

Primary data

Right	Width	Bottom	Middle	Thicknes s	Distance	Centerline	Curvatur e	Slope
3245	1.48	3395	3300	95		0		
3225	1.54	3375	3270	105	1.11	1.11		
3210	2.1	3540	3290	250	1.5	2.61		
3235	2.23	3515	3295	220	1.47	4.08		
3320	2.59	3570	3365	205	1.63	5.71		
3230	2.2	3615	3355	260	1.61	7.32		
3355	2.19	3685	3435	250	1.6	8.92		
3410	2.28	3725	3465	260	1.7	11.62		
3415	2.18	3715	3450	265	1.69	12.31		
3395	2.73	3685	3395	290	1.91	14.22		
3450	2.54	3715	3415	300	1.73	15.95		
3440	2.83	3735	3440	295	1.76	17.71	17.55	0.34 1.1098648 67
3425	1.94	3650	3455	195	0.85	18.56		
3505	2.25	3630	3505	125	0.45	19.01		
3480	1.4	3580	3500	80	0.4	19.41		
3490	1.1	3590	3505	85	0.6	20.01	2.07	0.145 4.0069273 47
				0	20.01	19.84	1.0085685 48	
3510	2.26	3775	3545	230	0.72	20.73	0.58	0.185 17.690889 62

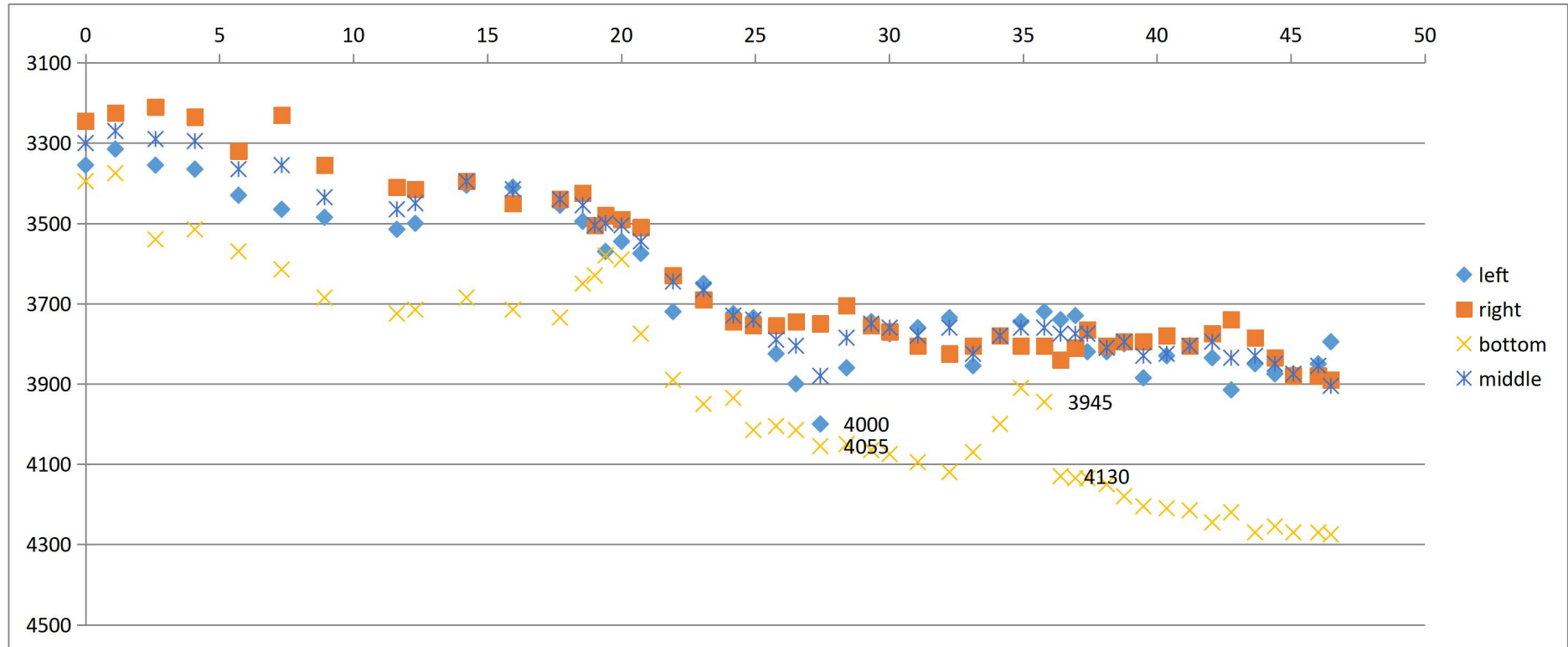
3630	3.85	3890	3645	245	1.2	21.93					
3690	3.77	3950	3665	285	1.14	23.07					
3745	4.88	3935	3730	205	1.11	24.18					
3755	4.74	4015	3740	275	0.75	24.93	4.07		0.24	3.3747129	72
3755	4.78	4005	3790	215	0.85	25.78					
3745	4.77	4015	3805	210	0.74	26.52					
3750	5.12	4055	3880	175	0.91	27.43	5.52		0.28	2.9038188	65
3705	3.38	4050	3785	265	0.98	28.41					
3755	3.01	4065	3750	315	0.92	29.33					
3770	3.27	4075	3760	315	0.69	30.02					
3805	3.15	4095	3780	315	1.05	31.07					
3825	2.93	4120	3760	360	1.18	32.25	10.11	345	0.345	1.9544388	17
3805	2.99	4070	3825	245	0.88	33.13					
3780	2.11	4000	3780	220	1.01	34.14					
3805	2.05	3910	3760	150	0.78	34.92					
3805	1.92	3945	3760	185	0.87	35.79	3.43		0.175	2.9207215	21
				0	15.78	14.12	36.67	14.2	1.1175637		
										39	
3840	1.35	4130	3775	355	0.61	36.4	0.66		0.185	15.658345	3
3810	1.78	4135	3775	360	0.55	36.95					
3765	2.24	4135	3775	360	0.45	37.4					

