

Data Exchange and  
Dissemination: RA III/IV –  
Coordination Group on Satellite  
Data Requirements

# ACTION PROPOSED

## **The second session is invited to:**

Take note of the draft Roadmap for Regional Satellite Data Distribution in RA III and IV;

Take note of the progress in updating the list of data requirements (including product prioritization from users), and advise on the best approach for defining priority;

Discuss the proposal for a face-to-face meeting in 2016;

# SDR Teleconferences

All minutes from teleconferences or face-to-face meetings are available (<http://satellite.cptec.inpe.br/geonetcast/es/datareq.html>).

Six teleconferences were conducted since IPET-SUP-1 (the last one on 19 January 2016) and one face-to-face meeting at the April 2015 NOAA Satellite Conference.

- Survey preparation and Implementation. Survey results will be very important to establish a strategy plan for the satellite data requirements and dissemination, for the training and the definition of the mechanisms to improve satellite data utilization in the region.
- Roadmap for satellite data distribution, with focus on GOES-R.
- Receive updates on the operational GOES constellation, GNC-A and GOES-R
- Identify priorities in the list of satellite data requirements, and the identification of the products on the list of satellite data requirements.

# Face to Face Meeting

- It was held in Greenbelt, USA from 27 to 28 April 2015.
- 21 representatives from the two Regions, WMO Regional representatives as well as the WMO Space Programme, and NOAA representatives.
- The detailed report can be found in the URL <http://satelite.cptec.inpe.br/geonetcast/br/datareq.html> .

# The Roadmap for regional satellite data distribution in Region III and IV

- The current draft roadmap presents the background situation and the new components of the satellite system in the region. It also shows the actual status and the timetable for the next satellite generation (GOES-R series) and their characteristics. In addition, the document presents the different ways to have access to the data, and potential solution pathways for Members (e.g., using a GOES-R Re-Broadcast Station (GRB), using GEONETCast-Americas, etc). The roadmap is a very important document for the region and will guide the users towards the different possibilities to access the next satellite generation.

# The list of data requirements

Product prioritization from users

The table was updated and priorities are now defined specifically by each user; it is possible to know how many countries and who is asking for each product

INFORMATION FROM PROVIDERS												USER REQUIREMENTS			
ID #	Data Provider	Data Characteristics	Format	Data Distribution	Geographical Area	Frequency	Size (kB)	Size Comment	Format Expected in the Future	FINAL Size (Compressed) kB	Societal Benefit Areas	Priority	Timeliness	Basic Application (Identified by User)	Specific Application (Detailed)
<b>1</b> <b>GOES Imagery</b>															
1.7	NOAA NESDIS	GOES images, channel VIS, WV, IR, Resolution 4km Follows GOES East and West Schedules	LRIT	NOAA Low Rate Information Transmission Service	3AM (All routine and RSO Scan Sectors fm GOES East	Constant Broad-cast	2340	128 Kbps Constant Broadcast	HRIT/LRIT	N/A	<input type="checkbox"/> DIS <input type="checkbox"/> WAT <input type="checkbox"/> BIO <input type="checkbox"/> HEA <input checked="" type="checkbox"/> WEA <input type="checkbox"/> ENE <input type="checkbox"/> ECO <input type="checkbox"/> CLI <input type="checkbox"/> AGR	<input checked="" type="radio"/> High <input type="radio"/> Medium <input type="radio"/> Low <input type="radio"/> Not Required	30 min ▼	Image generation ▼	Sectorized image generation for South America

The updated table and with both classifications of priority can be accessed here: <http://satellite.cptec.inpe.br/geonetcast/br/datareq.html>

**Priority - giving weight 3, for high, 2 for medium, 1 for low and 0 for not required. The final compilation considers the number of points a specific product has.**

SATELLITE DATA REQUIREMENTS FOR RA III AND RA IV - PRIORITIES ACCORDING TO THE REGION															
USER REQUIREMENTS					INFORMATION FROM PROVIDERS										
PRIORITY	N° of "High Priority" votes (Weight 3)	N° of "Medium Priority" votes (Weight 2)	N° of "Low Priority" votes (Weight 1)	TOTAL SUM	Product ID #	Data Provider	Data Characteristics	Format	Data Distribution	Geographical Area	Frequency	Size (kB)	Size Comment	Format Expected in the Future	FINAL Size (Compressed) kB
1	9	5	2	39	18	NOAA NESDIS	GOES Full Disk Visible Full Resolution	GeoTIFF	GNC-A	GOES East Footprint	3 Hours	178	Average File Size (6 per day)	GeoTIFF	108.600,0
2	6	8	1	35	19	NOAA NESDIS	GOES Full Disk IR Full Resolution	GeoTIFF	GNC-A	GOES East Footprint	3 Hours	8	Average File Size (8 per day)	GeoTIFF	4.900,0
3	7	5	3	34	11	NOAA NESDIS	GOES Full Disk WV Full Resolution	GeoTIFF	GNC-A	GOES East Footprint	3 Hours	4	Average File Size (8 per day)	GeoTIFF	2.100,0
4	8	3	0	30	17	NOAA NESDIS	GOES images, channel VIS, WV, IR, Resolution 4km Follows GOES East and West Schedules	LRT	NOAA Low Rate Information Transmission Service (LRT)	3AM (All routine and PSD Scan Sectors frn GOES East and West)	Constant Broadcast	2360	128 Kbps Constant Broadcast	HRITLRT	NA

