AMERIFLUX (/)

QA/QC Report: Format

This report details results of the AmeriFlux QA/QC data processing pipeline.
For more information, see How to Read This Report (), QA/QC Results Definitions (), FAQ (https://ameriflux.lbl.gov/data/faq/#qaqc), and Upload Format Instructions (https://ameriflux.lbl.gov/half-hourly-hourly-data-upload-format/)

FAIL **Review failures and warnings**
Upload a corrected replacement file.

Uploaded File Report ATMOS_L3_2024-08-12_ch4gapfilled_fluxnet.csv Report ID: 78795

Site ID: US-AMS
Site contact: Gavin McNicol (mailto:gmcnicol@uic.edu)

Uploader: Gavin McNicol
Upload date: 2024-Aug-14 06:34
Uploaded filename: ATMOS_L3_2024-08-12_ch4gapfilled_fluxnet-20240814063403173335.csv

Format QA/QC report summary:
All format QA/QC tests attempted. Issues were encountered. Please correct issues and upload a replacement file.

Test	Results	Additional Information
Are Timestamp variables present?	FAIL	Expected timestamp variable(s) **TIMESTAMP_START** is / are missing.
Timestamp problem encountered.	FAIL	These Format QA/QC assessments could not be completed: Do filename time components match file time period? Is Timestamp resolution OK? Any Timestamp duplicates?
Is Filename Format valid?	FAIL	These filename components are not in the standard AmeriFlux format: **SITE_ID, resolution, ts-end (end time)**
Are Timestamp variables as expected?	FAIL	These unexpected variables were found in columns 1 & 2 instead of TIMESTAMP_START and TIMESTAMP_END: **TIMESTAMP, DATE**

Test	Results	Additional Information
Any invalid Missing-Value Formats?	FAIL	Missing values are not indicated with -9999 for these variables (number of timestamps): **DOY (243), daytime (1798), file_records (1798), used_records (1798), TAU (1799), TAU_SSITC_TEST (1798), H (11207), H_SSITC_TEST (1798), LE (12763), LE_SSITC_TEST (2173), FC (13510), FC_SSITC_TEST (2157), FH2O (12763), qc_h2o_flux (2173), FCH4 (16659), FCH4_SSITC_TEST (8430), SH (2252), SLE (2689), SC (2681), h2o_strg (2689), SCH4 (9682), co2_vadv (2157), h2o_vadv (2173), ch4_vadv (8430), co2_molar_density (2157), CO2 (2157), CO2_MIXING_RATIO (2157), co2_time_lag (2157), co2_def_timelag (1798), h2o_molar_density (2173), H2O (2173), H2O_MIXING_RATIO (2173), h2o_time_lag (2173), h2o_def_timelag (1798), ch4_molar_density (8430), CH4 (8430), CH4_MIXING_RATIO (8430), ch4_time_lag (8430), ch4_def_timelag (1798), T_SONIC (1798), TA (1798), PA (1798), air_density (1798), air_heat_capacity (1798), air_molar_volume (1798), ET (12763), water_vapor_density (2173), e (2173), es (1946), specific_humidity (2173), RH (2187), VPD (2187), Tdew (2173), u_unrot (1798), v_unrot (1798), w_unrot (1798), u_rot (1798), v_rot (1798), w_rot (1798), WS (1798), WS_MAX (1798), WD (1798), yaw (1798), pitch (1798), roll (27610), USTAR (1798), TKE (1798), MO_LENGTH (11266), ZL (11207), bowen_ratio (2173), T (1798), model (1798), FETCH_MAX (10717), x_offset (10717), x_10 (10717), x_30 (10717), x_50 (10717), FETCH_70 (10717), FETCH_90 (10717), TAU_UNCORR (1798), Tau_scf (1798), H_UNCORR (1798), H_scf (1798), LE_UNCORR (2173), LE_scf (2173), FC_UNCORR (2157), co2_scf (2157), un_h2o_flux (2173), h2o_scf (2173), FCH4_UNCORR (8430), ch4_scf (8430), spikes_hf (1798), amplitude_resolution_hf (1798), drop_out_hf (1798), absolute_limits_hf (1798), skewness_kurtosis_hf (1798), skewness_kurtosis_sf (1798), discontinuities_hf (1798), discontinuities_sf (1798), timelag_hf (1798), timelag_sf (1798), attack_angle_hf (1798), non_steady_wind_hf (1798), u_spikes (1798), v_spikes (1798), w_spikes (1798), ts_spikes (1798), co2_spikes (1798), h2o_spikes (1798), ch4_spikes (1798), chopper_LI7500 (1798), detector_LI7500**

