

F00626

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

DESCRIPTIVE REPORT

Type of Survey: Field Examination

Registry Number: F00626

LOCALITY

State(s): New York

General Locality: NY Harbor and Vicinity

Sub-locality: NY Harbor and Vicinity

2012

CHIEF OF PARTY
CDR Lawrence T. Krepp

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

F00626

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): **New York**

General Locality: **NY Harbor and Vicinity**

Sub-Locality: **NY Harbor and Vicinity**

Scale: **10000**

Dates of Survey: **11/01/2012 to 11/03/2012**

Instructions Dated: **11/01/2012**

Project Number: **S-B935-TJ-12**

Field Unit: **NOAA Ship *Thomas Jefferson***

Chief of Party: **CDR Lawrence T. Krepp**

Soundings by: **Multibeam Echo Sounder**

Imagery by: **Side Scan Sonar, Multibeam Echo Sounder Backscatter**

Verification by: ***Atlantic Hydrographic Branch***

Soundings Acquired in: **meters at Mean Lower Low Water**

Remarks:

The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via <http://www.ngdc.noaa.gov/>.

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Descriptive Report to Accompany Survey F00626

Project: S-B935-TJ-12

Locality: NY Harbor and Vicinity

Sublocality: NY Harbor and Vicinity

Scale: 1:10000

November 2012 - November 2012

NOAA Ship *Thomas Jefferson*

Chief of Party: CDR Lawrence T. Krepp

A. Area Surveyed

Areas were surveyed based upon USCG requests and HSD tasking.

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
40° 48" 20.16' N 73° 53" 40.2' W	40° 28" 35.04' N 74° 4" 10.92' W

Table 1: Survey Limits

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

A.2 Survey Purpose

In response to Hurricane Sandy and the subsequent closure of New York harbor and approaches, the USCG has requested the NOAA Ship *Thomas Jefferson* for survey support.

A.3 Survey Quality

The survey is NOT adequate to supersede previous data.

Do not concur. The Atlantic Hydrographic Branch (AHB) deems the survey data adequate for superseding prior data and updating nautical chart products.

Crosslines were not acquired over the MBES data. Also, data were reduced to MLLW using observed tides and one tide station (Sandy Hook, NJ) was not functional at the time of survey.

Verified TCARI tides were applied to the data during office processing.

A.4 Survey Coverage

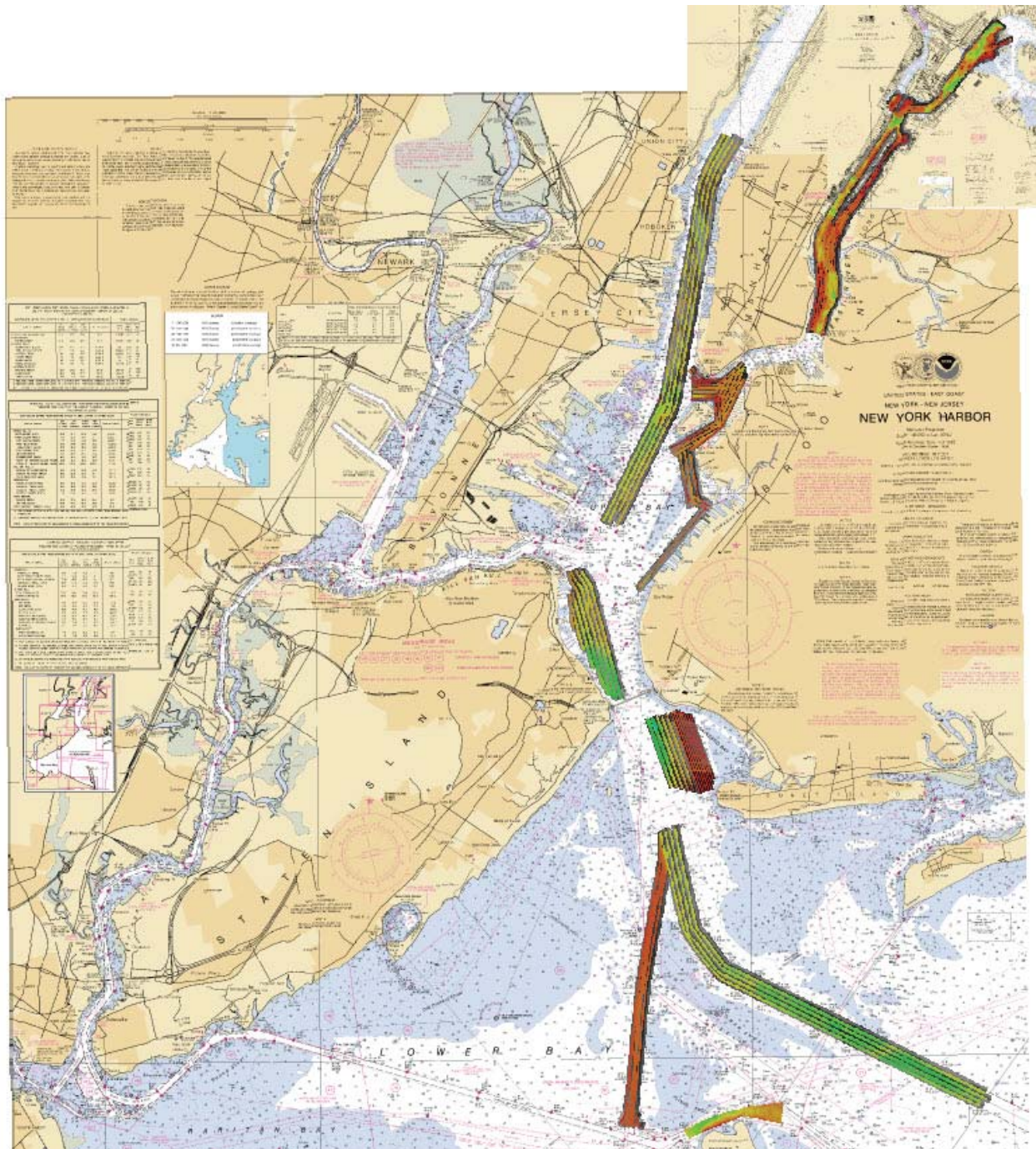


Figure 1: Coverage Graphic for F00626

Survey Coverage was in accordance with the requirements in the Project Instructions and the HSSD.

There were deviations from the survey coverage requirements as required in the Project Instructions. In some areas the field did not achieve 200% side scan coverage with set line multibeam. Object detection multibeam coverage was not obtained by the field.

A.5 Survey Statistics

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

	Vessel	S222	3101	3102	Total
LNM	SBES Mainscheme	0	0	0	0
	MBES Mainscheme	0	0	46.65	46.65
	Lidar Mainscheme	0	0	0	0
	SSS Mainscheme	0	0	0	0
	SBES/MBES Combo Mainscheme	0	0	0	0
	SBES/SSS Combo Mainscheme	0	0	0	0
	MBES/SSS Combo Mainscheme	74.76	65.06	37.17	176.99
	SBES/MBES Combo Crosslines	0	0	0	0
	Lidar Crosslines	0	0	0	0
	Number of Bottom Samples				0
Number AWOIS Items Investigated				0	
Number Maritime Boundary Points Investigated				0	
Number of DPs				0	
Number of Items Items Investigated by Dive Ops				0	
Total Number of SNM				14.72	

Table 2: Hydrographic Survey Statistics

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

Survey Dates	Julian Day Number
11/01/2012	306
11/02/2012	307
11/03/2012	308

Table 3: 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>S222</i>	<i>3101</i>	<i>3102</i>
LOA	208 feet	31 feet	31 feet
Draft	14 feet	5.1 feet	5.1 feet

Table 4: Vessels Used

B.1.2 Equipment

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

Manufacturer	Model	Type
Reson	7125 ROV	MBES
Reson	7125 SV1	MBES
Klein	5000	SSS
Applanix	POSMV v4	Positioning and Attitude System
Brooke Ocean	MVP 100	Sound Speed System
Seabird	Seacat 19+	Conductivity, Temperature and Depth Sensor

Table 5: Major Systems Used

B.2 Quality Control

B.2.1 Crosslines

Crosslines, acquired for this survey, totalled 0% of mainscheme acquisition.

Crosslines were not acquired as this was an emergency response survey looking for specific items on the seafloor.

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Measured	Zoning
0 meters	0.105 meters

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
S222	N/A meters/second	1 meters/second	0.2 meters/second
3101 & 3102	4 meters/second	N/A meters/second	0.2 meters/second

Table 7: Survey Specific Sound Speed TPU Values

CO-OPS provided a tidal error value of 0.21m which is at the 2 standard deviation level. CARIS computes TPU based on 1 standard deviation. Based on this, the value entered into CARIS was one-half the value provided by CO-OPS.

B.2.3 Junctions

No comparisons were conducted as this was an emergency response survey.

There are no contemporary surveys that junction with this survey.

B.2.4 Sonar QC Checks

Crosslines were not conducted.

B.2.5 Equipment Effectiveness

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

B.2.6 Factors Affecting Soundings

Damaged Tidal Station

The tidal station at Sandy Hook, NJ was damaged by the hurricane and as a result was not functional during the dates of survey. As a result, CO-OPS adjusted the tidal zoning.

Verified water levels did not have any outages. TCARI tides were applied during office processing.

B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: Casts were conducted every 2-3 hours for 3101 and 3102 and every 20-30 minutes for S222.

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

Backscatter was logged as a 7k file and submitted to the IOCM processing center and/or directly to NGDC, and is not included with the data submitted to the Branch.

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: NOAA Profile Field v.5.2

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
F00626_Mosaic_100_1m	SSS Mosaic	1 meters	-	N/A	Object Detection
F00626_Mosaic_200_1m	SSS Mosaic	1 meters	-	N/A	Object Detection
F00626_2m_CUBE_MLLW	CUBE	2 meters	2.53 meters -	NOAA_2m	Complete MBES

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
			36.82 meters		
F00626_50cm_CUBE_MLLW	CUBE	50 centimeters	1.78 meters - 39.45 meters	NOAA_0.5m	Object Detection

Table 8: Submitted Surfaces

BASE surfaces were not finalized as this was an emergency response survey.

