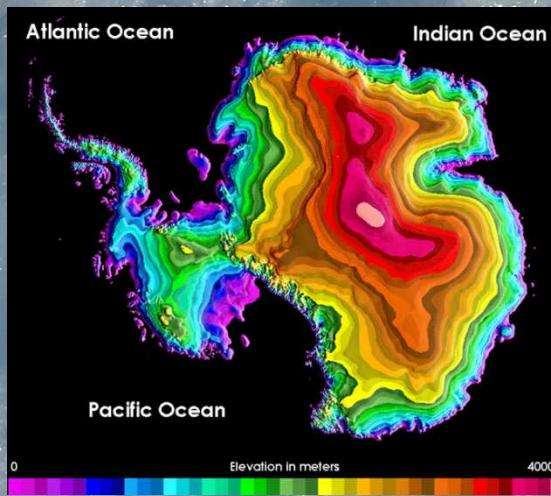


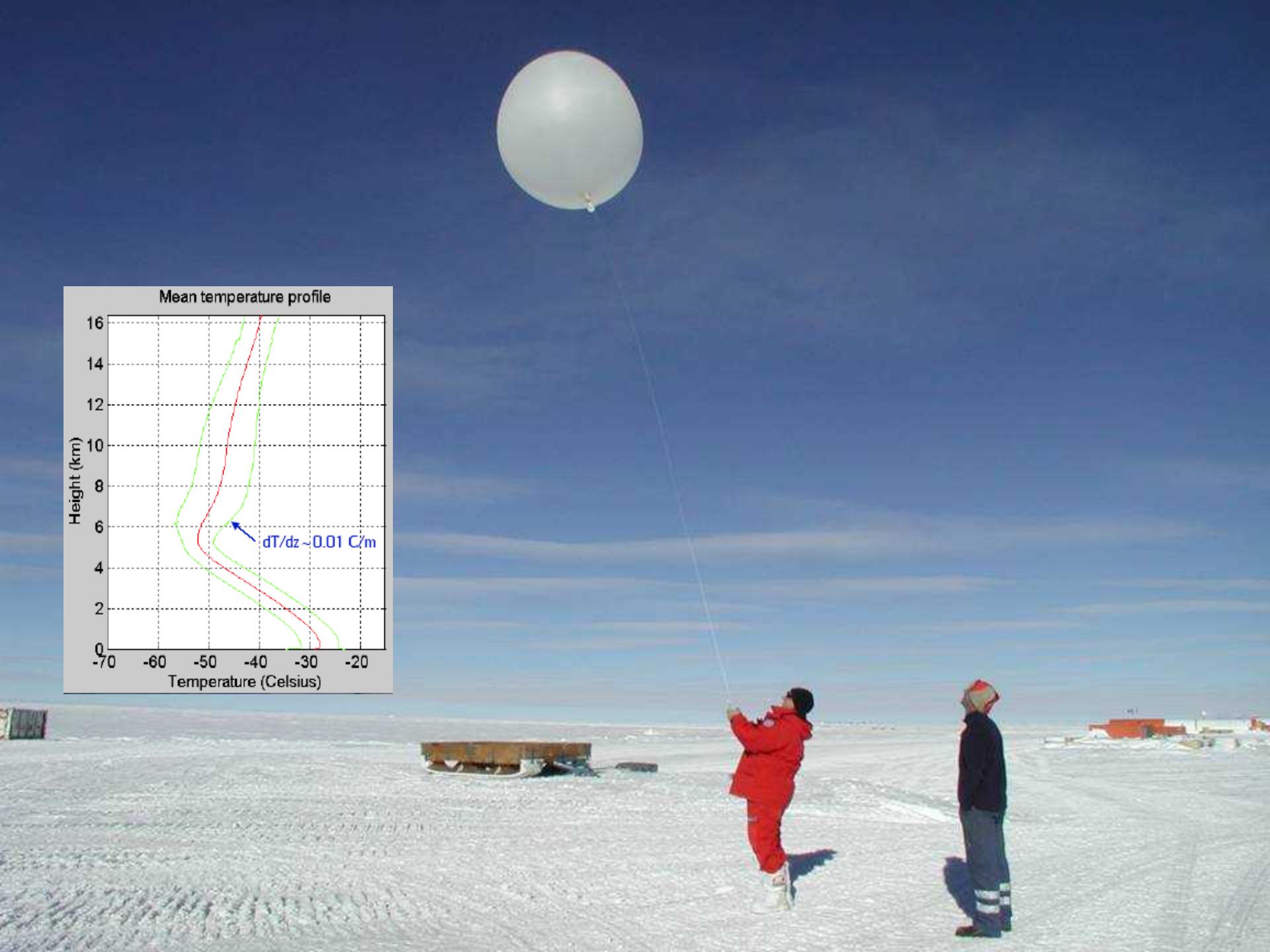
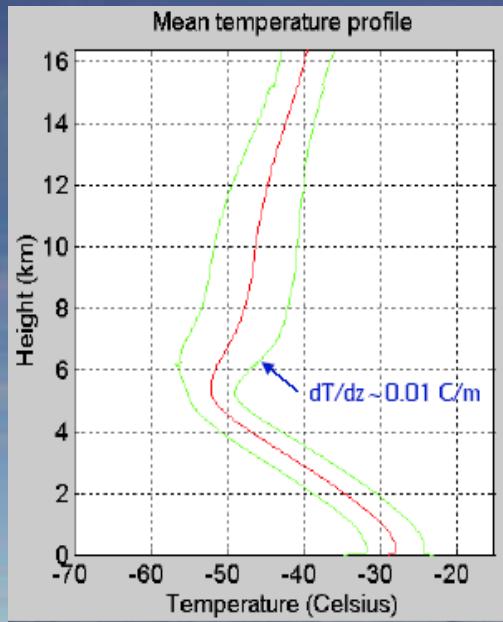
DISPOSITIF INSTRUMENTAL DC LA METEOROLOGIE CLASSIQUE

- Le site
- Quelques observations de routine
 - Le profilage « 45 m » (BLDC)
 - Le profilage « 2 m » (SBLDC)
 - Gradients horizontaux

Dome C, Antarctica

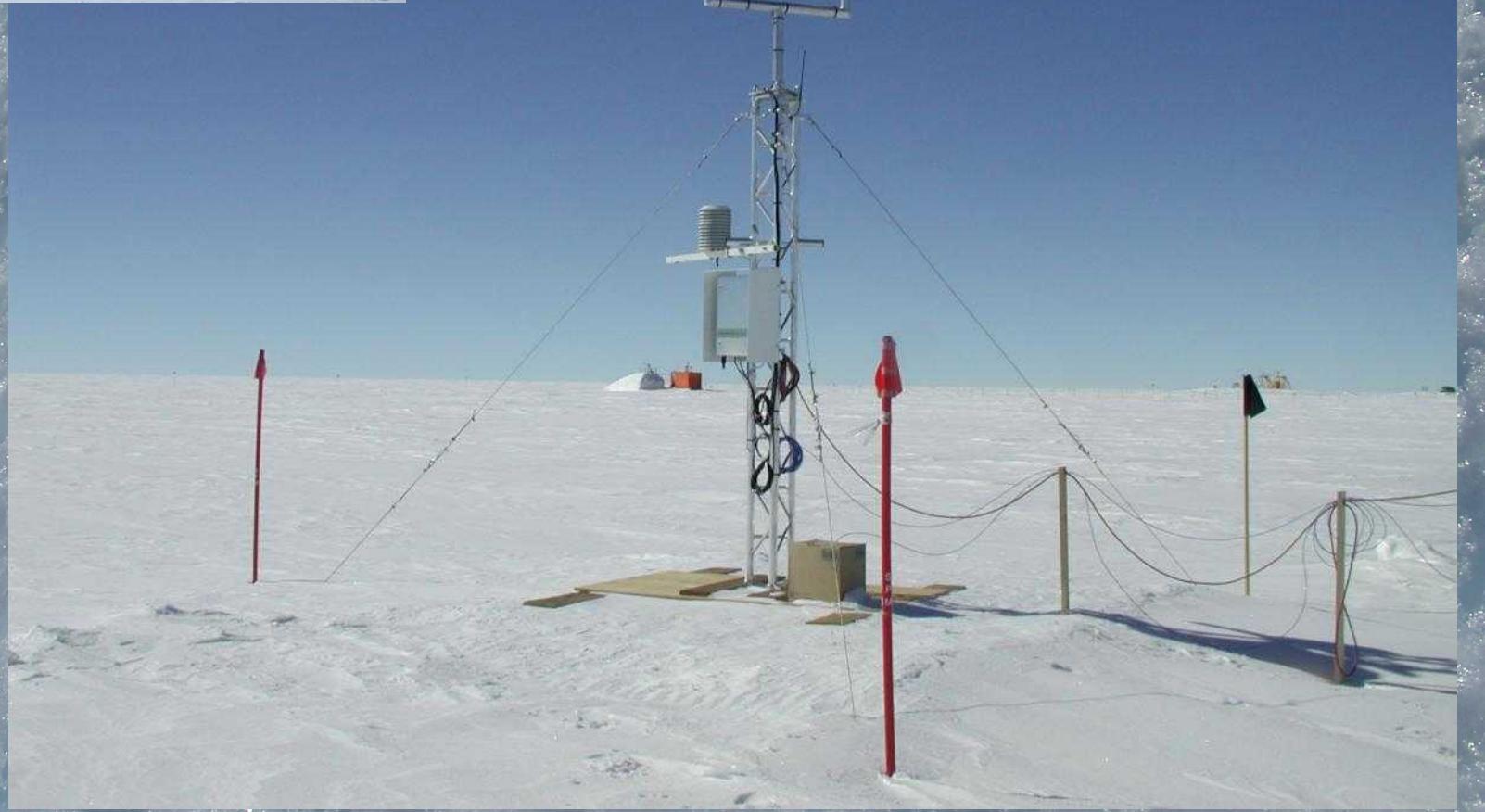
Latitude 75°06.06S Longitude 123°20.74E Altitude
3350m



