ASAMM-Beaufort – Flight 43 – 4 October 2015

Area flown: Block 3, 4 complete transects; block 11, 2 complete transects; block 12, 6 complete transects.
Total hours flown: 8.2 (2 flights)
Total transect hours: 4.2
Number of bowhead whales seen: 164 (8 calves)
Weather and visibility: Skies were partly cloudy to overcast. Sea state ranged from Beaufort 1-4. Visibility varied from <1 to 10 km, with visual impediments including glare, low ceiling, and precipitation. Sea ice cover ranged from 0-85% new/grease ice in the area surveyed. Sea ice was limited to shallow areas nearshore and in Harrison Bay. Transect lines in block 11 were truncated due to fading daylight.
Sightings: Bowhead whales (including 2 dead), 1 unidentified cetacean (dead), belugas (including 31 calves), walruses, unidentified pinnipeds, and small unidentified pinnipeds.

Preliminary Summary, Flight 43 Date: 10/4/2015

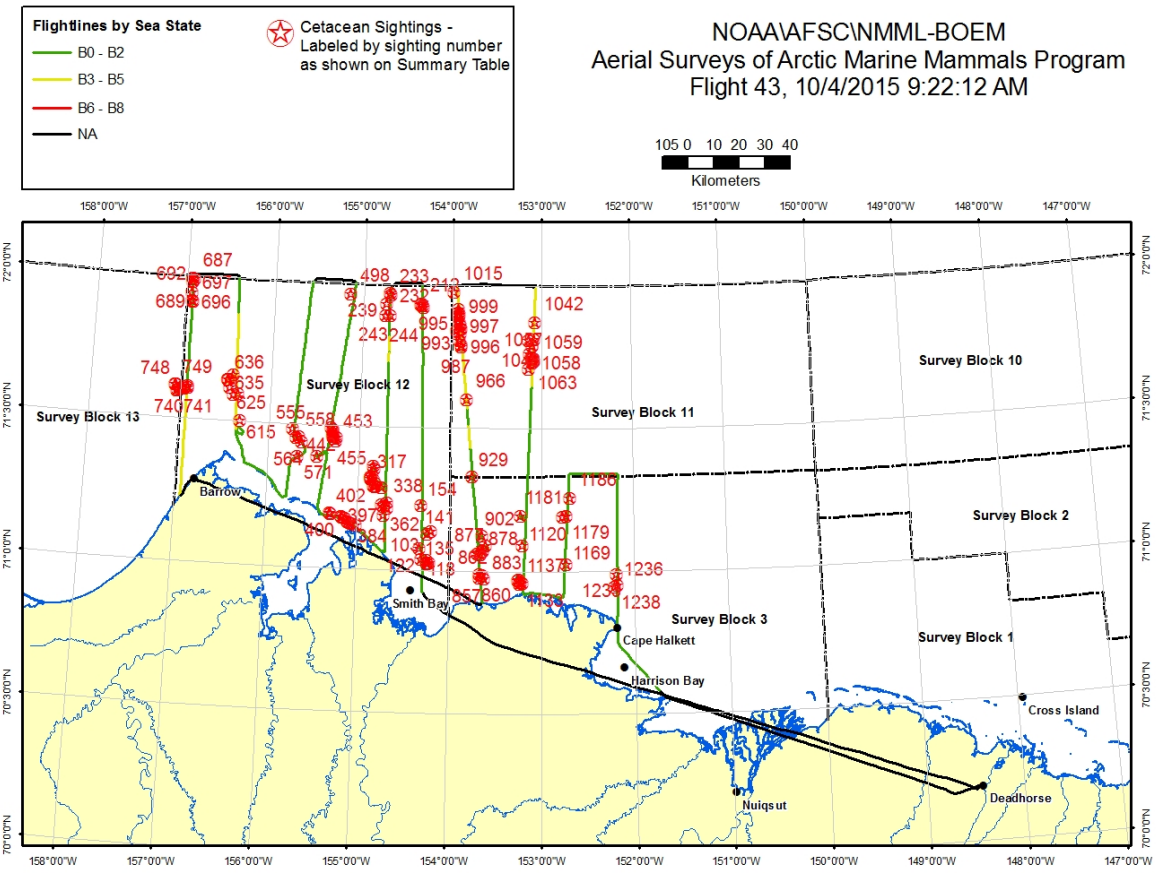
Total bowhead whales: 164	Start time: 10/4/2015 9:32:29 AM	End time: 10/4/2015 7:05:35 PM
Bowhead whale sightings: 90	Transect minutes: 250	Transect km:879.6
Bowhead whales on transect: 92	Circling minutes: 90	Circling km: 263.5
Bowhead whale cow-calf pairs: 8	Trans+Circ minutes: 340	Trans+Circ km: 1143.1
Bowhead whale cow-calf pairs on transect: 4	Search minutes: 40	Search km: 133.9
Bowhead whale repeats: 0	Total minutes: 494	Total km: 1854.5
Possible repeats: 0	Deadhead minutes: 114	Deadhead km: 577.5
Total gray whales: 0	Search blocks: 0, 12, 11, 3	
Total belugas: 227	Transect blocks: 12, 0, 3, 11	
Other whale sightings: 1		
Walruses: Yes		
Total polar bears: 0		

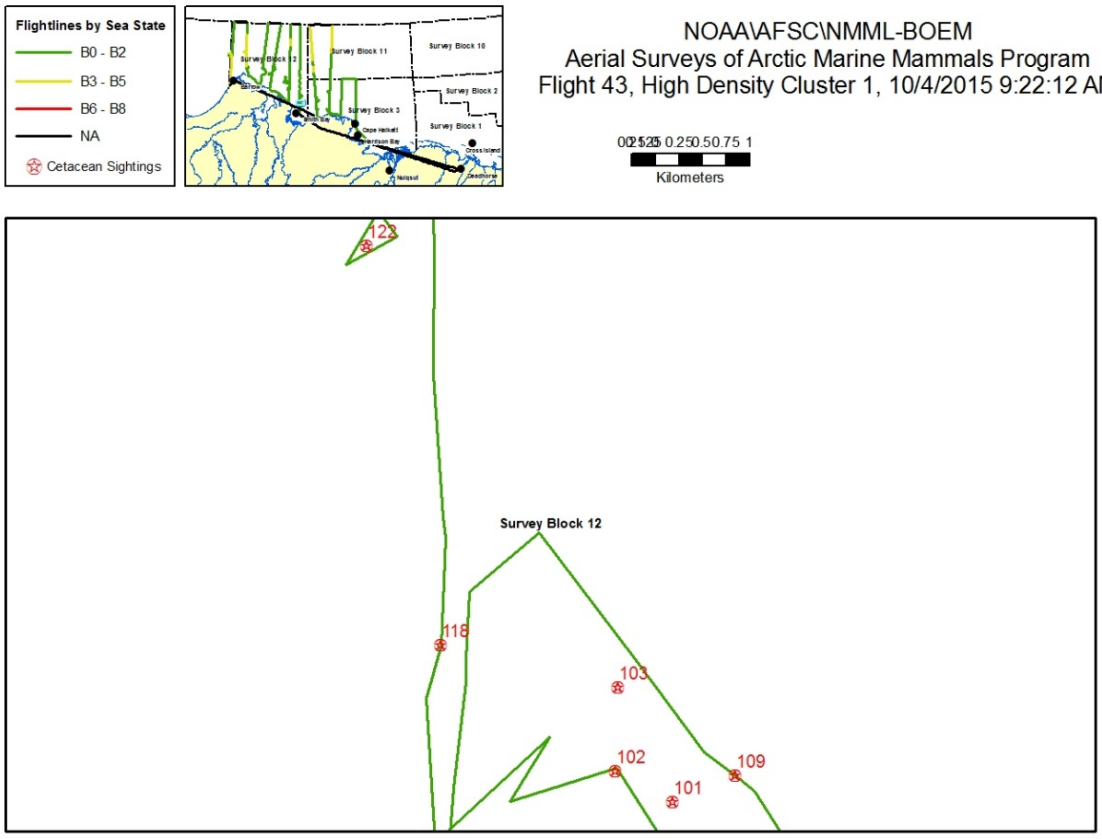
Cetacean Sightings:

