



Australian Government

Geoscience Australia

# From Register to Real-World Use: Enhancing Vocabulary Register for Search, Access, and Integration

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Earth sciences for Australia's future | [ga.gov.au](http://ga.gov.au)



## Acknowledgement of Country

Geoscience Australia values the lands, water and sky as we work to deepen a shared understanding of Country and Earth.

We respect First Nations peoples and their enduring connection, contribution and obligations to Country. Reflecting on our shared history, we are committed to listen and learn.

Geoscience Australia: A Journey of Connection  
Artwork by Lani Balzan

# Persistent Identifiers in Action

Started publishing look up tables

- Supports PID usage
- Enhances data referencing and retrieval

PIDs now power hyperlinks in GA's services portal

- Ensures links remain stable and reliable over time

Hyperlinks direct users into concept scheme landing page

- Improves navigation and access to structured information

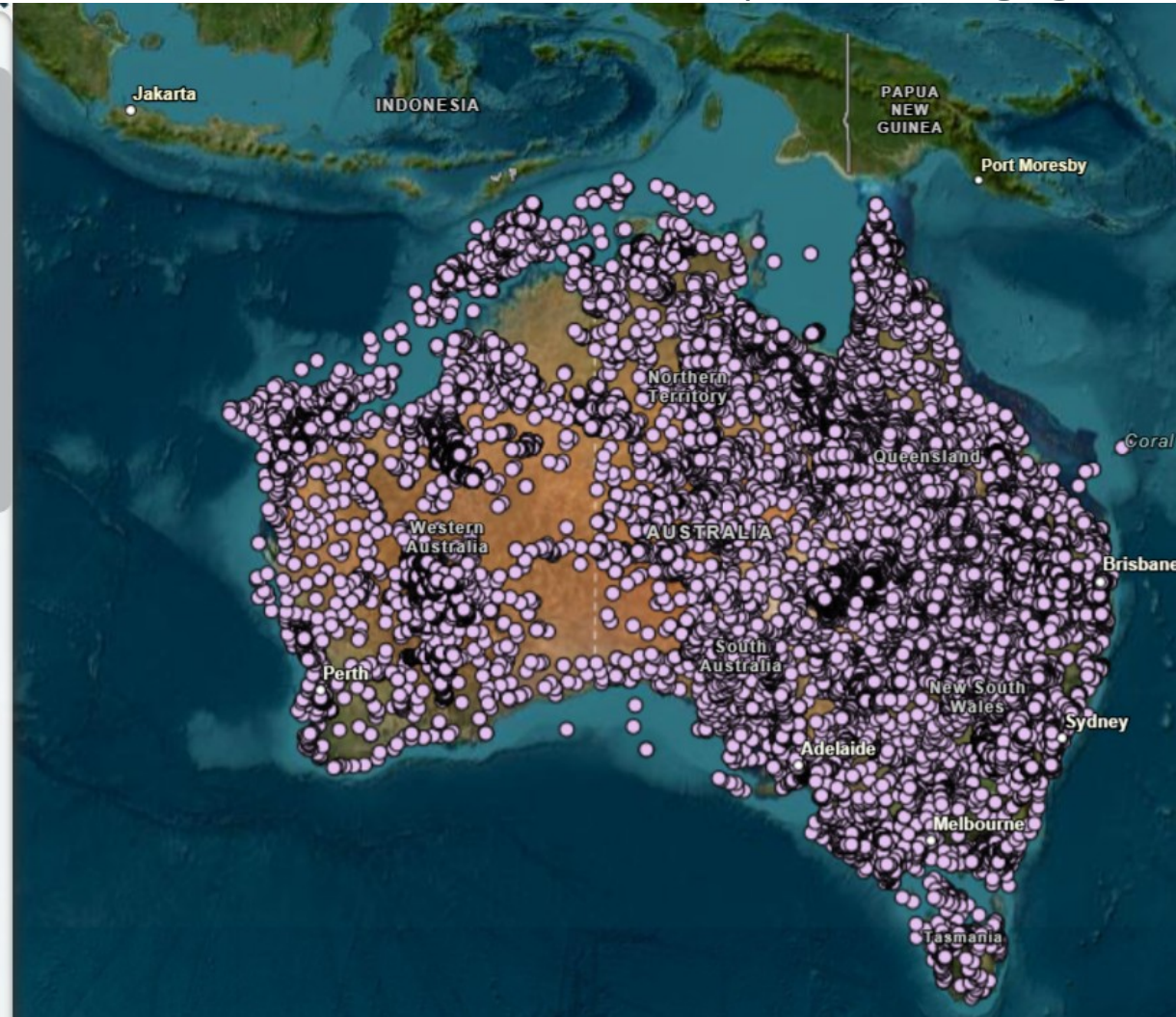
# Persistent Identifiers in Action

<https://services.ga.gov.au/>

**Map Layers** ▾

Search Map Layers  Search ...

