

Blue RECR
Ashtech Zxtreme
SN ZE120011226
PN 800889 REV B

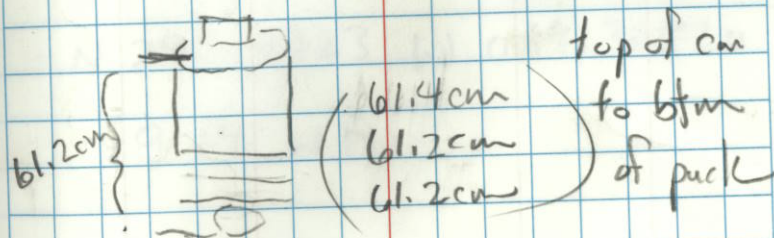
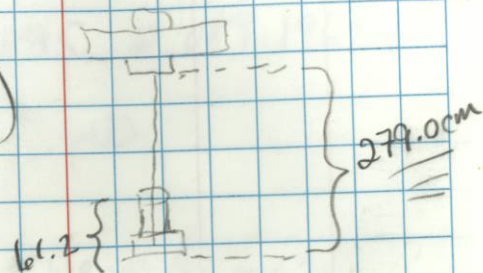


7/12/14

2014-314-FA

TWIN VEE - SMG CHOKE #2
SN CR13149
PN 700936 REV D

(278.8 cm
279.0 cm
279.8 cm)



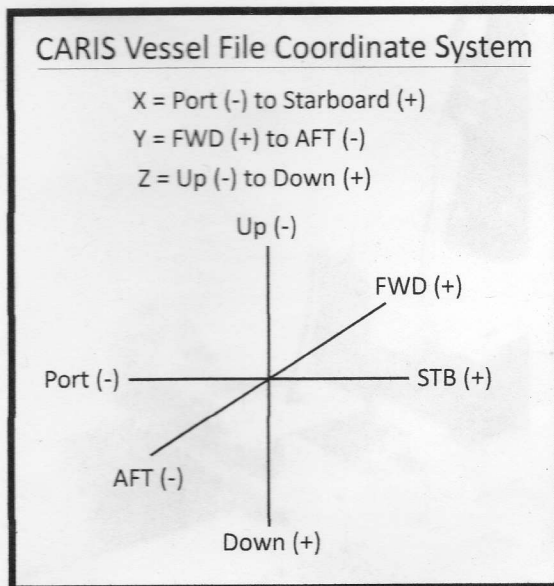
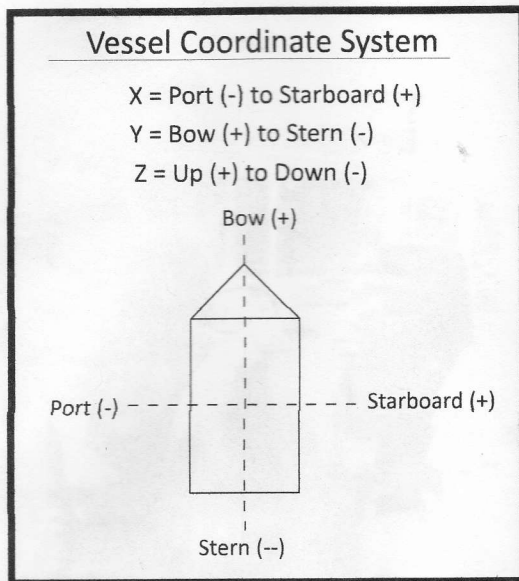
* top of can to water level *

14BIM02

USGS SPCMSC - RV Jabbaw Offsets - 2014

Vessel Diagram for Single Beam Instrument Offsets

These offsets can be used in HYPACK, the CARIS vessel file and the CARIS TPU offsets within the vessel file. Refer to the diagrams for CARIS program orientation and the last page for CARIS TPU values.

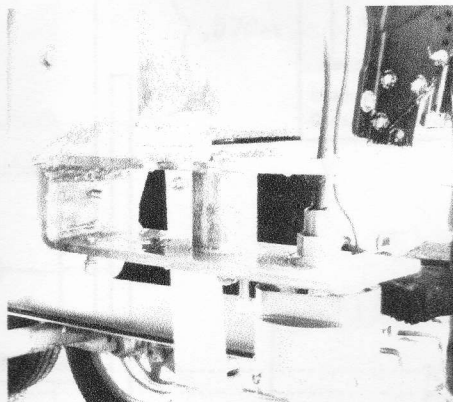
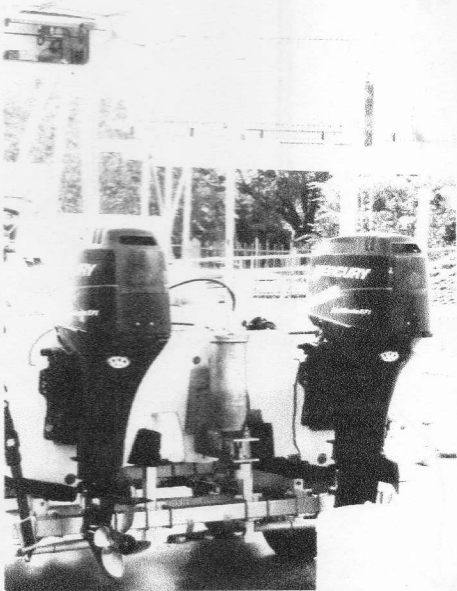


Ashtech Z-Xtreme

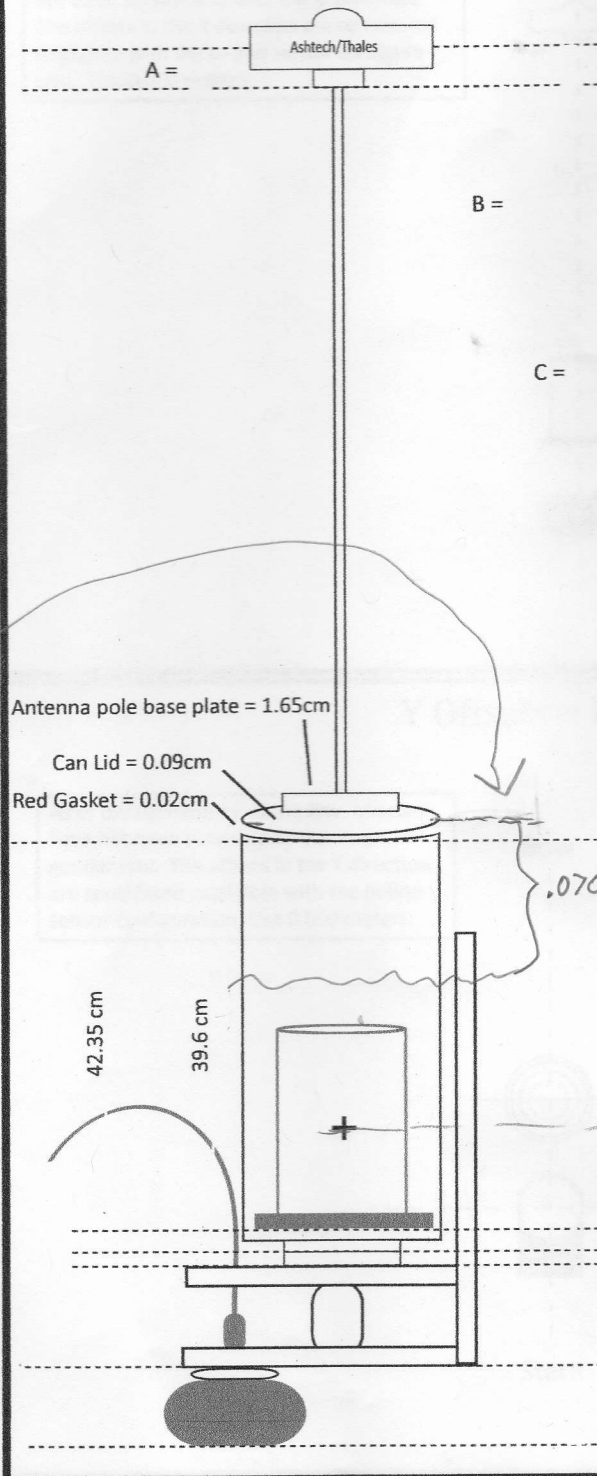
SN = 2E120011226

PN = 800889 Rev B

Digital Photographs R/V Jabba Jaw with Odom Mount



Z Offset for the Ashtech Antenna - Odom Mount



Antenna P/N#	700936 Rev D
Antenna S/N#	CR 13149
Antenna Name	SNG CHOKe #2 CHOKe RING
A = Antenna phase center (see note below)	NA using model in GRAFNAV
B = Distance of antenna reference point to base of transducer.	2.790M Meters
C = A + B (used to calculate antenna phase center - see note)	NA

Value A explained:

This is the antenna model's internal phase center. It is either modeled or calculated. Modelling the phase center is more accurate and is accounted for in the programs OPUS and GrafNav. However, if a static value needs to be used versus the modeled, the equation below may be used.

Example

$$A = (2.546 \times L1) - (1.54 \times L2)$$

where L1 and L2 are phase centers in mm and vary depending on antenna model. These values are obtained from the antenna model sheets found at the website:

Additional Static Measurements:

	Top of TSS to bottom of black base plate = 23.25 cm (half of this = 11.625 cm)
	TSS black base plate only = 1.5 cm
	Inside of TSS can housing w/out lid = 39.6 cm
	Outside of TSS can housing w/out lid = 42.35 cm

Top of Plate to inside of can = 2.5 cm
Plate height = 1.2 cm

Mount height = 9.7 cm

Odom washer height = 0.011 cm

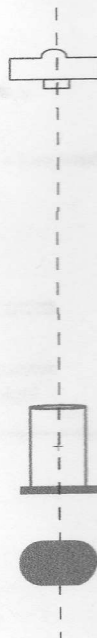
Odom transducer height = 6.7 cm

TOP of can to water line = 70 mm = .070 m

11.625 cm
2.5
1.2
9.7
0.011
6.700
31.736

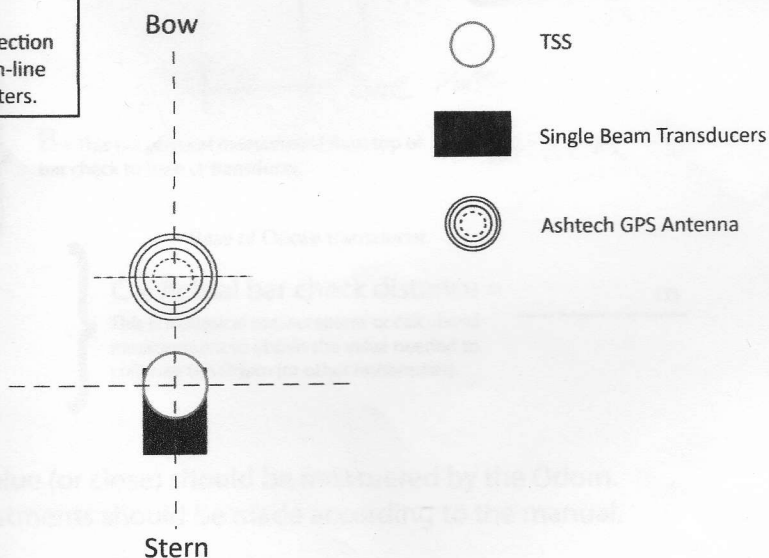
X Offsets = Port to Starboard

As of 07/2014 the RV Jabba Jaw offsets have not been surveyed in with the geodimeter. The offsets in the X direction are considered negligible with the in-line sensor configuration. Use 0.000 meters.



