

AUTORITA' DI BACINO
DI RILIEVO REGIONALE



PROVINCIA
DI SAVONA

PIANO DI BACINO VARATELLA

Piano stralcio per la tutela dal rischio idrogeologico
di cui all'art.1, comma 1 del D.L. 11/06/1998 n.180,
convertito in legge 03/08/1998 n.267 e s.m.

VERIFICHE IDRAULICHE

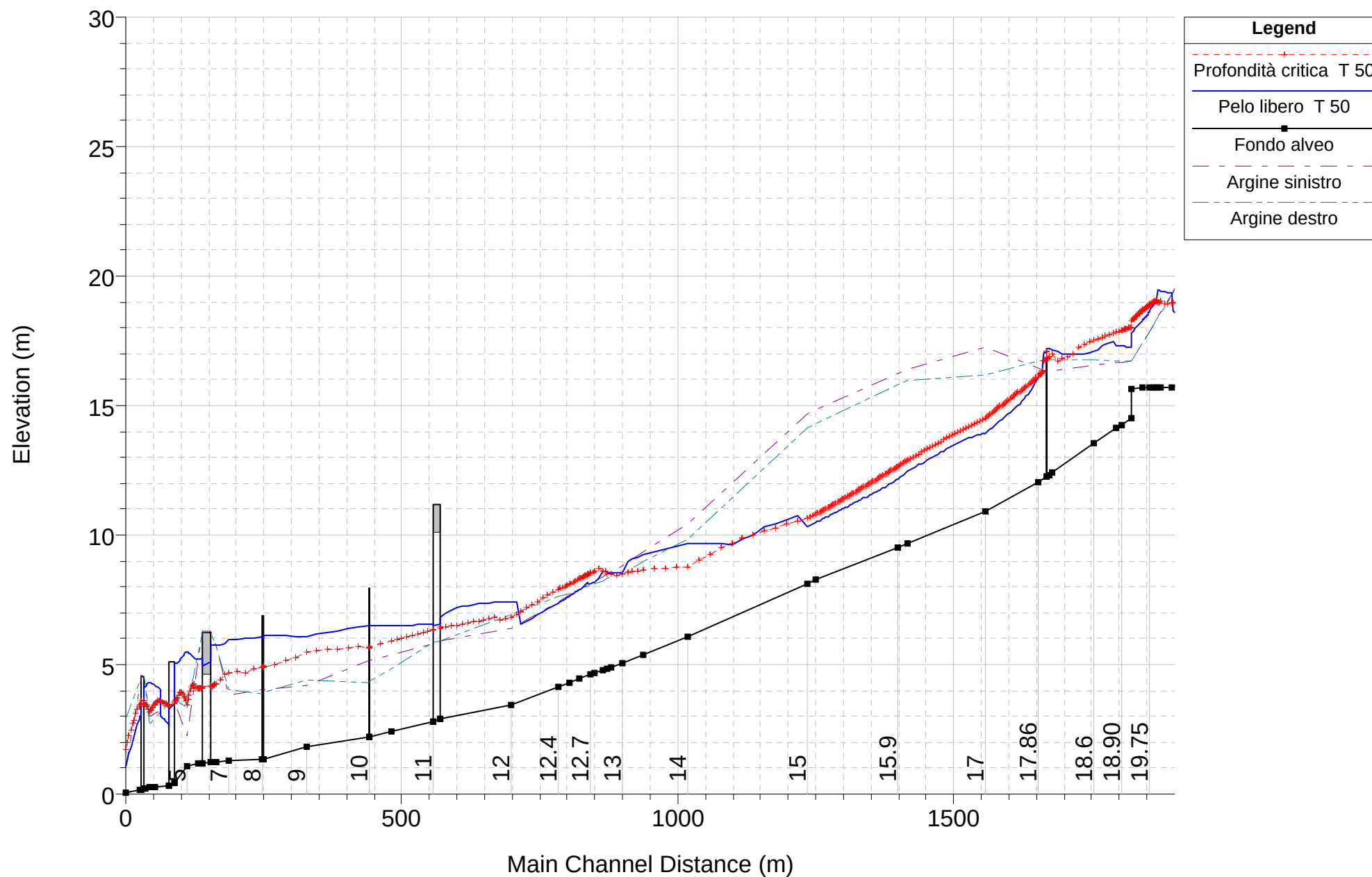
AGGIORNAMENTI PIANO DI BACINO VARATELLA – VERIFICHE IDRAULICHE

DELIBERA	OGGETTO	DESCRIZIONE	ATTI MODIFICATI
DGP n.52 del 15/02/2005	Attuazione del comma 15 dell'art. 97 della L.R. 18/1999 relativo alle procedure di modifica ed integrazione dei piani di bacino di rilievo regionale	Modifiche degli atti di piano a seguito di evidenziazione di errori di priorità di stampa, controllo incrociato dei tematismi, comunicazioni da parte di altri Servizi di questo Settore come approvati nel Comitato Tecnico Provinciale della Difesa del Suolo seduta del 21/09/2004	– TAV. 10 Carta del Rischio Geomorfologico (CTP 21/09/04) CTR 245060
		Riperimetrazione delle fasce di inondabilità in sponda sinistra del T. Varatella nel Comune di Toirano e modifica dei relativi atti di piano in seguito a realizzazione opere idrauliche così come approvata nel Comitato Tecnico Provinciale della Difesa del Suolo sedute del 25/11/2004 e del 25/01/05.	– Relazione generale di piano – Verifiche idrauliche – TAV. 9 Carta delle fasce di inondabilità (CTP 25/1/05) CTR (245070) – TAV. 11 Carta del rischio idraulico (CTP 25/1/05) CTR (245060-245070) – TAV. 14 Carta delle aree inondabili (CTP 25/1/05) CTR (245070)

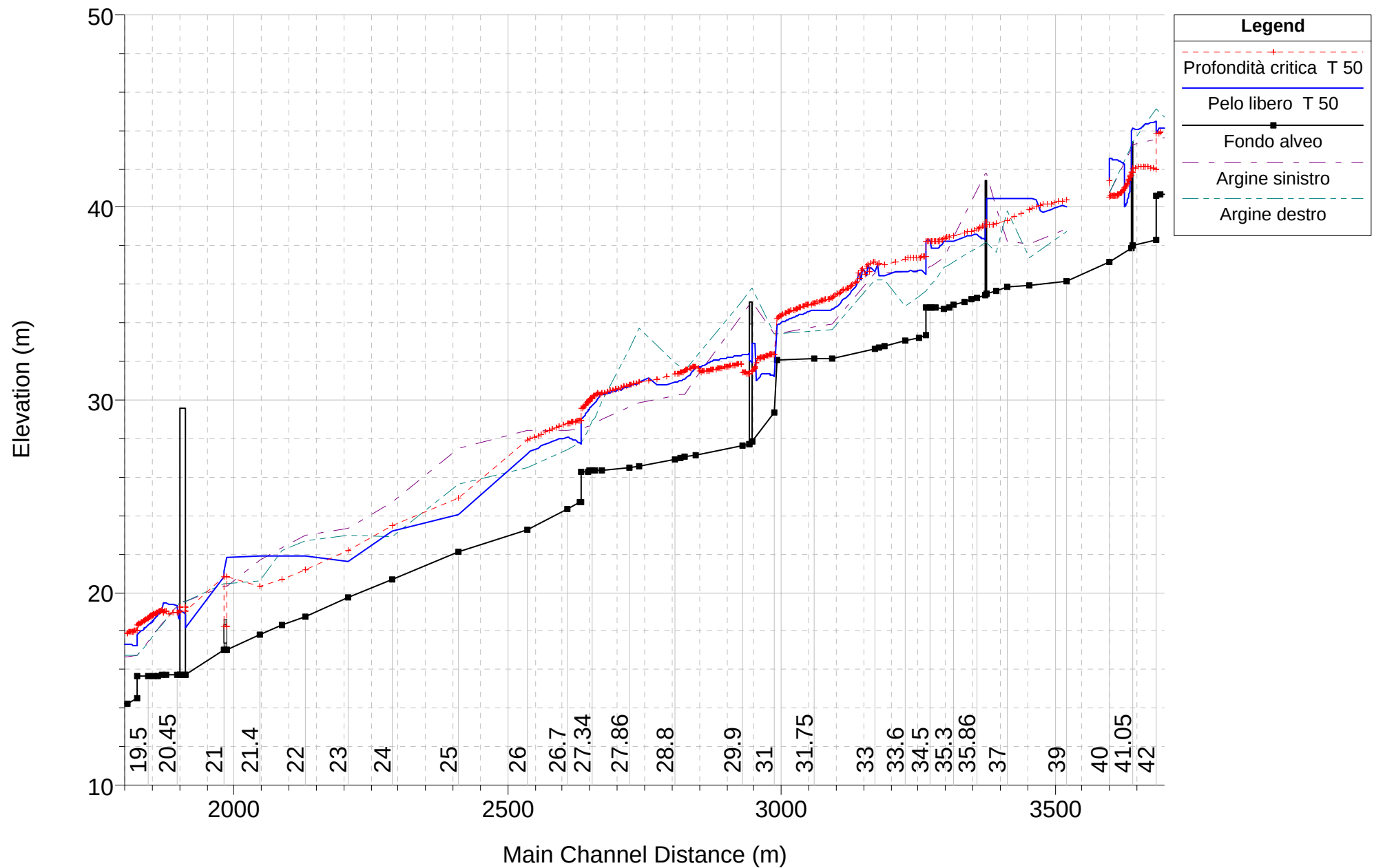
PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO
PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI

VARATELLA

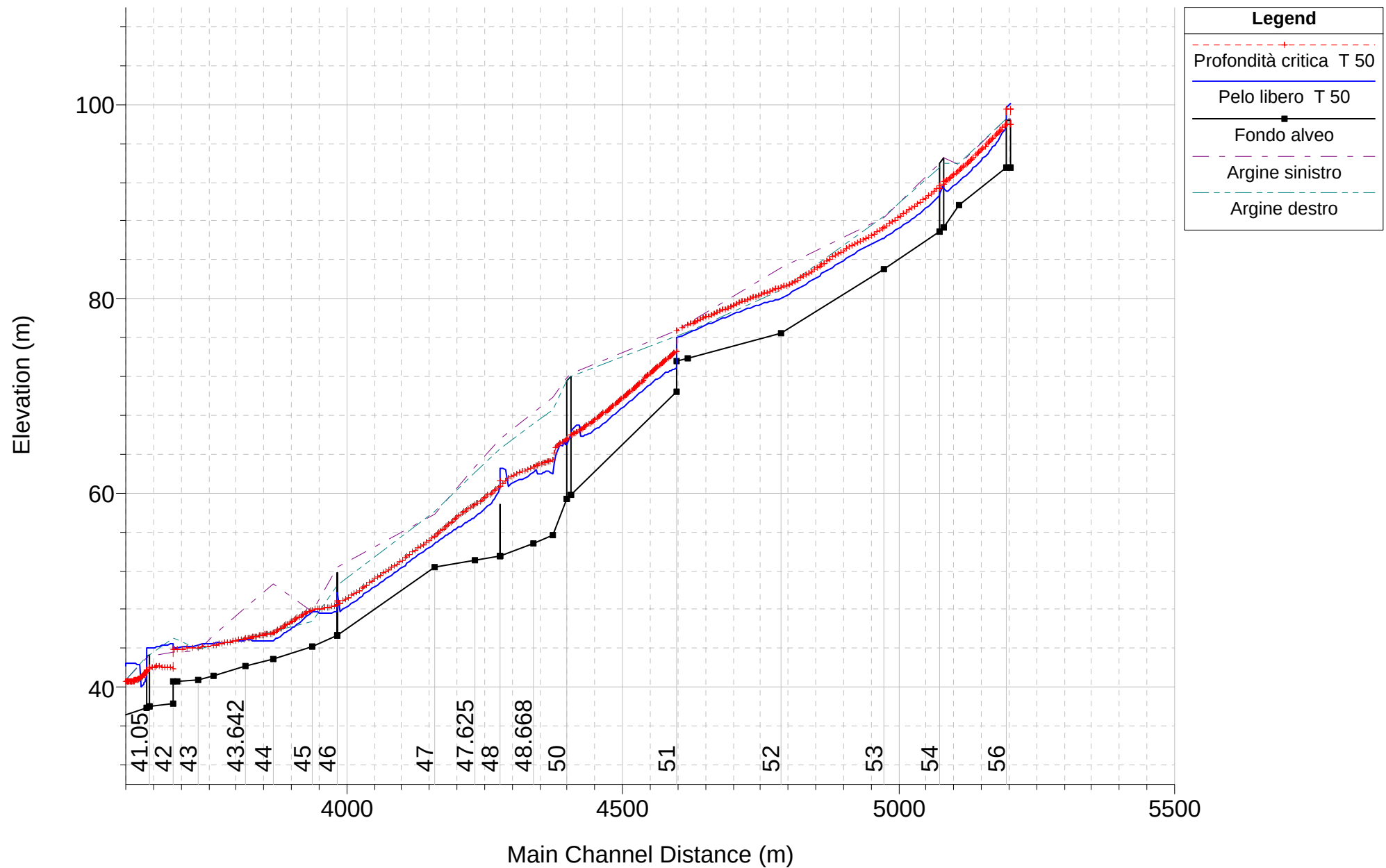
Torrente Varatella – profilo longitudinale di moto permanente T=50 anni



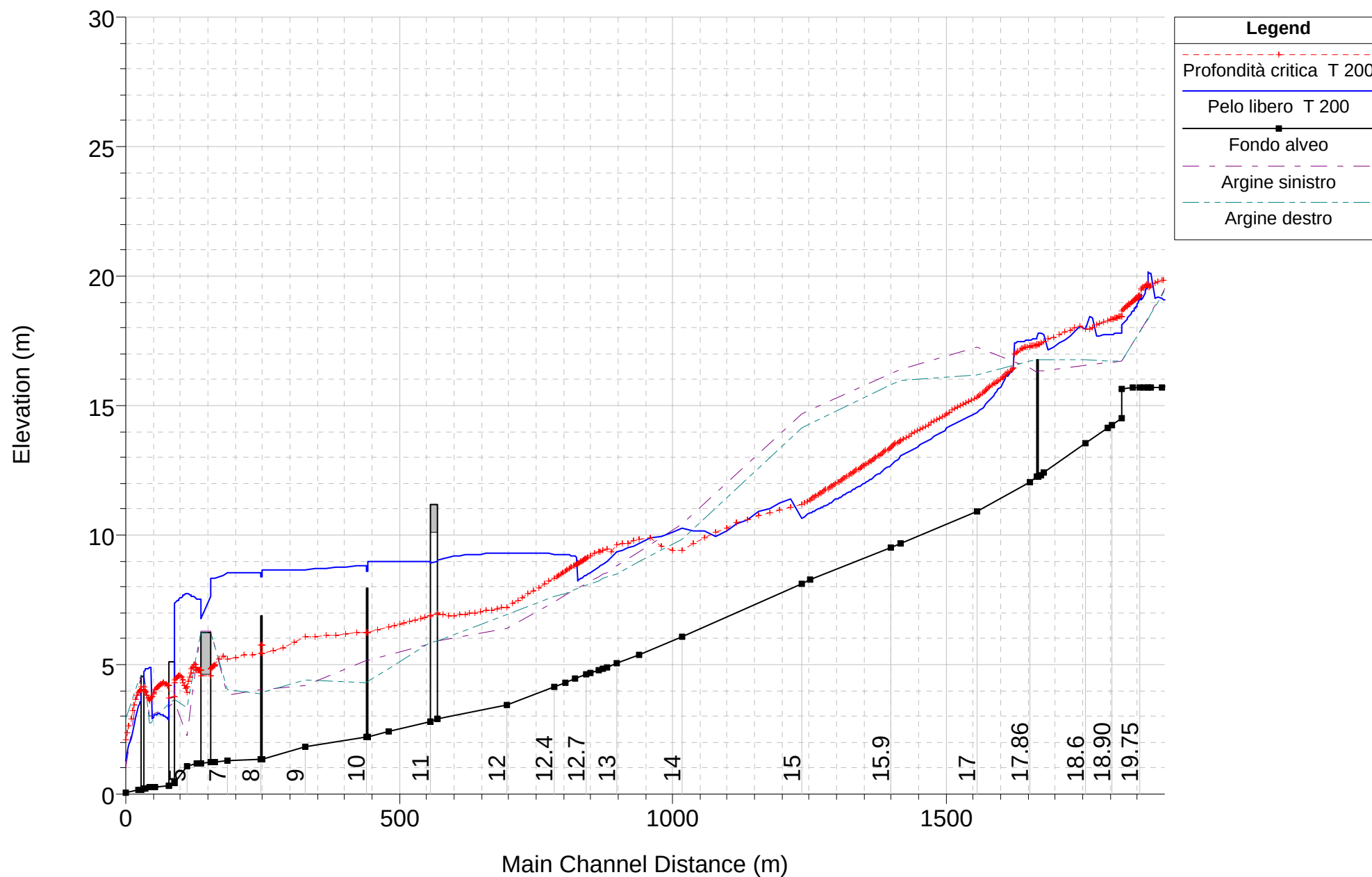
Torrente Varatella – profilo longitudinale di moto permanente T=50 anni



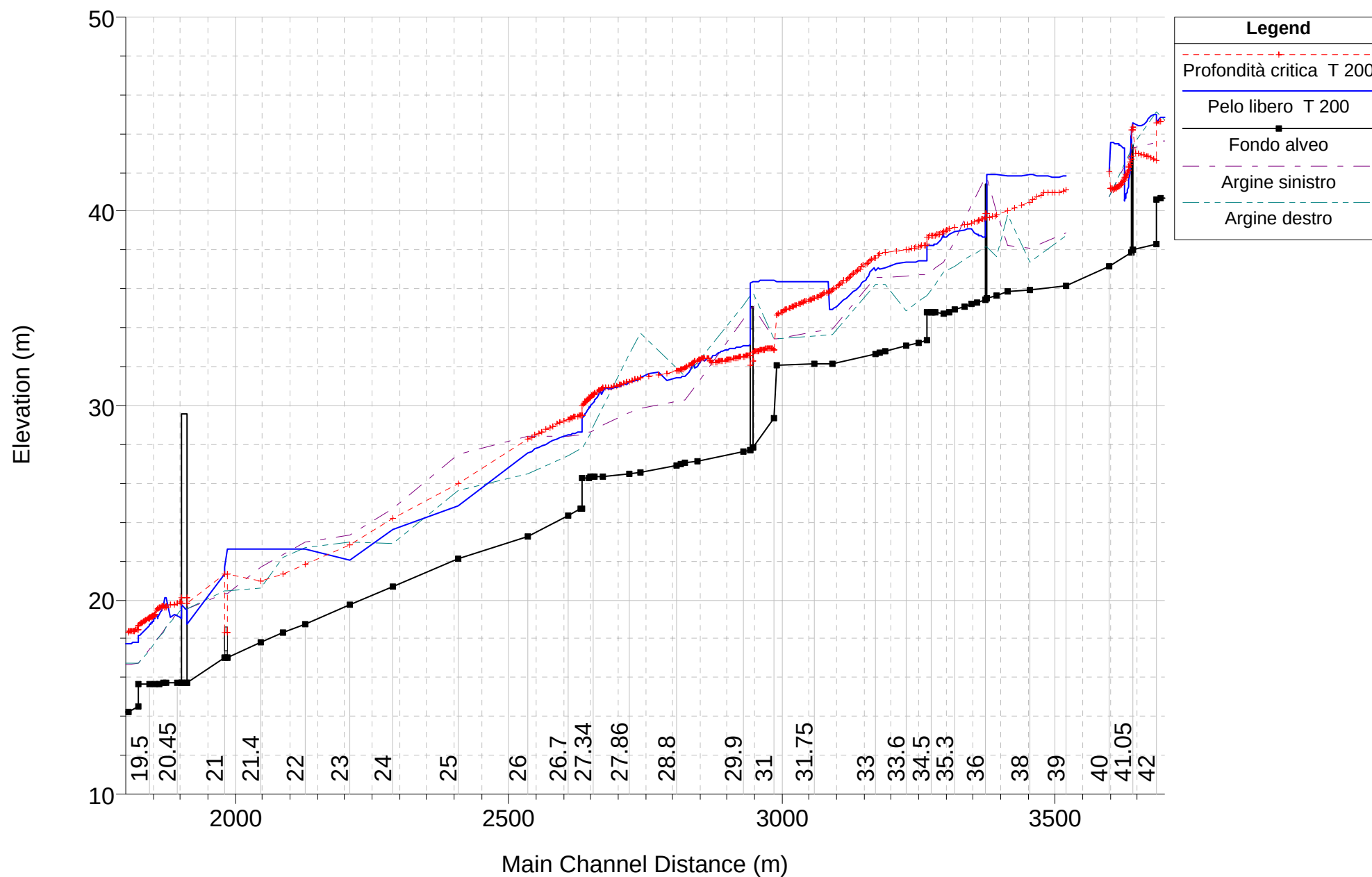
Torrente Varatella – profilo longitudinale di moto permanente T=50 anni



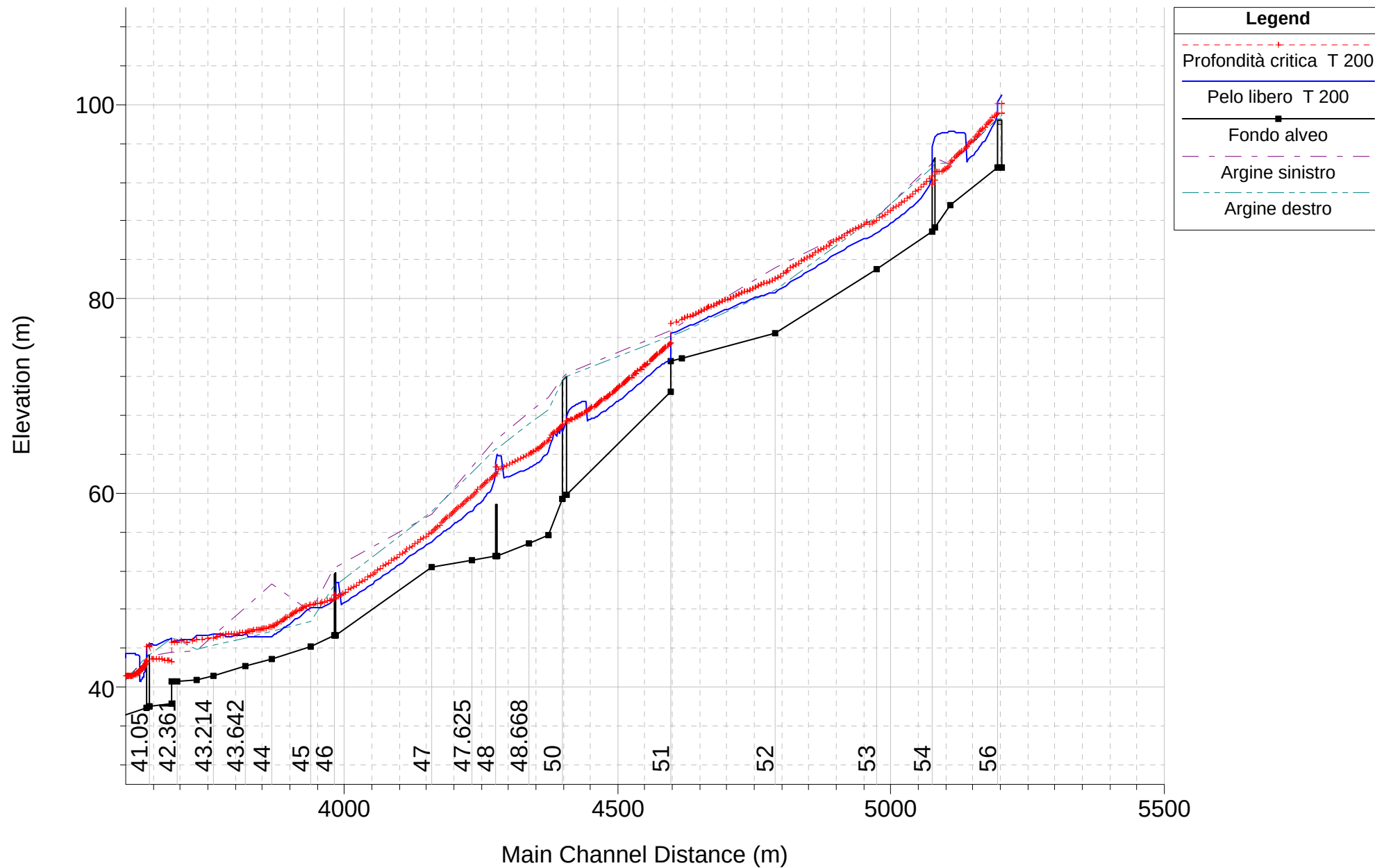
Torrente Varatella – profilo longitudinale di moto permanente T=200 anni



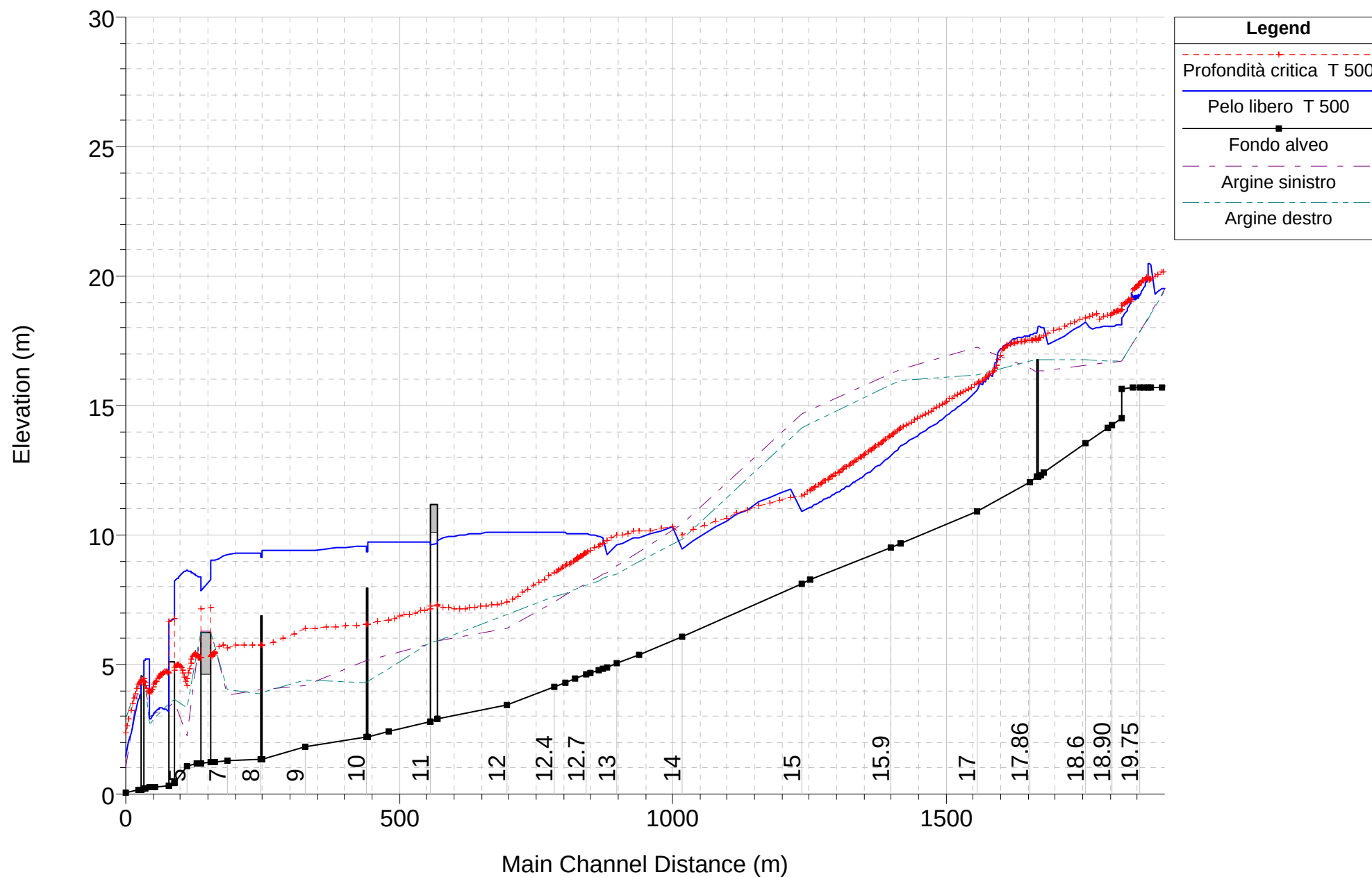
Torrente Varatella – profilo longitudinale di moto permanente T=200 anni



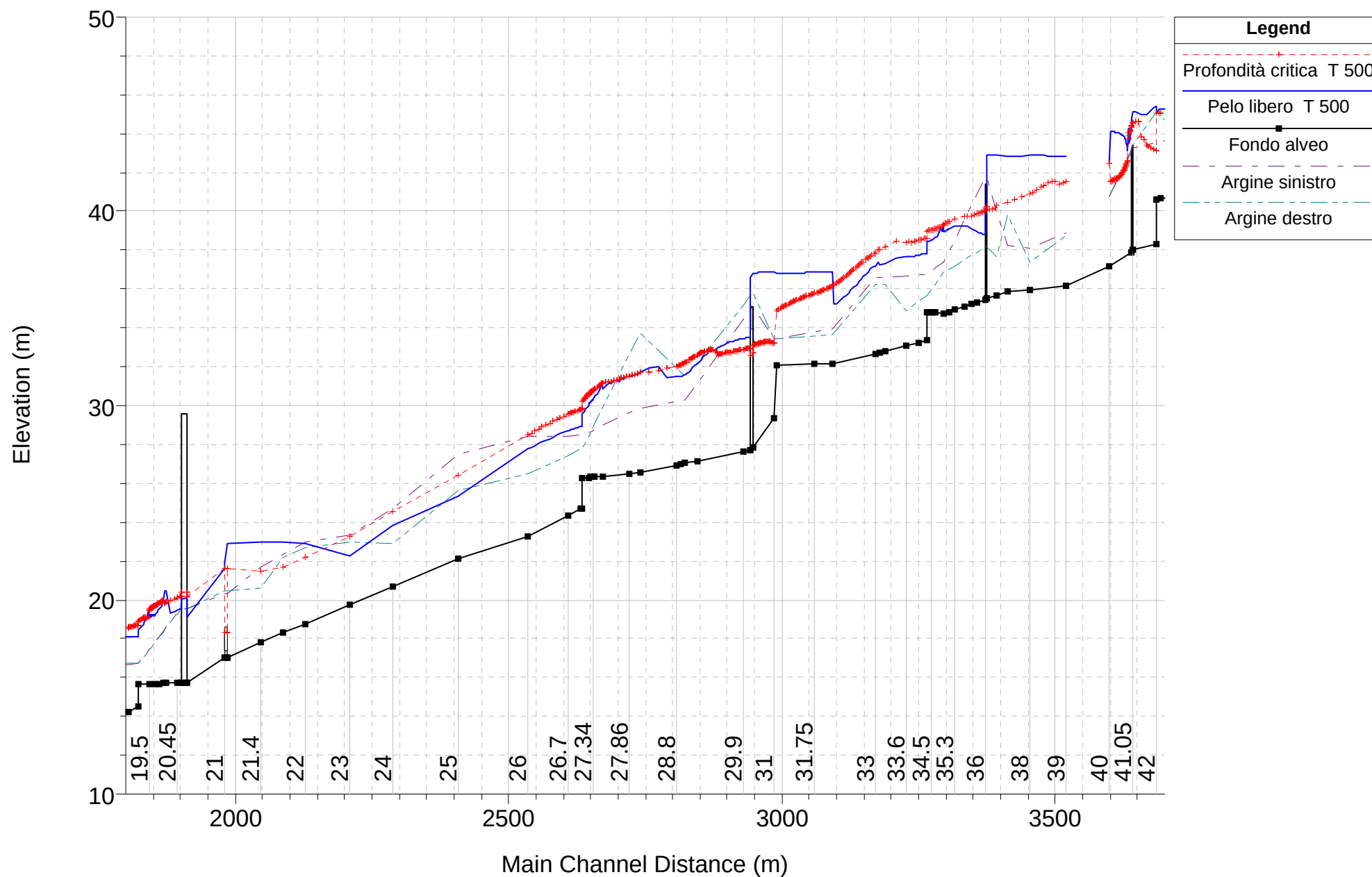
Torrente Varatella – profilo longitudinale di moto permanente T=200 anni



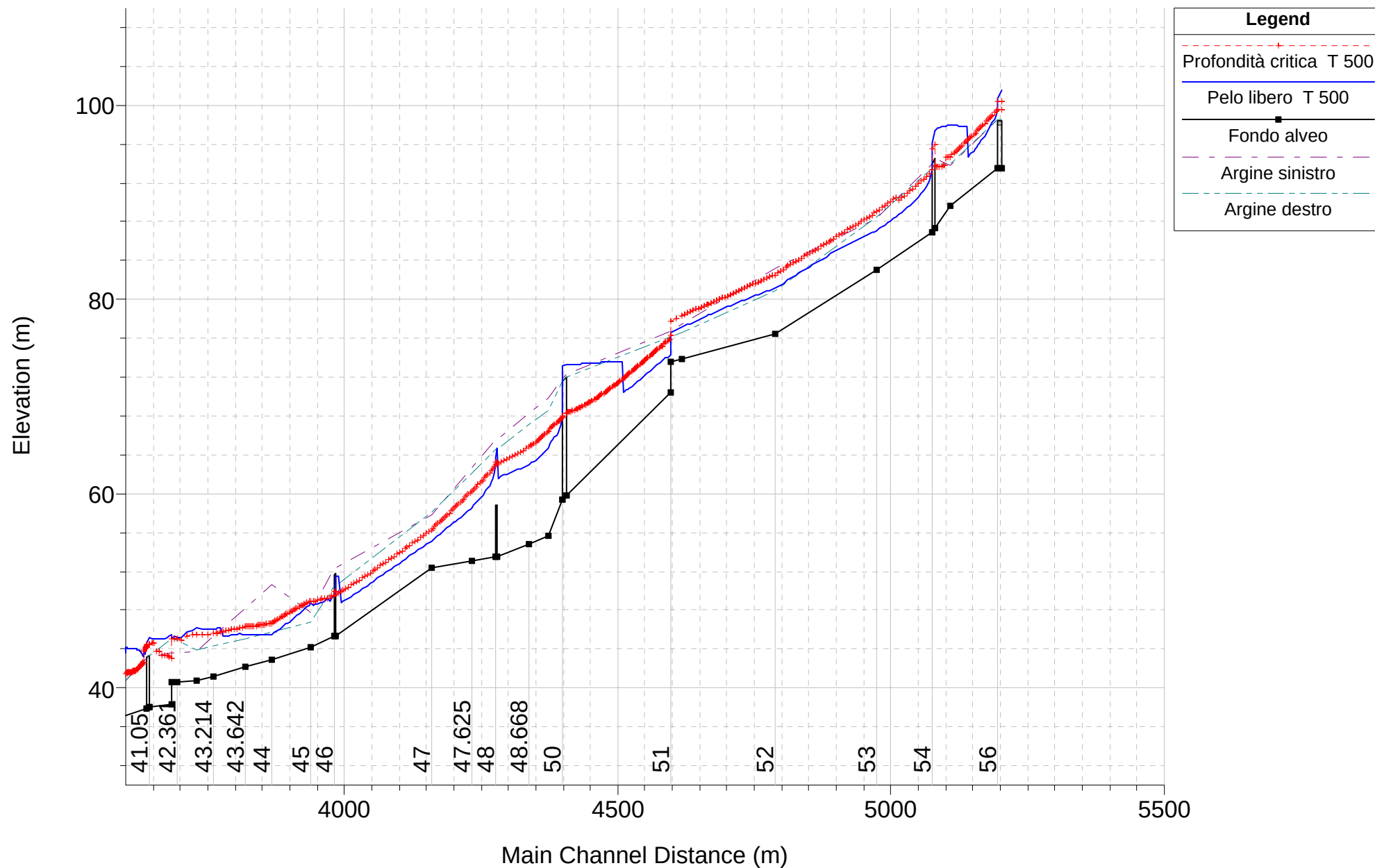
Torrente Varatella – profilo longitudinale di moto permanente T=500 anni



Torrente Varatella – profilo longitudinale di moto permanente T=500 anni



Torrente Varatella – profilo longitudinale di moto permanente T=500 anni



GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO
LIBERO IN CONDIZIONI DI MOTO PERMANENTE
PER LE PORTATE $T=50, 200, 500$ ANNI

