

**Swath Acquisition Overview**

<b>USGS SPCMSC FAN#</b>	2014-314-FA sub FAN= 14BIM01	<b>SXS File = 14bim01_193_prerollcal.sxs</b>			
<b>Date (s)</b>	7-13-2014 to 7-20-2014	<b>Transducer 01 - Port</b>		<b>Transducer 02-STBD</b>	
<b>Day of Year (s)</b>	193, 196-207	Height Offset (m)	0.116	Height Offset (m)	0.116
<b>Survey Vessel or Platform</b>	R/V Sallenger	Forward Offset (m)	0.069	Forward Offset (m)	0.069
<b>Swath System</b>	SWATHplus +H 468 kHz	Starboard Offset (m)	-0.062	Starboard Offset (m)	0.062
<b>SWATHplus version for acquisition</b>	SWATHplus software v. 3.07.10 and v. 3.07.17	Azimuth Offset (degrees)	-90	Azimuth Offset (degrees)	90
<b>SXS file used for acquisition</b>	14bim01_193_prerollcal.sxs; 14BIM01_JD196.sxs; and saved each survey day with DOY appended	Elevation Offset (degrees)	-30	Elevation Offset (degrees)	-30
<b>Navigation for acquisition</b> (i.e. OmniSTAR, WAAS, CORS Station, RTK)	Marinestar High Precision (HP) subscription from Fugro	Skew Offset (degrees)	0	Skew Offset (degrees)	0
<b>Boat Motion for acquisition</b> (i.e. F180, F190, F190 wet pod, TSS)	F190R Wet Pod	Pitch Offset (degrees)	0	Pitch Offset (degrees)	0
<b>Collecting External GPS for Navigation</b> (i.e. Ashtech Receivers)	Yes using Z-Xtreme P/N 800889 Rev D	Water Depth for SOS calculaton (m)	0.5	Water Depth for SOS calculaton (m)	0.5
<b>Center of Reference Point (CRP) for acquisition</b>	F190R Wet Pod	<b>SXS File = 14BIM01_JD196</b>			
<b>SVP at head</b>	Yes	<b>Transducer 01 - Port</b>		<b>Transducer 02-STBD</b>	
<b>SVP Profiles (detailed log attached)</b>	yes	Height Offset (m)	0.116	Height Offset (m)	0.116
<b>Technician(s)</b>	Dana Wiese	Forward Offset (m)	0.069	Forward Offset (m)	0.069
		Starboard Offset (m)	-0.062	Starboard Offset (m)	0.062
		Azimuth Offset (degrees)	-90	Azimuth Offset (degrees)	90
		Elevation Offset (degrees)	-30	Elevation Offset (degrees)	-30
		Skew Offset (degrees)	0	Skew Offset (degrees)	0
		Pitch Offset (degrees)	0	Pitch Offset (degrees)	0
		Water Depth for SOS calculaton (m)	0.5	Water Depth for SOS calculaton (m)	0.5

SWATH Roll Calibration Log		Line Acceptance Options	
FAN #	14bim01		
DOY_YY	200_14	Max. deviation from parallel (deg)	20
Grid Processor Ver.		Minimum length of overlap (m)	10
SXS file used	14BIM01_JD200	Minimum line separation (m)	5
DGPS source		Maximum line separation (m)	100

PreShift Calibration										
Lines	Calibration Lines	1 and 2	2 and 3	3 and 4	4 and 5	4 and 6	5 and 7	6 and 7	7 and 8	
1	14bim01_2014Jul19_203335	Overlap direction prt/prt or stb/stb	stbd/stbd	prt/prt	stbd/stbd	prt/prt	prt/prt	stbd/stbd	stbd/stbd	prt/prt
2	14bim01_2014Jul19_204146	Std. Dev roll angle	0.149	0.073	0.152	0.089	0.068	0.133	0.246	0.068
3	14bim01_2014Jul19_204830	Mean roll angle	0.253	0.093	0.222	0.128	0.026	0.190	0.259	0.062
4	14bim01_2014Jul19_205547	Value Accepted	y	y	y	y	y	y	y	y
5	14bim01_2014Jul19_210242	Calibration Run Summary								
6	14bim01_2014Jul19_211105	roll port # passes = 4	mean roll angle =	0.077	shifts = degree	0.077				
7	14bim01_2014Jul19_211514	roll stb # passes =4	mean roll angle =	0.231	shifts = degree	0.231				
8	14bim01_2014Jul19_212209	Log file name								
		Grid file name	14BIM01_200_GridProc_7lines_preshift_v2							

Shift 1 Calibration										
Lines	Calibration Lines	1 and 2	2 and 3	3 and 4	4 and 5	4 and 6	5 and 7	6 and 7	7 and 8	
1	14bim01_2014Jul19_203335	Overlap direction prt/prt or stb/stb	stbd/stbd	prt/prt	stbd/stbd	prt/prt	prt/prt	stbd/stbd	stbd/stbd	prt/prt
2	14bim01_2014Jul19_204146	Std. Dev roll angle	0.149	0.076	0.155	0.090	0.068	0.137	0.267	0.072
3	14bim01_2014Jul19_204830	Mean roll angle	0.026	0.015	-0.003	0.046	-0.052	-0.036	0.028	-0.016
4	14bim01_2014Jul19_205547	Value Accepted	y	y	y	y	y	y	y	y
5	14bim01_2014Jul19_210242	Calibration Run Summary								
6	14bim01_2014Jul19_211105	roll port # passes = 4	mean roll angle =	-0.002	shifts = degree					
7	14bim01_2014Jul19_211514	roll stb # passes =4	mean roll angle =	0.004	shifts = degree					
8	14bim01_2014Jul19_212209	Log file name								
		Grid file name	14BIM01_200_GridProc_7lines_shift01_v2							

Shift 2 Calibration										
Lines	Calibration Lines	1 and 2	2 and 3	3 and 4	4 and 5	4 and 6	5 and 7	6 and 7	7 and 8	
1	14bim01_2014Jul19_203335	Overlap direction prt/prt or stb/stb	stbd/stbd	prt/prt	stbd/stbd	prt/prt	prt/prt	stbd/stbd	stbd/stbd	prt/prt
2	14bim01_2014Jul19_204146	Std. Dev roll angle	0.149	0.076	0.155	0.090	0.068	0.137	0.267	0.072
3	14bim01_2014Jul19_204830	Mean roll angle	0.022	0.017	-0.006	0.048	-0.050	-0.040	0.024	-0.014
4	14bim01_2014Jul19_205547	Value Accepted	y	y	y	y	y	y	y	y
5	14bim01_2014Jul19_210242	Calibration Run Summary								
6	14bim01_2014Jul19_211105	roll port # passes = 4	mean roll angle =	0.000	shifts = degree					
7	14bim01_2014Jul19_211514	roll stb # passes =4	mean roll angle =	0.000	shifts = degree					
8	14bim01_2014Jul19_212209	Log file name								
		Grid file name	14BIM01_200_GridProc_7lines_shift02_v2							

