



AIRCRAFT ICING AND GROUND TRANSPORTATION ALERT

6 April 2007 20:00 UT (2:00 PM Local Time)

Extreme aircraft icing and ground transportation risk is now occurring in the Denver Front Range region in Colorado. We are sending this alert to provide warning to traffic control and weather reporting authorities. The last time an icing event like this occurred on 4 March 2003 there more than one million dollars of damage to jet aircraft engines occurred at Denver International Airport. If pilots had been warned of the supercooled liquid this loss could have been prevented. Radiometrics is issuing this alert in an effort to help avoid similar losses.

A microwave radiometer provides continuous temperature and humidity profiles with an accuracy equivalent to radiosonde observation uncertainty. A radiometer also provides liquid water profiles, as shown in Figure 1. In this case there is dense supercooled liquid from the surface to 1 km height that presents severe aircraft and ground transportation icing risk.

Continuous data: http://67.107.206.176/x01boulderco/x01_boulder_co.html

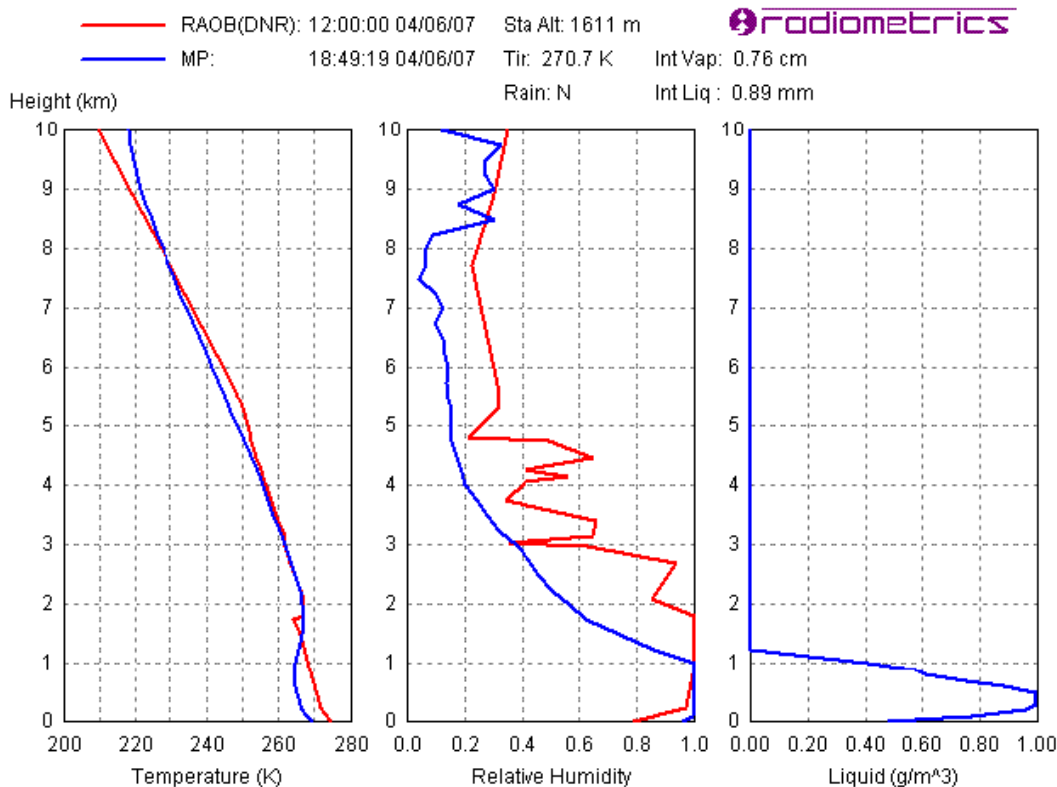


Figure 1. Boulder radiometer (blue) at 1849 UT (12:49 pm LT) and Denver radiosonde (red) at 1200 UT (5:00 am LT) showing dense supercooled liquid.

