

CORI Project: 2005-09

13 Sept. 2005

***2005 Aerial Video Imaging Survey,
Southeast Alaska
(20th - 25th, July 2005
20th - 21st, Aug. 2005)***



Prepared for the

National Marine Fisheries Service (NOAA)

and

The Nature Conservancy

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A number people and agencies contributed time to these surveys including:

Dave Albert of The Nature Conservancy (TNC), who served as Navigator for two days of survey.

Mandy Lindeberg of NOAA/NMFS who served as Coastal Ecologist,

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Carl Schoch of Prince William Sound Science Center (PWSSC), who served as Coastal Geomorphologist for two days of the survey,

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Alaska Department of Natural Resources
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INTRODUCTION

This survey combines the use of digital video camera technology with real-time GPS mapping to image the shoreline of areas in southeast Alaska: Icy Strait, Lynn Canal, Yakutat, and Sitka, at low tide. The unusual features of the survey are: (a) the survey was conducted during the lowest tides of the year so the entire intertidal zone is imaged; (b) the technique is not weather dependent so imagery can be collected in any conditions under which aircraft can fly and; (c) both a coastal ecologist and coastal geomorphologist were in the aircraft providing real-time commentary on intertidal features that may not be visible on the imagery.

The survey was conducted by Coastal & Ocean Resources, Inc. (CORI), of Sidney, BC under contract to the NOAA/National Marine Fisheries Services, and the Alaska Arm of The Nature Conservancy, located in Juneau Alaska.

This report is divided into two sections, one for each flight survey team. The flight crew names and responsibilities are summarized in Tables 1 to 3. Figures 1 to 3 show the overall flight coverage for each team by tape number.

Table 1 Southeast Alaska AVI Flight Personnel and Responsibilities (Team Raven)

Function	Individual/ Affiliation	Responsibilities
<i>geomorphologist project leader</i>	John Harper, CORI	co-ordination of survey, video imaging, geomorphology commentary, project reporting
<i>coastal ecologist</i>	Mary Morris, Archipelago Marine Resources	biology commentary, digital photographs
<i>navigator</i>	Jodi Harney, CORI	in flight navigation & recording, post-flight track plotting
<i>pilot</i>	Lewis Hart, Coastal Helicopters	

Table 2 Southeast Alaska AVI Flight Personnel and Responsibilities (Team Halibut)

Function	Individual/ Affiliation	Responsibilities
<i>geomorphologist project leader</i>	Neil Borecky, CORI Carl Schoch, PWSSC	co-ordination of survey, video imaging, geomorphology commentary, project reporting
<i>coastal ecologist</i>	Mandy Lindeberg, Auke Bay Marine Lab	biology commentary, digital photographs
<i>navigator</i>	Neil Borecky, CORI Dave Albert, TNC	in flight navigation & recording, post-flight track plotting
<i>pilots</i>	Bill Snider Coastal Helicopters Alan Arnone, Air Excursions	

Table 3 Southeast Alaska AVI Flight Personnel and Responsibilities (Team Kingfisher)

Function	Individual/ Affiliation	Responsibilities
<i>geomorphologist project leader</i>	John Harper, CORI	co-ordination of survey, video imaging, geomorphology commentary, project reporting
<i>coastal ecologist</i>	Mandy Lindeberg, Auke Bay Marine Lab	biology commentary, digital photographs
<i>navigator</i>	Dave Albert, TNC	in flight navigation & recording, post-flight track plotting
<i>pilots</i>	Lewis Hart, Coastal Helicopters	

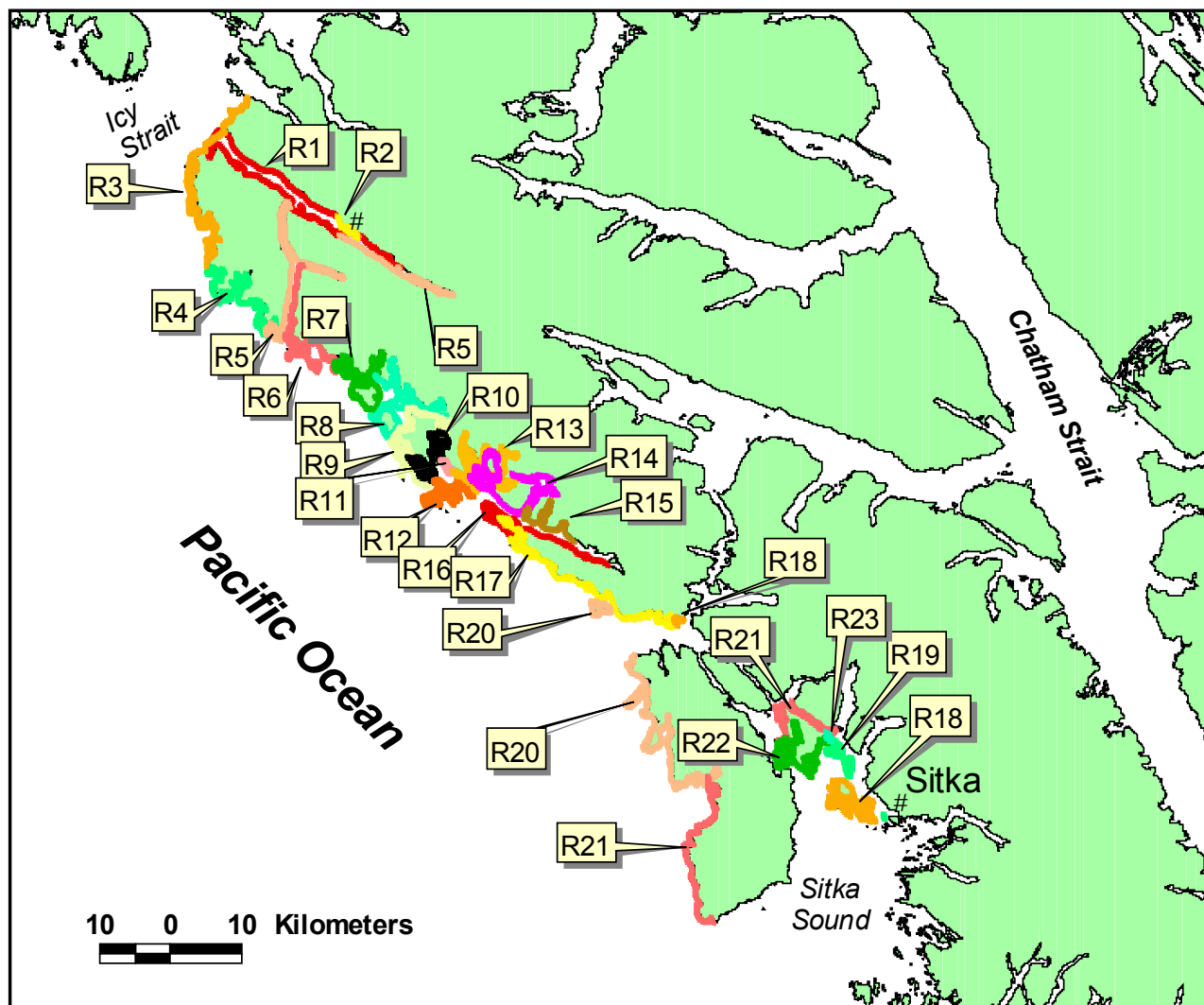


Figure 1. Index map of tapes from the *Team Raven* component of the 2005 Southeast Alaska ShoreZone survey.

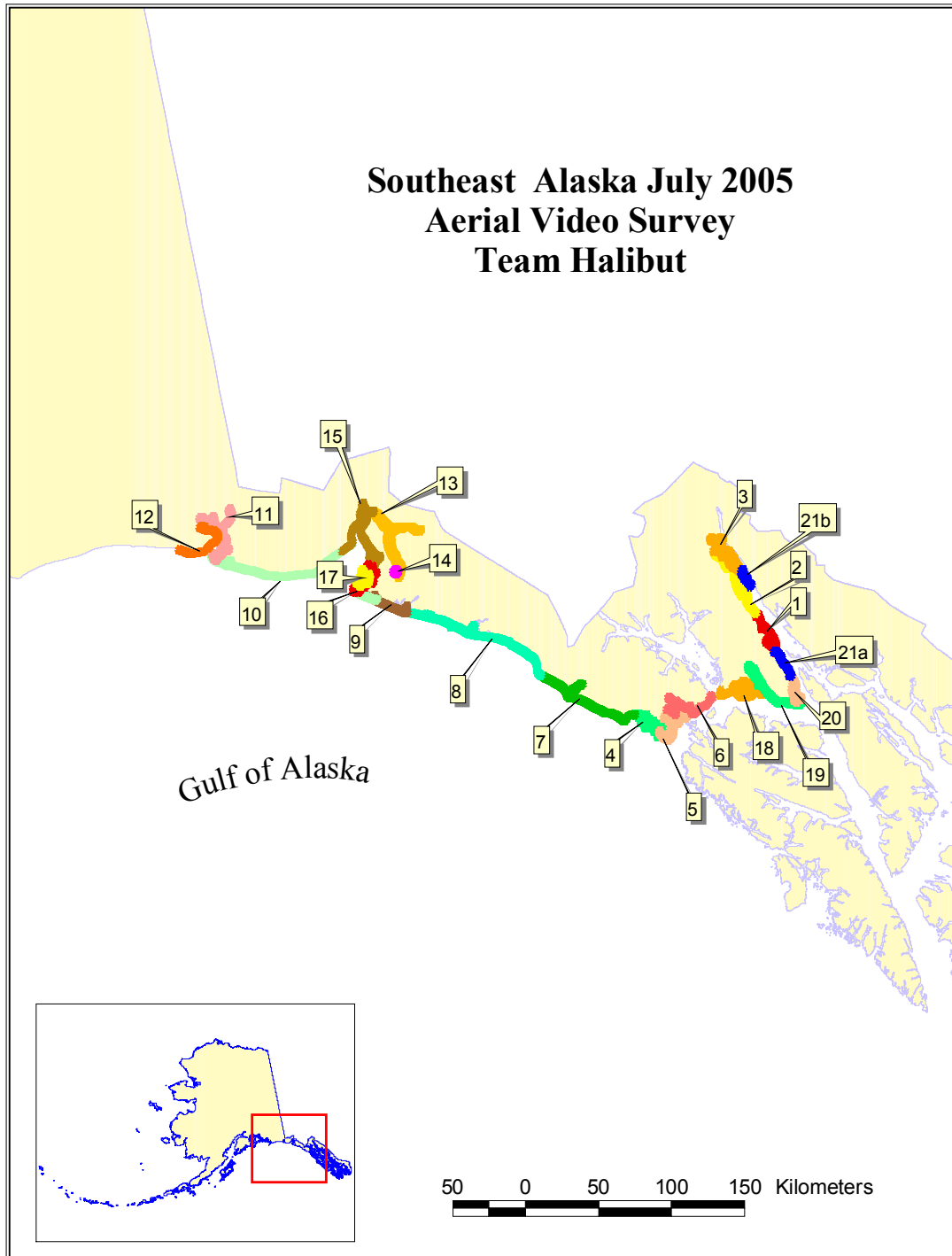


Figure 2. Index map of tapes from the *Team Halibut* component of the 2005 Southeast Alaska ShoreZone survey.

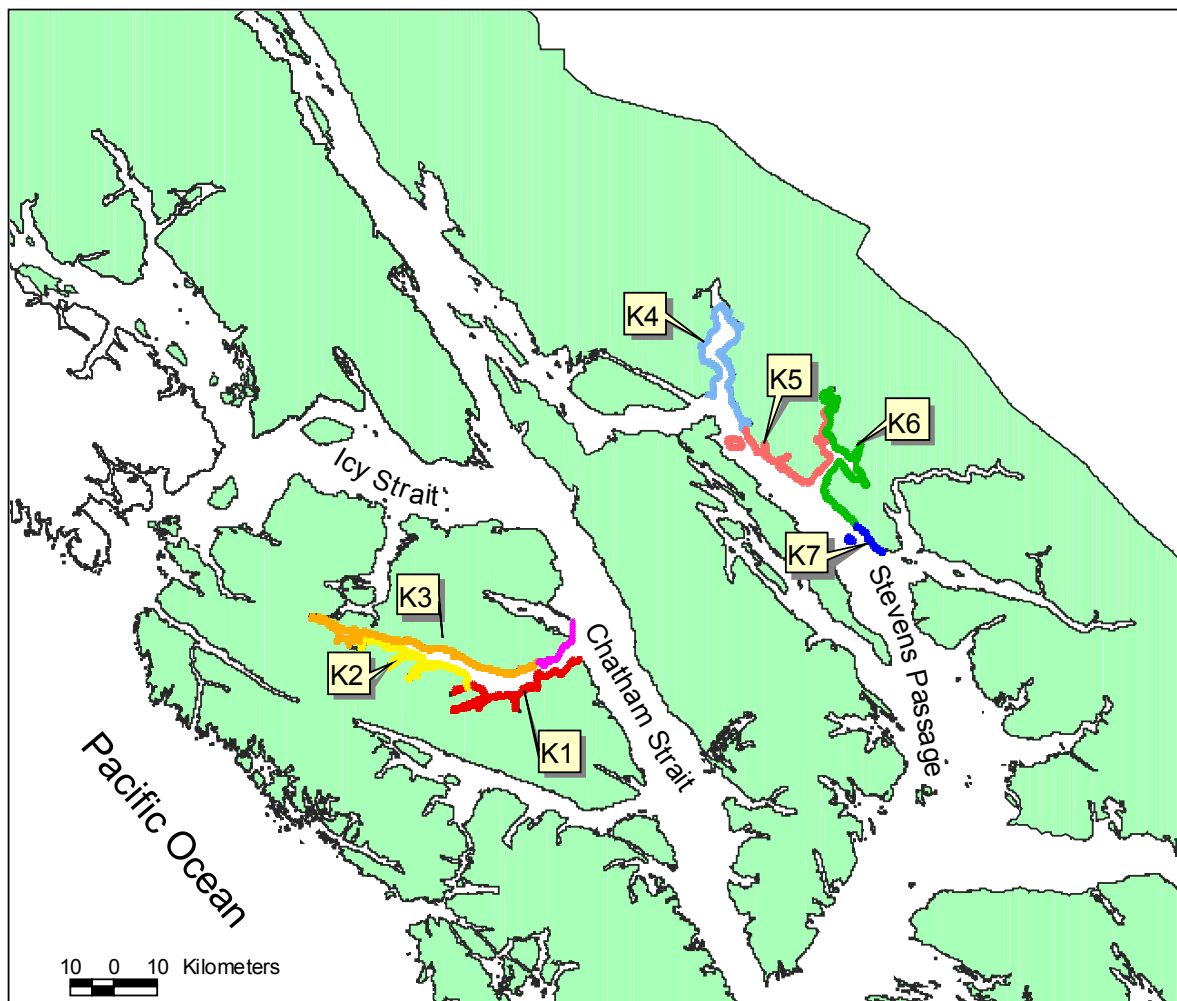


Figure 3. Index map of tapes from the *Team Kingfisher* component of the 2005 Southeast Alaska ShoreZone survey.

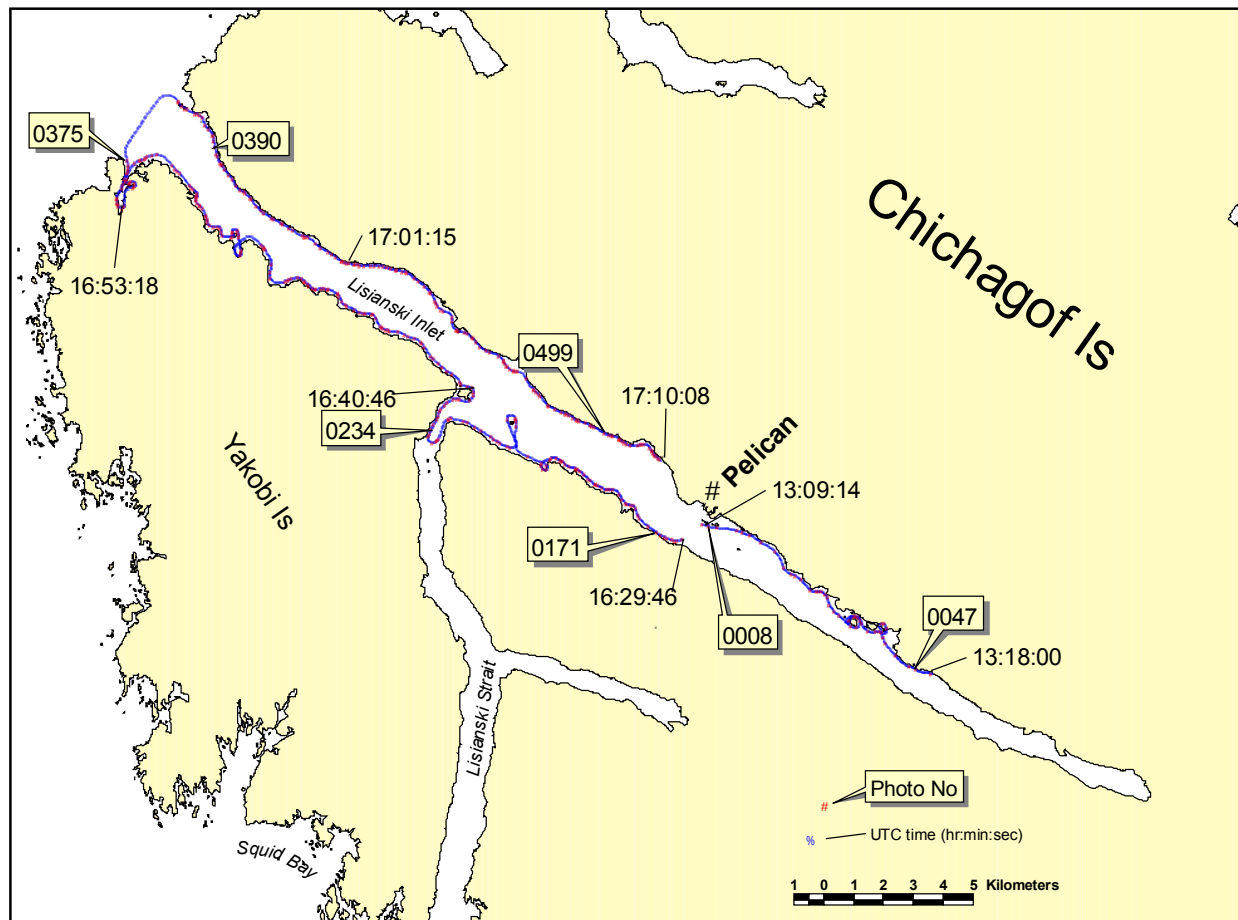


Figure 4. Location of Tape SE05_R_01, 20 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_01
General Location: North end of Lisianski Inlet
Date: 20 July 2005
Time Start: 13:09:14
Time End: 17:10:08
Tape Length: 59:13
Weather Break: 13:17:57 to 16:29:46
Weather: Low ceiling, foggy, calm

Electronic File Names: 20Jul05.trk, 20 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
13:09:14	island at Pelican Creek	SE05_MM_0008	17303	26
13:18:00	south of Pelican (stop due to fog)	SE05_MM_0047		
	break due to fog			
16:29:16	restart opposite of Pelican	SE05_MM_171		
16:40:46	Miner Is, mouth of Lisanski Strait	SE05_MM_0236		
16:53:18	head of Soapstone Cove	SE05_MM_0375		
17:04:25	"Basalt Knob", NW of Pelican	SE05_MM_0458		
17:10:08	northwest of Pelican	SE05_MM_0521		

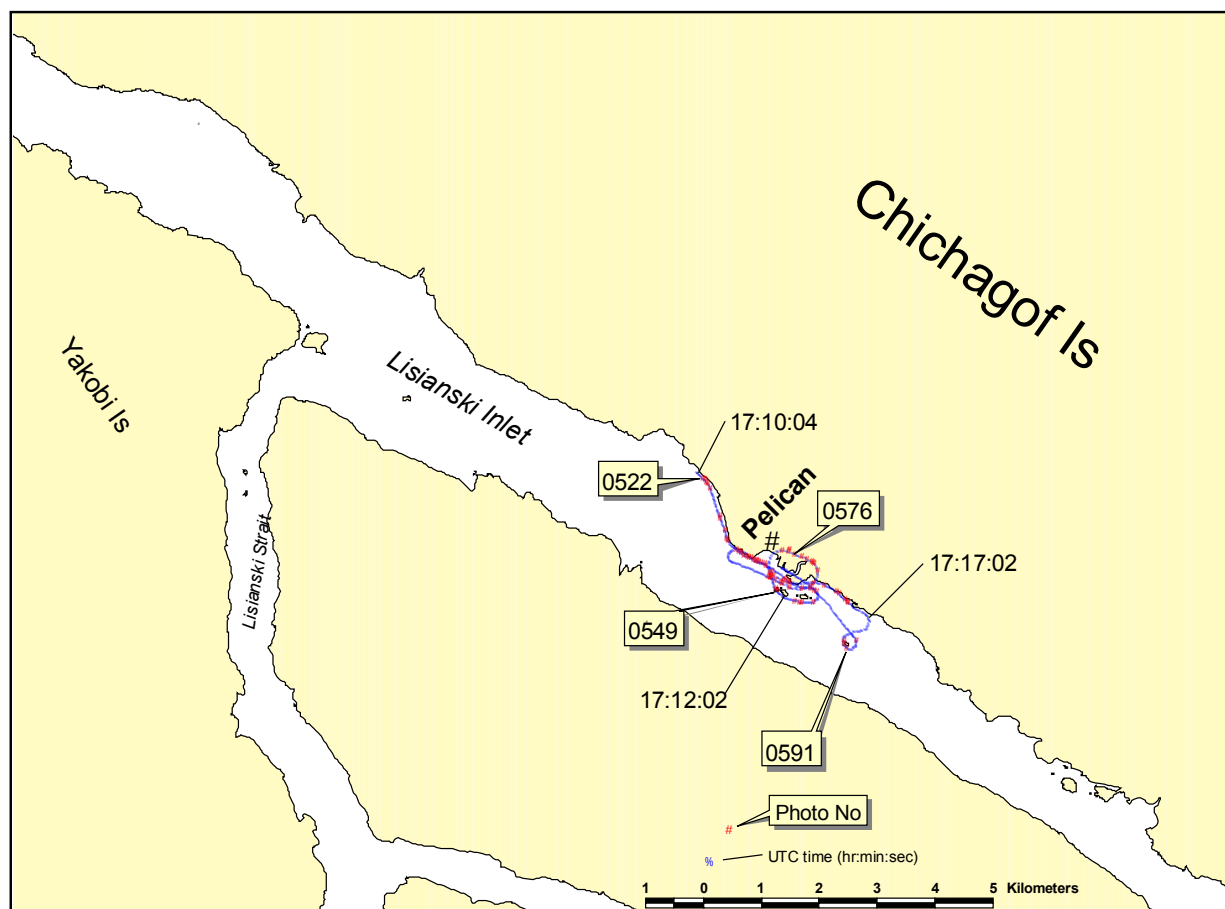


Figure 5. Location of Tape SE05_R_02, 20 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_02
General Location: North end of Lisianski Inlet
Date: 20 July 2005
Time Start: 17:11:00
Time End: 17:19:05
Tape Length: 07:55
Weather: sunny, calm

Electronic File Names: 20Jul05.trk, 20 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:11:00	northwest of Pelican	SE05_MM_0522	17303	26
17:19:05	island south of Pelican	SE05_MM_0591		

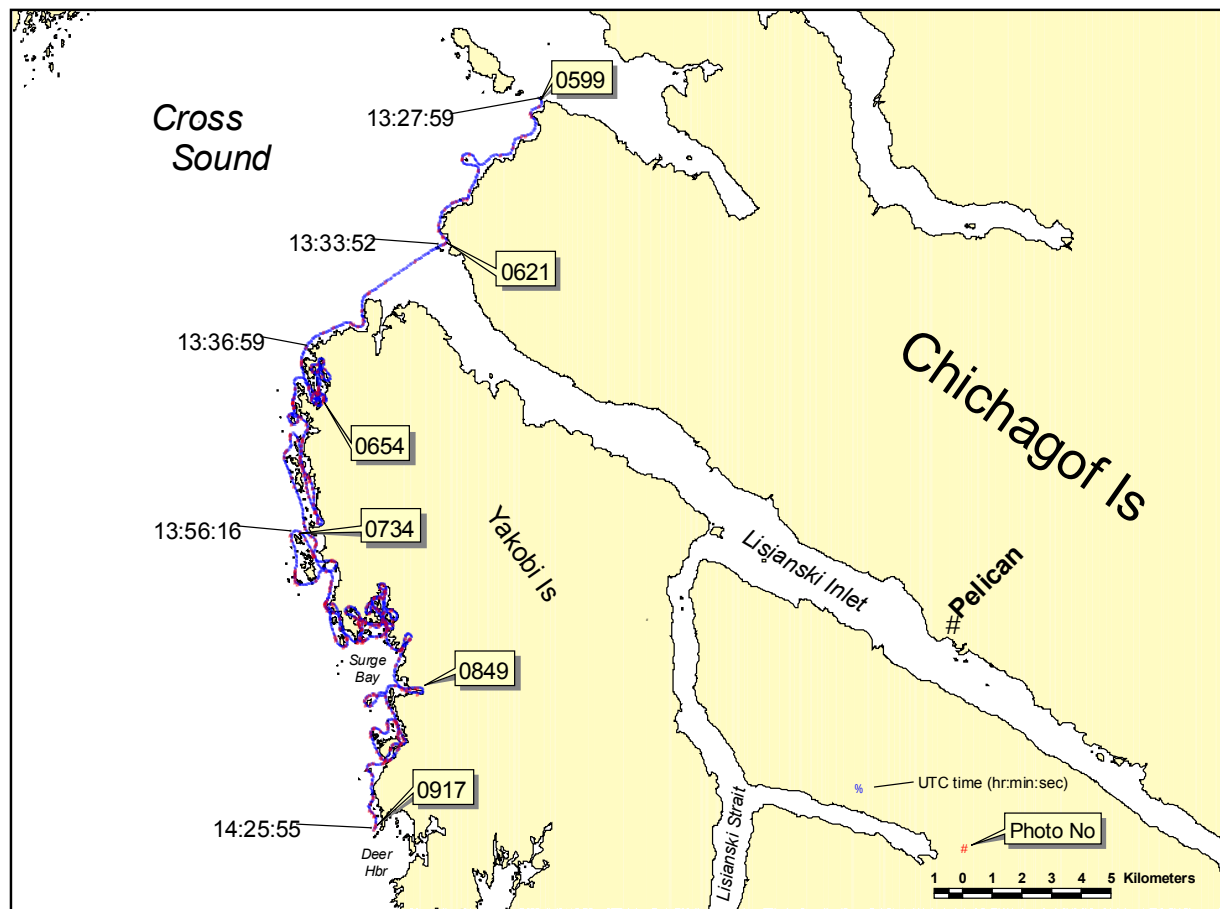


Figure 6. Location of Tape SE05_R_03, 21 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_03
General Location: West Yakobi Island
Date: 21 July 2005
Time Start: 13:27:57
Time End: 14:25:15
Tape Length: 59:00
Weather: sunny, calm

Electronic File Names: 21Jul05.trk, 21 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
13:27:57	start at Pt Lucan in Port Althorp	SE05_MM_0599	17302	31
13:33:52	Column Pt, entrance to Lisianski Inlet	SE05_MM_0621	17303	31
13:36:59	Cape Bingham, NW Yakobi Is	SE05_MM_0654		
13:56:16	large island north of Surge Bay	SE05_MM_0734		
14:06:43	head of Surge Bay	SE05_MM_0793	17303	26
14:25:15	tip of long point at Deer Harbor	SE05_MM_0917		

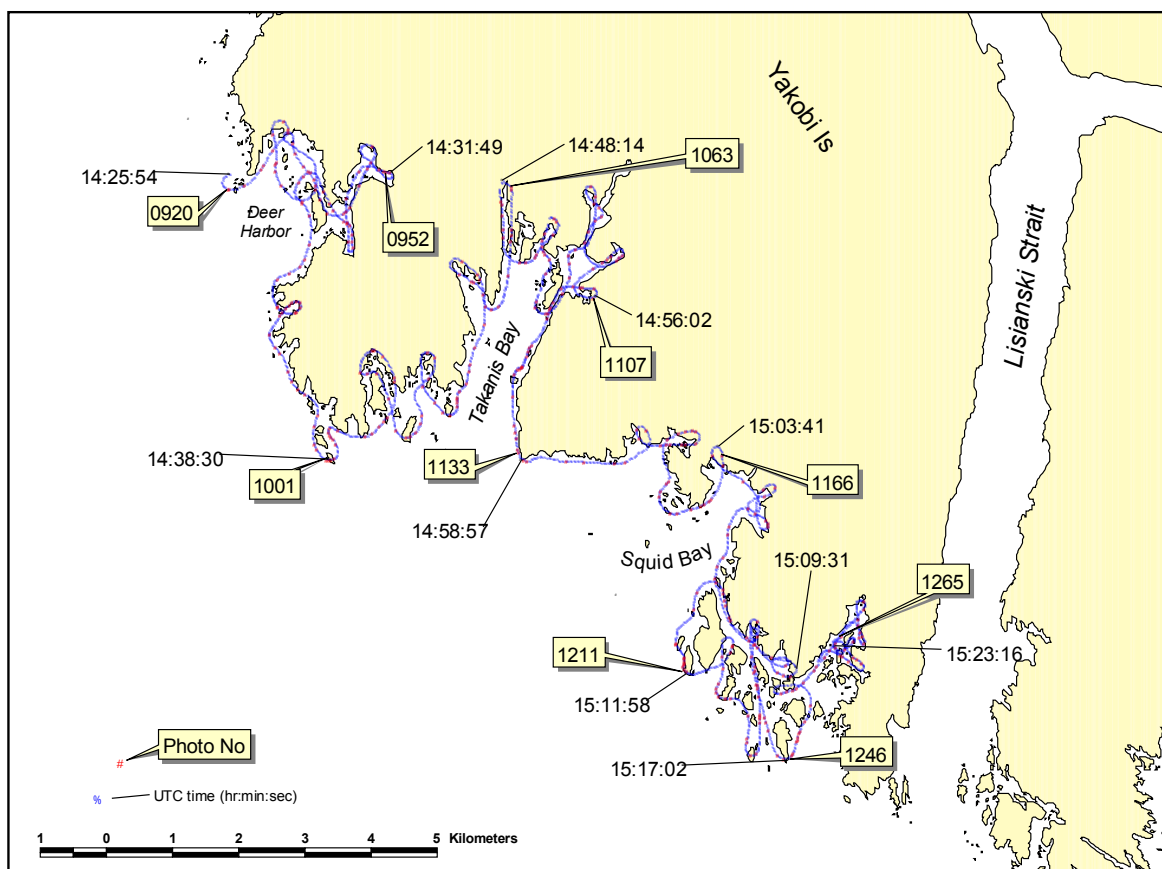


Figure 7. Location of Tape SE05_R_04, 21 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_04
General Location: Southwest Yakobi Island
Date: 21 July 2005
Time Start: 14:25:50
Time End: 15:23:16
Tape Length: 59:00
Weather: sunny, calm