Finalized surfaces were created during office review. Surface resolutions were altered to accurately represent the data submitted to the branch.

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.

Standard Vertical Control Methods Used:

Discrete Zoning

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
The Battery	8518750
Bergen Point West Reach	8519483

Table 9: NWLON Tide Stations

There was no Water Level file associated with this survey.

File Name	Status
B935TJ12CORP.zdf	Preliminary

Table 10: Tide Correctors (.zdf or .tc)

A request for final approved tides was sent to N/OPS1 on 11/06/2012. The final tide note was received on 01/09/2013.

A final TCARI grid was provided to us, however data were not re-processed as this was an emergency response survey.

During office processing final TCARI tides were applied using file F00626.tc.

C.2 Horizontal Control

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

The projection used for this project is 18N.

The following DGPS Stations were used for horizontal control:

DGPS Stations
Sandy Hook, NJ

Table 11: USCG DGPS Stations

D. Results and Recommendations

D.1 Chart Comparison

D.1.1 AWOIS Items

No AWOIS items exist for this survey.

D.1.2 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.3 Charted Features

Charted features exist for this survey, but were not investigated.

Charted features were addressed during office processing.

D.1.4 Uncharted Features

Uncharted features exist for this survey, but were not investigated.

D.1.5 Dangers to Navigation

The following DTON reports were submitted to the processing branch:

DTON Report Name	Date Submitted
DTON Report 1	2012-11-03

Table 12: DTON Reports

Danger to Navigation Reports are included in Appendix I of this report.

D.1.6 Shoal and Hazardous Features

Shoals or potentially hazardous features exist for this survey, but were not investigated.

D.1.7 Channels

Channels, designated anchorages, precautionary areas, safety fairways, traffic separation schemes, pilot boarding areas, and/or channel and range lines exist within the survey limits, but were not investigated.

D.1.8 Bottom Samples

No bottom samples were required for this survey.

D.2 Additional Results

D.2.1 Shoreline

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

Shoreline was not assigned for this survey.

D.2.2 Prior Surveys

Prior survey comparisons exist for this survey, but were not investigated.

D.2.3 Aids to Navigation

Aids to navigation (ATONs) exist for this survey, but were not investigated.

D.2.4 Overhead Features

Overhead features exist for this survey, but were not investigated.

D.2.5 Submarine Features

Submarine features exist for this survey, but were not investigated.

D.2.6 Ferry Routes and Terminals

Ferry routes and/or terminals exist for this survey, but were not investigated.

D.2.7 Platforms

No platforms exist for this survey.

D.2.8 Significant Features

D.2.9 Construction and Dredging

Present and/or planned construction or dredging exists within the survey limits, but was not investigated.

D.2.10 New Survey Recommendations

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

D.2.11 New Inset Recommendations



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 and Specifications Deliverables Manual, Field Procedures Manual, Standing and 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
LT William G. Winner	Field Operations Officer	03/22/2013	
CDR Lawrence T. Krepp	Commanding Officer	03/22/2013	

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 Station
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	Local Notice to Mariners
LNM	Linear Nautical Miles
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
ST	Survey Technician
SVP	Sound Velocity Profiler
TCARI	Tidal Constituent And Residual Interpolation
TPU	Total Propagated Error
TPU	Topside Processing Unit
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
UTM	Universal Transverse Mercator
XO	Executive Officer
ZDA	Global Positioning System timing message
ZDF	Zone Definition File

APPENDIX I
TIDES AND WATER LEVELS



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NOAA Ship THOMAS JEFFERSON (MOA-TJ)
439 West York St
Norfolk, VA 23510-1145

November 06, 2012

MEMORANDUM FOR: Gerald Hovis, Chief, Products and Services Branch, N/OPS3

FROM: CDR Lawrence T. Krepp, NOAA Ship THOMAS JEFFERSON (MOA-TJ)

SUBJECT: Request for Approved Tides/Water Levels

Please provide the following data:

1. Tide Note
2. Final TCARI grid
3. Final zoning in MapInfo and .MIX format
4. Six Minute Water Level data (Co-ops web site)

Transmit data to the following:

NOAA Ship THOMAS JEFFERSON (MOA-TJ)
439 West York St
Norfolk, VA 23510-1145

These data are required for the processing of the following hydrographic survey:

Project No.: S-B935-TJ-12
Registry No.: F00626
State: New York
Locality: NY Harbor and Vicinity Response
Sublocality: NY Harbor and Vicinity

Attachments containing:

- 1) an Abstract of Times of Hydrography,
- 2) digital MID MIF files of the track lines from Pydro

cc: MOA-TJ



Year_DOY	Min Time	Max Time
2012_306	08:02:13	23:26:12
2012_307	12:51:54	21:07:44
2012_308	13:10:38	17:53:00



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : January 06, 2013

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: S-B935-TJ-2012
HYDROGRAPHIC SHEET: F00626

LOCALITY: NY Harbor and Vicinity, NY
TIME PERIOD: November 01 - November 03, 2012

TIDE STATION USED: 851-8750 The Battery NY
Lat. 40° 42.0' N Long. 74° 0.8' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.443 meters

TIDE STATION USED: 851-9483 Bergen Point, NY
Lat. 40° 38.2' N Long. 74° 8.5' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.582 meters

REMARKS: RECOMMENDED GRID

Please use the TCARI grid "F00626.tc" as the final grid for project S-B935-TJ-2012, Registry No. F00626, during the time period between November 01 and November 03, 2012.

Refer to attachments for grid information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

HOVIS.GERALD
D.THOMAS.13
65860250

Digitally signed by
HOVIS.GERALD.THOMAS.1365860250
DN: c=US, o=U.S. Government,
ou=DoD, ou=PKI, ou=OTHER,
cn=HOVIS.GERALD.THOMAS.1365860
250
Date: 2013.01.07 16:51:08 -05'00'

CHIEF, PRODUCTS AND SERVICES BRANCH



shore waters.

CAUTION

MARINE PIPELINES AND CABLES

Submarine pipelines and submarine cables are shown on this chart as follows:

- Submarine pipeline and cable areas: 
- Area: 
- Cable Area: 

Uncharted submarine pipelines and cables may exist within the area of this chart. Not all submarine pipelines and cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of 100 fathoms or less in areas where pipelines and cables may exist, and when dredging, or trawling. Dredging wells may be marked by lighted or unlighted buoys.

HORIZONTAL DATUM

The horizontal datum of this chart is the North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to in this chart are based on the North American Datum of 1927. Geographic positions referred to in this chart do not require conversion to the datum of this chart.

RADAR REFLECTORS


Radar reflectors have been placed on many structures to aid in navigation. Individual radar reflector information on these aids has been provided on this chart.



CAUTION

Radio beacons have been calibrated for use in conjunction with the use of certain other radio aids to navigation. Individual radio beacon information can be found in the U.S. Coast and Geodetic Survey and Mapping Division's National Imagery and Mapping Agency's Chart 117.

Positional bearings to commercial broadcast stations are subject to error and should be used with caution.

