

# Arctic Sea Ice

Sea ice forms at the surface of the ocean when the temperature drops to the freezing point (about  $-2^{\circ}\text{C}$  or  $29^{\circ}\text{F}$ .) Sea ice extent is a measurement of the area of ocean where there is at least some sea ice. Scientists gather data about sea ice from satellites that pass over the polar regions several times

a day. Sea ice influences our global climate by reflecting sunlight and cooling the earth. Arctic sea ice is more significant to understanding our global climate than Antarctic sea ice because much more Arctic ice remains through the summer.

Using the data in the table, graph the extent of Arctic sea ice over time. What trend do you see on the graph?

## Arctic Sea Ice Extent (Area of ocean with at least 15% sea ice, in millions of square kilometers in September of that year, rounded to the nearest tenth.)

Year	May
1979	7.0
1980	7.6
1981	6.9
1982	7.2
1983	7.3
1984	6.4
1985	6.5
1986	7.2
1987	7.2
1988	7.2
1989	6.9
1990	6.1
1991	6.3
1992	7.3
1993	6.8
1994	7.0
1995	6.0
1996	7.4
1997	6.7

Year	May
1998	6.4
1999	5.8
2000	6.0
2001	6.7
2002	5.6
2003	6.1
2004	5.8
2005	5.5
2006	5.8
2007	4.2
2008	4.6
2009	5.1
2010	4.8
2011	4.5
2012	3.4
2013	5.1
2014	5.0
2015	4.4
2016	4.1

Data are from the Sea Ice Index provided by the National Snow and Ice Data Center (NSIDC). NSIDC is part of the Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado Boulder.

An interactive online version of the data from 1979 to the present is available at: <http://nsidc.org/arcticseaicenews/charctic-interactive-sea-ice-graph/>.