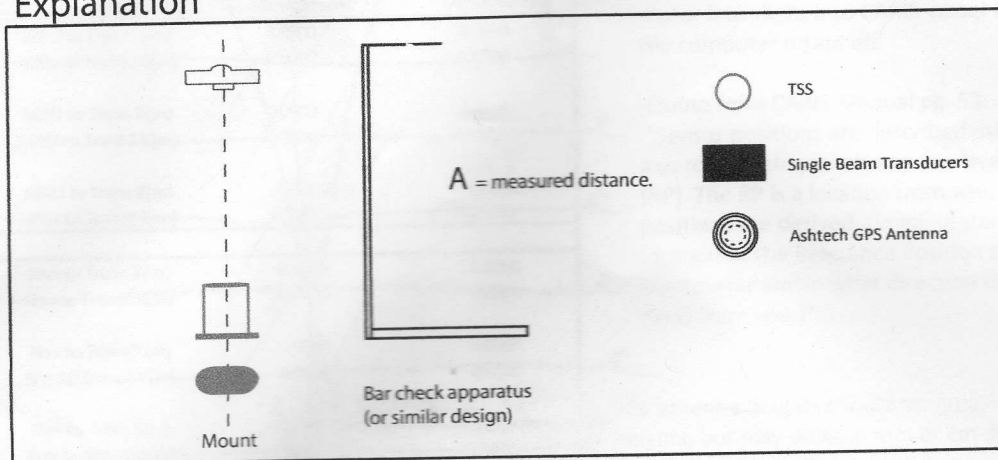
Y Offsets = Bow Stern

As of 07/2014 the RV Jabba Jaw offsets have not been surveyed in with the geodimeter. The offsets in the Y direction are considered negligible with the in-line sensor configuration. Use 0.000 meters.

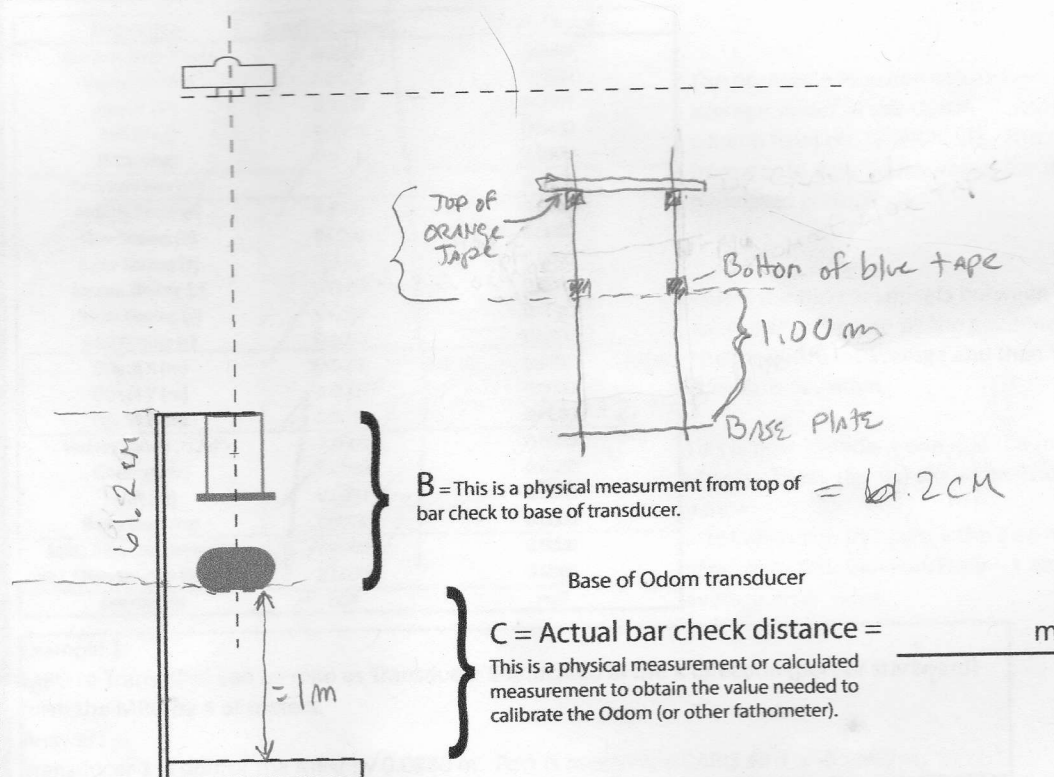


Explanation

Bar Check



7/14/2014



$A - B = C$ This value (or close) should be measured by the Odom.
If not then adjustments should be made according to the manual.

SOP - 2014 - RV Jabba Jaw Offsets

CARIS Vessel File Offsets - Signs are according to CARIS orientation		
TPU Offsets	Knudsen Mount	Odom Mount
MRU to Trans X(m)	0.0000	0.0000
MRU to Trans2 X(m)	0.0000	0.0000
MRU to Trans Y(m)	0.0000	0.0000
MRU to Trans2 Y(m)	0.0000	0.0000
MRU to Trans Z(m)	-0.37025	-0.32625
MRU to Trans2 Z(m)	0.0000	0.0000
Nav to Trans X(m)	0.0000	0.0000
Nav to Trans2 X(m)	0.0000	0.0000
Nav to Trans Y(m)	0.0000	0.0000
Nav to Trans2 Y(m)	0.0000	0.0000
Nav to Trans Z(m)	-2.790	-2.790
Nav to Trans2 Z(m)	0.0000	0.0000
Trans Roll (deg)	0.0000	0.0000
Trans Roll 2 (deg)	0.0000	0.0000

Notes:

-Enter four digits into CARIS vessel file and let the computer round off.

-Quote from CARIS Manual pg. 53:
"Sensor positions are described using X-Y-Z axis coordinates relative to a Reference Point (RP). The RP is a location from which all other positions are derived. (Imagine standing at the location of the Reference Position and describing how far and in what direction the sensor is away from you.)"

The antenna heights should be similar to these heights, but may differ in mm or cm depending on antenna type. Also sometimes a nut is needed to keep the antenna snug on the pole which may alter the final height.

TPU StdDev	Knudsen Mount	Odom Mount
Motion Gyro (deg)	0.0000	0.0000
Heave % Amp	5.0000	5.0000
Heave (m)	0.0500	0.0500
Roll (deg)	0.0400	0.0400
Pitch deg)	0.0400	0.0400
Position Nav (m)	0.5900	0.5900
Timing Trans (s)	0.0000	0.0000
Nav Timing (s)	0.0000	0.0000
Gyro Timing (s)	0.0000	0.0000
Heave Timing (s)	0.0000	0.0000
Pitch Timing (s)	0.0000	0.0000
Roll Timing (s)	0.0000	0.0000
Offset X (m)	0.0000	0.0000
Offset Y (m)	0.0000	0.0000
Offset Z (m)	0.0000	0.0000
Vessel Speed (m/s)	3.0000	0.0000
Loading (m)	0.0000	0.0000
Draft (m)	0.0000	0.0000
Delta Draft (m)	0.0000	0.0000
MRU Align Std Dev gyro	0.0000	0.0000
MRU Align Std Dev Roll/Pitch	0.0000	0.0000
Comments	null	null

The position navigation values here are the average values of the standard deviation column from the GrafNav file. They change from day to day. So the vessel file should be populated accordingly.

This is the physical offsets between the sensor as measured by the geodimeter. It is the measurement average and then the standard deviation.

This is how confident one is in the measured offsets. These (for us) would be from the F190 where:

MRU Align Std. Dev gyro = the Z error value
MRU Align Std. Dev Roll/Pitch = Y and X average error value.

Example 1:

MRU to Trans X(m) can be read as Transducer 1 is located in the X direction (port or starboard) from the MRU by # of meters.

Answer:

Transducer 1 is port of the MRU by 0.0880 m. Port is negative in CARIS so it is -0.0880 m.

Example 2:

MRU to Trans2 X(m) can be read as Transducer 2 is located in the X direction (port or starboard) from the MRU by # of meters.

Answer:

Transducer 2 is starboard of the MRU by 0.0880 m. Starboard is positive in CARIS so it is 0.0880 m.

USGS SPCMCS FACS Operations Log - Kinematic Survey

Page 1 of 2

SPCMSC FAN# 14B1M02	Crew:	Dates: 7-12-14 7-12-14
Kinematic Rover	Recording Interval (s)	Comments
Platform (boat, buggy, pole, etc)	R/V JAWAN JAW	
Receiver Make/Model#	AshTech Z-xtreme	
Receiver S/N#	SN ZE120011226	
Antenna Model or P/N#	800889 Rev B PN = 700936 Rev D	
Antenna S/N#	SM6-choke #2 CR13149	
Antenna Height (m)	2.790cm	
Offset Diagram? Photos?	Both	
Primary Static Base Information	Recording Interval (s)	Comments
Base Location	BRET	RI = 0.1s day 30s night
NGS PID # if applicable	USGS Installed	
Base Site Name:	BRET	
Receiver Make/Model#	AshTech ProFlex 500 802077 G	
Receiver S/N#	201038004	
Antenna Model or P/N#	Thales Choke Ring No DOME 701945-02-Rev E	
Antenna S/N#	CR6200538004	
Tripod Height (m)	2.60m	
Diagram? Photo?		
Secondary Static Base Information	Recording Interval (s)	Comments
Base Location	BRT2	RI = 0.1s day 30s night
NGS PID # if applicable	USGS Installed - PK NAIL	
Base Site Name	BRT2	
Receiver Make/Model#	AshTech ProFlex 500 RECEIVER PN 802077G	
Receiver S/N#	2010038002	
Antenna Model or P/N#	Thales CR Ring No DOME 701945-02 Rev E	
Antenna S/N#	CR6200548008	
Tripod Height (m)	1.240	
Diagram? Photo?		