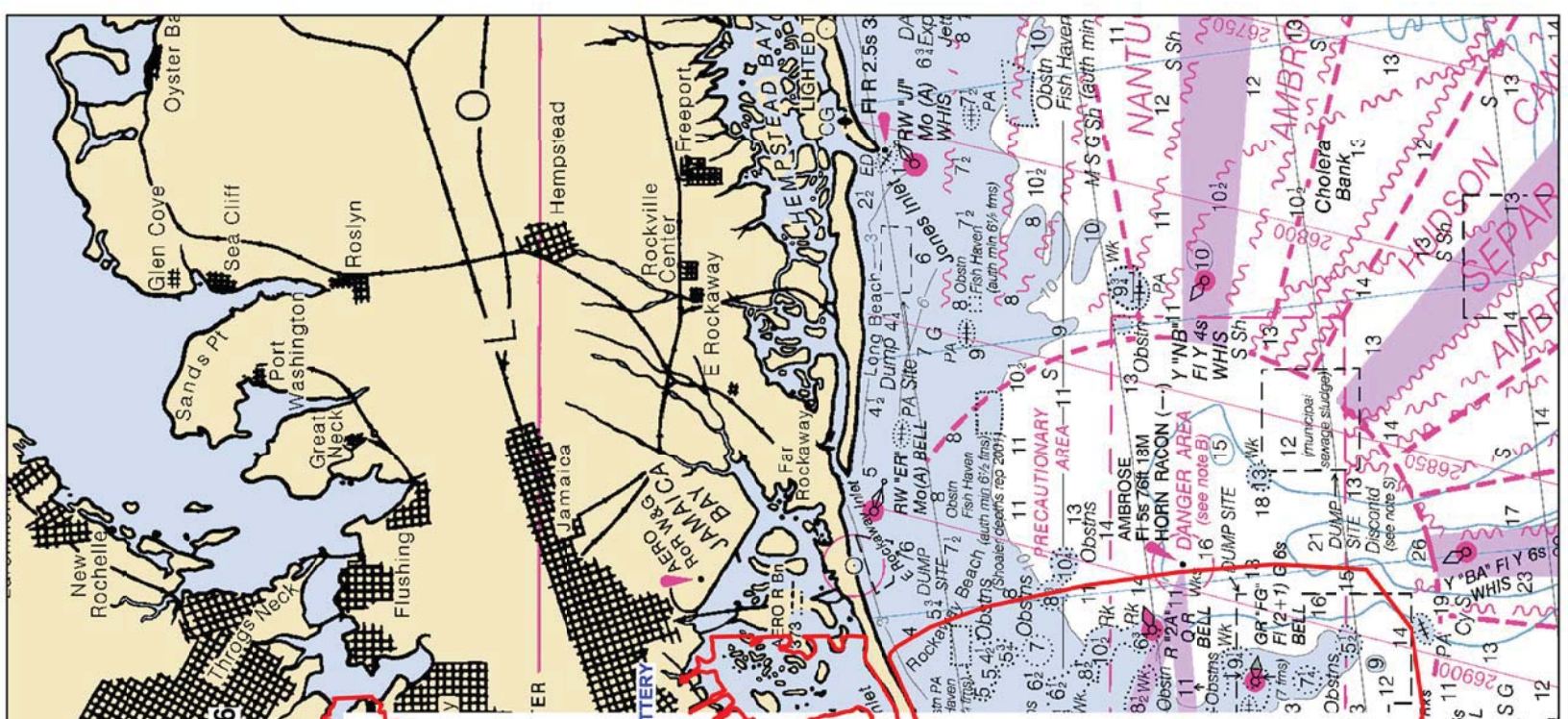
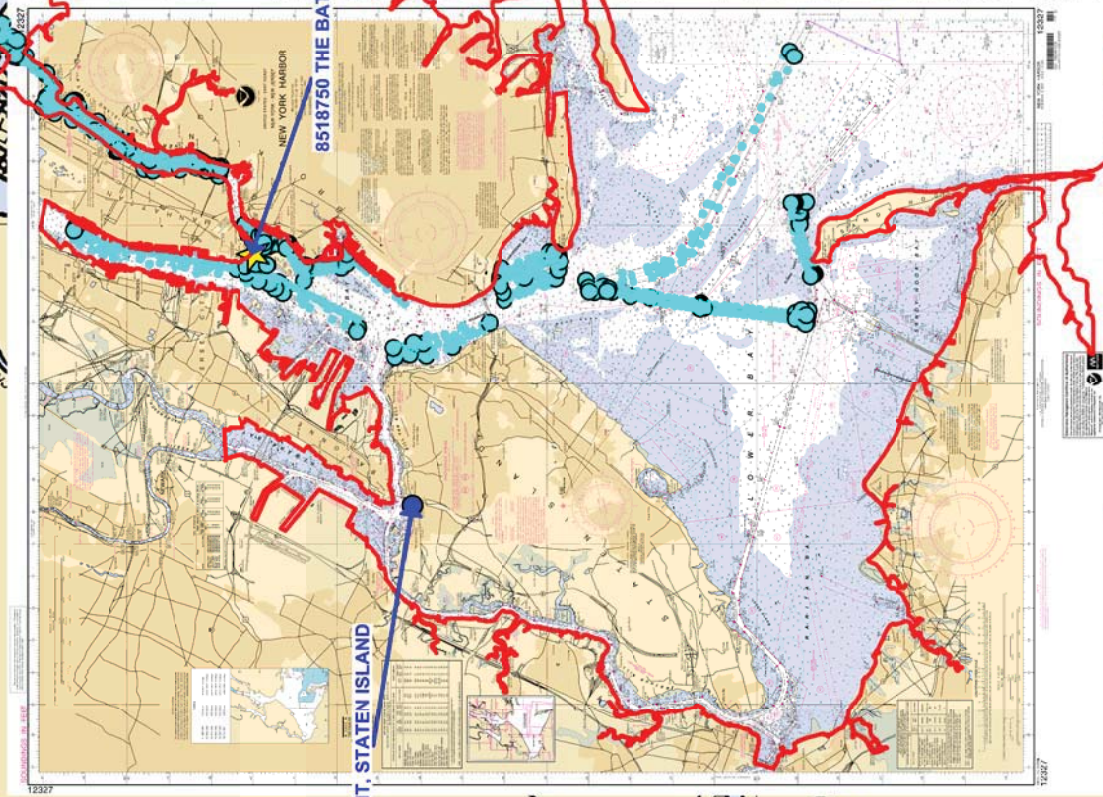
Approximate locations are shown thus:  (Approximate location)

(For complete list of Symbols and Abbreviations, see Chart No. 1.) (Lights are white unless otherwise indicated.)

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2 and 3. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or the 5th Coast Guard District in Portsmouth, VA or at the Offices of the District Commander, 1st Coast Guard District in Philadelphia, PA or the District Commander, 2nd Coast Guard District in New York, NY. Refer to charted regulation section numbers.

**Final TCARI Grid for S-B935-TJ-2012, Registry No. F00626
NY Harbor and Vicinity Response, NY**



APPENDIX II

SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE

Subject: Re: Crossline comparison

From: Chris van Westendorp <Christiaan.VanWestendorp@noaa.gov>

Date: Thu, 10 Sep 2009 13:00:35 -0400

To: "mark.blankenship" <Mark.Blankenship@noaa.gov>

CC: LCDR Rick Brennan <Richard.T.Brennan@noaa.gov>, Castle Parker <Castle.E.Parker@noaa.gov>, Edward Owens <Edward.Owens@noaa.gov>, LT Jasper Schaer <jasper.schaer@noaa.gov>, CDR Shep Smith <Shep.Smith@noaa.gov>, Daniel Wright <Daniel.Wright@noaa.gov>

Mark,

Per 5.1.4.3 of the HSSD, AHB authorizes TJ to use the Standard Deviation layer to conduct surface difference comparison and analysis on future survey submissions of multibeam data. This meets the crossline comparison requirement laid out in HSSD.

Please let me know if you have any questions or need for further clarification.

R/

LCDR Chris van Westendorp, NOAA

mark.blankenship wrote:

Chris,

You mentioned in the meeting today that AHB was not going to require the multiple CUBE surface comparison, instead allowing us to use a single surface standard deviation layer to do our checks with. Is there any memo coming out for that?

Mark

LCDR Chris van Westendorp <christiaan.vanwestendorp@noaa.gov>

Atlantic Hydrographic Branch

NOAA OCS

APPENDIX III

SURVEY FEATURES REPORT

AWOIS	0
DTONs	1
Maritime Boundary Items	0
Wrecks	9

F00626 Feature Report

Registry Number: F00626
State: New York
Locality: NY Harbor and Vicinity
Sub-locality: NY Harbor and Vicinity
Project Number: S-B395-TJ-12
Survey Dates: 11/01/2012 - 11/03/2012

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
12339	46th	06/01/2008	1:10,000 (12339_1)	[L]NTM: ?
12341	26th	06/01/2003	1:10,000 (12341_1)	[L]NTM: ?
12335	42nd	03/01/2008	1:10,000 (12335_1)	[L]NTM: ?
12342	23rd	01/01/2005	1:10,000 (12342_1)	[L]NTM: ?
12337	23rd	10/01/2005	1:20,000 (12337_1)	[L]NTM: ?
12327	101st	04/01/2008	1:40,000 (12327_1)	[L]NTM: ?
12363	40th	06/01/2005	1:80,000 (12363_1)	[L]NTM: ?
12300	47th	05/01/2008	1:400,000 (12300_1)	[L]NTM: ?
13006	34th	05/01/2007	1:675,000 (13006_1)	[L]NTM: ?
5161	13th	10/01/2003	1:1,058,400 (5161_1)	[L]NTM: ?
13003	49th	04/01/2007	1:1,200,000 (13003_1)	[L]NTM: ?
14500	27th	10/01/2002	1:1,500,000 (14500_1)	[L]NTM: ?

* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	46ft Wreck	Wreck	14.06 m	40° 43' 29.3" N	074° 01' 20.3" W	---
1.2	44ft Wreck	Wreck	13.61 m	40° 46' 25.4" N	073° 56' 34.1" W	---
1.3	80ft Wreck	Wreck	24.50 m	40° 46' 35.6" N	073° 56' 20.1" W	---
1.4	9ft Wreck Area	Wreck	2.79 m	40° 46' 19.2" N	073° 56' 09.5" W	---
1.5	59ft Wreck	Wreck	18.10 m	40° 47' 27.6" N	073° 54' 42.5" W	---

1.6	56ft Wreck	Wreck	16.99 m	40° 47' 41.9" N	073° 54' 25.1" W	---
1.7	59ft Wreck	Wreck	17.94 m	40° 47' 54.9" N	073° 54' 19.5" W	---
1.8	61ft Wreck	Wreck	18.68 m	40° 48' 11.3" N	073° 54' 11.3" W	---
1.9	72ft Wreck	Wreck	22.00 m	40° 48' 11.2" N	073° 54' 07.0" W	---
2.1	DTON 1 - 23ft Rock	Rock	7.08 m	40° 47' 39.8" N	073° 54' 24.6" W	---

1 - New Features

1.1) 46ft Wreck

Survey Summary

Survey Position: 40° 43' 29.3" N, 074° 01' 20.3" W
Least Depth: 14.06 m (= 46.13 ft = 7.688 fm = 7 fm 4.13 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940641 00001(0226000E5A610001)
Charts Affected: 12335_1, 12337_1, 12327_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940641 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

46ft (12335_1, 12337_1, 12327_1, 12363_1)
 7 ¾fm (12300_1, 13006_1, 13003_1, 14500_1)
 14.0m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626

VALSOU - 14.059 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature located at survey position with MB. Wreck measures approximately 10.7m long by 3.7m wide. Compile: Recommend to add wreck.

