H13162

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

DESCRIPTIVE REPORT

Type of Survey:	Basic Hydrographic Survey
Registry Number:	H13162

LOCALITY

State(s):	Florida
General Locality:	Florida Keys National Marine Sanctuary and Vicinity
Sub-locality:	Isaac Shoal

2018

CHIEF OF PARTY
David Neff, ACSM C.H.

LIBRARY & ARCHIVES

Date:

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTRY NUMBER:

HYDROGRAPHIC TITLE SHEET

H13162

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:	**Florida Keys National Marine Sanctuary and Vicinity**
Sub-Locality:	**Isaac Shoal**
Scale:	**40000**
Dates of Survey:	**08/24/2018 to 01/04/2019**
Instructions Dated:	**07/20/2018**
Project Number:	**OPR-H355-KR-18**
Field Unit:	**eTrac, Inc**
Chief of Party:	**David Neff, ACSM C.H.**
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:

All times are UTC. The purpose of this survey is to update existing NOS nautical charts. H13162 will cover approximately 45 square nautical miles of surrouding Isaac Shoal. SUBCONSULTANT: Geodynamics LLC, 310A Greenfield Dr., Newport, NC 98570

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 H13162

Project: OPR-H355-KR-18

Locality: Florida Keys National Marine Sanctuary and Vicinity

Sublocality: Isaac Shoal

Scale: 1:40000

August 2018 - January 2019

eTrac, Inc

Chief of Party: David Neff, ACSM C.H.

A. Area Surveyed

eTrac Inc. conducted hydrographic survey operations in the Florida Keys National Marine Sanctuary and surrounding vicinity. H13162 covers approximately ~~45~~* square nautical miles of survey area. 210 linear nautical miles were aquired during the survey. H13162 is surrounding Isaac Shoal and Rebecca Shoal off the coast of Key West, Florida.

Survey was conducted within these limits between August 24, 2018 (DN236) and January 4, 2019 (DN004).

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
24° 37' 14.99" N 82° 37' 10.34" W	24° 31' 8.26" N 82° 29' 2.58" W

Table 1: Survey Limits
**4.23 sqnm*

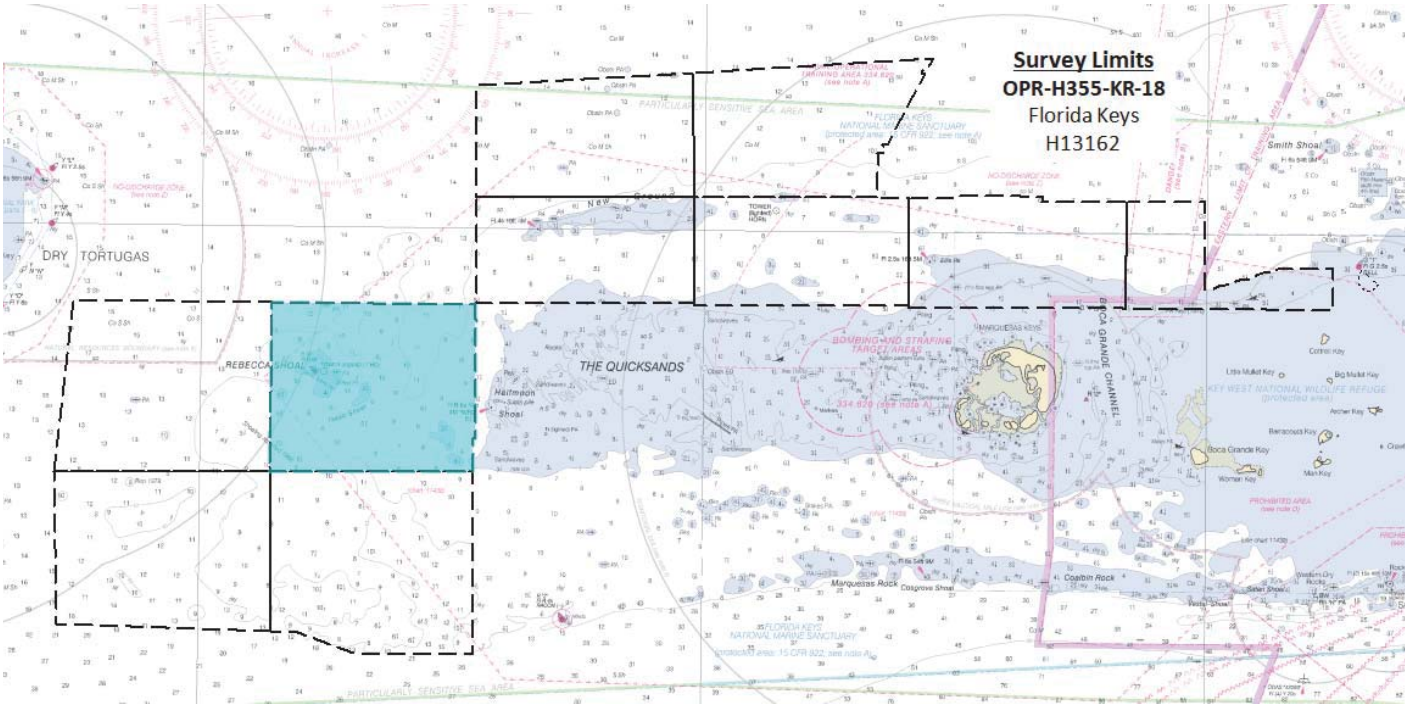

Figure 1: Survey Limits Overview (light blue area)

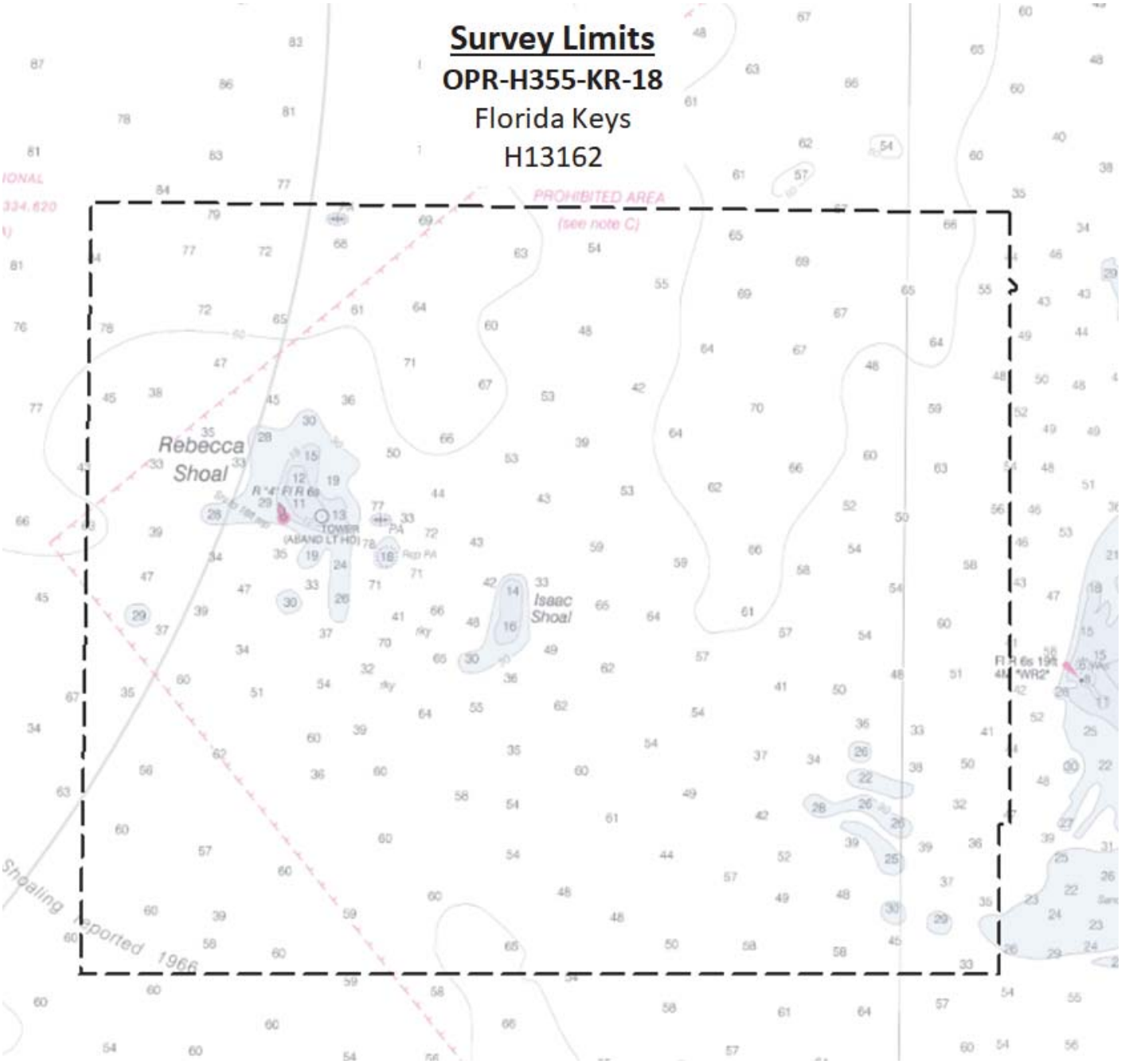

Figure 2: Survey Limits (black line)

All data were acquired in accordance with the requirements in the Project Instructions and specifications set forth in the Hydrographic Survey Specifications and Deliverables 2018 Edition (HSSD 2018).

A.2 Survey Purpose

The purpose of this survey is to update existing National Ocean Service (NOS) nautical charts.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

Survey H13162 is accurate to International Hydrographic Organization (IHO) Order 1a as required per the HSSD 2018.

