

Inputs for MyLake-Sediment Model

Lake Erie

I. Markelov, B. McNeil

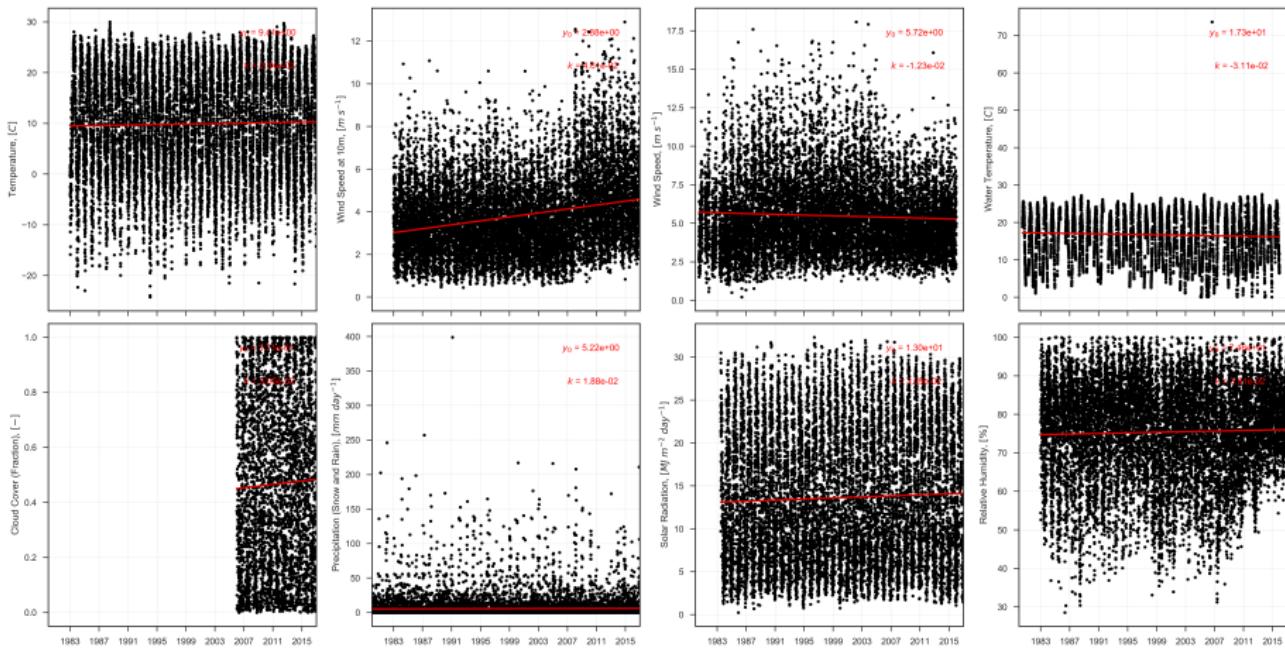
Ecohydrology

February 16, 2017

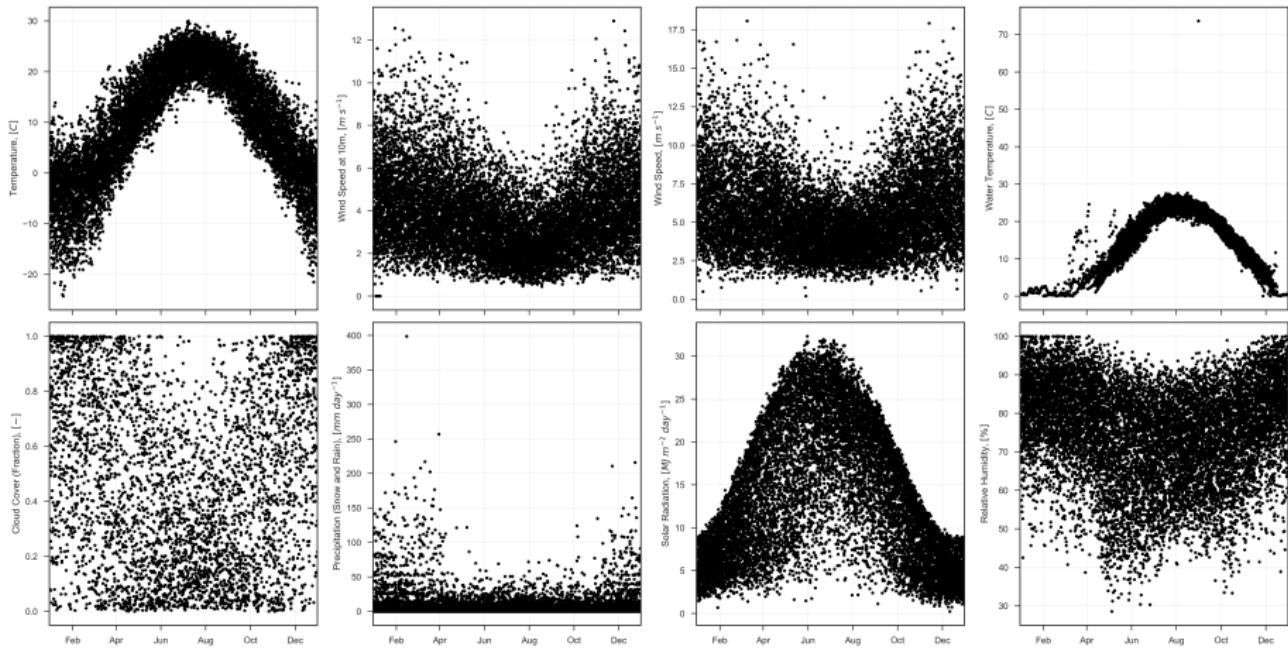
- 1 Weather
 - Western Basin
 - Central Basin
 - Eastern Basin
- 2 River Inputs
 - Density and Completeness of Data
 - Example of data
- 3 River Input Combined
- 4 Supplemental information
 - Boxplots of river inputs
 - All year trends
 - One year patterns
 - Weather Boxplots
 - Separate plots of Rivers
 - Eastern basin
 - Central Basin
 - Western basin

