



# Wave climate projection dataset 2022

## 1. IDENTIFICATION INFORMATION

Name	Wave climate projection dataset 2022
DOI	doi:10.20783/DIAS.642 [ <a href="https://doi.org/10.20783/DIAS.642">https://doi.org/10.20783/DIAS.642</a> ]
Metadata Identifier	KU_wave_climate_projection_202220230727103510-DIAS20221121113753-en

## 2. CONTACT

### 2.1 CONTACT on DATASET

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### 2.2 CONTACT on PROJECT

#### 2.2.1 Data Integration and Analysis System

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## 4. DATASET CREATOR

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## 5. DATE OF THIS DOCUMENT

2023-07-27

## 6. DATE OF DATASET

publication : 2022-02-01

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## 7. DATASET OVERVIEW

### 7.1 Abstract

1) Ocean wave climate projection dataset created using the ocean wave model and the atmospheric global climate model (AGCM). The dataset consists of present climate data (3 ensemble members, 25 years each) and future climate data (4 members under RCP 8.5 scenario, 1 member under RCP 2.6 scenario, 25 years each). The domains are global (Spatial resolution: 0.5625 degree), western North Pacific (1/6 degree), and Japan area (1/15 degree). The AGCM data is based on "Climate projection data with 20km-mesh AGCM by SOUSEI program" ([http://search.diasjp.net/en/dataset/GCM20\\_SOUSEI](http://search.diasjp.net/en/dataset/GCM20_SOUSEI)).

2) This dataset can be useful for coastal disaster risk assessment under climate change, coastal structure design, climate change impact assessment of coastal ecosystem, etc.

### 7.2 Topic Category(ISO19139)

oceans

climatologyMeteorologyAtmosphere

### 7.3 Temporal Extent

Begin Date	1979-01-01
End Date	2099-12-31

### 7.4 Geographic Bounding Box

North latitude bound	81
West longitude bound	-180
Eastbound longitude	180
South latitude bound	-81

### 7.5 Grid

Dimension Name	Dimension Size (slice number of the dimension)	Resolution Unit
time		1 (hour)
row		0.5625, 1/6, 1/15 (deg)
column		0.5625, 1/6, 1/15 (deg)

### 7.6 Geographic Description

### 7.7 Keywords

## 7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Oceans > Ocean Waves > Sea State, Climate Indicators > Atmospheric/Ocean Indicators > Extreme Weather	GCMD_science
theme	GLOBAL CHANGE > Impacts of global change	AGU

## 7.7.2 Keywords on Project

### 7.7.2.1 Data Integration and Analysis System

Keyword Type	Keyword	Keyword thesaurus Name
theme	DIAS &gt; Data Integration and Analysis System	No_Dictionary

## 7.8 Online Resource

file download : <https://data.diasjp.net/dl/storages/filelist/dataset:642>

## 7.9 Data Environmental Information

The file naming is as follows. KUwave\_{experiment}\_{YYYY}{MM}.nc · {experiment} is the experiment name from SPA\_m01, SPA\_m02, SPA\_m03, SFA\_rcp85, SFA\_rcp85\_c1, SFA\_rcp85\_c2, SFA\_rcp85\_c2, SFA\_rcp26. · {YYYY} is year and {MM} is month.

## 7.10 Distribution Information

name	version	specification
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# 8. DATA PROCESSING

# 9. DATA REMARKS

# 10. DATA POLICY

## 10.1 Data Policy by the Data Provider

Data Policy:

1. Individual users should not redistribute the data to any third party.
2. The source of the database should be acknowledged in scientific and technical papers, publications, press releases and other communications in case of using the data.
3. This dataset can be used for non-commercial purposes. For commercial use of this dataset, the prior explicit permission of the data provider must be obtained.

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Disclaimer:

The intellectual property rights of the dataset belong exclusively to Disaster Prevention Research Institute, Kyoto university. Disaster Prevention Research Institute, Kyoto university is not responsible for any damage that may result from the use of this dataset.

## 10.2 Data Policy by the Project

### 10.2.1 Data Integration and Analysis System

If data provider does not have data policy, DIAS Terms of Service (<https://diasjp.net/en/terms/>) and DIAS Privacy Policy (<https://diasjp.net/en/privacy/>) apply.

If there is a conflict between DIAS Terms of Service and data provider's policy, the data provider's policy shall prevail.

## 11. LICENSE

## 12. DATA SOURCE ACKNOWLEDGEMENT

### 12.1 Acknowledge the Data Provider

The wave climate data is provided by Shimura and Mori (2019).

Shimura. T. and N. Mori (2019) FUTURE PROJECTION OF SPECTRAL WAVE CLIMATE AROUND JAPAN, Journal of Japan Society of Civil Engineers, Ser. B2 (Coastal Engineering), 75(2), p. I\_1177-I\_1182. [https://www.jstage.jst.go.jp/article/kaigan/75/2/75\\_I\\_1177/\\_article/-char/en](https://www.jstage.jst.go.jp/article/kaigan/75/2/75_I_1177/_article/-char/en)

### 12.2 Acknowledge the Project

#### 12.2.1 Data Integration and Analysis System

If you plan to use this dataset for a conference presentation, paper, journal article, or report etc., please include acknowledgments referred to following examples. If the data provider describes examples of acknowledgments, include them as well.

” In this study, [Name of Dataset] provided by [Name of Data Provider] was utilized. This dataset was also collected and provided under the Data Integration and Analysis System (DIAS), which was developed and operated by a project supported by the Ministry of Education, Culture, Sports, Science and Technology. ”

## 13. REFERENCES

Shimura. T. and N. Mori (2019) FUTURE PROJECTION OF SPECTRAL WAVE CLIMATE AROUND JAPAN, Journal of Japan Society of Civil Engineers, Ser. B2 (Coastal Engineering), 75(2), p. I\_1177-I\_1182. [https://www.jstage.jst.go.jp/article/kaigan/75/2/75\\_I\\_1177/\\_article/-char/en](https://www.jstage.jst.go.jp/article/kaigan/75/2/75_I_1177/_article/-char/en)