- Administrative Boundaries >
- Boreholes, Drill Holes and Wells ▾
- National ▾
- Geoscience Australia (GA) ▾
- Geoscience Australia (GA) Borehole Construction Logs ☆ ⊕
- Geoscience Australia (GA) Borehole Directional Surveys ☆ ⊕
- Geoscience Australia (GA) Borehole Earth Material (Lithological) Logs ☆ ⊕
- Geoscience Australia (GA) Borehole Samples ☆ ⊕
- Geoscience Australia (GA) Borehole Stratigraphic Logs ☆ ⊕
- Geoscience Australia (GA) Boreholes ☆ ⊕
- Geoscience Australia (GA) Boreholes (GeoSciML-Lite) ☆ ⊕
- Geoscience Australia (GA) Boreholes (GeoSciML) ☆ ⊕
- GeoSciML >
- National Virtual Core Library (NVCL) >
- Offshore >
- Regional Studies and Compilations >
- State >



# Persistent Identifiers in Action



Geoscience Australia (GA) Boreholes	
General	
IDENTIFIER	<a href="http://pid.geoscience.gov.au/samplingFeature/au/BH534107">http://pid.geoscience.gov.au/samplingFeature/au/BH534107</a>
NAME	New Seaclem 1
PURPOSE	petroleum - exploration
STATUS	<b>abandoned</b>
OPERATOR	Advent Energy Ltd
DRILLER	Diamond Offshore
DRILLSTARTDATE	2010-12-14T13:00:00.000+00:00
DRILLENDDATE	2010-12-28T13:00:00.000+00:00
STARTPOINT	offshore
BOREHOLELENGT H_M	750
ELEVATION_M	-135
ELEVATION_SRS	<a href="http://www.opengis.net/def/crs/EPSSG/0/5711">http://www.opengis.net/def/crs/EPSSG/0/5711</a>
POSITIONALACCU RACY	100 metres
SOURCE	Geoscience Australia Borehole Database
METADATA_URI	<a href="http://pid.geoscience.gov.au/dataset/ga/126310">http://pid.geoscience.gov.au/dataset/ga/126310</a>
ENO	534107
GMLID	gsmp.boreholeview.534107
REPORTED_STAT US_DATE	2011-01-08T13:00:00.000+00:00
STATUS_DATE_Q UALIFIER	<b>estimated</b>
NVCLCOLLECTIO N	false

TENEMENT	PEP11
DATA_CUSTODIA N	Geoscience Australia
COLLAR_LONG_G DA94	152.3797
COLLAR_LAT_GD A94	-32.927695
COLLAR_EASTIN G_MGA94	442006.97
COLLAR_NORTHI NG_MGA94	6356559.5
UTM_ZONE	56
OBSERVATION_M ETHOD	<b>company supplied location, method unknown</b>
OBSERVATION_D ATE	2010-12-14T13:00:00.000+00:00
COUNTRY	AUS
STATE	NSW
GEOLOGICAL_PR OVINCES	Sydney Basin
LEGISLATION	<b>OPGSA</b>
RIG_NAME	Ocean Patriot
RIG_RELEASE_DA TE	2011-01-08T13:00:00.000+00:00
DEPTH_REF_POI NTS	rotary table, 21.5 m above lowest astronomical tide
LINKED_FILES	N
QA_STATUS	checked
BOREHOLE_REP ORT_URI	<a href="https://portal.ga.gov.au/bhcr/minerals/534107">https://portal.ga.gov.au/bhcr/minerals/534107</a>


# Persistent Identifiers in Action

<https://vocabs.ga.gov.au/>


## GA Vocabulary Register

Home

### abandoned

**IRI** <https://pid.geoscience.gov.au/def/voc/ga/BoreholeStatus/abandoned> 


**Type** [Concept](#)

**definition** 

All operations and activities are terminated. The operator has left the site with no intention of returning to the borehole. The borehole is not necessarily plugged. Similar to CoalLog status "completed".

