Harvard Forest Data Archive HF004-02

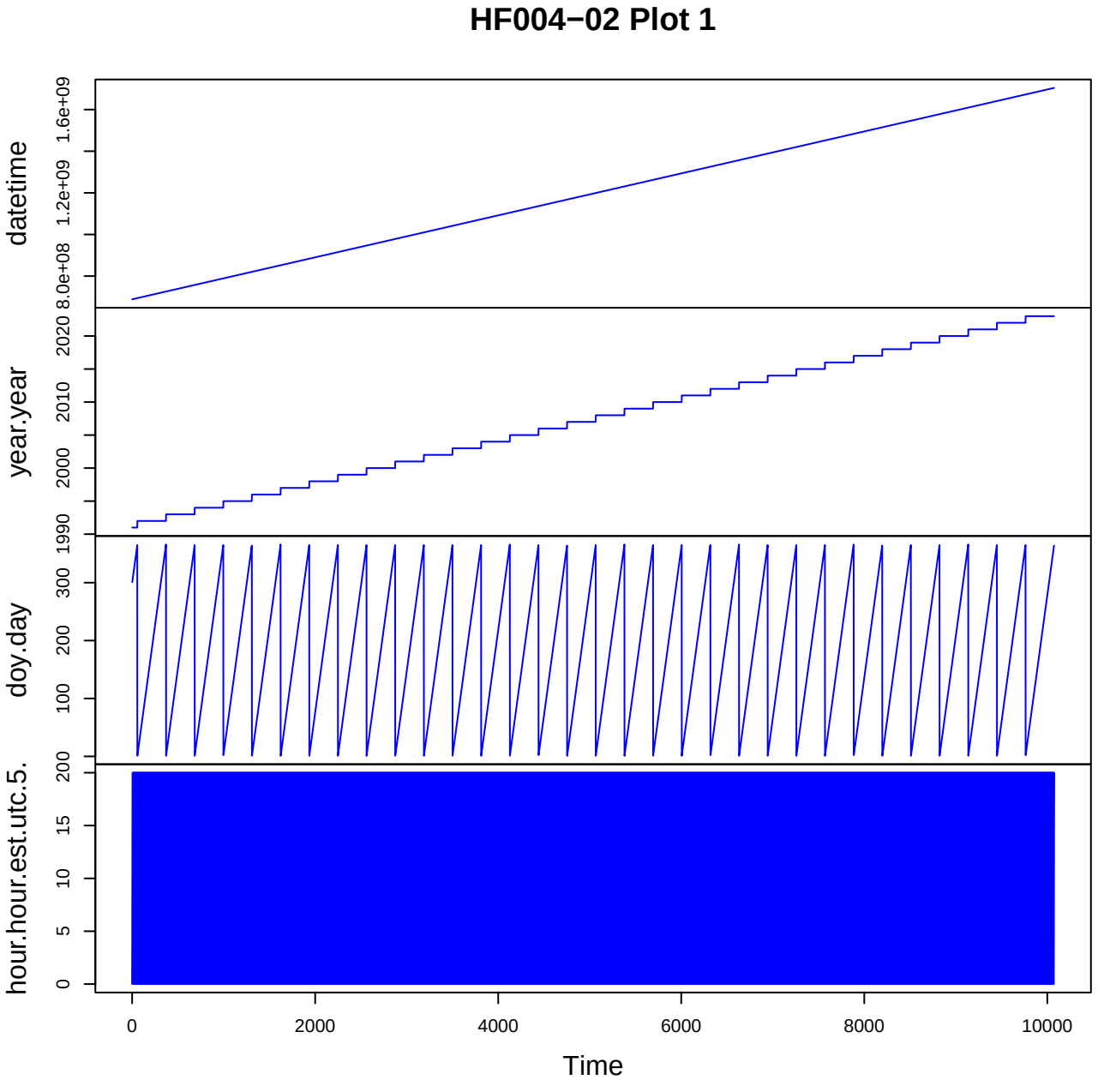
Data File:

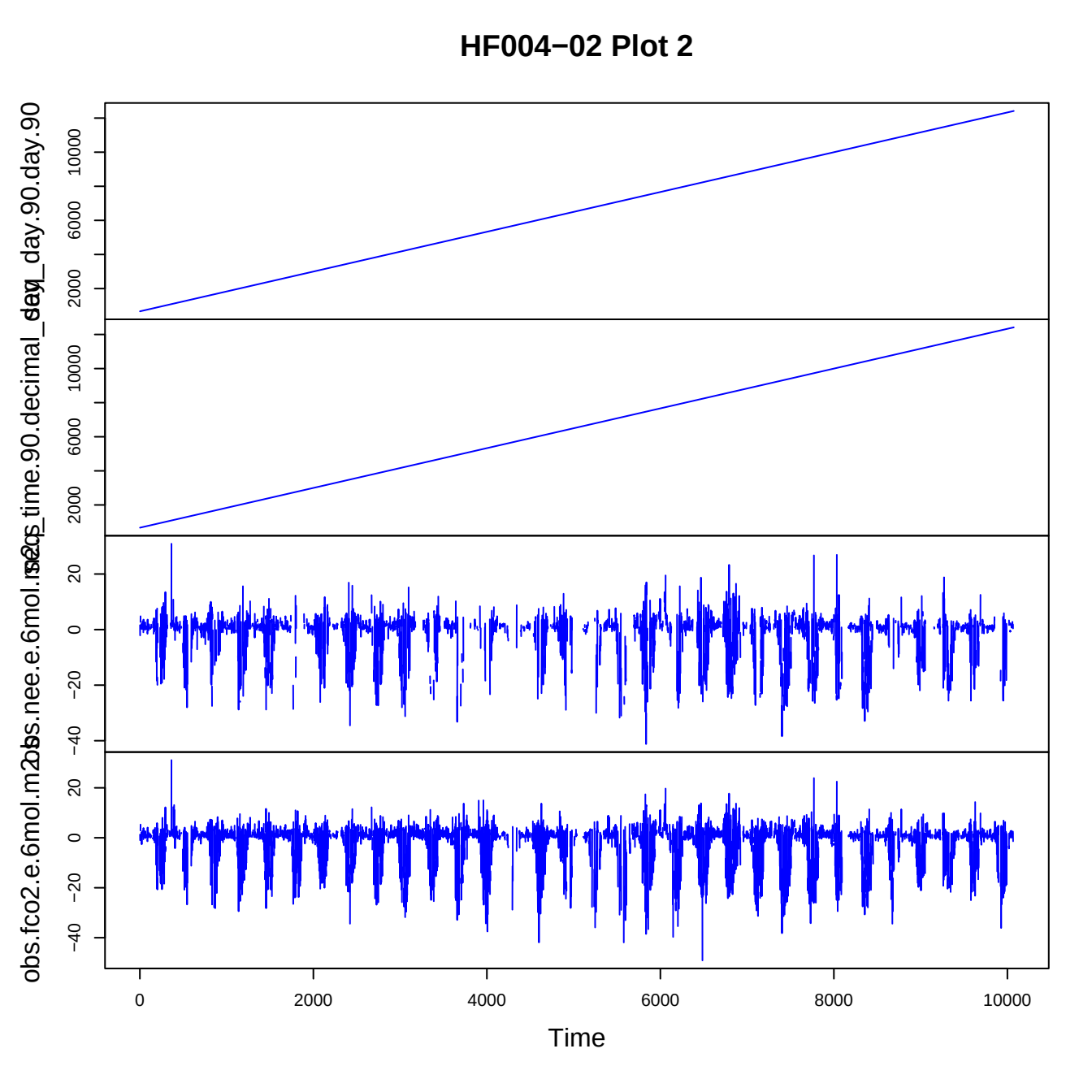
Name = hf004-02-filled.csv
Description = filled data
Rows = 282072 Columns = 36
MD5 checksum = ace22d900b175b8d7ee3780ad6b20e8a

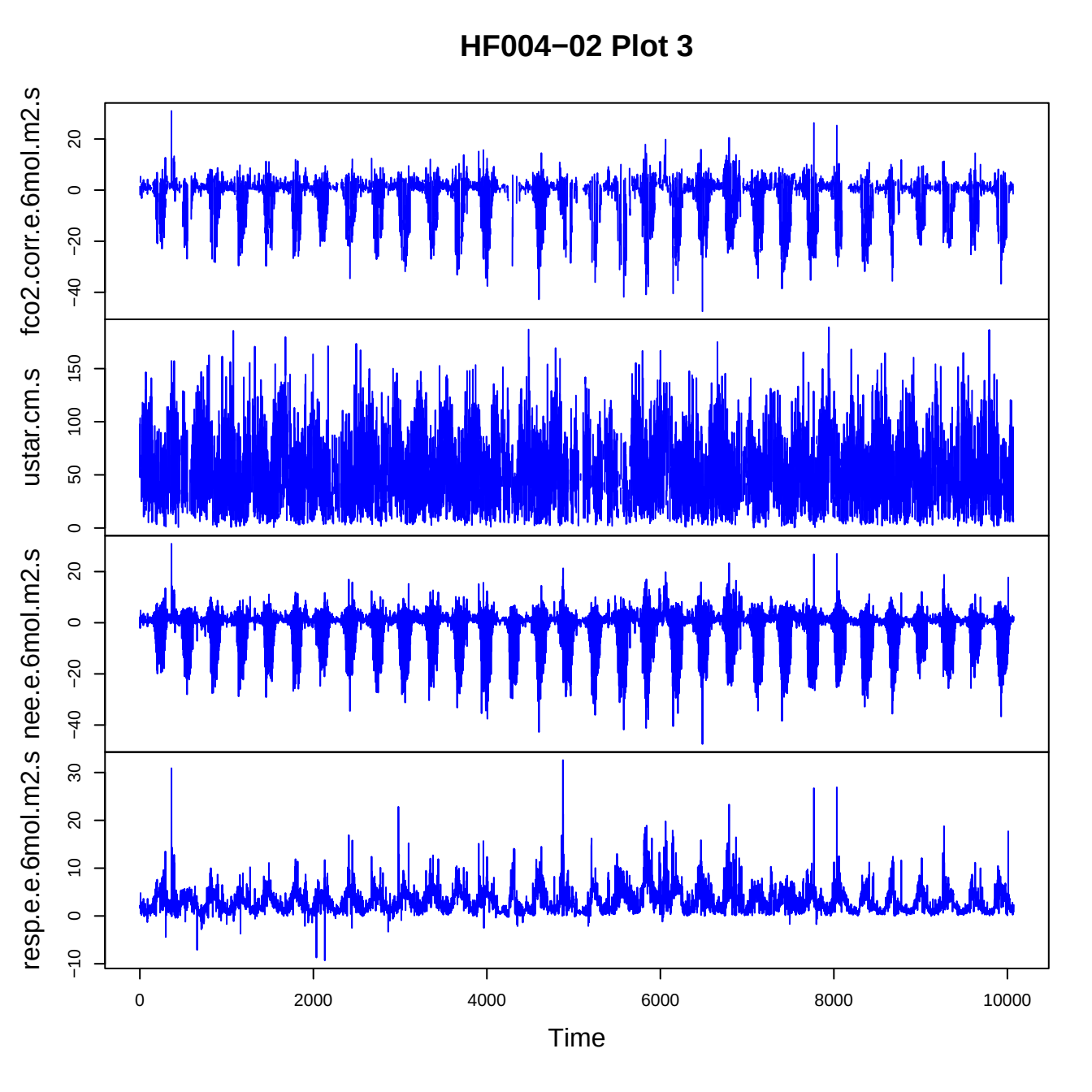
Variables:

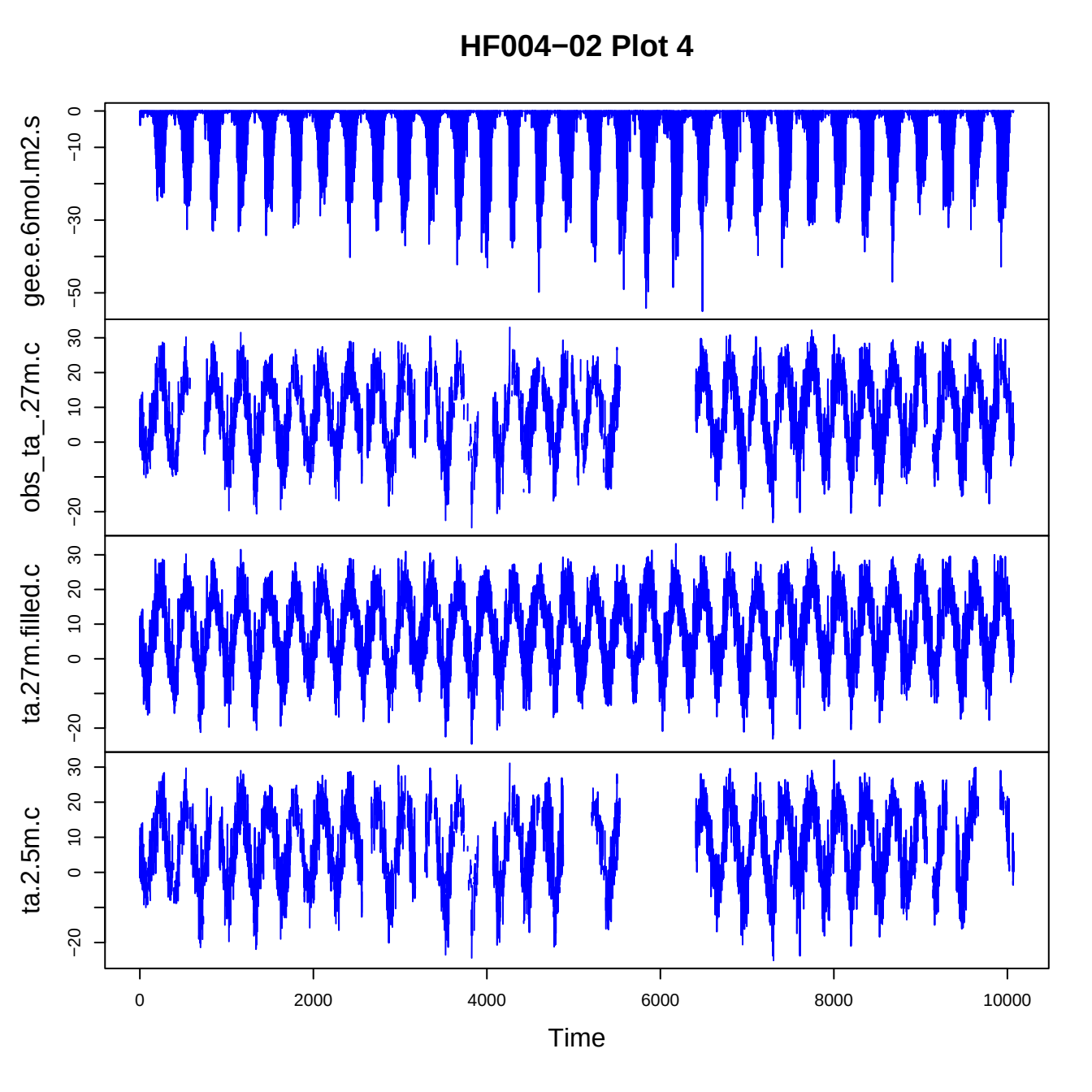
datetime = date and time
year.year = year
doy.day = day of year; January 1 = 1 (nominalDay)
hour.hour.est.utc.5. = hour of day in EST; (EST=GMT-5) (nominalHour)
seq_day.90.day.90 = sequential day starting in 1990, 1 = Jan. 1 1990 (nominalDay)
