

An integrated system of observations driven by societal benefit: A Roadmap for Arctic Observing and Data Systems (ROADS)



The need:

- The pace, extent and magnitude of Arctic changes are unprecedented
- Observations inform actions in the face of these changes
- Sustaining Arctic Observing Networks (SAON) has been given a mandate to facilitate

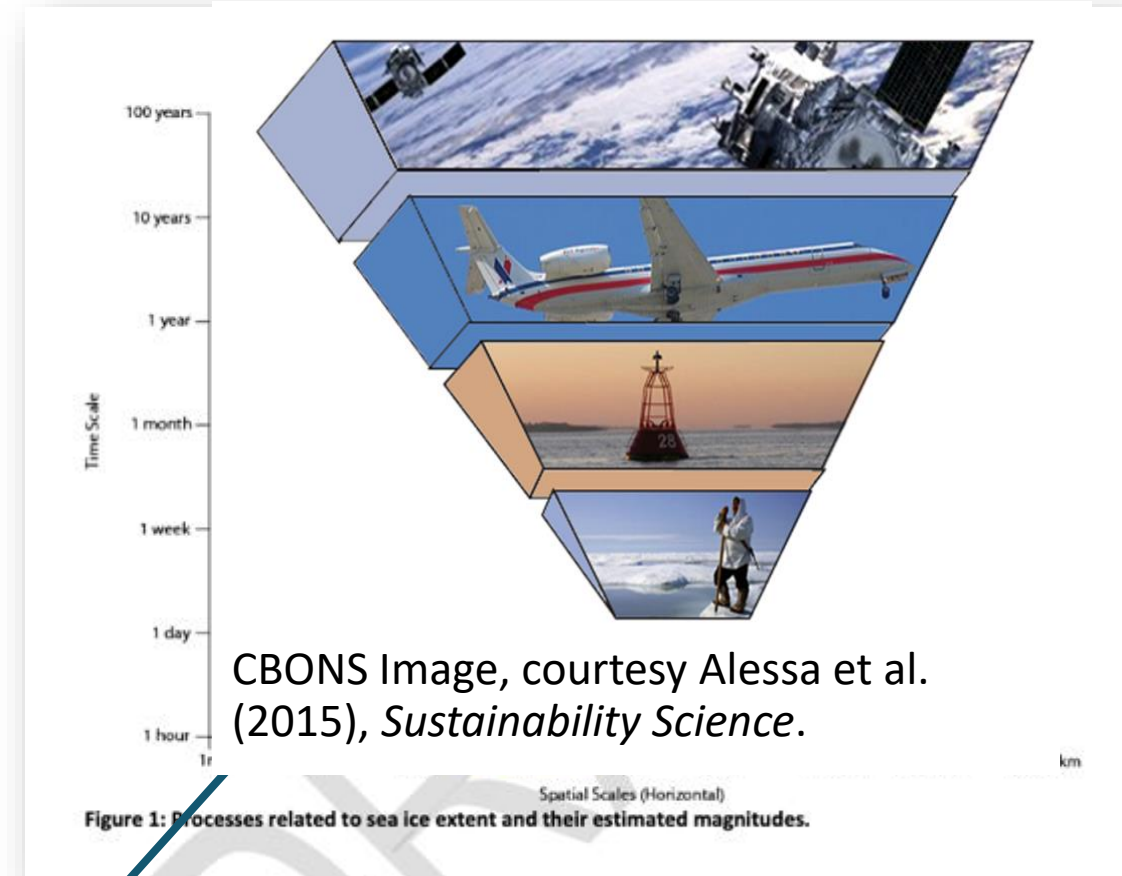
ROADS Principles & Assumptions:

- It must include funding for Indigenous Peoples' equitable partnership and active participation;
- It should complement and integrate, without duplication, the current planning approaches used by existing efforts (regional to global);

ROADS Element: *Shared Arctic Variables (SAVs)*. SAVs are **conceptually broad phenomena** that provide a structured interface for coordination and collaboration in support of societal benefit.

- Identified for their criticality to achieving Arctic societal benefit
- Defined by their observing system requirements
- Implemented through specific recommendations based on best available technology and practices.

SAVs are developed in Expert Panels. Get involved: www.arcticobserving.org, email: info@arcticobserving.org



CBONS Image, courtesy Alessa et al. (2015), *Sustainability Science*.

Adopting **SEA ICE** as *Shared Arctic Variable* would extend requirements towards lower latency and spatial scales/locations relevant for local activity (e.g. fast ice)