DIAS MLIT XRAIN dataset

1. IDENTIFICATION INFORMATION

Name	MLIT XRAIN dataset
Metadata Identifier	MLIT_XRAIN20230727072246-DIAS20221121113753-en

2. CONTACT

2.1 CONTACT on DATASET

Name	Ministry of Land, Infrastructure, Transport and Tourism Water and Disaster Management Bureau River Planning Division River Information Policy Planning Office
Organization	Ministry of Land, Infrastructure, Transport and Tourism Water and Disaster Management Bureau River Planning Division River Information Policy Planning Office
E-mail	hqt-dias@gxb.mlit.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	Ministry of Land, Infrastructure, Transport and Tourism Water and Disaster Management Bureau River Planning Division River Information Policy Planning Office
Organization	Ministry of Land, Infrastructure, Transport and Tourism Water and Disaster Management Bureau River Planning Division River Information Policy Planning Office

4. DATASET CREATOR

Name	Ministry of Land, Infrastructure, Transport and Tourism Water and Disaster Management Bureau River Planning Division River Information Policy Planning Office

Organization	Ministry of Land, Infrastructure, Transport and Tourism Water and Disaster Management Bureau River Planning Division River Information Policy Planning Office

5. DATE OF THIS DOCUMENT

2023-07-27

6. DATE OF DATASET

publication : 2010-07-05

7. DATASET OVERVIEW

7.1 Abstract

MLIT_XRAIN is a general name of the databases of physical quantities, including areal precipitation, observed by the X-band multi-parametric (X-MP) radar raingauges and C-band multi-parametric (C-MP) radar raingauges, owned by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT).

"MLIT_XRAIN" is composed of the following 4 types of data on DIAS:

1) "MLIT_XRAIN_raw" data are physical quantities directly measured by each X-MP radar, and are composed of eight parameters, including received power, differential phase (inter-polarization phase difference), etc.

2) "MLIT_XRAIN_intermediated" data are the primarily processed data from the raw data and includes five parameters for each radar, such as radar reflectivity factors, specific differential phase, etc.

3) "MLIT_XRAIN_composite" data are the radar-derived precipitation data estimated from synthesized radar data with all X-band multi-parametric (X-MP) radars of MLIT, mainly covering major city areas. The number of X-MP radars was 11 at first, and finally increased to 39, and the period of the archived composite database is until February 2020. Any C-band MP (C-MP) radars' data has not been utilized in this database.

4) "MLIT_XRAIN_CXMP_composite " data are the radar-derived precipitation data estimated from the synthesized radar data with all the C-MP & X-MP radars of MLIT, the covering area of which has been being gradually extended to almost the entire of Japan. This composite database has been archived since June 2017.

If you need not directly measured radar signals but usual precipitation data, please use the MLIT_XRAIN_CXMP_composite or MLIT_XMP_XRAIN_composite.

In the application for permission form, select "composite".

For more information on XRAIN and synthetic radar rainfall, please refer to the "Radar Rain Gauge for Practical Engineers" (in Japanese) on the website of the River Information Center of Japan, the URL of which is listed under "Online Information" below.

7.2 Topic Category(ISO19139)

climatologyMeteorologyAtmosphere

7.3 Temporal Extent

Begin Date	2010-07-05
End Date	Under Continuation

7.4 Geographic Bounding Box

North bound latitude	43.922222
West bound longitude	129.550000
Eastbound longitude	142.570833
South bound latitude	30.833333

7.5 Grid

7.6 Geographic Description

7.7 Keywords

7.7.1 Keywords on Dataset

Keyword Type	Keyword	Keyword thesaurus Name
theme	Atmosphere > Precipitation	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

MLIT XRAIN XMP composite dataset (English document) : http://metadata.diasjp.net/dmm/doc/MLIT_XRAIN_composite-DIAS-en.html

MLIT XRAIN XMP composite dataset (Japanese document) : http://metadata.diasjp.net/dmm/doc/MLIT_XRAIN_composite-DIAS-ja.html

MLIT XRAIN XMP intermediated dataset (Englisht document) : http://metadata.diasjp.net/dmm/doc/MLIT_XRAIN_intermediated-DIAS-en.html

