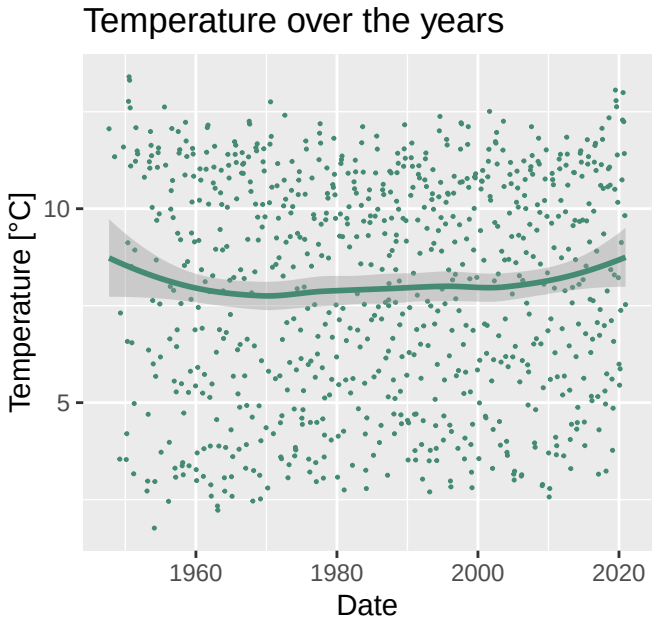
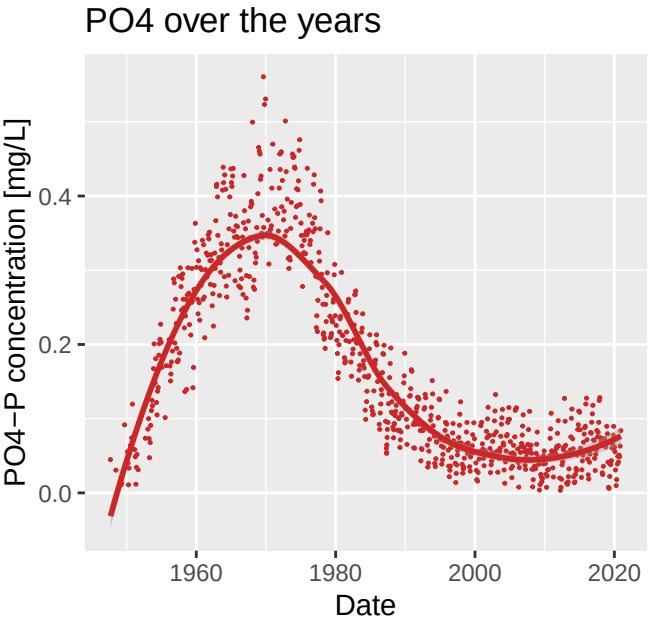
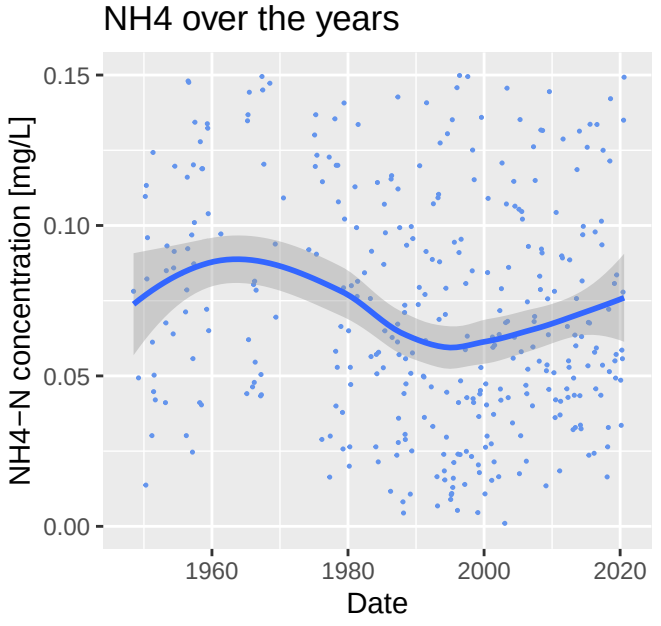
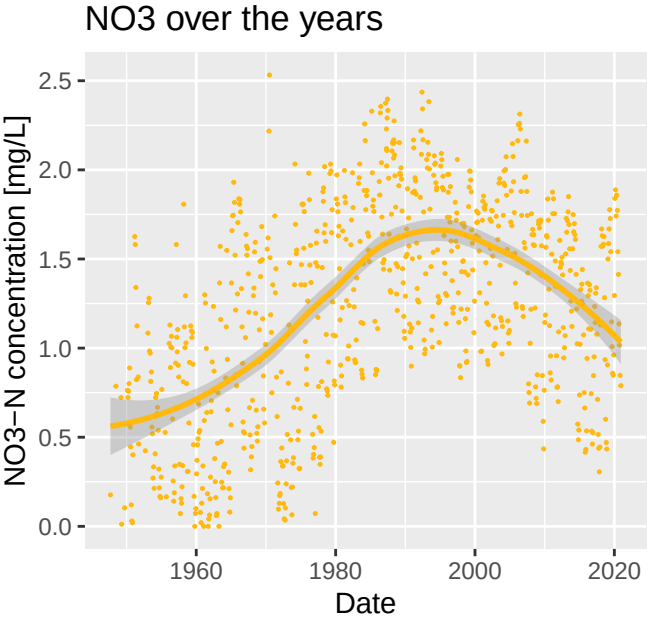
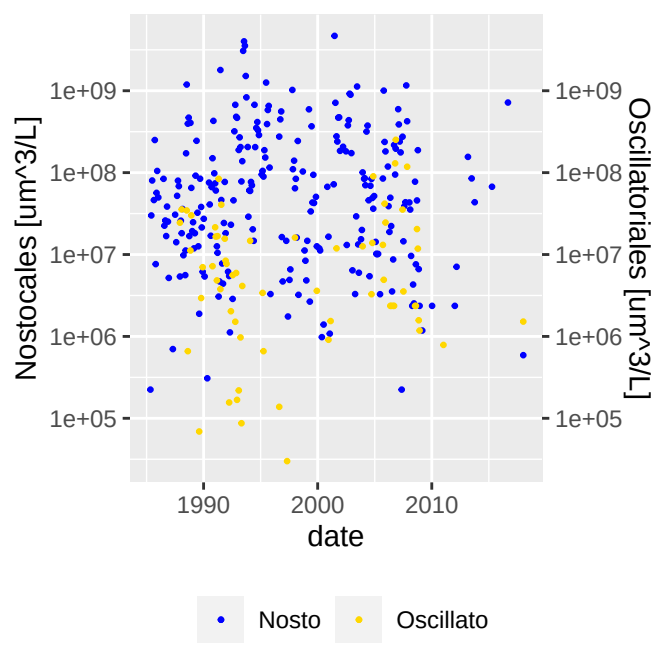
GRE lake

