

**Jetstream-31 (J31) Flight Report for INTEX-ITCT
Flight 20 – 2 August 2004**

Profile with DC-8 over Ron Brown. Ron Brown sonde. Langley calibration.

In Cabin: Howard, Livingston, Sandholm, Schmid.

Overview

This was the fourteenth J31 flight out of Pease, and the second J31 flight on 2 August. First target was a profile over the Ron Brown with the DC-8. Second was a Langley calibration.

J31 and its instruments performed well.

Flight Path, Timing, and Measurements

Flight path is shown in Figure 1 below. Takeoff at 1955 UT. Climbed to 21 kft to look for cirrus-free region. Profiled down to near surface and flew leg toward Ron Brown under DC-8 path. Then flew spiral up (3-4 mi radius) while DC-8 spiraled down (8-10 mi radius).

Ron Brown released an ozonesonde at 2200 UT, when J31 was near the top of its spiral..

AATS data are in Figure 2 below; SSFR data are in Figure 3.

After the profile with the DC-8, J31 flew racetracks for an AATS Langley calibration.

Landing was at ~2351 UT.

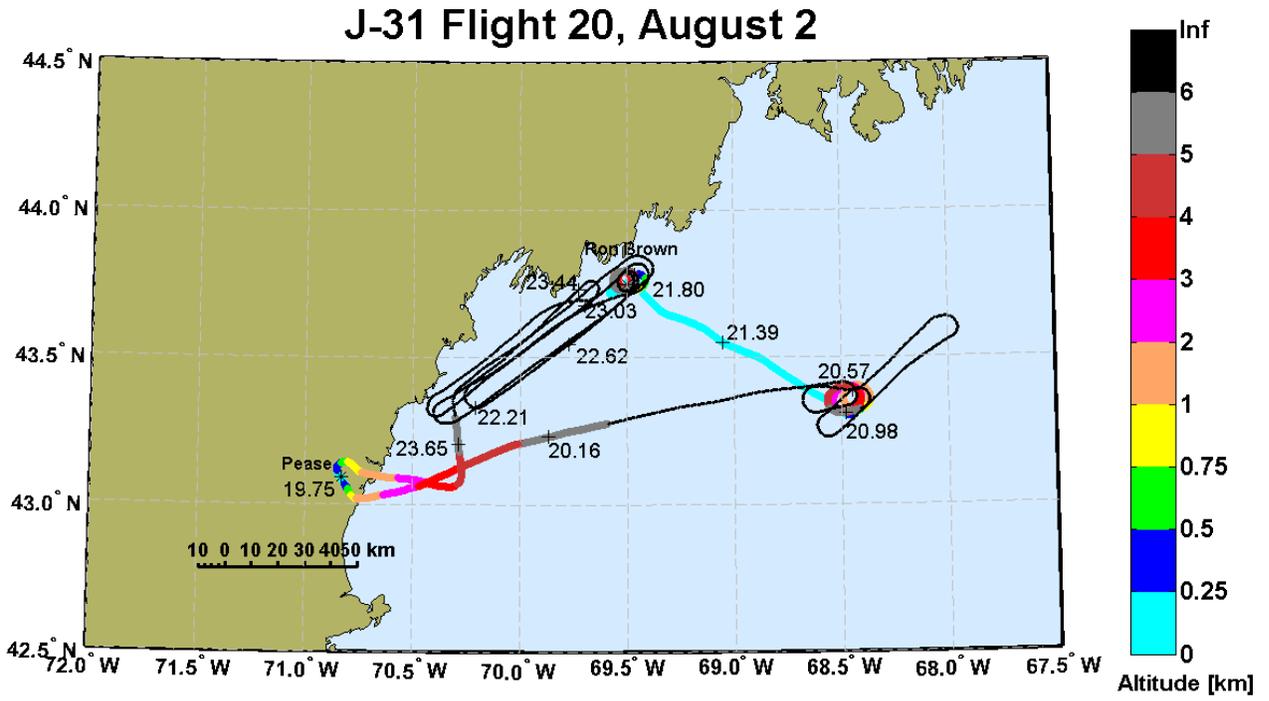


Figure 1. Flight track of J-31, Flight 20, 2 August 2004.

