

APPENDIX I. DETAILED TEXTURAL ANALYSES OF MIOCENE TO QUATERNARY SEDIMENTS, LEG 71¹

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INTRODUCTION

In conjunction with a study of ice-rafted detritus (IRD), textural analyses were carried out on Miocene to Quaternary sediments at Sites 511, 512, 513, and 514 (Table 1). Grain-size statistics were computed for the < 62.5 μm fraction in order to identify changes in current velocity; the sand fraction was omitted from these determinations because it consists primarily of ice-raft and biogenic components. The contributions by terrigenous sediment in the 62.5–250 μm and the > 250 μm fractions were determined (Table 1).

METHODS

Wet samples were freeze-dried, weighed, and washed through a 62.5 μm sieve. The sand fraction was dried, weighed, and sieved into a > 250- μm and a 62.5–250 μm fraction; each fraction was weighed.

The mud was collected and centrifuged to remove salt and reduce the volume. Sodium metaphosphate solution was added and the sample thoroughly agitated and mixed. The grain-size distribution of the mud was determined using a Sedigraph 5000D particle-size analyzer. Part of each sample was analyzed from 62.5 μm to 1 μm ; a second aliquot was analyzed from 62.5 μm to 4 μm . An analysis was acceptable if both traces were within 2% of one another from 62.5 μm to 4 μm .

Grain-size statistics (moment measures) were determined from digitized Sedigraph traces. All values are expressed in phi grain-size units.

Table 1. Textural analyses, Sites 511, 512, 513, and 514.

Sample (interval in cm)	Sand	Silt (%)	Clay	< 62.5 μm			Terrigenous	
				Mean (ϕ)	Sorting	Skewness	> 250 μm (mg/g)	62.5–250 μm (mg/g)
Hole 511								
1-1, 5-9	83.49	13.21	3.30	6.72	1.62	0.75	698.16	126.15
1-1, 20-24	84.84	8.31	6.85	8.29	3.08	0.49	655.94	179.19
1-1, 100-104	78.72	10.64	10.64	8.29	2.45	0.38	558.49	210.69
1-1, 146-150	73.13	14.78	12.09	7.76	2.04	0.20	572.15	148.48
1-2, 50-54	62.66	18.11	19.23	8.25	2.32	0.26	440.46	172.39
1-2, 130-134	72.25	13.87	13.88	8.16	2.21	0.20	565.80	136.92
Hole 512								
1-1, 10-14	94.81	2.91	2.28	7.65	2.51	0.30	372.59	555.45
1-1, 50-54	96.25	3.75					882.54	73.41
1-1, 75-79	70.88	9.90	19.22	8.98	2.10	-0.03	480.72	218.44
1-2, 13-17	4.52	26.73	68.75	8.82	1.29	0.59	1.23	1.34
1-2, 85-89	4.59	24.33	71.08	8.88	1.25	0.27	5.43	1.24
2-1, 26-30	8.33	27.04	64.63	8.78	1.28	0.42	4.01	5.53
2-1, 123-127	5.41	25.54	69.05	8.90	1.54	0.19	1.26	4.61
2-2, 58-62	6.56	25.23	68.21	8.94	1.59	0.18	3.11	5.32
2-2, 114-118	7.29	24.10	68.61	8.83	1.30	0.27	1.01	0.74
2-3, 20-24	3.15	22.76	74.09	8.92	1.30	0.03	2.00	0.89
2-3, 116-120	2.53	31.19	66.28	8.79	1.36	0.18	1.31	1.66
3-1, 127-131	1.63	34.43	63.94	8.55	1.16	0.29	1.31	0.39
3-2, 40-44	1.20	33.59	65.21	8.63	1.26	0.17	0.75	0.96
3-2, 109-113	3.99	32.64	63.37	8.72	1.42	0.36	1.06	0.97
4-1, 43-47	6.78	26.10	67.12	8.83	1.42	0.09	4.50	4.13
4-1, 120-124	4.12	32.12	63.76	8.63	1.24	0.38	0.49	1.53
4-2, 26-30	15.15	26.04	58.81	8.97	1.70	0.27	0.30	2.12
4-2, 100-104	6.73	29.38	63.89	9.05	1.86	0.21	1.00	2.73

Table 1. (Continued).