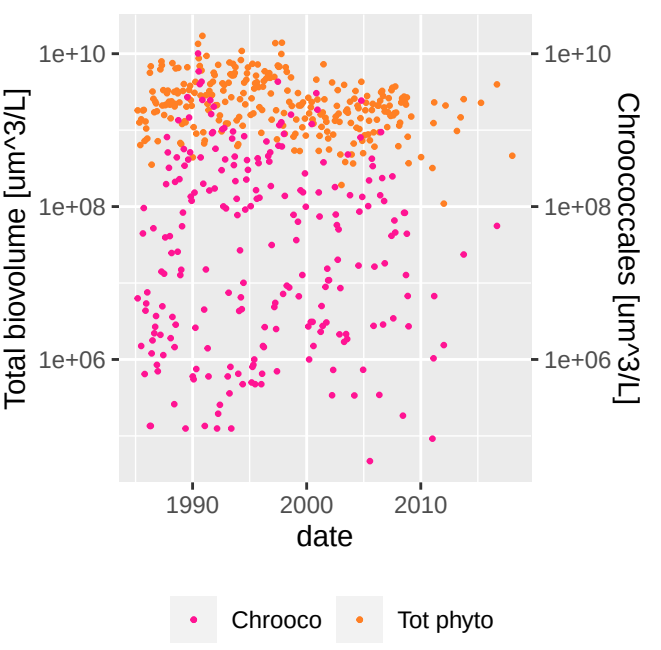

Temperature over the years
Temperature [°C]
10
5
1960
1980
2000
2020
Date

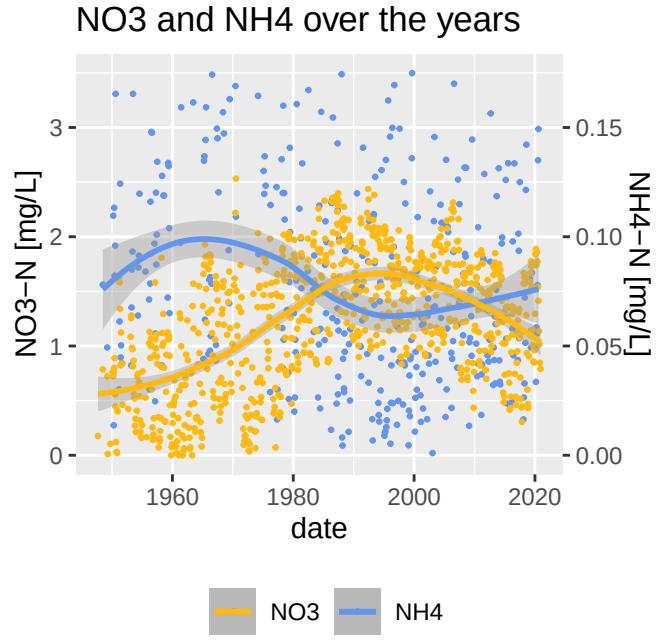

PO4 over the years
PO4−P concentration [mg/L]
0.4
0.2
0.0
1960
1980
2000
2020
Date

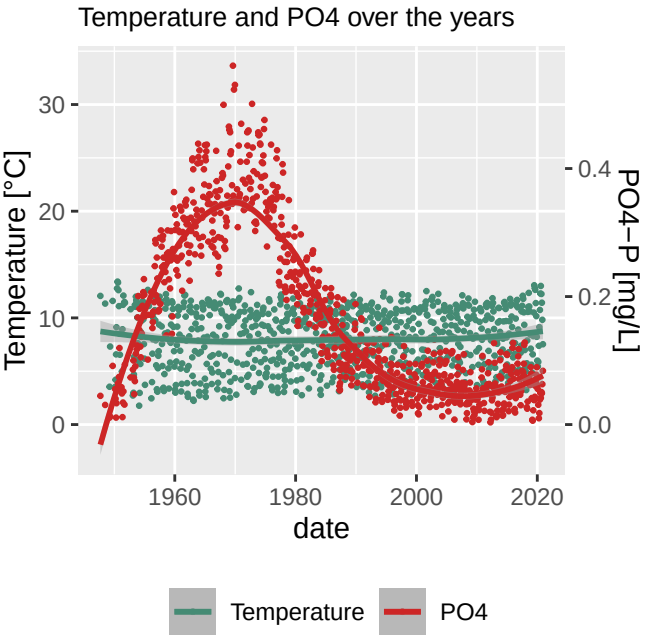

NH4 over the years
NH4−N concentration [mg/L]
0.15
0.10
0.05
0.00
1960
1980
2000
2020
Date