Statistics

length	left	right	bottom	middle	width
0	3355	3245	3395	3300	1.48
1.11	3315	3225	3375	3270	1.54
2.61	3355	3210	3540	3290	2.1
4.08	3365	3235	3515	3295	2.23
5.71	3430	3320	3570	3365	2.59
7.32	3465	3230	3615	3355	2.2
8.92	3485	3355	3685	3435	2.19
11.62	3515	3410	3725	3465	2.28
12.31	3500	3415	3715	3450	2.18
14.22	3405	3395	3685	3395	2.73
15.95	3410	3450	3715	3415	2.54
17.71	3455	3440	3735	3440	2.83
18.56	3495	3425	3650	3455	1.94
19.01	3505	3505	3630	3505	2.25
19.41	3570	3480	3580	3500	1.4
20.01	3545	3490	3590	3505	1.1
20.73	3575	3510	3775	3545	2.26
21.93	3720	3630	3890	3645	3.85
23.07	3650	3690	3950	3665	3.77
24.18	3725	3745	3935	3730	4.88
24.93	3735	3755	4015	3740	4.74
25.78	3825	3755	4005	3790	4.78

26.52	3900	3745	4015	3805	4.77
27.43	4000	3750	4055	3880	5.12
28.41	3860	3705	4050	3785	3.38
29.33	3745	3755	4065	3750	3.01
30.02	3775	3770	4075	3760	3.27
31.07	3760	3805	4095	3780	3.15
32.25	3735	3825	4120	3760	2.93
33.13	3855	3805	4070	3825	2.99
34.14	3780	3780	4000	3780	2.11
34.92	3745	3805	3910	3760	2.05
35.79	3720	3805	3945	3760	1.92
36.4	3740	3840	4130	3775	1.35
36.95	3730	3810	4135	3775	1.78
37.4	3820	3765	4135	3775	2.24
38.12	3820	3805	4150	3810	2.54
38.77	3800	3795	4180	3795	2.24
39.49	3885	3795	4205	3830	2.62
40.36	3830	3780	4210	3825	2.9
41.22	3805	3805	4215	3805	2.5
42.06	3835	3775	4245	3795	2.59
42.77	3915	3740	4220	3835	2.83
43.66	3850	3785	4270	3830	3.08
44.4	3875	3835	4255	3850	3.58
45.09	3875	3880	4270	3875	3.56
46.02	3850	3880	4270	3855	3.12
46.49	3795	3890	4275	3905	3.45

Figure 6a



Quantification results of the canyon geomorphology

length	width	left	right	bottom	mid
0	1.48	3355	3245	3395	3300
1.11	1.54	3315	3225	3375	3270
2.61	2.1	3355	3210	3540	3290
4.08	2.23	3365	3235	3515	3295
5.71	2.59	3430	3320	3570	3365
7.32	2.2	3465	3230	3615	3355
	2.19	3485	3355	3685	3435
11.62	2.28	3515	3410	3725	3465
12.31	2.18	3500	3415	3715	3450
14.22	2.73	3405	3395	3685	3395
15.95	2.54	3410	3450	3715	3415
17.71	2.83	3455	3440	3735	3440
18.56	1.94	3495	3425	3650	3455
19.01	2.25	3505	3505	3630	3505
19.41	1.4	3570	3480	3580	3500
20.01	1.1	3545	3490	3590	3505
20.73	2.26	3575	3510	3775	3545
21.93	3.85	3720	3630	3890	3645
23.07	3.77	3650	3690	3950	3665
24.18	4.88	3725	3745	3935	3730
24.93	4.74	3735	3755	4015	3740

25.78	4.78	3825	3755	4005	3790
26.52	4.77	3900	3745	4015	3805
27.43	5.12	4000	3750	4055	3880
28.41	3.38	3860	3705	4050	3785
29.33	3.01	3745	3755	4065	3750
30.02	3.27	3775	3770	4075	3760
31.07	3.15	3760	3805	4095	3780
32.25	2.93	3735	3825	4120	3760
33.13	2.99	3855	3805	4070	3825
34.14	2.11	3780	3780	4000	3780
34.92	2.05	3745	3805	3910	3760
35.79	1.92	3720	3805	3945	3760
36.4	1.35	3740	3840	4130	3775
36.95	1.78	3730	3810	4135	3775
37.4	2.24	3820	3765	4135	3775
38.12	2.54	3820	3805	4150	3810
38.77	2.24	3800	3795	4180	3795
39.49	2.62	3885	3795	4205	3830
40.36	2.9	3830	3780	4210	3825
41.22	2.5	3805	3805	4215	3805
42.06	2.59	3835	3775	4245	3795
42.77	2.83	3915	3740	4220	3835
43.66	3.08	3850	3785	4270	3830
44.4	3.58	3875	3835	4255	3850
45.09	3.56	3875	3880	4270	3875
46.02	3.12	3850	3880	4270	3855

