

WMO SPACE PROGRAMME

Werner Balogh
WMO Space Programme Office

The Joint Meeting of RA II WIGOS Project and RA V TT-SU
for RA II and RA V NMHSs



WORLD
METEOROLOGICAL
ORGANIZATION

Jakarta, Indonesia
11 October 2018

2030 Agenda for Sustainable Development



- WMO contributes to 12 of the 17 SDGs and is the co-custodian of SDG 13 on Climate Action

<https://public.wmo.int/en/our-mandate/what-we-do/wmo-contributing-sustainable-development-goals-sdgs>



WMO Space Programme

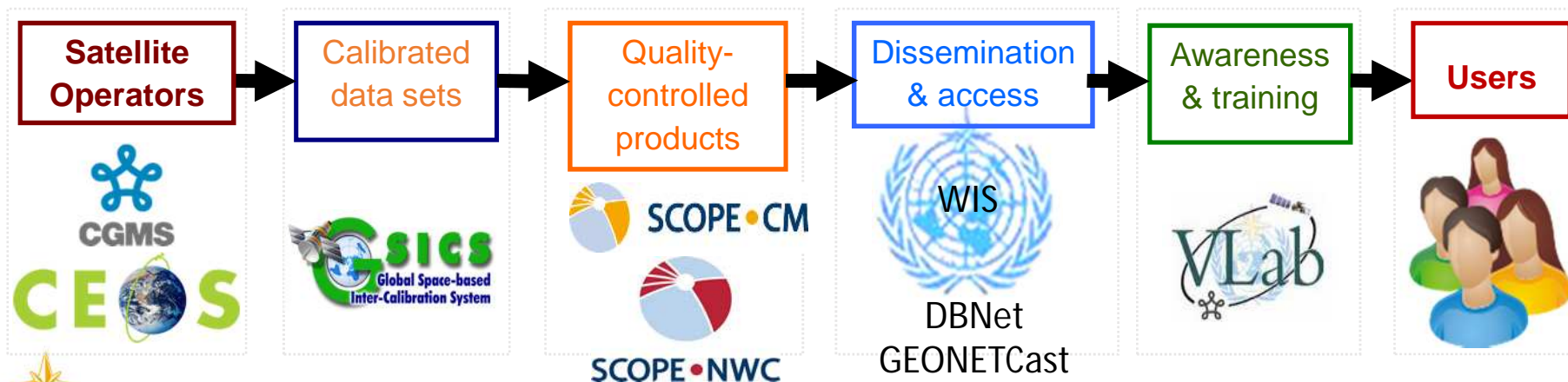
- Established by Resolution 5 (Cg-XIV) of the 14th WMO Congress in 2003
- Promote availability and utilization of satellite data and products for weather, climate, water and related applications.
- Coordinate environmental satellite matters and activities throughout all WMO Programmes.
- 16th WMO Congress in 2011 confirmed four main components:



See http://www.wmo.int/pages/prog/sat/index_en.php



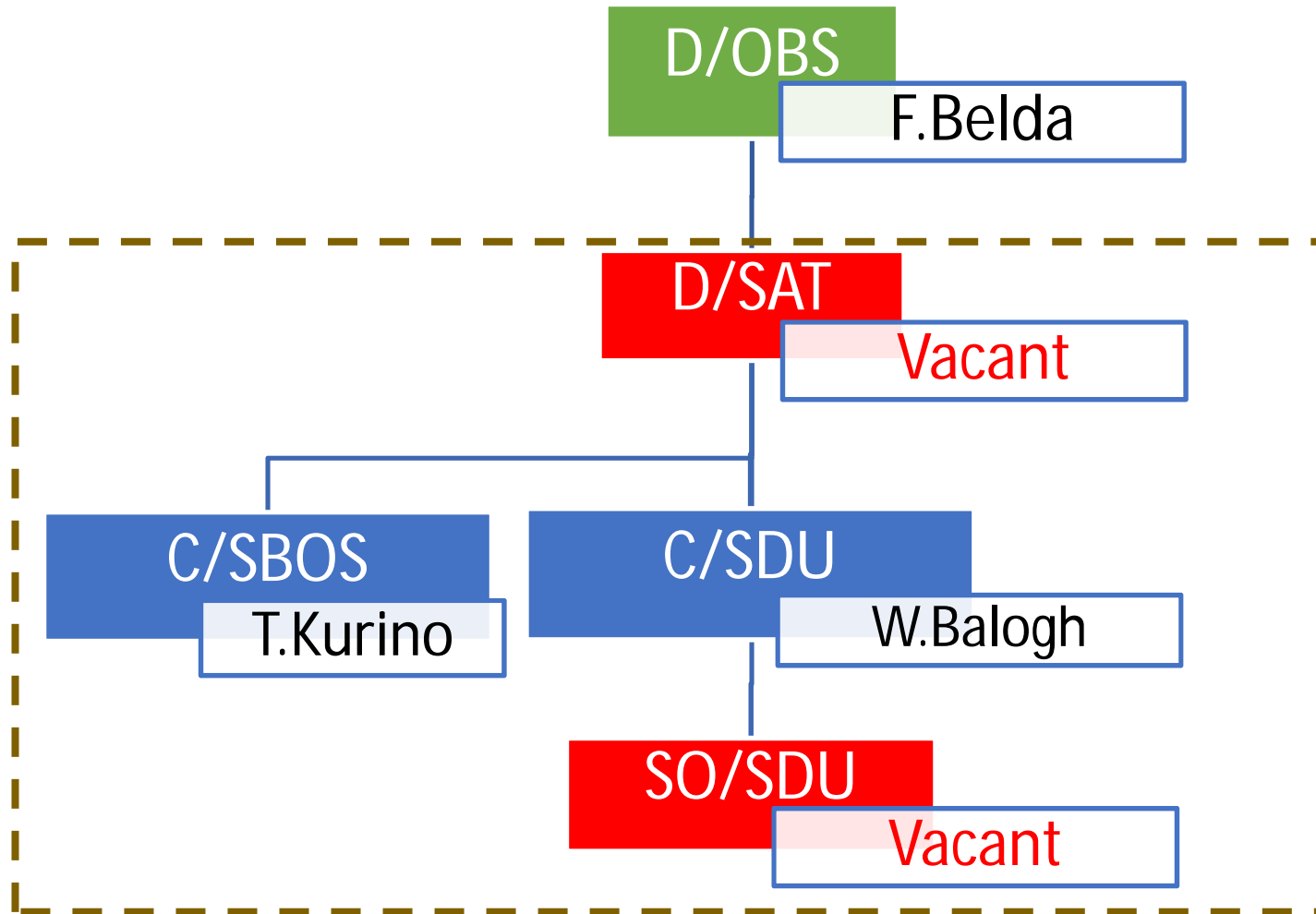
WMO Space Programme Value Chain



8 October 2018

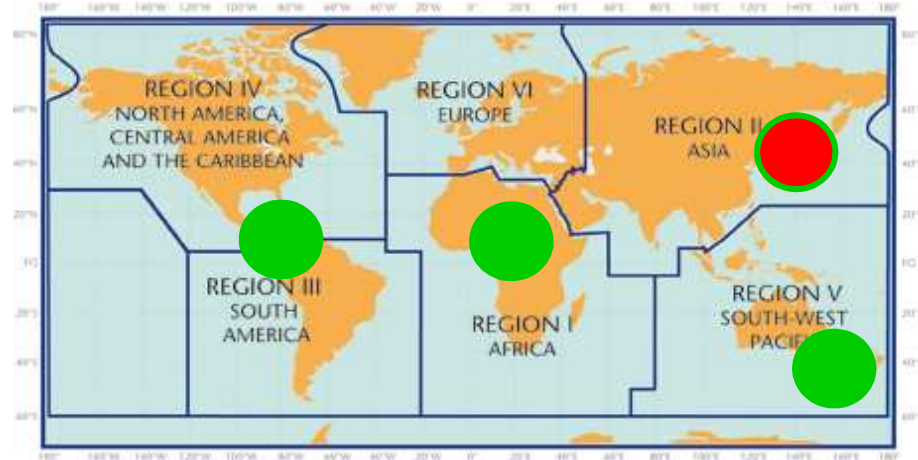
AOMSUC-9

WMO Space Programme Office



Regional User Mechanisms

- RA I (Africa) Dissemination Expert Group (RAIDEG)
- RA II (Asia): WIGOS Project Coordination Group
- RA III/IV (Americas): Coordination Group
- RA V (SW Pacific): Task Team on Satellite Utilization



Bringing together:

- Operational users
- Satellite providers
- Training centres (VLab CoEs)
- Scientific users
- Others

Objectives:

- User-provider dialogue
- Expressing user requirements
- Coordinating data distribution
- Identifying training needs
- Implementing WIGOS/WIS

See http://www.wmo.int/pages/prog/sat/index_en.php (Regional Activities)



Space Programme Website



WORLD METEOROLOGICAL ORGANIZATION

WEATHER CLIMATE WATER

Please visit our public website:
<http://public.wmo.int>

Home

- Planning & Monitoring
- PROGRAMMES
- GFCS
- AMCOMET
- Publications
- Library
- Learning
- Meteorterm
- Youth

Search ...

[Click here to search with Google](#)

WMO Space Programme

[Programmes](#) > [Space](#) > [Home](#)

WMO Space Programme

The Space Programme's objective is to promote availability and utilization of satellite data and products for weather, climate, water and related applications to WMO Members.

It coordinates environmental satellite matters and activities throughout all [WMO Programmes](#) and gives guidance on the potential of remote-sensing techniques in meteorology, hydrology and related disciplines.

