

Second Report of the Regular Limnological Survey of Lake Biwa (1967)

IV. Abiotic Environment*

By

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When the writer examines the data of the abiotic environment, following features can be found.

Regarding **water temperature** in three stations of Nb-2, Nb-5, and Na-3, it is lower in both Nb-2 and Nb-5 during January. It rises as a whole since March; remarkable rise is noticed between April and June. The highest one is shown in August and then it drops gradually between September and December. In Station 1e, the lowest figure is found between February and March. The lag, when we compare with data of Nb-2, Nb-5, and Na-3, may be owed to the difference of water depth, that is water volume. The rise of water temperature begins in April continuing to June. However, hypolimnetic water temperature below 30 m depth keeps constant figure even in August. After August, epilimnetic water temperature drops gradually accompanying complete circulation of warm monomictic type.

As for **hydrogen ion** concentration in Nb-2, Nb-5, and Na-3, it is somewhat higher in February. Generally, it rises between April and June; remarkable rise is shown in July indicating 8.4 in Nb-5. It is lower in August though water temperature is the highest but Station Na-3 still keeps higher figure till October. As a whole, it is low in December. In Station 1e, it is low between January and February showing general rise since April but the drop in bottom layer is conspicuous after May as the result of oxygen consumption. Because of the higher figure in the epilimnetic water in July, difference between surface layer and bottom layer is noticeable. The lowest figure is found in December.

Saturation value of the **dissolved oxygen** in Nb-2, Nb-5, and Na-3 is below 100 % between January and March, but is above 100 % in both April and May. In June, most of the figures are below 90 % but they increase in July, August,

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and October. In Station Ie, oversaturation of the dissolved oxygen is conspicuous in epilimnion in both May and June, but it decreases after July and maintained unsaturated except October. The dissolved oxygen in bottom layer, however, is maintained 80~90% from January to May, then decreases gradually and shows 50~60% from July to December.

		Depth(m)	Temp.(°C)	pH	O ₂ (cc/1)	O ₂ (%)
Station	Ie-1	0	8.9	7.1	6.54	80
Date	Jan. 13, 1967	1	8.8	7.1	6.72	83
Weather	Clear	2	8.8	7.1	6.70	82
Air temperature	8.6°C.	5	8.7	7.1	6.65	81
Wind direction	NNW	10	8.6	7.1	6.53	80
speed	1.8m/sec.	15	8.6	7.1	6.55	80
Cloud form	—	20	8.5	7.1	6.55	80
amount	0	30	8.5	7.0	6.59	81
Transparency	6.0m	50	8.3	7.0	6.31	77
Wave	Rippled	72(B)	7.8	7.0	6.88	83
Mud temperature	—					

Station	Ie-1	0	7.6	7.3	7.60	91
Date	Feb. 15, 1967	1	7.5	7.3	7.65	91
Weather	Clear	2	7.5	7.3	7.65	91
Air temperature	5.1°C.	5	7.4	7.3	7.61	90
Wind direction	W	10	7.3	7.3	7.63	91
speed	3.0m/sec.	15	7.3	7.3	7.59	90
Cloud form	KC	20	7.3	7.2	7.58	90
amount	5	30	7.2	7.2	7.66	90
Transparency	7.3m	50	7.2	7.0	7.57	90
Wave	Gentle	73(B)	7.2	7.0	7.57	90
Mud temperature	7.0°C.					

Station	Ie-1	0	7.6	7.2	7.86	94
Date	Mar. 13, 1967	1	7.5	7.2	7.88	94
Weather	Cloudy	2	7.5	7.2	7.85	93
Air temperature	9.6°C.	5	7.4	7.2	7.81	93
Wind direction	E	10	7.3	7.2	7.94	94
speed	1.0m/sec.	15	7.1	7.2	7.75	91
Cloud form	SC	20	7.1	7.2	8.01	94
amount	10	30	7.1	7.2	7.94	93
Transparency	6.3m	50	7.0	7.2	7.74	91
Wave	Rippled	73(B)	7.0	7.2	7.71	90
Mud temperature	7.2°C.					

