

Metadata format: ISO 19139**ATA GeoMAP quality (v.2022-08)****ISO 19139 metadata content**

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Resource Identification Information

CITATION

TITLE ATA GeoMAP quality (v.2022-08)

CREATION DATE 2022-07-28

PRESENTATION FORMAT mapDigital

COLLECTION TITLE ATA SCAR GeoMAP Geology (v.2022-08)

OTHER CITATION DETAILS GeoMAP Team Compilers: S.C. Cox, B. Smith Lyttle (GNS Science) 'Engine room' Workers: T. Abu-Alam (Norway), M. Ballinger (Australia), L. Bamber (UK), S. Elkind (USA), B. Kitchener (Australia), L. Lelli (Italy), J. Mawson (NZ), A. Millikin (USA), N. Dal Seno (Italy), L. Whitburn (NZ), T. White (USA) Principal Collaborators: A. Burton-Johnson (UK), G. Capponi (Italy), L. Crispini (Italy), D. Elliot (USA), S. Elvevold (Norway), J. Goodge (USA), J. Halpin (Australia), A. Läufer (Germany), E. Mikhalsky (Russia), P. Morin (USA), C. Siddoway (USA), A. Martin (NZ), F. Morgan (NZ) Scientific and Technical Advisors: J. Galindo-Zaldívar (Spain), D. Heron (NZ), J. López-Martínez (Spain), W.B. Lyons (USA), P. Morin (USA), N. Pant (India), M. Rattenbury (NZ), O. Raymond (Australia), P. Scadden (NZ), B. Storey (NZ), G. Wilson (NZ)

THEMES OR CATEGORIES OF THE RESOURCE geoscientificInformation

PLACE KEYWORDS

KEYWORDS Antarctica

DESCRIPTIVE KEYWORDS

KEYWORDS Downloadable Data

THESAURUS ArcIMS Metadata Service Content Types

ABSTRACT

This layer comprises a quality assessment of the compiled data for SCAR GeoMAP v.2022-08 geological dataset of Antarctica. It represents an assessment of the extent of data captured, and an assessment of attributed information of this area as a gridded dataset, made by the compiler of this dataset. It is intended that this will provide an indicative assessment of the quality of the dataset for end users, together with information on regions that would benefit from further investigation. These data comprise polygon geometry with each polygon having attributes describing an assessment of quality the encompassed area based on the capture of rock outcrop geology, fault and structural measurement mapping,

and supporting comments. Each polygon covers a grid area of 1 degree of longitude and 15 minutes of latitude. The relative 'quality' is ranked on a scale from 5 to 1, where 5 is highest. Bedrock geology has been captured from mapping at 1:250,000 or more detailed; Cover sequences and occurrence of seasonal water have been reviewed and classified from ground studies, or aerial or satellite imagery; faults and structural data have been captured; rock outcrop polygon areas have been checked against LIMA or other satellite imagery (accurate to +/-100m); links to a source bibliography are complete. 4. Bedrock geology has been captured from mapping at regional scale (mostly less than 1:250,000); Cover sequences and occurrence of seasonal water have been reviewed and classified from aerial or satellite imagery, but there may not be local studies to constrain age; faults and structural data will generally have been captured; rock outcrop polygon areas have been checked against LIMA or other satellite imagery (accurate to +/-200m); links to a source bibliography are complete. 3. Bedrock geology has been captured from mapping at regional scale (mostly greater than 1:250,000); Cover sequences and seasonal water have been mapped but information for classification is limited; some faults and structural data have been captured; there has been some checking of rock outcrop polygon areas against satellite imagery (accurate to +/-500m); further links to bibliographic sources could be added. 2. Bedrock geology may be well-constrained, or alternatively interpreted at large scale mapping (e.g. greater than 1:1,000,000); There has been very limited review of cover sequences and seasonal water; faults and structural data are unlikely to have been captured; rock outcrop polygon areas could be improved by checking against satellite imagery (only accurate to +/-1000m). 1. is lowest. Quality rank refers to the early stages of work where little or no information has been attributed to rock outcrop polygons; and polygons have not been checked for their locational position and/or shape. In some places there is no information to assign (where outcrops may not have been visited or had geology inferred) in which case polygons have been attributed as 'unknown'. There are still quite a few places in Antarctica where an entire 1 degree x 15 minute grid polygon appears to be unknown and quality = 1. A quality rank of 0 indicates that no mapable geological feature is recorded in this area. The GeoMAP dataset was produced as part of the Regional Geological Map Archive and Datafile, one of the Nationally Significant Collections and Databases supported by the New Zealand Government's Strategic Science Investment Fund (contract C05X1701). DOI <https://doi.org/10.21420/7SH7-6K05>

PURPOSE

This vector data layer spatially represents the coverage, quality assessment and completeness of geological data capture for the compilation of the GeoMAP v.2022-08 geological database.

