Guide to the Use of the Data Collection System of the Himawari series of satellite (Himawari-DCS)

Japan Meteorological Agency 19 October 2021

The Data Collection System of the **Himawari** series of satellite (referred to below as "**Himawari**-DCS") is designed for use in collecting and distributing in-situ observational data obtained through automatic surface stations (regional Data Collection Platforms, referred to below as "DCPs").

This Guide to the Use of the Data Collection System of the **Himawari** series of satellite (**Himawari**-DCS) (referred to below as "the Guide") is provided in support of applications to the Japan Meteorological Agency (referred to below as "JMA") for the use of **Himawari**-DCS. It outlines the availability of **Himawari**-DCS, arrangements for operating a new DCP, terms and conditions, technical requirements and other important information for users. Please be sure to use the latest version of the Guide and its annexes, since JMA may change the content, including its annexes, without notice.

1 Availability of Himawari-DCS

Himawari-DCS is available for the collection of data from DCPs within the footprint of the operational Himawari, provided that those DCPs: 1) contribute to the international collection of real-time meteorological or tidal/tsunami observational data, or 2) contribute to international projects conducted in accordance with arrangements that are agreed internationally and expected to contribute to the enhancement of meteorological, seismological or oceanographic services. Please note that it may not be possible to approve all applications due to limits on the availability of **Himawari**-DCS radio frequency channels.

2 Arrangements for operating a new DCP

The arrangements for operating a new DCP are detailed below (see Annex 1 for an outline).

2.1 Application

The organization wishing to use **Himawari**-DCS for the collection of data from a new DCP (referred to below as "the applicant") should apply using the Application Form for a New Regional Data Collection Platform for **Himawari**-DCS (referred to below as the "Application Form") in Annex 2 after reading this Guide carefully, including its annexes. JMA may request amendments to submitted Application

Forms that are incomplete.

2.2 Examination and coordination

JMA will examine the submitted Application Form on the basis of **Himawari**-DCS availability described in paragraph 1, the terms and conditions described in paragraph 3, and the Technical Requirements of Regional Data Collection Platforms for using the Data Collection System of the **Himawari** series of satellite (**Himawari**-DCS) (referred to below as the "Technical Requirements") in Annex 3. JMA will, if necessary, resolve any relevant issues in coordination with the applicant to optimize the number of users taking advantage of **Himawari**-DCS as efficiently and effectively as possible.

2.3 Notice of implementation testing toward operational data collection or notice of declination

On completion of the examination and coordination outlined in subparagraph 2.2 above and if the DCP is acceptable, JMA will notify the applicant of implementation testing using **Himawari**-DCS toward operational data collection, together with the information necessary to conduct the testing (such as the radio frequency channel, DCP address and time slot). If the DCP cannot be accepted, JMA will send a notice of declination to the applicant.

2.4 Implementation testing

JMA and the applicant will conduct implementation testing for the DCP after its radio license is granted to the applicant by the radio administrative body of the country where the DCP will be installed and operated. If the testing is successful, JMA will immediately shift to data collection from the DCP on a trial basis and report data to the applicant (also on a trial basis). If the testing is not successful, JMA will send a notice outlining the test results and request the applicant to improve the DCP. JMA and the applicant will later conduct implementation testing again after the improvements have been made.

2.5 Notice of date of commencement for formal and operational data collection If the implementation testing is successful, JMA will notify of the test results and the date of commencement for formal and operational data collection (in coordination with the applicant) together with the terms and conditions described in paragraph 3. The applicant – the new operator of the DCP – will formally receive data collected from the DCP as of the date specified.

