

world

2m sea level rise 'plausible' by 2100

● The area of land lost to the ocean could be equivalent to that of France, Germany, Spain and Britain combined and would displace more than 180 million people

● Earth has already heated 1C since pre-industrial times, contributing roughly 3mm to sea levels each year.

Washington, United States

Global sea levels could rise by two metres (6.5 feet) and displace tens of millions of people by the end of the century, according to new projections that double the UN's benchmark estimates.

The vast ice sheets of Greenland and Antarctica contain enough frozen water to lift the world's oceans dozens of metres. The expansion of water as oceans warm also contributes to sea level rise.

But predicting the rates at which they will melt as the planet heats is notoriously tricky.

The United Nations' Intergovernmental Panel on Climate Change (IPCC) said its 2013 Fifth Assessment Report that under current emissions trajectories -- a "business-as-usual" scenario known as RCP8.5 -- would likely rise by up to one metre by 2100.

That prediction has since been viewed as conservative, as the levels of planet-warming green-



Houses on bamboo stilts amid encroaching bay waters in Sitio Pariahan, Bulacan. Areas north of Manila like the provinces of Pampanga and Bulacan have sunk four-six centimetres (1.5-2.4 inches) a year since 2003, according to satellite monitoring. The creeping bay waters put people and property at risk, while the threat is amplified by high-tides and flooding brought by the roughly 20 storms that pound the archipelago every year.

house gas emissions continue to rise year on year, and satellites showing accelerated rates of melt-off from massive ice sheets atop Antarctica and Greenland.

A group of the world's leading ice scientists this week released an expert judgement on the situation, drawing on their own experience and observations.

While there was still a significant margin of error, they

found it "plausible" that under the business-as-usual emissions scenario, sea-level rises could exceed two metres by 2100.

The authors said the area of land lost to the ocean could be equivalent to that of France, Germany, Spain and Britain combined and would displace more than 180 million people.

"A sea-level rise of this magnitude would clearly have pro-

found consequences for humanity," they said.

'The true risks'

In October the IPCC released a landmark climate report that called for a drastic and immediate drawdown in coal, oil and gas consumption in order to arrest the rapid rise in the levels of greenhouse gases in the atmosphere.

That report, however, did not include revised estimates of sea level rise.

Earth has already heated 1C since pre-industrial times, contributing roughly 3mm to sea levels each year.

The authors of the new study, released Monday in the journal *Proceedings of the National Academy of Sciences*, argue that the IPCC's sea-level rise predic-

tion was too constrained by focusing on what was "likely" to happen.

At wider probabilities -- 5-95 percent likelihood -- they found that under 2C of warming seas could rise 36-126 cm by 2100.

In world that has warmed by 5C -- unlikely but certainly not impossible given projected fossil fuel demand in the coming decades -- they calculated a five percent risk of sea levels surpassing two metres higher, topping out at 238 cm.

Willy Aspinall, from the University of Bristol's School of Earth Sciences, said he hoped the study could provide policymakers with a more accurate worst-case scenario "crucial for robust decision making."

"Limiting attention to the 'likely' range, as was the case in the IPCC Fifth Assessment Report, may be misleading and will likely lead to a poor evaluation of the true risks," he added.



The Paris climate deal, struck between nations in 2015, aims to limit global temperature rises to well below two degrees Celsius (3.6 Fahrenheit), and encourages countries to work towards a 1.5C cap.

Eiffel Tower climber grabbed after sparking evacuation



A man (C) climbs up to the top of the Eiffel Tower, in Paris, without any protection

Paris, France

A climber who sparked an evacuation of the Eiffel Tower on Monday was grabbed after clinging to the famous Paris landmark for more than six hours, officials said.

The man, who was not immediately identified, "is in the hands of the emergency teams" deployed to the tower, which will reopen to visitors as normal early on Tuesday, the company operating the structure said in a statement.

It said firemen who had rap-

pelled down from the tower's third-floor observation deck to near the black-clad climber managed to "talk the individual down".

The man "has been grabbed," a police official added.

Emergency procedures triggered by the man's unauthorised climb forced an evacuation of the iconic monument, the esplanade underneath it and a large section of the adjacent Champ de Mars park mid-afternoon Monday.

Police earlier said they did not know his motive for climbing up its iron beams.

Billionaire to grads: I'll pay your debt

Washington, United States

Sunday was already a day of joy and pride for the graduating class at historically black Morehouse College in Atlanta, Georgia -- and then it got a whole lot better.

Robert F. Smith, an African-American businessman with a fortune estimated at \$4.4 billion, told the new graduating class that he plans to pay off the entirety of their student debt: an estimated \$40 million.

Of course, Smith received a thunderous round of applause from the 400 graduates -- and from their parents.

"My family is going to create a grant to eliminate your student loans," Smith told the assemblage, according to the college's Twitter account.

"This is my class," said Smith, who was at the ceremony to receive an honorary degree.

"I know my class will pay this forward" and help improve the lives of other black Americans.

Smith had earlier this year announced a \$1.5 million donation to the school, but Sunday's news came as a surprise even to staff at Morehouse, according to the Atlanta Journal and Constitution.



Robert Smith, left, laughs with David Thomas, center, and actress Angela Bassett (Courtesy of Bloomberg)

A spokesman said it was the biggest gift in the history of the school, whose graduates include civil rights leader Martin Luther King Jr., filmmaker Spike Lee and actor Samuel L. Jackson.

"If I could do a backflip, I would," Elijah Dormeus, a business major, told the newspaper. "I am deeply ecstatic."

He said he has \$90,000 in student debt. His mother, Andrea Dormeus, is a school bus driver in New York's Harlem neighborhood.

Smith, a graduate of Cornell and Columbia universities, founded Vista Equity Partners in 2000, and by 2015 had become the richest African-American, according to *Forbes* magazine, with a fortune surpassing even that of billionaire celebrity (and fellow Morehouse donor) Oprah Winfrey.

In recent years, the soaring costs of college education -- and the rising number of defaults -- have made student debt a growing national issue, addressed by

many of the Democrats seeking their party's presidential nomination.

Total student debt now exceeds \$1.5 trillion, according to the Fitch ratings agency.

So at least at Morehouse, Robert Smith had folks breathing a sigh of relief on Sunday.

Charles Releford Jr., the father of one newly minted graduate and of a second son in Morehouse's class of 2020, has a fervent wish for Smith.

"Maybe he'll come back next year," he said.



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