

TsunamiHazard2013

Shapefile



Tags

Tsunami, Hazard, New Zealand

Summary

This dataset defines the coastal sections, tsunami warning zones, and maximum expected tsunami height for return periods of 100, 500, 1000 and 2500 years at the 50th and 84th percentile of confidence. The dataset is intended to inform tsunami hazard. It derives from the model described in Power (2013).

Description

This dataset defines the maximum expected tsunami height (maximum amplitude) for return periods of 100, 500, 1000 and 2500 years at the 50th and 84th percentile of confidence, as estimated by the model described in Power (2013). The dataset also defines the coastal sections that were used for this modelling. The maximum expected tsunami heights are presented for each of these coastal sections.

Please note that the maximum expected tsunami height will typically only occur at one location within each coastal section. It is a conservative (pessimistic) assumption if this height is used throughout the section.

Credits

GNS Science

Use limitations

This data has been prepared by the Institute of Geological and Nuclear Sciences Limited (GNS Science) exclusively for and under contract to the Ministry of Civil Defence and Emergency Management. Unless otherwise agreed in writing by GNS Science, GNS Science accepts no responsibility for any use of, or reliance on any contents of this data by any person other than the Ministry of Civil Defence and Emergency Management and shall not be liable to any person other than the Ministry of Civil Defence and Emergency Management, on any ground, for any loss, damage or expense arising from such use or reliance.

This data is intended to be used in conjunction with Power (2013), and with acknowledgement of the limitations of the methodology expressed there (and in particular those on page 169 of that report).

Extent

West -177.141870 **East** 178.776876
North -34.213102 **South** -47.471046

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:150,000,000

Topics and Keywords

THEMES OR CATEGORIES OF THE RESOURCE geoscientificInformation, oceans

* CONTENT TYPE Downloadable Data

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS New Zealand

PLACE KEYWORDS Chatham Islands

TEMPORAL KEYWORDS 2013

THEME KEYWORDS tsunami

THEME KEYWORDS probabilistic

THEME KEYWORDS hazard

THEME KEYWORDS national

Citation

* TITLE TsunamiHazard2013

PUBLICATION DATE 2016-05-01 00:00:00

PRESENTATION FORMATS * digital map

OTHER CITATION DETAILS

Power, W.L. (compiler). 2013. Review of Tsunami Hazard in New Zealand (2013 Update), GNS Science Consultancy Report 2013/131. 222 p.

Citation Contacts

RESPONSIBLE PARTY

INDIVIDUAL'S NAME William Power

ORGANIZATION'S NAME GNS Science

CONTACT'S POSITION Senior Geophysicist - Scientific Programmer

CONTACT'S ROLE point of contact

Resource Details

DATASET LANGUAGES * English (NEW ZEALAND)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE * vector

* PROCESSING ENVIRONMENT Version 6.2 (Build 9200); Esri ArcGIS 10.3.1.4959

CREDITS

GNS Science

ARCGIS ITEM PROPERTIES

- * NAME TsunamiHazard2013
- * LOCATION
file:///\\corp.gns.cri.nz\gnsshared\tsunami\TsunamiZones\TsunamiZones.gdb
- * ACCESS PROTOCOL Local Area Network

Extents

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

- * WEST LONGITUDE -177.141870
- * EAST LONGITUDE 178.776876
- * NORTH LATITUDE -34.213102
- * SOUTH LATITUDE -47.471046
- * EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

- * WEST LONGITUDE -177.141870
- * EAST LONGITUDE 178.776876
- * SOUTH LATITUDE -47.471046
- * NORTH LATITUDE -34.213102
- * EXTENT CONTAINS THE RESOURCE Yes

Resource Constraints

CONSTRAINTS

LIMITATIONS OF USE

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Spatial Reference

ARCGIS COORDINATE SYSTEM

- * TYPE Geographic
- * GEOGRAPHIC COORDINATE REFERENCE GCS_WGS_1984

* COORDINATE REFERENCE DETAILS

GEOGRAPHIC COORDINATE SYSTEM

- WELL-KNOWN IDENTIFIER 4326
- X ORIGIN -400
- Y ORIGIN -400
- XY SCALE 999999999.99999988

Z ORIGIN -100000
Z SCALE 10000
M ORIGIN -100000
M SCALE 10000
XY TOLERANCE 8.983152841195215e-009
Z TOLERANCE 0.001
M TOLERANCE 0.001
HIGH PRECISION true
LEFT LONGITUDE -180
LATEST WELL-KNOWN IDENTIFIER 4326
WELL-KNOWN TEXT
GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433],AUTHORITY["EPSG",4326]]

REFERENCE SYSTEM IDENTIFIER

- * VALUE 4326
- * CODESPACE EPSG
- * VERSION 8.6.2

Spatial Data Properties

VECTOR

- * LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

- FEATURE CLASS NAME TsunamiHazard2013
- * OBJECT TYPE composite
 - * OBJECT COUNT 268

ARCGIS FEATURE CLASS PROPERTIES

- FEATURE CLASS NAME TsunamiHazard2013
- * FEATURE TYPE Simple
 - * GEOMETRY TYPE Polygon
 - * HAS TOPOLOGY FALSE
 - * FEATURE COUNT 268
 - * SPATIAL INDEX TRUE
 - * LINEAR REFERENCING FALSE

Distribution

DISTRIBUTION FORMAT

- NAME Shapefile

Fields

DETAILS FOR OBJECT TsunamiHazard2013 ►

- * TYPE Feature Class
- * ROW COUNT 268

FIELD OBJECTID

- * ALIAS OBJECTID
- * DATA TYPE OID
- * WIDTH 4
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION
Internal feature number.

- * DESCRIPTION SOURCE
Esri

- * DESCRIPTION OF VALUES
Sequential unique whole numbers that are automatically generated.

