CONTRAIL Data Protocol

January, 2009

The CONTRAIL (Comprehensive Observation Network for TRace gases by AIrLiner) project is being jointly conducted by NIES (National Institute for Environmental Studies), the MRI (Meteorological Research Institute), JAL (Japan Airlines International), JAMCO (JAMCO Corporation) and JAL-F (JAL Foundation).

The CONTRAIL Database contains all the CO_2 data measured by CME (except the data from the last 6 months which has not yet been validated), as well as the information from the aircraft data system (aircraft position, temperature, wind direction and wind speed). See the publications listed below for more detailed information.

The data was processed and checked by the following Principal Investigators (PIs), before being submitted to the Database.

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If you want to use CONTRAIL datasets in your research, please contact Toshinobu Machida by e-mail with your name, affiliation, institute, mail address, and a brief description of your research project as well as the data you are requesting (period, area, vertical or horizontal, etc.). Once your request is accepted by the PIs, they will provide you with the available datasets for your research.

Before using CONTRAIL data in a presentation or publication, please contact the PIs to discuss the results as well as co-authorship and collaboration.
In any case of presentation and publication, the data source from the CONRAIL project and our publication should be cited.
All persons making use of the CONTRAIL data are requested to provide a short annual report describing the work carried out with the data and listing any relevant publications or presentations by the following January.
Distribution of the CONTRAIL data to a third person is prohibited.

References:

Machida, T., H. Matsueda, Y. Sawa, et al., (2008), Worldwide measurements of atmospheric CO_2 and other trace gas species using commercial airlines. *J. Atmos. Oceanic. Technol.* **25** (10), 1744-1754, DOI: 10.1175/2008JTECHA1082.1.
http://ams.allenpress.com/perlserv/?request=get-abstract&doi=10.1175/2008JTECHA1082.1

Machida, T., H. Matsueda and Y. Sawa, (2007), IGAC Newsletter, issue No. 37, 23-30.
http://www.igac.noaa.gov/newsletter/