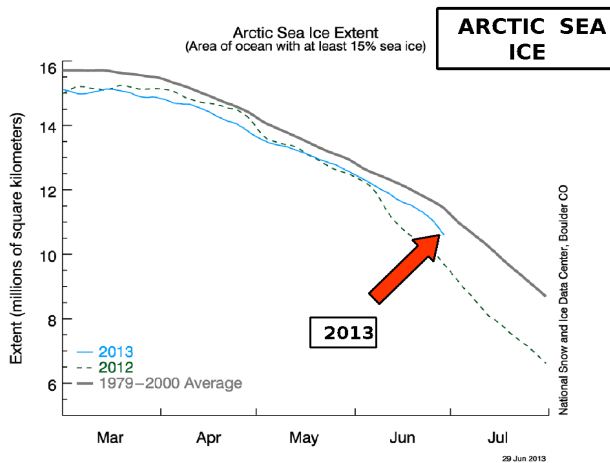
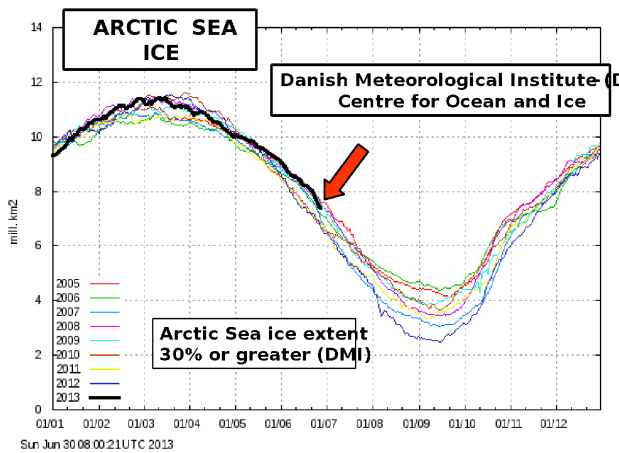


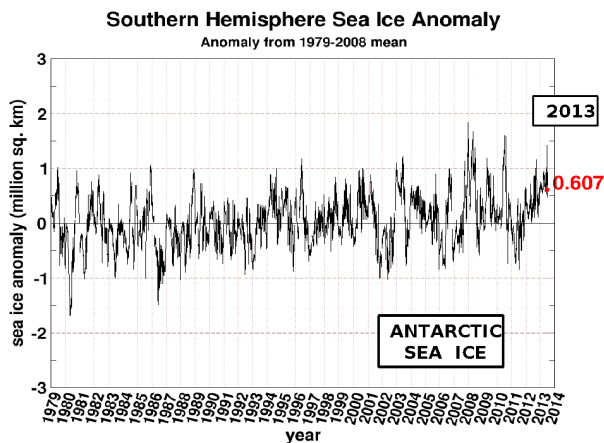
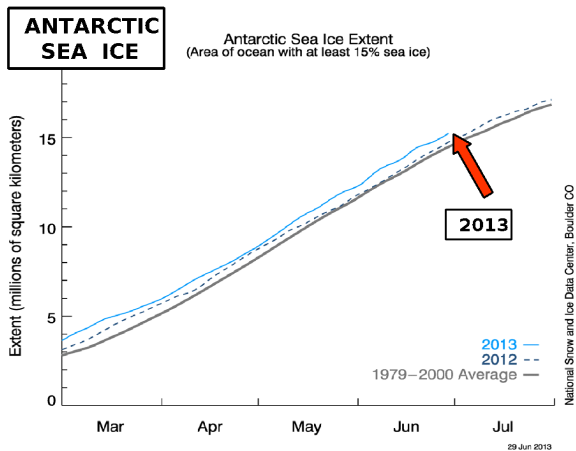
CLIMATE CHANGE 7

