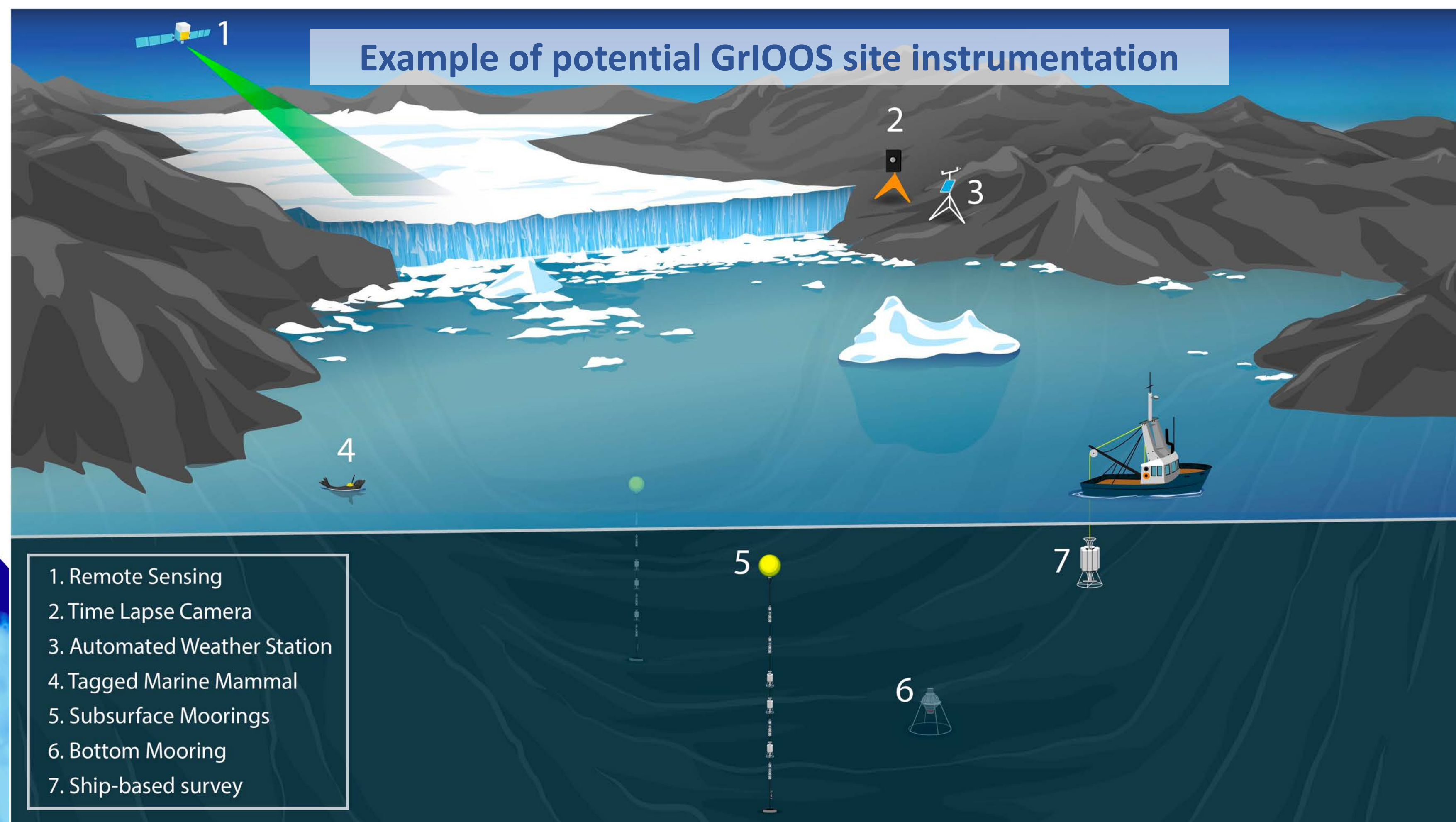
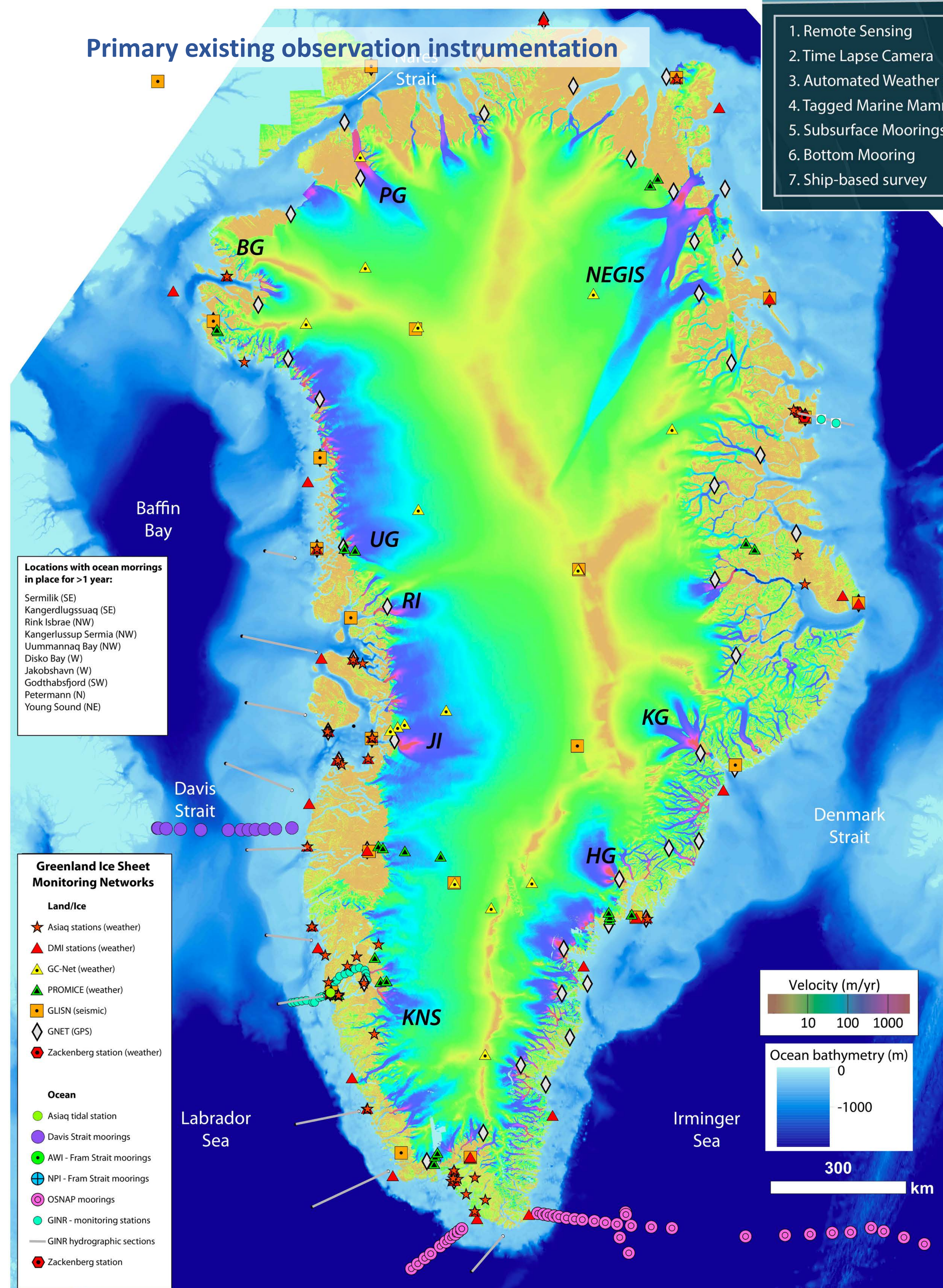


# Observing Arctic land ice change must be a scientific priority.

Understanding the timing, location, and magnitude of Arctic ice loss is critical for decision making at multiple levels. Quantifying current ice loss and accurately project future ice loss, and related sea level, requires continued improvements in understanding the ongoing evolution of land ice. **Development of a coordinated, long-term observation program is necessary.**



## Primary existing observation instrumentation



While surface melt and snowfall is observed directly through the Programme for Monitoring of the Greenland Ice Sheet (PROMICE - ▲) and Greenland Climate Network (GC-Net - ▲), little is known about many dynamic marine-terminating glacier processes. To meet this need **we strongly recommend creating a Greenland Ice Sheet-Ocean Observing System (GrIOOS)** and evaluation of necessary observing programs for capturing complementary data from other Arctic land ice areas. **Data from a comprehensive observing program will enable scientific advances that fundamentally address the needs of policy and decision makers.**

Reference: **Straneo, F. et al. (2019), The Case for a Sustained Greenland Ice Sheet-Ocean Observing System (GrIOOS), *Frontiers in Marine Sciences*, doi:10.3389/fmars.2019.00138.**



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