

### **Polar Prediction**

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#### **Outline**



- > The WWRP Polar Prediction Project
- > The WCRP Polar Climate Predictability Initiative (PCPI)
- Possible areas of collaboration
- Discussion



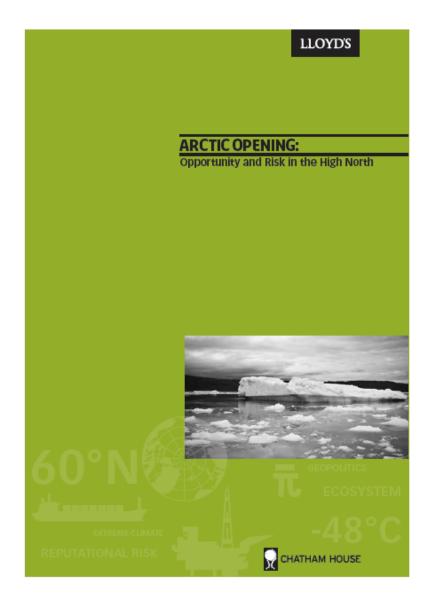


## **Opportunity and risk**



Some statements from the report:

- The Arctic is likely to attract substantial investment over the coming decade (\$100 bn)
- The environmental consequences of disasters in the Arctic are likely to be worse than in other regions
- Significant knowledge gaps across the Arctic need to be closed urgently





#### **PPP Mission Statement**



"Promote cooperative international research enabling development of improved weather and environmental prediction services for the polar regions, on time scales from hourly to seasonal."



## **PPP Steering Group**



- Thomas Jung (chair)
- Peter Bauer
- David Bromwich
- Paco Doblas-Reyes
- Chris Fairall
- Marika Holland
- Trond Iversen
- Brian Mills
- Pertti Nurmi
- Don Perovich
- > Phil Reid
- Ian Renfrew
- Gregory Smith
- > Gunilla Svensson
- Mikhail Tolstykh

SG4, Boulder, 1-3 October 2013



- Jonny Day (APECS liasion)
- Neil Gordon (WMO consultant)



#### Research areas



#### Research Goals

Service-oriented Research

User Applications and Societal Benefits

Verification

Forecasting System Research

Observations

Modelling

Ensemble Forecasting Underpinning Research

Predictability and Diagnostics

Global Linkages

Source: PPP Implementation Plan



# Flagship themes



- > Sea ice prediction
  - Explore predictability
  - Develop of coupled prediction systems
- Linkages between polar regions and lower-latitudes
  - Determine mechanisms and strengths
  - Implications for predictions in middle latitudes
- Improved availability of observations from polar regions
- ➤ The Year of Polar Prediction (YOPP)



## Sea ice prediction





Photo: Andrew Peacock/www.footloosefotography.com
The Russian ship MV Akademik Shokalskiy is trapped in thick Antarctic ice 1,500 nautical miles south of Hobart, Australia, Friday, Dec. 27, 2013

