

CGMS-40 actions and recommendations

	A	B	C	D	E	F	G	H	I	J
1	<b>Actions open from CGMS-38 and -39 (at CGMS-40)</b>									
2	<b>Actionee</b>	<b>Action</b>	<b>#</b>	<b>Description</b>	<b>Action feedback/closin</b>	<b>Deadline</b>	<b>Status</b>	<b>COMMENTS, Link to HLPP</b>		
3	NOAA and IMD	WGII	38.36	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	Remains open. Action by NOAA and IMD needed related to resolving algorithm differences	(CGMS-38) New deadline CGMS-42	OPEN			
4	WMO	WGIII	38.40	Action 38.40: WMO in collaboration with the atmospheric composition community and satellite experts to further refine the requirements for atmospheric composition requirements and the optimal way to address these in the revised baseline.	Remains open. No progress; Ad-hoc task team to review the needs for GAW (atmospheric composition) regarding satellite measurements and the 2004 IGACO recommendations has not yet been formed.	(CGMS-38) New deadline CGMS-41	OPEN			
5	CGMS Members	WGI	39.21	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	Remains open - new deadline proposed end Q1 2013 for specific follow up e-meeting of WG-I activities. Linked to HLPP: EESS X-Band congestion and interference assessments.	(CGMS-40) New deadline: 31/03/2013	OPEN			
6	NASA	WGII	39.25	Action 39.25: NASA to discuss with GSICS the use of COVE tool to facilitate sensor calibration and validation activities. Deadline: CGMS-40	NASA-WP-02/03; NOAA-WP-14,15,19	(CGMS-40) New deadline: CGMS-41	OPEN			
7	NASA	WGII	39.26	Action 39.26: NASA to ask GPM-XCAL team to review and consider use of GSICS Product Acceptance Procedure. Deadline CGMS-40	GPM current intercalibration efforts are not at the final state where a submission to the GSICS intercalibration process will yield useful results. It is vital that GPM first obtains data from the GMI/DPR instruments to verify its double-difference intercalibration results. At the point where the intercalibration process has been verified, NASA will reexamine use of the GSICS process. Pending launch of GPM currently planned for February 2014.	(CGMS-40) New deadline: CGMS-42	OPEN			
8	CGMS Satellite Operators	WGII	39.37	Action 39.37: CGMS Satellite Operators to consider the requirements of satellite information for coastal applications that are described in WMO-WP-30, and provide comments to WMO (blee@wmo.int). Deadline: 31 December 2011	Following discussions in WGII at CGMS-40 the action will be referred to CGMS-41.	(CGMS-39 31/12/2011) New deadline CGMS-41	OPEN			
9	EUMETSAT	WGIV	39.46	Action 39.46: EUMETSAT to re-assess the European user requirement for a L-band service from its LEO satellites, bearing in mind the ongoing broader consultation process of WMO, and report to CGMS accordingly. Deadline: CGMS-40	Ongoing.	(CGMS-40) New deadline: CGMS-41	OPEN			
10	CGMS Members and WMO	WGIV	39.49	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	EUM: Harald.rothfuss@eumetsat.int WMO: nhettich@wmo.int Other members to nominate their points of contact.	(CGMS-40) New deadline CGMS-41	OPEN			
11	CGMS Members	WGIV	39.51	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	EUMETSAT: No further developments since CGMS-39. EUMETSAT is prepared to revisit this following an input from other CGMS members. NOAA has provided inputs which were circulated via the CGMS list server on 02/11/12. Other CGMS members to provide their input.	(CGMS-40) New deadline CGMS-41	OPEN			
12	WMO	WGIV	39.53	Action 39.53: WMO to further refine the web-based Product Access Guide for satellite products, within the WMO Space Programme website, in collaboration with CGMS satellite operators. Deadline: CGMS-40	WMO provided the link to the Product Access Guide: <a href="http://www.wmo.int/pages/prog/sat/product-access-guide_en.php">http://www.wmo.int/pages/prog/sat/product-access-guide_en.php</a>  Status: Open. Ongoing activity, link to be provided by WMO.	(CGMS-40) New deadline CGMS-41	OPEN			
