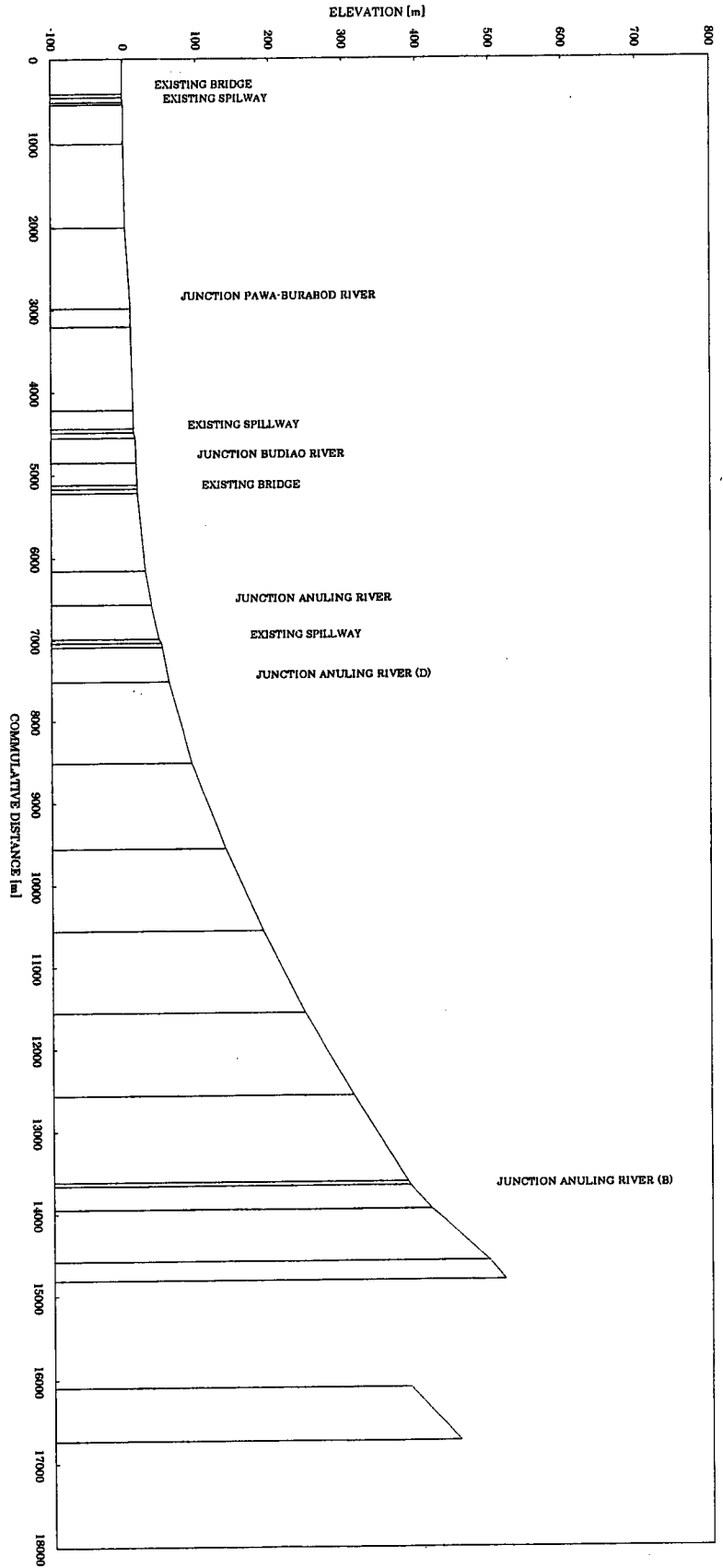


2. Longitudinal Profile of River Bed Compared with the 1983 survey and the 1999 survey

2.1 Longitudinal Profile of River Bed (Based on March, 1999 Survey)

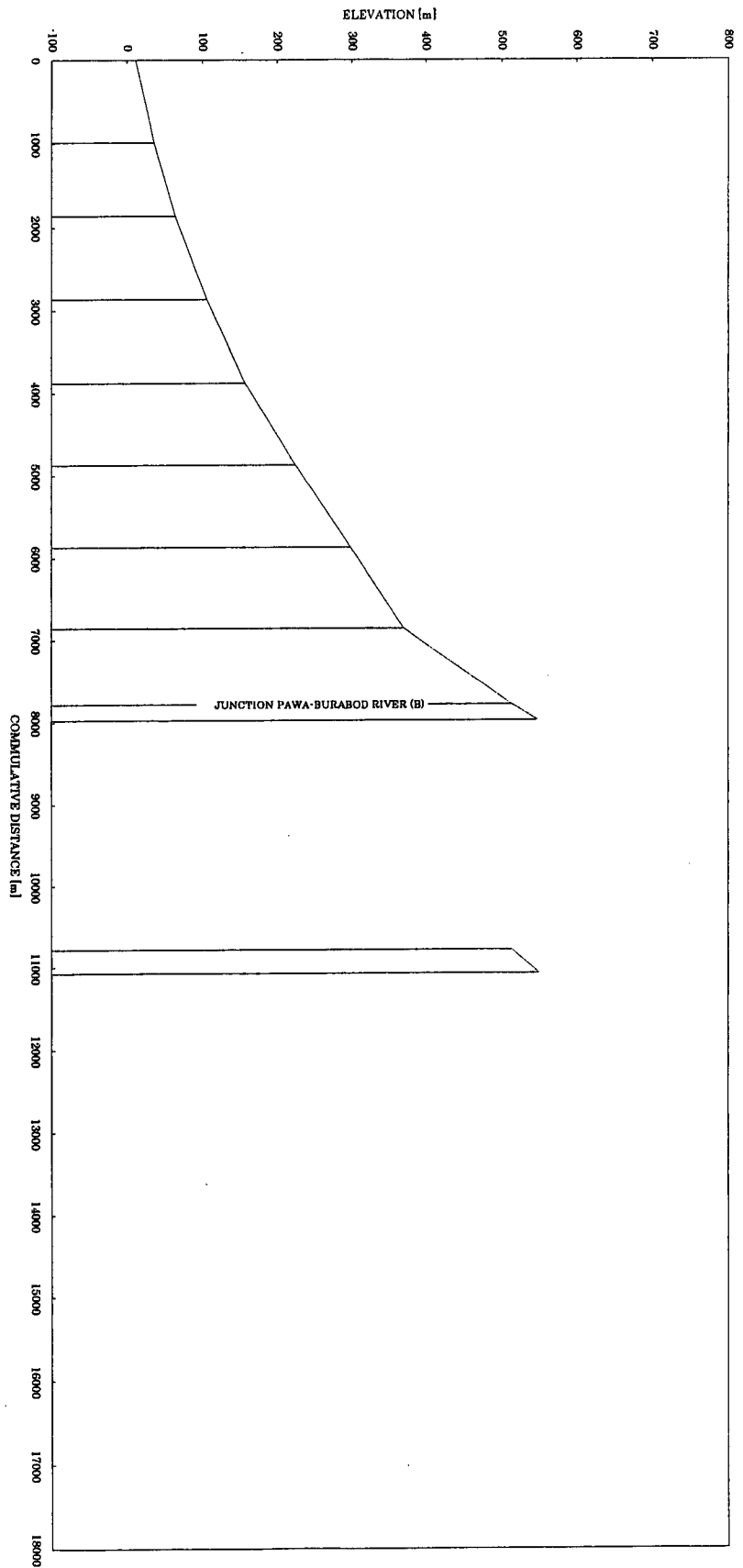
**DF II 2.1 Longitudinal Profile of River Bed
(Yawa River / Anoling river / Anoling River (B))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	-0.90
413.45	413.45	-0.53
43.42	466.87	-1.02
85.82	512.69	-0.48
28.58	541.27	0.02
407.28	1008.53	0.48
999.50	2008.09	2.69
976.21	2984.30	9.70
220.75	3208.05	9.78
1008.04	4213.09	13.00
225.17	4438.26	13.45
40.86	4488.11	14.01
63.86	4551.97	16.05
301.99	4853.96	17.30
261.47	5115.43	18.29
62.60	5188.03	18.54
47.57	5235.60	18.57
838.05	6153.66	29.18
415.89	6569.34	37.71
0.00	6569.34	37.46
419.44	6988.78	48.10
50.00	7038.78	51.31
60.00	7098.78	52.28
424.86	7513.64	61.33
1002.40	8516.04	92.34
1037.86	9553.70	138.37
1004.98	10558.68	189.48
999.80	11558.48	246.23
1003.49	12561.97	312.36
1053.60	13615.57	388.81
44.55	13660.12	389.11
287.47	13947.59	418.12
627.84	14575.23	497.88
232.75	14807.98	519.08
0.00	7090.78	388.96
642.58	7733.36	487.78



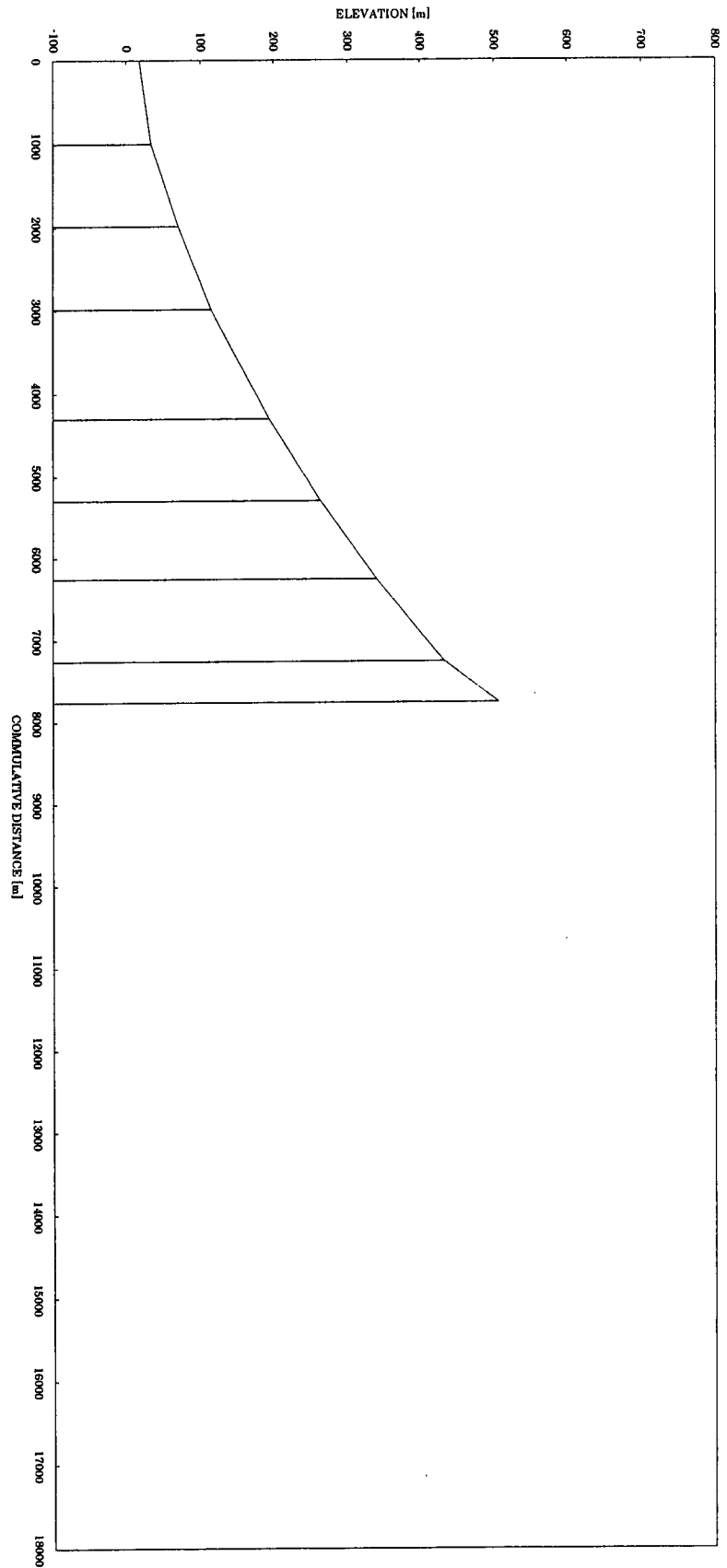
**DF II 2.1 Longitudinal Profile of River Bed
(Pawa-Burabod River / Pawa-Burabod River (B))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	11.37
988.30	988.30	35.32
873.30	1861.69	63.63
1001.05	2862.74	105.51
1016.56	3878.30	157.16
986.03	4874.33	224.27
993.97	5868.30	297.93
989.05	6857.95	369.73
928.91	7784.86	512.86
183.07	7977.93	547.26
0.00	7784.86	512.86
289.37	8074.23	549.39



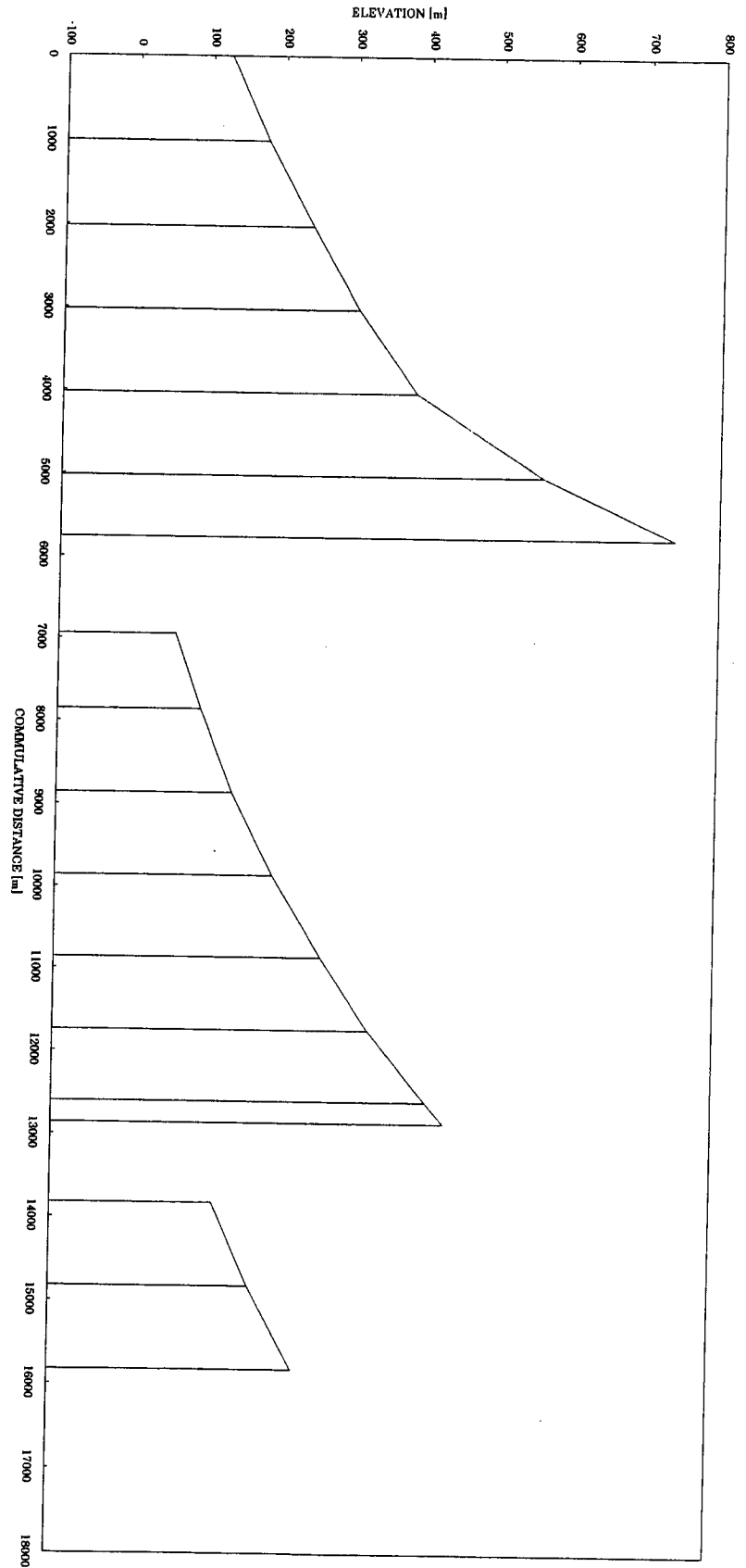
**DF II 2.1 Longitudinal Profile of River Bed
(Budiao River)**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	18.21
990.39	990.39	33.05
992.22	1982.61	70.16
1007.01	2989.62	114.12
1310.48	4300.10	184.19
594.74	5294.84	283.74
961.86	6256.70	339.92
1000.85	7257.55	432.27
499.36	7756.91	506.49



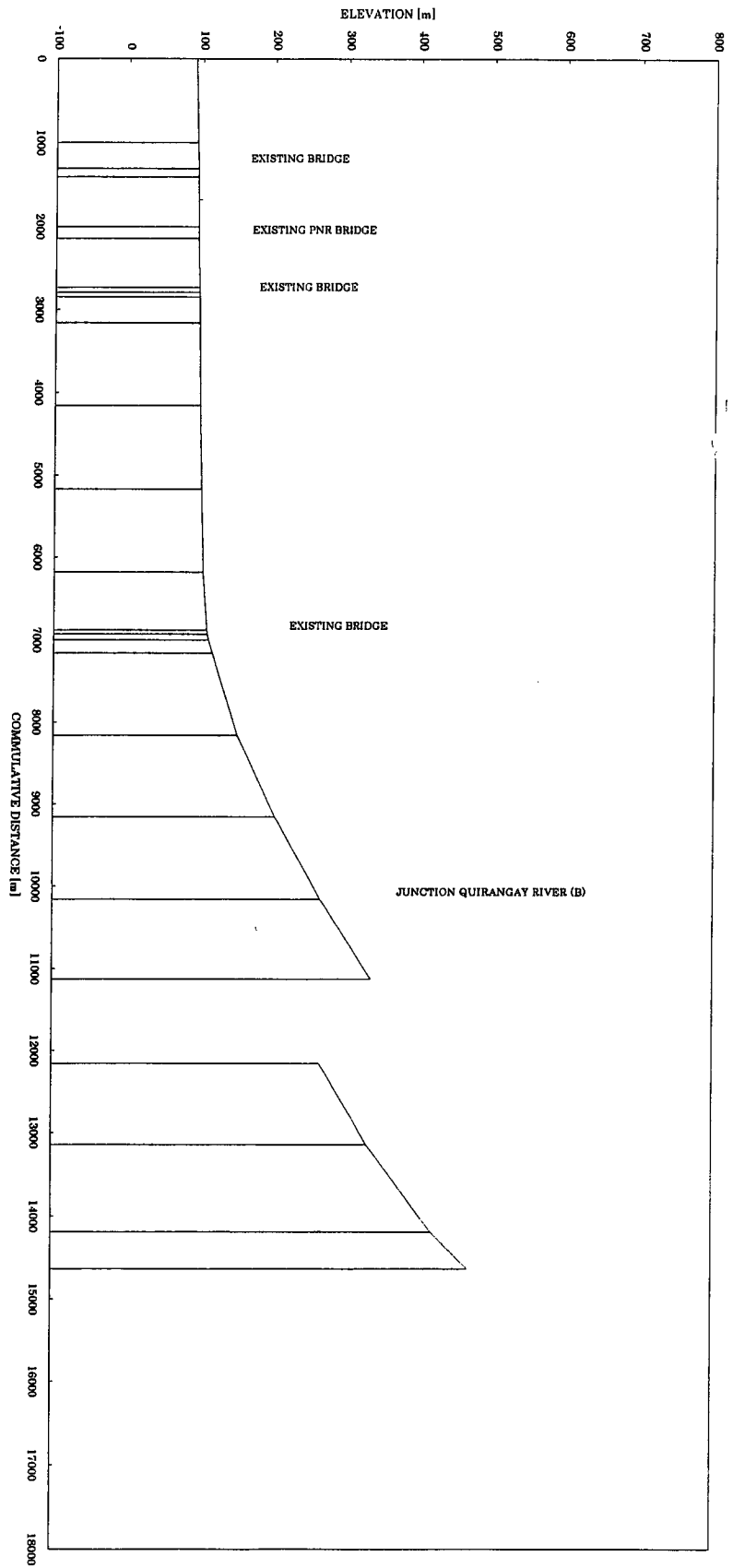
**DF II 2.1 Longitudinal Profile of River Bed
(Anoling River (C) / Anoling River (D) / Anoling River (E))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	2519.78	124.78
1003.23	3523.01	177.60
1015.00	4538.68	236.42
1000.36	5539.03	304.89
1002.07	6541.10	385.60
996.79	7537.88	561.81
743.19	8291.07	739.80
0.00	944.30	61.33
913.18	1867.49	95.86
1001.81	2869.29	141.78
1001.96	3861.25	198.49
1001.57	4862.82	265.88
880.21	5743.03	332.50
803.72	6806.76	412.33
260.45	6867.20	437.93
0.00	2826.89	122.97
1000.19	3827.08	173.78
1000.25	4827.33	234.72



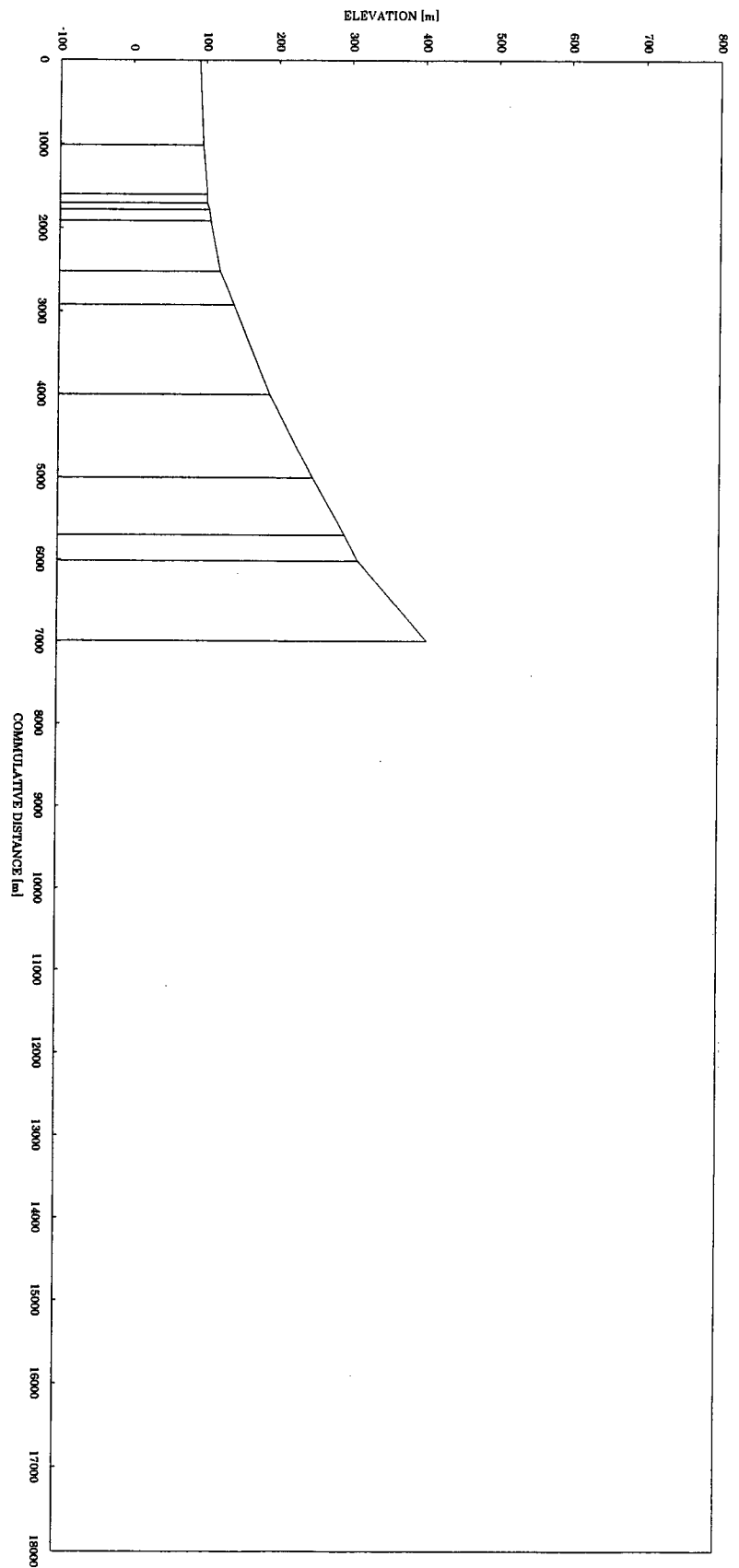
**DF II 2.1 Longitudinal Profile of River Bed
(Quirangay River / Quirangay River (B))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	90.39
1000.59	1000.59	92.68
306.94	1307.53	94.16
100.93	1408.46	93.71
596.15	2004.61	94.98
140.75	2145.36	94.52
591.49	2736.85	96.92
54.41	2793.26	96.32
56.93	2850.19	96.75
307.34	3157.53	97.35
998.45	4155.98	98.42
1012.58	5168.56	100.82
1008.86	6177.42	103.63
698.98	6876.40	109.52
50.10	6926.50	110.41
71.89	6998.39	112.03
161.46	7159.85	116.92
1001.07	8160.92	152.25
896.68	9167.60	204.12
1000.21	10167.71	266.32
973.16	11130.86	336.53
0.00	10167.71	266.32
988.88	11146.59	331.96
1043.75	12190.34	419.96
446.55	12636.89	470.92