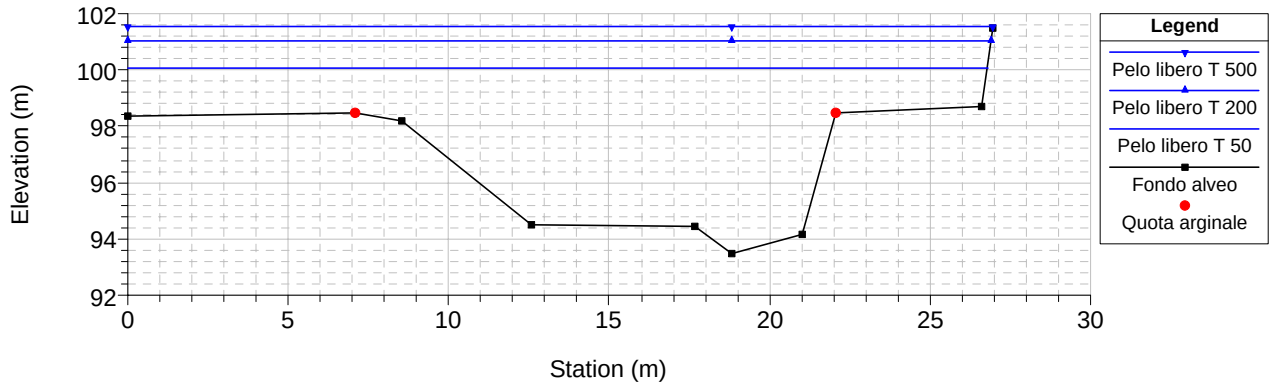
VARATELLA

DALLA SEZ. 56
ALLA SEZ. 1

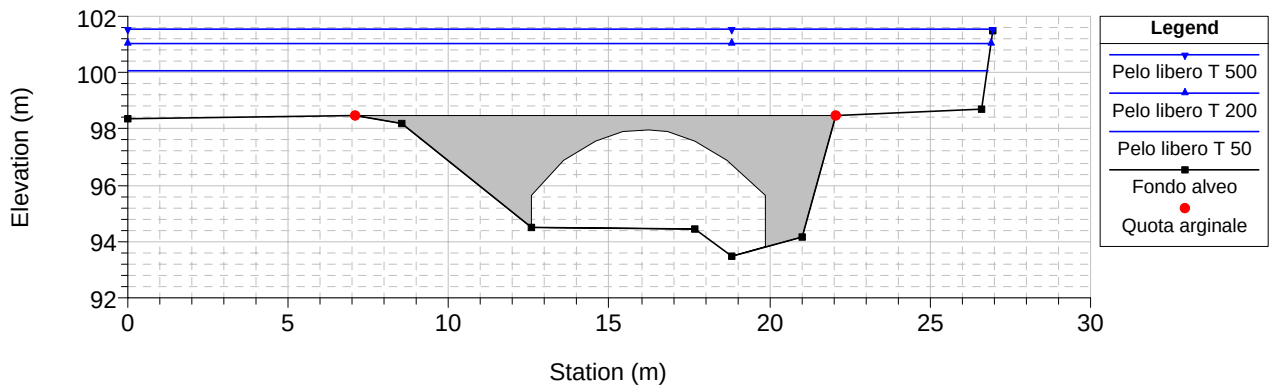
TORRENTE VARATELLA

Sezioni trasversali

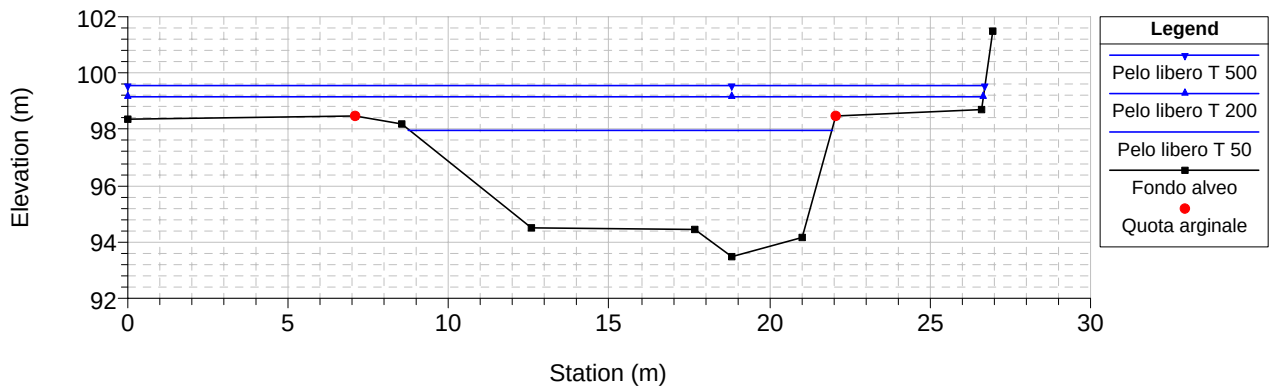
RS = 56.1



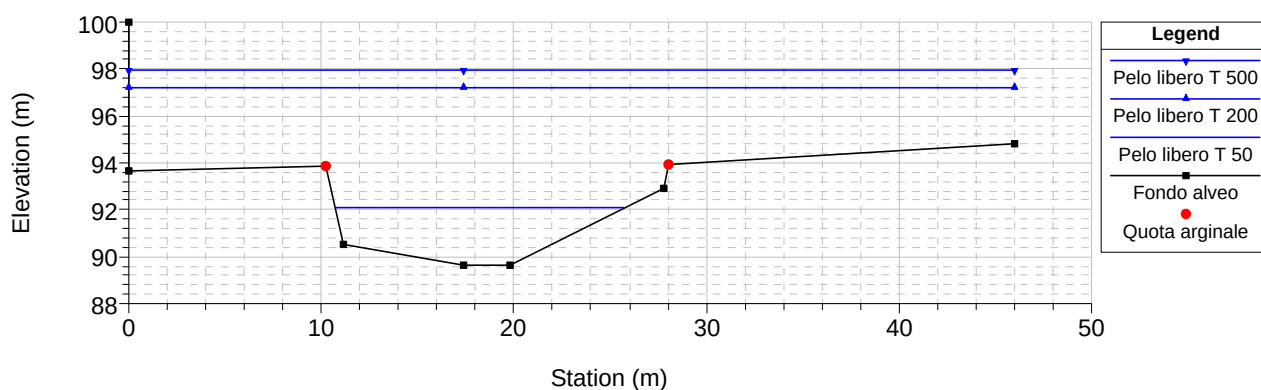
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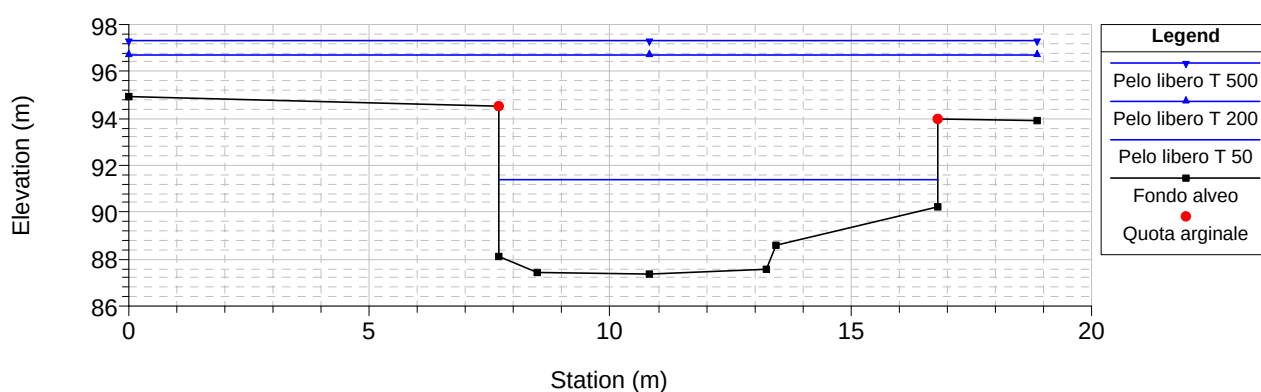
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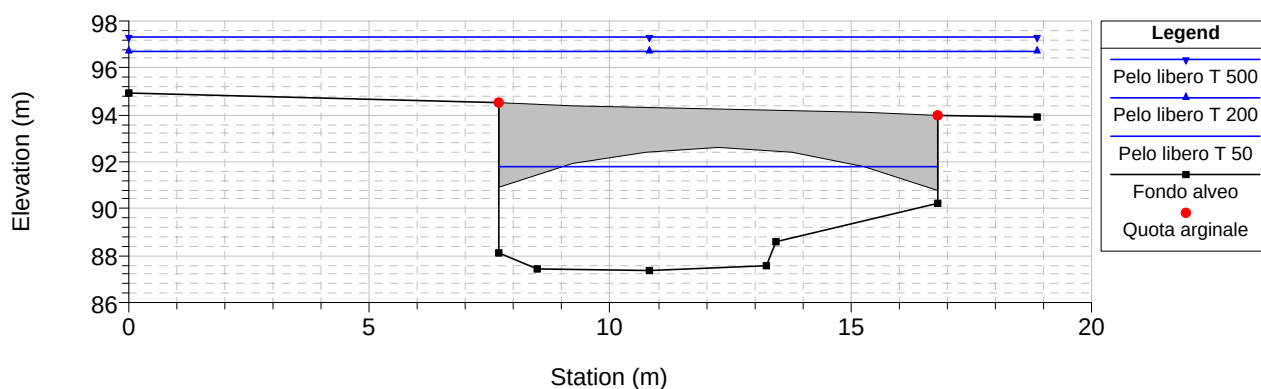
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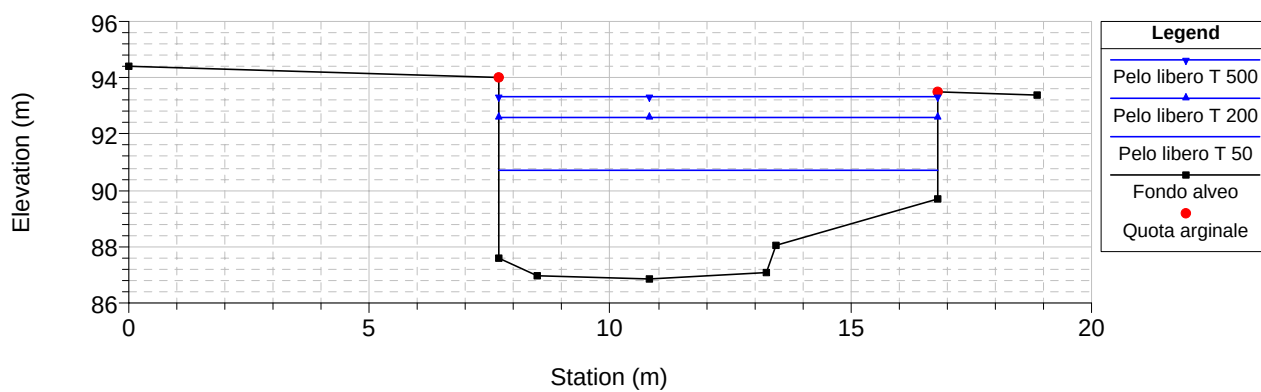
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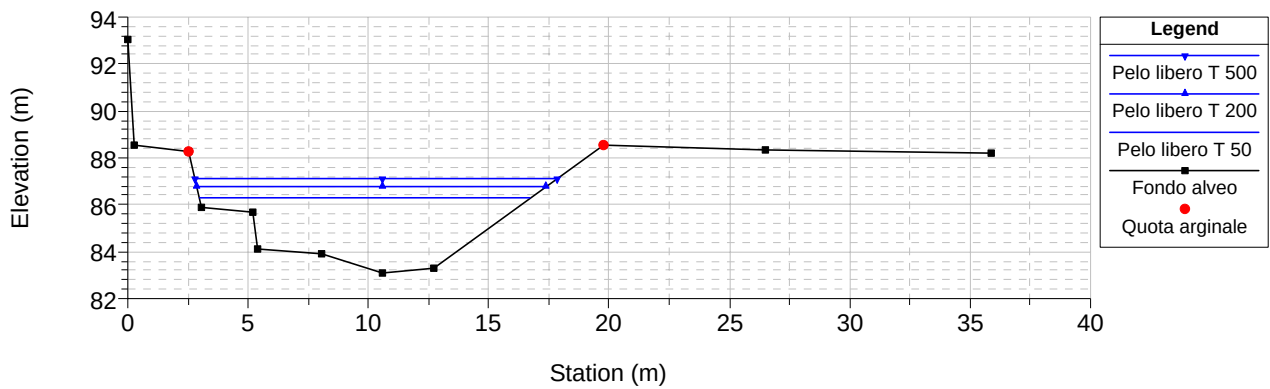
RS = 54.05 BR



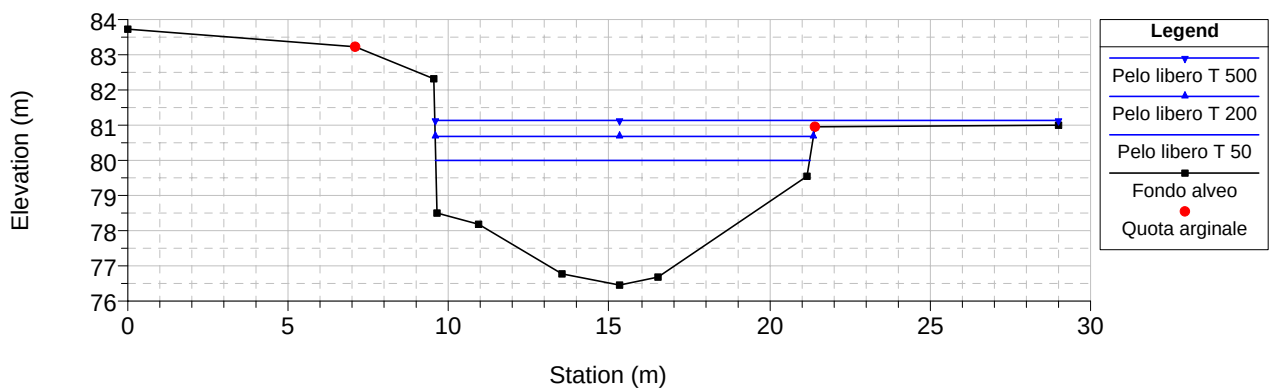
RS = 54



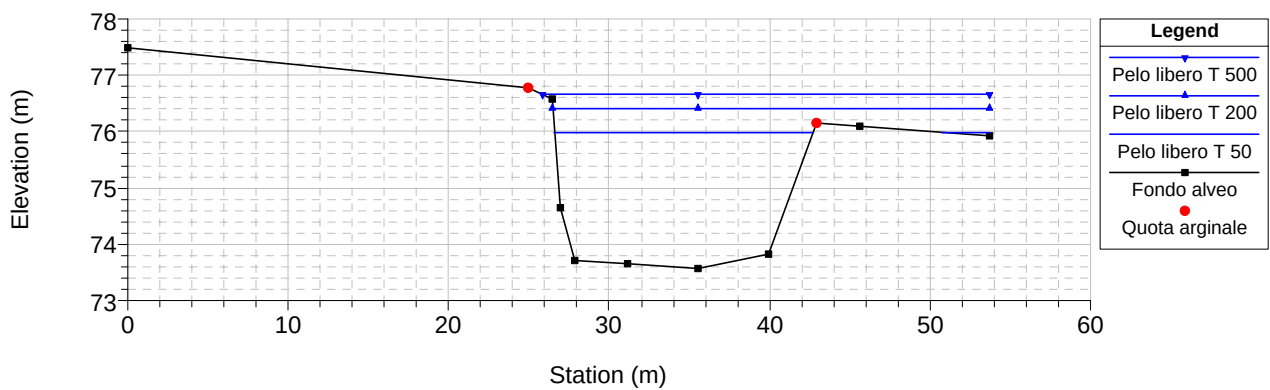
RS = 53



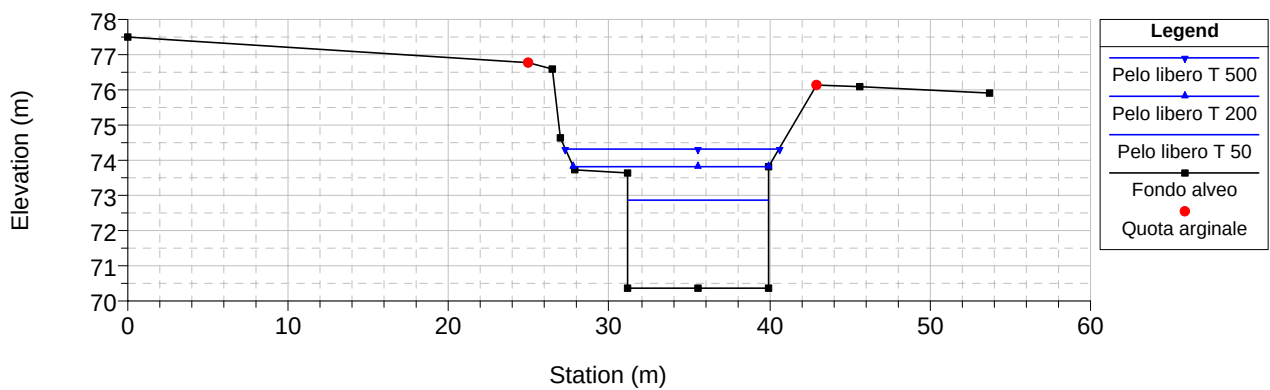
RS = 52



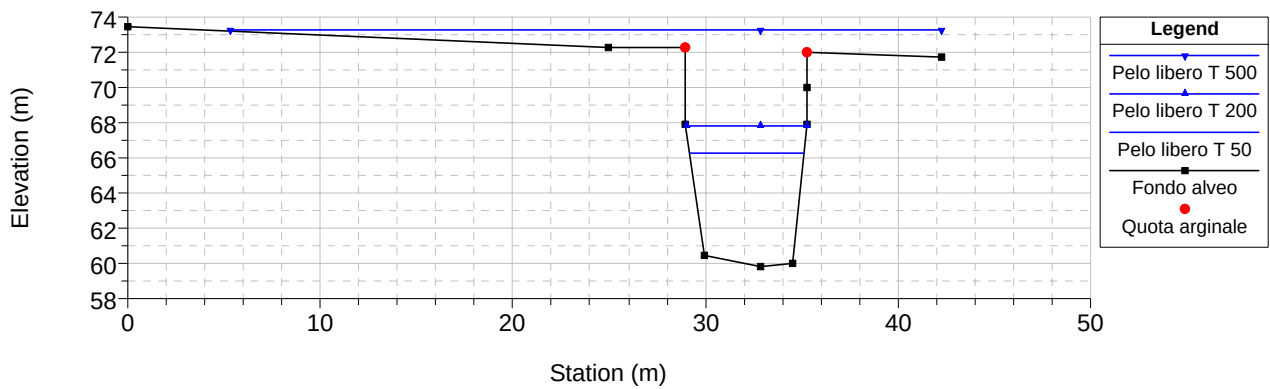
RS = 51.2



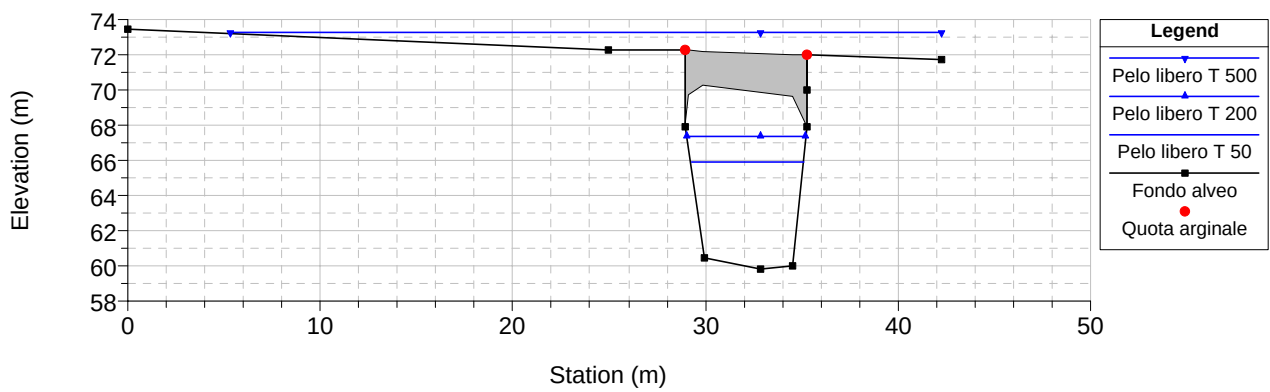
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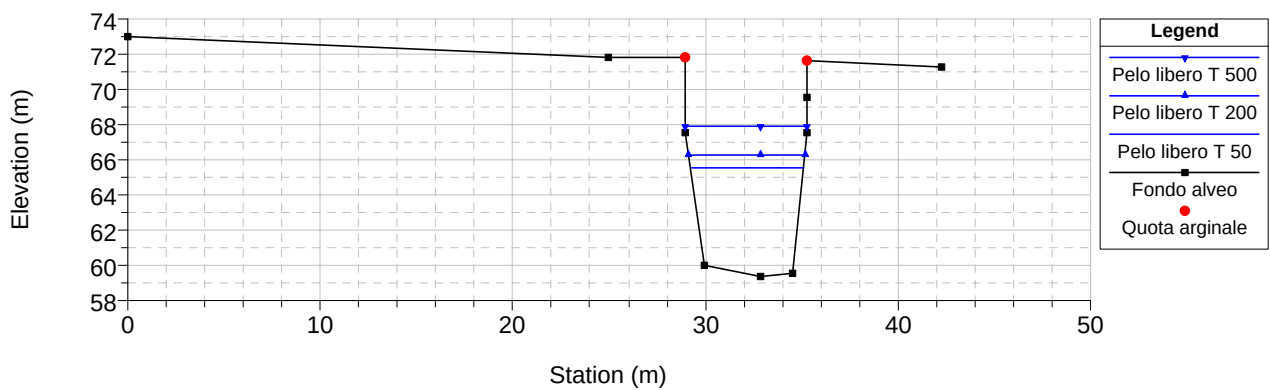
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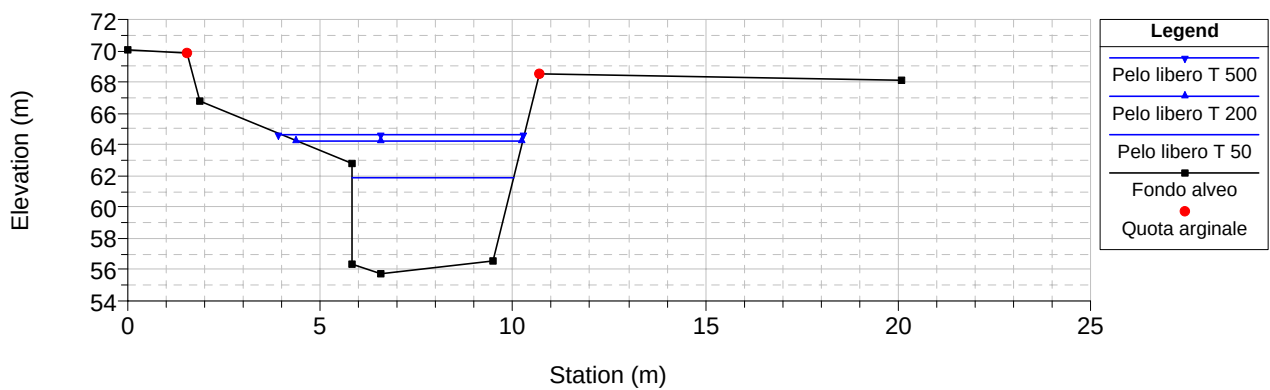
RS = 50.05 BR



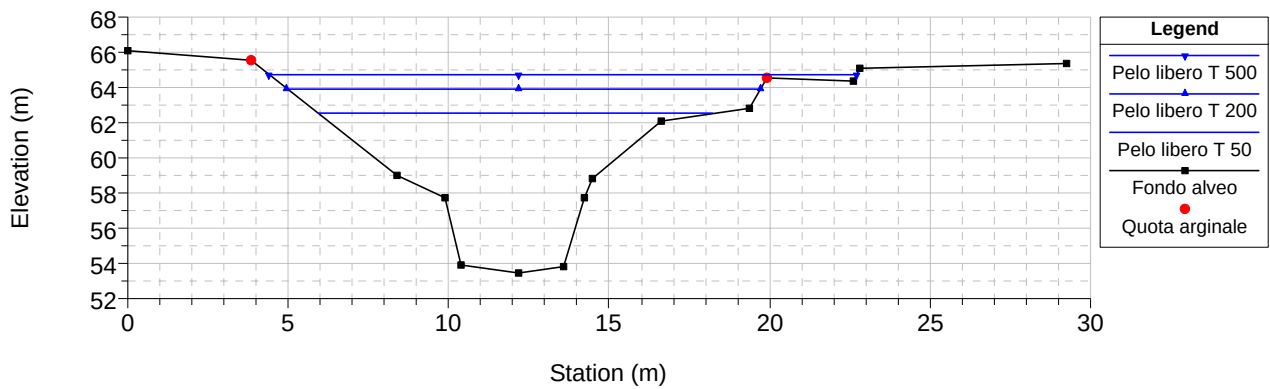
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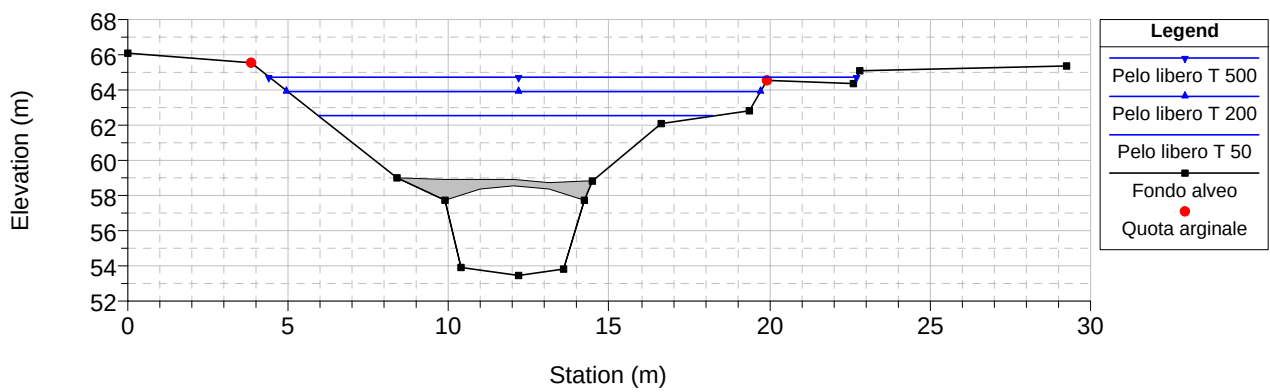
RS = 49



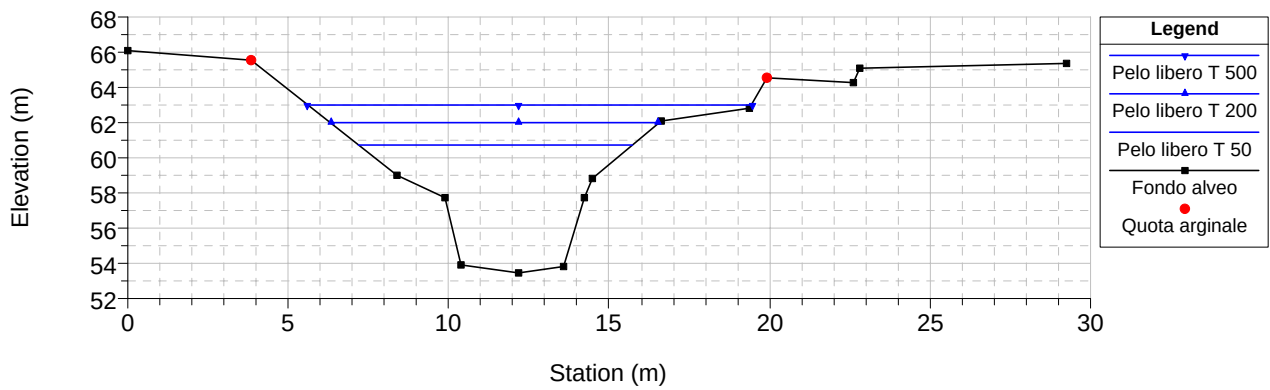
RS = 48.1



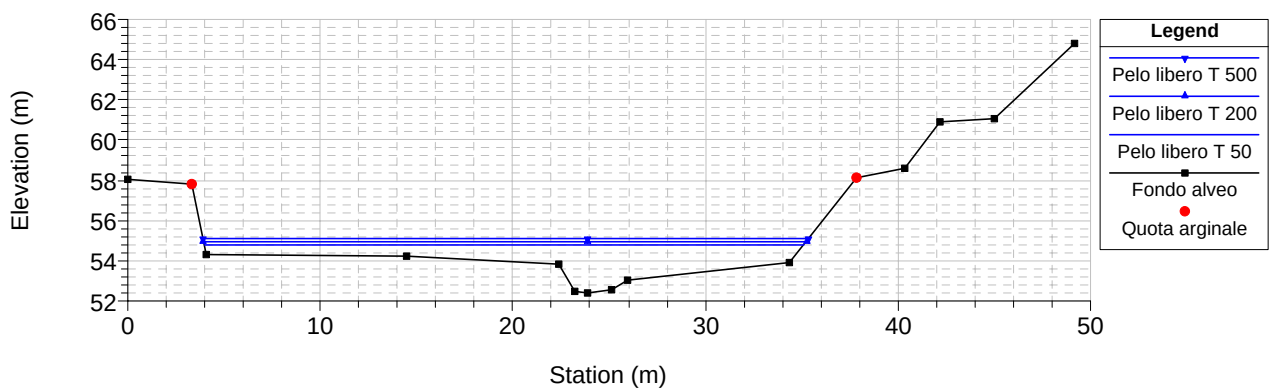
RS = 48.05 BR



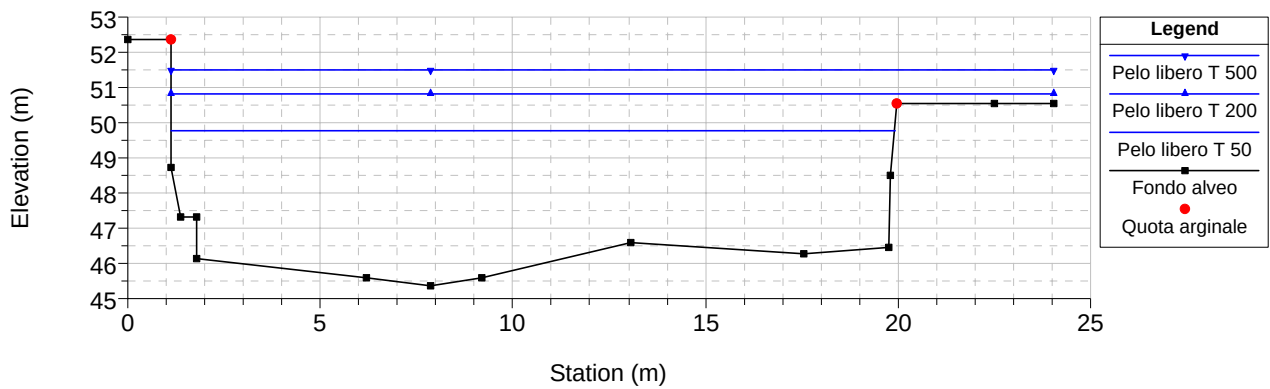
RS = 48



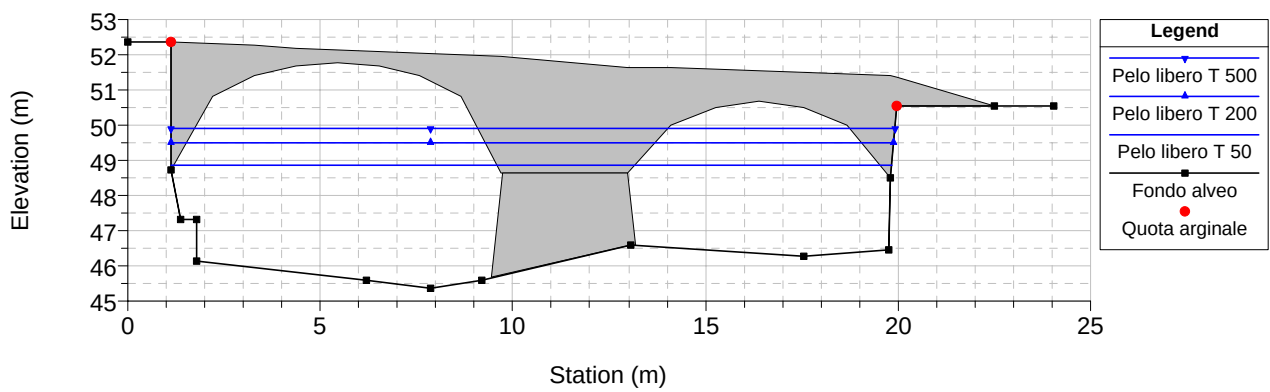
RS = 47



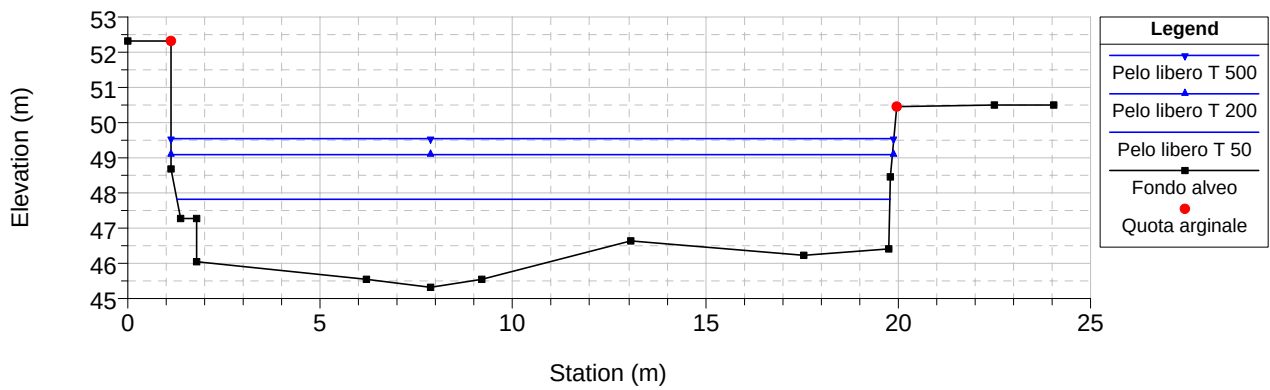
RS = 46.1



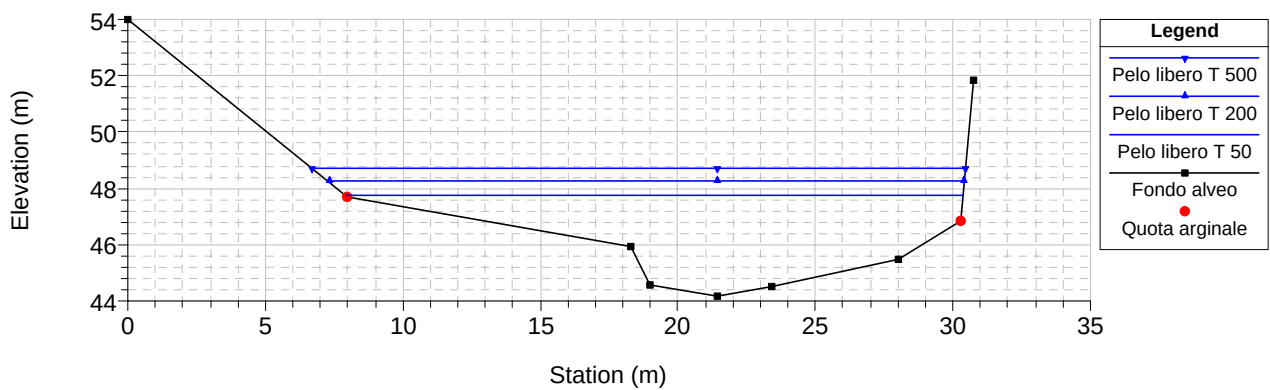
RS = 46.05 BR



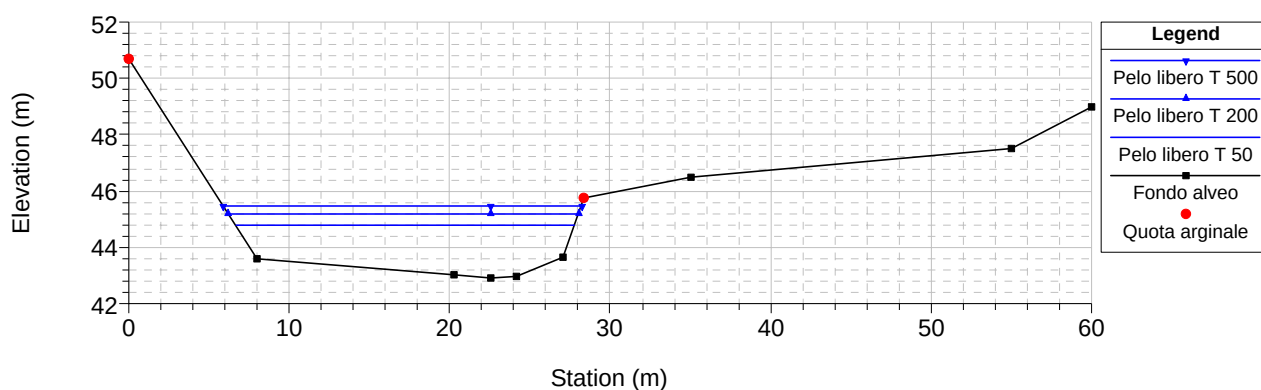
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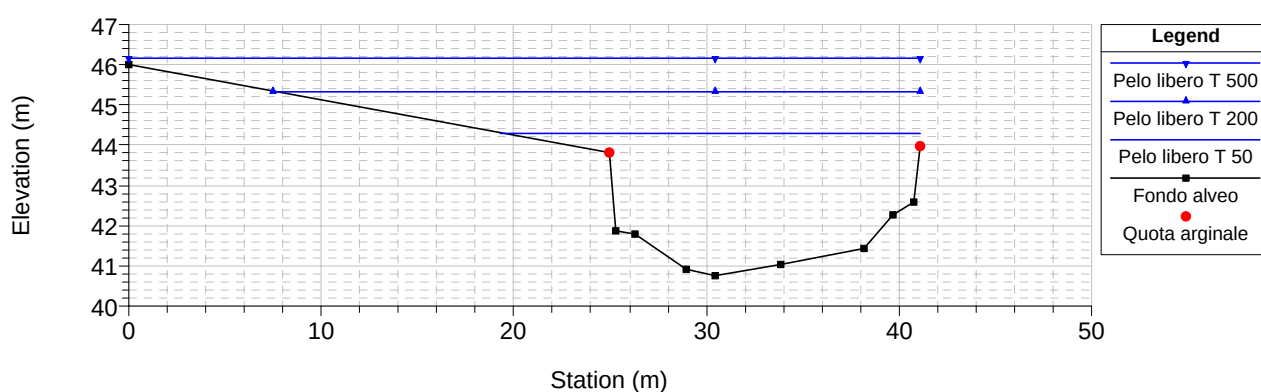
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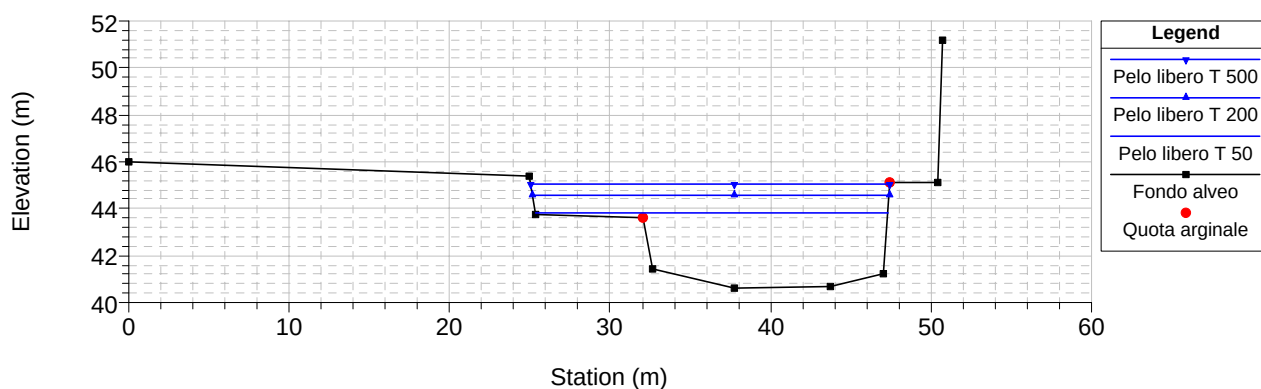
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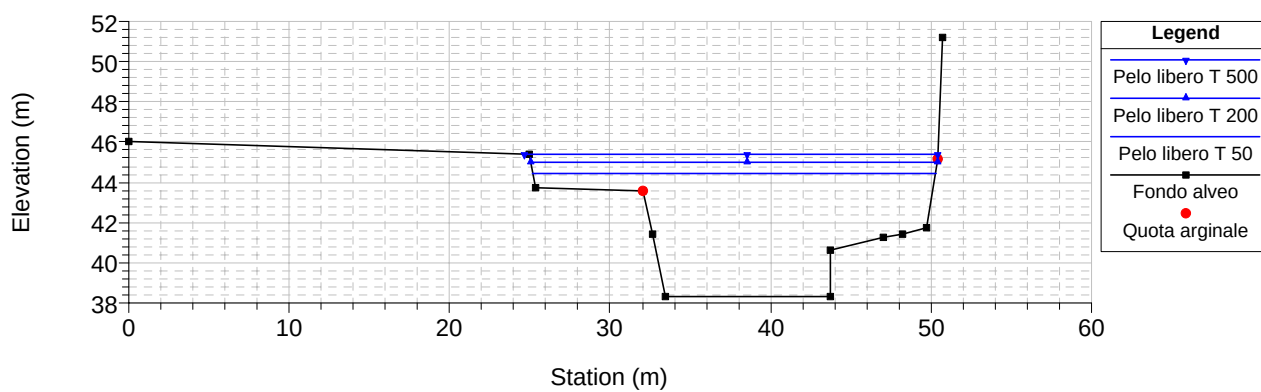
RS = 43

