

HimawariRequest Service Description

Version 1.0



Japan Meteorological Agency

Document Control*

Version	Date	Version information
V 0.1	May 2017	Reported at IPET-SUP-3
V 0.2	June 2017	Reported at CGMS-45
V 0.3	September 2017	Reported at SCOPE-Nowcasting-EP
V 0.4	October 2017	Reported at the fifth meeting of the RA II WIGOS Project to Develop Support for NMHSs in Satellite Data, Products and Training
V 1.0	18 January 2018	First edition release

* Formerly titled 'Protocol for Himawari-8/9 Request-driven Rapid Scan in WMO RA II and RA V.'

HimawariRequest Service Description

1 Introduction

The Advanced Himawari Imager (AHI) on board Himawari-8/9 is capable of frequent and flexible observation, providing Full-Disk images of the earth every 10 minutes and regional images with shorter intervals (Fig. 1). Full-Disk and other regional observations have spatial resolutions of 0.5 to 2 km and spectral coverage incorporating 16 bands.

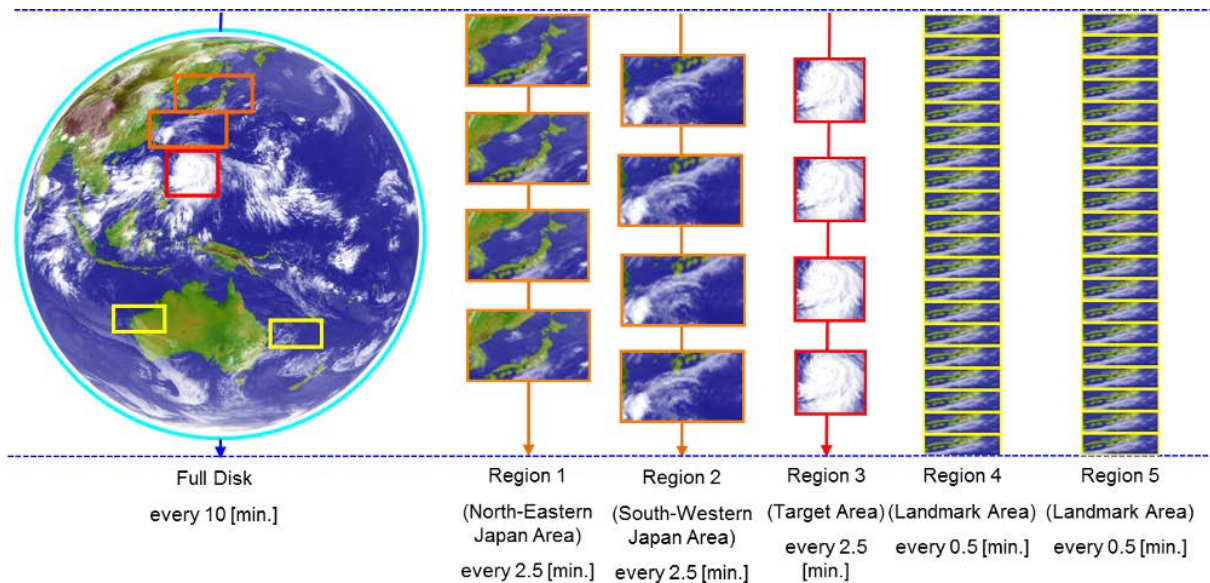


Figure 1: AHI observation sequence within a 10-minute time frame

In regional monitoring, Target Area (Region 3) observation provides imagery covering a 1,000 x 1,000 km area every 2.5 minutes with flexibility for location changes to support JMA's national and international services. The observation is normally focused on an area of active volcanoes in the domain of the Tokyo VAAC, and is adapted to encompass typhoons within the RSMC Tokyo Typhoon Center's area of responsibility.

The HimawariRequest service allows National Meteorological and Hydrological Services (NMHSs) to request particular Target Area observations in order to leverage this flexibility on an international scale.

JMA provides the service in collaboration with the Australian Bureau of Meteorology (AuBoM) based on the partnership on meteorological satellites between the two organizations.

2 Request Guidelines

2.1 Service Overview

The HimawariRequest service enables NMHSs in the Himawari-8/9 coverage area (referred to here as "Users" or individually "User") to request specific areas and times for Target Area observation.

2.2 Basic Principles

- (1) Requests from Users may be overridden or interrupted depending on circumstances within Japan or JMA.
- (2) The service is provided on a best-effort basis in consideration of operational limitations.
- (3) Users' requests relating to emergency operations for tropical cyclones and volcanic eruptions are prioritized over other users' requests.
- (4) Observations shall not initially exceed 48 hours, but may be extended in response to additional requests.

