

# Observations and Measurements

## Field Names List

Parameter	Description	Units
cruise_id	Cruise identification	unitless
GEOTRC_INSTR	Sampling instrument; added from BCO-DMO EPZT master event file.	unitless
GEOTRC_SAMPNO	Unique GEOTRACES sample number	unitless
STNNBR	Station number; added from BCO-DMO EPZT master event file.	unitless
GEOTRC_EVENTNO	GEOTRACES event number; added from BCO-DMO EPZT master event file.	unitless
julian_day	Sampling start Julian day	unitless
day_start	Sampling start day	unitless
month_start	Sampling start month	unitless
year_start	Sampling start year	unitless
time_start_utc	Sampling start time	unitless
ISO_DateTime_UTC_start	Start date and time formatted to ISO 8601 standard; format: YYYY-mm-ddTHH:MM:SS.xxZ	unitless
lat_start	Sampling start Latitude (decimal degrees)	decimal degrees
lon_start	Sampling start Longitude (decimal degrees)	decimal degrees
day_end	Sampling end day	unitless
month_end	Sampling end month	unitless
year_end	Sampling end year	unitless
time_end_utc	Sampling end time	unitless
ISO_DateTime_UTC_end	End date and time formatted to ISO 8601 standard; format: YYYY-mm-ddTHH:MM:SS.xxZ	unitless
lat_end	Sampling end Latitude (decimal degrees)	decimal degrees

lon_end	Sampling end Longitude (decimal degrees)	decimal degrees
air_vol_total	Total volume of air sampled	cubic meters (m3)
Al_TP_Conc_Avg_Aerosol	Total particulate aerosol Aluminium (Al) concentration, average of 3 replicates. Detection limit = 0.004 ng/m3.	nanograms per cubic meter (ng/m3)
Al_TP_Conc_Var_Aerosol	Total particulate aerosol Al concentration, variance	nanograms per cubic meter (ng/m3)
Al_TP_Conc_QF_Aerosol	Total particulate aerosol Al concentration, data quality flag	unitless
Ti_TP_Conc_Avg_Aerosol	Total particulate aerosol Titanium (Ti) concentration, average of 3 replicates. Detection limit = 0.002 ng/m3.	nanograms per cubic meter (ng/m3)
Ti_TP_Conc_Var_Aerosol	Total particulate aerosol Ti concentration, variance	nanograms per cubic meter (ng/m3)
Ti_TP_Conc_QF_Aerosol	Total particulate aerosol Ti concentration, data quality flag	unitless
V_TP_Conc_Avg_Aerosol	Total particulate aerosol Vanadium (V) concentration, average of 3 replicates. Detection limit = 0.00002 ng/m3.	nanograms per cubic meter (ng/m3)
V_TP_Conc_Var_Aerosol	Total particulate aerosol V concentration, variance	nanograms per cubic meter (ng/m3)
V_TP_Conc_QF_Aerosol	Total particulate aerosol V concentration, data quality flag	unitless
Mn_TP_Conc_Avg_Aerosol	Total particulate aerosol Manganese (Mn) concentration, average of 3 replicates. Detection limit = 0.0009 ng/m3.	nanograms per cubic meter (ng/m3)
Mn_TP_Conc_Var_Aerosol	Total particulate aerosol Mn concentration, variance	nanograms per cubic meter (ng/m3)
Mn_TP_Conc_QF_Aerosol	Total particulate aerosol Mn concentration, data quality flag	unitless

Fe_TP_Conc_Avg_Aerosol	quality flag Total particulate aerosol Iron (Fe) concentration, average of 3 replicates. Detection limit = 0.04 ng/m3.	nanograms per cubic meter (ng/m3)
Fe_TP_Conc_Var_Aerosol	Total particulate aerosol Fe concentration, variance	nanograms per cubic meter (ng/m3)
Fe_TP_Conc_QF_Aerosol	Total particulate aerosol Fe concentration, data quality flag	unitless
Cu_TP_Conc_Avg_Aerosol	Total particulate aerosol Copper (Cu) concentration, average of 3 replicates. Detection limit = 0.001 ng/m3.	nanograms per cubic meter (ng/m3)
Cu_TP_Conc_Var_Aerosol	Total particulate aerosol Cu concentration, variance	nanograms per cubic meter (ng/m3)
Cu_TP_Conc_QF_Aerosol	Total particulate aerosol Cu concentration, data quality flag	unitless
Cd_TP_Conc_Avg_Aerosol	Total particulate aerosol Cadmiuim (Cd) concentration, average of 3 replicates. Detection limit = 0.0004 ng/m3.	nanograms per cubic meter (ng/m3)
Cd_TP_Conc_Var_Aerosol	Total particulate aerosol Cd concentration, variance	nanograms per cubic meter (ng/m3)
Cd_TP_Conc_QF_Aerosol	Total particulate aerosol Cd concentration, data quality flag	unitless
Pb_TP_Conc_Avg_Aerosol	Total particulate aerosol Lead (Pb) concentration, average of 3 replicates. Detection limit = 0.00 ng/m3.	nanograms per cubic meter (ng/m3)
Pb_TP_Conc_Var_Aerosol	Total particulate aerosol Pb concentration, variance	nanograms per cubic meter (ng/m3)
Pb_TP_Conc_QF_Aerosol	Total particulate aerosol Pb concentration, data quality flag	unitless