**Priority - can consider the maximum high priority assigned by any user, and thus determine the products with highest priority.**

SATellite DATA REQUIREMENTS FOR RA III AND RA IV - PRIORITIES ACCORDING TO THE REGION														
USER REQUIREMENTS					INFORMATION FROM PROVIDERS									
PRIORITY	N° of "High Priority" votes (Weight 3)	N° of "Medium Priority" votes (Weight 2)	N° of "Low Priority" votes (Weight 1)	TOTAL SUM	Product ID #	Data Provider	Data Characteristics	Format	Data Distribution	Geographical Area	Frequency	Size (kB)	Size Comment	Format Expected in the Future
<b>1</b>	9	5	2	39	1.8	NOAA NESDIS	GOES Full Disk Visible Full Resolution	GeoTIFF	GNC-A	GOES East Footprint	3 Hours	178	Average File Size (6 per day)	GeoTIFF
<b>2</b>	8	3	0	30	1.7	NOAA NESDIS	GOES images, channel VIS, WV, IR, Resolution 4km Follows GOES East and West Schedules	LRIT	NOAA Low Rate Information Transmission Service (LRIT)	3AM (All routine and RSO Scan Sectors fm GOES East and West)	Constant Broadcast	2340	128 Kbps Constant Broadcast	HRIT/LRIT
<b>3</b>	7	5	3	34	1.10	NOAA NESDIS	GOES Full Disk WV Full Resolution	GeoTIFF	GNC-A	GOES East Footprint	3 Hours	4	Average File Size (8 per day)	GeoTIFF
<b>4</b>	7	3	0	29	1.12	NOAA NESDIS	GOES East Visible	JPEG Image	WWW site	GOES East & West Foot-print	3 Hours	60	Example image	N/A



# How to deliver this data to the user?

- Now we have the update satellite data requirements, with prioritization, validate....
- Now is time to find out the way to deliver the data!

# Discuss the proposal for a face-to-face meeting in 2016

The need for a face-to-face meeting in 2016 was proposed during the 2015 meeting in Greenbelt, driven by the imminent launch of GOES-R. The objective of this meeting is to define the Region-based approach to exploit GOES-R data, to define and respond to training needs specific for GOES-R, and to discuss the results of the regional survey and the new satellite data requirement.

Former Tandem with VLAB in Barbados – now it could be to close...

## Draft justification for a face-to-face RA-3-4-SDR meeting in 2016

### Preamble:

The WMO has recognized that the new generation geostationary satellites, such as GOES-R, “*will have major impact on user infrastructure, systems applications, and services and require coordination action at the scientific, technical, financial, organization and technical levels*” and “*that timely and careful preparation is essential to avoid any disruption of operations upon transition to these new systems, and to ensure that Members take advantage of the new capabilities as early as possible to provide a better service to users*”.

GOES-R will be launched in the very near future. To help ensure countries are prepared, the WMO Region 3-4 Satellite Data Requirements Working Group (RA-3-4-SDR) is proposing to hold a face-to-face meeting to enable knowledge sharing, collaboration and minimize the duplication of efforts.

### Motivation for face to face SDR Meeting:

- a)** To prepare the Region for exploiting GOES-R data such as: coordinated upgrading of satellite data receiving equipment, exchange of best practice configuring GOES-R station, understanding the data processing and product generation software and tools, needs for education and training, possibilities of data exchange and dissemination, exchange experiences in tenders and specifications preparation.
- b)** Survey and the new table of satellite data requirements – validate the new requirement table and explore alternatives for disseminations
- c)** Survey and Training – what the region need – Provides courses and strategy (in agreement with VLAB).

**d) Move forward- some topics**

- i. Regions providing data
- ii. Regions participating in the system development.
- iii. Region installing GNC-A stations.
- iv. Software for visualization and analysis.
- v. Cooperation in product development and validation with NOAA.

**Proposal Schedule Activities**

- 1) GOES-R – First Day
- 2) Data Requirements and training – Second Day
- 3) Next Steps ½ day – Wrap up ½ day.
- 4) Training GOES-R and GNC-A – 4<sup>th</sup> day

## **Expected Outcomes**

- a) Country having all background information to have a decision about GOES-R data reception, processing and product generations, be trained about GOES-R new data and products, learn about products available and how to access it and how to specify a station based in their own needs and data dissemination strategies from the different possible data sources. The group has developed a roadmap to assist countries in this decision.
- b) Defined and validated the table of data requirements and the definition of the procedures for update and new requisitions.
- c) Defined the training need on the region and the possible strategies to have it.
- d) Definition of the next SDR actions.
- e) Be trained to use GNC-A and GOES-R.

## **Proposal:**

Meeting in Barbados from 4 (Wednesday) to 7 May (Saturday – training day), the week before the 8<sup>th</sup> session of the VLab Management Group.