

# Radars and Convection Poster Sessions

# Data Products

- Data products DYNAMO
  - NOAA P-3 Tail Radar – Z, CZ, V native submitted
  - SPOL – Z, V, Pol native and gridded available, PID needs improvement
  - SMART-R – Z, V,  $H_{top}$  gridded available, Sector mask needed, LH by request
  - Mirai C-band – Z, V, C-S,  $H_{top}$  gridded volume available, surveillance scans to come
  - TOGA C-band – Z native available, V in progress
- Data products ARM
  - CSAPR (Manus) –  $Z_{corr}^*$ , V, gridded to come
  - KAZR (Gan) – Merged SPOL/KAZR Z, microphysics and radiative heating available; KAZR (Manus) to come
- Gan DSD and NOAA P-3 Z-R calculations
  - All facilities have rain product, but need updated Z-R
- Improved convective-stratiform partitioning

# Science Results

- Cloud Population
  - Boundary layer cloud formation
  - Transition of cloud populations
  - Life cycle of precipitating clouds
- MJO Convective Characteristics
  - Discharge-recharge not supported
  - Deeper convection with more stratiform during active MJO
  - KWs modulating MJO convection
  - MJO convection over land
  - Additional ITCZ convection differs from MJO
- Microphysics and Kinematics
  - Ice species impact during MJO
  - Relating kinematics to HID

# Remaining Issues

- Radar data catalog should include product identification table
- Future research:
  - Evolution of cloud population
  - Transition from non-precipitating to precipitating
  - Microphysical and kinematic properties
  - Environmental influence (i.e., waves, moisture)