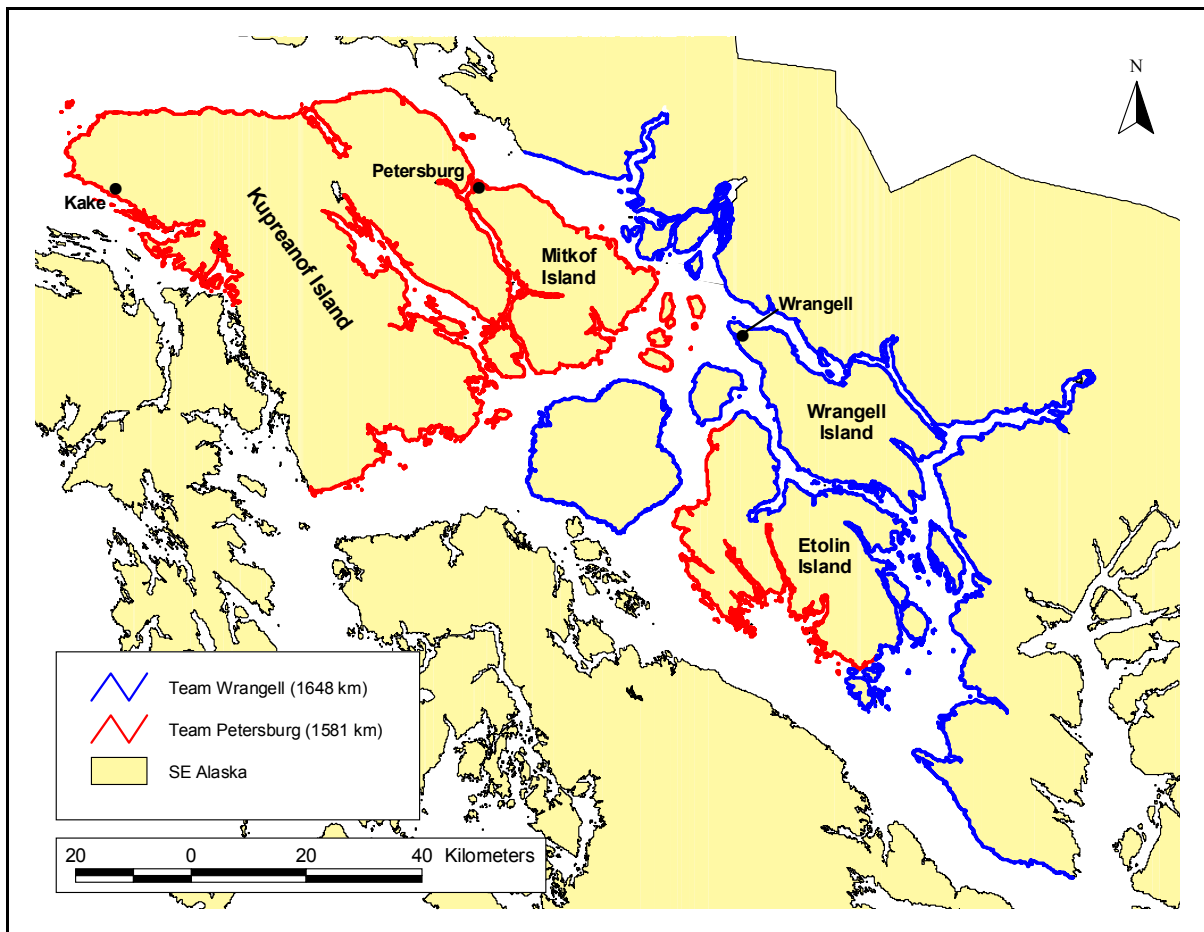


FLIGHT REPORT
ShoreZone Aerial Video Imaging (AVI) Survey
Southeast Alaska
May 4-9, 2008
Team Wrangell (WR)
Team Petersburg (PE)



Prepared for:
NOAA National Marine Fisheries Service
The Nature Conservancy
Alaska State Department of Natural Resources



By:

COASTAL & OCEAN RESOURCES INC.

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ShoreZone is a coastal habitat mapping and classification system in which georeferenced aerial imagery is collected specifically for the interpretation and integration of geological and biological features of the intertidal zone and nearshore environment. Oblique low-altitude aerial video and digital still imagery of the coastal zone is collected during summer low tides (zero tide level or lower), usually from a helicopter flying at <100 m altitude. The flight trackline is recorded at 1-second intervals using Fugawi electronic navigation software and is continuously monitored in-flight to ensure all shorelines have been imaged. Video and still imagery collected are georeferenced and time-synchronized. Video imagery is accompanied by continuous, simultaneous commentary by a geologist and a biologist aboard the aircraft. The imagery and commentary are later used in the definition of discrete along-shore coastal habitat units and the “mapping” of observed physical, geomorphic, sedimentary, and biological features in those units. More than 20 agencies and groups support the ShoreZone Coastal Habitat Mapping Program in Alaska. For more information on the ShoreZone program and its partners, please visit Coastal and Ocean Resources, Inc. web site at <http://www.coastalandoceans.com>.

The purpose of this flight report is to summarize the field activities of the ShoreZone aerial video imaging (AVI) survey conducted out of **Wrangell and Petersburg, Southeast Alaska** during the low-tide window of **May 4-9, 2008**. The survey was conducted by Coastal & Ocean Resources Inc. (CORI, Sidney, British Columbia) under contract with NOAA National Marine Fisheries Service, the Alaska State Department of Natural Resources, and The Nature Conservancy. A coastal ecologist from Archipelago Marine Research Ltd. (AMR, Victoria, British Columbia) was sub-contracted by CORI to provide biological expertise. Table 1 provides a summary of crew affiliations and responsibilities.

The tables and figures on the following pages summarize the extent and location of the AVI data and imagery collected by each team, a total of **3,229 km of shoreline**. Both teams utilized helicopters chartered from Coastal Helicopters in Juneau, Alaska. Imagery was collected looking at the shoreline from the left side of the aircraft with the door removed. A total of 38 mini DV master tapes were collected during the survey and recorded to DVDs (19 tapes per team). This report contains a summary table for each tape, illustrating its location, length, and key geographic points. Maps for each tape are annotated with representative geographic names, trackline times (in hh:mm:ss UTC in 24-hour clock time), and photo numbers. The six-digit UTC time is also imprinted on the video imagery that is provided on DVD with this report.

Representative digital still photos from each day of the survey are provided in the last section of this report. All photos are supplied on DVD, organized by tape number for each team, consistent with the image library. More than 17,600 photos were collected by these two teams.

The shapefiles and GIS data that accompany this report on DVD illustrate the flight trackline positions at 1-second intervals (displayed by tape number), as well as the digitized shoreline segments flown. Within each survey team, data and imagery are linked by a date time code (yyyymmddhhmmss). When processing is complete, all imagery will be posted online at the NOAA ShoreZone web site (<http://www.fakr.noaa.gov/maps/szintro.htm>). We gratefully acknowledge field support provided by the U.S. Forest Service in Wrangell (Tom Cady, Mark Pempek, and Dennis Reed).

Table 1. Survey teams and flight report contents.

Team	Base	Tapes	Pages
Wrangell (WR)	Wrangell, AK	SE08_WR_01 to SE08_WR_19	5 - 44
Petersburg (PE)	Wrangell and Petersburg, AK	SE08_PE_01 to SE08_PE_19	45 - 84
Daily Photos (both teams)			85-104

Table 2. ShoreZone AVI Flight Personnel and Responsibilities: Team Wrangell (WR).

Crew Member	Individual / Affiliation	Responsibilities
<i>Geomorphologist</i>	Kalen Morrow CORI, Sidney BC	survey coordination, videography, geomorphic commentary, post-flight data processing, project reporting
<i>Coastal Ecologist</i>	Mary Morris AMR, Victoria BC	digital photography, biologic commentary
<i>Navigator</i>	Sean Daley CORI, Sidney BC	in-flight navigation, post-flight data processing
<i>Pilot</i>	Bill Snider Coastal Helicopters Juneau, Alaska	

Table 3. ShoreZone AVI Flight Personnel and Responsibilities: Team Petersburg (PE).

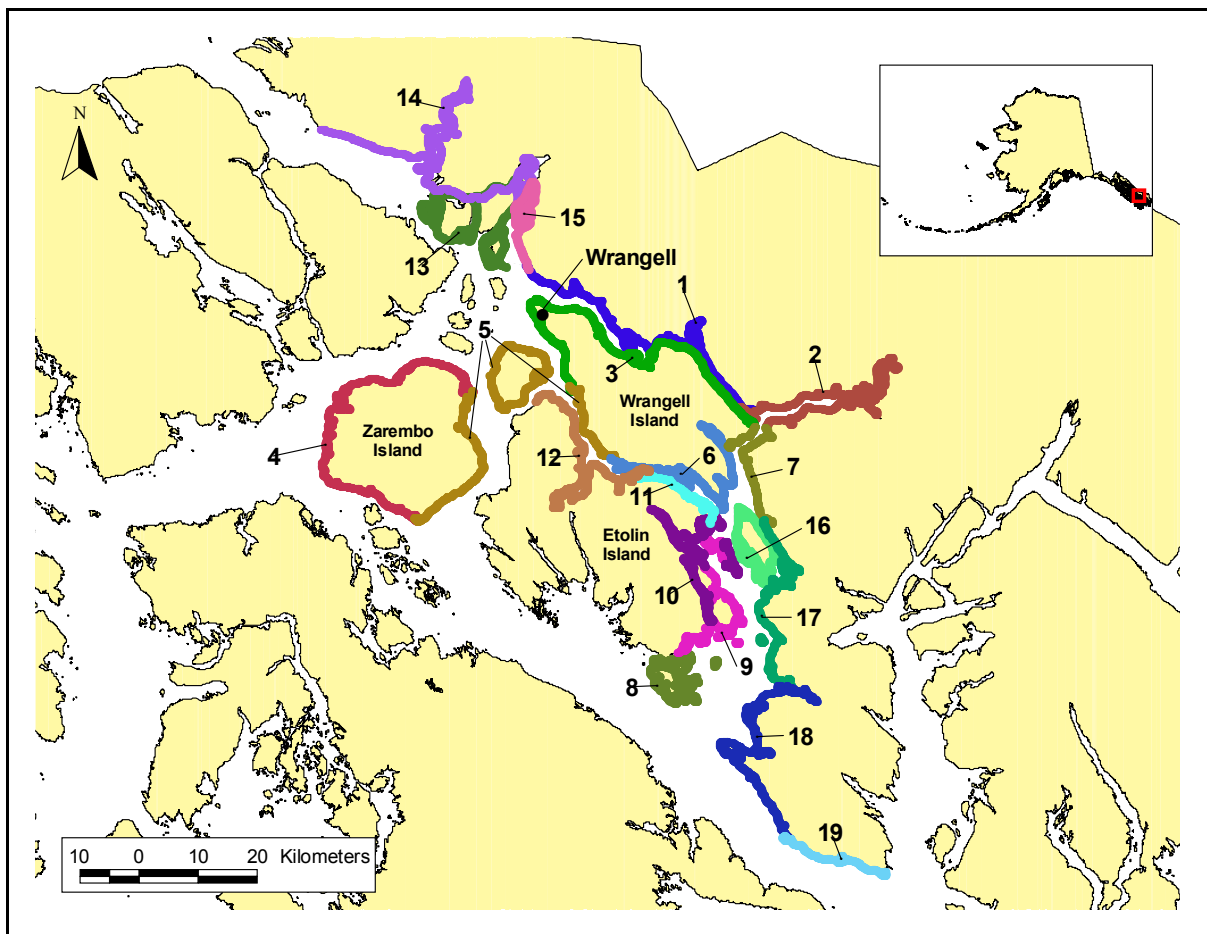
Crew Member	Individual / Affiliation	Responsibilities
<i>Geomorphologist</i>	Jodi Harney CORI, Sidney BC	survey coordination, videography, geomorphic commentary, post-flight data processing, project reporting
<i>Coastal Ecologist</i>	Mandy Lindeberg NOAA NMFS, Juneau	digital photography, biologic commentary
<i>Navigators</i>	Lindsay Sherman Sam Still CORI, Sidney BC	in-flight navigation, post-flight data processing
<i>Pilot</i>	Lewis Hart Coastal Helicopters Juneau, Alaska	

Table 4. Shoreline survey summary, by team and by tape.

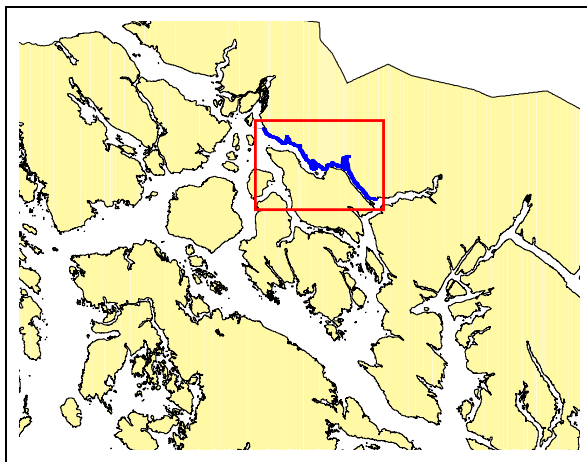
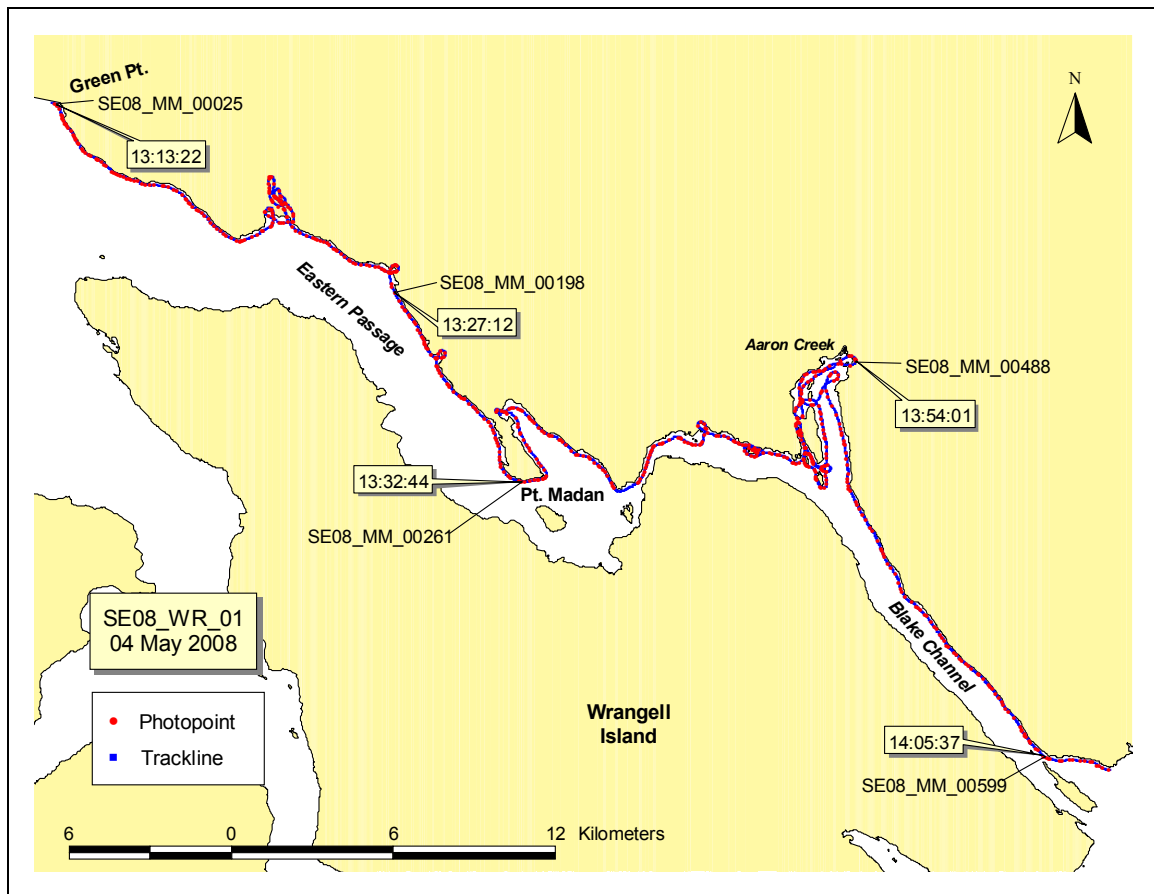
Team	Tape	Location
Wrangell	SE08_WR_01	Eastern Passage, Blake Channel
	SE08_WR_02	Bradfield Canal
	SE08_WR_03	Eastern Passage, Blake Channel
	SE08_WR_04	Zarembo Island
	SE08_WR_05	Zarembo Island, Woronkofski Island, Wrangell Island
	SE08_WR_06	Zimovia Strait, Fool's Inlet, Wrangell Island
	SE08_WR_07	Anan Bay, Frosty Bay, Bradfield Canal
	SE08_WR_08	Onslow Island, Eagle Island, Stone Island
	SE08_WR_09	Brownson Island, Bold Island, Niblack Island
	SE08_WR_10	Canoe Passage, Brownson Island, Menefee Inlet
	SE08_WR_11	South end of Zimovia Strait, Whaletail Cove
	SE08_WR_12	Olive Cove, Anita Bay, North Etolin Island
	SE08_WR_13	Stikine Delta, Farm Island, Dry Island
	SE08_WR_14	Le Conte Bay, Stikine River Delta
	SE08_WR_15	Stikine River Delta
	SE08_WR_16	Deer Island, Ernest Sound
	SE08_WR_17	Seward Passage, Sunny Bay, Cleveland Peninsula
	SE08_WR_18	Vixen Inlet, Union Bay, South Cleveland Peninsula
	SE08_WR_19	South Cleveland Peninsula, Clarence Strait
Petersburg	SE08_PE_01	Northwest Etolin Island
	SE08_PE_02	West Etolin Island
	SE08_PE_03	Rocky Bay, Southwest Etolin Island
	SE08_PE_04	Rocky Bay, Southwest Etolin Island
	SE08_PE_05	Mosman and Burnett Inlets, Southwest Etolin Island
	SE08_PE_06	McHenry Inlet, South Etolin Island
	SE08_PE_07	Delta islands and South Mitkof
	SE08_PE_08	East Mitkof Island and Wrangell Narrows
	SE08_PE_09	Southeast Mitkof Island
	SE08_PE_10	West side Wrangell Narrows
	SE08_PE_11	Northeast Kupreanof Island
	SE08_PE_12	Northwest Kupreanof Island, Kake
	SE08_PE_13	Northwest Kupreanof Island, Kake
	SE08_PE_14	Keku Strait, West Kupreanof Island
	SE08_PE_15	Woewodski Island and south Duncan Canal
	SE08_PE_16	Duncan Canal
	SE08_PE_17	Duncan Canal
	SE08_PE_18	Pt. Barrie to Douglas Bay, South Kupreanof Island
	SE08_PE_19	Douglas Bay to Kah Sheets, South Kupreanof Island

**ShoreZone Aerial Video Imaging (AVI) Survey
Southeast Alaska
May 4-9, 2008**

Team Wrangell (WR)
Survey Maps and Tape Logs
DVDs: SE08_WR_01 to SE08_WR_19



Flight trackline map showing the location and extent of specific videotapes (DVDs) for the May 4-9 **Team Wrangell** survey in Southeast Alaska.



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Wrangell (WR)**

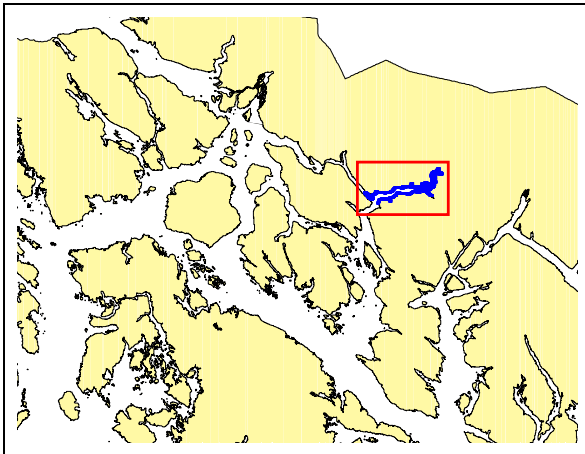
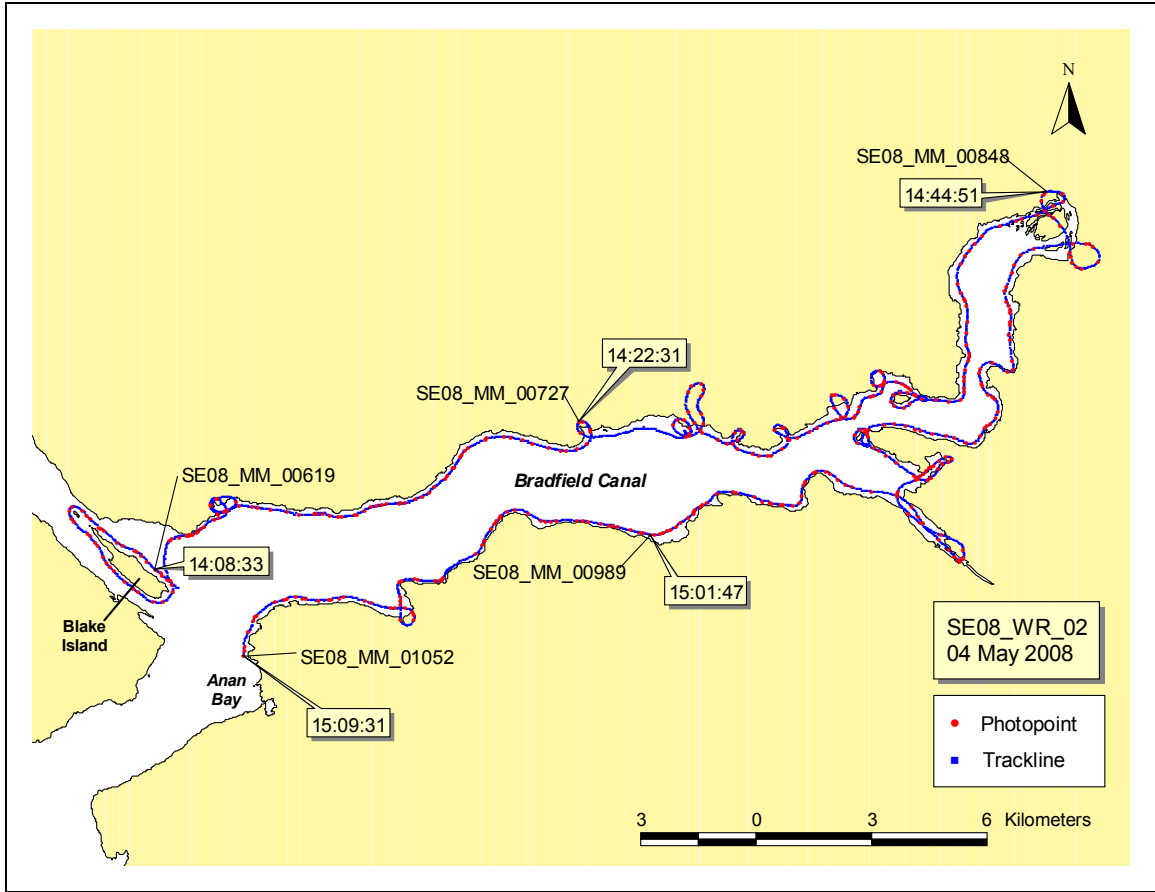
Tape: SE08_WR_01 **Date:** 04 May 08

General Location: Wrangell Island - Eastern Passage, Blake Channel

Time Start (UTC):	13:13:15	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	14:07:04	Nav:	Daley
Tape Length:	00:53:49		

Weather: Overcast

Time (UTC)	Location	Photo
13:13:22	Green Point, Eastern Passage	SE08_MM_00025
13:27:12	Eastern Passage	SE08_MM_00198
13:32:44	Point Madan	SE07_MM_00261
13:54:01	Aaron Creek	SE08_MM_00488
14:05:37	Blake Channel	SE08_MM_00599



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

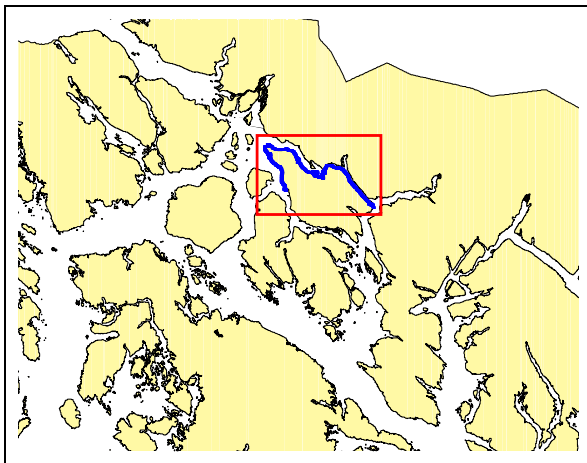
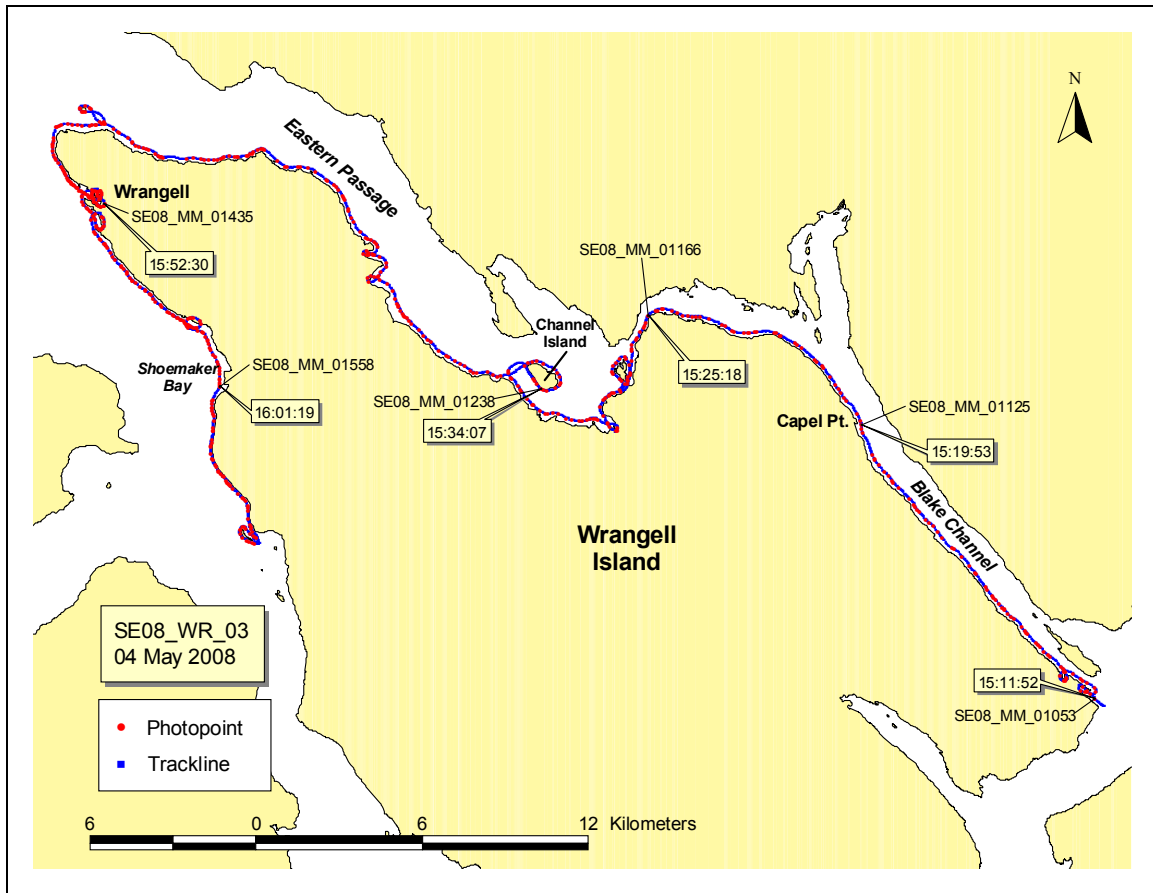
Tape: SE08_WR_02 **Date:** 04 May 08

