

Prepared by JMA  
Agenda Item: 7.6  
Discussed in WG I

**JMA'S OPERATIONAL DCS STATUS REPORT  
+ STATUS OF IMPLEMENTATION OF BEST PRACTICES**

The Japan Meteorological Agency (JMA) has operated the Data Collection System (DCS) since its first Geostationary Meteorological Satellite (GMS) went into operation in 1978. The system plays important roles in collecting meteorological information as well as seismic intensity and tidal/tsunami data collaborating with the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS). In Japan, more than 400 DCPs collect seismic intensity data. Himawari-8's DCS has been operational since July 2015, and Himawari-9 took over the DCS service in 2022 and will continue in this role until 2029.

The Agency has decided that the planned Himawari-10 program set to replace Himawari-8/9 will assume the same DCS.

Action/Recommendation proposed: none

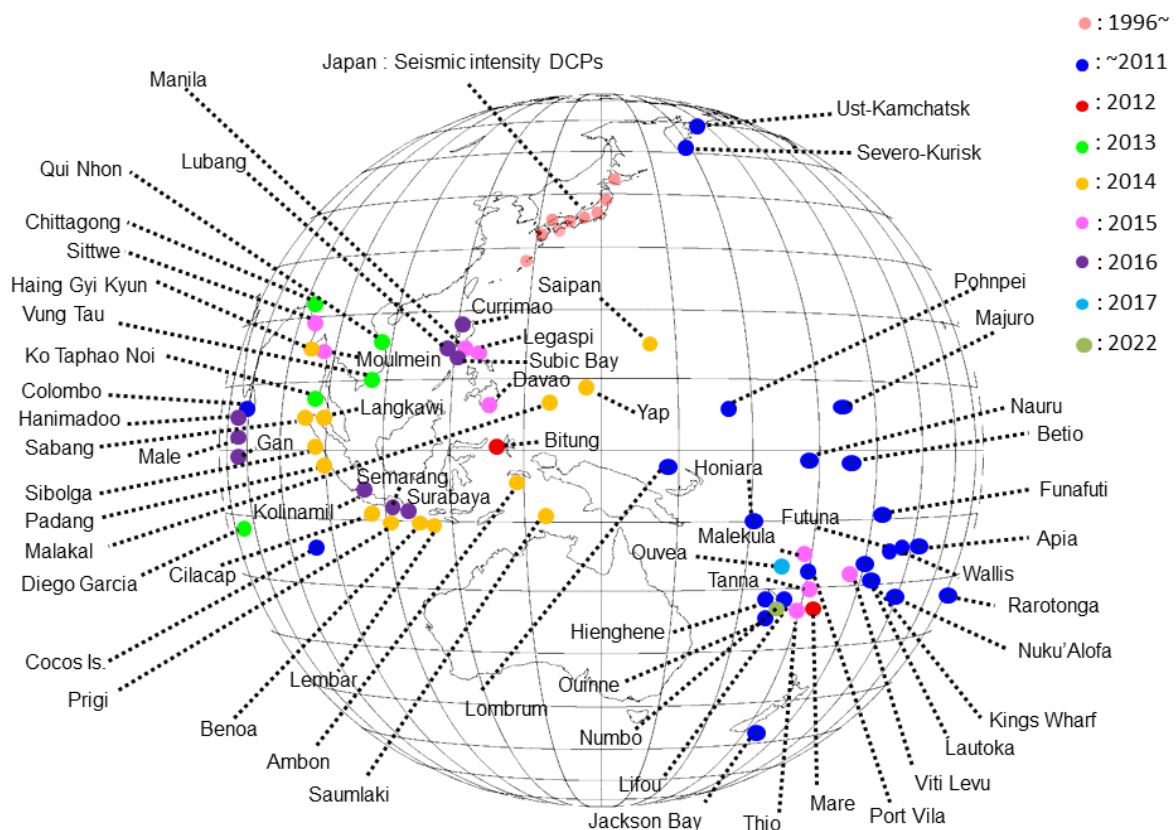
## **1 INTRODUCTION**

JMA has operated the Data Collection System (DCS) since its first Geostationary Meteorological Satellite (GMS) went into operation in 1978. The system plays important roles in collecting meteorological information as well as seismic intensity and tidal/tsunami data. In July 2015, Himawari-8 entered operation and took over the DCS service from MTSAT. In March 2017, Himawari-9 entered a period of in-orbit standby as back-up to Himawari-8. Himawari-9 took over the DCS service in 2022 and will continue in this role until 2029.

