

**H13285**

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

**DESCRIPTIVE REPORT**

Type of Survey: Navigable Area

Registry Number: H13285

**LOCALITY**

State(s): Florida

General Locality: Gulf of Mexico

Sub-locality: 9 miles South of Indian Pass

**2019**

CHIEF OF PARTY  
Dean R Moyles

LIBRARY & ARCHIVES

Date:

**HYDROGRAPHIC TITLE SHEET**

**H13285**

**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: **Gulf of Mexico**

Sub-Locality: **9 miles South of Indian Pass**

Scale: **20000**

Dates of Survey: **08/22/2019 to 11/26/2019**

Instructions Dated: **06/20/2019**

Project Number: **OPR-J359-KR-19**

Field Unit: **Fugro Pelagos**

Chief of Party: **Dean R Moyles**

Soundings by: **Multibeam Echo Sounder**

Imagery by: **Multibeam Echo Sounder Backscatter**

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 16N, 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 H13285

Project: OPR-J359-KR-19

Locality: Gulf of Mexico

Sublocality: 9 miles South of Indian Pass

Scale: 1:20000

August 2019 - November 2019

**Fugro Pelagos**

Chief of Party: Dean R Moyles

### A. Area Surveyed

Survey H13285 (Table 1) is located 9 miles South of Indian Pass (Figure 1). The M/V Go Liberty acquired complete coverage multibeam echosounder (MBES) and multibeam echosounder acoustic backscatter (MBAB) within the assigned survey limits from 22 August 2019 to 4 October 2019 (Tables 3 and 4). M/V Pelagos acquired complete MBES and MBAB within the assigned survey limits from 8 September 2019 to 26 November 2019 (Tables 3 and 4).

#### A.1 Survey Limits

Data were acquired within the following survey limits:

<b>Northwest Limit</b>	<b>Southeast Limit</b>
29° 35' 23.55" N	29° 25' 39.05" N
85° 20' 33.81" W	85° 12' 2.48" W

*Table 1: Survey Limits*

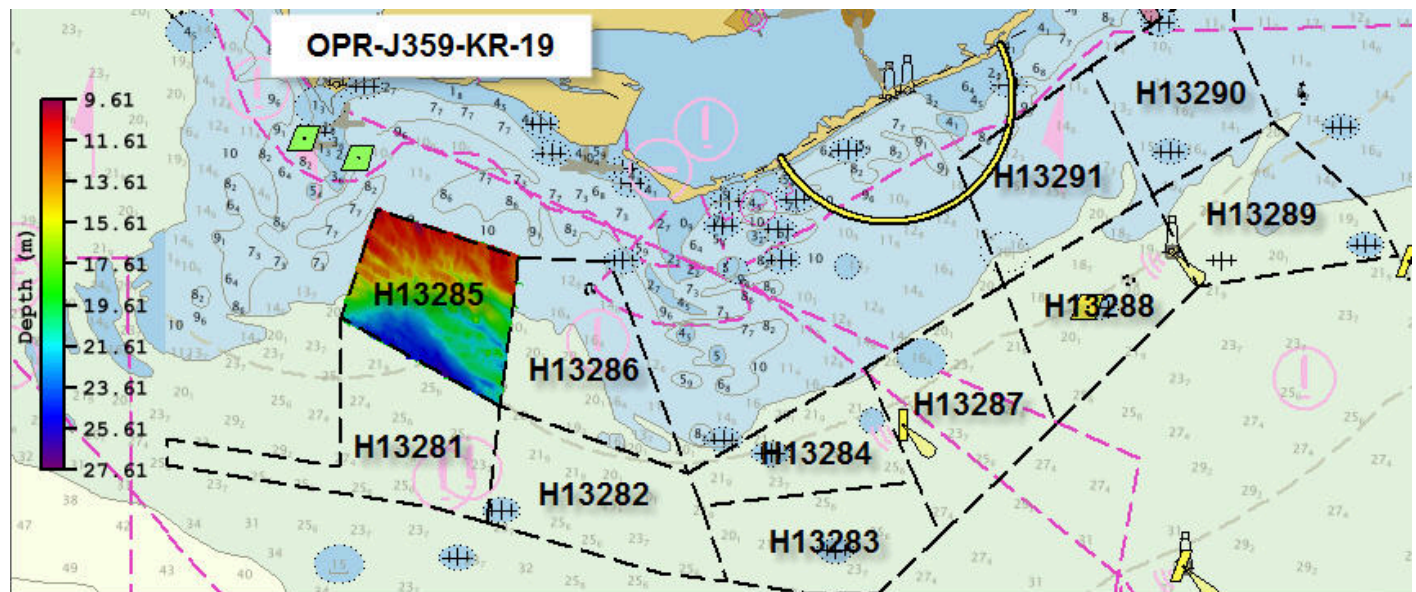


Figure 1: Survey H13285 relative to overall sheet limits of OPR-J359-KR-19

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

## A.2 Survey Purpose

The Vicinity of Apalachicola project will provide contemporary surveys to update National Ocean Service (NOS) nautical charting products. The survey areas are offshore of Apalachicola Bay and Joseph Bay, FL. The survey will provide updated bathymetry and feature data to address concerns of migrating shoals, thus reducing the risk to navigation within the project area.

The Apalachicola Surveys delineate the western extent to the Big Bend Mapping project, a Florida Coastal Mapping Program (FCMaP) priority. This multi-year, multi-agency mapping project will fill in an area in which only 2% of the seafloor is mapped to modern standards. Improving the understanding of the bathymetry, geomorphology, bio-diversity and distribution of habitats in this region will support Floridian fisheries, coastal modeling, and resource management.

The project will cover approximately 323 square nautical miles of high priority survey area identified in the latest iteration of NOAA HSD's risk based prioritization model. Data from this project will supersede all prior survey data providing modern hydrographic survey data for this area and updating the local charting products.

## A.3 Survey Quality

The entire survey is adequate to supersede previous data.

Full coverage MBES and MBAB (Table 2 and Figures 2-4) were achieved within the survey limits of H13285 per HSSD 2019 5.2.2.3.

