Connecting Data to Society for Science, Decision Making and Policy - Current and Future Considerations

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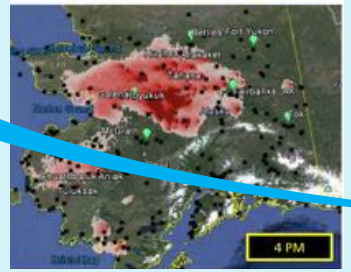
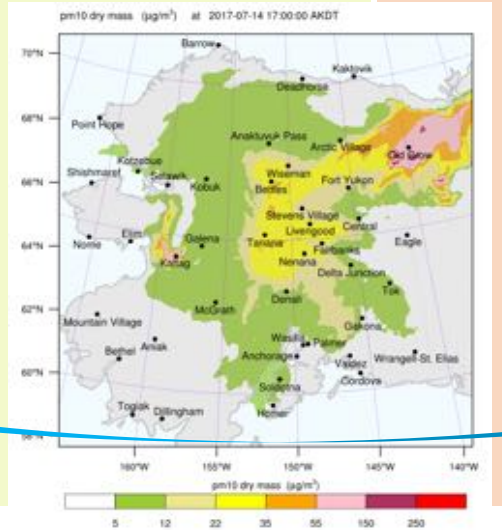
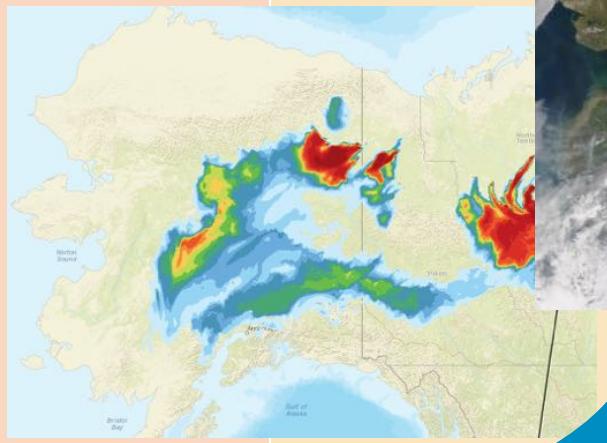
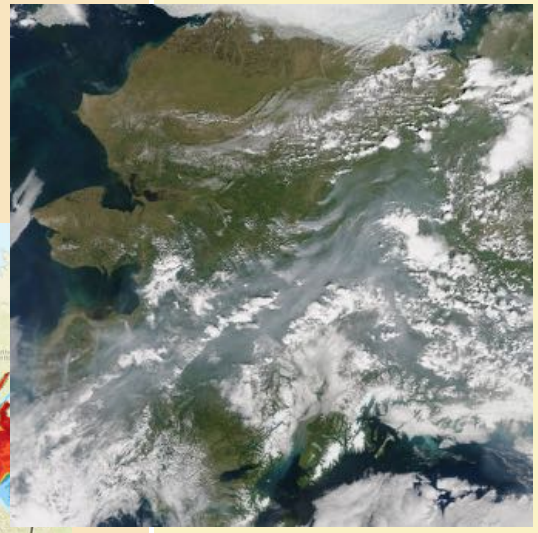








NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE
U.S. AON

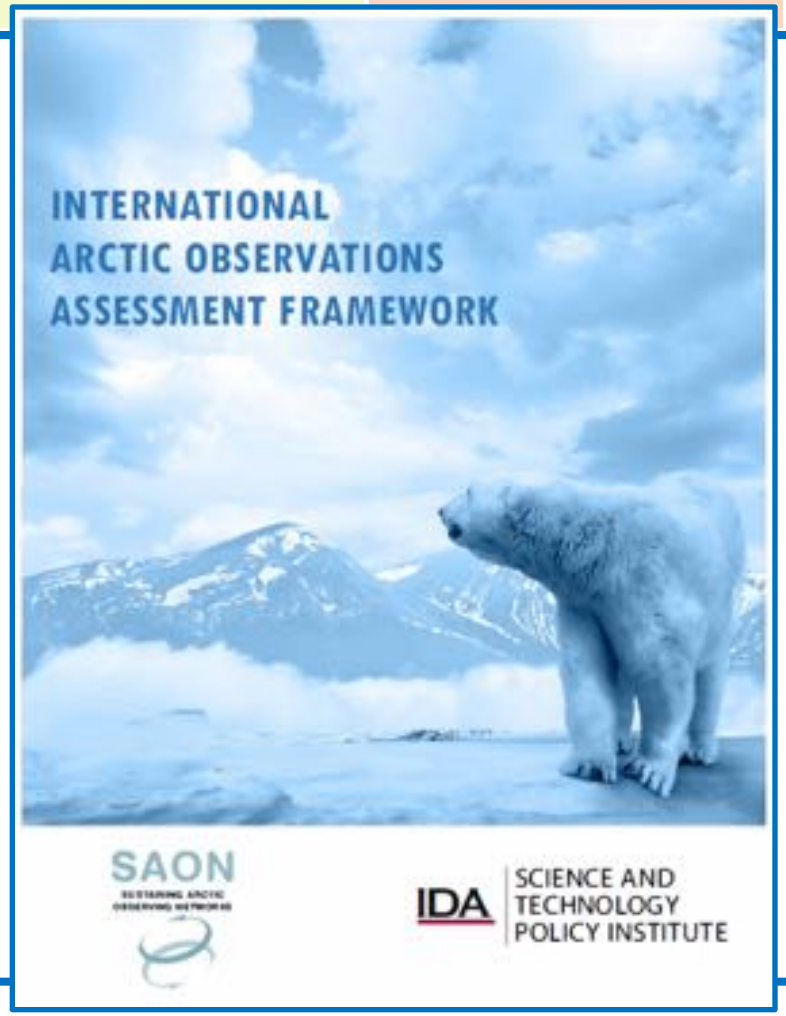
Developing Systems-Level View – Societal Benefit Drivers

I. Clarify the user base for the observing system, their needs

II. Identify barriers to efficient exploitation of system to meet those needs

III. Identify "essential variables" that can become foci for structuring inter-organizational efforts

IV. Improve readiness for the future observing system



1. Disaster Preparedness
2. Environmental Quality
3. Food Security
4. Fundamental Understanding of Arctic Systems
5. Human Health
6. Infrastructure and Operations
7. Marine and Coastal Ecosystems and Processes
8. Natural Resources
9. Resilient Communities
10. Sociocultural Services
11. Terrestrial and Freshwater Ecosystems and Processes
12. Weather and Climate

