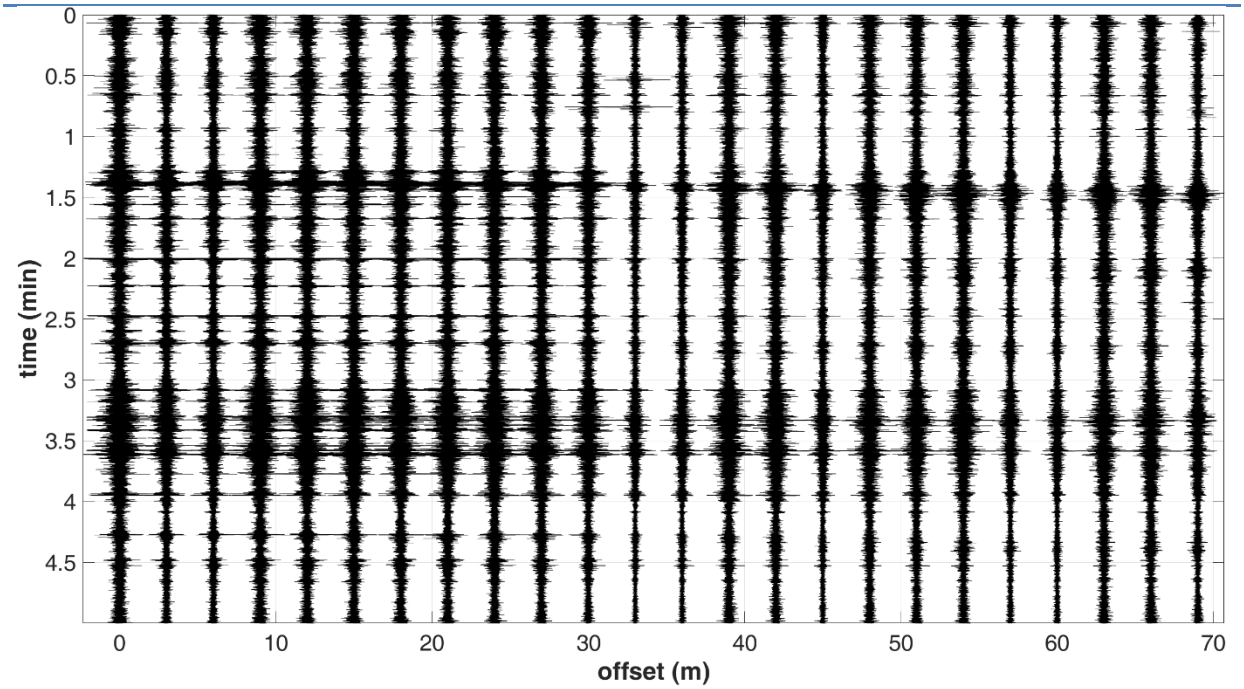
Sismogrammi MASW



REMI

Numero tracce: 24

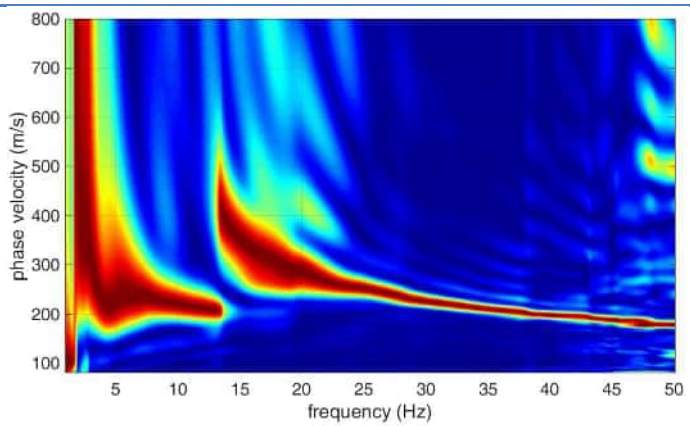
Sismogrammi REMI



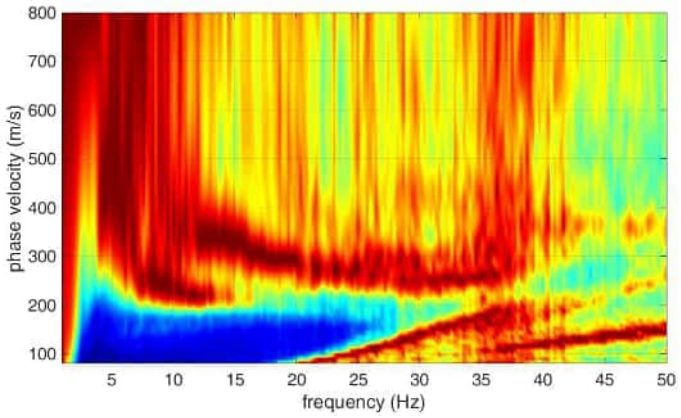
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

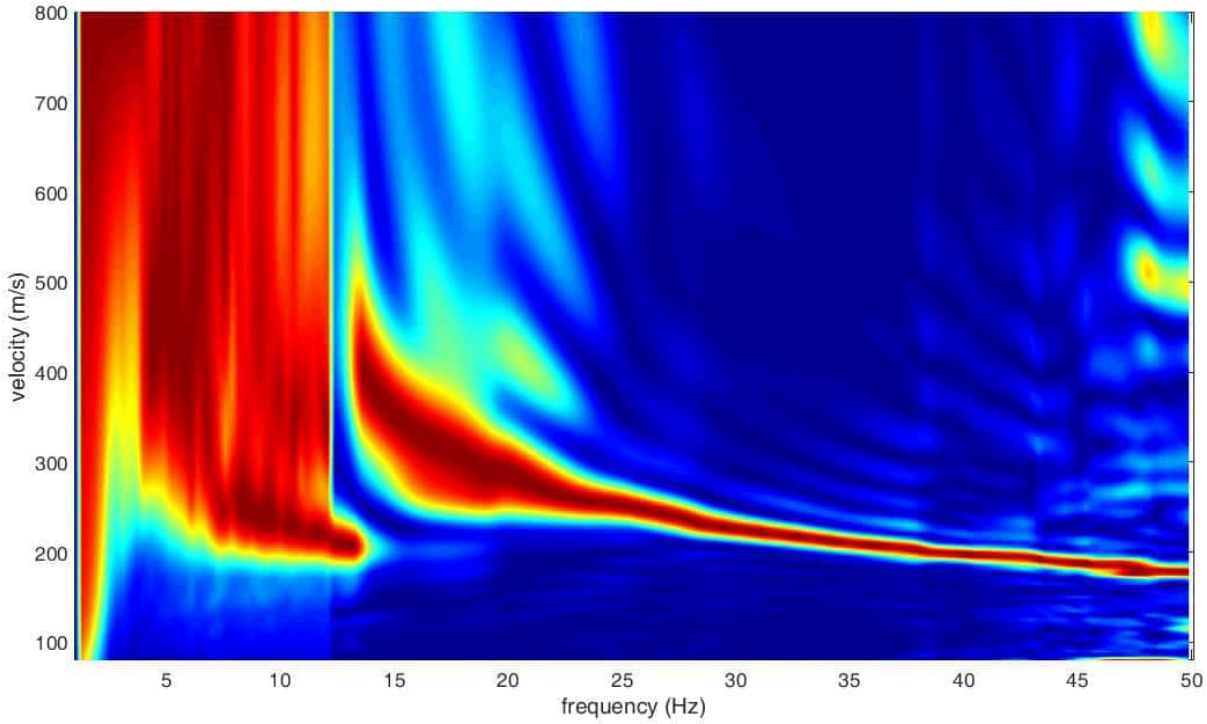


Spettro REMI



Frequenza di unione spettri: 12 Hz

Unione spettro REMI + MASW

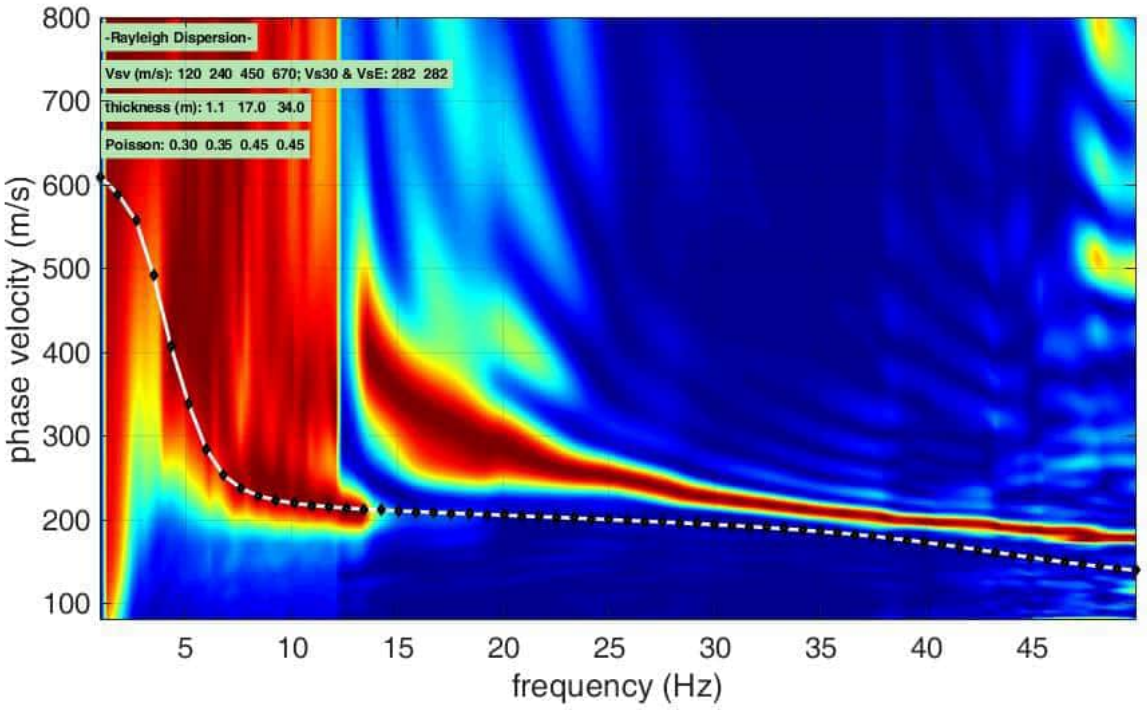


Inversione:

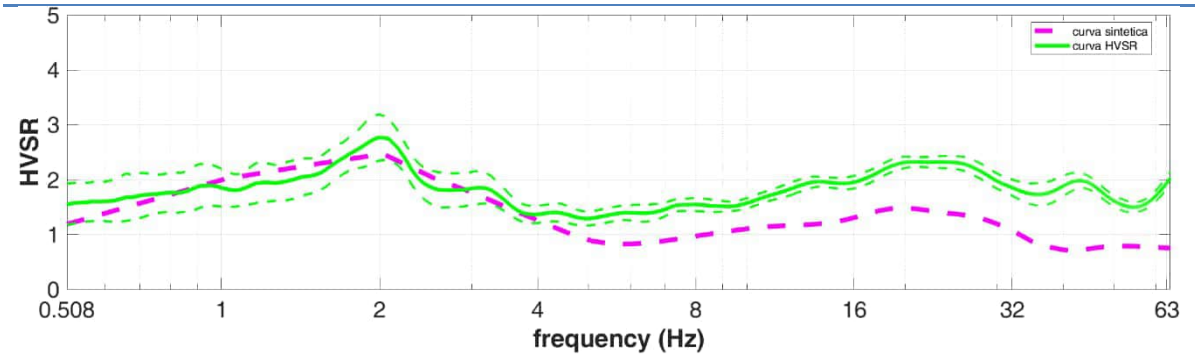
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



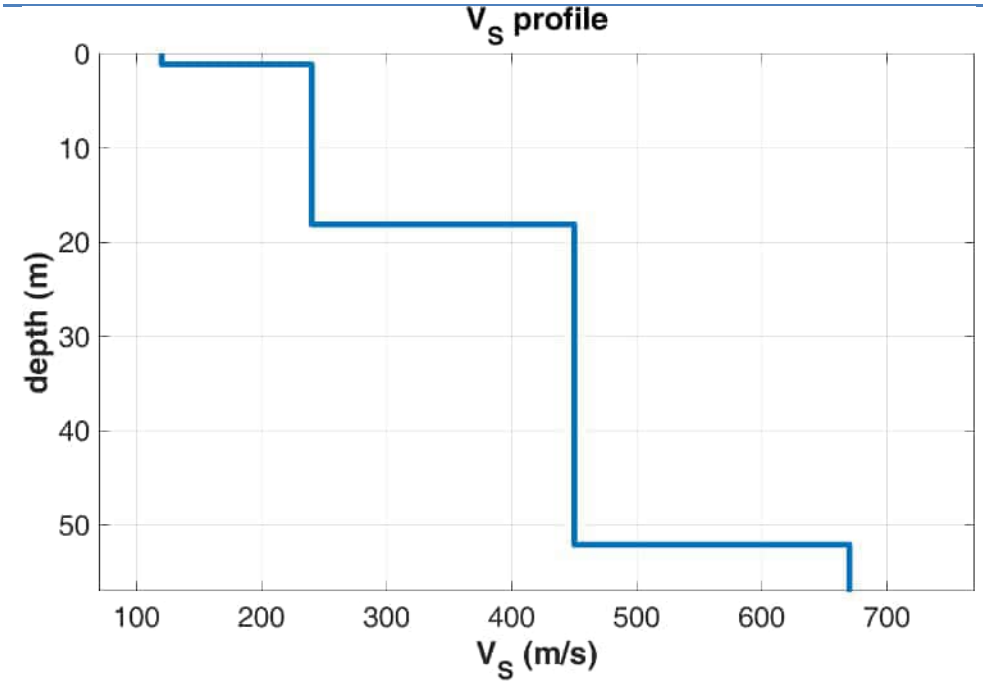
Modello sintetico su spettro HVSR



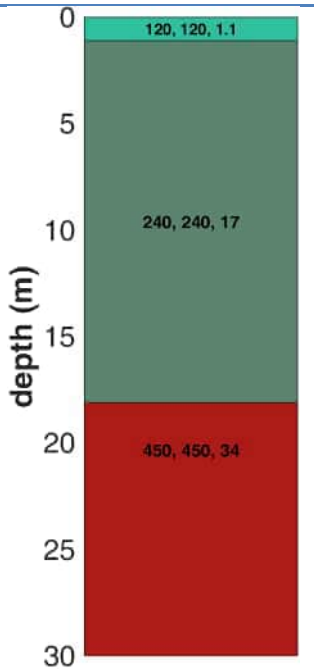
Modello sismostratigrafico:
N° di strati: 4

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	1.1	1.1	224	120
2	17.0	18.1	500	240
3	34.0	52.1	1492	450
4	∞	∞	2222	670

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 282 m/s

INDAGINE MASW + REMI

Località Via Sapinia	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 17.30
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI18	**File** FOR MASW18a_STK.dat; FOR REMI18.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW18a_0103.drm
☒ FOR MASW18a_0203.drm
☒ FOR MASW18a_0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

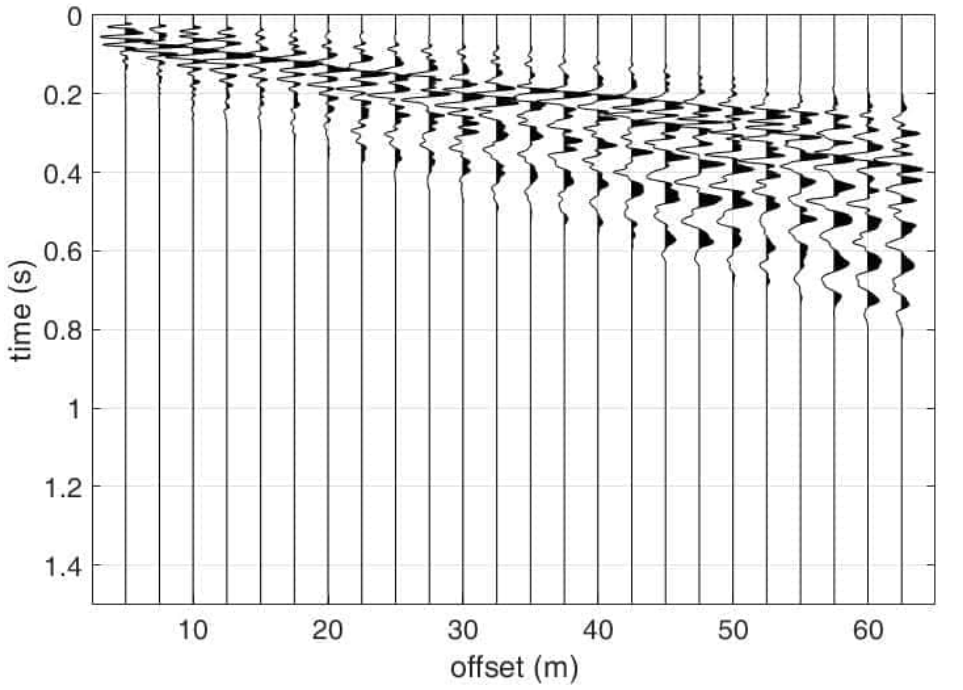
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

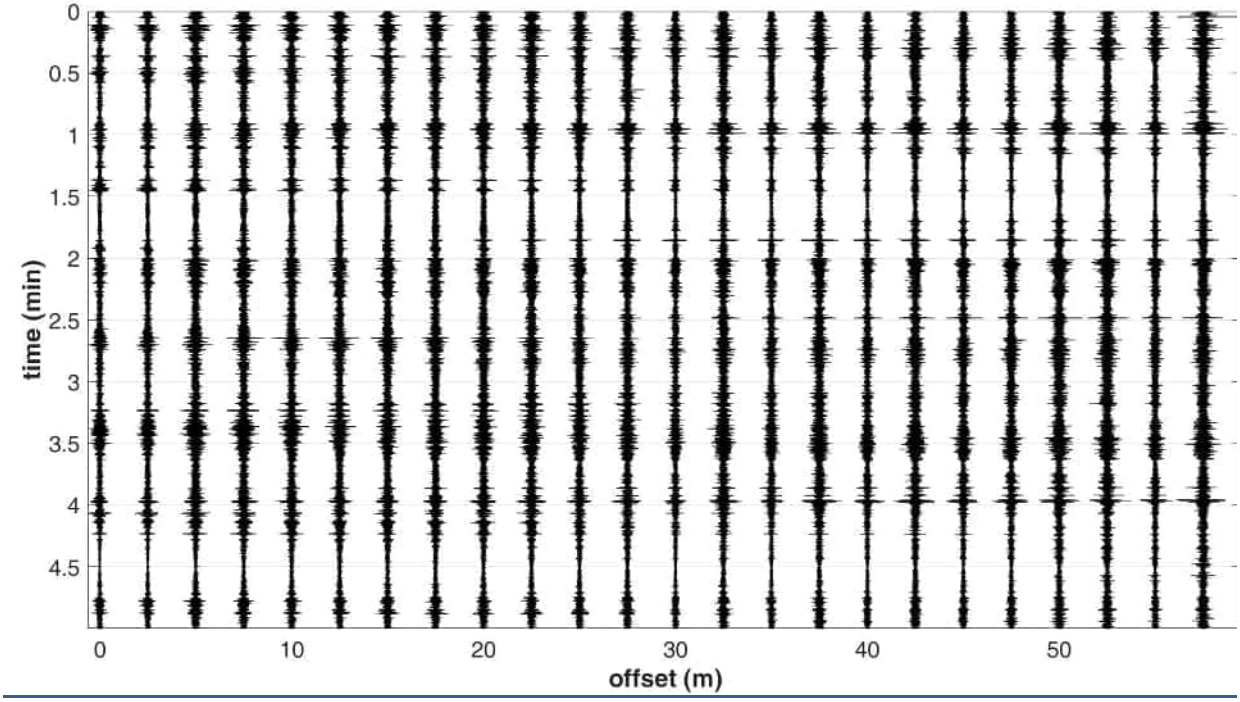
Sismogrammi MASW



REMI

Numero tracce: 24

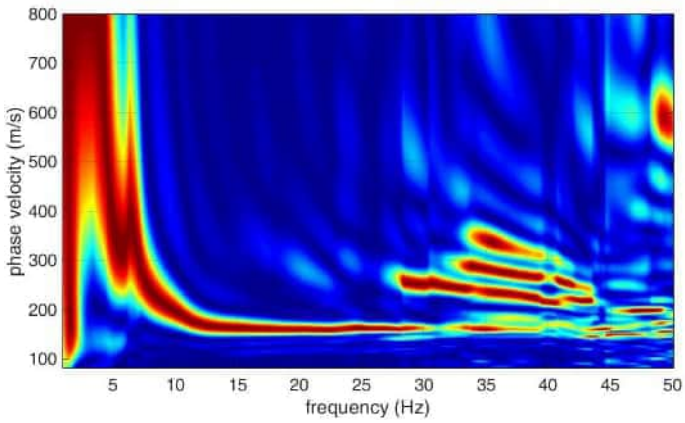
Sismogrammi REMI



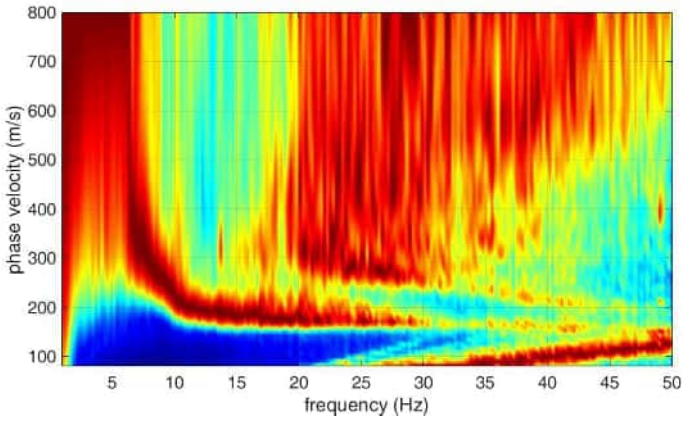
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

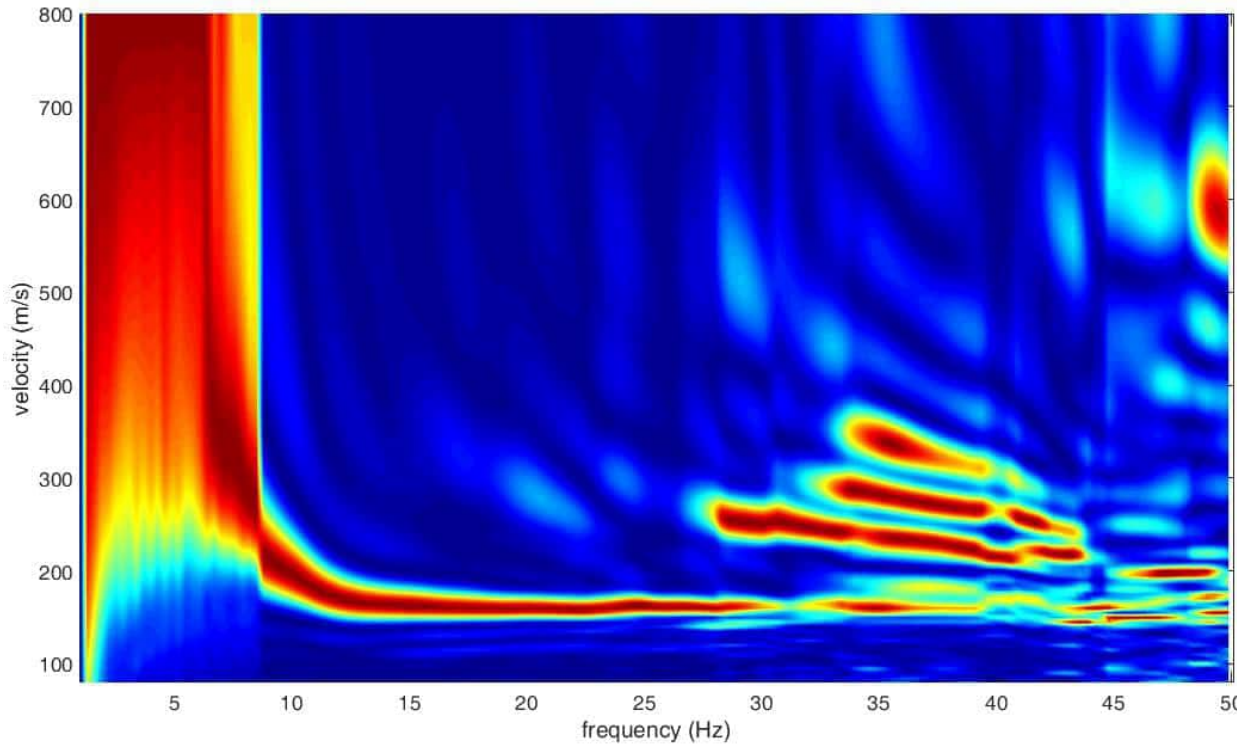


Spettro REMI



Frequenza di unione spettri: 8.5 Hz

Unione spettro REMI + MASW

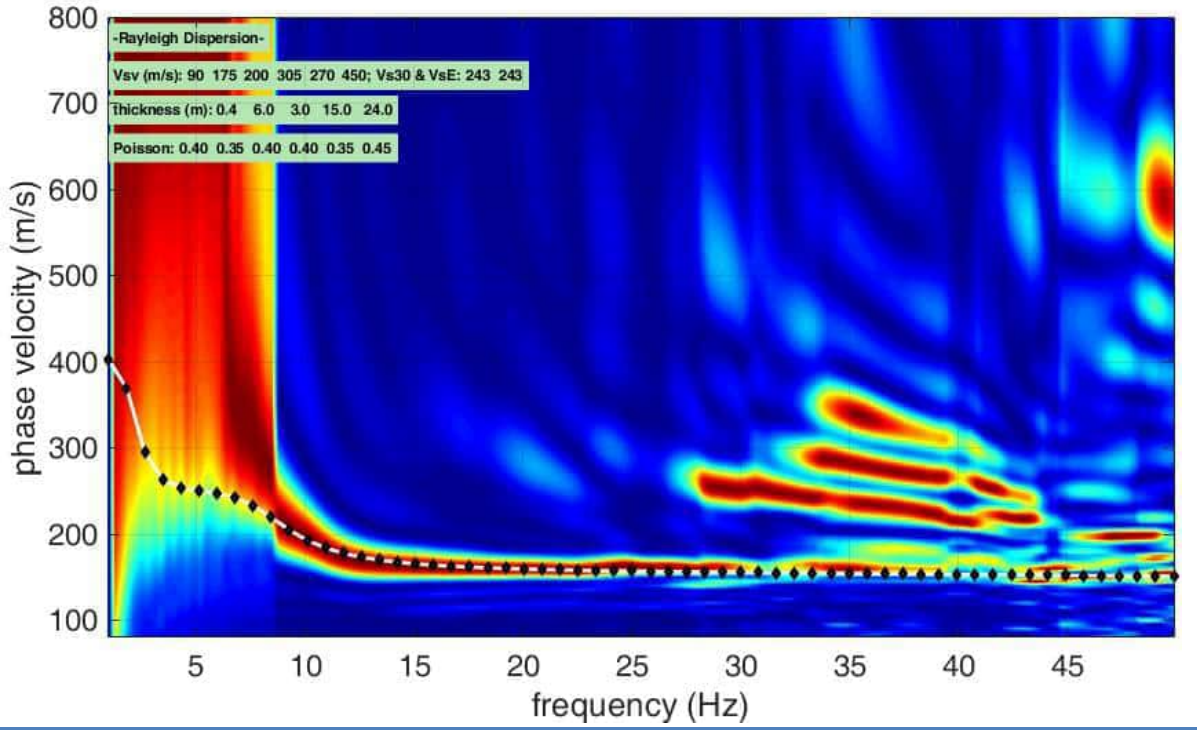


Inversione:

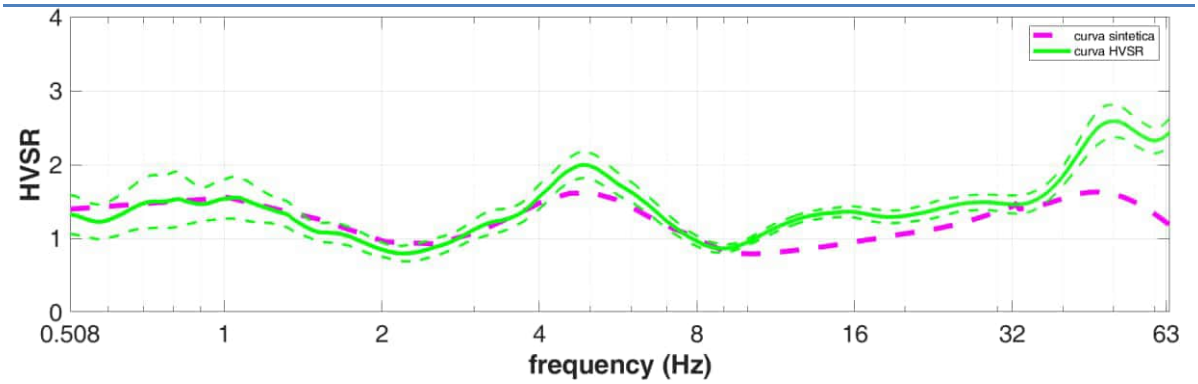
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



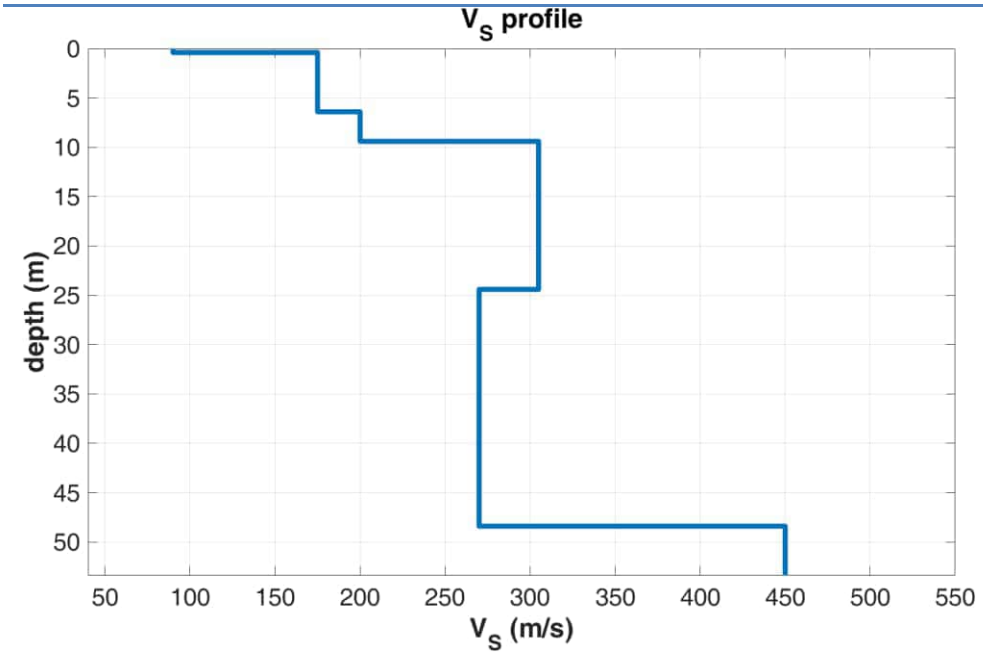
Modello sintetico su spettro HVSR



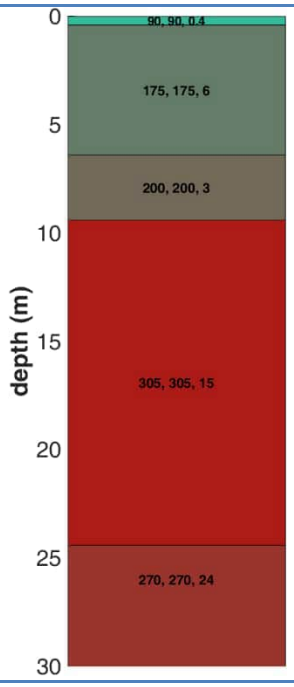
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.4	0.4	220	90
2	6.0	6.4	364	175
3	3.0	9.4	490	200
4	15.0	24.4	747	305
5	24.0	48.4	562	270
6	∞	∞	1492	450

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 243 m/s

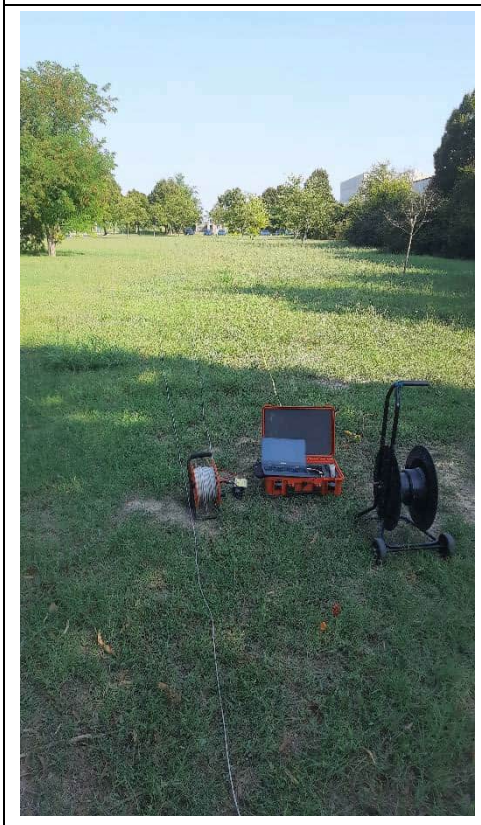
INDAGINE MASW + REMI

Località Via Virgilio	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 28/08/2024	**Ora** 16.30
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 19	**File** FOR MASW19a_STK.dat; FOR REMI19.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



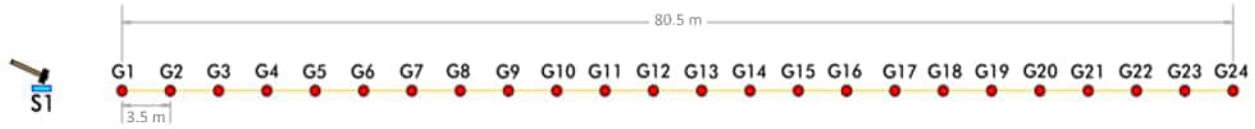
MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	
Tipologia energizzazione:		
☐ Fucile sismico	Modello:	
☒ Mazza	Kg: 5	
☐ Grave	Kg:	
☐ Mazza su trave	Kg:	

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW19a _0103.drm
☒ FOR MASW19a _0203.drm
☒ FOR MASW19a _0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3.5 m
Lunghezza stendimento (m): 80.5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI: camion acceso a circa 20 m

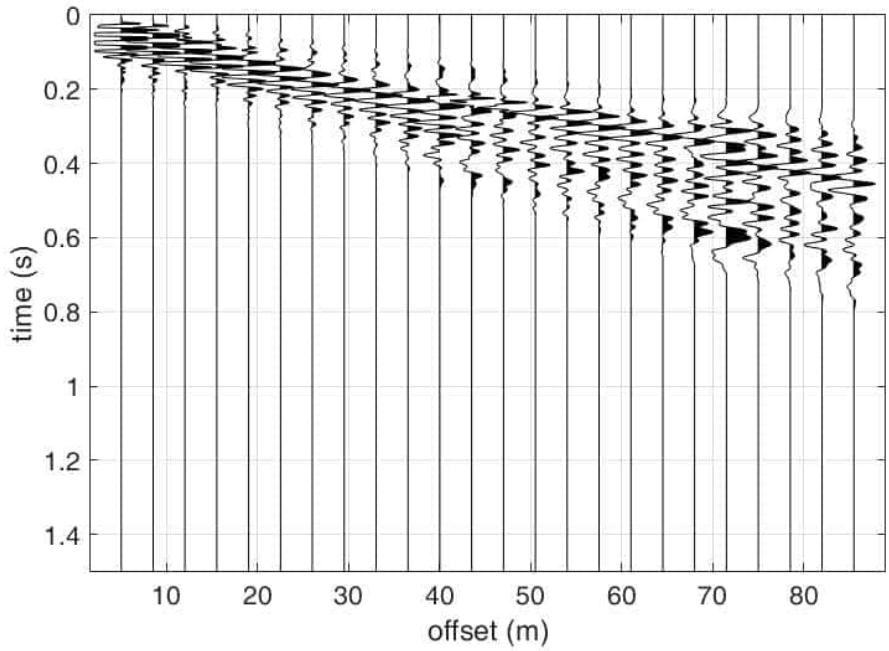
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

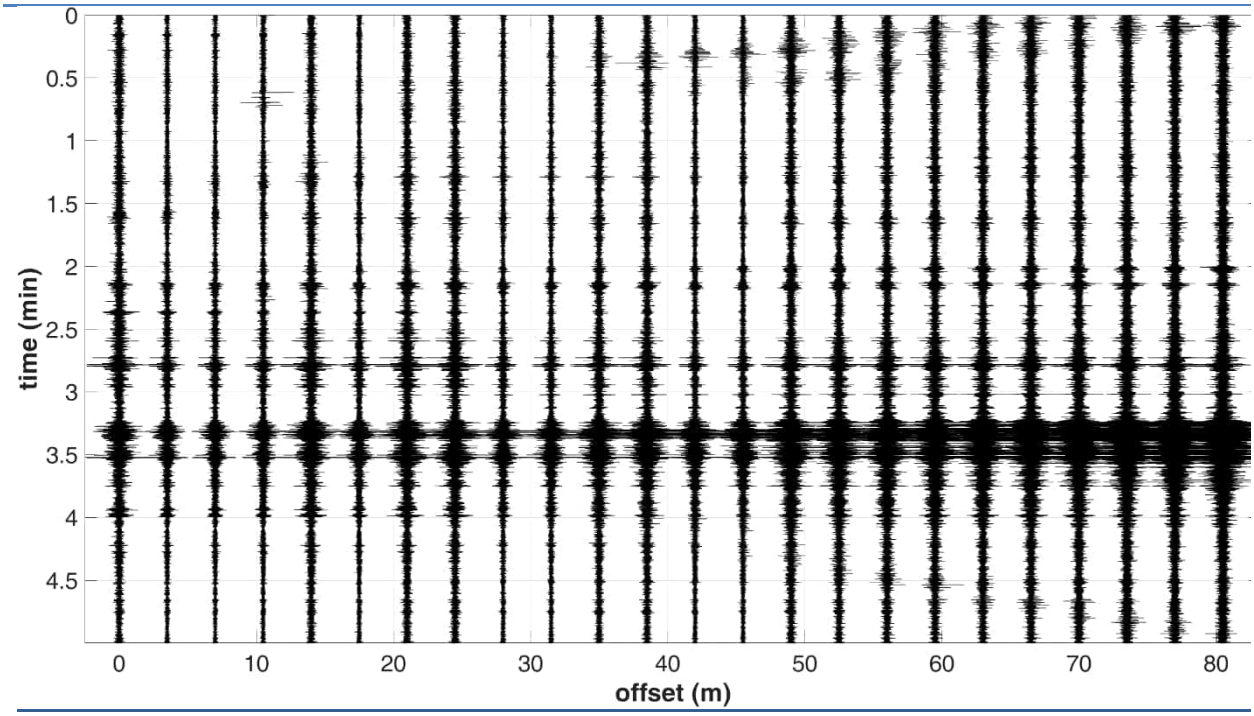
Sismogrammi MASW



REMI

Numero tracce: 24

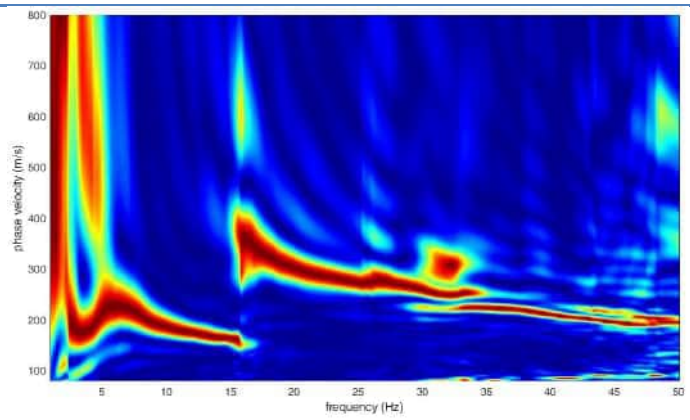
Sismogrammi REMI



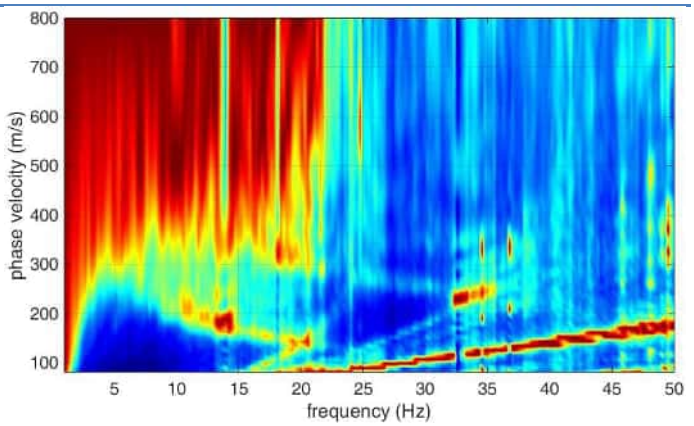
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

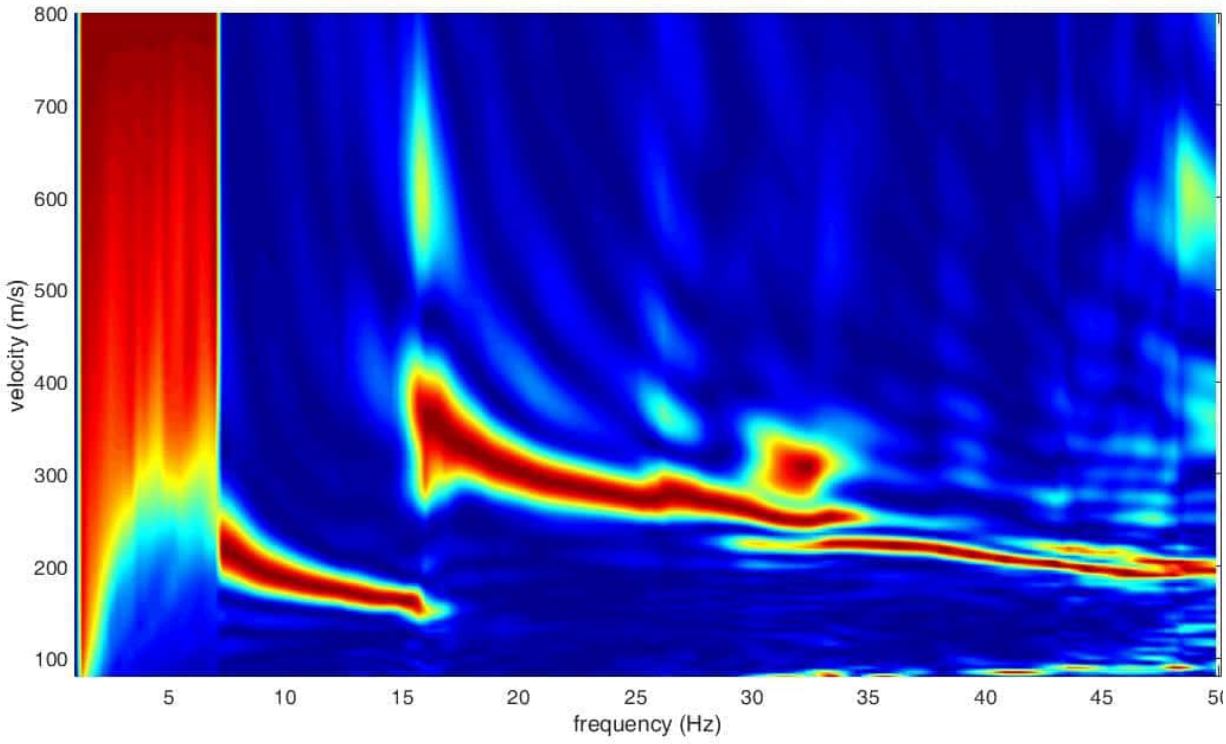


Spettro REMI



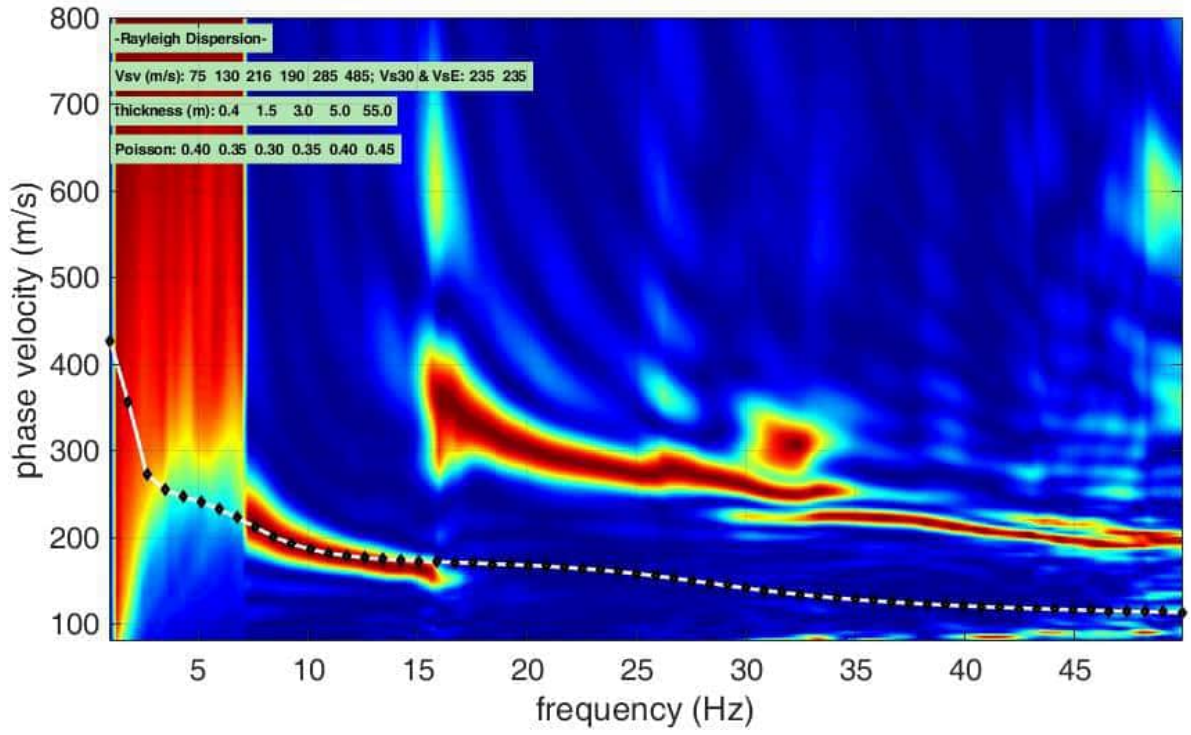
Frequenza di unione spettri: 7 Hz

Unione spettro REMI + MASW

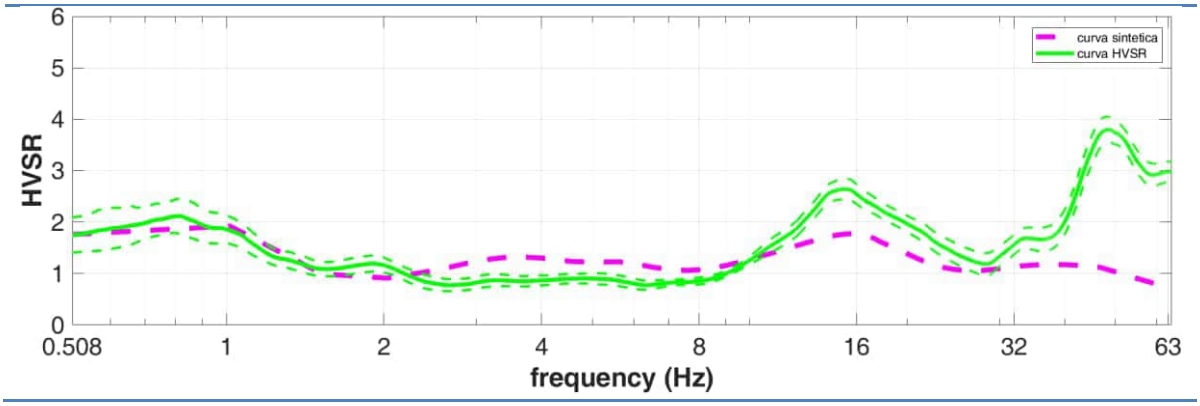


Inversione:
Inversione congiunta MASW + REMI + HVSR

Modello sintetico su spettro REMI + MASW



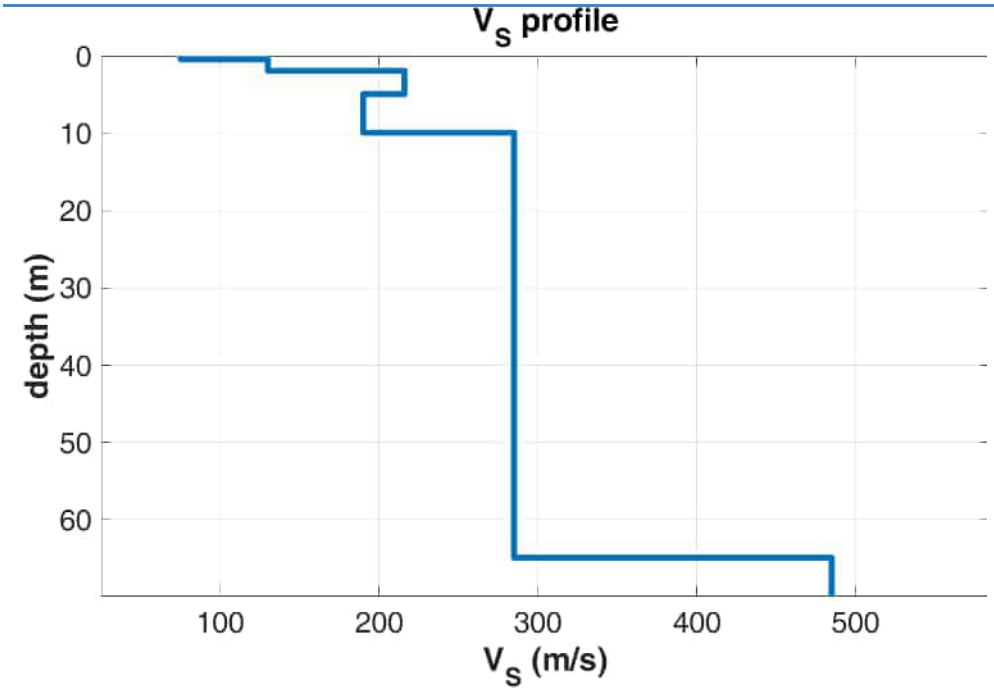
Modello sintetico su spettro HVSR



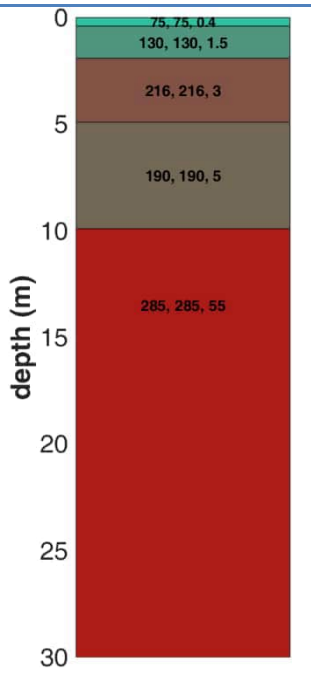
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.4	0.4	184	75
2	1.5	1.9	271	130
3	3.0	4.9	404	216
4	5.0	9.9	396	190
5	55.0	64.9	698	285
6	∞	∞	1609	485

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 235 m/s

INDAGINE MASW + REMI

Località Via Ambrosolo Giorgio	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 03/09/2024	**Ora** 17.20
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI 20	**File** FOR MASW20a_STK.dat; FOR REMI20.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 2.5 m
Lunghezza stendimento (m): 57.5 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	
Tipologia energizzazione:		
☐ Fucile sismico	Modello:	
☒ Mazza	Kg: 5	
☐ Grave	Kg:	
☐ Mazza su trave	Kg:	

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW20a_0103.drm
☒ FOR MASW20a_0203.drm
☒ FOR MASW20a_0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 2.5 m
Lunghezza stendimento (m): 57.5	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☒ asciutto	☐ bagnato		☐ saturo

OSSERVAZIONI:

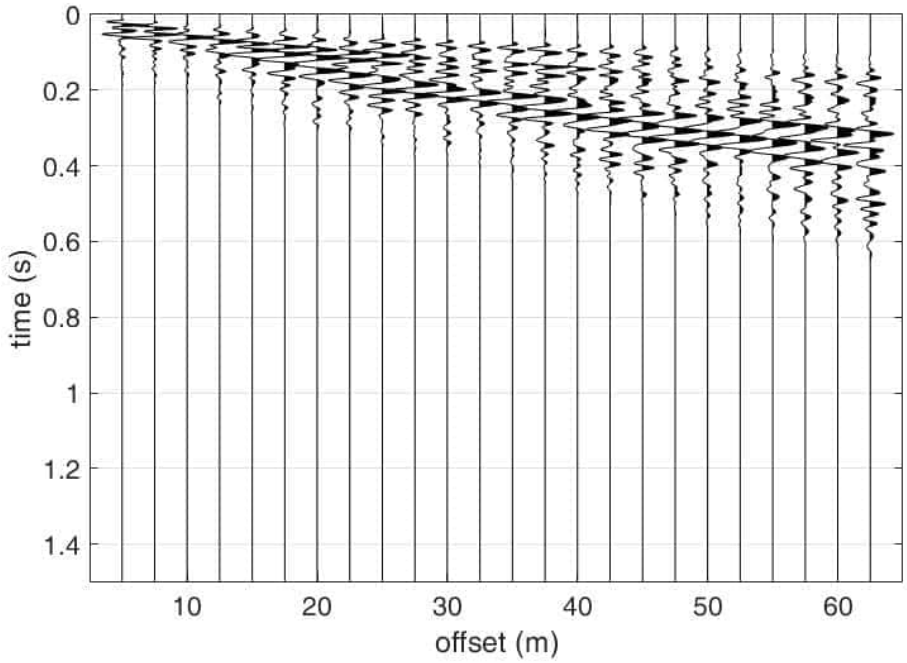
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

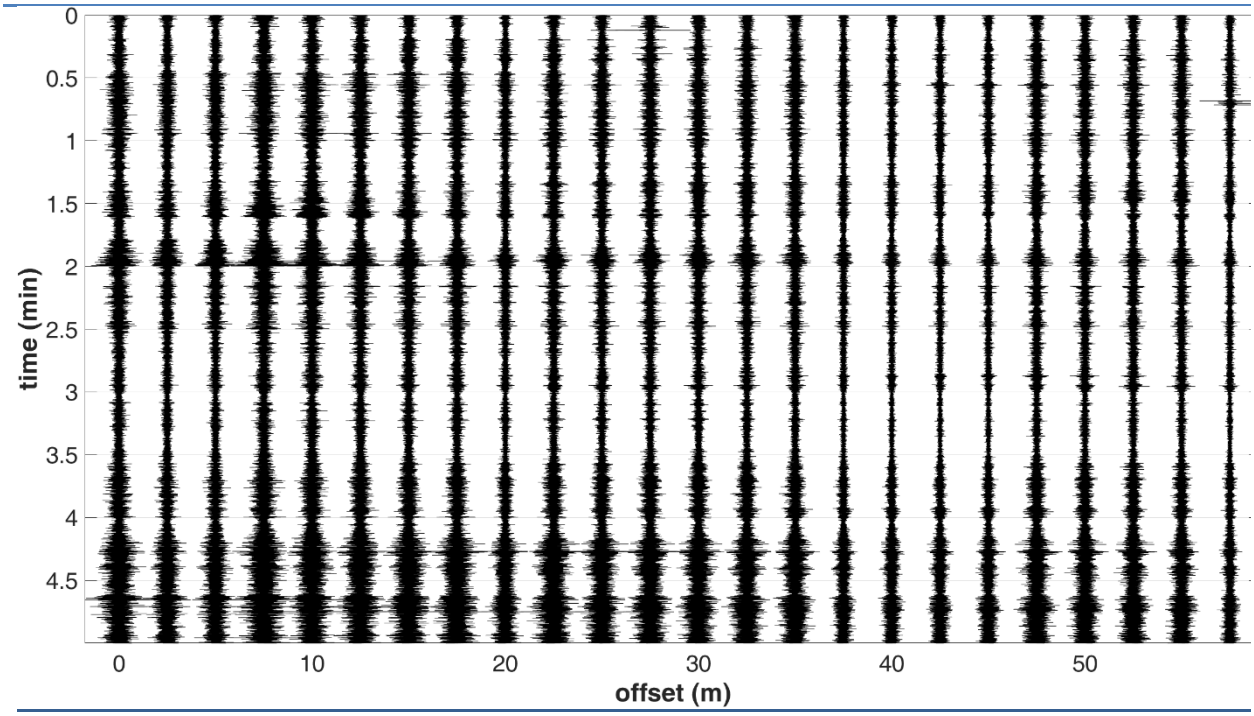
Sismogrammi MASW



REMI

Numero tracce: 24

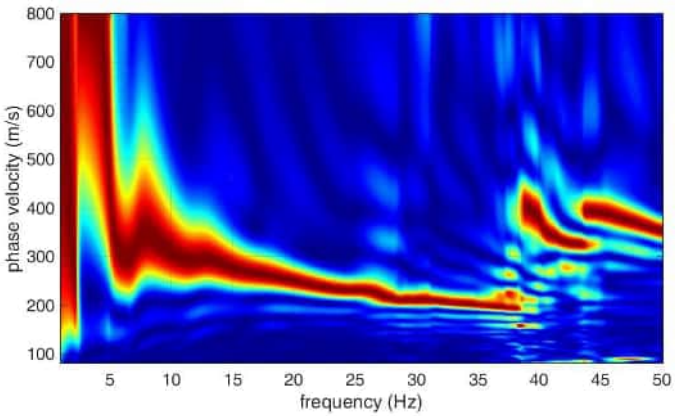
Sismogrammi REMI



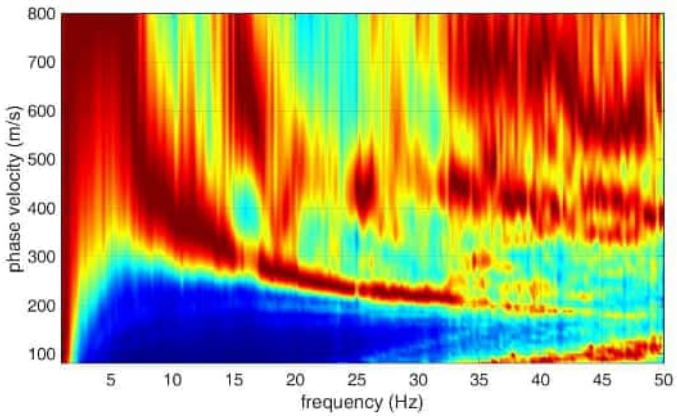
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

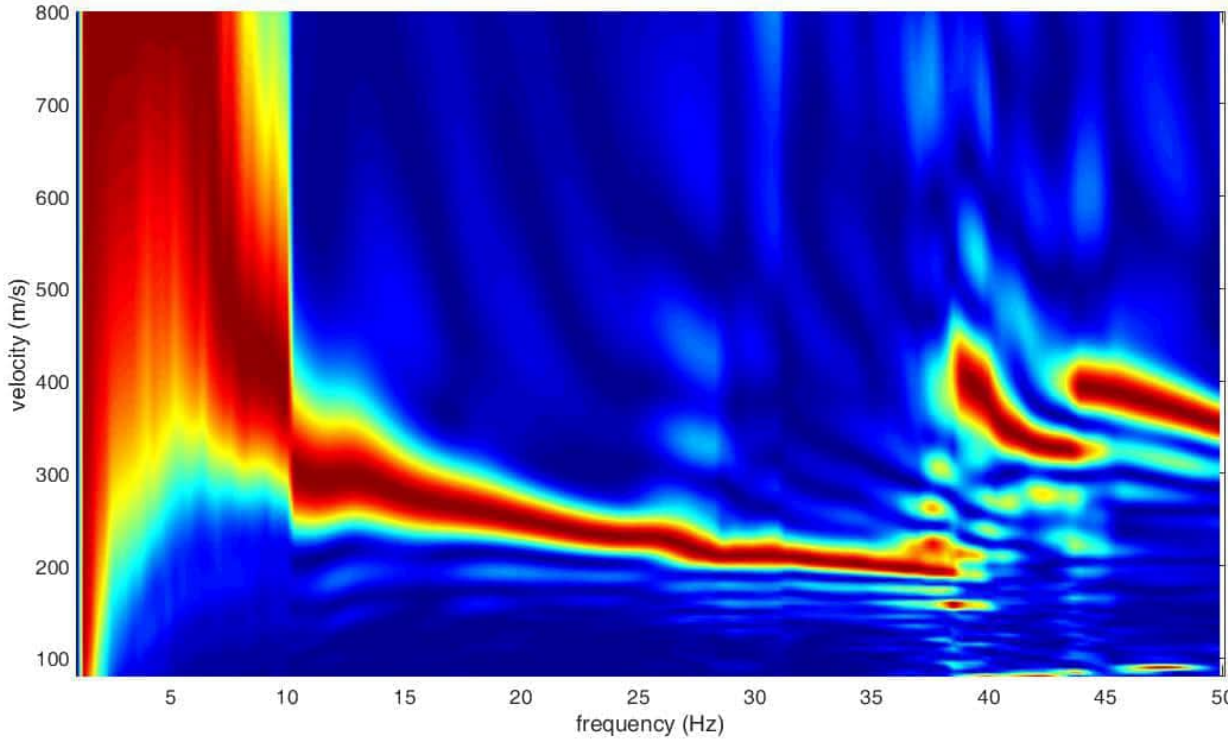


Spettro REMI



Frequenza di unione spettri: 10 Hz

Unione spettro REMI + MASW

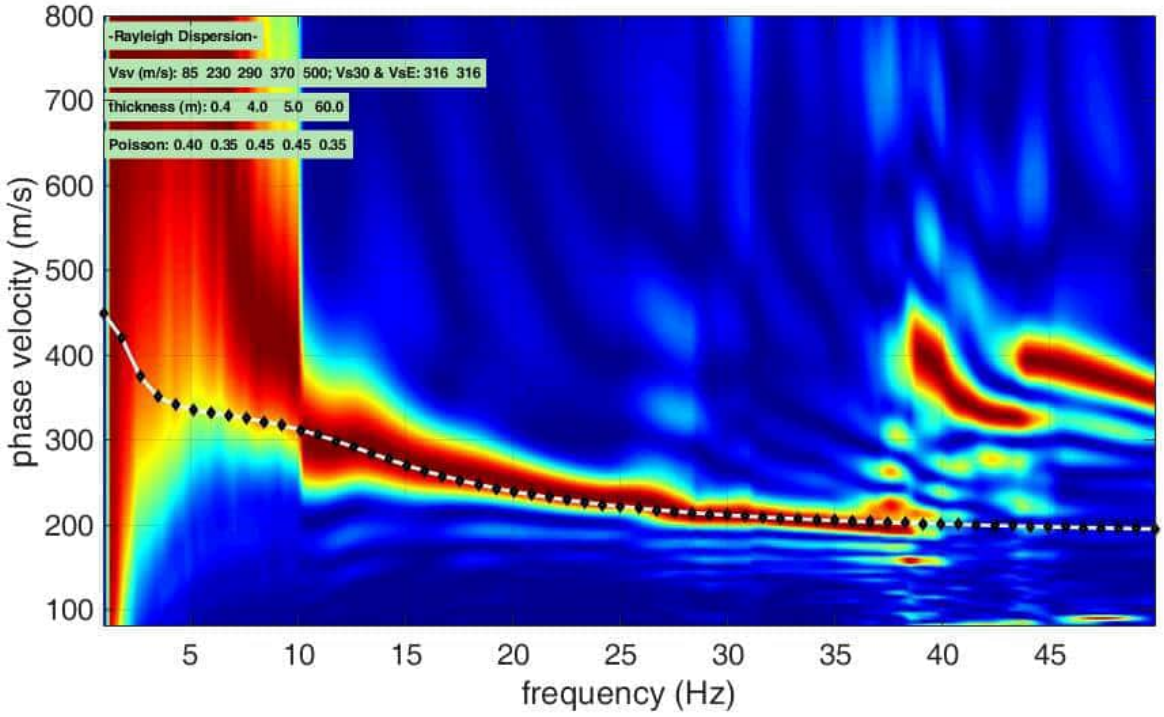


Inversione:

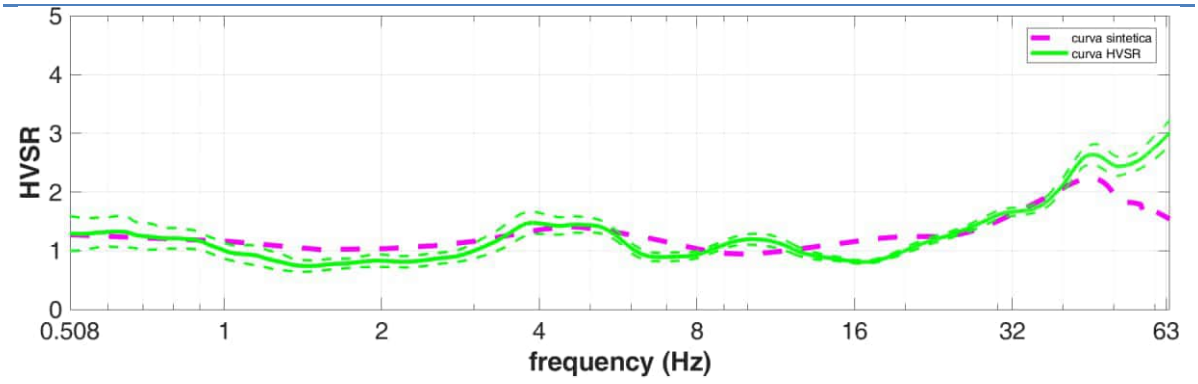
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



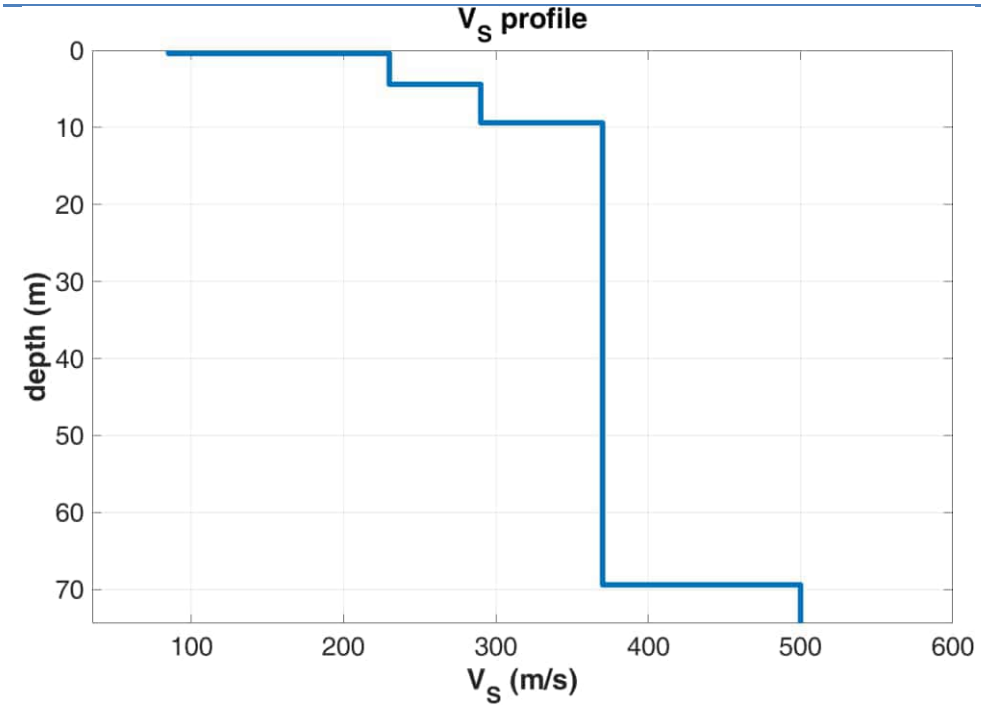
Modello sintetico su spettro HVSR



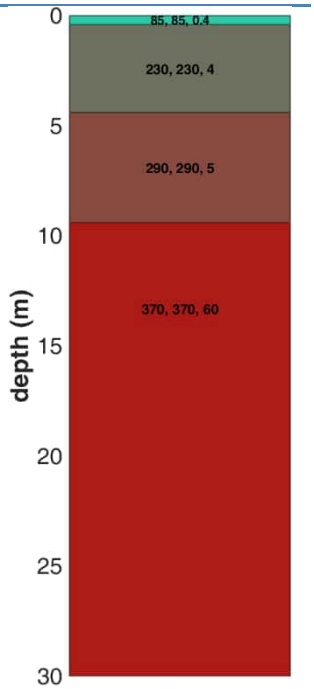
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.4	0.4	208	85
2	4.0	4.4	479	230
3	5.0	9.4	962	290
4	60	69.4	1227	370
5	∞	∞	1041	500

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 316 m/s

INDAGINE MASW + REMI

Località Via Correcchio Loc. Ospedaletto	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 29/08/2024	**Ora** 11.00
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI21	**File** FOR MASW21a_STK.dat; FOR REMI21.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW21a_0103.drm
☒ FOR MASW21a_0203.drm
☒ FOR MASW21a_0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

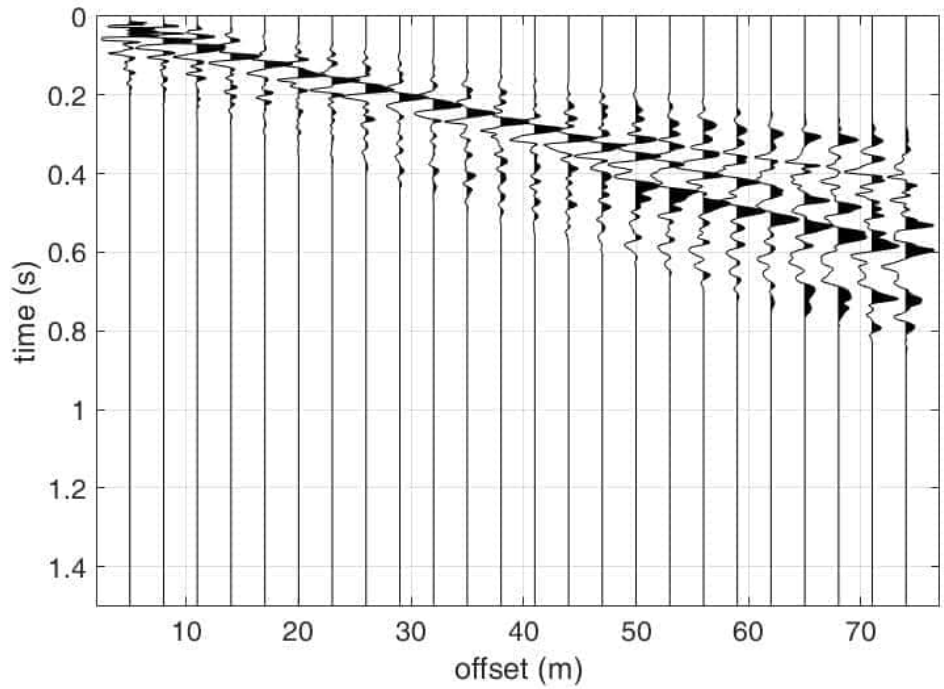
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

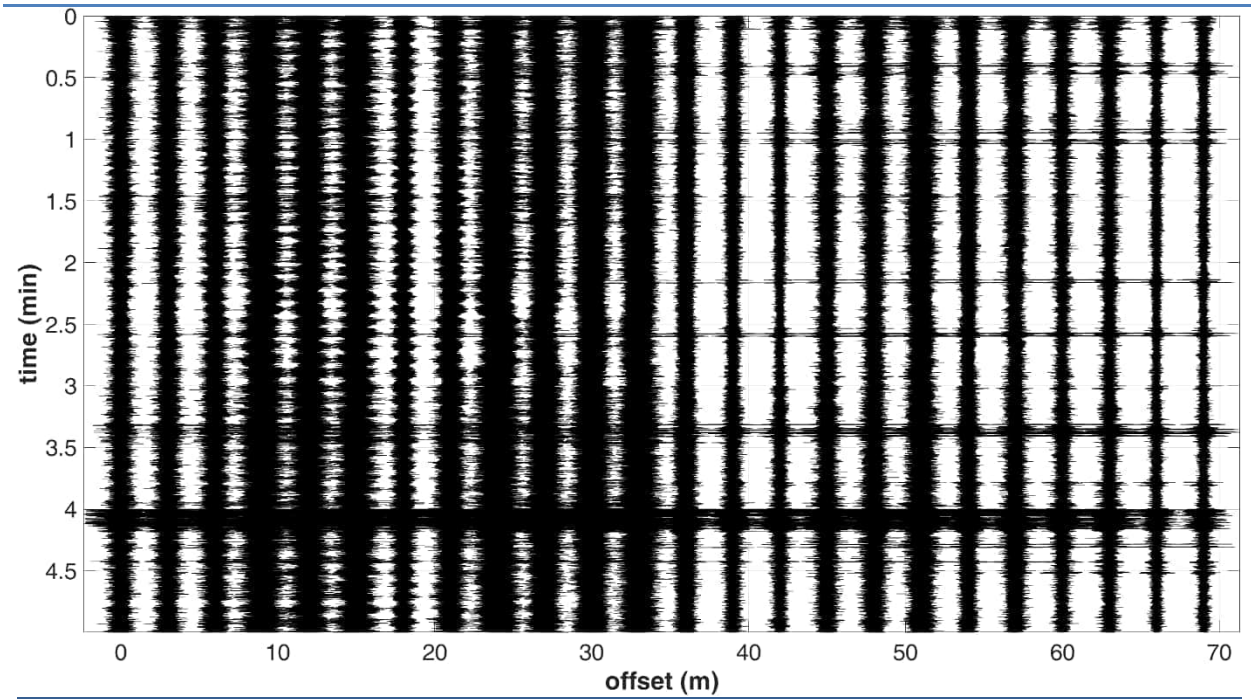
Sismogrammi MASW



REMI

Numero tracce: 24

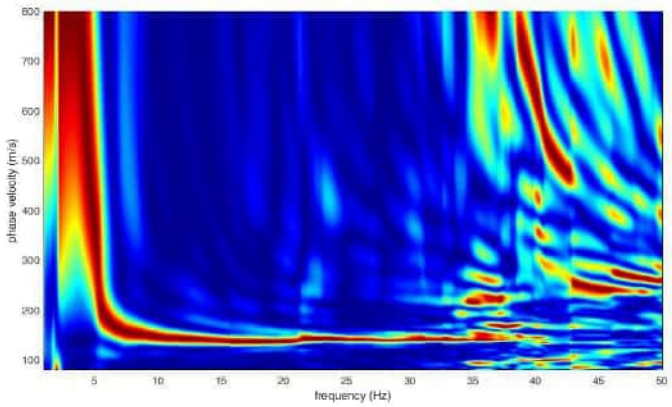
Sismogrammi REMI



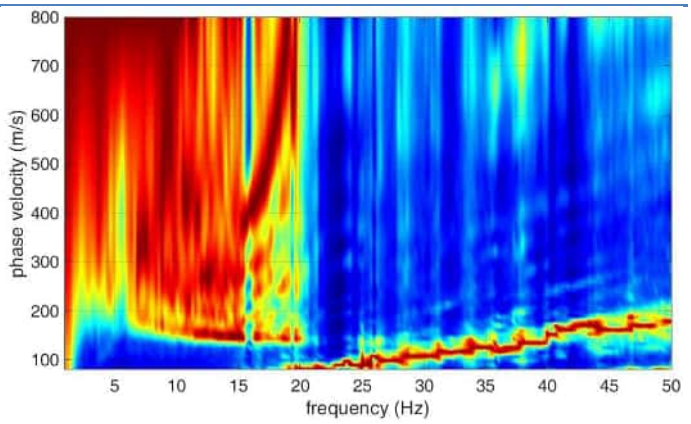
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