Weather

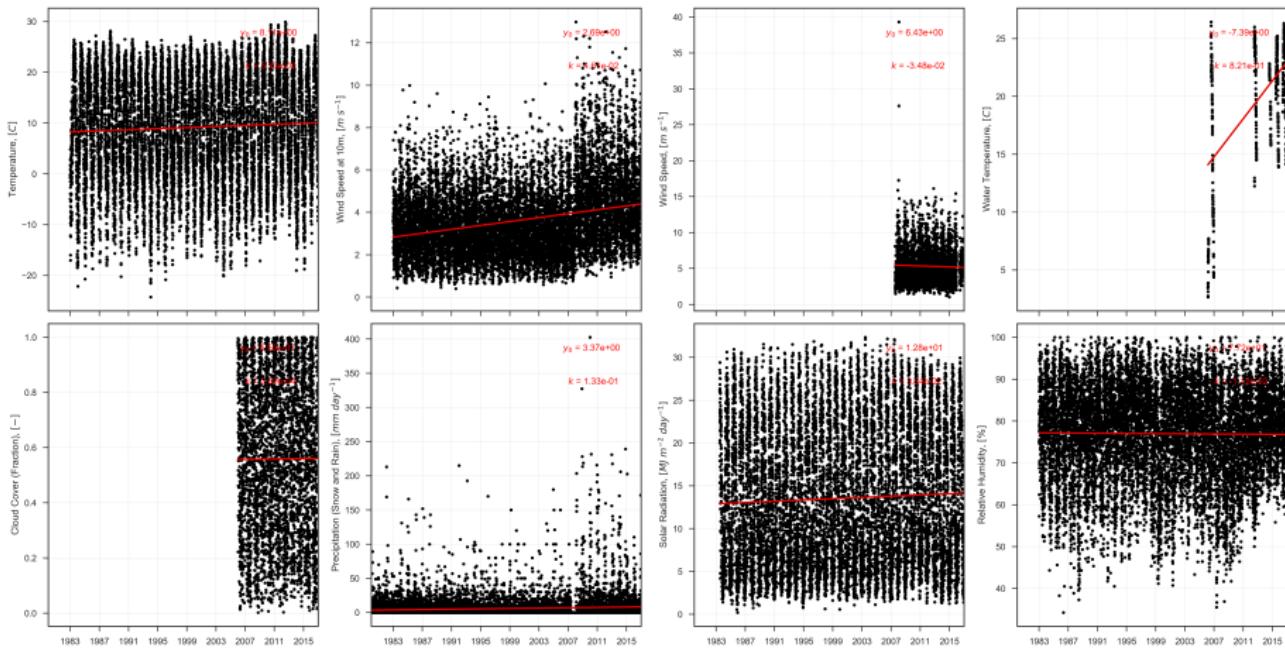
Western Basin: All years



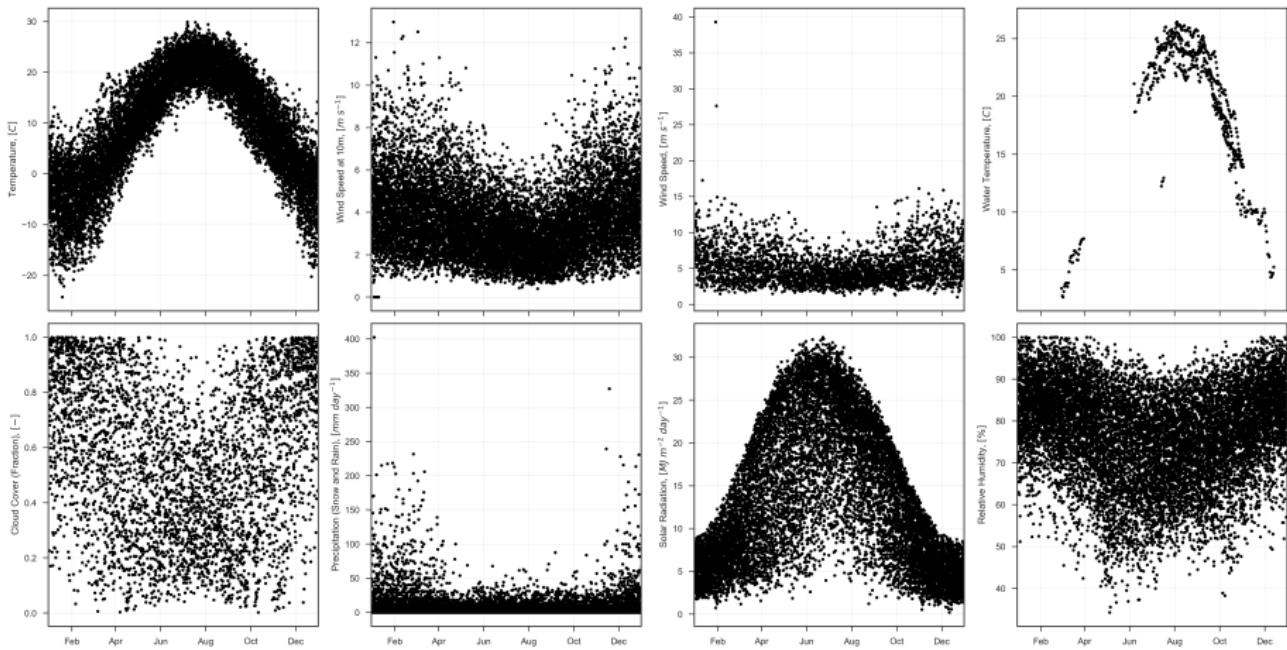