Electronic File Names: 21Jul05.trk, 21 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
14:25:50	start at the long point at the mouth of Deer Harbor	SE05_MM_0920	17303	26
14:38:59	Cape Cross, NW entrance to Takanis Bay	SE05_MM_1004		
14:53:22	head of Takanis Bay	SE05_MM_1093		
14:58:57	Pt. Satchrun, SW entrance Takanis Bay	SE05_MM_1135		
15:05:14	head of Squid Bay	SE05_MM_1170		
15:21:34	approximate end of tape, Greentop Harbor	SE05_MM_1278		

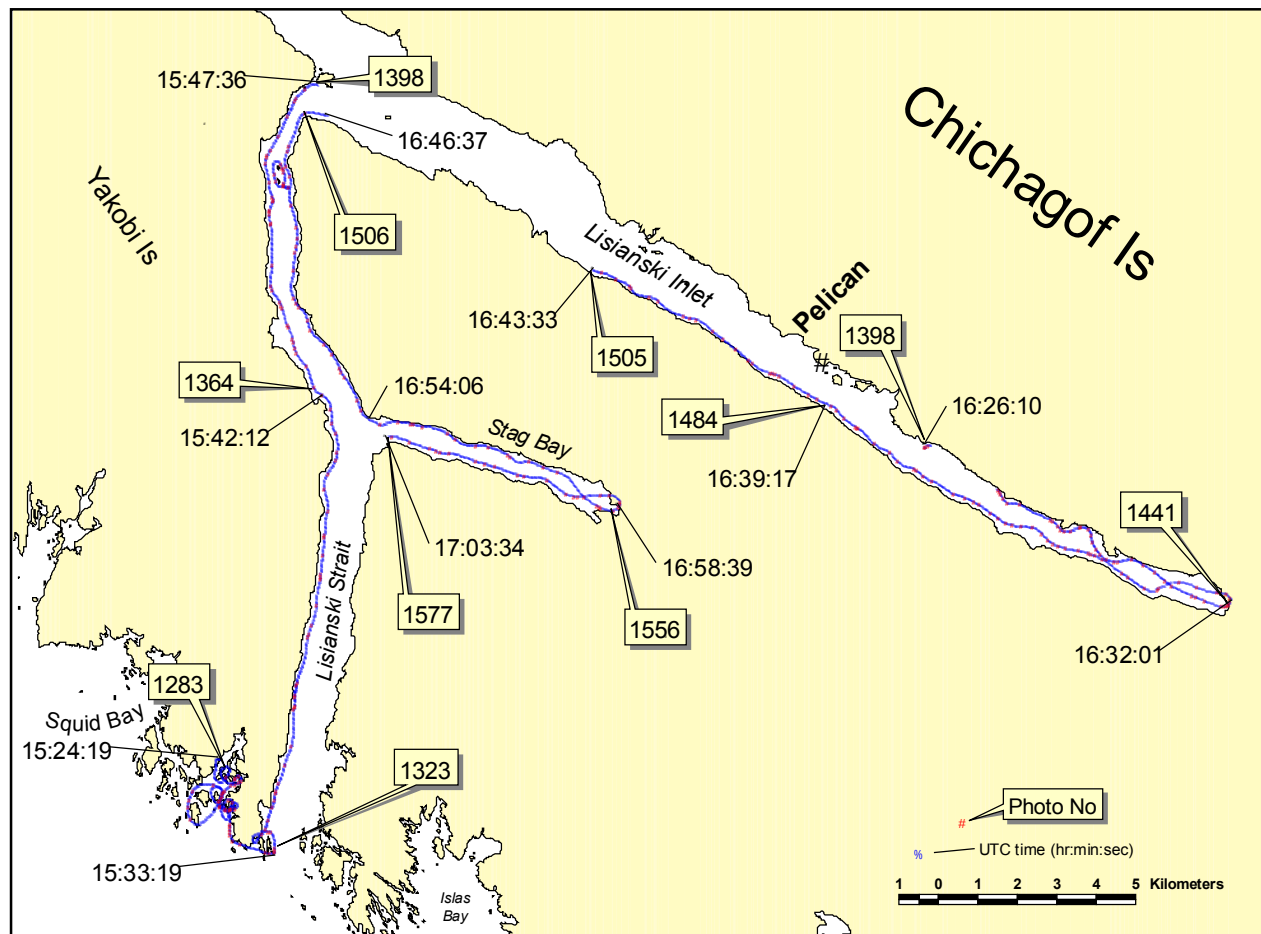


Figure 8. Location of Tape SE05_R_05, 21 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_05
General Location: Lisianski Strait, south end of Lisianski Inlet
Date: 21 July 2005
Time Start: 15:24:06
Time End: 17:02:32
Tape Length: 59:00
Tape Breaks: for fuel - 15:47:38 to 16:26:10
transit over previously imaged shoreline - 16:43:33 to 16:46:37
Weather: sunny, calm

Electronic File Names: 21Jul05.trk, 21 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
15:24:06	start at Greentop Harbor, south end Yakobi Is	SE05_MM_1283	17303	26
15:33:19	entrance to Lisianski Strait	SE05_MM_1323		
15:42:12	small cove across from entrance to Stag Bay	SE05_MM_1364		
15:47:36	Miner Is at north end of Lisianski Strait	SE05_MM_1393		
	break for fuel			
16:26:10	restart SE of Pelican in Lisianski Inlet	SE05_MM_1398		
16:32:01	head of Lisianski Inlet	SE05_MM_1442		
16:43:33	overlap with previous coverage, opposite Pelican	SE05_MM_1505		
	jump over previous coverage			
16:46:52	north entrance to Lisianski Strait	SE05_MM_1506		
16:54:06	entrance to Stag Bay	SE05_MM_1539		
16:58:33	head of Stag Bay	SE05_MM_1558		
17:02:35	entrance to Stag Bay	SE05_MM_1577		

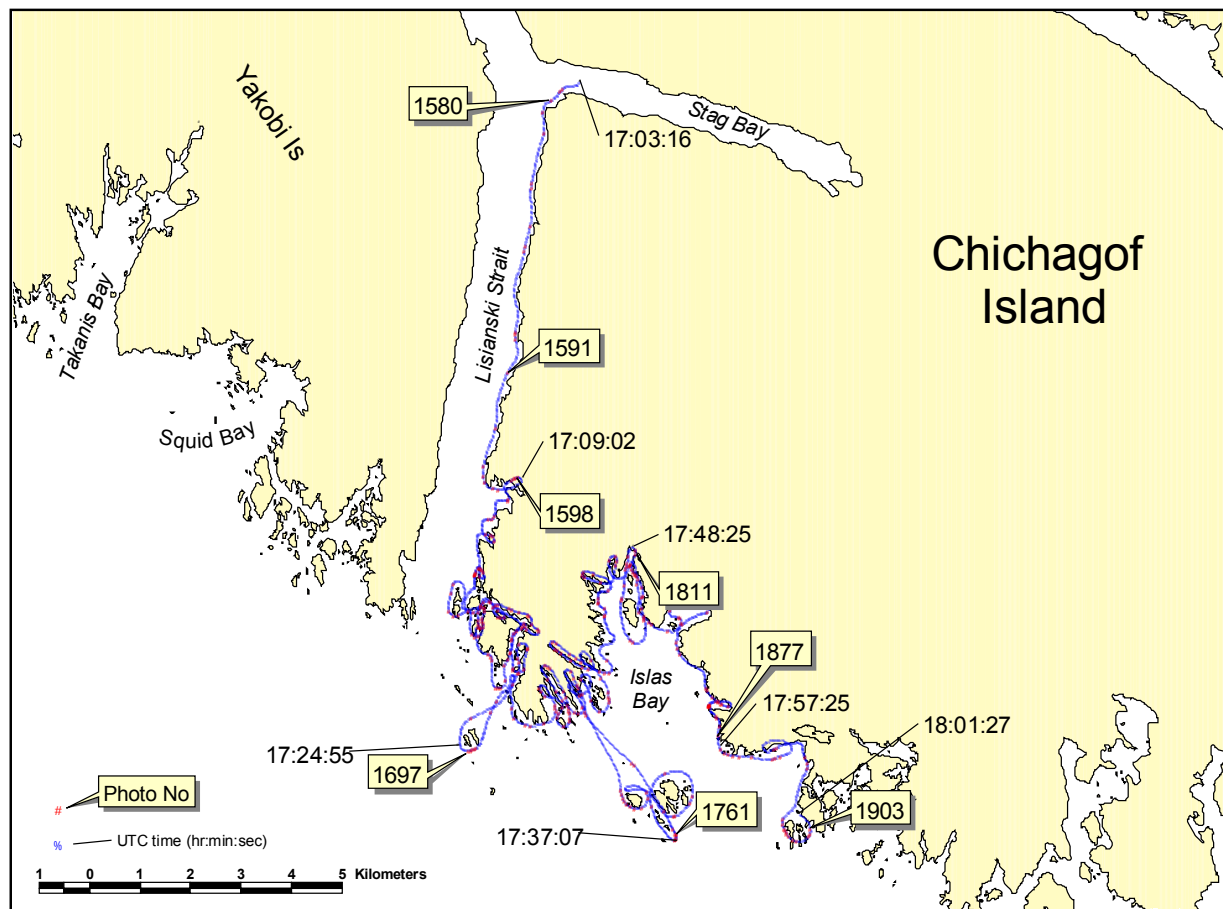


Figure 9. Location of Tape SE05_R_06, 21 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_06
General Location: southern and Islas Bay
Date: 21 July 2005
Time Start: 17:03:16
Time End: 18:01:27
Tape Length: 59:00
Weather: sunny, calm

Electronic File Names: 21Jul05.trk, 21 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:03:16	south entrance to Stage bay, Lisianski Strait	SE05_MM_1578	17303	26
17:09:02	Lost Cove, Lisianski Strait	SE05_MM_1598		
17:24:55	Urey Rocks	SE05_MM_1697		
17:37:07	Porcupine Islands, Islas Bay	SE05_MM_1761		
17:48:25	Head of Ilin Bay	SE05_MM_1813		
17:57:25	Pt. Dougherty	SE05_MM_1877		
18:01:27	Post and Skinner Is	SE05_MM_1903	17321	

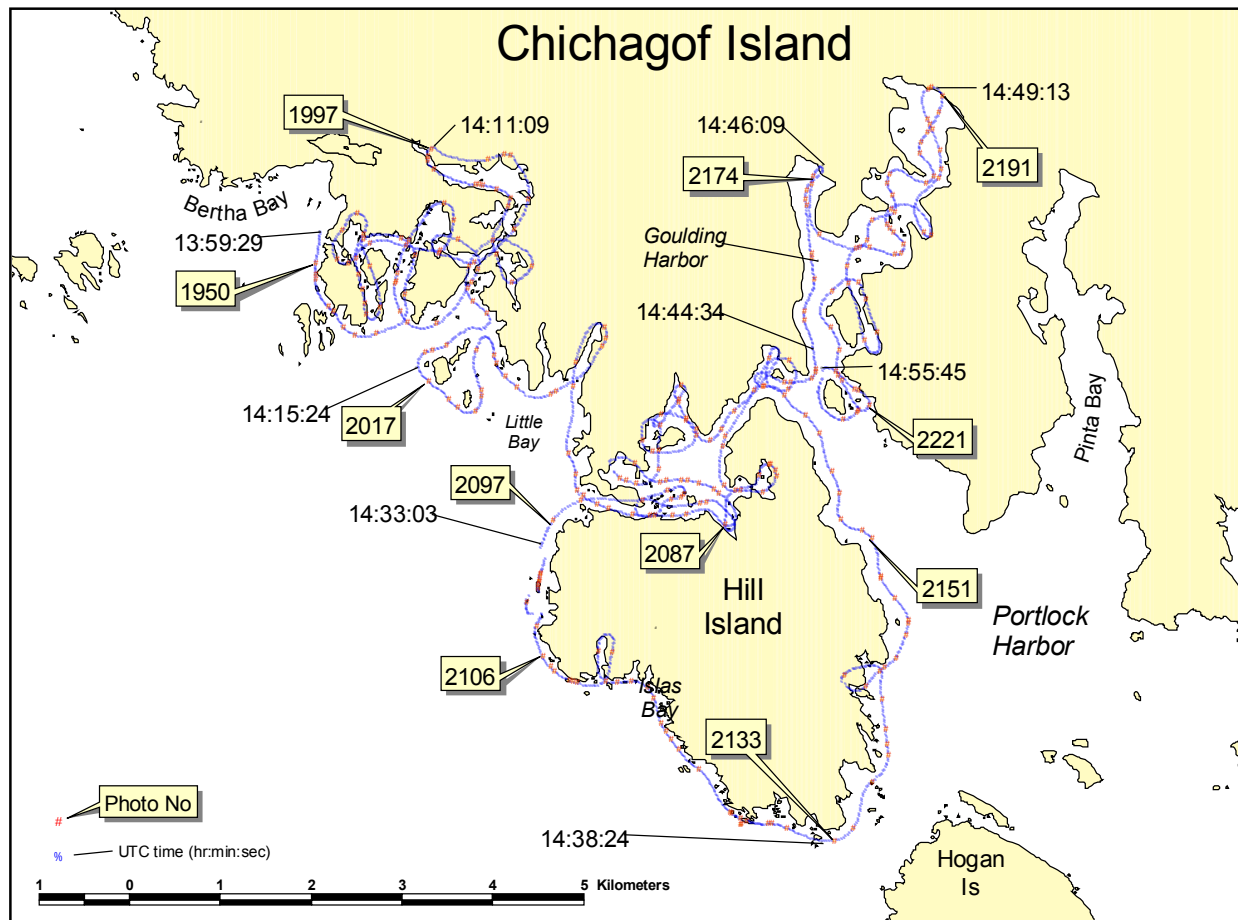


Figure 10. Location of Tape SE05_R_07, 22 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_07
General Location: Bertha Bay, Little Bay, Portlock Harbor on west Chichagof Is
Date: 22 July 2005
Time Start: 13:59:27
Time End: 14:56:31
Tape Length: ~59:00
Weather: sunny, calm

Electronic File Names: 22Jul05.trk, 22 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
13:59:29	Bertha Bay, Post Island	SE05_MM_1950	17321	26
14:11:09	head of Sea Level Slough	SE05_MM_1997		
14:15:24	west side of Middle Is	SE05_MM_2017		
14:33:03	Cape Dearborn, Hill Island	SE05_MM_2097		
14:38:24	southern tip, Hill Island	SE05_MM_2133		
14:44:34	west entrance to Goulding Harbor	SE05_MM_2166		
14:56:29	island at east entrance to Goulding Harbor	SE05_MM_2227		

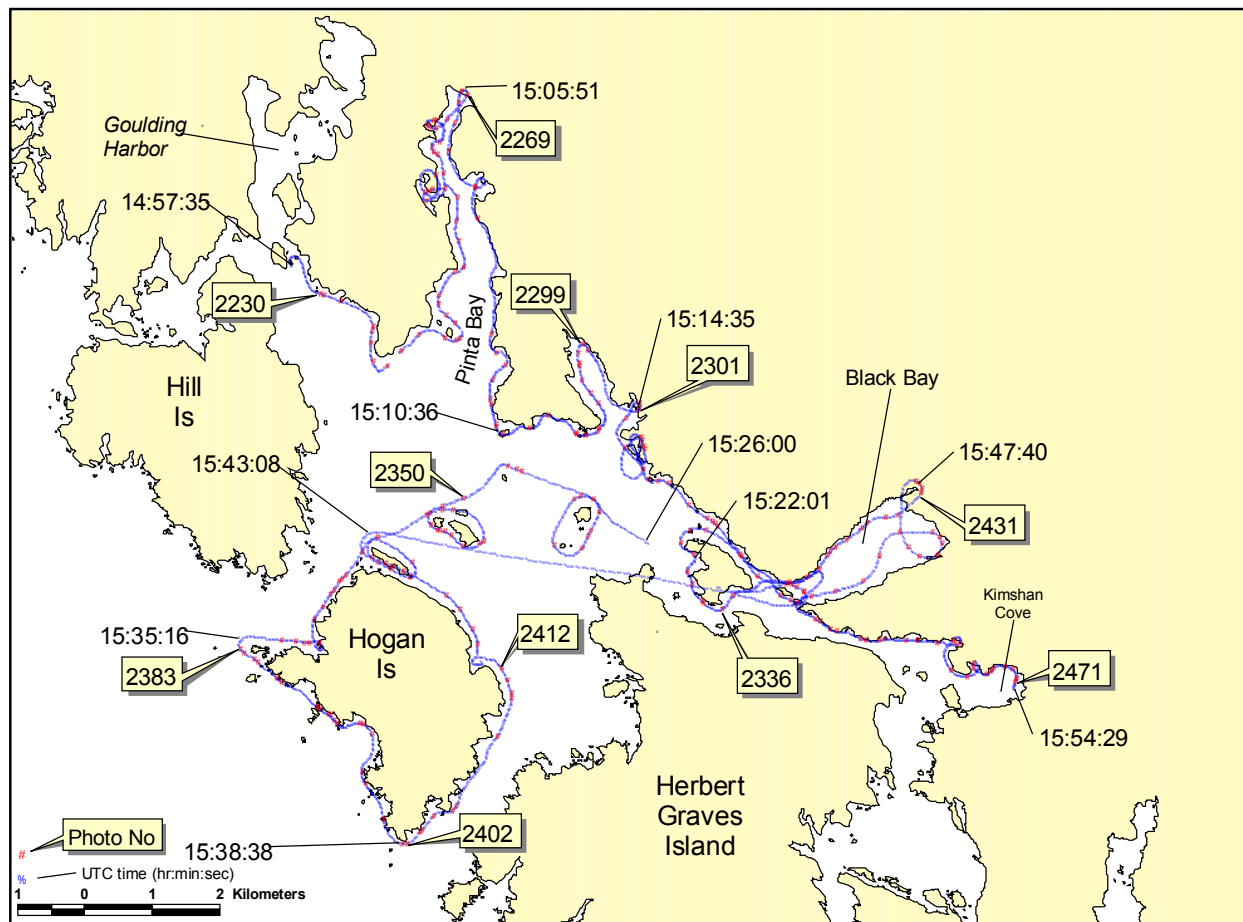


Figure 11. Location of Tape SE05_R_08, 22 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_08
General Location: Portlock Harbor and associated islands
Date: 22 July 2005
Time Start: 14:57:32
Time End: 15:54:29
Tape Length: ~59:00
Weather: sunny, calm

Electronic File Names: 22Jul05.trk, 22 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
14:57:35	island at east entrance to Goulding Harbor	SE05_MM_2230	17321	26
15:05:51	head of Pinta Bay	SE05_MM_2269		
15:10:36	east entrance to Pinta Bay	SE05_MM_2285		
15:14:35	east entrance to Didrickson Bay	SE05_MM_2301		
15:35:16	west tip of Hogan Is	SE05_MM_2283		
15:38:38	south tip of Hogan Is	SE05_MM_2402		
15:42:08	north tip of Hogan Is	SE05_MM_2416		
15:47:40	head of Black Bay	SE05_MM_2431		
15:54:29	Kimshan Cove, northeast end of Ogden Passage	SE05_MM_2471		

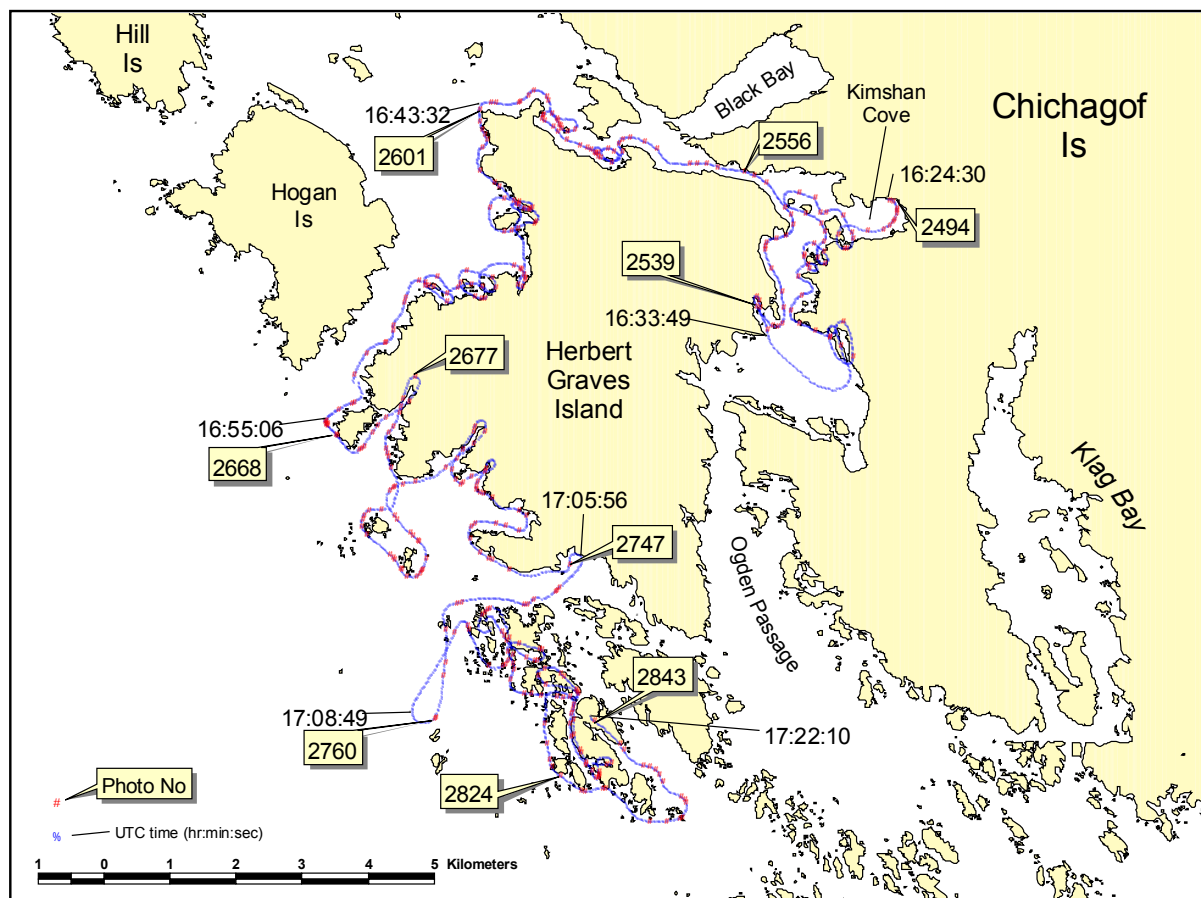


Figure 12. Location of Tape SE05_R_09, 22 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_09
General Location: Herbert Graves Island, Myriad Islands
Date: 22 July 2005
Time Start: 16:24:30
Time End: 17:22:10
Tape Length: ~59:00
Weather: sunny, calm

Electronic File Names: 22Jul05.trk, 22 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:24:30	Kimshan Cove	SE05_MM_2494	17321	26
16:33:49	Herbert Graves Is, west side of Ogden Passage	SE05_MM_2539		
16:43:32	northwest tip of Herbert Graves Is	SE05_MM_2601		
16:55:08	southwest corner of Herbert Graves Is	SE05_MM_2668		
17:05:56	Kukkan Passage - break to Myriad Islands	SE05_MM_2747	17322	
17:08:49	White Sisters Islands	SE05_MM_2760		
17:22:10	Myriad Islands	SE05_MM_2843		

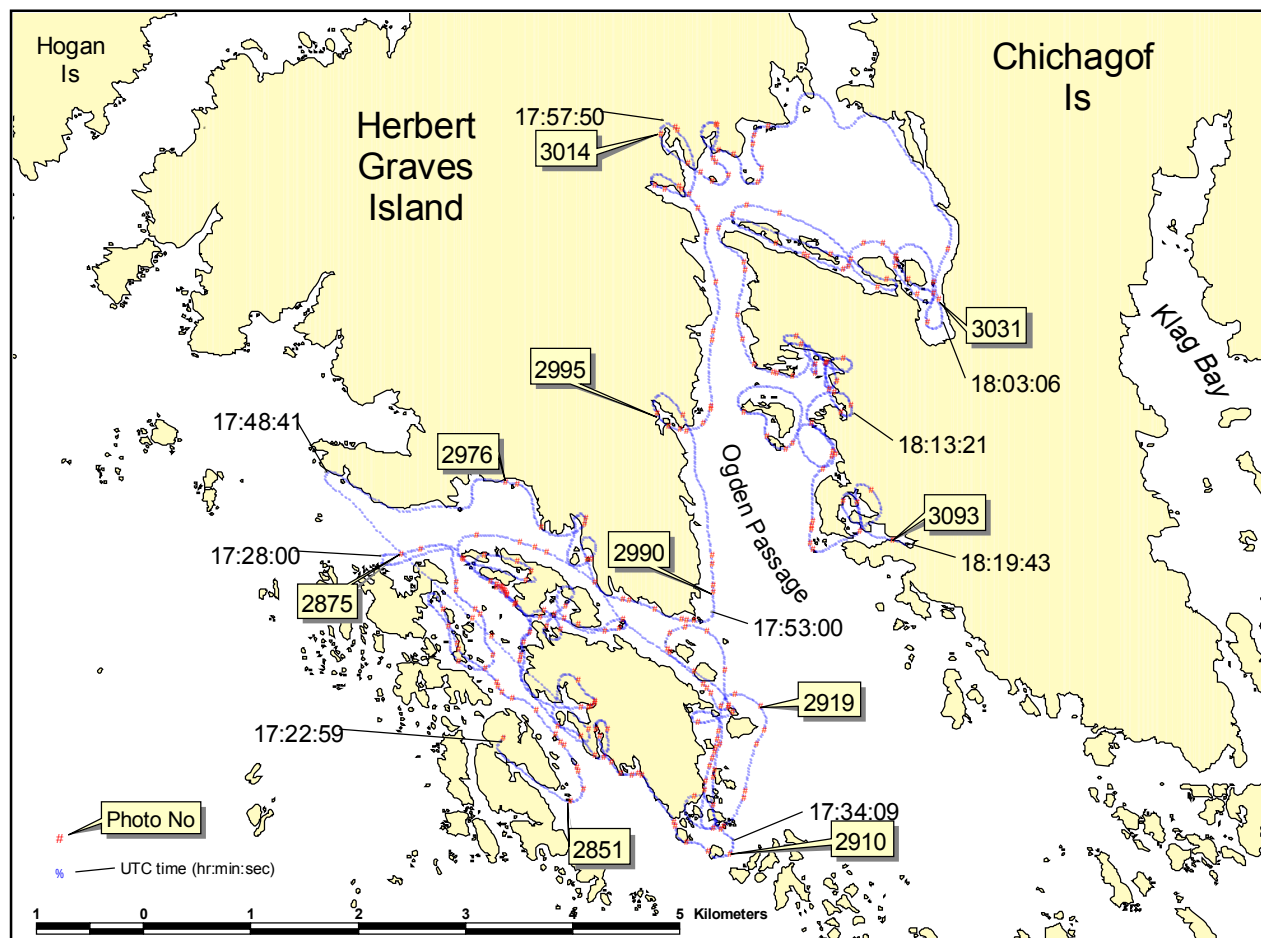


Figure 13. Location of Tape SE05_R_10, 22 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_10
General Location: Herbert Graves Island, Myriad Islands
Date: 22 July 2005
Time Start: 16:24:30
Time End: 17:22:10
Tape Length: ~59:00
Weather: sunny, calm

Electronic File Names: 22Jul05.trk, 22 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:24:30	Kimshan Cove	SE05_MM_2494	17321	26
16:33:49	Herbert Graves Is, west side of Ogden Passage	SE05_MM_2539		
16:43:32	northwest tip of Herbert Graves Is	SE05_MM_2601		
16:55:08	southwest corner of Herbert Graves Is	SE05_MM_2668		
17:05:56	Kukkan Passage - break to Myriad Islands	SE05_MM_2747	17322	
17:08:49	White Sisters Islands	SE05_MM_2760		
17:22:10	Myriad Islands	SE05_MM_2843		

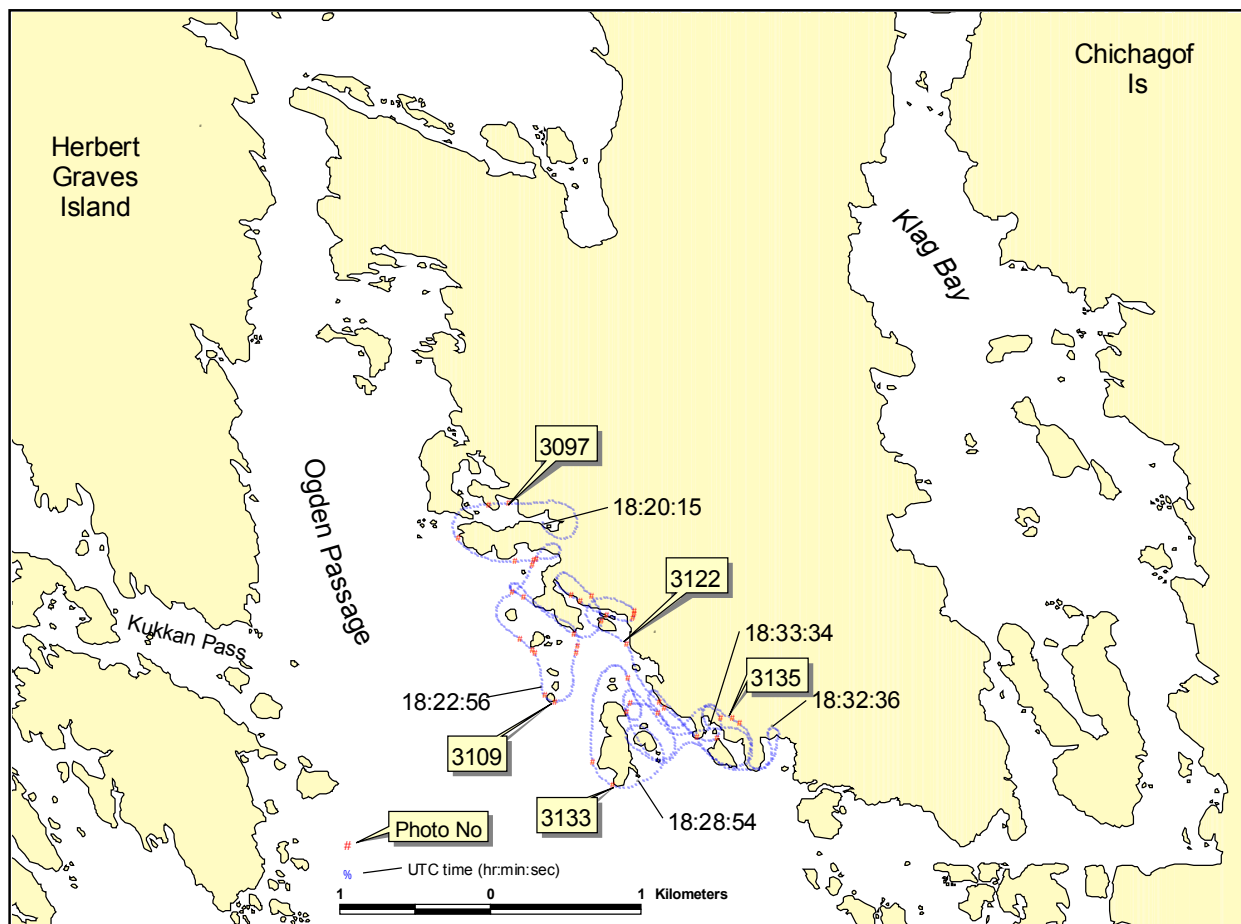


Figure 14. Location of Tape SE05_R_11, 22 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_11
General Location: Southeastern shore of Ogden Passage
Date: 22 July 2005
Time Start: 18:20:14
Time End: 18:33:34
Tape Length: ~13:00
Weather: sunny, calm

