



CGMS-40 NOAA-WP-01  
Prepared by NOAA  
Agenda Item: I.2  
Discussed in Plenary

**SUMMARY LIST OF ACTIONS FROM CGMS XXXIX**  
(Final 26 October 2012)

NOAA response to actions from CGMS XXXIX.

## **Summary List of Outstanding CGMS Actions and Recommendations (Final 26 October 2012)**

### **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-33.

**Permanent 02:** CGMS Members to report to CGMS plenary on their activities and plans related to space weather including: (i) impact of solar events and space radiation on satellites, protective measures, (ii) space weather observations, and (iii) space weather warning services.

Status: See NOAA-WP-07.

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

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

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

See NOAA-WP-33.

**Permanent 08:** CGMS Members to provide WMO with the update of their programmes for the dossier on the space-based GOS.

Status, See NOAA-WP-10.

**Permanent 10:** CGMS Members to provide at every CGMS meeting a list of frequencies used by their current and future systems in the format provided in WG I report-39 (Annex 1).

Status: NOAA-WP-12.

### **B. Actions from CGMS-38**

**None.**

**C. Actions from CGMS-39**

**Action 39.05:** CGMS Members to report at CGMS-40 on activities to implement a web-accessible instrument monitoring website. Deadline CGMS-40.

Status: GSICS EP meeting on November 4 will assess status for presentation at plenary.

**Action 39.06:** CGMS Members to send nominations for vice chairmanship for GSICS. Deadline 28 Feb 2012.

Status: None received to date. It will be talked about at GSICS EP meeting on November 4. NOAA will discuss at plenary.

**Action 39.07:** CGMS Members to consider hosting GSICS EP-12 meeting in spring 2012 and send proposal to WMO Secretariat. Deadline 31 Dec 2011

Status: Closed - meeting was held in College Park, MD

**Action 39.08:** CGMS Members to provide a contact point to WMO to coordinate their potential contributions to SWFDP (Severe Weather Forecasting Demonstration Project). Deadline: CGMS-40

Status: NOAA contact points are James Gurka (NESDIS) and Anthony Mostek (NWS). See, CGMS-39 NOAA-WP-13

**Action 39.10:** CGMS Members to provide a detailed review of current and future plans to contribute to the global architecture for Climate Monitoring at CGMS-40. Deadline: CGMS-40.

Status: NOAA/NCDC in coordination with STAR and OSPO entered data on NOAA's Essential Climate Variables in response to an Inventory Request from Mark Dowell, CEOS WG Climate Chair. NOAA utilized a prioritization for NOAA ECVs based upon the CDR maturity matrix. The priority was: 1) operational CDRs (per the NOAA CDR program at NCDC), 2) transitional CDRs (per the NOAA CDR program) and 3) research CDRs (mostly STAR).

**Action 39.11:** CGMS Members who are interested in joining the Writing Team on global architecture for climate monitoring to nominate participants by end of November 2011.

Status: Completed. No action taken. NOAA already has representatives serving on the Writing Team.

**Action 39.12:** CGMS Members are invited to send comments on the global architecture for climate monitoring to the Secretariat and CGMS Secretariat to send an official CGMS response on the Writing Team Report to the Writing Team Chair prior to the CEOS Plenary by end of October 2011. Deadline: 31 October 2011.

Status: Completed - Comments provided by NOAA via Writing Team Members.



**Action 39.14:** CGMS Satellite Operators to update their web pages to include the VLab logo and to more clearly show their support to VLab activities and CoEs. Deadline: CGMS-40.

See NOAA-WP-11.

**Action 39.15:** CGMS Satellite Operators, in their areas of responsibilities, should be ready to make a contribution towards funding of VLab Management Group (VLMG) members to attend the VLMG-6 in Brazil in September 2012. Deadline: CGMS-40.

Status: See NOAA-WP-11.

**Action 39.16:** CGMS Satellite Operators to report to WMO Space Programme and CGMS Secretariat within 2 weeks, regarding the possibility to financially support the continuity of employment of the VLab Technical Support Officer (TSO). Deadline: 31 October 2011.

Status: NOAA provided funding to support the continuity of employment of the VLAB Technical Support Officer.

