

Name of dataset or data source:	Marine LiDAR classified point cloud data (LAS)
Custodian of the dataset or data source:	ED Science (E&H)
Description:	<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 data provided here are classified LAS format point clouds, subset into 1) 1 x 1 km tiles of classified height (combined topo-bathymetry) and 2) areas of reflectivity (strength of signal return) data, both in GDA 2020 (horizontal datum; Zones 55 or 56) at Australian Height Datum (vertical datum) with vertical precision to International Hydrographic Order (IHO) 1B. Point cloud data tied to GRS80 ellipsoid is also available. Reflectivity data is further subset into 1) LADS and 2) Riegel sensors. Data covers an area of 6862 km² and is subdivided into 48 sub-datasets, the extents of which are generally defined in their alongshore extent by the boundaries of NSW Secondary Sediment Compartments (Geosciences Australia). Each data file is prefixed with the compartment name and year of collection. Data provided are available on the ELVIS website (Geosciences Australia - https://elevation.fsdf.org.au). Metadata, data quality statements and geographical data coverage ArcGIS shapefiles are available via SEED https://www.seed.nsw.gov.au/edphome/home.aspx, as are links to the datasets. The data are intended to inform coastal and marine management and should not be used for navigation without additional processing.</p>
Data quality rating:	<ul style="list-style-type: none"> ★ Institutional Environment - 5 ★ Accuracy - 5 ★ Coherence - 5 ★ Interpretability - 5 ★ Accessibility - 5

INSTITUTIONAL ENVIRONMENT	Excellent ★
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- ✓ Does the information have the potential to enhance services or service delivery?
- ✓ The data aligns with the Data Quality Framework, including:

- Legislation
- Policies
- Information Asset Governance
- Standards
- Data Management Plans

✓ The following governance roles and responsibilities for this asset are clearly assigned:

- Information Asset Owner
- Information Asset Custodian
- Information Steward

✓ Data collection is authorised by law, regulation or agreement

✓ The Custodial agency has no commercial interest or conflict of interest in the data

ACCURACY

Excellent



✓ Data has been subject to a data assurance process (for example: Checking for errors at each stage of data collection and processing, or verifying data entry and making corrections if necessary.)

✓ Data is revised and the revision is published if errors are identified

✓ There are no known gaps in the data or if there are gaps (for example: non-responses, missing records, data not collected), they have been identified in caveats attached to the dataset.

✓ No changes have been made or other factors identified (for example: weighting, rounding, de-identification of data, changes or flaws in data collection or verification methods) that could affect the validity of the data; or any changes/factors have been identified in caveats attached to the asset.

✓ The data collection met the objectives of the primary user. The data correctly represents what it was designed to measure, monitor or report.

COHERENCE

Excellent



✓ Standard definitions, common concepts, classifications and data recording practices have been used.

✓ Elements within the data can be meaningfully compared.

✓ This data is generally consistent with similar or related data sources from the same discipline

✓ The data can be analysed over time (for example, there have not been any significant changes in the way items are defined, classified or counted over time).

✓ The data does not form part of a collection or, if it is the latest in a series of data releases, there have not been any changes in methodology or external impacts since the last data release.

INTERPRETABILITY

Excellent



✓ A data dictionary is available to explain the meaning of data elements, their origin, format and relationships

✓ Information is available about the primary data sources and methods of data collection (e.g. instruments, forms, instructions).

✓ Information is available to help users evaluate the accuracy of the data and any level of error

✓ Information is available to explain concepts, help users correctly interpret the data and understand how it can be used

✓ Information is available to explain ambiguous or technical terms used in the data

- i Find out more about the data dictionary from the Custodian (contact details below).
- i Find out more about the primary data sources and methods of data collection from the Custodian (contact details below).
- i Find out more about concepts used in this dataset and how to understand or interpret the data from the Custodian (contact details below).
- i Find out more about ambiguous or technical terms used in the data from the Custodian (contact details below).

ACCESSIBILITY

Excellent



- ✓ Data is available online with an open licence
- ✓ Data is available in machine-processable, structured form (e.g. CSV format instead of an image scan of a table)
- ✓ Data is available in a non-proprietary format (e.g. CSV, XML)
- ✓ Data is described using open standards (e.g. RDF, SPARQL) and persistent identifiers (URIs or DOIs)
- ✓ Data is linked to other data, to provide context (e.g. employee ID is linked to employee name or species name is linked to genus)

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For more information about this dataset or data source, contact:

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Data Broker email:

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131555

Understanding the Data Quality Statement

The data quality statement aims to help you understand how a particular dataset could be used and whether it can be compared with other, similar datasets. It provides a description of the characteristics of the data to help you decide whether the data will be fit for your specific purpose.

The Data Quality statement is prepared by the data custodian (provider of the dataset), using a questionnaire that has been developed in accordance with the NSW Government Standard for Data Quality Reporting.

About the quality rating:

The reporting questionnaire asks five questions for each of these data quality dimensions:

- Institutional Environment
- Accuracy
- Coherence
- Interpretability
- Accessibility

For each question: “yes” = 1 point; “no” = 0 points

The number of points determines the Quality Level for each dimension (high, medium, low).

Only dimensions with four or five points receive a star.

Points	Quality Level	Star / No Star
0	Poor	No Star
1	Poor	No Star
2	Fair	No Star
3	Good	No Star
4	Very Good	Star
5	Excellent	Star

Evaluating data quality

Quality relates to the data's “fitness for purpose”. Users can make different assessments about the data quality of the same data, depending on their “purpose” or the way they plan to use the data.

The following questions may help you evaluate data quality for your requirements. This list is not exhaustive. Generate your own questions to assess data quality according to your specific needs and environment.

- What was the primary purpose or aim for collecting the data?
- How well does the coverage (and exclusions) match your needs?
- How useful are these data at small levels of geography?
- Does the population presented by the data match your needs?
- To what extent does the method of data collection seem appropriate for the information being gathered?
- Have standard classifications (eg industry or occupation classifications) been used in the collection of the data? If not, why? Does this affect the ability to compare or bring together data from different sources?
- Have rates and percentages been calculated consistently throughout the data?
- Is there a time difference between your reference period, and the reference period of the data?
- What is the gap of time between the reference period (when the data were collected) and the release date of the data?
- Will there be subsequent surveys or data collection exercises for this topic?
- Are there likely to be updates or revisions to the data after official release?