H13171

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

DESCRIPTIVE REPORT

Type of Survey:	Navigable Area
Registry Number:	H13171

LOCALITY

State(s):	Florida
General Locality:	Approaches to Tampa Bay, FL
Sub-locality:	7 NM West of Long Key

2018

Scott Melancon

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Date: 2019.03.08 07:51:05 -06'00'

CHIEF OF PARTY
Scott Melancon

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Date:

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:
HYDROGRAPHIC TITLE SHEET	**H13171**

INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

State(s):	**Florida**
General Locality:	**Approaches to Tampa Bay, FL**
Sub-Locality:	**7 NM West of Long Key**
Scale:	**20000**
Dates of Survey:	**09/29/2018 to 12/07/2018**
Instructions Dated:	**07/17/2018**
Project Number:	**OPR-J317-KR-18**
Field Unit:	**Oceaneering International, Inc.**
Chief of Party:	**Scott Melancon**
Soundings by:	**Multibeam Echo Sounder**
Imagery by:	**Side Scan Sonar** ***and Multibeam Echo Sounder***
Verification by:	**Atlantic Hydrographic Branch**
Soundings Acquired in:	**meters at Mean Lower Low Water**

Remarks:

Any revisions to the Descriptive Report (DR) applied during office processing are shown in red italic text. The DR is maintained as a field unit product, therefore all information and recommendations within this report are considered preliminary unless otherwise noted. The final disposition of survey data is represented in the NOAA nautical chart products. All pertinent records for this survey are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via https://www.ncei.noaa.gov/.

Products created during office processing were generated in NAD83 UTM 17N, MLLW. All references to other horizontal or vertical datums in this report are applicable to the processed hydrographic data provided by the field unit.

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Descriptive Report to Accompany Survey H13171

Project: OPR-J317-KR-18

Locality: Approaches to Tampa Bay, FL

Sublocality: 7 NM West of Long Key

Scale: 1:20000

September 2018 - December 2018

Oceaneering International, Inc.

Chief of Party: Scott Melancon

A. Area Surveyed

The survey area is located 7 NM West of Long Key, in the general locality of the Approaches to Tampa Bay, Florida.

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
27° 48' 5.14" N 83° 2' 22.45" W	27° 36' 38.85" N 82° 51' 36.02" W

Table 1: Survey Limits

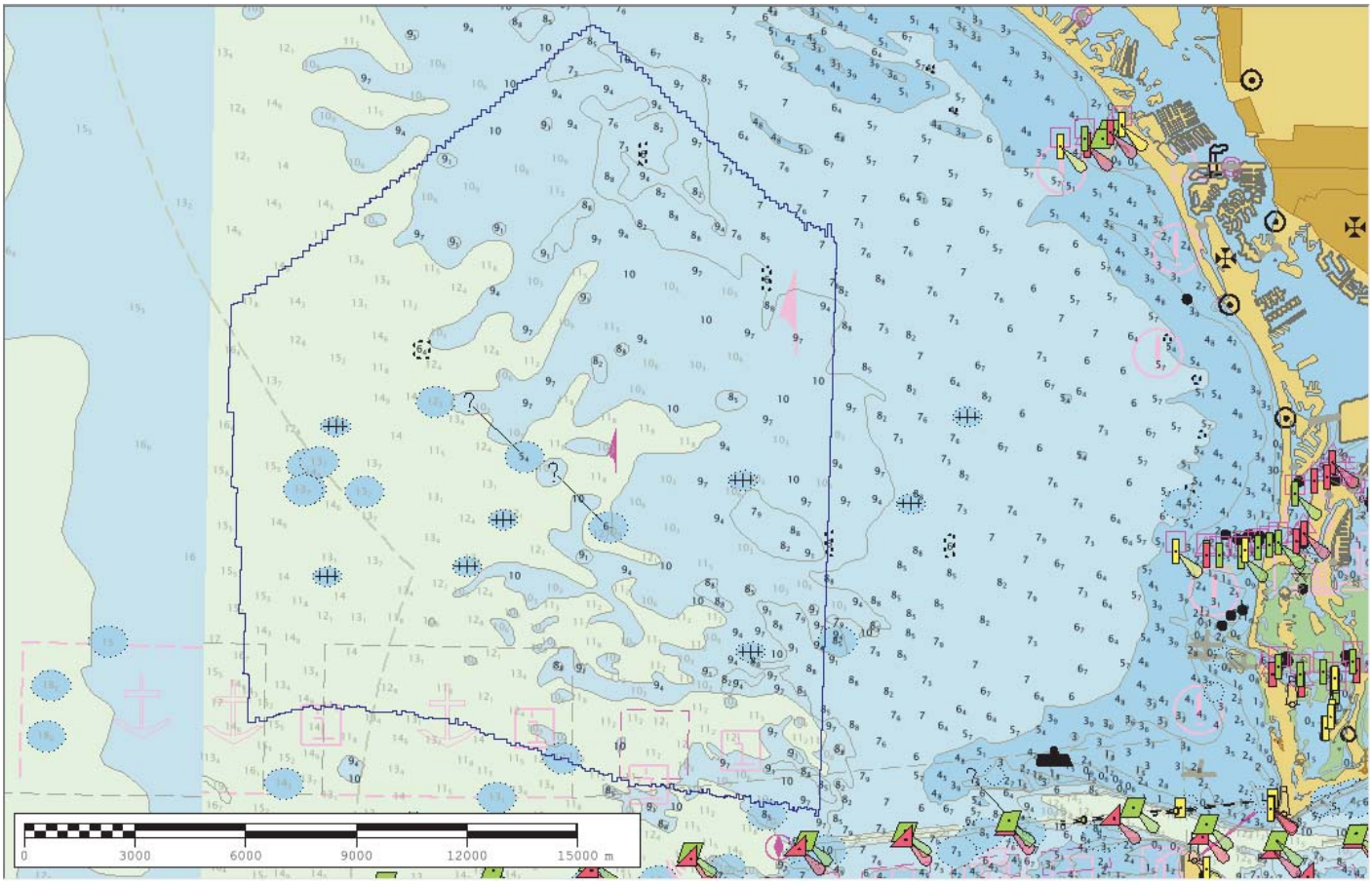


Figure 1: The H13171 survey limits shown as blue outline.

Survey limits were acquired in accordance with the requirements in the Project Instructions and the HSSD.

A.2 Survey Purpose

The purpose of the project is to provide contemporary surveys to update the National Ocean Service nautical charting products to support an increase in vessel traffic into Tampa Bay, FL. There is a lack of modern data in the area, which is subject to strong storm events that have the potential to cause shoaling.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

A.4 Survey Coverage

The following table lists the coverage requirements for this survey as assigned in the project instructions:

Water Depth	Coverage Required
All waters in survey area (except Sheet 4)	Complete Coverage
All waters in survey area	Report significant shoaling via weekly progress reports. PM/COR may adjust survey prioritization based on observed shoaling.

Table 2: Survey Coverage

Survey coverage was in accordance with the requirements listed above and in the HSSD.

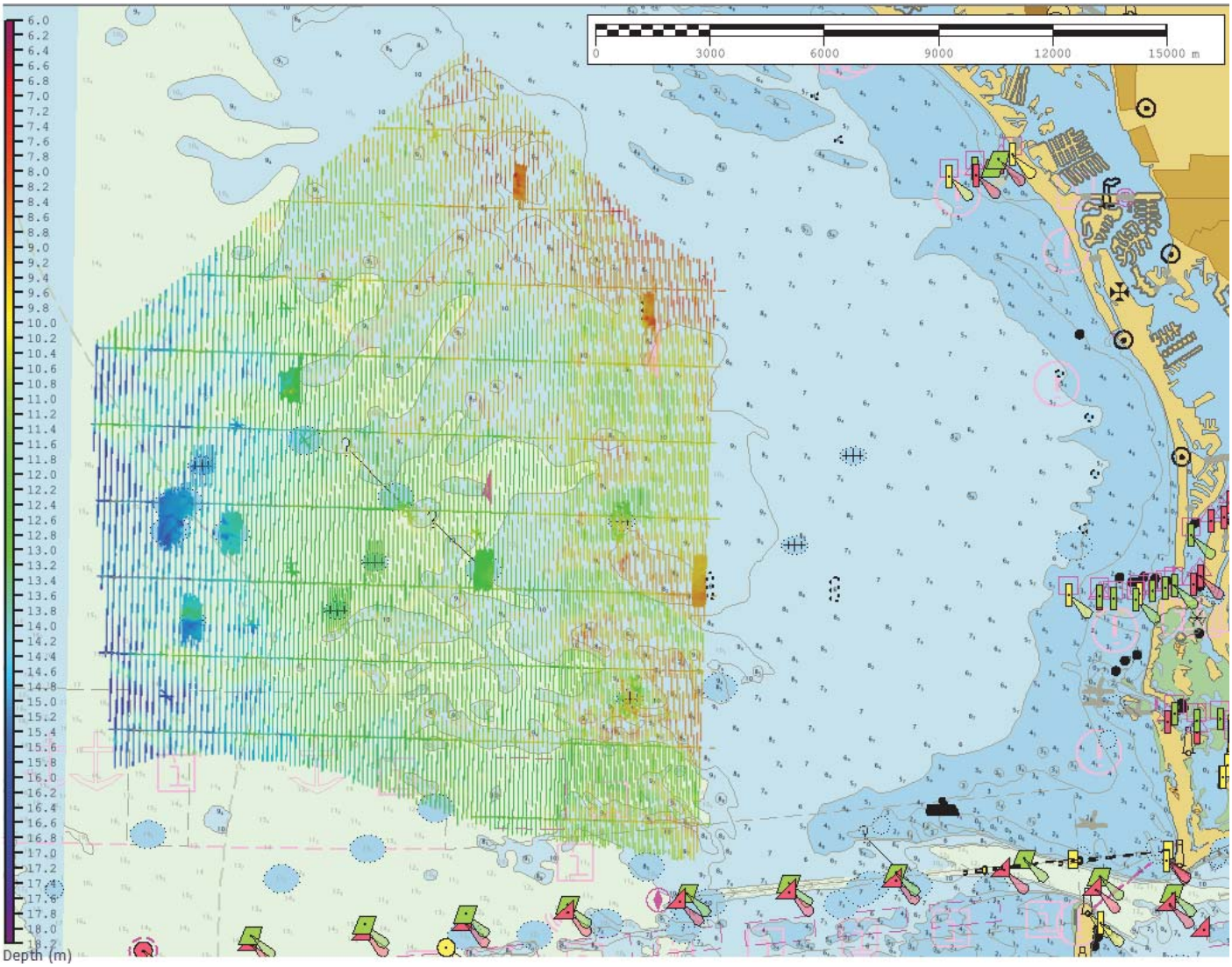


Figure 2: H13171 Survey Coverage.

A.6 Survey Statistics

The following table lists the mainscheme and crossline acquisition mileage for this survey:

	HULL ID	*1237094*	*Total*
LNM	**SBES Mainscheme**	0.00	0
	MBES Mainscheme	0.00	0
	Lidar Mainscheme	0.00	0
	SSS Mainscheme	0.00	0
	SBES/SSS Mainscheme	0.00	0
	MBES/SSS Mainscheme	1260.62	1260.62
	SBES/MBES Crosslines	71.22	71.22
	Lidar Crosslines	0.00	0
Number of Bottom Samples			22
Number Maritime Boundary Points Investigated			0
Number of DPs			41
Number of Items Investigated by Dive Ops			0
Total SNM			75.~~80~~ ***12***

Table 3: Hydrographic Survey Statistics

The following table lists the specific dates of data acquisition for this survey:

Survey Dates	Day of the Year
09/29/2018	272
09/30/2018	273

Survey Dates	Day of the Year
10/01/2018	274
10/02/2018	275
10/03/2018	276
10/04/2018	277
10/05/2018	278
10/06/2018	279
10/13/2018	286
10/14/2018	287
10/15/2018	288
10/16/2018	289
10/17/2018	290
11/06/2018	310
11/07/2018	311
11/10/2018	314
11/17/2018	321
11/18/2018	322
11/19/2018	323
11/20/2018	324
11/23/2018	327
11/24/2018	328
12/06/2018	340
12/07/2018	341

Table 4: Dates of Hydrography

It was observed that there were several unit options for nautical miles within the CARIS program. However, 'area' only had one option for nautical mile units as Square Int. Nautical Miles. To be consistent, Int. Nautical Miles was used as the unit for the LNM shown in Table 3. Detached Positions (DP) include CTD casts and lead line comparisons conducted within survey bounds, but not bottom samples because there is a separate entry for those.

B. Data Acquisition and Processing

B.1 Equipment and Vessels

Refer to the Data Acquisition and Processing Report (DAPR) for a complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods. Additional information to supplement sounding and survey data, and any deviations from the DAPR are discussed in the following sections.

B.1.1 Vessels

The following vessels were used for data acquisition during this survey:

Hull ID	***1237094***
LOA	40.84 meters
Draft	1.98 meters

Table 5: Vessels Used

The R/V Sea Scout (Hull ID 1237094) was used as the survey platform for all data acquisition within H13171.

B.1.2 Equipment

The following major systems were used for data acquisition during this survey:

Manufacturer	**Model**	**Type**
Kongsberg Maritime	EM 2040C	MBES
Klein Marine Systems	5000V2	SSS
C-Nav	3050	Positioning System
Teledyne TSS	DMS05	Attitude System
Teledyne TSS	Meridian Surveyor	Gyrocompass
Sea-Bird Scientific	SBE 19plus	Conductivity, Temperature, and Depth Sensor
YSI	600R-BCR-C-T	Conductivity, Temperature, and Depth Sensor

Table 6: Major Systems Used

B.2 Quality Control

B.2.1 Crosslines

Multibeam/single beam echo sounder/side scan sonar crosslines acquired for this survey totaled 5.65% of mainscheme acquisition.

Crosslines were run generally perpendicular to mainscheme lines in order for quality control statistics to be generated after completion of mainscheme survey lines. The total crossline mileage was 71.22 nautical miles and total mainline mileage was 1260.62 nautical miles. Multibeam fill-ins were included in the total mainline mileage. Investigation lines and SSS rerun lines for which MB was also acquired were not included.

Separate 1-meter mainline and crossline Combined Uncertainty and Bathymetric Estimator (CUBE) surfaces were generated and the surface difference tool within CARIS HIPS was used to evaluate crossline and mainscheme line agreement. The mainline surface was used as Surface 1 and the crossline surface as Surface 2. Statistical information about the difference surface was generated using the Compute Statistics tool (Figure 3). The analysis shows that greater than 99% of depth difference values are between -0.24 and 0.26 meters. This is well within the maximum allowable Total Vertical Uncertainty (TVU) for the depths of the comparison area (6.69 – 18.08 meters) which ranges from ±0.508 to ±0.552 meters. It is evident from the histogram (Figure 3) that several depth differences exceed the maximum allowable TVU. Further examination indicates that depth differences greater than ±0.50 m are concentrated within 6 discrete areas (Figure 4) and associated with sea floor features/contacts. Review of these areas did not indicate obvious outliers.

The crossline surface, mainline surface, difference surface and exported ASCII file of histogram results are located in Separates\II_Digital_Data\Crossline_Comparison.

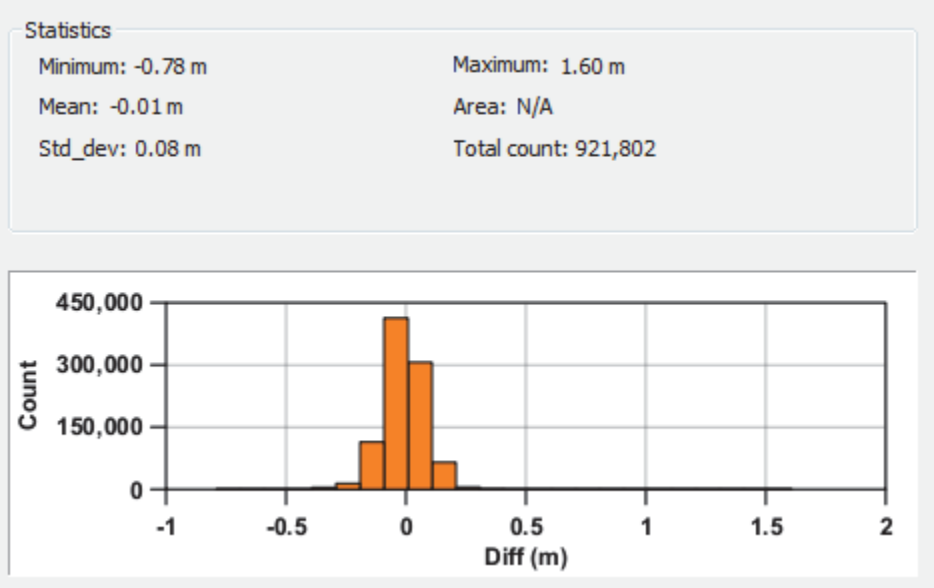


Figure 3: Crossline comparison statistics and histogram output from CARIS compute statistics tool.

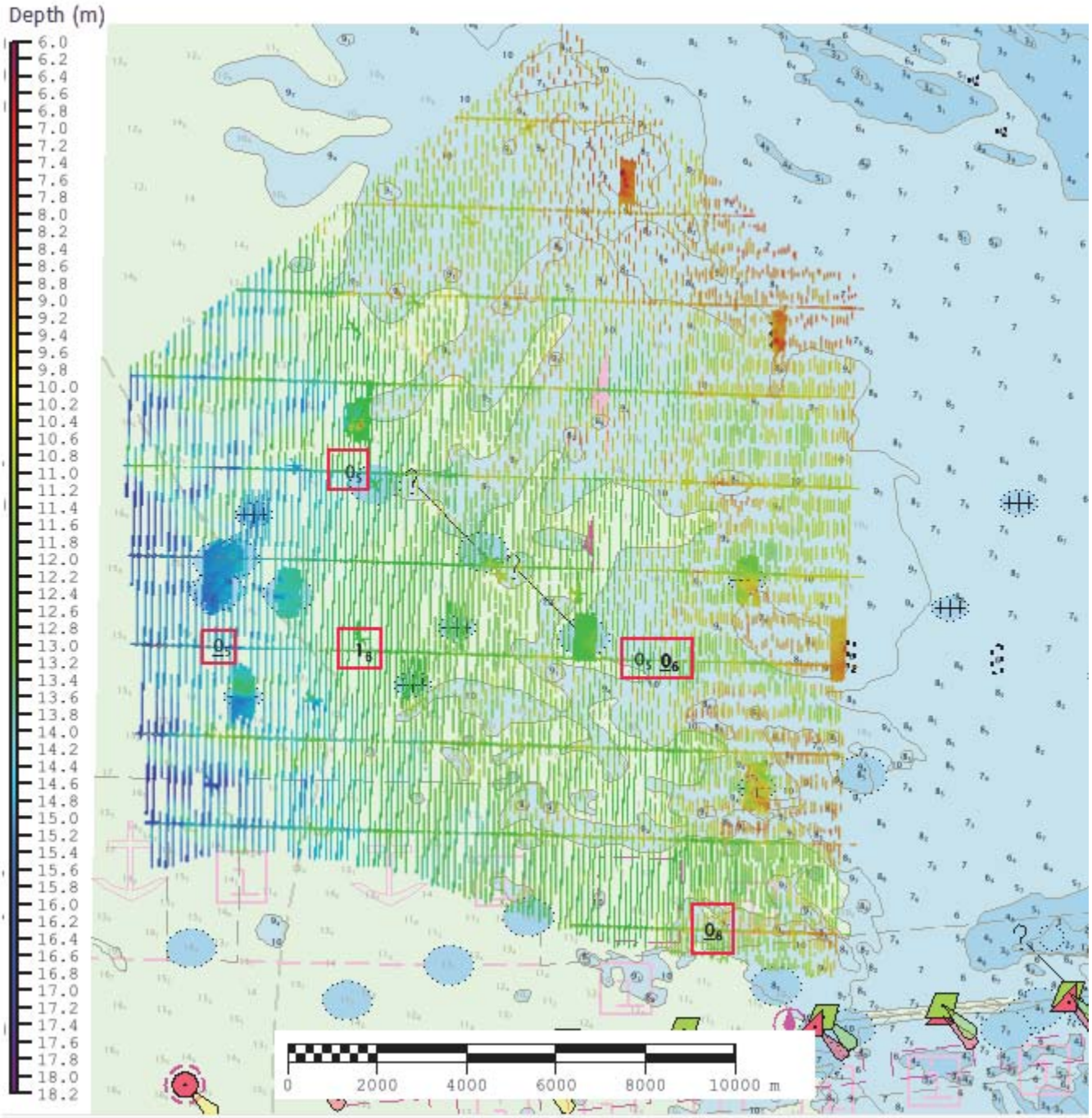


Figure 4: H13171 survey area overlain with crossline difference surface. Black sounding features within red polygons indicate areas where depth differences between mainline and crossline data are greater than ±0.50 m.

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Method	Measured	Zoning
ERS via VDATUM	0.1 meters	0.131 meters

Table 7: Survey Specific Tide TPU Values.

Hull ID	Measured - CTD	Measured - MVP	Surface
1237094	2 meters/second	n/a meters/second	0.8 meters/second

Table 8: Survey Specific Sound Speed TPU Values.

The Total Propagated Uncertainty (TPU) for each sounding was computed within CARIS, the multibeam data processing software. The vessel file stores static values of the estimated uncertainties associated with each individual sensor. The Compute TPU dialog contains placeholders for the user to specify tidal and sound speed uncertainty, as well as whether the sources of uncertainty are static (come from the vessel file) or were collected in real-time. This particular survey contains all static uncertainty sources. The above uncertainty estimates are combined with a DeviceModels.xml that contains individual sonar model characteristics to calculate the total TPU.

Currently there is no entry for static vertical uncertainty associated with a positioning system or the separation model within CARIS. The workaround is to enter these values in the Tide Measured and Zoning entry locations. Internal verification indicates that the C-Nav™ 3050 systems have a vertical uncertainty of ~20 cm at the 95% confidence level. The 95% confidence level is expressed as 1.96 standard deviations from the mean. CARIS entries of uncertainty are assumed to be 1-sigma (one standard deviation from the mean) and this value of 20 cm is divided by 1.96 for a value of 10 cm to enter into CARIS. The 1-sigma VDATUM Maximum Combined Uncertainty (MCU) value for the separation model (13.1 cm) is provided in the project instructions.

An Uncertainty child layer is generated during the bathymetric surface creation process that shows the uncertainty at each node of the surface. HydrOffice QCTools was used to analyze the uncertainty of all finalized and un-finalized grids. It was observed that all uncertainty values are within specifications for all un-finalized surfaces (Figures 5 - 13). However, all but two of the finalized surfaces contain less than 0.002% of uncertainty values that do not meet specifications (Figures 14 - 22). Review indicates that this is due to the finalization parameter where the uncertainty is defined as the greater of either the standard deviation or uncertainty for a particular node. Review of the finalized surfaces indicates that nodes that do not meet specifications are associated with features and contacts.

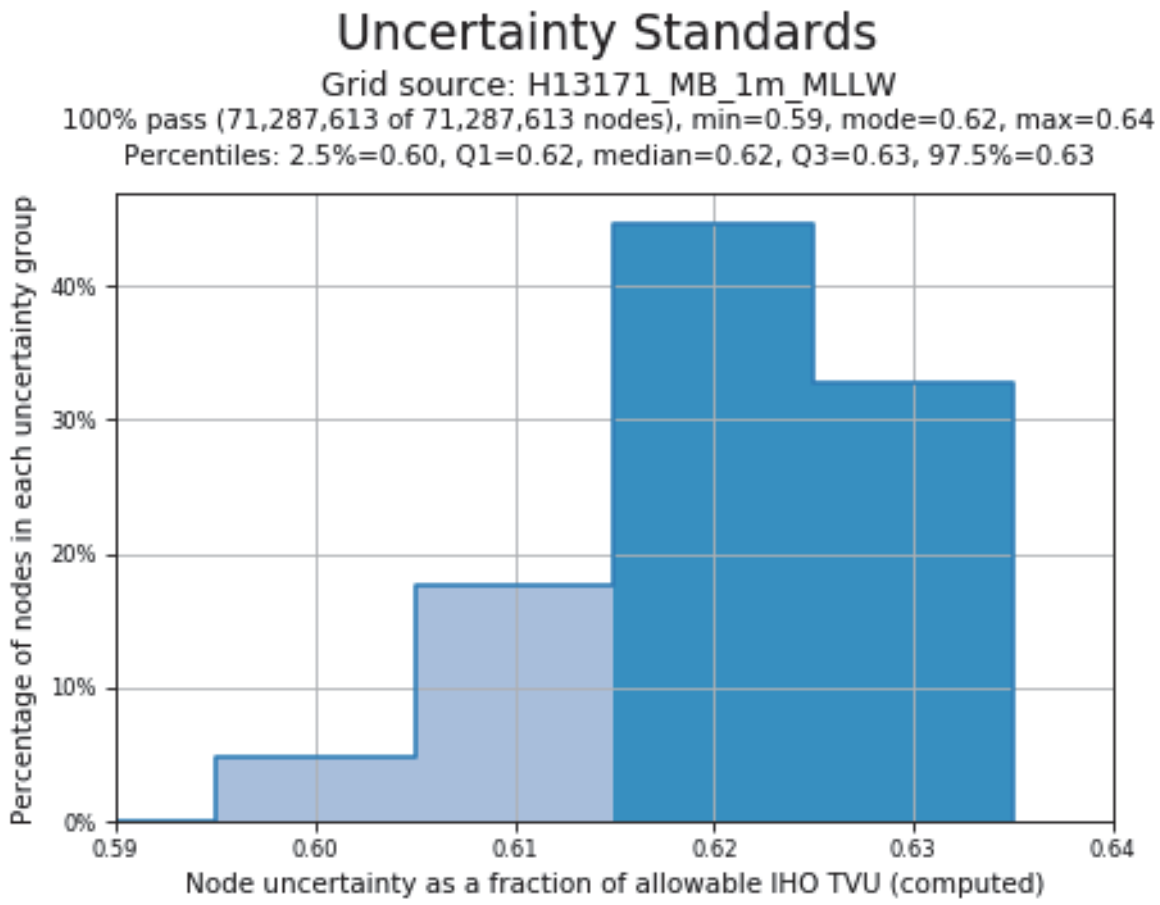


Figure 5: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_1m_MLLW.

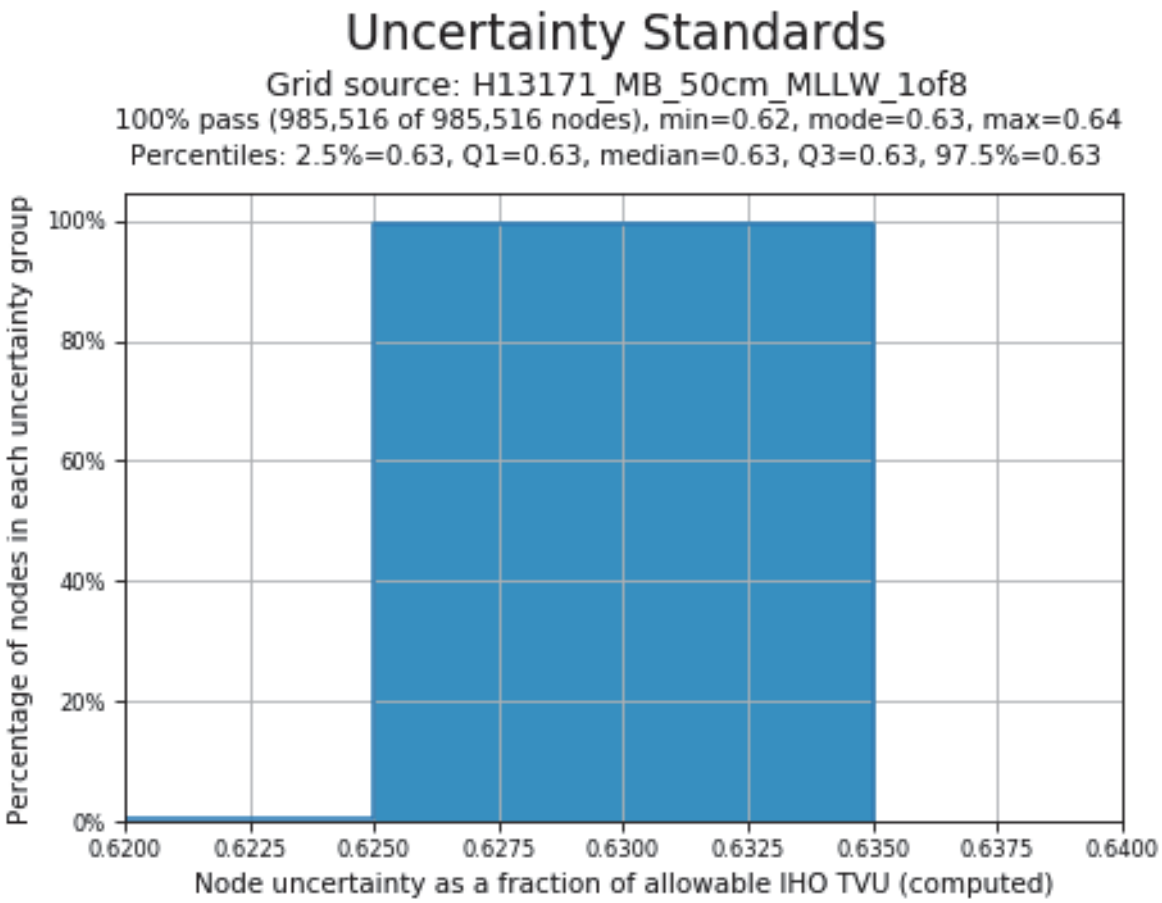


Figure 6: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_1of8.