Test	Results	Additional Information
		(1798), pll_LI7500 (1798), sync_LI7500 (1798), not_ready_LI7700 (1798), no_signal_LI7700 (1798), re_unlocked_LI7700 (1798), bad_temp_LI7700 (1798), laser_temp_unregulated_LI7700 (1798), block_temp_unregulated_LI7700 (1798), motor_spinning_LI7700 (1798), pump_on_LI7700 (1798), top_heater_on_LI7700 (1798), bottom_heater_on_LI7700 (1798), calibrating_LI7700 (1798), motor_failure_LI7700 (1798), bad_aux_tc1_LI7700 (1798), bad_aux_tc2_LI7700 (1798), bad_aux_tc3_LI7700 (1798), box_connected_LI7700 (1798), mean_value_RSSI_LI7500 (2200), u_var (1798), v_var (1798), w_var (1798), ts_var (1798), co2_var (2157), h2o_var (2173), ch4_var (8430), wts_cov (1798), wco2_cov (2157), wh2o_cov (2173), wch4_cov (8430), air_t_mean (1798), air_p_mean (1798), auxiliary_input_1_mean (1798), auxiliary_input_2_mean (1798), auxiliary_input_3_mean (1798), auxiliary_input_4_mean (1798), vin_sf_mean (1798), co2_mean (1807), h2o_mean (1808), dew_point_mean (2035), co2_signal_strength_7500_mean (1798), ch4_mean (2663), rssi_77_mean (2663), ch4_aux1_mean (2663), ch4_aux2_mean (2663), ch4_aux3_mean (2663), ch4_aux4_mean (2663), ch4_tc_1_mean (2663), ch4_tc_2_mean (2663), ch4_tc_3_mean (2663), X (27610), Year_local (2), jday_local (2), month_local (2), hour_local (2), min_local (2), DOY_local (2), badrot (1798), badt (1798), badq (2167), badc (1999), badm (3476), badwind (1798), badL (1798), badwindffp (1798), badustar (1798), DOM (13445), Month (13445), Year (13445), Time (13445), WD60 (13532), WS60 (13555), WD_STD60 (13536), T60 (13546), WD10 (13679), WS10 (14045), WD_STD10 (13690), T10 (13553), DPT (13839), RH_1 (13679), TD100 (13553), P (13470), RS (16924), NETRAD (13474), Pressure (13477), WatVapPress (13566), TS10 (13486), TS100 (27610), TS10F (14180), SWC_00 (9219), SWC_01 (72), SWC_02 (9219), SWC_12 (72), SWC_11 (72), SWC_10 (72), SWC_20 (22767), SWC_21 (72), SWC_22 (15850), SWC_32 (7225), SWC_31 (3849), SWC_30 (9404),

Test	Results	Additional Information
		SWC_40 (15854), SWC_41 (72), SWC_42 (72), SWC_52 (72), SWC_51 (72), SWC_50 (72), SWC_60 (7767), SWC_61 (72), SWC_62 (72), SWC_72 (72), SWC_71 (72), SWC_70 (72), SWC_03 (16846), SWC_04 (77), SWC_14 (6400), SWC_13 (77), SWC_24 (77), SWC_23 (77), SWC_33 (72), SWC_34 (72), SWC_44 (72), SWC_43 (4067), SWC_30cm (72), SWC_50cm (72), SWC_53 (72), SWC_54 (72), SWC_64 (72), SWC_63 (72), SWC_74 (72), SWC_73 (72), SWC_05 (4952), SWC_06 (5816), SWC_07 (7120), SWC_17 (72), SWC_16 (72), SWC_15 (72), SWC_25 (108), SWC_26 (72), SWC_27 (72), SWC_37 (72), SWC_36 (16526), SWC_35 (72), SWC_45 (16525), SWC_46 (13149), SWC_47 (72), SWC_57 (72), SWC_56 (72), SWC_55 (12490), SWC_65 (72), SWC_66 (72), SWC_67 (72), SWC_77 (72), TS_00 (9236), TS_01 (159), TS_02 (9295), TS_12 (72), TS_11 (76), TS_10 (154), TS_20 (22798), TS_21 (78), TS_22 (15850), TS_32 (7244), TS_31 (3853), TS_30 (9425), TS_40 (15890), TS_41 (76), TS_42 (220), TS_52 (101), TS_51 (85), TS_50 (307), TS_60 (7805), TS_61 (77), TS_62 (72), TS_72 (72), TS_71 (98), TS_70 (75), TS_03 (16857), TS_04 (111), TS_14 (6400), TS_13 (7222), TS_24 (78), TS_23 (87), TS_33 (120), TS_34 (72), TS_44 (116), TS_43 (4079), TS_30cm (87), TS_50cm (1422), TS_53 (100), TS_54 (89), TS_64 (79), TS_63 (132), TS_74 (100), TS_73 (72), TS_05 (4952), TS_06 (5826), TS_07 (7136), TS_17 (9573), TS_16 (72), TS_15 (4602), TS_25 (2315), TS_26 (74), TS_27 (85), TS_37 (76), TS_36 (16576), TS_35 (74), TS_45 (16597), TS_46 (13169), TS_47 (95), TS_57 (201), TS_56 (81), TS_55 (5737), TS_65 (10178), TS_66 (1660), TS_67 (89), TS_77 (6917), DOY_START (38), TA_EP (1798), RH_EP (2187), esmet (1798), VPDmet (2187), SW_IN_POT (38), Year_localmet (2), jday_localmet (2), month_localmet (2), hour_localmet (2), min_localmet (2), DOY_localmet (2), VPD_hPa (2187)
Issues that cannot be autocorrected.	FAIL	File has duplicate variables DATE (column 4); TIME (column 277); TIMESTAMP (column 432); YEAR (column 434). File had issues that could not be automatically corrected. Autocorrection FAILED.