Electronic File Names: 22Jul05.trk, 22 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
18:20:14	small bay on eastern side of Ogden Passage	SE05_MM_3097	17322	26
18:22:56	islands off old village site	SE05_MM_3109		
18:33:34	island at Elbow Passage	SE05_MM_3135		

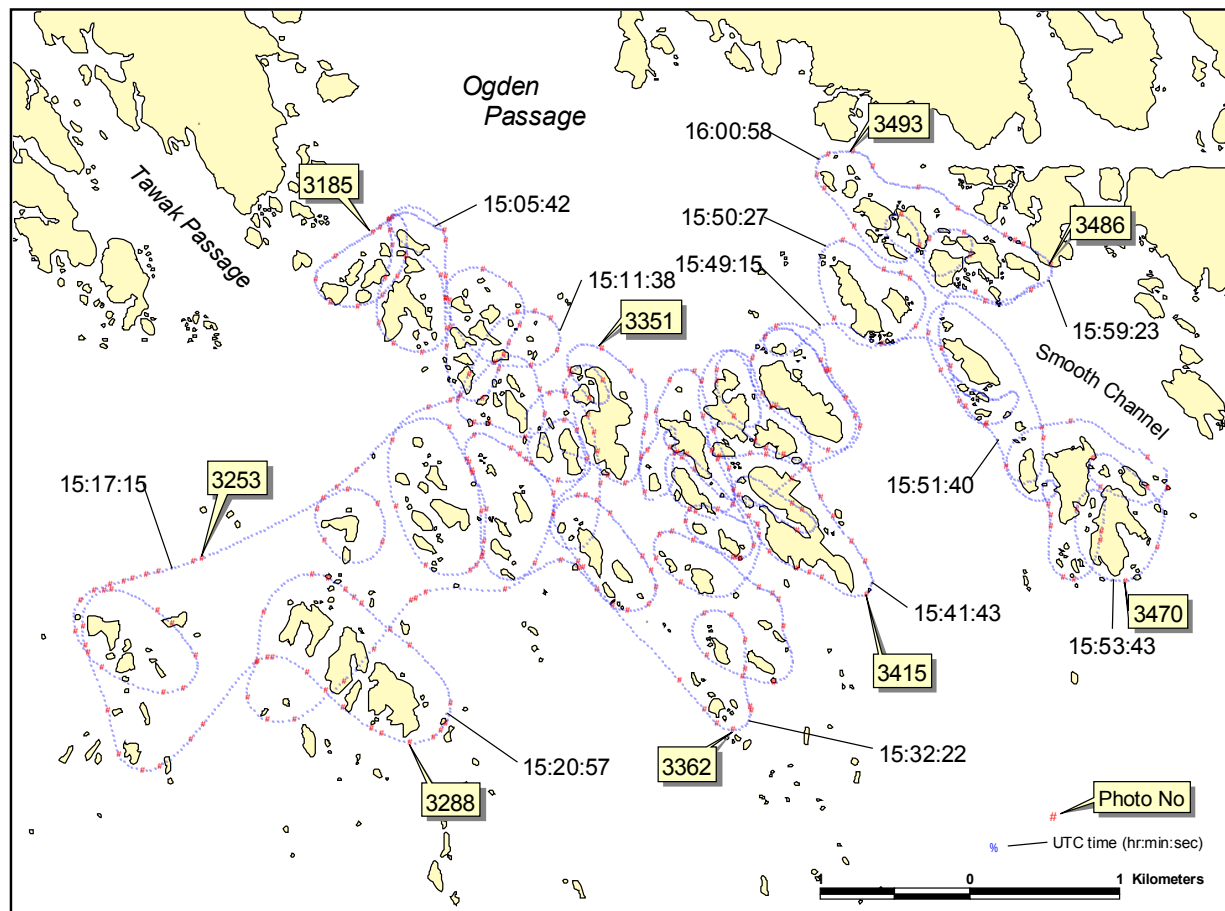


Figure 15. Location of Tape SE05_R_12, 23 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_12
General Location: island group south of Ogden Passage
Date: 23 July 2005
Time Start: 15:05:40
Time End: 16:03:34
Tape Length: ~59:00
Weather: sunny, calm

Electronic File Names: 23Jul05.trk, 23 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
15:05:40	northeast-most corner of island group	SE05_MM_3185	17322	26
15:17:15	southwest corner of island group - Granite Islands	SE05_MM_3253		
15:20:57	southern-most of Granite Islands	SE05_MM_3288		
15:32:22	southeast corner of island group	SE05_MM_3362		
15:49:15	northeast corner of island group	SE05_MM_3450		
16:00:58	islands between Elbow Passage and Smooth Channel	SE05_MM_3493		

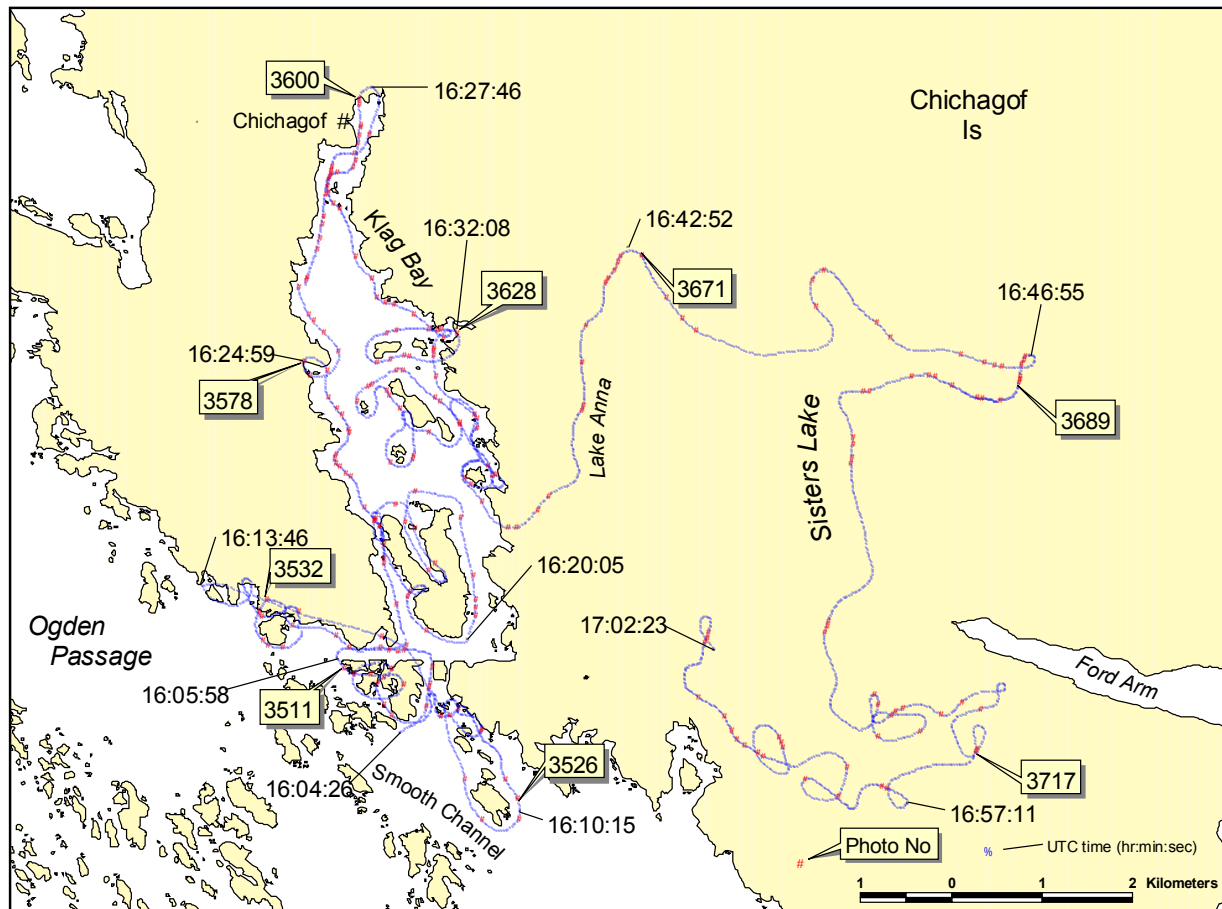


Figure 16. Location of Tape SE05_R_13, 23 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_13
General Location: Lag Bay, Lake Anna, Sisters Lake
Date: 23 July 2005
Time Start: 16:04:24
Time End: 17:02:31
Tape Length: ~59:00
Weather: sunny, calm

Electronic File Names: 23Jul05.trk, 23 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:04:24	islands at entrance to Klag Bay	SE05_MM_3504	17322	26
16:13:46	just west of entrance to Klag Bay	SE05_MM_3532		
16:27:46	head of Klag Bay, Chichagof Mine site	SE05_MM_3600		
16:38:00	entrance to Lake Anna	SE05_MM_3653		
16:42:52	north tip, Lake Anna	SE05_MM_3671		
16:46:55	eastern tip, Sisters Lake	SE05_MM_3689		
16:57:11	southeast corner of Sisters Lake	SE05_MM_3717		
17:02:23	entrance to small bay, southwest Sisters Lake	SE05_MM_3735		

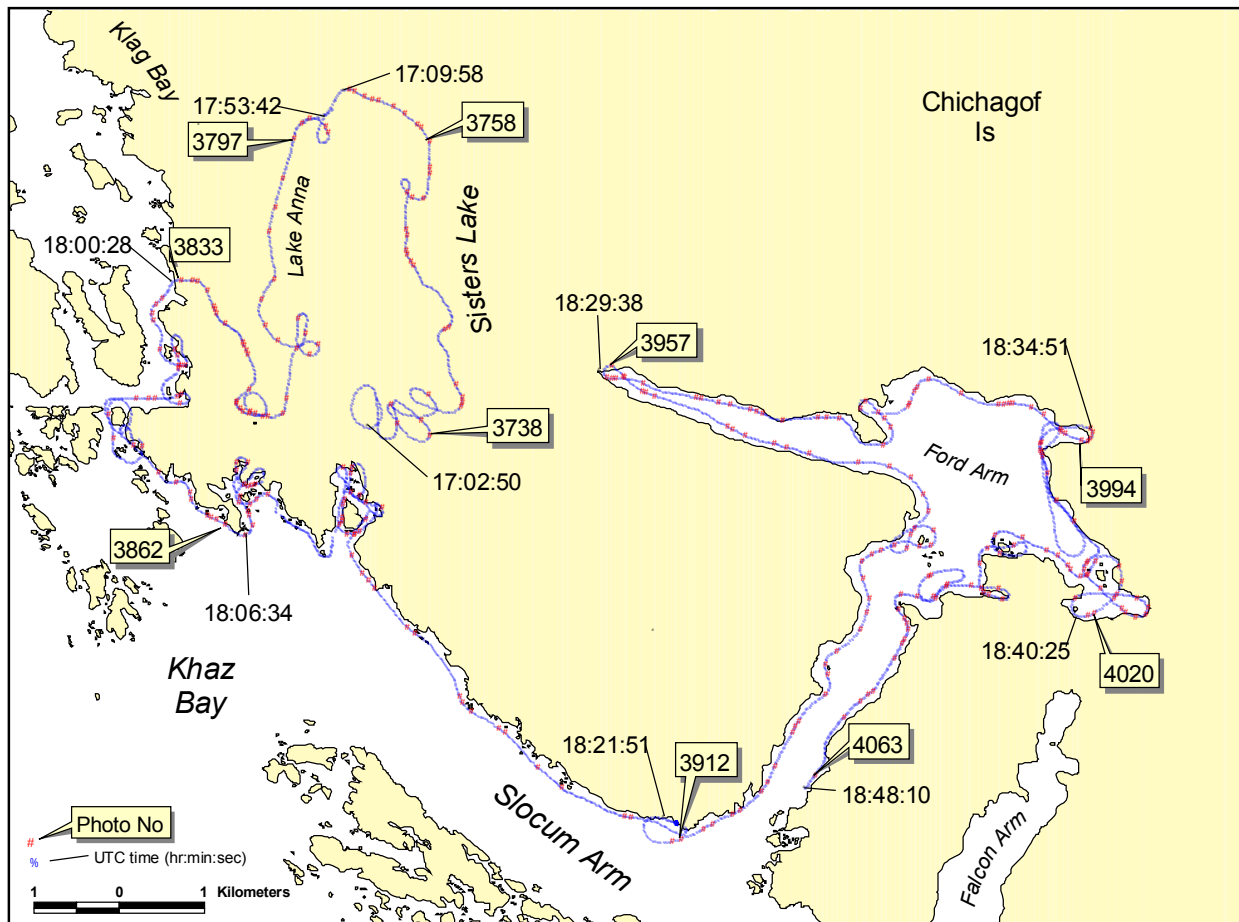


Figure 17. Location of Tape SE05_R_14, 23 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_14
General Location: Lake Anna, Sisters Lake, Klag Bay, Slocum Arm, Ford Arm
Date: 23 July 2005
Time Start: 17:02:50
Time End: 18:48:10
Tape Length: ~59:00
Tape Breaks: 17:10:54 to 17:53:42 break for fuel
Weather: sunny, calm

Electronic File Names: 23Jul05.trk, 23 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:02:50	entrance to small bay, southwest Sisters Lake	SE05_MM_3738	17322	26
17:10:54	northeast corner of Lake Anna	SE05_MM_3770		
	fuel break			
17:53:42	northeast corner of Lake Anna	SE05_MM_3796		
18:00:00	entrance of Lake Anna to Klag Bay	SE05_MM_3830		
18:06:34	island at entrance to Slocum Arm, west of Double Cove	SE05_MM_3862		
18:21:51	entrance to Ford Arm	SE05_MM_3912		
18:29:38	northwest corner of Ford Arm	SE05_MM_3957		
18:40:25	eastern tip of Ford Arm	SE05_MM_4020		
18:48:10	entrance to Ford Arm	SE05_MM_4063		

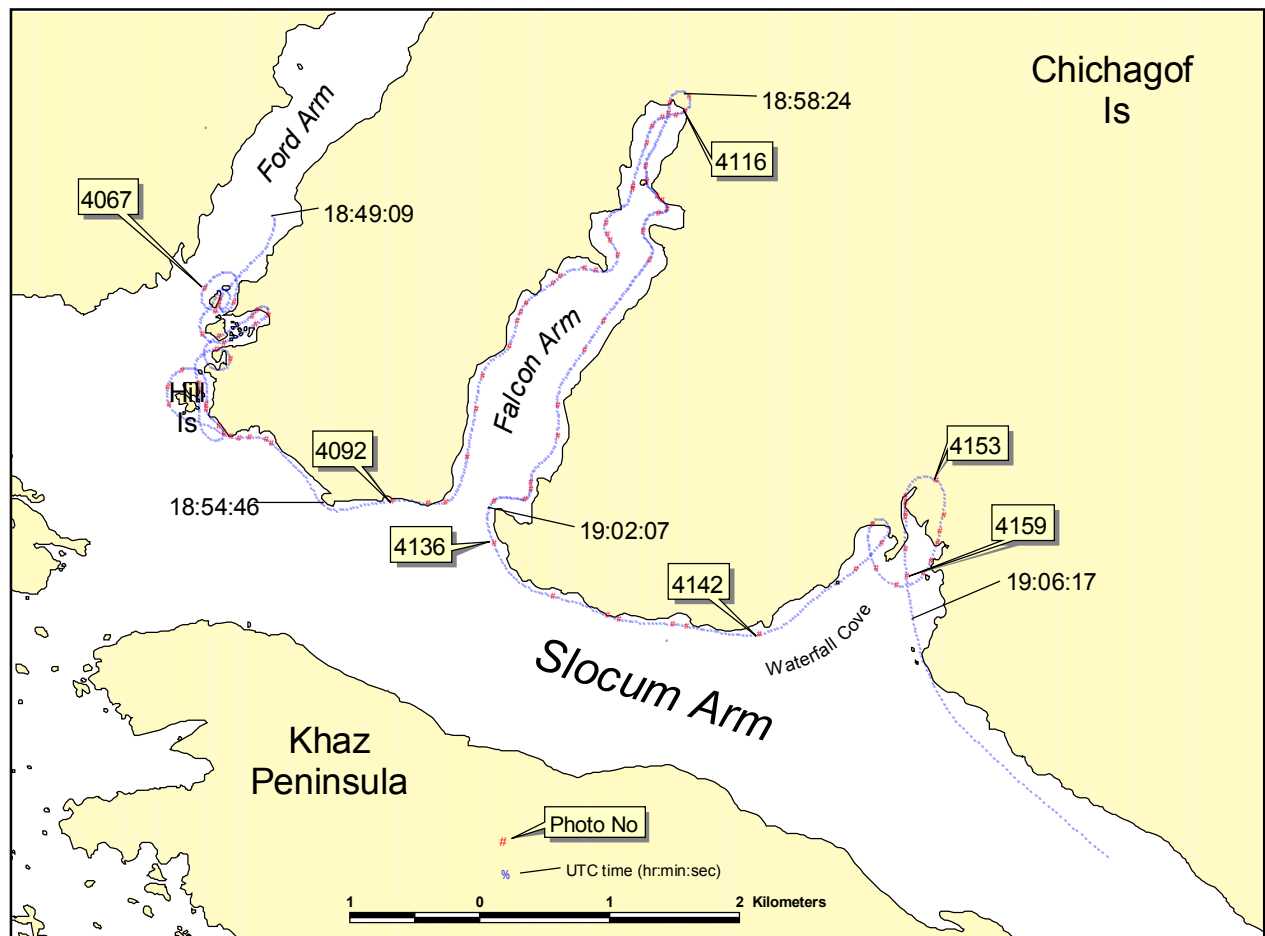


Figure 18. Location of Tape SE05_R_15, 23 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_15
General Location: Slocum Arm, Falcon Arm, Waterfall Bay
Date: 23 July 2005
Time Start: 18:49:07
Time End: 19:07:21
Tape Length: ~59:00
Weather: sunny, calm

Electronic File Names: 23Jul05.trk, 23 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
18:49:07	entrance to Ford Arm	SE05_MM_4064	17322	26
18:54:46	entrance to Falcon Arm	SE05_MM_4092		
18:58:24	head of Falcon Arm	SE05_MM_4116		
19:02:07	entrance to Falcon Arm	SE05_MM_4136		
19:03:39	entrance to Waterfall Cove	SE05_MM_4142		
19:06:17	complete Waterfall Cove	SE05_MM_4159		

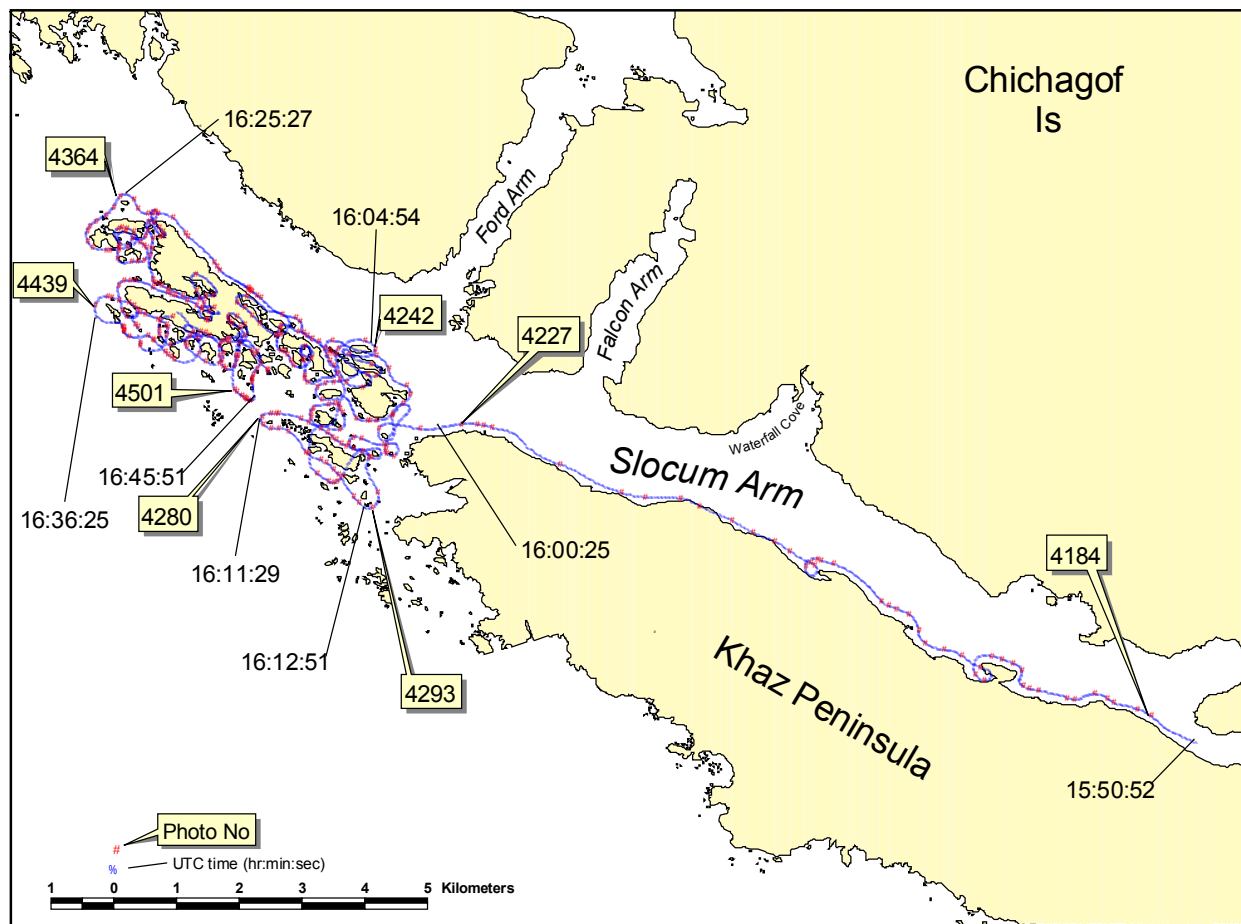


Figure 19. Location of Tape SE05_R_16, 24 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_16
General Location: Slocum Arm, island group at Entrance to Slocum Arm
Date: 24 July 2005
Time Start: 15:50:49
Time End: 16:47:14
Tape Length: ~59:00
Weather: sunny, calm

Electronic File Names: 24Jul05.trk, 24 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
15:50:52	opposite Flat Cove in Slocum Arm	SE05_MM_4184	17322	26
16:00:25	northern tip of Khaz Peninsula	SE05_MM_4227		
16:12:51	southeastern corner of island group	SE05_MM_4293		
16:25:27	northwestern tip of island group	SE05_MM_4364		
16:36:25	western tip of island group	SE05_MM_4439		
16:45:51	south central portion of island group	SE05_MM_4501		

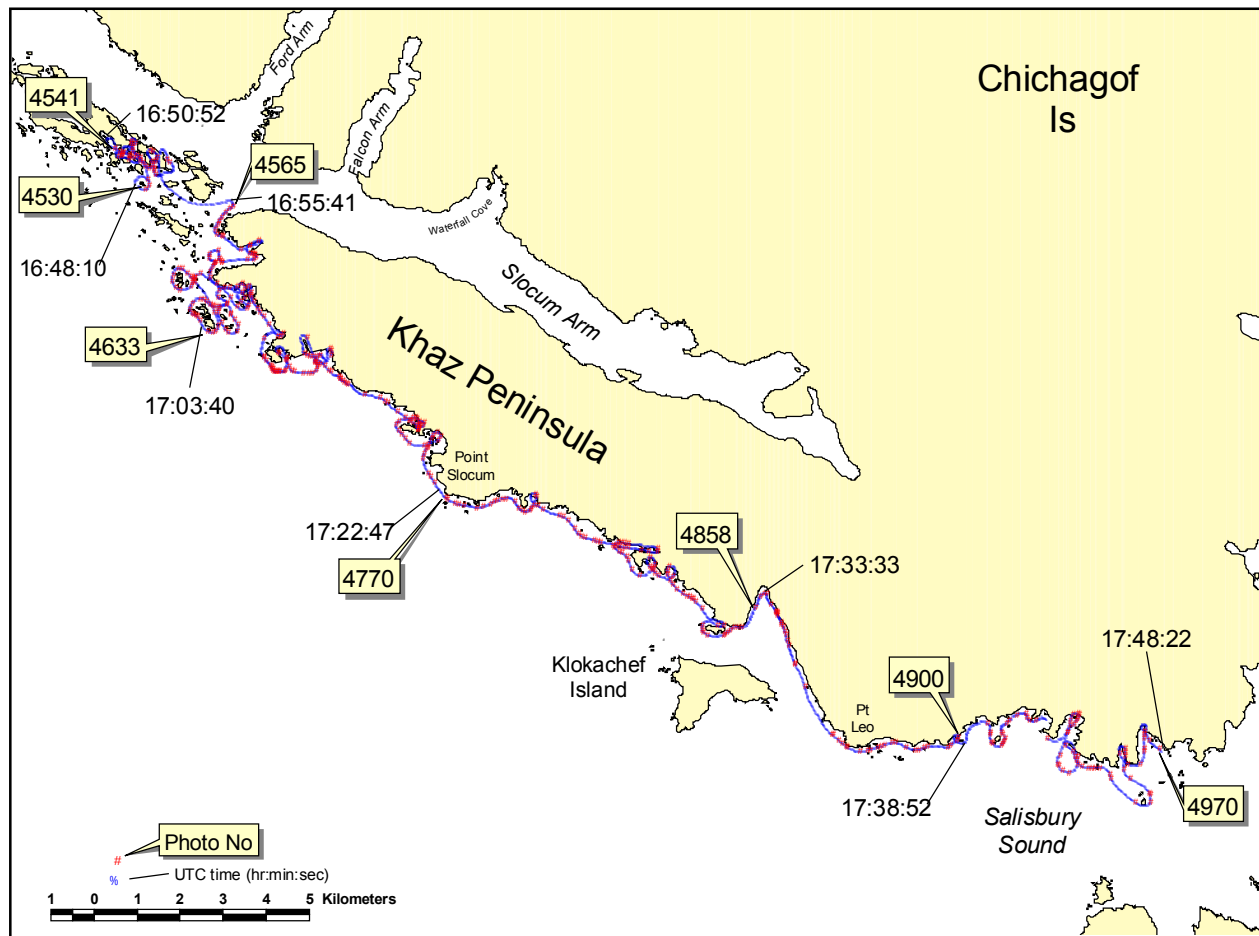


Figure 20. Location of Tape SE05_R_17, 24 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_17
General Location: Khaz Peninsula, island group at Entrance to Slocum Arm
Date: 24 July 2005
Time Start: 16:47:53
Time End: 17:48:22
Tape Length: ~60:00
Weather: sunny, calm

Electronic File Names: 24Jul05.trk, 24 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:48:10	south central portion of island group	SE05_MM_4541	17322	26
16:55:41	re-join Khaz Peninsula	SE05_MM_4565		
17:03:40	islands to south of tip of Khaz Peninsula	SE05_MM_4633		
17:22:47	Point Slocum	SE05_MM_4770	17323	
17:38:52	Pt. Leo	SE05_MM_4900		
17:48:22	Krugloi Is	SE05_MM_4970		

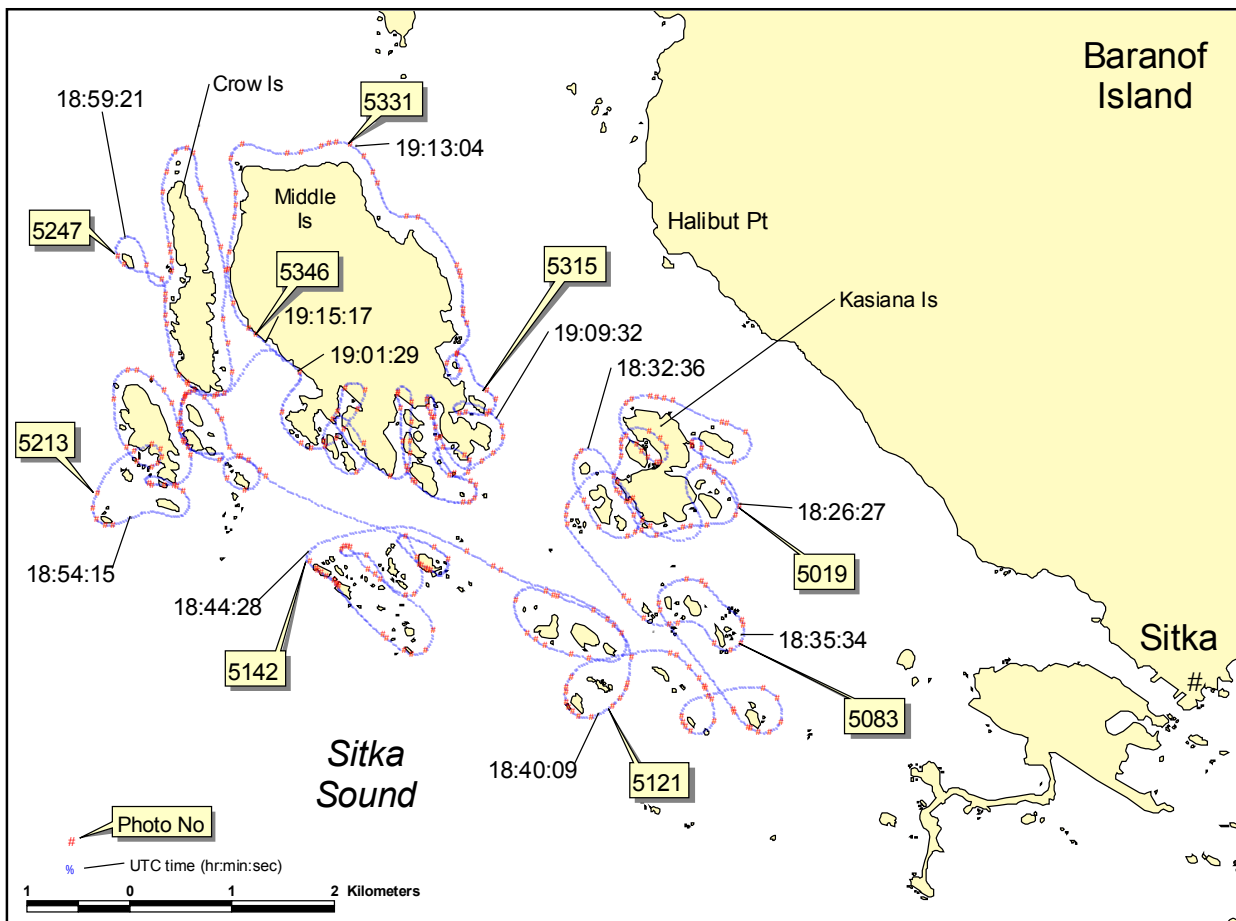
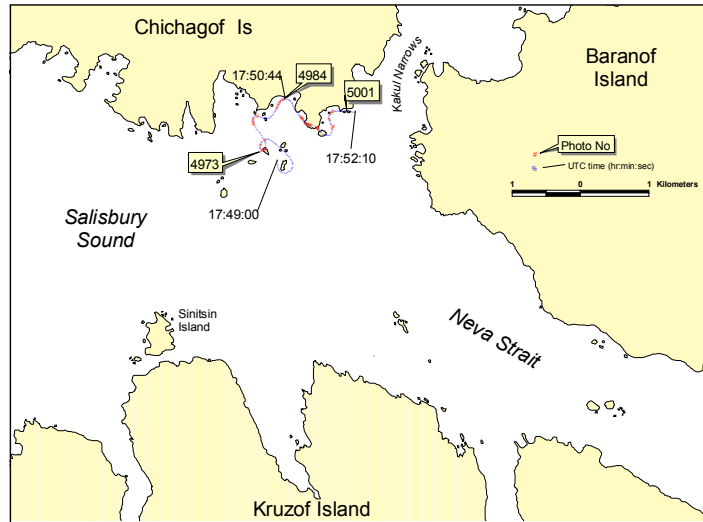


