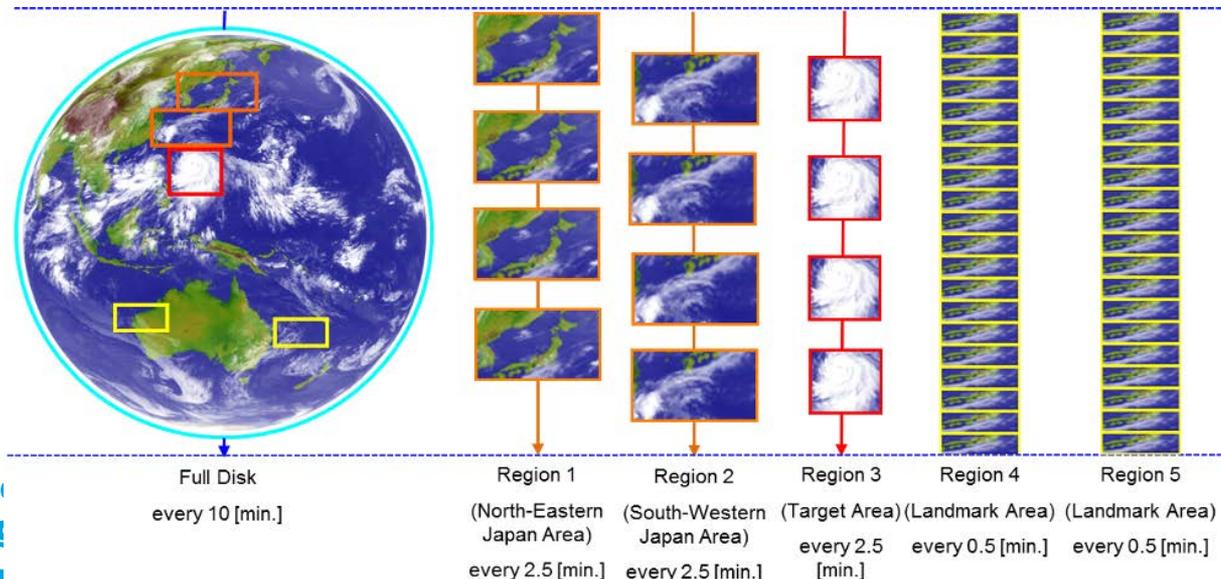




# Introduction (1/2)

- AHI (Advanced Himawari Imager) on Himawari-8/9 has the ability of various scans during 10 minutes Full Disk observation.
- AHI can flexibly change the scan range of “Target Area (Region 3)” for 2.5 min rapid scan observation of phenomena such as typhoons and active volcanoes.
- Rapid scanning of Himawari-8/9 is mainly focused on
  - tropical cyclones in the RSMC Tokyo - Typhoon Center's area of responsibility
  - volcanic eruptions for the Tokyo Volcanic Ash Advisory Center (VAAC Tokyo)



## Introduction (2/2)

- Jakarta Declaration (October 2015)
  - The Joint RA-II/RA-V Workshop on WIGOS for Disaster Risk Reduction
  - One of its goals is “developing a protocol for NMHSs of the countries in the region to request event-driven rapid scan imagery”
- RA II WIGOS Project on “Develop Support for NMHSs in satellite Data, Products and Training”
  - New 4 year implementation plan was adopted at 16th session of RA II, February 2017
  - To develop a protocol for NMHSs of the countries in the Region to request event-driven rapid Scan imagery
  - To assist NMHSs to utilize rapid scan data in support of DRR in response to their requests

## Feasibility study on event-driven Rapid Scan

- Based on the Jakarta Declaration, JMA and AuBoM conducted a joint feasibility study toward the development of a protocol for the request of Himawari-8 Rapid Scan observation between February and March 2016.
- JMA collaborates with AuBoM to create the cyclone tracking system by “Target Area” observation during high season for cyclone (Southern Hemisphere) whereas low season for typhoon (Northern Hemisphere).
- The study was proceeded successfully as reported at CGMS-44.

## Draft Protocol (1/3)

- Target region of this protocol
  - RA II and RA V
- The term ***rapid scanning*** refers to
  - Image repetition cycles of significantly less than 10 minutes, and 2.5minutes for Himawari-8/9
- National security and other national priorities or interest of Japan take priority in principle
  - Tropical cyclones in the area of RSMC Tokyo, volcanic eruptions in the area of Tokyo VAAC and so on.
- AuBoM manages the request from NMHSs in RA V

## Draft Protocol (2/3)

- Tropical cyclones and volcanic eruptions take higher priority than other events
- Request will be submitted via email with designated format
  - Center position, start / end time of Target area observation should be included
- JMA will determine the priority, reconfigure the relevant satellite system and establish related operating processes
  - Some anticipation time is needed
- Maximum duration of requests is supposed not to exceed 48 hours.
  - Any extension will require a additional request in line with this protocol

## Draft Protocol (3/3)

- Rapid scan observation data is available from:
  - HimawariCloud (internet data dissemination system)
  - MSC web (jpeg image only)
- Feedback
  - NMHSs whose requests are accepted should provide AuBoM or JMA with feedback on target-area observation results rather than 10-minute full-disk observation results.

# Technical Implementation

- JMA, AuBoM and each NMHS to determine authorized contact points
- JMA to establish an email request form
- RA V and RA II members to inform AuBoM and JMA respectively of center position and start/end times of the Target area observation in the dedicated format
- AuBoM to inform JMA of those information from RA V members

# Schedule

- This protocol is under construction in coordination
- JMA will report the further development at
  - 5th WIGOS project coordination group meeting in October 2017
- JMA supposes that this protocol will be activated after the meeting

Thank you

