W00612

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

DESCRIPTIVE REPORT

Type of Survey: Habitat Mapping

Registry Number: W00612

LOCALITY

State(s): Florida

General Locality: Gulf of Mexico

Sub-locality: De Soto Canyon

1997

CHIEF OF PARTY
Kathryn M. Scanlon

LIBRARY & ARCHIVES

Date:

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

REGISTRY NUMBER:

HYDROGRAPHIC TITLE SHEET

W00612

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:	**De Soto Canyon**
Scale:	**175000**
Dates of Survey:	**03/20/1997 to 03/31/1997**
Instructions Dated:	**N/A**
Project Number:	**ESD-PHB-22**
Field Unit:	**US Geological Survey**
Chief of Party:	**Kathryn M. Scanlon**
Soundings by:	**Unknown Unknown** (**SBES**)
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 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.

DESCRIPTIVE REPORT MEMO

August 09, 2022

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM: Report prepared by PHB on behalf of field unit
Kathryn M. Scanlon
Chief of Party, US Geological Survey

SUBJECT: Submission of Survey W00612

From the Introduction section of the Cruise Report (https://pubs.usgs.gov/of/1999/of99-589/htm/interp.htm):

"The U.S. Geological Survey (USGS), in cooperation with the National Oceanographic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), and Florida State University (FSU), collected the data presented here as part of a larger study of seafloor habitats on the shelf edge of the northeastern Gulf of Mexico. It is a pilot study, carried out to demonstrate the utility of geologic mapping to fisheries management issues. This report contains sidescan-sonar mosaics, seismic-reflection profiles, texture and calcium carbonate content of sediment samples and interpretative maps of the seafloor morphology, sediments, and benthic habitats of the study area.

The study area is an approximately 150-km2 area along the shelf edge in the northeastern Gulf of Mexico. The site is on the eastern side of the DeSoto Canyon and 75 km due south of Cape San Blas on the Florida panhandle. Water depth ranges from about 50 meters (m) to 120 m. It was chosen because reports from fishermen suggested that high-relief rocky outcrops, which are preferred by gag grouper as spawning aggregation sites, would be abundant. The geologic maps help the fisheries biologists select station locations for ongoing monitoring studies and provide a basis for siting of future reserves."

A 4-meter VBES grid was provided to the Pacific Hydrographic Branch via the External Source Data Team.

All soundings were reduced to Mean Lower Low Water using VDatum. 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.

The original data was in ArcGIS shapefile format with longitude, latitude, and depth values (in WGS84 horizontal and LMSL vertical datums) listed in the attribute table. The attribute table was

exported to a CSV file, which was then converted to NAD83 UTM 16 horizontal datum using VDatum. The updated CSV file was then imported into CARIS Base Editor 5.5 as a point cloud CSAR file. This CSAR file was then imported as a 4 meter grid CSAR.

A separation file was created using the Pydro tool VDatum SEP from Shapefile in order to convert vertical datum from LMSL to MLLW. Due to a lack of full VDatum coverage, a small extension to the separation file was added using ArcGIS to fully cover the extents of this survey. The resulting SEP file was then imported into the CARIS Base Editor project, and a difference layer was created of the 4 meter CSAR in LMSL datum minus the SEP file. The result was the final 4 meter grid in MLLW vertical datum.

All survey systems and methods utilized during this survey were as described in the Cruise Report for this survey (https://pubs.usgs.gov/of/1999/of99-589/htm/interp.htm).

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

US Geological Survey acquired the data outlined in this report. Data are available at https://cmgds.marine.usgs.gov/fan_info.php?fan=1997-005-FA. Additional documentation from the data provider may be attached to this report.

In general, the depths in the 4-meter gridded surface show good agreement with the latest ENCs US3GC05M and US3GC06M. Given that this data is more recent and has been evaluated to be of higher quality than currently charted data, it is recommended that this data supersede charted depths in the common area.

This survey does meet charting specifications and is adequate to supersede prior data. This ESD survey is higher quality and more recent than the currently charted data (CATZOC C, 1940-1949). It is recommended that this survey supersede charted data in the common area and be designated as CATZOC B.