

Harvard Forest Data Archive HF103-01

Data File:

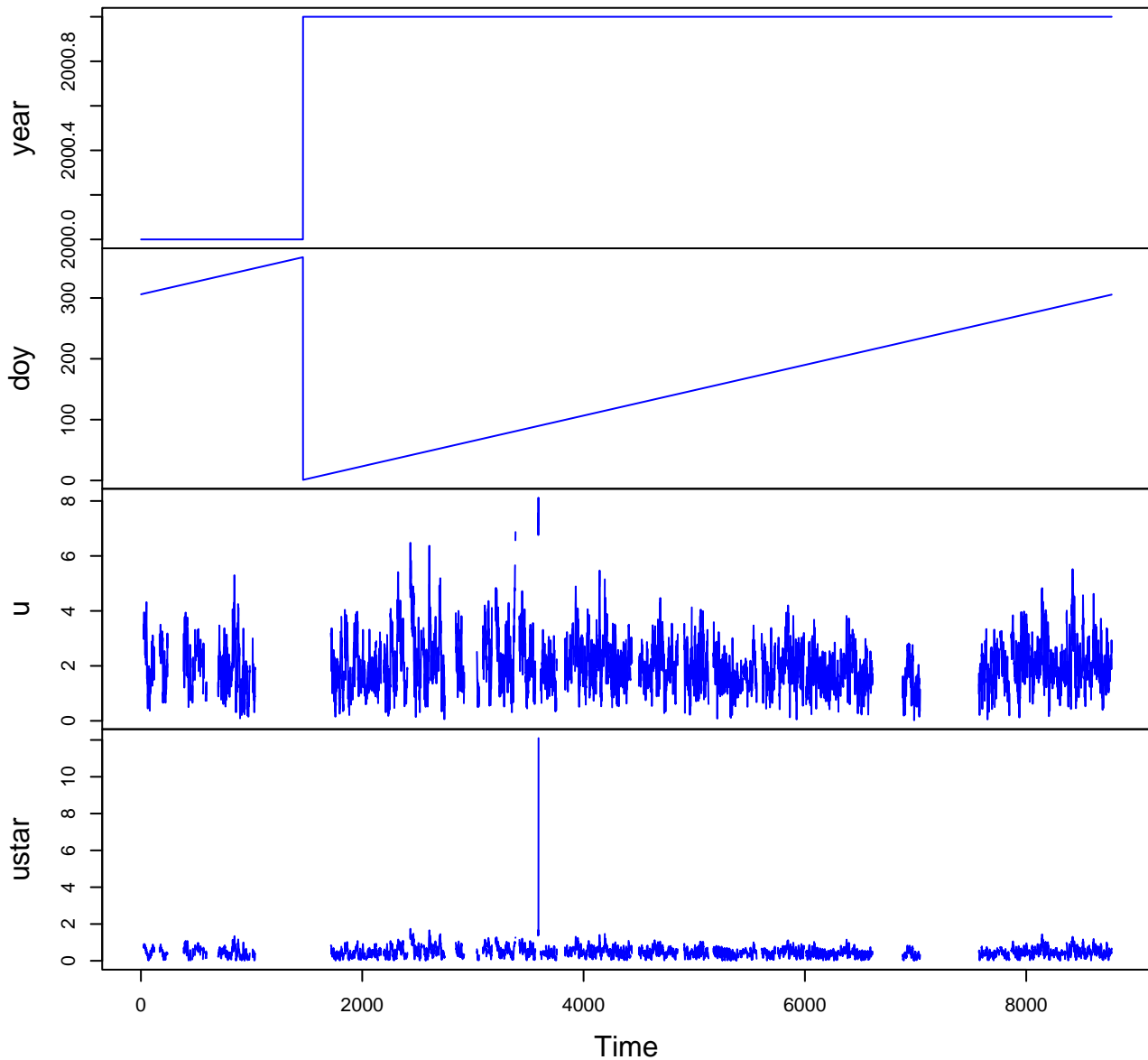
Name = hf103-01-flux-2000-2001.csv  
Description = eddy flux (2000-2001)  
Rows = 17543 Columns = 13  
MD5 checksum = 3036b096c814c480593876e0e72b4b46

Variables:

