

CGMS-39 NOAA-WP-01 Prepared by NOAA Agenda Item: A.1 Discussed in Plenary

SUMMARY LIST OF ACTIONS FROM CGMS XXXVII

(21 September 2011)

NOAA response to actions from CGMS XXXVIII.



Summary List of Outstanding CGMS Actions and Recommendations

A. Permanent Actions

Permanent 01: Members to inform the Secretariat of any change in the status or plans of their satellites to allow the updating of the CGMS Tables of Satellites. The Secretariat to review the tables of current and planned polar and geostationary satellites and to distribute this updated information, via the WWW Operational Newsletter, via Electronic Bulletin Board, or other means as appropriate. CGMS satellite operators to update table 7 for polar-orbiting satellite equator crossing times on an annual basis. CGMS Members to update the table on polar-orbiting satellite equator crossing times as well as the table on coverage from geostationary satellites.

Status: See NOAA-WP-02, 03, 04, 07, 08, 25, 32.

Permanent 02: CGMS Members to report on anomalies from solar events at CGMS meetings.

Status: See NOAA-WP-05, 06.

Permanent 03: CGMS Members to review the list of available list servers used by CGMS groups and update as appropriate.

Status: NOAA provided updates to list servers via e-mail.

Permanent 04: CGMS satellite operators to consider the IOC satellite requirements, especially the data dissemination methods, bearing in mind the ongoing formations of GOOS Regional Alliances (GRAs).

Status: NOAA responded at CGMS XXXV, no update at this time.

Permanent 06: All CGMS satellite operators to regularly include user statistics in their reports on current satellite systems. Deadline: CGMS-39.

Status: See NOAA-WP-02, 03, 04, 07

B. Actions from CGMS-37

Action 37.37: All CGMS satellite operators to regularly include user statistics in their reports on current satellite systems. Deadline: CGMS-38

Status: See NOAA-WP-02, 03, 04, 07

C. Actions from CGMS-38

Action 38.03: CGMS Members to report on their activities related toSpace Debris / collision mitigation measures by CGMS-39.

Status: See NOAA-WP-06.



Action 38.04: CGMS Members to provide information on anomalies affecting their spacecrafts and payload caused by cosmic radiation. Deadlin: CGMS-39

Status: See NOAA-WP-05

Action 38.05: Action 38.05: CGMS Members to provide written recommendation to WMO on its proposal to develop a space-based architecture for climate monitoring by 15 December 2010.

Status: N/A.

Action 38.07: CGMS Satellite Operators are encouraged to note the usefulness of RA II Pilot Project web pages on the WMO Space Programme (WMOSP) website providing information related meteorological satellites for NMHSs users, and to support the Project providing the information of satellite data and products answering to the questionnaire, which will be sent from the project co-coordinators.

Response: The RA II Pilot project was established to help NMHSs in the region to improve the flow of satellite-related information. The major focus of the initiative is to facilitate the timely provision of satellite-related information by satellite operators themselves to users, i.e., NMHSs in RA II, especially in developing countries including LDCs.

NOAA would like to thank members of Regional Association II (RA II) for developing a very informative webpage. The composition and arrangement are extremely well organized. The website highlights the mission of the project and emphasizes the need to alignment of Pilot Project activities and Virtual Laboratory activities to optimize assistance to the NMHSS.

The website address provisions of satellite related information from satellite operators to users in RA II and are available in a timely manner. The site offers a central location for information exchange and regional coordination. The RA II Pilot project sets a foundation for creating a synergy to which countries can benefit without duplication of effort.

Recommend that NOAA be added as an observing member to support training initiatives and provide assistance to the NMHSs via the Virtual Laboratory.

Action 38.08: CGMS Members are invited to participate in the First Workshop on Space-based Architecture for Climate, focussing on "Continuity and architecture requirements for climate monitoring", to be held on 13 and 14 January 2011 in Geneva. Comments on Workshop outline to be received by to WMO by 1.12.2010

Status: See NOAA-WP-18.

Action 38.10: CGMS Members are invited to support the Global Cryosphere Watch (GCW) by identifying relevant operational satellite products, and developing new satellite derived climate products, which would contribute to GCW and to comment on the benefit of cryosphere reference sites that meet long-term in-situ needs as well as satellite cal/val needs.

