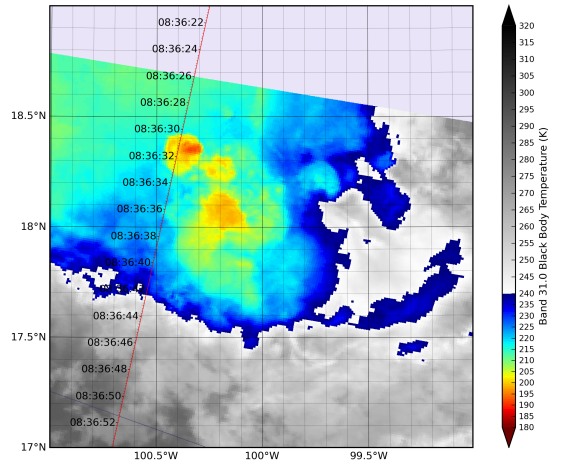


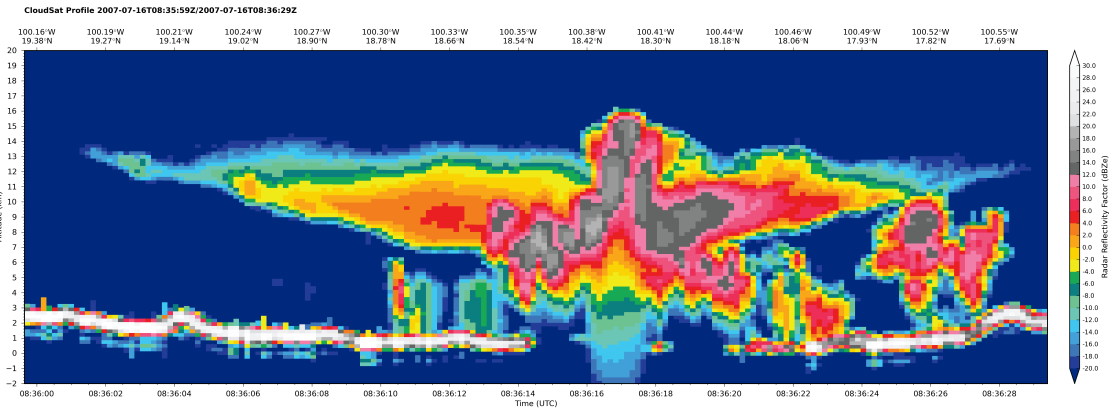
a, this track captures a cumulonimbus cloud in the south of Mexico at 3:36 am local time. In particular, CALIPSO flew over an overshooting top at 8:36:31 UTC as can be recognised on the swath by brightness temperature as low as -80 C. **b**, the entire cloud is best observable with CPR. Reflectivity is strongest near the centre of the cloud, probably because it contains hail or partly melted ice particles, which generate high response at this wavelength. **c**, in contrast with CPR, CALIOP only captures the anvil and the overshooting top of the Cb. This lies at a very high altitude of about 14 km. Response is extremely strong from the overshooting top (more than $0.1 \text{ km}^{-1} \text{ sr}^{-1}$).

a)

MODIS Swath, CALIPSO Trajectory 2007-07-16T08:36:20Z/2007-07-16T08:36:53Z



b)



c)

