

Deployment and Data: The Sea Ice Mesonet Station in Frobisher Bay

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Outline

- 1) Station Description and Deployment
- 2) Brief look at the Data
- 3) Development of Sea Ice Products (SSMI, AMRS-E, MODIS, CIS)



Partners In Iqaluit:

Jamal Shirley

Nunavut Research Institute

Jason Carpenter - Sr. Instructor;

Markus Dyck, Instructor [MNRM, AWB]

Environmental Technology Program Nunavut
Arctic College

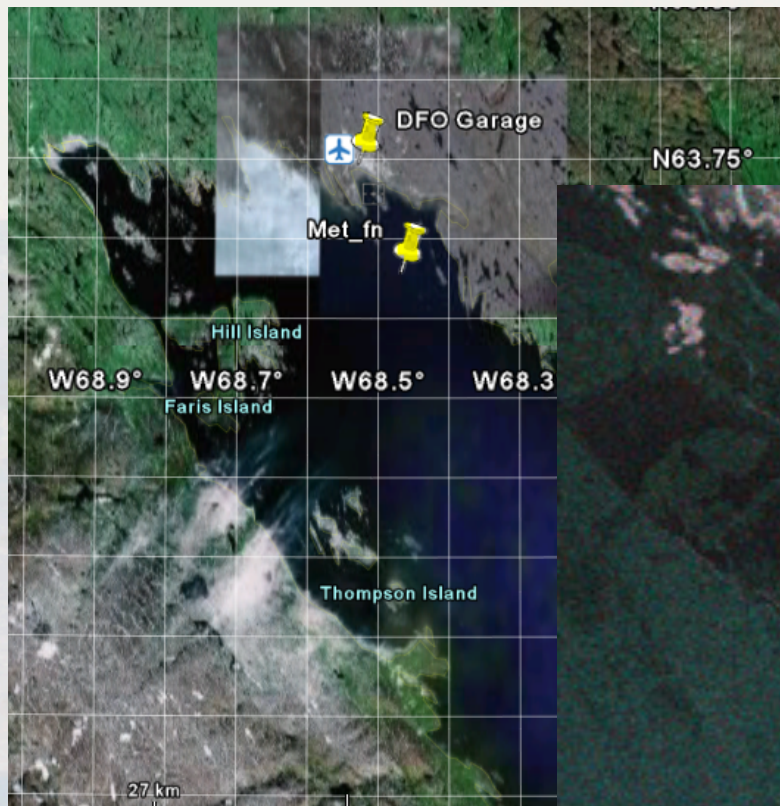
HTO – Iqaluit

Keith Pelley

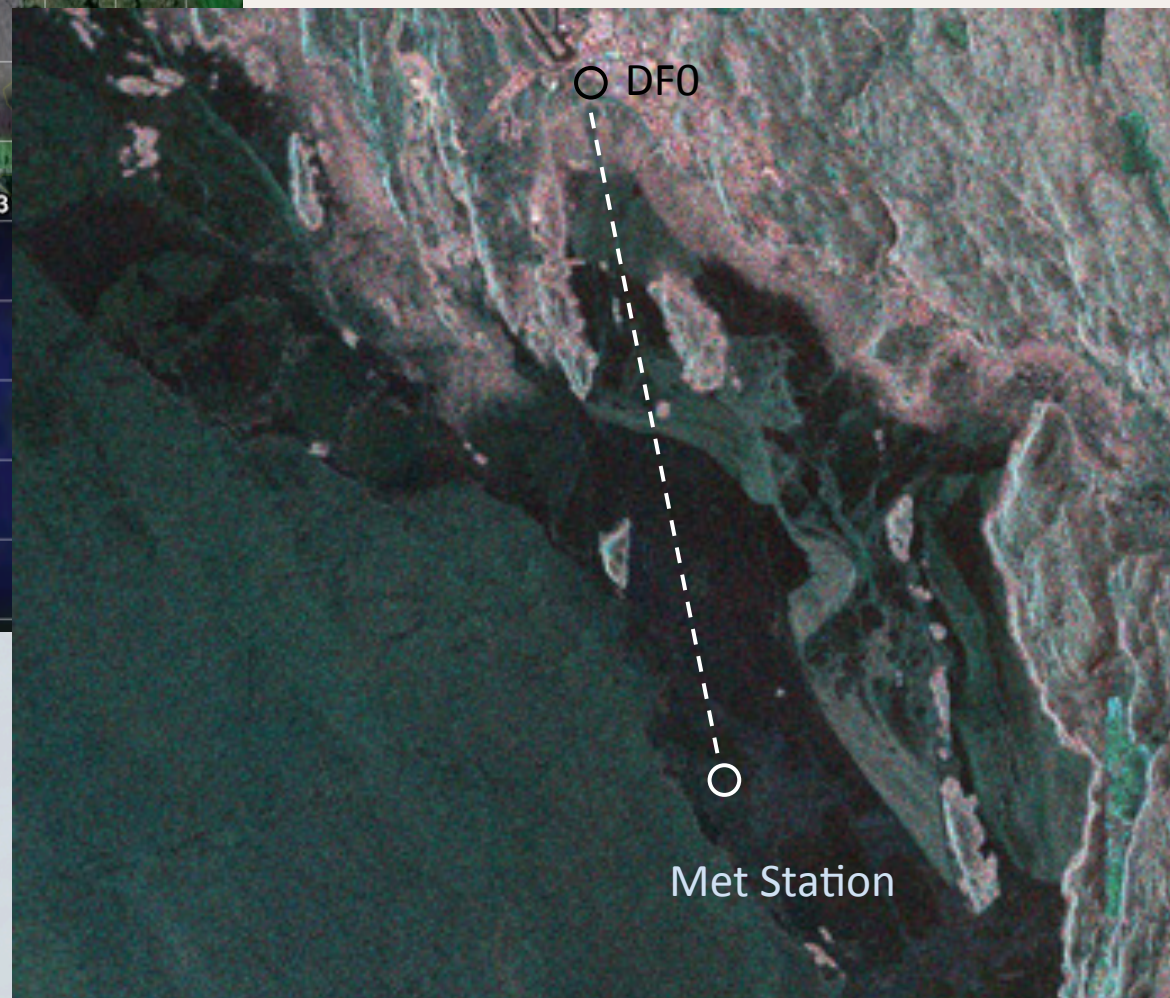
A/Area Director, Eastern Arctic Area Office
Fisheries and Oceans Canada



