

Station Data								
Station	G 115	Cast #	1601-024		Local Date	6-13-2016	Time	7:00 am

Lat. N	68° 26.6704	Temp.	-1.51 °C	Depth	1710 m.
Long. W	61° 22.1824	Salinity	32.24	Fluor.	0.55

Samples in dark	
Time	8:08 am

PAM Measurements - Rapid Light Curves

Tube	Niskin	Depth	Sample #	Settings	Light <small>all 0.10 s. except where noted</small>	Time	1st Y(II)
① 3	14	10 m.		Measuring Light	Ampl. 1	9:00	0.065
				Int. 4	Int. 4	9:03	0.058
				Freq. 12			
				System Parameters	Ampl. 1	9:05	0.048
				Gain 12	Int. 5	9:08	0.031
				PM-Gain 30			
③ 6	A	30 m.		F-Offs. 723	Ampl. 2	9:10	0.138
					Int. 4	9:14	0.365
				Measuring Light	Ampl. 1	9:22	0.207
				Int. 4	Int. 4	9:25	0.092
				Freq. 12			
				System Parameters	Ampl. 1	9:28	0.279
⑤ 7	5	40 m.		Gain 12	Int. 5	9:30	0.205
				PM-Gain 30	Ampl. 2	9:32	0.382
				F-Offs. 723	Int. 4	9:35	0.268
				Measuring Light	Ampl. 1	9:45	0.077
				Int. 4	Int. 4	10:00	0.151
				Freq. 12			
⑦ 3	14	10 m.	NPQ curve a	System Parameters	Ampl. 1	10:06	0.096
				Gain 12	Int. 5	10:19	0.163
				PM-Gain 30	Ampl. 2	10:21	0.096
				F-Offs. 723	Int. 4	10:24	0.138
				NPQ box not checked (except for 40m.)			
②			b		Ampl. 6	9:17	0.387
					Int. 5		
④	6	A	30 m.	NPQ curve a	30 seconds	9:49	0.383
						9:37	0.345
⑥	7	5	40 m.	NPQ curve a		9:43	0.407
						10:27	0.111

why so high?

30s. not 10s.

NPQ curves

Amp. 1, Int. 4 10:11 0.049 10 s.
 Amp. 1, Int. 4 10:14 0.121 10 s.
 Amp. 1, Int. 5 10:16 0.219 10 s.

Station Data

Station	G 115	Cast #	1601-024	Local Date	6-13-2016	Time	7:00 am
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PAM Measurements - Fv/Fm

Tube	Niskin	Depth	Sample #	Settings	Time	F	Fm'	Y(II)
1	18	sfc		Measuring Light	10:53	419	415	—
				Int. 4	10:54	450	450	0.0
				Freq. 12	10:56	422	441	0.043
				System Parameters	10:57	440	459	0.041
				Gain 12	10:57	449	516	0.130
2	16	5 m.		Measuring Light	10:59	465	544	0.145
				Int. same	11:00	417	480	0.131
				Freq. same	11:01	409	423	0.033
				System Parameters	11:02	374	397	0.058
				Gain	11:02	512	523	0.021
3	14	10 m.		Measuring Light	11:03	393	441	0.109
				Int. same	11:04	355	398	0.108
				Freq. same	11:06	402	473	0.150
				System Parameters	11:07	472	618	0.236
				Gain	11:08	493	607	0.188
4	13	15 m.		Measuring Light	11:10	390	472	0.174
				Int. same	11:11	371	457	0.188
				Freq. same	11:12	503	614	0.181
				System Parameters	11:13	458	595	0.230
				Gain	11:14	414	476	0.130
5	10	20 m.		Measuring Light	11:15	359	458	0.216
				Int. same	11:16	395	432	0.086
				Freq. same	11:17	358	434	0.175
				System Parameters	11:18	525	611	0.141
				Gain	11:19	376	421	0.107
				PM-Gain				
				F-Offs.				

