

## World News Roundup

## Climate

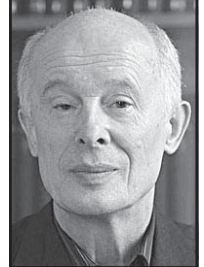
## 'Stronger pledges'

## Scientists 'predict' El Nino again in '20

BARCELONA, Nov 6, (RTRS): The complex El Nino weather pattern that can bring disastrous heavy rainfall and long droughts to countries around the Pacific – from Peru to Indonesia and Australia – will probably emerge again in 2020, researchers have predicted.

An international team of scientists forecast an 80% chance next year of an El Nino, which occurs when sea-surface temperatures rise substantially above normal in the east-central Equatorial Pacific.

This week they said their model – which uses an algorithm that draws on analysis of links between changing air temperatures at a network of grid points across the Pacific region – could predict an El Nino at least a year ahead.



Schellnhuber

"Conventional methods are unable to make a reliable 'El Nino' forecast more than six months in advance. With our method, we have roughly doubled the previous warning time," said co-developer Armin Bunde, a physicist at Germany's Justus Liebig University Giessen.

The term El Nino, meaning "boy child" in Spanish, was first used in the 19th century by fishermen in Peru and Ecuador to refer to the unusually warm waters that reduced their catch just before Christmas, according to the World Meteorological Organization (WMO).

The phenomenon occurs every two to seven years and typically lasts for 9 to 12 months, often beginning mid-year and peaking between November and January.

Hans Joachim Schellnhuber, director emeritus of the Potsdam Institute for Climate Impact Research (PIK), said insights from the new method – which has been tested over the past few years – would be made available to people affected by El Nino. PIK researcher Josef Ludescher said he would soon discuss the findings with the weather service in Peru.

## Risk

El Nino often brings torrential rains in the north of the mountainous Latin American nation, with a high risk of mudslides, he said.

El Nino also can cause extended droughts in other parts of South America, Indonesia, Australia and Africa, PIK said.

In the Indian subcontinent, it may change monsoon patterns, while California can experience more precipitation.

The new prediction method could give more time for authorities to prepare for such impacts, Ludescher added.

The team is now adapting the algorithm to be able to predict the timing and strength of El Nino. In the future, a similar method could be used to improve forecasts of Asia's monsoon, he told the Thomson Reuters Foundation.

The discovery of the new method was first published in 2013 in the Proceedings of the National Academy of Sciences journal – and the scientists have since been checking its accuracy.

They said this week it correctly predicted the onset of the large El Nino that started in 2014 and ended in 2016 and the most recent event in 2018, as well as absences in other years.

The next expected El Nino, due to peak in late 2020, could push global average annual temperature rise to a new record in 2021, the researchers said.

Air temperature rise lags Pacific warming by about three months, they noted.

According to the WMO, 2016 became the warmest year on record because of the powerful El Nino in 2015-2016, combined with long-term climate change.

## Also:

**WASHINGTON:** The vast majority of national commitments in the 2015 Paris Agreement are inadequate to prevent the worst effects of global warming, scientists said on Tuesday, naming the world's biggest greenhouse gas emitting countries as among those that must ratchet up their efforts.

"Governments are moving in the right direction, but nowhere near enough, so hopefully they will be willing to take on much stronger commitments" in next month's United Nations climate summit in Spain, said Robert Watson, lead author of the report by the nonprofit Universal Ecological Fund.

The report ranked nearly 75%, or 136, of the pledges as insufficient, including ones by major carbon emitters China, the United States, and India. A dozen, by countries including Australia, Japan and Brazil, were judged only partially sufficient.

Countries at next month's summit in Madrid will hash out some details of the international pact to curb warming. Chile withdrew as host following weeks of riots protesting inequality.

Of the 184 pledges countries made under the climate agreement, only 36 are ambitious enough to help reach the agreement's goal of keeping global warming less than 1.5°C (2.7°F) above pre-industrial levels. Most of those 36 are by countries in the European Union.

Watson, a former chair of the UN Intergovernmental Panel on Climate Change, said the report could be read two ways: "You can read 'it's hopeless', or 'this is a wake-up call'."