Quick Access

- [OSCAR/Requirements \(Observing Requirements Database\)](#)
- [OSCAR/Space \(Satellite & Instrument Database\)](#)
- [Satellite Status list](#)
- [Satellite User Readiness Navigator \(SATURN\)](#)
- [Product Access Guide \(PAG\)](#)
- [Virtual Laboratory for Education and Training in Satellite Meteorology \(VLAB\)](#)
- [Working Documents for Meetings](#)

Upcoming Meetings and Events

06/10/18 to 11/10/18	9th Asia-Oceania Meteorological Satellite Users' Conference (AOMSUC-9)
08/10/18 to 12/10/18	WMO SCOPE-Nowcasting Initiative - Intercomparison of Satellite-based Volcanic Ash Retrieval Algorithms Workshop
23/10/18 to 25/10/18	Third DBNet Coordination Meeting (DBNet-CG-3)

» [Go to Meetings and Events](#)

Latest News and Announcements

15/06/2018	GEONETCast Americas User Group Webinars
29/05/2018	Ninth Asia Oceania Meteorological Satellite User's Conference
03/03/2018	What is in the Calendar in March?

» [Go to News and Announcements](#)

Programme Overview

- [Home](#)
- [Activities and objectives](#)
- [Structure and Governance](#)
- [News and External Announcements](#)
- [Calendar of Events](#)
- [Contact Information](#)
- [⇒ Space-based GOS](#)
- [⇒ Data access & use](#)
- [⇒ Awareness & Training](#)
- [⇒ Space Weather](#)
- [Regional Activities](#)
- [Information Resources](#)
- [Partners](#)

- [CGMS](#)
- [GOS](#)
- [WIGOS](#)
- [WIS](#)
- [OSCAR Database](#)