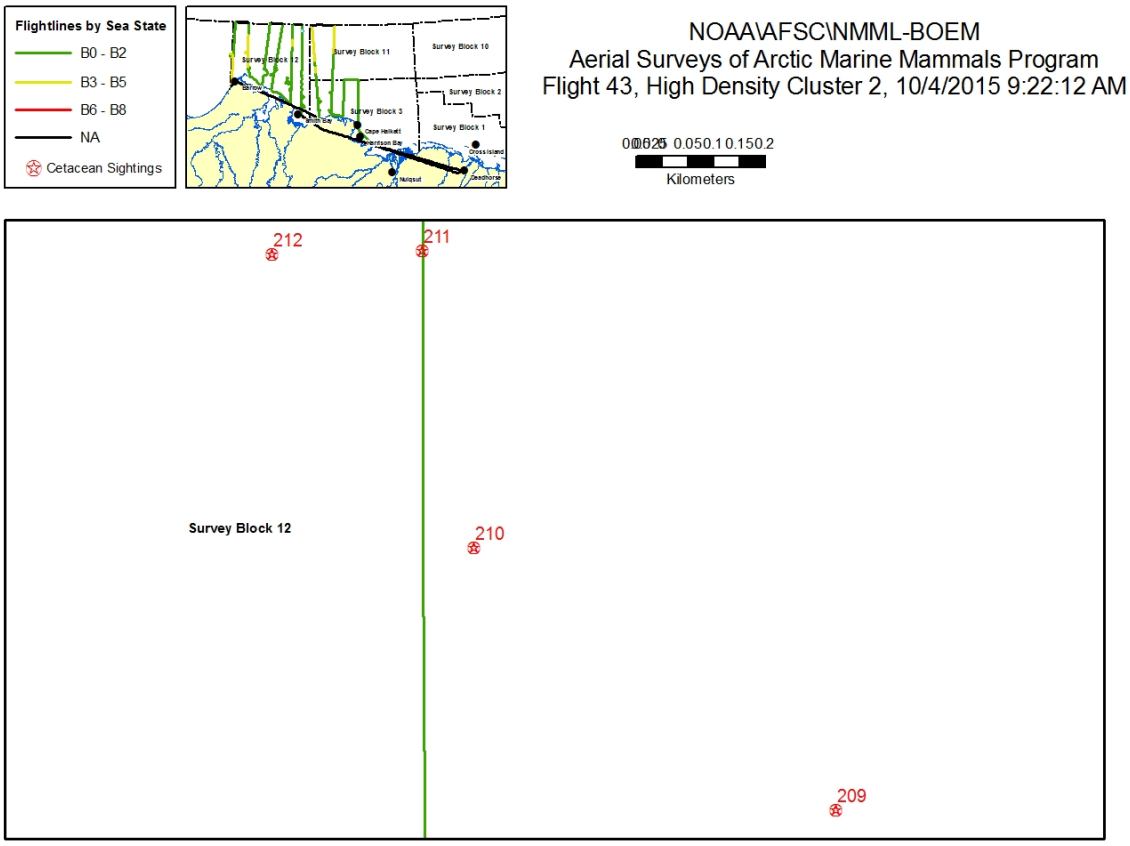
Event	Lat	Long	Block	Species	Total	Calves	Behavior	Swim Direction	On Effort
101	71.02	-154.28	12	bowhead whale	1	0	rest	-1	True
102	71.03	-154.28	12	bowhead whale	2	1	mill	-1	True
103	71.03	-154.28	12	bowhead whale	1	0	rest	-1	True
109	71.03	-154.2	12	bowhead whale	1	0	rest	-1	False
118	71.04	-154.29	12	bowhead whale	1	0	rest	-1	False
122	71.08	-154.29	12	bowhead whale	6	0	feed	-1	True
135	71.14	-154.29	12	bowhead whale	2	0	mill	-1	True
141	71.13	-154.23	12	bowhead whale	2	1	mill	-1	False
154	71.23	-154.3	12	bowhead whale	1	0	swim	270	True
209	71.92	-154.34	12	beluga	1	0	swim	359	True
210	71.93	-154.34	12	beluga	2	1	swim	358	True
211	71.93	-154.34	12	beluga	9	0	swim	-1	True
212	71.93	-154.34	12	beluga	5	3	swim	359	True
232	71.97	-154.7	12	beluga	7	1	swim	9	True
233	71.96	-154.71	12	beluga	13	4	swim	336	True
239	71.93	-154.71	12	beluga	2	0	mill	-1	True
243	71.89	-154.71	12	beluga	2	1	swim	90	True
244	71.89	-154.71	12	beluga	1	0	swim	360	True
289	71.32	-154.7	12	bowhead whale	2	0	feed	-1	True
290	71.3	-154.7	12	bowhead whale	20	0	feed	-1	True
294	71.29	-154.74	12	bowhead whale	1	0	swim	-1	False
296	71.29	-154.81	12	bowhead whale	1	0	feed	-1	False
297	71.29	-154.81	12	beluga	1	0	rest	-1	False
298	71.29	-154.82	12	bowhead whale	1	0	tail slap	-1	False
300	71.29	-154.83	12	bowhead whale	2	0	feed	-1	False
309	71.35	-154.82	12	bowhead whale	2	0	mill	-1	False
310	71.36	-154.84	12	bowhead whale	2	0	feed	-1	False