**is in scheme** 

[Borehole Geology - Status](#) 

Further metadata 

# Schemas

<https://pid.geoscience.gov.au/>

## Data collections in this service

Name	Description
<a href="#">Field Site</a>	This collection contains field site locations for geological observations and physical samples collected by Geoscience Australia's geoscience surveys in Australia and Antarctica. Attributes provided in this collection include header information,...
<a href="#">Survey</a>	This collection contains airborne, land, and marine geophysical surveys conducted or managed by Geoscience Australia and its predecessor agencies, as well as surveys from State and Territory geological survey agencies. Attributes provided in this...
<a href="#">Gravity Station</a>	This collection contains a network of permanently placed and documented Benchmarks used to tie different gravity surveys to a common datum. The network was set up and is maintained by Geoscience Australia and its predecessor agencies, with help from...
<a href="#">Sample</a>	Information about samples of all types, eg. spot samples, or intervals down a wellbore or along a section. Includes information about location, sample type, sample ID, sampling method, sampling feature type, geological setting, and flags indicating...
<a href="#">Borehole</a>	This collection contains boreholes drilled by Geoscience Australia and its predecessor organisations (BMR, AGSO), all boreholes drilled in Australian Commonwealth offshore marine jurisdictions, and a selection of onshore boreholes drilled by...
<a href="#">Mineral Occurrence</a>	This collection contains point location and attribute information for mineral deposits, mineralised zones and mineral projects from Geoscience Australia's OZMIN database.
<a href="#">Mine</a>	This collection contains point location and attribute information for mines in Australia, including relevant commodities, operating status and geological information.

# Schemas

## Sample

### Schema

Name	Data Type	Comments	Mandatory
geometry	<a href="#">geometry</a>		
sampleno	NUMBER	Geoscience Australia's internal unique identifier for the sample.	Y
igsn	VARCHAR2	International Generic Sample Number. Unique alphanumeric identifier assigned under the IGSN scheme.	N
sample_id	VARCHAR2	Identifying number or code assigned to the sample in the field or laboratory.	N
eno	NUMBER	Geoscience Australia's internal unique identifier for the entity that was sampled from.	Y
sampling_feature_name	VARCHAR2	The name of the entity that was sampled, as stored in the Geoscience Australia database.	Y
sampling_feature_type	VARCHAR2	Type of entity that was sampled (e.g. BOREHOLE, FIELDSITE, SECTION).	N
sample_type	VARCHAR2	Term to describe the type of sample (e.g. borehole specimen, outcrop specimen, core, water specimen).	N
sampling_method	VARCHAR2	Term to describe the method by which the sample was collected (e.g. outcrop sampling, drilling, grab).	N
material_class	VARCHAR2	The type of material that was sampled (e.g. rock, sediment, water).	N
earth_materials	VARCHAR2	EARTH MATERIALS: Y if there is earth material data (e.g. lithology and associated qualifiers) occurs for the sample in Geoscience Australia's field geology database.	N
stratigraphic_unit	VARCHAR2	Name of the stratigraphic unit, as appears in the Australian Stratigraphic Units database (ASUD).	N
geological_province	VARCHAR2	Name given to a province, as appears in the Geoscience Australia's Provinces database.	N
sample_remark	VARCHAR2	Any additional comments or remarks about the sample including but not limited to extra earth materials or lithology	N

# Improved Navigation and Layouts

Vocabulary Register

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System Home

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Vocabularies

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Search

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SPARQL

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About the System

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VocExcel

## GA Vocabularies

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**URI**  
<https://vocabs.ga.gov.au>

**Description**  
 Vocabularies managed and published by Geoscience Australia.

**Members**

- Associated Resource Type
- Borehole Geology - Construction Material
- Borehole Geology - Construction Type
- Borehole Geology - Date Qualifier
- Borehole Geology - Directional Survey Azimuth
- Borehole Geology - Directional Survey Class
- Borehole Geology - Directional Survey Method
- Borehole Geology - Directional Survey Path Computing Method
- Borehole Geology - Directional Survey Recording Mode
- Borehole Geology - Drilling Methods
- Borehole Geology - Legislation
- Borehole Geology - Location Method
- Borehole Geology - Purpose
- Borehole Geology - Status
- Boreholes Organic Geochemistry - Source Rock Quality
- Field Geology - Contact Character
- Field Geology - Contact Type
- Field Geology - Field Site Purpose
- Field Geology - Field Site Type
- Field Geology - Landform Type
- Field Geology - Mode of Occurrence
- Field Geology - Proportion Terms

Old UI



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Vocabulary Registry Persistent Identity

Login

GA Vocabulary Register

[Home](#) > [Vocabularies](#)

