



# Regional Ocean simulation -1/4degree North Pacific

## 1. IDENTIFICATION INFORMATION

Name	Regional Ocean simulation -1/4degree North Pacific
Edition	v0.5
Abbreviation	MOM_rNP0.5
Metadata Identifier	MOM_rNP20230727075644-en

## 2. CONTACT

### 2.1 CONTACT on DATASET

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### 2.2 CONTACT on PROJECT

## 3. DOCUMENT AUTHOR

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## 4. DATASET CREATOR

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## 5. DATE OF THIS DOCUMENT

2023-07-27

## 6. DATE OF DATASET

creation : 2009-02-17

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## 7. DATASET OVERVIEW

### 7.1 Abstract

The OGCM in this study is version 3 of the GFDL Modular Ocean Model (MOM; Pacanowski and Griffies, 1999), which is equipped with several sophisticated parameterization schemes, for example, nonlocal K Profile Parameterization (Large et al., 1994) for mixed layer physics, Gent and McWilliams's scheme (Gent and McWilliams, 1990) for isopycnal mixing, and quicker advection scheme (Leonald, 1979).

The horizontal resolution is 1/4 in both latitude and longitude, with 45 vertical levels spaced from 10m near the sea surface to 400m at the bottom.

This model has good capability to reproduce ocean circulation processes and is expected to form a platform suitable for the use of the 4D-VAR adjoint model.

The climatology data produced by 4D-VAR regional ocean reanalysis were used as the initial condition of this experiment. And the satellite-based SST by Tohoku Univ., the sensible and latent heat, momentum, radiation flux data by JRA25 reanalysis were used as the boundary forcing.

### 7.2 Topic Category(ISO19139)

oceans

### 7.3 Temporal Extent

Begin Date	1990-01-01
End Date	2004-12-31
Temporal Characteristics	Daily

### 7.4 Geographic Bounding Box

North latitude bound	65
West longitude bound	85
Eastbound longitude	-65
South latitude bound	-30

### 7.5 Grid

Dimension Name	Dimension Size (slice number of the dimension)	Resolution Unit
row	840	0.25 (deg)
column	380	0.25 (deg)
vertical	45	2.5-400 (m)

### 7.6 Geographic Description

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North Pacific Ocean

## 7.7 Keywords

### 7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Ocean, Reanalysis	GODAE

### 7.7.2 Keywords on Project

## 7.8 Online Resource

: [http://www.jamstec.go.jp/e/medid/dias/kadai/clm/clm\\_kadai.html](http://www.jamstec.go.jp/e/medid/dias/kadai/clm/clm_kadai.html)

## 7.9 Data Environmental Information

## 7.10 Distribution Information

name	version	specification

# 8. DATA PROCESSING

## 8.1 Data Processing (1)

8.1.1 General Explanation of the data producer's knowledge about the lineage of a dataset

### 8.1.2 Data Source

Data Source Citation Name	Description of derived parameters and processing techniques used

# 9. DATA REMARKS

# 10. DATA POLICY

## 10.1 Data Policy by the Data Provider

## 10.2 Data Policy by the Project

# 11. LICENSE

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## 12. DATA SOURCE ACKNOWLEDGEMENT

12.1 Acknowledge the Data Provider

12.2 Acknowledge the Project

## 13. REFERENCES