

Title	NSW Marine LiDAR Topo-Bathy 2018 Geotif
Alternative title(s)	Coastal marine topographic and bathymetric surveys and imagery
Abstract	<p>Remotely sensed topographic (elevation) and bathymetric (depth) information were acquired for the NSW coast (Point Danger to Cape Howe) and southern Queensland (Palm Beach to Point Danger) using Airborne LiDAR Bathymetry (ALB - a combination of Light Detection And Ranging (LiDAR) and Laser Airborne Depth Sounding (LADS) sensors) during July - December 2018. Data were acquired by Fugro Pty Ltd on behalf of NSW Office of Environment and Heritage using a Riegl VQ-820-G ALB (LiDAR) and Fugro LADS High-Definition sensors aboard sub-contracted Corporate Air Cessna C441 (VH-VEH). Funding was provided through the NSW Coastal Reforms package. The objective of the project was to provide high-resolution data better than 3-5 m spaced soundings (0.5 m spot spacing terrestrial; 3.4 m spot spacing marine) from the mean high-water mark to ~200m inland, and from the shore, seaward (LADS - bathymetry) to the point of laser extinction (~20-40m water depth depending on in-water conditions). Positioning data were collected on the ellipsoid ITRF 2014 GRS80 in UTM Z56 and post-processed using local base stations (CORSnet NSW) to provide a Post Processed Kinematic GNSS solution for final aircraft trajectory before being applied to all data. The final data Geotif products are provided on the <a href="#">Geosciences Australia ELVIS website</a>. They are combined gridded terrestrial (elevation) and subtidal marine (bathymetry) data at 5 x 5 m (horizontal resolution) Geotifs exported using ESRI ArcMap from rasters (weighted average of clean soundings) in GDA 2020 (horizontal datum) to Australian Height Datum (vertical datum) and vertical precision to International Hydrographic Order (IHO) 1B. Data covers an area of 6862 km<sup>2</sup> provided in 48 sub-datasets the extents of which are generally defined in their alongshore extent by the boundaries of NSW Secondary Sediment Compartments (Geosciences Australia). Other data outputs will include raw and classified LAS format files, aerial imagery and raw seabed reflectance data to be made available shortly on the ELVIS website. Data packages containing Arc Grids (topo-bathy, contours), XYZ, KMZ, tif, pdf maps and Fledermaus SD files will be made publicly available via the AODN (<a href="#">Australian Ocean Data network</a>). Metadata, data quality statements and a geographical data coverage ArcGIS shapefile are available via <a href="#">SEED</a>. The data are intended to inform coastal and marine management and should not be used for navigation without additional processing.</p>

## Resource locator

<a href="#">Show on SEED Web Map</a>	<p>Name: Show on SEED Web Map</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Display dataset on SEED's map</p> <p>Function: download</p>
<a href="#">Data Quality Statement</a>	<p>Name: Data Quality Statement</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Data quality statement for Marine LiDAR</p> <p>Function: download</p>
<a href="#">Download Package</a>	<p>Name: Download Package</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Zipped folder including an ArcGIS shapefile of the spatial extent of the NSW Marine LiDAR Topo-Bathy 2018 Dataset (including Geotif extents)</p> <p>Function: download</p>
<a href="#">REST Service</a>	<p>Name: REST Service</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p>

NSW Marine LIDAR Topo-Bathy 2018 Geotif - REST  
Function: download

## Unique resource identifier

Code 45089194-912d-4ecf-8200-969e0796afee

Presentation form Multimedia digital

Edition v1.1

Dataset language English

## Metadata standard

Name ISO 19115

Edition 2016

Dataset URI <https://datasets.seed.nsw.gov.au/dataset/45089194-912d-4ecf-8200-969e0796afee>

Purpose Baseline data for coastal hazard management by state and local governments for Coastal Reforms. The data are intended to inform coastal and marine management including modelling of coastal and marine processes. The data should not be used for navigation without additional processing.

Status Completed

Spatial representation type grid

## Spatial reference system

Code identifying the spatial reference system 4283

Spatial resolution 5 m

Additional information source Extent along Australia's east coast if from Palm Beach in southeast Queensland to Cape Howe at the NSW/Victorian border from a minimum of 200m inland from the shore to point of LADS extinction (nominally 20-40m water depth) offshore.

## Topic category

### Keyword set

keyword value  
GEOSCIENCES-Geomorphology  
MARINE-Coasts  
MARINE-Geology-and-Geophysics  
MARINE-Reefs  
LAND-Topography  
PHOTOGRAPHY-AND-IMAGERY-Remote-Sensing

### Originating controlled vocabulary

Title	ANZLIC Search Words
Reference date	2008-05-16
<b>Geographic location</b>	
West bounding longitude	149.414062
East bounding longitude	154.423828
North bounding latitude	-37.801968
South bounding latitude	-27.465385
NSW Place Name	NSW coast
<b>Vertical extent information</b>	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
<b>Temporal extent</b>	
Begin position	2018-07-01
End position	N/A
<b>Dataset reference date</b>	
<b>Resource maintenance</b>	
Maintenance and update frequency	Unknown
<b>Contact info</b>	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	<a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>
Web address	<a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a>
Responsible party role	pointOfContact
<b>Lineage</b>	<p>Generally, the 2019 dataset is a 'one-off' collection but future collections may be added a later date, funding permitting. Some earlier LiDAR/LADS surveys collected 2008 and 2011 are also to be provided. Additional details on the systems, aircraft, specifications of sensors used, auxiliary data, processing, classification etc are provided in Report of Survey and associated reports. The final Report of Survey can be accessed via the OEH Offshore Mapping webpage and/or OEH IAR, ELVIS or AusSeabed websites or upon request. System installation occurred at Goulburn airport 3-10 July 2018 followed by verification flights with surveys commencing from Ballina airport 11 July 2018. A total of 93 flights were conducted from 11 July 2018 to 20 October 2018 followed by demobilisation 21-24 October 2018 in Goulburn. Data are processed by Fugro (Adelaide) and provided to OEH Jan-Jun 2019.</p>

Limitations on public access

Scope dataset

#### DQ Completeness Commission

Effective date 2019-08-20

Explanation Some additional datasets from earlier Marine LiDAR surveys (2008, 2011) are to be included; this survey (2018) contains some data from southern Queensland.

#### DQ Absolute External Positional Accuracy

Effective date 2019-06-20

Explanation 1m

#### Responsible party

Contact position Data Broker

Organisation name NSW Department of Climate Change, Energy, the Environment and Water

Telephone number 131555

Email address [data.broker@environment.nsw.gov.au](mailto:data.broker@environment.nsw.gov.au)

Web address <https://www.nsw.gov.au/departments-and-agencies/dcceew>

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Metadata date 2024-09-16T23:42:18.498934

Metadata language