

AVE Flight for Tuesday June 21, 2005

Takeoff: 1200LT (1700Z)
Nominal Duration: 5.0 hrs
Landing: 1700 LT (2200Z)

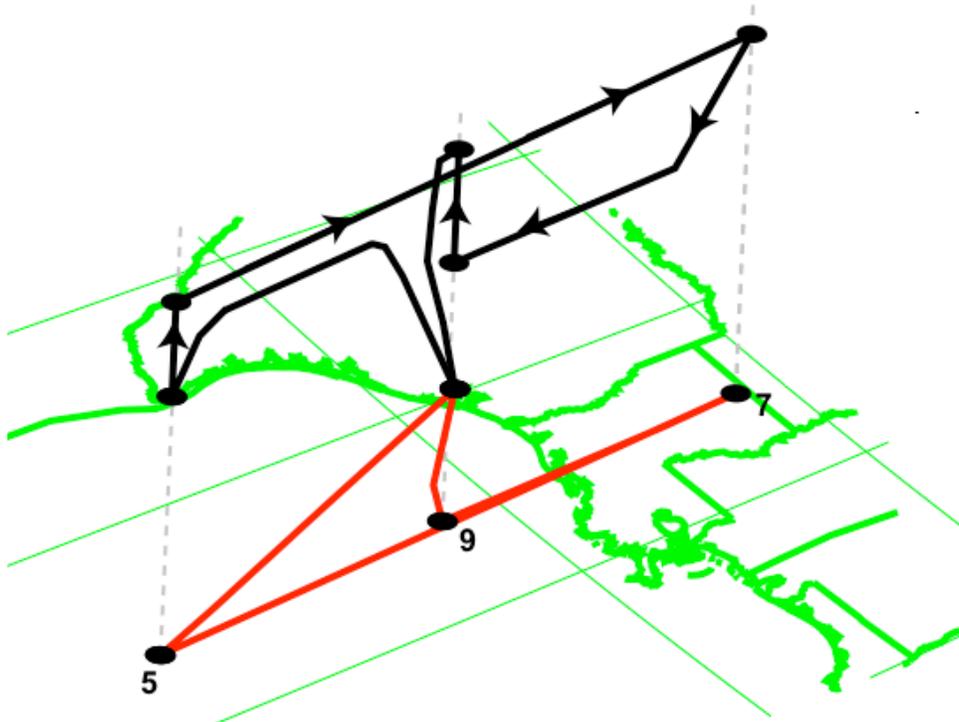
AVE Flight Objective:

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 several HIRDLS observation points across a PV filament that is stretched across the northern Gulf region.

Specific objectives:

- Provide coincident measurements at the Aura HIRDLS sampling points with the Argus, Ozone, JLH and Harvard H2O aircraft instruments
- Multiple profiles for HIRDLS validation
- Aura OMI overpass will occur at **1912 UT (1412 local)**.
- Aura HIRDLS overpass will occur at **2055 UT (1555 local)**

Flight Profile: The Aura HIRDLS track of observation points passes through Louisiana on Tuesday. The plane will takeoff at noon CDT (1700 UT), fly southwest over the Gulf. The plane will be flying down to about 22°N and 92°W (point 5) to pick up the Aura HIRDLS track. As the plane heads south, it will drop down to 41,000 feet (dive #1). When the plane gets to the southern point spiral upward to 57,000 feet and then turn north. The plane will continue northward to the Louisiana-Arkansas border (point 7), turn south and dive down to 41,000 feet. At point 9, the plane will spiral upward to 59,000 feet (on a PV filament) and then turn for home.



Flight profile as a function of latitude and altitude for the flight of June 21.