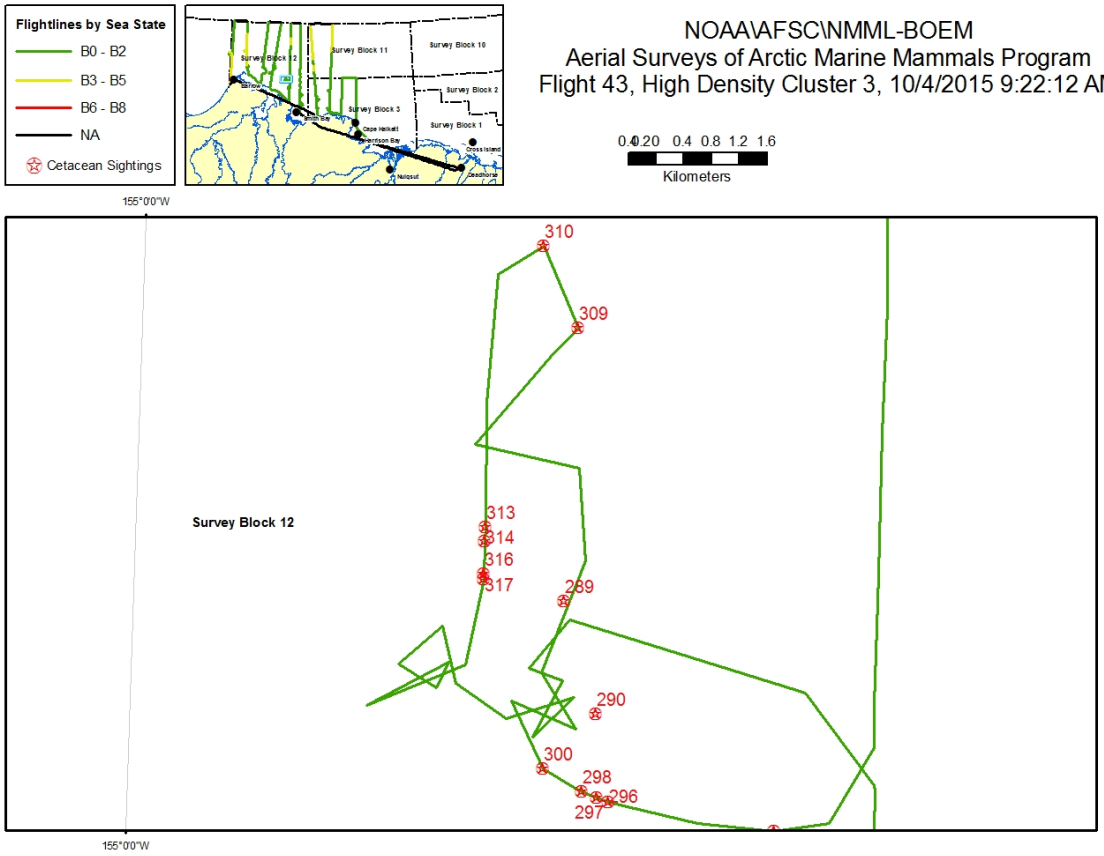
313	71.32	-154.86	12	bowhead whale	1	0	feed	-1	False
314	71.32	-154.86	12	bowhead whale	3	0	feed	-1	False
316	71.32	-154.86	12	bowhead whale	1	0	feed	-1	False
317	71.32	-154.86	12	bowhead whale	1	0	breach	-1	False
338	71.23	-154.7	12	bowhead whale	2	0	tail slap	-1	True
344	71.22	-154.69	12	bowhead whale	1	0	rest	-1	True
345	71.22	-154.7	12	bowhead whale	1	0	rest	72	True
350	71.23	-154.73	12	bowhead whale	2	1	mill	-1	False
362	71.19	-154.7	12	bowhead whale	1	0	rest	-1	True
381	71.15	-155.02	12	bowhead whale	3	0	feed	-1	False
384	71.16	-155.06	12	bowhead whale	1	0	feed	-1	False
385	71.16	-155.08	12	bowhead whale	1	0	feed	-1	False
392	71.16	-155.1	12	bowhead whale	1	0	feed	-1	False
394	71.17	-155.13	12	bowhead whale	1	0	feed	-1	False
396	71.17	-155.16	12	bowhead whale	5	0	feed	-1	False
397	71.17	-155.18	12	bowhead whale	2	0	feed	-1	False
400	71.19	-155.28	12	bowhead whale	1	0	feed	-1	False
402	71.19	-155.3	12	bowhead whale	1	0	feed	-1	False
419	71.39	-155.36	12	bowhead whale	1	0	dead	-1	True
434	71.45	-155.33	12	bowhead whale	2	0	mill	-1	True
435	71.46	-155.33	12	bowhead whale	2	0	mill	-1	True
437	71.46	-155.33	12	bowhead whale	1	0	rest	-1	True
438	71.47	-155.33	12	bowhead whale	1	0	rest	-1	True
440	71.48	-155.32	12	bowhead whale	2	0	mill	-1	True
441	71.48	-155.32	12	bowhead whale	6	0	mill	-1	True
442	71.49	-155.32	12	bowhead whale	2	0	log play	-1	True
453	71.46	-155.25	12	bowhead whale	1	0	feed	-1	False
455	71.44	-155.26	12	bowhead whale	1	0	rest	-1	False
498	71.96	-155.11	12	beluga	1	0	swim	128	True
555	71.48	-155.72	12	bowhead whale	1	0	swim	-1	True
558	71.46	-155.73	12	bowhead whale	1	0	swim	274	True
562	71.45	-155.7	12	bowhead whale	3	0	mill	-1	False
564	71.44	-155.63	12	bowhead whale	1	0	rest	-1	False
571	71.38	-155.67	12	bowhead whale	1	0	rest	-1	False
615	71.5	-156.37	12	bowhead whale	1	0	swim	298	True
622	71.59	-156.38	12	bowhead whale	1	0	dive	268	True
623	71.6	-156.38	12	bowhead whale	1	0	dive	267	True
625	71.62	-156.38	12	bowhead whale	1	0	swim	297	True
628	71.64	-156.39	12	bowhead whale	2	0	swim	272	True
632	71.66	-156.42	12	bowhead whale	1	0	swim	-1	False
634	71.64	-156.48	12	bowhead whale	1	0	swim	-1	False
635	71.64	-156.48	12	bowhead whale	1	0	swim	-1	False
636	71.64	-156.48	12	bowhead whale	1	0	swim	-1	False
685	71.99	-156.93	12	beluga	9	0	swim	277	True
686	71.99	-156.93	12	beluga	4	0	swim	277	True
687	71.99	-156.93	12	beluga	1	0	swim	277	True
689	71.97	-156.94	12	beluga	5	0	swim	273	True
692	71.94	-156.94	12	beluga	8	2	swim	298	True
696	71.91	-156.93	12	beluga	2	1	swim	269	True
697	71.91	-156.93	12	beluga	1	0	swim	270	True
727	71.61	-156.93	12	bowhead whale	2	0	mill	-1	True
729	71.6	-156.93	12	bowhead whale	1	0	rest	-1	True
735	71.61	-156.92	12	bowhead whale	2	1	mill	-1	False
737	71.61	-156.97	12	bowhead whale	1	0	swim	-1	False
739	71.6	-157.01	13	bowhead whale	1	0	rest	-1	False
740	71.6	-157.03	13	bowhead whale	7	1	mill	-1	False
741	71.59	-157.04	13	bowhead whale	1	0	rest	-1	False
748	71.61	-157.06	13	bowhead whale	1	0	rest	-1	False
749	71.62	-157.05	13	bowhead whale	1	0	rest	-1	False
852	70.98	-153.66	3	bowhead whale	1	0	swim	264	True
857	70.97	-153.61	3	bowhead whale	1	0	feed	-1	False
860	70.97	-153.66	3	bowhead whale	1	0	rest	-1	False
862	70.99	-153.66	3	bowhead whale	1	0	rest	-1	False
868	71.06	-153.68	3	bowhead whale	2	0	feed	-1	True
869	71.06	-153.68	3	bowhead whale	1	0	swim	264	True
877	71.07	-153.63	3	bowhead whale	1	0	feed	-1	False

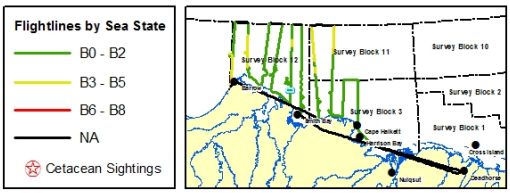
878	71.07	-153.64	3	bowhead whale	1	0	rest	-1	False
883	71.08	-153.69	3	bowhead whale	4	1	feed	-1	True
902	71.12	-153.7	3	bowhead whale	3	1	feed	-1	True
929	71.33	-153.75	3	bowhead whale	1	1	dead	-1	True
966	71.6	-153.83	11	unid cetacean	1	0	dead	-1	True
987	71.78	-153.89	11	beluga	10	0	swim	266	True
989	71.79	-153.89	11	beluga	4	0	swim	265	True
991	71.81	-153.89	11	beluga	23	3	swim	236	True
993	71.83	-153.9	11	beluga	1	0	swim	266	True
995	71.84	-153.9	11	beluga	2	0	swim	264	True
996	71.85	-153.91	11	beluga	1	0	swim	264	True
997	71.85	-153.91	11	beluga	1	0	swim	264	True
999	71.86	-153.91	11	beluga	9	1	swim	264	True
1000	71.87	-153.91	11	beluga	8	2	swim	264	True
1003	71.89	-153.92	11	beluga	1	0	swim	263	True
1004	71.9	-153.92	11	beluga	19	2	swim	264	True
1005	71.9	-153.92	11	beluga	1	0	swim	264	True
1007	71.9	-153.92	11	beluga	12	2	swim	266	True
1009	71.92	-153.93	11	beluga	9	2	swim	265	True
1015	71.98	-153.95	11	beluga	8	0	swim	296	True
1042	71.87	-153.08	11	beluga	1	0	swim	241	True
1046	71.81	-153.09	11	beluga	1	0	swim	272	True
1048	71.81	-153.09	11	beluga	1	0	swim	271	True
1050	71.79	-153.09	11	beluga	1	0	swim	274	True
1051	71.79	-153.1	11	beluga	1	0	swim	274	True
1054	71.76	-153.1	11	beluga	1	0	swim	2	True
1055	71.75	-153.1	11	beluga	2	1	swim	272	True
1057	71.75	-153.1	11	beluga	2	0	mill	-1	True
1058	71.74	-153.1	11	beluga	4	0	swim	272	True
1059	71.74	-153.1	11	beluga	2	0	swim	272	True
1061	71.73	-153.1	11	beluga	12	2	swim	274	True
1063	71.71	-153.1	11	beluga	1	0	swim	272	True
1102	71.19	-153.17	3	bowhead whale	2	0	feed	-1	True
1120	71.09	-153.18	3	bowhead whale	1	0	dive	-1	True
1128	70.97	-153.19	3	bowhead whale	1	0	feed	-1	True
1129	70.97	-153.19	3	bowhead whale	4	0	feed	-1	True
1131	70.96	-153.2	3	bowhead whale	3	0	feed	-1	False
1133	70.96	-153.23	3	bowhead whale	1	0	feed	-1	False
1137	70.96	-153.22	3	bowhead whale	1	0	feed	-1	False
1169	71.02	-152.75	3	bowhead whale	1	0	dive	-1	True
1179	71.19	-152.72	3	beluga	1	0	swim	33	True
1181	71.19	-152.72	3	beluga	13	3	swim	63	True
1186	71.26	-152.71	3	beluga	1	0	swim	93	True
1233	70.99	-152.18	3	bowhead whale	1	0	feed	-1	True
1236	70.95	-152.18	3	bowhead whale	1	0	swim	272	True
1238	70.94	-152.18	3	bowhead whale	1	0	rest	-1	True


