

H13543

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

**DESCRIPTIVE REPORT**

Type of Survey: Navigable Area

Registry Number: H13543

**LOCALITY**

State(s): California

General Locality: San Francisco Bay

Sub-locality: Pinole Shoal

**2022**

CHIEF OF PARTY  
CAPT John Lomnicky

LIBRARY & ARCHIVES

Date:

**HYDROGRAPHIC TITLE SHEET**

**H13543**

**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): **California**

General Locality: **San Francisco Bay**

Sub-Locality: **Pinole Shoal**

Scale: **5000**

Dates of Survey: **05/12/2022 to 05/14/2022**

Instructions Dated: **08/06/2021**

Project Number: **OPR-L361-FA-21**

Field Unit: **NOAA Ship *Fairweather***

Chief of Party: **CAPT John Lomnicky**

Soundings by: **Kongsberg Maritime EM 2040 (MBES)**

Imagery by: **N/A**

Verification by: **Pacific 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 WGS 84 UTM 10N, MLLW. All references to other horizontal or vertical datums in this report are applicable to the processed hydrographic data provided by the field unit.*

## DESCRIPTIVE REPORT MEMO

June 09, 2022

**MEMORANDUM FOR:** Pacific Hydrographic Branch

**FROM:** ENS Adam Martinez  
Sheet Manager, NOAA Ship *Fairweather*

**SUBJECT:** Submission of Survey H13543

The San Francisco Bay project will provide updated bathymetry to maintain data infrastructure for one of the Nation's key waterways. The project will address reports of shoaling, obstruction concerns, and chart discrepancies. Charting updates to this area were requested by the US Army Corps of Engineers, San Francisco Bar Pilots, The San Francisco Bay Conservation and Development Commission, local port agencies, US Geological Survey, and others. The project includes approaches to the ports of Richmond, Oakland, and San Francisco. These waters also provide passage to the Redwood City and Stockton Ports. San Francisco Bay supports port traffic that moves 51 million tons of cargo annually, and supports local fisheries worth \$150 million annually. California has over a half a million (542,000) marine dependent jobs accounting \$21.6 billion in annual wages, and \$44.8 billion GDP.(1) The new bathymetric data will enhance the safety of cargo and tanker traffic transiting to these ports, and support commercial fishing, recreational boating, and marine tourism based in the region. This project will provide critical data for the updating of National Ocean Service (NOS) nautical charting products and services to increase maritime safety in the region. The data will provide updated overbank depths which can impact settlement and squat calculations of tankers transiting through the channels. Pinole Shoal Channel is the primary channel in the project. Data from this project is intended to supersede all prior survey data in the common area.

There were no products created for this survey.