Station Location



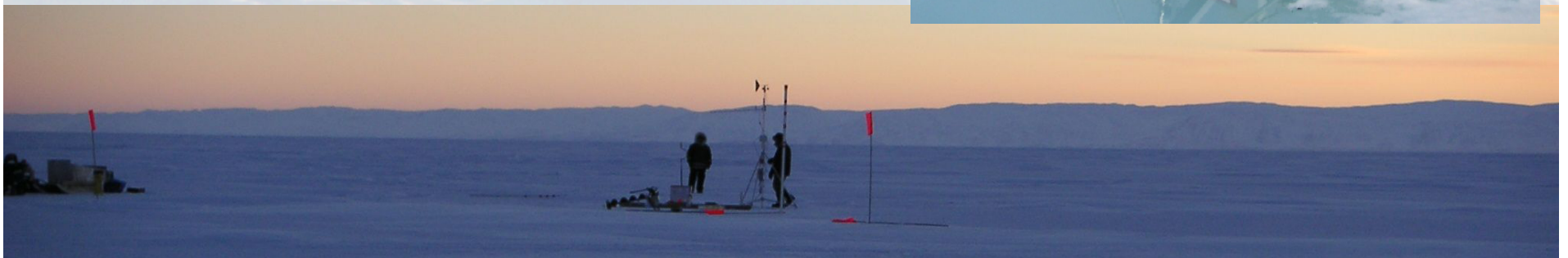
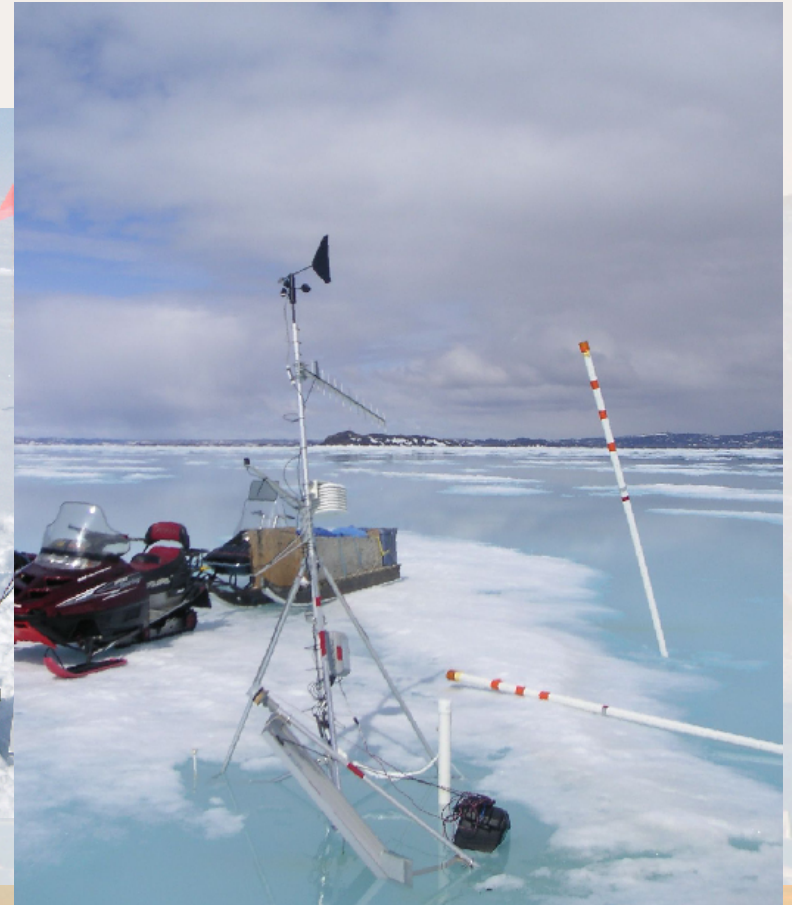
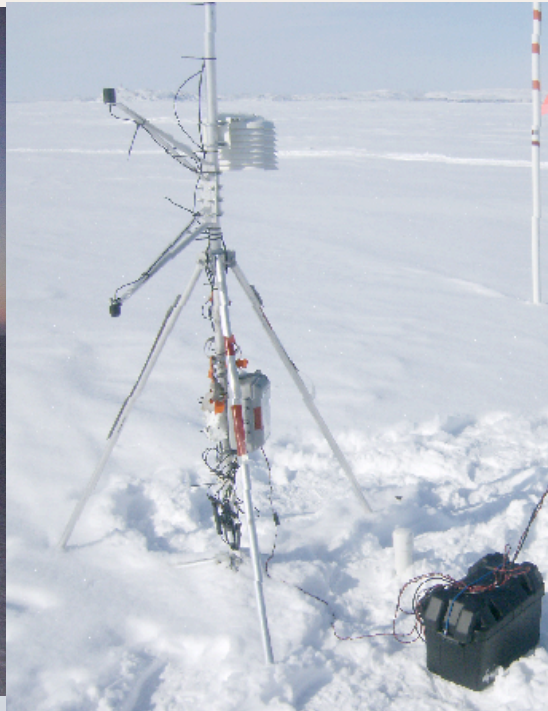
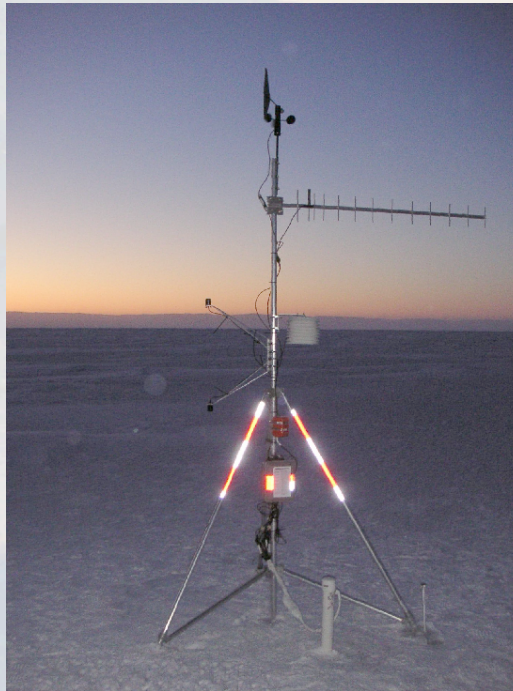
RADARSAT-2