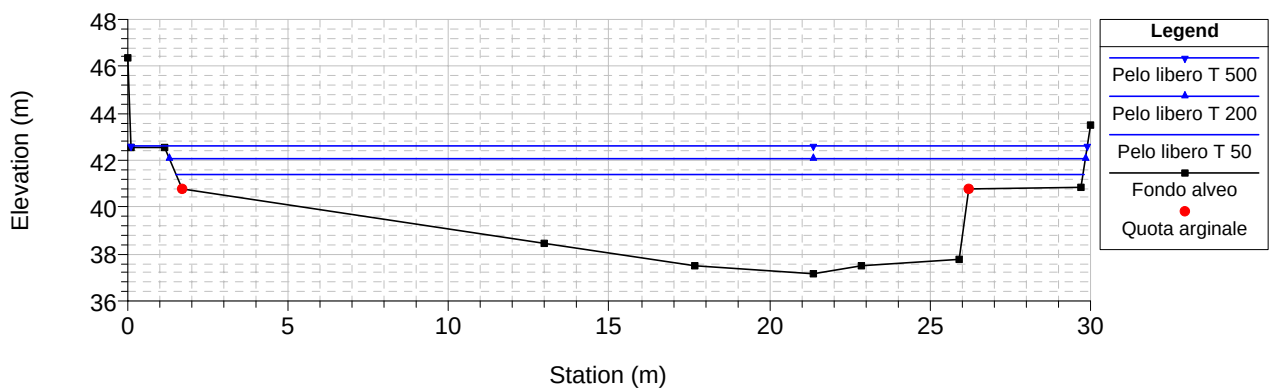
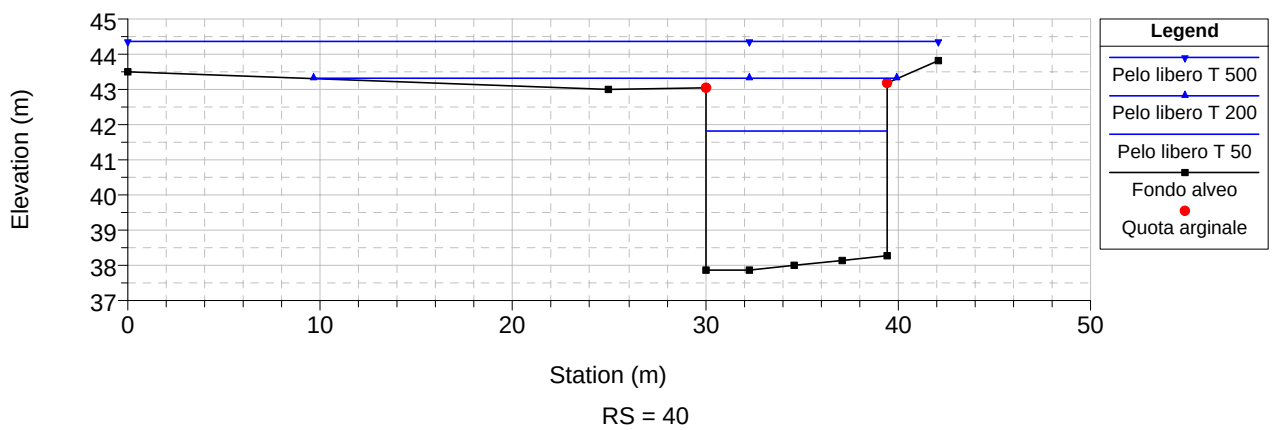
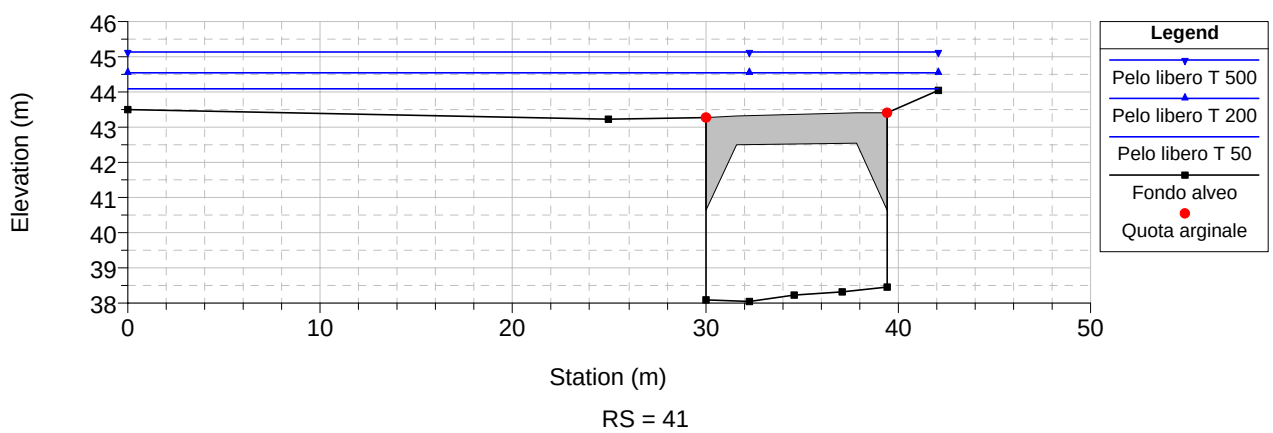
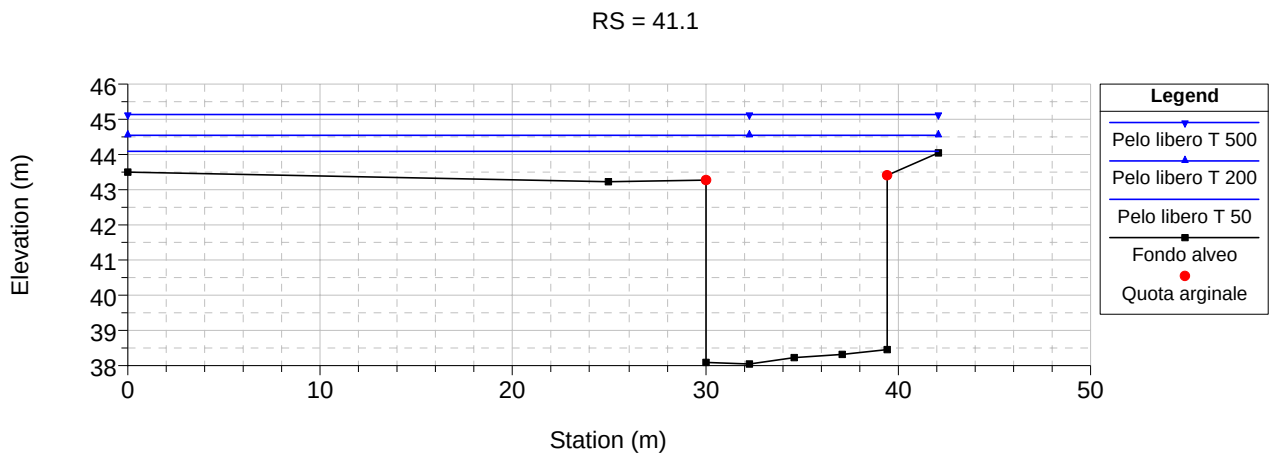


RS = 42.2

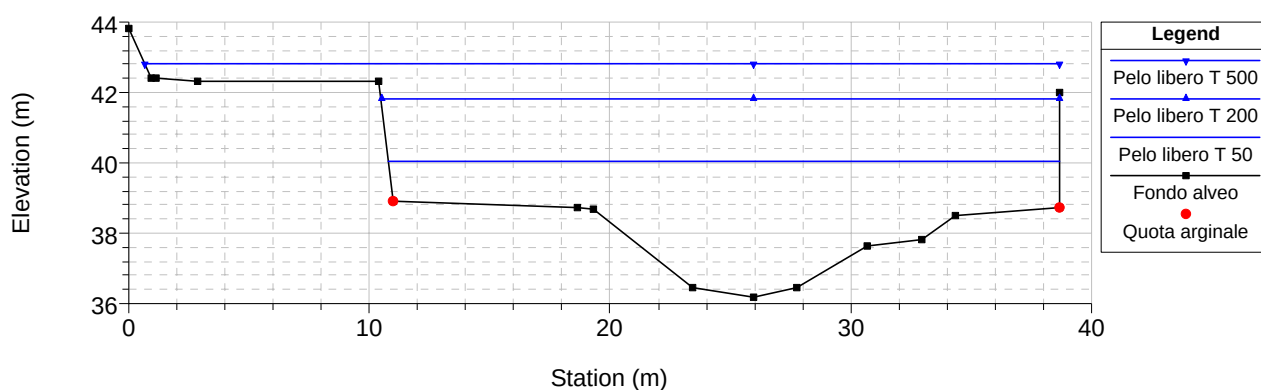


RS = 42

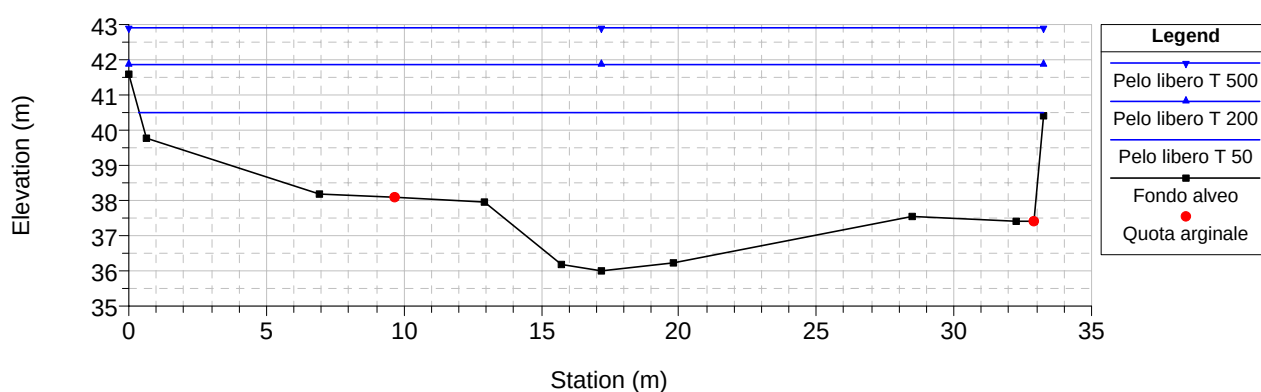




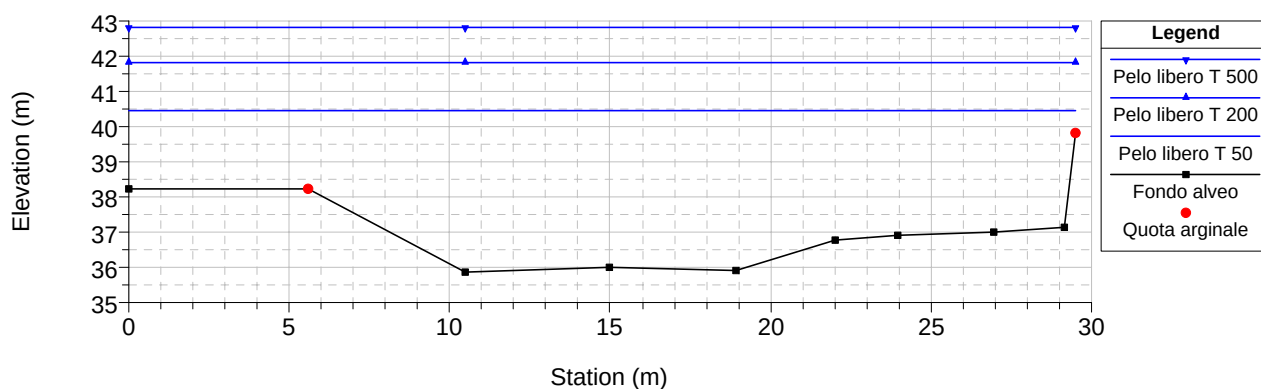
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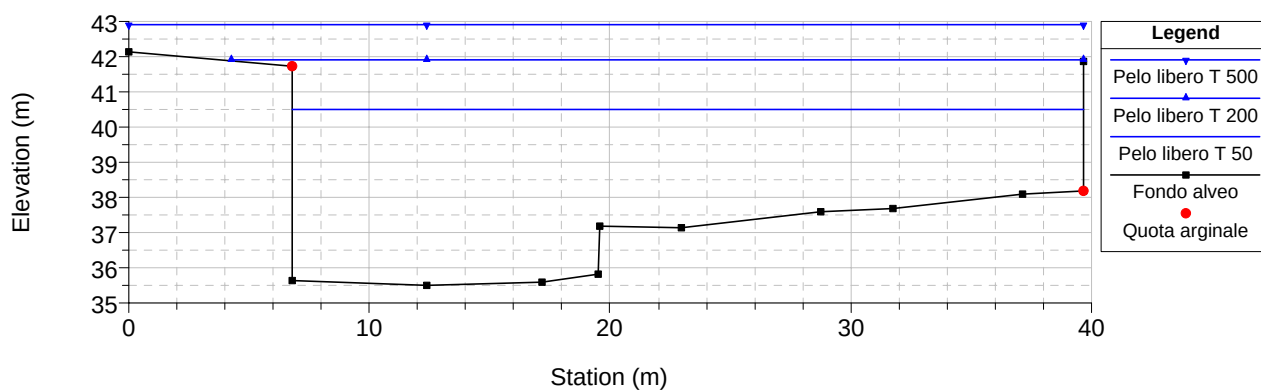
RS = 38



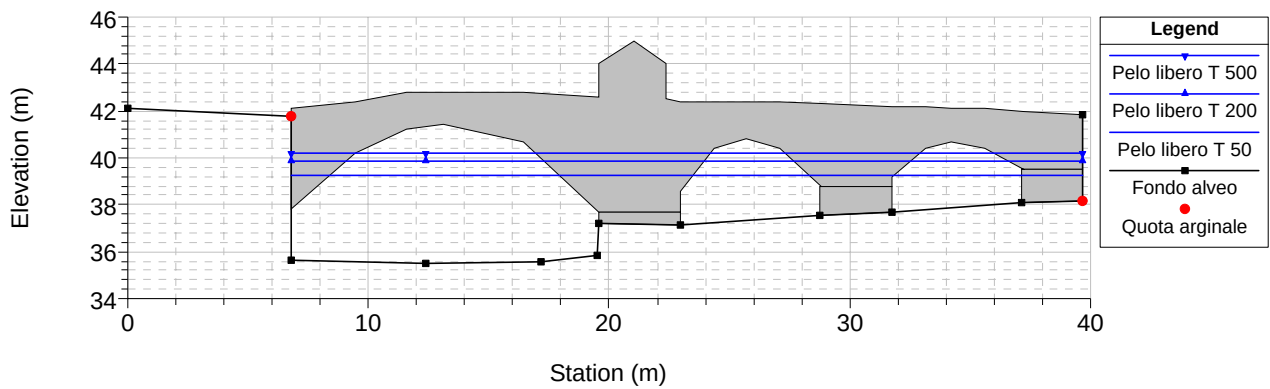
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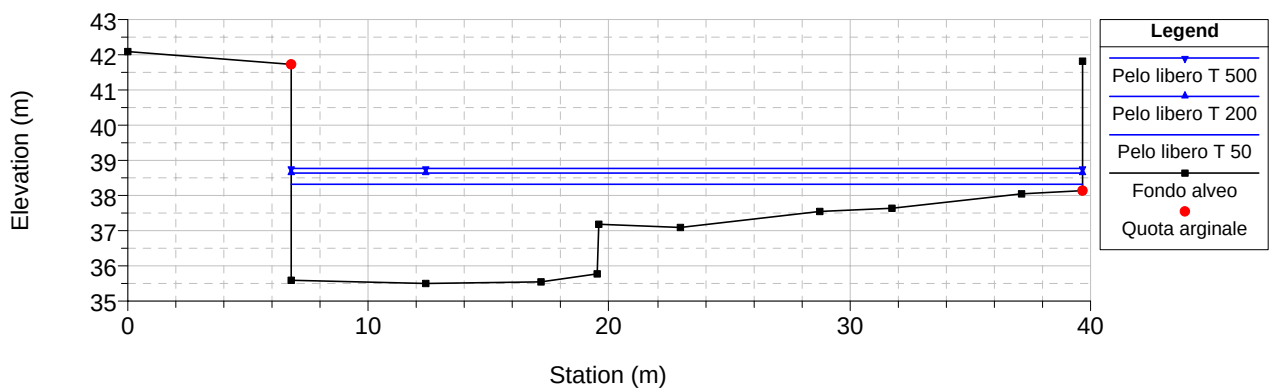
RS = 36.1



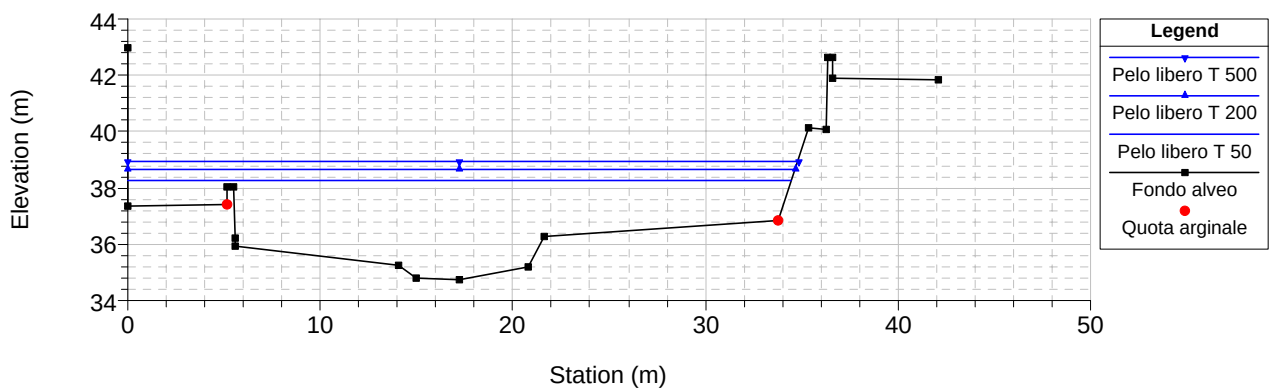
RS = 36.05 BR



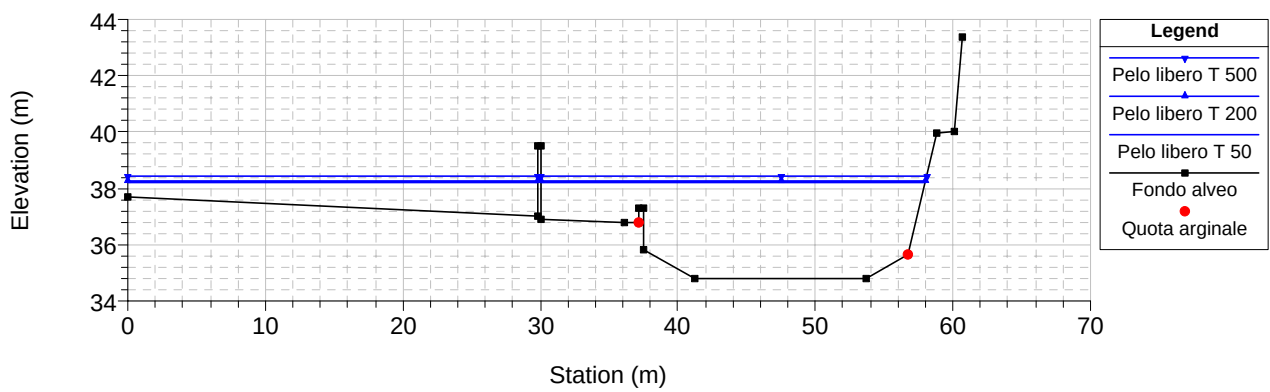
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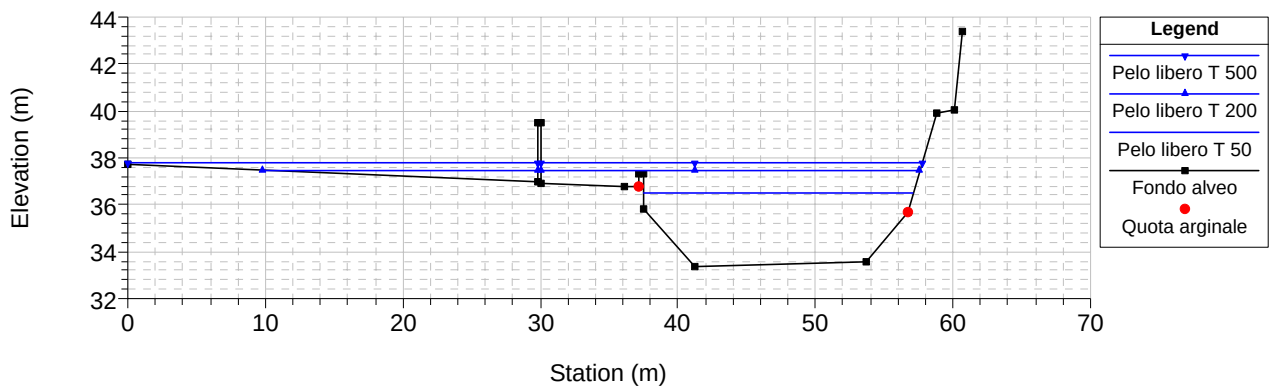
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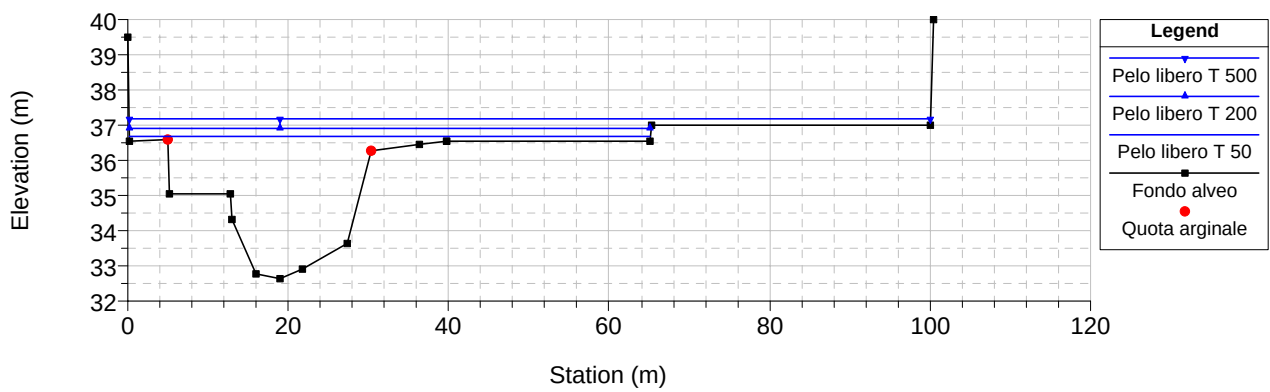
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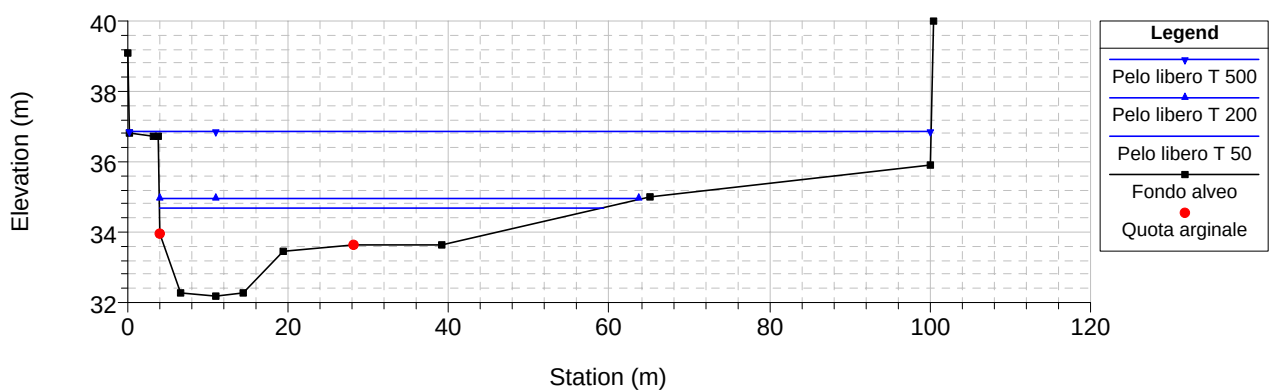
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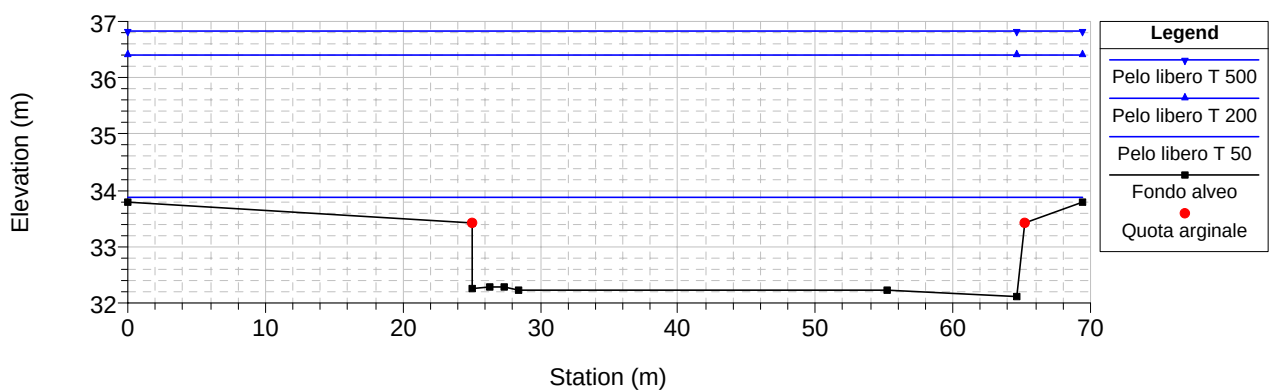
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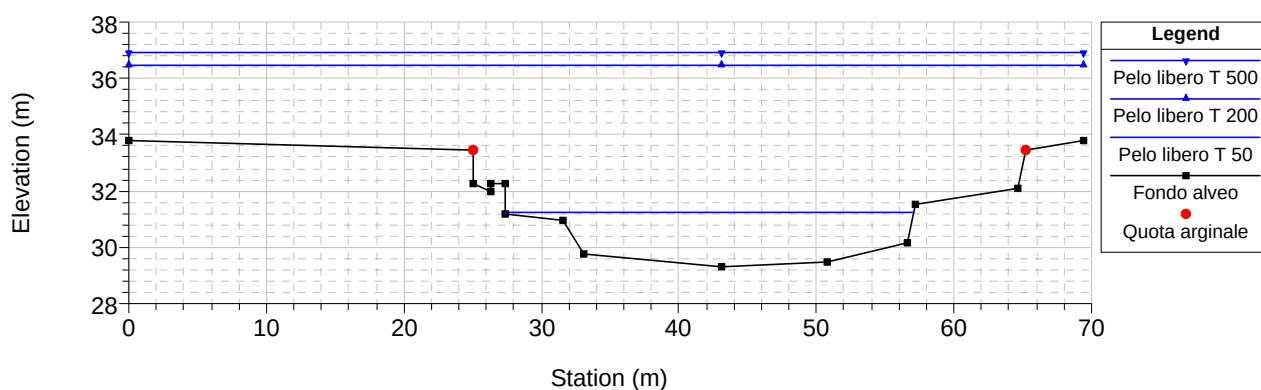
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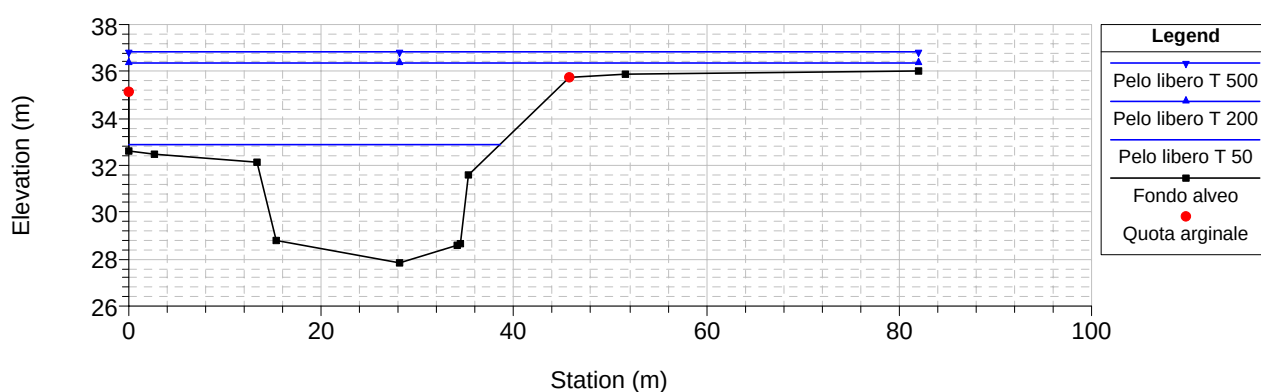
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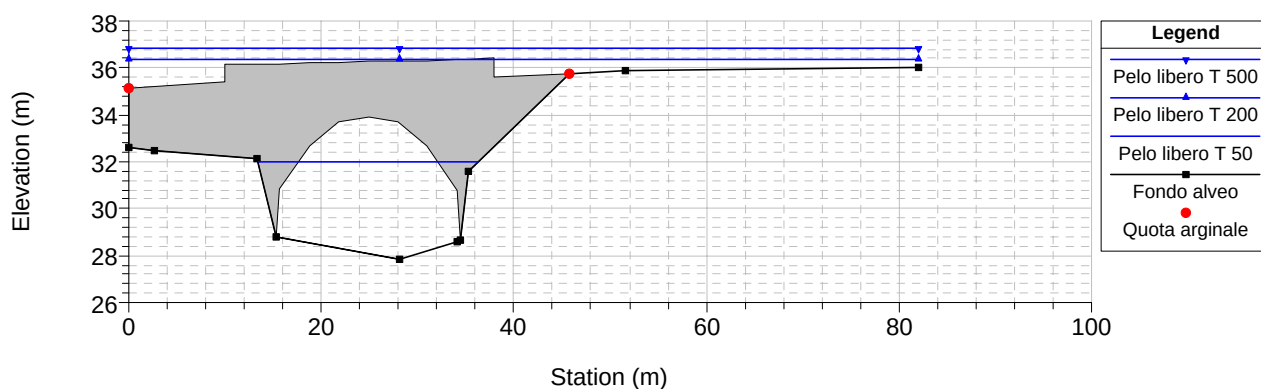
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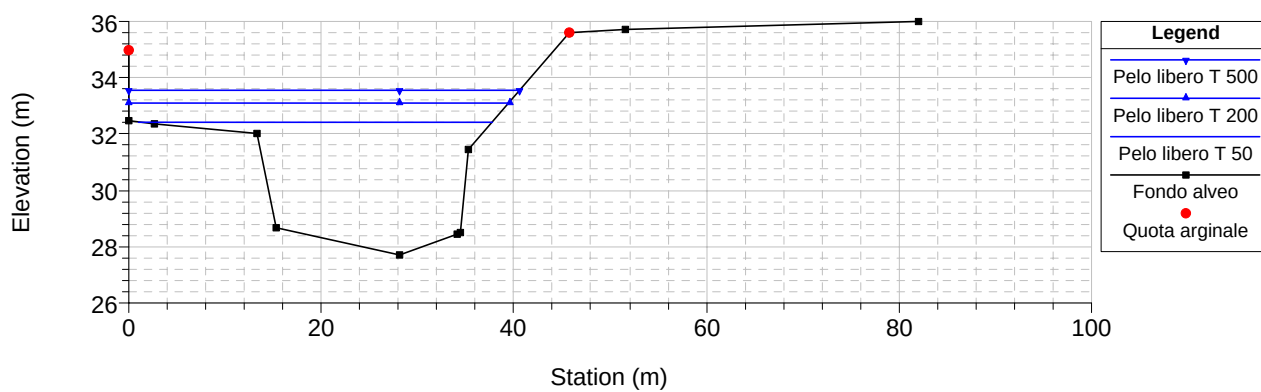
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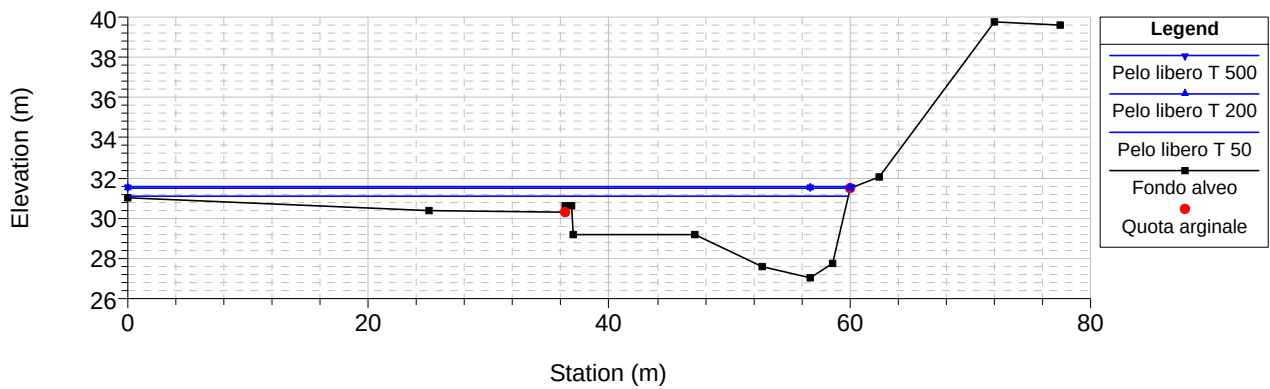
RS = 30.05 BR