<b>Summary</b>	Port Shift 1 Value Used	0.077	Starboard Shift 1	0.231		
	Port Shift 2 Value Used	-0.002	Starboard Shift 2	0.004		
	Port Shift 3 Value Used	0.000		0.000		
	Sum	0.075	Sum	0.235		
	So Port angle if using =	-29.33	+	0.075	=	-29.259
	So Starboard angle if using =	-30.70	+	0.235	=	-30.460

Notes

**SVP Detailed Log**

**SVP Profiles**

**USGS SPCMSC FAN#**

2014-314-FA; 14BIM01

<u>Date Taken</u>	<u>SVP File Name</u>	<u>Time</u>	<u>Easting</u>	<u>Northing</u>
196_2014	svp002	1404	291711.7	3263550.4
196_2014	svp003	1844	291494.7	3263387.6
196_2014	svp004	2043	284759.8	3259041.8
196_2014	svp005	2211	290061.1	3262389.4
197_2014	svp006	1510	283927.9	3258295.4
197_2014	svp007	1707	288371.2	3261186.7
197_2014	svp008	1841	290374.8	3252472.5
197_2014	svp009	2029	286133.6	3259630.4
197_2014	svp010	2134	291916.3	3263322.1
197_2014	svp011	2227	283753.3	3258147.5
199_2014	svp018	1342	292128.3	3262967.7
199_2014	svp019	1506	284149.3	3257787.7
202_2014	svp022	1332	291632.6	3263561.3
202_2014	svp023	1404	288039.1	3261263.3
202_2014	svp024	1433	283645.6	3258463.7
202_2014	svp025	1449	285126.5	3259332.5
202_2014	svp026	1630	286934.9	3260433.6
202_2014	svp027	1933	290097.4	3262231.6
202_2014	svp028	2154	291865.8	3263275.6
202_2014	svp029	2344	290835.9	3262526.6
203_2014	svp030	1332	291966.5	3263205.5
203_2014	svp031	1348	291042.2	3262602.6
203_2014	svp032	1427	286702.4	3259826
203_2014	svp033	1537	290188.6	3261992.2
203_2014	svp034	1703	292040.56	3263026.54
203_2014	svp035	1829	284043.13	3257958.16
203_2014	svp036	1925	289580.3	3261504.59



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193	2256	005_2256	225649			SOL; recording line 5 in opposite direction. Trawl scar as target?		
193	2300					EOL		
193	2306	006_2306	230603			SOL; recording a line perpendicular to the patch		
193	2307					EOL		
193	2312	005_2312	231218			SOL		
193	2314					EOL; recording a line in opposite direction to previous lines. May have been a little off line.		
193	2315	005_2315	231558			SOL; repeat of above but closer to line and in opposite direction		
193	2317					EOL		
<b>JD196-Tuesday 15 July 2014</b>								
196	1335					Waiting for F190 to calibrate. Crew: Browning (Capt.), Wiese (ET), Miselis (PI). Front moving through this morning, conditions not ideal for surveying.		
196	1351					F190 calibrated. Heading toward lines to collect cast.		
196	1403				V000008.txt	svp002; E: 291711.7, N:3263550.4; unable to move .svp cast across network...working on a workaround.		
196	1438					finally able to see share, but can't access it through programs...will have to work on this tonight. Ready to deploy bubble pulser.		
196	1515					Finally have bubble pulser deployed.		
196	1546					Connection at the bp plate lost during deployment. Recovered the plate and the streamer to address issue and abandoned deck to wait out weather.		
196	1551	14BIM01_001_1554	14BIM01_2014Jul15_155157			SOL; going to collect swath while we're waiting on weather to address bubble pulser issues. Started collecting .sxps also.		
196	1555					Crossing the MRGO channel between Breton and Gosier Islands		
196	1601					Recording raw GPS data on Ashtech; had a hard time getting to the screen to see sessions. Receiver #: ZE120013402		
196	1604					turned off Garmin sounder		
196	1615					EOL; head to skiff to pickup some extra crew to assist with bp. Jen on skiff, Jake aboard		
196	1626	14bim01_001_1629	14bim01_2014Jul15_162657			SOL -SXP/SXR		
196	1700					EOL (??) - dealing with Bubble pulser		
196	1739		14bim01_20140715_173959			SOL bubble		
196	1740			14bim01_20140715_173959		SOL-SXP/SXR		
196	1752		14bim01_2014Jul15_175253			SOL-SXP/SXR		
196	1753			14bim01_20140715_175305		SOL bubble		
196								
196	1807	*_003	*_????	????		SOL		
196								
196	1808					no roll corrections; appears we have lost a time sync because time sync cant connect to any servers but only affected swath computer; restarted time server, closed down swath and restart TIU and reestablished link to swath computer.		

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196	1843				V000011.txt	svp003; e:291494.7, n: 3263387.6		
196	1853	003_1853		185250		SOL-HYpack/bp		
196	1854		_185416			SOL -SXP/SXR		
196	1856					Ray bending on SOS; SOS on previous lines may have not been applied.		
196	1906					bp record not looking very good...appears to be some AC(?) noise in the waveform.		
196	1919					Original patch lines were a little too shallow for what we needed. Created patch_v2 in deeper water; spacing is 15m and getting coverage across nadir so .sxps will have to be trimmed.		
196	1924		_192421			SOL		
196	1938					Swath -noise at far range – applied along track filters 1 & 2		
196	1942					seeing heave artifact in swath data		
196	1943					adjusted towing point on hydrophones from cabin roof to stern cleat		
196	1946					tried to bump up speed from 2.5knts to 3ish knts. Bp data looking worse.		
196	1948					turned on heave filter under “sensor filters”; doesn't seem to have helped		
196	1949					turned off heave filter; doesn't seem to have helped.		
196	1951					tried hydro port on bp.		
196	1954		_195421			SOL		
196	1959					along track lines on backscatter & streaks on swath		
196	2023					heave and boat motion still an issue especially with some of the larger swells		
196	2024		_202421					
196	2026					wind and chop picking up with the passing of a small squall; going right into seas—bp data looking like crap; swath data isn't looking so hot either.		
196	2032					moving toward line to stay into seas.		
196	2035					moving back toward line		
196	2036					back on line; seas improving with squall passage		
196	2041					slowing down to do a cast.		
196	2042				V000015	svp004; E: 284759.8, N: 3259041.8		
196	2048					sos applied		
196	2054		_205421			SOL		
196	2059					EOL		
196	2105	004_2105	_210507	_210012		SOL; data looking much better going with the sea		
196	2109					different bottom types in backscatter?		
196	2112					barge wake totally attenuating swath signal		
196	2201					swath crashed.		
196	2202		_220225			SOL-swath; need to update SOS info		
196	2206					SOS Applied – good		
196	2209					slowing down to do a cast.		
196	2210				V000017.txt	svp005; E: 290061.1, N: 3262389.4		
196	2211					underway again		
196	2216					SOS applied, but X-profile still looks like SOS is too slow		
196	2219					at crash, forgot to reapply ray bending. Now applied and X-profile is looking much better!		

