

BWASP – Flight 37 – October 13 2008

Area flown: Blocks 1 and 2, completed four westernmost transects; Block 3, completed four easternmost transects

Total hours flown: 5.3

Total transect hours: 3.5

Number of bowheads seen: 2 (0 calves)

Weather and visibility: Very good with Beaufort 0 to 3 and good visibility. Ice conditions were complex with freeze-up occurring rapidly. Grease ice was present near the coast and extensively offshore as well. Small percentages of broken floe were seen near shore with higher occurrence offshore.

Sightings: Two bowheads, bearded seals, and over 20 polar bears on Cross Island

Bowhead Preliminary Summary, Flight 37 Date: 10/13/2008

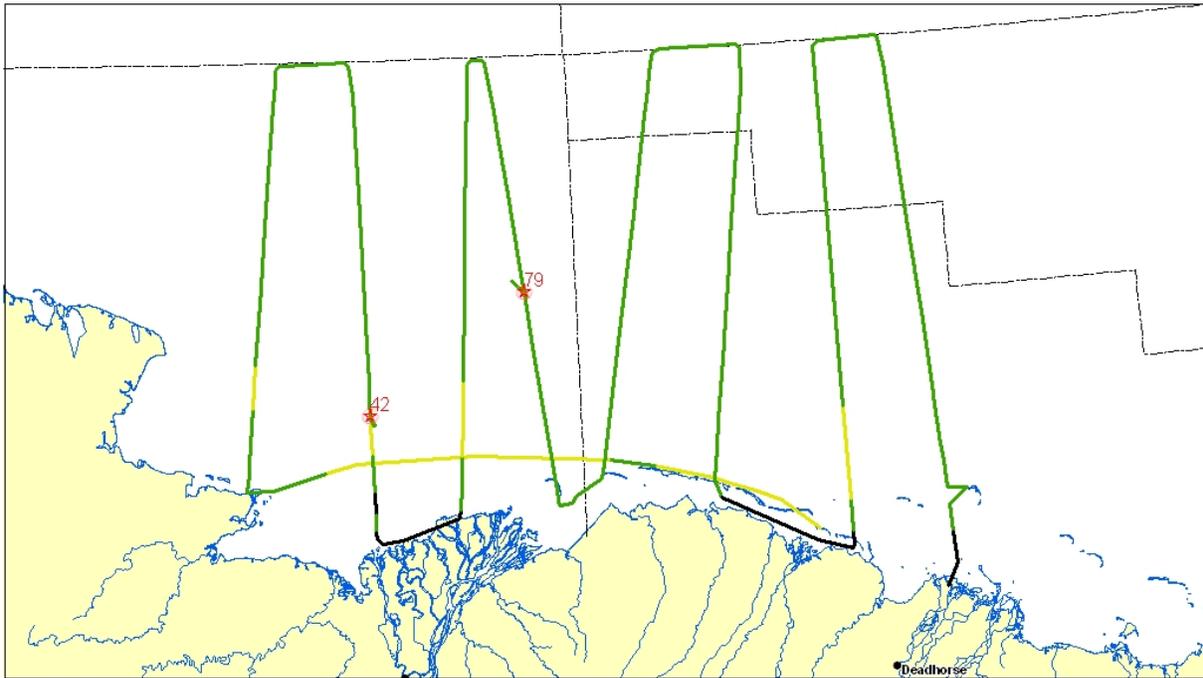
Total bowheads: 2	Start time: 10/13/2008 11:41:37 AM	End time: 10/13/2008 4:46:18 PM
Bowhead sightings: 2	Transect minutes: 207	Transect km: 715.1
Bowheads on transect: 2	Connect minutes: 22	Connect km: 79.9
Bowhead calves: 0	Trans+Con minutes: 229	Trans+Con km: 795
Bowhead calves on transect: 0	Search minutes: 64	Search km: 157.3
Bowhead repeats: 0	Total minutes: 305	Total km: 992.9
Possible repeats: 0	Deadhead minutes: 12	Deadhead km: 40.6
Total gray whales: 0	Search blocks: 1, 3, 11, 2, 10	
Total belugas: 0	Transect blocks: 3, 1, 2	
Other whale sightings: 0		
Total walrus: 0		
Total bear: 22		