See http://www.wmo.int/pages/prog/sat/index_en.php



RA II WIGOS Project

Meteorological Satellites -Japan Meteorological Agency (JMA)-

HOME > Services > Meteorological Satellites > NMHSs > RA II WIGOS Project




Meteorological Satellites

- Introduction
- News Release Archive
- Satellite Imagery
- Satellite Imagery (Rapid Scan)
- Operational Information
- For NMHSs
- About Us
- Links
- Site Map


RA II WIGOS Project to Develop Support for NMHSs in Satellite Data, Products and Training

- "WMO Space Programme"
- "Access to low-level satellite data"
- "WMO OSCAR/Space (Satellite missions, systems, and instruments)"
- "Satellite products and imagery for RA II"
- "WMO Product Access Guide"

Co-coordinator



Under the auspices of



index

- Background
- Mission
- Accomplishments
- Work Plan 2017-2020
- Structure of the Project
- Meetings of the Coordinating Group
- Newsletters

See http://www.jma.go.jp/jma/jma-eng/satellite/ra2wigosproject/ra2wigosproject-intro_en_jma.html



RA V Task Team on Satellite Utilisation

Australian Government
Bureau of Meteorology

RA-V Satellite Users Portal

Home TT-SU News Contact

Home
TT-SU
 Workplan 2016
News
Contact

Links

- World Meteorological Organisation
- WMO RAV Events & Meetings
- DBnet 2nd Coordination Meeting
- Bureau of Meteorology
- BOM Satellite Viewer
- BOM Satellite Virtual Lab

Task Team on Satellite Utilisation (TT-SU)

TT-SU Objectives

Identify and document the needs for satellite observations and derived products, for RA-V members.

The TT-SU aims to deliver a regional set of requirements for satellite data and products required by RA-V members, to fulfil their national/international roles in support of weather forecasts and warnings. Based on an agreed set of requirements, data providers will work with data users to meet the requirements, through ongoing leadership by the Task Team.

Methodology

To develop a set of requirements for satellite data and exchange in RA-V, the TT-SU has adopted the WMO "Procedure for documenting regional requirements for satellite data and exchange".

- Workplan for 2016

TT-SU Members

- **Agnes Lane** (lead), Bureau of Meteorology
- **Kelly Sponberg**, NOAA
- **Riris Adriyanto**, BKMG
- **Paul Seymour**, NOAA
- **Vincente Palcon Jr**, PAGASA

Date created: Sat, 28 Mar 2015
Last modified: Sun, 21 Aug 2016 07:13:25 +0000
Page count: 0003617

© Copyright Commonwealth of Australia 2018, Bureau of Meteorology (ABN 92 637 533 532)
Disclaimer | Privacy | Accessibility

See <http://www.virtuallab.bom.gov.au/portal/ttsu/>



WMO/CGMS Virtual Laboratory

Home

Established by the World Meteorological Organization (WMO) and the Coordination Group for Meteorological Satellites (CGMS), the **Virtual Laboratory for Training and Education in Satellite Meteorology (VLab)** is a global network of specialized training centres and meteorological satellite operators working together to improve the utilisation of data and products from meteorological and environmental satellites.

Eight satellite operators are involved: CMA, CONAE, EUMETSAT, INPE, JMA, KMA, NOAA and ROSHYDROMET, and thirteen training centres – called Centres of Excellence (CoEs) – located in Argentina (Buenos Aires and Cordoba), Australia (Melbourne), Barbados (Bridgetown), Brazil (Cachoeira Paulista), China (Beijing and Nanjing), Costa Rica (San Jose), Kenya (Nairobi), Morocco (Casablanca), Niger (Niamey), Oman (Muscat), Republic of Korea (Gwanghyewon), the Russian Federation (Moscow and St Petersburg) and South Africa (Pretoria). Three CoEs are linked to universities (Buenos Aires, St. Petersburg and Nanjing).