**Action 39.17:** CGMS Satellite Operators are invited to note GOS-2011-September edition of the dossier and to forward to WMO (bibizzar@tin.it) any update or missing information concerning their programmes for inclusion in GOS-2012-January. Deadline: 31 January 2012.

Status: NOAA provided updates to GOS Dossier in December 2011.

**Action 39.18:** Interested CGMS Members to nominate a participant in the CGMS Internal Study Task Force in charge of reviewing CGMS structure, meetings and practices for next meeting. Deadline: 31 October 2011

Status: Closed.

**Action 39.19:** CGMS Members to review and approve the report of the CGMS Internal Study Task Force by April 2012 so that it could be implemented for CGMS-40. Deadline: 15 April 2012.

Status: Closed.

**Action 39.20:** CGMS Members to report on their plans for the utilisation of the band 7750-7850/7900 MHz for their existing and future LEO systems (including the detailed list of frequencies used in the band, associated bandwidth and signal characteristics – together with the orbital parameters). Deadline: 31 Dec.2011

Status: See [CGMS-39 NOAA-WP-14](#) and [CGMS-39 NOAA-WP-15](#).

**Action 39.24:** NASA and NOAA to report on cal/val results from the NPP instruments, including comparisons of NPP sensors with EOS sensors and with airborne instruments. Deadline: CGMS-40

Status: See NOAA-WP-14 and NOAA-WP-15.



**CGMS Action 39.21:** Based on the inputs of the previous action, CGMS members to analyse potential interference issues, reporting results of analysis back to CGMS WG-I by next CGMS meeting. Deadline: CGMS-40.

Status: Open.

**Action 39.28:** Satellite operators are requested to provide funding for participants of the 6<sup>th</sup> IPWG Workshop which will take place in Fortaleza, Brazil (tentatively 15-19 October 2012). Deadline: 30 June 2012.

Status: NOAA provided \$5,000 (USD) in support of this workshop.

**Action 39.30:** The co-chairs of IWWG and the rapporteur are requested to discuss the results from NWP impact studies at IWW11, and to synthesize general observations on performance. Due date: IWW11 in February 2012 and report to CGMS-40.

Status: See NOAA-WP-21.

**Action 39.32:** CGMS agencies are encouraged to participate in the next International Radio Occultation Working Group (IROWG) Workshop to be held in Estes Park, Colorado 28 March - 3 April, 2012. Details can be found at [www.irowg.org](http://www.irowg.org). Deadline 01 March 2012.

Status: NOAA participated in the IROWG Workshop held in Estes Park, Colorado 28 March - 3 April, 2012.

**Action 39.33:** CGMS agencies are encouraged to report scientific progress on use of Radio-occultation, opportunities to provide increased coverage by RO sensors as well as to report on data gap issues to the IROWG, and directly to CGMS. Deadline: CGMS-40.

Status: See NOAA-WP-33.

**Action 39.36:** VLab co-chairs to address the potential of training support with the SWFDP responsible in WMO. Deadline: CGMS-40.

Status: Open.

**Action 39.37:** CGMS Satellite Operators to consider the requirements of satellite information for coastal applications that are described in WMO-W-30, and provide comments to WMO ([blee@wmo.int](mailto:blee@wmo.int)). Deadline: 31 December 2011.

Status: See NOAA-WP-23.

**Action 39.38:** CGMS members to liaise with WMO ([blee@wmo.int](mailto:blee@wmo.int)) to coordinate training activities on forecasting and warning for storm surges and coastal inundation. Deadline: 31 December 2011.

Status: NOAA and EUMETSAT under the CEOS Ocean Vector Wind Constellation supports satellite wind/wave training courses for forecasters to improve utilization of available satellite wind/wave in marine forecasting.

**Action 39.39:** NOAA to report to SCOPE-CM on the progress of extending SSMI

precipitable water products with SSMIS. Deadline: Next SCOPE-CM meeting that will take place in August 2012 in Berlin. Deadline: 31 August 2012.

Status: Updates were provided to the SSMI-S.

**Action 39.41:** CGMS requests the Rapporteurs to discuss, at the upcoming International Scientific Working Group meetings, the WG contributions to ECV production and reprocessing activities, and other relevant climate work. Deadline: CGMS-40.