Event	Lat	Long	Block	Species	Total	Repeat	Calves	Swim direction	Swim Speed	Behavior	On effort
42	70.68	-151.11	3	bowhead	1	no	0	299	slow	swim	True
79	70.89	-150.27	3	bowhead	1	no	0	-1	unknown	feed	True

Flightlines by Sea State

- B0 - B2
- B3, B4
- B5, B6
- B7 - B12
- n/a

**Minerals Management Service
Bowhead Whale Aerial Survey Program
Flight 37, 10/13/2008**



Meteorological/Oceanographic Summary, Flight 37 Date: 10/13/2008

Event	Lat	Long	Time	Type	% Ice	SeaState	Sky	Vis impeded left	Vis impeded right
1	70.23	-148.46	11:41:37 AM	.	-1	.	overcast	.	.
2	70.4	-148.74	11:47:11 AM	.	-1	.	overcast	.	.
3	70.44	-148.77	11:48:23 AM	grease/new	60	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	3-5 km
4	70.5	-148.97	11:50:49 AM	grease/new	30	B4 numerous caps, 11-16 kt	partly cloudy	5-10 km	3-5 km
5	70.52	-149.08	11:51:52 AM	new + broken floe	30	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	3-5 km
6	70.54	-149.25	11:53:24 AM	new + broken floe	10	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	1-2 km

7	70.54	- 149.32	11:54:02 AM	new + broken floe	10	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	3-5 km
8	70.57	- 149.62	11:56:44 AM	new + broken floe	10	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
9	70.58	- 149.86	11:58:46 AM	new + broken floe	2	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	5-10 km
10	70.6	- 150.57	12:04:41 PM	new + broken floe	10	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	5-10 km
11	70.6	- 151.19	12:09:53 PM	grease/new	40	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	3-5 km
12	70.58	- 151.36	12:11:22 PM	grease/new	70	B1 ripples, 1-3 kt	partly cloudy	5-10 km	3-5 km
13	70.55	- 151.63	12:13:44 PM	grease/new	90	B0 glassy, <1 kt	partly cloudy	5-10 km	3-5 km
14	70.55	- 151.78	12:15:55 PM	shorefast	90	B0 glassy, <1 kt	partly cloudy	5-10 km	3-5 km
15	70.58	- 151.76	12:16:56 PM	grease/new	90	B0 glassy, <1 kt	partly cloudy	5-10 km	3-5 km
16	70.6	- 151.76	12:17:39 PM	grease/new	80	B1 ripples, 1-3 kt	partly cloudy	5-10 km	3-5 km
17	70.63	- 151.75	12:18:33 PM	grease/new	80	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
18	70.67	- 151.74	12:19:47 PM	frazzle	90	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
19	70.7	- 151.74	12:20:45 PM	frazzle	90	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	5-10 km
20	70.77	- 151.72	12:23:12 PM	frazzle	90	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
21	70.91	- 151.68	12:27:39 PM	frazzle	90	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
22	71.01	- 151.65	12:31:05 PM	broken floe	1	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
23	71.11	- 151.63	12:34:03 PM	broken floe	1	B1 ripples, 1-3 kt	overcast	5-10 km	5-10 km
24	71.14	- 151.62	12:35:06 PM	broken floe	10	B1 ripples, 1-3 kt	overcast	5-10 km	5-10 km
25	71.19	-151.6	12:36:55 PM	broken floe	10	B1 ripples, 1-3 kt	overcast	5-10 km	5-10 km
26	71.23	- 151.59	12:37:54 PM	broken floe	20	B1 ripples, 1-3 kt	overcast	5-10 km	5-10 km

