



WMO STATEMENT AT SBSTA 51

02 December 2019, Madrid, Spain

World Meteorological Organization

Mr Chairperson,

Distinguished delegates,

The World Meteorological Organization (WMO) along with its co-sponsored bodies, the Global Climate Observing System (GCOS) and the World Climate Research Programme (WCRP), continues working to increase the relevance of the information provided to the Parties to the UNFCCC. Systematic observations are critical for supporting monitoring and prediction of the climate system and for understanding future impacts. There are still substantial gaps in observations data and knowledge however related to the carbon cycle and atmospheric Greenhouse Gas concentrations (GHG), the response of the oceans and cryosphere and changes in regional climates due to the lack of long- term observations in critical parts of the world, such as the tropics, the polar regions, and over the oceans.

To address one of these gaps, WMO is contributing to further development of the Global Cryosphere Watch (GCW) within the framework of the WMO Integrated Global Observing System (WIGOS). This is a necessary step in addressing the urgency of improved global coverage and homogeneity of cryosphere observations, data, and information, supporting Member states' climate science activities and service delivery for water resource management, climate prediction and weather forecasting, and improved understanding of natural hazards and risks. In October 2019, WMO organized a High Mountain Summit, co-organized with Food and Agriculture Organization (FAO), FAO-Mountain Partnership, and UNESCO, with

participants from 45 countries. The Summit called for the inclusion of mountain-specific indicators in local, national, regional and global reporting mechanisms, such as National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs).

With the ocean covering 2/3 of the Earth surface, and increasing maturity of ocean models and their coupling with Numerical Weather Prediction models, engagement of WMO with the ocean community is becoming increasingly important. WMO, with its Infrastructure Commission and the Research Board along with partner agencies, will be proactive in reviewing how the governance of the Global Ocean Observing System (GOOS) ought to evolve in a framework where many actors can promote seamless prediction at all time scales, and work with the ocean community for optimizing contribution of the oceans to this effort. Again, working with the ocean community will be key in this regard, to reach consensus on observational user requirements, the best mix of technologies to be used and how to address the gaps, build capacity and establish partnerships.

The WMO provisional Statement on the State of the Global Climate in 2019 shows a striking record warming recorded from 2015 through 2019, a continuous upward trend in the atmospheric concentration of the major greenhouse gases, an increasing rate of sea level rise, and the loss of sea ice in both northern and southern polar regions. The global temperature in 2019 to date is 1.1°C above pre-industrial levels. In October 2019, the global mean sea level reached its highest value since the beginning of satellite altimetry recording in 1993. The WMO Greenhouse Gas Bulletin shows that globally averaged concentrations of carbon dioxide (CO₂) reached 407.8 parts per million in 2018, up from 405.5 parts per million (ppm) in 2017.

This year, for the first time, WMO is launching, through the Global Framework for Climates Services, a State of Climate Services report that provides insight into the status, the value, and the role climate services play in support of adaptation with a particular focus on agriculture. The report includes systematic analyses of gaps and needs of climate for early warning information for use in the agriculture and food security sector, serving as the basis for directing climate investments in the sector.