Figure 21. Location of Tape SE05_R_18, 24 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_18
General Location: Salisbury Sound; islands northwest of Sitka
Date: 24 July 2005
Time Start: 17:48:59
Time End: 19:15:17
Tape Length: ~59
Fuel Break: 17:52:10 to 18:26:27
Weather: sunny, calm

Electronic File Names: 24Jul05.trk, 24 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:48:59	Krugloi Is	SE05 MM 4973	17323	26
17:52:10	Kakul Narrows	SE05 MM 5001		
	break for fuel			
18:26:27	Kasiana Is	SE05 MM 5019	17324	27
18:35:34	Apple Is	SE05 MM 5083		
18:40:09	Black Rock	SE05 MM 5121		
18:44:28	Chaichei Is	SE05 MM 5142		
18:54:15	Gagarni Is	SE05 MM 5213		
18:59:21	western side of Crow Is	SE05 MM 5247		
19:01:29	start on west side of Middle Island	SE05 MM 5259		
19:15:17	complete Middle Is	SE05 MM 5346		

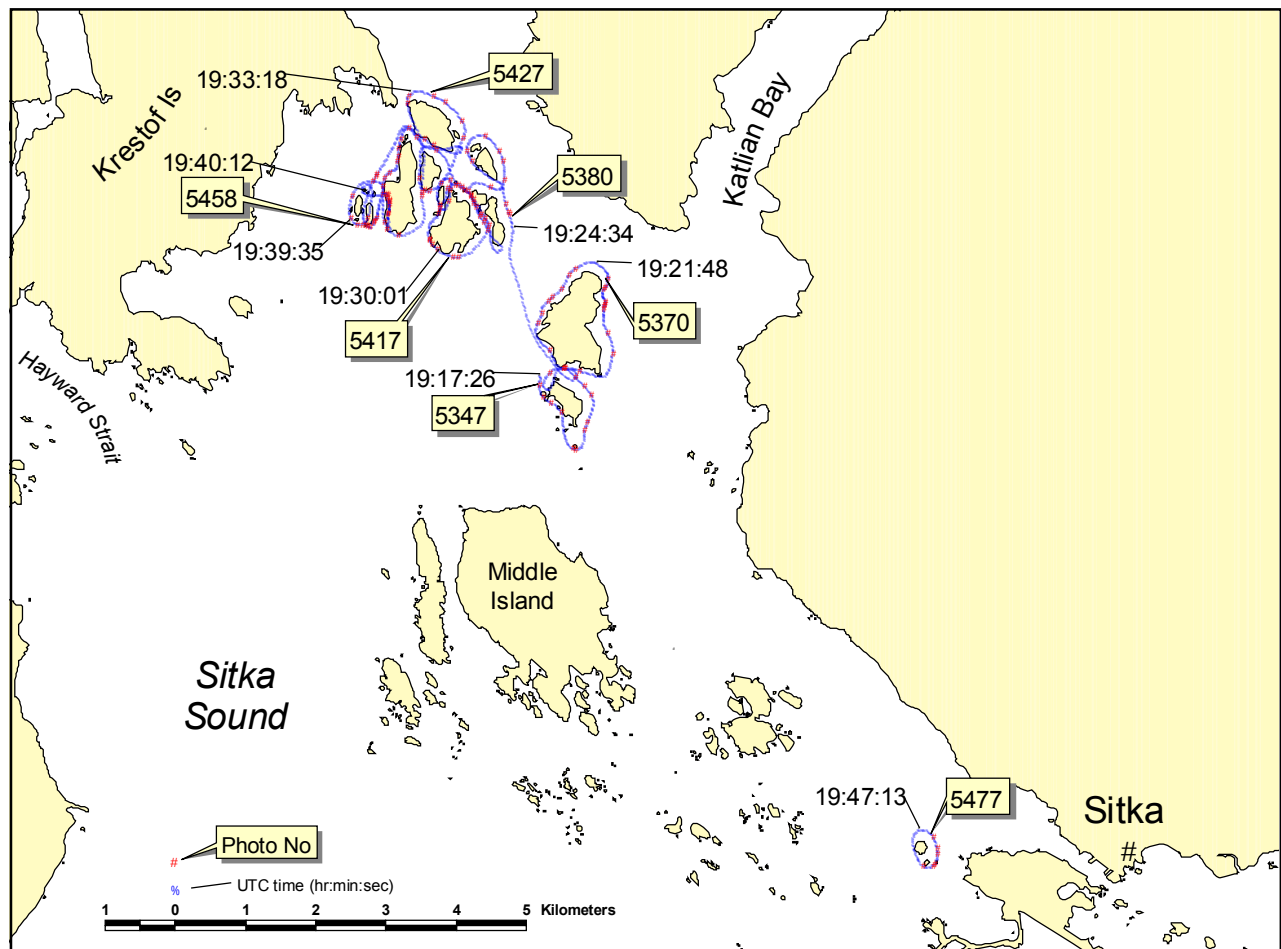


Figure 22. Location of Tape SE05_R_19, 24 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_19
General Location: islands to northwest of Sitka
Date: 24 July 2005
Time Start: 19:17:25
Time End: 19:47:20
Tape Length: ~40
Weather: sunny, calm

Electronic File Names: 24Jul05.trk, 24 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
19:17:25	Little Gavanski Is	SE05_MM_5327	17324	26
19:21:48	Big Gavanski Is	SE05_MM_5370		
19:24:34	start Siginaka Islands, SE corner	SE05_MM_5380		
19:33:18	northern tip, Siginaka Islands	SE05_MM_5427		
19:41:37	complete Siginaka Islands	SE05_MM_5468		
	transit to Battery Island			
19:47:13	Battery Is off Sitka runway	SE05_MM_5477		

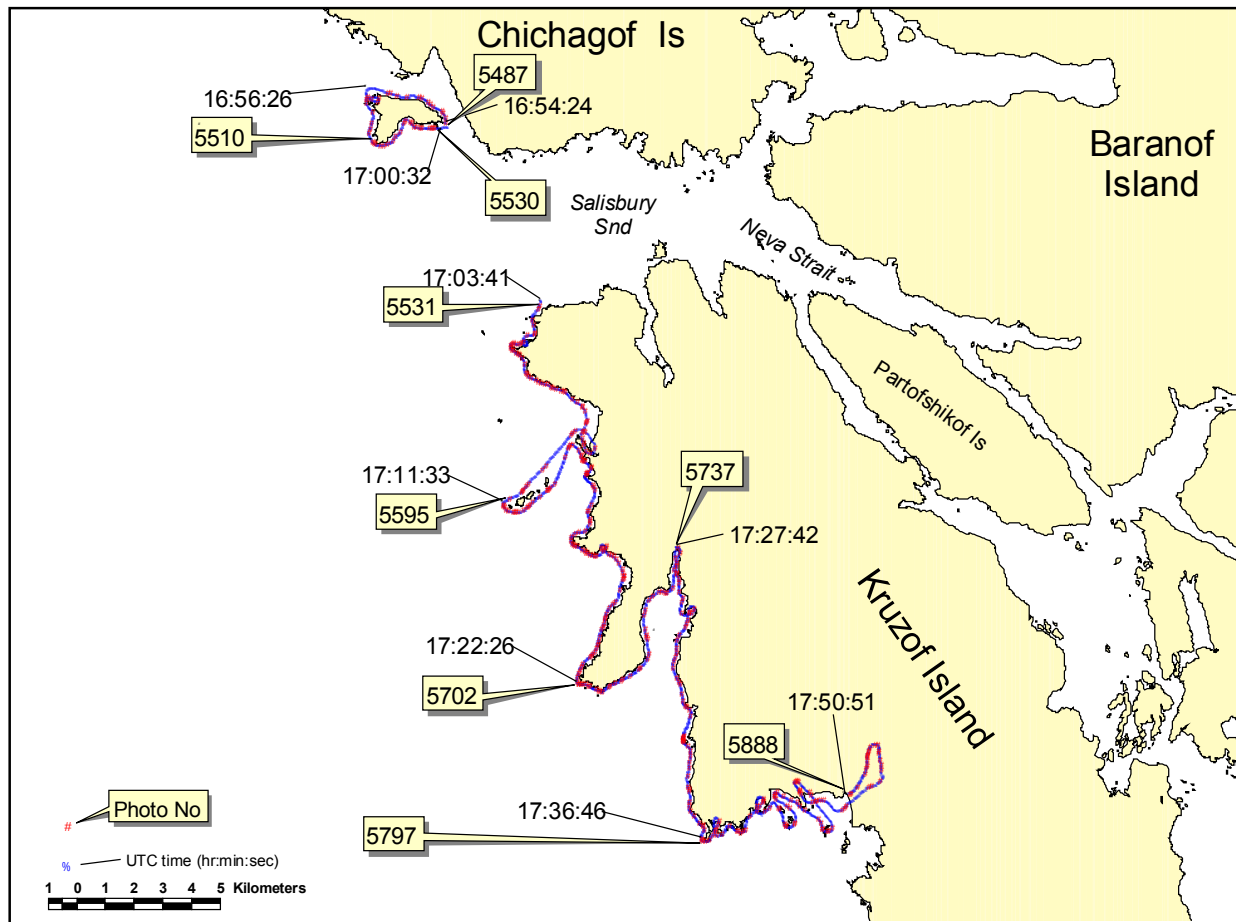


Figure 23. Location of Tape SE05_R_20, 25 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_20
General Location: Klokachef Is, northwest shore of Kruzof Is
Date: 25 July 2005
Time Start: 16:54:24
Time End: 17:50:51
Tape Length: ~40
Weather: sunny, moderate winds

Electronic File Names: 25Jul05.trk, 25 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:56:26	start Klokachef Is	SE05_MM_5487	17323	26
17:00:32	complete Klokachef Is	SE05_MM_5530		
17:03:41	start northwest Kruzof Is	SE05_MM_5531		
17:11:33	Sea Lion Islands	SE05_MM_5595	17325	
17:22:26	Pt. Amelia	SE05_MM_5702		
17:27:42	head of Gilmer Bay	SE05_MM_5737		
17:36:46	Pt. Mary, north of Shelikof Bay	SE05_MM_5797		
17:50:51	estuary in Shelikof Bay	SE05_MM_5888		

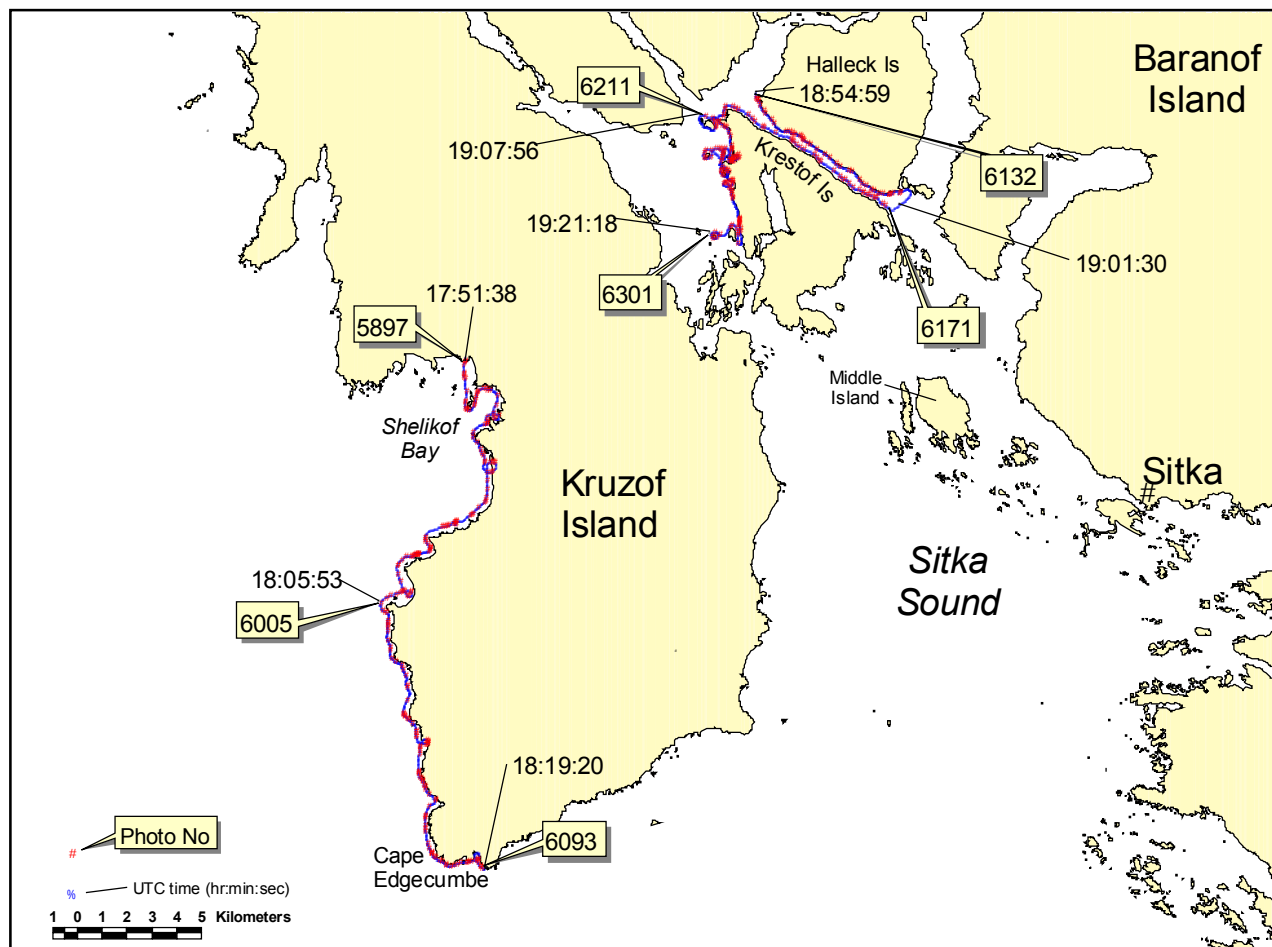


Figure 24. Location of Tape SE05_R_21, 25 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_21
General Location: southwest shore of Kruzof Is; Halleck and Krestof Is
Date: 25 July 2005
Time Start: 17:51:37
Time End: 19:21:18
Tape Length: ~59
Break for Fuel: 18:19:20 to 18:54:53
Weather: sunny, moderate winds

Electronic File Names: 25Jul05.trk, 25 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:51:37	Shelikof Bay	SE05 MM 5897	17325	26
18:05:53	Beaver Pt	SE05 MM 5530		
18:19:20	Cape Edgecombe	SE05 MM 5531		
	break for fuel			
18:54:53	western tip Halleck Is, Olga Strait	SE05 MM 6132	17324	
19:01:30	south entrance to Olga Strait; east Krestof Is	SE05 MM 6171		
19:07:56	northern tip of Krestof Is	SE05 MM 6211		
19:21:18	Brady and Mills Islands	SE05 MM 6301		

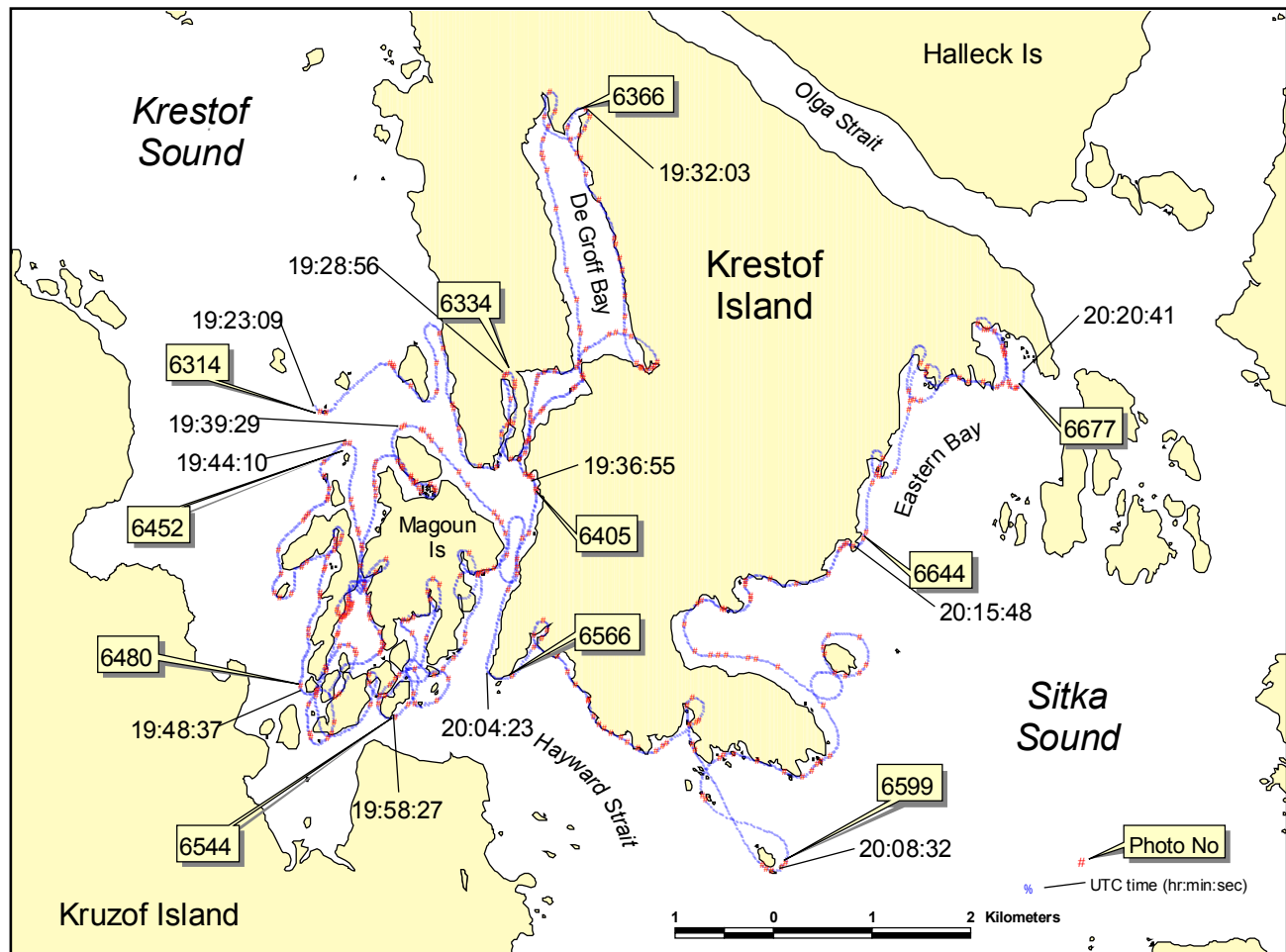


Figure 25. Location of Tape SE05_R_22, 25 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_22
General Location: islands in northern Sitka Sound
Date: 25 July 2005
Time Start: 19:23:08
Time End: 20:20:41
Tape Length: ~59
Weather: sunny, moderate winds

Electronic File Names: 25Jul05.trk, 25 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
19:23:09	Mills Island	SE05_MM_6314	17324	26
19:28:56	entrance to De Graff Bay	SE05_MM_6334		
19:36:55	east entrance to De Graff Bay	SE05_MM_6405		
19:39:29	northern tip of Magoun Is	SE05_MM_6314		
19:48:37	southwest corner of Magoun Is group	SE05_MM_6480		
19:58:27	south end of Magoun Is group	SE05_MM_6544		
20:04:23	southwest corner of Krestof Is	SE05_MM_6566		
20:20:41	southeast tip Krestof Is, Eastern Bay	SE05_MM_6677		

Note: Clam Gardens at 19:49:14 to 19:50:29, photos 6485 to 6500

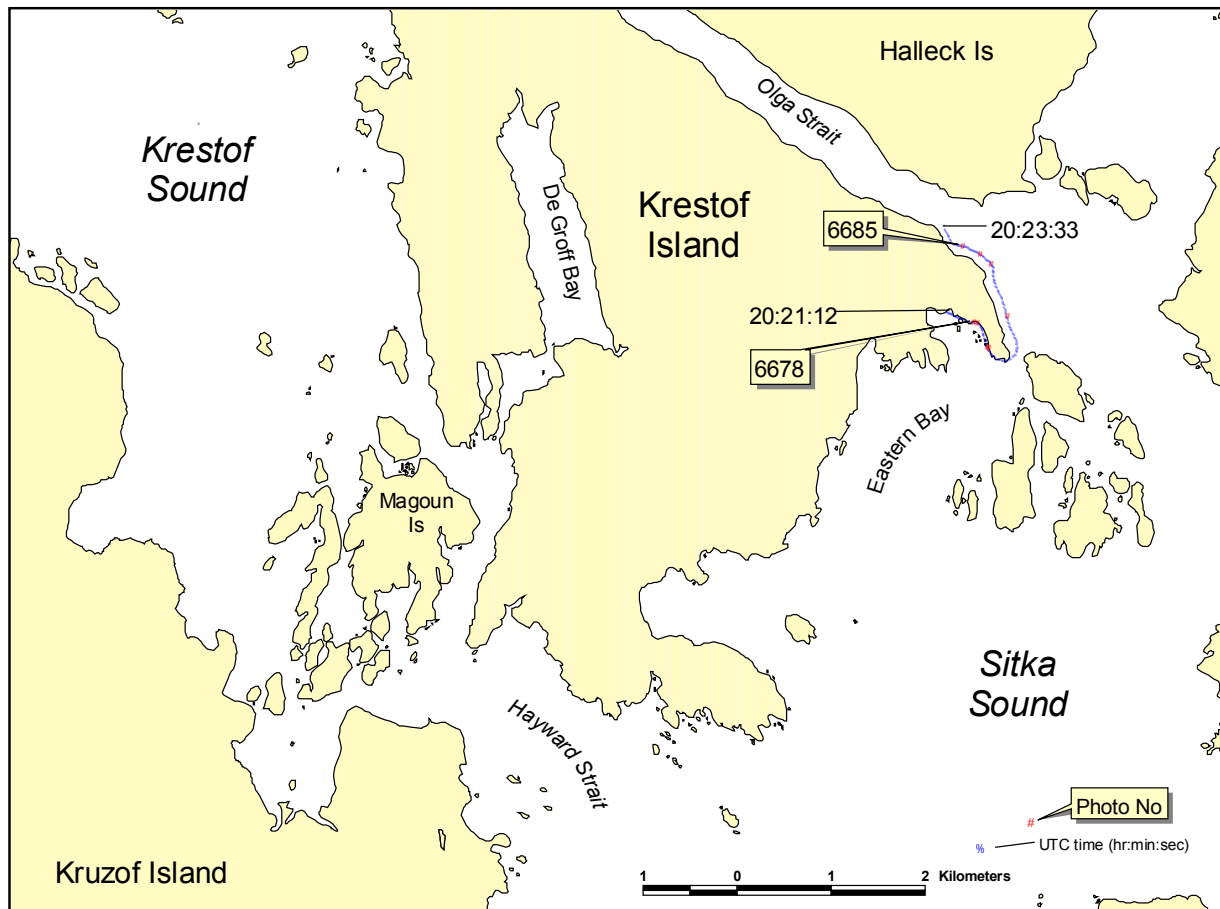


Figure 26. Location of Tape SE05_R_23, on 25 July 2005

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_R_23
General Location: eastern tip of Krestof Is
Date: 25 July 2005
Time Start: 20:21:12
Time End: 20:23:33
Tape Length: ~2
Weather: sunny, moderate winds

Electronic File Names: 25Jul05.trk, 25 Jul05.txt, SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
20:21:12	small bay within Eastern Bay at Eastern Pt, Krestof Is	SE05_MM_6678	17324	26
20:23:33	Eastern Pt, Krestof Is	SE05_MM_6685		

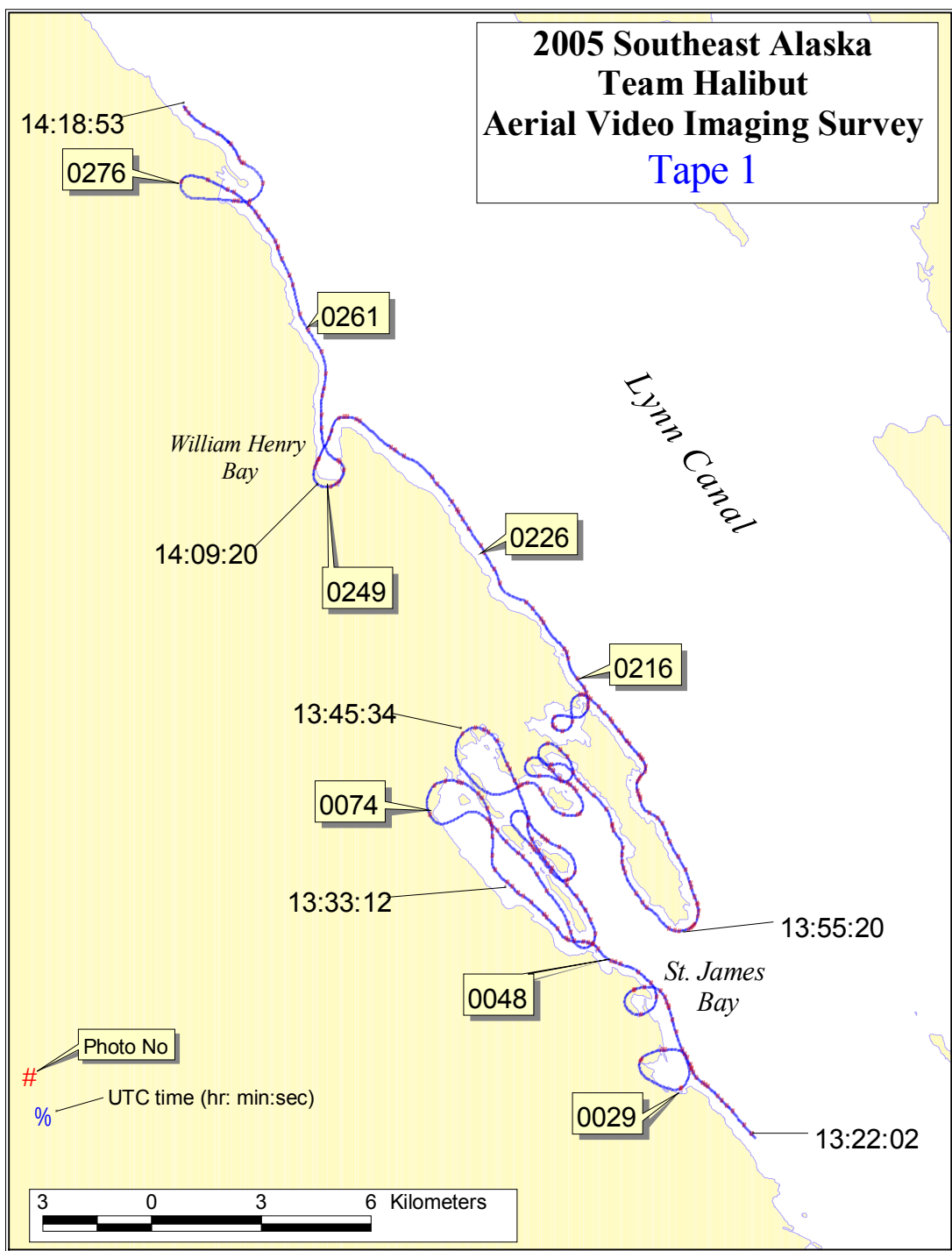


Figure 27. Location of Tape SE05_H_01, 20 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_01
General Location: Lynn Canal, St. James Bay, William Henry Bay
Date: 20 July 2005
Time Start: 13:22:02
Time End: 14:18:53
Tape Length: 56:51
Weather: Low overcast with fog

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
13:22:16	start north of St. James Point	SE05 ML 0009	17316	32
13:29:40	St. James Point	SE05 ML 0048		
13:34:30	St. James Bay	SE05 ML 0074		
14:02:24	exit of Boat Harbour	SE05 ML 0216		
14:09:34	William Henry Bay	SE05 ML 0249		
14:15:40	Endicott River	SE05 ML 0276		

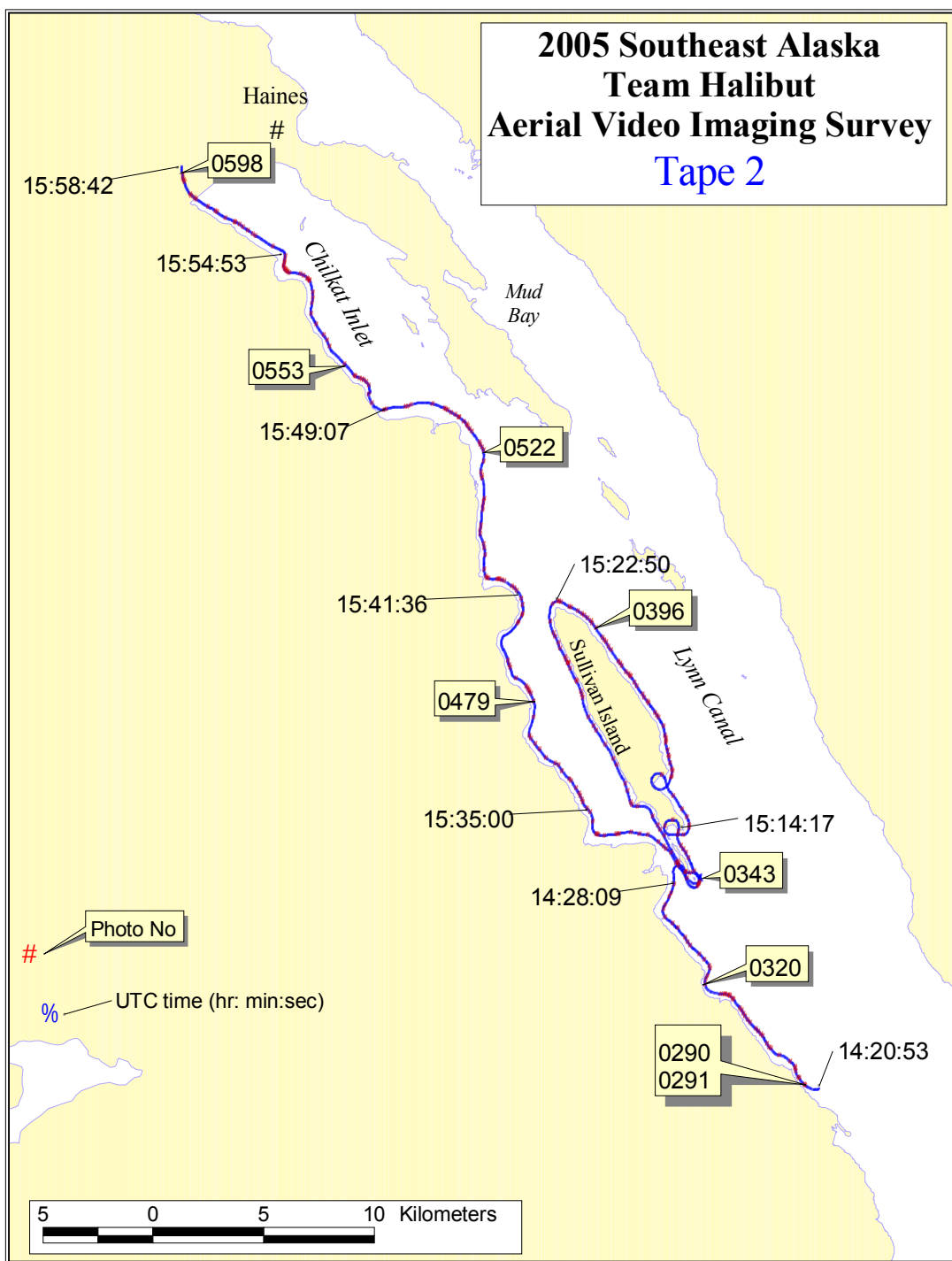


Figure 28. Location of Tape SE05_H_02, 20 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_02
General Location: Lynn Canal, Sullivan Island, Chilkat Inlet
Date: 20 July 2005
Time Start: 14:20:33
Time End: 15:58:42
Tape Length: 59:23
Weather: Partly cloudy, slight chance of rain

