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

The 45-m tower at Dome C: A unique facility on the plateau.
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 =>...
The most extreme inversions in 2009 winter. More than 2°C/m locally. No inversion (convective mixing) in the summer midday.
12 June 2009 early morning

Temperature vs. Height

- Tower 03:00
- ECMWF 02:00
- ECMWF 08:00
Humidité relative
Yearly records of snow startigraphy

Long-term records of snow temperature

Surface monitoring (air/snow interface)
Deep snow properties profiles (5-20 m)

Posssum: grain size profile