#### 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	Complete coverage (HSSD 2019 5.2.2.3)

Table 2: Survey Coverage

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

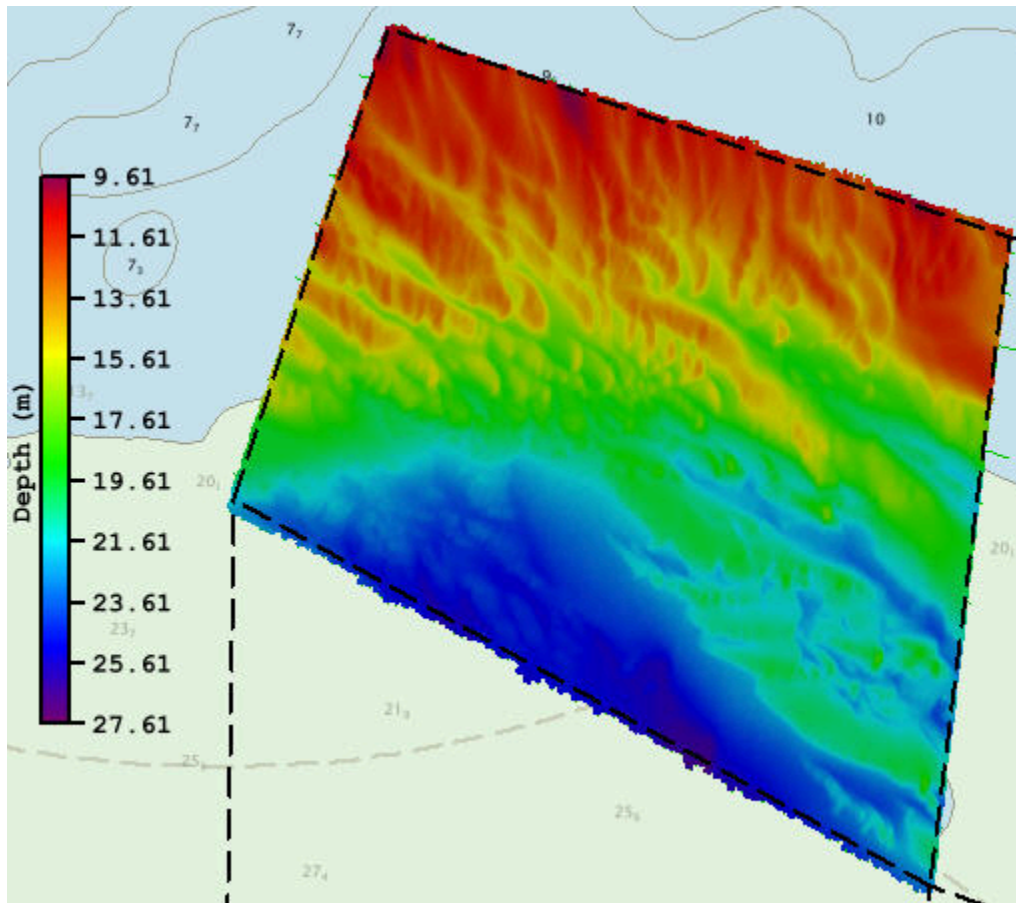


Figure 2: Survey H13285 complete coverage MBES

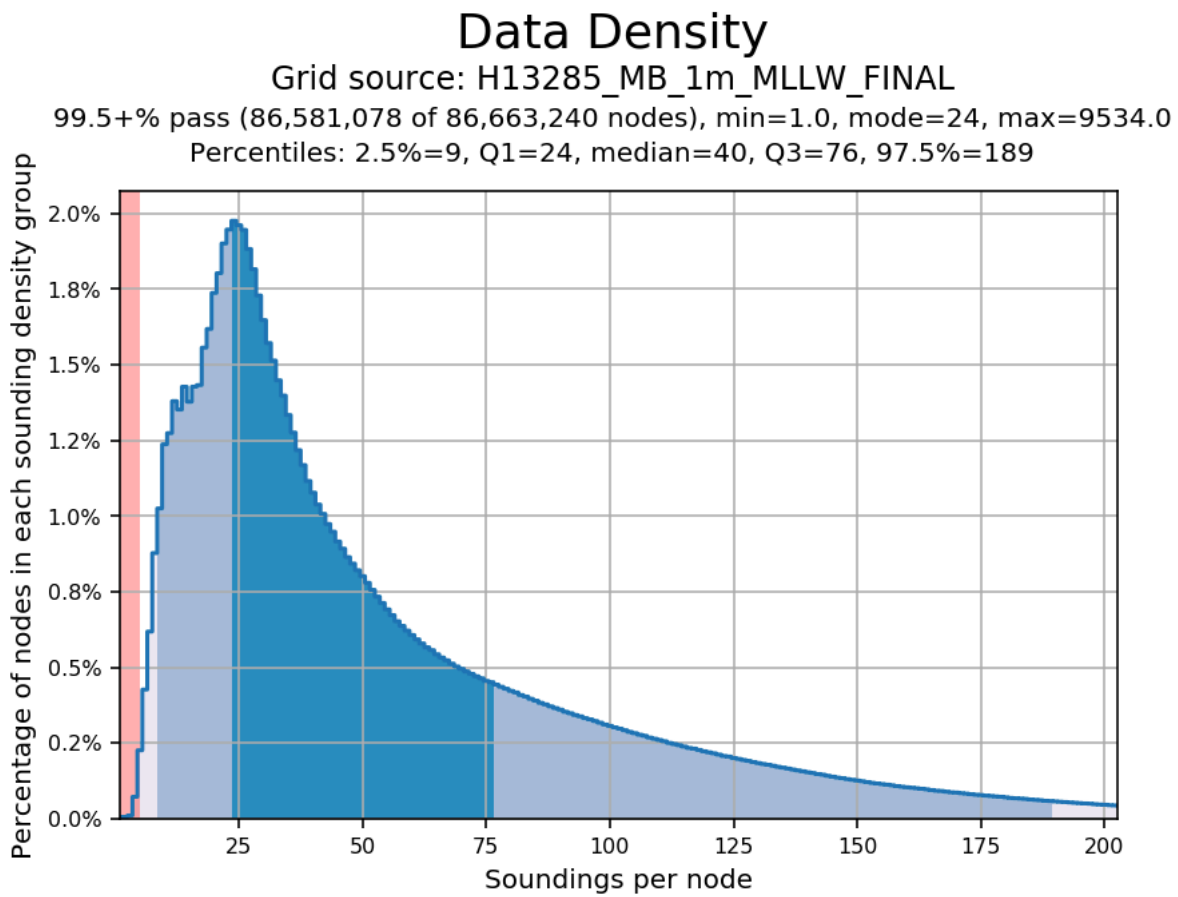
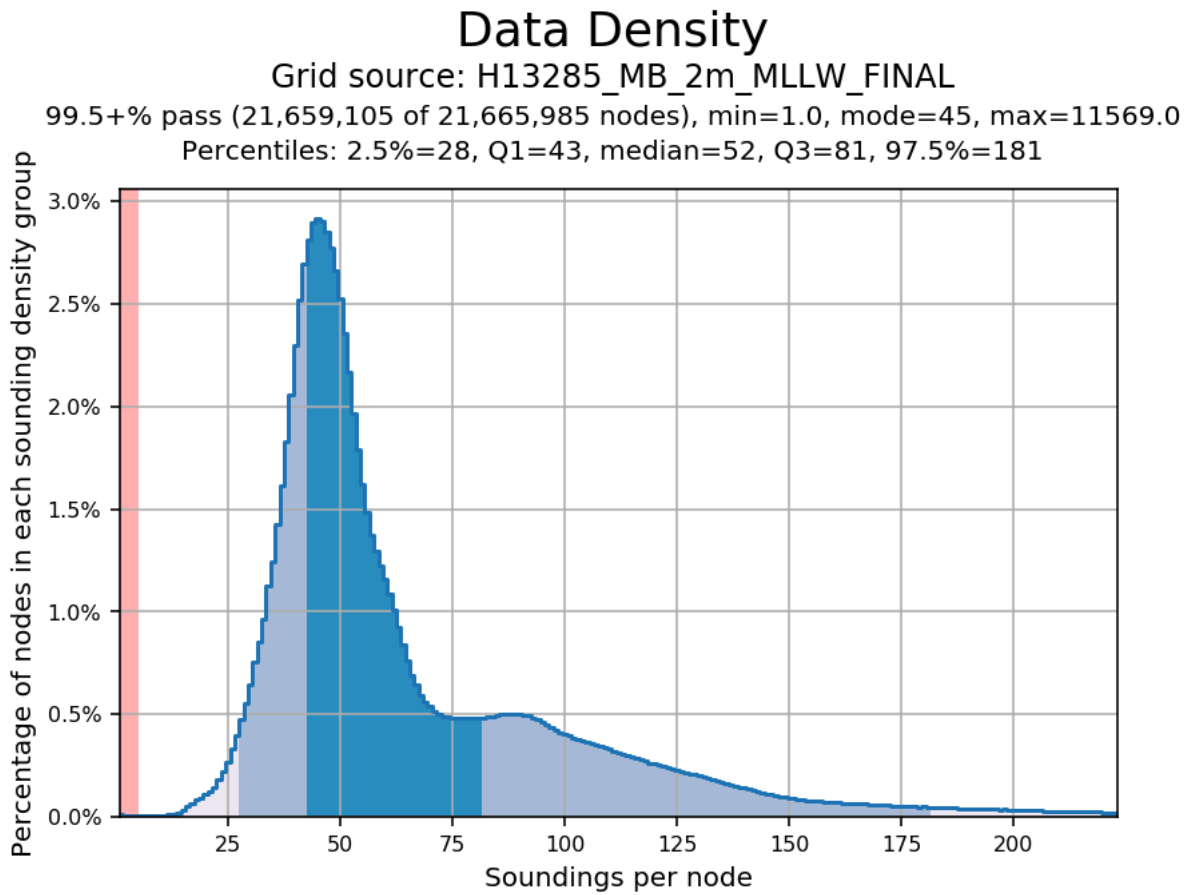


Figure 3: Survey H13285 1m complete coverage MBES density QC



*Figure 4: Survey H13285 2m complete coverage MBES density QC*

## A.6 Survey Statistics

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

	<b>HULL ID</b>	<i>M/V Go Liberty</i>	<i>M/V Pelagos (T-50)</i>	<i>M/V Pelagos (7125)</i>	<i>Total</i>
<b>LNM</b>	<b>SBES Mainscheme</b>	0	0	0	0
	<b>MBES Mainscheme</b>	1031.84	436.23	17.57	1485.64
	<b>Lidar Mainscheme</b>	0	0	0	0
	<b>SSS Mainscheme</b>	0	0	0	0
	<b>SBES/SSS Mainscheme</b>	0	0	0	0
	<b>MBES/SSS Mainscheme</b>	0	0	0	0
	<b>SBES/MBES Crosslines</b>	66.0	0	1.43	67.43
	<b>Lidar Crosslines</b>	0	0	0	0
<b>Number of Bottom Samples</b>				7	
<b>Number Maritime Boundary Points Investigated</b>				0	
<b>Number of DPs</b>				0	
<b>Number of Items Investigated by Dive Ops</b>				0	
<b>Total SNM</b>				45.89	

Table 3: Hydrographic Survey Statistics

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

<b>Survey Dates</b>	<b>Day of the Year</b>
08/22/2019	234

<b>Survey Dates</b>	<b>Day of the Year</b>
08/23/2019	235
08/24/2019	236
08/25/2019	237
08/26/2019	238
08/27/2019	239
08/28/2019	240
08/29/2019	241
09/08/2019	251
09/10/2019	253
09/11/2019	254
09/12/2019	255
09/13/2019	256
09/16/2019	259
09/18/2019	261
09/23/2019	266
09/24/2019	267
09/25/2019	268
09/26/2019	269
09/27/2019	270
09/28/2019	271
09/29/2019	272
09/30/2019	273
10/02/2019	275
10/03/2019	276
10/04/2019	277
10/05/2019	278
10/20/2019	293
11/16/2019	320
11/26/2019	330

*Table 4: Dates of Hydrography*



## 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	<i>M/V Go Liberty</i>	<i>M/V Pelagos</i>
<b>LOA</b>	150 feet	34 feet
<b>Draft</b>	10 feet	2 feet

*Table 5: Vessels Used*



*Figure 5: M/V Go Liberty*



*Figure 6: M/V Pelagos*

M/V Go Liberty (Table 5 and Figure 5) and M/V Pelagos (Table 5 and Figure 6) acquired MBES, MBAB, surface sound velocity, sound velocity profiles, attitude and positioning data (Table 6) within the survey limits of H13285. For a detailed listing of equipment used to acquire survey data, refer to the DAPR submitted with this report under Project Reports.

