
GeoMAP

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1.1 Citation and Metadata

Cox, Simon Christopher; Smith Lyttle, Belinda; Elkind, Samuel; Smith Siddoway, Christine; Morin, Paul; Capponi, Giovanni; Abu-Alam, Tamer; Ballinger, Matilda; Bamber, Lauren; Kitchener, Brett; Lelli, Luigi; Mawson, Jasmine F; Millikin, Alexie; Dal Seno, Nicola; Whitburn, Louis; White, Tristan; Burton-Johnson, Alex; Crispini, Laura; Elliot, David; Elvevold, Synnove; Goodge, John W; Halpin, Jacqueline A; Jacobs, Joachim; Mikhalsky, Eugene; Martin, Adam P; Morgan, Fraser; Smellie, John; Scadden, Phil; Wilson, Gary (2023). Lower Hutt, New Zealand. GNS Science. Release v.2022-08.

Metadata: [doi:10.21420/7SH7-6K05](https://doi.org/10.21420/7SH7-6K05)

1.2 Documentation created by Sam Elkind

LINKS TO GEOMAP RESOURCES

- [SCAR GeoMAP Action Group homepage](#)
- [Antarctic Explorer](#)
- [View a Map of the Data Here](#)
- [Download the Data Here](#)
- [GeoMAP Metadata](#)
- [GeoSciML](#)

DOCUMENTATION PAGES

ATA_GeoMAP_geological_units:

- *Geology Field Glossary*

ATA_GeoMAP_legends:

- *Legends*

ATA_GeoMAP_sources:

- *Source Field Glossary*
- *Published Papers*
- *Published Maps*
- *GIS Datasets*
- *Theses*
- *Unpublished Works*
- *Unknown Works*

ATA_GeoMAP_faults:

- *Faults Field Glossary*

ATA_GeoMAP_quality:

- *Quality Field Glossary*

Restricted Value Lists:

- *Restricted Values*

3.1 Geological Units Field Glossary

3.1.1 MAPSYMBOL

- **Reference:** Restricted text that contains the unique code for this geologic unit. For GeoMAP the first letters will be Chronostratigraphic subdivision (AGECODE), then a Lithostratigraphic based on dominant types of rock then subordinate rocks (LITHCODE).
- **Type:** Text
- **Length:** 20.0
- **Field Values:** *List of Values*

- **GSA Alias:** mapSymbol
- **fieldSource:** GMNZ

More Information:

- **Unique Values:** 186
- **Most frequently occurring value:** KCzv
- **Number of values with a single occurrence:** 5

3.1.2 PLOTSYMBOL

- **Reference:** Restricted text that contains the code based on MAPSYMBOL that can be used to aggregate similar geological units to assign cartographic colour
- **Type:** Text
- **Length:** 20.0
- **Field Values:** [List of Values](#)
- **GSA Alias:** plotSymbol
- **fieldSource:** GMNZ

More Information:

- **Unique Values:** 198
- **Most frequently occurring value:** KCzv
- **Number of values with a single occurrence:** 6

3.1.3 NAME

- **Reference:** Free text containing name of the geologic unit and conforming to the GeoSciML usage of name.
- **Type:** Text
- **Length:** 255.0
- **GeoSciML Name:** name
- **GSA Alias:** name
- **fieldSource:** GeoSciML

More Information:

- **Unique Values:** 789
- **Most frequently occurring value:** outcrop of unknown rock type
- **Number of values with a single occurrence:** 44

- **Number of values with a single occurrence:** 0

3.1.16 TYPENAME

- **Reference:** Restricted text that describes the type of geologic unit and conforming to GeoSciML usage of geologicUnitType.
- **Type:** Text
- **Length:** 50.0
- **Field Values:** [List of Values](#)
- **Source:** Must match entryname of TYPE_URI
- **GeoSciML Name:** geologicUnitType
- **GSA Alias:** geologicUnitType
- **fieldSource:** GeoSciML

More Information:

- **Unique Values:** 5
- **Most frequently occurring value:** lithostratigraphic unit
- **Number of values with a single occurrence:** 0

