

Ice Water United States

As temperatures rise in the summer, turquoise splotches of color begin to speckle the icy surfaces of the Arctic. Those splashes of blue are melt ponds—areas where snow has melted and pooled in low spots atop glaciers and sea ice. During an airborne research campaign in July 2014, a scientist shot this photograph while flying over a glacier in southeastern Alaska. Chunks of ice float on the pond's turquoise water.

Many questions remain about the impact of melt ponds on the Arctic. Compared to bright white snow and ice, liquid water absorbs much more heat from sunlight. So when a pool of water forms on top of ice, it changes the heat balance. The water warms in the sunlight and can speed the melting of surrounding ice, influencing the overall melting and movement of ice sheets and sea ice.