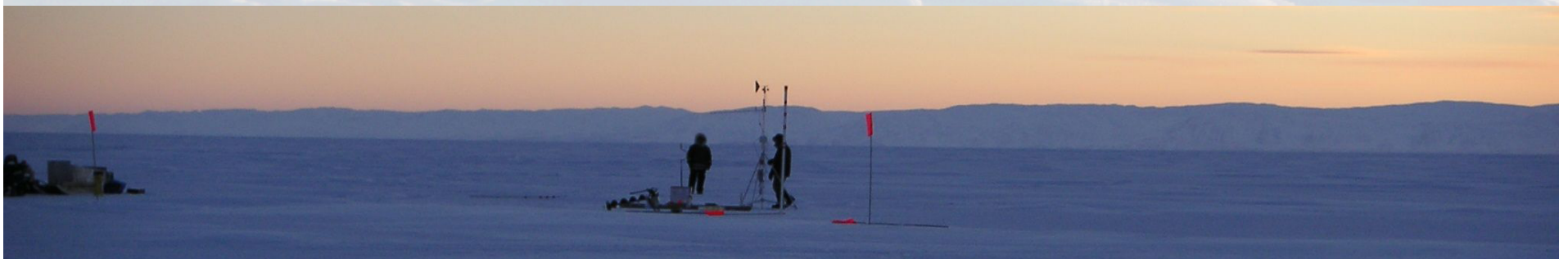
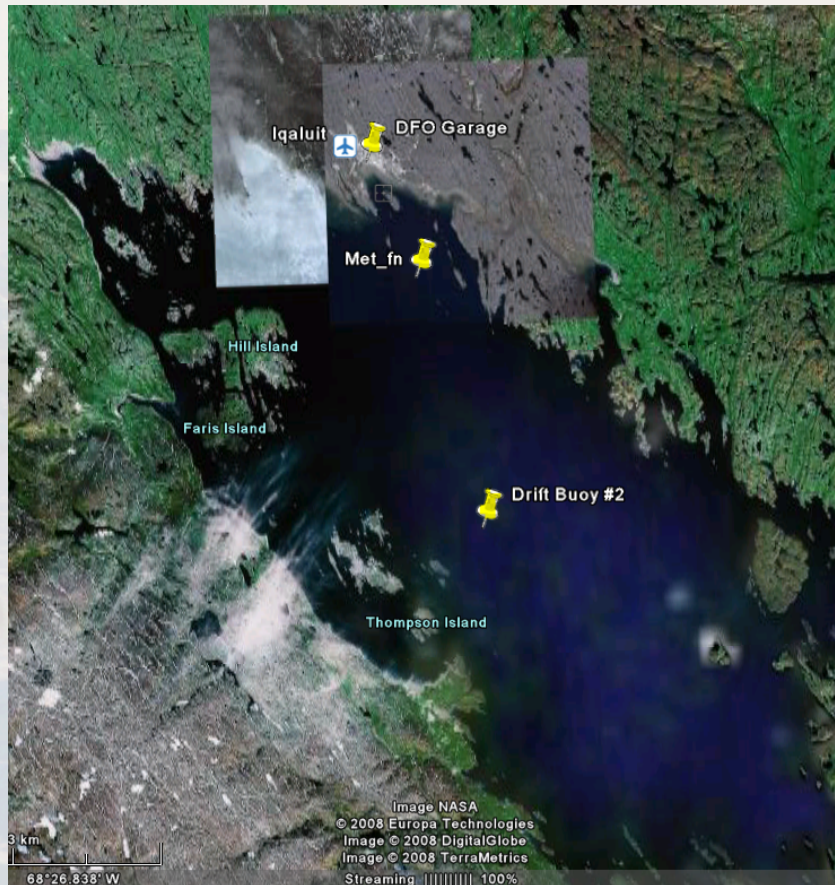
Acquired January 7, 2008; RGB (HH, VV, HV); 8m

