Item class GeodeticCRS

NZGD2000 - LatLonEHt

Item status VALID Identifier 287

Information source Title Standard for New Zealand Geodetic Datum 2000

Author Office of the Surveyor General Publisher Land Information New Zealand

Publication date 2007-11-16

Edition date

Issue identification LINZS25000

Data source ISO Geodetic Registry Scope Spatial referencing.

Datum New Zealand Geodetic Datum 2000

Coordinate System Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height.

Orientations: north, east, up. UoM: degree, degree, metre.

### Extent

| Description             | New Zealand - onshore and offshore - Antipodes Islands, Auckland Islands, Bounty Islands, Campbell Island Chatham Islands, Kermadec Islands, North Island, Raoul Island, Snares Islands, South Island, Stewart Island. |                                   |
|-------------------------|--|-----------------------------------|
| Geographic Bounding Box | West-bound longitude North-bound latitude East-bound longitude South-bound latitude  | 160.0<br>-25.0<br>-170.0<br>-60.0 |

Item class GeodeticDatum

New Zealand Geodetic Datum 2000

Item status VALID
Identifier 199

Alias NZGD2000

Information source Title Standard for New Zealand Geodetic Datum 2000

Author Office of the Surveyor General Publisher Land Information New Zealand

Publication date 2007-11-16

Edition date

Issue identification LINZS25000

Data source ISO Geodetic Registry

Remarks Replaces New Zealand Geodetic Datum 1949 and Chatham Islands

Datum 1979 from March 2000.

Anchor definition Based on ITRF96 at epoch 2000.0.

Release date 2000 Coordinate Reference Epoch 2000.0

Scope Spatial referencing

Ellipsoid GRS 1980
Prime Meridian Greenwich

#### Extent

New Zealand - onshore and offshore Antipodes Islands, Auckland Islands, Bounty
Islands, Campbell Island Chatham Islands,
Kermadec Islands, North Island, Raoul Island,
Snares Islands, South Island, Stewart Island.

Geographic Bounding Box West-bound longitude 160.0

North-bound latitude -25.0
East-bound longitude -170.0
South-bound latitude -60.0

Item class Ellipsoid

Name GRS 1980

Item status VALID Identifier 27

Alias Geodetic Reference System 1980

Alias GRS1980
Alias IAG GRS80

Alias International 1979

Alias GRS80

Information source Title Geodetic Reference System 1980

Author H. Moritz

Publisher Springer International Publishing

Publication date 2003-03

Series/Journal name Journal of Geodesy Issue identification Volume 74, No. 1

Page 128–162

Information source Title Geodetic Reference System 1980

Author H. Moritz

Publisher International Association of Geodesy

Publication date 1984

Series/Journal name Bulletin Geodesique Issue identification Volume 58, No. 3

Page 395-405

Data source ISO Geodetic Registry

Remarks Adopted by IUGG 1979 Canberra. Inverse flattening is derived from

geocentric gravitational constant GM = 3986005e8 m\*m\*m/s/s, dynamic form factor J2 = 108263e-8 and Earth's angular velocity =

7292115e-11 rad/s.

 Semi-major axis
 6378137.0 m

 Inverse flattening
 298.257222101 m

Item class PrimeMeridian

Name Greenwich

Item status VALID
Identifier 25

Alias Zero meridian

Information source Title Why the Greenwich meridian moved

Author S. Malys, J.H. Seago, N.K. Pavlis, P.K.

Seidelmann, G.H. Kaplan

Publisher Springer International Publishing

Publication date 2015-12

Series/Journal name Journal of Geodesy Issue identification Volume 89, No. 12

Page 1263–1272

Information source Title IERS Conventions (2010)

Author G. Petit, B.J. Luzum (eds)

Publisher Verlag des Bundesamts fur Kartographie und

Geodasie

Publication date 2010

Edition date

Series/Journal name IERS Technical Notes

Issue identification 36.0

Other citation details ISSN: 1019-4568

Data source ISO Geodetic Registry

Greenwich longitude 0.0 °

EllipsoidalCS Item class

Name Ellipsoidal 3D CS. Axes: latitude, longitude,

ellipsoidal height. Orientations: north, east, up.

UoM: degree, degree, metre.

**VALID** Item status Identifier 46

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization Author

(ISO)

Publisher International Organization for Standardization

(ISO)

2007-07-01 Publication date Edition Second Edition Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used in geographic 3D coordinate reference systems. Horizontal

coordinates referenced to this CS are in degrees. Any degree

representation (e.g. DMSH, decimal, etc.) may be used but that used

must be declared for the user.

#### Axes

Item class CoordinateSystemAxis

Name Geodetic latitude

Item status **VALID** Identifier 38

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization **Author** 

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01 Edition Second Edition Series/Journal name International Standard ISO 19111:2007

Issue identification

Data source ISO Geodetic Registry

Used in geographic 2D and geographic 3D coordinate reference Remarks

systems.

Abbreviation Lat Direction north

Unit degree (supplier to define representation)

CoordinateSystemAxis Item class

Name **Geodetic longitude** 

Item status **VALID** 

Identifier 34

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

Author International Organization for Standardization

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01

Edition Second Edition

Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used in geographic 2D and geographic 3D coordinate reference

systems.

Abbreviation Lon
Direction east

Unit degree (supplier to define representation)

Item class CoordinateSystemAxis

Name Ellipsoidal height

Item statusVALIDIdentifier36

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

Author International Organization for Standardization

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01

Edition Second Edition

Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used only as part of an ellipsoidal 3D coordinate system in a

geographic 3D coordinate reference system, never on its own.

*Abbreviation* h

Direction up
Unit metre