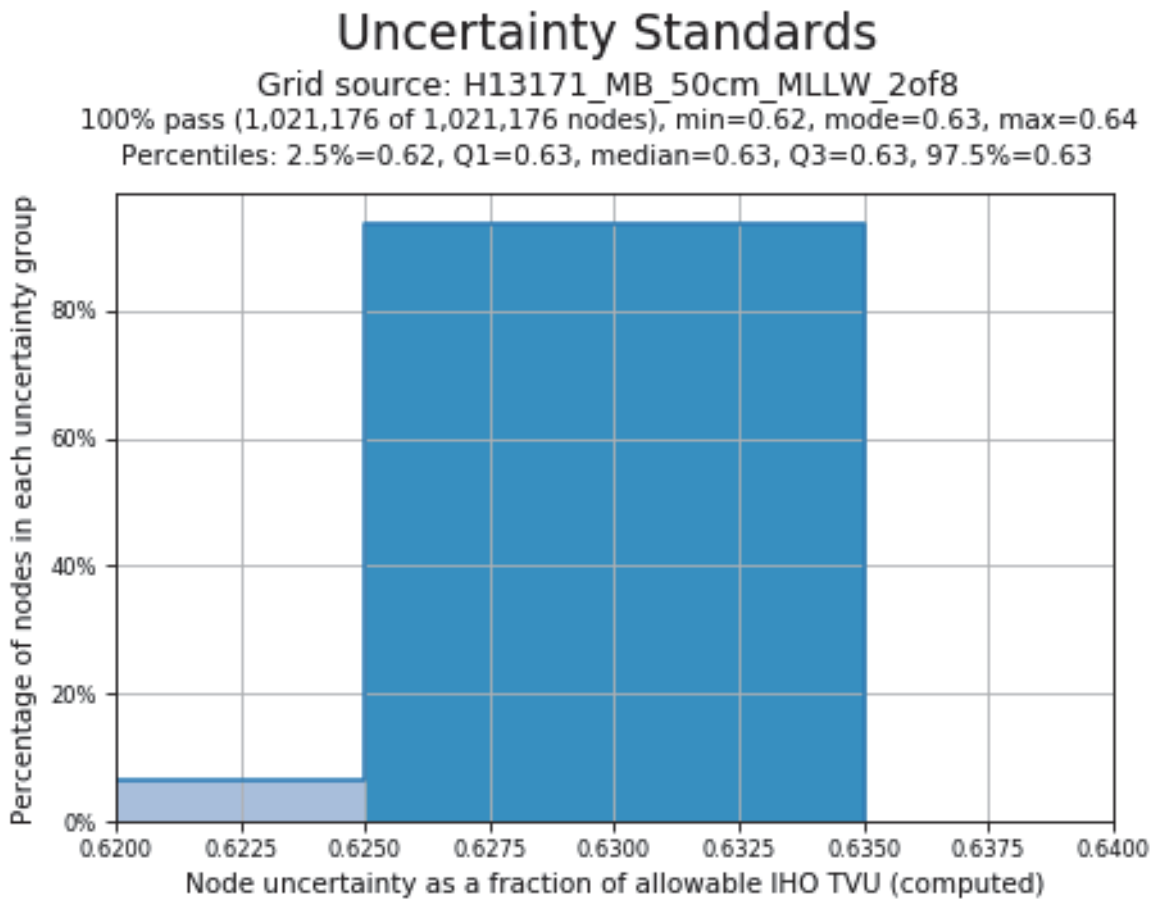


Figure 7: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_2of8.

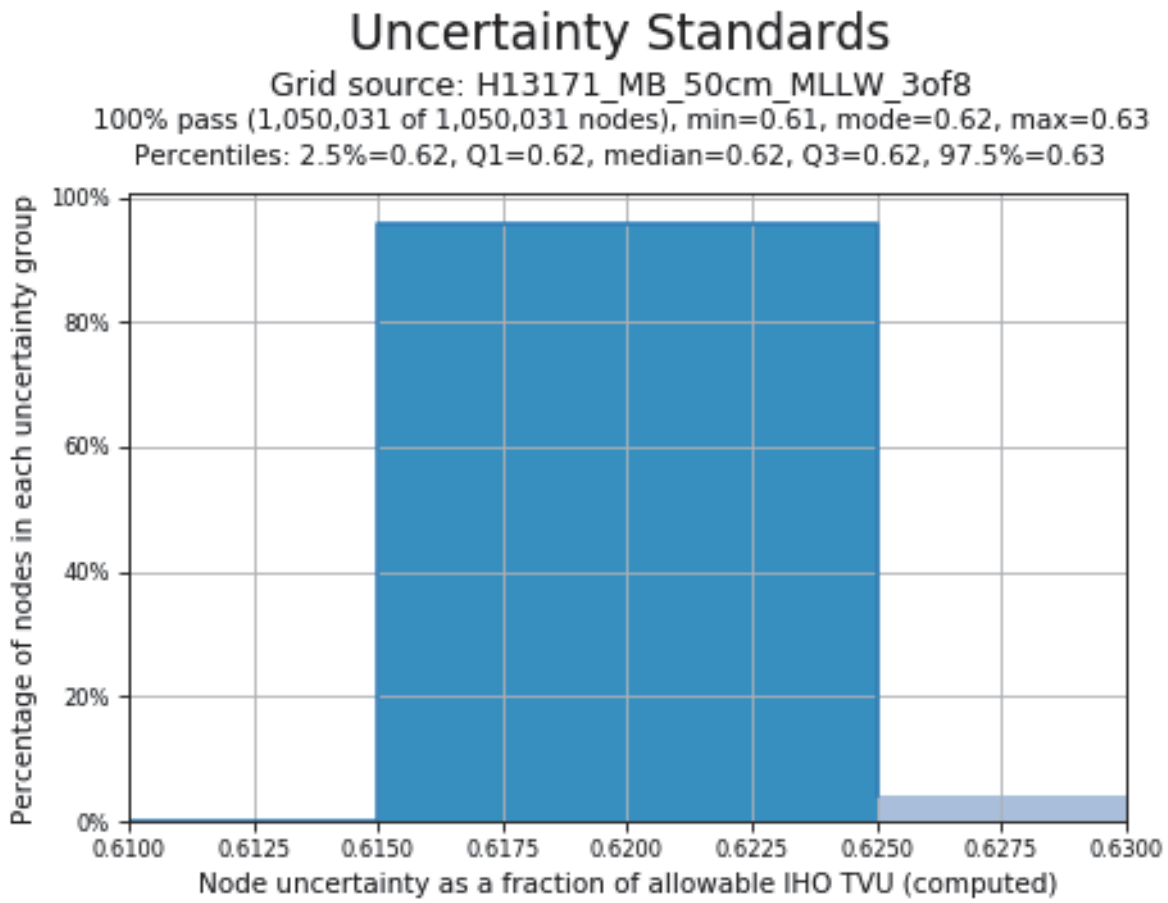


Figure 8: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_3of8.

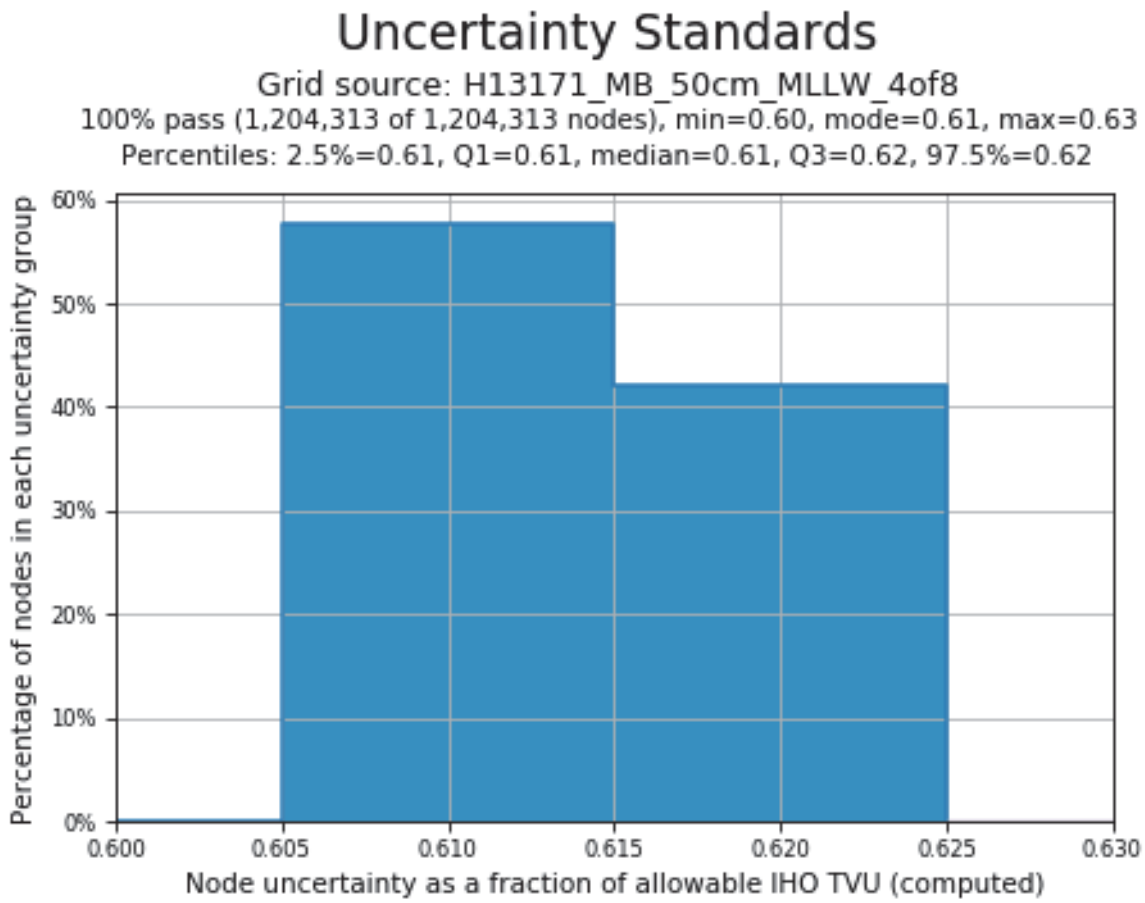


Figure 9: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_4of8.

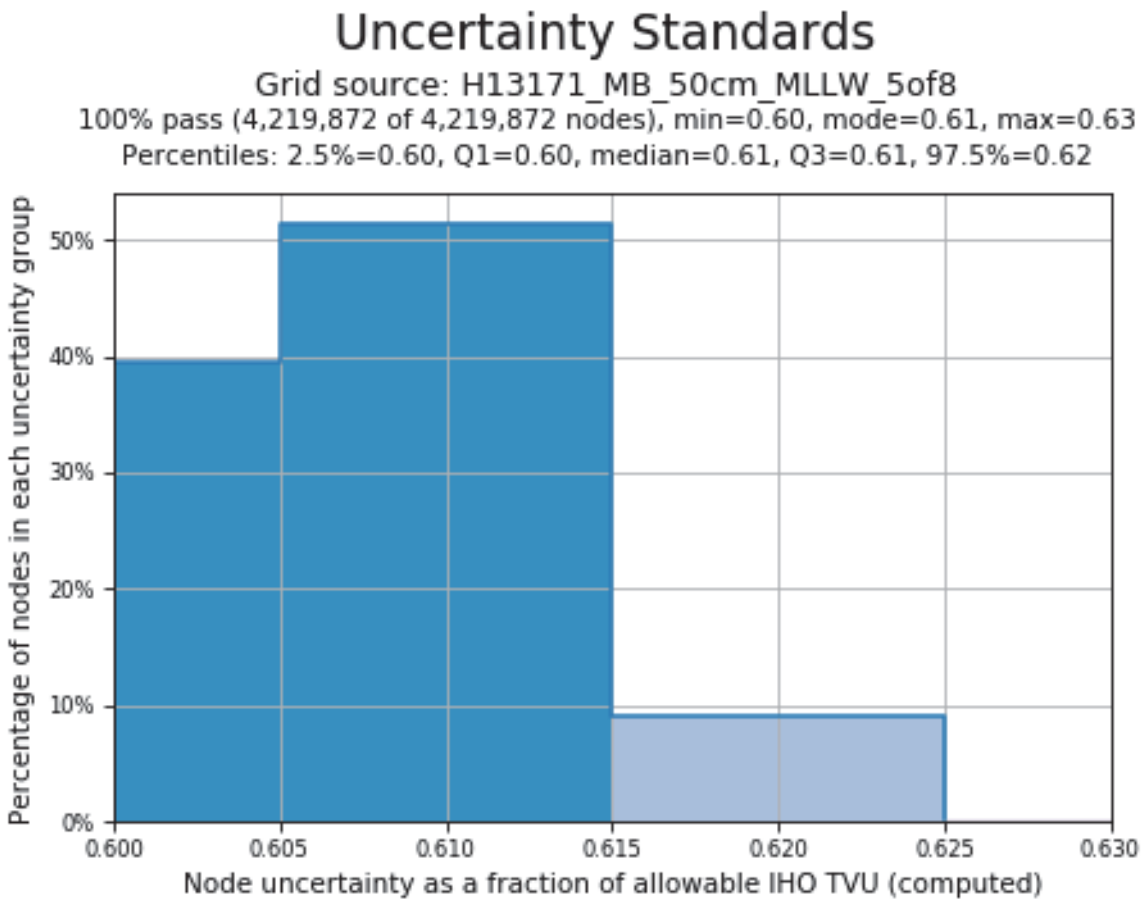


Figure 10: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_5of8.

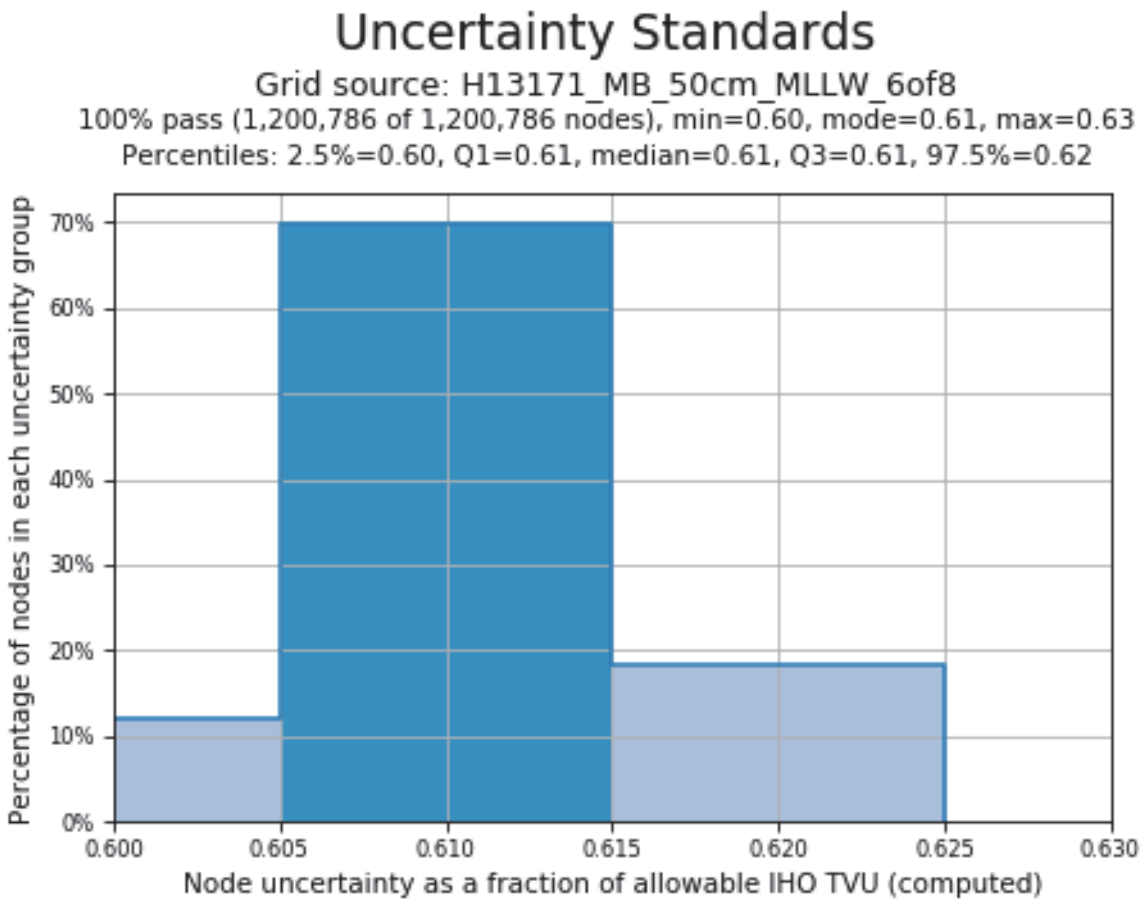


Figure 11: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_6of8.

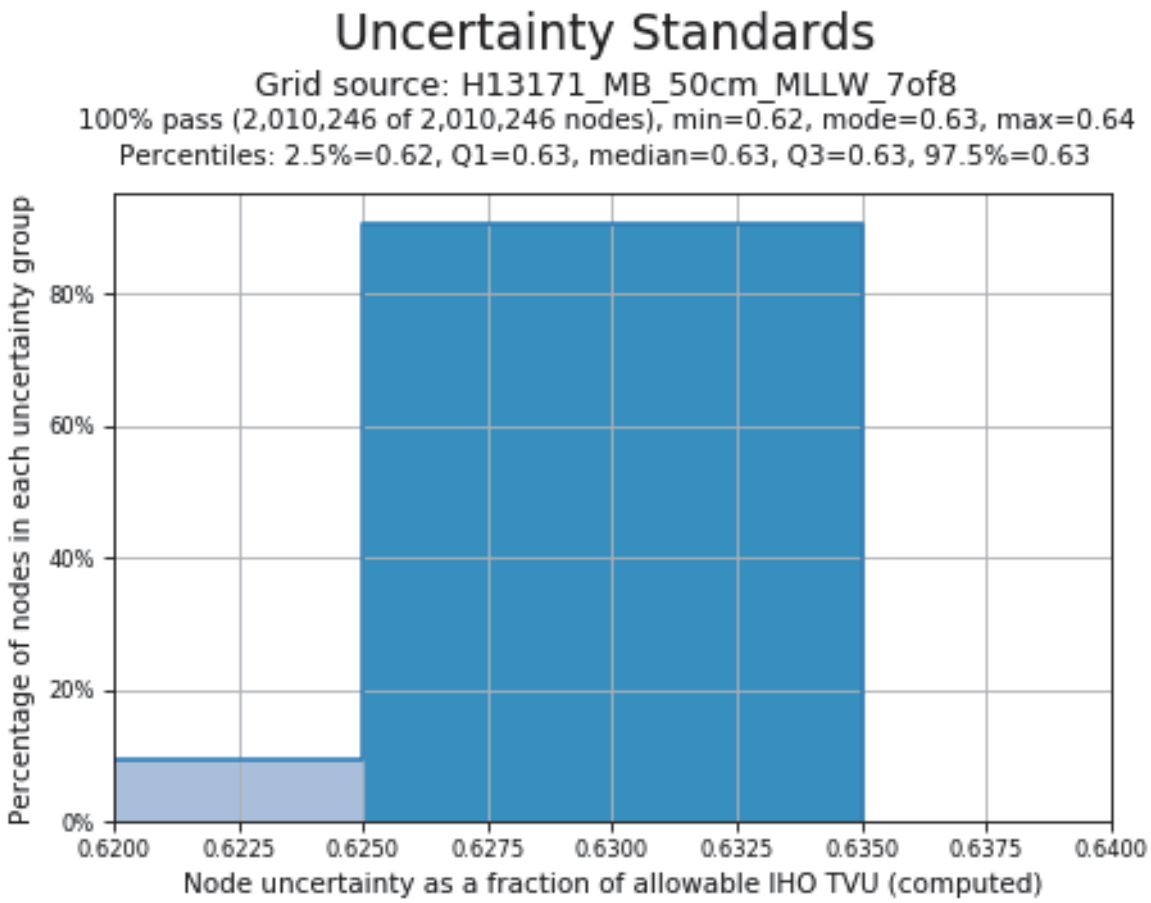


Figure 12: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_7of8.

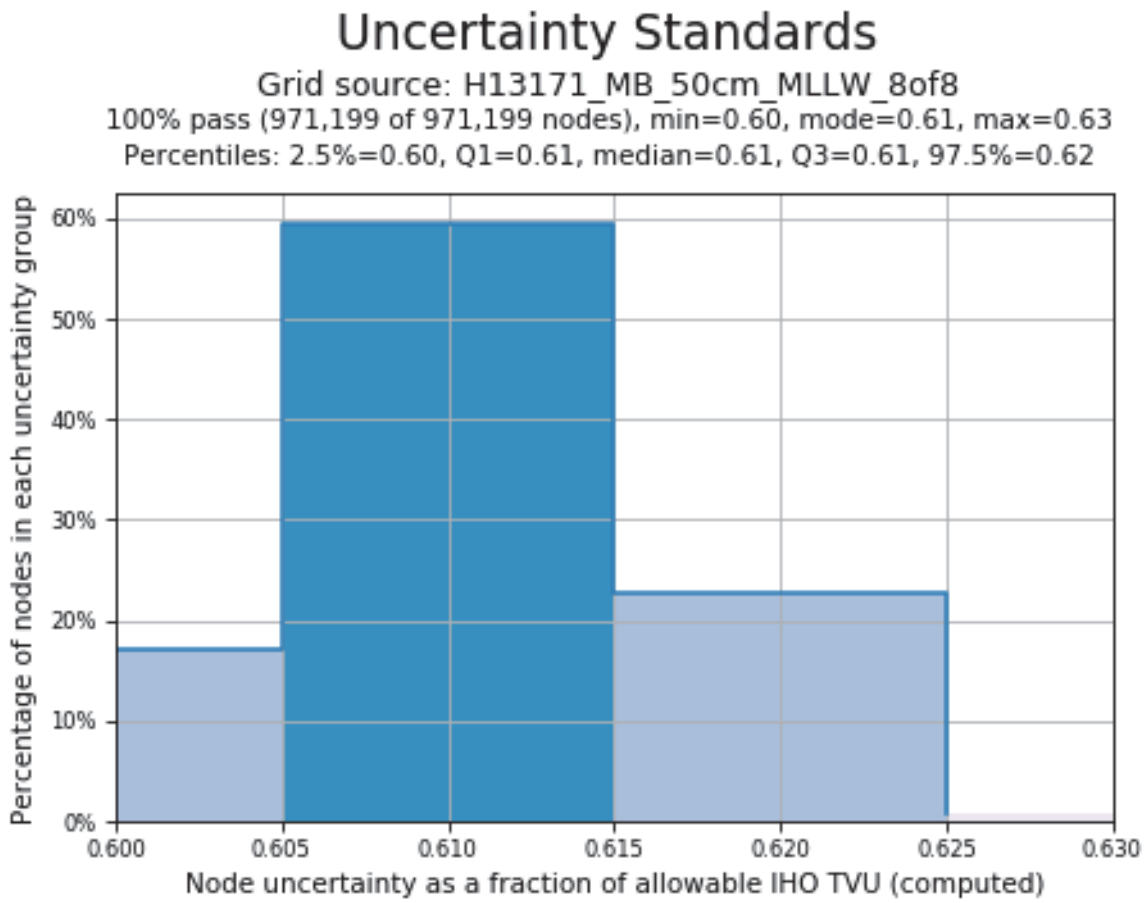


Figure 13: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_8of8.

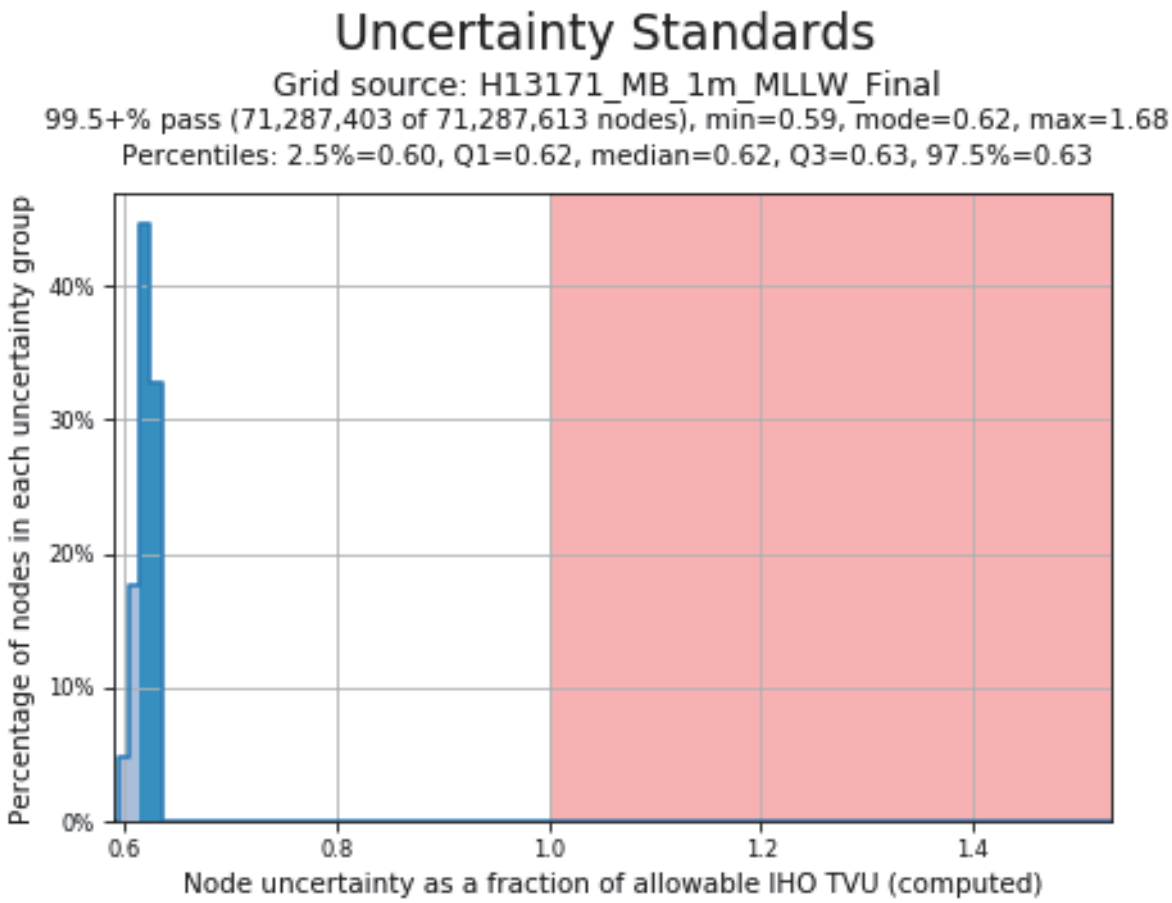


Figure 14: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_1m_MLLW_Final.

