ET-SUP

World Meteorological Organization

Weather • Climate • Water

Expert Team on Satellite Utilisation and Products

Chairman's Report

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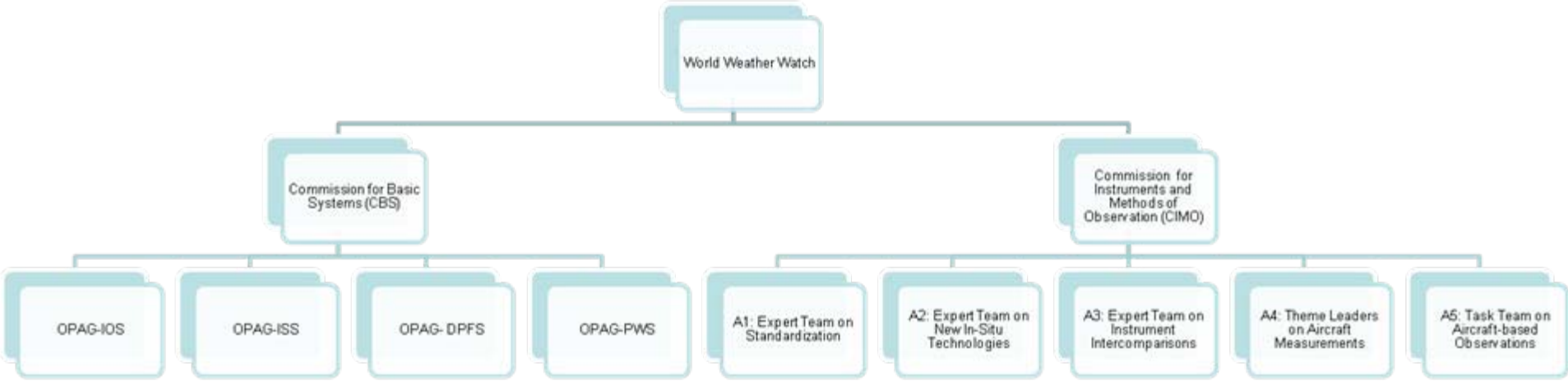
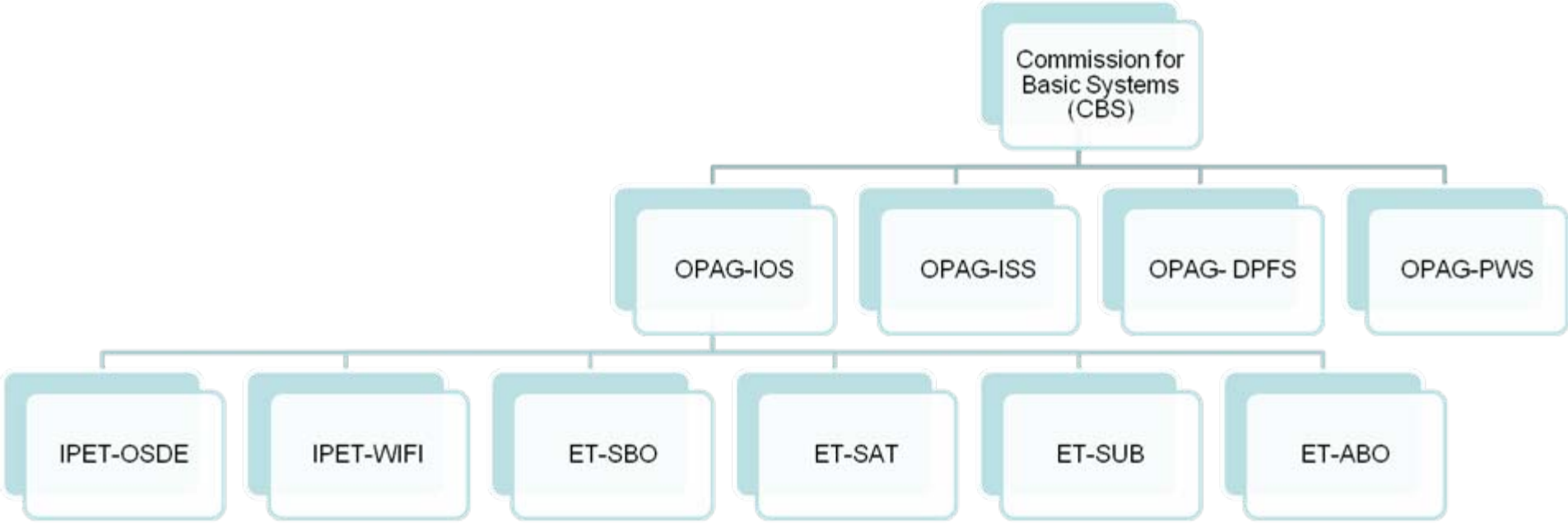
Outline

