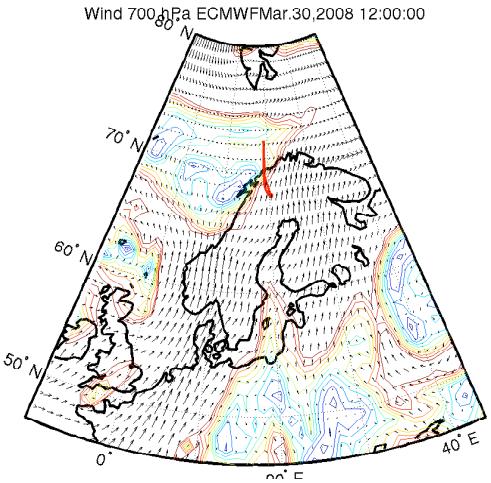
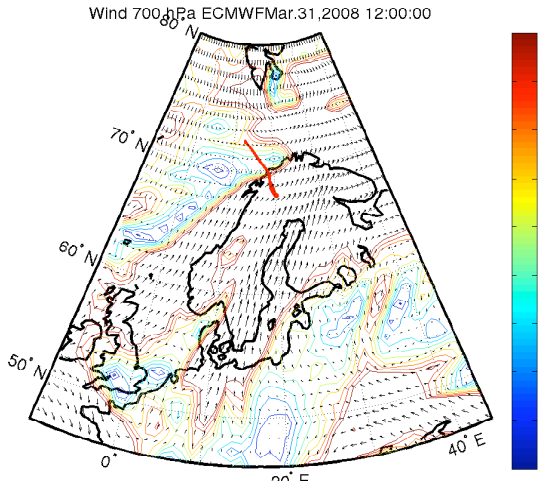
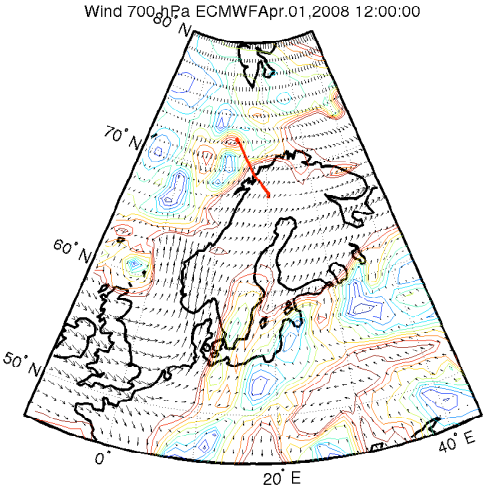
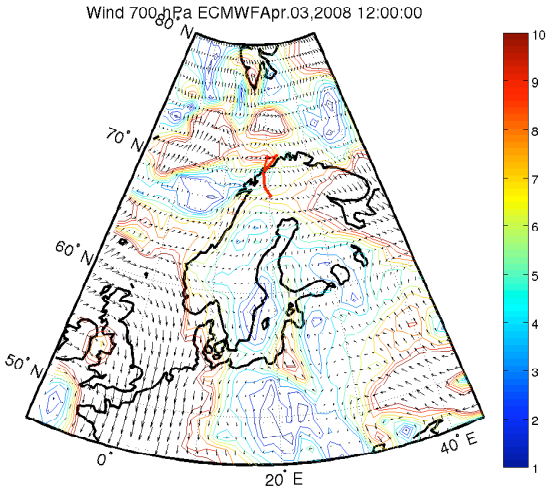
Supplementary information for: Transport of aerosol to the Arctic: analysis of CALIOP and French aircraft data during the spring 2008 POLARCAT campaign

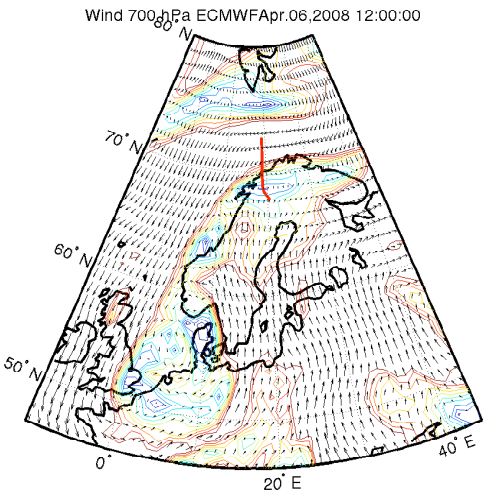
G. Ancellet, J. Pelon, Y. Blanchard, B. Quennehen, A. Bazureau, R. Adam de Villiers, K.S. Law, A. Schwarzenboeck,

