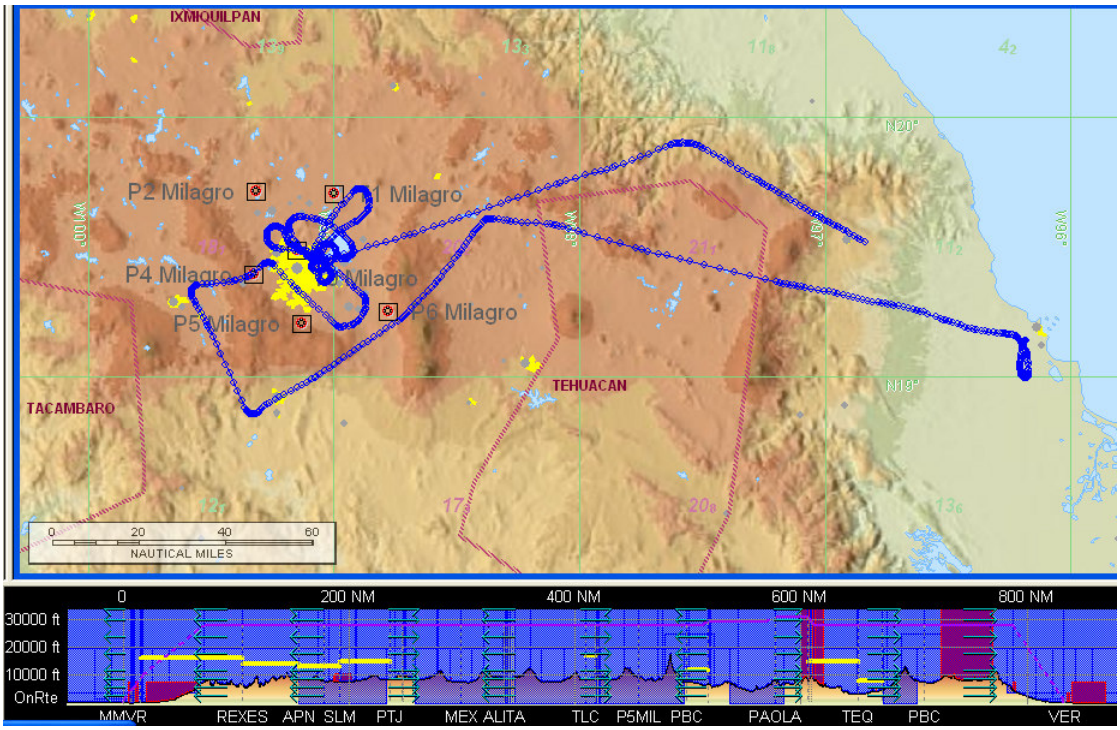
NASA B200/MILAGRO-5 Flight Summary
6 March 2006

Goals

- Coordinated flight with the J31 on transit to Mexico City to acquire coincident HySPAR and RSP data
- Overflight of stacked patterns from G1 flight plan "P"
- Terra underflight; coincident data with MISR in Local Mode over Mexico City; overpass time = 1712 UT
- Overflight of the J31 spirals at T0 to acquire coincident extinction profiles

Intended Flight Plan



Flight Operations

Take off: 1553 UT
Landing 1846UT

Mission proceeded as planned and data were acquired corresponding to all objectives.

It seems unlikely that we will be able to make the planned comparisons with the data from the J31. According to the J31 AATS-14 PI, conditions encountered during the J31 spiral at T0 were not conducive for accurate extinction profile from AATS-14 due to excessive horizontal variability over the spiral footprint. Preliminary reports indicate a similar problem existed for the RSP data from the J31.

Data were acquired over the G1 flight tracks and information on layer altitudes were radioed to the G1 when it arrived on station. Reports from G1 scientists indicated that this information was useful in selecting new altitudes for their stacked/wall patterns during their mission.

With respect to the orbits over the J31 spirals and G1 patterns, we note that it would be beneficial to execute passes with longer straight legs over the regions of interest rather than tight orbits. The instrument is programmed to block the transmitted beam when bank angles exceed 10 degrees, hence time spent in tight maneuvers results in loss of valuable data acquisition time.

Lidar data images from this flight will soon be posted to the Research Products section of the MILAGRO Field Catalog.

Instrument Status

The HSRL and HySPAR instruments functioned nominally. The LAABS instrument locked up a few times during the flight and had to be restarted.