- Context
- ET-SUP-7
- CGMS-41
- Training
- SCOPE-Nowcasting Workshop
- Issues
- Next Steps

WMO Structures and ET-SUP



WMO Structures and ET-SUP



ET-SUP-7 27 to 30 May 2013

- Focus on SCOPE-Nowcasting
  - Established criteria and reviewed pilots
- Results of 2012 Survey on the Use of Satellite Data
  - Made recommendations around future surveys
- Identified a number of issues relating to satellite data formats
  - Recommended future work to address these
- Provided guidance for accessing and using new satellite capabilities;
- Discussed global data dissemination through IGDDS, RARS and GEONETCast
  - Made recommendations to advance these concepts;

Meeting Outcomes

- Reviewed a number of case studies for the application of satellite data in support of climate services
  - Set out a programme of work for expanding these case studies;
- Discussed important developments in user training and capacity building
  - the Virtual Laboratory for Education and Training in Satellite Meteorology,
  - the GOES-R Proving Ground programme,
  - Committee on Space Research (COSPAR) activities.


The 41st Meeting of the Coordination Group
for Meteorological Satellites (CGMS-41)
8 to 12 July 2013, Tsukuba, Japan
CGMS
JAXA

CGMS-41

- WMO Space Programme invited to speak
  - Highly prominent in program
- 3 Keynote Presentations during Plenary
  1. Ensuring the preparedness of users to the new generation of satellites
  2. User needs/evolution of regional data dissemination requirements
  3. SCOPE-Nowcasting: Concept, objectives and pilot activities

CGMS-41 – Actions in Plenary

1. CGMS space agencies to nominate focal points for a task team to share experience and prepare a dynamic WMO web-based portal on initiatives taken by satellite operators to prepare users for the next generation of GEO satellites.
2. WMO to report on the [illegible] WMO web-based portal for user preparedness o[illegible] satellites.
3. CGMS members to report on t[illegible]egion-based groups maintaining satellite data access and exchange requirements.
4. CGMS members to nominate focal points for the SCOPE-Nowcasting initiative as appropriate
5. Feedback from CGMS members sought on the final makeup of the SCOPE-Nowcasting pilot projects by 1 September 2013

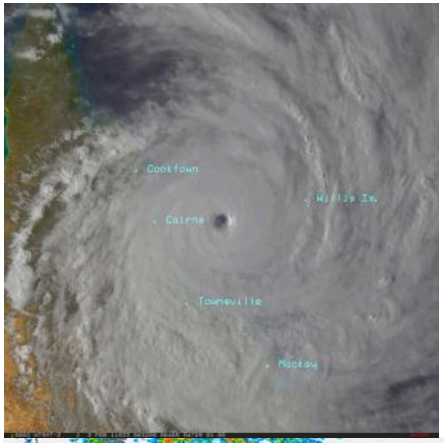
Satellite User Readiness Navigator portal (SATURN)

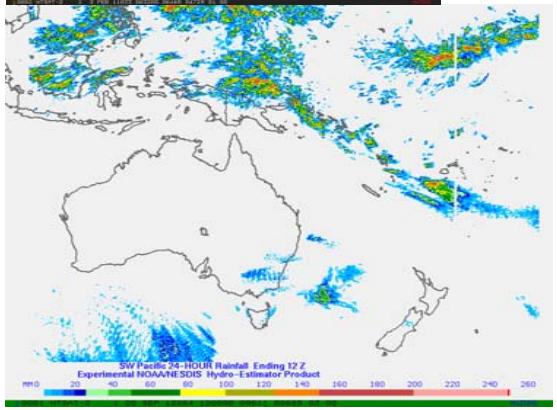
Training

- Training gaps were identified through the user survey and through interaction with Regional Requirements groups;
- A Training Workshop on advanced geostationary data was held on 7-8 October 2013 at Australian VLab Centre of Excellence in conjunction with the Asia-Oceania Meteorological Satellite Users Conference;
- An International Training Course on Aeronautical Meteorological Services was conducted on 16 - 27 July 2014 at VLab CoE in Beijing; and
- A VLab/COSPAR training event is planned for 21 July – 1 August 2014 at Tver University, Russian Federation.

