

## Flight Summary Pre-AVE Flights

### General Information

**Flight date** – 27 Jan 2004

**Flight description** –Flight #5 for the Pre-AVE mission

**Flight duration** – 4 h 34 m

**Crew** – Scott Reagan (x49826) and Shelley Baccus (x49807)

**Instruments flown:** ALIAS, ARGUS, CAPS, DU FCAS, DU MACS, DU NMASS, Frost Point, HU\_CO2, JLH, MTP, NOAA CIMS, NOAA CH4, NOAA O3, PANTHER, PTW, PALMS, Total Water, VIPS, Water Vapor, WAS

**Instruments not flown:** none

### Flight Log

<b>Before Taxi</b>	16:05	<b>Takeoff</b>	16:23	<b>Landing</b>	20:57
--------------------	-------	----------------	-------	----------------	-------

### Gear extension/retractions

Gear Up	16:23	
Gear Down	20:31	

### Weather Observations

- On climb: Clear
- Cruise:
  - FL 550 at 16:54 – Can see cirrus out on the horizon in front. Might be below us.
  - FL 580 at 17:24 – Same
  - FL 480 at 17:39 – Can see cirrus layers around us. May go 2000 feet above us.
  - FL 580 at 18:28 – Higher cirrus. We think we are in it.
  - Descending at 18:43 – looks like we are in cirrus.
  - FL 500 at 18:49 – still in it.
  - Climbing at 19:17 through FL 545 – in cirrus.
  - FL 482 at 19:50 – In cirrus
  - FL 490 – 20:04 – In cirrus – might be blow off from neighboring storm (see pictures)

On descent: Started going through clouds at 20:42 around 8600 ft.

### Flight Profile

Leg	Alt	Start	Finish	Then
1	580	17:07	17:30	Descend
2	480	17:35	17:55	Climb
3	580	18:08	18:40	Descend
4	480	18:45	19:15	Climb
5	580	19:26	19:43	Descend
6	480	19:47	20:04	Climb
7	604 TOC		20:19	Descend

### Instrument Notes:

- O3 fail light on and off at 17000 ft and 17:00. On & off again at 17:03-05. Never on for more than 2 minutes. Fail sequence was not performed.
- 17:35 – CIMS light flashed ~4x and stayed ON. (This was right after nose up at end of descent to FL 480.) Started failure sequence at 17:36. The light flashed several times and then stayed on at 19:53. Started fail sequence at 19:54.
- MACS fail light went on at 18:13. Resets were run at 18:13, 18:25, 18:39, 18:54, 19:10, 19:25.