

# Coordination Group on Meteorological Satellites

Mitch Goldberg

ITWG Rapporteur to CGMS

# CGMS – the early years

The Coordination Group for Meteorological Satellites (CGMS) came into being on 19 September 1972, when representatives of the European Space Research Organisation (since 1975 called the European Space Agency, ESA), Japan, the United States of America, Observers from the World Meteorological Organisation (WMO) and the Joint Planning Staff for the Global Atmosphere Research Programme met in Washington to discuss questions of compatibility among geostationary meteorological satellites. EUMETSAT has run the Secretariat since 1987.

# CGMS

- CGMS provides an international forum for the exchange of technical information on geostationary and polar orbiting meteorological satellite systems.
- But its more than this: CGMS discussions spawn actions and recommendations at the highest agency level which require responses.
- It consists of 15 member organisations and 7 observers.
- Four CGMS annual working groups



## Coordination Group for Meteorological Satellites

### CGMS

[Home](#)  
[About Us](#)  
[Members](#)  
[Observers](#)  
[Charter](#)  
[Working groups](#)  
[Contact us](#)  
[Satellite Status](#)

### News

### Initiatives

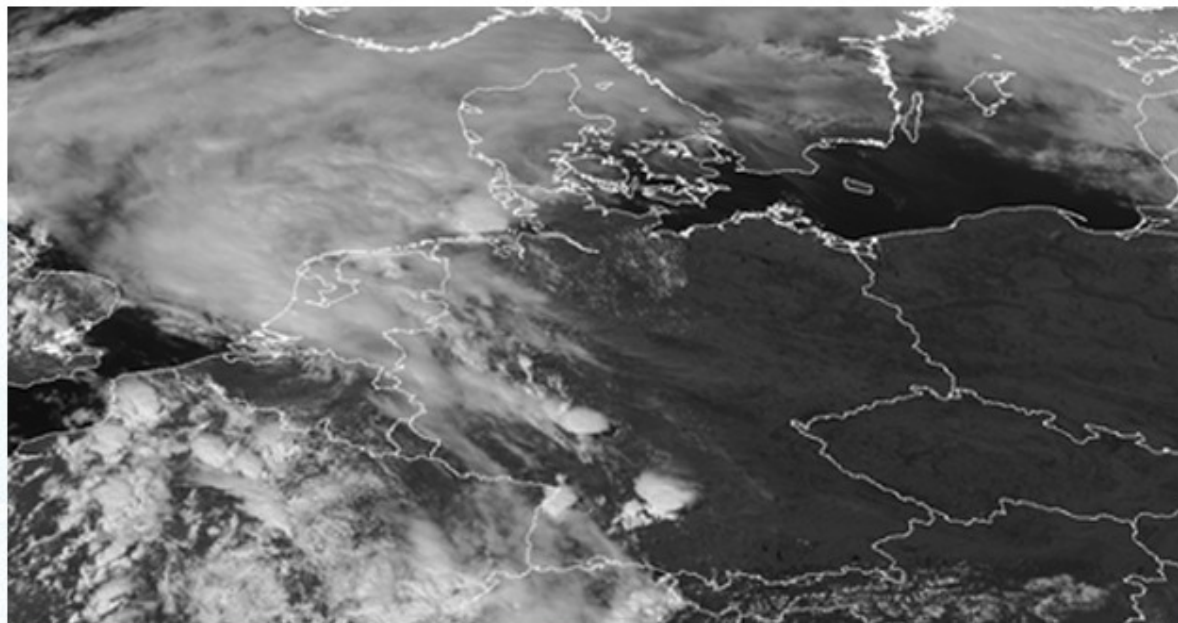
[GSICS](#)  
[SCOPE-CM](#)  
[Virtual Laboratory](#)

### Publications

### Meetings

[CGMS Events](#)  
[Registration to CGMS-39](#)

### Search



### Member's Section

Name

Password

[Login](#)

[create an account](#)

\*\*\* 1972-2012 - CGMS 40 years! \*\*\*

The next CGMS plenary meetings will take place on 5-9 November 2012 (CGMS-40) in Lugano, Switzerland, and on 8-12 July 2013, in Japan (CGMS-41).

### CGMS-39

Report of the 39th  
Meeting of the CGMS  
2011

[Download \(PDF\)](#)

Organisation	Link	Accession date
China Meteorological Administration	<a href="#">CMA</a>	1989
Centre National d'Etudes Spatiales	<a href="#">CNES</a>	2004
China National Space Administration	<a href="#">CNSA</a>	2006
The European Space Agency	<a href="#">ESA</a>	2003
EUMETSAT	<a href="#">EUMETSAT</a>	1987
India Meteorological Department	<a href="#">IMD</a>	1979
Intergovernmental Oceanographic Commission / UNESCO	<a href="#">IOC/UNESCO</a>	2001
Japan Aerospace Exploration Agency	<a href="#">JAXA</a>	2003
Japan Meteorological Agency	<a href="#">JMA</a>	1972
Korea Meteorological Administration	<a href="#">KMA</a>	2005
National Aeronautics and Space Administration	<a href="#">NASA</a>	2003
National Oceanic and Atmospheric Administration	<a href="#">NOAA</a>	1972
Russian Federal Space Agency	<a href="#">ROSCOSMOS</a>	2003
Russian Federal Service for Hydrometeorology and Environmental Monitoring	<a href="#">ROSHYDROMET</a>	1973
World Meteorological Organization	<a href="#">WMO</a>	1973



