

Harvard Forest Data Archive HF459-10

Data File:

Name = hf459-10-al-mass-spectrometry.csv

Description = Arthur Brook Lower mass spectrometry (monthly)

Rows = 7515 Columns = 14

MD5 checksum = f427a701383ff07007f0da6725b70d2e

Variables:

date = date of sample

Measured_Mass = masses resulting from processed mass to charge ratios. Processing followed Fu et al. (2020) (dimensionless)

C = number of carbon atoms in a formula (dimensionless)

H = number of hydrogen atoms in a formula (dimensionless)

O = number of oxygen atoms in a formula (dimensionless)

N = number of nitrogen atoms in a formula (dimensionless)

C13 = number of carbon-13 atoms in a formula (dimensionless)

S = number of sulfur atoms in a formula (dimensionless)

P = number of phosphorous atoms in a formula (dimensionless)

Cl = number of chlorine atoms in a formula (dimensionless)

Relative_Abandance = percentage intensity of a formula's mass peak compared to the base peak (dimensionless)

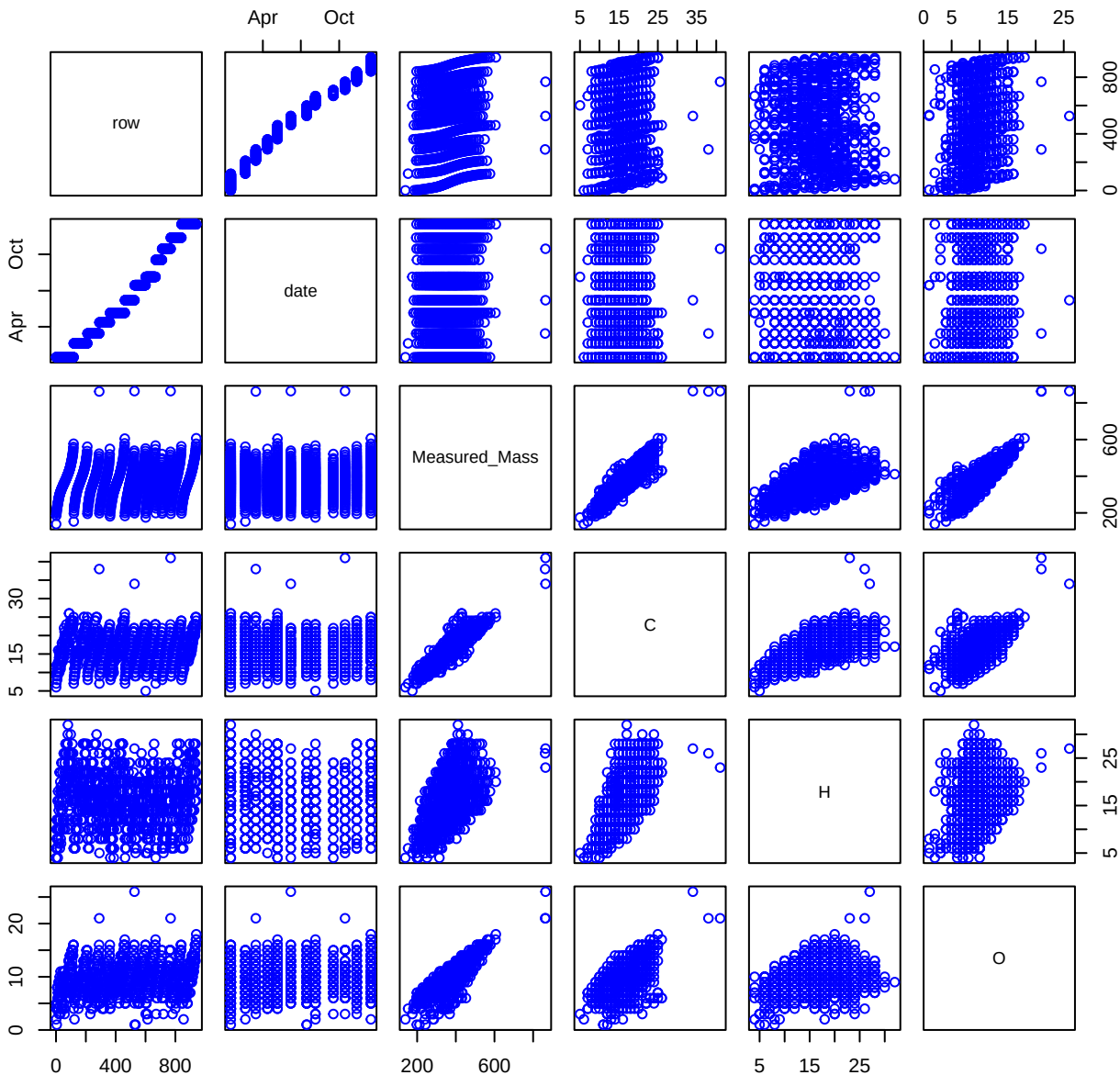
H_C = H/C ratio (dimensionless)