Sample (interval in cm)	Sand	Silt (%)	Clay	< 62.5 μm			Terrigenous	
				Mean (ϕ)	Sorting	Skewness	> 250 μm (mg/g)	62.5–250 μm (mg/g)
Hole 512 (Cont.)								
5-1, 38-42	4.62	30.04	65.34	8.68	1.12	0.13	0.49	0.00
5-1, 140-144	8.17	27.55	64.28	8.96	1.68	0.26	2.69	0.30
5-2, 23-27	6.92	27.46	65.62	9.02	1.66	0.48	2.62	0.84
5-2, 133-137	4.20	22.03	73.77	9.29	1.63	0.05	1.16	0.64
Hole 513								
1-1, 118-122	7.02	28.82	64.16	9.32	2.18	0.17	26.96	26.48
1-2, 50-54	3.79	26.94	69.27	10.03	2.45	0.04	14.12	14.19
1-2, 127-131	9.52	28.05	62.43	9.23	2.06	0.22	27.82	21.95
1-3, 46-50	8.12	27.10	64.78	9.32	2.09	0.19	12.89	13.44
1-3, 126-130	5.53	29.76	64.71	9.28	2.15	0.16	15.69	20.18
1-4, 50-54	3.58	27.96	68.46	9.56	2.27	0.17	9.79	9.79
1-5, 50-54	4.58	30.06	65.36	9.07	1.94	0.20	17.39	12.59
1-5, 141-145	5.10	28.00	66.90	8.18	1.91	0.27	11.40	3.71
3-1, 25-27	5.95	28.21	65.84	9.39	2.13	2.40	7.14	4.95
3-1, 132-133	4.48	30.18	65.34	9.37	2.23	0.35	2.96	13.30
3-2, 25-27	13.80	27.15	59.05	9.39	2.17	0.32	14.70	22.64
3-2, 37-39	3.56	26.23	70.21	9.45	2.09	0.01	2.00	4.81
3-2, 48-50	4.12	30.39	65.49	9.22	2.09	0.12	3.14	10.96
3-3, 25-27	8.85	29.17	61.98	9.60	2.57	0.12	22.79	27.85
3-4, 25-27	10.88	23.17	65.95	9.95	2.37	0.07	27.54	24.93
3-5, 25-27	6.59	26.62	66.79	9.76	2.38	0.19	7.82	9.06
3-6, 25-25	5.57	25.50	68.93	9.97	2.47	-0.04	20.06	17.16
4-1, 12-14	5.71	26.40	67.89	9.90	2.48	0.07	17.50	12.20
4-2, 12-14	8.18	27.55	64.27	9.78	2.48	0.07	30.82	17.56
4-3, 12-14	5.66	25.47	68.87	10.05	2.55	-0.01	3.25	7.12
4-4, 12-14	4.44	27.71	67.85	9.86	2.50	0.12	4.88	5.53
4-5, 12-14	4.15	28.75	67.10	9.62	2.36	0.17	3.45	6.93
4-6, 12-14	1.10	26.70	72.20	9.93	2.47	0.07	2.19	0.63
5-1, 126-128	4.16	21.08	74.76	10.25	2.46	0.01	2.08	3.64
5-2, 126-128	5.86	31.54	62.60	9.75	2.67	0.25	12.78	9.70
5-3, 126-128	3.66	26.01	70.33	9.80	2.41	0.16	10.12	7.42
5-4, 126-128	11.12	14.22	74.66	10.07	2.48	0.04	43.56	40.97
5-5, 126-128	10.11	25.62	64.27	9.65	2.28	0.31	19.79	13.67
5-6, 126-128	4.52	29.12	66.36	9.79	2.57	0.17	8.75	7.34
6-1, 40-42	1.54	28.06	70.40	9.87	2.50	0.11	0.29	0.40
6-2, 40-42	3.50	24.12	72.38	10.10	2.48	0.03	4.16	3.76
6-3, 40-42	3.13	26.64	70.23	10.00	2.49	0.08	2.72	2.63
6-4, 40-42	4.19	27.31	68.50	9.87	2.57	0.20	6.97	7.32