General Location: Bradfield Canal

Time Start (UTC):	14:08:06	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	15:09:31	Nav:	Daley
Tape Length:	00:56:08		

Weather: Overcast

Time (UTC)	Location	Photo
14:08:33	Blake Island	SE08_MM_00619
14:22:31	North side of Bradfield Canal	SE08_MM_00727
	Tape Break: 14:24:24 to 14:29:39	
14:44:51	Head of Bradfield Canal	SE08_MM_00848
15:01:47	South side of Bradfield Canal	SE08_MM_00989
15:09:31	Anan Bay	SE08_MM_01052



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

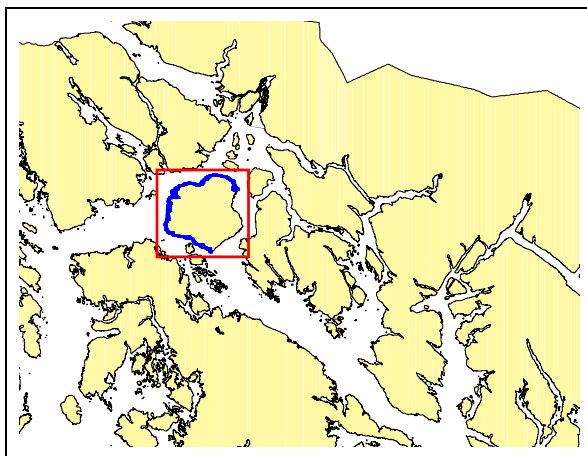
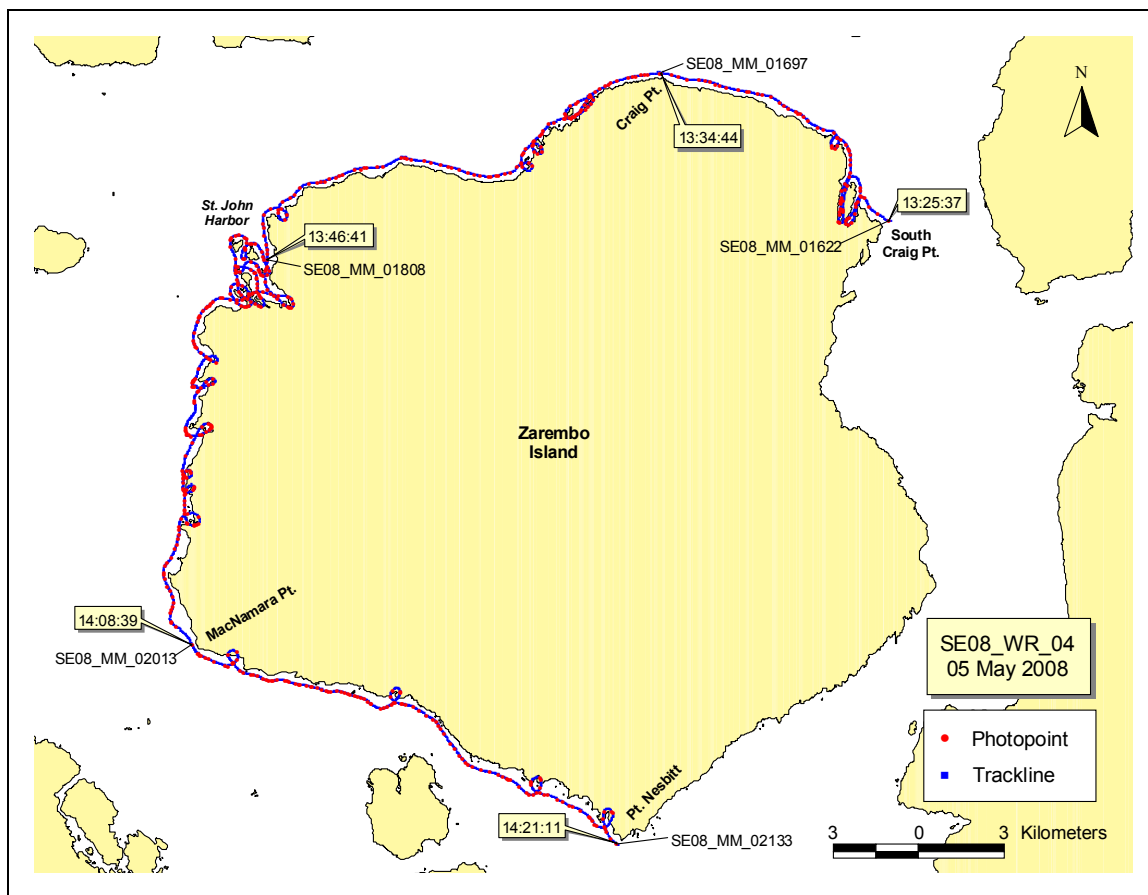
Tape: SE08_WR_03 **Date:** 04 May 08

General Location: Wrangell Island - Eastern Passage, Blake Channel

Time Start (UTC):	15:11:34	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	16:07:05	Nav:	Daley
Tape Length:	00:55:31		

Weather: Overcast

Time (UTC)	Location	Photo
15:11:52	Eastern point of Wrangell Island	SE08_MM_01053
15:19:53	Capel Pt., Blake Channel	SE08_MM_01125
15:25:18	The Narrows, Eastern Passage / Blake Channel	SE08_MM_01166
15:34:07	Channel Island	SE08_MM_01238
15:52:30	Wrangell	SE08_MM_01435
16:01:19	Shoemaker Bay	SE08_MM_01558



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

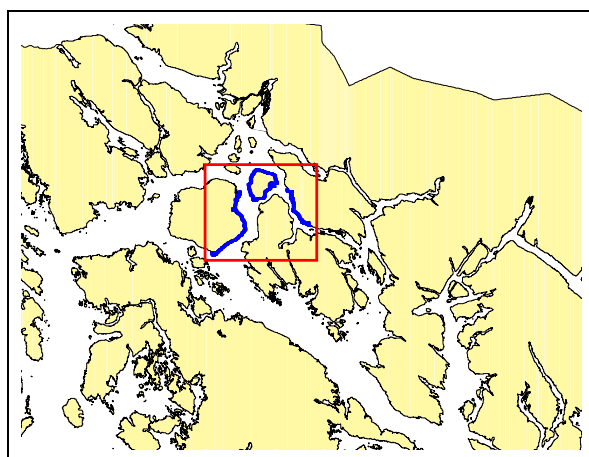
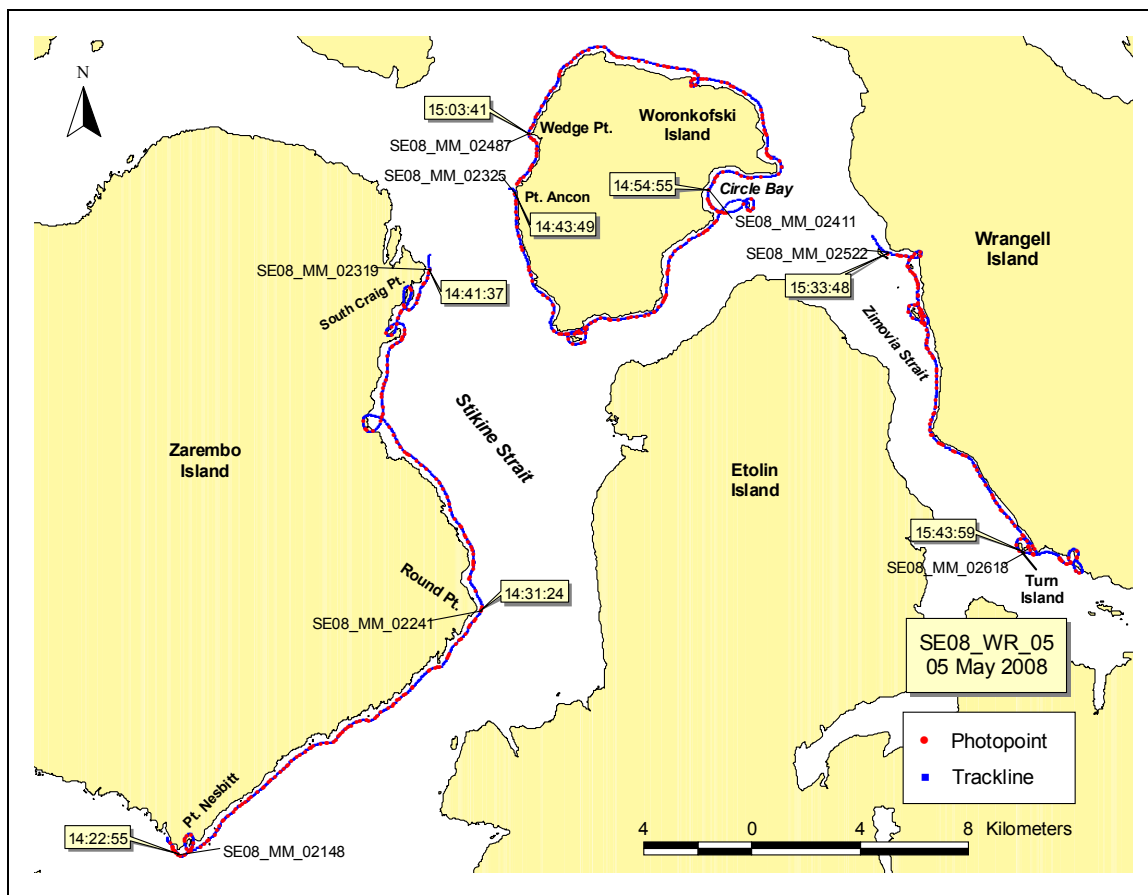
Tape: SE08_WR_04 **Date:** 05 May 08

General Location: Zarembo Island

Time Start (UTC):	13:25:34	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	14:21:14	Nav:	Daley
Tape Length:	00:55:40		

Weather: Overcast

Time (UTC)	Location	Photo
13:25:37	South Craig Point	SE08_MM_01622
13:34:44	Craig Point	SE08_MM_01697
13:46:41	St. John Harbor	SE08_MM_01808
14:08:39	MacNamara Point	SE08_MM_02013
14:21:11	Pt. Nesbitt	SE08_MM_02133



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

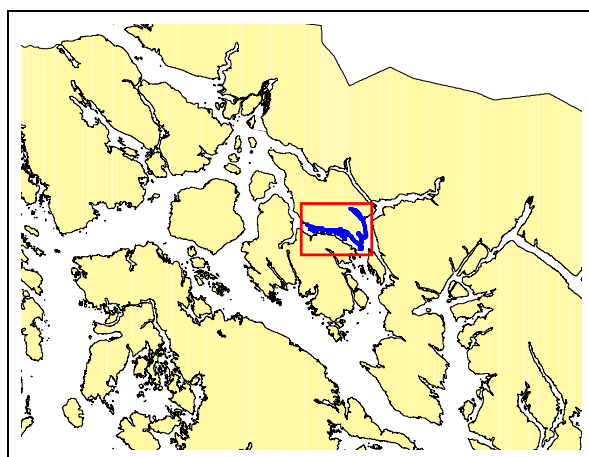
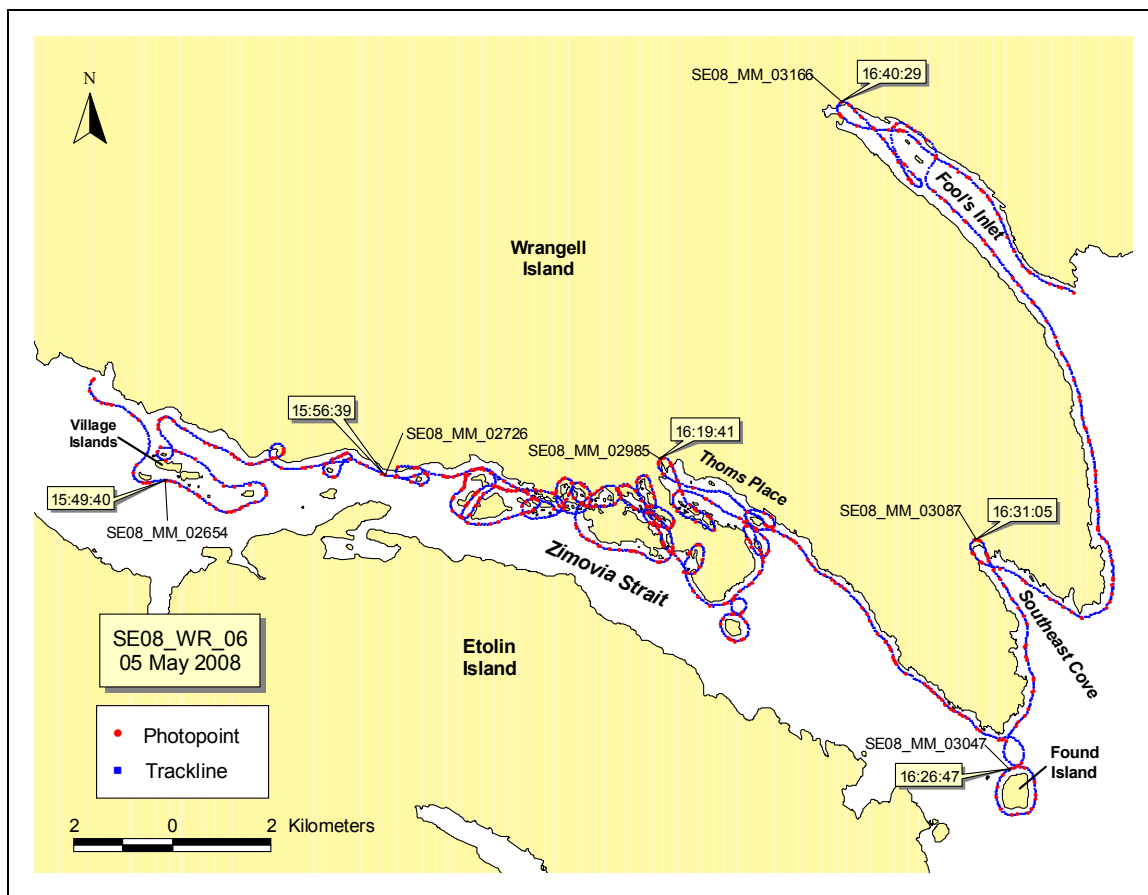
Tape: SE08_WR_05 **Date:** 05 May 08

General Location: Zarembo Island, Woronkofski Island, Wrangell Island

Time Start (UTC):	14:22:00	Geo:	Morrow
Fuel Break:	15:04:57 to 15:33:23	Bio:	Morris
Time End (UTC):	15:46:40	Nav:	Daley
Tape Length:	00:54:30		

Weather: Overcast

Time (UTC)	Location	Photo
14:22:55	Pt. Nesbitt, Zarembo Island	SE08_MM_02148
14:31:24	Round Pt., Zarembo Island	SE08_MM_02241
14:41:37	South Craig Pt., Zarembo Island	SE08_MM_02319
	Tape Break: 14:41:54 to 14:43:34 (transit)	
14:43:49	Pt. Ancon, Woronkofski Island	SE08_MM_02325
14:54:55	Circle Bay, Woronkofski Island	SE08_MM_02411
15:03:41	Wedge Point, Woronkofski Island	SE08_MM_02487
	Fuel Break: 15:04:57 to 15:33:23	
15:33:48	Zimovia Strait, Wrangell Island	SE08_MM_02522
15:43:59	Turn Island	SE08_MM_02618



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Wrangell (WR)**

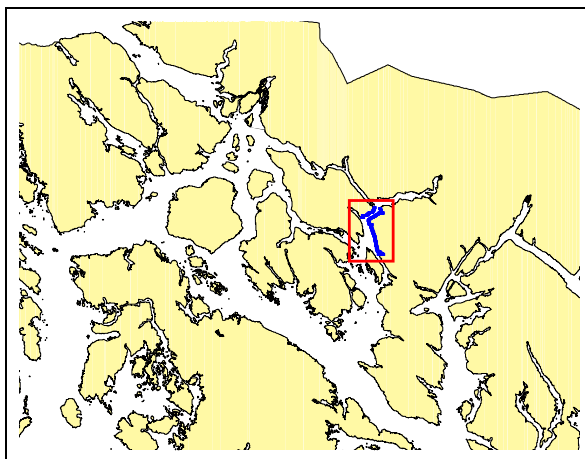
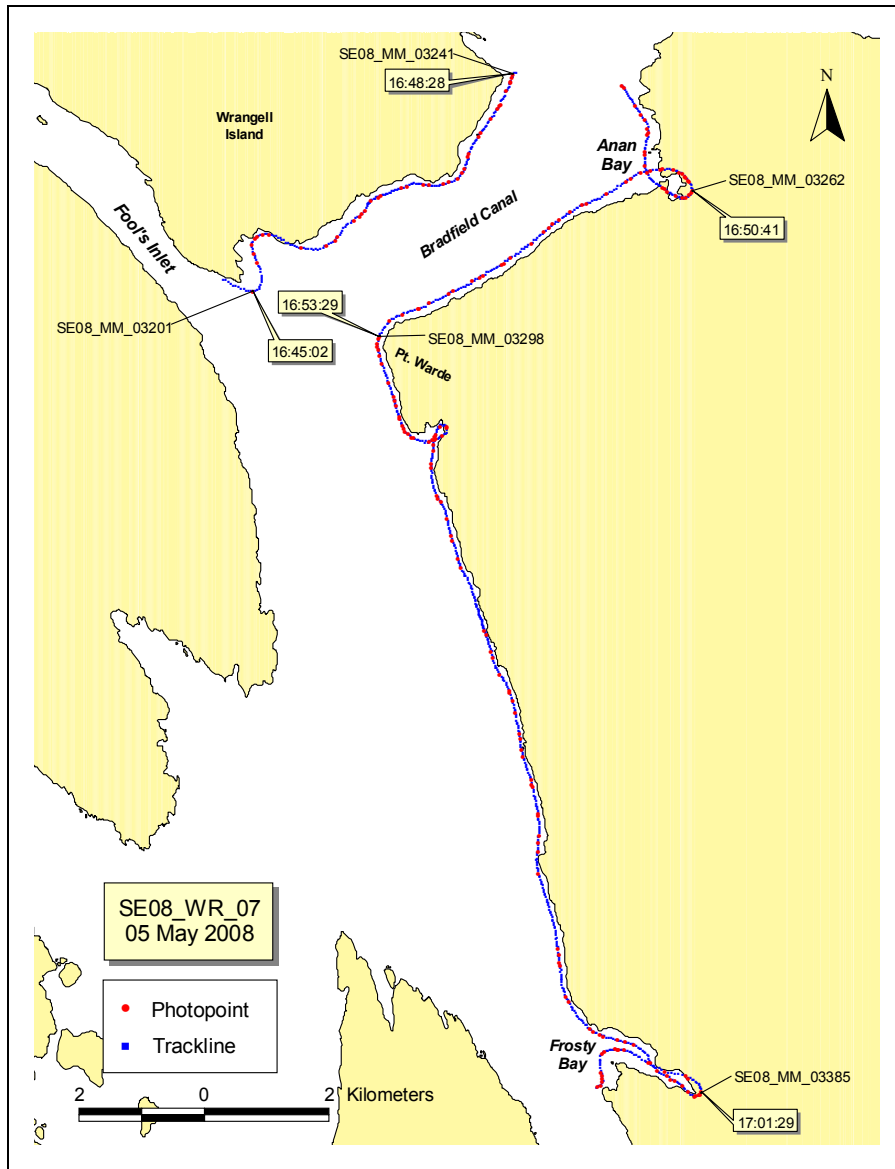
Tape: SE08_WR_06 **Date:** 05 May 08

General Location: Zimovia Strait, Fool's Inlet, Wrangell Island

Time Start (UTC):	15:47:56	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	16:43:49	Nav:	Daley
Tape Length:	00:55:53		

Weather: Overcast

Time (UTC)	Location	Photo
15:49:40	Village Islands	SE08_MM_02654
15:56:39	The Narrows, Zimovia Strait	SE08_MM_02726
16:19:41	Thoms Place	SE08_MM_02985
16:26:47	Found Island	SE08_MM_03047
16:31:05	Head of Southeast Cove	SE08_MM_03087
16:40:29	Head of Fool's Inlet	SE08_MM_03166



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

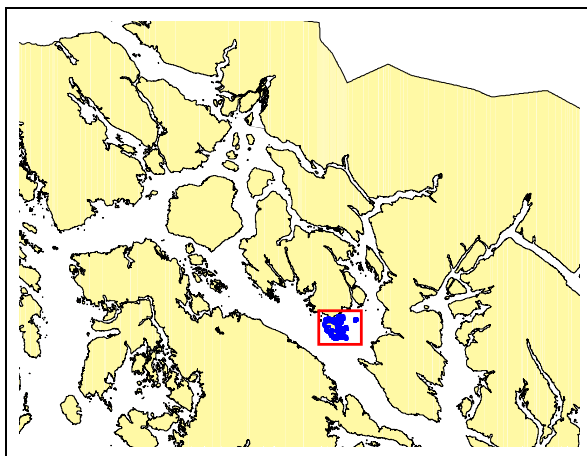
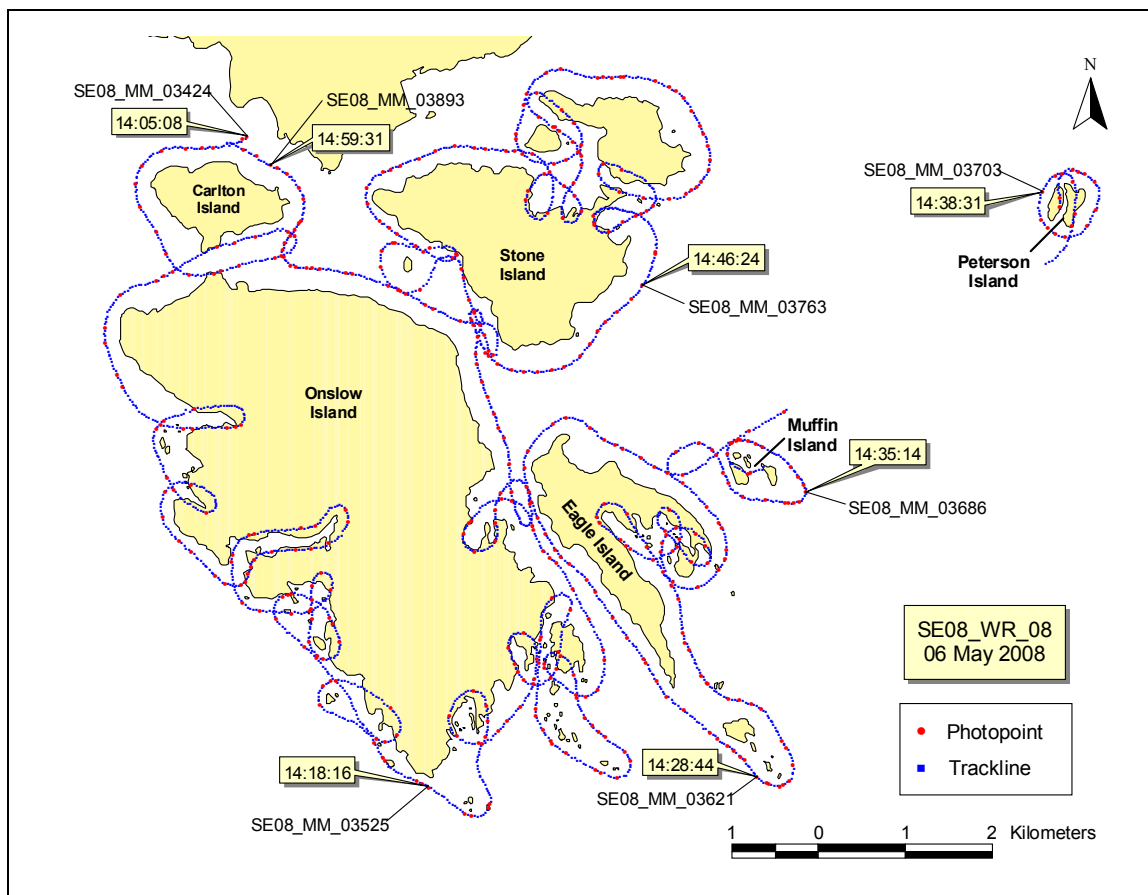
Tape: SE08_WR_07 **Date:** 05 May 08

General Location: Anan Bay, Frosty Bay, Bradfield Canal

Time Start (UTC):	16:44:50	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	17:02:40	Nav:	Daley
Tape Length:	00:17:00		

Weather: Overcast

Time (UTC)	Location	Photo
16:45:02	Mouth of Fool's Inlet, Wrangell Island	SE08_MM_03201
16:48:28	East corner of Wrangell Island – Bradfield Canal	SE08_MM_03241
	Tape Break: 16:48:31 to 16:49:19 (transit)	
16:50:41	Anan Lagoon	SE08_MM_03262
16:53:29	Pt. Warde	SE08_MM_03298
17:01:29	Frosty Bay	SE08_MM_03385



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

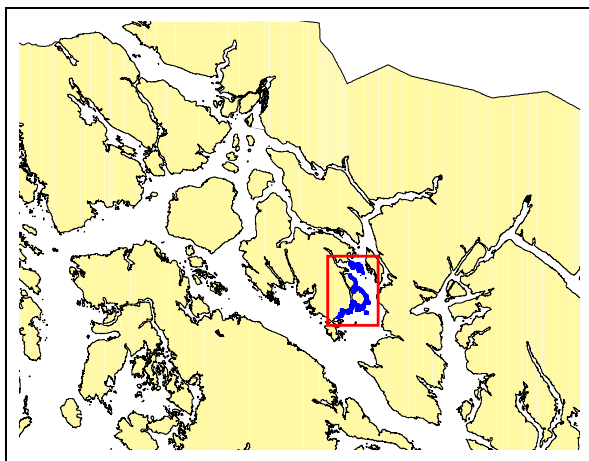
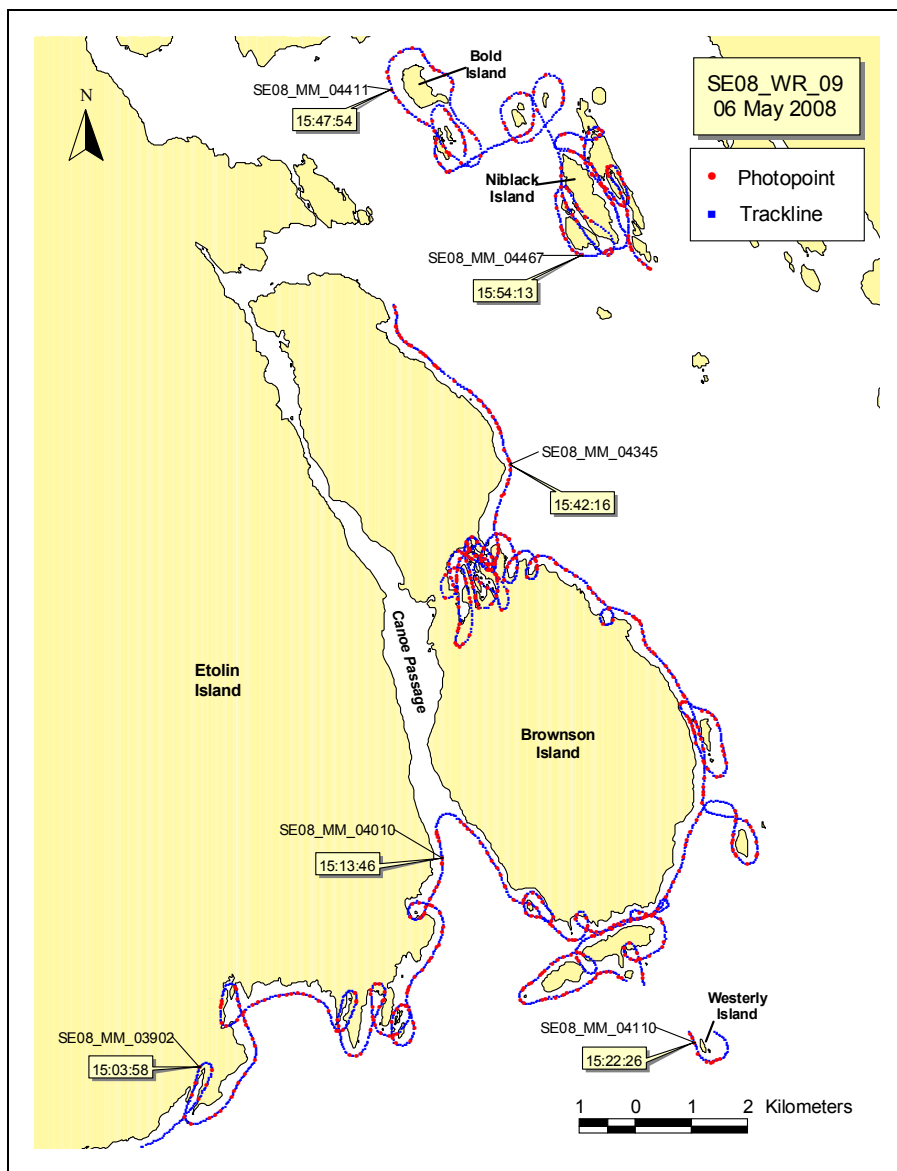
Tape: SE08_WR_08 **Date:** 06 May 08