Watson estimated that even if all nations meet their existing pledges, the world would be headed for temperature rise of between 3° and 3.5°C, which could lead to more extreme weather, rising sea levels and the loss of plant and animal species.

The report rated the European Union's 28 member states as having sufficient pledges because they aim to cut emissions of greenhouse gases by at least 40% below the 1990 level by 2030.



**BEIJING:** Chinese leader Xi Jinping on Wednesday hailed a visit by French President Emmanuel Macron as giving a boost to multi-lateralism and free trade, amid ongoing economic tensions with Washington.

The two countries also pledged continued support for the Paris Agreement as the US begins its withdrawal from the landmark climate deal.

Following a welcome ceremony at the Great Hall of the People in central Beijing, Xi said the two leaders had sent "a strong signal to the world about steadfastly upholding multi-lateralism and free trade, as well as working together to build open economies."

In his remarks, Macron said China and Europe "share the same feeling that trade war only results in losers."

"Developing market access and partnerships between our companies is a priority," Macron said.



In this image made from a video provided by NASA the Starliner capsule rests on the ground after a test of Boeing's crew capsule's launch abort system in White Sands Missile Range in NM, on Nov 4. The capsule carried no astronauts Monday morning, just a test dummy. (AP)

## Space

## Boeing crew capsule completes major flight test in desert

## New insight into distant frontier

WASHINGTON, Nov 6, (Agencies): The journey of NASA's dauntless Voyager 2 spacecraft through our solar system's farthest reaches has given scientists new insight into a poorly understood distant frontier: the unexpectedly distinct boundary marking where the sun's energetic influence ends and interstellar space begins.

The US space agency previously announced that Voyager 2, the second human-made object ever to depart the solar system following its twin Voyager 1, had zipped into interstellar space on Nov 5, 2018 at a point more than 11 billion miles (17.7 billion km) from the sun. Several research papers published on Monday provided scientific details of that crossing.

Both Voyager 1 and Voyager 2 were launched in 1977, designed for five-year missions. Voyager 1 left the solar system at a different location in 2012. Both are now traversing the Milky Way galaxy's interstellar medium, a chillier region filling the vast expanses between the galaxy's stars and planetary systems.

The solar wind - the unending flow of charged particles emanating from the outer atmosphere of the sun - creates an immense protective bubble called the heliosphere that envelops the solar system. The boundary of the solar system - the place where the solar wind ends and interstellar space begins - is called the heliopause.

Voyager 2's scientific instruments detected abrupt differences in plasma density and magnetic particles upon crossing the heliopause, the researchers said. The researchers said the heliopause appeared to be much thinner than expected.

Plasma - the fourth state of matter after solids, liquids and gases - exists in the solar system as a soup of the charged particles beaming continuously outward from the sun and clashing with interstellar plasma that darts inward from other cosmic events like stellar explosions.

## Also:

**CAPE CANAVERAL, Fla:** Boeing's capsule for astronauts underwent its first major flight test Monday, shooting a mile into the air then parachuting back to the New Mexico desert. The Starliner capsule carried no

crew, just a test dummy for the 1 1/2-minute shakedown of the launch abort system. Only two of the three main parachutes opened, but both NASA and Boeing said astronauts would have been safe if aboard.

The abort system is designed to provide a fast getaway for a crew, if there's an emergency on the Florida pad or in flight.

For its next test, Boeing plans to launch a Starliner to the International Space Station next month, without a crew.

All three astronauts assigned to the first crew flight - targeted for next year - were present for Monday's test.

"We hope we never need to use this system," said NASA astronaut Mike Fincke. "But in case we ever have any trouble aboard the beautiful Atlas V on the launch pad, we know after today's test that we'll be able to get off safely."

SpaceX - NASA's other commercial crew partner - successfully launched a Dragon capsule to the space station in March. That capsule carried a test dummy and supplies; SpaceX aims to put astronauts on board sometime early next year. Boeing also is shooting for an early 2020 launch of astronauts to the space station.

Whether SpaceX or Boeing, it will be the first time Americans launch into orbit from the US since NASA's last space shuttle flight in 2011. US astronauts have been hitching rides on Russian rockets, costing NASA tens of millions of dollars per seat.

