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WMO's Climate Watch System

K. Eichler
World Meteorological Organization (WMO), Geneva, Switzerland (keichler@wmo.int)

Inter-annual variations can affect global and regional atmospheric and oceanic circulation. Many of these variations are recurrent and are usually depicted with well known climatic patterns such as the El Niño Southern Oscillation (ENSO), the North Atlantic Oscillation (NAO), etc. They correlate significantly with the departures from the mean state of climate parameters at monthly, seasonal and annual time scales and with the onset of extreme weather and climate events leading to direct and indirect consequences on lives, goods, properties and the well being of societies. Droughts, heat waves, cold waves, flooding, extreme wind storms, land slides, bush and forest fires, costal erosions to list just these are the most popular induced impacts which may be triggered by one or several of such anomalies. In the context of global warming these extremes are expected to become in the future more frequent, more severe and gaining more geographical extend than usually known. Some of the observed increase in climate extremes already fit in these projections.

To this effect, National Meteorological and Hydrological Services (NMHSs) should be adequately equipped and prepared to continuously monitor and assess the state of the climate, evaluate available long range forecasts, and where conditions warrant provide to the users concise and understandable climate early warning information at weekly, 10-day, monthly, and seasonal time scale.

Setting up an effective Climate Watch System for climate extremes has been for more than a decade a focus of the WMO and to improve climate risk management capabilities among nations. It is designed to provide advisories (climate watches) to inform the users, particularly those involved in natural hazard preparedness, mitigation and response on ongoing, pending and/or expected climate anomalies and their negative impacts.

The presentation will show the current activities and general information on CWS in the context of the GFCS as well as examples of already issued Climate Watches.