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
14:20:59	Start. north of Endicott River	SE05_ML_0290	17316, 17317	32, 38
14:29:54	S. end Sullivan Island	SE05_ML_0343		
15:21:33	NE tip Sullivan Island	SE05_ML_0396		
15:46:06	Glacier Point	SE05_ML_0522		
15:51:00	start of Chilkat River flats	SE05_ML_0553		
15:58:30	Airport on Chilkat River	SE05_ML_0598		

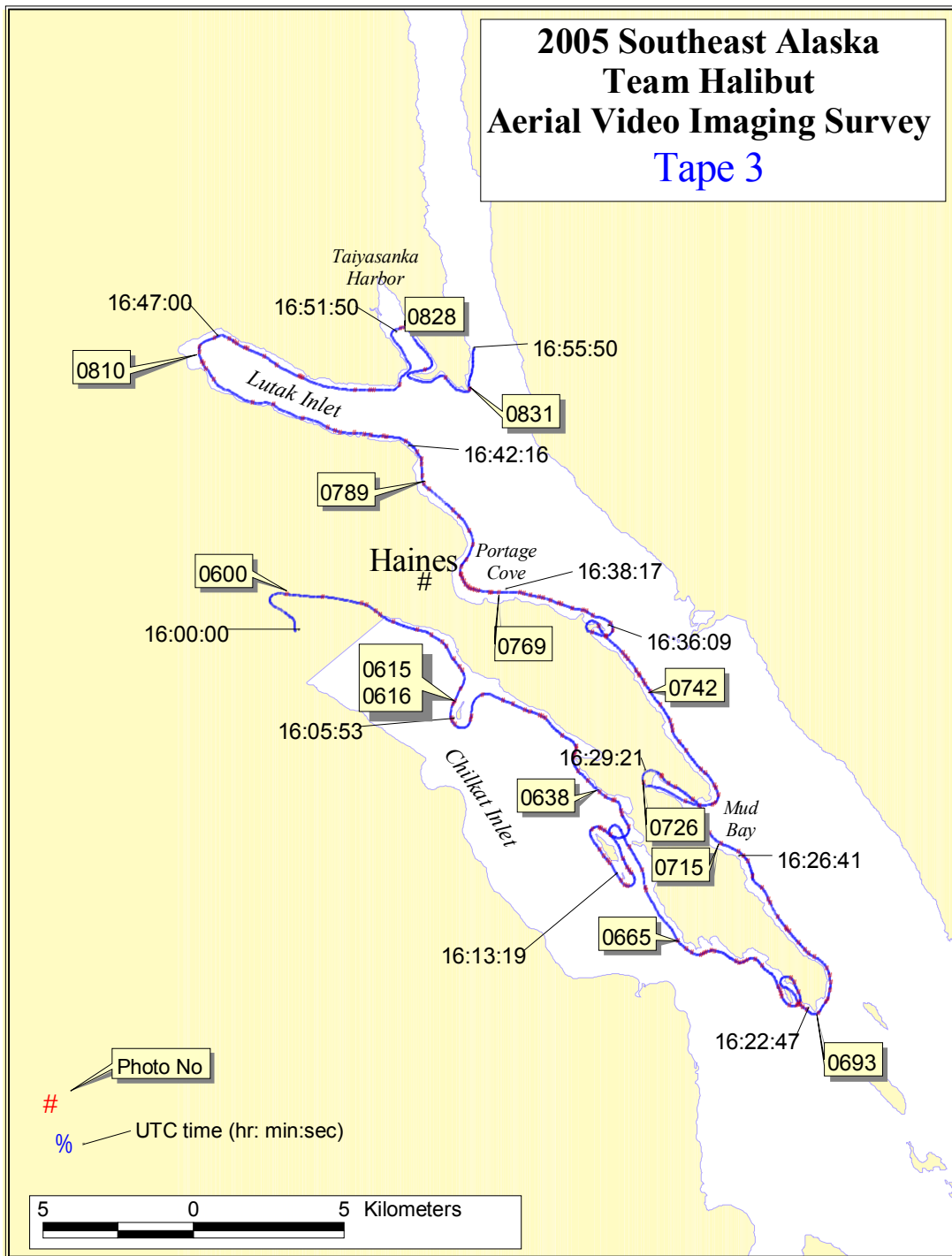


Figure 29. Location of Tape SE05_H_03, 20 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_03
General Location: Lynn Canal, Chilkat Inlet, Haines, Lutak Inlet, Taiyasanka Harbor
Date: 20 July 2005
Time Start: 16:00:00
Time End: 16:55:53
Fuel Break: 14:30:10 to 15:11:15
Tape Length: 57:55
Weather: Partly cloudy, slight chance of rain

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:03:36	Chilkat River	SE05_ML_0610	17317	38
16:05:30	Pyramid Island, Chilkat River	SE05_ML_0615		
16:22:52	S. tip of Chilkat Peninsula	SE05_ML_0693		
16:29:24	Mud Bay	SE05_ML_0726		
16:41:24	Haines Ferry Terminal	SE05_ML_0789		
16:46:36	Head of Lutak Inlet	SE05_ML_0810		
16:51:56	Taiyasanka Harbor	SE05_ML_0828		

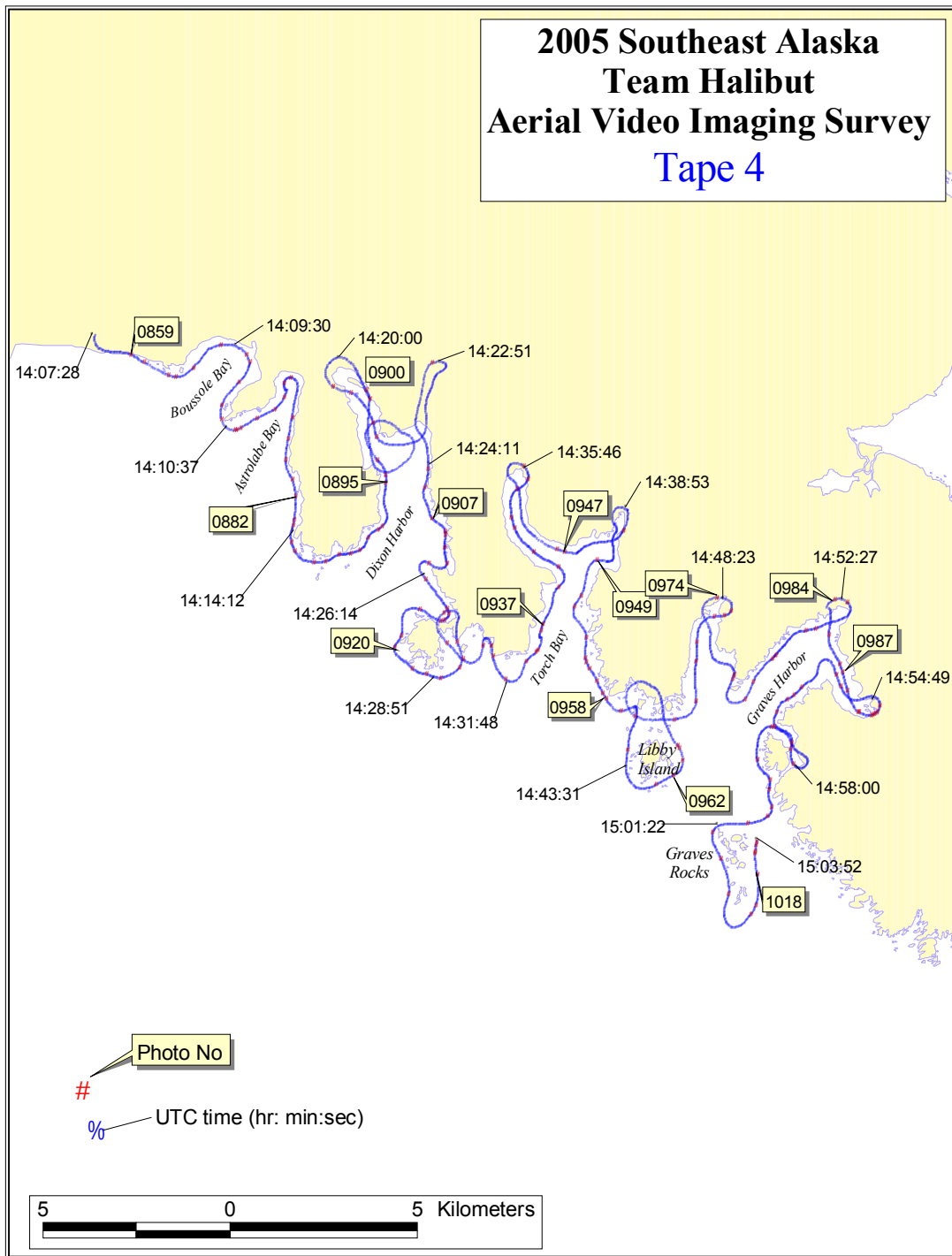


Figure 30. Location of Tape SE05_H_04, 21 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_04
General Location: Glacier National Park, Palma Bay to Graves Rocks
Date: 21 July 2005
Time Start: 14:07:28
Time End: 15:03:52
Tape Length: 58:30
Weather: Clear, bright conditions

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
14:09:41	Boussole Bay	SE05_ML_0865	17301	31
14:13:30	mouth of Astrolabe Bay	SE05_ML_0882		
14:19:26	head of Dixon Harbour	SE05_ML_0900		
14:28:10	mouth of Dixon Harbour	SE05_ML_0920		
14:37:27	head of Torch Bay	SE05_ML_0947		
14:44:10	E. side of Libby Island	SE05_ML_0962		
14:52:33	Head of Graves Harbor	SE05_ML_0984		
15:03:28	E. side of Graves Rocks	SE05_ML_1018		

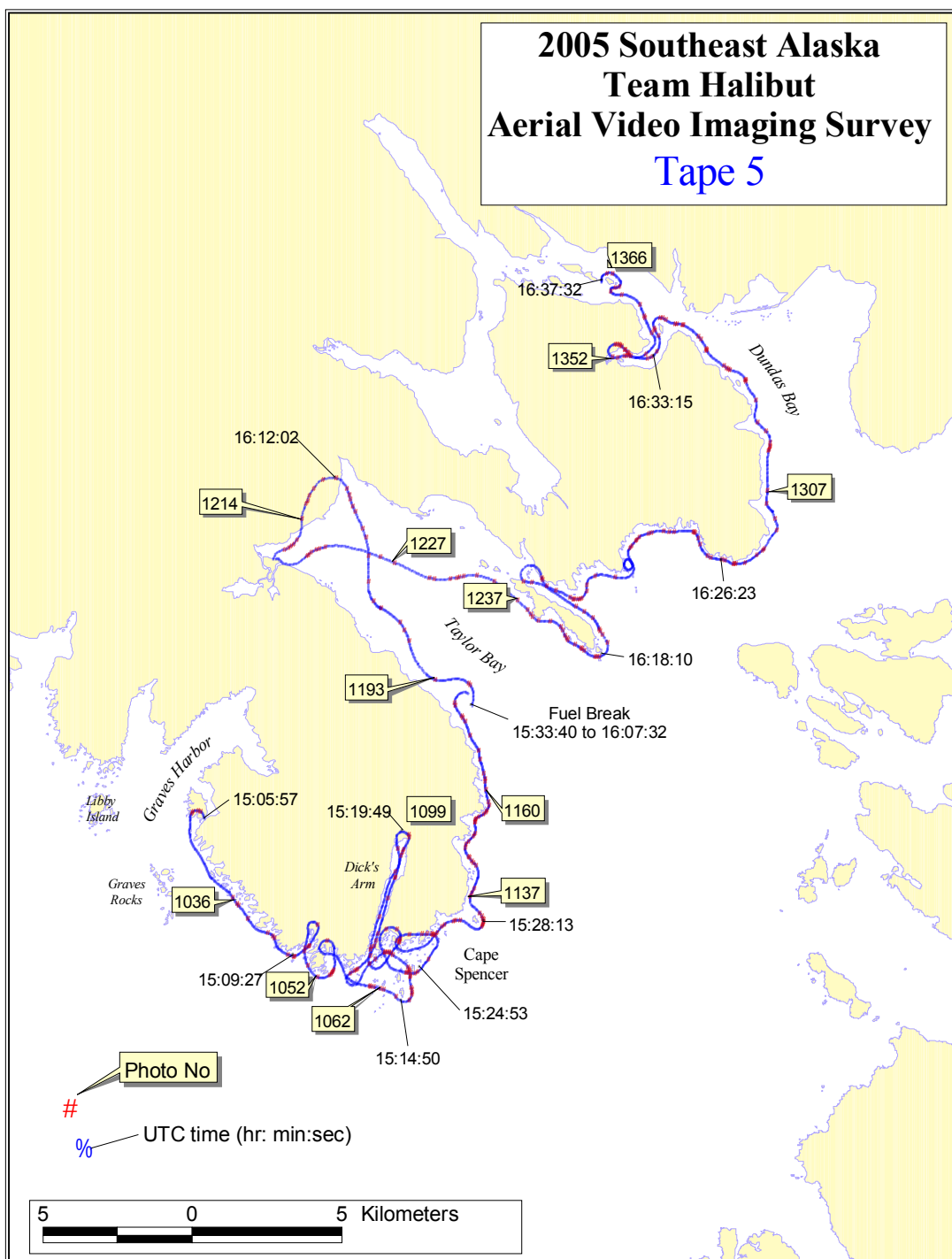


Figure 31. Location of Tape SE05_H_05, 21 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_05
General Location: Glacier National Park, Graves Rocks to Cape Spencer, Taylor Bay, Dundas Bay
Date: 21 July 2005
Time Start: 15:05:57
Time End: 16:37:32
Fuel Break: 15:33:40 to 16:07:32
Tape Length: 59:51
Weather: Clear, bright conditions

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
15:08:05	Polka Peninsula	SE05 ML 1036	17302	31
15:11:48	Point Villaluenga	SE05 ML 1052		
15:14:22	Cape Spencer	SE05 ML 1062		
15:19:40	Head of Dick's Arm	SE05 ML 1099		
15:33:40 to 16:07:32	Fuel Break	Fuel		
16:12:33	Head of Taylor Bay	SE05 ML 1214		
16:28:27	Mouth of Dundas Bay	SE05 ML 1307		
16:37:08	Dundas Bay	SE05 ML 1366		

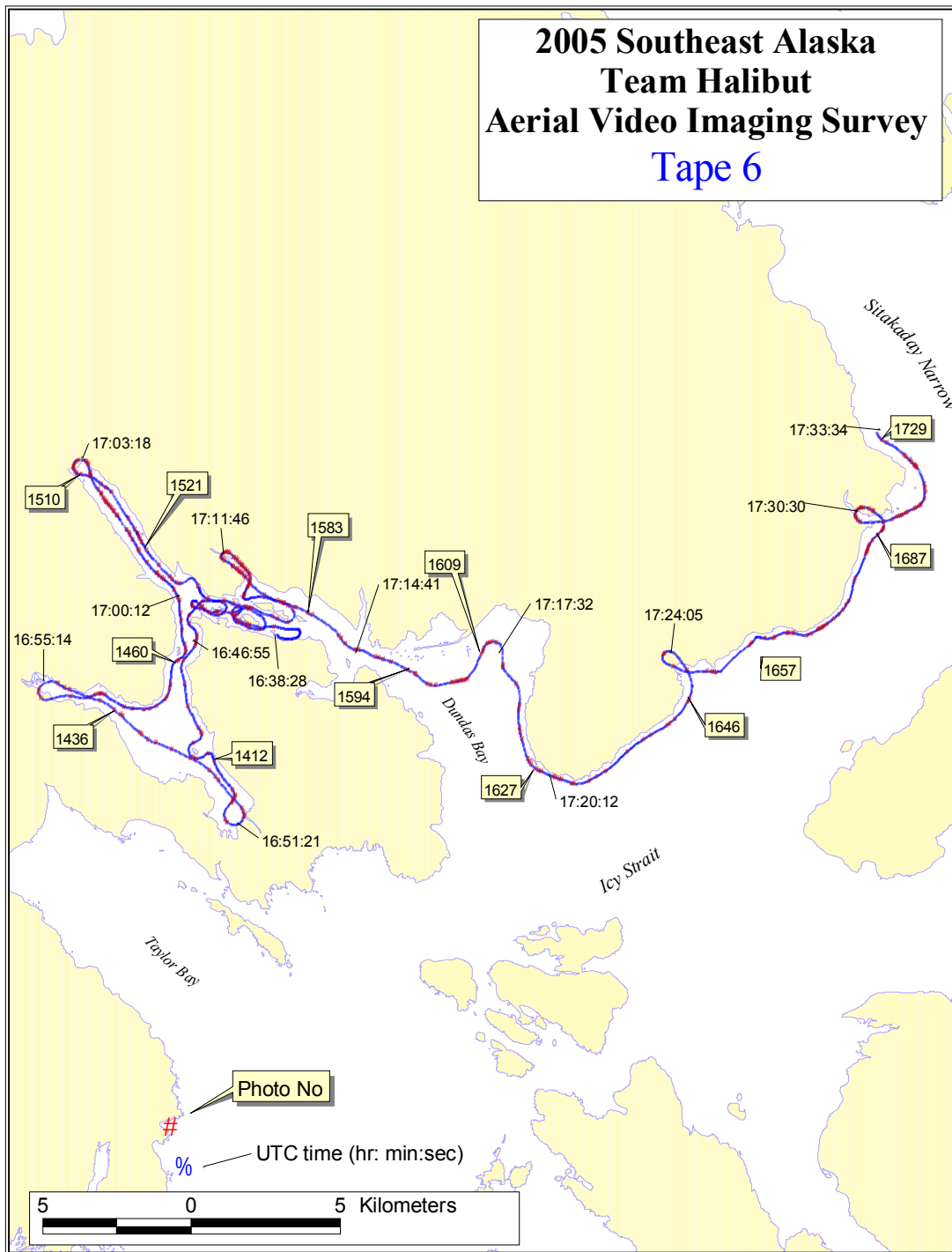


Figure 32. Location of Tape SE05_H_06, 21 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_06
General Location: Glacier National Park, Dundas Bay to Sitakaday Narrows
Date: 21 July 2005
Time Start: 16:38:28
Time End: 17:33:34
Tape Length: 57:27
Weather: Clear, bright conditions

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:49:52	SW arm Dundas Bay	SE05 ML 1412	17302	31
17:03:46	NW arm Dundas Bay	SE05 ML 1510		
17:17:02	Large flats on the NE corner of Dundas Bay	SE05_ML_1609		
17:19:35	Mouth of Dundas Bay	SE05 ML 1627		
17:23:04	Small bay NE of Dundas Bay, opposite Lemesurier Island	SE05_ML_1646		
17:33:25	Point Carolus	SE05 ML 1729		

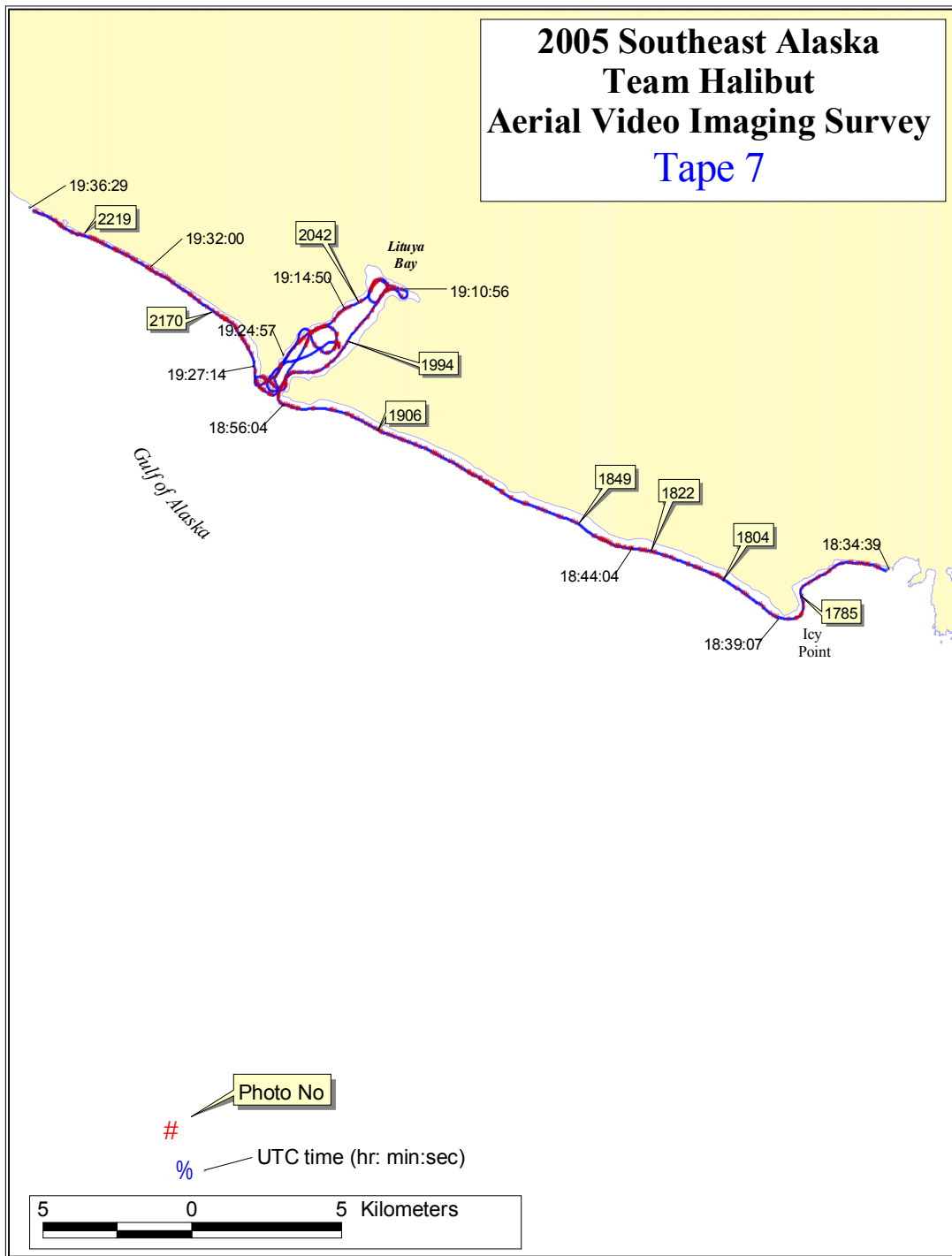


Figure 33. Location of Tape SE05_H_07, 22 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_07
General Location: Gulf of Alaska, Icy Point, Lituya Bay, Cape Fairweather
Date: 22 July 2005
Time Start: 18:34:29
Time End: 19:36:29
Tape Length: 58:40
Weather: Morning Fog clearing to partly cloudy with sunny periods

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
18:37:38	Icy Point	SE05 ML 1785	16760	38, 35
18:43:27	S. side of LaPerouse Glacier (just south)	SE05_ML_1822		
19:07:56	E. side Lituya Bay	SE05 ML 1994		
19:14:16	W. Side Lituya Bay	SE05 ML 2042		
19:29:34	Four Mile Creek	SE05 ML 2170		

NOTE!!! This section of the shore was flown above the zero tide mark due to ground-fog. Beach morphology was really not changed from low to high tides.

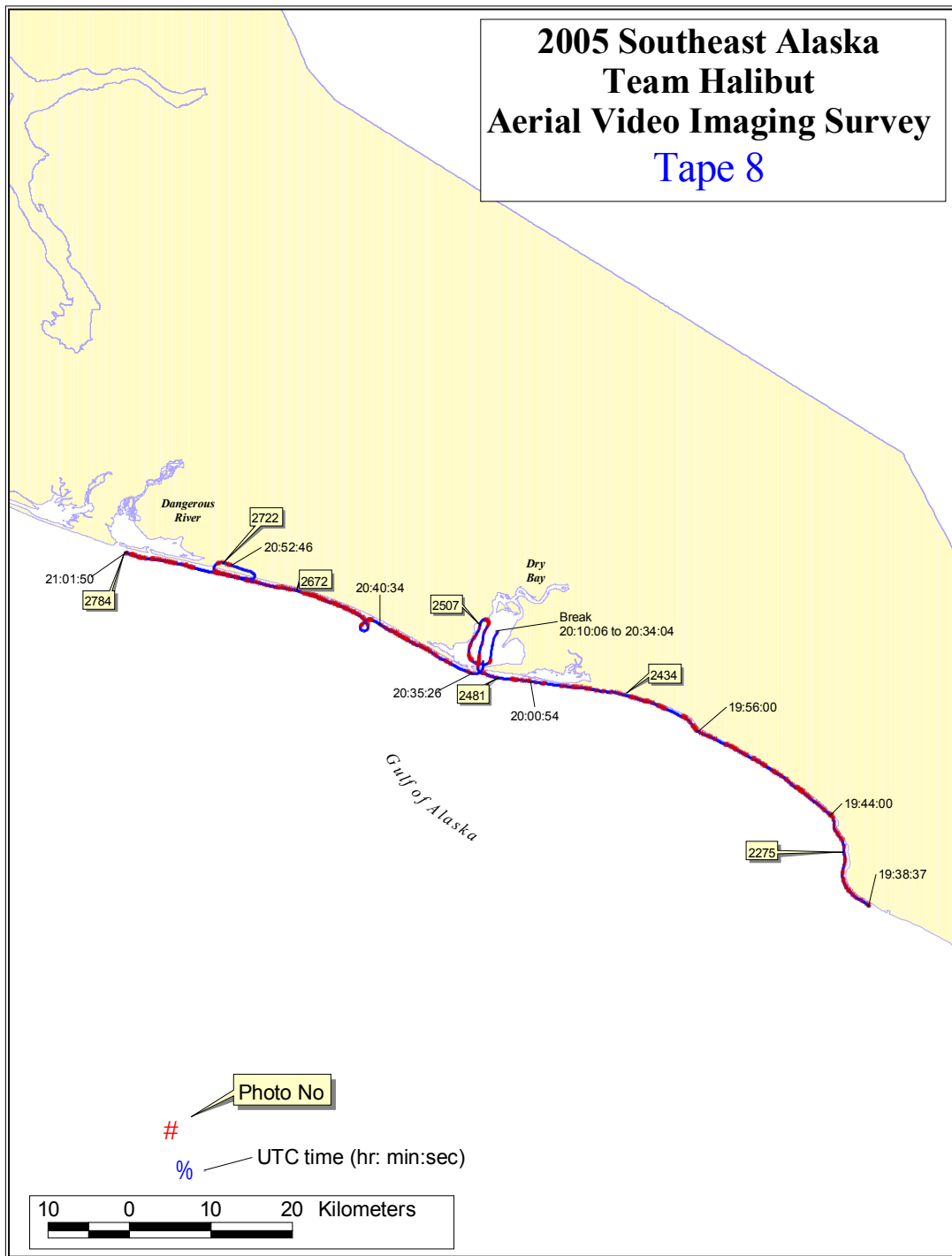


Figure 34. Location of Tape SE05_H_08, 22 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_08
General Location: Gulf of Alaska, Cape Fairweather, Dry Bay, Dangerous River
Date: 22 July 2005
Time Start: 19:38:37
Time End: 21:01:50
Break: 20:10:06 to 20:34:04
Tape Length: 60:00
Weather: Morning Fog clearing to partly cloudy with sunny periods

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
19:41:59	Cape Fairweather	SE05 ML 2275	16760	38, 35
20:02:23	Large beach flats E. of Dry Bay	SE05 ML 2481		
20:10:06 to 20:34:04	Break (Dry Bay)	Break		
20:06:17	Dry Bay	SE05 ML 2507		
20:47:07	Awke River	SE05 ML 2672		
20:52:21	Beach flats near Dangerous River	SE05 ML 2722		
21:01:46	Dangerous River	SE05 ML 2784		

NOTE!!! This section of the shore was flown above the zero tide mark due to ground-fog. Beach morphology was really not changed from low to high tides.