2.3 Request Management

A 2016 feasibility study conducted by JMA and AuBoM on request-based Himawari-8 Target Area observation indicated potential advantages from AuBoM brokerage of RA V (South-West Pacific) observation requests in order to mitigate burdens placed on JMA in relation to extreme events.

Accordingly, RA V Users should submit requests directly to AuBoM. In the event of conflicting requests from different Users, AuBoM shall assign priority in line with Basic Principle 3 above. If this is impractical, AuBoM shall assign priority at its own discretion. AuBoM shall inform JMA of a single request for each time slot.

Users of RA II (Asia) and the United States of America (USA) should submit requests directly to JMA.

The related procedures are detailed in Section 2.5.

2.4 Registration

Before using the service, Users must submit a completed registration form (see the Annex) specifying the e-mail address from which requests will be sent in order to enable validation by JMA and AuBoM.

2.5 Request Procedure

Users should e-mail requests via the dedicated website using the registered e-mail address with information on the observation center and the desired start/end times to trigger subsequent procedures. The relevant URL will be provided once registration is complete.

2.5.1 Procedure for Users of RA II and USA

Users of RA II and USA can e-mail requests to JMA directly. The procedure is as follows (see Fig. 2):

1. User: E-mails request to JMA.
2. JMA: E-mails reply.
3. JMA: Changes relevant JMA system settings.

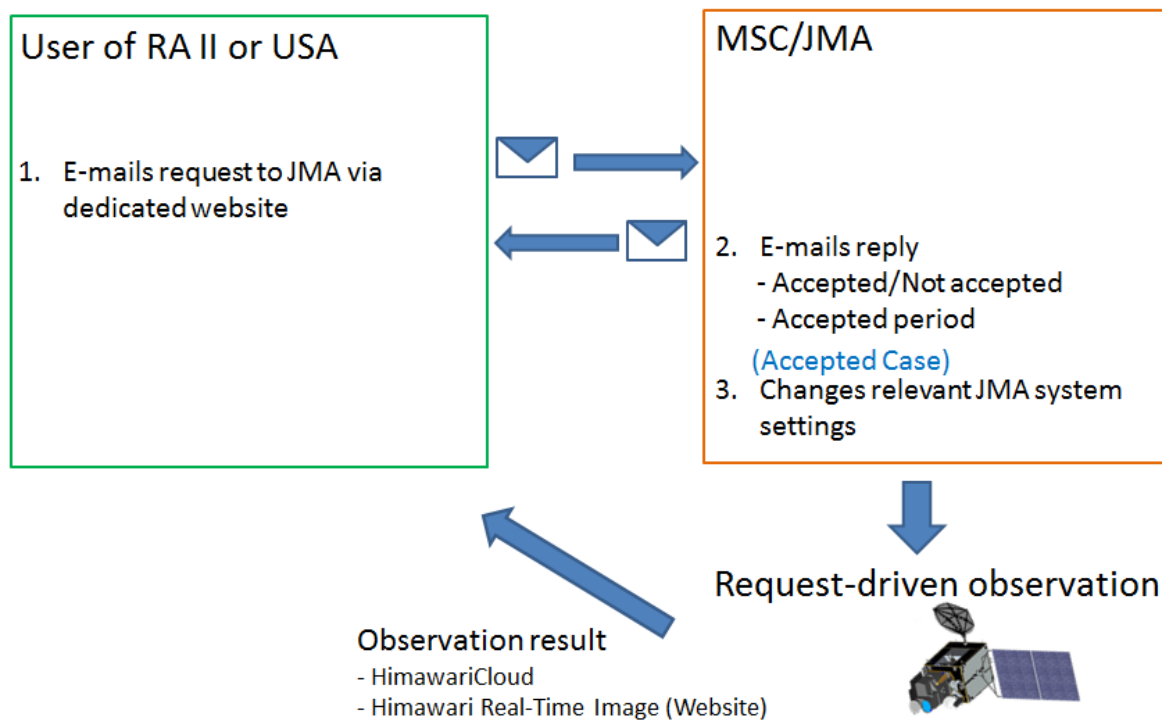


Figure 2: Request procedure for Users of RA II and USA

2.5.2 Procedure for RA V Users

The AuBoM procedure for RA V Users is as follows (Fig. 3):

1. User: E-mails request to AuBoM.
2. AuBoM: Resolves any relevant observation conflicts and forwards the request e-mail to JMA.
3. JMA: E-mails reply to AuBoM.
4. JMA: Changes relevant JMA system settings.
5. AuBoM Forwards JMA reply to User.