### **B.1.2 Equipment**

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

<b>Manufacturer</b>	<b>Model</b>	<b>Type</b>
Teledyne RESON	SeaBat 7125 SV2	MBES
Teledyne RESON	SeaBat T50-P	MBES
Teledyne RESON	SVP 70	Sound Speed System
AML Oceanographic	Smart SVP	Conductivity, Temperature, and Depth Sensor
Teledyne Oceanscience	CastAway-CTD	Conductivity, Temperature, and Depth Sensor
Applanix	POS MV 320 v5	Positioning and Attitude System

*Table 6: Major Systems Used*

For a detailed listing of equipment, refer to the DAPR submitted with this report.

## B.2 Quality Control

### B.2.1 Crosslines

Multibeam/single beam echo sounder/side scan sonar crosslines acquired for this survey totaled 4.54% of mainscheme acquisition.

Crosslines for survey H13285 were acquired in accordance with section 5.2.4.2 of the HSSD 2019 (Figure 7). Of the 11,452,691 nodes compared between H13285 mainscheme MBES and MBES crosslines, 100% were within 50cm difference. The mean difference is 0.01m, with a standard deviation of 0.07m (Figure 8).

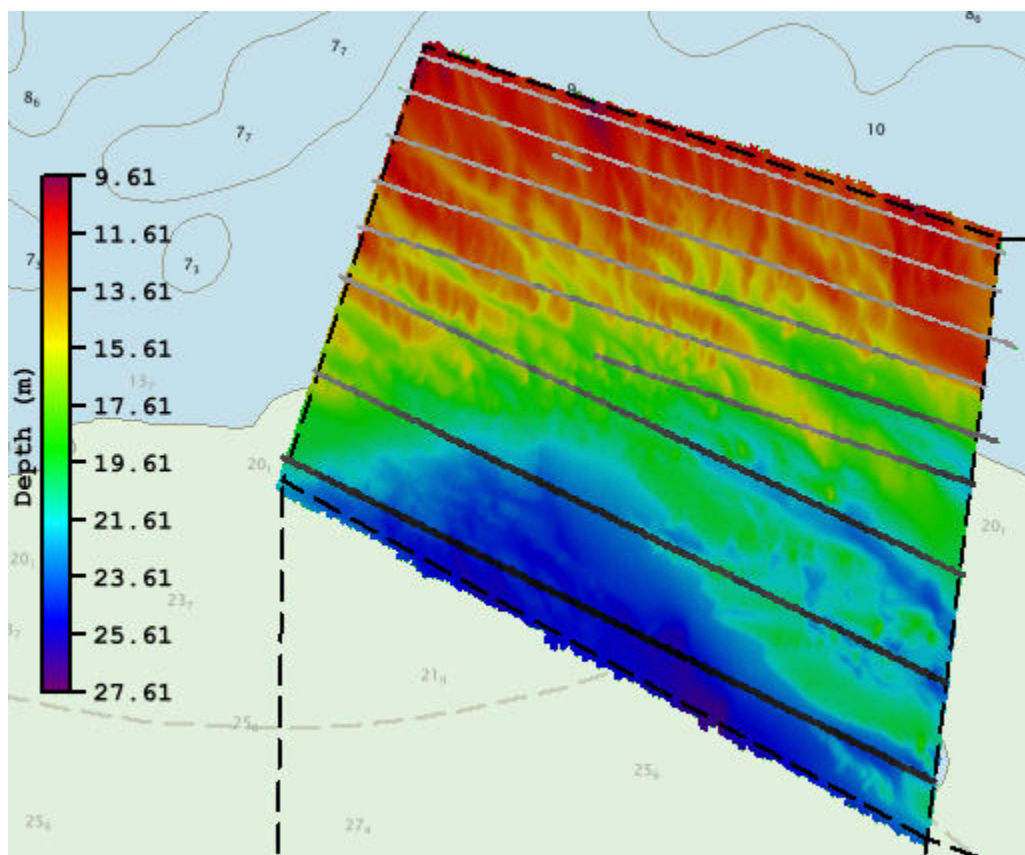


Figure 7: H13285 MBES mainscheme and MBES crossline distribution

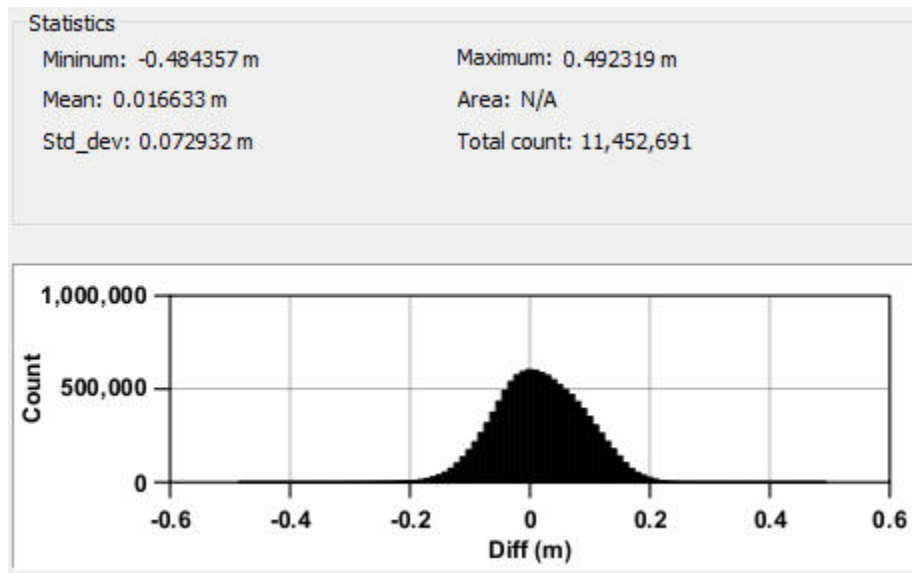


Figure 8: H13285 MBES mainscheme differenced from MBES crosslines statistical output

### B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Method	Measured	Zoning
ERS via VDATUM	0.1 meters	0.101 meters

Table 7: Survey Specific Tide TPU Values.

Hull ID	Measured - CTD	Measured - MVP	Measured - XBT	Surface
M/V Go Liberty	1.337 meters/second	N/A meters/second	N/A meters/second	0.25 meters/second
M/V Pelagos (T-50)	1.618 meters/second	N/A meters/second	N/A meters/second	0.25 meters/second
M/V Pelagos (7125)	2.235 meters/second	N/A meters/second	N/A meters/second	0.25 meters/second

Table 8: Survey Specific Sound Speed TPU Values.

Survey H13285 uncertainty values (Tables 7 and 8) were evaluated both in CARIS HIPS 9.1 and via Pydro QC Tools v3.0.19. Both the finalized 1m (Figure 9) and 2m (Figure 10) bathymetric grids meet uncertainty standards with 100% of nodes passing.

