

BOG 3

Intercomparisons/Metrics

Focus Questions

- What are our goals for intercomparison or coupled-process improvement?
- How can we best evaluate skill?
- What metrics are standard and which are best for evaluation?
- Would it be useful to run models with a hierarchy of complexity?

Synopsis: Group 1

- Emphasized need for verification
 - Significant issue: spatial/temporal data availability
 - Need long-term, consistent verification data set
 - Reanalyses poorly suited in the Arctic
 - Observational records sparse
 - Need benchmarks
 - Combine available models into ensemble
 - Forecast skill not necessarily related to quality of physical parameterizations
 - Problems identifying independent data

Synopsis: Group 2

- Emphasized need for model intercomparison project
 - Should be done in hierarchy => simple to complex
 - Validation/verification obs. Not priority
 - Much to be learned from differences between models
 - Coordinated data denial experiment?
 - Need to compile/standardize campaign data
 - SHEBA, ASCOS, ACSE, MIRAI, Healy
 - NWS Arctic Testbed
 - MOSAIC, YOPP in the future 2017-2019

Synopsis: Group 3

- Emphasized need for process-oriented diagnostic studies
- Focus on SeaState and similar
 - Classifying data into conditions
 - Leveraging the full column of observations:
ocean=>ice=>BL=>troposphere
 - How well do models reproduce ice growth rates, energy budgets, tendencies