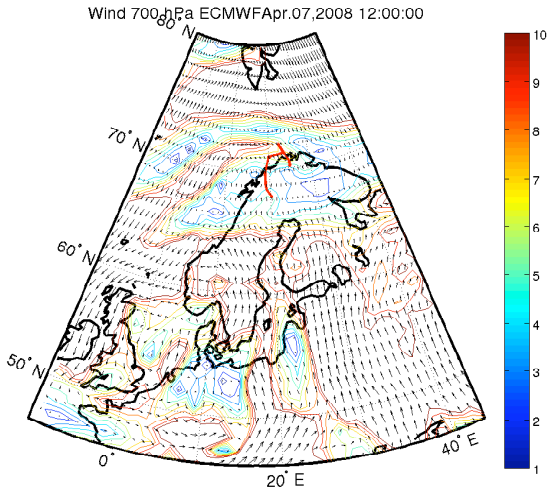












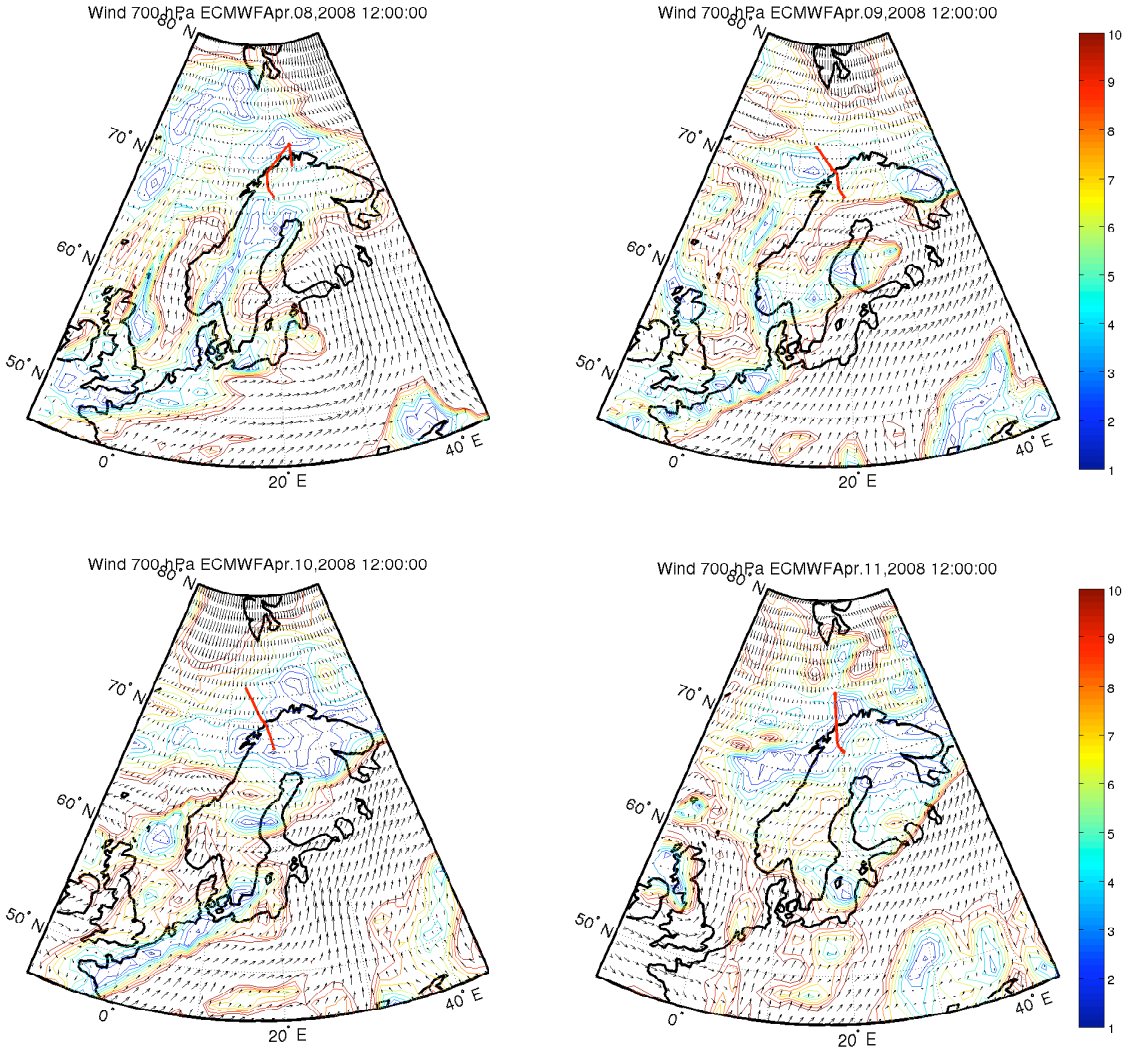
