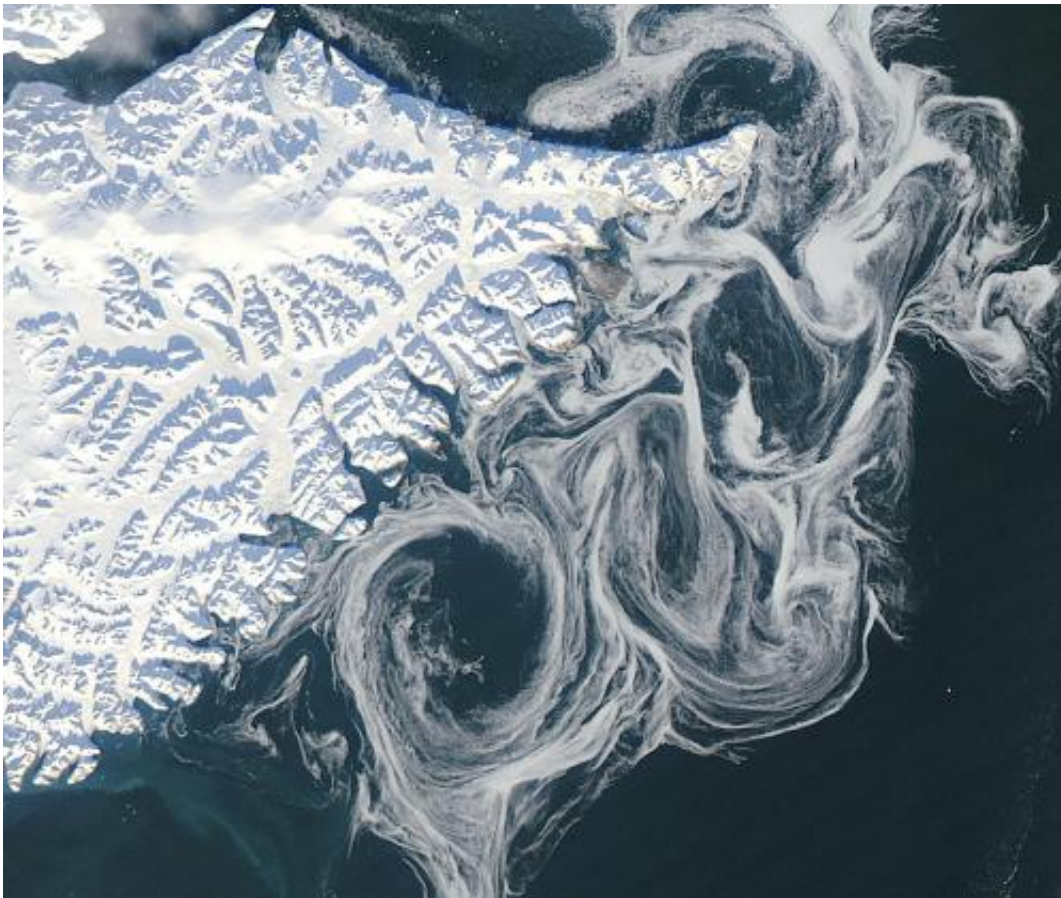


NASA satellite sees ghostly remains of vanishing Arctic Sea ice

October 29 2012, by Jason Major

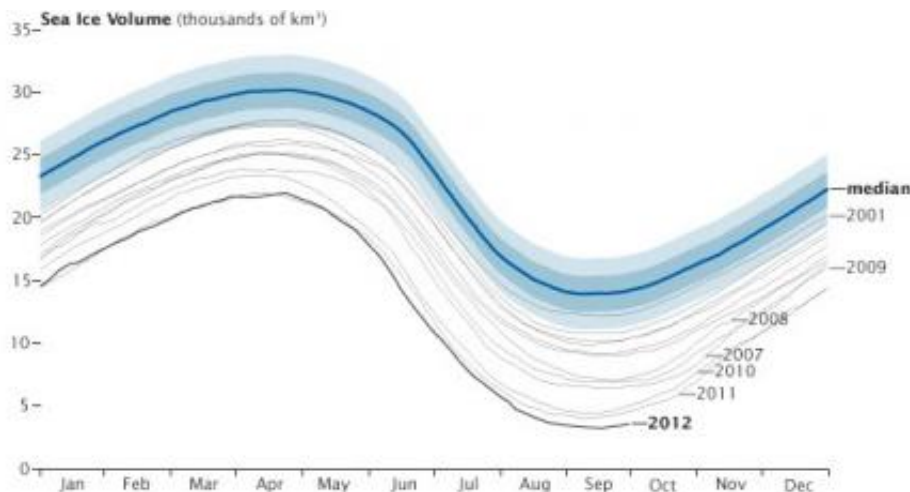


Sea ice swirls in ocean currents off the coast of Greenland. Credit: Jeff Schmaltz, NASA/GSFC

Spooky spectral swirls of last season's sea ice drift in currents off the coast of eastern Greenland in this image from NASA's [Aqua satellite](#),

acquired on October 17. Although sea ice in the Arctic will start forming again after September's record low measurements, these ghostly wisps are likely made up of already-existing ice that has migrated south.

As [global temperatures](#) rise—both over land and in the ocean—thinner sea ice builds up during the Arctic winter and thus more of it melts during the summer, a pattern that will eventually lead to an ice-free Arctic if trends continue. The past several years saw sea ice in the Arctic below the 1979-2000 average, with this past September displaying the lowest volumes yet recorded.



The graph below, made from data modeled by the Polar Science Center at the University of Washington, show the chilling—or, perhaps, not-so-chilling—results of this century's recent observations.

Along Greenland's east coast, the Fram Strait serves as an expressway for sea ice moving out of the Arctic Ocean. The movement of ice through the strait used to be offset by the growth of ice in the Beaufort

Gyre.

Until the late 1990s, ice would persist in the gyre for years, growing thicker and more resistant to melt. Since the start of the twenty-first century, however, ice has been less likely to survive its trip through the southern part of the Beaufort Gyre. As a result, less [Arctic sea ice](#) has been able to pile up and form multi-year ice.

Thin, free-drifting ice—as seen above—moves very easily with winds and currents.

Aqua is a NASA Earth [Science satellite](#) mission named for the large amount of information that the mission is collecting about the Earth's [water cycle](#), including evaporation from the oceans, water vapor in the atmosphere, clouds, precipitation, [soil moisture](#), sea ice, land ice, and snow cover on the land and ice. Aqua was launched on May 4, 2002, and carries six Earth-observing instruments in a near-polar low-Earth orbit. [MODIS](#), which acquired the image above, is a 36-band spectroradiometer that measures physical properties of the atmosphere, oceans and land.

Provided by [Universe Today](#)

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