General Location: Onslow Island, Eagle Island, Stone Island

Time Start (UTC):	14:05:08	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	14:59:48	Nav:	Daley
Tape Length:	00:51:25		

Weather: High overcast

Time (UTC)	Location	Photo
14:05:08	Carlton Island	SE08_MM_03424
14:18:16	Ernest Pt., Onslow Island	SE08_MM_03525
14:28:44	Onslow Pt., Eagle Island	SE08_MM_03621
14:35:14	Muffin Island	SE08_MM_03686
	Tape Break: 14:36:15 to 14:37:47 (transit)	
14:38:31	Peterson Island	SE08_MM_03703
	Tape Break: 14:39:42 to 14:41:21 (transit)	
14:46:24	Stone Island	SE08_MM_03763
14:59:31	Carlton Island	SE08_MM_03893



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

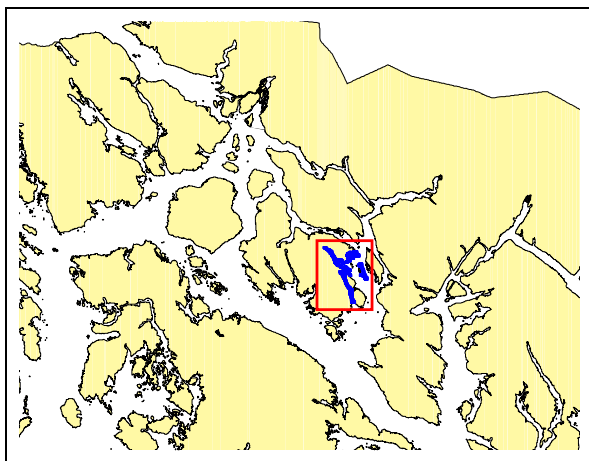
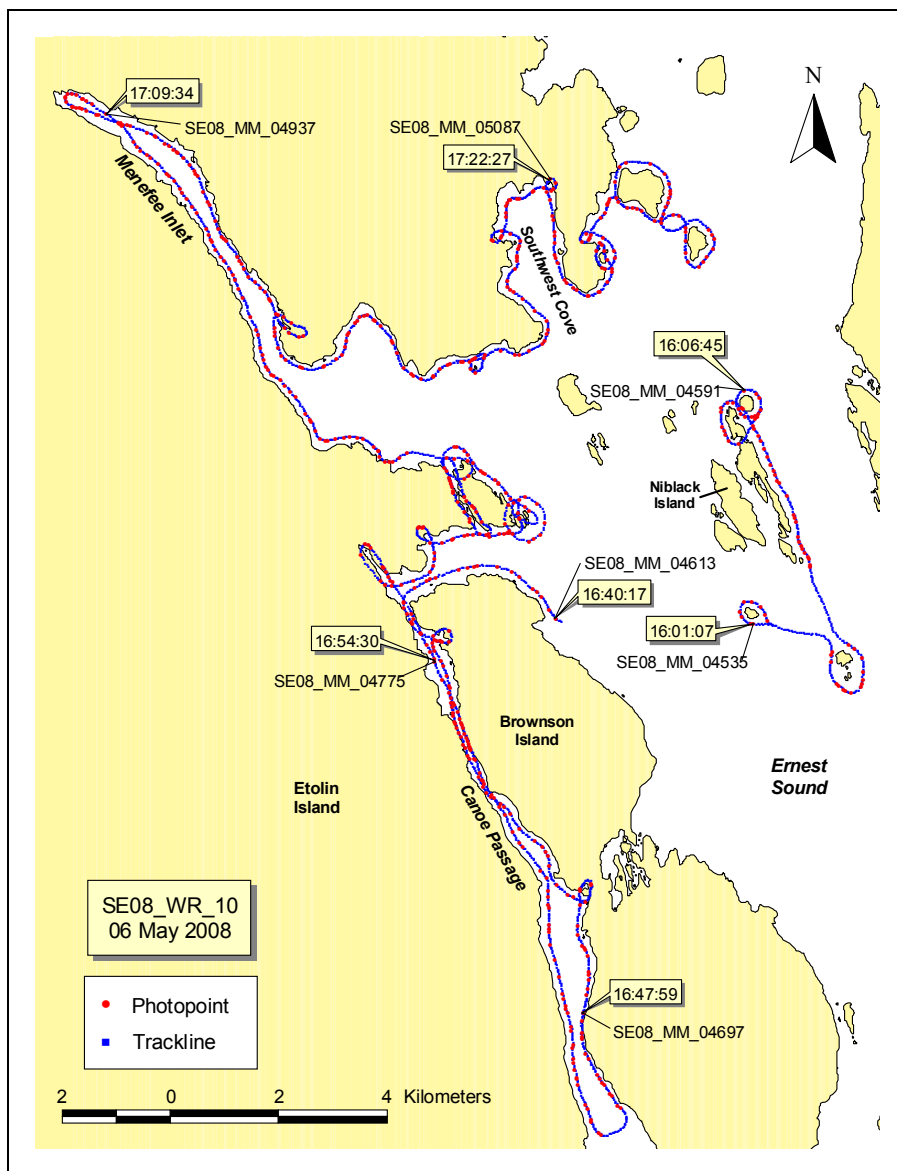
Tape: SE08_WR_09 **Date:** 06 May 08

General Location: Brownson Island, Bold Island, Niblack Island

Time Start (UTC):	15:02:54	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	15:59:30	Nav:	Daley
Tape Length:	00:54:01		

Weather: High overcast

Time (UTC)	Location	Photo
15:03:58	South Etolin Island	SE08_MM_03902
15:13:46	Southwest entrance to Canoe Passage	SE08_MM_04010
	Tape Break: 15:21:41 to 15:22:19 (transit)	
15:22:26	Westerly Island	SE08_MM_04110
	Tape Break: 15:23:08 to 15:23:49 (transit)	
15:42:16	East side of Brownson Island	SE08_MM_04345
	Tape Break: 15:44:16 to 15:45:26 (transit)	
15:47:54	Bold Island	SE08_MM_04411
15:54:13	Niblack Island	SE08_MM_04467



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

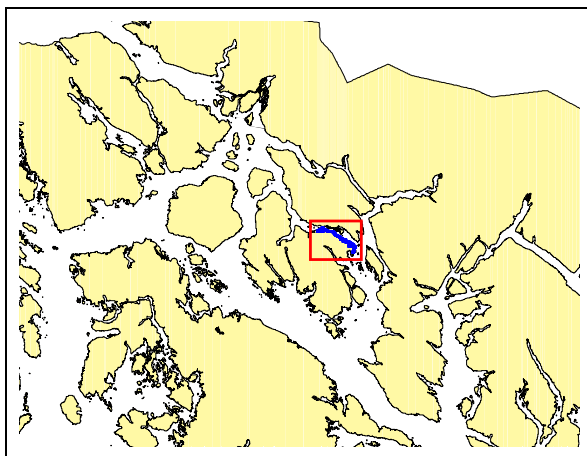
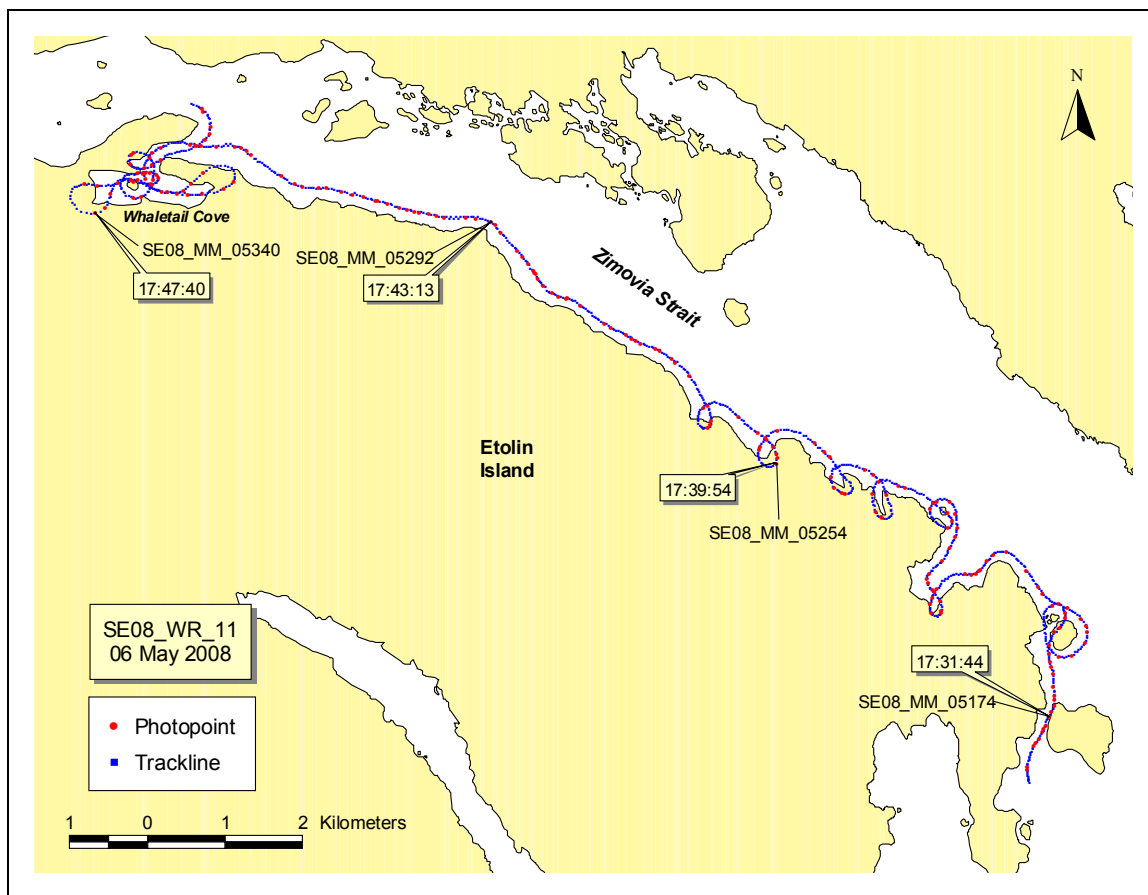
Tape: SE08_WR_10 **Date:** 06 May 08

General Location: Canoe Passage, Brownson Island, Menefee Inlet

Time Start (UTC):	16:00:22	Geo:	Morrow
Fuel Break:	16:07:17 to 16:40:11	Bio:	Morris
Time End (UTC):	17:30:31	Nav:	Daley
Tape Length:	00:57:13		

Weather: High overcast

Time (UTC)	Location	Photo
16:01:07	Small islet south of Niblack Island, Ernest Sound	SE08_MM_04535
16:06:45	Small islet north of Niblack Island, Ernest Sound	SE08_MM_04591
	Fuel Break: 16:07:17 to 16:40:11	
16:40:17	North Brownson Island	SE08_MM_04613
16:47:59	East side of Canoe Passage – Brownson Island	SE08_MM_04697
16:54:30	West side of Canoe Passage – Etolin Island	SE08_MM_04775
17:09:34	Head of Menefee Inlet	SE08_MM_04937
17:22:27	Head of Southwest Cove	SE08_MM_05087



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Wrangell (WR)**

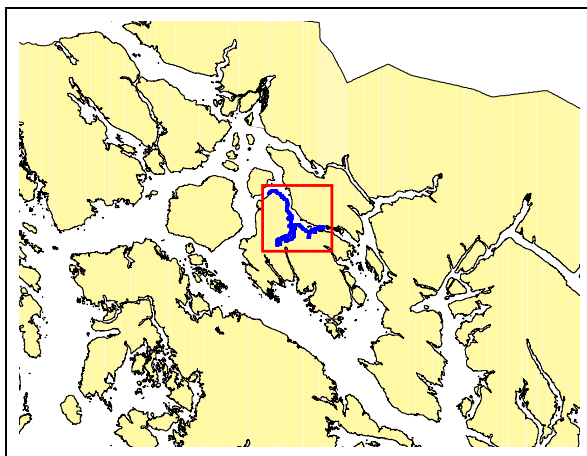
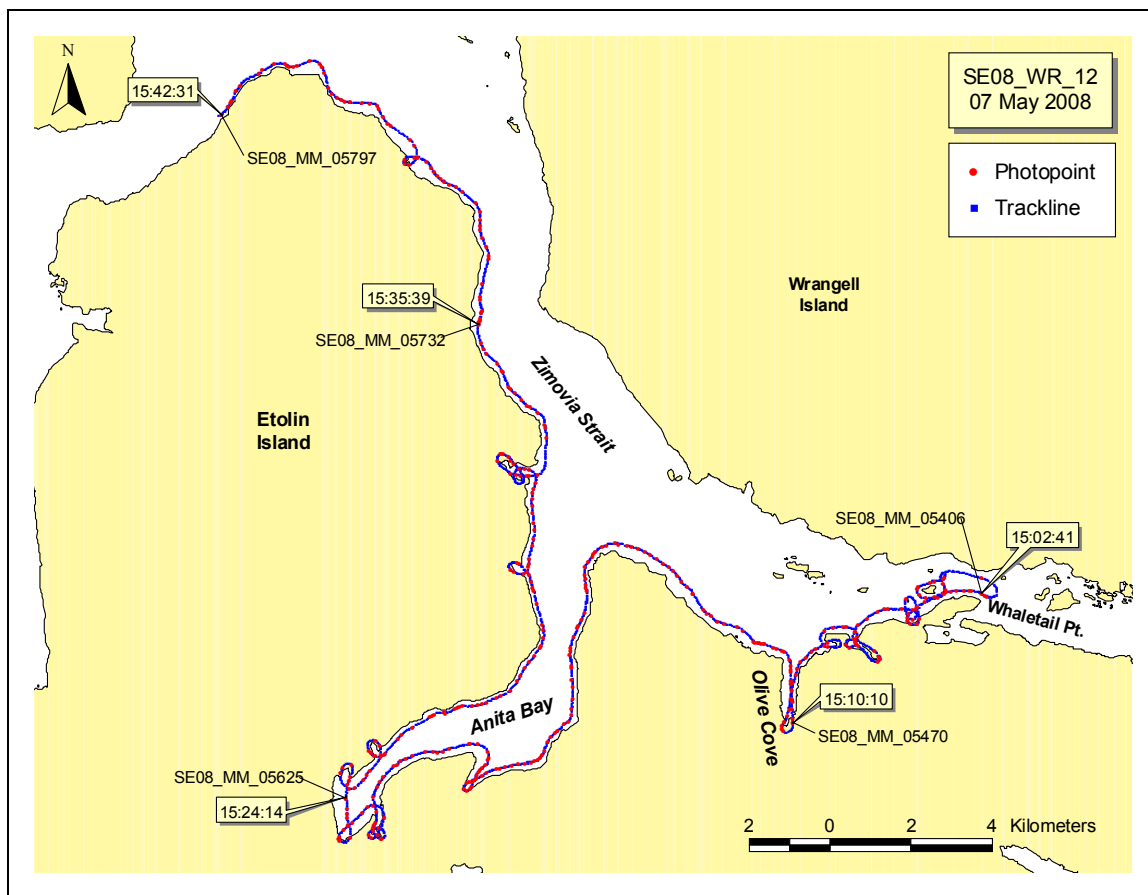
Tape: SE08_WR_11 **Date:** 06 May 08

General Location: South end of Zimovia Strait, Whaletail Cove

Time Start (UTC):	17:31:04	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	17:50:14	Nav:	Daley
Tape Length:	00:19:10		

Weather: High overcast

Time (UTC)	Location	Photo
17:31:44	South end of Zimovia Strait – Etolin Island	SE08_MM_05174
17:39:54	Zimovia Strait – Etolin Island	SE08_MM_05254
17:43:13	Zimovia Strait – Etolin Island	SE08_MM_05292
17:47:40	Whaletail Cove	SE08_MM_05340



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

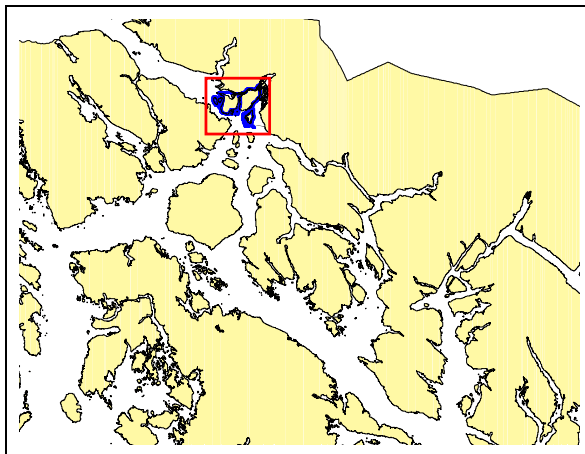
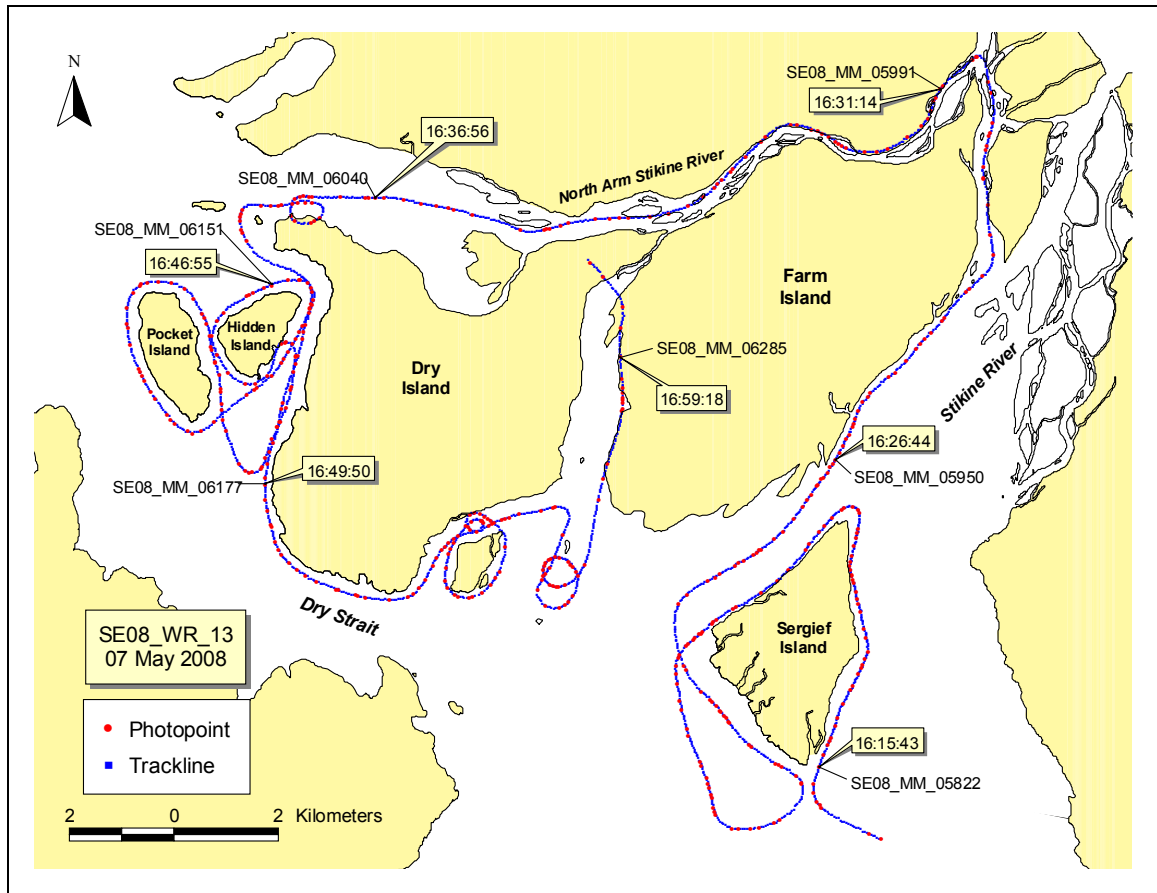
Tape: SE08_WR_12 **Date:** 07 May 08

General Location: Olive Cove, Anita Bay, North Etolin Island

Time Start (UTC):	15:00:17	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	15:42:34	Nav:	Daley
Tape Length:	00:42:17		

Weather: Partly cloudy

Time (UTC)	Location	Photo
15:02:41	Whaletail Point	SE08_MM_05406
15:10:10	Olive Cove	SE08_MM_05470
15:24:14	Head of Anita Bay	SE08_MM_05625
15:35:39	Kunk Creek	SE08_MM_05732
15:42:31	North end of Etolin Island – Chichagof Pass	SE08_MM_05797



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

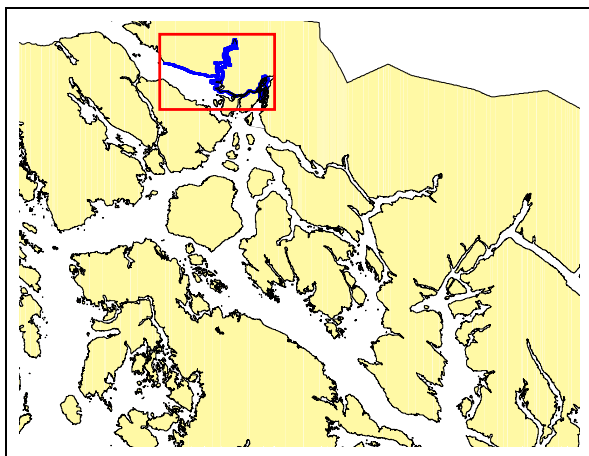
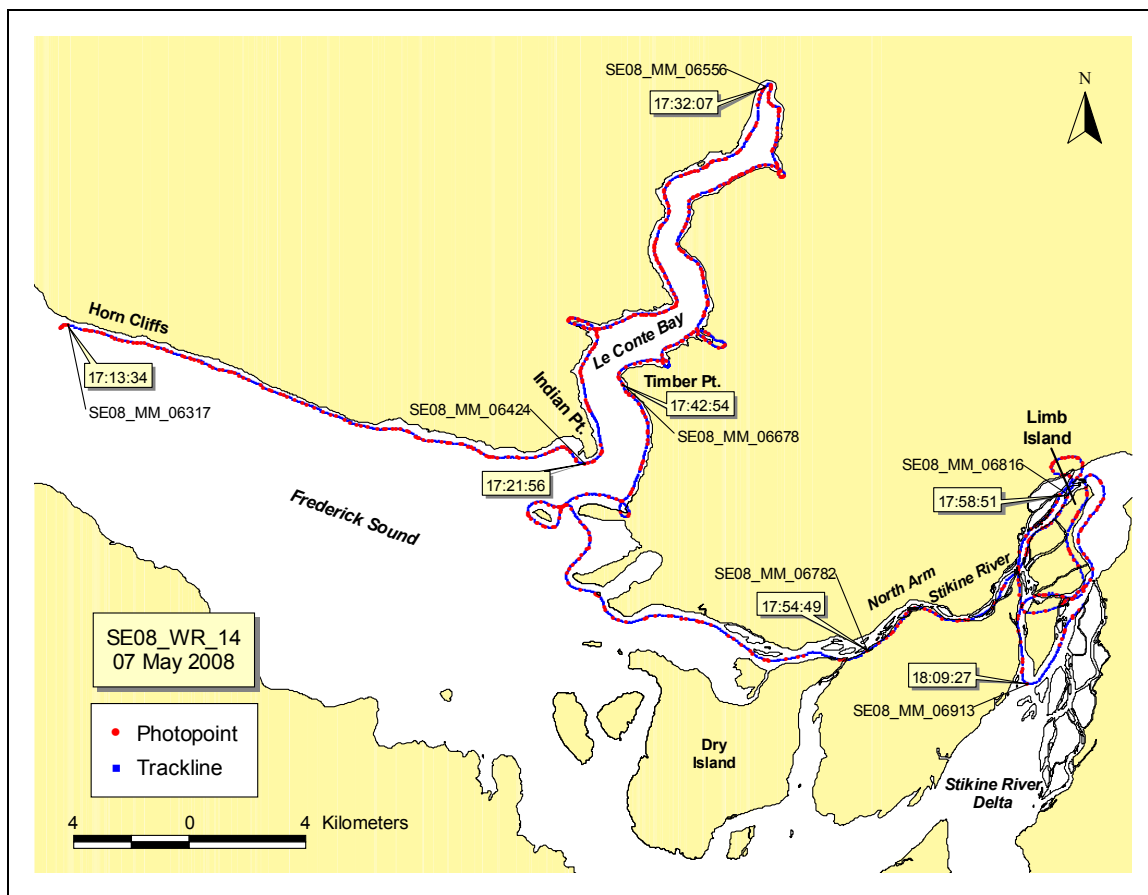
Tape: SE08_WR_13 **Date:** 07 May 08

General Location: Stikine Delta, Farm Island, Dry Island

Time Start (UTC):	16:14:48	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	17:00:08	Nav:	Daley
Tape Length:	00:45:20		

Weather: Partly cloudy

Time (UTC)	Location	Photo
16:15:43	South Sergief Island	SE08_MM_05822
16:26:44	South Farm Island	SE08_MM_05950
16:31:14	Farm Island – North Arm Stikine River	SE08_MM_05991
16:36:56	Dry Island – North Arm Stikine River	SE08_MM_06040
16:46:55	Hidden Island	SE08_MM_06151
16:49:50	Dry Island – Dry Strait	SE08_MM_06177
16:59:18	Knig Slough	SE08_MM_06285



