

# Summary Notes MJO

# Radar Big Challenges

- Merge 3 C-band radars (SMART-R, Mirai and Revelle) to develop bigger picture of clouds/precipitation as MJO develops
  - Merging aircraft and radar data
- Synthesizing atmosphere and upper ocean radar data on Revelle
  - Propose workshop in June to develop strategies
- Develop interface between radar and modeling efforts (how will the radar data be used in the models?)
- Radar data analyzed to ID physical processes to ID atmosphere/ocean interactions—this research leads to use in models

# Radar Challenges (cont)

- Improve microphysical understanding of the clouds (using polarimetric observations)
- LES, SCM, Cloud Resolving and Regional models have much to gain from the radar data
- Consider NCAR Summer Colloquium for radar/model integration
- Possible use of DYNAMO data for global models
- Comparison of DYNAMO radar data with other radars (e.g. Darwin)

# General Workshop Issues

- Cloud population and water vapor variability need to be analyzed together
- Development of high resolution coupled model for atmosphere ocean interface
- Suite of models to address multi-scale questions
- DYNAMO is unique opportunity to merge the observations and model activities at all relevant scales (e.g. LES to global)