Kinematic Receiver Log

Local Time Zone: <u>Central</u>			GPS			UTC Time or GPS Seconds			
Date	Start	Stop	Week	Session	RI	Start	Stop	Total Epochs	Comments
7-14-14	22:00 ~00:00			A	1	22:00	~00:10		JD 195
7-15-14	~ 17:00			C	1		~1700		storm / ODOM problems
7-15-14	19:18 00:03			D	2	19:18	00:03		2nd part of Day
7-16-14									
7-17-14									
7-18-14									
7-19-14	Weather Day								
7-20-14	Weather Day								
7-21-14									
7-22-14	—	—		A	1	~13:00			
7-23-14	—	—		A	1	~13:30			Storm - Return to VI
7-23-14				B	2	~18:40			Post Storm
									Note Session A on yesterday
									Base; Session B on today
7-24-14	—	—		A	—	—	—		No Survey / Port & C&W
7-25-14	—	—		A	1	~19:32	—		

SPCMSC FAN # 14BIM82							Page 1 of 1
DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
195	START OF TWIN VEE R/V		Jabba JAW SBB survey				
195	22:29	1	004-2229	P=8 C=138	*.BIN	SVP Cast 01	N/A BAR FIELD A, TEMPTED, TOO DARK
195	22:53	2	003-2253		*.BIN		
"	23:08						EOL
"	23:09	3	002-2309		*.BIN		SOL
"	23:36	4	—		*.BIN	SVP-002	N/A EOL 3 SVP-002
"	23:39	4	001-2339		*.BIN		
"	23:57	—	007			N/A	EOL 1
"	23:58	5	017-2358		*.BIN		SOL 17 crossing back to VI
"	00:10	—	—		—	—	WAVES ~ 2'
"					*.BIN	In The Day	overall WAVES 1-2'; WINDS ~ 10-15
"							BAR CHECK UNSUCCESSFUL
*195			SVP		SVP-003	EOL CAST	
New DAY JD	196	July 15, 2014	Nancy & Kyle on TV				196-
196	13:25	SVP			SVP 4		Cast at Western Western end
"	13:32	5	005-1332	P=8 C=138	*.BIN		SOL 5 EOL 13:3644
"	13:56	6	006-1356		*.BIN		EOL 14:23

SUPS

SPCMSC FAN # 1401M02

R/V F. bba JAW

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
196	14:25	007	007-1425	*.BIN	SVP	NA	WIND still blocking out of WSS
							So NOTE west heading lines have dropouts
196	14:41:50	-	"	*.BIN	SVP-006	NA	MIDDLE of line 007-1425
196	14:40:57	-	-	-			EOL 7
196	14:55:	8	008-1455	*.BIN	-	NA	SOL 8 NW SVP 007 @ EOL
"	* Avoiding Storm Heading to Line 13 of Priority 1						
"	15:25	9	009-1525				Not on planned line 13 - Recording to line 13
"	~15:55	-	-	-	SVP-008	-	~5m depth per check
"	16:01	10	013-1601	0002 *.BIN	"	-	SOL 13
	H ₂ O over Bow - ODOM	3	STOPPED WORKING - Heading back to IV				Takes ODOM 2 & signal response
X	Restart	GPS	= SESSION D				
"	1918	17	017-1918				
"	20:00:56	17			SVP 94.75m WD		@ end of line 17
"		16	016-2002	*.BIN			Crossing line 16 heading NE
"	20:	16	016-20??	*.BIN			Started the line
"	20:32	16	016-2032	*.BIN			Restarted crossing line 16 - NE
"	~20:04	-	-	-	SVP-010	-	
"	21:08	15	015-2108				SOL transit to Line 15
"	21:26	15	015-2126	*.BIN	Line into waves		Cont. line 15 after Switching Comp Battery

* Time Sync all day

[illegible]

R/V Jabbu Jaw

DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
196	22:34	19	013-2234	*.BIN	NA	NA	Finishing line 13 from hite
196	22:40	20	012-2240	*.BIN	—	NA	ODOM #3 Out. NW w/ waves
196	23:07	—	—	—	SVP-011	NA	SOL Line 12
196	23:10	21	011-2310	*.BIN	—	NA	EOL 12 CRST 11
196	23:38	22	010-2338	*.BIN	—	NA	SOL 11 CALMER OUT
196	00:03	23	009-0003	*.BIN	—	"	EOL 11 SOL 10
196							END OF DAY 196
NOTE for PROCESSING The lines heading South/SW the boat was heading into WAVES!!							
197	Start of day 3 Finishing last line of Priority 1, then packing up priority 2 lines - TV crew Trevor & Kyle						
197	13:56	24	014-1356	*.BIN	—		Last line of Priority 1 H = ~2%
197	15:10	—			SVP-012		@ beginning of line 25 of Priority 2
*	Beginning Priority 2 lines, starting with line 25 heading SE						

SPCMSC FAN # 14B1M02

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
197	15:12	25	025-1512	*.BIN	-		First line of Priority 2
197	15:53	26	024-1553	.BIN	-		
197	17:29	26	024-1729	.BIN	-		ECHOSOUNDER 3 CRASHED SWAPPED TO ECHOSOUNDER 4 BEGINS AT LINE 24 OF P2: GAIN: 158 2.0
197	17:49	27	023-1749	*.BIN	-		
197	18:21	28	022-1821	*.BIN	SVP 13		SVP @ end of line 23 (P2)
197	18:50	29	021-1850	*.BIN			
197	19:15	30	020-1915	*.BIN	SVP 14		SVP in middle of line 20
197	19:46	31	019-1946	*.BIN	-		
197	20:15	32	018-2015	*.BIN	SVP 15		start of line 18
197	20:29	32	018-2029	*.BIN	-	-	start of line 18 again
197	20:49	33	017-2049	*.BIN	-	-	
197	21:13	34	016-2113	"	-	-	
197	21:37	35	015-2137	"	SVP 16	-	@ end of line 15
197	21:58	36	014-2158	"	-		changed gain to 145 - getting "B" values
197	22:17	37	013-2217	"	-		Crossed our Jet ski line within
197	22:36	38	012-2236	"	-		minutes of the Jet ski passing
197	22:59	39	011-2259	"	SVP 17 (beginning)		- should be a good comparison point
197	23:22	40	010-2322	"	-		
197							MISSED UP, HIT CTRLS SEVERAL TIMES INSTEAD OF CTRL E AT EOL 40
197	23:43	41	009-2343	"			

SPCMSC FAN #

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
198	START OF DAY	4	TV CREW	TREVOE & KME			GAIN: 145 Power: 5
198	13:15	42	008-1315	*.BIN	-	-	
198	13:43	42	008-1343	*.BIN	-	-	WAS NOT TIME SYNKEED, RESTARTING LINE 42 AFTER SYNC
198	13:59	43	007-1359	"	-		
198	14:17	44	006-1417	"			
198	14:40	45	005-1440	"			SV18 @ end of line 6 (NW)
198	15:02	46	004-1502	"	-		
198	15:22	47	003-1522	"	SUP19	-	SV19 AT END OF LINE 4/7
198	15:44	48	002-1544	"	-	-	
198	16:04	49	001-1604	"	-	-	
* Finished Priority 2, Beginning Priority 3 - Line 9 heading ENE							
198	16:29	50	009-1629	.BIN	* Abandoned LINE 9		taking too much time over bowl
198	16:37	51	005-1637	.BIN			switching to line 5 heading SW
198	17:05	52	004-1705	"	SUP20	-	SUP 20 AT MIDDLE OF LINE 5
198	18:11	53	003-1811	"	SV21 (as in Hypack)		POWER CHANGED TO 8
198	19:16	54	002-1910	"	-	-	
198	20:05	55	001-2005	"	SV22 @ beginning of line 1		
198	21:06	56	012-2106	"	SV23 AT EOL 1		(CHANGED GAIN: 193 Power: 6)

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
198	21:41	57	011 - 2141	*.BIN	SVP 24		
198	22:21	58	010 - 2221	"			
198	22:59	59	009 - 2259	"			
198	23:45	60	008 - 2345	"	SVP 25 @ end of line 8		
198	00:00	60	008 - 0000	"			LINE 8 RESTARTED SOMEHOW
	EOB 198						
199	Friday	July 18 th	2014	Crew - Jake F & Kyle K			
199	Started day with SVP cast				SVP 26		
199	13:43	61	006 - 1343	*.BIN	SVP 27 @ end (sw)		1 st line of day
199	14:45	62	005 - 1445	"			picking up 5 heading NW @ crossing line 9
199	15:13	63	007 - 1513	"			last line of priority 3
199	15:48	64	002 - 1548		SVP 28 @ end		Start Priority 4
199	17:05	65	006 - 1705				se
199	17:37	66	007 - 1737				Heading - NW
199	18:10	67	008 - 1810				Heading - SE
199	18:45	68	009 - 1845				SVP 29
199	19:10	69	010 - 1910				

SPCMSC FAN #

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
202	13:33	—	—		SVP30		Starting up on line 11 of P4
"	13:38	70	011-1338	*.BIN	-		NW
"	14:00	71	012-1400	"	-		SE GPS ERROR (Data Card Not Ready)
"	14:07	72	012-1407	"	-		SE
202	14:24	73	013-1424	"	SVP31 @ end of 13		NW
"	14:55	74	014-1455	"	-		SE
"	15:21	75	015-1521	"	-		NW
"	15:46	76	016-1546	"	SVP32 @ End of 16		SE echot G-192 (All Day) So far
202	16:19	77	017-1619	"	-		NW
"	16:49	78	061-1649	"	SVP33 @ end of 1		NE crossing line
"			* Heading to Gulf side Priority 4 lines				
"	18:14	79	018-1814	*.BIN	SVP34 @ End of 12		SE
202	18:41	80	019-1841	"			NW
"	19:12	81	020-1912	"	SVP35 @ End of 20		SE * GPS Battery died * also stopped turning earlier
"	19:41	82	021-1941	"			NW * send request on data card for today
"	20:06	83	022-2006	"			Heading - SE
202	20:30	84	023-2030	"			Heading NW
"	20:55	85	024-2055	"	SVP36 @ end 24		SE
"	21:22	86	025-2122	"			NW
202	21:48	87	026-2148	*.BIN			SE

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SPCMSC FAN #							Page _____ of _____
DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
202	22:11	88	027-2211	*.BIN	C		NW
"	22:33	89	028-2233	"	SVP37 @		end of line 28
"	22:56	90	029-2256	"			
	23:28	91	003-2328				NE till line 24
	23:57	92	004-2357				SW start @ line 24
203	00:00	92	004-0000				auto stop + start
				EOD			
203	13:16	93	005-1316	*.BIN	SVP38 @ end		Tuesday July 22nd
"	14:07	92	004-1407	"	SVP39 @ line 24		Gain - 198, Power 8 (changed)
"	15:15	91	003-1515	"			changed power to 6 @ 15:25
203	16:07	94	023-16:07	*.BIN			starting priority 5
"	16:26	95	024-1626	"	SVP40 @ EOL 24		
203	17:06	96	025-1706	"	-	-	
203	17:26	97	026-1726	"	-	-	
203	17:55	98	027-1755	"			1754
203	18:26	99	028-1826	"			
"	18:48	100	029-1848	*.BIN			
203	19:15	101	030-1915	"	SVP 41 At 30		
	19:43	102	031-1943	"			

SPCMSC FAN #

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
202	22:11	88	027-2211	*.BIN	C		NW
"	22:33	89	028-2233	"	SVP37 @		end of line 28
"	22:56	90	029-2256	"			
	23:28	91	003-2328				NE till Line 24
	23:57	92	004-2357				SW start @ Line 24
203	00:00	92	004-0000				auto stop + start
				EOD			
203	13:16	93	005-1316	*.BIN	SVP38 @ end		Tuesday July 22nd
"	14:07	94	004-1407	"	SVP39 @ line 24		Gain - 198, Power 8 (changed)
"	15:15	91	003-1515	"			changed power to 6 @ 15:25
203	16:07	94	023-16:07	*.BIN			* Starting priority 5
"	16:26	95	024-1626	"	SVP40 @ End 24		
203	17:06	96	025-1706	"	SVP -		
203	17:26	97	026-1721	"	-		
203	17:55	98	027-1755	"			1754
203	18:26	99	028-1826	"			
"	18:48	100	029-1848	*.BIN			
203	19:15	101	030-1915	"	SVP 41 At 30		
	19:43	102	031-1943	"			
203	20:20:51				SVP 42		
203		103	001-	*.BIN			