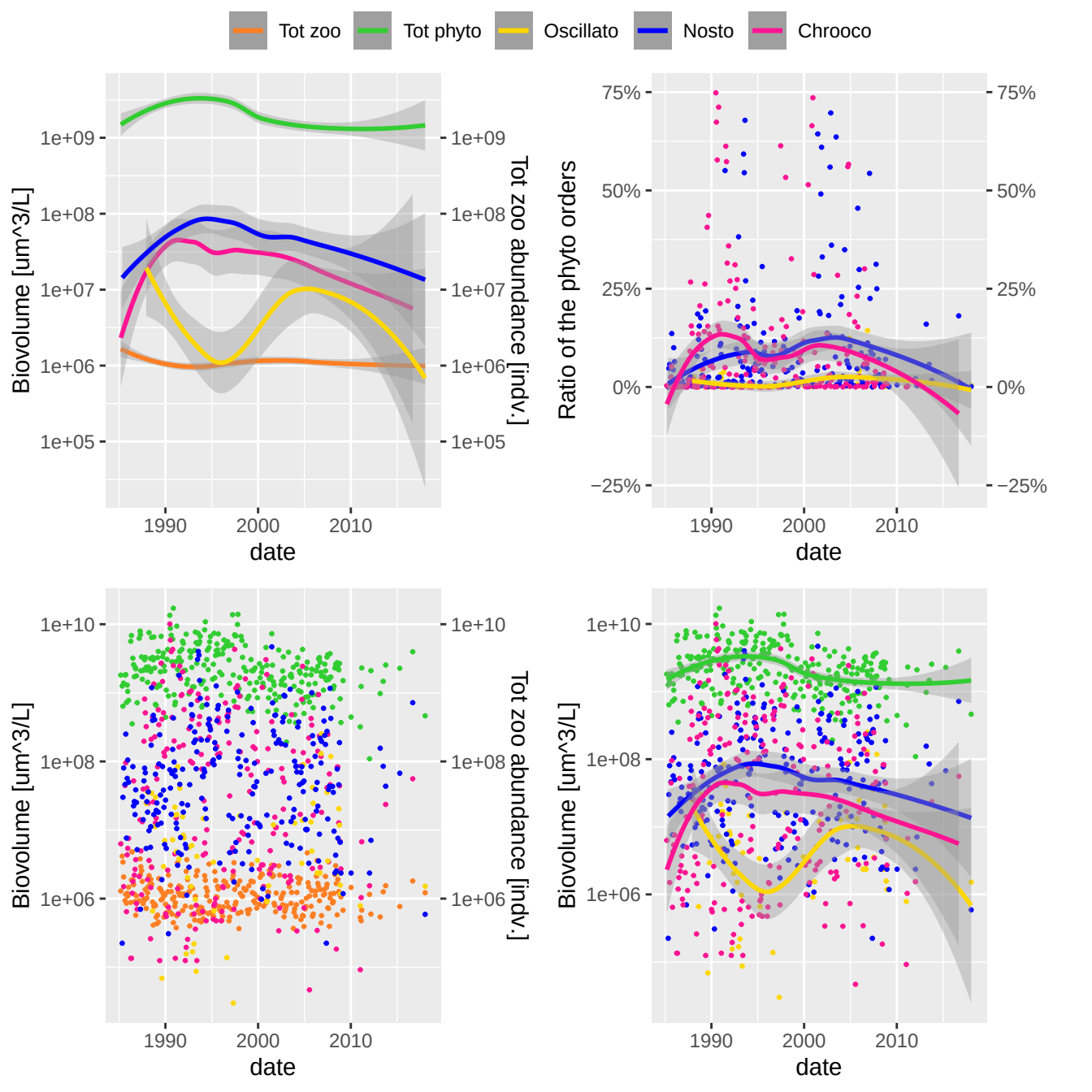

NO3 over the years
NO3−N concentration [mg/L]
2.5
2.0
1.5
1.0
0.5
0.0
1960
1980
2000
2020
Date

