### ISO Geodetic Registry

Item class Transformation

Name GDA2020 to AVWS - NHt [GA v1]

Item status INVALID Identifier 791

Alias Australian Geodetic Quasi-Geoid

Alias AGQG

Alias AGQG\_20191107

Information source Title AGQG\_20191107.gsb
Author Geoscience Australia

Publisher Geoscience Australia

Revision date 2019-11-07

Other citation details https://s3-ap-southeast-2.amazonaws.com/

geoid/AGQG/AGQG\_20191107.gsb (accessed

2021-09-27)

Information source Title Australian Vertical Working Surface (AVWS):

**Technical Implementation Plan** 

Author Intergovernmental Committee on Surveying and

Mapping (ICSM)

Publisher Geoscience Australia

Revision date 2020-08-26 Edition Version 1.2 Edition date 2020-08-26

Other citation details https://www.icsm.gov.au/sites/default/

files/2020-08/AVWS%20Technical

%20Implementation%20Plan\_V1.2.pdf (accessed

2021-09-27)

Information source Title Australian Vertical Working Surface

Author Geoscience Australia
Publisher Geoscience Australia

Revision date 2020

Other citation details Website. https://www.icsm.gov.au/australian-

vertical-working-surface (accessed 2021-09-27)

Data source ISO Geodetic Registry

Remarks AGQG is used to realise the AVWS datum. Uncertainties (4-8 cm

across mainland Australia) are given in the accompanying grid file AGQG\_uncertainty\_20191107.gsb. This version of the AGQG model contains a systematic bias of ~0.91 m due to an error in information from suppliers of the global model used in its creation. This AGQG model has been replaced with version GAv2 called AGQG\_20201120.

Operation version GA v1

Scope Spatial referencing

Operation accuracy 0.1 m

Source CRS GDA2020 - LatLonEHt

Target CRS AVWS - NHt

Operation method Geographic3D to GravityRelatedHeight (AUSGeoid v2)

#### Extent

Description Australia including Lord Howe Island,

Macquarie Island, Ashmore and Cartier Islands, Christmas Island, Cocos (Keeling) Islands, Norfolk Island. All onshore and offshore.

Geographic Bounding Box	West-bound longitude	93.41	
	North-bound latitude	-8.47	
	East-bound longitude	173.34	
	South-bound latitude	-60.56	

## Operation parameter values

Geoid (height correction) model file	AGQG_20191107.gsb	
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# **ISO Geodetic Registry**

Item class OperationMethod

Name Geographic3D to GravityRelatedHeight

(AUSGeoid v2)

Item statusVALIDIdentifier83

Alias AUSGeoid09

Data source ISO Geodetic Registry

Remarks The Information Source references software which offers both bi-cubic

and bi-linear interpolation methods. Unlike earlier Australian models which used bi-linear interpolation, AUSGeoid09 uses the bi-cubic

method. See Info Source for file format doc.

Formula The AUSGeoid09 model of the Australian Height Datum

#### Operation parameters

Geoid (height correction) model file