Gateway Pages to a Multi-institution, Geographically Distributed, Network of Data Sets for Atmospheric Trace Species

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One of the original functions of the Carbon Dioxide Information Analysis Center (CDIAC) was to gather measurements of atmospheric concentrations of carbon dioxide and other radiatively active trace species, provided by institutions worldwide, and to organize the measurements into useful data sets for the research community and the public. Although we still archive data for long term preservation, the organization and presentation of the data are now best accomplished by the institutions that make the measurements. However, a comprehensive "gateway" to data on a wide variety of time scales, from all available sources, is still needed. To address this need, CDIAC now provides Gateway Pages which can be accessed for links to available data from several institutions. Links to the World Data Center for Paleoclimatology are provided to facilitate access to data on a wide variety of time scales. Emphasis is on ease of use and comprehensive coverage for users including atmospheric scientists, geoscientists, statisticians and students, as well as for the general public. Users can find data and graphics on any individual species of interest from a wide variety of geographic locations. We provide additional graphics to summarize available information from multiple sources and time scales. We also provide some tutorial information for the general public, students, and researchers from disciplines other than atmospheric chemistry. Summaries of measurement methodologies and calibrations, and of recent trends in atmospheric concentrations of individual species are also provided, along with references to the literature. Last but not least, we provide citation information, and users are strongly encouraged to acknowledge those who made the effort to obtain the data and assure their quality.

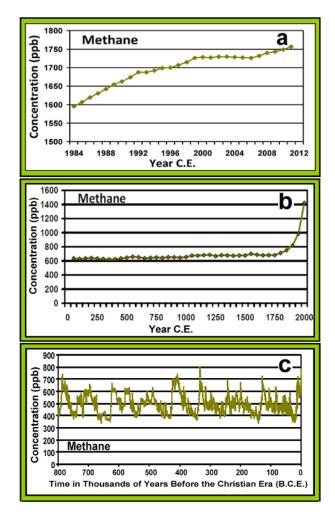


Figure 1. Graphics showing time series of atmospheric methane concentrations from Antarctica that are available from the Gateway Pages: (a) as measured instrumentally in modern times at the South Pole. (b) the 2000-year record from ice-core data at Law Dome, Antarctica (50-year averages ending in the year indicated), and (c) the 800,000-year record from ice-core data at Dome C, Antarctica.