Feature Images

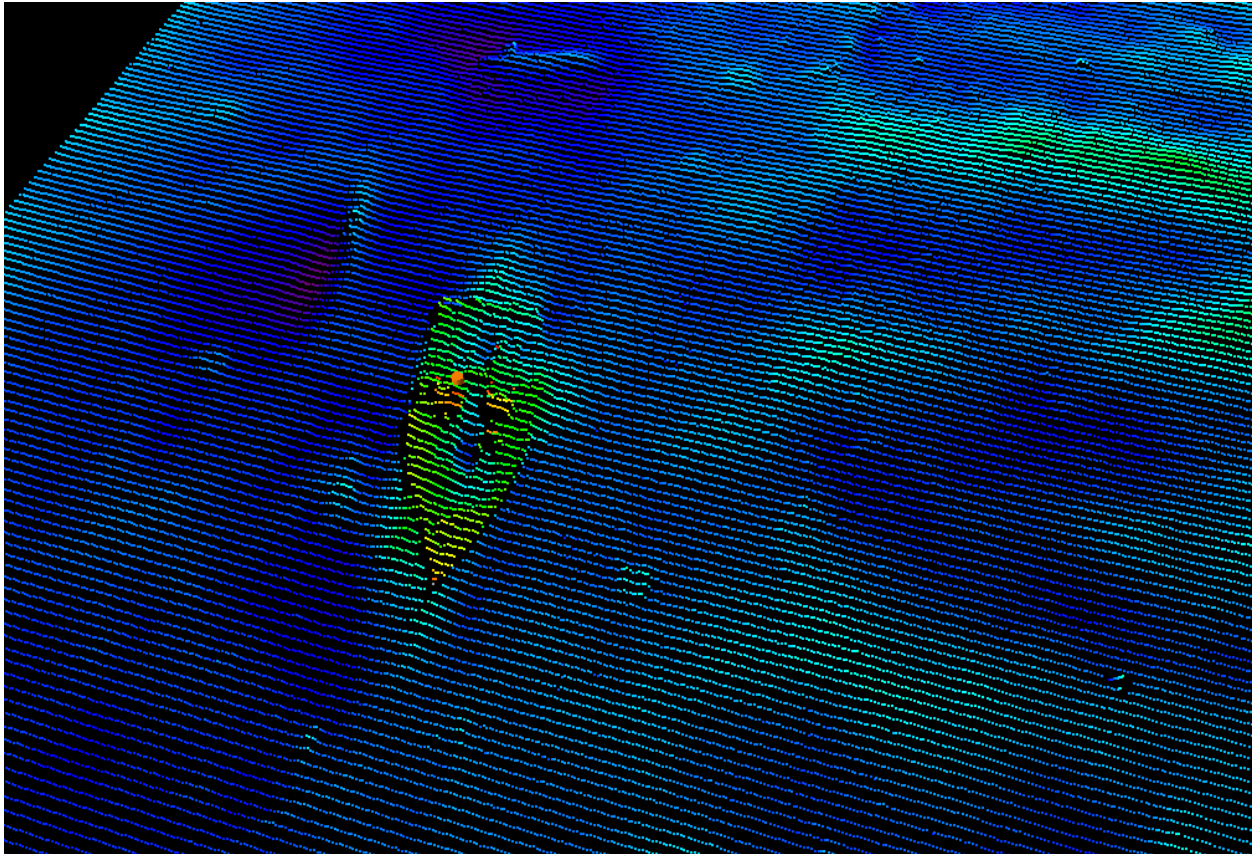


Figure 1.1.1

1.2) 44ft Wreck

Survey Summary

Survey Position: 40° 46' 25.4" N, 073° 56' 34.1" W
Least Depth: 13.61 m (= 44.66 ft = 7.444 fm = 7 fm 2.66 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940596 00001(0226000E5A340001)
Charts Affected: 12339_1, 12341_1, 12327_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940596 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

44ft (12339_1, 12341_1, 12327_1, 12363_1)
 7 ½fm (12300_1, 13006_1, 13003_1, 14500_1)
 13.6m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626

VALSOU - 13.613 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature located at survey position with SS and MB. Compile: Recommend to add wreck.

Feature Images

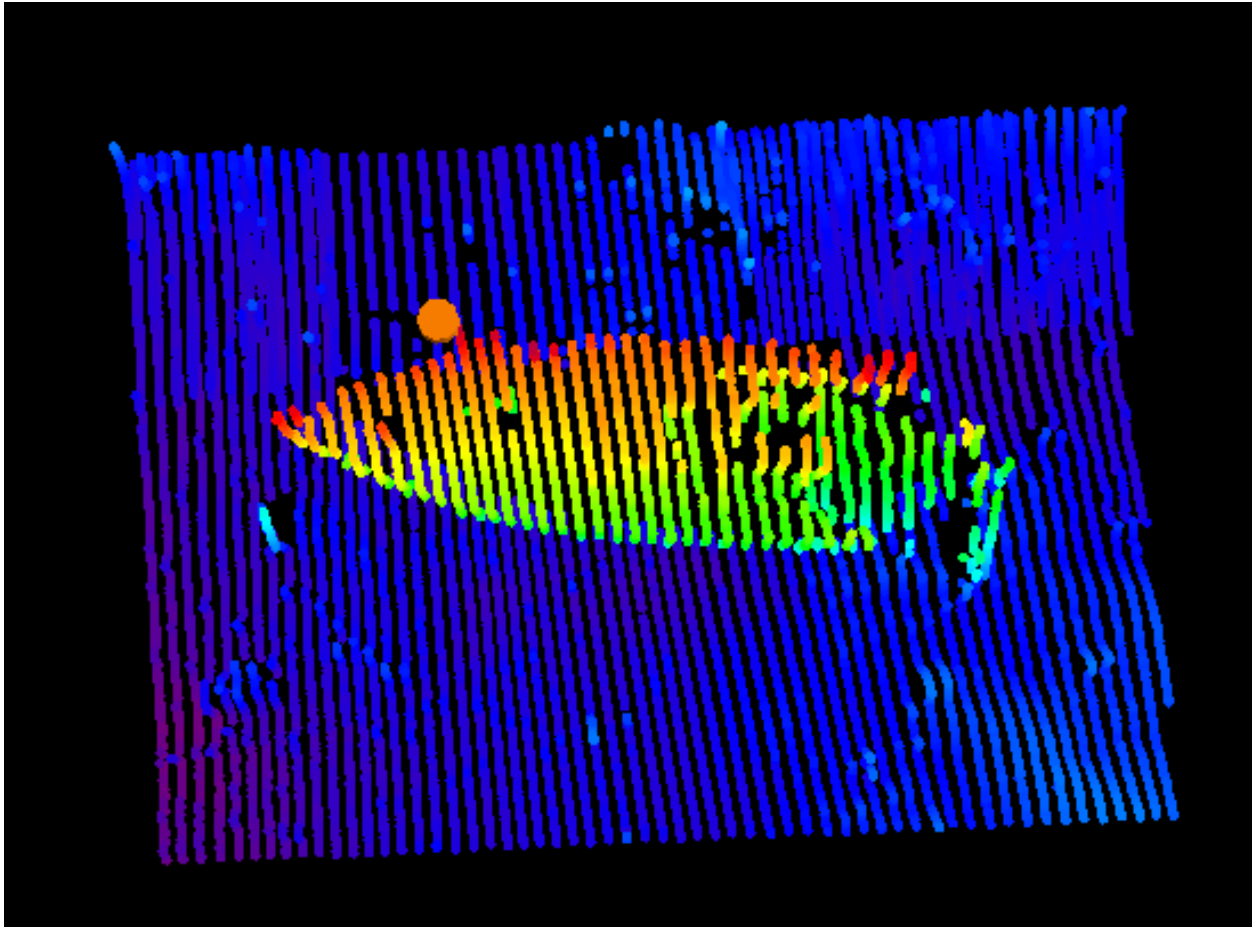


Figure 1.2.1

1.3) 80ft Wreck

Survey Summary

Survey Position: 40° 46' 35.6" N, 073° 56' 20.1" W
Least Depth: 24.50 m (= 80.38 ft = 13.396 fm = 13 fm 2.38 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940573 00001(0226000E5A1D0001)
Charts Affected: 12339_1, 12341_1, 12327_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940573 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

80ft (12339_1, 12341_1, 12327_1, 12363_1)

13ft (12300_1, 13006_1, 13003_1, 14500_1)

24m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626

VALSOU - 24.499 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature located at survey position with SS and MB. Compile: Recommend to add wreck.

