



MOVE/MRI.COM-JPN Dataset

1. IDENTIFICATION INFORMATION

Name	MOVE/MRI.COM-JPN Dataset
Abbreviation	MOVE-JPN 2020
DOI	doi:10.20783/DIAS.639 [https://doi.org/10.20783/DIAS.639]
Metadata Identifier	MOVEJPN_MRI_202020240726144532-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

2024-07-26

6. DATE OF DATASET

7. DATASET OVERVIEW

7.1 Abstract

MOVE/MRI.COM-JPN Dataset is the dataset produced by an ocean data assimilation system developed by Meteorological Research Institute, Japan Meteorological Agency.

This dataset represents the ocean states around Japan with a horizontal resolution of 2 km.

Variables

* Daily mean

- 3D: Zonal velocity, Meridional Velocity, Temperature, Salinity

- 2D: Sea surface height, Sea level pressure, Tide height of 8 tidal components, Sea ice concentration

- 1D: Global mean sea level pressure

* 30-minutes snapshot (only sea surface)

- 2D: Zonal velocity, Meridional Velocity, Temperature

Calculation method of sea surface height derived from ocean variations (SSH_ocean)

* $SSH_{ocean} = \text{Sea surface height} - (\text{Inverted barometer response}) - (\text{Tidal height of 8 tidal components})$

* Inverted barometer response assumes $-1[\text{cm/hPa}] * SLPa[\text{hPa}]$

* $SLPa = \text{Global mean sea level pressure} - \text{Sea level pressure}$

Naming rule

* $nc_{\{var\}}.\{YYYYMMDD\}$

* $\{var\}$: variable name

* $\{YYYYMMDD\}$: date

7.2 Topic Category(ISO19139)

oceans

7.3 Temporal Extent

Begin Date	2008-01-01
End Date	2019-12-31

7.4 Geographic Bounding Box

North latitude	bound	52
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West longitude bound	117
Eastbound longitude	160
South latitude bound	20

7.5 Grid

Dimension Name	Dimension Size (slice number of the dimension)	Resolution Unit
row	1423	1/33 (deg)
column	1604	1/50 (deg)
vertical	60	2-700 (m)

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Oceans > Ocean Circulation > Ocean Currents, Oceans > Ocean Temperature > Potential Temperature, Oceans > Salinity/Density > Salinity, Oceans > Sea Surface Topography > Sea Surface Height, Oceans > Sea Ice > Sea Ice Concentration	GCMD_science
theme	Models > GCM	GCMD_platform

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

MOVE/MRI.COM-JPN Dataset (Japanese only) : https://mri-ocean.github.io/mricom/mri.com-user_jpn_start.html

file download : <https://data.diasjp.net/dl/storages/filelist/dataset:639>

7.9 Data Environmental Information

7.10 Distribution Information

name	version	specification
netCDF	4.7.3	

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

- Users shall register their name, affiliation, email address and purpose of use before access to this dataset will be permitted
- Users shall not download or use this dataset in whole or in part without express consent from the Japan Meteorological Agency (JMA).
- Users shall not use this dataset for any commercial, advertising, or marketing purposes.
- Users shall not provide the content of this dataset to third parties.
- In the event of using this dataset in an academic presentation, paper, article, or report, etc., users shall cite "MOVE/MRI.COM-JPN Dataset, which was produced by an ocean data assimilation system developed by Meteorological Research Institute, Japan Meteorological Agency".
- In the event of using this dataset in an academic presentation, paper, article, or report, etc., users shall submit a copy of the work to JMA.
- Users shall adhere to other instructions by JMA.

[Disclaimer]

- JMA is not liable for any losses or any damage when this dataset is used.

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

MOVE/MRI.COM-JPN Dataset, which was produced by an ocean data assimilation system developed by Meteorological Research Institute, Japan Meteorological Agency

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

Kei Sakamoto, Hiroyuki Tsujino, Hideyuki Nakano, Shogo Urakawa, Takahiro Toyoda, Nariaki Hirose, Norihisa Usui and Goro Yamanaka, Development of a 2km-resolution ocean model covering the coastal seas around Japan for operational application, *Ocean Dynamics*, 2019, 69: 1181. <https://doi.org/10.1007/s10236-019-01291-1>

Nariaki Hirose, Norihisa Usui, Kei Sakamoto, Hiroyuki Tsujino, Goro Yamanaka, Hideyuki Nakano, Shogo Urakawa, Takahiro Toyoda, Yosuke Fujii, and Nadao Kohno, Development of a new operational system for monitoring and forecasting coastal and open ocean states around Japan, *Ocean Dynamics*, 2019, 69: 1333. <https://doi.org/10.1007/s10236-019-01306-x>

Nariaki Hirose, Kei Sakamoto, Norihisa Usui, Goro Yamanaka, and Nadao Kohno, The 10-year reanalysis dataset of an operational system for monitoring and forecasting coastal and open-ocean status around Japan, *Technical Reports of the Meteorological Research Institute*, 2020, 83. 10.11483/mritechrepo.83