



## Ocean and coastal extreme waves (4m), 2012

### Metadata

#### File Identifier

80A2F423-A183-4BC0-8E9A-A43E2572B0B4

#### Language

eng

#### Character Set

##### Character Set Code

utf8

#### Hierarchy Level

##### Scope Code

series

#### Hierarchy Level Name

series

### Contact

#### Responsible Party

##### Organisation Name

Stats NZ

#### Contact Info

##### Contact

##### Address

##### Address

##### Country

Australia

#### Role

##### Role Code

pointOfContact

### Date Stamp

#### Date

2019-10-14

### 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

4326

### Identification Info

#### Data Identification

##### Citation

##### Citation

##### Title

Ocean and coastal extreme waves (4m), 2012

##### Date

##### Date

Date

### Abstract

These data estimate the occurrence of extreme wave events in coastal and oceanic waters for 2012, particularly for wave events where significant wave height exceeds a threshold of 4 metres and for a period of at least 12 hours. Significant wave height is defined as four times the square root of the variance of sea surface elevation due to wave motion.

### Purpose

The data have been commissioned from NIWA in order to quantify the occurrence of extreme wave events in New Zealand on an annual basis. However, it is apparent that NIWA's primary reason for collecting these data is to develop as accurate a picture as possible of what is happening at present with extreme waves. I.e. while it is possible to compare data over time to create a longer-term series of data on extreme waves - data are not completely comparable over time because the resolution of data has increased over time (allowing more and more accuracy of data over time - but reducing long-term comparability). NIWA has advised that international data maybe available that provides a longer time series of extreme wave events (at lower resolution). Further work is needed to look into this.

### Status

Progress Code  
completed

### Point Of Contact

Responsible Party  
Organisation Name  
Stats NZ

Contact Info  
Contact  
Address  
Address  
Country  
New Zealand

Role  
Role Code  
publisher

### Resource Maintenance

Maintenance Information  
Maintenance And Update Frequency  
Maintenance Frequency Code  
asNeeded

### 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**

CLIMATE-AND-WEATHER

**Keyword**

CLIMATE-AND-WEATHER-Meteorology

**Keyword**

CLIMATE-AND-WEATHER-Extreme-weather-events

**Keyword**

MARINE-Meteorology

**Keyword**

MARINE-Coasts

**Keyword**

OCEANOGRAPHY

**Keyword**

OCEANOGRAPHY-Physical

**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

Creative Commons Attribution 4.0 International

#### Use Constraints

##### Restriction Code

license

## Spatial Representation Type Code

grid

12

## Language

eng

## Character Set

### Character Set Code

utf8

## Topic Category Code

climatologyMeteorologyAtmosphere

## Topic Category Code

oceans

## Topic Category Code

environment

## Extent

### EX \_ Extent

#### Geographic Element

##### EX \_ Geographic Bounding Box

143.2617184.6289-54.49219-20.82031

## Data Quality Info

### DQ \_ Data Quality

#### Scope

##### DQ \_ Scope

###### Level

###### Scope Code

series

###### Level Description

###### Scope Description

###### Other

series

## Lineage

### LI \_ Lineage

#### Statement

This index was generated using NIWA's operational wave forecasting model NZWAVE-12 (Gorman, 2016). This model has a 12-kilometre resolution and models wave heights. The model was created using: • wind from NIWA's NZLAM-12 weather forecast model • swell from NIWA's global wave forecast model We use a duration threshold of 12 hours as it allows semi-diurnal tides to cover their full low water to high water range. This means that there was both a high tide (when overtopping and damage to coastal infrastructure, for example, is most likely) and a low tide during an event. Gorman, R (2016). Extreme wave indices for New Zealand coastal and oceanic waters. NIWA Client Report HAM2016-014 prepared for the Ministry for the Environment.

## Metadata Constraints

### Security Constraints

#### Classification

##### Classification Code

unclassified