Feature Images

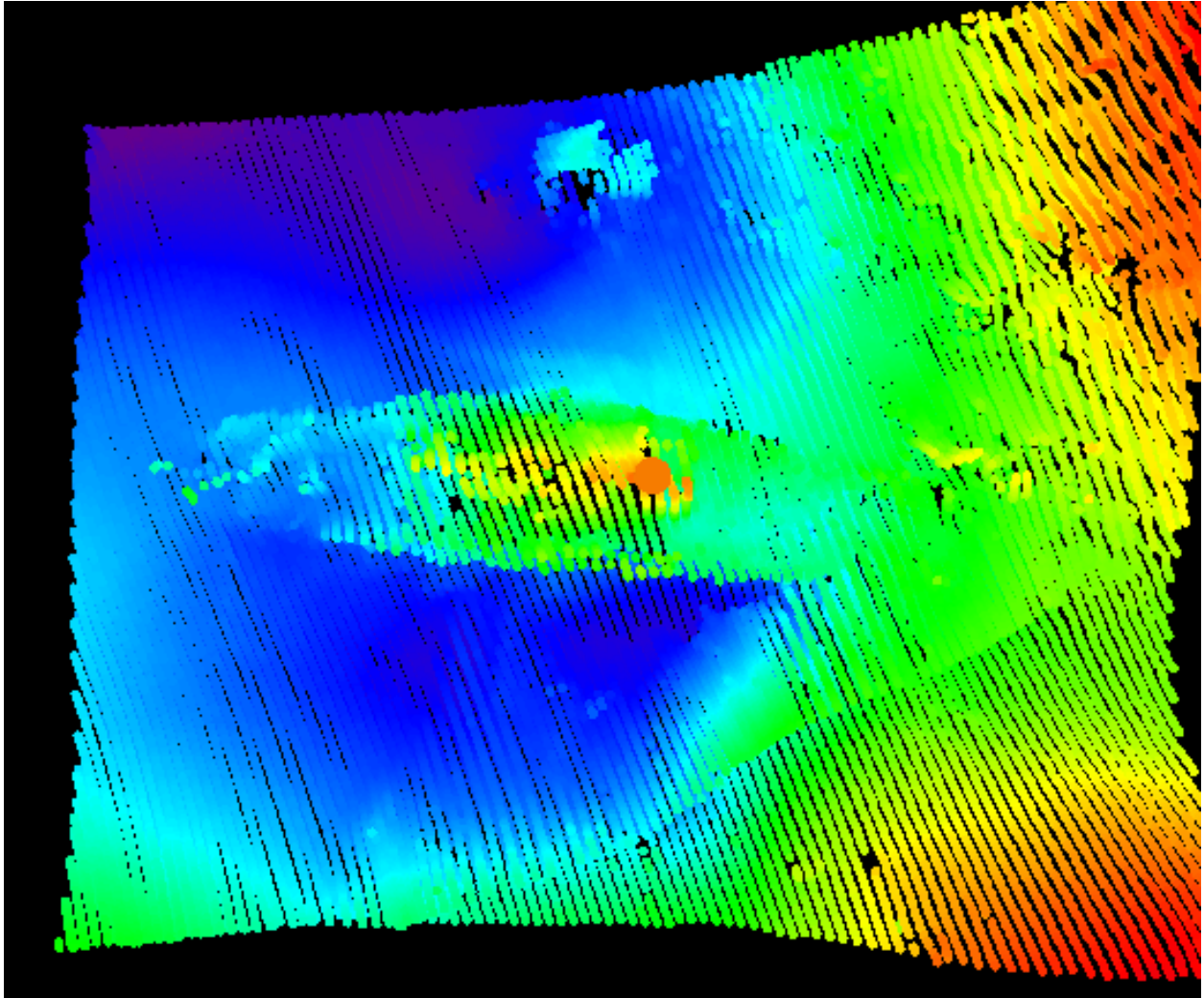


Figure 1.3.1

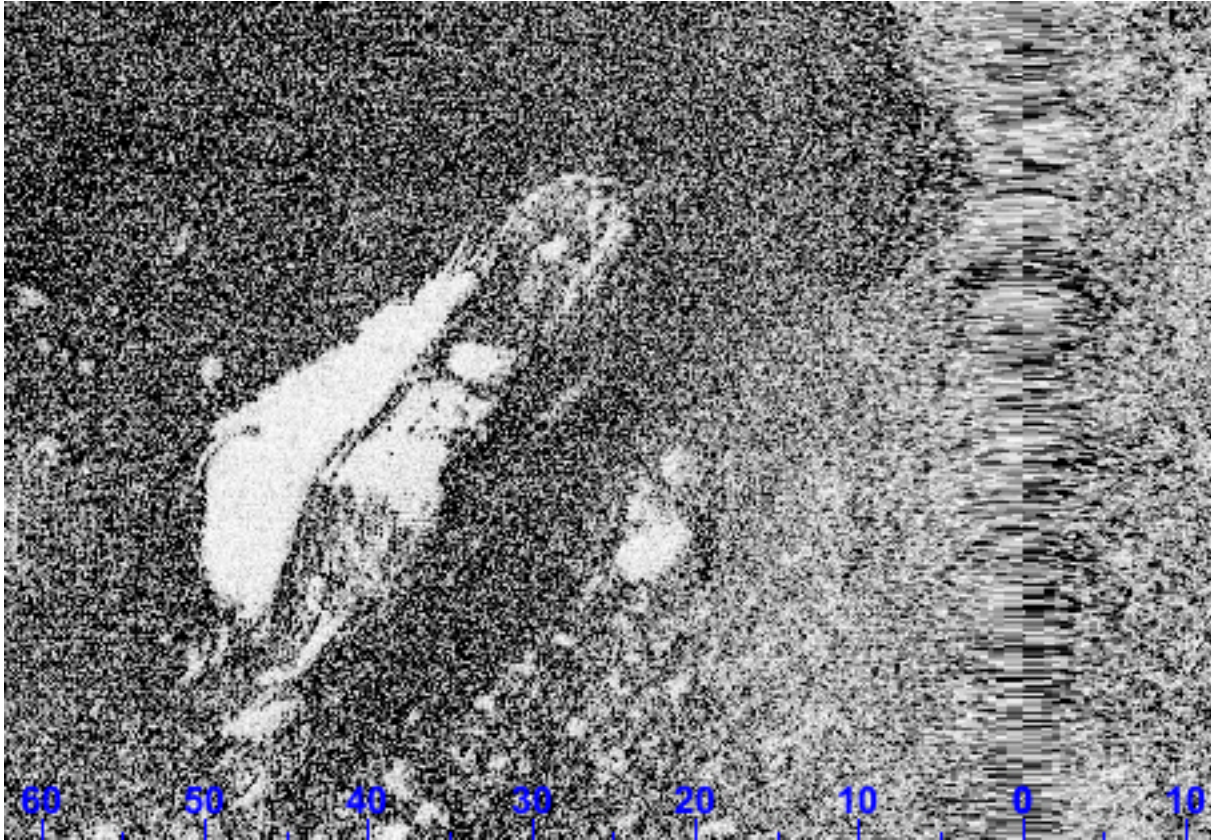


Figure 1.3.2

1.4) 9ft Wreck Area

Survey Summary

Survey Position: 40° 46' 19.2" N, 073° 56' 09.5" W
Least Depth: 2.79 m (= 9.16 ft = 1.527 fm = 1 fm 3.16 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940639 00001(0226000E5A5F0001)
Charts Affected: 12339_1, 12327_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940639 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

9ft (12339_1, 12327_1, 12363_1)

1 ½fm (12300_1, 13006_1, 13003_1, 14500_1)

2.8m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 9:value reported (not confirmed)
 SORDAT - 20121103
 SORIND - US,US,graph,F00626
 VALSOU - 2.792 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Wreckage area located at survey position with SS and MB, least depth not known. Compile:
Recommend to add wreck area.