---

## CGMS

[Home](#)  
[About Us](#)  
[Members](#)  
[Observers](#)  
[Charter](#)  
[Working groups](#)  
[Contact us](#)  
[Satellite Status](#)

---

## News

## Initiatives

[GSICS](#)  
[SCOPE-CM](#)  
[Virtual Laboratory](#)

---

## Publications

## Meetings

[CGMS Events](#)  
[Registration to CGMS-39](#)

---

## CGMS observers

---

The current list of CGMS observer agencies:

Organisation	Link
Canada Space Agency	<a href="#">CSA</a>
Environment Canada	<a href="#">EC</a>
IOC-UNESCO	
Indian Space Research Organisation	<a href="#">ISRO</a>
Korea Aerospace Research Institute	<a href="#">KARI</a>
Korea Ocean Research & Development Institute	<a href="#">KORDI</a>
State Oceanographic Administration	<a href="#">SOA</a>

# CGMS Annual Working Groups

- **WG 1: Telecommunications**
  - Frequency allocations, interference
- **WG 3: Contingency Planning**
  - “help your neighbor in case of satellite failure”
- **WG4: Global Data Dissemination**
  - Direct Readout, Software packages, EuMETCAST, GEONETCAST, CMACAST
  - Data exchange

# WG2: Satellite Products

- Image Processing Techniques
- Satellite Data Calibration and Validation
- Infrared/Microwave sounding and ITWG
- Precipitation and IPWG
- Atmospheric Motion Vector and IWWG
- Radio Occultation and IROWG
- Cloud and Ash/Dust
- Ocean parameters
- Other parameters and products



# Plenary Topics include:

- Virtual Laboratory (Outreach, training, capacity building)
- GSICS
- SCOPE-CM

# ITWG actions can create CGMS actions or recommendations

- CMA to consider early morning orbit because  
.....
- Action: CMA to determine the feasibility of an early morning orbit in order to ....., Suspense: CGMS 40.

# CGMS restructuring

- Create a 3- 5 year high level priority plan
- CGMS plenary shall task Plenary WGs to address specific and relevant topics
- Improve engagement with the CGMS international scientific working groups
  - ITWG, IPWG, IWWG, IROWG
  - Two months prior to CGMS, ITWG co-chairs to meet with rapporteur to identify key issues to be discussed at CGMS annual meeting. Clearly stated actions

# Summary

- CGMS is the highest level interagency forum for satellite matters with a special focus on operational satellites.
- ITWG critical issues are reported at CGMS, we are working towards further improving engagement between ITWG and CGMS
- ITWG provide issues and recommended actions for discussion at CGMS, and CGMS reports back on the disposition of those actions through the rapporteur.
- Excellent phasing: CGMS 40/41 (Nov 2012/13), ITSC 19 ( after Nov 2013)
- [CGMS-39 Annotated Agenda](#)

# ITWG report at CGMS-38

- Recommend the Russian Federation to make the Meteor-M mission a fully contributing component of the GOS by providing the global data sets from this mission in a timely manner with all necessary ancillary information.
- Recommend satellite agencies operating environmental polar satellites to provide or continue to provide a Direct Broadcast capability on their polar environmental satellite systems, and make available in a timely manner the Direct Broadcast data processing (L0 to L1, and/or L1 to L2) software, documentation, and related training.
- ITWG recommends that the constellation of at least three orbits (early morning, morning, and afternoon), each with full sounding capabilities (IR and MW), is maintained. The WG recommends coordination between agencies of the overpass times of operational satellites with sounding capability (IR and MW) to maximise coverage (including, e.g. China, India).
- Satellite agencies that are considering changing the frequency or viewing geometry/resolution of heritage measures need to consider the impact on climate monitoring and particularly trend characterisation.
- Recognising that climate change may have a diurnal cycle component ITWG recommends to CGMS that they explicitly consider the coordinated international phasing of satellites to ensure adequate sampling of diurnal cycle.
- ITWG recommends JMA to consider a broadcast service to facilitate access to Himawari-8 and -9 data, in particular for users in Pacific islands who have limited Internet connectivity.
- ITWG recommends CGMS satellite operators to investigate the potential use of satellite-to-satellite communication (e.g. Tracking and Data Relay Satellite System, TDRSS) as a mechanism to support timely collection and redistribution of polar-orbiting satellite data in future systems.
- There is international frequency-spectrum allocations that guide frequency band usage and delineate restrictions placed on such use. It is recognised among the environmental satellite community; however, that there are instances in which emitters are likely to cause the loss of data that is of interest to this community. An international registry of emitters would provide advance notification for future environmental satellite missions. It is proposed that a discussion of such a registry be held within appropriate (WMO, CGMS) entities. Such a registry could contain information on emitter locations, RF characteristics, duty cycles, and anticipated time frame of emitter existence. This would expand a current initiative, a much smaller scale effort named Radiofrequency Interference Survey of the Earth (RISE).