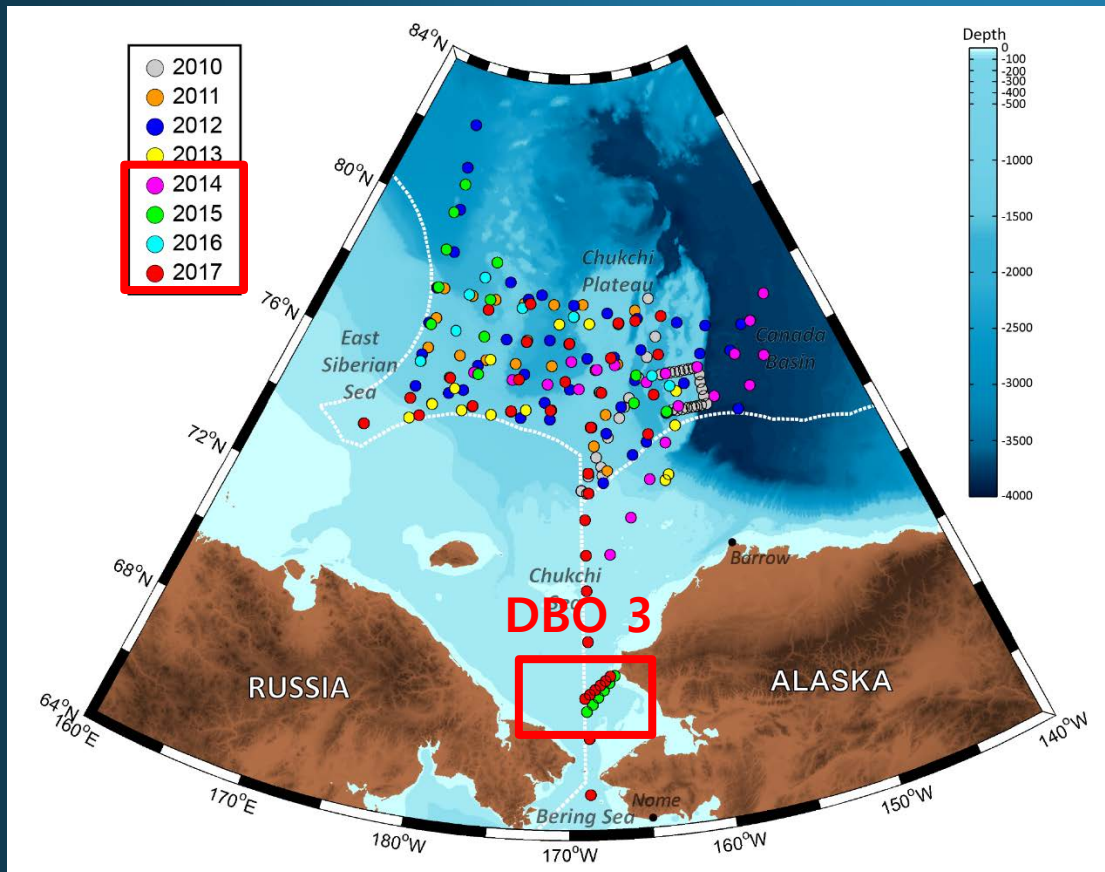


KOPRI Biological Oceanography (DBO)



Major observations

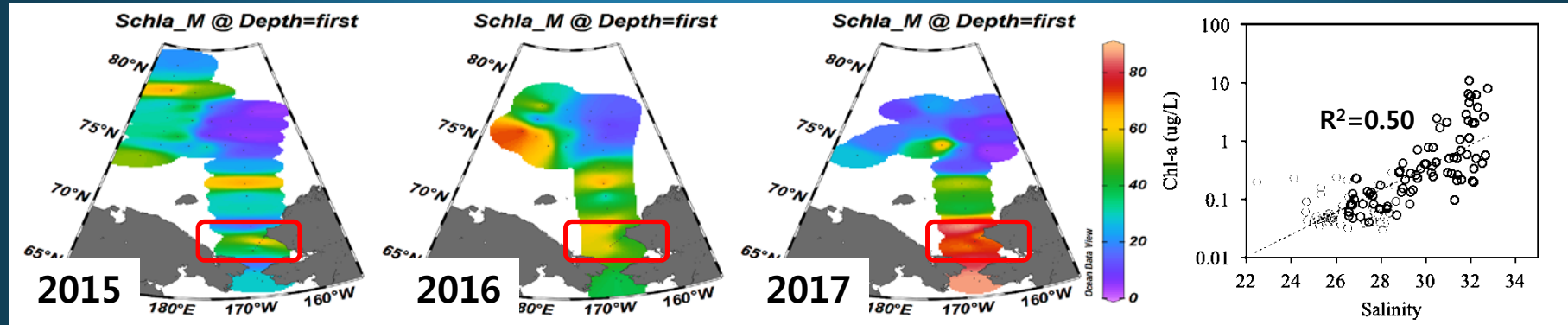
- **Phytoplankton** community structure, primary production, and **Physiology**
- **Microzooplankton** community structure and grazing impact
- **Mesozooplankton** population and community structure