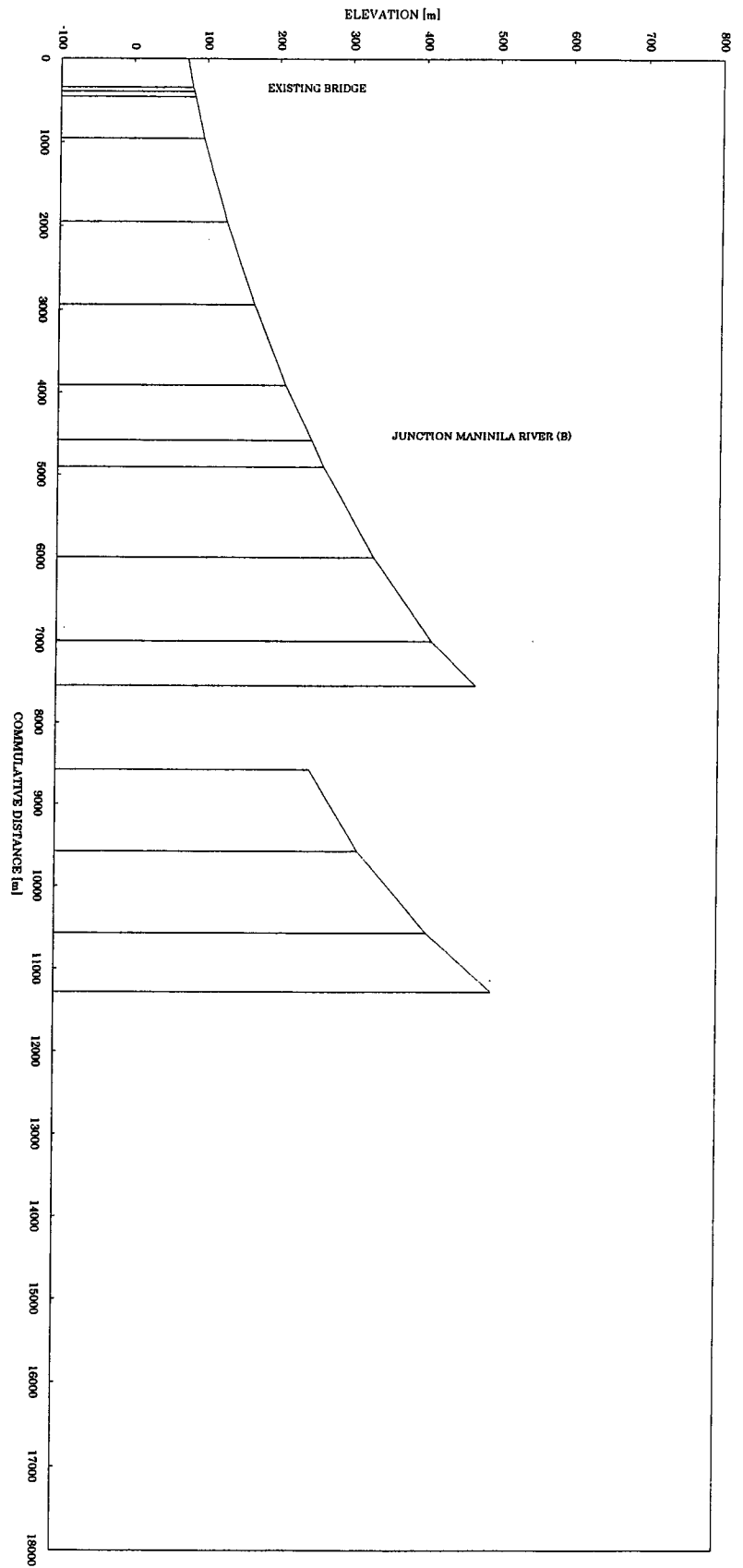
DF II 2.1 Longitudinal Profile of River Bed (Tumpa River)

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	90.34
1016.61	1016.61	95.30
586.25	1600.76	101.41
100.14	1700.90	101.42
80.33	1781.23	104.80
134.63	1915.86	105.49
600.52	2516.78	120.53
401.94	2918.72	139.53
1086.49	4006.21	189.80
1003.66	5008.87	247.96
693.14	5702.01	291.94
313.44	6015.45	310.89
974.38	6989.84	405.10



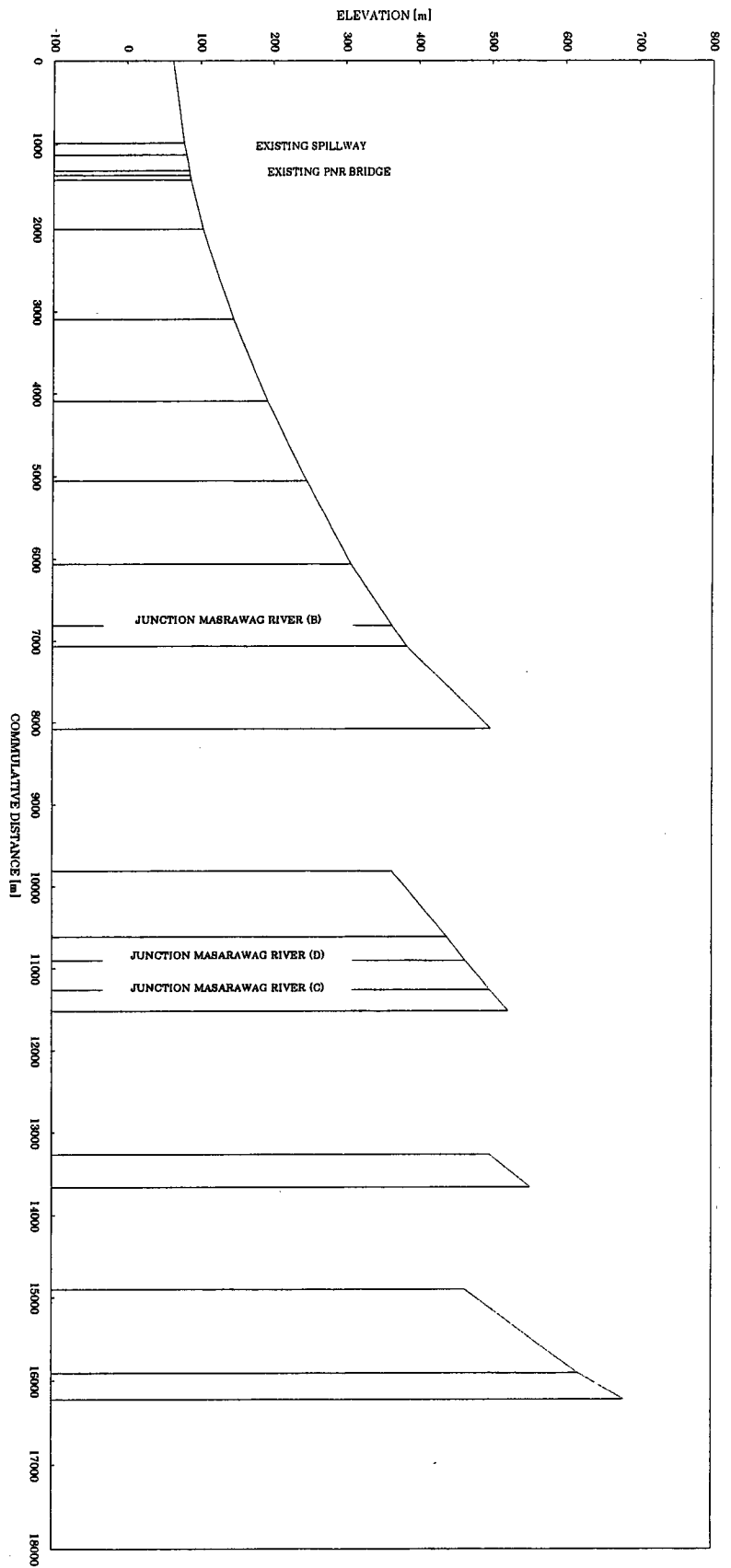
**DF II 2.1 Longitudinal Profile of River Bed
(Maninila River / Maninila River (B))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	72.66
343.12	343.12	78.86
49.07	392.19	82.01
68.08	461.27	83.38
501.80	963.17	96.77
987.21	1950.38	128.31
986.22	2936.00	187.32
908.72	3806.32	218.73
871.96	4678.27	246.41
324.86	4903.12	263.46
1100.24	6003.36	332.15
1007.16	7010.61	411.79
539.63	7660.14	473.11
0.00	4678.27	246.41
1000.30	6578.57	313.16
992.06	6670.63	407.86
714.14	7284.77	486.70



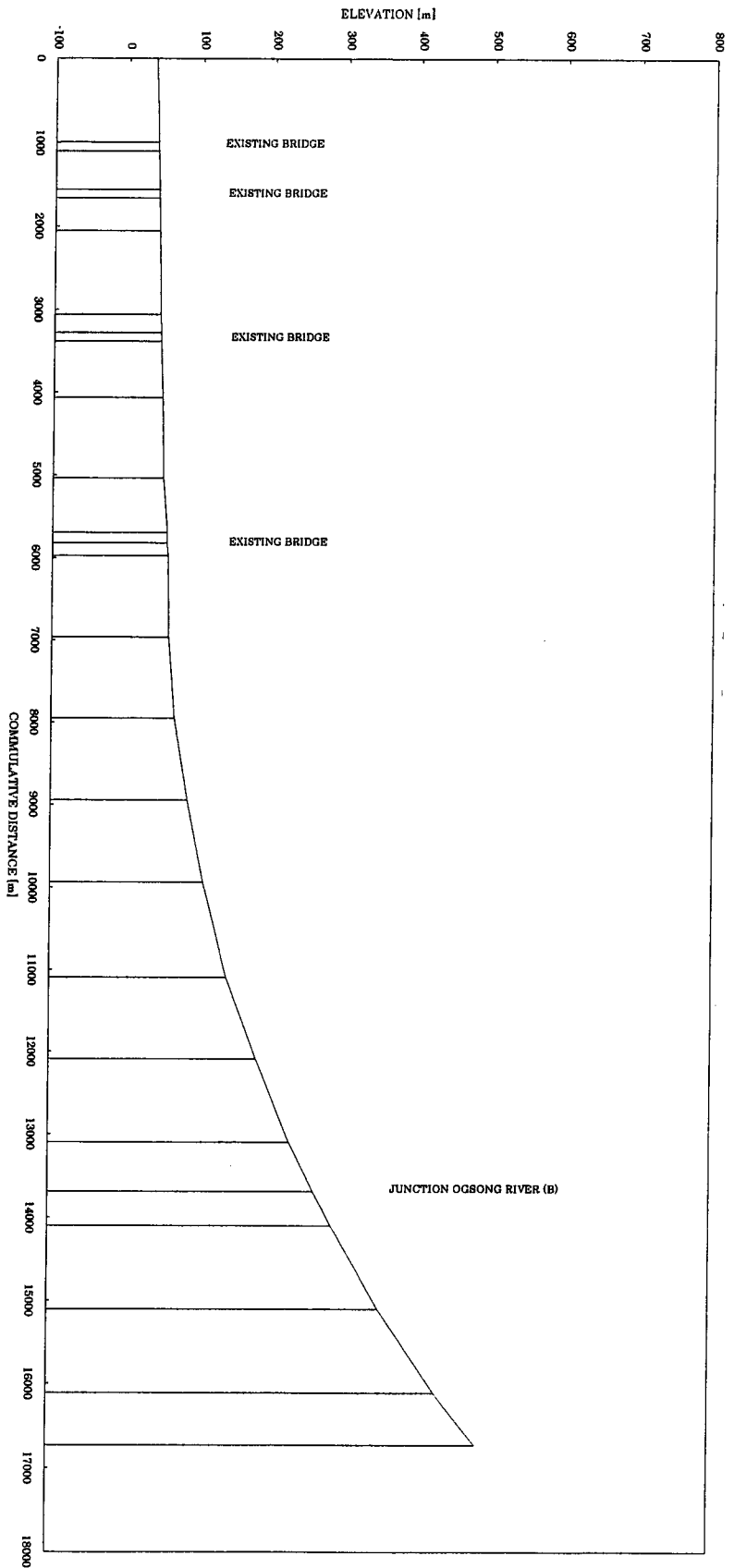
**DF II 2.1 Longitudinal Profile of River Bed
(Masarawag River / Masarawag River (B) / Masarawag River (C))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	02.91
980.88	980.88	77.87
138.19	1120.08	80.89
186.17	1306.25	84.78
53.88	1360.23	85.66
51.86	1412.09	86.76
687.63	1999.62	103.24
1091.87	3091.49	145.38
1004.29	4095.78	192.78
958.10	5053.88	248.41
1000.09	6053.97	307.83
761.48	6815.45	364.63
249.73	7065.18	383.96
1017.68	8082.86	499.43
0.00	8111.51	384.63
802.30	7613.81	439.86
292.35	7906.16	495.41
368.63	8264.69	498.82
256.60	8521.35	524.14
0.00	8204.69	498.82
402.66	8607.34	565.12
0.00	7906.16	465.41
1001.87	8908.03	620.03
317.06	9225.09	681.87



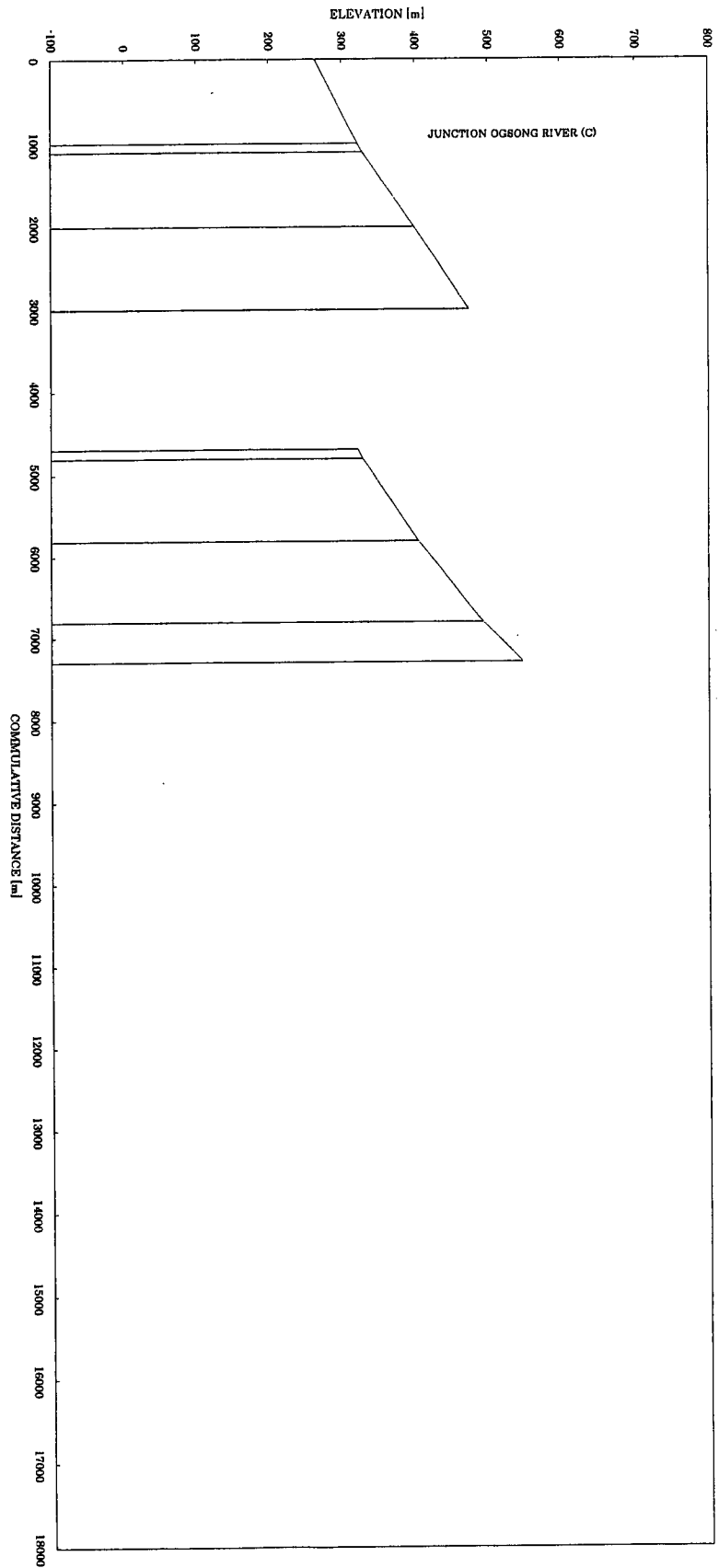
**DF II 2.1 Longitudinal Profile of River Bed
(Ogsong River)**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	38.07
990.01 108.96	990.01 1098.97	30.36 38.32
450.28 103.11	1654.86 1658.06	40.91 41.11
390.48	2054.54	42.27
1008.08 218.66 101.44	3080.62 3279.18 3380.62	44.48 48.09 48.27
882.69	4083.31	47.81
974.84	5038.15	49.82
659.00 124.00 162.15	6697.15 6821.15 6973.30	55.64 56.28 56.92
988.94	8962.24	68.45
987.89	7950.13	67.61
997.39	8947.62	86.04
985.35	9932.87	107.64
1182.01	11084.88	141.28
1003.08	12097.96	183.49
1001.81	13099.77	229.05
890.06 412.74	13989.83 14102.57	262.08 286.97
1002.17	15104.74	352.76
1003.83	16108.67	429.73
824.20	16732.87	480.05



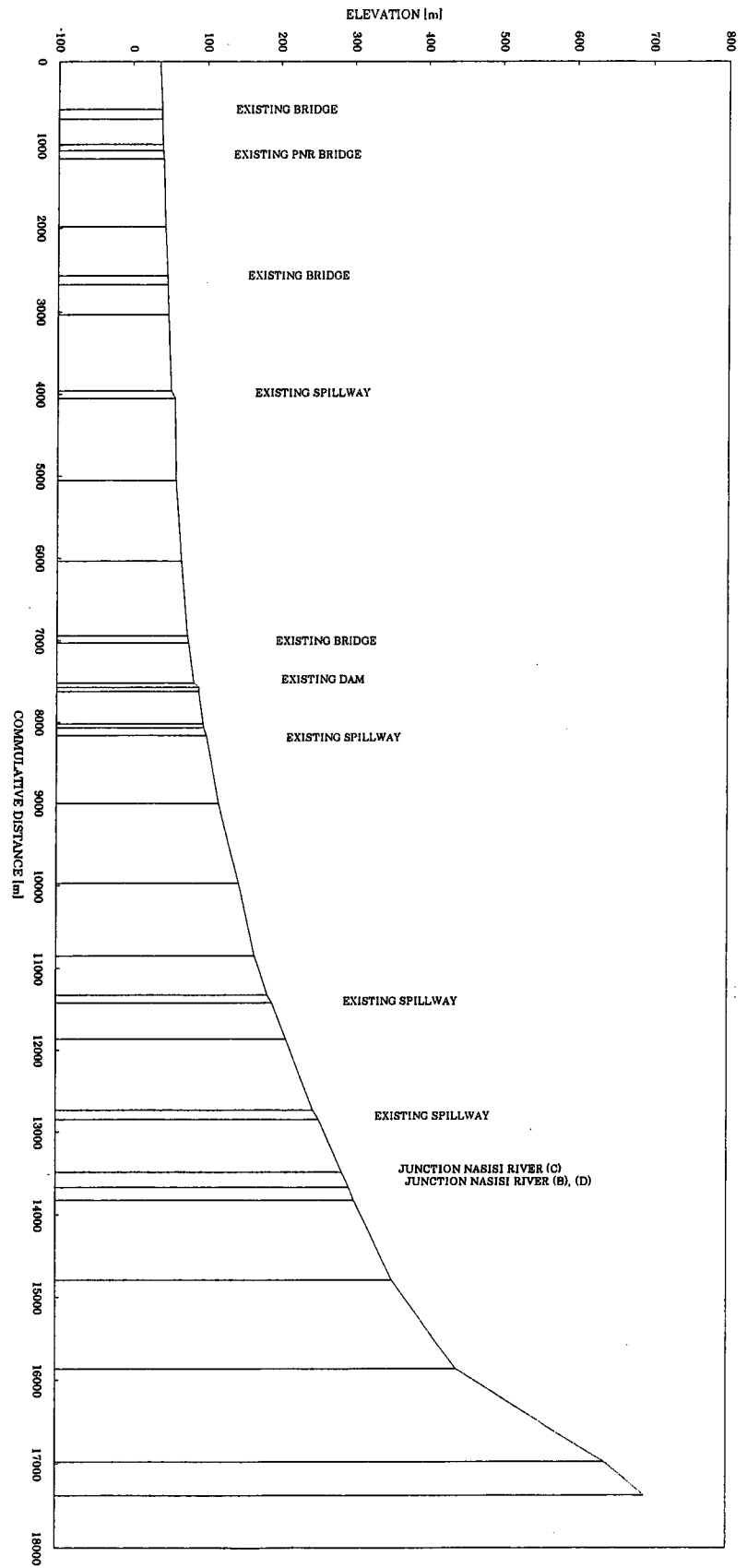
**DF II 2.1 Longitudinal Profile of River Bed
(Ogsong River (B) / Ogsong River (C))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	13689.83	262.70
999.32 106.18	14689.15 14795.34	321.88 328.29
896.64	15691.98	398.78
1002.40	16694.38	474.07
0.00 114.82	14689.15 14804.07	321.88 328.29
1006.21	15809.28	404.05
998.80	16808.08	482.85
489.39	17294.47	547.33



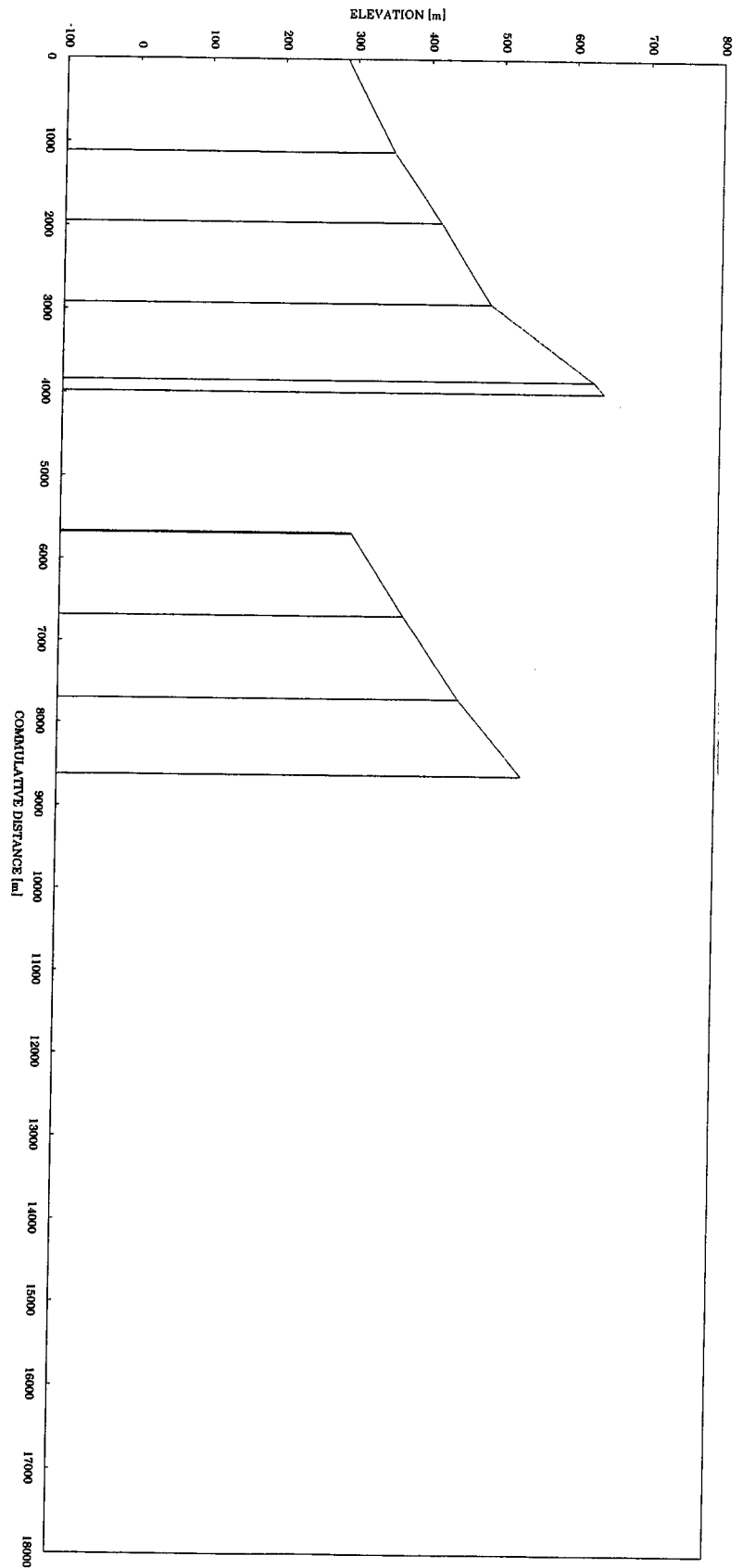
**DF II 2.1 Longitudinal Profile of River Bed
(Nasisi River / Nasisi River (B))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	35.64
542.12	572.12	38.62
112.76	684.88	38.70
304.17	989.05	39.85
77.30	1066.35	40.08
98.13	1164.48	40.97
816.70	1981.18	43.59
583.40	2564.58	47.01
105.83	2670.41	47.20
361.55	3031.96	48.63
927.85	3959.81	52.64
91.00	4050.81	57.65
1003.02	6053.83	59.41
982.93	6036.76	67.20
904.07	6940.83	75.67
85.09	7025.92	77.30
492.35	7518.27	84.12
51.83	7569.90	91.35
60.03	7619.93	90.61
306.79	8016.72	97.14
51.79	8068.51	97.83
91.60	8160.01	101.46
845.98	9005.99	117.95
935.16	9971.15	146.04
879.13	10850.28	167.69
476.29	11326.57	186.07
97.54	11424.11	191.00
439.67	11863.68	210.23
873.22	12736.90	246.84
113.63	12850.53	253.83
637.17	13487.70	285.25
180.50	13668.20	294.83
156.71	13824.91	302.40
965.72	14790.63	353.88
1077.03	15867.66	440.15
1110.27	16977.93	639.53
401.32	17379.25	692.32

