# 17 July 2002 Mission Report

**Summary and Forecast:**

Convective activity kicked off on the west coast in the Naples and Ft. Myers areas around 1730Z. Anvils began streaming off to the west from both systems and were quite extensive over the eastern Gulf by about 1845Z.

This was a no-fly day for the ER-2, WB-57F, Twin Otter, and Citation.

**Aircraft Reports:**

***Proteus***

The Proteus took off around 1600Z, with the goal of flying an Aqua overpass. The Aqua overpass track was aligned parallel to the west coast of the Florida peninsula. The overpass took place at 1846Z. The Proteus lined up in a NE-SW-oriented racetrack pattern that was about 20 km wide. The track extended from about 30 km north of Cuba at the south end to the Ft. Myers area on the north end, with the west side of the track over Key West. The Proteus made three circuits of this track, with clear-sky conditions over the ocean portions for most of the flight. This was desirable for the AIRS validation, which was accomplished successfully. On the last circuit, they got into some of the anvil blow-off from the Ft. Myers system. The Proteus landed around 2000Z.

***P-3***

The P-3 took off at 1755Z and sampled the outflow to the west of the convection occurring in the Naples area. The deepest convective tops observed with the ELDORA radar were higher than 18 km altitude, and individual cells were seen to “pulsate” in relation to one another. The P-3 sat in this system for almost the entire flight at an altitude of about 5 kft. At 2026Z they tried to make a jog east to sample the air on the other side of the Naples convection, but by then the anvils from the Florida east-convection system had reached and merged with the west-coast air. The P-3 returned to base at 2215Z.