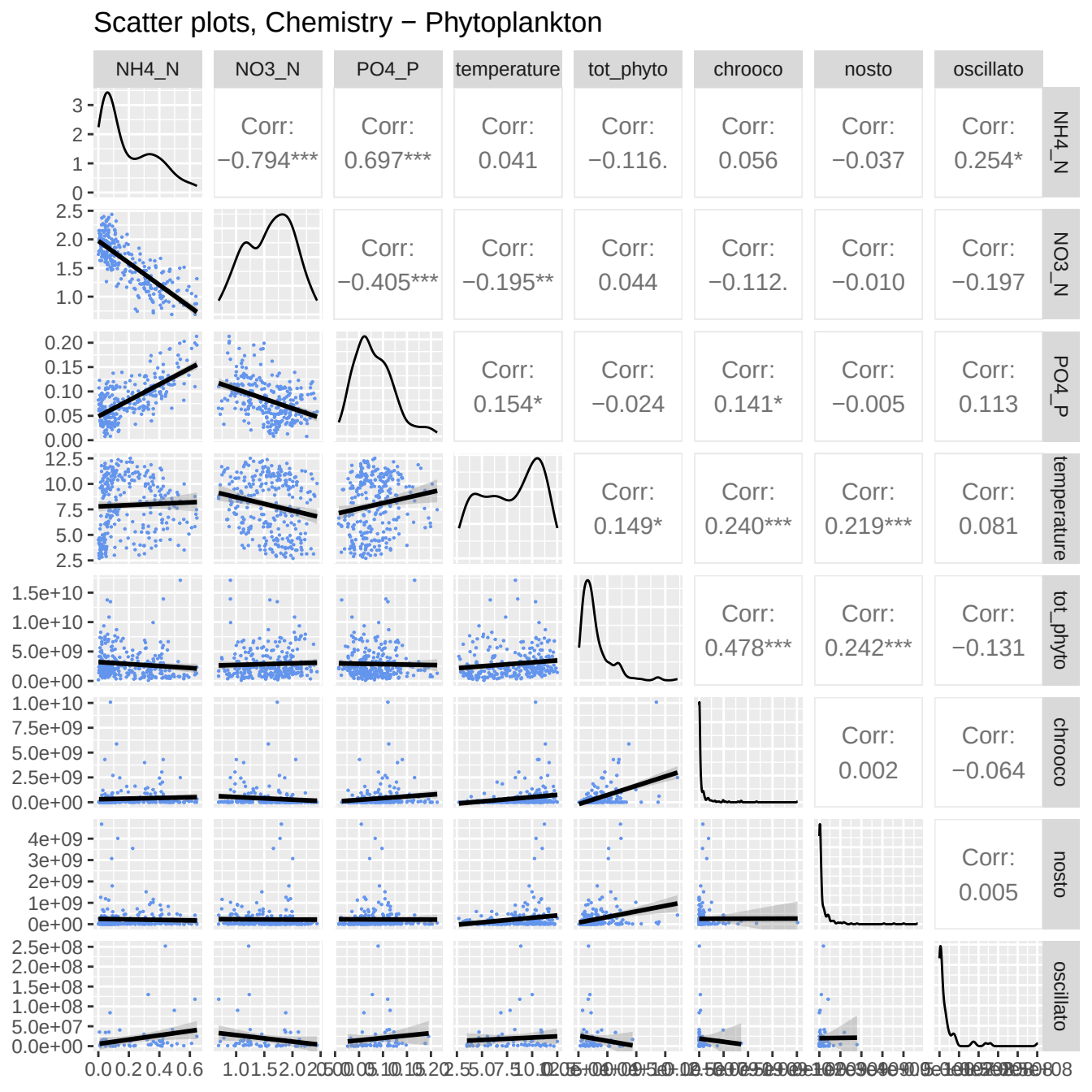

Nostocales [um^3/L]
Oscillatoriales [um^3/L]
1e+09
1e+08
1e+07
1e+06
1e+05
1990
2000
2010
date
Nosto
Oscillato