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

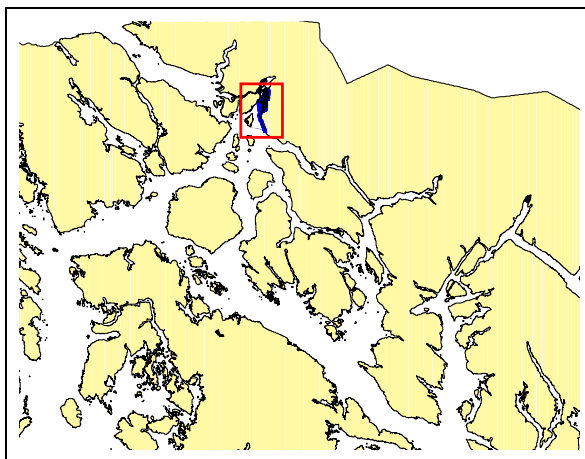
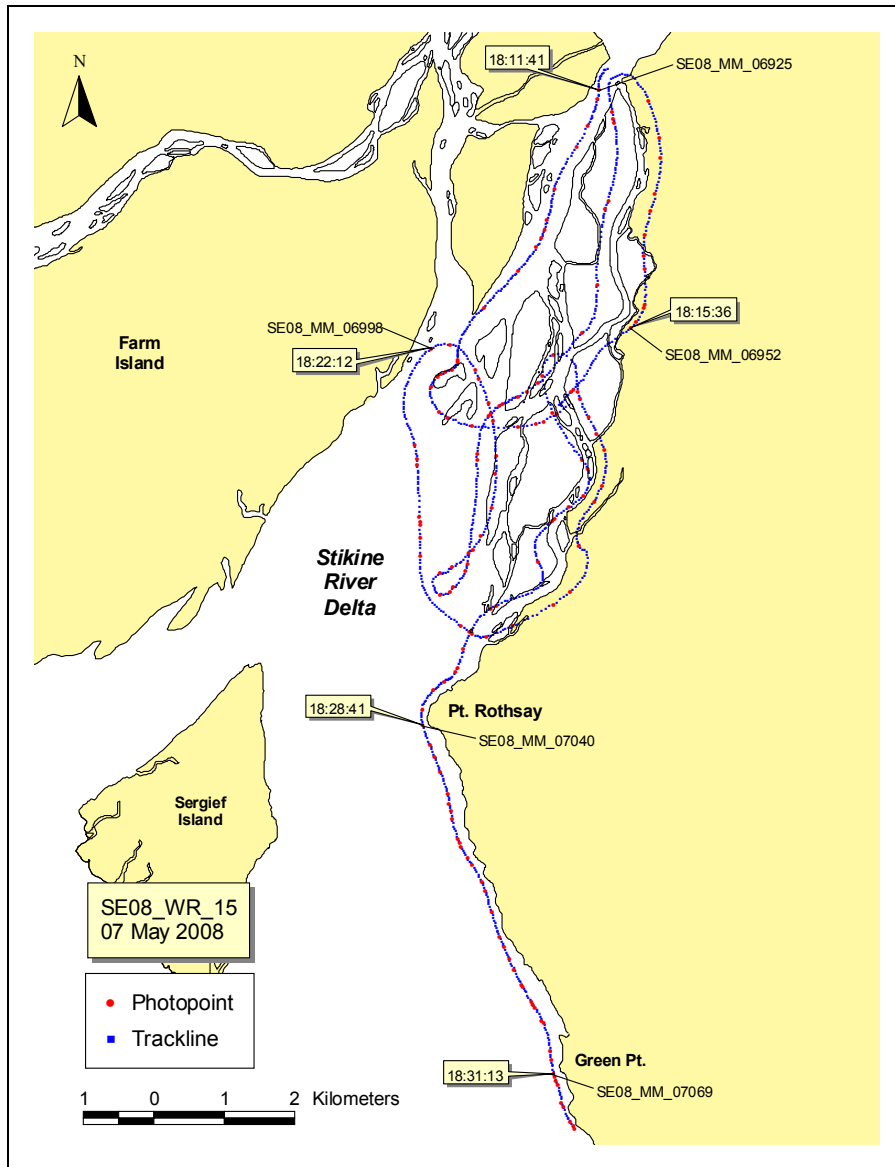
Tape: SE08_WR_14 **Date:** 07 May 08

General Location: Le Conte Bay, Stikine River Delta

Time Start (UTC):	17:13:22	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	18:10:53	Nav:	Daley
Tape Length:	00:57:31		

Weather: Partly cloudy

Time (UTC)	Location	Photo
17:13:34	Horn Cliffs – Frederick Sound	SE08_MM_06317
17:21:56	Indian Point – Le Conte Bay	SE08_MM_06424
17:32:07	Le Conte Glacier	SE08_MM_06556
17:42:54	Timber Point – Le Conte Bay	SE08_MM_06678
17:54:49	North Arm Stikine River	SE08_MM_06782
17:58:51	North Limb Island	SE08_MM_06816
18:09:27	Stikine River Delta	SE08_MM_06913



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

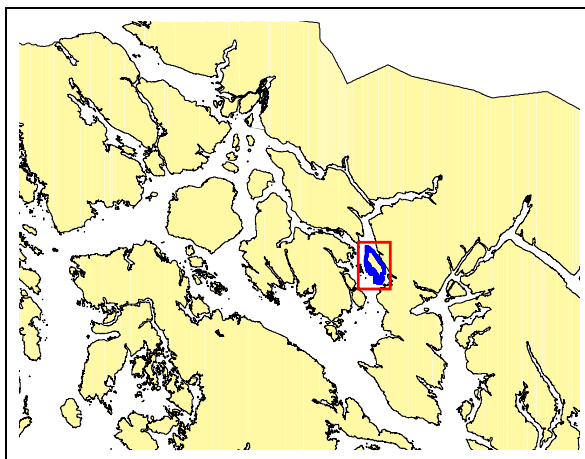
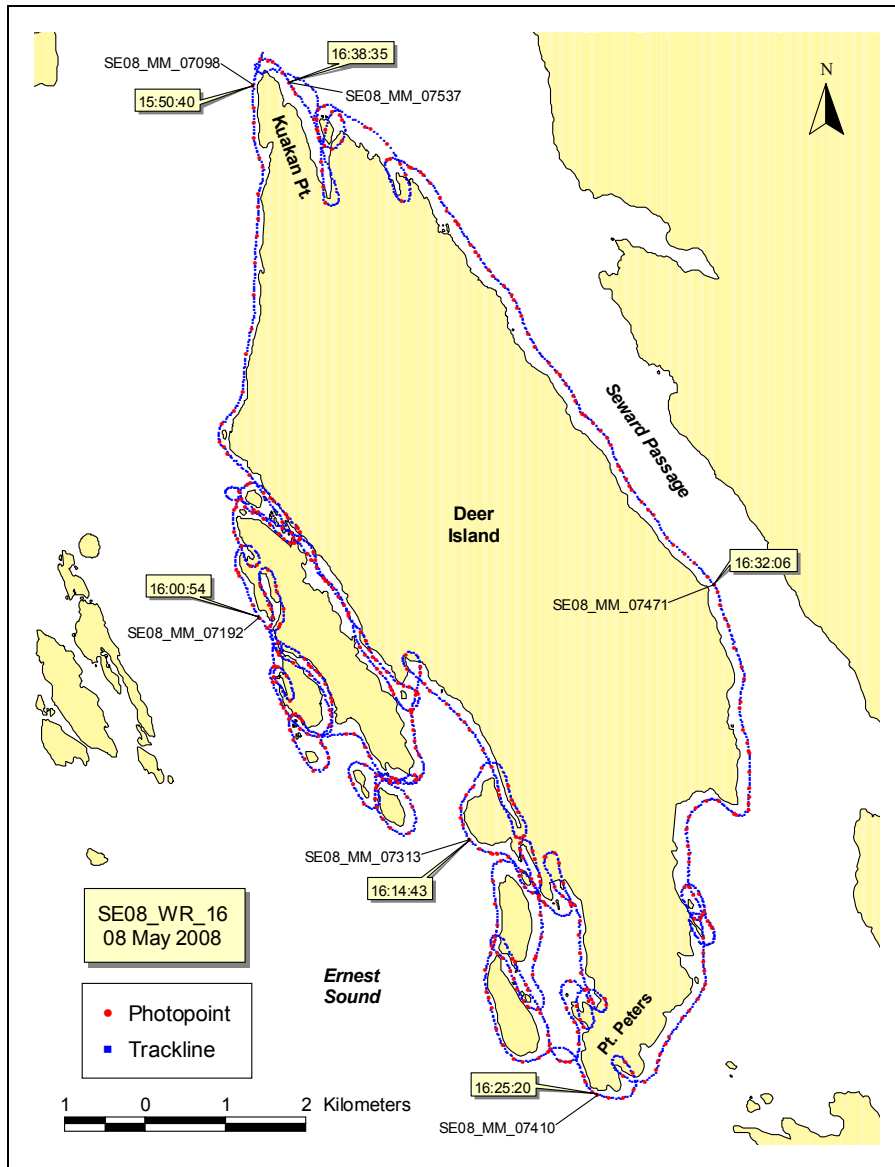
Tape: SE08_WR_15 **Date:** 07 May 08

General Location: Stikine River Delta

Time Start (UTC):	18:11:29	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	18:31:42	Nav:	Daley
Tape Length:	00:20:13		

Weather: Partly cloudy

Time (UTC)	Location	Photo
18:11:41	Stikine River Delta	SE08_MM_06925
18:15:36	Stikine River Delta	SE08_MM_06952
18:22:12	Stikine River Delta	SE08_MM_06998
18:28:41	Pt. Rothsay	SE08_MM_07040
18:31:13	Green Point	SE08_MM_07069



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

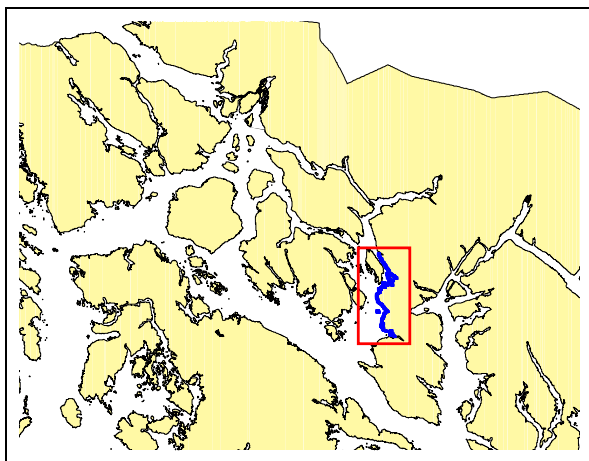
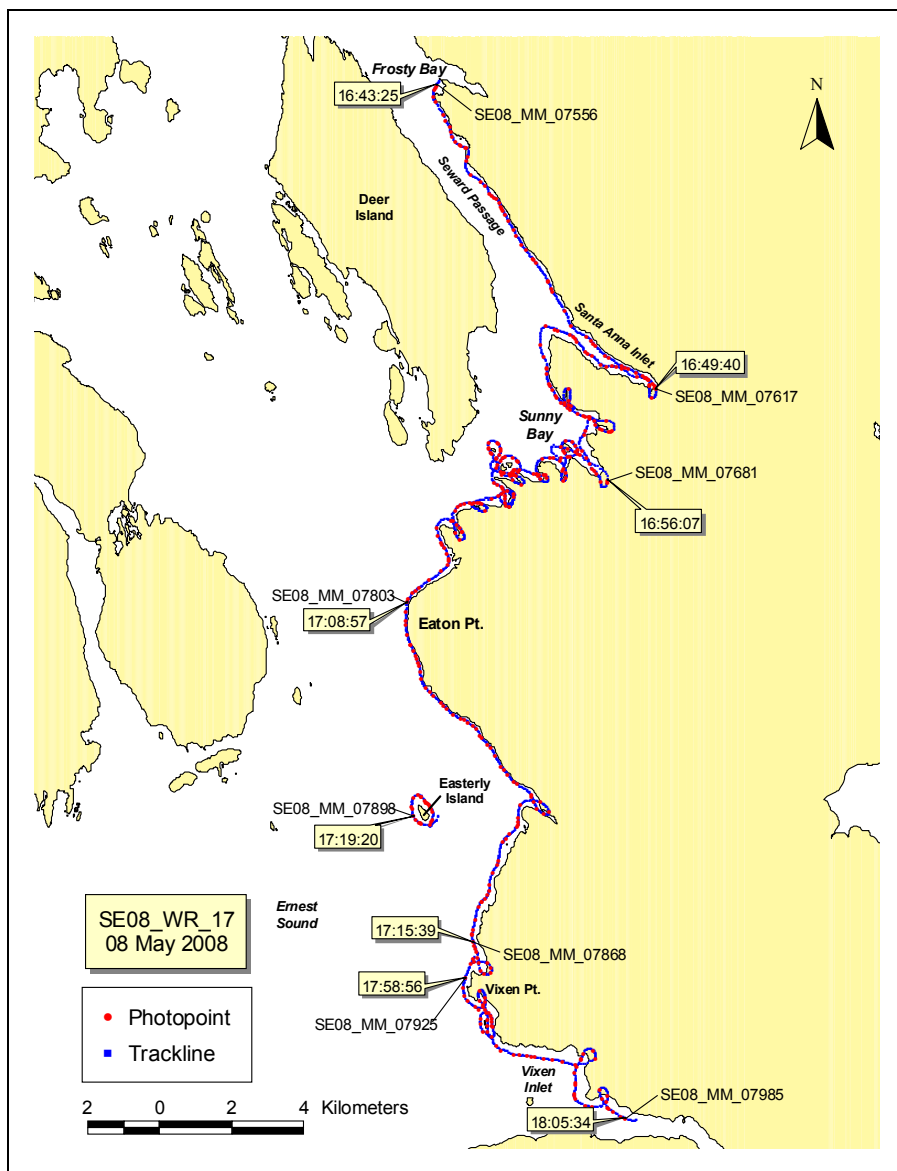
Tape: SE08_WR_16 **Date:** 08 May 08

General Location: Deer Island, Ernest Sound

Time Start (UTC):	15:50:26	Geo:	Morrow
Fuel Break:	None	Bio:	Morris
Time End (UTC):	16:40:22	Nav:	Daley
Tape Length:	00:49:56		

Weather: Sunny

Time (UTC)	Location	Photo
15:50:40	Kuakan Pt. - north Deer Island	SE08_MM_07098
16:00:54	Islands adjacent to the west of Deer Island	SE08_MM_07192
16:14:43	Ernest Sound – west Deer Island	SE08_MM_07313
16:25:20	Pt. Peters - south Deer Island	SE08_MM_07410
16:32:06	Seward Passage – east Deer Island	SE08_MM_07471
16:38:35	Kuakan Pt. - north Deer Island	SE08_MM_07537



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

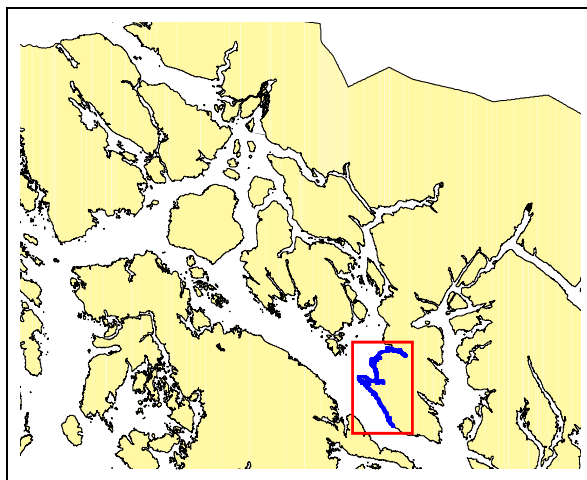
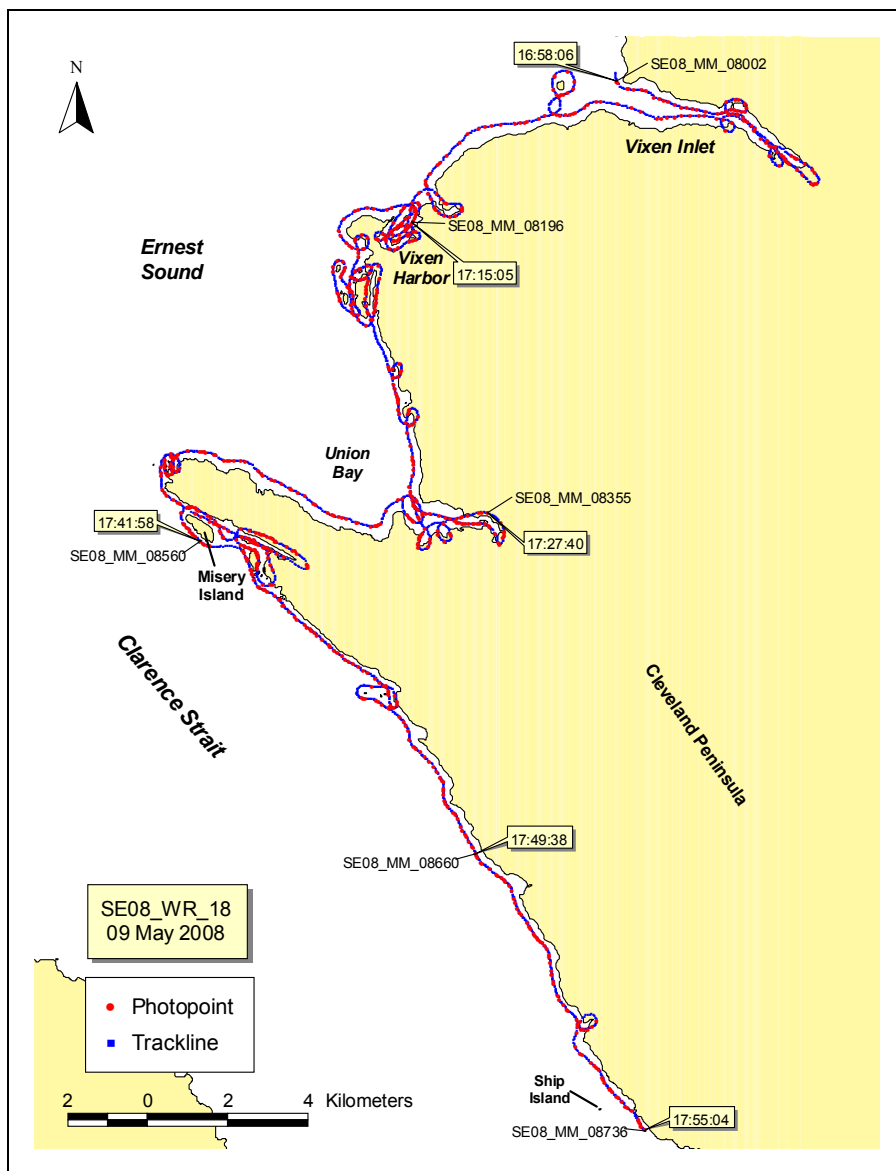
Tape: SE08_WR_17 **Date:** 08 May 08

General Location: Seward Passage, Sunny Bay, Cleveland Peninsula

Time Start (UTC):	16:43:20	Geo:	Morrow
Fuel Break:	17:19:46 to 17:58:37	Bio:	Morris
Time End (UTC):	18:05:44	Nav:	Daley
Tape Length:	00:41:41		

Weather: Sunny

Time (UTC)	Location	Photo
16:43:25	Frosty Bay	SE08_MM_07556
16:49:40	Head of Santa Anna Inlet	SE08_MM_07617
16:56:07	Sunny Bay	SE08_MM_07681
17:08:57	Eaton Point	SE08_MM_07803
17:15:39	North of Vixen Point	SE08_MM_07868
	Tape Break: 17:16:36 to 17:18:24 (transit)	
17:19:20	Easterly Island	SE08_MM_07898
	Fuel Break: 17:19:46 to 17:58:37	
17:58:56	Vixen Point	SE08_MM_07925
18:05:34	Vixen Inlet	SE08_MM_07985



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

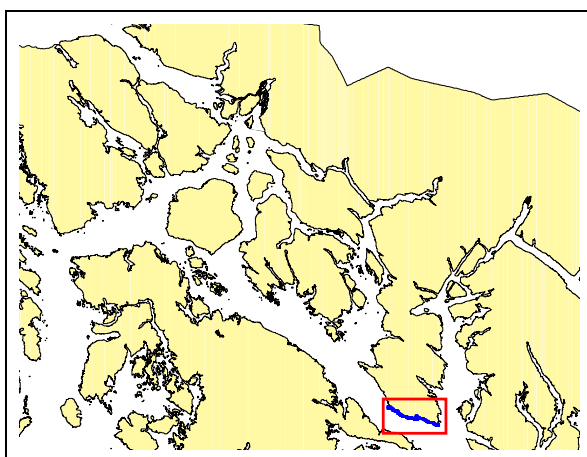
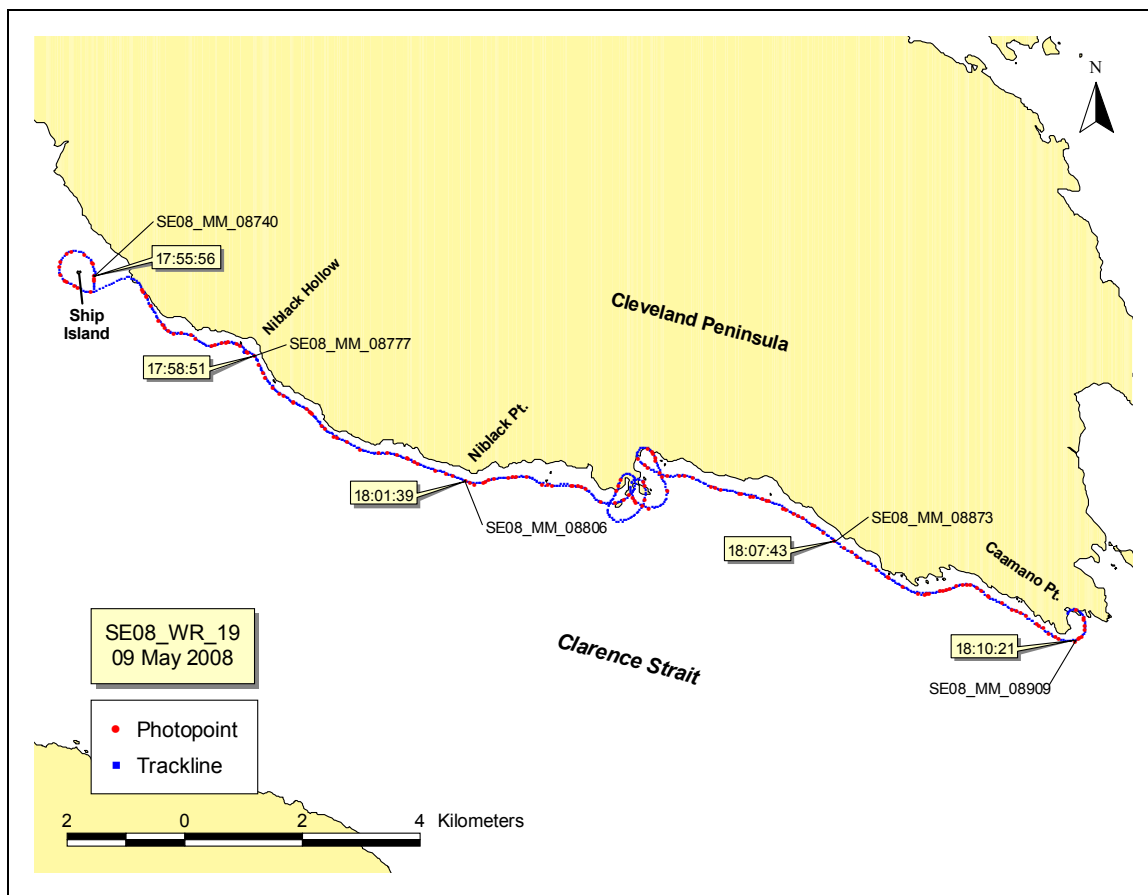
Tape: SE08_WR_18 **Date:** 09 May 08

General Location: Vixen Inlet, Union Bay, South Cleveland Peninsula

Time Start (UTC): 16:58:00	Geo: Daley
Fuel Break: None	Bio: Morris
Time End (UTC): 17:55:04	Nav: Morrow
Tape Length: 00:57:04	

Weather: Sunny

Time (UTC)	Location	Photo
16:58:06	Vixen Inlet	SE08_MM_08002
17:15:05	Vixen Harbor	SE08_MM_08196
17:27:40	Union Bay	SE08_MM_08355
17:41:58	Misery Island	SE08_MM_08560
17:49:38	Clarence Strait – Cleveland Peninsula	SE08_MM_08660
17:55:04	Clarence Strait – near Ship Island	SE08_MM_08736



2008 Southeast Alaska Aerial Video Imaging Survey Team Wrangell (WR)

Tape: SE08_WR_19 **Date:** 09 May 08

General Location: South Cleveland Peninsula, Clarence Strait

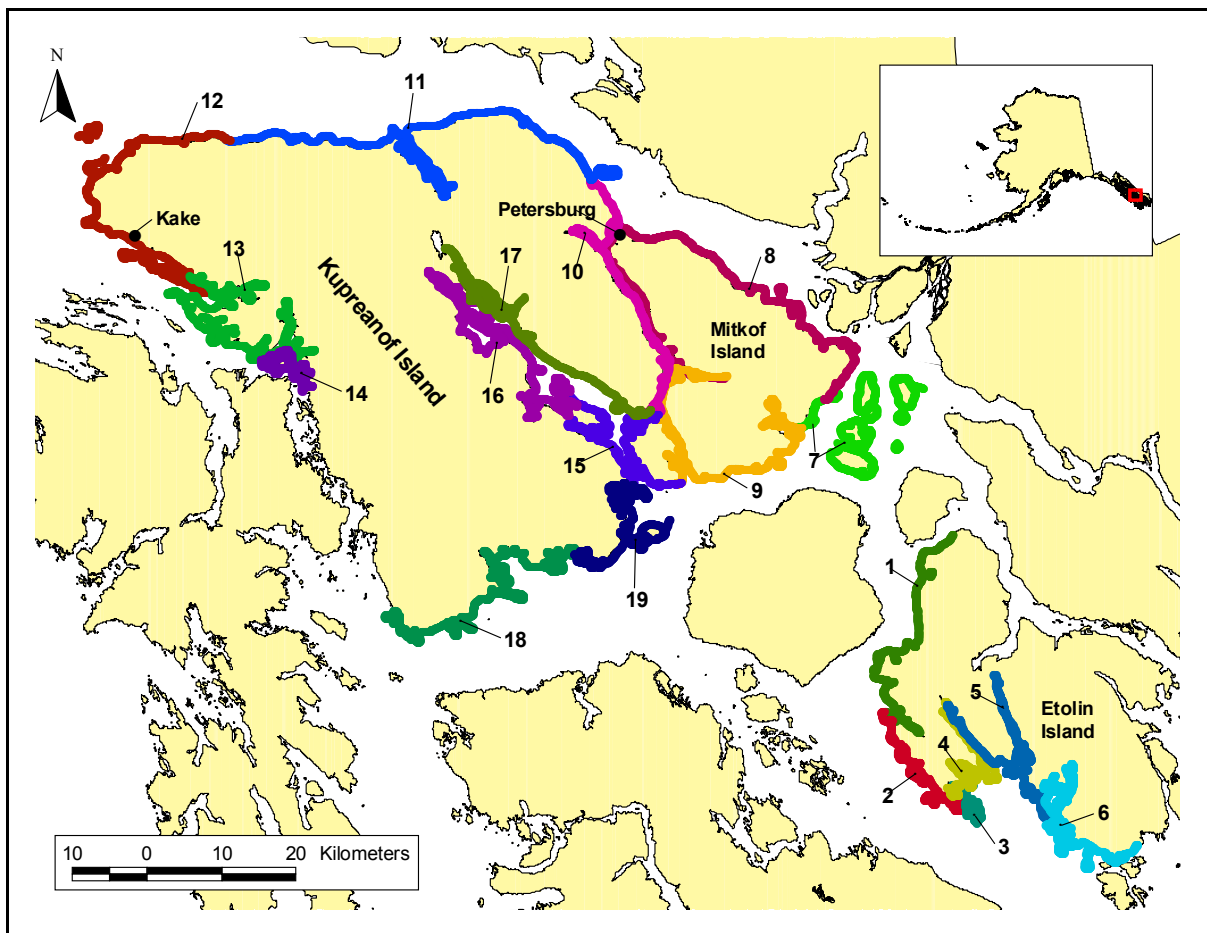
Time Start (UTC):	17:55:48	Geo:	Daley
Fuel Break:	None	Bio:	Morris
Time End (UTC):	18:10:48	Nav:	Morrow
Tape Length:	00:15:00		

Weather: Sunny

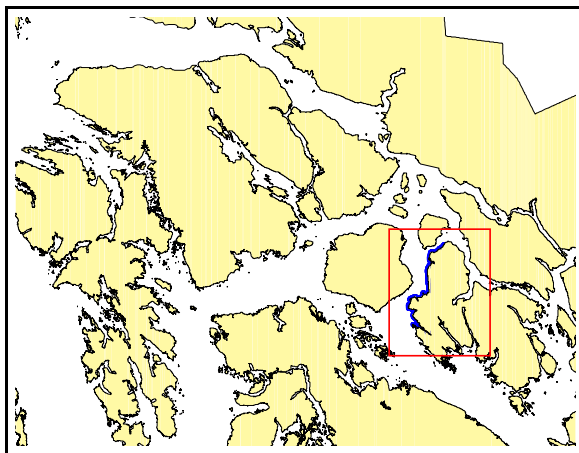
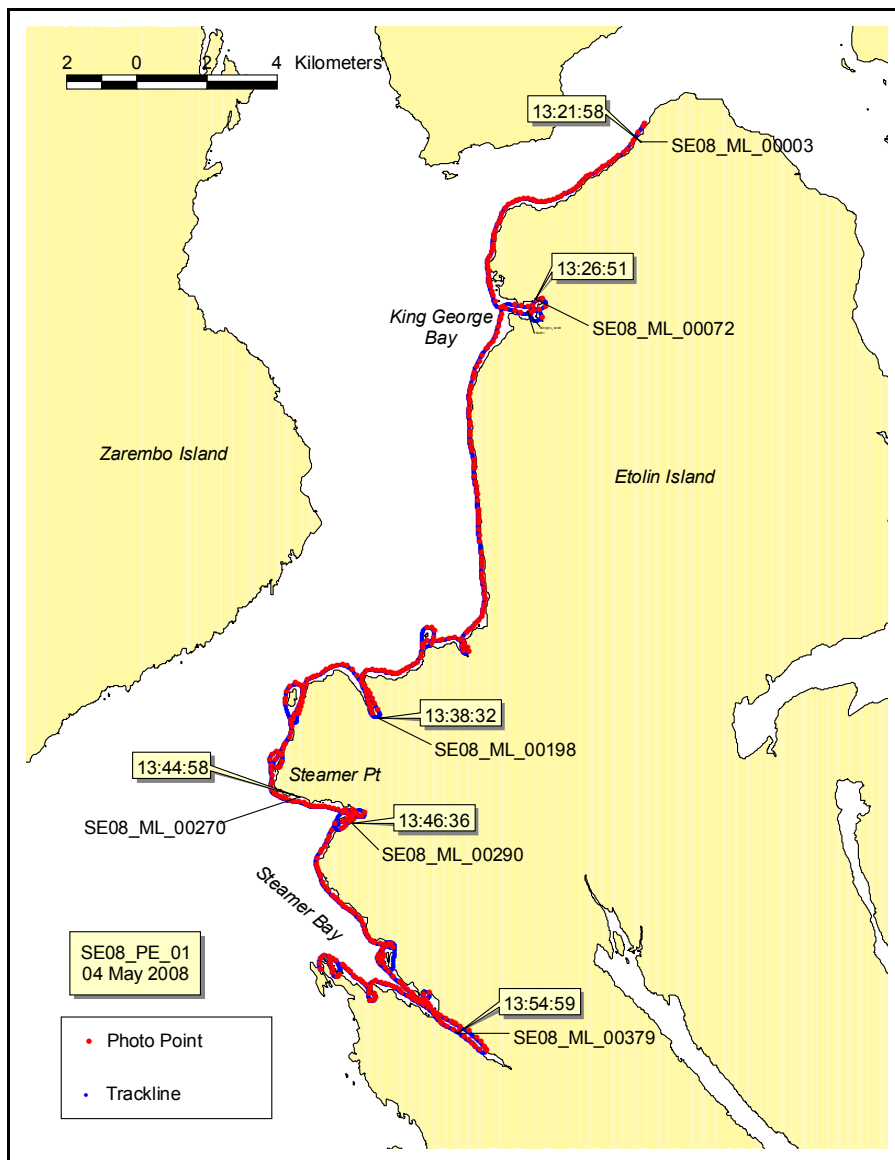
Time (UTC)	Location	Photo
17:55:56	Ship Island	SE08_MM_08740
17:58:51	Niblack Hollow	SE08_MM_08777
18:01:39	Niblack Point	SE08_MM_08806
18:07:43	Clarence Strait – South Cleveland Peninsula	SE08_MM_08873
18:10:21	Caamano Point - South Cleveland Peninsula	SE08_MM_08909

**ShoreZone Aerial Video Imaging (AVI) Survey
Southeast Alaska
May 4-9, 2008**

Team Petersburg (PE)
Survey Maps and Tape Logs
DVDs: SE08_PE_01 to SE08_PE_19



Flight trackline map showing the location and extent of specific videotapes (DVDs) for the May 4-9, 2008 **Team Petersburg** survey in Southeast Alaska.