6-5, 40-42	2.82	17.98	79.20	10.61	2.45	-0.13	1.96	1.79
6-6, 40-42	2.90	20.39	76.71	10.39	2.48	-0.03	5.45	4.51
9-2, 73-75	4.13	23.97	71.90	9.96	2.43	0.15	2.03	1.96
9-3, 73-75	4.05	26.87	69.08	9.76	2.44	0.16	2.43	4.37
9-4, 73-75	3.03	25.21	71.76	9.90	2.37	0.11	1.43	1.35
9-5, 73-75	3.34	25.61	71.05	9.72	2.27	0.19	2.48	2.87
9-6, 73-75	0.80	30.26	68.94	9.41	2.31	0.25	0.89	2.84
9-7, 62-64	2.34	19.53	78.13	9.95	2.05	0.05	1.67	1.03
Hole 513A								
1-1, 28-30	8.84	16.32	74.84	10.29	2.08	-0.05	21.42	7.76
1-1, 51-53	0.72	19.16	80.12	10.23	2.06	-0.02	0.56	1.20
1-1, 62-64	1.43	20.90	77.67	9.98	2.03	0.02	1.41	5.16
1-1, 87-89	1.55	19.89	78.56	10.16	2.13	-0.05	1.33	8.31
1-1, 99-101	1.85	19.63	78.52	10.32	2.23	-0.06	2.27	9.36
1-1, 118-120	1.08	17.81	81.11	10.48	2.84	-0.13	0.73	1.08
1-1, 124-126	0.88	22.80	76.32	9.96	2.14	-0.00	0.45	3.29
1-2, 3-5	1.02	21.78	77.20	10.25	2.31	-0.02	0.46	3.10
1-2, 21-23	2.95	22.32	74.73	10.28	2.33	-0.02	4.62	10.70
1-2, 50-52	2.33	25.88	71.79	10.01	2.53	0.09	1.87	3.95
1-2, 58-60	2.90	25.25	71.85	10.03	2.35	0.06	2.69	10.20
1-2, 89-91	2.60	22.21	75.19	10.01	2.15	0.00	9.92	6.92
1-2, 107-109	1.63	21.15	77.22	10.00	2.09	0.01	2.43	7.11
1-2, 125-127	1.56	18.70	79.74	10.20	2.05	-0.07	3.56	7.52
1-3, 3-5	2.05	22.82	15.13	9.82	2.07	-0.06	2.00	9.33
1-3, 19-21	2.48	20.19	77.33	10.09	2.10	-0.01	2.21	11.80
1-3, 49-51	2.27	24.53	73.20	9.99	2.27	0.00	1.22	8.58
1-3, 70-72	4.05	20.63	75.32	10.38	2.49	-0.04	1.35	2.68
1-3, 84-86	3.53	22.67	73.80	10.35	2.44	-0.11	10.65	10.70
2-1, 27-29	1.52	17.92	80.56	10.40	2.18	-0.09	2.42	4.99
2-1, 58-60	2.04	22.33	75.63	10.25	2.34	-0.08	0.63	9.44
2-1, 77-79	1.99	22.05	75.96	10.24	2.32	-0.08	0.81	9.31
2-1, 80-82	4.77	21.90	73.33	10.23	2.42	-0.03	2.76	5.52
2-1, 136-138	2.45	21.85	75.70	10.30	2.35	-0.07	1.32	11.30
2-2, 61-63	8.30	22.28	69.42	10.12	2.41	-0.02	5.81	6.89
2-2, 80-82	5.59	22.77	73.64	10.27	2.43	-0.04	2.38	4.66
2-3, 31-33	2.25	19.65	78.10	10.22	2.29	-0.03	1.74	7.43
2-3, 56-58	1.46	17.24	81.30	10.29	2.18	-0.08	0.95	4.62
2-3, 80-82	2.31	21.49	76.20	10.24	2.44	0.01	2.20	4.23
2-4, 76-78	1.93	19.32	78.75	10.30	2.32	-0.12	1.12	3.91
2-4, 80-82	2.02	18.62	79.36	10.25	2.33	-0.03	4.66	5.13
2-4, 124-126	1.22	17.78	81.00	10.04	2.01	-0.06	2.27	3.70

