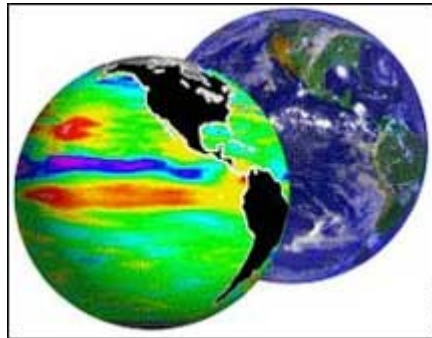


El Niño calms Atlantic hurricane season

El Niño, that nasty weather pattern blamed for causing a wet winter, hot summer and everything in between may not be so bad after all. The warm water associated with El Niño helped reduce the number of intense hurricanes that formed in the Atlantic Ocean, according to a scientist at NASA.

"El Niño is a natural part of the climate system, not a beast in and of itself," said Robert M. Wilson of NASA's Marshall Space Flight Center. "It's an interaction between the ocean and the atmosphere that has global consequences. One of the consequences of El Niño is less hurricane development in the Atlantic."

Wilson recently completed analyzing data from hurricanes that formed in the Atlantic Ocean between 1950 and 1998. He discovered that when El Niño was present, which occurs every three to seven years, the number of intense hurricanes was never more than three. But when El Niño was not around, the number of intense hurricanes in one season reached as high as seven.



A false-color image of the Earth shows ocean temperatures. El Niño's warmer waters are represented by red and yellow.

On average, during the seasons El Niño graced us with its presence, the Atlantic experienced only one intense hurricane, but when El Niño was not present, there were two or more intense hurricanes.

"Because El Niño won't be around this year, the 1999 Atlantic hurricane season should be an active one," predicts Wilson. "There will probably be about four intense hurricanes, but we may see even more."

The first of the 1999 season, Hurricane Dennis has been reduced to a tropical storm but continues to linger and cause damage to North Carolina's barrier islands.

The study: Statistical Aspects of Major (Intense) Hurricanes in the Atlantic Basin During the Past 49 Hurricane Seasons: Implications for the Current Season will appear in *Geophysical Research Letters*.

While El Niño may curb hurricane activity in the Atlantic, it seems to increase the number of hurricanes in the Pacific. The warm, wet conditions El Niño creates in the eastern Pacific are especially helpful in forming intense hurricanes, or cyclones, as they are called in Australia and other parts of the western Pacific. Seven intense hurricanes were produced in the Pacific during the 1997 hurricane season while the Atlantic saw only one intense hurricane.

The 1997-98 El Niño lasted from April 1997 to May 1998, but its effects were felt until mid-July. The 1997 hurricane season produced only one intense Atlantic hurricane: Erika, a class three storm. The cold water of La Niña, the opposite of El Niño, influenced recent weather events, including most of the 1998 hurricane season. Of Hurricane Bonnie (class three), Georges (class four) and Mitch (class five), Mitch was the most devastating. In the Central American countries of Nicaragua and Honduras, Mitch caused \$10 billion in damage and killed more than 9,000 people.



Hurricane Bonnie hovers over the East Coast of the U.S. on Aug. 26, 1998

"The 1998-99 La Niña appears to be winding down. Should El Niño return next spring or summer, one suspects that tell-tale signs of its impending occurrence will soon be manifested," said Wilson. If El Niño comes back for another round, next year's hurricane season should be calm. However, if a long break follows the present La Niña, the next hurricane season may be another non-El Niño-related season and one can expect three or more major hurricanes.

El Niño is the warm phase of the larger El Niño-Southern Oscillation (ENSO) cycle. Research suggests that ENSO quells Atlantic hurricane activity by influencing the upper troposphere (the lowest region of the Earth's atmosphere), according to William Gray of Colorado State University.

The rise in ocean temperatures associated with El Niño causes strong upper tropospheric winds to blow from the Pacific Ocean to the tropical Atlantic Ocean. These strong winds can blow the tops off developing hurricanes and can also block the westward motion of hurricanes that form off the coast of Africa.

For the 1999 hurricane season, Gray has predicted 14 tropical storms, nine hurricanes, and four intense hurricanes for the Atlantic basin.

Other factors, including ENSO, like strength and direction of winds in the troposphere and stratosphere, the barometric (atmospheric) pressure in the Caribbean, rainfall and temperature conditions in West Africa and possibly global warming contribute to Atlantic hurricane activity.

Copyright 1999, Environmental News Network, All Rights Reserved

Summary

The story is about El Niño – the nasty weather pattern, which causes yearly a lot of damage. There are a few people who researches such weather. They even found some good things about El Niño. One of the good things is that when El Niño is present, there are just few hurricanes. One time there wasn't El Niño and there were a lot of hurricanes, but when El Niño was present, number of hurricanes dropped down to just three or less.

When there is a bad thing, there is always a good thing, too. Every bad thing has his good thing, too.