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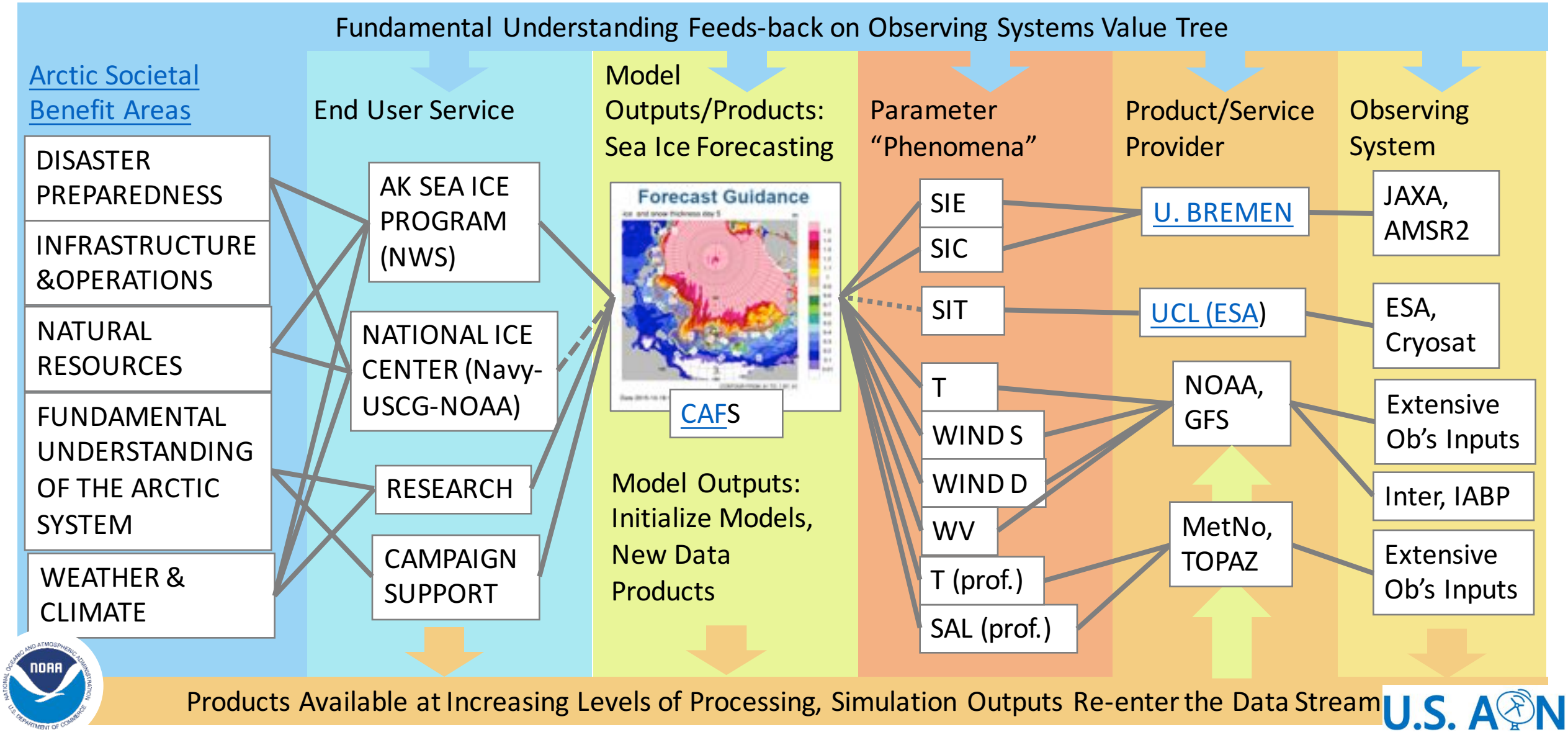
I. Clarify the user base for the observing system, their needs

