



## **The 1994 to 2008 concentration variations of atmospheric CO<sub>2</sub> observed at Jubany Station (Antarctica)**

veronica gallo, sara de simone, luigi ciattaglia, claudio rafanelli, and piero diego

CNR – Institute of Acoustic “O.M. Corbino” – ICES Group – Rome, Italy (veronica.gallo@idac.rm.cnr.it)

Since 1994 the Italian PNRA (National Research Program in Antarctica) and the Argentina DNA (Direction National de Antartico) have been collecting continuous atmospheric carbon dioxide measurements at Jubany. The Antarctic station at Jubany (62° 14'S, 58° 40'W) is located in King George Island, in the South Shetland archipelago, north of the Antarctic Peninsula. The laboratory is situated at an elevation of 15 m.s.l. on the SE slope of Potter Bay. The measurements are taken by using a Siemens U5 analyzer based on NDIR (Non Dispersive InfraRed) absorption method. Details are given on the station environment, meteorological conditions, instrumentation, and data selection strategy. The paper presents the first 14 years (1994-2008) of continuous atmospheric CO<sub>2</sub> measurements; the interannual and seasonal variations of CO<sub>2</sub> data are described