## Vocabularies

Item	preferred label	type	Publisher	status	qualified derivat
<a href="#">Geoscience Australia Profile of QUDT Units</a>	Geoscience Australia Profile of QUDT Units	Concept Scheme	Geoscience Australia		
<a href="#">Borehole Geology - Construction Material</a>	Borehole Geology - Construction Material	Concept Scheme	Geoscience Australia		
<a href="#">Borehole Geology - Construction Type</a>	Borehole Geology - Construction Type	Concept Scheme	Geoscience Australia		
<a href="#">Borehole Geology - Purpose</a>	Borehole Geology - Purpose	Concept Scheme	Geoscience Australia		
<a href="#">Borehole Geology - Status</a>	Borehole Geology - Status	Concept Scheme	Geoscience Australia		

New UI

# More Metadata Fields



Contact Point



Publisher



Creator



Version



Multiple alternative labels

# Included Photographic Examples

## Crest

IRI <https://pid.geoscience.gov.au/def/voc/ga/SeabedGeomorphologyMorphology/crest>

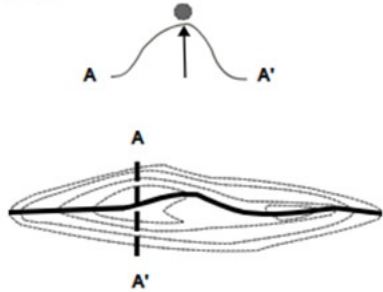
Type [Concept](#)

definition [↗](#) A line of highest elevation along a bathymetric high, the lateral position of which can vary longitudinally. CRESTS contrast with CENTRELINES, which define mid-line axes along elongated features.

is in scheme [↗](#) [Seabed geomorphology - Part 1 Morphology](#)

### Further metadata

image [↗](#)



is defined by [↗](#) [Seabed geomorphology - Part 1 Morphology](#)

is top concept in scheme [↗](#) [Seabed geomorphology - Part 1 Morphology](#)

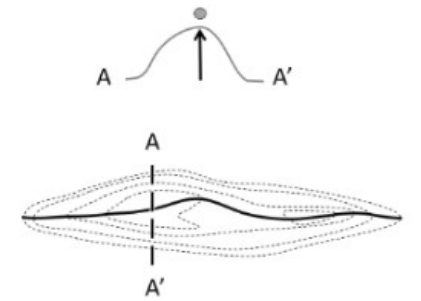
preferred label [↗](#) Crest

type [↗](#) [Concept](#)

## CREST

A line of highest elevation along a bathymetric high, the lateral position of which can vary longitudinally.

*CRESTS contrast with CENTRELINES, which define mid-line axes along elongated features.*



# Stronger Search Facility

## Search the GA Vocabulary Register



Matched on preferred label [↗](#)

[Seabed geomorphology - Part 2 Geomorphology](#) > [lagoon \(BGU\)](#) [↗](#)

*A stretch of usually saline water separated from the sea by a low BARRIER or coral REEF (Cf. REEF LAGOON - Biogenic; Goudie, 2006).*

Concept [↗](#) [i](#)

[Seabed geomorphology - Part 2 Geomorphology](#) > [reef lagoon \(BGU\)](#) [↗](#)

*Fully or partly enclosed shallow depressions in coral REEFs (Hopley, 2011; Maxwell, 1968).*

Concept [↗](#) [i](#)

[Seabed geomorphology - Part 2 Geomorphology](#) > [closed lagoon \(BGU-T\)](#) [↗](#)

*A LAGOON that is isolated from the sea by a BARRIER.*

Concept [↗](#) [i](#)

[Seabed geomorphology - Part 2 Geomorphology](#) > [open lagoon \(BGU-T\)](#) [↗](#)

*A LAGOON that is open to tidal exchange via a narrow tidal inlet, or channel through a BARRIER.*

Concept [↗](#) [i](#)

[Seabed geomorphology - Part 2 Geomorphology](#) > [intermittently closed and open lagoon \(BGU-T\)](#) [↗](#)

*A LAGOON that switches from being open and closed to tidal exchange, due to fluctuations in freshwater input.*

Concept [↗](#) [i](#)

Per page 20 [v](#)

# Stronger Search Facility

## Search the GA Vocabulary Register

 × 🔍

[Seabed geomorphology - Part 2 Geomorphology](#) > [beachface \(BGU\)](#) 🔗

*The coastal area between the low-tide shoreline (SHOREFACE) and the maximum height of wave effect.*