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196	2221					SVP #s in Hypack need to be amended to match svp logs associated with swath.		
196	2231					EOL		
196	2231	052_2234	_223152	_223235		SOL; recording data as we transit to beginning of shore perpendicular line		
196	2243					crossing line to come back around to it		
196	2244					EOL-bp; SonarWiz crash		
196	2254					back on line; BP record not showing in Sonar Wiz but data is being recorded to drive.		
196	2323					EOL SonarWiz – troubleshooting		
196	2328			232804		SOL-SBP		
196	2330					EOL, EOD		
<b>JD197-Wednesday 16 July 2014</b>								
197	1430					Personnel: Capt: DeWitt; ET: Wiese, PI: Miselis. Weather much nicer today on the east side of the island. Switched location of primary and secondary antennas for the F190. Primary antenna is now located on the starboard and secondary is port. Uploaded config to F190 and recalibrated. Heading to south end of the survey area to start a line.		
197	1510				V000020	svp006, E:283927.9, N: 3258295.4		
197	1535					bubble pulser deployed		
197	1552	14BIM01_006_1553	14bim01_2014Jul16_155249	14BIM01-20140716_155302		SOL		
197	1558					Swath – Along Track 2 not applied		
197						Bubble – gain=30,low pass=50, high pass = 3000, 500ms trig, key in , rcvr out. SonarWiz gain = 3,100ms acq, + pol, Ext trig		
197	1602					swath and backscatter very interesting here		
197	1613		_162252			heave offsets still in swath		
197								
197	1626					Bubble pulse gain set to 21		
197	1627					heave artifact still an issue; set time server to sync up every minute, so perhaps regions of timing issues will be shorter.		
197	1646					pulser trigger off to test swath backscatter		
197	1648					bubble pule on again – no swath change		
197	1652		_155252					
197	1658					total loss of motion information...affecting swath and hypack. Appears to be a GPS jump? Marked with Hypack target.		
197	1659					Oops. Forgot to start logging MCOMs. Started now.		
197	1707				V000022	svp007; E:288371.2, N: 3261186.7		
197	1712					SOS cast applied		
197	1713					Just noticed Marine Star correction lost. Running in stand-alone mode now. Probably related to big GPS excursion noted at 1658.		
197	1718					EOL		
197	1725					Restarted F190 and acquired Marine Star correction immediately. Recalibrating F190.		
197	1823					F190 recalibrated. Started recording MCOM.		
197	1825		_182506			SOL sxr/sxp		
197	1826	006_1826				SOL hypack		
197	1828			_182811		SOL bp		

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197	1836					weird and abrupt change in depth across port swath
197	1839					SOS artifact in Swath ??
197	1842				V000024	svp008; E: 290374.8, N: 3252472.5
197	1847					SOS cast applied-cross profile artifact corrected
197	1901					EOL Swath, Hypack. Bubble
197	1905	005_1905	_190533			SOL; no bp on this line
197	1906					5 kts
197	1916					Used "synchronize to GPS time" under Tools...no apparent change in heave artifact...
197	1921					tried to load "actions log" and got an "out of memory" warning that will not go away. Checked both raw and processed data files and both are still recording, so we'll continue to record and deal with the errant windows on the next line.
197	1935		_193535			SOL
197	1958					the windows do block a fair amount of the cross profile making it difficult to see whether or not there are SOS artifacts. Ripples at the far range, port.
197	2005		_200535			SOL
197	2011					EOL, had to force quit sea swath to end line, checked data files and they appear to be complete.
197	2012	008_2012	_201224			SOL; no bp on this line
197	2023					very cool bathy down here
197	2029				V000027	svp009; E:286133.6, N: 3259630.4
197	2040					SOS cast applied
197	2047					may want to consider interpolating between casts now that we have more svp cast coverage; may try to do that on the next line.
197	2100					turns out that when there's very little boat motion, the bathy data look great.
197	2112					EOL
197	2113				V000030	svp010; E: 291916.3, N: 3263322.1. SOS cast applied prior to SOL
197	2125	007_2125	_212518			SOL; no bp on this line. Started Hypack a little after swath. SOS applied prior to start of line.
197	2127					applied Along Track 2 filter
197	2155		_215522			SOL
197	2213					good backscatter target here; oil pipeline
197	2218					front on the water attenuated the signal
197	2226					EOL
197	2227				V000032	svp011; E: 283753.3, N: 3258147.5; SOS cast applied prior to SOL
197	2245	010_2245	_224506	_224512		SOL -changed out SB hydrophone tuna ball for smaller float
197	2255					current pushing boat around
197	2300					Swath -"Out of Memory " problem – unable to change swath parameters
197	2309					lots of roll...from an unknown source. It's pretty flat out here now. Bp data looking good at 3knts.
197	2312					seems to be some kind of 'high' off to port....edge of platform?
197	2315		_231508			SOL
197	2316					possible SOS artifact here.

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197	2329					SOS issue – smiley face
197	2338					rig platform targets to stbd.
197	2340					abrupt change in bathy record; probably switched from on SOS table to another, but SOS artifact appears to be better. Need to try “interpolate between tables” setting tomorrow.
197	0005					Bad sync error in Hypack. No other issues with any other computers.
197	0019					Autopilot went awry. Had to come around to get back on line. Did not suspend logging.
197	0027					on line
197	0028					EOL - phone caught on plate
197	0037					EOL Swath
<b>JD198-Thursday 17 July 2014</b>						
198	1320					Personnel: Capt: DeWitt; ET: Wiese, PI: Miselis. Weather nicer than yesterday morning—a little chop and ~ 1ft seas. Deployed swath and began calibrating F190.
198	1335				V000034	svp012; E: 291707.1, N: 3263469.7
198	1345	14BIM01_009_1345	14BIM01_2014Jul17_134548			SOL; first line of the day was aborted—on wrong Hypack line. No bp on this line.
198	1415		_141550			SOL
198	1423					We've been messing around with the attitude sensor corrections; will try entering in a “heave offset” value when we can get a measurement between the MRU and the water line before the next line.
198	1424					slight deviation from line.
198	1442					SOL; trying to save sxps across the network. Also added a heave offset of 0.68 m to attitude sensor corrections.
198	1449				V000037	svp013; E: 283925.1, N: 3257928.9
198	1504	012_1454	_150437			SOL – Hypack -1445 not stopped
198	1509					heave offset seems to have eliminated heave artifact in data...
198	1529				V000039	svp014; E: 287362.5, N: 3260186.7
198	1534		_153442			SOL; SOS cast applied
198	1535					diverting around platform
198	1604					heading into the seas..data quality declining toward the end of this line; EOL
198	1605	011_1605	_160530			SOL
198	1631					diverting around platform
198	1635		_163532			SOL; seem to be seeing heave artifact again.
198	1659					abrupt decrease in swath width with no apparent change in depth.
198	1703					EOL
198	1705	014_1705	_170547			SOL; will wait to deploy bp until going with seas again.
198	1735		_173548			SOL
198	1801				V000041	svp015; E: 290490.5, N: 3262073.9
198	1805		_180548			SOL
198	1814					EOL; just remembered to start logging MCOM
198	1819	013_1819	_181925			SOL
198	1849		_184927			SOL