27	71.27	- 151.58	12:39:13 PM	broken floe	20	B0 glassy, <1 kt	overcast	5-10 km	5-10 km
28	71.29	- 151.57	12:39:55 PM	broken floe	20	B0 glassy, <1 kt	overcast	5-10 km	5-10 km
29	71.3	- 151.55	12:40:21 PM	broken floe	10	B0 glassy, <1 kt	overcast	5-10 km	5-10 km
30	71.3	-151.4	12:41:51 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
31	71.3	-151.2	12:43:47 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
32	71.29	- 151.17	12:44:07 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
33	71.24	- 151.15	12:45:44 PM	new + broken floe	90	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
34	71.13	- 151.15	12:49:21 PM	new + broken floe	90	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
35	71.07	- 151.14	12:51:18 PM	new + broken floe	90	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
36	70.99	- 151.14	12:53:56 PM	broken floe	1	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
38	70.88	- 151.13	12:57:43 PM	broken floe	1	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
39	70.84	- 151.13	12:59:02 PM	frazzle	60	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
40	70.74	- 151.12	1:02:17 PM	frazzle	60	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
41	70.71	- 151.12	1:03:25 PM	frazzle	50	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
42	70.68	- 151.11	1:04:13 PM	frazzle	50	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
43	70.67	- 151.11	1:04:29 PM	frazzle	50	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
44	70.66	- 151.09	1:07:48 PM	frazzle	50	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
45	70.66	- 151.11	1:10:26 PM	no ice	0	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	5-10 km
46	70.61	- 151.11	1:12:06 PM	grease/new	50	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
47	70.57	- 151.11	1:13:17 PM	grease/new	80	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km

48	70.54	-151.11	1:14:15 PM	grease/new	100	n/a	partly cloudy	5-10 km	5-10 km
49	70.51	-151.1	1:15:20 PM	grease/new	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
50	70.47	-151.1	1:16:17 PM	grease/new	100	n/a	partly cloudy	5-10 km	5-10 km
51	70.46	-151.1	1:16:39 PM	grease/new	100	n/a	partly cloudy	5-10 km	5-10 km
52	70.45	-151.07	1:17:13 PM	grease/new	100	n/a	partly cloudy	5-10 km	5-10 km
53	70.46	-150.96	1:18:31 PM	no ice	0	n/a	partly cloudy	0 km	0 km
55	70.49	-150.66	1:22:39 PM	no ice	0	n/a	partly cloudy	0 km	0 km
56	70.51	-150.66	1:23:08 PM	shorefast	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
57	70.55	-150.65	1:24:24 PM	grease/new	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
58	70.6	-150.64	1:26:17 PM	frazzle	30	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	5-10 km
59	70.66	-150.63	1:28:02 PM	no ice	0	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	5-10 km
60	70.69	-150.62	1:29:01 PM	broken floe	1	B3 scattered caps, 7-10 kt	partly cloudy	5-10 km	5-10 km
61	70.74	-150.62	1:30:35 PM	broken floe	2	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
62	70.89	-150.59	1:35:44 PM	broken floe	30	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
63	70.99	-150.58	1:38:50 PM	broken floe	30	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
64	71.16	-150.55	1:44:16 PM	broken floe	10	B1 ripples, 1-3 kt	partly cloudy	3-5 km	5-10 km
66	71.22	-150.54	1:46:15 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	3-5 km	3-5 km
67	71.25	-150.53	1:47:10 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	3-5 km	1-2 km
68	71.29	-150.53	1:48:25 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	3-5 km	1-2 km
69	71.3	-150.5	1:48:50 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	3-5 km