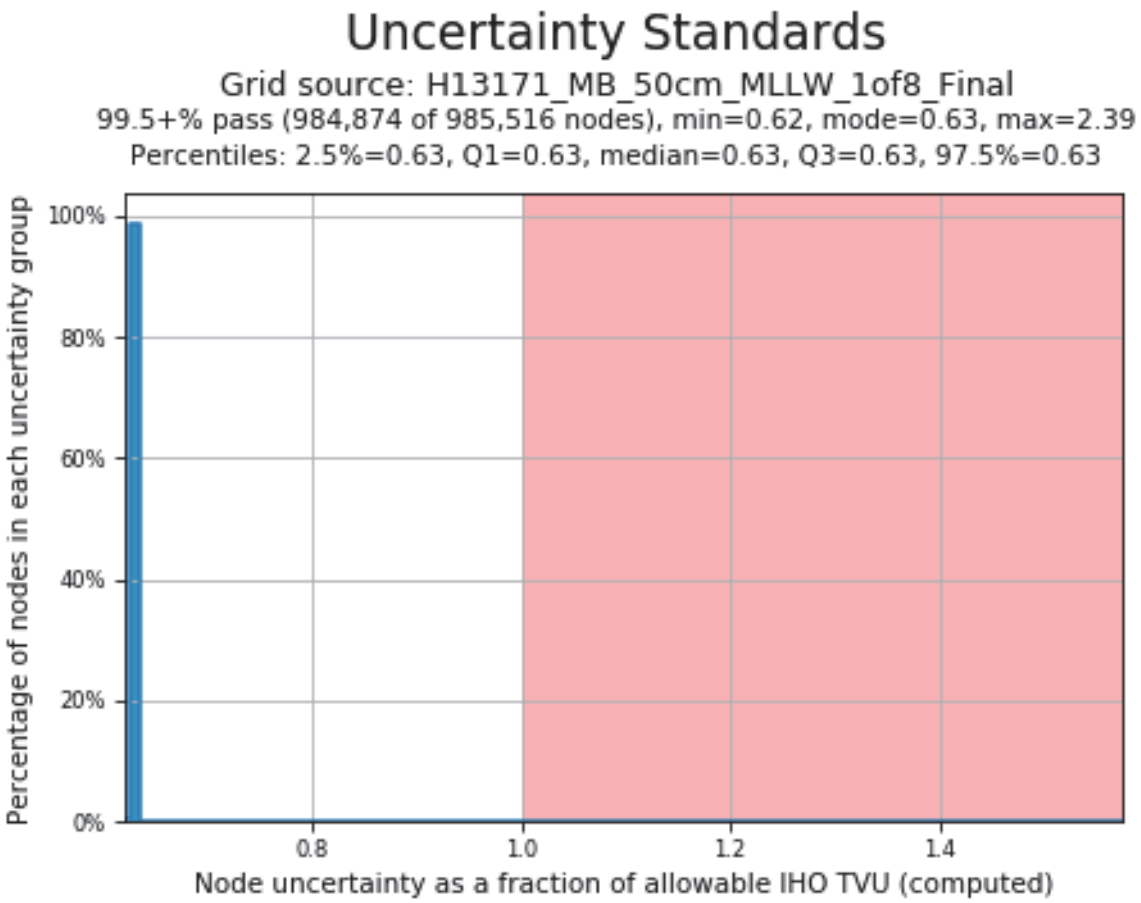


Figure 15: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_1of8_Final.

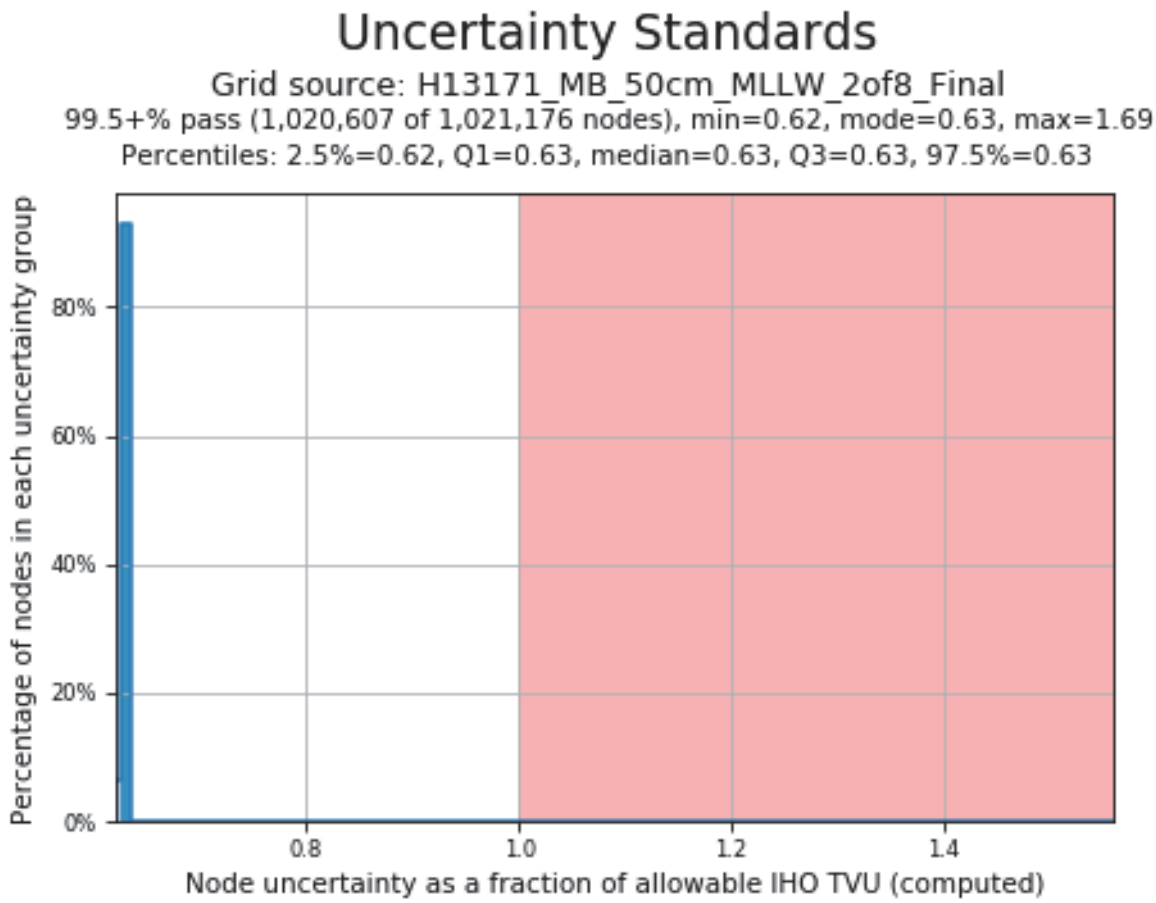


Figure 16: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_2of8_Final.

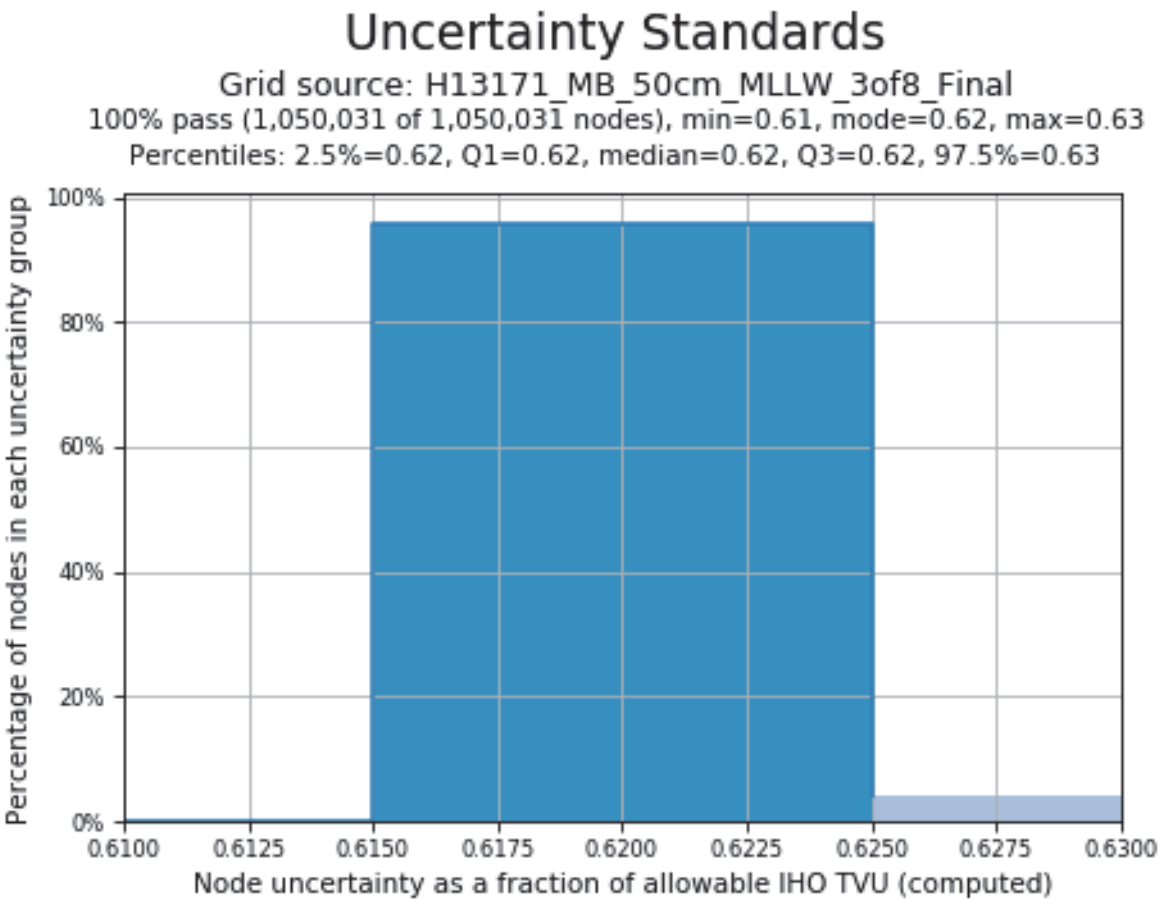


Figure 17: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_3of8_Final.

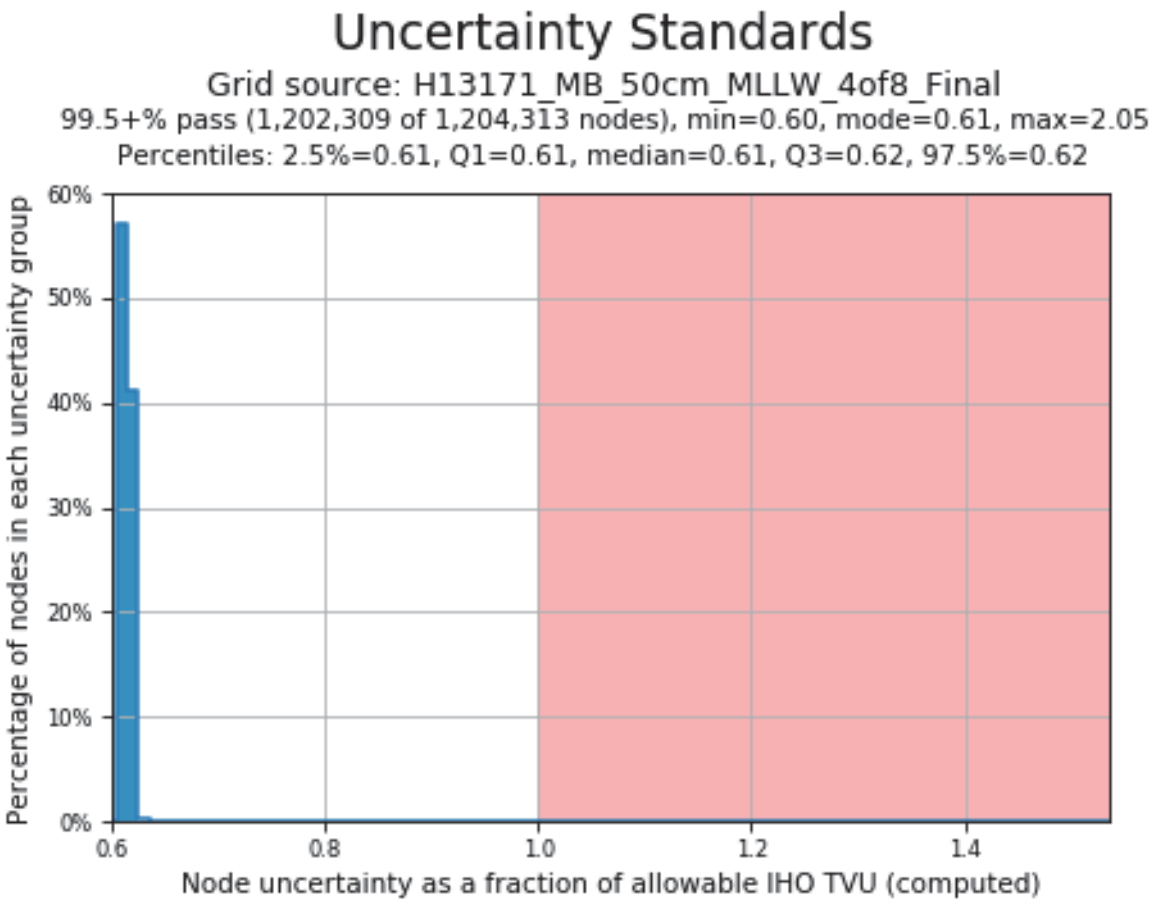


Figure 18: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_4of8_Final.

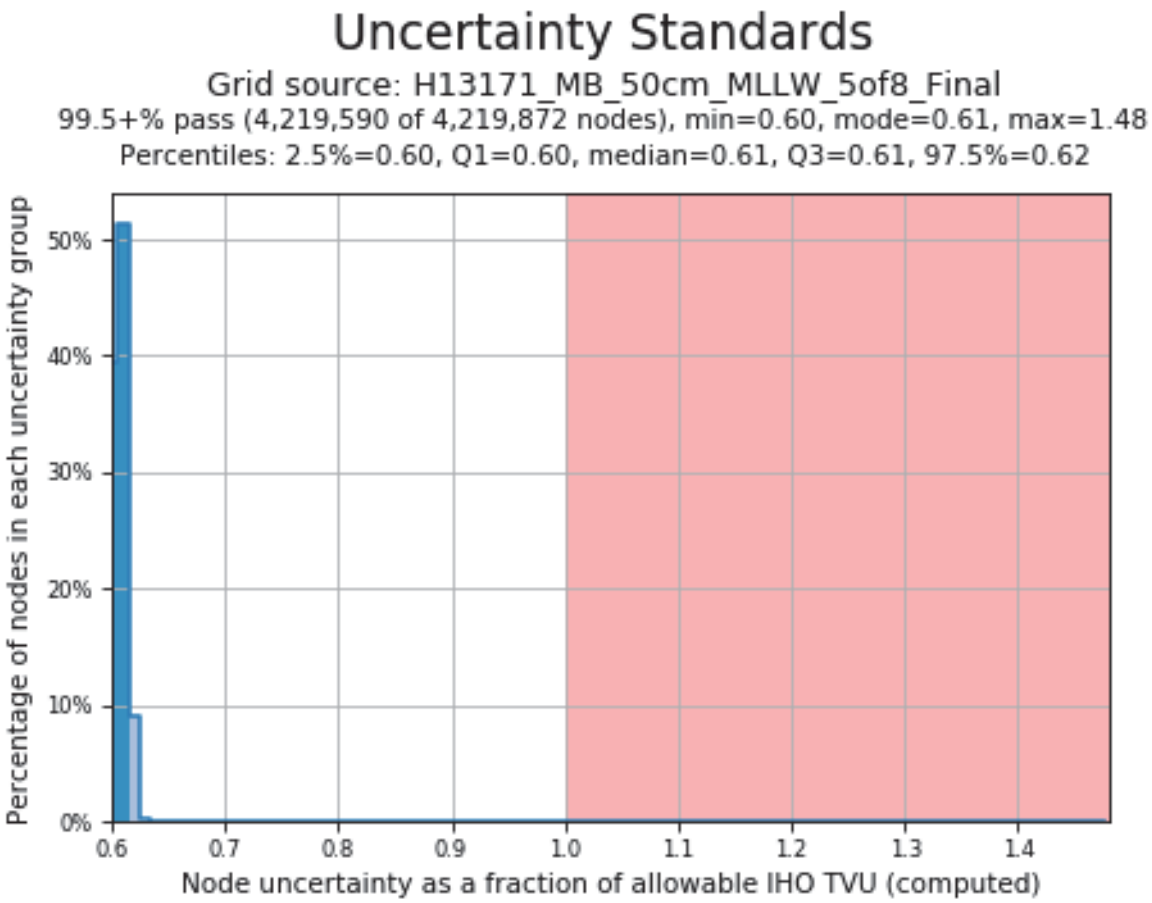


Figure 19: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_5of8_Final.

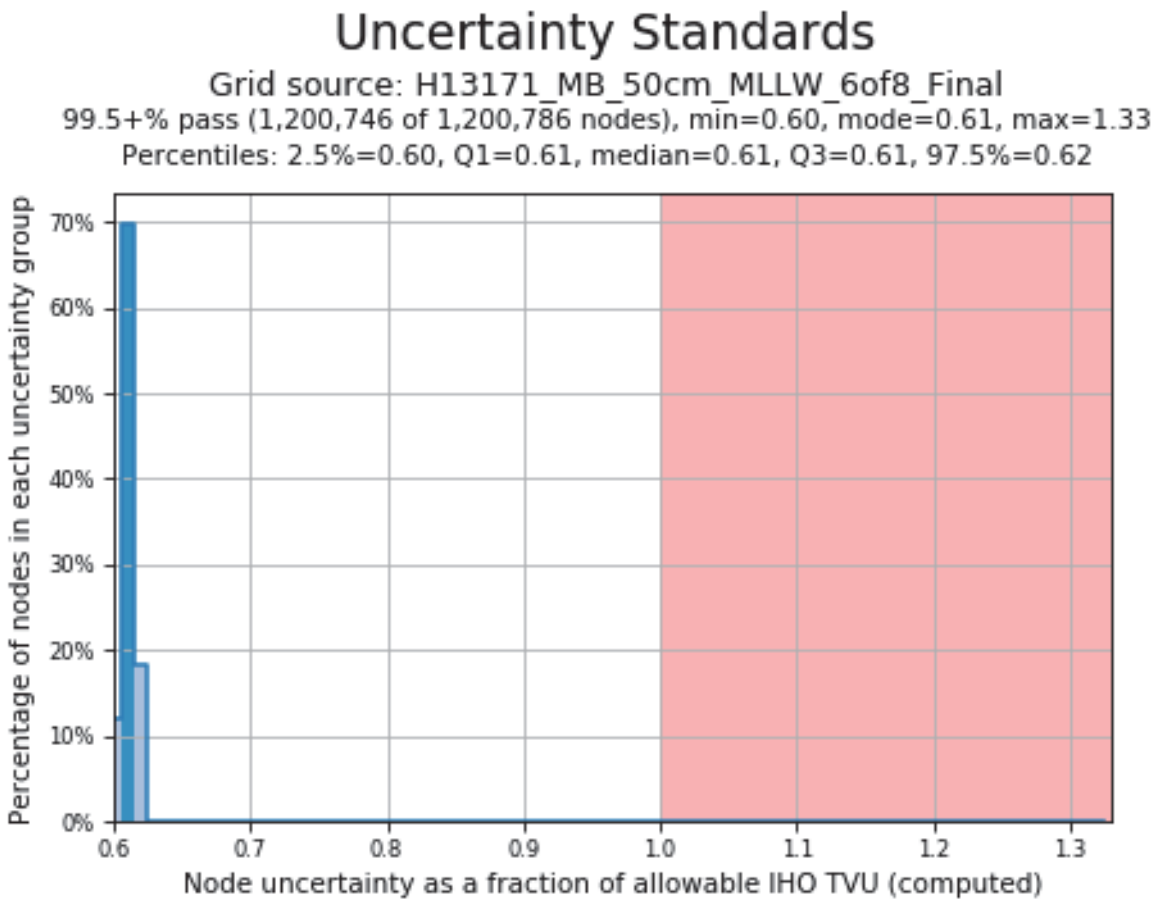


Figure 20: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_6of8_Final.

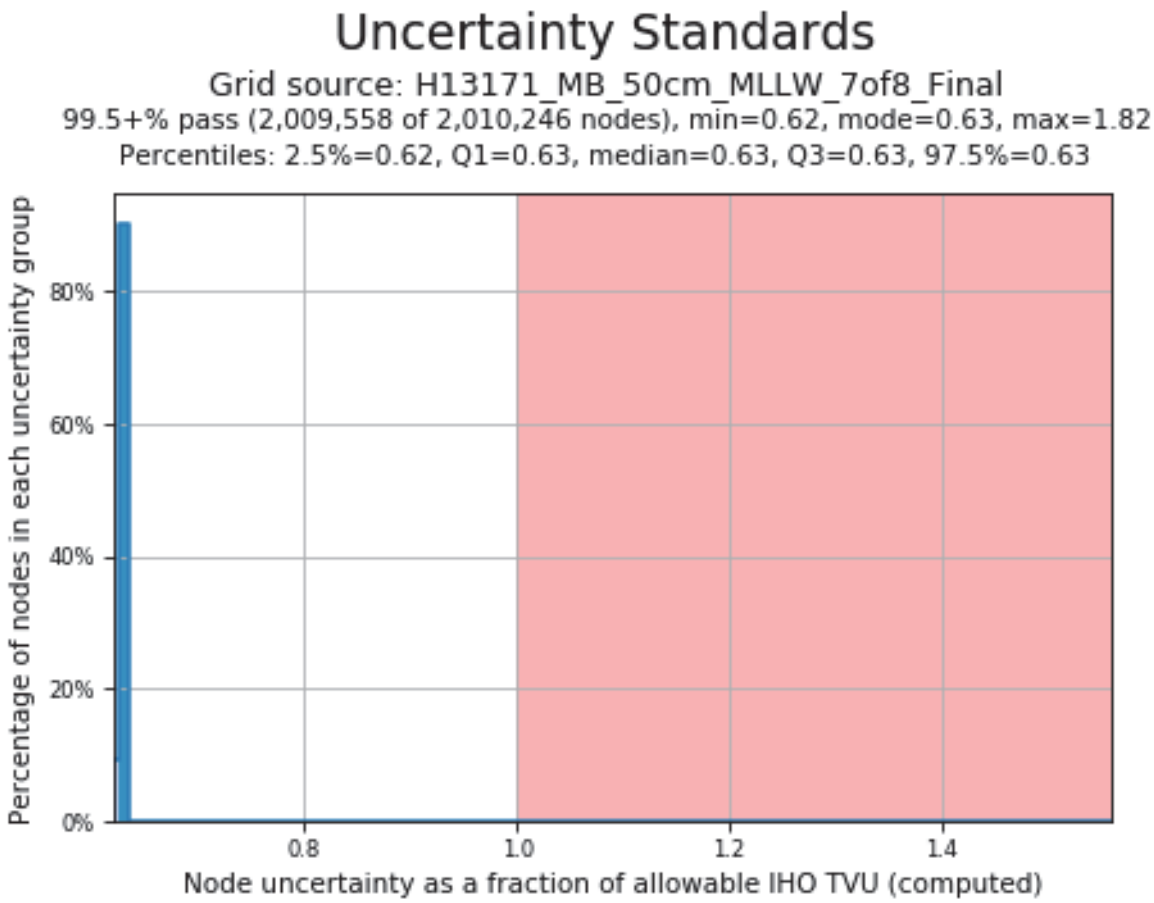


Figure 21: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_7of8_Final.

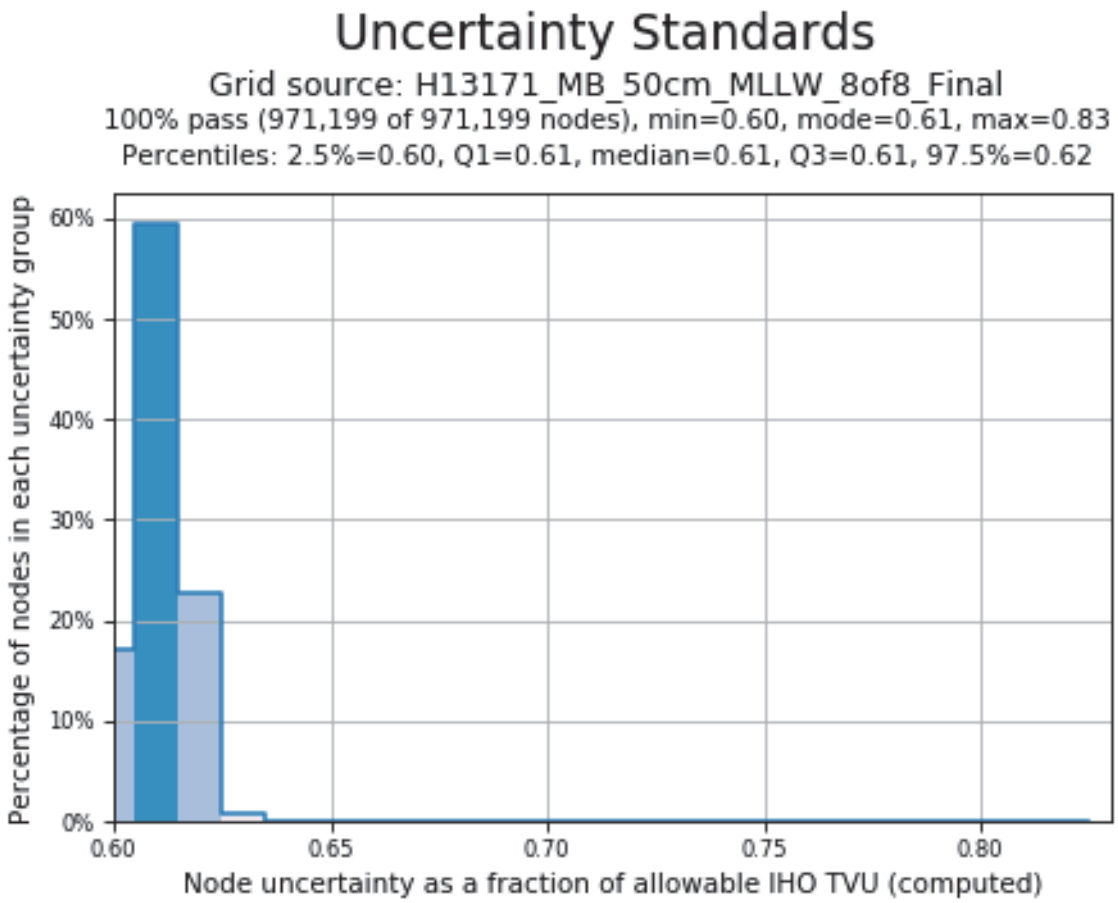


Figure 22: Uncertainty QA output from HydrOffice QCTools for surface H13171_MB_50cm_MLLW_8of8_Final.

B.2.3 Junctions

Survey H13171 junctions with three contemporary surveys: H13170, H13173 and H13176 (Figure 23). A preliminary junction between H13171 and H13170 was conducted to ensure general agreement of depths. A difference surface between the depth layers of H13171 and the adjoining survey were generated and areas of disagreement were evaluated. A more thorough evaluation will be conducted in the specific Sheet Descriptive Reports using finalized surfaces when available that addresses difference values greater than 2^0.5 * TVU, as outlined in the HSSD (2018).