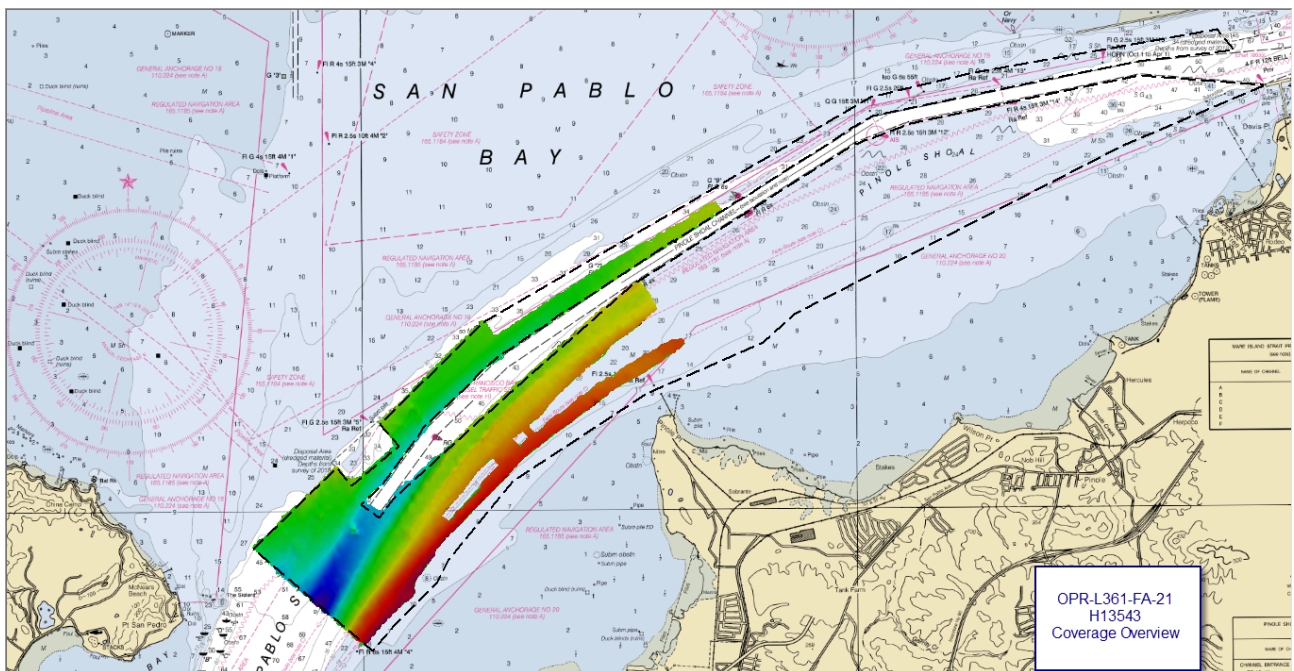
All soundings were reduced to Mean Lower Low Water using VDatum. The horizontal datum for this project is World Geodetic System (WGS) 1984. The projection used for this project is Universal Transverse Mercator (UTM) Zone 10.

