

Extra reading for the enthusiast – weather clips for August

Welcome to AMS News You Can Use. Each week, we send out a sampling of recent news and items of interest in meteorology and related fields, as covered by various media outlets.

Understanding past climate change 'tipping points' can help us prepare for the future

ScienceDaily - July 29, 2021

Of all the creatures on Earth, humans manipulate their environments the most. But, how far can we push it before something drastic happens? Scientists are calling for a better understanding of past extreme climate change events in an attempt to anticipate future changes.

Satellite Images Show Turkey's Wildfires from Above

The Weather Channel - August 2, 2021

Satellite images show Turkey's wildfires burning from above. The country is battling deadly wildfires along its coastline for the sixth day in a row.

A Summer of Fire-Breathing Smoke Storms

NASA Earth Observatory - July 30, 2021

For decades, scientists have been tracking extreme thunderstorms created by wildfires. However, the ferocity of the storms that have popped up in Canada in 2021 has surprised them.

Chasing the light from elusive 'milky seas': CSU researchers light a path toward unraveling mysteries of the ocean from space

EurekAlert! - July 29, 2021

Using nearly a decade of satellite data, researchers at Colorado State University have uncovered "milky seas" in a way they've never been seen before – a rare and fascinating oceanic bioluminescent phenomenon detected by a highly sensitive spaceborne low-light sensor.

NOAA's Saildrone Observations for Improvement of Hurricane Intensity Forecasts

WeatherNation - July 28, 2021

Improving the accuracy and ultimate value of NOAA's operational hurricane forecasts requires more complete real-time knowledge of atmospheric and oceanic conditions and more realistic representation of key physical processes in hurricane forecast models.

How tiny satellites could help warn the next big hurricane

KXAN - July 29, 2021

Hurricanes and tropical storms, collectively called tropical cyclones, are becoming more violent as the climate warms, making it more crucial than ever that meteorologists produce accurate forecasts to keep people safe.

Pinpointing the Roots of Extreme Weather Events

Physics - July 27, 2021

A statistical method for fingerprinting the patterns of heat waves and cold spells could reveal whether climate change caused an extreme weather event.

A barrage of waterspouts swarmed the Great Lakes on Sunday

The Washington Post - August 2, 2021

More than 40 waterspouts were reported, as the season for these vortexes has begun.

5 takeaways from the major new U.N. climate report.

The New York Times - August 9, 2021

On Monday the Intergovernmental Panel on Climate Change, a scientific body convened by the United Nations, released a major new report concluding that the world cannot avoid some devastating impacts of climate change, but that there is still a narrow window to keep the devastation from getting even worse.

5G Wireless Could Interfere with Weather Forecasts

Scientific American - August 3, 2021

Satellite tracking of water vapor, critical for accurate forecasts, may be foiled by cellphone tower transmissions.

Fires Rage in Turkey

NASA Earth Observatory - August 4, 2021

More land area in Turkey has been consumed by fire already this year than usually burns in an entire year.

State of the science on western wildfires, forests and climate change

ScienceDaily - August 3, 2021

Seeing the urgent need for change, a team of scientists from leading research universities, conservation organizations and government laboratories across the West has produced a synthesis of the scientific literature that clearly lays out the established science and strength of evidence on climate change, wildfire and forest management for seasonally dry forests.

'The ocean remembers': Study suggests ocean maintained relatively steady temperature through most of 20th century

Phys.org - August 9, 2021

These findings are the result of the addition of a largely underexplored factor in ocean heat content (OHC): Deep ocean temperatures.

Extreme weather events may share the same mechanism

Earth.com - August 9, 2021

Record-breaking weather events, both hot and cold, may actually share the same underlying mechanism. An international research team has looked into three extreme events from the past winter to identify the forces that are driving such swings in the weather.

Weather News Is A Rare Media Bright Spot - At Fox, The Weather Channel, Twitter And More

Forbes - August 7, 2021

Weather news has long been an under-appreciated aspect of the media business. Or, said another way and to borrow a recent pun from The New York Times - weather is taking the media industry by storm.

Atlantic hurricane season is about to ramp up dramatically, as NOAA boosts forecast

The Washington Post - August 4, 2021

The Atlantic has been quiet lately. That's about to change. NOAA is calling for 15 to 21 named storms this season.

'Fingerprints' of extreme weather revealed by new statistical approach

Phys.org - August 16, 2021

Determining if particular extreme hot or cold spells were caused by climate change could be made easier by a new mathematical method.