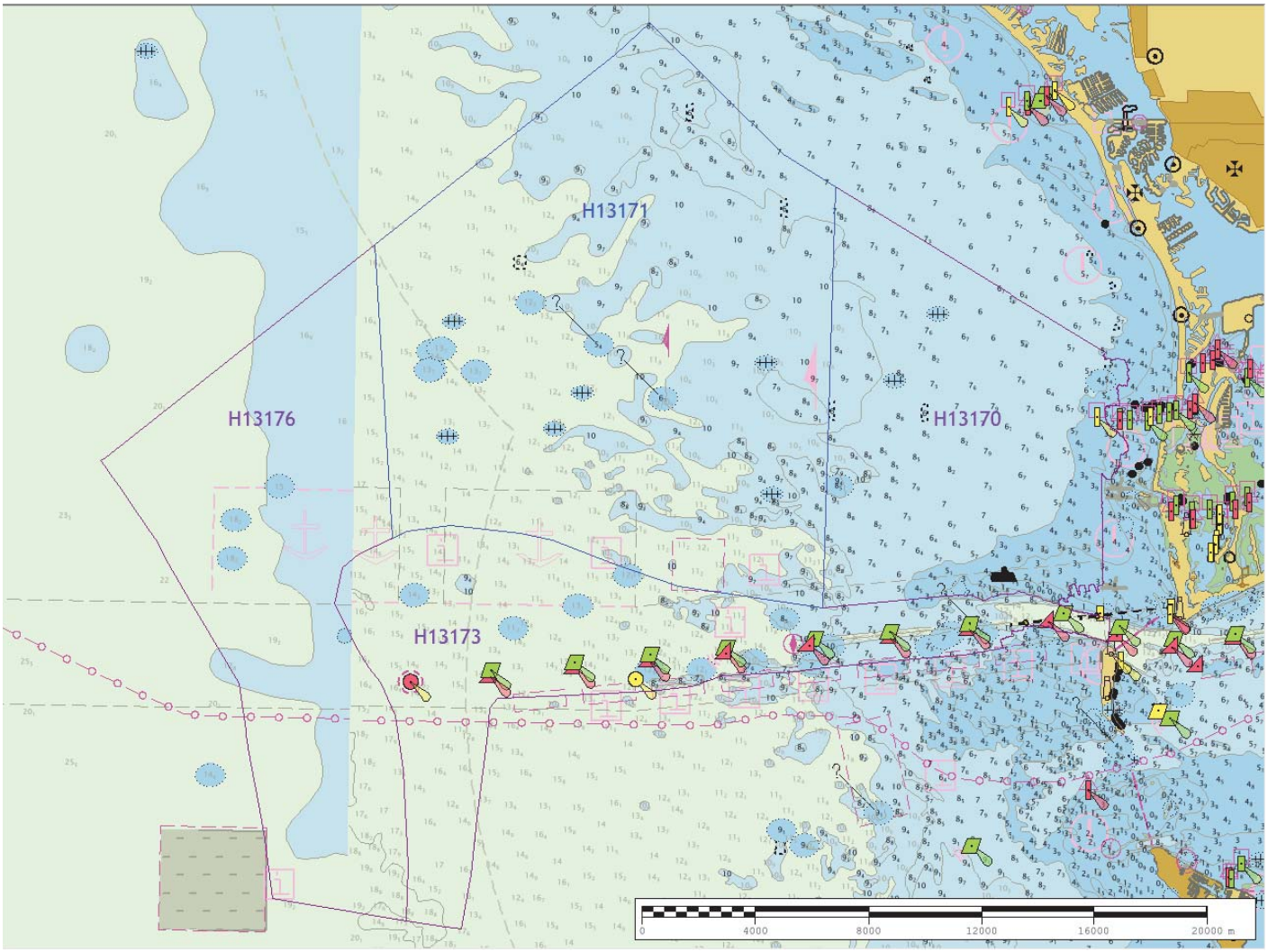


Figure 23: H13171 Survey Junctions.

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H13170	1:20000	2018	Oceaneering	E
H13173	1:20000	2018	Oceaneering	S
H13176	1:20000	2018	Oceaneering	W

Table 9: Junctioning Surveys

H13170

A preliminary junction comparison was conducted with H13170, which is located east of H13171. Preliminary analysis indicates greater that 99% of depth difference values are between -0.22 and 0.18 m. A thorough review will be completed in the Descriptive Report of H13170.

H13173

The survey junction between H13171 and H13173 will be addressed in the Descriptive Report for H13173.

H13176

The survey junction between H13171 and H13176 will be addressed in the Descriptive Report for H13176.

B.2.4 Sonar QC Checks

Sonar system quality control checks were conducted as detailed in the quality control section of the DAPR.

B.2.5 Equipment Effectiveness

Sonar Settings

If necessary, the angle of the multibeam sonars were modified in order to moderate the effects of factors such as increased sea state or to increase coverage; any changes are documented in the acquisition logs.

Noise

Multibeam data indicate an area of noise on line 2098 between timestamps 11:56:13 and 11:57:32 UTC that was difficult to clean.

Navigation

Sections of data with a stretched appearance were noted in the SSS mosaic on line 2107 near timestamps 00:02:59 and 00:05:37 UTC. The project logs indicate that the navigation was lost in the collection software at new day. Further investigation indicates that this is a timing issue in that there is a time gap between consecutive pings. New navigation could not be inserted because there is no corresponding timestamp.

Spiral Artifact

Spiral artifacts were observed within the MBES data during post-processing (Figure 24). This appeared to occur after the original navigation had been replaced with processed GPS navigation. Further review indicated that the attitude and ellipsoid height appeared to look normal but the navigation (including ship speed) showed variation. An attempt was made to reject the navigation with interpolation within the MBES processing software (CARIS) which removed the spiral artifact but introduced a different artifact. Review of the post-processed, filtered GPS data indicated duplicate positions at consecutive times. The UNIX 'uniq' command was used to remove duplicate/repeating adjacent positions from the GPS files. Removing the duplicate positions and re-applying the new navigation (appended with .uniq) to the MBES data removed the spiral artifacts. This will become standard procedure for future surveys.

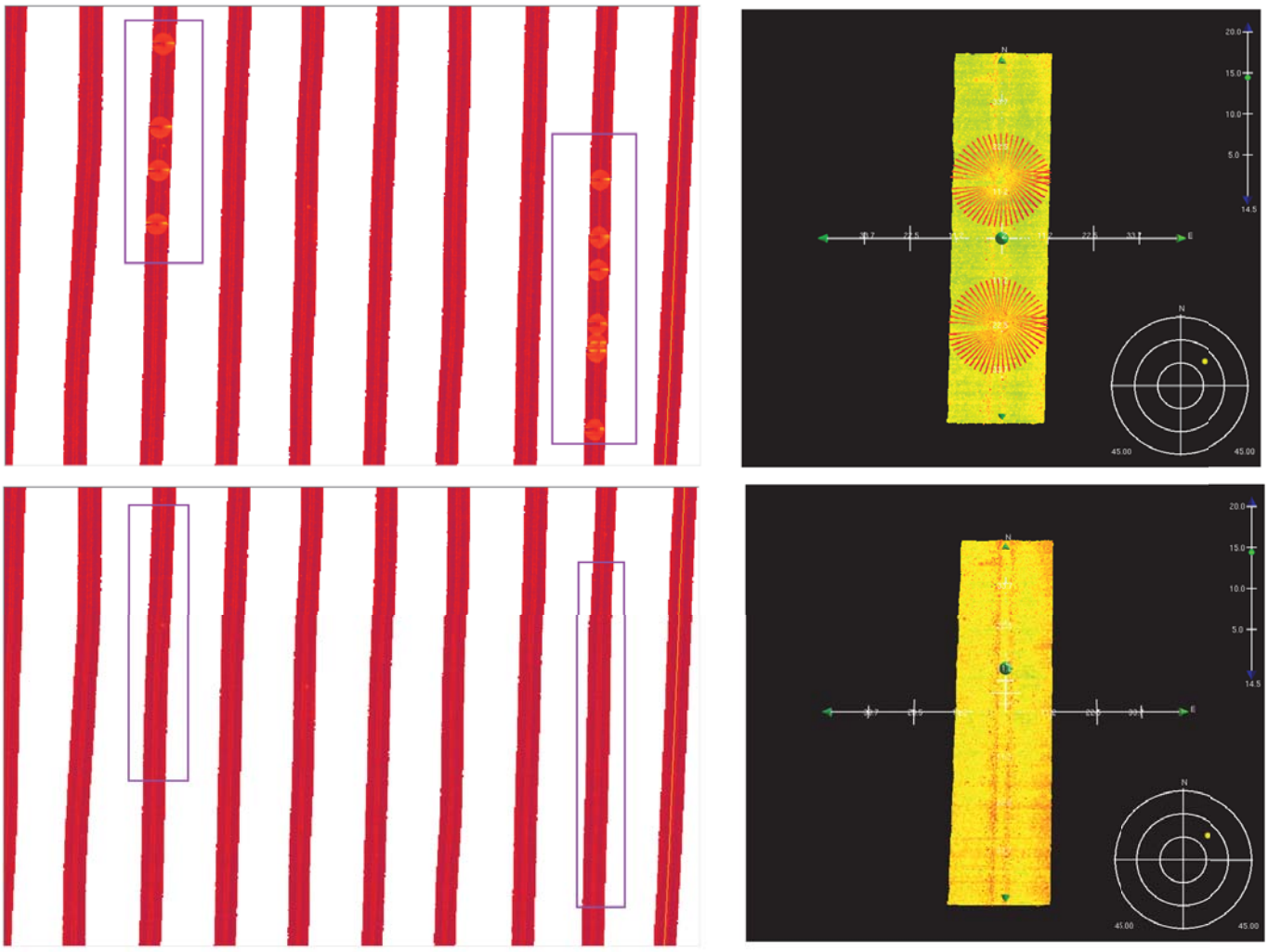


Figure 24: Top images show spiral depth artifact with post-processed ASCII navigation applied in both plan view (standard deviation layer) and 3D view. Bottom images show data processed with ASCII navigation after removing duplicate points in both plan view (standard deviation layer) and 3D view.

Seesaw Pattern Artifact

Artifacts in which one side of the swath is deeper and one side is shallower for a small period of time were observed periodically throughout the survey (Figure 25). It is unclear exactly the cause of this; it could be a roll artifact or potentially due in part to aeration under the multibeam head. These were generally small and on the order of 10 cm from the surrounding sea floor. More extreme variations were cleaned as necessary.

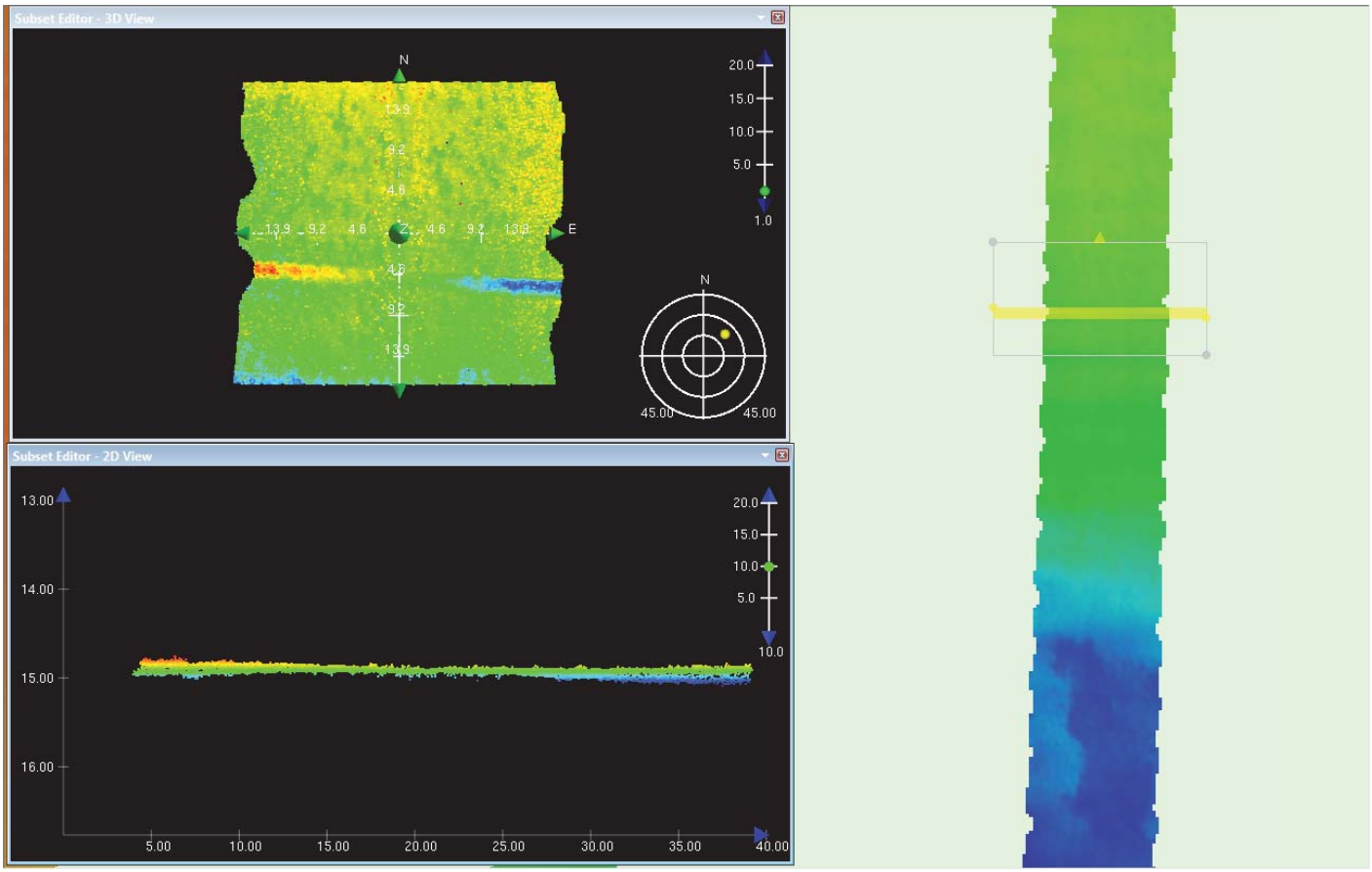


Figure 25: Example of artifact in which one side of the MBES swath is deeper and one side is shallower.

B.2.6 Factors Affecting Soundings

Environmental Factors

Weather, sea state, thermoclines, and fish/marine life were all temporary factors that affected the data periodically throughout the duration of the survey. These are noted in the acquisition and processing logs and reruns were collected when necessary.

Sound Speed Artifacts

Sound speed artifacts were observed periodically within the data. Several lines on November 11, 2018 in particular show sound speed artifacts (Figure 26). Review indicates that lines collected with the previous day's CTD show more sound speed artifacts than the lines collected with the CTD nearest in time. The error was generally on the order of 10 cm and no additional sound speed correction other than what is specified in the DAPR was conducted during post-processing.

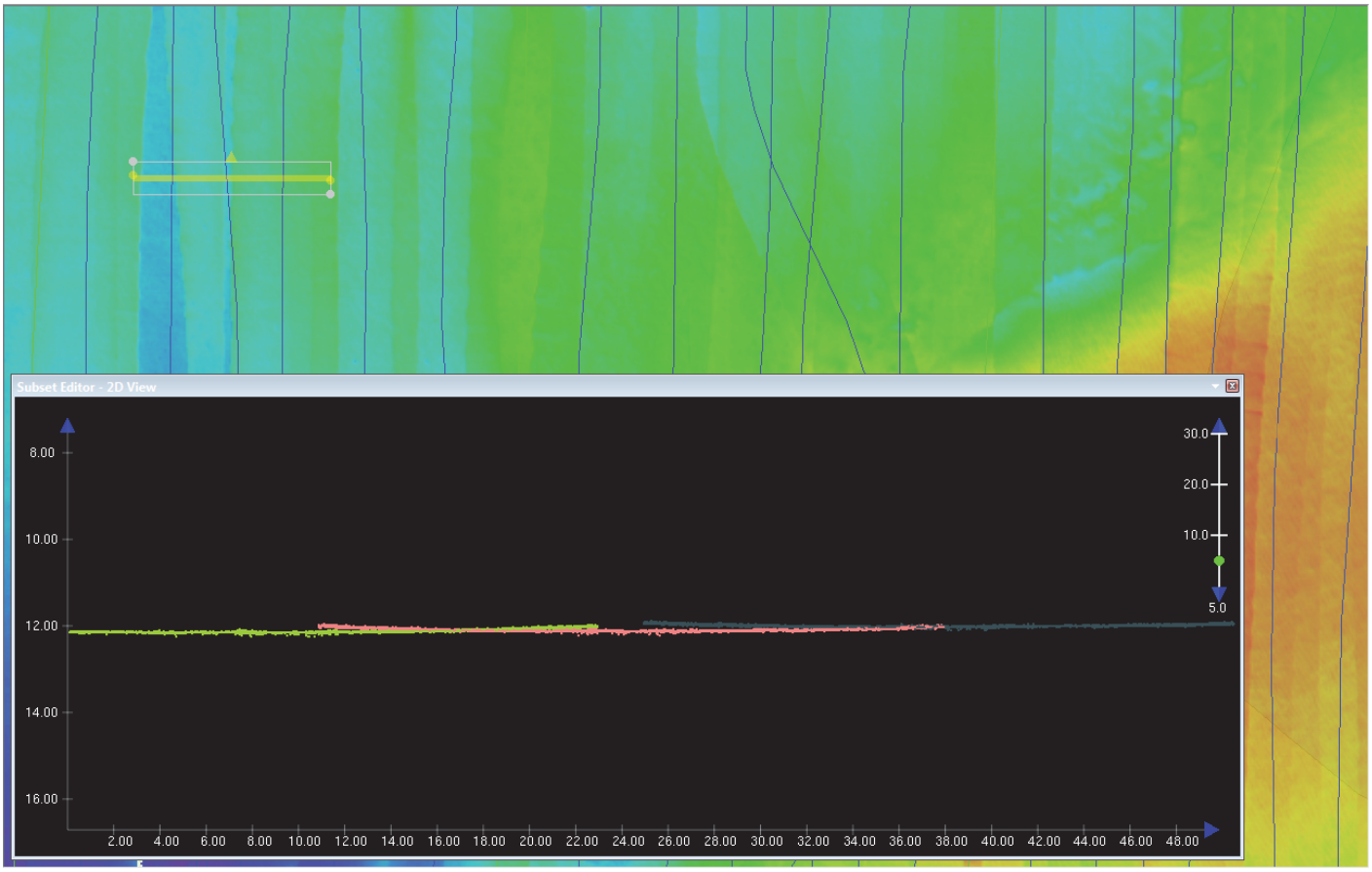


Figure 26: Example of sound speed artifacts within the H13171 MBES data. The navigation tracklines highlighted blue in the display window are lines from November 11, 2018. Exaggeration is set to 5x in the 2D display window.

B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: CTD casts were conducted twice per day and more often as necessary.

Sea-Bird Scientific SBE19 and SBE19plus Conductivity, Temperature, Depth (CTD) sensors were used for speed of sound measurements through the water column. The water column sound speed profile was applied in Kongsberg's Seafloor Information System (SIS) MBES control software to correct the multibeam data in

real-time. Endeco YSI sondes were used to determine the sound speed at the transducer. Sound speed data are located in Separates II Digital Data\Sound Speed Data Summary.

B.2.8 Coverage Equipment and Methods

Mainline coverage within the survey area consisted of Complete Coverage (100% side scan sonar with concurrent multibeam data acquisition). Feature disprovals as shown in the Project Reference File (PRF) were conducted with either 200% SSS or Object Detection Multibeam Coverage. Specifically, all Fish Haven Areas (including discrete obstructions with obstruction type as Fish Haven) were surveyed with Object Detection Multibeam coverage. Other assigned investigations were surveyed with either 200% SSS or Object Detection Multibeam (Figure 27). One feature did not have an assigned radius around it within the PRF. As per the original Project Instructions, a disproval radius of 480 meters was used. Water column data were collected over the Fish Haven areas with obvious debris and over all new investigation items.

Bathymetric and water column data were acquired with a Kongsberg EM2040C multibeam echo sounder. Side scan sonar acoustic imagery was collected with a Klein 5000 V2 system.

It was noted during post-processing that the Sheet bounds were not completely covered with SSS on much of the eastern side by up to several meters. It would appear that this was due in part to the line plan set up. The first line was close to 50 m from the edge of the sheet, so any amount of the vessel being offline could result in a data gap. Data in adjacent Sheet 1 (H13170) does cover the boundary and the data were included in the mosaic to ensure complete coverage within the survey bounds.

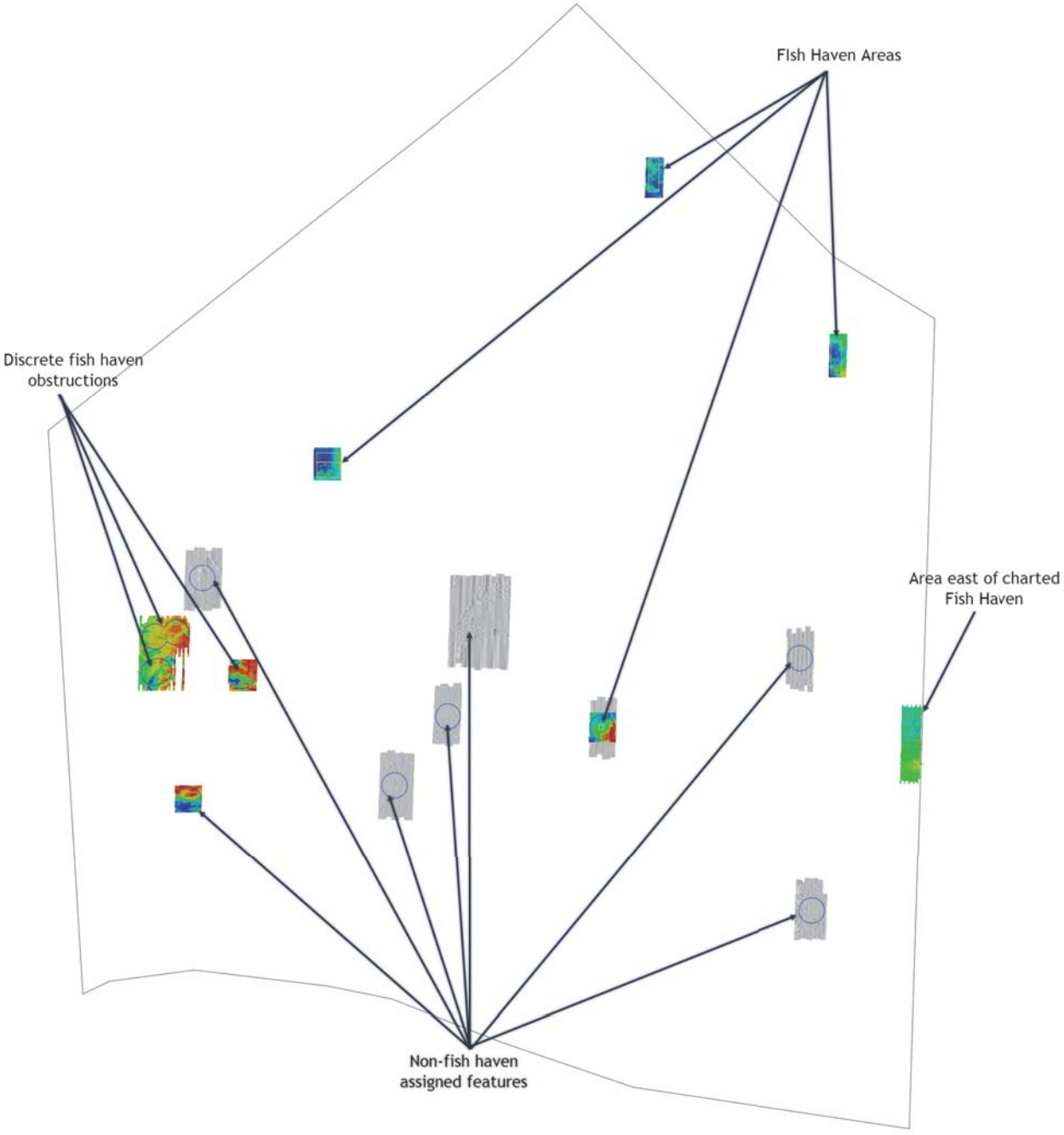


Figure 27: Assigned feature verification/disproval coverage within H13171.

B.2.9 Density

HydrOffice QCTools was used to analyze the density of all finalized surfaces. The density of all finalized surfaces meet the density requirements for which at least 95% of all nodes on the surface shall be populated with at least 5 soundings (Figures 28 – 36).

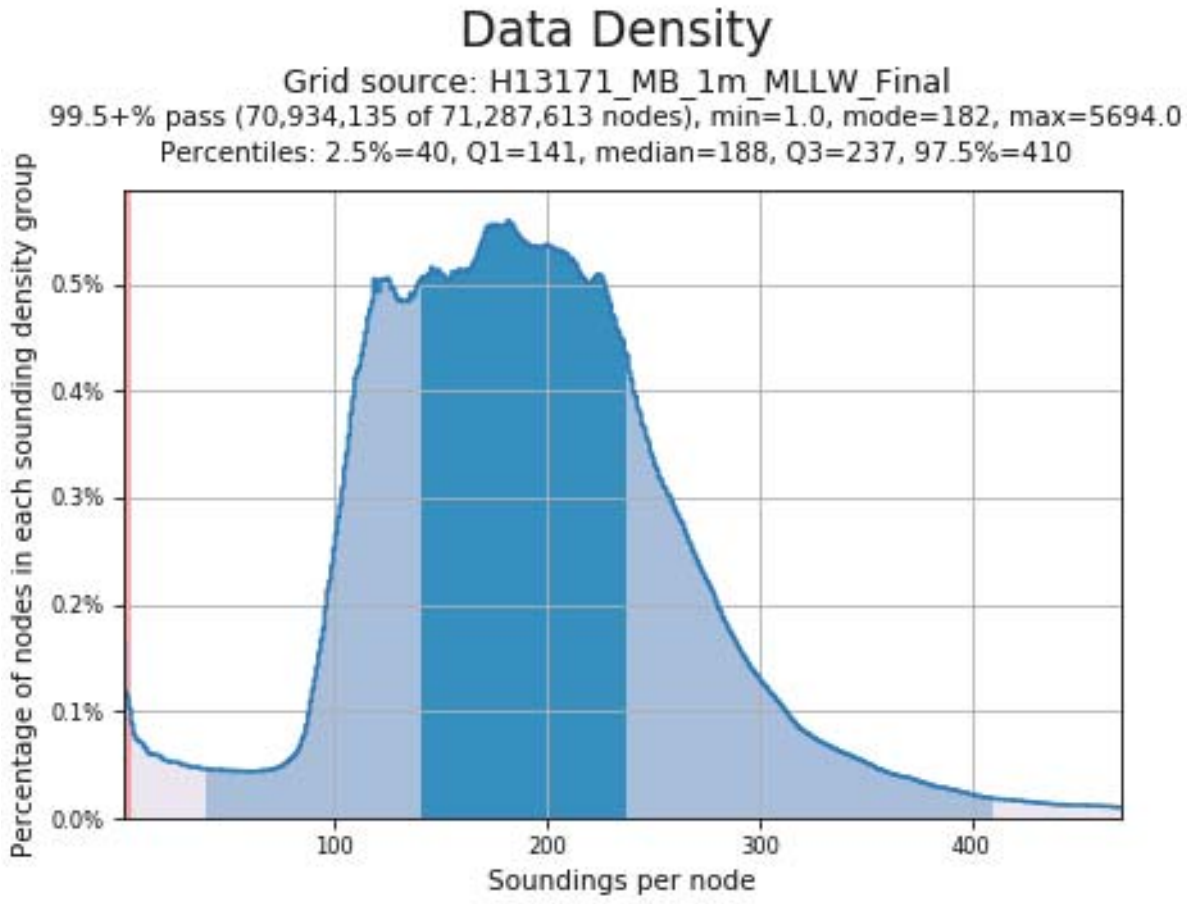


Figure 28: Statistical information about the density child layer of the H13171_MB_1m_MLLW_Final surface generated from HydrOffice QCTools.

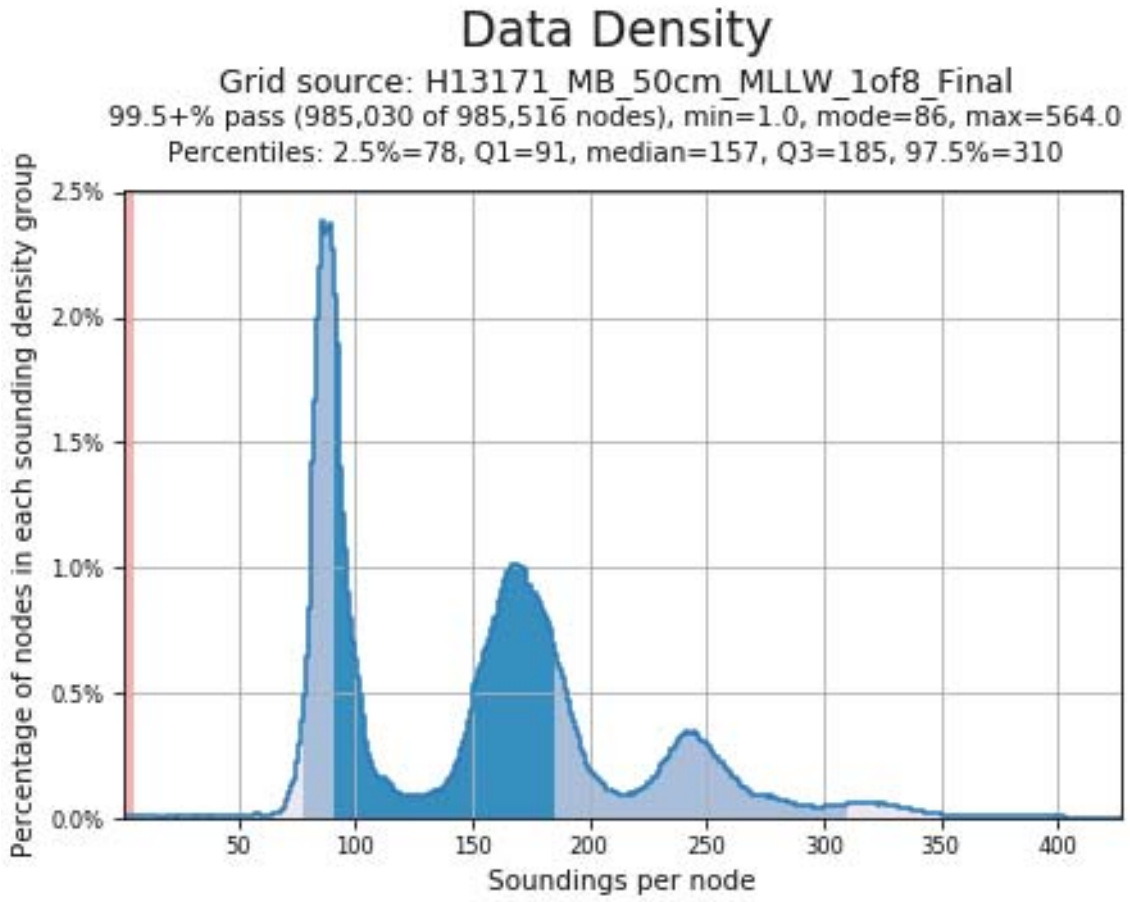


Figure 29: Statistical information about the density child layer of the H13171_MB_50cm_MLLW_1of8_Final surface generated from HydrOffice QCTools.