Status: Dr. Goldberg discussed this topic at the ITWG Feb 2012 meeting.

**Action 39.42:** NOAA to provide more information on the content of LRD broadcasts in due course. Deadline: CGMS-40.

Status: See NOAA-WP-28.

**Action 39.43:** EUMETSAT and NOAA to prepare a new global specification for LEO high rate broadcast services and present it for consideration at the next meeting of CGMS. Deadline: CGMS-40.

Status: Closed.

**Action 39.49:** CGMS Members to nominate Points of Contact who can assist WMO with the development of common guidelines for long term data preservation. Deadline for nominations 31 December 2011. WMO to prepare a report on the guidelines to be presented to CGMS 40. Deadline: CGMS 40.

Status: Open.

**Action 39.51:** All CGMS Members to propose using interoperability standards for providing and sharing of climate data records and report on their efforts at the next meeting of CGMS. Deadline: CGMS 40.

Status: NOAA provided updates via e-mail.

**Action 39.52:** EUMETSAT and NOAA to report on their progress on sharing climate data records and using common interoperability standards for providing the data. Deadline: CGMS 40.

Status: NOAA provided updates via e-mail.

**Action 39.54:** All CGMS Members to report at the next CGMS meeting on their progress with the implementation of WIS. Deadline: CGMS-40.

Status: Open.

**D. Recommendations from CGMS-39**

**Recommendation 39.01** CGMS agencies are invited to assess the possibility of moving an IR Sounding in early morning orbit.

Status: Open

**Recommendation 39.02:** CGMS Satellite Operators are invited to support the strategy for improving the use of satellite data in SWFDP regional subprojects.

Status: Open

**Recommendation 39.03:** Satellite operators are asked to strive to harmonize the spectral characteristics of future Visible and Infrared imager channels in order to enable seamless application of differential absorption methods to data acquired from different platforms.

Status: Open

**Recommendation 39.04:** CGMS Satellite operators are asked to ensure the earliest possible deployment of next generation geostationary  platforms multi-spectral VIS-IR capabilities.

Status: Open

**Recommendation 39.05:** CGMS Satellite operators are asked to consider the deployment of operational LIDAR sensors in Low Earth Orbit to  daily provide multi coverage over global air routes.

Status: Open

**Recommendation 39.06:** CGMS members are invited to ensure, as appropriate, their involvement in the Polar Space Task Group in support of the WMO Global Cryosphere Watch (List of invitees to first meeting 13-14 October 2011 in Geneva, Switzerland:[http://www.wmo.int/pages/prog/sat/meetings/documents/PSTG-1\\_Inf\\_02\\_%20Invitees.pdf](http://www.wmo.int/pages/prog/sat/meetings/documents/PSTG-1_Inf_02_%20Invitees.pdf) )

Status: Open

**Recommendation 39.07:** CGMS is invited to note the outcome of the 2011 WOAP workshop, in particular in the context of the development of an architecture for climate monitoring from space.

Status: Open

**Recommendation 39.08:** CGMS Members are invited to include links to the VLab Calendar of Events and the ESRC.

Status: Open

**Recommendation 39.09:** CGMS Members are encouraged to participate in the ad-hoc workshop and subsequent activities of the future International Forum of Users of Satellite Data Telecommunication Systems. This is adopted with the understanding that the Terms of Reference (ToR) of this forum are still draft and will be subject to consolidation by the participants in the group.

Status: Open

**Recommendation 39.10:** All AMV and CSR product providers are invited to continue or start the regular reprocessing of those products with state-of-the-art algorithms.

Status: Open

**Recommendation 39.11:** CGMS agencies are encouraged to provide instrument monitoring results at CGMS-40.

Status: See NOAA-WP-16.

**Recommendation 39.12:** CGMS Satellite Operators to provide regular information on satellite/instruments events affecting calibration and establish corresponding websites.

Status: Open

**Recommendation 39.13:** CGMS Satellite Operators to provide Instrument Performance Monitoring information routinely on their respective websites.

Status: Open

**Recommendation 39.14:** CGMS Members participating in GSICS to provide a representative in the GDWG.

Status: See WMO-WP-23.

**Recommendation 39.15:** CGMS to support the development of guidelines by WMO for the design of future instruments with a view of harmonizing some spectral characteristics (e.g. central  $\lambda$ ) of at least some core geostationary imager channels.

