Harvard Forest Data Archive HF103-01

Data File:

Name = hf103-01-flux-2000-2001.csv
Description = eddy flux (2000-2001)
Rows = 17543  Columns = 13
MD5 checksum = 3036b096c814c480593876e0e72b4b46

Variables:

year = year
doy = day of year, with hour of day converted to a fraction of a day
(nominalDay)
u = horizontal windspeed measured by the sonic anemometer at 27 m (5
m above average canopy surface) (metersPerSecond)
ustar = friction velocity, or square root of momentum flux
(metersPerSecond)
wdir = wind direction (degree)
par = photosynthetically active radiation at 24 m (2 m above average
canopy surface) (micromolePerMeterSquaredPerSecond)
tair = air temperature measured by shielded thermocouple at about 22
m (average canopy surface height) (celsius)
tair_min = minimum Tair during the 24 hours preceding noon (celsius)
tsoil = soil temperature measured 10 cm below soil surface. (Average
of 5-6 measurements randomly located between 0 and 50 m from the
eddy covariance tower, with one measurement on each of 6 transects
spaced 60 degrees apart in compass orientation.) (celsius)
vpd = water vapor pressure deficit of air, based on water vapor
concentration provided by CO2/H2O analyzer, and Tair (kilopascal)
co2_flux = value measured by the eddy covariance system. Valid as
data point only if wind is from SW (between 180 and 270 degrees) and
u*> 0.4 (micromolePerMeterSquaredPerSecond)
co2_flux_est = estimate based on a mathematical model of carbon flux
created at the same time of year as the missing data point, using hour of
day plus measured values of PAR, Tair, Tsoil, VPD, and daily_min_Tair
(micromolePerMeterSquaredPerSecond)
<table>
<thead>
<tr>
<th>Variable</th>
<th>Min</th>
<th>Median</th>
<th>Mean</th>
<th>Max</th>
<th>NAs</th>
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