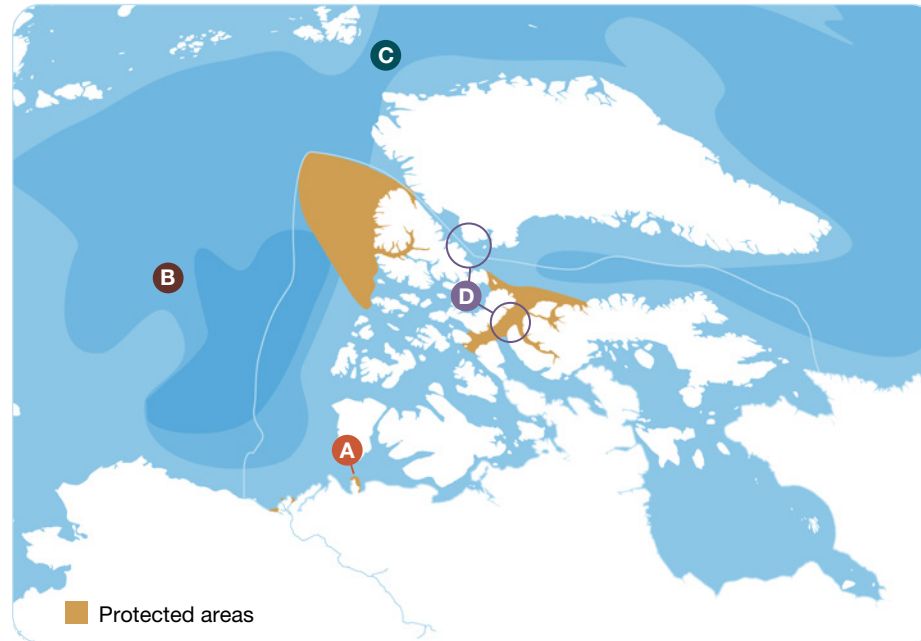
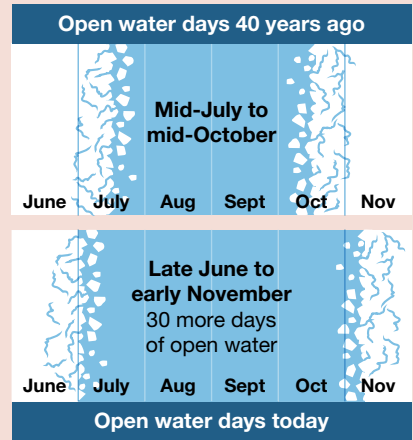


Sea ice changes

Sea ice is changing across the Arctic. These changes influence Arctic marine ecosystems in many ways. Each box shows a different way that the ice is changing.

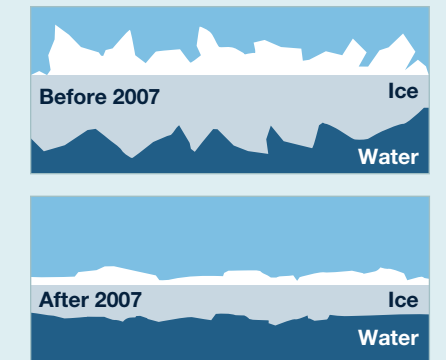
Ice duration: Coastal zone A

In the Anguniaqvia Niqiqyuam Marine Protected Area, coastal sea ice lasts a full month less than it did 40 years ago.



Ice transport: Fram Strait C

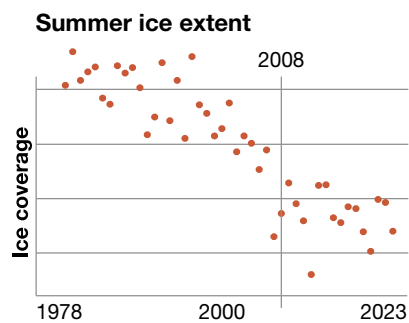
Ice moves from the Arctic Ocean into the Atlantic through Fram Strait. Until 2007, the ice was thick and rugged. Since then, the ice has been thin and much flatter.



Ice extent: Whole Arctic B

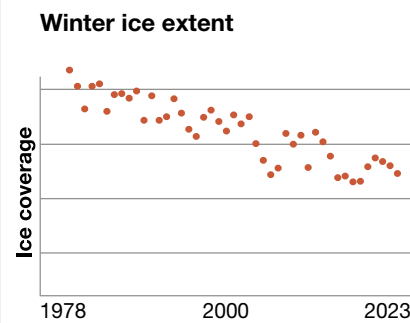
Ice extent in summer

- 42% decrease in ice extent
- Decrease occurred mostly before 2008

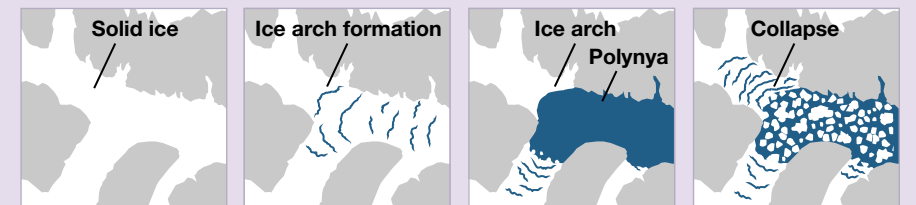


Ice extent in winter

- 10% decrease in ice extent
- Decrease has remained steady over time



Ice structure: Arches D



- An ice arch is a structure that blocks mobile sea ice. This allows an area with open water (a polynya) to form beside the arch. Polynyas are important open-water habitats in otherwise ice-covered areas.
- In a polynya, phytoplankton can bloom earlier in spring, fish can gather, and marine mammals and seabirds can find food.

Forming later, collapsing earlier: 1979–2022

Lancaster ice arch: lasts on average 1.5 months less

North Water ice arch: lasts on average 3 months less. Ice arch failed to form for the first time in 2007 and then again in 2009, 2010, 2017, and 2019.