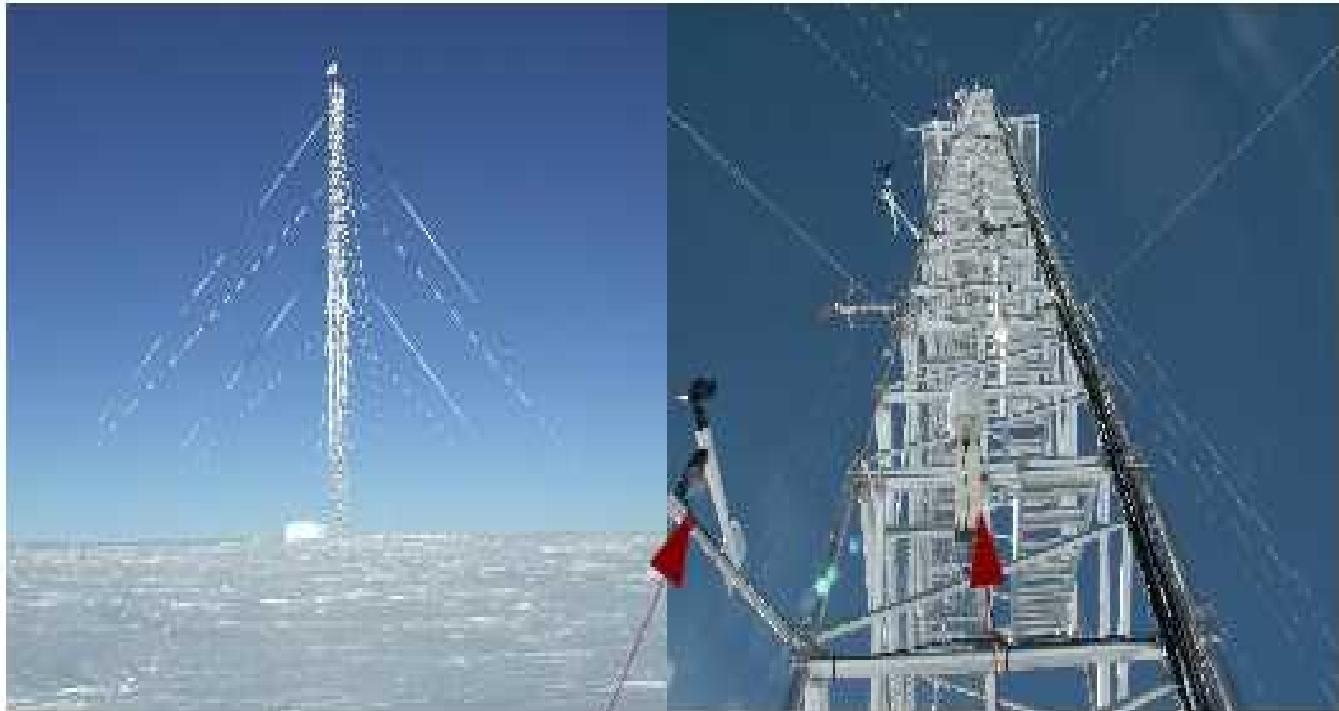




AMRC 1995 (1980) on



ENEA-RMO
2005 on

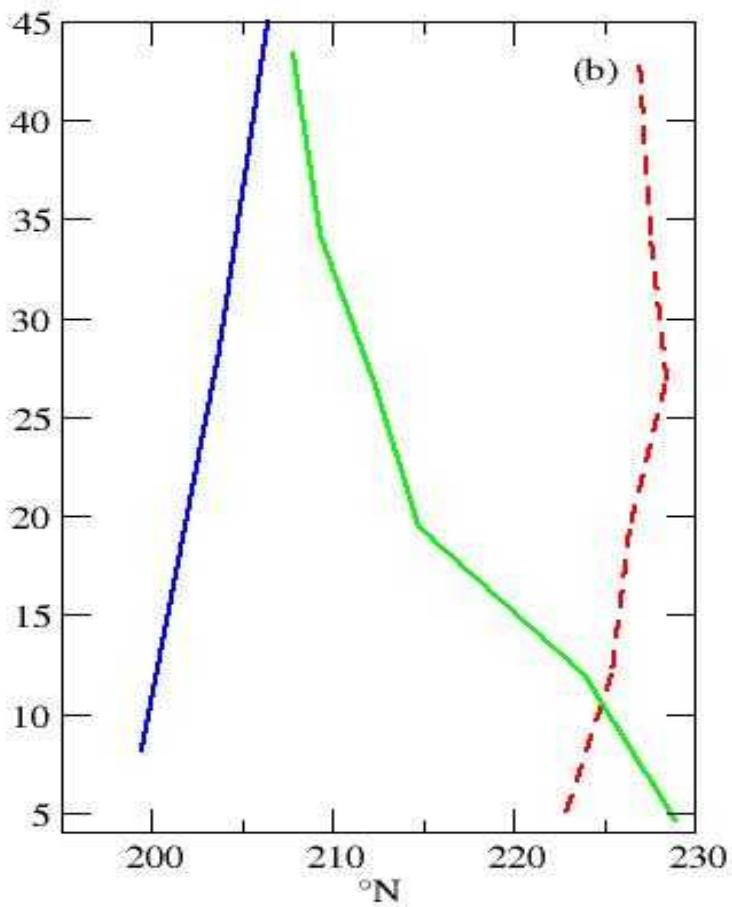
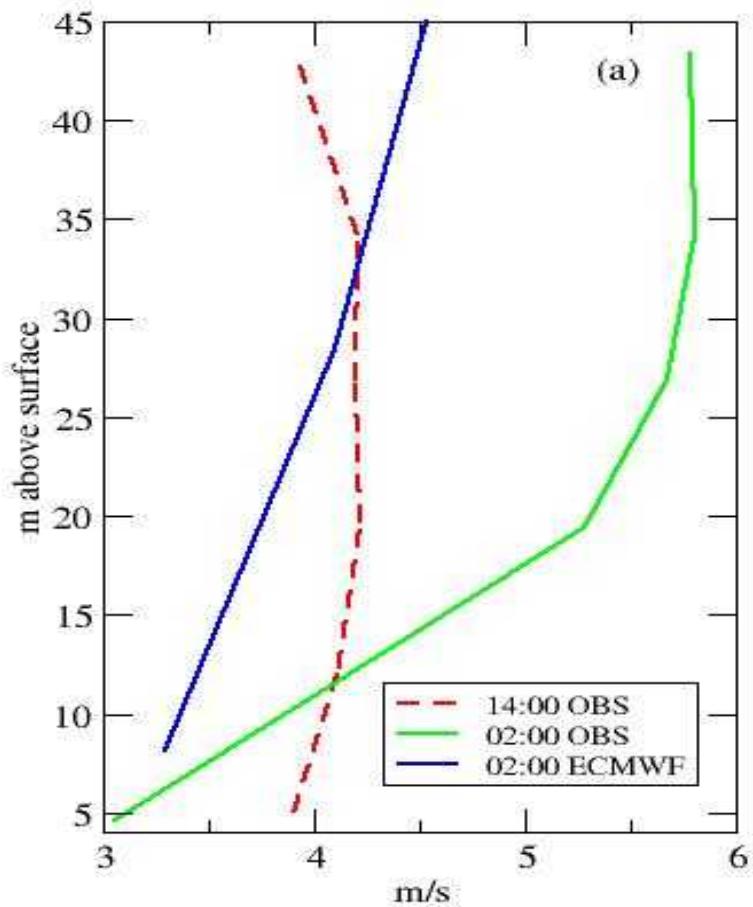


