

Phytoplankton on Ice Antarctica

It may look like someone dyed the water, but the green hue visible off the coast of Antarctica is entirely natural. Granite Harbor, a cove near Antarctica's Ross Sea, got its color from phytoplankton at the water's surface. These microscopic, plant-like organisms typically flourish here in spring and summer, when the edge of the sea ice recedes and there is ample sunlight. But scientists have noticed that, given the right conditions, they can grow in autumn, too. In March 2017, Landsat 8 captured such an event in this image.

Sea ice, winds, sunlight, nutrient availability, and predators all factor into whether plankton can grow in large enough quantities to color the slush-ice and make it visible from space. Phytoplankton are important for the ecology of the Southern Ocean, as they are an abundant food source for zooplankton, fish, and other marine species.