



The Japanese 55-year Reanalysis using conventional data only with high resolution SST(JRA-55CHS)

1. IDENTIFICATION INFORMATION

Name	The Japanese 55-year Reanalysis using conventional data only with high resolution SST(JRA-55CHS)
Abbreviation	JRA-55CHS
Metadata Identifier	JRA55_CHS20230727100317-DIAS20221121113753-en

2. CONTACT

2.1 CONTACT on DATASET

Name	Numerical Prediction Division, Information Infrastructure Department
Organization	Japan Meteorological Agency
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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
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3. DOCUMENT AUTHOR

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Organization	Japan Meteorological Agency

4. DATASET CREATOR

Name	Climate Research Department
Organization	Meteorological Research Institute

5. DATE OF THIS DOCUMENT

2023-07-27

6. DATE OF DATASET

publication : 2020-08-01

7. DATASET OVERVIEW

7.1 Abstract

The Meteorological Research Institute of the Japan Meteorological Agency, under support of the Japanese “Hotspot project” (Nakamura et al. 2015), is constructing an additional product of the Japanese 55-year Reanalysis (JRA-55) family. The product, named “JRA-55CHS”, utilizes high-resolution (quarter-degree) sea-surface temperature (SST) as lower-boundary condition with the same data assimilation system as the JRA-55 Conventional (JRA-55C), into which no satellite data is assimilated (Masunaga et al. 2018). The dataset is intended to be suitable for diagnosing small-scale oceanic influence (such as the one from the western boundary currents) on atmosphere, which is not necessarily well represented in JRA-55 and JRA-55CHS. The reanalysis period of the JRA-55CHS is from 1985 through 2012. We recommend to use together with the JRA-55C data.

7.2 Topic Category(ISO19139)

climatologyMeteorologyAtmosphere

7.3 Temporal Extent

Begin Date	1985-04-01
End Date	2012-12-31
Temporal Characteristics	6hourly

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
row	288	1.25 (deg)

column	145	1.25 (deg)
vertical	37	1-50 (hPa)

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Atmosphere	GCMD_science
theme	Balloons/Rockets, In Situ Land-based Platforms, In Situ Ocean-based Platforms, Models	GCMD_platform
theme	Climate, Weather	GEOSS

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

JRA project website : <https://jra.kishou.go.jp/>

JRA-55 Product Users Handbook (in English) : https://jra.kishou.go.jp/JRA-55/index_en.html#manual

JRA-55 Product Users Handbook (in Japanese) : https://jra.kishou.go.jp/JRA-55/index_ja.html#manual

Quality Issues (in English) : https://jra.kishou.go.jp/JRA-55/index_en.html#quality

Quality Issues (in Japanese) : https://jra.kishou.go.jp/JRA-55/index_ja.html#quality

File download : <https://data.diasjp.net/dl/storages/filelist/dataset:592>

7.9 Data Environmental Information

7.10 Distribution Information

name	version	specification
GRIB	1	

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
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9. DATA REMARKS

Users should be careful because of the absence of detailed quality control.

10. DATA POLICY

10.1 Data Policy by the Data Provider

(1) Users should provide user information including name, affiliation, e-mail address.

(2) Users should not distribute the Products to any third party without JMA's prior consent. Use of the Products for any commercial purposes is also prohibited.

(3) The source of the Products should be duly acknowledged in scientific or technical papers, publications, press releases or other communications regarding the Products.

In addition, the following paper must be cited in an appropriate manner:

Masunaga, R., H. Nakamura, H. Kamahori, K. Onogi, and S. Okajima, 2018: JRA-55CHS: An atmospheric reanalysis produced with high-resolution SST. SOLA, 14, doi:10.2151/sola.2018-002.

(4) Users should provide JMA with a copy of their scientific or technical papers, publications, press releases or other communications regarding the Products.

Disclaimer

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10.2 Data Policy by the Project

10.2.1 Data Integration and Analysis System

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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

The source of the Products should be duly acknowledged in scientific or technical papers, publications, press releases or other communications regarding the Products.

Example:

The dataset used for this study are provided from the Japanese 55-year Reanalysis (JRA-55) project carried out by the Japan Meteorological Agency (JMA).

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

- (1) Masunaga, R., H. Nakamura, H. Kamahori, K. Onogi, and S. Okajima, 2018: JRA-55CHS: An atmospheric reanalysis produced with high-resolution SST. SOLA, 14, 6–13, doi:10.2151/sola.2018-002.
- (2) Nakamura, H., A. Isobe, S. Minobe, H. Mitsudera, M. Nonaka, and T. Suga, 2015: “Hot Spots” in the climate system – new developments in the extratropical ocean-atmosphere interaction research: A short review and an introduction. *J. Oceanogr.*, 71, 463–467, doi:10.1007/s10872-015-0321-5.
- (3) Kobayashi, S., Y. Ota, Y. Harada, A. Ebita, M. Moriya, H. Onoda, K. Onogi, H. Kamahori, C. Kobayashi, H. Endo, K. Miyaoka, and K. Takahashi, 2015: The JRA-55 Reanalysis: General specifications and basic characteristics. *J. Meteor. Soc. Japan*, 93, 5–48, doi:10.2151/jmsj.2015-001.
- (4) Kobayashi, C., H. Endo, Y. Ota, S. Kobayashi, H. Onoda, Y. Harada, K. Onogi, and H. Kamahori, 2014: Preliminary results of the JRA-55C, an atmospheric reanalysis assimilating conventional observations only. SOLA, 10, 78–82, doi:10.2151/sola.2014-016.