VLMG-8 Meeting in Barbados, May 2016

CoE: Moodle Login

username

Login

Follow VLab

[f](#) [RSS](#)

Newsletter subscriptions

Name

E-mail

Subscribe

Recent News

- [GEONETCast Americas User Group Webinars](#)
- [Ninth Asia Oceania Meteorological Satellite User's Conference](#)
- [What is in the Calendar in March?](#)

Links to Centres of Excellence

- [Argentina](#)
- [Australia](#)
- [Brazil](#)

See <https://www.wmo-sat.info/vlab/>



Strategic Plan 2020-2023

WMO STRATEGIC PLAN AT A GLANCE

Vision 2030

By 2030, a world where all nations, especially the most vulnerable, are more resilient to the socioeconomic impact of extreme weather, climate, water and other environmental events, and empowered to boost their sustainable development through the best possible services, whether over land, at sea or in the air

Overarching Priorities

Enhancing preparedness for, and reducing losses of life and property from hydrometeorological extremes

Supporting climate-smart decision making to build resilience and adaptation to climate risk

Enhancing socioeconomic value of weather, climate, hydrological and related environmental services

Core Values

▪ Accountability for Results and Transparency ▪ Collaboration and Partnership ▪ Inclusiveness and Diversity ▪

Long-Term Goals

1 Better serve societal needs:
Delivering authoritative, accessible, user-oriented and fit-for-purpose information and services

2 Enhance Earth system observations and predictions:
Strengthening the technical foundation for the future

3 Advance targeted research:
Leveraging leadership in science to improve understanding of the Earth system for enhanced services

4 Close the capacity gap:
Enhancing service delivery capacity of developing countries to ensure availability of essential information and services

5 Strategic realignment of WMO structure and programmes:
Effective policy- and decision-making and implementation

Strategic Objectives

2020-2023 focus

- 1.1 Strengthen national multi-hazard early warning systems and extend reach to better enable effective response to the associated risks
- 1.2 Broaden the provision of policy- and decision-supporting climate information and services
- 1.3 Further develop services in support of sustainable water management
- 1.4 Enhance and innovate the provision of value-added, decision-supporting weather information and services

- 2.1 Optimize the acquisition of observation data through the WMO Integrated Global Observing System
- 2.2 Improve and increase access to, exchange and management of current and past observation data and derived products through the WMO Information System
- 2.3 Enable access and use of numerical analysis and prediction products at all temporal and spatial scales from the WMO Global Data Processing and Forecast System