seq_time.90.decimal_day = sequential time in fractional days; 1.5 is 12 noon January 1 1990 (nominalDay)
obs.nee.e.6mol.m2.s = observed NEE (FCO2 + storage) in micromoles CO2/m2/s (micromolePerMeterSquaredPerSecond)
obs.fco2.e.6mol.m2.s = observed FCO2 (CO2 eddy covariance flux) in micromoleCO2/m2/s (micromolePerMeterSquaredPerSecond)
fco2.corr.e.6mol.m2.s = observed FCO2 + storage correction (micromolePerMeterSquaredPerSecond)
ustar.cm.s = observed u* (u* = sqrt(-1 * <u'w'>) in cm/s (centimetersPerSecond)
nee.e.6mol.m2.s = net ecosystem exchange filled by model in micromole CO2 /m2/s (micromolePerMeterSquaredPerSecond)
resp.e.e.6mol.m2.s = ecosystem respiration filled and derived (see below) e-6mol/m2/s (micromolePerMeterSquaredPerSecond)
gee.e.6mol.m2.s = gross ecosystem exchange derived and filled (micromolePerMeterSquaredPerSecond)
obs_ta_.27m.c = observed air temperature at 27 m (top of tower) (celsius)
ta.27m.filled.c = filled air temperature with missing points replaced by available data (celsius)
ta.2.5m.c = observed air temperature at 2.5m above ground (celsius)
ta.2.5m.filled.c = filled air temperature at 2.5 m above ground (celsius)