## Uncertainty Standards

Grid source: H13285\_MB\_1m\_MLLW\_FINAL

100% pass (86,663,240 of 86,663,240 nodes), min=0.54, mode=0.58, max=0.94

Percentiles: 2.5%=0.55, Q1=0.56, median=0.58, Q3=0.58, 97.5%=0.60

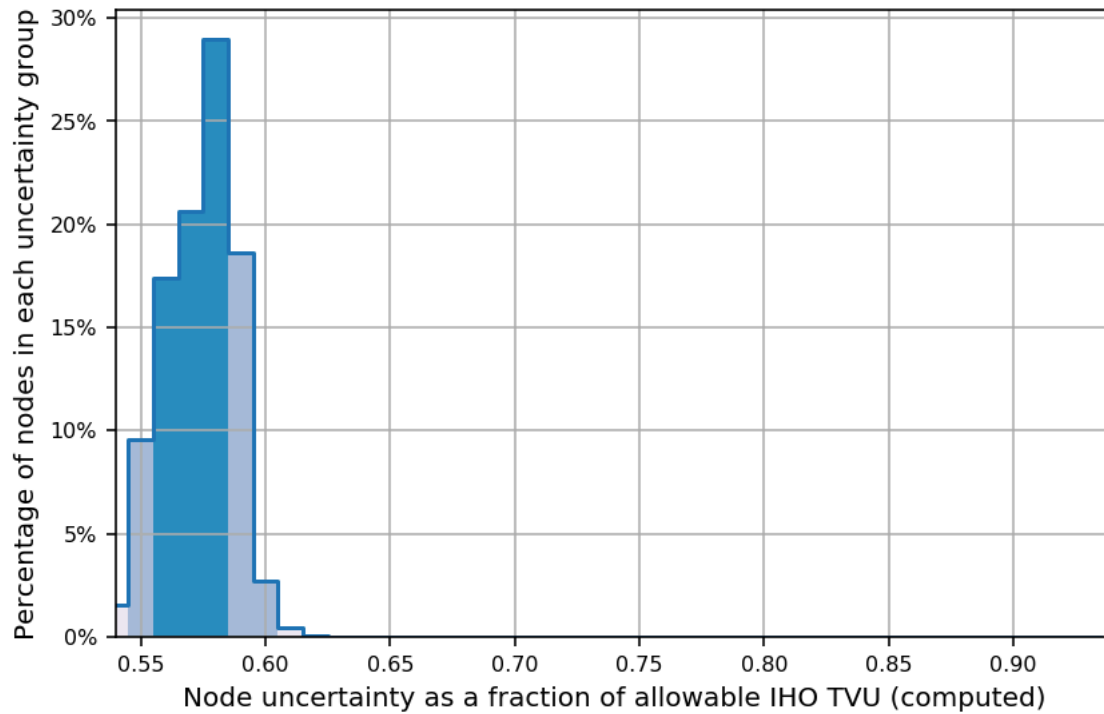
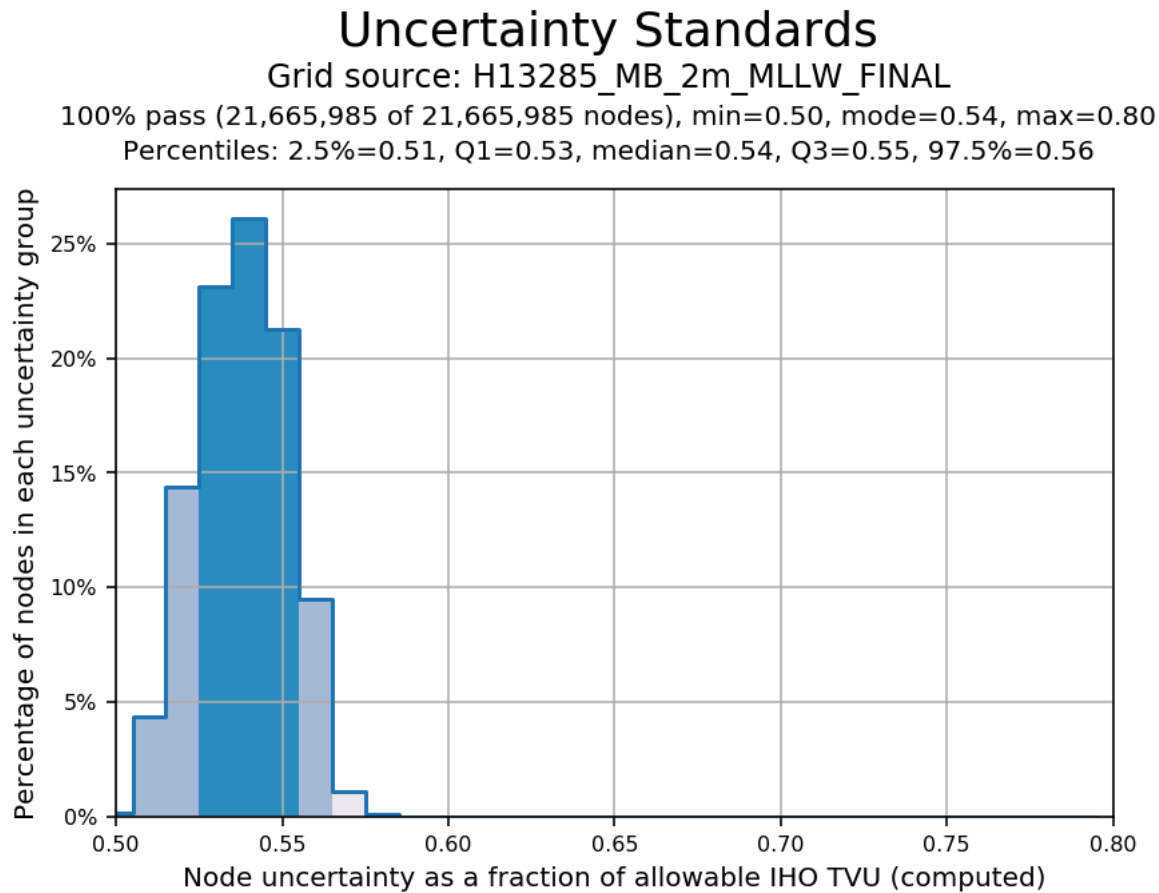


Figure 9: H13285 1m finalized grid TPU QC





*Figure 10: H13285 2m finalized grid TPU QC*

### B.2.3 Junctions

Three contemporary surveys are available to compare to H13285: H13187, H13281 and H13286 (Table 9).

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H13187	1:20000	2019	Fugro Pelagos, Inc.	NW
H13281	1:20000	2019	Fugro Pelagos, Inc.	S
H13286	1:20000	2019	Fugro Pelagos, Inc.	SE

*Table 9: Junctioning Surveys*

## H13187

Survey H13187 was acquired by Fugro Pelagos in 2019 as a part of OPR-J359-KR-18. Of the 1,053,483 grid nodes compared between H13285 and H13287, 99.9% agree within 50cm (Figure 11).

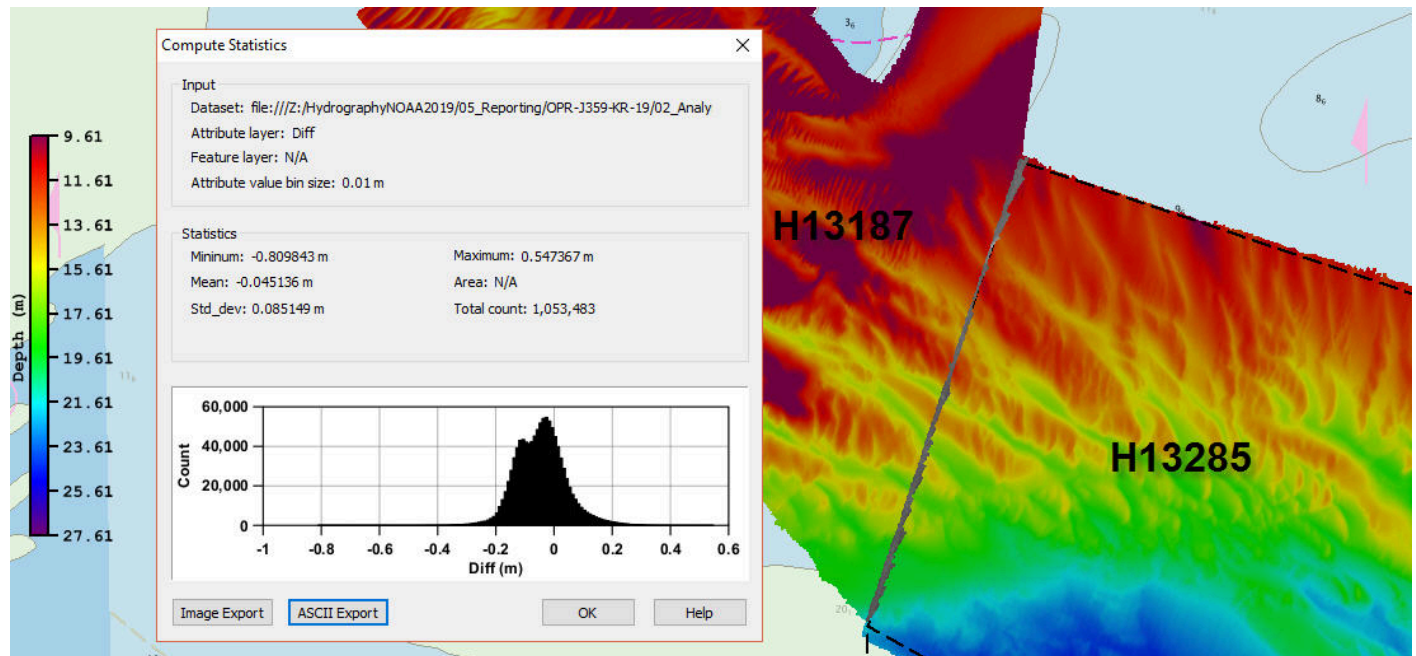


Figure 11: Survey H13285 junction with Survey H13187

## H13281

Survey H13281 was acquired by Fugro Pelagos in 2019 as a part of OPR-J359-KR-19. Of the 1,017,305 grid nodes compared between H13285 and H13281, 100% agree within 50cm (Figure 12).