Western Basin: 1 year



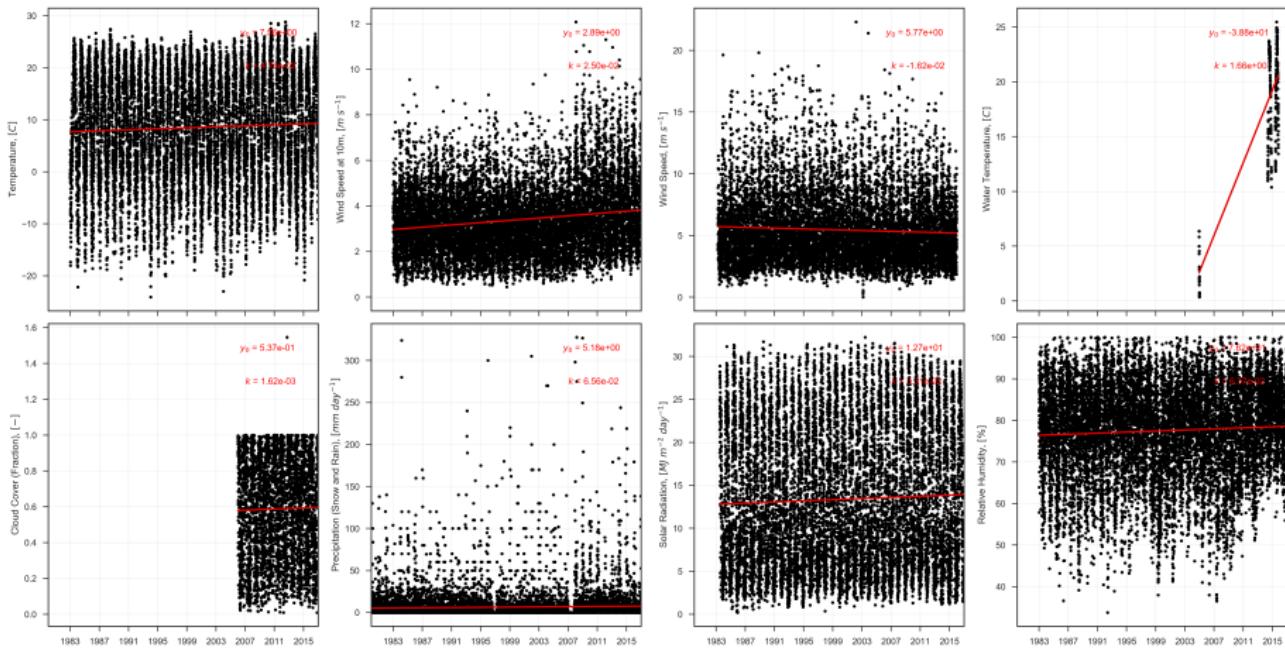
Central Basin: All years



