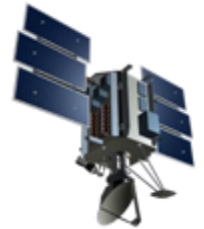
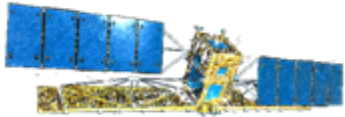


# U.S. National / Naval Ice Center (NIC)



Thomas Holden  
14 Jan 2014



USCG



USN



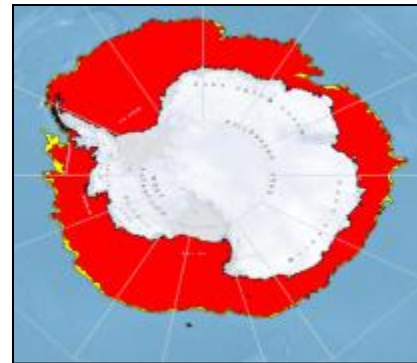
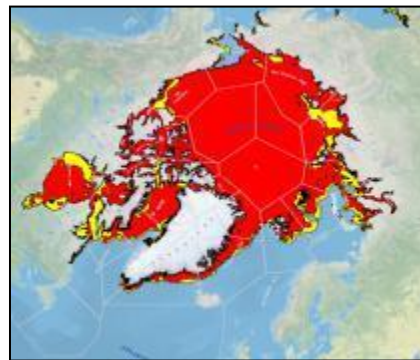
NOAA



# NIC Mission



- A multi-agency operational center operated by the United States Navy, National Oceanic and Atmospheric Administration, and United States Coast Guard.
- GLOBAL sea ice analysis and forecasting.



Coverage 20.6 Million Square Miles – Arctic, Antarctic, and Great Lakes

**Mission:** Provide the highest quality, timely, accurate, and relevant snow and ice products and services to meet the strategic, operational, and tactical requirements of U.S. national interests across a global area of responsibility.



# NIC Organization



**United States Fleet Forces Command**

**NOAA**

**COMMANDANT  
United States Coast Guard**

*Commander  
Naval Meteorology &  
Oceanography Command  
(CNMOC)*

*National Environmental  
Satellite, Data &  
Information Service (NESDIS)*

*Asst. Comm. Marine, Safety,  
Security, and Stewardship  
(CG-5)*

*Naval Oceanographic Office  
Stennis Space Center, MS  
(NAVOCEANO)*

*Office of Satellite and Product  
Operations (OSPO)/  
Center for Satellite Applications &  
Research (STAR)*

*Marine Transportation  
Systems Management  
(CG-55)*

*Office of Maritime  
Transportation Systems  
(CG-552)*

**NAVICECEN  
Naval Ice Center**

**National  
Ice Center**

*Mobility & Ice Operations  
Division (CG-5523)*

**National  
Ice Center**

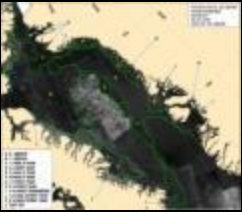


# Operations and Product Generation

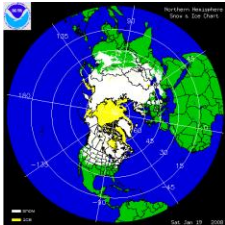
Human, Derived, Automated, and Reconfigured



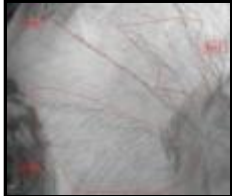
**Products (Routine/Special Support)**



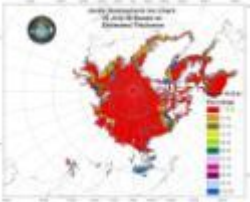
Annotated Images



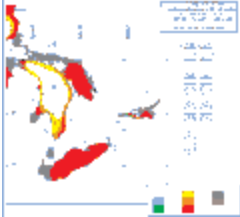
IMS snow and ice maps



Fractures, Leads and Polynas (FLAP)




Ice Thickness Estimations

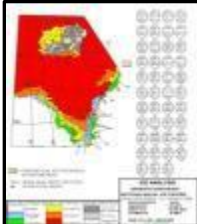



Ice Forecast Outlooks

**Expert Ice Analyses, Forecasting, and Quality Control**



Ingest 100GB Daily

Data Fusion  
 Derived Data Automation  
 Direct Data Dissemination



Satellite



Air Recon



Surface Observations



Modeling



Bouys





# Icebreaker Support



- Ice Concentration, Ice Edge, Est Ice Thickness, Route Recommendation
- Short Term Forecast (7-10 days)
- Various Formats: .kml; .kmz; ESRI shapefile; graphic; annotated imagery tailored to customer needs
- Healy – ftp imagery from MDA

**In order for NIC to plan, resource and provide operational support to its customers, those customers must clearly articulate their ice product requirements for current and future missions.**



# FUNDING SAR IMAGERY



- No identified source of funds after April 1, 2014
- SAR imagery is for SUBFOR support
- **'Adjust'** order if have route far in advance
- Outside agency obtain imagery and have delivered to NIC



# Questions?

