

# ACSE buoy deployments All dates/times in UTC

Deployment num.	Date		Folder
1L1	18/07/2014	YD199	20140718_1
2L1	19/07/2014	YD200	20140719_1
3L1	14/08/2014	YD226	20140814_1
4L1	15/08/2014	YD227	20140814_1
1L2	26/08/2014	YD238	20140826_1
2L2	28/08/2014	YD240	20140828_1
3L2	28/08/2014	YD240	20140828_2
4L2	29/08/2014	YD241	20140829_1
5L2	30/08/2014	YD242	20140830_1
6L2	30/08/2014	YD242	20140830_2
7L2	31/08/2014	YD243	20140831_1
8L2	31/08/2014	YD243	20140831_2
9L2	2014/04/09	YD247	20140904_1
10L2	2014/04/09	YD247	20140904_2
11L2	2014/04/09	YD247	20140904_3
12L2	2014/06/09	YD249	20140906_1
13L2	2014/12/09	YD255	20140912_1
14L2	2014/12/09	YD255	20140912_2
15L2	14/09/2014	YD257	20140914_1
16L2	14/09/2014	YD257	20140914_2
17L2	14/09/2014	YD257	20140914_3
18L2	17/09/2014	YD260	20140917_1
19L2	20/09/2014	YD263	20140920_1
20L2	20/09/2014	YD263	20140920_2
21L2	22/09/2014	YD265	20140922_1
22L2	24/09/2014	YD267	20140924_1

Two deployments in one file

Large gap in record

Timestamp issue (manually resolved)

Ship contamination

FIXED WRONG!

1D stats	Lat	Lon	In water
-	76.774	125.83	13:18
RDT	76.893	127.798	12:50
-	74.322	-171.444	22:25
SDT	74.398	-169.671	03:24
-	72.821	-175.486	06:30
-	75.172	179.875	21:10
RDT	75.143	179.862	22:50
RDT	75.475	-179.757	20:27
RDT	75.304	-179.627	06:50
RDT	75.079	-179.988	21:38
RDT	75.505	-179.092	07:58
RDT	75.025	179.833	20:45
RDT	76.4672	176.7894	01:00
RDT	76.3642	176.4383	04:02
RDT	76.3209	175.8902	08:02
RDT	76.4074	173.9226	07:05
RDT	79.8183	154.1786	03:22
RDT	79.9228	154.3826	06:36
RDT	81.329	141.7355	03:20
RDT	81.063	142.1099	09:00
RDT	80.4743	142.9158	22:20
RDT	80.7008	142.1143	06:35
RDT	84.5113	151.9179	02:08
RDT	85.1343	151.5701	21:33
RDT	84.269	148.7352	02:19
RDT	84.7222	150.9535	22:45

## anually recorded times (UTC)

### Used .RDT timeser

Undisturbed waves	Recovery begins	Start
<u>-</u>	15:00	-
13:00	18:29	13:05
22:27	23:50	-
03:26	04:30	03:26
_	-	<u>-</u>
21:25	10:55:00 PM (?)	<u>-</u>
22:52	23:30	22:52
20:34	21:55	20:42
07:00	07:45	07:05
21:52	23:54	21:52
08:05	08:40	08:10
20:55	22:55	21:05
01:10	02:00	01:15
04:10	05:38	04:15
08:13	09:27	08:15
07:15	08:32	07:15
03:25	03:56	03:30
06:41	08:54	06:45
03:25	05:40	03:25
09:03	10:05	09:10
22:23	00:43	22:30
06:39	08:11	06:43
02:15	05:33	04:15
23:01	00:43	23:01
02:21	03:19	02:30
22:55	00:07	23:03

## ies start/end (UTC)

End	Good duration (min)
-	0
18:30	325
-	0
04:30	64
_	0
-	0
23:45	38
21:55	73
07:50	45
23:50	118
08:35	25
23:05	120
02:00	45
05:45	90
09:35	80
08:32	77
03:52	22
09:00	133
04:30	65
10:05	55
00:43	133
08:11	88
05:33	78
00:43	102
03:25	55
00:10	67

#### **Conditions**

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Waves built slightly during the day, the died down a little early evening

Big bit of open water but ice visible all around, ~6 m/s

~10 m/s

#### Light winds

#### Sea ice present, NW winds 8-10 m/s

Sea ice, NW winds 8 m/s

Sea Ice, winds 8 m/s from NW

Light winds. Sea Ice

10 m/s winds, drifted ~ 2nm, Sea Ice

Lovely! Balmy, light winds and glourious sunset. Sea Ice

Sea Ice

#### Winds < 6 m/s, initially short fetch, very small wave field, few floating bergs.

Winds < 8 m/s, initially near ice, short fetch growing, small wave field, few floating bergs.

Winds < 4 m/s, very calm, few floating bergs.

Winds decreasing from ~10 to 2, sea ice present

Near ice edge, with scattered small floes; winds  $\sim$  6 m/s, no wind waves, swell from SW Swell, some sea ice.

\*buoy drifted back to ship around 04:32 & then out again around 04:46

winds ~ 8 m/s from SSW, open water, both wind waves & swell

open water, WSW winds 6-9 m/s; scattered snow showers

winds SE 8-10 m/s, sizeable swell, waves ~1.5-2 m??

On-ice SSE winds 6-8 m/s, -5.5C (within ice-modified air to east)

In pancake ice, but in Oden drift track, weak 5 m/s on-ice flow

In open water, with off-ice flow from ENE at about 6-8 m/s

In thin pancake/frazil ice, winds ~4 ms/ from 270, T~ -7C

#### Lay alongside ship whole time.

18:18 - 18:25 pulling in towards ship - buoy was drifting too far to port

Waverider left on power for next deployment...

Log file indicates repeated restart after file error – probably a result of the false power up and down when initially started the first L2 attempt, didn't get buoy away from ship side.

Had to end somewhat quickly after CTD caught on iceberg. Not sure if data from this deployment is ok - big gap. Ph Photos taken to document fetch, including radar screen

Initially used only 2/3 of tether, worried about ice. All tether from 21:30. Photos taken to document fetch, incl radar set Buoy powered up for quite a while before deployment, due to dinner. Photos taken to document fetch, incl radar sc Photos taken to document fetch, incl radar screen

GoPro on buoy and one under rear most float. Buoy had to stay on shortish tether due to ship operations (no more Photos taken to document fetch, incl radar screen

#### Photos taken to document fetch, incl radar screen

Photos taken to document fetch, incl radar screen

Photos taken to document fetch, incl radar screen

At around 08:00 had to pull buoy in a bit to avoid ice flow. Photos taken to document fetch, incl radar screen Buoy not drifting out very far because ship not drifting; possibly some reflection of waves back to buoy

Excellent deployment, TSX overpass@22:00 Sep 14

Photos to document wave conditions (Ola?)

Swell and wind waves from south

Noticeable swell from south propagating throiugh pancake ice

Buoy drifted in ship's wake through pancake ice, but weak swell from SSW representative of that in ice. Thicker pan