Aerovane

Radiation shielded
Thermo-hygrometer

The 45-m tower at Dome C : A unique facility on the plateau

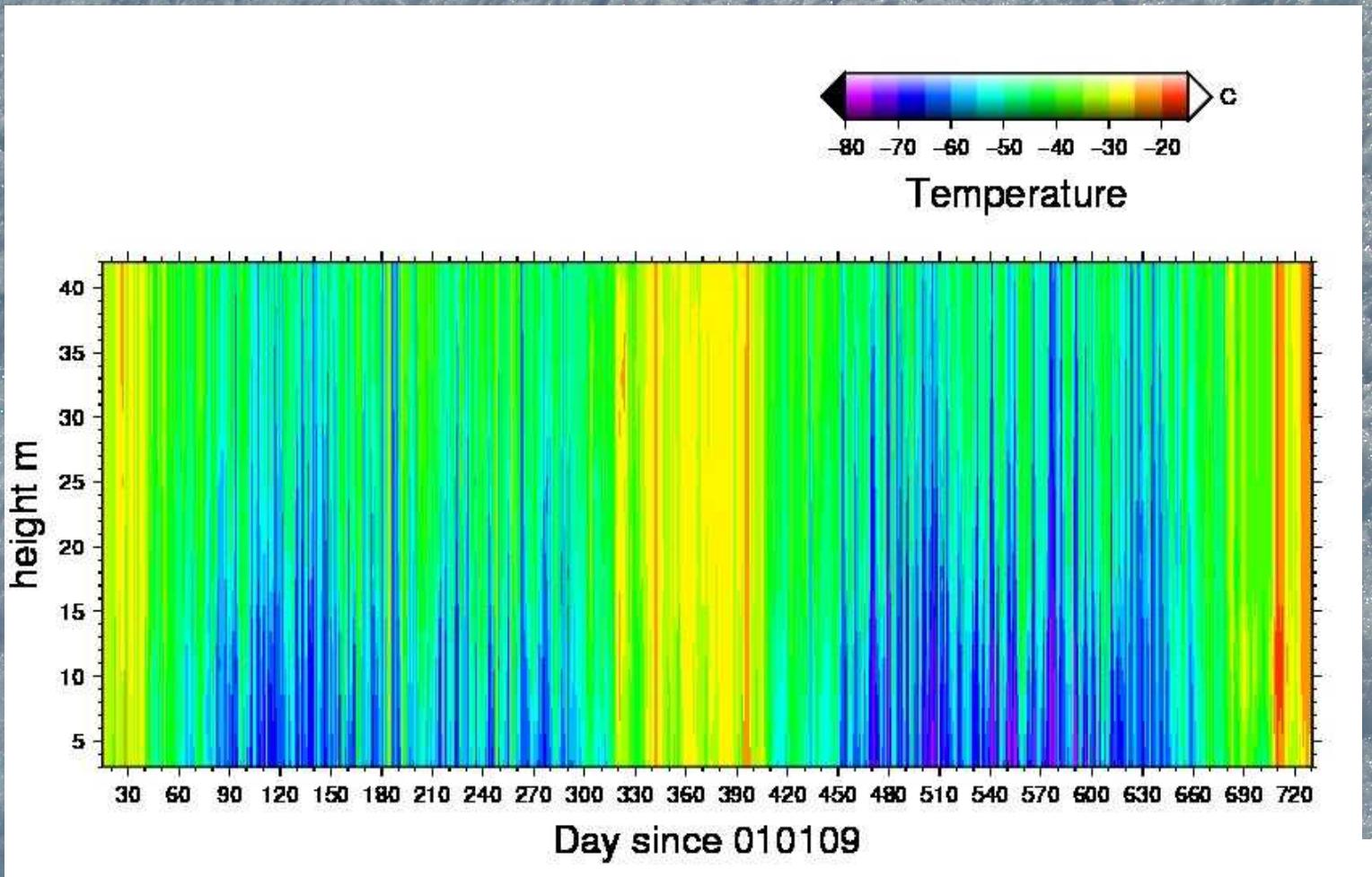
A continuous surface atmospheric boundary layer profiling system, 4 to 44 m above surface, since January 2008



Observed (tower) and analyzed (ECMWF) mean wind profile, January 2008

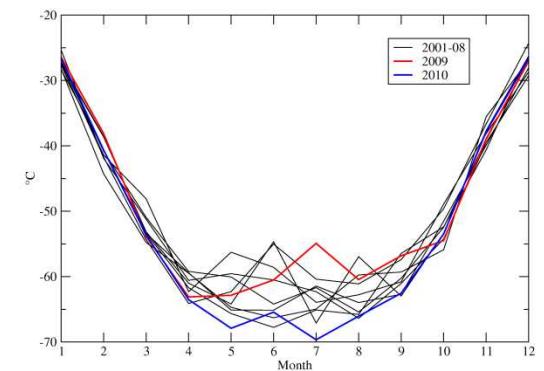


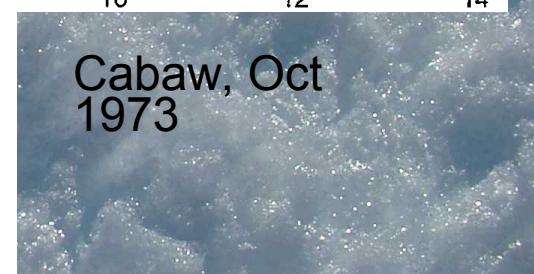
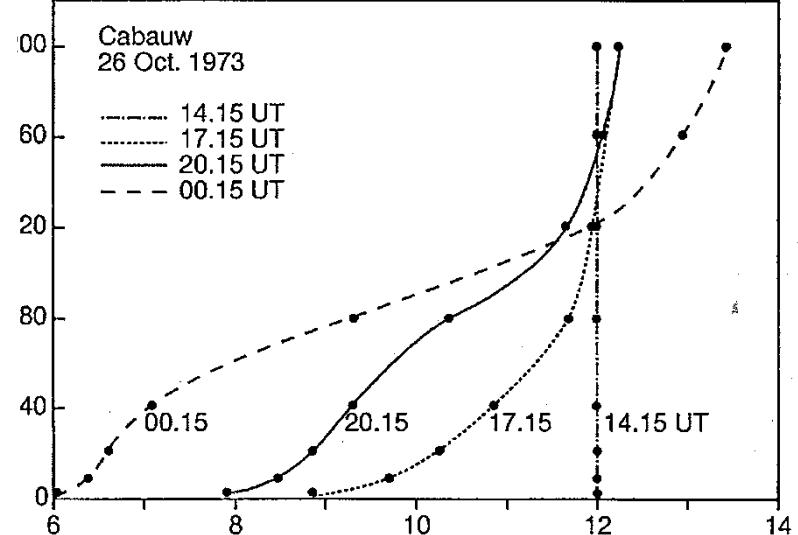
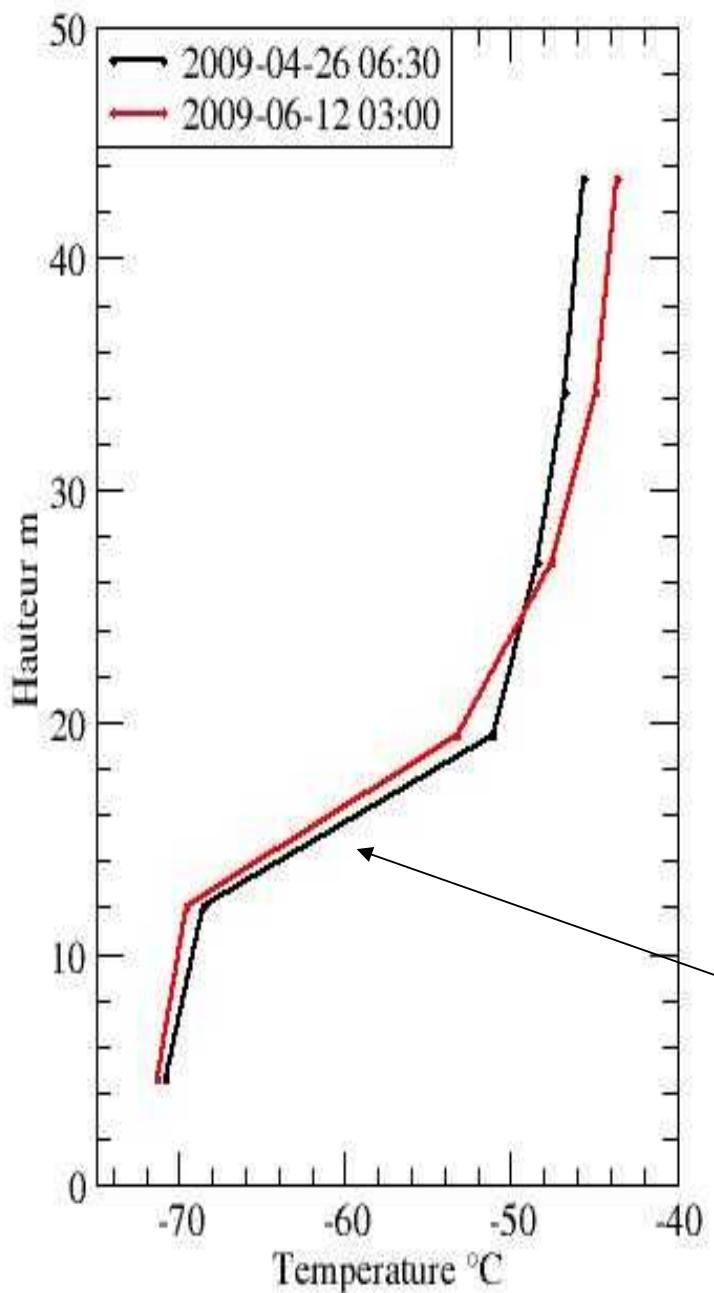
- But this is a tough environment for (men and) instruments : Deep freeze, frost deposition...
- The 2008 recording stopped short in the winter
- Some improvements during the 2009 field season =>...