13										
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17	<b>CGMS-40 actions</b>									
18	<b>PLENARY</b>									
19	<b>Actionee</b>	<b>Action</b>	<b>#</b>	<b>Description</b>	<b>Action feedback/closin</b>	<b>Deadline</b>	<b>Status</b>	<b>COMMENTS, Link to HLPP</b>		
20	IOC	Plen II.5	40.1	IOC to provide a paper on guidance to CGMS members on sea surface topography. Deadline: CGMS-41		CGMS-41	OPEN		HLPP#3	
21	WMO	Plen IV.1	40.2	WMO Secretary General to send a letter to CMA inviting them to consider redeploying the FY-3 to an early morning orbit and offering international support to reach this objective.		30-Nov-12	OPEN		HLPP#1	
22	WMO	Plen IV.1	40.3	WMO to convene a CGMS tiger team to coordinate the technical evaluation of the global and regional impact of flying a FY-3 satellite in early morning orbit, in order to support CMA in the assessment process.		31-Dec-12	OPEN		HLPP#1	
23	CGMS WGIII	Plen IV.2	40.4	WGIII to establish a CGMS tiger team on assessing the impact and socio-economic benefits of satellite missions who would collaborate with e.g. the WMO CBS and other partners and would report at CGMS-41.		CGMS-41	OPEN		HLPP#4.1	
24	CGMS agencies	Plen IV.2	40.5	WGII to identify in consultation with the ISWGs the priority ECV climate data records and communicate these priorities to the SCOPE-CM Secretariat for consideration in the call for proposal of January 2013. [WGII]		31-Dec-12	OPEN		HLPP#5.1	
25	WMO	Plen IV.2	40.6	WMO to coordinate impact studies, through the CBS, in order to update and refine its requirements for GNSS radio-occultation (e.g. number of occultations/day, distribution in space)		CGMS-41	OPEN		HLPP#1.1	

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	CGMS Secretariat	Plen V.2	40.7	CGMS Secretariat to explore the possibility to coordinate Climate related activities with CEOS in line with the work done for the preparation of the Architecture for Climate Monitoring from Space and to report at CGMS-41		CGMS-41	OPEN	HLPP#5.1		
26	WMO/Vlab co-chairs	Plen VI.1	40.8	WMO in cooperation with the VLab co-chairs to continue facilitate the integration of ISRO and IMD into the Vlab		CGMS-41	OPEN	HLPP#4.2		
27	CGMS/VLab co-chairs	Plen VI.1	40.9	CGMS to investigate the possibility to provide funding to the VLab CoEs in Argentina, Australia, Brazil and South Africa, to establish a project for generation of conceptual models for the Southern Hemisphere.		CGMS-41	OPEN	HLPP#4.2		
28	<b>WG I - telecommunications</b>									
29	CGMS satellite operators	WGI	40.10	Interested satellite operators to inform WMO if they identify/designate a representative to be invited to the Satcom forum (WMO point of contact is Etienne Charpentier, Echarpentier@wmo.int)		31-Dec-12	OPEN	HLPP#2.0		
30	CGMS members	WGI	40.11	CGMS members to provide comments to the draft ToR of the Users of Satellite Data Telecommunication Systems (Satcom) Forum, included in annex to CGMS-40 WMO-WP-02, by the end of December 2012.		31-Dec-12	OPEN	HLPP#2.0		
31	CGMS members	WGI	40.12	CGMS members to complete and review interference assessment (in response to action 39.21) by end Q1 2013 (e-meeting).		31-Mar-13	OPEN	HLPP#1.3		
32	CGMS members	WGI	40.13	Round table for comments review to proposed update to CGMS Global Specification 04 (by end of Q1 2013 -same e-meeting as for action 40.12).		31-Mar-13	Closed for CMA	HLPP#1.3		
33	<b>WG II - data and products</b>									
34	CGMS Secretariat	WGII	40.14	CGMS Secretariat to modify agenda item WGII/2 "Image processing techniques" to "Image processing techniques and satellite imagery for nowcasting" for CGMS-41)		15 May 2013 (for CGMS-41)	OPEN	HLPP#3		
35	EUM and NOAA	WGII	40.15	NOAA and EUMETSAT are invited to present a consensus concept and realisation of a calibrations events logging system with emphasis on issues and lessons learned. Due date: CGMS-41.		CGMS-41	OPEN	HLPP#3		