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198	1916					diverting around platform		
198	1923					EOL		
198	1940	016_1940	_194046	_194048		SOL		
198	1941					SB -gain=12, low=50, hi=3000, 500ms trig		
198	1943					autopilot takes over....		
198	2010		_201048			SOL		
198	2024					diverting around barges		
198	2033				V000043	svp016; E: 286839.5, N: 3259616.3		
198	2038					SOS cast applied		
198	2040		_204048			SOL		
198	2101					out of memory window popped up in swath again.		
198	2110		_211048			SOL		
198	2155					target in backscatter—wreck?		
198	2206					EOL		
198	2212					Edited swath pro config file to decrease circular buffer size from 600 to 100 to use less memory and hopefully prevent "out of memory" error.		
198	2215	015_2214	_221600			SOL		
198	2246		_224607			SOL		
198	2254					SymmTime appears to not be running. Icon from lower right task bar is no longer showing up.		
198	2257					diverting around barges		
198	2259					coming back around to the line		
198	2303					Frowny profile...need to do a cast.		
198	2305				V000045	svp017; E: 285428.1, N: 3258745.8		
198	2307					wake/front attenuated signal		
198	2309					SOS cast applied		
198	2315					EOL, EOD		
<b>JD199-Friday 18 July 2014</b>								
199	1321					Personnel: Capt: DeWitt, ET: Wiese, PI: Miselis. Weather conditions similar to yesterday, but we're expecting weather later today. Began F190 calibration.		
199	1333					mcom calibrated		
199	1339					mcom logging		
199	1343				V000047	svp018; E: 292128.3, N: 3262967.7		
199	1352	14bim01_017_1352				SOL		
199	1358		14bim01_2014Jul18_135825			SOL		
199	1422					didn't see that MCOMs were actually being copied to drive, so stopped and restarted logging to confirm.		
199	1428		_142829			SOL		
199	1441					heading into white caps coming from the SE		
199	1446					diverting around barges		
199	1448					back on line		
199	1454					lots of roll/artifacts in the data today...		
199	1458		_145829			SOL; boat wake attenuated signal		
199	1504					EOL		
199	1506				V000050	svp019; E: 284149.3, N:3257787.7		
199	1513	018_1513	_151307			SOL		
199	1522					data are looking crappy, even going with the seas. Grrr. It's as if the swath isn't getting any heading correction at all.		

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199	1527					diverting around barges
199	1528					back on line
199	1542					"out of memory" warning again...grrr.
199	1543		_154312			SOL
199	1545					need to figure out this heave issue; will finish this line and head back to VI to troubleshoot
199	1608					EOL; heading back to skiff to get to bottom of heave issue.
<b>JD200-Saturday 19 July 2014</b>						
200						14BIM01_200.sxs, Using PC clocks/swathproconfig.txt changed/port – IMU f190 measurement corrected) . Heave looks better
200	2034	14BIM01_007_2034	14BIM01_2014JUL19_203335			SOL, F190 logging, roll cal lines
200	2040					EOL
200	2041	006_2041	_204146			SOL
200	2047					EOL
200	2048	005_2048	_204830			SOL
200	2054					EOL
200	2055	004_2055	_205547			SOL
200	2101					EOL
200	2102	003_2102	_210214			SOL
200	2107					EOL – Generator hiccup
200	2111	003_2111	_211105			SOL
200	2114					EOL
200	2115	002_2115	_211514			SOL
200	2121					EOL
200	2122	001_2122	_212209			SOL
200	2127					EOL
200	2129				V000052	svp020: E: 287226.4, N: 3265381.3
200						EOD
<b>JD201-Sunday 20 July 2014</b>						
201	2013					Personnel: Capt: DeWitt, ET: Wiese, PI: Miselis. Stormy morning kept us off the water, but the cells seem to be more rain than wind now, so we're trying to get some lines done. F190 calibrating.
201	2016					F190 calibrated. Waiting on time server to sync up.
201	2024				V000055	SVP021; E: 291648.7, N: 3263480.3
201						entered in new roll offsets based on yesterday's roll lines and corrected antenna offsets: T1 = -29.26 and T2 = -30.46. These are only ~0.2 of a degree different than the originals.
201	2041					Time server still not synced. Restarting.
201	2142					Time server still not synced. Running it from server time to see if that will work. Should take 2-10 minutes.
201	2202					Time server still not synced. Will pull up head and go back to VI to see if we can get a portable generator to power the server.
<b>JD202-Monday 21 July 2014</b>						

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202	1320					Personnel: Capt: DeWitt, ET: Wiese, PI: Miselis. Weather has finally seemed to pass, so we're getting an earlier start. F190 calibrating. Using Timenet timeserver on swath.		
202	1322					F190 calibrated. Heading toward lines to collect cast.		
202	1332				V000057	svp022; E: 291632.6, N: 3263561.3		
202	1338	14BIM01_001_1338	14BIM01_2014Jul21_133813			SOL – down sampling SXP to 20cm		
202	1403					seeing possible SOS artifact; slowing down to do a cast		
202	1404				V000059	svp023; E: 288039.1, N: 3261263.3		
202	1408					SOL; SOS cast applied		
202	1413					with all of the rain and proximity to the river, SOS continues to be an issue. Getting a slight frown here even having taken a cast less than 10 minutes ago.		
202	1429					Symmeticom SYNCED – continue using TIMENET		
202	1432					EOL		
202	1433				V000061	SVP024; E:283645.6, N: 3258463.7		
202	1437					SOS Applied – good		
202	1438	002_1438				SOL		
202	1449					svp025; E: 285126.5, N: 3259332.5		
202	1453				V000063	SOS cast applied		
202	1508					SOL		
202	1515					“out of memory” warning again on swath.		
202	1520					slight SOS issue here.		
202	1528					seem to be seeing more of a heave artifact now...timing or “out of memory” link?		
202	1537					EOL		
202	1554					Swath PC time sync now on Symmetricom		
202	1559	003_1600				SOL; only saving .sxrs to see if we can avoid an “out of memory” error		
202						seem to be seeing more of a heave artifact with Symmetricom; should compare lines 1 or 2 with line 3 this evening.		
202	1629					SOL		
202	1630				V000066	svp026; E: 286934.9, N: 3260433.6		
202	1652					EOL		
202	1653	004_1653				SOL		
202	1723					SOL		
202	1750					EOL		
202	1751	005_1751				SOL; will try to write .sxps again		
202	1758					GPS is causing boat on Hypack and Garmin to crab		
202	1809					“out of memory” warning again on swath....seems to be related to writing .sxps		
202	1821					vertical lines no longer appearing in backscatter...???		
202	1822					SOL		
202	1848					EOL		
202	1849	006_1849				SOL – not saving SXP		
202	1850					Vert lines on backscatter		
202	1852					Workboat wake		
202	1919					SOL		
202	1933				V000068	svp027; E: 290097.4, N: 3262231.6; started new .sxs called 14BIM01_202a.sxs		