Station Deployment: January 9, 2008 – May 20, 2008

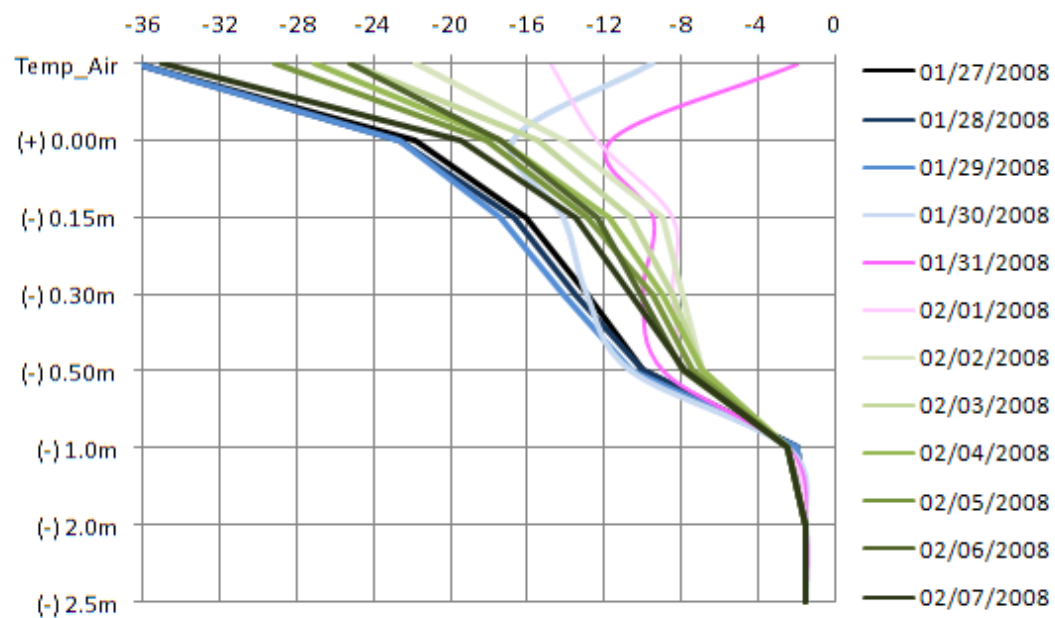
Met Station Description



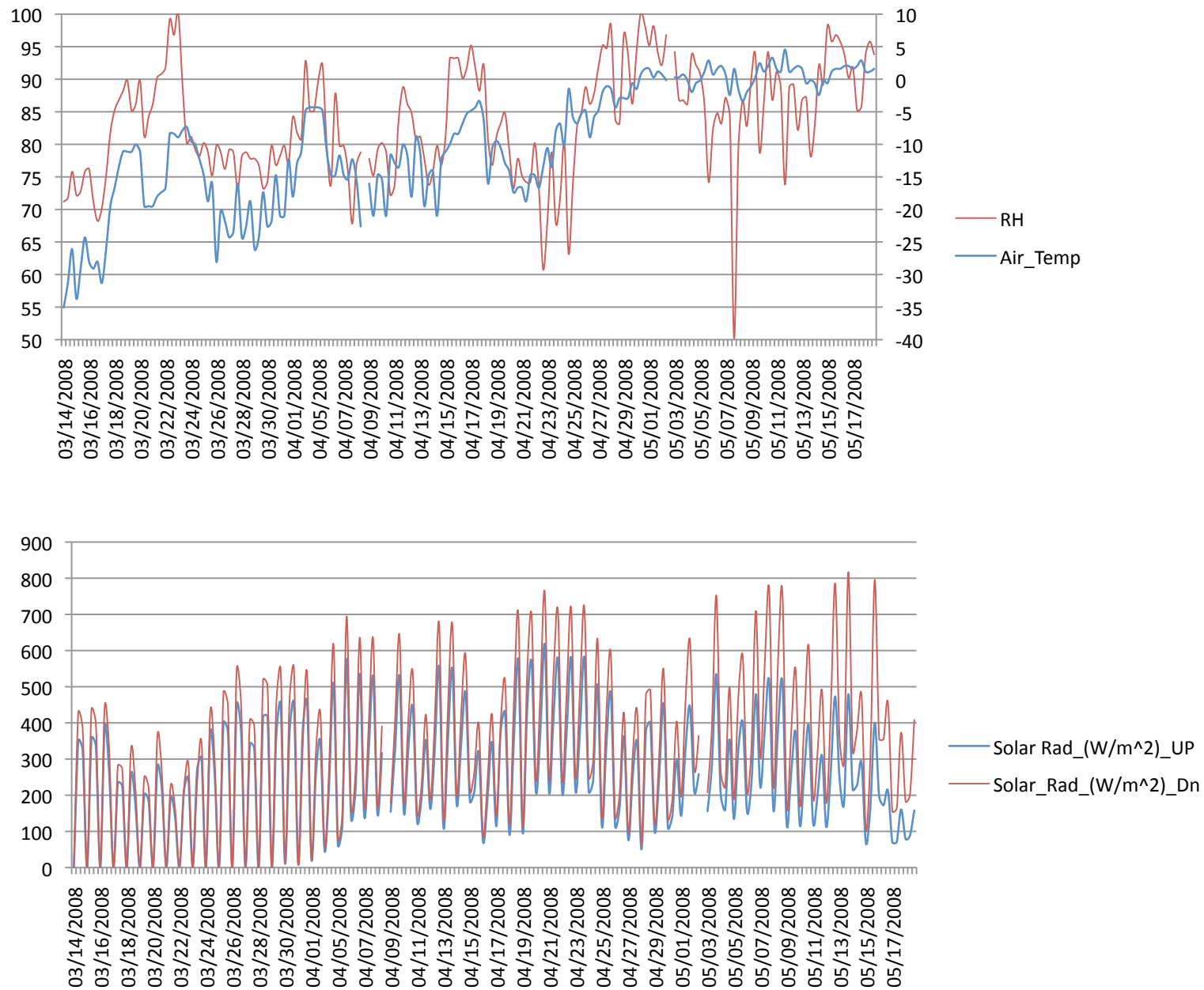
Ice tracking Buoy