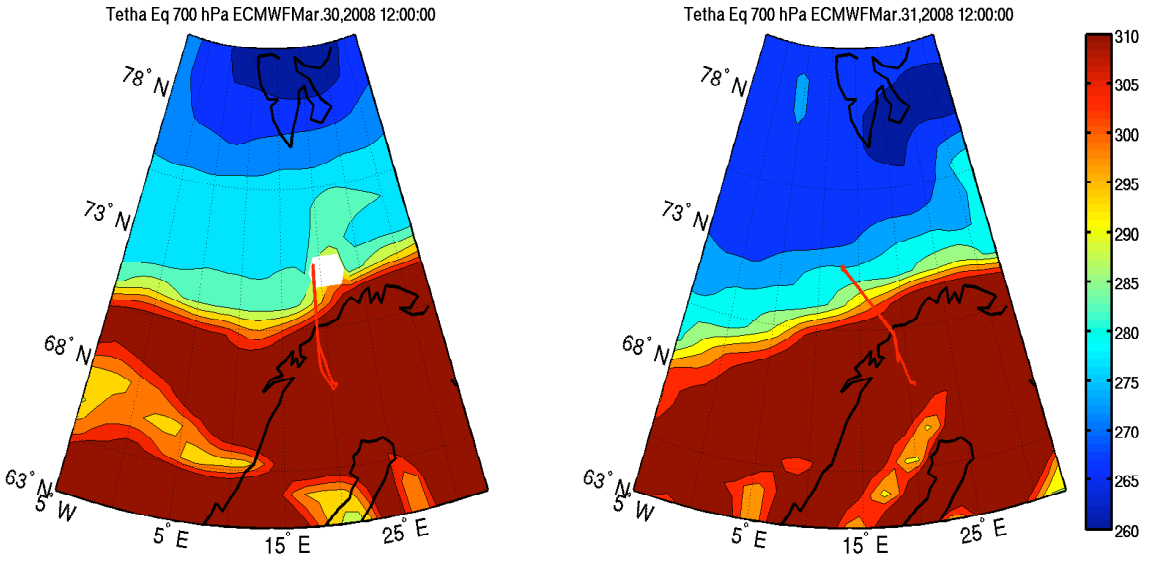
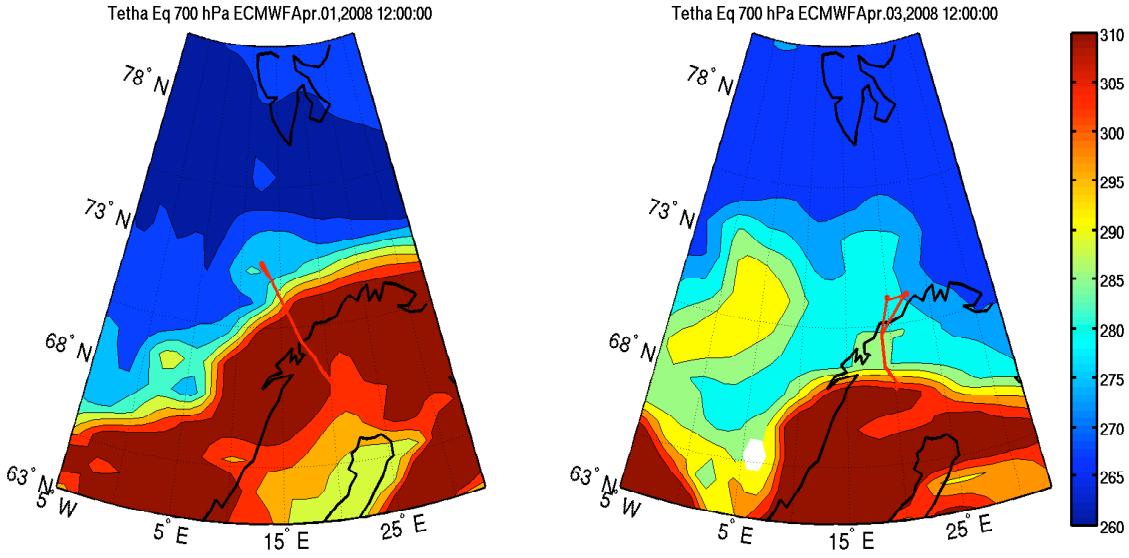
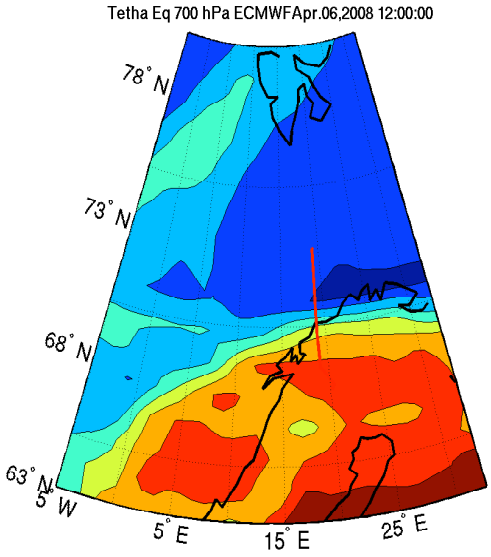