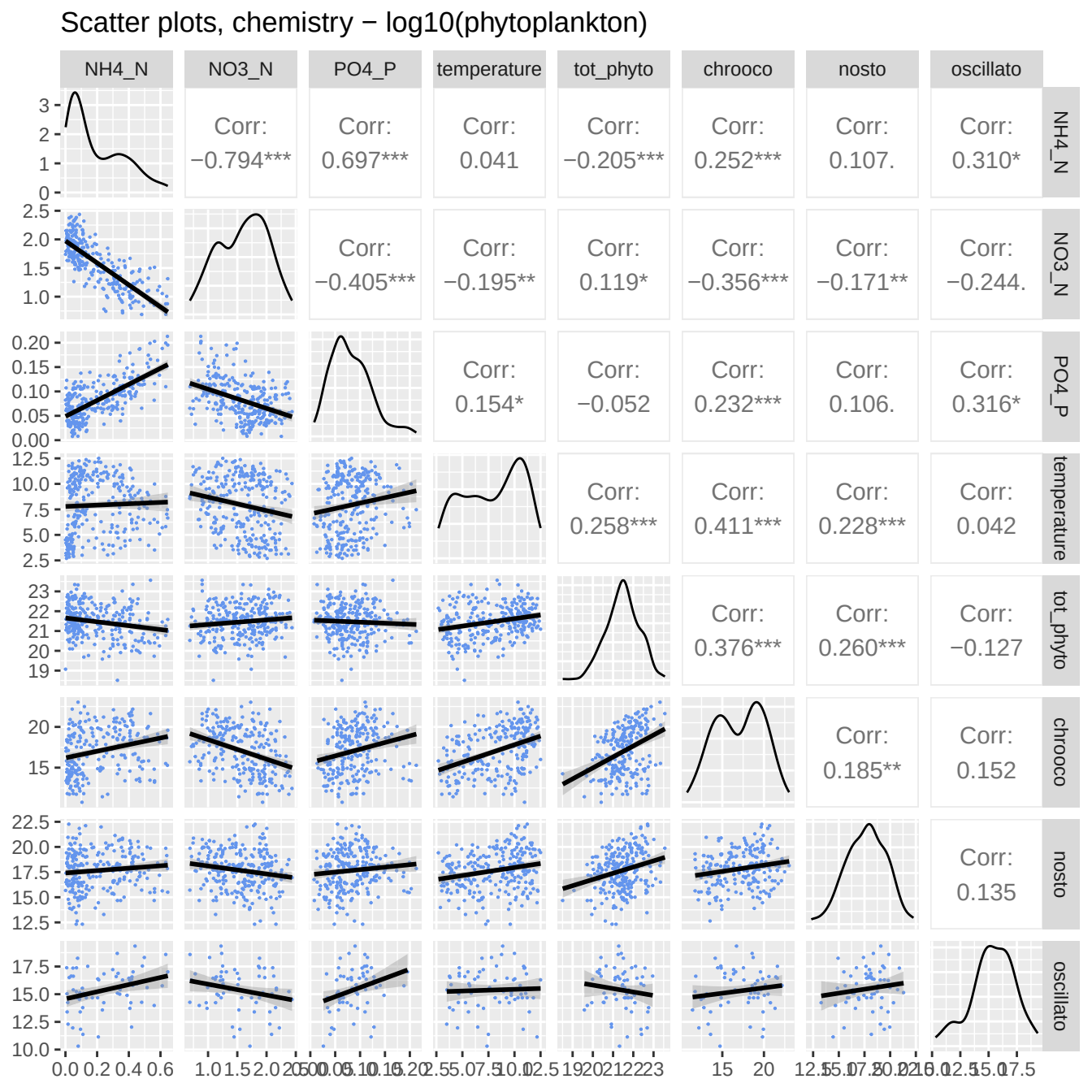

Total biovolume [um^3/L]
Chroococcales [um^3/L]
1e+10
1e+08
1e+06
1990
2000
2010
date
Chrooco
Tot phyto

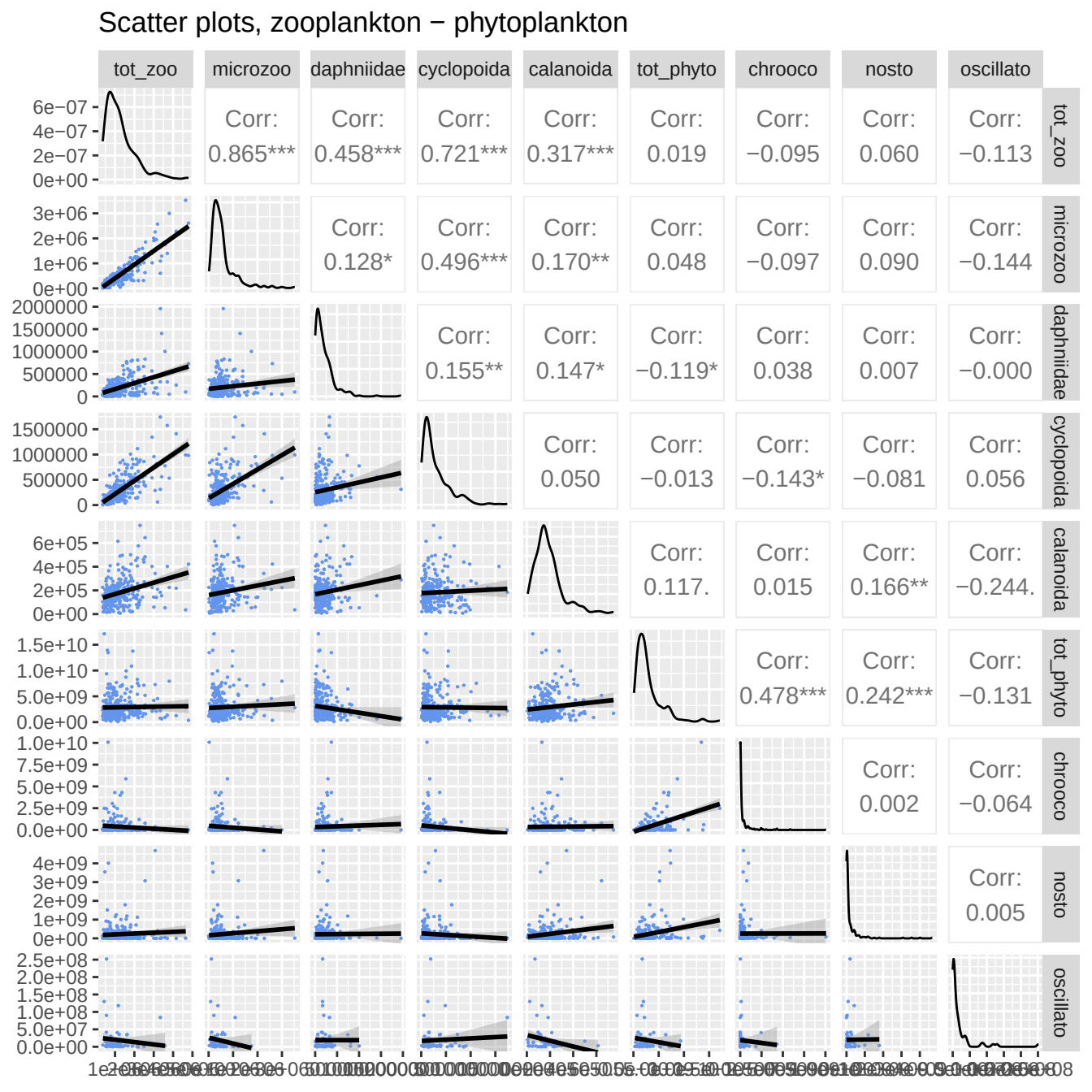

NO3 and NH4 over the years
NO3−N [mg/L]
NH4−N [mg/L]
3
2
1
0
0.15
0.10
0.05
0.00
1960
1980
2000
2020
date
NO3
NH4