3.1.17 TYPE_URI

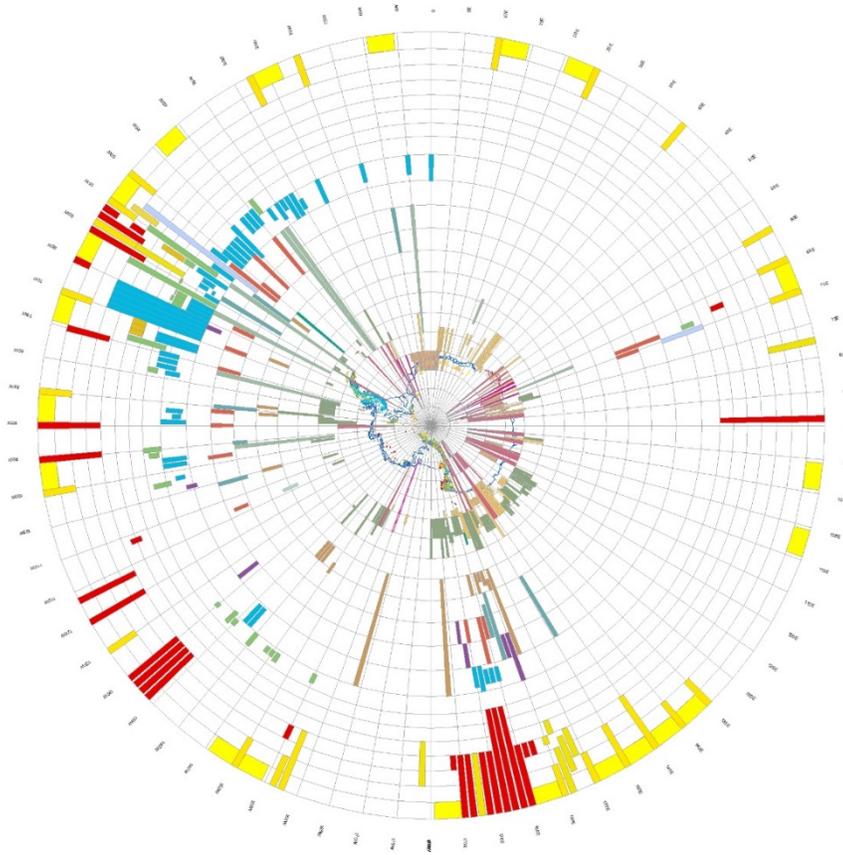
- **Reference:** Restricted text that contains a link to the GeoSciML definition of the geologicUnitType. Must be a valid URI from:
- **Type:** Text
- **Length:** 255.0
- **Field Values:** [List of Values](#)
- **Source:** <http://resource.geosciml.org/classifier/cgi/geologicunittype>
- **GeoSciML Name:** geologicUnitType_uri
- **GSA Alias:** geologicUnitType_uri
- **fieldSource:** GeoSciML

More Information:

- **Unique Values:** 5
- **Most frequently occurring value:** http://resource.geosciml.org/classifier/cgi/geologicunittype/lithostratigraphic_unit
- **Number of values with a single occurrence:** 0

3.3 Chrono-spatial Legend

3.3.1 Antarctic Polar Stereographic



3.4 Ages and Age codes

3.4.1 ARCHEAN (A)

3.4.2 PROTEROZOIC (Rz)

- Paleoproterozoic (L)
- Mesoproterozoic (M)
- Neoproterozoic (N)

3.4.3 PALEOZOIC (Pz)

- Cambrian (E)
- Ordovician (O)
- Silurian (S)
- Devonian (D)
- Carboniferous (C)
- Permian (Y)

3.4.4 MESOZOIC (Mz)

- Triassic (T)
- Jurassic (J)
- Cretaceous (K)

3.4.5 CENOZOIC (Cz)

- Paleogene (P)
- Neogene (G)
- Quaternary (Q)
- Holocene (H)
- Uncertain (?)

3.5 Lithologies and Lith codes

3.5.1 SEDIMENTARY ROCKS:

- unconsolidated sediments (c)
- mudstone, siltstone, sandstone, conglomerate (s)
- limestone (l)
- volcanogenic sediments (j)
- mixed sediments and volcanic rocks (w)

3.5.2 VOLCANIC ROCKS:

- felsic (f)
- intermediate (a)
- mafic to ultramafic (b)
- felsic to mafic (v)

3.5.3 INTRUSIVE ROCKS:

- felsic (g)
- mixed intrusives (i)
- intermediate (h)
- mafic (d)
- mafic to ultramafic (u)

3.5.4 METAMORPHIC ROCKS:

- Low-medium grade (p)
 - metacarbonate (m)
 - siliciclastic (y)
 - hornfels (o)
 - volcanic rocks (t)
 - felsic to intermediate intrusive rocks (r)
 - mafic to ultramafic (e)
- High-grade (n)
 - quartzite (q)
 - complexes (x)
- Fault/Shear rocks
 - tectonics(z)