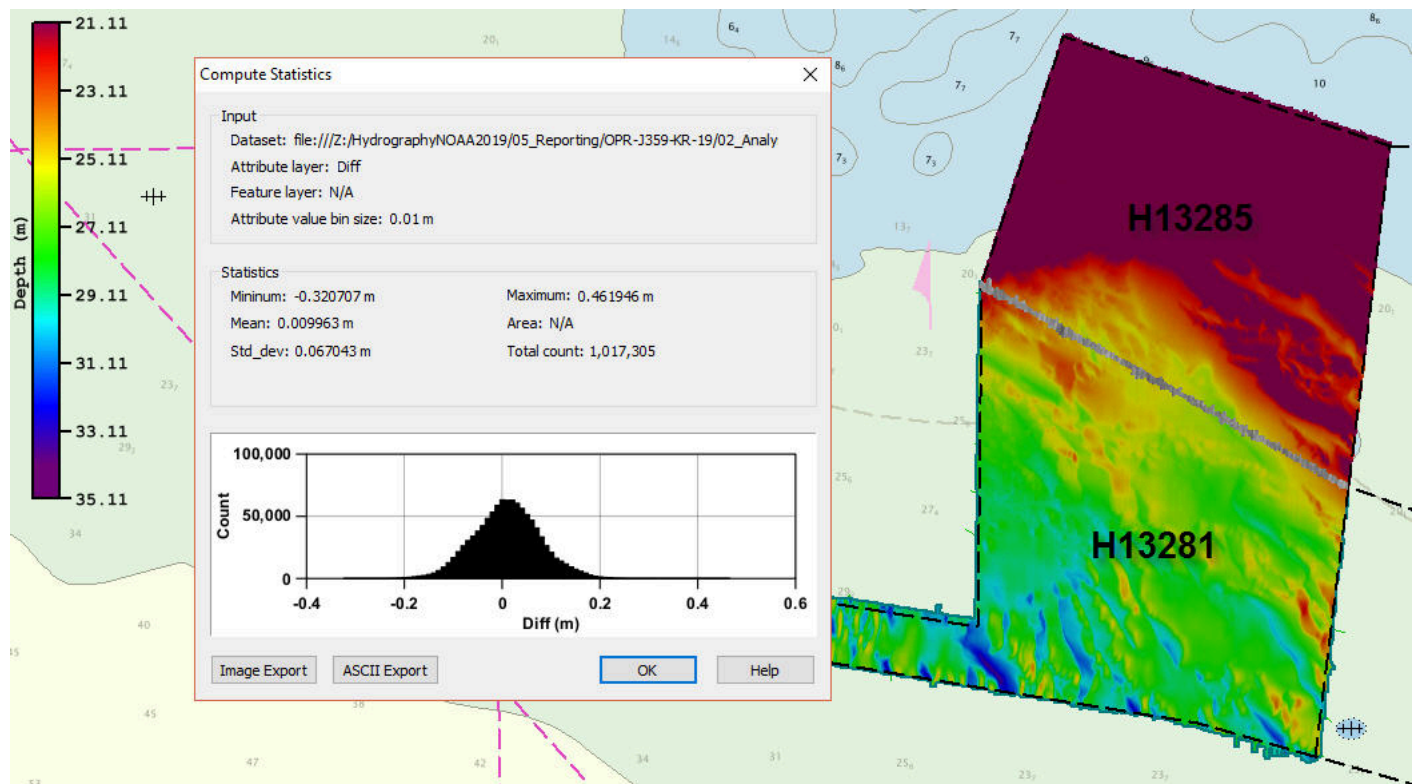


Figure 12: Survey H13285 junction with Survey H13281

## H13286

Survey H13286 was acquired by Fugro Pelagos in 2019 as a part of OPR-J359-KR-19. Of the 1,550,023 grid nodes compared between H13285 and H13286, 100% agree within 50cm (Figure 13).



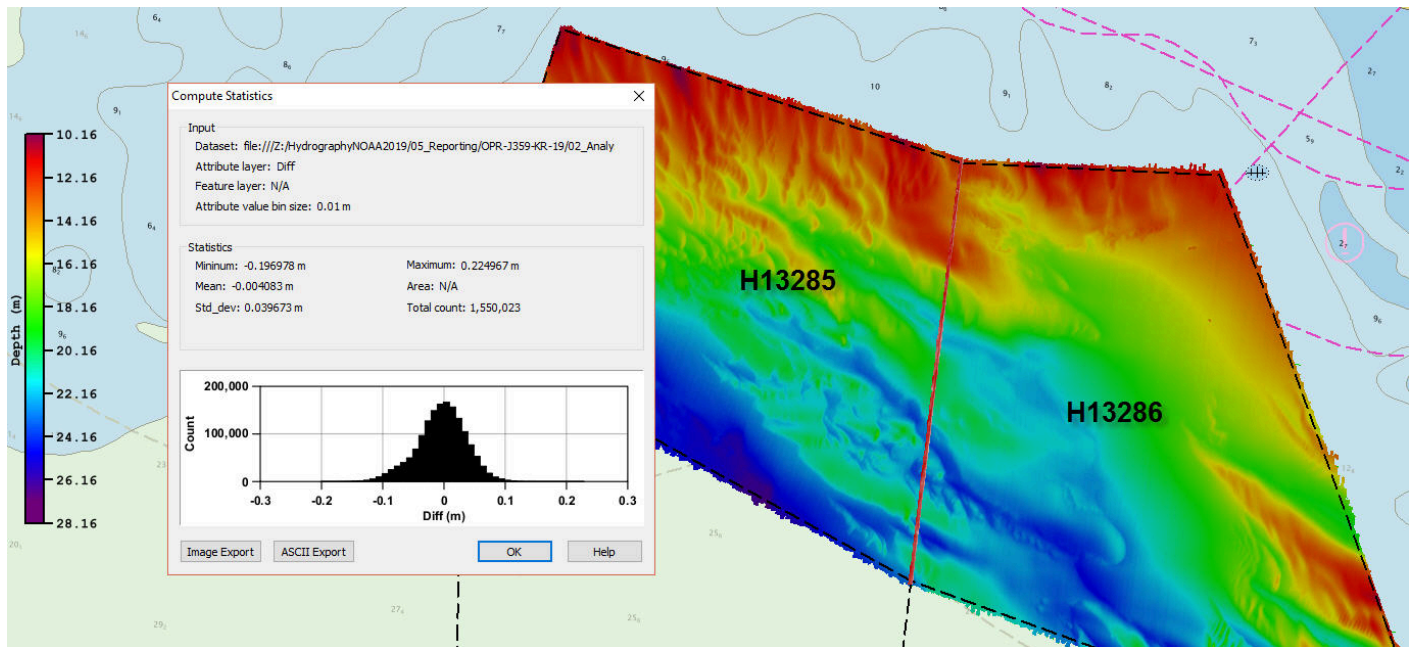


Figure 13: Survey H13285 junction with Survey H13286

## 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

There were no conditions or deficiencies that affected equipment operational effectiveness.

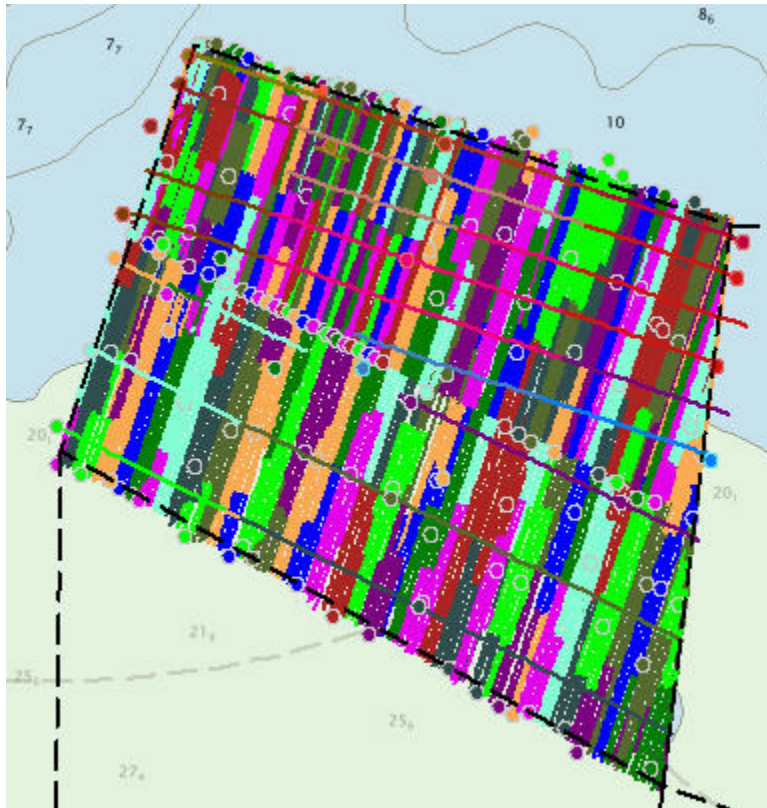
## B.2.6 Factors Affecting Soundings

There were no other factors that affected corrections to soundings.

