NOTES

Key Behaviors: --- Are these the things that CMMAP has advantage in studying? Are these the CMMAP foci?
1. Deep (moist) convection – don’t forget frontal convection – AND Shallow (aka Boundary Layer) Convection ---- these are about coupling of convection to larger-scale circulation
2. “Storms” (convective AND baroclinic) --- again coupling

Key Statistical Relationships: --- Metrics for Benchmark Runs? --- What kind of Runs?
---- We don’t do this but we provide explanations of what affects these relationships?
1. Diurnal Cycle (land-ocean)
2. Land-ocean (latitude) differences in vertical distribution of cloud-precipitation mass
3. Size distribution of convective and baroclinic systems
4. Monsoons & Cyclones
5. MJO & ENSO
6. Distribution of precipitation & radiation perturbation intensity and duration

Crucial Tests: --- What’s the Goal --- One model to be developed or better understanding of how to represent some processes in global models?
Given the State of the Atmosphere, what should the cloud/precipitation properties be?
Given the Cloud/Precipitation properties, what are the effects on E&W?
So how do you infer something useful about climate feedbacks?
NOTES

Key (“Innovative”) Tools: ----- OBS & MODEL
1. ISCCP-TRMM-CLOUDSAT-CALIPSO Emulators
2. Regime Analysis Tools including evolution
3. Diagnosis of E&W AND momentum exchange processes

----- Model output directly into Regime Classification with Diagnosis;
This is a CPU vs Storage trade-off