2008 Southeast Alaska Aerial Video Imaging Survey
Team Petersburg (PE)

Tape: SE08_PE_01

Date: 04 May 08

General Location: Northwest Etolin Island

Time Start (UTC): 13:21:57

Geo: Harney

Fuel Break: None

Bio: Lindeberg

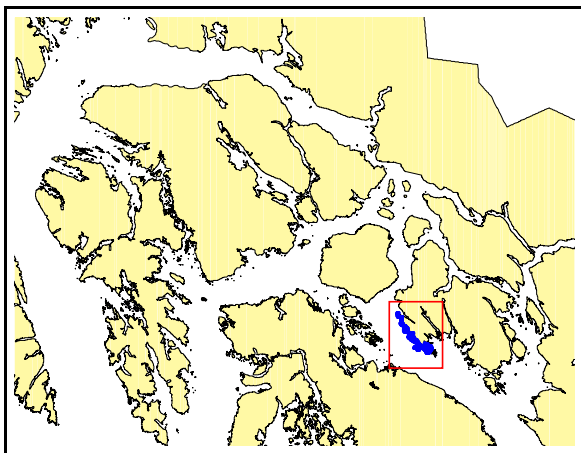
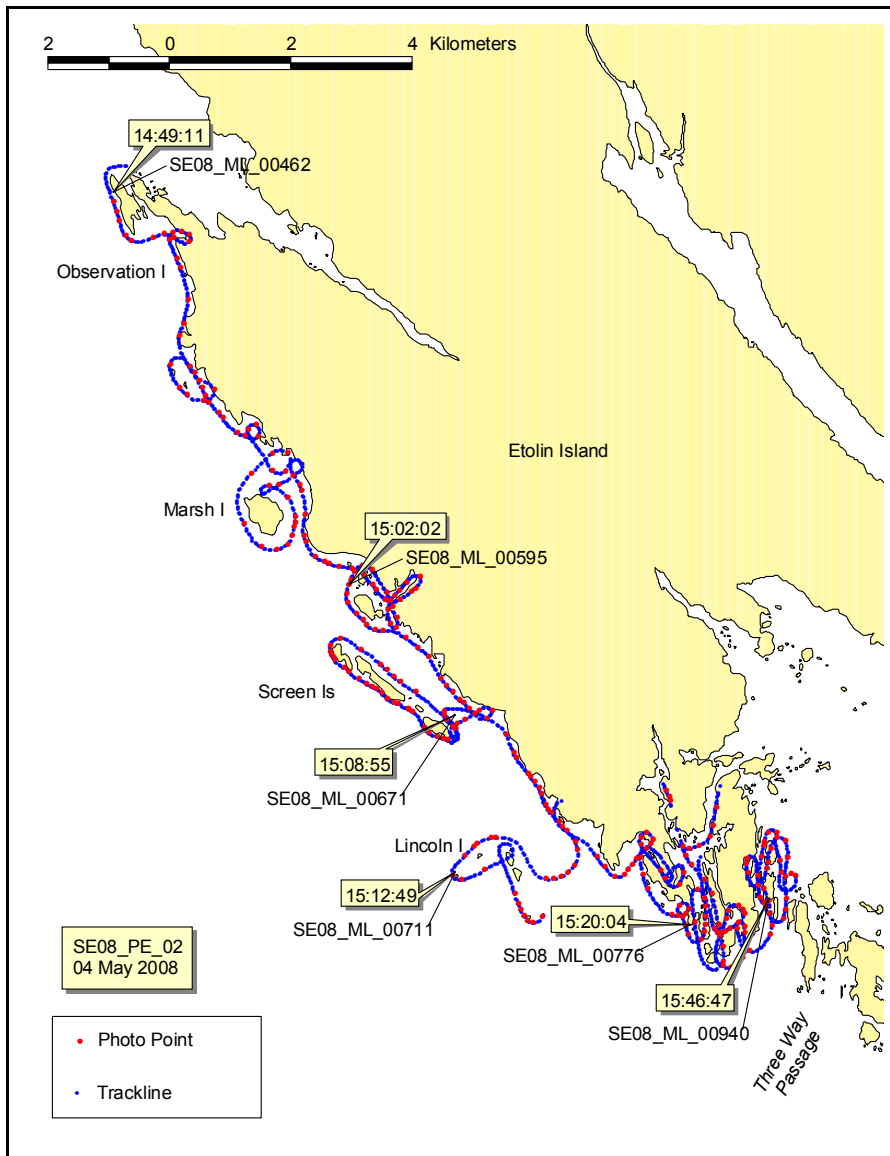
Time End (UTC): 14:00:32

Nav: Still

Tape Length: 00:38:35

Weather: Overcast, windy

Time (UTC)	Location	Photo
13:21:58	North Etolin	SE08_ML_00003
13:26:51	King George Bay	SE08_ML_00072
13:38:32	Quiet Harbor	SE07_ML_00198
13:44:58	Steamer Point	SE08_ML_00270
13:46:36	Northern Steamer Bay	SE08_ML_00290
13:54:59	Southern Steamer Bay	SE08_ML_00379



2008 Southeast Alaska Aerial Video Imaging Survey Team Petersburg (PE)

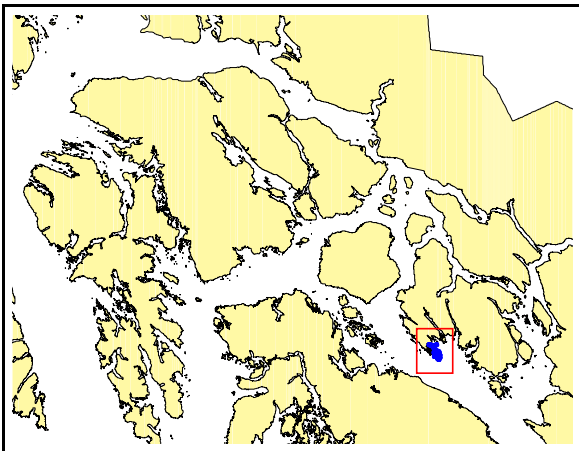
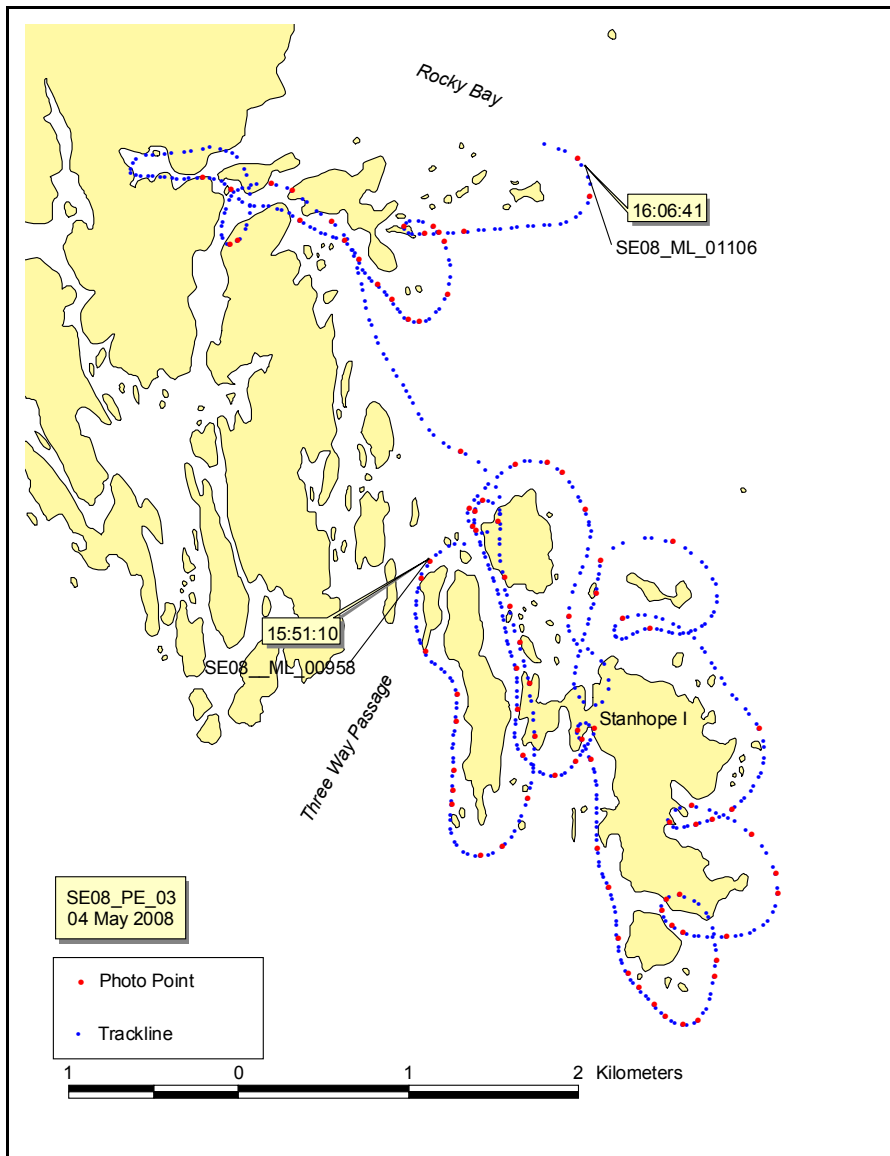
Tape: SE08_PE_02 **Date:** 04 May 08

General Location: West Etolin Island

Time Start (UTC): 14:48:40	Geo: Harney
Fuel Break: None	Bio: Lindeberg
Time End (UTC): 15:48:32	Nav: Still
Tape Length: 00:44:54	

Weather: Overcast, windy

Time (UTC)	Location	Photo
14:49:11	Observation Island	SE08_ML_00462
15:02:02	Islands off Johnson Cove	SE08_ML_00595
15:08:55	Screen Island	SE08_ML_00671
15:12:49	Lincoln Rock and Lighthouse	SE08_ML_00711
	Tape Break: 15:14:09 to 15:15:01	
15:20:04	Three Way Passage	SE08_ML_00776
	Tape Break: 15:26:17 to 15:40:19 (gps failure)	
15:46:47	Three Way Passage	SE08_ML_00940



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Petersburg (PE)**

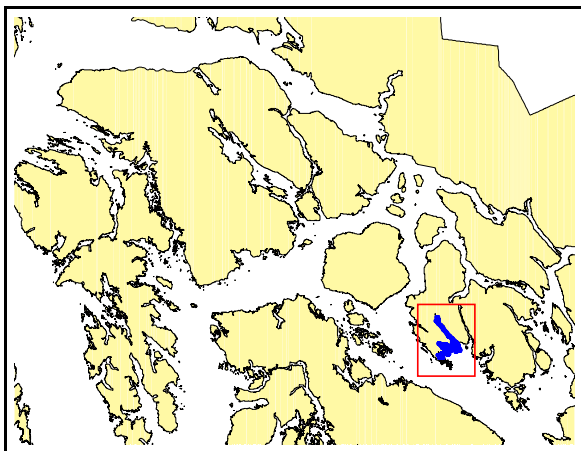
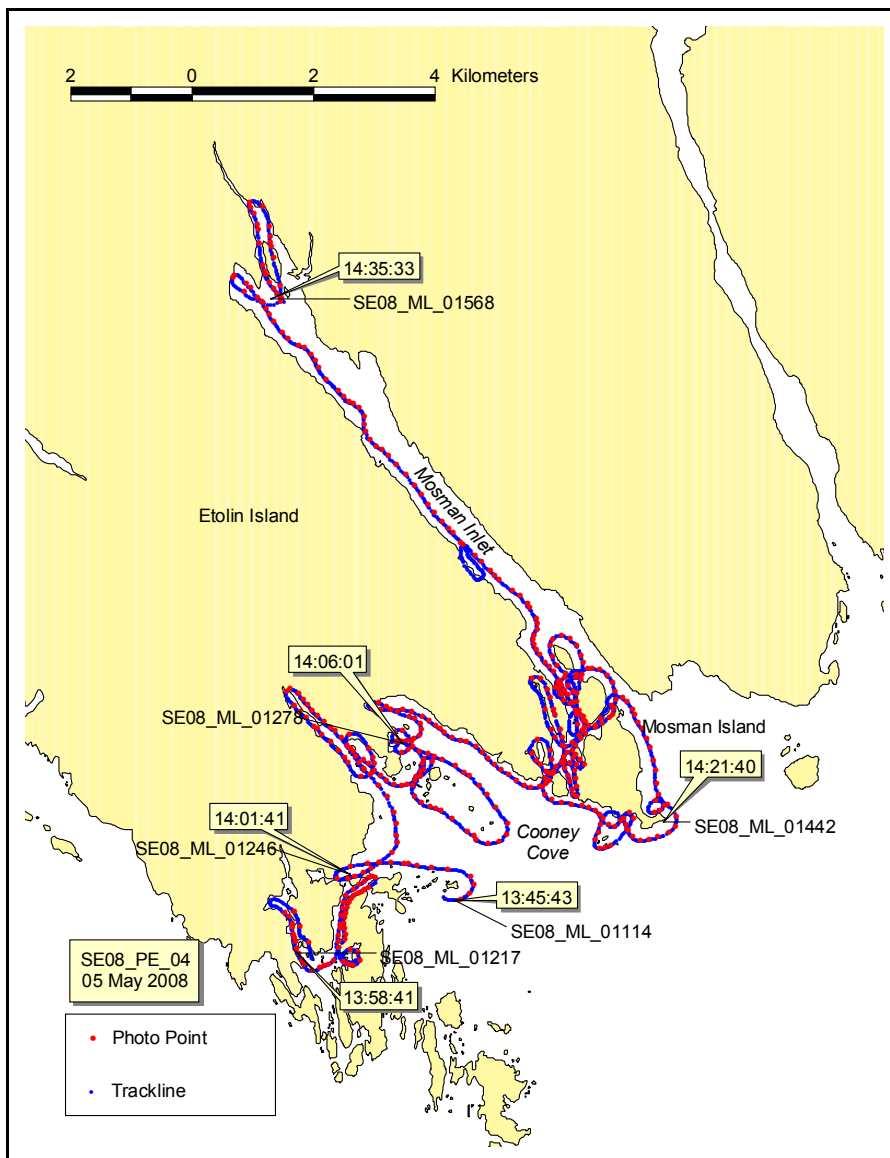
Tape: SE08_PE_03 **Date:** 04 May 08

General Location: Rocky Bay, Southwest Etolin Island

Time Start (UTC): 15:51:02 **Geo:** Harney
Fuel Break: None **Bio:** Lindeberg
Time End (UTC): 16:06:46 **Nav:** Still
Tape Length: 00:15:44

Weather: Overcast, windy

Time (UTC)	Location	Photo
15:51:10	Three Way Passage	SE08_ML_00958
16:06:41	Rocky Bay	SE08_ML_01106



2008 Southeast Alaska Aerial Video Imaging Survey **Team Petersburg (PE)**

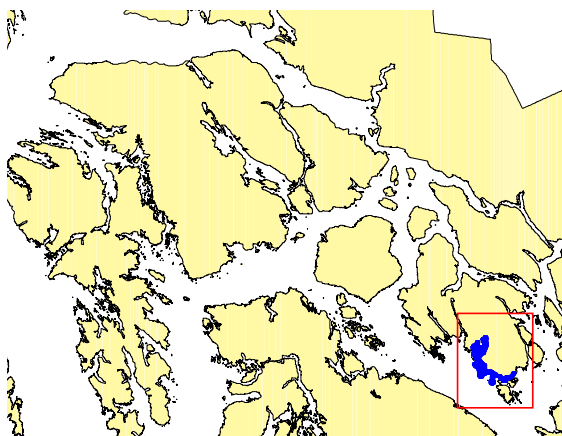
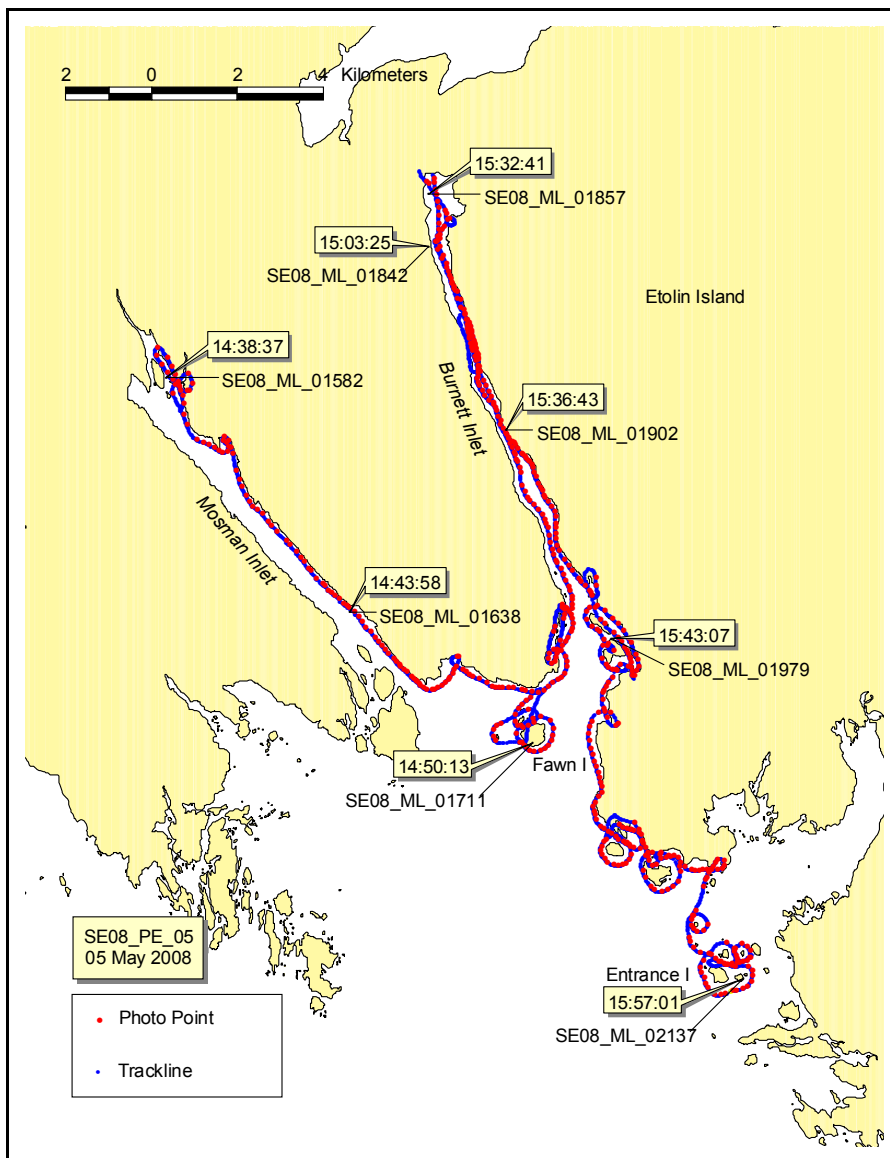
Tape: SE08_PE_04 **Date:** 05 May 08

General Location: Rocky Bay, Southwest Etolin Island

Time Start (UTC):	13:45:32	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	14:35:36	Nav:	Sherman
Tape Length:	00:45:08		

Weather: Overcast, light winds

Time (UTC)	Location	Photo
13:45:43	Three Way Passage	SE08_ML_01114
	Tape Break: 13:55:45 to 13:58:27	
13:58:41	North of Three Way Passage	SE08_ML_01217
	Tape Break: 14:03:51 to 14:05:14	
14:01:41	Northern Three Way Passage	SE08_ML_01246
14:06:01	Cooney Cove	SE08_ML_01278
14:21:40	Southern Mosman Island	SE08_ML_01442
	Tape Break: 14:23:50 to 14:24:35	
14:35:33	Head of Mosman Inlet	SE08_ML_01568



2008 Southeast Alaska Aerial Video Imaging Survey Team Petersburg (PE)

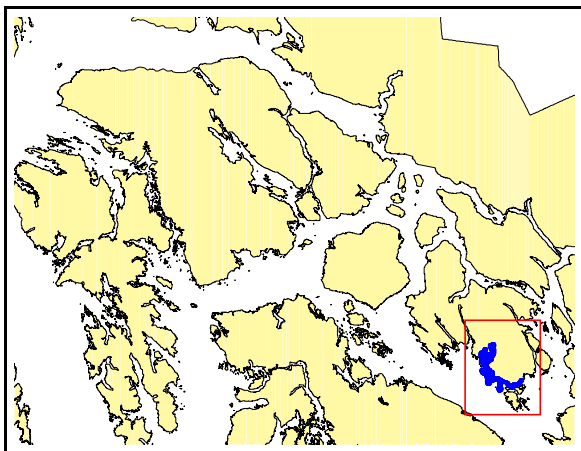
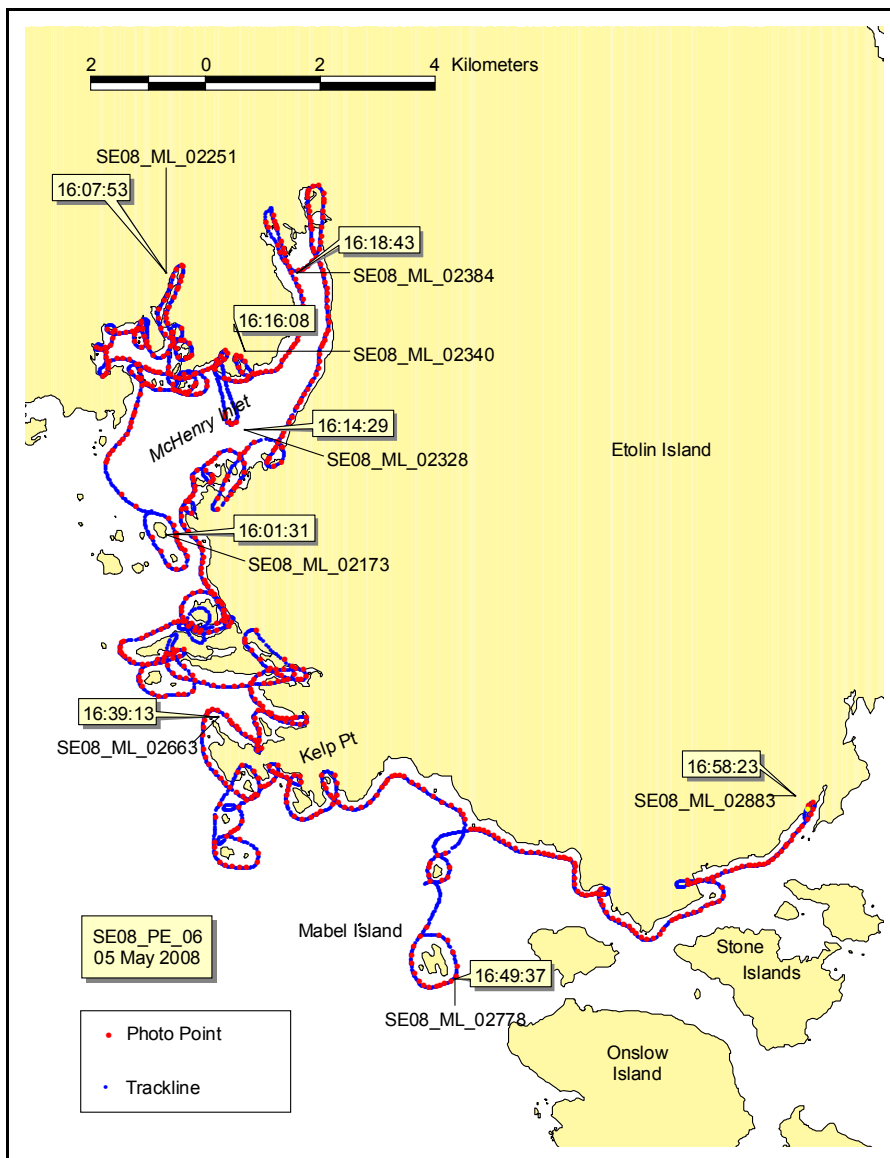
Tape: SE08_PE_05 **Date:** 05 May 08

General Location: Mosman and Burnett Inlets, Southwest Etolin Island

Time Start (UTC):	14:37:05	Geo:	Harney
Fuel Break:	15:04:44 to 15:32:31	Bio:	Lindeberg
Time End (UTC):	15:59:12	Nav:	Sherman
Tape Length:	00:54:18		

Weather: Overcast, light winds

Time (UTC)	Location	Photo
14:38:37	Northern Mosman Inlet	SE08_ML_01582
14:43:58	Southeast side of Mosman Inlet	SE08_ML_01638
14:50:13	Fawn Island	SE08_ML_01711
15:03:25	Northern Burnett Inlet	SE08_ML_01842
	Fuel Break: 15:04:44 to 15:32:31 (Anita Bay)	
15:32:41	Head of Burnett Inlet	SE08_ML_01857
15:36:43	Hatchery, central Burnett Inlet	SE08_ML_01902
15:43:07	South Burnett Island	SE08_ML_01979
15:57:01	Entrance Island, mouth of McHenry Inlet	SE08_ML_02137



