

# ARM/ASR 2020 meeting: break-out session

## COMBLE and high-latitude clouds over open water

hosts: Bart Geerts, Univ. of Wyoming  
Mikhail Ovchinnikov, PNNL

### Objectives

- *Use of data from COMBLE, MARCUS, (AC)<sup>3</sup> ..., to describe the high-latitude shallow convective cloud regime during post-frontal cold-air outbreaks over open water*
  - BL processes, mesoscale dynamics impacted by moist convection
  - Aerosol-cloud-precipitation interactions
- *Approaches and coordination for SCM/LES/CRM simulations: model initialization and validation dataset*
- *Link to GCMs/ESMs: known climate model biases*

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### Agenda

- *Presentations* (up to 10 min each)
  - Brief Intro, agenda, polling questions
  - Aerosol-cloud-precipitation interactions in mixed-phase clouds over the Southern Ocean (Greg McFarquhar)
  - Overview of data collected in COMBLE (Nathan Wales)
  - Cloud properties during marine cold air outbreaks in COMBLE: a preliminary survey (Bart Geerts)
  - Case study of a CAO in COMBLE (Yonggang Wang)
  - Large Eddy Simulation of CAO Clouds in the Fram Strait, validated against airborne and satellite measurements (Roel Neggers)
  - An observational and modelling case study of post-frontal boundary-layer convection over the Southern Ocean in MARCUS (Zachary Lebo)
  - Status and calibration of the radar data (Alexis Hunzinger)
  - Preliminary plans for VAPs and model forcing datasets in COMBLE (Damao Zhang)
- *Discussions* (20 min each)
  - Approaches for SCM/LES/CRM model setups, initializations, and coordinated evaluation in COMBLE, links to climate models (moderator: Mikhail Ovchinnikov)
  - Data product needs (moderator: Mike Jensen)

# zoom webinar etiquette

- All: please show your full name
- Everyone is muted by default
- Attendees will only be able to “Raise Hand” and use Q&A feature
- “Chat” feature is restricted use
- Mikhail will monitor the Q&A list, and the chat. He can allow attendees to talk, or promote them to “panelists” if needed for the discussion
- Phone-in attendees can “Raise Hand” using \*9 and can mute/unmute using \*6
- This session will be recorded