

Earthweek: Diary of a Changing World

Week ending Friday, March 6, 2020

By Steve Newman

Vanishing Beaches

The effects of global heating will erode approximately half of the world's existing beaches by the end of this century if efforts to cut carbon emissions fail, according to a study by the Joint Research Center of the European Commission.

It says more than 22,400 miles of sandy coastline will be eroded by rising tides and stormier seas during the next 30 years before conditions worsen and far more beaches disappear during the latter half of the century.

Writing in the journal *Nature Climate Change*, study author Michalis Voutsoukas says that even modest efforts to reduce greenhouse gas emissions could prevent about 17% of the shoreline retreat by 2050 and 40% by 2100.

Earthquakes

The central Philippines' Leyte Island was jolted by a 5.5 magnitude temblor that caused scattered damage.

• Two moderate tremors were felt in Trinidad and nearby areas of northeastern Venezuela.

Failing Lungs

A new study finds that the forests in the heart of Africa and across the Amazon will stop absorbing carbon dioxide emissions as a whole in as little as 15 years, forcing scientists and politicians to rethink their strategies on combating the global climate crisis.

In what researcher Simon Lewis at the University of Leeds describes as the most worrying paper he's ever written, he describes how CO2 absorption in the Amazon has already plunged.

Fortunately, the amount of emissions being absorbed by forests around the world has actually increased due to higher temperatures and more tree growth in temperate regions.

Ebola's End

Health officials in the Democratic Republic of Congo say they are optimistic that the country's protracted Ebola outbreak is finally coming to an end.

The World Health Organization says the last surviving patient was just released from a clinic in the north-eastern town of Beni.

A 42-day waiting period has just begun, and if no more people are found to be infected during that time, the outbreak can be declared officially over.

The second-worst outbreak on record has killed 2,264 of the 3,444 people believed infected since it began in August 2018.

Eastern Swarms

Farmers in parts of Pakistan are battling the worst locust plague in nearly 30 years after heavy rains from earlier tropical cyclones provided perfect conditions for unprecedented breeding and explosive population growth of the insects.

While most recent headlines have highlighted the damage the vast desert locust crisis has inflicted on eastern Africa, other swarms have spread eastward from around the Red Sea to Iran, Pakistan and into parts of India.

Viral Cleansing

Air quality across China's typically polluted industrial zones has improved dramatically in recent weeks since the coronavirus crisis forced the country to shut down much of its industrial production.

Observations by satellites operated by NASA and the European Space Agency show how dramatically toxic nitrogen dioxide levels in China have plunged.

"This is the first time I have seen such a dramatic drop-off over such a wide area for a specific event," said air quality researcher Fei Liu at NASA's Goddard Space Flight Center.

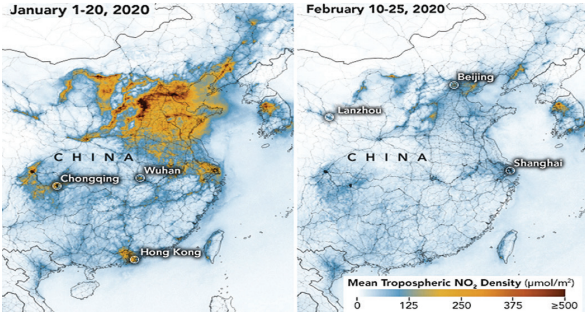
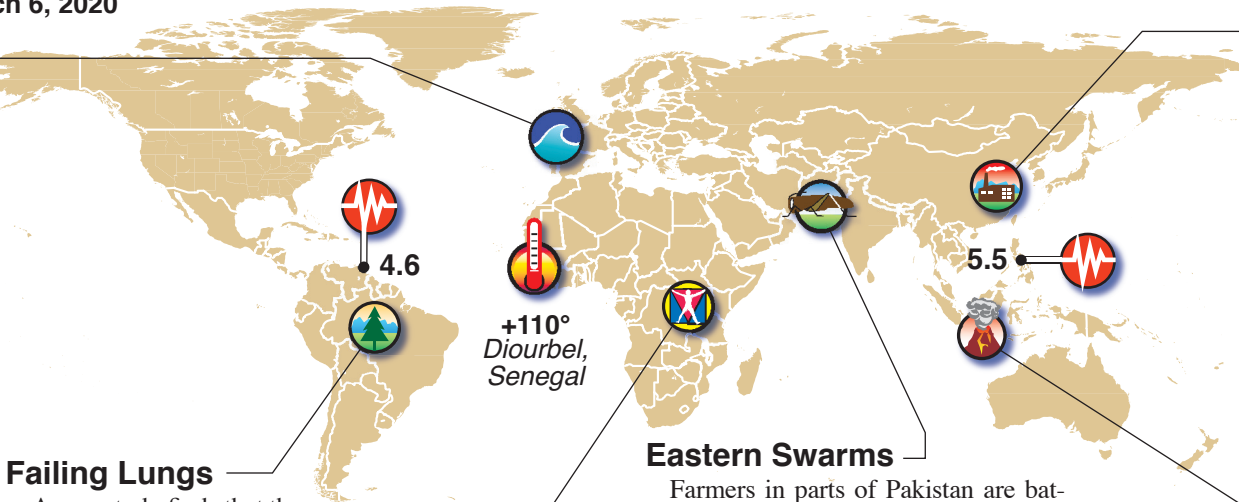
Smog levels also fell to a smaller extent during the 2008 Beijing Olympics and the global financial crisis.

Java Eruption

A sudden eruption of one of Indonesia's most active volcanoes sent columns of ash soaring high above Java.

The eruption of Mount Merapi caused sand and superheated material to cascade down the mountain.

A 2010 eruption killed more than 300 people.



China's drop in NO2 coincided with Lunar New Year celebrations, when pollution typically falls somewhat, and the drop in industrial production from the coronavirus crisis. Photo: NASA Earth Observatory