FIELD SHAPE

- * ALIAS SHAPE
- * DATA TYPE Geometry
- * WIDTH 0
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION
Feature geometry.

- * DESCRIPTION SOURCE
Esri

- * DESCRIPTION OF VALUES
Coordinates defining the features.

FIELD SECTN_CODE

- * ALIAS Section Code
- * DATA TYPE SmallInteger
- * WIDTH 2
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
Code number of coastal section. Coastal sections are 20 km subdivisions of the warning zones. Hazard data is provided for each coastal section in separate fields.

- DESCRIPTION SOURCE
GNS Science

FIELD SECTN_NAME

- * ALIAS Section Name
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
Name of coastal section.

- DESCRIPTION SOURCE
GNS Science

FIELD WZONE_CODE

- * ALIAS Warning Zone Code
- * DATA TYPE SmallInteger

* WIDTH 2
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

Warning zone code number. Warning zones comprise several coastal sections.

DESCRIPTION SOURCE

GNS Science

FIELD WZONE_NAME

* ALIAS Warning Zone Name
* DATA TYPE String
* WIDTH 100
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

Warning zone name.

DESCRIPTION SOURCE

GNS Science

FIELD H100y50p

* ALIAS Tsunami Height (Maximum Amplitude) in metres at 50th percentile at 100 year return period
* DATA TYPE Single
* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

The maximum expected tsunami height (maximum amplitude) in metres at the 100 year return period and at the 50th percentile of confidence. See Power (2013) for details.

DESCRIPTION SOURCE

GNS Science

FIELD H500y50p

* ALIAS Tsunami Height (Maximum Amplitude) in metres at 50th percentile at 500 year return period
* DATA TYPE Single
* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

The maximum expected tsunami height (maximum amplitude) in metres at the 500 year return period and at the 50th percentile of confidence. See Power (2013) for details.

DESCRIPTION SOURCE

GNS Science

FIELD H1000y50p

* ALIAS Tsunami Height (Maximum Amplitude) in metres at 50th percentile at 1000 year return period
* DATA TYPE Single
* WIDTH 4

* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

The maximum expected tsunami height (maximum amplitude) in metres at the 1000 year return period and at the 50th percentile of confidence. See Power (2013) for details.

DESCRIPTION SOURCE

GNS Science

FIELD H2500y50p

* ALIAS Tsunami Height (Maximum Amplitude) in metres at 50th percentile at 2500 year return period

* DATA TYPE Single

* WIDTH 4

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

The maximum expected tsunami height (maximum amplitude) in metres at the 2500 year return period and at the 50th percentile of confidence. See Power (2013) for details.

DESCRIPTION SOURCE

GNS Science

FIELD H100y84p

* ALIAS Tsunami Height (Maximum Amplitude) in metres at 84th percentile at 100 year return period

* DATA TYPE Single

* WIDTH 4

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

The maximum expected tsunami height (maximum amplitude) in metres at the 100 year return period and at the 84th percentile of confidence. See Power (2013) for details.

DESCRIPTION SOURCE

GNS Science

FIELD H500y84p

* ALIAS Tsunami Height (Maximum Amplitude) in metres at 84th percentile at 500 year return period

* DATA TYPE Single

* WIDTH 4

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

The maximum expected tsunami height (maximum amplitude) in metres at the 500 year return period and at the 84th percentile of confidence. See Power (2013) for details.

DESCRIPTION SOURCE

GNS Science

FIELD H1000y84p

- * ALIAS Tsunami Height (Maximum Amplitude) in metres at 84th percentile at 1000 year return period
- * DATA TYPE Single
- * WIDTH 4
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The maximum expected tsunami height (maximum amplitude) in metres at the 1000 year return period and at the 84th percentile of confidence. See Power (2013) for details.

DESCRIPTION SOURCE

GNS Science

FIELD H2500y84p

- * ALIAS Tsunami Height (Maximum Amplitude) in metres at 84th percentile at 2500 year return period
- * DATA TYPE Single
- * WIDTH 4
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

The maximum expected tsunami height (maximum amplitude) in metres at the 2500 year return period and at the 84th percentile of confidence. See Power (2013) for details.

DESCRIPTION SOURCE

GNS Science

FIELD SHAPE_Length

- * ALIAS SHAPE_Length
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION

Length of feature in internal units.

* DESCRIPTION SOURCE

Esri

* DESCRIPTION OF VALUES

Positive real numbers that are automatically generated.

FIELD SHAPE_Area

- * ALIAS SHAPE_Area
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- * FIELD DESCRIPTION

Area of feature in internal units squared.

* DESCRIPTION SOURCE

Esri

* DESCRIPTION OF VALUES

Positive real numbers that are automatically generated.

Metadata Details

* METADATA LANGUAGE English (NEW ZEALAND)

* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

METADATA IDENTIFIER f21f7731-b34c-4ea8-937c-bc6c2ce50527

SCOPE OF THE DATA DESCRIBED BY THE METADATA * dataset

SCOPE NAME * dataset

* LAST UPDATE 2016-09-29

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

METADATA STYLE ISO 19139 Metadata Implementation Specification

STANDARD OR PROFILE USED TO EDIT METADATA ISO19139

CREATED IN ARCGIS FOR THE ITEM 2016-09-29 12:48:52

LAST MODIFIED IN ARCGIS FOR THE ITEM 2016-09-29 14:47:48

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2016-09-29 14:47:48

Metadata Contacts

METADATA CONTACT

INDIVIDUAL'S NAME Biljana Lukovic

ORGANIZATION'S NAME GNS Science

CONTACT'S POSITION GIS Analyst

CONTACT'S ROLE point of contact

Metadata Constraints

CONSTRAINTS

LIMITATIONS OF USE

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