A.4 Survey Coverage

Survey Coverage was partially completed within survey limits. M/V Marcelle collected crosslines in H13162 and R/V Taku collected mainscheme and crosslines over Rebecca Shoal and Isaac Shoal. Due to unforeseen circumstances regarding the Key West Lobster Fishery having a large amount of lobster fishing equipment obstructing the area of survey, it was determined that the R/V Marcelle could not safely operate in the area without causing undue damage to the deployed lobster equipment or the hydrographic survey equipment aboard the R/V Marcelle. Due to this, the R/V Marcelle was demobilized from the project on October 28, 2018. A contract modification was issued for this partial coverage. For the crosslines collected by Marcelle, there are holidays in the data. Where data collection occurred over Rebecca Shoal and Isaac Shoal, coverage was in accordance with the requirements in the Project Instructions and HSSD 2018. H13162 was surveyed to Complete Coverage with backscatter standards set forth in the HSSD 2018. Reference Appendix II for correspondence regarding the contract modification.

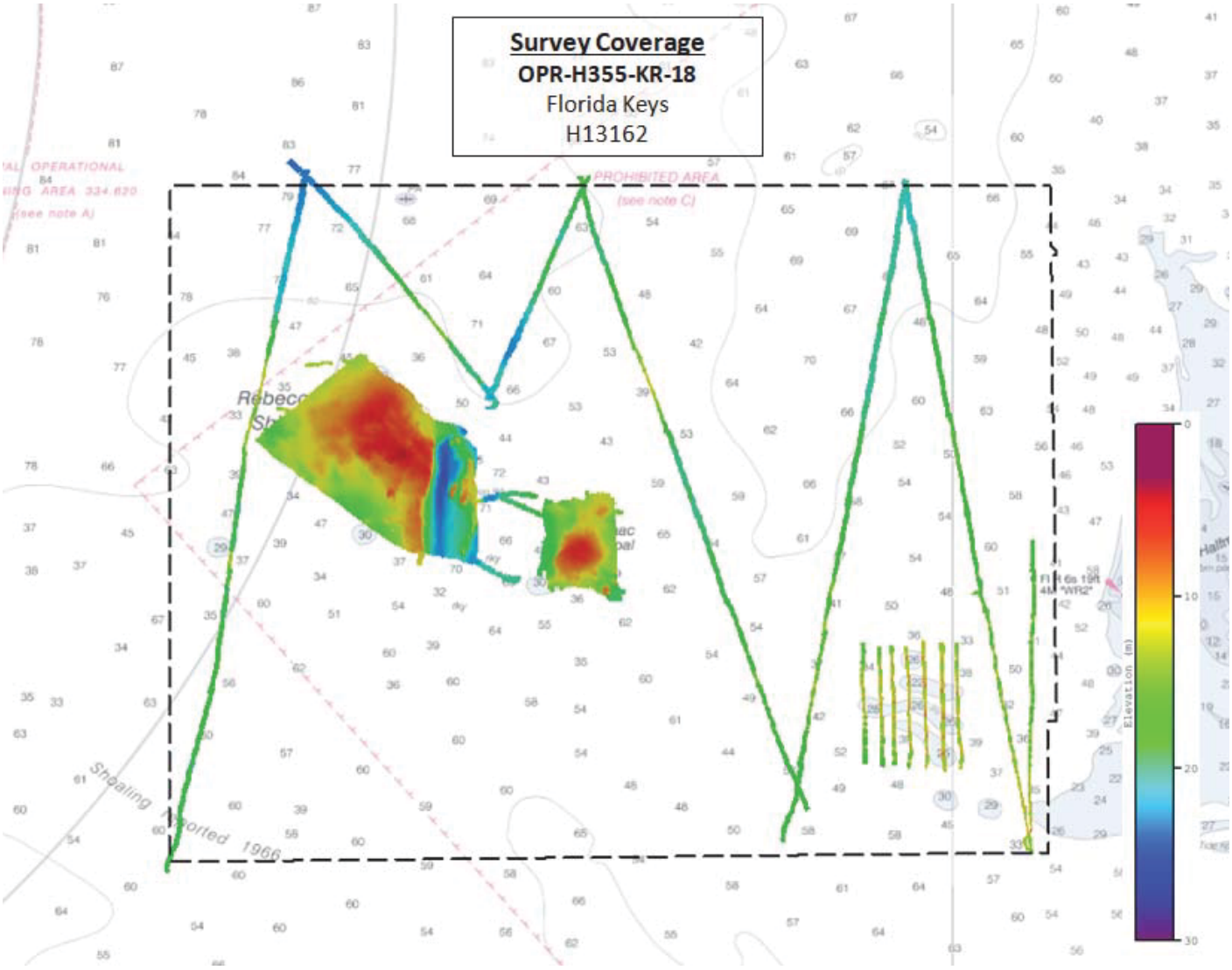

Figure 3: Survey Coverage

A.5 Survey Statistics

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

	HULL ID	*Taku*	*Marcelle*	*Total*
LNM	SBES Mainscheme	0	0	0
	MBES Mainscheme	170	0	170
	Lidar Mainscheme	0	0	0
	SSS Mainscheme	0	0	0
	SBES/SSS Mainscheme	0	0	0
	MBES/SSS Mainscheme	0	0	0
	SBES/MBES Crosslines	7	33	40
	Lidar Crosslines	0	0	0
Number of Bottom Samples				3
Number of AWOIS Items Investigated				0
Number Maritime Boundary Points Investigated				0
Number of DPs				0
Number of Items Investigated by Dive Ops				0
Total SNM				~~45~~ *4.23*

Table 2: Hydrographic Survey Statistics

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

Survey Dates	Day of the Year
09/07/2018	250
09/09/2018	252
09/10/2018	253
09/14/2018	257
09/15/2018	258
09/16/2018	259
10/18/2018	291
01/04/2019	4

Table 3: Dates of Hydrography

Note: R/V Marcelle lines were orginally collected as crosslines, but were not included in the crossline calculation since these lines were not over mainscheme data.

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 are discussed in the following sections.

B.1.1 Vessels

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

Hull ID	*R/V Marcelle*	*R/V Taku*
LOA	45 meters	10 meters
Draft	2.6 meters	0.6 meters

Table 4: Vessels Used

The R/V Marcelle is a 45 meter steel-hulled vessel equipped with a custom over-the-side (port) multibeam pole mount.

The R/V Taku is a 10 meter aluminum catamaran equipped with a custom stern multibeam pole mount.

B.1.2 Equipment

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

Manufacturer	Model	Type
Kongsberg	2040C	MBES
R2Sonic	2024	MBES
Applanix	POSMV 320 V5	Positioning and Attitude System
AML	Base.X	Sound Speed System
AML	Smart.X	Sound Speed System
eTrac	eTrac MVP	Sound Speed System

Table 5: Major Systems Used

Note: R/V Marcelle utilized a dualhead Kongsberg 2040C multibeam, an eTrac-built MVP and an AML Base.X for sound speed system and a POSMV 320 V5 for the positioning system. R/V Taku utilized a dualhead R2Sonic 2024 multibeam echosounder system, an AML Smart.X for the sound speed system and a POSMV 320 V5 for the positioning system.

B.2 Quality Control

B.2.1 Crosslines

Crosslines acquired for this survey totaled 24% of mainscheme acquisition.

A comparison of crossline mileage to mainscheme mileage yields a crossline percentage of 4.25%, and is noted to be above the required 4%.

Note: R/V Marcelle lines were orginally collected as crosslines, but were not included in the crossline calculation since these lines were not over mainscheme data. Therefore, although the calculation from survey statistics lists the crosslines percentage as 24%, 4.25% is a more accurate calculation of the crossline percentage.

A beam-to-beam statistical analysis was performed using the Cross Check tool in Qimera. A 1 meter Combined Uncertainty and Bathymetric Estimator (CUBE) weighted dynamic surface was created incorporating only the mainscheme lines and excluded crosslines. The Cross Check tool was used to perform

the beam-by-beam comparison of the crossline data to the mainscheme surface. Comparisons showed excellent agreement, well above 95% of the allowable TVU.

Note: This surface was created for QC only and is not submitted as a surface deliverable.

The beam-to-beam crossline comparison report generated through the Qimera Cross Check tool is included in Separates II.

Below is a histogram of the crossline comparison statistics showing IHO Order 1a compliance per beam.

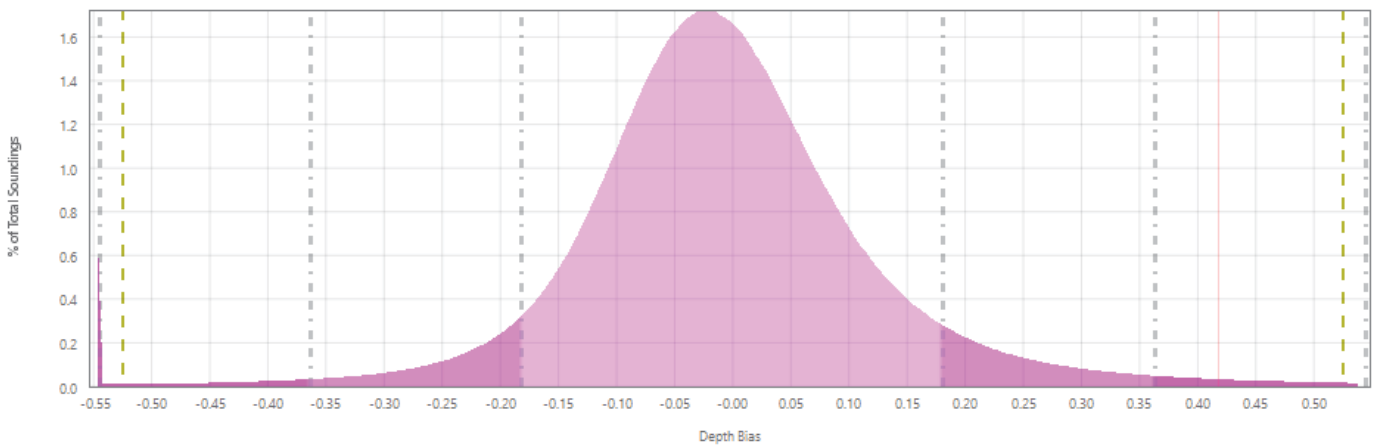

Figure 4: H13162 Crossline Comparison (1m)

B.2.2 Uncertainty

Hull ID	Measured - CTD	Measured - MVP	Surface
R/V Taku	0.5 meters/second	0 meters/second	0.025 meters/second
R/V Marcelle	0.5 meters/second	0.5 meters/second	0.025 meters/second

Table 6: Survey Specific Sound Speed TPU Values

Standard deviation and uncertainty layers of the Dynamic Surface were utilized during data processing to search for features, water column noise, and systematic errors.