Example from US AON Sea Ice Forecasting Task Team

Development Required



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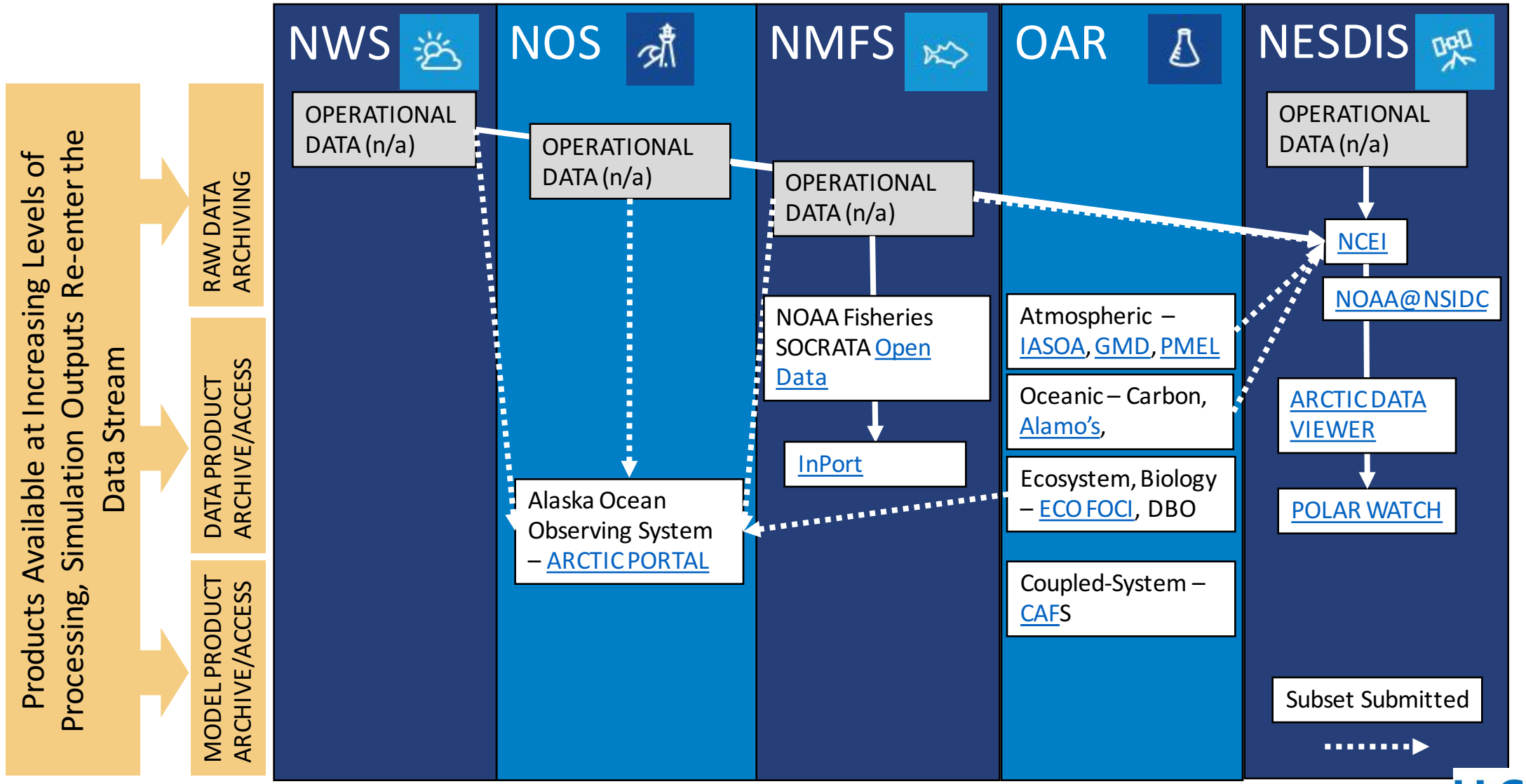
II. Identify barriers to efficient exploitation

