

 ${\it Earth~Observations~for~Water~Sustainability} \\ 9^{th}~-11^{th}~May,~2018 \\ European~Centre~for~Medium-Range~Weather~Forecasts~(ECMWF)$

GEOGLOWS Business Meeting Agenda

Objective of the Meeting: to engage the GEO and International community in the development of pathways to more efficiently implement the agenda of the GEOGLOWS Initiative.

The GEOGLOWS business meeting brings together experts representing the provider and user communities, the international and GEO coordination Initiatives, and technical experts in operational forecasts, space and in-situ based earth observation, and water management. The objective of the meeting will be achieved by facilitating collaborations, enabling projects, and encouraging conversations that will strengthen these programmes, increasing awareness of related activities and leverage existing or planned activities to provide relevant and actionable information to address technical and policy challenges for water sustainability.

Structure and organization of the meeting.

The meeting will take place over two and a half days broadly organized along the following lines:

- Wednesday 9th May. The initial session will provide an overview of the coordination of water activities under GEO, followed by a session in which the user community will identify needs of EO and products to address global water problems.
- Thursday 10th May. The morning will include presentations from space agencies and a conversation on Essential Water Variables (EWV). The afternoon will involve the presentation of a new proposal from the IGWCO and parallel discussions under the objectives of the GEOGLOWS Working groups.
- Friday 11th May. The morning will start with a report from the Working Groups discussions setting the priorities and next steps in the proposed activities. A brief session on Africa water activities will follow, to conclude with briefs from the WMO and JPI water activities, as well as a summary of the Meeting.



	European Centre for Medium-Range Weather Forecasts (ECMWF) GEOGLOWS Annual Business meeting
	Wednesday, 9th May 2018
13:00 - 14:30	Steering Committee meeting and Working Group chairs
	Closed Meeting
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45.00.45.45	14:30 -15:00 General Registration and Coffee
15:00-15:15	Welcoming remarks and program introduction from ECMWF (Florian
45 45 45 00	Pappenberger)
15:15-15:30	GEOGLOWS Overview and Meeting Priorities (Angélica Gutierrez-
	Magness)
15.00 15.10	Overview Talks
15:30 - 15:40	Water activities in the GEO Work plan (Douglas Cripe)
15:40 - 15:50	Seven Principles for Sharing Data from Nationally Funded Programs and
	Projects" Paul Koch
15:50 - 16:00	Summary of the GEOGLOWS Steering Committee meeting (Rose Osinde
	Alabaster)
16:00 - 16:20	Reaction from the audience to the guidance of the SC
16:20 – 18:00 B	ackground briefings on Needs for EO and products to address global water problems.
	Chair: Edward Beighley
16:20 - 16:35	FMGlobal (Yasir Kaheil)
16:35 - 16:50	Present and potential future collaborations of the World Bank with
	GEOGLOWS (Harsh Nagaraja)
16:50 - 17:05	The present and future needs for Earth observations and science in
	water- and climate-related insurance Programme (Tom Philp)
17:05 - 17:20	Operational global water quality products in Copernicus Land – state of
	the art and current challenges (Stefan Simis)
17:20 - 17:35	Application of Earth Observations in support of a legal framework for
	Water Sustainability in Indigenous communities in the Americas. (Felipe
	Gutierrez)
17:35 - 17:50	Monitoring Surface Water Changes over the lower Mekong with multiple
	satellite techniques toward sustainable water management. (Hyongki
	Lee)



Thursday, May 10, 2018		
8:15 – 9:15 Space Agency Contributions to GEOGLOWS and other potential contributions. CHAIR: Nagaraja Rao Harshadeep		
8:15 - 8:30	NASA's Applied Sciences-Water Resources program (Bradley Doorn) – USA	
8:30 - 8:45	Overview of UK Space Agency and water-related activities (Richard Allan)	
8:45 - 9:00	Global Surface Water Explorer (GSWE). (Luca DE-Felice - JRC)	
9:00 - 9:15	Water Program at CNES (Selma Cherchali) – France	
9:15 – 10:30 A conversation on Essential Water Variables CHAIR: Jose Romero		
	The discussion on EWV will take place during the WG sessions in the afternoon	
9:15 - 9:30	The role of GEOGLOWS in defining EWV Water Cycle Variables (George Huffman)	
9:30 - 9:45	Meteorological Prediction Systems - ECMWF (David Richardson)	
9:45 - 10:00	The role of CEOS in the EWV (Paul Digiacomo - NOAA)	
10:00 - 10:15	The need for integrated EO based water observation system. (Ahmad Al Bitar).	
10:15 – 10:30	GEMS/Water Programme, its needs and expectations for EWV on water quality (UNESCO/	
10:30 - 10:45 Br	reak	
10:45 – 13:00 The role of forecasting in GEOGLOWS and nexus to areas beyond hydrology CHAIR: Jim Nelson		
10:45 - 10:55	GEOGLOWS Global Streamflow Forecasting (GSFF) background and objectives (Jim Nelson)	
10:55 - 11:10	Background information on GloFAS and its role in hydroforecasting (Christel Prudhomme)	
11:10 - 11:30	Discussion of the global Streamflow project (GSFF) methods, implementation, validation exercises (Jim Nelson)	
11:30 - 11:40	Esri's water data services that are enhancing the GSFF project and beyond (Steve Kopp)	
11:45-12:00	Review of GSFF pilot projects (Nepal, Bangladesh, Peru, Colombia, Dominican Republic, Tanzania, Thailand, Brazil)	