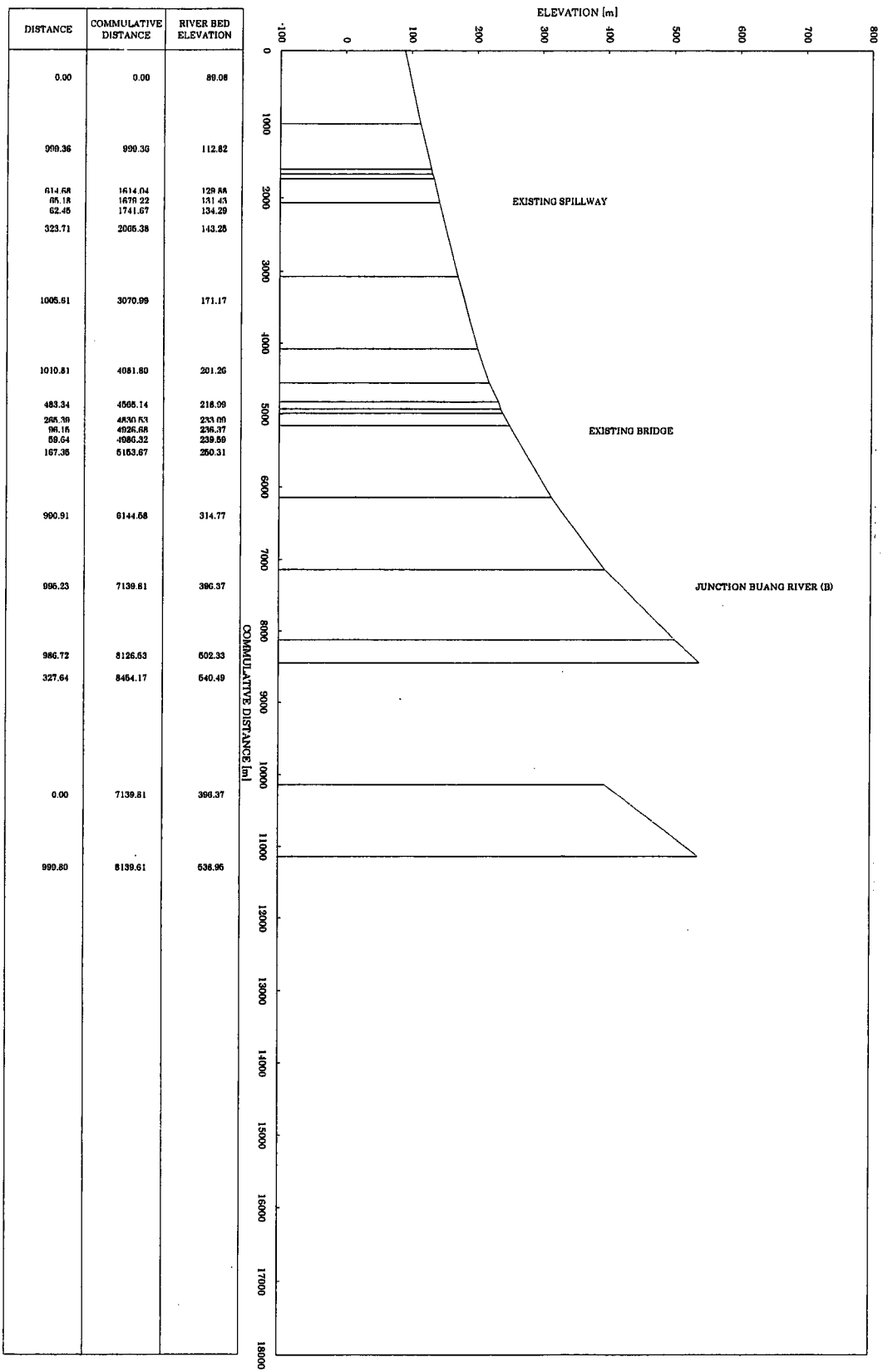


**DF II 2.1 Longitudinal Profile of River Bed
(Nasisi River (C) / Nasisi River (D))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	13487.70	285.35
1119.86	14602.56	350.63
830.51	15438.09	415.87
970.43	16408.52	485.21
921.48 139.65	17330.00 17469.65	628.61 642.65
0.00 15.32	13668.20 13683.52	294.83 299.97
1006.70	14690.23	371.85
1010.58	15700.81	448.57
925.39	16626.20	536.03

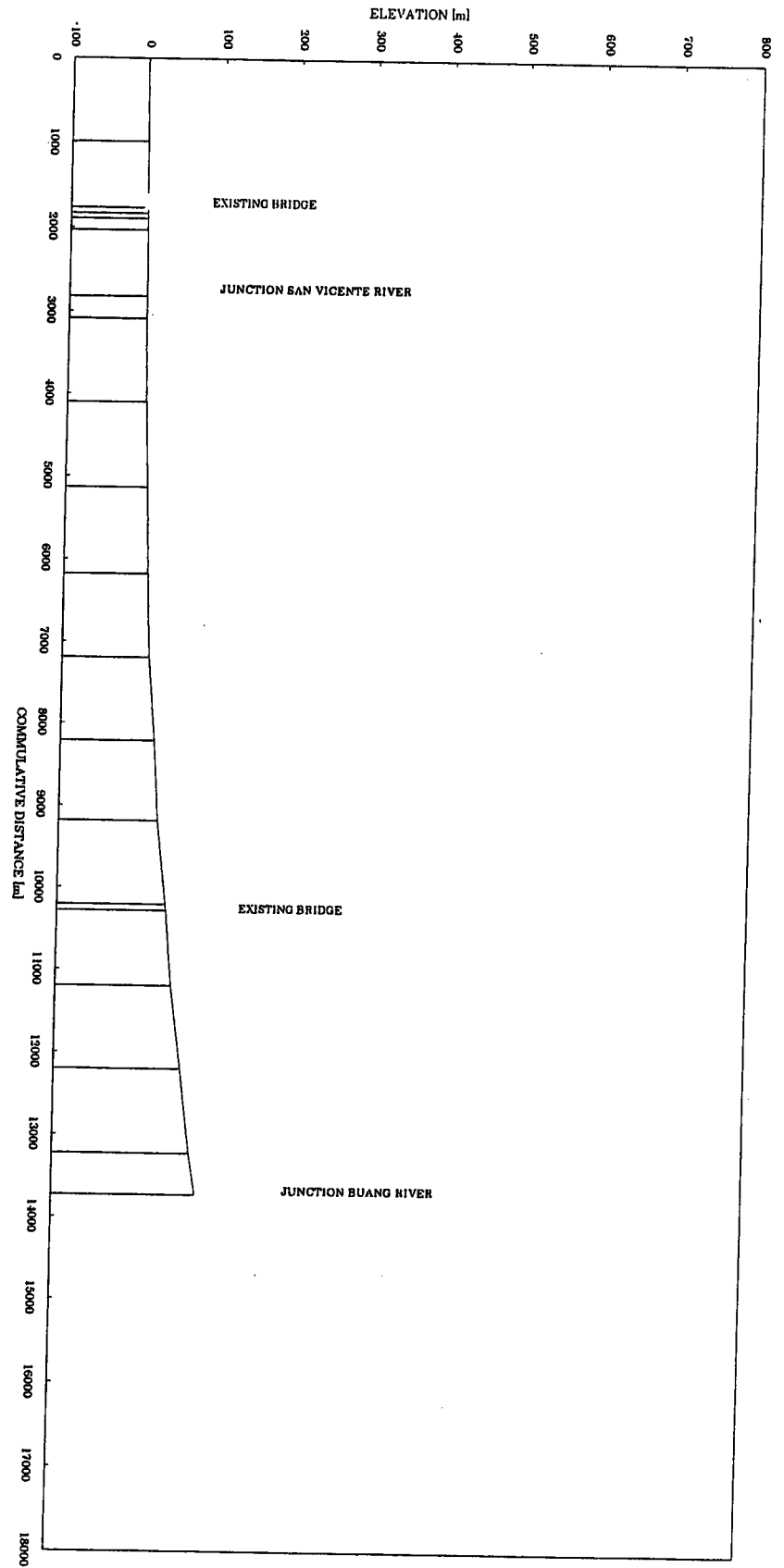


**DF II 2.1 Longitudinal Profile of River Bed
(Buang River / Buang River (B))**



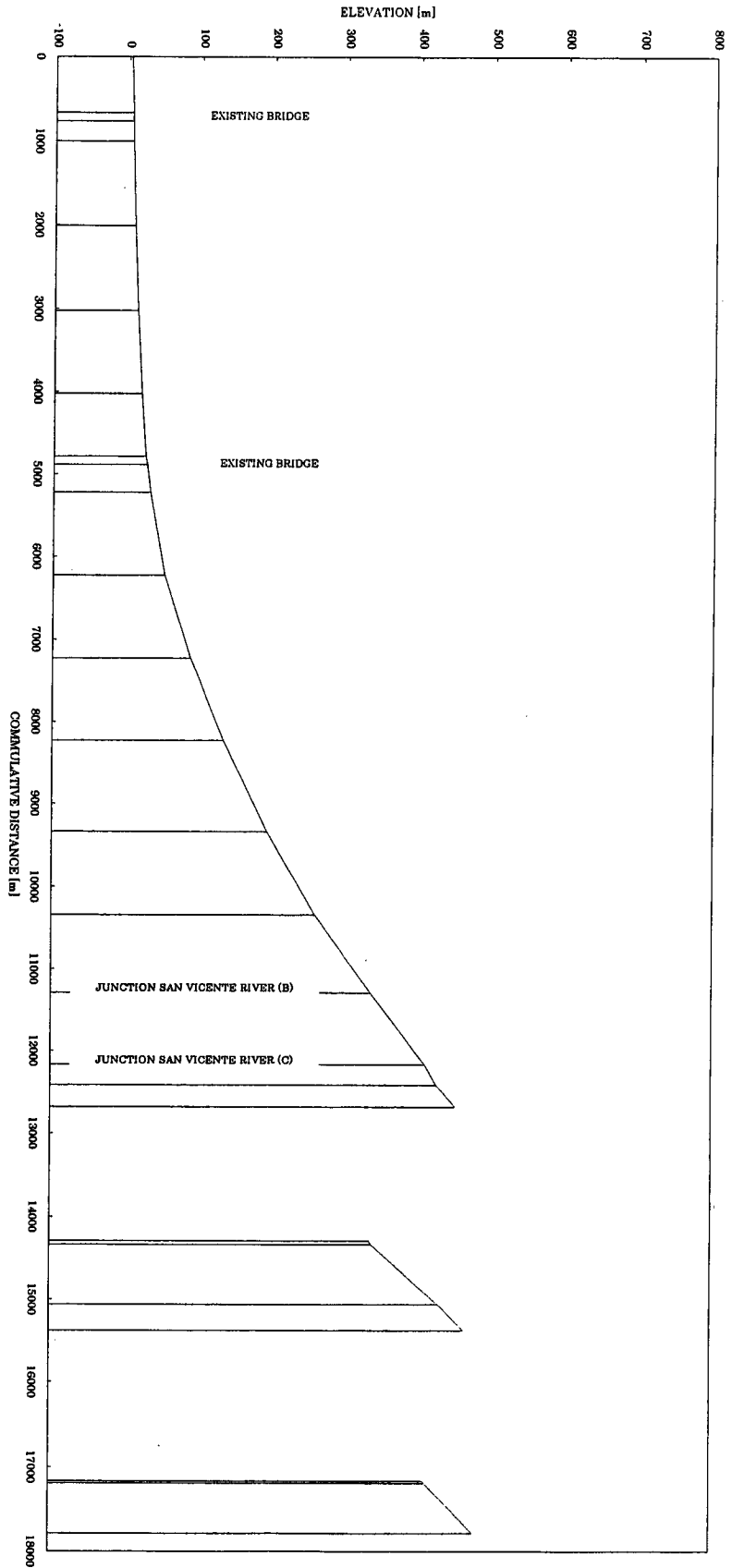
**DF II 2.1 Longitudinal Profile of River Bed
(Quinali River)**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	-1.43
988.61	988.61	0.06
770.38 46.36 80.30 134.89	1767.87 1854.22 1894.62 2029.11	0.94 1.17 1.19 1.27
780.90 268.79	2820.01 3088.80	2.33 2.08
1016.23	4104.03	4.06
1029.92	5133.96	7.96
1044.67	6178.62	11.11
1011.30	7189.92	14.86
1017.09	8207.01	23.19
978.12	9185.13	30.22
1022.39 76.86	10207.52 10284.37	42.47 43.27
917.07	11201.44	61.89
1001.67	12203.01	66.92
1022.81	13225.82	79.61
606.14	13730.96	88.02



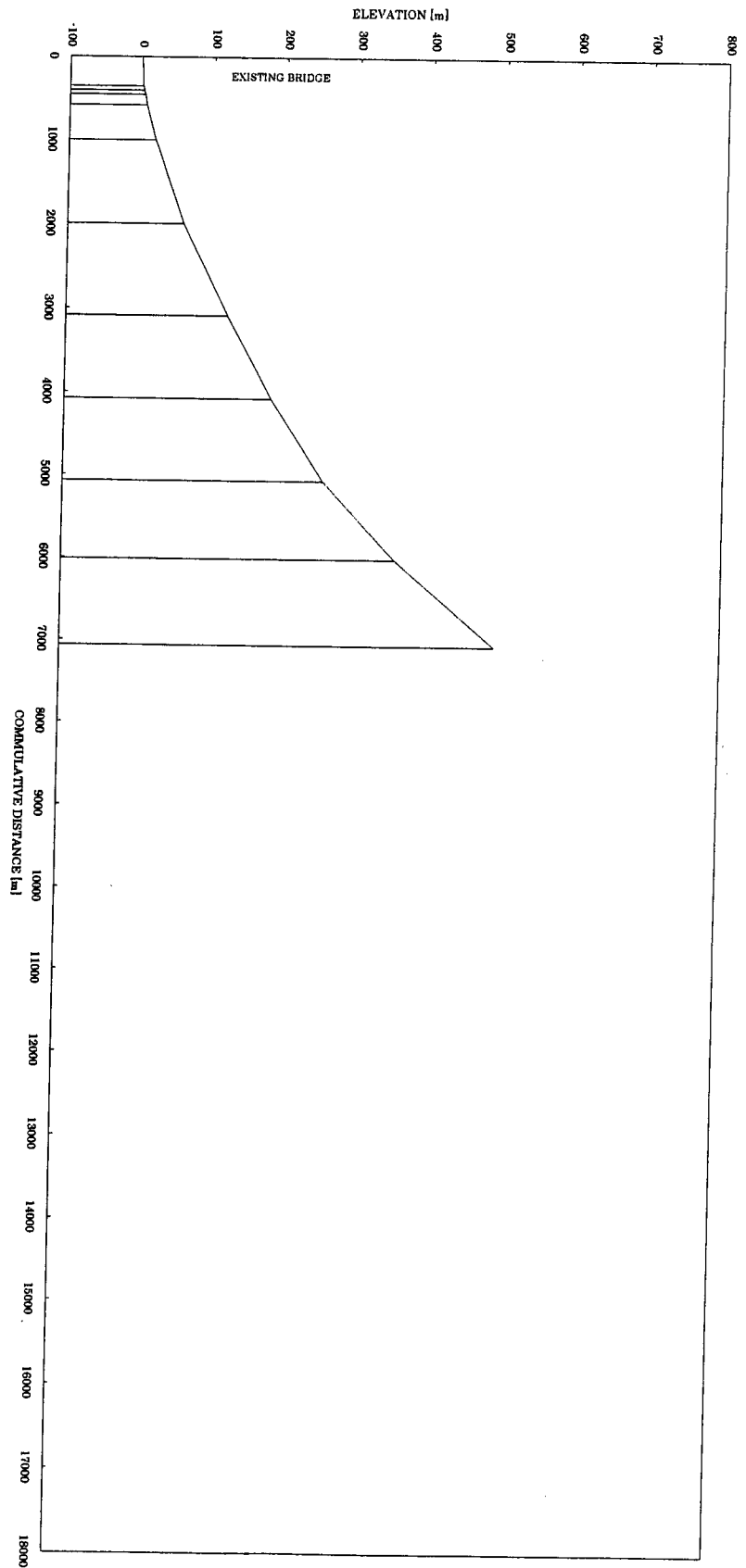
**DF II 2.1 Longitudinal Profile of River Bed
(San Vicente River / San Vicente River (B) / San Vicente River (C))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	2.53
661.72	661.72	5.22
102.32	764.04	6.28
239.53	1003.57	5.71
1008.89	2012.26	8.58
1009.39	3021.65	13.21
1002.46	4024.10	19.29
782.51	4786.61	26.04
101.27	4887.88	27.01
334.75	5222.63	31.20
1003.00	6225.63	51.48
1001.36	7226.99	67.85
1002.51	8228.50	134.22
1109.81	9338.31	184.70
1001.52	10341.03	260.51
963.27	11294.30	337.02
674.20	12168.50	412.02
261.61	12420.11	427.31
284.69	12684.80	463.36
0.00	11294.30	337.82
45.28	11339.58	340.41
723.24	12062.80	431.32
315.28	12378.08	466.37
0.00	12168.50	412.02
24.25	12192.75	414.02
697.33	12790.08	479.75



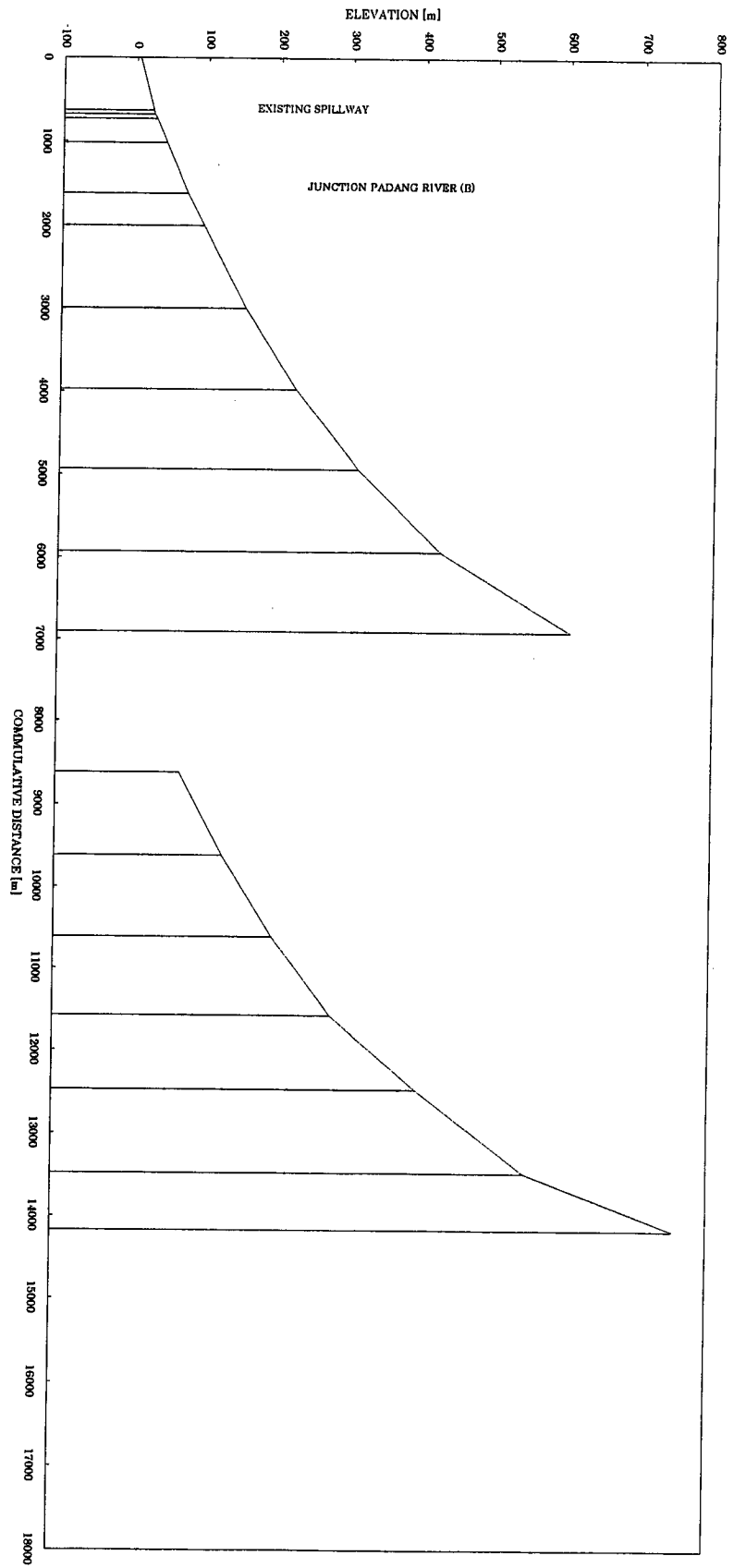
**DF II 2.1 Longitudinal Profile of River Bed
(Arimbay River)**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	-0.10
362.37	362.37	1.77
80.00	402.37	3.19
60.00	462.37	4.81
128.86	579.32	7.26
421.70	1001.02	20.08
992.32	1993.34	60.63
1082.22	3085.56	122.76
991.53	4077.09	185.45
994.88	5071.97	257.42
943.37	6018.34	357.42
1048.86	7063.89	494.42