Per Section 5.2.2.1.3 of the 2020 Field Procedures Manual no Horizontal and Vertical Control Report has been generated for H13543.

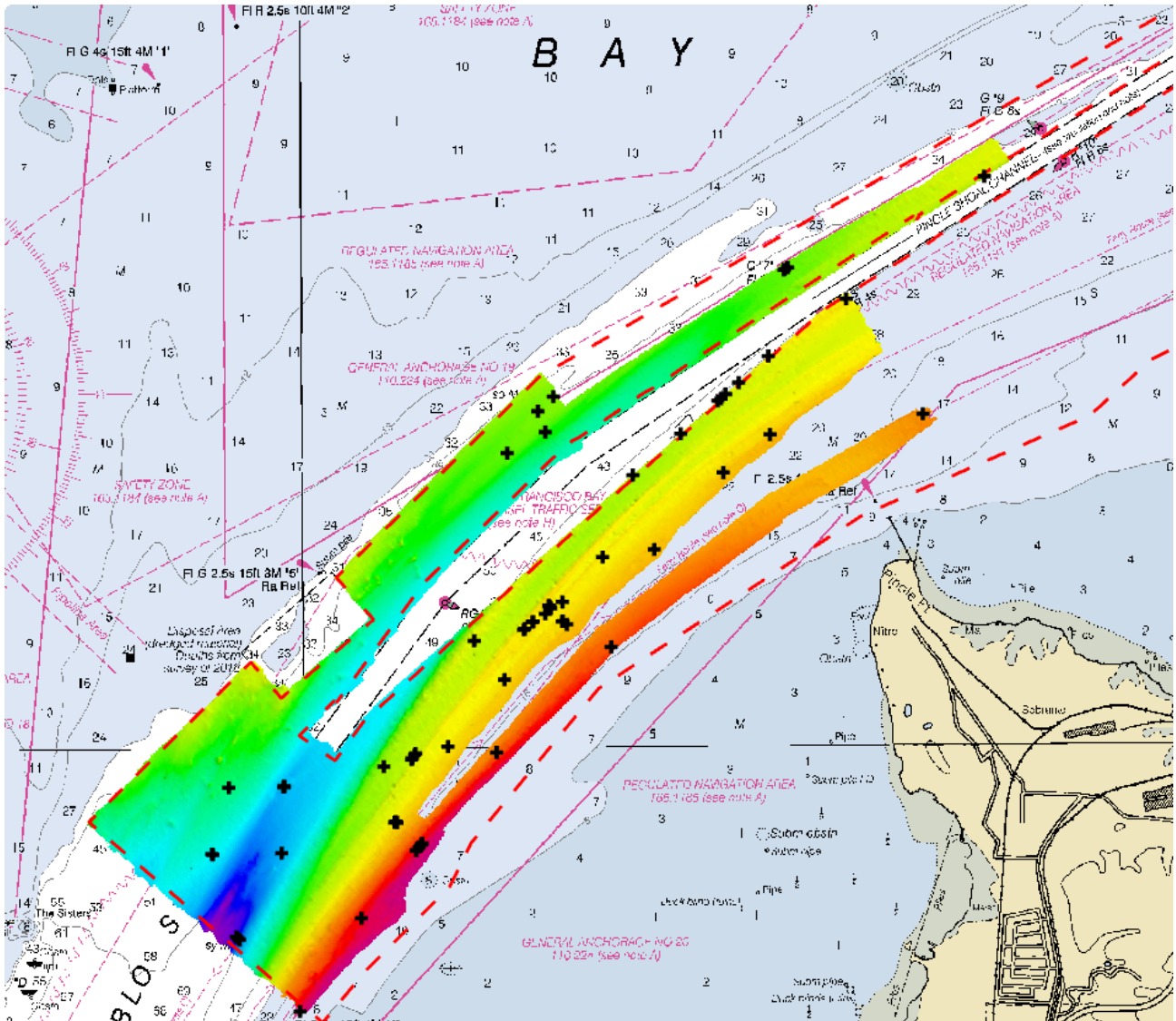
All survey systems and methods utilized during this survey were as described in the DAPR.

