WMO OMM

WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
世界气象组织

Secrétariat
7 bis, avenue de la Paix – Case postale 2300
CH 1211 Genève 2 – Suisse
Tél.: +41 (0) 22 730 81 11
Fax: +41 (0) 22 730 81 81
wmo@wmo.int – public.wmo.int

Fifty-Seventh Session of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space

Vienna, 3 – 14 February 2020

WMO Statement
(check against delivery)

Agenda Item 4. General exchange of views and introduction of reports submitted on national activities

Madam Chair,

Distinguished Delegates,

WMO is a United Nations specialised agency with 193 members. It is the United Nations systems authoritative voice on weather, water, climate and related environmental services.

2019 was a particular important year for WMO. The World Meteorological Congress, the supreme decision-making body of WMO, which takes place every four years, held its 18th meeting in Geneva, Switzerland[1]. The Congress approved a package of sweeping reforms to embrace a more comprehensive Earth system approach and took important decisions on the strategy, policies, standards, budget and office holders of WMO[2].

This will ensure a stronger focus on water resources and the ocean, more coordinated climate activities and a concerted effort to translate science into services for society. The reforms also pave the way for greater engagement with the rapidly growing private sector and more structured collaboration with development agencies.

In line with this, the governance structure of WMO is being overhauled to ensure that it is better equipped to tackle mounting challenges such as climate change, extreme weather, environmental degradation and urbanization, whilst harnessing technological advances

[1] See https://public.wmo.int/en/eighteenth-world-meteorological-congress-cg-18.

[2] See https://public.wmo.int/en/media/press-release/world-meteorological-congress-approves-sweeping-reforms.

from satellites, supercomputing and big data. The refom also seeks to narrow the growing capacity gap between developed and less-developed WMO members and to channel more resources to WMO's regional operations.

To help achieve these goals, Congress approved a new WMO strategic plan for the years 2020 to 2023 with the overarching vision of "A world where all nations, especially the most vulnerable, are more resilient to the socioeconomic impact of extreme weather, water, climate and other environmental events; and are empowered to boost their sustainable development through the best possible weather, climate and water services."[3].

Madam Chair,

Distinguished Delegates,

Our quickly changing climate reminds us of the necessity of such reforms so that we can stand a chance to face this global threat[4]. WMO's consolidated analysis of leading international datasets shows that 2019 was the second warmest year on record after 2016. Average temperatures for the five-year period 2015-2019 and for the ten-year period 2010-2019 were the highest on record. Since the 1980s each decade has been warmer than the previous one. This trend is expected to continue because of record levels of heat-trapping greenhouse gases in the atmosphere[5]. The last time the Earth experienced a comparable concentration of CO2 was 3 to 5 million years ago, when the temperature was 2 to 3 degrees C warmer and sea level was 10-20 m higher than now. On the current path of carbon dioxide emissions, we are heading towards a temperature increase of 3 to 5 degrees Celsius by the end of this century.

However, Temperatures are only part of the story. The past year and decade have been characterized by retreating ice, record sea levels, increasing ocean heat and acidification, and extreme weather. These have combined to have major impacts on the health and well-being of both humans and the environment, as highlighted by WMO's Provisional Statement on the State of the Global Climate in 2019, which was presented at the UN Climate Change Conference, COP25, in Madrid[6]. The full statement will be issued in March 2020[7].

---

[3] See https://library.wmo.int/index.php?lvl=notice_display&id=21525.
[4] See https://www.un.org/en/un75/climate-crisis-race-we-can-win.
[5] See https://public.wmo.int/en/media/press-release/wmo-confirms-2019-second-hottest-year-record.
[6] See https://public.wmo.int/en/media/press-release/2019-concludes-decade-of-exceptional-global-heat-and-high-impact-weather.
[7] See https://public.wmo.int/en/our-mandate/climate/wmo-statement-state-of-global-climate.

Our monitoring of the climate is increasingly informed by space-based systems. Some of the findings would not be possible without the data gathered by Earth Observation satellites. It is now beginning to pay off that we have collected space-based climate data for the past decades, and we are starting to see certain climate trends in that data that help us to verify climate model calculations.
In this context the 18th World Meteorological Congress adopted Resolution 51 (Cg-18) on the "Implementation of the architecture for climate monitoring from space", which will support climate and GHG monitoring from space, ensuring that the respective satellite missions are included in the framework of the WMO Integrated Global Observing System (WIGOS).

Madam Chair,
Distinguished Delegates,

The World Radiocommunication Conference 2019 (WRC-19), which was held last October and November in Egypt and attended by more than 160 nations, agreed on the allocation of bandwidths of the world's radio spectrum[8,9]. WMO will monitor the impact of the decision relating to protection levels of the 23.6 to 24 GHz band from interference from 5G telecommunication technology that will now be operating in the adjacent band. While WMO recognizes the need for new technology for telecommunications, it is also necessary to ensure that future WRC decisions will offer adequate protection for those frequencies used by meteorological and earth systems satellites that contribute to improved weather forecasts protecting life and property.
WMO, through its Steering Group on Radio Frequency Coordination (SG-RFC) will continue working with WMO Members and the International Telecommunications Union (ITU) with the goal to ensure the protection of vital radio spectrum[10].

Madam Chair,
Distinguished delegates,

Thank you very much for your attention.

---

[8] See https://public.wmo.int/en/media/news/wmo-expresses-concern-about-radio-frequency-decision.
[9] See https://public.wmo.int/en/media/press-release/wmo-calls-protection-of-radio-frequencies-vital-weather-forecasts.
[10] See https://www.wmo.int/pages/prog/www/TEM/WMO_RFC/TOR_en.html.