Status: See NOAA-WP-12.



Action 38.11: The WMO / CGMS Virtual Laboratory Management Group (VLMG) to liaise with the SWFDP to identify opportunities to coordinate training activities and share training resources that would allow Member countries in SWFDP project regions, such as Southern and Eastern Africa, Southeastern Asia and the Southern Pacific, to further enhance the benefits realized through the SWFDP in better using satellite-based products in support of severe weather forecasting.

Status: See NOAA-WP-13.

Action 38.12: CGMS Satellite Operators to provide a contact point for Severe Weather Forecasting Demonstration Project (SWFDP), who would contribute to inform the SWFDP project on relevant satellite data and products responding to SWFDP needs, and to identify opportunities for development of improved products and services. Deadline: CGMS-39.

Status: See NOAA-WP-13.

Action 38.14: CGMS Members are invited to nominate further representatives for the web committee and send it to cgmssec@eumetsat.int. The CGMS Secretariat will be the point of contact. The committee to receive comments/feedback/ suggestions on the website.

Status: NOAA representative to the CGMS web committee is Derek Hanson.

Action 38.15: CGMS Members to provide to each CGMS meeting a list of frequencies used by their current and future systems in the format provided in WG I report (Annex 1) (merged version of WMO frequency reports amended with the extra fields as provided in Tables 1 and 2 of Document CGMS-38 EUM-WP-23). Deadline: CGMS-39

Status: See NOAA-WP-14.

Action 38.16: Action 38.16: CGMS members to provide to the CGMS Secretariat and IMD their operational and planned use of the data collection service (regional and international) that contains or overlap the band 402.25-402.65 in a format as provided in Annex 1 of this WG I report. Deadline: 15 December 2010 at the latest.

Status: NOAA responded via e-mail.

Action 38.17: Concerning US public enquire for sharing with 4G mobile systems of the 1675-1710 MHz band CGMS members are encouraged to provide CGMS secretariat their inputs and position regarding the impact on their current and future systems (or a more general copy of the letters submitted in response of the US public enquire). Deadline: 1 December 2010.

Status: No response.



Action 38.19: Action 38.19: NOAA to report on progress towards using SSMIS to extend the SSMI records on total precipitable water. Deadline: CGMS-39

Status: See NOAA-WP-20.

Action 38.20: CGMS agencies to provide reports on satellite calibration anomalies Deadline: CGMS-39.

Status: See NOAA-WP-21.

Action 38.23: Action 38.23: ITWG rapporteur will provide actions related to calibration to GSICS. Deadline: 28 February 2011.

Status: See NOAA-WP-22.

Action 38.24: ITWG rapporteur will provide actions related to climate to SCOPE-CM. Deadline: 28 February 2011.

Status: See NOAA-WP-22.

Action 38.25: ITWG rapporteur and ITWG co-chairs to invite IMD and ISRO to consider participation in ITWG. Deadline: 28 February 2011.

Status: See NOAA-WP-22.

Action 38.26: Recognising limited validation data-sets and the use of SEVIRI for GOES-R and MTG algorithm development, EUMETSAT and NOAA to coordinate with South Africa for creation of validation data-sets for rainfall products and to report at CGMS 39.

Status: See NOAA-WP-23.

Action 38.27: Action 38.27: All satellite operators are invited to inform the CGMS Secretariat whether they will support a second AMV intercomparison study. They are also invited to provide feedback on potential improvements and changes (due date 31 March 2011).

Response: NOAA provided input for the plan which describes the design and experimental setup for this 2nd AMV intercomparison study. NOAA is mentioned in this report as a participant. Currently, Dr. Jo Schmetz, EUMETSAT, is reviewing this document.

Action 38.31: Action 38.31: CGMS Satellite Operators are invited to report on a regular basis on their capabilities and plans to support volcanic ash monitoring, including the development of relevant products and techniques for utilisation, in order to inform the relevant ICAO and WMO bodies: the WMO/IUGG Volcanic Ash Scientific Advisory Group and the ICAO International Volcanic Ash Task Force/International Airways Volcanic Watch Operations Group (IVATF/IAVWOPSG).