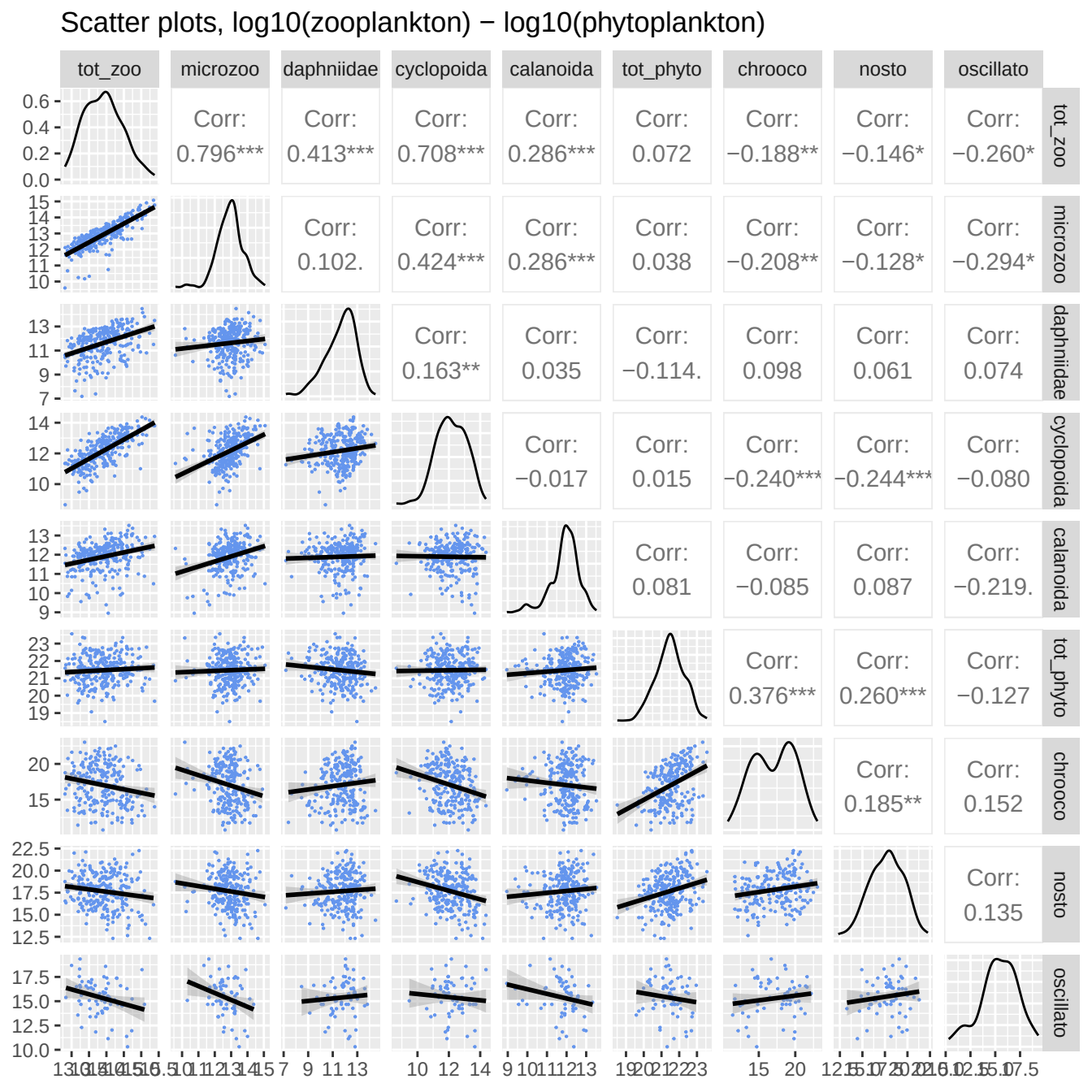

Temperature and PO4 over the years
Temperature [°C]
PO4−P [mg/L]
30
20
10
0
0.4
0.2
0.0
1960
1980
2000
2020
date
Temperature
PO4


Tot zoo
Tot phyto
Oscillato
Nosto
Chrooco
Biovolume [um^3/L]
Tot zoo abundance [indv.]
1e+09
1e+08
1e+07
1e+06
1e+05
1990
2000
2010
date
Ratio of the phyto orders
75%
50%
25%
0%
−25%
1e+10