70	71.3	- 150.45	1:49:24 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	3-5 km
71	71.29	- 150.43	1:49:41 PM	broken floe	1	B1 ripples, 1-3 kt	partly cloudy	<1 km	<1 km
72	71.21	- 150.39	1:52:27 PM	broken floe	10	B1 ripples, 1-3 kt	partly cloudy	2-3 km	3-5 km
73	71.18	- 150.38	1:53:19 PM	broken floe	10	B1 ripples, 1-3 kt	partly cloudy	2-3 km	<1 km
74	71.17	- 150.38	1:53:45 PM	broken floe	10	B1 ripples, 1-3 kt	partly cloudy	3-5 km	3-5 km
75	71.06	- 150.34	1:57:14 PM	new + broken floe	20	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
76	71.01	- 150.32	1:58:55 PM	new + broken floe	20	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
78	70.92	- 150.28	2:01:46 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
79	70.89	- 150.27	2:02:45 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
80	70.89	- 150.27	2:02:47 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
81	70.89	- 150.29	2:07:54 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
82	70.91	- 150.34	2:13:02 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
83	70.89	- 150.27	2:14:31 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
84	70.79	- 150.24	2:17:39 PM	broken floe	2	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
85	70.69	-150.2	2:20:48 PM	broken floe	1	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
86	70.59	- 150.16	2:24:19 PM	grease/new	30	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
87	70.56	- 150.15	2:25:08 PM	grease/new	60	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
88	70.54	- 150.15	2:25:51 PM	grease/new	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
89	70.52	- 150.14	2:26:29 PM	shorefast	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
90	70.51	- 150.14	2:26:44 PM	shorefast	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km

91	70.51	- 150.07	2:27:51 PM	shorefast	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
92	70.53	- 150.05	2:28:20 PM	grease/new	80	B1 ripples, 1-3 kt	overcast	5-10 km	5-10 km
93	70.55	- 149.91	2:30:28 PM	grease/new	40	B1 ripples, 1-3 kt	overcast	5-10 km	5-10 km
94	70.58	- 149.89	2:31:17 PM	broken floe	1	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
95	70.67	- 149.84	2:34:18 PM	broken floe	2	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
96	70.79	- 149.78	2:38:32 PM	broken floe	1	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
97	70.91	- 149.72	2:42:22 PM	broken floe	5	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
98	71.01	- 149.67	2:45:40 PM	broken floe	10	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
99	71.07	- 149.64	2:47:39 PM	new + broken floe	30	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
100	71.17	- 149.59	2:50:49 PM	new + broken floe	50	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
101	71.19	- 149.57	2:51:28 PM	new + broken floe	60	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
102	71.21	- 149.56	2:52:16 PM	grease/new	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
103	71.28	- 149.53	2:54:19 PM	grease/new	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
104	71.3	- 149.52	2:54:54 PM	grease/new	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
105	71.3	- 149.47	2:55:26 PM	grease/new	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
107	71.3	- 149.05	2:59:30 PM	grease/new	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
108	71.3	- 149.04	2:59:48 PM	grease/new	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
109	71.22	- 149.05	3:02:04 PM	grease/new	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
110	71.13	- 149.08	3:05:01 PM	new + broken floe	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
111	71.11	- 149.09	3:05:43 PM	new + broken floe	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km

