

Arctic storms to decrease with global warming: study

September 15 2010



The Kongsbreen glacier taken in the Norwegian fjord Kongsfjord off the coast of Ny-Alesund in June 2010. Brief but vicious Arctic storms known as polar lows are likely to become much less frequent as global warming intensifies, scientists in Britain determined on Wednesday.

Brief but vicious Arctic storms known as polar lows are likely to become much less frequent as global warming intensifies, scientists in Britain determined on Wednesday.

Polar lows brew in ice-free high latitudes in the North Atlantic in winter and can swiftly become a hazard for shipping and oil rigs.

The number of these storms averaged 36 per season in the 20th century, climatologists at the University of Reading said.

By 2100, this tally would fall to between 17 and 23 per season, depending on concentrations of heat-trapping [greenhouse gases](#) in the air.

"There would be roughly only half as many in future," Matthias Zahn, of the university's Environmental Systems Science Centre, told AFP.

The simulation is based on three scenarios for greenhouse-gas emissions used by the UN's Intergovernmental Panel on Climate Change (IPCC).

The reason for the fall lies in a change in the difference in temperature between the ocean's surface and the mid-atmosphere.

This differential is what causes a polar low to develop. Changing the difference hampers the storm's formation and intensification, according to the paper, released by *Nature*, the British science journal.

Zahn said further work was underway to simulate polar lows in the northern Pacific.

(c) 2010 AFP

Citation: Arctic storms to decrease with global warming: study (2010, September 15) retrieved 28 April 2024 from <https://phys.org/news/2010-09-arctic-storms-decrease-global.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--