Flightlines by Sea State
B0 - B2
B3 - B5
B6 - B8
NA
Cetacean Sightings - Labeled by sighting number as shown on Summary Table
NOAA\AFSC\NMML-BOEM
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, 10/4/2015 9:22:12 AM
105 0 10 20 30 40
Kilometers
Survey Block 10
Survey Block 11
Survey Block 12
Survey Block 13
Survey Block 2
Survey Block 3
Survey Block 1
Barrow
Smith Bay
Cape Halkett
Harrison Bay
Cross Island
Nuiqsut
Deadhorse


Flightlines by Sea State
B0 - B2
B3 - B5
B6 - B8
NA
Cetacean Sightings
NOAA\AFSC\NMML-BOEM
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 1, 10/4/2015 9:22:12 AM
Kilometers
Survey Block 12


Flightlines by Sea State
B0 - B2
B3 - B5
B6 - B8
NA
Cetacean Sightings
Survey Block 12
Survey Block 11
Survey Block 10
Survey Block 2
Survey Block 3
Survey Block 1
Cape Halkett
Anderson Bay
Cross Island
Deadhorse
Nuiqsut
NOAA\AFSC\NMML-BOEM
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 2, 10/4/2015 9:22:12 AM
0 0.025 0.05 0.1 0.15 0.2
Kilometers
212
211
Survey Block 12
210
209


Flightlines by Sea State
B0 - B2
B3 - B5
B6 - B8
NA
Cetacean Sightings
Survey Block 12
Survey Block 11
Survey Block 10
Survey Block 2
Survey Block 3
Survey Block 1
Cape Halkett
Anderson Bay
Cross Island
Deadhorse
Nuiqsut
NOAA\AFSC\NMML-BOEM
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 3, 10/4/2015 9:22:12 AM
0 0.20 0.4 0.8 1.2 1.6
Kilometers
155°0'0"W
310
309
Survey Block 12
313
314
316
317
289
290
300
298
296
297
155°0'0"W



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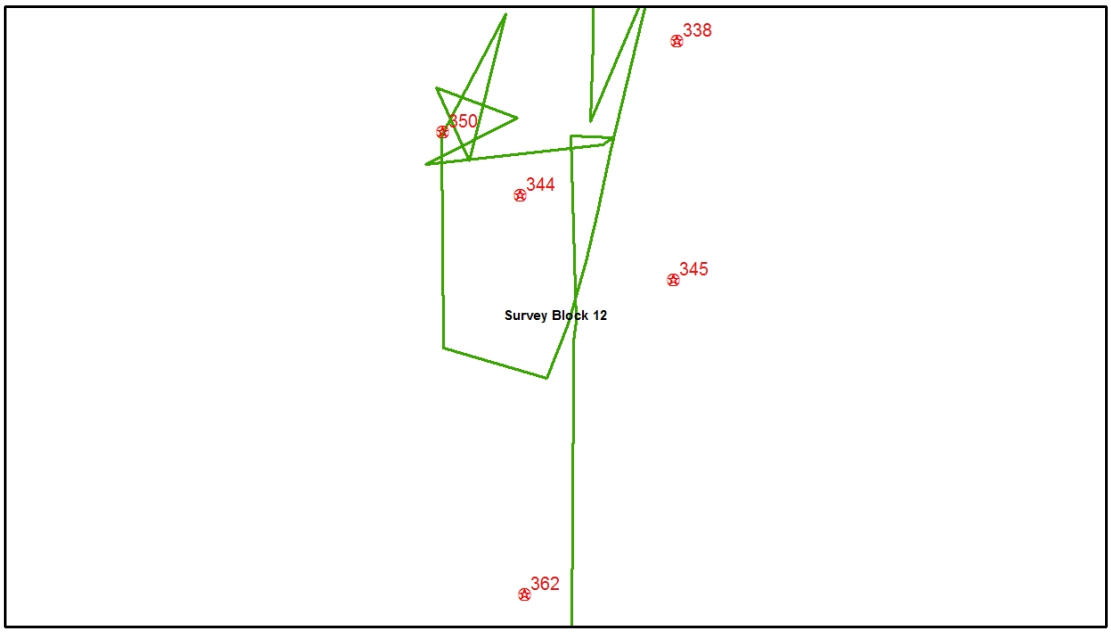
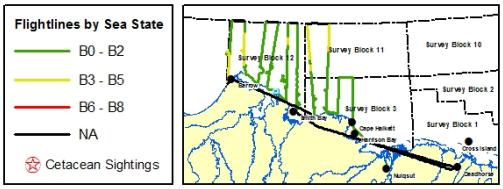
Flight 43, High Density Cluster 4, 10/4/2015 9:22:12 AM

0 0.125 0.25 0.5 0.75 1
Kilometers





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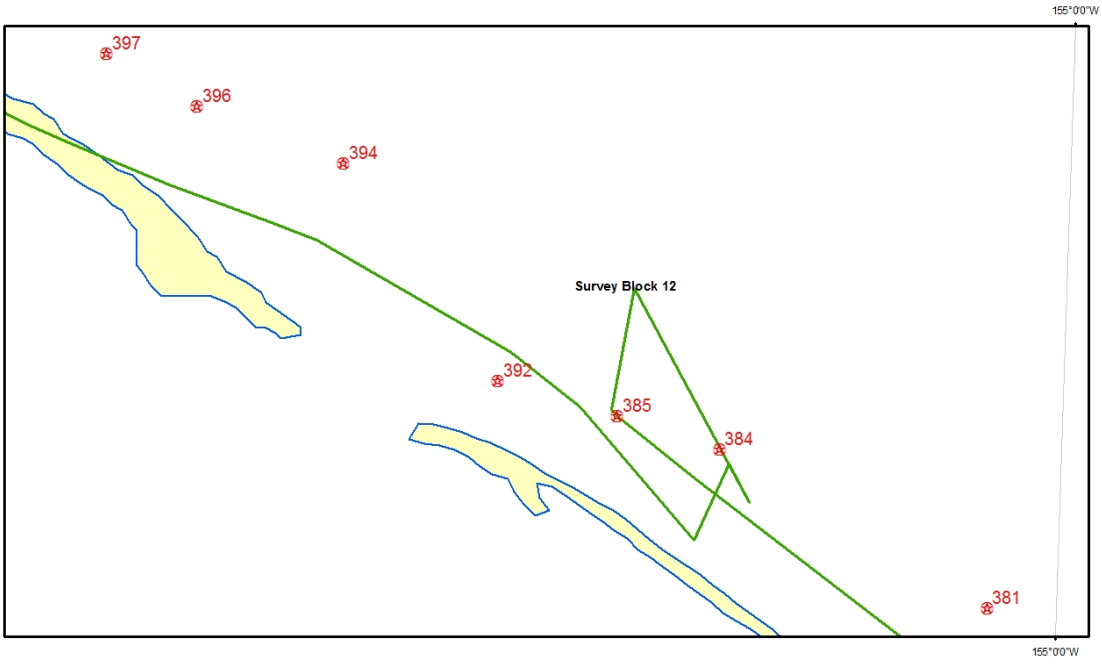
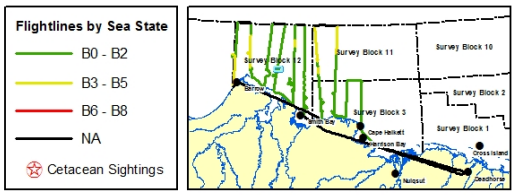
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 5, 10/4/2015 9:22:12 AM

