

Oleg Pokrovsky, Main Geophysical Observatory, St. Petersburg, Russia

We are also interested in your thoughts and ideas on the following:

1. Factors driving the 2009 minimum.

Two major factors: (i) warm Atlantic water inflow in Russian sector of Arctic and (ii) unusual North Pacific SST field configuration during late Spring and Summer of 2009.

First factor maintains previous year minimum

ice extent in Russian shelf seas (I mean Barents and Kara Seas).

Second one - Changes in the SST spatial structure in North Pacific caused an short term atmospheric circulation regime which accelerate thin ice destruction in Chukchi Sea at late summer. In September the PDO again turns into its negative phase. Thus Pacific sector of Arctic will be at high level of ice extent values.

2. Additional data or data products that would be useful for improving outlooks in the future, including any critical gaps in field observations.

Data on the core North Atlantic water inflow (e.g. temperatures at depth of 150-300 m)

in Iceland domain.

We need reliable forecasts of the SST fields in North Pacific.

Early signs of changes in the SST fields in North Atlantic.

3. Implications, based on this year's results, for the future state of arctic sea ice.

There are two major ice extent regulated mechanisms:

(i) core Atlantic waters

(ii) SST in North Pacific which determine the atmospheric circulation types govern ice extent in East Russian and Alaska/Canada Arctic.

4. Any other "lessons learned" - including the usefulness of the Outlook as a community synthesis tool, suggestions for future outlook activities, or any other topic you want to comment on.

It very urgent to develop more flexible prediction tools than GCM which are very inertial to any external disturbances.