


FORP-NP10 version4 spin-up and historical

1. IDENTIFICATION INFORMATION

Name	FORP-NP10 version4 spin-up and historical
DOI	doi:10.20783/DIAS.665 [https://doi.org/10.20783/DIAS.665]
Metadata Identifier	FORP_NP10_spinup_and_historical20240613101257-DIAS20221121113753-en

2. CONTACT

2.1 CONTACT on DATASET

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4. DATASET CREATOR

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5. DATE OF THIS DOCUMENT

2024-06-13

6. DATE OF DATASET

publication : 2024-01-04

7. DATASET OVERVIEW

7.1 Abstract

This dataset contains a spin-up run to create initial states for projection experiments and a subsequent historical run to verify the basic performance of the projection system used to generate Future Ocean Regional Prediction dataset using a North Pacific model with a horizontal resolution of approximately 10 km version 4, 4.5 (FORP_NP10_version4, 4.5).

Development and calculation are conducted as a collaborative efforts between JAMSTEC and MRI under the support of MEXT research program TOUGOU (JPMXD0717935561) and SENTAN (JPMXD072268743).

The dataset provides the basic performance verification results of the projection system (Tsujino et al. 2024) in a reproducible format, and is provided as a companion dataset that can be used in combination with FORP_NP10_version 4 and 4.5 to improve mutual utility value.

7.2 Topic Category(ISO19139)

climatologyMeteorologyAtmosphere

oceans

environment

7.3 Temporal Extent

Begin Date	1937-01-01
End Date	2018-12-31
Temporal Characteristics	Monthly

7.4 Geographic Bounding Box

North latitude bound	63
West longitude bound	99
Eastbound longitude	-75
South latitude bound	-15

7.5 Grid

Dimension Name	Dimension Size (slice number of the dimension)	Resolution Unit
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row	2049	1/11 (deg)
column	784	1/10 (deg)
vertical	60	variable (m)

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Oceans > Ocean Temperature > Potential Temperature, Oceans > Ocean Chemistry > Carbon Dioxide, Oceans > Ocean Chemistry > Biogeochemical Cycles, Oceans > Ocean Circulation > Ocean Currents	GCMD_science

7.7.2 Keywords on Project

7.7.2.1 Data Integration and Analysis System

Keyword Type	Keyword	Keyword thesaurus Name
theme	DIAS > Data Integration and Analysis System	No_Dictionary

7.8 Online Resource

file download : <https://data.diasjp.net/dl/storages/filelist/dataset:665>

7.9 Data Environmental Information

7.10 Distribution Information

name	version	specification
netCDF	4	

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

10.2.1 Data Integration and Analysis System

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12. DATA SOURCE ACKNOWLEDGEMENT

12.1 Acknowledge the Data Provider

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

Tsujino, H., Nakano, H., Sakamoto, K., Urakawa, L. S., Toyama, K., Kosugi, N., et al. (2024). Impact of increased

horizontal resolution of an ocean model on carbon circulation in the North Pacific Ocean. *Journal of Advances in Modeling Earth Systems*, 16, e2023MS003720. <https://doi.org/10.1029/2023MS003720>