Test	Results	Additional Information
Is Filename Format valid?	WARNING	These filename components are not in the standard AmeriFlux format: **ts-start (start time), optional parameter included (will be removed in autocorrected file)**

Test	Results	Additional Information
Are Data Variable names in correct format?	WARNING	These variable names are not in standard AmeriFlux format: **DATE, filename, date, time, DOY, daytime, file_records, used_records, qc_h2o_flux, h2o_strg, co2_v.adv, h2o_v.adv, ch4_v.adv, co2_molar_density, co2_time_lag, co2_def_timelag, h2o_molar_density, h2o_time_lag, h2o_def_timelag, ch4_molar_density, ch4_time_lag, ch4_def_timelag, air_density, air_heat_capacity, air_molar_volume, ET, water_vapor_density, e, es, specific_humidity, Tdew, u_unrot, v_unrot, w_unrot, u_rot, v_rot, w_rot, yaw, pitch, roll, TKE, bowen_ratio, T., model, x_offset, x_10., x_30., x_50., TAU_UNCORR, Tau_scf, H_UNCORR, H_scf, LE_UNCORR, LE_scf, FC_UNCORR, co2_scf, un_h2o_flux, h2o_scf, FCH4_UNCORR, ch4_scf, spikes_hf, amplitude_resolution_hf, drop_out_hf, absolute_limits_hf, skewness_kurtosis_hf, skewness_kurtosis_sf, discontinuities_hf, discontinuities_sf, timelag_hf, timelag_sf, attack_angle_hf, non_steady_wind_hf, u_spikes, v_spikes, w_spikes, ts_spikes, co2_spikes, h2o_spikes, ch4_spikes, chopper_LI.7500, detector_LI.7500, pll_LI.7500, sync_LI.7500, not_ready_LI.7700, no_signal_LI.7700, re_unlocked_LI.7700, bad_temp_LI.7700, laser_temp_unregulated_LI.7700, block_temp_unregulated_LI.7700, motor_spinning_LI.7700, pump_on_LI.7700, top_heater_on_LI.7700, bottom_heater_on_LI.7700, calibrating_LI.7700, motor_failure_LI.7700, bad_aux_tc1_LI.7700, bad_aux_tc2_LI.7700, bad_aux_tc3_LI.7700, box_connected_LI.7700, mean_value_RSSI_LI.7500, u_var, v_var, w_var, ts_var, co2_var, h2o_var, ch4_var, w.ts_cov, w.co2_cov, w.h2o_cov, w.ch4_cov, air_t_mean, air_p_mean, auxiliary_input_1_mean, auxiliary_input_2_mean, auxiliary_input_3_mean, auxiliary_input_4_mean, vin_sf_mean, co2_mean, h2o_mean, dew_point_mean, co2_signal_strength_7500_mean, ch4_mean, rssi_77_mean, ch4_aux.1_mean, ch4_aux.2_mean, ch4_aux.3_mean, ch4_aux.4_mean, ch4_tc_1_mean, ch4_tc_2_mean, ch4_tc_3_mean, X,**