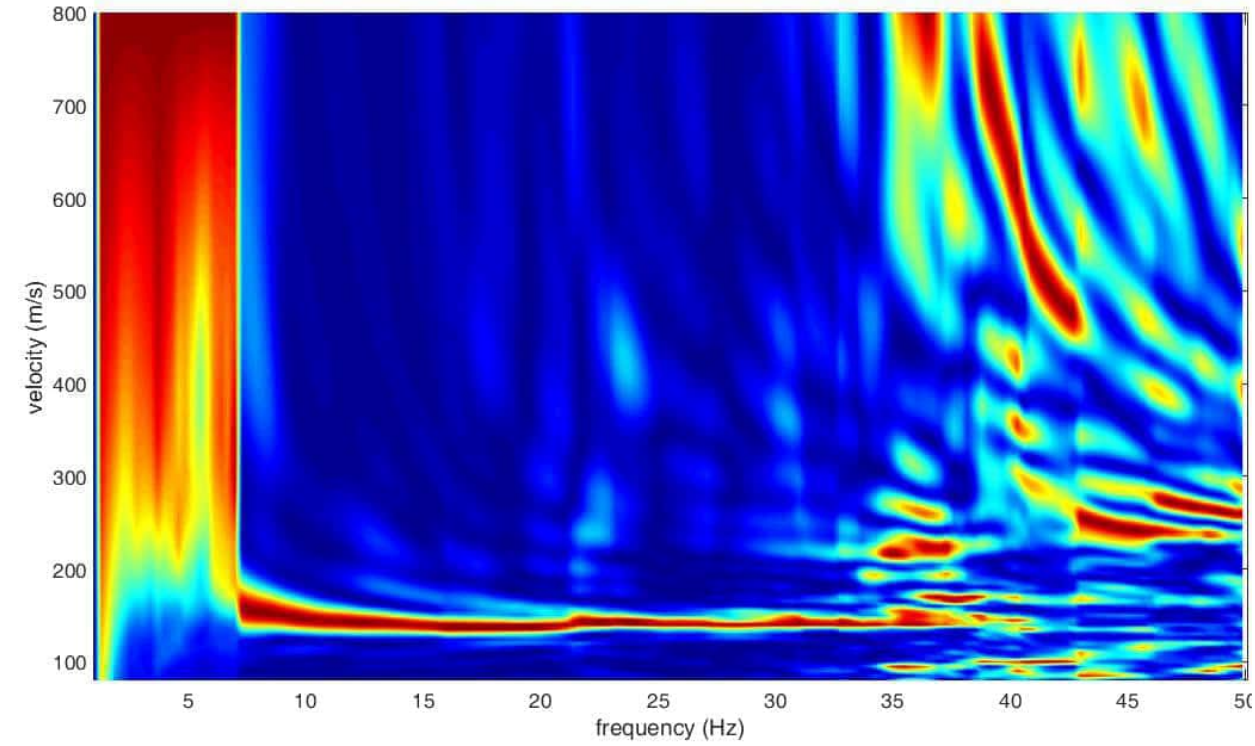


Spettro REMI



Frequenza di unione spettri: 7 Hz

Unione spettro REMI + MASW

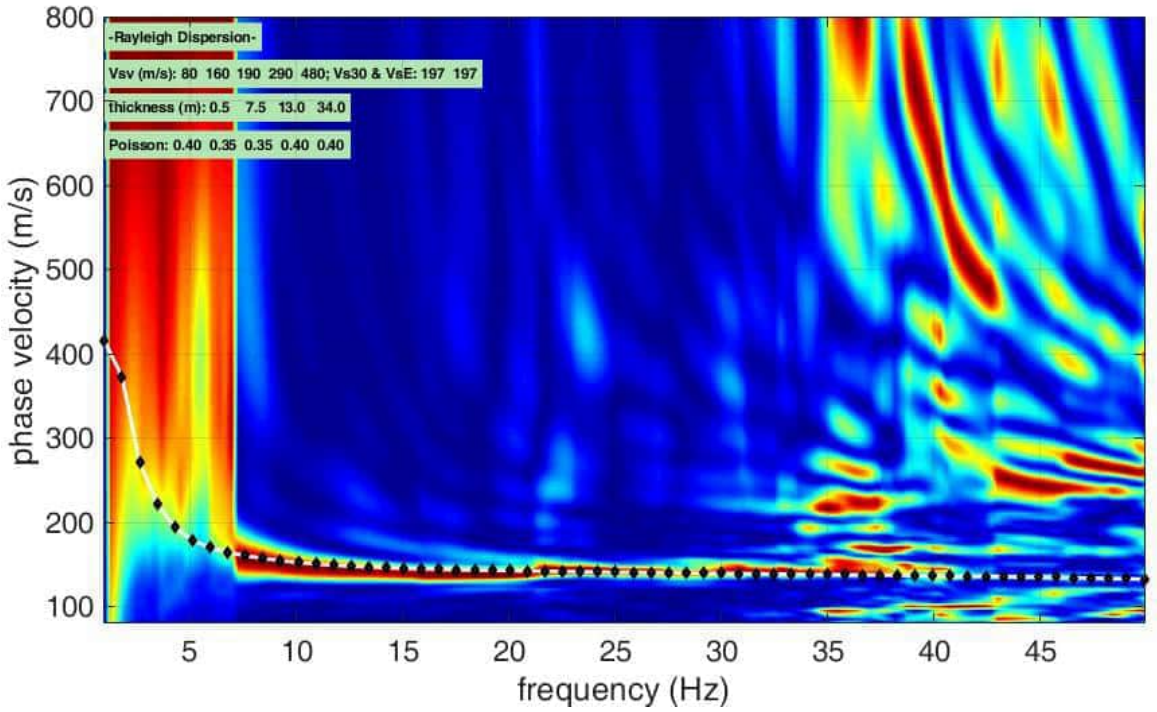


Inversione:

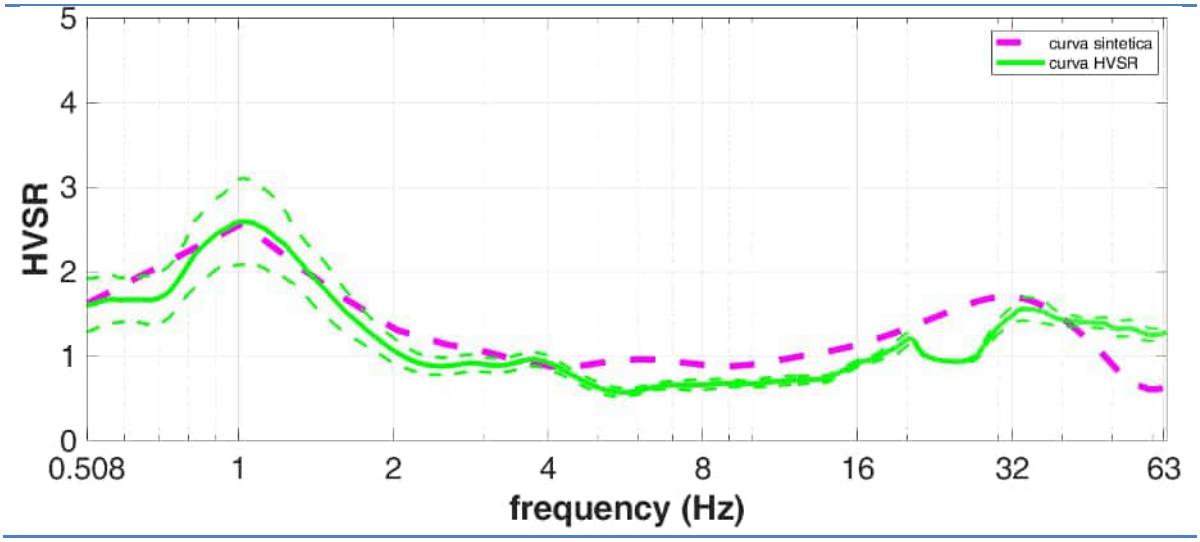
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



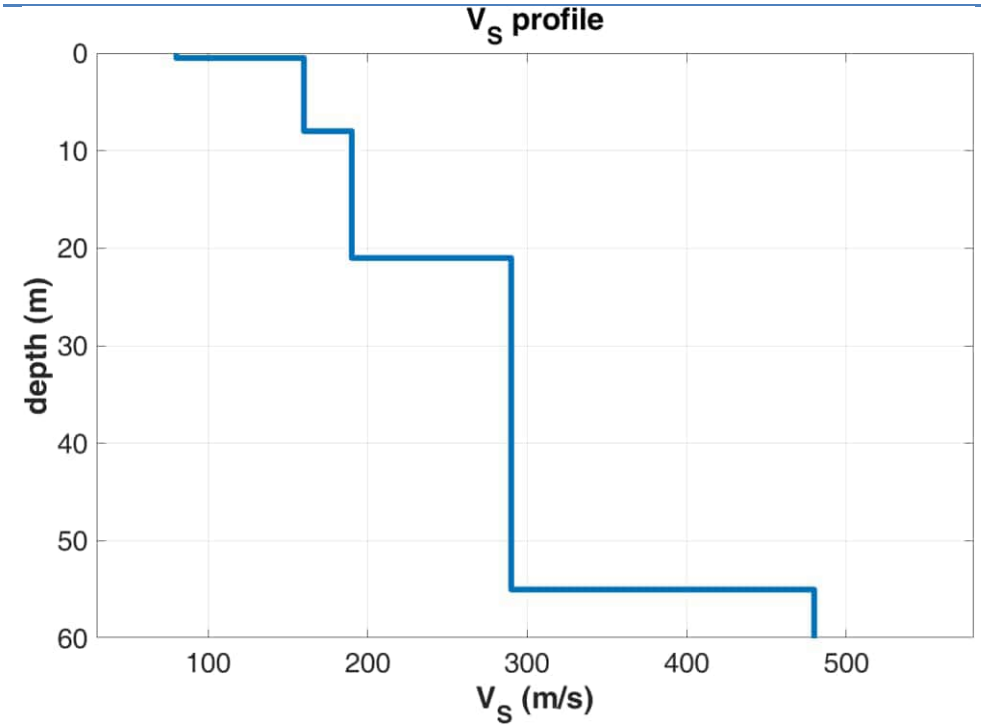
Modello sintetico su spettro HVSR



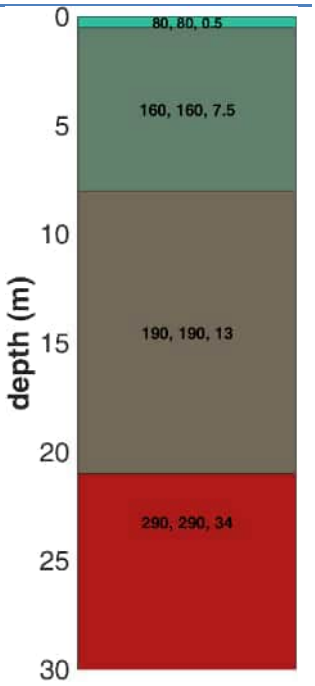
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.5	0.5	196	80
2	7.5	8.0	333	160
3	13.0	21.0	396	190
4	34.0	55.0	710	290
5	∞	∞	1176	480

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 197 m/s

INDAGINE MASW + REMI

Località Parchetto via Scaldarancio	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 29/08/2024	**Ora** 8.20
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI22	**File** FOR MASW22a_STK.dat; FOR REMI22.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW

Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW22a_0103.drm
☒ FOR MASW22a_0203.drm
☒ FOR MASW22a_0303.drm

MISURA REMI

N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

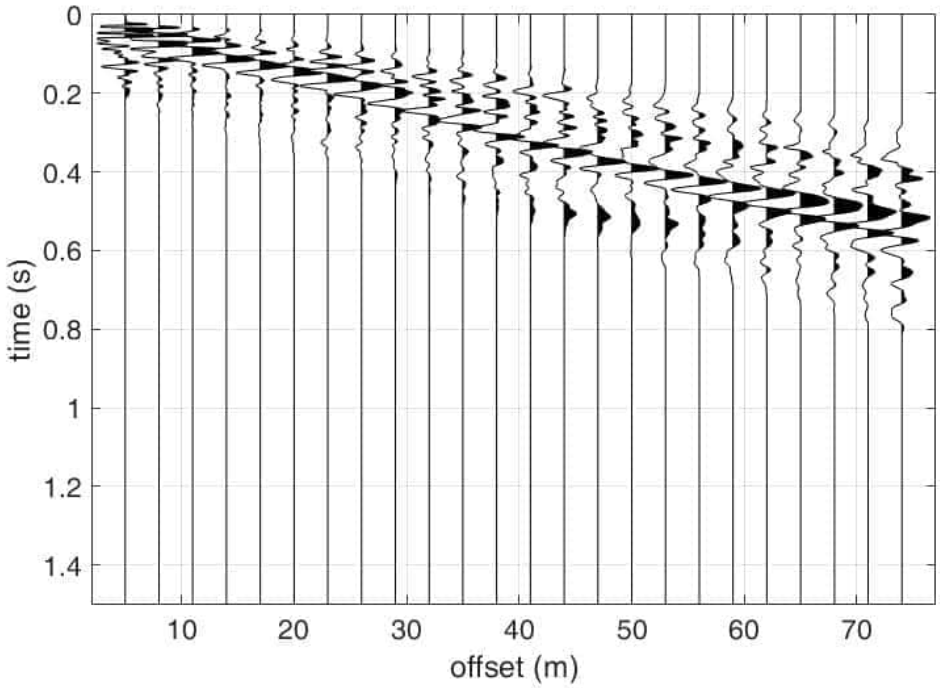
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

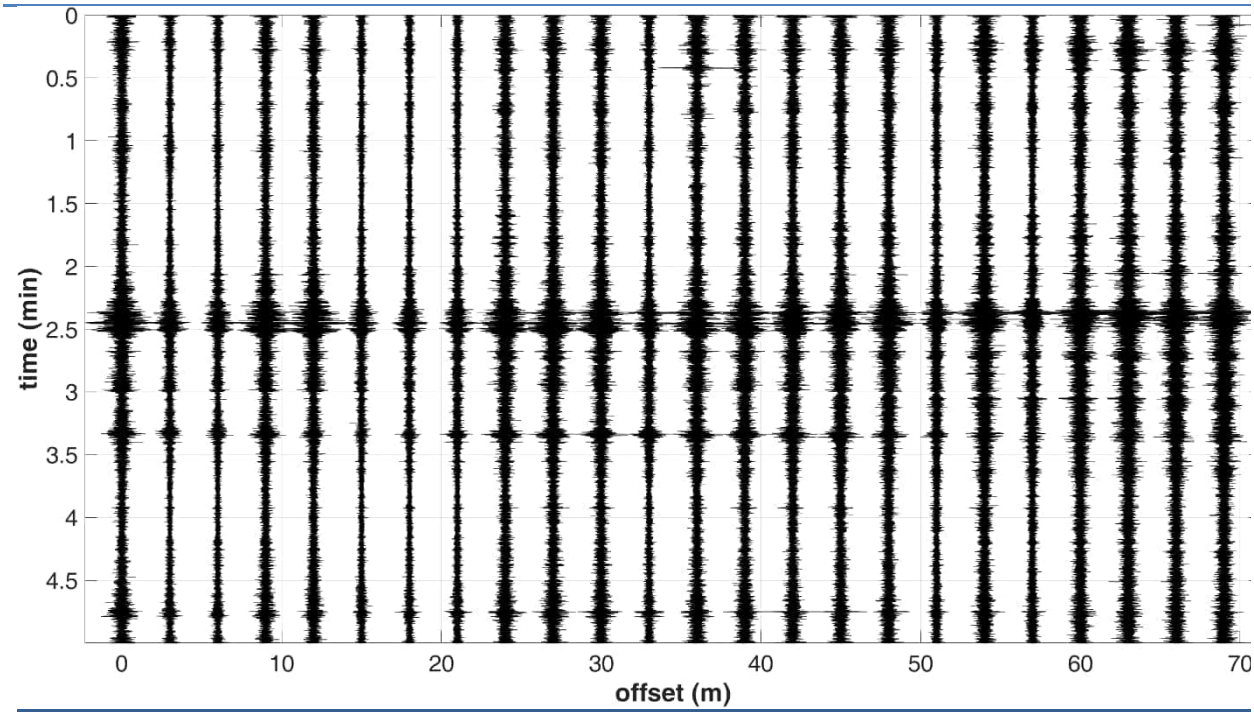
Sismogrammi MASW



REMI

Numero tracce: 24

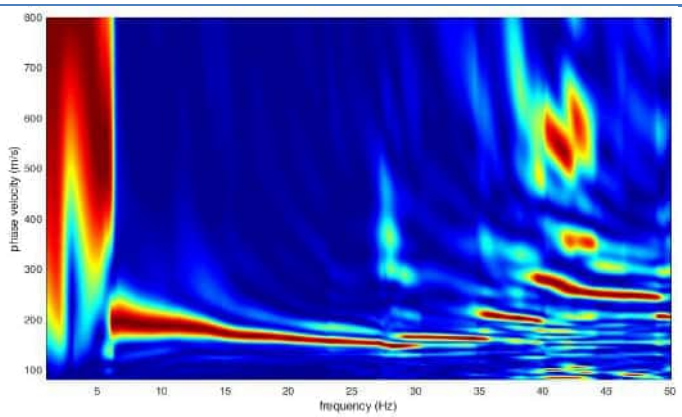
Sismogrammi REMI



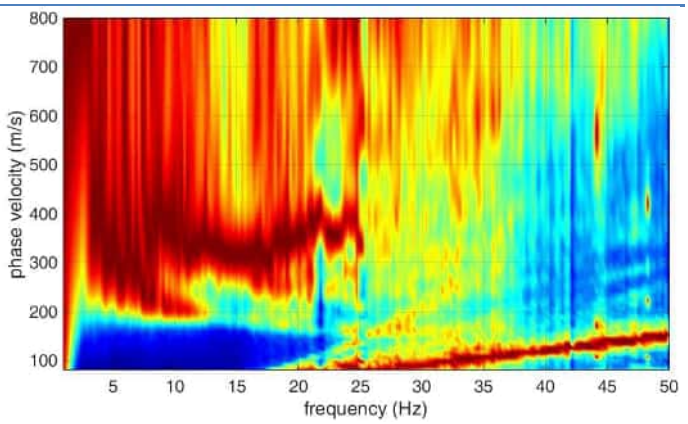
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

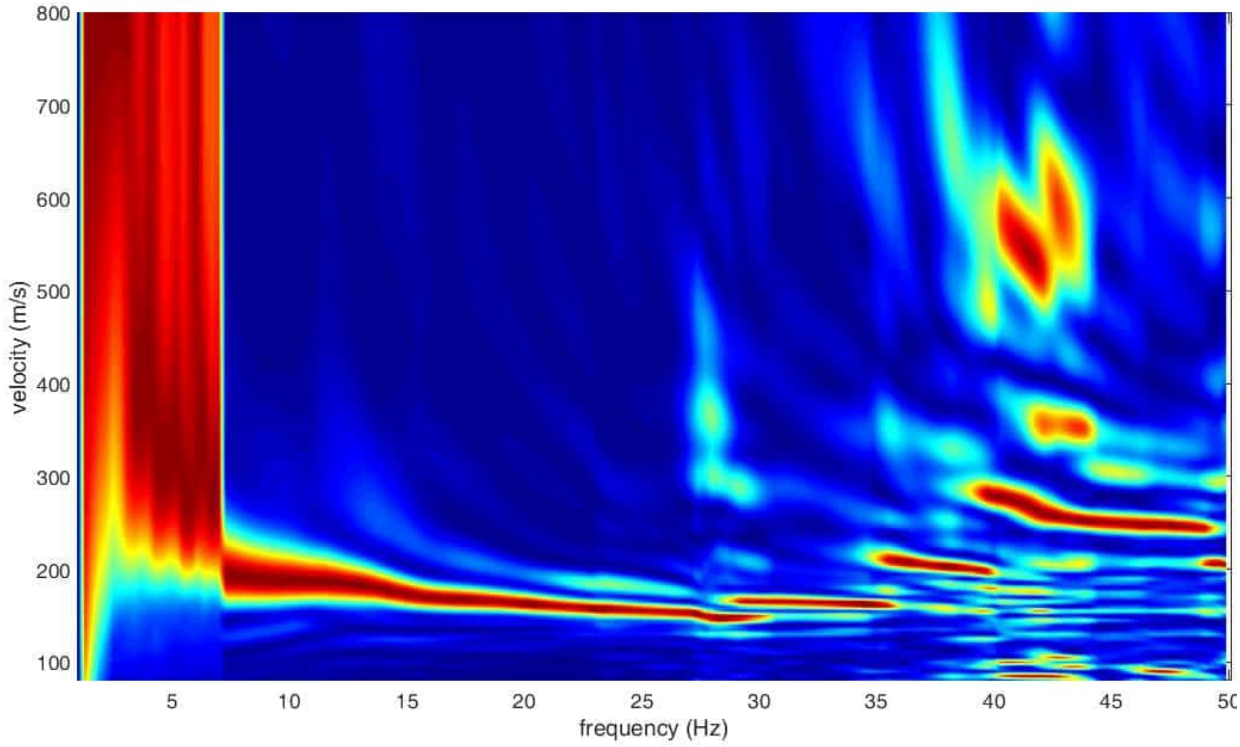


Spettro REMI



Frequenza di unione spettri: 7 Hz

Unione spettro REMI + MASW

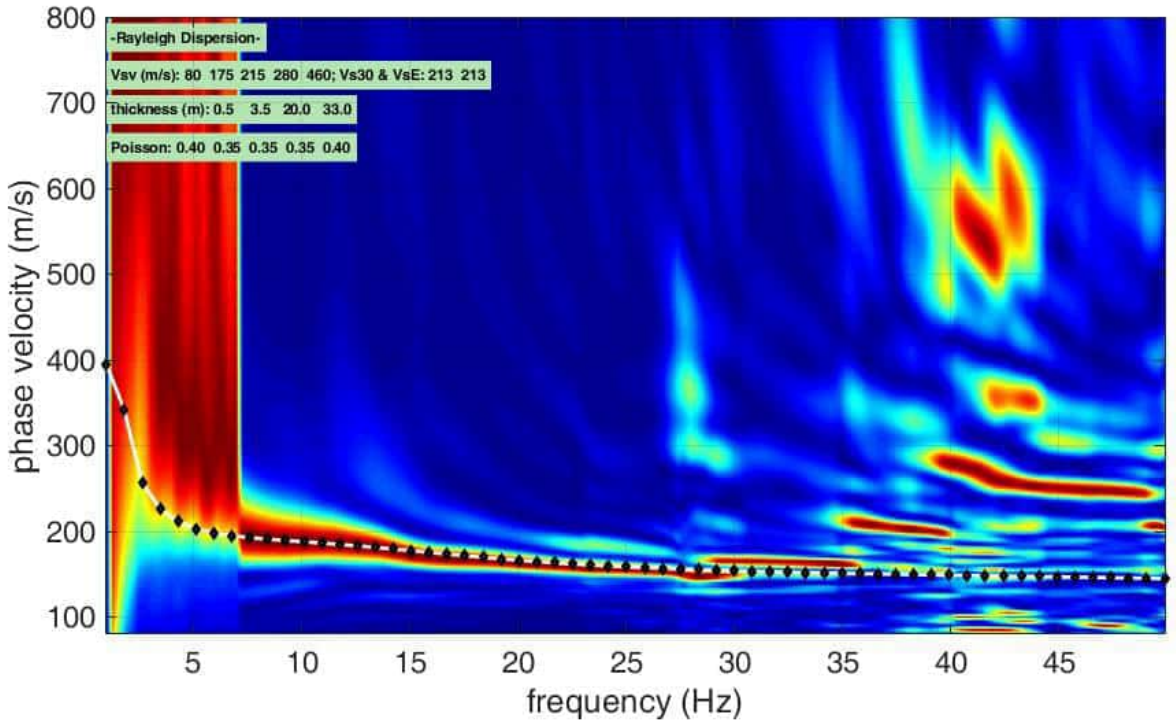


Inversione:

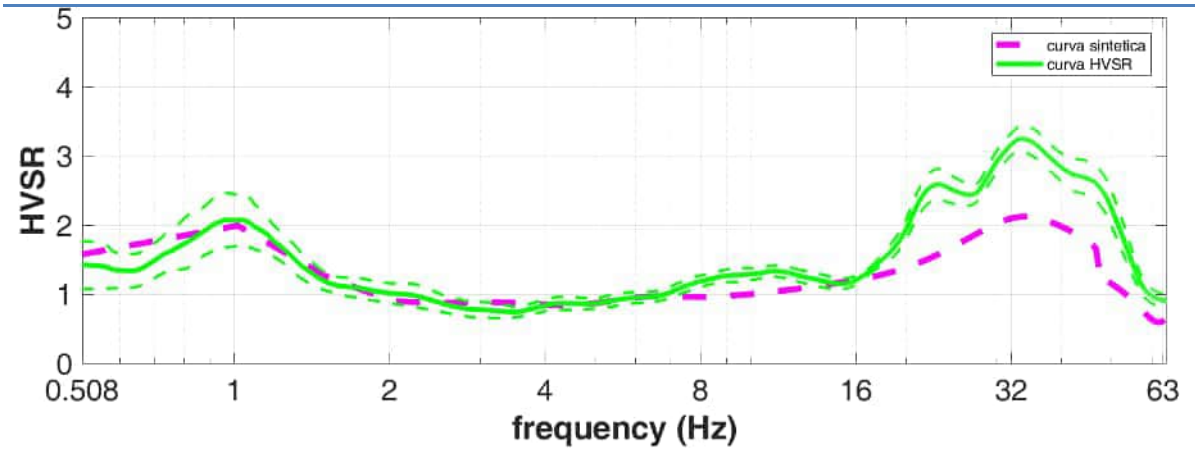
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



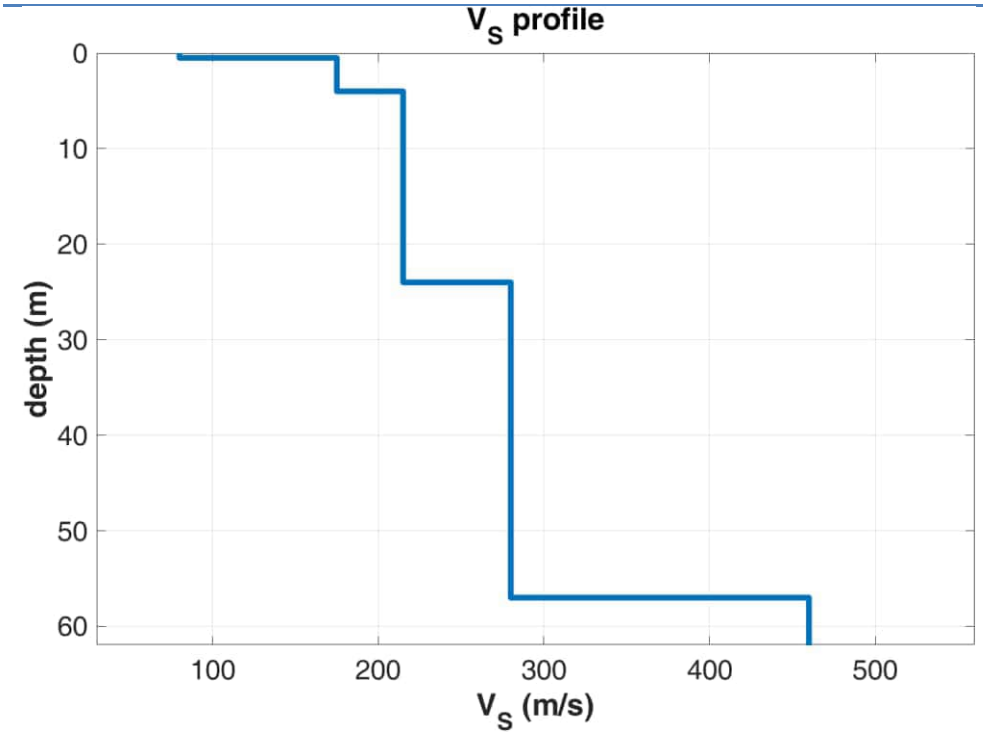
Modello sintetico su spettro HVSR



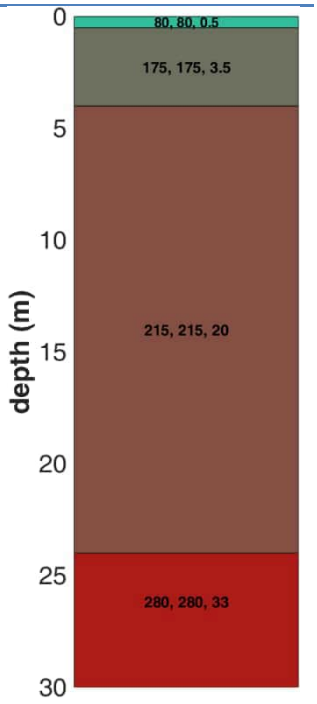
Modello sismostratigrafico:
N° di strati: 5

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.5	0.5	196	80
2	3.5	4.0	364	175
3	20.0	24.0	448	215
4	33.0	57.0	583	280
5	∞	∞	1127	460

Modello sismostratigrafico Vs (m/s)



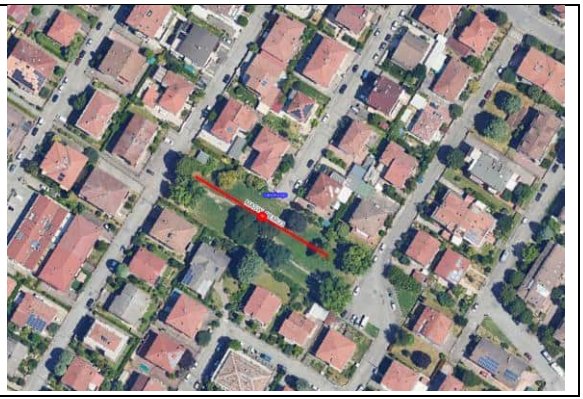
Dettaglio primi 30 m



Valore Vs_{30} = 213 m/s

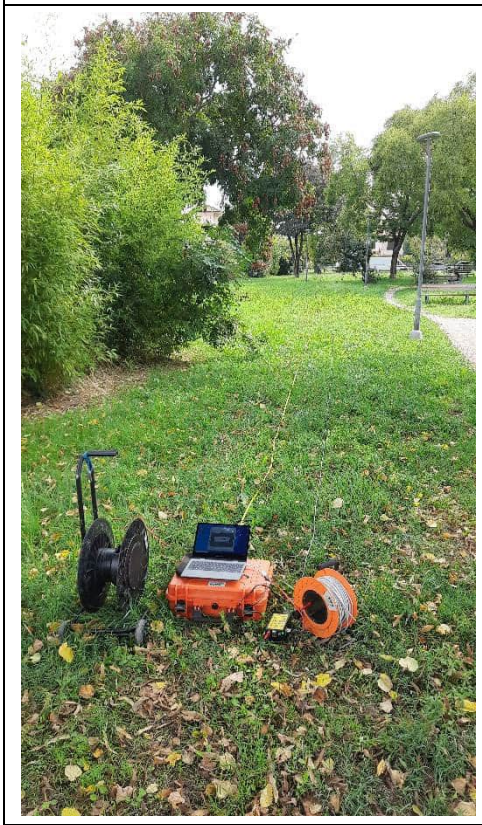
INDAGINE MASW + REMI

Località Giardini Don Arturo Femicelli	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 26/09/2024	**Ora** 12.15
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI23	**File** FOR MASW23b_STK.dat; FOR REMI23.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:	
☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW23b_0103.drm
☒ FOR MASW23b_0203.drm
☒ FOR MASW23b_0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

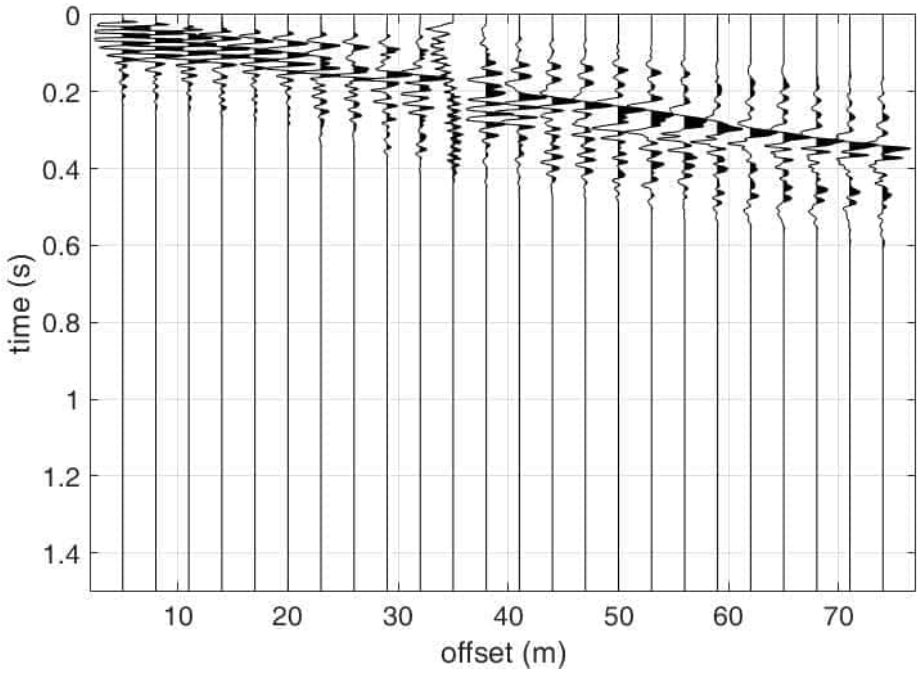
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

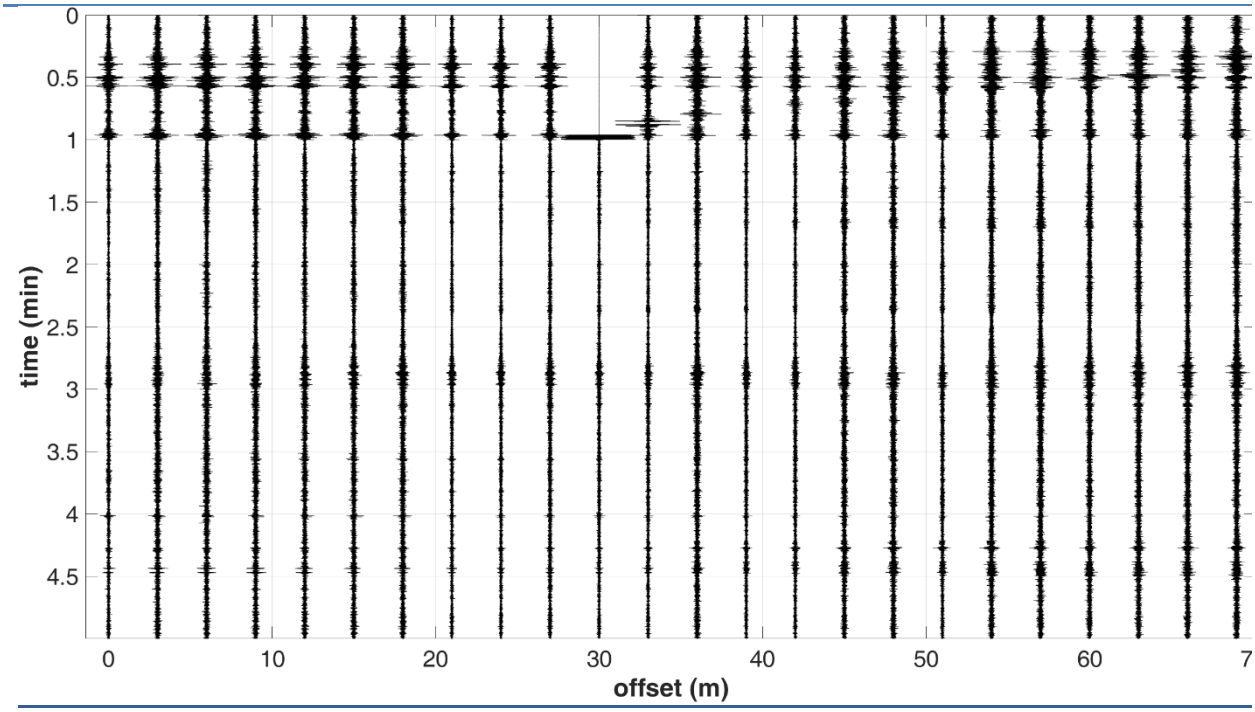
Sismogrammi MASW



REMI

Numero tracce: 24

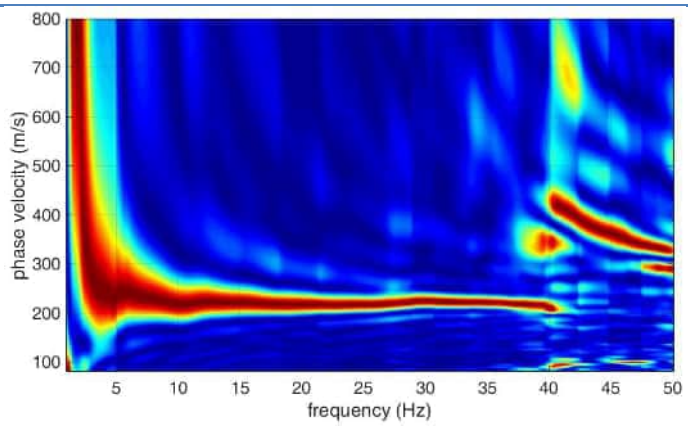
Sismogrammi REMI



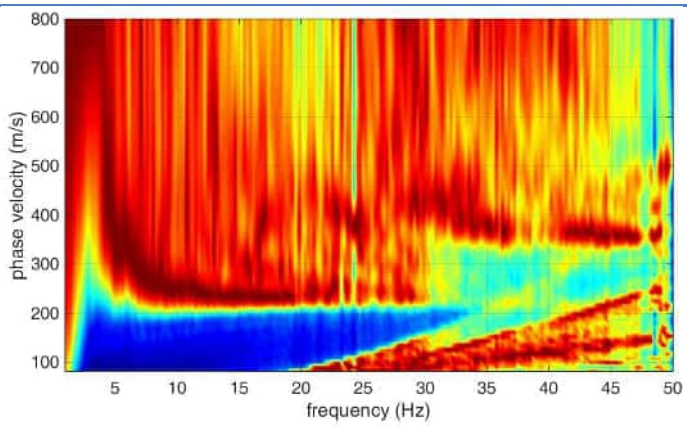
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

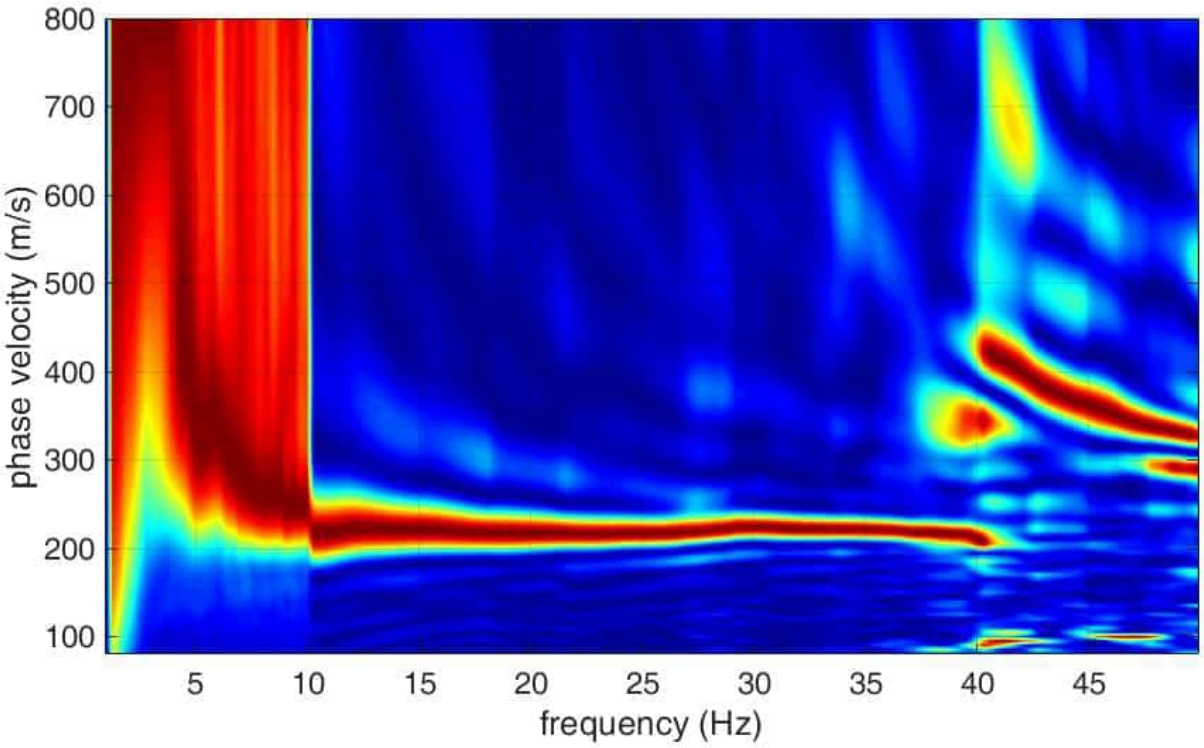


Spettro REMI



Frequenza di unione spettri: 10 Hz

Unione spettro REMI + MASW

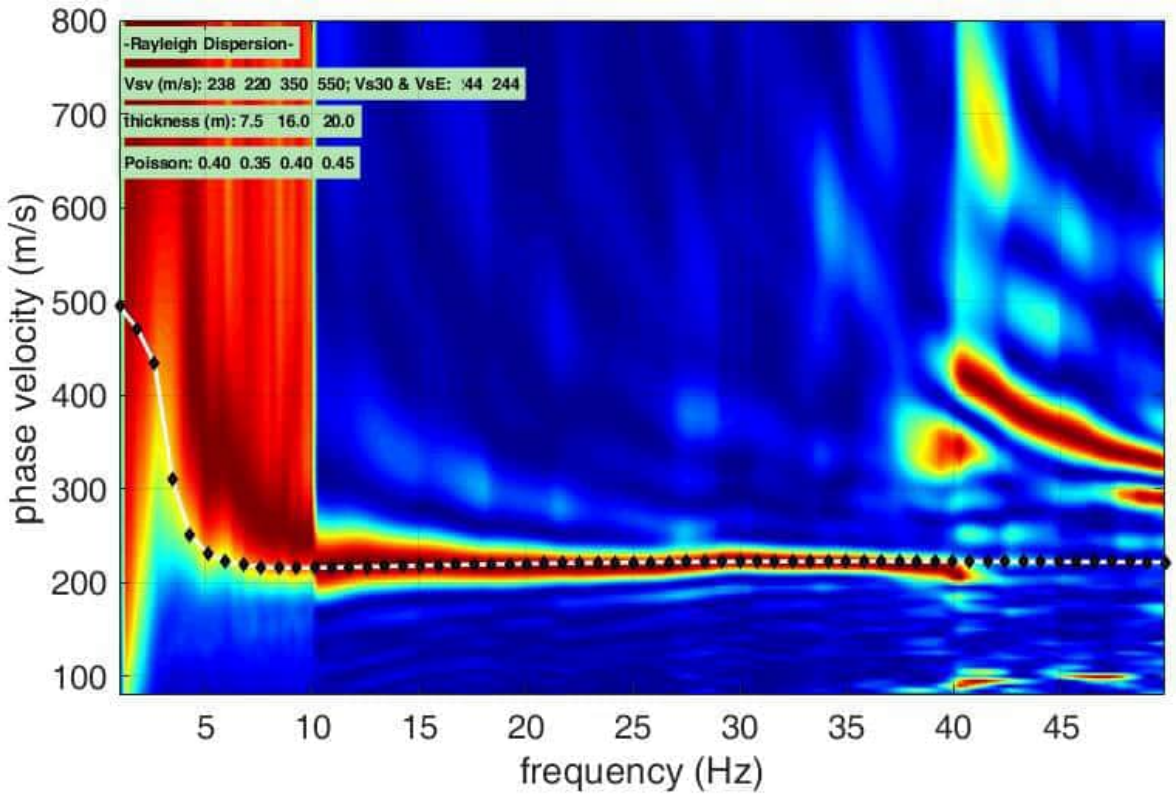


Inversione:

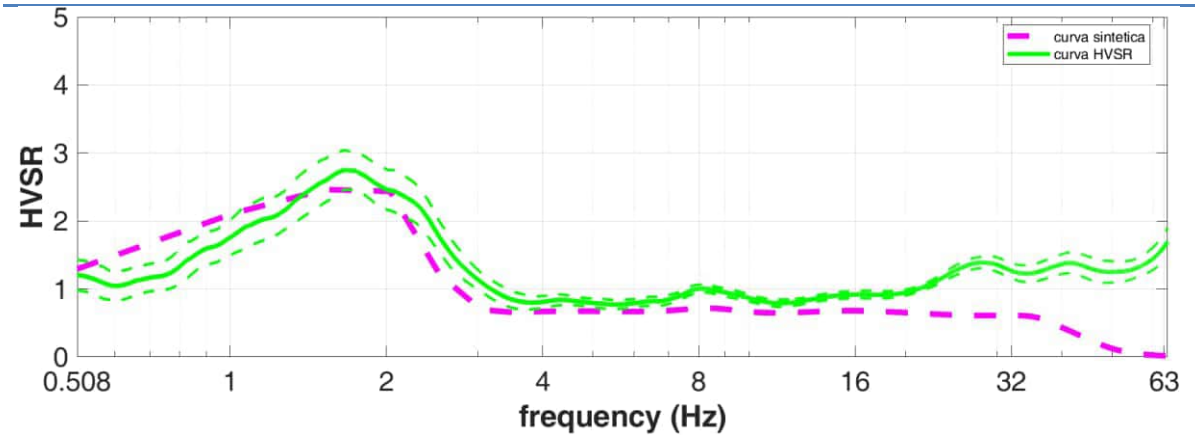
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



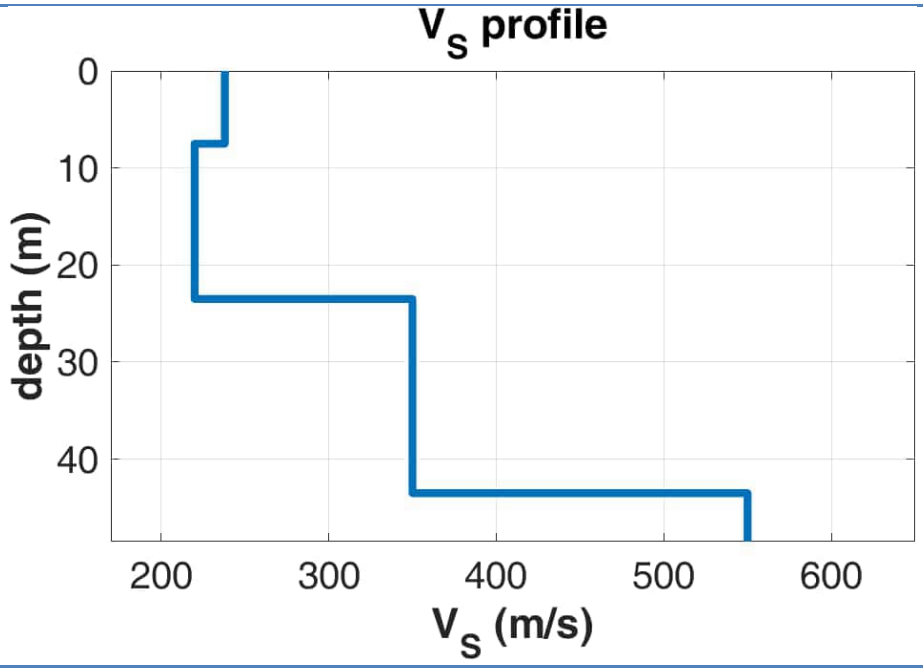
Modello sintetico su spettro HVSR



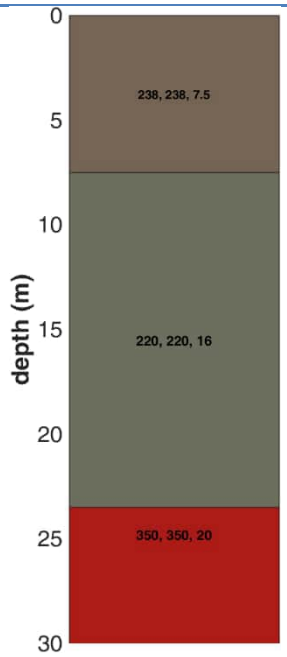
Modello sismostratigrafico:
N° di strati: 4

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	7.5	7.5	583	238
2	16.0	23.5	458	220
3	20.0	43.5	857	350
4	∞	∞	1824	550

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 244 m/s

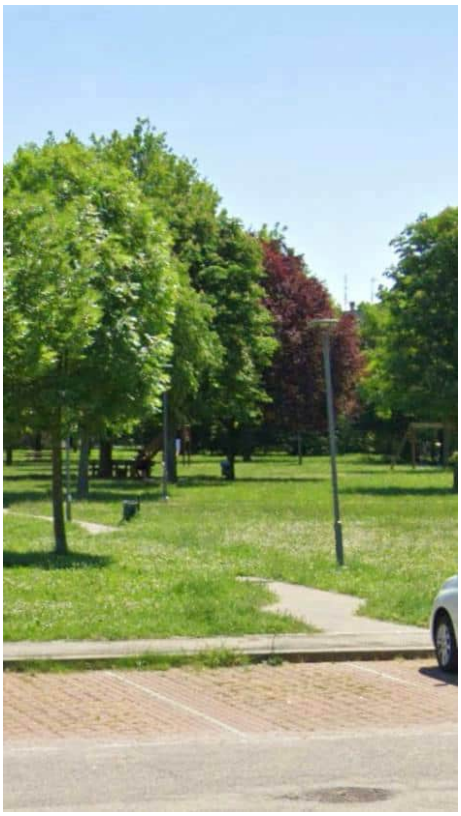
INDAGINE MASW + REMI

Località Via Piero Calamandrei	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 29/08/2024	**Ora** 10.10
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI24	**File** FOR MASW24b_STK.dat; FOR REMI24.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW

Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:

☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW24b_0103.drm
☒ FOR MASW24b_0203.drm
☒ FOR MASW24b_0303.drm

MISURA REMI

N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

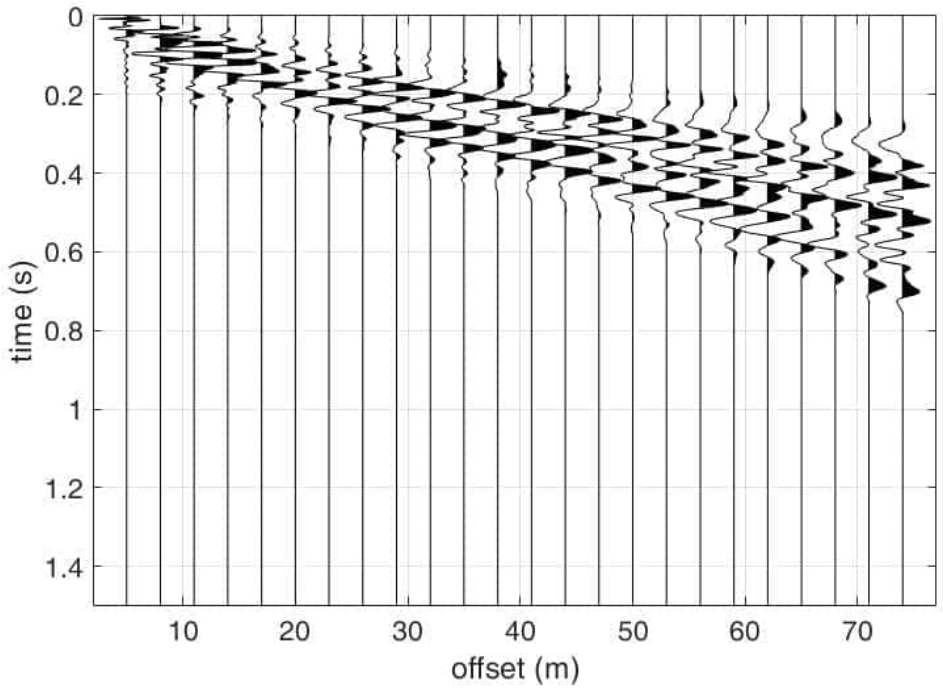
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

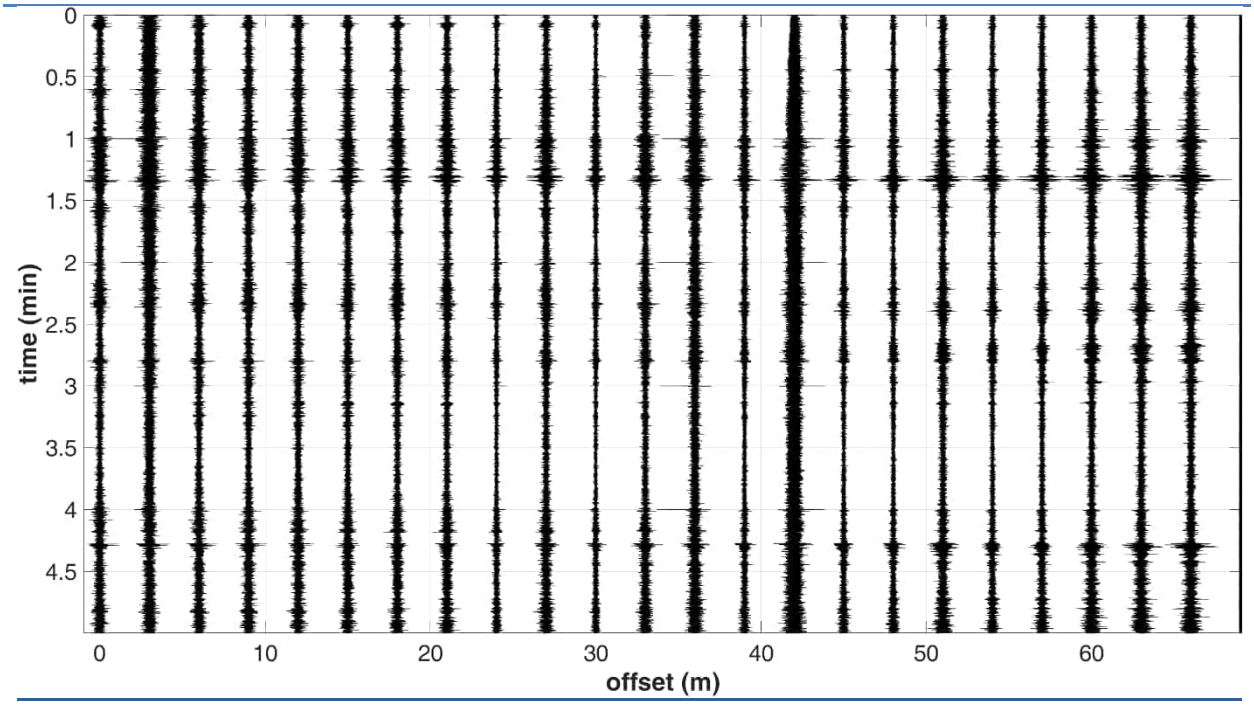
Sismogrammi MASW



REMI

Numero tracce: 24

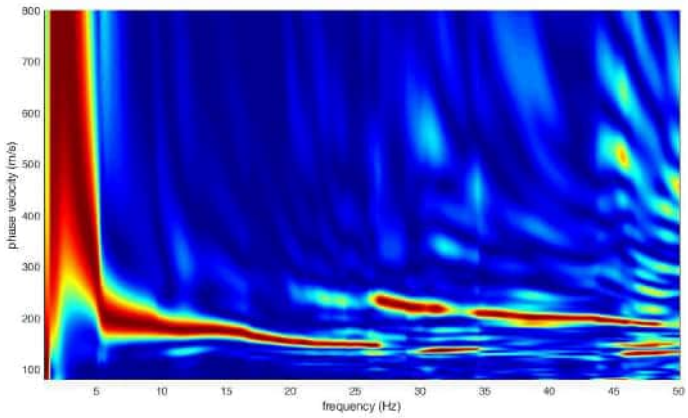
Sismogrammi REMI



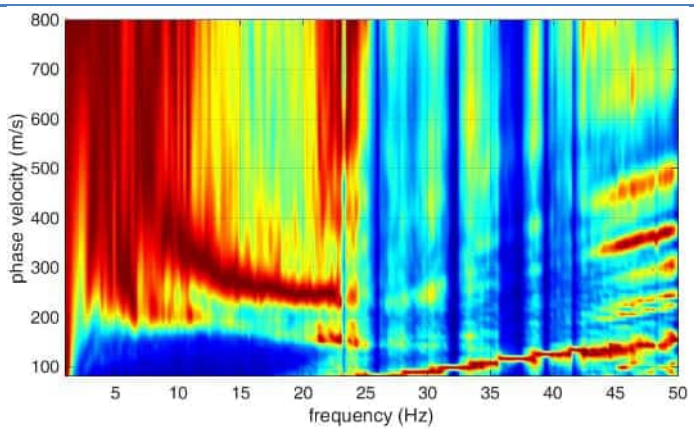
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

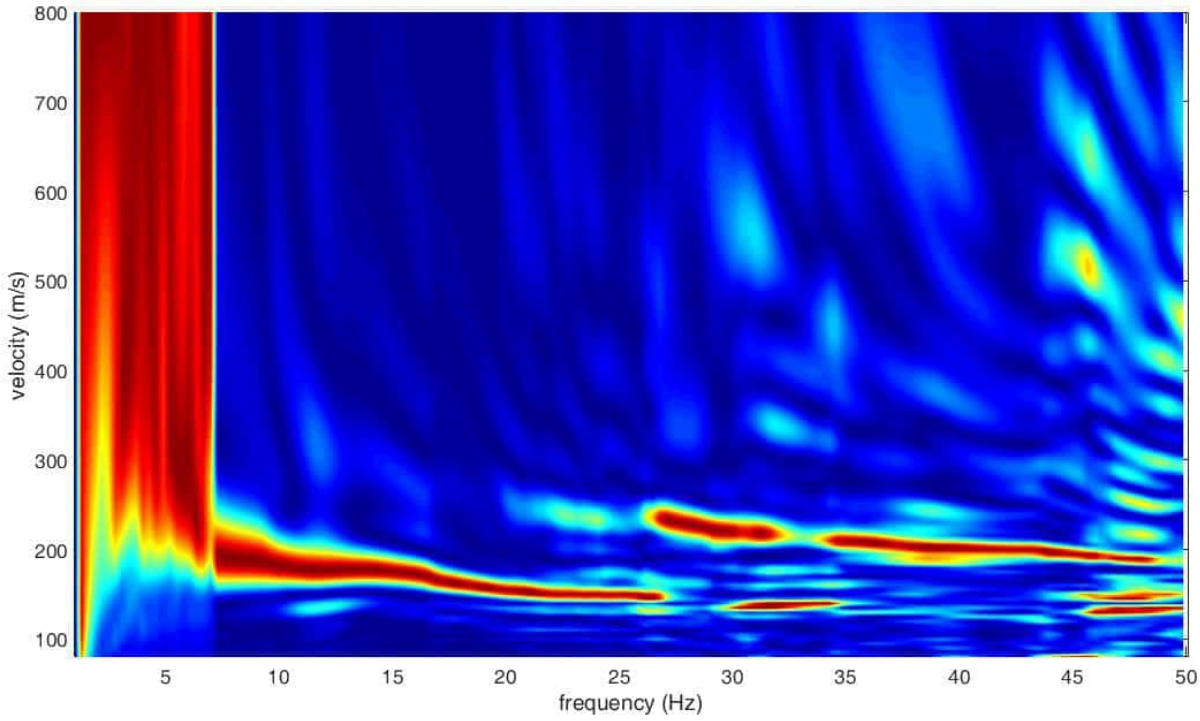


Spettro REMI



Frequenza di unione spettri: 7 Hz

Unione spettro REMI + MASW

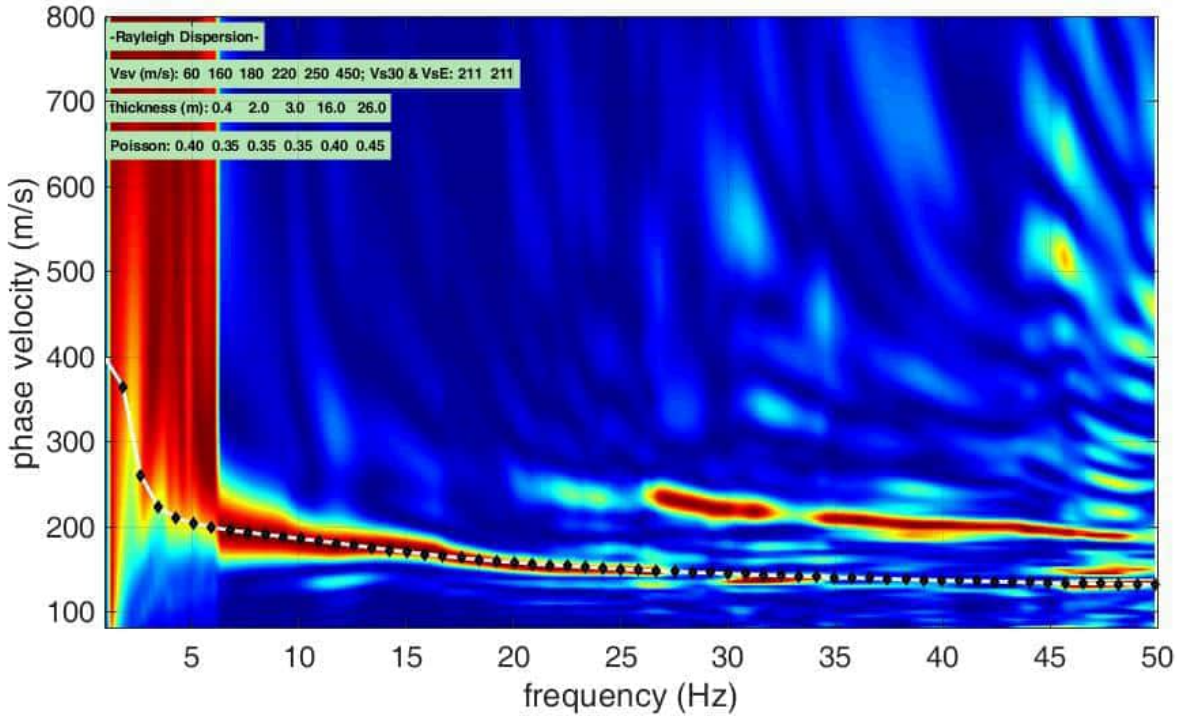


Inversione:

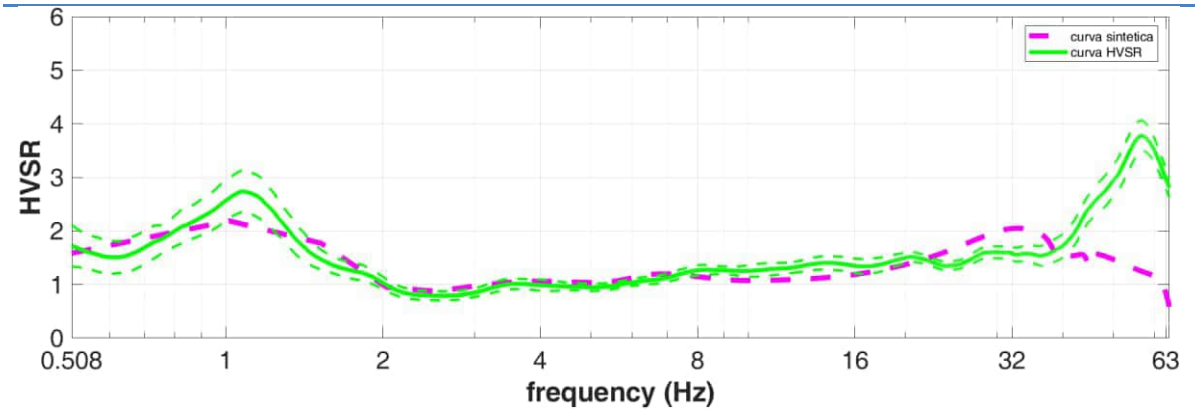
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



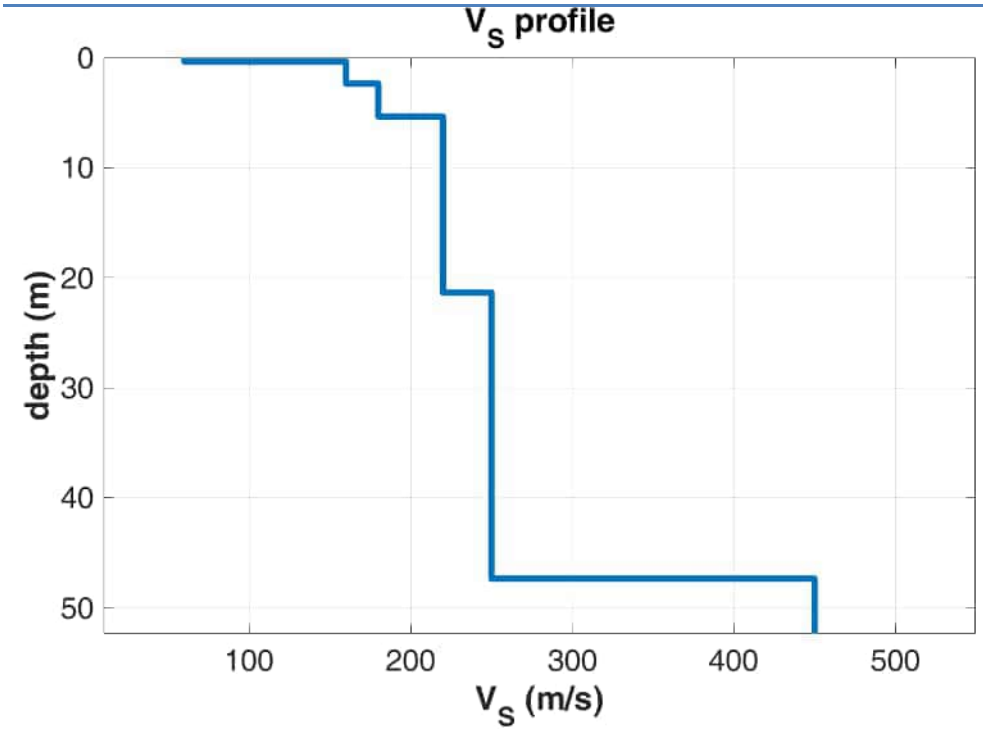
Modello sintetico su spettro HVSR



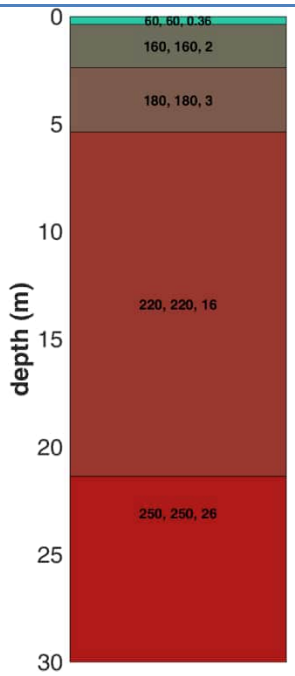
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.4	0.4	147	60
2	2.0	2.4	333	160
3	3.0	5.4	375	180
4	16.0	21.4	458	220
5	26.0	47.4	612	250
6	∞	∞	1492	450

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 211 m/s

INDAGINE MASW + REMI

Località Parco delle Crocerossine	**Comune** Forlì (FC)	
Cantiere MS III Livello	**Data** 26/09/2024	**Ora** 14.30
Codice lavoro FRLI.00.2423	**Committente** Comune di Forlì	
Codice Prova MASW+REMI25	**File** FOR MASW25b_STK.dat; FOR REMI25.dat	
Operatore: Dott. Geol. Alessandro Ferrari		



STRUMENTAZIONE		
Marca: Sara Electronic Instruments	**Modello:** Sismografo digitale DoReMi	
Marca Geofoni: Geo Space	**Orientamento**: ☒ H ☐ V	**Frequenza (Hz):** 4.5

SPECIFICHE INDAGINE (MASW + REMI)



MISURA MASW		
Tipo onda: Raylaight	**N°canali**: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69 + 5		
Offset minimo (m): 5	**N° shot:** 3	
Durata reg.: 1.5 s	**Frequenza di camp.:** 2000 Hz	

Tipologia energizzazione:	
☐ Fucile sismico	Modello:
☒ Mazza	Kg: 5
☐ Grave	Kg:
☐ Mazza su trave	Kg:

Stacking:
usate 3 acquisizioni su 3:
☒ FOR MASW25b_0103.drm
☒ FOR MASW25b_0203.drm
☒ FOR MASW25b_0303.drm

MISURA REMI	
N°canali: 24	**Spaziatura**: 3 m
Lunghezza stendimento (m): 69	
Durata reg.: 5 x 60 s	**Frequenza di camp.:** 500 Hz

Acquisizione:
acquisite 5 tracce da 1 min successivamente unite in unica traccia da 5 minuti

Geometrie stendimento:



TERRENO INDAGATO				
Superficie:	☒ vegetale	☐ riporto	☐ roccia	☐ pavimentazione:
Condizioni terreno:	☐ asciutto	☒ bagnato		☐ saturo

OSSERVAZIONI:

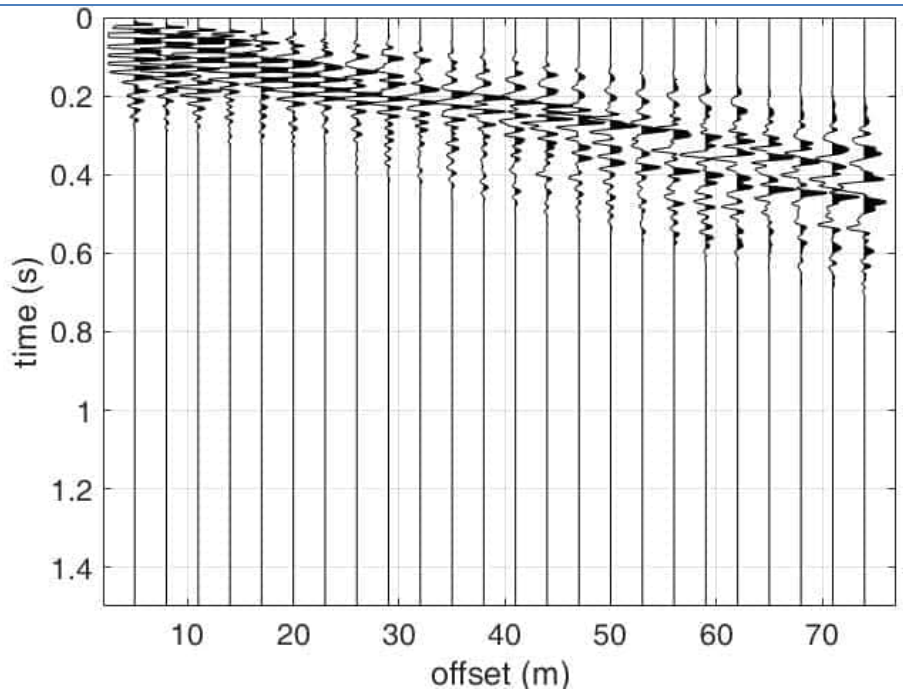
Tracce acquisite

MASW

Numero tracce: 24

Selezione temporale MASW: selezione manuale

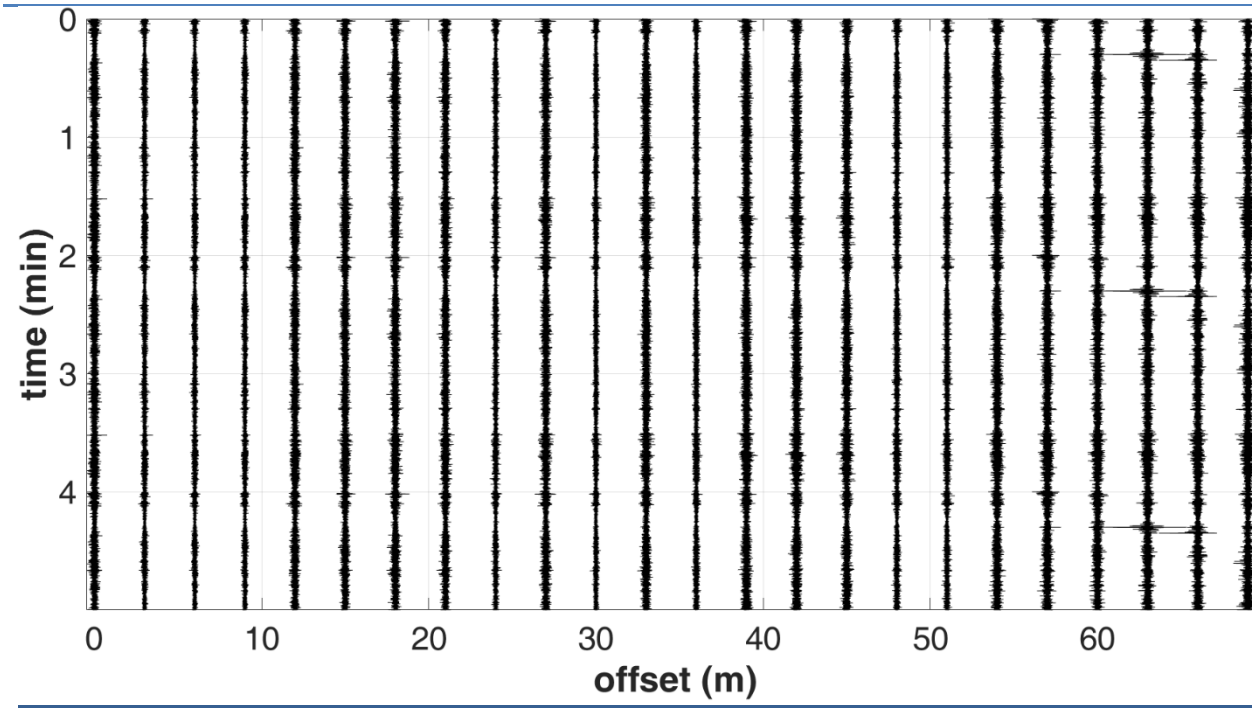
Sismogrammi MASW



REMI

Numero tracce: 24

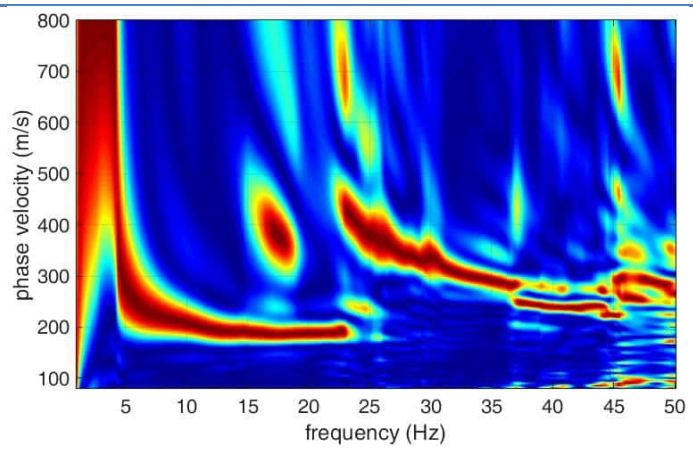
Sismogrammi REMI



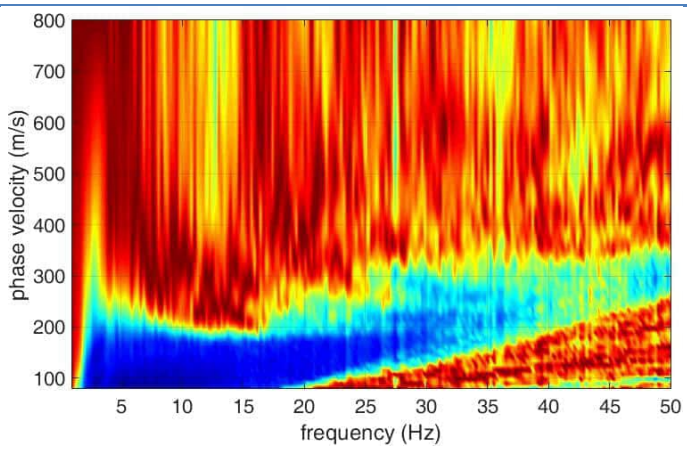
Analisi spettrale

Frequenza minima di elaborazione: 1 Hz
Frequenza massima di elaborazione: 50 Hz
Velocità minima di elaborazione: 80 m/s
Velocità massima di elaborazione: 800 m/s

Spettro MASW in onde di Rayleigh

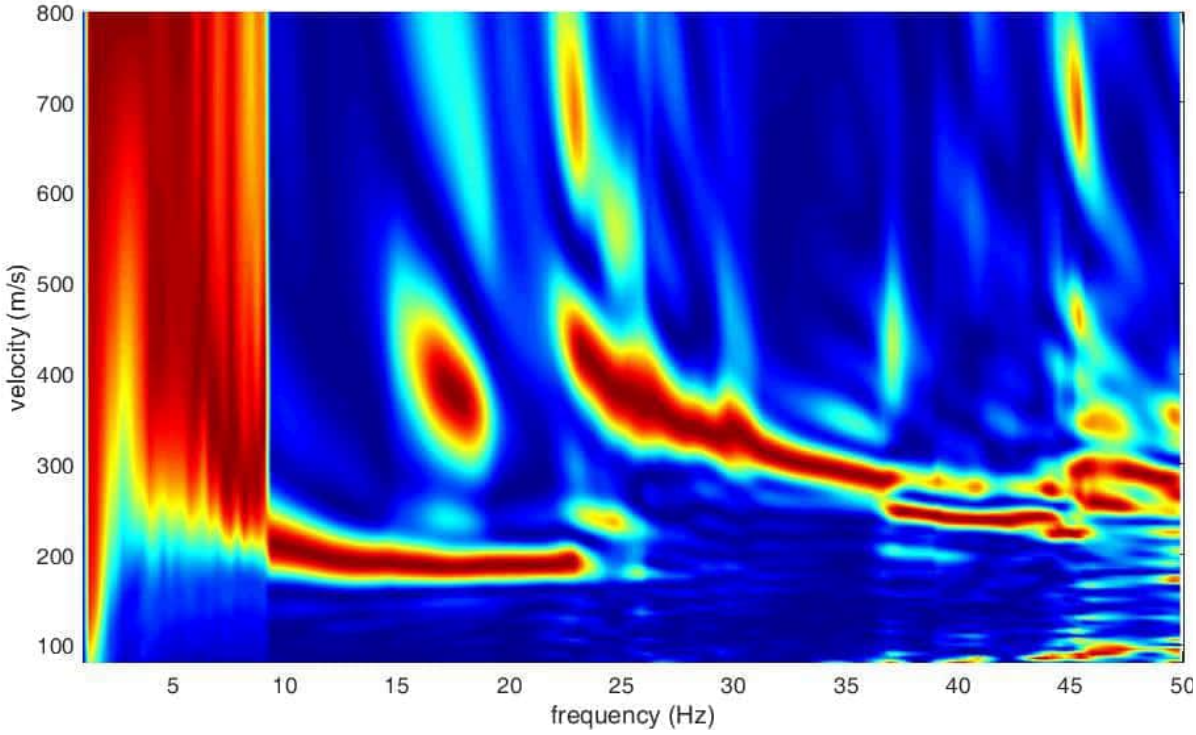


Spettro REMI



Frequenza di unione spettri: 9 Hz

Unione spettro REMI + MASW

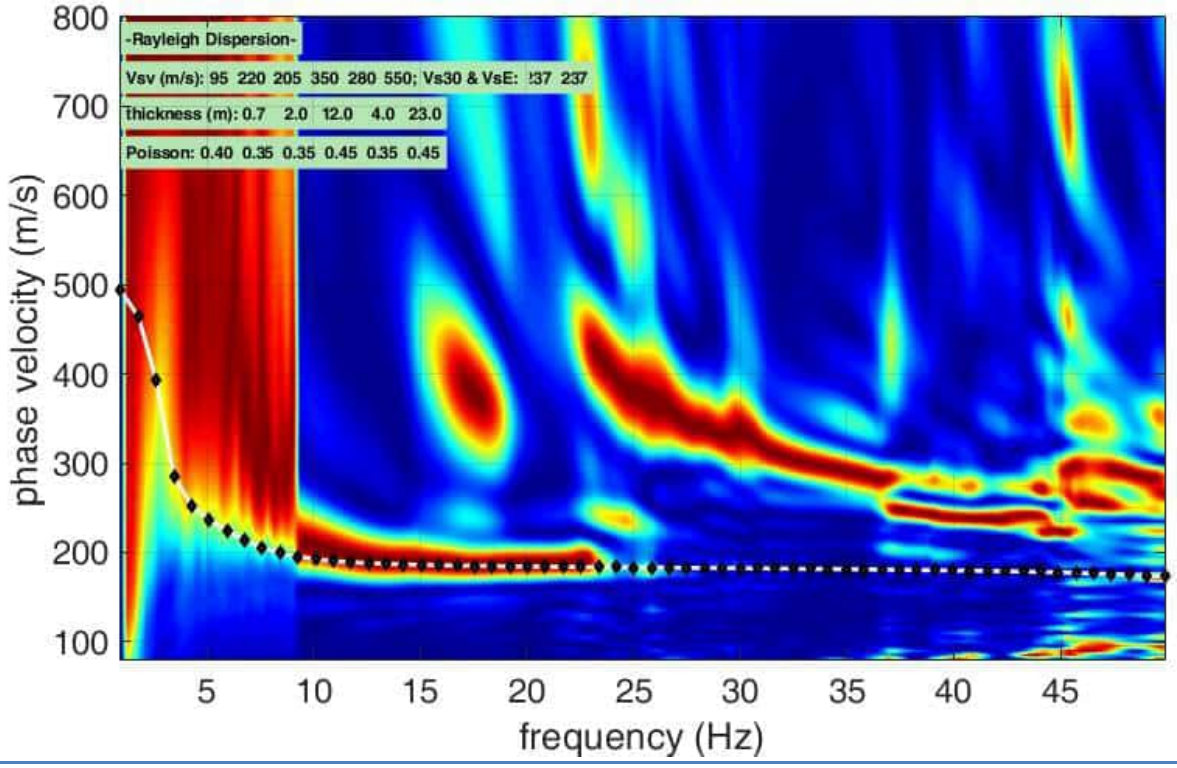


Inversione:

