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ANDREW REVKIN

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Experts Confirm Open Water Circling Arctic

By [ANDREW C. REVKIN](#)

[**UPDATE 9/6:** The National Ice Center on Friday said that a navigable passage has opened through sea ice along the entire Russian Arctic coast, although the center added that patches of dangerous thick ice still pepper the area. In a statement, the center said: "**This is the first recorded occurrence of the Northwest Passage and Northern Sea Route both being open at the same time.**" The [full statement](#) is below in the comment string. Here's an [animation loop of the retreating sea ice](#).]

There have been some breathless headlines in the last few days about the [North Pole's being an "island" for the first time in 125,000 years](#). Aside from the fact that 90 degrees north sits in the middle of a 2.5-mile-deep ocean, that's quite a statement considering two things: first, no one has been routinely monitoring sea ice along both coastlines between then and now, and second, the region was clearly warmer than it is today (in summers) around [8,000 to 10,000 years ago](#) — on both the Siberian and [North American](#) sides.

And one of the groups focusing most closely on possible Arctic shipping lanes, the [National Ice Center](#) operated by the Navy and Commerce Department, says flatly that the satellites are misreading conditions in many spots and that there is too much ice in a critical spot along the Russian coast (highlighted in the smaller image above) to allow anything but ice-hardened ships to get through. In an e-mail message Wednesday, Sean R. Helfrich, a scientist at the ice center, said that ponds of meltwater pooling on sea ice could fool certain satellite-borne instruments into interpreting ice as open water, "suggesting areas that have substantial ice cover as being sea-ice free." The highlighted area is probably still impassible ice, including large amounts of thick old floes, he said. I sent the note to an array of sea-ice experts, and many, including Mark Serreze at the [National Snow and Ice Data Center](#), concurred.

Headlines and shipping lanes aside, it's becoming clearer that the [Arctic Ocean of our history and lore](#) — an ice-locked region hostile to humans (except for seal-hunting Inuit and the crews of nuclear submarines) — is transforming in summers to a place where

It appears that the age-old shipping lane along Russia's Arctic coast, the Northeast Passage, is wide open, as is one route through the Northwest Passage over Canada, according to a map of sea ice on Sept. 2, created by German scientists using NASA satellite data. The inset shows an area that typically is clogged with ice. An American ice-tracking agency had said the route was not open, but on Friday confirmed that the ice had parted and a navigable route existed. (Credit: [Institute of Oceanography/University of Hamburg](#))

ships may in a few decades find [reliable short cuts](#) between Asian manufacturers and distant markets, where [polar bears may be fewer](#) and thinner, where [oil and gas rigs](#) may increasingly dot the land and sea. Human-driven global warming is almost certainly playing a growing role in the region, although experts still say there are large natural fluctuations involved as well (darn, [more hedges](#)).

In the long run, it's entirely possible that if and when my sons have children, they'll grow up with an entirely new sense of the word Arctic, less attuned to the fatal 19th-century misadventures of the "man who ate his boots," [England's Lord Franklin](#), and more to the growing geopolitical tussles over the world's newest fully functioning sea.

Efforts to propel aggressive action to cut risks from building greenhouse gases face many challenges, and one is surely the "[shifting baselines](#)" of human awareness over time. Jeremy Jackson has convincingly asserted that this trait has largely masked the near [destruction of ocean fish stocks](#). [Robert Brulle](#) has noted how it has blunted communities' awareness of degrading environments.

[After each evacuation](#), New Orleans appears at risk of losing ever more of its population, not in a refugee-style rush like those described by many climate campaigners, but as [one household at a time](#) gives up the fight. The Arctic Ocean's shift to having a more [Antarctic-style sheath of floating sea ice](#) — present in winter, absent in summer — will not happen with a glaring headline.

But one day, a generation may well be born for whom the notion of north-pressing explorers with ships crushed in the floes will seem almost outlandish.