Station Data

Station	G115	Cast #	1601-024	Local Date	6-13-2016	Time	7:00
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PAM Measurements - Fv/Fm

Tube	Niskin	Depth	Sample #	Settings	Time	F	Fm'	Y(II)
6	Carboy A.	30 m.		Measuring Light	11:21	312	367	0.150
				Int. <i>same</i>	11:22	260	318	0.182
				Freq.	11:23	296	352	0.159
				System Parameters	11:24	327	406	0.195
				Gain PM-Gain F-Offs.	11:25	270	366	0.262
7	5	40 m.		Measuring Light	11:26	204	230	0.113
				Int. <i>same</i>	11:27	271	280	0.032
				Freq.	11:27	194	232	0.164
				System Parameters	11:28	243	287	0.153
				Gain PM-Gain F-Offs.	11:29	238	271	0.122
8	3	50 m.		Measuring Light	11:30	204	224	0.089
				Int. <i>same</i>	11:33	225	209	-
				Freq.	11:34	239	256	0.066
				System Parameters	11:35	238	244	0.025
				Gain PM-Gain F-Offs.	11:36	175	193	0.093
9	2	60 m.		Measuring Light	11:37	152	183	0.169
				Int. <i>same</i>	11:38	148	158	0.063
				Freq.	11:39	158	185	0.146
				System Parameters	11:40	191	209	0.086
				Gain PM-Gain F-Offs.	11:41	209	196	-
10	1	80 m.		Measuring Light	11:42	227	244	0.070
				Int.	11:43	154	197	0.218
				Freq.	11:44	213	255	0.165
				System Parameters	11:45	164	161	-
				Gain PM-Gain F-Offs.	11:46	179	193	0.073

Station Data ice station								
Station	115	Cast #	ice + water		Local Date	6.13.2016	Time	~17:45

Lat. N	68° 23.5019	Temp.	-1.41	Depth	
Long. W	61° 17.1106	Salinity	32.19	Fluor.	0.43

Samples in dark	
Time	18:10

PAM Measurements - Rapid Light Curves							
Tube	Niskin	Depth	Sample #	Settings	Light	Time	1st Y(II)
1	water pumped from below the ice ~2 m.	water ~2m.		Measuring Light	Ampl. 1	18:52	0.248
				Int. 4	Int. 4	18:56	0.255
				Freq. 12			
				System Parameters	Ampl. 1	18:58	0.091
				Gain 12	Int. 5	19:01	0.197
				PM-Gain 30			
				F-Offs.	Ampl. 2	19:04	0.115
					Int. 4	19:06	0.308
				Measuring Light	Ampl.		
				Int.	Int.		
				Freq.			
				System Parameters	Ampl.		
				Gain	Int.		
				PM-Gain			
				F-Offs.	Ampl.		
					Int.		
				Measuring Light	Ampl.		
				Int.	Int.		
				Freq.			
				System Parameters	Ampl.		
				Gain	Int.		
				PM-Gain			
				F-Offs.	Ampl.		
					Int.		
1	NPR curve	~2m.			Ampl. 6 Int. 5		
					0.30 seconds		

Station Data

Station	G 201	Cast #	1601-028	Local Date	6-14-2016	Time	13:30
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Lat. N		Temp.		Depth	
Long. W		Salinity		Fluor.	~ 0.5

Samples in dark

Time 14:24

PAM Measurements - Rapid Light Curves

Tube	Niskin	Depth	Sample #	Settings	Light	Time	1st Y(II)
3	14	20 m.		Measuring Light	Ampl. 1	15:22	0.2184
				Int. 3	Int. 4	15:26	0.250
				Freq. 10	Ampl. 1	15:29	0.242
				System Parameters	Int. 5	15:31	0.199
				Gain 12	Ampl. 2	15:35	0.355
				PM-Gain 30	Int. 4	15:37	0.427
				F-Offs. 407	Ampl. 6	15:46	0.276
				NPQ Curve *forgot to check NPA box	Int. 5	15:41	0.399
5	carboy A	40 m. DCM	6 (FLUSH)	Measuring Light	Ampl. 1	15:52	0.262
				Int. same	Int. 4	15:54	0.224
				Freq. same	Ampl. 1	15:57	0.250
				System Parameters	Int. 5	15:59	0.292
				Gain	Ampl. 2	16:02	0.377
				PM-Gain	Int. 4	16:04	0.374
				F-Offs.	Ampl. 6	16:07	0.463
				NPQ Curve *forgot to check NPA box :30s	Int. 5	16:12	0.633
7	5	50 m.		Measuring Light	Ampl. 1	16:19	0.171
				Int. 4	Int. 4	16:22	0.229
				Freq. 12	Ampl. 1	16:24	0.178
				System Parameters	Int. 5	16:27	0.186
				Gain 12	Ampl. 2	16:29	0.311
				PM-Gain 30	Int. 4	16:32	0.261
				F-Offs. 407	Ampl. 6	16:35	0.336
				NPQ Curve	Int. 5	16:40	0.381

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} much higher

Station Data

Station	G 201	Cast #	1601-028	Local Date	6-14-2016	Time	13:30
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PAM Measurements - Fv/Fm