During Monday's test at the Army's White Sands Missile Range, Boeing counted down to zero, then the Starliner's four launch abort engines fired. The capsule, launched from a test stand, accelerated about 650 mph (1,000 kph) in five seconds flat.

The capsule soared nearly a mile (1,300 meters) into the air and a mile downrange, before the parachutes and then air bags inflated seconds before touchdown.



Climate activist Greta Thunberg speaks after a student-led climate change march in Los Angeles on Nov 1. Thunberg says young people are rallying to fight climate change because their age leaves them with the most to lose from damage to the planet. (AP)



Bruton



Watson

## Discovery

**Schools reopen in Delhi:** Schools reopened on Wednesday in the Indian capital with toxic air level coming down by more than half since authorities declared a health emergency last weekend.

With strong winds blowing away pollutants, the air quality index at the US Embassy in New Delhi read 155 as compared to 500 over the weekend that was 10 times the recommended WHO level.

Air pollution in New Delhi peaks around Nov 1 due to smog from festival fireworks and smoke from the burning of stubbles in agricultural fields.

A Supreme Court-appointed panel temporarily banned construction activity in the New Delhi region to control the dust in the air.

Authorities also barred smoke-spewing cargo trucks from city streets, experimented at limiting the number of cars on the road and tried to snuff out stubble and garbage fires and ordered builders to cover construction sites to stop dust from enveloping the area.

But the battle is not over as authorities tackle a large amount of toxic foam floating in the Yamuna River, caused partly by high ammonia levels emanating from industrial pollutants. (AP)



## Ireland to impose 'latte levy':

Ireland will impose a so-called latte levy on disposable coffee cups by 2021 in a bid to change consumer habits and cut the environmental impact from the use of single-use plastics, its minister for climate action said on Wednesday.

Ireland has begun to step up action to cut environmental impacts across its economy after exceeding its annual greenhouse gas emissions allocation for the third year running in 2018, pushing it further from its European Union-mandated commitments.

The government hopes the proposed levy of up to 0.25 euros per cup will encourage coffee drinkers to instead carry around reusable "Keep Cups" that already allow customers to claim a discount in some coffee shops.

The charge is among a number of new and increased levies to encourage more sustainable behaviour, including applying

an increased 0.25 euro plastic bag levy to the more expensive medium weight plastic bags sold at supermarket tills.

Ireland first introduced a tax on plastic bags in 2002.

"One of the things we clearly have to do is cut down on single-use disposables and the most obvious one of those is disposable cups," Climate Action Minister Richard Bruton told Irish national broadcaster RTE.

Up to 200 million single use coffee cups are thrown away every year by Ireland's 4.9 million people, a government-funded report found last year.

Neighbouring Britain resisted calls by



A male western grebe (right), shares a fish with his mate as they float on a wetland near Rutland, ND, on June 22. Around the world, efforts are being made to reclaim wetlands that have been filled in to plant crops or fill other human needs. (AP)

campaigners and lawmakers to impose a similar levy on single-use coffee cups last year, opting instead to reduce the use of the cups through voluntary measures.

Bruton's department said the rate of the disposable cup levy would likely be 0.10 euros, 0.15 euros or 0.25 euros once it concludes a six-week consultation and market research. A cup of coffee in Ireland can cost about 3 euros. (RTRS)

"Pup is endangered dingo": A DNA test has revealed that a stray dog found in the garden of an Australian east coast home is a rare purebred dingo, rather than an abandoned puppy as rescuers first thought.

Found in the back garden on a house in Wandiligong, 330 km (205 miles) north-east of Melbourne, capital of the state of Victoria, the animal, named Wandi, has been moved to a sanctuary for the endangered species after being identified.

"He is going to be a very valuable little thing, depending on his eventual development, and the way he continues to get along with everybody else in the sanctuary," said Lyn Watson, director of the Australian Dingo Foundation that runs it.

Watson told the Australian Broadcasting Corporation the DNA test had shown the animal to be an alpine dingo, vulnerable to extinction because of inbreeding, hunting and government eradication programs. (RTRS)