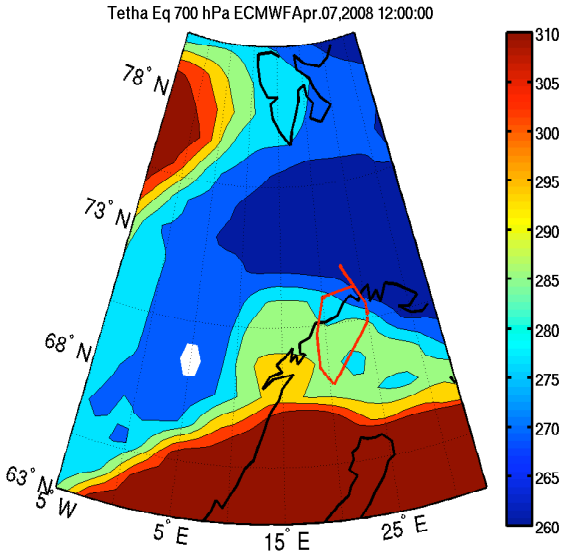
Figure 1 Wind field at 700 hPa,12:00UT from March 30 to April 11 for the aircraft flights listed in Table 1. The color scale corresponds to the wind intensity in $m.s^{-1}$

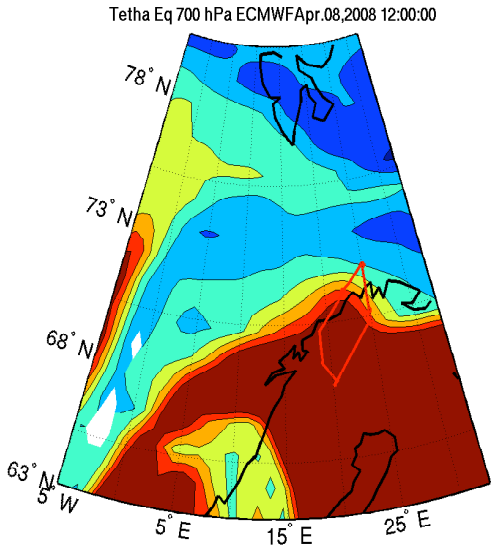


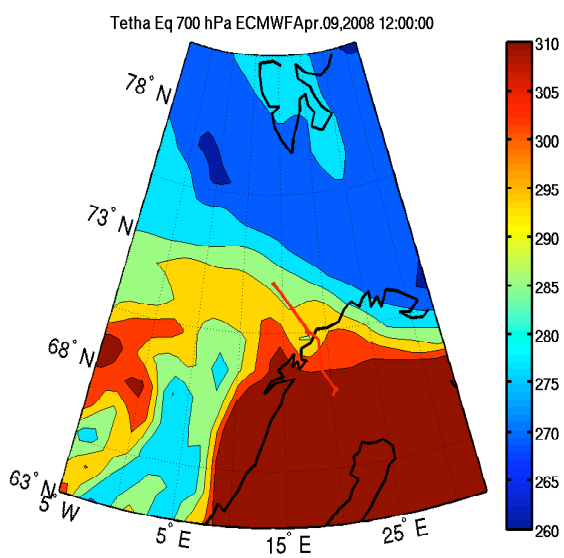

Tetha Eq 700 hPa ECMWFApr.01,2008 12:00:00
78° N
73° N
68° N
63° N
5° W
5° E
15° E
25° E

Tetha Eq 700 hPa ECMWFApr.03,2008 12:00:00
78° N
73° N
68° N
63° N
5° W
5° E
15° E
25° E
310
305
300
295
290
285
280
275
270
265
260


Tetha Eq 700 hPa ECMWFApr.06,2008 12:00:00
78° N
73° N
68° N
63° N
5° W
5° E
15° E
25° E


Tetha Eq 700 hPa ECMWFApr.07,2008 12:00:00
78° N
73° N
68° N
63° N
5° W
5° E
15° E
25° E
310
305
300
295
290
285
280
275
270
265
260


Tetha Eq 700 hPa ECMWFApr.08,2008 12:00:00
78° N
73° N
68° N
63° N
5° W
5° E
15° E
25° E


Tetha Eq 700 hPa ECMWFApr.09,2008 12:00:00
78° N
73° N
68° N
63° N
5° W
5° E
15° E
25° E
310
305
300
295
290
285
280
275
270
265
260