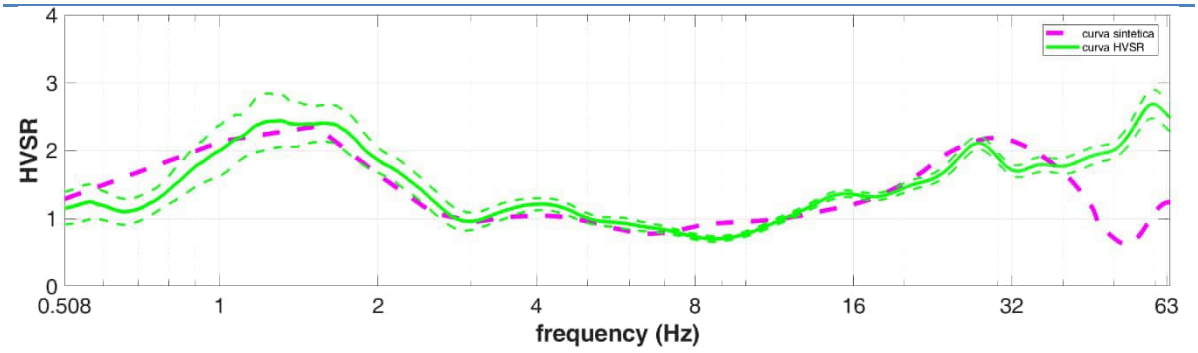
Inversione congiunta MASW + REMI + HVSR

la curva HVSR è stata utilizzata per risolvere le basse frequenze (Corrispondenti a maggiori profondità)

Modello sintetico su spettro REMI + MASW



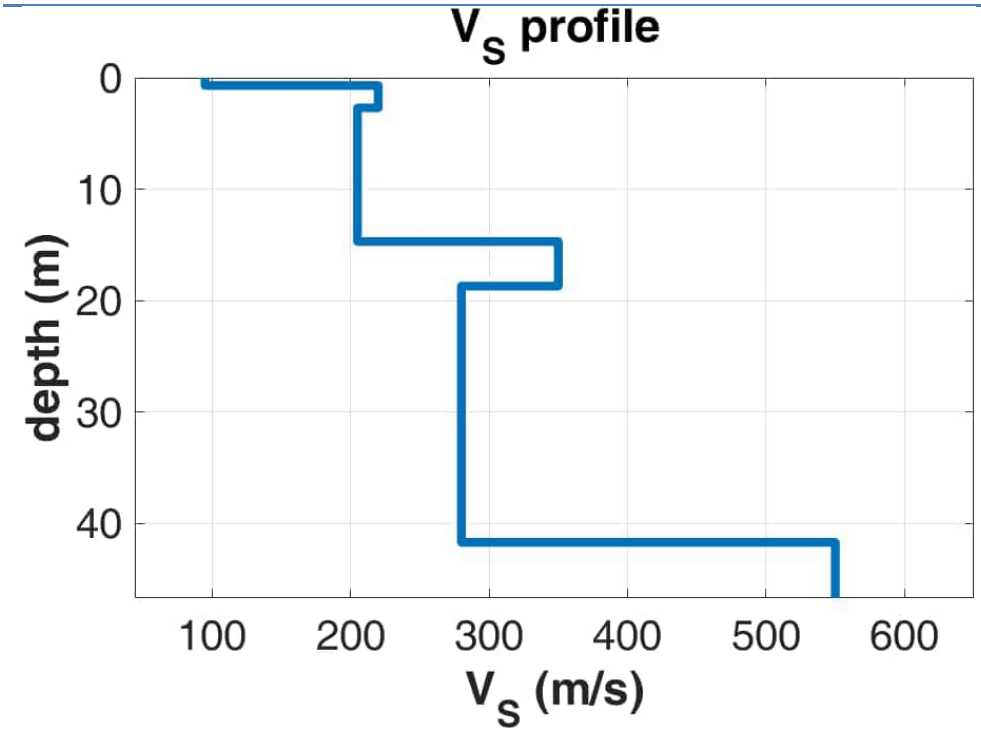
Modello sintetico su spettro HVSR



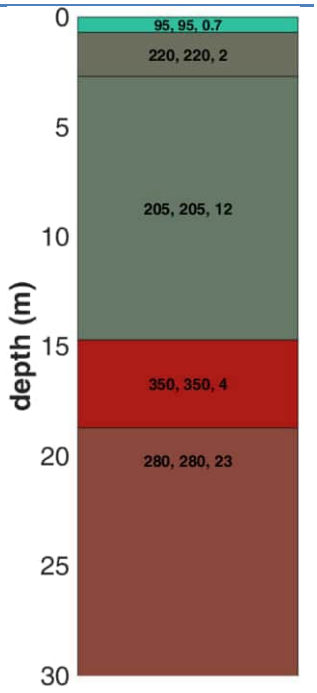
Modello sismostratigrafico:
N° di strati: 6

Strato	Spessore	Profondità	Vp	Vs
n.	(m)	(m)	(m/s)	(m/s)
1	0.7	0.7	233	95
2	2.0	2.7	458	220
3	12.0	14.7	427	205
4	4.0	18.7	1161	350
5	23.0	41.7	583	280
6	∞	∞	1824	550

Modello sismostratigrafico Vs (m/s)



Dettaglio primi 30 m



Valore Vs_{30} = 237 m/s

MISURE DI MICROTREMORE SISMICO

HVSR

PROVA HVSR

Comune Forlì	**Località** Villafranca	
Cantiere	**Data** 28/08/2024	**Ora** 11.24
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_01	**File** FO_01.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				80
	camion	✓					
	passanti		✓				80
	altro	✓					
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

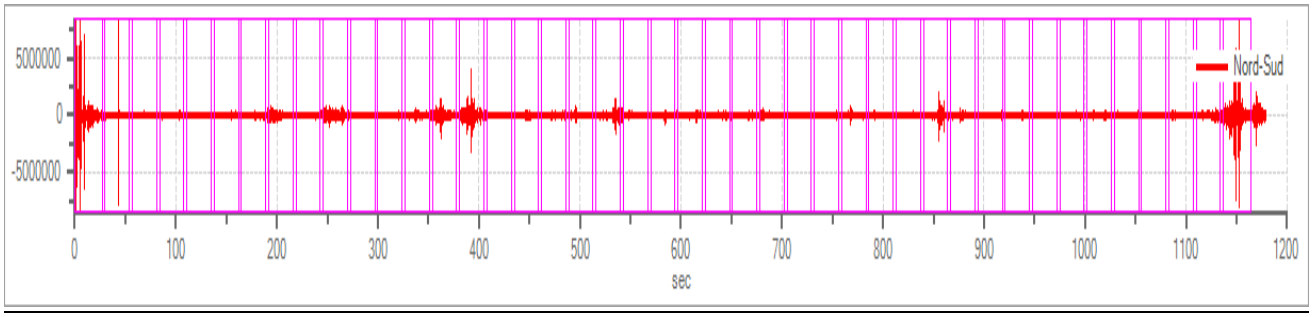
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245248
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

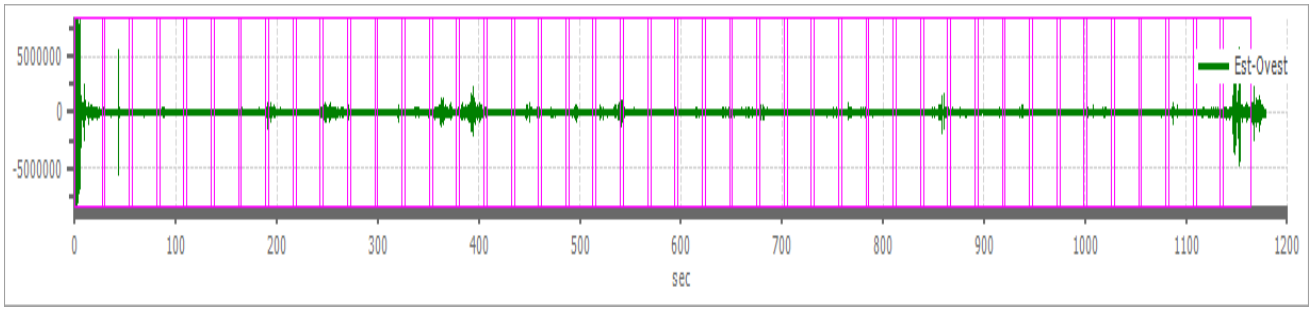
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	33
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

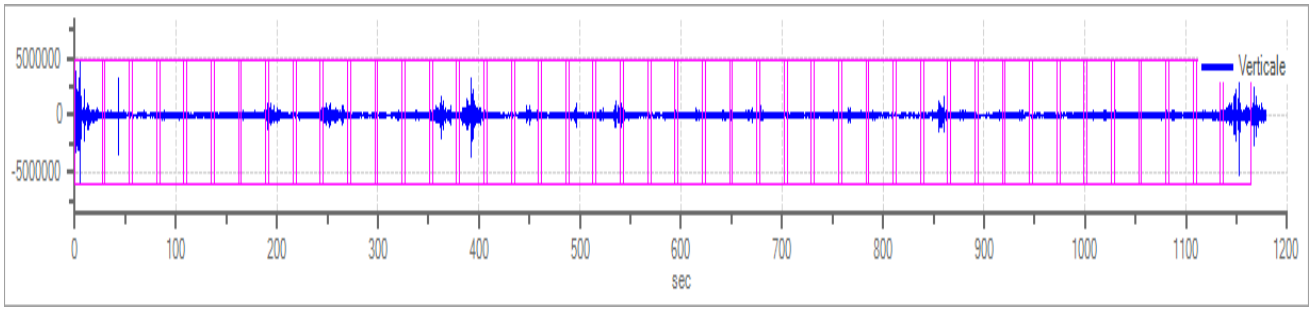
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

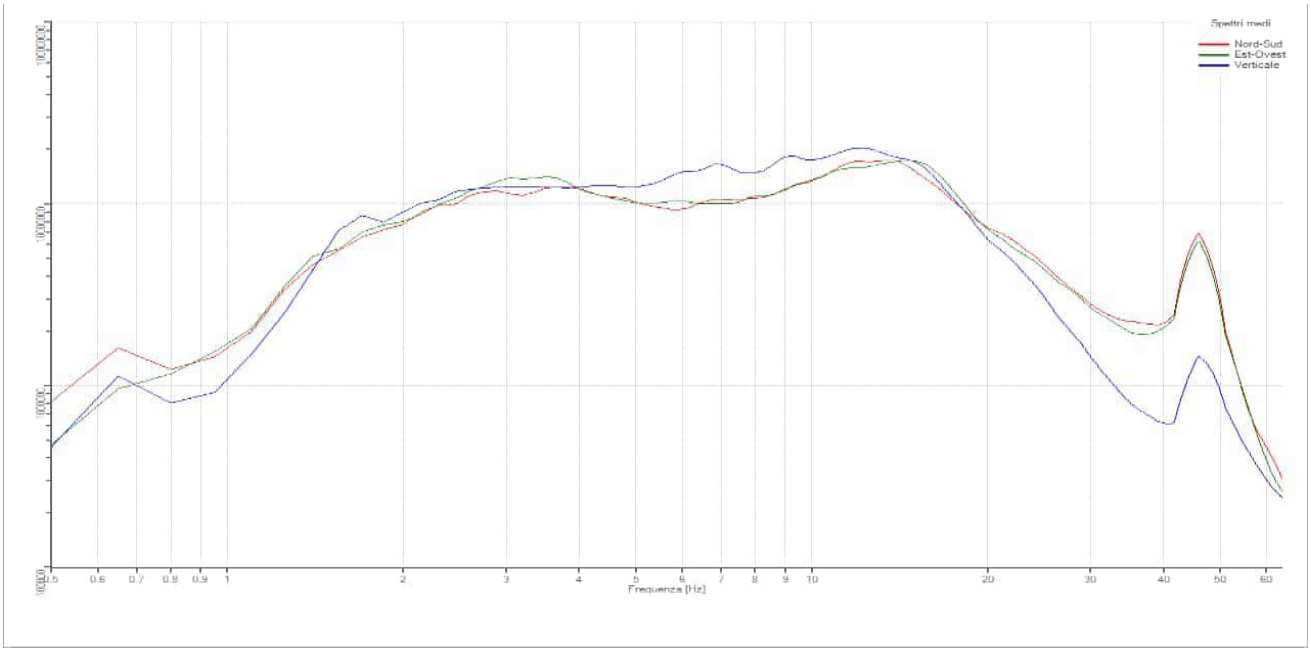


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

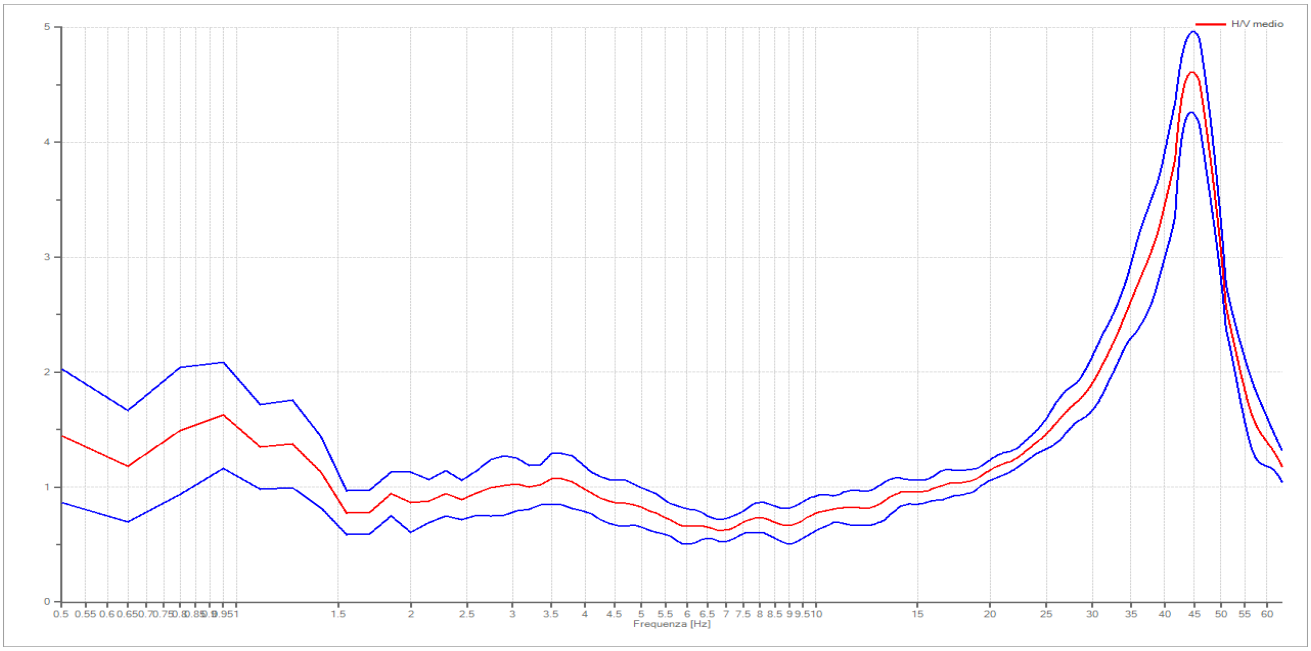
Dati riepilogativi:

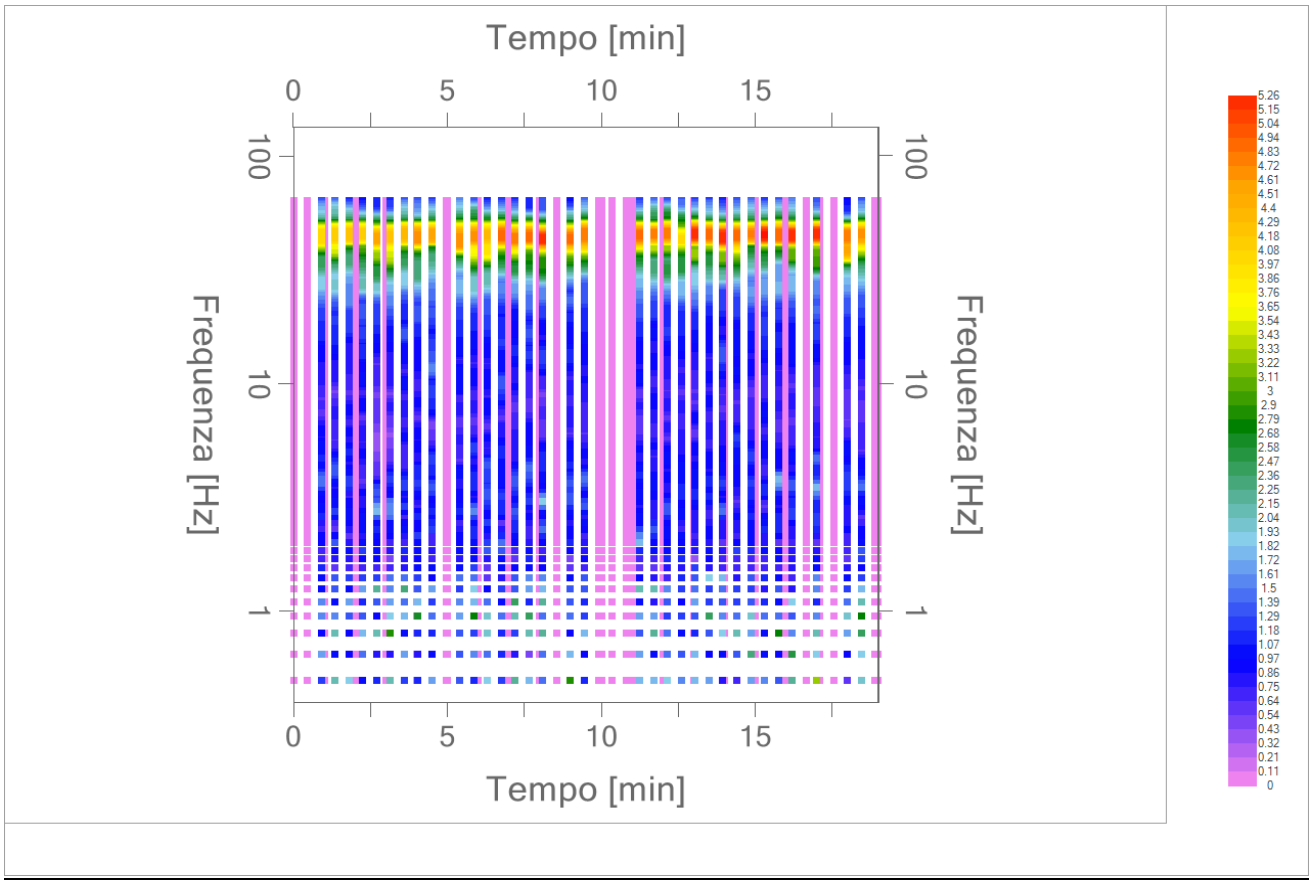
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento::	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

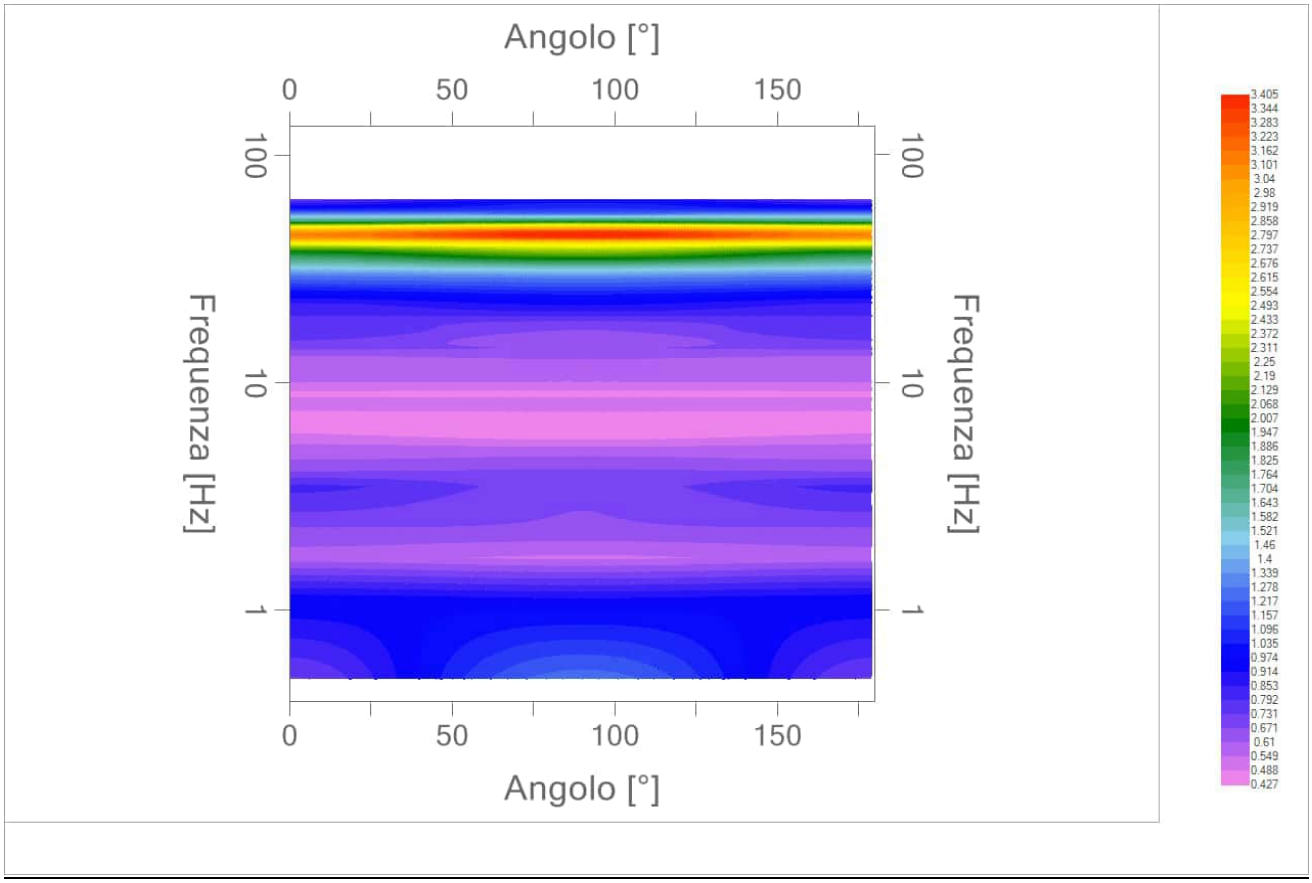
Frequenza del picco del rapporto H/V: 44.75 Hz ± 0.08 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.75 ± 0.08 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Antica Pieve	
Cantiere	**Data** 28/08/2024	**Ora** 15.34
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_02	**File** FO_02.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Ponti	☐ assenti		☒ presenti	
Strutt. sotterranee	☐ assenti	☒ presenti: sottoservizi		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto				✓		50
	camion				✓		50
	passanti		✓				50
	altro						
Disturbo cont.	☐ assente	☒ presente: fabbriche in funzione					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

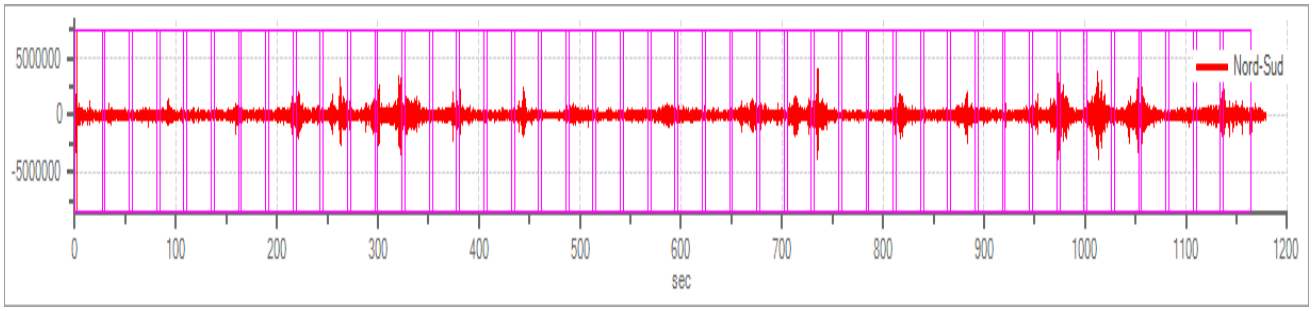
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

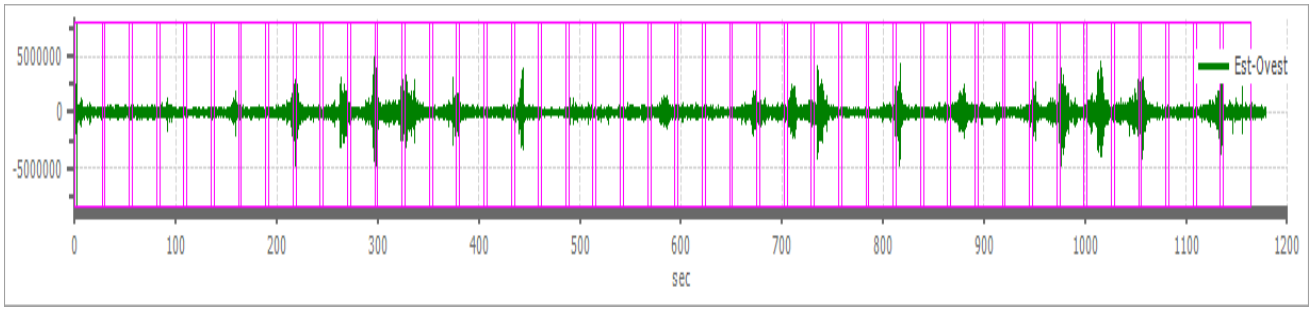
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	33
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

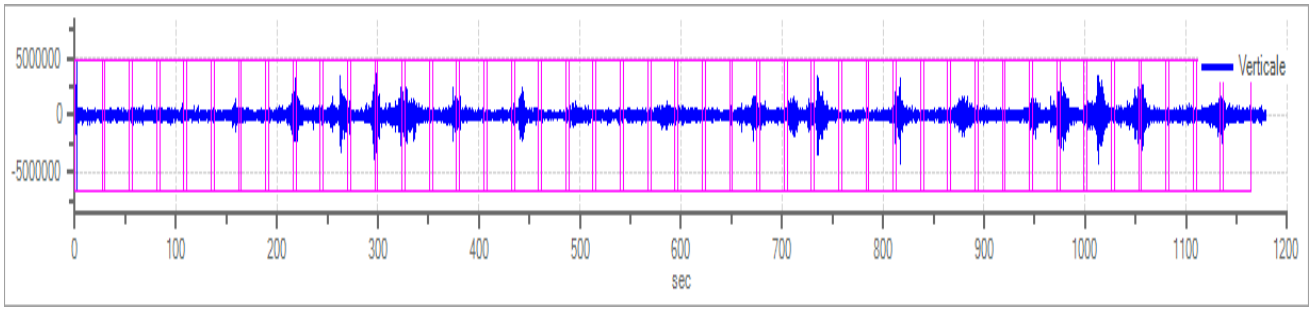
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

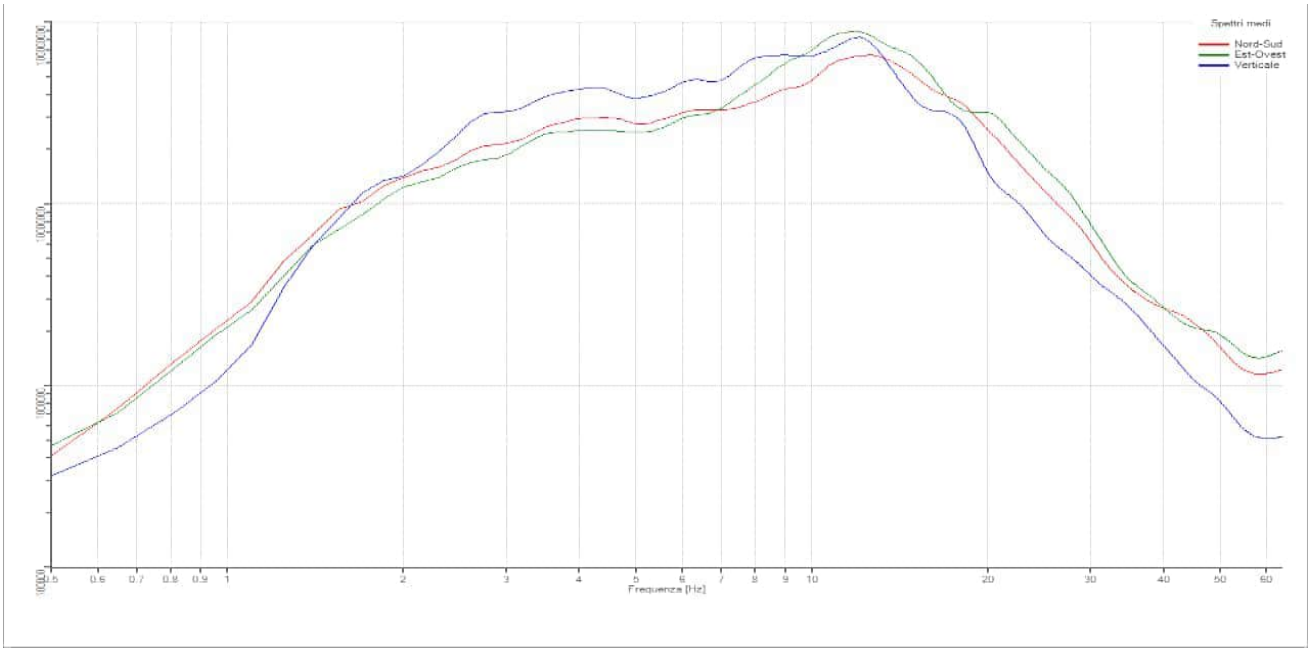


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

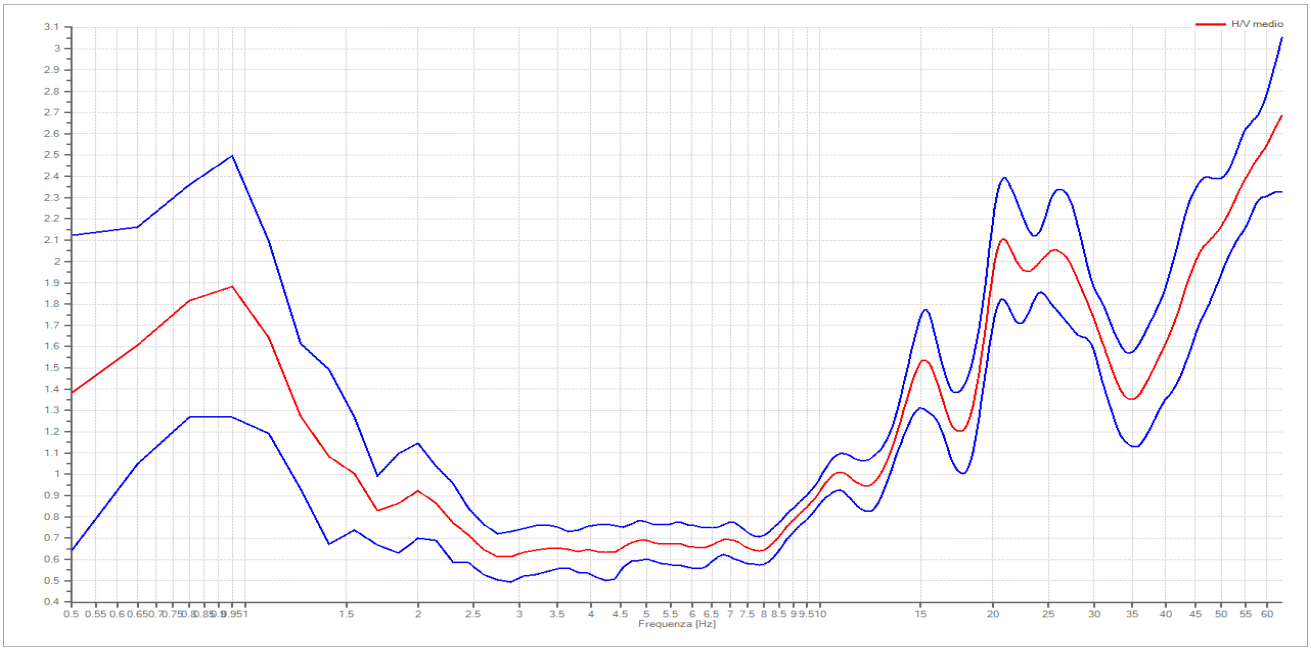
Dati riepilogativi:

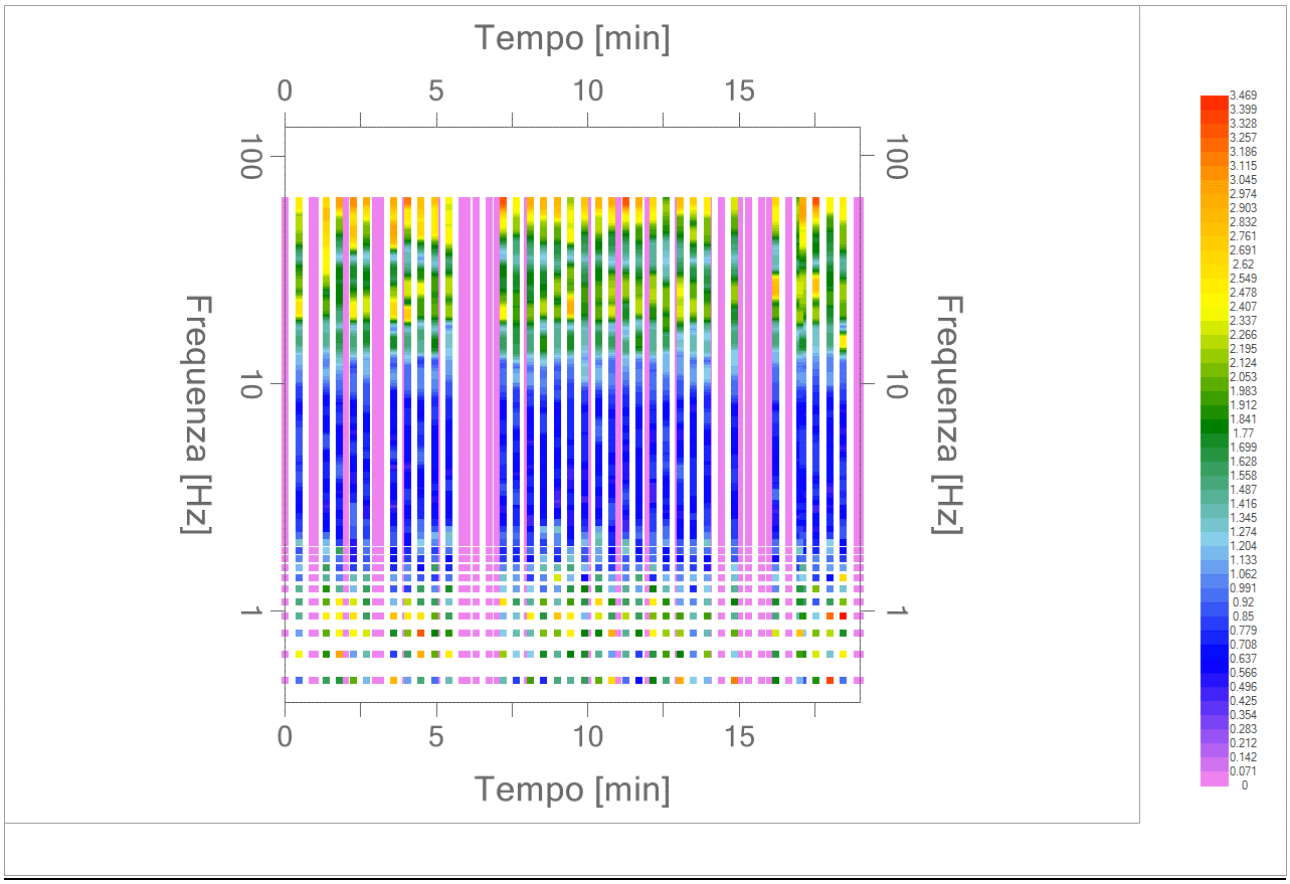
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

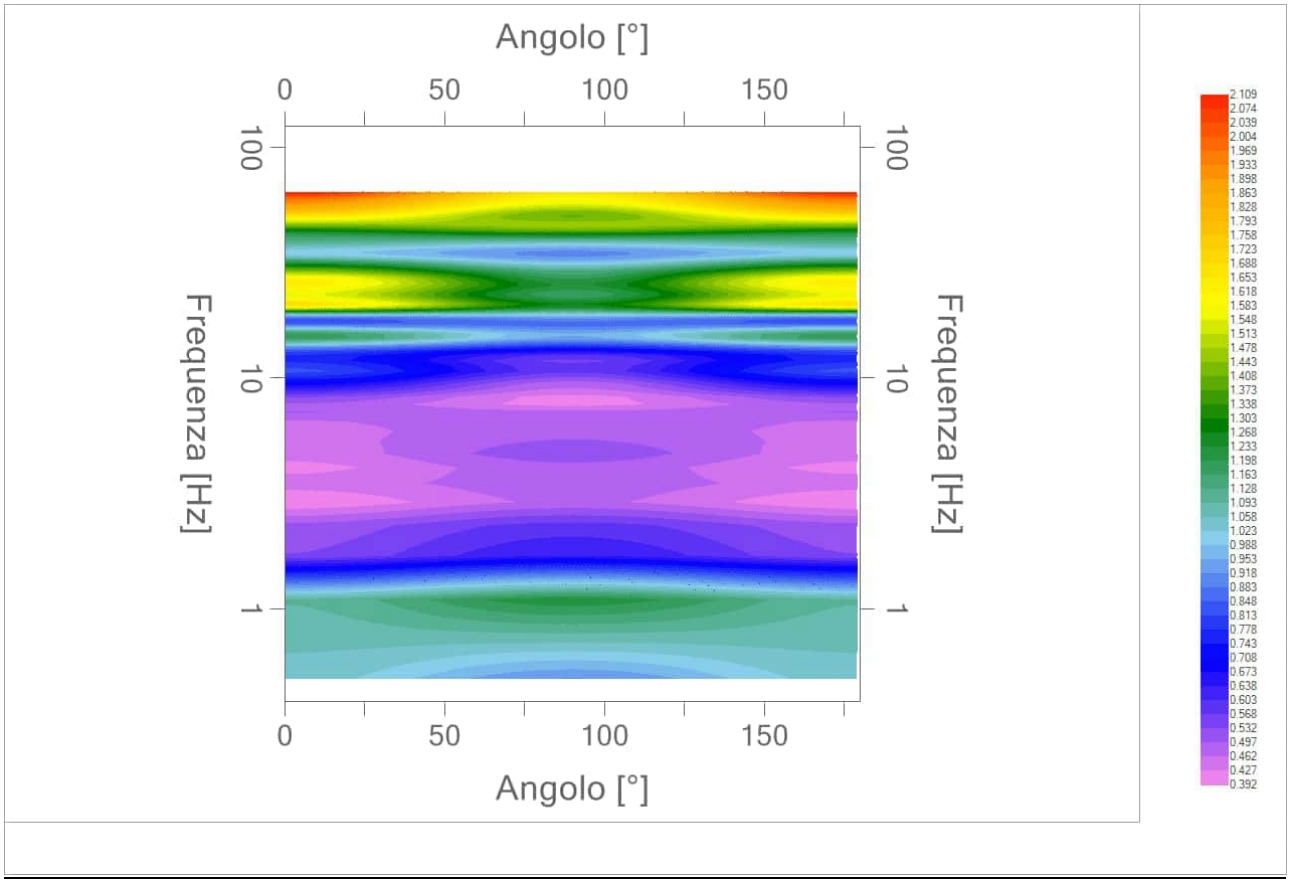
Frequenza del picco del rapporto H/V: 63.80 Hz ± 0.14 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 63.80 ± 0.14 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Villafranca	
Cantiere	**Data** 28/08/2024	**Ora** 12.13
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_03	**File** FO_03.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☒ suolo asciutto	☐ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto			✓			25
	camion		✓				25
	passanti		✓				25
	altro						
Disturbo cont.	☐ assente	☒ presente: fabbriche in funzione					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

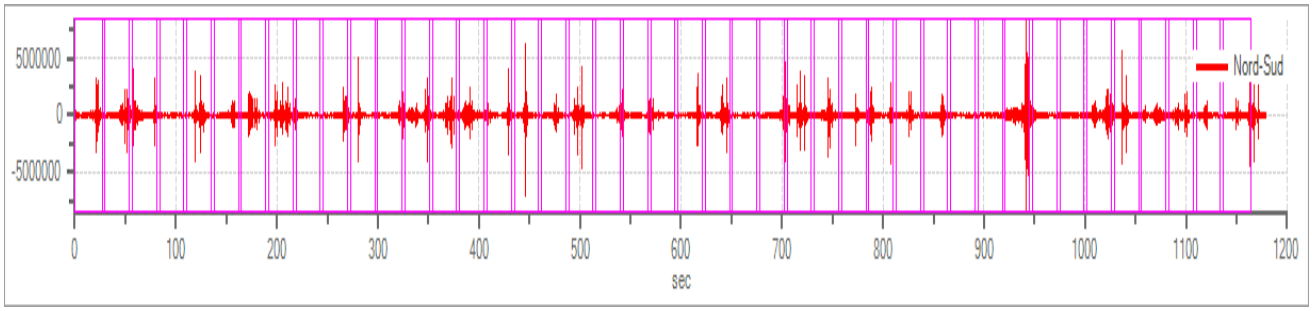
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245184
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

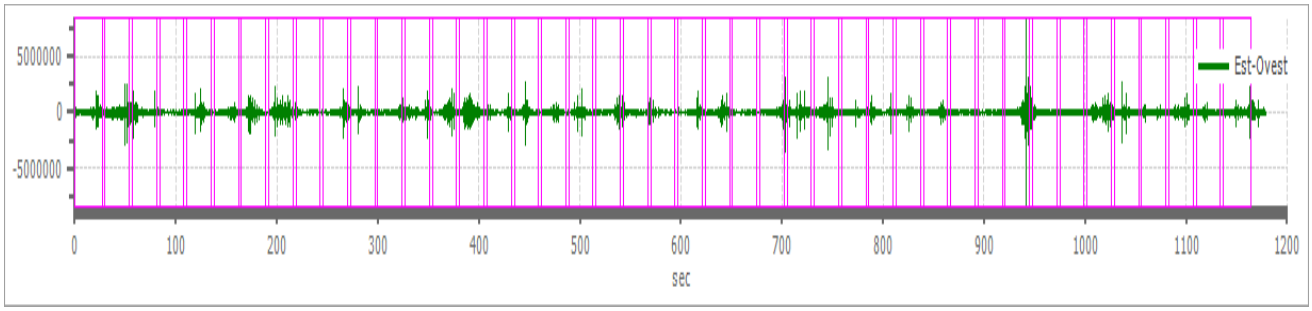
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	36
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

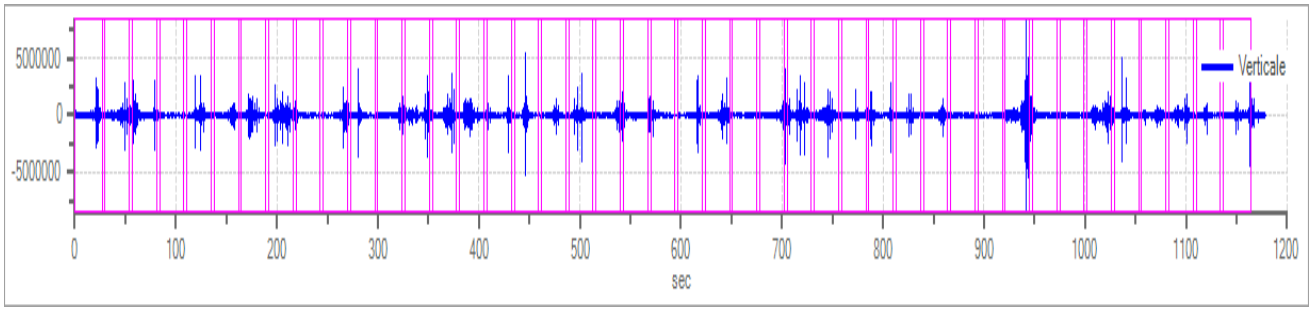
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

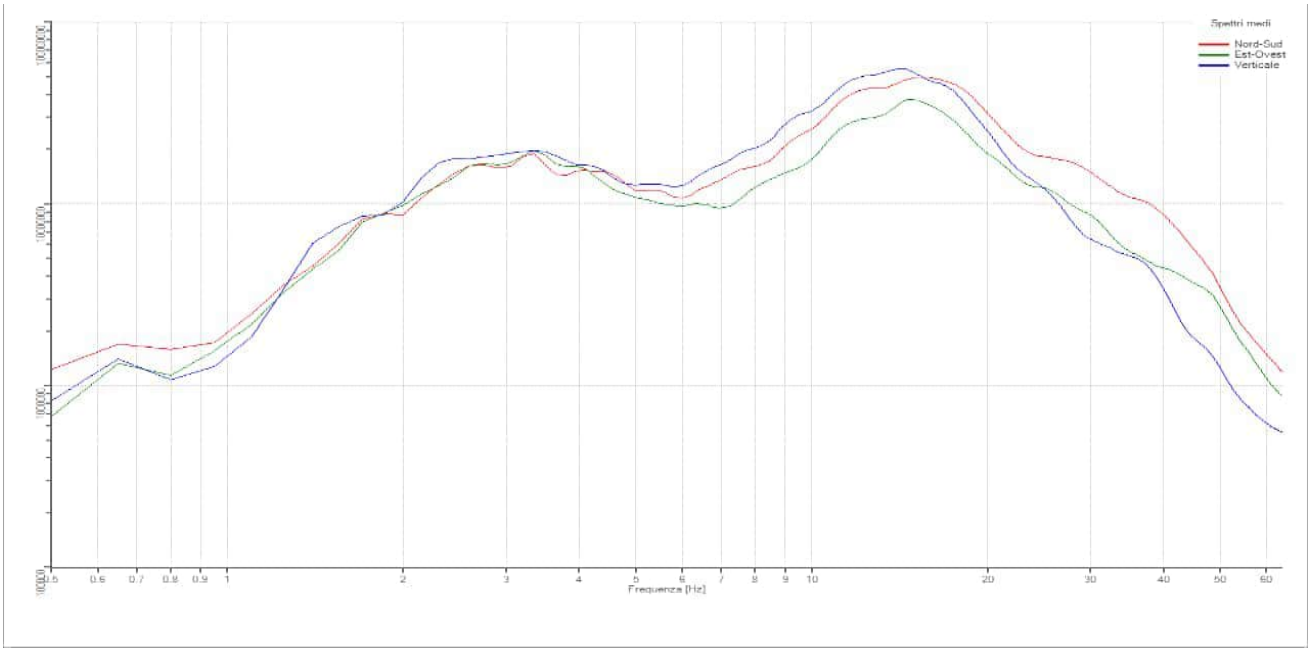


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

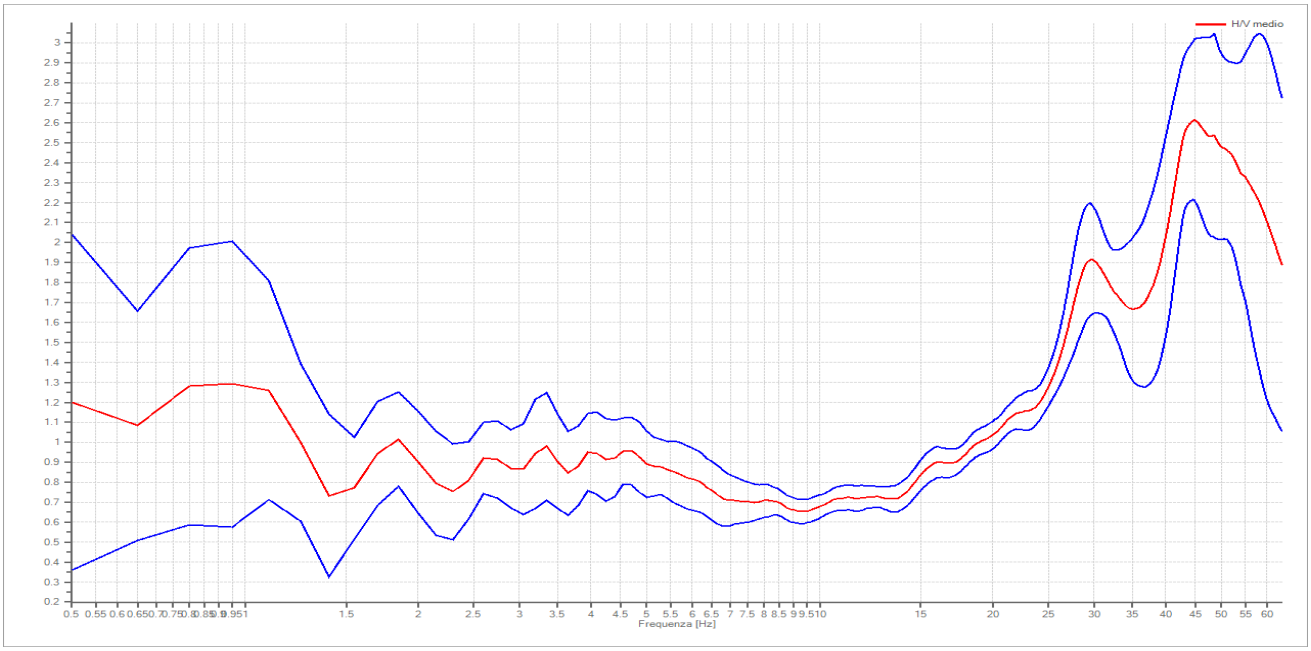
Dati riepilogativi:

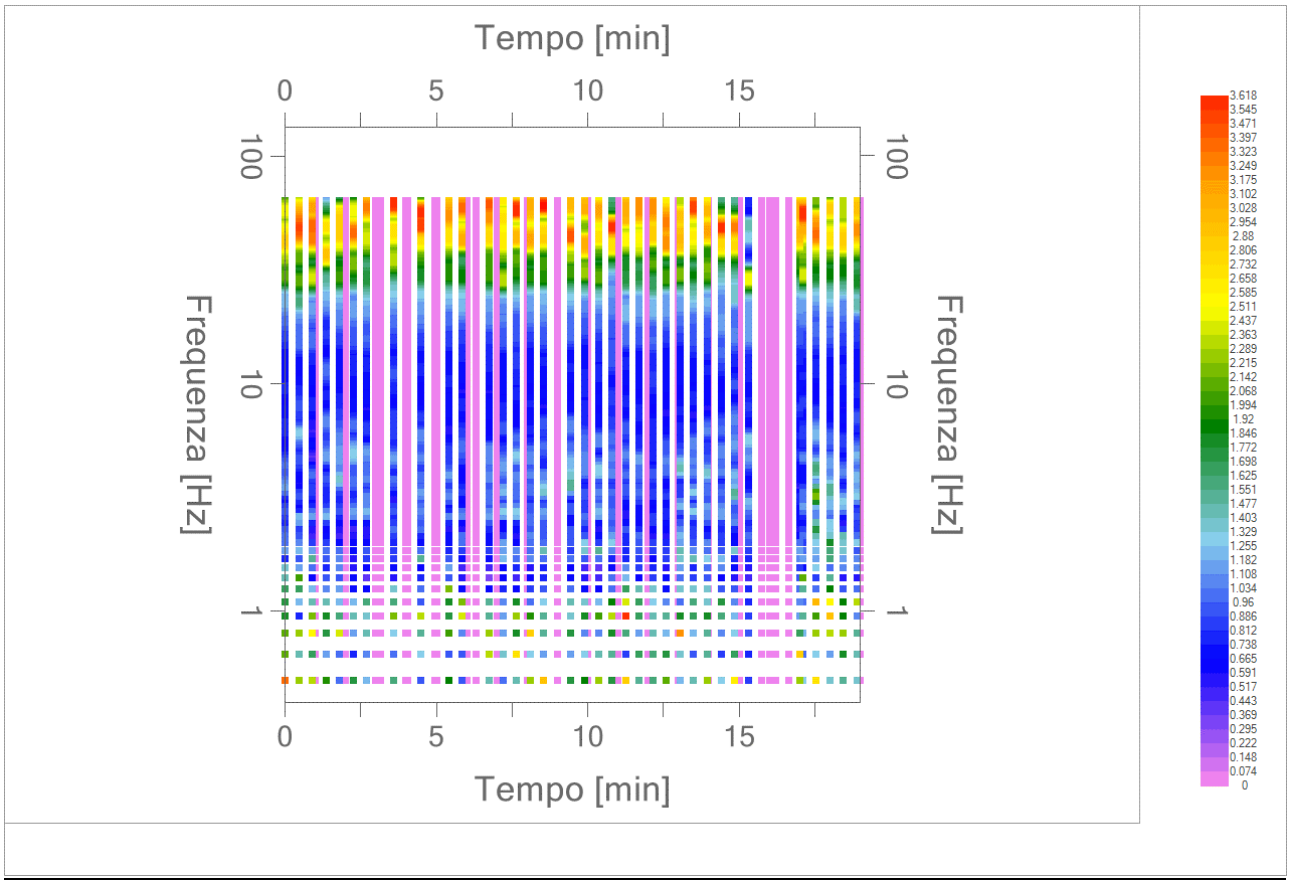
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

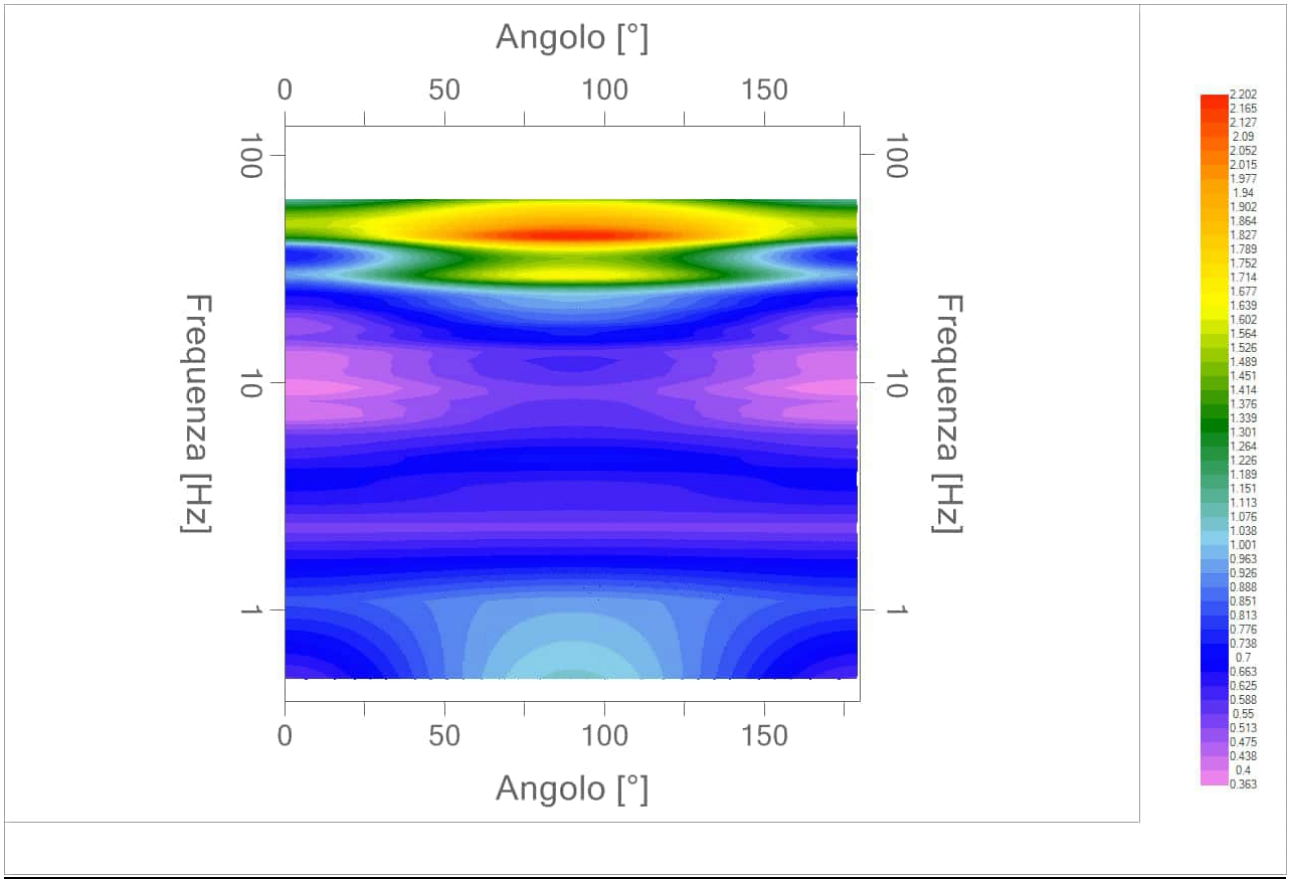
Frequenza del picco del rapporto H/V: 44.90 Hz ± 0.15 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.90 ± 0.15 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Roncadello	
Cantiere	**Data** 28/08/2024	**Ora** 10.29
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_04	**File** FO_04.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto			✓			30
	camion		✓				30
	passanti		✓				30
	altro						
Disturbo cont.	☐ assente	☒ presente: escavatore in funzione					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

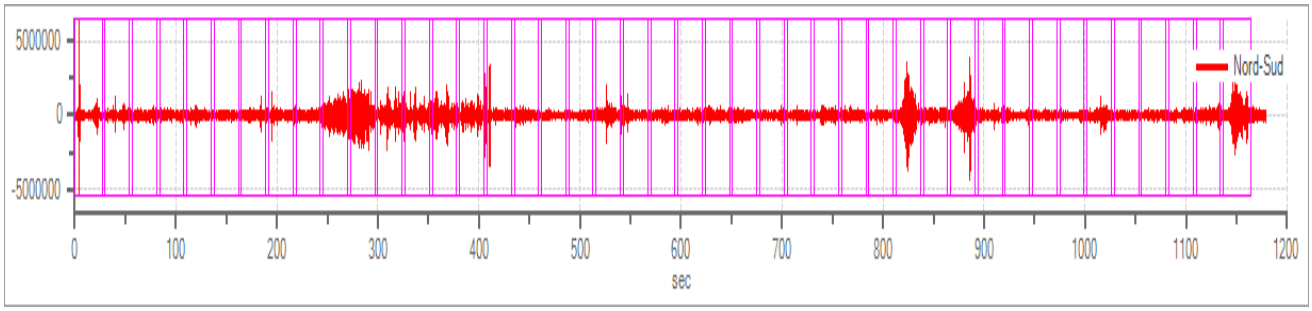
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245313
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

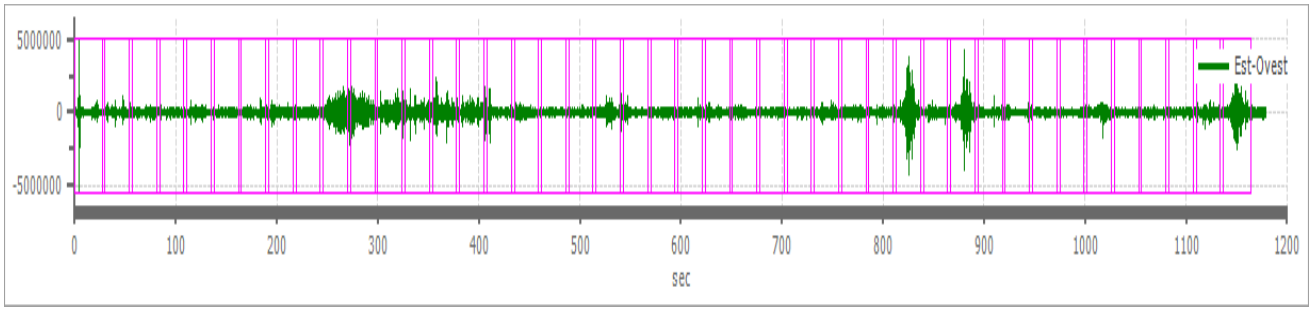
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	34
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

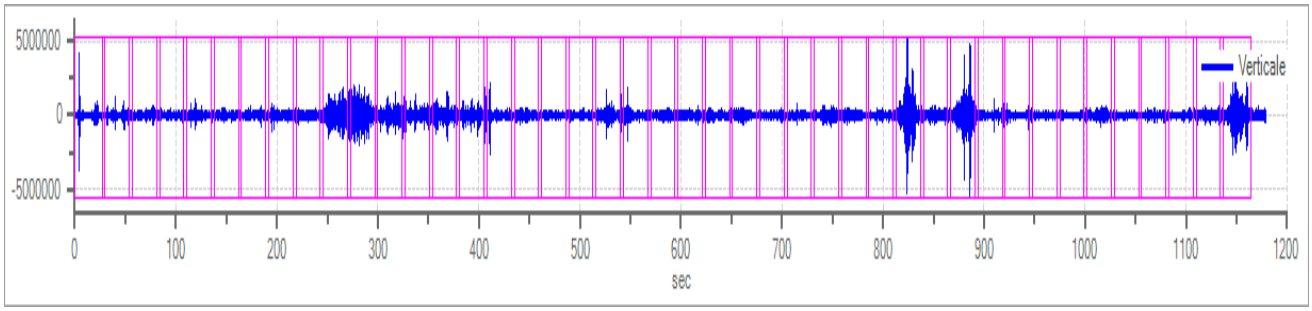
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

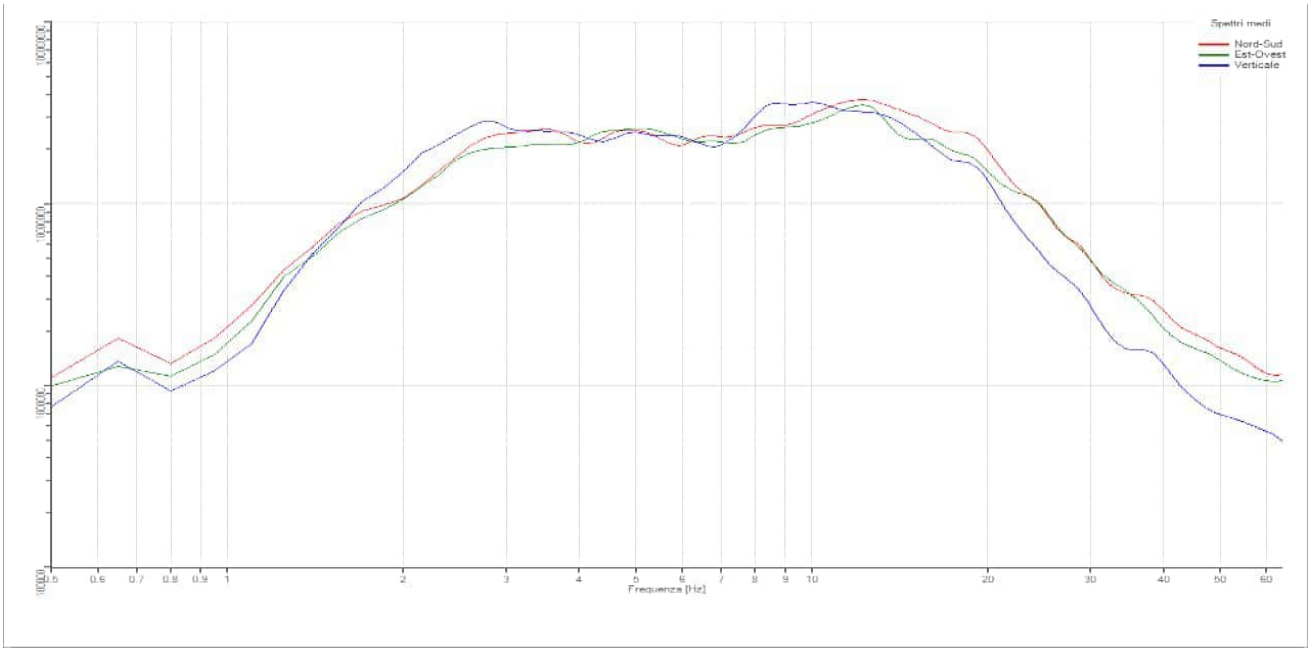


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

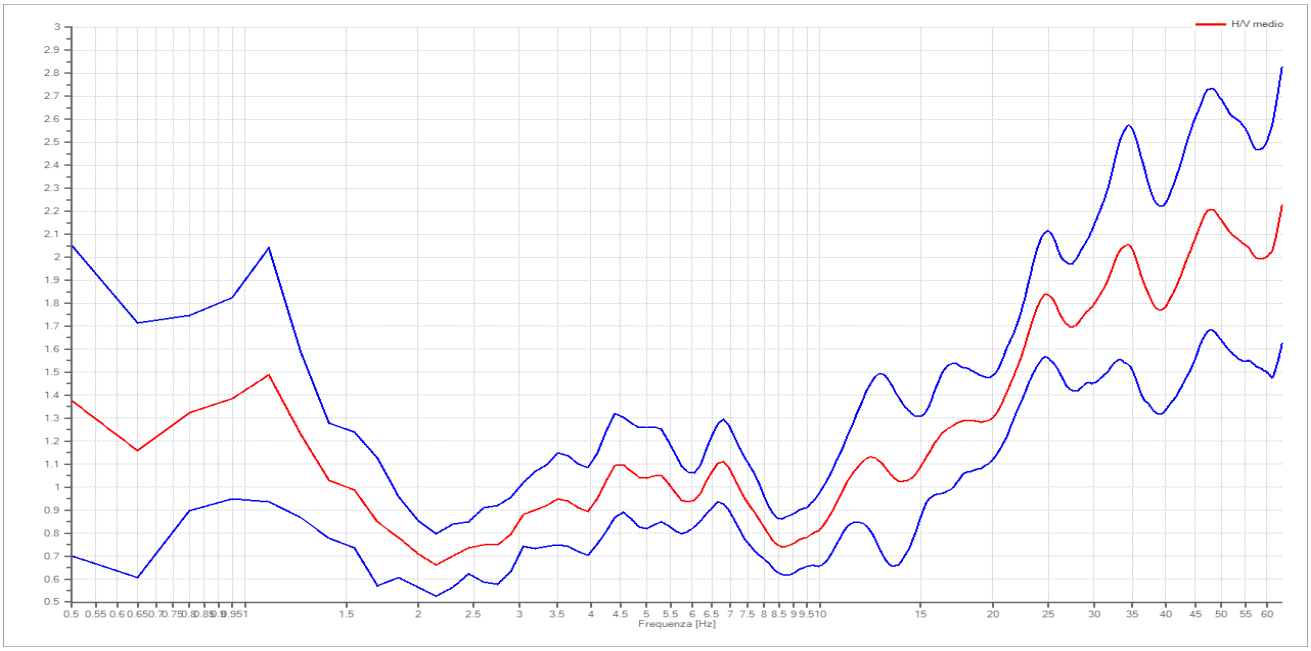
Dati riepilogativi:

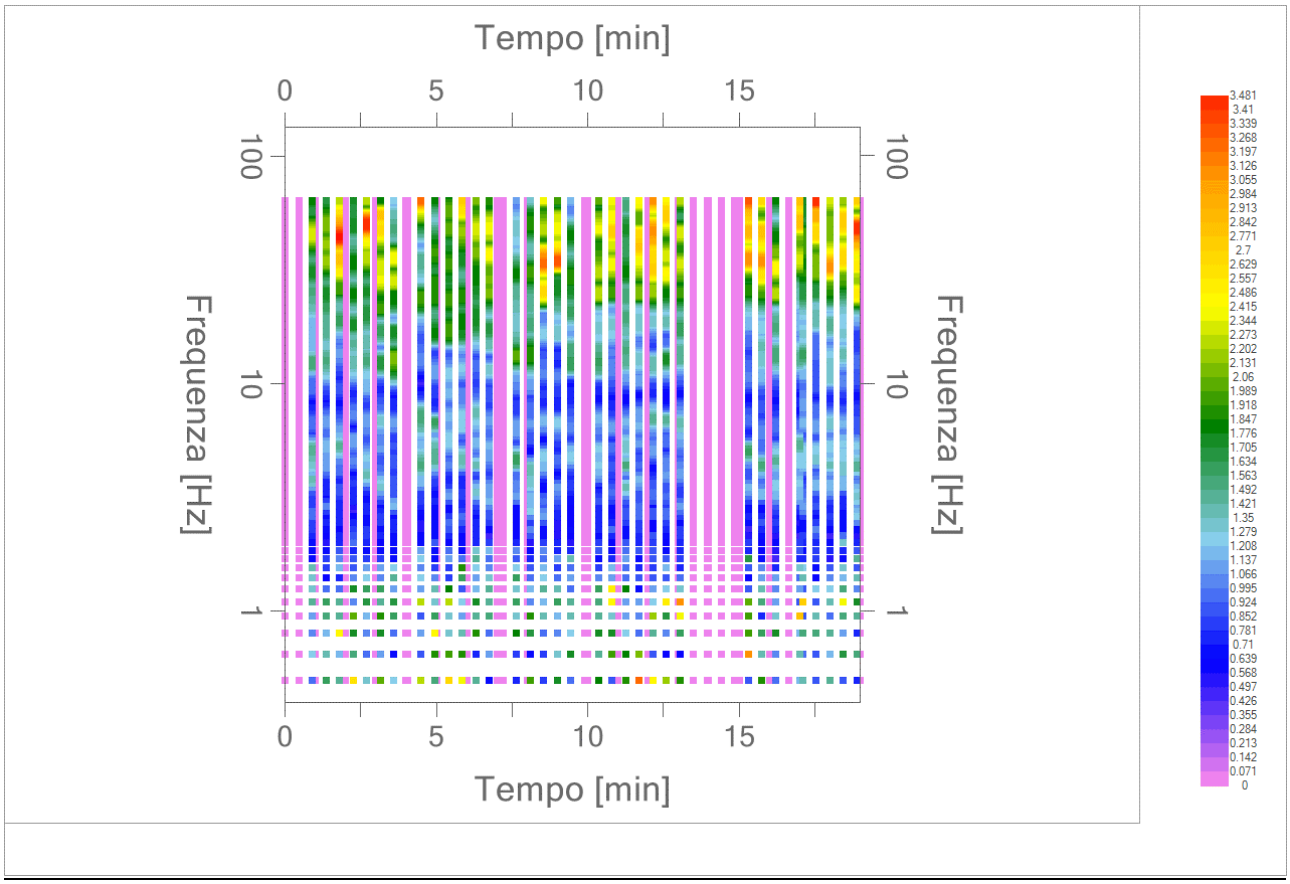
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

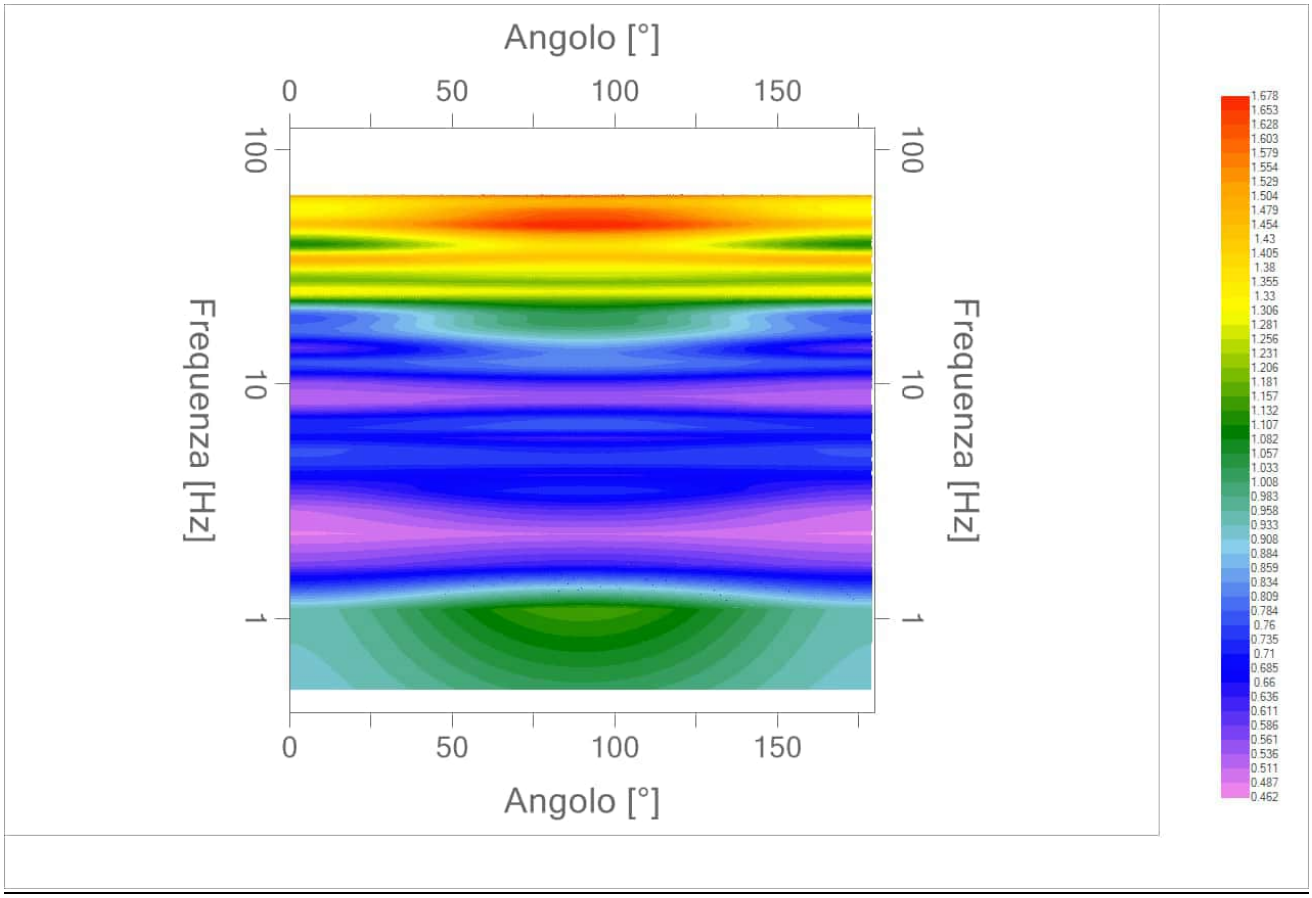
Frequenza del picco del rapporto H/V: 63.80 Hz ± 0.27 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 63.80 ± 0.27 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro* [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	NO
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	NO
$\sigma_f < \varepsilon(f_0)$	NO
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

*I risultati relativi alle verifiche eseguite ai sensi delle linee guida SESAME, evidenziano che il segnale presenta un picco H/V "non chiaro". Tale segnale tuttavia è comunque interpretabile, poiché, sempre ai sensi delle linee guida SESAME, corrisponde a un picco di origine stratigrafica.

