

El Nino gets the blame for weirdness

But the weather 'event,' while strong, is only part of the reason for a rash of unusual weather that has befallen the country so far this winter.

By Martha T. Moore
and Maria Puente
USA TODAY

Warm in Boston, cold in Florida, wet in the Southwest and dry on the Plains. This winter's weather is weird and wild, and El Nino is getting the blame for all of it, deservedly or not.

In Florida, the lifeguards wore wetsuits to keep warm during a cold snap last month. On the East Coast, people are outside in shorts and T-shirts. The week's high temperatures hit 62 in Philadelphia and 75 in Norfolk, Va.

The warm air blew into Framingham, Mass., this week and gave Framingham State College sophomore Michael Murphy a premature case of spring fever. "It's hard to get into studying mode when it feels like spring break," he said while shopping for CDs. "If I flunk a course, I'll have to blame El Nino."

The plows in Bismarck, N.D., which handled 101 inches last winter, have yet to get out of the garage.

"We've been doing (street) sweeping and getting caught up on our equipment repair, which we seldom get the chance to do," says Bob Gausvik, director of public works. What's the weather like up there? "Lovely. Really nice."

El Nino, the climatic phenomenon that occurs every few years, has become the all-purpose culprit for weather ranging from unseasonable to freaky. In October, during a fierce blizzard, 120 mph winds leveled 31 square miles of old-growth forest in Colorado.

Last month, a snowstorm hit Guadalajara, Mexico, for the first time since 1881. In December, a tornado hit Chavez County, N.M. — only the second December tornado there.

With this track record, El Nino has become a bit of a meteorological bogeyman.

"We've had a lot of phone calls about it, especially from people out West. Some of them are practically hysterical," says Susan Peery, managing editor of the *Old Farmer's Almanac* in Dublin, N.H.

El Nino isn't entirely responsible for the current wave of weather. But it's certainly the biggest force shaping this winter. El Nino is what happens when sea surface temperatures in the eastern Pacific Ocean, around the Equator, get unusually warm. That generates strong westerly winds, which push mild air over much of the U.S. and keep cold Canadian winds up north. It also pulls tropical humidity north, fueling storms across the South.



In Houston: Ryan Baker pulls his dog, Hazard, to higher ground Wednesday. Flooding from the San Jacinto River forced some residents to evacuate from their homes. El Nino is being blamed.

El Nino "events," as weather watchers call them, happened in 1992 and 1995. So why all the fuss this year? Because this year's version is a big one, "from a statistical standpoint, one of the strongest events we've ever seen," says Tom Schlatter, a meteorologist at the Forecast Systems Laboratory of the National Oceanic and Atmospheric Administration in Colorado.

When El Nino hits the continent, two things happen:

► **In the southern half of the country, lots of precipitation:** The heavens opened on Florida last month.

Tornadoes ripped through Haines City, heavy rains swamped Tampa and normally balmy Hollywood beach was so cold that hardy Canadian lifeguards donned wetsuits. Tampa Bay recorded rainfall nearly eight times above average: 15.57 inches for the month of December vs. 2.15 inches normally. In Fort Lauderdale, where umbrellas are selling better than suntan lotion, the blustery rains put a damper on beachgoing: "I don't know too much about El Nino, but this weather definitely isn't good for business," says Michael "Red" Barton, resting aboard the open-topped, empty rickshaw he normally loads with tourists.

In the Southwest, it wasn't just tourism that suffered. In southeastern New Mexico, near Roswell, 21 inches of snow fell in December, the most in one month since 1893. The snow trapped ranchers in their homes, and stranded cat-

tle and sheep in remote fields where drifts reached 10 feet. The Air National Guard dropped about 500 tons of hay, but at least 5,800 cattle and 2,500 sheep are feared dead.

In southern California, the full impact of El Nino hasn't arrived. The storms that blessed Sierra ski resorts with several feet of snow in recent days were normal winter blasts off the Gulf of Alaska, not attributable to El Nino, says Norm Hoffmann, meteorologist in charge of the National Weather Service's San Francisco forecast office. But the one El Nino storm so far — on Dec. 7 — was a big one, dumping eight inches of rain on southern California and causing mudslides, flooding, power failures and evacuations.

► **For the north, a drier, warmer winter.** In central Wisconsin, temperatures were 10 degrees above average for December — highs in the 30s — so rivers and lakes haven't frozen. Commuters are thrilled to find the ferry is still running on the Wisconsin River between Merrimac and Okee, saving commuters 25 minutes on the drive to work. On New Year's Day, a water ski team practiced on Lake Monona in Madison, which hasn't been ice-free this late since 1932.

"I got a snow-blower for Christmas, but I'm still waiting for the snow," says Patty Fowler of Madison. "It's kind of sad for the kids... There's no skating, no sledding, no snowmobiling."

The most predictable impact of El Nino is warmth, says

Klaus Wolter of the University of Colorado Climate Diagnostic Center in Boulder. "That's really the fingerprint, or the footprint, of El Nino, that you get these really warm winters."

But El Nino doesn't deserve all the credit for the taste of spring in the East this week.

The warm spell is "one of those weather events we're not likely to see the rest of this winter," says Vernon Kousky of the National Weather Service's Climate Prediction Center.

"It's just normal variability. I don't think you can blame it on El Nino," Schlatter says.

The warm weather resulted when the jet stream, which has been pushing storms across the southern USA much of the time since fall, curved northward over the Mississippi Valley and then eastward over the Northeast, bringing warm air with it.

