

Research Expedition Details-RV ARAON, Korea

Dates: July 4-Oct 4, 2022

Departs from: Incheon, Korea

Returns to: Incheon, Korea

Research Area Location: Northern Bering and Chukchi Seas

Vessel: ARAON

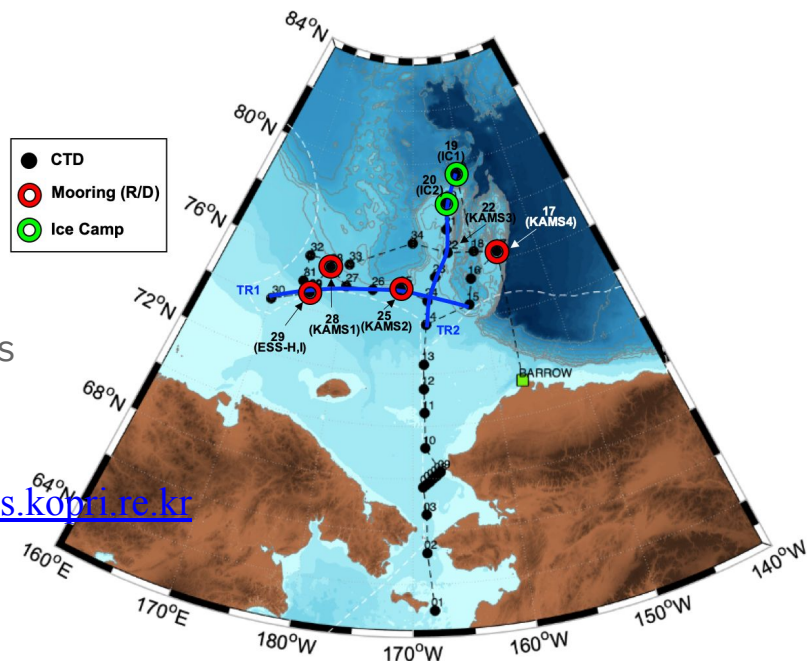
Research website: Korea Arctic Ocean-data System; <http://kaos.kopri.re.kr>

Project supported by: K-AWARE (KOPRI), Korean government

Contact information: Eun Jin Yang, ejyang@kopri.re.kr



RV Araon



Key Scientific Questions & Motivations

Objectives:

- To identify key environmental parameters (physical and biogeochemical) in rapid transition due to the sea-ice decrease in the Pacific Arctic Ocean and predict environmental change patterns
- To development of satellite-based sea ice change observation system
- Ship-based, Ice camps, Satellites

Sampling:

- Surface and upper-air meteorological variables: understanding and prediction of weather events
- Radiative fluxes and clouds: clouds' role in radiation budget, cloud amount & vertical distribution
- Identify the variation of water mass distribution and structure, circulation pattern in the regional of interest
- Chemical and biological oceanography: sea ice and water column, trophic and food web structure
- Map geological features/structures in the Arctic continental margin