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Foro Boario	
Cantiere	**Data** 28/08/2024	**Ora** 9.17
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_05	**File** FO_05.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto			✓			30
	camion		✓				30
	passanti		✓				30
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

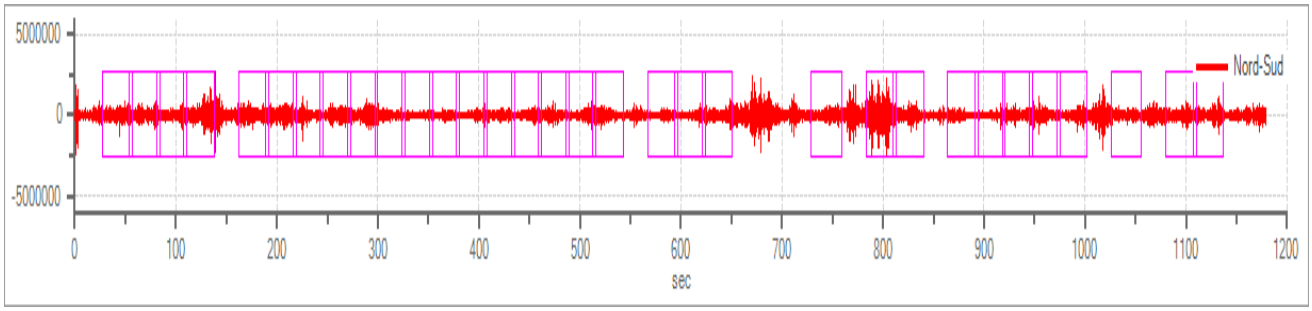
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

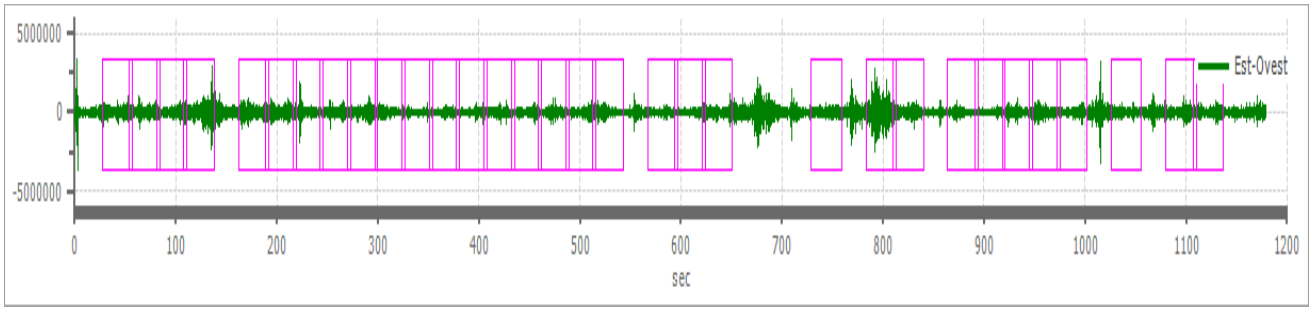
Dati riepilogativi:

Numero totale finestre selezionate:	32
Numero finestre incluse nel calcolo:	28
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

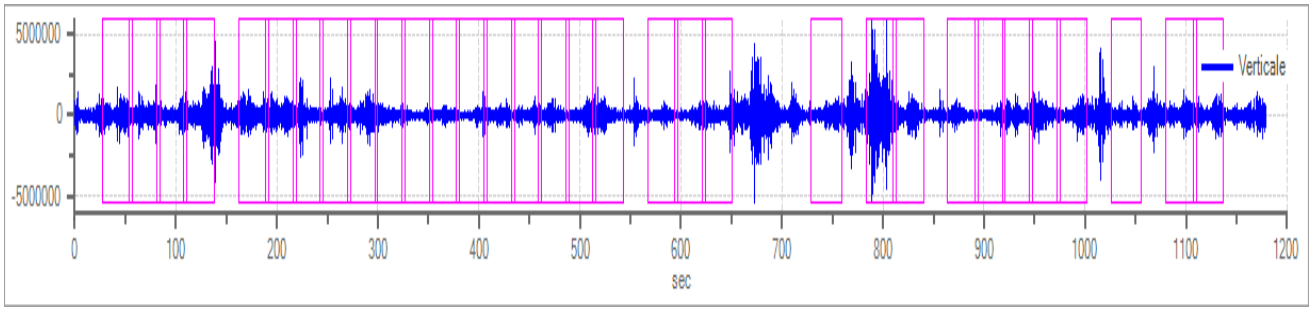
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

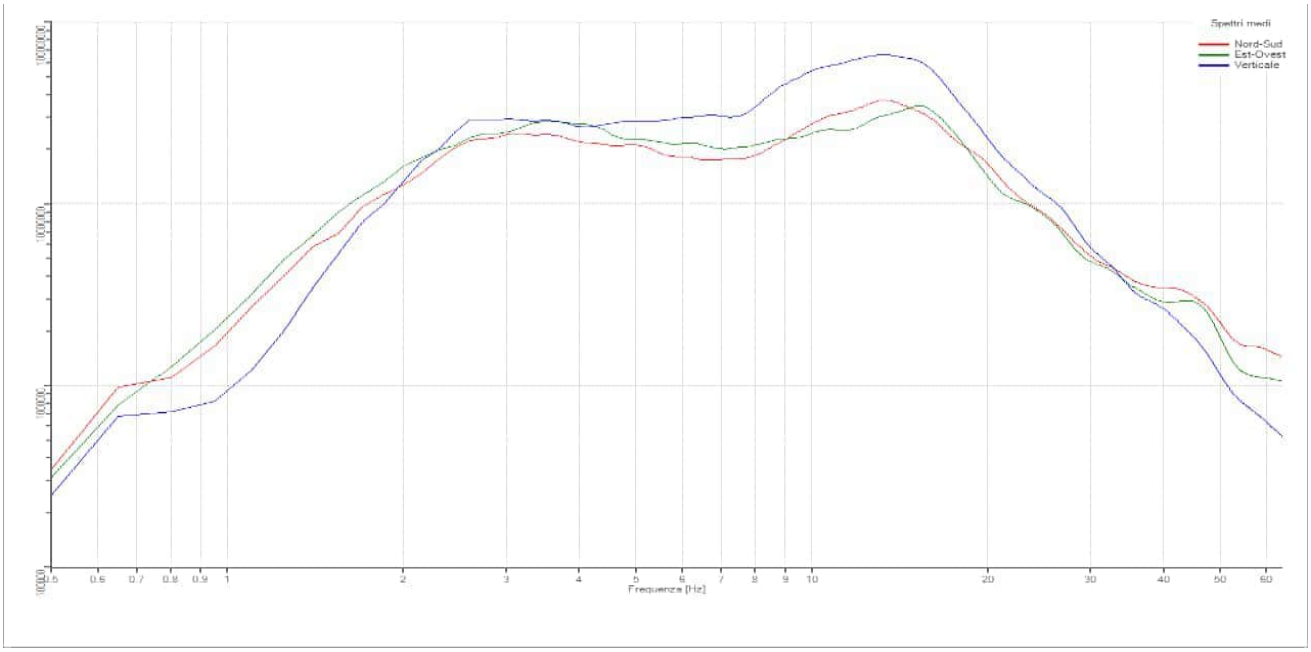


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

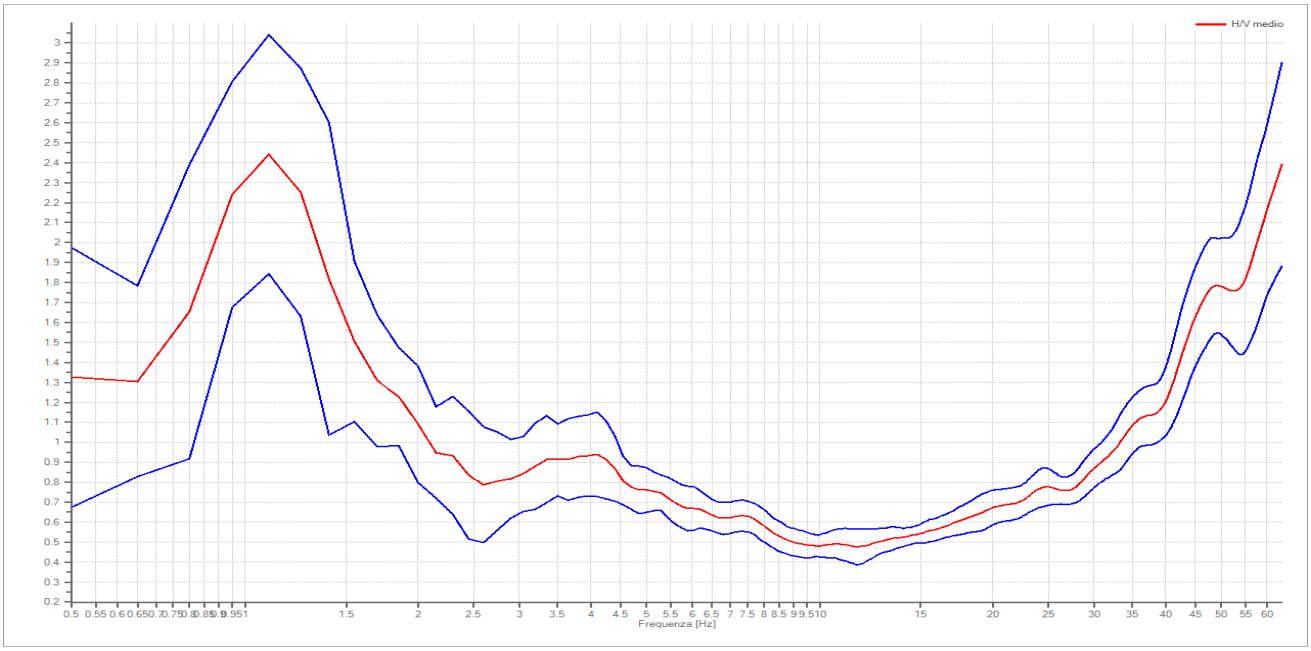
Dati riepilogativi:

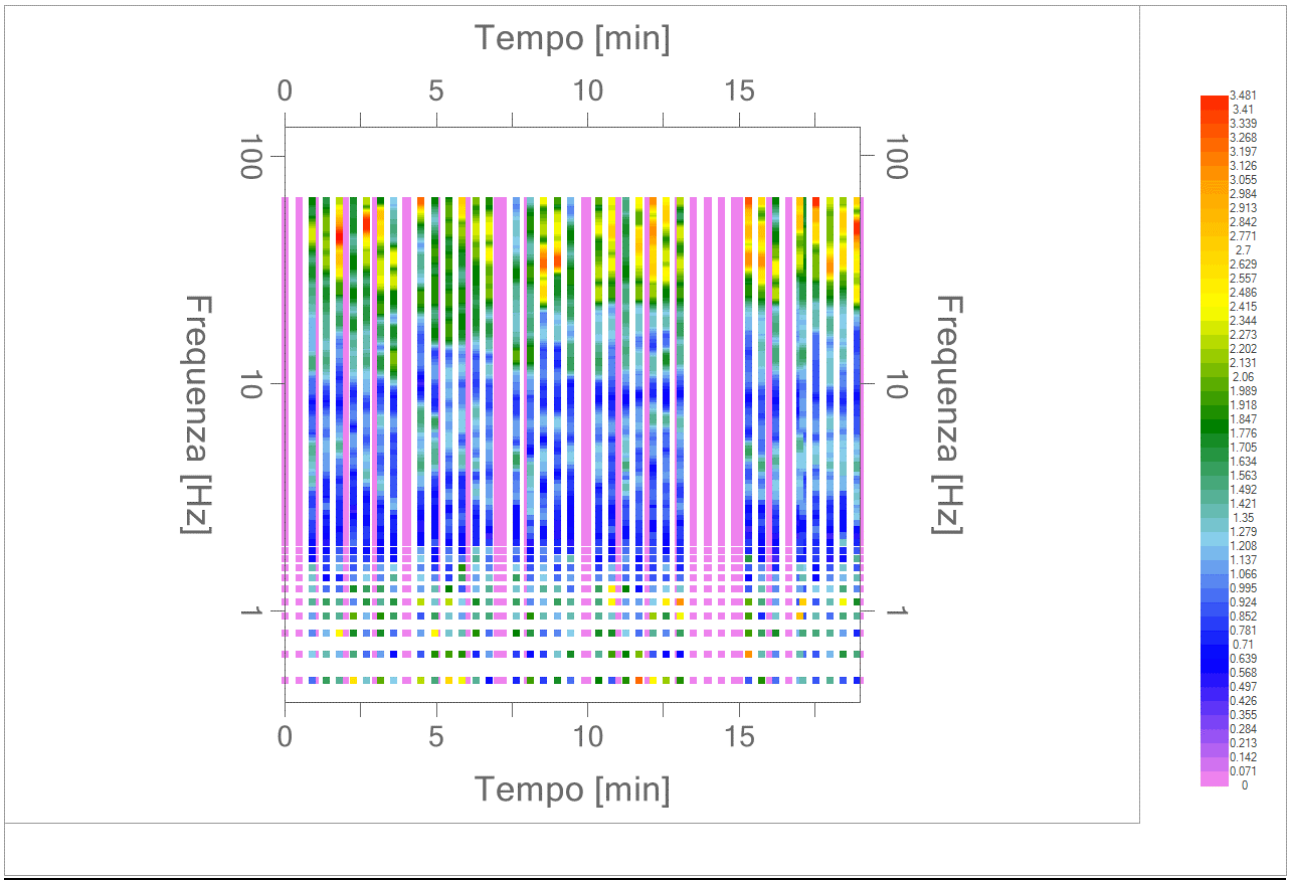
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

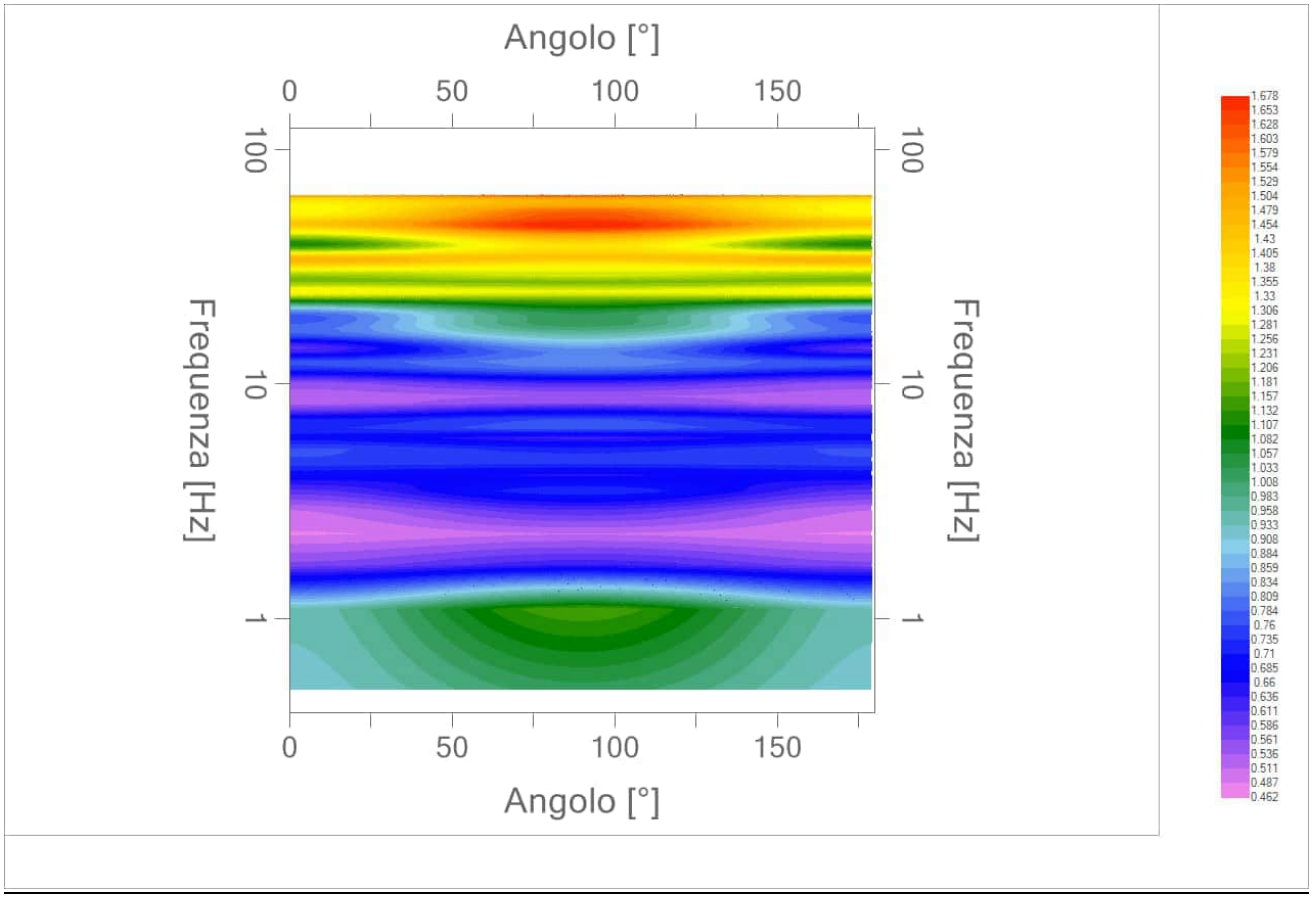
Frequenza del picco del rapporto H/V: 1.10 Hz ± 0.24 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 1.10 ± 0.24 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro* [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	NO
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	NO
$\sigma_f < \varepsilon(f_0)$	NO
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

*I risultati relativi alle verifiche eseguite ai sensi delle linee guida SESAME, evidenziano che il segnale presenta un picco H/V "non chiaro". Tale segnale tuttavia è comunque interpretabile, poiché, sempre ai sensi delle linee guida SESAME, corrisponde a un picco di origine stratigrafica.

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Via Edison	
Cantiere	**Data** 28/08/2024	**Ora** 12.05
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_06	**File** FO_06.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☐ assenti	☒ presenti: sottoservizi		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto				✓		40
	camion			✓			40
	passanti			✓			40
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

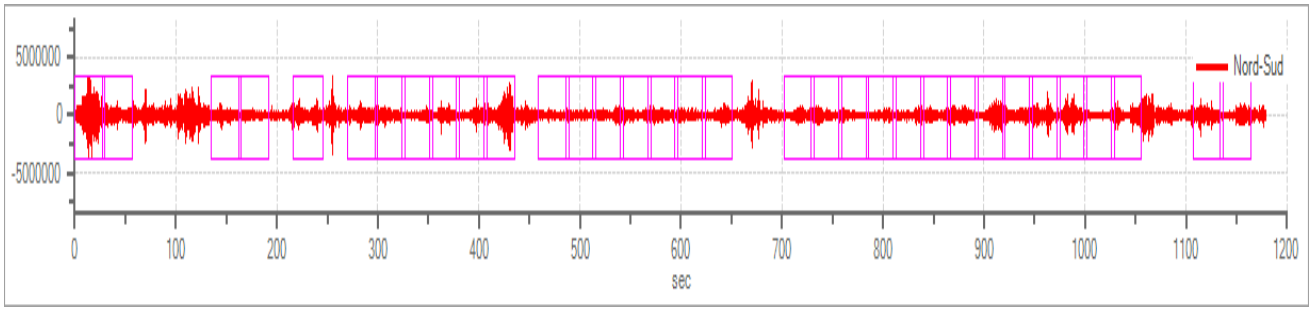
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245249
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

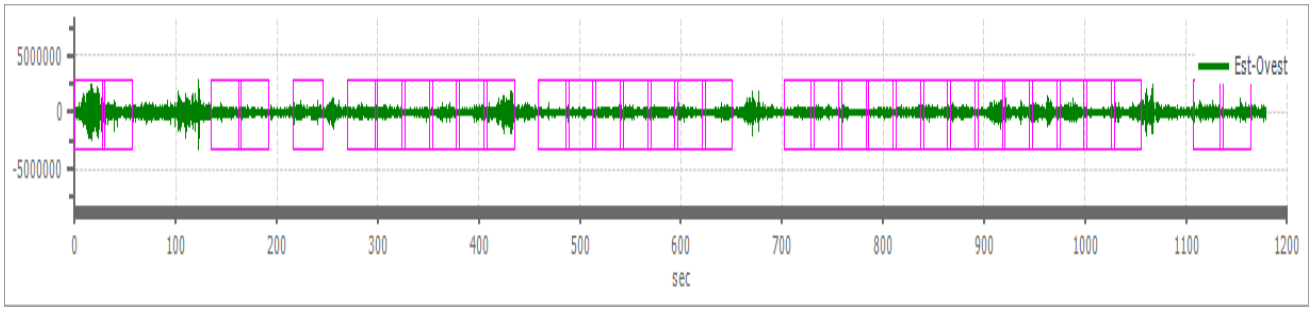
Dati riepilogativi:

Numero totale finestre selezionate:	33
Numero finestre incluse nel calcolo:	24
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

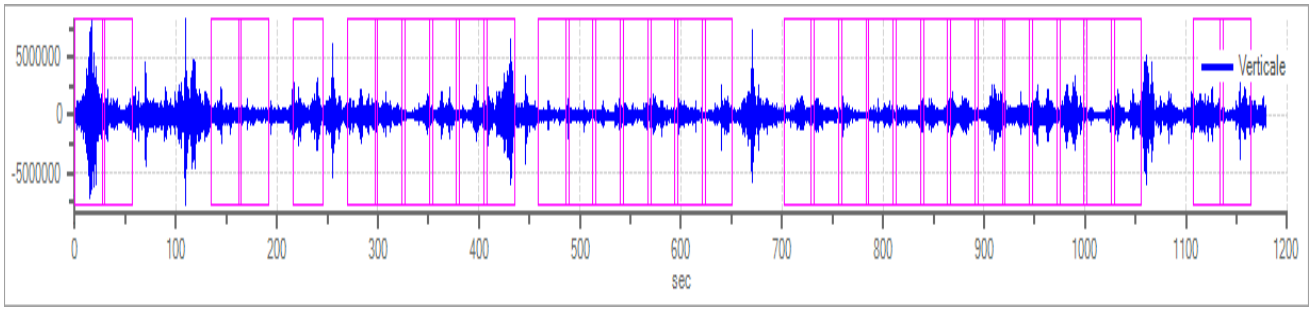
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

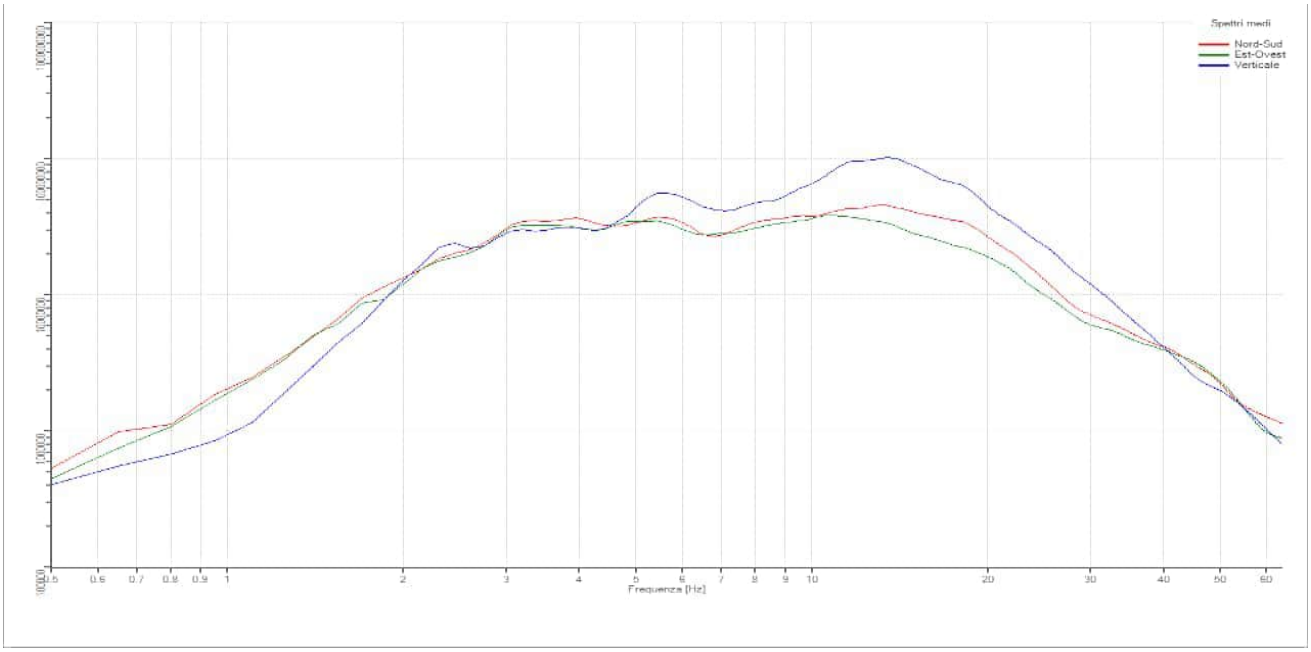


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

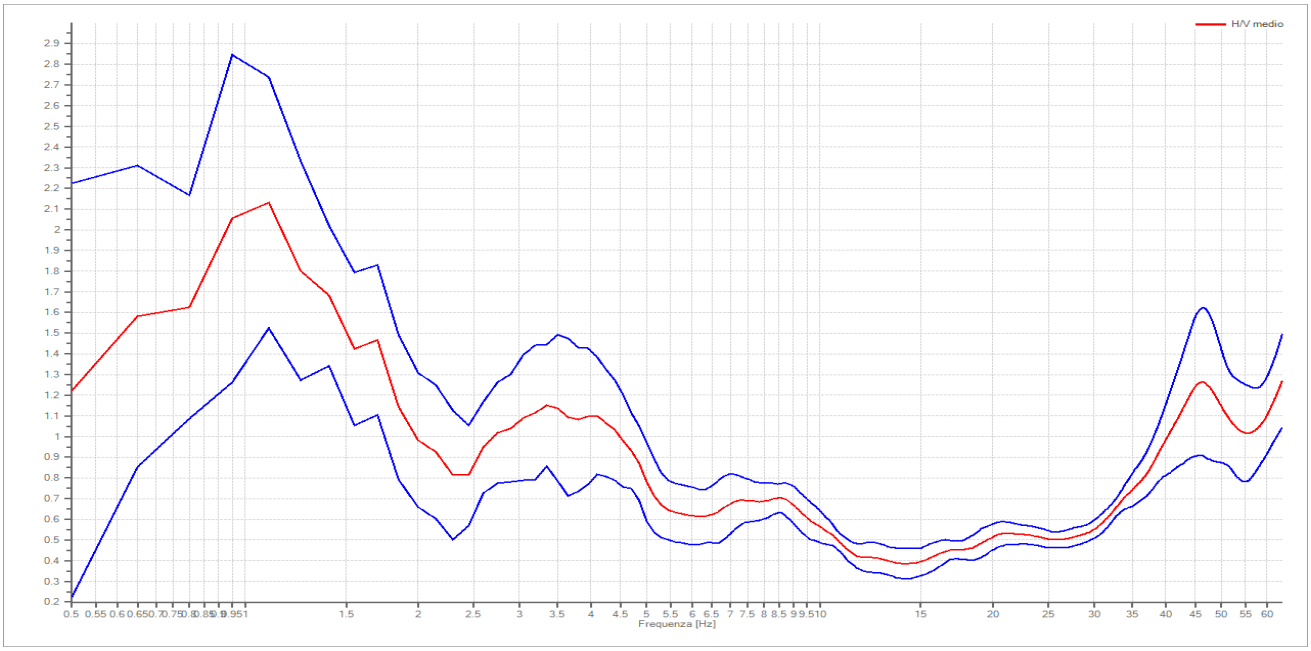
Dati riepilogativi:

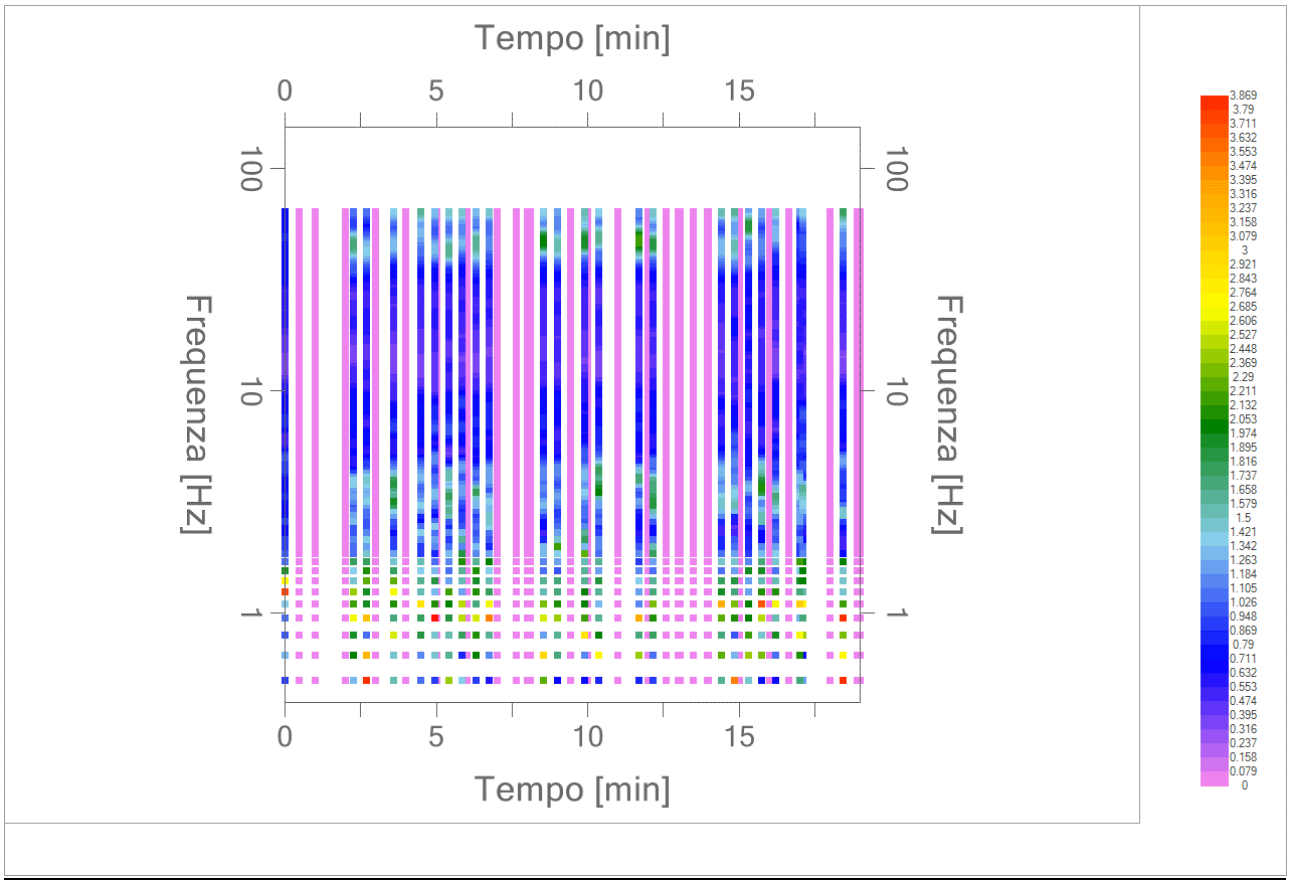
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

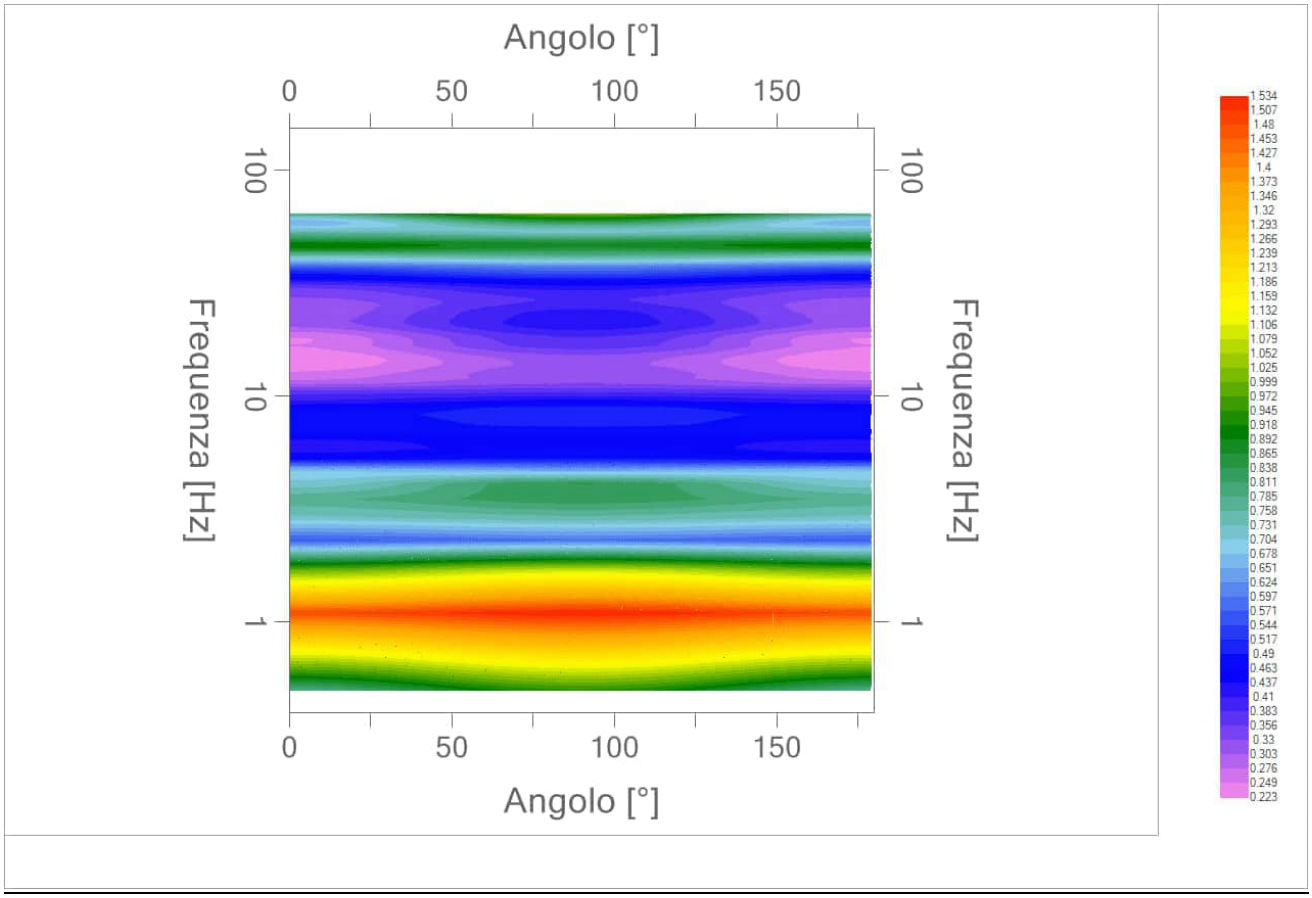
Frequenza del picco del rapporto H/V: 1.10 Hz ± 0.28 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 1.10 ± 0.24 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro* [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	NO
$\sigma_f < \varepsilon(f_0)$	NO
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

*I risultati relativi alle verifiche eseguite ai sensi delle linee guida SESAME, evidenziano che il segnale presenta un picco H/V "non chiaro". Tale segnale tuttavia è comunque interpretabile, poiché, sempre ai sensi delle linee guida SESAME, corrisponde a un picco di origine stratigrafica.

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Via Edison	
Cantiere	**Data** 28/08/2024	**Ora** 09.12
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_07	**File** FO_07BIS.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto				✓		50
	camion			✓			50
	passanti		✓				50
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

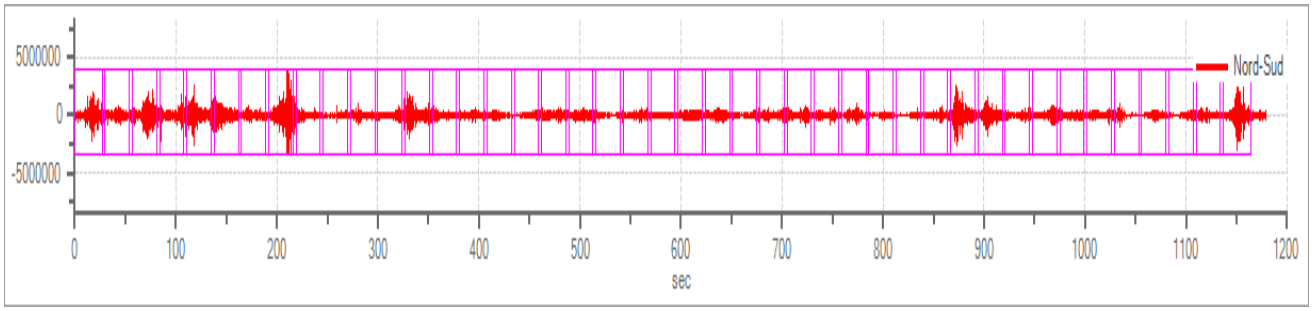
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

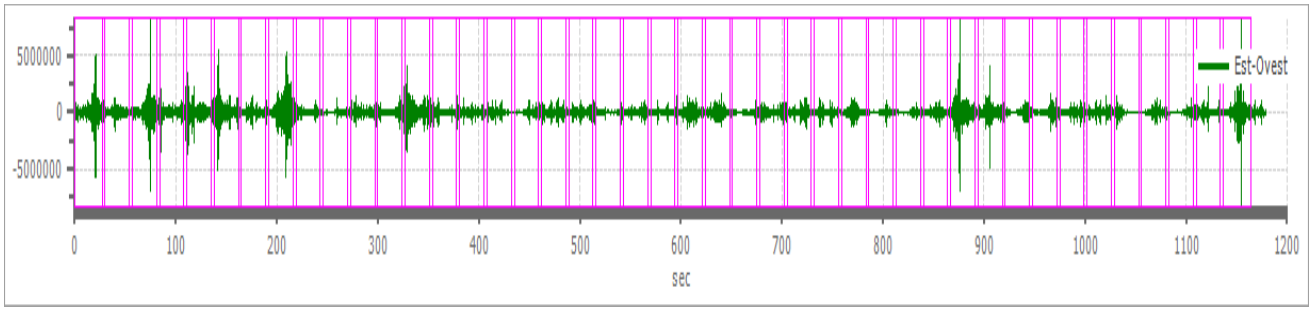
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	38
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

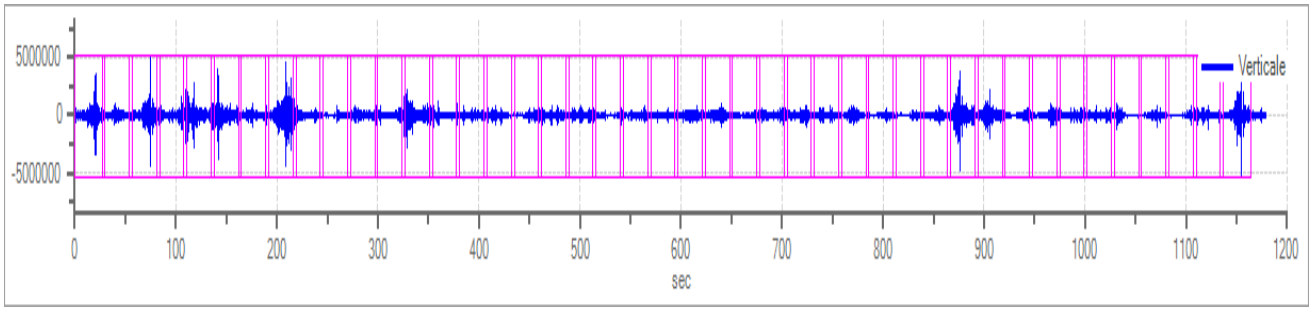
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

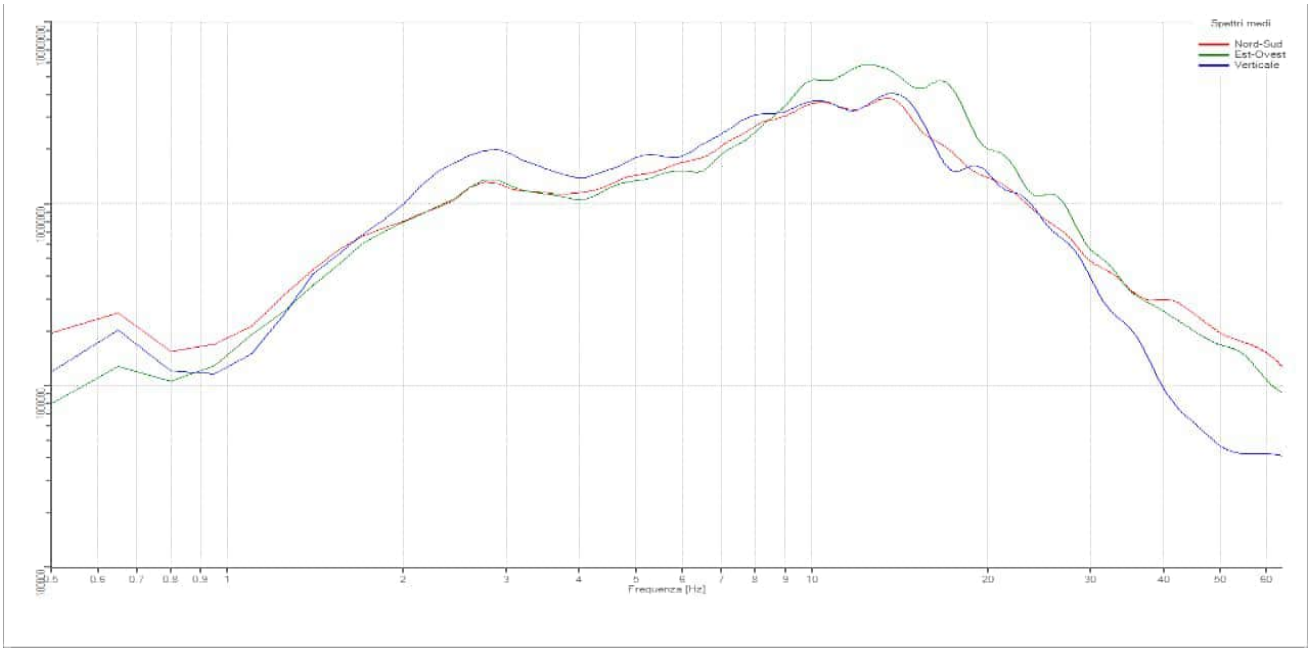


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

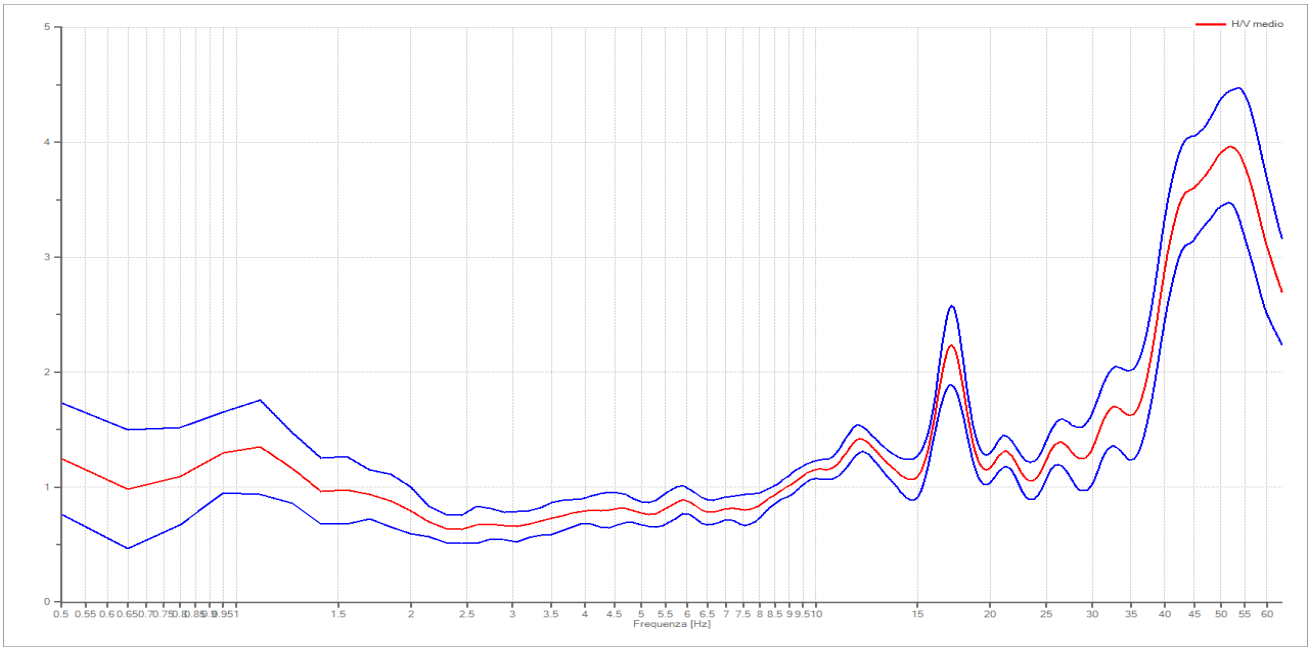
Dati riepilogativi:

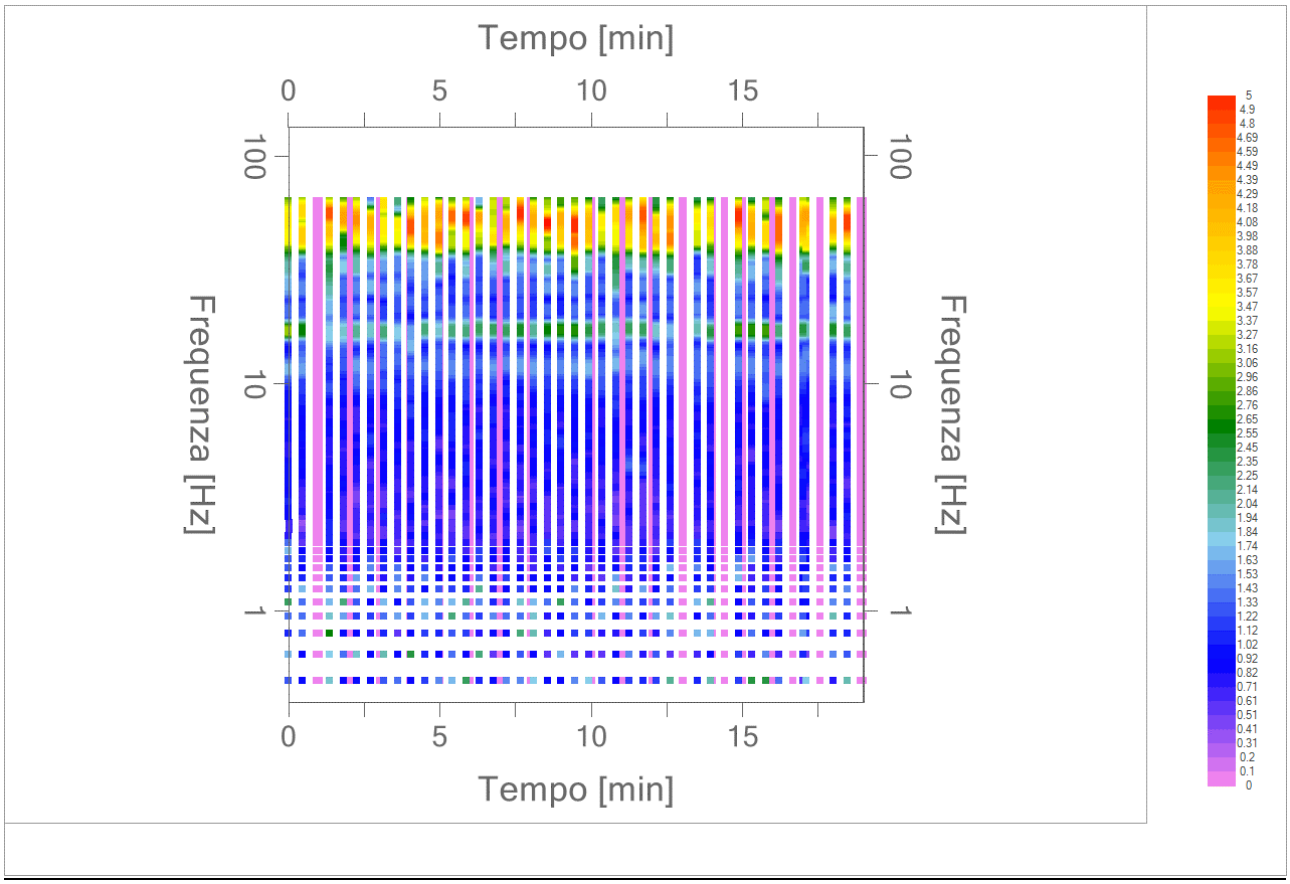
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

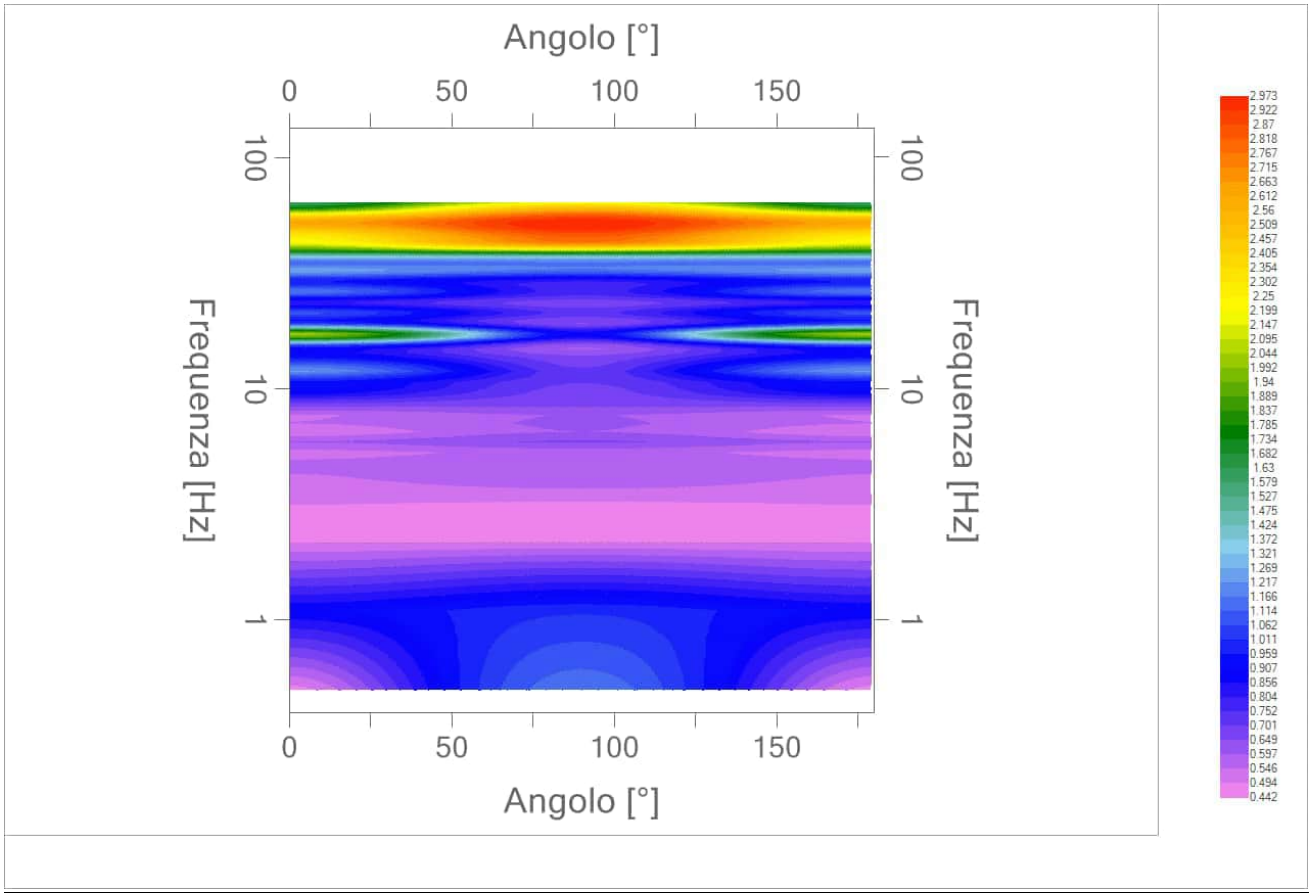
Frequenza del picco del rapporto H/V: 51.95 Hz ± 0.12 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 1.10 ± 0.24 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Via Mattei	
Cantiere	**Data** 28/08/2024	**Ora** 13.33
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_08	**File** FO_08.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Ponti	☐ assenti		☒ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto				✓		100
	camion				✓		100
	passanti		✓				100
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

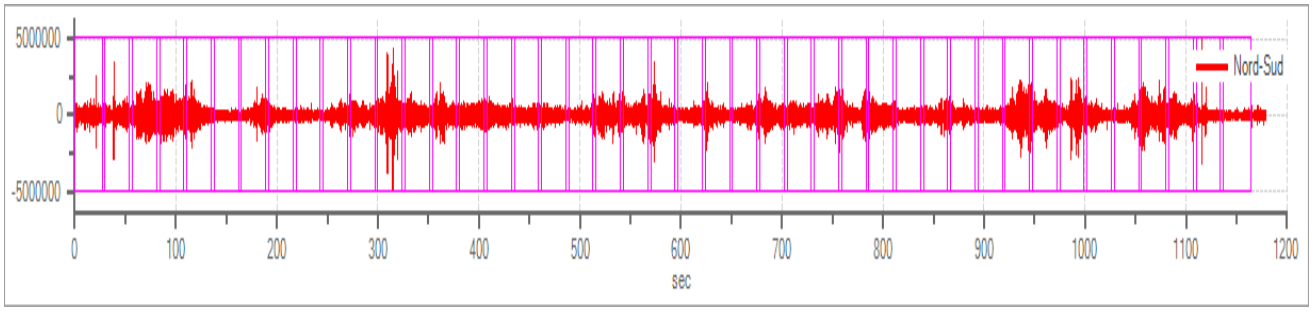
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245186
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

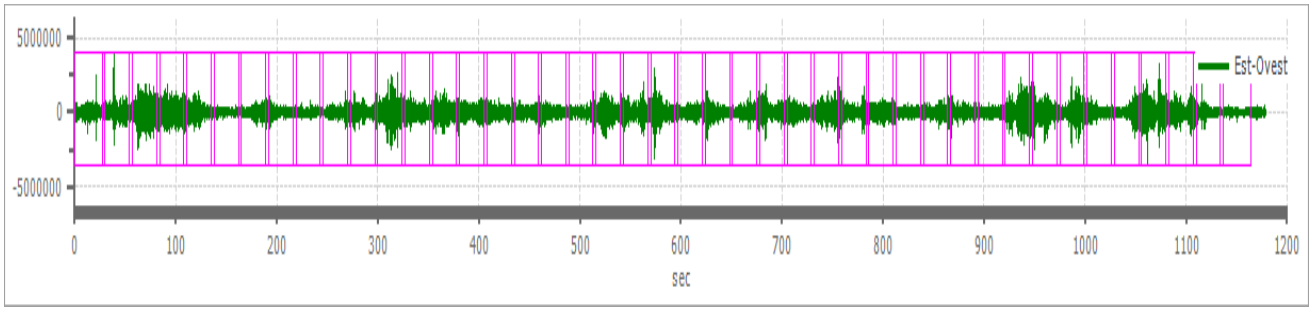
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	36
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

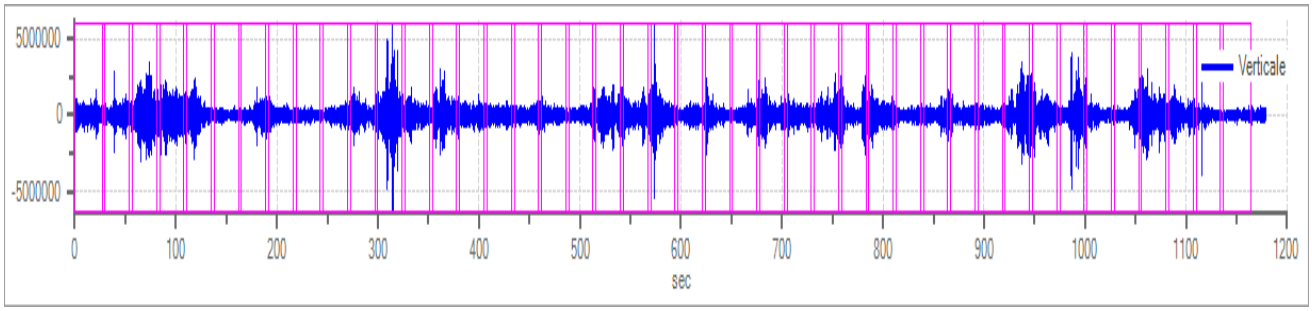
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

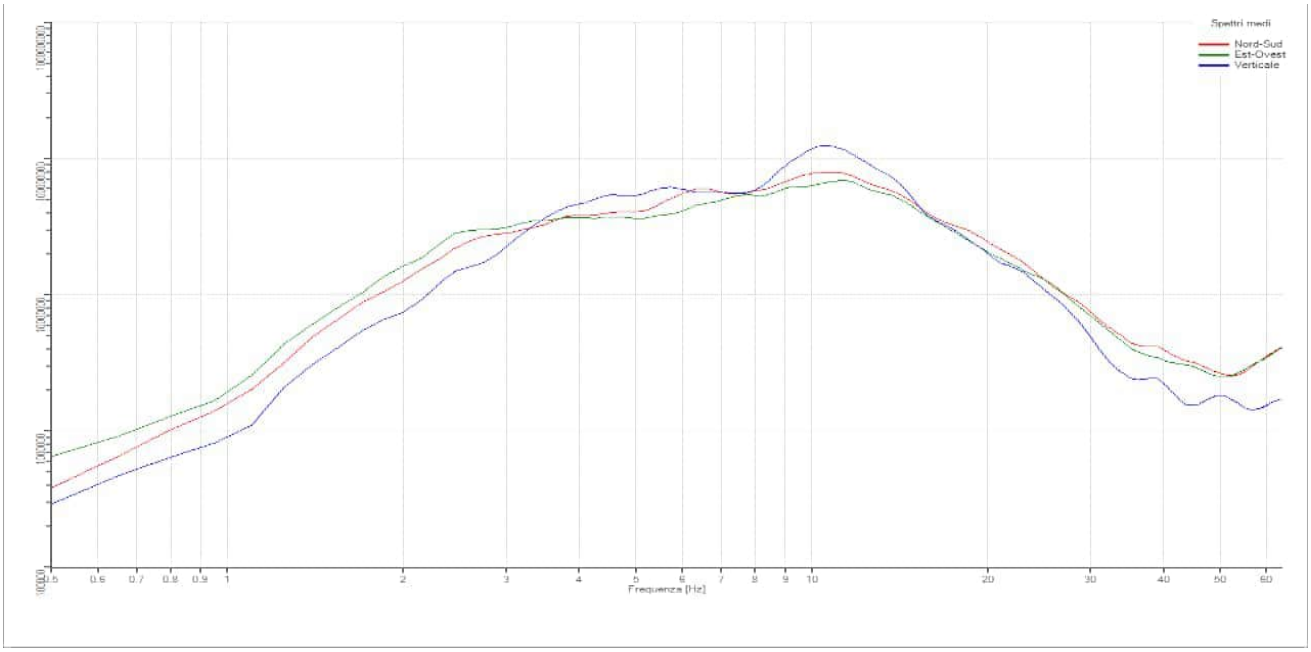


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

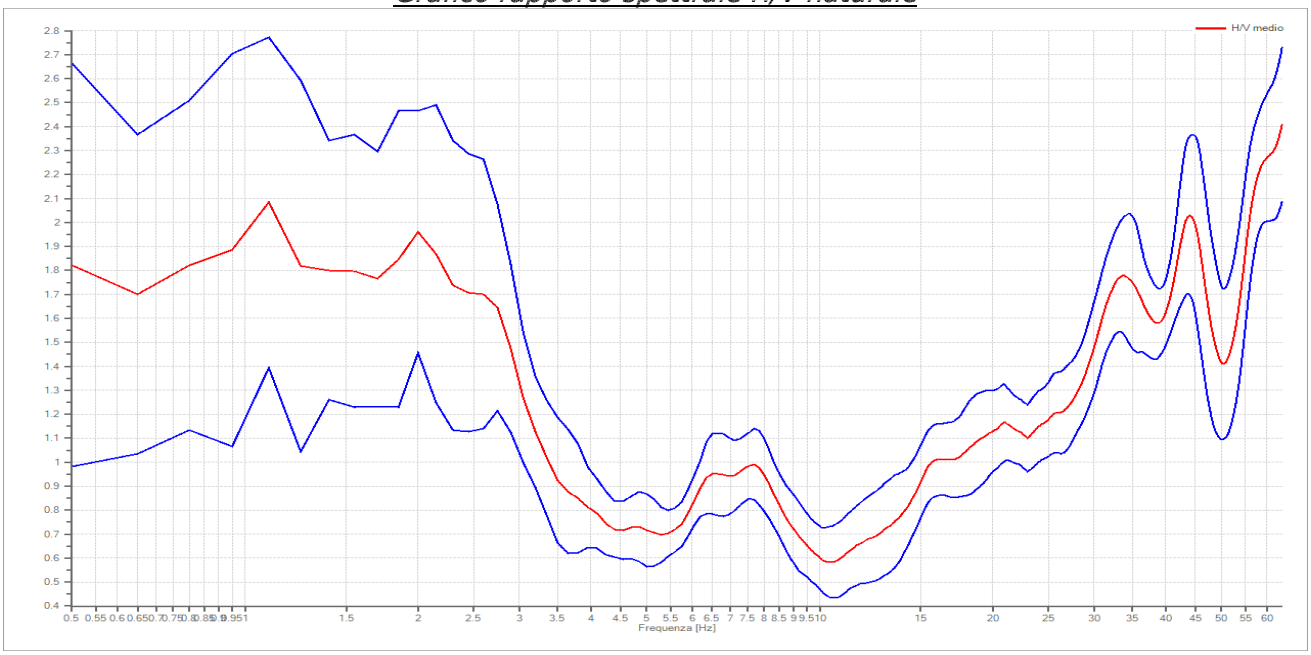
Dati riepilogativi:

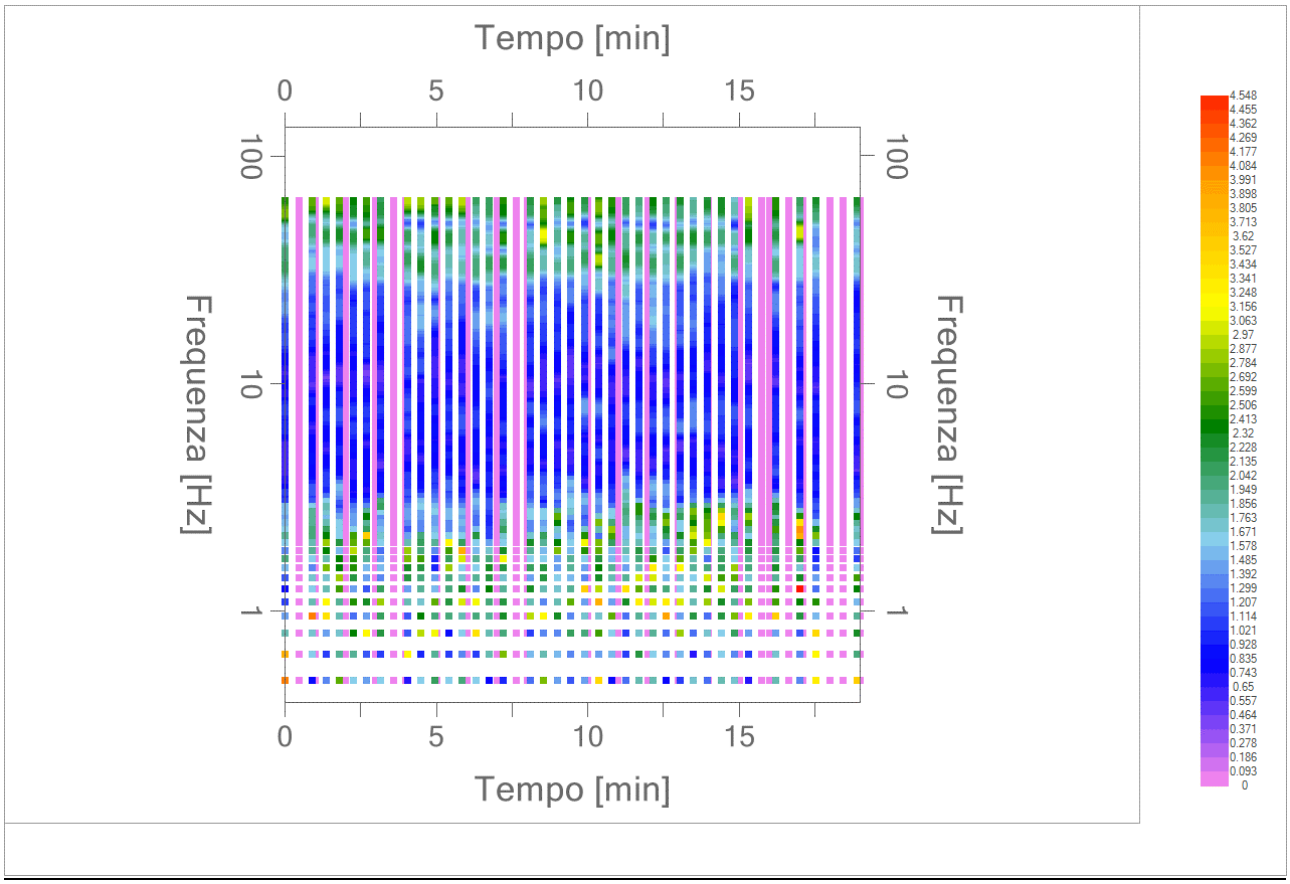
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

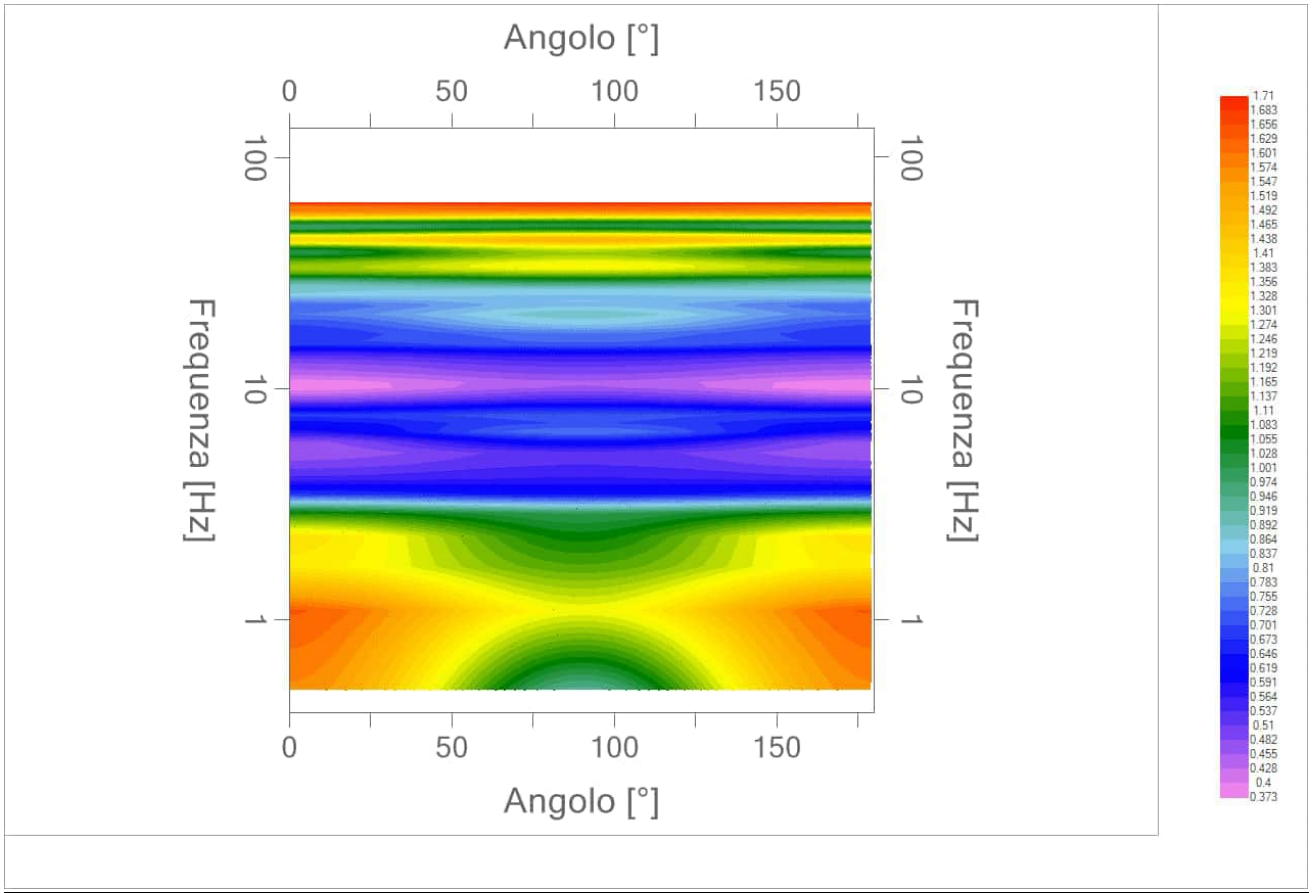
Frequenza del picco del rapporto H/V: 63.80 Hz ± 0.13 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 63.80 ± 0.13 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Via Lama	
Cantiere	**Data** 29/08/2024	**Ora** 14.26
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_09	**File** FO_09.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto				✓		60
	camion				✓		60
	passanti		✓				60
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

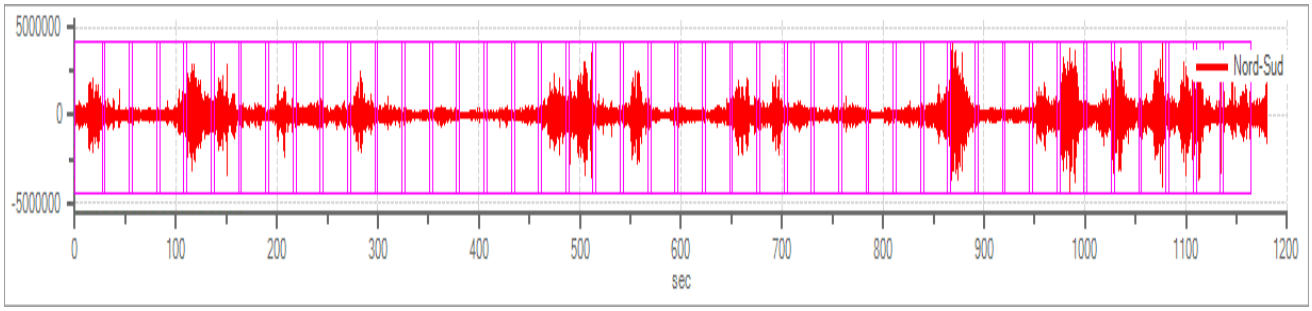
Numero tracce:	3
Durata registrazione:	1180 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245377
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

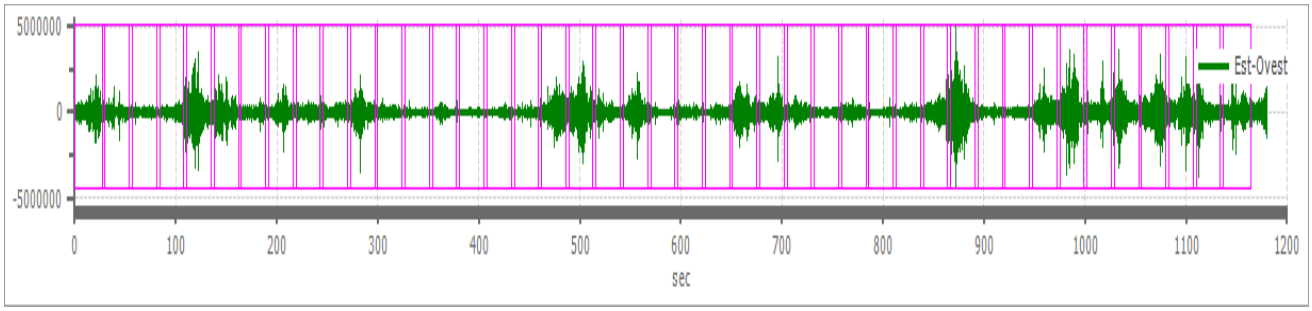
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	37
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

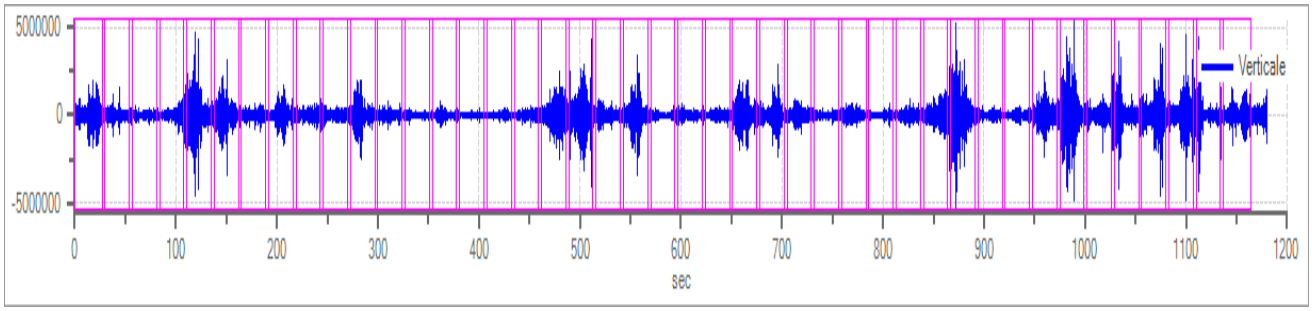
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

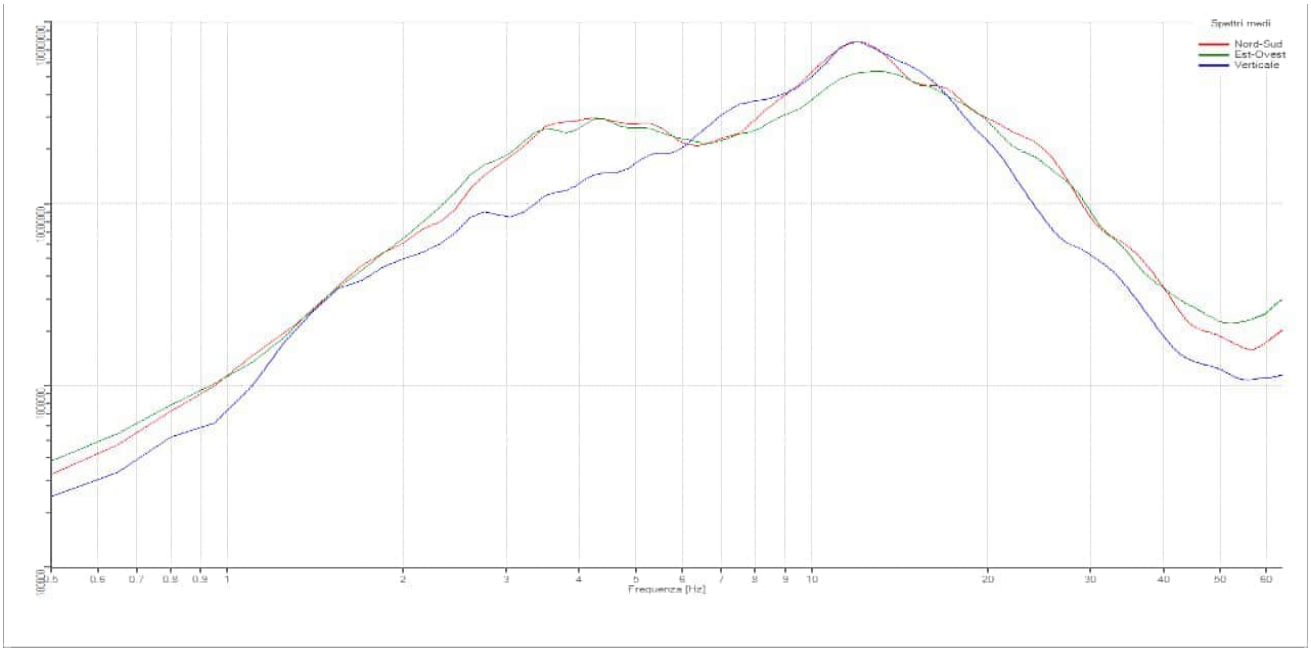


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

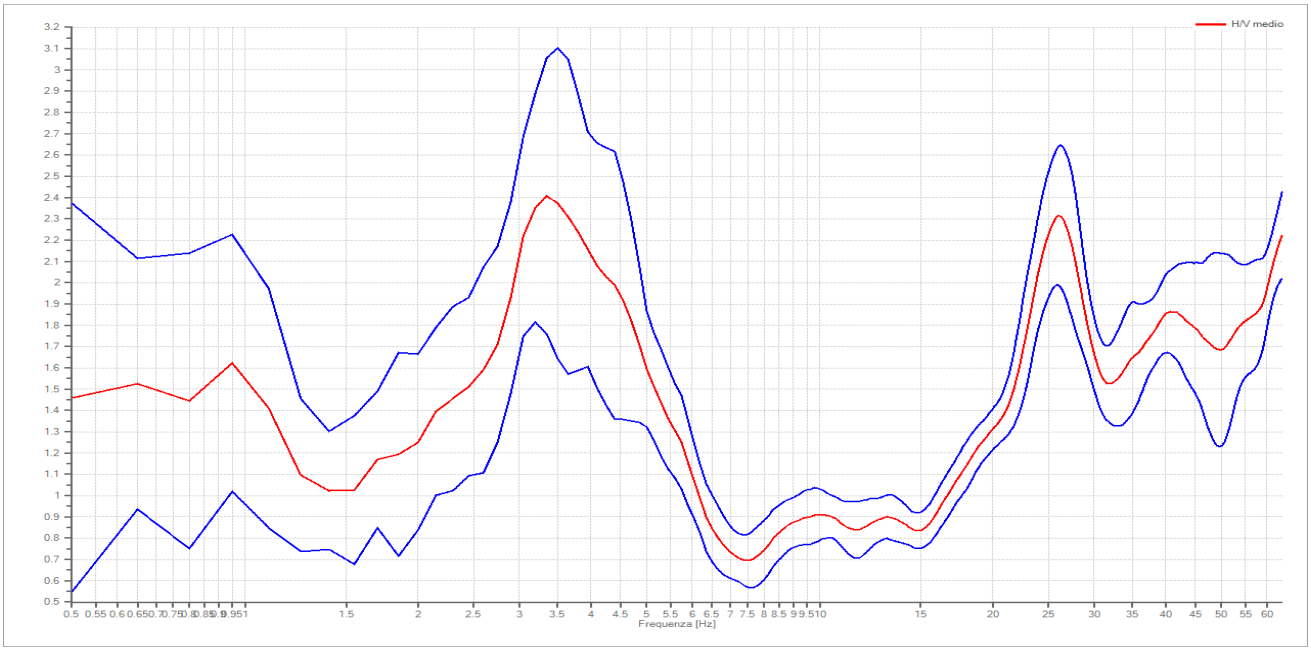
Dati riepilogativi:

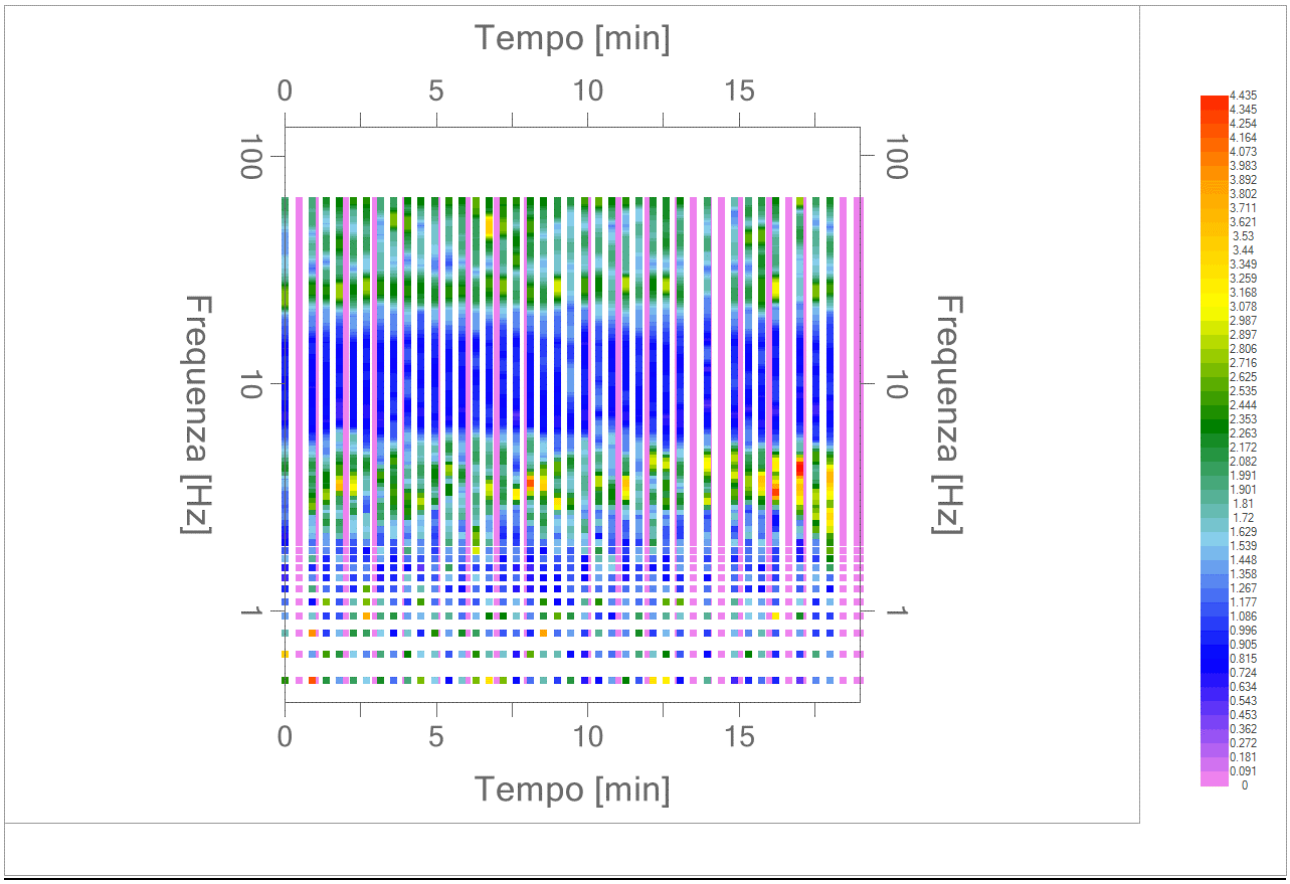
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

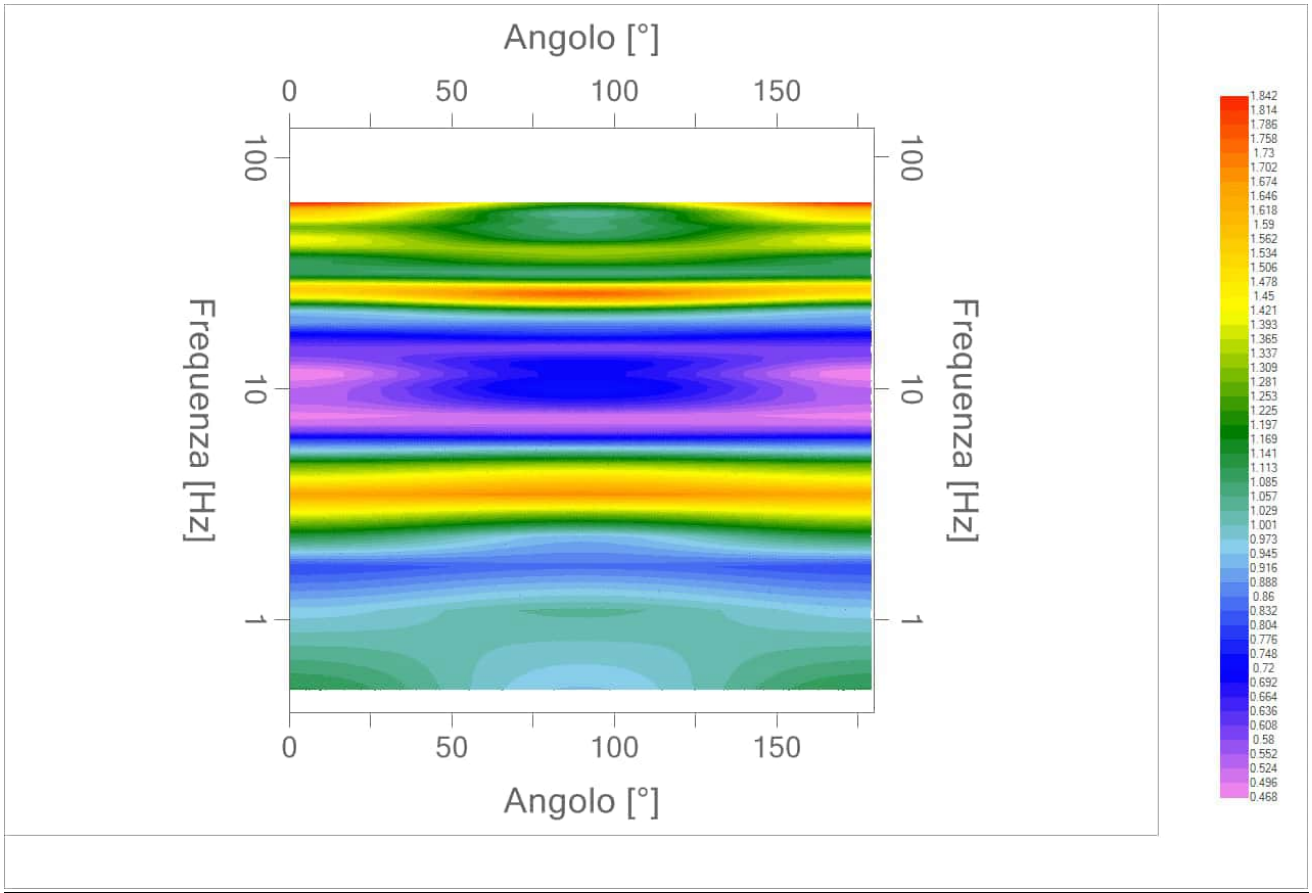
Frequenza del picco del rapporto H/V: 3.35 Hz ± 0.27 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 3.35 ± 0.27 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro* [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	NO
$\sigma_f < \varepsilon(f_0)$	NO
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

*I risultati relativi alle verifiche eseguite ai sensi delle linee guida SESAME, evidenziano che il segnale presenta un picco H/V "non chiaro". Tale segnale tuttavia è comunque interpretabile, poiché, sempre ai sensi delle linee guida SESAME, corrisponde a un picco di origine stratigrafica.

