

Sensor status report 2022

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This is a status report of the sondes used for the stickleback-experiments 2022 in Greenland. The upper table shows the measuring period of each of the 11 sondes used (the data for sonde2 pond ERL122 apparently became inaccessible), the number of observations and some comments.

##	Pond	Sonde	start_date	start_time	end_date	end_time	n
## 1	B2P3	Sonde06	2022-06-22	14:02:33	2022-07-03	18:26:33	7974
## 2	B2P2	Sonde09	2022-06-22	14:12:54	2022-07-03	15:58:54	7974
## 3	B1P1	Sonde16	2022-06-22	09:43:33	2022-07-02	08:39:33	7169
## 4	B3P3	Sonde10	2022-06-22	15:33:02	2022-07-03	16:33:02	7951
## 5	B3P1	Sonde14	2022-06-23	00:23:40	2022-07-02	23:59:40	6797
## 6	B3P2	Sonde13	2022-06-23	08:37:44	2022-07-03	12:41:44	7323
## 7	B3P0	Sonde11	2022-06-23	08:34:19	2022-07-03	12:36:19	7322
## 8	ERL85	Sonde07	2022-06-22	10:48:21	2022-07-03	09:28:21	7881
## 9	B2P4	Sonde08	2022-06-22	14:05:18	2022-07-03	17:01:18	8009
## 10	ERL152	Sonde15	2022-06-22	10:24:03	2022-06-30	21:18:03	4039
## 11	B3P4	Sonde12	2022-06-22	12:34:19	2022-06-29	05:36:19	4832
##						comments	
## 1							
## 2							
## 3							
## 4							
## 5							
## 6							
## 7						no ODO measurements	
## 8							
## 9							
## 10						early stop all measurements, huge data-gaps	
## 11						early stop all measurements	

The lower table is a completeness-check of the observations, during the period where we had complete days (cutting at the beginning and in the end to ensure equal periods of time for all sondes). It is apparent that all data is complete except the one from Sonde15 in pond ERL152.

##	Date	Sonde06	Sonde07	Sonde08	Sonde09	Sonde10	Sonde11	Sonde12	Sonde13
## 1:	2022-06-23	120	120	120	120	120	120	120	120
## 2:	2022-06-24	720	720	720	720	720	720	720	720
## 3:	2022-06-25	720	720	720	720	720	720	720	720
## 4:	2022-06-26	720	720	720	720	720	720	720	720
## 5:	2022-06-27	720	720	720	720	720	720	720	720
## 6:	2022-06-28	720	720	720	720	720	720	720	720
## 7:	2022-06-29	89	89	90	89	90	89	89	90

##	Sonde14	Sonde15	Sonde16
## 1:	120	75	120
## 2:	720	662	720
## 3:	720	656	720
## 4:	720	323	720
## 5:	720	560	720
## 6:	720	491	720
## 7:	90	48	90

Summary:

- Two sondes apparently lost power early (sonde15 pond ERL152, sonde12 pond B3P4).
- One sonde didn't measure optical dissolved oxygen and its derivatives (ODO, sonde11 pond B3P0).
- Additionally, sonde15 in pond ERL152 displayed huge data-gaps when plotted (visible in the completeness-table). Either there must have been some problem with the sonde itself, or the data-gaps occurred when the data was transferred to the field laptop and subsequently splitted.