SPCMSC FAN # 14 BIM02

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
204	START OF DAY			Line file	Sallenger Priority	#2	
204	13:36:43	104	-	-	SVP 043		Get E/N from Hypack - CASTAWAY NOT WANT TO ACQUIRE GPS
204	13:38	104	023-1338	*.BIN	-	-	SOL Line 23
"		"	"	"	-	-	GAIN = 198 Power = 6 signal good @ 5 knots
204	~14:25	"	"	"	SVP 044	-	~8m H ₂ O 2
204	~14:40	"	"	"		-	EOL 23
204	14:43	105	022-1443	*.BIN	SVP 045	-	SOL 22 CAST
							→ Problems w/ Line file versions
							CAN use the file but storm
							so returned to VI
↑	↑ GPS SESSION A	↑	↑				
204	GPS SESSION B	↓	↓			↓	Post storm ↓
204	-	106	-	-	SVP 046	-	SOL 18 going offshore
204	18:54	106	018-1854	*.BIN	"	-	SOL 18 going offshore; CALM
204	19:20	"	"	"	"	-	Power ↑ to 7
204	19:46	107	017-1946	*.BIN	"	-	SOL 17
204	21:16	"	"	"	"	-	Lost 2,000 meters messy w/ gain
204	21:20	108	016-2120	"	-	-	increased Power to 8
204	21:59	108	016-2159				Restart logging post cast
204					SVP 047		

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SPCMSC FAN # 14 BIN02

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
204	22:16	109	015-2216	*.BIN	-	-	SOL 15
	~23:12		2			-	CURRENT PUSHING SO EOL & RUNNING
204		109	015-2318	*.BIN	-	-	to NW side of lines & survey offshore for cleaner faster survey
204	23:47						EOL
	END OF DAY						
205	No SURVEY - Processing - Day in Port - Reful / Supp 1188						
206	TRANSIT to site on IV						HYPACK computer SYNC ✓
206	19:34	110	014-1936	*.BIN	SVP_048	-	Start of Day SOL 14 P=7 G=197
206	20:25	111	013-2025	*.BIN	-	-	SOL 13 - current strong - running ^{running to next} END
206	20:45	11	11	*.BIN	-	-	RESUMED logging
206	21:00	-	11			-	SIGNAL ISSUED to 122 ^{to 122} AND POWER: 8
206	22:11	112	012-2214	*.BIN	SVP_049	-	SOL 12 @ WIND PUSHING SO
206	22:11	11	11	"	-	-	RAN to top of line - Seabreeze WAVES SATURATED EOL
206	22:50:12	11	11	"	SVP_050	-	~ 9m H ₂ O Z
206	23:41		011-2341	*.BIN	-		SOL 11 up to Line 24
206	23:32		END OF DAY				

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
204	22:16	109	015-2216	*.BIN	-	-	GUL 15
	~23:12		2			-	CURRENT PUSHING SO EOL & RUNNING
204		109	015-2318	*.BIN	-	-	to NW side of lines & survey
						-	offshore for cleaner faster
						-	survey
204	23:47						EOL
-	END OF DAY	-	-	-	-	-	
205	No SURVEY - Processing	-	Day in Port -	REFUL / Supp	lies		
206	TRANSIT to site on IV						HYPACK computer SYNC ✓
206	19:34	110	014-1936	*.BIN	SVP-048	-	START OF DAY SOL 14
							P=7 G=197
206	20:25	111	013-2025	*.BIN	-	-	SOL 13 - current strong - ^{running to North} moving END
206	20:45	11	11	*.BIN	-	-	RESUMED logging
206	21:00	-	* 11	"	-	-	Signal issued - stop ^{start} 11 ¹²² AND Power: 8
206	22:11	112	012-2147	*.BIN	SVP-049	-	SOL 12 & WIND PUSHING SO
206	22:11	11	11	"	-	-	RAN to top of line - Seabreeze
206	22:50:12	11	11	"	SVP-050	-	WAVES STARTED HOW
206	23:41	113	011-2341	*.BIN	-		~ 9m H ₂ O Z
206	23:32	"	END OF DAY				SOL 11 up to Line 24
207	14:18	"			SVP-051	-	START OF DAY

[illegible]

SPCMSC FAN # 14 B1M02

DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
207	14:24	113	011-1424	*.BIN	—	—	Raining SE
			GAIN TO	140, to 197			Mostly sunny SW wind
			Power to	6, back to 8			"5-10 Kts,
207	15:27	114	010-1527				NW P.8 G:197
	16:02				SVP 052		Gain to 110
	16:38						Gain to 77
207	16:41	115	009-1641				SE - Thunderstorms for S
207	17:44	116	008-1744	*.BIN	SVP 053	—	NW
207	19:05	117	007-1905	*.BIN			SE MR. GO?
207	20:06	118	006-2006				NW - paused to run N
		118	"				and run w/ current SE
	21:17	118	"				Power to 10 2117
207	21:52	119	005-2152		SVP 054		
207	23:19	120	004-2319	*.BIN	EODay		Ended line ~1/2 way
208	14:11	120	004-1416	*.BIN	SVP-055	—	Pick up line 4 @ 20 P=11
	—		"	"	"	—	heading out of channel & current
	—		"	"	"	—	is present
208	1500	121	003-1500	*.BIN	SVP 056		NW. Fish drops started soon
208	16:09	122	002-1609	*.BIN	SVP 057		offshore
208	17:19	123	001-1719	*.BIN			SOL #1 NW

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DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
208	1852	124	20-1852	*.BIN	-		TRANSIT TO CROSSING
208	1856				SVP-058		
208	1857	124	20-1857	*.BIN	-	-	SOL L20 crossing
	NOTE FOR LHM	*3 & 2	heading into	current &	WAVES off		star port bow grade
	so lots of dropouts; can in Power changes not help!						
208	1937						For Line 20
208	1952		Jen called us back to IV to re-evaluate afternoon plan				- F190 = DOWN
208					SVP-059		Start Sal PR3
208	SESSION B for GPS		Moving to Priority 3 of salenger				Starting w/ LINE 2; Jet Ski
	going to finish up lines from						
208	2045	125	001-2045	*.BIN	8		Sal-PR2.1NW (NAME?) SE offshore
	BATTERY Power in white box decreased & inverter stopped working 9.66V @ 10.61; tried inverter 2 & no luck. Will attach inverter 1 to ODOM battery for remaining day. Serial port replicator working still & powered via the USB port.						
		003-			SVP-060		@ Start
209			Picking up Sallenger Priority 3 line (every other) starting w/ 3				
209		126	003 1356	*.BIN	-		Sal Priority 3 Heading SE

SPCMSC FAN # 14BIM02

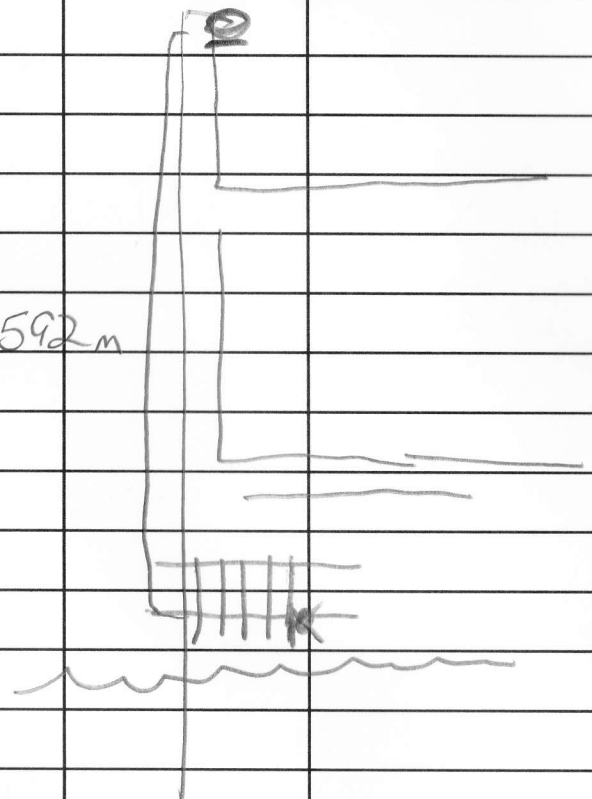
Page 13 of 15

DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
209	14:26	126	003-1426	*.BIN	-	-	clocked were not synced - resumed
209	15:25				SVP 61		
209	15:33	127	005-1533	*.BIN			Heading - NW
209	16:31	128	007-1631	*.BIN	SVP-62	-	SW
209	17:22	128	007-1631	*.BIN	SVP-63	-	SW SUP AT MED POINT OF LINE 7
209	17:51	129	009-1751	*.BIN	-	-	NW
209	19:00				SVP 64		
209	19:01	130	011-1901	*.BIN			Heading NE (begin crossing)
209	19:27	131	013-1927	*.BIN			SW
209	20:12	132	015-2012	"	SVP-65	-	AT EOL 15 (20:43)
209	20:44	133	017-2044				
209	21:25	134	019-2125	*.BIN		-	
209	21:56	135	018-2156	*.BIN	SVP-66		AT EOL 18
209	22:39	136	016-2239	*.BIN			
			END OF DATA				
210	13:46	137	008-1346	*.BIN			picking up Sal priority 3 even
210	14:57	138	006-1457	"	SVP 67		@ end of line 6 (NW)
210	16:03	139	004-1603	"			Heading - SE
210	17:07	140	002-1707	"			NW
210	17:33	140	002-1733-0001	"	-	-	ISSUE w/TSS, RESTARTED EVERYTHING

DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
210	18:36	141	010-1836	*.BIN	-	-	
210	19:06	142	012-1906	*.BIN	-	-	
210	19:44	143	014-1944	*.BIN	SVP-68		SW SVP A EOL 14
			Finished with Sal priority 3 lines				
			Seabird GPS Occupation				
			BSB1 - on piling near island center, occupied for 20 minutes at 1 Hz, measured distance from bolt at top of seabird to top of piling. Used Ashtech Z-extreme receiver and Jtek chibi ring antenna.				
			Receiver - SN ZE120011224, PN 800889 REV B				
			Antenna - SN CR13149, PN 200936 REV D				
			GPS Session -				
			Vertical offset - 3.14m				
			Horizontal offset - .18m (East)				