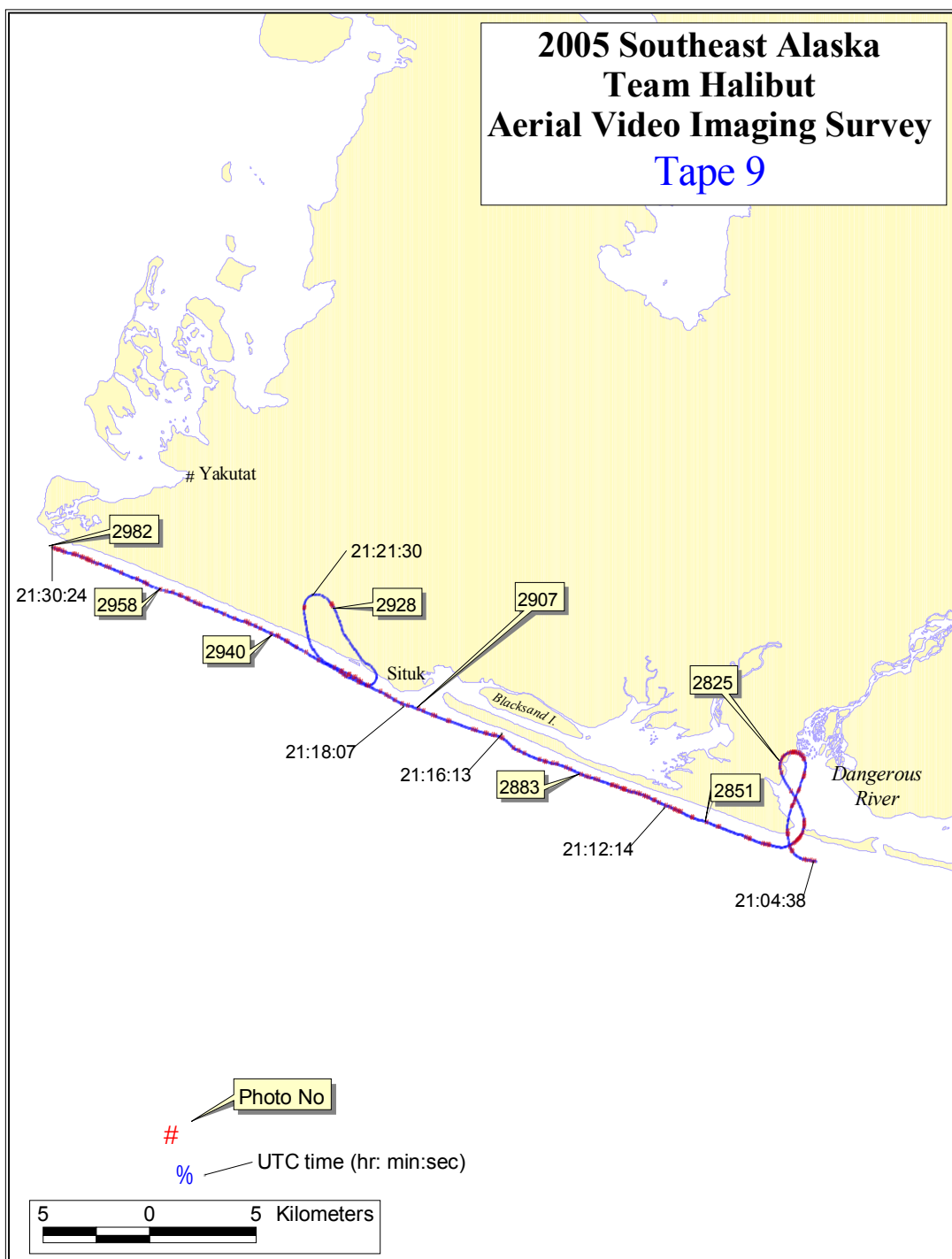


Figure 35. Location of Tape SE05_H_09, 22 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_09
General Location: Gulf of Alaska, Dangerous River to Ocean Cape
Date: 22 July 2005
Time Start: 21:04:38
Time End: 21:30:24
Tape Length: 24:57
Weather: Sunny, clear

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
21:07:31	Dangerous River	SE05 ML 2825	16760	35
21:14:16	Blacksand Spit	SE05 ML 2883		
21:25:43	Cannon Beach	SE05 ML 2940		
21:30:24	Ocean Cape	SE05 ML 2982		

NOTE!!! This section of the shore was flown above the zero tide mark. (Fog delayed lift-off)
Beach morphology was really not changed from low to high tides.

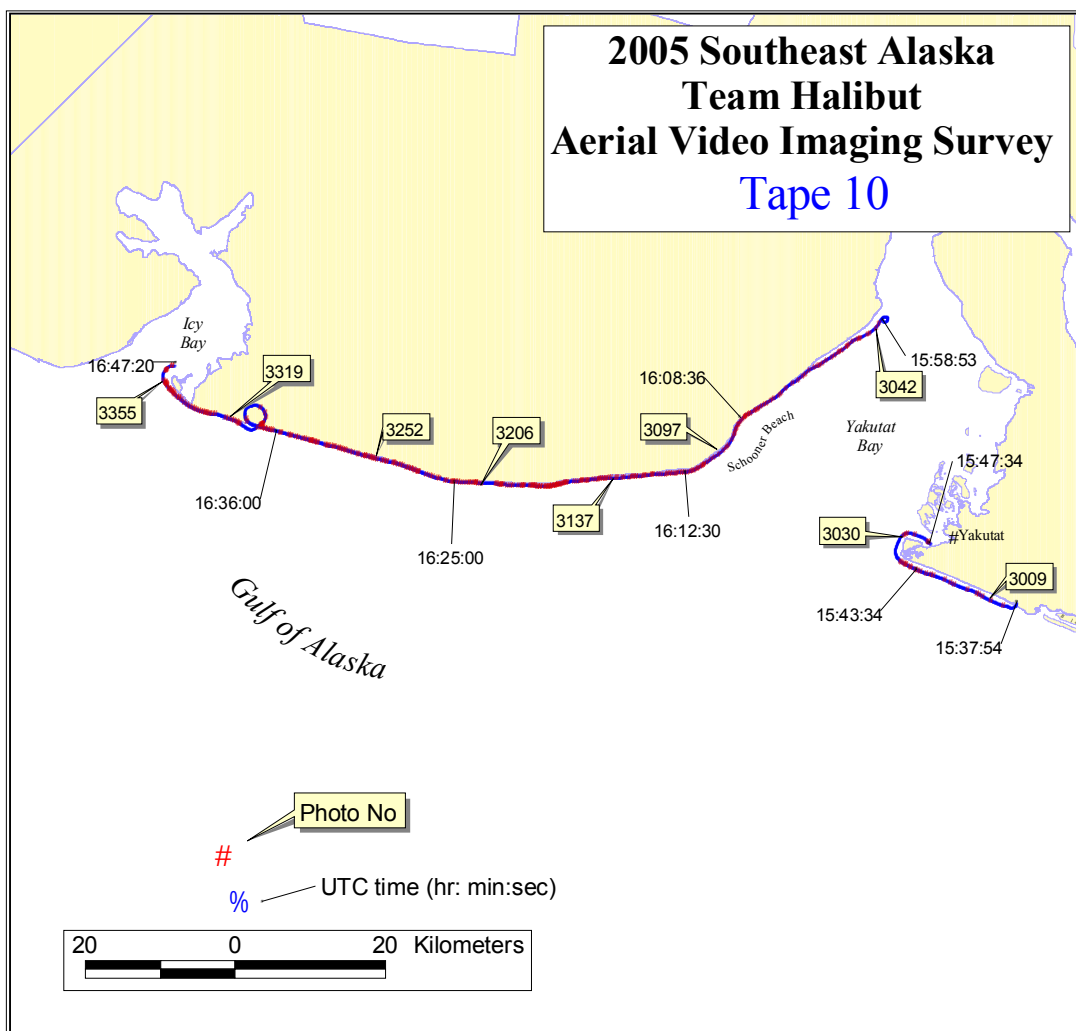


Figure 36. Location of Tape SE05_H_10, 23 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_10
General Location: Gulf of Alaska, Yakutat Bay to Icy Bay
Date: 23 July 2005
Time Start: 15:37:54
Time End: 16:47:20
Break: 15:47:34 to 15:58:53
Tape Length: 49:07
Weather: Sunny, clear
Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
15:39:21	Cannon Beach	SE05 ML 3009	16760	35
15:46:06	Pt. Carrew	SE05 ML 3030		
16:00:14	Blitzhni Point (Yakutat Bay)	SE05 ML 3042		
16:10:13	Schooner Beach	SE05 ML 3097		
16:30:29	Yana Stream	SE05 ML 3252		
16:46:04	Point Riou Spit/Tsimpshian Point	SE05 ML 3355		

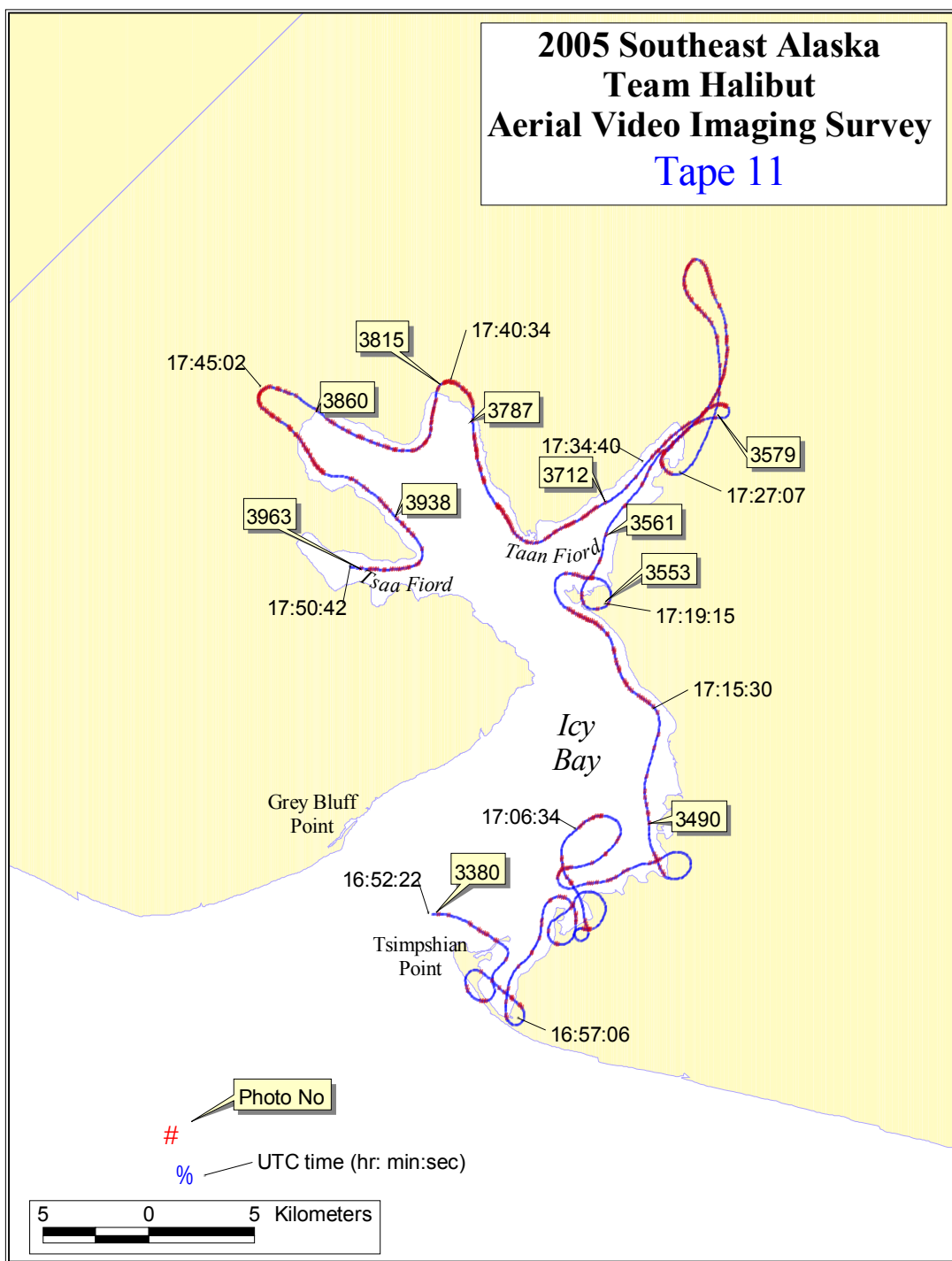


Figure 37. Location of Tape SE05_H_11, 23 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_11
General Location: Gulf of Alaska, Icy Bay, Taan and Tsaa Fjords
Date: 23 July 2005
Time Start: 16:52:22
Time End: 17:50:42
Tape Length: 58:20
Weather: Sunny, clear

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:52:28	Point Riou Spit/Tsimpshian Point	SE05 ML 3380	16741	34,77
17:21:35	Mouth of Taan Fiord	SE05 ML 3561		
17:24:24	Head of Taan Fiord	SE05 ML 3579		
17:44:03	Head of Icy Bay	SE05 ML 3860		
17:50:30	Tsaa Fiord	SE05 ML 3963		

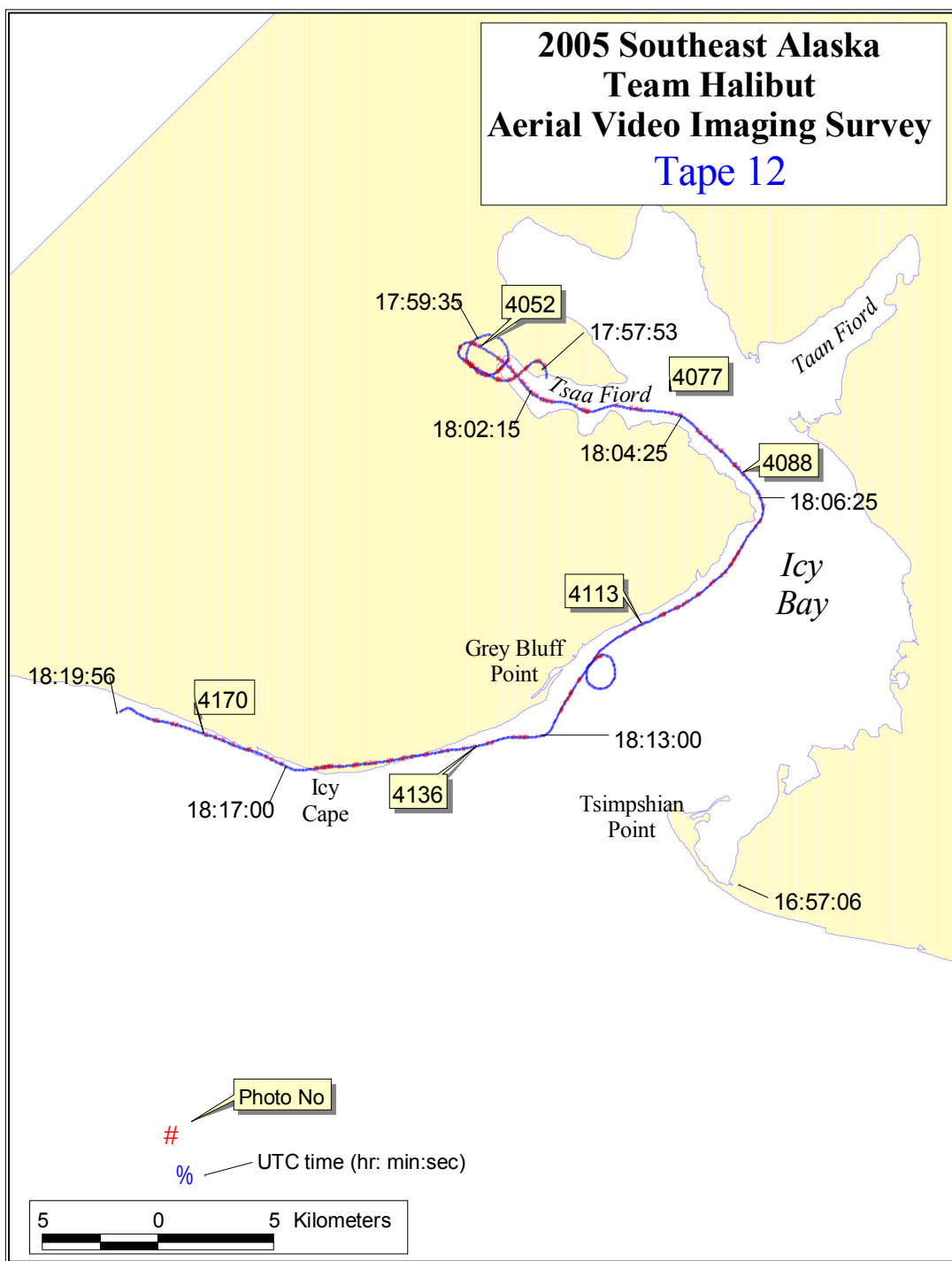


Figure 38. Location of Tape SE05_H_12, 23 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_12
General Location: Gulf of Alaska, Tsaa Fjord, Icy Bay to Icy Cape
Date: 23 July 2005
Time Start: 17:57:33
Time End: 18:19:56
Tape Length: 22:23
Weather: Sunny, clear

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
18:01:19	waterfall at Tsaa Fiord	SE05 ML 4052	16741	34,77
18:04:17	mouth of Tsaa Fiord	SE05 ML 4077		
18:09:06	mid-way, w. side Icy Bay	SE05 ML 4113		
18:14:14	mouth of Icy Bay, w. side	SE05 ML 4136		
18:18:30	Icy Cape	SE05 ML 4170		

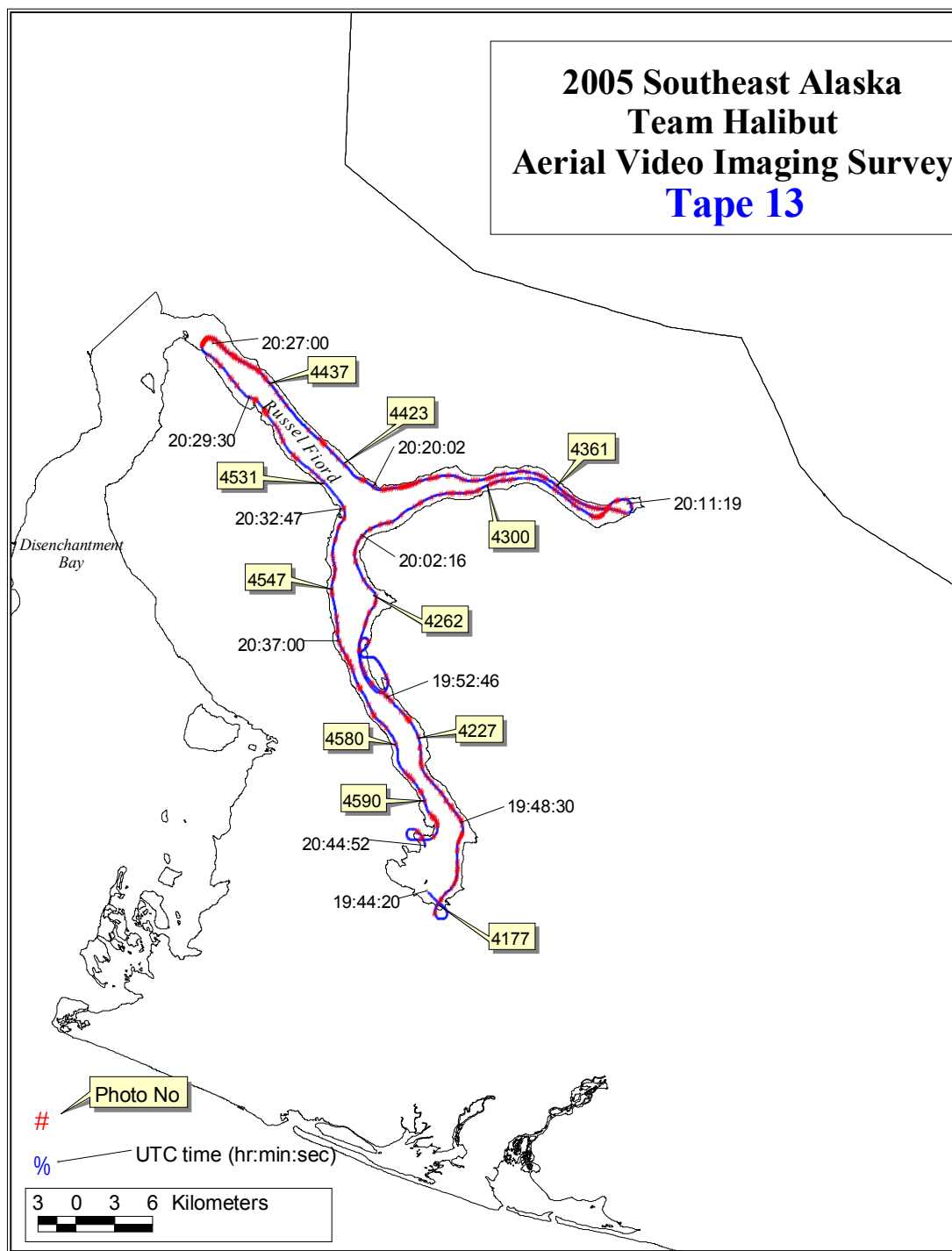


Figure 39. Location of Tape SE05_H_13, 23 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_13
General Location: Russell Fiord
Date: 23 July 2005
Time Start: 19:44:20
Time End: 20:44:52
Tape Length: 60:32
Weather: Sunny, clear

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
19:45:53	Head of Russell Fiord (s. end)	SE05 ML 4177	16760	35
20:06:18	E. arm Russell Fiord	SE05 ML 4300		
20:24:37	W. arm Russell Fiord, nearing Hubbard Glacier	SE05_ML_4437		
20:35:26	W. side of Russell Fiord	SE05 ML 4547		
20:42:09	S.W. side Russell Fiord	SE05 ML 4590		

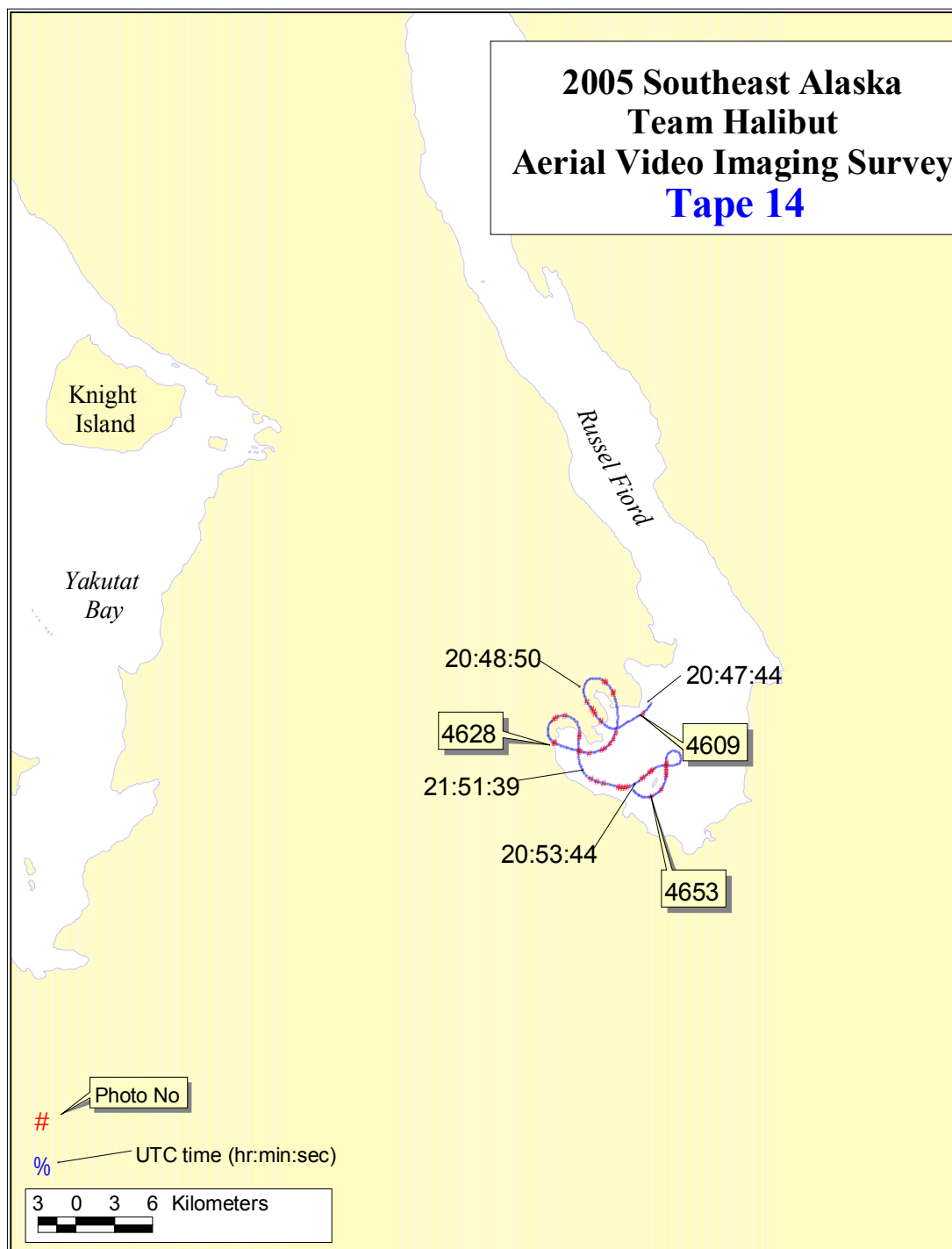


Figure 40. Location of Tape SE05_H_14, 23 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_14
General Location: Russell Fiord, south end
Date: 23 July 2005
Time Start: 20:47:44
Time End: 20:53:44
Tape Length: 07:42
Weather: Sunny, clear

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
20:47:53	S. end Russell Fiord, start	SE05 ML 4609	16760	35
20:53:28	small Island, S. end Russell Fiord, end	SE05 ML 4653		

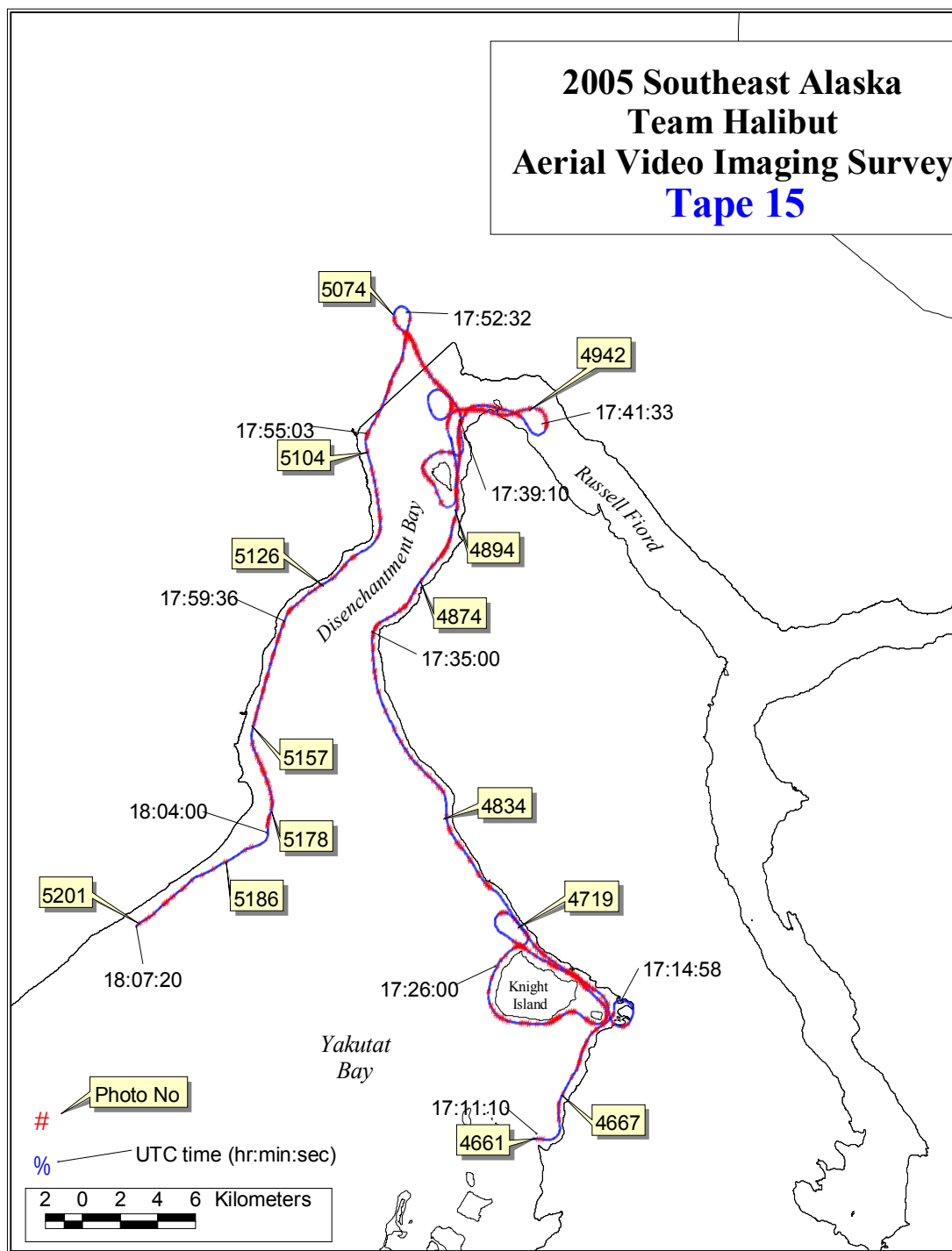


Figure 41. Location of Tape SE05_H_15, 24 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_15
General Location: Yakutat Bay, Disenchantment Bay, Hubbard Glacier
Date: 24 July 2005
Time Start: 17:11:10
Time End: 18:07:20
Tape Length: 59:07
Weather: Ground fog in the morning, then clearing

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:11:16	Humpback Cove	SE05 ML 4661	16761	34, 35
17:18:34	Logan Beach	SE05 ML 4719		
17:21:32	mouth Disenchantment Bay	SE05 ML 4754		
17:41:50	Hubbard Glacier	SE05 ML 4942		
17:51:58	Head of Disenchantment Bay	SE05 ML 5074		
18:03:25	Blizhni Pt.	SE05 ML 5178		
18:07:15	Malaspina Lake area/outwash	SE05 ML 5201		

* Note a later start due to morning ground fog

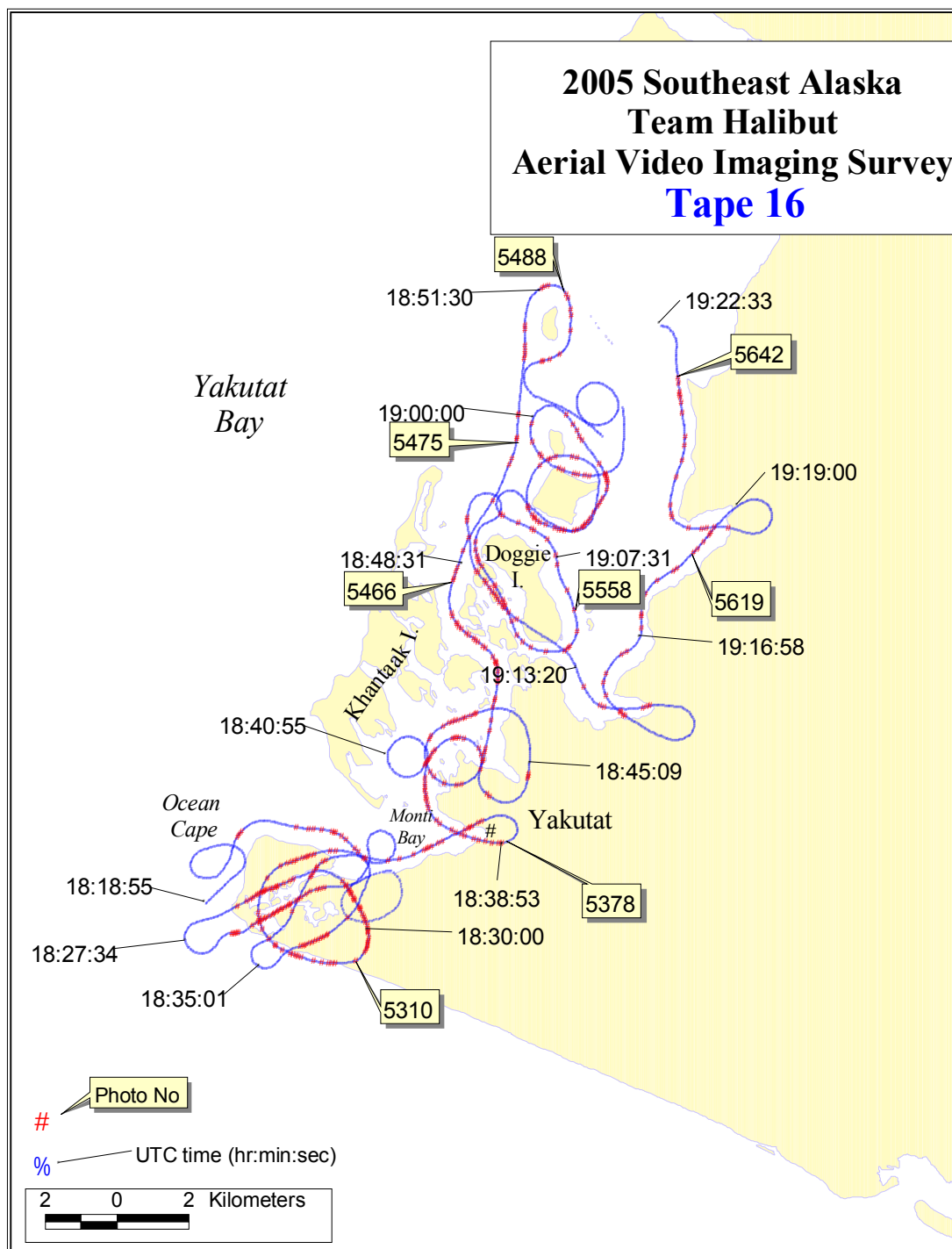


Figure 42. Location of Tape SE05_H_16, 24 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_16
General Location: Yakutat Bay, Yakutat Harbor, The Ankau, Phipps Peninsula
Date: 24 July 2005
Time Start: 18:18:55
Time End: 19:22:33
Tape Length: 57:44
Weather: Clear

