Study finds wind speeds rose over world's oceans

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During the last quarter-century, average wind speeds have increased over the world's oceans, as have wave heights, generating rougher seas, researchers reported in a study published online Thursday.

Since faster winds cause more evaporation, the increase could lead to more water vapor in the air, compounding any increase from global warming and providing added moisture for rain. Generally, that means a higher chance for rainfall.

Researchers led by Ian Young of Swinburne University of Technology in Australia report in the journal *Science* that over a 23-year period, average wind speed over the oceans rose by 0.25 percent per year.

The proportion of increase in wave height was less than for wind speed, the researchers noted, while the increase for extreme winds was more than for average winds.

The researchers said the higher winds aren't necessarily the result of global warming.

But Eugene S. Takle, director of the climate science program at Iowa State University, and not part of Young's research team, noted that evaporation rises with higher wind speeds, so the result would be more moisture in the air even without global warming. And the warming shown in many studies would also increase evaporation.

Just two years ago, Takle and colleagues published a study of wind speeds over land showing a decrease, rather than the increase Young's team found in its measurements from satellites and buoys. Young studied satellite records from 1985 to 2010, though records for 1990-91 were not available because of satellite problems.

"I don't think these results provide a clear contradiction to our findings of declining wind speeds over land, since measurements are made in different environments," said Takle.

He noted that the day-to-night changes in temperature are different over land than over water and the boundary layer - the portion of the atmosphere that most closely interacts with the surface - is generally thicker over land than water.

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