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202	1949					now seeing vertical stripes on the bathy waterfall as well; EOL		
202	1954	007_1954	_195400			SOL		
202	2021					trying to troubleshoot network issue on Capp-C. At some point "out of memory" error came up. Not even saving .sxps...this is ridiculous.		
202	2040					target in backscatter—pipeline.		
202	2051					EOL		
202	2052	008_2052	_205227			SOL		
202	2100					EOL		
202	2101		_210121			SOL – project structure changed – disable auto time save		
202	2131					EOL		
202	2131		_213120			SOL		
202	2153					EOL		
202	2154				V000070	svp028; E: 291865.8, N: 3263275.6		
202	2156		_215606			SOL; swath only—trying to save .sxrs and .sxps but without the automated saving function		
202	2157	009_2157				SOL, Hypack		
202	2219					hmmm....seeing more "heave" in the data while saving .sxps?		
202	2224					"out of memory" warning again on swath. Definitely seems to be related to saving .sxps.		
202	2226					EOL swath— swath out of memory		
202	2228		_222842			SOL		
202	2229					going through our own wake		
202	2253					EOL		
202	2254	010_2254	_225402			SOL		
202	2309		_230903			SOL		
202	2324		_232403			SOL		
202	2339		_233903			SOL; subtle SOS artifact here?		
202	2344				V000074	svp029; E: 290835.9, N: 3262526.6		
202	2353					EOL, EOD		
<b>JD203-Tuesday 22 July 2014</b>								
203	1317					Personnel: Capt: DeWitt, ET: Wiese, PI: Miselis. Very calm this morning. Started F190 calibration.		
203	1326					F190 calibrated. Heading toward lines to collect cast.		
203	1332				V000076	svp030; E: 291966.5, N: 3263205.5		
203	1339					svp030 applied		
203	1341	14BIM01_011_1341	14BIM01_2014Jul22_134136			SOL		
203	1344					Saving MCOM		
203	1347					Lots of smiling here...doing another cast.		
203	1348				V000078	svp031; E: 291042.2, N: 3262602.6		
203	1354					svp applied		
203	1356		_135641			SOL		
203	1403					"out of memory" warning again on swath...wtf. Can't update default SOS or enter in any new casts without doing a hard shutdown of the program. Will try running SwathPlus in WindowsXP mode on next restart.		
203	1408					diverting around platform		
203	1411		_141141			SOL		

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203	1414					Garmin sounder now off.		
203	1419							
203	1423		swath			EOL – forced		
203	1425					XP mode tried – not working		
203	1427				V000080	svp032; E: 286702.4, N: 3259826.0		
203	1432					svp032 applied		
203	1434		_143418			SOL		
203	1445					“out of memory” warning again on swath. Also, lost vertical stripes of noise on the backscatter.		
203	1452					EOL – forced shutdown		
203	1457	012_1458	_145734			SOL		
203	1510					hard to tell if having SOS issues here or not...very dynamic changes.		
203	1515					“out of memory” warning again on swath.		
203	1524					EOL-swath only		
203	1525		_152545			SOL; restarted swath as diverted around platform. No restart in Hypack.		
203	1530					vertical lines appearing in backscatter again.		
203	1537				V000082	svp033; out of memory E (hypack): 290188.6, N(hypack): 3261992.2		
203	1540					Switched swath to “A” WIN XP sp3		
203								
203	1645	012_1646	_164544			SOL		
203	1657					SOS artifact here. Will take a cast at the end of this line.		
203	1700					EOL		
203					V000084	svp034; E: 292037.8, N: 3263032.7		
203						Out of memory errors are now prohibiting the recording of raw data. Need to figure this out before starting line.		
203	1732	013_1732	_173238			SOL...finally. Increased transmit pulse length to 148 cycles to drop across track resolution to 0.47m.		
203						obvious SOS issue in the data, but we just need to collect some data and make sure we don't run into any “out of memory” errors....		
203	1747		_174745			SOL		
203	1748					“out of memory” error but was able to get window to go away...error related to start of line?		
203	1802		_180245			SOL; got another “out of memory” error upon automatic file creation. Will disable for next line.		
203	1805					obvious SOS artifacts in the data, but we're not really feeling like changing too many things right now since we are actually collecting data.		
203	1817		_181745			SOL; will OOM error again.		
203	1828					EOL		
203	1829				V000086	svp035; E: 284042.9, N: 3257958.3		

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203	1842	014_1835	_184253			SOL, 13BIMNEW_C (from the 13bim07 folder) saved as 14BIM01_203b. Was able to save .sxrs and .sxps with this file prior to logging last line. Also turned autosave off. Also, if have to restart will not use the 'read file' button to read in SOS values. Instead will cut and paste values into swath. In shallow water and seas are picking up with a storm building south of us so record is looking noisy, especially to stbd. Increased # of cycles for transmit pulse length from 34 to 148...will affect resolution of backscatter.		
203	1855					water front attenuating swath signal; may not be much useable data on stbd ducer		
203						sonar, attitude and position are all set to sonar clock will end line and restart recording with PC clock settings.		
203	1859					EOL-swath only		
203	1900		_190009			SOL-swath only		
203	1916					EOL		
203	1916		_191635			SOL		
203	1926				V000088	svp036; E: 289580.3, N: 3261505.0		
203	1930					svp036 applied		
203	1934		_193406			SOL		
203	1942					noisy water column; seas about 1 ft now and stbd of the boat.		
203	1947					EOL		
203	1948		_194828	015_1948		SOL		
203	2000					autopilot took over...coming around back to line.		
203	2013		_201344			SOL		
203						lots of editing to do on this line.		
203	2045					EOL		
<b>JD204-Wednesday 23 July 2014</b>								
204	1331					Personnel: Capt: Kelso, ET: Wiese, PI: Miselis. Little rain cells this morning, but dry now. Forecast calling for SW winds 5-10knots. F190 calibrating.		
204	1346					F190 calibrated. Heading toward lines to collect cast.		
204	1348				V000090	svp037; E: 292083.9, N: 3262915.0		
204	1355	14BIM01_017_1355	14BIM01_2014Jul23_135511			SOL		
204	1409					coming off the platform? Nope, just a depression.		
204	1422					looks like far range off the port is just far enough to pick up a drop off but not consistently.		
204	1427					definitely looks like we're seeing the edge of the platform now.		
204	1428		_142848			SOL		
204	1430				V000092	svp038; E: 286849.8, N: 3259559.6		
204	1433					diverting around pilings		
204	1436					back on line		
204	1437					svp038 applied		
204	1441					water front right along the port side...may have imaged it a bit		
204	1442					just started up Ashtech		
204	1445					current pushing boat around		