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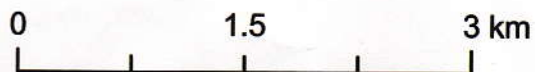
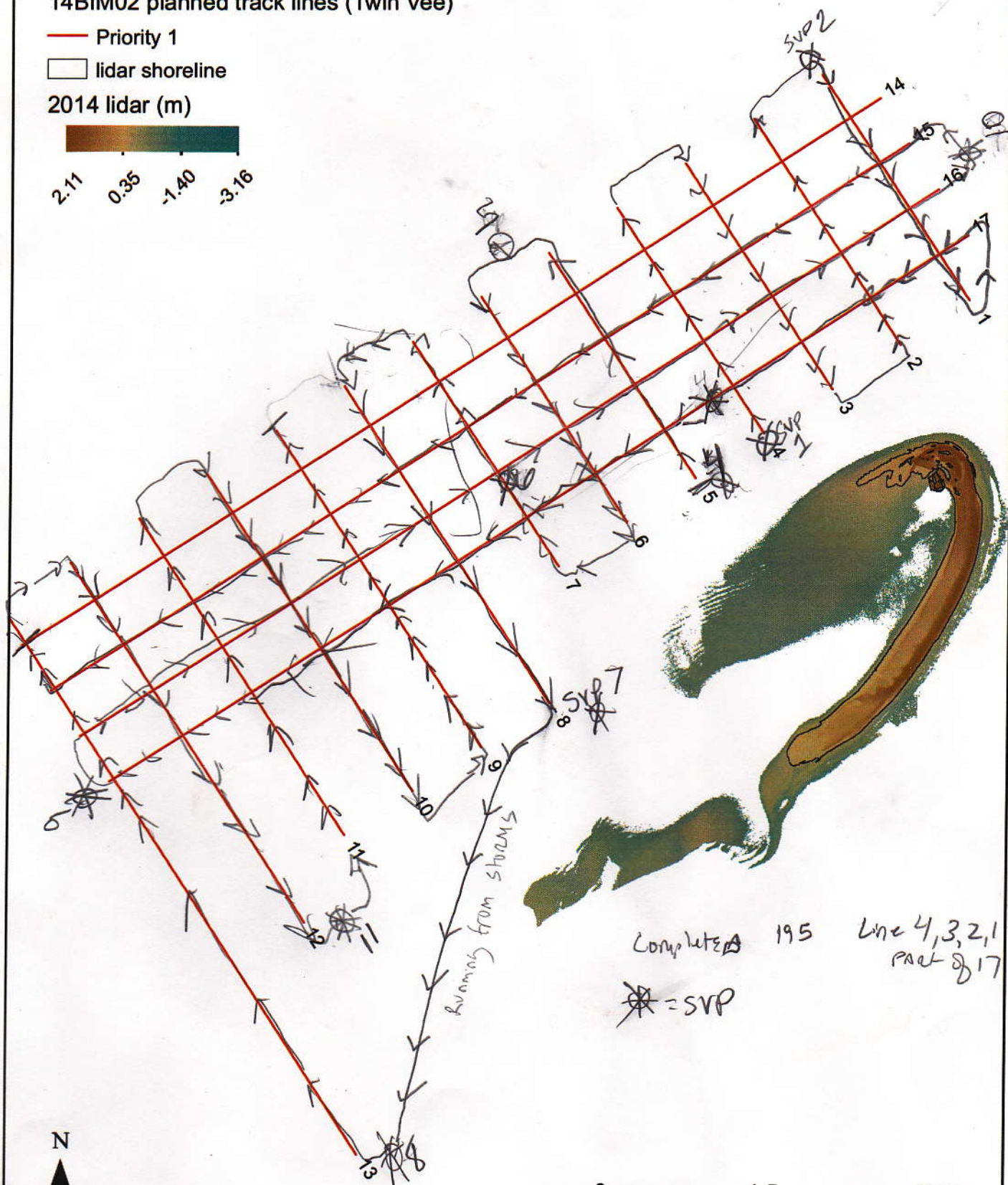
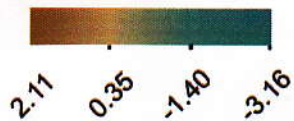
DOY	UTC Time	Line #	Hypack Line Name	Odom Waveform File	SOS Profile Name or Reading (m/s)	Bar Check (m)	Comments
	BSB2		On pumping Station		north of island on NW side		
			on NE main Support		(with small antenna on top)		
			Receiver	- Zxtreme	s/n ZE120011225, P/n 800889 Rev B		
			antenna	- SMG-6ANT-4	s/n 5952 P/n - 701975-01 Rev A.		
							
	6.592m						

14BIM02 planned track lines (Twin Vee)

— Priority 1

□ lidar shoreline

2014 lidar (m)



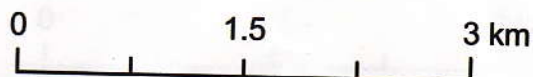
14BIM02 planned track lines (Twin Vee)

— Priority 1
 □ lidar shoreline

2014 lidar (m)



done!

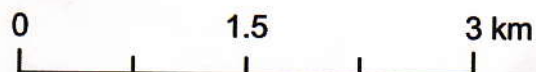
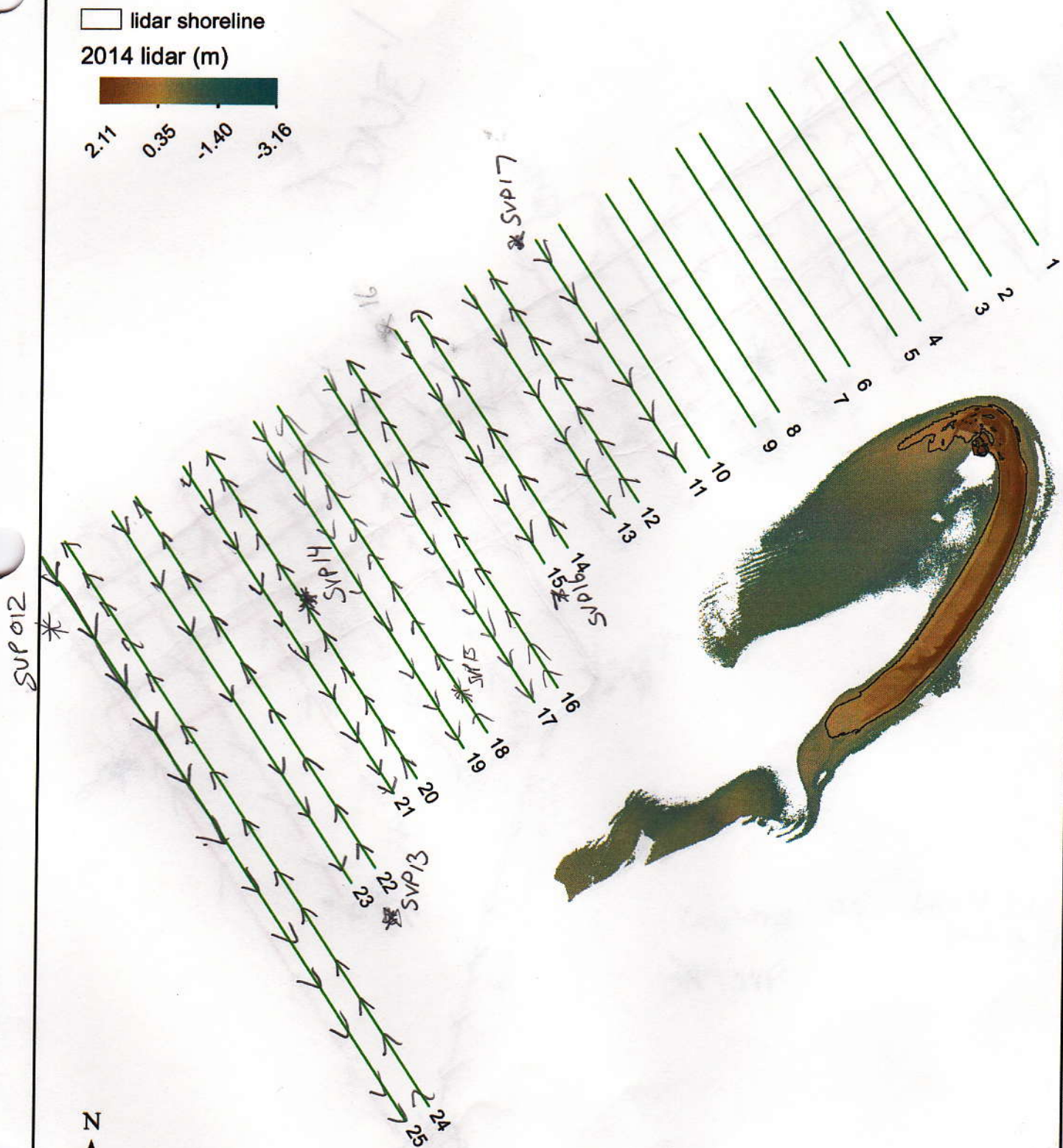


14BIM02 planned track lines (Twin Vee)

— Priority 2

□ lidar shoreline

2014 lidar (m)

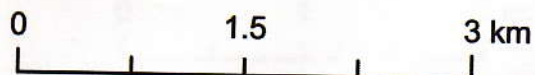
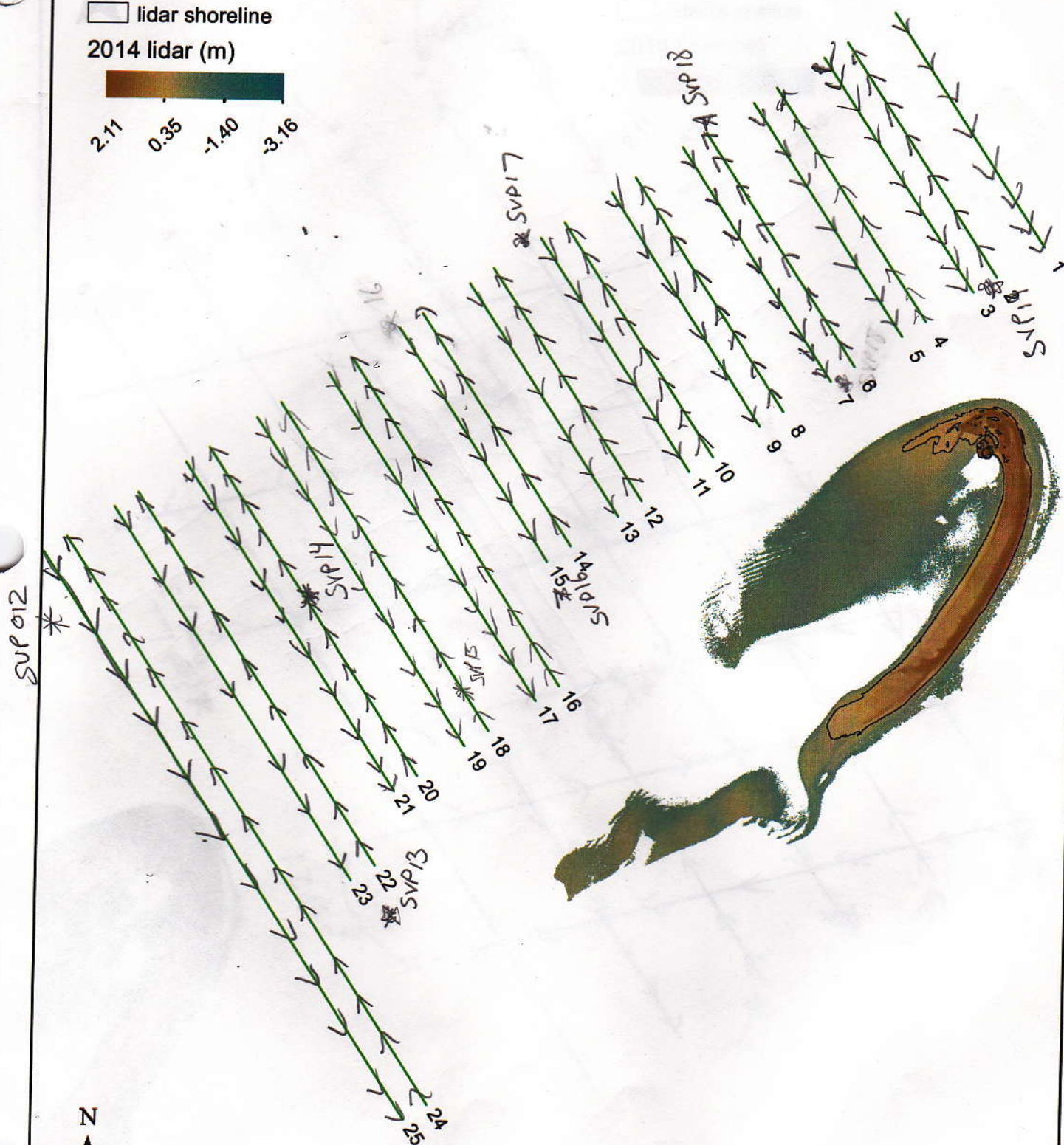