MLIT XRAIN XMP intermediated dataset(Japanese document) : http://metadata.diasjp.net/dmm/doc/MLIT_XRAIN_intermediated-DIAS-ja.html

MLIT XRAIN XMP raw dataset (English document) : http://metadata.diasjp.net/dmm/doc/MLIT_XRAIN_raw-DIAS-en.html

MLIT XRAIN XMP raw dataset (Japanese document) : http://metadata.diasjp.net/dmm/doc/MLIT_XRAIN_raw-DIAS-ja.html

MLIT XRAIN CXMP composite dataset (English Document) : http://metadata.diasjp.net/dmm/doc/MLIT_XRAIN_CXMP_composite-DIAS-en.html

MLIT XRAIN CXMP composite dataset (Japanese Document) : http://metadata.diasjp.net/dmm/doc/MLIT_XRAIN_CXMP_composite-DIAS-ja.html

FRICS "Radar Rain Gauge for Practical Engineers" (in Japanese) : http://www.river.or.jp/jigyo/radar/314.html

7.9 Data Environmental Information

The data of the Ichihazama radar site do not exist after December 14, 2015, because of removal. # The data of the Ichinoseki radar site do not exist after February 13, 2017, because of removal. # From July 9, 2018 the following 3 radar sites were added. 1. Takanosu (Akita Pref.) : X-band MP radar, 2. Myoujinnsan (Ehime Pref.): C-band MP radar, 3. Happonngiyama (Nagasaki Pref.): C-band MP radar. # From October27, 2020, the following 1 radar site was added. 1. Hakodake (Hokkaido Pref.): C-band MP radar. # From January 24, 2021, the following 1 radar site was added. 1. Houdatsusan (Hokuriku): C-band MP radar. # From August 29, 2022, the following 1 radar site was added. 1. Muriyama (Hokkaido) : C-band MP radar.

7.10 Distribution Information

name	version	specification

8. DATA PROCESSING

9. DATA REMARKS

10. DATA POLICY

10.1 Data Policy by the Data Provider

1. XRAIN data sets are to be used only for scientific research or educational purposes, and shall not be used for any other purposes, including for profit, than stated in the application form.

2. User shall provide the name, affiliation, contact information of the person responsible for the research group that will use this data, as well as the purpose of of use.

Unless there are special circumstances, the period of use shall be limited to three years in principle.

However, if it is confirmed that the terms of use have been violated, the use of the data may be suspended regardless of the period of use.

3. After the end of the period of use of this data or the suspension, user shall discontinue to use and promptly destroy this data.

However, this shall not apply to the retention of this data as the basis for conference presentations, thesis presentations, journal publications, reports, etc. using this data.

4. Any modification or change of the original XRAIN data sets is prohibited.

5. User shall not provide the original XRAIN data sets to any third party outside of the research group.

6. If user has made a conference presentation, paper presentation, journal presentation, or report using this data, submit a copy of the publication (reprint in the case of a paper, or a copy of the abstract in the case of an oral or poster presentation) to the contact and mailing address below.

* Contact

River Information Planning Office, River Planning Division, Water Management and Land Conservation Bureau, Ministry of Land, Infrastructure, Transport and Tourism.

Chuo Joint Government Building No. 3,

2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo 100-8918, Japan

Email: hqt-dias@gxb.mlit.go.jp

User shall also submitt to the address specified in the Terms of Use of the Project.

7. User shall cooperate with inquiries from the data provider concerning the contents of materials using this data (materials submitted to the data provider in accordance with 6.) about the documents submitted by the rule 5.

<Disclaimer>

1. Data provider shall not liable for any losses or any damage from the use of XRAIN data sets.

2. Data provider may discontinue to provide XRAIN data sets without any prior notice.

3. Data provider does not support any additional processing or analysis of the provided data.

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

Whenever XRAIN data sets are used for any academic presentations, and any publication of scientific results, the author(s) shall specify the source of the Products.

Example:

"XRAIN data sets used for this study are provided by Ministry Land, Infrastructure, transport and Tourism, Japan"

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