Feature Images

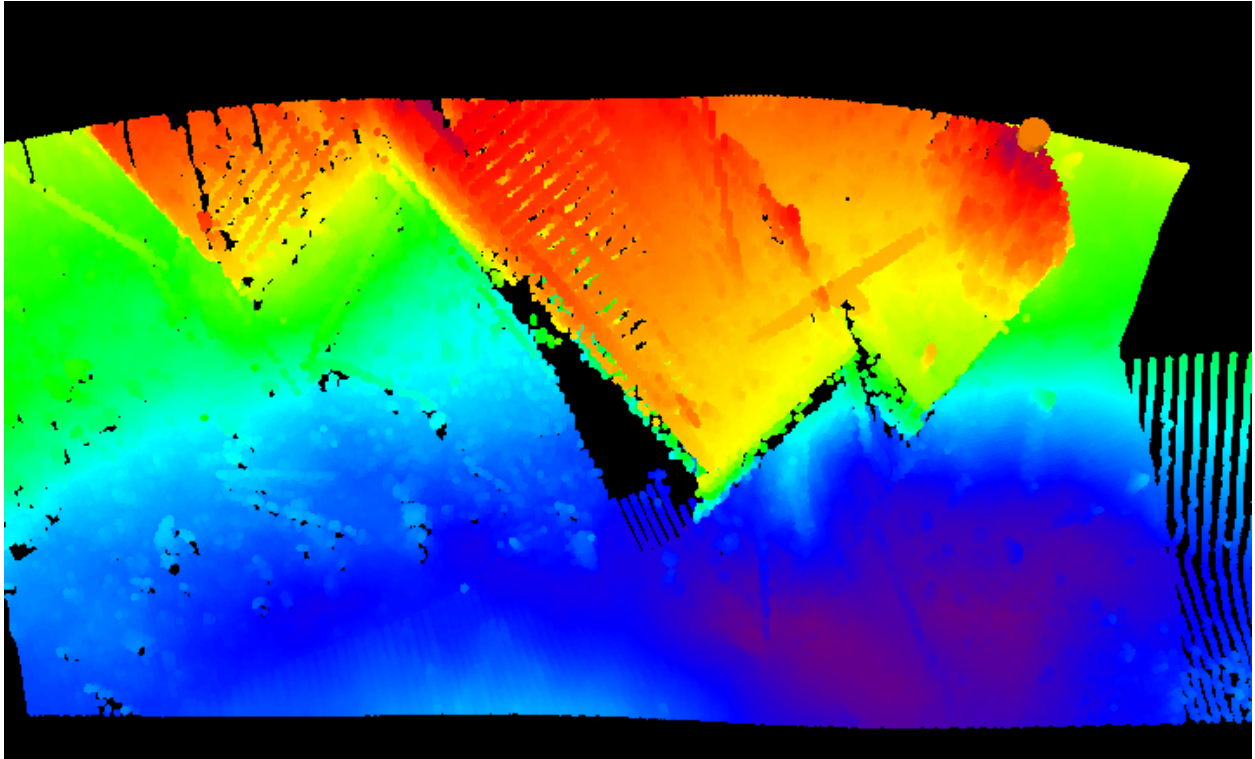


Figure 1.4.1

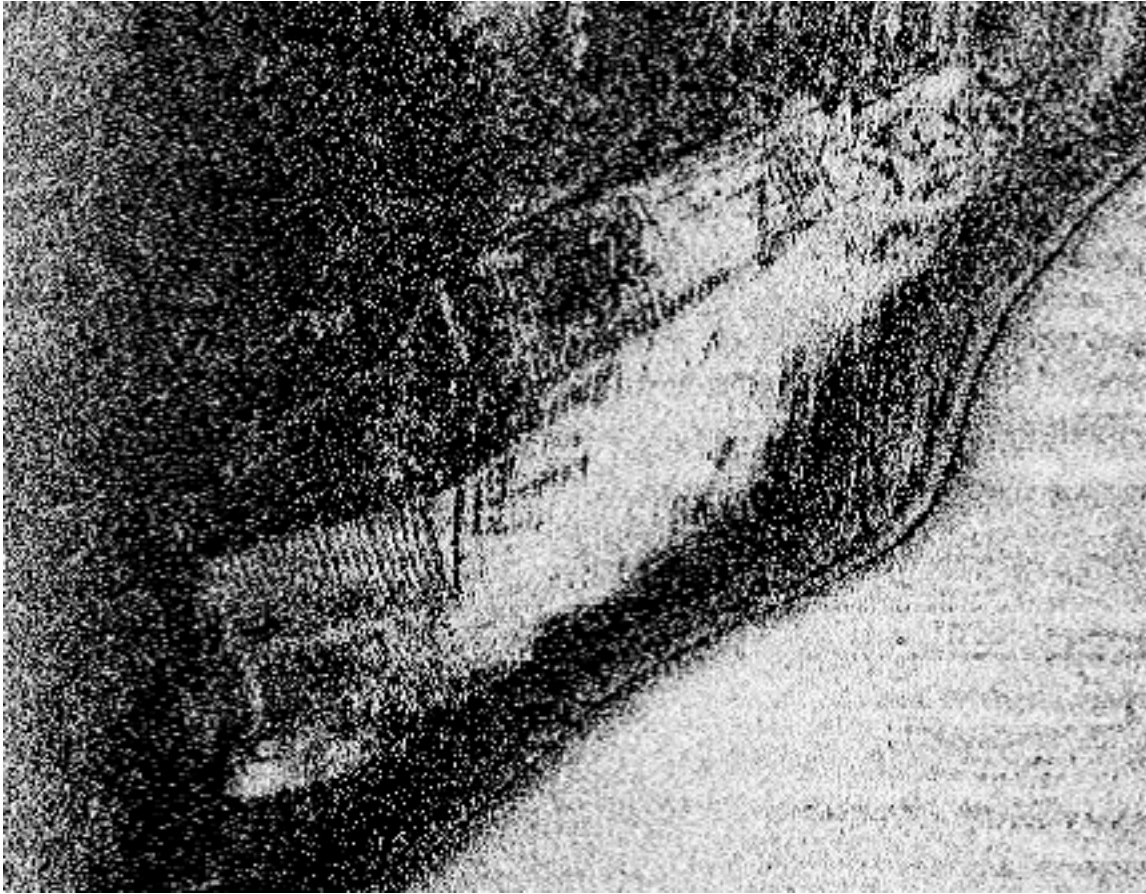


Figure 1.4.2

1.5) 59ft Wreck

Survey Summary

Survey Position: 40° 47' 27.6" N, 073° 54' 42.5" W
Least Depth: 18.10 m (= 59.40 ft = 9.899 fm = 9 fm 5.40 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940663 00001(0226000E5A770001)
Charts Affected: 12339_1, 12342_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940663 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

59ft (12339_1, 12342_1, 12363_1)
 9 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 18.1m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626
 VALSOU - 18.104 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature located at survey position with SS and MB. Compile: Recommend to add wreck.

Feature Images

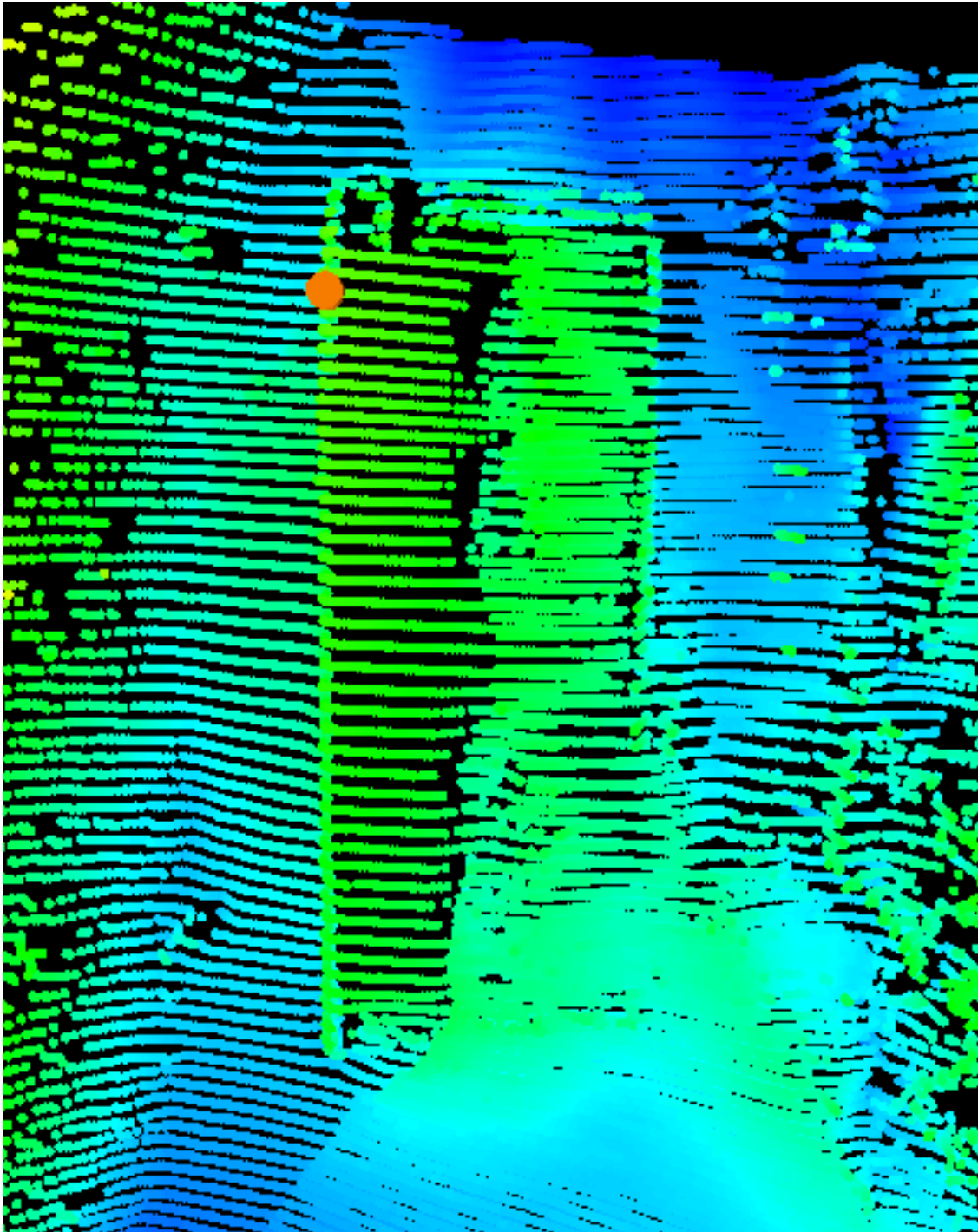


Figure 1.5.1

1.6) 56ft Wreck

Survey Summary

Survey Position: 40° 47' 41.9" N, 073° 54' 25.1" W
Least Depth: 16.99 m (= 55.75 ft = 9.292 fm = 9 fm 1.75 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940571 00001(0226000E5A1B0001)
Charts Affected: 12339_1, 12342_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940571 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

56ft (12339_1, 12342_1, 12363_1)
 9 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 17.0m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626
 VALSOU - 16.993 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature located at survey position with SS and MB. Compile: Recommend to add wreck.

Feature Images

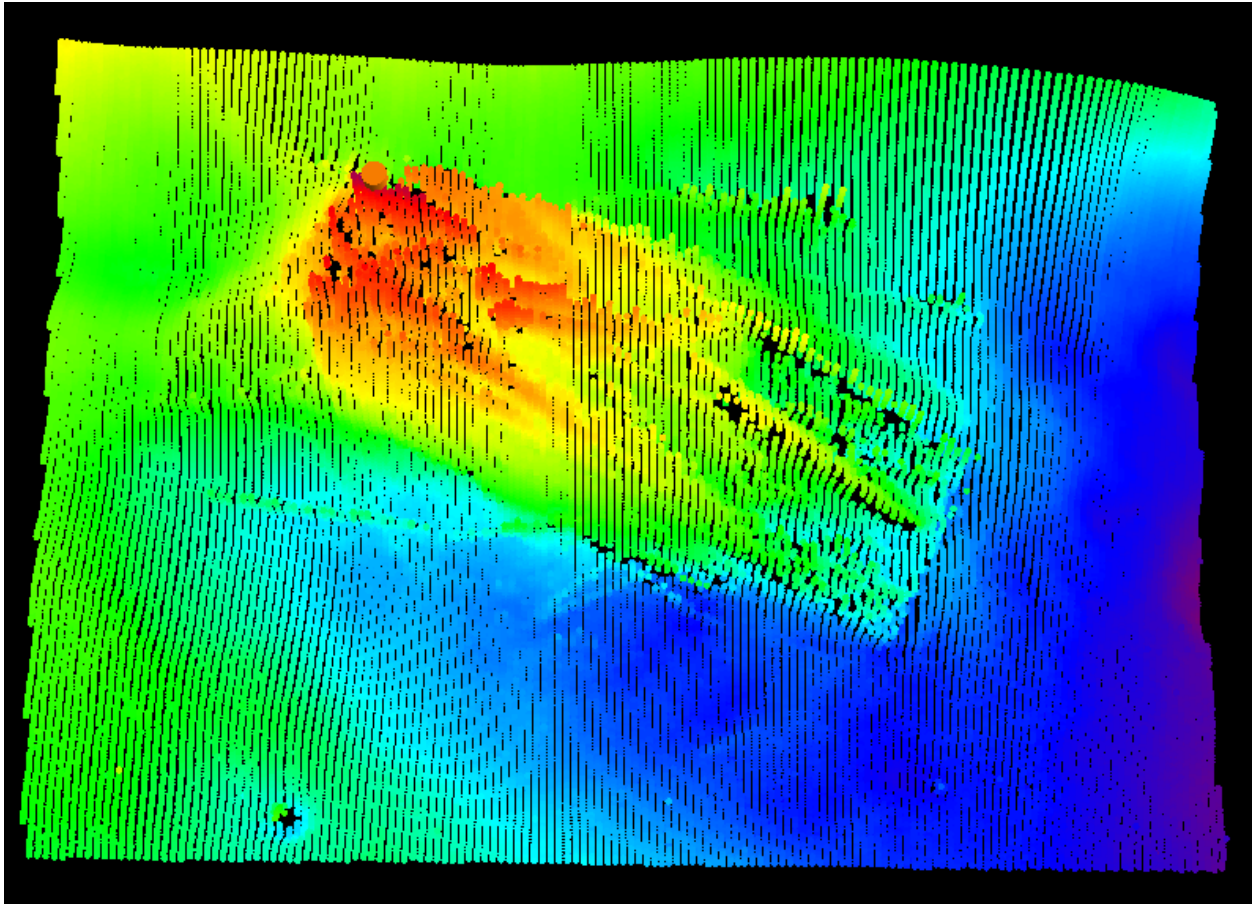


Figure 1.6.1

1.7) 59ft Wreck

Survey Summary

Survey Position: 40° 47' 54.9" N, 073° 54' 19.5" W
Least Depth: 17.94 m (= 58.87 ft = 9.812 fm = 9 fm 4.87 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940637 00001(0226000E5A5D0001)
Charts Affected: 12339_1, 12342_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940637 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