[See a satellite's 'scary view' of US wildfire smoke and Hurricane Linda](#)

CNET - August 16, 2021

Wildfires in California and Oregon are sending out massive smoke plumes at the same time as a hurricane whirls in the Pacific.

[With A Sight, Sound And Radar Picture, Saildrone Could Build An AI Database Of Everything In The Ocean](#)

Forbes - August 16, 2021

The autonomous unmanned surface vessels (USVs) that California-based Saildrone is pitching to the U.S. Navy and Coast Guard as persistent sensor platforms grew out of company founder Richard Jenkins' desire to go fast on land.

[The devastating wildfires of 2021 are breaking records and satellites are tracking it all](#)

Space.com - August 11, 2021

Wildfires in Siberia have broken a record for annual fire-related emissions of carbon dioxide.

[World Photography Day: Kolkata Cloud Chasers on Weather Photography, Capturing Extreme Events and More](#)

The Weather Channel - August 15, 2021

Chasing your passion is often easier said than done, even if the passion in question is safe and not-so-life-threatening.

[A NASA scientist explains why the weather is becoming more extreme](#)

The Verge - August 10, 2021

The Verge spoke with Alex Ruane, one of the authors of the new report and a research physical scientist at the NASA Goddard Institute for Space Studies.

[UN hot on the trail of temperature records](#)

Phys.org - August 17, 2021

During last week's heatwaves in Italy and Spain, meteorologists in both countries announced provisional data suggesting temperature records had been set there.

[Researchers use artificial intelligence to unlock extreme weather mysteries](#)

ScienceDaily - August 10, 2021

A new machine learning approach helps scientists understand why extreme precipitation days in the Midwest are becoming more frequent. It could also help scientists better predict how these and other extreme weather events will change in the future.

Slow-moving storm Henri drenches Northeast US

The Associated Press - August 23, 2021

Tropical Storm Henri socked the Northeast with strong winds as it made landfall Sunday on the coast of Rhode Island and sent lashing bands of rain westward, knocking out power to over 140,000 homes and causing deluges that closed bridges, swamped roads and left some people stranded in their vehicles.

Scientists' 1st-ever view of sun's middle corona could sharpen space weather forecasts

Space.com - August 24, 2021

Recent telescope views shed new light on the sun's elusive middle corona that could prove beneficial to space weather forecasts.

Rain fell at the normally snowy summit of Greenland for the first time on record

CNN - August 19, 2021

For the first time on record, precipitation on Saturday at the summit of Greenland — roughly two miles above sea level — fell as rain and not snow.

Bee flight suffers under temperature extremes

ScienceDaily - August 18, 2021

Rising temperatures could help some northern-latitude bees fly better, but more frequent extreme weather events could push them past their limits.

California Burning

NASA Earth Observatory - August 22, 2021

Several destructive fires have charred landscapes in northern California, and their emissions are adding up.

Climate change: Europe's extreme rains made more likely by humans

BBC News - August 24, 2021

The heavy rainfall behind deadly flooding in Europe in July was made more likely by climate change, scientists say.

[Tracking water storage shows options for improving water management during floods and droughts](#)

Phys.org - August 19, 2021

Researchers at The University of Texas at Austin have created a balance sheet for water across the United States—tracking total water storage in 14 of the country's major aquifers over 15 years.

[North America is surrounded by 4 storms and wildfire smoke in this satellite view](#)

Space.com - August 19, 2021

A stunning new satellite image captures four different storms churning in the skies above North America as the continent nears the peak of hurricane season.

[On Saturday, a catastrophic flash flood unfolded in Tennessee. Here's how it happened.](#)

The Washington Post - August 23, 2021

Radars estimated that nearly 21 inches of rain fell in a single day, while river levels rose to historic heights.

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Weather Eye wit John Maunder

1 https://thebfd.co.nz/2021/08/05/weather-eye-with-john-maunder-16/?utm_source=envelope&utm_medium=website&utm_campaign=SocialSnap

2 <https://www.sunlive.co.nz/blogs/15874-biomassand-when-country-runs-out-of-rubbish-2.html>

3 https://thebfd.co.nz/2021/08/11/weather-eye-with-john-maunder-17/?utm_source=envelope&utm_medium=website&utm_campaign=SocialSnap

4 https://thebfd.co.nz/2021/08/25/weather-eye-with-john-maunder-19/?utm_source=envelope&utm_medium=website&utm_campaign=SocialSnap

5 <https://www.sunlive.co.nz/blogs/15925-blocking-highs.html>

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