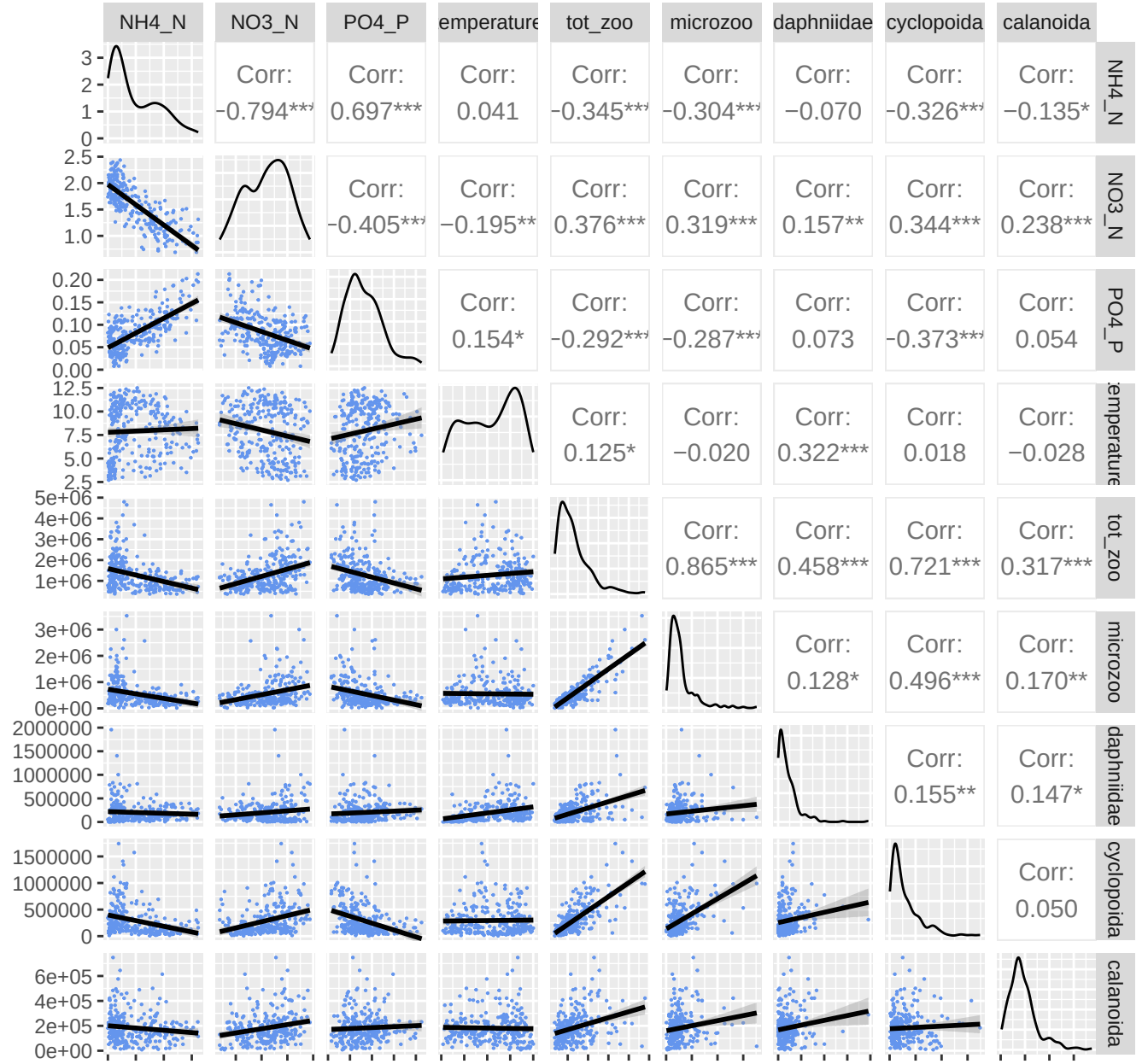

Scatter plots, Chemistry − Phytoplankton
NH4_N
NO3_N
PO4_P
temperature
tot_phyto
chrooco
nosto
oscillato
Corr: −0.794***
Corr: 0.697***
Corr: 0.041
Corr: −0.116.
Corr: 0.056
Corr: −0.037
Corr: 0.254*
Corr: −0.405***
Corr: −0.195**
Corr: 0.044
Corr: −0.112.
Corr: −0.010
Corr: −0.197
Corr: 0.154*
Corr: −0.024
Corr: 0.141*
Corr: −0.005
Corr: 0.113
Corr: 0.149*
Corr: 0.240***
Corr: 0.219***
Corr: 0.081
Corr: 0.478***
Corr: 0.242***
Corr: −0.131
Corr: 0.002
Corr: −0.064
Corr: 0.005

