Dias Ocean Renalysis

1. IDENTIFICATION INFORMATION

| Name | Ocean Renalysis |
|------------------------|--------------------------------|
| Edition | v2.1 |
| Abbreviation | DIAS_ODAPv2.1 |
| Metadata Identifier | DIAS_0DAPv2.120230727081546-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

revision : 2008-06-05

7. DATASET OVERVIEW

7.1 Abstract

The 4D-VAR assimilation system used here is the same as in Masuda et al. [2003] covering the global ocean. The OGCM 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 lin both latitude and longitude, with 36 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 assimilated elements in this study are the temperature and salinity from the World Ocean Database 1998 (for climatologies) and the World Ocean Database 2001, Reynolds SST values, and seasurface dynamic-height anomaly data derived from TOPEX/Poseidon altimetry. All observational data were averaged onto 1 degree by 1 degree bins and then compiled as series of 10-day means for the surface data and monthly means for the subsurface data.

7.2 Topic Category(IS019139)

oceans

7.3 Temporal Extent

| Begin Date | 1986-01-01 | |
|-----------------------------|------------------------|--|
| End Date | 2004-12-31 | |
| Temporal Characteristics | monthly,10day (,daily) | |

7.4 Geographic Bounding Box

| North latitude | bound | 80 |
|------------------------|-------|------|
| West longitude | bound | -180 |
| Eastbound longitude | | 180 |
| South latitude | bound | -75 |

7.5 Grid

| Dimension Name | Dimension Size (slice number of the dimension) | Resolution Unit |
|----------------|--|-----------------|
| row | 360 | 1 (deg) |
| column | 155 | 1 (deg) |

vertical

10-400 (m)

7.6 Geographic Description

global

7.7 Keywords

7.7.1 Keywords on Dataset

| Keyword Type | Keyword | Keyword thesaurus Name |
|--------------|---|---------------------------|
| theme | OCEANOGRAPHY GENERAL > Ocean data assimilation and reanalysis | AGU |
| theme | Ocean , Reanalysis | others |

7.7.2 Keywords on Project

7.8 Online Resource

: 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

9. DATA REMARKS

10. DATA POLICY

- 10.1 Data Policy by the Data Provider
- 10.2 Data Policy by the Project

11. LICENSE

12. DATA SOURCE ACKNOWLEDGEMENT

12.1 Acknowledge the Data Provider

[Reference Requirement]The data used in this study have been obtained from the Data Server of "Kyousei" category #7 (k7) of "RR2002: Project for Sustainable Coexistence of Human, Nature, and the Earth" sponsored by MEXT.

[Reference Requirement]This dataset should be referenced as the following statement. "Masuda, Shuhei, Dr. et al. (): Ocean Renalysis. Data Integration and Analysis System in Japan Agency for Marine-Earth Science and Technology, Yokohama, Japan."

12.2 Acknowledge the Project

13. REFERENCES