## Eddy Covariance Half-hourly files

Column	definition	Units
heading	definition	Ullits
Fc_wpl	CO2 flux, WPL corrected	mg m <sup>-2</sup> s <sup>-1</sup>
LE_wpl	Latent heat flux, WPL corrected	W m <sup>-2</sup>
Hs	Sensible heat flux	W m <sup>-2</sup>
Tau	Shear stress	kg m <sup>-1</sup> s <sup>-2</sup>
U_star	Friction velocity	m s <sup>-1</sup>
stdev Uz	Standard deviation of vertical velocity	m s <sup>-1</sup>
cov Ux Uz	Covariance of x and z wind components	m <sup>-2</sup> s <sup>-2</sup>
cov_Uy_Uz	Covariance of y and z wind components	m <sup>-2</sup> s <sup>-2</sup>
cov co2 Uz	Covariance of CO <sub>2</sub> and vertical velocity	mg m <sup>-2</sup> s <sup>-1</sup>
cov h2o Uz	Covariance of H <sub>2</sub> O and vertical velocity	g m <sup>-2</sup> s <sup>-1</sup>
cov Ts Uz	Cov. of sonic T and vertical velocity	K m s <sup>-1</sup>
stdev Ux	Standard deviation of x wind comp.	m s <sup>-1</sup>
cov Ux Uy	Cov. of x and y wind comps.	m <sup>-2</sup> s <sup>-2</sup>
cov co2 Ux	Covariance of CO <sub>2</sub> and x wind comp.	mg m <sup>-2</sup> s <sup>-1</sup>
cov h2o Ux	Covariance of $GO_2$ and x wind comp.	g m <sup>-2</sup> s <sup>-1</sup>
cov Ts Ux	Covariance of sonic T and x wind comp.	K m s <sup>-1</sup>
stdev Uy	Standard deviation of y wind comp.	m s <sup>-1</sup>
cov co2 Uy	Covariance of CO <sub>2</sub> and y wind comp.	mg m <sup>-2</sup> s <sup>-1</sup>
cov h2o Uy	Covariance of $GO_2$ and y wind comp.	g m <sup>-2</sup> s <sup>-1</sup>
cov Ts Uy	Covariance of sonic T and y wind comp.	K m s <sup>-1</sup>
stdev co2	Standard deviation of CO <sub>2</sub> conc.	mg m <sup>-3</sup>
stdev_coz stdev h2o	Standard deviation of CO <sub>2</sub> conc.  Standard deviation of H <sub>2</sub> O conc.	g m <sup>-3</sup>
Ux_Avg	Mean x wind component	m s <sup>-1</sup>
<del>_</del>	Mean y wind component	m s <sup>-1</sup>
Uy_Avg	Mean z wind component	m s <sup>-1</sup>
Uz_Avg co2 mean	Mean CO <sub>2</sub> concentration	mg m <sup>-3</sup>
_	Mean H <sub>2</sub> O concentration	g m <sup>-3</sup>
h2o_Avg		C
Ts_mean	Mean sonic Temperature	
rho_a_mean	Mean harametric procesure	kg m <sup>-3</sup>
press_mean	Mean barometric pressure	kPa C
panel_temp	Datalogger panel temperature	
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 <sup>-1</sup>
rslt_wnd_spd	Mean resultant windspeed	m s <sup>-1</sup>
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	и	
amp_l_f_Tot	и	
chopper_f_Tot	и	
detector_f_Tot	и	
pll_f_Tot	и	
pll_f_Tot	и	
sync_f_Tot	u	
agc_Avg	Irga gain control	
Fc_irga	Raw CO2 flux	mg m <sup>-2</sup> s <sup>-1</sup>
LE_irga	Raw H2O flux	g m <sup>-2</sup> s <sup>-1</sup>
co2_wpl_LE	CO2 WPL correction for LE	mg m <sup>-2</sup> s <sup>-1</sup>
co2_wpl_H	CO2 WPL correction for H	mg m <sup>-2</sup> s <sup>-1</sup>
h2o_wpl_LE	H20 WPL correction for LE	g m <sup>-2</sup> s <sup>-1</sup>
h2o_wpl_H	H20 WPL correction for H	g m <sup>-2</sup> s <sup>-1</sup>