36	CGMS members	WGII	40.16	CGMS members to complete the GSICS vision questionnaire. Deadline: January 2013		31-Jan-13	Closed for CMA	HLPP#3		
37	NASA	WGII	40.17	NASA to report on optimisation of polar orbits of ocean color missions using the COVE Tool, especially those that are planning mid morning orbits, to provide maximum daily coverage from sensors with orbit swath of less than 1500 km.		CGMS-41	OPEN	HLPP#1.1		
38	IMD	WGII	40.18	IMD with GSICS assistance to employ GSICS Satellite Inter-calibration tools to intercompare geostationary imager to IASI and/or AIRS. IMD to identify a focal point, and to present findings at CGMS-41		31 Dec 2012; CGMS-41	OPEN	HLPP#3		
39	ROSH	WGII	40.19	Roshydromet with GSICS assistance to employ GSICS Satellite Inter-calibration tools to intercompare geostationary imager to IASI and/or AIRS. Roshydromet to identify a focal point, and to present findings at CGMS-41.		31 Dec 2012; CGMS-41	OPEN	HLPP#3		
40	ITWG	WGII	40.20	ITWG co-chairs to initiate updating of the ITWG website and relevant documentation in order to reflect sponsorship by CGMS. By: CGMS-41		CGMS-41	OPEN	HLPP#4		
41	CGMS members	WGII	40.21	CGMS members and WMO to provide adequate support to ensure active participation at international meetings, and training events by developing and LDCs, e.g. for the IPWG-7 workshop in Japan in Oct 2014.		CGMS-41	OPEN	HLPP#4.3		
42	CGMS members	WGII	40.22	All CGMS members that have committed to participate in the second AMV derivation intercomparison project are invited to carry out the study on the basis of the guidance provided by IWWG and the Meteosat data set provided by EUMETSAT. All CGMS members to report on preliminary results at CGMS-41. Final results should be presented at IWW12 in 2014.		CGMS-41	CMA-WP-06	HLPP#3		
43	CGMS members	WGII	40.23	CGMS to convene through the IROWG an ad-hoc meeting on the global GNSS-RO constellation, inviting all interested CEOS agencies.		CGMS-41	OPEN	HLPP#1.1		
44	EUM, JMA, NOAA	WGII	40.24	EUMETSAT, JMA and NOAA are invited to report on their development toward common and consistent volcanic ash products from Meteosat and MTSAT-2 and GOES, respectively. Due date CGMS-41		CGMS-41	OPEN	HLPP#3		
45	EUM	WGII	40.25	EUMETSAT to invite Dr. Fred Prata to make a presentation on volcanic ash products science and applications at CGMS-41.		CGMS-41	OPEN	HLPP#3		
46	CGMS Secretariat	WGII	40.26	To request CREW to develop a proposal related to establishment of a new International Science WG, involving all CGMS members and WMO, WCRP and GCOS, including the proposed focus of the group, an account of ongoing activities in other fora (a "gap analysis"), and financial implications, for discussion at CGMS-41.		CGMS-41	OPEN	HLPP#3		
47	CGMS members	WGII	40.27	CGMS members to provide additional comments to the SCOPE-Nowcasting concept and confirm their participation in pilot projects as delineated in Annex I of WMO-WP-04.		15-Dec-12	CMA-WP-04	HLPP#3		
48	CGMS members	WGII	40.28	CGMS members participating in SCOPE-Nowcasting to nominate a focal point to the ad hoc SCOPE-Nowcasting Working Group, to meet in Q2/Q3 2013 (cf. Annex II).		15-Dec-12	CLOSED for CMA	HLPP#3		
49	ROSH	WGII	40.29	ROSHYDROMET to report at CGMS-41 on the technical modalities for the near-real time provision of Meteor-M global data sets and associated ancillary information, as needed to fully contribute to the GOS.		CGMS-41	OPEN	HLPP#2		
50	CGMSSEC	WGII	40.30	CGMS Secretariat to respond to the letter of the IRC President Dr Robert Cahalan (in which the IRC agrees that the ITWG becomes also formally a CGMS working group) and to express its appreciation on behalf of all CGMS members. Deadline: 1 December 2012.		01-Dec-12	OPEN	HLPP#3		
51	CGMS members	WGII	40.31	CGMS members to evaluate the requirement by IPWG for 3-hourly global temporal sampling of satellites (including non sun- synchronous platforms).		CGMS-41	OPEN	HLPP#3		
52	<b>WG III - contingency &amp; continuity</b>									