IHO Order 1a uncertainty specification was met by 100% of the nodes.

The final Bathymetric Attributed Grid (BAG) surface's uncertainty was generated through the NOAA QC Tools and an image of the results is located below.

For H13162 the following percentages represent the results of the TPU testing:

Complete Coverage MBES (Finalized 1m CUBE weighted Dynamic Surface in NOAA QC Tools) = 99.5+% of nodes are within the allowable TPU.

Complete Coverage MBES (Finalized 2m CUBE weighted Dynamic Surface in NOAA QC Tools) = 99.5+% of nodes are within the allowable TPU.

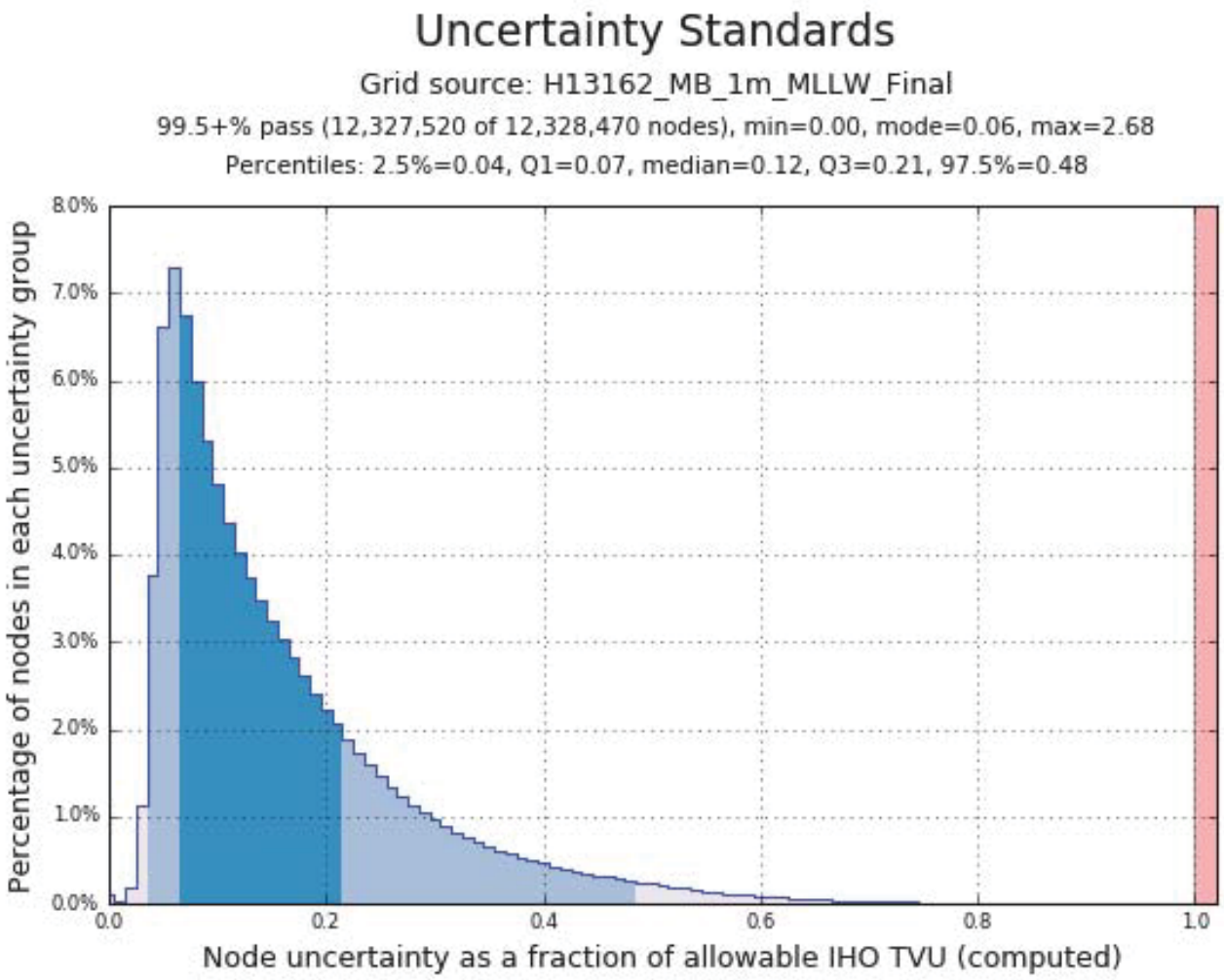

Figure 5: H13162 Finalized 1m Complete Coverage MBES TPU Statistics

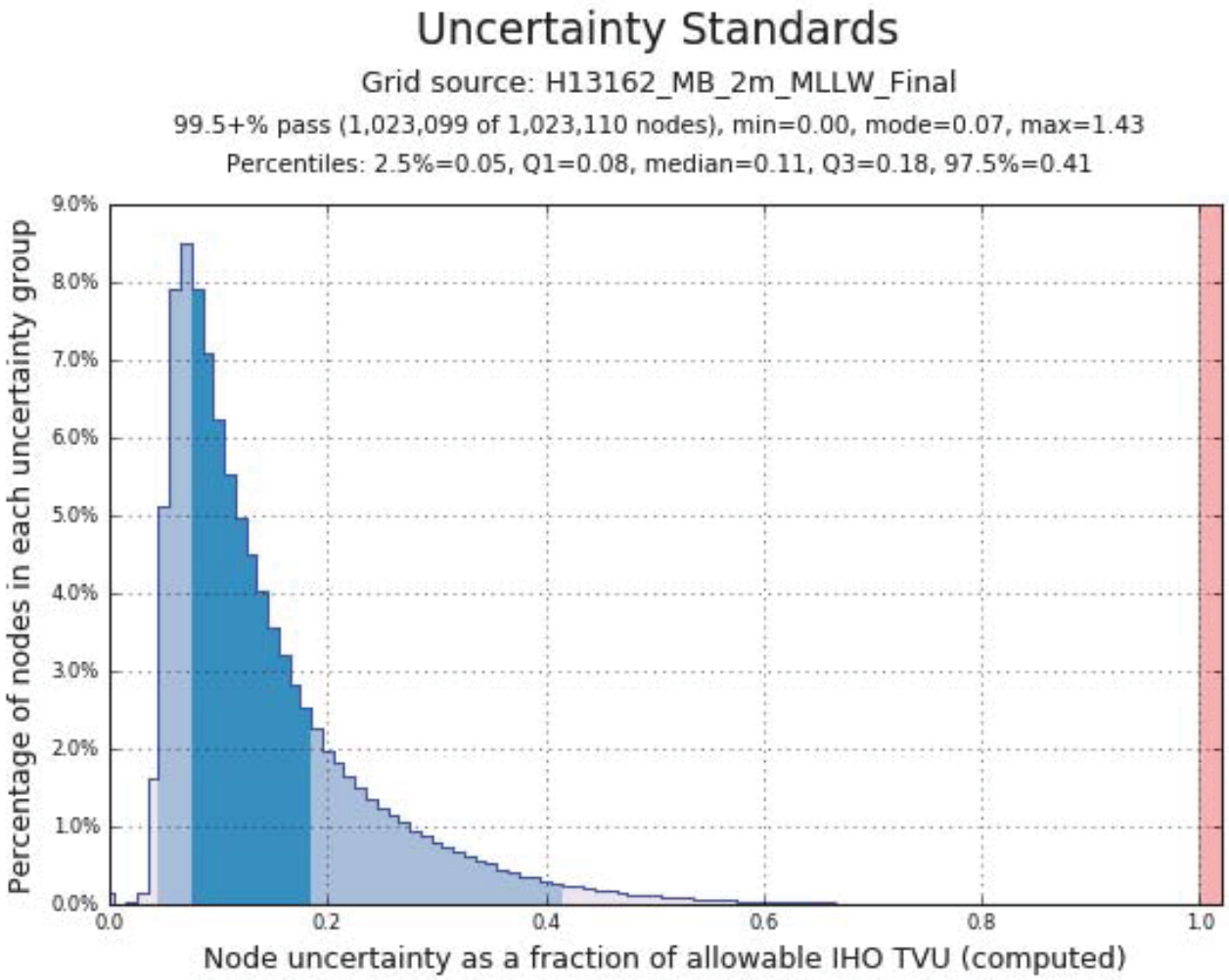

Figure 6: H13162 Finalized 2m Complete Coverage MBES TPU Statistics

B.2.3 Junctions

Note: No junction comparisons were completed for this survey due to partial sheet coverage. Survey coverage details were discussed in A.4 Survey Coverage.

There are no contemporary surveys that junction with this survey.

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: SVP casts were generally taken every 2 hours. Ocassionally casts would exceed a 2 hour frequency, however would never exceed a 4 hour frequency. On R/V Marcelle casts were applied in both QPS QINSy and Kongsberg SIS acquisition software at the time of the cast. On R/V Taku casts were applied in QPS QINSy acquisition software at the time of the cast. Surface SVP measured at 1Hz was compared to surface speed from the current profile in realtime. If the surface velocity comparison was in excess of 2m/s at any time during survey operations, a new cast was taken.

Surface sound speeds were compared in realtime and profile to profile for each cast on the vessel. Additionally, the processor reviewed profiles in Qimera to remove spurious readings within a cast, compare day-to-day casts, and to check distribution over the surveyed area, in order to better understand trends for efficient acquisition planning.

B.2.8 Coverage Equipment and Methods

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

B.2.9 Data Density Evaluation

In order to determine if the density of the data met the specified 5 soundings per node, data density was evaluated using DensityTrac in the AmiTrac program, developed in-house by eTrac Inc. Each finalized CUBE weighted dynamic surface's nodes were exported to a BBH file. The BBH file was then loaded into the DensityTrac program and density statistics were computed.

For H13162 the following percentages represent the results of the density query:

Complete Coverage MBES (Finalized 1m CUBE weighted Dynamic Surface) = 99.6543% of nodes are composed from at least 5 soundings.