SCOPE-Nowcasting

- Sustained,
- Co-Ordinated
- Processing of
- Environmental Satellite Data for
- Nowcasting





Background

- Concept arose from discussions in 2010 (in the 5th meeting of the WMO Expert Team on Satellite Utilization and Products – ET-SUP-5)

- Recognised the benefits of the SCOPE for Climate Monitoring (SCOPE-CM) initiative, where the value of different models of cooperation among satellite operators in generating satellite datasets for climate has been demonstrated through theme-driven pilot projects.

- SCOPE-CM information:
  - http://www.wmo.int/pages/prog/sat/scope-cm_en.php

Project Plan

Phase I (2012-2014): Inception and Demonstration

- Establish ad-hoc Working Group:
  - ET-SUP Members
  - WWRP and SWFDP rep
  - WMO Space Programme
- Agree on concept and pilot project criteria
- Agree on pilot projects and individual providers, hosts, clients, schedules
  - Each pilot: Demonstration of impact; identify areas of synergy, collaboration, harmonization
- First meeting of all SCOPE-NWC initial partners
  - Establishment of initial network and structure, including governance and terms and conditions of all partners

SCOPE-NWC Criteria

ET-SUP-7 (May 2013) outlined a number of criteria for SCOPE-Nowcasting projects. These are:

a) use of multi-satellite data;

b) dataset formats can be read by standard tools;

c) concise product documentation;

d) open and easy access;

e) available in near-real time (<6h);

f) availability of training information; and

g) an official commitment from all agencies involved in the project.

SCOPE Nowcasting First Workshop

19-22 November 2013 at WMO

Meeting Goals

- Review the SCOPE-Nowcasting concept;
- Review and refine each of the pilot projects with regard to the criteria established at ET-SUP-7; and
- Prepare an action plan for the next 3-5 years for each of the pilot projects.

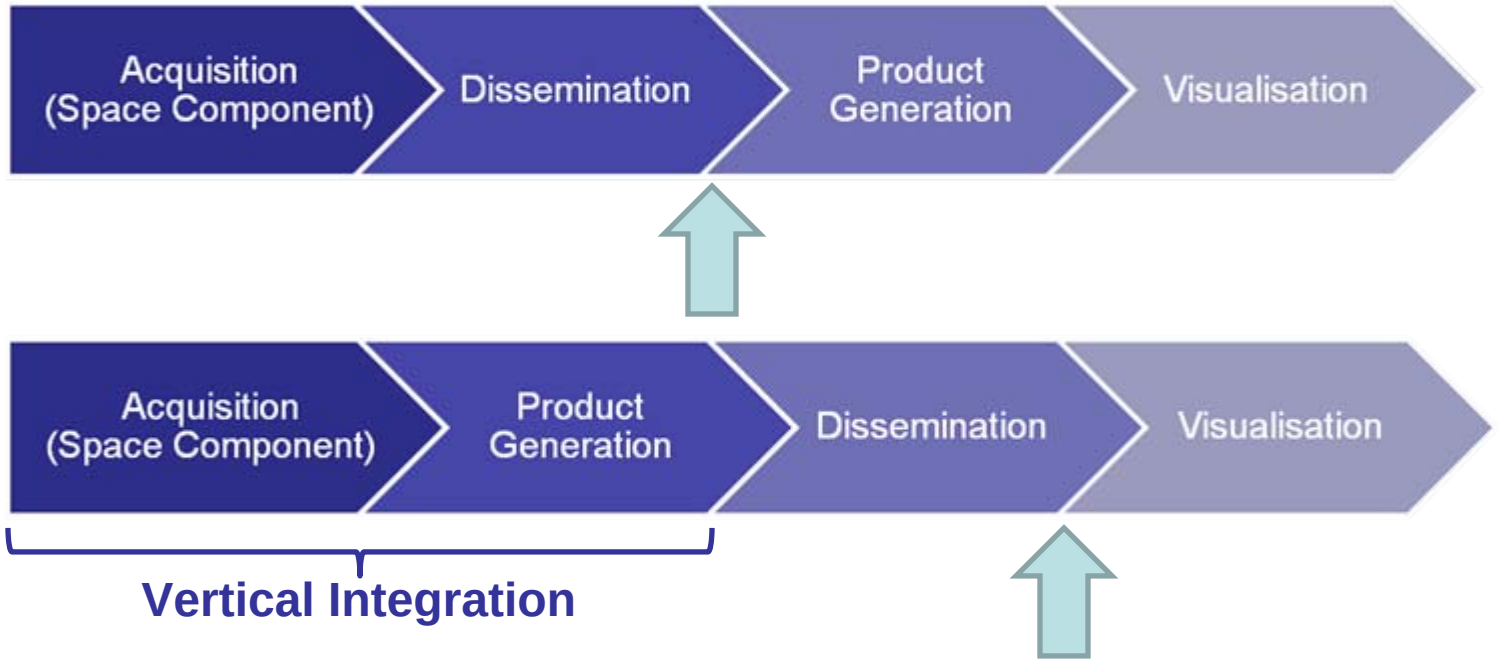
SCOPE-Nowcasting - Pilot project outlines

