Author(s):

Eric C. Apel, Rebecca S. Hornbrook, Alan Hills
ACD/NCAR, 3450 Mitchell Lane, Boulder, CO 80301 US, 303-497-1452
apel@ucar.edu, http://staff.ucar.edu/browse/people/10885

1.0 Data Set Overview:

TORERO Field Project, Project P.I. Rainer Volkamer
Time period covered: 1/19/2012 through 2/28/2012
TOGA measurements from on board the NSF/NCAR Gulfstream-V
http://www.eol.ucar.edu/projects/torero/

2.0 Instrument Description:

The Trace Organic Gas Analyzer (TOGA) is a fast online Gas Chromatograph/Mass Spectrometer (GC/MS), with a measurement frequency of approximately one 40s sample every 2 minutes, capable of measuring up to 50 different volatile organic compounds (VOCs), including selected C_4-C_{10} hydrocarbons, C_1-C_9 oxygenated VOCs, halogenated VOCs, DMS, HCN, and CH$_3$CN.
See individual data files for specific VOCs measured during TORERO, individual VOC measurement accuracies and detection limits.

4.0 Data Format:

Data are in ICARTT format, one file per research flight.

5.0 Data Remarks:

Please contact P.I. prior to use.
No data was obtained during RF14, 19-Feb-2012.

6.0 References:

Recent publications:
E. C. Apel et al., Impact of the deep convection of isoprene and other reactive trace species on radicals and ozone in the upper troposphere, Atmos. Chem. Phys., 12, 1135, doi:10.5194/acp-12-1135-2012, 2012.
E. C. Apel et al., Chemical evolution of volatile organic compounds in the outflow of the Mexico City Metropolitan area, Atmos. Chem. Phys., 10, 2353, doi:10.5194/acp-10-2353-2010, 2010.