Tube	Niskin	Depth	Sample #	Settings	Time	F	Fm'	Y(II)
1	18	sfz		Measuring Light	17:01	414	538	0.230
				Int. 3	17:02	399	491	0.187
				Freq. 12	17:03	311	395	0.213
				System Parameters	17:04	369	577	0.360
				Gain 12 PM-Gain 30 F-Offs. 365	17:04	306	452	0.323
2	16	10 m.		Measuring Light	17:05	349	442	0.210
				Int. same	17:06	339	484	0.300
				Freq. same	17:07	290	443	0.345
				System Parameters	17:08	470	726	0.353
				Gain PM-Gain F-Offs.	17:09	274	411	0.333
4	12	30 m.		Measuring Light	17:11	191	370	0.484
				Int. same	17:12	243	491	0.505
				Freq. same	17:13	250	540	0.537
				System Parameters	17:14	215	476	0.548
				Gain PM-Gain F-Offs.	17:14	152	377	0.597
6	7	45 m.		Measuring Light	17:17	267	397	0.327
				Int. 4	17:17	274	431	0.364
				Freq. 12	17:18	275	416	0.339
				System Parameters	17:19	218	366	0.404
				Gain 12 PM-Gain 30 F-Offs. 407	17:20	224	380	0.411
8	3	60 m.		Measuring Light	17:21	203	342	0.406
				Int. same	17:22	194	317	0.388
				Freq. same	17:23	153	297	0.485
				System Parameters	17:24	293	396	0.396
				Gain PM-Gain F-Offs.	17:26	211	345	0.388

Station Data

Station	G 201	Cast #	1601-028	Local Date	6-14-2016	Time	13:30
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PAM Measurements - Fv/Fm

Tube	Niskin	Depth	Sample #	Settings	Time	F	Fm'	Y(II)
9	2	80 m.		Measuring Light	17:27	142	187	0.241
				Int. Freq. <i>same</i>	17:28	144	172	0.163
				System Parameters	17:28	157	175	0.103
				Gain	17:29	134	169	0.207
				PM-Gain	17:30	138	171	0.193
10	1	100 m.		Measuring Light	17:31	83	79	—
				Int. Freq. <i>same</i>	17:32	60	79	0.241
				System Parameters	17:33	59	79	0.253
				Gain	17:34	37	81	0.543
				PM-Gain	17:34	56	73	0.233
				Measuring Light				
				Int. Freq.				
				System Parameters				
				Gain				
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Station Data

Station	G 204	Cast #	1601-083	Local Date	06-15-2016	Time	8:00
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Lat. N	68° 42.6441	Temp.	-1.56°C	Depth	537 m.
Long. W	59° 15.0557	Salinity	53.00	Fluor.	5

Samples in dark

Time	9:00
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PAM Measurements - Rapid Light Curves

Tube	Niskin	Depth	Sample #	Settings	Light	Time	1st Y(II)
2	16	5 m.		Measuring Light	Ampl. 1	9:58	0.083
				Int. 1	Int. 4	10:01	0.042
				Freq. 12			
				System Parameters	Ampl. 1	10:03	0.044
				Gain 12	Int. 5	10:06	0.112
				PM-Gain 30			
				F-Offs. 87	Ampl. 2	10:09	0.192
					Int. 4	10:11	0.402
				NPQ Curve	Ampl. 6	10:14	0.431
				* box not checked	Int. 5	10:20	0.399
4	Carboy A	15 m. DCM	FLASH 9	Measuring Light	Ampl. 1	10:26	0.160
				Int. <i>same</i>	Int. 4	10:28	0.284
				Freq. <i>same</i>			
				System Parameters	Ampl. 1	10:30	0.241
				Gain	Int. 5	10:33	0.261
				PM-Gain			
				F-Offs.	Ampl. 2	10:35	0.330
					Int. 4	10:38	0.443
				NPQ Curve	Ampl. 6	10:40	0.433
				* box not checked	Int. 5	10:45	0.425
6	7	25 m.		Measuring Light	Ampl. 1	10:53	0.396
				Int. 2	Int. 4	10:56	0.496
				Freq. 12			
				System Parameters	Ampl. 1	10:58	0.342
				Gain 12	Int. 5	11:01	0.335
				PM-Gain 30			
				F-Offs. 242	Ampl. 2	11:03	0.451
					Int. 4	11:06	0.425
				NPQ Curve	Ampl. 6	11:08	0.490
					Int. 5	11:13	0.542

⊗ sewage + kitchen waste dumped during cast