0.2 0.1 0 0.2 0.4 0.6 0.8
Kilometers





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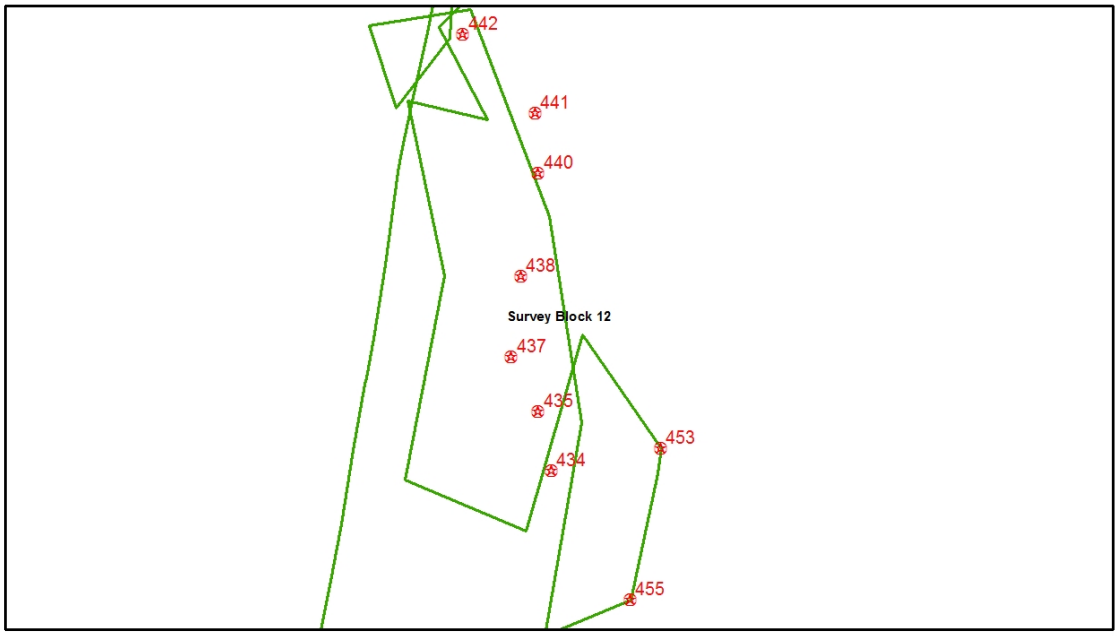
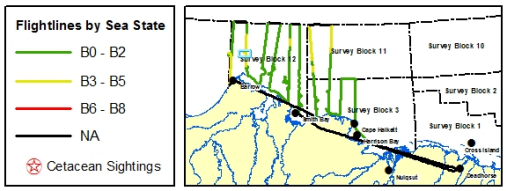
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 6, 10/4/2015 9:22:12 AM

0.0 0.15 0.3 0.6 0.9 1.2
Kilometers





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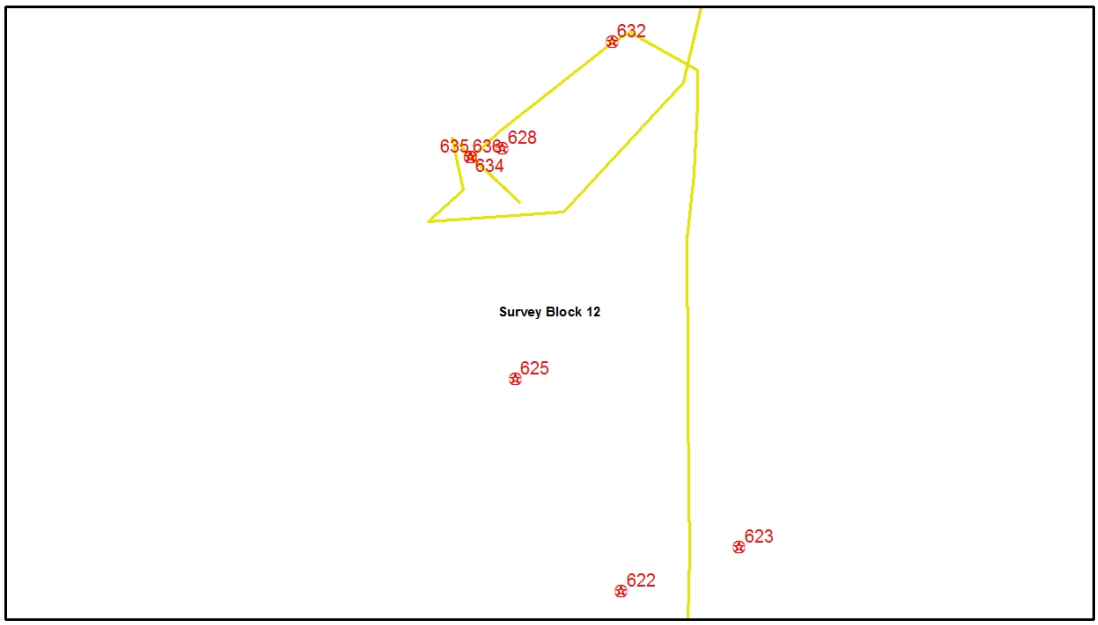
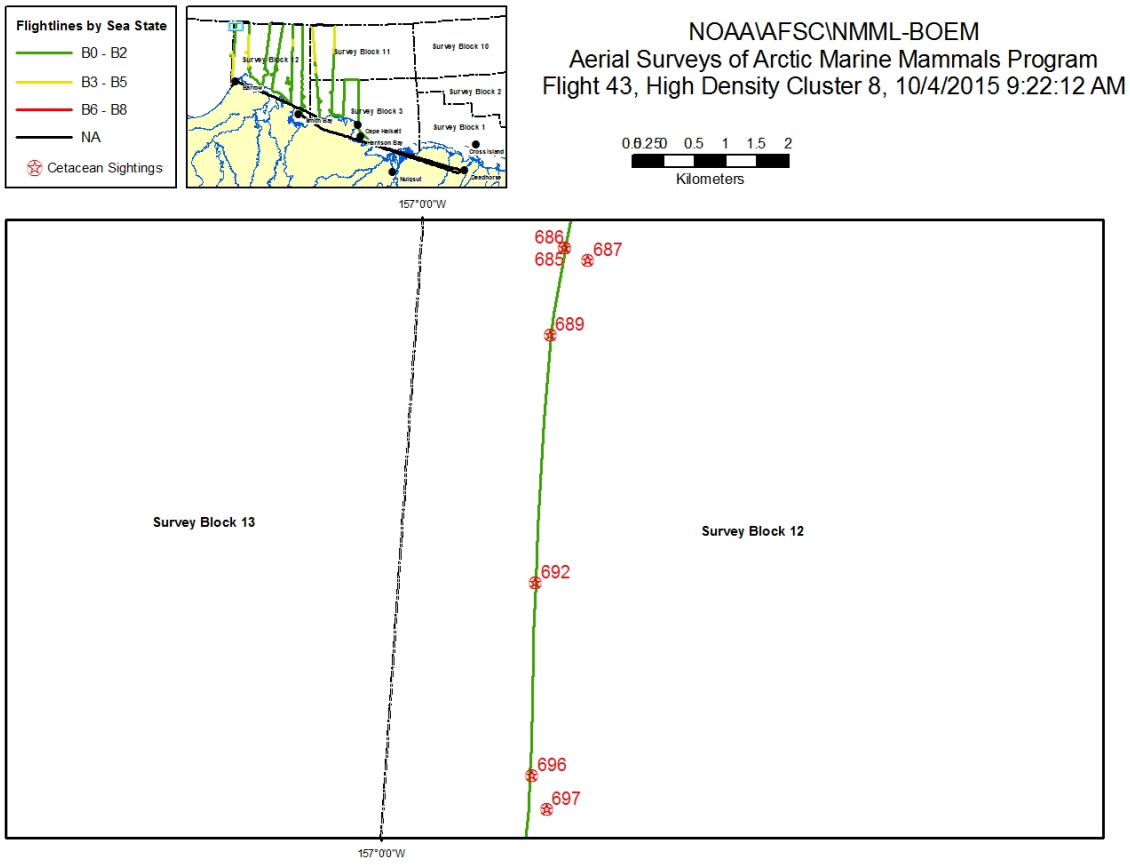
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 7, 10/4/2015 9:22:12 AM

