

Sea ice Outlook based on July information

1. *Names of Scientist(s) making the Outlook.*

Oleg M. Pokrovsky

2. *Estimate of sea ice extent for the month of September 2008*

4.6 million square kilometers

3. *Principal method (numerical model, statistical model, comparison to 2007 weather and satellite data, etc.) Keep this short as it will go into a table.*

Analysis of current weather conditions, its comparison against these for 2007.

4. *A short several sentence summary of your primary physical reasoning behind the estimate provided in #2. We are primarily interested in how you may be using data from July.*

Persisted air circulation system in Northern Pacific provided permanent inflow of warm air to Alaska/Canada sector of Arctic and outflow cooled air through East Siberian sector of Arctic . Thus, in former domain one can find less ice sheet cover than in last year, but latter is fully covered with ice. There is a general negative trend of SST in North Pacific represented by time series of PDO (Pacific Decadal Oscillation), which is turning in negative phase (see figures). July satellite data of the NSIDC (see table) demonstrates that this factor is enforced during last month. In general, Pacific sector of Arctic will be more ice covered than in 2007. Northward wind in European sector of Arctic provided usual condition for ice melting in Barents Sea and lesser in Kara Sea.

Table. Comparison of the Arctic ice extent values between winter and spring months of 2007 and 2008.

Year/month	Arctic Ice extent (million sq. km)
2007/Feb	14.5
2008/Feb	15.0
2007/March	14.7
2008/March	15.2
2007/April	13.9
2008/April	14.5
2007/May	13.0
2008/May	13.2
2007/June	11.5
2008/June	11.4
2007/July	8.1
2008/July	9.0

5. Any expanded information with figures which backs up #4.

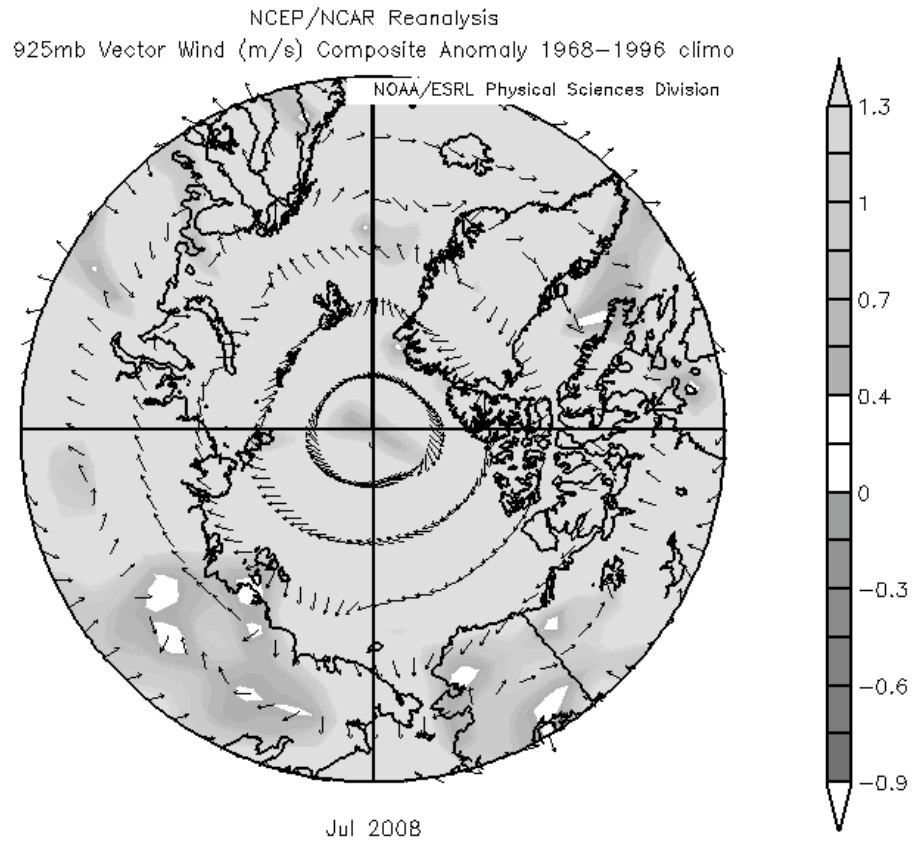


Fig.1 Vector wind field for July 2008.