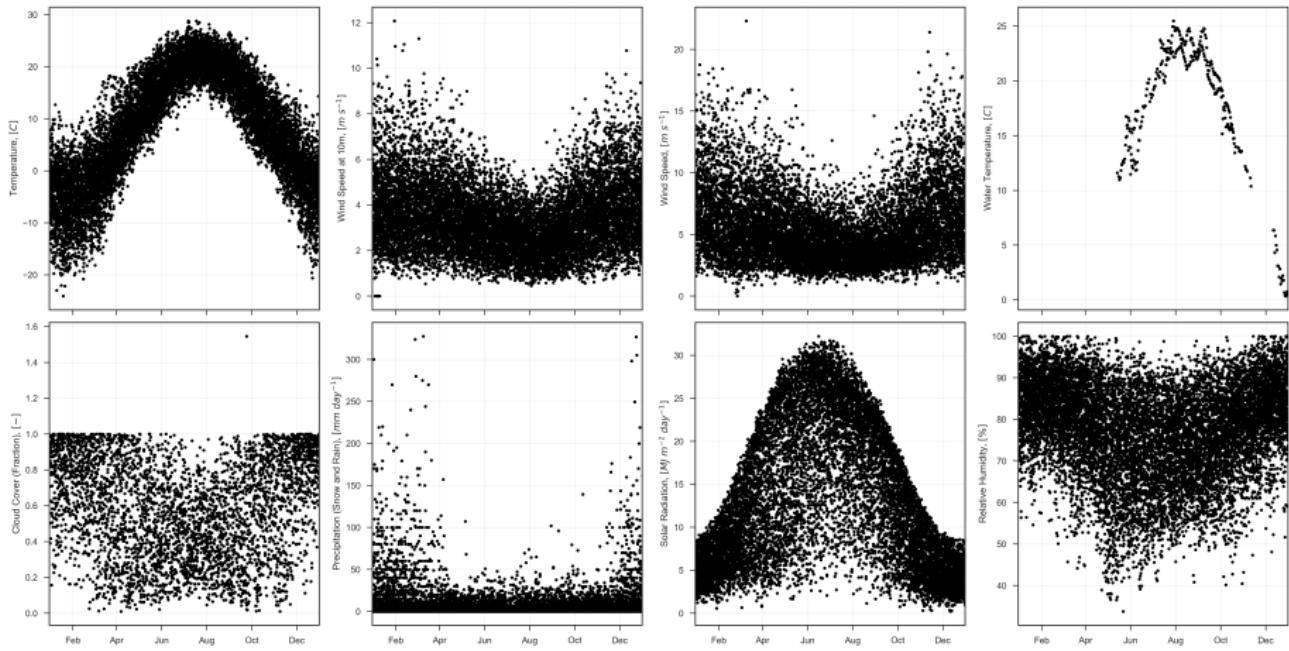
Central Basin: 1 year



Eastern Basin: All years