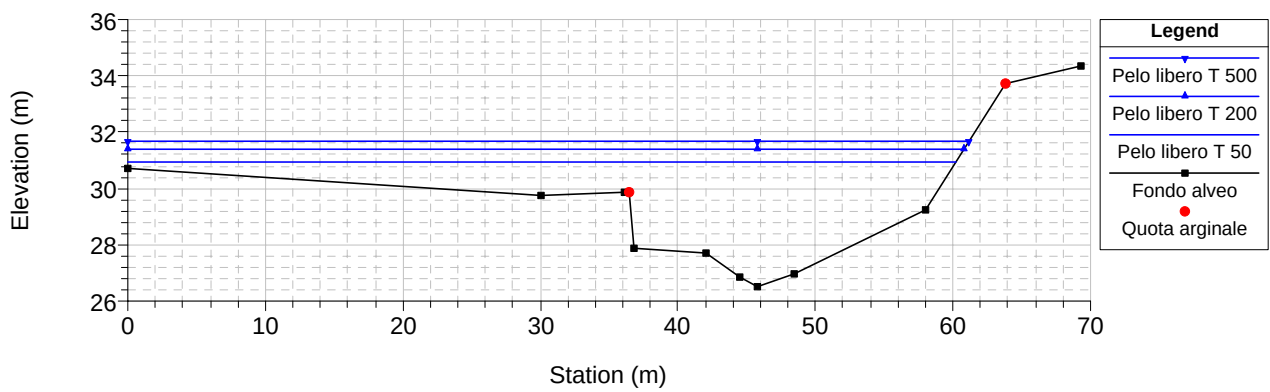
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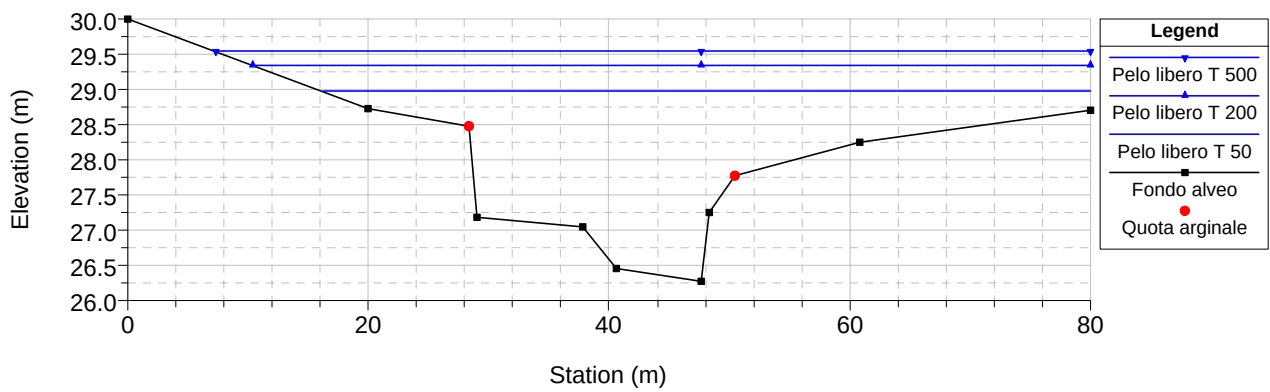
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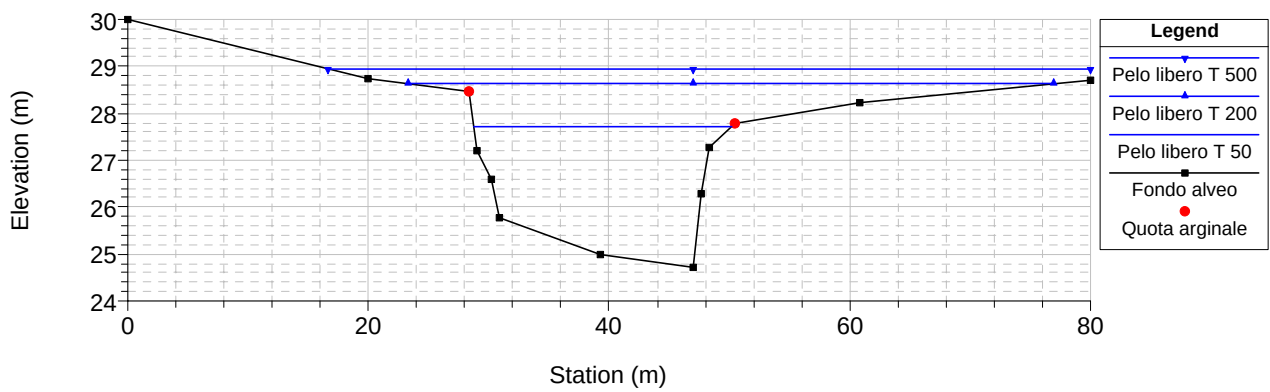
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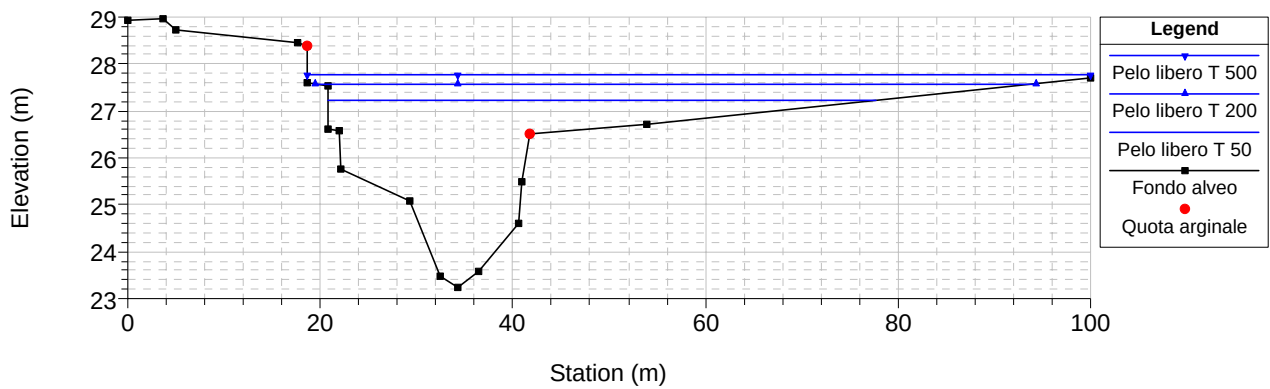
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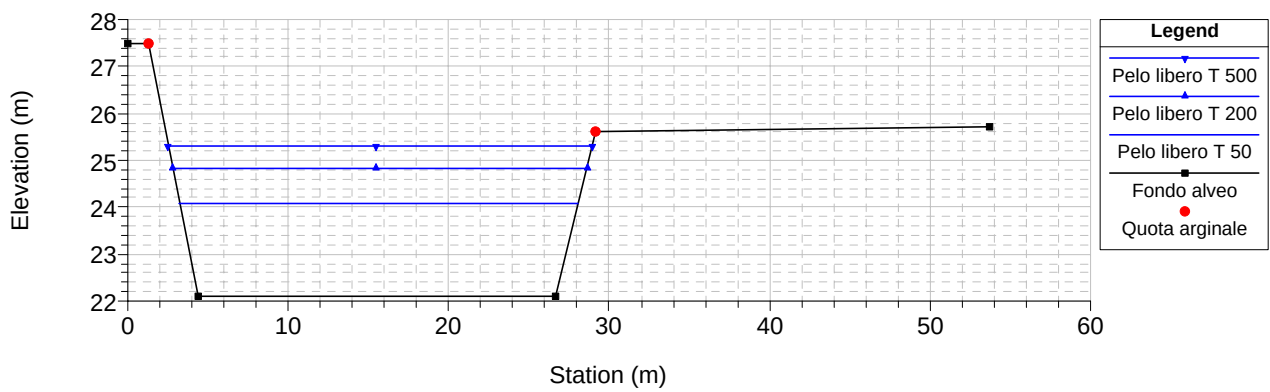
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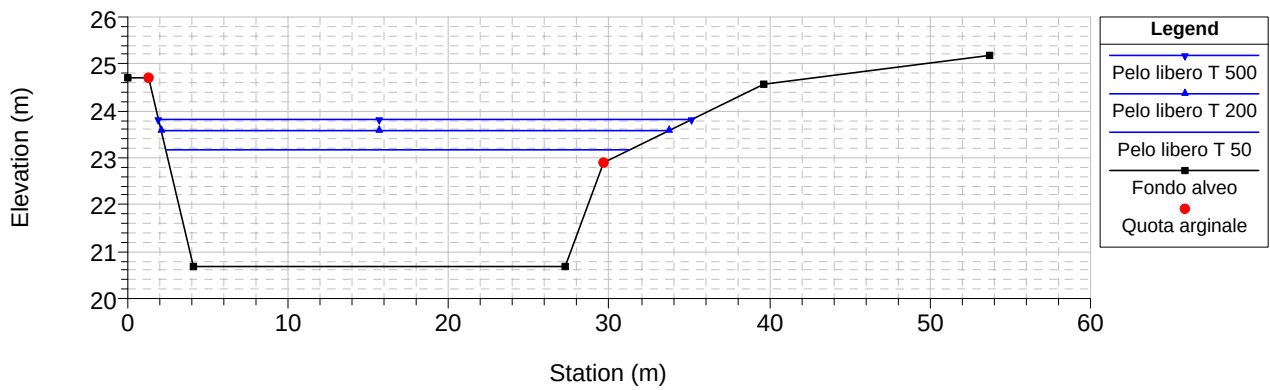
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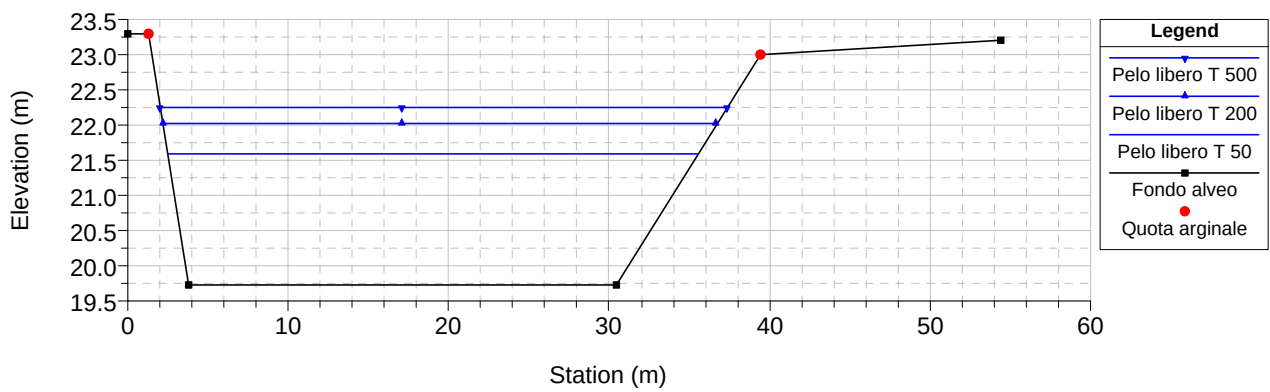
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RS = 24

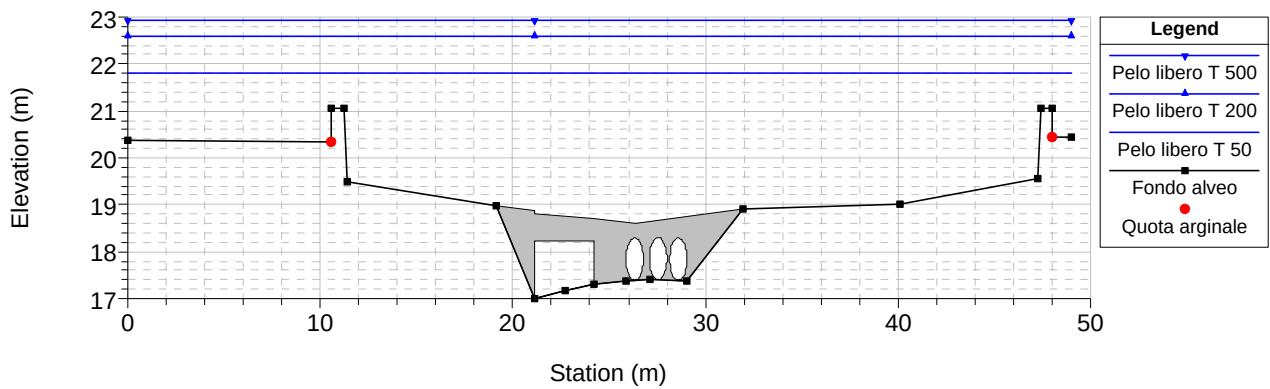


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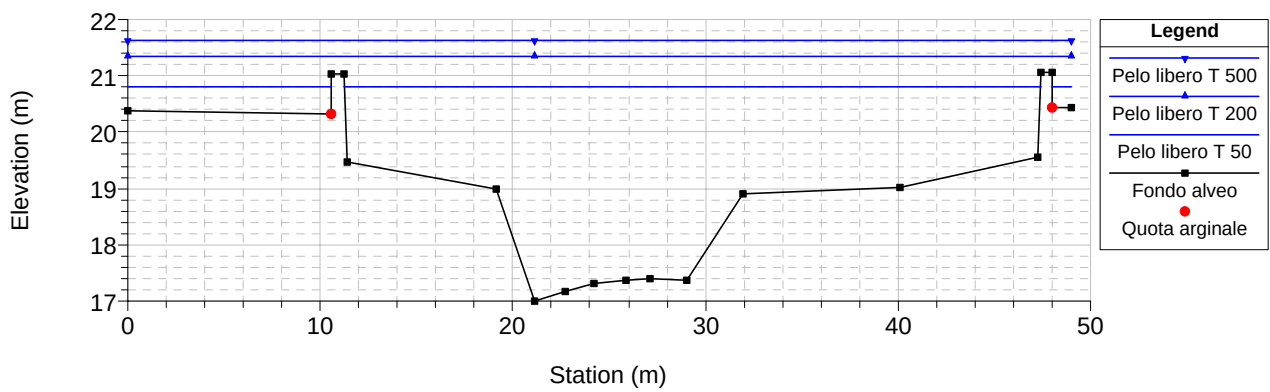




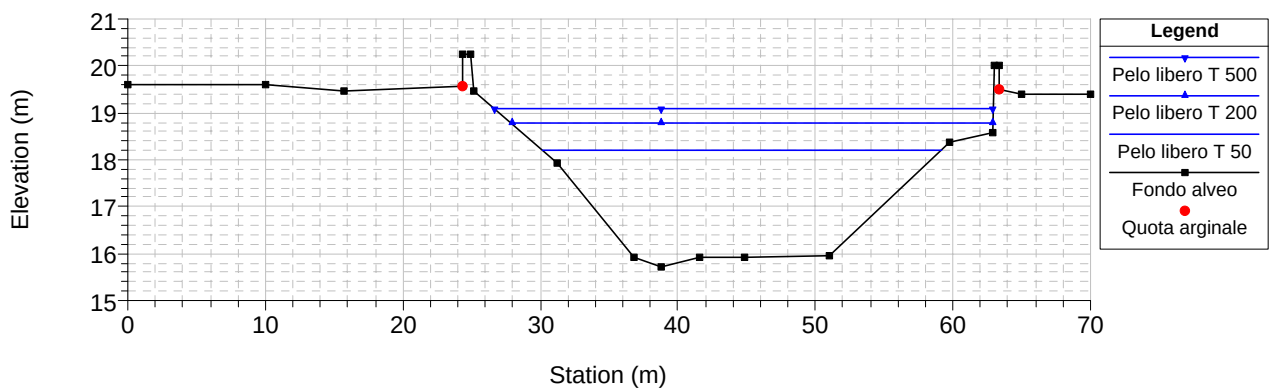
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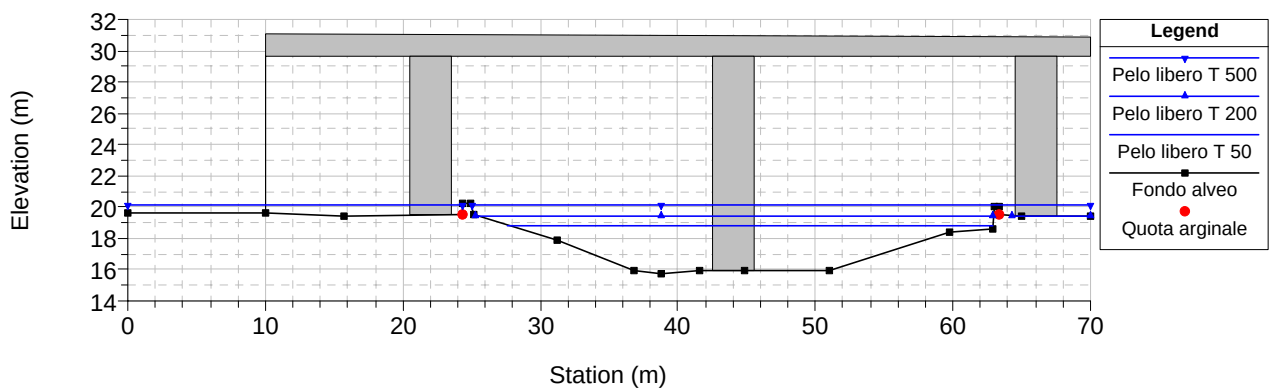
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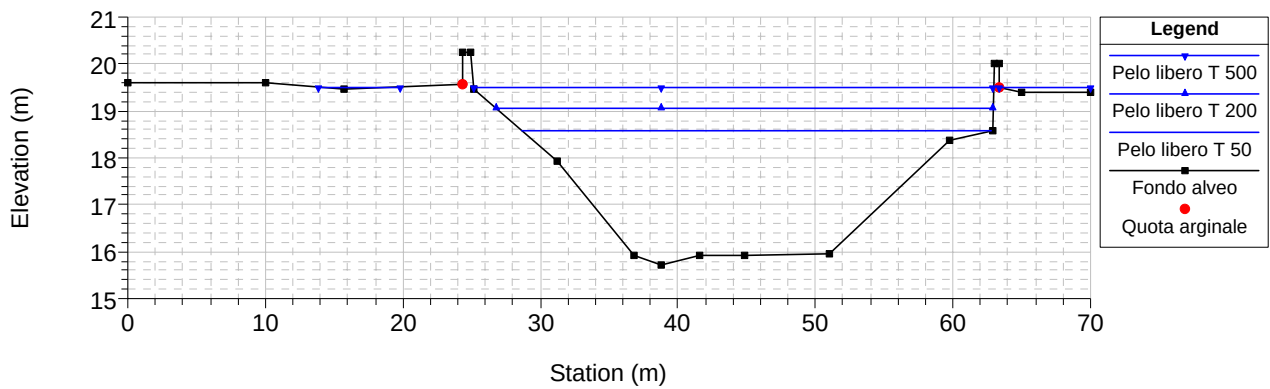
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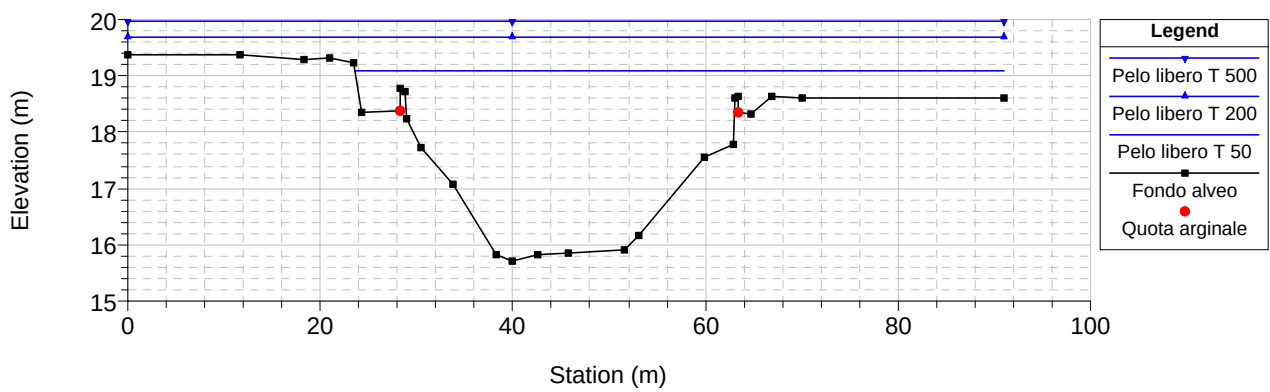
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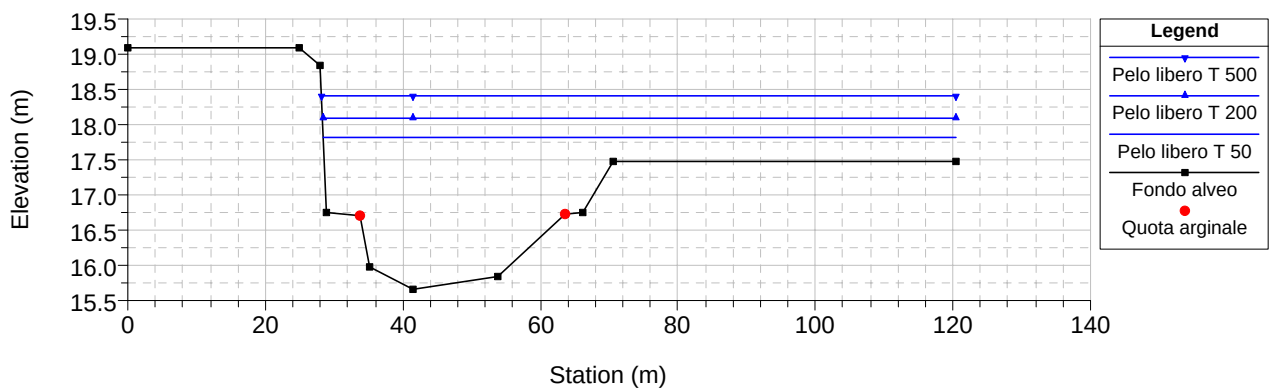
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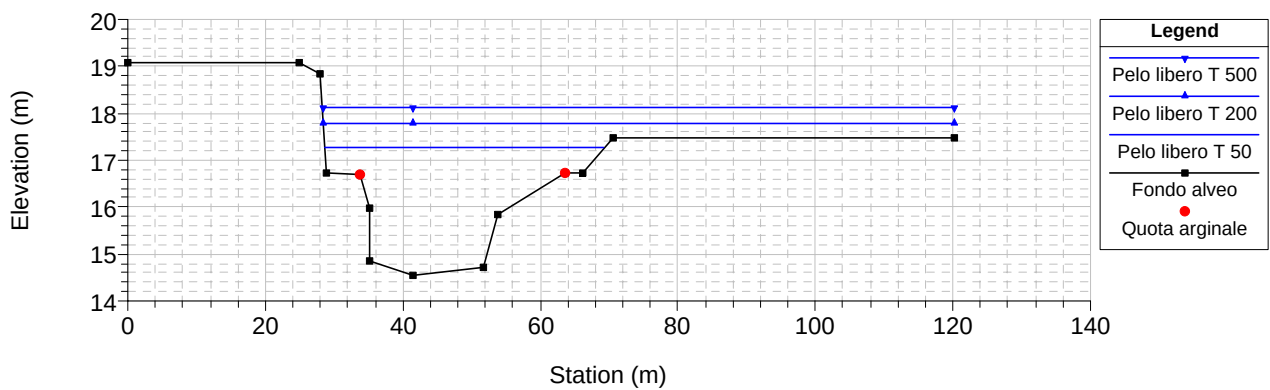
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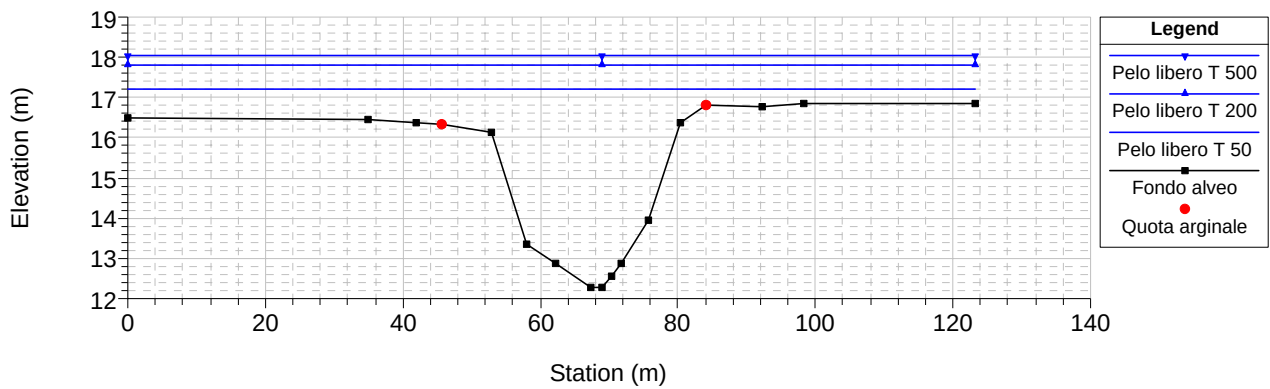
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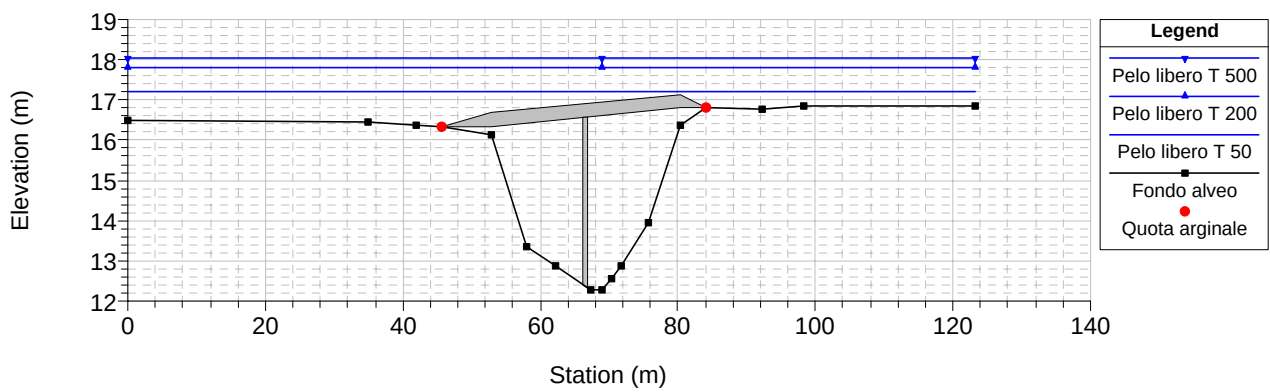
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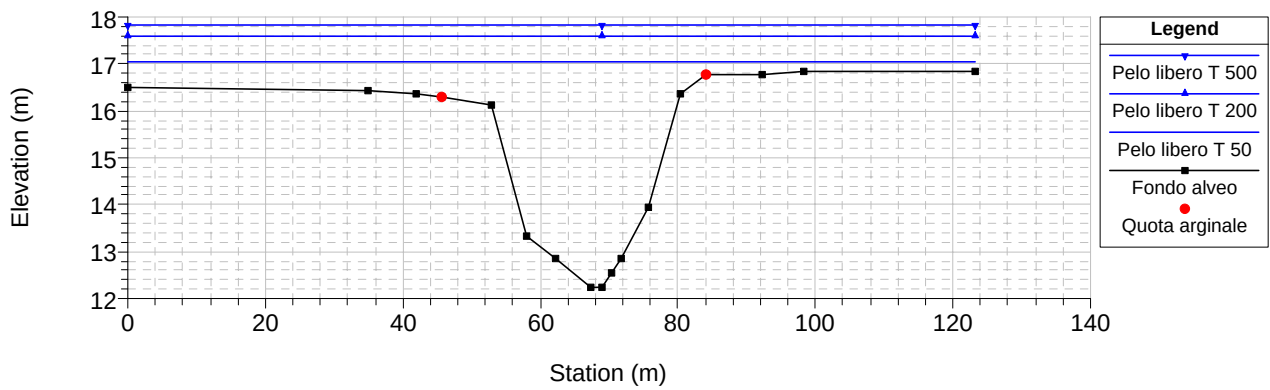
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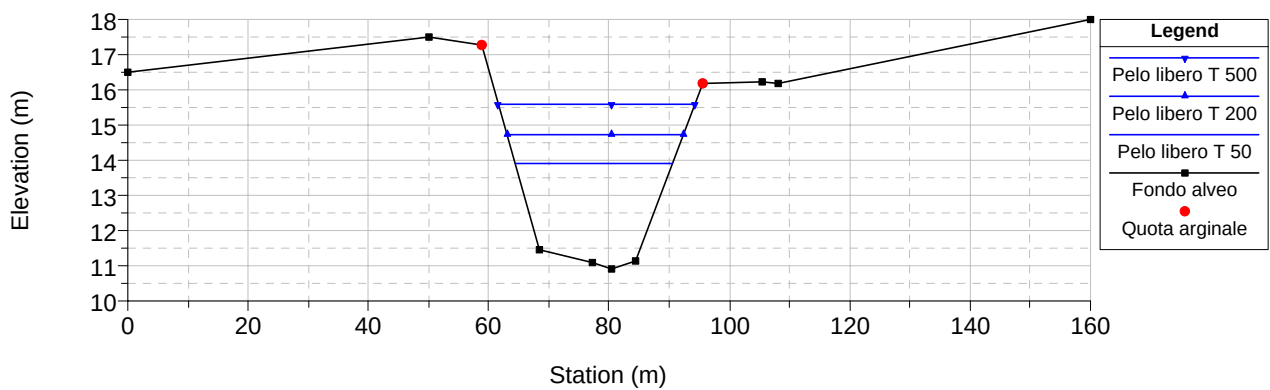
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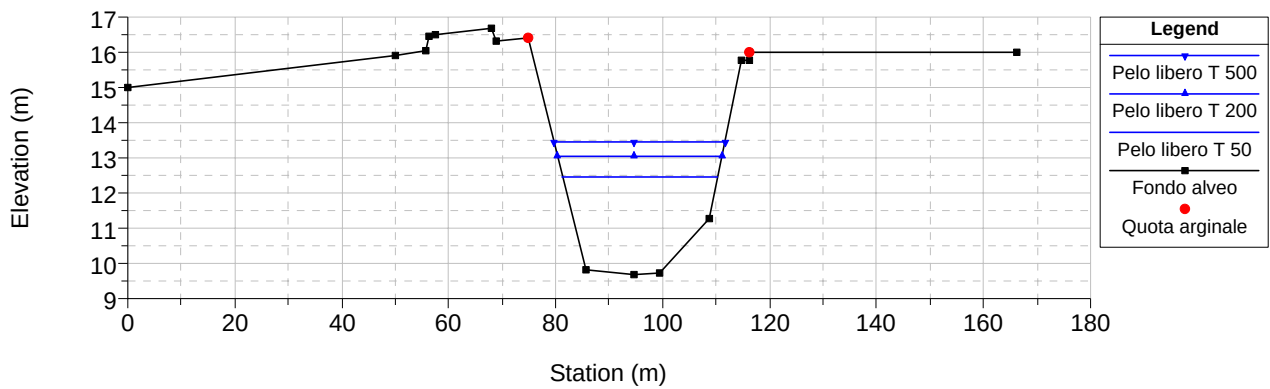
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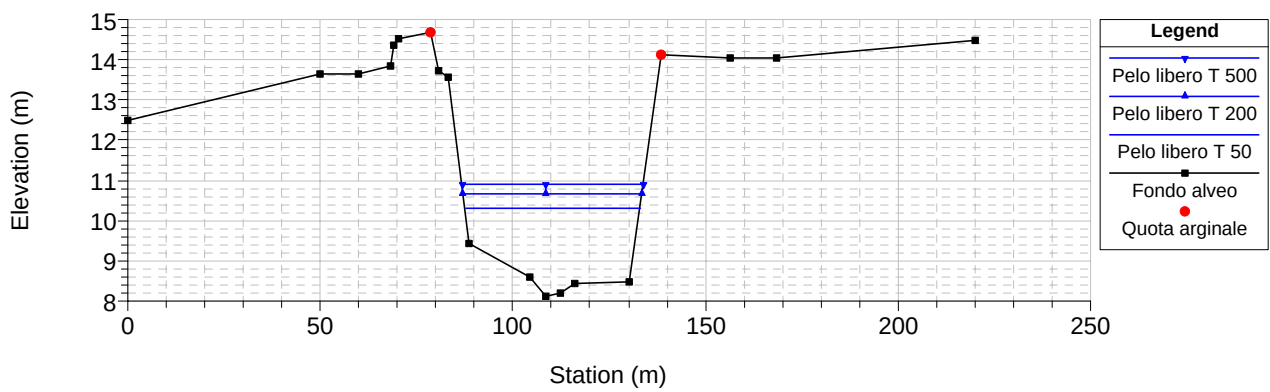
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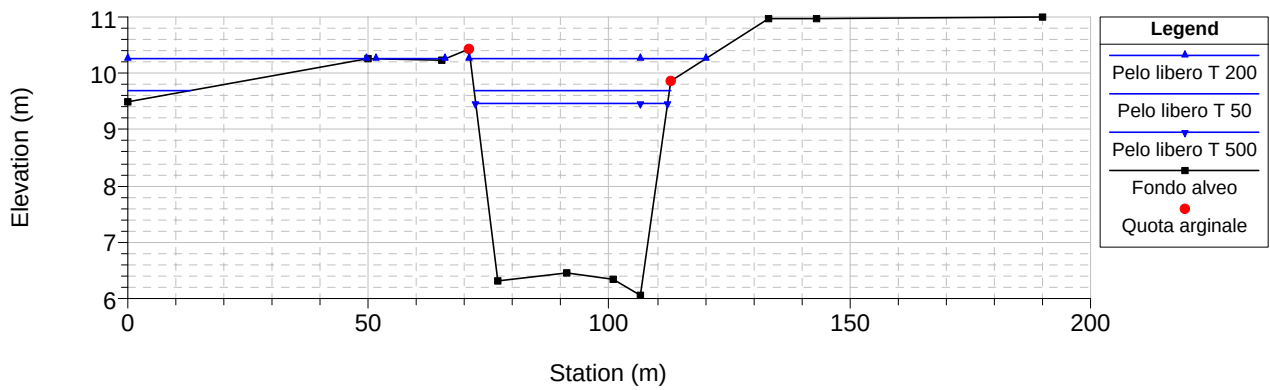
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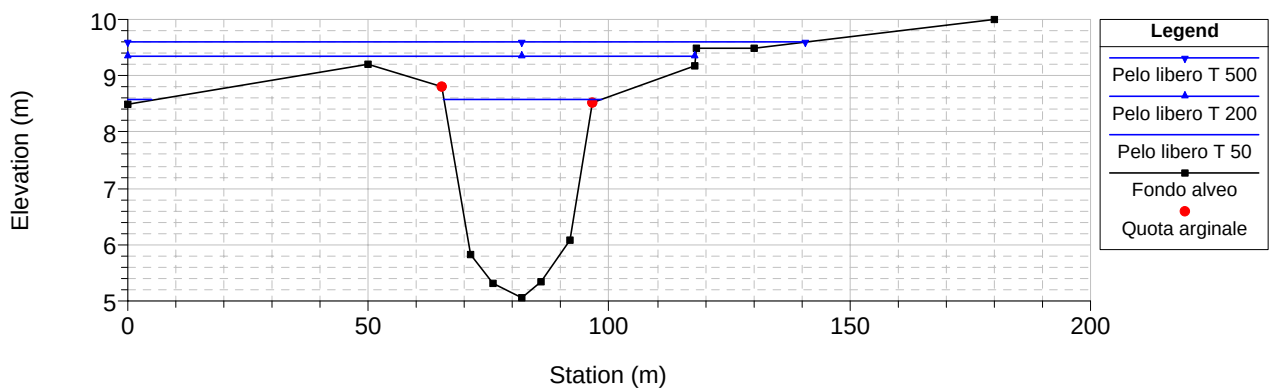
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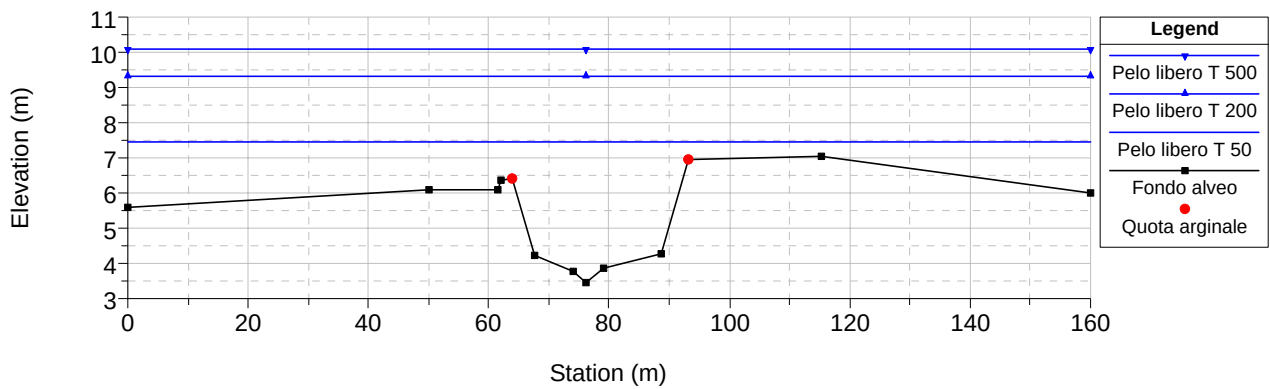
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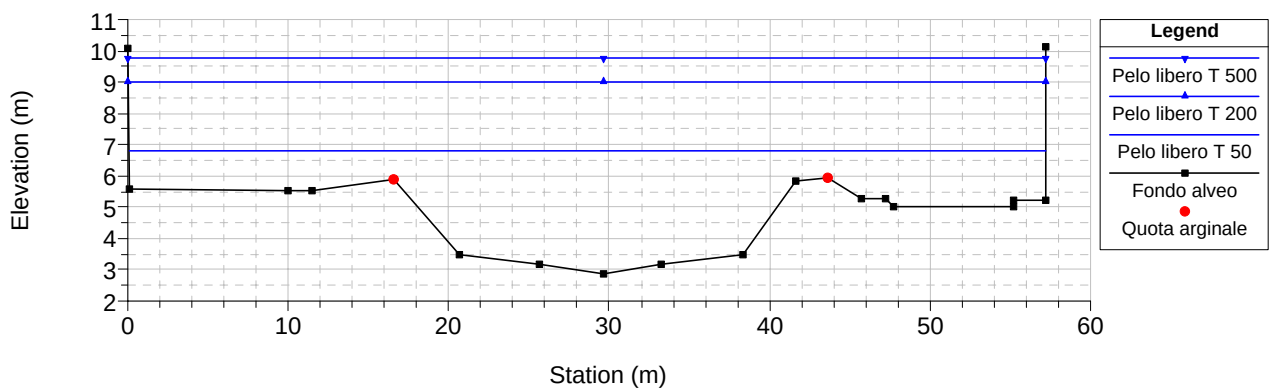
RS = 13