Test	Results	Additional Information
		Year_local, jday_local, month_local, hour_local, min_local, time_local, DOY_local, badrot, badt, badq, badc, badm, badwind, badL, badwindffp, obs, ustar_thr, badustar, badflux, NEE_uStar_f, NEE_uStar_fqc, NEE_uStar_fall, NEE_uStar_fall_qc, NEE_uStar_fnum, NEE_uStar_fsd, NEE_uStar_fmeth, NEE_uStar_fwin, NEE_U05_f, NEE_U05_fqc, NEE_U05_fall, NEE_U05_fall_qc, NEE_U05_fnum, NEE_U05_fsd, NEE_U05_fmeth, NEE_U05_fwin, NEE_U50_f, NEE_U50_fqc, NEE_U50_fall, NEE_U50_fall_qc, NEE_U50_fnum, NEE_U50_fsd, NEE_U50_fmeth, NEE_U50_fwin, NEE_U95_f, NEE_U95_fqc, NEE_U95_fall, NEE_U95_fall_qc, NEE_U95_fnum, NEE_U95_fsd, NEE_U95_fmeth, NEE_U95_fwin, NEE_f, NEE_fsd, LE_f, LE_fsd, H_f, H_fsd, FCH4_f, FCH4_fsd, Tair_f, Tair_fqc, Tair_fall, Tair_fall_qc, Tair_fnum, Tair_fsd, Tair_fmeth, Tair_fwin, VPD_f, VPD_fqc, VPD_fall, VPD_fall_qc, VPD_fnum, VPD_fsd, VPD_fmeth, VPD_fwin, Rg_f, Rg_fqc, Rg_fall, Rg_fall_qc, Rg_fnum, Rg_fsd, Rg_fmeth, Rg_fwin, GPP_f, RECO_U05, RECO_U50, RECO_U95, RECO_DT, GPP_DT, RECO_DT_SD, GPP_DT_SD, RECO_DT_U05, GPP_DT_U05, RECO_DT_U05_SD, GPP_DT_U05_SD, RECO_DT_U50, GPP_DT_U50, RECO_DT_U50_SD, GPP_DT_U50_SD, RECO_DT_U95, GPP_DT_U95, RECO_DT_U95_SD, GPP_DT_U95_SD, datetime, DOM, Month, Year, Time, PSC, WD60, WS60, WD_STD60, T60, WD10, WS10, WD_STD10, T10, DPT, TD100, RS, Pressure, WatVapPress, TS10, TS100, TS10F, SWC_30cm, SWC_50cm, TS_30cm, TS_50cm, TS_rmean_pre, TS_rstd_pre, TS_rmean, TS_rstd, SWC_rmean, SWC_rstd, Timestamp, hour, year, NR, TS_mean, SWC_mean, DOY.met, DOY_START, DOY_END, TA_EP, RH_EP, es.met, VPD.met, SW_IN_POT, Year_local.met, jday_local.met, month_local.met, hour_local.met, min_local.met, time_local.met, DOY_local.met, obs1, VPD_hPa, FCH4_F_RF, FCH4_F_UNCERTAINTY_RF, FCH4_F1_RF, FCH4_F2_RF, FCH4_F3_RF, FCH4_F4_RF, FCH4_F5_RF, FCH4_F6_RF, FCH4_F7_RF, FCH4_F8_RF, FCH4_F9_RF, FCH4_F10_RF.