par.28m.e.6mol.m2.s = observed photosynthetically active radiation (PPFD) at 28m (above the canopy) (micromolePerMeterSquaredPerSecond)
par.28m.filled.e.6mol.m2.s = filled photosynthetically active radiation (PPFD) (micromolePerMeterSquaredPerSecond)
pardir_ue.m2.s = total PAR at 29 meters (microeinsteinPerMeterSquaredPerSecond)
pardfs_ue.m2.s = diffuse component of PAR at 29 meters (microeinsteinPerMeterSquaredPerSecond)

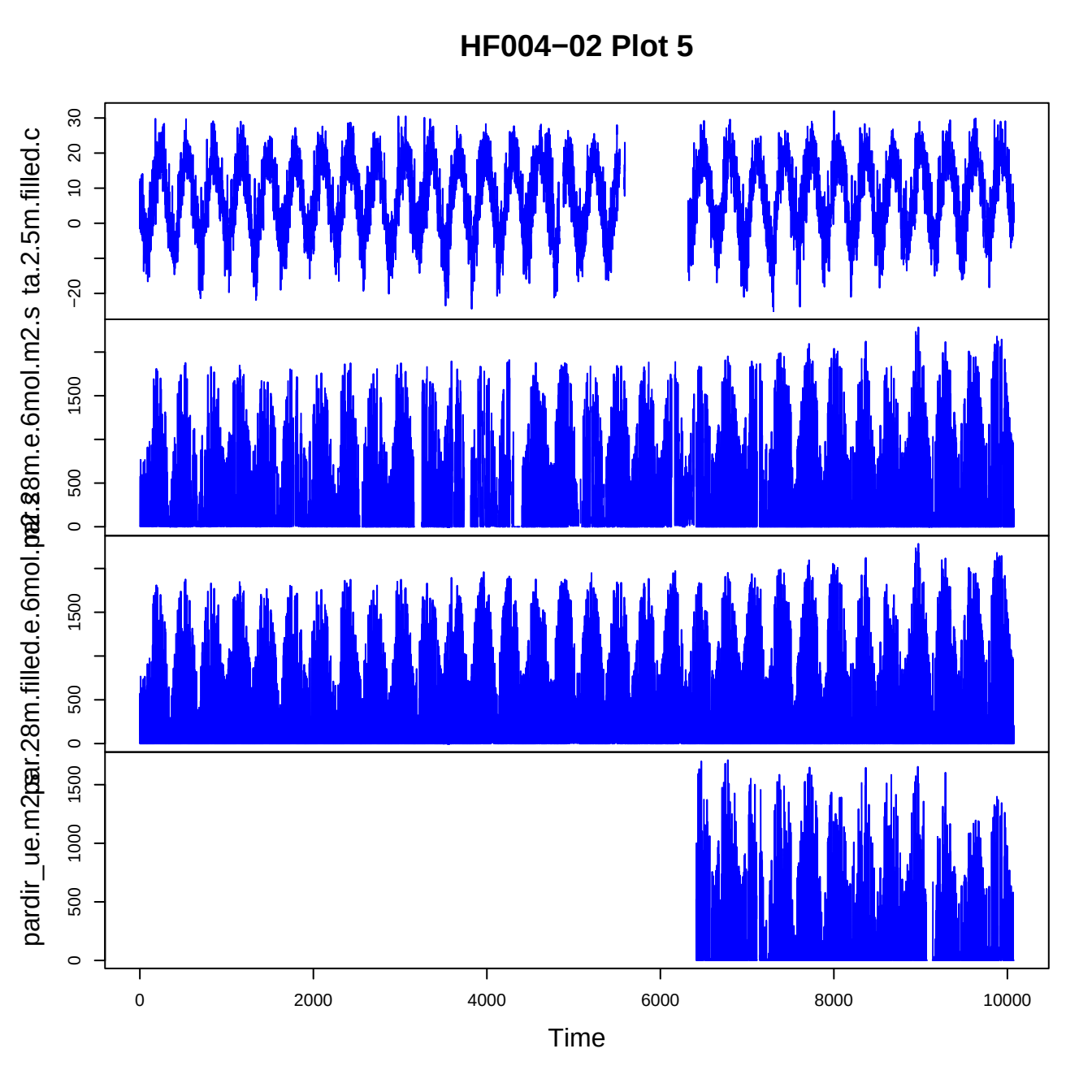
Variable	Min	Median	Mean	Max	NAs
datetime	1991-10-28T00:00			2023-12-31T23:00	0
year.year	1991.000	2007.000	2007.408	2023.000	0