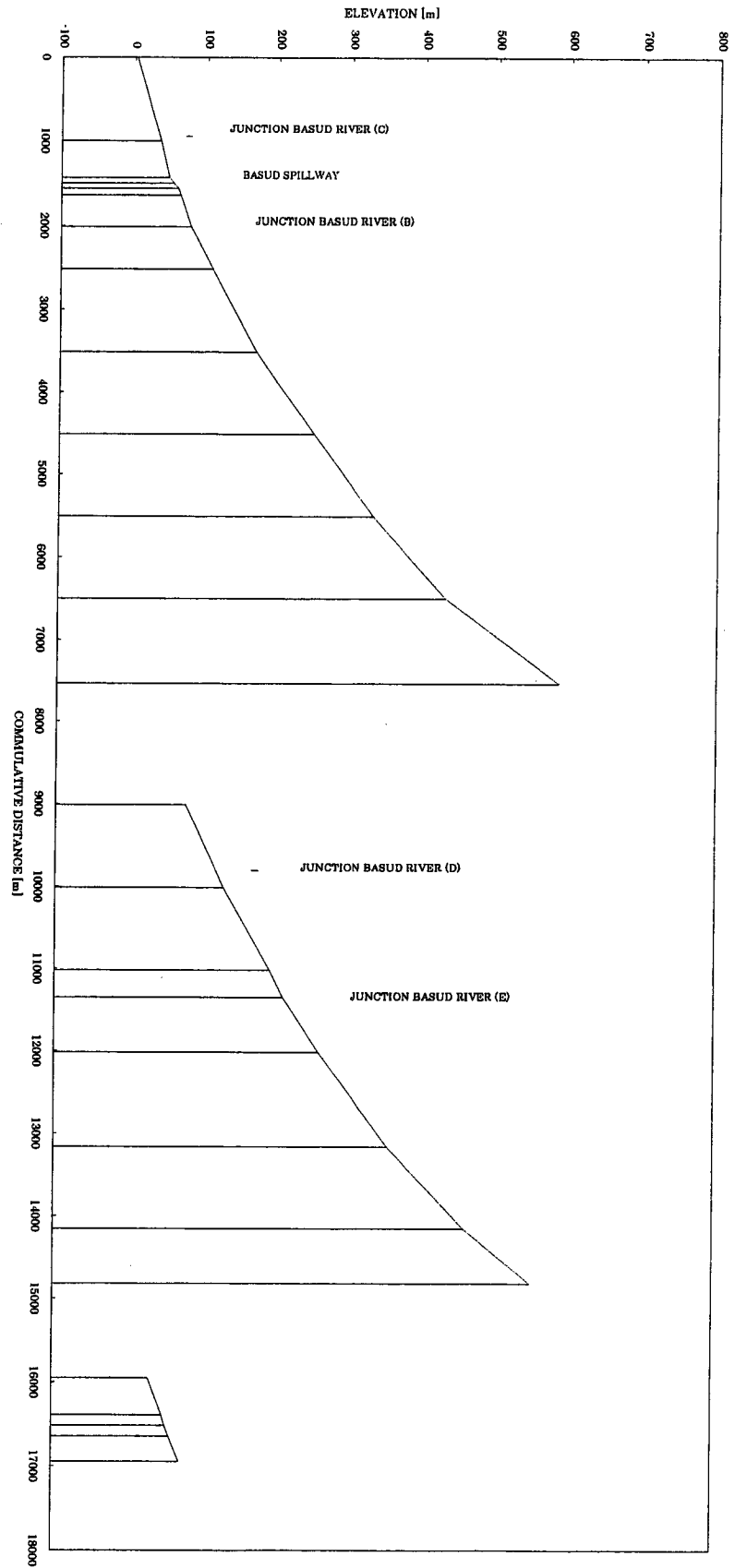
**DF II 2.1 Longitudinal Profile of River Bed
(Padang River / Padang River (B))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	4.58
624.52	624.52	23.55
44.87	669.39	24.74
55.26	724.65	28.13
291.24	1015.89	41.98
600.46	1616.35	72.45
382.09	1998.34	95.33
990.85	2990.19	154.61
984.62	3974.71	224.33
993.40	4938.11	312.64
990.66	5928.77	426.73
980.22	6908.99	608.24
0.00	1016.38	70.10
1002.09	2018.44	131.19
1000.34	3018.78	200.56
990.59	4079.37	282.15
898.30	5477.67	400.84
1003.05	6480.72	662.31
890.55	7171.28	755.02



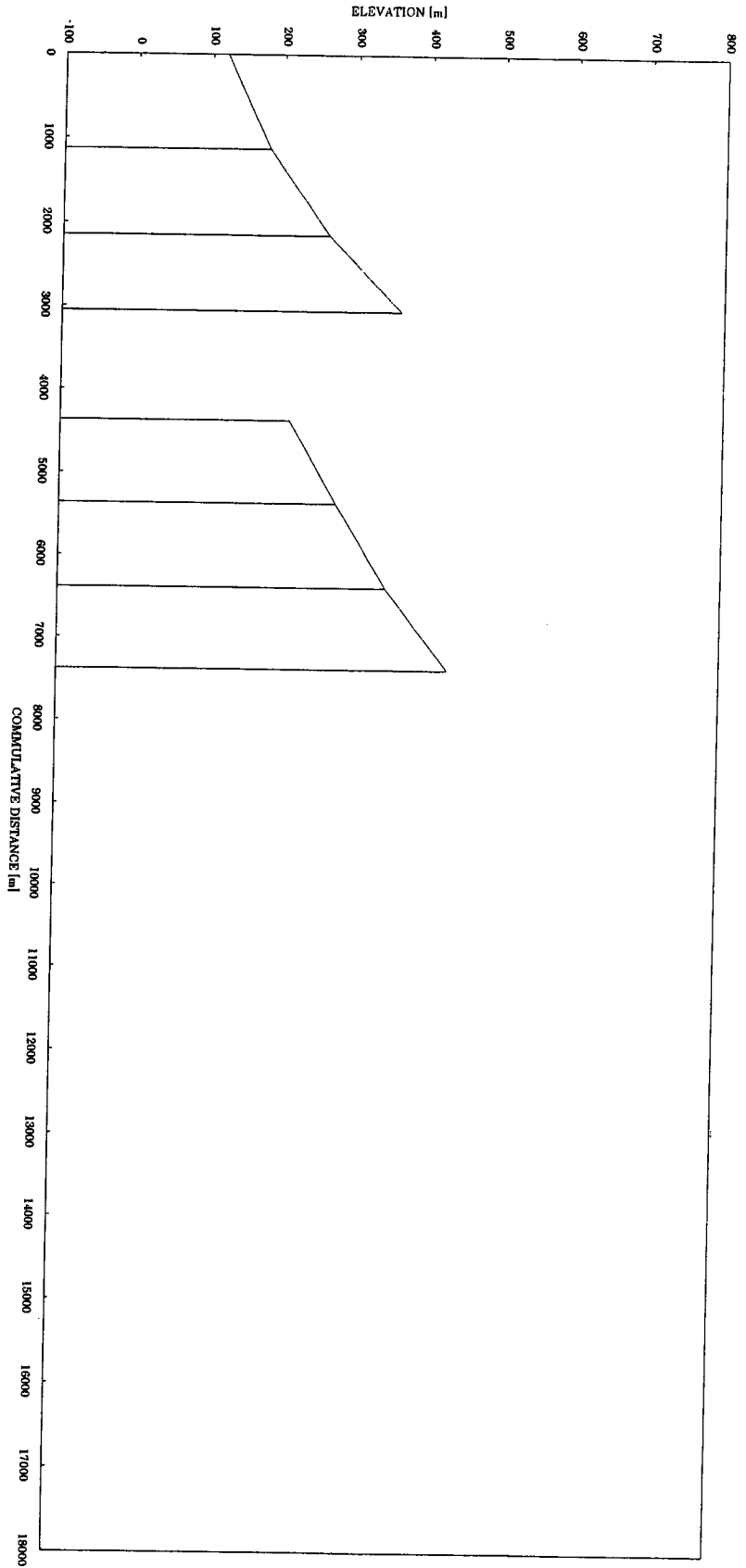
**DF II 2.1 Longitudinal Profile of River Bed
(Basud River / Basud River (B) / Basud River (C))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	2.16
1001.68	1001.68	35.05
436.55	1438.13	48.12
62.54	1500.77	48.12
62.54	1563.40	60.54
77.21	1640.61	63.54
372.10	2012.71	78.78
600.87	2613.58	108.09
1000.06	3613.03	170.29
1002.50	4616.13	250.74
991.43	5607.56	332.81
993.90	6601.46	432.10
1031.94	7633.40	589.03
0.00	2012.71	78.78
1001.54	3014.25	131.29
1002.12	4016.37	196.54
336.24	4352.61	214.98
663.14	5015.75	263.54
1181.08	6196.83	358.30
987.54	7184.47	462.84
687.41	7871.88	554.43
0.00	960.21	32.04
440.07	1390.28	51.32
123.88	1514.17	55.58
129.43	1643.60	61.28
302.75	1946.35	75.28



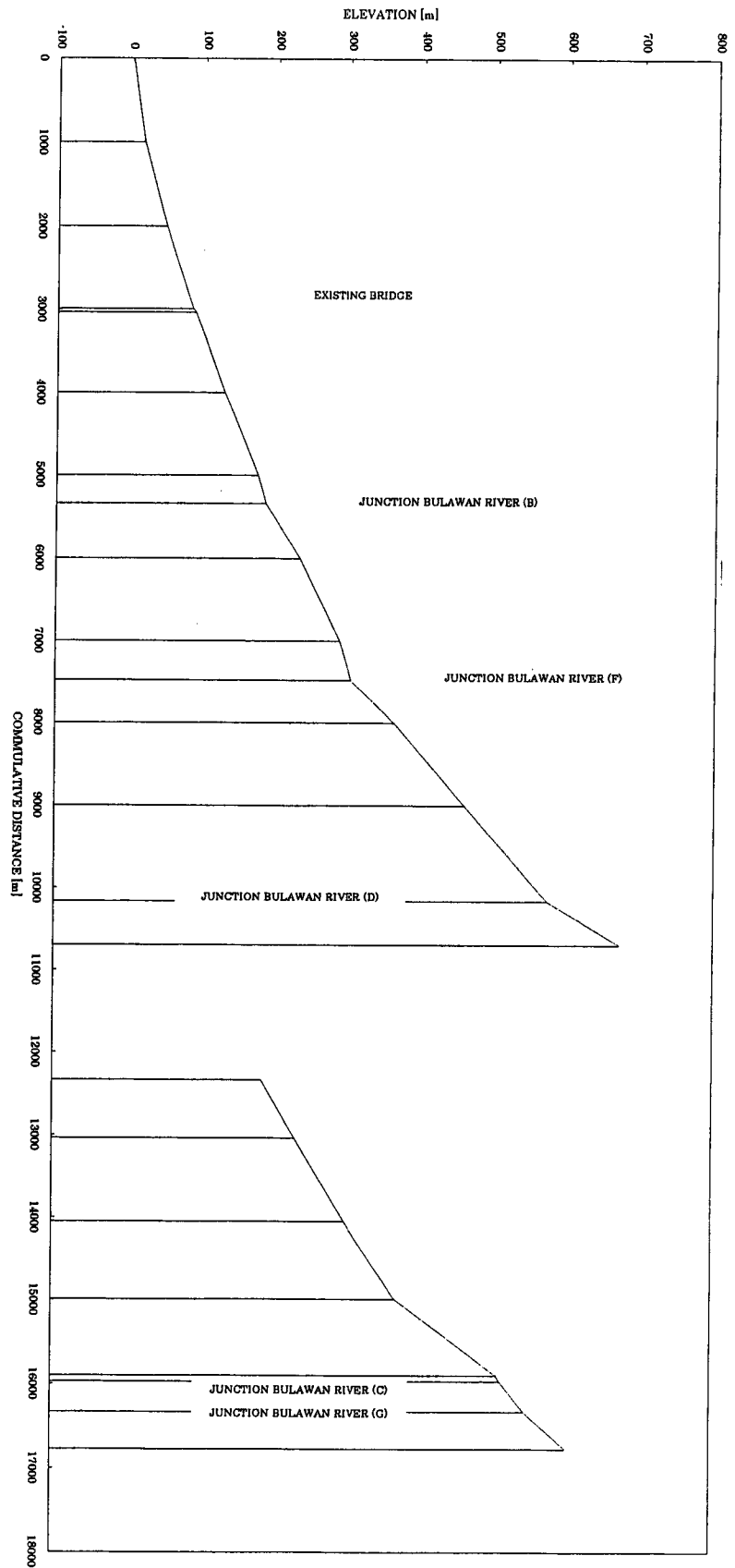
**DF II 2.1 Longitudinal Profile of River Bed
(Basud River (D) / Basud River (E))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	2807.69	120.10
1120.37	3933.96	181.03
1020.89	4964.55	263.37
907.73	5862.28	362.53
0.00	4367.05	212.90
987.13	6364.18	277.77
1028.84	6393.12	346.61
988.86	7389.07	431.84



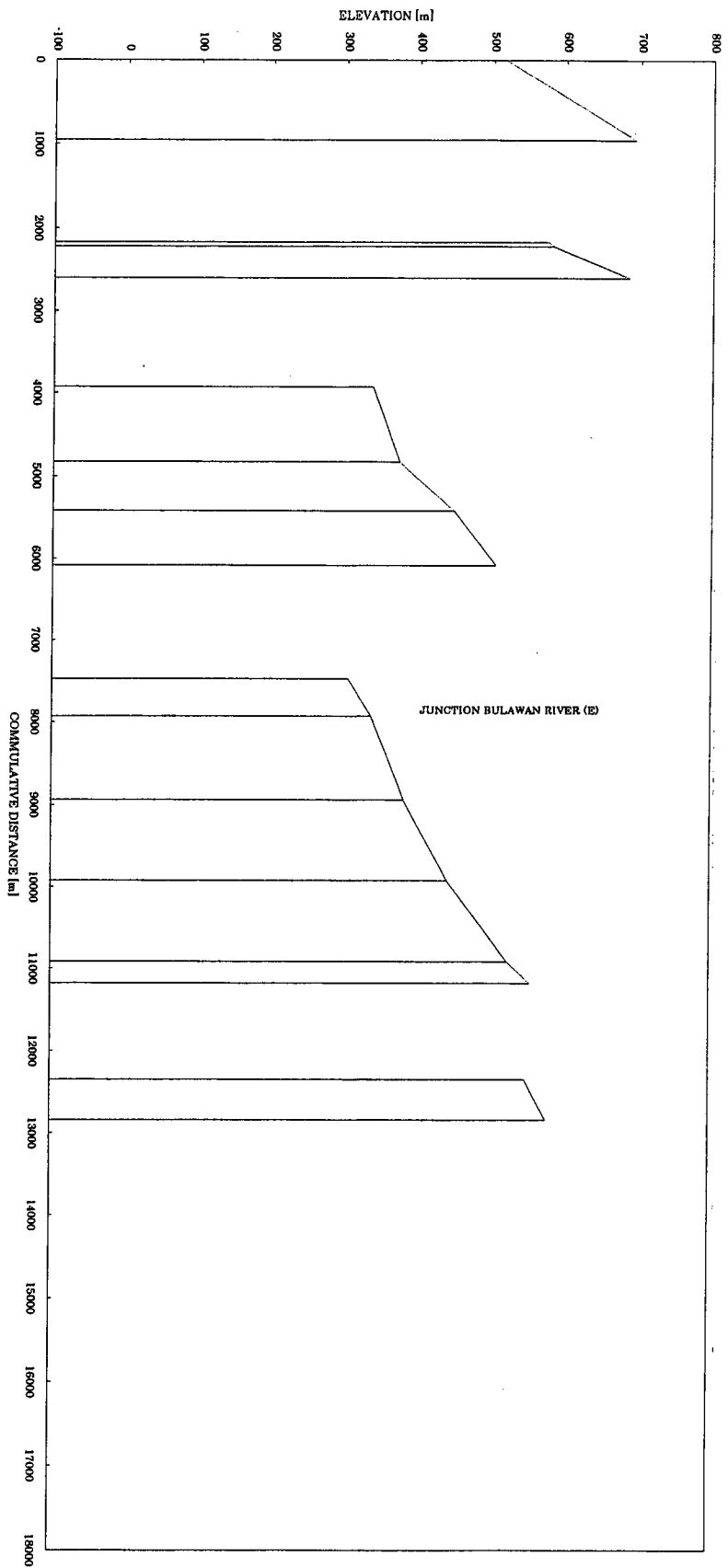
**DF II 2.1 Longitudinal Profile of River Bed
(Bulawan River / Bulawan River (B))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	0.00	0.29
1000.00	1000.00	17.00
1000.00	2000.00	47.07
891.28	2901.28	84.01
41.77	3033.05	88.05
906.96	4000.00	128.97
1000.00	5000.00	175.74
338.40	5338.40	186.80
661.00	6000.00	234.36
1000.00	7000.00	289.18
474.49	7474.49	306.97
525.61	8000.00	364.61
1000.00	9000.00	461.21
1165.37	10165.37	576.22
631.68	10897.05	674.84
0.00	5338.40	186.80
703.71	6042.11	233.08
1008.82	7051.93	301.14
939.87	7991.60	371.15
807.13	8898.73	511.02
80.58	8968.29	515.35
361.33	9329.62	549.66
443.87	9773.49	607.99



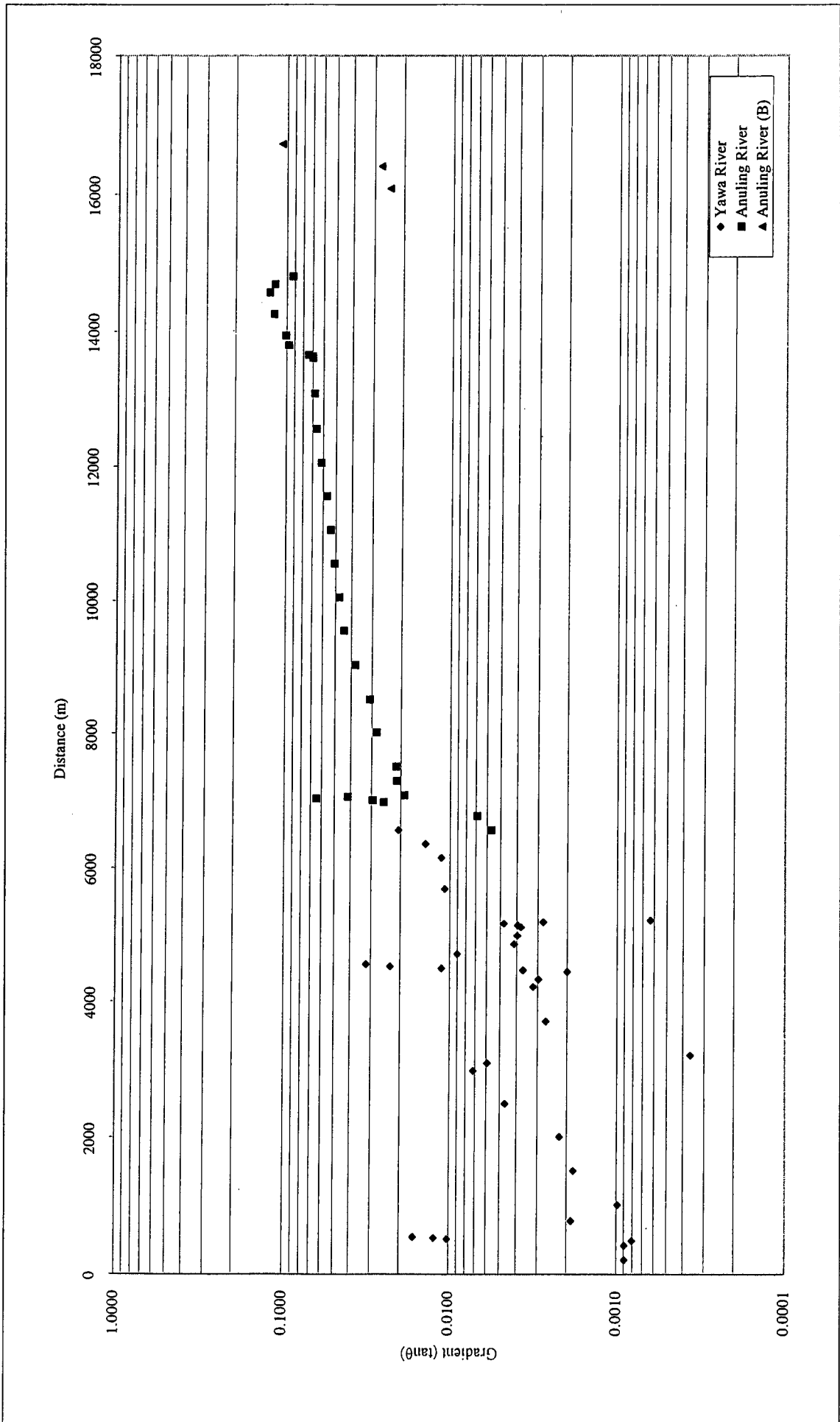
**DF II 2.1 Longitudinal Profile of River Bed
(Bulawan River (C) / Bulawan River (D) / Bulawan River (E) / Bulawan River (F) / Bulawan River (G))**

DISTANCE	COMMULATIVE DISTANCE	RIVER BED ELEVATION
0.00	8968.29	516.35
963.34	9921.93	692.75
0.00	10166.37	576.22
63.11	10218.48	582.68
381.33	10599.81	685.04
0.00	7927.50	337.69
896.86	8824.36	374.42
583.09	9417.45	448.00
865.22	10082.67	506.31
0.00	7474.49	306.67
463.01	7927.50	337.89
1007.92	8936.42	383.14
988.58	9924.00	442.47
094.89	10918.89	524.76
260.78	11179.65	557.16
0.00	9348.47	650.84
491.58	9840.05	579.98

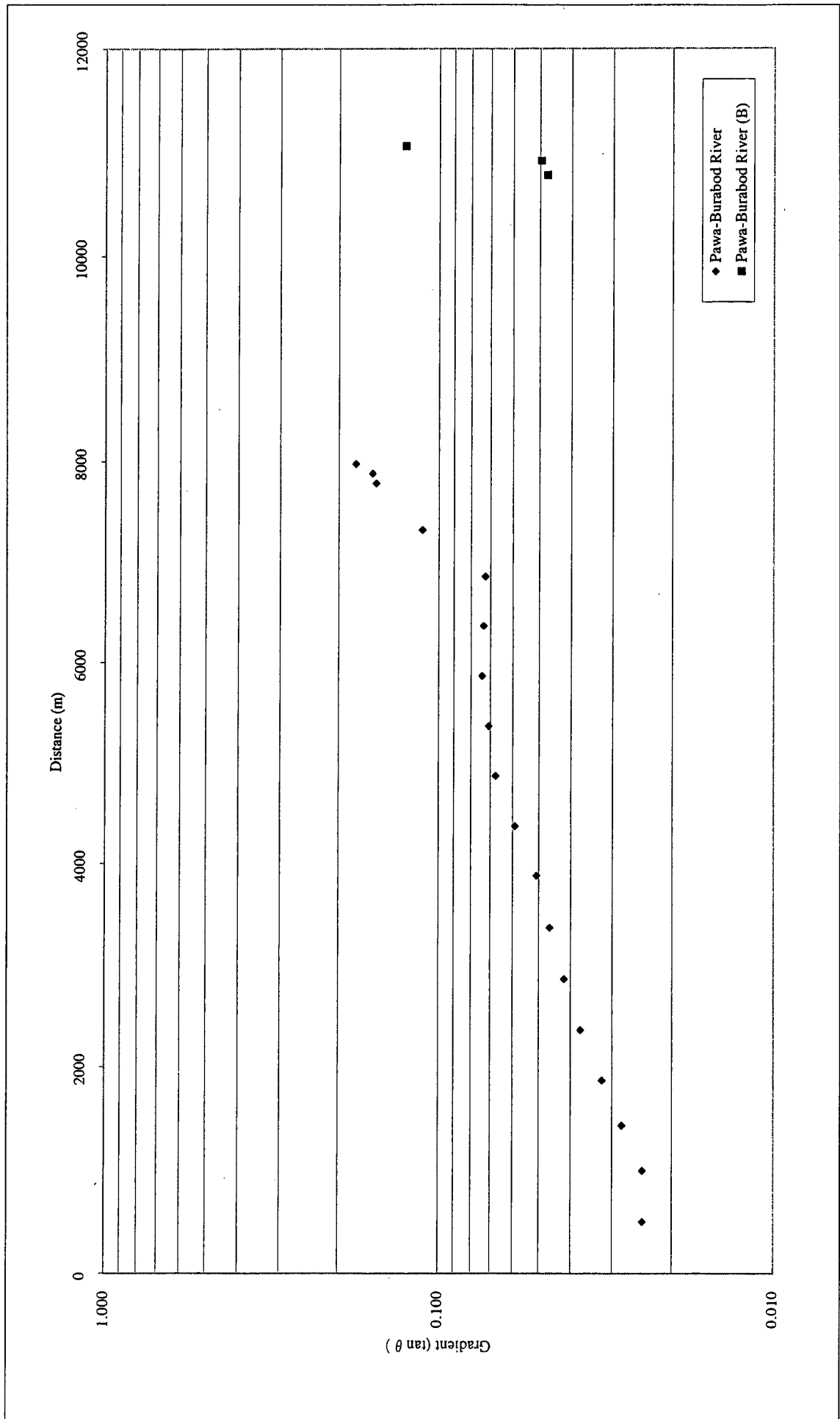


2.2 Relation Graph between Horizontal Distance and River Bed

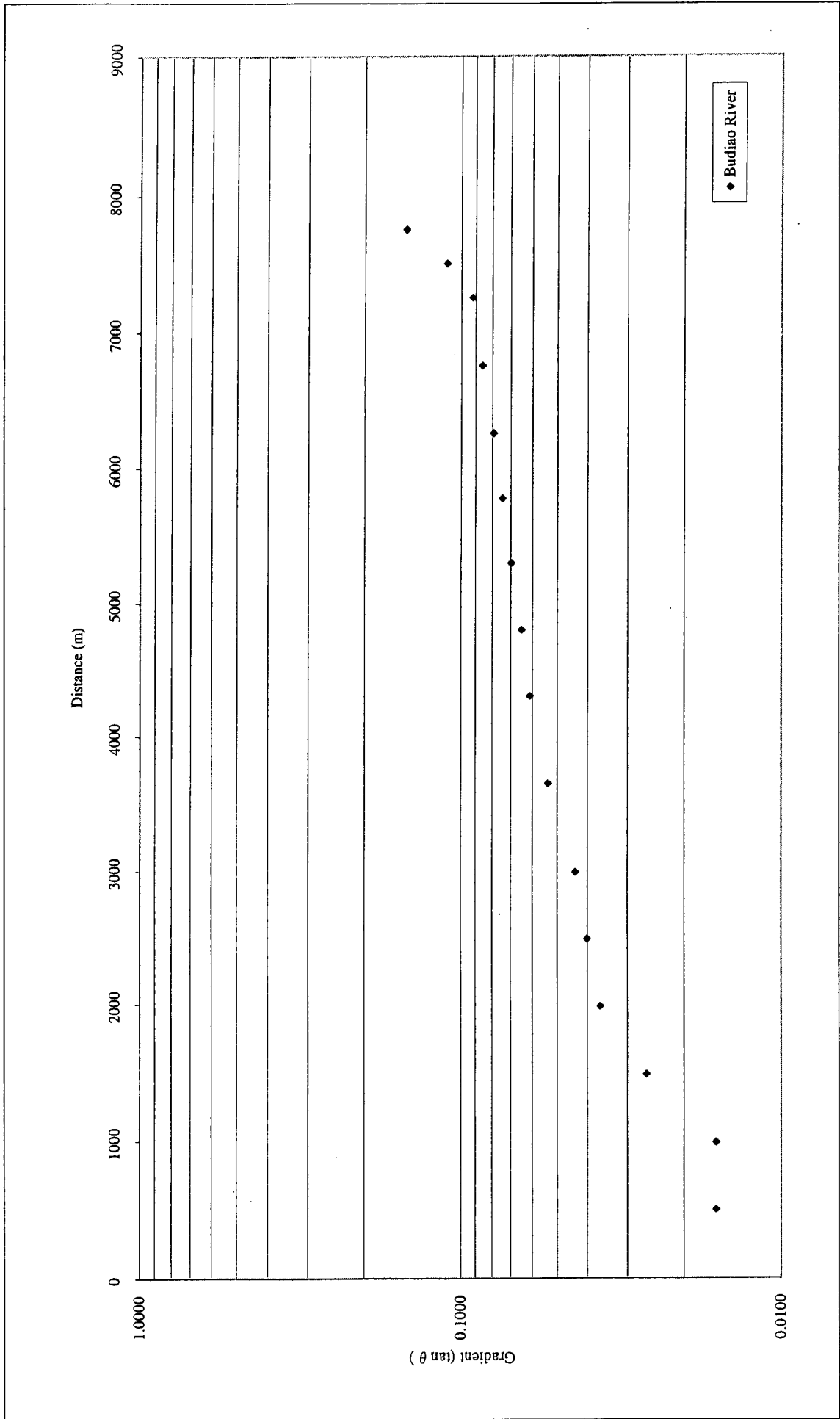
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Yawa River / Anoling River / Anoling River (B))**



