

Eddy Covariance Half-hourly files

| Column heading | definition | Units |
|----------------|--|------------------------------------|
| Fc_wpl | CO2 flux, WPL corrected | mg m ⁻² s ⁻¹ |
| LE_wpl | Latent heat flux, WPL corrected | W m ⁻² |
| Hs | Sensible heat flux | W m ⁻² |
| Tau | Shear stress | kg m ⁻¹ s ⁻² |
| U_star | Friction velocity | m s ⁻¹ |
| stdev_Uz | Standard deviation of vertical velocity | m s ⁻¹ |
| cov_Ux_Uz | Covariance of x and z wind components | m ⁻² s ⁻² |
| cov_Uy_Uz | Covariance of y and z wind components | m ⁻² s ⁻² |
| cov_co2_Uz | Covariance of CO ₂ and vertical velocity | mg m ⁻² s ⁻¹ |
| cov_h2o_Uz | Covariance of H ₂ O and vertical velocity | g m ⁻² s ⁻¹ |
| cov_Ts_Uz | Cov. of sonic T and vertical velocity | K m s ⁻¹ |
| stdev_Ux | Standard deviation of x wind comp. | m s ⁻¹ |
| cov_Ux_Uy | Cov. of x and y wind comps. | m ⁻² s ⁻² |
| cov_co2_Ux | Covariance of CO ₂ and x wind comp. | mg m ⁻² s ⁻¹ |
| cov_h2o_Ux | Covariance of H ₂ O and x wind comp. | g m ⁻² s ⁻¹ |
| cov_Ts_Ux | Covariance of sonic T and x wind comp. | K m s ⁻¹ |
| stdev_Uy | Standard deviation of y wind comp. | m s ⁻¹ |
| cov_co2_Uy | Covariance of CO ₂ and y wind comp. | mg m ⁻² s ⁻¹ |
| cov_h2o_Uy | Covariance of H ₂ O and y wind comp. | g m ⁻² s ⁻¹ |
| cov_Ts_Uy | Covariance of sonic T and y wind comp. | K m s ⁻¹ |
| stdev_co2 | Standard deviation of CO ₂ conc. | mg m ⁻³ |
| stdev_h2o | Standard deviation of H ₂ O conc. | g m ⁻³ |
| Ux_Avg | Mean x wind component | m s ⁻¹ |
| Uy_Avg | Mean y wind component | m s ⁻¹ |
| Uz_Avg | Mean z wind component | m s ⁻¹ |
| co2_mean | Mean CO ₂ concentration | mg m ⁻³ |
| h2o_Avg | Mean H ₂ O concentration | g m ⁻³ |
| Ts_mean | Mean sonic Temperature | C |
| rho_a_mean | Mean air density | kg m ⁻³ |
| press_mean | Mean barometric pressure | kPa |
| panel_temp | Datalogger panel temperature | C |
| wnd_dir,csa | Compass wind direction | CW deg. from N |
| wnd_dir_csat3 | Wind direction with respect to sonic. | +/- deg. |
| wnd_spd | Mean windspeed | m s ⁻¹ |
| rslt_wnd_spd | Mean resultant windspeed | m s ⁻¹ |
| batt_volt_Avg | Battery voltage | V |
| std_wnd_dir | St. dev. of wind dir? | Deg. |
| n_Tot | Number of data points in period | |
| csat_warnings | Number of csat warning flags | |

| | | |
|----------------|---------------------------------------|------------------------------------|
| irga_warnings | | |
| irga_warnings | Number of irga warnings | |
| sig_lck_f_Tot | See Licor manual for flag definitions | |
| amp_h_f_Tot | " | |
| amp_l_f_Tot | " | |
| chopper_f_Tot | " | |
| detector_f_Tot | " | |
| pll_f_Tot | " | |
| pll_f_Tot | " | |
| sync_f_Tot | " | |
| agc_Avg | Irga gain control | |
| Fc_irga | Raw CO2 flux | mg m ⁻² s ⁻¹ |
| LE_irga | Raw H2O flux | g m ⁻² s ⁻¹ |
| co2_wpl_LE | CO2 WPL correction for LE | mg m ⁻² s ⁻¹ |
| co2_wpl_H | CO2 WPL correction for H | mg m ⁻² s ⁻¹ |
| h2o_wpl_LE | H2O WPL correction for LE | g m ⁻² s ⁻¹ |
| h2o_wpl_H | H2O WPL correction for H | g m ⁻² s ⁻¹ |