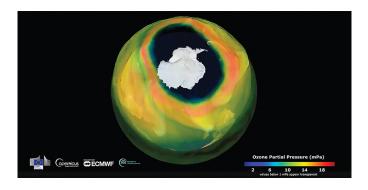
Earthweek: Diary of a Changing World

Written by Gallupsun Staff Friday, 30 October 2020 01:57



Week ending Friday, October 16, 2020

'Dying' Arctic

Researchers returning from the world's most ambitious study ever of the North Pole say they found proof that the Arctic Ocean "is dying," due to unprecedented warming and the melting of the polar ice cap. A team of several hundred scientists from 20 countries say they found during their 389-day Arctic mission that the North Pole is surrounded by "badly eroded, melted, thin and brittle ice." The mountain of data they collected will take up to two years to analyze and may help to predict conditions up to 100 years in the future. The team from the German Alfred Wegener Institute's Polarstern ship says the results will also help them understand how dwindling sea ice influences the Arctic's climate system and how it's felt around the world.

Earthquakes

Much of northern Taiwan, including the capital of Taipei, was jolted by a magnitude 4.9 quake.

• A rare but mild tremor shook northern Arizona.

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Micro Fliers

U.S. researchers have developed a sensor so tiny that it can be deployed on insects or mini drones to reach places too small or dangerous for humans to go. The University of Washington invention can be released from its tiny airborne transports by a Bluetooth command, then drop up to 72 feet when it has reached its desired location. Once on the ground, it can measure things like temperature, humidity or other factors for almost three years. The sensor weighs only about one-tenth the weight of a jellybean, or one-hundredth of an ounce. It is designed to spin as it falls, with its low weight and rotation keeping its maximum falling speed at around 11 mph. Scientists say a network of the sensors could monitor an entire forest or farm.

Climate Disasters

A new report says disasters triggered by the deepening climate crisis have risen at a "staggering" rate since the start of this century. The World Meteorological Organization publication says this is in sharp contrast to the far fewer disasters during the previous two decades. "This is clear evidence that in a world where the global average temperature in 2019 was 1.1 degrees Celsius above the pre-industrial period, the impacts are being felt in the increased frequency of extreme weather events, including heat waves, droughts, flooding, winter storms, hurricanes and wildfires," the report says.

Massive Ozone Hole

The ozone hole in the stratosphere above Antarctica reached its annual peak on Oct. 1, which scientists say was the largest and deepest in 15 years. This was in contrast to an unusually small and short-lived ozone hole in 2019 caused by unusual weather conditions. "There is much variability in how far ozone hole events develop each year," Vincent-Henri Peuch, director of Europe's Copernicus Atmosphere Monitoring Service, said. He added that it's proof nations need to continue enforcing the Montreal Protocol, which bans emissions of ozone-depleting chemicals.

Tropical Cyclones

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China's Heibei Island and the northern half of Vietnam were drenched by tropical storms Nangka and Linfa, which struck the region in rapid succession.

• At least four people were left dead in the wake of Hurricane Delta's fury along the Louisiana coast. Power was knocked out and lowlands inundated in a region still recovering from disastrous Hurricane Laura in August.

Lava Hazard

Lava, which during a 2002 eruption killed about 250 people and destroyed parts of a major East African city, is once again rising into Mount Nyiragongo's lava lake in the Democratic Republic of Congo. Researchers from Italy's University of Campania predict the threat from the accumulating lava will peak in about four years, but a quake could unleash it at any time. The volcano has the world's largest lava lake, which drained in a matter of hours after a 2002 temblor, releasing low-silica and runny lava that cascaded into the eastern Congolese city of Goma at nearly 40 mph.

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