Example from US AON Sea Ice Forecasting Task Team **Data @ NOAA**



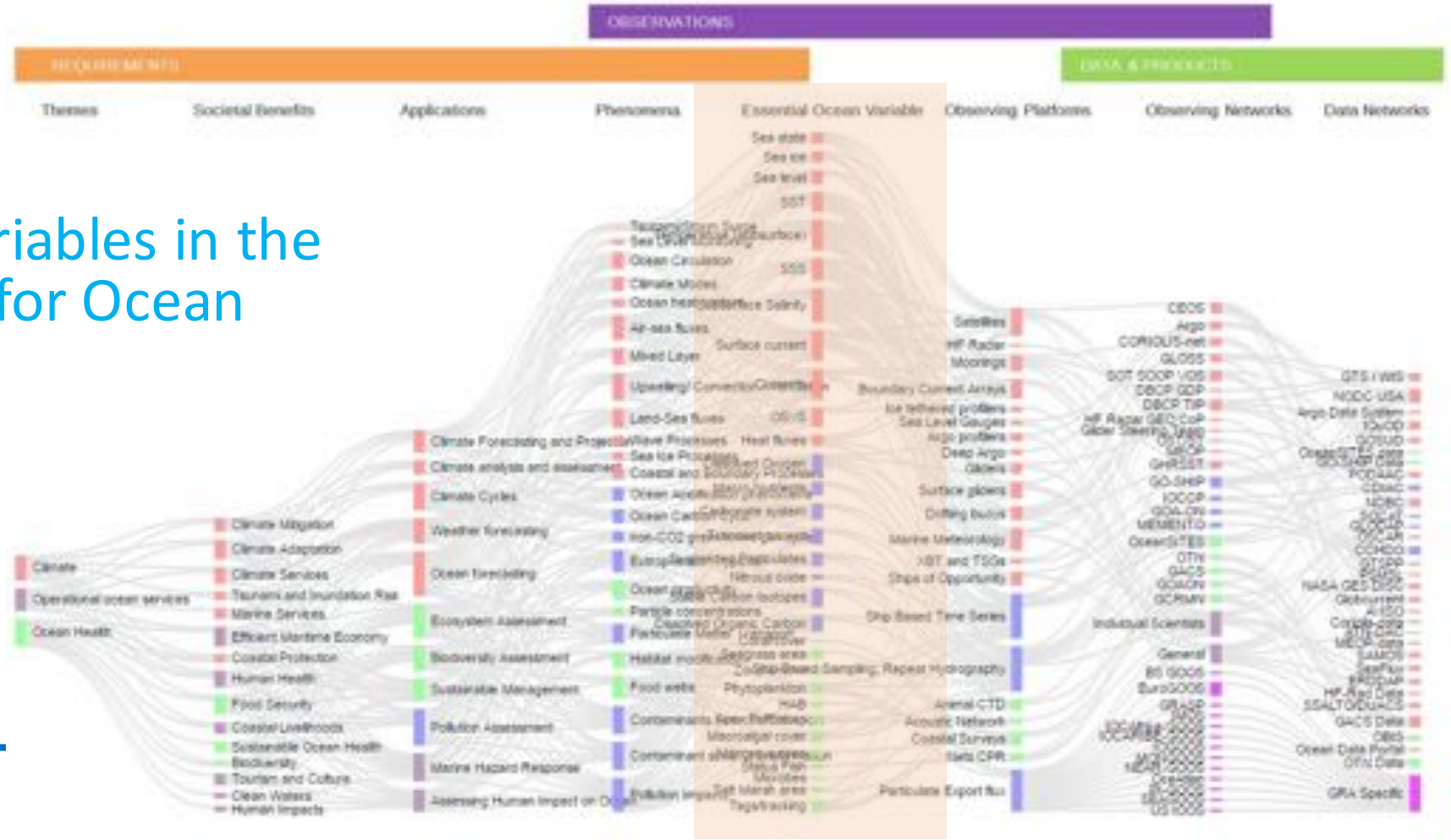
II. Identify barriers to efficient exploitation of system to meet those needs

From the Use Side: Spatial Resolution, Spatial Coverage, Temporal Resolution, Latency, Accuracy, Known Uncertainty, Machine Call Accessibility, Confidence/Knowledge about Product, Stability, Parameter Mismatch (e.g. Thickness v. Free Board), Awareness

From the Producer Side: In all of the above, what is required from the modeling community remains a challenge; lack of networking/standardization/best practice exchange across providers of similar data from in situ platforms; lack of consistency in how observing systems are understood (sensor v. platform v. transect v. etc.)

III. Identify “essential variables” that can become foci for structuring inter-organizational efforts

Essential Variables in the Framework for Ocean Observing



IV. Improve Readiness for the Future Observing System - What might the future hold?

What Technologies will dominate the future observing system?

How might PPP's impact data accessibility?

Dr. Neil Jacobs

Is Open Data making US less competitive globally?

