



**MESSAGE ON THE OCCASION OF WORLD METEOROLOGICAL DAY 2023  
“The future of weather, climate and water across generations”**

**by  
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Greetings from the World Meteorological Organization secretariat in Geneva.

Our weather and climate and water cycle know no national or political boundaries. International cooperation is essential. This philosophy has driven the work of the great meteorological family since 1873 and will guide us in the future.

The demand for our expertise and our science has never been higher.

World Meteorological Day 2023 is very special because it takes place during the 150th anniversary of WMO’s predecessor, the International Meteorological Organization.

For the past 150 years, National Meteorological and Hydrological Services have collected and standardized data which underpin the weather forecasts we now take for granted. [The history of WMO data exchange](#) is a success story of scientific cooperation to save lives and livelihoods.

We are the second oldest United Nations agency. We are proud of our achievements and will celebrate them in a landmark year when our decision-making World Meteorological Congress will agree strategic priorities to promote our vision of a world which is more resilient to extreme weather, climate, water and other environmental events.

## **Early Warnings for All**

There is increasing momentum behind the ambitious drive to ensure that life-saving early warning systems cover everyone in the next five years. The Early Warnings for All Initiative, launched by UN Secretary-General António Guterres on World Meteorological Day 2022 was endorsed at COP27 in Sharm-el-Sheikh and has won support from developed and developing countries, from the UN family and the private sector.

Early warnings work. They must work for everyone.

Half of WMO Members still do not have adequate Multi-Hazard Early Warning Systems and we need to fill the gaps in the basic observing system, especially in Least Developed Countries and Small Island Developing States.

Early warnings are the low-hanging fruit of climate change adaptation – which is no longer a luxury but a must. According to the World Economic Forum, in the next ten-year time frame, failure to mitigate climate change, failure of climate change adaptation and natural disasters are the highest risks for the global economy.

At least half of all disasters are water-related. At the UN Water Conference in New York (22 to 24 April), WMO will show how water-related hazards like floods and droughts are increasing. Climate change and the melting of glaciers will also lead to more water stress. Better water monitoring and management are essential and this is why WMO is working on a Global Water Information System to promote free exchange of hydrological data.

## **Greenhouse Gas Monitoring**

Climate change is the defining challenge of our time. How we respond to that challenge will determine the future of our planet and our children and grandchildren. This will be highlighted in the Synthesis of the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

The global average temperature is more than 1.1°C higher than it was when the IMO was founded 150 years ago. Our weather is more extreme, our ocean is warmer and more acidic, sea levels have risen and glaciers and ice are melting. The rate of change is accelerating.

Atmospheric levels of greenhouse gases remain at record levels. And yet there is currently no comprehensive, timely international exchange of surface and space-based greenhouse gas observations.

To fill the void, WMO is seeking to develop a sustained and coordinated [Global Greenhouse Gas Monitoring Infrastructure](#).

It would expand and consolidate WMO's long-standing activities in greenhouse gas monitoring under the auspices of the Global Atmosphere Watch and the Integrated Global Greenhouse Gas Information System.

The concept is based on the highly successful World Weather Watch, which was ushered in at the start of the satellite era and celebrates its 60th anniversary this year. It remains the gold standard for international cooperation.

WMO's Members can be proud of our achievements in our long and rich history. We started life in an era of morse code and telegrams for shipping forecasts. Supercomputers and satellite technology are opening up new horizons for ever more reliable weather and climate prediction – with the possibility of kilometer-scale models.

But even in an era of artificial intelligence and machine learning, we still depend on the personal dedication and commitment of the staff of National Meteorological and Hydrological Services who work every day of every year to save lives.

We thank you all.

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