

Table 2: Experimental CloudSat products

Product	Description
Precipitation type	Temperature profile in lowest 2 km and existence of bright band
Rain amount	Z profiles corrected for attenuation, Mie scattering; AMSR radiances to give precipitation water path ; Surface echo strength to give path integrated attenuation constraint
Snow amount	Z profiles corrected for attenuation, Mie scattering; AMSR radiances to give ice water path
Cloud phase	Z and lidar profiles, MODIS radiances to discriminate ice, liquid, mixed phase
Cloud Microphysics	Z and lidar profiles, optical depth, MODIS radiances to give droplet size profiles, number concentrations