Category	Product	Region	Provider	User	Gaps
Basic nowcasting	RGB composites	WMO Region II (Asia) and Region V (SW Pacific)	JMA, CMA, KMA	NMSs in Region II and V	No standard products available; products limited
Advanced nowcasting	Volcanic Ash Products	Global	CMA, JMA, KMA, EUMETSAT, NOAA	NMHSs, VAACs	No standard products available; products limited
Advanced nowcasting	Blended satellite global precipitation product (GEO+LEO)	Global coverage	Hydro Estimator, NASA TRMM (3B42), NOAA (real-time MW)	Civil authorities, NMHSs, Flash flood guidance systems, general users	Rapid, facilitated access to quantitative precipitation estimates
RT Atmospheric Composition products	Dust Monitoring and Prediction Products	WMO Region II (Asia) and V (South-West Pacific)	CMA, JMA, KMA	SDS-WDCs, NMSs (to issue results and warnings) in RA II and RA V	Regional diversity of aerosol-related products not harmonized

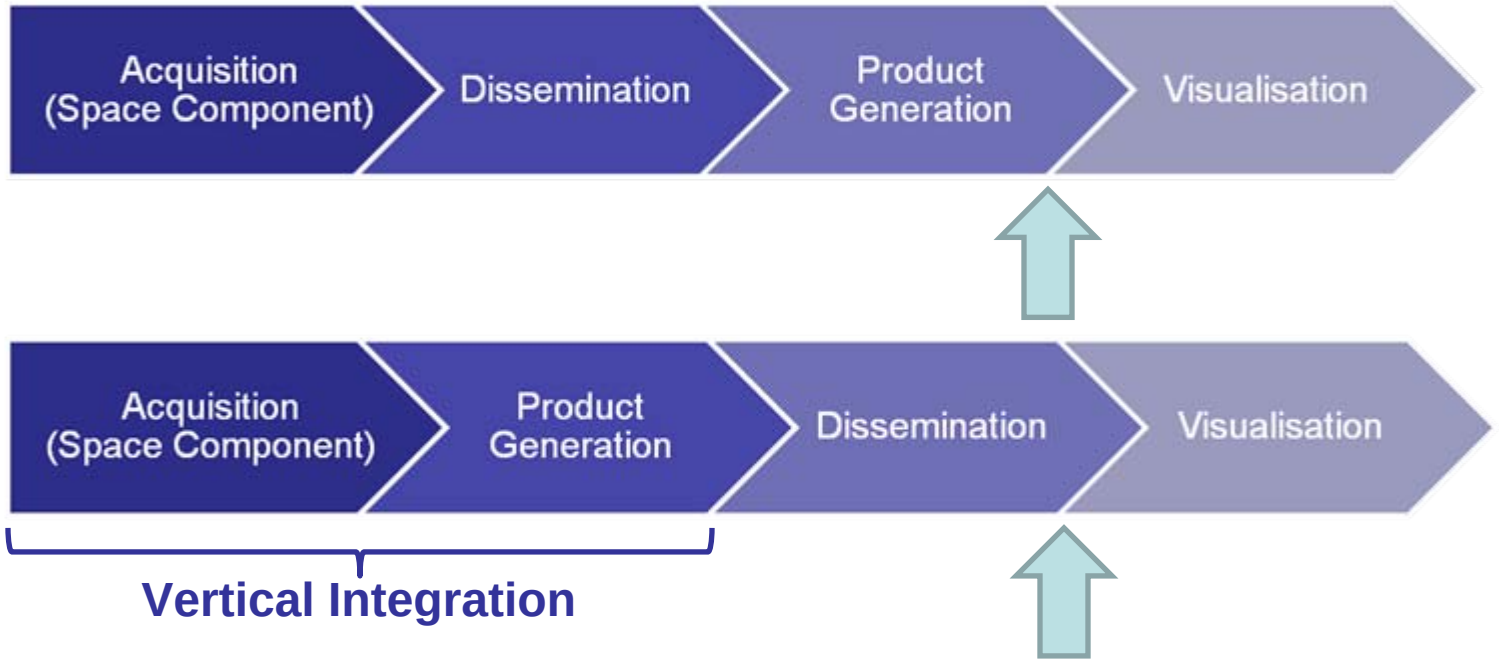
Issues

- Many countries not extracting full benefit from space-based observations
  - These are often the countries who can benefit most
  - The gaps are often further down the value chain (products/dissemination/visualisation)

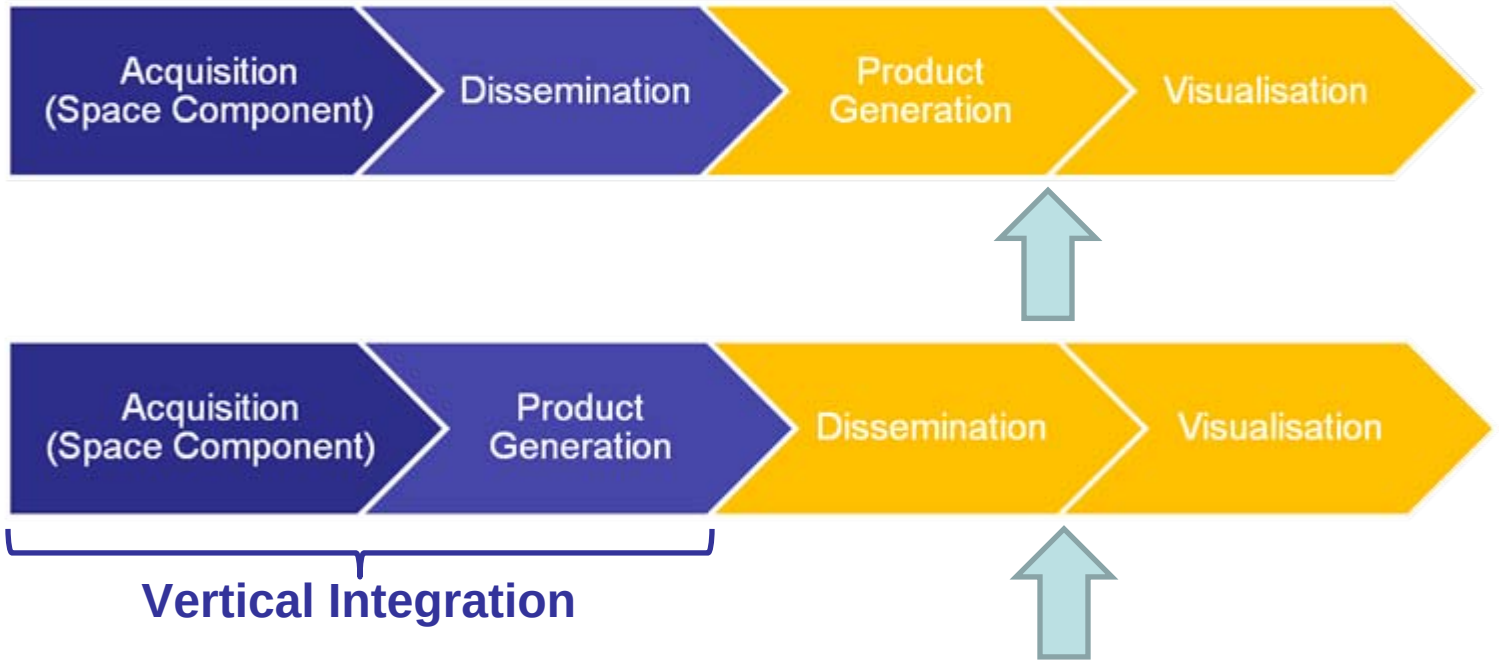
Differing Requirements – High Level Users



Differing Requirements – Basic Users



Differing Requirements – Basic Users - Gaps



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Thank you for your attention

www.wmo.int/sat