¹ Ludwig, W. J., Krashenninikov, V. A., et al., *Init. Repts. DSDP, 71*: Washington (U.S. Govt. Printing Office).

Table 1. (Continued).

Sample (interval in cm)	Sand	Silt (%)	Clay	< 62.5 µm		Terrigenous		
				Mean (φ)	Sorting	Skewness	>250 µm (mg/g)	62.5-250 µm (mg/g)
Hole 513A (Cont.)								
2-5, 21-23	2.36	17.77	79.87	10.11	2.09	-0.09	3.19	9.96
2-5, 60-62	4.72	25.25	70.03	9.64	2.29	-0.05	3.71	21.58
2-5, 80-82	5.49	20.32	74.19	10.31	2.40	-0.05	4.83	12.75
2-5, 140-142	2.95	20.28	76.77	9.82	2.02	-0.12	1.48	7.18
2-6, 80-82	2.81	14.58	82.61	10.39	2.19	-0.04	2.35	5.25
3-1, 90-92	2.13	13.21	84.66	10.98	2.37	-0.38	2.04	3.95
3-2, 42-44	1.60	21.16	77.24	9.89	2.09	0.06	1.36	1.55
4-1, 90-92	1.02	16.83	82.15	10.04	2.03	0.09	0.26	0.47
4-2, 90-92	1.09	13.35	85.56	10.59	2.20	-0.08	0.00	0.72
4-3, 90-92	1.06	19.79	79.15	10.42	2.46	-0.07	0.67	1.27
4-4, 90-92	1.25	19.26	79.49	10.14	2.16	0.05	0.34	0.00
4-5, 90-92	1.47	22.66	75.87	9.95	2.28	0.19	0.32	0.50
4-6, 90-92	3.48	19.30	77.22	10.04	2.18	0.10	0.86	1.74
5-1, 90-92	1.74	18.18	80.08	10.47	2.38	-0.09	0.56	1.21
5-2, 90-92	7.06	17.19	75.75	10.31	2.32	-0.11	20.79	17.97
5-3, 90-92	1.13	15.03	83.84	10.53	2.04	0.07	0.12	0.25
5-4, 90-92	3.17	18.40	78.43	10.04	2.15	0.13	0.06	0.00
5-5, 90-92	4.65	17.16	78.19	10.46	2.36	-0.06	0.37	0.25
5-6, 90-92	2.87	12.63	84.50	10.52	2.13	-0.05	0.21	0.00
6-1, 40-42	0.94	19.32	79.74	9.98	2.03	-0.08	0.25	0.40
6-2, 40-42	2.05	16.65	81.30	10.59	2.34	-0.17	0.66	0.22
6-3, 40-42	1.72	17.69	80.59	10.77	2.53	-0.23	0.27	0.30
6-4, 40-42	2.18	13.69	84.13	10.60	2.20	-0.10	4.05	0.40
6-5, 40-42	0.87	16.36	82.77	10.33	2.23	0.00	0.61	0.80
6-6, 40-42	1.30	17.77	80.93	10.40	2.32	-0.07	0.73	0.66
7-3, 40-42	2.06	28.88	69.06	9.50	2.27	0.24	0.00	2.72
7-4, 40-42	2.41	24.40	73.19	9.73	2.19	0.19	0.00	2.49
7-5, 40-42	2.35	24.41	73.24	9.74	2.22	0.27	0.82	0.37
7-6, 40-42	1.53	22.65	75.82	9.69	2.02	0.16	0.15	0.32
8-1, 93-95	4.26	16.28	79.46	10.62	2.38	-0.10	0.09	0.00
8-2, 93-95	0.91	16.85	82.24	10.29	2.19	-0.06	0.14	0.00
8-3, 93-95	1.94	16.67	81.39	10.54	2.35	-0.09	0.11	0.00
8-4, 126-128	1.20	20.75	78.05	10.42	2.50	-0.10	0.20	0.00