## B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: Sound velocity profiles were acquired every two hours from the M/V Go Liberty and M/V Pelagos using either an AML SV&P or a Teledyne Oceanscience UCTD SV&P (Figure 14).

Refer to the DAPR for additional information.



*Figure 14: Temporal and geographic distribution of SVP casts within survey H13285*

## B.2.8 Coverage Equipment and Methods

All equipment and survey methods were used as detailed in the DAPR.

## B.3 Echo Sounding Corrections

### B.3.1 Corrections to Echo Soundings

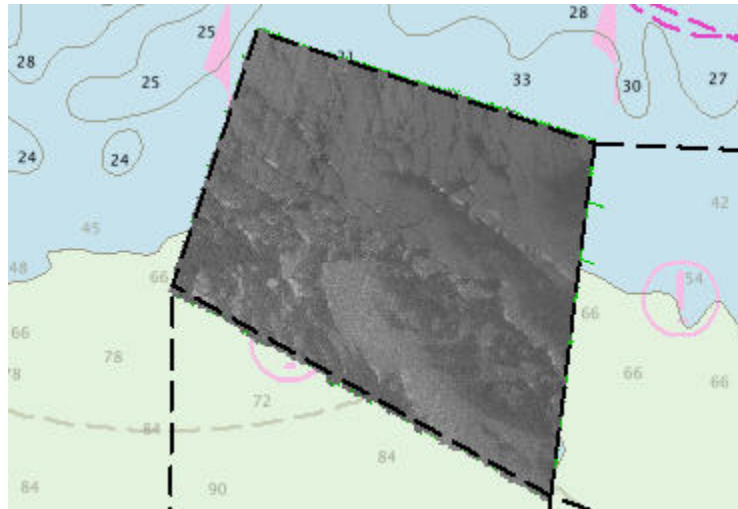
All data reduction procedures conform to those detailed in the DAPR.

### B.3.2 Calibrations

All sounding systems were calibrated as detailed in the DAPR.

### B.4 Backscatter

All equipment and survey methods utilized in the acquisition and processing of Survey H13285 backscatter (Figure 15) are detailed in the DAPR.



*Figure 15: Survey H13285 backscatter coverage*

### B.5 Data Processing

#### B.5.1 Primary Data Processing Software

The following Feature Object Catalog was used: NOAA Profile Version 2019.

## 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
H13285_MB_1m_MLLW	CARIS Raster Surface (CUBE)	1 meters	9.61 meters - 27.58 meters	CMC_1m	Complete MBES
H13285_MB_1m_MLLW_Final	CARIS Raster Surface (CUBE)	1 meters	9.61 meters - 20.0 meters	CMC_1m	Complete MBES
H13285_MB_2m_MLLW	CARIS Raster Surface (CUBE)	2 meters	9.64 meters - 27.51 meters	CMC_2m	Complete MBES
H13285_MB_2m_MLLW_Final	CARIS Raster Surface (CUBE)	2 meters	18.0 meters - 27.51 meters	CMC_2m	Complete MBES
H13285_MBAB_1m_400kHz	MB Backscatter Mosaic	1 meters	-	N/A	Complete MBES
H13285_MBAB_2m_400kHz	MB Backscatter Mosaic	2 meters	-	N/A	Complete MBES

Table 10: Submitted Surfaces

## 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 Datum Transformation

The following ellipsoid-to-chart vertical datum transformation was used:

Method	Ellipsoid to Chart Datum Separation File
ERS via VDATUM	EC_Apalachicola_xyNAD83-MLLW_geoid12b.csar

*Table 11: ERS method and SEP file*

## C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD 83).

The projection used for this project is Universal Transverse Mercator (UTM) Zone 16.

### PPP

All positioning and attitude data associated with OPR-J359-KR-19 was post-processed in POSpac MMS using PP-RTX methods. For further discussion, reference the HVCR and or DAPR submitted with this report.

## D. Results and Recommendations

### D.1 Chart Comparison

A chart comparison was conducted using the Triangle Rule script within the Chart Review Tool of Pydro QC Tools. A combined s57 file of charted soundings extracted from ENC's listed in the project instructions and an s57 file of surveyed soundings were compared with the following results (Figure 16):

1,038 of the 55,047 soundings selected within survey H13285 exceed charted values by greater than 1ft (Figure 17). The highest survey-to-chart discrepancies of 9ft occur at the locations of the crests of shifting sand waves, the highest of which occur: 29-28-58.58N 085-13-25.60W and 29-31-44.20N 085-14-08.52W (Figures 18 and 19).

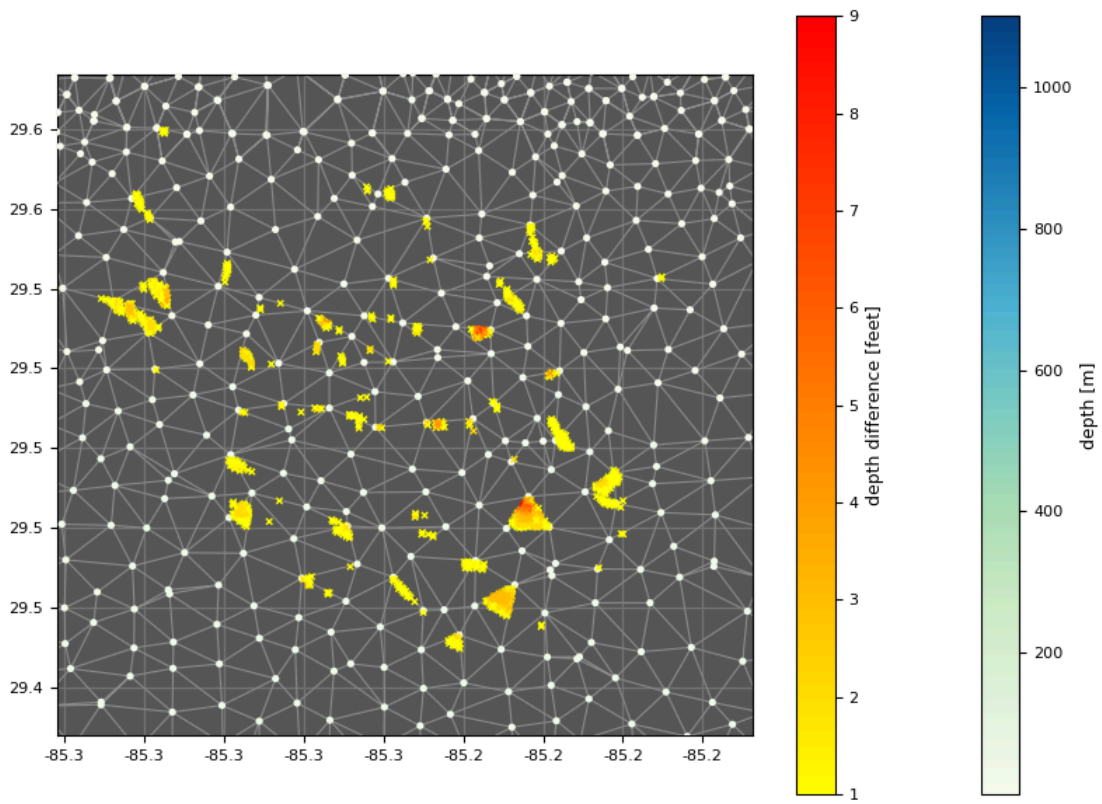


Figure 16: Pydro QC Tools chart review output of H13285 surveyed soundings shoal to charted soundings