Station	Ie-1	Depth(m)	Temp.(°C)	pH	O ₂ (cc/l)	O ₂ (%)
Date	Apr. 14, 1967	0	10.4	7.4	7.98	102
Weather	Partly cloudy	1	10.7	7.4	7.58	97
Air temperature	15.0°C.	2	10.5	7.3	7.69	98
Wind direction	N	5	10.0	7.3	7.64	96
speed	8.0m/sec.	10	9.5	7.3	7.91	99
Cloud form	CS	15	9.5	7.3	7.80	98
amount	8	20	9.2	7.3	8.00	99
Transparency	5.0m	30	9.0	7.3	7.77	96
Wave	Moderate	50	8.5	7.3	7.95	97
Mud temperature	7.8°C.	73(B)	7.6	7.3	7.69	92
Station	Ie-1	0	15.9	7.4	7.81	112
Date	May 11, 1967	1	15.2	7.4	7.54	106
Weather	Clear	2	14.4	7.4	7.60	106
Air temperature	17.4°C.	5	14.0	7.5	7.57	104
Wind direction	E	10	13.8	7.5	7.62	105
speed	4.3m/sec.	15	13.6	7.4	7.71	105
Cloud form	C	20	11.7	7.3	7.62	100
amount	2	30	8.9	7.2	7.81	96
Transparency	6.5m	50	7.5	7.0	6.88	82
Wave	—	65(B)	6.9	7.0	7.18	84
Mud temperature	—					
Station	Ie-1	0	23.3	7.5	6.07	100
Date	June 15, 1967	1	22.9	7.5	6.12	101
Weather	Clear	2	21.9	7.5	6.11	99
Air temperature	26.1°C.	5	20.8	7.5	6.38	101
Wind direction	NE	10	20.2	7.4	6.07	95
speed	2.8m/sec.	15	16.5	7.4	6.62	96
Cloud form	KN	20	12.2	7.1	7.10	94
amount	1	30	9.3	7.4	6.22	77
Transparency	6.3m	50	7.4	7.1	6.89	82
Wave	Gentle	73(B)	7.2	7.1	6.34	75
Mud temperature	8.2°C.					
Station	Ie-1	0	26.3	8.4	5.39	95
Date	July 17, 1967	1	26.2	8.4	5.74	100
Weather	Cloudy	2	26.1	8.4	5.84	102
Air temperature	26.7°C.	5	23.7	8.4	5.96	99
Wind direction	E	10	21.5	8.2	5.52	89
speed	2.0m/sec.	15	16.7	7.1	5.11	75
Cloud form	KN	20	11.4	7.1	5.53	72
amount	8	30	9.4	7.1	5.86	73
Transparency	4.8m	50	7.8	7.0	6.11	73
Wave	Rippled	73(B)	7.2	6.8	5.18	61
Mud temperature	7.8°C.					

Station	Ie-1	Depth(m)	Temp.(°C)	pH	O ₂ (cc/l)	O ₂ (%)
Date	Aug. 16, 1967	0	27.5	8.1	5.38	97
Weather	Partly Cloudy	1	27.4	8.1	5.37	96
Air temperature	27.9°C.	2	27.4	8.1	5.37	96
Wind direction	—	5	27.0	8.1	5.48	98
speed	—	10	24.9	8.1	5.84	100
Cloud form	SC	15	16.3	7.1	5.48	79
amount	8	20	11.9	7.0	6.09	80
Transparency	6.5m	30	9.4	7.0	6.59	82
Wave	Smooth	50	7.7	6.9	6.56	78
Mud temperature	8.6°C.	71.1(B)	7.1	6.8	4.89	58
Station	Ie-1	0	24.5	7.5	5.09	87
Date	Sept. 19, 1967	1	24.5	7.5	5.19	88
Weather	Clear	2	24.5	7.5	5.12	87
Air temperature	24.0°C.	5	24.5	7.5	4.99	85
Wind direction	NNE	10	24.4	7.4	5.14	87
speed	10m/sec.	15	24.4	7.4	5.02	85
Cloud form	C	20	15.5	6.9	4.94	70
amount	2	30	10.4	6.9	5.89	75
Transparency	5.2m	50	7.9	6.9	5.98	72
Wave	Heavy	73(B)	7.2	6.8	4.53	54
Mud temperature	8.0°C.					
Station	Ie-1	0	20.4	7.5	6.33	100
Date	Oct. 20, 1967	1	20.0	7.5	6.63	103
Weather	Clear	2	19.9	7.5	6.54	102
Air temperature	18.5°C.	5	19.7	7.5	6.38	99
Wind direction	—	10	19.6	7.5	6.38	99
speed	0m/sec.	15	19.5	7.4	6.31	97
Cloud form	—	20	13.3	7.3	6.15	84
amount	5	30	9.1	7.0	6.44	80
Transparency	6.9m	50	7.7	7.0	6.42	77
Wave	Smooth	72.8(B)	7.1	6.9	5.13	60
Mud temperature	7.5°C.					
Station	Ie-1	0	15.5	7.5	5.96	85
Date	Nov. 15, 1967	1	15.4	7.5	5.93	84
Weather	Cloudy	2	15.4	7.5	5.94	84
Air temperature	16.5°C.	5	15.4	7.5	5.95	85
Wind direction	N	10	15.3	7.4	5.88	84
speed	12m/sec.	15	15.2	7.4	5.88	83
Cloud form	KC	20	13.0	7.1	5.24	71
amount	8	30	9.5	7.1	5.23	65
Transparency	6.0m	50	7.7	7.0	5.24	63
Wave	Rippled	72(B)	7.2	6.8	4.18	50
Mud temperature	7.6°C.					

