

AVE Flight for June 15, 2005

Takeoff: 1230LT (1730 UT)
Nominal Duration: 5.5 hrs
Landing: 1800 LT (2300 UT)

AVE Flight Objective:

Provide: 1) make in-situ observations for the MLS satellite instrument at points along the Aura satellite track, and 2) conduct a vertical profile of trace gases at two MLS observation points.

Specific objectives:

- Provide coincident measurements at the Aura MLS sampling points with the Argus, Ozone, and CIMS aircraft instruments
- Conduct spiral profiles at the end of the flight profile to provide high vertical resolution in the in-situ observations
- Investigate CO and ozone gradients in the upper troposphere.
- Aura overpass will occur at **1948 UT (1448 local)**.

Flight Profile: The Aura track is almost directly overhead tomorrow. The plane will takeoff at 1230 CDT (1730 UT), fly NNW and pick up the Aura-MLS track near Crockett, TX (point 3 on the plot) at an altitude of 41,000 feet (12.5 km). The 57 will then turn SSE and fly at 41,000 ft along the Aura track. At point 4 (25°N), the plane will turn NNE along the track and ascend to 47,000 feet (14.3 km). The plane will then fly up to the Crockett, TX point (6) and ascend to 53,000 feet. At 53,000 feet, the plane will turn back SSE and fly to 23°N. The plane will then turn and ascend to maximum altitude (60,000 feet). The Aura overpass time is about 1948 CDT. The plane should be approximately overhead Houston at the time of the overpass between points 5 and 6. The plane will land at about 1800 CDT (6 pm).

