

## AVE Flight for June 17, 2005

Takeoff: 1200LT (1700 UT)  
Nominal Duration: 5.5 hrs  
Landing: 1730 LT (2230 UT)

### AVE Flight Objective:

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

### Specific objectives:

- Provide coincident measurements at the Aura HIRDLS sampling points with the Argus, Ozone, JLH and Harvard H<sub>2</sub>O aircraft instruments
- Multiple profiles for HIRDLS validation
- Aura OMI overpass will occur at **1938 UT (1438 local)**.
- Aura HIRDLS overpass will occur at **2121 UT (1621 local)**

**Flight Profile:** The Aura track just slightly to our west on Friday and nearly passes over the DOE SGP site. The plane will takeoff at 1200 CDT (1700 UT), fly W and pick up the Aura-MLS track about 50 miles south of San Antonio (point 3 on the plot) at an altitude of 41,000 feet (12.5 km). The 57 will then turn N and do a “crenellation” flight by alternating between 41,000 and 58,000 feet in altitude as it flies northward to point 9 at the Kansas-Nebraska border. The Aura OMI overpass time is about 1438 CDT and the Aura HIRDLS overpass time is at 1621 CDT. The plane will land sometime between 5:00 and 5:30 pm.