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204	1447					weather deteriorating...narrow storm cell moving through. Seas picking up a bit.		
204	1449					EOL		
204	1450	016_1451	_145051			SOL		
204	1452					wind chop on the water now that we're in the storm. Going with the seas.		
204	1458					SOS at head 1515...probably from the rain.		
204	1500					rolling a lot with the seas; starboard side struggling in the seas.		
204	1511					lots of editing to do on this line given the weather.		
204	1516					lots of smiling here...SOS at the head is fluctuating between 1515 and 1528. A cast probably won't help. Changed default SOS to 1525.		
204	1518		_151831			SOL		
204	1530					SOS is looking better now.		
204	1538		_153855			SOL		
204	1542					playing around with transmit power to determine if we can reduce returns from water surface...it's just super noisy out here...		
204	1555					EOL		
204						no MCOMs recorded for these two lines; going to recover swath...will come back out when weather improves since data are looking so crappy.		
204	1838					Back out on the water. Conditions are much calmer. Calibrating F190.		
204	1907					F190 Calibrated		
204	1910				V000094	svp039; E: 292157.2, N: 3262761.2		
204	1915	019_1915	_191525			SOL; SOS cast applied		
204	1935		_193512			working off old cast. Need to take a new one.		
204	1937				V000096	svp040; E: 288945.0, N: 3260774.8		
204	1943					SOS applied		
204	1953					Deleted 2 sound casts out of 14BIM01_204.sxs. Renamed 14BIM01_204b.sxs		
204	1956		_195636			SOL		
204	1958					Pilings		
204	2014					Crabbing down the line; heading and line azimuth are off by about 20 degrees, some suggestion in coverage window that there may be an offset between the swath and the trackline, but it's difficult to tell in the coverage screen. Will have to check in with processors to see if this apparent artifact adversely affect the data		
204	2020					EOL		
204	2021	018_2021	_202114			SOL; doing some serious crabbing down these lines...		
204	2038					Pilings		
204	2042		_204202			SOL		
204	2043					not crabbing as much		
204	2101					autopilot went wacko – in circles		
204	2116		_211643			SOL		
204	2121					Crabbing		
204	2123					EOL		
204	2124	021_2124	_212450			SOL		
204	2129					crabbing in the MRGO channel again...		

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204	2147		_214744			SOL		
204	2156					crabbing again, about 10 degrees to stbd.		
204	2203				V000099.txt	svp041; E: 287255.8, N: 3259525.6		
204	2208					SOS applied		
204	2224					EOL		
<b>JD205-Thursday 24 July 2014</b>								
205	1318					Personnel: Capt: Kelso, ET: Wiese, PI: Miselis. Forecast calling for SW winds 5-10knots; calm this morning. F190 calibrating.		
205	1331					F190 Calibrated. Going toward line to do a cast. Logging MCOMs.		
205	1334				V000101	svp42; E: 284263.2, N: 3257711.2		
205	1340					SOS Applied – good		
205	1341	14BIM01_020_1341	14BIM01_2014JUL24_134230			SOL – writing SXR's and SXP's to CAPP-A. No apparent memory issues.		
205	1347					Lots of noise in the water column here		
205	1351					SOS issue here already.		
205	1414				V000103	svp043; E: 288832.9, N: 3260646.3		
205	1420					SOS Applied – good		
205	1420		_142037			SOL		
205	1429					dropped our speed from 6+ knots to about 5.5 to improve range.		
205	1437					EOL		
205	1439	023_1439	_143922			SOL		
205	1500		_150020			SOL		
205	1528					weather deteriorating...narrow storm cell moving through. Seas picking up.		
205	1537					very little coming from the far range here...seas coming to from stbd.		
205	1544					seas settling down now and record is improving. Didn't start a new line because we were watching for water spouts.		
205	1547					bedforms!		
205	1550					EOL		
205	1550	022_1551	_155057			SOL		
205	1600					Signal degradation		
205	1617				V000105	svp044; E: 287627.3, N: 3259706.0		
205	1622					SOS applied		
205	1630		_163044			SOL		
205	1651					EOL		
205	1653	025_1653	_165352			SOL		
205	1712					Shit. Just remembered that we forgot to include updated phase offsets (configuration --> phase offsets) and roll calibration offsets to everything collected since 1842 on JD203. All .sxps (only collected this JD) will have to be rewritten with correct phase and roll offsets. Saved correct offsets to 14BIM01_205.sxs, so .sxps written from now on should be ok.		
205	1732		_173231			SOL		
205	1735					crabbing slightly here.		
205	1802					EOL		
205	1805	024_1805	_180519			SOL-bedforms!		

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205	1815		_181515			SOL—trying to go for smaller file sizes		
205	1835		_183506			SOL		
205	1849					crew boat wake...with mysterious brown goo at the surface...hmmmm		
205	1851		_185131			SOL		
205	1853				V000108	svp045; E: 290665.5, N: 3261455.4		
205	1857					SOS applied		
205	1906					EOL		
205	1908	027_1908	_190814			SOL – crabbing to stbd.		
205	1927					major front between to water masses—signal attenuation.		
205	1928		_192802			SOL		
205	1944					sea breeze (?) kicking up out of the southwest...white caps and noise at far range..		
205	1949		_194928			SOL		
205	1956					seem to be crabbing again...		
205	2005				V000110	svp046; E: 285613.2, N: 3257943.6		
205	2009					SOS applied		
205	2016					EOL		
205	2017	026_2017	_201754			SOL-crabbing along the line...		
205	2032					not crabbing as much		
205	2042		_204311			SOL		
205	2100		_210052			SOL		
205	2112					crabbing		
205	2117					EOL		
205	2118				V000113	svp047; E: 292523.2, N: 3262281.0		
205	2121					14BIM01_205b.SXS created. SOS position 1 of previous SXS SOS table replaced with SVP047 values.		
205						Remaining SOS table values to be replaced by successive SVP cast values.		
205	2121	029_2123	_212151			SOL – whitecaps – into seas, 1' – 2'.		
205	2140		_214017			SOL		
205	2200		_220011			SOL		
205	2215					lots of noise at the far range...again...		
205	2216					we've been crabbing along this line for some time.		
205	2226					SOS may need to be adjusted slightly here.		
205	2228					EOL		
<b>JD206-Friday 25 July 2014</b>								
206	1335					Personnel: Capt: Kelso, ET: Wiese, PI: Miselis & Flocks. Winds out of the W ~10 knots...rolly out here. F190 calibrating.Had to restart the f190 and the software several times this morning. It was hanging up on the heading initialization.		
206	1406					F190 calibrated. Heading toward lines to collect cast.		
206	1413				V000116	svp048; E: 284482.9, N: 3257194.5		
206	1419					SOS applied		
206	1420	14BIM01_028_1420	14BIM01_2014Jul25_142030			SOL – SXR/SXP		
206	1426					Bad Sync error in Hypack		
206	1440					noise at the far range		
206	1441		_144138			SOL		
206	1500		_150020			SOL		
206	1509					noise at the far range to port truncating swath range		