Complete Coverage MBES (Finalized 2m CUBE weighted Dynamic Surface) = 99.551% of nodes are composed from at least 5 soundings.

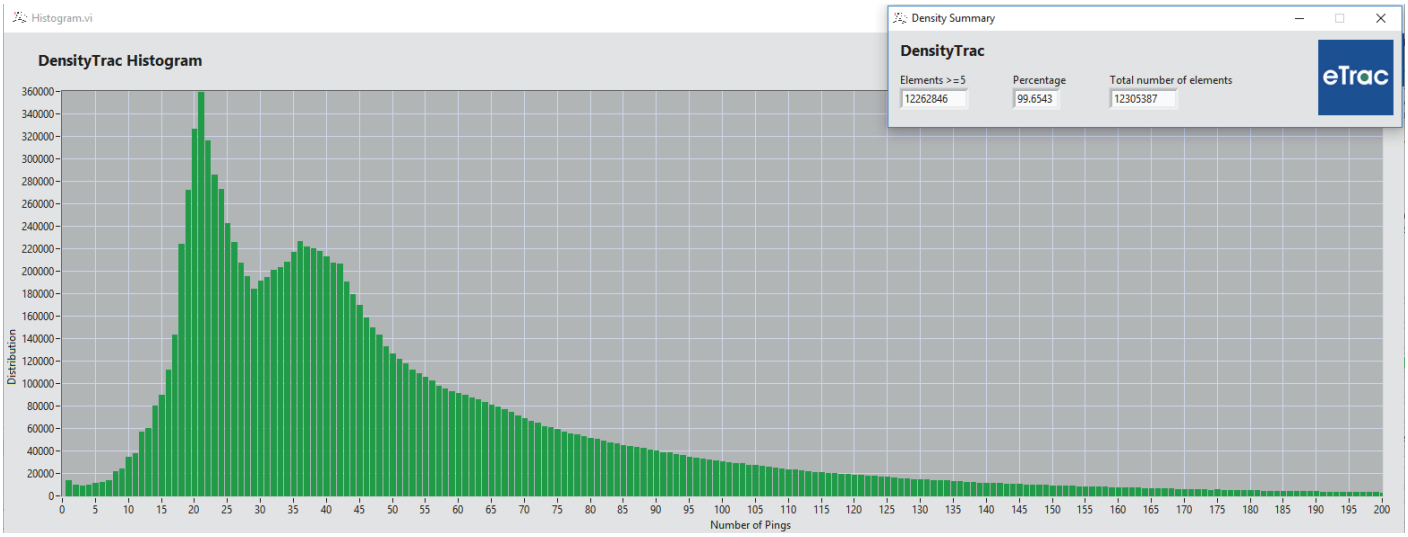

Figure 7: H13162 Finalized 1m Complete Coverage MBES Density Distribution

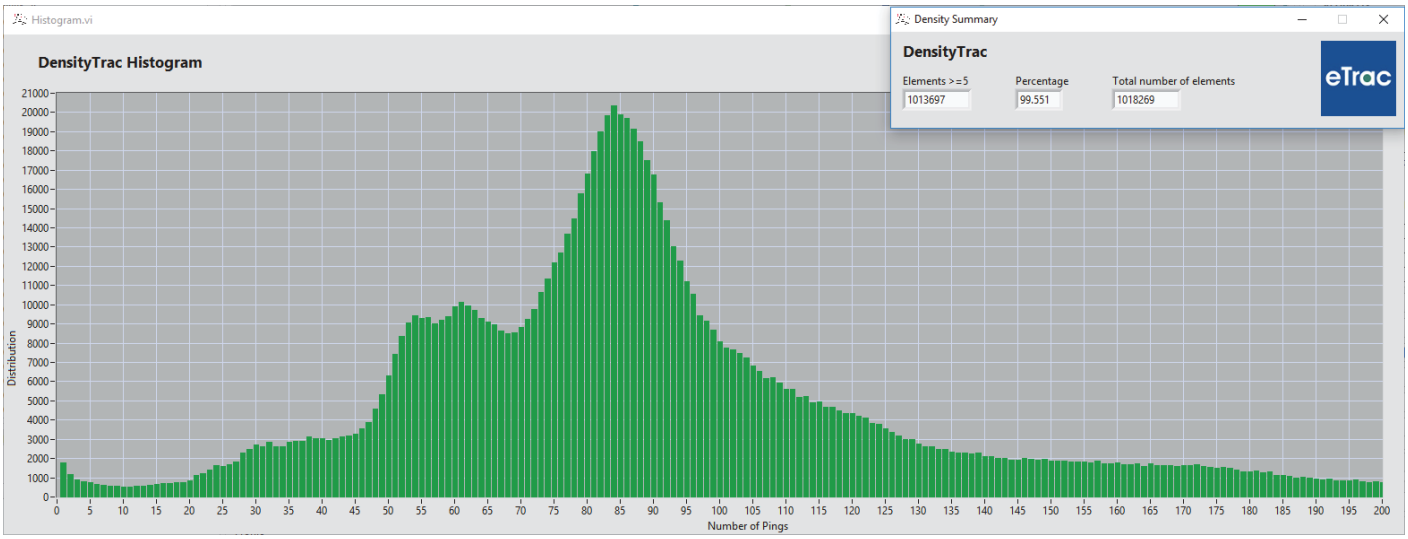

Figure 8: H13162 Finalized 2m Complete Coverage MBES Density Summary

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

Backscatter data were collected throughout the survey and are retained in the raw ALL and DB files. Every effort was made in the field to collect quality backscatter data while maintaining the primary mandate of high quality bathymetric data. While no processing or analysis of backscatter was required, eTrac Inc. verified coverage and general quality of the backscatter data collected. A beam intensity window was monitored in Qinsy during aquisiton to ensure backscatter data collection. Raw backscatter data were viewed in QPS FMGeocoder to further confirm collection criteria had been met. Shown below is an example of the unprocessed backscatter mosaic from H13162 DN257.

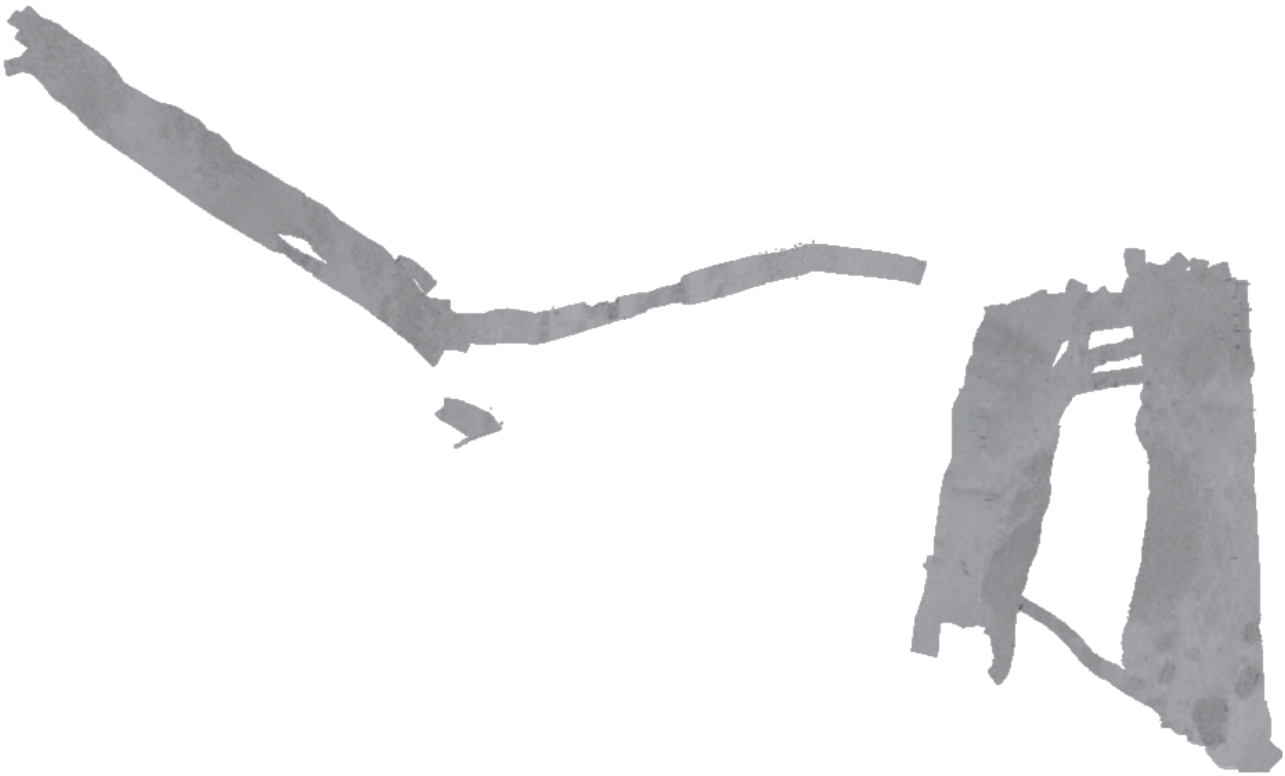

Figure 9: Raw backscatter from R/V Taku (DN257)

B.5 Data Processing

B.5.1 Software Updates

There were no software configuration changes after the DAPR was submitted.

The following Feature Object Catalog was used:

No Feature Object Catalog was used. Qimera was used as the primary processing software, which included feature management.

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
H13162_MB_1m_MLLW_Final	CUBE	1 meters	3.1 meters - 20 meters	NOAA_1m	Complete MBES
H13162_MB_2m_MLLW_Final	CUBE	2 meters	18 meters - 25.7 meters	NOAA_2m	Complete MBES

Table 7: Submitted Surfaces

Where data collection occurred, a 1m and 2m surface are provided meeting Complete Coverage MBES with backscatter specifications for H13162.