2008 Southeast Alaska Aerial Video Imaging Survey **Team Petersburg (PE)**

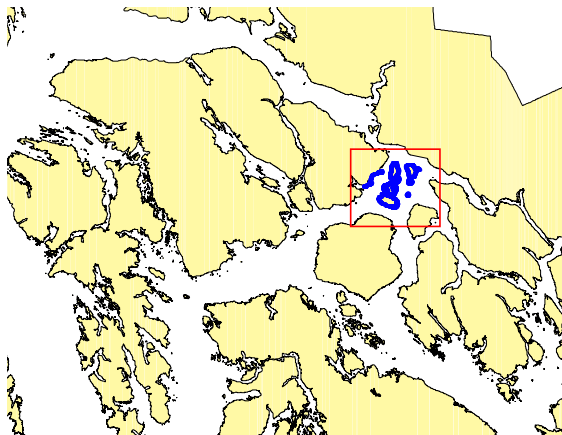
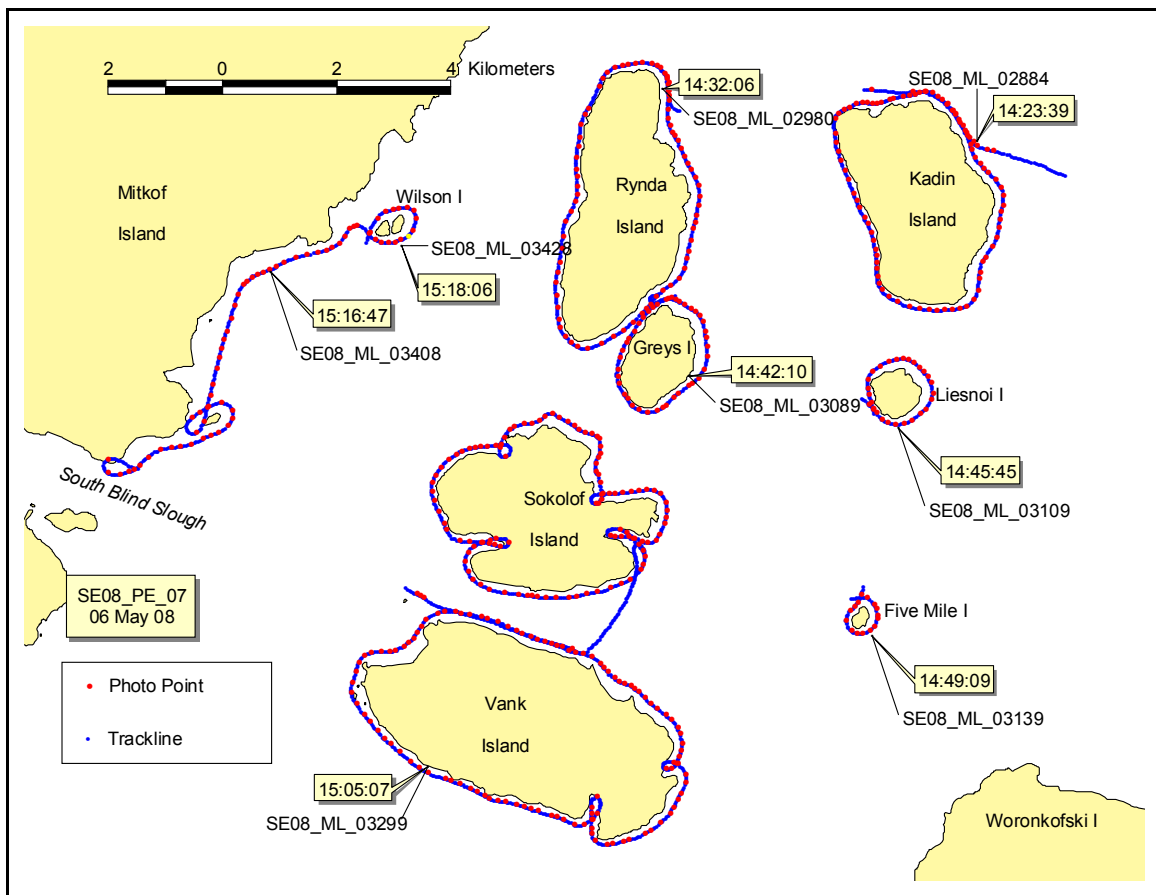
Tape: SE08_PE_06 **Date:** 05 May 08

General Location: McHenry Inlet, South Etolin Island

Time Start (UTC):	16:00:30	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	16:58:32	Nav:	Sherman
Tape Length:	00:58:02		

Weather: Overcast, light winds

Time (UTC)	Location	Photo
16:01:31	Islands at entrance of McHenry Inlet	SE08_ML_02173
16:07:53	North arm of Jadski Cove	SE08_ML_02251
16:14:29	Island south of Jadski Cove	SE08_ML_02328
16:16:08	Lower McHenry Inlet	SE08_ML_02340
16:18:43	Head of McHenry Inlet	SE08_ML_02384
16:39:13	Kelp Point	SE08_ML_02663
16:49:37	Mabel Island	SE08_ML_02778
16:58:23	South of Krogh Lake	SE08_ML_02883



2008 Southeast Alaska Aerial Video Imaging Survey Team Petersburg (PE)

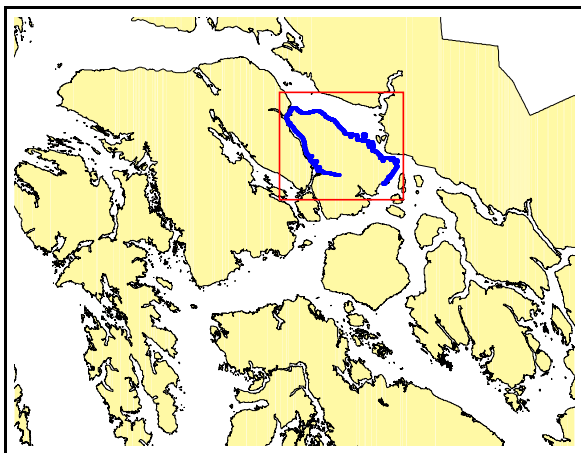
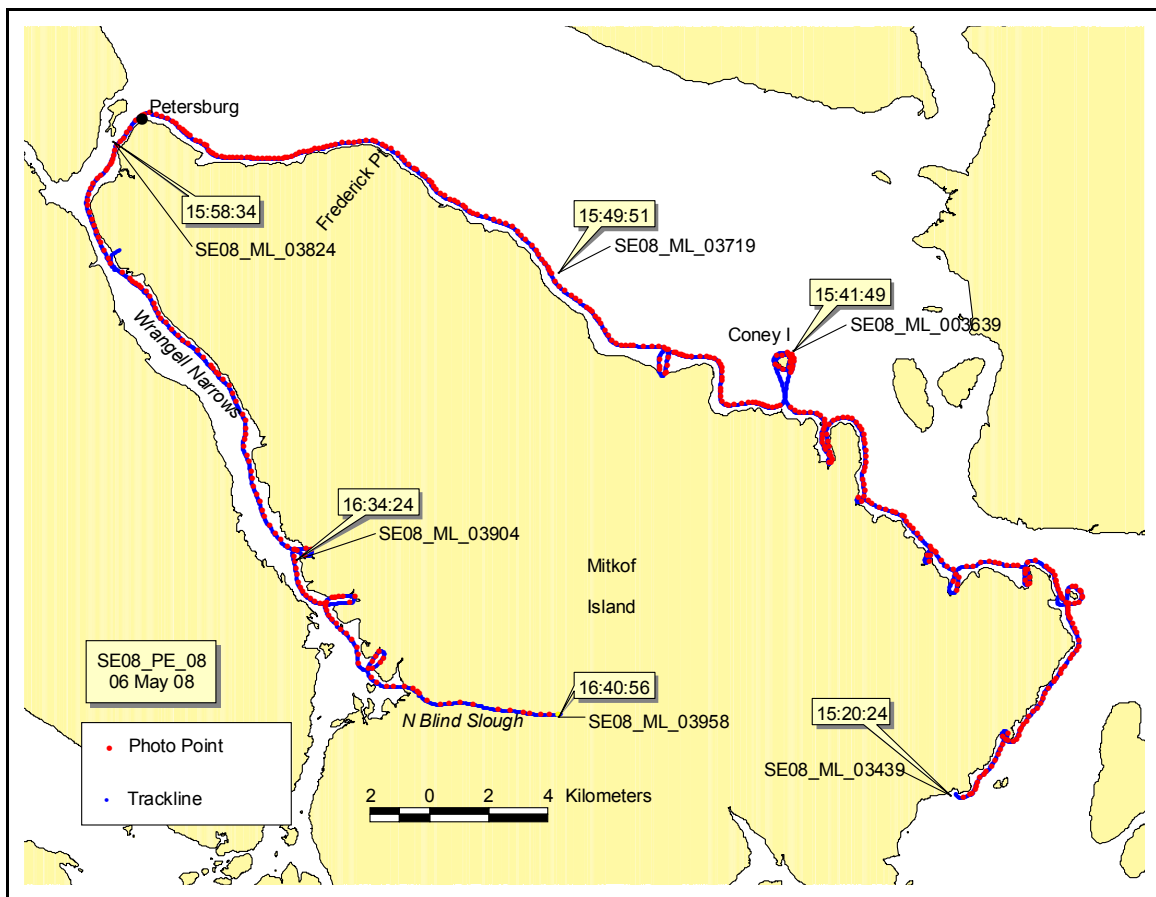
Tape: SE08_PE_07 **Date:** 06 May 08

General Location: Delta islands and South Mitkof

Time Start (UTC): 14:23:07	Geo: Harney
Fuel Break: None	Bio: Lindeberg
Time End (UTC): 15:18:54	Nav: Still
Tape Length: 00:44:45	

Weather: Overcast

Time (UTC)	Location	Photo
14:23:39	Kadin Island	SE08_ML_02884
	Tape Break: 14:30:34 to 14:31:55	
14:32:06	Rynda Island	SE08_ML_02980
	Tape Break: 14:38:09 to 14:40:25	
14:42:10	Greys Island	SE08_ML_03089
	Tape Break: 14:43:28 to 14:45:23	
14:45:45	Liesnoi Island	SE08_ML_03109
	Tape Break: 14:47:12 to 14:48:35	
14:49:09	Fivemile Island	SE08_ML_03139
	Tape Break: 14:49:41 to 14:51:13	
15:05:07	Vank Island	SE08_ML_03299
	Tape Break: 15:10:42 to 15:13:05	
15:16:47	South Mitkof Island	SE08_ML_03408
15:18:06	Wilson Island	SE08_ML_03428



2008 Southeast Alaska Aerial Video Imaging Survey **Team Petersburg (PE)**

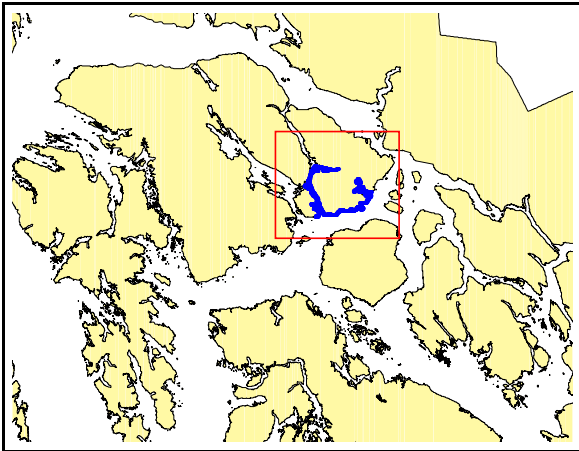
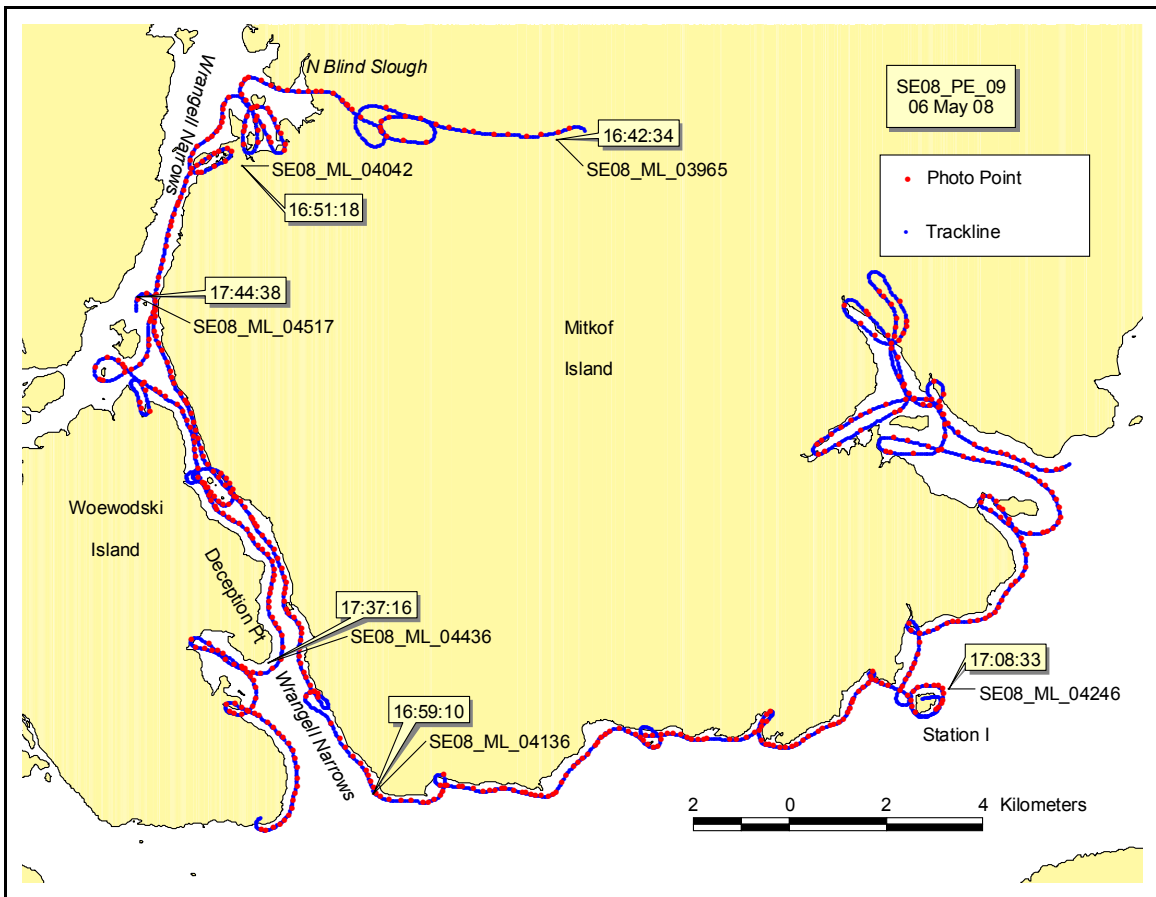
Tape: SE08_PE_08 **Date:** 06 May 08

General Location: East Mitkof Island and Wrangell Narrows

Time Start (UTC):	15:20:15	Geo:	Harney
Fuel Break:	16:00:43 to 16:27:07	Bio:	Lindeberg
Time End (UTC):	16:40:59	Nav:	Still
Tape Length:	00:54:18		

Weather: Overcast

Time (UTC)	Location	Photo
15:20:24	South Mikof Island	SE08_ML_03439
15:41:49	Coney Island	SE08_ML_03639
15:49:51	South of Frederick Pt., eastern Mitkof Island	SE08_ML_03719
15:58:34	Petersburg	SE08_ML_03824
	Fuel Break: 16:00:43 to 16:27:07 (Petersburg)	
16:34:24	Rock Pt., east side Wrangell Narrows	SE08_ML_03904
16:40:56	Blind Slough	SE08_ML_03958



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Petersburg (PE)**

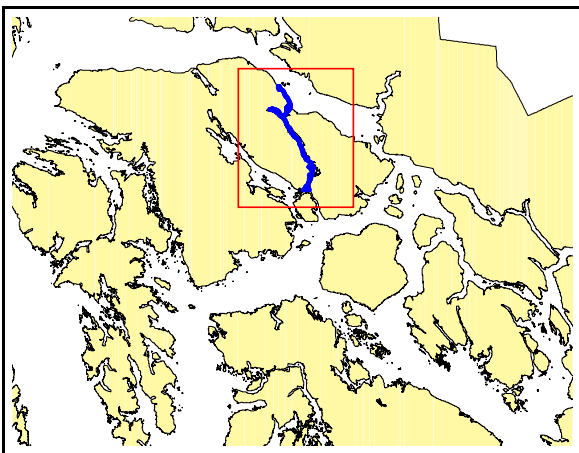
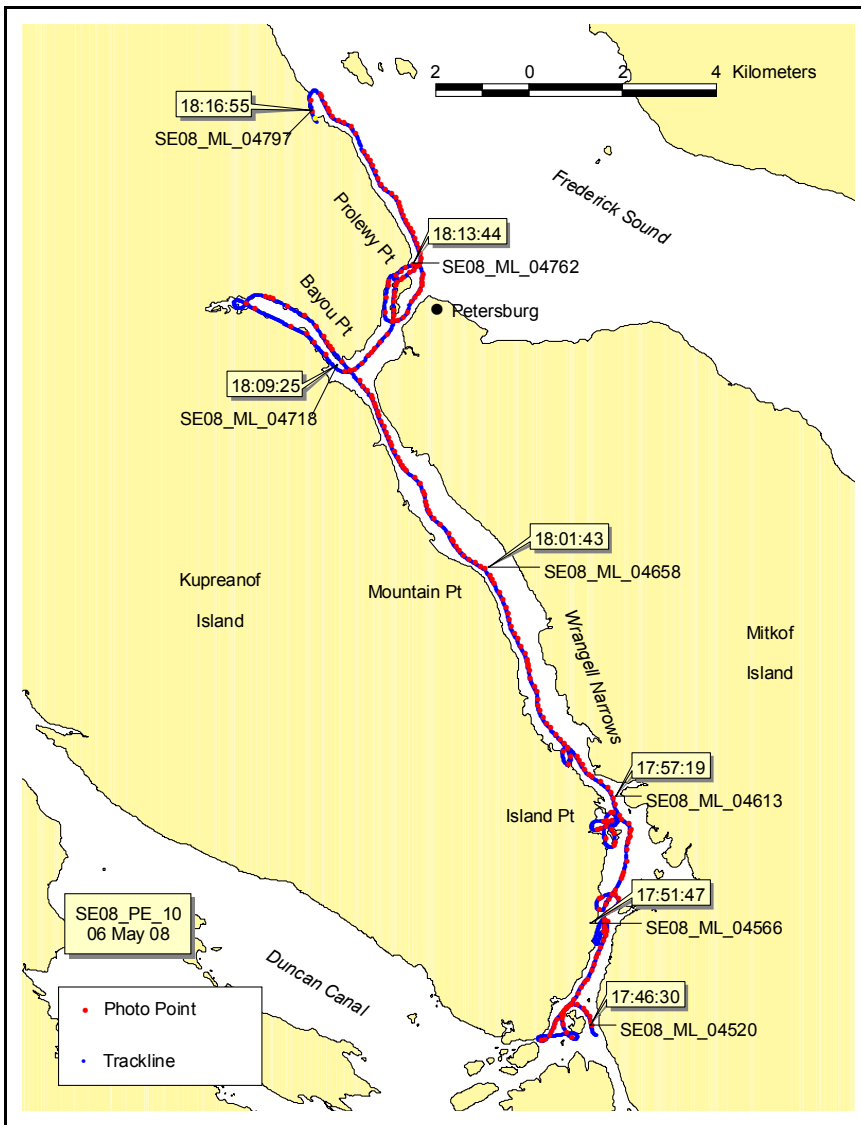
Tape: SE08_PE_09 **Date:** 06 May 08

General Location: Southeast Mitkof Island

Time Start (UTC):	16:42:24	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	17:44:53	Nav:	Still
Tape Length:	00:53:37		

Weather: Overcast

Time (UTC)	Location	Photo
16:42:34	Blind Slough	SE08_ML_03965
16:51:18	Spruce Point, Blind Slough	SE08_ML_04042
16:59:10	Pt. Alexander, southeast Mitkof Island	SE08_ML_04136
17:08:33	Station Island, southern Mitkof Island	SE08_ML_04246
	Tape Break: 17:24:10 to 17:33:00 (transit)	
17:37:16	Deception Pt., Woewodski Island	SE08_ML_04436
17:44:38	Keene Island	SE08_ML_04517



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Petersburg (PE)**

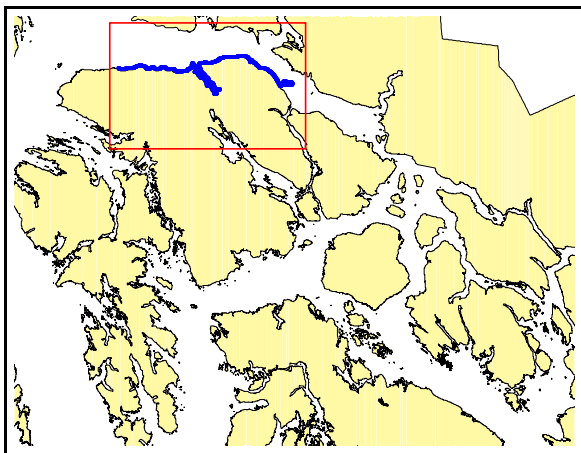
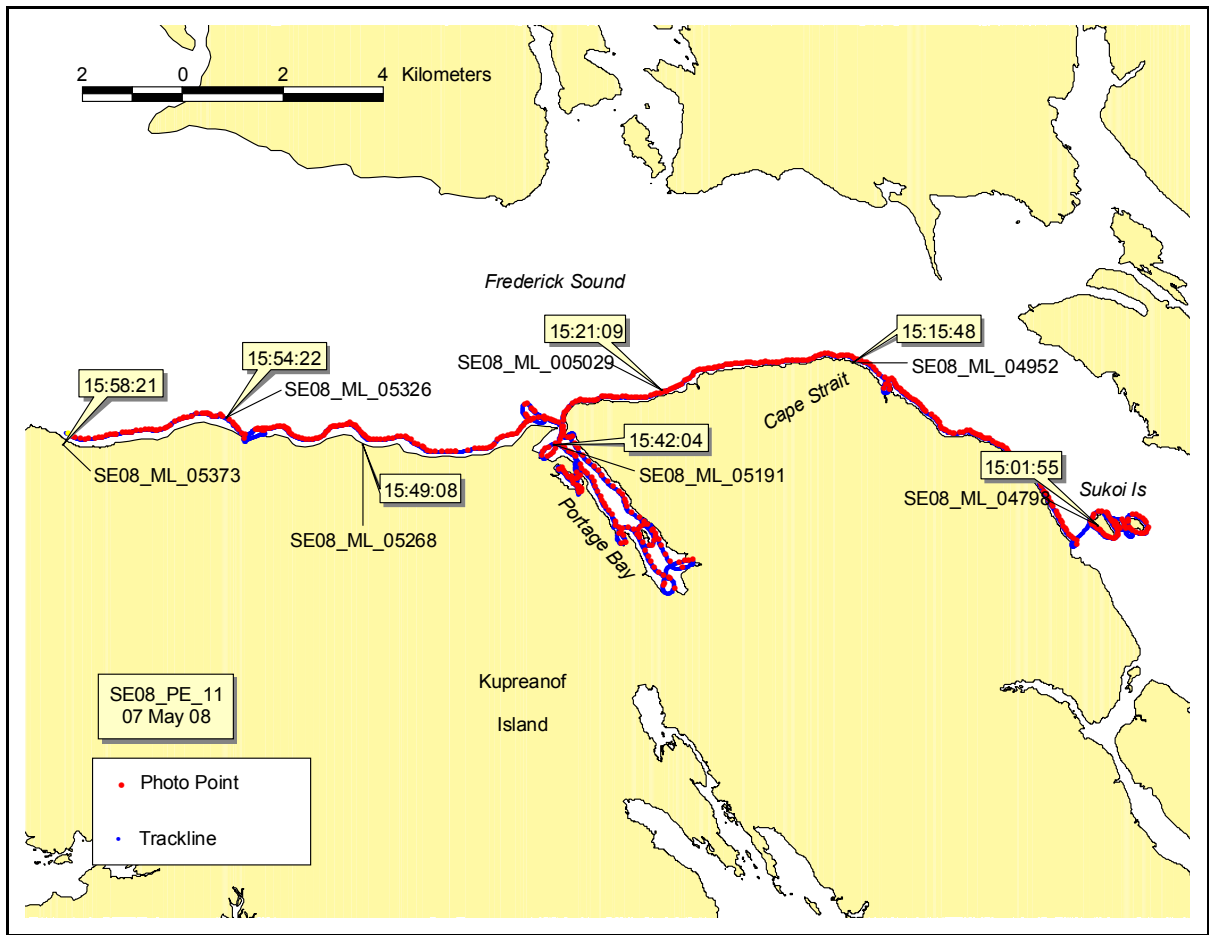
Tape: SE08_PE_10 **Date:** 06 May 08

General Location: West side Wrangell Narrows

Time Start (UTC):	17:46:12	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	18:16:58	Nav:	Still
Tape Length:	00:30:46		

Weather: Overcast

Time (UTC)	Location	Photo
17:46:30	Keene Island	SE08_ML_04520
17:51:47	Tube worms, west side Wrangell Narrows	SE08_ML_04566
17:57:19	Island Point	SE08_ML_04613
18:01:43	Mountain Point	SE08_ML_04658
18:09:25	Bayou Point	SE08_ML_04718
18:13:44	Prolewy Point	SE08_ML_04762
18:16:55	Colp Lake stream, east of Sukoi Islets	SE08_ML_04797



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Petersburg (PE)**

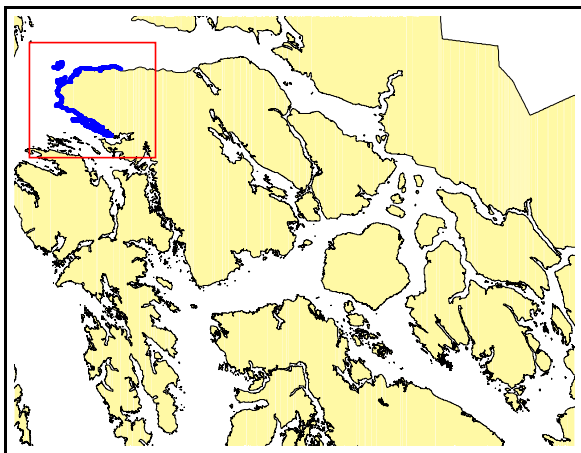
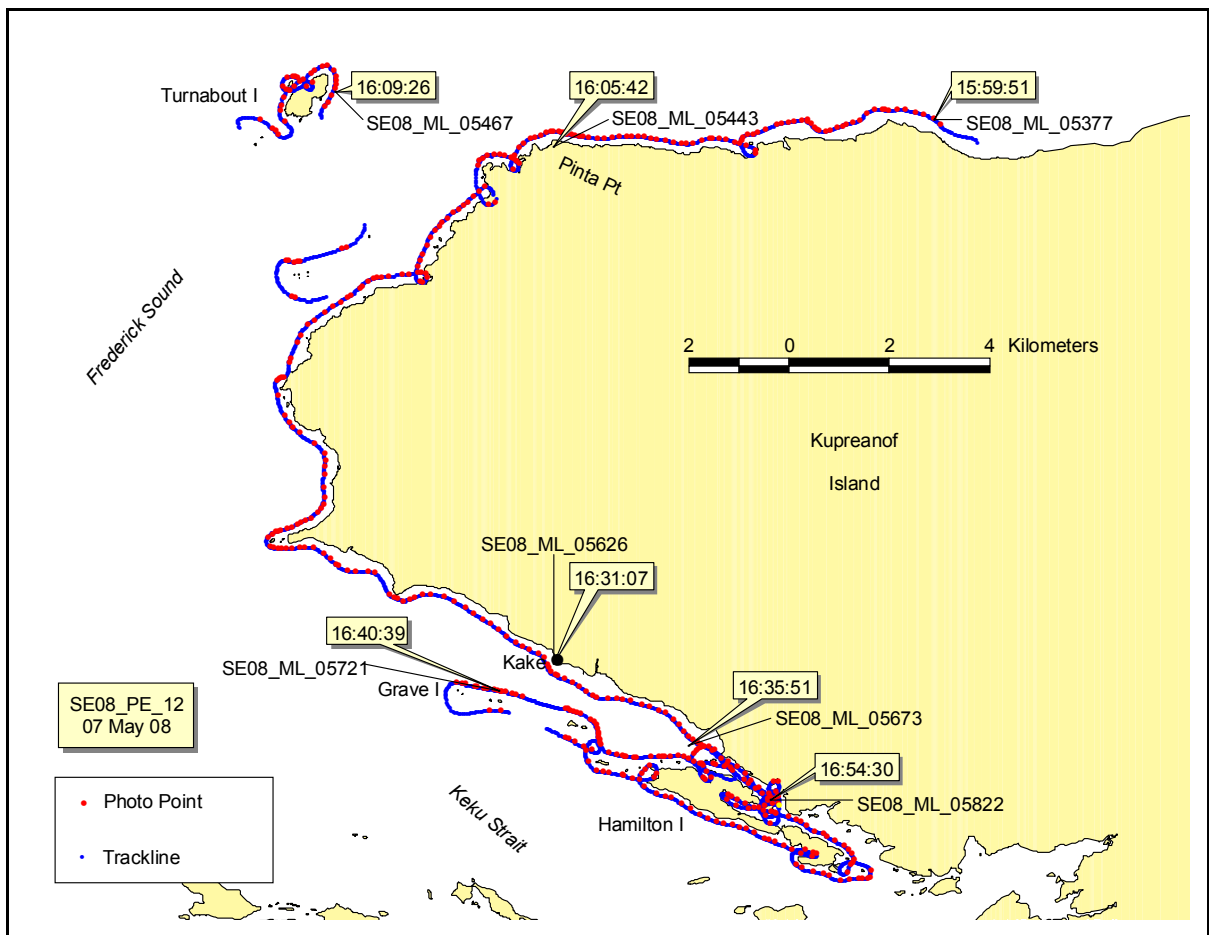
Tape: SE08_PE_11 **Date:** 07 May 08