59ft (12339_1, 12342_1, 12363_1)
 9 $\frac{3}{4}$ fm (12300_1, 13006_1, 13003_1, 14500_1)
 17.9m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626
 VALSOU - 17.944 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature located at survey position with SS and MB. Compile: Recommend to add wreck.

Feature Images

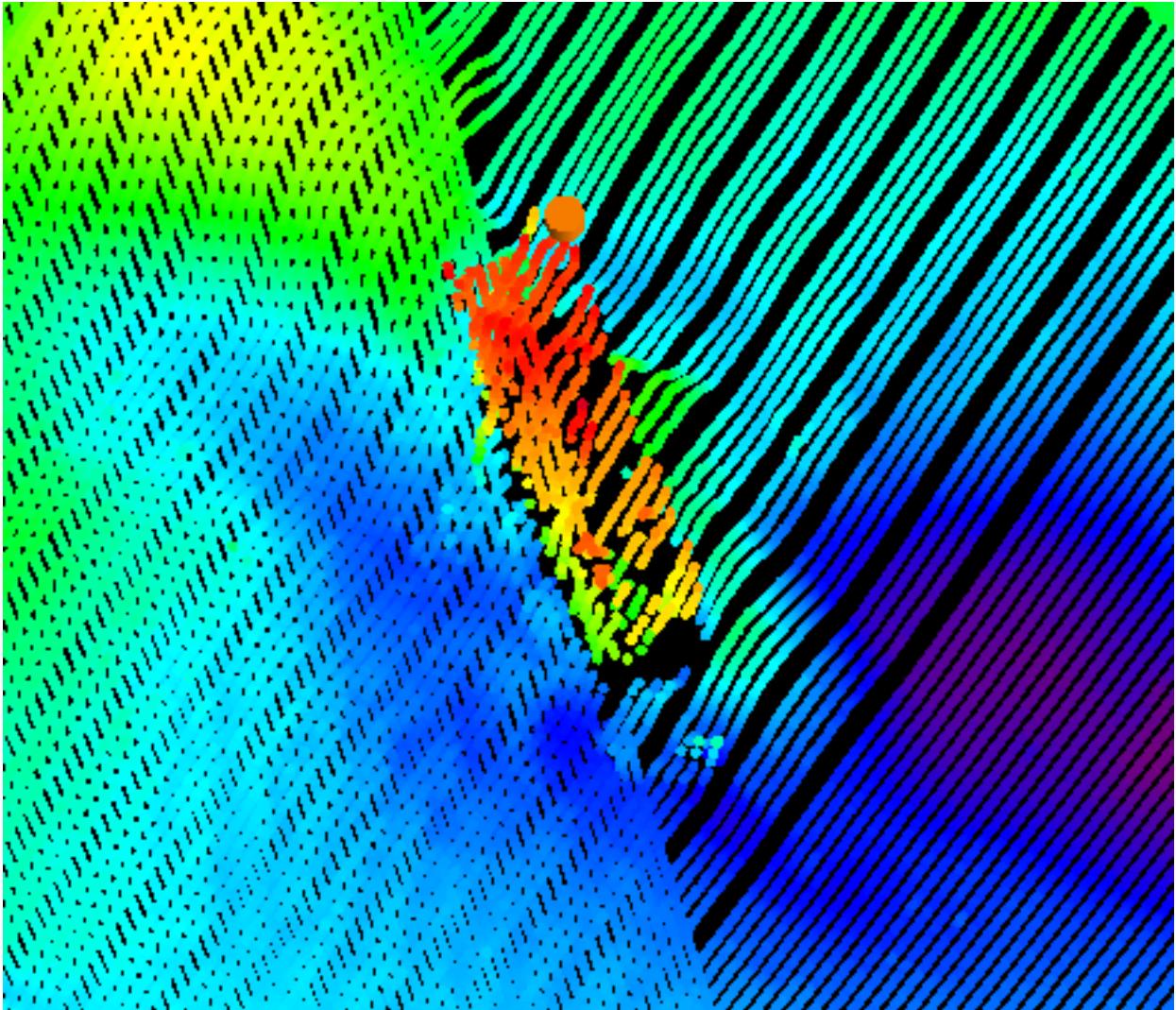


Figure 1.7.1

1.8) 61ft Wreck

Survey Summary

Survey Position: 40° 48' 11.3" N, 073° 54' 11.3" W
Least Depth: 18.68 m (= 61.28 ft = 10.213 fm = 10 fm 1.28 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940569 00001(0226000E5A190001)
Charts Affected: 12339_1, 12342_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940569 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

61ft (12339_1, 12342_1, 12363_1)
 10 ¼fm (12300_1, 13006_1, 13003_1, 14500_1)
 18.7m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626
 VALSOU - 18.677 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature located at survey position with SS and MB. Compile: Recommend to add wreck.

Feature Images

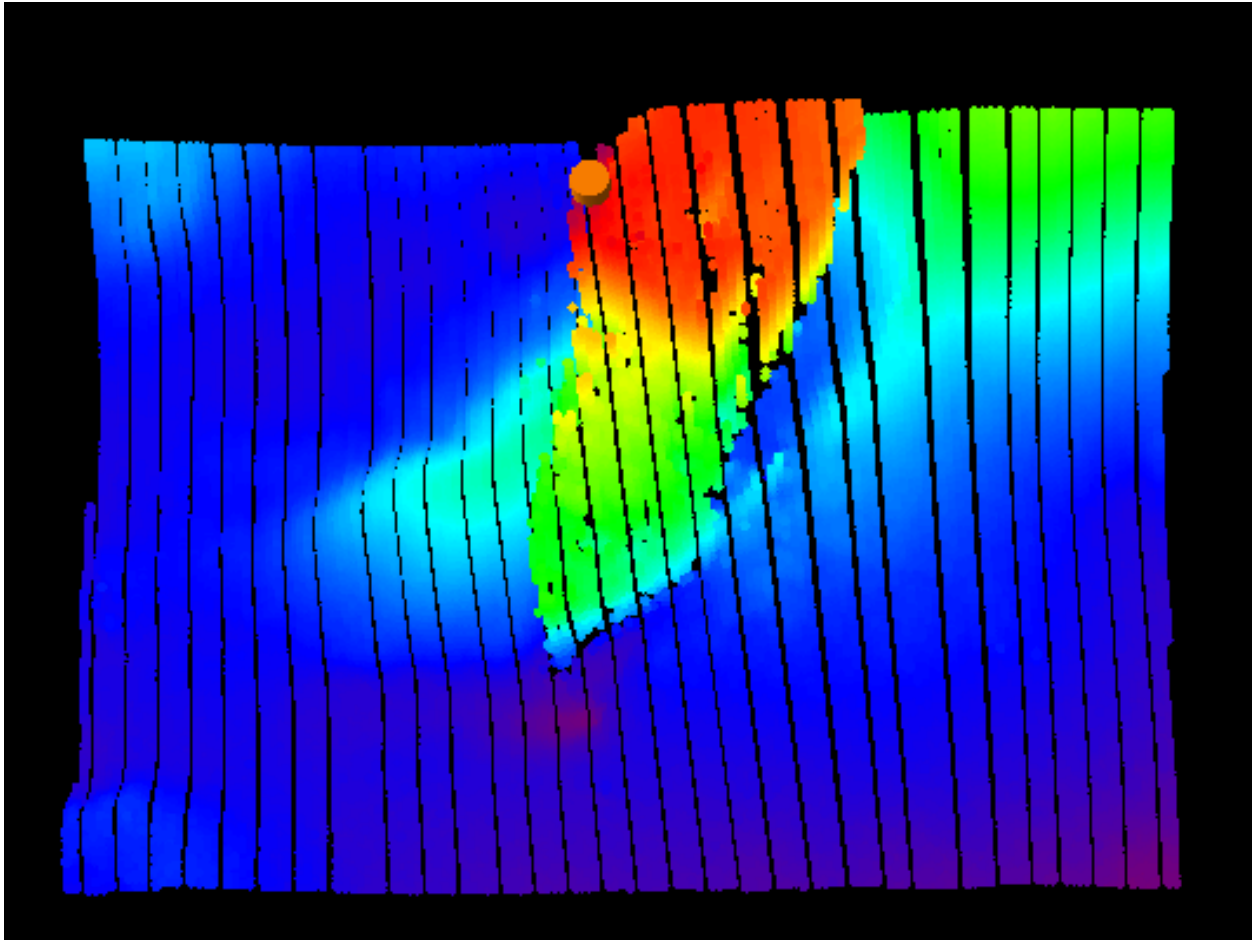


Figure 1.8.1

1.9) 72ft Wreck

Survey Summary

Survey Position: 40° 48' 11.2" N, 073° 54' 07.0" W
Least Depth: 22.00 m (= 72.19 ft = 12.031 fm = 12 fm 0.19 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940664 00001(0226000E5A780001)
Charts Affected: 12339_1, 12342_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940664 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

72ft (12339_1, 12342_1, 12363_1)

12ft (12300_1, 13006_1, 13003_1, 14500_1)

22m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 1:non-dangerous wreck
 NINFOM - Add wreck
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626
 VALSOU - 22.002 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Feature located at survey position with SS and MB. Compile: Recommend to add wreck.