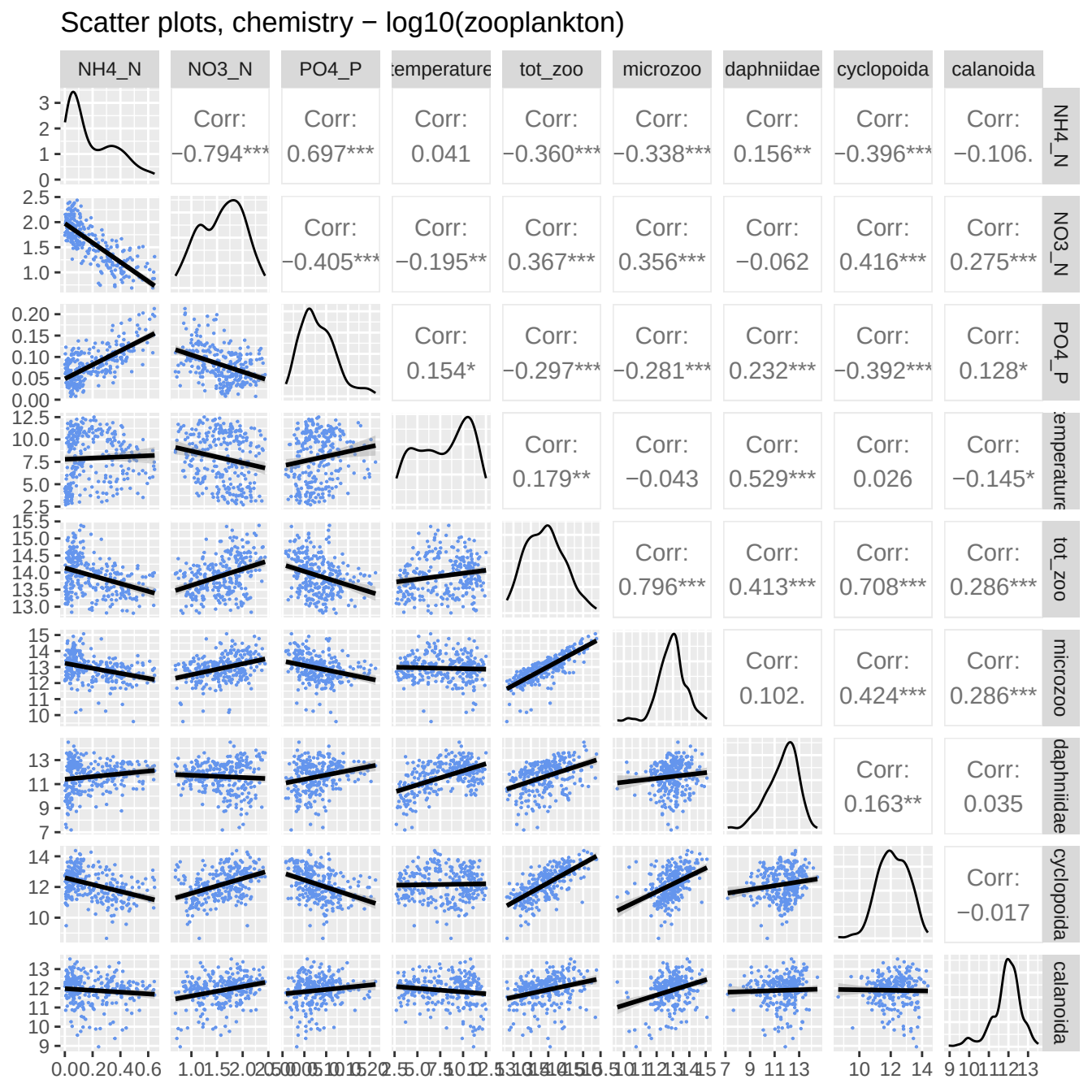

Scatter plots, chemistry − log10(phytoplankton)
NH4_N
NO3_N
PO4_P
temperature
tot_phyto
chrooco
nosto
oscillato
Corr: −0.794***
Corr: 0.697***
Corr: 0.041
Corr: −0.205***
Corr: 0.252***
Corr: 0.107.
Corr: 0.310*
Corr: −0.405***
Corr: −0.195**
Corr: 0.119*
Corr: −0.356***
Corr: −0.171**
Corr: −0.244.
Corr: 0.154*
Corr: −0.052
Corr: 0.232***
Corr: 0.106.
Corr: 0.316*
Corr: 0.258***
Corr: 0.411***
Corr: 0.228***
Corr: 0.042
Corr: 0.376***
Corr: 0.260***
Corr: −0.127
Corr: 0.185**
Corr: 0.152
Corr: 0.135


Scatter plots, zooplankton − phytoplankton
tot_zoo
microzoo
daphniidae
cyclopoida
calanoida
tot_phyto
chrooco
nosto
oscillato
Corr: 0.865***
Corr: 0.458***
Corr: 0.721***
Corr: 0.317***
Corr: 0.019
Corr: −0.095
Corr: 0.060
Corr: −0.113
Corr: 0.128*
Corr: 0.496***
Corr: 0.170**
Corr: 0.048
Corr: −0.097
Corr: 0.090
Corr: −0.144
Corr: 0.155**
Corr: 0.147*
Corr: −0.119*
Corr: 0.038
Corr: 0.007
Corr: −0.000
Corr: 0.050
Corr: −0.013
Corr: −0.143*
Corr: −0.081
Corr: 0.056
Corr: 0.117.
Corr: 0.015
Corr: 0.166**
Corr: −0.244.
Corr: 0.478***
Corr: 0.242***
Corr: −0.131
Corr: 0.002
Corr: −0.064
Corr: 0.005


Scatter plots, log10(zooplankton) − log10(phytoplankton)
tot_zoo
microzoo
daphniidae
cyclopoida
calanoida
tot_phyto
chrooco
nosto
oscillato
Corr: 0.796***
Corr: 0.413***
Corr: 0.708***
Corr: 0.286***
Corr: 0.072
Corr: −0.188**
Corr: −0.146*
Corr: −0.260*
Corr: 0.102.
Corr: 0.424***
Corr: 0.286***
Corr: 0.038
Corr: −0.208**
Corr: −0.128*
Corr: −0.294*
Corr: 0.163**
Corr: 0.035
Corr: −0.114.
Corr: 0.098
Corr: 0.061
Corr: 0.074
Corr: −0.017
Corr: 0.015
Corr: −0.240***
Corr: −0.244***
Corr: −0.080
Corr: 0.081
Corr: −0.085
Corr: 0.087
Corr: −0.219.
Corr: 0.376***
Corr: 0.260***
Corr: −0.127
Corr: 0.185**
Corr: 0.152
Corr: 0.135

Scatter plots, chemistry − zooplankton




Scatter plots, chemistry − log10(zooplankton)
NH4_N
NO3_N
PO4_P
temperature
tot_zoo
microzoo
daphniidae
cyclopoida
calanoida
Corr: −0.794***
Corr: 0.697***
Corr: 0.041
Corr: −0.360***
Corr: −0.338***
Corr: 0.156**
Corr: −0.396***
Corr: −0.106.
Corr: −0.405***
Corr: −0.195**
Corr: 0.367***
Corr: 0.356***
Corr: −0.062
Corr: 0.416***
Corr: 0.275***
Corr: 0.154*
Corr: −0.297***
Corr: −0.281***
Corr: 0.232***
Corr: −0.392***
Corr: 0.128*
Corr: 0.179**
Corr: −0.043
Corr: 0.529***
Corr: 0.026
Corr: −0.145*
Corr: 0.796***
Corr: 0.413***
Corr: 0.708***
Corr: 0.286***
Corr: 0.102.
Corr: 0.424***
Corr: 0.286***
Corr: 0.163**
Corr: 0.035
Corr: −0.017