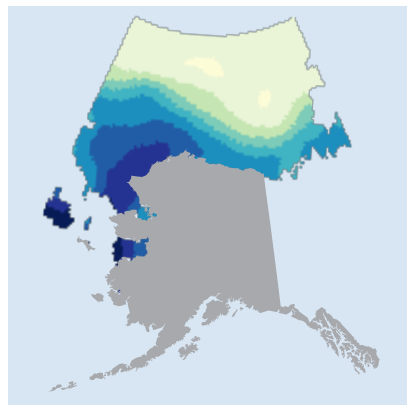


Pale yellow
means solid ice.

Dark blue means
open water.



This time series of images shows almost two centuries of declines in Arctic sea ice, which typically reaches its lowest extent in the fall. These visualizations were made using the Historical Sea Ice Atlas web tool from the UAF Scenarios Network for Alaska + Arctic Planning. Viewers can explore a compilation of sea ice data, whose sources range from handwritten whaling-ship logbook records to satellite observations. The concept of the small multiple (see box at right) aids understanding of this data-rich display.

Left: Example graphic of sea ice extent and concentration relative to Alaska.

A “small multiple” is many images, consistently displayed
Here, the same design structure repeats for a large collection of images. The idea is that once viewers understand the design for one slice of data, they can understand the rest. As the eye moves from one image to the next, this constancy of design allows viewers to focus on changes in information rather than changes in graphical composition. A steady canvas makes for a clearer picture. — Edward Tufte, Envisioning Information