Feature Images

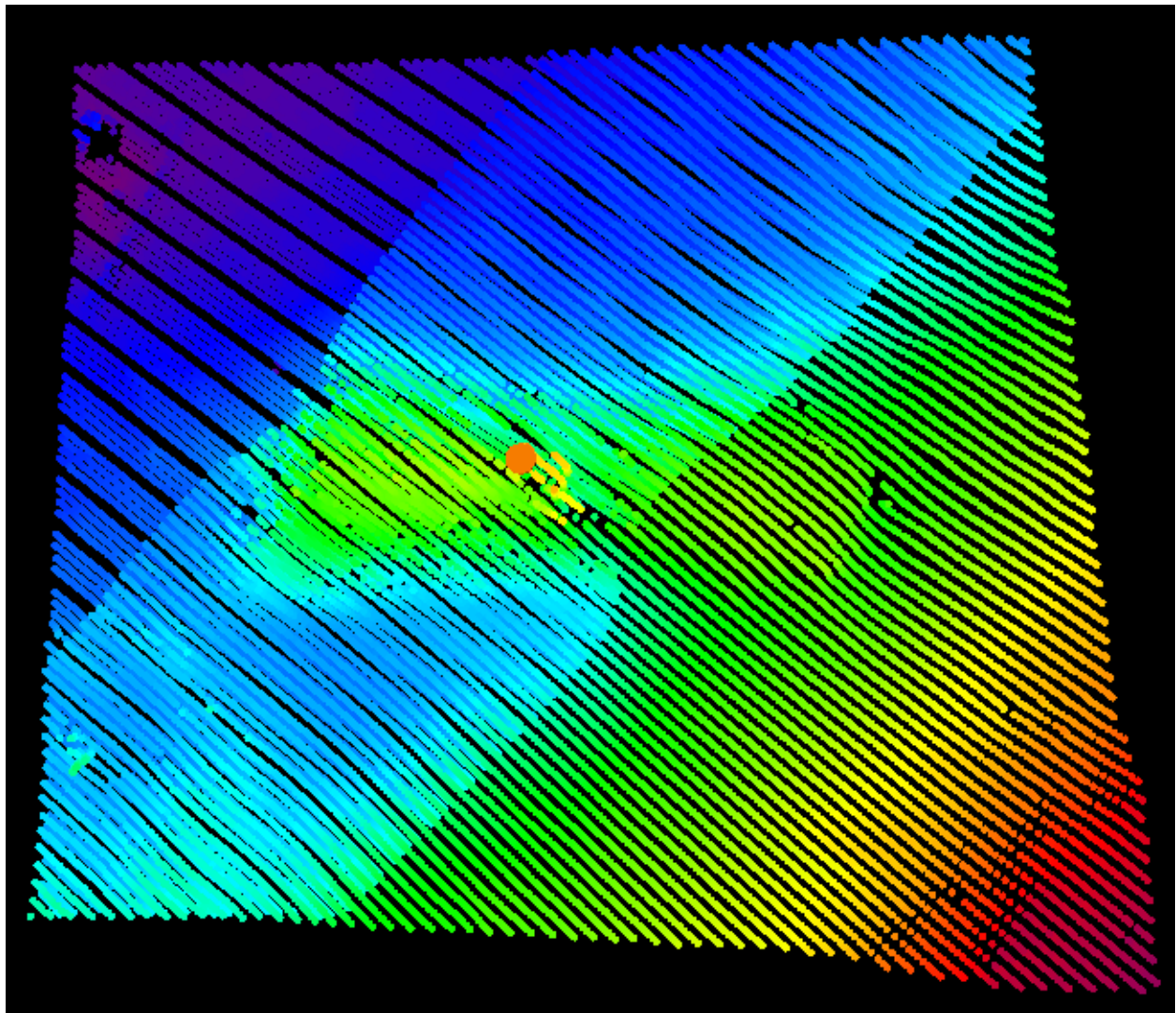


Figure 1.9.1

2 - Dangers To Navigation

2.1) DTON 1 - 23ft Rock

DANGER TO NAVIGATION

Survey Summary

Survey Position: 40° 47' 39.8" N, 073° 54' 24.6" W
Least Depth: 7.08 m (= 23.22 ft = 3.870 fm = 3 fm 5.22 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2012-308.00:00:00.000 (11/03/2012)
Dataset: F00626_Features.000
FOID: US 0000940625 00001(0226000E5A510001)
Charts Affected: 12339_1, 12342_1, 12363_1, 12300_1, 13006_1, 5161_1, 13003_1, 14500_1

Remarks:

[None]

Feature Correlation

Source	Feature	Range	Azimuth	Status
F00626_Features.000	US 0000940625 00001	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

23ft (12339_1, 12342_1, 12363_1)
 3 ¾fm (12300_1, 13006_1, 13003_1, 14500_1)
 7.1m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: NINFOM - Add rock
 QUASOU - 6:least depth known
 SORDAT - 20121103
 SORIND - US,US,graph,F00626

VALSOU - 7.077 m

WATLEV - 3:always under water/submerged

Office Notes

SAR: Charted DTON located at survey position with MB. Recommend to update least depth and change from obstruction to rock. Compile: Concur, recommend to delete charted obstruction and add rock.

Feature Images

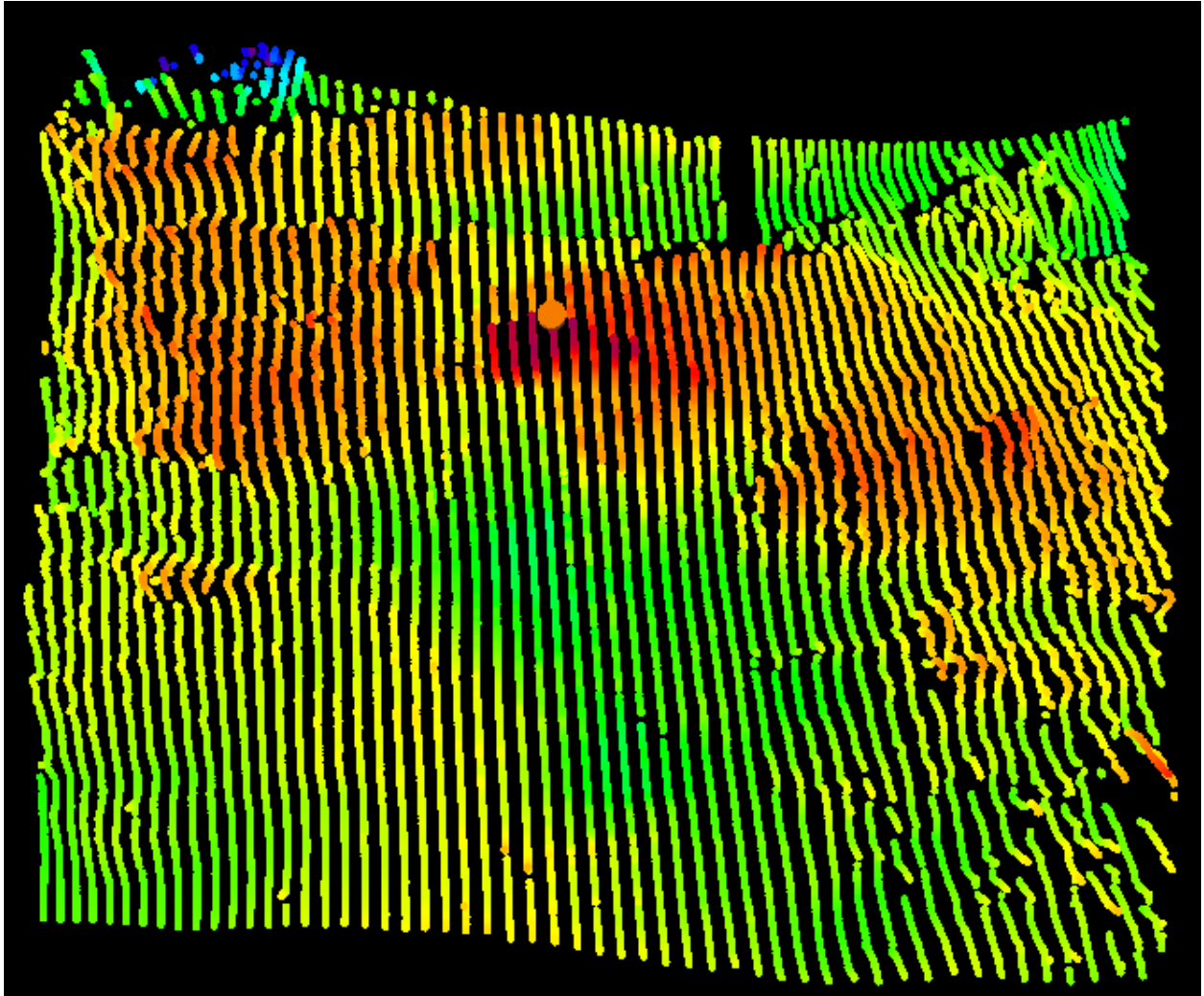


Figure 2.1.1

APPROVAL PAGE

F00626

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 NGDC for archive:

- F00626_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records

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: _____

LCDR Matthew Jaskoski, NOAA
Chief, Atlantic Hydrographic Branch