Science Questions

- What is dust influence on cloud microphysics and dynamics?
- What is the direct effect of dust on radiative transfer?
- How do MCS evolve from continental to maritime regime?
- Do MCS undergo transition from continental to maritime regime?
- Can changes in boundary layer optical depth be noted with the changes in aerosol compositions?
Flight plan Tuesday 05/09/06

- Asian pollution (points 8-1; 2-3)
- TES-Limb (points 3-6)
- TES-Nadir (spiral at point 7)

Take off time: 11:45 LT
Flight time: 9 hrs
Under DC-8 Permitted Condition: Ideal Flight Leg

SAL

A-Train orbit

Microphysical processes/Radiative Forcing/Aged Dust

CALIPSO Validation

Instability/Radiative Forcing/Fresh Dust

Clear

Boundary layer to sample clouds (droplet size, liquid water content)

Coinciding with satellite orbit at high (10 km) altitude

Dropsonde
S Spiral - in situ vertical profiling
1. Cloud Base Pass

2. Spirals up

3. Follow top

4. Aerosol Sampling Descent
Terra MODIS 10:30 a.m.

Aqua MODIS 1:30 p.m.

More clouds