

Norwegian young sea ICE cruise 2015(N-ICE2015)

Primary objective:

To understand the effects of the new thin, first year, sea ice regime in the Arctic on energy flux, ice dynamics and the ice associated ecosystem, and local and global climate.

Secondary objectives:

- Understand how available ocean heat is mixed upwards towards the sea ice and to what extent it influences the sea ice energy budget.
- Understand the fate of solar radiation incident on the first-year sea ice in the region and how its fate is affected by properties of the atmosphere, snow, ice, and ocean.
- Quantification of the changing mass balance of Arctic sea ice and its snow cover.
- Model the dynamics of the drifting ice.
- Understand the ice associated ecosystem and model future changes.
- Effects on local and global weather systems.

The project is made possible by a joint funding between Center for Ice, Climate and Ecosystems at the Norwegian Polar Institute, the Polar Institute and the Ministry of environment

Method: RV Lance (<http://www.npolar.no/en/about-us/lance/>) will be frozen into the drift ice at approximately N83.25 E30 in the beginning of January 2015 and passively drift with the ice probably in a southwesterly direction. The N-ICE2015 is planned to last for 6 months until the end of June 2015.

For further information please contact project leader Harald Steen (steen@npolar.no)