General Location: Northeast Kupreanof Island

Time Start (UTC):	15:01:49	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	15:58:24	Nav:	Sherman
Tape Length:	00:56:35		

Weather: Sunny

Time (UTC)	Location	Photo
15:01:55	Sukoi Islets	SE08_ML_04798
15:15:48	Cape Strait	SE08_ML_04952
15:21:09	Near Boulder Point, N. Kupreanof Island	SE08_ML_05029
15:42:04	West Point, Portage Bay, N. Kupreanof Island	SE08_ML_05191
15:49:08	N. Kupreanof Island	SE08_ML_05268
15:54:22	Wave-cut platforms, N. Kupreanof Island	SE08_ML_05326
15:58:21	Tape end: N. Kupreanof Island	SE08_ML_05373



2008 Southeast Alaska Aerial Video Imaging Survey **Team Petersburg (PE)**

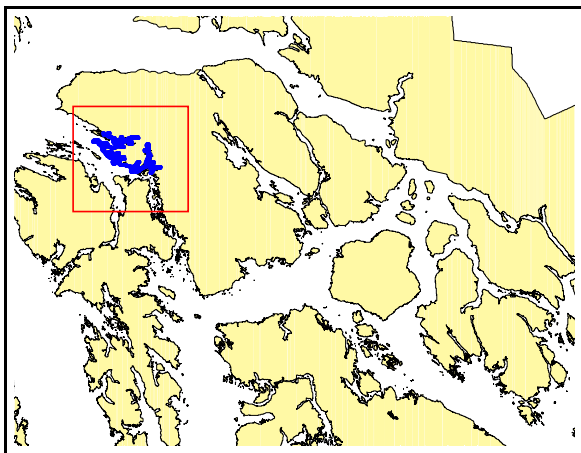
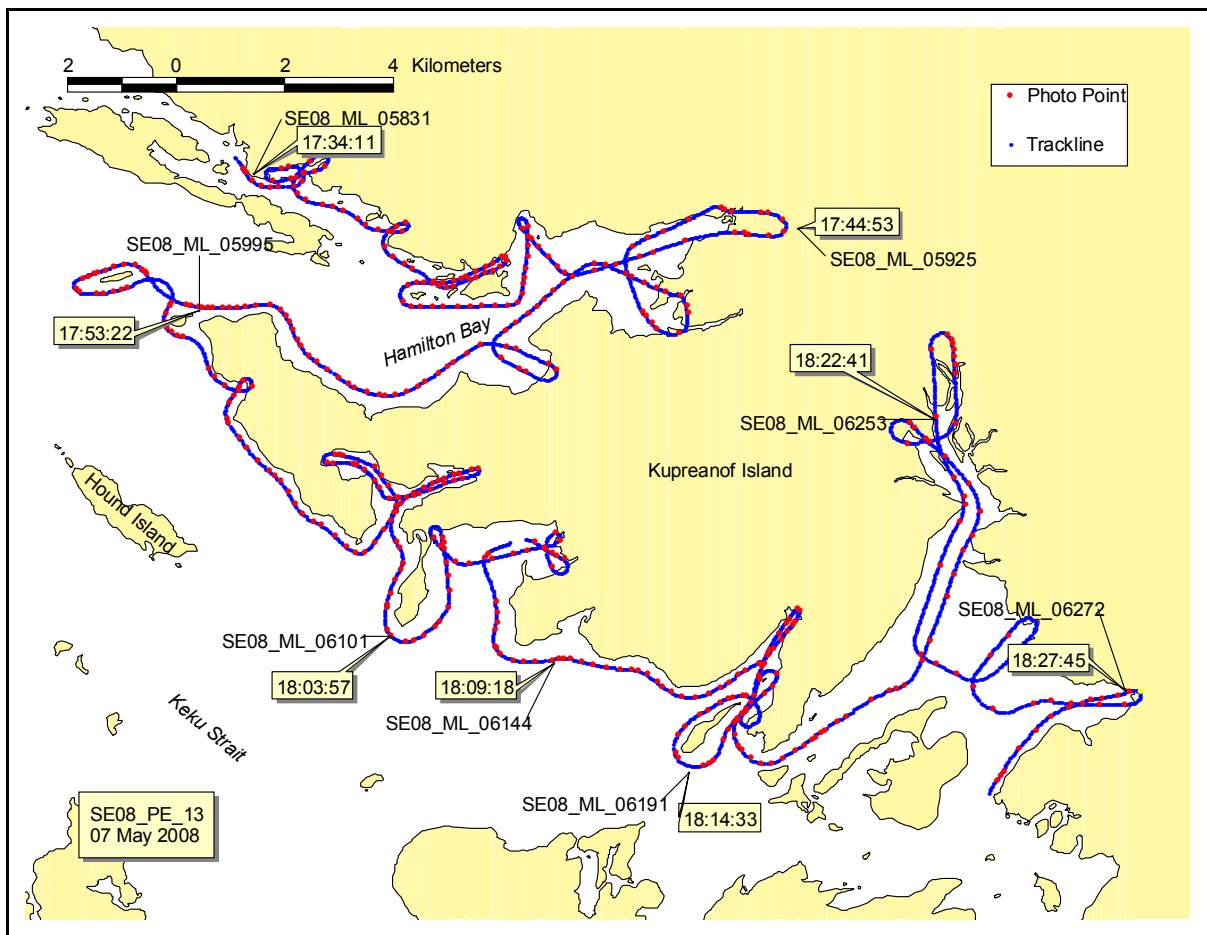
Tape: SE08_PE_12 **Date:** 07 May 08

General Location: Northwest Kupreanof Island, Kake

Time Start (UTC):	15:59:25	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	16:55:38	Nav:	Sherman
Tape Length:	00:53:55		

Weather: Sunny

Time (UTC)	Location	Photo
15:59:51	North Kupreanof Island	SE08_ML_05377
16:05:42	East of Pinta Pt.	SE08_ML_05443
16:09:26	Turnabout Island	SE08_ML_05467
	Tape Break: 16:16:36 to 16:18:52 (transit)	
16:31:07	Kake	SE08_ML_05626
16:35:51	Off Hamilton Island, near Kake	SE08_ML_05673
16:40:39	Grave Island, near Kake	SE08_ML_05721
16:54:30	Portage Pass, west Kupreanof Island	SE08_ML_05822



2008 Southeast Alaska Aerial Video Imaging Survey **Team Petersburg (PE)**

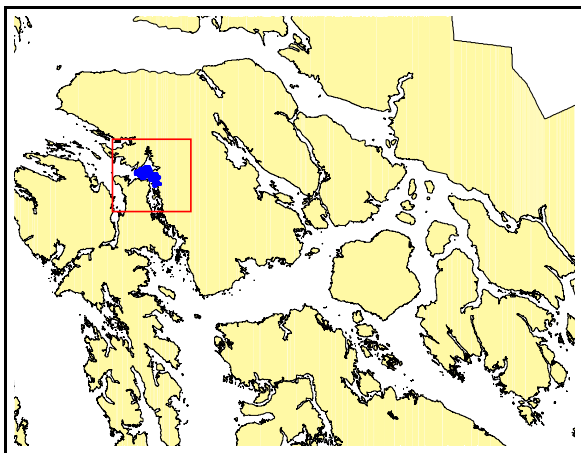
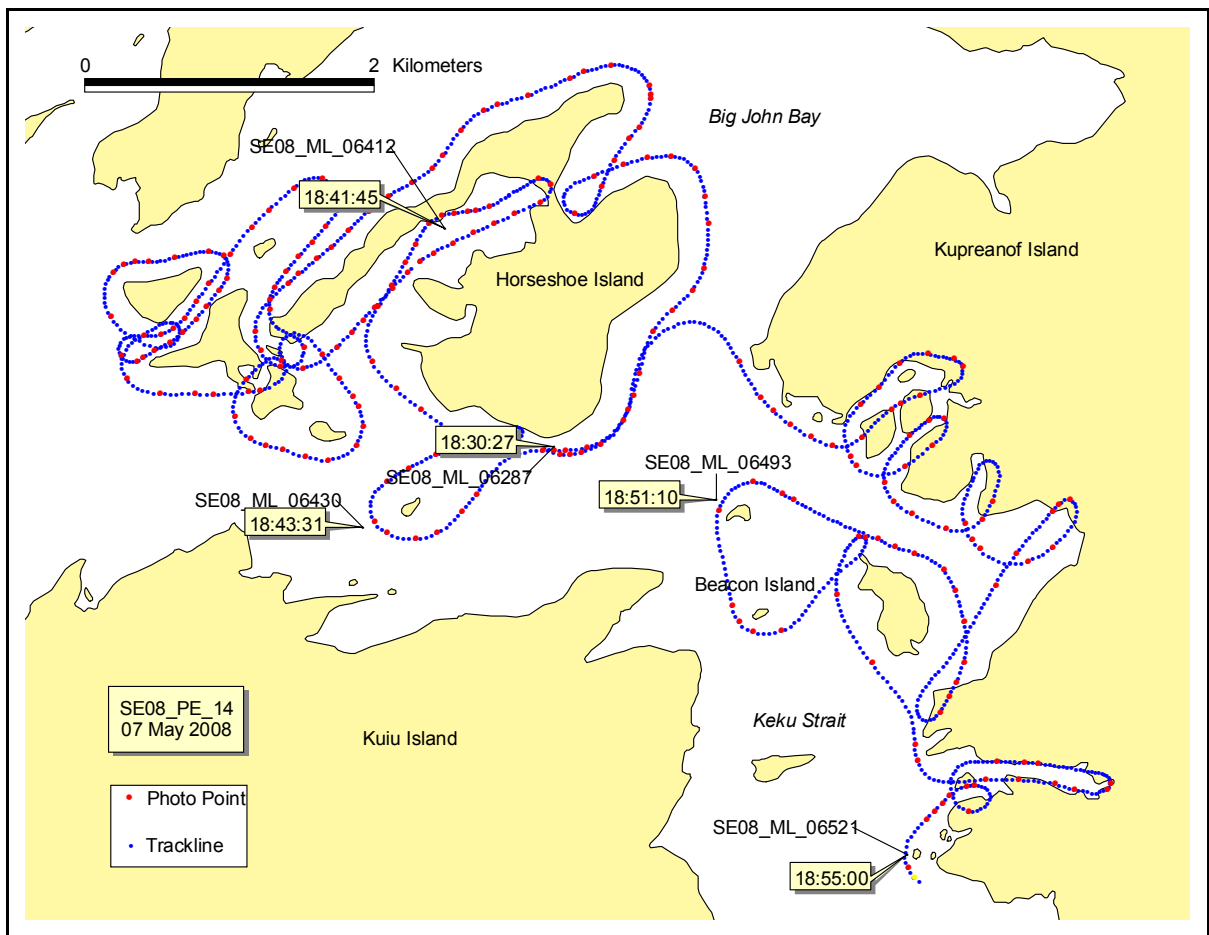
Tape: SE08_PE_13 **Date:** 07 May 08

General Location: Northwest Kupreanof Island, Kake

Time Start (UTC):	17:34:05	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	18:29:27	Nav:	Sherman
Tape Length:	00:55:13		

Weather: Sunny

Time (UTC)	Location	Photo
17:34:11	Portage Pass, west Kupreanof Island	SE08_ML_05831
17:44:53	Hamilton Bay	SE08_ML_05925
17:53:22	Point Hamilton	SE08_ML_05995
18:03:57	Salt Point	SE08_ML_06101
	Tape Break: 18:07:42 to 18:07:49	
18:09:18	Davidson Bay	SE08_ML_06144
18:14:33	Entrance Island	SE08_ML_06191
18:22:41	Big John Bay	SE08_ML_06253
18:27:45	Big John Creek	SE08_ML_06272



2008 Southeast Alaska Aerial Video Imaging Survey **Team Petersburg (PE)**

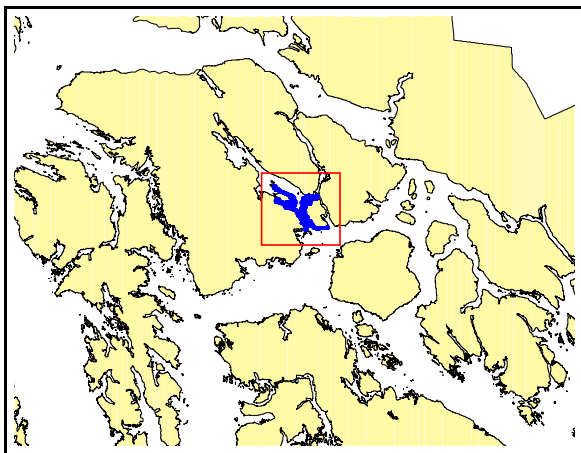
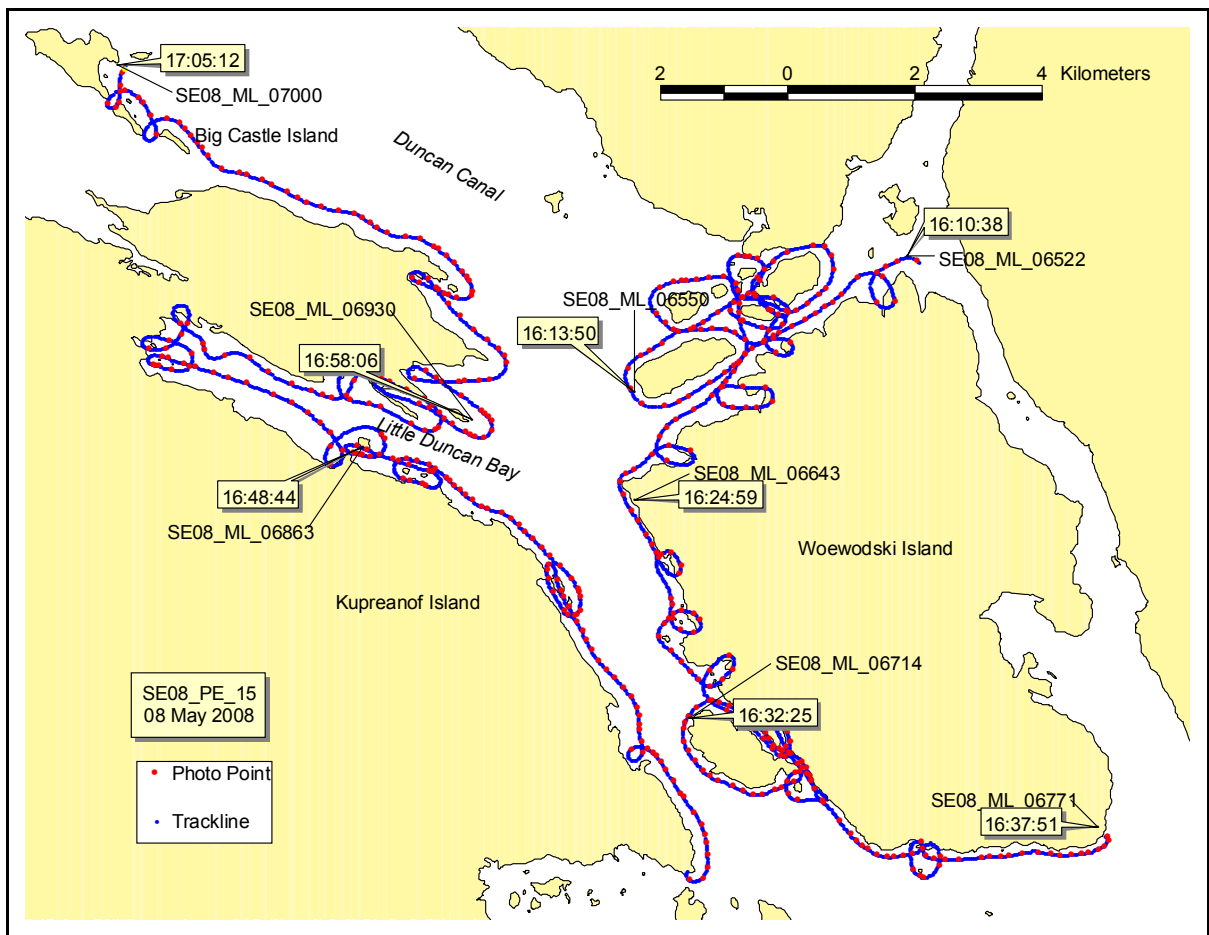
Tape: SE08_PE_14 **Date:** 07 May 08

General Location: Keku Strait, West Kupreanof Island

Time Start (UTC):	18:30:24	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	18:55:01	Nav:	Sherman
Tape Length:	00:24:37		

Weather: Sunny

Time (UTC)	Location	Photo
18:30:27	Horseshoe Island, Big John Bay	SE08_ML_06287
18:41:45	Stedman Cove, Horseshoe Island	SE08_ML_06412
18:43:31	Berry Island	SE08_ML_06430
18:51:10	Beacon Island	SE08_ML_06493
18:55:00	Keku Strait, north of High Island	SE08_ML_06521



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Petersburg (PE)**

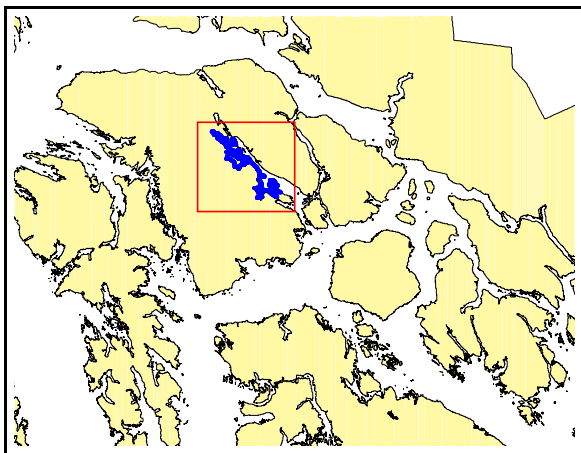
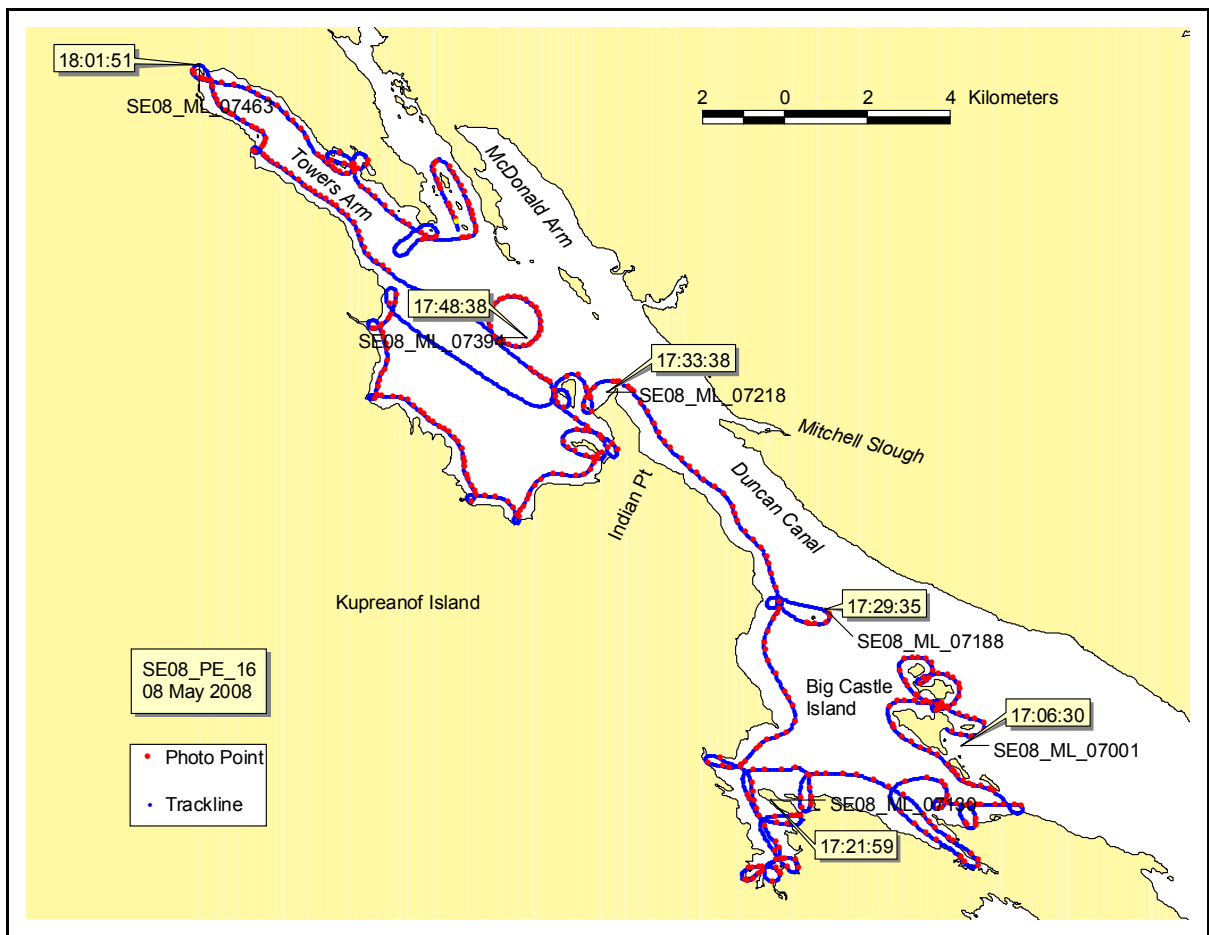
Tape: SE08_PE_15 **Date:** 08 May 08

General Location: Woewodski Island and south Duncan Canal

Time Start (UTC):	16:10:36	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	17:05:14	Nav:	Still
Tape Length:	00:51:30		

Weather: Sunny

Time (UTC)	Location	Photo
16:10:38	North Woewodski Island	SE08_ML_06522
16:13:50	Fair Island	SE08_ML_06550
16:24:59	Near Harvey Lake Trail, NW Woewodski Island	SE08_ML_06643
16:32:25	Butterworth Island	SE08_ML_06714
16:37:51	Southeast Woewodski Island	SE08_ML_06771
	Tape Break: 16:37:53 to 16:40:59	
16:48:44	Emily Island, Little Duncan Bay	SE08_ML_06863
16:58:06	Entrance to Little Duncan Bay	SE08_ML_06930
17:05:12	Big Castle Island, central Duncan Canal	SE08_ML_07000



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Petersburg (PE)**

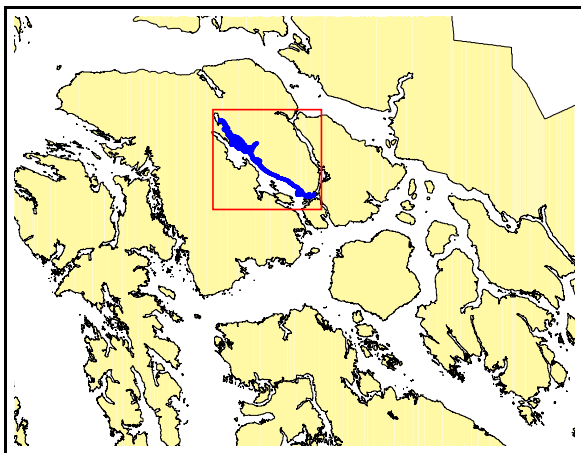
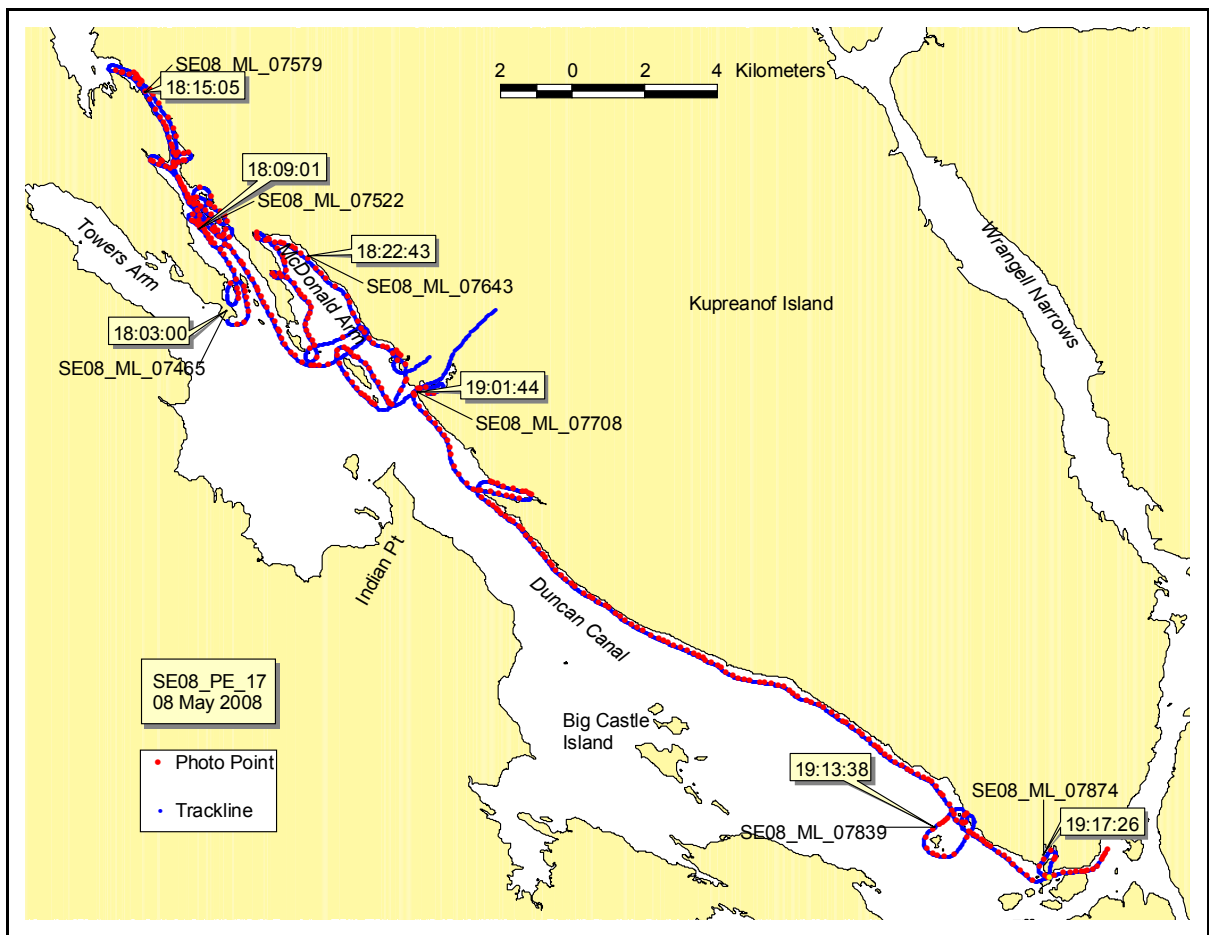
Tape: SE08_PE_16 **Date:** 08 May 08