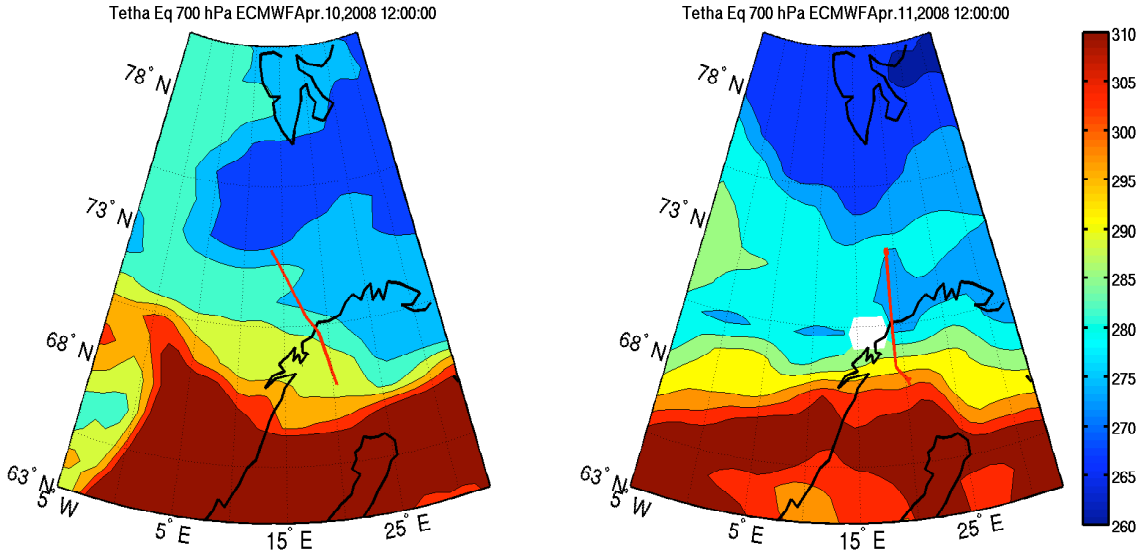
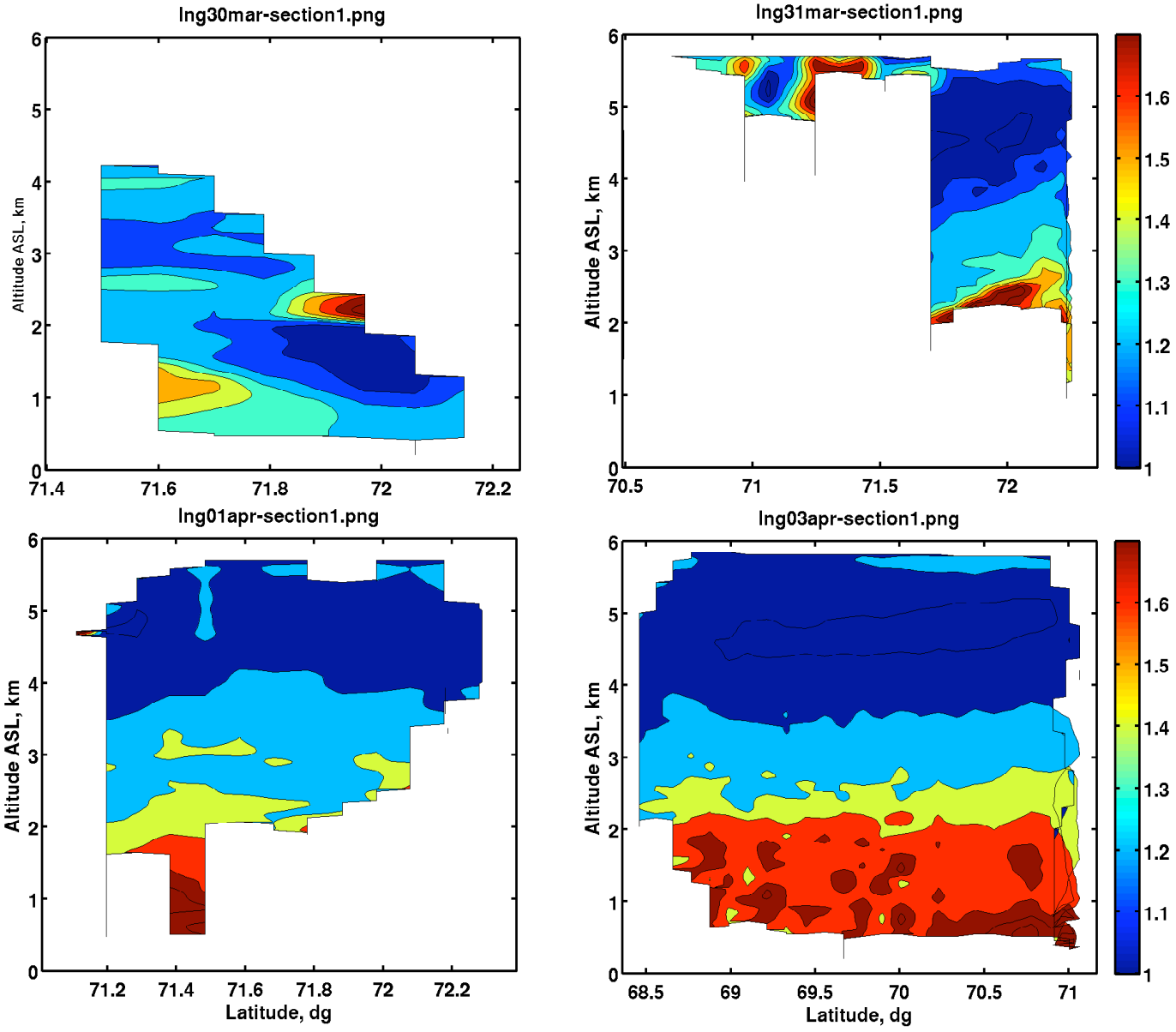
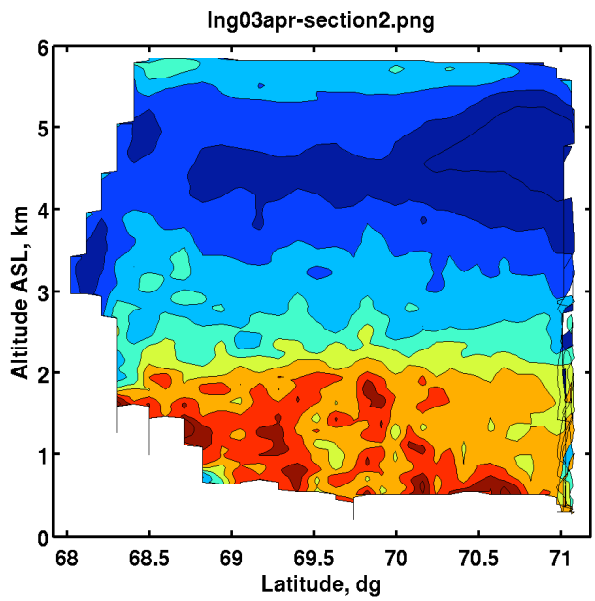
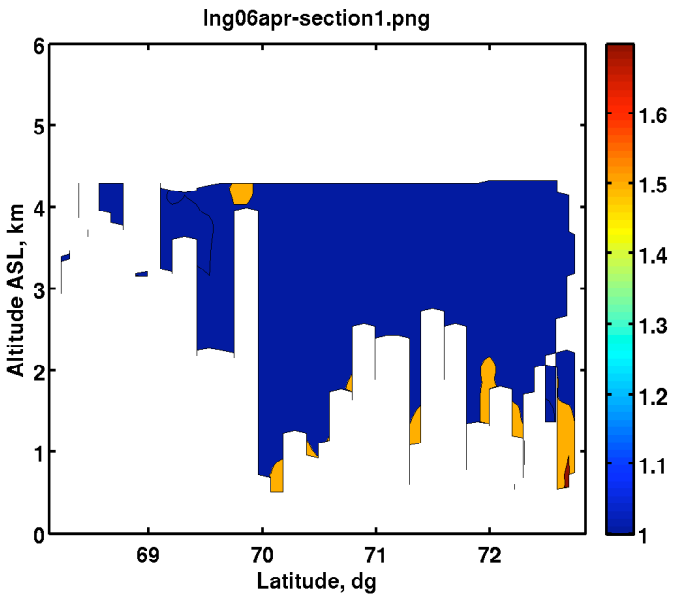
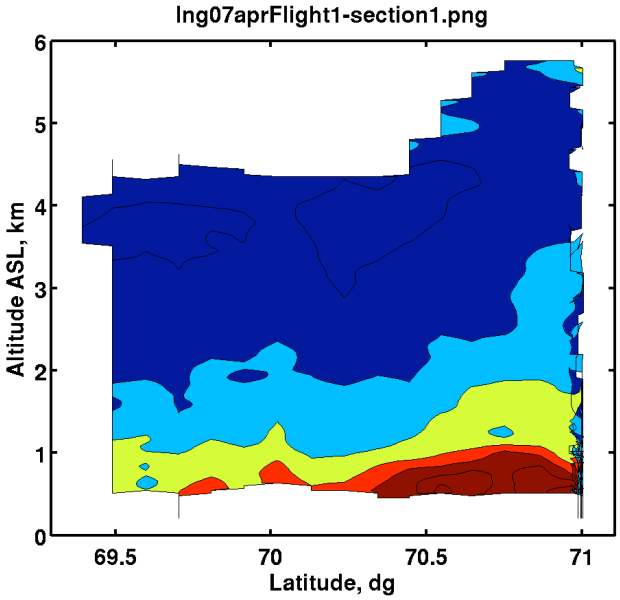