Status: See NOAA-WP-24.



Action 38.32: Propose CMA, IMD, NOAA, and other interested CGMS agencies to support future training related to the use of satellites to monitor dust, volcanic ash, fog, and forest fires in conjunction with the WMO Virtual Laboratory. Deadline: CGMS-39.

Status: See NOAA-WP-13.

Action 38.33: Invite CGMS operators to submit to the next CGMS meeting Working Papers on nowcasting applications, including cloud analysis, fog detection and forest fires. Deadline: CGMS-39.

Status: See NOAA-WP-26.

Action 38.36: NOAA and IMD to better understand differences in TC intensity estimations and to inform CGMS members on the outcome. Deadline: CGMS-39.

Status: N/A.

Action 38.38: CGMS satellite operators to report at CGMS-39 on their user-preparation activities for the next generation geostationary satellite series.

Status: See NOAA-WP-08.

Action 38.41: CGMS Satellite Operators to confirm their commitments to contribute to the updated baseline for the space-based component of the Global Observing System (Due date: CGMS-39).

Status: NOAA responded via e-mail and provided documents at meeting.

Action 38.43: Action 38.43: CGMS Members to review the Draft Mapping of the gap analysis with the GCOS ECVs, and provide comments to WMO (Dr Bizzarro Bizzarri, bibizzar@tin.it) to be considered for a revised version to be submitted to the "Workshop on Continuity and Architecture Requirements for Climate Monitoring" on 13-14 January 2011. (Deadline: 15 December 2010.)

Status: NOAA responded via e-mail.

Action 38.44: NOAA to provide a report to CGMS on its planning for the transition of users from the current GOES system to GOES-R. Deadline CGMS 39.

Status: See NOAA-WP-08.

Action 38.46: CGMS satellite operators to inform CGMS on progress towards the achievement of future broadcast services (physical layers, formats, etc.) in the timeframe of the EPS-SG and JPSS satellites. Deadline CGMS 39.

Status: NOAA has no response at this time.



Action 38.47: NOAA and EUMETSAT to present a description of joint broadcast services for EPS-SG and JPSS. Deadline CGMS 39.

Status: See NOAA-WP-27.

Action 38.48: CGMS satellite operators to inform CGMS on efforts to widen user access and to establish and respond to user requirements with GEONETCast. Deadline CGMS 39.

Status: See NOAA-WP-31.

Action 38.49: CGMS members to report on their measures and plans regarding interoperability and standardised online data access for archived data-sets. Deadline CGMS-39.

Status: See NOAA-WP-28.

Action 38.50: CGMS members are invited to report on the current measures taken in their Organisation for the long-term preservation of data and indicate if a future harmonised approach (e.g. common guidelines) would be helpful. Deadline CGMS-39.

Status: See NOAA-WP-29.

Action 38.51: CGMS Members to verify if they have been registered as a part of WIS, in particular as Data Collection or Production Centres (DCPCs) or National Centres (NCs).

Response: NCDC is not registered on the WMO Information System (WIS).

Action 38.52: Candidate DCPCs or NCs to review the WIS specifications to ensure they are able to support the relevant WIS interfaces, including ensuring metadata describing their products and services is available in WMO format (ISO19115) for uploading to a Global Information System Centre (GISC).

Response: NOAA's National Geophysical Data Center has reviewed the WMO WIS metadata requirements and determined that we are able to support the relevant WIS interfaces, including ensuring that metadata describing our products and services are available in WMO format (ISO19115) for uploading to a Global Information System Centre (GISC).

D. Recommendations from CGMS-38

Recommendation 38.01: CGMS recommended to consider the possibility to extend the IODC coverage after 2013 and after the end of life of Meteosat-7.

Status: NOAA is very supportive of this recommendation.



Recommendation 38.02: CGMS members to examine opportunities to incorporate Severe Weather Forecasting Demonstration Project (SWFDP) required data and products in their broadcast schemes.

Status: NOAA continues to investigate the resources needed to support the required additional data sets in the current broadcast schedules.