Status: Open.

**Recommendation 39.16:** CGMS Members that are not currently participating to consider an active role in the future progress of GSICS, enabling their sensors to be used for inter-calibration and to benefit from the experience collected in GSICS.

Status: Open.





**CGMS Recommendation 39.17:** CGMS agencies are encouraged to support scientists to attend the next ITWG.

Status: See NOAA-WP-18 and NOAA-WP-19.

**WGII Recommendation 39.18:** The snowfall community is confident in the capabilities of Space-borne multi-frequency Doppler radar for global snowfall measurement and requests space research agencies to plan future missions that implement double-frequency capability as a minimum.

Status: Open.

**Recommendation 39.19:** Space agencies should continue to favour integrated science teams that encompass the measurement, modelling and data assimilation communities through proposals, campaigns and free dataflow.

Status: Open.

**Recommendation 39.20:** CGMS agencies are encouraged to follow NASA's example of comprehensive and sustaining science support for satellite missions, including comprehensive validation campaigns.

Status: Open.

**Recommendation 39.21:** CGMS members are invited to assist the funding of a training event which is planned to be held concurrently with IPWG-6

Status: See NOAA-WP-20.

**Recommendation 39.22:** All AMV providers should make an effort to have the quality of their products tested by NWP centers. It is recommended to present such results already at the 11th International Winds Workshop in February 2012.

Status: Open.

**Recommendation 39.23:** CGMS-39 advised IWWG 11 to further address the salient issues and topics listed in EUM-WP-27.

Status: Open.

**Recommendation 39.24:** CGMS agencies are encouraged to support scientists to attend the next IWWG.

Status: Open.

**Recommendation 39.25:** CGMS Agencies are invited :

- i) to further test the performance of the NWCSAF AMV software package by testing the products in a NWP data monitoring/assimilation system, and
- ii) to extend the current software to clear-sky WV AMVs.

Status: Open.



**Recommendation 39.26:** Satellite AMV providers are invited to examine the stand-alone AMV software package from the NWCSAF and to report back to CGMS 40.

Status: Open.

**Recommendation 39.27:** EUMETSAT NWC SAF to consider providing a tested option to allow running of alternative algorithms to support algorithm intercomparisons studies.

Status: Open.

**Recommendation 39.28:** NOAA/CIMSS to report on additional case study results using NearCasting, and, if practical, to include collaboration with the Severe Weather Forecasting Demonstration Project (SWFDP) for the Lake Victoria region. Deadline CGMS-40.

Status: See NOAA-WP-24.

**Recommendation 39.29:** CGMS Satellite Operators are invited to advise on satellite products that could be made available in response to the needs of the SWFDP – Eastern Africa, to facilitate the timely provision of such satellite-related information, and to consider the SWFDP needs for the Lake Victoria Basin region in future product development activities.

Status: Open.

**Recommendation 39.30:** CGMS Members are encouraged to identify opportunities to develop and improve products and services contributing to CIFDP.

Status: Open.

**Recommendation 39.31:** WGIII recommended that the baseline be submitted to and endorsed by the plenary with the amendments and clarifications brought by the session, as included in Annex 1 to the WG-III report.

Status: Open.

**Recommendation 39.32:** R&D or operational satellite operators should consider the provision of some high-accuracy and stable reference instruments as anchors for operational instruments, in particular, for climate purposes.

Status: Open.

**Recommendation 39.33:** CGMS Satellite Operators to address the anticipated or potential gaps identified in the WMO Gap Analysis, in particular:

- infrared and microwave sounding on the early morning orbit,
- hyperspectral sounding missing in some geostationary sectors,
- long-term follow-on of radio-occultation constellation,
- global precipitation measurement precipitation radar follow-on mission,
- long-term Earth Radiation Budget monitoring
- limb sounding for stratospheric ozone, long living greenhouse gases and ozone precursors.



Status: Open.

**Recommendation 39.34:** CGMS satellite operators to adopt the World Geodetic System (WGS84) and Earth Geodetic Model (EGM-96) geographical reference systems for the normalized geostationary projections in all future geostationary systems and related products, and inform the users accordingly.

Status: Open.