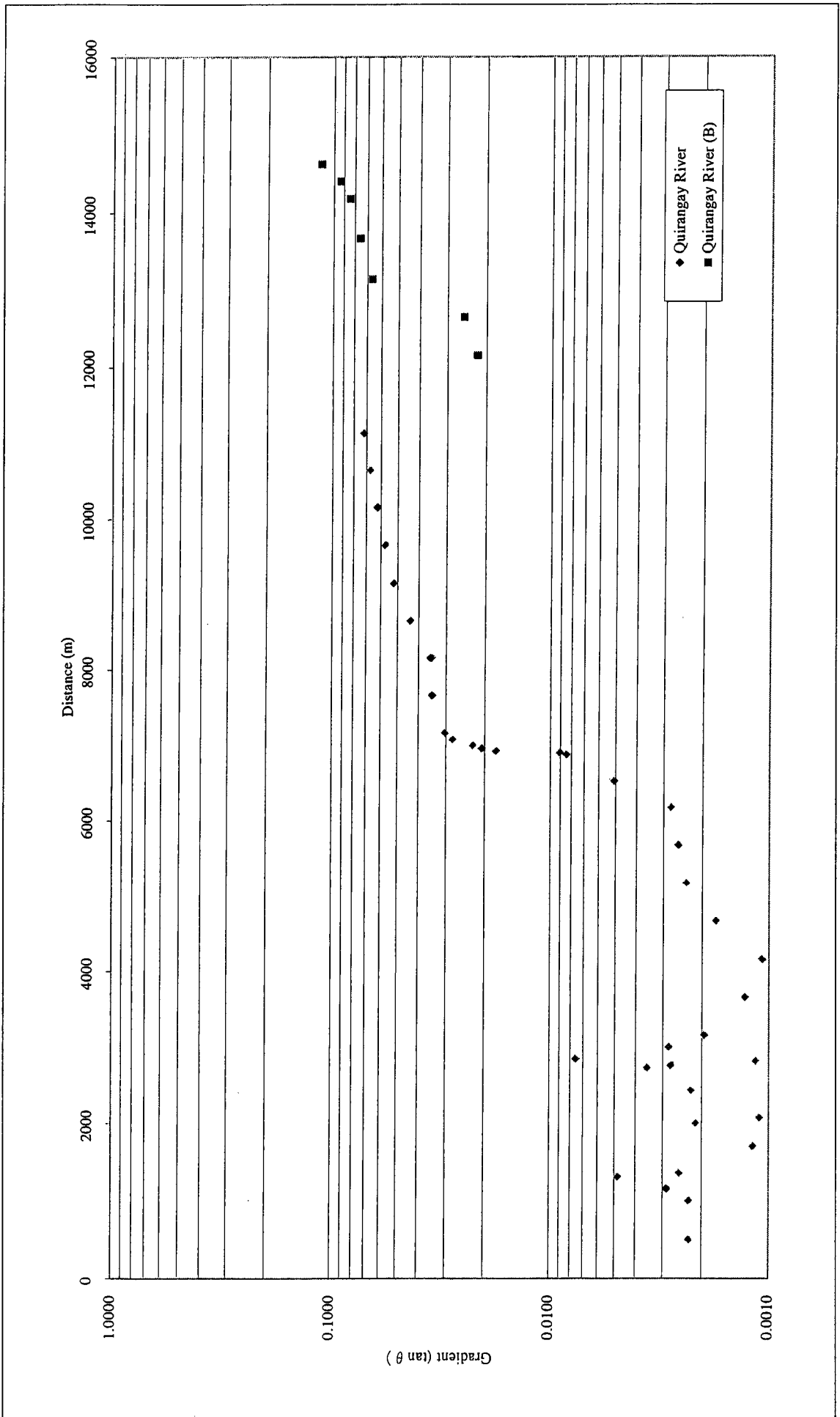
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Pawa-Burabod River / Pawa-Burabod River (B))**



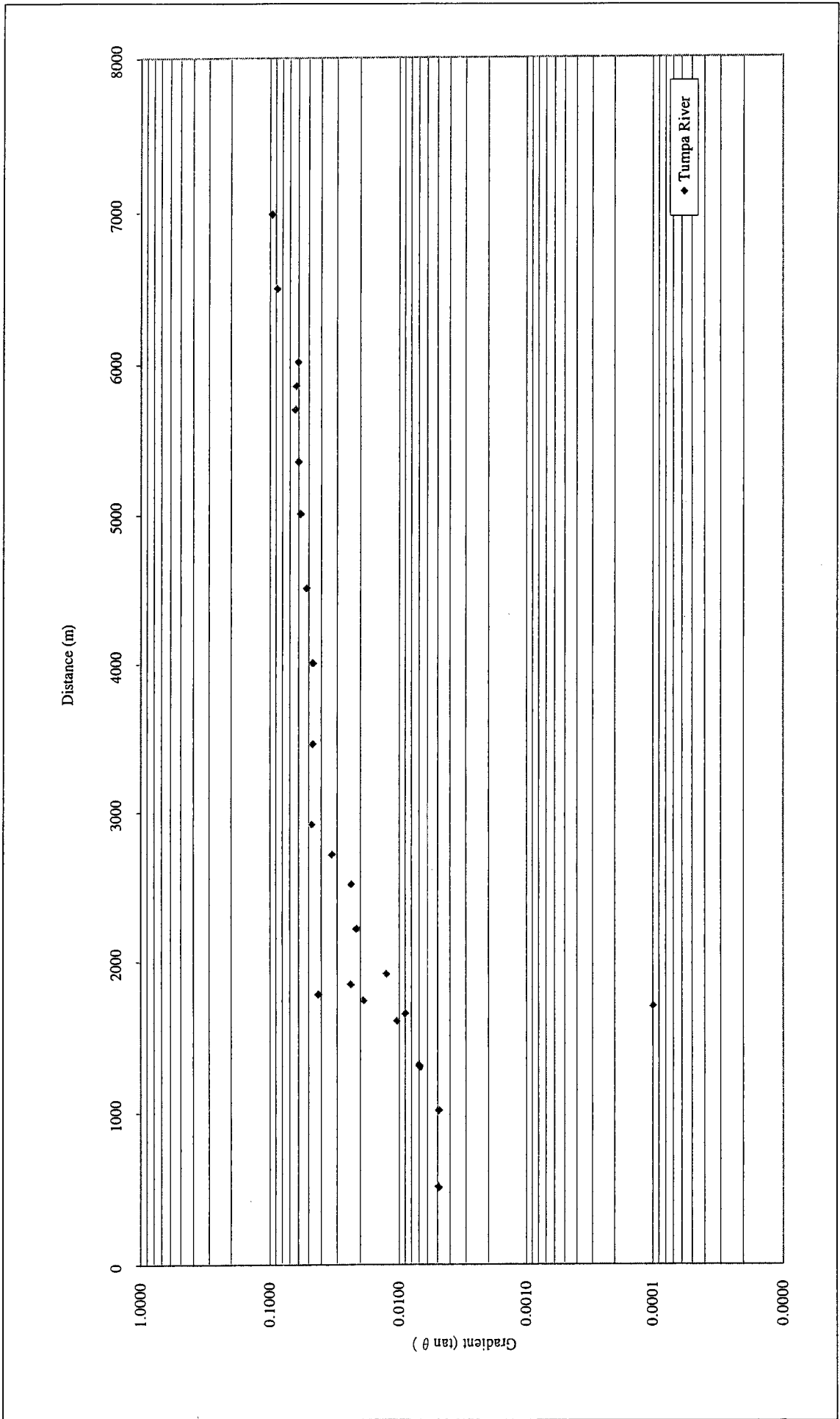
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Budiao River)**



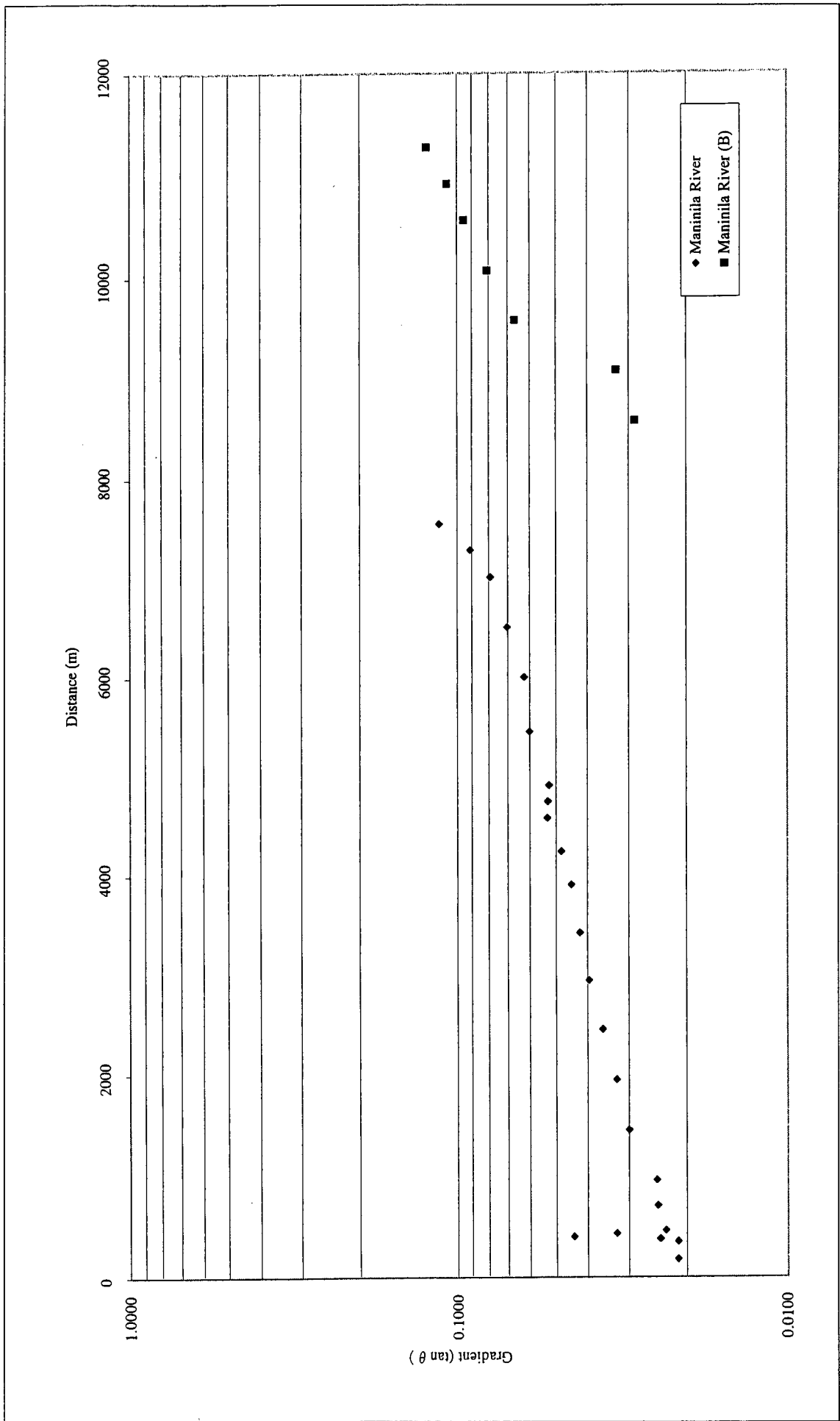
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Quirangay River / Quirangay River(B))**



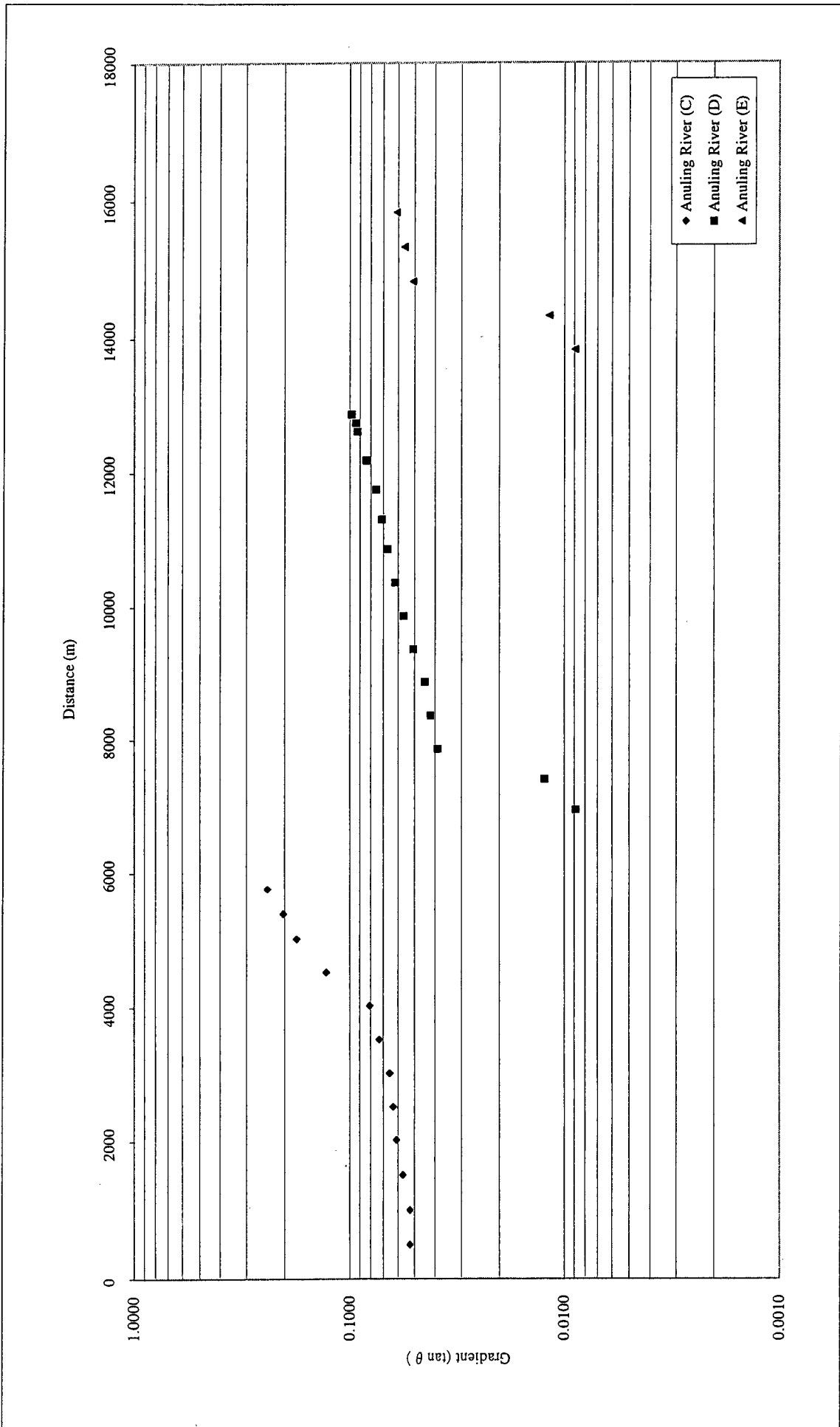
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Tumpa River)**



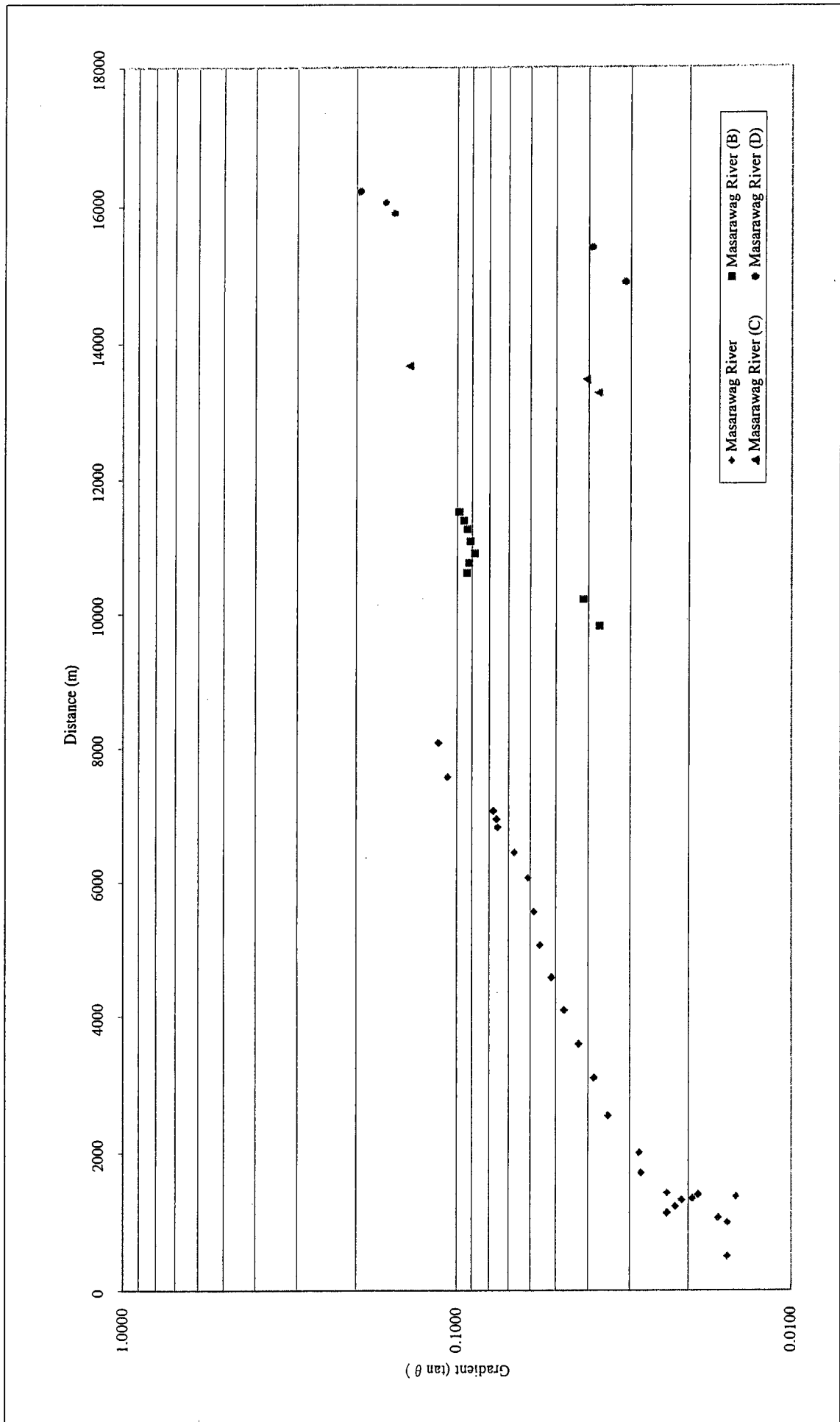
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Maninila River / Maninila River(B))**



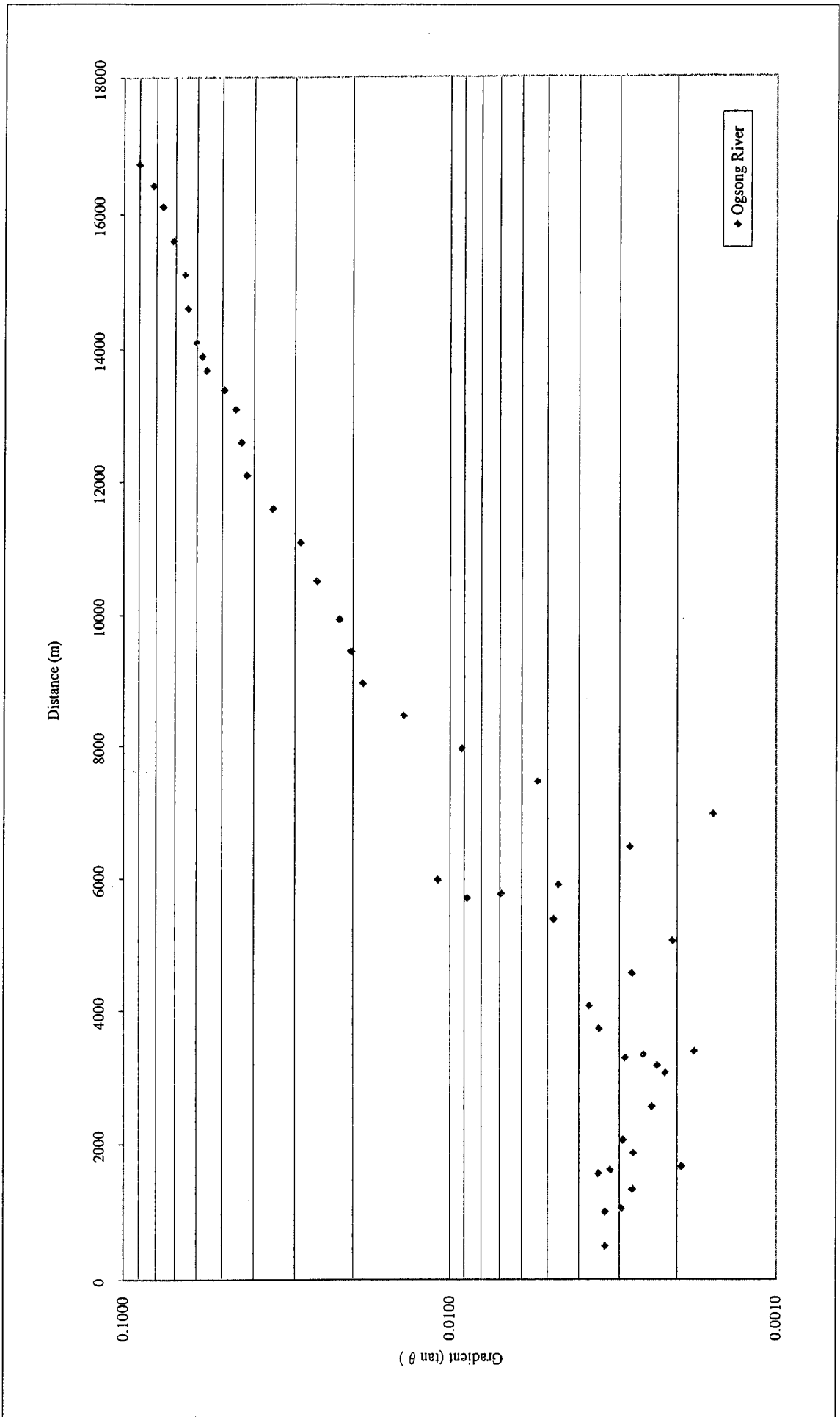
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Anoling River (C) / Anoling River (D) / Anoling River (E))**



