WMO RA II and RA V 2018 Survey on the Use of Satellite Data

RA II WIGOS Project to Develop Support for NMHSs in Satellite Data, Products and Training RA V Task Team on Satellite Utilization

The Joint Meeting of RA II WIGOS Project and RA V TT-SU for RA II and RA V NMHSs Jakarta, 11 October 2018

History of User Survey in RA II (and RA V)

2012

- RA II Survey, WMO Survey
- 2nd Meeting of the Coordinating Group
 - "Action: The Co-coordinators and WMO SP to seek linkage between the WMO SP Product Access Guide and RA II Product Portal avoiding the duplication of the similar information and considering sustainability.", Final Report, October 2012

2016

• WMO Survey (every 4 years)

2017

- CGMS-45 WGIV (Coordination Group for Meteorological Satellites)
 - "JMA/KMA to coordinate a regional user survey in RA II/V based on the WMO 2016 global survey (CGMS-45 WMO-WP-15) in collaboration with BOM and WMO, taking into consideration the communication satellite broadcast systems available in the regions.", A45.01, June 2017
- 5th Meeting of the Coordinating Group
 - "The co-coordinators of the project will develop and conduct a regional user survey in 2018 in coordination with the chair of the RA-V Task Team on Satellite Utilization (JMA, KMA and BoM)."

2018

• RA II and RA V 2018 Survey

Objectives (RA II WIGOS Project)

- Work Plan 2017-2020 (excerpts)
 - To facilitate the timely provision of satellite-related information by satellite operator to NMHSs in RA II including developing countries via the project web page, newsletters, user's conference, etc., aligning with VLab activities to optimize assistance to NMHSs in RA II and coordinating training activities on use of satellite data/products;
 - To identify requirements and current and planned utilization capabilities of NMHSs in RA II regarding data and products of Earth observation satellites including new generation geostationary meteorological satellites in support of their weather services, including forecasts and warnings, providing a gap analysis in which the capabilities are matched against the requirements so as to develop an action plan to close the gap;

Summary of the Prior User Surveys

- RA II Survey 2012
 - cf. RA II Pilot Project Newsletter Vol. 3 No. 2, April 2012
 - 20 out of 35 members in RA II responded to the questionnaire.
 - Digital data disseminated via satellites and digital data obtained from the internet were the most popular mechanism of data reception, and it was recognized that analogue data obtained from the internet was also the popular mechanism.
 - There was a strong need for the data from Research and Development and other environmental satellites, especially TRMM. Data from NPP was also requested. A stronger product processing capability is needed.
 - Required but not available parameters are ranked by popularity. Precipitation rate ranked as the clear No. 1.
 - Monitoring dust and Ocean current is getting an interest from RA II Members.
 - A large scale of training, the support of E-learning in satellite meteorology by WMO and the regular training were required.
- WMO Survey 2016
 - cf. 3.1 b) Results from the WMO 2016 Survey

RA II and RA V 2018 Survey (1/3)



The Coordinating Group of the RA II WIGOS Project to Develop Support for NMHSs in Satellite Data, Products and Training and the RA V Task Team on Satellite Utilization

Thank you for taking the time to participate in our survey.

We designed the survey to collect up-to-date information on the use of satellite data for meteorological, climate, water, and related environmental applications in WMO RA II and RA V. We are particularly interested in the needs and challenges that users and countries face in accessing, visualizing and using satellite data. Your feedback to this survey is important to us. Feedback will facilitate international action to better serve the global community of satellite data users.

PLEASE SUBMIT THE COMPLETED SURVEY TO "metsat@met.kishou.go.jp" BY THE 21st DECEMBER 2018

1. Are you completing this survey as an individual, on behalf of your organization, or on behalf of the Permanent Representative of your country to WMO?

(\$)	 Options for answer: I am completing this survey as an individual I am completing this survey on behalf of my organization I am completing this survey on behalf of the Permanent Representative of my country with WMO
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2. Please tell us about yourself.

(Note the personal information you provide will be treated confidentially in line with the WMO.