Station	Ie-1	Depth(m)	Temp.(°C)	pH	O ₂ (cc/1)	O ₂ (%)
Date	Dec. 15, 1967	0	10.7	7.3	6.92	89
Weather	Clear	1	10.7	7.3	6.62	85
Air temperature	9.5°C.	2	10.7	7.3	6.01	77
Wind direction	W	5	10.7	7.3	6.89	88
speed	10m/sec.	10	10.7	7.2	7.47	96
Cloud form	—	15	10.7	7.3	6.99	90
amount	3	20	10.7	7.3	7.00	90
Transparency	8.0m	30	10.7	7.2	6.98	89
Wave	Moderate	50	8.0	7.0	5.70	69
Mud temperature	7.4°C.	71(B)	7.2	6.9	4.98	59
Station	Nb-2	Transparency	0.8m			
Date	Jan. 14, 1967	Wave	Gentle			
Weather	Cloudy	Mud temperature	—			
Air temperature	3.1°C.					
Wind direction	NNW	0	4.8	7.1	8.14	91
speed	6.0m/sec.	1	4.8	7.1	7.96	89
Cloud form	N	1.9(B)	4.8	7.1	7.79	87
amount	9					
Station	Nb-5	Transparency	2.2m			
Date	Jan. 14, 1967	Wave	Gentle			
Weather	Cloudy	Mud temperature	4.8°C.			
Air temperature	1.9°C.					
Wind direction	NNW	0	4.1	7.2	8.38	92
speed	9.3m/sec.	1	4.1	7.2	8.42	92
Cloud form	N	2	4.1	7.2	8.24	90
amount	8	—(B)	4.4	7.1	7.81	86
Station	Na-3	Transparency	0.6m			
Date	Jan. 14, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	5.8°C.			
Air temperature	3.7°C.					
Wind direction	W	0	5.8	7.2	7.43	85
speed	6m/sec.	1	5.8	7.2	7.59	87
Cloud form	N	2(B)	5.6	7.1	7.61	80
amount	6					
Station	Nb-2	Transparency	1.7m			
Date	Feb. 17, 1967	Wave	Gentle			
Weather	Cloudy	Mud temperature	—			
Air temperature	3.5°C.					
Wind direction	S	0	4.4	7.3	8.44	93
speed	6.0m/sec.	1	4.3	7.3	8.38	92
Cloud form	—	2(B)	4.3	7.3	8.37	92
amount	10					