46.49

3.45

3795

3890

4275

3905

Figure 6a

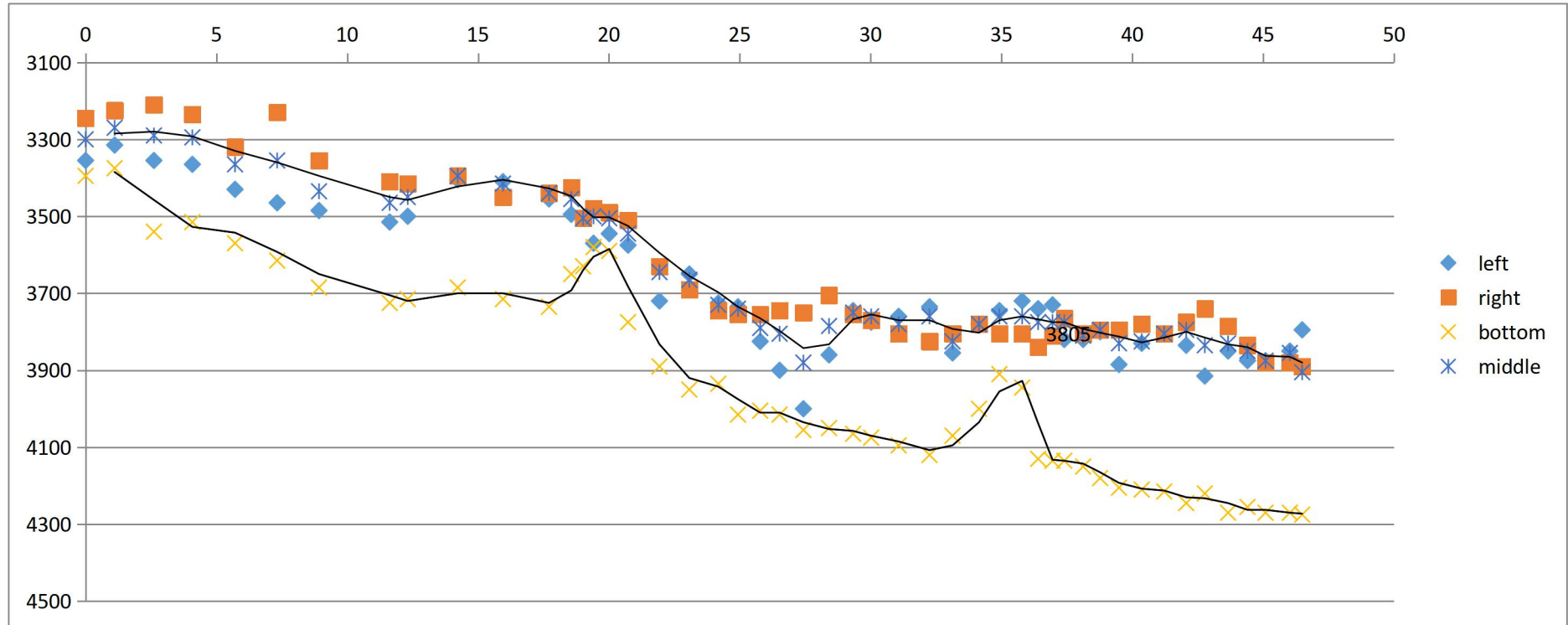
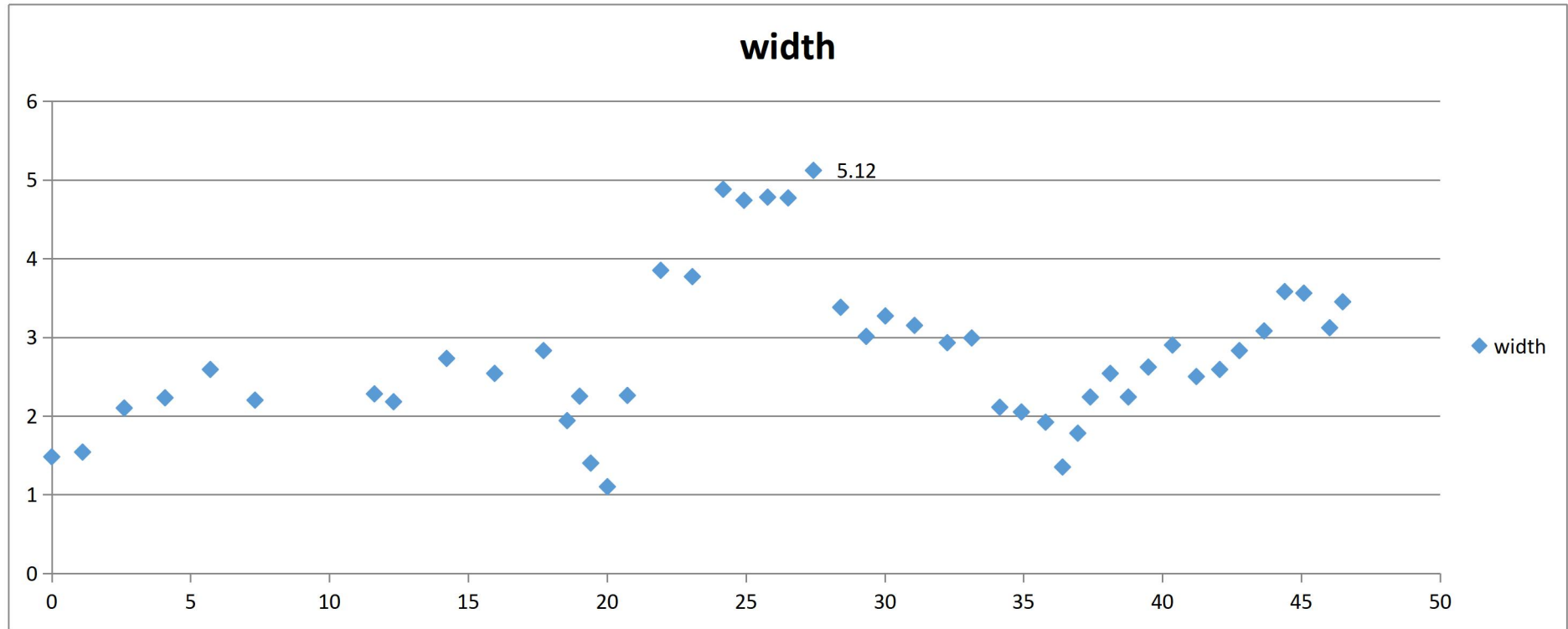