All data were reviewed for DTONs and none were identified in this survey.

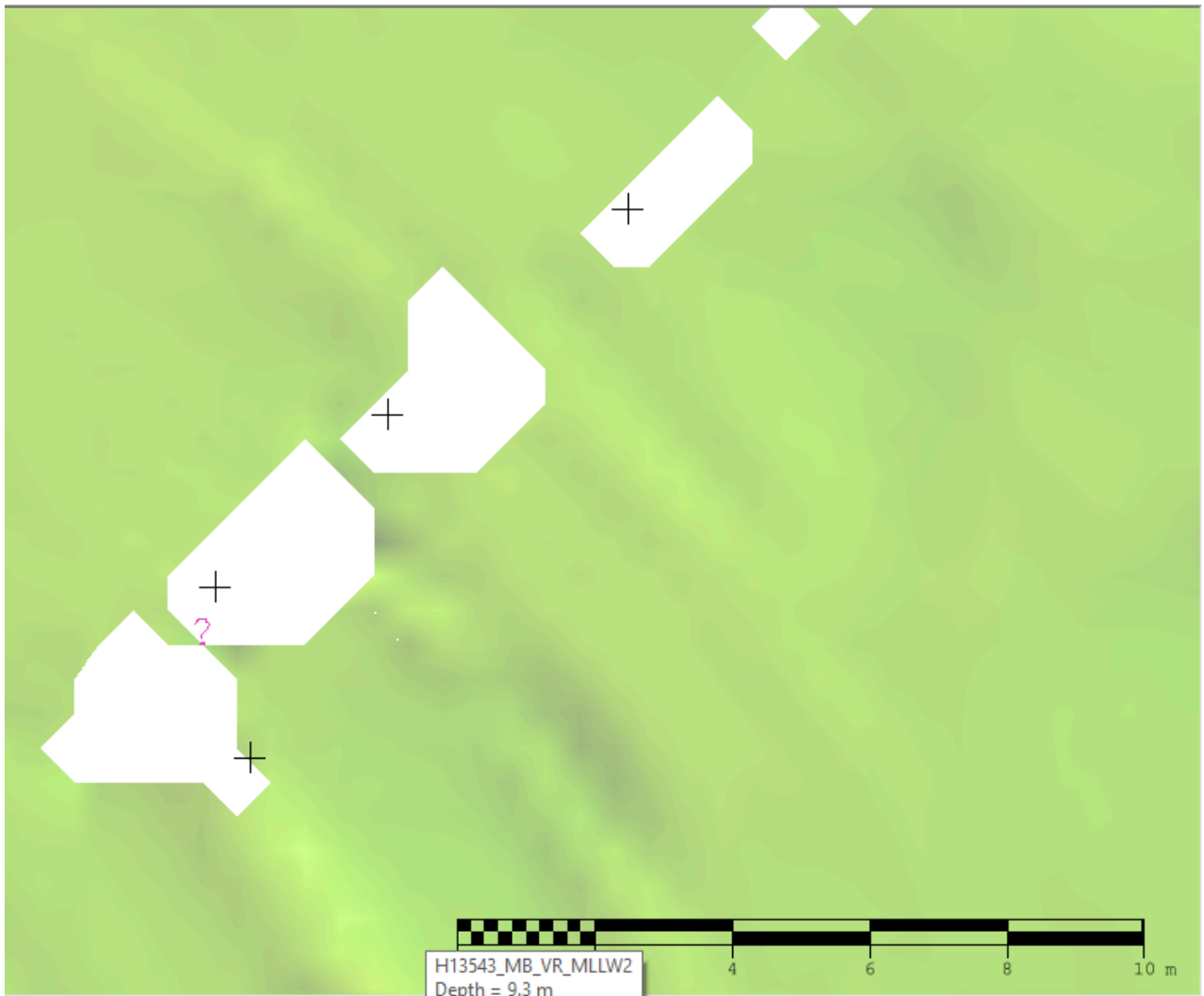
No major features were found in the surveyed data, and none are considered by the field unit to be navigationally hazardous. The only points of note are a mound in the center of the sheet, and what are believed to be crab pots, tires or a defunct buoy block. Due to having to leave the working grounds prematurely, acquisition and cleanup was unable to be completed on this sheet. As a result there are holidays throughout the sheet. On some of the edges there are also artifacts, where the data is off-set for small areas. Within the data at the start and end of some lines are artifacts where the data is offset. Most of the artifacts are out of the sheet limits, and have as such little effect on the survey. One line in particular has been removed from the survey, 0000\_20220512\_191410\_FA2805\_M, due to insurmountable errors. Due to having sufficient overlap from the other survey lines, the removal of this line file has no impact on the overall coverage of the survey. Flier finder has also flagged features incorrectly, All the fliers are either designated soundings, or are the artifacts noted above.