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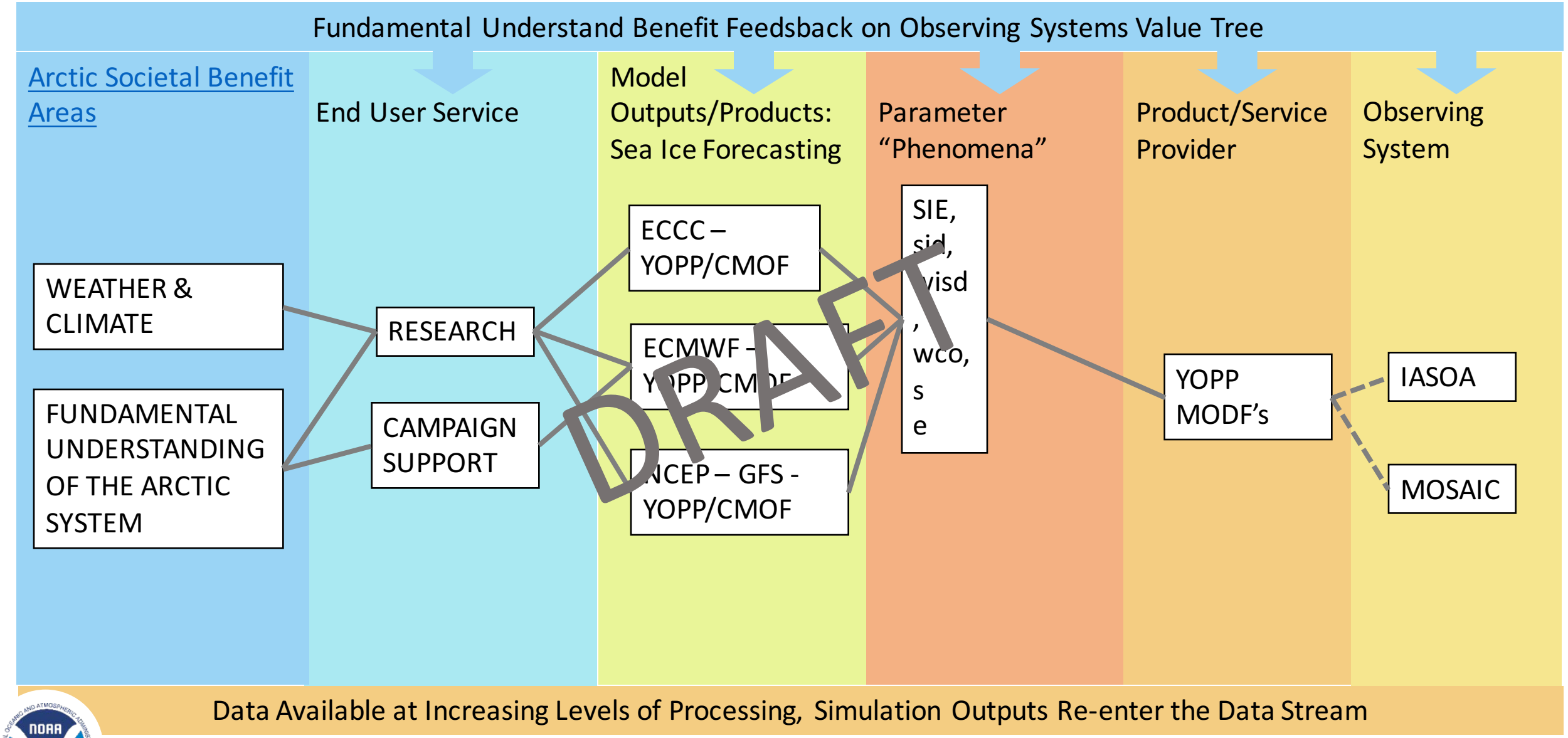
- **How can data interoperability inform the systems level view?**
- **How can the systems level view inform data interoperability?**
- **What likely and unlikely scenarios might disrupt interoperability ”design”?**

THANK YOU!

Sandy Starkweather @metaarctic

Example from Atmospheric Merged Observatory Data Files (MODF)



Observing System-Benefits Mapping Assessment for Smoke Detection & Forecasting

ACTION: Identify resources and link dependencies for key End User Services