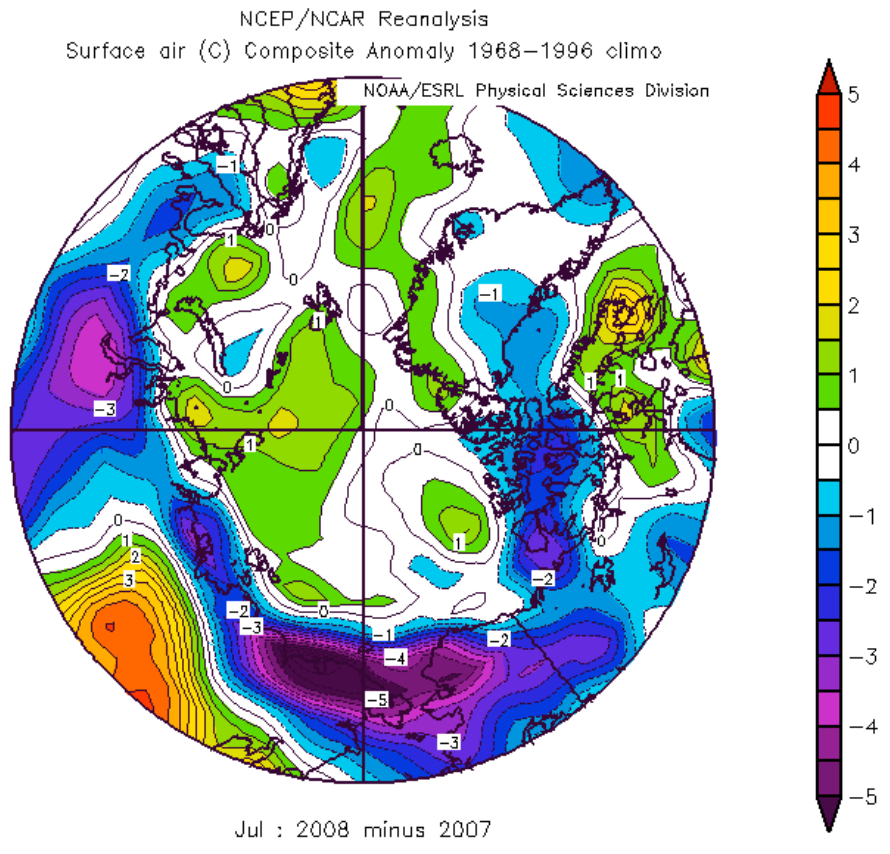


Fig. 2. Difference of the SAT between July 2008 and July 2007.

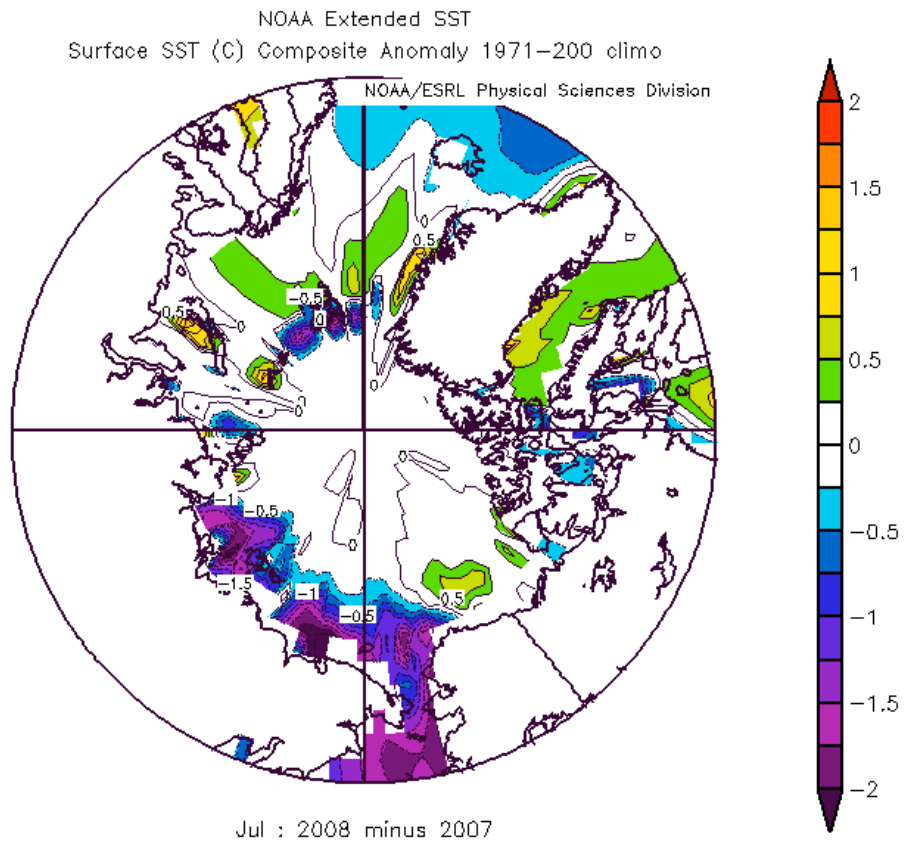


Fig. 3. Difference of the SST between July 2008 and July 2007.

6 *Any information on regional sea ice conditions or outlooks.*

It is probable that east-west passage in East Siberia (Laptev and East-Siberian Seas) will be mainly ice covered in September. In contrast, major part of Alaska/Canadian coastline - will be free of ice.