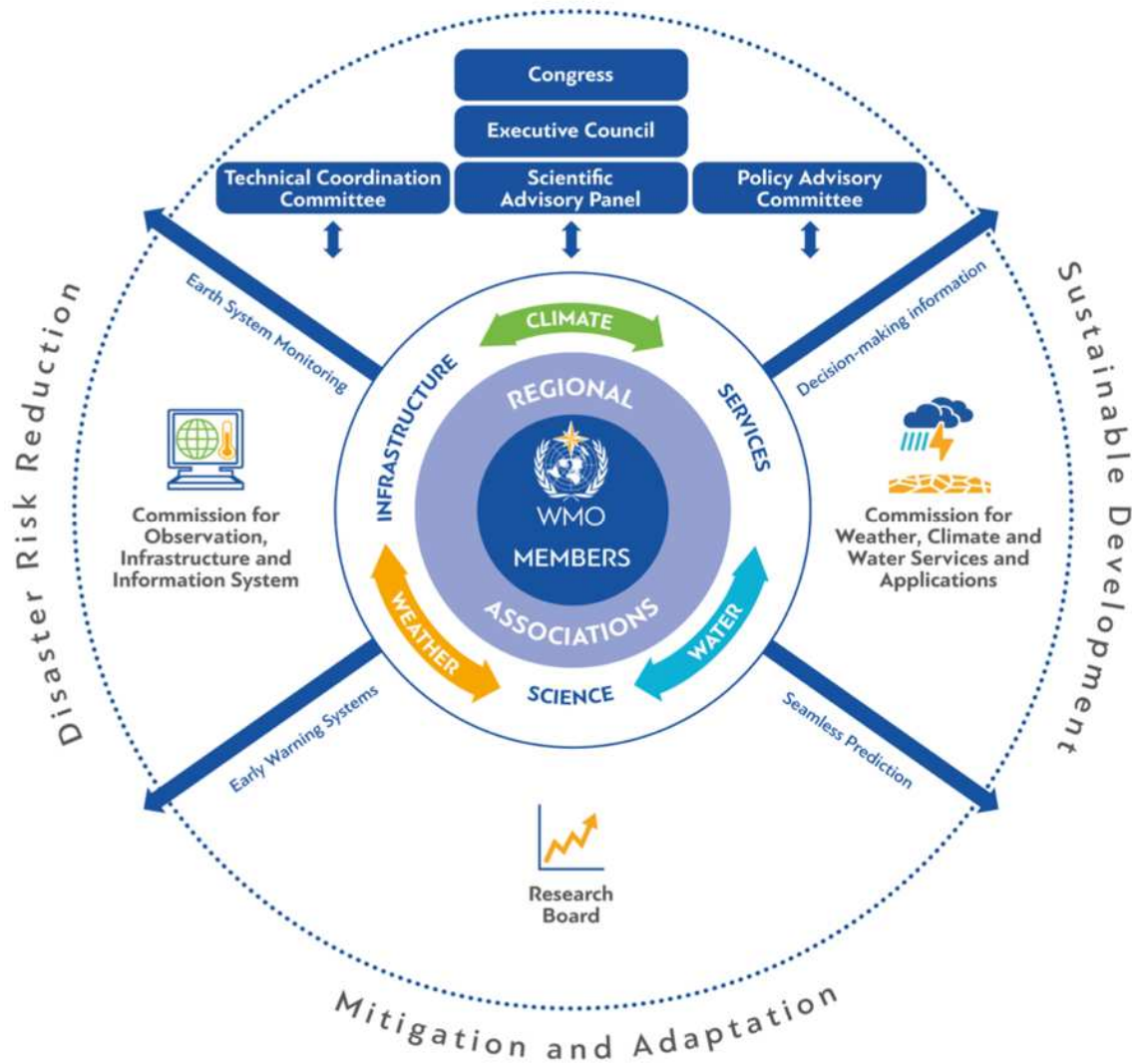
- 3.1 Advance scientific knowledge of the Earth system
- 3.2 Enhance the science-to-service value chain ensuring scientific and technological advances improve predictive capabilities
- 3.3 Advance policy-relevant science

- 4.1 Address the needs of developing countries to enable them to provide and utilize essential weather, climate, hydrological and related environmental services
- 4.2 Develop and sustain core competencies and expertise
- 4.3 Scale-up effective partnerships for investment in sustainable and cost-efficient infrastructure and service delivery

- 5.1 Optimize WMO constituent body structure for more effective decision-making
- 5.2 Streamline WMO programmes
- 5.3 Advance equal and effective participation of women and men in governance, scientific cooperation and decision-making



Proposed New WMO Structure



Challenges & Opportunities

- Space Programme in the new WMO structure
- Sustain OSCAR and routinely conduct RRR
- Implement space-based WIGOS Vision 2040, including the architecture for climate monitoring
- Assist NMHSs with removing hurdles to capacity building
- Address needs of the WMO Earth System Approach
- Engage with the Global Weather Enterprise
- Bridge gap between space agencies and NMHSs
- Small satellite activities
- Maintain and promote open and free access to data
- Enlarge user community and integrate space-based data and information into decision making processes
- Contribute to implementing global development agendas
- Interaction with Regional Satellite Data/User Requirements Groups



Thank you

WMO Space Programme

http://www.wmo.int/pages/prog/sat/index_en.php



WORLD
METEOROLOGICAL
ORGANIZATION