PROGETTO:	*Studio di Microzonazione Sismica del territorio comunale di Forlì*

PROVA HVSR

Comune Forlì	**Località** Carpena	
Cantiere	**Data** 03/09/2024	**Ora** 16.12
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_10	**File** FO_10.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				
	camion	✓					
	passanti		✓				
	altro	✓					
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

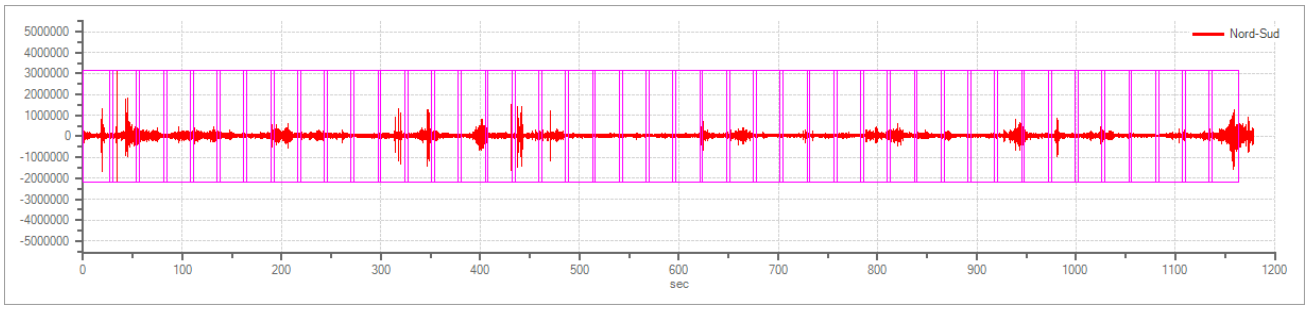
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245184
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

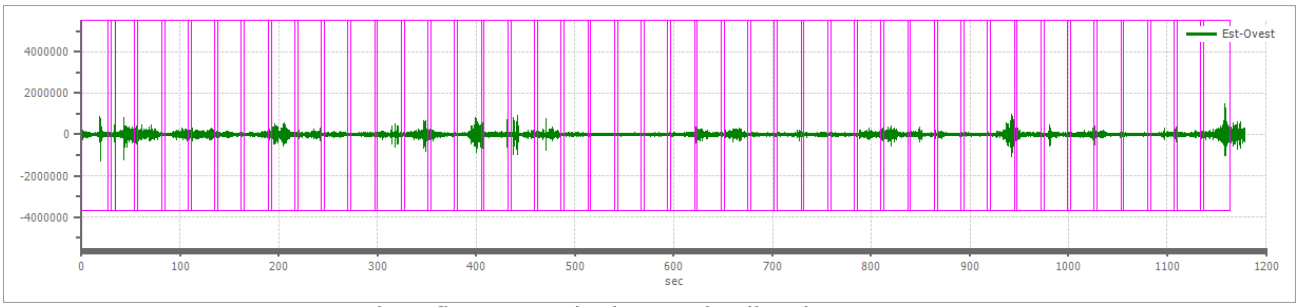
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	24
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

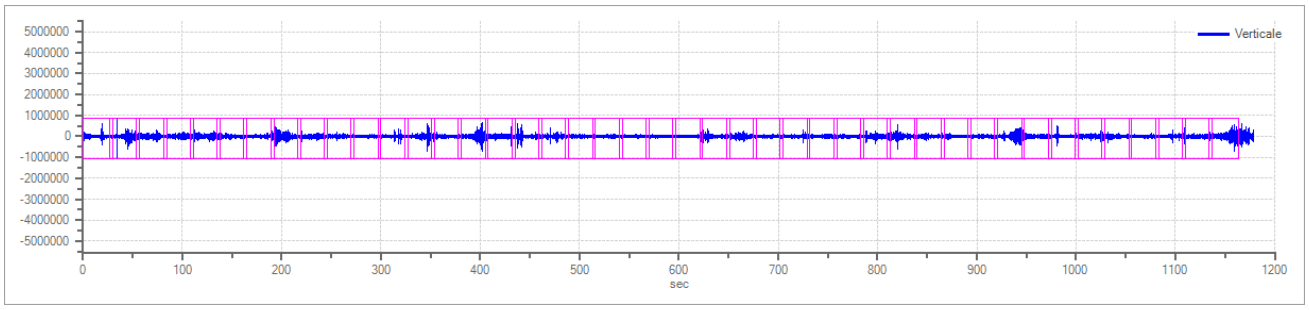
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

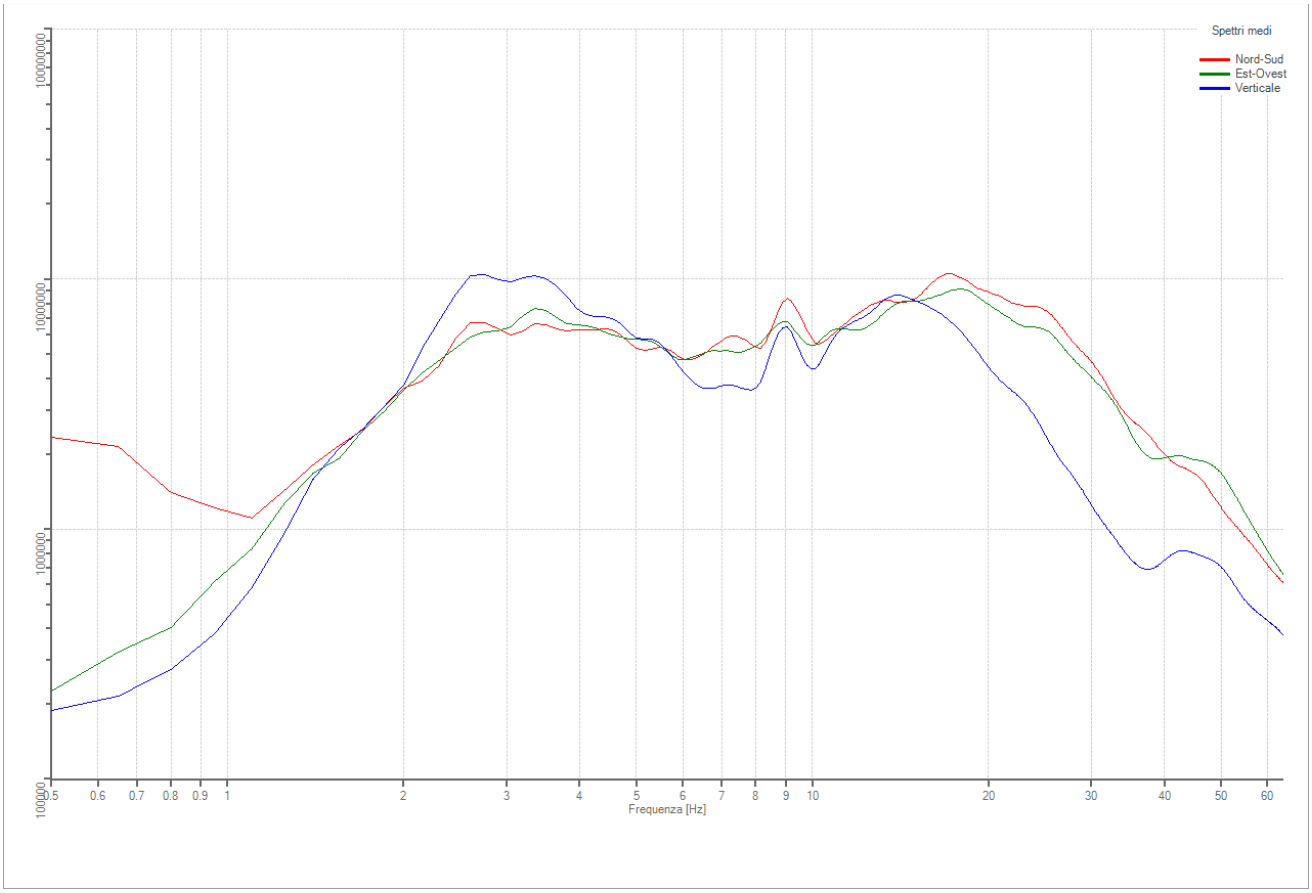


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

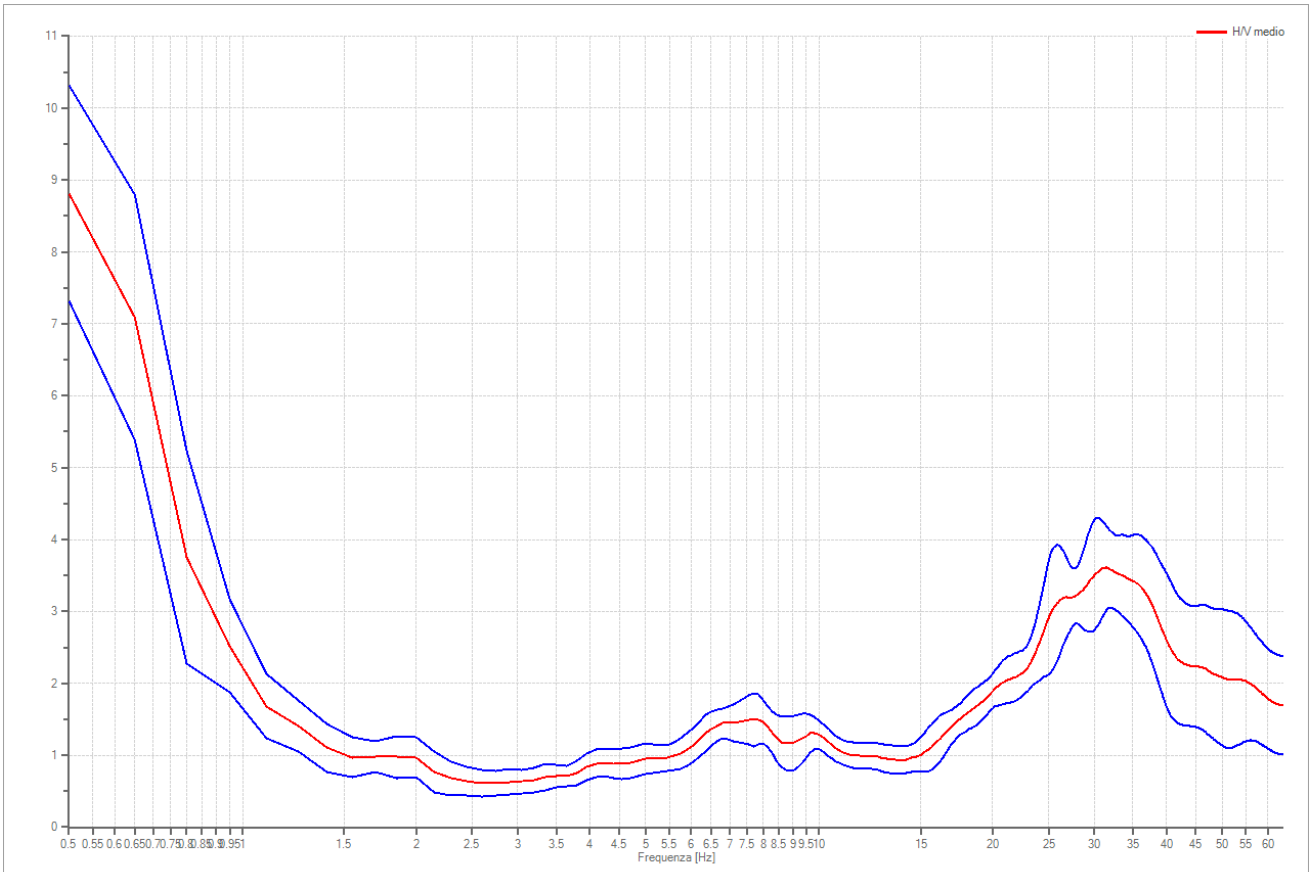
Dati riepilogativi:

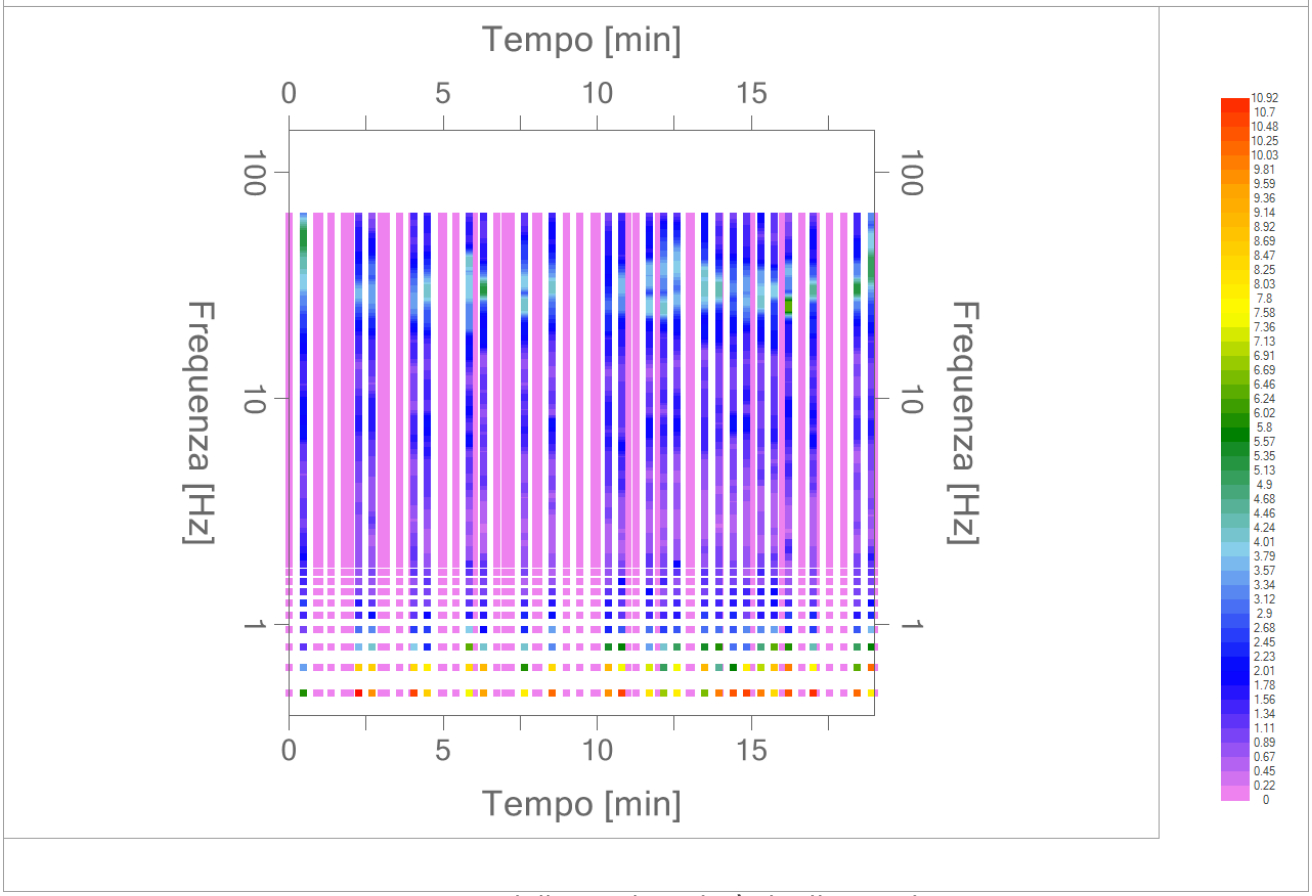
Frequenza massima: 64.00 Hz
Frequenza minima: 0.50 Hz
Passo frequenze: 0.15 Hz
Tipo lisciamento:: Triangolare proporzionale
Percentuale di lisciamento: 10.00 %
Tipo di somma direzionale: Media quadratica

Risultati:

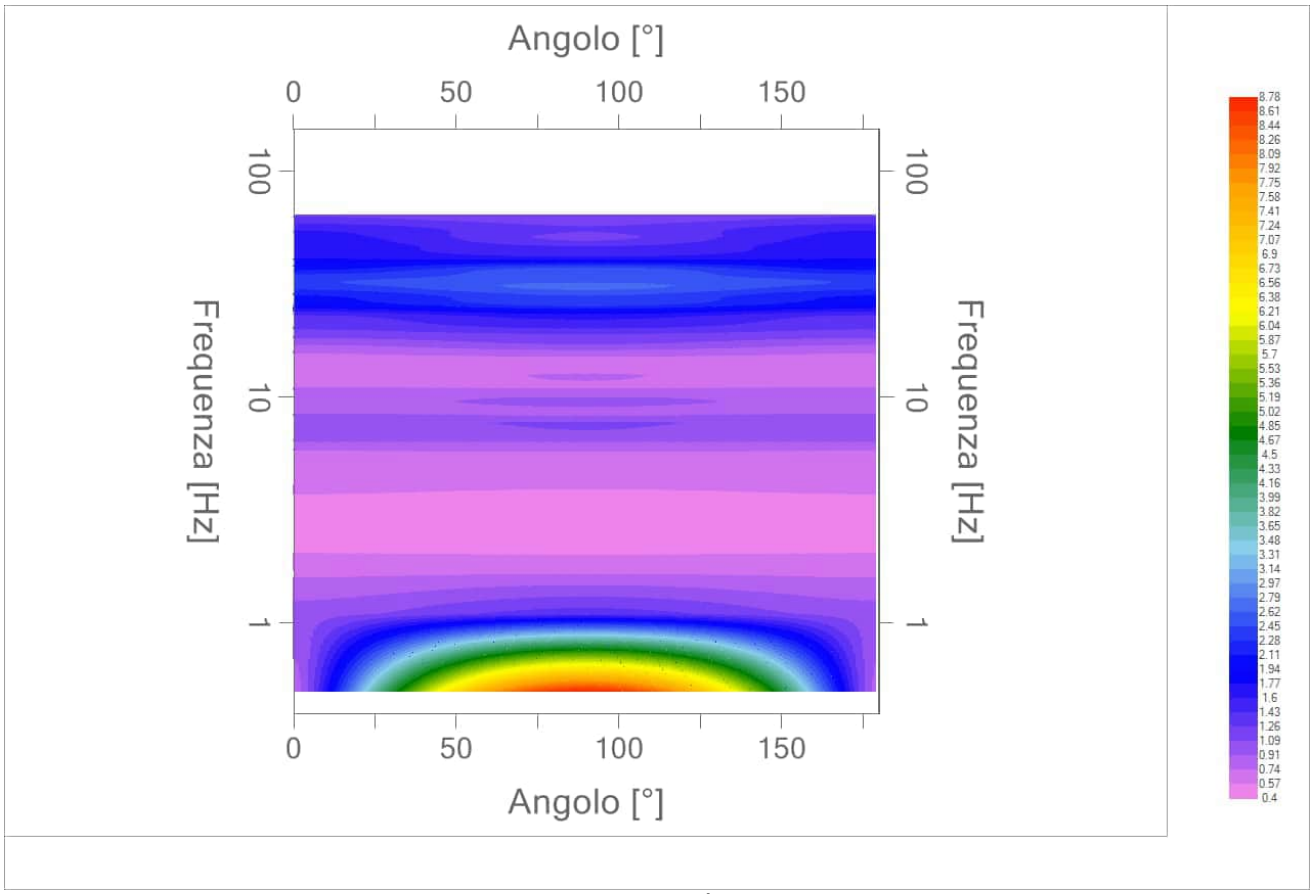
Frequenza del picco del rapporto H/V: 0.50Hz ±0.17 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 0.50 ± 0.17 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale

f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** Via Tina Gori	
Cantiere	**Data** 26/09/2024	**Ora** 13.45
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_11	**File** FO_11.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				25
	camion	✓					
	passanti		✓				25
	altro	✓					
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

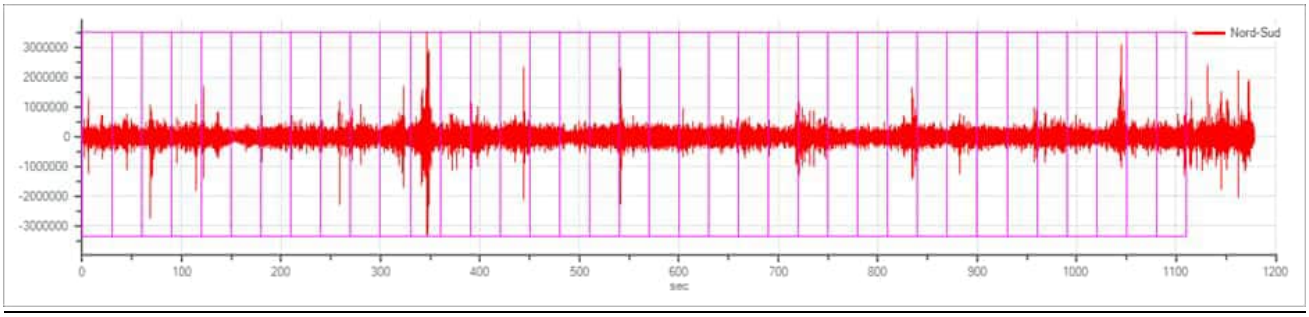
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245248
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

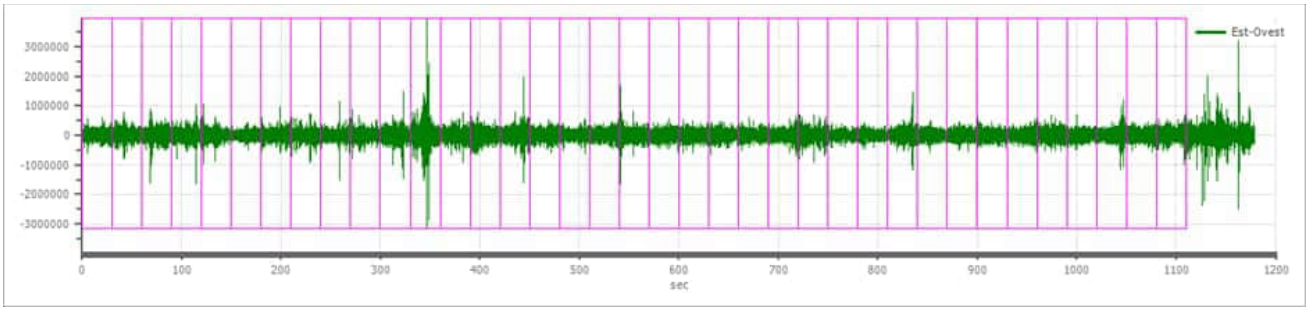
Dati riepilogativi:

Numero totale finestre selezionate:	37
Numero finestre incluse nel calcolo:	37
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

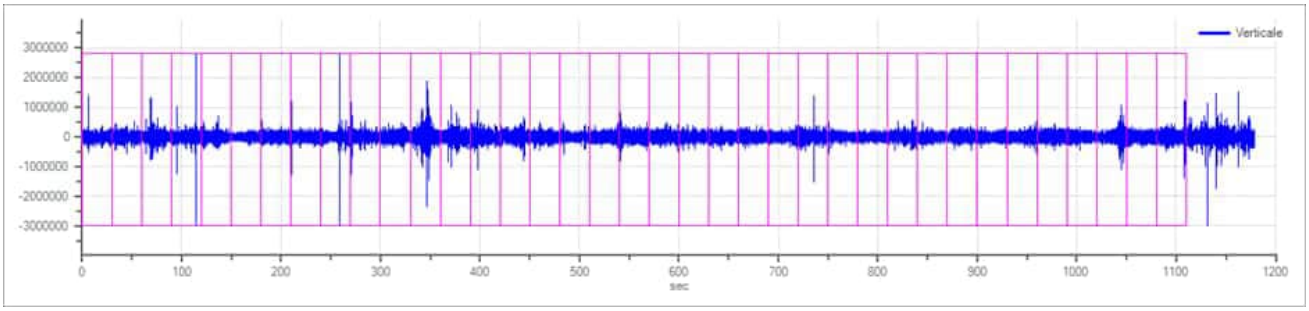
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

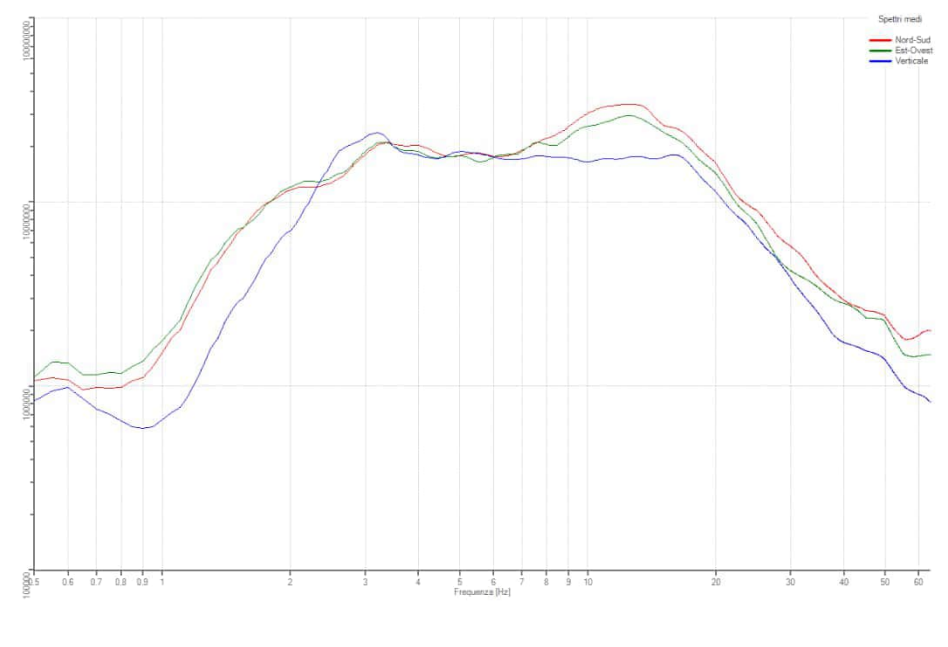


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

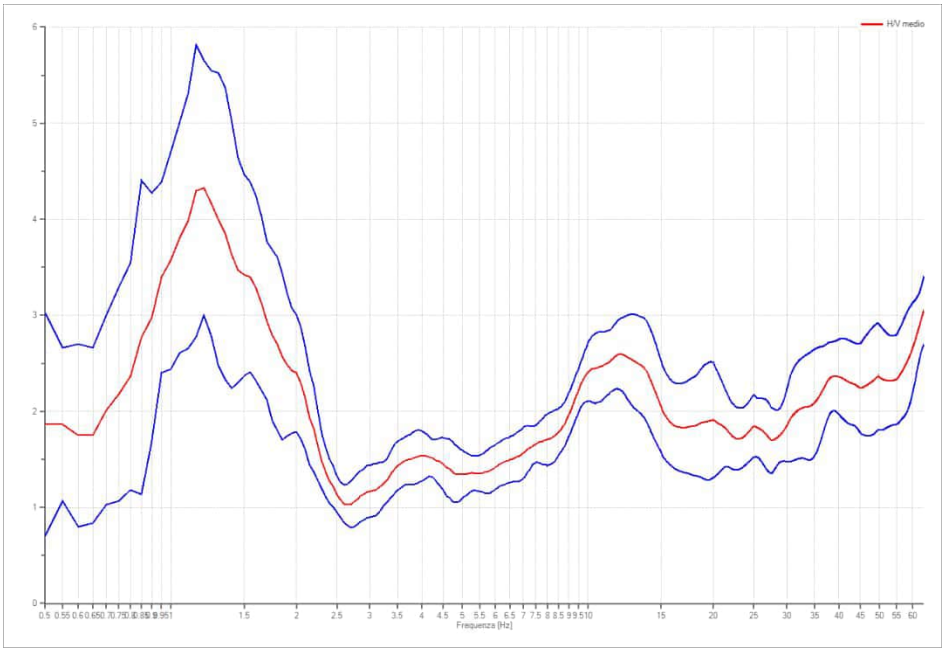
Dati riepilogativi:

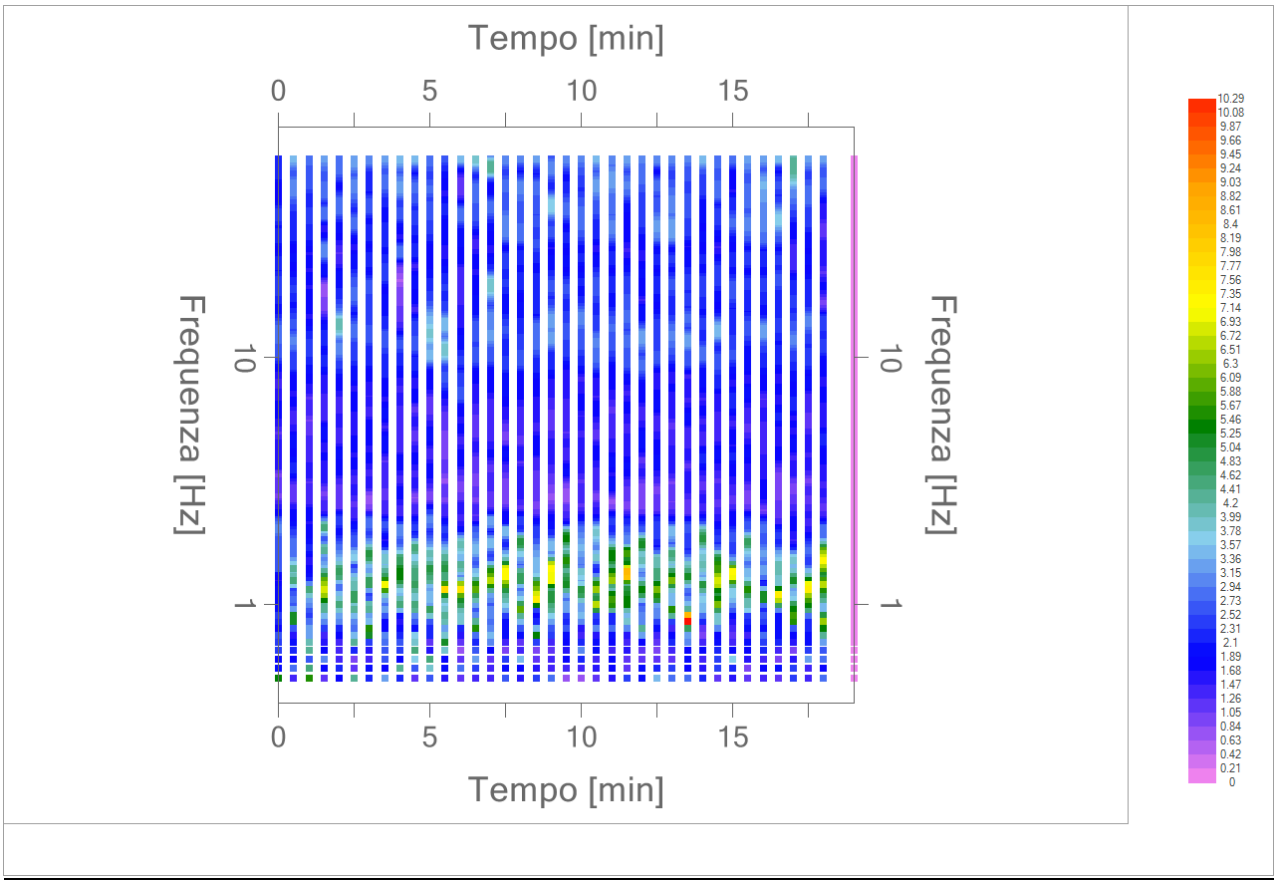
Frequenza massima: 64.00 Hz
Frequenza minima: 0.50 Hz
Passo frequenze: 0.05 Hz
Tipo lisciamento: Triangolare proporzionale
Percentuale di lisciamento: 10.00 %
Tipo di somma direzionale: Media geometrica

Risultati:

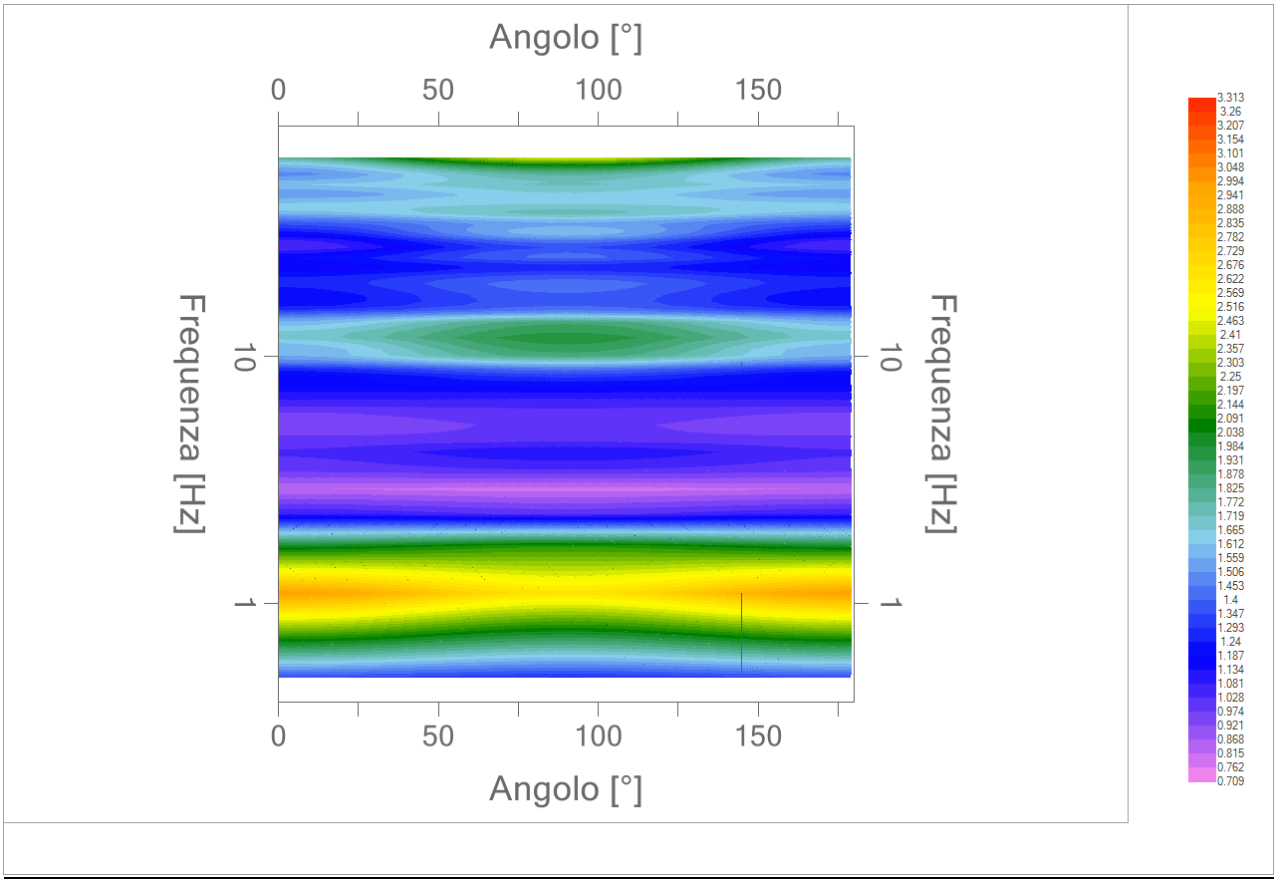
Frequenza del picco del rapporto H/V: 1.20 Hz ±0.31 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.75 ± 0.08 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	Ok
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	*Studio di Microzonazione Sismica del territorio comunale di Forlì*

PROVA HVSR

Comune Forlì	**Località** San Lorenzo	
Cantiere	**Data** 03/09/2024	**Ora** 14.15
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_12	**File** FO_12.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				10
	camion	✓					
	passanti				✓		10
	altro				operai		
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

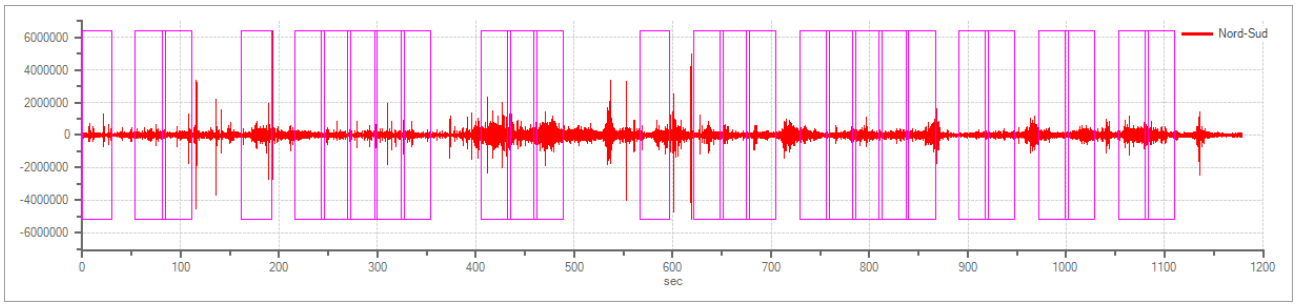
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245120
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

Dati riepilogativi:

Numero totale finestre selezionate:	27
Numero finestre incluse nel calcolo:	24
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

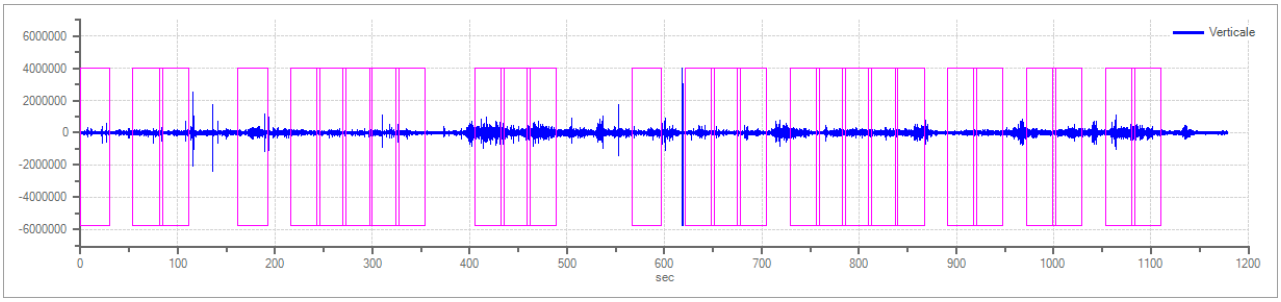
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

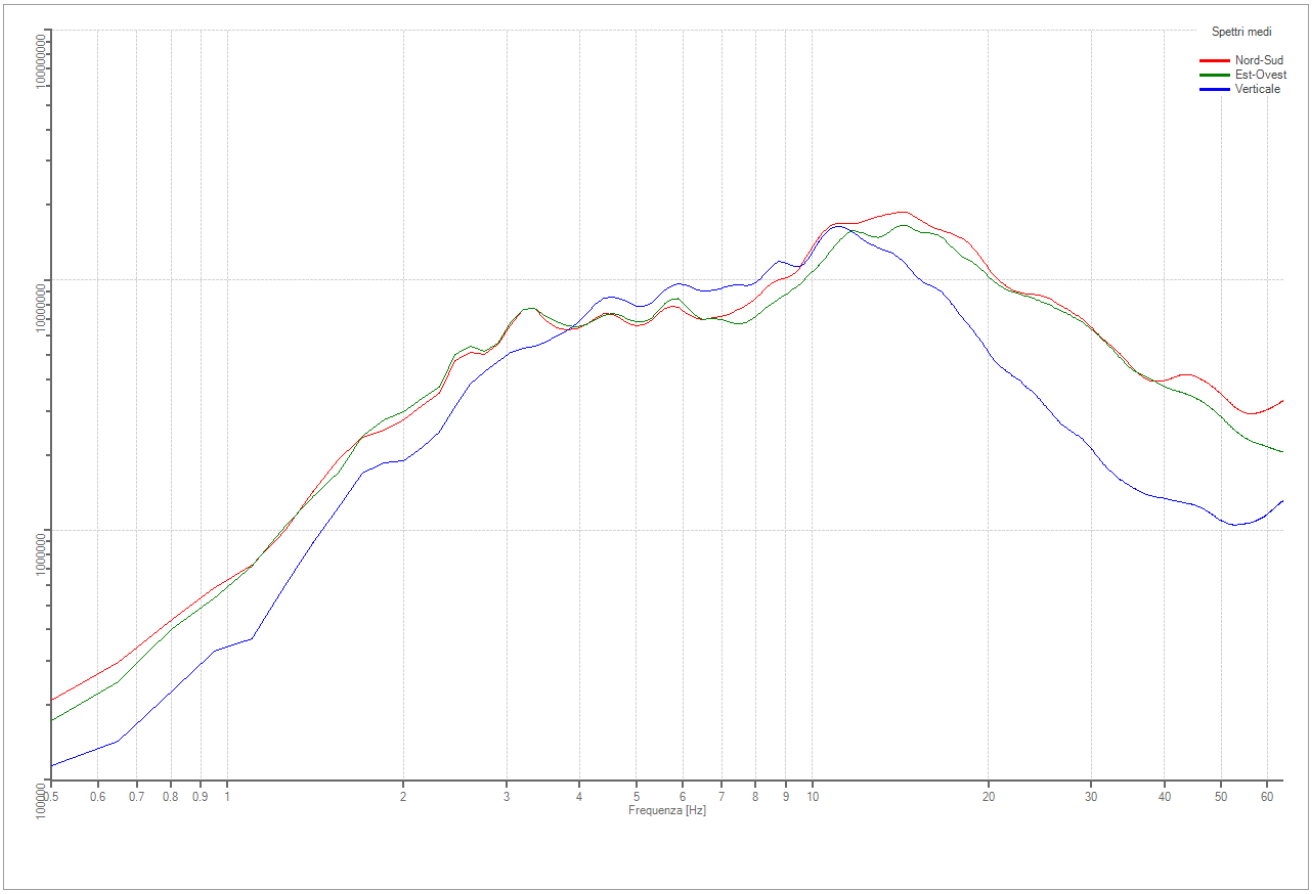


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

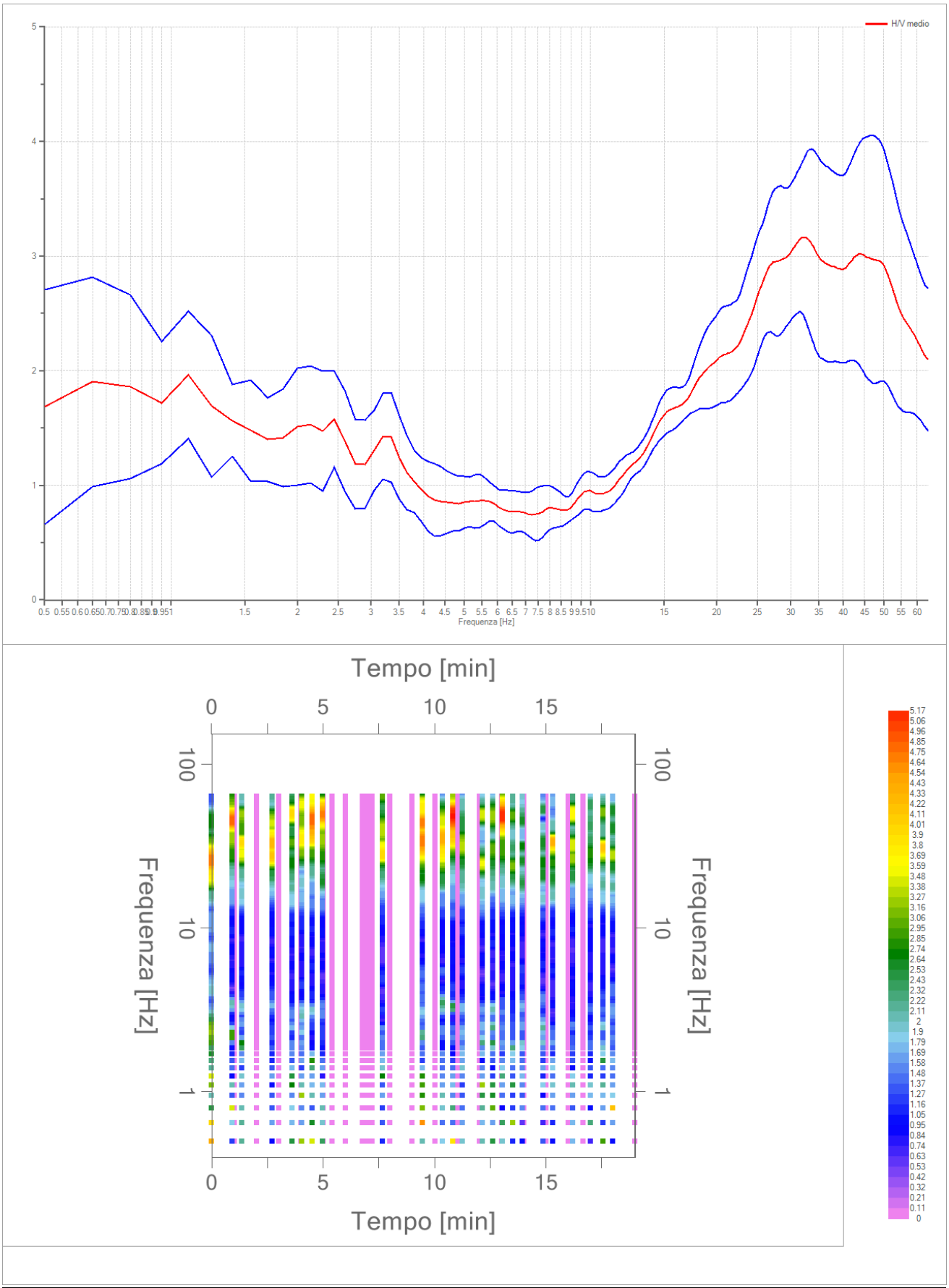
Dati riepilogativi:

Frequenza massima: 64.00 Hz
Frequenza minima: 0.50 Hz
Passo frequenze: 0.15 Hz
Tipo lisciamento:: Triangolare proporzionale
Percentuale di lisciamento: 10.00 %
Tipo di somma direzionale: Media quadratica

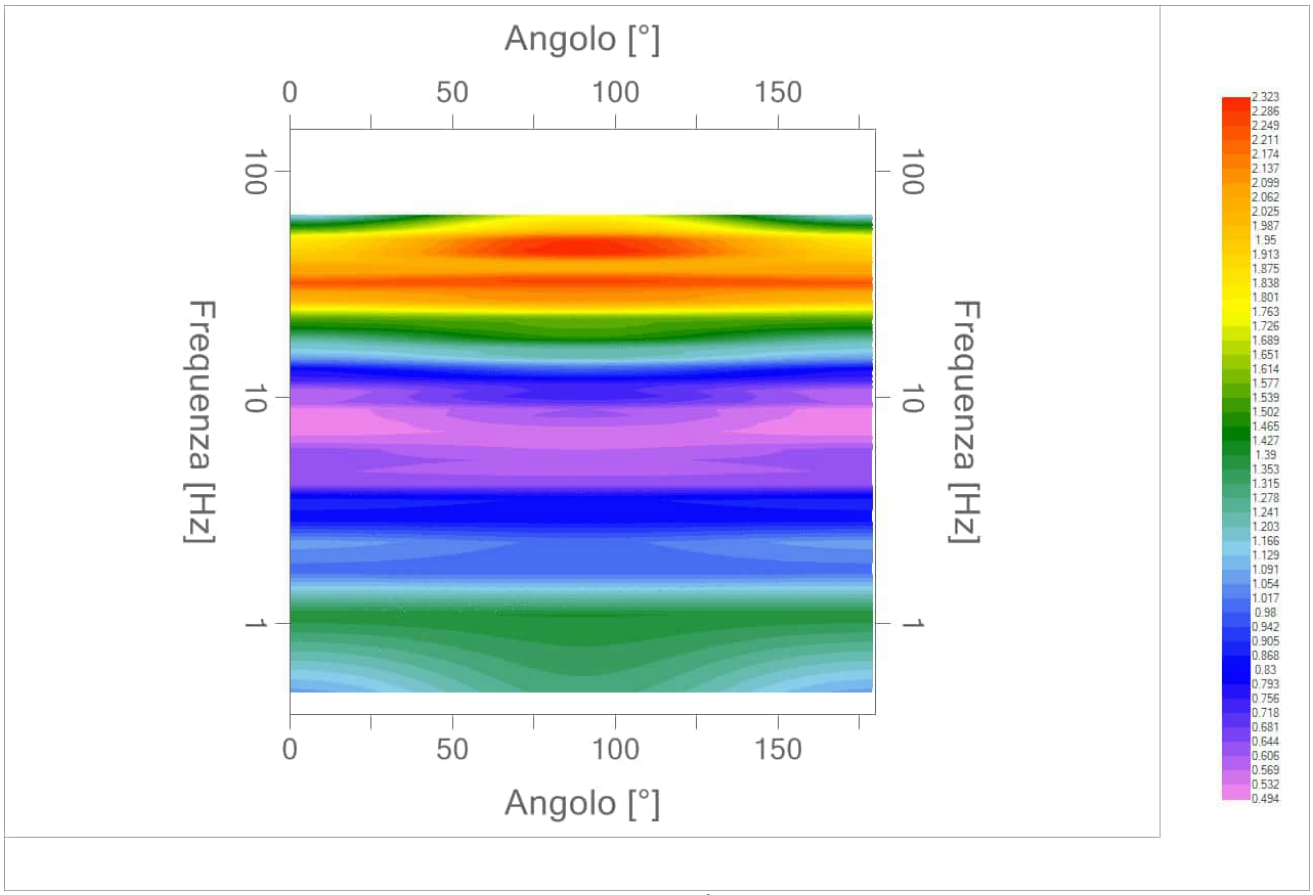
Risultati:

Frequenza del picco del rapporto H/V: 32.30 Hz ±0.22 Hz

Grafico rapporto spettrale H/V naturale



Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 32.30 ± 0.22 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	NO
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale

f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	*Studio di Microzonazione Sismica del territorio comunale di Forlì*

PROVA HVSR

Comune Forlì	**Località** Via Gandhi	
Cantiere	**Data** 06/09/2024	**Ora** 15.16
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_13	**File** FO_13.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☐ assenti	☒ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				40
	camion			✓			40
	passanti	✓					
	altro	✓					
Disturbo cont.	☐ assente	☒ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

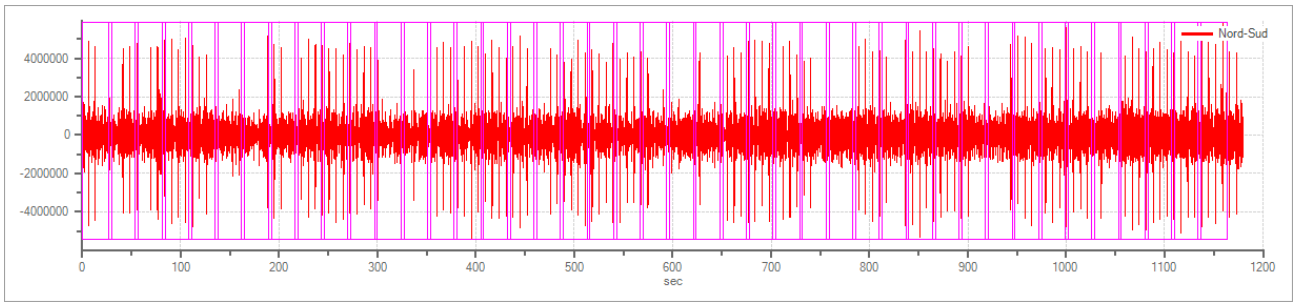
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

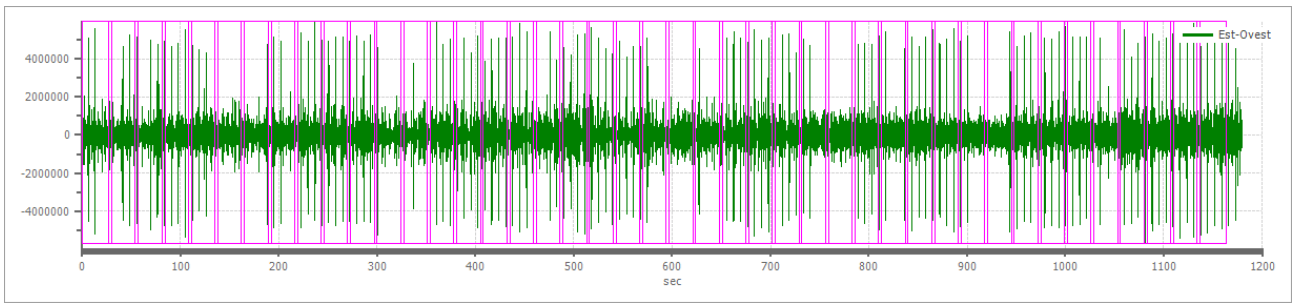
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	43
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

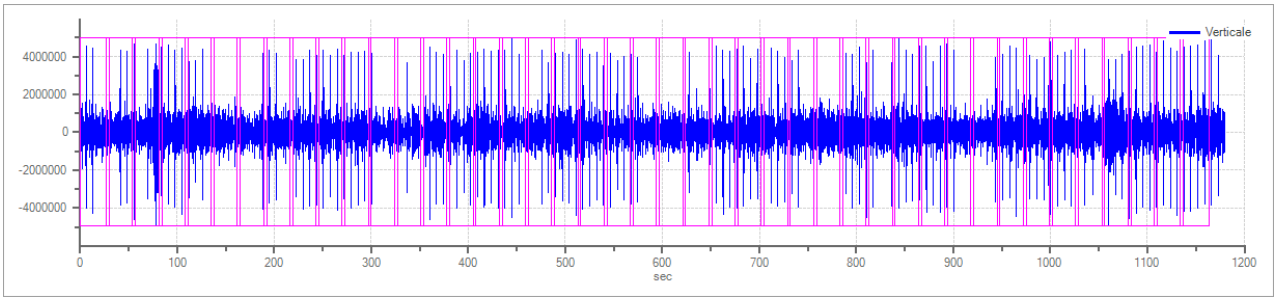
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

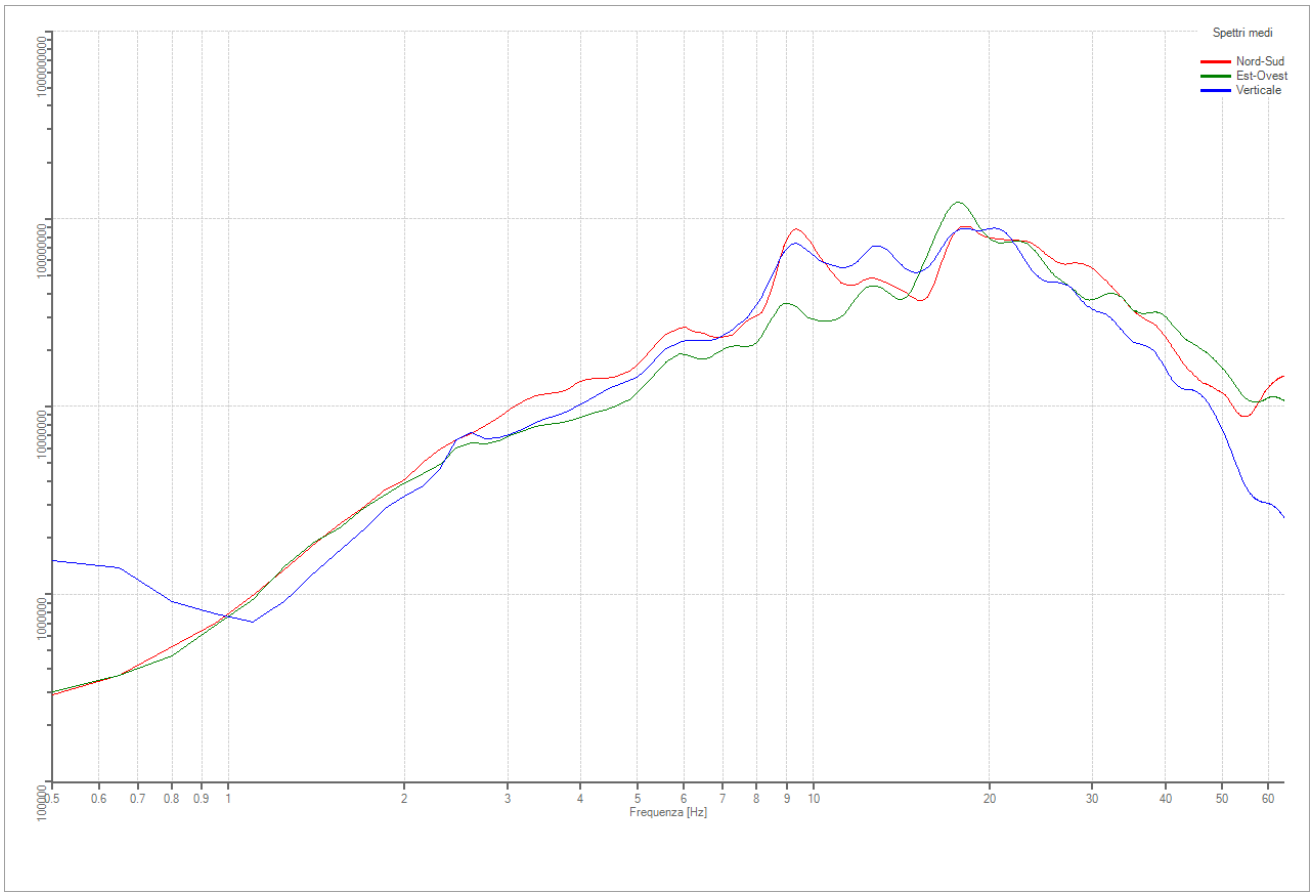


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

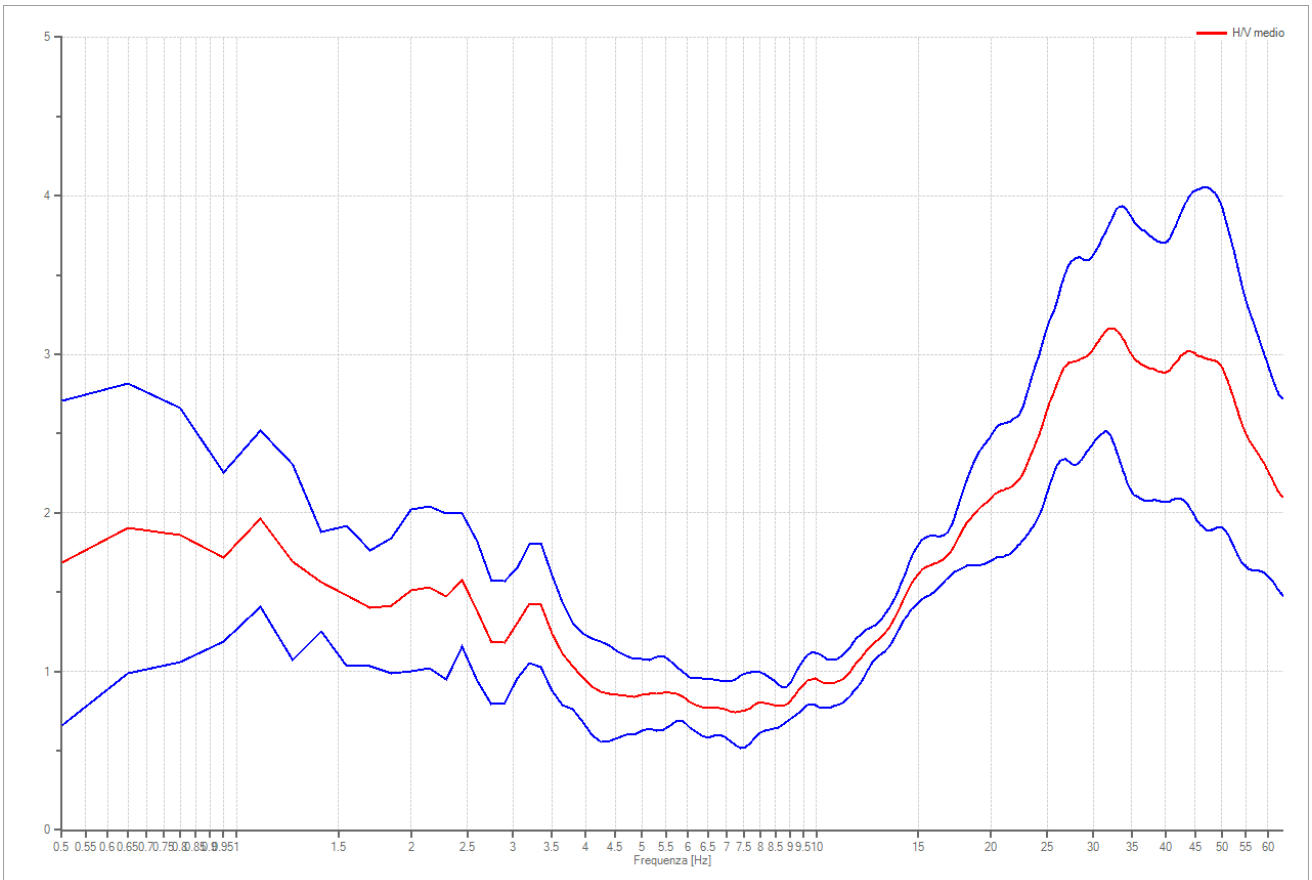
Dati riepilogativi:

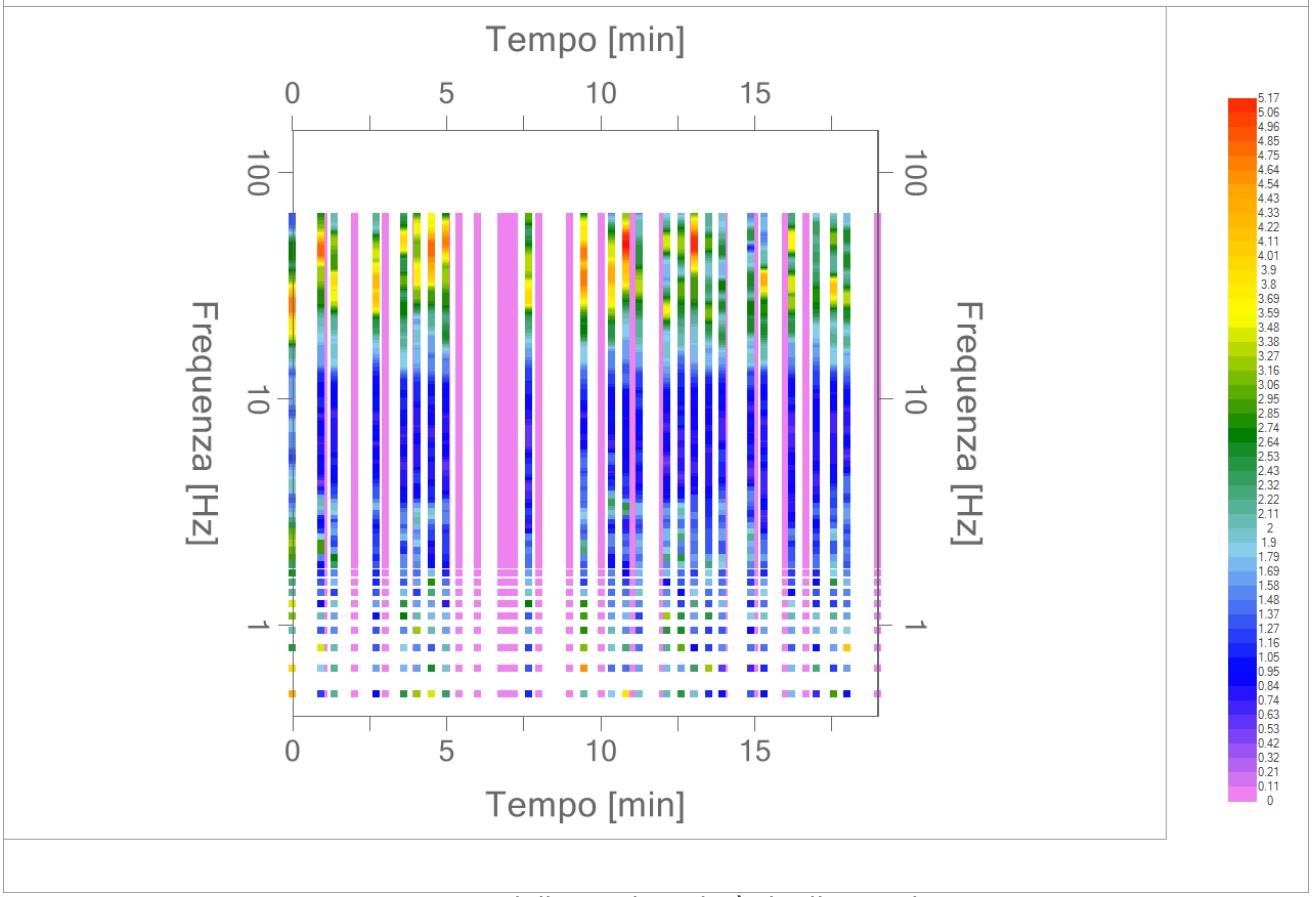
Frequenza massima: 64.00 Hz
Frequenza minima: 0.50 Hz
Passo frequenze: 0.15 Hz
Tipo lisciamento:: Triangolare proporzionale
Percentuale di lisciamento: 10.00 %
Tipo di somma direzionale: Media quadratica

Risultati:

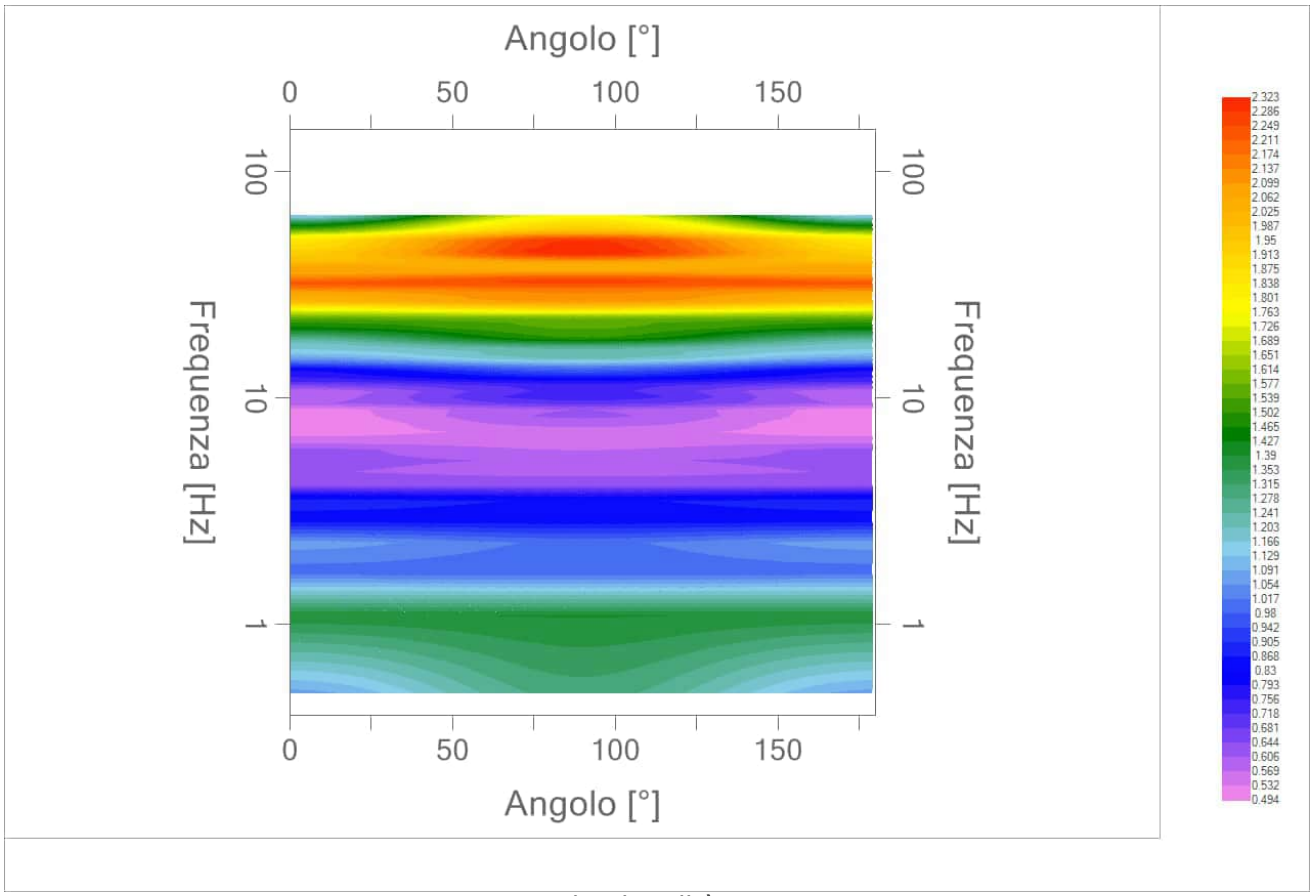
Frequenza del picco del rapporto H/V: 63.80 Hz ±0.06 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 63.80±0.06 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale

f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** via Carnaccini	
Cantiere	**Data** 26/09/2024	**Ora** 15.55
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_14	**File** FO_14.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				20
	camion	✓					
	passanti		✓				20
	altro	✓					
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

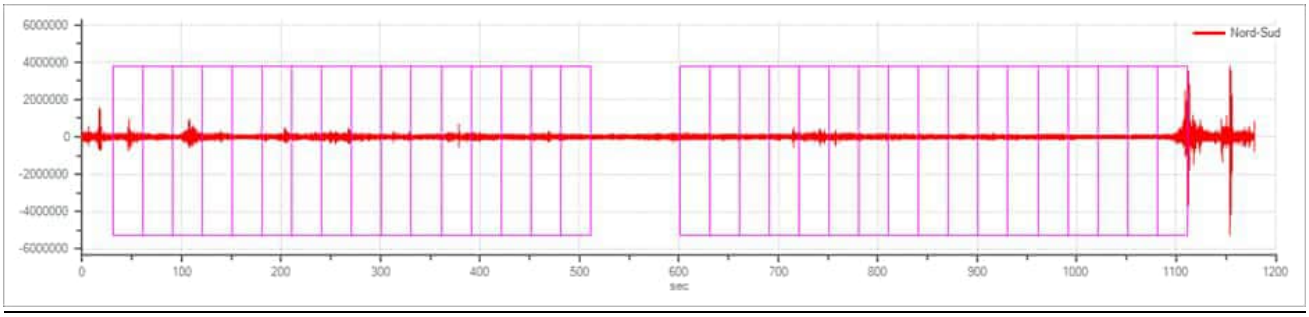
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245248
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

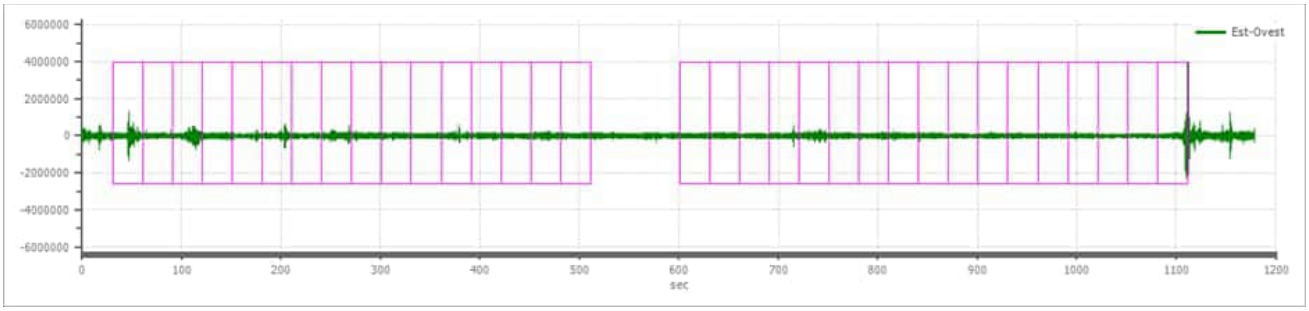
Dati riepilogativi:

Numero totale finestre selezionate:	33
Numero finestre incluse nel calcolo:	33
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

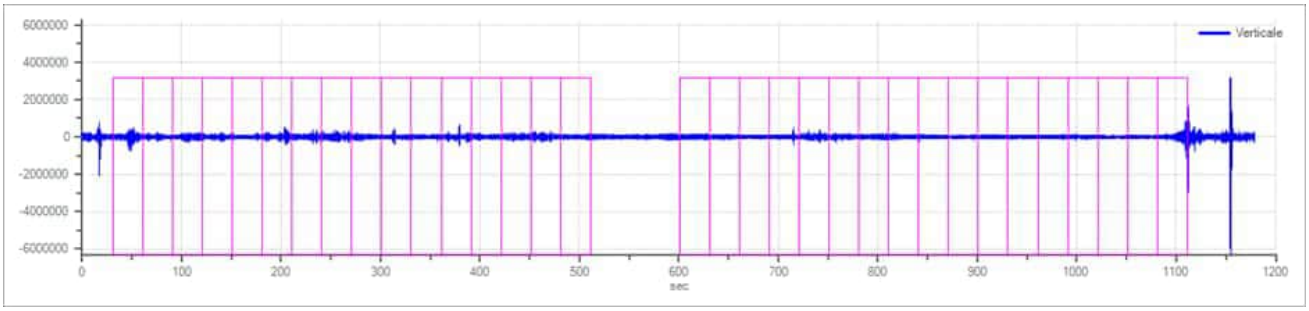
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

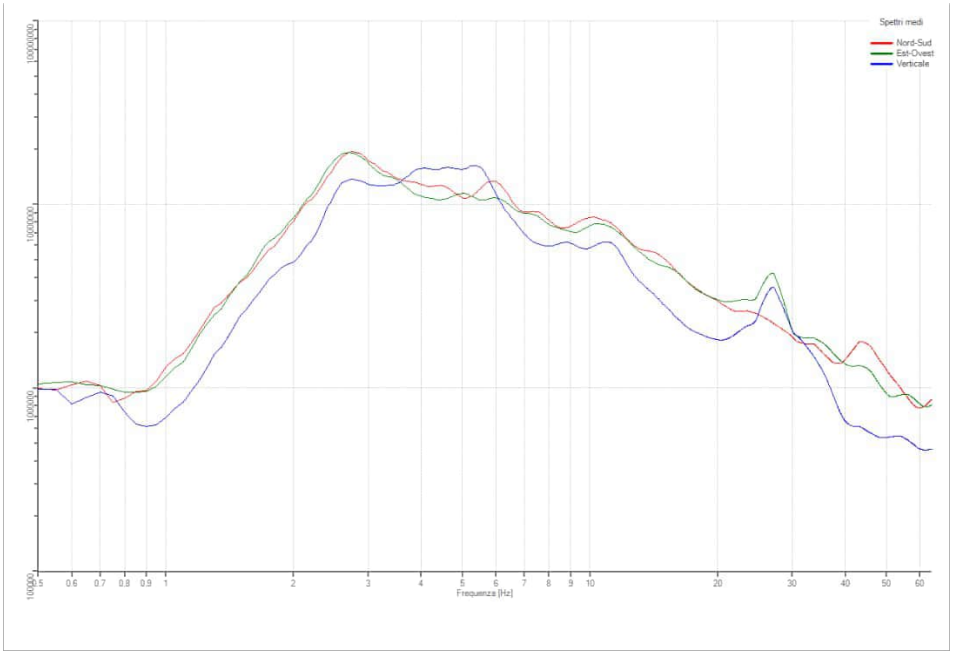


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

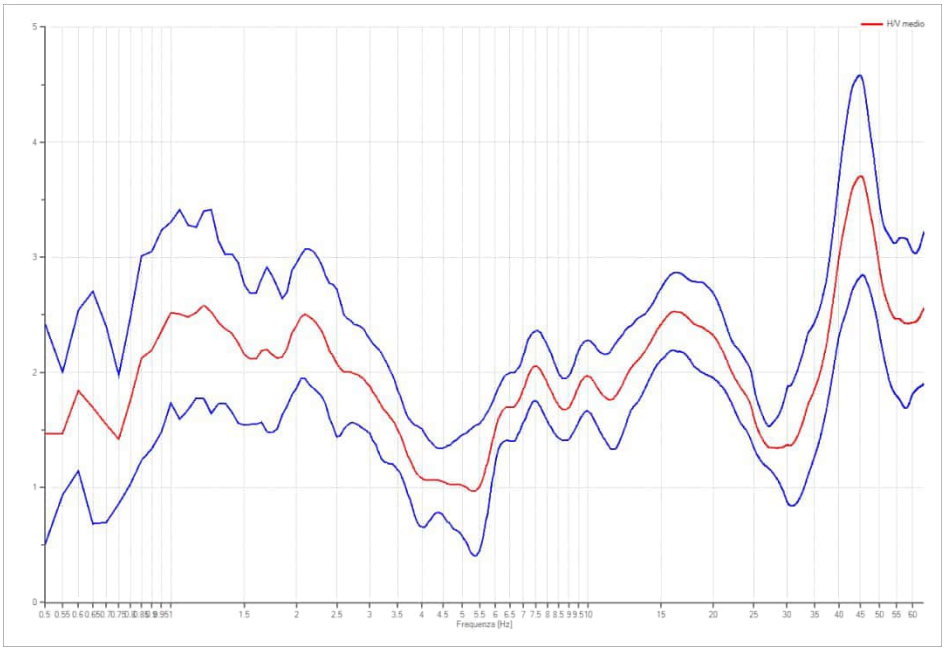
Dati riepilogativi:

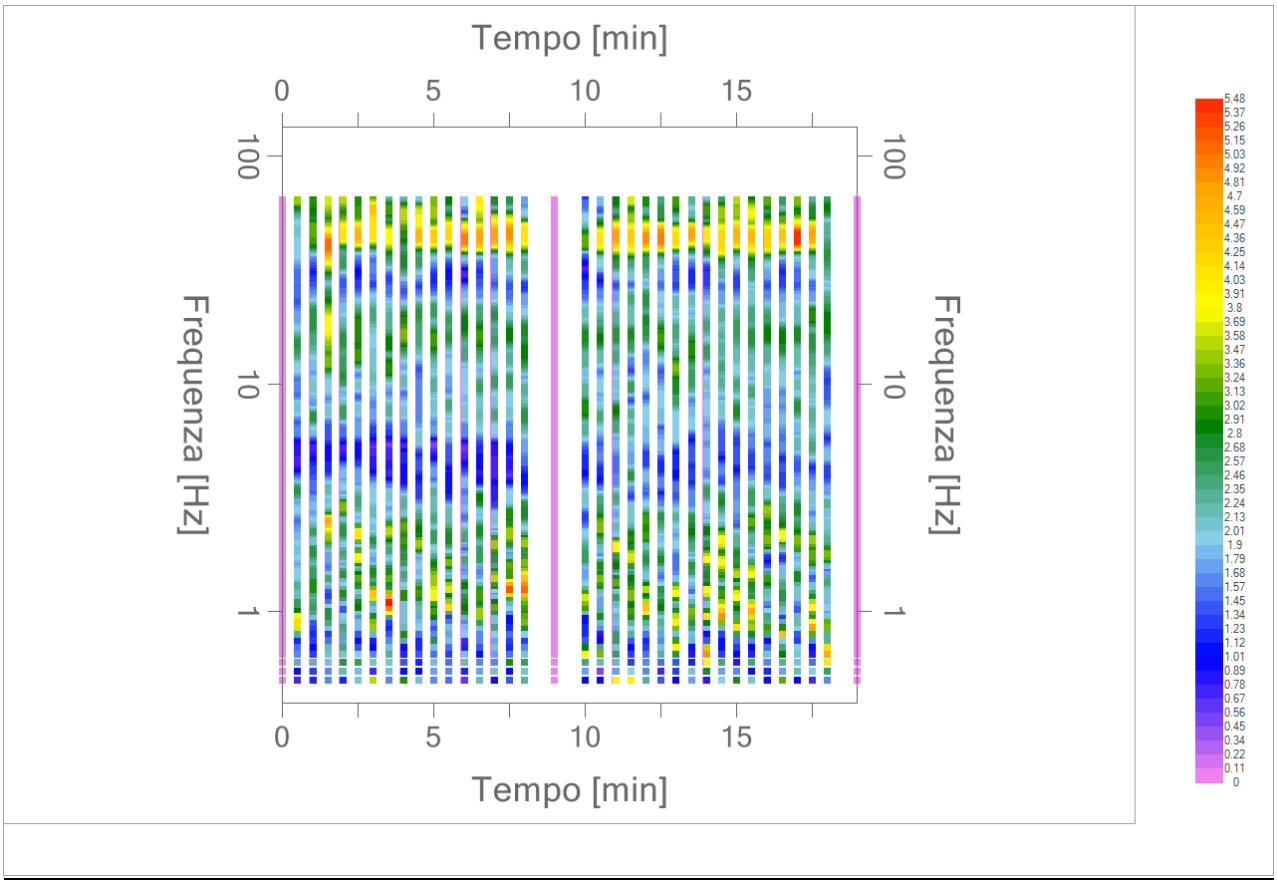
Frequenza massima: 64.00 Hz
Frequenza minima: 0.50 Hz
Passo frequenze: 0.05 Hz
Tipo lisciamento:: Triangolare proporzionale
Percentuale di lisciamento: 10.00 %
Tipo di somma direzionale: Media geometrica

Risultati:

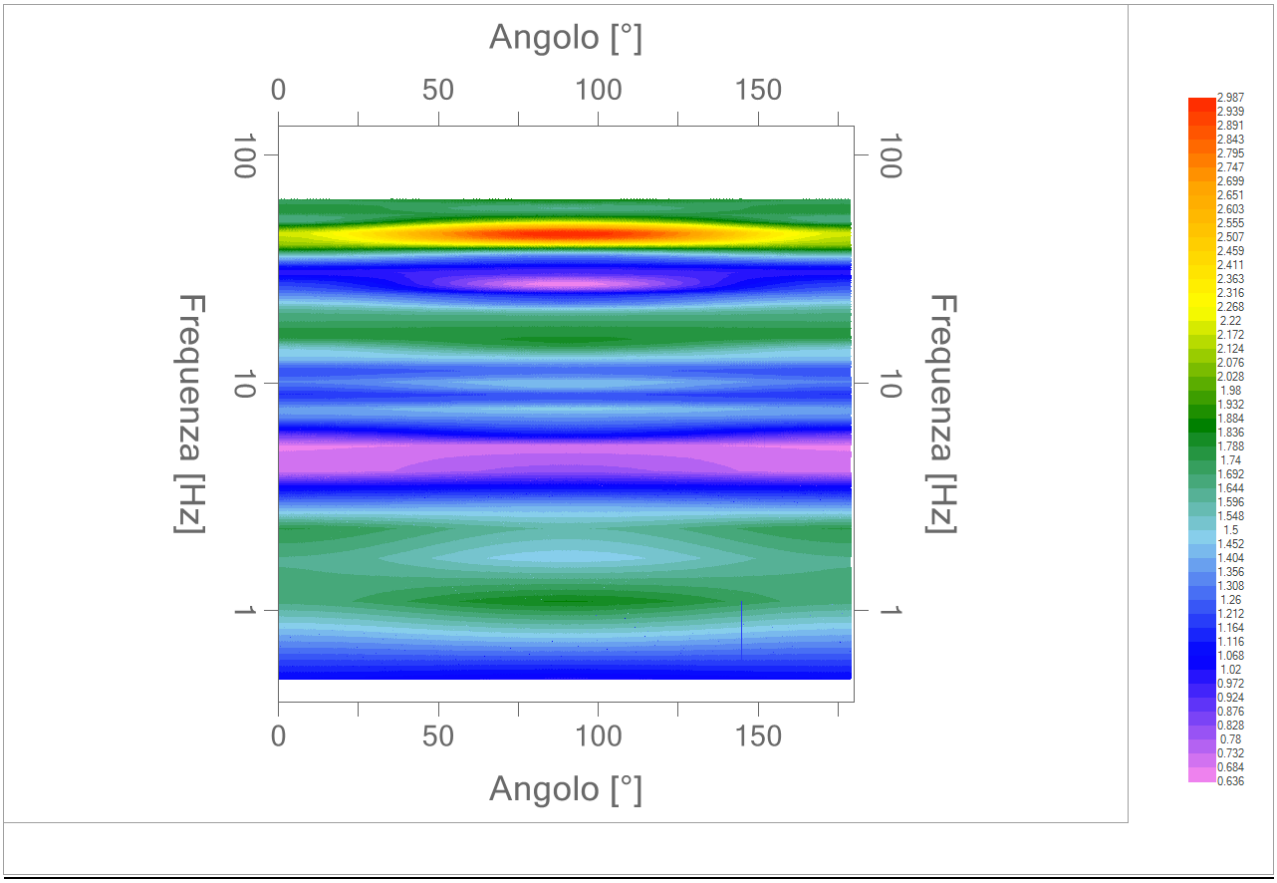
Frequenza del picco del rapporto H/V: 45.20 Hz ± 0.23 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.75 ± 0.08 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Villa Grappa	
Cantiere	**Data** 28/08/2024	**Ora** 14.16
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_15	**File** FO_15BI2.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☒ suolo asciutto	☐ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto	✓					20
	camion	✓					20
	passanti		✓				20
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

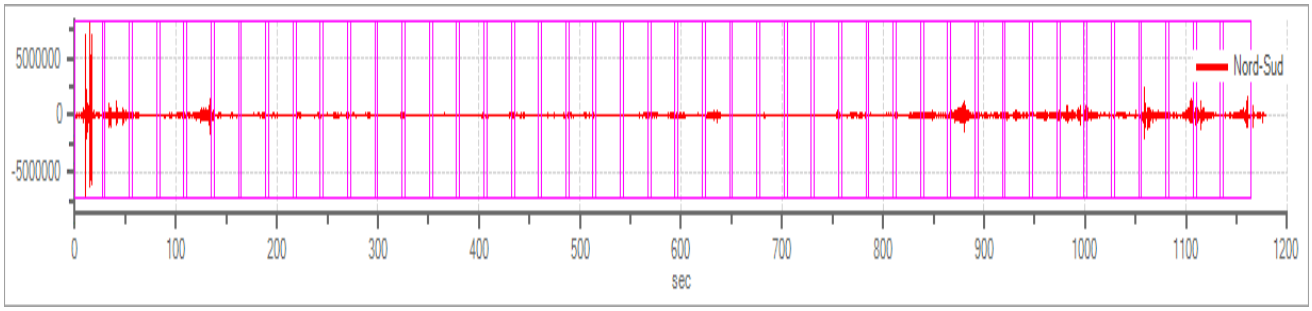
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

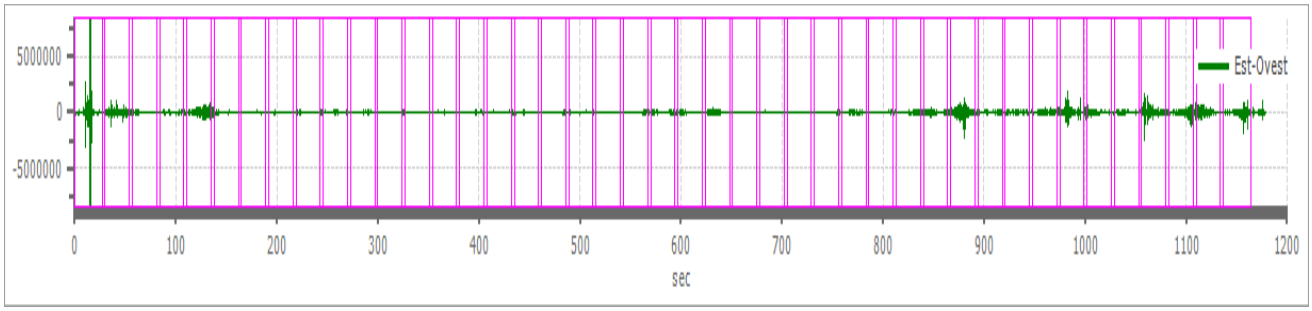
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	37
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

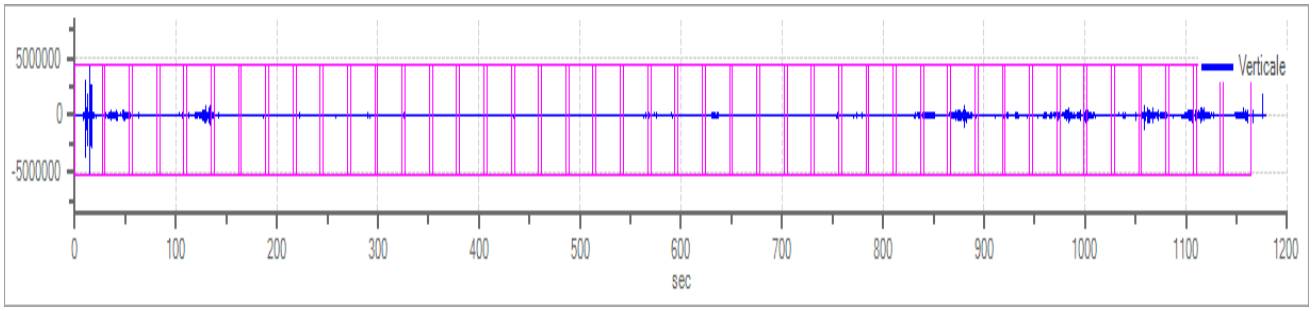
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

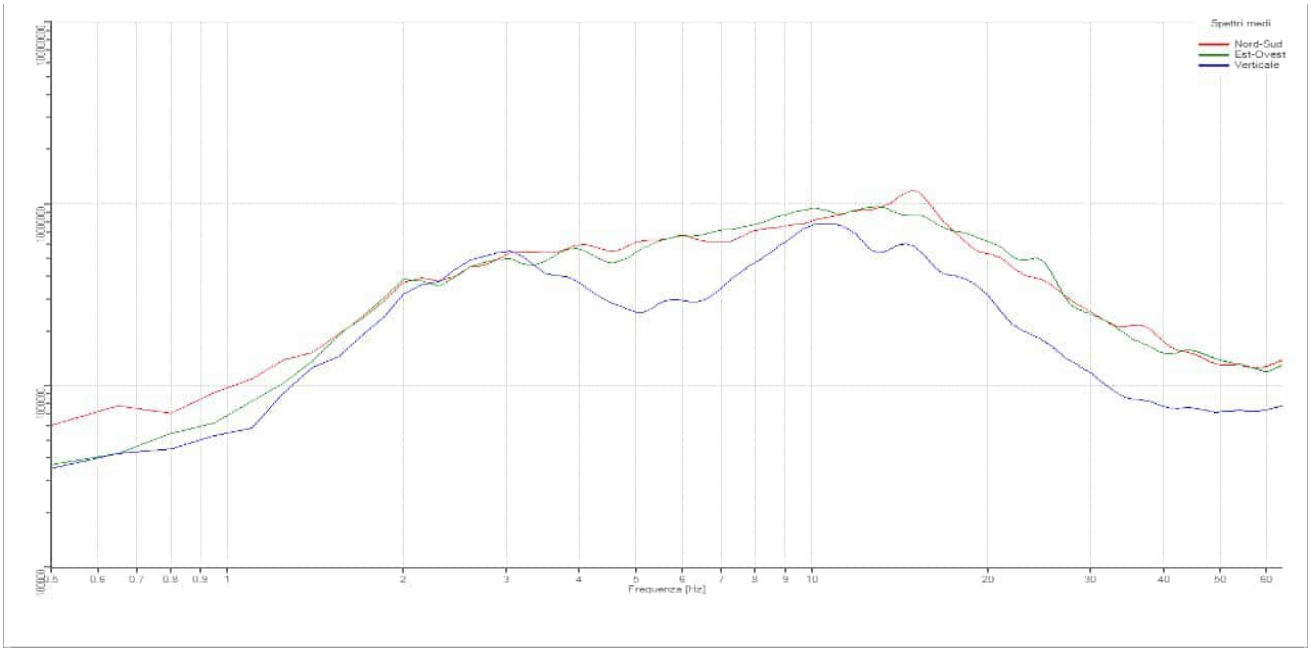


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

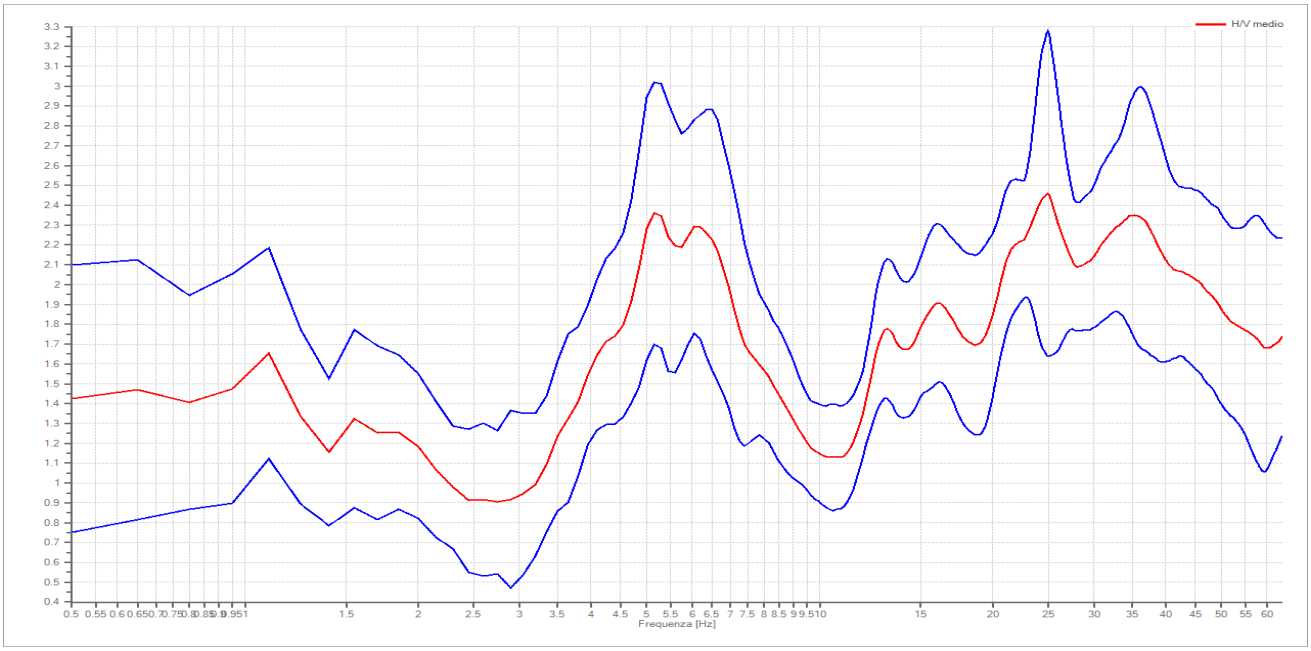
Dati riepilogativi:

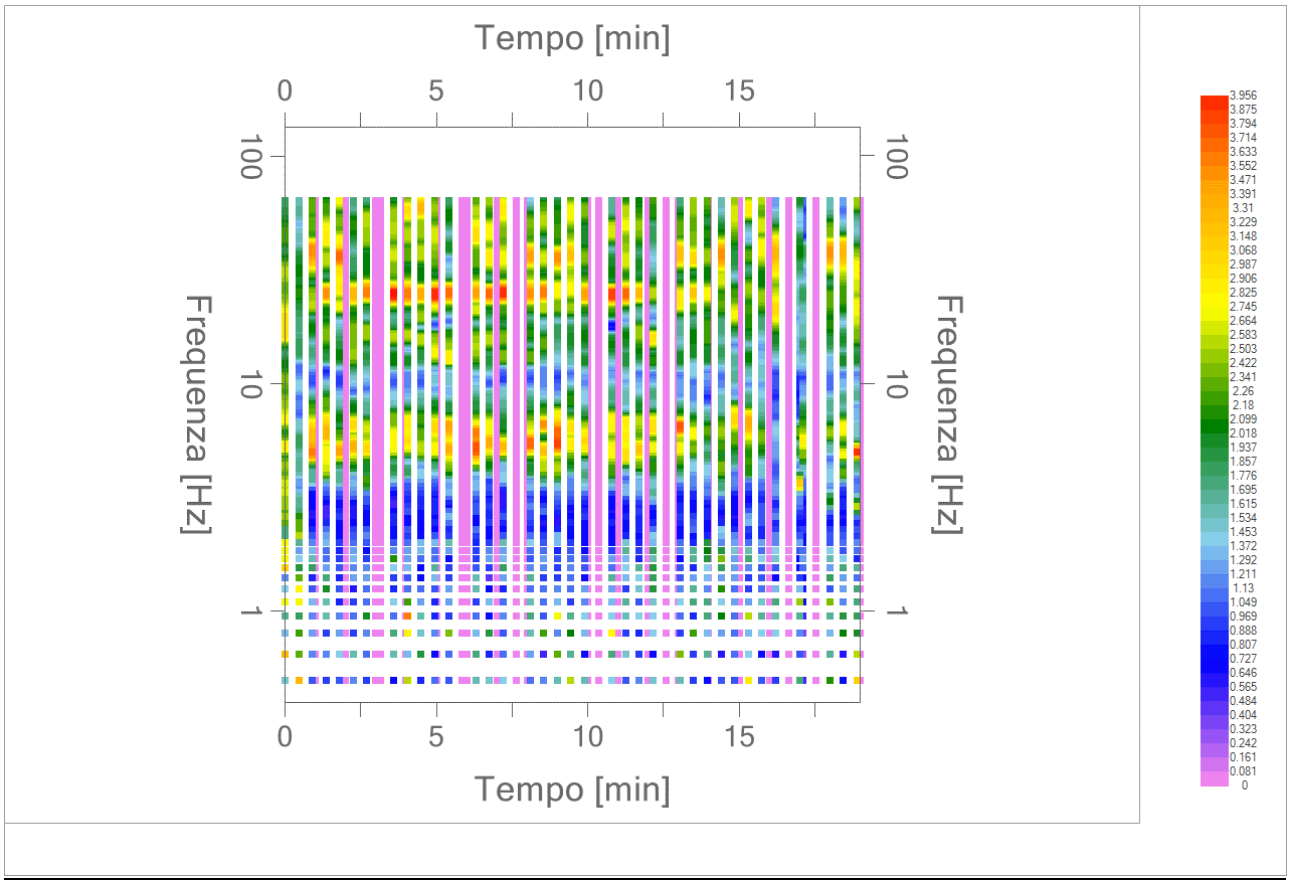
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

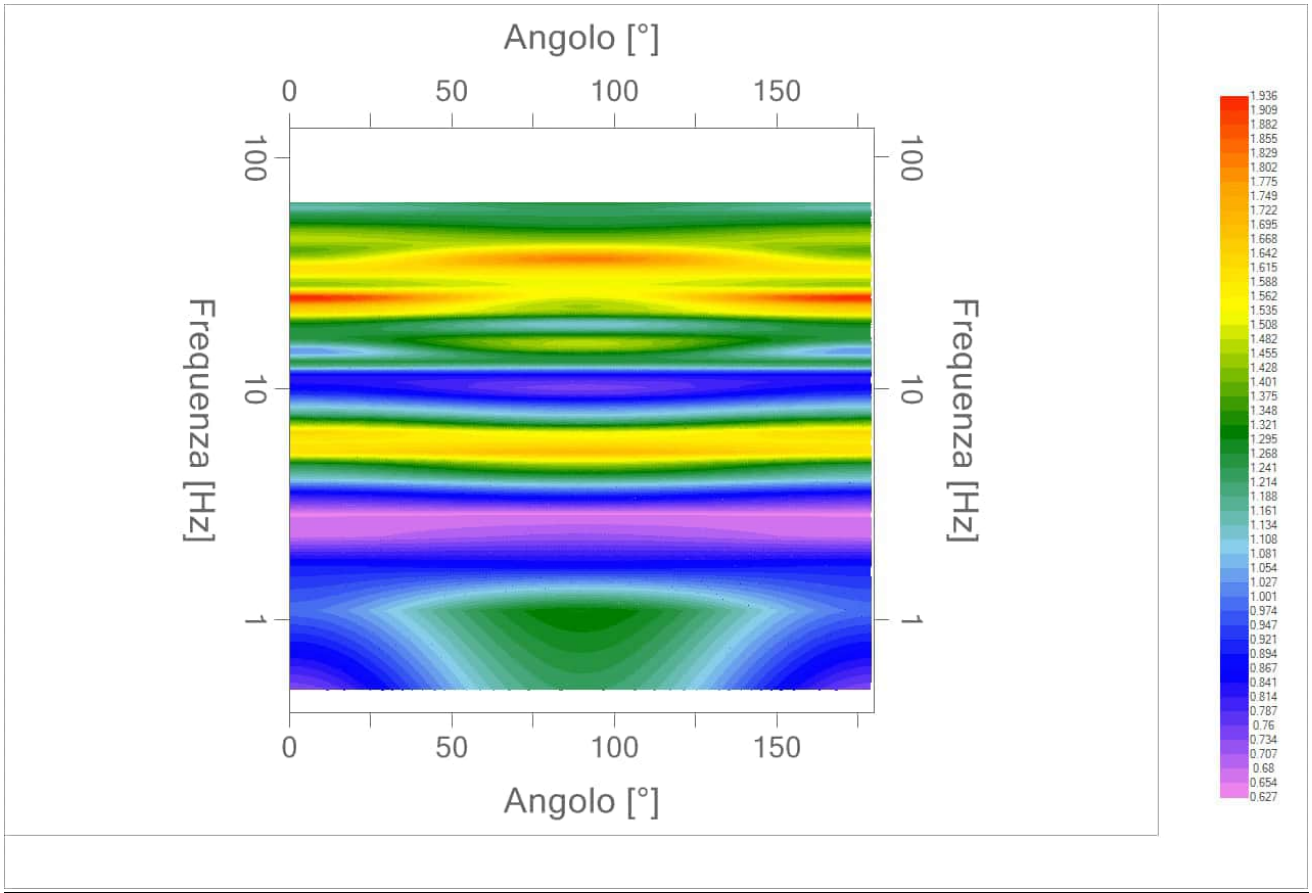
Frequenza del picco del rapporto H/V: 24.95 Hz ± 0.33 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 24.95 ± 0.33 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro* [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	NO
$\sigma_f < \varepsilon(f_0)$	NO
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

*I risultati relativi alle verifiche eseguite ai sensi delle linee guida SESAME, evidenziano che il segnale presenta un picco H/V "non chiaro". Tale segnale tuttavia è comunque interpretabile, poiché, sempre ai sensi delle linee guida SESAME, corrisponde a un picco di origine stratigrafica.

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Quattro	
Cantiere	**Data** 28/08/2024	**Ora** 15.25
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_16	**File** FO_16.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				15
	camion	✓					
	passanti		✓				15
	altro						
Disturbo cont.	☐ assente	☒ presente: penetrometro in funzione					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

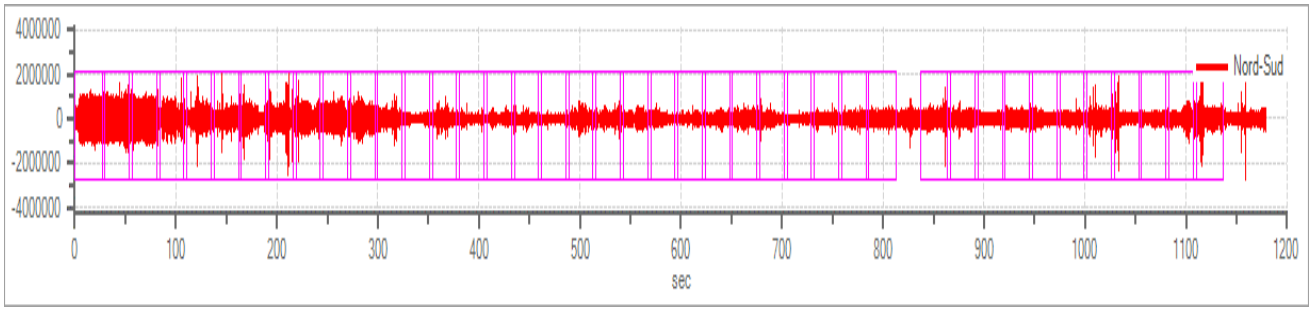
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245248
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

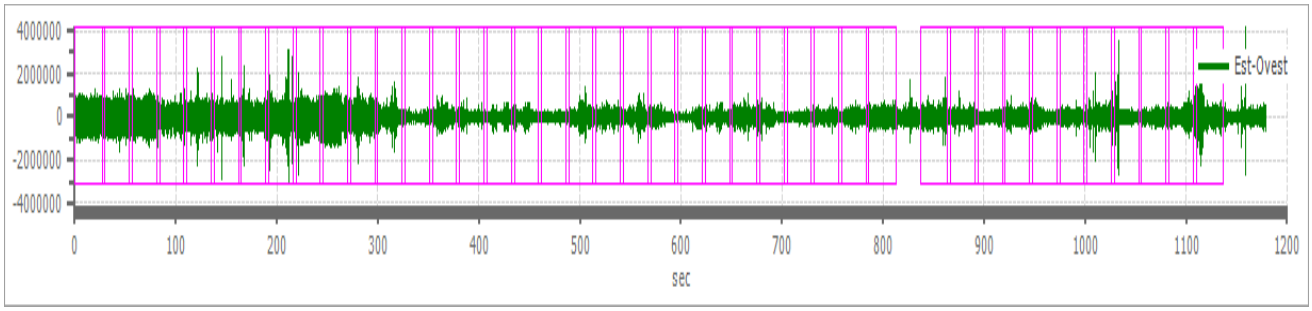
Dati riepilogativi:

Numero totale finestre selezionate:	41
Numero finestre incluse nel calcolo:	33
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

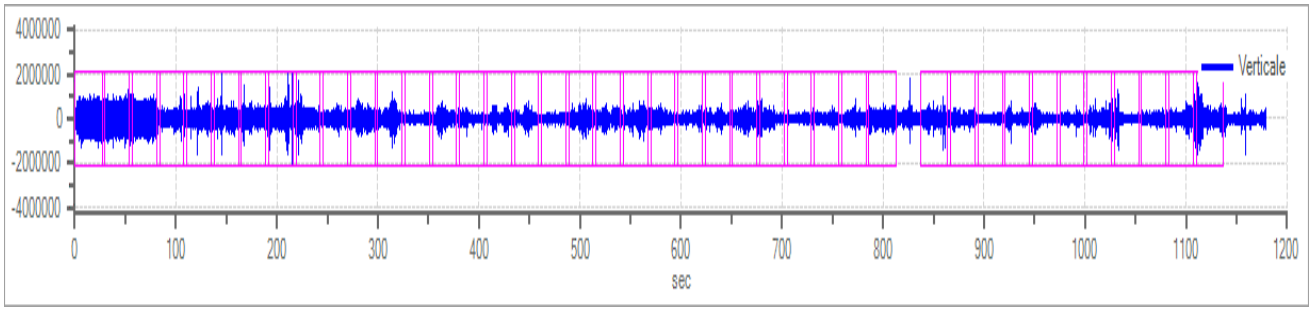
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

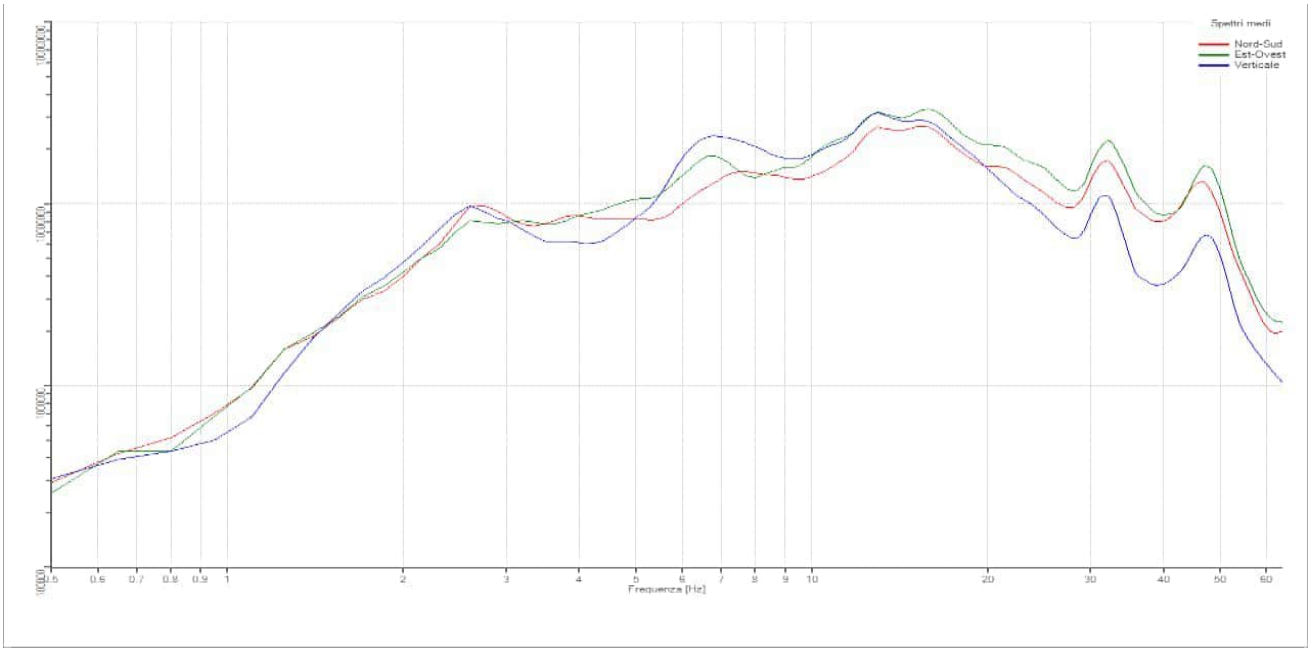


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

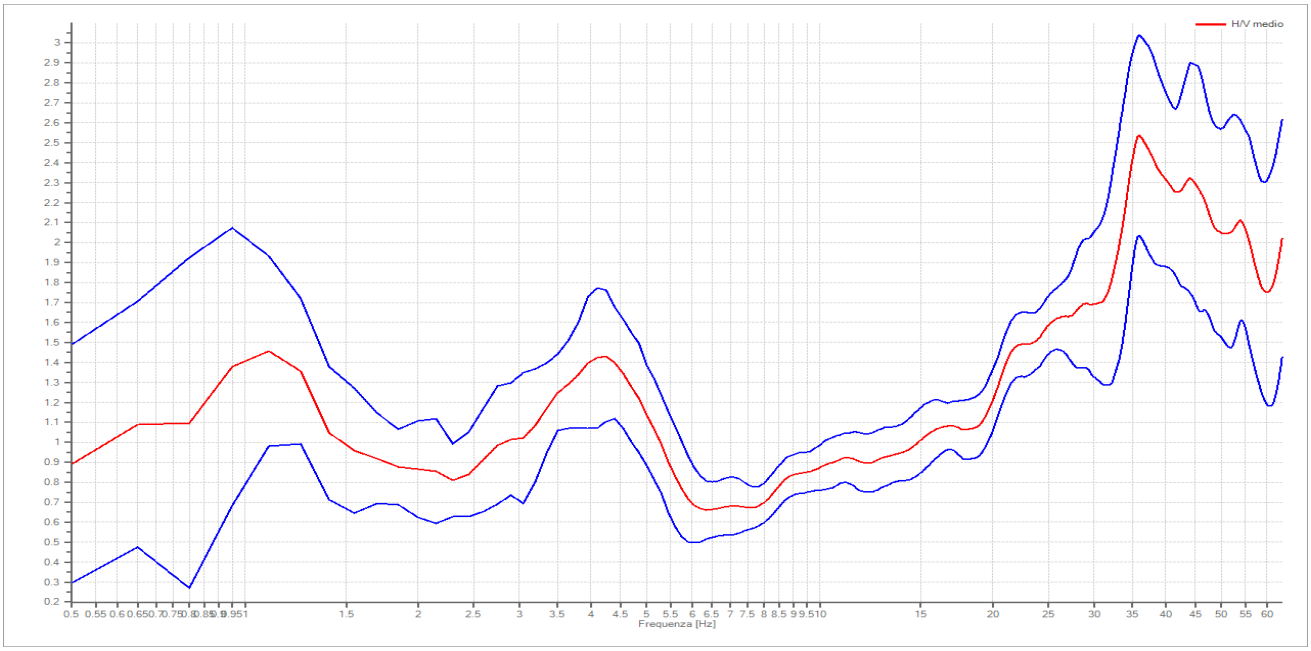
Dati riepilogativi:

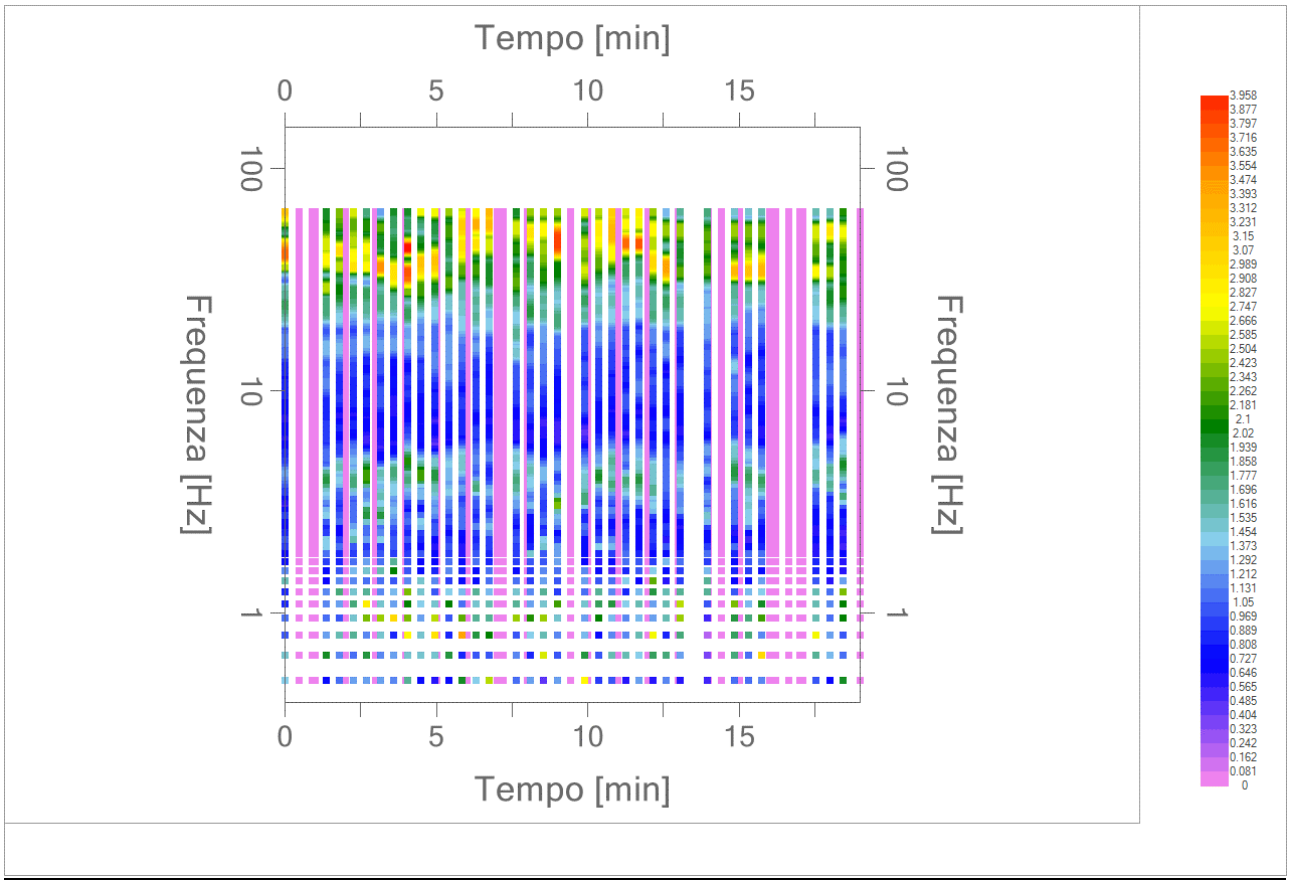
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

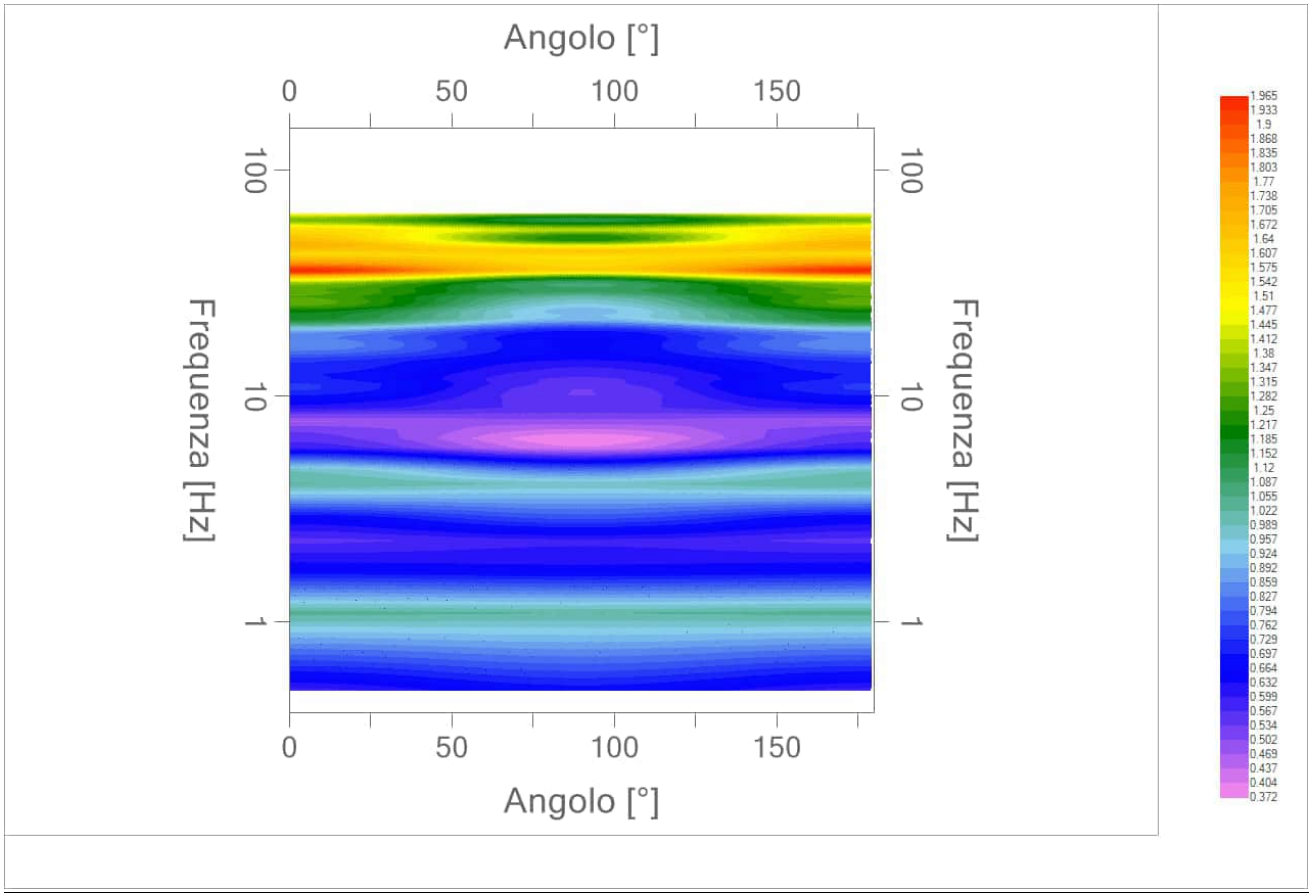
Frequenza del picco del rapporto H/V: 35.90 Hz ± 0.20 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 24.95 ± 0.33 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** Via Bruschi	
Cantiere	**Data** 26/09/2024	**Ora** 11.25
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_17	**File** FO_17.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto			✓			30
	camion			✓			
	passanti			✓			30
	altro	✓					
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

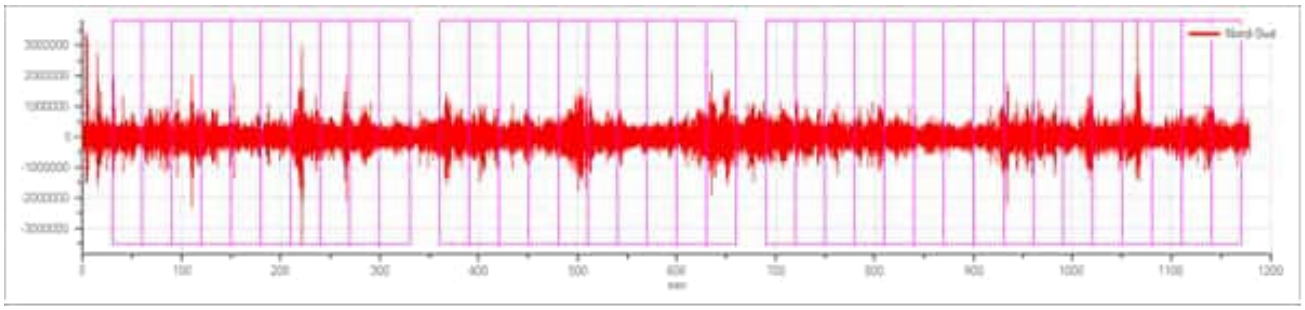
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245248
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

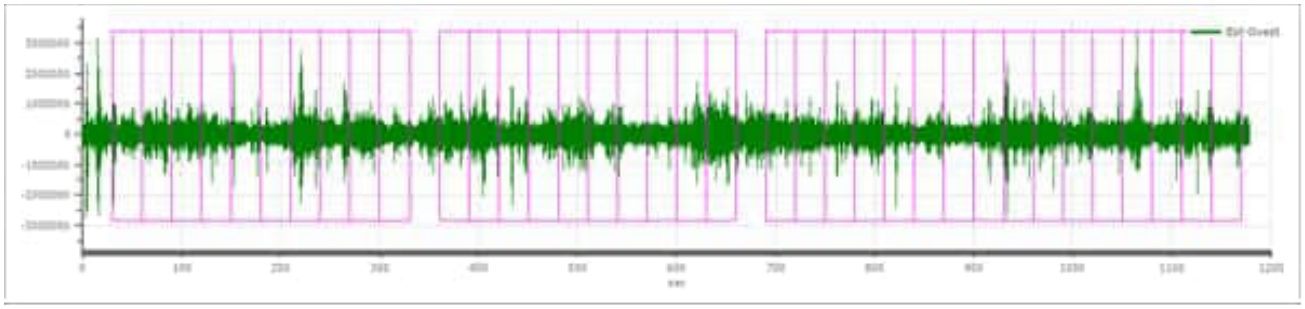
Dati riepilogativi:

Numero totale finestre selezionate:	36
Numero finestre incluse nel calcolo:	36
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

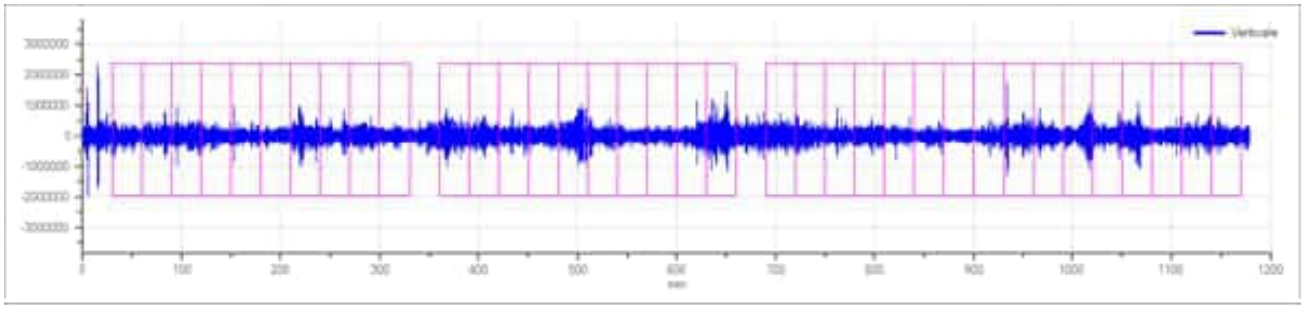
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

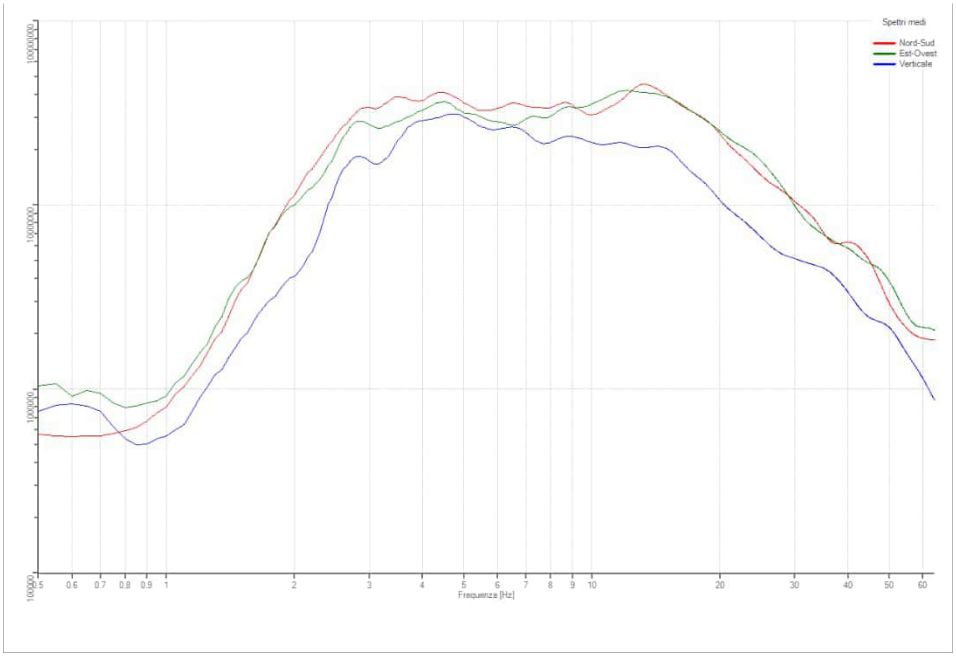


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

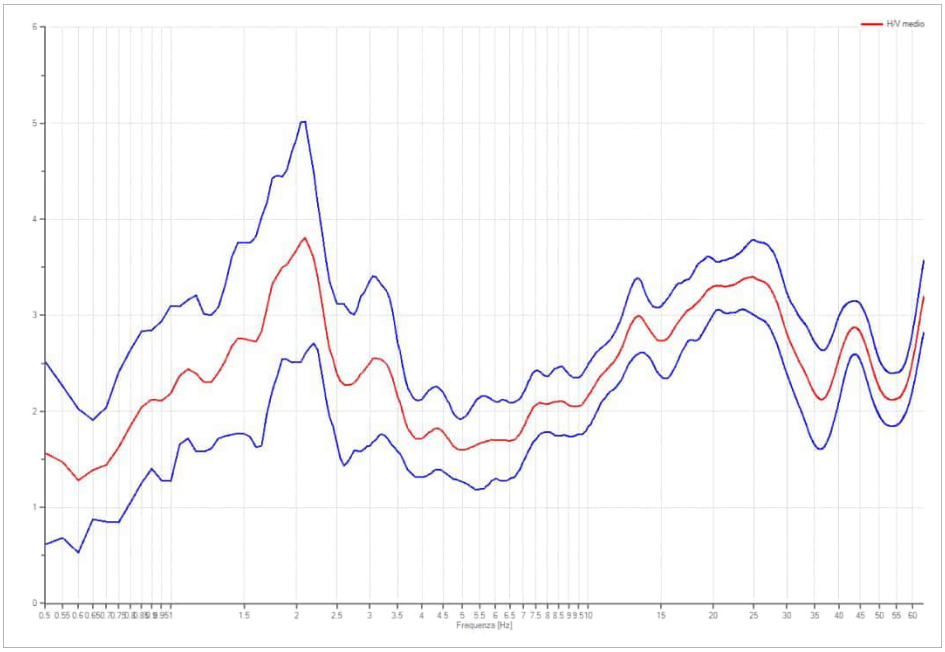
Dati riepilogativi:

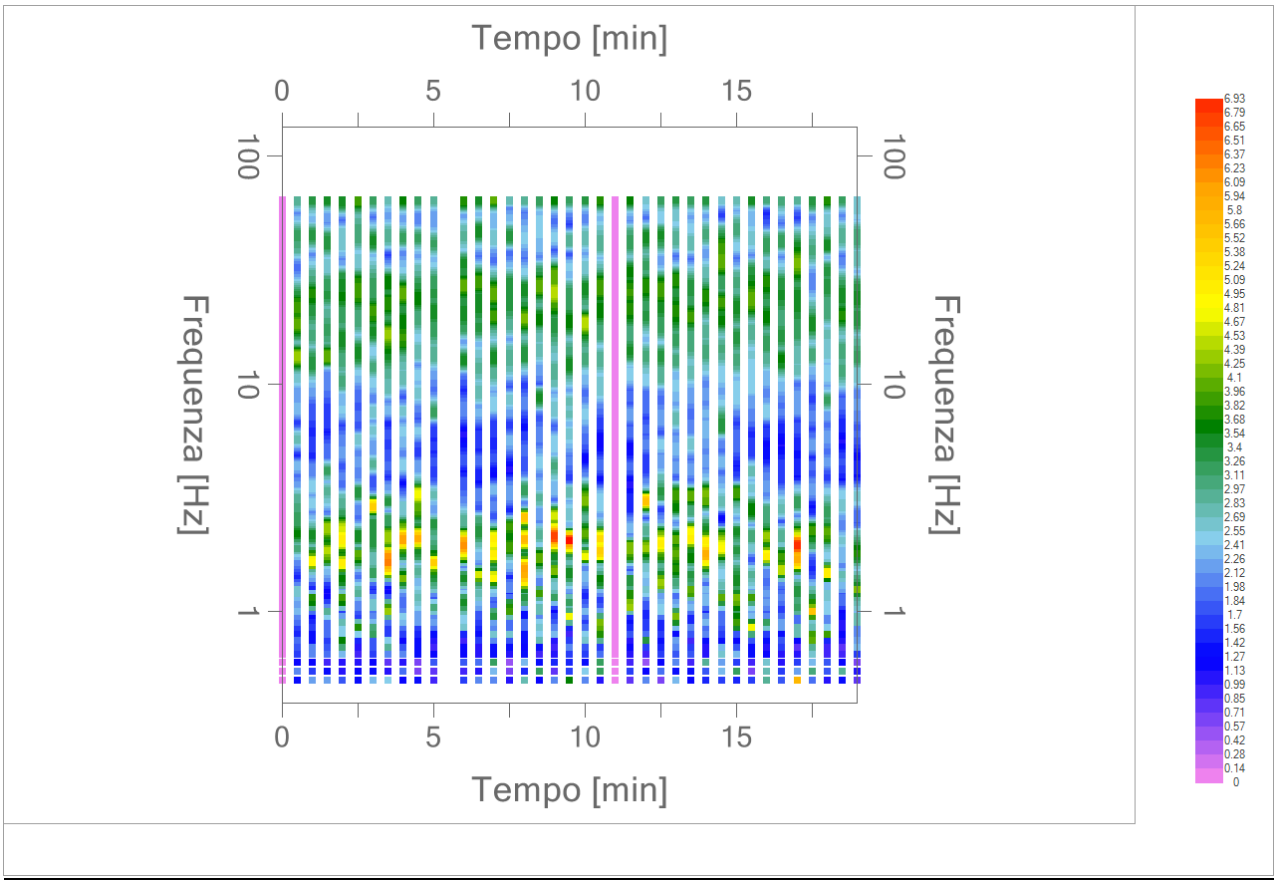
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.05 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media geometrica

Risultati:

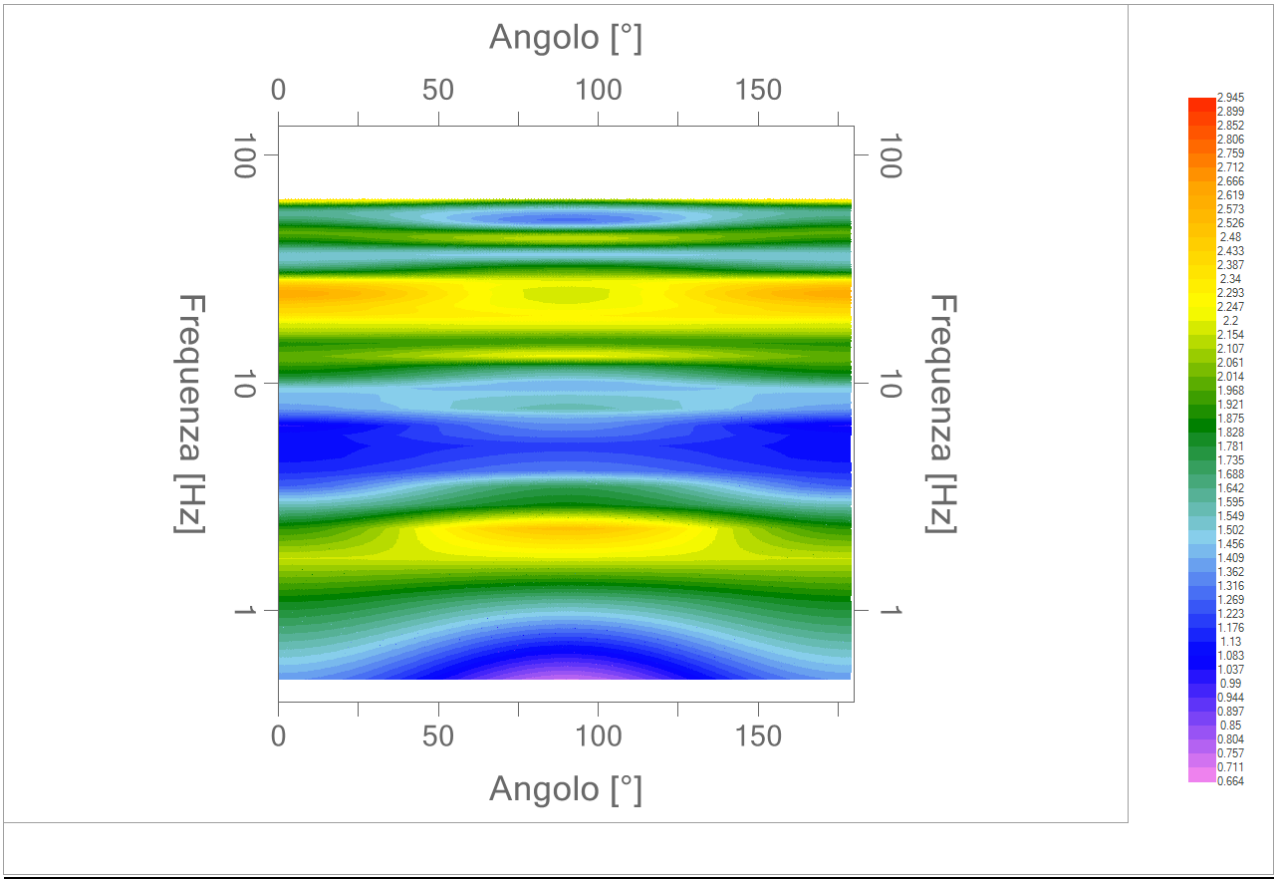
Frequenza del picco del rapporto H/V: 2.10 Hz ±0.32 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.75 ± 0.08 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	NO
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** Forlì	
Cantiere	**Data** 28/08/2024	**Ora** 17.38
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_18	**File** FO_18.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☐ sparse	☐ fitte	☒ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☐ fitte	☒ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				30
	camion		✓				30
	passanti			✓			30
	altro						
Disturbo cont.	☐ assente	☒ presente: penetrometro in funzione					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

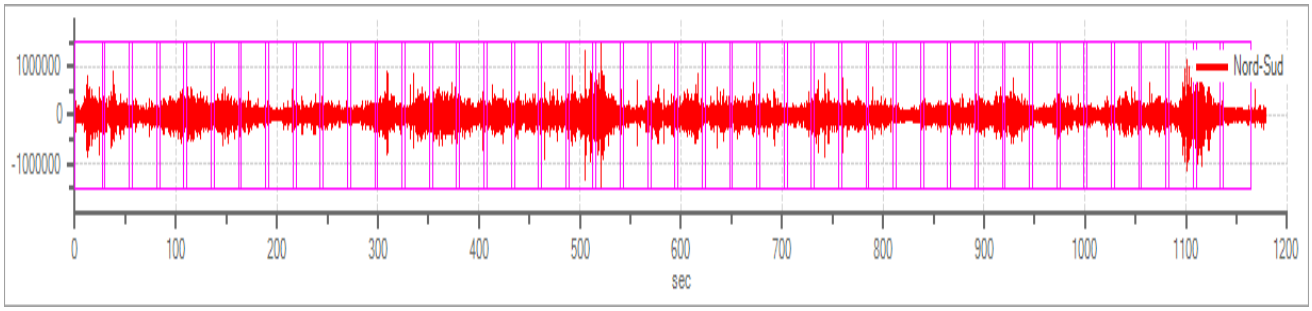
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245249
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

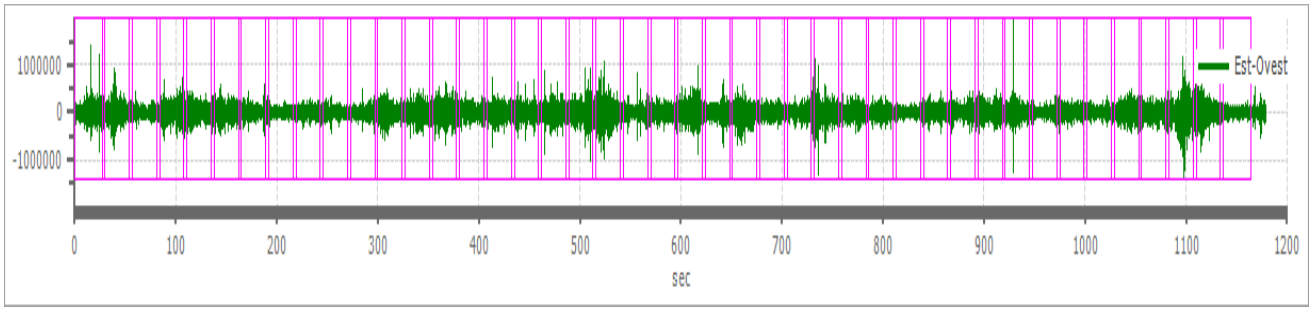
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	38
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

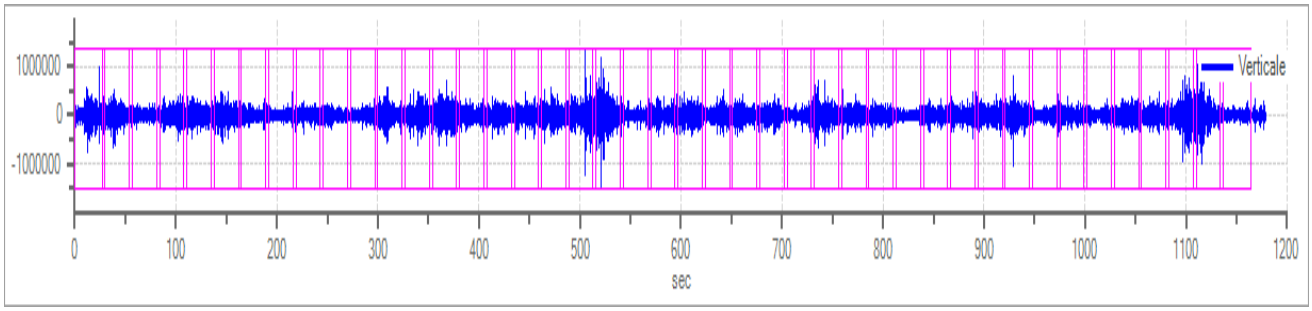
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

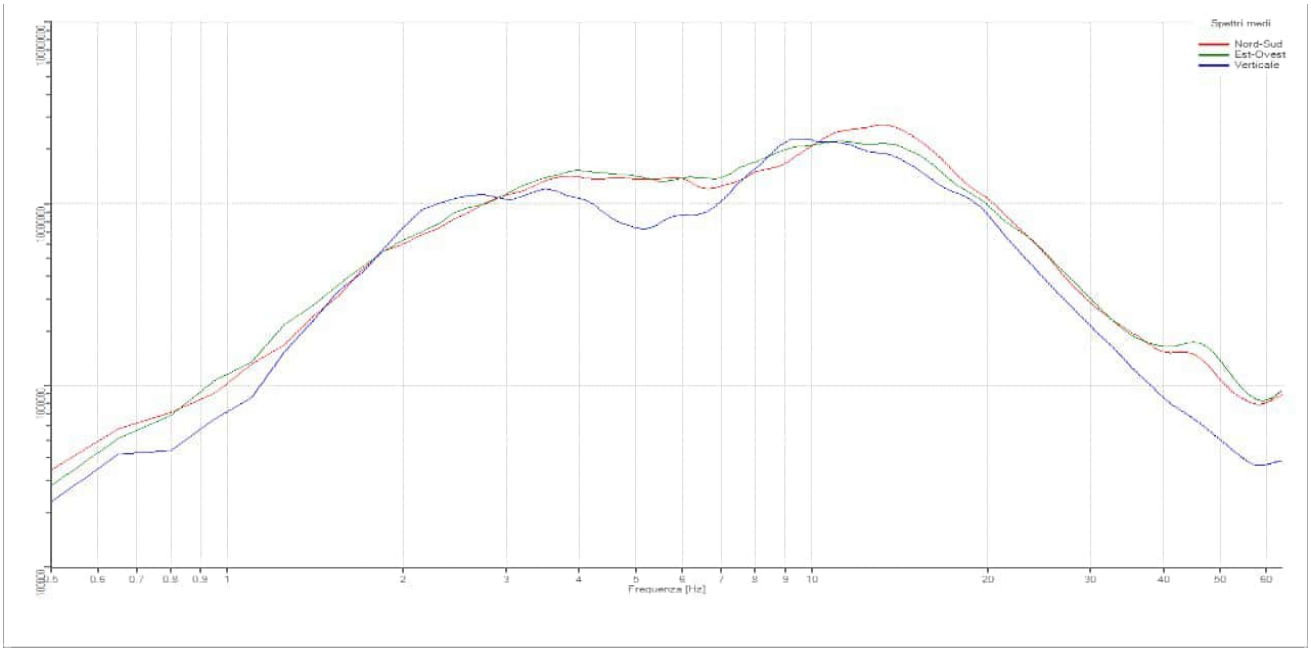


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

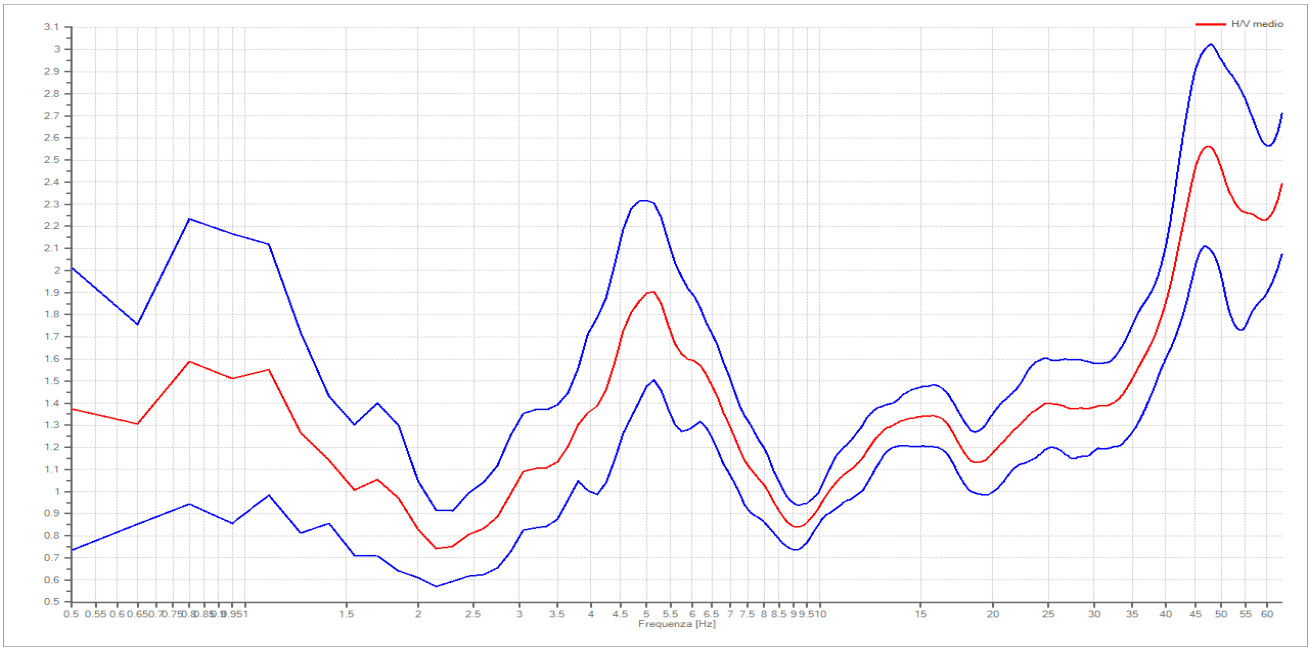
Dati riepilogativi:

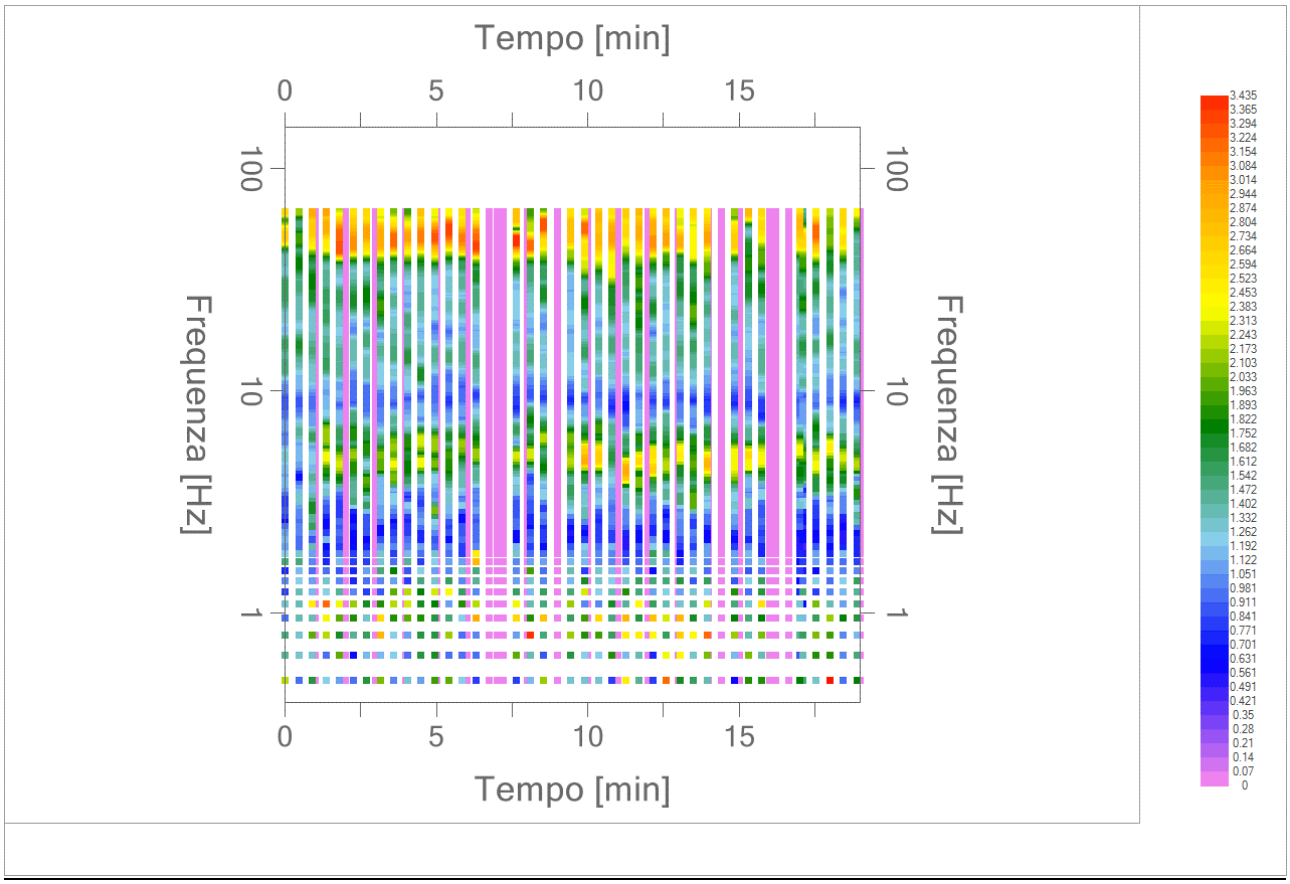
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