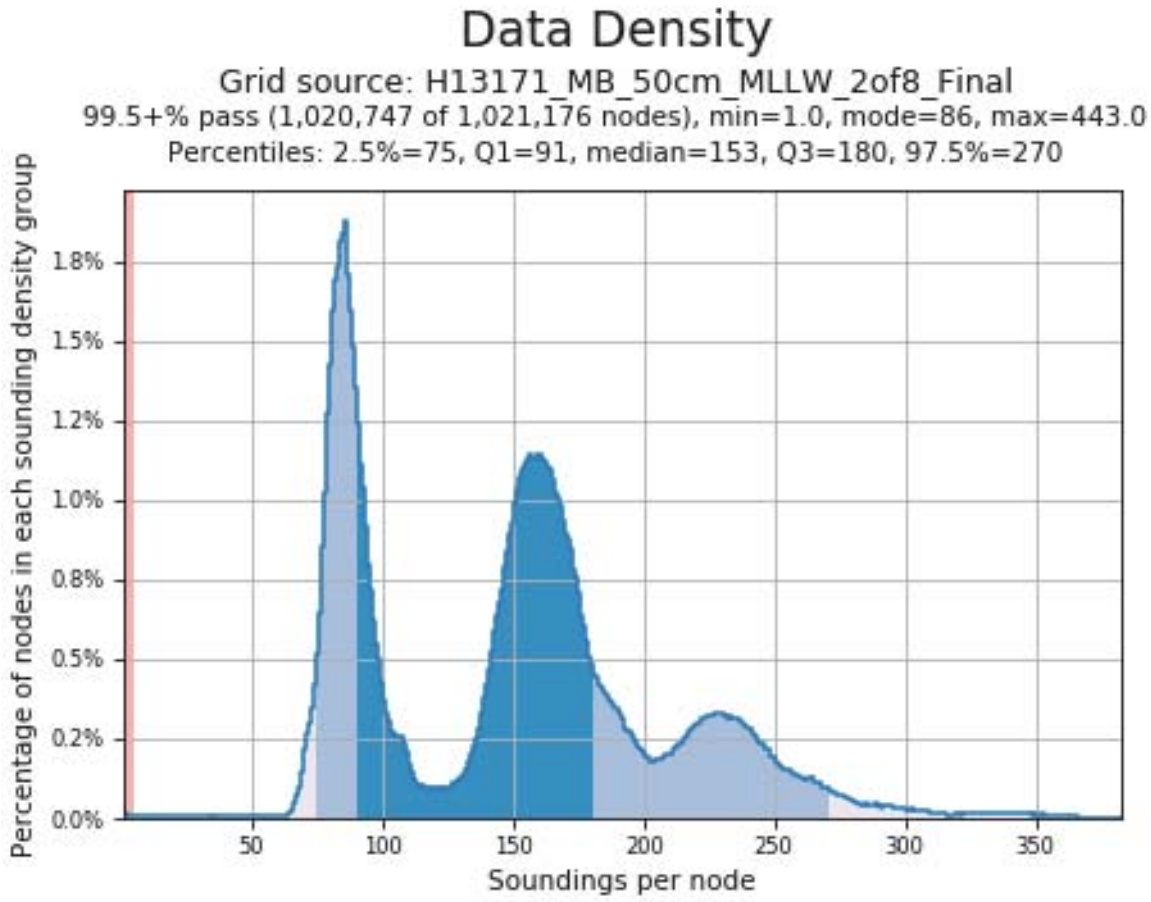


Figure 30: Statistical information about the density child layer of the H13171_MB_50cm_MLLW_2of8_Final surface generated from HydrOffice QCTools.

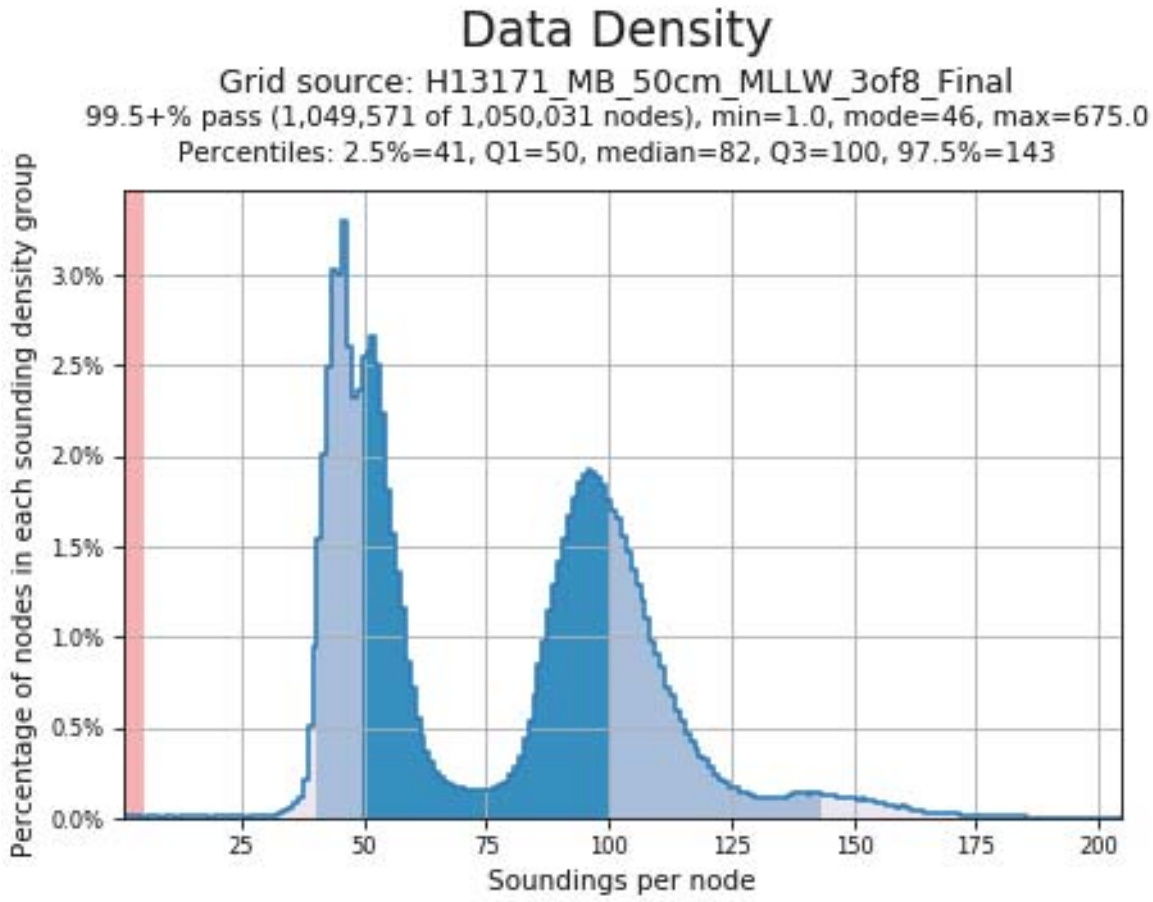


Figure 31: Statistical information about the density child layer of the H13171_MB_50cm_MLLW_3of8_Final surface generated from HydrOffice QCTools.

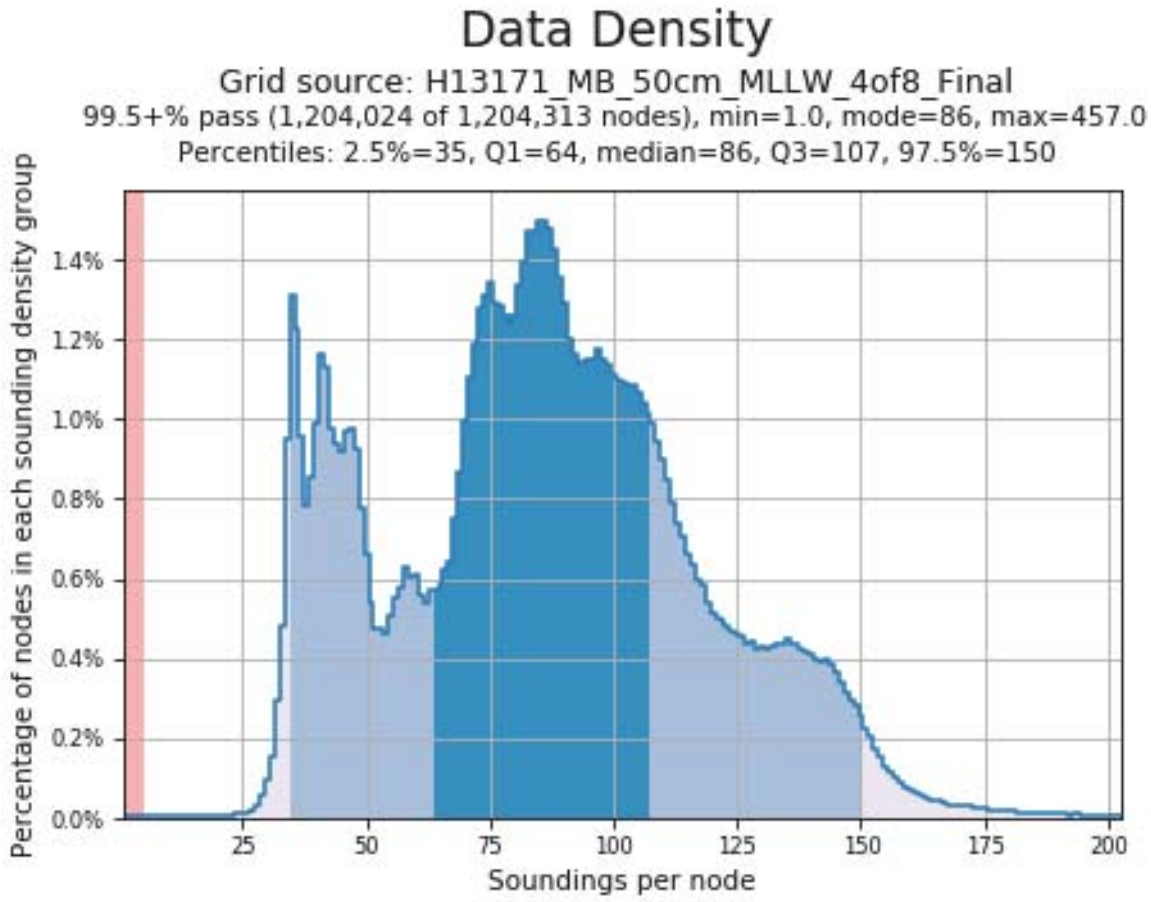


Figure 32: Statistical information about the density child layer of the H13171_MB_50cm_MLLW_4of8_Final surface generated from HydrOffice QCTools.

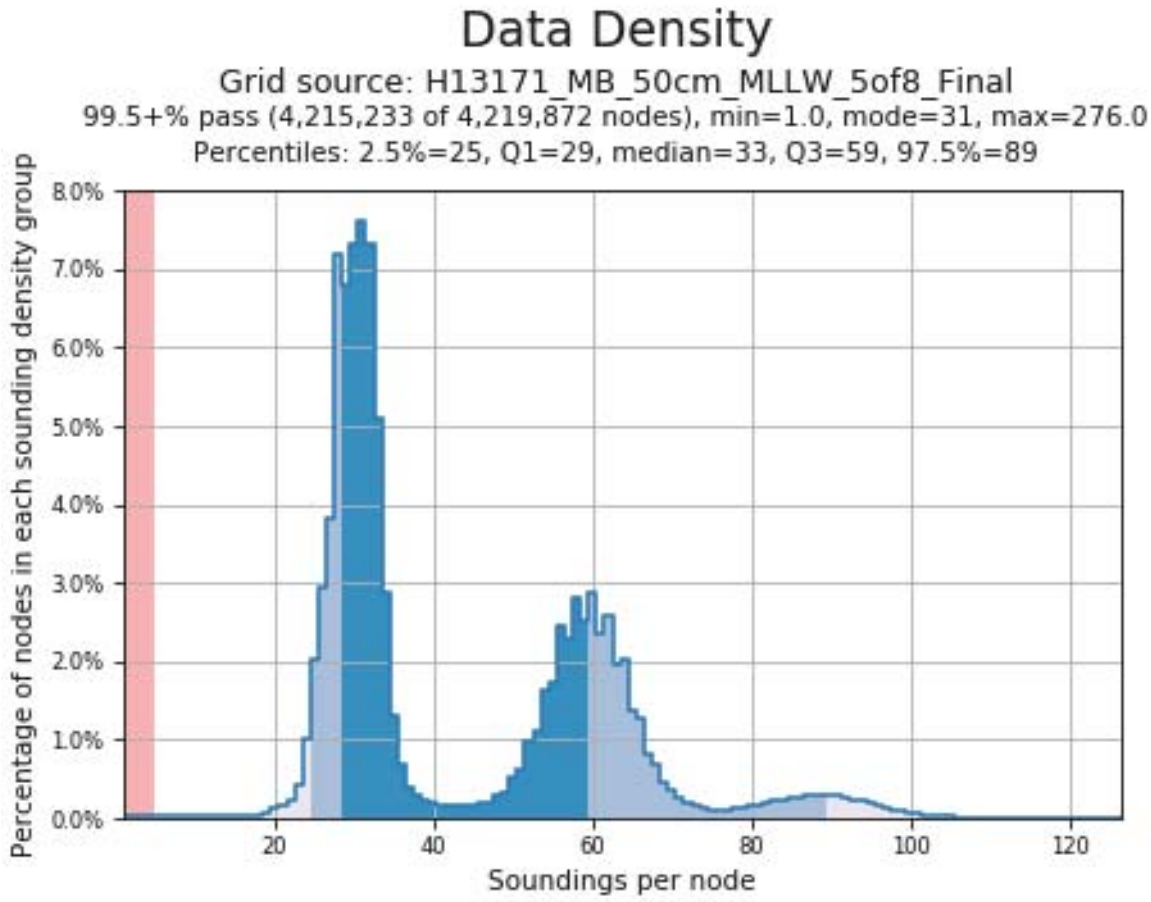


Figure 33: Statistical information about the density child layer of the H13171_MB_50cm_MLLW_5of8_Final surface generated from HydrOffice QCTools.

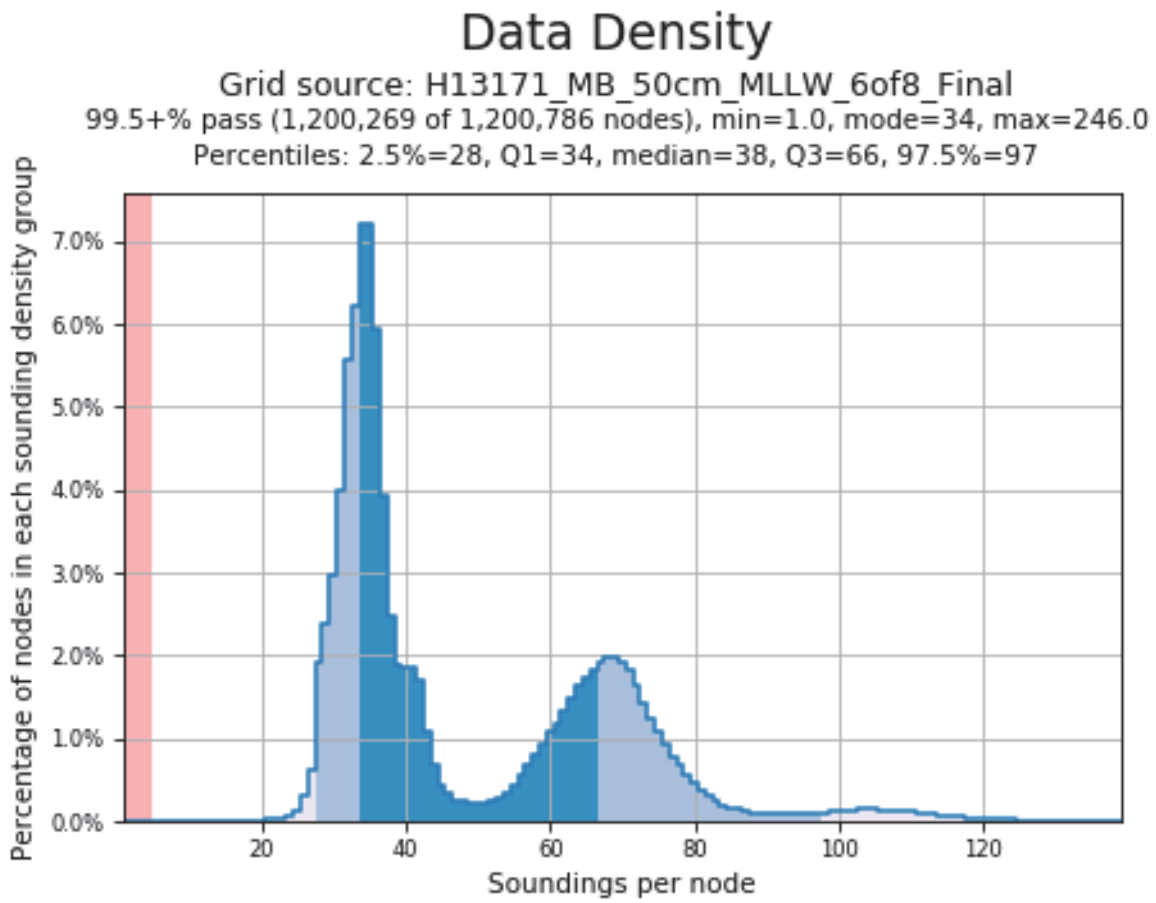


Figure 34: Statistical information about the density child layer of the H13171_MB_50cm_MLLW_6of8_Final surface generated from HydrOffice QCTools.

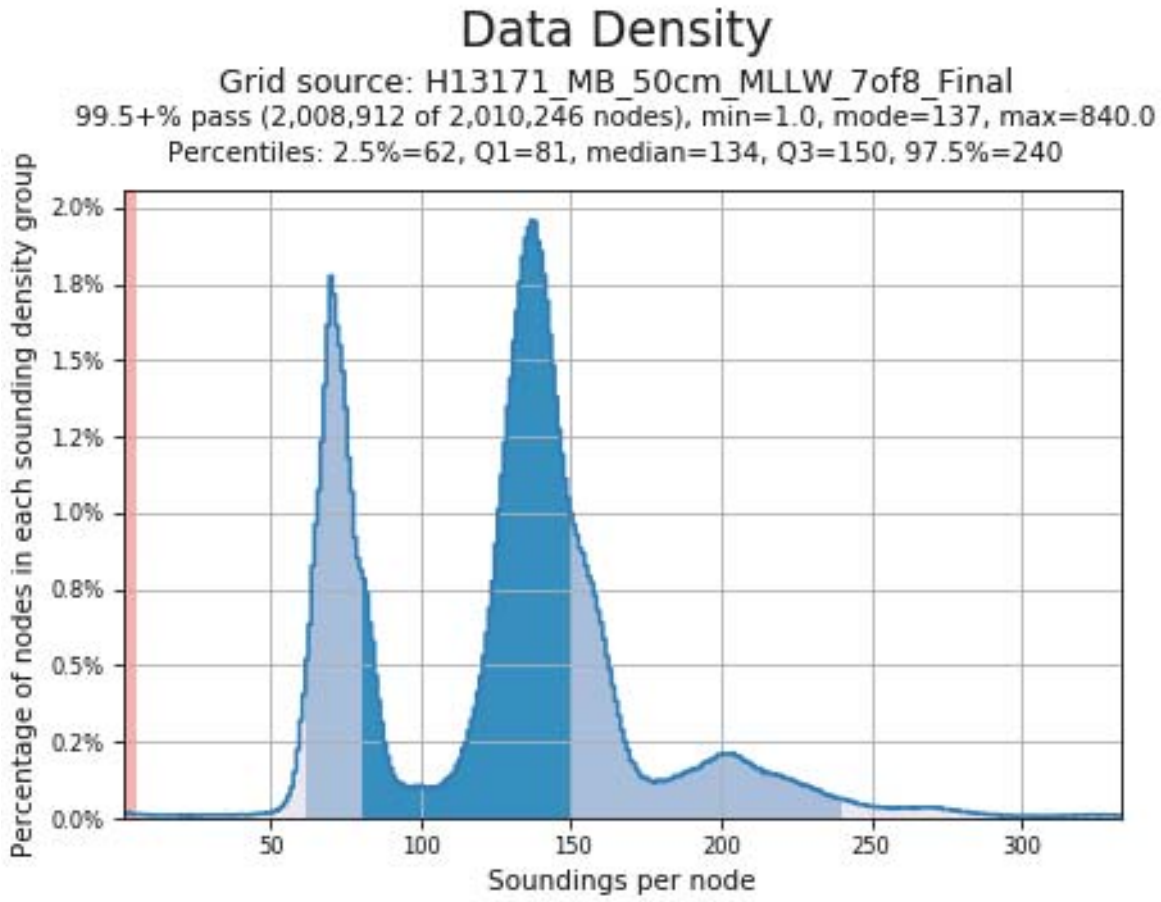


Figure 35: Statistical information about the density child layer of the H13171_MB_50cm_MLLW_7of8_Final surface generated from HydrOffice QCTools.

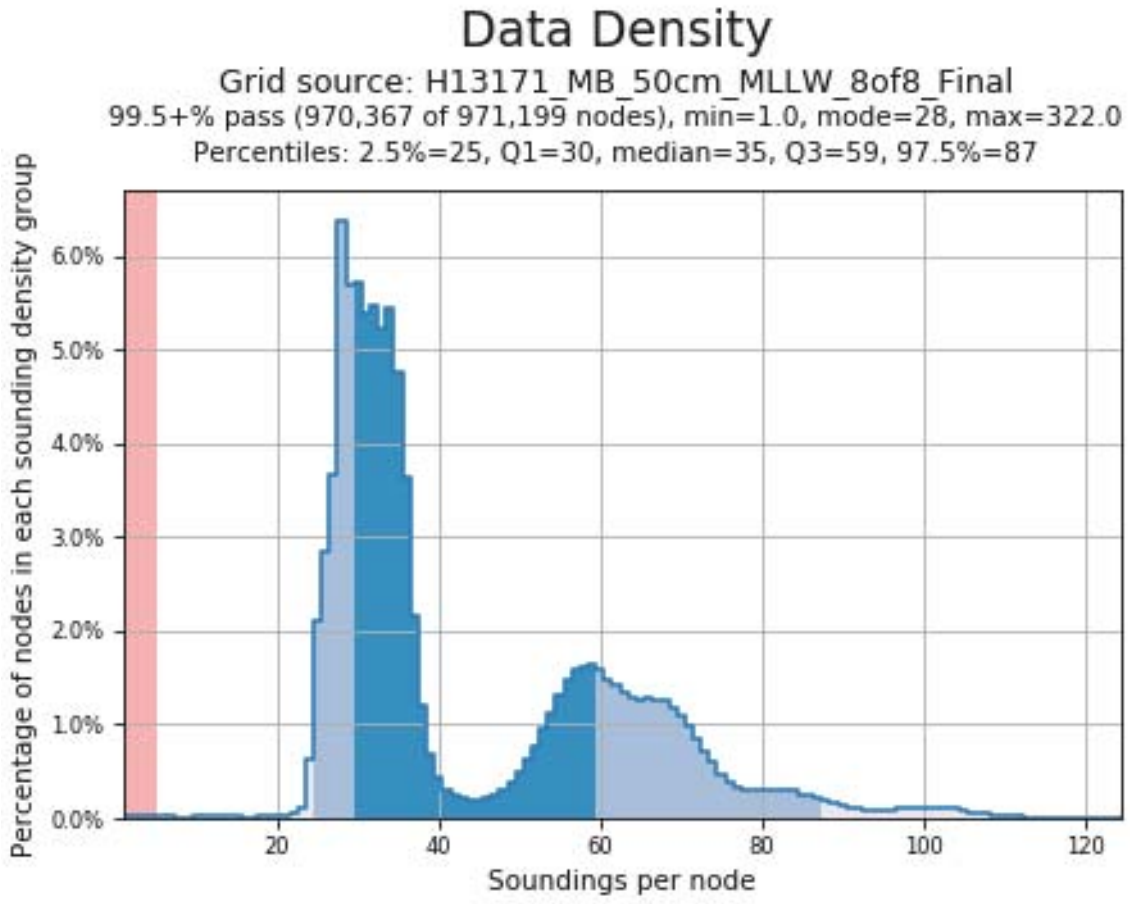


Figure 36: Statistical information about the density child layer of the H13171_MB_50cm_MLLW_8of8_Final surface generated from HydrOffice QCTools.

B.2.10 Holidays

HydrOffice QCTools was used to determine the existence of holidays within all Object Detection Multibeam grids.

No holidays exist within the Composite Source File (CSF) boundaries of the Fish Havens or user-delineated debris areas for the following grids: H13171_MB_50cm_MLLW_1of8_Final and H13171_MB_50cm_MLLW_2of8_Final. No holidays exist within the assigned radii for the following grids: H13171_MB_50cm_MLLW_3of8_Final, H13171_MB_50cm_MLLW_5of8_Final and H13171_MB_50cm_MLLW_6of8_Final

Four holidays exist within the CSF boundary of the Fish Haven area and user-defined debris area of H13171_MB_50cm_MLLW_4of8_Final. Data indicate these are due to ‘acoustic shadows’ behind features. Five holidays exist within the user-defined debris area within H13171_MB_50cm_MLLW_7of8_Final. Data indicate these are due to gaps between lines and ‘acoustic shadows’ behind features. Three holidays exist

within the assigned radii of the following grid: H13171_MB_50cm_MLLW_8of8_Final. Data indicate these are due to MBES ping drops.

A small data gap exists between lines 2114.000 and 2114.001. This line was split in order to apply different GPS files to separate parts of the line.

B.3 Echo Sounding Corrections

B.3.1 Corrections to Echo Soundings

All data reduction procedures conform to those detailed in the DAPR.

B.3.2 Calibrations

All sounding systems were calibrated as detailed in the DAPR.

B.4 Backscatter

All equipment and survey methods were used as detailed in the DAPR. Backscatter was logged within each raw Kongsberg EM file.

B.5 Data Processing

B.5.1 Primary Data Processing Software

The following software program was the primary program used for bathymetric data processing:

Manufacturer	Name	Version
Teledyne	CARIS HIPS	10.4

Table 10: Primary bathymetric data processing software

The following software program was the primary program used for bathymetric data processing:

Manufacturer	Name	Version
QPS	Qimera	1.7.4

Table 11: Primary bathymetric data processing software

The following software program was the primary program used for imagery data processing:

Manufacturer	Name	Version
Chesapeake Technologies, Inc.	SonarWiz	V6005.0025

Table 12: Primary imagery data processing software

The following Feature Object Catalog was used: NOAA Extended Attribute Files V5_8.

CARIS HIPS version 10.4 was the primary software program used for bathymetric data processing. However, there was a period where there was an issue in CARIS with water column additional bathymetry not showing up in the right depth location. To continue moving forward, the water column data were reviewed in Qimera. Please note that although Table 11 states that Qimera was a primary program used for processing bathymetric data, it would be considered a secondary processing software. One S-57 of DtoNs 8 and 9 was also generated from Qimera during this time. The issue has since been fixed in CARIS. There was a zero entry in the SVC section of the vessel file that was causing the problem. This was removed and the MBES data re-merged in CARIS. A computer hardware issue prevented processing large amounts of water column data in CARIS and water column data were added sparingly. Water column data were added to additional bathymetry and the H13171_MB_1m_MLLW surface for investigations 17 and 19.