Test	Results	Additional Information
		They will not be included in the standard AmeriFlux data products. Non-standard variables will be saved for a non-standard data product that will be available in future.
Any Variables suspected gap-fill?	WARNING	These variables are suspected to be gap-filled because they have no missing values: DATE, date, time, time_local, obs, ustar_thr, NEE_uStar_f, NEE_uStar_fqc, NEE_uStar_fall, NEE_uStar_fall_qc, NEE_uStar_fnum, NEE_uStar_fsd, NEE_uStar_fmeth, NEE_uStar_fwin, NEE_U05_f, NEE_U05_fqc, NEE_U05_fall, NEE_U05_fall_qc, NEE_U05_fnum, NEE_U05_fsd, NEE_U05_fmeth, NEE_U05_fwin, NEE_U50_f, NEE_U50_fqc, NEE_U50_fall, NEE_U50_fall_qc, NEE_U50_fnum, NEE_U50_fsd, NEE_U50_fmeth, NEE_U50_fwin, NEE_U95_f, NEE_U95_fqc, NEE_U95_fall, NEE_U95_fall_qc, NEE_U95_fnum, NEE_U95_fsd, NEE_U95_fmeth, NEE_U95_fwin, NEE_f, NEE_fsd, LE_f, LE_fsd, H_f, H_fsd, FCH4_f, FCH4_fsd, Tair_f, Tair_fqc, Tair_fall, Tair_fall_qc, Tair_fnum, Tair_fsd, Tair_fmeth, Tair_fwin, VPD_f, VPD_fqc, VPD_fall, VPD_fall_qc, VPD_fnum, VPD_fsd, VPD_fmeth, VPD_fwin, Rg_f, Rg_fqc, Rg_fall, Rg_fall_qc, Rg_fnum, Rg_fsd, Rg_fmeth, Rg_fwin, RECO, GPP_f, RECO_U05, RECO_U50, RECO_U95, RECO_DT, GPP_DT, RECO_DT_SD, GPP_DT_SD, RECO_DT_U05, GPP_DT_U05, RECO_DT_U05_SD, GPP_DT_U05_SD, RECO_DT_U50, GPP_DT_U50, RECO_DT_U50_SD, GPP_DT_U50_SD, RECO_DT_U95, GPP_DT_U95, RECO_DT_U95_SD, GPP_DT_U95_SD, datetime, TS_rmean_pre, TS_rstd_pre, TS_rmean, TS_rstd, SWC_rmean, SWC_rstd, hour, year, NR, TS_mean, SWC_mean, DOYmet, DOY_END, time_localmet, obs1, FCH4_F_RF, FCH4_F_UNCERTAINTY_RF, FCH4_F1_RF, FCH4_F2_RF, FCH4_F3_RF, FCH4_F4_RF, FCH4_F5_RF, FCH4_F6_RF, FCH4_F7_RF, FCH4_F8_RF, FCH4_F9_RF, FCH4_F10_RF. If these variables are gap-filled, use the _F variable qualifier. Non-filled data must be submitted for primary flux variables (FC, FCH4, LE, H). Consider submitting non-filled data for all other variables.

Test	Results	Additional Information
Any Variables with ALL Data Missing?	WARNING	These variables have all data missing: **roll, X, TS100**. Previously uploaded data with the same time period will be overwritten.

Test	Results	Additional Information
AMP can attempt these autocorrections if site team addresses failed issues in replacement file.	WARNING	• Fixed invalid variable name NEE_f with NEE_F: made uppercase • Fixed invalid variable name LE_f with LE_F: made uppercase • Fixed invalid variable name H_f with H_F: made uppercase • Fixed invalid variable name FCH4_f with FCH4_F: made uppercase • Fixed invalid variable name VPD_f with VPD_F: made uppercase • Fixed invalid variable name GPP_f with GPP_F: made uppercase • NOTE un-fixable variable names: TIMESTAMP; DATE; filename; date; time; DOY; daytime; file_records; used_records; qc_h2o_flux; h2o_strg; co2_v.adv; h2o_v.adv; ch4_v.adv; co2_molar_density; co2_time_lag; co2_def_timelag; h2o_molar_density; h2o_time_lag; h2o_def_timelag; ch4_molar_density; ch4_time_lag; ch4_def_timelag; air_density; air_heat_capacity; air_molar_volume; ET; water_vapor_density; e; es; specific_humidity; Tdew; u_unrot; v_unrot; w_unrot; u_rot; v_rot; w_rot; yaw; pitch; roll; TKE; bowen_ratio; T.; model; x_offset; x_10.; x_30.; x_50.; TAU_UNCORR; Tau_scf; H_UNCORR; H_scf; LE_UNCORR; LE_scf; FC_UNCORR; co2_scf; un_h2o_flux; h2o_scf; FCH4_UNCORR; ch4_scf; spikes_hf; amplitude_resolution_hf; drop_out_hf; absolute_limits_hf; skewness_kurtosis_hf; skewness_kurtosis_sf; discontinuities_hf; discontinuities_sf; timelag_hf; timelag_sf; attack_angle_hf; non_steady_wind_hf; u_spikes; v_spikes; w_spikes; ts_spikes; co2_spikes; h2o_spikes; ch4_spikes; chopper_LI.7500; detector_LI.7500; pll_LI.7500; sync_LI.7500; not_ready_LI.7700; no_signal_LI.7700; re_unlocked_LI.7700; bad_temp_LI.7700; laser_temp_unregulated_LI.7700; block_temp_unregulated_LI.7700; motor_spinning_LI.7700; pump_on_LI.7700; top_heater_on_LI.7700; bottom_heater_on_LI.7700; calibrating_LI.7700; motor_failure_LI.7700; bad_aux_tc1_LI.7700; bad_aux_tc2_LI.7700; bad_aux_tc3_LI.7700; box_connected_LI.7700; mean_value_RSSI_LI.7500; u_var; v_var; w_var; ts_var; co2_var; h2o_var; ch4_var;