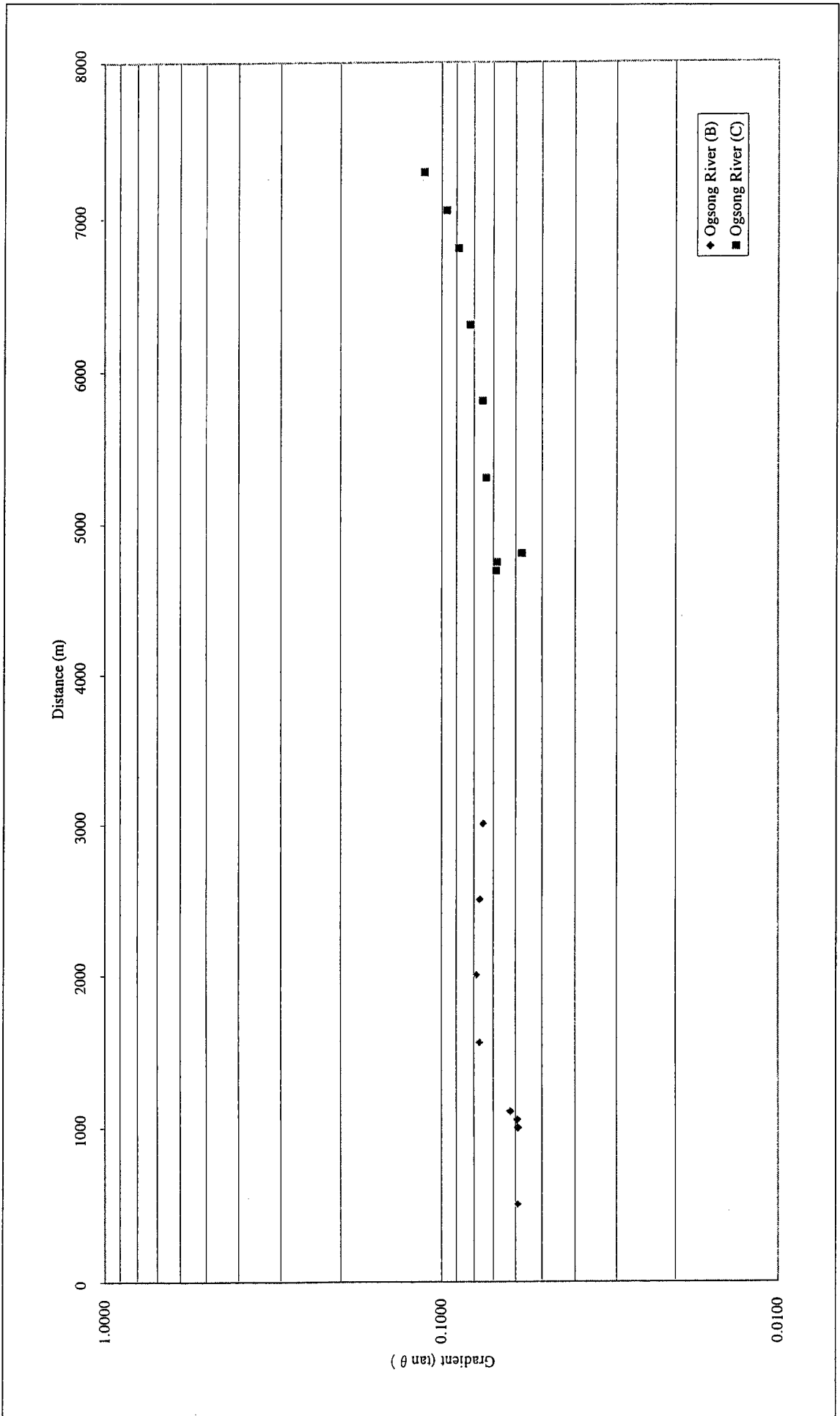
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Masarawag River / Masarawag River (B) / Masarawag River (C) / Masarawag River (D))**



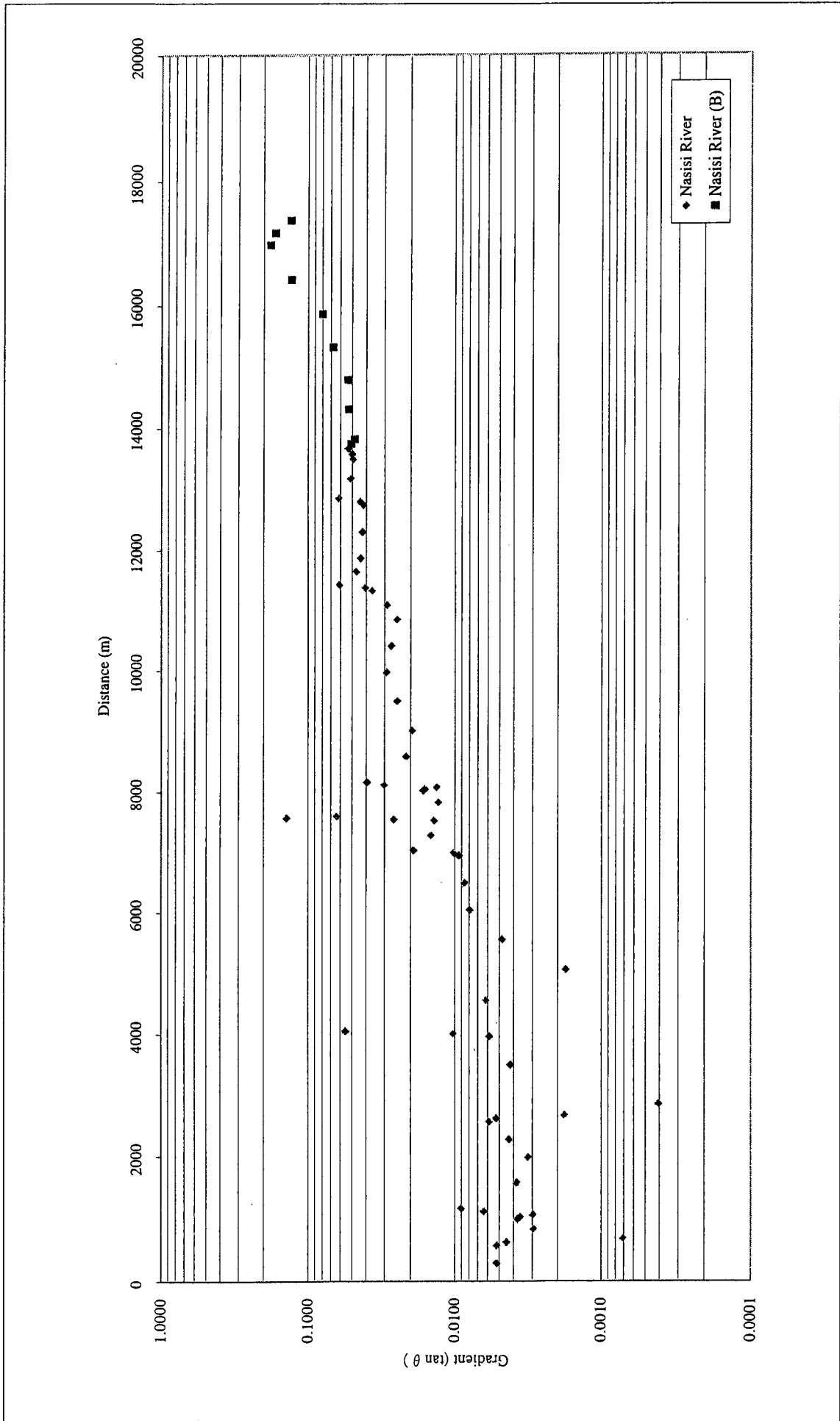
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Ogsong River)**



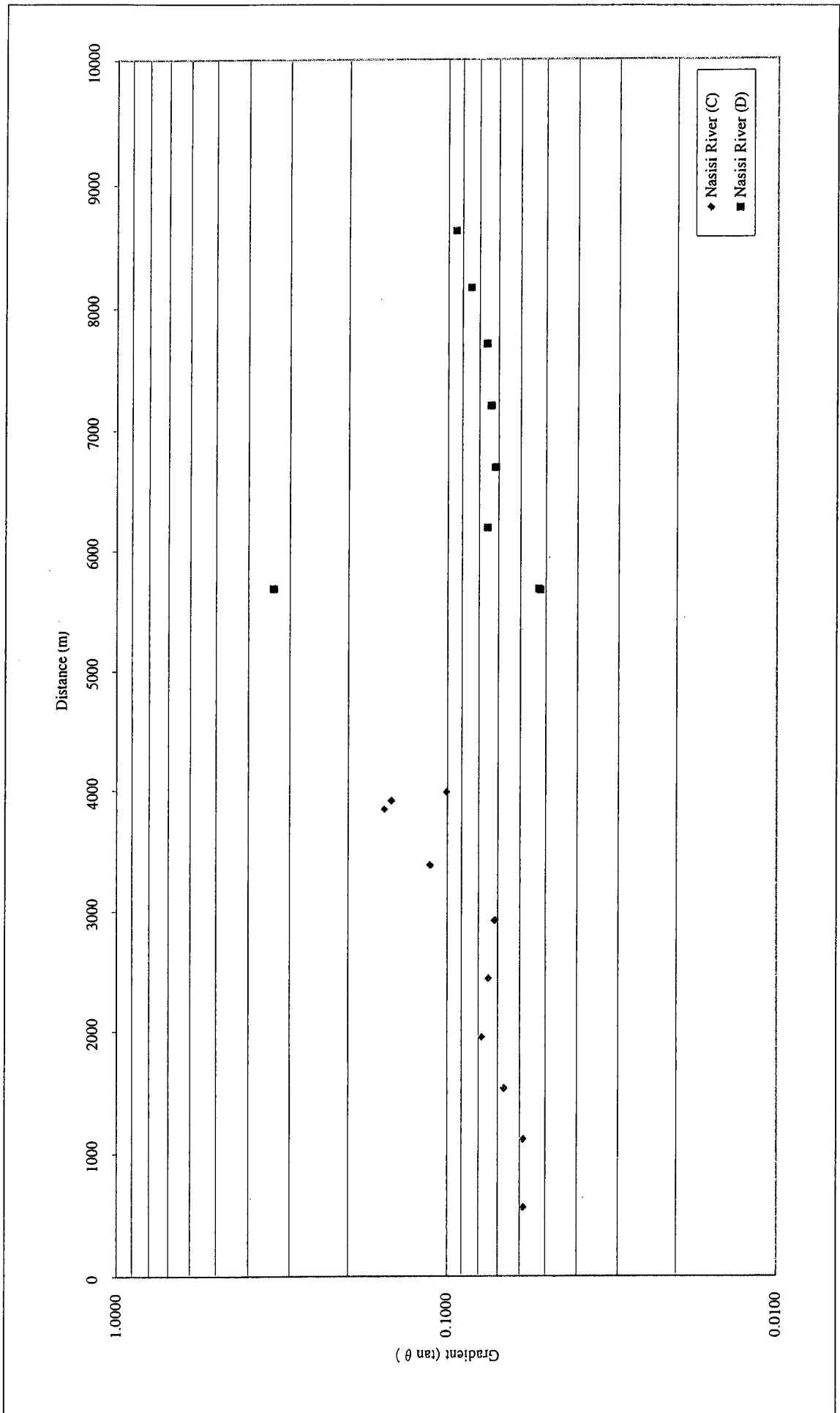
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Ogsong River (B) / Ogsong River(C))**



**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Nasisi River / Nasisi River(B))**



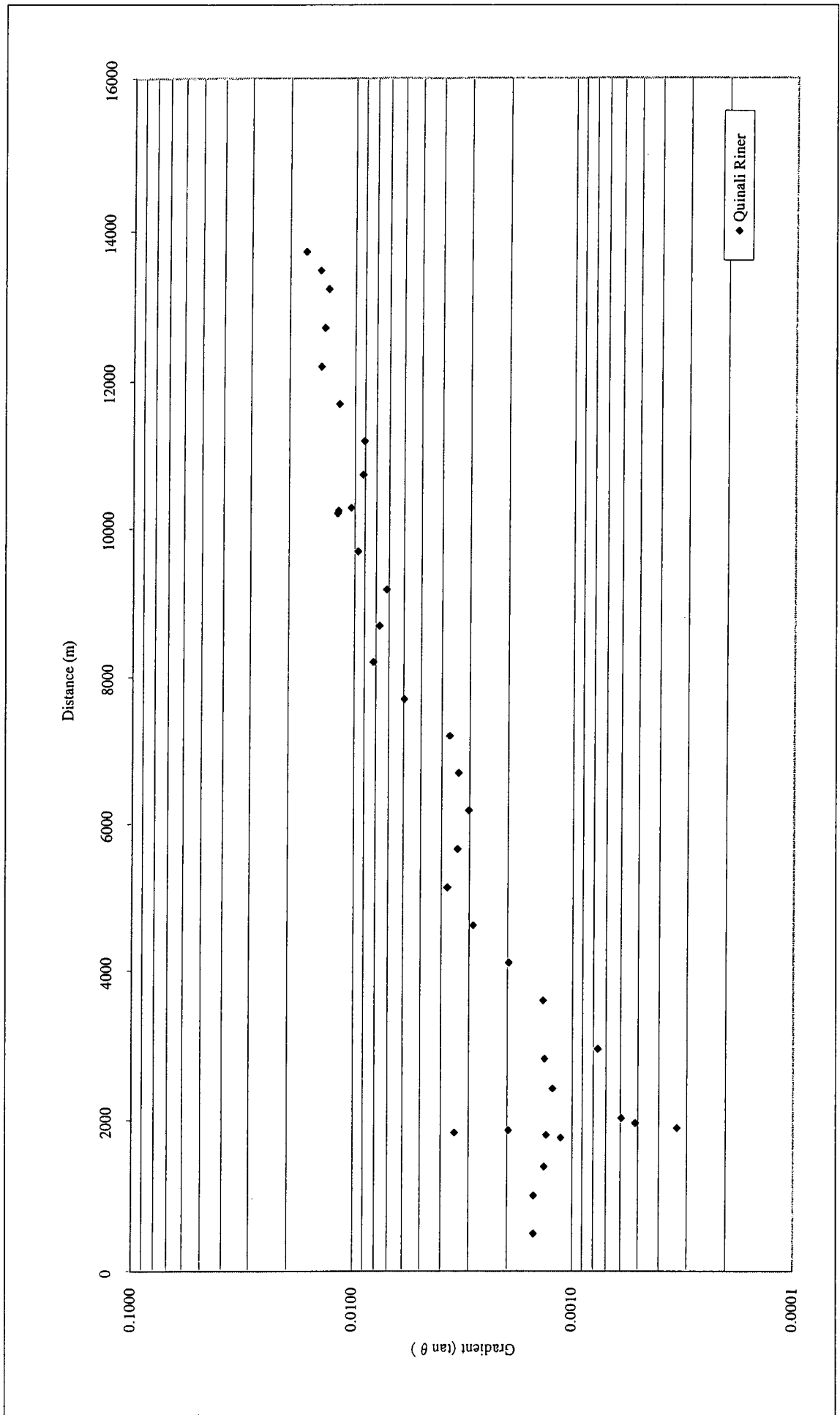
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Nasisi River (C) / Nasisi River(D))**



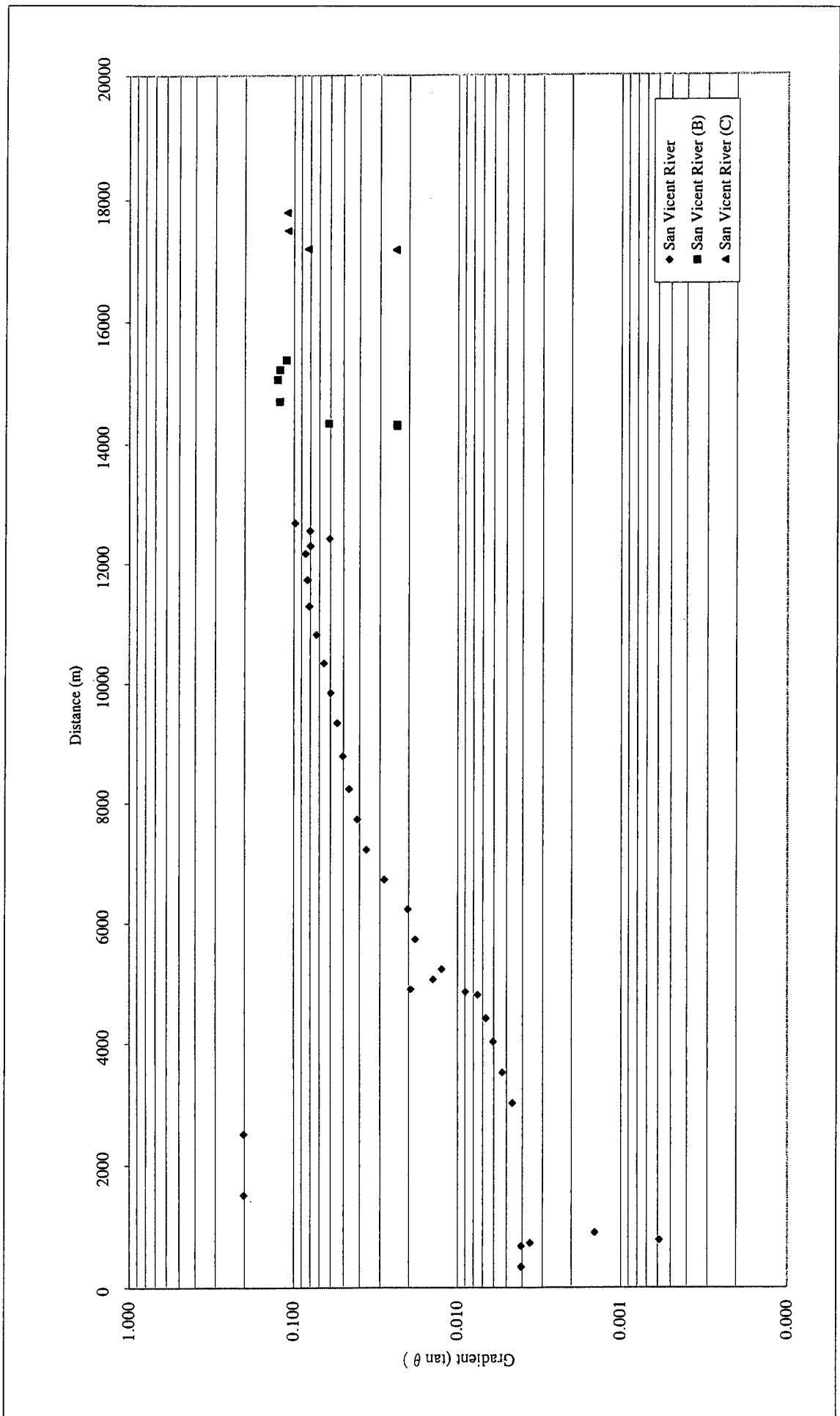
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Buang River / Buang River (B))**



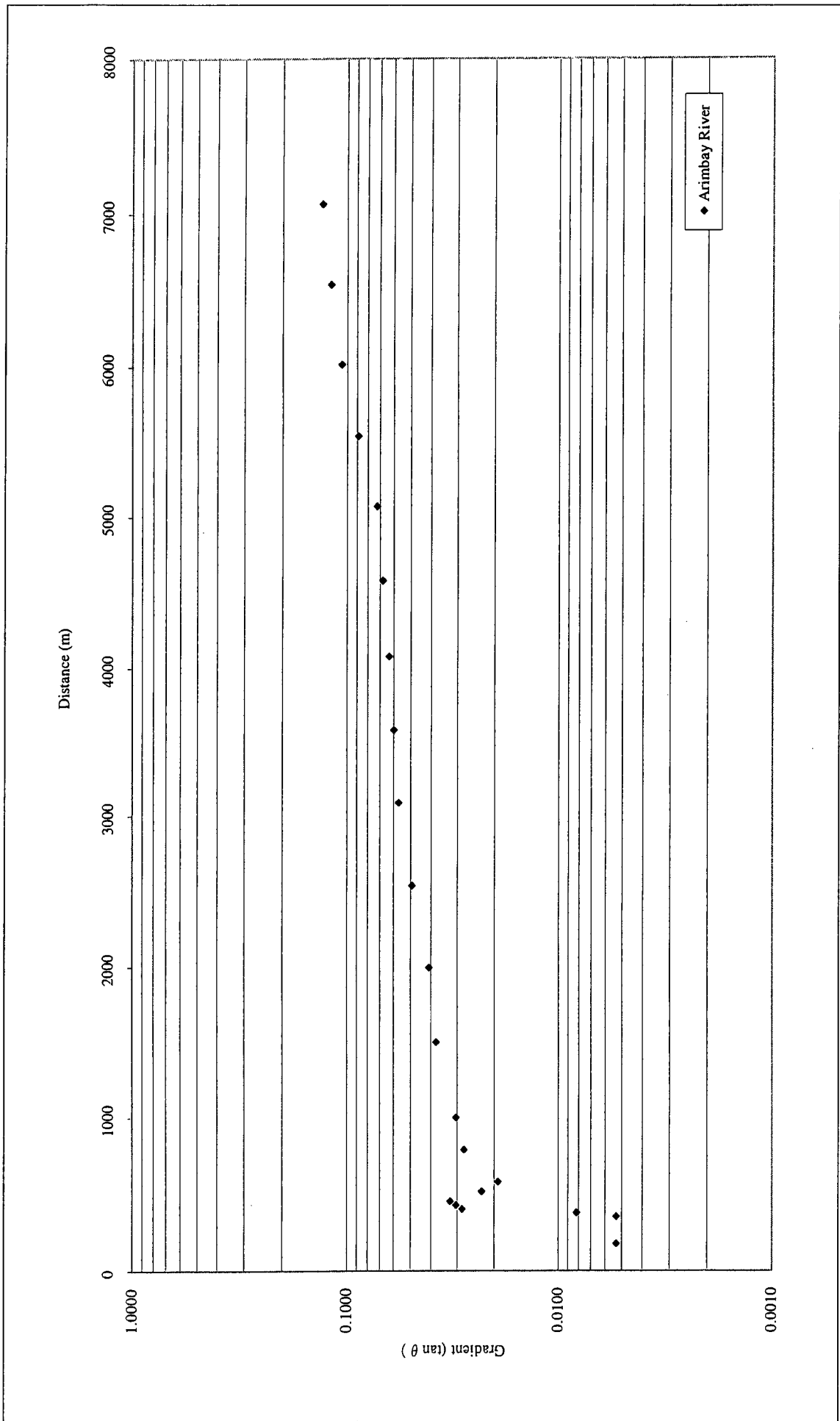
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Quinali River)**



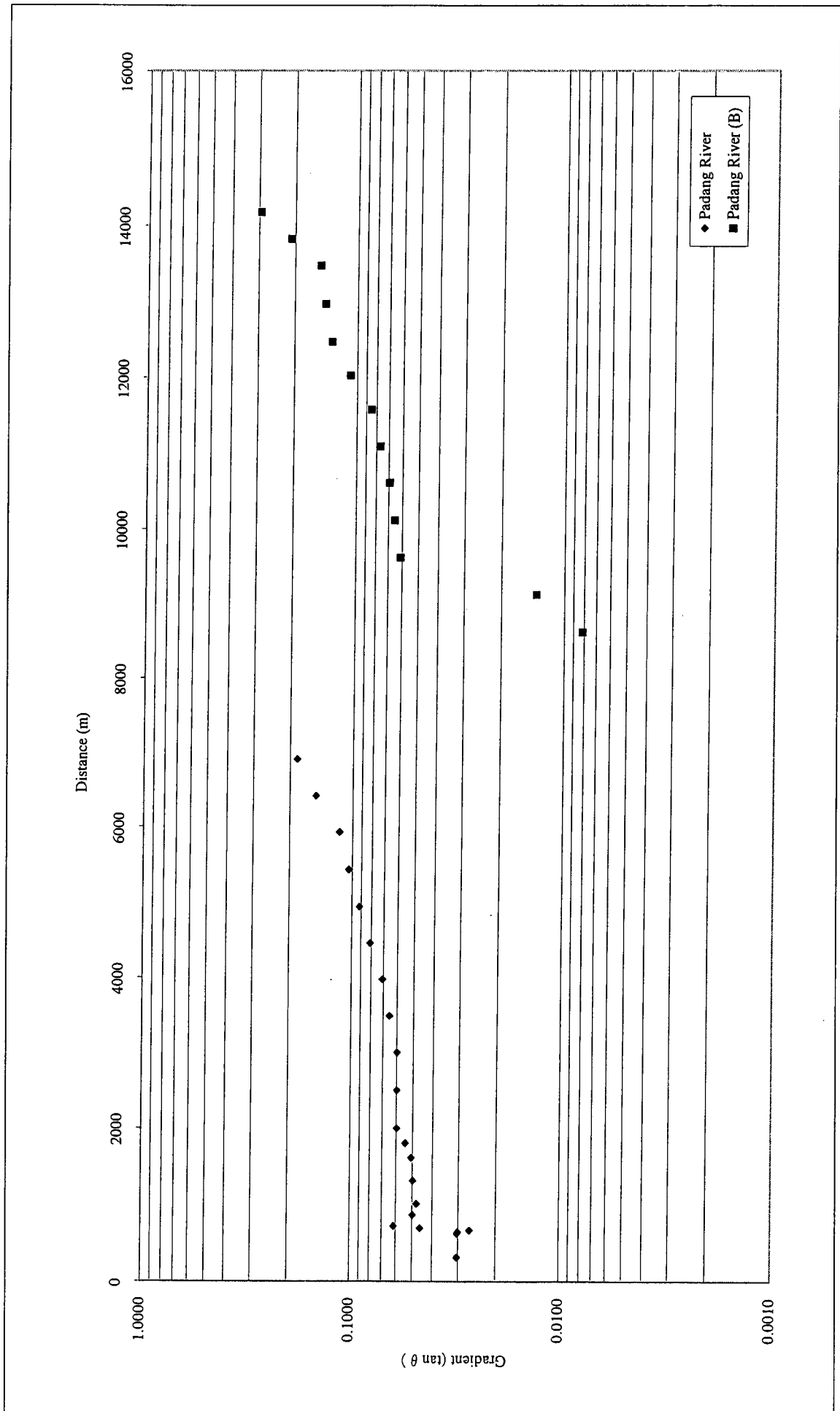
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(San Vicente River / San Vicente River (B) / San Vicente River (C))**