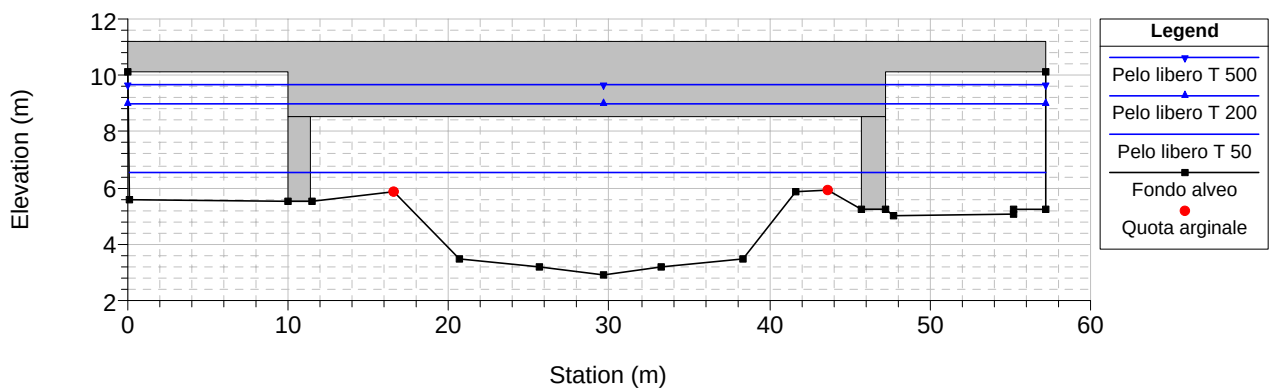
RS = 12



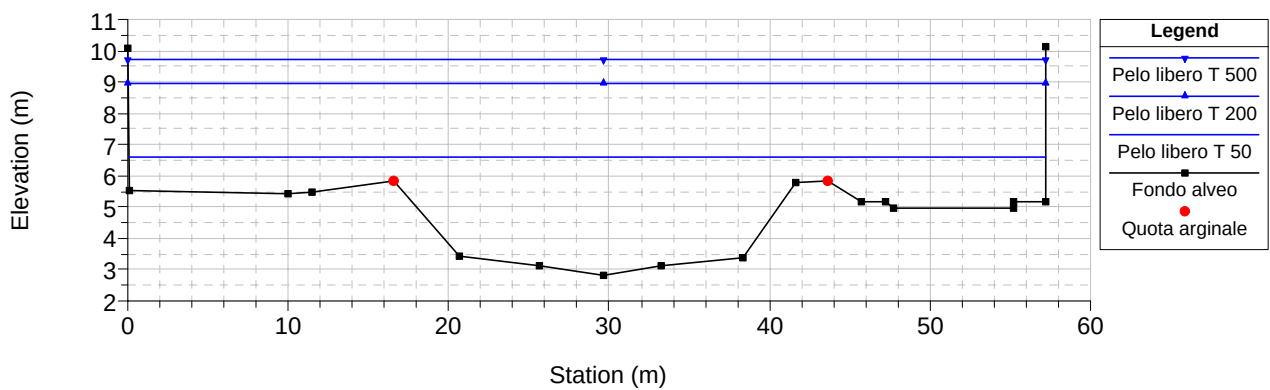
RS = 11.1



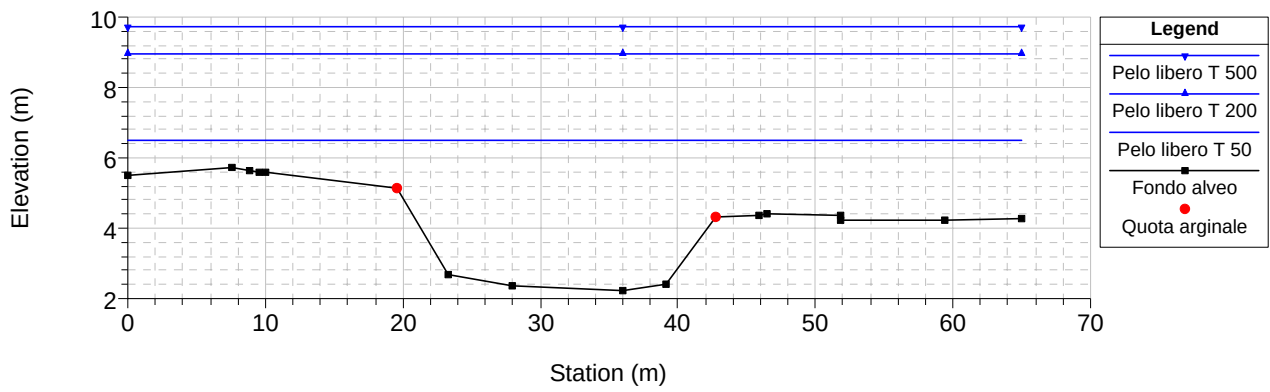
RS = 11.05 BR



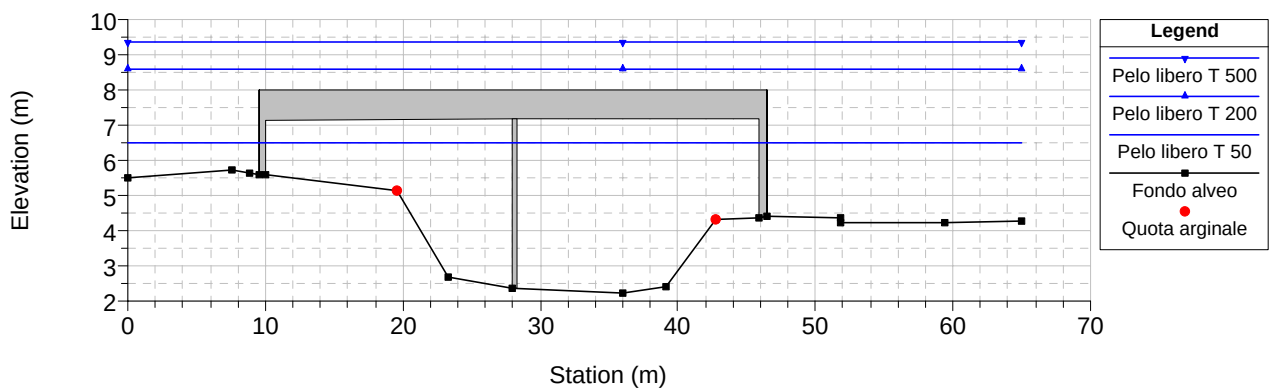
RS = 11



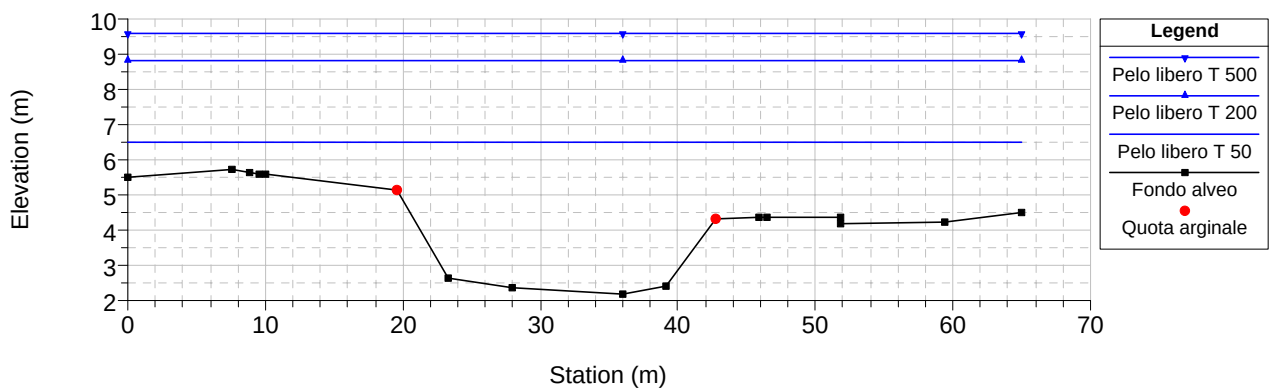
RS = 10.1



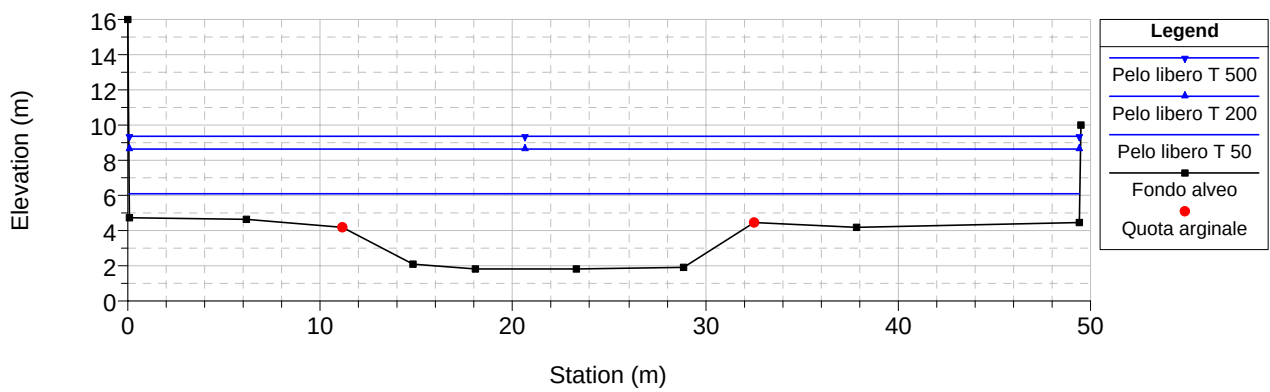
RS = 10.05 BR



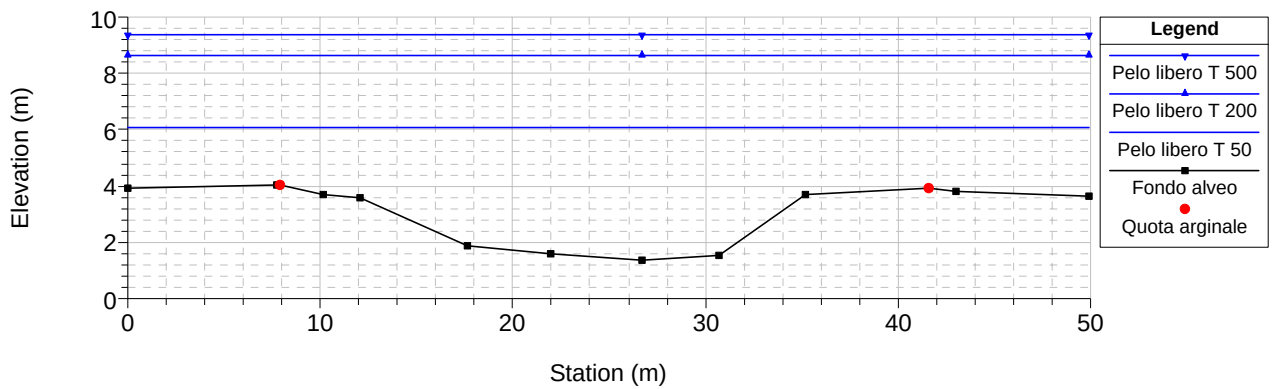
RS = 10



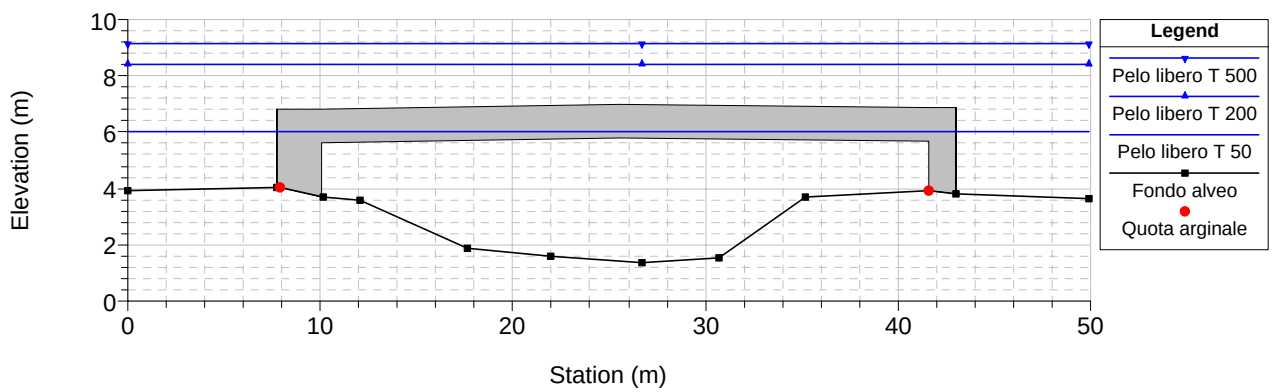
RS = 9



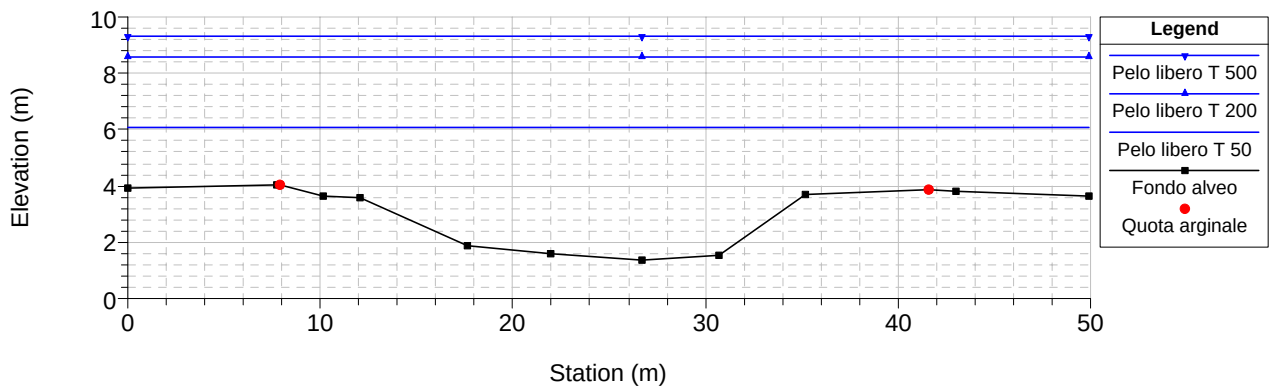
RS = 8.1



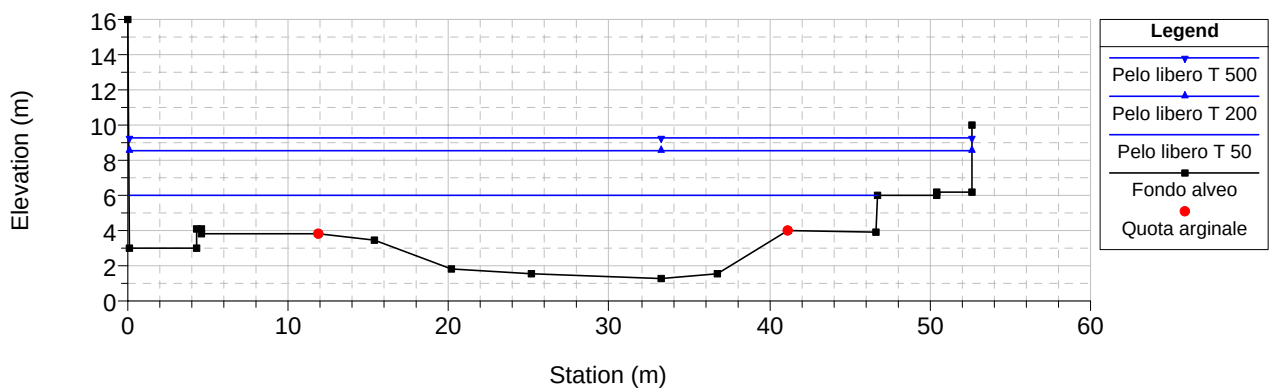
RS = 8.05 BR



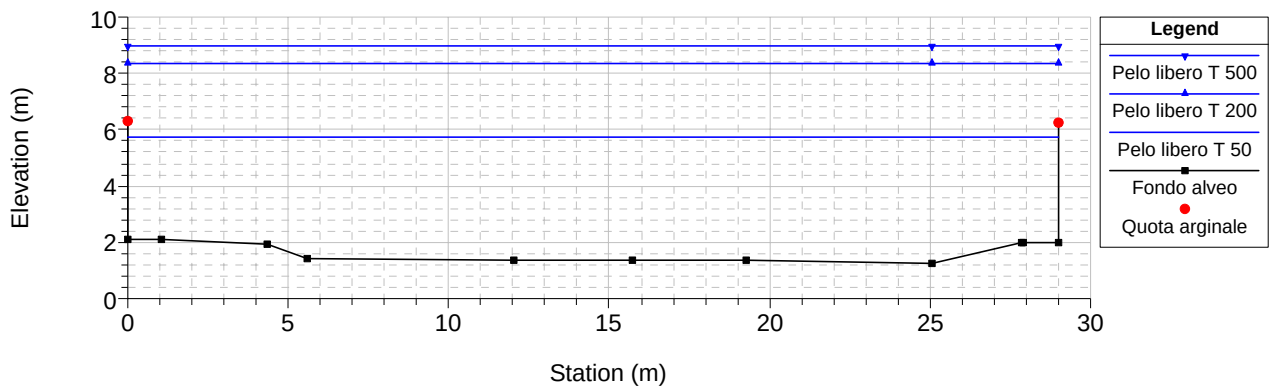
RS = 8



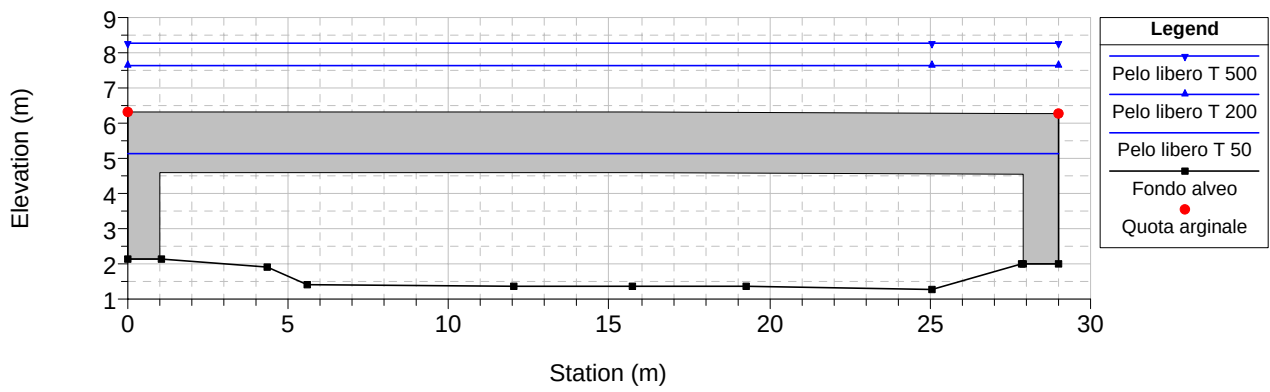
RS = 7



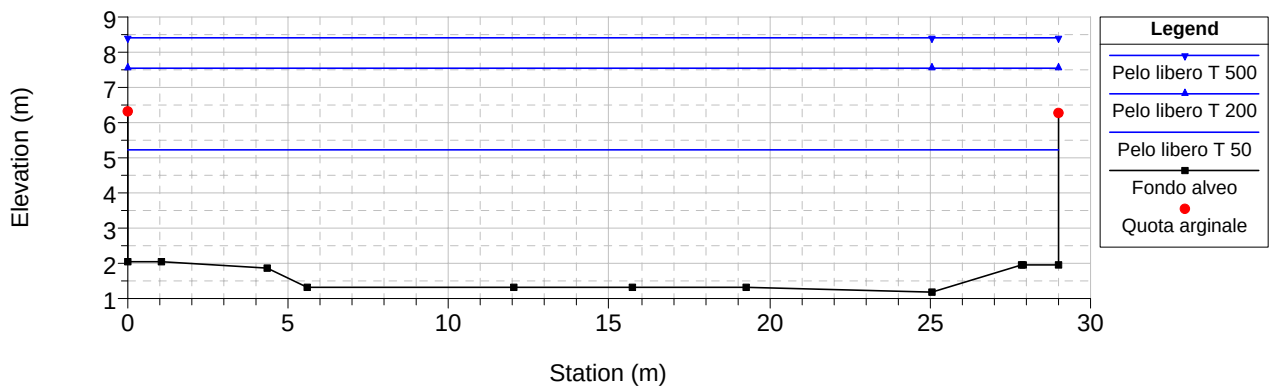
RS = 6.1



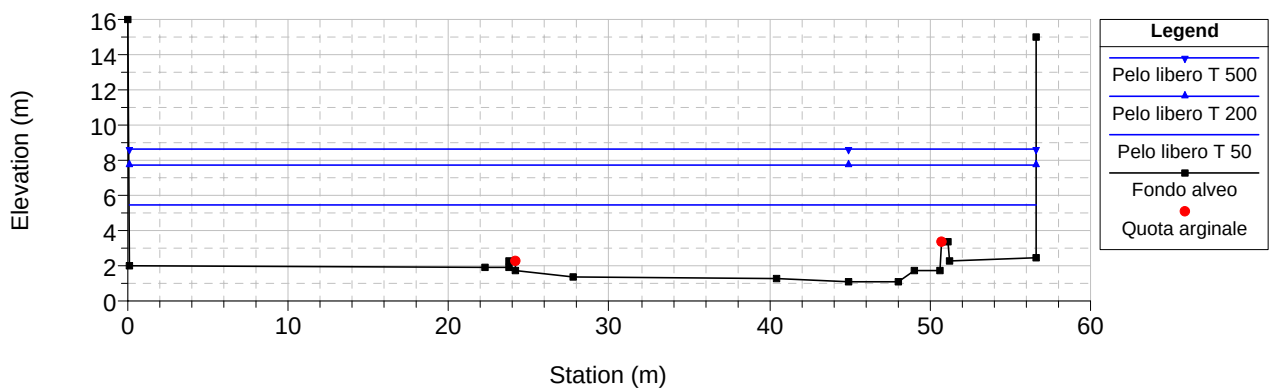
RS = 6.05 BR



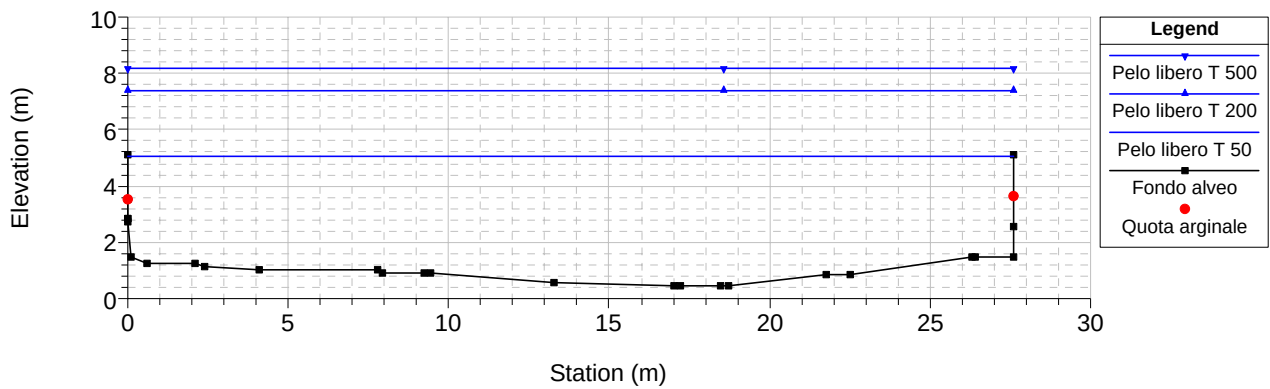
RS = 6



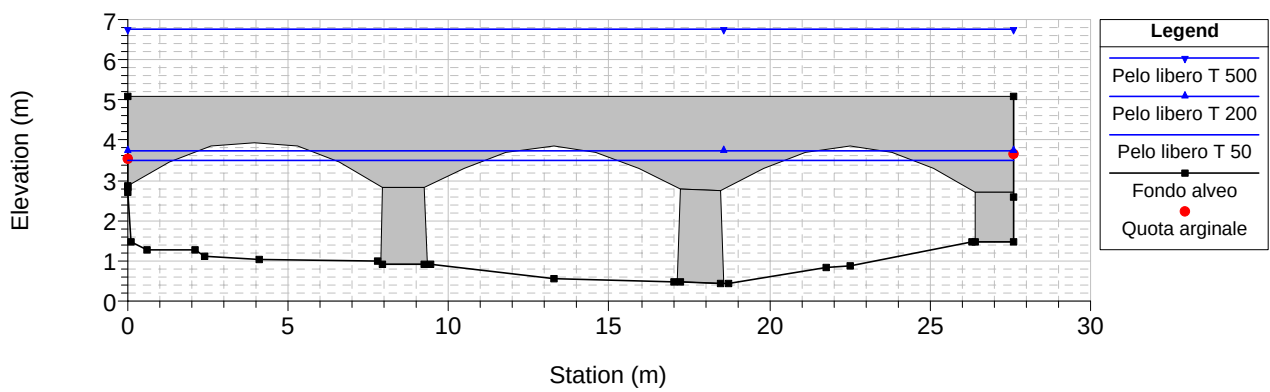
RS = 5



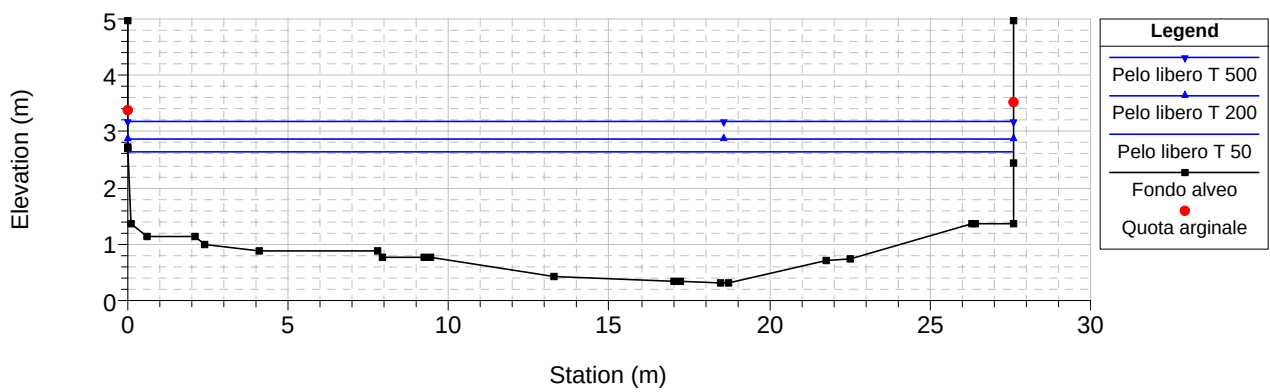
RS = 4.1



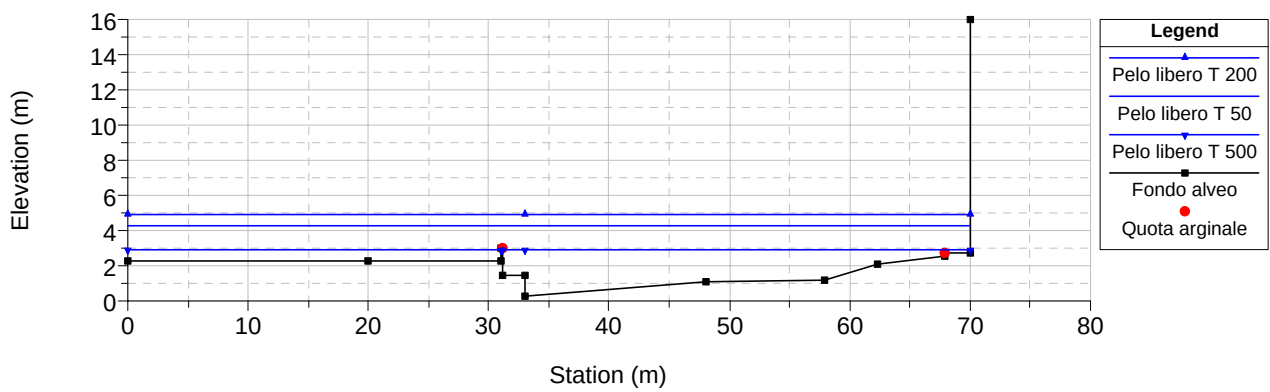
RS = 4.05 BR



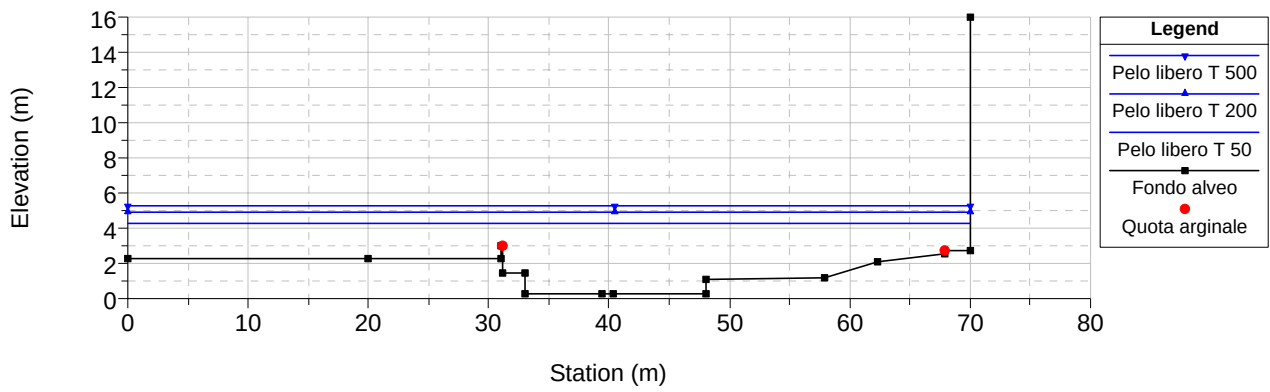
RS = 4



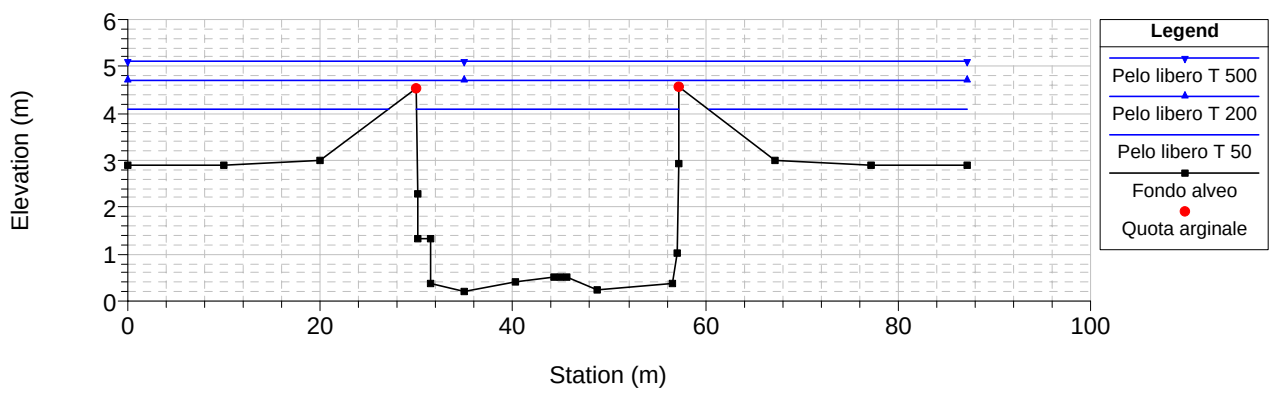
RS = 3.2



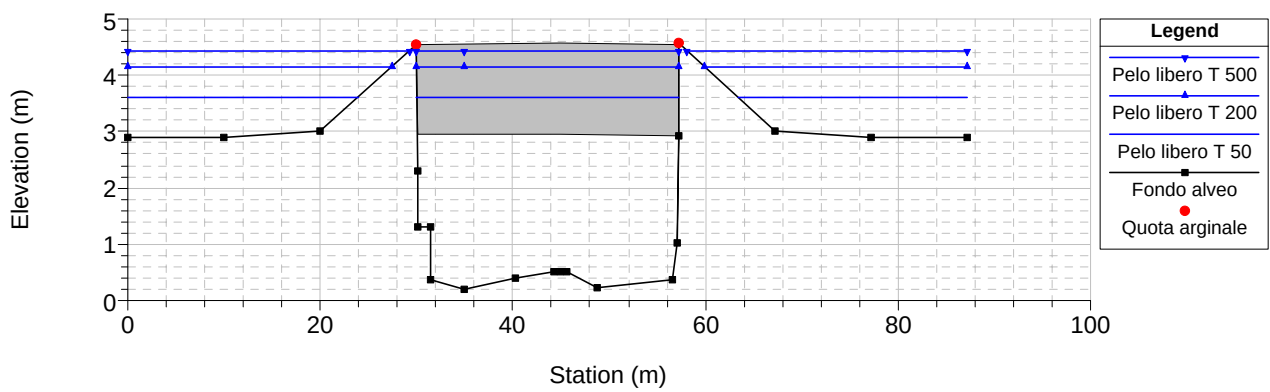
RS = 3



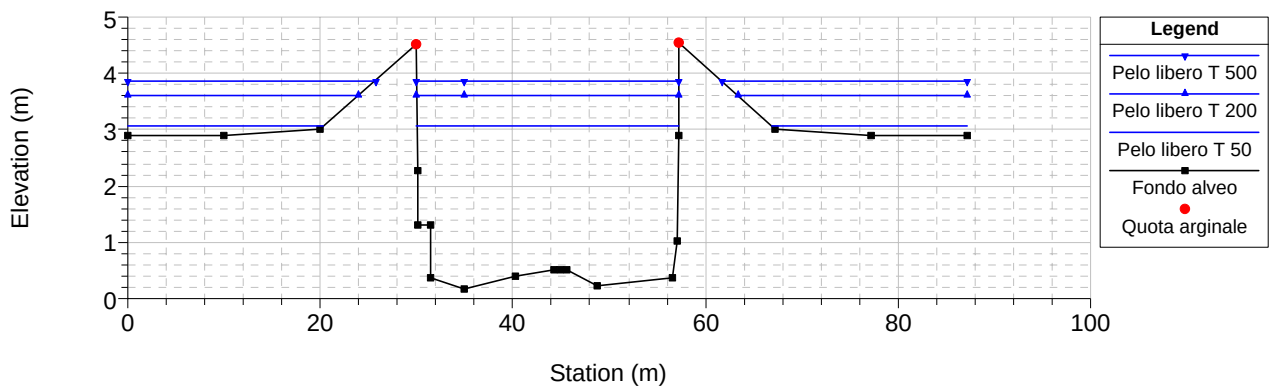
RS = 2.1



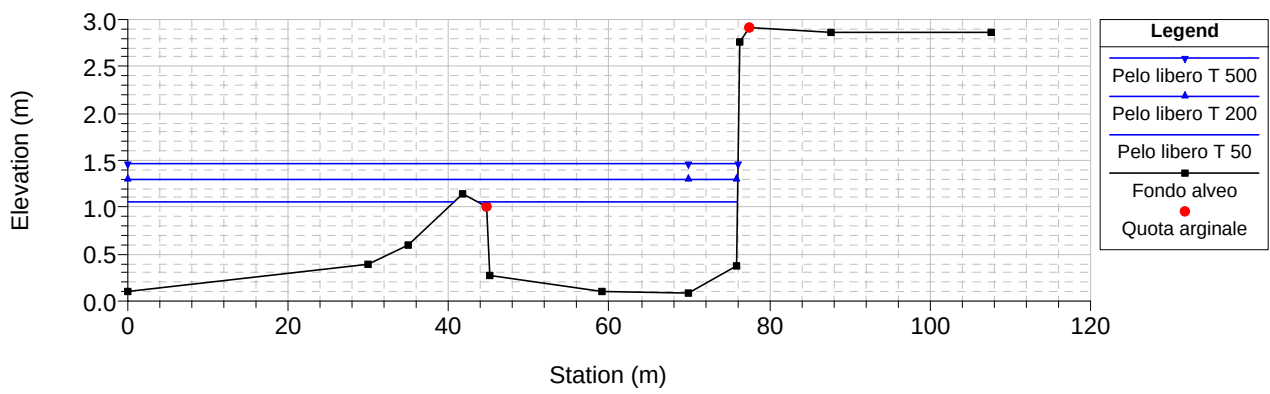
RS = 2.05 BR



RS = 2



RS = 1



MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO
PERMANENTE:

TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE
PER LE PORTATE $T=50, 200, 500$ ANNI

VARATELLA

Torrente Varatella T=50 anni

Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
56,1	220	93,5	98,46	98,48	100,04	97,99	100,4	2,48	88,81	0,43
56,05	Bridge									
56	220	93,5	98,46	98,48	97,98	97,98	99,51	5,49	40,08	1,01
55	220	89,64	93,87	93,91	92,07	93,2	95,85	8,62	25,52	2,11
54,1	220	87,35	94,5	94	91,41	92,1	94,29	7,52	29,25	1,34
54,05	Bridge									
54	220	86,85	94	93,5	90,71	91,6	93,99	8,02	27,42	1,48
53	220	83,07	88,3	88,54	86,27	87,33	89,67	8,17	26,94	1,86
52	220	76,46	83,23	80,96	80	81,22	83,22	7,94	27,71	1,64
51,2	220	73,58	76,78	76,14	75,99	76,78	78,24	6,63	33,19	1,61
51	220	70,37	76,78	76,14	72,88	74,6	77,95	9,98	22,04	2,01
50,1	220	59,8	72,23	72	66,28	65,95	68,6	6,75	32,61	0,92
50,05	Bridge									
50	220	59,4	71,83	71,6	65,55	65,55	68,18	7,18	30,63	1
49	220	55,69	69,9	68,57	61,91	63,35	66,73	9,73	22,62	1,34
48,1	220	53,46	65,57	64,51	62,52	60,75	63,42	4,2	52,34	0,65
48,05	Bridge									
48	220	53,45	65,56	64,5	60,74	60,74	62,78	6,33	34,77	1
47	220	52,37	57,78	58,09	54,75	55,54	57,67	7,57	29,06	2,5
46,1	220	45,37	52,36	50,53	49,79	48,52	50,31	3,21	68,64	0,54
46,05	Bridge									
46	220	45,31	52,3	50,47	47,82	48,48	50,14	6,75	32,57	1,63
45	220	44,18	47,72	46,83	47,77	47,99	49,11	5,14	42,82	1,19
44	220	42,92	50,67	45,74	44,78	45,59	47,42	7,2	30,57	1,91
43	220	40,74	43,8	43,97	44,3	44,1	45,41	4,55	48,37	0,98
42,2	220	40,63	43,58	45,12	43,84	43,84	45,09	4,85	45,35	1,08
42	220	38,32	43,58	45,12	44,48	41,96	44,78	2,33	94,36	0,38
41,1	220	38,06	43,25	43,4	44,11	42,02	44,64	2,75	79,97	0,64
41,05	Bridge									
41	220	37,86	43,05	43,2	41,82	41,82	43,73	6,12	35,97	1
40	350	37,17	40,77	40,77	41,36	41,36	42,67	4,97	70,35	1,01
39	350	36,2	38,89	38,73	40,03	40,41	41,81	5,9	59,32	1,29
38	350	35,98	38,1	37,4	40,49	39,87	41,21	3,62	96,61	0,67
37	350	35,86	38,24	39,81	40,46	39,35	41,06	3,31	105,63	0,56
36,1	350	35,52	41,75	38,19	40,5	39,08	40,92	2,9	120,68	0,48
36,05	Bridge									
36	350	35,48	41,75	38,15	38,34	39,04	40,73	6,85	51,1	1,75
35	350	34,74	37,4	36,86	38,23	38,36	39,5	4,85	72,18	1,07
34,2	350	34,8	36,76	35,65	38,23	38,23	39,09	3,47	100,81	0,84
34	350	33,36	36,76	35,65	36,5	37,45	38,94	6,89	50,79	1,37
33	350	32,64	36,58	36,27	36,68	37,19	37,93	4,61	75,88	1,36
32	350	32,16	33,96	33,65	34,7	35,31	36,58	5,42	64,63	1,6
31,2	350	32,11	33,43	33,43	33,86	34,26	35,19	4,78	73,2	1,49
31	350	29,33	33,43	33,43	31,24	32,34	34,86	8,43	41,5	2,28
30,1	350	27,86	35,12	35,78	32,91	31,49	33,48	3,35	104,52	0,65
30,05	Bridge									
30	350	27,71	34,97	35,63	32,41	31,34	33,16	3,83	91,49	0,77
29	350	27,04	30,31	31,52	31,08	31,48	32,47	4,58	76,34	1,3
28	350	26,53	29,89	33,75	30,94	30,94	31,76	3,49	100,24	0,86
27,2	350	26,28	28,47	27,78	28,97	29,54	30,75	5,06	69,16	1,55
27	350	24,71	28,47	27,78	27,7	28,96	30,63	7,59	46,13	1,65