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206	1514					EOL
206	1514				V000119	svp049: E: 292546.5, N: 3262241.1
206	1520	031_1520	_151942			SOL-SXR/SXS -F190 logging started/not started previously. F190 .RD raw files saving.
206	1540		_154025			SOL
206	1556		_155655			SOL
206	1557				V000121	svp050: E: 287668.7, N: 3258925.5
206	1605					initially applied a cast, but didn't have any measurements between the surface and 1.1 m, so appended 3 measurements from the upcast to the downcast; saved as svp050
206	1611					Lots of rolling on this line.
206	1622					EOL
206	1621	030_1622	_162150			SOL – SXR/SXP - – CAPP-C Hypack PC is drifting +10sec . 'Bad Sync' on Hypack
206	1641		_164147			SOL
206	1701		_170109			SOL
206	1712					Tide line
206	1719					EOL
206	1721	0033_1722	_172137			SOL – CAPP-C Hypack synced
206	1731					Tide line
206	1744		_174404			SOL
206	1806		_180636			SOL—a bit of frowning toward end of last line and beg of this one.
206	1808				V000123	svp051; E: 286543.2, N: 3258015.3
206	1809					Hypack crashed
206	1810	033_1810				SOL – network seems slower
206	1817					SOS applied – looks smiley Bad SOS cast?
206	1822					SOS looks fine – EOL
206	1824	032_1823	_182401			SOL
206	1829					Tide line
206	1830				V000125	svp052: E: 285623.8, N: 3257497.7—trying to nail the SOS here, but it's been difficult.
206	1835					SOS applied—still not good. Processors will have to play around with SOS here.
206	1837					crabbing
206	1839					turned ray bending off and back on again and the SOS issue seemed to improve but not sure if this is because of water column changes or an actual improvement in the cast.
206	1844		_184421			SOL
206	1854					slight smile here?, crabbing about 10 degrees to port
206	1858					another front in the water; lots of signal attenuation.
206	1903				V000127	svp053; E: 289254.4, N: 3260166.2—trying to nail down SOS in water mass associated with MRGO
206	1907					SOS Applied – good
206	1913		_191324			SOL
206	1914					seas have died down considerably.
206	1918					Big frown in cross-profile. SOS is killing us today—it's so variable. Will take a cast at the end of this line and will likely stop writing .sxps since there's no sense in writing data that will have to be reprocessed anyway!

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206	1925					EOL		
206	1927				V000129	svp054; E: 292775.3, N: 3261845.8		
206	1936	035_1936	_193650			SOL—sxrs only.		
206	1937					crabbing about 20 degrees to stbd.		
206	1939					not getting a very wide swath given the depth in this muddy water.		
206	2000		_200000			SOL		
206	2002					far range is picking up on pycnocline at ~1-1.5m water depth.		
206	2009					EOL. Engines died.		
206	2020					Oil added -OK		
206	2026		_202026			SOL		
206	2035					slight smile here, but already have tried to get casts in this area. It's pretty dynamic.		
206	2043					slight frown here.		
206	2050		_205008			SOL		
206	2051					EOL		
206	2052	034_2052	_205232			SOL		
206	2054				V000131	svp055; E: 285118.1, N: 3256994.1; got pushed quite a bit off line.		
206	2100					SOS Applied – didn't really make much of a difference...ugh.		
206	2105					profile is smiling now.		
206	2114					SOS doesn't seem to be an issue now.		
206	2115		_211531			SOL		
206	2123					current pushing boat around		
206	2128					Port far range is picking up on pycnocline at ~1-1.5m water depth again		
206	2134					slight smile here		
206	2142		_214211			SOL		
206	2144					KK: "and the crabbing begins..." About 15-20 degrees to port		
206	2150					pycnocline attenuating swath signal...especially to port.		
206	2158					EOL		
206	2200	037_2200	_220010			SOL		
206	2202					crabbing again, about 20 degrees to stbd. Seas have picked up again: heading into ~1 ft from the SSW		
206	2215					not crabbing as much now.		
206	2217				V000133	svp056; E: 290656..7, N: 3260290.7		
206	2220					SOS Applied		
206	2221		_222146			SOL		
206	2227					no crabbing here.		
206	2233					SOS issue		
206	2237					Swath head power cube fell out momentarily		
206	2250		_225025			SOL—crabbing again 10-15 degrees to stbd., seas are getting rougher.		
206	2252					crab angle increasing		
206	2308					EOL		
<b>JD207-Saturday 26 July 2014</b>								
207	1353					Personnel: Capt: Fredericks, ET: Wiese, PI: Miselis. Seas aren't too bad this morning. .F190 calibrating.		
207	1424					F190 Cal – saving MCOM/RD		

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207	1428				V000135	svp057; E: 284884.0, N: 3256711.5		
207	1433					svp applied		
207	1435	036_1436	14BIM01_2014Jul26_143545			SOL SXR -14BIM01_207.SXS		
207	1530					EOL		
207	1531				V000137	svp058; E: 292870.6, N: 3261823.2		
207	1534	039_1535	_135534			SOL		
207	1553					avoid wellhead		
207	1555					Pilings		
207	1610				V000139	svp059; E: 288087.6, N: 3258487.2		
207	1633					EOL		
207	1633	038_1633	_163351			SOL – flat sea		
207	1635					Stbd attenuated by wake		
207	1636					Port side picking up pycnocline		
207	1643					surfing crew boat wake		
207	1711				V000141	svp060; E: 290597.7, N: 3260181.1—forgot to get a here and now, so appended cast table with Hypack target position.		
207	1727					EOL		
207	1729	041_1729	_172925			SOL		
207	1752					seas picking up under a cell that's forming around us. Data quality deteriorating and far range picking up upper water column noise and the pycnocline. Losing about 10m of range on port & stbd.		
207	1814				V000144	svp061; E: 286905.4, N: 3257522.7		
207	1831					EOL		
207	1832	040_1832	_183302			SOL		
207	1838					seas have calmed down after passage of cell.		
207	1901					crew boat wake...lots of rolling.		
207	1917					signal attenuation at the pycnocline.		
207	1931					EOL		
207	1933	043_1933	_193306			SOL		
207	1957					crew boat wake.		
207	2013					far range is picking up on pycnocline at ~1.5-2m water depth.		
207	2023					picking up mid-range upper water column noise on port side now.		
207	2033				V000146	svp062; E: 285885.6, N: 3256620.6		
207	2039					EOL		
207	2040	042_2040	_204023			SOL		
207	2043					grounding the TIU to the swath pole; noticeably improves noise in amplitude signal		
207	2049					going with the seas now...signal quality improved.		
207	2053					current has picked up. Crabbing ~10 degrees to port.		
207	2137					EOL		
207	2137	045_2137	_213751			SOL		
207	2138					Astech card full		
207	2203					Tried to start a new session after deleting some of the older sessions, but can't get to the screen that shows the sessions incrementing, so we're not sure if it's recording or not.		
207	2224					Crabbing 15 – 20 deg Stbrd		
207	2232					having a hard time with port signal...clearing the buffers helps momentarily but then the range is reduced again.		

