Record-breaking heat bakes US, Europe, China

July 14 2023, by Lucie AUBOURG

A traffic warden in Las Vegas mans his street corner in searing heat in Las Vegas, Nevada.

Summer has just begun in the Northern Hemisphere but a brutal heat wave is already gripping parts of Europe, China and the United States,
where record temperatures expected this weekend are a stark illustration of the dangers of a warming climate.

Extreme heat advisories have been issued for more than 100 million Americans with the National Weather Service forecasting particularly dangerous conditions in Arizona, California, Nevada and Texas.

At the same time, several European nations, including France, Germany, Italy, Spain and Poland, are also baking in searing temperatures.

The mercury may soar as high as 48 degrees Celsius (118.4 degrees Fahrenheit) on the islands of Sicily and Sardinia, the European Space Agency said—"potentially the hottest temperatures ever recorded in Europe."

North Africa has also been sweltering and the Moroccan meteorological service issued an extreme heat red alert for southern parts of the country.

Some regions of China, including the capital Beijing, are also experiencing sweltering temperatures and a major Chinese power company said its single-day power generation hit a record high on Monday.

Last month was already the hottest June on record, according to the US space agency NASA and the European Union's Copernicus Climate Change Service.

Extreme weather resulting from a warming climate is "unfortunately becoming the new normal," warns Secretary-General Petteri Taalas of the World Meteorological Organization (WMO).

Excessive heat is one of the deadliest meteorological events, according
to the WMO. One recent study estimates over 61,000 people died from heat during Europe's record-breaking summer last year.

**Death Valley**

A contributing factor to the higher temperatures this year may be the climate pattern known as El Nino.

El Nino events, which occur every two to seven years, are marked by warmer-than-average sea surface temperatures in the central and eastern Pacific near the Equator, and last about nine to 12 months.

North America has already seen a series of extreme meteorological events this summer, with smoke from wildfires that continue to burn out of control in Canada causing extraordinary air pollution across large parts of the United States.

The US northeast, particularly Vermont, has also recently been pummeled by torrential rains which have caused devastating floods.

According to climate scientists, global warming can cause heavier and more frequent rainfall.

Meanwhile, residents of much of the southern United States have been experiencing unrelenting high temperatures for weeks.

Daniel Swain, a climate scientist at the University of California, Los Angeles, said the temperature in Death Valley could equal or surpass the record for the hottest air temperature ever reliably measured on Earth.

The WMO's official record is 56.7C (134F) recorded in Death Valley, in the southern California desert. But that was measured in 1913 and Swain stands by the figure of 54.4C (130F) from 2020 and 2021.
'Exceptionally high'

The oceans have not been spared from the warm early summer either.

Water temperatures off the southern coast of Florida have surpassed 32C (90F), according to the National Oceanic and Atmospheric Administration.

As for the Mediterranean, surface temperatures will be "exceptionally high" over the coming days and weeks, the WMO said, exceeding 30C (86F) in some parts, several degrees above average.

Warming ocean temperatures can have devastating consequences for aquatic life both in terms of survival and migration and can also negatively impact the fishing industry.

At the other end of the planet, Antarctic sea ice hit its lowest recorded level for a month of June.

The world has warmed an average of nearly 1.2C (1.9F) since the mid-1800s, unleashing more intense heatwaves, more severe droughts in some areas and storms made fiercer by rising seas.

The WMO's Taalas said the current heat wave "underlines the increasing urgency of cutting greenhouse gas emissions as quickly and as deeply as possible."

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