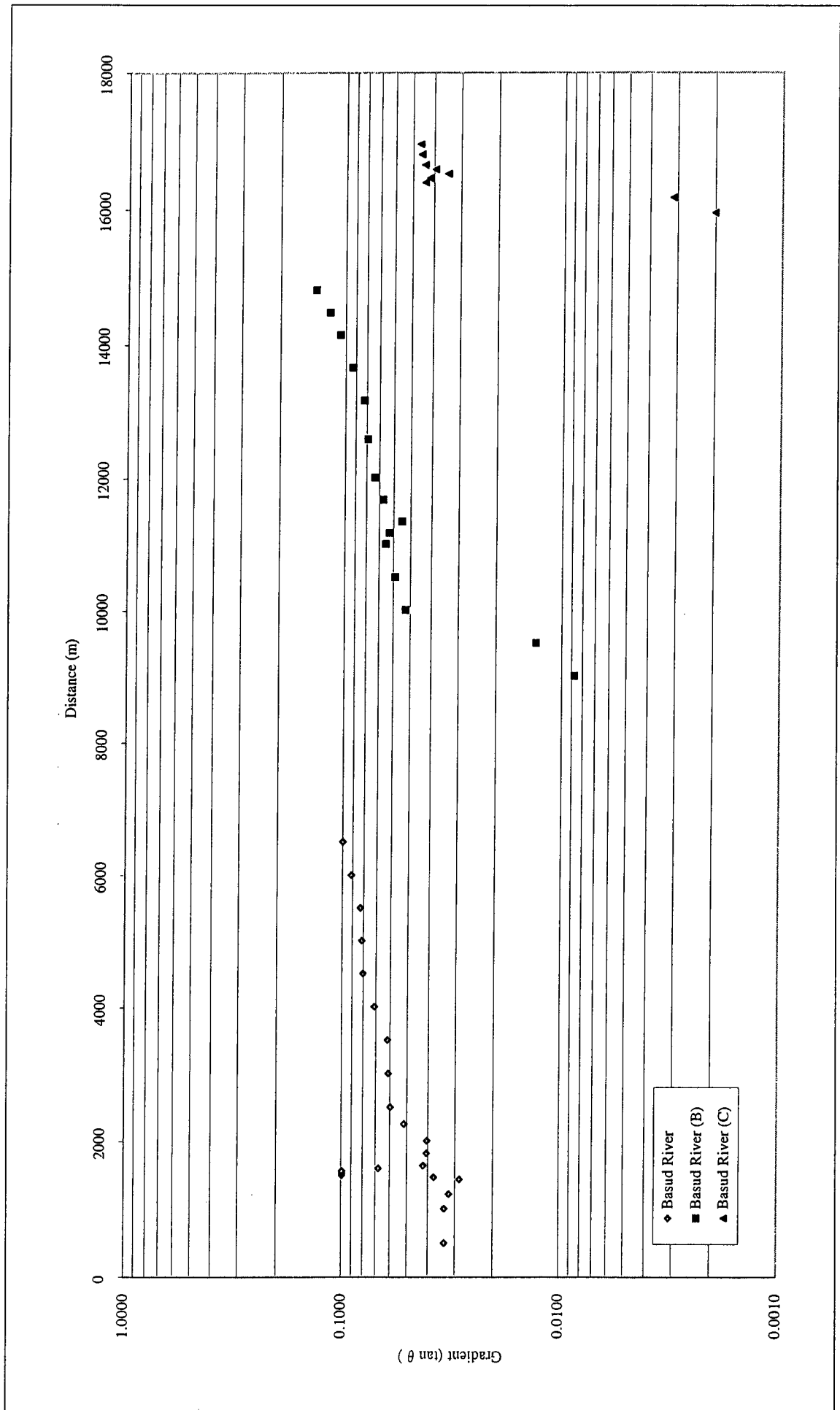
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Arimbay River)**



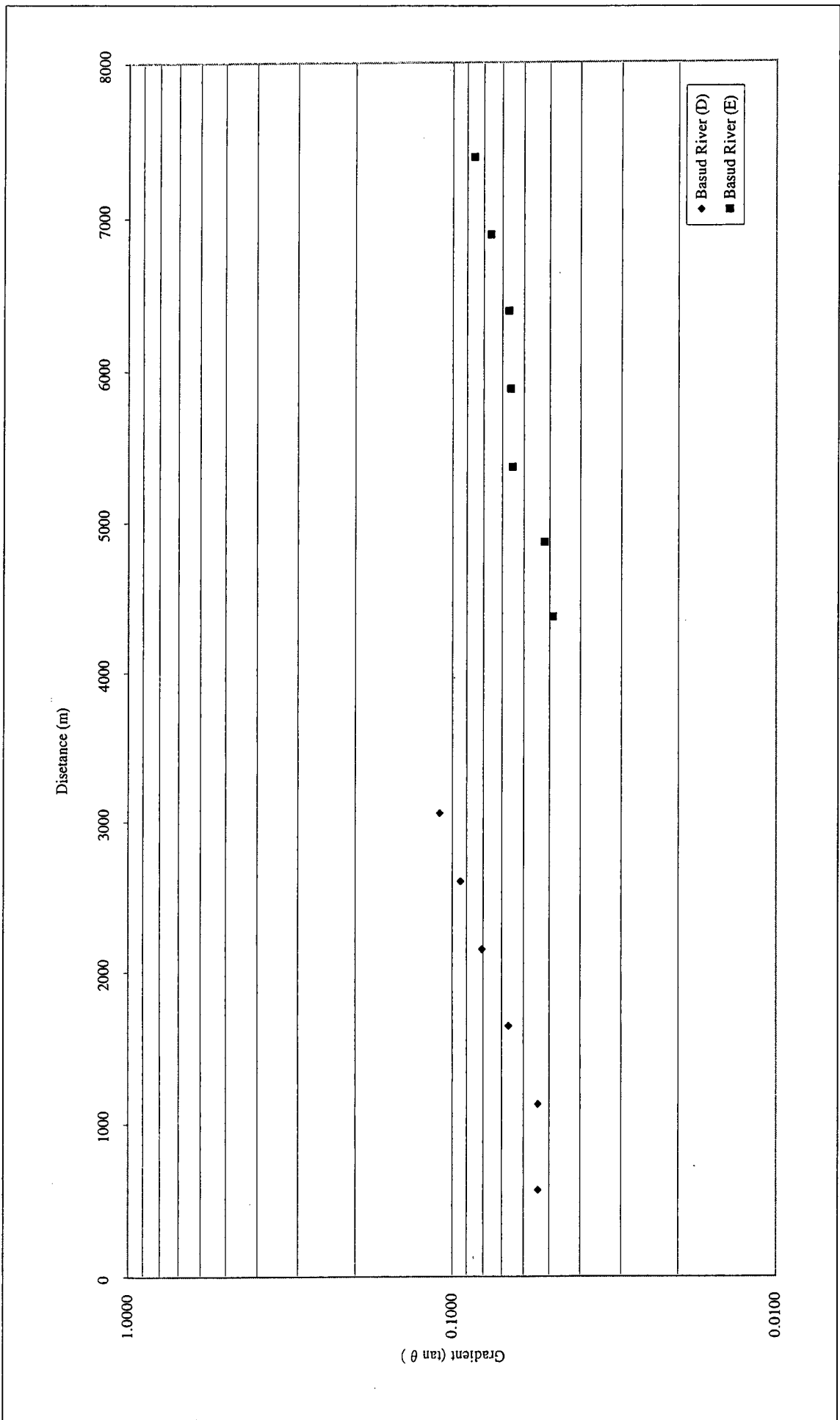
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Padang River / Padang River (B))**



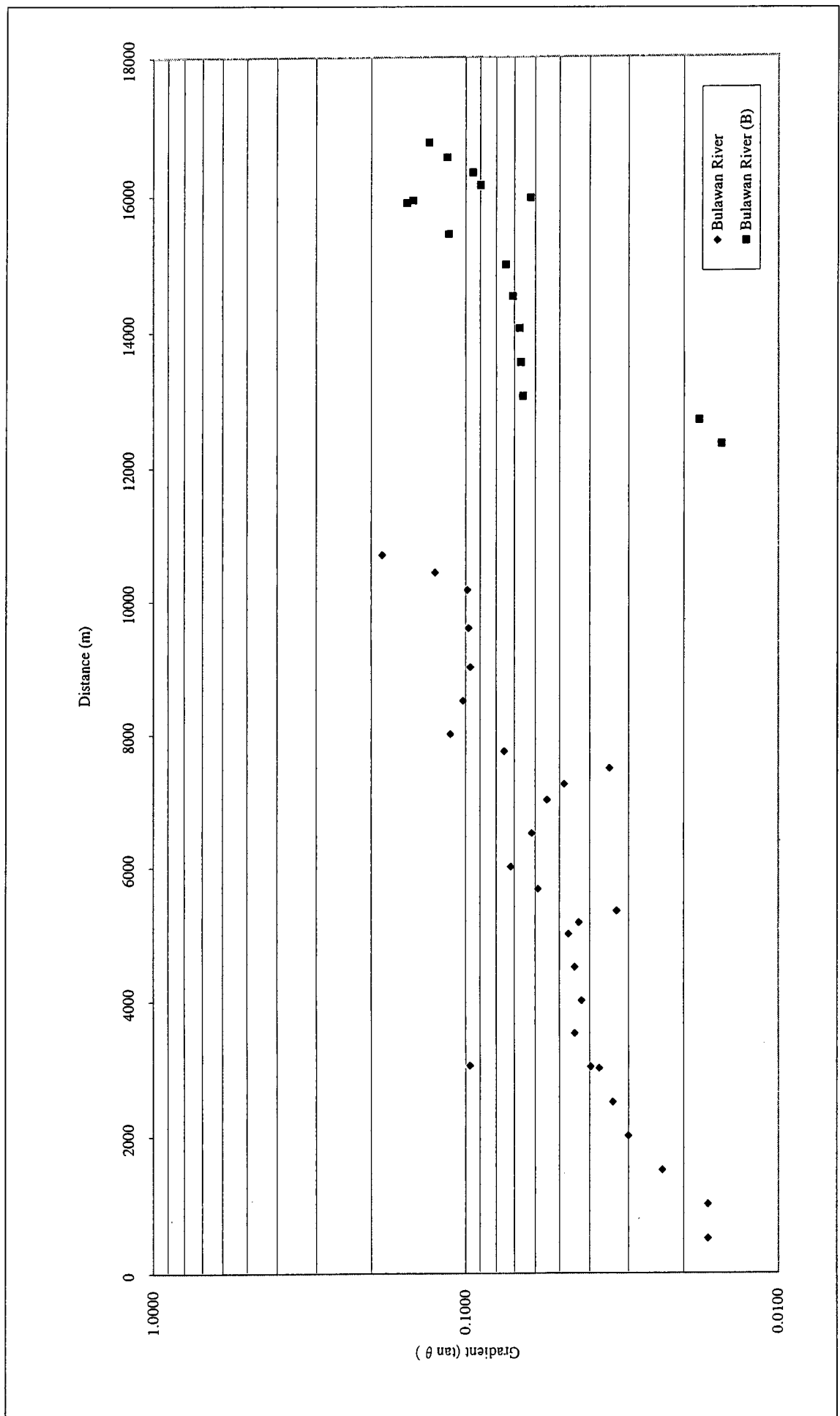
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Basud River / Basud River (B) / Basud River (C))**



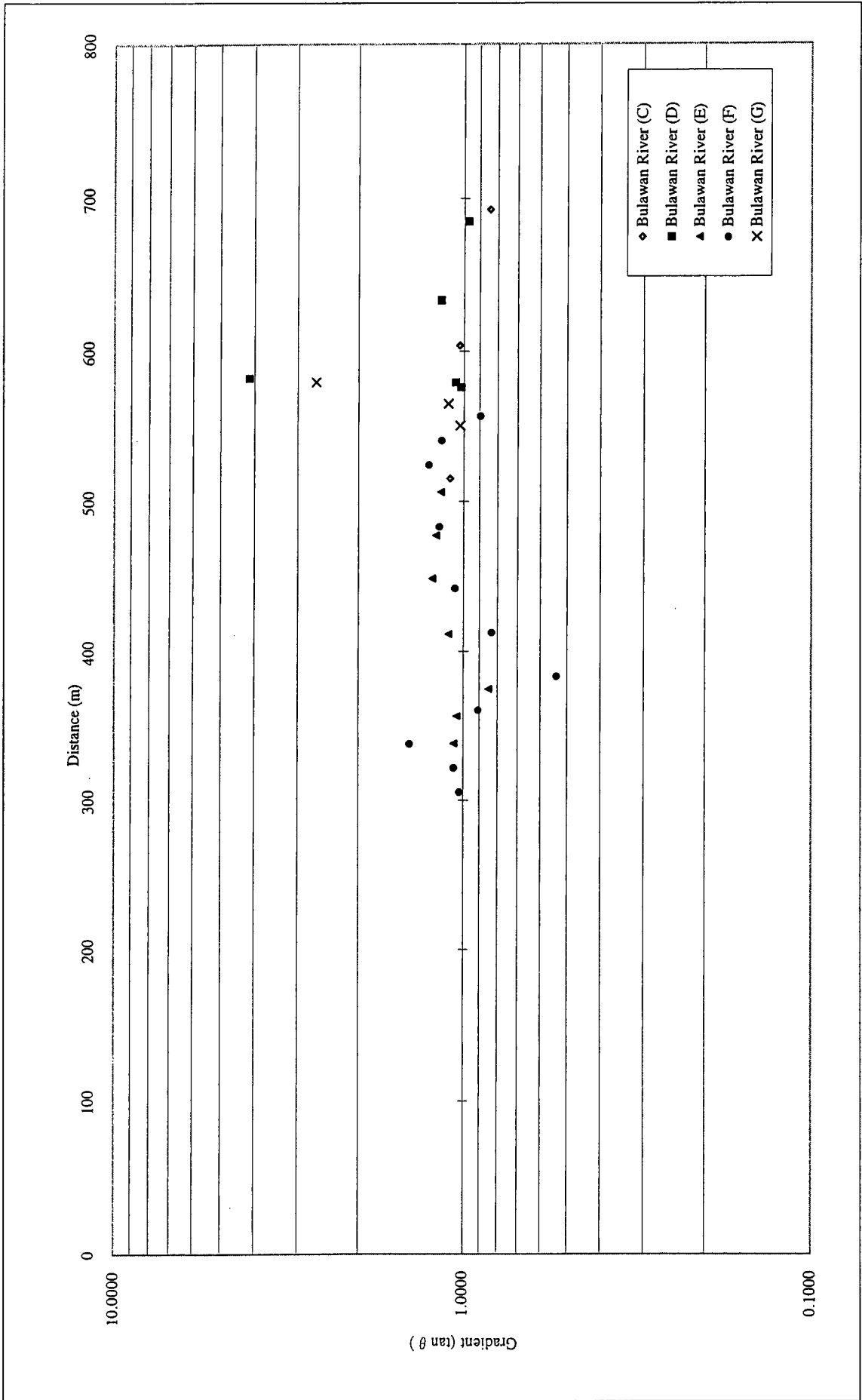
**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Basud River (D) / Basud River (E))**



**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Bulawan River / Bulawan River (B))**

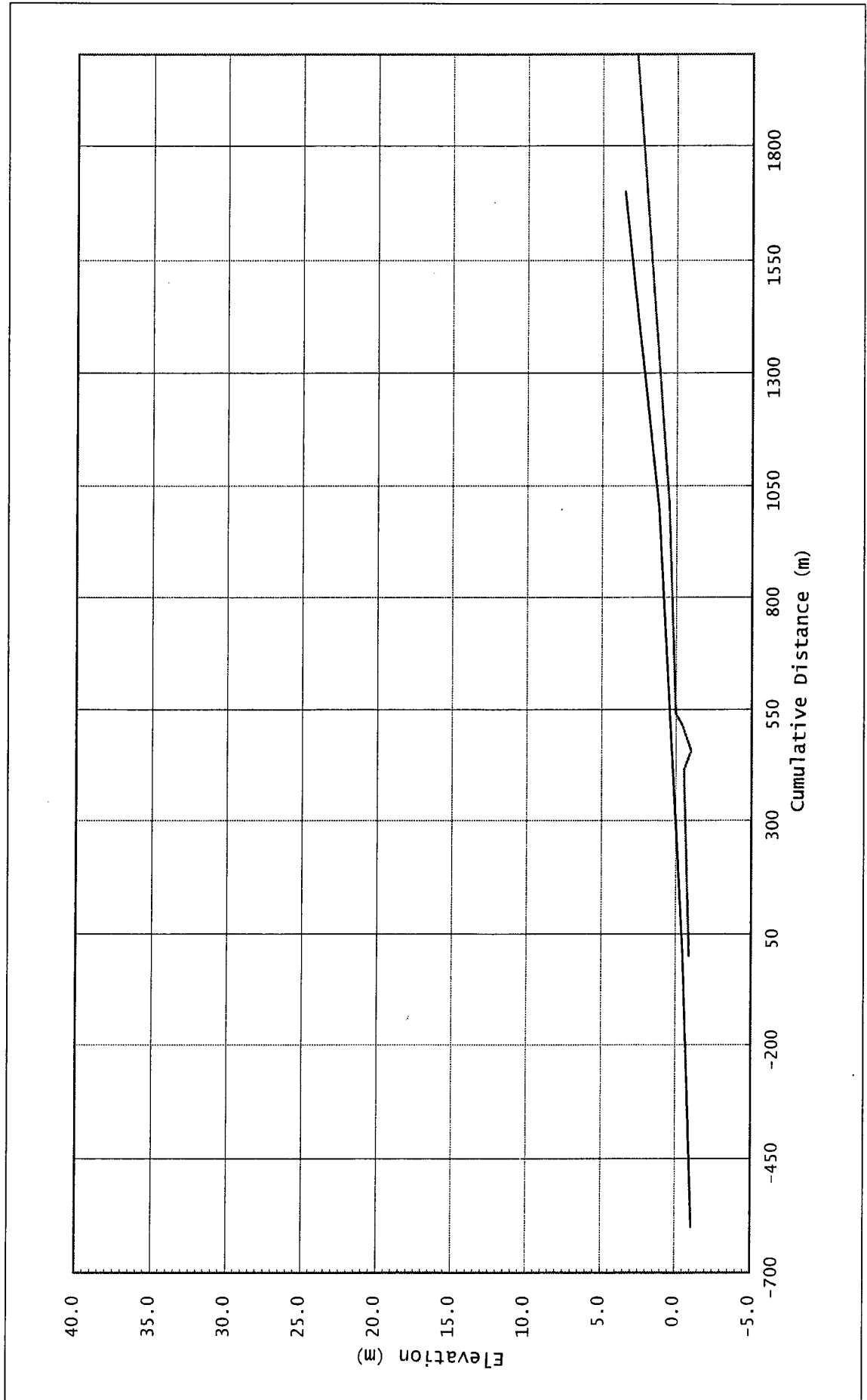


**DF II 2.2 Relation Graph between Horizontal Distance and River Bed Gradient
(Bulawan River (C) / Bulawan River (D) / Bulawan River (E) / Bulawan River (F) / Bulawan River (G))**

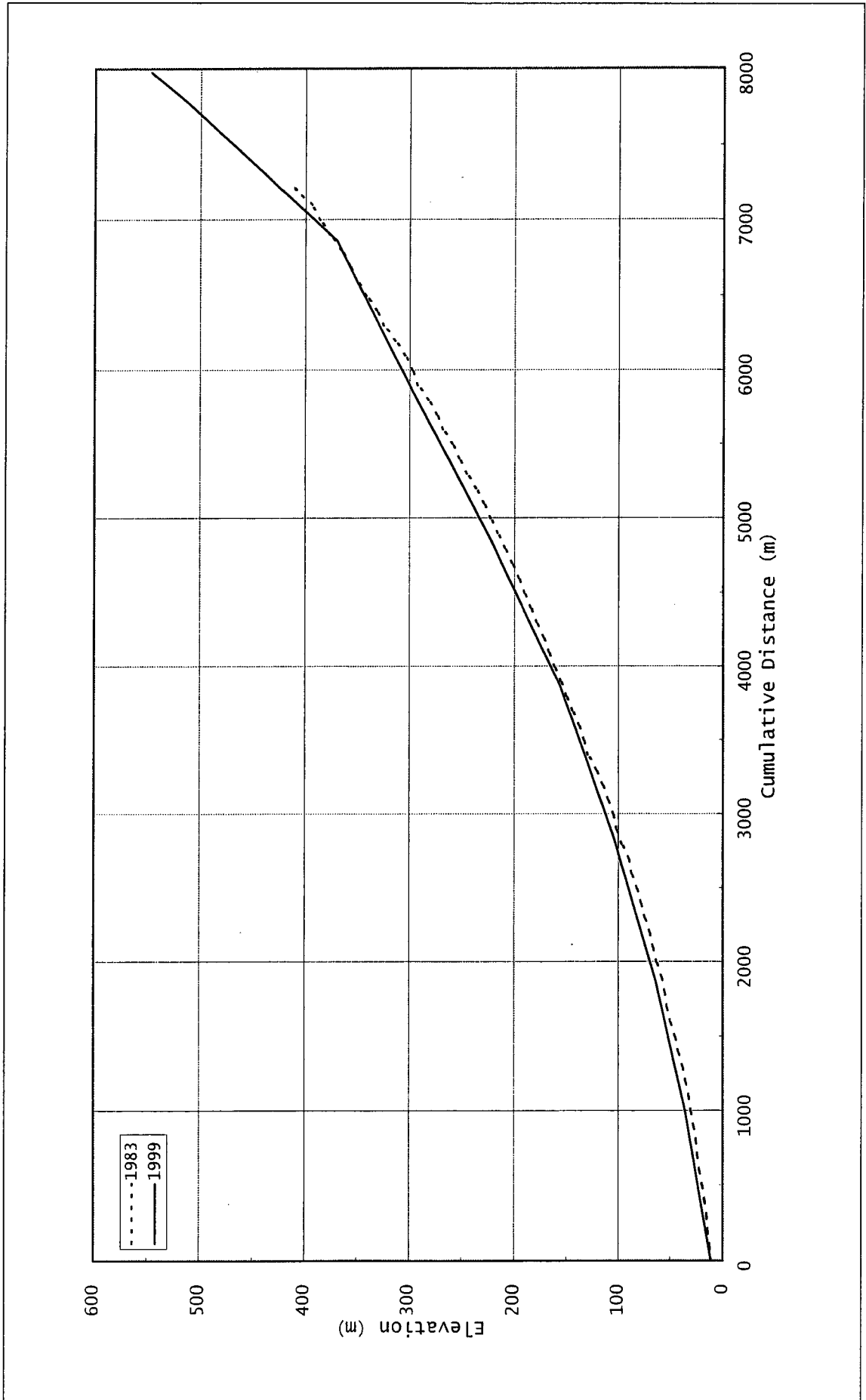


2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999

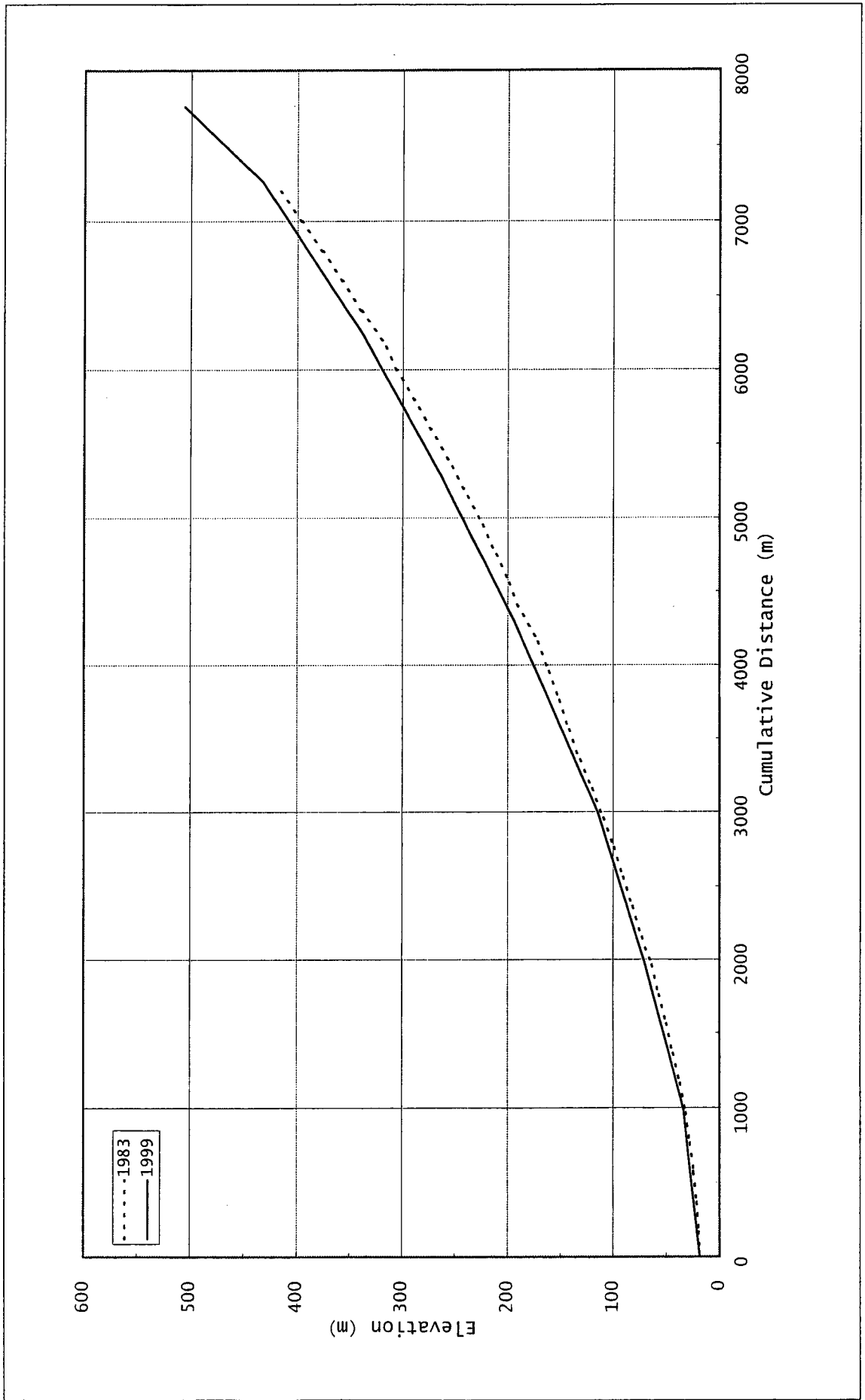
**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Yawa River)**