B.5.2 Surfaces

The following surfaces and/or BAGs were submitted to the Processing Branch:

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H13171_MB_1m_MLLW	CARIS Raster Surface (CUBE)	1 meters	6.17 meters - 18.08 meters	NOAA_1m	Complete MBES
H13171_MB_1m_MLLW_Final	CARIS Raster Surface (CUBE)	1 meters	5.70 meters - 18.08 meters	NOAA_1m	Complete MBES
H13171_MB_50cm_MLLW_1of8	CARIS Raster Surface (CUBE)	0.5 meters	6.07 meters - 10.07 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_1of8_Final	CARIS Raster	0.5 meters	5.76 meters - 10.07 meters	NOAA_0.5m	Object Detection

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
	Surface (CUBE)				
H13171_MB_50cm_MLLW_2of8	CARIS Raster Surface (CUBE)	0.5 meters	6.94 meters - 10.46 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_2of8_Final	CARIS Raster Surface (CUBE)	0.5 meters	6.44 meters - 10.46 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_3of8	CARIS Raster Surface (CUBE)	0.5 meters	11.24 meters - 12.44 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_3of8_Final	CARIS Raster Surface (CUBE)	0.5 meters	11.24 meters - 12.44 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_4of8	CARIS Raster Surface (CUBE)	0.5 meters	7.66 meters - 15.22 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_4of8_Final	CARIS Raster Surface (CUBE)	0.5 meters	7.42 meters - 15.22 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_5of8	CARIS Raster Surface (CUBE)	0.5 meters	14.24 meters - 16.31 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_5of8_Final	CARIS Raster Surface (CUBE)	0.5 meters	14.24 meters - 16.31 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_6of8	CARIS Raster Surface (CUBE)	0.5 meters	13.67 meters - 15.61 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_6of8_Final	CARIS Raster	0.5 meters	13.67 meters -	NOAA_0.5m	Object Detection

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
	Surface (CUBE)		15.61 meters		
H13171_MB_50cm_MLLW_7of8	CARIS Raster Surface (CUBE)	0.5 meters	7.48 meters - 11.15 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_7of8_Final	CARIS Raster Surface (CUBE)	0.5 meters	7.26 meters - 11.15 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_8of8	CARIS Raster Surface (CUBE)	0.5 meters	13.23 meters - 15.76 meters	NOAA_0.5m	Object Detection
H13171_MB_50cm_MLLW_8of8_Final	CARIS Raster Surface (CUBE)	0.5 meters	13.23 meters - 15.76 meters	NOAA_0.5m	Object Detection
H13171_SSSAB_1m_455kHz_1of1	SSS Mosaic	1 meters	-	N/A	100% SSS
H13171_SSSAB_1m_455kHz_2of2	SSS Mosaic	1 meters	-	N/A	200% SSS

Table 13: Submitted Surfaces

B.5.3 MBES Data Review

The 'deep' and 'shoal' depth layers of the surfaces were reviewed to highlight outliers (fliers). Identified fliers were manually rejected. In addition, Bathymetric Attributed Grid (BAG) files of the 'deep' and 'shoal' layers were exported and HydrOffice QCTools Flier Detection utility used to identify potential fliers. These were imported into the CARIS display window and the data reviewed to further identify any potential erroneous MBES data, which were removed as necessary.

B.5.4 Fixed File Path

During post-processing, ASCII navigation files (time, lat, lon, GPS height) were imported into CARIS with an associated .info file, which contains information on the contents and formatting of the ASCII navigation files.

When projects processed in the above manner were copied from a network location to external or internal drives or from internal to external drives it was observed that the path of the info file remained fixed to the original path name. Upon opening the copied project, the CARIS program asked to update the navigation folder, but not the info file. Keeping the info file in with the ASCII navigation did not appear to change this. Certain editors such as navigation editor or swath editor could not be opened within CARIS and the lines became locked.

The workaround is to recreate the exact folder structure of the original project on the internal or external drive. However, it is recognized that this is an issue for submission because files are placed in the appropriate submission folders without regard for how the projects were originally set up.

A request was logged with CARIS support and the information sent to the development team. Information from CARIS supports indicates that the Check Project process was not checking for an *.info file when using an ASCII file for auxiliary navigation. CARIS correspondence indicates that this has been fixed so that the check process will look for *.info missing files, enabling users to update their location using the Reset Raw Data Location dialog box. This fix should be available in both versions 10.4.10 (tentatively early-January) and 11.1.0 (tentatively mid-January). Due to licensing limitations this has not been tested in-house and the workaround to maintain original path names and drive letters was used. The original path for this project is:

N:\noaa\2018-OPR-J317-KR-18_193519-TampaBay\Sheets\H13171-Sheet2\Geo\Software_Projects\CARIS\H13171

C. Vertical and Horizontal Control

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying HVCR.

C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

ERS Methods Used:

ERS via VDATUM

Ellipsoid to Chart Datum Separation File:

TampaBay_EC_poly_xyNAD83-MLLW_geoid12b

C.2 Horizontal Control

The horizontal datum for this project is North American Datum 1983.

The projection used for this project is 17N.

The positioning systems aboard the vessels utilize Oceaneering® C-Nav® systems which deliver Precise Point Positioning (PPP). The C-Nav® GPS systems receive corrections through the C-Nav® Subscription Services.

D. Results and Recommendations

D.1 Chart Comparison

Chart comparisons were evaluated in CARIS. A combination of sounding selection layers, user-defined depth ranges and contours generated from multibeam survey data were used to compare surveyed soundings to charted depths. The sounding selection layer was generated from the H13171 surface using a shoal biased, single-defined radius of 200 m, which provided sufficient soundings across the survey area with which to compare to charted depths and contours. In order to differentiate surveyed soundings, soundings from the selected sounding layer were separated into different layers based on charted contour depths: all soundings 9.1 m and less were added to one layer, soundings between 9.11 and 10.9 m were added to another layer, and soundings 10.91 m and greater were added to a final layer. The user defined depth range color chart based on charted contours is shown in Figure 37.

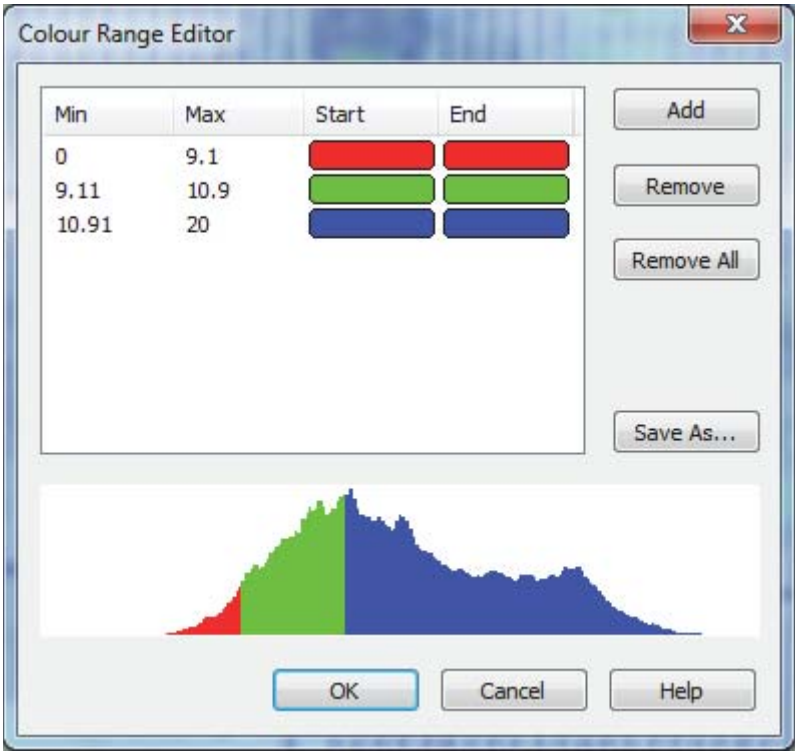


Figure 37: Color range chart used to compare H13171 surveyed depths to charted contours.

D.1.1 Electronic Navigational Charts

The following are the largest scale ENCs, which cover the survey area:

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US4FL10M	1:80000	32	12/10/2018	12/10/2018	NO
US5FL11M	1:40000	46	10/11/2018	12/10/2018	NO
US5FL17M	1:40000	13	12/03/2018	12/03/2018	NO
US3GC06M	1:456394	23	05/23/2018	12/10/2018	NO
US3GC07M	1:350000	33	06/14/2018	11/05/2018	NO

Table 14: Largest Scale ENCs

US4FL10M

Local Notice to Mariners (LNM) were downloaded from the Office of Coast Survey (OCS) website for Raster Nautical Chart (RNC) 11412 and reviewed subsequent to the date of the Project Instructions and before the end of the survey. The last LNM reviewed for Chart 11412 Current Edition 48 Print Date Jul./2018, Tampa Bay and St. Joseph Sound was LNM 45/18, 7th Dist posted on 11/15/2018 to Add an Obstruction in Feet. One Local Notice to Mariners was issued within the survey bounds (LNM 45/18, 7th Dist to Add Obstruction in Feet - 40 Obstn - posted on 11/1/2018) that corresponds to a DtoN submitted for this survey.

US4FL10M is the only affected ENC that covers the entire bounds of survey H13171. Surveyed soundings range from 5.70 to 18.08 m (18.71 - 59.31 ft) referenced to MLLW and surveyed depths generally increase from the east and northeast to the west and southwest within the survey area. Review of the selected sounding layer and bathymetric surface indicates that surveyed soundings generally agree with charted depths within 0.3 m (1 ft), or surveyed soundings are deeper than charted depths by up to 1.2 m (4 ft). The 9.1-m (29.86-ft) and 10.9-m (35.76-ft) charted contours are present within the survey area. Survey data indicate that while depths of a particular range do exist within the presently charted contours, the outline and shape of the contours has changed. Data also indicate that several isolated contours no longer exist, while new isolated contours are present (Figures 38 - 41).

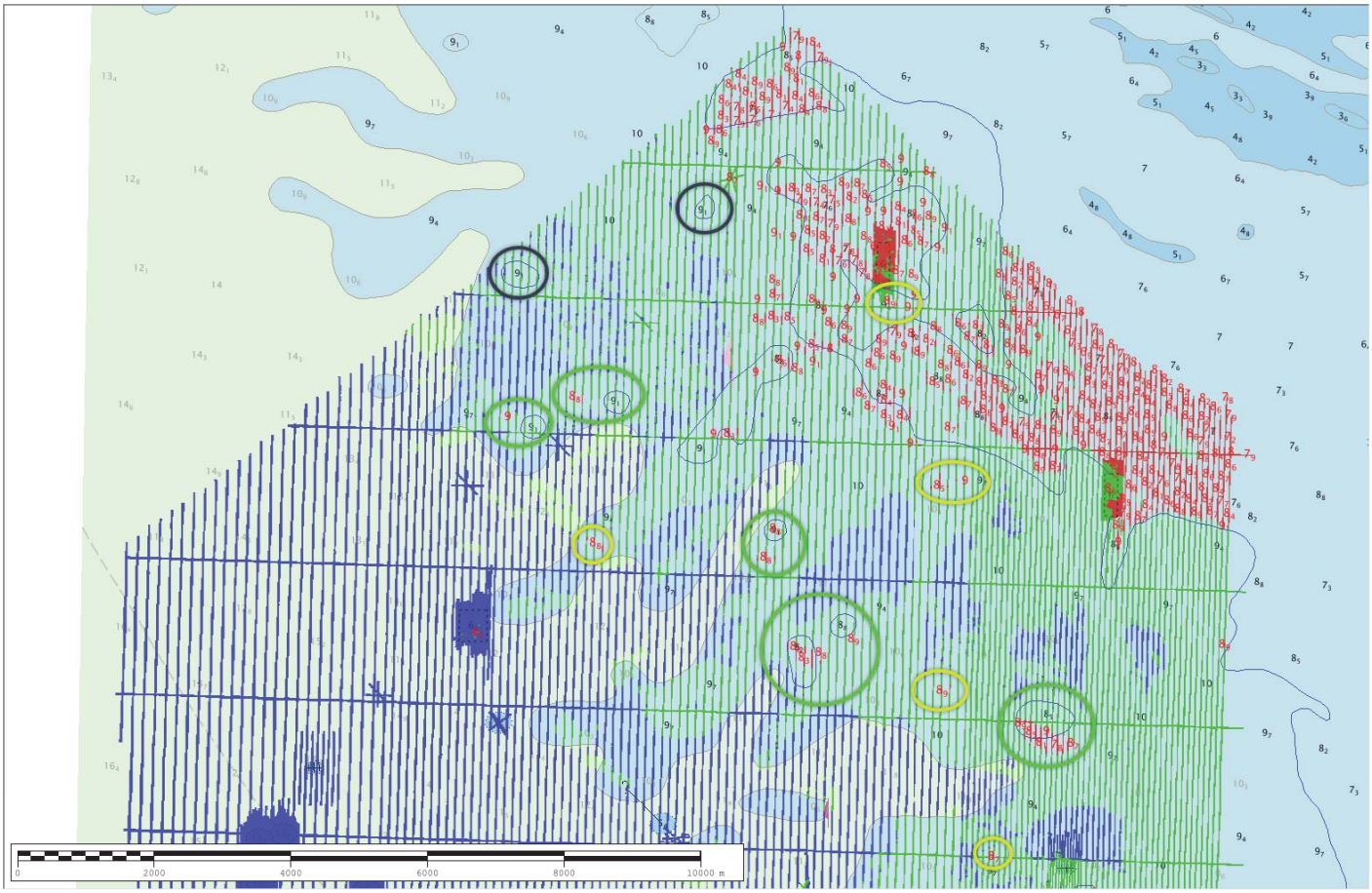


Figure 38: Image of the northern section of the H13171_MB_1m_MLLW_Final surface colored using the depth range chart shown in Figure 37 with the 9.1-m US4FL10M charted contour shown in blue. Red soundings indicate soundings from the selected sounding layer that are 9.1 m or less. Yellow polygons indicate potentially new isolated contours. Black polygons show where survey data indicate deeper data is present than currently charted. Green polygons show examples of areas where the survey data indicate contours are similar but shifted.

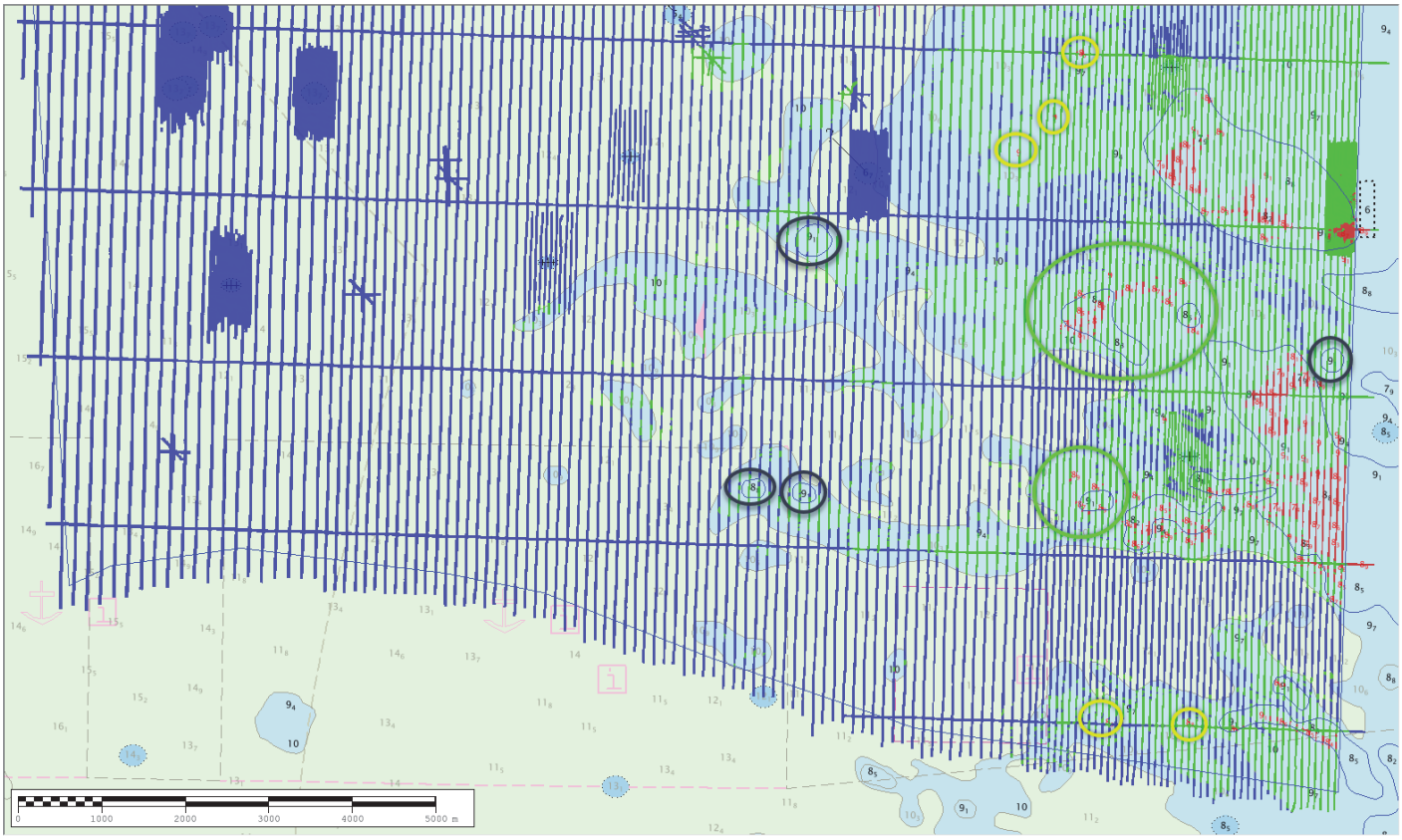


Figure 39: Image of the southern section of the H13171_MB_1m_MLLW_Final surface colored using the depth range chart shown in Figure 37 with the 9.1-m US4FL10M charted contour shown in blue. Red soundings indicate soundings from the selected sounding layer that are 9.1 m or less. Yellow polygons indicate potentially new isolated contours. Black polygons show where survey data indicate deeper data is present than currently charted. Green shows examples of areas where data indicate the contours are similar but shifted.

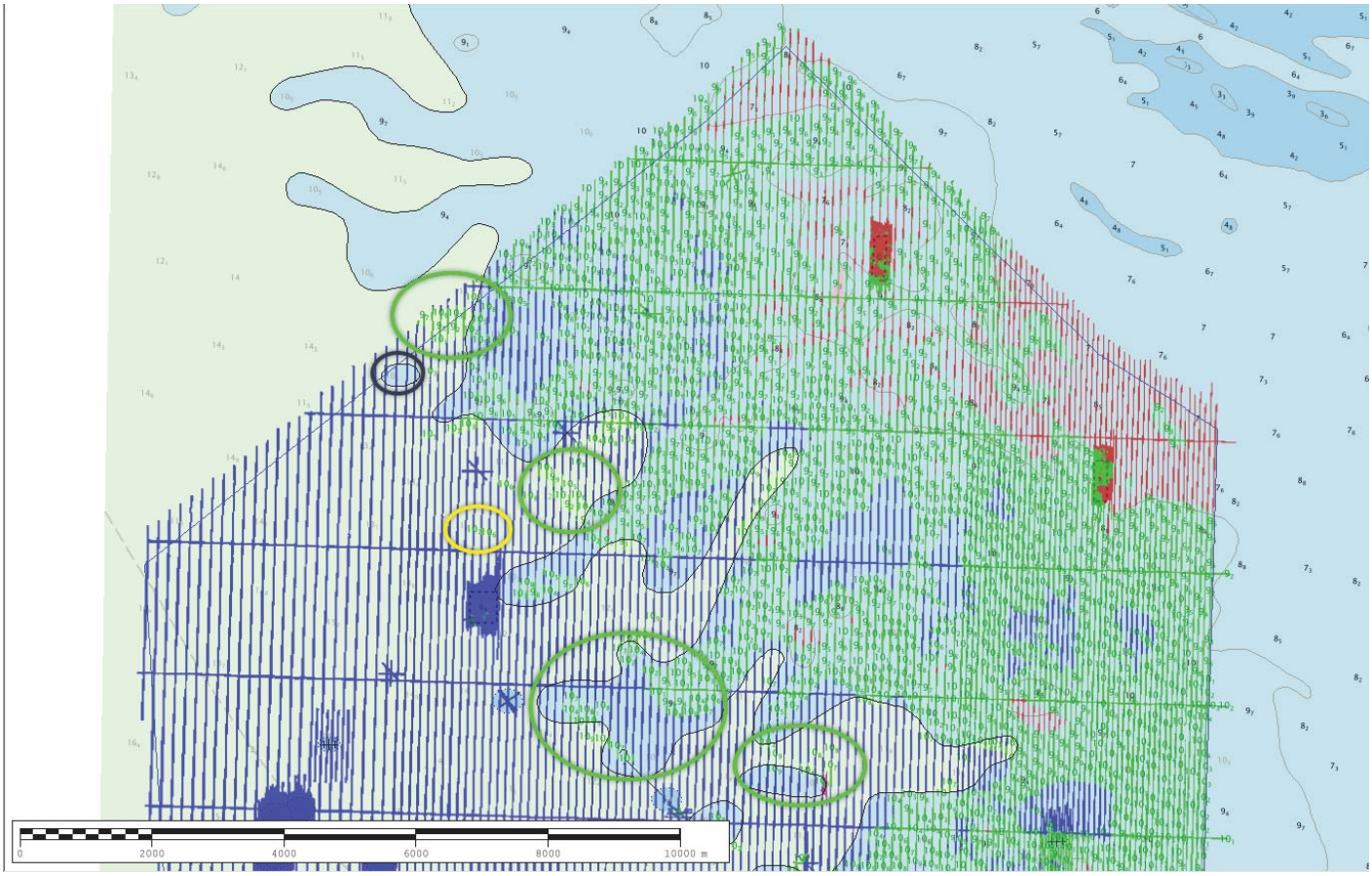


Figure 40: Image of the northern section of the H13171_MB_1m_MLLW_Final surface colored using the depth range chart shown in Figure 37 with the 10.9-m US4FL10M charted contour shown in black. Green soundings indicate soundings from the selected sounding layer that are between 9.11 m and 10.9 m. Yellow polygons indicate potentially new isolated contours. Black polygons show where survey data indicate deeper data is present than currently charted. Green polygons show examples of areas where data indicate that the contours are have shifted.

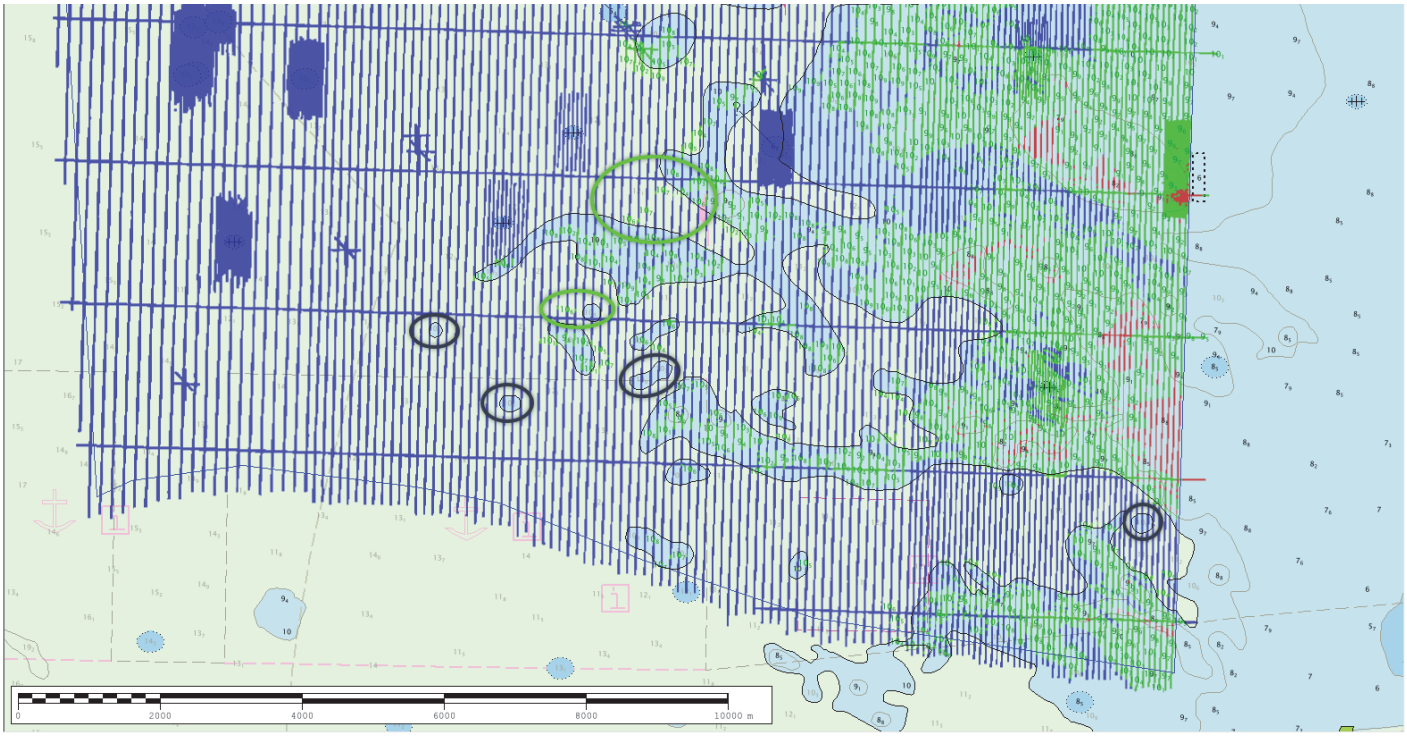


Figure 41: Image of the southern section of the H13171_MB_1m_MLLW_Final surface colored using the depth range chart shown in Figure 37 with the 10.9-m US4FL10M charted contour shown in black. Green soundings indicate soundings from the selected sounding layer that are between 9.11 m and 10.9 m. Black polygons show isolated contours where survey data indicate deeper data is present than currently charted. Green polygons show examples of areas where data indicate that the contours have shifted.

US5FL11M

Local Notice to Mariners (LNM) were downloaded from the OCS website for RNC 11415 and reviewed subsequent to the date of the Project Instructions and before the end of the survey. The last LNM reviewed for Chart 11415 Current Edition 13 Print Date Nov./2018, Tampa Bay Entrance; Manatee River Extension was LNM 45/18, 7th Dist posted on 11/15/2018 to Add an Obstruction in Feet. One Local Notice to Mariners was issued within the survey bounds (LNM 45/18, 7th Dist to Add Obstruction in Feet - 40 Obstn - posted on 11/1/2018) that corresponds to a DtoN submitted for this survey.

US5FL11M covers all but the northwestern corner and northern peak of the H13171 survey area. The 9.1-m (29.86-ft) contours are present on US5FL11M within the survey area and although they vary slightly from the US4FL10M contour positions, the general trends and overall observations made for US4FL10M are valid for US5FL11M. There is one contour in the northeast portion of the survey area that is present on US5FL11M that is not present on US4FL10M (Figure 42). It is unclear if this contour should have a different value because, although it is labeled as a 9.1-m contour it is within a larger 9.1-m contour. Survey data indicate that depths are generally deeper than 9.1 m within this area. Depths on US5FL11M generally match those of US4FL10M though, due to the scale of the chart, more charted depths exist for USFL11M. Observations made for US4FL10M with regards to charted and surveyed depths are generally valid for

US5FL11M. In three locations in particular (Figures 43 and 44), charted depths of US4FL10M are different than those of US5FL11M.