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54	NOAA	WGIII	40.32	NOAA, in consultation with South America users and WMO, to investigate options for a follow-on to GOES-12 mission for South America, in order to develop a transition plan, involving GOES or other geostationary satellites, until the availability of the GOES next generation, which is expected to provide full coverage of both North and South America.		15-Apr-13	OPEN	HLPP#1.1		
55	EUMETSAT	WGIII	40.33	EUMETSAT to report at CGMS-41 on its plans for Indian Ocean coverage beyond 2013.		31-Dec-12	OPEN	HLPP#1.1		
56	CGMS members	WGIII	40.34	All CGMS Members to review and update their contribution to the mapping of CGMS mission plans against the CGMS baseline, and inform WMO accordingly. (5 December 2012)		05-Dec-12	OPEN	HLPP#1.1		
57	CGMS members	WGIII	40.35	CGMS Members to consider opportunities for partnership with NOAA on COSMIC-2 ground segment and DSCOVR follow-on mission and report to CGMS-41. (July 2013)		CGMS-41	OPEN	HLPP#1.1		
58	CGMS satellite operators	WGIII	40.36	CGMS satellite operators to inform the ICTSW via the WMO Secretariat (jlaleuille@wmo.int) on their needs for space weather data and warning products.		CGMS-41	Closed for CMA	HLPP#5.2		
59	<b>WGIV - global data dissemination</b>									
60	CGMS satellite operators	WGIV	40.37	CGMS satellite operators to report about the implementation of the World Geodetic System (WGS84) and Earth Geodetic Model (EGM-96) geographical reference systems.		CGMS-41	OPEN	HLPP#2		
61	ROSH	WGIV	40.38	ROSHYDROMET to report at CGMS-41 on the technical modalities for the near-real time provision of Meteor-M global data sets and associated ancillary information, as needed to fully contribute to the GOS.		CGMS-41	OPEN	HLPP#2		
62	CMA and NOAA	WGIV	40.39	CMA and NOAA to review the draft revised Global Specification 04 and provide comments by April 2013, with the goal to provide a revised version for CGMS-41.		31 Mar 2013; CGMS 41	CMA wrote a comment to the WGIV teleconf 27/03/13	HLPP#2		
63	WMO and NOAA	WGIV	40.40	WMO and NOAA to discuss future possibility of NOAA disseminating via GEONETCast-Americas certain environmental data to users in Central and South America.		CGMS-41	OPEN	HLPP#2		
64	CGMS members	WGIV	40.41	CGMS members to propose experts for a CGMS-WMO Task Force on Metadata implementation, for the purpose of interfacing with the WMO IPET-MDRD in the context of the revision of the WMO core metadata profile.		CGMS-41	OPEN	HLPP#2		
65	CGMS Secretariat and WMO	WGIV	40.42	The CGMS Secretariat to draft, in consultation with the WMO secretariat and the Co-Chair of the IPET-MDRD, the terms of reference for the CGMS-WMO Task Force on meta data implementation.		31-Dec-12	OPEN	HLPP#2		
66	CGMS members	WGIV	40.43	JMA, CMA, KMA, NOAA and other CGMS agencies, as appropriate, to nominate focal points to the Task Team on Satellite User Requirements recently established in RA V (South-West Pacific) (Lead: Russell Stringer, Bureau of Meteorology Australia, r.stringer@bom.gov.au); due date: end of the 2012		31-Dec-12	OPEN	HLPP#2		
67	CGMS members	WGIV	40.44	CGMS Members to support the RA V Task Team in organising a workshop in late 2013 to advance its work plan, in conjunction with the 4th Asia/Oceania Meteorological Satellites Users' Conference in Australia.		30-Sep-13	OPEN	HLPP#2		
68	<b>CGMS-40 Recommendations</b>									
69	<b>PLENARY</b>									
70	"Actionee"	Rec	#	Description	Action feedback/closin	Deadline	Status	COMMENTS, Link to HLPP		
71	CGMS members	Plen R	40.01	Satellite operators to provide regular, annual contributions into the WMO VLab Trust Fund to ensure the continuation of the post of the VLab TSO		CGMS-41	OPEN			
72	CGMS members	Plen R	40.02	Satellite operators and WMO to provide necessary resources for the translation of relevant training materials (websites, modules and related) into other WMO languages		CGMS-41	OPEN			