8-5, 126-128	1.88	14.23	83.89	10.56	2.18	-0.13	0.11	0.16
9-1, 18-20	1.00	15.84	83.16	11.11	2.55	-0.43	0.22	0.21
10-1, 100-102	5.28	18.94	75.78	10.54	2.47	-0.13	0.26	0.25
10-2, 100-102	2.57	19.00	78.43	10.20	2.25	0.11	0.25	1.35
10-3, 100-102	1.61	16.23	82.16	10.44	2.26	-0.04	0.17	1.08
10-4, 100-102	2.59	19.48	77.93	10.33	2.33	-0.01	0.13	0.07
10-5, 100-102	4.80	19.04	76.16	10.16	2.26	0.13	0.19	0.12
10-6, 100-102	2.57	16.08	81.35	11.22	2.55	-0.53	0.10	0.56
11-1, 23-25	0.90	17.64	81.46	10.02	1.99	-0.09	0.30	1.14
11-1, 60-62	3.39	32.85	63.76	9.14	2.09	0.26	0.00	0.57
11-2, 60-62	4.04	22.07	73.89	10.13	2.12	-0.13	0.63	3.91
11-2, 74-76	1.88	14.03	84.09	10.57	2.15	-0.11	0.13	0.89
11-2, 83-85	1.13	11.86	87.01	10.79	2.12	-0.26	0.27	2.89
11-2, 133-135	4.91	36.61	58.48	9.05	2.35	0.29	2.12	1.47
11-3, 126-128	2.07	38.19	59.74	9.04	2.30	0.33	0.16	0.95
11-7, 31-33	5.75	38.17	56.08	8.95	2.23	0.38	0.87	1.74
11-7, 53-55	2.26	39.10	58.64	8.77	1.97	0.36	0.18	0.89
Hole 514								
1-1, 65-67	2.64	26.77	70.59	9.74	2.37	0.06	7.10	10.27
2-1, 65-67	2.77	21.39	75.84	10.43	2.57	-0.19		
2-2, 65-67	4.90	20.92	74.18	10.17	2.38	-0.09	21.30	19.07
2-3, 65-67	4.08	21.10	74.82	10.27	2.33	0.00	1.97	9.31
3-1, 90-92	6.09	18.31	75.60	10.22	2.36	-0.03	16.90	13.11
3-2, 60-62	11.03	16.90	72.07	10.73	2.58	-0.22	9.29	10.59
3-3, 60-62	5.73	20.27	74.00	9.92	2.18	-0.08	23.92	23.08
4-1, 140-142	1.04	15.83	83.13	10.41	2.15	-0.10	2.34	0.89
4-2, 80-82	21.61	15.68	62.71	10.27	2.33	0.02	122.20	66.53
4-3, 72-74	1.36	17.26	81.38	10.52	2.34	-0.18	2.60	1.74
5-3, 106-108	17.71	16.87	65.42	10.12	2.25	-0.01	73.80	89.03
5-4, 70-72	2.28	26.87	70.85	9.34	1.97	0.11	3.48	3.15
6-1, 96-98	3.74	21.18	75.08	9.70	1.92	-0.08	5.42	3.56
6-2, 96-98	4.10	24.45	71.45	9.90	2.43	0.05	18.61	12.64
6-3, 96-98	3.07	30.53	66.40	9.38	2.19	0.24	3.72	1.84
8-1, 140-142	2.13	21.04	76.83	10.16	2.33	0.01	2.68	1.23
8-2, 53-55	2.09	27.90	70.01	9.89	1.99	-0.02	2.40	4.35
8-3, 6-8	0.85	20.82	78.33	10.27	2.35	-0.09	0.00	0.04
9-1, 46-48	3.87	27.40	68.73	9.59	2.22	0.16	9.49	3.77
9-2, 46-48	4.12	24.93	70.95	9.83	2.32	0.12	9.86	3.40