Figure 6b



Slope data

length	bottom	bottom			
0	3395	3.395			
1.11	3375	3.375			
2.61	3540	3.54	0.145	2.61	3.17983012
4.08	3515	3.515			
5.71	3570	3.57			
7.32	3615	3.615			
8.92	3685	3.685			
11.62	3725	3.725	0.185	7.96	1.331383334
12.31	3715	3.715			
14.22	3685	3.685			
15.95	3715	3.715			
17.71	3735	3.735	0.01	6.6	0.086811721
18.56	3650	3.65			
19.01	3630	3.63			
19.41	3580	3.58			
20.01	3590	3.59	0.145	2.02	4.105773606

20.73	3775	3.775			
21.93	3890	3.89			
23.07	3950	3.95			
24.18	3935	3.935			
24.93	4015	4.015	0.425	4.69	5.177906046
25.78	4005	4.005			
26.52	4015	4.015			
27.43	4055	4.055			
28.41	4050	4.05			
29.33	4065	4.065			
30.02	4075	4.075			
31.07	4095	4.095			
32.25	4120	4.12	0.105	6.45	0.932639612
33.13	4070	4.07			
34.14	4000	4			
34.92	3910	3.91	0.21	2.67	4.497151615
35.79	3945	3.945	0.035	0.6	3.338470544
36.4	4130	4.13			
36.95	4135	4.135			
37.4	4135	4.135			
38.12	4150	4.15			
38.77	4180	4.18			
39.49	4205	4.205			
40.36	4210	4.21			
41.22	4215	4.215			
42.06	4245	4.245			

42.77	4220	4.22			
43.66	4270	4.27			
44.4	4255	4.255			
45.09	4270	4.27			
46.02	4270	4.27			
46.49	4275	4.275	0.33	9.63	1.962638779