Test	Results	Additional Information
		w.ts_cov; w.co2_cov; w.h2o_cov; w.ch4_cov; air_t_mean; air_p_mean; auxiliary_input_1_mean; auxiliary_input_2_mean; auxiliary_input_3_mean; auxiliary_input_4_mean; vin_sf_mean; co2_mean; h2o_mean; dew_point_mean; co2_signal_strength_7500_mean; ch4_mean; rssi_77_mean; ch4_aux.1_mean; ch4_aux.2_mean; ch4_aux.3_mean; ch4_aux.4_mean; ch4_tc_1_mean; ch4_tc_2_mean; ch4_tc_3_mean; X; Year_local; jday_local; month_local; hour_local; min_local; time_local; DOY_local; badrot; badt; badq; badc; badm; badwind; badL; badwindffp; obs; ustar_thr; badustar; badflux; NEE_uStar_f; NEE_uStar_fqc; NEE_uStar_fall; NEE_uStar_fall_qc; NEE_uStar_fnum; NEE_uStar_fsd; NEE_uStar_fmeth; NEE_uStar_fwin; NEE_U05_f; NEE_U05_fqc; NEE_U05_fall; NEE_U05_fall_qc; NEE_U05_fnum; NEE_U05_fsd; NEE_U05_fmeth; NEE_U05_fwin; NEE_U50_f; NEE_U50_fqc; NEE_U50_fall; NEE_U50_fall_qc; NEE_U50_fnum; NEE_U50_fsd; NEE_U50_fmeth; NEE_U50_fwin; NEE_U95_f; NEE_U95_fqc; NEE_U95_fall; NEE_U95_fall_qc; NEE_U95_fnum; NEE_U95_fsd; NEE_U95_fmeth; NEE_U95_fwin; NEE_fsd; LE_fsd; H_fsd; FCH4_fsd; Tair_f; Tair_fqc; Tair_fall; Tair_fall_qc; Tair_fnum; Tair_fsd; Tair_fmeth; Tair_fwin; VPD_fqc; VPD_fall; VPD_fall_qc; VPD_fnum; VPD_fsd; VPD_fmeth; VPD_fwin; Rg_f; Rg_fqc; Rg_fall; Rg_fall_qc; Rg_fnum; Rg_fsd; Rg_fmeth; Rg_fwin; RECO_U05; RECO_U50; RECO_U95; RECO_DT; GPP_DT; RECO_DT_SD; GPP_DT_SD; RECO_DT_U05; GPP_DT_U05; RECO_DT_U05_SD; GPP_DT_U05_SD; RECO_DT_U50; GPP_DT_U50; RECO_DT_U50_SD; GPP_DT_U50_SD; RECO_DT_U95; GPP_DT_U95; RECO_DT_U95_SD; GPP_DT_U95_SD; datetime; DOM; Month; Year; Time; PSC; WD60; WS60; WD_STD60; T60; WD10; WS10; WD_STD10; T10; DPT; TD100; RS; Pressure; WatVapPress; TS10; TS100; TS10F; SWC_30cm; SWC_50cm; TS_30cm; TS_50cm; TS_rmean_pre; TS_rstd_pre; TS_rmean; TS_rstd; SWC_rmean; SWC_rstd;

Test	Results	Additional Information
		Timestamp; hour; year; NR; TS_mean; SWC_mean; DOY.met; DOY_START; DOY_END; TA_EP; RH_EP; es.met; VPD.met; SW_IN_POT; Year_local.met; jday_local.met; month_local.met; hour_local.met; min_local.met; time_local.met; DOY_local.met; obs1; VPD_hPa; FCH4_F_RF; FCH4_F_UNCERTAINTY_RF; FCH4_F1_RF; FCH4_F2_RF; FCH4_F3_RF; FCH4_F4_RF; FCH4_F5_RF; FCH4_F6_RF; FCH4_F7_RF; FCH4_F8_RF; FCH4_F9_RF; FCH4_F10_RF • Changed 1403991 missing values to -9999 from 1403991 instances of -9999.0. • Generated TIMESTAMP_START from TIMESTAMP_END variable.

