

4TH SATELLITE SOIL MOISTURE VALIDATION  
AND APPLICATION WORKSHOP  
and the  
CCI SOIL MOISTURE USER WORKSHOP

18 - 20 September 2017, Vienna, Austria

# Discussion Topic 1

## Is there a need for updating the GCOS accuracy requirements?



# What is GCOS?

- Assessing the current state of the global observing system
- Advocating and promoting the establishment and enhancement of the systems
- Promoting the transfer and accessibility of data to the user community
- Identifying measurable key variables
- Coordinating activities with other global observing systems, panels and task groups



	2017				2018				2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Panel Meetings	Red				Red				Red				Red				Red			
Steering Committee				Red				Red				Red				Red				Red
Update new Implementation Plan															Blue	Blue	Blue	Blue	Yellow	Blue
Publish Updated Implementation Plan																				Purple
Invite suggestions & comments on requirements		Green	Yellow	Yellow																
Panels to consider and prepare proposals					Green	Green	Green													
Agree Proposals									Green											
Public Review of requirements										Yellow	Yellow									
Revised Requirements												Green	Green							
Second Public Review														Yellow	Yellow					



# ECV Soil Moisture



- Actions as described in GCOS 2016 Implementation Plan
  - Action T15: Satellite soil-moisture data records
  - Action T16: Multi-satellite, soil-moisture data services
  - Action T17: International soil-moisture network
  - Action T18: Regional high-resolution soil-moisture data record



# ECV Requirements

- Current ECV requirements according to the GCOS 2016 Implementation Plan, Annex 1:

18 - 20 September 2017, Vienna, Austria

Soil Moisture	Frequency	Depth	Accuracy	Stability
Surface soil moisture	Daily	1-25 km	0.04 m <sup>3</sup> /m <sup>3</sup>	0.01 m <sup>3</sup> /m <sup>3</sup> /year
Freeze/thaw	Daily	1-25 km	90%	tbd
Surface inundation	Daily	1-25 km	90%	tbd
Root-zone soil moisture	Daily	1-25 km	0.04 m <sup>3</sup> /m <sup>3</sup>	0.01 m <sup>3</sup> /m <sup>3</sup> /year

<https://public.wmo.int/en/programmes/global-climate-observing-system/essential-climate-variables>