Recommendation 38.03: CGMS members to consider ways and means to strengthen their support to international scientific expert teams involved in peer review of climate data records (for example, to the CGMS Working Groups IPWG, IWWG, ITWG and IROWG, and to the World Climate Research Programme Global Energy and Water Cycle Experiment Radiation Panel (WCRP GEWEX RP)).

Status: NOAA has no response at this time.

Recommendation 38.04: CGMS Satellite Operators are invited to consider the development of new operational sensors for cryospheric variables, especially snowfall.

Status: NOAA has no response at this time.

Recommendation 38.05: CGMS members are invited to provide information on the planned use of the band 7750 - 7850/7900 MHz in order to facilitate an early coordination of this band among MetSat operators in the framework of SFCG.

Status: See NAA-WP-15.

Recommendation 38.06: When planning frequency use of current and future DCS systems, CGMS members are encouraged to adhere to the content of Resolution SFCG 30-1 providing the basic general partitioning of the band 401 – 403 MHz and related sharing conditions for future long-term coordinated use of DCS systems on geostationary and non-geostationary MetSat and EESS systems. If considered necessary, further coordination within the selected sub-bands should be initiated and performed within the framework of SFCG.

Status: See NOAA-WP-17.

Recommendation 38.07: CGMS members planning to use the 7750-7900 MHz band investigate using the CGMS global standards for AHRPT.

Status: NOAA has no response at this time.

Recommendation 38.08: NOAA to consider sharing 1 minute simulated imagery upon request from CGMS agencies planning new advanced imagers in geostationary orbit.

Status: See NOA-WP-18.



Recommendation 38.11: NOAA to publish results on the characteristics of targets for vicarious calibration presented in NOAA-WP-26.

Status: NOAA has no response at this time.

Recommendation 38.12: NOAA to use GPS RO measurements to assess the systematic bias remaining in the MSU/AMSU intercalibrated FCDRs.

Status: NOAA has no response at this time.

Recommendation 38.13: NOAA to present results on the Stratospheric Sounding Unit (SSU) intercalibration and derived long term trends and comparisons with trends from MSU/AMSU.

Status: NOAA has no response at this time.

Recommendation 38.15: CGMS operators are invited to express their interest in the portable AMV software package from the EUMETSAT 'Nowcasting SAF' for testing and internal comparisons.

Status: See NOAA-WP-34.

Recommendation 38.19: Orbital planes of operational sun-synchronous satellites with sounding capability (IR and MW) should be coordinated with a view to optimize the temporal distribution in order to maximize coverage.

Response: Through agreements with EUMETSAT and the US Department of Defence (DoD), NOAA is responsible for providing continuity of IR and MW sounding capabilities in the early PM (~ 1330) orbital plane. EUMETSAT is responsible for providing continuity in the mid AM (~ 0930) orbit. DoD is responsible for the early AM (~ 0530) orbit.

Note: DoD's DMSP satellite includes a MW sounding capability but not an IR sounding capability. Continuity of the early AM orbit will be achieved through the Defence Weather Satellite System (DWSS), which may not fly an IR sounder capability.

Recommendation 38.20: The WG recommended to proceed with an update of the CGMS baseline for GEO, LEO and HEO satellites in advance of CBS-XV in 2012, describing the target configuration for 2015.

Response: NOAA updates to the CGMS baseline include:

- 2015 Geo baseline: NOAA will be operating GOES 13 in the east (75° W) position and GOES-14 in the west (135° W) position
- 2015 LEO baseine: In 2015, the Joint Polar Satellite System (JPSS)
 Program will be operating the NPOESS Preparatory Project (NPP) satellite in the 1330 orbit.
- 2015 HEO baseline: NOAA has no plans to operate any satellites in a HEO orbit
- Atmospheric composition -- Ozone, methane, aerosols, and other trace gases will be measured by the NPP sensors Ozone Monitoring and



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Profiling Suite: Nadir and Limb sensors (OMPS N&L and the Crosstrack Infrared Sounder (CrIS)

Recommendation 38.21: CGMS to keep under review the baseline for GEO, LEO and HEO satellites for 2015 with the aim to ensure, by 2025, a full implementation of the WMO Vision for the GOS in 2025.

Status: NOAA has no response at this time.