

Harvard Forest Data Archive HF139-01

Data File:

Name = hf139-01-light-curve.csv

Description = light response curves

Rows = 135 Columns = 12

MD5 checksum = dbf8928873acf88a85818b6fab0ee58b

Variables:

co2 = controlled ambient CO₂ levels at which light response curves were measured (dimensionless)

n = sample size (number)

rday.meas = daytime respiration rate at PPF = 0 actually measured during gas-exchange, in $\mu\text{mol C m}^{-2} \text{s}^{-1}$. Included here since Rday values extrapolated from the curve fitting are sometimes questionable. (micromolePerMeterSquaredPerSecond)

rday.curvefit = daytime respiration rate at PPF = 0 estimated from the curve fit (micromolePerMeterSquaredPerSecond)

aqe = apparent quantum efficiency, slope of the initial linear portion of the light response curve (dimensionless)

amax = maximum net assimilation rate estimated asymptotically from the fitted curve (micromolePerMeterSquaredPerSecond)

convexity = convexity parameter for the fitted curve (dimensionless)

lcp = light compensation point, estimated as the X-intercept by the fitted curve (micromolePerMeterSquaredPerSecond)

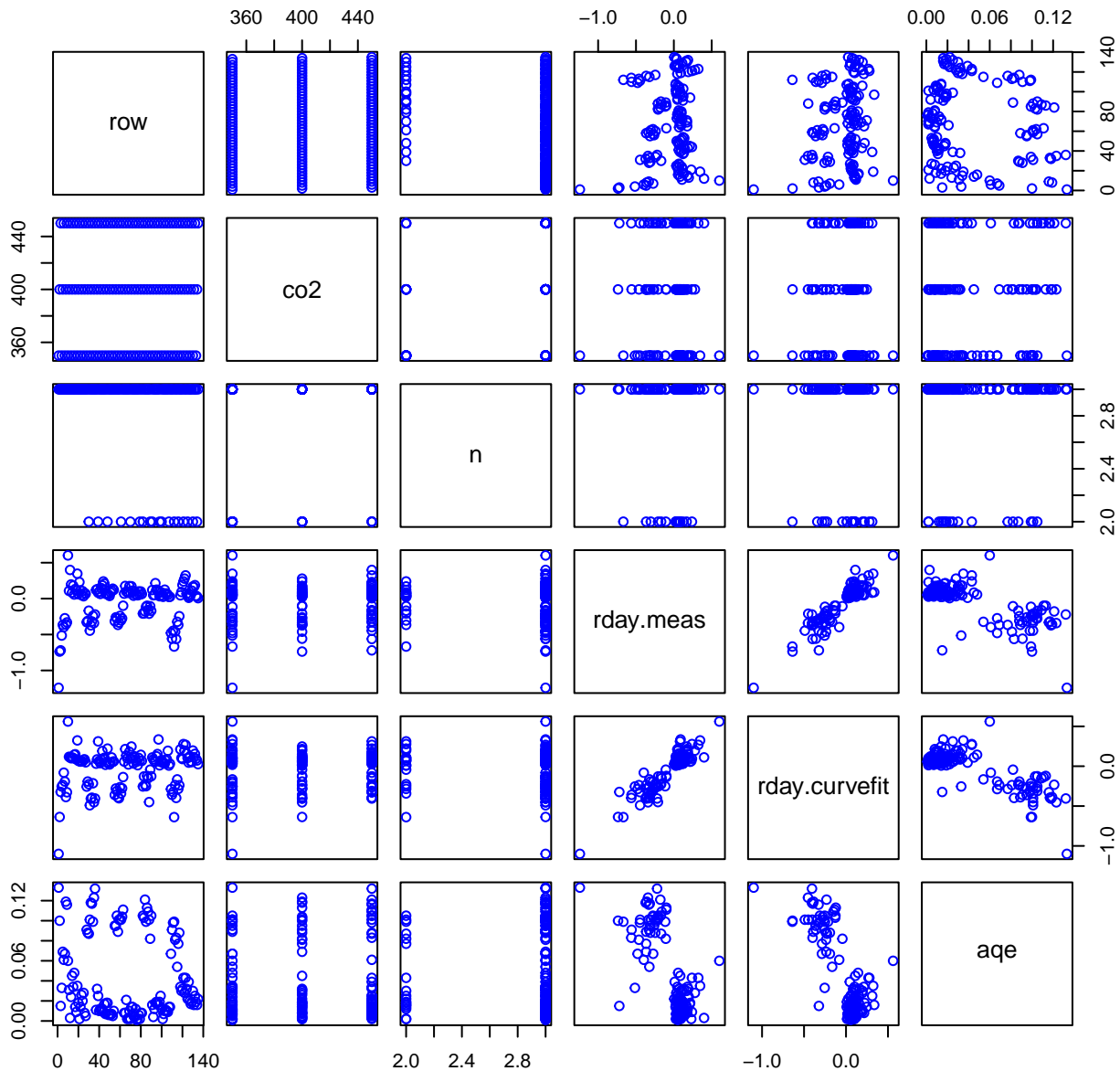
lsat = light saturation point, calculated as the PPF value that corresponds to the intersection between

the quantum yield slope and

estimated Amax (micromolePerMeterSquaredPerSecond)

Variable	Min	Median	Mean	Max	NAs
co2	350.000	400.000	400.000	450.000	0
n	2.000	3.000	2.867	3.000	0
rday.meas	-1.241	0.053	-0.042	0.601	0
rday.curvefi	-1.100	0.056	-0.032	0.561	0
age	0.001	0.022	0.043	0.133	0
amax	0.075	1.066	2.375	8.727	0
convexity	0.002	0.111	0.156	0.610	0
lcp	0.035	1.115	1.901	12.600	0
lsat	0.467	22.633	38.333	211.034	0

HF139-01 Plot 1



HF139-01 Plot 2