73	CGMS members	Plen R	40.03	Satellite operators and trainers to take note of the new "CBS Guideline for ensuring user readiness for new generation satellites" and plan appropriate projects to ensure user readiness		CGMS-41	OPEN			
74	CGMS members	Plen R	40.04	CGMS agencies are encouraged to exploit opportunities for education, outreach and training through the WMO-CGMS Virtual Laboratory for enhanced utilisation of observations and products for marine forecasting, especially of high winds in coastal areas.		CGMS-41	OPEN			
75	CGMS members (Vlab)	Plen R	40.05	CGMS agencies to support widening of VLab scope (marine, land applications, agricultural meteorology).		CGMS-41	OPEN			
76	<b>WGI - telecommunications</b>									
77	CGMS satellite operators	WGI R	40.06	CGMS satellite operators are invited to note the CBS-XV recommendations and the resulting WMO requirements for Direct Broadcast from polar-orbiting meteorological satellites in both X-Band and L-Band.		CGMS-41	OPEN			
78	CGMS members	WGI R	40.07	The establishment of the Satcom Forum has been discussed in WG-I who confirmed that CGMS representation is proposed to be maintained by the CGMS secretariat (currently S. Burns) and also encouraged additional CGMS members (specially satellite operators having an interest in data collection and related issues) to identify themselves as potential participants.		CGMS-41	OPEN			
79	<b>WGII - data and products</b>									
80	CGMS members	WGII R	40.08	CGMS agencies are invited to present working papers at CGMS-41 working group II on image processing tools for enabling the integration of various datasets for promote decision support efforts.		CGMS-41	OPEN			
81	EUM	WGII R	40.09	EUMETSAT to continue to provide secretariat support to the SCOPE-CM initiative.		CGMS-41	OPEN			
82	CGMS satellite operators	WGII R	40.10	CGMS operators are encouraged to provide instrument performance monitoring information routinely on their respective websites.		CGMS-41	OPEN			
83	CGMS members (GSICS)	WGII R	40.11	All CGMS members participating in GSICS should consider nominating candidates for the positions of Chair and vice-chairs of the working groups and the Executive Panel; they should also provide representatives to the GRWG and GDWG.		CGMS-41	OPEN			
84	CGMS members	WGII R	40.12	CGMS members that are not currently participating in GSICS to consider an active role in the future progress of GSICS.		CGMS-41	OPEN			

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85	ITWG	WGII R	40.13	CGMS requests that ITWG consider changing its name to better reflect the substantial evolution of sounding technology and science.		CGMS-41	OPEN			
86	CGMS satellite operators	WGII R	40.14	CGMS members to plan the sequence of satellite launches into the polar orbit to minimise the risk of instrument failures and gaps in the time series of observations, in accordance with the GCOS Climate Monitoring Principles. Space agencies should consider this for the further planning of the Architecture for Climate Monitoring from Space.		CGMS-41	OPEN			
87	CGMS members	WGII R	40.15	CGMS members to conduct studies to trade off benefits of spectral, radiometric, and spatial resolutions of infrared sounders and to pursue the development of next generation sounders.		CGMS-41	OPEN			
88	CGMS members	WGII R	40.16	Support for line-by-line (LBL) reference model development is of paramount importance and should be continued to ensure that users (in both operational and non-operational institutions) have access to the latest updates in LBL forward modelling.		CGMS-41	OPEN			
89	CGMS members	WGII R	40.17	CGMS members should set up the archives of historical data necessary for CDR generation, together with the relevant algorithm versions for products, and other metadata (e.g., spectral response functions) derived by operational and quasi-operational satellite algorithms. This should include the preservation of pre-1979 records. Access mechanisms need to enable CDR generation by users. All archived records should be registered in the ECV Inventory.		CGMS-41	OPEN			