Torrente Varatella T=50 anni

Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
26	350	23,25	28,39	26,5	27,23	27,91	29,05	5,24	66,85	1,54
25	350	22,09	27,48	25,6	24,08	24,94	26,91	7,45	47	1,73
24	350	20,69	24,7	22,91	23,17	23,45	24,75	5,56	63	1,2
23	350	19,73	23,3	23	21,59	22,19	23,62	6,31	55,49	1,55
22	350	18,77	23	22,7	21,91	21,18	22,55	3,55	98,56	0,67
21,5	350	18,29	22,3	22,19	21,91	20,67	22,4	3,11	112,67	0,53
21,4	350	17,81	21,72	20,6	21,9	20,29	22,31	2,69	130,03	0,51
21,06	350	17	20,33	20,45	21,82	20,79	22,2	2,61	134,04	0,5
21,05	Culvert									
21	350	17	20,33	20,45	20,81	20,81	21,74	4,14	84,59	0,99
20,6	350	15,73	19,56	19,5	18,21	19,02	20,77	7,09	49,37	1,74
20,55	Bridge									
20,5	350	15,73	19,56	19,5	18,57	19,02	20,26	5,75	60,89	1,37
20	380	15,7	18,37	18,34	19,08	19,08	19,9	3,66	103,79	0,94
19,2	380	15,66	16,71	16,72	17,82	18,29	19,32	4,54	83,61	1,52
19	380	14,53	16,71	16,72	17,26	18,03	19,27	6,03	63,01	1,54
18,1	380	12,26	16,33	16,8	17,21	16,83	17,64	2,41	157,87	0,68
18,05	Bridge									
18	380	12,24	16,31	16,78	17,05	16,81	17,57	2,72	139,78	0,81
17	380	10,9	17,28	16,2	13,93	14,54	16,11	6,55	58,05	1,41
16	380	9,66	16,41	15,98	12,46	12,9	14,31	6,02	63,08	1,3
15	380	8,13	14,69	14,14	10,3	10,62	11,67	5,18	73,34	1,3
14	380	6,06	10,44	9,86	9,7	8,77	10,22	3,16	120,22	0,68
13	380	5,07	8,8	8,51	8,57	8,49	9,75	4,8	79,11	1,06
12	380	3,45	6,41	6,95	7,44	6,83	7,63	1,6	238,14	0,42
11,1	380	2,89	5,89	5,92	6,83	6,44	7,41	3,04	124,95	0,66
11,05	Bridge									
11	380	2,82	5,82	5,85	6,58	6,37	7,27	3,32	114,62	0,75
10,1	380	2,21	5,15	4,33	6,5	5,64	6,89	2,45	155,08	0,51
10,05	Bridge									
10	380	2,2	5,14	4,32	6,48	5,64	6,88	2,46	154,23	0,51
9	380	1,83	4,19	4,43	6,08	5,49	6,65	2,99	127,26	0,59
8,1	380	1,37	4,05	3,9	6,11	4,9	6,45	2,46	154,49	0,45
8,05	Bridge									
8	380	1,36	4,04	3,89	6,06	4,88	6,41	2,49	152,56	0,45
7	380	1,27	3,84	4,01	5,95	4,69	6,33	2,5	151,8	0,44
6,1	380	1,25	6,3	6,25	5,74	4,12	6,24	3,11	122,31	0,48
6,05	Bridge									
6	380	1,19	6,3	6,25	5,25	4,06	5,86	3,47	109,58	0,57
5	380	1,1	2,24	3,32	5,49	3,45	5,67	1,77	214,25	0,29
4,1	380	0,45	3,52	3,65	5,03	3,57	5,6	3,33	114,14	0,52
4,05	Bridge									
4	380	0,32	3,39	3,52	2,63	3,44	5,42	7,4	51,37	1,73
3,3	380	0,27	3,11	2,94	4,19	3,51	4,62	2,71	140,09	0,56
3,2	380	0,25	3,02	2,75	4,3	3,27	4,55	2,12	179,24	0,42
3	380	0,25	3,02	2,75	4,3	3,18	4,54	2,05	185,82	0,4
2,1	380	0,2	4,54	4,57	4,09	3,49	4,51	2,46	154,28	0,57
2,05	Bridge									
2	380	0,18	4,52	4,55	3,06	3,48	4,43	4,9	77,51	1,47
1	380	0,08	1	2,92	1,05	1,72	3,6	6,83	55,63	2,5

Torrente Varatella T=200 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
56,1	310	93,5	98,46	98,48	101,02	99,16	101,43	2,7	114,93	0,42
56,05	Bridge									
56	310	93,5	98,46	98,48	99,17	99,17	100,46	4,74	65,35	0,97
55	310	89,64	93,87	93,91	97,19	94,15	97,33	1,55	200,59	0,24
54,1	310	87,35	94,5	94	96,69	93,1	97,26	3,15	98,32	0,44
54,05	Bridge									
54	310	86,85	94	93,5	92,6	92,6	95,06	6,94	44,67	1
53	310	83,07	88,3	88,54	86,77	88,09	91	9,1	34,05	1,9
52	310	76,46	83,23	80,96	80,68	82,01	84,54	8,71	35,59	1,6
51,2	310	73,58	76,78	76,14	76,4	77,46	79,24	7,1	43,67	1,79
51	310	70,37	76,78	76,14	73,81	75,41	79	10,09	30,71	2,03
50,1	310	59,8	72,23	72	67,82	67,36	70,6	7,39	41,92	0,91
50,05	Bridge									
50	310	59,4	71,83	71,6	66,32	66,97	70,27	8,81	35,17	1,16
49	310	55,69	69,9	68,57	64,22	65,37	68,56	9,23	33,6	1,23
48,1	310	53,46	65,57	64,51	63,94	61,97	64,88	4,3	72,13	0,62
48,05	Bridge									
48	310	53,45	65,56	64,5	61,96	61,96	64,25	6,7	46,25	1
47	310	52,37	57,78	58,09	54,96	55,98	58,82	8,7	35,62	2,61
46,1	310	45,37	52,36	50,53	50,83	49,15	51,45	3,47	89,44	0,56
46,05	Bridge									
46	310	45,31	52,3	50,47	49,11	49,11	50,63	5,47	56,71	1
45	310	44,18	47,72	46,83	48,25	48,55	49,95	5,75	53,89	1,2
44	310	42,92	50,67	45,74	45,19	46,19	48,37	7,91	39,18	1,89
43	310	40,74	43,8	43,97	45,34	44,97	46,33	4,03	77,01	0,85
42,2	310	40,63	43,58	45,12	44,57	44,57	45,99	5,05	61,39	0,97
42	310	38,32	43,58	45,12	45,01	42,62	45,46	2,88	107,65	0,45
41,1	310	38,06	43,25	43,4	44,52	44,18	45,22	3,18	97,37	0,67
41,05	Bridge									
41	310	37,86	43,05	43,2	43,31	42,8	45,2	5,76	53,81	1,38
40	500	37,17	40,77	40,77	42,07	42,07	43,71	5,52	90,54	0,99
39	500	36,2	38,89	38,73	41,83	41,1	42,9	4,55	109,79	0,74
38	500	35,98	38,1	37,4	41,88	40,5	42,55	3,5	142,81	0,54
37	500	35,86	38,24	39,81	41,83	40,03	42,47	3,43	145,92	0,49
36,1	500	35,52	41,75	38,19	41,9	39,68	42,35	2,99	166,96	0,44
36,05	Bridge									
36	500	35,48	41,75	38,15	38,64	39,64	42,07	8,2	60,98	1,92
35	500	34,74	37,4	36,86	38,64	38,97	40,47	5,8	86,23	1,17
34,2	500	34,8	36,76	35,65	38,25	38,71	39,96	4,9	102,12	1,18
34	500	33,36	36,76	35,65	37,47	38,3	39,89	6,3	79,34	1,56
33	500	32,64	36,58	36,27	36,93	37,61	38,84	5,45	91,81	1,46
32	500	32,16	33,96	33,65	34,94	35,95	37,57	6,37	78,46	1,78
31,2	500	32,11	33,43	33,43	36,4	34,66	36,63	2,01	249,02	0,34
31	500	29,33	33,43	33,43	36,46	32,88	36,6	1,53	327,33	0,22
30,1	500	27,86	35,12	35,78	36,39	32,74	36,58	1,85	270,55	0,32
30,05	Bridge									
30	500	27,71	34,97	35,63	33,13	32,59	34,03	4,2	119,03	0,77
29	500	27,04	30,31	31,52	31,5	31,92	33,08	4,92	101,72	1,2
28	500	26,53	29,89	33,75	31,42	31,42	32,39	3,88	128,93	0,85
27,2	500	26,28	28,47	27,78	29,34	29,97	31,32	5,33	93,74	1,47
27	500	24,71	28,47	27,78	28,63	29,53	31,25	6,55	76,31	1,75

Torrente Varatella T=200 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
26	500	23,25	28,39	26,5	27,58	28,29	29,85	5,56	89,86	1,62
25	500	22,09	27,48	25,6	24,81	26	27,78	7,64	65,48	1,53
24	500	20,69	24,7	22,91	23,6	24,19	25,86	6,58	76,01	1,36
23	500	19,73	23,3	23	22,01	22,8	24,63	7,16	69,79	1,61
22	500	18,77	23	22,7	22,61	21,8	23,45	4,06	123,02	0,7
21,5	500	18,29	22,3	22,19	22,61	21,3	23,3	3,59	139,16	0,68
21,4	500	17,81	21,72	20,6	22,64	20,98	23,17	3,05	163,75	0,51
21,06	500	17	20,33	20,45	22,59	21,34	23,06	2,92	171,36	0,5
21,05	Culvert									
21	500	17	20,33	20,45	21,34	21,34	22,47	4,53	110,36	0,96
20,6	500	15,73	19,56	19,5	18,78	19,85	21,55	7,37	67,82	1,69
20,55	Bridge									
20,5	500	15,73	19,56	19,5	19,06	19,85	21,15	6,41	78,04	1,39
20	550	15,7	18,37	18,34	19,68	19,68	20,56	3,61	152,44	0,89
19,2	550	15,66	16,71	16,72	18,1	18,64	19,91	5,02	109,58	1,47
19	550	14,53	16,71	16,72	17,8	18,46	19,88	5,42	101,45	1,65
18,1	550	12,26	16,33	16,8	17,79	17,35	18,21	2,4	229,43	0,56
18,05	Bridge									
18	550	12,24	16,31	16,78	17,61	17,34	18,12	2,64	208,25	0,65
17	550	10,9	17,28	16,2	14,72	15,35	17,12	6,87	80,08	1,33
16	550	9,66	16,41	15,98	13,04	13,66	15,42	6,84	80,46	1,35
15	550	8,13	14,69	14,14	10,67	11,17	12,57	6,11	90,03	1,4
14	550	6,06	10,44	9,86	10,26	9,4	10,96	3,39	162,46	0,9
13	550	5,07	8,8	8,51	9,33	9,64	10,46	3,86	142,32	1,12
12	550	3,45	6,41	6,95	9,31	7,22	9,37	1,02	536,88	0,18
11,1	550	2,89	5,89	5,92	9,01	6,94	9,3	2,2	249,63	0,34
11,05	Bridge									
11	550	2,82	5,82	5,85	8,97	6,87	9,25	2,19	251,02	0,33
10,1	550	2,21	5,15	4,33	8,97	6,24	9,16	1,74	316,13	0,25
10,05	Bridge									
10	550	2,2	5,14	4,32	8,81	6,24	9,01	1,8	305,56	0,27
9	550	1,83	4,19	4,43	8,66	6,06	8,94	2,16	254,69	0,3
8,1	550	1,37	4,05	3,9	8,66	5,42	8,89	1,95	282,12	0,26
8,05	Bridge									
8	550	1,36	4,04	3,89	8,56	5,41	8,79	1,98	277,38	0,27
7	550	1,27	3,84	4,01	8,53	5,24	8,76	1,92	286,53	0,26
6,1	550	1,25	6,3	6,25	8,33	4,84	8,72	2,79	197,23	0,34
6,05	Bridge									
6	550	1,19	6,3	6,25	7,52	4,78	8,02	3,13	175,63	0,41
5	550	1,1	2,24	3,32	7,75	3,92	7,9	1,61	341,74	0,21
4,1	550	0,45	3,52	3,65	7,37	4,32	7,85	3,08	178,58	0,39
4,05	Bridge									
4	550	0,32	3,39	3,52	2,87	4,19	7,44	9,47	58,09	2,08
3,3	550	0,27	3,11	2,94	3,05	4,01	6,31	7,54	72,92	2,15
3,2	550	0,25	3,02	2,75	4,87	3,69	5,23	2,51	219,48	0,45
3	550	0,25	3,02	2,75	4,88	3,62	5,22	2,43	226,18	0,43
2,1	550	0,2	4,54	4,57	4,71	4,03	5,19	2,65	207,19	0,55
2,05	Bridge									
2	550	0,18	4,52	4,55	3,61	4,03	5,1	4,69	117,37	1,2
1	550	0,08	1	2,92	1,3	2,1	4,3	7,39	74,41	2,38

Torrente Varatella T=500 anni

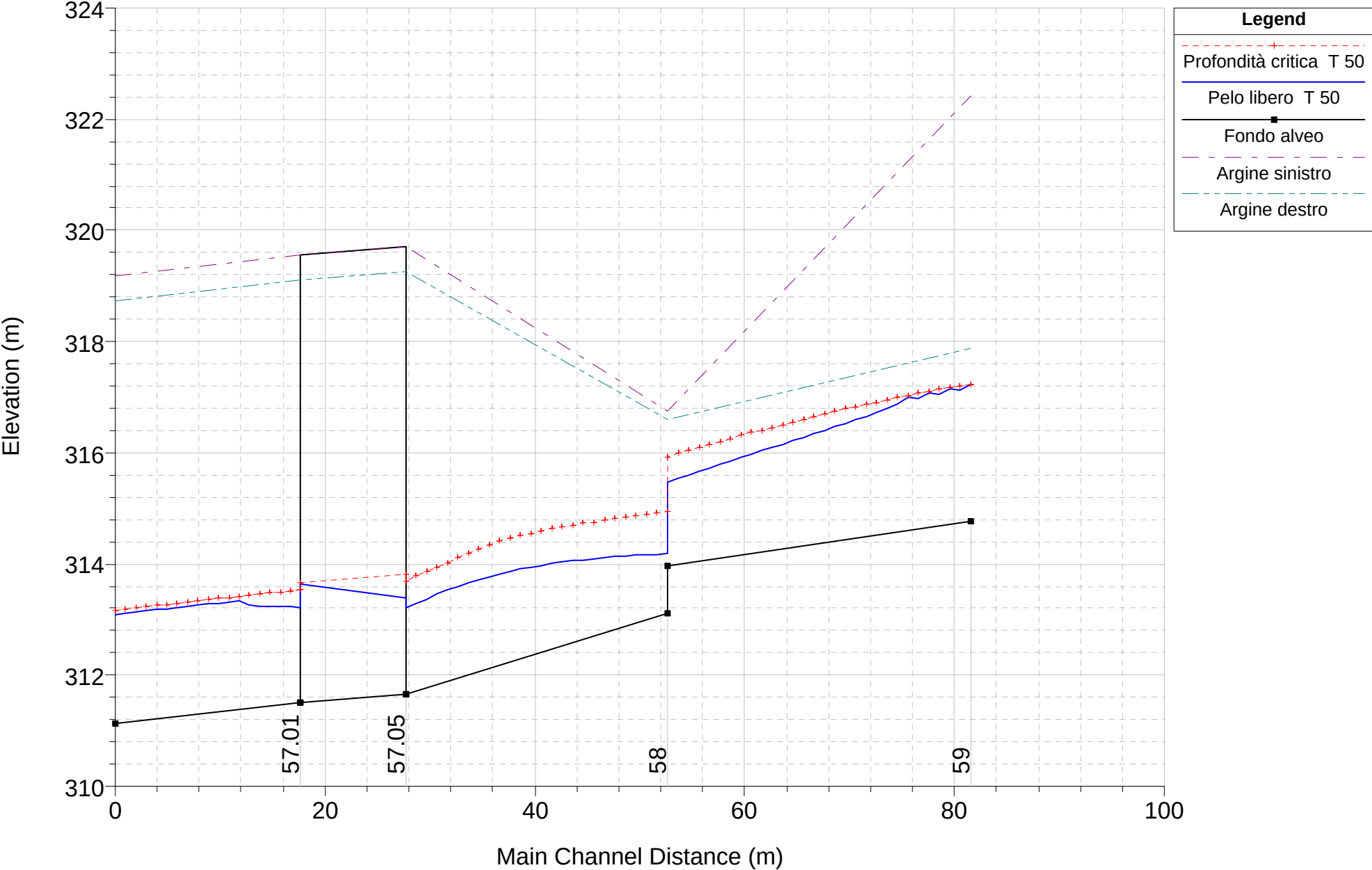
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
56,1	380	93,5	98,46	98,48	101,56	99,57	102,05	2,93	129,56	0,43
56,05	Bridge									
56	380	93,5	98,46	98,48	99,56	99,56	101,01	5,01	75,92	0,95
55	380	89,64	93,87	93,91	97,94	94,72	98,09	1,62	234,89	0,23
54,1	380	87,35	94,5	94	97,34	93,81	98,01	3,44	110,44	0,45
54,05	Bridge									
54	380	86,85	94	93,5	93,31	93,31	96,12	7,43	51,18	1
53	380	83,07	88,3	88,54	87,11	89,03	91,95	9,75	38,97	1,93
52	380	76,46	83,23	80,96	81,14	82,54	85,43	8,97	42,37	1,94
51,2	380	73,58	76,78	76,14	76,65	77,81	79,85	7,49	50,73	1,77
51	380	70,37	76,78	76,14	74,32	76,34	79,64	10,22	37,18	1,96
50,1	380	59,8	72,23	72	73,23	68,33	74,12	3,82	99,35	0,74
50,05	Bridge									
50	380	59,4	71,83	71,6	67,93	67,93	71,54	8,42	45,12	1
49	380	55,69	69,9	68,57	64,68	66,48	70,22	10,43	36,44	1,39
48,1	380	53,46	65,57	64,51	64,77	63,01	65,79	4,44	85,6	0,66
48,05	Bridge									
48	380	53,45	65,56	64,5	63	63	65,13	6,47	58,74	1
47	380	52,37	57,78	58,09	55,11	56,29	59,64	9,43	40,28	2,66
46,1	380	45,37	52,36	50,53	51,48	49,59	52,18	3,64	104,29	0,55
46,05	Bridge									
46	380	45,31	52,3	50,47	49,56	49,56	51,29	5,84	65,04	1
45	380	44,18	47,72	46,83	48,74	48,96	50,49	5,82	65,32	1,12
44	380	42,92	50,67	45,74	45,48	46,63	49,01	8,33	45,63	1,86
43	380	40,74	43,8	43,97	46,15	45,49	46,95	3,52	107,89	0,69
42,2	380	40,63	43,58	45,12	45,02	45,02	46,61	5,31	71,51	0,95
42	380	38,32	43,58	45,12	45,43	43,09	46	3,21	118,29	0,48
41,1	380	38,06	43,25	43,4	45,15	44,52	45,75	3,07	123,64	0,57
41,05	Bridge									
41	380	37,86	43,05	43,2	44,38	44,38	45,43	3,9	97,34	0,82
40	600	37,17	40,77	40,77	42,58	42,48	44,34	5,71	105,09	0,97
39	600	36,2	38,89	38,73	42,82	41,51	43,78	4,22	142,31	0,7
38	600	35,98	38,1	37,4	42,9	40,87	43,53	3,39	176,75	0,47
37	600	35,86	38,24	39,81	42,82	40,43	43,47	3,42	175,37	0,45
36,1	600	35,52	41,75	38,19	42,92	40,06	43,36	2,9	207	0,41
36,05	Bridge									
36	600	35,48	41,75	38,15	38,79	40,02	43	9,09	66,02	2,05
35	600	34,74	37,4	36,86	38,96	39,34	41,03	6,16	97,44	1,17
34,2	600	34,8	36,76	35,65	38,45	38,99	40,42	5,28	113,72	1,2
34	600	33,36	36,76	35,65	37,82	38,62	40,36	6,11	98,23	1,49
33	600	32,64	36,58	36,27	37,16	37,85	39,29	5,31	112,96	1,59
32	600	32,16	33,96	33,65	36,88	36,15	37,26	2,42	247,61	0,49
31,2	600	32,11	33,43	33,43	36,84	34,9	37,1	2,15	279,43	0,34
31	600	29,33	33,43	33,43	36,9	33,21	37,07	1,68	357,95	0,24
30,1	600	27,86	35,12	35,78	36,82	33,1	37,05	1,96	306,22	0,32
30,05	Bridge									
30	600	27,71	34,97	35,63	33,54	32,95	34,54	4,43	135,38	0,77
29	600	27,04	30,31	31,52	31,56	32,19	33,68	5,7	105,29	1,38
28	600	26,53	29,89	33,75	31,69	31,69	32,77	4,12	145,79	0,85
27,2	600	26,28	28,47	27,78	29,54	30,23	31,67	5,56	107,85	1,46
27	600	24,71	28,47	27,78	28,94	29,83	31,62	6,3	95,17	1,64

Torrente Varatella T=500 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
26	600	23,25	28,39	26,5	27,76	28,48	30,22	5,75	104,38	1,62
25	600	22,09	27,48	25,6	25,32	26,42	28,28	7,63	78,67	1,41
24	600	20,69	24,7	22,91	23,82	24,58	26,56	7,19	83,42	1,45
23	600	19,73	23,3	23	22,25	23,27	25,26	7,68	78,1	1,65
22	600	18,77	23	22,7	22,94	22,18	23,94	4,33	138,68	0,85
21,5	600	18,29	22,3	22,19	22,94	21,69	23,76	3,82	156,97	0,74
21,4	600	17,81	21,72	20,6	22,99	21,44	23,63	3,34	179,53	0,54
21,06	600	17	20,33	20,45	22,93	21,64	23,5	3,18	188,47	0,52
21,05	Culvert									
21	600	17	20,33	20,45	21,64	21,64	22,91	4,81	124,82	0,96
20,6	600	15,73	19,56	19,5	19,1	20,18	22,02	7,57	79,3	1,63
20,55	Bridge									
20,5	600	15,73	19,56	19,5	19,51	20,18	21,56	6,3	95,22	1,46
20	670	15,7	18,37	18,34	19,96	19,96	20,92	3,77	177,68	0,86
19,2	670	15,66	16,71	16,72	18,4	18,87	20,05	4,89	136,98	1,28
19	670	14,53	16,71	16,72	18,12	18,7	20,02	5,12	130,93	1,37
18,1	670	12,26	16,33	16,8	18,05	17,59	18,51	2,57	260,35	0,57
18,05	Bridge									
18	670	12,24	16,31	16,78	17,82	17,57	18,4	2,86	234,14	0,66
17	670	10,9	17,28	16,2	15,59	15,84	17,58	6,25	107,24	1,1
16	670	9,66	16,41	15,98	13,44	14,13	16,09	7,21	92,88	1,35
15	670	8,13	14,69	14,14	10,89	11,52	13,15	6,66	100,63	1,45
14	670	6,06	10,44	9,86	9,46	10,01	11,38	6,14	109,17	1,19
13	670	5,07	8,8	8,51	9,61	9,97	10,8	3,8	176,34	1,08
12	670	3,45	6,41	6,95	10,11	7,4	10,17	1,01	665,39	0,16
11,1	670	2,89	5,89	5,92	9,8	7,25	10,11	2,27	294,59	0,32
11,05	Bridge									
11	670	2,82	5,82	5,85	9,71	7,18	10,02	2,28	293,54	0,32
10,1	670	2,21	5,15	4,33	9,72	6,54	9,93	1,84	364,9	0,25
10,05	Bridge									
10	670	2,2	5,14	4,32	9,57	6,55	9,78	1,89	354,74	0,26
9	670	1,83	4,19	4,43	9,39	6,39	9,72	2,3	291,04	0,3
8,1	670	1,37	4,05	3,9	9,4	5,76	9,66	2,1	318,86	0,27
8,05	Bridge									
8	670	1,36	4,04	3,89	9,29	5,75	9,56	2,13	314,09	0,27
7	670	1,27	3,84	4,01	9,27	5,62	9,53	2,06	325,29	0,26
6,1	670	1,25	6,3	6,25	9,01	5,31	9,49	3,09	216,86	0,36
6,05	Bridge									
6	670	1,19	6,3	6,25	8,39	5,25	8,96	3,34	200,71	0,41
5	670	1,1	2,24	3,32	8,65	4,22	8,82	1,71	392,63	0,21
4,1	670	0,45	3,52	3,65	8,2	4,81	8,76	3,32	201,63	0,39
4,05	Bridge									
4	670	0,32	3,39	3,52	3,19	4,68	8,31	10,02	66,85	2,06
3,3	670	0,27	3,11	2,94	3,19	4,31	7,22	8,3	80,68	2,27
3,2	670	0,25	3,02	2,75	2,92	3,96	6,91	8,07	83,01	2,36
3	670	0,25	3,02	2,75	5,24	3,87	5,64	2,66	251,45	0,45
2,1	670	0,2	4,54	4,57	5,13	4,34	5,62	2,75	243,53	0,53
2,05	Bridge									
2	670	0,18	4,52	4,55	3,87	4,33	5,52	4,89	136,99	1,18
1	670	0,08	1	2,92	1,46	2,35	4,73	7,76	86,33	2,32

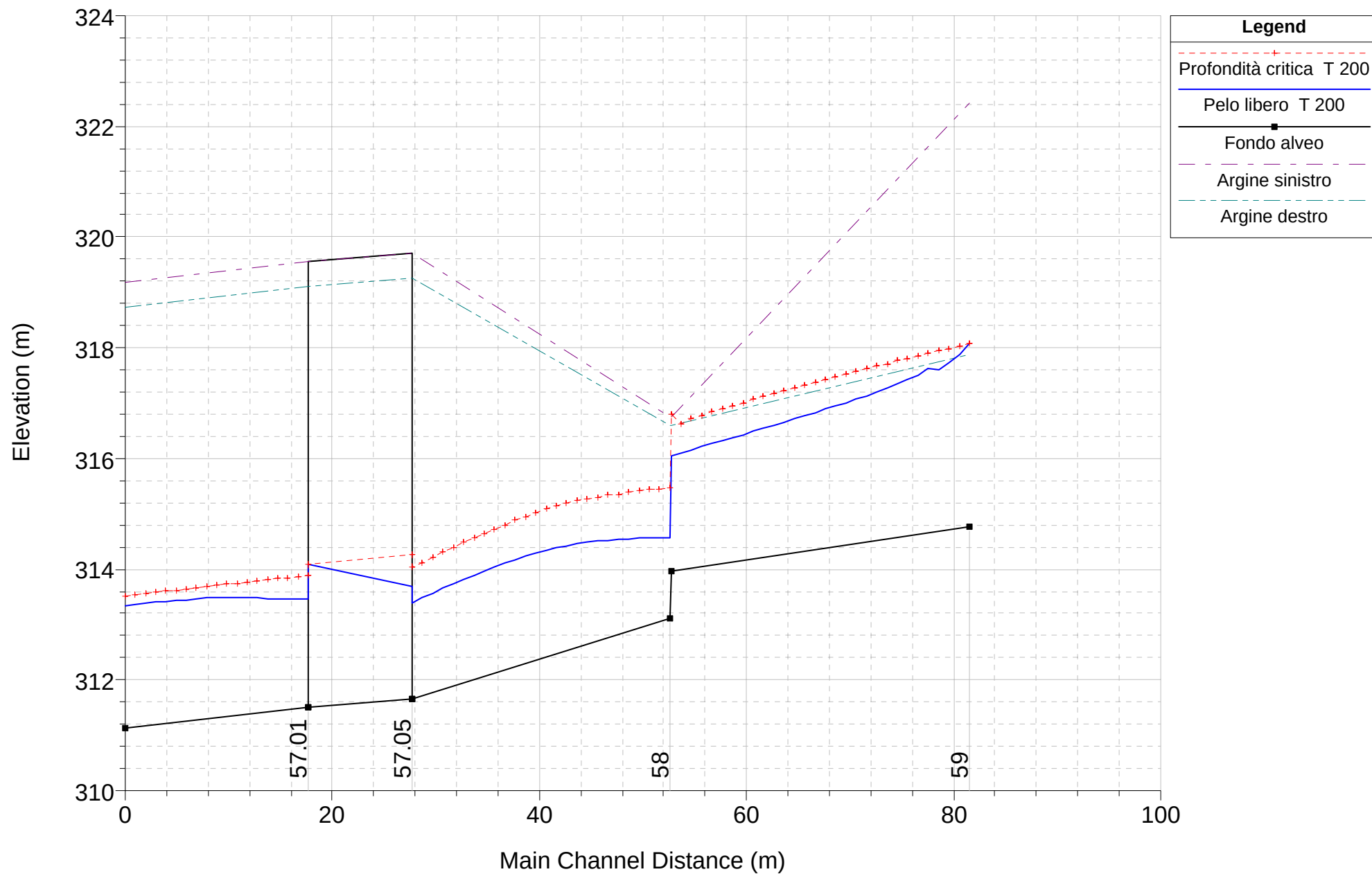
**PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO
PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI**

VARATELLA CAVA COMITO

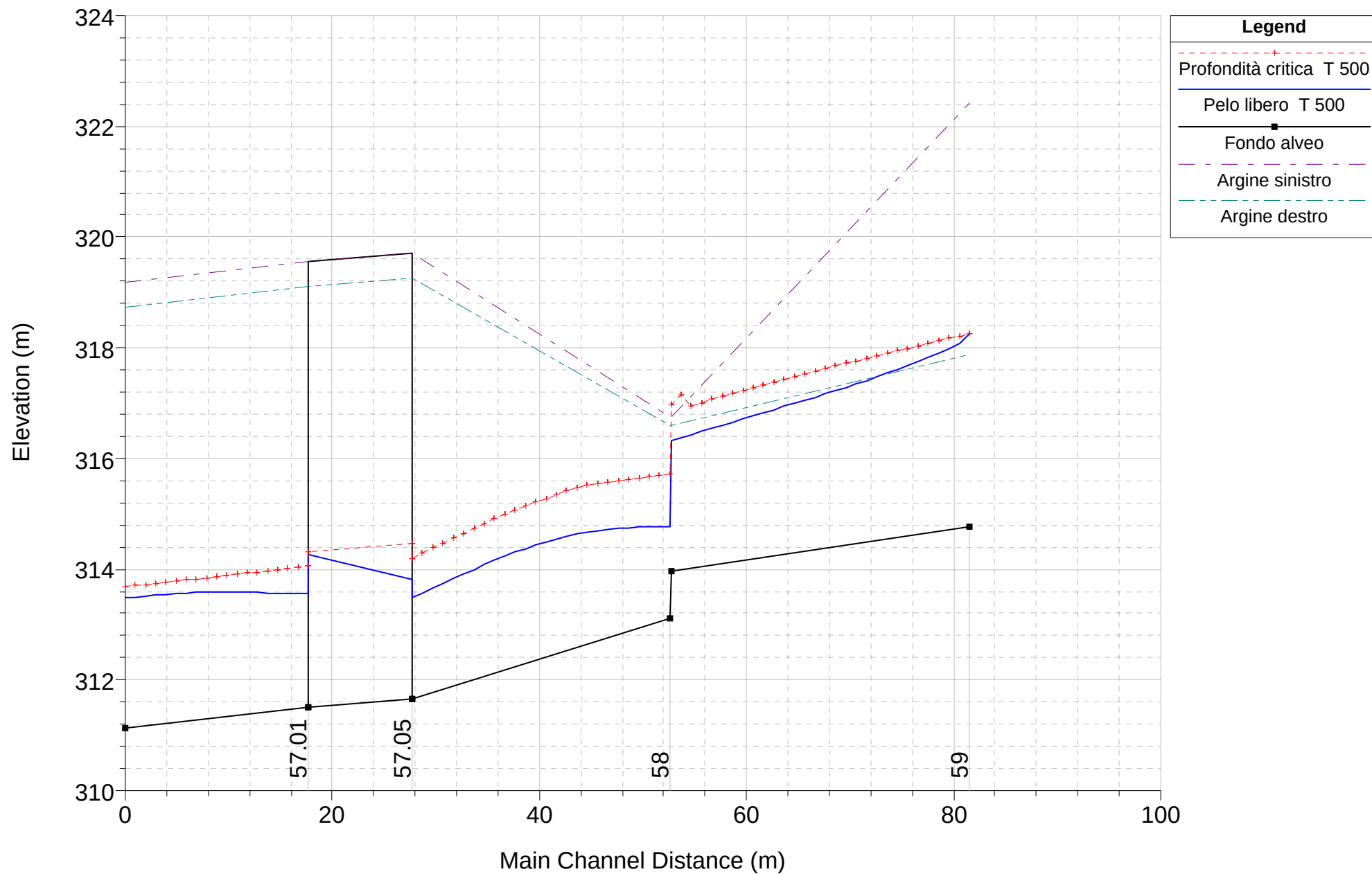
Torrente Varatella (Cava Comito) – profilo longitudinale di moto permanente T=50 anni



Torrente Varatella (Cava Comito) – profilo longitudinale di moto permanente T=200 anni



Torrente Varatella (Cava Comito) – profilo longitudinale di moto permanente T=500 anni



GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO
LIBERO IN CONDIZIONI DI MOTO PERMANENTE
PER LE PORTATE T=50, 200, 500 ANNI

VARATELLA CAVA COMITO

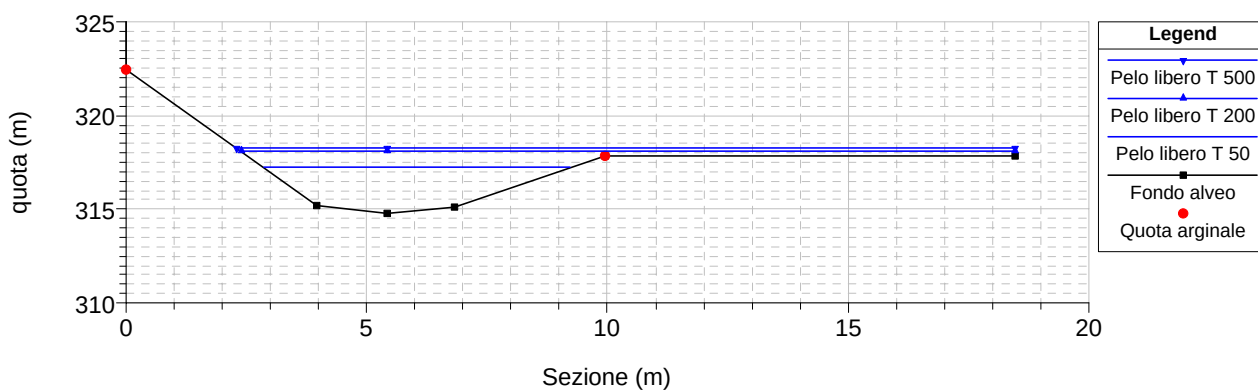
DALLA SEZ. 59
ALLA SEZ. 57

TORRENTE VARATELLA

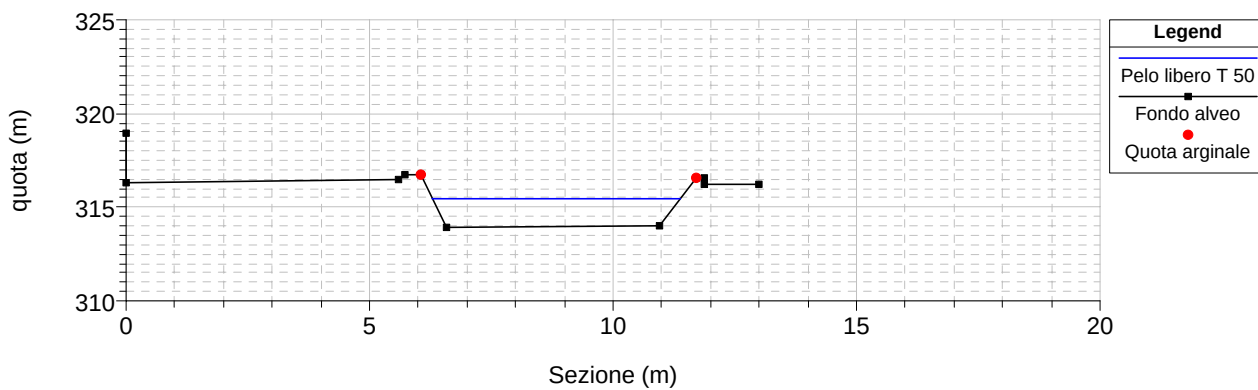
Cava Comito

Sezioni trasversali

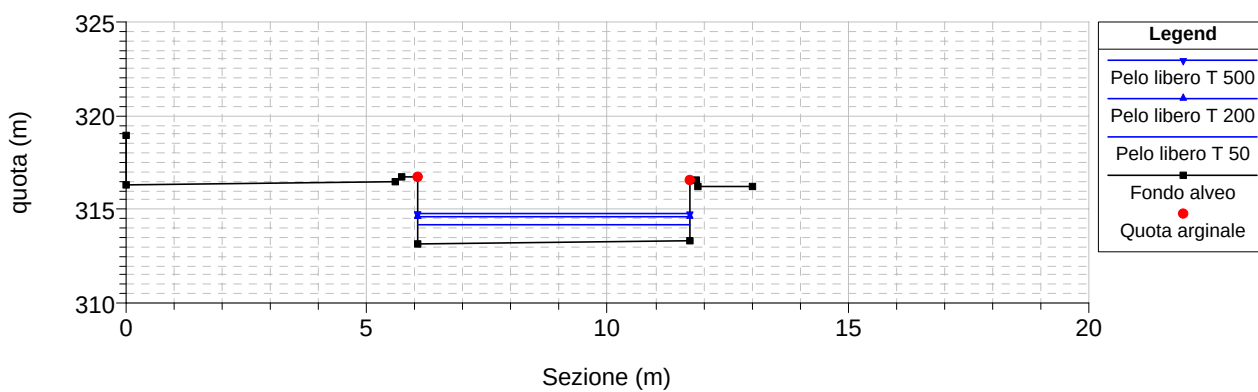
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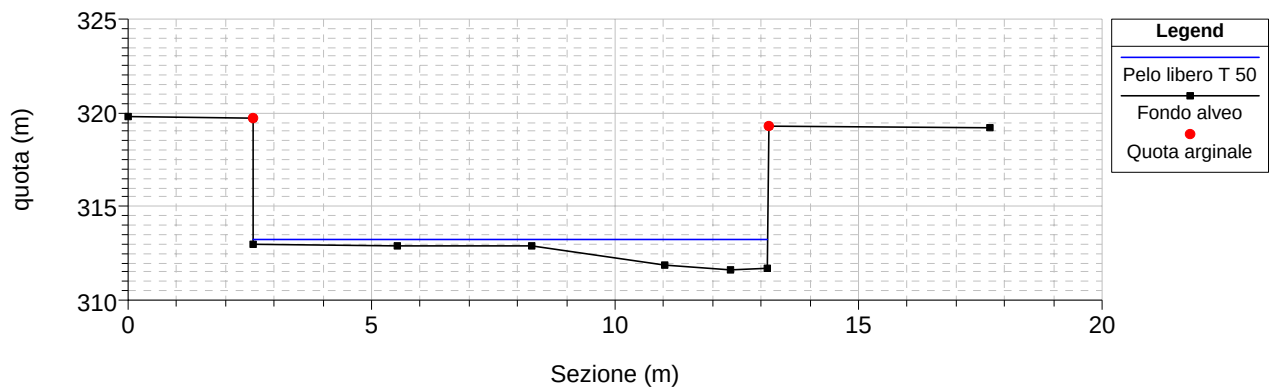
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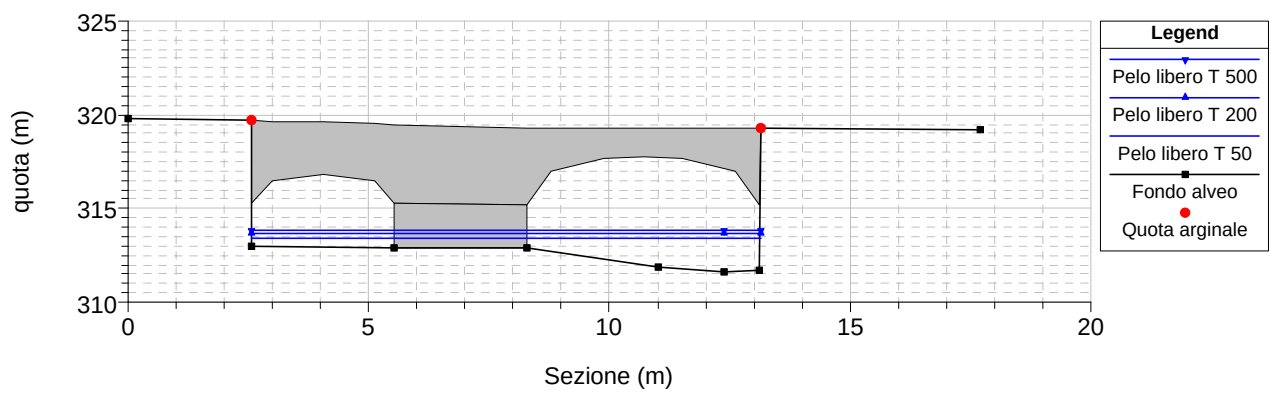
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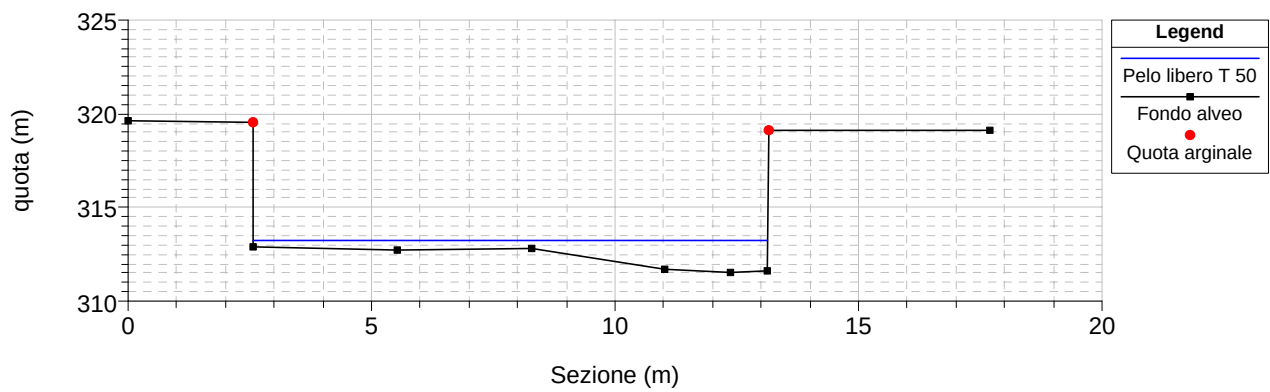
RS = 57.1