14BIM02 planned track lines (Twin Vee)

— Priority 2

□ lidar shoreline

2014 lidar (m)



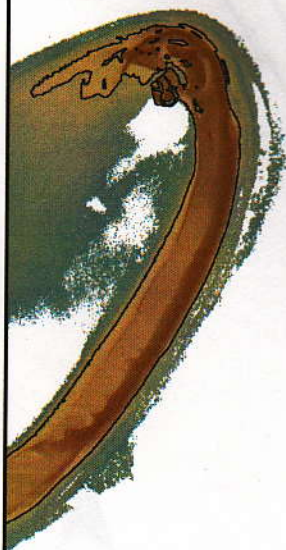
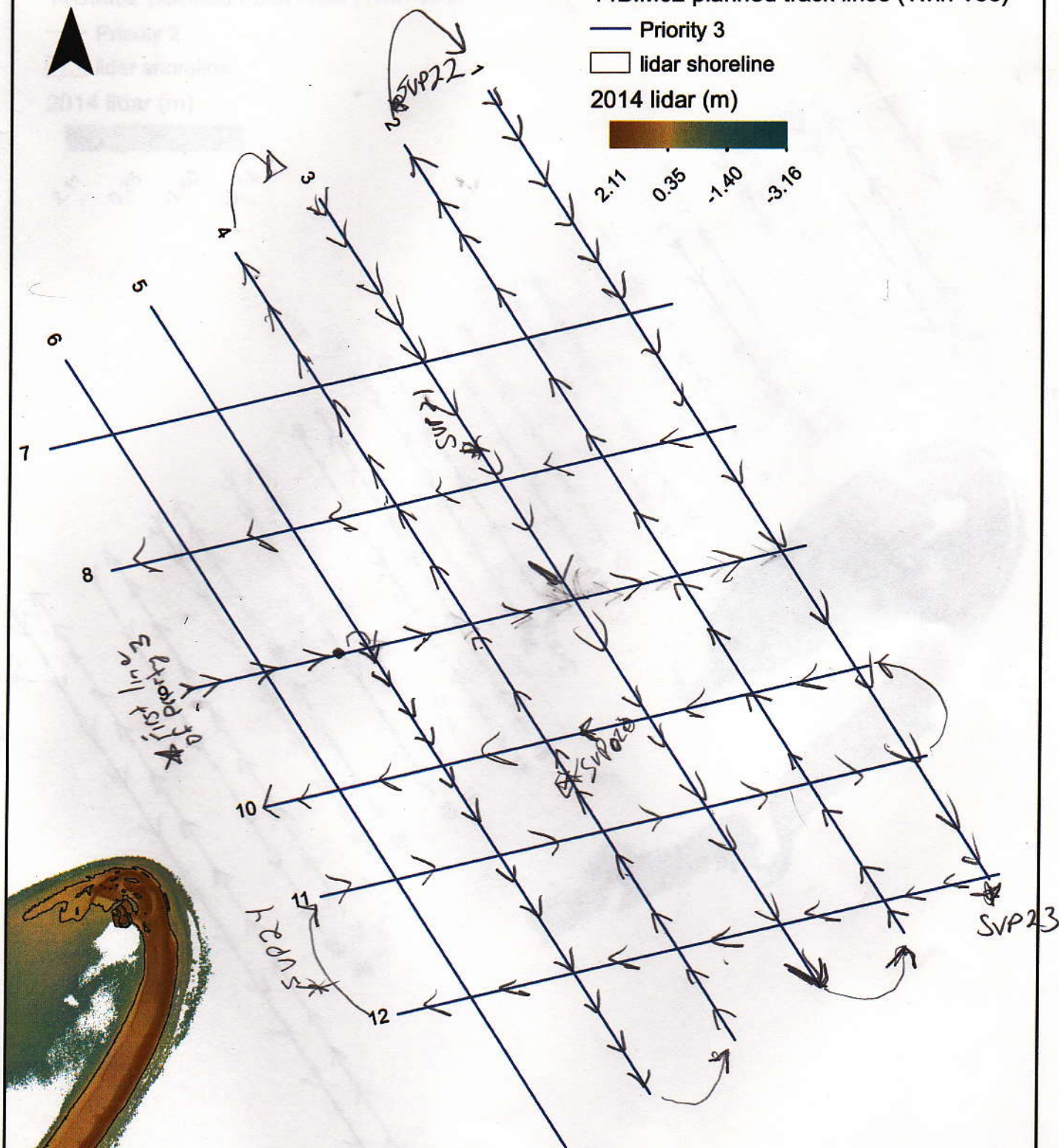
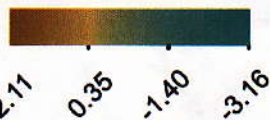


14BIM02 planned track lines (Twin Vee)

— Priority 3

□ lidar shoreline

2014 lidar (m)



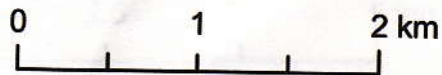
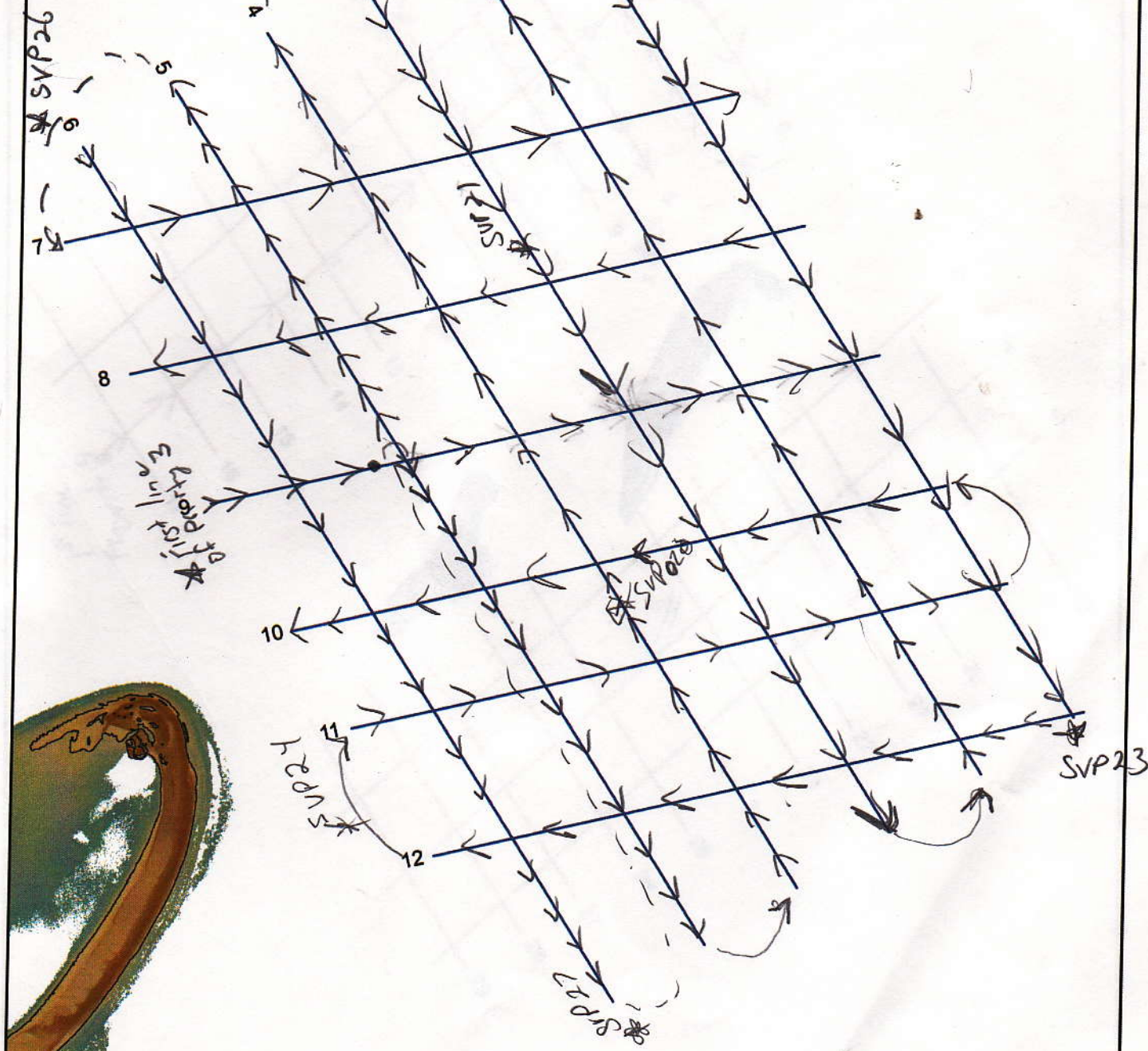


14BIM02 planned track lines (Twin Vee)

— Priority 3

□ lidar shoreline

2014 lidar (m)