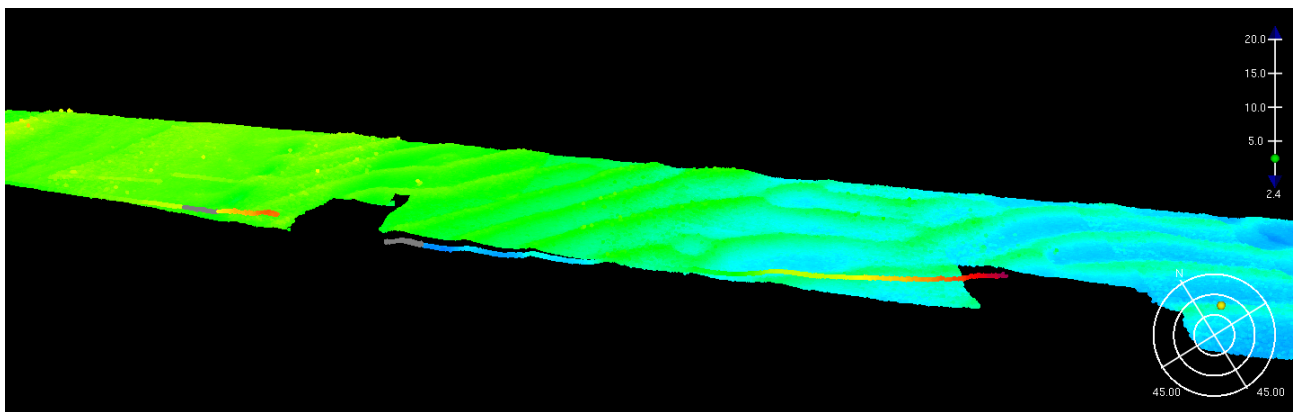
*H13543 Coverage Overview*



*H13543 Holidays throughout MBES coverage*

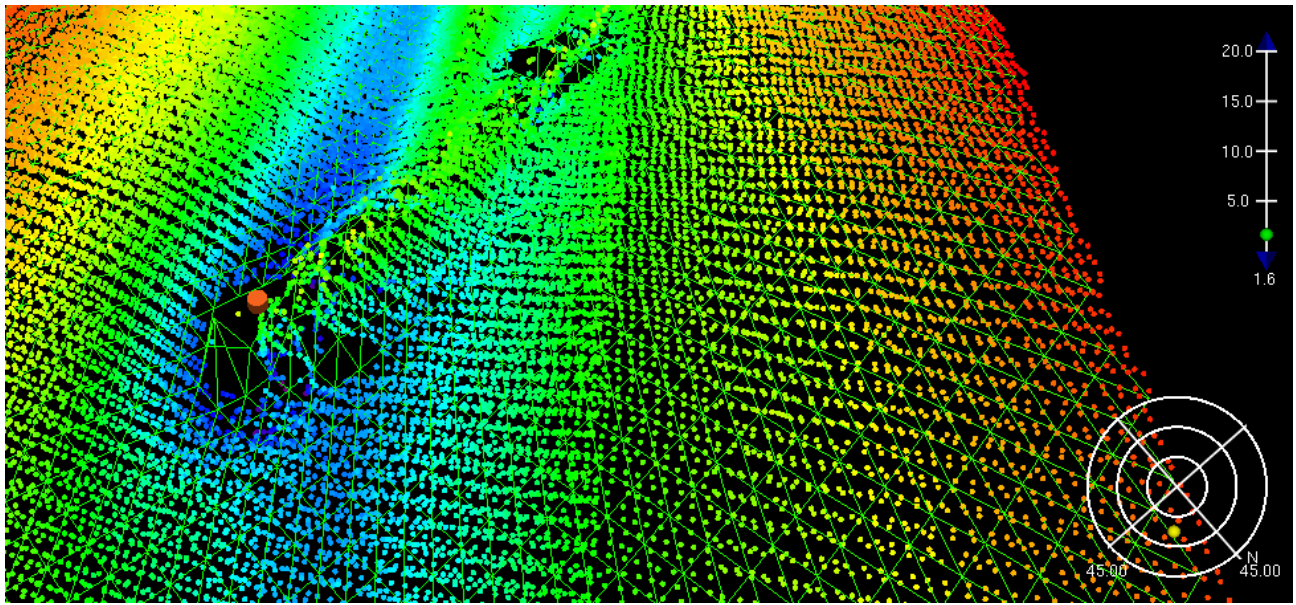


*H13543 Holidays*

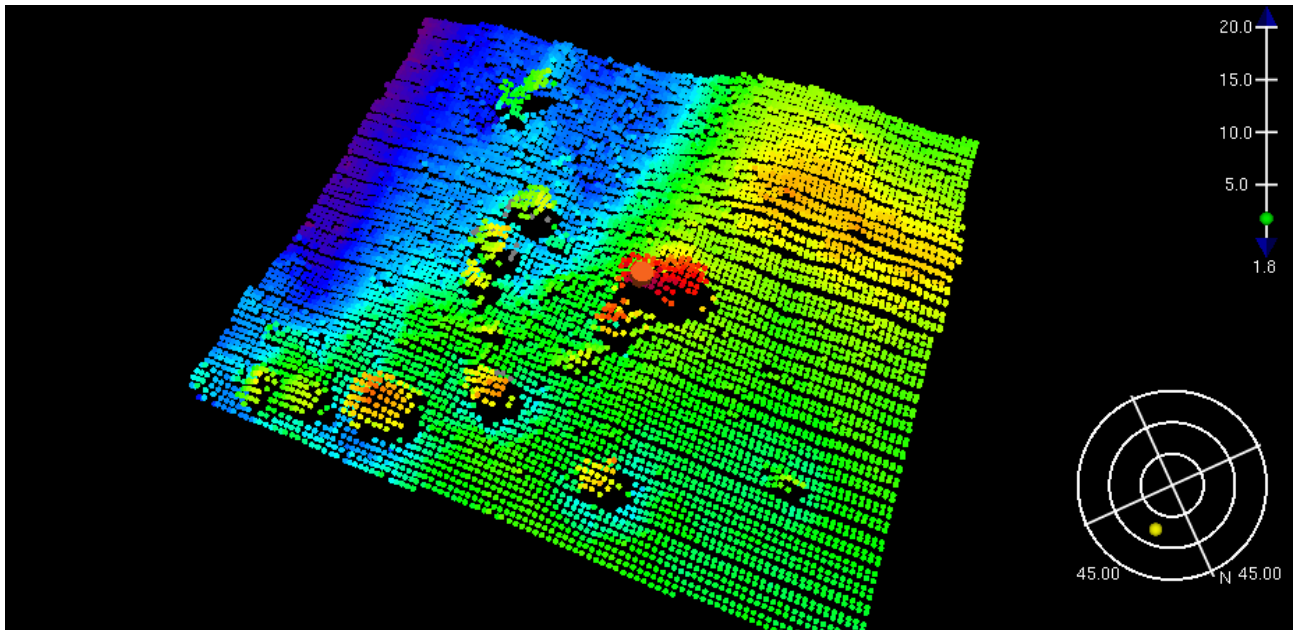