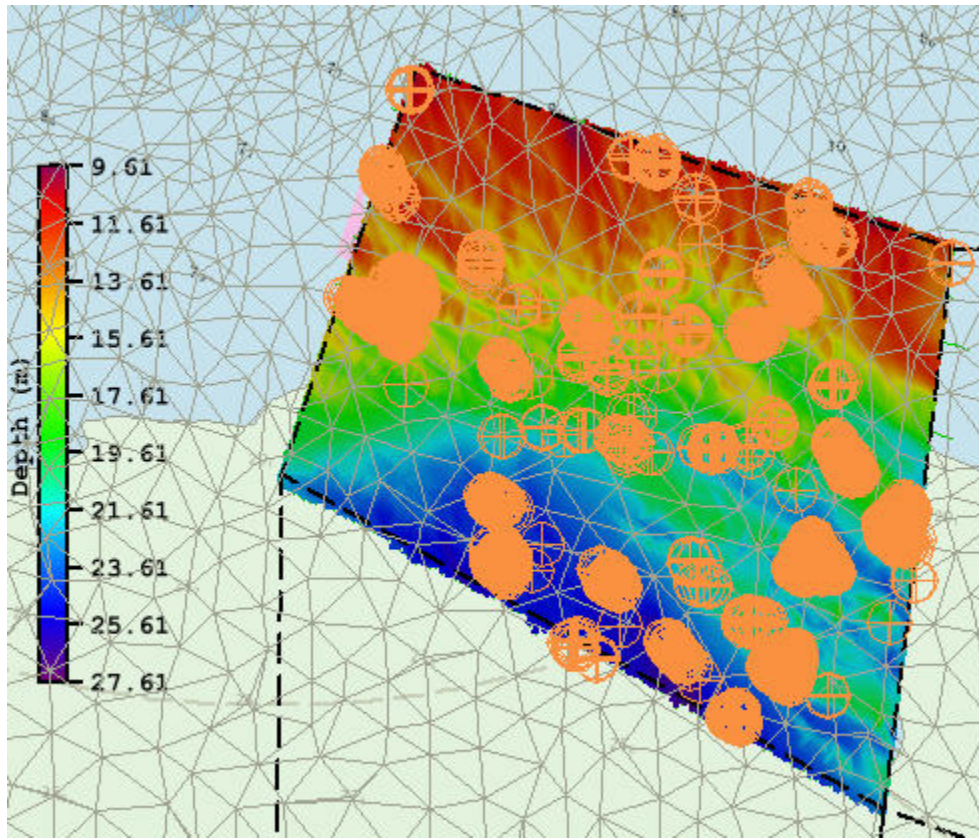


Figure 17: Pydro QC Tools output of areas of H13285 shoal to charted soundings by greater than 1ft

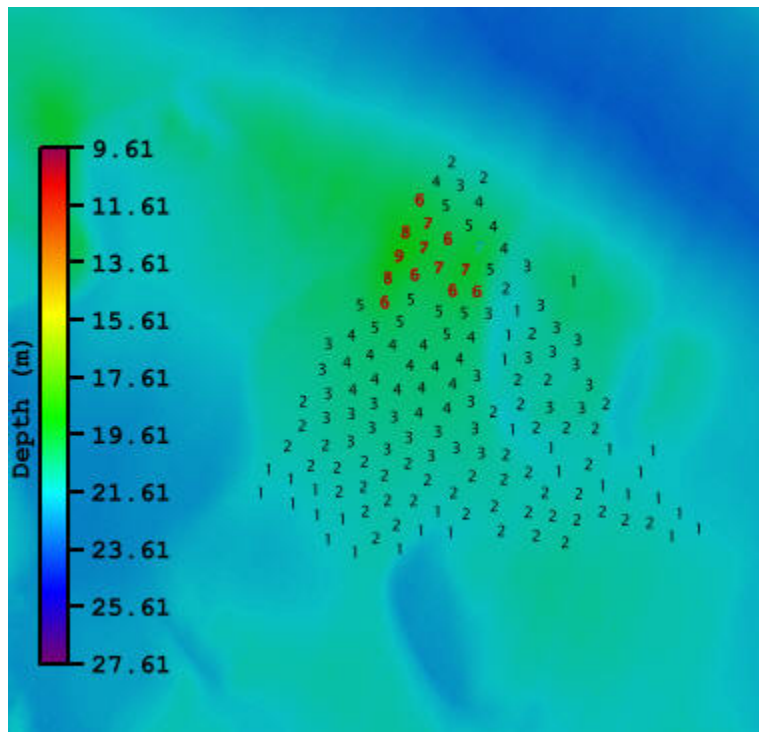


Figure 18: Area of shoaling located 29-28-58.58N 085-13-25.60W

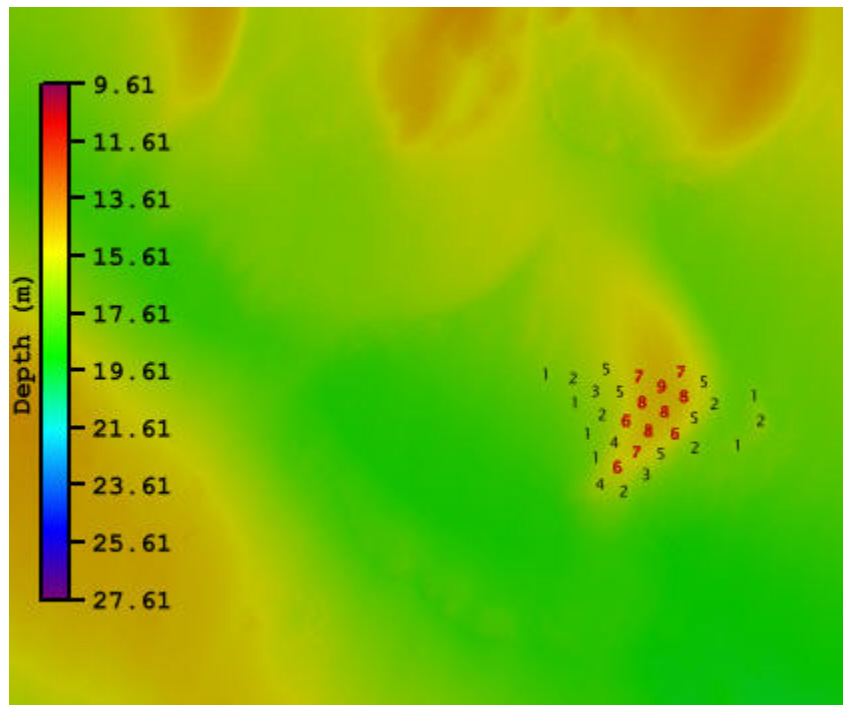


Figure 19: Area of shoaling located 29-31-44.20N 085-14-08.52W

### D.1.1 Electronic Navigational Charts

The following are the largest scale ENC's, which cover the survey area:

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US5FL64M	1:40000	19	06/10/2019	06/10/2019	NO
US4FL68M	1:80000	16	06/10/2019	06/10/2019	NO
US4FL60M	1:80000	24	05/09/2019	05/09/2019	NO
US3FL06M	1:350000	24	06/10/2019	06/10/2019	NO

Table 12: Largest Scale ENC's

US5FL64M

US4FL68M



US4FL60M

US3FL06M

### **D.1.2 Maritime Boundary Points**

No Maritime Boundary Points were assigned for this survey.

### **D.1.3 Charted Features**

No charted features exist for this survey.

### **D.1.4 Uncharted Features**

No uncharted features exist for this survey.

### **D.1.5 Shoal and Hazardous Features**

No shoals or potentially hazardous features exist for this survey.

### **D.1.6 Channels**

No channels exist for this survey. There are no designated anchorages, precautionary areas, safety fairways, traffic separation schemes, pilot boarding areas, or channel and range lines within the survey limits.

### **D.1.7 Bottom Samples**

A total of 7 bottom samples were acquired within the sheet limits of survey H13285. Reference the Final Feature File associated with this survey for further details.

## **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 Aids to Navigation**

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

### **D.2.3 Overhead Features**

No overhead features exist for this survey.

### **D.2.4 Submarine Features**

No submarine features exist for this survey.

### **D.2.5 Platforms**

No platforms exist for this survey.

### **D.2.6 Ferry Routes and Terminals**

No ferry routes or terminals exist for this survey.

### **D.2.7 Abnormal Seafloor and/or Environmental Conditions**

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

### **D.2.8 Construction and Dredging**

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

### **D.2.9 New Survey Recommendation**

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

**D.2.10 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. I have reviewed the attached survey data and reports.

All field sheets, 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 meets or exceeds requirements as set forth in the NOS Hydrographic Surveys Specifications and Deliverables, Field Procedures Manual, Letter Instructions, and all HSD Technical Directives. 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.

Approver Name	Approver Title	Approval Date	Signature
Dean R Moyles	Chief of Party	01/17/2020	Dean Moyles  Digitally signed by Dean Moyles Date: 2020.03.30 13:39:37 -02'30'

## F. Table of Acronyms

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

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

<b>Acronym</b>	<b>Definition</b>
<b>PRF</b>	Project Reference File
<b>PS</b>	Physical Scientist
<b>RNC</b>	Raster Navigational Chart
<b>RTK</b>	Real Time Kinematic
<b>RTX</b>	Real Time Extended
<b>SBES</b>	Singlebeam Echosounder
<b>SBET</b>	Smooth Best Estimate and Trajectory
<b>SNM</b>	Square Nautical Miles
<b>SSS</b>	Side Scan Sonar
<b>SSSAB</b>	Side Scan Sonar Acoustic Backscatter
<b>ST</b>	Survey Technician
<b>SVP</b>	Sound Velocity Profiler
<b>TCARI</b>	Tidal Constituent And Residual Interpolation
<b>TPU</b>	Total Propagated Uncertainty
<b>USACE</b>	United States Army Corps of Engineers
<b>USCG</b>	United States Coast Guard
<b>UTM</b>	Universal Transverse Mercator
<b>XO</b>	Executive Officer
<b>ZDF</b>	Zone Definition File

**From:** [Moyles, Dean](#)  
**To:** [NODC.submissions@noaa.gov](mailto:NODC.submissions@noaa.gov)  
**Cc:** [Starla Robinson - NOAA Federal](#)  
**Subject:** NCEI Sound Speed Data  
**Date:** Wednesday, March 25, 2020 2:03:00 PM  
**Attachments:** [OPR-J359-KR-19\\_20200325.zip](#)

---

Please find the attached Sound Speed Data for OPR-J359-KR-19 in the NetCDF template format. I apologize this was omitted from the final deliverables, please let me know if you have any questions.