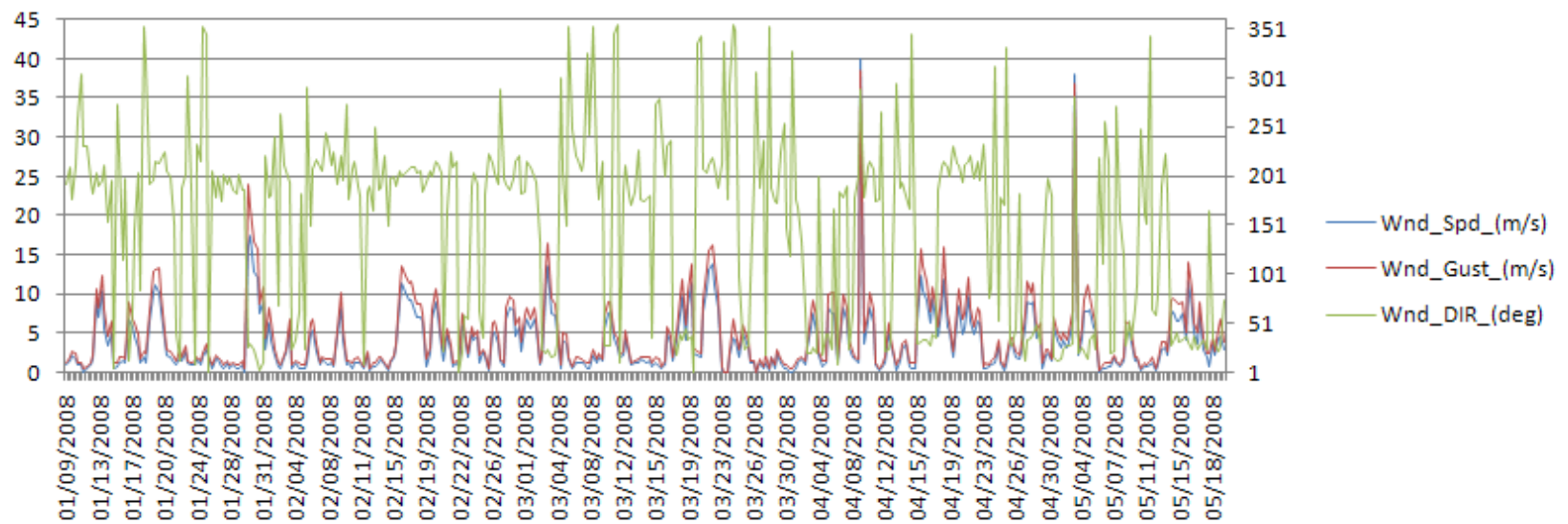
Sea Ice Temperature Profile: Jan 27 – Feb 7, 2008



Sub-sample of Met. Station Data, 1) RH, Air Temp; 2) Up & Downwelling Rad.