Température 2009-2010

AMRC AWS
2001-2010

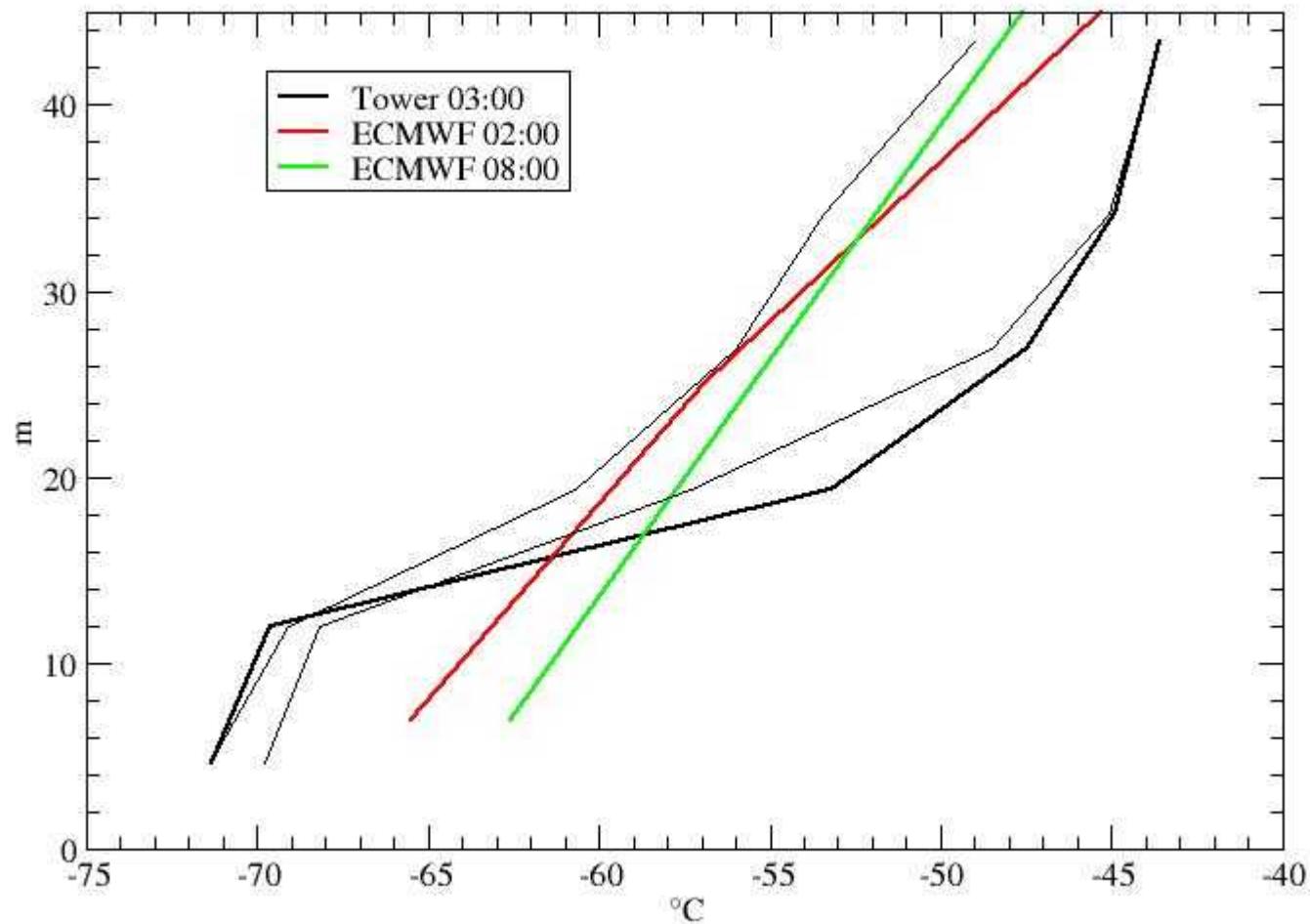


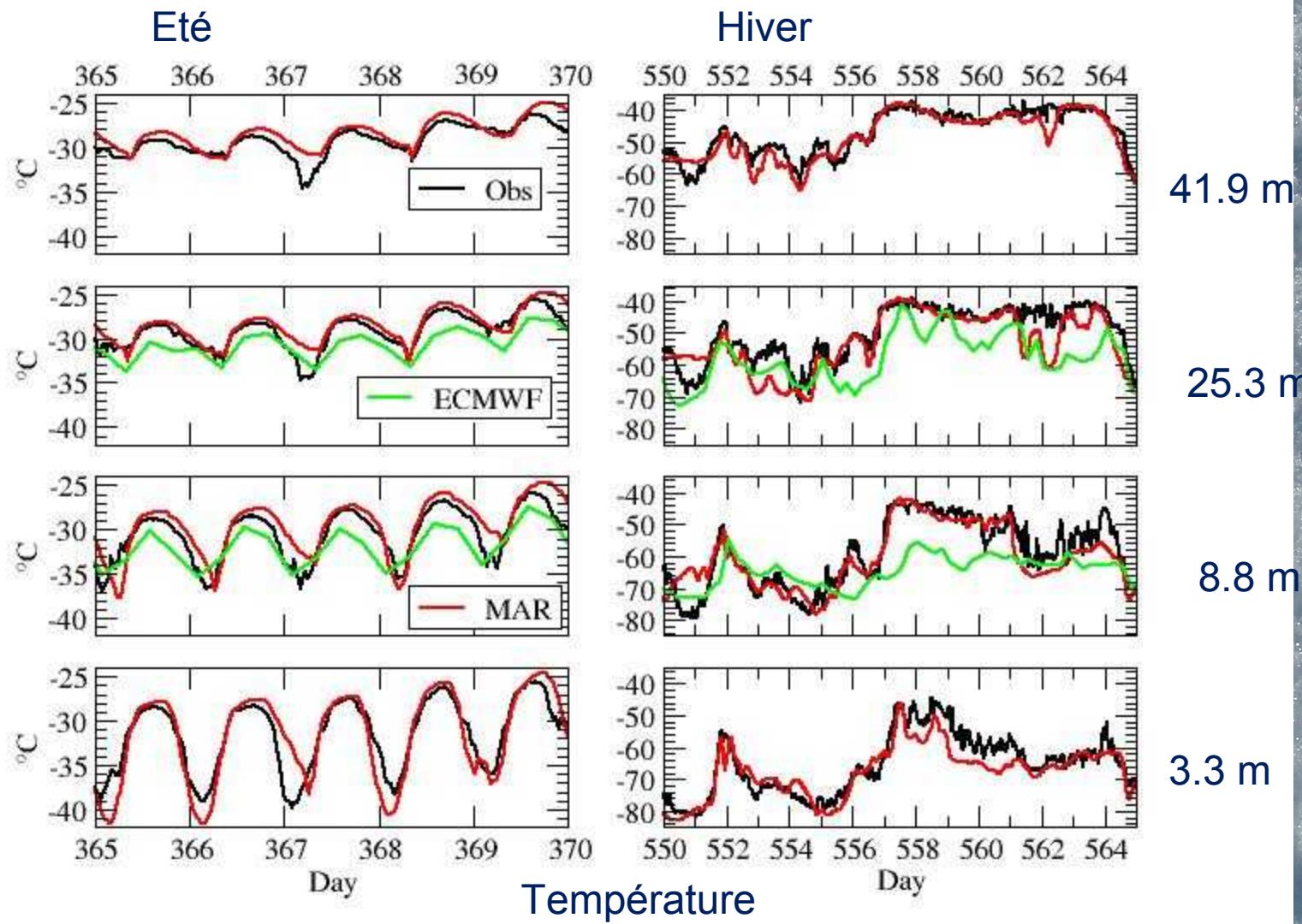


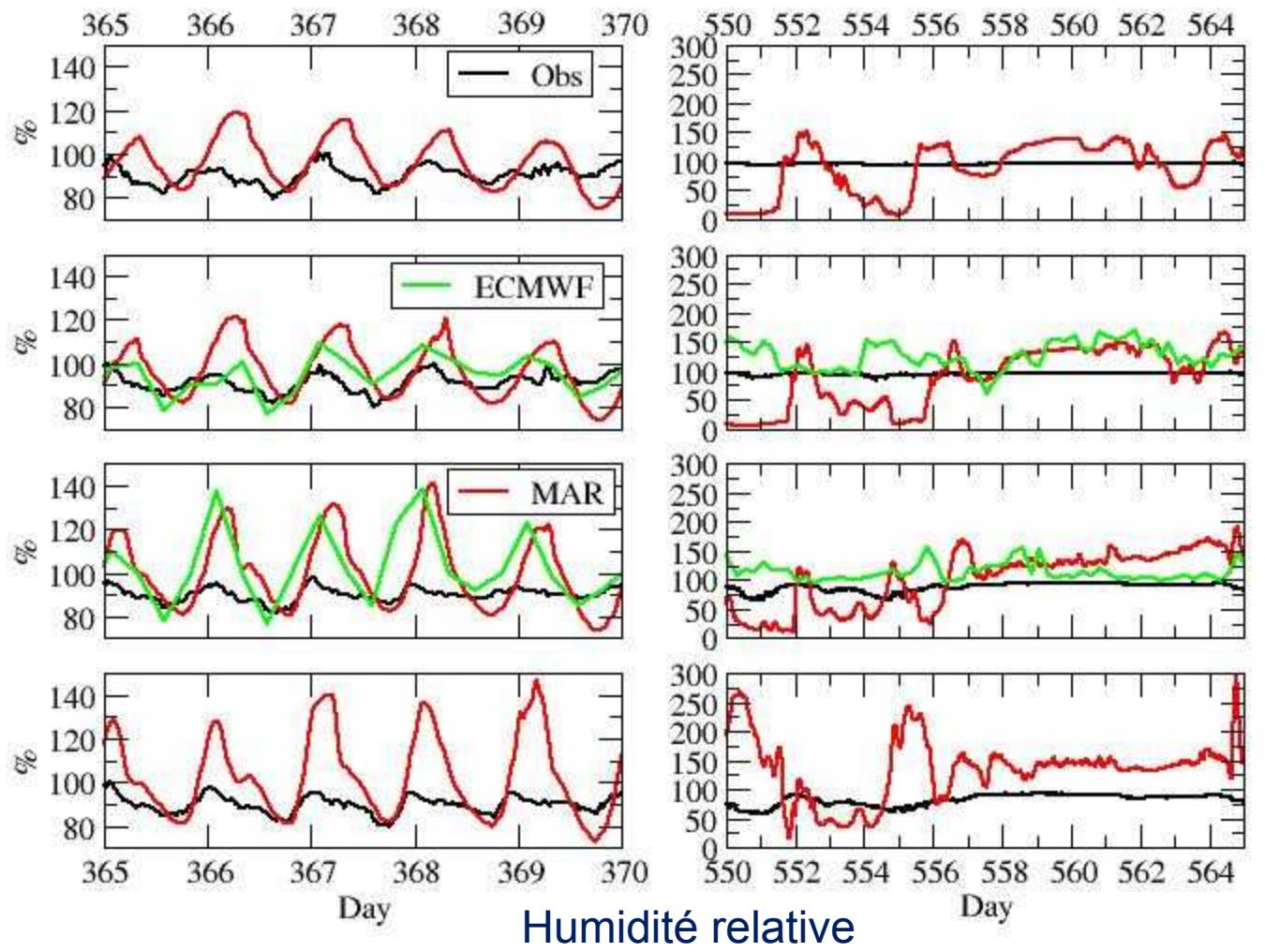
The most extreme inversions
In 2009 winter
More than 2°C / m locally

