

CASTEL - ANTARCTIC CHARACTERISTICS

Coordinates	75° 06' S 123° 24' E
Altitude a.s.l. (m)	3280
Avg pressure (hPa)	650
GPS satellite visibility	yes
Sun az. above the horizon (min÷max, Jan 1 2004)	7° ÷ 37°
Avg zenith transparency at 225 GHz	> 0.9

Summer

Avg temperature (°C)	-35 ± 5
Minimum temperature (°C)	-45
Max daily temperature variations (°C)	13
Avg humidity (g/m ³)	< 3
Avg wind speed (m/s)	2.8
Max wind speed (m/s)	17

Transfer and storage

Minimum temperature during transfer (°C)	-60
Minimum winter temperature (°C)	-80
Max pressure on platform (Kg)	250 Kg/m ²
Max volume (m x m x m)	1 x 1 x 1
Min platform-container distance (m)	6

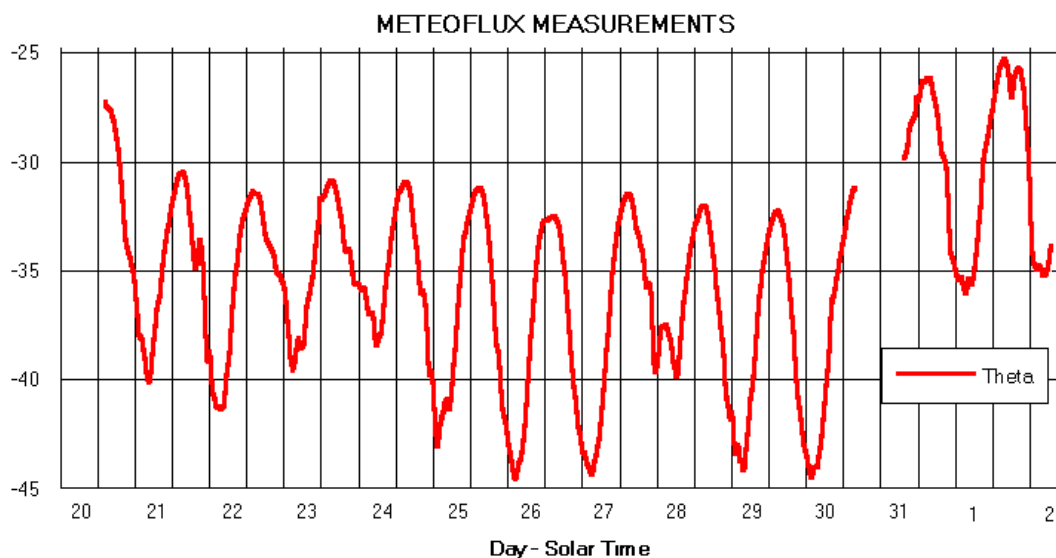


Fig.1: temperature (in C°) at 3 m altitude above the ice sheet at Dome C from January 20th to February 2nd 1997.

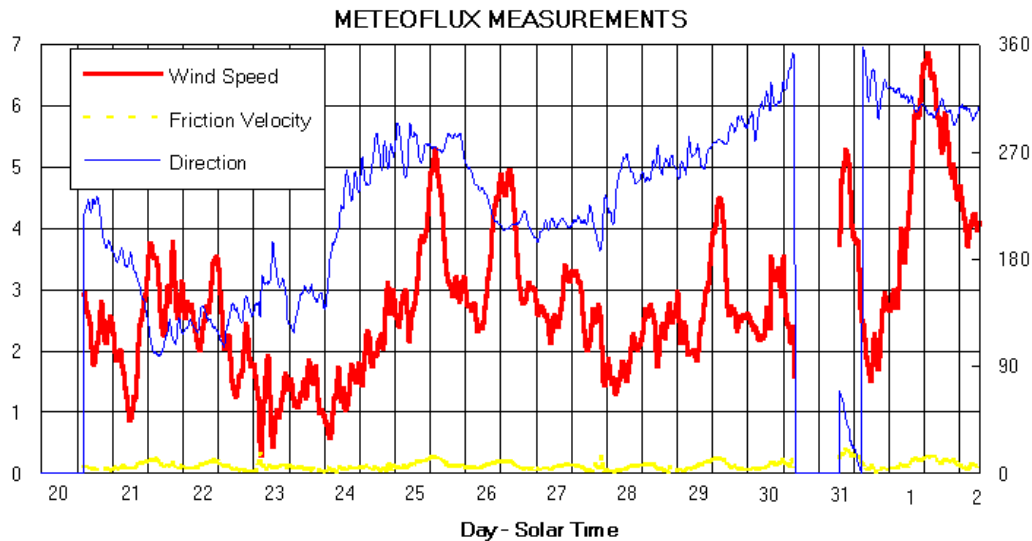


Fig.2: wind speed (in m/s, solid red curve) at 3 m altitude above the ice sheet at Dome C from January 20th to February 2nd 1997.

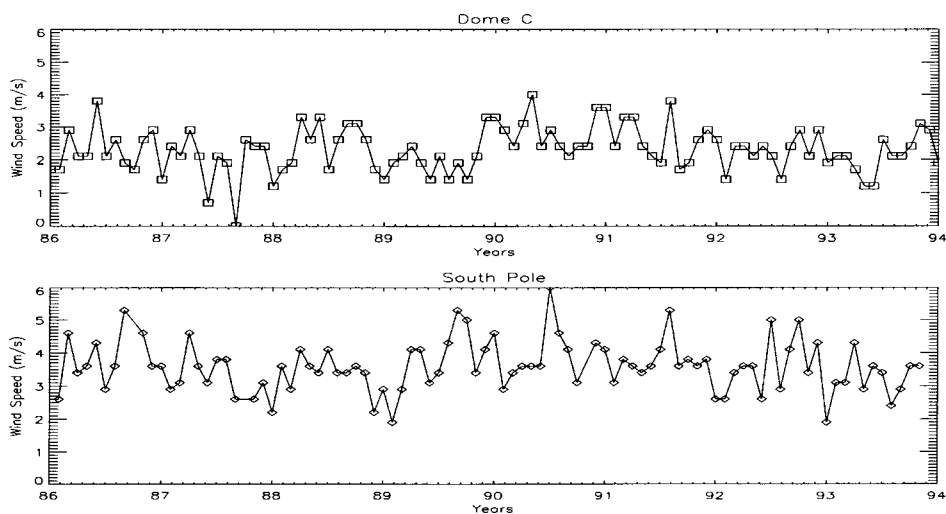


Fig.3: average wind speed (in m/s) at Dome C (top) and South Pole (bottom), from Valenziano and Dall'Oglio 1999.

Data are obtained from:

- Valenziano, S., Dall'Oglio, G., 1999, "Millimeter Astronomy from the High Antarctic Plateau: Site Testing at Dome C", PASA, 16, 167
- Argentini, S., Dargaud, G., 1997, "A few results from Dome C 1997 pre-campaign", su <http://sung3.ifs.rm.cnr.it/domec/ReportDomeC97.html>
- AWS 1995 data summary.

The French Platform (January 2003) at Dome C