RS = 57.05 BR



RS = 57.01



MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO
PERMANENTE:
TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE
PER LE PORTATE T=50, 200, 500 ANNI

VARATELLA CAVA COMITO

Torrente Varatella Cava Comito T=50 anni

Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
59	40	314.77	322.42	317.87	317.23	317.23	318.03	3.97	10.08	1.01
58.1	40	313.96	316.76	316.6	315.47	315.93	317.08	5.62	7.11	1.52
58	40	313.12	316.76	316.6	314.18	314.94	316.96	7.38	5.42	2.41
57.1	40	311.66	319.7	319.25	313.21	313.69	314.92	5.8	6.9	2.29
57.05	Bridge									
57.01	40	311.51	319.55	319.1	313.22	313.54	314.33	4.67	8.56	1.66

Torrente Varatella Cava Comito T=200 anni

Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
59	60	314.77	322.42	317.87	318.07	318.07	318.72	3.34	17.95	1.01
58.1	60	313.96	316.76	316.6	316.04	316.81	317.84	5.95	10.08	1.39
58	60	313.12	316.76	316.6	314.58	315.48	317.7	7.83	7.66	2.15
57.1	60	311.66	319.7	319.25	313.4	314.03	315.74	6.78	8.85	2.36
57.05	Bridge									
57.01	60	311.51	319.55	319.1	313.46	313.89	314.96	5.43	11.06	1.69

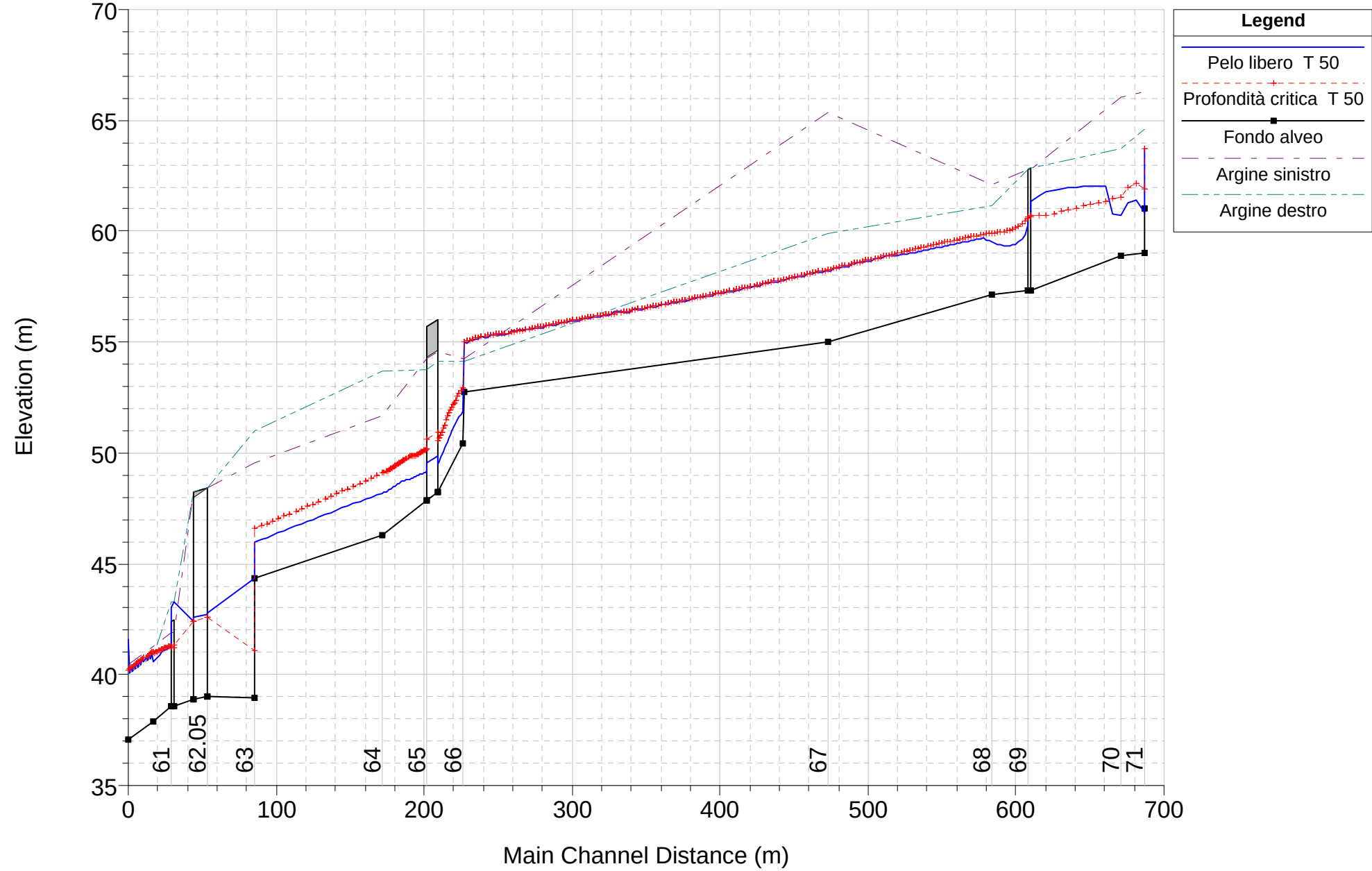
Torrente Varatella Cava Comito T=500 anni

Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
59	70	314.77	322.42	317.87	318.25	318.25	318.92	3.34	20.93	0.94
58.1	70	313.96	316.76	316.6	316.33	316.98	318.15	5.93	11.8	1.59
58	70	313.12	316.76	316.6	314.78	315.71	318.01	7.96	8.79	2.04
57.1	70	311.66	319.7	319.25	313.48	314.2	316.11	7.18	9.74	2.39
57.05	Bridge									
57.01	70	311.51	319.55	319.1	313.56	314.05	315.24	5.75	12.18	1.71

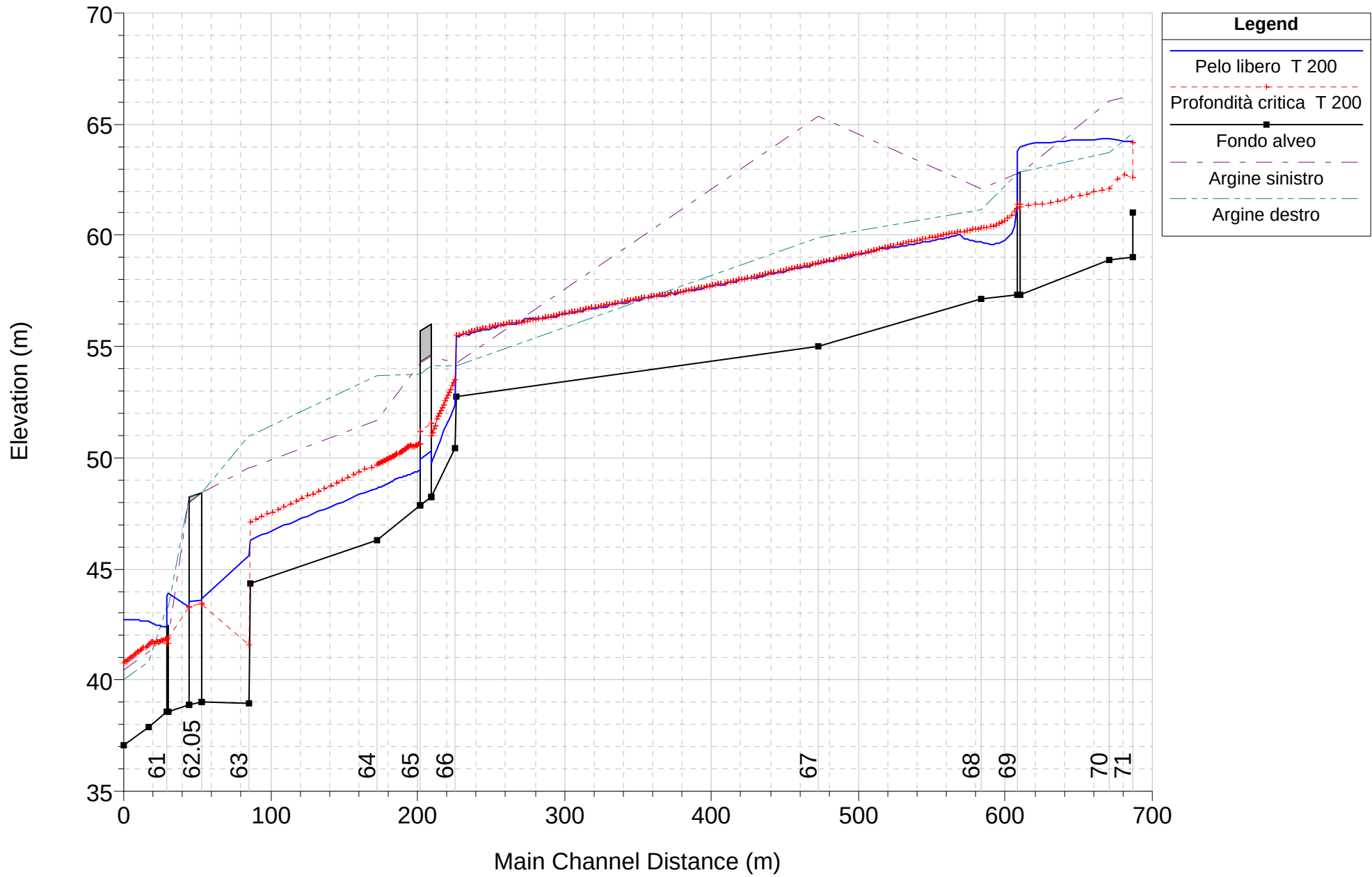
**PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO
PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI**

VARATELLA – RIO BARESCIONE

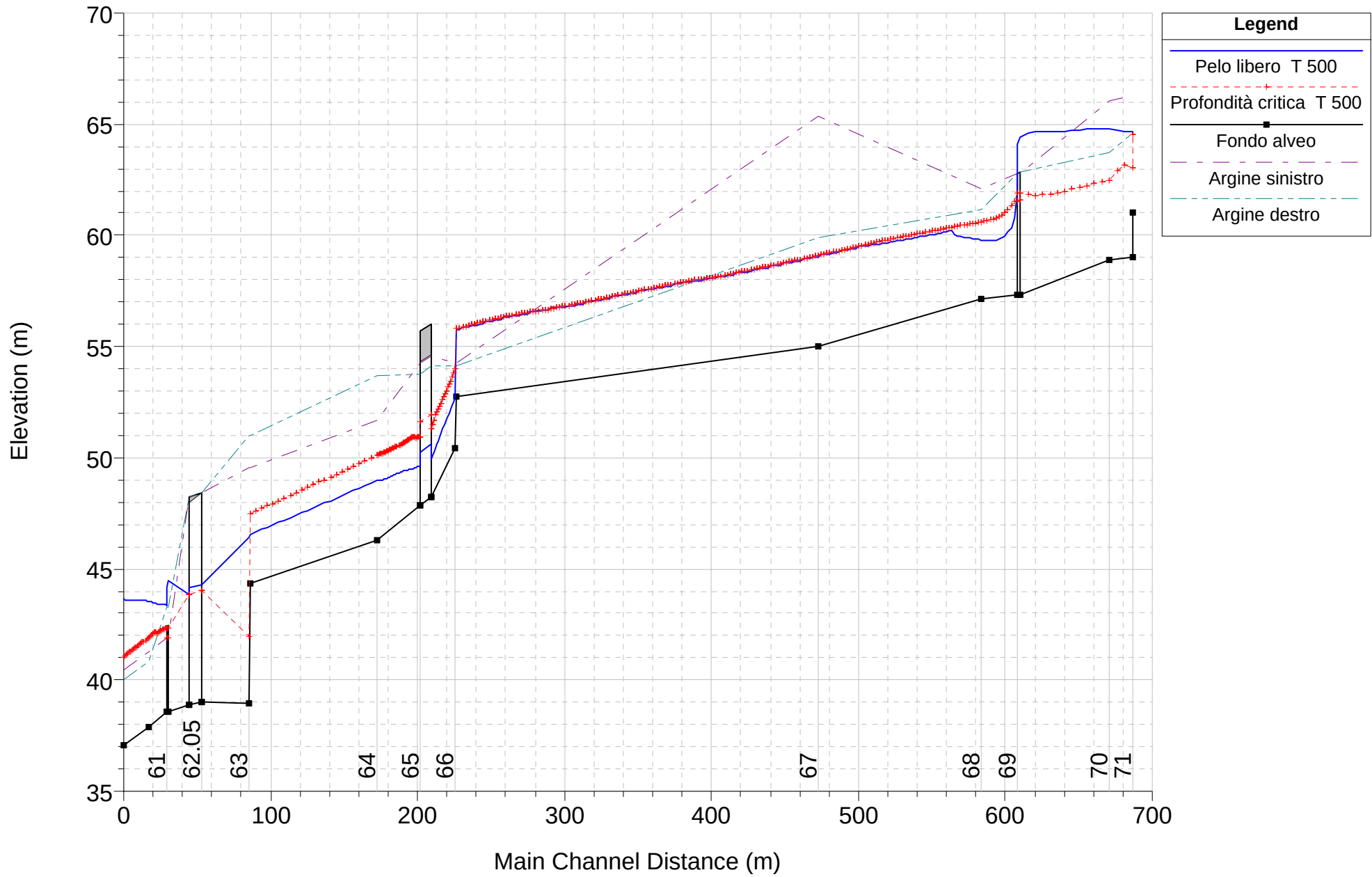
Rio Barescione – profilo longitudinale di moto permanente T=50 anni



Rio Barescione – profilo longitudinale di moto permanente T=200 anni



Rio Barescione – profilo longitudinale di moto permanente T=500 anni



GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO
LIBERO IN CONDIZIONI DI MOTO PERMANENTE
PER LE PORTATE $T=50, 200, 500$ ANNI

