



Research Data Collection

Data Management Plan

This document records the whole process of the data collections, including pre-preparation data, data ingest, catalogue registry, license, data quality assurance, roles specified, the checklist of publishing data, issues identified, and the final status of collections on the National Computational Infrastructure.

Data Collection Title	OFES Re-analysis dataset
NCI Data Collection Code*:	rq5
Scientific Merit/Abstract :	This dataset is subset of OFES, OGCM (Ocean general Circulation Model) for the Earth Simulator. OFES is a fifty-year eddy-resolving simulation of the world ocean. The data cover from January 1980 to December 2010, the spatial extent is global with exclusions of the poles and resolution is 1/10 of degree. This high resolution allows a good representation of boundary currents and mesoscale eddies. High-resolution simulations, such as this, are not only useful to regional studies, but also to improve climate models, of which the ocean is an important component. Another important role is to provide climatology for areas where observations are sparse. As well as the simulation output data, this collection comes with software to perform Lagrangian trajectory simulations.
Data Ownership and Custodianship :	The OFES data was among the first global eddy-resolving model runs in the world. The Japanese Earth Simulator, on which the model was run, was among the largest supercomputers in the world. However, the data archived here is just a copy of the original data, so has no historic value for itself.
Dataset Purpose :	High resolution ocean climatology
Dataset Status :	Dataset transfer is complete. More documentation needs to be prepared, there's more of the original data that could be replicated in the future.
Alternative Title/Dataset Identifier :	n/a
DOI**:	Because this dataset is an exact replica of the original dataset, we think users should use the DOI of the original dataset. At the moment the original data has no DOI assigned yet.
Activities:	Linked to the ARCCSS ocean research groups: (number) researchers and students are part of this group and (number) already have access to the data at NCI
Main (Principle) Data owner :	Erik van Sebille, associate investigator Centre of Excellence for Climate System Science (ARCCSS) based at CCRC/UNSW, e-mail: E.vanSebille@unsw.edu.au, phone: 0293857196, NCI-id: evs561
Data Custodian (if different from data owner) :	Paola Petrelli, climate data support officer Centre of Excellence for Climate System Science (ARCCSS) based at IMAS/UTAS, e-mail: paola.petrelli@utas.edu.au, phone: 0362266674, NCI-id: ppx581
Other Data Owners :	n/a

Main community contact* :	Andy Hogg, chief investigator Centre of Excellence for Climate System Science (ARCCSS) based at Research School of Earth Science/ANU, e-mail: Andy.Hogg@anu.edu.au, phone: 0261259962, NCI-id:
Ingest/Data transfer :	Paola Petrelli, climate data support officer Centre of Excellence for Climate System Science (ARCCSS) based at IMAS/UTAS, e-mail: paola.petrelli@utas.edu.au, phone: 0362266674, NCI-id: pxp581
Quality Assurance :	Paola Petrelli, climate data support officer Centre of Excellence for Climate System Science (ARCCSS) based at IMAS/UTAS, e-mail: paola.petrelli@utas.edu.au, phone: 0362266674, NCI-id: pxp581
Publishing* :	n/a
Maintenance* :	n/a
User Support* :	n/a
Data Service* Development :	n/a
Data Service Operation :	n/a
Contact for Media Communication* :	Data Provider: Alvin Stone, communications officer at Centre of Excellence for Climate System Science (ARCCSS) based at CCRC/UNSW, e-mail: alvin.stone@unsw.edu.au, phone: 0293858953 NCI: Ben Evans/Lucy Guest
Data Life-cycle Control :	n/a
Security Classification :	There is no security issue
Use limitations :	There are no use limitations for this dataset and/or special requirements
Access constraints :	Users are requested to sign up the original data owners agreement to access the data. A copy is available at http://apdrc.soest.hawaii.edu/ESC/Certification_APDRC_060802_form.pdf . It should be e-mailed to the data owners and cc-ed to the data custodian.
Use Constraints :	Non-commercial use, enforced by acceptance of the original data owners' agreement.
Spatial Extent :	0-360 degrees latitude and -75 to 75 degrees longitude; resolution of 0.1 degrees; datum/projection
Temporal Extent :	Temporal extent is 1 January 1980 to 31 December 2010, as three-day temporal snapshots

Format Name/Format version :	NetCDF The data is accessible without any specialist software.
Dataset Version :	For versions and software used to generate the data refer to the OFES data description document*. This dataset is a final product
Tools :	Any software that read NetCDF formats can be used
Software :	no specific software needed
Algorithms/Libraries :	NetCDF libraries
Flexibility :	Given the common format and the extent of the data, other researchers could easily use it for different purposes, across different platforms.
Ingest Process :	All of the data is currently on /g/data1 disk at NCI. If additional data is needed, we will work out a way to transfer via net from JAMSTEC
Quality Assurance Process :	We will document the quality assurance process undertaken by the original data owners. This is an exact replica of the original data, so we won't perform any further QC. However, we will regularly check data to make sure is complete and not corrupted by performing md5 checksum every three months.
Maintenance Process :	We will check regularly data consistency, as part of the quality assurance plan. Regular update is not needed, occasional updates are possible if the original data is updated and if new data becomes available.
Backup and Recovery plan :	Data is re-downloadable and any scripts used to download the data will be hosted at NCI, together with associated software and the data itself. Given the data size a backup would speed up recovery process
Services :	THREDDS
Catalogue Registry* :	GeoNetwork
Federated Catalogues* :	n/a
Search Words/ keywords :	040104 Climate Change Processes, 040503 Physical Oceanography
Website :	OFES web pages: http://www.jamstec.go.jp/esc/research/AtmOcn/product/ofes.html and http://www.jamstec.go.jp/esc/research/AtmOcn/ofes/index.en.html
Documentation and Compilation :	OFES _Data_Descriptions.docx

Digital Data Transfer Options :	n/a
Feedback :	n/a
Retention of Data :	ARCCSS duration: June 2018
Conflict of Interest :	None
How-to Guide :	Instructions will be available on the data page of the ARCCSS CMS wiki and as a Readme file on the data storage
Data Ingest :	Data is already in place
Quality assurance :	Quality assurance already performed by data creators
Metadata catalogue :	by Dec 2014.
Tick pre-publishing checklist :	When things are ready.
Wrap up and publishing data :	Double check for the final data publication.