RAII and RAV 2018 Survey (2/3)

4	A	В	C	D	E	F	G	H		J	К	L	M	N	0	Р
						SATE	LLITE DAT	A REQUIR	EMEN	TS FO	R RA II	AND R	AV			
2						INFORMAT	ION FROM PROVIDE	RS					User Requirements			
4	ID #	Parameter (Select one of the options)	Data Provider	Data Characteristics	Format	Data Distribution	Geographical Area	Horizontal Resolution (km/deg)	Frequency	Maximum Data Traffic at a Time (kB, 2 significant digits)	Reference	Priority (Select one of the options)	Do you access/receiv e the data/products ? (Select one of the options)	Timeliness (Select one of the options)	Most Important Application Area (Select one of the options)	Specifi Applicati (detailed
5	1	Aerosol total column	KMA	Aerosol Optical Depth, Aerosol Index	Binary / PNG	NMSC/KMA Webpage	Full Disk / Extended Northerm Herrisphere/ East Asia / Local Area	1 km:Visible based products 4 km: IR-based products	3 hours (Full Disk) / 15 minutes	15000	go.kstem/home page/en/ver2/stat ic/selectStaticPa ge.do?view=data center.dataServic					
5	2	Aerosol total column	KMA	Aerosol Optical Depth, Aerosol Index	HDF-EOS5/ PNG	DCPC Webpage	Full Disk / Extended Northerm Hemisphere	1 km:Visible based products 4 km: IR-based products	3 hours (Full Disk) / 15 minutes	15000	http://dopc.nmsc. kma.go.kr/openw is-user- portal/srv/en/mai n/home					
7	3	Atmospheric motion vector	KMA	COMS Atmospheric Motion Vector (AMV)	Binary / PNG	NMSC/KMA Webpage	Full Disk / Extended Northerm Hemisphere/ East Asia / Local Area	1 km:Visible based products 4 km: IR-based products	3 hours (Full Disk) / 15 minutes	10000	go kritenikove pageleniver2/stat ic/selectStaticPa ge.do?view=data center.dataServic					
3	4	Atmospheric motion vector	КМА	COMS Atmospheric Motion Vector (AMV)	ASCII / PNG	DCPC Webpage	Full Disk / Extended Northerm Hemisphere	1 km:Visible based products 4 km: IR-based products	3 hours (Full Disk) / 15 minutes	10000	http://dcpc.nmsc. kma.go.kr/openw is-user- portal/srv/en/mai n.home					
•	5	Atmospheric motion vector	JMA	Himawari-8/9 Atmospheric Motion Vector (AMV)	BUFR4	GTS	60S-60N, 90E-160W	34 km	1 hour	3200	<u>"Products</u> <u>Atmospheric</u> <u>Motion vector</u> (AMV)," http://www.data.j ma.go.jp/ms.owe b/en/product/pro- duct/amv/index.h tml					
0	6	Atmospheric motion vector	KMA	COMS Atmospheric Motion Vector (AMV)	BUFR4	GTS	60S-60N, 75E-180E	96 km	15 minutes	30						
		Cloud parameters (Cloud base height, Cloud cover, Cloud ice total column,		Cloud Parameter		MONT	Full Disk / Extended Northerm	1 km:Visible based	3 hours (Full		http://hmac.kma. go.knhtmi/home page/en/ver2/stat					

An initial inventory of available satellite data/products (JMA and KMA)

RA II and RA V 2018 Survey (3/3)

- SECTION 1 ACCESS TO SATELLITE DATA AND PRODUCTS
 - Q1) An initial set of satellite data inventory for RA II and RA V: user priority, access, timeliness, and application area
 - Q2) Use of current GEO satellites
 - Q3) Preparation for future GEO satellites
 - Q4) Access mechanism
- SECTION 2 USE AND APPLICATIONS OF SATELLITE DATA AND PRODUCTS
 - Q5) Most important available parameters and most required but not available parameters for each application area
 - Q6) Optimal temporal frequency of geostationary satellite data delivery, impact of the latest GEO satellite RGB
 - Q7) Top three weather-related hazards, most important satellite data/products currently used, which satellite product would help you improve your services for these hazards
 - Q8) Which polar orbiting products you currently use operationally and which products you would like to use
- SECTION 3 EDUCATION AND TRAINING
 - Q9) Training needs, delivery of training, and awareness of training resources

RA II and RA V 2018 Survey (4/3)

- RA II Project co-coordinators and RA V TT-SU Lead have developed the questionnaire for the RA II and RA V 2018 survey, having several teleconferences.
- RA II Project coordinating group and RA V TT-SU members including EUMETSAT, NESDIS and WMO have been inquired their comments for the draft questionnaire.
- The RA II and RA V 2018 survey was developed, based on the results of the prior WMO/RA II/AOMSUC surveys.
- An initial inventory of available satellite data/products (provided by JMA and KMA) in RA II and RA V is compiled in accordance with CBS-15/Doc. 4.2(1) and the inventory will be incorporated in the survey.

RA II and RA V 2018 Survey: Schedule

- RA II co-coordinators and RA V lead and/or WMO will announce the survey to the NMHS point of contacts via e-mail. (After this meeting, as soon as possible)
- RA II and RA V NMHSs will return their questionnaire via e-mail (Deadline: 21th December).
- The co-coordinators and the lead report the result of the questionnaire (2nd RA II and V Joint meeting, 2019).

Thank you!