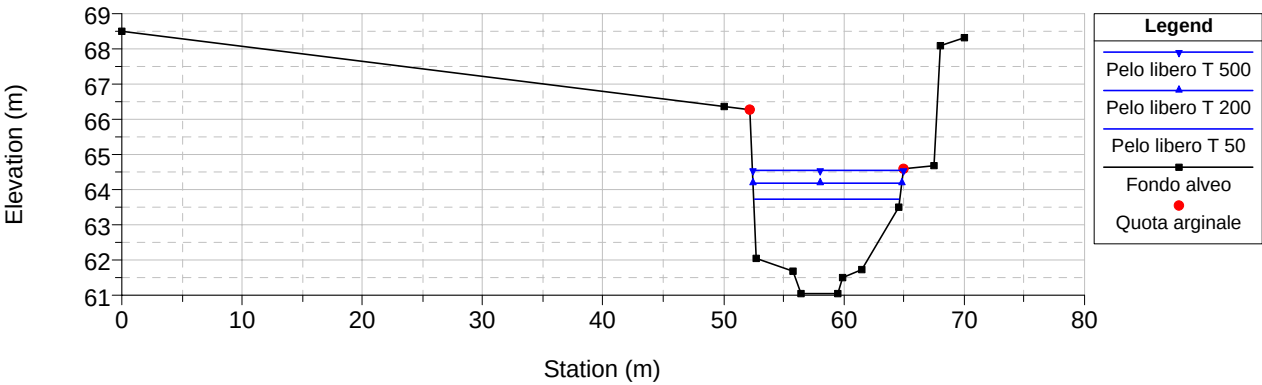
VARATELLA – RIO BARESCIONE

DALLA SEZ. 71
ALLA SEZ. 60

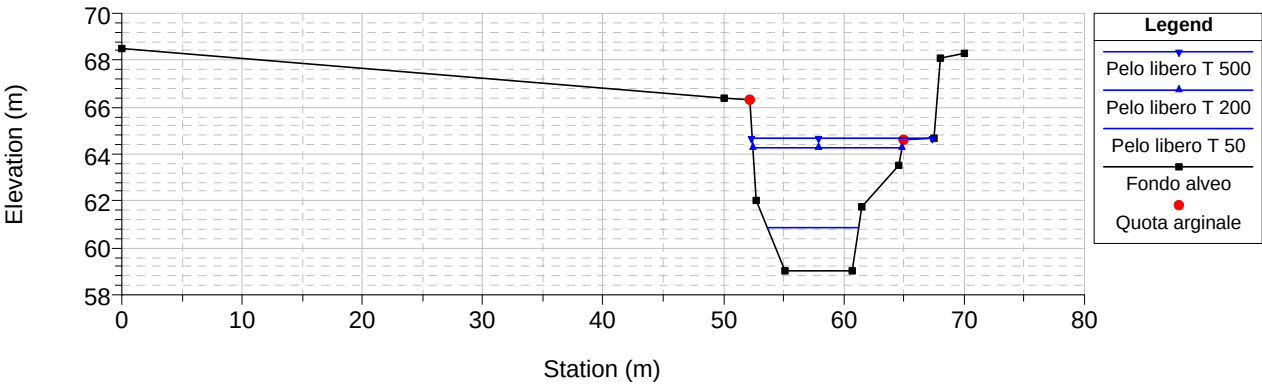
RIO BARESCIONE

Sezioni trasversali

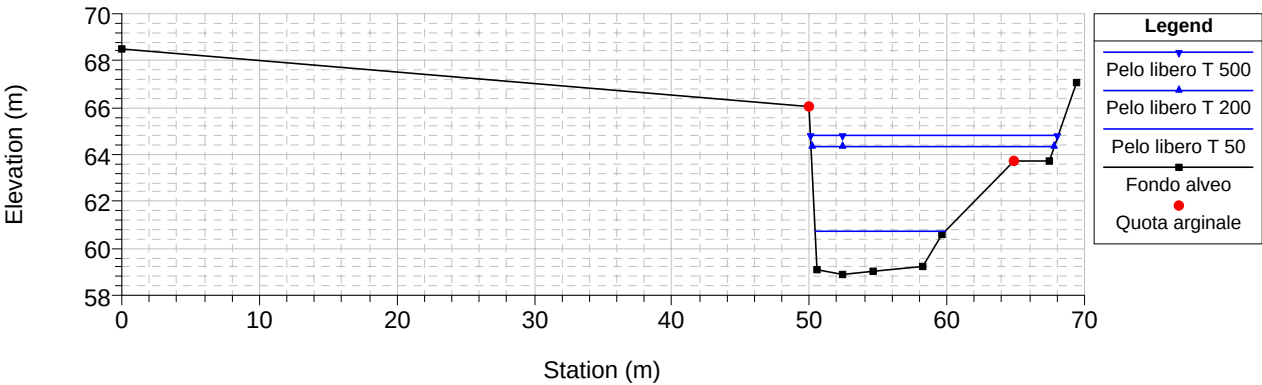
RS = 71.2



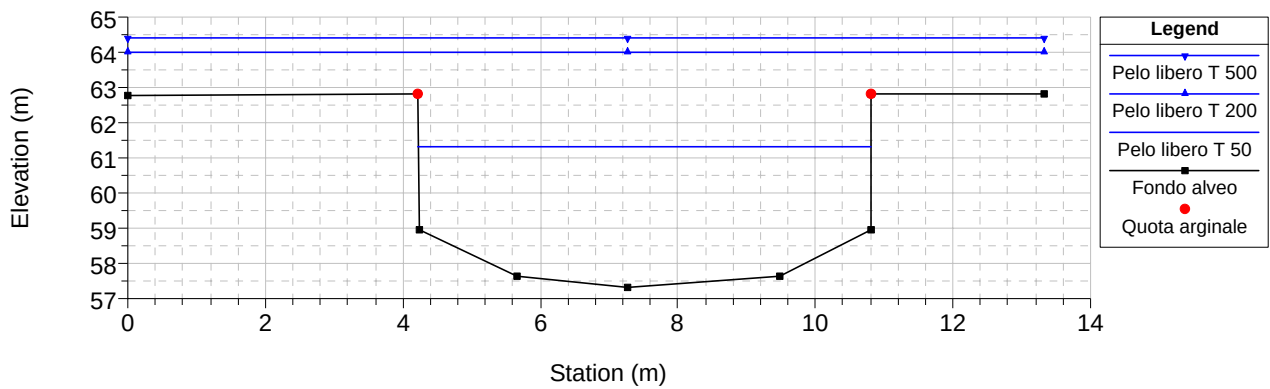
RS = 71



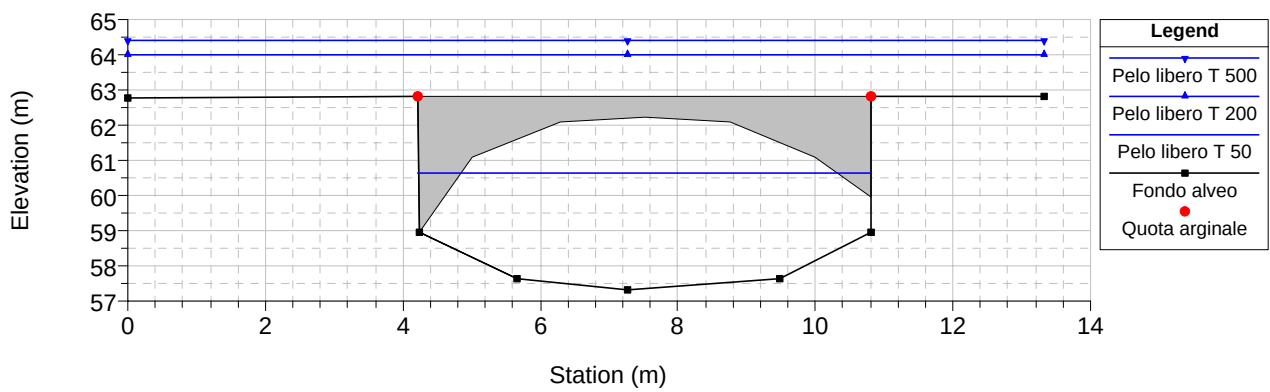
RS = 70



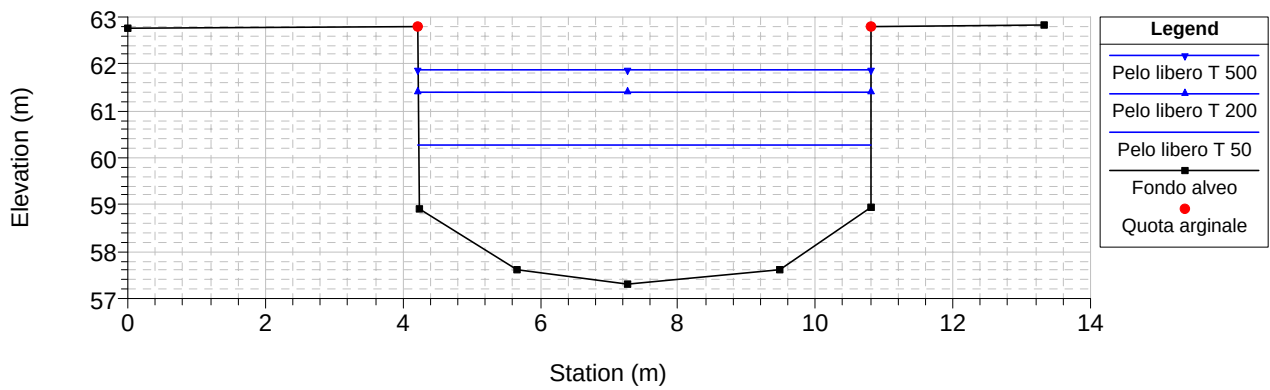
RS = 69.1



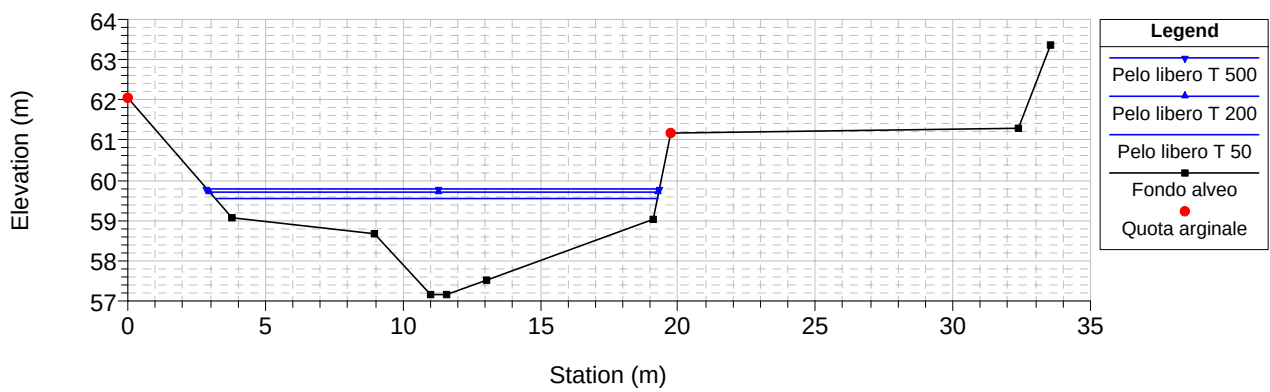
RS = 69.05 BR



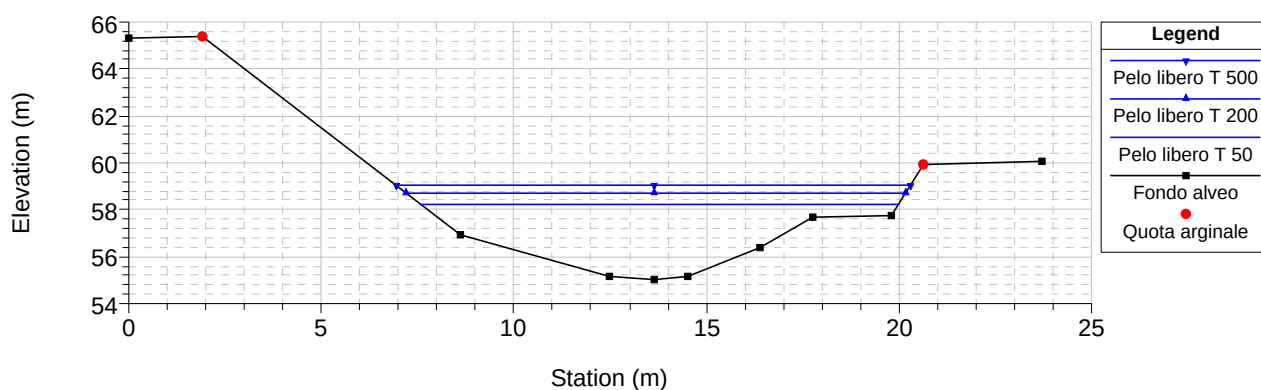
RS = 69



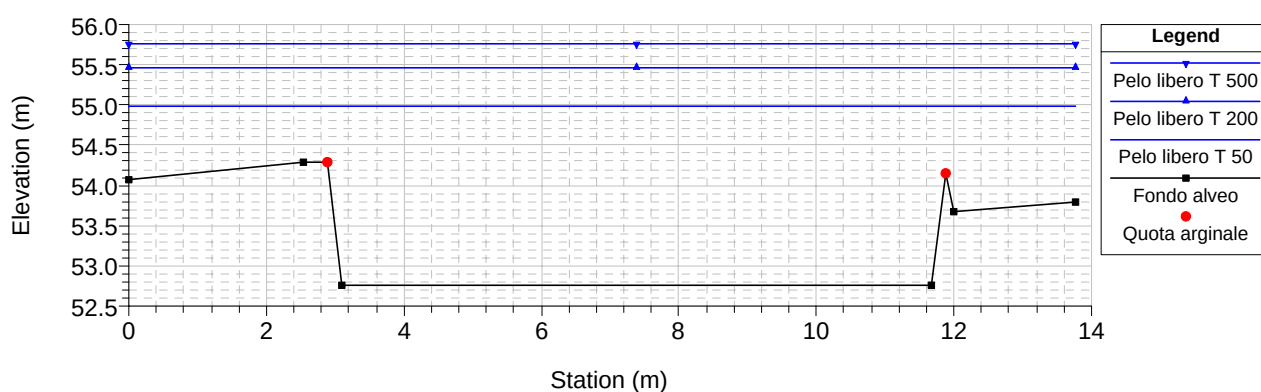
RS = 68



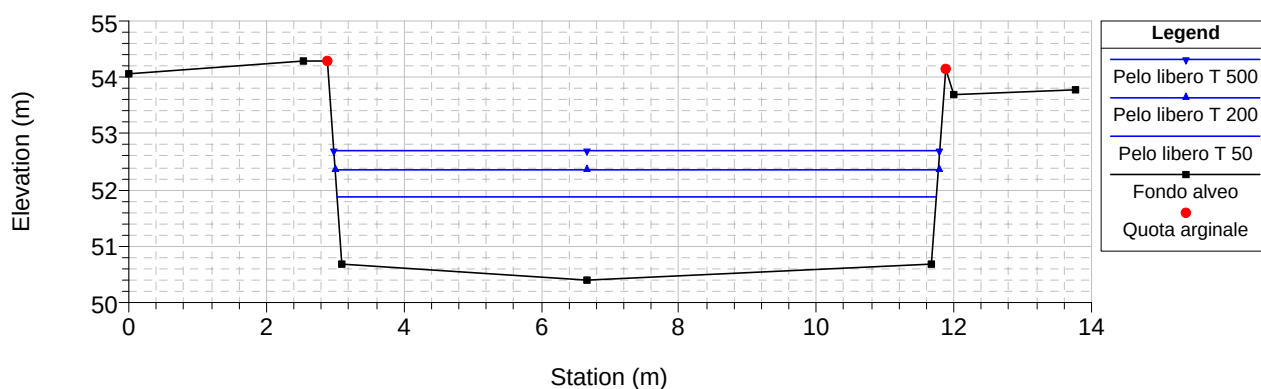
RS = 67



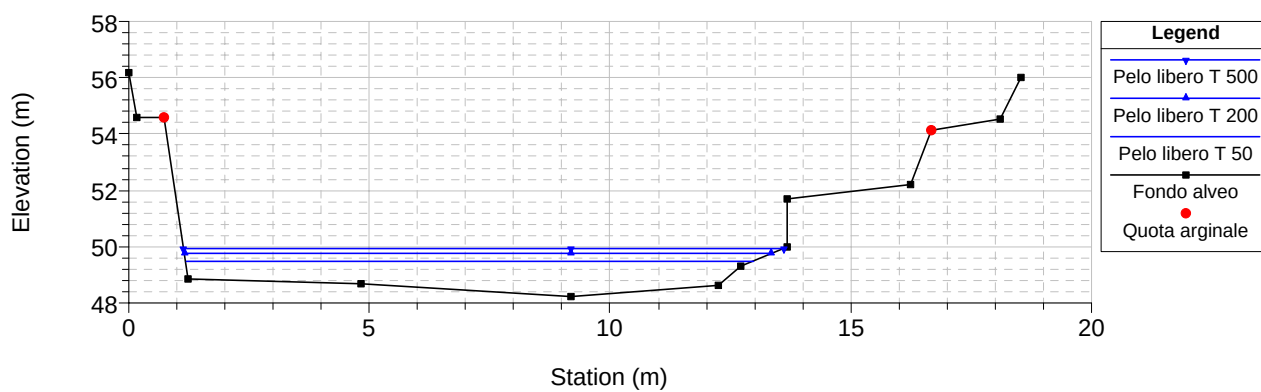
RS = 66.2



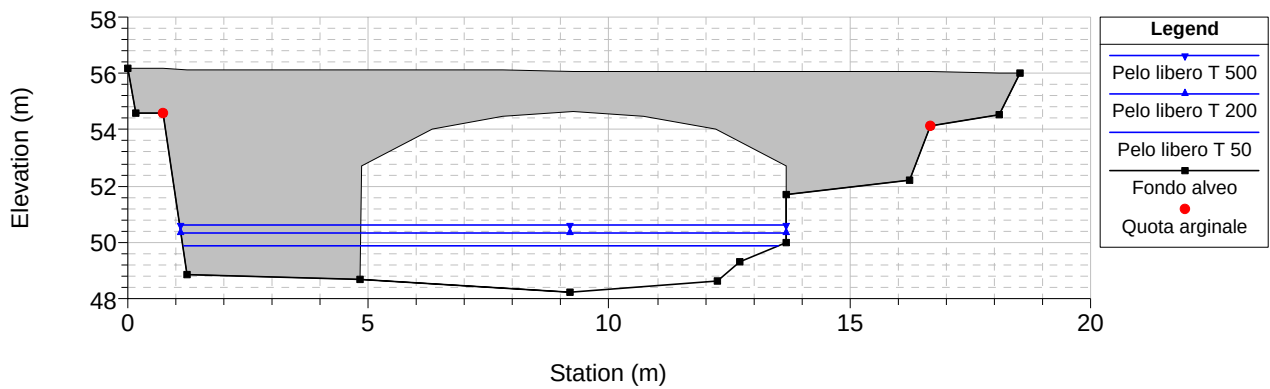
RS = 66



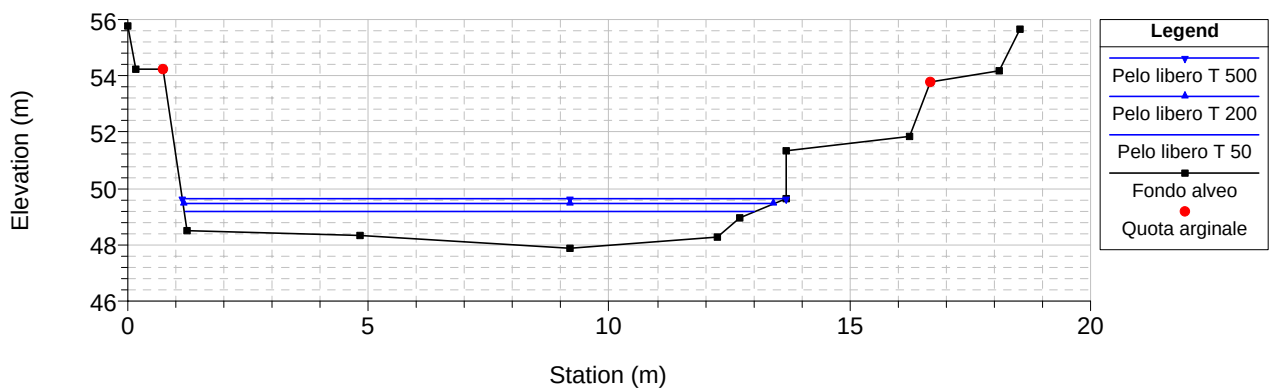
RS = 65.1



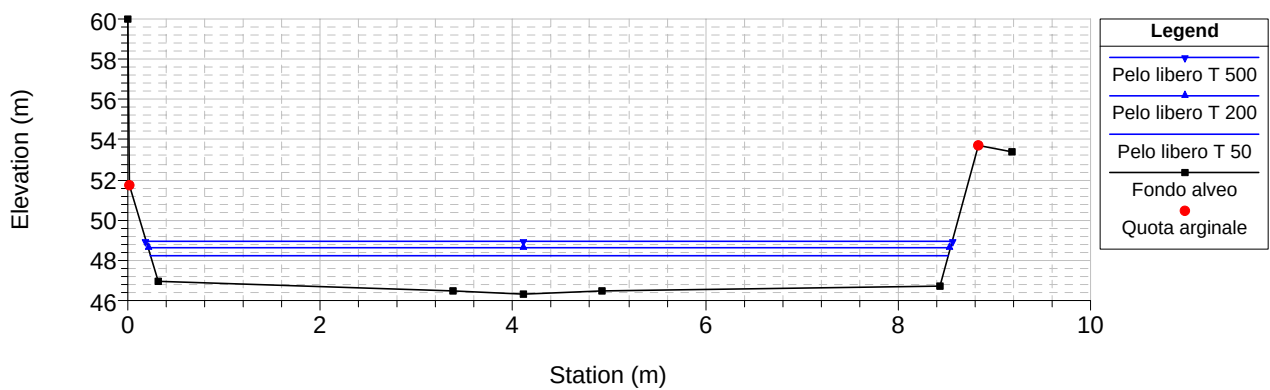
RS = 65.05 BR



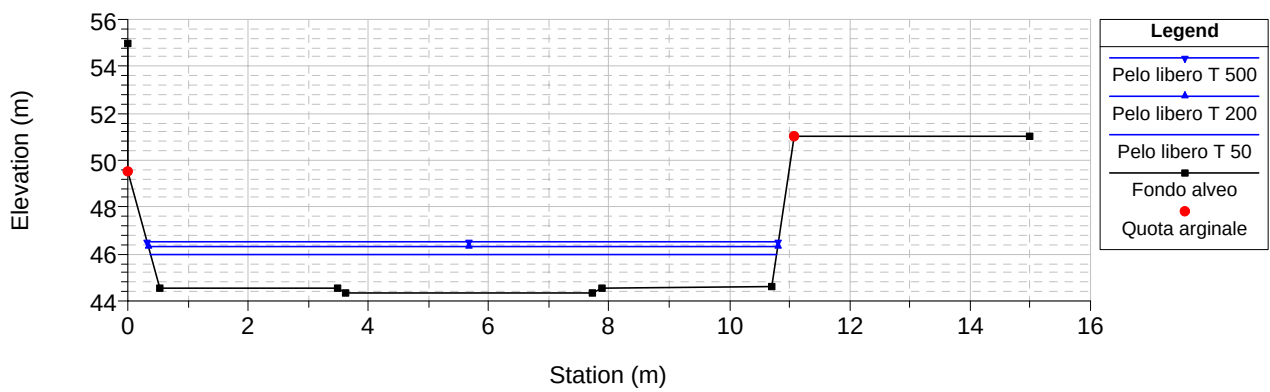
RS = 65



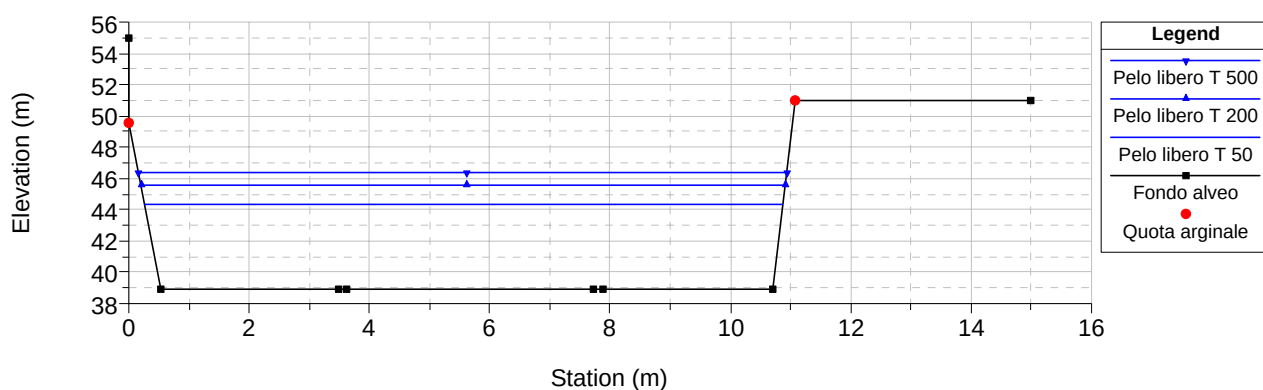
RS = 64



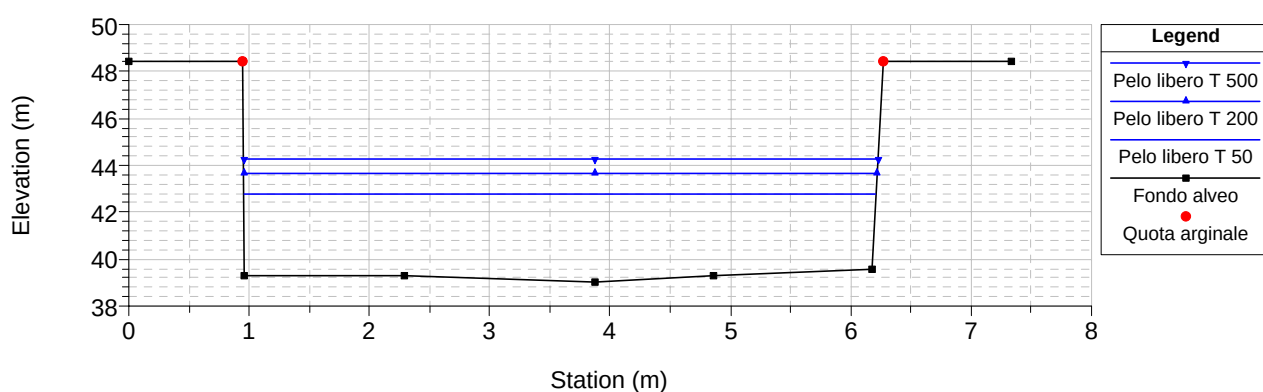
RS = 63.2



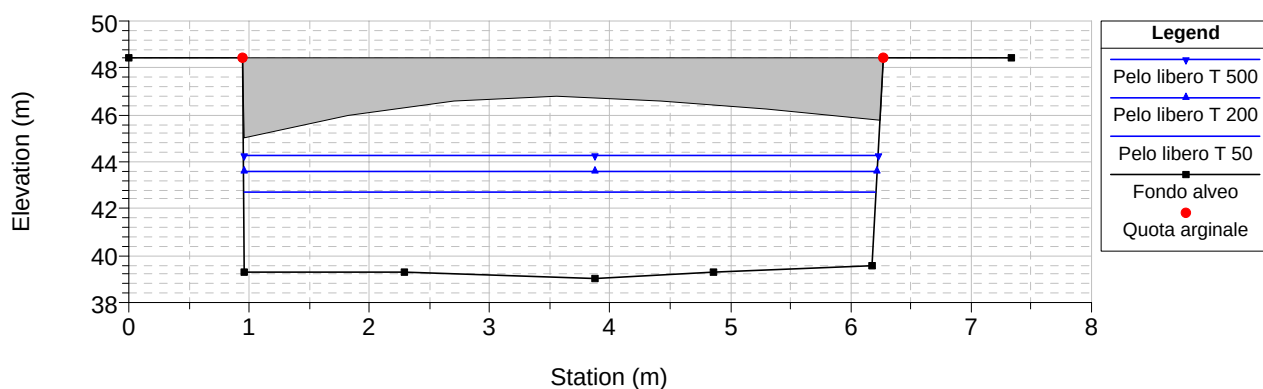
RS = 63



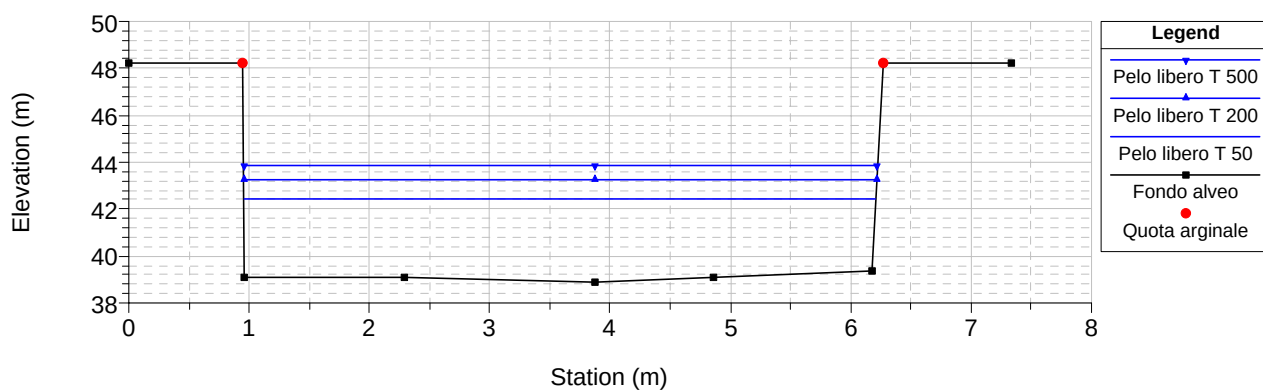
RS = 62.1



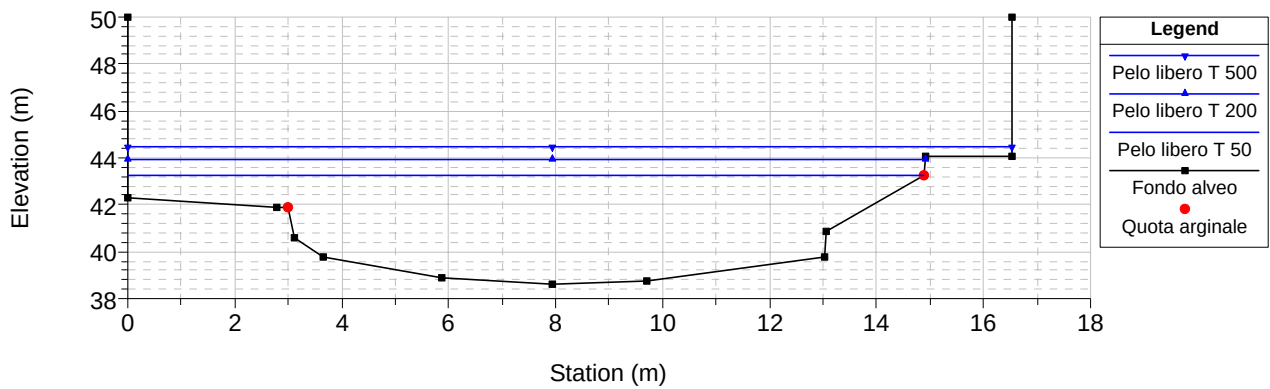
RS = 62.05 BR



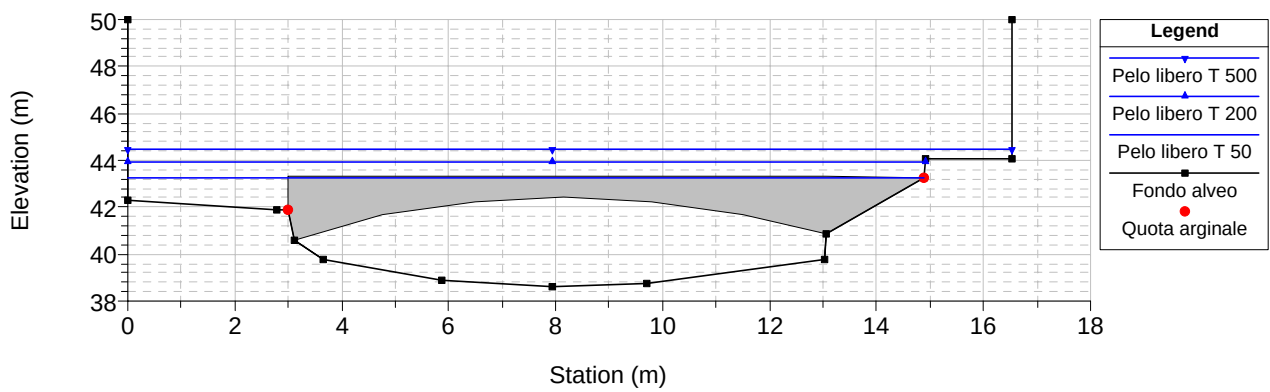
RS = 62



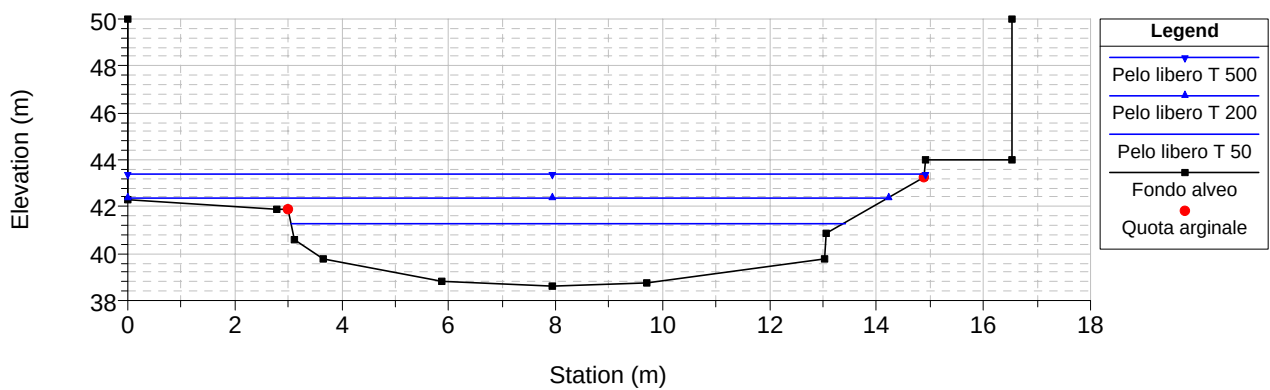
RS = 61.1



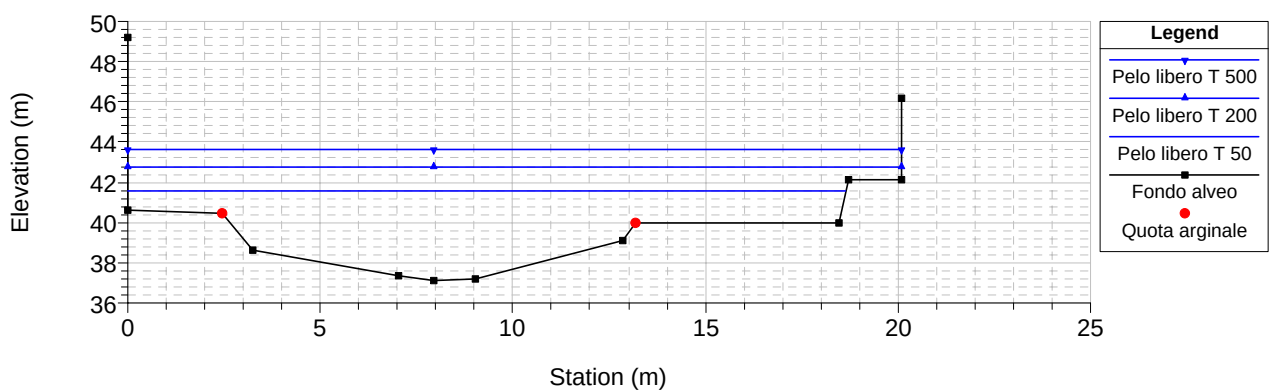
RS = 61.05 BR



RS = 61



RS = 60



**MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO
PERMANENTE:
TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE
PER LE PORTATE T=50, 200, 500 ANNI**

VARATELLA – RIO BARESCIONE

Rio Barescione T=50 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
71,2	100	61,03	63,71	63,71	64,67	0,012658	4,34	23,04	12,09	1
71	100	59,03	60,84	61,94	64,4	0,065882	8,36	11,96	7,55	2,12
70	100	58,91	60,74	61,54	63,27	0,046455	7,05	14,19	9,45	1,84
69,1	100	57,34	61,34	60,69	62,29	0,010094	4,33	23,08	6,58	0,74
69,05	Bridge									
69	100	57,32	60,29	60,66	62,2	0,025156	6,12	16,33	6,58	1,24
68	100	57,16	59,54	59,92	60,9	0,028197	5,16	19,38	16,08	1,5
67	100	55,02	58,23	58,27	59,21	0,009577	4,38	22,82	12,42	1,03
66,2	100	52,75	54,99	55,03	55,97	0,009168	4,57	24,46	13,76	0,98
66	100	50,41	51,89	52,93	55,67	0,084997	8,62	11,6	8,72	2,39
65,1	100	48,23	49,49	50,53	54,04	0,103902	9,45	10,58	11,79	3,18
65,05	Bridge									
65	100	47,87	49,17	50,17	53,36	0,091655	9,07	11,02	11,84	3
64	100	46,32	48,19	49,09	51,25	0,043028	7,75	12,9	8,28	1,98
63,2	100	44,34	45,97	46,6	48,09	0,030153	6,44	15,52	10,41	1,68
63	100	38,93	44,32	41,06	44,48	0,000774	1,79	56,01	10,61	0,25
62,1	100	39,04	42,77	42,59	44,28	0,01506	5,44	18,38	5,25	0,93
62,05	Bridge									
62	100	38,86	42,41	42,41	44,08	0,017189	5,73	17,45	5,25	1
61,1	100	38,6	43,25	41,31	43,5	0,001188	2,23	46,96	14,88	0,37
61,05	Bridge									
61	100	38,59	41,3	41,3	42,36	0,009432	4,57	21,91	10,36	1
60	100	37,08	41,56	40,22	41,81	0,001221	2,34	48,74	18,64	0,4

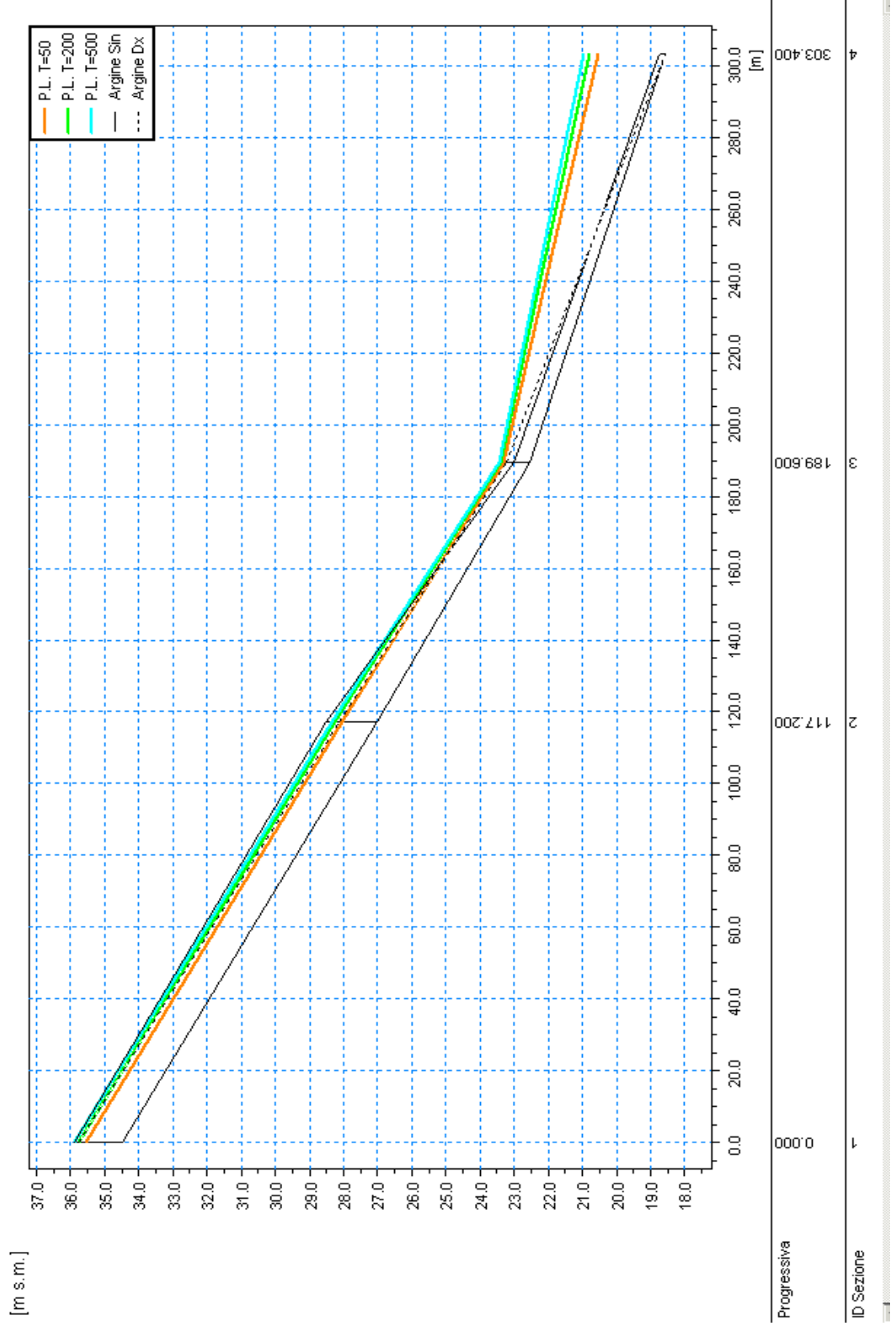
Rio Barescione T=200 anni

Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
71,2	140	61,03	64,19	64,19	65,38	0,01265	4,83	28,97	12,35	1,01
71	140	59,03	64,25	62,6	64,71	0,00334	3,02	46,42	12,38	0,5
70	140	58,91	64,33	62,1	64,61	0,001691	2,34	60,85	17,59	0,37
69,1	140	57,34	64	61,41	64,47	0,003318	3,14	48,69	13,32	0,4
69,05	Bridge									
69	140	57,32	61,39	61,39	63,19	0,018757	5,94	23,56	6,58	1
68	140	57,16	59,69	60,33	61,8	0,038869	6,44	21,73	16,31	1,78
67	140	55,02	58,7	58,75	59,91	0,00954	4,86	28,78	12,97	1,04
66,2	140	52,75	55,45	55,5	56,68	0,009	5,15	30,87	13,76	1
66	140	50,41	52,36	53,53	56,38	0,066943	8,88	15,77	8,78	2,11
65,1	140	48,23	49,76	50,99	54,95	0,089009	10,09	13,88	12,19	3,02
65,05	Bridge									
65	140	47,87	49,44	50,63	54,29	0,080475	9,76	14,35	12,25	2,88
64	140	46,32	48,64	49,71	52,24	0,040098	8,41	16,65	8,33	1,9
63,2	140	44,34	46,32	47,13	49,05	0,031533	7,32	19,13	10,47	1,73
63	140	38,93	45,57	41,6	45,78	0,000864	2,02	69,38	10,71	0,25
62,1	140	39,04	43,65	43,43	45,54	0,016747	6,08	23,02	5,26	0,93
62,05	Bridge									
62	140	38,86	43,25	43,25	45,34	0,019012	6,4	21,87	5,26	1
61,1	140	38,6	43,92	41,87	44,26	0,001289	2,59	57,03	14,9	0,4
61,05	Bridge									
61	140	38,59	42,36	41,85	43,24	0,005422	4,18	34,17	14,2	0,77
60	140	37,08	42,75	40,75	42,98	0,000813	2,31	71,79	20,08	0,34

Rio Barescione T=500 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
71,2	170	61,03	64,53	64,53	65,87	0,012572	5,12	33,19	12,54	1,01
71	170	59,03	64,69	63,03	65,24	0,003574	3,27	52,11	14,96	0,51
70	170	58,91	64,81	62,47	65,13	0,001736	2,52	69,25	17,91	0,38
69,1	170	57,34	64,41	61,9	64,97	0,003702	3,46	54,11	13,32	0,43
69,05	Bridge									
69	170	57,32	61,89	61,89	63,93	0,01977	6,33	26,87	6,59	1
68	170	57,16	59,8	60,6	62,45	0,044792	7,22	23,55	16,49	1,93
67	170	55,02	59,03	59,09	60,37	0,009422	5,14	33,08	13,36	1,04
66,2	170	52,75	55,76	55,82	57,17	0,008996	5,53	35,12	13,76	1,02
66	170	50,41	52,71	54,03	56,87	0,059155	9,04	18,8	8,81	1,98
65,1	170	48,23	49,96	51,31	55,53	0,0816	10,46	16,25	12,48	2,93
65,05	Bridge									
65	170	47,87	49,64	50,95	54,85	0,07364	10,11	16,81	12,53	2,79
64	170	46,32	48,97	50,13	52,87	0,038064	8,75	19,42	8,37	1,83
63,2	170	44,34	46,55	47,49	49,71	0,032374	7,87	21,61	10,5	1,75
63	170	38,93	46,43	41,96	46,67	0,000922	2,16	78,65	10,77	0,26
62,1	170	39,04	44,28	44,01	46,4	0,01776	6,46	26,31	5,27	0,92
62,05	Bridge									
62	170	38,86	43,83	43,83	46,2	0,020317	6,83	24,9	5,27	1
61,1	170	38,6	44,45	42,34	44,83	0,001277	2,79	65,47	16,51	0,4
61,05	Bridge									
61	170	38,59	43,37	42,33	44,03	0,003051	3,65	48,86	14,89	0,6
60	170	37,08	43,63	41,05	43,85	0,000632	2,29	89,49	20,09	0,31

PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO
PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI

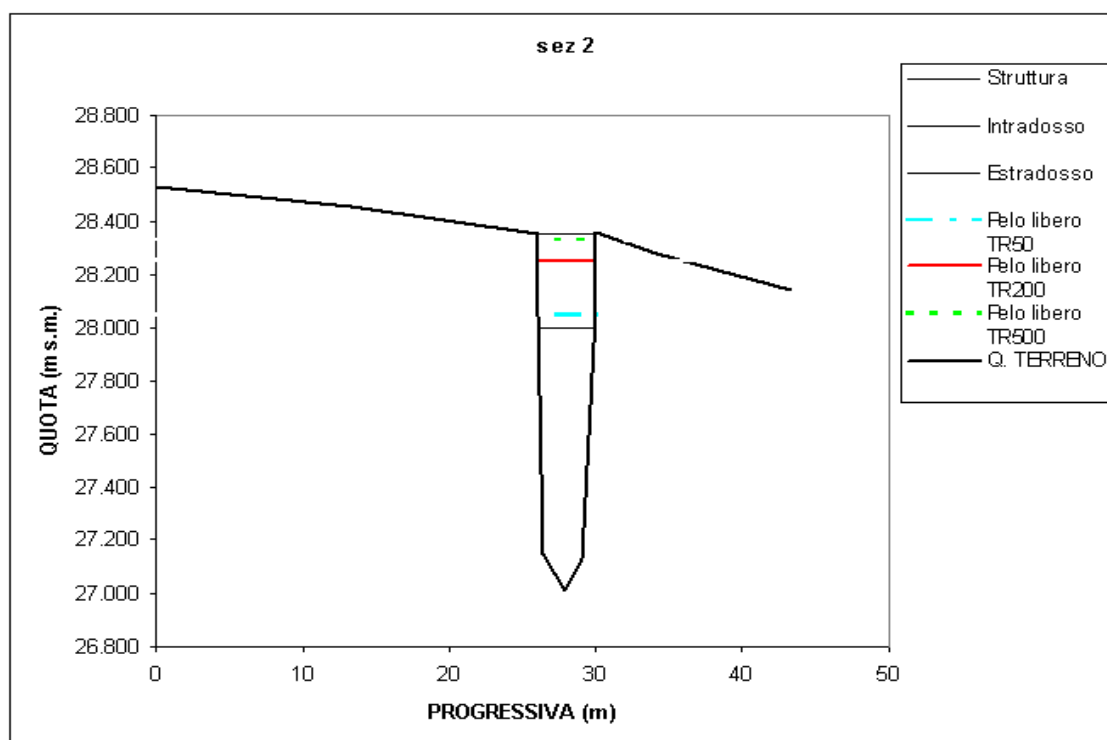
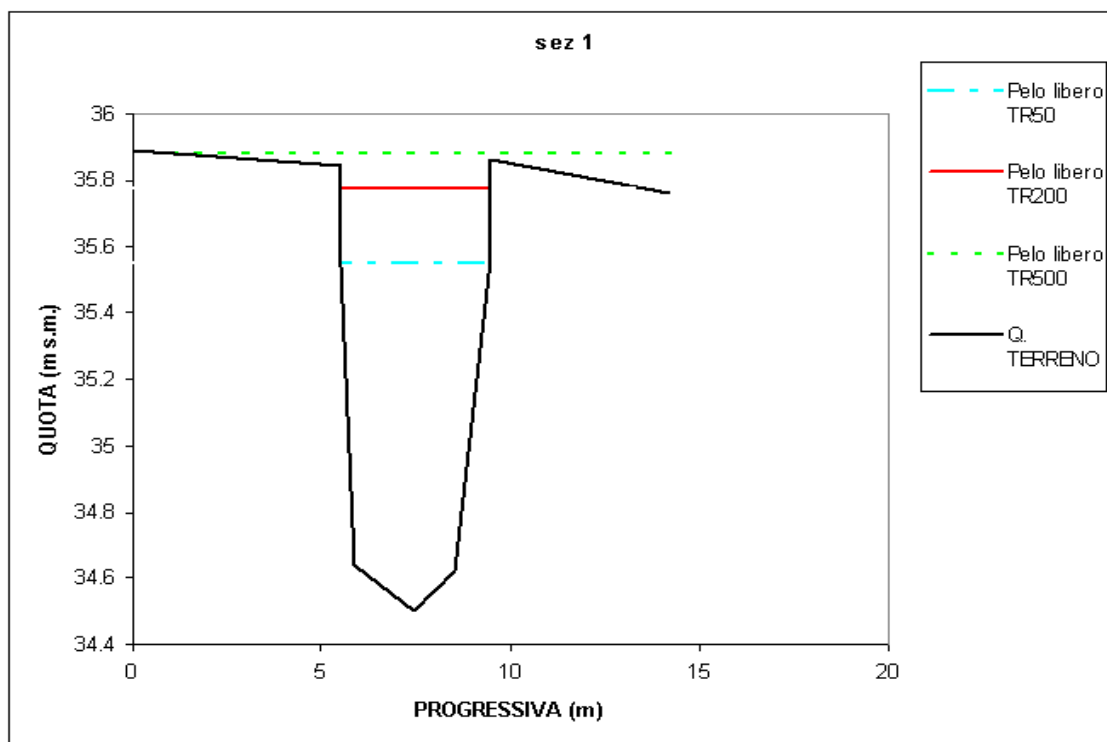
RIO PATTARELLO

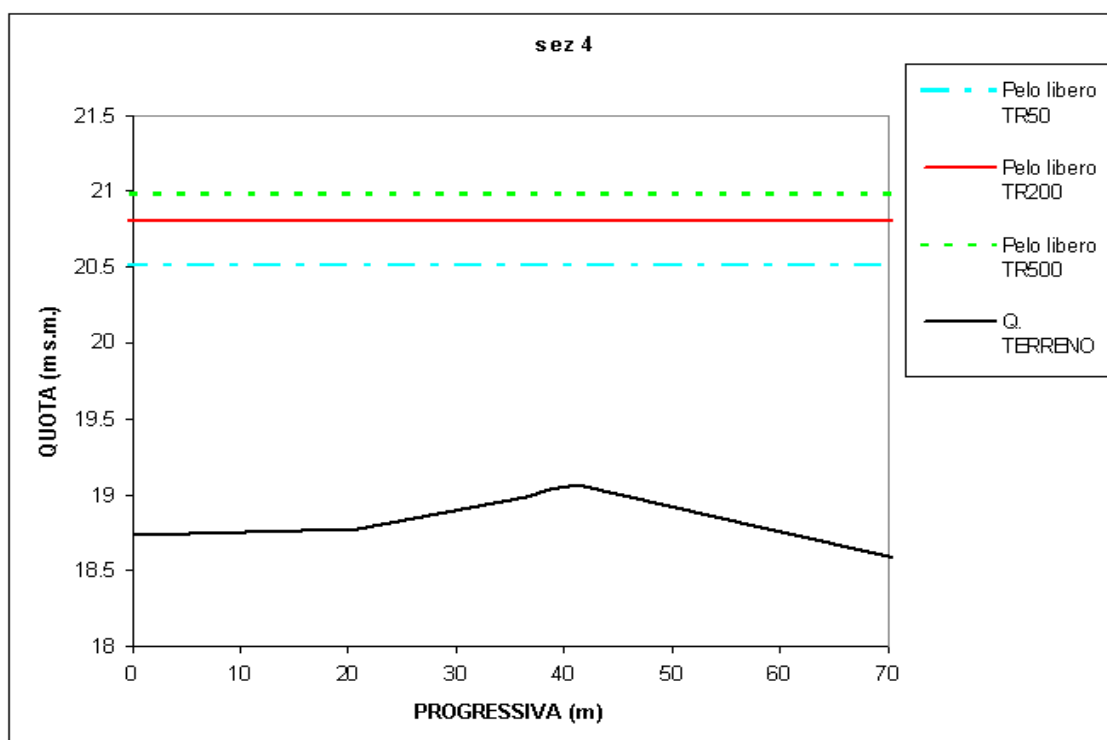
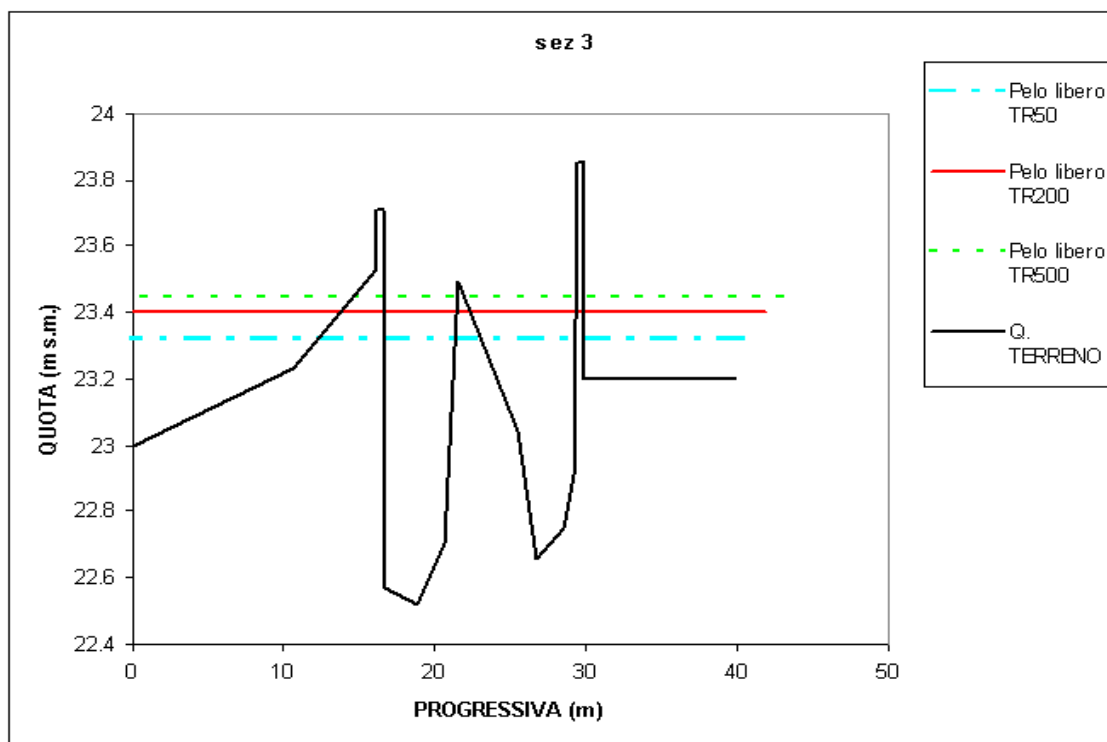


GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO
LIBERO IN CONDIZIONI DI MOTO PERMANENTE
PER LE PORTATE T=50, 200, 500 ANNI

RIO PATTARELLO

DALLA SEZ. 1
ALLA SEZ. 4





MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO
PERMANENTE:
TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE
PER LE PORTATE T=50, 200, 500 ANNI

RIO PATTARELLO

RIO DI PATTARELLO – PROFILO DI CORRENTE PER T=50 ANNI							
ID Sez.	Progr. (m)	Quota fondo (m s.m.)	P.L. (m s.m.)	A (m ²)	b (m)	v (m/s)	Fr (-)
1	0.00	34.50	35.55	3.18	3.92	3.77	1.34
2	117.20	27.01	28.05	3.16	3.93	3.80	1.35
3	189.60	22.52	23.32	8.87	33.20	1.35	0.84
4	303.40	18.57	20.52	121.89	72.03	0.10	0.02

Rio di Pattarello - Risultati delle simulazioni idrauliche – T = 50 anni

RIO DI PATTARELLO – PROFILO DI CORRENTE PER T=200 ANNI							
ID Sez.	Progr. (m)	Quota fondo (m s.m.)	P.L. (m s.m.)	A (m ²)	b (m)	v (m/s)	Fr (-)
1	0.00	34.50	35.77	4.06	3.92	3.77	1.34
2	117.20	27.01	28.25	4.36	3.93	3.80	1.35
3	189.60	22.52	23.40	11.85	33.20	1.35	0.84
4	303.40	18.57	20.81	142.78	72.03	0.10	0.02

Rio di Pattarello -Risultati delle simulazioni idrauliche – T = 200 anni

RIO DI PATTARELLO – PROFILO DI CORRENTE PER T=500 ANNI							
ID Sez.	Progr. (m)	Quota fondo (m s.m.)	P.L. (m s.m.)	A (m ²)	b (m)	v (m/s)	Fr (-)
1	0.00	34.50	35.88	4.89	12.70	4.09	2.10
2	117.20	27.01	28.33	5.50	15.98	3.64	1.98
3	189.60	22.52	23.45	13.56	37.00	1.47	0.78
4	303.40	18.57	20.98	155.02	72.03	0.13	0.03

Rio di Pattarello -Risultati delle simulazioni idrauliche – T = 500 anni