Mesozooplankton-microbial food web interactions in a climatically changing sea ice environment

P.I.'s
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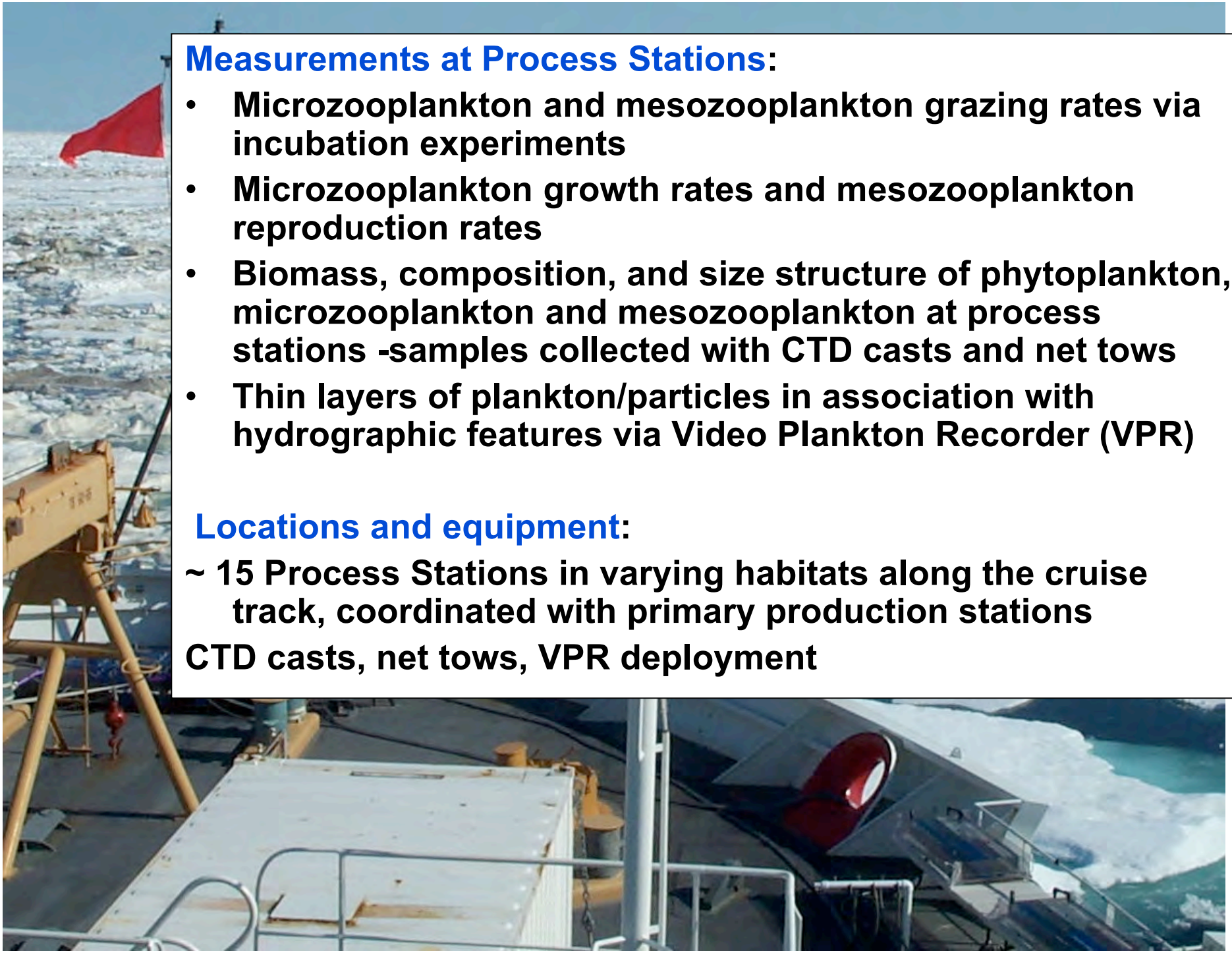
Major objective:

- Field study of impact of changing sea ice conditions on planktonic food web structure

- Focused on microzooplankton and mesozooplankton grazing rates and the fate of phytoplankton blooms/ice algae in the Bering Sea during spring

-Coordinate with: Gradinger ice algae; Sambrotto/Sigman new prod & N cycling; Moran/Lomas prim prod; Harvey/ Lessard euphausiid rate processes