Station	Nb-5	Transparency	1.3m			
Date	Feb. 17, 1967	Wave	Rippled			
Weather	Cloudy	Mud temperature	5.2°C.			
Air temperature	3.6°C.	Depth(m)	Temp.(°C)	pH	O ₂ (cc/1)O ₂ (%)	
Wind direction	SW	0	4.7	7.3	8.41	93
speed	8.0m/sec.	1	4.6	7.3	8.46	94
Cloud form	—	2	4.6	7.3	8.31	92
amount	10	4.4(B)	4.4	7.3	8.36	92
Station	Na-3	Transparency	1.3m			
Date	Feb. 17, 1967	Wave	Rippled			
Weather	Cloudy	Mud temperature	5.8°C.			
Air temperature	4.6°C.					
Wind direction	SW	0	5.4	7.3	8.18	92
speed	5.3m/sec.	1	5.3	7.3	8.12	91
Cloud form	—	2.1(B)	5.3	7.3	8.14	92
amount	9					
Station	Nb-2	Transparency	0.8m			
Date	Mar. 14, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	—			
Air temperature	13.0°C.					
Wind direction	S	0	8.7	7.2	7.55	92
speed	0m/sec.	1	8.6	7.2	7.53	92
Cloud form	CS	1.9(B)	8.3	7.2	7.56	92
amount	1					
Station	Nb-5	Transparency	1.7m			
Date	Mar. 14, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	8.4°C.			
Air temperature	12.9°C.					
Wind direction	E	0	9.0	7.3	7.89	97
speed	2.7m/sec.	1	8.6	7.3	7.93	97
Cloud form	—	2	8.3	7.3	7.94	96
amount	1	4.5(B)	8.1	7.3	7.92	96
Station	Na-3	Transparency	0.7m			
Date	Mar. 14, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	8.8°C.			
Air temperature	14.0°C.					
Wind direction	E	0	9.1	7.2	7.75	96
speed	2.7m/sec.	1	9.1	7.2	7.75	96
Cloud form	C	—(B)	8.8	7.2	7.70	95
amount	1					

Station	Nb-2	Transparency	1.1m			
Date	Apr. 17, 1967	Wave	Rippled			
Weather	Cloudy	Mud temperature	11.6°C.			
Air temperature	17.6°C.	Depth(m) Temp.(°C)	pH	O ₂ (cc/1)	O ₂ (%)	
Wind direction	N	0	12.4	7.3	7.72	103
speed	4.5m/sec.	1	11.9	7.3	7.72	102
Cloud form	SK	2.1(B)	11.5	7.3	7.68	100
amount	9					
Station	Nb-5	Transparency	1.5m			
Date	Apr. 17, 1967	Wave	Rippled			
Weather	Cloudy	Mud temperature	10.8°C.			
Air temperature	14.0°C.					
Wind direction	NE	0	11.9	7.4	7.99	105
speed	4.5m/sec.	1	11.6	7.4	7.85	103
Cloud form	SK	2	11.4	7.4	7.95	103
amount	9	4.7(B)	10.9	7.3	7.57	98
Station	Na-3	Transparency	1.3m			
Date	Apr. 17, 1967	Wave	Rippled			
Weather	Cloudy	Mud temperature	12.0°C.			
Air temperature	12.8°C.					
Wind direction	NE	0	12.5	7.1	7.41	99
speed	4.5m/sec.	1	12.5	7.1	7.59	101
Cloud form	SK	2.3(B)	12.3	7.1	7.52	100
amount	10					
Station	Nb-2	Transparency	1.0m			
Date	May 16, 1967	Wave	Smooth			
Weather	Cloudy	Mud temperature	—			
Air temperature	20.9°C.					
Wind direction	—	0	18.1	7.5	6.81	103
speed	0m/sec.	1	17.8	7.5	6.83	102
Cloud form	C	2.1(B)	17.1	7.5	6.91	102
amount	5					
Station	Nb-5	Transparency	1.6m			
Date	May 16, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	16.3°C.			
Air temperature	20.0°C.					
Wind direction	—	0	19.3	7.6	7.13	110
speed	0 m/sec.	1	18.8	7.6	7.24	110
Cloud form	C	2	18.2	7.6	7.19	108
amount	3	4.5(B)	17.5	7.5	6.87	102

Station	Na-3	Transparency	1.4m			
Date	May 16, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	18.9°C.			
Air temperature	24.0°C.	Depth(m) Temp. (°C)pHO ₂ (cc/1)O ₂ (%)				
Wind direction	SE	0	19.8	7.6	7.02	109
speed	1.8m/sec.	1	19.6	7.6	7.14	111
Cloud form	C	2.2(B)	19.7	7.6	7.03	109
amount	2					

Station	Nb-2	Transparency		1.0m		
Date	June 16, 1967	Wave		Rippled		
Weather	Cloudy	Mud temperature		—		
Air temperature	26.9°C.					
Wind direction	N	0	25.3	7.4	5.05	86
speed	2.0m/sec.	1	24.2	7.5	5.31	89
Cloud form	CS	1.6(B)	24.1	7.5	5.26	89
amount	7					