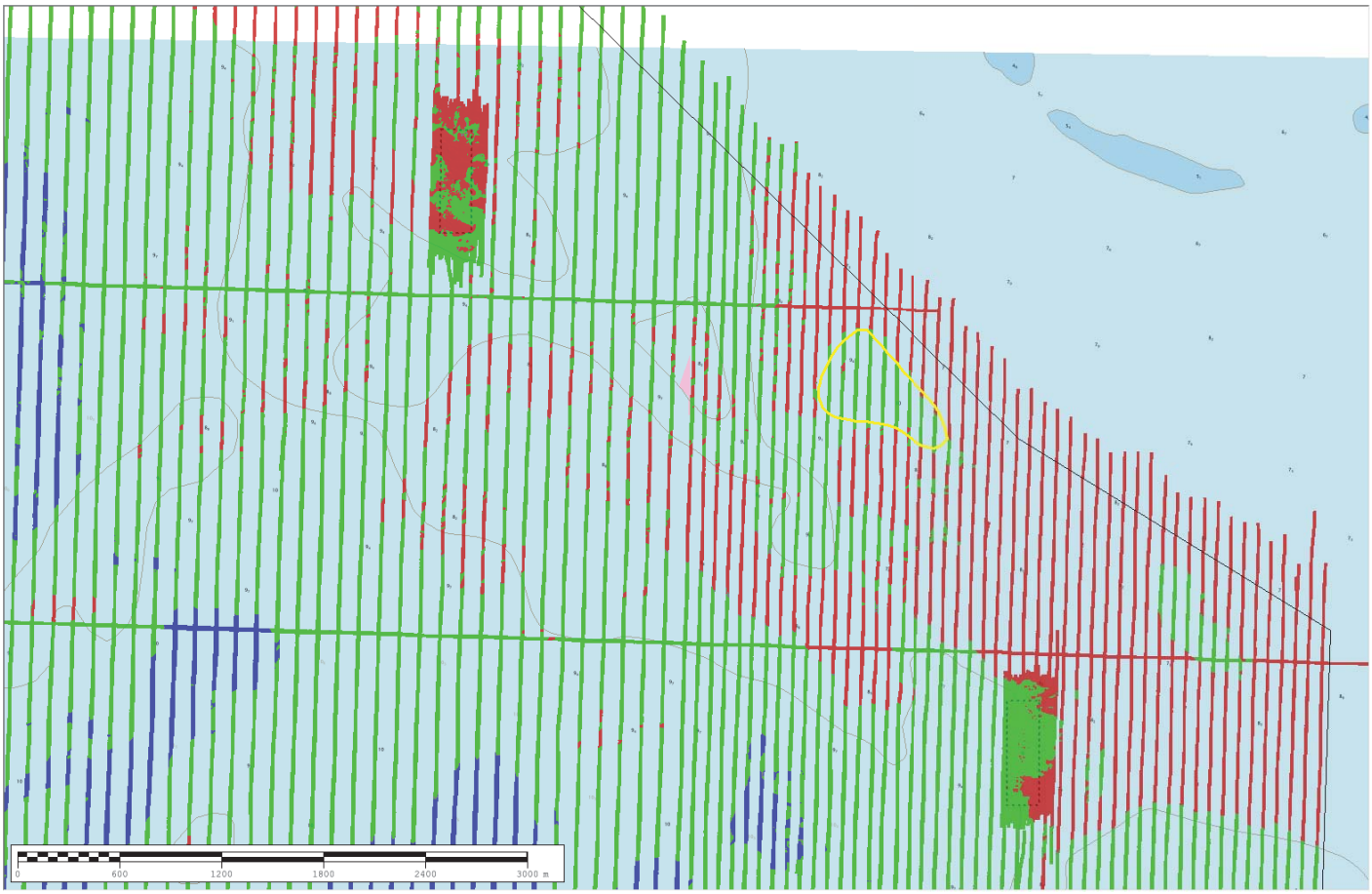


Figure 42: Image of the southern section of the H13171_MB_1m_MLLW_Final surface colored using the depth range chart shown in Figure 37. Yellow outline shows one 9.1-m contour present on US5FL11M that is not present on US4FL10M. Survey data indicate that depths are generally deeper than 9.1 m in this area.

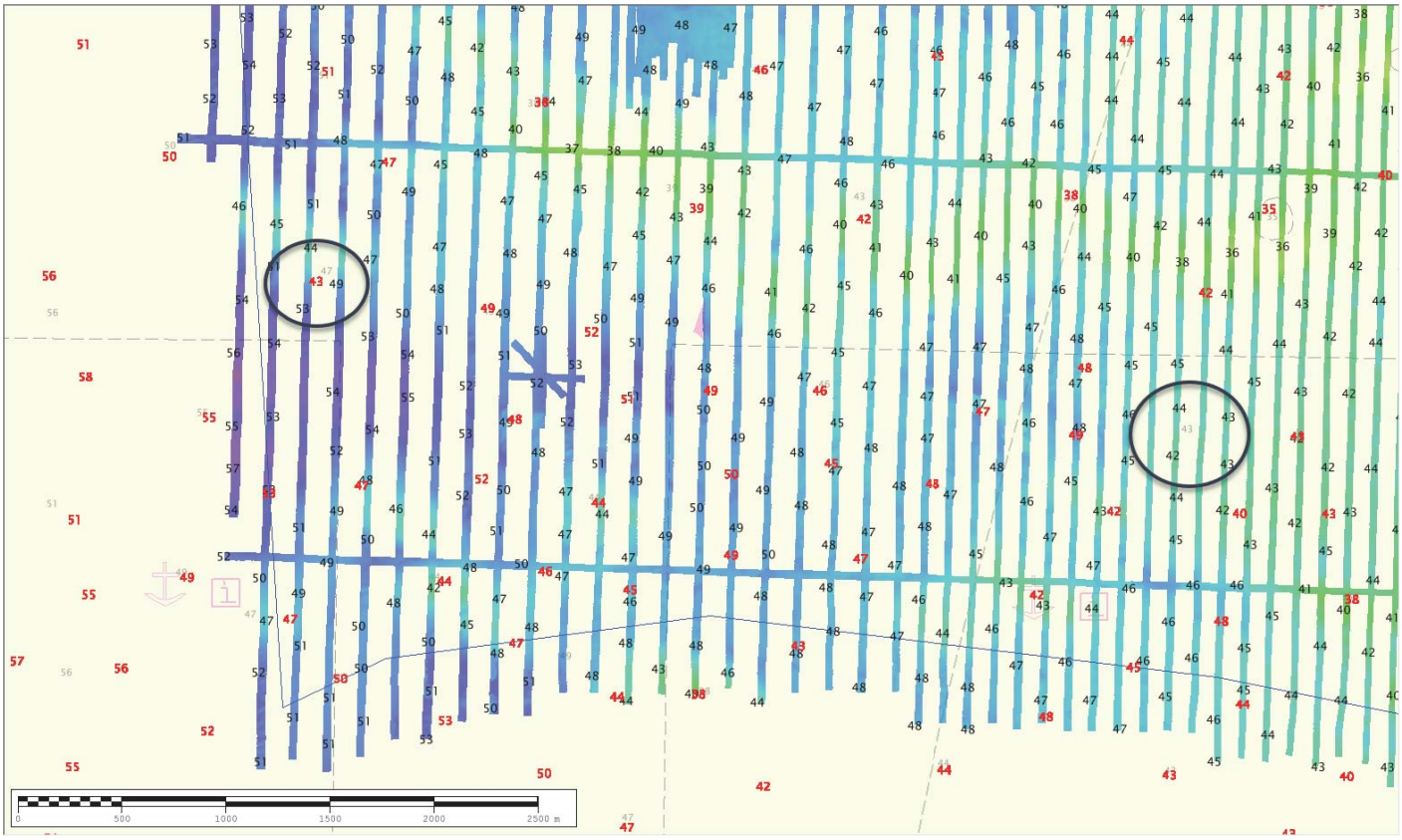


Figure 43: Image of southwestern portion of H13171 survey area. Red soundings are from US5FL11M, grey soundings are from US4FL10M and black soundings are from the survey selected soundings layer. Black circle to the right shows a charted depth from US4FL10M that is not present on US5FL11M, but agrees with surveyed soundings. The left circle shows a charted depth from US4FL10M which is deeper than the US5FL11M charted depth in same area. Surveyed soundings show a variation of depths.

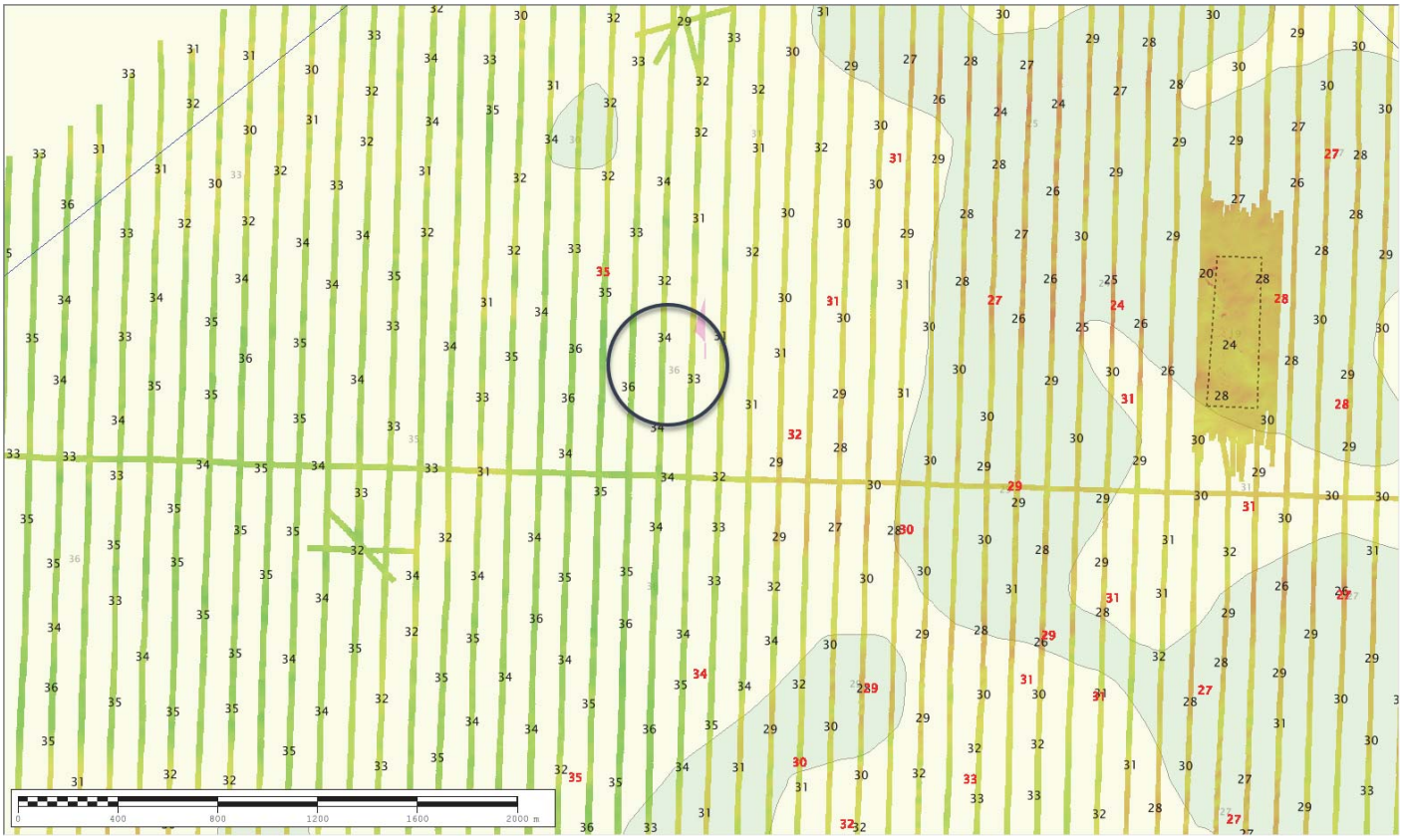


Figure 44: Image of northwestern portion of H13171 survey area. Red soundings are from US5FL11M, grey soundings are from US4FL10M and black soundings are from the survey selected soundings layer. Black circle shows charted depth from US4FL10M, which is different from surrounding US5FL11M charted depths and deeper than surveyed soundings.

US5FL17M

US5FL17M covers the very northern peak of the H13171 survey area. Charted depths and contours are similar to that of US4FL10M and observations made for US4FL10M are valid for USFL17M.

US3GC06M

Local Notice to Mariners (LNM) were downloaded from the OCS website for RNC 11400 and reviewed subsequent to the date of the Project Instructions and before the end of the survey. The last LNM reviewed for Chart 11400 Current Edition 36 Print Date Jan./2006, Tampa Bay to Cape San Blas was LNM 46/18, 8th Dist posted on 11/29/2018 to Add a Dangerous Wreck. One Local Notice to Mariners was issued within the survey bounds (LNM 45/18, 7th Dist to Add Obstruction in Fathoms - 6 1/2 Obstn - posted on 11/1/2018) that corresponds to a DtoN submitted for this survey.

US3GC06M covers all but a narrow sliver in the southeast corner of the H13171 survey area. Because of the scale of the chart, the contours are much broader than those on US4FL10M (Figure 43). However, the general observations made for the US4FL10M chart are valid for US3G06M as well.

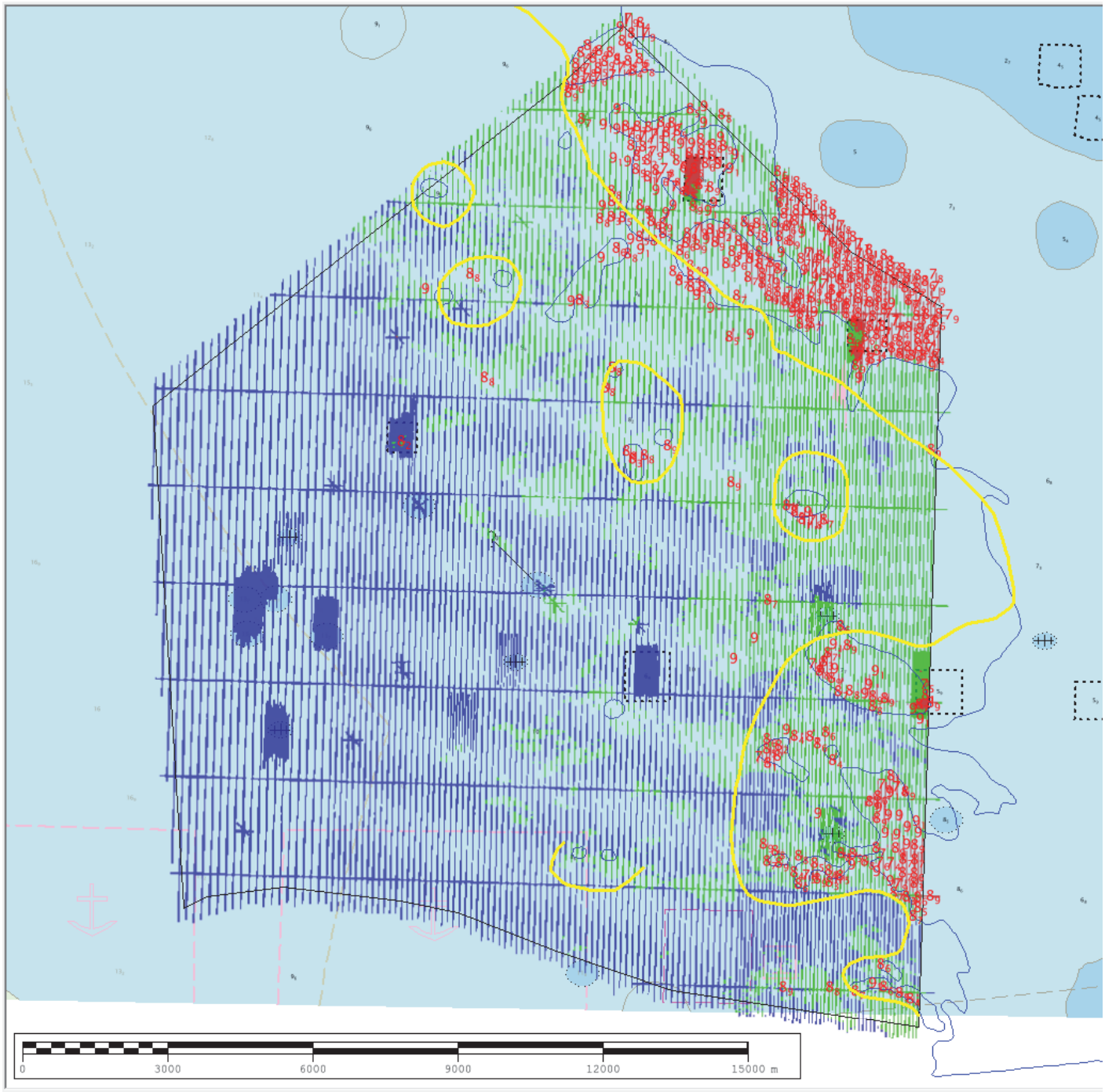


Figure 45: Image of the H13171_MB_1m_MLLW_Final surface colored using the depth range chart shown in Figure 37 and red soundings from the selected sounding layer that are 9.1 m or less. Blue lines indicate the 9.1-m contour from US4FL10M and yellow lines indicate the 9.1-m contour from US3GC06M.

US3GC07M

US3GC07M covers a very small portion of the southeast corner of the H13171 survey area. The 5.40-m and 9.1-m (17.72-ft and 29.86-ft) contours extend slightly into the H13171 survey area but survey data indicate depths are deeper than 9.1 m (29.86 ft) in these areas.

D.1.2 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.3 Charted Features

Prior to commencing survey operations, the Composite Source File indicated that seven charted wrecks, five fish haven areas and five discrete obstructions categorized as fish havens existed within survey bounds. One fish haven area feature on US5FL11M is shown as a discrete feature on US4FL10M (27.680°N, 82.928°W). This feature and one charted wreck (27.697°N, 82.946°W) have question mark symbols associated with them. One fish haven area is only partially covered by US5FL11M and is shown as two adjacent areas in the CSF file. These were all assigned to be investigated and either investigated with Object Detection Multibeam Coverage (fish haven areas in particular) or 200% side scan sonar coverage. Refer to the Final Feature File for additional information regarding all charted features.

D.1.4 Uncharted Features

Four additional obstructions were added to the Final Feature File that were not addressed as Dangers to Navigation either due to similarity to nearby charted depths or proximity to features with shallower leasts that were submitted as DtoNs. Refer to the Final Feature File for addtional information.

D.1.5 Shoal and Hazardous Features

Eleven potential Danger to Navigations were submitted within five separate DtoN Reports for this survey. Four discrete obstructions and two soundings within a larger debris area, which were originally part of DtoN #7, were accepted as official DtoNs. Refer to the Final Feature File and Supplemental Survey Records and Correspondence for additional information.

D.1.6 Channels

The survey area of H13171 partially covers two designated anchorages in the south and southwest portion of the survey area and partially covers the northern safety fairway for Egmont Channel in the southeast portion of the survey area. Comparison of the selected sounding layer and bathymetric surface and charted depths indicates that surveyed soundings generally agree with or are 0.3 - 0.6 m (1 - 2 ft) deeper than US5FL11M charted depths. US5FL11M shows two charted depths of 10 and 9.7 m (33 and 32 ft with NOAA rounding applied) as well as a small portion of the 9.1-m (29.86-ft) contour within with the overlap of the safety

fairway and the H13171 survey area. Surveyed soundings generally agree with charted depths but are 0.4 m (~2 ft with NOAA rounding applied) shallower than the charted 10-m (33-ft) depth.

D.1.7 Bottom Samples

Twenty-two bottom samples were acquired within the bounds of H13171. It was recognized that this is one more than defined in the final Project Reference File (PRF). Review of field documents indicates that bottom samples 13 and 14 were shown to be almost right next to one another and further review indicates that the original PRF file received on June 11, 2018 shows two bottom samples in approximately the same location. The field inquired with OII Project Management and moved one of these bottom sample locations. Refer to the Final Feature File for additional information.

D.2 Additional Results

D.2.1 Shoreline

Shoreline was not assigned in the Hydrographic Survey Project Instructions or Statement of Work.

D.2.2 Prior Surveys

No prior survey comparisons exist for this survey.

D.2.3 Aids to Navigation

No Aids to navigation (ATONs) exist for this survey.

D.2.4 Overhead Features

No overhead features exist for this survey.

D.2.5 Submarine Features

No submarine features exist for this survey.

D.2.6 Platforms

No platforms exist for this survey.

D.2.7 Ferry Routes and Terminals

No ferry routes or terminals exist for this survey.

D.2.8 Abnormal Seafloor and/or Environmental Conditions

No abnormal seafloor and/or environmental conditions exist for this survey.

D.2.9 Construction and Dredging

No present or planned construction or dredging exist within the survey limits.

D.2.10 New Survey Recommendation

No new surveys or further investigations are recommended for this area.

D.2.11 Inset Recommendation

No new insets are recommended for this area.

E. Approval Sheet

As Chief of Party, field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy.

This report and attached survey data have been reviewed. This Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meet or exceed requirements as set forth in the NOS Hydrographic Surveys Specifications and Deliverables, Statement of Work and Project Instructions. These data are adequate to supersede charted data in their common areas. This survey is complete and no additional work is required with the exception of deficiencies noted in the Descriptive Report.

Report Name	Report Date Sent
Data Acquisition and Processing Report	2019-03-01
Horizontal and Vertical Control Report	2019-03-01

Approver Name	Approver Title	Approval Date	Signature
Scott Melancon	Chief of Party	03/01/2019	Scott Melancon Digitally signed by Scott Melancon DN: cn=Scott Melancon, o, ou, email=smelancon@oceaneering.com, c=US Date: 2019.03.08 08:28:39 -06'00'
Nicole Galloway	Geoscientist	03/01/2019	

F. Table of Acronyms

Acronym	Definition
AHB	Atlantic Hydrographic Branch
AST	Assistant Survey Technician
ATON	Aid to Navigation
AWOIS	Automated Wreck and Obstruction Information System
BAG	Bathymetric Attributed Grid
BASE	Bathymetry Associated with Statistical Error
CO	Commanding Officer
CO-OPS	Center for Operational Products and Services
CORS	Continually Operating Reference Staiton
CTD	Conductivity Temperature Depth
CEF	Chart Evaluation File
CSF	Composite Source File
CST	Chief Survey Technician
CUBE	Combined Uncertainty and Bathymetry Estimator
DAPR	Data Acquisition and Processing Report
DGPS	Differential Global Positioning System
DP	Detached Position
DR	Descriptive Report
DTON	Danger to Navigation
ENC	Electronic Navigational Chart
ERS	Ellipsoidal Referenced Survey
ERZT	Ellipsoidally Referenced Zoned Tides
FFF	Final Feature File
FOO	Field Operations Officer
FPM	Field Procedures Manual
GAMS	GPS Azimuth Measurement Subsystem
GC	Geographic Cell
GPS	Global Positioning System
HIPS	Hydrographic Information Processing System
HSD	Hydrographic Surveys Division
HSSD	Hydrographic Survey Specifications and Deliverables

Acronym	Definition
HSTP	Hydrographic Systems Technology Programs
HSX	Hypack Hysweep File Format
HTD	Hydrographic Surveys Technical Directive
HVCR	Horizontal and Vertical Control Report
HVF	HIPS Vessel File
IHO	International Hydrographic Organization
IMU	Inertial Motion Unit
ITRF	International Terrestrial Reference Frame
LNM	Linear Nautical Miles
MBAB	Multibeam Echosounder Acoustic Backscatter
MCD	Marine Chart Division
MHW	Mean High Water
MLLW	Mean Lower Low Water
NAD 83	North American Datum of 1983
NAIP	National Agriculture and Imagery Program
NALL	Navigable Area Limit Line
NM	Notice to Mariners
NMEA	National Marine Electronics Association
NOAA	National Oceanic and Atmospheric Administration
NOS	National Ocean Service
NRT	Navigation Response Team
NSD	Navigation Services Division
OCS	Office of Coast Survey
OMAO	Office of Marine and Aviation Operations (NOAA)
OPS	Operations Branch
MBES	Multibeam Echosounder
NWLON	National Water Level Observation Network
PDBS	Phase Differencing Bathymetric Sonar
PHB	Pacific Hydrographic Branch
POS/MV	Position and Orientation System for Marine Vessels
PPK	Post Processed Kinematic
PPP	Precise Point Positioning
PPS	Pulse per second

Acronym	Definition
PRF	Project Reference File
PS	Physical Scientist
PST	Physical Science Technician
RNC	Raster Navigational Chart
RTK	Real Time Kinematic
SBES	Singlebeam Echosounder
SBET	Smooth Best Estimate and Trajectory
SNM	Square Nautical Miles
SSS	Side Scan Sonar
SSSAB	Side Scan Sonar Acoustic Backscatter
ST	Survey Technician
SVP	Sound Velocity Profiler
TCARI	Tidal Constituent And Residual Interpolation
TPE	Total Propagated Error
TPU	Topside Processing Unit
USACE	United States Army Corps of Engineers
USCG	United Stated Coast Guard
UTM	Universal Transverse Mercator
XO	Executive Officer
ZDA	Global Positiong System timing message
ZDF	Zone Definition File

ABSTRACT OF TIMES OF HYDROGRAPHY
R/V Sea Scout

Project: OPR-J317-KR-18 Registry No.: H13171
Contractor Name: Oceaneering International, Inc.
Date: February 2019
Sheet Number: 2
Inclusive Dates: September 29, 2018 - December 7, 2018
Field Work is Complete

Time (UTC)

Julian Day	Start	End	Year
272	0345	2400	2018
273	0000	2400	2018
274	0000	2400	2018
275	0000	2318	2018
276	0049	2400	2018
277	0000	2400	2018
278	0000	2306	2018
279	0648	2037	2018
286	0033	2400	2018
287	0000	2400	2018
288	0000	2400	2018
289	0000	2400	2018
290	0000	2400	2018
291	0000	0130	2018
310	1805	2223	2018
311	0000	0550	2018
311	0938	1014	2018
314	0215	1547	2018
321	2052	2400	2018
322	0000	2400	2018
323	0000	2400	2018
324	0000	2305	2018
327	2135	2400	2018
328	0000	0310	2018
340	1905	2333	2018
341	1811	2037	2018

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) DtoN Submission 1

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Wed, Oct 17, 2018 at 10:01 AM
To: ahb.dton@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good morning,

Please see attached zip file for DtoN Submission 1 of H13171 (Sheet 2) of OPR-J317-KR-18, which contains information regarding a potential wreck that is currently uncharted according to charts US3GC06M, US4FL10M and US5FL11M.

Please let us know if you have any questions or need any additional information.
Thank you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13171_DtoN_Submission_1.zip
790K

From:	OCS NDB - NOAA Service Account
To:	Castle E Parker
Cc:	Briana Hillstrom - NOAA Federal; Meredith Payne - NOAA Federal; Kathryn Pridgen - NOAA Federal; Scott Melancon; Nicole Galloway; _NOS OCS PBA Branch; _NOS OCS PBB Branch; _NOS OCS PBC Branch; _NOS OCS PBD Branch; _NOS OCS PBE Branch; _NOS OCS PBG Branch; Charles Porter - NOAA Federal; Chris Libeau; James M Crocker; Ken Forster; Kevin Jett - NOAA Federal; Matt Kroll; Michael Gaeta; NSD Coast Pilot; PHB Chief; Tara Wallace
Subject:	Fwd: H13171 DtoN #1 Submission to NDB
Date:	Thursday, October 18, 2018 6:34:07 PM
Attachments:	H13171_DtoN_1.zip

DD-29991 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is an obstruction approximately 7 nautical miles west of Long Key in the approaches to Tampa Bay, FL.

The following charts are affected:
11415 kapp 2981
11412 kapp 175
11400 kapp 177

The following ENCs are affected:
US5FL11M
US4FL10M
US3GC06M

References:
H13171
OPR-J317-KR-18

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov

---------- Forwarded message ---------
From: **Castle Parker - NOAA Federal** <castle.e.parker@noaa.gov>
Date: Wed, Oct 17, 2018 at 2:52 PM
Subject: H13171 DtoN #1 Submission to NDB
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>, Nicole Galloway <ngalloway@oceaneering.com>

Good day,

Please find attached compressed file related to H13171 DtoN Report #1, containing an uncharted 40ft obstruction located in the vicinity of 7nm west of Long Key. The submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD) is intended for chart application.

The information originates from a NOAA contract field unit and was submitted to the Atlantic Hydrographic Branch (AHB) for review, processing, and submission. The contents of the attached file were generated at AHB. The attached file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please contact me via email or phone 757-364-7472. Thank you for your assistance with this matter.

Regards,

Gene

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 364-7472

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) DtoN Submission 2

2 messages

Galloway, Nicole <ngalloway@oceaneering.com> Fri, Jan 11, 2019 at 3:04 PM
To: ahb.dton@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good afternoon,

Please see attached zip file for DtoN Submission 2 of H13171 (Sheet 2) of OPR-J317-KR-18, which contains information regarding 6 discrete obstructions (DtoNs 2 - 6) and one foul area (DtoN 7) observed within the survey area. The foul area is west of a charted fish haven and a MB geotiff and SSS geopng files have been included. Additional soundings of least depths of features within the area were added for information purposes. If discrete obstruction features are preferred, we can convert the soundings to obstructions.