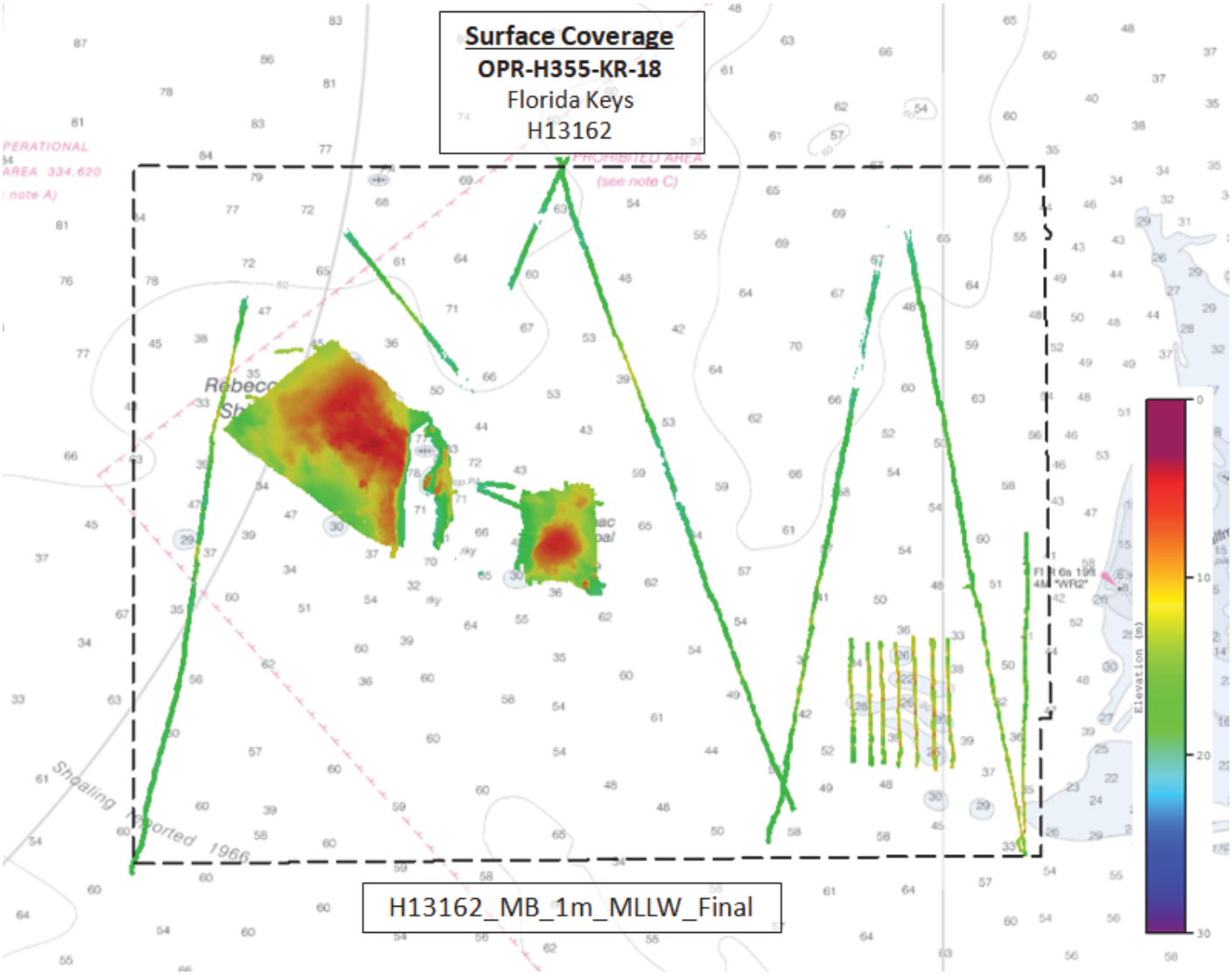

Figure 10: H13162 Delivered CUBE weighted Dynamic Surface Coverage Graphic (1m)

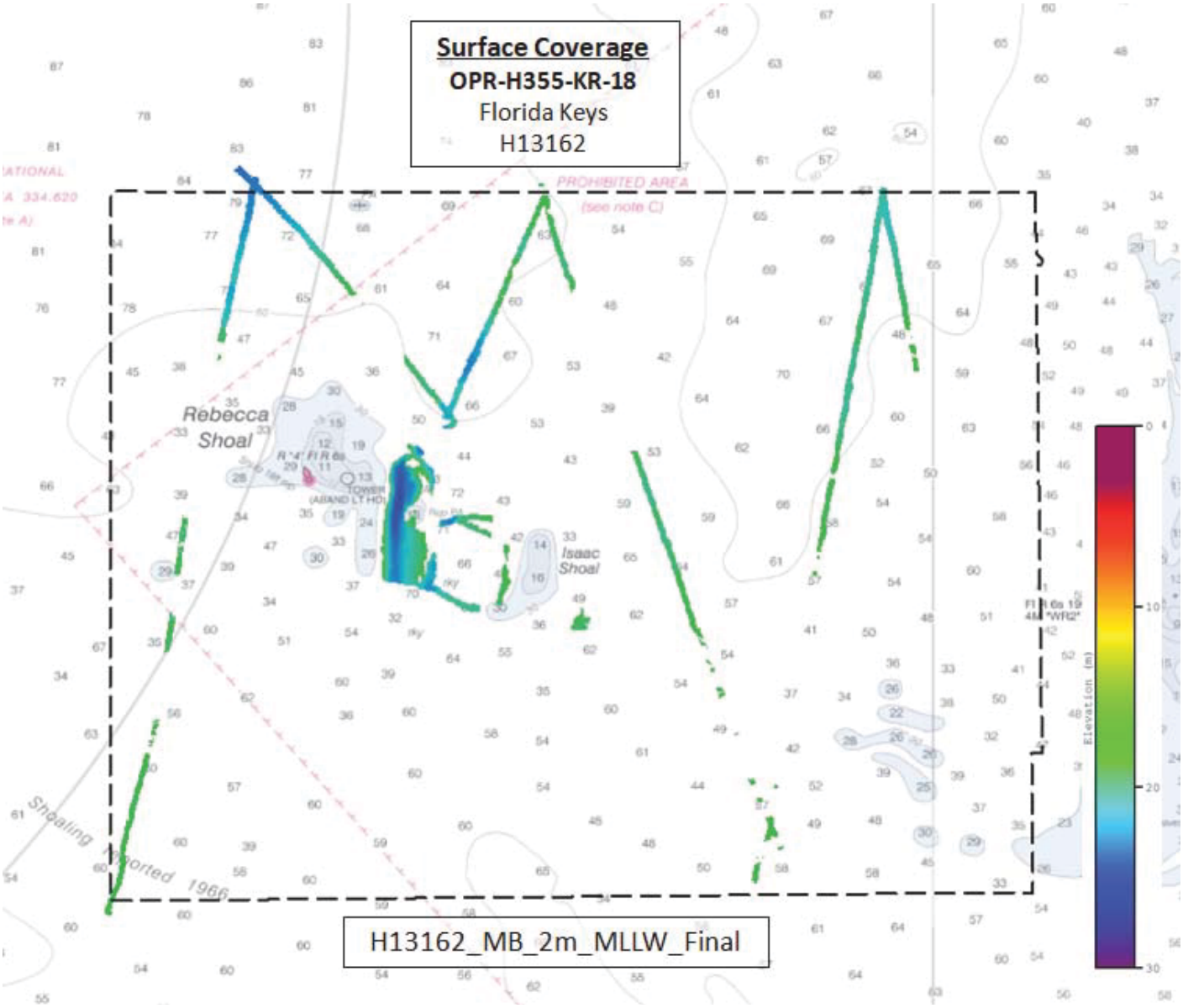

Figure 11: H13162 Delivered CUBE weighted Dynamic Surface Coverage Graphic (2m)

C. Vertical and Horizontal Control

C.1 Vertical Control

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

Non-Standard Vertical Control Methods Used:

VDatum

Ellipsoid to Chart Datum Separation File:

ITRF_to_MLLW_FL_KEYS.bin

In order to reference soundings to MLLW, a VDatum separation model was applied to the Qinsy DB files via a separation file in the aquisition software.

Note: The vertical control methods are further addressed in the HVCR and DAPR.

C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD83).

The projection used for this project is UTM Zone 17N.

D. Results and Recommendations

D.1 Chart Comparison

A chart comparison was conducted for H13162 using Qimera and Caris HIPS and SIPS. Contours and soundings were compared against the largest scale ENC US4FL92M to accomplish the chart comparison. The methods and results of the comparison are detailed below.

Contour Comparison Method: Using the 1 meter CUBE weighted Dynamic Surface, the 12 foot, 18 foot, 30 foot and 60 foot contours were generated in Qimera and displayed against the charted contour. Additionally, the 1 meter CUBE weighted Dynamic Surface was viewed by a custom color band range based on the contour intervals (6ft, 12ft, 18ft, 30ft, 60ft). The results of the comparison are described below, followed by 1-2 images of example areas.

Sounding Comparison Method: Using the same 1 meter CUBE weighted Dynamic surface, soundings were generated in Caris HIPS and SIPS. Soundings were displayed against the charted soundings and a visual comparison was made. The results of the comparison are described below, followed by 1-2 images of example areas.

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?
US4FL92M	1:80000	13	10/16/2018	02/14/2019	NO

Table 8: Largest Scale ENCs

US4FL92M

Contour Comparison Results: In the vicinity of Rebecca Shoal, the 12 foot contour distinguishes multiple small shoals varying from approximately 2 to 50ft wide, differing from the charted 12 foot contour which distinguishes an approximately 3200ft wide shoal. The 18 foot contour distinguishes multiple shoals varying from approximately 20 to 3000ft wide, differing from the charted 18 foot contour which distinguishes an approximately 4700ft wide shoal. The 30 foot contour distinguishes multiple shoals varying from approximately 100 to 6800ft wide, differing from the charted 30 foot contour which distinguishes an approximately 10500ft wide shoal. In general, the 18 and 30 foot contours are located in the same vicinity as the charted contours.

There is a 60 foot contour to the east of Rebecca Shoal, differing from the chart which does not have a 60 foot contour in the vicinity. East of the 60 foot contour there is a 30 foot contour that distinguishes two shoals approximately 550 to 700ft wide, differing from the charted 30 foot contour which distinguishes an approximately 1500ft wide shoal. In general, 30 foot contour is located in the same vicinity as the charted contour.