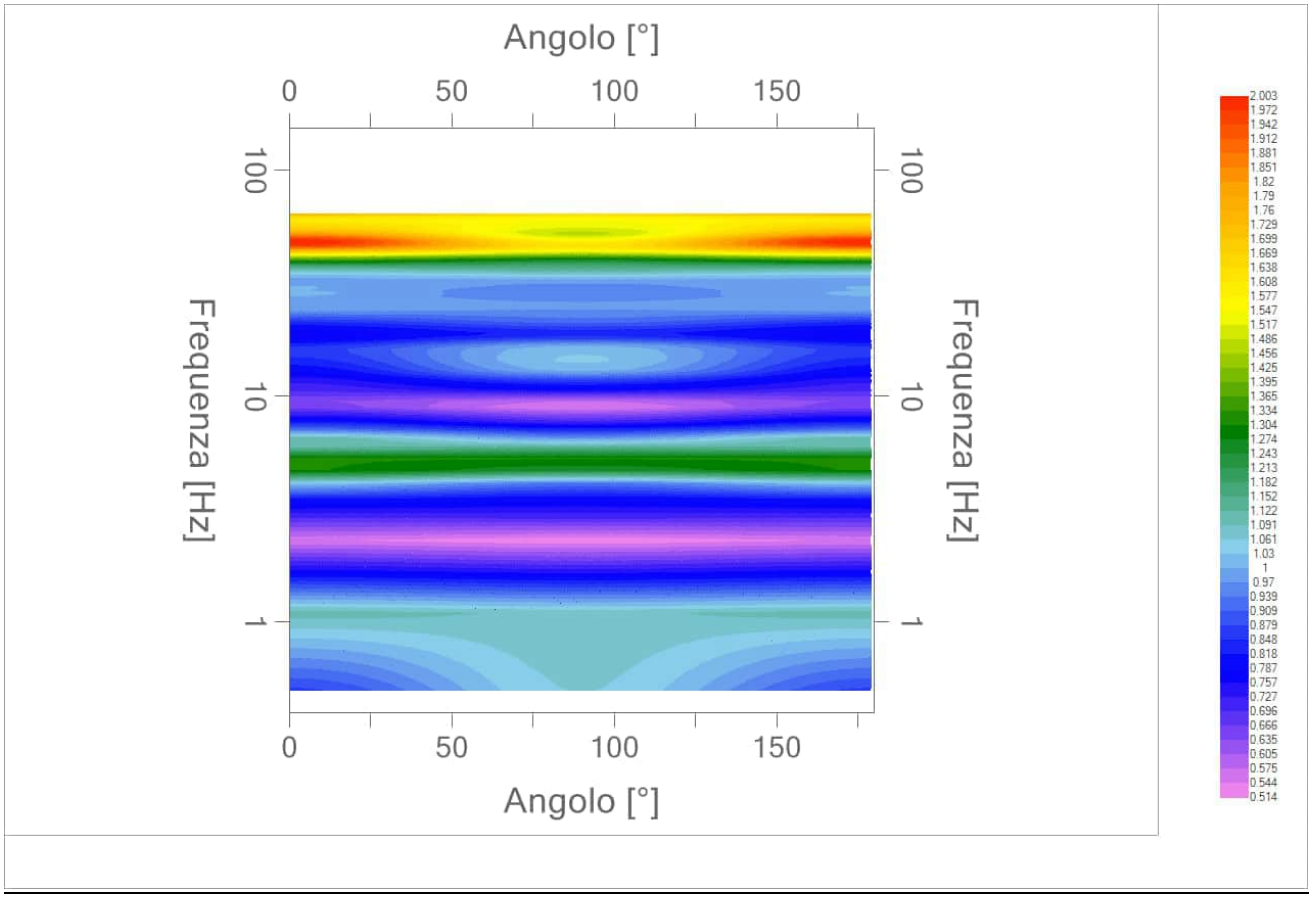
Frequenza del picco del rapporto H/V: 47.45 Hz ± 0.18 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 47.45 ± 0.18 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	Località	
Cantiere	Data 28/08/2024	Ora 16.32
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_19	File FO_19.SAF	Durata (min) 20
Strumento Echo Tromo HVSR3	Freq.camp. 208 Hz	F. sensore 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				45
	camion		✓				45
	passanti		✓				45
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

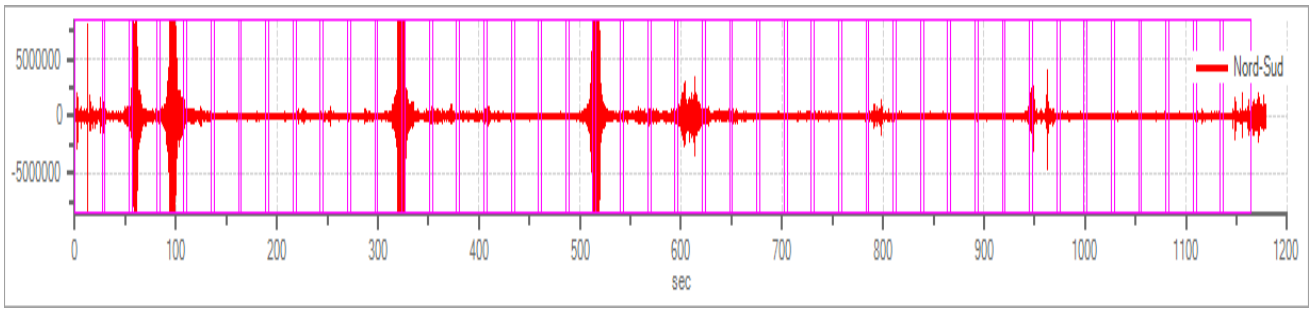
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

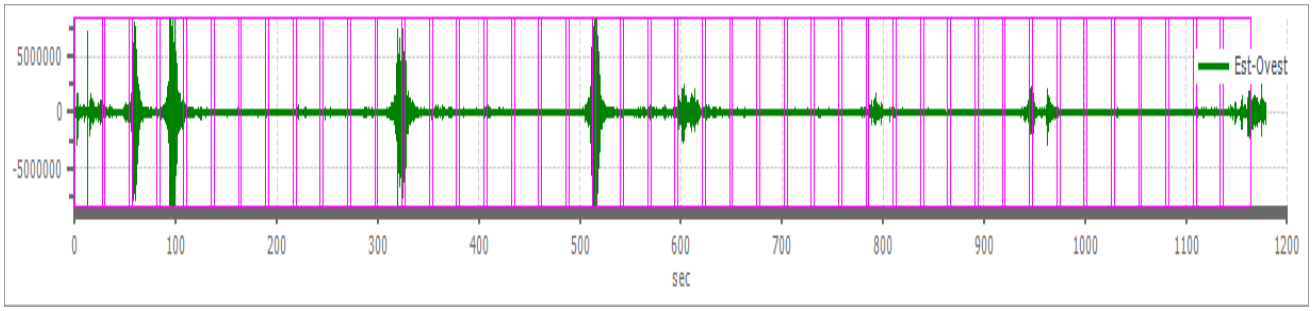
Dati riepilogativi:

Numero totale finestre selezionate:	43
Numero finestre incluse nel calcolo:	31
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

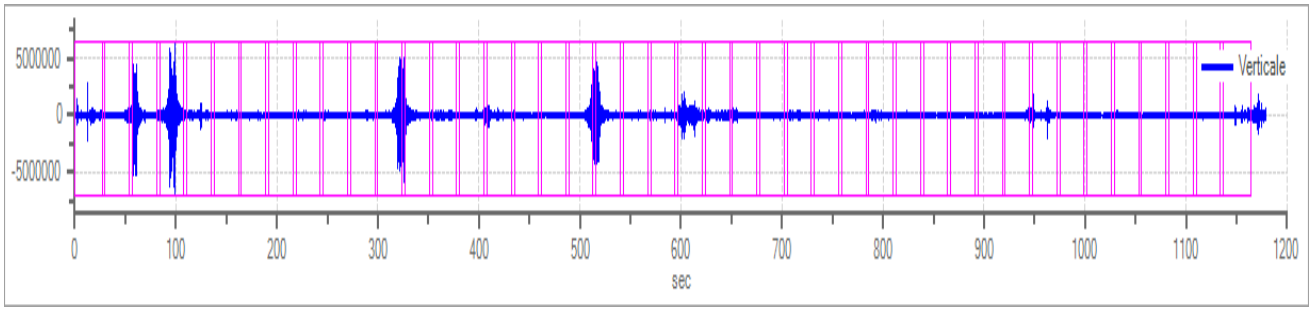
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

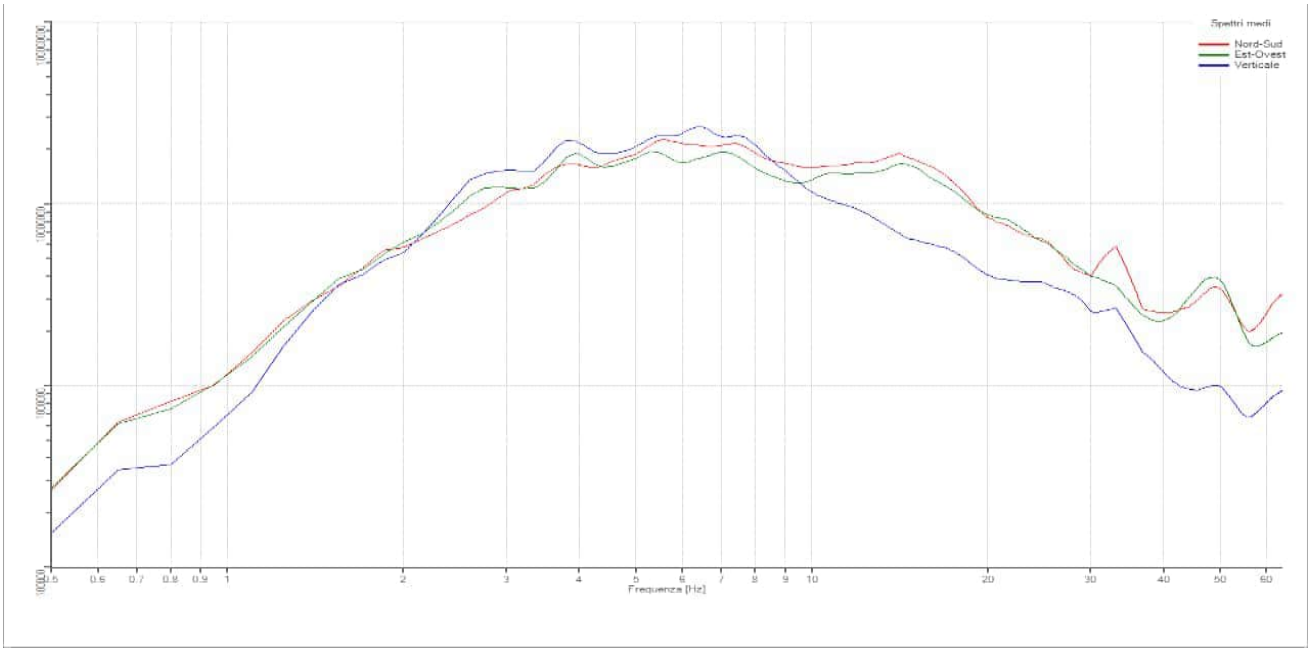


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

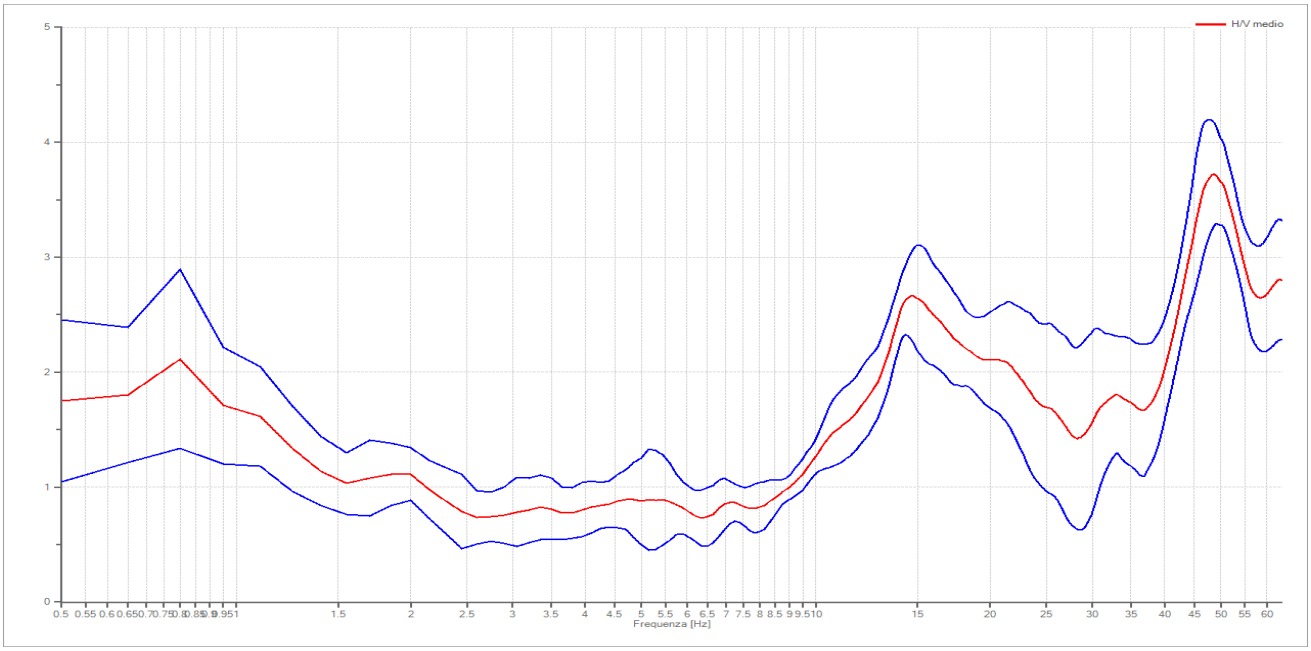
Dati riepilogativi:

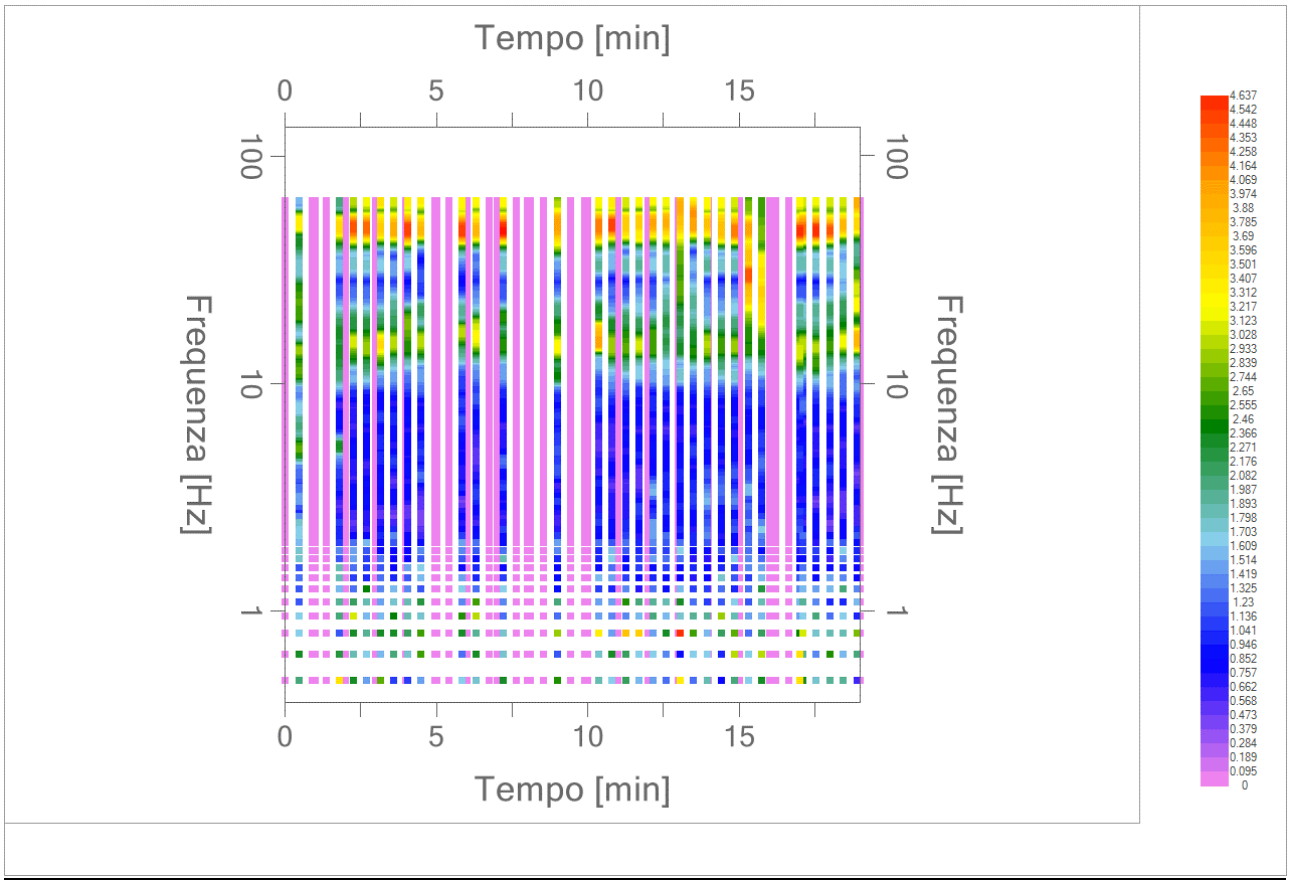
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

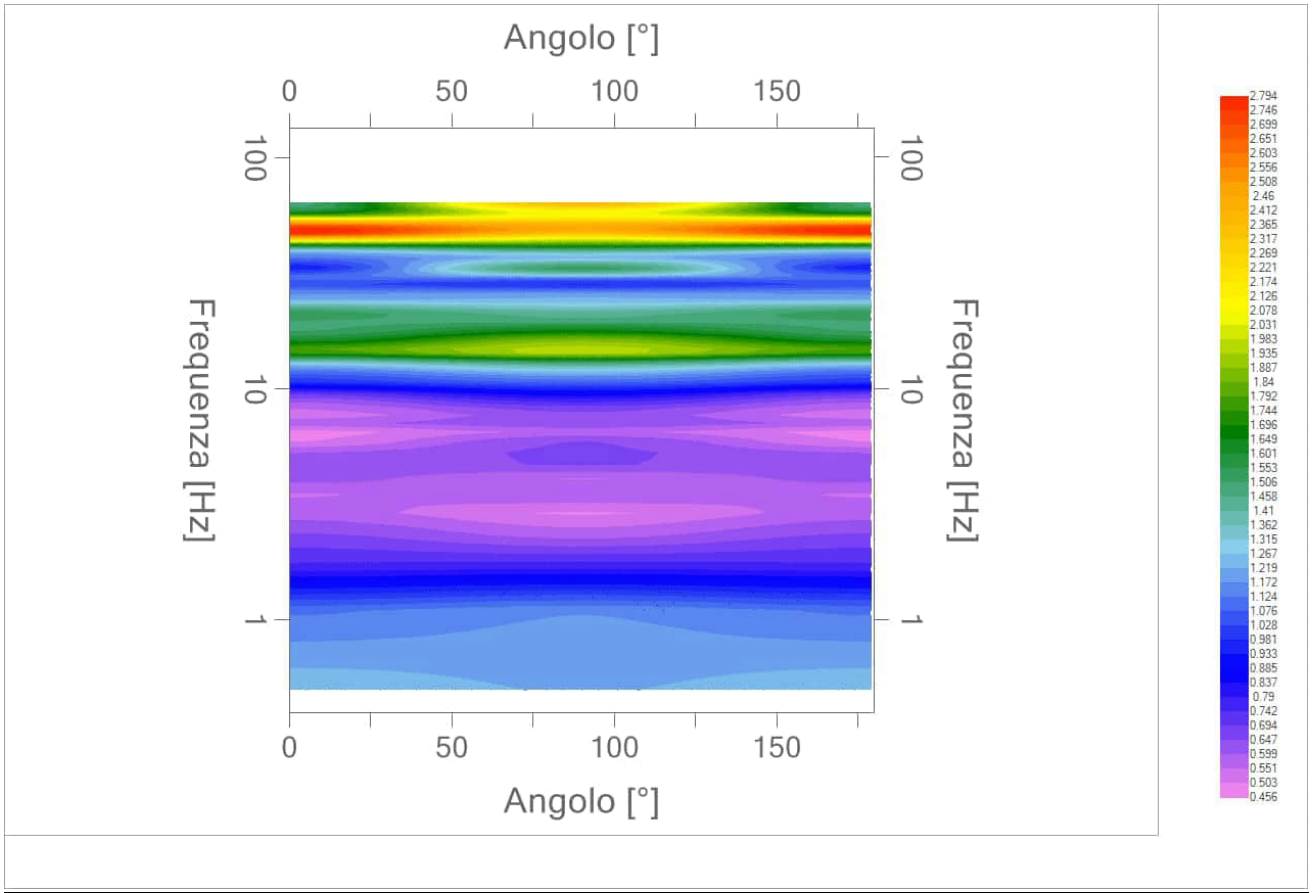
Frequenza del picco del rapporto H/V: 48.80 Hz ± 0.12 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 48.80 ± 0.12 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	*Studio di Microzonazione Sismica del territorio comunale di Forlì*

PROVA HVSR

Comune Forlì	**Località** Parco Glauco Fiorini	
Cantiere	**Data** 03/09/2024	**Ora** 17.20
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_20	**File** FO_20.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☐ assenti	☒ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				5
	camion	✓					
	passanti		✓				5
	altro	✓					
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

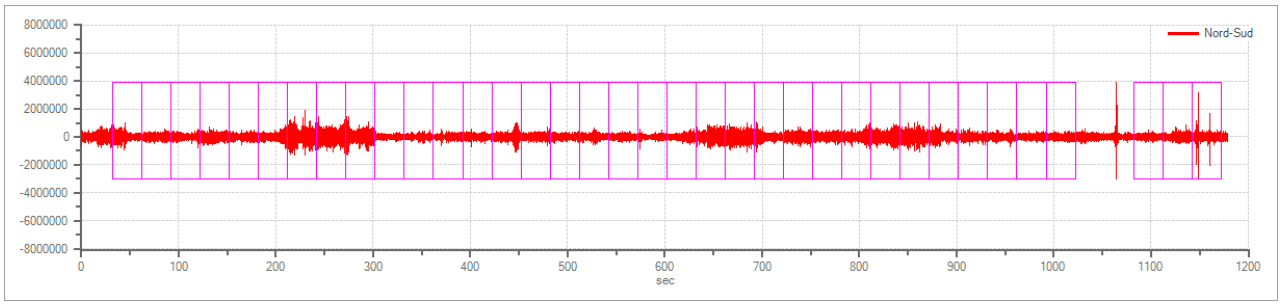
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245184
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

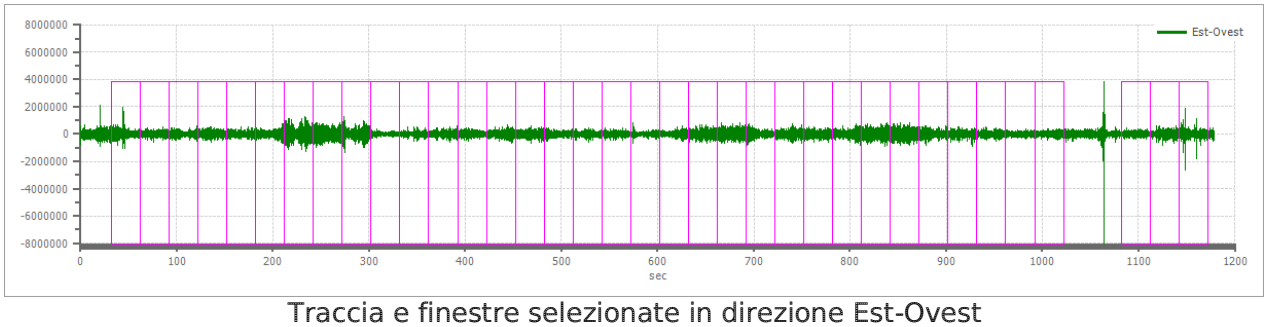
Dati riepilogativi:

Numero totale finestre selezionate:	41
Numero finestre incluse nel calcolo:	36
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

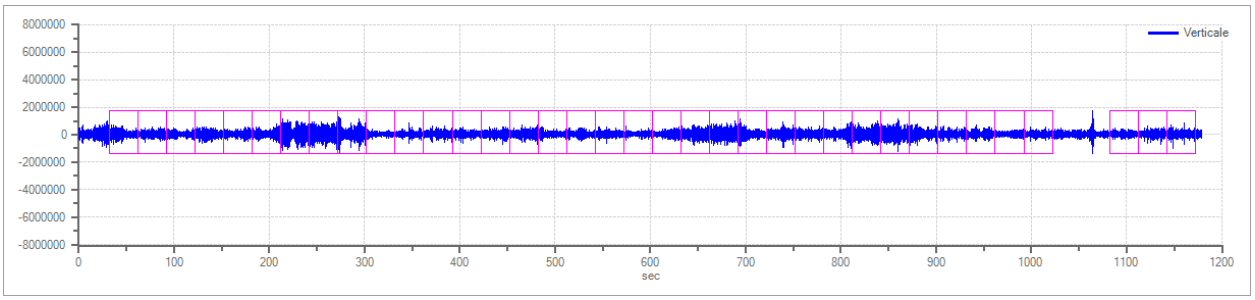
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

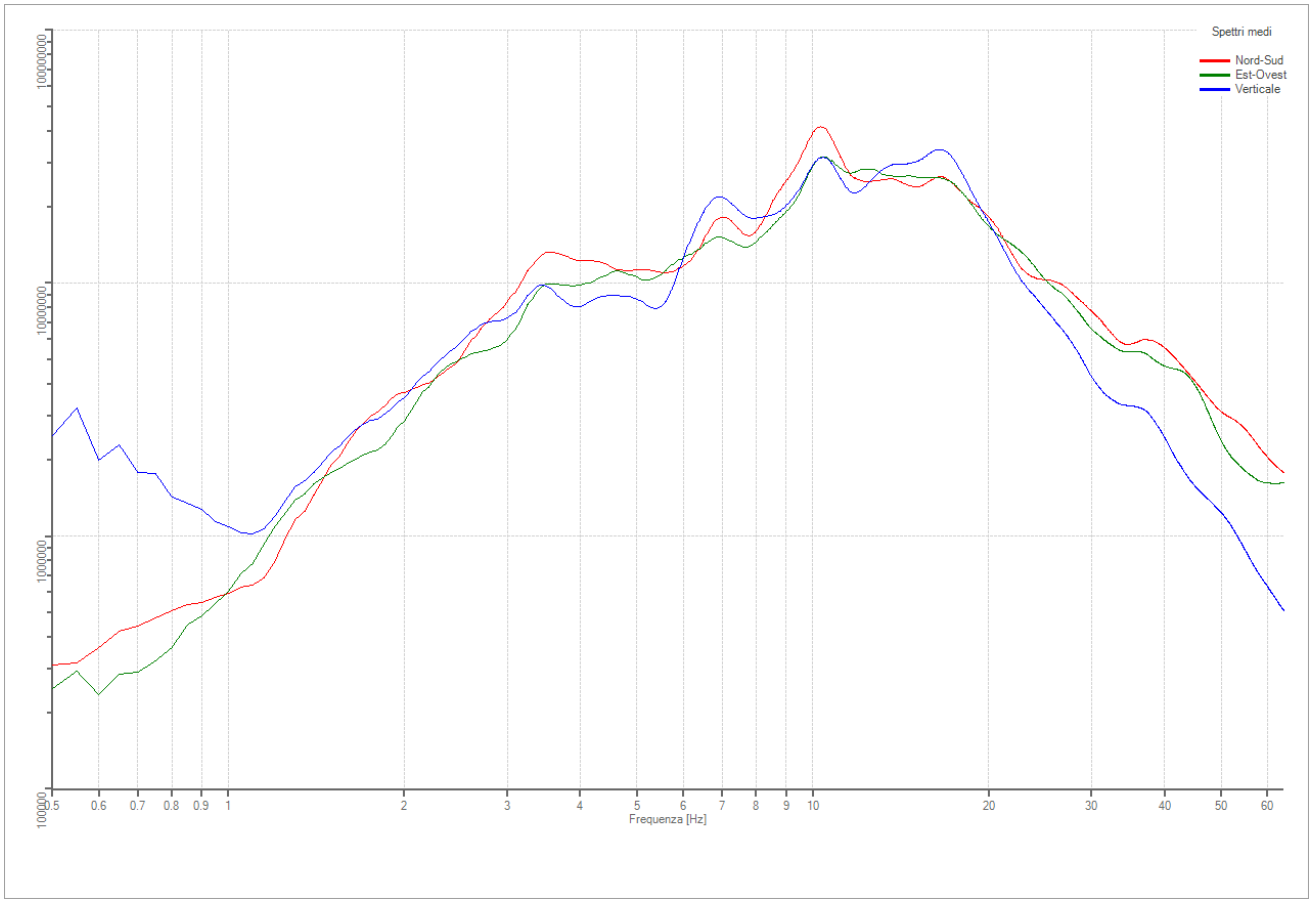


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

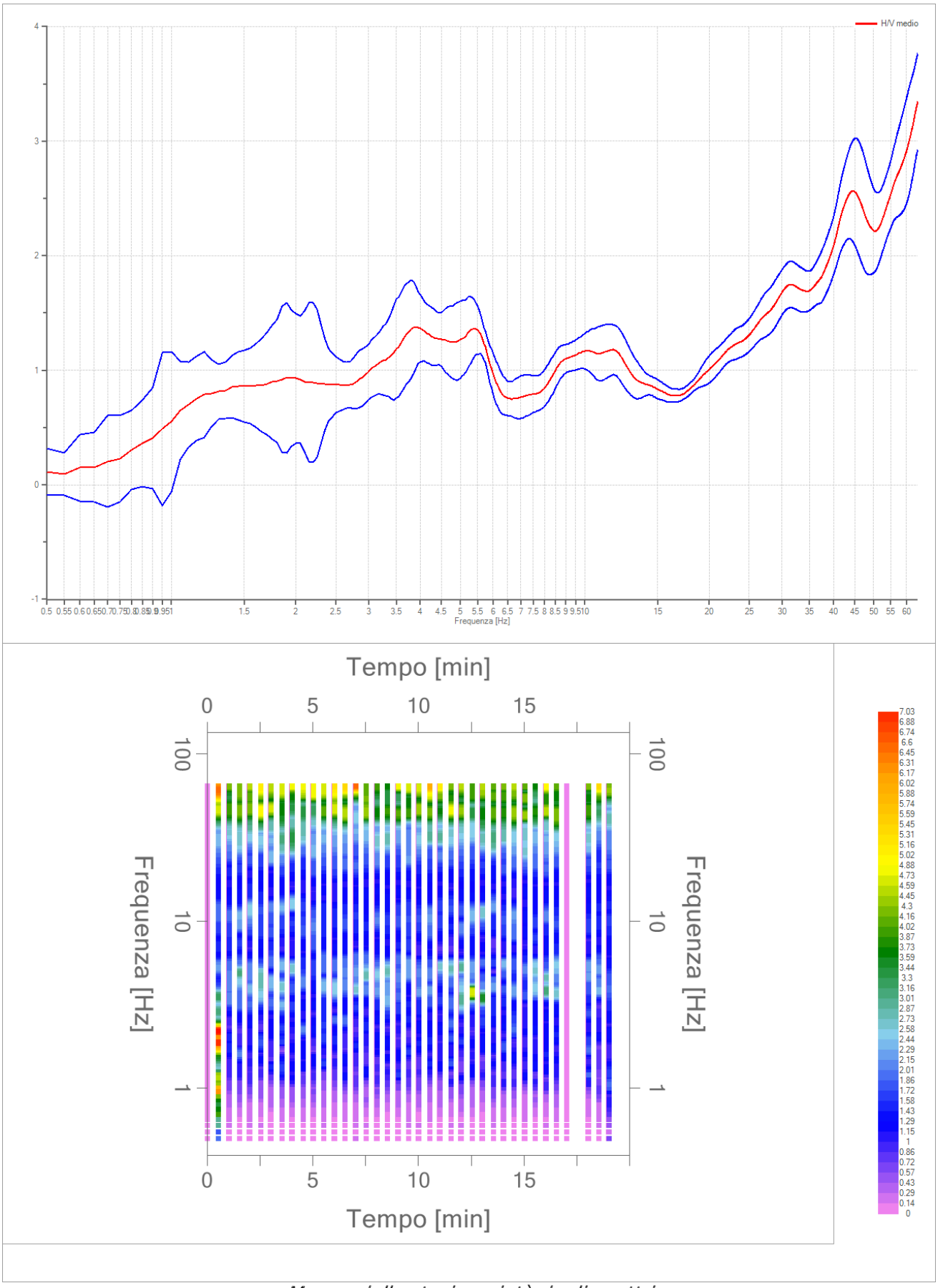
Dati riepilogativi:

Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento::	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

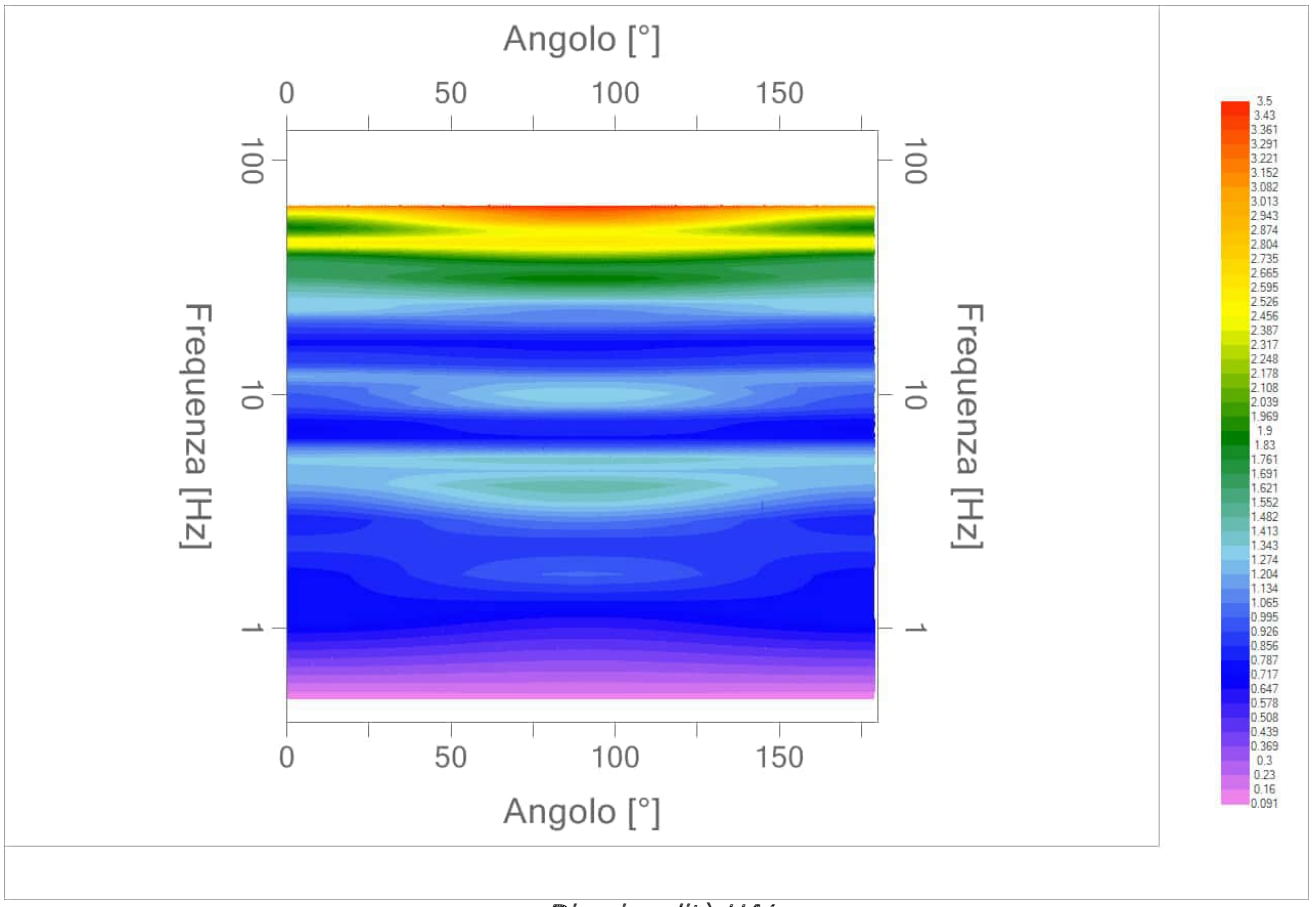
Risultati:

Frequenza del picco del rapporto H/V: 63.95 Hz ±0.09 Hz

Grafico rapporto spettrale H/V naturale



Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 63.95 ± 0.09 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale

f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Via Corecchio	
Cantiere	**Data** 29/08/2024	**Ora** 11.05
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_21	**File** FO_21.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Fabbriche	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto			✓			50
	camion			✓			50
	passanti	✓					
	altro						
Disturbo cont.	☐ assente	☒ presente: fabbriche					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

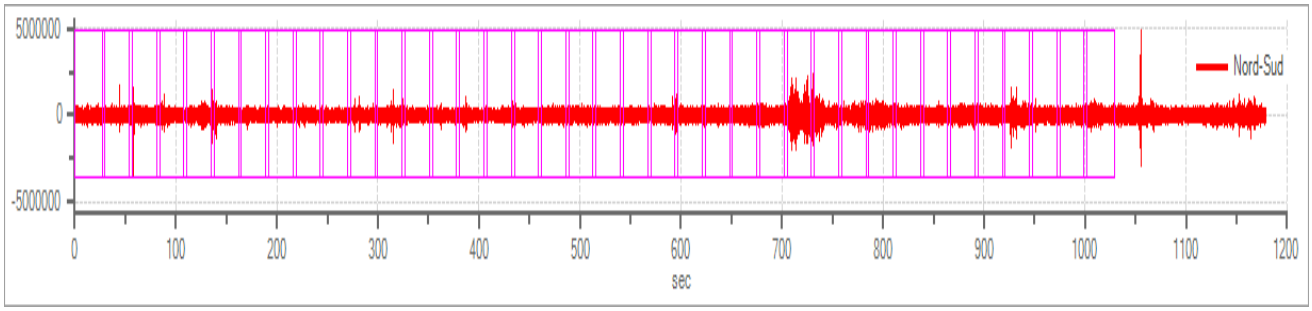
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245248
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

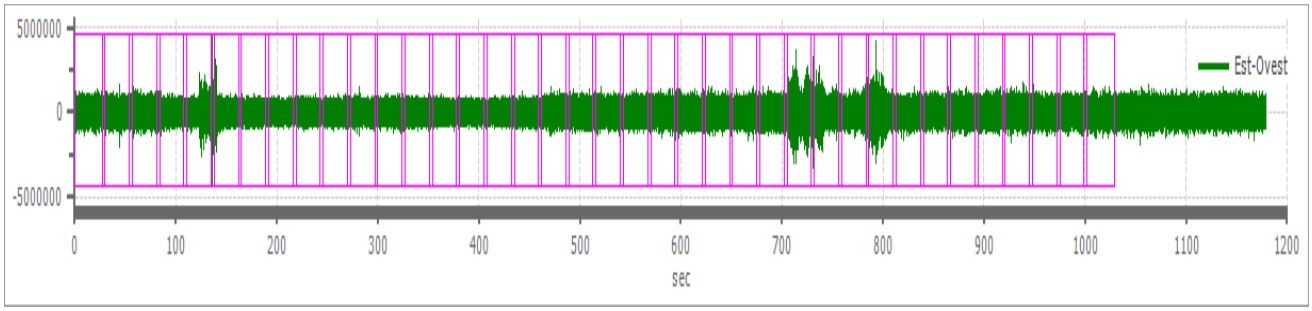
Dati riepilogativi:

Numero totale finestre selezionate:	38
Numero finestre incluse nel calcolo:	27
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

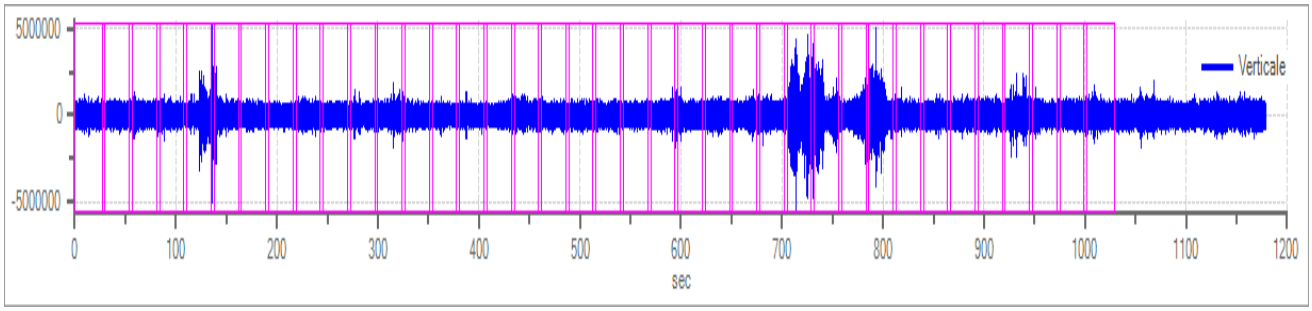
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

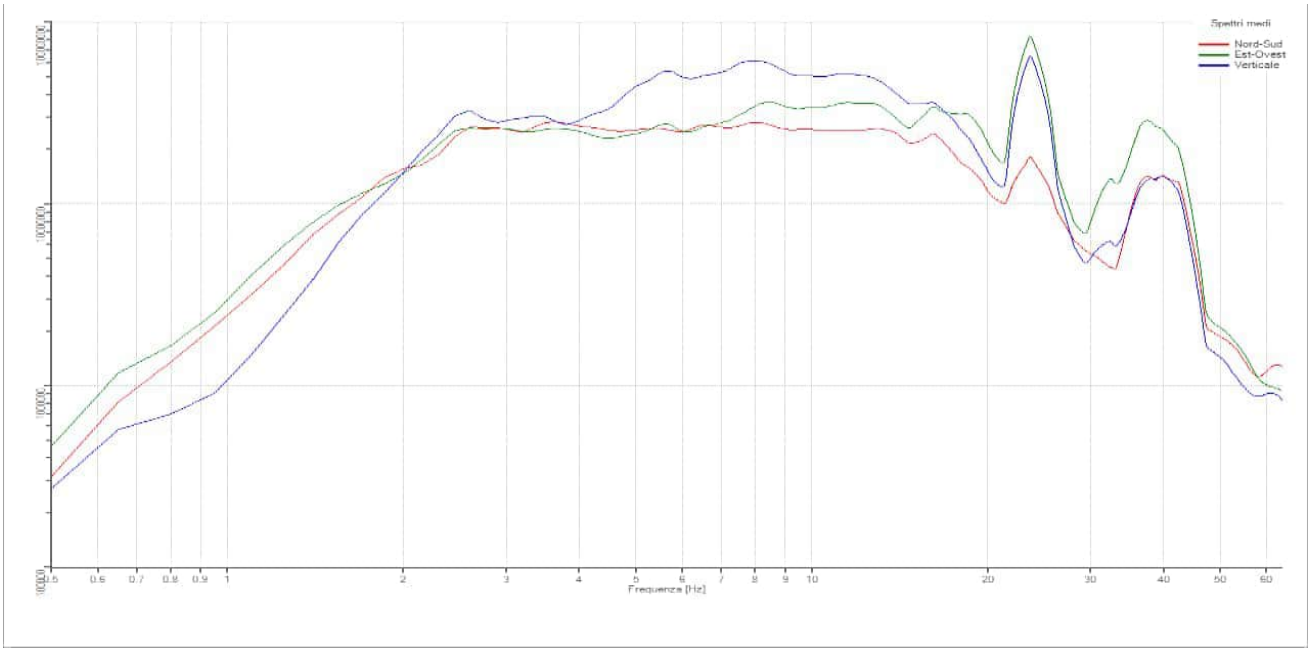


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

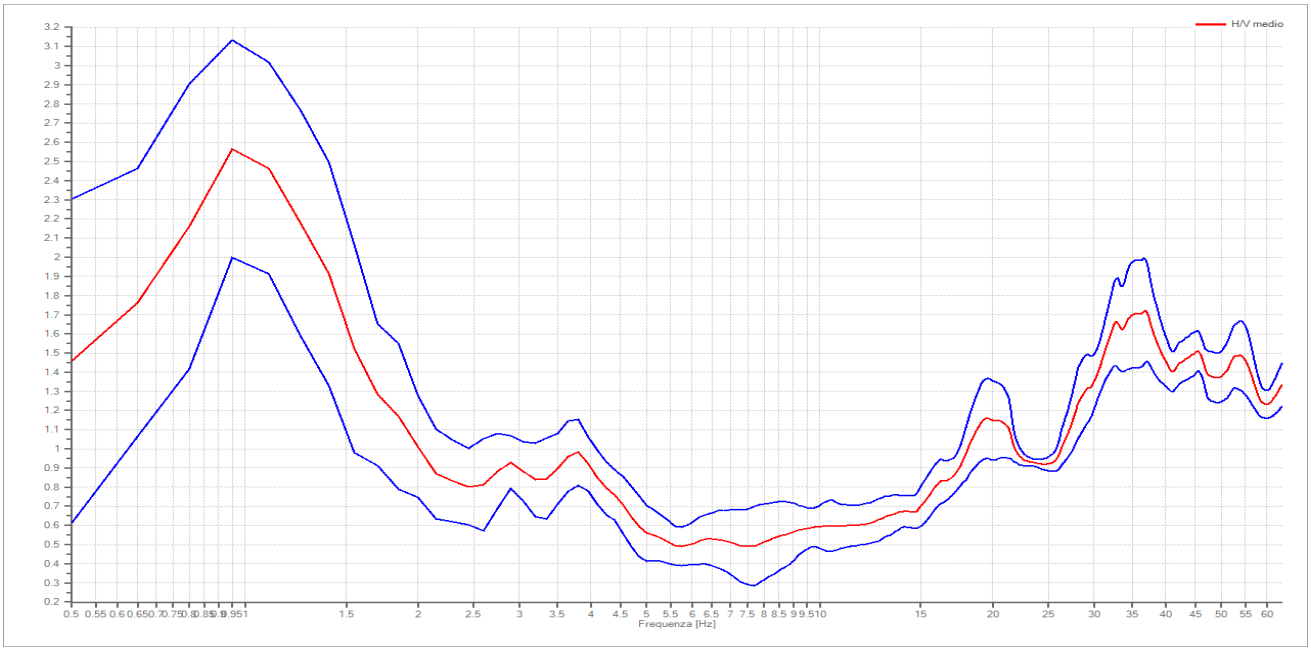
Dati riepilogativi:

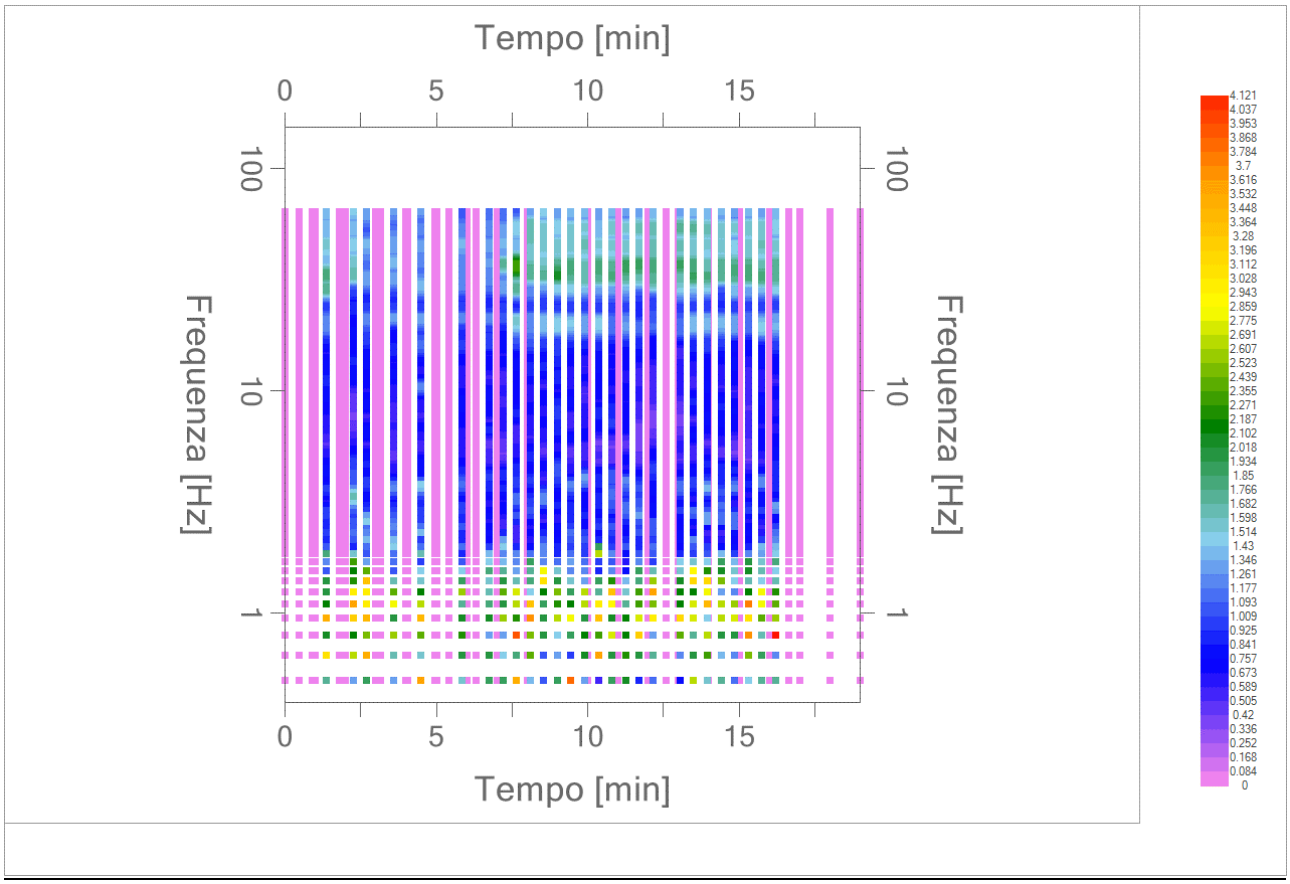
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

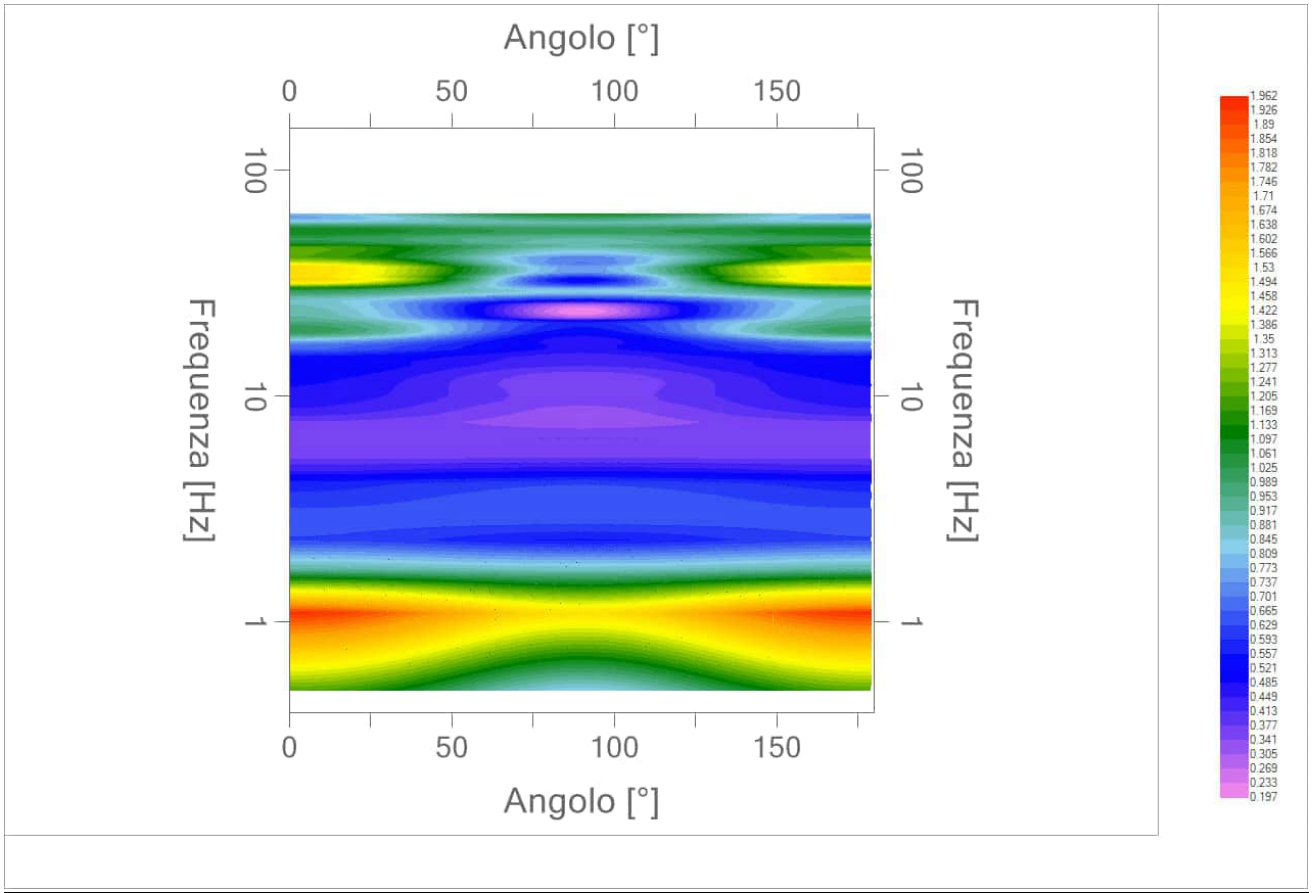
Frequenza del picco del rapporto H/V: 0.95 Hz ± 0.22 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 0.95 ± 0.22 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROGETTO:	Studio di Microzonazione Sismica del territorio comunale di Forlì

PROVA HVSR

Comune Forlì	**Località** Scaldarancio	
Cantiere	**Data** 29/08/2024	**Ora** 08.23
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_22	**File** FO_22.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				100
	camion		✓				100
	passanti		✓				
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

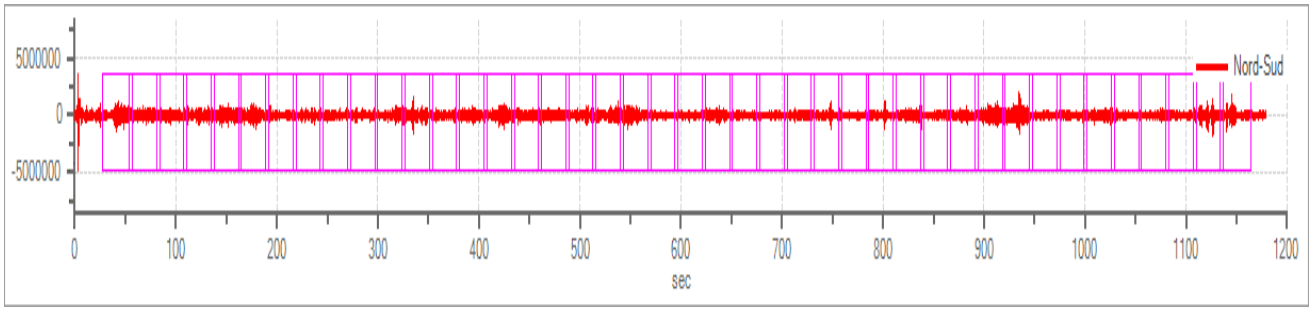
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00 Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

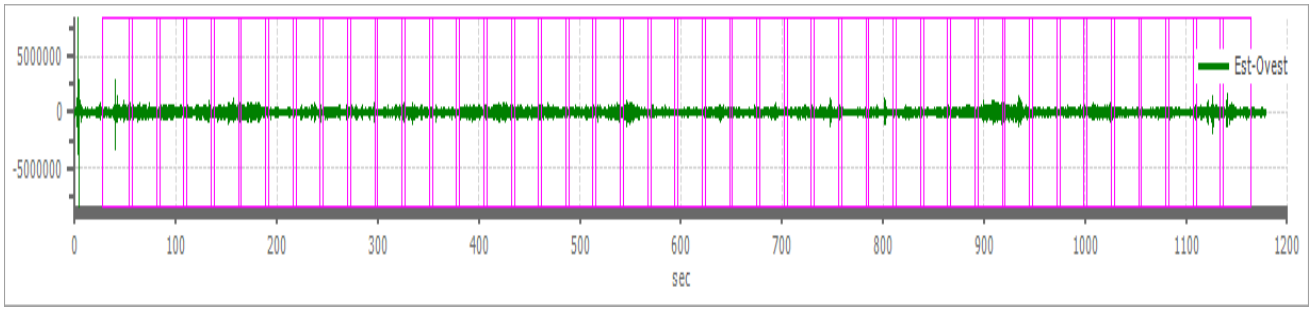
Dati riepilogativi:

Numero totale finestre selezionate:	42
Numero finestre incluse nel calcolo:	36
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

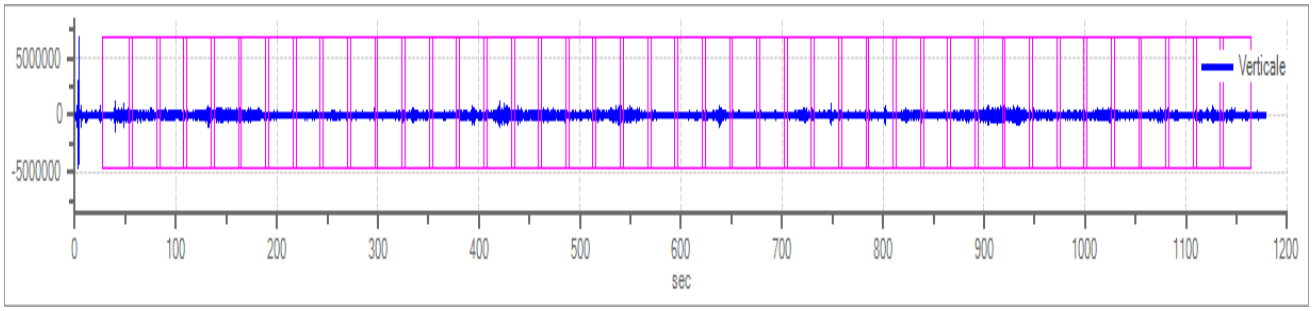
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

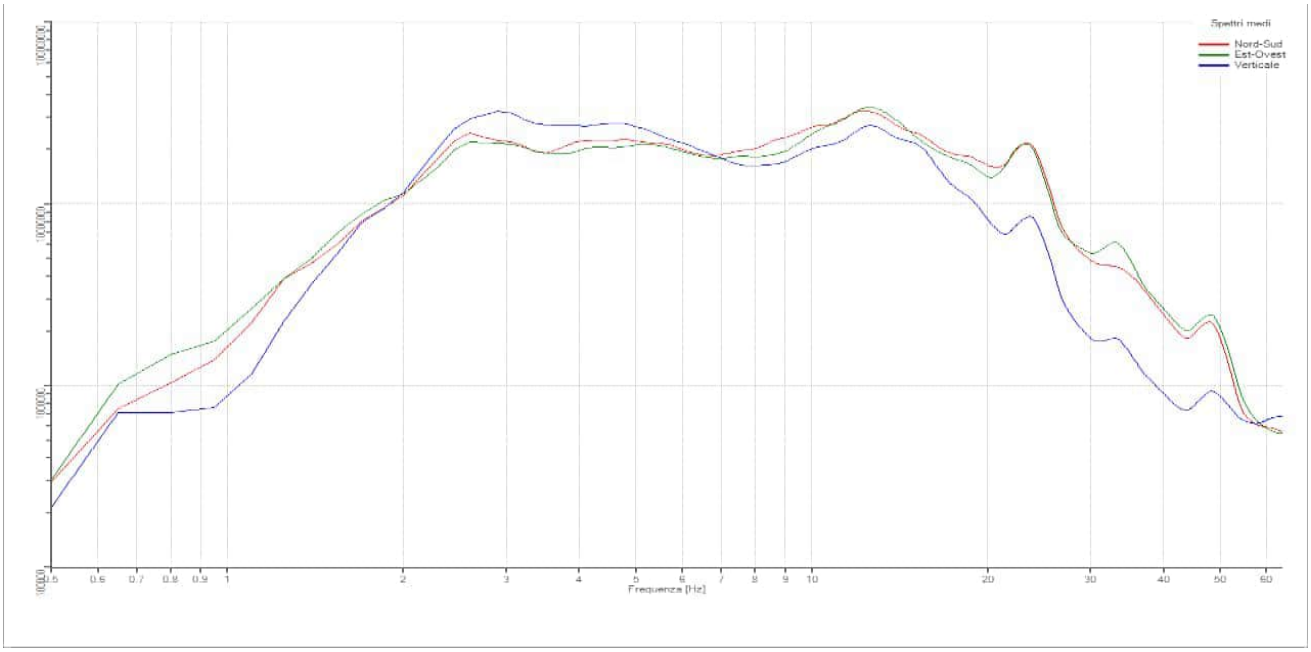


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

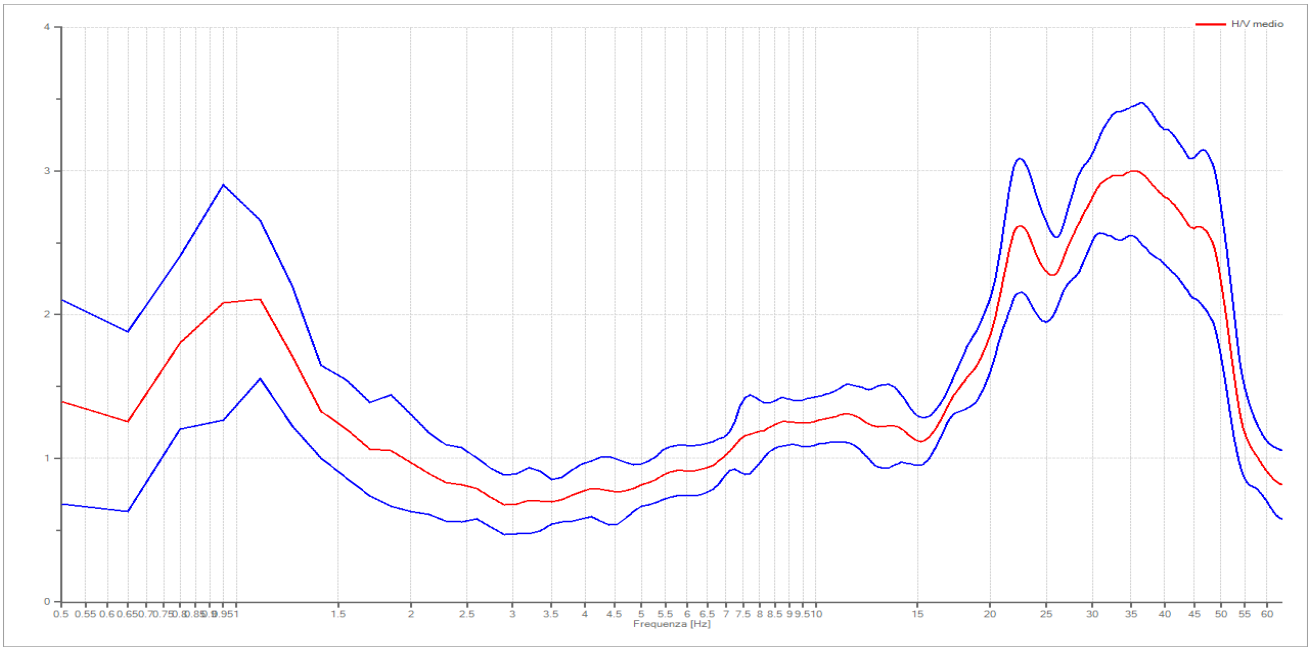
Dati riepilogativi:

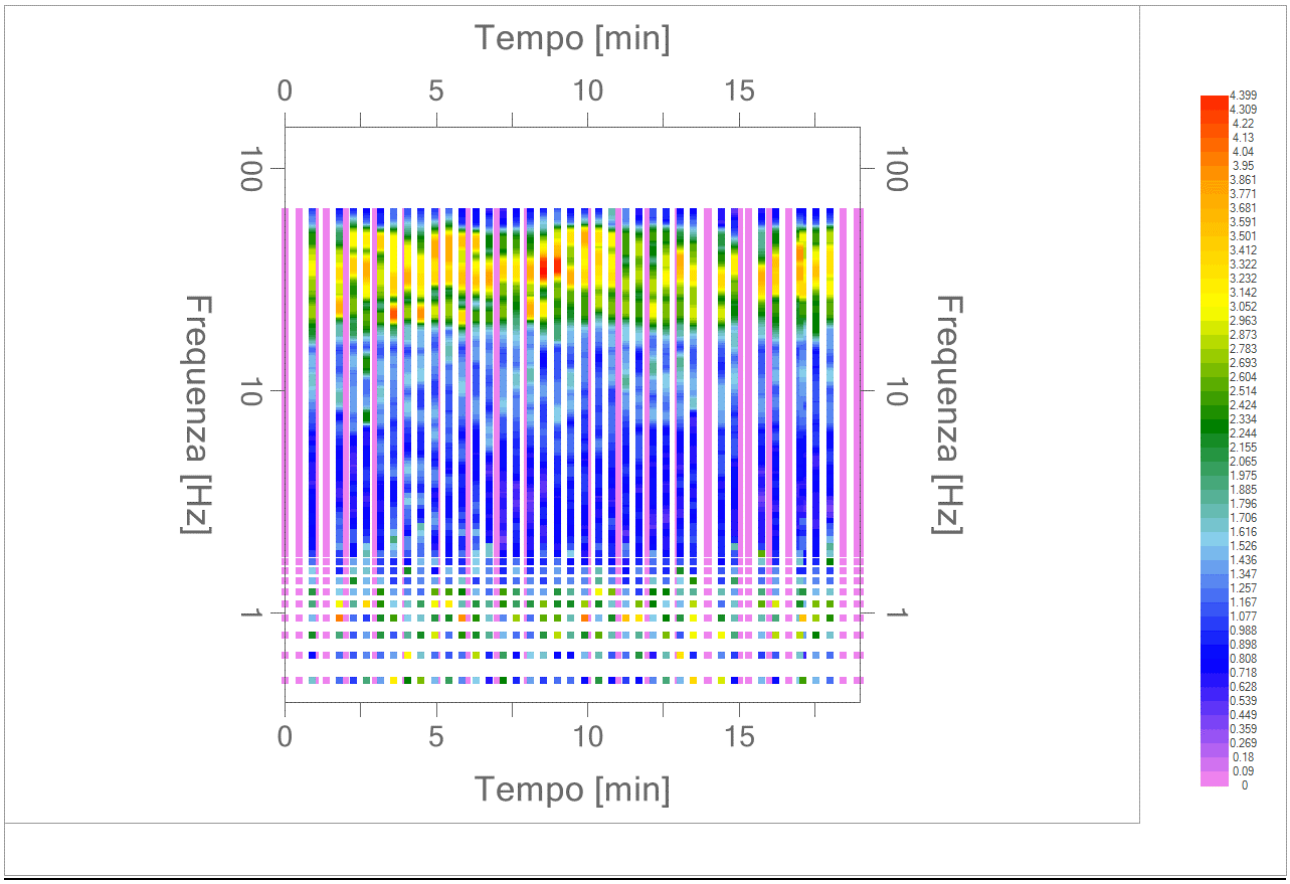
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

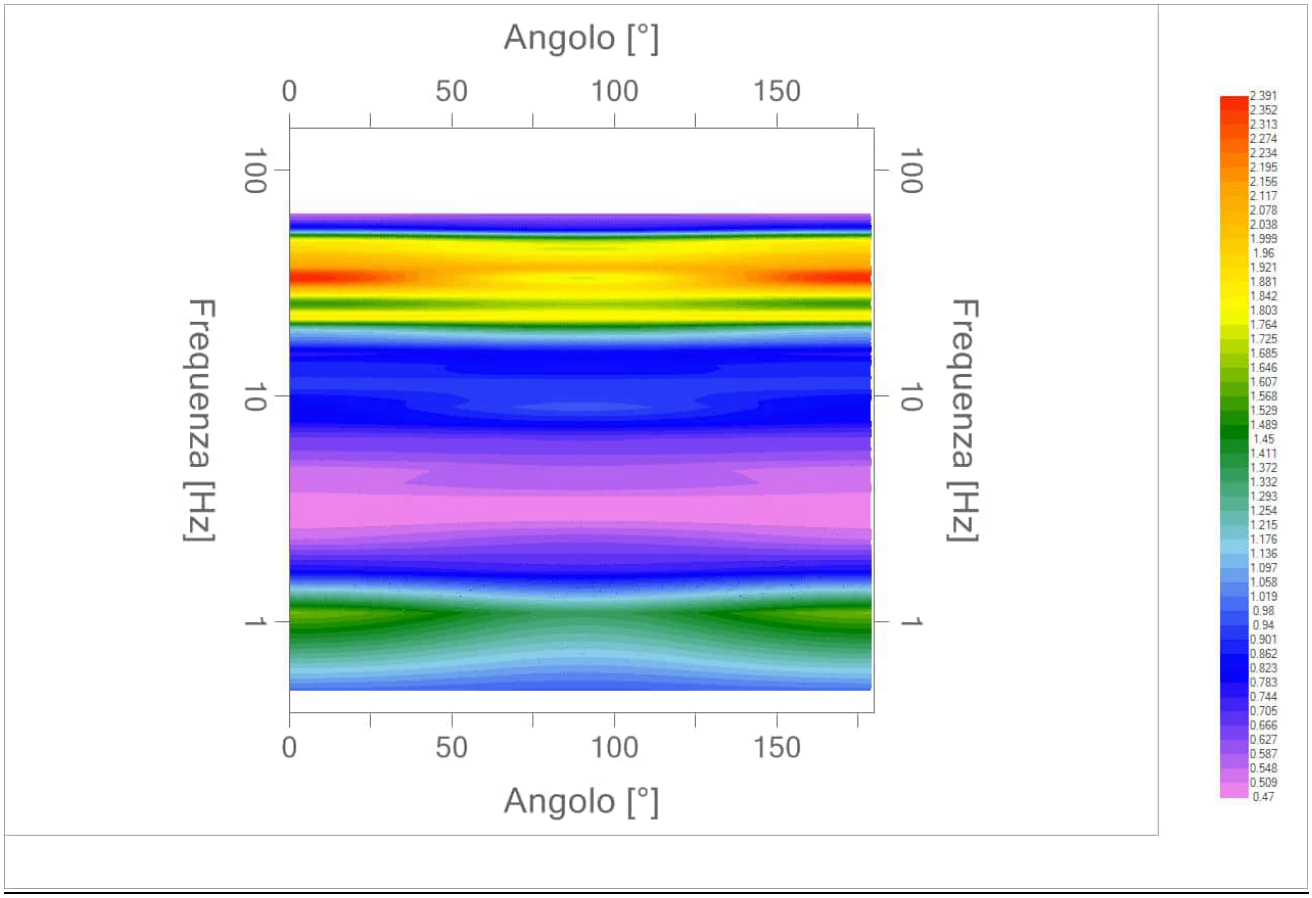
Frequenza del picco del rapporto H/V: 35.30 Hz ± 0.15 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 35.30 ± 0.15 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** Via Gaetano Ghinassi	
Cantiere	**Data** 26/09/2024	**Ora** 12.20
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_23	**File** FO_23.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				20
	camion		✓				
	passanti		✓				20
	altro	✓					
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

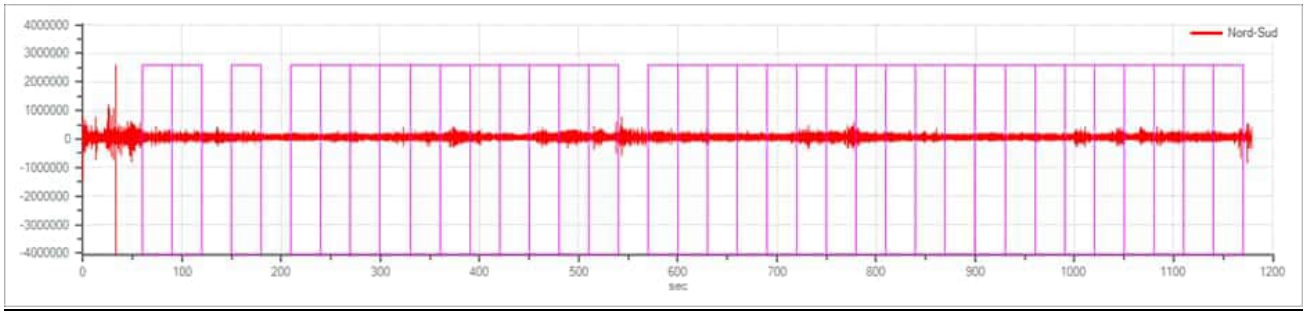
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245248
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

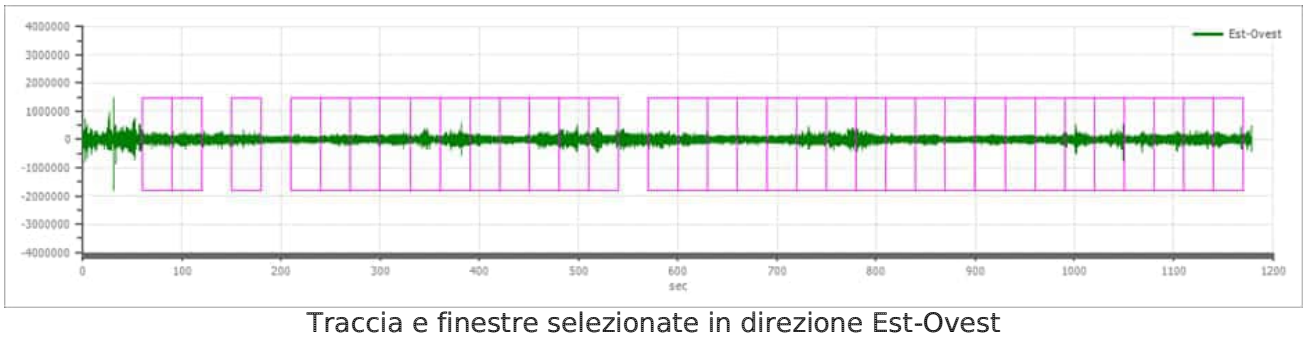
Dati riepilogativi:

Numero totale finestre selezionate:	34
Numero finestre incluse nel calcolo:	34
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

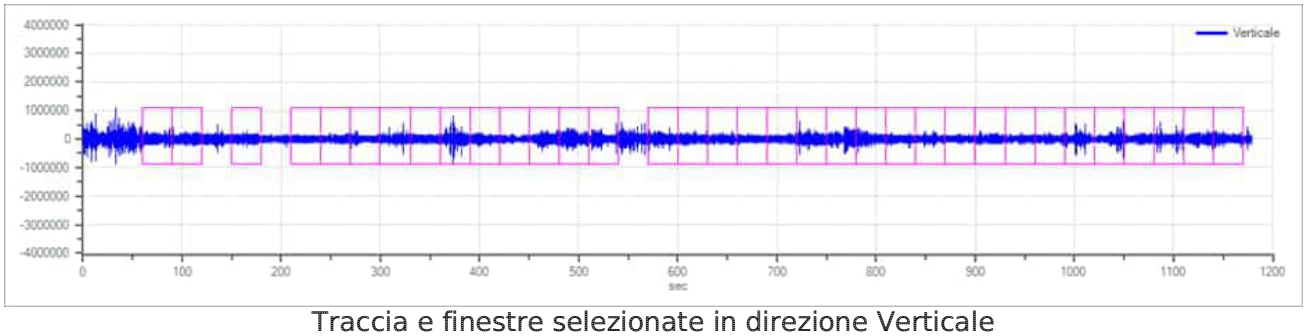
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

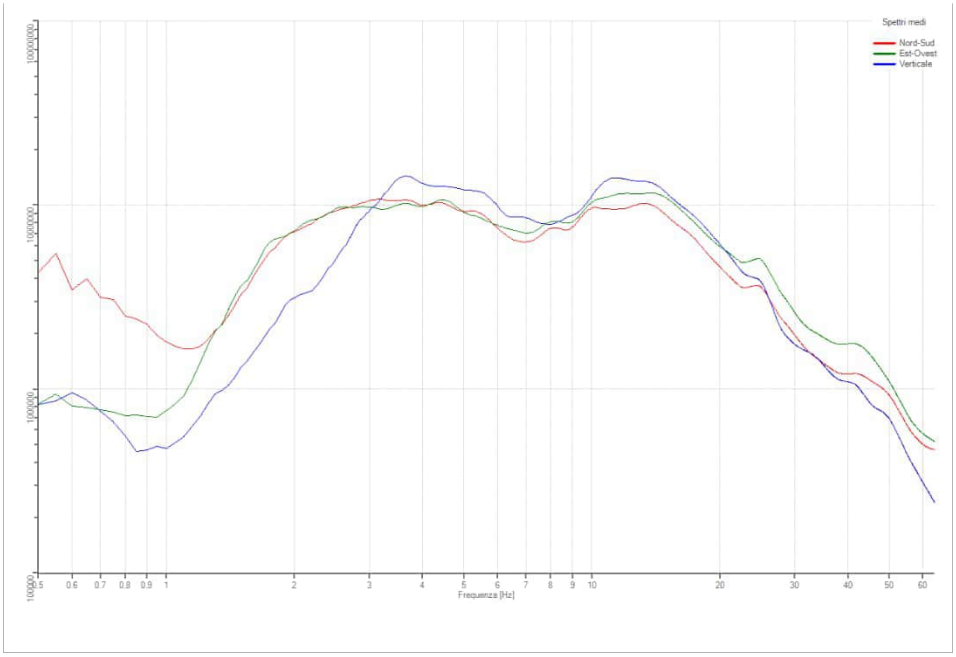


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

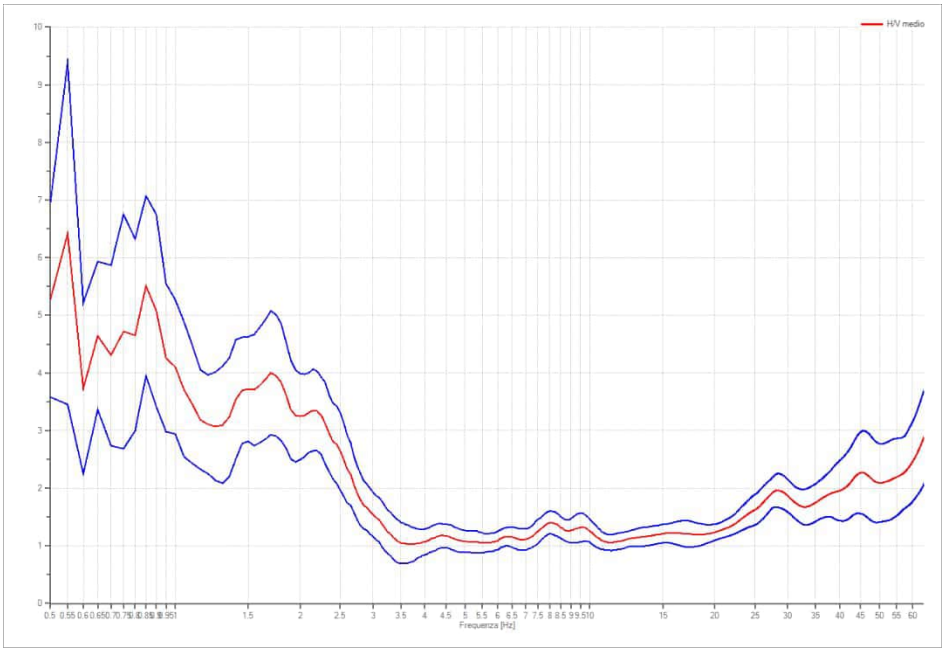
Dati riepilogativi:

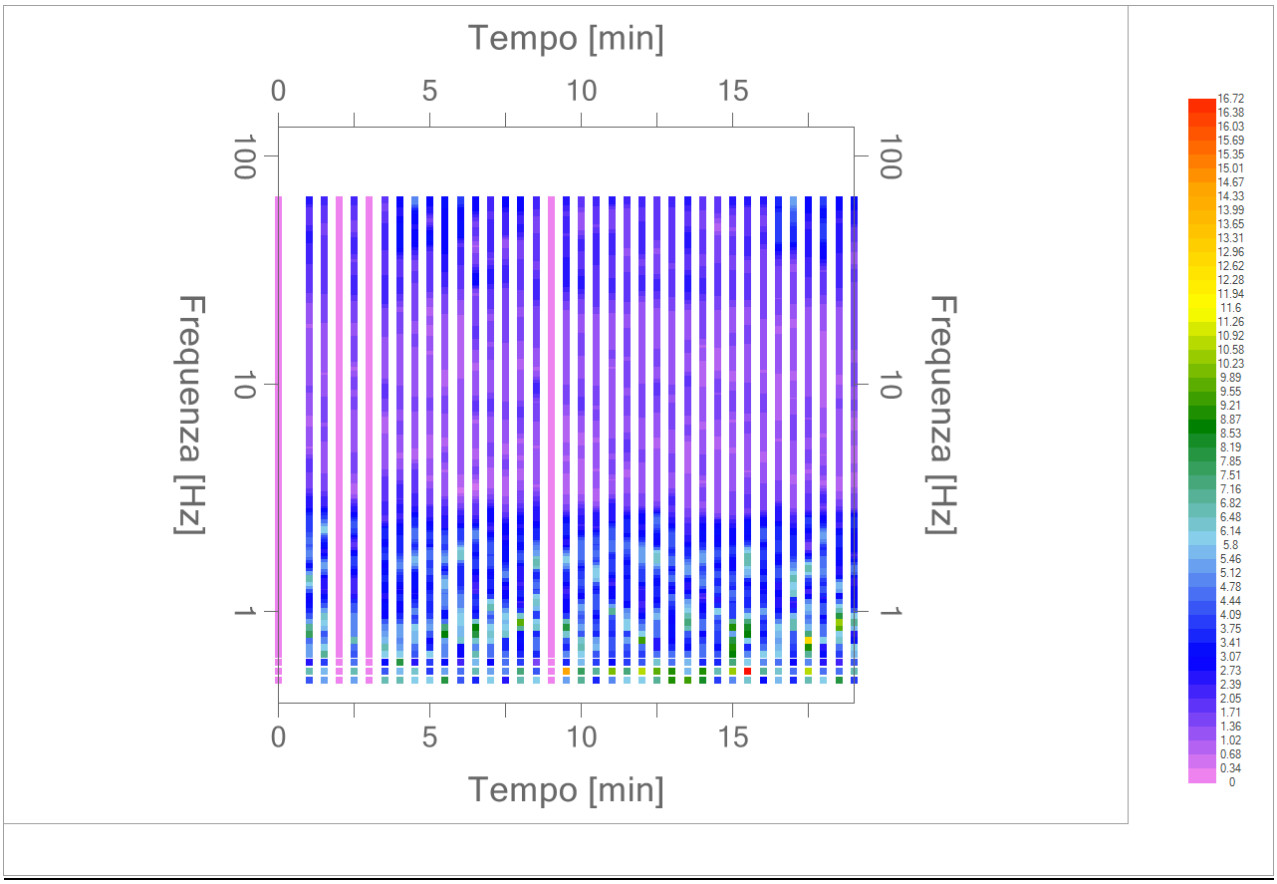
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.05 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media geometrica

Risultati:

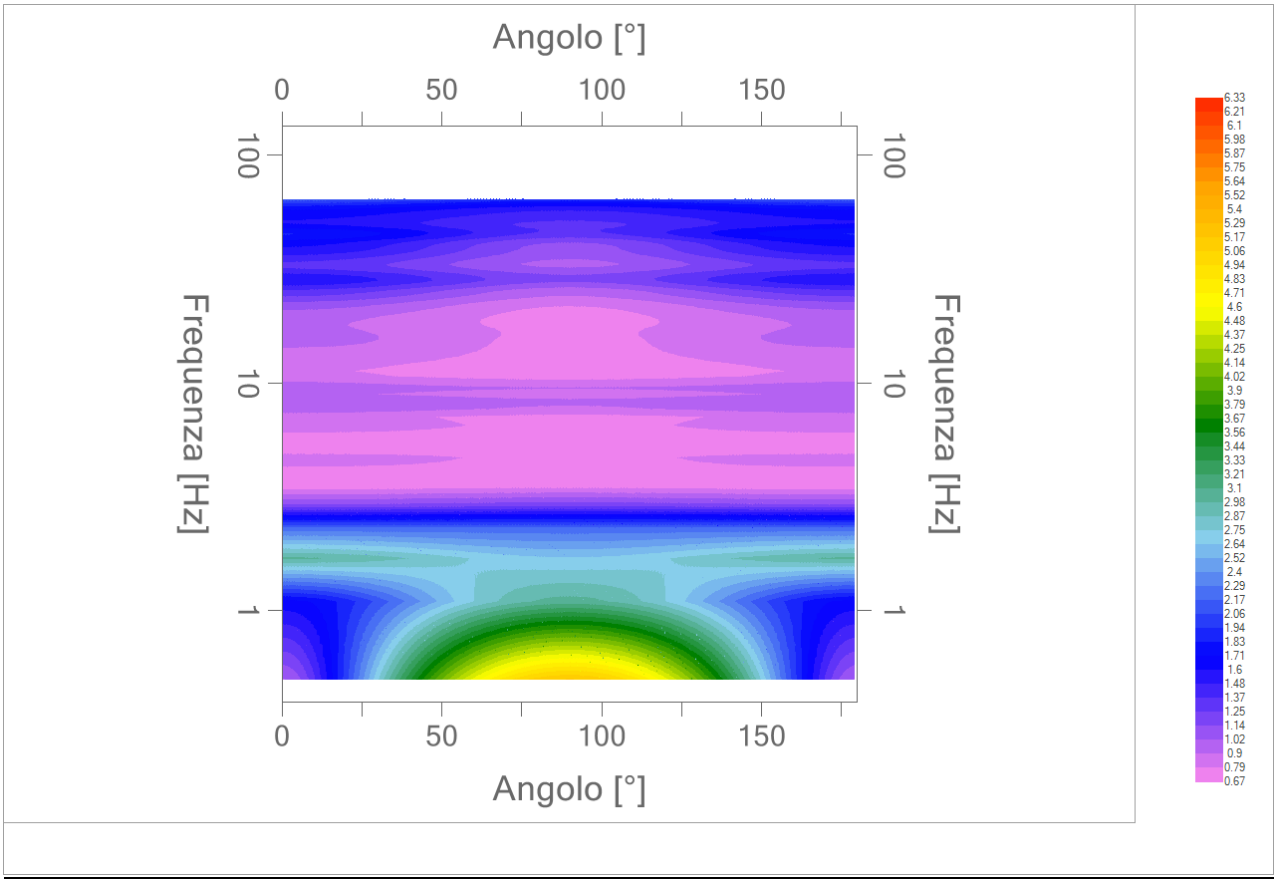
Frequenza del picco del rapporto H/V: 0.55 Hz ±0.46 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.75 ± 0.08 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	Ok
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** Via Europa	
Cantiere	**Data** 29/08/2014	**Ora** 10.12
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_24	**File** FO_24.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto	✓					
	camion	✓					
	passanti			✓			5
	altro						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

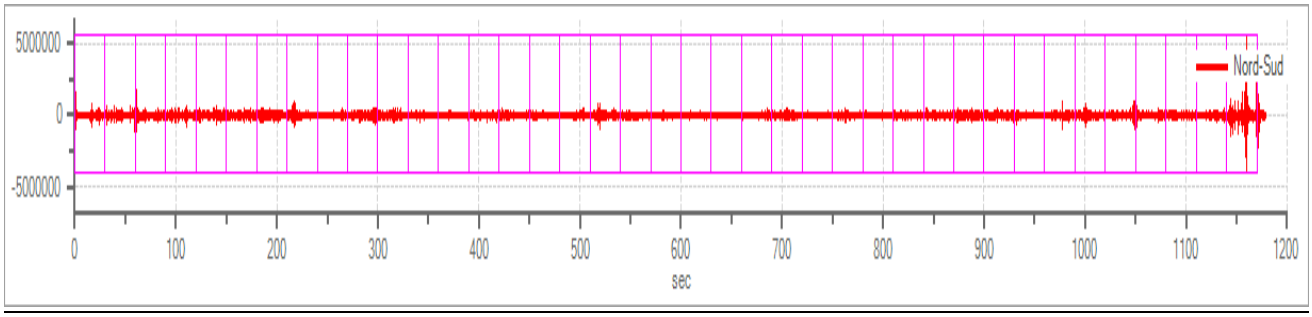
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

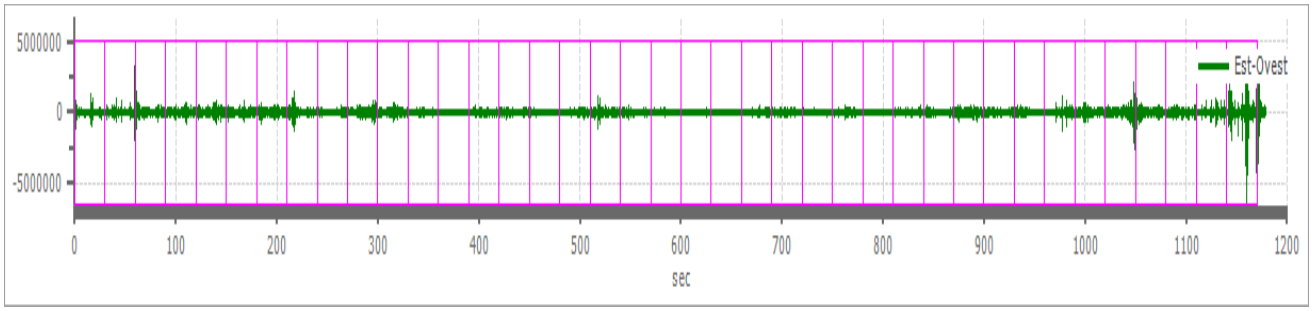
Dati riepilogativi:

Numero totale finestre selezionate:	39
Numero finestre incluse nel calcolo:	31
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

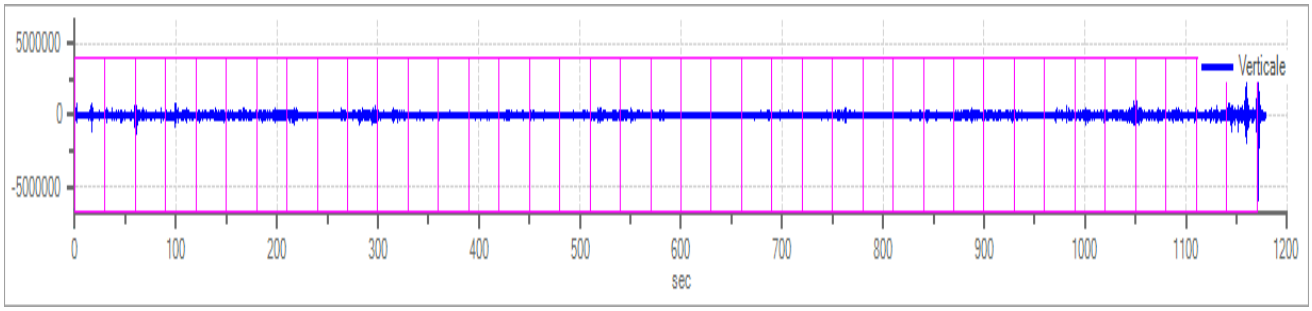
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

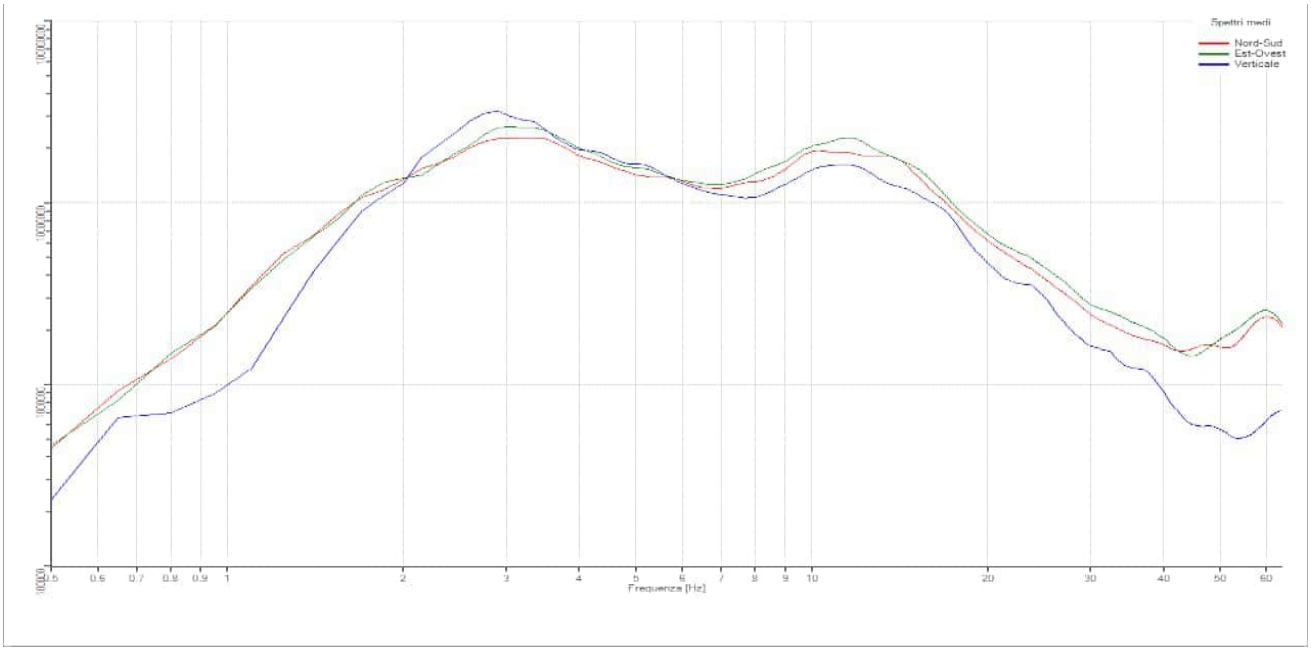


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

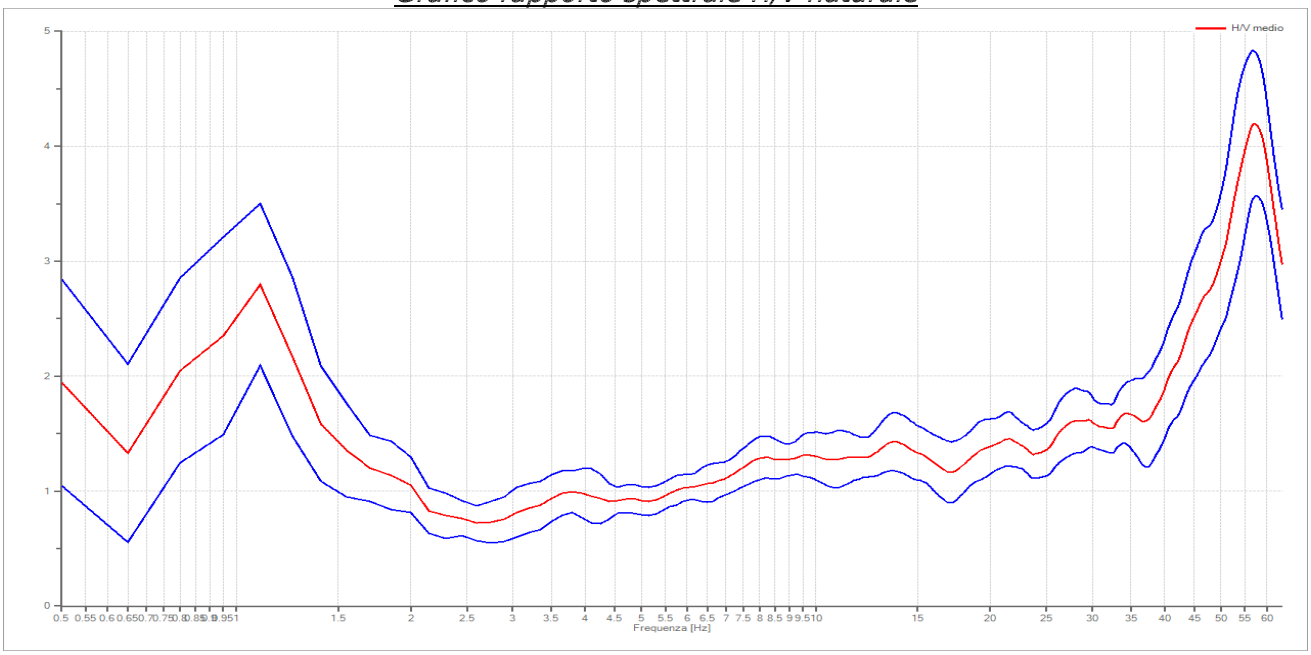
Dati riepilogativi:

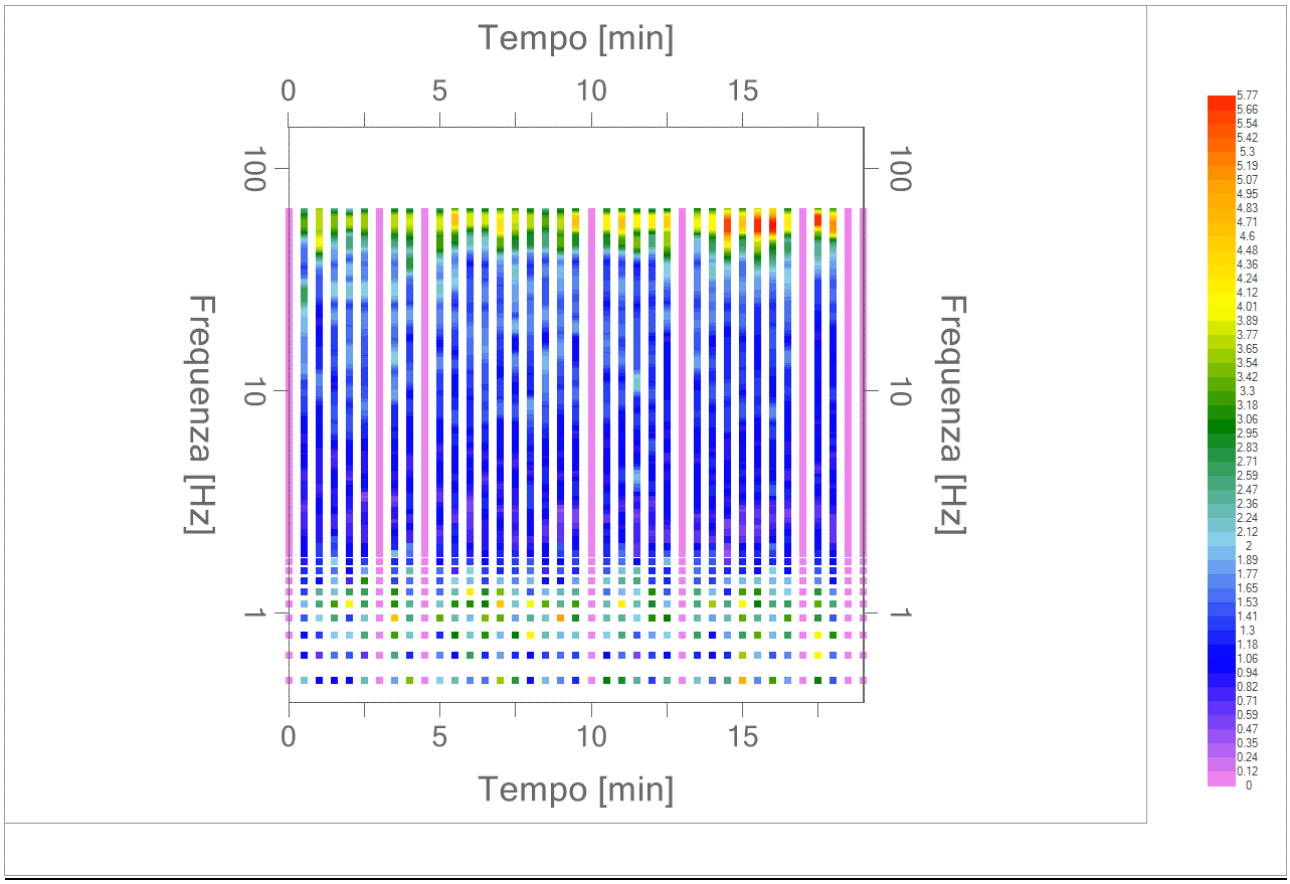
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.15 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media quadratica

Risultati:

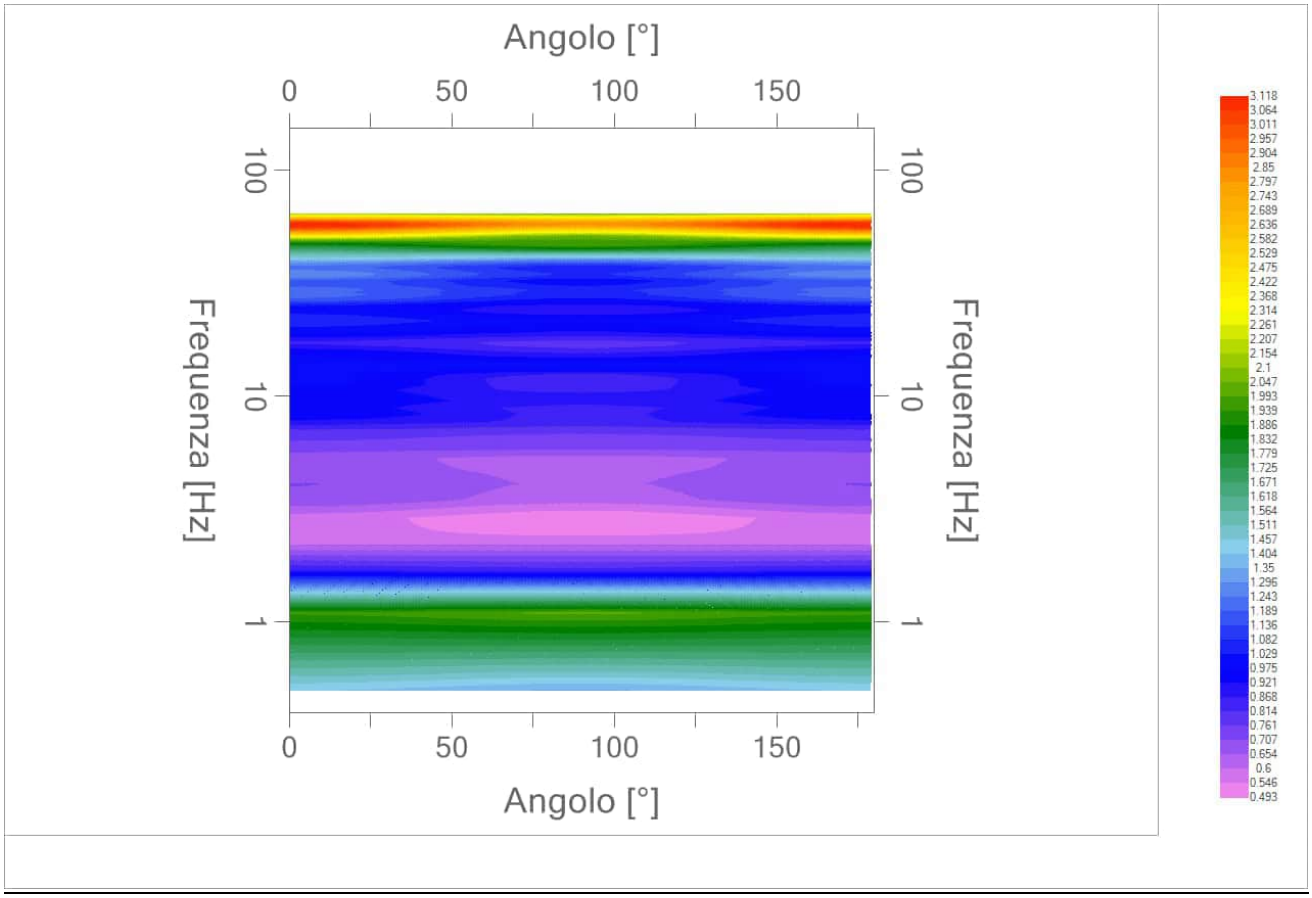
Frequenza del picco del rapporto H/V: 57.20 Hz ± 0.15 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 57.20 ± 0.15 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** Via Ettore Nadiani	
Cantiere	**Data** 26/09/2024	**Ora** 14.45
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_25	**File** FO_25.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☐ assente	☒ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				30
	camion	✓					
	passanti		✓				30
	altro	✓					
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

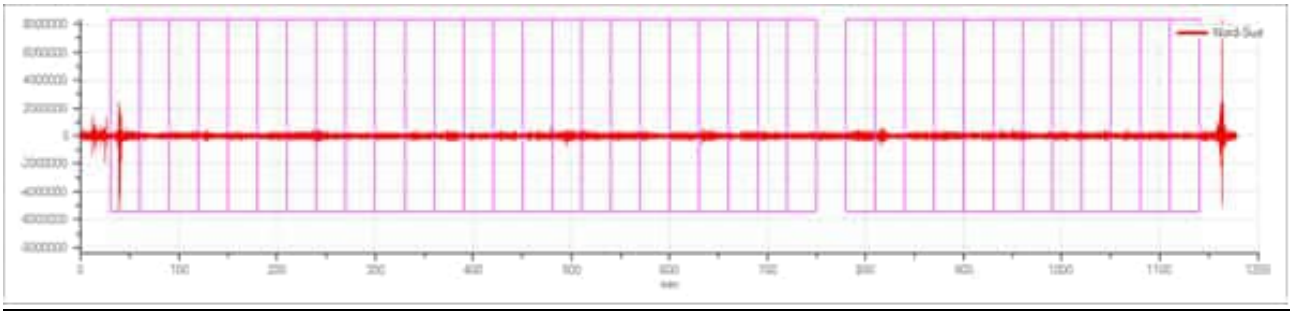
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245184
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

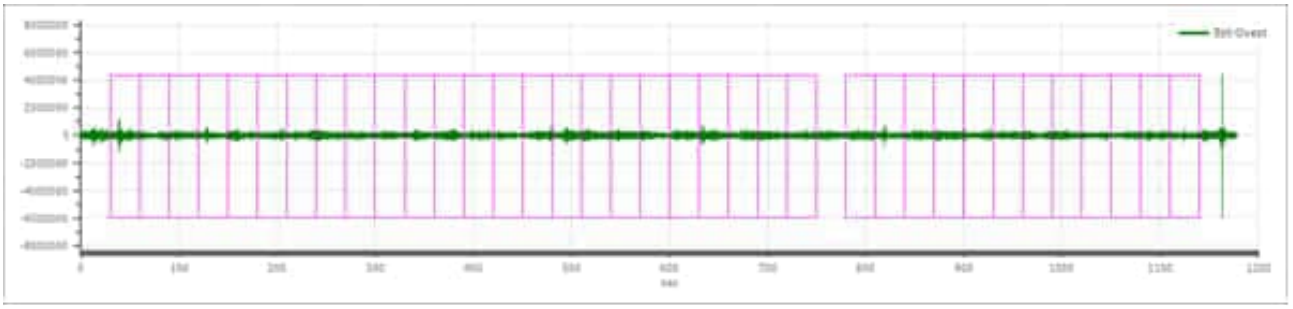
Dati riepilogativi:

Numero totale finestre selezionate:	36
Numero finestre incluse nel calcolo:	36
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

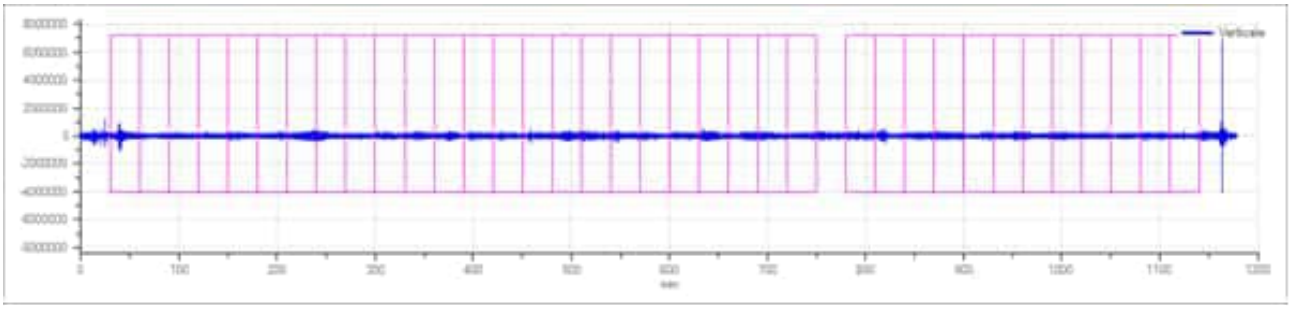
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

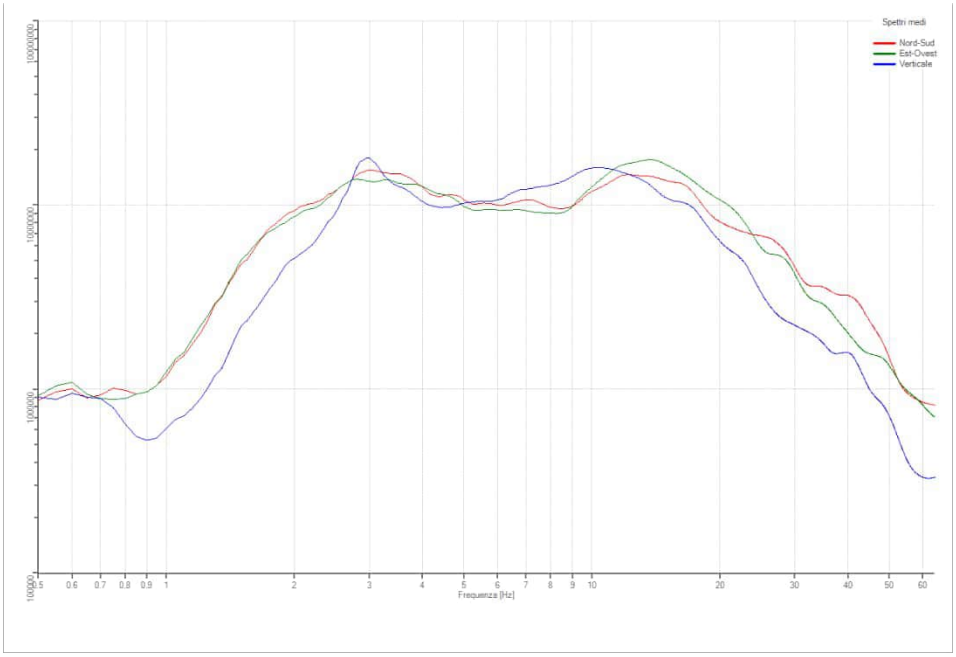


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

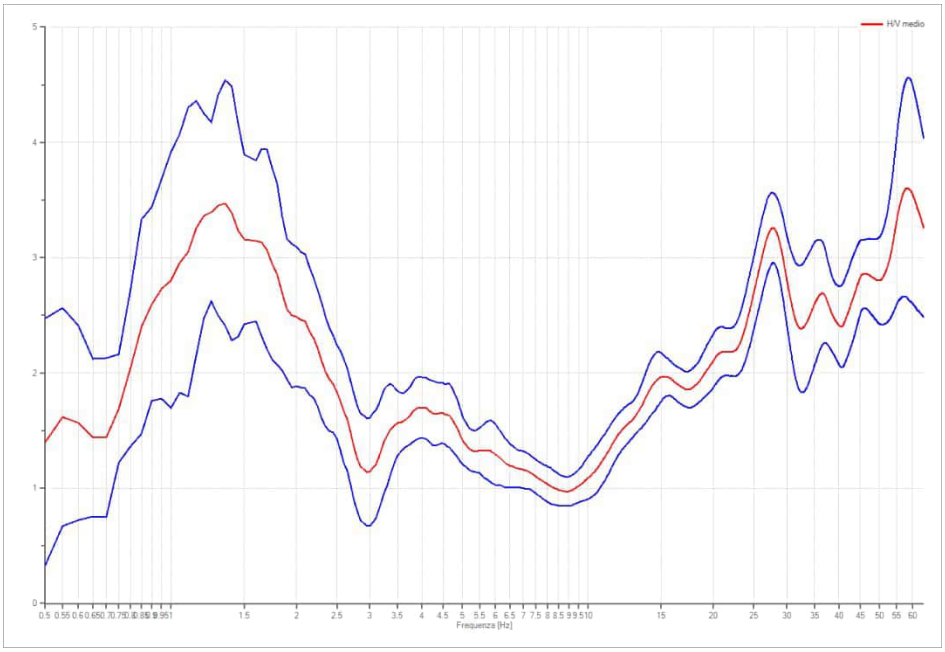
Dati riepilogativi:

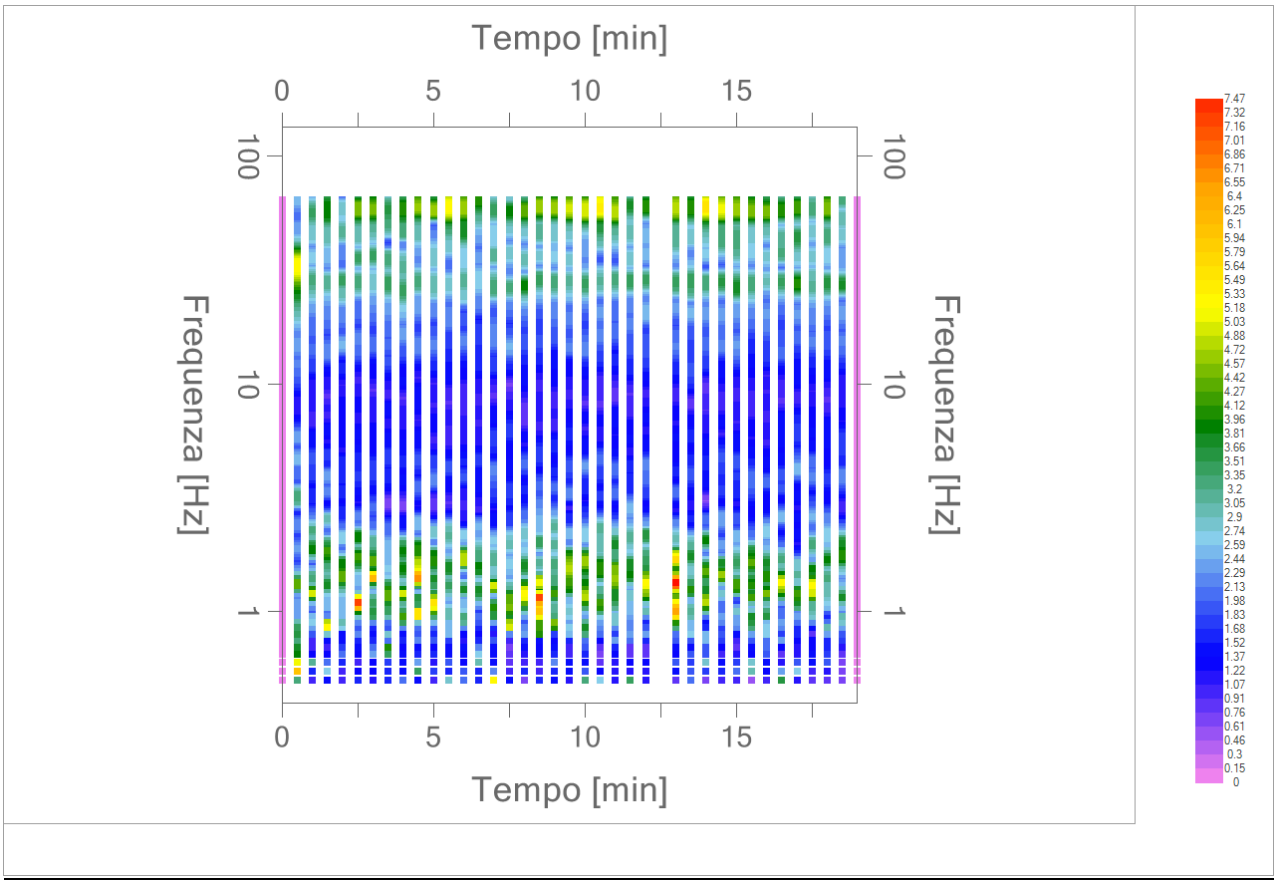
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.05 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media geometrica

Risultati:

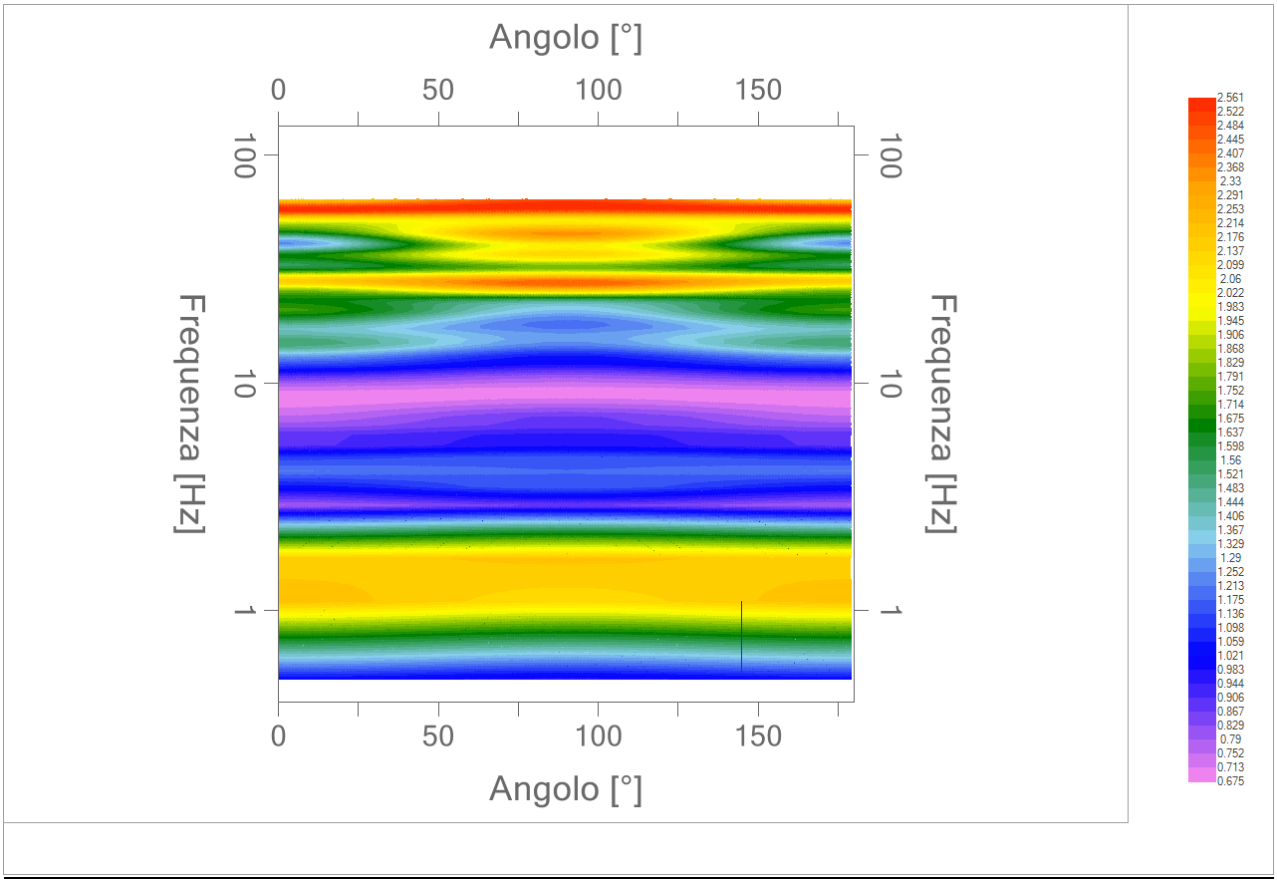
Frequenza del picco del rapporto H/V: 58.30 Hz ±0.26 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.75 ± 0.08 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	NO
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	NO
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** Rep. Cispadana	
Cantiere	**Data** 26/09/2024	**Ora** 8.25
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_26	**File** FO_26.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☐ sparse	☒ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				20
	camion		✓				
	passanti		✓				20
	altro cantiere						
Disturbo cont.	☐ assente	☒ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

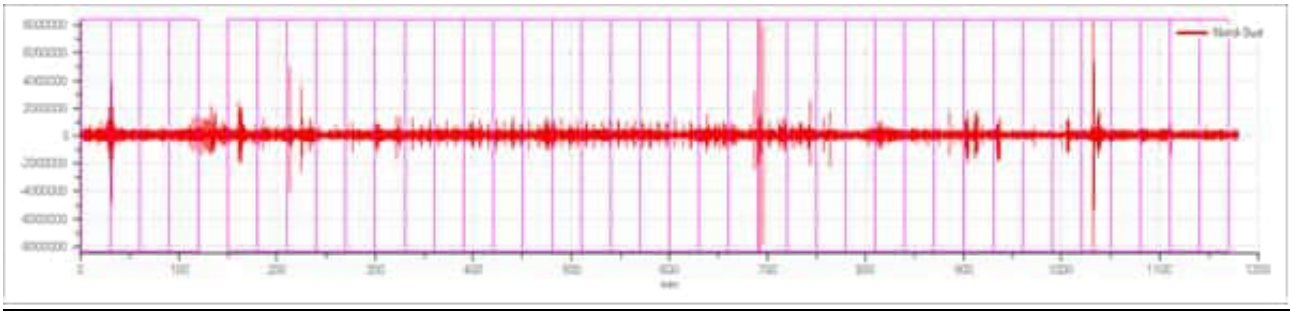
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245316
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

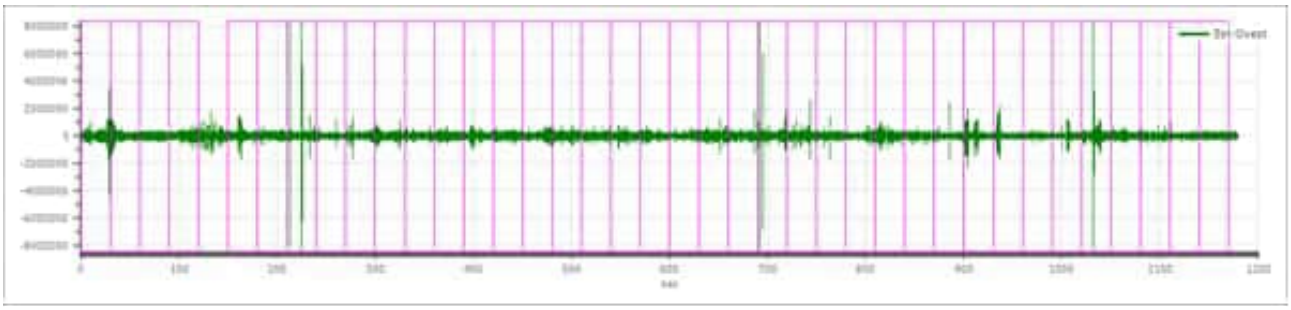
Dati riepilogativi:

Numero totale finestre selezionate:	38
Numero finestre incluse nel calcolo:	38
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

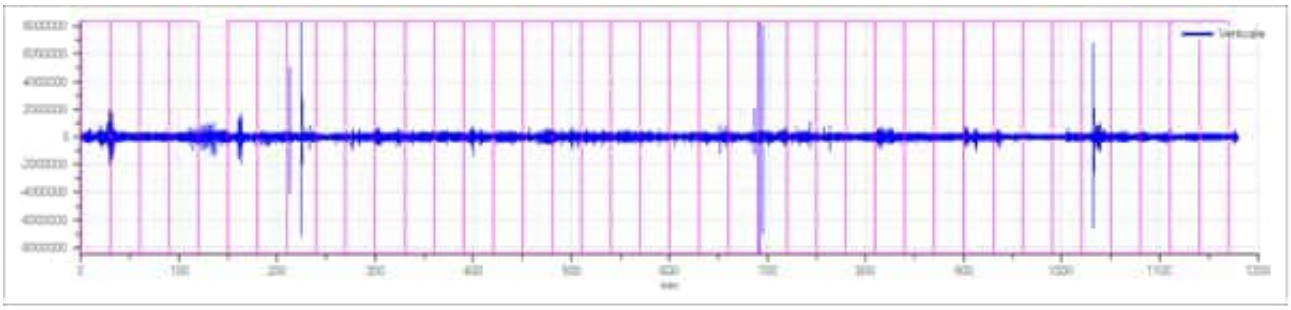
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

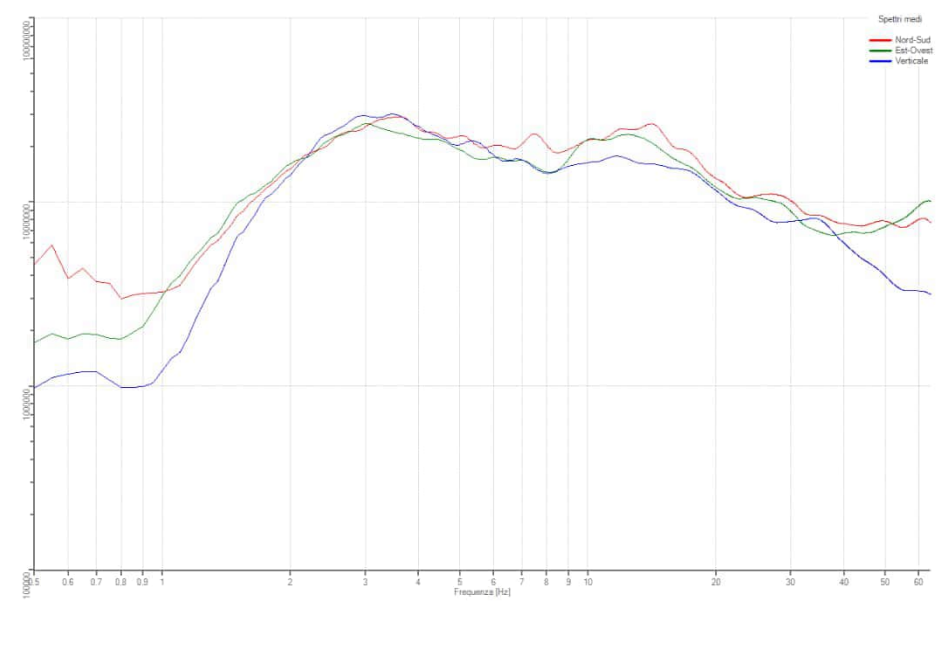


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

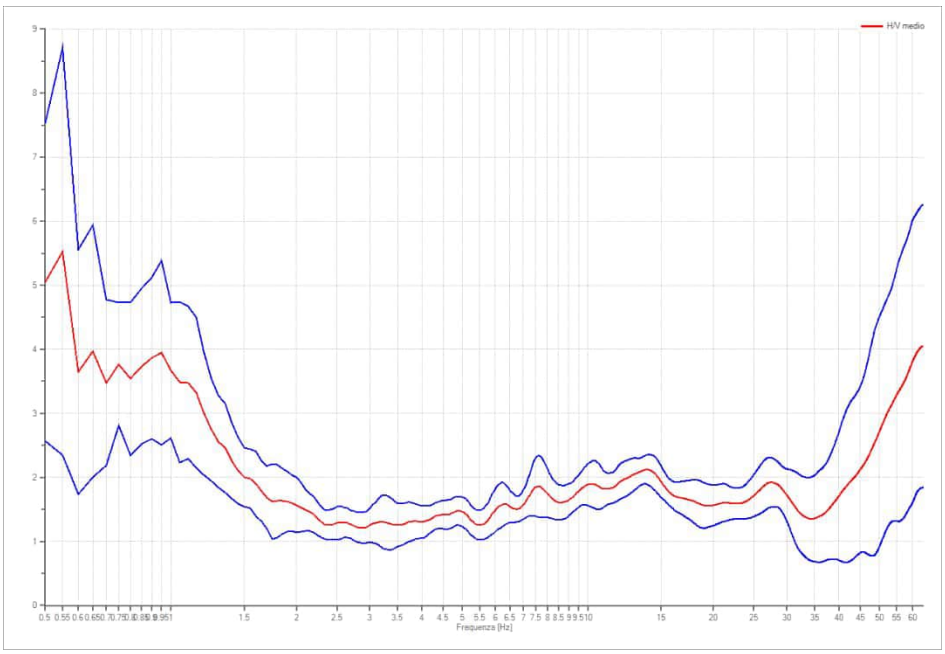
Dati riepilogativi:

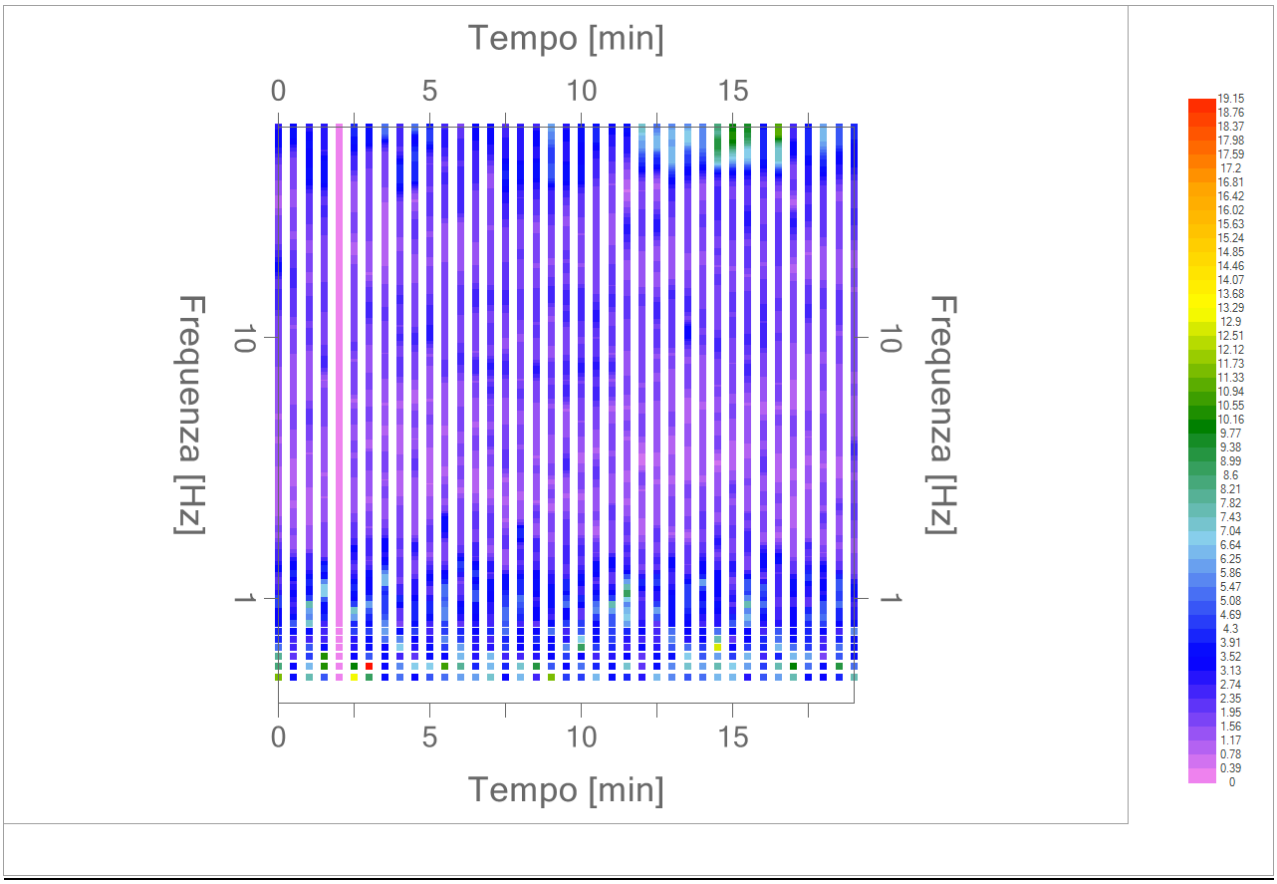
Frequenza massima: 64.00 Hz
Frequenza minima: 0.50 Hz
Passo frequenze: 0.05 Hz
Tipo lisciamento: Triangolare proporzionale
Percentuale di lisciamento: 10.00 %
Tipo di somma direzionale: Media geometrica

Risultati:

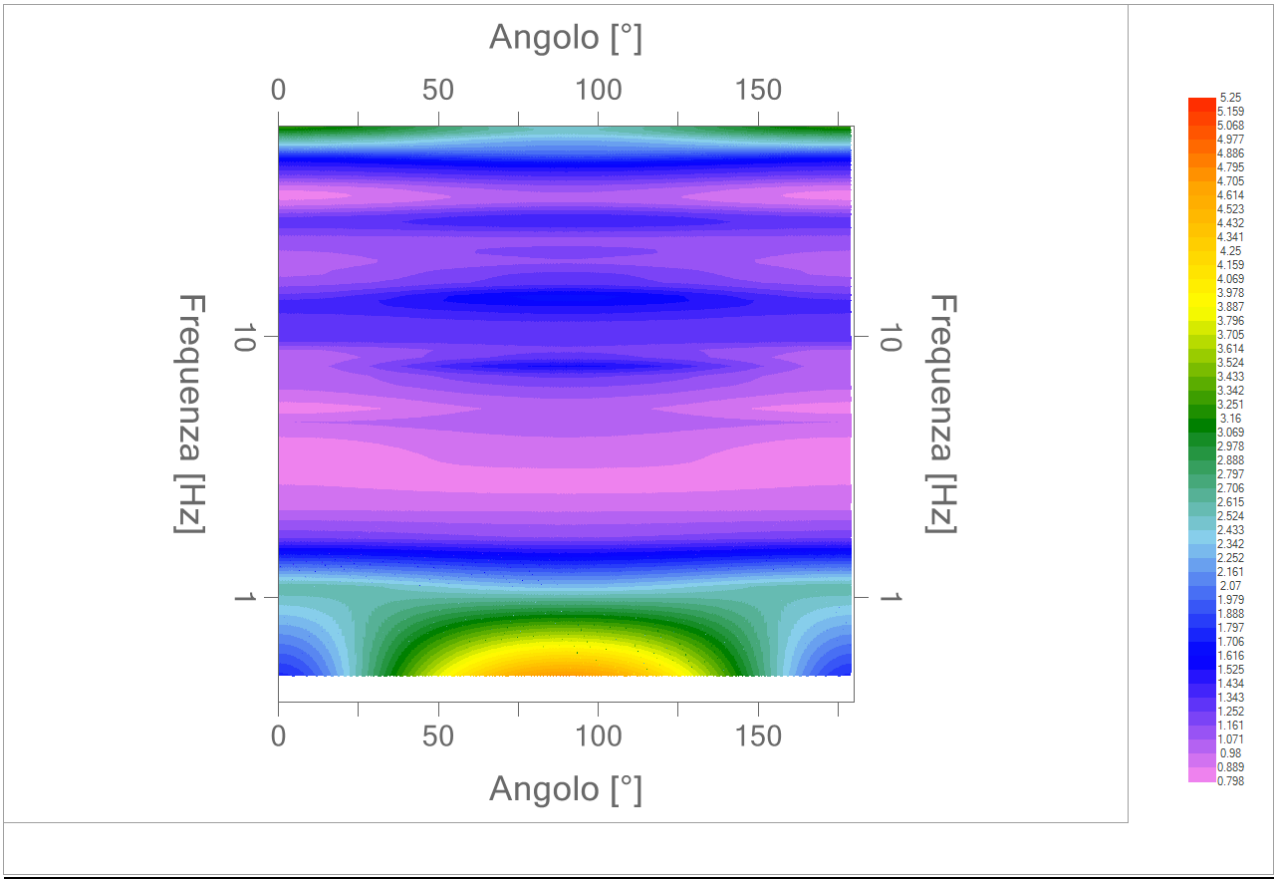
Frequenza del picco del rapporto H/V: 0.55 Hz ±0.58 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.75 ± 0.08 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	Ok
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20

PROVA HVSR

Comune Forlì	**Località** Via Giovanni Acquaderni	
Cantiere	**Data** 26/09/2024	**Ora** 15.20
Codice lavoro FRLI.00.2423 - MS3 Forlì		
Codice Prova FO_27	**File** FO_27.SAF	**Durata (min)** 20
Strumento Echo Tromo HVSR3	**Freq.camp.** 208 Hz	**F. sensore** 2.0 Hz
Operatore Dott. Geol. Matteo Bertolotti		

CONDIZIONI ATMOSFERICHE				
Vento	☒ assente	☐ debole (<5m/s)	☐ medio (5>v>30 m/s)	☐ forte (>30 m/s)
Pioggia	☒ assente	☐ debole	☐ media	☐ forte

TERRENO DI PROVA				
Suolo	☒ argilloso-limoso soffice	☐ argilloso-limoso duro	☒ con erba	☐ senza erba
	☐ ghiaia	☐ sabbia	☐ roccia	
	☐ suolo asciutto	☒ suolo umido	☐ suolo saturo	
Pavimentazione artificiale	☐ rilevato in ghiaia	☐ cemento/cls	☐ asfalto	☐ ceramica
	☐ altro:			
Accoppiamento sensore	☒ piedini infissi	☐ piedini da pavimento	☐ accoppiamento artificiale	☐ sabbia ☐ altro

STRUTTURE CIRCOSTANTI				
Abitazioni	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Fabbriche	☒ assenti	☐ sparse	☐ fitte	☐ molto fitte
Ponti	☒ assenti		☐ presenti	
Strutt. sotterranee	☒ assenti	☐ presenti:		
Piante	☐ assenti	☒ sparse	☐ fitte	☐ molto fitte

SORGENTI RUMORE							
Disturbo discontinuo		assente	raro	moderato	forte	molto forte	Distanza (m)
	auto		✓				100
	camion	✓					
	passanti		✓				100
	altro cantiere						
Disturbo cont.	☒ assente	☐ presente:					

OSSERVAZIONI:

Tracce in input

Dati riepilogativi:

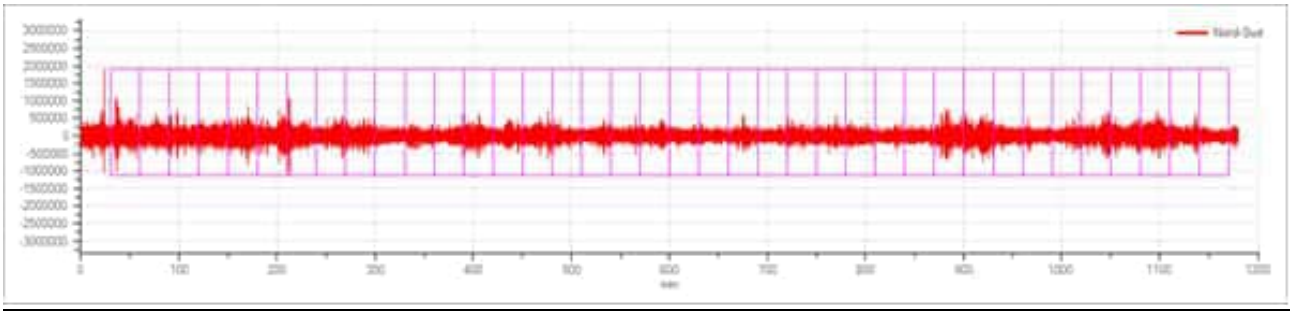
Numero tracce:	3
Durata registrazione:	1179 s
Frequenza di campionamento:	208.00Hz
Numero campioni:	245312
Direzioni tracce:	Nord-Sud; Est-Ovest; Verticale.

Finestre selezionate

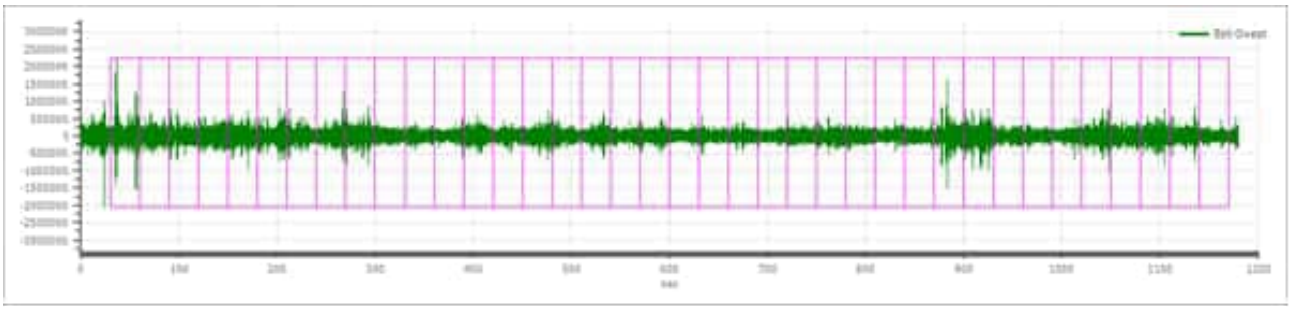
Dati riepilogativi:

Numero totale finestre selezionate:	38
Numero finestre incluse nel calcolo:	38
Dimensione temporale finestre:	30.00 s
Tipo di lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %

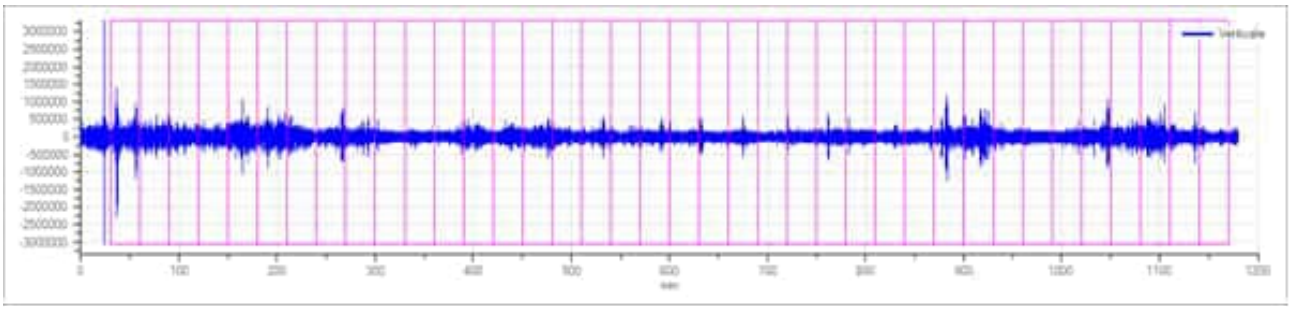
Grafici tracce con finestre selezionate:



Traccia e finestre selezionate in direzione Nord-Sud

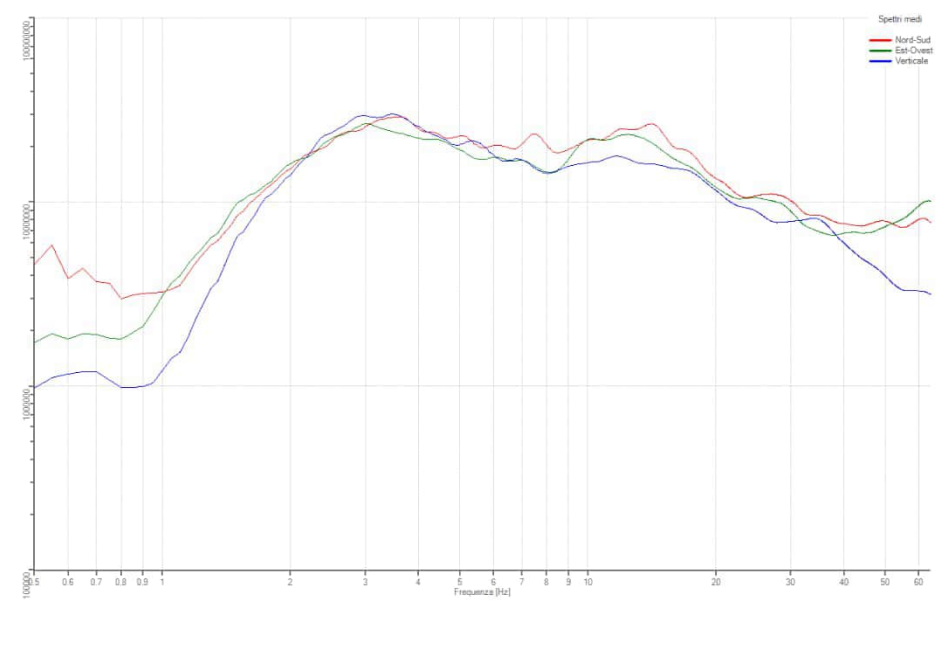


Traccia e finestre selezionate in direzione Est-Ovest



Traccia e finestre selezionate in direzione Verticale

SPETTRI DELLE SINGOLE COMPONENTI



Rapporto spettrale H/V

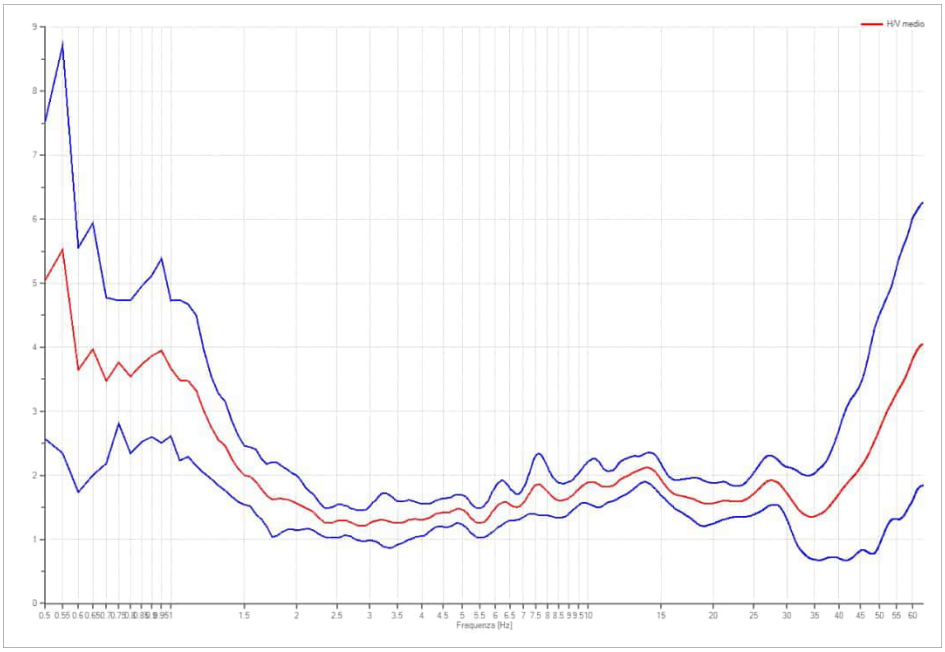
Dati riepilogativi:

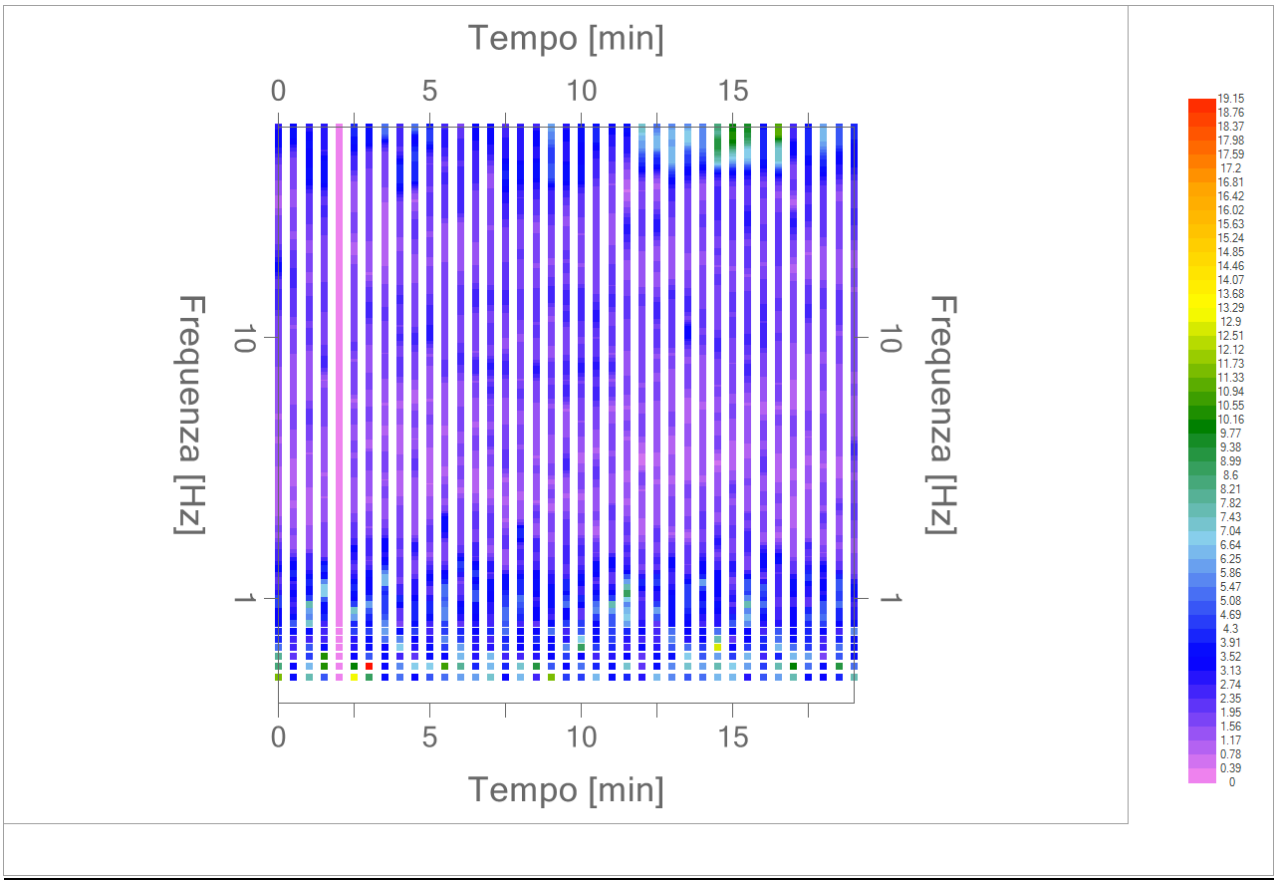
Frequenza massima:	64.00 Hz
Frequenza minima:	0.50 Hz
Passo frequenze:	0.05 Hz
Tipo lisciamento:	Triangolare proporzionale
Percentuale di lisciamento:	10.00 %
Tipo di somma direzionale:	Media geometrica

Risultati:

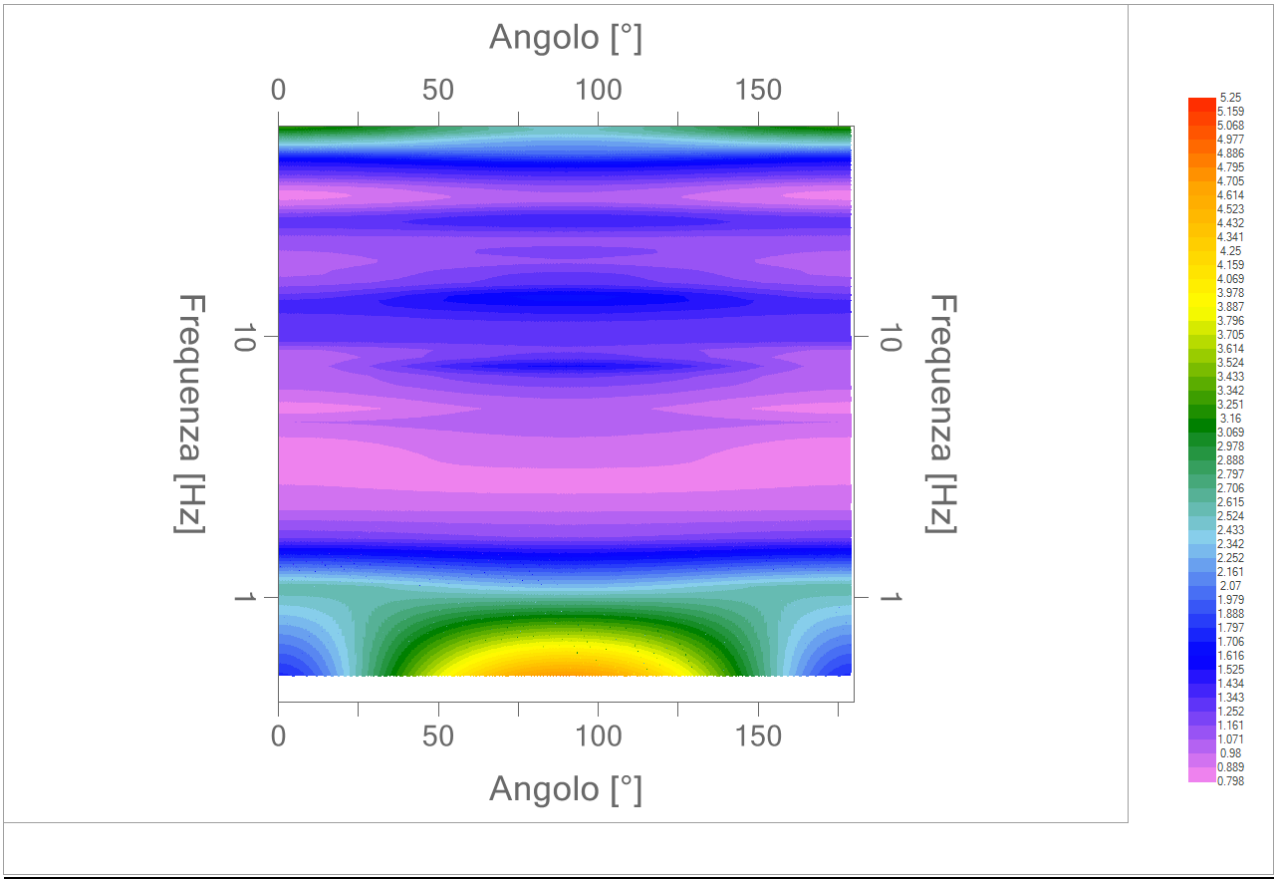
Frequenza del picco del rapporto H/V: 1.25 Hz ±0.31 Hz

Grafico rapporto spettrale H/V naturale





Mappa della stazionarietà degli spettri



Direzionalità H/V

Verifica secondo le linee guida SESAME, 2005

Picco H/V a 44.75 ± 0.08 Hz (nell'intervallo 0.50 – 20.0 Hz).

Criteri per una curva H/V affidabile [Tutti 3 dovrebbero risultare soddisfatti]	
$f_0 > 10 / L_w$	OK
$n_c(f_0) > 200$	OK
$\sigma_A(f) < 2$ per $0.5f_0 < f < 2f_0$ se $f_0 > 0.5$Hz $\sigma_A(f) < 3$ per $0.5f_0 < f < 2f_0$ se $f_0 < 0.5$Hz	OK
Criteri per un picco H/V chiaro [Almeno 5 su 6 dovrebbero essere soddisfatti]	
Esiste f^- in $[f_0/4, f_0]$ | $A_{H/V}(f^-) < A_0 / 2$	OK
Esiste f^+ in $[f_0, 4f_0]$ | $A_{H/V}(f^+) < A_0 / 2$	OK
$A_0 > 2$	OK
$f_{picco}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	OK
$\sigma_f < \varepsilon(f_0)$	OK
$\sigma_A(f_0) < \theta(f_0)$	OK

L_w	lunghezza della finestra
n_w	numero di finestre usate nell'analisi
$n_c = L_w n_w f_0$	numero di cicli significativi
f	frequenza attuale
f_0	frequenza del picco H/V
σ_f	deviazione standard della frequenza del picco H/V
$\varepsilon(f_0)$	valore di soglia per la condizione di stabilità $\sigma_f < \varepsilon(f_0)$
A_0	ampiezza della curva H/V alla frequenza f_0
$A_{H/V}(f)$	ampiezza della curva H/V alla frequenza f
f^-	frequenza tra $f_0/4$ e f_0 alla quale $A_{H/V}(f^-) < A_0/2$
f^+	frequenza tra f_0 e $4f_0$ alla quale $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	deviazione standard di $A_{H/V}(f)$, $\sigma_A(f)$ è il fattore per il quale la curva $A_{H/V}(f)$ media deve essere moltiplicata o divisa
$\sigma_{logH/V}(f)$	deviazione standard della funzione log $A_{H/V}(f)$
$\theta(f_0)$	valore di soglia per la condizione di stabilità $\sigma_A(f) < \theta(f_0)$

Valori di soglia per σ_f e $\sigma_A(f_0)$					
Intervallo di freq. [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	0.25 f_0	0.2 f_0	0.15 f_0	0.10 f_0	0.05 f_0
$\theta(f_0)$ per $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
log $\theta(f_0)$ per $\sigma_{logH/V}(f_0)$	0.48	0.40	0.30	0.25	0.20