Station	Nb-5	Transparency		2.5m		
Date	June 16, 1967	Wave		Gentle		
Weather	Cloudy	Mud temperature		23.2°C.		
Air temperature	24.0°C.					
Wind direction	NE	0	24.3	7.5	5.30	90
speed	3.5m/sec.	1	24.3	7.5	5.41	91
Cloud form	CS	2	23.9	7.5	5.01	84
amount	7	4.1(B)	23.5	7.5	5.14	86

Station	Na-3	Transparency		1.2m		
Date	June 16, 1967	Wave		Rippled		
Weather	Cloudy	Mud temperature		24.5°C.		
Air temperature	24.4°C.					
Wind direction	E	0	25.3	7.6	5.54	95
speed	1.8m/sec.	1	26.1	7.6	5.24	91
Cloud form	CS	1.8(B)	25.9	7.6	4.87	85
amount	8					

Station	Nb-2	Transparency		0.8m		
Date	July 15, 1967	Wave		Gentle		
Weather	Cloudy	Mud temperature		—		
Air temperature	26.8°C.					
Wind direction	NW	0	26.5	7.8	6.27	110
speed	2.5m/sec.	1	26.2	7.8	6.39	111
Cloud form	CS	2.2(B)	26.0	7.6	6.17	108
amount	8					

Station	Nb-5	Transparency	1.0m			
Date	July 15, 1967	Wave	Gentle			
Weather	Cloudy	Mud temperature	22.3°C.			
Air temperature	26.8°C.	Depth(m) Temp.(°C)	pH O ₂ (cc/1)O ₂ (%)			
Wind direction	NW	0	25.3	8.4	5.74	99
speed	5.0m/sec.	1	25.2	8.4	6.04	104
Cloud form	CS	2	25.1	8.4	5.89	101
amount	9	4.8(B)	22.4	7.2	4.84	79
Station	Na-3	Transparency	1.2m			
Date	July 15, 1967	Wave	Rippled			
Weather	Cloudy	Mud temperature	24.2°C.			
Air temperature	27.4°C.					
Wind direction	NW	0	25.7	7.8	5.45	94
speed	4.0m/sec.	1	25.5	7.8	5.83	100
Cloud form	CS	2.5(B)	24.8	7.2	5.17	88
amount	10					
Station	Nb-2	Transparency	1.4m			
Date	Aug. 15, 1967	Wave	Rippled			
Weather	Cloudy after thunderstorm	Mud temperature	—			
Air temperature	26.4°C.	0	28.1	7.3	5.46	99
Wind direction	NE	1	28.1	7.5	5.50	100
speed	1.0m/sec.	1.8(B)	28.0	7.5	5.50	99
Cloud form	SK					
amount	9					
Station	Nb-5	Transparency	2.3m			
Date	Aug. 15, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	24.8°C.			
Air temperature	27.8°C.					
Wind direction	—	0	27.4	7.9	5.58	99
speed	0m/sec.	1	27.2	7.8	5.55	99
Cloud form	KC	2	27.1	7.8	5.64	101
amount	6	4(B)	24.6	7.5	5.35	91
Station	Na-3	Transparency	1.5m			
Date	Aug. 15, 1967	Wave	Smooth			
Weather	Cloudy	Mud temperature	27.6°C.			
Air temperature	28.6°C.					
Wind direction	—	0	28.2	8.2	6.22	113
speed	0 m/sec.	1	27.6	8.2	6.07	109
Cloud form	SK	1.9(B)	27.2	8.0	5.89	105
amount	9					

Station	Nb-2	Transparency	0.9m			
Date	Sept. 20, 1967	Wave	Smooth			
Weather	Cloudy	Mud temperature	—			
Air temperature	22.9°C.	Depth(m) Temp.(°C)	pH	O ₂ (cc/1)	O ₂ (%)	
Wind direction	—	0	22.9	7.3	5.19	85
speed	0m/sec.	1	22.8	7.3	5.17	85
Cloud form	N	1.6(B)	22.8	7.3	5.22	86
amount	10					

Station	Nb-5	Transparency	1.4m			
Date	Sept. 20, 1967	Wave	Smooth			
Weather	Cloudy	Mud temperature	24.2°C.			
Air temperature	22.6°C.					
Wind direction	—	0	24.3	7.6	5.22	88
speed	0m/sec.	1	24.2	7.6	5.17	87
Cloud form	N	2	24.2	7.6	5.20	88
amount	10	4.1(B)	24.2	7.5	5.18	87