O_C = O/C ratio (dimensionless)

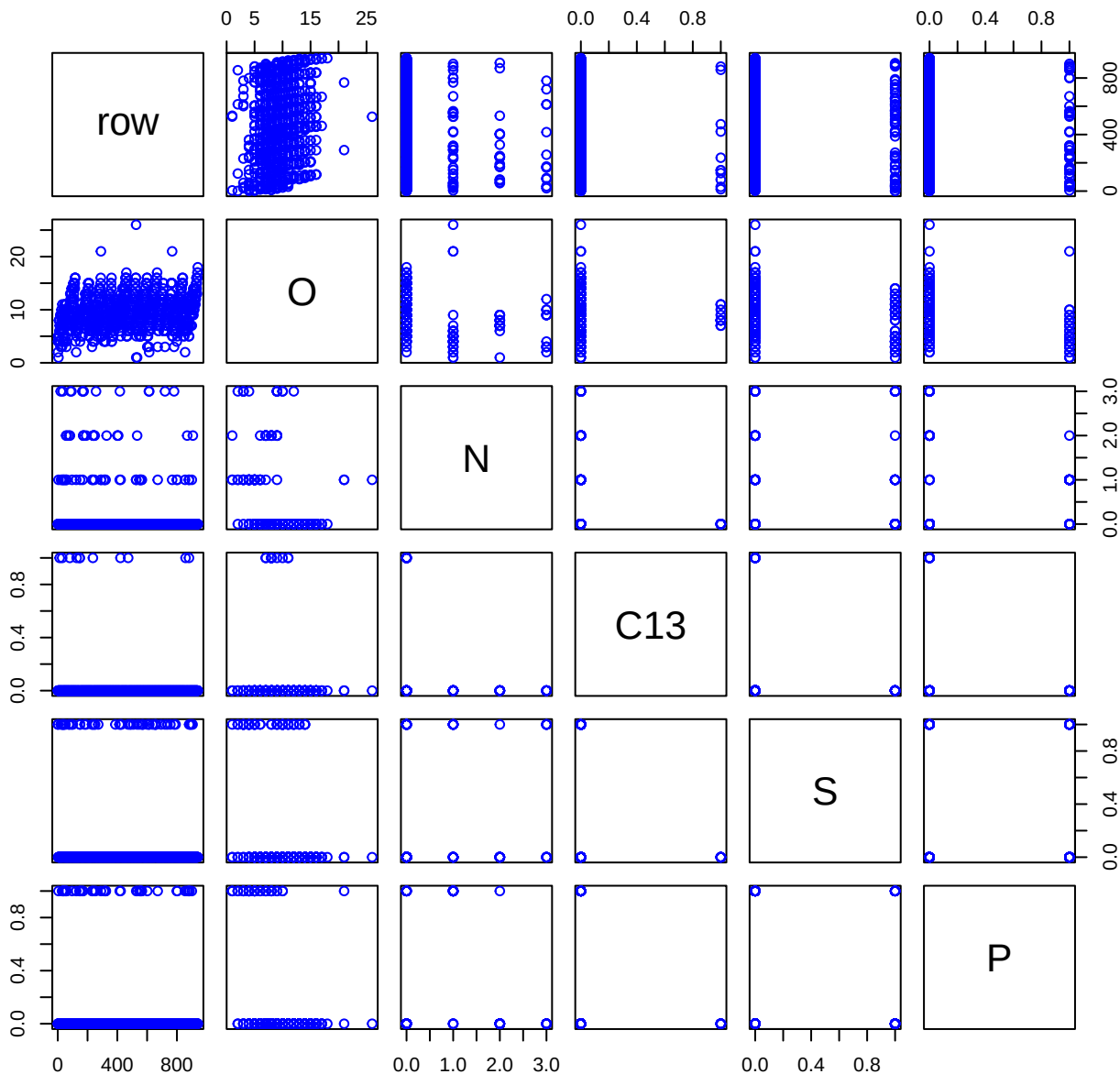
NOSC = nominal oxidation state of carbon (dimensionless)

