DIAS Integrated Research Program for Advancing Climate Models (TOUGOU Program) CMIP6 simulation data by non-hydrostatic general circulation model NICAM16-9S: HighResMIP

1. IDENTIFICATION INFORMATION

Name	Integrated Research Program for Advancing Climate Models (TOUGOU Program) CMIP6 simulation data by non-hydrostatic general circulation model NICAM16-9S: HighResMIP
Abbreviation	CMIP6.HighResMIP.MIROC.NICAM16-9S
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5. DATE OF THIS DOCUMENT

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6. DATE OF DATASET

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7. DATASET OVERVIEW

7.1 Abstract

"Integrated Research Program for Advancing Climate Models" ("TOUGOU Program") is a five-year project being implemented by the Ministry of Education, Culture, Sports, Science and Technology ("MEXT") from FY2017 to FY2021 with the primary objective of elucidating the mechanisms of climate change and generating information on climate change projections through the development of climate models that will form the basis for all climate change countermeasures.

The TOUGOU Program consists of four research themes. The objectives of the theme A is to actively participate in the coupled model intercomparison project phase 6 (CMIP6) by using the global climate models developed in the previous programs, and to carry out many original climate model simulations to generate the forecast information necessary for the formulation of near-future adaptation and mitigation measures. Theme B aims to, such as, more precisely estimate CO_2 emissions by using the Earth System Model (ESM), a climate model that incorporates biological and chemical processes into the global climate model.

This dataset contains the results of the HighResMIP by NICAM16-9S, among the various simulations for CMIP6 that have been carried out in this TOUGOU Program using the global climate models and the Earth system models developed in Japan.

This study was supported by the Environment Research and Technology Development Fund (JPMEERF20172R01) of the Environmental Restoration and Conservation Agency of Japan (ERCA) and the Integrated Research Program for Advancing Climate Models (TOUGOU) (JPMXD0717935457), the FLAGSHIP2020 project within the priority study4, and Program for Promoting Researches on the Supercomputer Fugaku (Large Ensemble Atmospheric and Environmental Prediction for Disaster Prevention and Mitigation), of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan.

All CMIP6 data are collected, managed and published by the Earth System Grid Federation (ESGF), and DIAS serves as one node of the ESGF. All public datasets, including this dataset, are available from ESGF. Please refer to the CMIP6 Guidance for Data Users (link below) for information on the use of these datasets, including this dataset.

7.2 Topic Category(ISO19139)

climatologyMeteorologyAtmosphere

7.3 Temporal Extent

Begin Date	1950-01-01
End Date	2015-01-01

7.4 Geographic Bounding Box

North bound latitude	90

West bound longitude	-180
Eastbound longitude	180
South bound latitude	-90

7.5 Grid

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Climate	GEOSS

7.7.2 Keywords on Project

7.8 Online Resource

DOI landing page, Citation information : https://doi.org/10.22033/ESGF/CMIP6.1036

TOUGOU Program Web site : http://www.jamstec.go.jp/tougou/program/index.html

CMIP6 Project Web site : https://pcmdi.llnl.gov/CMIP6

CMIP6 Terms of Use : https://pcmdi.llnl.gov/CMIP6/TermsOfUse

CMIP6 Guidance for Data Users : https://pcmdi.llnl.gov/CMIP6/Guide/dataUsers.html

MIP Description : https://search.es-doc.org/

Model Information : https://explore.es-doc.org/cmip6/models/miroc/nicam16-9s

ESGF, Search Variables (in DKRZ) : http://esgf-data.dkrz.de/search/cmip6-dkrz

ESGF, Search Variables (in LLNL) : http://esgf-node.llnl.gov/search/cmip6

Errata Information : https://errata.es-doc.org/

7.9 Data Environmental Information

7.10 Distribution Information

name	version	specification
netCDF	classic	CF Convention

8. DATA PROCESSING

9. DATA REMARKS

10. DATA POLICY

10.1 Data Policy by the Data Provider

This dataset is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License (CC BY-SA 4.0).

See "CMIP6 Guidance for Data Users" for the detailed information.

https://pcmdi.llnl.gov/CMIP6/Guide/dataUsers.html

10.2 Data Policy by the Project

11. LICENSE

12. DATA SOURCE ACKNOWLEDGEMENT

12.1 Acknowledge the Data Provider

Cite this dataset as:

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[1] Please use the latest dataset version or if not available the latest data download date as version in your data citation.

For acknowledgement, see CMIP6 Terms of Use.

12.2 Acknowledge the Project

13. REFERENCES

The Non-hydrostatic Icosahedral Atmospheric Model: description and development. Satoh, Masaki; Tomita, Hirofumi; Yashiro, Hisashi; Miura, Hiroaki; Kodama, Chihiro; Seiki, Tatsuya; Noda, Akira T; Yamada, Yohei; Goto, Daisuke; Sawada, Masahiro; Miyoshi, Takemasa; Niwa, Yosuke; Hara, Masayuki; Ohno, Tomoki; Iga, Shin-ichi; Arakawa, Takashi; Inoue, Takahiro; Kubokawa, Hiroyasu. DOI:10.1186/s40645-014-0018-1