Himawari-8 and -9 use the Ka band (18 GHz) as the downlink frequency for relaying DCP data. To take into account rainfall attenuation in this band, the main and sub antenna sites, which are more than 800 km apart, both receive the downlink for redundancy.

## **2 CURRENT STATUS OF HIMAWARI-DCS**

The figure below shows the distribution of tidal/tsunami and seismic intensity DCPs allocated to regional channels in Himawari-DCS, including tidal/tsunami DCP stations collaborating with the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS). In Japan, more than 400 DCPs collect seismic intensity data. In 2022, a new tidal DCP began operation in the western Pacific.



**Figure: Distribution of tidal/tsunami and seismic intensity DCPs in Himawari-DCS**

### 3 FUTURE OF THE HIMAWARI-DCS

JMA has decided that the planned Himawari-10 program set to replace Himawari-8/9 will assume the same DCS.

### 4 STATUS OF IMPLEMENTATION OF THE BEST PRACTICES IN SUPPORT TO DCP DATA ACCESS

**Best Practice BP.01:**

*Satellite Operators offering DCS should make all the DCS data available via the Internet on a DCS Web Service.*

Compliant. JMA makes all meteorological and tidal DCP data available online for registered users.

**Best Practice BP.02:**

*Satellite Operators offering DCS should make all the DCS data globally available on the WMO GTS.*

Compliant. JMA makes all meteorological and tidal DCP data globally available via the WMO GTS.

**Best Practice BP.03:**

*Satellite Operators offering DCS should ensure their DCS Web Service makes all DCS data within their system available to a valid registered user.*

Compliant. JMA makes all meteorological and tidal DCP data available online for registered users.

**Best Practice BP.04:**

*The Satellite Operators offering DCS should ensure high DCS data availability and put in place mechanisms to be able to detect and recover problems with the service with minimum delays.*

Compliant.

**Best Practice BP.05:**

*The Satellite Operators offering DCS should ensure DCS data are made available on the DCS Web Service as soon as possible.*

Compliant.

**Best Practice BP.06:**

*The Satellite Operators offering DCS should provide an on-line DCS data archive, which is sized according to user's applications requirements and expandable to cope with evolving user needs.*

Compliant. 7-day archives are available online for DCP users.

**Best Practice BP.07:**

*The Satellite Operators offering DCS should ensure their DCS Web Services offer the possibility for tailoring DCS data retrieval.*

Compliant. JMA provides DCP data online for download.

**Best Practice BP.08:**

*The Satellite Operators offering DCS should put in place mechanisms to notify the DCS Data Users of any service changes and issues, which impact the access to DCS data (e.g. delays, outages).*

*The information provided in the notification should be as detailed as possible, including the extent of the impact, expected duration of the impact, etc. Updates to the notifications should be issued regularly and a final notification should be sent to confirm return to nominal service.*

Compliant. JMA notifies users of any service changes and issues on its website.

**Best Practice BP.09:**

*The Satellite Operators offering DCS should ensure their DCS Web Services allows easy maintenance of up-to-date record of the DCP Operator's contact information by the users.*

JMA's website does not display DCP operator contact information. However, the WIGOS OSCAR/Surface website displays such information for meteorological data.

**Best Practice BP.10:**

*The Satellite Operators offering DCS should provide the DCS Users with a full set of DCS Data Access documentation, accessible through the DCS Web Service.*

Compliant. JMA provides such online documentation on the DCP website.

## **5 STATUS OF IMPLEMENTATION OF THE BEST PRACTICES IN SUPPORT TO DCP TX CERTIFICATION PROCESS**

JMA does not require certification for DCP transmitter manufacturers.