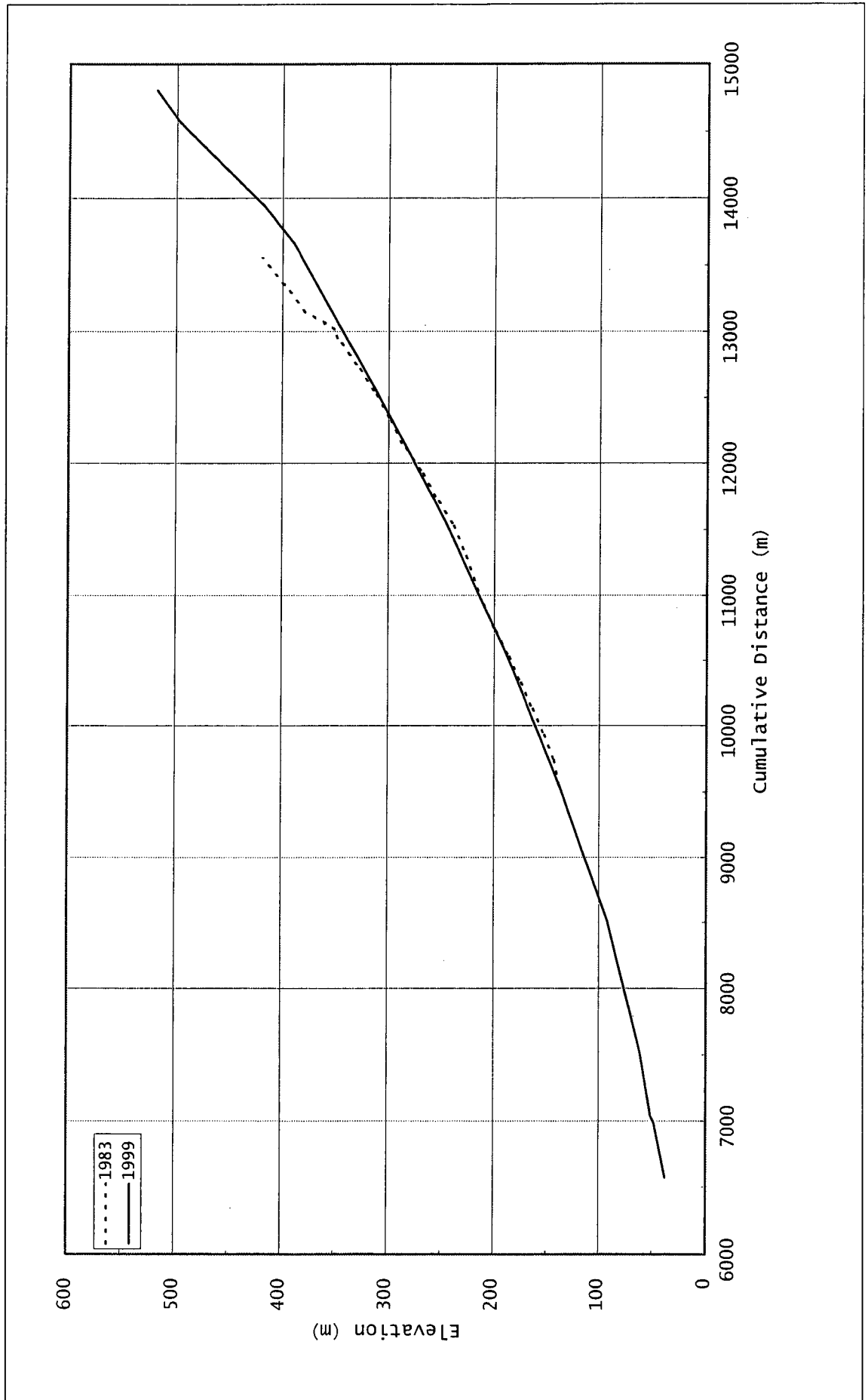
**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Pawa-Burabod River)**



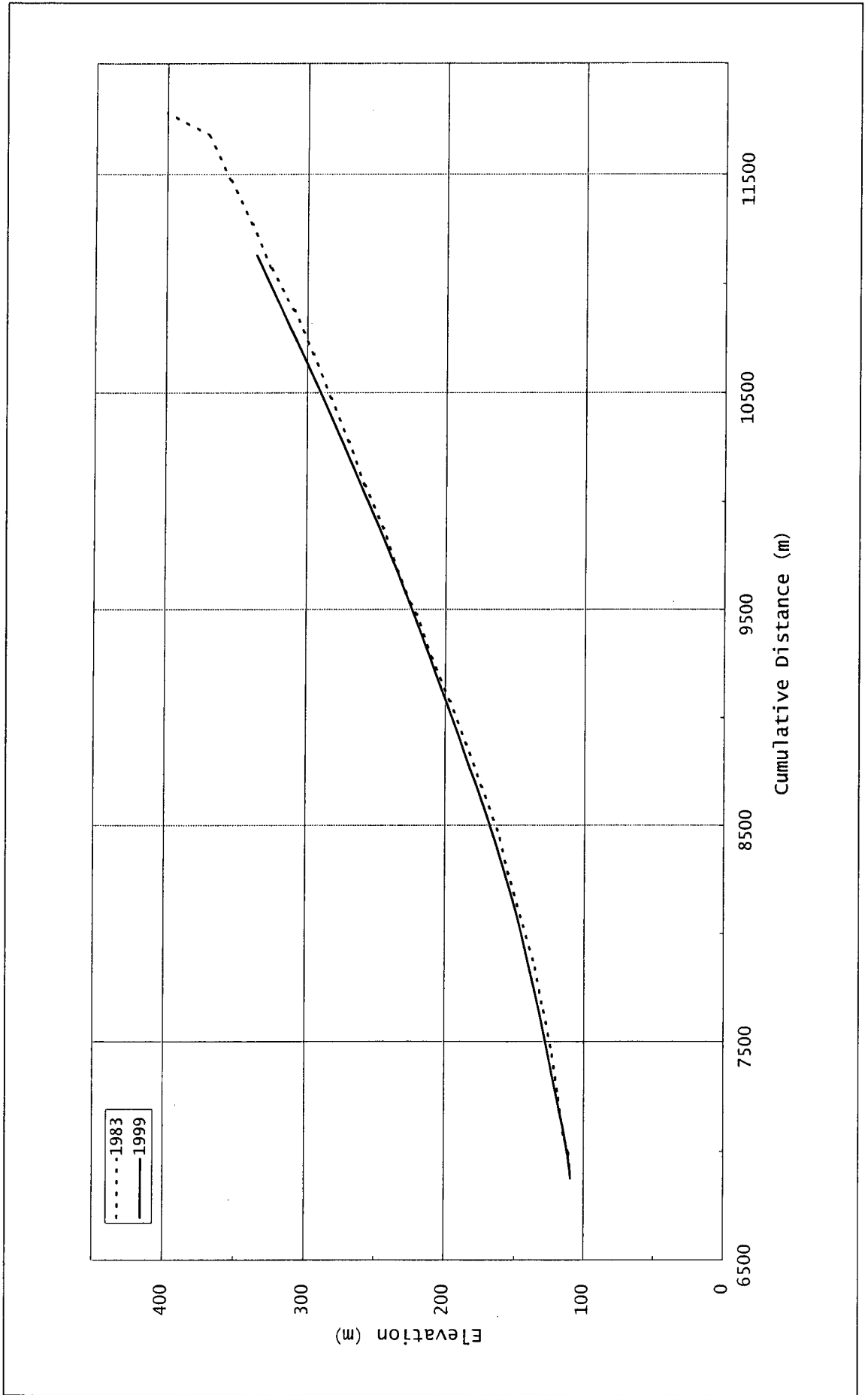
**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Budiao River)**



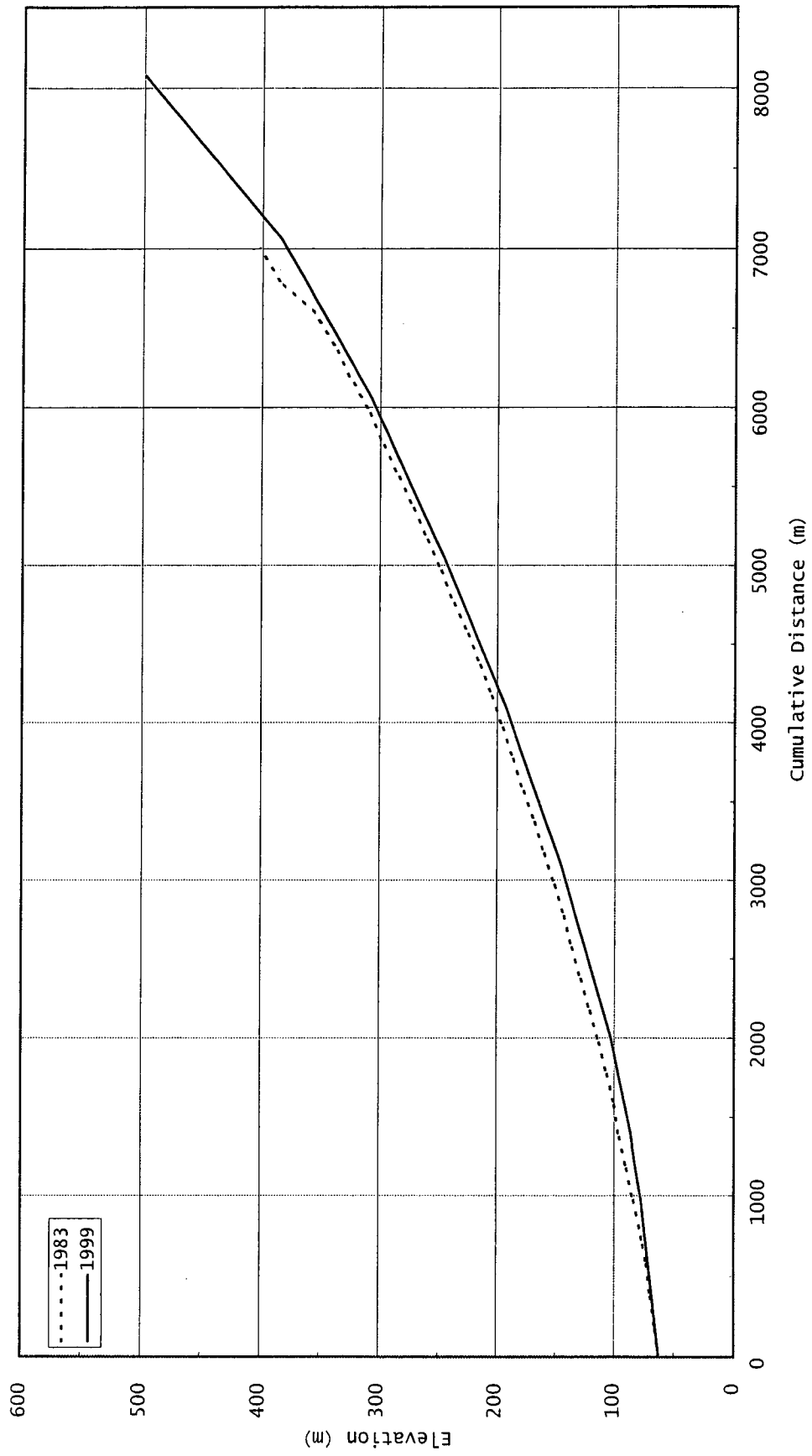
**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Anoling River)**



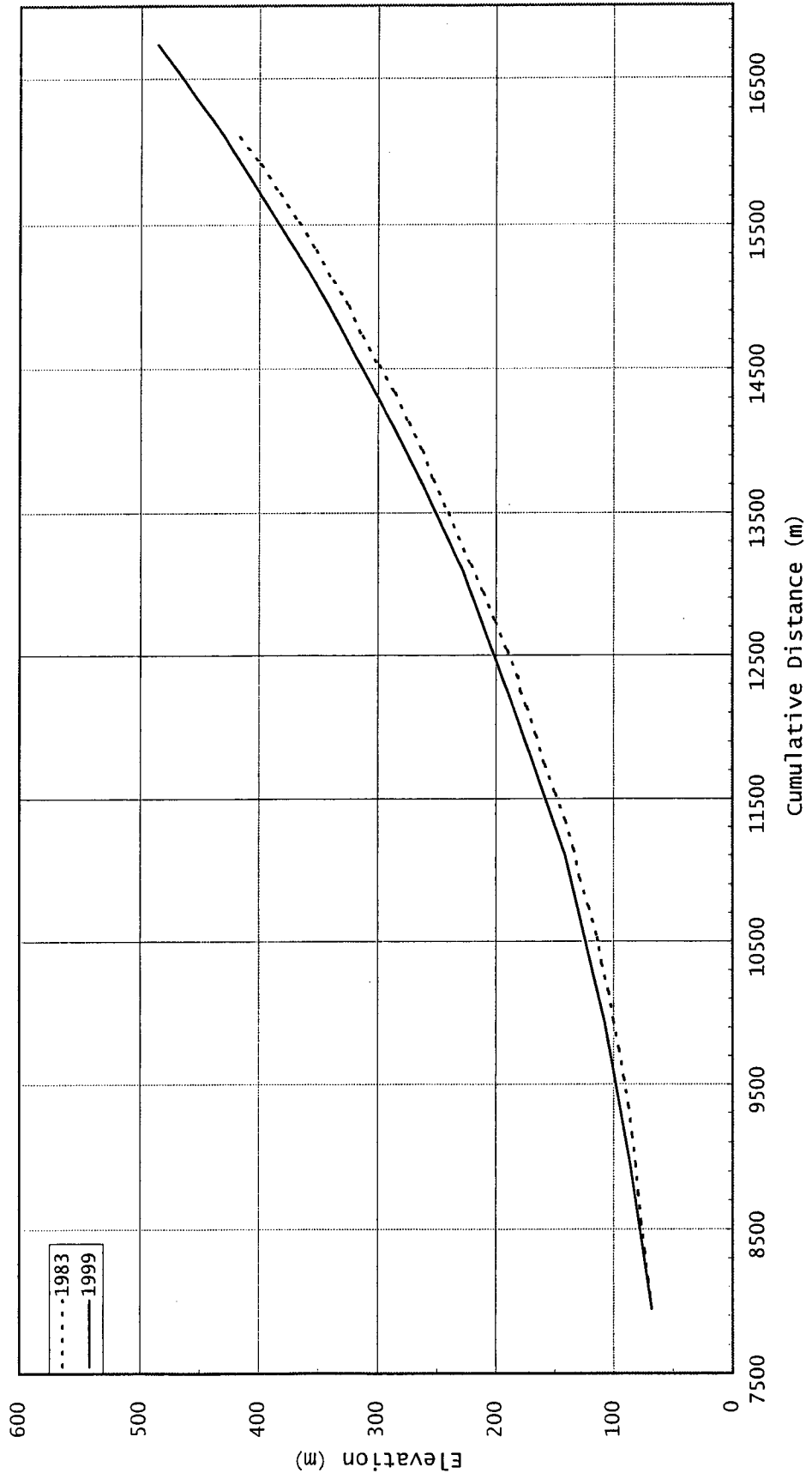
**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Quirangay River)**



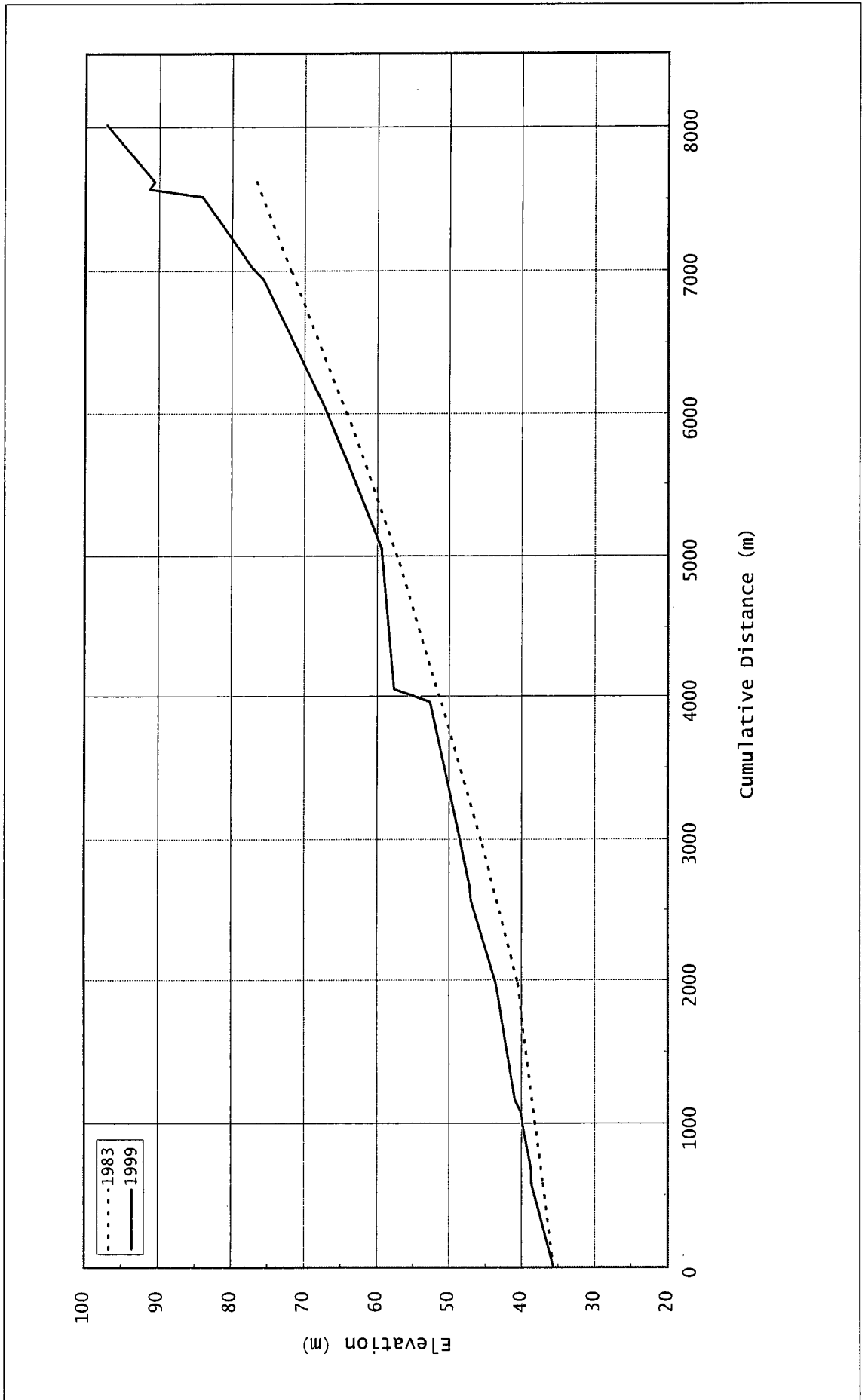
**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Masarawag River)**



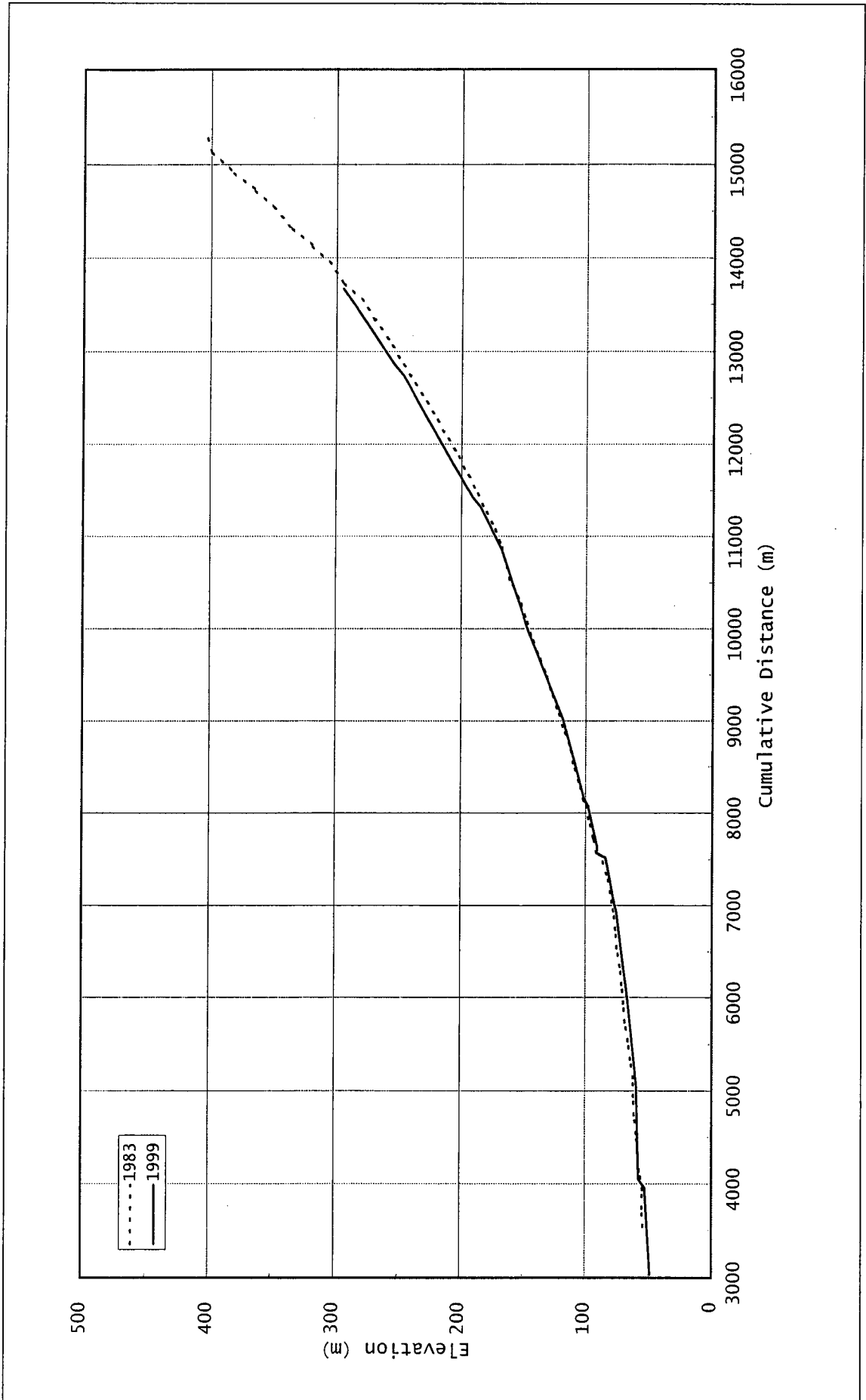
**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Ogsong River)**



**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Nasisi River (1/2))**



**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Nasisi River (2/2))**



**DF II 2.3 Profiles of River Bed Compound with the 1983 Survey and the 1999
(Profile of Quinali (B) River)**