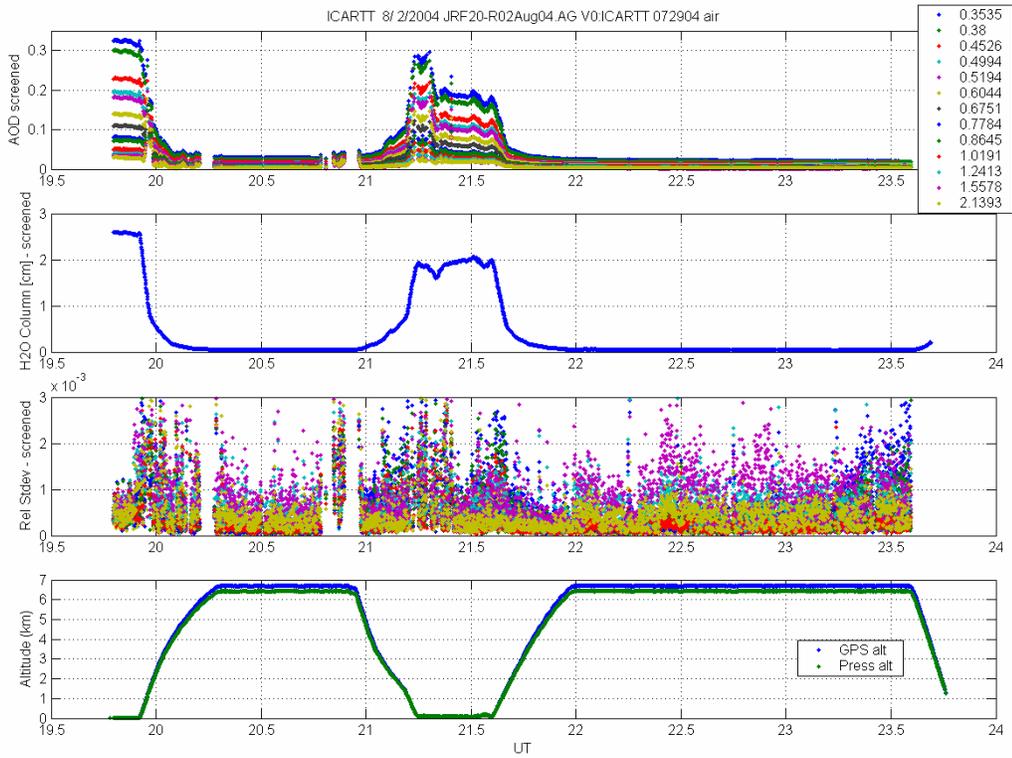


Figure 2. Time series of AATS-14 data for J-31 Flight 20, 2 August 2004.

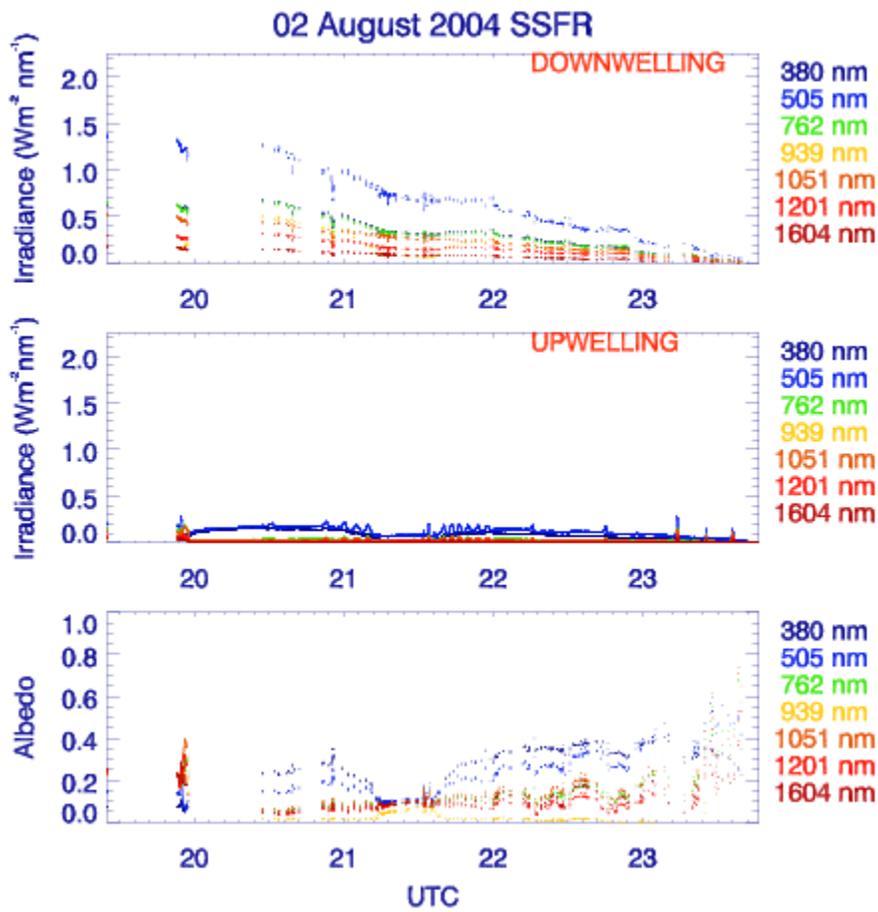


Figure 3. Time series of SSFR-measured downwelling and upwelling irradiance and albedo for J31 Flight 20, 2 August 2004. The downwelling (and albedo) has been filtered to remove data when the aircraft attitude deviated by more than 3% from level.