Summary Statistics					
Descriptive Statistics					
Variable	Min	Median	Mean	Max	NAs
date	2024-01-15	2024-06-07	2024-06-15	2024-12-16	0
Measured_Mas	138.986	368.072	369.691	864.074	0
C	4.000	16.000	16.316	41.000	0
H	4.000	16.000	16.179	32.000	0
O	1.000	9.000	9.601	26.000	0
N	0.000	0.000	0.130	5.000	0
C13	0.000	0.000	0.013	1.000	0
S	0.000	0.000	0.043	1.000	0
P	0.000	0.000	0.054	1.000	0
Cl	0.000	0.000	0.000	0.000	0
Relative_Abu	0.434	5.268	8.139	100.000	0
H_C	0.364	1.000	0.992	2.600	0
O_C	0.059	0.600	0.601	1.000	0
NOSC	-1.278	0.278	0.244	3.600	0

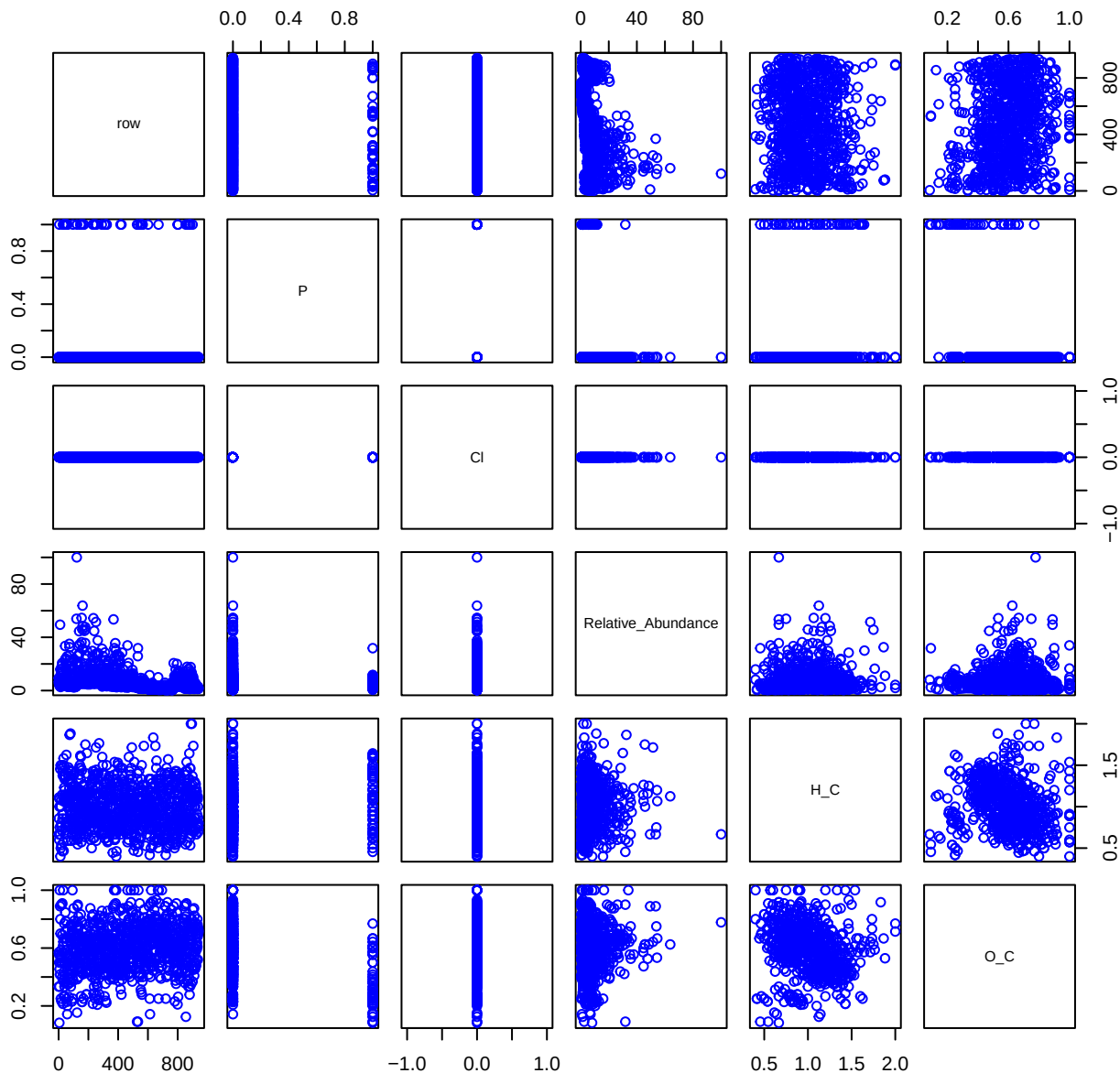
HF459-10 Plot 1



HF459-10 Plot 2



HF459-10 Plot 3



HF459-10 Plot 4