No inversion (convective mixing) in the summer mid-day

12 June 2009 early morning

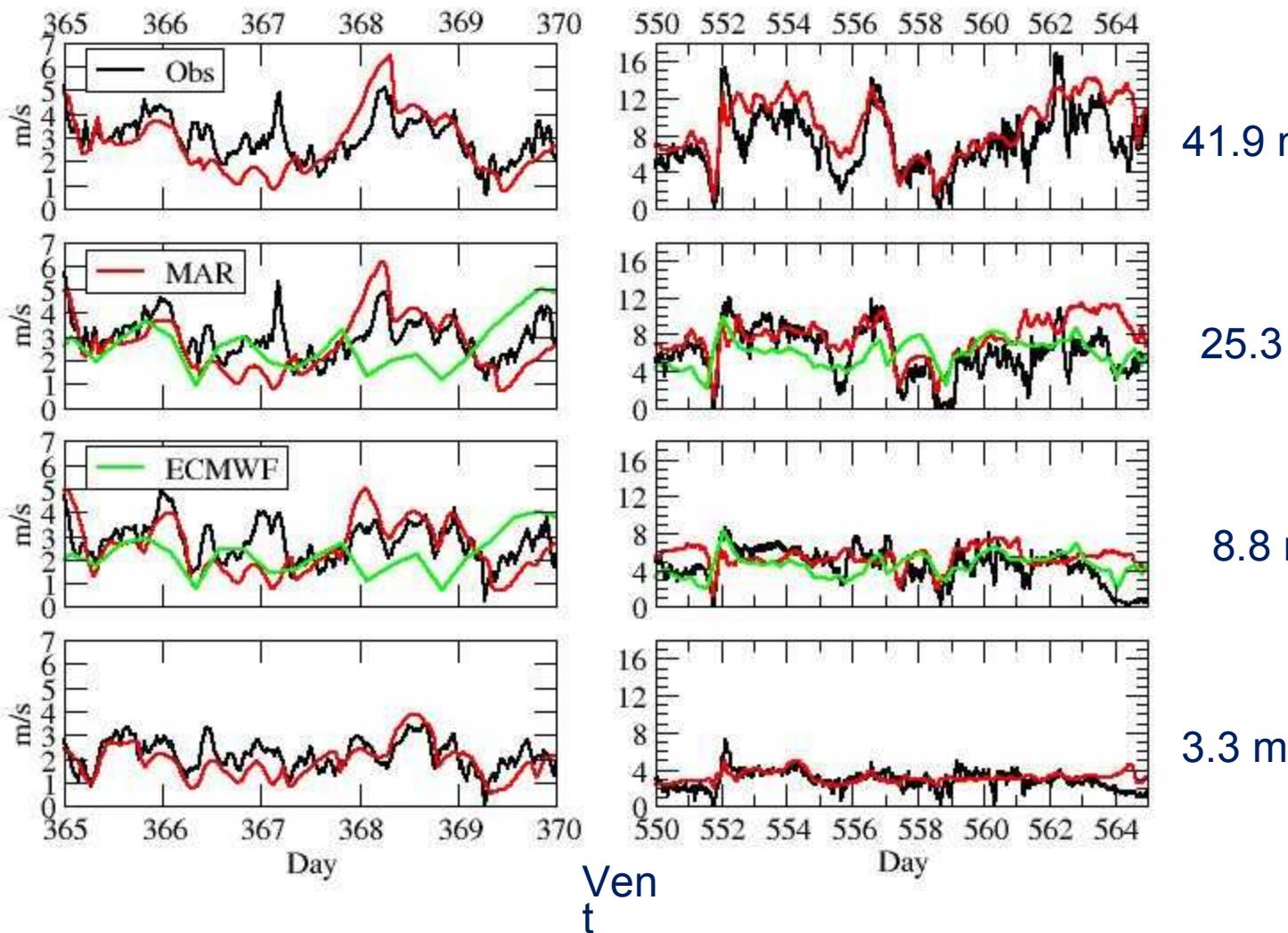


