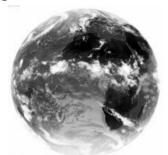


Overarching Questions

How do the micro to meso scale atmospheric processes control global Water and Energy Exchanges?





- → radiation budget
- → hydrological cycle→ atmospheric circulations







How will GASS help address these questions?

• By coordinating projects/activities:

Daily cycle precipitation (DCP)

Aerosols and precipitation (GAP)

Upper tropospheric clouds (UTCC)

Land surface temperature, snowpack and precipitation (LS4P)

Mesoscale organization of shallow convection (EUREC⁴A)

Mesoscale organization of deep convection

Cold air outbreaks (COMBLE+)

Convective momentum transport and its impact on the tropical circulation (Friction)

Air-sea coupling

Global Cloud Resolving Model simulations (DYAMOND)

Coupled models nudging

- Sharing info and facilitating access to relevant model outputs and observations (e.g. how-to's, hackathons, seminars)
- Sharing process-oriented diagnostics and codes (e.g. MCS tracking)
- Organizing workshops that will bridge expertises and communities around key questions
- Connecting to other <u>WCRP partners</u> (e.g. GDAP/GLASS/GHP, CFMIP, WGNE)