Break-Out Group Summaries

SeaState Modeling/Forecasting Workshop

2 FEB 2016

BOG 1 – Observations

- Datasets needed to validate/verify models
  - Large-scale:
    - Quick and dirty for starters (state variables), spatial integration
  - Mesoscale:
    - Surface temps
    - Atmos. boundary layer profiles; ice drift velocity
    - Sea ice thickness; snow depth
  - Process Understanding:
    - Surface Energy Budget Terms – this is where the physics come into play, critical for coupled modeled systems
    - Data should inform tendencies, energy budgets, growth rates vs. sea ice edge or a specific metric
    - Aggregating cases wrt overall conditions – don't worry about geo-referenced obs but collate cases that illustrate coupled process issues
    - Ocean Terms – Stratification; heating; obs needed for models

BOG 1 cont.

- Validating satellite obs
  - (those are better match to models)
- Assimilation study to assess needs
- Importance of providing uncertainty w/ each obseration
- Create common dataset for model intercomparison study
- Caution of tuning model to match single case/cruise
  - Want function response of models

- Future opportunities
  - CANAPE 2016 – Sikuliaq underway data only
  - SODA – 2018
  - MOSAiC – 2019