90	CGMS satellite operators	WGII R	40.18	CGMS agencies to support fast delivery initiatives using direct broadcast with extensions wherever possible (e.g., IASI, METOP-B, NPP), including on future polar orbiting satellites.		CGMS-41	OPEN			
91	CGMS members	WGII R	40.19	CGMS agencies to work with EUMETSAT to extend Regional ATOVS Retransmission Services (RARS) with Direct Readout stations receiving NPP.		CGMS-41	OPEN			
92	IWWG	WGII R	40.20	IWWG co-chairs to provide a state-of-the-art overview on the research on high resolution wind production and usage and to encourage increased focus on this theme at IWW12. This will involve input from NWP centres (to investigate need for this data in high resolution models and how best to assimilate) and data producers (how best to adapt the derivation).		CGMS-41	OPEN			
93	CGMS satellite operators	WGII R	40.21	Satellite providers should investigate the potential of global AMVs from tandem satellites: e.g. dual Metop, MODIS/VIRS and the future Sentinel 3A/B. First assessments are invited for CGMS-41 as a basis for more detailed discussions at IWW12 in 2014.		CGMS-41	OPEN			
94	CGMS members	WGII R	40.22	CGMS members are invited to participate in the 3rd workshop of the International Radio Occultation Working Group, taking place near Graz, Austria from 5 - 11 September 2013. In particular, colleagues from China, India, Russia are invited to report on their radio occultation activities.		31-Jul-13	OPEN			
95	CGMS members	WGII R	40.23	CGMS agencies should engage in reprocessing of radio/occultation data to maximize their utility in anchoring climate reanalyses.		CGMS-41	OPEN			
96	WMO	WGII R	40.24	The scientific evolution of volcanic ash products should be considered as a pilot activity of SCOPE-Nowcasting.		CGMS-41	OPEN			
97	WMO	WGII R	40.25	WMO in consultation with ICAO to refine the requirement for volcanic ash monitoring and to devise a way forward towards evaluation and operational use of a consistent volcanic ash product from current geostationary satellites.		02-Apr-13	OPEN			
98	CGMS satellite operators	WGII R	40.26	All operators are invited to consider also the implementation of a common volcanic ash product. Implementation in parallel to existing products would help the evaluation.		CGMS-41	OPEN			
99	EUM, JMA, NOAA	WGII R	40.27	The scientific development (EUM, JMA, NOAA joint development of common/consistent volcanic ash products) should be considered as a pilot activity of SCOPE-Nowcasting. Due date CGMS-41 (ref. action WGII 40.24)		CGMS-41	OPEN	HLPP#3		
100	CGMS members	WGII R	40.28	CGMS recommended that new sea surface temperature datasets be compared with other satellite and in-situ sea surface temperature datasets under the auspices of the Group on High Resolution Sea Surface Temperature (GHRST), which was described in CGMS-39 IOC-WP-01.		CGMS-41	OPEN			
101	ESA, NASA, CGMS members	WGII R	40.29	CGMS recommended that ESA, NASA and other agencies interested in understanding the water cycle continue to coordinate infrastructure development to calibrate and validate Aquarius and SMOS sea surface salinity satellite observations.		CGMS-41	OPEN			
102	NOAA, CGMS members	WGII R	40.30	CGMS recommended that NOAA and other agencies interested in understanding the carbon cycle continue to coordinate infrastructure development to calibrate and validate the Suomi NPP ocean colour satellite observations.		CGMS-41	OPEN			
103	CGMS members [Vlab]	WGII R	40.31	Marine forecasters training activities should be widened with input and participation by other CGMS operators.		CGMS-41	OPEN			
104	CNSA, ROSC	WGII R	40.32	CNSA (HU-1A/B), ROSCOSMOS (Severyanin-M SAR) to report on their provisions to make data available to users, to CGMS-41.		CGMS-41	OPEN			