Variable names found in the file:

TIMESTAMP, DATE, filename, date, time, DOY, daytime, file_records, used_records, TAU, TAU_SSITC_TEST, H, H_SSITC_TEST, LE, LE_SSITC_TEST, FC, FC_SSITC_TEST, FH2O, qc_h2o_flux, FCH4, FCH4_SSITC_TEST, SH, SLE, SC, h2o_strg, SCH4, co2_v.adv, h2o_v.adv, ch4_v.adv, co2_molar_density, CO2, CO2_MIXING_RATIO, co2_time_lag, co2_def_timelag, h2o_molar_density, H2O, H2O_MIXING_RATIO, h2o_time_lag, h2o_def_timelag, ch4_molar_density, CH4, CH4_MIXING_RATIO, ch4_time_lag, ch4_def_timelag, T_SONIC, TA, PA, air_density, air_heat_capacity, air_molar_volume, ET, water_vapor_density, e, es, specific_humidity, RH, VPD, Tdew, u_unrot, v_unrot, w_unrot, u_rot, v_rot, w_rot, WS, WS_MAX, WD, yaw, pitch, roll, USTAR, TKE, MO_LENGTH, ZL, bowen_ratio, T., model, FETCH_MAX, x_offset, x_10., x_30., x_50., FETCH_70, FETCH_90, TAU_UNCORR, Tau_scf, H_UNCORR, H_scf, LE_UNCORR, LE_scf, FC_UNCORR, co2_scf, un_h2o_flux, h2o_scf, FCH4_UNCORR, ch4_scf, spikes_hf, amplitude_resolution_hf, drop_out_hf, absolute_limits_hf, skewness_kurtosis_hf, skewness_kurtosis_sf, discontinuities_hf, discontinuities_sf, timelag_hf, timelag_sf, attack_angle_hf, non_steady_wind_hf, u_spikes, v_spikes, w_spikes, ts_spikes, co2_spikes, h2o_spikes, ch4_spikes, chopper_LI.7500, detector_LI.7500, pll_LI.7500, sync_LI.7500, not_ready_LI.7700, no_signal_LI.7700, re_unlocked_LI.7700, bad_temp_LI.7700, laser_temp_unregulated_LI.7700, block_temp_unregulated_LI.7700, motor_spinning_LI.7700, pump_on_LI.7700, top_heater_on_LI.7700, bottom_heater_on_LI.7700, calibrating_LI.7700, motor_failure_LI.7700, bad_aux_tc1_LI.7700, bad_aux_tc2_LI.7700, bad_aux_tc3_LI.7700, box_connected_LI.7700, mean_value_RSSI_LI.7500, u_var, v_var, w_var, ts_var, co2_var, h2o_var, ch4_var, w.ts_cov, w.co2_cov, w.h2o_cov, w.ch4_cov, air_t_mean, air_p_mean, auxiliary_input_1_mean, auxiliary_input_2_mean, auxiliary_input_3_mean, auxiliary_input_4_mean, vin_sf_mean, co2_mean, h2o_mean, dew_point_mean, co2_signal_strength_7500_mean, ch4_mean, rssi_77_mean, ch4_aux.1_mean, ch4_aux.2_mean, ch4_aux.3_mean, ch4_aux.4_mean, ch4_tc_1_mean, ch4_tc_2_mean, ch4_tc_3_mean, X, Year_local, jday_local, month_local, hour_local, min_local, time_local, DOY_local, badrot, badt, badq, badc, badm, badwind, badL, badwindffp, obs, ustar_thr, badustar, badflux, NEE_uStar_f, NEE_uStar_fqc, NEE_uStar_fall, NEE_uStar_fall_qc, NEE_uStar_fnum, NEE_uStar_fsd, NEE_uStar_fmeth, NEE_uStar_fwin, NEE_U05_f, NEE_U05_fqc,