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
18:30:21	Phipps Peninsula	SE05 ML 5310	16761	34, 35
18:38:53	Yakutat Town	SE05 ML 5378		
18:48:18	Ahduck Bay, Doggie Island	SE05 ML 5466		
18:49:56	Kriwoi Island	SE05 ML 5475		
19:07:59	E. Side Doggie Island	SE05 ML 5558		
19:18:00	Redfield Cove	SE05 ML 5619		
19:21:54	Humpback Cove	SE05 ML 5642		

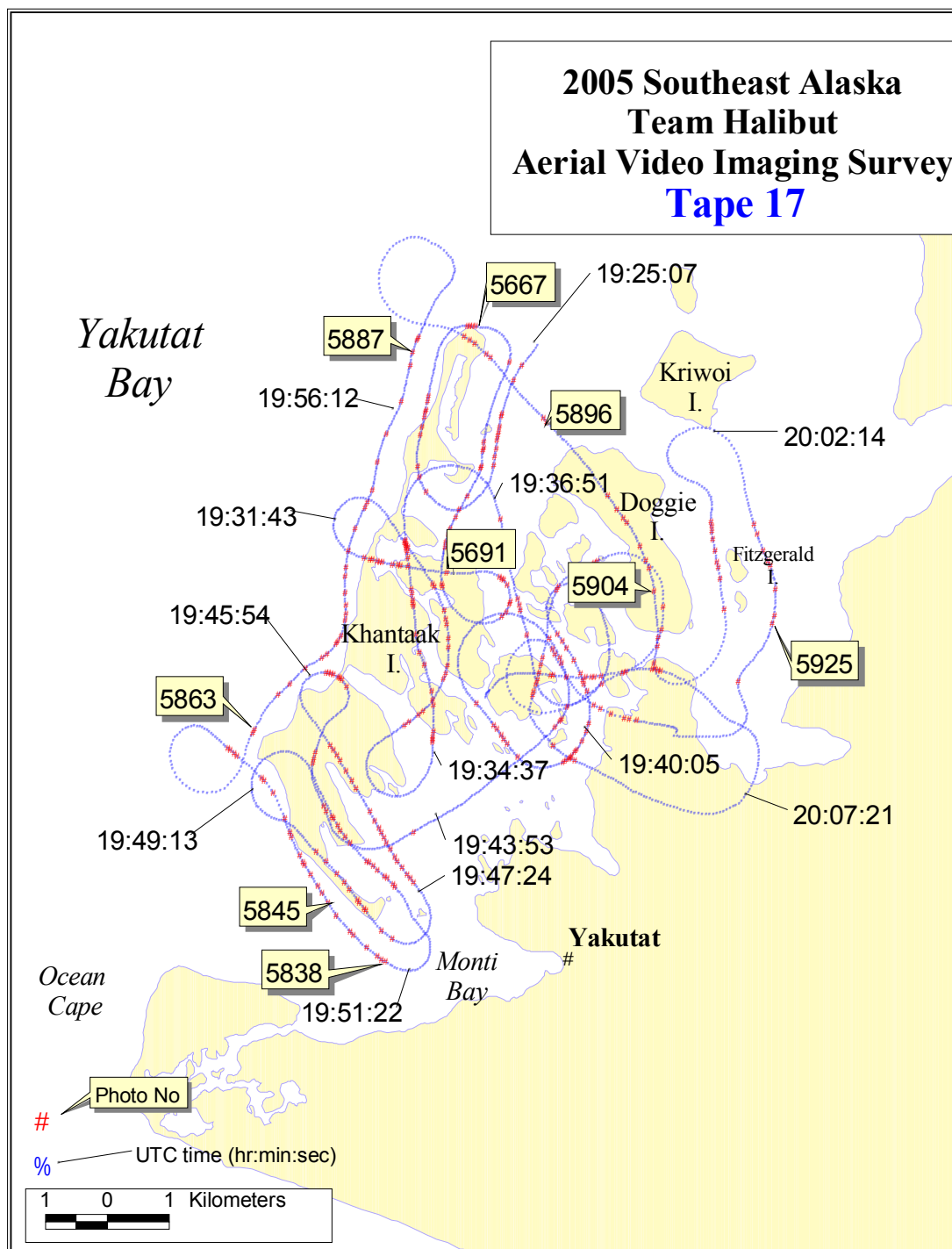


Figure 43. Location of Tape SE05_H_17, 24 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_17
General Location: Yakutat Bay, Yakutat Harbor, Doggie Island, Johnstone Passage,
Khantaak I.
Date: 24 July 2005
Time Start: 19:25:07
Time End: 20:11:20
Tape Length: 48:11
Weather: Clear

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
19:27:49	N. end Khantaak I. (Gilbert Spit)	SE05 ML 5667	16761	34, 35
19:51:59	S. end Khantaak I.	SE05 ML 5845		
19:53:59	W. side Khantaak I.	SE05 ML 5863		
19:58:46	Ahduck Bay	SE05 ML 5896		
19:59:58	middle of cluster (over Doggie I.)	SE05 ML 5904		
20:03:17	Fitzgerald and Gregson Islands	SE05 ML 5925		

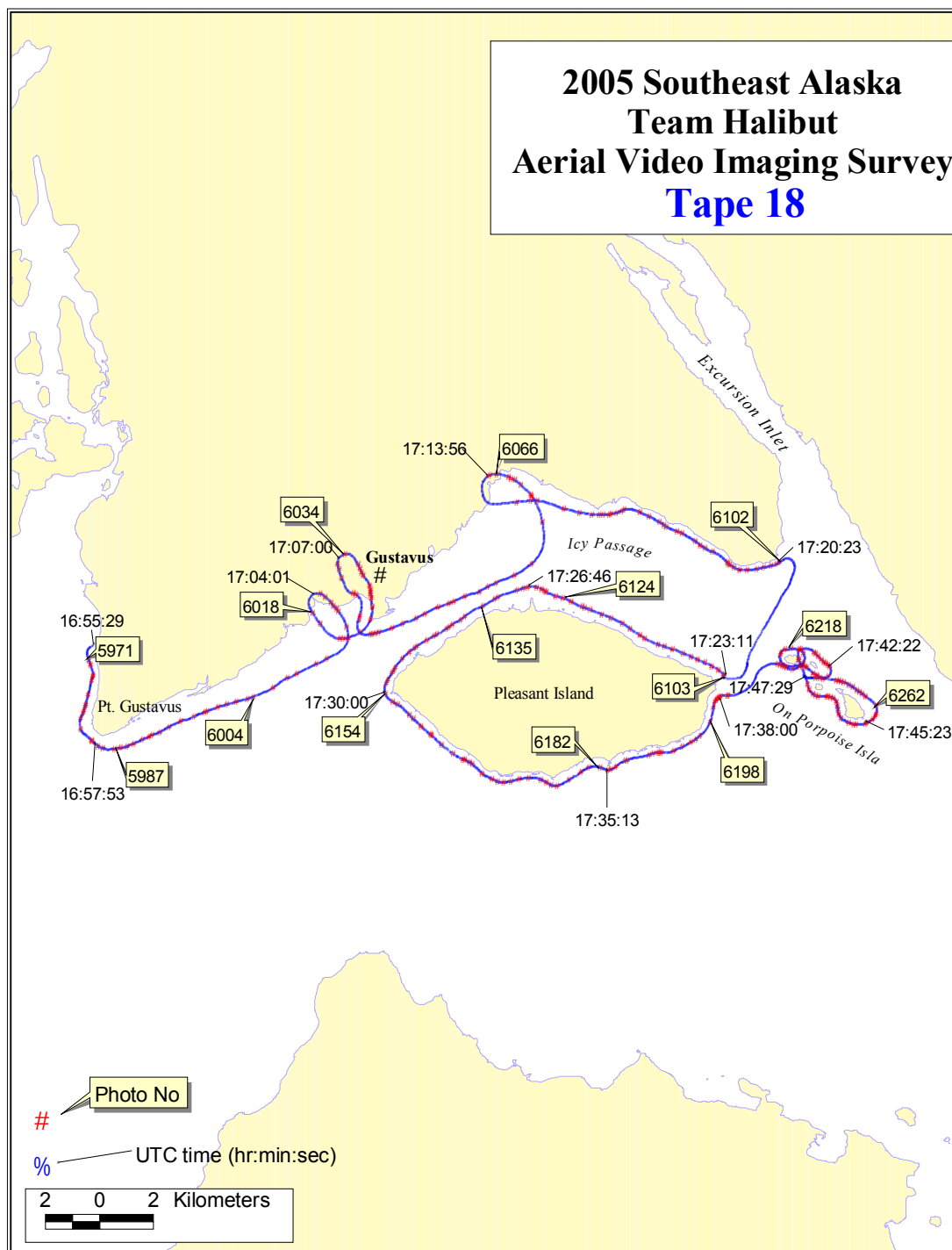


Figure 44. Location of Tape SE05_H_18, 25 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_18
General Location: Gustavus, Pleasant I., Icy Strait, Icy Passage, Porpoise Islands
Date: 25 July 2005
Time Start: 16:55:29
Time End: 17:47:29
Tape Length: 54:02
Weather: High Overcast, occasional light rain.

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:55:50	Glacier Bay/ Pt. Gustavus	SE05 ML 5971	17302	32
17:06:51	Gustavus River/Harbor	SE05 ML 6034		
17:20:20	mouth of Excursion Inlet	SE05 ML 6102		
17:26:06	N. side Pleasant Island	SE05 ML 6124		
17:35:05	S. side Pleasant Island	SE05 ML 6182		
17:40:28	northernmost. Porpoise Island	SE05 ML 6218		
17:45:51	largest of Porpoise Islands	SE05 ML 6262		

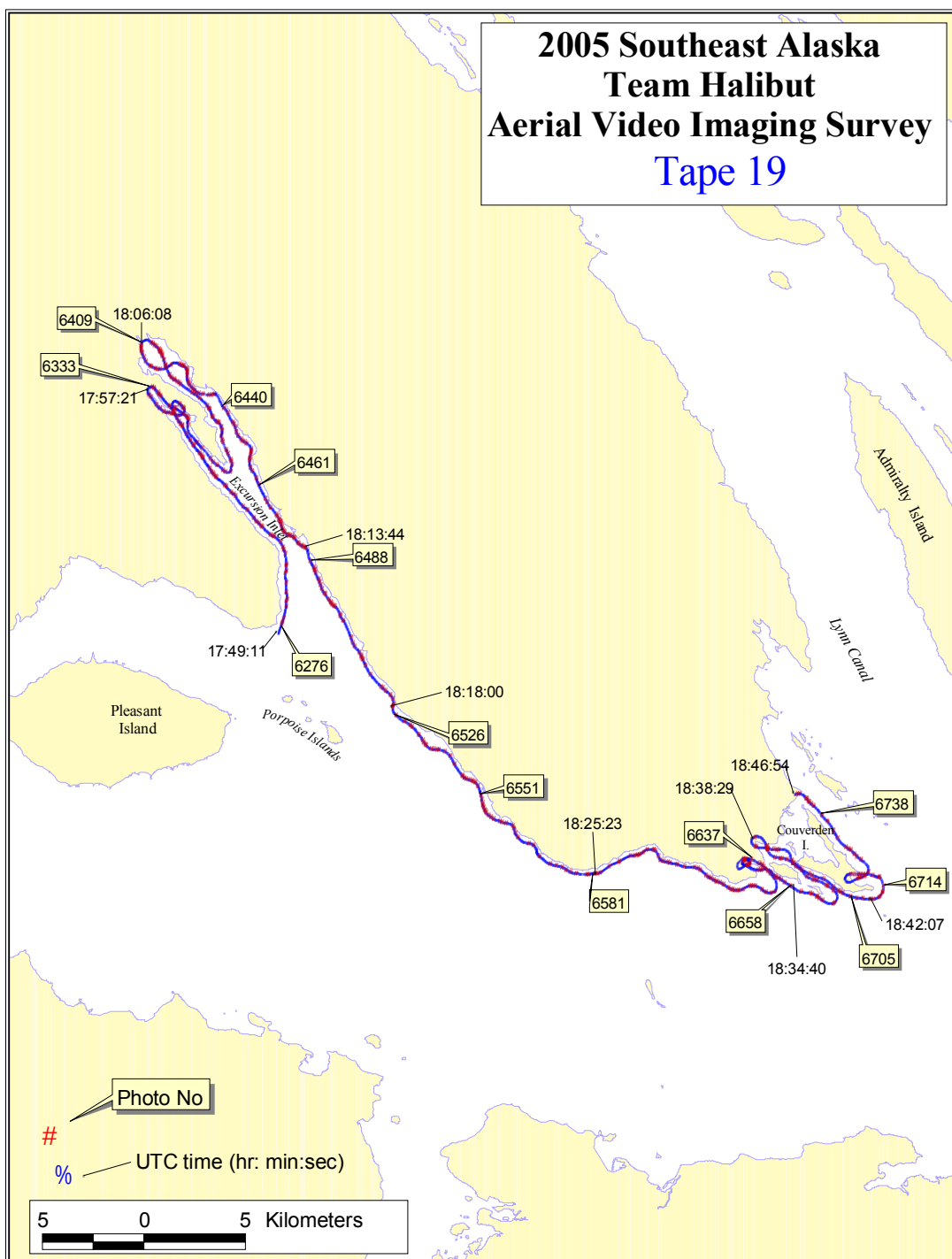


Figure 45. Location of Tape SE05_H_19, 25 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_19
General Location: Excursion Inlet, Couverden I, Icy Strait
Date: 25 July 2005
Time Start: 17:49:11
Time End: 18:46:54
Tape Length: 59:47
Weather: High Overcast, occasional light rain

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:49:26	w. entrance to Excursion Inlet	SE05 ML 6276	17302	32
18:06:17	mouth of Excursion Inlet	SE05 ML 6409		
18:14:03	e. entrance to Excursion Inlet	SE05 ML 6488		
18:34:39	Ansley I., SW. side	SE05 ML 6658		
18:41:29	Couverden I., SW. side	SE05 ML 6705		
18:46:02	Couverden I., NE. Side	SE05 ML 6738		

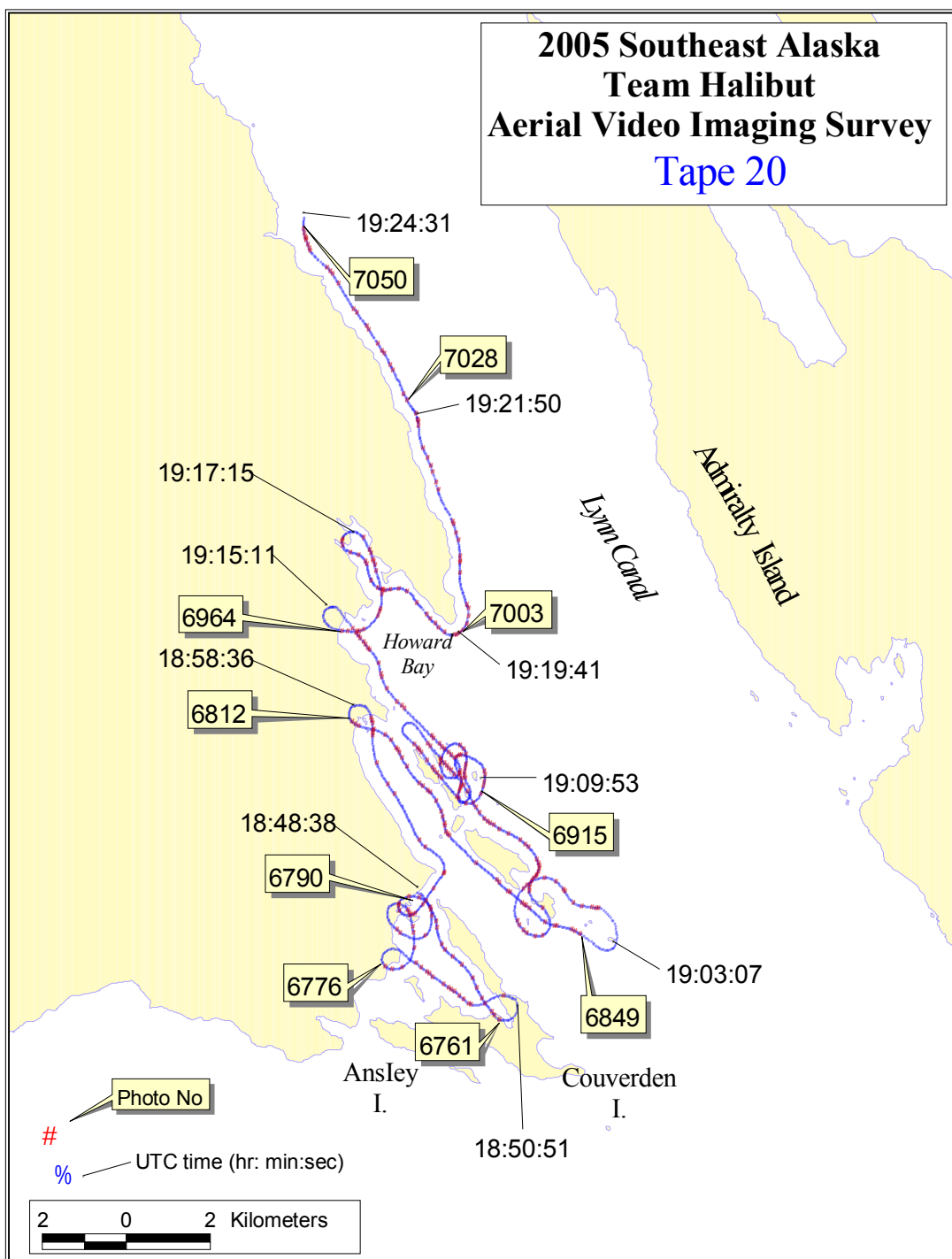


Figure 46. Location of Tape SE05_H_20, 25 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_20
General Location: Couverden I, Lynn Canal
Date: 25 July 2005
Time Start: 18:48:38
Time End: 19:24:31
Tape Length: 37:55
Weather: High Overcast, occasional light rain

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
18:50:32	Couverden I., small harbour	SE05 ML 6761	17316	32
19:02:41	Couverden rocks	SE05 ML 6849		
19:15:35	w. entrance to Howard Bay	SE05 ML 6964		
19:19:33	e. entrance to Howard Bay	SE05 ML 7003		
19:24:24	Lynn Canal, under Mt. Golub	SE05 ML 7050		

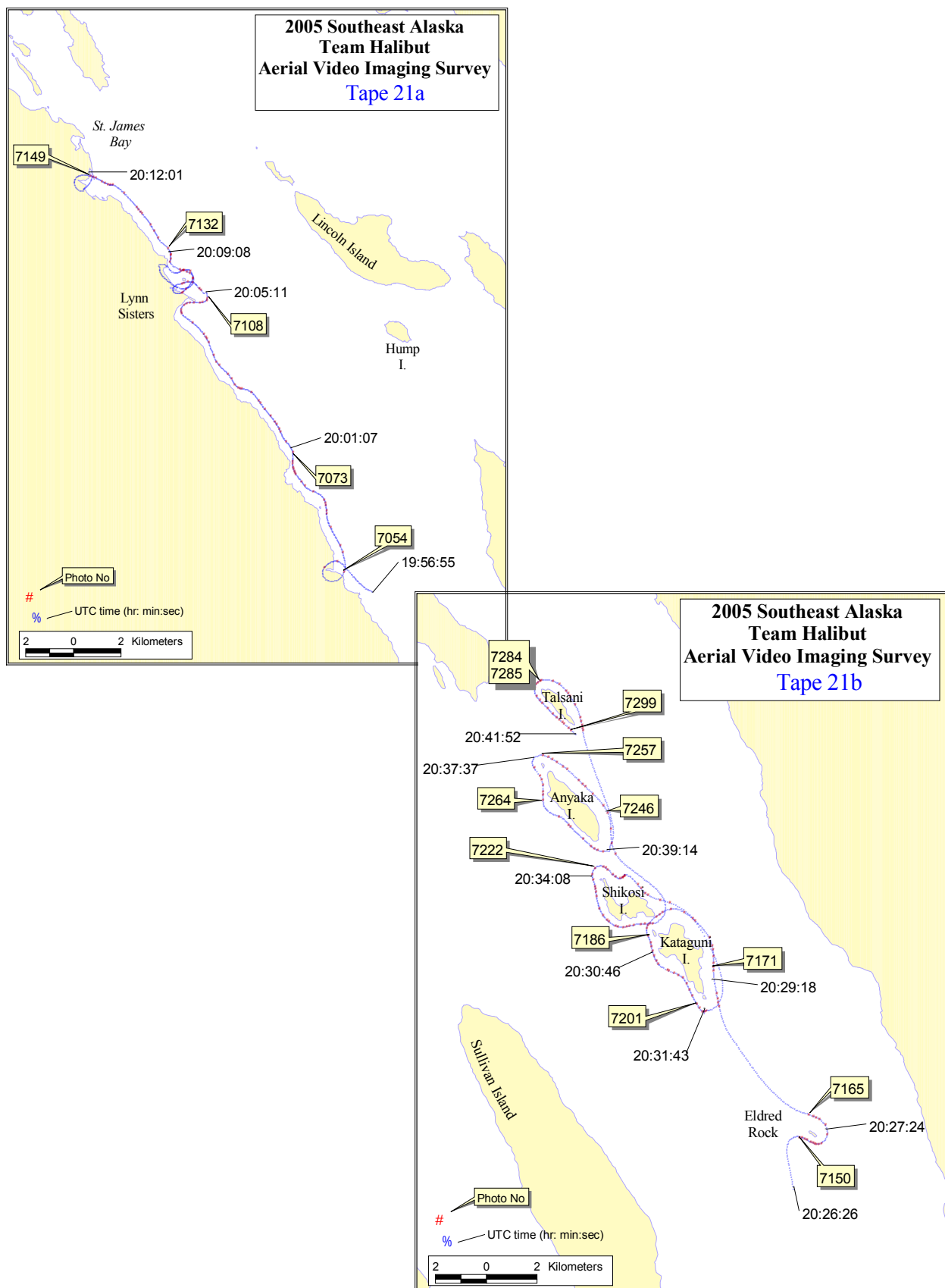


Figure 47. Location of Tape SE05_H_21a and 21b, 25 July 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_H_21a, b
General Location: West Side Lynn Canal, Chilkat Islands
Date: 25 July 2005
Time Start: 19:56:55
Time End: 20:41:52
Tape Length: 37:55
Weather: High Overcast, occasional light rain

Electronic File Names: SE_July05_MasterFlightV1.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
19:58:29	Lynn Canal, under Mt. Golub	SE05 ML 7054	17316	32
20:05:04	Lynn Sisters	SE05 ML 7108		
20:11:07	Marsh just north of St. James Bay	SE05 ML 7149		
20:12:01 to 20:26:26	Transit time to Chilkat Islands	Transit		
20:26:56	Eldred Rock	SE05 ML 7150	17317	38
20:29:18	Kataguni I.	SE05 ML 7171		
20:33:58	Shikosi I.	SE05 ML 7222		
20:36:41	Anyaka I.	SE05 ML 7246		
20:41:48	Talsani	SE05 ML 7299		

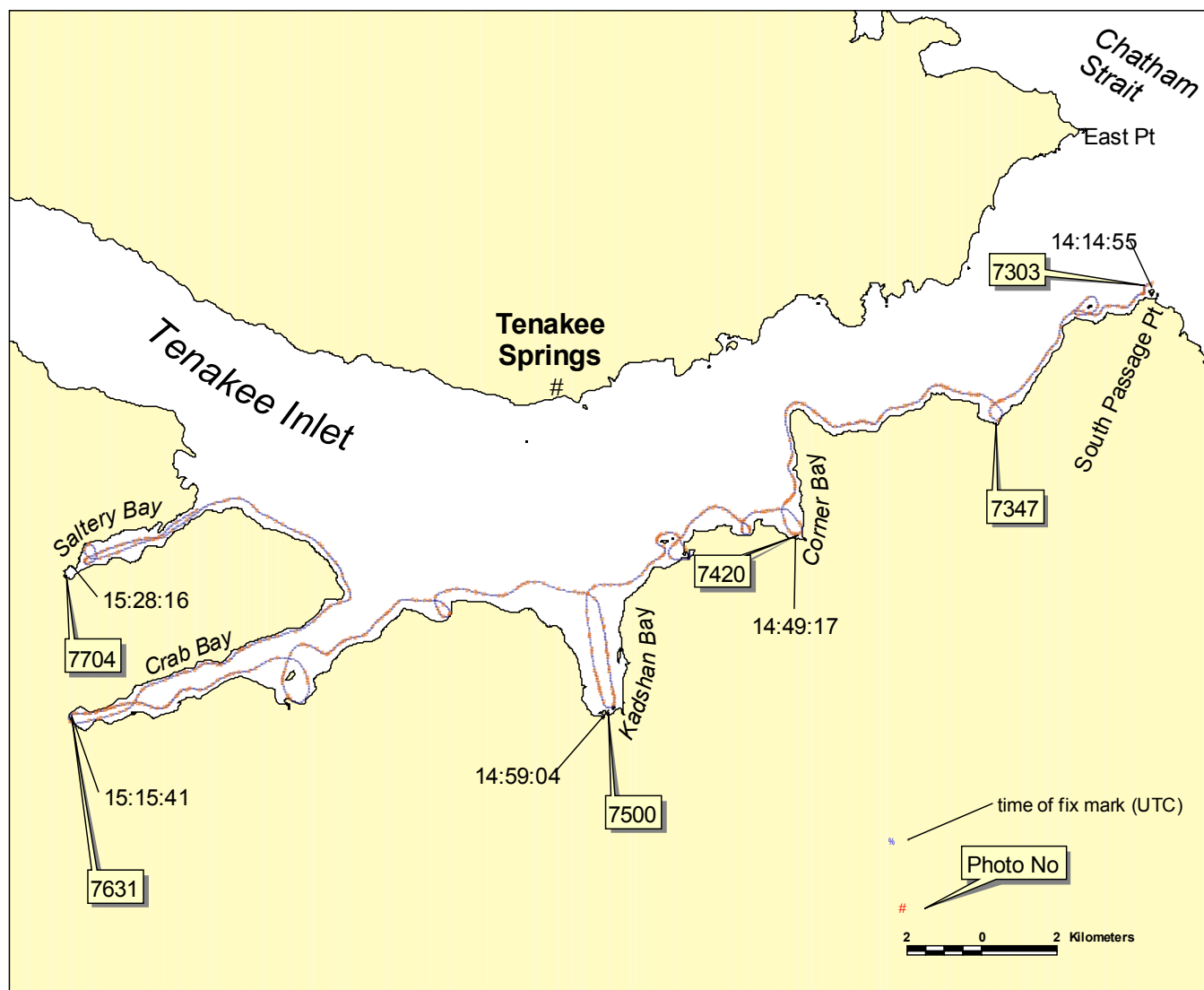


Figure 48. Location of Tape SE05_K_01, 20 August 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_K_01
General Location: Southeast end of Tenakee Inlet
Date: 20 August
Time Start: 13:34:49
Time End: 15:31:38
Tape Length: 59:45
Weather: High ceiling, calm

Electronic File Names: 20Augl05.trk, 20Augl05.txt, KingfisherFlightlineV2.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
14:34:55	start at South Passage Point	SE05_ML_7303	17300	27
14:41:26	head of Trap Bay	SE05_ML_7347		
14:49:17	head of Corner Bay	SE05_ML_7420		
14:59:04	head of Kadashan Bay	SE05_ML_7500		
15:15:41	head of Crab Bay	SE05_ML_7631		
15:28:16	head of Saltery Bay	SE05_ML_7704		
15:31:29	mouth of Saltery Bay	SE05_ML_7719		