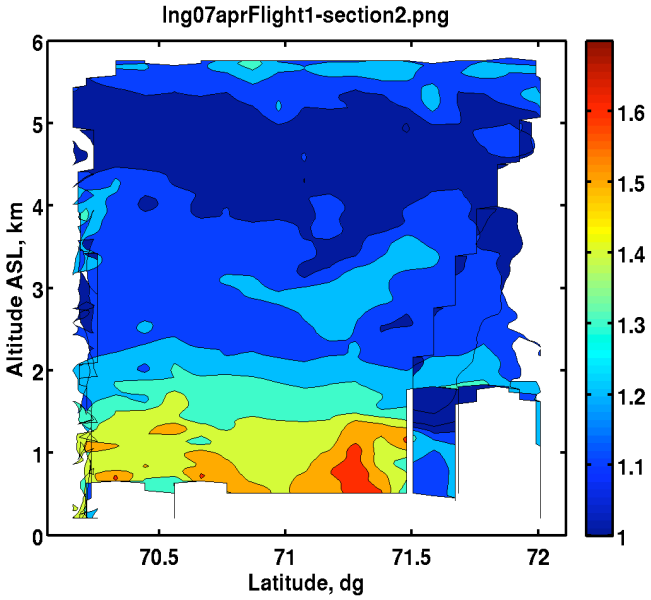
Figure 2: Equivalent potential temperature in K at 700 hPa, 12:00 UT from March 10 to April 11 for the aircraft flights listed in Table 1