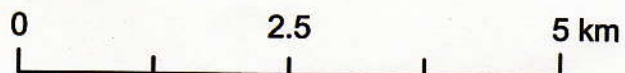
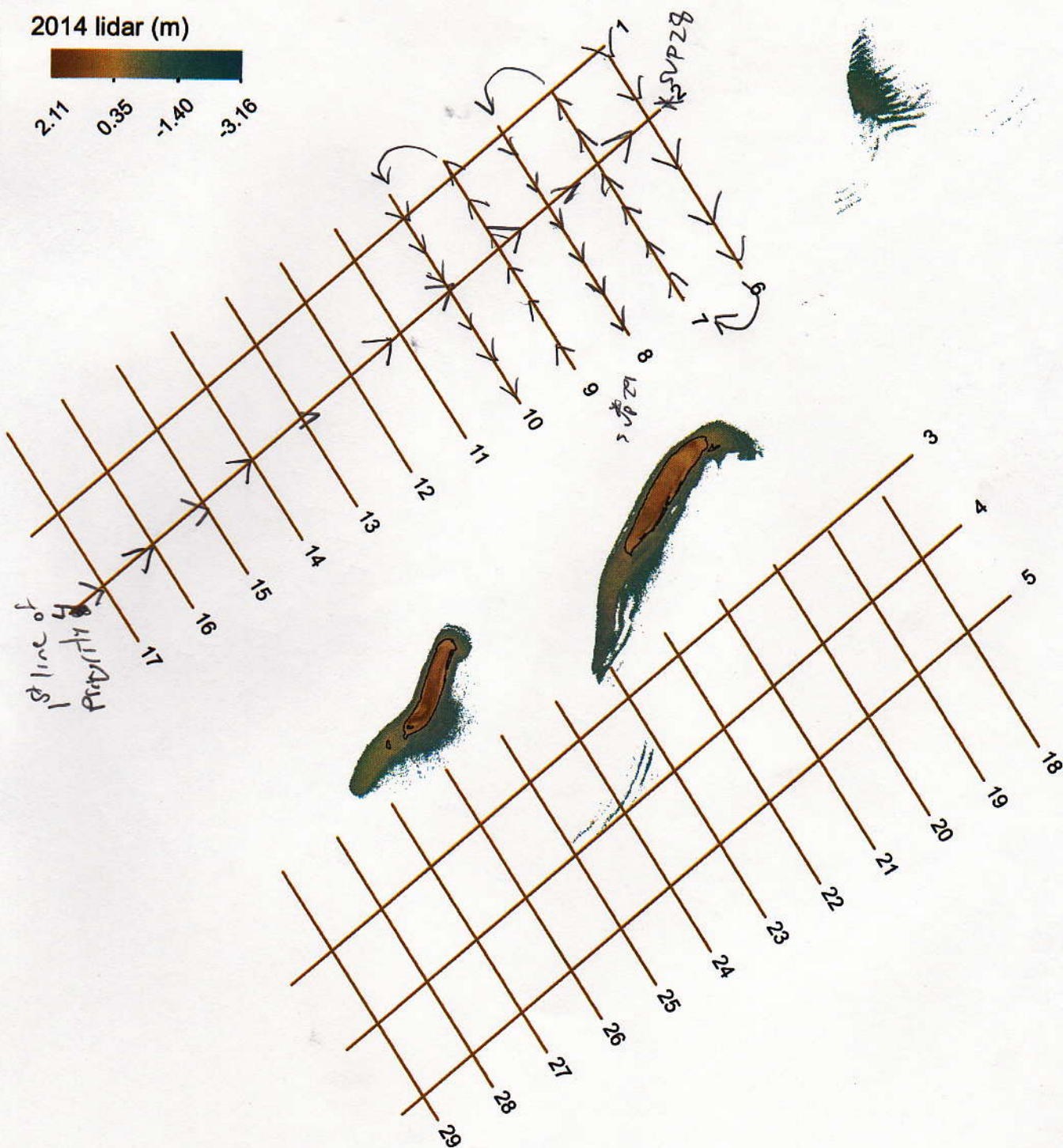


14BIM02 planned track lines (Twin Vee)

— Priority 4

□ lidar shoreline

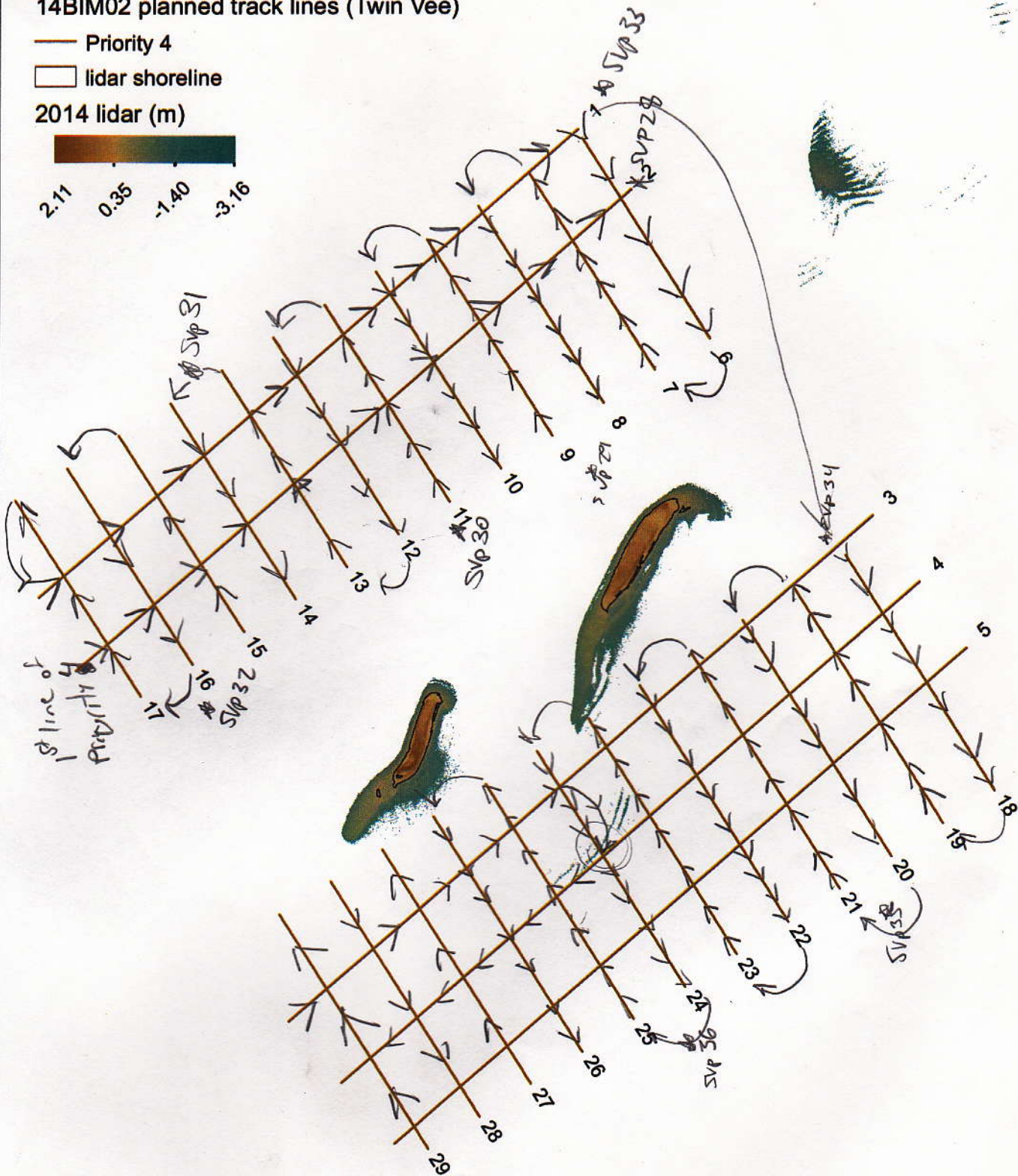
2014 lidar (m)



14BIM02 planned track lines (Twin Vee)

- Priority 4
- lidar shoreline

2014 lidar (m)



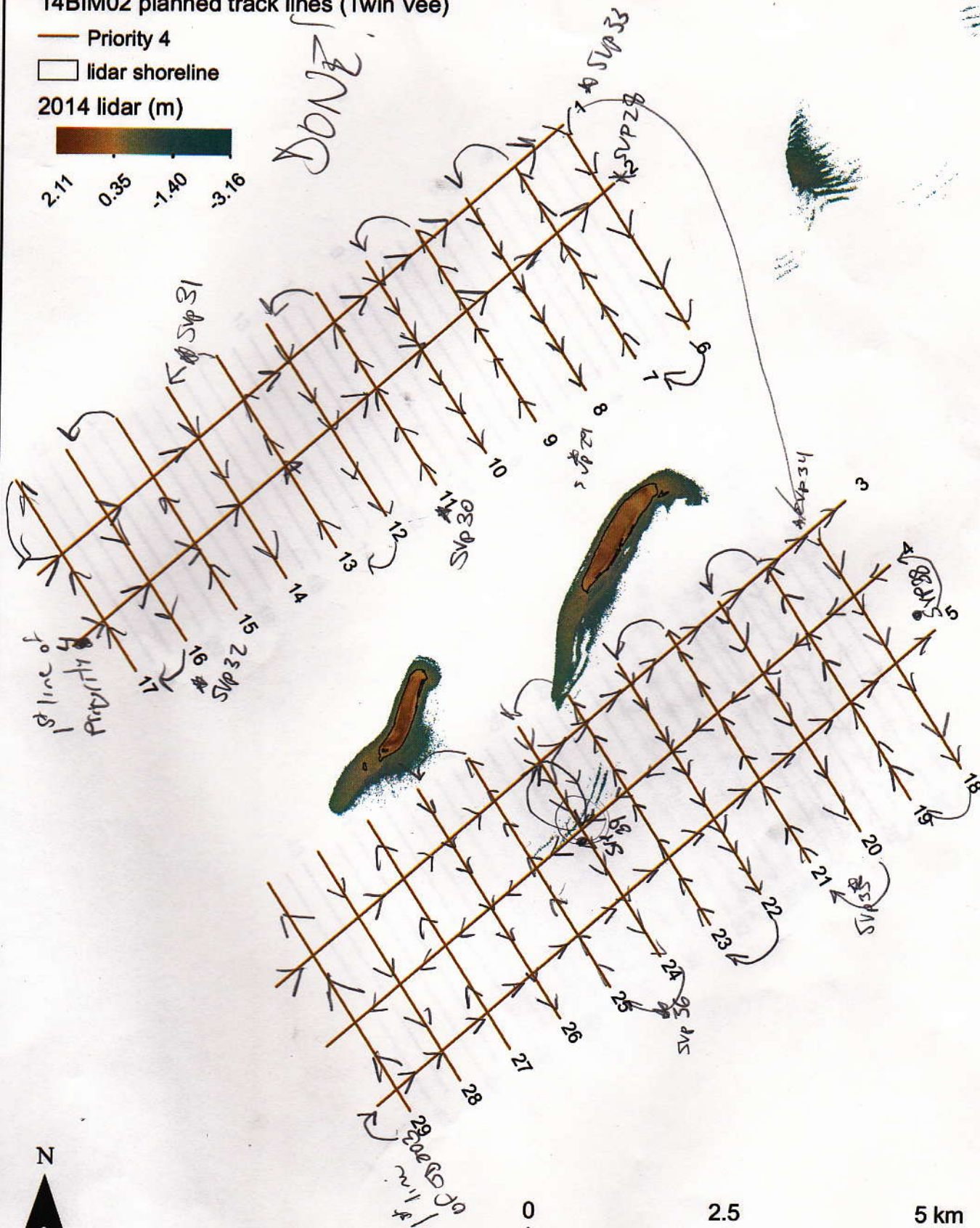
14BIM02 planned track lines (Twin Vee)

— Priority 4
 □ lidar shoreline

2014 lidar (m)



