

Data set information for HARC Project H63 Aircraft Measurement Support of TexAQS II

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This document presents information about the comma delimited ASCII text files and graphical products. Tables 1-1 to 1-4 lists science flights, file names and naming conventions, quality control flags and parameters in data files, respectively.

For more information regarding the measurements refer to H-63 Aircraft Measurements in Support of TexAQS II final report titled “Baylor Aircraft-Based Air Quality Measurement Data Atlas” and for quality control refer to “Quality Assurance Project Plan for Aircraft Measurements in Support of TexAQS II.”

Table 1-1. List of science flights and data status

Date	Experiment	Comments
8/21/2006	Stationary front	
8/22/2006	Stationary front	
8/30/2006	Top down emissions verification-ship channel	Morning; SOF Box; Vertical profiles NE of ship channel and near La Porte
8/30/2006	Top down emissions verification-ship channel	Afternoon
8/31//2006	Top down emissions verification-ship channel	Morning; SOF Box; Vertical profiles NE of ship channel and near La Porte
8/31/2006	Top down emissions verification-ship channel	Afternoon
9/13/2006	Top down emissions verification-ship channel	Morning; SOF Box; Vertical profiles NE of ship channel and near La Porte
9/13/2006	Top down emissions verification-ship channel	Afternoon; SOF Box; Vertical profile near La Porte
9/20/2006	Top down emissions verification-Texas City	SOF Box; Vertical profile near La Porte and west of Texas City
9/27/2006	Top down emissions verification-Freeport and Sweeney	SOF Box (at Freeport facilities and Sweeney); Vertical profile upwind of Sweeney and downwind
10/05/2006	Vertical mixing	4 vertical profiles over Moody Tower and 2 over West Houston airport

Table 1-2. File naming conventions and file structure

Filename	File type	Directory
Aztec_year_month_day (e.g. Aztec_060927)	Comma limited ASCII text	L01_data
bsp_track	png (portable network graphics)	L01_plots
co_track	png	L01_plots
HCHO_track	png	L01_plots
no2_track	png	L01_plots
no_track	png	L01_plots
noy_track	png	L01_plots
ozone_track	png	L01_plots
rad_track	png	L01_plots
so2_track	png	L01_plots
TS1	png	L01_plots
TS2	png	L01_plots
TS3	png	L01_plots
TS4	png	L01_plots
TS5	png	L01_plots

Table 1-3. NARSTO standard QC flags

QC flag	Defined as
V0	Valid
M2	Invalid
M1	Missing
V6	Suspect
M2	Cal
M2	Zero

Table 1-4. Parameters and units for data files

Parameter	Units
Timewave_5s	timewave (Igor)
Date_DDMMYY	dd/mm/yy
Time_cdt	Hours: Minutes: Seconds
*Gps_lat_deg_5s	Degrees
*Gps_lon_deg_5s	Degrees
*Gps_alt_ft_5s	Feet
*Pres_mb_5s	Millibars
*Temp_degC_5s	Degrees celsius
*Rh_percent_5s	Percent
*WS_mph_5s	Miles per hour
*wd_deg_5s	Degrees
*o3_ppbv_5s	parts per billion v/v
*no_ppbv_5s	parts per billion v/v
*no2_ppbv_5s	parts per billion v/v
*noy_ppbv_5s	parts per billion v/v
*so2_ppbv_5s	parts per billion v/v
*rad_ppbv_5s	parts per billion v/v
co_ppbv_5s	parts per billion v/v
*neph_green_invMm_5s	Inverse megameters
*neph_red_invMm_5s	Inverse megameters
*neph_blue_invMm_5s	Inverse megameters
*HCHO_meas_calc_5s	parts per billion v/v

*includes QC flag column