**DRAFT CONCEPT NOTE - GLOBAL CLIMATE OBSERVATION – 2nd Science Conference**

**September/October 2021**

**WHAT IS THE PURPOSE OF THE SECOND CONFERENCE?**

The first GCOS Science Conference held from 2–4 March 2016, in Amsterdam, The Netherlands, was a success both for attendees and those who watched on line. The organization was outstanding with major support from EUMETSAT. The first conference was clearly linked to the new Implementation Plan, which was eventually published at the end 2016. It brought together a wide range of observations not normally discussed together: from forest fires to ocean heat.

The GCOS Steering Committee at its 24th session in October 2016 recommended that a second conference should be held to further the coordination of a system of climate observation systems, and to review it status. This will be reinforced at the upcoming 26th steering meeting in October 2018. GCOS is currently planning to re-assess the status of the implementation of global climate observations in 2020/2021, and to revise its current Implementation Plan as contribution to the Global Stock Take in 2023, which is discussed under the Paris Agreement.

The second GCOS science conference in September/October 2021 will invite the broad Earth observation community, representatives of regions in urgent need to adapt to a changing climate, the authors of the IPCC sixth assessments reports, which will release the findings of their Working Groups I, II and III in 2021, and key leaders from the World Climate Research Program, WCRP. The focus should be on specific issues: e.g., knowledge gaps, but also progress made with regard to the global Earth cycles: water, energy and carbon.

A first preparatory step to agree on common objectives, will be an all GCOS panels meeting, held from 18-22 March 2019, in conjunction with WCRP Data and Advisory Panel and the joint CEOS-CGMS WG Climate.

GCOS is responsible within the United Nations and its Framework Convention on Climate Change, UNFCCC, for ensuring a sustained, long term, reliable system for monitoring the global climate.