

**June Sea Ice Outlook 2016**  
**James Morison**

Outlook value: 4.0 million square kilometers

Margin of error: n/a (not applicable)

Outlook method: heuristic

**Summary:**

I had conversations with Axel Schweiger and others following the Seasonal Ice Zone Reconnaissance Surveys (SIZRS) flights during third week of June 2016, who observed some melting but no big ponds as yet. There was open water on and south of 150W, 72N, which puts the ice retreat edge a bit earlier than seen recently. Ice was solid from 74N to 75N with more leads at 76 N, which seems similar to early season patterns seen in recent years that have an intermediate region of pretty solid conditions somewhere south of the Beaufort Gyre center. Usually more winter snow in the Central Arctic has seemed to indicate less September sea ice extent. But, with no spring observations from the North Pole Environmental Observatory in the central Arctic ocean in 2016 I don't know what the snow conditions were like in that region this year. The winter Arctic Oscillation index was about the same as for 2011 and a similar deviation below the long-term trend would suggest a 2016 minimum extent of 4.2 million sq. km. This is pretty squishy, but given the current extent and ice conditions in the Beaufort Sea, I think this year's September average will be about 4 million sq. km.