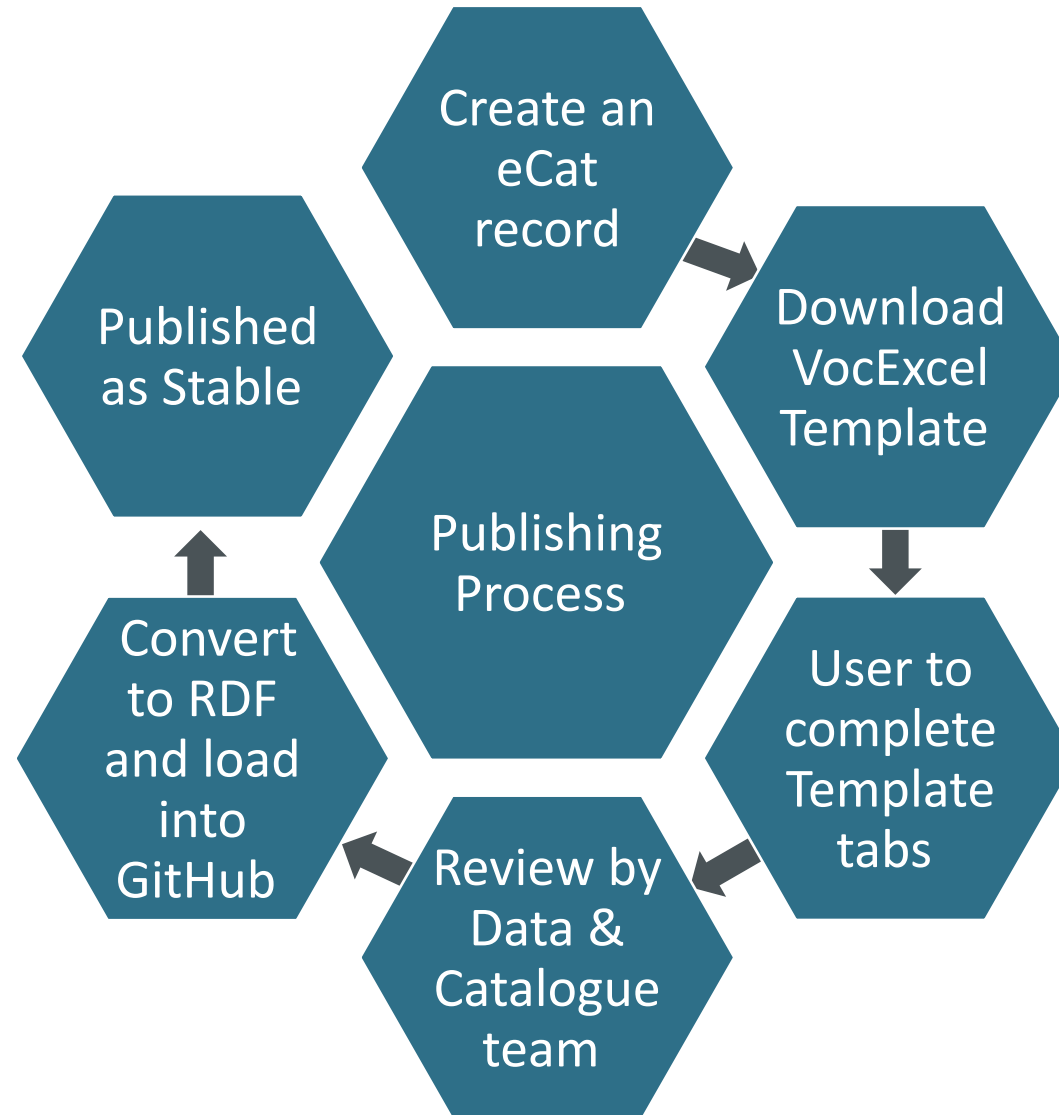
Matched on alternative label 🔗

Concept 🔗 ⓘ

Per page 20 ▾

Showing 1 to 1 of 1 items

# Publishing Process



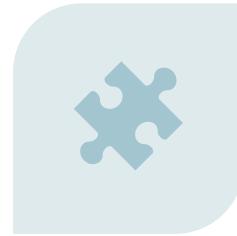
# Why Does this Matter?



Communicating  
terms used hidden  
behind access  
constraints



Supporting  
FAIR principles



Internal  
consistency &  
long-term  
management



Enabling data  
interoperability  
& improve  
cross domain  
search tools



Shared  
understanding &  
consistency  
among scientific  
communities

# Where We're Headed

- High Level Themes
- Remediate RDF files
- Build in-house capability to manage photos
- Steer away from direct GitHub interaction
- Enhance the database descriptions
- Hover over definitions in portal
- Streamline keywords in the Data & Discovery Portal





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# Thank You



## Further information

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[data@ga.gov.au](mailto:data@ga.gov.au)



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