Station	Na-3	Transparency	1.4m			
Date	Sept. 20, 1967	Wave	Smooth			
Weather	Cloudy	Mud temperature	24.0°C.			
Air temperature	22.6°C.					
Wind direction	—	0	23.7	8.0	5.57	93
speed	0m/sec.	1	23.7	8.0	5.67	95
Cloud form	N	—(B)	23.3	8.0	5.40	90
amount	10					

Station	Nb-2	Transparency	1.3m			
Date	Oct. 21, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	—			
Air temperature	19.8°C.					
Wind direction	—	0	17.3	7.5	6.75	100
speed	0m/sec.	1	17.2	7.5	6.62	98
Cloud form	KC	1.3(B)	17.2	7.5	6.67	98
amount	2					

Station	Nb-5	Transparency	1.0m			
Date	Oct. 21, 1967	Wave	Rippled			
Weather	Clear	Mud temperature	18.4°C.			
Air temperature	21.1°C.					
Wind direction	SW	0	18.2	7.5	6.34	96
speed	5.8m/sec.	1	18.3	7.5	6.47	98
Cloud form	KC	2	18.2	7.5	6.49	98
amount	2	3.8(B)	17.6	7.3	6.11	91

Station	Na-3	Transparency	1.5m			
Date	Oct. 21, 1967	Wave	Rippled			
Weather	Clear	Mud temperature	18.6°C.			
Air temperature	21.5°C.	Depth(m) Temp.(°C)	pH O ₂ (cc/1) O ₂ (%)			
Wind direction	S	0	18.5	8.1	7.07	107
speed	2.3m/sec.	1	18.5	8.0	7.21	109
Cloud form	KC	1.5(B)	18.4	8.1	7.36	112
amount	3					
Station	Nb-2	Transparency	1.4m			
Date	Nov. 16, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	—			
Air temperature	13.7°C.					
Wind direction	NNE	0	12.4	7.5	6.20	83
speed	1.5m/sec.	1	12.4	7.5	6.21	83
Cloud form	SK	—(B)	12.4	7.5	6.21	83
amount	5					
Station	Nb-5	Transparency	1.0m			
Date	Nov. 16, 1967	Wave	Rippled			
Weather	Clear	Mud temperature	13.6°C.			
Air temperature	13.8°C.					
Wind direction	SW	0	12.7	7.5	6.22	84
speed	5.0m/sec.	1	12.6	7.5	6.23	83
Cloud form	SK	2	12.5	7.5	6.38	85
amount	6	4.1(B)	12.8	7.5	6.12	82
Station	Na-3	Transparency	1.5m			
Date	Nov. 16, 1967	Wave	Smooth			
Weather	Clear	Mud temperature	13.4°C.			
Air temperature	14.2°C.					
Wind direction	—	0	13.1	7.5	5.80	78
speed	0m/sec.	1	13.1	7.5	5.80	78
Cloud form	SK	1.8(B)	13.0	7.5	5.81	78
amount	5					
Station	Nb. 2	Transparency	0.5m			
Date	Dec. 16, 1967	Wave	Moderate			
Weather	Clear	Mud temperature	—			
Air temperature	6.2°C.					
Wind direction	SW	0	5.2	7.4	8.32	94
speed	9.5m/sec.	1	5.2	7.4	8.32	94
Cloud form	SK	1.5(B)	5.2	7.4	8.31	93
amount	3					

Station	Nb-5	Transparency	3.0m			
Date	Dec. 16, 1967	Wave	Gentle			
Weather	Clear	Mud temperature	7.6°C.			
Air temperature	7.3°C.	Depth(m)	Temp. (°C)	pHO ₂ (cc/1)	O ₂ (%)	
Wind direction	SW	0	6.1	7.4	8.22	95
speed	7.0m/sec.	1	6.1	7.4	8.18	94
Cloud form	SK	2	6.1	7.4	8.25	95
amount	3	3.9(B)	6.1	7.4	8.15	94

Station	Na-3	Transparency	1.8m			
Date	Dec. 16, 1967	Wave	Rippled			
Weather	Clear	Mud temperature	6.4°C.			
Air temperature	8.4°C.					
Wind direction	SW	0	5.9	7.4	8.12	93
speed	4.3m/sec.	1	5.9	7.4	8.12	93
Cloud form	SK	1.8(B)	5.9	7.4	8.09	93
amount	3					

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