

ATMOSPHERIC CARBON DIOXIDE MEASUREMENTS IN ITALY

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Continuous measurements of atmospheric carbon dioxide have been performed, in Italy, at the mountain sites of Mt. Cimone and Plateau Rosa since 1979 and 1989 respectively, and at the marine site of Lampedusa since 1992. The three background sites are operated by three different institutions: the Italian Air Force Meteorological Service, CESI Ricerca and ENEA. The data produced by the three stations are provided to the Global Atmosphere Watch (GAW) Programme of the World Meteorological Organization (WMO). The trends of the three time series were analysed, compared and discussed. Data from the three stations show peaks in growth rate in 1998, 2002-2003, and 2005. For each site an analysis with the back-trajectories was performed in order to evaluate possible influences of source and sink areas.