**Dean Moyles**

*Marine Hydrographic Manager (NSPS/THSOA cert. No. 226)*  
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**From:** [Stone, Allison](#)  
**To:** [survey.outlines@noaa.gov](mailto:survey.outlines@noaa.gov)  
**Cc:** [Starla Robinson - NOAA Federal](#); [Moyles, Dean](#)  
**Subject:** OPR-J359-KR-19 Survey Outlines  
**Date:** Wednesday, November 27, 2019 5:22:16 PM  
**Attachments:** [H13281\\_SurveyOutline.000](#)  
[H13282\\_SurveyOutline.000](#)  
[H13284\\_SurveyOutline.000](#)  
[H13285\\_SurveyOutline.000](#)  
[H13286\\_SurveyOutline.000](#)  
[H13287\\_SurveyOutline.000](#)  
[H13288\\_SurveyOutline.000](#)

---

Good Afternoon,

Please find attached survey outlines associated with OPR-J359-KR-19:

H13281  
H13282  
(H13283-submitted 10/4/19, not submitted herein)  
H13284  
H13285  
H13286  
H13287  
H13288

A copy of this correspondence will be saved and submitted with the reporting package for this project. Please confirm receipt.

Kind regards,

**Allison Stone**  
*Hydrographer*  
Fugro

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**A** 6100 Hillcroft St Houston, TX 77081

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**From:** [Stone, Allison](#)  
**To:** [OCS.NDB@noaa.gov](mailto:OCS.NDB@noaa.gov); [Coast.Pilot@noaa.gov](mailto:Coast.Pilot@noaa.gov)  
**Cc:** [Starla Robinson - NOAA Federal](#); [Moyles, Dean](#)  
**Subject:** OPR-J359-KR-2019 Coast Pilot Report Review Report  
**Date:** Monday, December 2, 2019 1:38:33 PM  
**Attachments:** [OPR\\_J359\\_KR\\_19\\_CoastPilotReviewReport.pdf](#)  
[OPR-J359-KR-19CoastPilotReport.pdf](#)

---

Good afternoon,

Please find attached CP Review Report for project OPR-J359-KR-19. This review was conducted on the most recent Ch 6 of CP5 (24 Nov 2019).

CP5 Ch6 provided by HSD with Project Instructions was dated 20 May 2018.

In reference to the highlighted update requests, the wreck PA at the outer entrance to Government Cut was not included for investigation in the Project Instructions for investigation.

An additional comment was added relating to the prominence of the Highway 98 Bridge over the Gulf County Canal as a visual reference for approach.

If you have any additional comments or considerations, please do not hesitate to reach out.

**Allison Stone**

*Hydrographer*

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**From:** [Laura Jeffery - NOAA Federal](#)  
**To:** [Stone, Allison](#)  
**Cc:** [OCS.NDB@noaa.gov](#); [Coast.Pilot@noaa.gov](#); [Starla Robinson - NOAA Federal](#); [Moyles, Dean](#)  
**Subject:** Re: OPR-J359-KR-2019 Coast Pilot Report Review Report  
**Date:** Monday, December 2, 2019 3:50:29 PM

---

Thank you very much Allison! We will have this made into a source doc and process it for CP5 soon.

-Nautical Publications Branch/NOS

On Mon, Dec 2, 2019 at 12:11 PM 'Stone, Allison' via \_NOS OCS NSD Coast Pilot <[coast.pilot@noaa.gov](mailto:coast.pilot@noaa.gov)> wrote:

Good afternoon,

Please find attached CP Review Report for project OPR-J359-KR-19. This review was conducted on the most recent Ch 6 of CP5 (24 Nov 2019).

CP5 Ch6 provided by HSD with Project Instructions was dated 20 May 2018.

In reference to the highlighted update requests, the wreck PA at the outer entrance to Government Cut was not included for investigation in the Project Instructions for investigation.

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If you have any additional comments or considerations, please do not hesitate to reach out.

**Allison Stone**

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--

Laura B. Jeffery  
Nautical Publications Branch/NOS  
Cartographer/Reviewer  
240-533-0073

NOAA-NOS-OCS-NSD-NPB  
1315 E. West Hwy  
SSMC3, Station 6315  
Silver Spring, MD 20910

**From:** [Moyles, Dean](#)  
**To:** [ocs.ecc@noaa.gov](mailto:ocs.ecc@noaa.gov)  
**Cc:** [Starla Robinson - NOAA Federal](#)  
**Subject:** RE: OPR-J359-KR-19 Marine Mammal Sighting Logs  
**Date:** Wednesday, March 25, 2020 2:13:00 PM  
**Attachments:** [Marine Mammal Training Video Log 2019.xlsx](#)

---

Please find the attached Marine Mammal Training Log for OPR-J359-KR-19. I apologize this was omitted from the earlier submission.

**Dean Moyles**

*Marine Hydrographic Manager (NSPS/THSOA cert. No. 226)*  
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**From:** Nancy Young - NOAA Federal <nancy.young@noaa.gov>  
**Sent:** Tuesday, December 3, 2019 4:36 PM  
**To:** Moyles, Dean <dmoyles@fugro.com>  
**Subject:** Re: OPR-J359-KR-19 Marine Mammal Sighting Logs

Thanks very much, Dean.

On Mon, Dec 2, 2019 at 11:10 AM 'Moyles, Dean' via [\\_NMFS AFSC NMML POP INFORMATION](#) <[pop.information@noaa.gov](mailto:pop.information@noaa.gov)> wrote:

Please find the attached marine mammal sighting logs for OPR-J359-KR-19. Please let me know if you have any questions.

**Dean Moyles**

*Marine Hydrographic Manager (NSPS/THSOA cert. No. 226)*  
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--

**Nancy Young**  
*NOAA Fisheries*  
*Alaska Fisheries Science Center*  
*Marine Mammal Laboratory*  
*(206) 526-4297*

Name	Date of Completion
Allison Stone	7/2/2019
Honza Rokyta	7/2/2019
Dean Moyles	7/2/2019
Mike Minton	7/2/2019
Clay Walker	7/2/2019
Patrick Keilen	7/2/2019
Nicholas Burch	7/17/2019
Emanual Byas	7/17/2019
Reed Nelle	7/17/2019
Tiziana Munene	7/17/2019
Dylan Coe	7/17/2019
Matt Green	7/17/2019
Gary Baxter	7/18/2019
Bobby Touchstone	7/19/2019
Honza Rokyta	7/31/2019
Scott Ferguson	7/31/2019
Caroline Bradley	9/23/2019

**From:** [Moyles, Dean](#)  
**To:** ["pop.information@noaa.gov"](#); ["ocs.ecc@noaa.gov"](#)  
**Cc:** ["Starla Robinson - NOAA Federal"](#)  
**Subject:** OPR-J359-KR-19 Marine Mammal Sighting Logs  
**Date:** Monday, December 2, 2019 3:35:00 PM  
**Attachments:** [OPR-J359-KR-19 Marine Mammal Sightings.zip](#)

---

Please find the attached marine mammal sighting logs for OPR-J359-KR-19. Please let me know if you have any questions.

**Dean Moyles**

*Marine Hydrographic Manager (NSPS/THSOA cert. No. 226)*

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**Together we create a safe and liveable world.**

**From:** [Nancy Young - NOAA Federal](#)  
**To:** [Moyles, Dean](#)  
**Subject:** Re: OPR-J359-KR-19 Marine Mammal Sighting Logs  
**Date:** Tuesday, December 3, 2019 4:36:35 PM

---

Thanks very much, Dean.

On Mon, Dec 2, 2019 at 11:10 AM 'Moyles, Dean' via \_NMFS AFSC NMML POP INFORMATION <[pop.information@noaa.gov](mailto:pop.information@noaa.gov)> wrote:

Please find the attached marine mammal sighting logs for OPR-J359-KR-19. Please let me know if you have any questions.

**Dean Moyles**

*Marine Hydrographic Manager (NSPS/THSOA cert. No. 226)*

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**Nancy Young**  
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Marine Mammal Laboratory  
(206) 526-4297



APPROVAL PAGE

H13285

The survey data meet or exceed the current requirements of the Office of Coast Survey hydrographic data review process and may be used to update NOAA products. The following survey products will be archived at the National Centers for Environmental Information:

- Descriptive Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Collection of acoustic backscatter mosaics
- Bottom samples
- Geospatial PDF of survey products

Approved: \_\_\_\_\_

**Commander Meghan McGovern, NOAA**  
Chief, Atlantic Hydrographic Branch