In the vicinity of Isaac Shoal, the 18 foot contour distinguishes multiple small shoals that together create an approximately 700ft wide shoal, differing from the charted 18 foot contour which distinguishes an approximately 3200ft wide shoal. The 30 foot contour distinguishes an approximately 2400ft wide shoal, differing from the charted 30 foot contour which distinguishes an approximately 5500ft wide shoal. To the east of Isaac Shoal, there is a 30 foot contour distinguishes an approximately 450ft wide shoal, differing from the chart which does not have a 30 foot contour in that vicinity.

Note: Contours within lines outside of Rebecca Shoal and Isaac Shoal will not be discussed. Due to insufficient data coverage, contour trends cannot be adequately compared against the chart.

Sounding Comparison Results: In areas were the contour had changed, as noted above, and where a feature was detected, soundings differ from the charted depths. In general for H13162, the soundings are in variable agreements with the chart. Soundings are generally within 3 to 5 feet from the chart, although there are soundings that differ 1 to 2 feet from the chart, as well as soundings that differ 6 to 15 feet from the chart. Depth differences are not biased in any particular direction to support a systematic error.

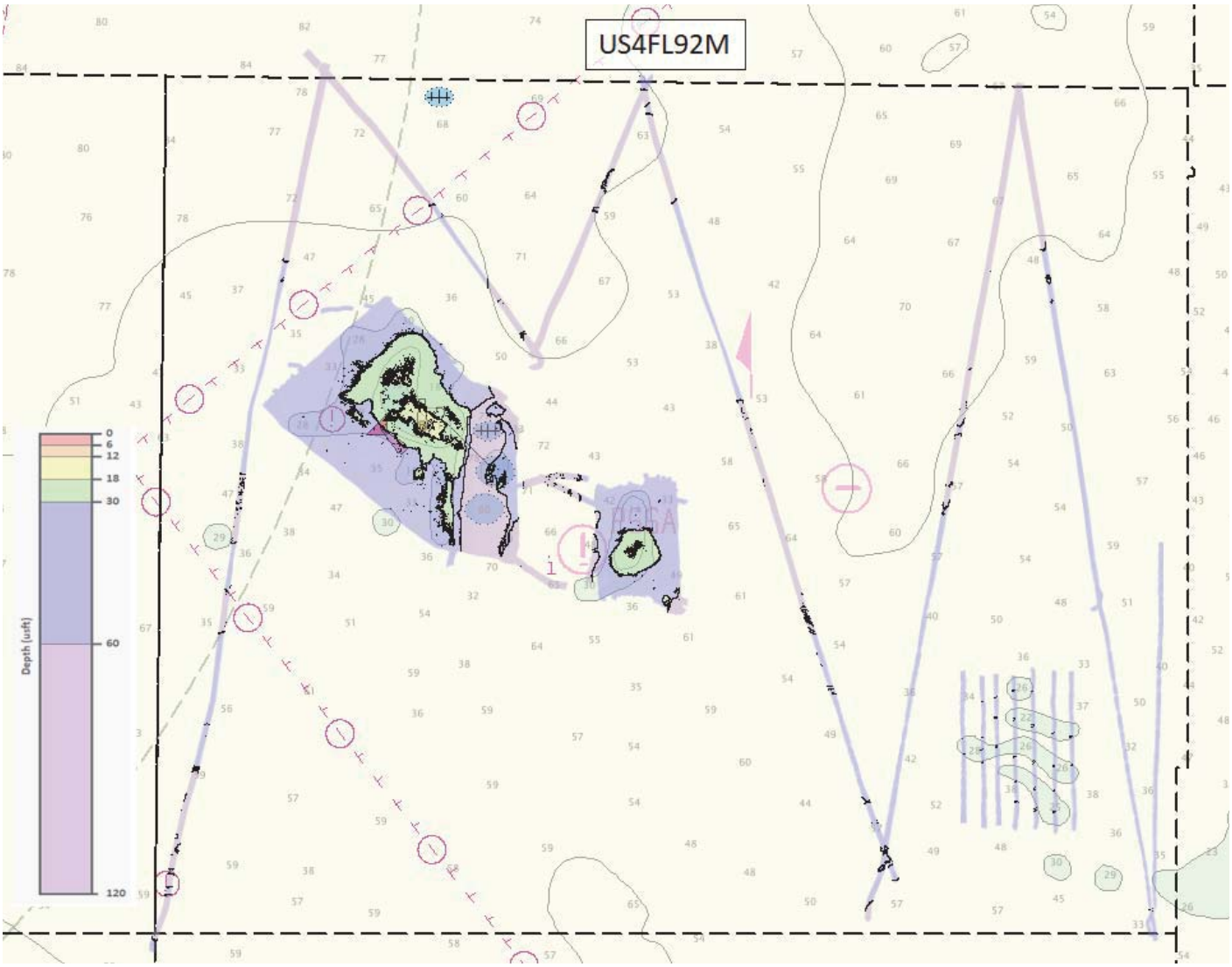

Figure 12: H13162 12ft, 18ft, 30ft and 60ft Contour Comparison (US4FL92M)

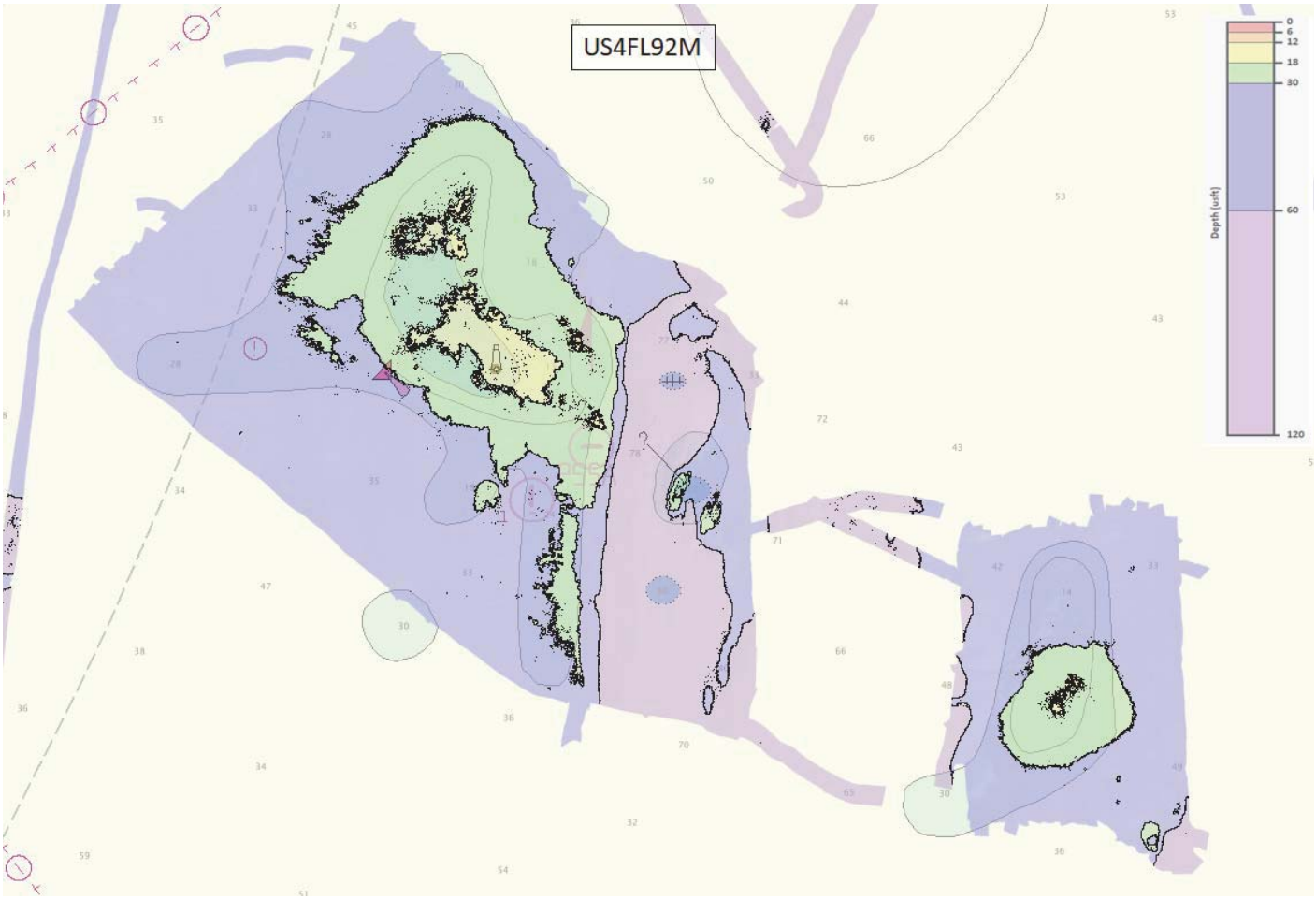

Figure 13: H13162 12ft, 18ft, 30ft and 60ft Contour Comparison (US4FL92M) - Rebecca Shoal and Isaac Shoal Detailed