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207	2241					EOL		
207	2242	044_2242		_224208		SOL		
207	2253				V000148	svp063; E: 287025.5, N: 3257222.1		
207	2309					lots o' bait fish in the water...signal attenuation.		
207	2327				V000150	svp064; E: 291794.7, N: 3260272.0		
207	2334					crabbing about 10-15 deg to port.		
207	2338					EOL		
<b>JD208-Sunday 27 July 2014</b>								
208	1428					Personnel: Capt: Reynolds, ET: Wiese, PI: Miselis. Little later of a start because Flocks/Bernier went to Venice this morning. Top plate of swath mount was difficult to bolt down over the last few days, so we made some adjustments this morning. Seas aren't too bad. F190 calibrating.		
208	1452					F190 not getting a nav lock, despite having 10 primary sats and 11 secondary sats. It's also receiving GPS packets. Not sure why it's taking so long to get nav lock.		
208	1710					Many calls from F190 users today at customer service. Apparently, the problem is with Novatel receivers are no longer receiving the right corrections. Coda is aware of the problem and will give us a call back. We'll be picking up the head and heading back to the VI. Grrrrr.		
208	2124	001_2125		14BIM01-20140727_212440		Trying to collect bubble pulser data. Twin Vee is running ahead and collecting single beam. Nav for bp and Hypack is coming from Ashtech. BP settings: Gain = 21, LF = 50, HF = 3000, Trig Rate = .500. Conditions south of Breton are pretty poor right now...a storm cell has popped up south of us and the seas are ~2-3ft with white caps. BP data are looking pretty poor—can barely make out seafloor. The sound source and phones are being towed ~50 ft behind the Sallenger—sound source from the port and phones from the stbd.		
208	2150					dropping speed from ~4knts to ~3.5 knts.		
208	2201					EOL-bp; will try to rerun this line when conditions improve.		
208	2203					EOL -Hypack		
<b>JD209-Monday 28 July 2014</b>								
209	1341					Personnel: Capt: Reynolds, ET: Wiese, PI: Miselis. Seas are not favorable for bubble pulser work—10-15 knots out of the W with 2 ft seas and intermittent 3ft rollers. Will try to collect some data going with the seas. Twin Vee is collecting single beam ahead of us, but in these conditions, it will likely be difficult.		

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209	1421					bp system deployed. Towing sound source from port davit and phones from stbd, atop swath mount which keeps the tow point ~2ft above the gunwale. Definitely like having the phones towed from above the gunwale rather than at it. Plate and phones are riding about 50ft astern. Gain = 21, LF = 50, HF = 3000, Trig Rate = .5 Speed is ~3knots.		
209	1428					Data are not looking great. Power supply is plugged into a wall outlet and is grounded to the boat. Seeing diagonal noise in the record and intermittent spikes.		
209	1432					Just switched over to UPS to determine if signal improves.		
209	1437					UPS does seem to reduce noise in the record slightly. Will keep it plugged into UPS. Not expecting miracles in these conditions but should try to go with the seas to see how record improves.		
209	1453	001_1453		14BIM01-20140728_145312		SOL, speed 3-3.5knts. Re-running line 1 from yesterday.		
209	1508					dropping speed to 2.5-3 knots. Seafloor is better defined, but there's either no geology here or we're not getting good penetration.		
209	1607				_160720	SOL		
209	1655					Seas have calmed down a bit. There are still some white caps but the seas are only about a ft now.		
209	1657					EOL		
209	1713	003_1713			_171156	SOL; trying a trig rate of .25 s with same LF and HF settings. Heading into the seas now. Definitely seeing electrical noise in the signal trace despite the fact that the system is grounded. Speed is 2.5-3 knots. Streamer is riding closer to the plate in this direction.		
209	1719					Seem to be having more drop outs in this direction...related to seas.		
209	1747					switched trig rate back to .5s		
209	1750					with the current and the sea state the streamer keeps scooting over closer to the plate, so instead of being separated by 8-10 ft, they're less than 5 feet apart and often right next to each other.		
209	1758					Added a saltwater ground off the port side. Lessened the intensity of the electrical noise, but the noise is still present.		
209	1814				_181441	SOL		
209	1850					Definitely some features at depth on this line.		
209	1903					EOL		
209	1918	005_1918			_191809	SOL; seas have calmed down again and we're going with them. Speed = 3-3.5 knots.		
209	1931					going a little faster here, not seeing very much so far, but didn't see too much at the end of the last line either.		
209	1953					BJ breaks horn		
209	2000					seas picking up out of the ssw coming from stbd side.		

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209	2001					should maybe consider doing even lines for cross lines...seeing some interesting stuff where line 5 crosses line 14.		
209	2014					reflectors cross line 15 too.		
209	2022				_202219	SOL		
209	2027					Speed = 3.5-4 knots...current must be picking up.		
209	2047					EOL		
209	2105	007_2105			_210553	SOL; seas have definitely picked up, but from the sw. Speed = 2.5-3 knots. Data quality degrading.		
209	2132					bumped up the gain to 27 from 21		
209						seas have picked up a little more...lots of white caps. Speed varying from 2-3 knots.		
209	2205				_220518	SOL		
209	2211					seas have picked up to 2-3 ft. now. Data not looking good.		
209	2226					EOL; data looking like crap. Not worth it.		
<b>JD210-Tuesday 29 July 2014</b>								
210	1424					Personnel: Capt: Reynolds, ET: Wiese, PI: Miselis. Seas out of the northwest this morning, 2-3 ft. bp deployed, plate from the port davit and phones from the swath mount on the stbd. Gain = 27, LF = 50, HF = 3000, Trig Rate = 0.5		
210	1449	009_1450			20140729_144959	SOL – seas 1' -3'; speed = 3.5-4 knots		
210	1513					slowing down to ~3 knots		
210	1543				_154344	SOL		
210	1606					EOL -Sonarwix Quit – moving syinfo window		
210	1607				_160719	SOL		
210	1631					EOL		
210	1649	019_1649			_165000	SOL; seas have calmed down considerably. Data are looking good. Speed 3-3.5 knots.		
210	1738					EOL		
210	1803	017_1803			_180344	SOL		
210						EOL		
210	1919	015_1919			_191937	SOL, slight wind chop with short-period 1 ft waves.		
210	1924					crabbing up this line. Speed 2.5-3 knots.		
210	1926					Interesting subsurface here		
210	2021					EOL		
210	2043	013_2043			_204356	SOL; slowing down to a speed of 2.5-3 knots from a transit speed of 3.5-4 knots.		
210	2056					Interesting subsurface here		
210	2100					Dana driving....this line and the end of the last line.		
210	2125					Speed up to 3 kts from 2 kts – Jen at wheel		
210	2130					SonarWiz not responding to mouse – 'Out of Memory' message		
210	2209	011_2209			_220908	SOL		
210	2213					2.5 kts		
210	2305					EOL; EOD; EOS!!!		