0.0 0.2 0.4 0.8 1.2 1.6
Kilometers





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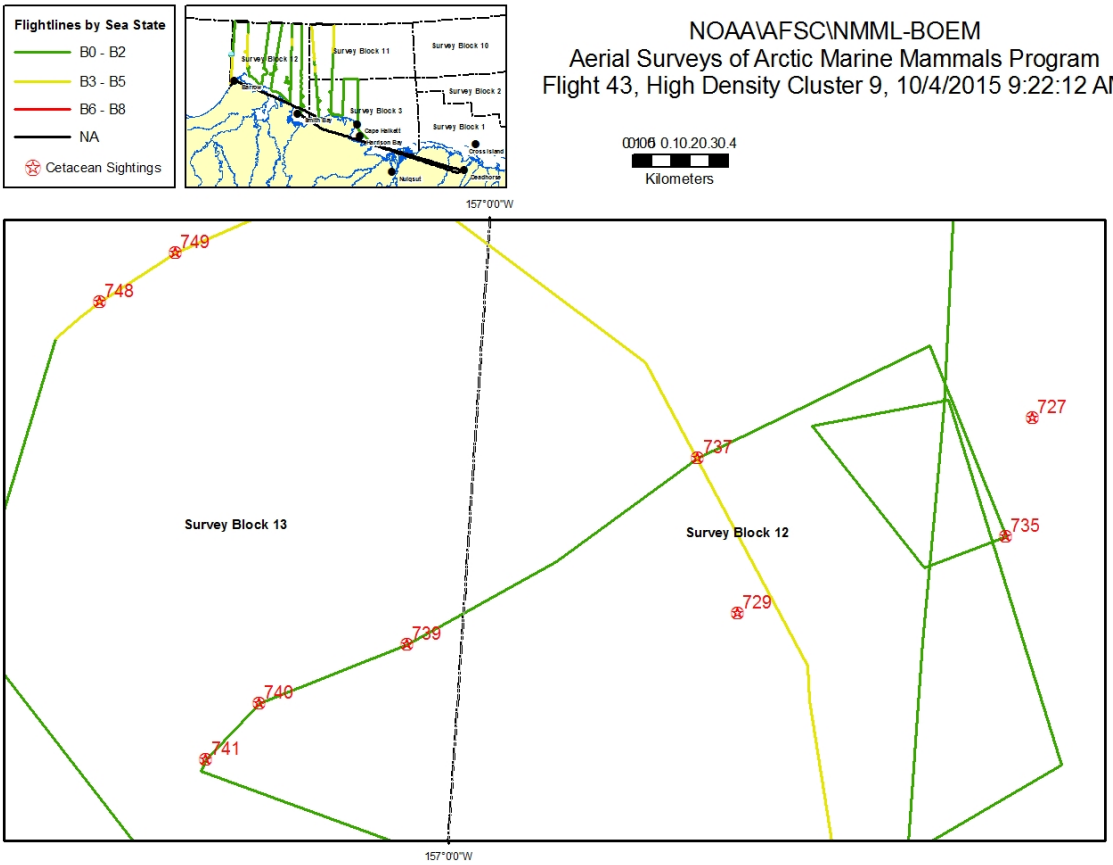
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 8, 10/4/2015 9:22:12 AM

0 0.25 0.5 1 1.5 2
Kilometers



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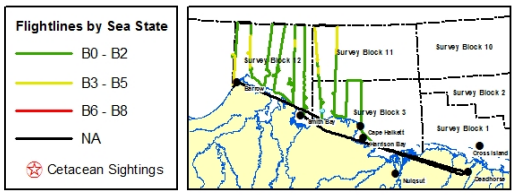
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 9, 10/4/2015 9:22:12 AM

0 0.1 0.2 0.3 0.4
Kilometers



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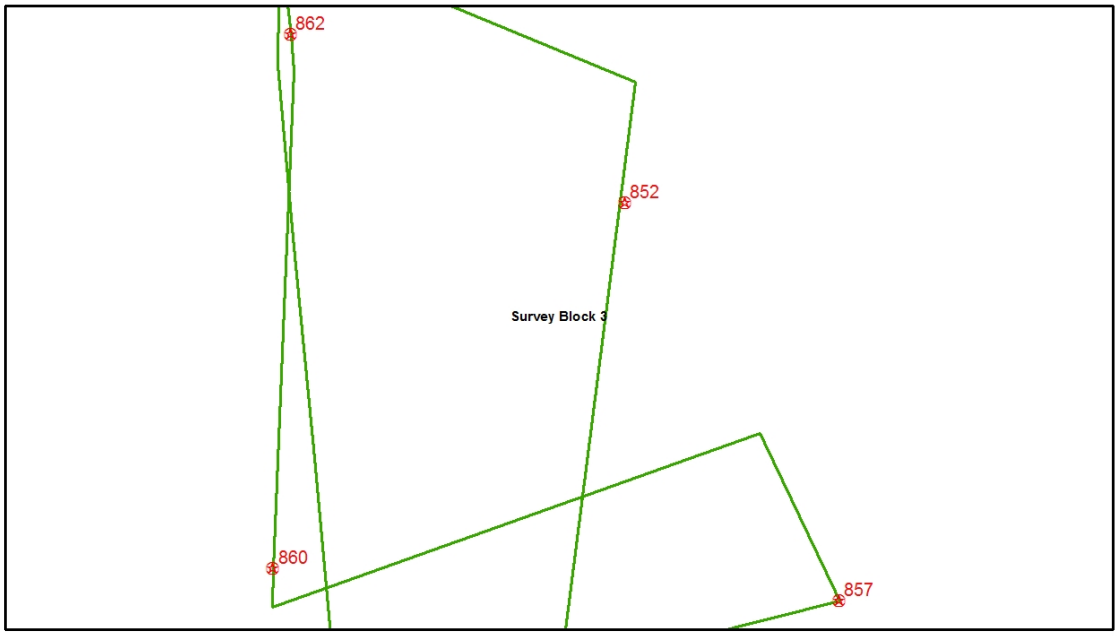
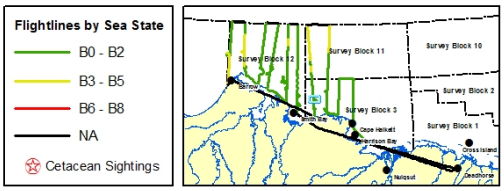
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 10, 10/4/2015 9:22:12 AM