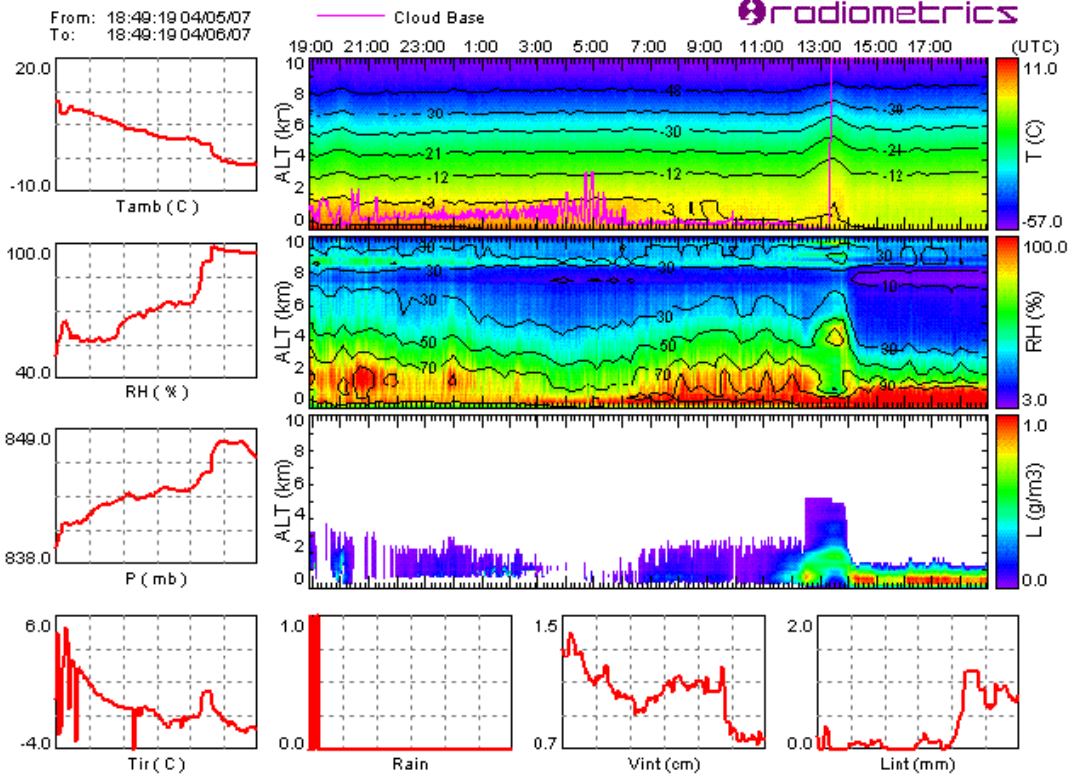


Figure 2. Radiometric retrievals to 10 km height for 24 hours before 12:49 pm.

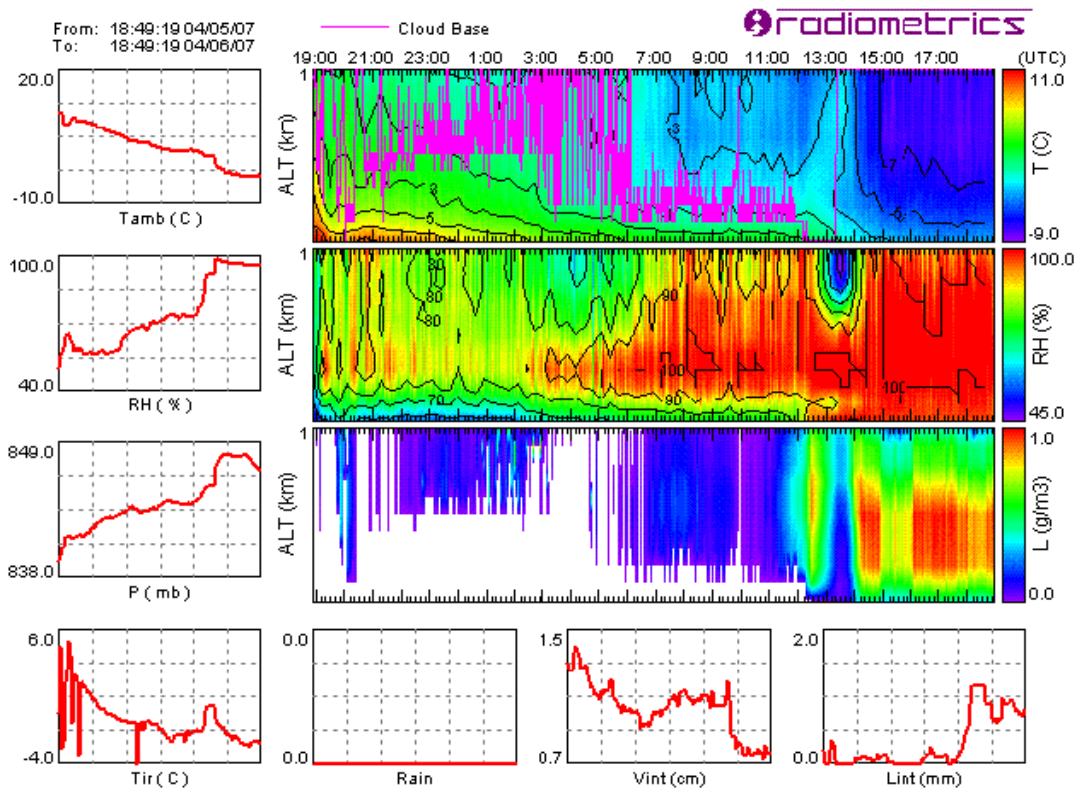


Figure 3. Radiometric retrievals to 1 km height for 24 hours before 12:49 pm.