Wind Data

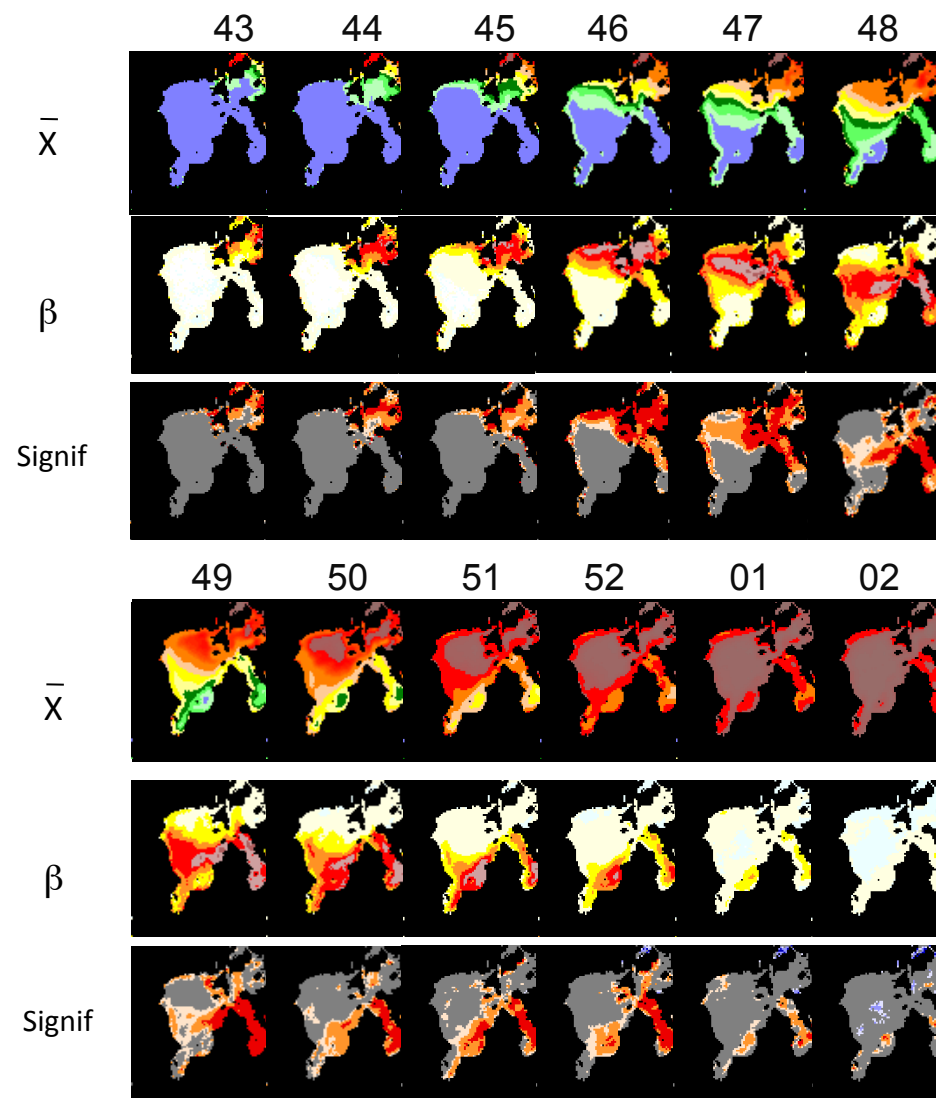


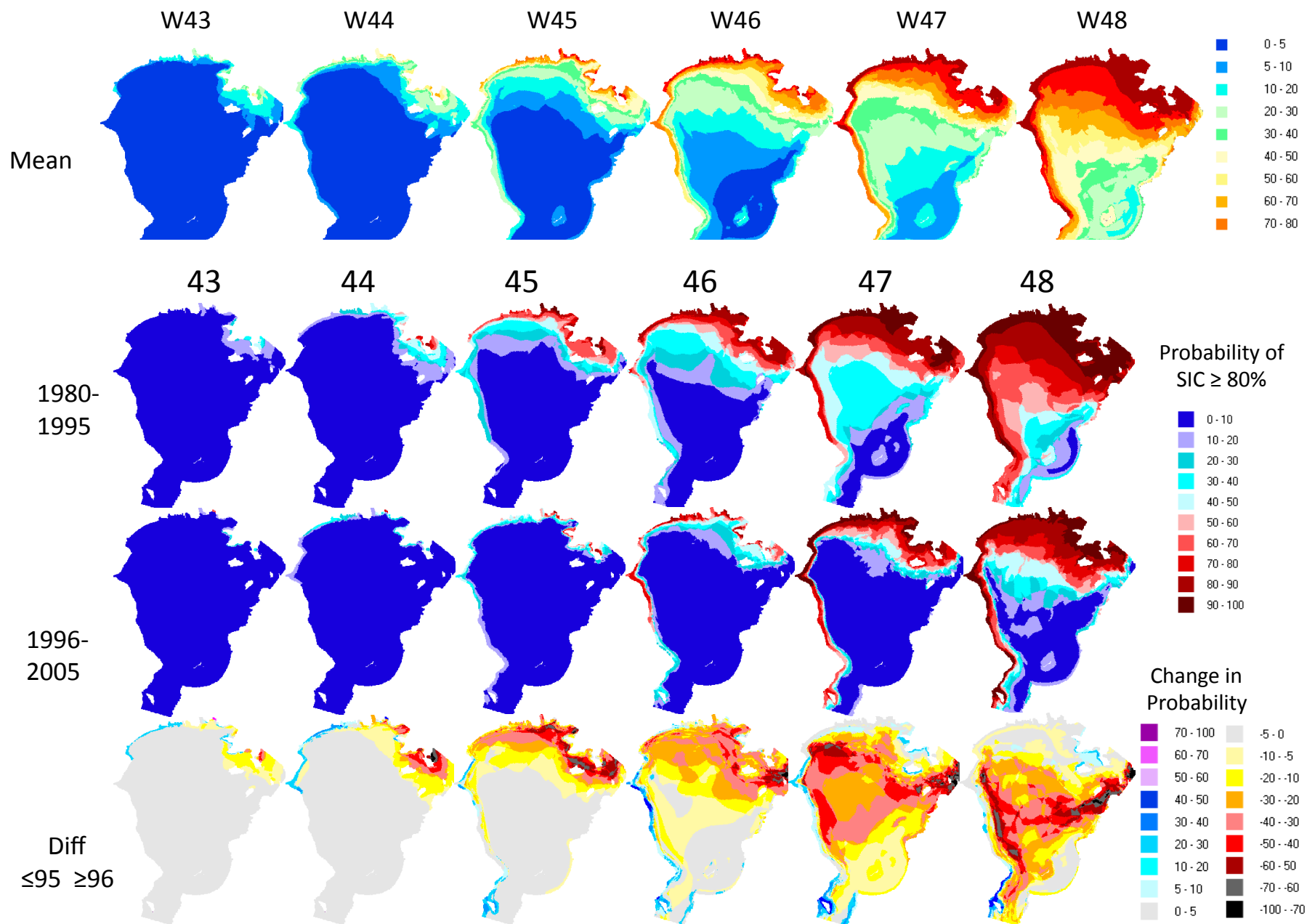
Sea Ice Related Work

- 1) Modeling – Ice Strength
- 2) Ice Climatology , historical Trends (1979/Present), frequency of open water per WOY as related to storm events., ice motion
- 3) RADARSAT imagery, daily SSMI (1979 –present) , daily AMSR-e (2001-present)
- 4) Interested in Feedback, if products are to be developed, I want them to be useful.....



Seasonal Ice extent and ice trends (CIS / SSMI) 1980-2007





Specific feedback as related to ice related products.....