doy.day	1.000	184.000	183.954	366.000	0
hour.hour.es	0.000	11.500	11.500	23.000	0
seq_day.90.d	666.000	6542.000	6542.000	12418.000	0
seq_time.90.	666.000	6542.479	6542.479	12418.958	0
obs.nee.e.6m	−49.300	0.900	−1.324	105.300	166726
obs.fco2.e.6	−49.100	0.800	−1.551	106.900	124052
fco2.corr.e.	−49.580	0.860	−1.595	107.700	124052
ustar.cm.s	0.100	47.000	51.648	220.900	69977
nee.e.6mol.m	−47.590	1.120	−0.827	107.700	0
resp.e.e.6mo	−11.800	2.530	3.133	107.700	0
gee.e.6mol.m	−60.220	0.000	−3.960	0.000	0
obs_ta_.27m.	−27.700	8.700	8.353	36.500	79730
ta.27m.fille	−27.700	8.700	8.310	35.000	0
ta.2.5m.c	−27.400	7.500	7.206	34.100	97717
ta.2.5m.fill	−27.800	7.800	7.414	32.900	24508
par.28m.e.6m	−19.700	18.000	306.886	2464.500	44585
par.28m.fill	−10.100	16.000	304.779	2381.000	0
pardir_ue.m2	−1.900	1.800	170.181	1760.300	187109
pardfs_ue.m2	0.000	19.100	142.579	1119.800	187109

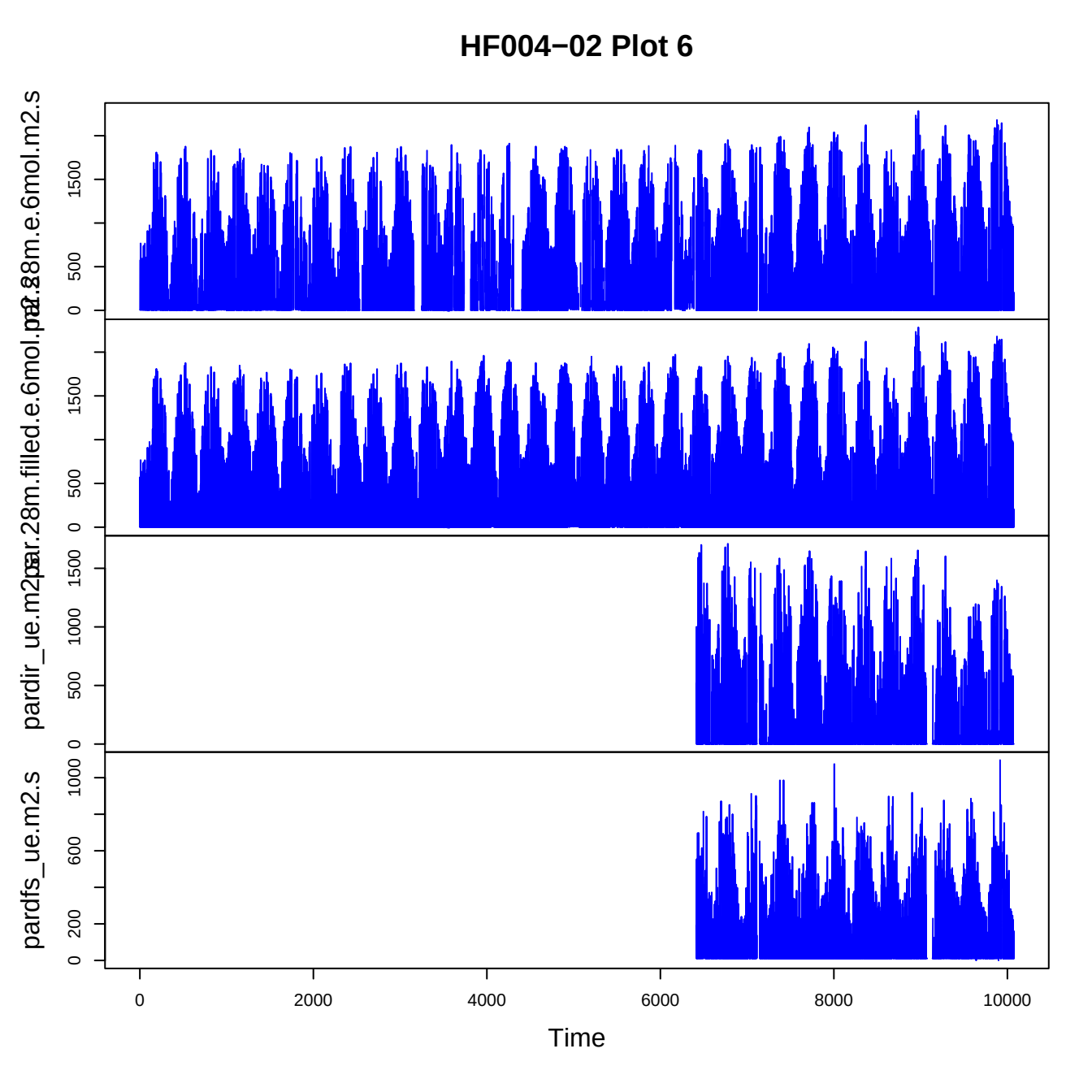

HF004−02 Plot 1
datetime
8.0e+08
1.2e+09
1.6e+09
year.year
2000
2010
2020
doy.day
100
200
300
hour.hour.est.utc.5.
0
5
10
15
20
0
2000
4000
6000
8000
10000
Time


HF004−02 Plot 2
obs.fco2.e.6mol.m2.s
obs.nee.e.6mol.m2.s
obs.time.90.decimal_day.90
obs.time.90.decimal_day.90
2000
6000
10000
−40
−20
0
20
0
2000
4000
6000
8000
10000
Time


HF004−02 Plot 3
fco2.corr.e.6mol.m2.s
ustar.cm.s
nee.e.6mol.m2.s
resp.e.e.6mol.m2.s
Time
0
2000
4000
6000
8000
10000


HF004−02 Plot 4
gee.e.6mol.m2.s
obs_ta_.27m.c
ta.27m.filled.c
ta.2.5m.c
0
−10
−30
−50
30
20
10
0
−20
0
2000
4000
6000
8000
10000
Time


HF004−02 Plot 5
ta.2.5m.filled.c
par.28m.e.6mol.m2.s
par.28m.filled.e.6mol.m2.s
pardir_ue.m2.s
Time
0
2000
4000
6000
8000
10000


HF004−02 Plot 6
par.28m.e.6mol.m2.s
par.28m.filled.e.6mol.m2.s
pardir_ue.m2.s
pardfs_ue.m2.s
0
500
1000
1500
200
600
0
2000
4000
6000
8000
10000
Time