

NZ Airborne Gravity Free-Air Anomalies at Ground Surface (2013-2014)

Metadata

File Identifier

cca2de2c-5f44-bfa5-be36-e1209a08e22c

Language

eng

Character Set

Character Set Code

utf8

Hierarchy Level

Scope Code

dataset

Hierarchy Level Name

dataset

Contact

Responsible Party

Individual Name

omit

Organisation Name

LINZ - Land Information New Zealand

Position Name

Chief Geodesist - National Geodetic Office

Contact Info

Contact

Phone

Telephone

Voice

04 4600110

Address

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Delivery Point

155 The Terrace

City

Wellington

Postal Code

6011

Country

New Zealand

Electronic Mail Address

info@linz.govt.nz

Role

Role Code

resourceProvider

Date Stamp

Date

2017-02-03

Metadata Standard Name

ANZLIC Metadata Profile: An Australian/New Zealand Profile of AS/NZS ISO 19115:2005,
Geographic information - Metadata

Metadata Standard Version

1.1

Reference System Info

Reference System

Reference System Identifier

Identifier

Code

4167

Identification Info

Data Identification

Citation

Citation

Title

NZ Airborne Gravity Free-Air Anomalies at Ground Surface (2013-2014)

Date

Abstract

****Introduction**** This dataset provides a 1 arc minute raster image of the free-air gravity anomalies, which have been downward continued to the ground surface (McCubbine et al, 2017). ****Description**** Gravity anomalies are differences between measured gravity (from the airborne gravity dataset) and an ellipsoidal model of the Earth's gravity field (GRS80). Gravity anomalies correspond to un-modelled density variations within the Earth's crust and upper mantle. They are used to investigate concealed geological structures and for quasigeoid modelling. These free-air anomalies show values which include gravitation impact of the topography. The national airborne gravity dataset is comprised of more than 50,000 linear km of flight observations, covering the three main islands of New Zealand and up to 10km

offshore. As the airborne gravity dataset was measured at flight altitude, the observations have been reduced to the ground surface (a process known as downward continuation). The national airborne gravity dataset was collected as a joint project between Land Information New Zealand (LINZ), GNS Science (GNS) and Victoria University of Wellington (VUW). The airborne survey was completed in a total of eight months, over two campaigns: August – October 2013, and February – June 2014. **Users may also be interested other layers created for Bouguer anomalies at ground surface and the along track observations from the gravity flight lines at flight elevation** [NZ Airborne Gravity Bouguer Anomalies at Ground Surface (2013-2014)](<https://data.linz.govt.nz/layer/3530>) and [NZ Airborne Gravity Flight Lines at Elevation (2013-2014)](<https://data.linz.govt.nz/layer/3531>). McCubbine, J. Stagpoole, V. Caratori-Tontini, F. Amos, M. Smith, E. and Winefield, R. (2017). Gravity anomaly grids for the New Zealand region. Manuscript submitted for publication New Zealand Journal of Geology and Geophysics.

Purpose

Purpose of this dataset is to supply the national airborne gravity dataset for use in geophysical research and mapping.

Credit

GNS Science

Credit

Victoria University of Wellington

Credit

Land Information New Zealand

Status

Progress Code

completed

Point Of Contact

Responsible Party

Individual Name

Omit

Organisation Name

LINZ - Land Information New Zealand

Position Name

Chief Geodesist - National Geodetic Office

Contact Info

Contact

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Electronic Mail Address

info@linz.govt.nz

Role

Role Code

pointOfContact

Point Of Contact

Responsible Party

Individual Name

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Organisation Name

LINZ - Land Information New Zealand

Position Name

Chief Geodesist - National Geodetic Office

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Postal Code

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Country
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Electronic Mail Address
info@linz.govt.nz

Role
Role Code
resourceProvider

Resource Maintenance
Maintenance Information
Maintenance And Update Frequency
Maintenance Frequency Code
monthly

Resource Format
Format
Name
*.xml
Version
Unknown

Descriptive Keywords
Keywords
Keyword
New Zealand
Type
Keyword Type Code
theme

Thesaurus Name
Citation
Title
ANZLIC Jurisdictions

Date

Edition
Version 2.1

Edition Date
Date
2008-10-29

Identifier
Identifier
Code
<http://asdd.ga.gov.au/asdd/profileinfo/anzlic-jurisdic.xml#anzlic->

jurisdic

Cited Responsible Party

Responsible Party

Organisation Name

ANZLIC the Spatial Information Council

Role

Role Code

custodian

Descriptive Keywords

Keywords

Keyword

GEOSCIENCES-Geophysics

Keyword

LAND-Geodesy

Type

Keyword Type Code

theme

Thesaurus Name

Citation

Title

ANZLIC Search Words

Date

Edition

Version 2.1

Edition Date

Date

2008-05-16

Identifier

Identifier

Code

<http://asdd.ga.gov.au/asdd/profileinfo/anzlic-theme.xml#anzlic-theme>

Cited Responsible Party

Responsible Party

Organisation Name

ANZLIC the Spatial Information Council

Role

Role Code

custodian

Resource Constraints

Security Constraints

Classification

Classification Code

unclassified

Resource Constraints

Legal Constraints

Use Limitation

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Use Constraints

Restriction Code

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Legal Constraints

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Use Constraints

Restriction Code

license

1.8

Language

eng

Character Set

Character Set Code

utf8

Topic Category Code

geoscientificInformation

Extent

EX _ Extent

Geographic Element

EX _ Geographic Description

Identifier

Authority

Citation

Title

ANZMet Lite Country codelist

Date

Edition

Version 1.0

Edition Date

Date

2009-03-31

Identifier

Identifier

Code

<http://asdd.ga.gov.au/asdd/profileinfo/anzlic-country.xml#Country>

Cited Responsible Party

Responsible Party

Organisation Name

ANZLIC the Spatial Information Council

Role

Role Code

custodian

Code

nzl

Extent

EX _ Extent

Geographic Element

EX _ Geographic Bounding Box

163.983413179.483723-47.99976-32.99946

Distribution Info

Distribution

Transfer Options

Digital Transfer Options

On Line

Online Resource

Linkage

URL

<https://data.linz.govt.nz/layer/53532-nz-airborne-gravity-free-air-anomalies-at-ground-surface-2013-2014/>

Data Quality Info

DQ _ Data Quality

Scope

DQ _ Scope

Level

Scope Code

dataset

Level Description

Scope Description

Other

dataset

Lineage

LI _ Lineage

Statement

This dataset is comprised of the downward continued free-air anomalies from the national airborne gravity survey. The downward continued process was completed using least squares collocation, a process which grids the dataset while reducing the data observed at elevation to the ground surface. The airborne survey was observed over a period of eight months, over two campaigns: August – October 2013, and February – June 2014.

Metadata Constraints

Security Constraints

Classification

Classification Code

unclassified

Metadata Constraints

Legal Constraints

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