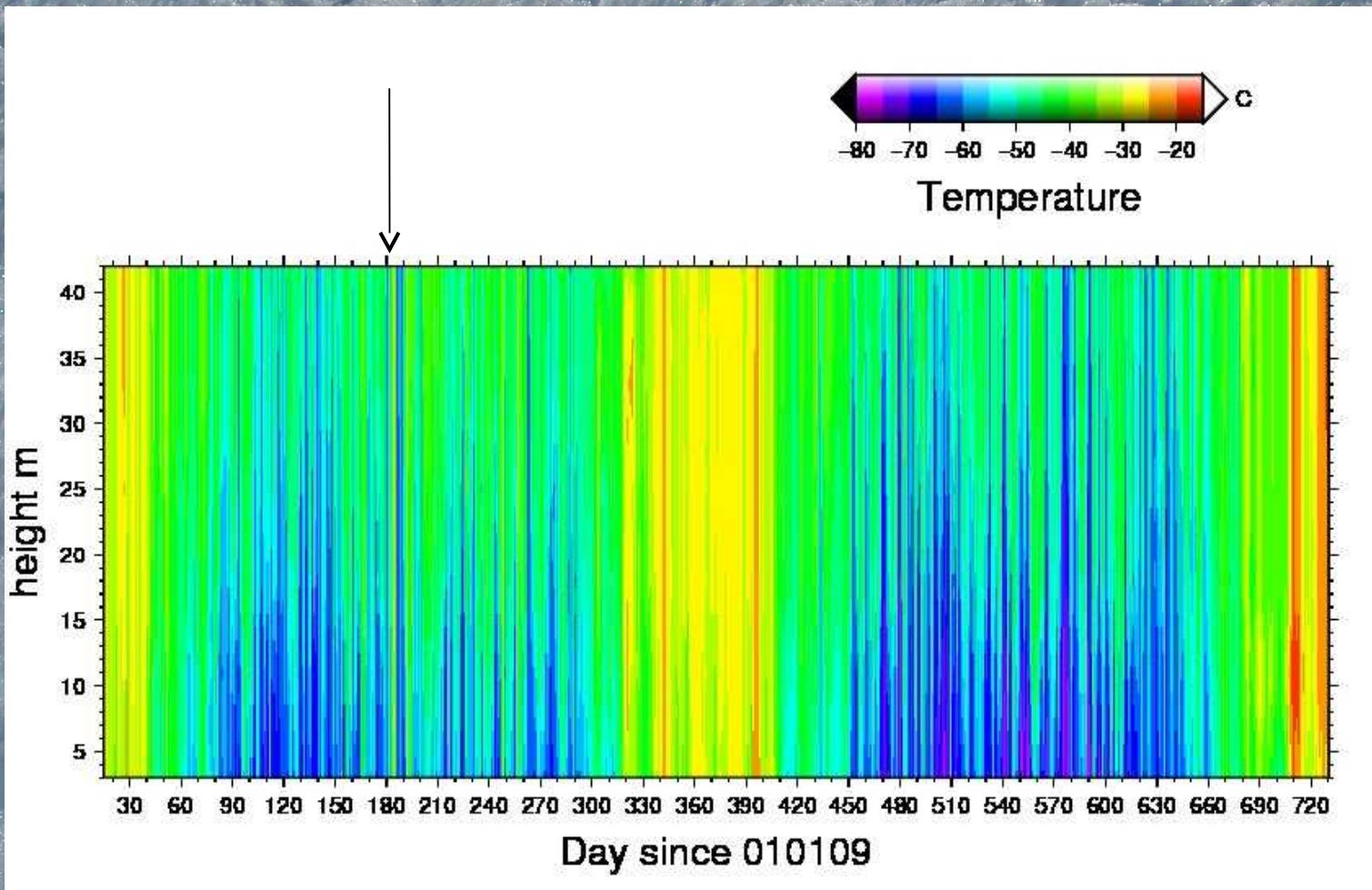


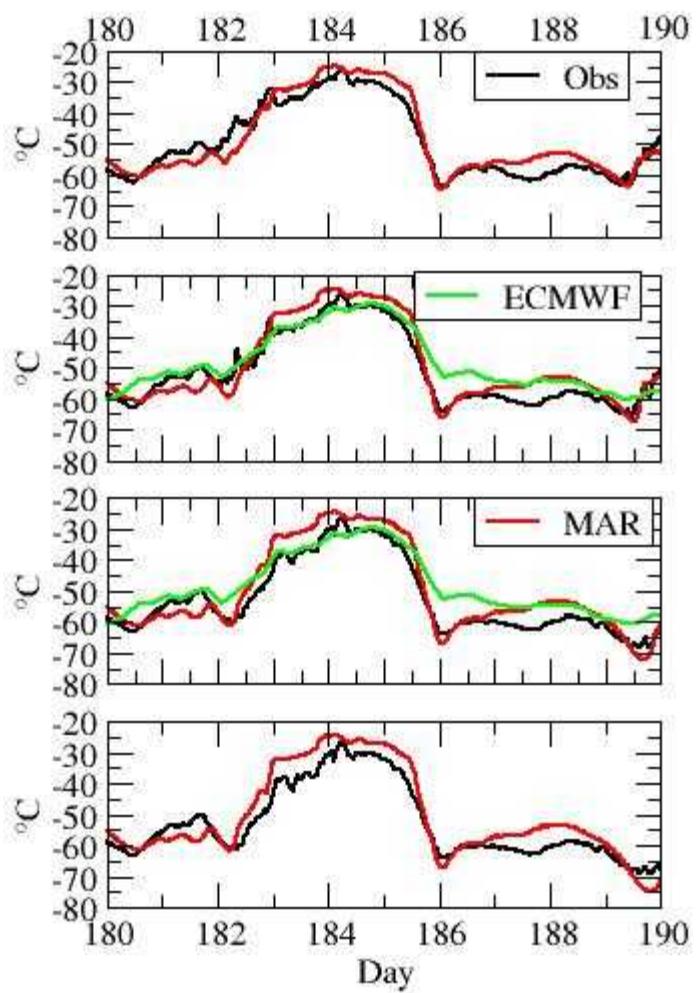
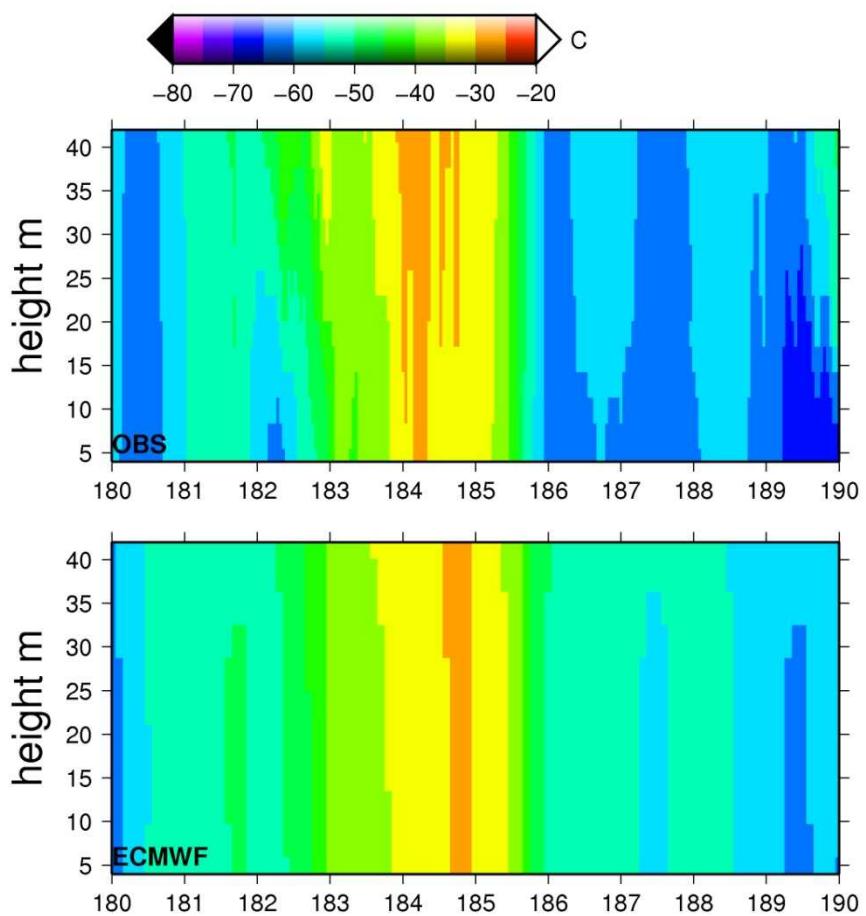