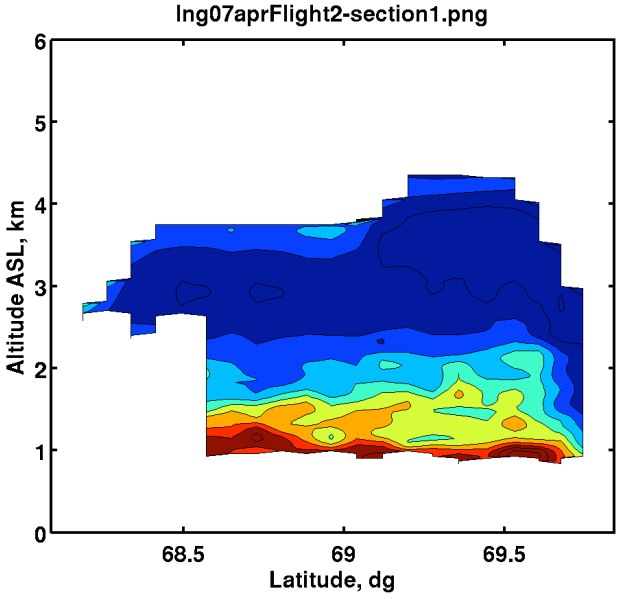


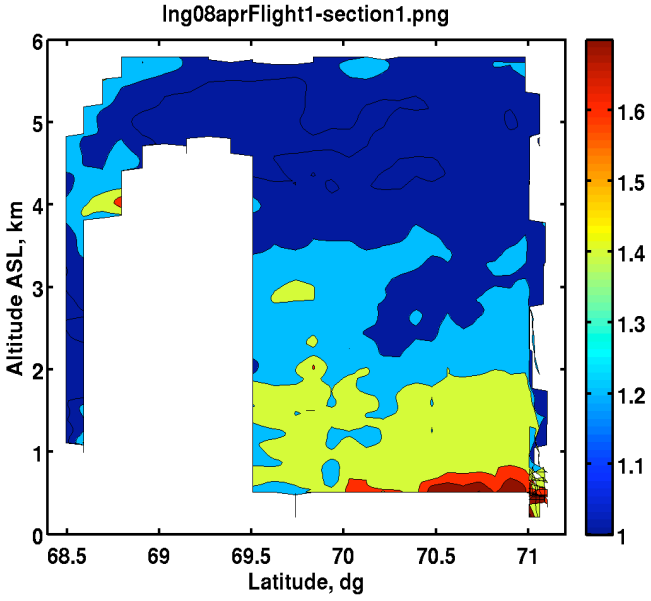

Ing03apr-section2.png
Altitude ASL, km
Latitude, dg


Ing06apr-section1.png
Altitude ASL, km
Latitude, dg

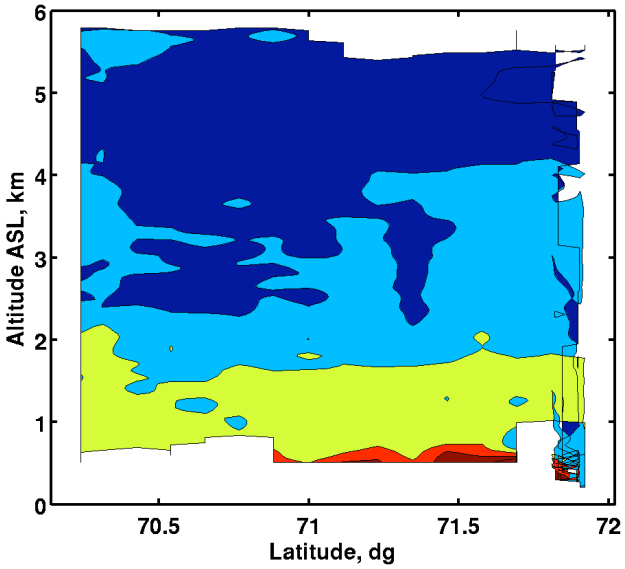

Ing07aprFlight1-section1.png
Altitude ASL, km
Latitude, dg


Ing07aprFlight1-section2.png
Altitude ASL, km
Latitude, dg

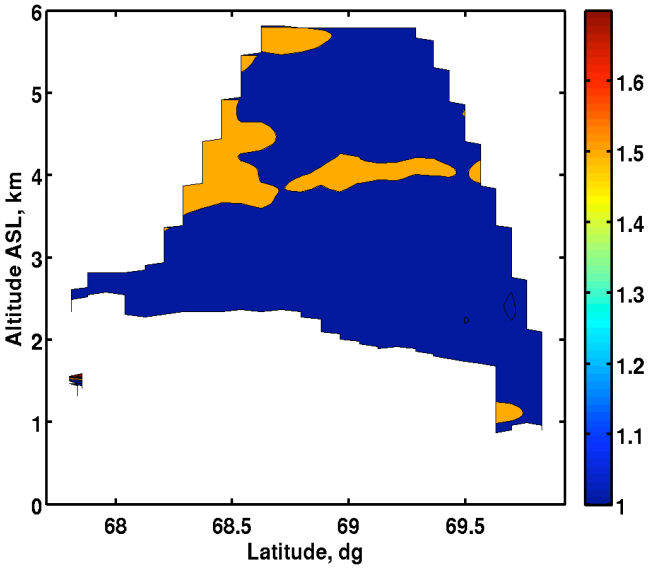

Ing07aprFlight2-section1.png
Altitude ASL, km
Latitude, dg


Ing08aprFlight1-section1.png
Altitude ASL, km
Latitude, dg