That's just when the Pocono Mountain Vacation Bureau started running \$200,000 worth of TV ads showing lots of snow. "I tried to pull some of them, but I couldn't," says Robert Uguccioni, executive director. "We don't have cross country, we don't have snowmobiling. Those are things that are non-existent without snow."

He's confident that snow will come back. In fact, snow flurries are possible there this weekend. "We're not worrying now, we're just sweating."

Contributing: Allen Best in Vail, Colo.; John Larrabee in Boston; John Ritter in San Francisco; and Deborah Sharp in Miami.



In Cincinnati: A man walks along the foggy Ohio River on Wednesday. Rain was expected to continue there through Friday. Meteorologists say El Nino can't be blamed for all unusual weather in the USA.

Evidence points to massive black hole

By Paul Hoversten
USA TODAY

WASHINGTON — Astronomers have found the strongest evidence yet for an enormous black hole at the center of our Milky Way galaxy.

"This is the gravitational anchor that all other objects in our galaxy including the sun are revolving around," said astronomer Farhad Yusuf-Zaheh of Northwestern University.

New data from radio and optical telescopes shows the object is 2.6 million times the size of our sun and is causing stars to speed by at 2 million miles per hour, astronomers told the American Astronomical Society on Wednesday.

Only a black hole that big could cause stars to move so fast, they said. A black hole is a collapsed star so dense that not even light escapes its gravity.

Astronomers have been trying since 1933 to prove such an

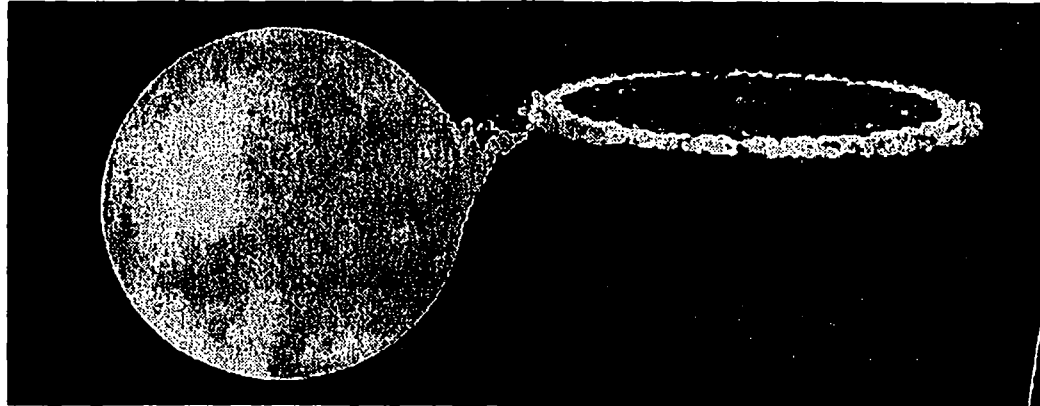
object exists at the Milky Way's core.

They can deduce the presence of one by measuring the motion of stars, gas and dust nearby. The larger the black hole, the faster nearby objects will travel.

"This is one of the firmest cases that we have" for a supermassive black hole at the heart of the Milky Way, said Andreas Eckart of Germany's Max Planck Institute for Extraterrestrial Physics.

Known as Sagittarius A, the black hole lies in the constellation Sagittarius 26,000 light years from Earth. It appears to have existed early in the Milky Way's history and has grown as it swallows stars, Eckart said.

Also researchers reported that a much smaller black hole in another part of the Milky Way in 1992 resembles a celestial "Old Faithful." It is located 40,000 light years from Earth in the constellation Aquila.



Astronomical discoveries:

Above, an image taken off an animation video shows the 'Old Faithful' black hole in the constellation Aquila about to overtake a star at left. At right, Andreas Eckart of Germany's Max Planck Institute for Extraterrestrial Physics talks about a larger black hole, known as Sagittarius, which is located at the heart of the Milky Way. It appears to have existed early in the Milky Way's history, Eckart says.



Computers predict dismal asteroid visit

By Paul Hoversten
USA TODAY

WASHINGTON — A three-mile-wide asteroid plunging into the Atlantic or Pacific oceans could trigger 300-foot waves strong enough to flood most coastal cities and kill millions of people, researchers say.

While there's no sign anything quite that big is headed our way, there is a 2%-3% chance in a 100-year lifetime that an asteroid large enough to cause coastal flooding could hit either ocean.

Jack Hills, an astrophysicist at Los Alamos National Laboratory, told the American Astronomical Society on Monday that new computer models show that the impact of an asteroid could inflict "the worst damage in human history. ... It would kill millions of people and cause billions in damage."

An asteroid 6 miles wide is thought to have hit Mexico's Yucatan peninsula 65 million

years ago, wiping out the dinosaurs. Wednesday, Hills described the scenario if one half that size hit in an ocean today:

► If it hit the mid-Atlantic Ocean, all of Delaware, Maryland and Virginia would be flooded. In New York, Long Island and Manhattan would be swamped. But Florida, except for Miami, on a deep bay, would mostly be spared because of the sloping continental shelf. Across the Atlantic, the coasts of France, Portugal and Spain would be flooded.

► If it hit in the Pacific Ocean, midway between Hawaii and San Francisco, the asteroid would launch an wave that would roll over much of Honolulu, flood the Los Angeles basin and wash away coastal cities and towns in Japan.

There's no evidence a three-mile-wide asteroid ever hit an ocean. But Hills' model indicates that one at least 600 feet across could hit once every 3,000 to 5,000 years.