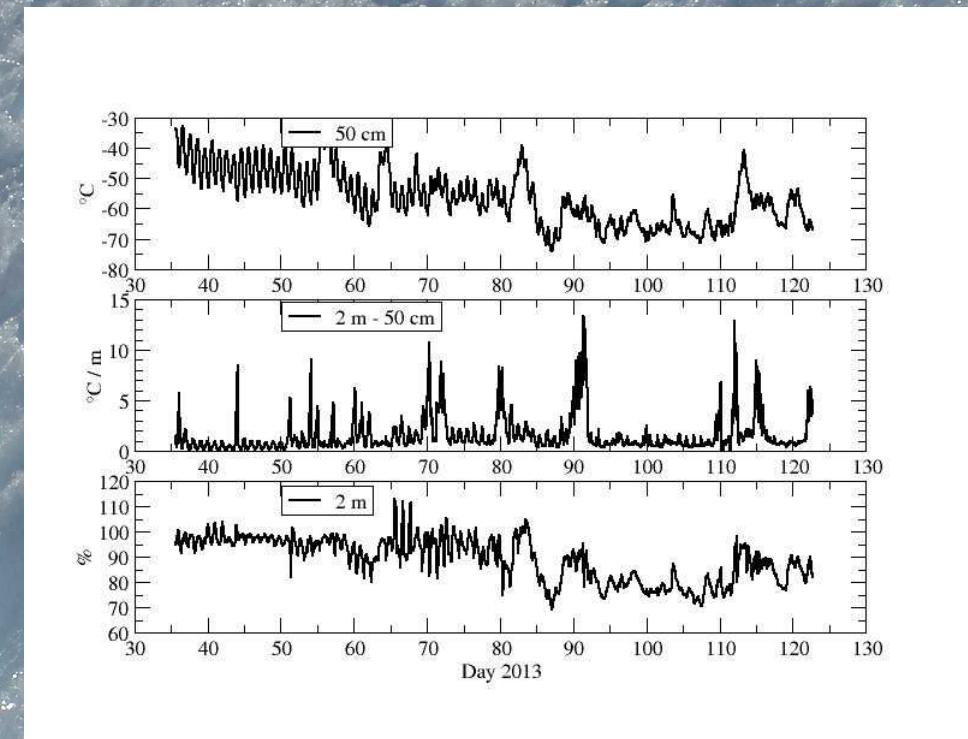
41.9 m
25.3 m
8.8 m
3.3 m

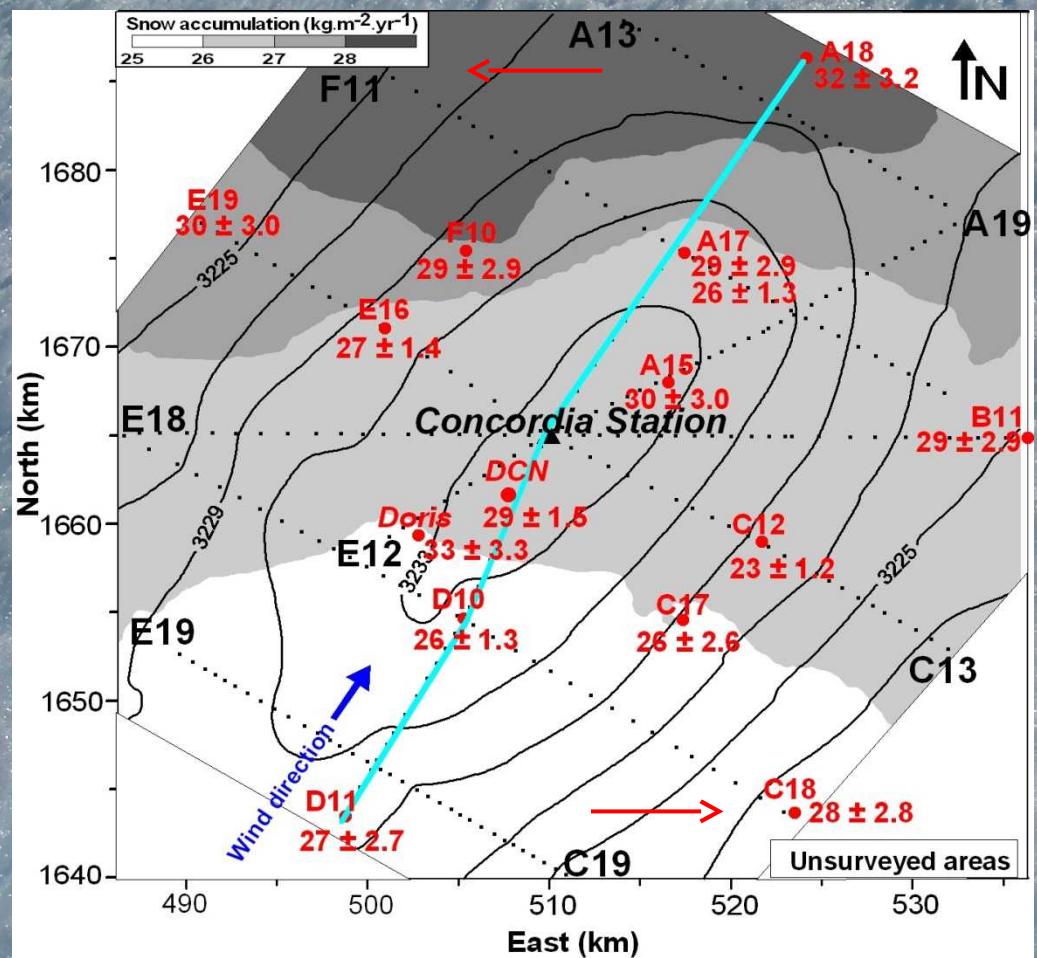
Humidité relative

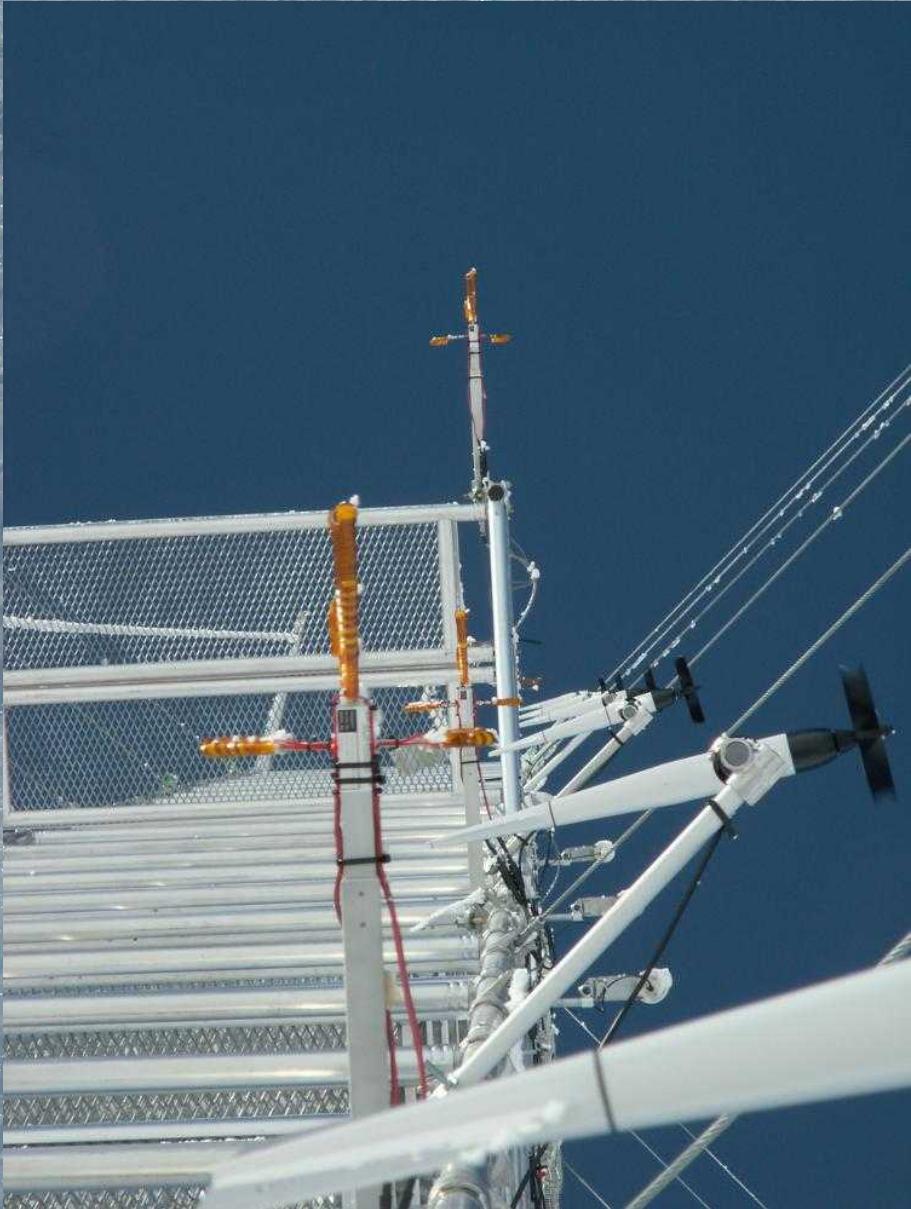




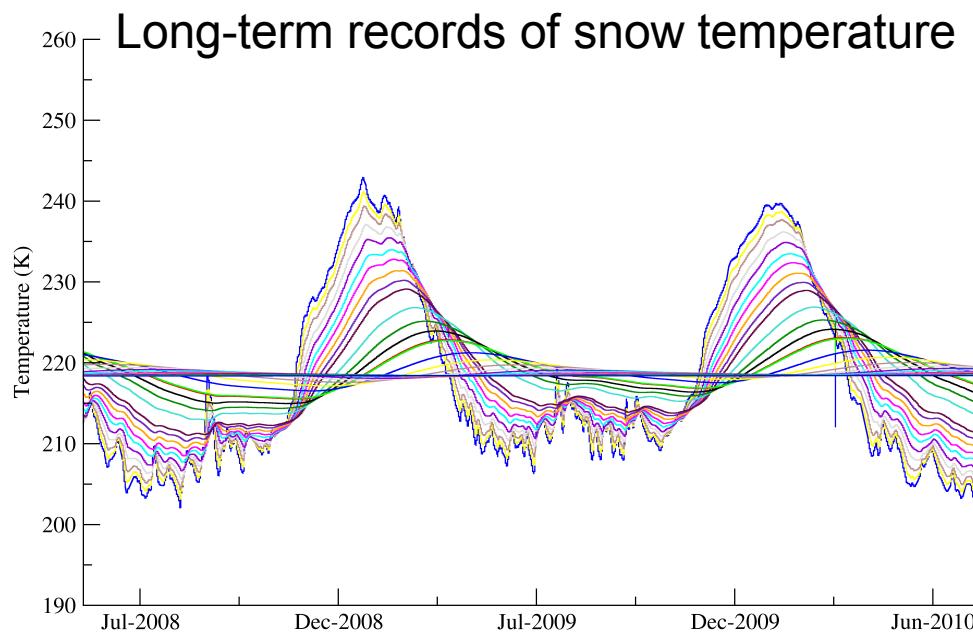