105	CGMS members	WGII R	40.33	Interested CGMS Members are invited to report by CGMS-41 on their respective processes for elaboration of user requirements for future marine and atmosphere services, and the status of their evaluation.		CGMS-41	OPEN			
106	CGMS satellite operators	WGII R	40.34	CGMS agencies to provide reports on ground- and space-based space weather observing systems to CGMS-41.		CGMS-41	OPEN			
107	<b>WGIII - contingency &amp; continuity</b>									
108	CGMS satellite operators	WGIII R	40.35	R & D or operational satellite operators should consider the provision of some high-accuracy, SI-traceable and stable reference instruments as anchors for operational instruments, in particular, for climate purposes.		CGMS-41	OPEN			

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109	CGMS satellite operators	WGIII R	40.36	CGMS Satellite Operators to address the anticipated or potential gaps identified in the WMO Gap Analysis, in particular: <ul style="list-style-type: none"> <li>• infrared and microwave sounding on the early morning orbit,</li> <li>• hyperspectral sounding missing in some geostationary sectors,</li> <li>• long-term follow-on of radio-occultation constellation,</li> <li>• global precipitation measurement precipitation radar follow-on mission,</li> <li>• long-term Earth Radiation Budget monitoring</li> <li>• limb sounding for high-vertical resolution observations in the stratosphere and mesosphere (of temperature, humidity, wind, aerosol, ozone and other trace gases).</li> </ul>		CGMS-41	OPEN			
110	CGMS members	WGIII R	40.37	All CGMS Members to provide updates on satellite programmes to be included in OSCAR, through their annual reports to CGMS and by other means as appropriate.		CGMS-41	OPEN			
111	CGMS members	WGIII R	40.38	CGMS satellite operators to support NWP centres to perform Observing System Experiments (OSEs) on the regional impact of a potential gap of sounding from the early morning orbit.		CGMS-41	OPEN			
112	CGMS members	WGIII R	40.39	CGMS Members to support CMA in further investigations of the benefit and technical consequences of potential move of a mid morning mission to an early morning mission.		CGMS-41	OPEN			
113	CGMS members	WGIII R	40.40	CGMS Members, through WG III, to evaluate the CGMS baseline in the light of the architecture strategy with a view to populate the space segment part of the initial physical view of the architecture and identify gaps and scenarios to address them.		CGMS-41	OPEN			
114	CGMS members [IROWG]	WGIII R	40.41	CGMS, via the IROWG, to support the development and use of GNSS radio-occultation for ionospheric monitoring.		CGMS-41	OPEN			
115	CGMS members	WGIII R	40.42	CGMS members operating dual-frequency altimeter missions to support the use of altimeter measurements for ionospheric monitoring.		CGMS-41	OPEN			
116	CGMSSEC	WGIII R	40.43	CGMS Secretariat to review the organization of space weather matters in the agenda of CGMS meetings.		CGMS-41	OPEN			
117	<b>WGIV - global data dissemination</b>									
118	CGMS satellite operators	WGIV R	40.44	CGMS satellite operators to actively support user readiness projects as part of the implementation of their new generation satellite systems, following best practices recommended in the "CBS Guideline for Ensuring User Readiness for New Generation Satellites".		CGMS-41	OPEN			
119	CGMS members	WGIV R	40.45	CGMS members are highly encouraged to utilise the operational infrastructure of WIS in particular for the description, inclusion and provision of their satellite meta data to WIS GISCs such that satellite data becomes discoverable within WIS and also consider using WIS in the context of provision of their satellite data.		CGMS-41	OPEN			
120	CGMS members	WGIV R	40.46	CGMS members are encouraged to support the expansion of RARS to advanced sounder data and the broader IGDDS initiatives in order to further expand the access to and use of satellite data and products.		CGMS-41	OPEN			