*H13543 Artifact example*

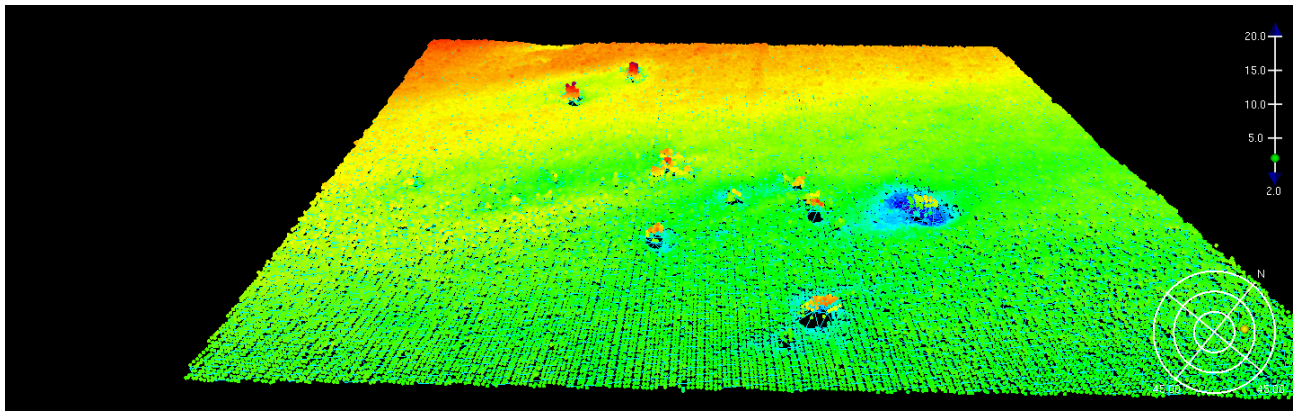




*Feature on H13543*



*Feature on H13543*



*H13543 possible crab pots*

This survey does meet charting specifications and is adequate to supersede prior data.