


Extreme temperature and precipitation indices

1. IDENTIFICATION INFORMATION

Name	Extreme temperature and precipitation indices
DOI	doi:10.20783/DIAS.525 [https://doi.org/10.20783/DIAS.525]
Metadata Identifier	extreme_indices20221122152209-DIAS20221121113753-en

2. CONTACT

2.1 CONTACT on DATASET

Name	Toshichika Iizumi
Organization	Institute for Agro-Environmental Sciences, National Agriculture and Food Research Institute
Address	3-1-3 Kannondai, Tsukuba, Ibaraki, 305-8604, Japan
TEL	029-838-8435
E-mail	iizumit@affrc.go.jp

2.2 CONTACT on PROJECT

2.2.1 Data Integration and Analysis System

Name	DIAS Office
Organization	Japan Agency for Marine-Earth Science and Technology
Address	3173-25, Showa-Cho, Kanazawa-ku, Yokohama-shi, Kanagawa, 236-0001, Japan
E-mail	dias-office@diasjp.net

3. DOCUMENT AUTHOR

Name	Toshichika Iizumi
Organization	Institute for Agro-Environmental Sciences, National Agriculture and Food Research Institute
E-mail	iizumit@affrc.go.jp

4. DATASET CREATOR

Name	Toshichika Iizumi
------	-------------------

Organization	Institute for Agro-Environmental Sciences, National Agriculture and Food Research Institute
E-mail	izumit@affrc.go.jp

5. DATE OF THIS DOCUMENT

2022-11-22

6. DATE OF DATASET

creation : 2017-08-08

7. DATASET OVERVIEW

7.1 Abstract

The climate_indices dataset offers 15 temperature and 12 precipitation extreme indices calculated using S14FD retrospective meteorological forcing dataset and CMIP5_CDFDM_S14FD bias-corrected CMIP5 GCM outputs from 1958 to 2100.

7.2 Topic Category(ISO19139)

climatologyMeteorologyAtmosphere

7.3 Temporal Extent

Begin Date	1958-01-01
End Date	2100-12-31
Temporal Characteristics	annual. (monthly data are available for some indices)

7.4 Geographic Bounding Box

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

7.5 Grid

Dimension Name	Dimension Size (slice number of the dimension)	Resolution Unit
column	720	0.5 (deg)
row	360	0.5 (deg)

vertical	1	1 (level)
----------	---	-----------

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Climate Indicators > Terrestrial Hydrosphere Indicators	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 from DIAS : <https://data.diasjp.net/dl/storages/filelist/dataset:525>

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

The 15 temperature indices and 12 precipitation indices are calculated using S14FD retrospective meteorological forcing dataset and CMIP5_CDFM_S14FD bias-corrected CMIP5 GCM outputs.

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

The reference (Iizumi et al., 2017) should be cited when the 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

Please consider citing the following DOI when this dataset was used.

doi:10.20783/DIAS.525

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

Iizumi, T., H. Takikawa, Y. Hirabayashi, N. Hanasaki, and M. Nishimori, 2017: Contributions of different bias-correction methods and reference meteorological forcing data sets to uncertainty in projected temperature and precipitation extremes. *Journal of Geophysical Research-Atmospheres*, doi: 10.1002/2017JD026613.

Copyright(c) 2006-2021 Data Integration & Analysis System (DIAS) All Rights Reserved.
This project is supported by " Data Integration & Analysis System " funded by MEXT, Japan