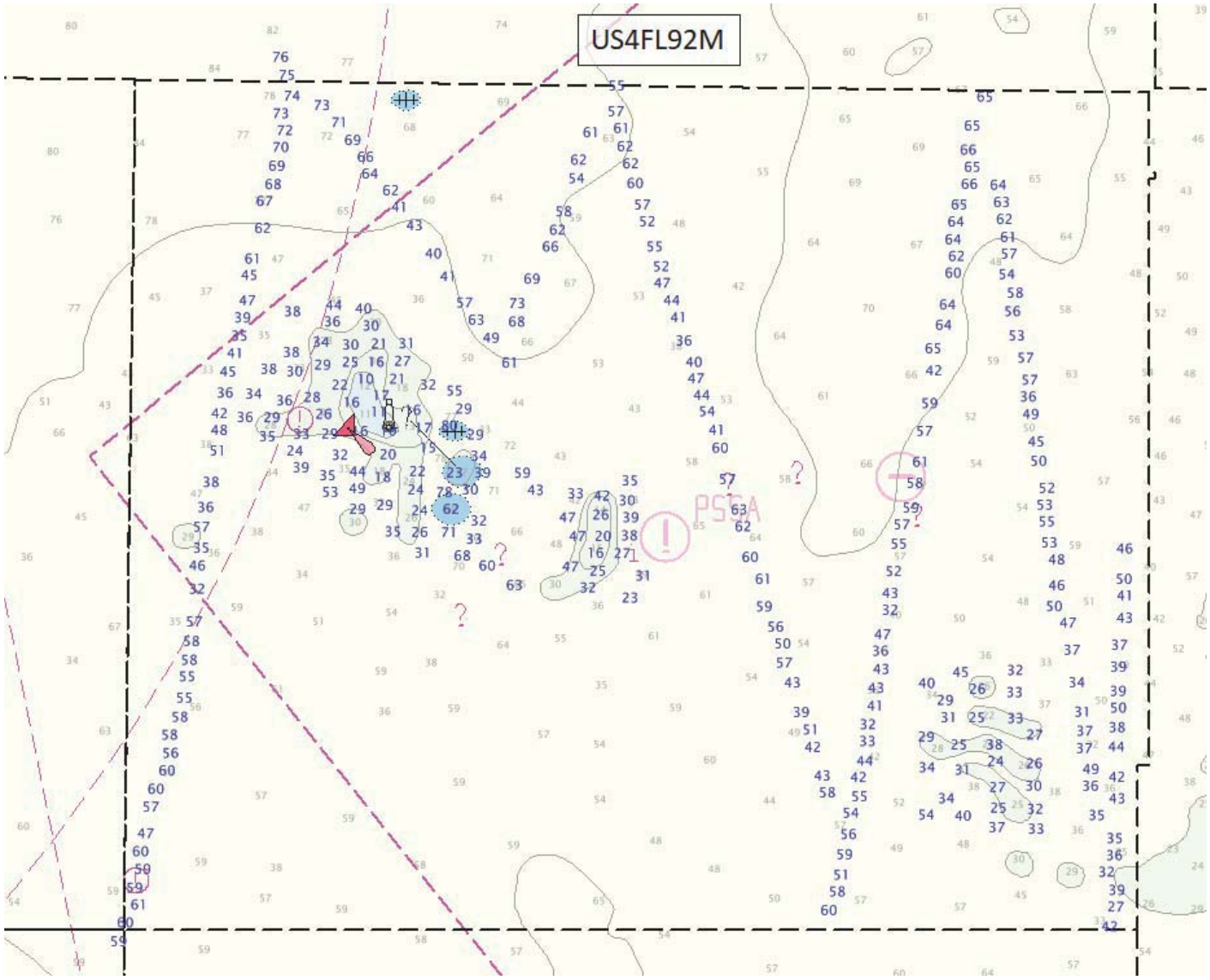

Figure 14: H13162 Sounding Comparison (US4FL92M)

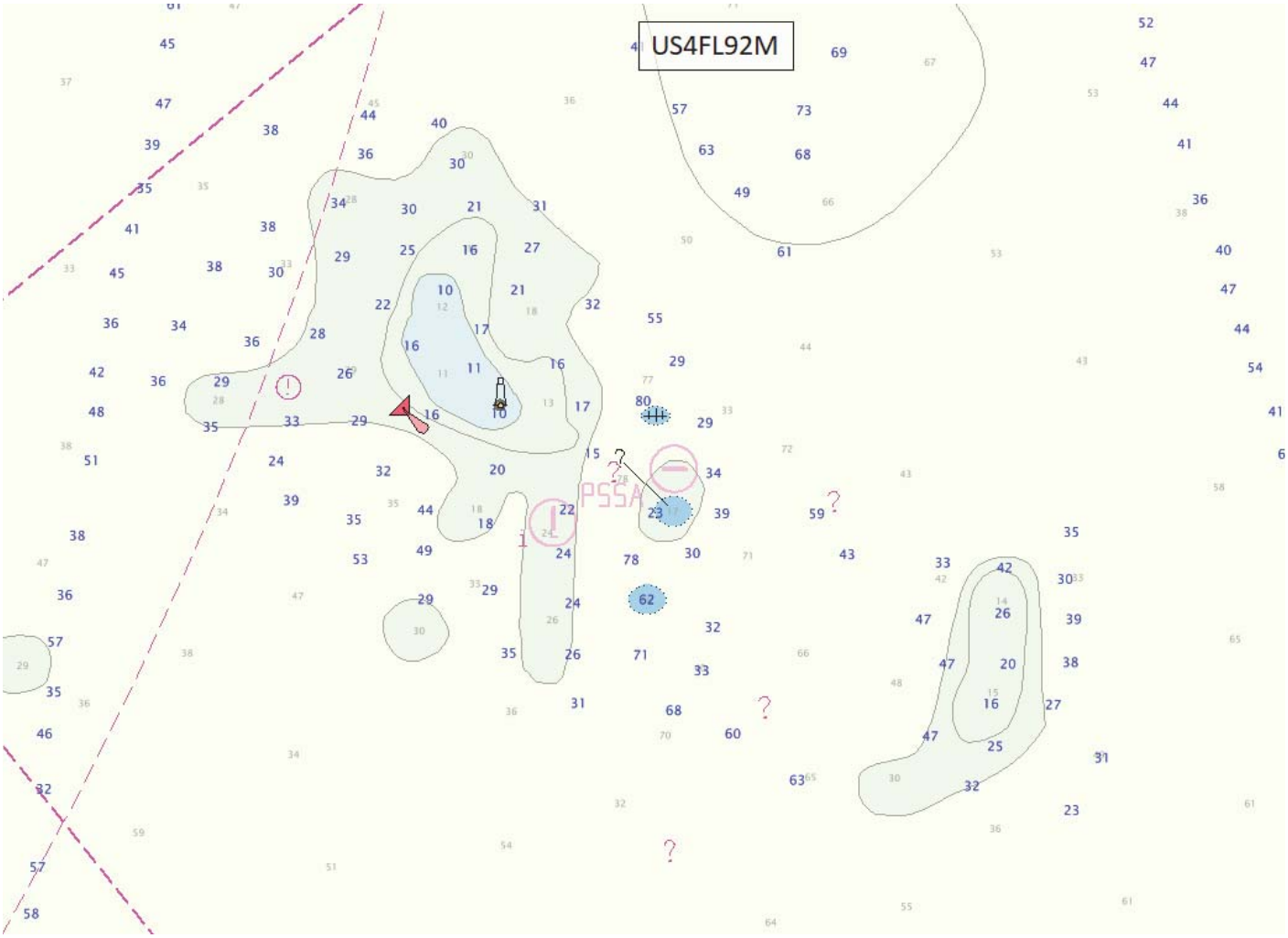

Figure 15: H13162 Sounding Comparison (US4FL92M) - Rebecca Shoal and Isaac Shoal Detailed

D.1.2 AWOIS Items

No AWOIS Items were assigned for this survey.

D.1.3 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.4 Charted Features

There were 7 charted features assigned to H13162. The assigned features are retained in the Final Feature File (FFF). Each feature in the FFF has been given a unique identifier in the "userid" field of the .000 S-57 file (format 2XXX). Refer to the FFF for determinations and recommendations of each feature.

Note: 1 charted feature was not addressed due to survey coverage.

D.1.5 Uncharted Features

There were 9 new features found in H13162 and added to the Final Feature File (FFF). Each feature was given a unique identifier in the "userid" field of the .000 S-57 file (format 2XXX). Refer to the FFF for determinations and recommendations of each feature.

D.1.6 Dangers to Navigation

The following DTON reports were submitted to the processing branch:

DTON Report Name	Date Submitted
H13162_DtoN_01	2019-01-30
H13162_DtoN_02-06	2019-02-27
H13162 USCG Report Rebecca Shoal Lighted Buoy 4	2019-03-04

Table 9: DTON Reports

There were 3 DtoN reports submitted for this survey, and added to the Final Feature File (FFF). H13162_DtoN_01 contains 1 feature. H13162_DtoN_02-06 contains 5 features. H13162 USCG Report Rebecca Shoal Lighted Buoy 4 contains 2 features. The 2 features in this report were also reported to USCG through the USCG ATON Driscrepency Report Form. Refer to the FFF for determinations and recomendations of each feature. Note: All DtoNs were included in the number of new, uncharted features within section D.1.5

D.1.7 Shoal and Hazardous Features

No shoals or hazardous features exist for this survey.

D.1.8 Channels

No channels exist for this survey.

D.1.9 Bottom Samples

3 location of drop camera imagery was obtained in accordance with Appendix I of the Project Instructions in areas designated by the feature object class springs (SPRING) in the Project Reference File (PRF). Drop camera imagery was obtained instead of physical bottom samples due to the vincity of the National Marine

Sanctuary. Drop camera imagery was used to define the NATSUR but was insuffient for defining the NATQUA and COLOUR.

A brief description of the results is listed below.

C1: sand, shells
C2: sand, shells
C3: sand, shells

Detailed information and images of the bottom samples listed above are located in the Final Feature File (FFF). Each bottom sample has been given a unique identifier in the "userid" field of the .000 S-57 file (format CX).

D.2 Additional Results

D.2.1 Shoreline

No shoreline exists for this survey.

D.2.2 Prior Surveys

No prior surveys exist for this survey.

D.2.3 Aids to Navigation

There were 2 charted AtoNs assigned in H13162. Each AtoN consists of 2 features. 1 AtoN was found to serve its intened pupose and is retained in the Final Feature File (FFF). The land area of this AtoN does not exist and was noted in the FFF. 1 AtoN was found off-station from the charted location and was reported as a DtoN, and was noted in the FFF. This AtoN contained two features (light and buoy). The off-station AtoN was reported to USCG through the USCG ATON Driscrepency Report Form as well as a standard DtoN report form. Each feature was given a unique identifier in the "userid" field of the .000 S-57 file (format 2XXX). Refer to the FFF for determinations and recommendations of each feature. Note: All assigned AtoNs were included in the number of charted features within section D.1.4. The off-station AtoN was included in the number of new features within section D.1.5 as well as the number of DtoNs in section D.1.6.

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 Ferry Routes and Terminals

No ferry routes or terminals exist for this survey.