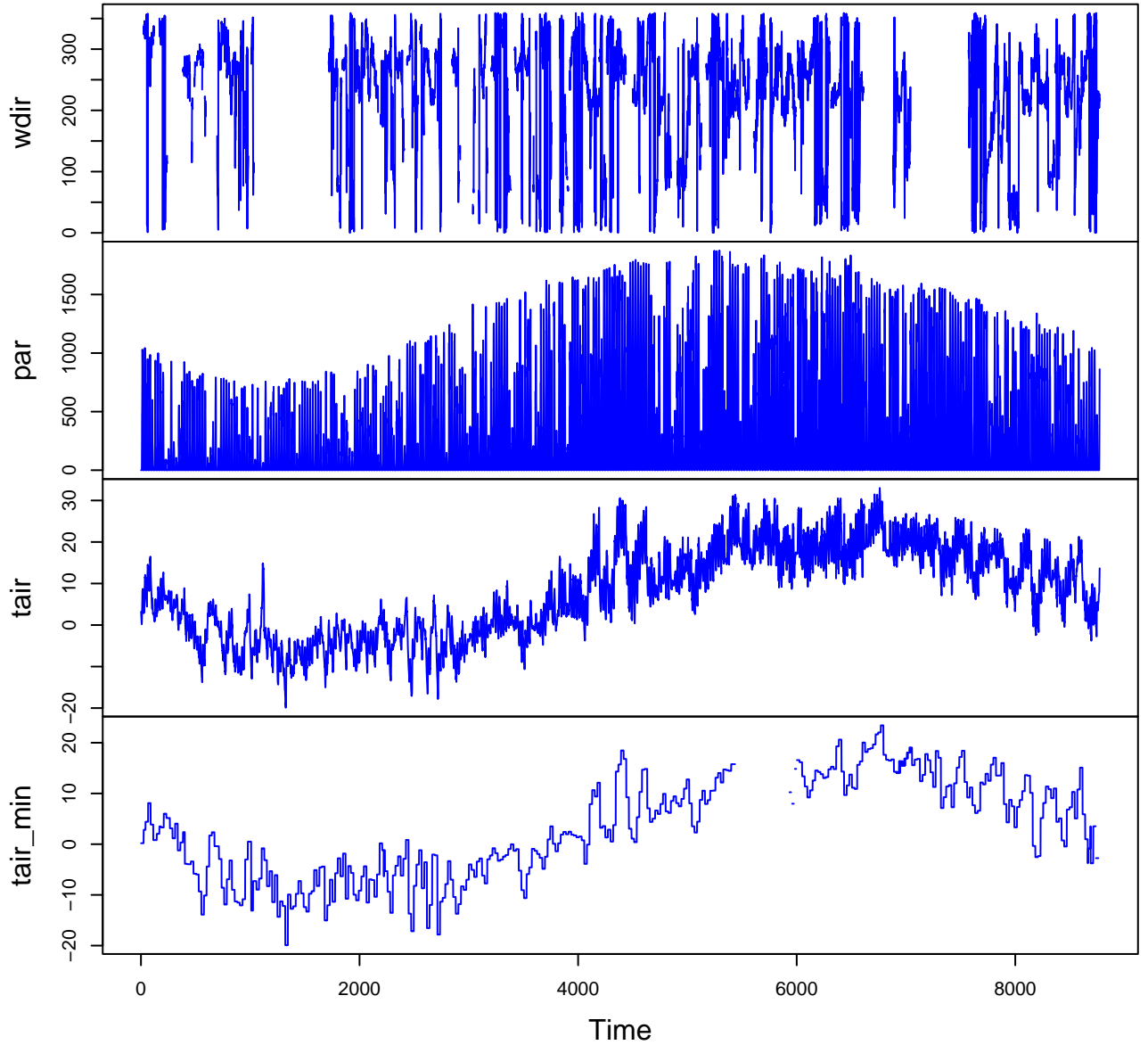
year = year  
doy = day of year, with hour of day converted to a fraction of a day  
(nominalDay)  
u = horizontal windspeed measured by the sonic anemometer at 27 m (5  
m above average canopy surface) (metersPerSecond)  
ustar = friction velocity, or square root of momentum flux  
(metersPerSecond)  
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)

Variable	Min	Median	Mean	Max	NAs
year	2000.000	2001.000	2000.833	2001.000	0
doy	1.000	183.730	183.824	366.980	0
u	0.020	1.890	2.002	10.540	5703
ustar	0.001	0.444	0.471	12.101	5698
wdir	0.000	251.000	227.741	374.000	5660
par	-1.000	10.000	297.181	1993.000	2
tair	-19.920	7.920	7.754	33.250	3
tair_min	-19.920	2.350	2.894	23.430	1083
tsoil	-0.910	7.830	7.381	19.330	158
vpd	0.120	8.645	10.096	35.510	13079
co2_flux	-35.930	0.190	-1.729	35.290	5712
co2_flux_est	-31.910	0.380	-0.834	34.950	5

# HF103-01 Plot 1



# HF103-01 Plot 2



# HF103-01 Plot 3