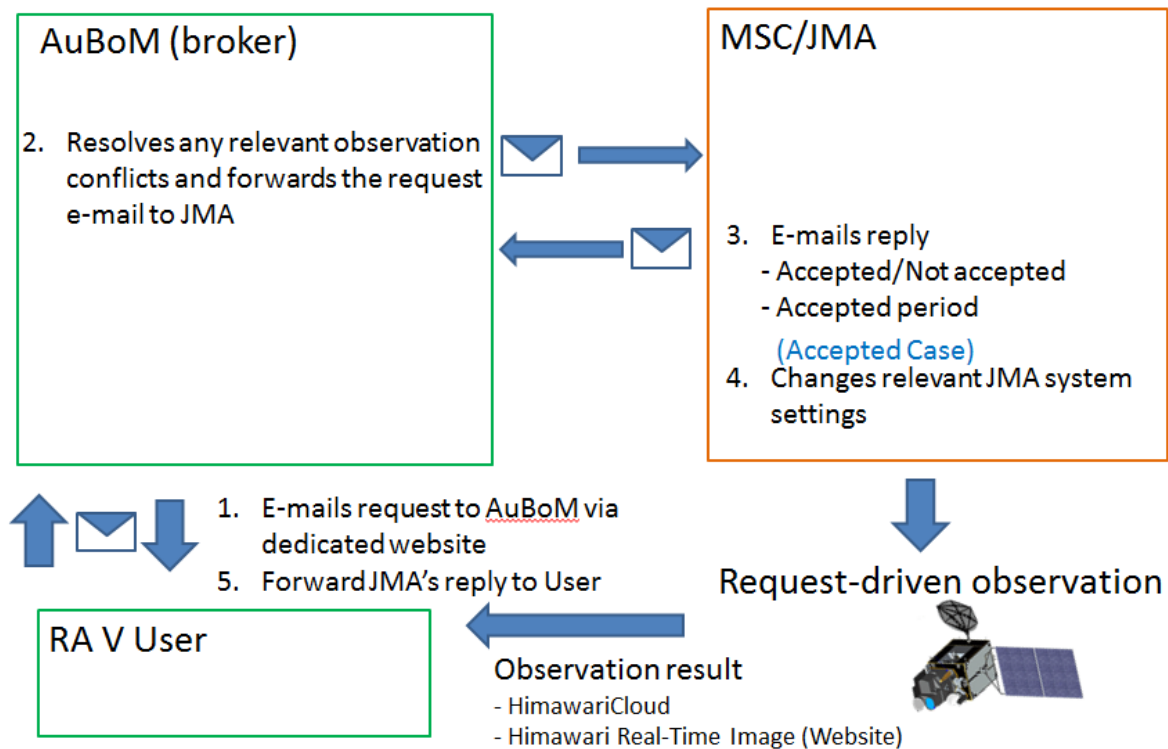


Figure 3: Request procedure for RA V Users

2.6 Service Availability

The HimawariRequest service is available 24/7 and provided ASAP. The request procedure is normally completed within around three hours during working hours and within around six hours otherwise.

3 Data Access

Target-Area observation data are provided via the HimawariCloud service. Related imagery is also available on the Himawari Real-time Image website ([imagery products](#) and [observation area](#)).

4 Feedback

Once the requested observation is complete, Users are asked to provide JMA with feedback on how the observation data are used.

HimawariRequest Registration Form

Users must register in advance for the HimawariRequest service. To register, email this completed form to JMA (metsat@met.kishou.go.jp) with “HimawariRequest Registration” in the subject line. RA V Member information provided on the form is shared with AuBoM, which plays a broker role in the request procedure for RA V Members

Section 1: Organization Information		
1.1	Nation	
1.2	Organization (one NMHS per nation)	
Section 2: Requester Contact Information		
For contact regarding processing of the nation's requests		
2.1	E-mail Provide the email address from which requests will be sent. Free email services may not be used.	
2.2	Phone number	
Section 3: Registrant Contact Information		
For contact with JMA and/or AuBoM		
3.1	Name	
3.2	Position	
3.3	E-mail	
3.4	Phone number	
Section 4: Supervisor Contact Information		
For contact with the request/registration supervisor		
4.1	Name	
4.2	Position	
4.3	E-mail	
4.4	Phone number	