D.2.7 Platforms

No platforms exist for this survey.

D.2.8 Significant Features

No significant features exist for this survey.

D.2.9 Construction and Dredging

No construction or dredging exist for this survey.

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. I have reviewed the attached survey data and reports.

All CUBE surfaces, 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 and Specifications Deliverables Manual, 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
David R. Neff, C.H.	VP of Survey, eTrac Inc.	03/13/2019	Digitally signed by David Neff Date: 2019.03.13 09:39:54-07'00'

Isadora Kratchman <izzy@etracinc.com>

H13162 DtoN 01

Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov> Fri, Jan 18, 2019 at 11:25 AM
To: Isadora Kratchman <izzy@etracinc.com>
Cc: Jacklyn James - NOAA Federal <jacklyn.c.james@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, "'ahb.dton@noaa.gov' (ahb.dton@noaa.gov)" <ahb.dton@noaa.gov>, David Neff <dave@etracinc.com>, Lisa Diamond <lisa@etracinc.com>, Verena Kellner <verena@etracinc.com>

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

On Thu, Jan 17, 2019 at 8:07 PM Isadora Kratchman <izzy@etracinc.com> wrote:

> All,
>
> Please find attached the standard DtoN package detailing H13162 DtoN 01.
>
> H13162 DtoN 01 is an underwater rock.
>
> Best regards,
>
> --
> **Isadora Kratchman**
> Hydrographic Surveyor
> Mobile: (301) 706-9246
> www.etracinc.com

--
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

Isadora Kratchman <izzy@etracinc.com>

FW: H13162 DtoN#1 (Resubmission)

Isadora Kratchman <izzy@etracinc.com> Fri, Feb 22, 2019 at 9:00 AM
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>

Thank you Gene

On Fri, Feb 22, 2019 at 8:57 AM Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> wrote:

FYI,

Below is the NDB registration email.

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

From: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Sent: Thursday, January 31, 2019 5:05 PM
To: Vanessa Miller - NOAA Federal <Vanessa.Miller@noaa.gov>
Cc: Castle E Parker <Castle.E.Parker@noaa.gov>; Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>; Corey Allen <Corey.Allen@noaa.gov>; Tiffany Squyres - NOAA Federal <tiffany.squyres@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>
Subject: Fwd: H13162 DtoN#1 (Resubmission)

DD-30272 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoN reported is a rock in the vicinity of Isaac Shoal in the Florida Keys.

The following charts have been assigned to the record:

11439 kapp 356

11434 kapp 373

11420 kapp 374

4148 kapp 420

11006 kapp 44

11013 kapp 379

411 kapp 45

The following ENCs have been assigned to the record:

US4FL1EQ

US4FL92M

US3FL90M

US2GC09M

US1GC09M

References:

H13162

OPR-H355-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: **Vanessa Miller - NOAA Federal** <Vanessa.Miller@noaa.gov>
Date: Wed, Jan 30, 2019 at 2:05 PM
Subject: H13162 DtoN#1 (Resubmission)
To: OCS NDB - NOAA Service Account <OCS.NDB@noaa.gov>

Cc: Castle Parker <castle.e.parker@noaa.gov>, Briana Welton - NOAA Federal <Briana.Hillstrom@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Tiffany Squyres - NOAA Federal <tiffany.squyres@noaa.gov>

Good Day,

This is a resubmission with metadata included.

Please find attached a zip file for survey H13162 DtoN report #1 for submission to Nautical Data Branch (NDB) of the Marine Chart Division (MCD). This Danger submission contains one 61ft Rock.

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 (757-364-7466).

Thank you for your assistance with this matter.

Regards,

Vanessa Self Miller

Physical Scientist

NOAA

Atlantic Hydrographic Branch

757-364-7466

--

Isadora Kratchman
Hydrographic Surveyor
Mobile: (301) 706-9246
www.etracinc.com

Isadora Kratchman <izzy@etracinc.com>

H13162 DtoNs 02 - 06

1 message

Isadora Kratchman <izzy@etracinc.com> Tue, Feb 26, 2019 at 5:05 PM
To: "'ahb.dton@noaa.gov' (ahb.dton@noaa.gov)" <ahb.dton@noaa.gov>, Jacklyn James - NOAA Federal <jacklyn.c.james@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>
Cc: Lisa Diamond <lisa@etracinc.com>, David Neff <david@etracinc.com>

All,

Please find attached the standard DtoN package detailing H13162 DtoNs 02, 03, 04, 05, and 06.

H13162 DtoNs 02 - 05 are rocks. H13162_DtoN_06 is a sounding on a coral ledge.

Best regards,

--
Isadora Kratchman
Hydrographic Surveyor
Mobile: (301) 706-9246
www.etracinc.com

5 attachments

H13162_DtoN_06.zip
454K

H13162_DtoN_05.zip
627K

H13162_DtoN_04.zip
932K

H13162_DtoN_03.zip
552K

H13162_DtoN_02.zip
311K

Isadora Kratchman <izzy@etracinc.com>

H13162 DtoN #2 - #6 Submission to NDB

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Thu, Feb 28, 2019 at 10:26 AM
To: Castle E Parker <Castle.E.Parker@noaa.gov>
Cc: AHB Chief <AHB.Chief@noaa.gov>, Jacklyn James - NOAA Federal <Jacklyn.C.James@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, David Neff <dave@etracinc.com>, Isadora Kratchman <izzy@etracinc.com>, Lisa Diamond <lisa@etracinc.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-30435 has been registered by the Nautical Data Branch and directed to Products Branch B for processing.

The DtoNs reported are several rocks and a shoal in the vicinity of Isaac Shoal in the Florida Keys.

The following charts have been assigned to the record:
11439 kapp 356
11434 kapp 373
11420 kapp 374
4148 kapp 420

The following ENCs have been assigned to the record:
US4FL1EQ
US4FL92M
US3FL90M

References:
H13162
OPR-H355-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, Feb 27, 2019 at 11:22 AM
Subject: H13162 DtoN #2 - #6 Submission to NDB
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, Jacklyn James - NOAA Federal <jacklyn.c.james@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, David Neff <dave@etracinc.com>, Isadora Kratchman <izzy@etracinc.com>, Lisa Diamond <lisa@etracinc.com>

Good day,

Please find attached compressed file for H13162 DtoN Report #2 through #6, containing four uncharted rocks and one sounding shoaler than the common charted depth range. The sounding and rocks are located in the vicinity of Rebecca Shoal and Isaac Shoal. 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

H13162_DtoN_2-6.zip
5471K

Isadora Kratchman <izzy@etracinc.com>

USCG ATON Discrepancy for USCG District 7 from NOAA survey H13162

Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> Mon, Mar 4, 2019 at 5:59 AM
To: d7OANpaton@uscg.mil
Cc: AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, Jacklyn James - NOAA Federal <jacklyn.c.james@noaa.gov>, Kathryn Pridgen - NOAA Federal <kathryn.pridgen@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>, David Neff <dave@etracinc.com>, Isadora Kratchman <izzy@etracinc.com>

Good day,

NOAA's Office of Coast Survey received a report from a field surveyor conducting NOAA hydrographic survey H13162 in the vicinity of Florida Keys National Marine Sanctuary, specifically at Rebecca Shoal.

- Rebecca Shoal Lighted Buoy 4 (Light List # 1090.1) was disproved at the documented location 24-34-43.607N 082-35-26.713W as currently reported in the Light List Volume III and depicted on NOAA chart products. Reference attached report for additional information.

For nautical charting purposes NOAA sources the position and characteristics of all ATONs from IATONIS. Any discrepancies noted by the field surveyor are routed directly to the appropriate USCG district. As a result, I wanted to pass along this information and recommend updating the Light List with the relevant information.

Please respond with any questions or comments.

Regards,

Castle Parker

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

H13162 USCG Report Rebecca Shoal Lighted Buoy 4.pdf
211K

Isadora Kratchman <izzy@etracinc.com>

USCG ATON Discrepancy Report Form Rebecca Shoal Lighted Buoy 4 submitted by eTrac

Isadora Kratchman <izzy@etracinc.com> Mon, Mar 4, 2019 at 2:30 PM
To: Jacklyn James - NOAA Federal <jacklyn.c.james@noaa.gov>, Louis Licate - NOAA Federal <louis.licate@noaa.gov>
Cc: David Neff <david@etracinc.com>, Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>

Jacklyn and Louis,

Attached is the PDF copy of the USCG ATON Discrepancy Report Form for the off station Rebecca Shoal Lighted Buoy 4.

As noted in the comments of this report, This AtoN Discrepancy was submitted in a DtoN Report titled "H13162 USCG Report Rebecca Shoal Lighted Bouy 4" sent in an email from Castle Parker to d7OANpaton@uscg.mil and Louis Licate earlier today 3/4/2019.

Best regards,

--
Isadora Kratchman
Hydrographic Surveyor
Mobile: (301) 706-9246
www.etracinc.com

USCG_ATON_Discrepancy_Report_Form_RebeccaShoalLightedBuoy4.pdf
77K

Isadora Kratchman <izzy@etracinc.com>

OPR-H355-KR-18 Survey Outlines H13160, H13161, H13162 & H13163

Brian Mohr - NOAA Federal <brian.mohr@noaa.gov> Wed, Mar 6, 2019 at 7:40 AM
To: Isadora Kratchman <izzy@etracinc.com>

Got it, thank you, I'll get H13160/1/2/3 updated in SURDEX shortly.

Brian Mohr
Physical Scientist - Data Manager
Hydrographic Surveys Division
brian.mohr@noaa.gov

On Tue, Feb 12, 2019 at 1:27 PM Isadora Kratchman <izzy@etracinc.com> wrote:

> Please find attached the following survey outlines for OPR-H355-KR-18:
>
> H13160
> H13161
> H13162
> H13163
>
> Best regards,
>
> --
> **Isadora Kratchman**
> Hydrographic Surveyor
> Mobile: (301) 706-9246
> www.etracinc.com

APPROVAL PAGE

H13162

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: Meghan McGovern 2020.10.28 14:47:51 -04'00'

Commander Meghan McGovern, NOAA Chief,
Atlantic Hydrographic Branch