NEE_U05_fall, NEE_U05_fall_qc, NEE_U05_fnum, NEE_U05_fsd, NEE_U05_fmeth, NEE_U05_fwin, NEE_U50_f, NEE_U50_fqc, NEE_U50_fall, NEE_U50_fall_qc, NEE_U50_fnum, NEE_U50_fsd, NEE_U50_fmeth, NEE_U50_fwin, NEE_U95_f, NEE_U95_fqc, NEE_U95_fall, NEE_U95_fall_qc, NEE_U95_fnum, NEE_U95_fsd, NEE_U95_fmeth, NEE_U95_fwin, NEE_f, NEE_fsd, LE_f, LE_fsd, H_f, H_fsd, FCH4_f, FCH4_fsd, Tair_f, Tair_fqc, Tair_fall, Tair_fall_qc, Tair_fnum, Tair_fsd, Tair_fmeth, Tair_fwin, VPD_f, VPD_fqc, VPD_fall, VPD_fall_qc, VPD_fnum, VPD_fsd, VPD_fmeth, VPD_fwin, Rg_f, Rg_fqc, Rg_fall, Rg_fall_qc, Rg_fnum, Rg_fsd, Rg_fmeth, Rg_fwin, RECO, GPP_f, RECO_U05, RECO_U50, RECO_U95, RECO_DT, GPP_DT, RECO_DT_SD, GPP_DT_SD, RECO_DT_U05, GPP_DT_U05, RECO_DT_U05_SD, GPP_DT_U05_SD, RECO_DT_U50, GPP_DT_U50, RECO_DT_U50_SD, GPP_DT_U50_SD, RECO_DT_U95, GPP_DT_U95, RECO_DT_U95_SD, GPP_DT_U95_SD, datetime, DOM, Month, Year, Time, PSC, WD60, WS60, WD_STD60, T60, WD10, WS10, WD_STD10, T10, DPT, RH_1, TD100, P, RS, NETRAD, Pressure, WatVapPress, TS10, TS100, TS10F, SWC_00, SWC_01, SWC_02, SWC_12, SWC_11, SWC_10, SWC_20, SWC_21, SWC_22, SWC_32, SWC_31, SWC_30, SWC_40, SWC_41, SWC_42, SWC_52, SWC_51, SWC_50, SWC_60, SWC_61, SWC_62, SWC_72, SWC_71, SWC_70, SWC_03, SWC_04, SWC_14, SWC_13, SWC_24, SWC_23, SWC_33, SWC_34, SWC_44, SWC_43, SWC_30cm, SWC_50cm, SWC_53, SWC_54, SWC_64, SWC_63, SWC_74, SWC_73, SWC_05, SWC_06, SWC_07, SWC_17, SWC_16, SWC_15, SWC_25, SWC_26, SWC_27, SWC_37, SWC_36, SWC_35, SWC_45, SWC_46, SWC_47, SWC_57, SWC_56, SWC_55, SWC_65, SWC_66, SWC_67, SWC_77, TS_00, TS_01, TS_02, TS_12, TS_11, TS_10, TS_20, TS_21, TS_22, TS_32, TS_31, TS_30, TS_40, TS_41, TS_42, TS_52, TS_51, TS_50, TS_60, TS_61, TS_62, TS_72, TS_71, TS_70, TS_03, TS_04, TS_14, TS_13, TS_24, TS_23, TS_33, TS_34, TS_44, TS_43, TS_30cm, TS_50cm, TS_53, TS_54, TS_64, TS_63, TS_74, TS_73, TS_05, TS_06, TS_07, TS_17, TS_16, TS_15, TS_25, TS_26, TS_27, TS_37, TS_36, TS_35, TS_45, TS_46, TS_47, TS_57, TS_56, TS_55, TS_65, TS_66, TS_67, TS_77, TS_rmean_pre, TS_rstd_pre, TS_rmean, TS_rstd, SWC_rmean, SWC_rstd, Timestamp, hour, year, NR, TS_mean, SWC_mean, DOY.met, DOY_START, DOY_END, TA_EP, RH_EP, es.met, VPD.met, SW_IN_POT, Year_local.met, jday_local.met, month_local.met, hour_local.met, min_local.met, time_local.met, DOY_local.met, obs1, VPD_hPa, FCH4_F_RF, FCH4_F_UNCERTAINTY_RF, FCH4_F1_RF, FCH4_F2_RF, FCH4_F3_RF, FCH4_F4_RF, FCH4_F5_RF, FCH4_F6_RF, FCH4_F7_RF, FCH4_F8_RF, FCH4_F9_RF, FCH4_F10_RF, TIMESTAMP_END

Processing code version: 2.0.0
Processing log file: https://amfcdn.lbl.gov/api/v1/qaqc_logs/QAQC_report_US-AMS_78795_20240814063419.log (https://amfcdn.lbl.gov/api/v1/qaqc_logs/QAQC_report_US-AMS_78795_20240814063419.log)