112	70.96	-149.15	3:10:35 PM	grease/new	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
113	70.91	-149.17	3:12:13 PM	broken floe	1	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
114	70.85	-149.2	3:14:17 PM	grease/new	60	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
115	70.82	-149.21	3:15:16 PM	broken floe	2	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
116	70.79	-149.22	3:16:23 PM	broken floe	2	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
118	70.78	-149.22	3:19:20 PM	broken floe	1	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
119	70.64	-149.27	3:23:33 PM	no ice	0	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
120	70.59	-149.29	3:25:09 PM	broken floe	1	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
121	70.54	-149.31	3:26:49 PM	broken floe	1	B2 sm waves, 4-6 kt	partly cloudy	5-10 km	5-10 km
122	70.51	-149.28	3:28:01 PM	grease/new	100	n/a	partly cloudy	5-10 km	5-10 km
123	70.42	-148.79	3:33:55 PM	grease/new	100	n/a	partly cloudy	5-10 km	5-10 km
124	70.41	-148.61	3:35:58 PM	grease/new	100	n/a	partly cloudy	5-10 km	5-10 km
125	70.41	-148.6	3:36:18 PM	shorefast	100	n/a	partly cloudy	3-5 km	2-3 km
126	70.44	-148.61	3:37:05 PM	grease/new	90	B0 glassy, <1 kt	overcast	3-5 km	2-3 km
127	70.49	-148.61	3:38:58 PM	no ice	0	B3 scattered caps, 7-10 kt	overcast	5-10 km	2-3 km
128	70.66	-148.61	3:44:27 PM	broken floe	2	B2 sm waves, 4-6 kt	overcast	5-10 km	5-10 km
129	70.73	-148.62	3:46:51 PM	grease/new	60	B2 sm waves, 4-6 kt	overcast	5-10 km	5-10 km
130	70.75	-148.62	3:47:37 PM	grease/new	90	B0 glassy, <1 kt	overcast	5-10 km	5-10 km
131	70.88	-148.62	3:51:45 PM	new + broken floe	70	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
132	70.93	-148.62	3:53:22 PM	new + broken floe	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km

133	71.08	- 148.63	3:58:29 PM	new + broken floe	80	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
134	71.24	- 148.64	4:03:58 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
135	71.29	- 148.64	4:05:39 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
136	71.3	-148.6	4:06:14 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
137	71.3	-148.3	4:09:32 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
138	71.29	- 148.28	4:09:48 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
139	71.25	- 148.26	4:11:12 PM	grease/new	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
140	71.1	- 148.23	4:16:20 PM	grease/new	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
141	70.96	-148.2	4:20:59 PM	new + broken floe	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
142	70.81	- 148.16	4:26:07 PM	grease/new	90	B0 glassy, <1 kt	partly cloudy	5-10 km	5-10 km
143	70.68	- 148.13	4:30:25 PM	grease/new	50	B1 ripples, 1-3 kt	partly cloudy	5-10 km	5-10 km
144	70.65	- 148.13	4:31:33 PM	broken floe	2	B1 ripples, 1-3 kt	partly cloudy	3-5 km	5-10 km
145	70.61	- 148.12	4:32:47 PM	broken floe	2	B1 ripples, 1-3 kt	overcast	<1 km	5-10 km
146	70.58	- 148.11	4:33:40 PM	broken floe	2	B1 ripples, 1-3 kt	overcast	<1 km	3-5 km
156	70.33	- 148.13	4:46:18 PM	no ice	0	n/a	overcast	0 km	0 km
147	70.55	-148.1	4:34:40 PM	broken floe	2	B1 ripples, 1-3 kt	overcast	<1 km	<1 km
148	70.5	-148.1	4:36:08 PM	broken floe	2	B1 ripples, 1-3 kt	overcast	<1 km	<1 km
149	70.5	- 147.99	4:37:31 PM	broken floe	2	B1 ripples, 1-3 kt	overcast	<1 km	<1 km
150	70.47	- 148.09	4:41:34 PM	broken floe	2	B1 ripples, 1-3 kt	overcast	<1 km	<1 km
151	70.45	- 148.09	4:42:11 PM	no ice	0	B1 ripples, 1-3 kt	overcast	<1 km	<1 km

152	70.42	- 148.09	4:43:12 PM	grease/new	100	n/a	overcast	<1 km	3-5 km
153	70.39	- 148.08	4:44:00 PM	shorefast	100	n/a	overcast	<1 km	3-5 km
154	70.37	- 148.07	4:44:50 PM	shorefast	100	n/a	overcast	<1 km	3-5 km