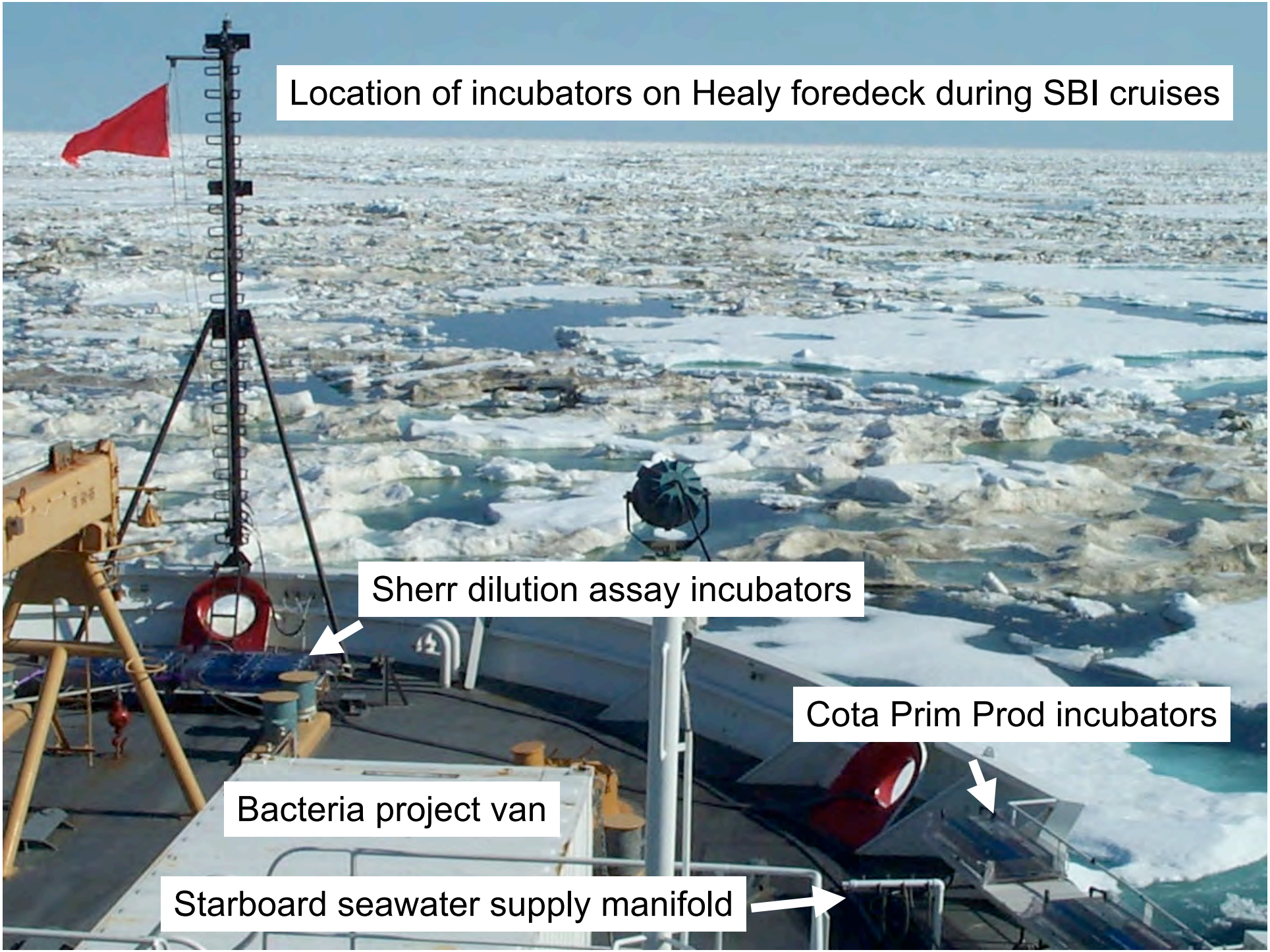
Measurements at Process Stations:

- Microzooplankton and mesozooplankton grazing rates via incubation experiments
- Microzooplankton growth rates and mesozooplankton reproduction rates
- Biomass, composition, and size structure of phytoplankton, microzooplankton and mesozooplankton at process stations -samples collected with CTD casts and net tows
- Thin layers of plankton/particles in association with hydrographic features via Video Plankton Recorder (VPR)

Locations and equipment:

~ 15 Process Stations in varying habitats along the cruise track, coordinated with primary production stations

CTD casts, net tows, VPR deployment


Location of incubators on Healy foredeck during SBI cruises
Sherr dilution assay incubators
Cota Prim Prod incubators
Bacteria project van
Starboard seawater supply manifold


Port seawater supply manifold
Sherr dilution assay incubators

Campbell-Ashjian mesozooplankton grazing plankton wheel incubator

Port seawater supply manifold