0 0.03 0.06 0.12 0.18 0.24
Kilometers





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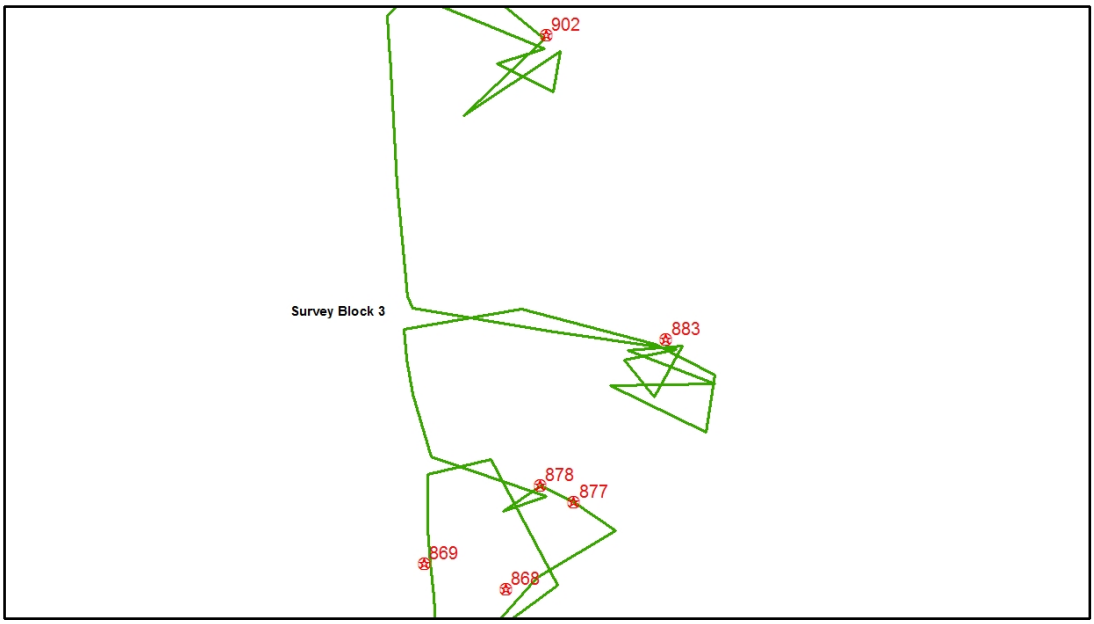
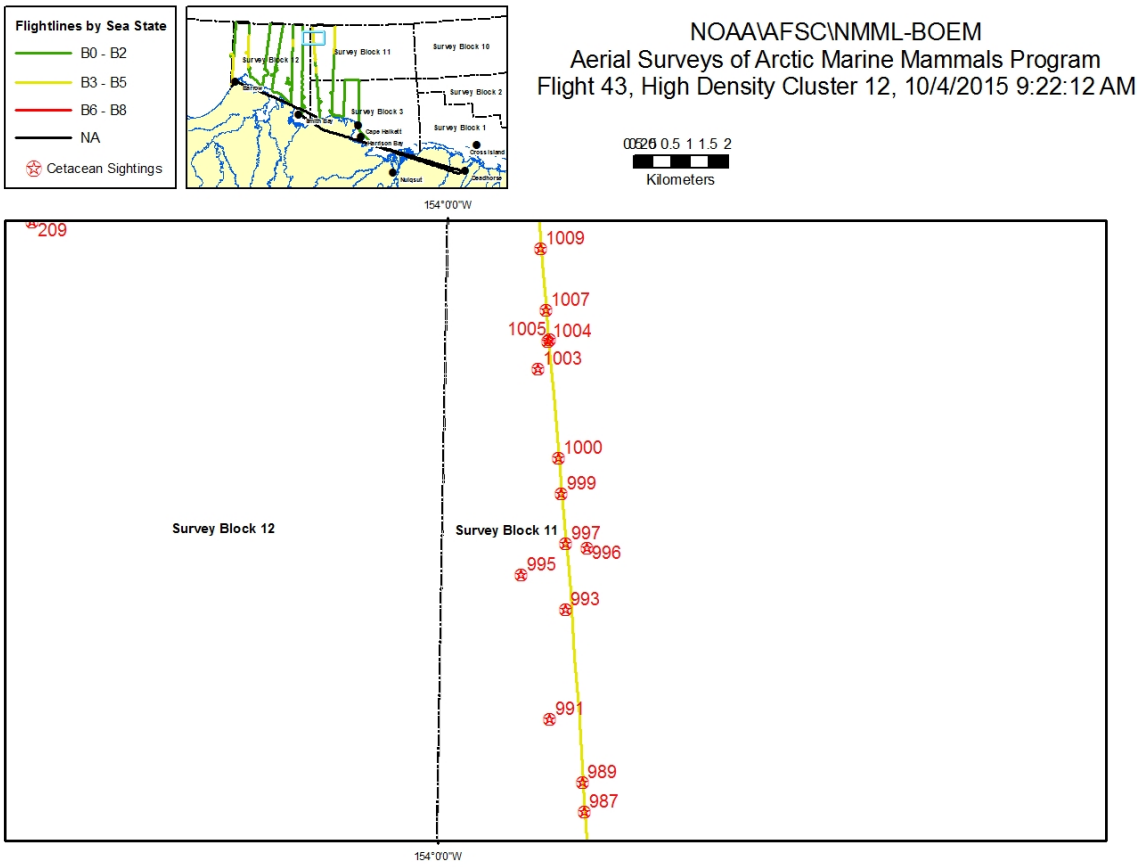
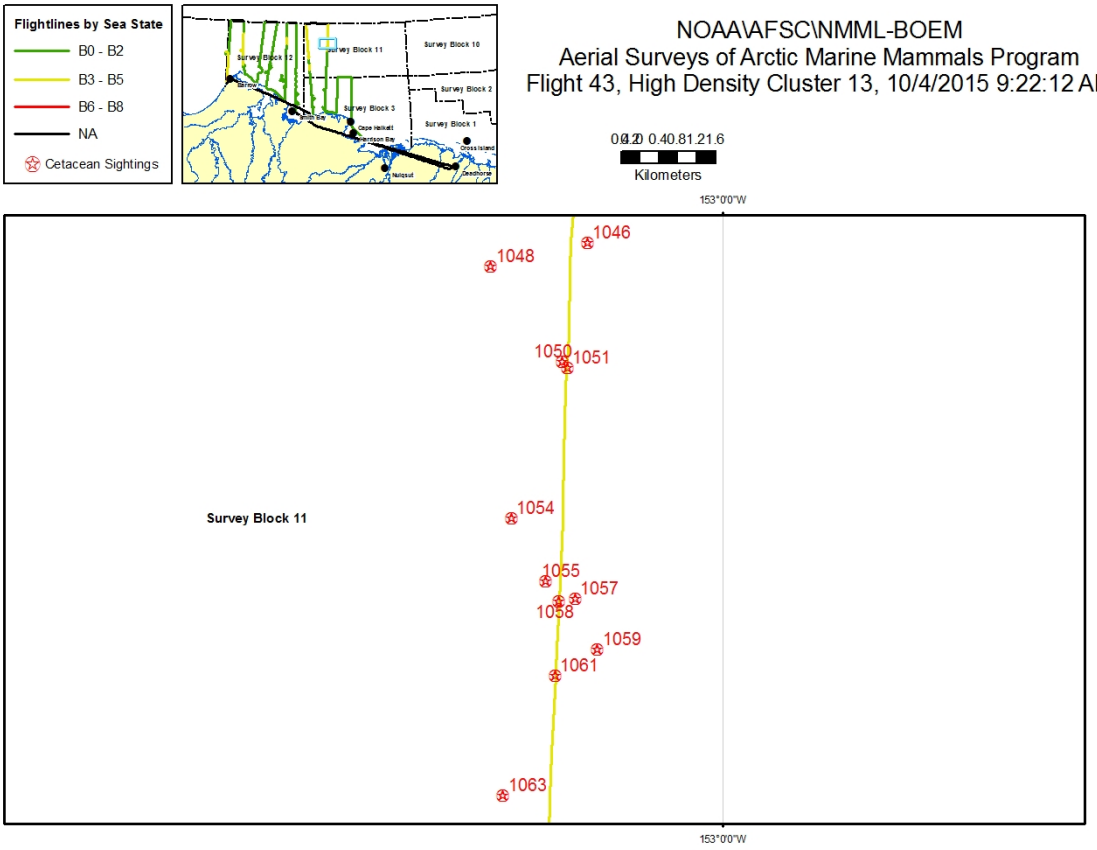
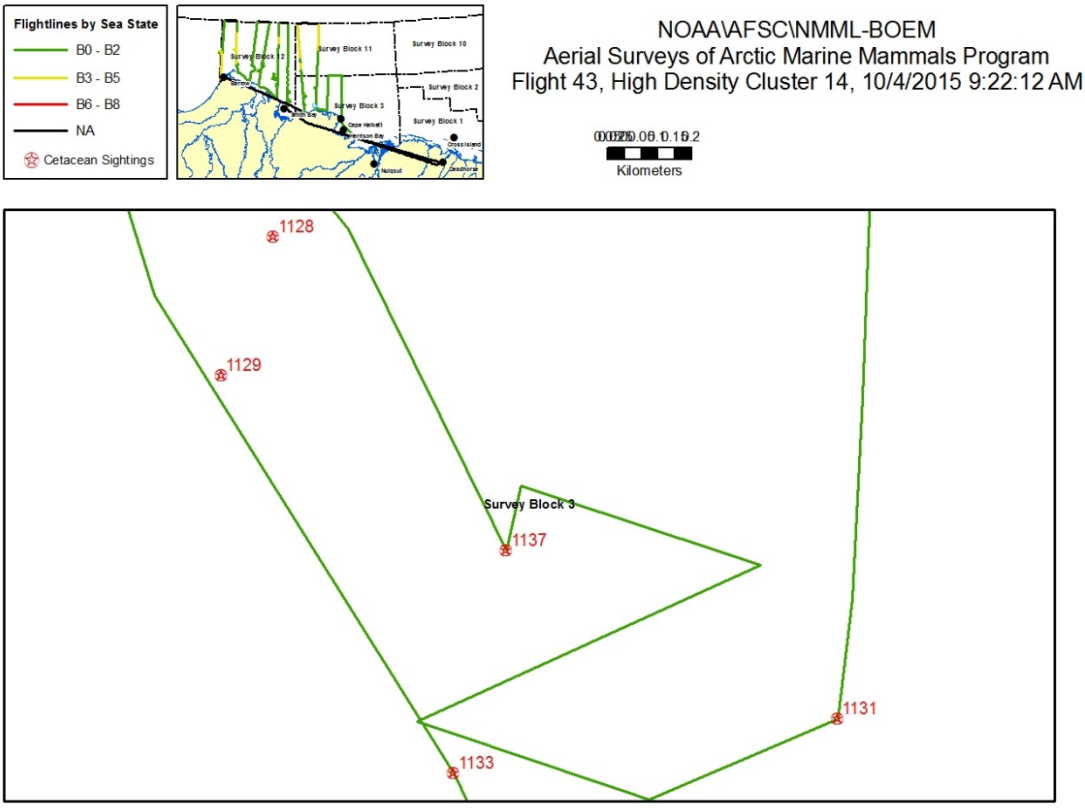
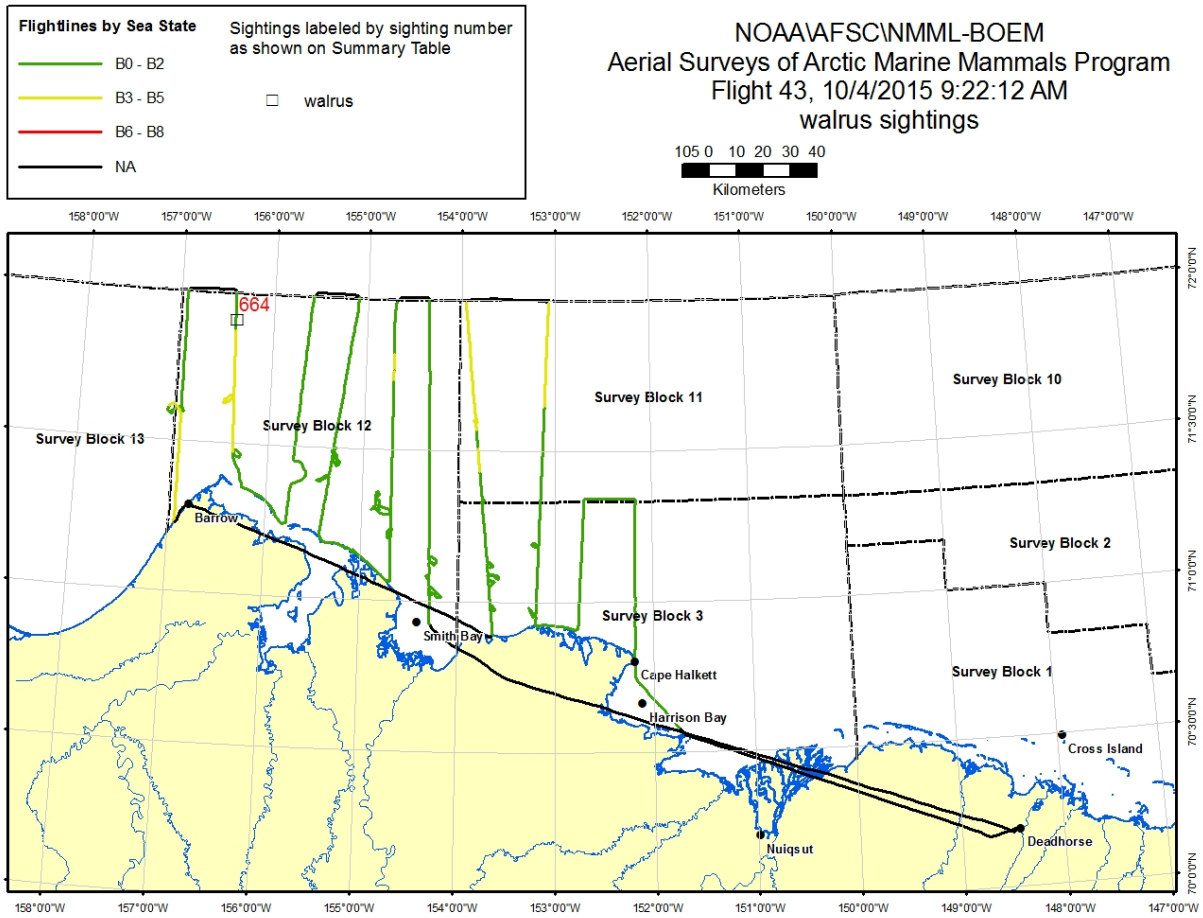
Kilometers