Pacific Arctic Group fall meeting
November 6 – 7, 2017
Seattle, USA

Phytoplankton community and physiology

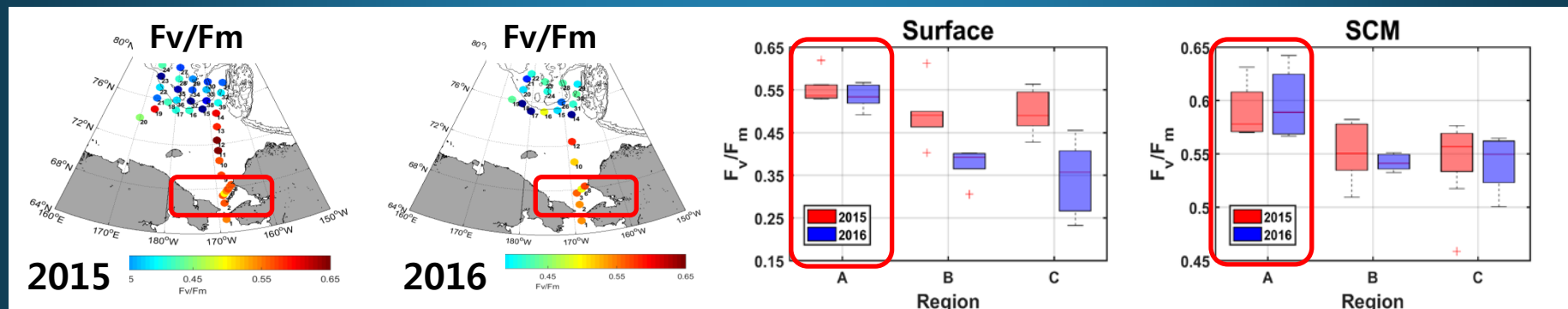
Phytoplankton community

- Strong seasonal variation and positive relationship with salinity
- Phytoplankton biomass is likely to be influenced by water mass contribution



Phytoplankton physiology

- Fv/Fm represented similar values in the two different sea ice retreat time
- Physiology might not be controlled by stratification and nitrate limitation

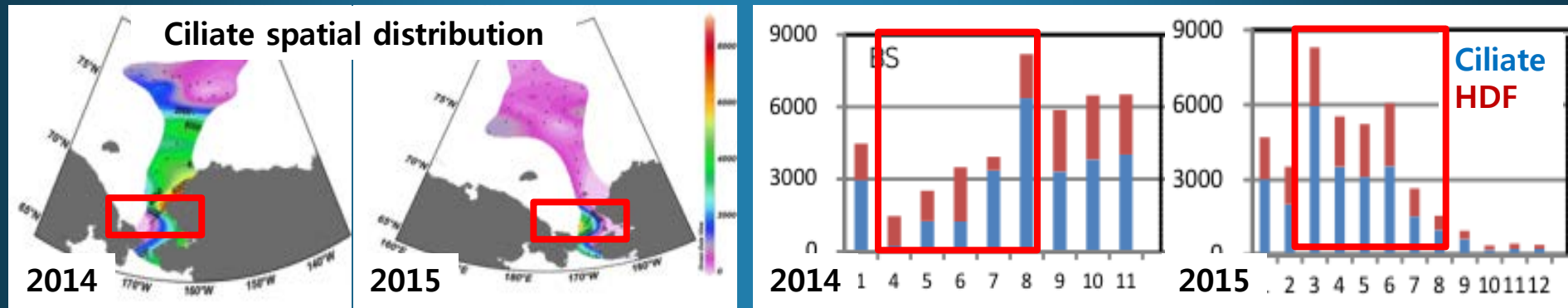


Zooplankton community and grazing impact

Microzooplankton community

*HDF: Heterotrophic dinoflagellate

- Ciliate and HDF are significant component of microzooplankton populations
- Picophytoplankton is the important factor for spatial dynamics of protozoa.



Mesozooplankton community

- Planktonic larvae and copepods were dominant groups in the zooplankton
- Species diversity and copepods proportion has increased from 2014 to 2016