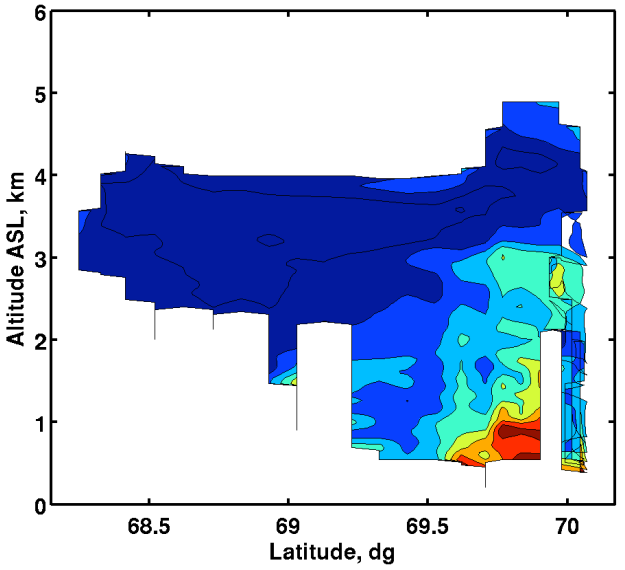
lng08aprFlight1-section2.png



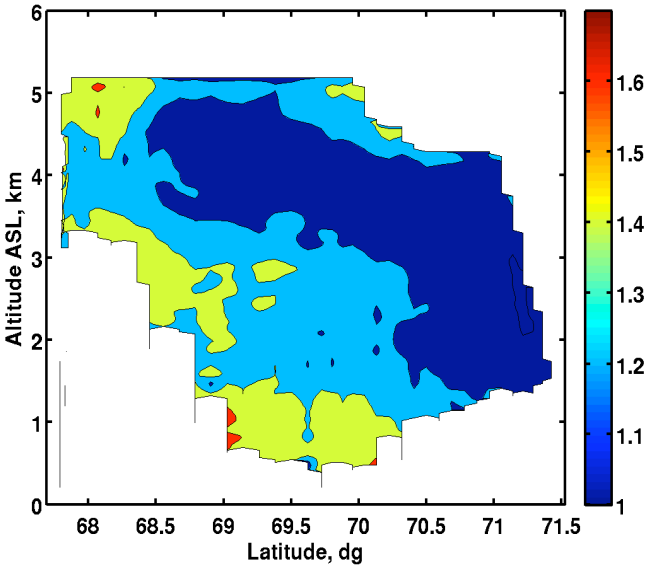
lng08aprFlight2-section1.png



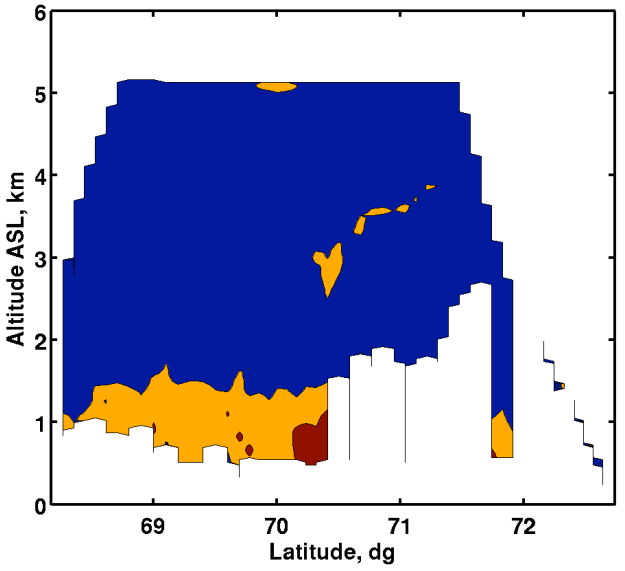
lng09apr-section1.png



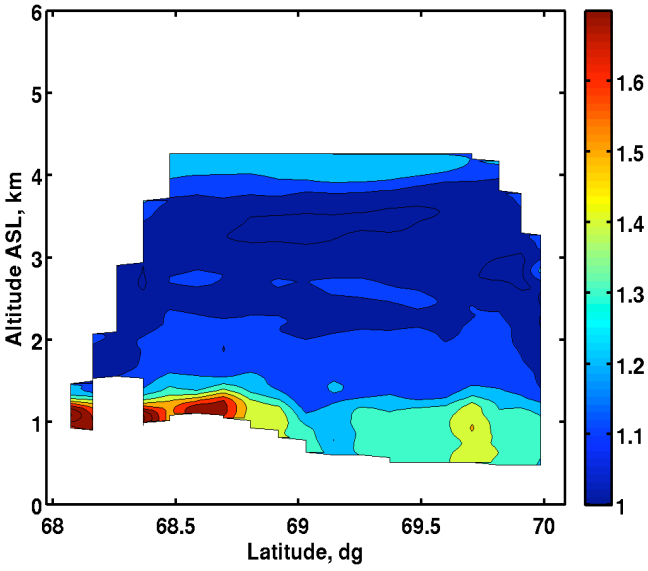
lng09apr-section2.png



lng10apr-section1.png



lng10apr-section2.png



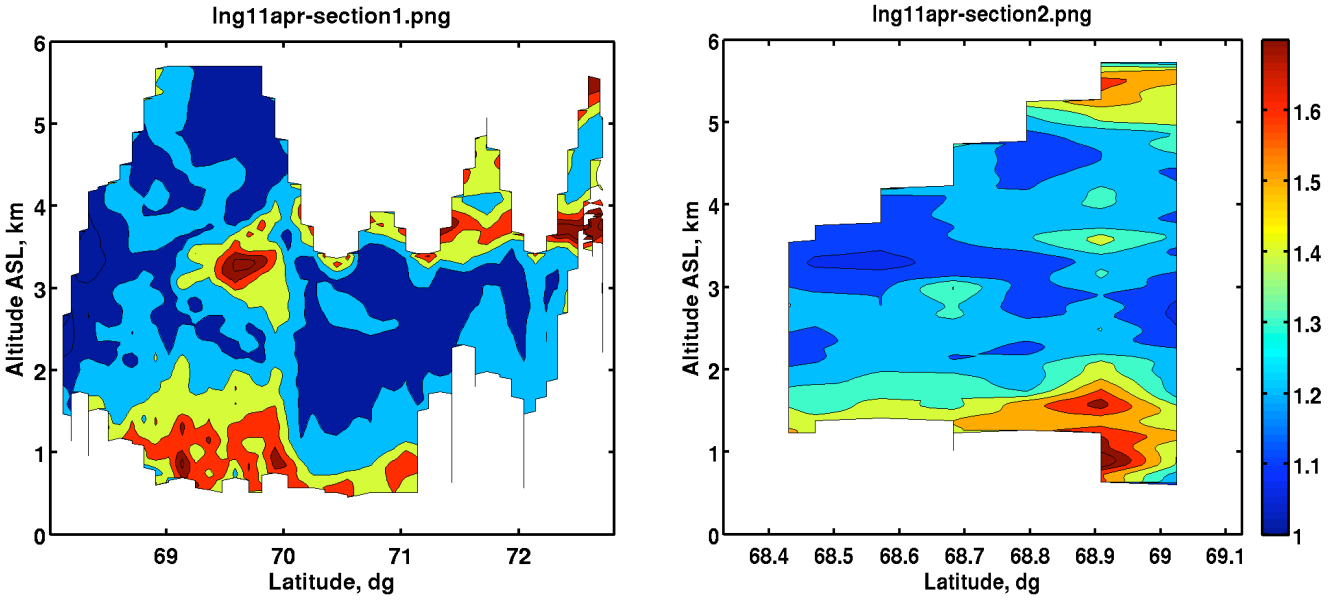


Fig. 3 Vertical cross sections of the airborne lidar 532 nm backscatter ratio for the aircraft meridional cross section from 30 March to 7 April listed in Table 1.