DATASET LANGUAGE English

DATASET CHARACTER SET utf8

RESOURCE CONSTRAINTS

CONSTRAINTS

LIMITATIONS OF USE

This material is licensed under a Creative Commons Attribution 4.0 International License. Acknowledging the source of data from both GNS Science and SCAR (The Scientific Committee on Antarctic Research) is requested. The following citation is suggested:

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): The GeoMAP (v.2022-08) continent-wide detailed geological dataset of Antarctica. PANGAEA, <https://doi.org/10.1594/PANGAEA.951482>

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RESOURCE CONSTRAINTS

LEGAL CONSTRAINTS

ACCESS CONSTRAINTS otherRestrictions

OTHER CONSTRAINTS

Public Domain Dedication

SPATIAL REPRESENTATION TYPE vector

PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.8.1.14362

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT CONTAINS THE RESOURCE true

WEST LONGITUDE -180

EAST LONGITUDE 180

NORTH LATITUDE -48.462851

SOUTH LATITUDE -90

CREDITS

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).

POINT OF CONTACT - POINTOfCONTACT

INDIVIDUAL'S NAME GMNZ Data Manager

ORGANIZATION'S NAME GNS Science

CONTACT INFORMATION

PHONE

VOICE +6445701444

ADDRESS

DELIVERY POINT PO Box 30368

CITY Lower Hutt

POSTAL CODE 5040

COUNTRY NEW ZEALAND

E-MAIL ADDRESS spatialdata@gns.cri.nz

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Spatial Representation - Vector

LEVEL OF TOPOLOGY FOR THIS DATASET geometryOnly

GEOMETRIC OBJECTS

OBJECT TYPE composite

OBJECT COUNT 43201

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Reference System Information

REFERENCE SYSTEM IDENTIFIER
VALUE 3031

CODESPACE EPSG
VERSION 6.7(9.0.0)

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Data Quality Information

SCOPE OF QUALITY INFORMATION
RESOURCE LEVEL dataset

LINEAGE

LINEAGE STATEMENT

GeoMAP v.2022-08 supercedes an earlier beta version (v.2019-07) made available at the XIII International Symposium on Antarctic Earth Sciences (ISAES), Incheon, Republic of Korea 22-26 July 2019.

This release v.2022-08 updates and corrects the dataset following informal feedback and peer review, and/or improves local areas with more attention to detail.

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Distribution Information

FORMAT
NAME File Geodatabase Feature Class
VERSION 10.5.1.7333

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Metadata Information

LAST UPDATE 2022-08-16
MAINTENANCE
UPDATE FREQUENCY asNeeded

METADATA CONTACT - POINTOFCONTACT

INDIVIDUAL'S NAME GMNZ Data Manager
ORGANIZATION'S NAME GNS Science
CONTACT'S POSITION Custodian

CONTACT INFORMATION

PHONE
VOICE +6445701444

ADDRESS

DELIVERY POINT PO Box 30368
CITY Lower Hutt

POSTAL CODE 5040
COUNTRY NEW ZEALAND
E-MAIL ADDRESS spatialdata@gns.cri.nz

ONLINE RESOURCE
FUNCTION PERFORMED information

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset
SCOPE NAME dataset

METADATA LANGUAGE English
METADATA CHARACTER SET utf8

NAME OF THE METADATA STANDARD USED ISO 19139 Geographic Information - Metadata -
Implementation Specification
VERSION OF THE METADATA STANDARD 2007

METADATA IDENTIFIER 5FBC628F-92C6-499D-B1A3-232E679E34A7
PARENT IDENTIFIER 333C1D5A-1F80-4ED2-B6A6-52AB2B03A52F

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