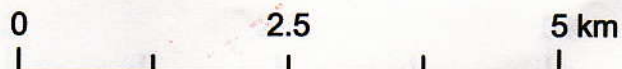
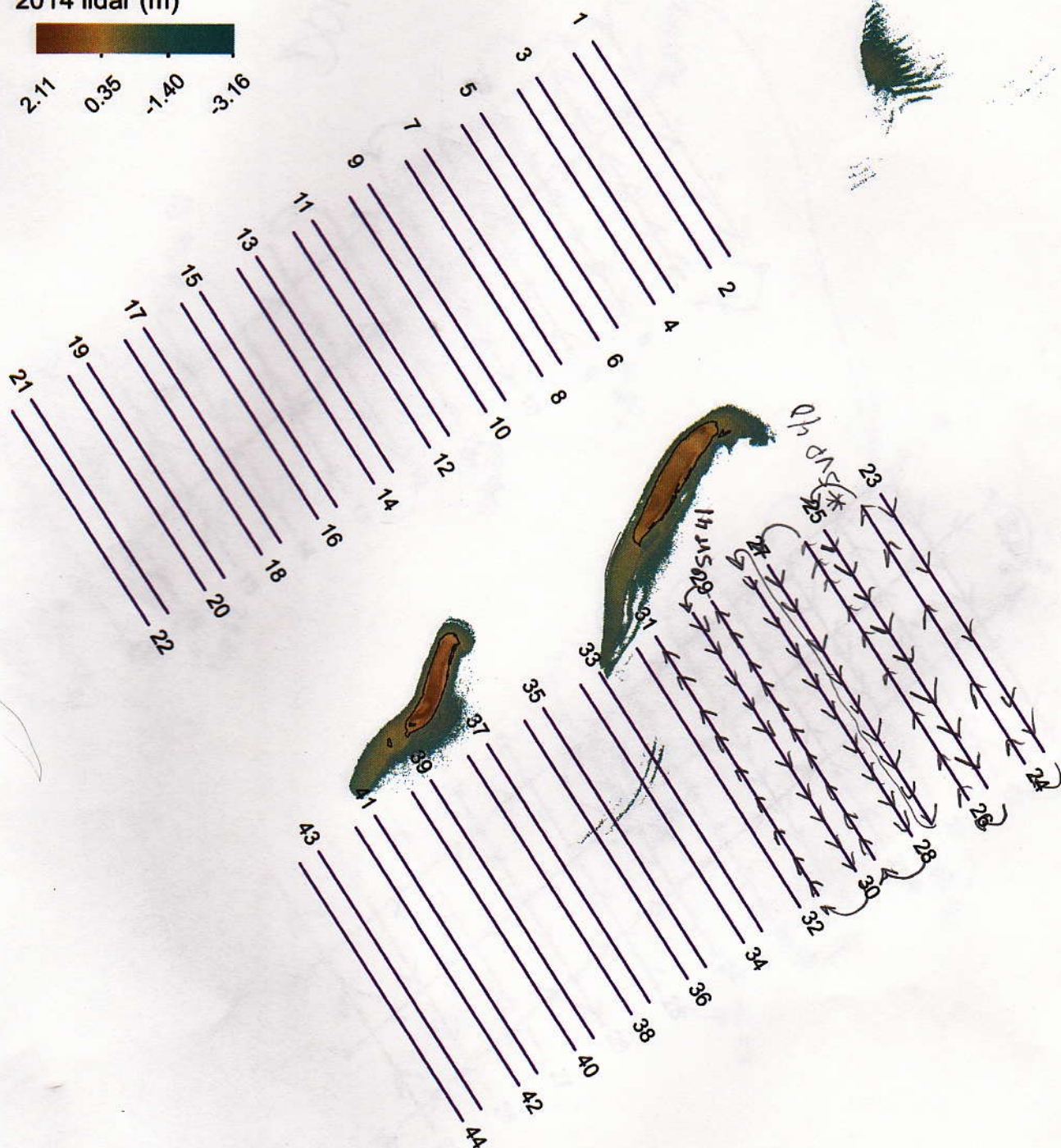
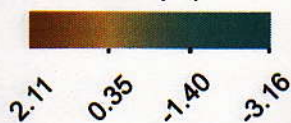
DONE



14BIM02 planned track lines (Twin Vee)

- Priority 5
- lidar shoreline

2014 lidar (m)



0 1.5 3 km

10 9 8 7 6 5 4 3 2 1

20

21

22

23

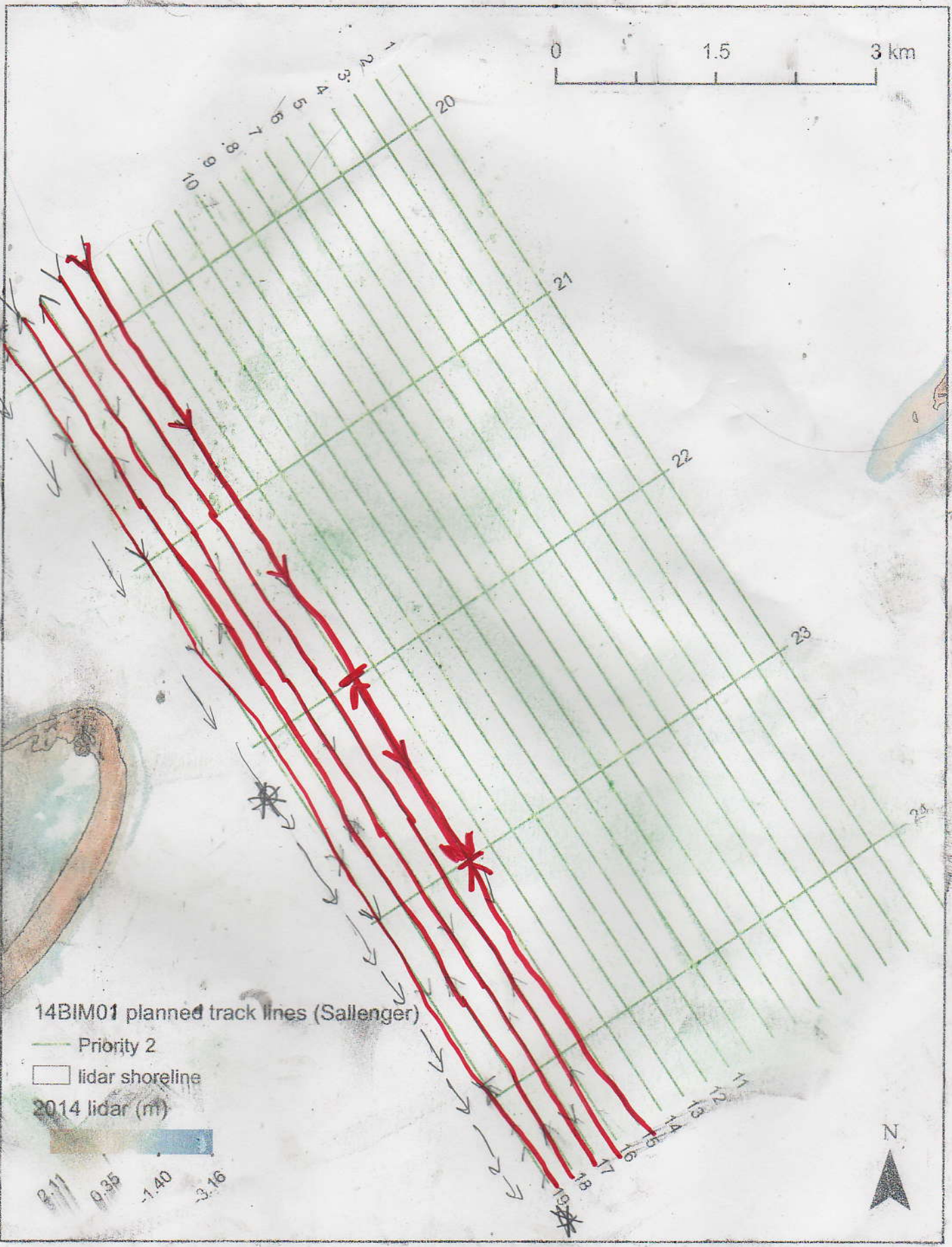
14BIM01 planned track lines (Sallenger)

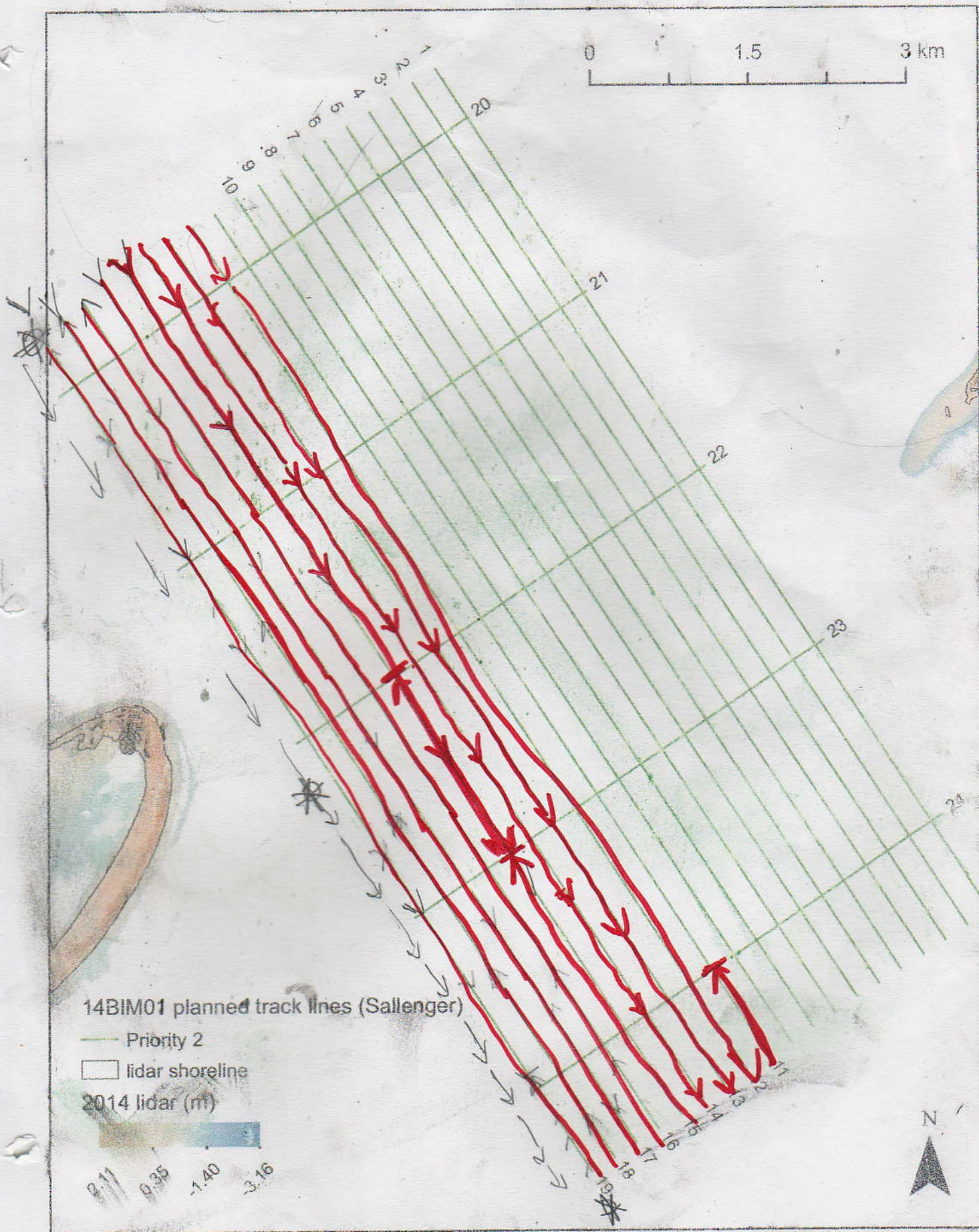
— Priority 2

□ lidar shoreline

2014 lidar (m)

2.11 0.35 -1.40 -3.16





0 1.5 3 km

14BIM01 planned track lines (Sallenger)

— Priority 2

□ lidar shoreline

2014 lidar (m)