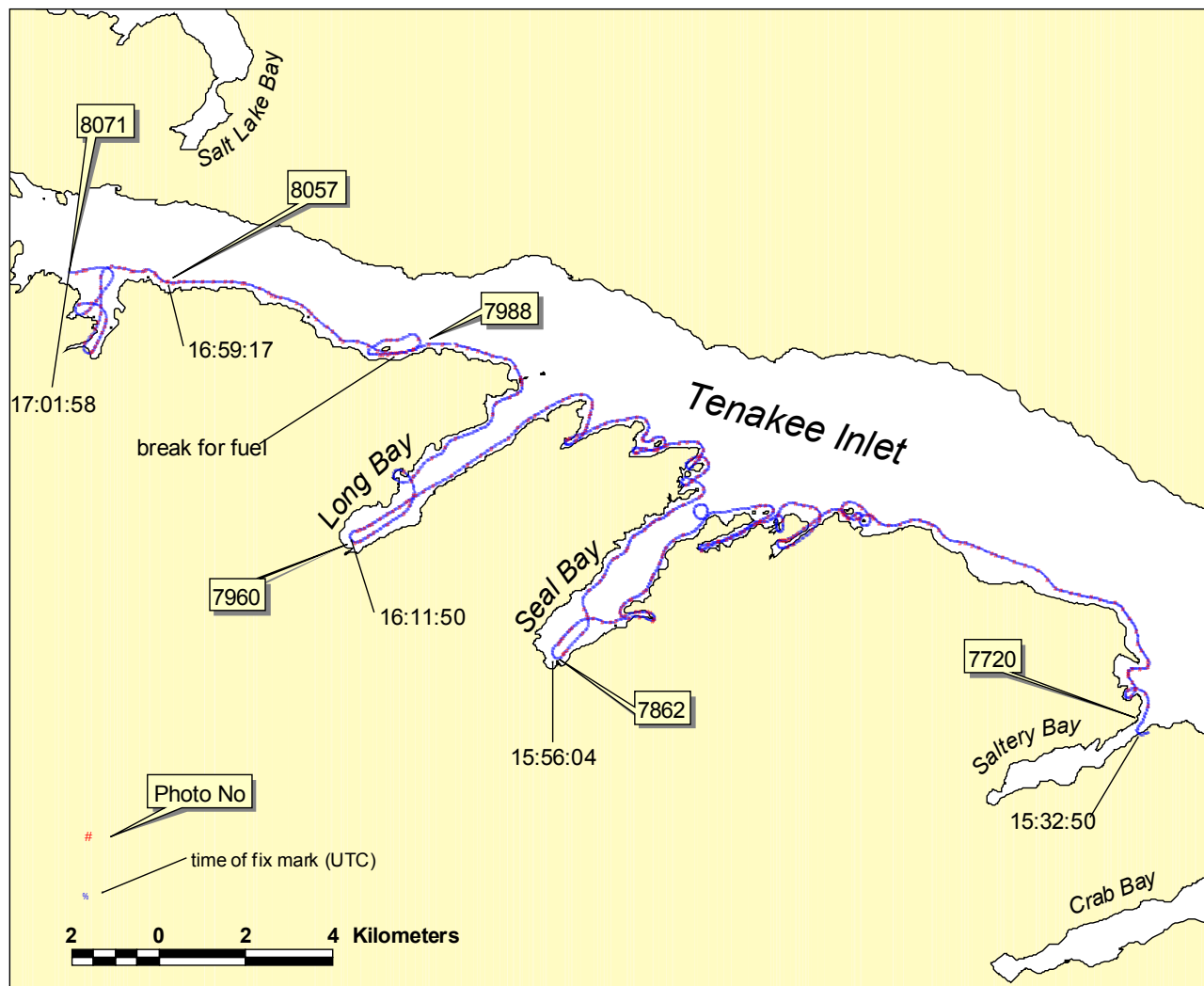


Figure 49. Location of Tape SE05_K_02, 20 August 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_K_02
General Location: south shore Tenakee Inlet
Date: 20 August 2005
Time Start: 15:32:28
Time End: 17:01:48
Tape Length: 58:28
Break for Fuel: 16:17:55 to 16:51:15
Weather: High ceiling, calm

Electronic File Names: 20Aug105.trk, 20Aug105.txt, KingfisherFlightlineV2.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
15:32:50	mouth of Saltery Bay	SE05_ML_7720	17300	27
15:56:04	head of Seal Bay	SE05_ML_7862		26
16:11:50	head of Long Bay	SE05_ML_7960		
16:17:55	last photo before fuel break	SE05_ML_7988		
	break for fuel (16:17:55 TO 16:51:15)			
16:52:35	small island to north of Long Bay	SE05_ML_8000		
16:59:17	head of small Bay south of Salt Lake bay	SE05_ML_8057		
17:01:48	end of tape	SE05_ML_8071		

Note: biologist audio missing from 16:05:34 to 16:15:38

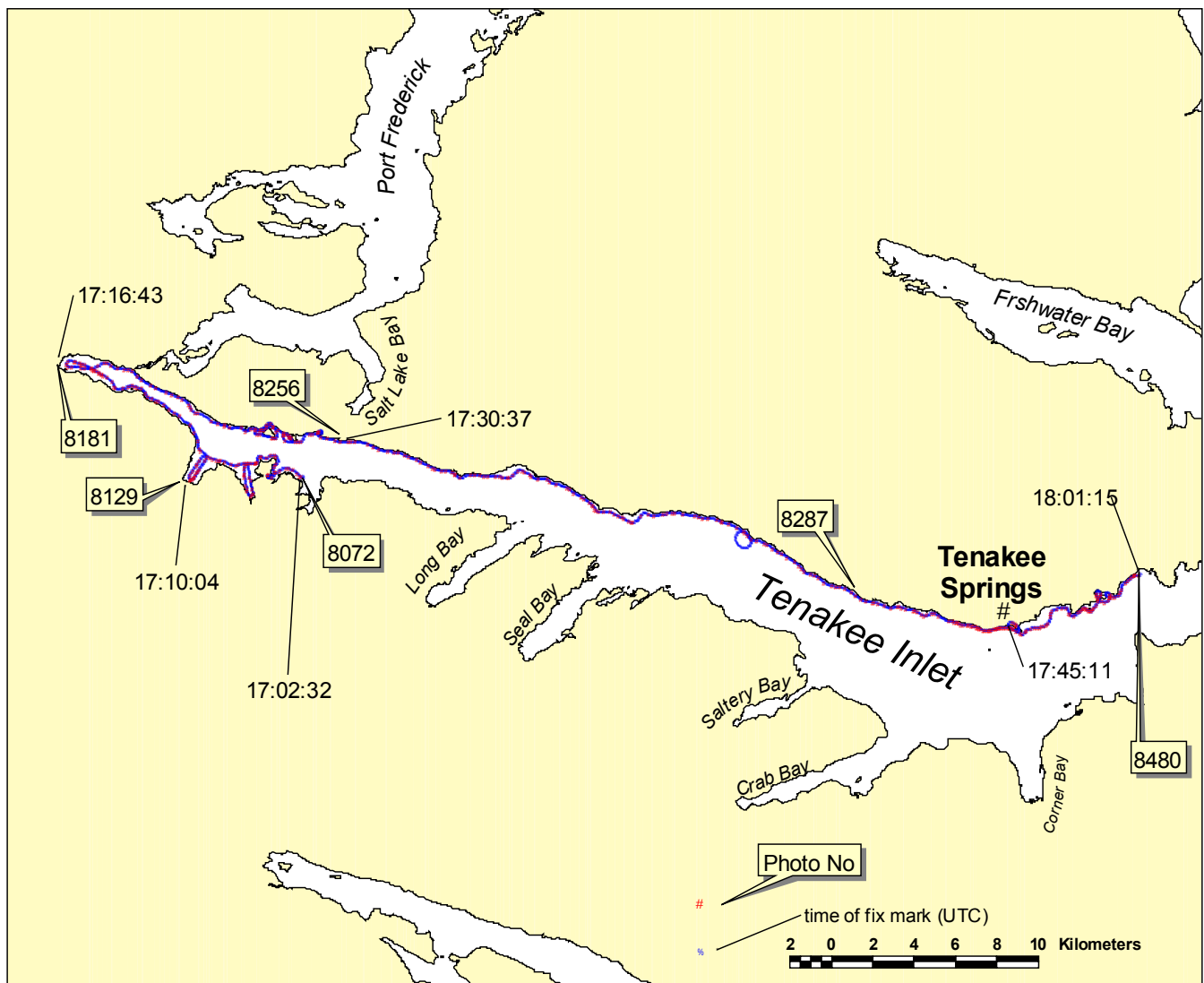


Figure 50. Location of Tape SE05_K_03, 20 August 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_K_03
General Location: Tenakee Inlet
Date: 20 August 2005
Time Start: 17:02:32
Time End: 18:01:19
Tape Length: 1:00:51
Weather: High ceiling, calm

Electronic File Names: 20Augl05.trk, 20Augl05.txt, KingfisherFlightlineV2.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:02:32	start of tape	SE05_ML_8072	17300	26
17:10:04	head of western-most bay before head of Inlet	SE05_ML_8129		
17:16:43	head of Tenakee Inlet	SE05_ML_8181		
17:30:37	due south of Salt Lake Bay	SE05_ML_8256		
17:35:53	small Bay due north of Saltery Bay mouth	SE05_ML_8287		
17:45:11	Tenakee Spring boat harbor	SE05_ML_8335		
18:01:15	Cannery Bay; end of tape	SE05_ML_8480		27

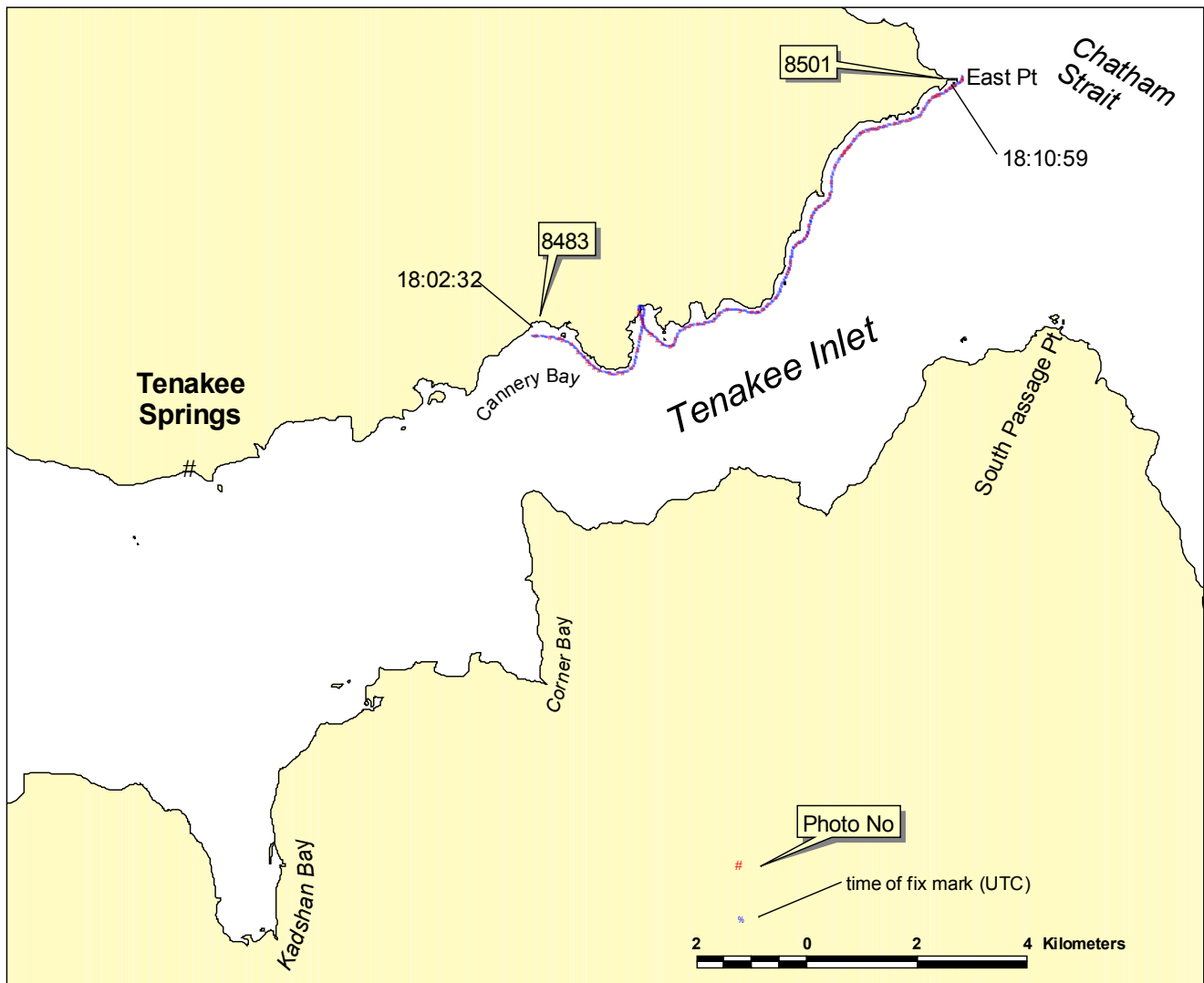


Figure 51. Location of Tape SE05_K_04, 20 August 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_K_04
General Location: northwest end of Tenakee Inlet
Date: 20 August 2005
Time Start: 18:02:32
Time End: 18:10:59
Tape Length: 10:45
Weather: High ceiling, calm

Electronic File Names: 20Augl05.trk, 20Augl05.txt, KingfisherFlightlineV2.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
18:02:32	Cannery Bay; start of tape	SE05_ML_8483	17300	27
18:04:46	head of small bay east of Cannery Pt	SE05_ML_8501		
18:10:59	East Point, end of tape			

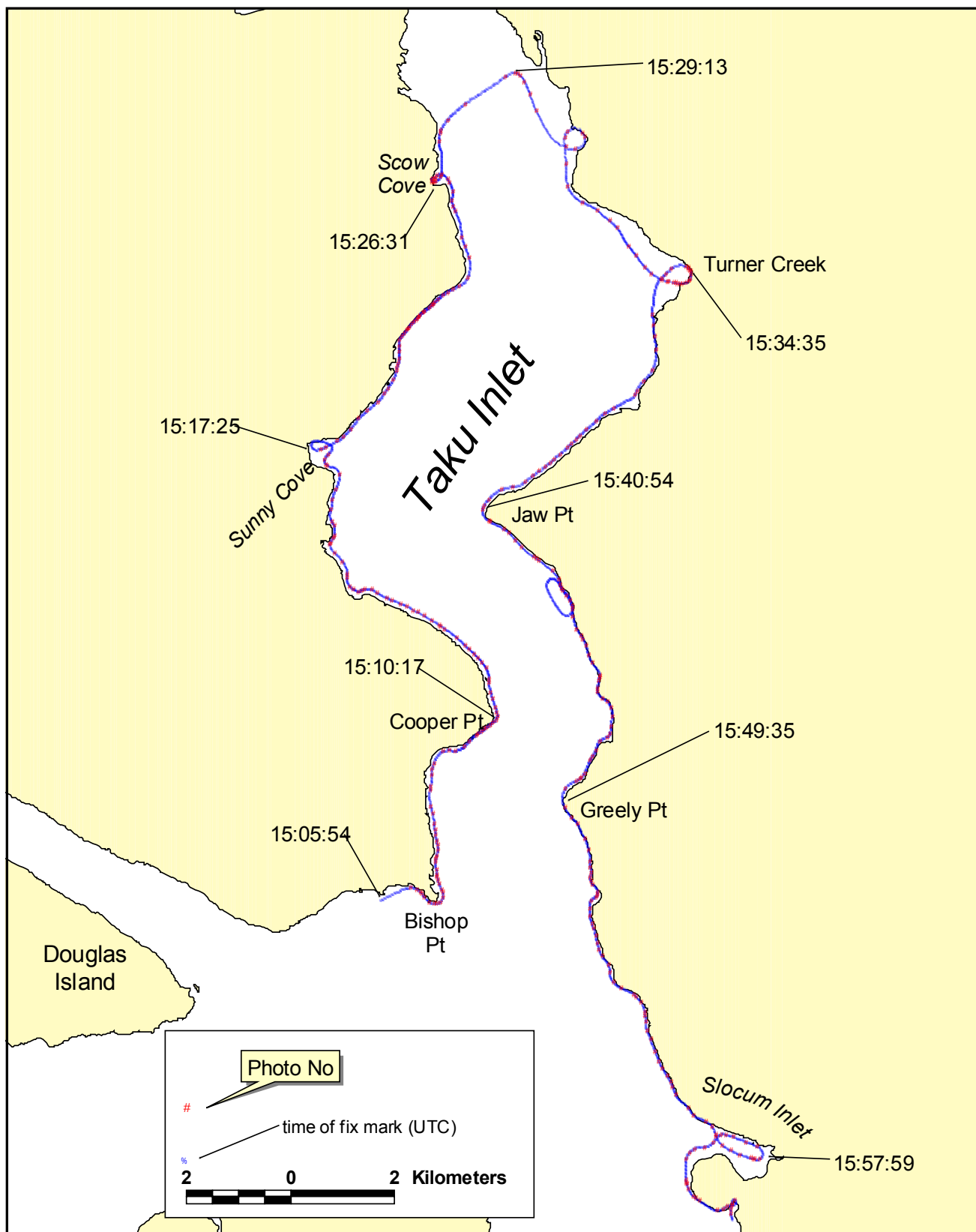


Figure 52. Location of Tape SE05_K_05, 21 August 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_K_05
General Location: Taku Inlet
Date: 21 August 2005
Time Start: 15:05:02
Time End: 16:01:54
Tape Length: 59:11
Weather: low ceiling, patchy fog, calm

Electronic File Names: 21Augl05a.trk, 21Augl05a.txt, KingfisherFlightlineV2.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
15:05:54	Bishop Point, mouth of Taku Inlet	SE05_ML_8578	17315	33
15:10:17	Cooper Point, Taku Inlet	SE05_ML_8616		
15:17:25	Sunny Cove Taku Inlet	SE05_ML_8667		
15:26:31	Scow Cove Taku Inlet	SE05_ML_8667		
	jump across Inlet -(15:27:49 to 15:29:13)			
15:30:46	head of Cove at Davidson Creek	SE05_ML_8742		
15:34:35	Turner Creek	SE05_ML_8767		
15:40:54	Jaw Point	SE05_ML_8803		
15:49:35	Greely Point	SE05_ML_8849		
15:57:59	head of Slocum Inlet	SE05_ML_8905	17300	
16:01:54	cove just south of Circle Point	SE05_ML_8926		

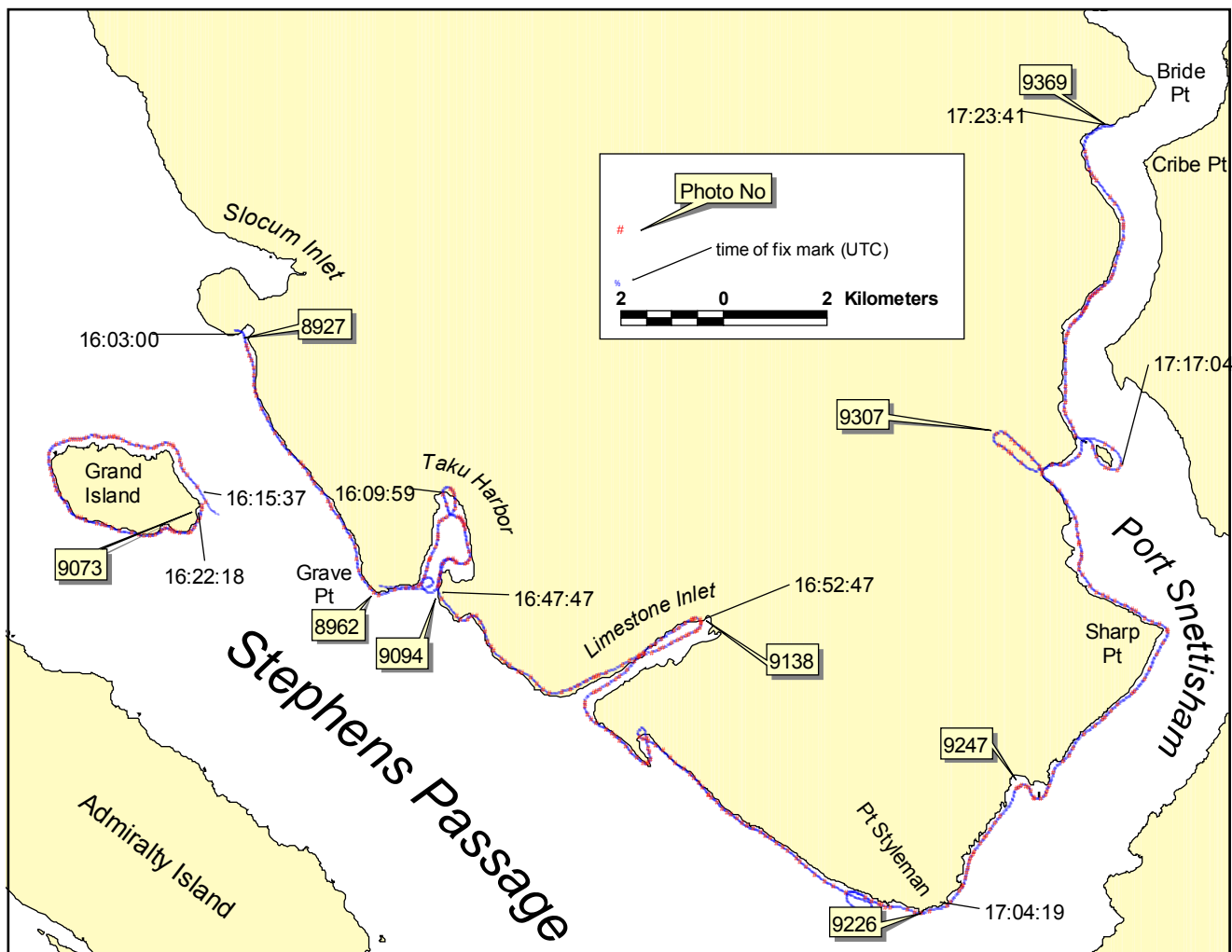


Figure 53. Location of Tape SE05_K_06, 21 August 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_K_06
General Location: Taku Harbor, Grand Island, Snettisham Inlet
Date: 21 August 2005
Time Start: 16:03:00
Time End: 17:23:41
Tape Length: 59:21
Fuel Break: 16:22:18 to 16:47:47
Weather: low ceiling, patchy fog, calm

Electronic File Names: 21Augl05a.trk, 21Augl05a.txt, KingfisherFlightlineV2.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
16:03:00	cove just south of Circle Point	SE05_ML_8927	17300	33
16:07:36	Graves Pt	SE05_ML_8962		
16:09:59	head of Taku Harbor	SE05_ML_8984		
	transit to Grand Is (16:12:36 to 16:15:37)	SE05_ML_9006		
16:15:37	eastern tip of Grand Isle		17300	
16:22:18	end at south tip of Grand Isle	SE05_ML_9073		
	break for fuel (16:22:18 to 16:47:47)			
16:47:47	start a Taku Harbor		17314	
16:48:20	Stockade Point	SE05_ML_9094		
16:52:57	head of Limestone Inlet	SE05_ML_9138		
17:04:19	Point Styleman, entrance to Snettisham Inlet	SE05_ML_9226	17315	
17:10:14	Sharp Point	SE05_ML_9273		
17:17:04	Fannie Island	SE05_ML_9321		
17:23:41	end of tape across from Crib Point	SE05_ML_9369		

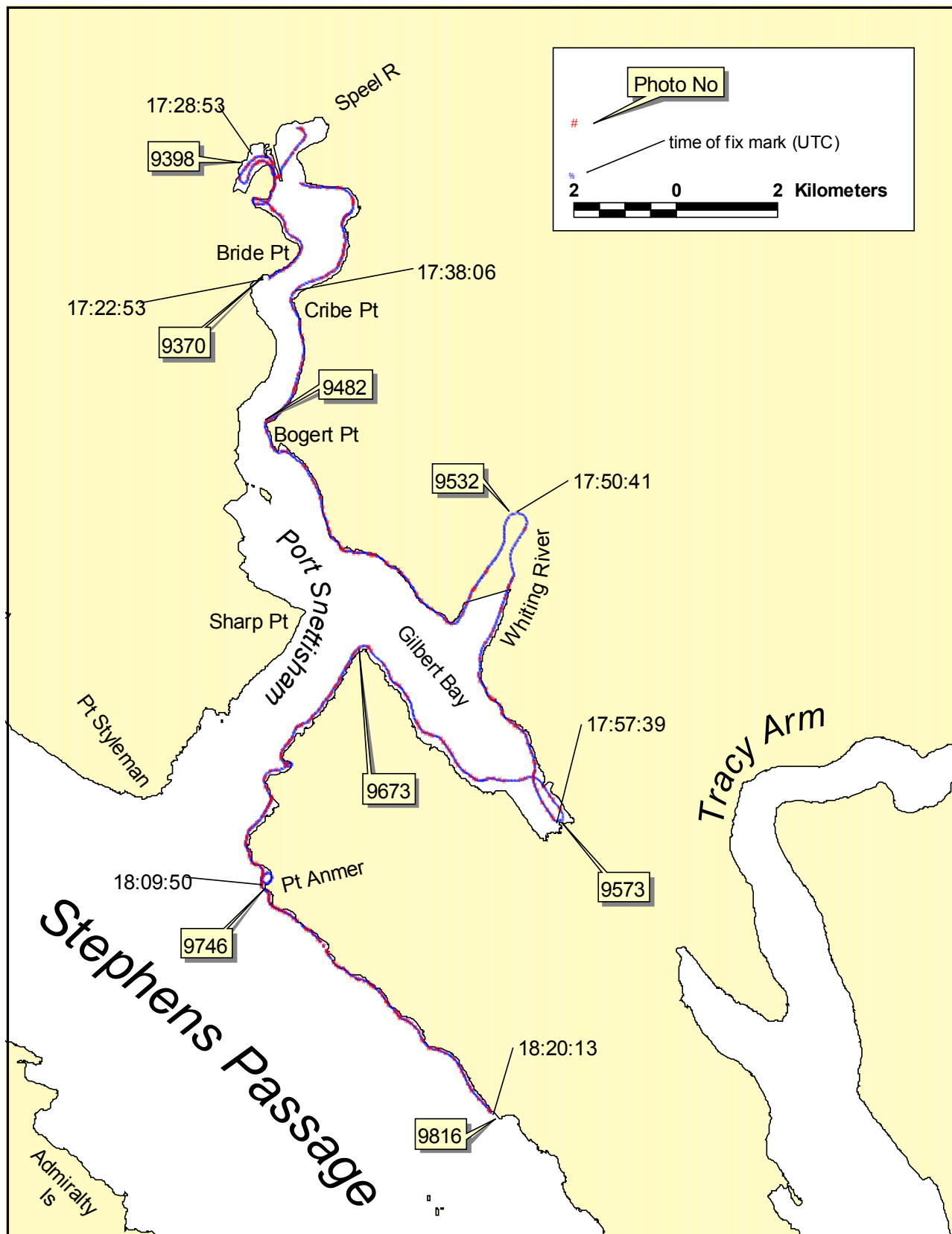


Figure 54. Location of Tape SE05_K_07, 21 August 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_K_07
General Location: Snettishan Inlet
Date: 21 August 2005
Time Start: 17:24:53
Time End: 18:20:13
Tape Length: 57:46
Weather: low ceiling, patchy fog, calm

Electronic File Names: 21Augl05a.trk, 21Augl05a.txt, KingfisherFlightlineV2.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
17:22:53	start of tape across from Crib Point	SE05_ML_9370	17315	33
17:28:53	Snettisham Power Plant and hatchery	SE05_ML_9398		
	nav gap: 17:32:40 to 17:33:58			
17:38:06	Crib Point	SE05_ML_9462		
17:50:41	head of Whiting River (crossing channel)	SE05_ML_9532		
17:57:39	head of Gilbert Bay	SE05_ML_9573		28
18:09:50	Point Anmer	SE05_ML_9350		
18:20:13	end tape			
18:25:19	boulder moguls	SE05_ML_9477	17300	
18:28:19	Point Coke; then transit to Midway Is	SE05_ML_9507		
18:31:37	start Midway Islands	SE05_ML_9509		
18:33:49	end Midway is and end survey	SE05_ML_9538		

Note: nav gap in tape requires reconstruction from video annotation somehow, photo numbering in camera reset.

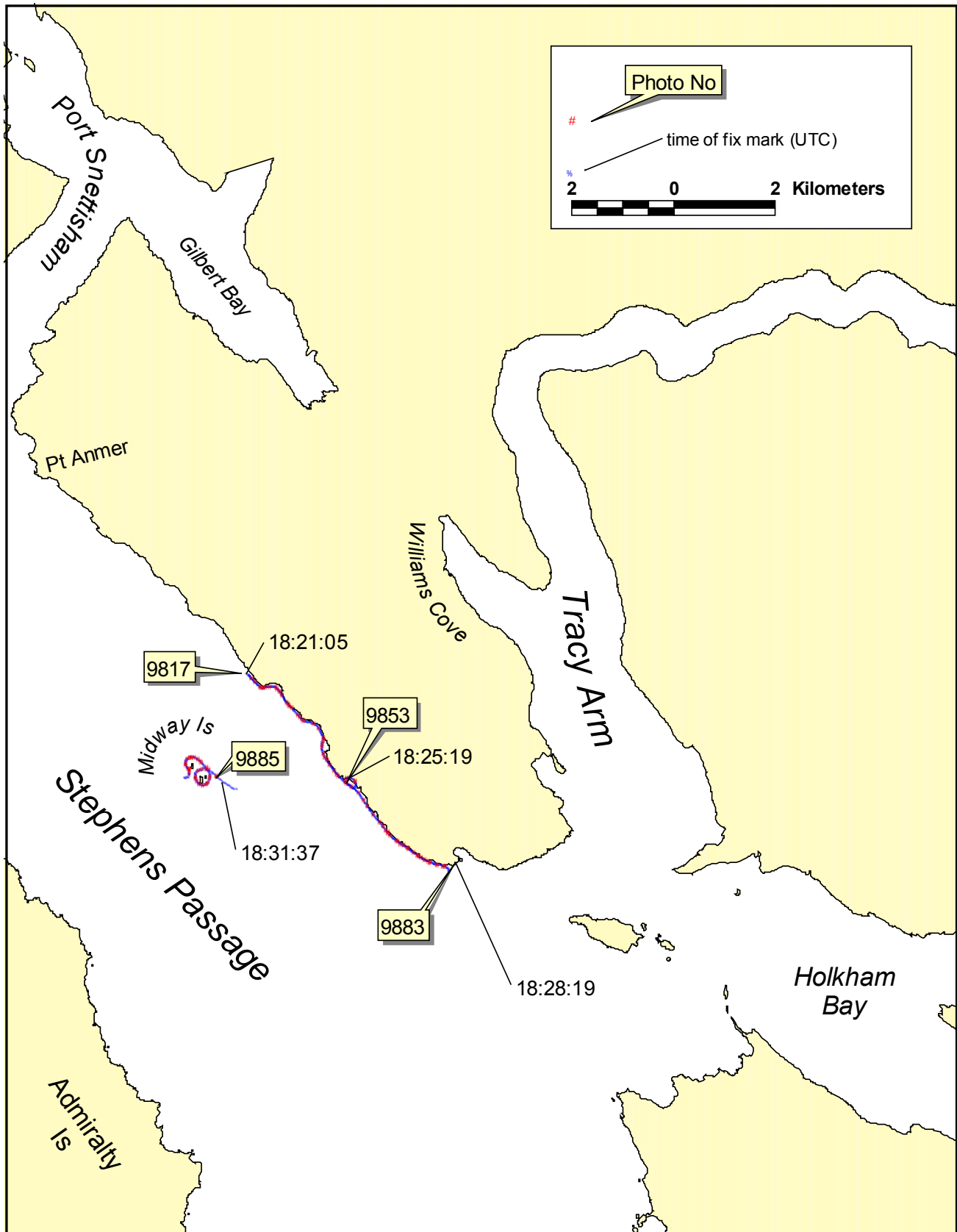


Figure 55. Location of Tape SE05_K_08, 21 August 2005.

Southeast Alaska 2005 Aerial Video Imaging Survey

Tape Number: SE05_K_08
General Location: west coast, Snettisham Peninsula, Midway Islands
Date: 21 August 2005
Time Start: 18:21:05
Time End: 18:33:41
Tape Length: 12:00
Weather: high ceiling, broken clouds with sunny periods

Electronic File Names: 21Augl05a.trk, 21Augl05a.txt, KingfisherFlightlineV2.mdb

UTC Time	Location	JPEG No.	Chart	Atlas Page
18:21:05	start tape	SE05_ML_9817	17300	28
18:25:19	boulder moguls	SE05_ML_9853		
18:28:19	Point Coke; then transit to Midway Is	SE05_ML_9883		
18:31:37	start Midway Islands	SE05_ML_9885		
18:33:49	end Midway is and end survey	SE05_ML_9914		