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12:00-12:15	Introduction to the International Flood Initiative in Asia-Pacific
	(Mamoru Miyamoto - ICHARM)
12:15 - 12:30	The role of the GSFF in Disaster Risk Reduction – Brazil Experience
	(Osvaldo Moraes – CEMADEN)
12:30 - 13:00	Discussion
13:00 – 14:00 Lunch	

14:00– 17: GEOGLOWS Working Group discussions (in 4 separate rooms)		
14:00-14:15	River discharge estimation from satellite data in ungauged basins", (Oubanas Hind - IRSTEA).	
14:15 – 14:30	Water Cycle Extremes: Proposal for Review of Requirements (Rick Lawford will present on behalf of Sushel Unninayar).	
14:30 - 15:30	Working Groups discussions	
	WG#1 Lead: Rose Alabaster, Camilo deBedout	
	WG#2 Lead: Jim Nelson, Edward Beighley	
	WG#3 Lead: Jose Romero, George Huffman (WEBEX), and Selma Cherchali	
	WG#4 Lead: Paul Koch, Angélica Gutierrez	
15:30 – 15:45 Break		
	Current GEOGLOWS deliverables and the wish list. Where are some of	
15:45 - 16:00	the synergies with meeting participants - Rick Lawford	
16:00 - 17:30	Second Session of Working Group discussions	
17:30	Adjourn	

Thursday, May 10, 2018 17:45 pre-dinner drinks (sponsored by ECMWF) 18:30 Dinner (served in ECMWF restaurant)



Friday, May 11, 2018 – Session on Africa		
CHAIR :Rose Osinde Alabaster		
	Short reports from Working Groups on highlights and recommendations	
8:30 - 9:30	from their deliberations	
	"Hydro meteorological applications in poorly observed regions and	
9:30 - 9:45	tropical basins: advantages and limitation of satellite observations and	
9:30 - 9:43	complementary techniques using the telecommunication network -	
	examples in Africa. " (Marielle Gosset)	
9:45 - 10:00	AMCOWs plans for monitoring and reporting for SDG6 in the African	
9.43 - 10.00	region (Canisius Kanangire)	
10.00 10.15	Report on the WMO Global Conference for Prosperity through	
10:00-10:15	Hydrological Services (Dominique Berod - WEBEX)	
10:15-10:30	Water JPI and possible synergies with GEOGLOWS - (Dominique	
10.13-10.30	Darmendrail – WEBEX)	
	UMFULA: The role of Earth Observations and climate information in the	
10:30 - 10:45	decision-making process for socio-economic benefits in Africa. (Christian	
	Siderius)	
10:45 - 11:15 Br	reak	
11:15 - 13:0	00 Panel on GEOGLOWS actions, next steps, funding, organization, and	
	Collaboration issues	
CHAIR: Brad Doorn		
11:15 - 11:30	Reporting and Activity monitoring within GEOGLOWS (Rick Lawford)	
11:30 - 11:45	Supporting the GEO Program (Douglas Cripe)	
11:45 - 12:00	Private partnerships (Rose Alabaster)	
12:00 - 12:40	Next steps and further recommendations (Group Discussion)	
12:40 - 13:00	Meeting Summary (Angélica Gutierrez)	
13:00 – 14:00 Lunch		



Earth Observations for Water Sustainability 9^{th} -11 th May, 2018

European Centre for Medium-Range Weather Forecasts (ECMWF)

Friday, May 11, 2018 Integrated Global Water Cycle Observations (IGWCO) Community of Practice 14th Annual Meeting

Purpose: The IGWCO COP Activity Review and planning meeting (Water GEO activities; contributions to GEOGLOWS activities; plans for GTN-H; follow-up the GEOSS Water Strategy, new initiatives, etc.)

Strategy, new initiatives, etc.)	
14:00 – 17:40	
14:00-14:15	Welcoming remarks and Review of activities and changes since the last
	meeting in Tuscaloosa (Rick Lawford)
14:15-14:25	Overview of the Changes in the GEO Programme and Secretariat in the
	past year and their implications for GEO Water activities (Douglas Cripe)
14:25- 15:40	Updates on GEO Water projects other than GEOGLOWS or
	GEOGLOWS reports
14:25 - 14:30	Drought (Will Pozzi or alt. TBC)
14:30 - 14:35	GEOCRI (Yubao Qiu (TBC))
14:35 - 14:45	AquaWatch (Paul DiGiacomo)
14:45 -14:55	Blue Planet (PaulDiGiacomo)
14:55 -15:00	Wetlands (Adrian Strauch) (TBC)
15:00 -15:10	In-Situ Observations and future plans for GTN-H (Stephan Dietrich on
	Webex)
15:10 - 15:20	EO4WEF (Rick Lawford)
15:20 - 15:30	AmeriGEOSS (Angelica Gutierrez)
15:30 - 15:40	DIAS and AWCI (Mamoru Miyamoto)
15:40– 16:00 Break	
16:00 - 17:00	Updates on joint projects and new opportunities (Rick Lawford).
16:00 - 16:15	Status of the Implementation of the GEOSS Water Strategy
16:15 - 16:25	Updates on new Initiatives: Extremes (from Sushel Unninayar, others)
16:25 - 16:40	Discussion of new research, applications and observational
	opportunities (Bradley Doorn, Selma Cherchali)
16:40 - 16:50	ECMWF research and services related to drought (Fredrik Wetterhall)
16:50 - 17:00	NextGEOSS (Bente Bye) (by Webex TBC)
17:00 - 17:30	Concluding presentations and Meeting Summary



17:00 - 17:10	Communication messages
	(Conference Opportunities, Publications, etc)
17:10 - 17:20	Summary and draft recommendations (Rick Lawford)