Onslow Bay Bathymetry

File or table name: Onslow Bay Bathymetry

Abstract: Bathymetry data are from the shallow (-2 to -11.5m, NAVD88) region of Onslow Bay, adjacent to Onslow Beach, NC. Data were collected in 2007 using a high-resolution (234 kHz) Sea Swath Plus Interferometric swath bathymetric profiler with co-registered side-scan sonar. Line spacing ranged from 50-150m to allow for nearly complete coverage of the seafloor, minimizing data holidays. The position of each data point was related to NAD83 using RTK-GPS. Vessel heave, pitch, and roll were corrected in real-time using an IXSEA Octans motion sensor. Seafloor depths were corrected to NAVD88 using Hypack software. Data were initially processed and gridded using proprietary software at a 2-m resolution, and were despiked, filtered, and smoothed. For purposes of nearshore-wide bathymetric mapping, the data were later gridded using Fledermaus IVS 7.0.1 Pro using a weighted moving average at a resolution of 5m7wt. Data span the nearshore off of Onslow Beach as well as the portions of New River Inlet.

FGDC and ESRI Metadata:

- Identification Information
- Distribution Information
- Metadata Reference Information

Metadata elements shown with blue text are defined in the Federal Geographic Data Committee's (FGDC) *Content Standard for Digital Geospatial Metadata (CSDGM)*. Elements shown with green text are defined in the *ESRI Profile of the CSDGM.* Elements shown with a green asterisk (*) will be automatically updated by ArcCatalog. ArcCatalog adds hints indicating which FGDC elements are mandatory; these are shown with gray text.

Identification Information:

Citation:
Citation information:
Originators: McNinch, J.E. and Wadman, H.M.

Title:
REQUIRED: Onslow Bay Bathymetry
***File or table name:** Onslow Bay Bathymetry

Publication date: Data were finalized September, 2009.

Description:
Abstract:
Bathymetry data are from the shallow (-2 to -11.5m, NAVD88) region of Onslow Beach. Data were collected in 2007 using a high-resolution (234 kHz) Sea Swath Plus Interferometric swath bathymetric profiler with co-registered side-scan sonar. Line spacing ranged from 50-150m to allow for nearly complete coverage of the seafloor, minimizing data holidays. The position of each data point was related to NAD83 using RTK-GPS. Vessel heave, pitch, and roll were corrected in real-time using an IXSEA Octans motion sensor.

Seafloor depths were corrected to NAVD88 using Hypack software. Data were initially processed and gridded using proprietary software at a 2-m resolution, and were despiked, filtered, and smoothed. For purposes of nearshore-wide bathymetric mapping, the data were later gridded using Fledermaus IVS 7.0.1 Pro using a weighted moving average at a resolution of 5m7wt. Data span the nearshore off of Onslow Beach as well as the portions of New River Inlet.

Purpose:
Bathymetry data were collected in support of the Defense Coastal/Estuarine Research program. Bathymetry data were needed to help develop a sediment budget for Onslow Bay beach and nearshore environments, identify any potential bathymetric influences on adjacent shoreline behavior, and constrain a numerical run-up model.

*__Language of dataset:__ English

Time period of content:
Time period information:
Single date/time:
Calendar date: September, 2007

Currentness reference:
Data were collected in September, 2007

Status:
Progress: Bathymetry data have been fully processed and corrected.

Maintenance and update frequency: Data represent a single snapshot in time of the bathymetry of the nearshore of Onslow Beach. They are not maintained or updated.

Spatial domain:
Bounding coordinates:

*__West bounding coordinate:__ -77.35481756

*__East bounding coordinate:__ -77.20803646

*__North bounding coordinate:__ 34.52163644

*__South bounding coordinate:__ 34.55975416

Keywords:
Theme: Interferometric swath bathymetry of the Onslow Beach nearshore, NC.
Theme keywords: Interferometric, bathymetry, geoscientificInformation, oceans, nearshore

Place: Onslow Bay nearshore region (-2 to -11.5m water depth)

Place keywords: Camp Lejeune

Access constraints: The data user must inform the respective DCERP researcher, discuss collaboration, and receive approval for use of data.
Use constraints:
Use of the DCERP data is restricted to academic, research, educational, government, or other not-for-profit professional purposes. Distribution and/or release of this information and/or data for other purposes is prohibited.

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Contact person: REQUIRED: Heidi M. Wadman

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Data set credit:

This research was conducted under the Defense Coastal/Estuarine Research Program (DCERP), funded by the Strategic Environmental Research and Development Program (SERDP).

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Distribution Information:

Distribution liability:
DCERP data are provided for use only by the data user. Redistribution of the metadata or data is prohibited.

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Metadata Reference Information:

***Metadata date:** 20090616

***Language of metadata:** en

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***Metadata standard name:** FGDC Content Standards for Digital Geospatial Metadata
***Metadata standard version:** FGDC-STD-001-1998

***Metadata time convention:** local time

Metadata extensions:
***Online linkage:** http://www.esri.com/metadata/esriprof80.html
***Profile name:** ESRI Metadata Profile

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