Flightlines by Sea State
B0 - B2
B3 - B5
B6 - B8
NA
Cetacean Sightings
Survey Block 12
Survey Block 11
Survey Block 10
Survey Block 2
Survey Block 3
Survey Block 1
Cape Halkett
Gwendson Bay
Nuiqsut
Cross Island
Deadhorse
NOAA\AFSC\NMML-BOEM
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 12, 10/4/2015 9:22:12 AM
Kilometers
154°0'0"W
209
1009
1007
1005
1004
1003
1000
999
997
996
995
993
991
989
987
Survey Block 12
Survey Block 11
154°0'0"W


Flightlines by Sea State
B0 - B2
B3 - B5
B6 - B8
NA
Cetacean Sightings
Survey Block 12
Survey Block 11
Survey Block 10
Survey Block 2
Survey Block 3
Survey Block 1
Cape Halkett
Gwendson Bay
Nuiqsut
Cross Island
Deadhorse
NOAA\AFSC\NMML-BOEM
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 13, 10/4/2015 9:22:12 AM
Kilometers
153°0'0"W
1046
1048
1050
1051
1054
1055
1057
1058
1059
1061
1063
Survey Block 11
153°0'0"W


Flightlines by Sea State
B0 - B2
B3 - B5
B6 - B8
NA
Cetacean Sightings
NOAA\AFSC\NMML-BOEM
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, High Density Cluster 14, 10/4/2015 9:22:12 AM
Kilometers
1128
1129
Survey Block 3
1137
1131
1133


Flightlines by Sea State
B0 - B2
B3 - B5
B6 - B8
NA
Sightings labeled by sighting number as shown on Summary Table
walrus
NOAA\AFSC\NMML-BOEM
Aerial Surveys of Arctic Marine Mammals Program
Flight 43, 10/4/2015 9:22:12 AM
walrus sightings
105 0 10 20 30 40
Kilometers
664
Survey Block 13
Survey Block 12
Survey Block 11
Survey Block 10
Survey Block 2
Survey Block 3
Survey Block 1
Barrow
Smith Bay
Cape Halkett
Harrison Bay
Cross Island
Deadhorse
Nuiqsut

Bowhead whale sighted breaching in the western Alaskan Beaufort Sea, ~60 km east of Barrow (Event 317), ASAMM-Beaufort Flight 43, 4 October 2015.

Bowhead whale feeding aggregation sighted in the western Alaskan Beaufort Sea, ~60 km ESE of Barrow (Event 290), ASAMM-Beaufort Flight 43, 4 October 2015. The suspended sediment caused by the feeding activity is clearly visible.

Bowhead whale feeding aggregation sighted in the western Alaskan Beaufort Sea, ~60 km ESE of Barrow (Event 290), ASAMM-Beaufort Flight 43, 4 October 2015. These whales were a part of a larger group of ~25 bowhead whales. Five whales are visible in this image, 3 in the upper half and 2 in the lower. The 2 whales in the upper right are coordinated side feeding with their left baleen and lower jaws visible; also note that one whale has a white chin and the other a predominantly black chin. The whale in the upper left is skim feeding with only its rostrum visible; note the larger size of this animal compared to the others in the image. The 2 whales in the lower left of the image are also likely feeding.

Bowhead whale cow/calf pair sighted in the western Alaskan Beaufort Sea, ~100 km SE of Barrow (Event 902), ASAMM-Beaufort Flight 43, 4 October 2015. The cow is barely visible subsurface directly beneath her calf.

Bowhead whale calf sighted taking a breath in the western Alaskan Beaufort Sea, ~100 km SE of Barrow (Event 902), ASAMM-Beaufort Flight 43, 4 October 2015.