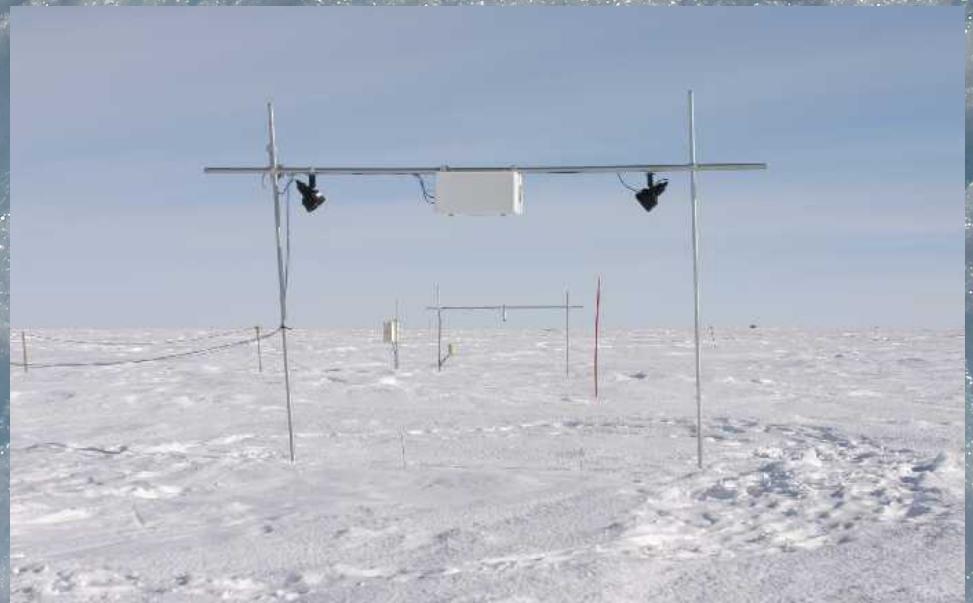




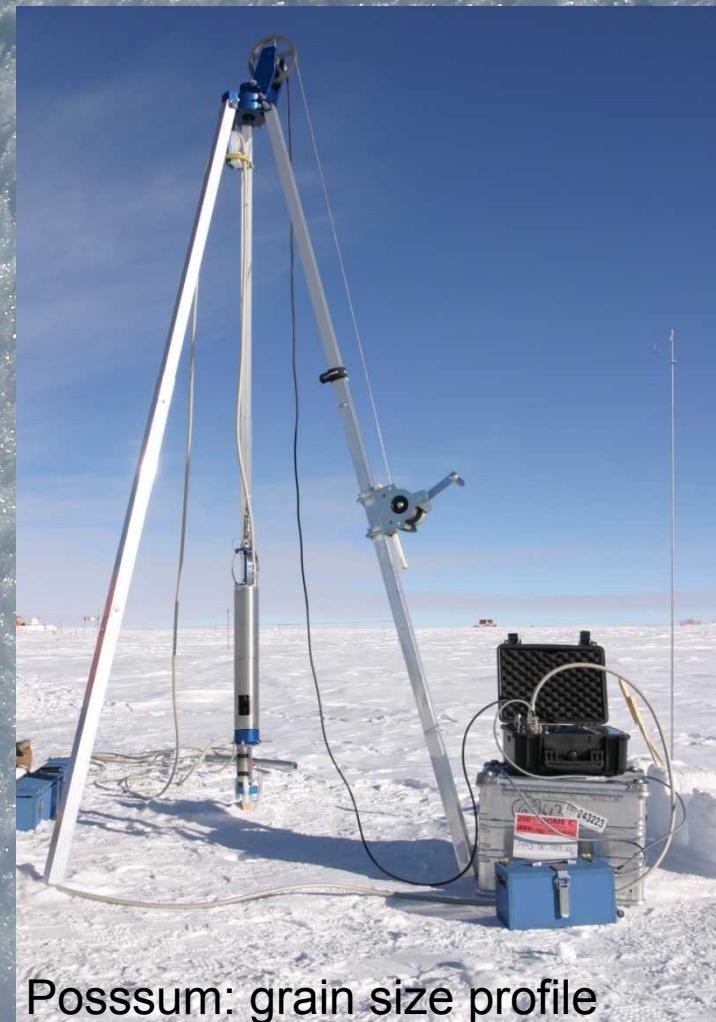
Yearly records of snow stratigraphy



Surface monitoring (air/snow interface)



Deep snow properties profiles (5- 20 m)



Possum: grain size profile