General Location: Duncan Canal

Time Start (UTC):	17:06:26	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	18:01:56	Nav:	Still
Tape Length:	00:55:30		

Weather: Sunny

Time (UTC)	Location	Photo
17:06:30	Big Castle Island, central Duncan Canal	SE08_ML_07001
17:21:59	Castle River, west side Duncan Canal	SE08_ML_07130
17:29:35	Rookery Island	SE08_ML_07188
17:33:38	Indian Point	SE08_ML_07218
17:48:38	Off Taylor Creek, southern Towers Arm	SE08_ML_07345
17:54:07	Head of Towers Arm, Duncan Canal	SE08_ML_07394
18:01:51	Entrance to North Arm, Duncan Canal	SE08_ML_07463



**2008 Southeast Alaska Aerial Video Imaging Survey
Team Petersburg (PE)**

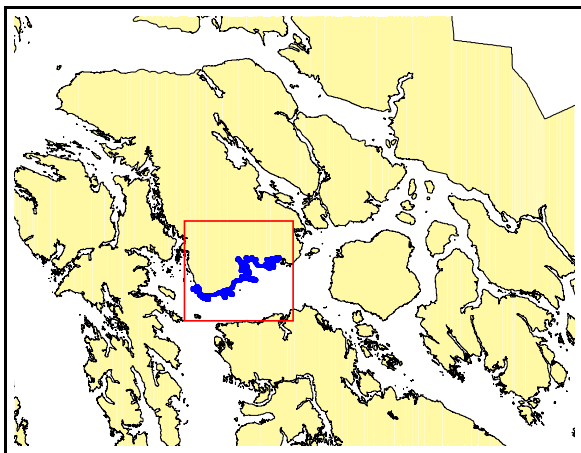
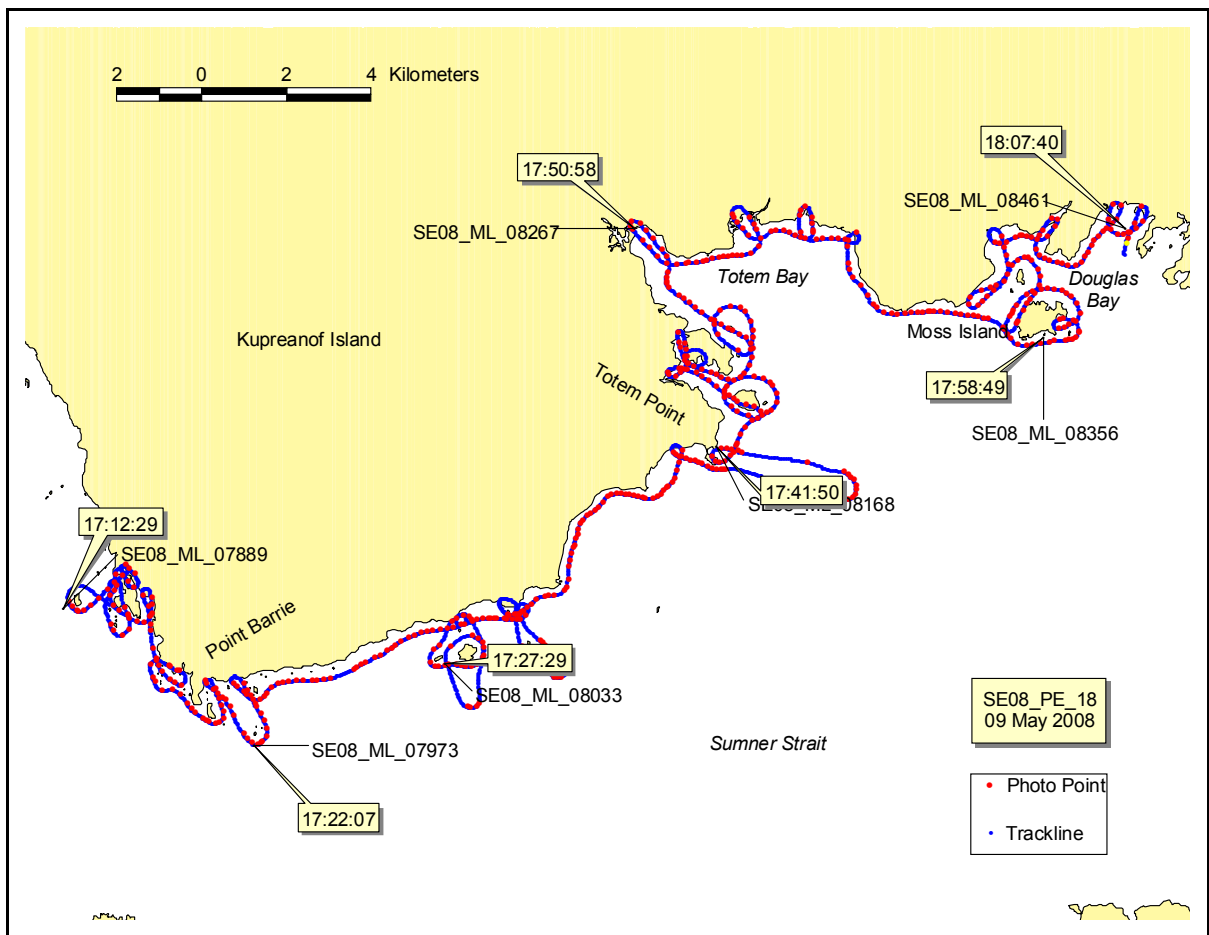
Tape: SE08_PE_17 **Date:** 08 May 08

General Location: Duncan Canal

Time Start (UTC):	18:02:50	Geo:	Harney
Fuel Break:	18:30:40 to 19:00:33	Bio:	Lindeberg
Time End (UTC):	19:18:17	Nav:	Still
Tape Length:	00:45:32		

Weather: Sunny

Time (UTC)	Location	Photo
18:03:00	Entrance to North Arm, Duncan Canal	SE08_ML_07465
18:09:01	Head of North Arm, Duncan Canal	SE08_ML_07522
18:15:05	Islets in central North Arm	SE08_ML_07579
18:22:43	McDonald Arm	SE08_ML_07643
	Fuel Break: 18:30:40 to 19:00:33 (Petersburg)	
19:01:44	Ohmer Slough	SE08_ML_07708
19:13:38	Grief Island, southeast Duncan Canal	SE08_ML_07839
19:17:26	Hood Point	SE08_ML_07874



2008 Southeast Alaska Aerial Video Imaging Survey **Team Petersburg (PE)**

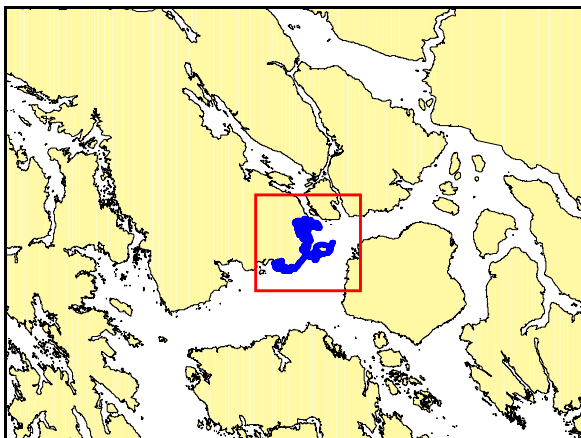
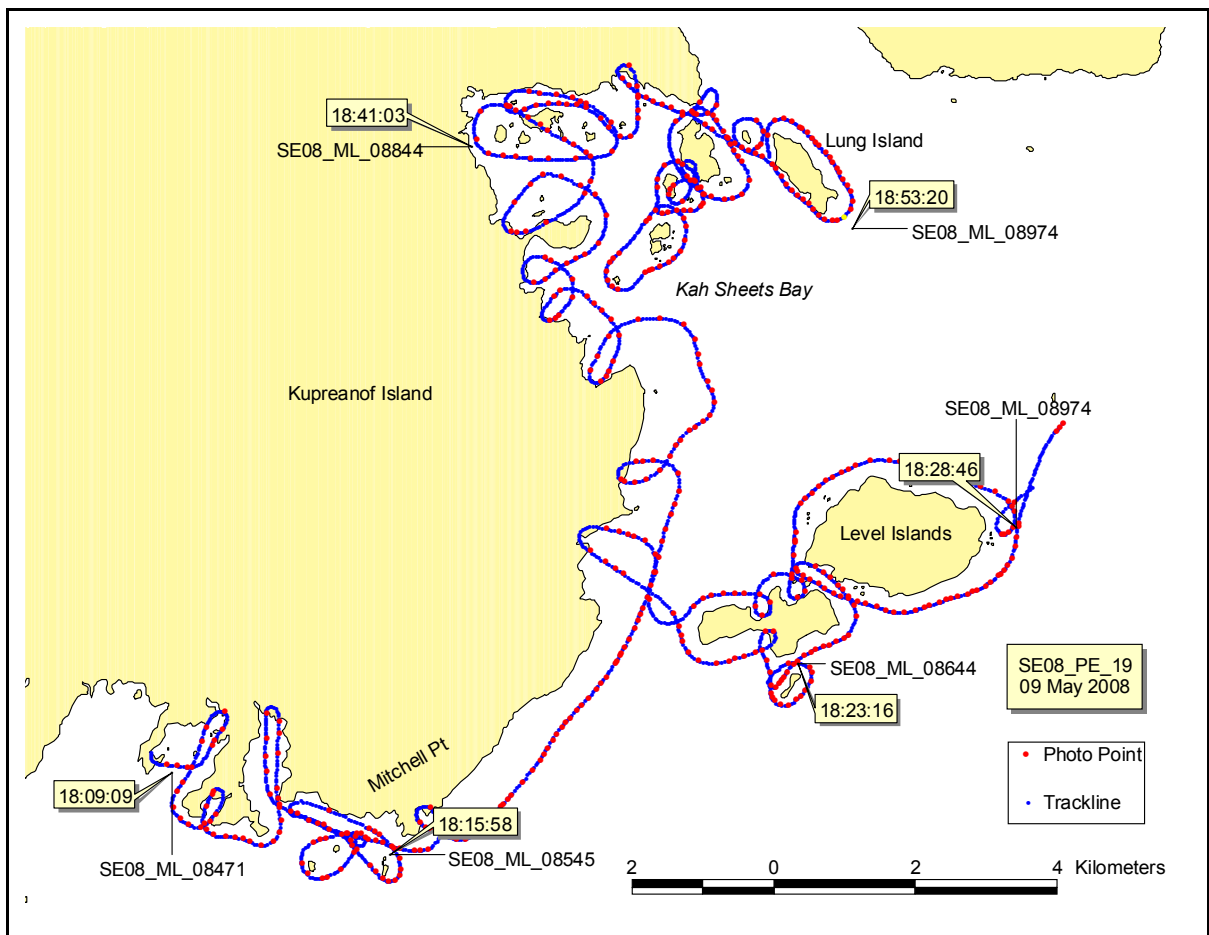
Tape: SE08_PE_18 **Date:** 09 May 08

General Location: Pt. Barrie to Douglas Bay, South Kupreanof Island

Time Start (UTC):	17:11:51	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	18:07:47	Nav:	Sherman
Tape Length:	00:55:56		

Weather: Sunny

Time (UTC)	Location	Photo
17:12:29	Trouble Island	SE08_ML_07889
17:22:07	Point Barrie, southwest Kupreanof Island	SE08_ML_07973
17:27:29	Yellow Island	SE08_ML_08033
17:41:50	Totem Point	SE08_ML_08168
17:50:58	Totem Bay	SE08_ML_08267
17:58:49	Moss Island	SE08_ML_08356
18:07:40	Douglas Bay	SE08_ML_08461



2008 Southeast Alaska Aerial Video Imaging Survey **Team Petersburg (PE)**

Tape: SE08_PE_19 **Date:** 09 May 08

General Location: Douglas Bay to Kah Sheets, South Kupreanof Island

Time Start (UTC):	18:08:58	Geo:	Harney
Fuel Break:	None	Bio:	Lindeberg
Time End (UTC):	18:54:35	Nav:	Sherman
Tape Length:	00:45:37		

Weather: Sunny





Time (UTC)	Location	Photo
18:09:09	Douglas Bay	SE08_ML_08471
18:15:58	Mitchell Point, Sumner Strait	SE08_ML_08545
18:23:16	West Level Islands	SE08_ML_08644
18:28:46	East Level Islands	SE08_ML_08715
18:41:03	Kah Sheets Bay	SE08_ML_08844
18:53:20	Lung Island	SE08_ML_08974

**ShoreZone Aerial Video Imaging (AVI) Survey
Southeast Alaska
May 4-9, 2008**

Team Wrangell (WR)
Sample Photos







Eastern Passage, Blake Channel, Bradfield Canal, east side of Wrangell Island

Coastline surveyed included large estuary features where salt marsh vegetation was just beginning to green up. Flocks of snow geese were seen in the Bradfield estuary. Steep bedrock shorelines showed a dense mid-intertidal Blue Mussel bioband, characteristic of fjord-type habitats. Biogenic sands characterized many pocket beaches and river deltas, a light-colored contrast to adjacent dark bedrock. Anthropogenic shorelines and boat harbors were observed in the Wrangell town site shorelines.

	
Aaron Creek estuary SE08_MM_00492.jpg	Blue Mussel bioband in Blake Channel SE08_MM_00546_.jpg
	
Stone wall fish traps, Bradfield Canal SE08_MM_00671.jpg	Shell sand beach, north Wrangell Island SE08_MM_01329.jpg
	
Construction at Wrangell airport SE08_MM_01391.jpg	Chief Shakes Island, Wrangell SE08_MM_01442.jpg


Zarembo Island, Woronkofski Island and southwest Wrangell Island

Zarembo Island has wide, flat coasts with lush lower intertidal Red Algae biobands, particularly on the west and south shores. Both wide bedrock flats and sediment-dominated cobble/boulder beaches were seen. Dragon Kelp was observed on the west side, across from the southernmost extent it was observed last year on the Prince of Wales shoreline.

	
<p>St. John Harbor, Zarembo Island SE08_MM_01819.jpg</p>	<p>Dragon kelp on west Zarembo Island SE08_MM_02036.jpg</p>
	
<p>Cape Nesbitt, south Zarembo Island SE08_MM_02151.jpg</p>	<p>Lush Red Algae bioband on lower intertidal beach, Meter Bight, Zarembo Island SE08_MM_02274.jpg</p>
	
<p>Possible clam garden, The Narrows, Zimovia Strait, Wrangell Island SE08_MM_02741.jpg</p>	<p>Bear with two cubs, digging clams near Pt. Warde, Bradfield Canal SE08_MM_03320.jpg</p>




South and southeast Etolin Island









South Etolin Island has wide reef and islet complexes, with areas of very protected bays and lagoons. Bedrock types ranged from columnar basalt to granite. A complex tidal lagoon feature with several ponded lagoons at different elevations was seen on the east side of Brownson Island. Both eelgrass and canopy kelps were sparse and observed infrequently.

	
<p>SE08_MM_03555.jpg Reefs and protected bays, South Onslow Island</p>	<p>Islet of columnar basalt, Muffin Island, Ernest Sound SE08_MM_03686.jpg</p>
	
<p>Solution streaks through splash zone lichens on granite bedrock cliffs, Canoe Pass, Etolin Island SE08_MM_04011.jpg</p>	<p>Complex tidal lagoon and current-dominated tidal channels, east Brownson Island SE08_MM_04331.jpg</p>
	
<p>Small Eelgrass bioband, Niblack Island, Ernest Sound SE08_MM_04480.jpg</p>	<p>Stone wall possible fish trap feature, Zimovia Strait, east Etolin Island. SE08_MM_05253.jpg</p>

Northeast Etolin Island, mainland shore Horn Point to Stikine and Stikine delta.







On Etolin Island, several possible cultural features were observed on mixed sediment beaches, as well as salt marsh estuaries at the heads of larger bays. Coastal habitats of the mainland shore were completely different than Etolin Island, and included the calving tidewater LaConte glacier and the windswept sand flats of the Stikine River delta. Highlights included the sea lions hauled out at Horn Point; coralline Red Algae and Dragon Kelp biobands near LaConte Bay; numerous moose on Limb Island, Bald Eagles congregated along the North Arm of the Stikine; and unusual assemblages of tubeworms on near Indian Point well established on the edge of the sand delta.

	
<p>Zimovia Strait, North Etolin Island, upper and lower intertidal boulder ridges SE08_MM_05515.jpg</p>	<p>Possible clam garden, Anita Bay, Etolin Island SE08_MM_05580.jpg</p>
	
<p>Estuary, north Etolin Island SE08_MM_05708.jpg</p>	<p>Stone wall possible fish traps, north Etolin Island SE08_MM_05711.jpg</p>

	
Sand dunes on upstream end of Sergief Island SE08_MM_05857.jpg	Settlement, south Farm Island, Stikine River delta SE08_MM_05946.jpg
	
Cabin on south Farm Island, Stikine River delta SE08_MM_06264.jpg	Dense feather duster tubeworms, NE Stikine delta SE08_MM_06304.jpg
	
Red Algae and Dragon Kelp biobands, Le Conte Bay SE08_MM_06404.jpg	Glacial striae, entrance to LaConte Bay SE08_MM_06525.jpg
	
Glacial U-shaped valley, upper LaConte Bay SE08_MM_06580.jpg	Lower Stikine River flats, looking west SE08_MM_06995.jpg







Cleveland Peninsula, Deer Island to Vixen Inlet

Most of the shoreline surveyed on May 8 was in Semi-protected and lower wave exposures. The Soft Brown Kelps bioband was seen in the nearshore subtidal throughout the survey area. Eelgrass beds occurred on sheltered beaches, however no canopy kelps were observed.

	
Underwater Soft Brown Kelps bioband visible in current affected passage, west Deer Island SE08_MM_07170.jpg	Pocket beaches and rock platform with brown bear (upper left) digging clams on the beach, west Deer Island SE08_MM_07235.jpg
	
Eelgrass on lower beach, west Deer Island SE08_MM_07286.jpg	Island complex, southwest Deer Island SE08_MM_07323.jpg
	
Rock platform with lush Red Algae bioband, near Vixen Point SE08_MM_07879.jpg	Offshore rock and sediment reef, near Vixen Point SE08_MM_07947.jpg

South Cleveland Peninsula, Vixen Inlet, to Meyers Chuck and south to Caamano Point

Extensive salt marsh estuary features were seen at the heads of Vixen Inlet and in Black Bear Creek at the head of Union Bay. The settlement of Meyers Chuck has numerous houses with docks and floats, which is also the first place on the Wrangell survey that any significant amount of canopy kelps were seen – both Bull Kelp and small amounts of Giant Kelp occurred there. The highest wave energy habitats of the survey occur along Clarence Strait, from Niblack Point to Caamano Point. Urchin barrens were seen around Caamano Point.







	
<p>Beach with fringing Dune Grass and Salt Marsh biobands, north shore Vixen Inlet SE08_MM_08005.jpg</p>	<p>Estuary salt marsh, head of Vixen Inlet SE08_MM_08047.jpg</p>
	
<p>Floathouse and salt marsh, Vixen Harbor SE08_MM_08164.jpg</p>	<p>Ruins of cannery and dock at Union Bay SE08_MM_08303.jpg</p>
	
<p>Settlement of Meyers Chuck, Cleveland Peninsula SE08_MM_08514.jpg</p>	<p>Urchin Barrens and Bull Kelp biobands, Meyers Chuck SE08_MM_08548.jpg</p>

**ShoreZone Aerial Video Imaging (AVI) Survey
Southeast Alaska
May 4-9, 2008**

Team Petersburg (PE)
Sample Photos






North and west Etolin Island including Steamer Bay, Marsh Island, Screen Island, Lincoln Rocks, Three Way Passage, Point Stanhope, and portions of Rocky Bay



Coastline surveyed included cliffs, rock ramps with pocket beaches, and complex reef-island groups.

	
Pocket beaches and distinctive red bioband on northwest Etolin Island, just east of Quiet Harbor SE08_ML_00177	Storm berm with logs in the supratidal; wide rock ramp in the intertidal; Steamer Point, Etolin Island SE08_ML_00270
	
Stream delta in Steamer Bay, Etolin Island SE08_ML_00379	Bare zone and urchin barrens, Observation Island SE08_ML_00462
	
Complex island groups and reefs off Johnson Cove SE08_ML_00595	Distinctive biobanding, Screen Island SE08_ML_00671

Rocky Bay, Cooney Cove, Mosman and Burnett Inlets, Jadski Cove, McHenry Inlet







Coastline surveyed included complex reef-island groups, fjord inlets, and portions of the South Etolin Island Wilderness Area. Dense Blue Mussel and Fucus biobands were observed, as well as eelgrass around island complexes, and extensive salt marsh vegetations at the heads of inlets.


	
<p>Complex island groups and reefs, Rocky Bay, southwest Etolin Island SE08_ML_01190</p>	<p>High current tidal channel, north of Three Way Passage, southwest Etolin Island SE08_ML_01217</p>
	
<p>Mussel beds, northern Three Way Passage SE08_ML_01246</p>	<p>Rock reef complex, southern Mosman Island SE08_ML_01442</p>
	
<p>Stream delta with biobanding, southeast side of Mosman Inlet SE08_ML_01639</p>	<p>Hatchery, central Burnett Inlet SE08_ML_01903</p>

	
<p>Islands at entrance of McHenry Inlet, south Etolin Island SE08_ML_02173</p>	<p>Island south of Jadski Cove, south Etolin Island SE08_ML_02328</p>
	
<p>Wetlands and bladed green algae, McHenry Inlet SE08_ML_02340</p>	<p>Head of McHenry Inlet SE08_ML_02385</p>
	
<p>Possible fish trap, head of McHenry Inlet SE08_ML_02407</p>	<p>Dense biobands and shell beaches, Kelp Point SE08_ML_02664</p>

Delta islands, Mitkof Island, Blind Slough, Wrangell Narrows, Petersburg, Coney Island

Coastline surveyed included vast sand and mud flats off the Stikine Delta connecting numerous high islands and low reefs between Wrangell and Mitkof Islands; rocky shorelines and sediment-dominated sloughs on Mitkof Island; and the modified shorelines of Wrangell Narrows and Petersburg. Rare colonial tubeworms were observed in both lower Wrangell Narrows and Coney Island, north of Petersburg.







	
Sand flats and ripples, northern Rynda Island SE08_ML_02978	Coralline algae and bull kelp, southern Vank Island SE08_ML_03299
	
Stream delta with red bioband, south Mitkof Island SE08_ML_03408	White and black marine lichens, Wilson Island SE08_ML_03428
	
Kelp and tube worms, Coney Island SE08_ML_03639	Coralline algae and dragon kelp, south of Frederick Point, eastern Mitkof Island SE08_ML_03719

	
<p>Petersburg SE08_ML_03824</p>	<p>Wetlands near Spruce Pt., Blind Slough SE08_ML_04042</p>
	
<p>Distinctive biobands, particularly blue mussel, Station Island, southern Mitkof Island SE08_ML_04246</p>	<p>Colonial tube worms, west side of Wrangell Narrows SE08_ML_04566</p>
	
<p>Potential fish trap near Island Pt., Wrangell Narrows SE08_ML_04611</p>	<p>Modified shoreline, west side Wrangell Narrows SE08_ML_04680</p>

North Kupreanof Island, Kake, Portage Pass, Hamilton Bay, Big John Bay


Coastline surveyed included wide, wave-cut platforms with coralline red algae and dragon kelp biobands, typical of energetic, rocky habitats on the northern shore along Frederick Sound. Near Kake and southward, reef and island complexes with dense biobands and anemone gardens were abundant offshore. Sediment-dominated sloughs and estuaries dominated the shoreline of western Kupreanof, particularly in the Portage Pass and Big John Bay.

	
Fringing dragon kelp (<i>Alaria fistulosa</i>) near Boulder Point, northern Kupreanof Island SE08_ML_05029	West Point, Portage Bay, northern Kupreanof Island SE08_ML_05191
	
Coralline algae and dragon kelp, northern Kupreanof Island SE08_ML_05268	Wide, wave-cut platforms, northern Kupreanof Island SE08_ML_05326
	
East of Pinta Point, northern Kupreanof Island SE08_ML_05443	Kake, northwest Kupreanof Island SE08_ML_05626

	
Anemone gardens (<i>Metridium senile</i>) off Hamilton Island, near Kake SE08_ML_05673	Grave Island, near Kake SE08_ML_05721
	
Portage Pass, south of Kake, between Hamilton Island and western Kupreanof SE08_ML_05822	Muskeg ponds, Horseshoe Island, Big John Bay SE08_ML_06286
	
Alongshore sediment plume, Horseshoe Island, Big John Bay SE08_ML_06312	Mariculture site, Stedman Cove, Horseshoe Island, Big John Bay SE08_ML_06412

North Woewodski, Castle River, Duncan Canal, Towers Arm, McDonald Arm, Mitchell Slough, Hood Point



Coastline surveyed included long, sediment-dominated fjord inlets with extensive mud flats connecting numerous island complexes and stream mouths; smaller bays; and large estuaries at the heads of inlets.







	
<p>Bull kelp (<i>Nereocystis leutkeana</i>), southeast Woewodski Island SE08_ML_06771</p>	<p>Islands off Kah Sheets Bay at the southern entrance to Duncan Canal SE08_ML_06776</p>
	
<p>Mariculture site, Emily Island, Little Duncan Bay SE08_ML_06863</p>	<p>Linear islets at the entrance to Little Duncan Bay SE08_ML_06930</p>
	
<p>Mudflats at the Castle River, west side of Duncan Canal SE08_ML_07130</p>	<p>Tannins in stream, Castle River SE08_ML_07145</p>

	
Duncan Canal SE08_ML_07328	Duncan Canal SE08_ML_07338
	
Mudflats off Taylor Creek, southern Towers Arm, Duncan Canal SE08_ML_07345	Head of Towers Arm, Duncan Canal SE08_ML_07394
	
Head of North Arm, Duncan Canal SE08_ML_07522	Grief Island, southeast Duncan Canal SE08_ML_07839

Point Barrie, Totem Bay, Douglas Bay, Mitchell Point, Level Island, Kah Sheets Bay

Coastline surveyed included wide, wave-cut platforms with coralline red algae and dragon kelp biobands, typical of energetic, rocky habitats on the southern shore along Sumner Strait. Offshore island complexes with seal haul-outs were observed, some with interesting geomorphic features such as columnar basalts and networks of high-intertidal pools.

	
<p>Islands off Pt. Barrie, southwest Kupreanof Island SE08_ML_07973</p>	<p>Red band, <i>A. marginata</i>, and dragon kelp, Pt. Barrie SE08_ML_07987</p>
	
<p>Columnar basalt, just east of Yellow Island on southwest Kupreanof Island SE08_ML_08075</p>	<p><i>A. marginata</i> and urchin barrens, southwest Kupreanof Island SE08_ML_08079</p>
	
<p>Cobble beach and columnar basalt outcrop, southwest Kupreanof Island SE08_ML_08101</p>	<p>Wide rock ramp with networks of high-intertidal pools, Totem Point SE08_ML_08168</p>

	
Mudflat, stream, and wetlands with log storm berm, Totem Bay SE08_ML_08267	Dragon kelp, islands off Mitchell Point, Sumner Strait SE08_ML_08545
	
Wide, wave-cut platform with coralline algae, east of Mitchell Pt., Sumner Strait SE08_ML_08606	New barnacle set, Level Islands, Sumner Strait SE08_ML_08644
	
Sparse eelgrass, Level Islands, Sumner Strait SE08_ML_08678	Urchin barrens with bull kelp, Level Islands, Sumner Strait SE08_ML_08715