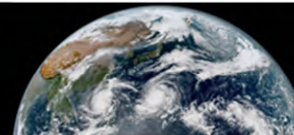




HimawariCast Newsletter

No. 1, 15 July 2016



Japan Meteorological Agency



Preface

A year and a half has passed since the Japan Meteorological Agency (JMA) launched its HimawariCast service, which provides primary sets of Himawari satellite imagery via a communication satellite to increasing numbers of operational users. Numerous National Meteorological and Hydrological Services in the Asia Pacific region now incorporate Himawari-8 data from the service into their weather monitoring and forecasting activities for disaster mitigation.

This HimawariCast Newsletter has been established in consideration of the current situation to enable sharing of important information and expertise on satellite imagery analysis. Its content will include important information relating to the operation of HimawariCast receiving systems, examples of satellite imagery analysis techniques and tips on using JMA's SATAID display and analysis program.

I hope the newsletter will support the use of

HimawariCast receiving and processing equipment and promote active communication between HimawariCast users and JMA as the service operator.

Hitomi Miyamoto
Director, Satellite Program Division

HimawariCast communication satellite switchover

As previously announced, the communication satellite switchover from JCSAT-2A to JCSAT-2B is currently ongoing. JCSAT-2B is located in the same position and has the same downlink frequency as JCSAT-2A, but their polarization directions intersect at right angles. HimawariCast users should complete the necessary transition work during the period between 03 UTC on 6 July and **03 UTC on 20 July 2016** to enable reception of HimawariCast data via JCSAT-2B. Users who have not yet taken these steps should act immediately.

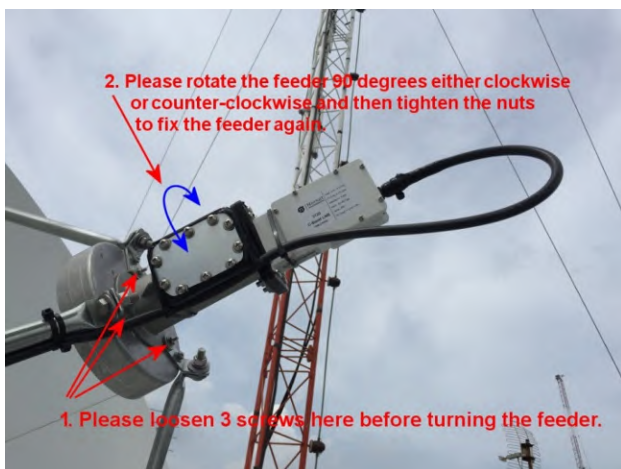
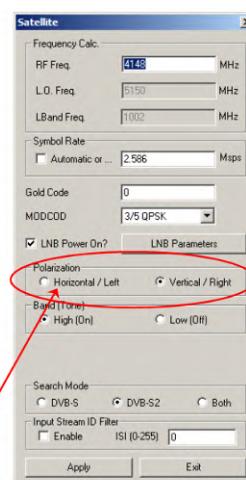


Figure 1. Rotating low noise block converter (LNB) work



The "Polarization" item might need to be changed to the "Horizontal/Left" item, when the JCSAT satellite is switched over to JCSAT-2B from JCSAT-2A

Figure 2. Satellite receiver setting (Novra S300D)

Transition work essentially consists of either one or two steps. One involves turning the low noise block converter (LNB) by 90 degrees (Figure 1), and the other involves changing the related setting. Figure 2 shows an example of the latter. Here, the user needs to switch the “polarization” option from “vertical” to “horizontal” in the satellite receiver program configuration. The work that individual users need to complete depends on antenna and LNB types. Contact your equipment vendor for details.

All users are recommended to determine LNB position that produces the highest carrier to noise ratio

(C/N).

After the communication satellite switchover, the area of HimawariCast coverage will change significantly as shown in Figure 3. Numerous countries in the Pacific region and elsewhere that cannot currently receive signals or need large antennas for JCSAT-2A will be able to receive JCSAT-2B signals with a 2.4-m-diameter (19.6 dB/K) antenna.

Information on HimawariCast transition work is also available at:

http://www.data.jma.go.jp/mscweb/en/himawari89/himawari_cast/transition.html

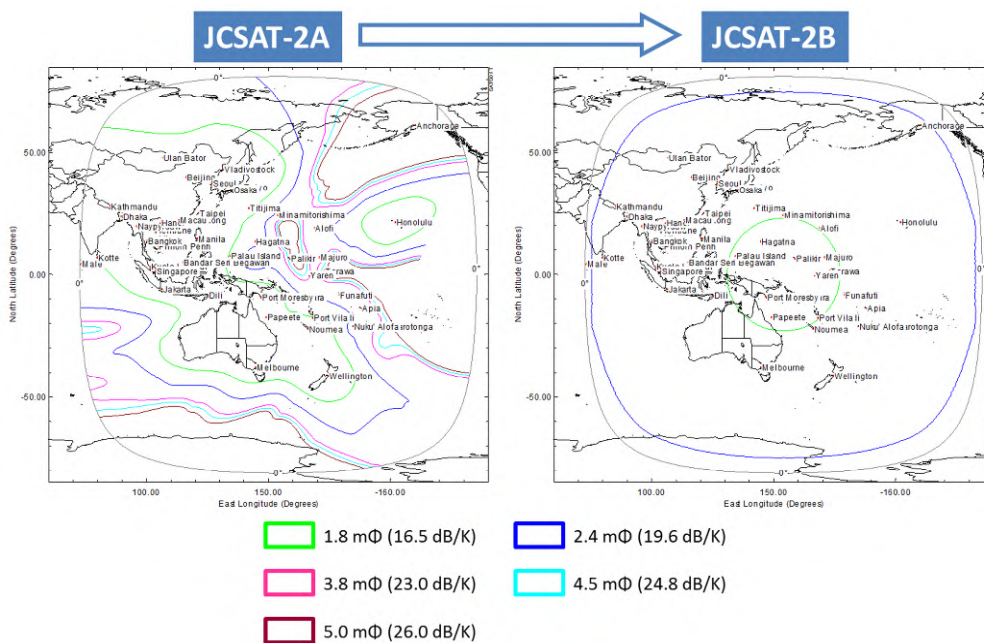


Figure 3. Antenna diameters needed for HimawariCast data reception

Up-to-date information, including the specifications of equipment needed to receive data via HimawariCast, is available on the HimawariCast web page:

http://www.data.jma.go.jp/mscweb/en/himawari89/himawari_cast/himawari_cast.html

Comments and inquiries

Comments and inquiries on this newsletter and/or the HimawariCast web page are welcomed.

Mr. Yasushi Izumikawa
 Senior Scientific Officer, Satellite Program Division, Observation Department
 Japan Meteorological Agency
 1-3-4 Otemachi, Chiyoda-ku, Tokyo, 100-8122, Japan
 Fax: +81-3-3217-1036
 Email: metsat@met.kishou.go.jp