ARCTIC SEA ICE DEPLETION -- A MYTH

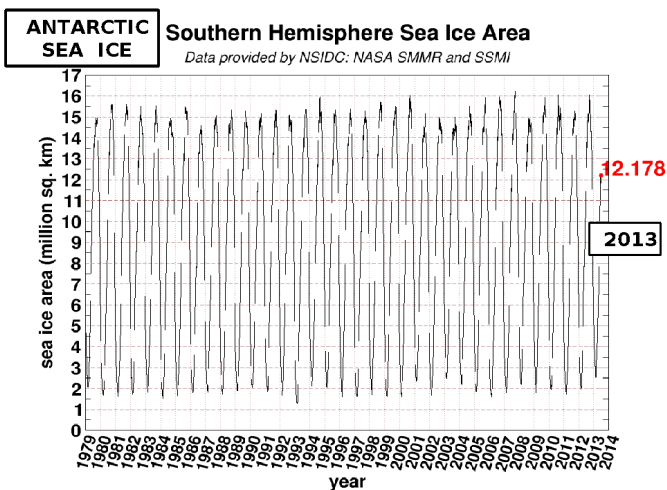
A lot of scaremongering has been going on over several years about the large losses of floating sea ice in the Northern Hemisphere's Arctic Region. The facts speak for themselves. The Figures below are the *latest data* (June 2013) from the Danish Meteorological Institute DMI, and the National Snow and Ice Data Center (NSIDC), Boulder, Colorado, USA. The Arctic is healthy and the ices area is not too far from the previous average 20 year history trend.



But the issue actually involves the *whole* planet – north and south poles combined. The Antarctic ice sheet cover is increasing, and is currently (June 2013) well above the average 20 year history trend.

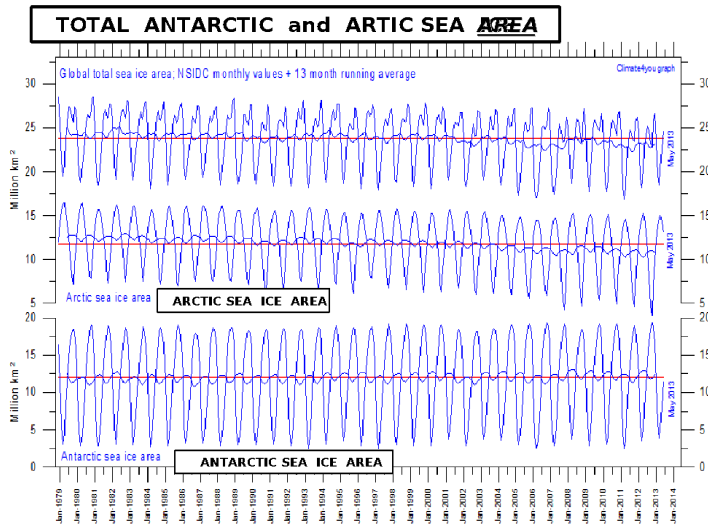


Reference: <http://wattsupwiththat.com/reference-pages/sea-ice-page>



The current Antarctic Sea Ice Cover is 12.178 million square kilometres (June 2013). Note that the yearly difference is close to 12-13 million square kilometres (*15 – 3 million square kilometres*). The land area of Australia is only 7.7 million square kilometres. This means that the floating sea ice that melts each year (and then reforms) is almost twice the size of Australia - every 12 months. Imagine if Australia was simply a floating ice sheet, and you flew from New Zealand to find Australia totally missing, then 6 months later flew back and found it totally recovered! The sea ice melting and reforming each year is far more than the size of

Australia at ~12 million square kilometres! Melting and reforming occurs at over 65,000 square kilometres /day!



We must look at the TOTAL PICTURE; not one location on top of the World. This is a single planet, and the *total* ice/snow cover is significant. Although there may be a small reduction in the total sea ice AREA over 30+ years, the other unaddressed factor is ice and snow VOLUME, or DEPTH. The Arctic is *only* floating ice. The Antarctic is mainly land with snow-ice on top (highest continent in the world at 2,500m) with a surrounding ice shelf. There are reports that the ice/snow depths are increasing in the Antarctic as well as places like Greenland (*that is another topic!*)

Professor Emeritus Geoffrey G Duffy
DEng, PhD, BSc, ASTC Dip., FRS NZ, FIChemE, CEng