Please let us know if you have any questions or need any additional information.
Thank you,
Nikki
--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13171_DtoN_Submission_2.zip
11208K

Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov> Mon, Jan 14, 2019 at 10:45 AM
To: "Galloway, Nicole" <ngalloway@oceaneering.com>
Cc: "'ahb.dton@noaa.gov' (ahb.dton@noaa.gov)" <ahb.dton@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Thank you for sending these. For your records, these DTONs will not be reviewed or forwarded to MCD until the partial U.S. Federal Government shut down ends.

Thank you,

Bri
[Quoted text hidden]
--
CDR Briana Welton Hillstrom, NOAA
Office of Coast Survey
Chief, Atlantic Hydrographic Branch
439 W York St, Norfolk, VA 23510
office: 757-364-7460
cell: 520-227-9269

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

H13171 DtoN #2 Submission to NDB

2 messages

Jeffery Marshall - NOAA Federal <jeffery.marshall@noaa.gov> Tue, Jan 29, 2019 at 3:46 PM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, Briana Welton - NOAA Federal <Briana.Hillstrom@noaa.gov>, Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, ngalloway@oceaneering.com, Louis.Licate@noaa.gov

Good day,

Please find attached the compressed file related to H13171 DtoN Report #2, 6 and 7, containing two (2) uncharted obstructions and two (2) shoal soundings located in the vicinity of 10 NM west of the Tampa Bay Entrance. The submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD) is intended for chart application.

The information originates from a NOAA contract field unit and was submitted to the Atlantic Hydrographic Branch (AHB) for review, processing, and submission. The contents of the attached file were generated at AHB. The attached file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.
If you have any questions, please contact me via email or phone. Thank you for your assistance with this matter.

Regards,
Jeff Marshall
--
Jeff Marshall
Certified Hydrographer/Physical Scientist
NOAA's Office of Coast Survey
Atlantic Hydrographic Branch
439 West York St.
Norfolk, VA 23435
Office Phone: 757-364-7464
Telework Phone: 908-601-2940
Email: jeffery.marshall@noaa.gov

H13171_DtoN_2_6_7.zip
3725K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Thu, Jan 31, 2019 at 11:19 AM
To: Jeffery Marshall - NOAA Federal <jeffery.marshall@noaa.gov>
Cc: AHB Chief <AHB.Chief@noaa.gov>, Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Castle E Parker <Castle.E.Parker@noaa.gov>, Corey Allen <Corey.Allen@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Nicole Galloway <ngalloway@oceaneering.com>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>, Charles Porter - NOAA Federal <charles.porter@noaa.gov>, Chris Libeau <Chris.Libeau@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>, Ken Forster <Ken.Forster@noaa.gov>, Kevin Jett - NOAA Federal <kevin.jett@noaa.gov>, Matt Kroll <Matt.Kroll@noaa.gov>, Michael Gaeta <Michael.Gaeta@noaa.gov>, NSD Coast Pilot <coast.pilot@noaa.gov>, PHB Chief <PHB.Chief@noaa.gov>, Tara Wallace <Tara.Wallace@noaa.gov>

DD-30248 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoNs reported are two obstructions and two shoals in the approaches to Tampa Bay, FL, west of Long Key.

The following charts have been assigned to the record:
11411 kapp 191
11415 kapp 2981

11412 kapp 175
11400 kapp 177

The following ENCs have been assigned to the record:
US5FL11M
US5FL17M
US4FL10M
US3GC06M

References:
H13171
OPR-J317-KR-18

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov

[Quoted text hidden]

H13171_DtoN_2_6_7.zip
3725K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) DtoN Submission 3

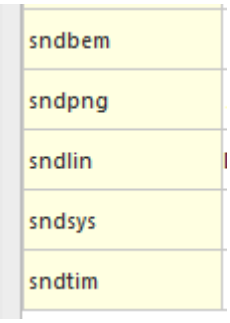
5 messages

Galloway, Nicole <ngalloway@oceaneering.com> Thu, Jan 17, 2019 at 2:17 PM
To: ahb.dton@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good afternoon,

Please see attached zip file for DtoN Submission 3 of H13171 (Sheet 2) of OPR-J317-KR-18, which contains information regarding 2 discrete obstructions (DtoNs 8 and 9). The multibeam for this set of obstructions was processed in Qimera and the least depth of DtoN 8 taken from extracted water column data. We are currently working with CARIS for a solution to issues we are facing with water column processing in CARIS.

The S-57 file was also generated in Qimera, and has some auto-populated attributes.



Please let us know if you have any questions or need any additional information.
Thank you,
Nikki
--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13171_DtoN_Submission_3.zip
9526K

Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov> Thu, Jan 17, 2019 at 3:43 PM
To: "Galloway, Nicole" <ngalloway@oceaneering.com>
Cc: "'ahb.dton@noaa.gov' (ahb.dton@noaa.gov)" <ahb.dton@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Thank you for your email. For your records, this DTON submission won't be processed until after the partial Government Shudown ends.

[Quoted text hidden]

--
CDR Briana Welton Hillstrom, NOAA
Office of Coast Survey
Chief, Atlantic Hydrographic Branch
439 W York St, Norfolk, VA 23510
office: 757-364-7460
cell: 520-227-9269

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Tue, Jan 29, 2019 at 1:32 PM
To: "Galloway, Nicole" <ngalloway@oceaneering.com>
Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Rita Bowker - NOAA Federal <rita.s.bowker@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good day Nikki,

Thanks for the Danger submission. The submission did not include observed time or SORDAT for H13171 DtoN #8 and #9. Per HSSD 2018 Section 1.6.3 the observed time (obstim) is required to be attributed. If the SORDAT was attributed AHB could use that for the Marine Chart Division (MCD) submission. Since MCD is tracking the timeline from field observation to submission we will need the observed time.

It is AHB's request for the observed time for H13717 DtoN 8 and 9 before it can be submitted to MCD. The simplest method of resolution would be to respond to this email with the observed time for each submitted features and AHB can attribute, rather than submitting a second DtoN feature file.

Thanks and regards,

Gene

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 364-7472

[Quoted text hidden]

Galloway, Nicole <ngalloway@oceaneering.com> Wed, Jan 30, 2019 at 8:09 AM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Rita Bowker - NOAA Federal <rita.s.bowker@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good morning Gene,

I realized that the file generated from Qimera has a 'sounding time' (sndtim), but this does not appear to get carried over in the S-57 when opened in another software (CARIS). Please see below for the sounding time of the least depth of the submitted features:

DtoN8: 2018-11-19 13:26:14.920 UTC
DtoN9: 2018-11-18 15:31:28.242 UTC

For future submissions, we will be sure to include the SORDAT and if applicable, the observed time.

Thank-you and sorry for any inconvenience.
Nikki
[Quoted text hidden]

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Wed, Jan 30, 2019 at 10:01 AM
To: "Galloway, Nicole" <ngalloway@oceaneering.com>

Thanks Nikki, appreciate your quick response. The DtoN should be going out today.

Regards,

gp

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 364-7472

[Quoted text hidden]

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

H13171 DtoN 8 & 9 Submission to NDB

3 messages

Rita Bowker - NOAA Federal <rita.s.bowker@noaa.gov> Wed, Jan 30, 2019 at 11:27 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Briana Welton - NOAA Federal <Briana.Hillstrom@noaa.gov>, Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, ngalloway@oceaneering.com, smelancon@oceaneering.com

Good Day,
Please find attached a zip file for survey H13171 DtoN report # 8-9 for submission to Nautical Data Branch (NDB) of the Marine Chart Division (MCD). This Danger submission contains one 19ft Obstruction and a 38ft Obstruction, approximately 4 nautical miles to 7.8 nautical miles north of Egmont Channel Safety Fairway and Approaches to Tampa Bay and 12 nautical miles west of Long Key.

The information originates from a NOAA contract field unit and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please direct them back to me via email or phone (757-364-7469).

Thank you for your assistance with this matter.
Regards,
Rita Bowker
--
Rita Bowker
NOAA Office of Coast Survey
Atlantic Hydrographic Branch
Physical Scientist
rita.s.bowker@noaa.gov
office (757) 364-7469

H13171_DtoN_8_9.zip
18756K

Rita Bowker - NOAA Federal <rita.s.bowker@noaa.gov> Wed, Jan 30, 2019 at 11:41 AM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Briana Welton - NOAA Federal <Briana.Hillstrom@noaa.gov>, Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, ngalloway@oceaneering.com, smelancon@oceaneering.com

[Quoted text hidden]

H13171_DtoN_8_9.zip
11979K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Thu, Jan 31, 2019 at 11:45 AM
To: Rita Bowker - NOAA Federal <rita.s.bowker@noaa.gov>
Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Castle E Parker <Castle.E.Parker@noaa.gov>, Corey Allen <Corey.Allen@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, Nicole Galloway <ngalloway@oceaneering.com>, Scott Melancon <smelancon@oceaneering.com>, _NOS OCS PBA Branch

<ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>, Charles Porter - NOAA Federal <charles.porter@noaa.gov>, Chris Libeau <Chris.Libeau@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>, Ken Forster <Ken.Forster@noaa.gov>, Kevin Jett - NOAA Federal <kevin.jett@noaa.gov>, Matt Kroll <Matt.Kroll@noaa.gov>, Michael Gaeta <Michael.Gaeta@noaa.gov>, NSD Coast Pilot <coast.pilot@noaa.gov>, PHB Chief <PHB.Chief@noaa.gov>, Tara Wallace <Tara.Wallace@noaa.gov>

DD-30273 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoNs reported are two obstructions in the approaches to Tampa Bay, FL, west of Long Key.

The following charts have been assigned to the record:
11415 kapp 2981
11412 kapp 175
11400 kapp 177

The following ENCs have been assigned to the record:
US5FL11M
US4FL10M
US3GC06M

References:
H13171
OPR-J317-KR-18

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov

[Quoted text hidden]

H13171_DtoN_8_9.zip
11979K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) DtoN Submission 4

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Fri, Feb 1, 2019 at 10:49 AM
To: ahb.dton@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good morning,

Please see attached zip file for DtoN Submission 4 of H13171 (Sheet 2) of OPR-J317-KR-18, which contains information regarding one obstruction (DtoN 10).

Please let us know if you have any questions or need any additional information.
Thank you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13171_DtoN_Submission_4.zip
126K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

H13171 DtoN #10

2 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Tue, Feb 5, 2019 at 3:24 PM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, Nicole Galloway <ngalloway@oceaneering.com>, Scott Melancon <smelancon@oceaneering.com>

Good Day,

Please find attached a zip file for survey H13171 DtoN report #10 for submission to Nautical Data Branch (NDB) of the Marine Chart Division (MCD). This Danger submission contains one 37ft Obstruction located approximately 3.7 nautical miles north of Egmont Channel Safety Fairway and Approaches to Tampa Bay

The information originates from a NOAA contract field unit and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please direct them back to me via email or phone (757-364-7472).

Thank you for your assistance with this matter.

Regards,

Gene

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 364-7472

H13171_DtoN_10.zip
269K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Wed, Feb 6, 2019 at 5:02 PM
To: Castle E Parker <Castle.E.Parker@noaa.gov>
Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, Nicole Galloway <ngalloway@oceaneering.com>, Scott Melancon

<smelancon@oceaneering.com>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>, Charles Porter - NOAA Federal <charles.porter@noaa.gov>, Chris Libeau <Chris.Libeau@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>, Ken Forster <Ken.Forster@noaa.gov>, Kevin Jett - NOAA Federal <kevin.jett@noaa.gov>, Matt Kroll <Matt.Kroll@noaa.gov>, Michael Gaeta <Michael.Gaeta@noaa.gov>, NSD Coast Pilot <coast.pilot@noaa.gov>, PHB Chief <PHB.Chief@noaa.gov>, Tara Wallace <Tara.Wallace@noaa.gov>

DD-30309 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is an obstruction in the approaches to Tampa Bay, FL, west of Long Key.

The following charts have been assigned to the record:
11415 kapp 2981
11412 kapp 175
11400 kapp 177

The following ENCs have been assigned to the record:
US5FL11M
US4FL10M
US3GC06M

References:
H13171
OPR-J317-KR-18

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov

[Quoted text hidden]

H13171_DtoN_10.zip
269K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) DtoN Submission 5

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Wed, Feb 6, 2019 at 9:39 AM
To: ahb.dton@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>

Good morning,

Please see attached zip file for DtoN Submission 5 of H13171 (Sheet 2) of OPR-J317-KR-18, which contains information regarding one obstruction (DtoN 11).

This contact is located ~ 570 m north of a contact that was submitted as DtoN 3, which was not accepted as a danger according to H13171 DtoN #2 Submission to NDB correspondence. The least depth of this contact (31 feet) is 1 foot shallower than that of DtoN 3 and close to a 35 foot charted depth. Based on DtoN 3 not being accepted, it is unclear if DtoN 11 would be accepted or not, but review would be appreciated.

Please let us know if you have any questions or need any additional information.
Thank you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com

2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13171_DtoN_Submission_5.zip
170K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

H13171 DtoN #11 Submission to NDB/MCD

2 messages

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Wed, Feb 6, 2019 at 12:21 PM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Nicole Galloway <ngalloway@oceaneering.com>, Scott Melancon <smelancon@oceaneering.com>

Good Day,

Please find attached a zip file for survey H13171 DtoN report #11 for submission to Nautical Data Branch (NDB) of the Marine Chart Division (MCD). This Danger submission contains one uncharted 31ft Obstruction located approximately 8 nautical miles west of Johns Pass.

The information originates from a NOAA contract field unit and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

If you have any questions, please direct them back to me via email or phone (757-364-7472).

Thank you for your assistance with this matter.

Regards,

Gene

Castle Eugene Parker

NOAA Office of Coast Survey

Atlantic Hydrographic Branch

Hydrographic Team Lead / Physical Scientist

castle.e.parker@noaa.gov

office (757) 364-7472

H13171_DtoN_11.zip
299K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Thu, Feb 7, 2019 at 1:58 PM

To: Castle E Parker <Castle.E.Parker@noaa.gov>
Cc: AHB Chief <AHB.Chief@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Nicole Galloway <ngalloway@oceaneering.com>, Scott Melancon <smelancon@oceaneering.com>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>, Charles Porter - NOAA Federal <charles.porter@noaa.gov>, Chris Libeau <Chris.Libeau@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>, Ken Forster <Ken.Forster@noaa.gov>, Kevin Jett - NOAA Federal <kevin.jett@noaa.gov>, Matt Kroll <Matt.Kroll@noaa.gov>, Michael Gaeta <Michael.Gaeta@noaa.gov>, NSD Coast Pilot <coast.pilot@noaa.gov>, PHB Chief <PHB.Chief@noaa.gov>, Tara Wallace <Tara.Wallace@noaa.gov>

DD-30320 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is an obstruction in the approaches to Tampa Bay, FL, west of Long Key.

The following charts have been assigned to the record:
11412 kapp 175
11400 kapp 177

The following ENCs have been assigned to the record:
US4FL10M
US3GC06M

References:
H13171
OPR-J317-KR-18

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov

[Quoted text hidden]

H13171_DtoN_11.zip
299K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) Final Survey Outline

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Mon, Jan 7, 2019 at 3:12 PM
To: survey.outlines@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good afternoon,

Please see attached zip file containing the final survey outline for H13171 (Sheet 2) of OPR-J317-KR-18. The outline was generated using ArcMap 10.2.2 and is in shape file format (.shp) with associated file formats (.shx, .dbf and .prj).

Note that this is the first time we are submitting a survey outline in shape file format so please let us know if anything needs to be updated.

Thank-you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com

2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

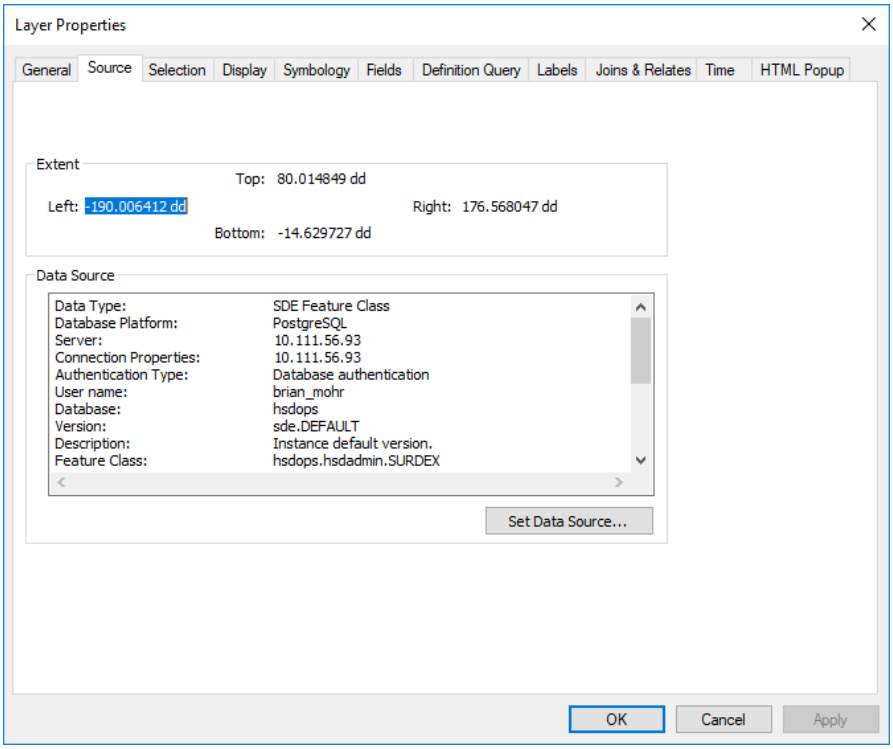
OPR-J317-KR-18_H13171_Final_Survey_Outline.zip
46K

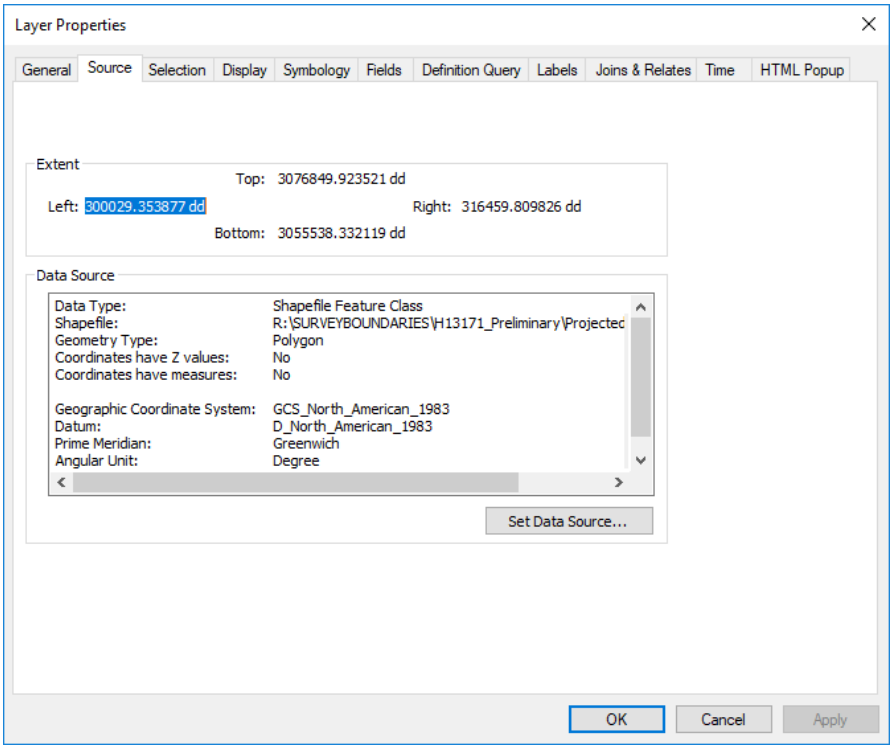
Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) Final Survey Outline

Brian Mohr - NOAA Federal <brian.mohr@noaa.gov> Thu, Jan 31, 2019 at 7:52 AM
To: "Galloway, Nicole" <ngalloway@oceaneering.com>

not sure how you generated the polygon on your end but although it has valid geometry and the appropriate spatial reference it is not aligning with our SURDEX outline database. Looks like the spatial extents are wacky. See below for examples. (top screenshot is the properties from our SURDEX feature class - bottom one is the outline for H13171)





On Mon, Jan 7, 2019 at 3:13 PM Galloway, Nicole <ngalloway@oceaneering.com> wrote:
[Quoted text hidden]

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) Final Survey Outline

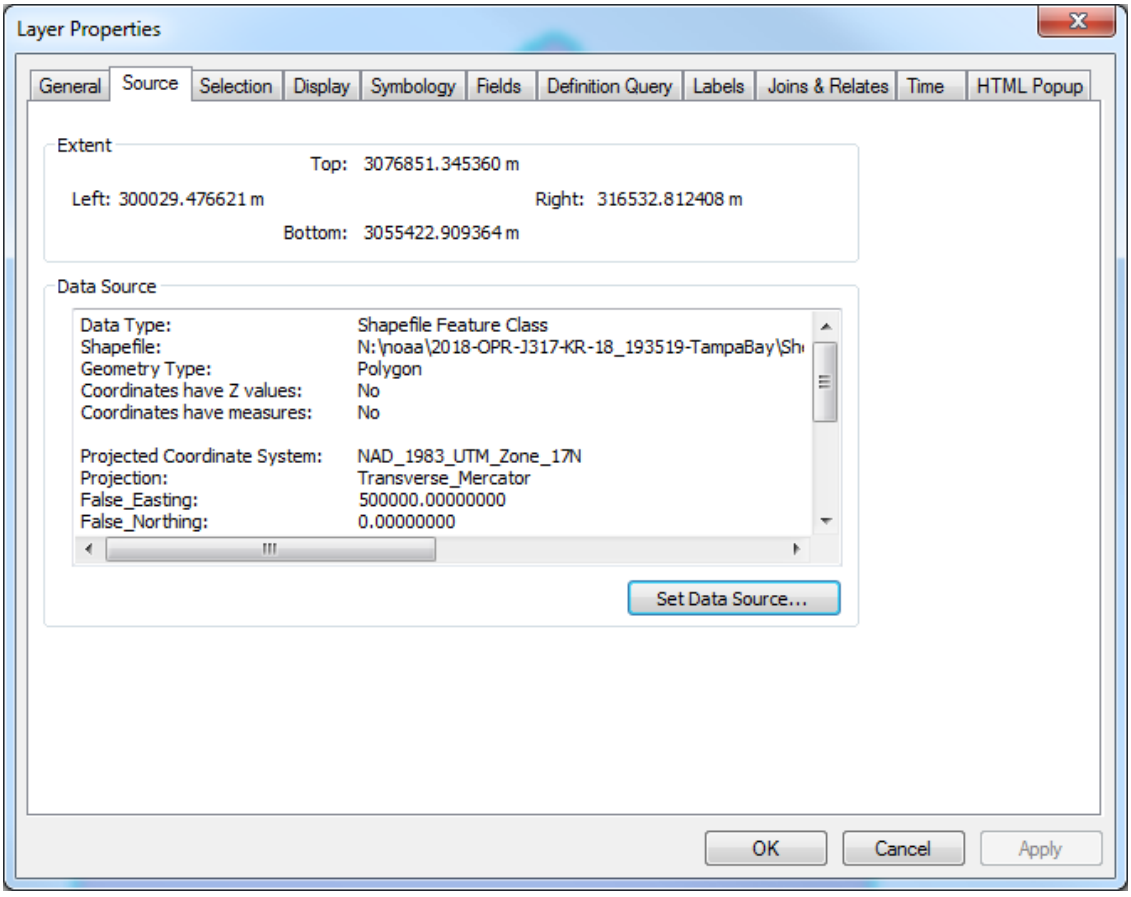
Galloway, Nicole <ngalloway@oceaneering.com> Fri, Feb 1, 2019 at 2:12 PM
To: Brian Mohr - NOAA Federal <brian.mohr@noaa.gov>

Hi Brian,

To create the shp file, I used the following steps:

1. Open SSS mosaic in ArcMap (came in without spatial reference)
2. 255 is the background color so used the reclassify tool to change 0 - 254 > 0 and 255/No Data > 1
3. Used the raster to polygon tool to create polygons of the '0' and '1' values in the reclassified image
4. Selected the polygon of the survey outline and exported it using the data frame spatial reference.

That is the shape file I sent you. I looked at the source info again today and looks the same as the one I sent earlier (though this one is projected).



Today I also imported that shape file into CARIS and generated an M_COVR S-57 file. (Please see attached)

I would very much like to know how to get what you need directly out of ArcGIS though. If you have any thoughts, please let me know!

Thank-you!
Nikki

[Quoted text hidden]

H13171_Final_Survey_Outline.000

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 H13171 (Sheet 2) Final Survey Outline - S-57

Galloway, Nicole <ngalloway@oceaneering.com> Wed, Feb 6, 2019 at 8:16 AM
To: survey.outlines@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good morning,

Please see attached final survey outline for H13171 (Sheet 2) of OPR-J317-KR-18 in S-57 format. Correspondence indicated that the original shapefile was not aligning with the database. This outline was generated using ArcMap 10.2.2 as a shapefile and imported into CARIS for creation of an S-57 M_COVR feature.

Thank-you,
Nikki

--

Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

H13171_Final_Survey_Outline.000
62K

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

[Send2NCEI] data submission confirmation for Reference ID: WX15MR

1 message

NODC.DataOfficer@noaa.gov <NODC.DataOfficer@noaa.gov> Tue, Feb 19, 2019 at 12:00 PM
To: ngalloway@oceaneering.com

Dear Nicole Galloway,

Thank you for submitting your data collection, titled "Sound Speed (CTD) collected from R/V Sea Scout in Approaches to Tampa, FL from 2018-09-29 to 2018-12-07", to the NOAA National Centers for Environmental Information (NCEI). Your submission package has been assigned Reference ID: WX15MR. After reviewing your data and metadata, NCEI will update you about the archival status of your submission package.

You will be notified if NCEI creates an archival information package (accession) of your data, including the unique identifier for that archival information package (the NCEI Accession number). When your data are archived, NCEI keeps an exact copy of the data and metadata you sent and will develop necessary tracking and discovery metadata. In addition, NCEI may create additional versions to ensure your data are preserved for long-term access.

Upon completion of these archival ingest actions, NCEI will publish your data online (including a copy of your original files). You will receive another email once your submission package (Reference ID: WX15MR) is published for global access. In addition, NCEI may include all or part of your data into one or more product databases, such as the World Ocean Database.

If you have any questions about NCEI archival processes, please contact NODC.DataOfficer@noaa.gov. Also, if at any time you wish to update your submission package, please send an e-mail to NODC.DataOfficer@noaa.gov with your request. Please remember to include your submission package Reference ID.

Thank you again for choosing to archive your data with the National Centers for Environmental Information (NCEI).

NCEI Data Officer Team
NOAA National Centers for Environmental Information
NOAA/NESDIS
1315 East-West Highway
Silver Spring, MD 20910
USA

OCEANEERING

Galloway, Nicole <ngalloway@oceaneering.com>

OPR-J317-KR-18 Coast Pilot Review

1 message

Galloway, Nicole <ngalloway@oceaneering.com> Mon, Apr 22, 2019 at 1:33 PM
To: OCS.NDB@noaa.gov, Coast.Pilot@noaa.gov
Cc: Meredith Payne - NOAA Federal <meredith.payne@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Scott Melancon <smelancon@oceaneering.com>

Good afternoon,

Please see attached Coast Pilot Review Report for Project OPR-J317-KR-18. Note that no changes were made as of the submission of deliverables for Sheets 1 and 2 of this project. There were no specific investigation items for OPR-J317-KR-18 with regard to the Coast Pilot and only one minor suggestion is addressed in this submission. We will continue to review the Coast Pilot information for the duration of the project will let you know if any updates are found.

Thank-you,
Nikki

--
Best regards,

Nicole Galloway
Geoscientist
Direct (+1) 337 761 6872
Mobile (+1) 603 978 7211
ngalloway@oceaneering.com
2155 Steppingstone Square | Chesapeake, VA | USA, Tel (+1)757 985 3714 | oceaneering.com

OPR-J317-KR-18_Coast Pilot Review Report.pdf
1183K

APPROVAL PAGE

H13171

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NCEI for archive

- Descriptive Report
- Data Acquisition and Processing Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Processed survey data and records
- GeoPDF of survey products
- Collection of Backscatter mosaics

The survey evaluation and verification has been conducted according current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: MCGOVERN.MEGHAN.ELIZABETH.1284020495 Digitally signed by MCGOVERN.MEGHAN.ELIZABETH.1284020495 Date: 2020.05.04 09:22:54 -04'00'

Commander Meghan McGovern, NOAA
Chief, Atlantic Hydrographic Branch