Table 1. (Continued).

Sample (interval in cm)	Sand	Silt (%)	Clay	< 62.5 µm		Terrigenous		
				Mean (φ)	Sorting	Skewness	>250 µm (mg/g)	62.5-250 µm (mg/g)
Hole 514 (Cont.)								
9-3, 46-48	2.74	23.34	73.92	9.89	2.24	0.13	1.08	0.87
10-1, 13-15	3.77	20.69	75.54	10.20	2.33	-0.01	2.87	2.16
10-2, 13-15	2.26	14.66	83.08	11.00	2.44	-0.40	1.48	0.94
10-3, 13-15	1.46	16.75	81.79	10.27	2.15	-0.04	1.68	1.19
11-1, 110-112	4.41	17.21	78.38	10.36	2.26	-0.06	4.70	1.00
11-2, 66-68	2.37	22.45	75.18	10.14	2.39	-0.03	0.50	1.02
12-1, 105-107	1.16	24.71	74.13	10.06	2.43	0.03	1.86	0.82
12-2, 105-107	2.59	22.89	74.52	9.85	2.30	0.06	0.52	0.40
13-1, 80-82	3.95	17.29	78.76	9.39	1.94	0.08	0.63	0.04
13-2, 80-82	1.35	21.21	77.44	10.18	2.27	0.03	0.55	0.51
13-3, 80-82	1.29	22.70	76.01	10.08	2.41	0.03	0.65	0.79
14-1, 133-135	2.26	17.10	80.64	10.19	2.09	-0.07	0.44	0.65
14-2, 113-115	1.81	16.69	81.50	10.55	2.37	-0.18	4.66	3.00
14-3, 133-135	0.78	18.85	80.37	10.23	2.27	-0.02	1.50	1.20
15-1, 84-86	3.90	19.22	76.88	10.14	2.26	0.02	33.26	1.02
15-2, 84-86	1.18	19.76	79.06	10.45	2.38	-0.10	1.84	2.00
15-3, 84-86	1.00	17.32	81.68	10.45	2.30	-0.14	1.69	1.71
16-2, 90-92	2.05	16.65	81.30	10.44	2.28	-0.19	0.82	0.86
16-3, 90-92	0.70	20.36	78.94	9.74	1.89	-0.13	1.37	1.62
17-1, 125-127	1.49	17.73	80.78	10.39	2.27	-0.14	0.78	0.64
17-2, 125-127	1.75	19.16	79.09	9.77	1.86	-0.08	0.00	0.62
17-3, 125-127	1.28	12.83	85.89	10.91	2.30	-0.30	0.31	0.21
18-1, 58-60	0.99	18.32	80.69	10.17	2.15	-0.05	0.88	0.18
18-2, 58-60	1.19	20.75	78.06	9.60	1.78	-0.05	0.75	0.65
18-3, 62-64	3.47	14.48	82.05	10.30	2.06	0.04	0.27	0.65
19-1, 69-71	0.74	16.58	82.68	10.25	2.08	-0.07	0.38	1.42
19-1, 126-128	2.04	17.63	80.33	10.13	2.15	0.04	2.14	1.20
19-2, 126-128	0.56	19.89	79.55	10.10	2.22	0.03	0.53	0.24
19-3, 100-102	1.12	18.79	80.09	10.26	2.23	0.01	2.02	1.29
20-2, 80-82	1.89	17.89	80.22	10.52	2.28	-0.03	0.62	0.76
20-3, 80-82	0.98	18.81	80.21	10.41	2.16	-0.05	0.36	0.48
21-2, 30-32	2.05	27.43	70.52	9.27	1.86	0.20	1.61	0.14
21-3, 30-32	1.29	21.72	76.99	9.76	2.01	0.22	0.19	0.05
22-2, 70-72	4.00	19.20	76.80	9.91	2.05	0.12	0.34	0.39
22-3, 70-72	2.41	23.42	74.17	9.56	1.86	0.04	0.74	0.98
23-2, 80-82	1.02	16.83	82.15	10.52	2.30	-0.14	0.58	0.70
24-1, 82-84	2.73	16.05	81.22	10.52	2.27	-0.07	0.40	0.51
24-2, 82-84	0.90	16.85	82.25	10.57	2.32	-0.15	0.20	0.10
24-3, 82-84	0.92	16.84	82.24	10.63	2.39	-0.25	0.62	1.22
25-1, 90-92	1.40	15.78	82.82	10.57	2.29	-0.15	0.40	0.52
25-2, 90-92	0.91	15.85	83.24	10.57	2.25	-0.15	0.34	0.42
25-3, 90-92	0.99	16.83	82.18	10.57	2.30	-0.16	0.25	1.60
26-1, 70-72	0.62	16.40	82.98	10.50	2.26	-0.17	0.28	0.78
26-2, 70-72	0.52	18.90	80.58	10.03	2.06	-0.09	0.57	0.61
26-3, 70-72	0.43	16.93	82.64	10.15	2.04	-0.10	0.39	0.71
27-1, 110-112	2.11	15.17	82.72	10.66	2.29	-0.16	0.36	0.99
27-2, 80-82	0.88	19.33	79.79	10.06	2.14	-0.01	0.31	1.01
28-1, 55-57	0.83	16.86	82.31	10.09	1.98	-0.06	0.29	1.85
28-2, 55-57	0.99	17.33	81.68	10.63	2.38	-0.19	0.29	0.73
28-3, 55-57	1.02	17.32	81.66	10.54	2.35	-0.16	0.19	0.01
29-1, 17-19	1.03	20.78	78.19	10.18	2.31	-0.03	0.21	1.86
29-2, 17-19	1.21	17.78	81.01	10.78	2.47	-0.27	0.17	0.02
29-3, 17-19	0.53	22.88	76.59	9.83	2.10	0.19	0.09	