Cloud Life Cycle Working Group

What is CLWG?

- Leadership: Tony Del Genio, Matthew Shupe
- Steering committee: In transition towards explicit representation by thematic groups
- Focus groups: More advanced organization, often cross-cutting multiple WGs. Persistent.
- Thematic groups: Topical areas that have been prioritized for enhanced attention.
- Interest groups: Evaluation stage.

Status of CLWG Research

- Developing leadership
- Obs and modelers working together
- Groups designing campaigns
- Considering new needed measurements
- Organizing group modeling activities
- Helping to characterize new instruments
- Organizing AGU sessions

Status of CLWG Research

Focus Groups:

Vertical Velocity: Moving towards comprehensive "best estimate" product.

QUICR: Proposing observational activity to help address key deficiencies.

Status of CLWG Research

- Initially 5 thematic groups
 - Some coordination with IOP activities (MC3E, AMIE)
 - Modification based on attendance/involvement
 - Pulled back on shallow-to-deep convective transitions theme.
- Most poster submissions were in our specified themes..... Does this mean we have a reasonable set of areas?

Status of CLWG

- Ice Physical and Radiative Properties/Processes
- Warm Low Cloud
- Phase Partition
- Mesoscale Convective Organization
- Madden-Julian Oscillation
- (Interest in Entrainment)

Translator Report

CLWG Directions

- Continuity. Meeting at each meeting helps to keep activities moving along.
- Leadership. Needed to maintain forward progress.
- Engagement. Pl participation to identifying activities and following through on participation.
- **Thinking big**. Designing experiments or major activities. Innovative use of facilities.

CLWG Directions

- Coordination. Build linkages. i.e., w/ CAPI (ice nucleation, aerosol impacts on warm clouds or convection), w/ FGs (campaigns, product development)
- **Communication:** Consider what is needed to facilitate activities. Web pages, trello, etc.

Impact of ARM reorganization

opportunities and challenges

- 1. SGP: more spatial measurements, operational LES.
- 2. NSA: enhanced observations, UAS/tethered balloon, future operational model?
- 3. ENA (Azores): Ramping up observations
- 4. What to do about future tropical research?
- 5. Long term possibilities for US supersites