3 Terms and conditions for the use of Himawari-DCS

The use of **Himawari**-DCS is governed by the following terms and conditions (referred to below as the "Terms and Conditions"):

3.1 Data collection, reporting and dissemination by JMA

JMA will report data (referred to below as "data") collected with Himawari-DCS

to the operator of the DCP (referred to below as "the operator") via the Global Telecommunication System (referred to below as the "GTS") of the World Meteorological Organization (WMO). In addition to the GTS, for operators with no GTS network connection, JMA will deliver data by e-mail and/or posting on the dedicated website managed by JMA's Meteorological Satellite Center (MSC) (referred to below as "the website"). JMA will issue an account name and password to allow website access by operators requesting DCP data to be posted online. Please note that all data posted on the website can be browsed and downloaded by any other operator with an account and password.

JMA may internationally disseminate data collected with **Himawari**-DCS regionally or globally.

3.2 Installation

The operator should install the DCP, observing the regulations and technical requirements outlined below.

- 3.2.1 The Radio Regulations of the International Telecommunication Convention and those of the country where the DCP will be installed and operated
- 3.2.2 Technical Requirements (Annex 3)

3.3 Operation

The operator should operate the DCP in observance of the following articles:

- 3.3.1 The operator should observe the regulations and technical requirements described in subparagraphs 3.2.1 and 3.2.2 above.
- 3.3.2 The operator should maintain the DCP properly.
- 3.3.3 Where data collected with **Himawari**-DCS needs to be disseminated internationally (such as where data acquired at synoptic stations meet the regional or global needs of the Global Observing System of the WMO's World Weather Watch Programme), the operator should disseminate, regionally or globally, all or part of the data to National Meteorological and Hydrological Services via the GTS, or to relevant organizations by other available means, depending on the content of the data and the purpose of its collection.
- 3.3.4 Any operator wishing to make changes in a) data transmission speed, b) radio frequency channel, c) time interval, or d) content of data collection should request permission from JMA for such changes by submitting a request in its preferred format.
- 3.3.5 The operator should advise JMA of changes in the DCP (other than those described in subparagraph 3.3.4), such as alterations to its location or equipment, at least one month before the change by submitting notification in its preferred format.
- 3.3.6 Where suspension of the DCP lasts or is anticipated to last more than a month, or breakdown of the DCP lasts or is anticipated to last more than a week, the operator should notify JMA of the above suspension or breakdown promptly in its preferred

format.

3.3.7 The operator should submit a plan of operation for the DCP to JMA at least once a year in its preferred format.

3.4 Possible action in the event of failure to observe the above articles

If the operator fails to observe any of the articles described in subparagraphs 3.2 and 3.3, JMA may stop or suspend data collection from the DCP.

3.5 Liability

JMA accepts no responsibility for issues arising from the use of data obtained by DCPs and delivered via the GTS or other means, or from any interruption of data collection due to satellite system breakdowns or other causes.

4 Contact points and notification of operational information

4.1 Contact point for applications described in subparagraph 2.1 and for changes described in subparagraph 3.3.4

Japan Meteorological Agency Satellite Program Division

Address: 3-6-9 Toranomon, Minato City, Tokyo 105-8431, Japan

E-mail: metsat@met.kishou.go.jp

4.2 Contact point for matters described in subparagraphs 3.3.5, 3.3.6 and 3.3.7

Meteorological Satellite Center

System Engineering Division

Address: 3-235 Nakakiyoto, Kiyose, Tokyo 204-0012, Japan

E-mail: msc.dcp@met.kishou.go.jp

Fax: +81-424-92-2443

4.3 Operational information

JMA will post information on its website (URL below) in the event of any changes in the operation of Himawari-DCS such as the suspension of data collection due to equipment maintenance.

http://www.data.jma.go.jp/mscweb/en/operation8/bulletin list H8.html

- **Annex 1** Arrangements for Operating a New Regional Data Collection Platform
- **Annex 2** Application Form for a New Regional Data Collection Platform for Himawari-DCS
- Annex 3 Technical Requirements of Regional Data Collection Platforms for using the Data Collection System of the **Himawari** series of satellite (**Himawari**-DCS)