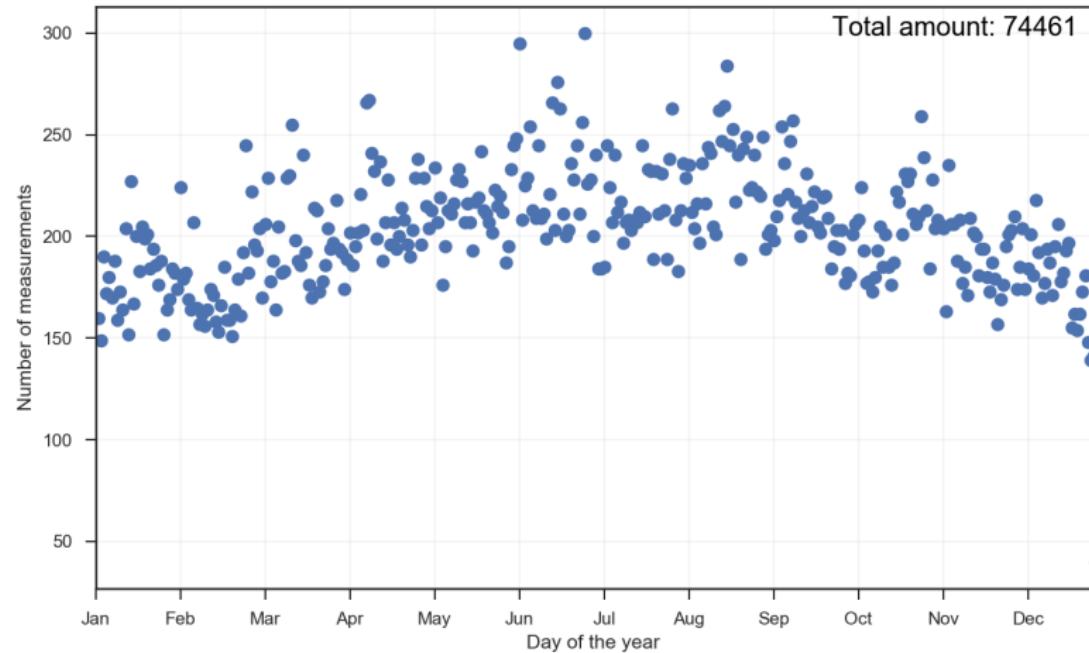


Eastern Basin: 1 year

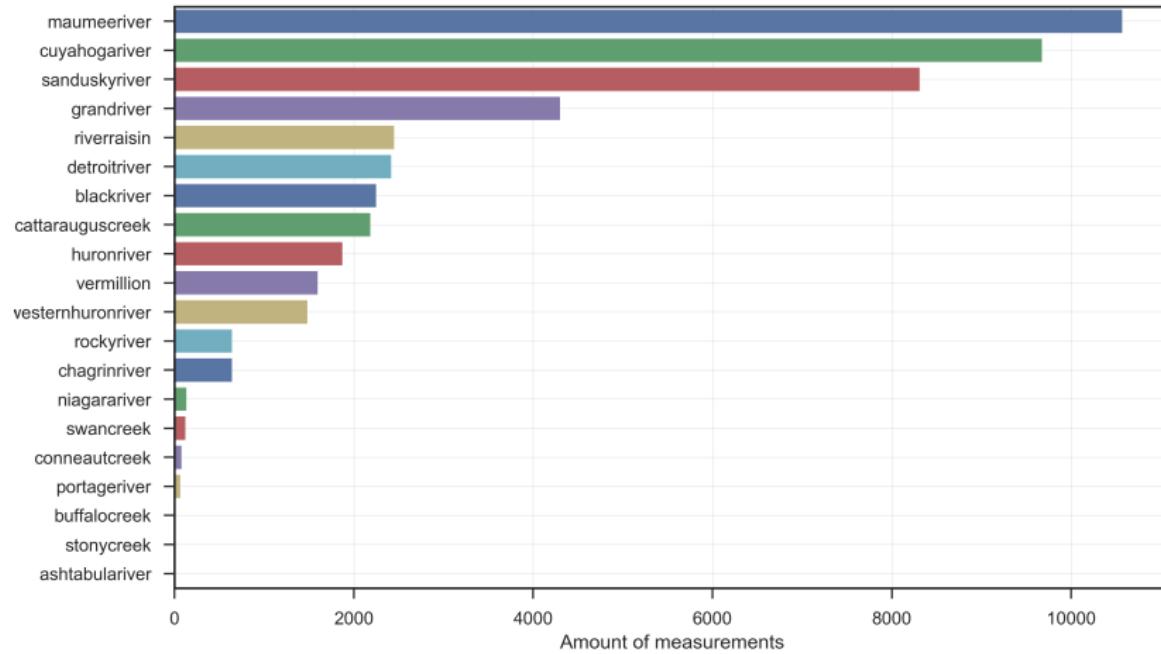


River Inputs

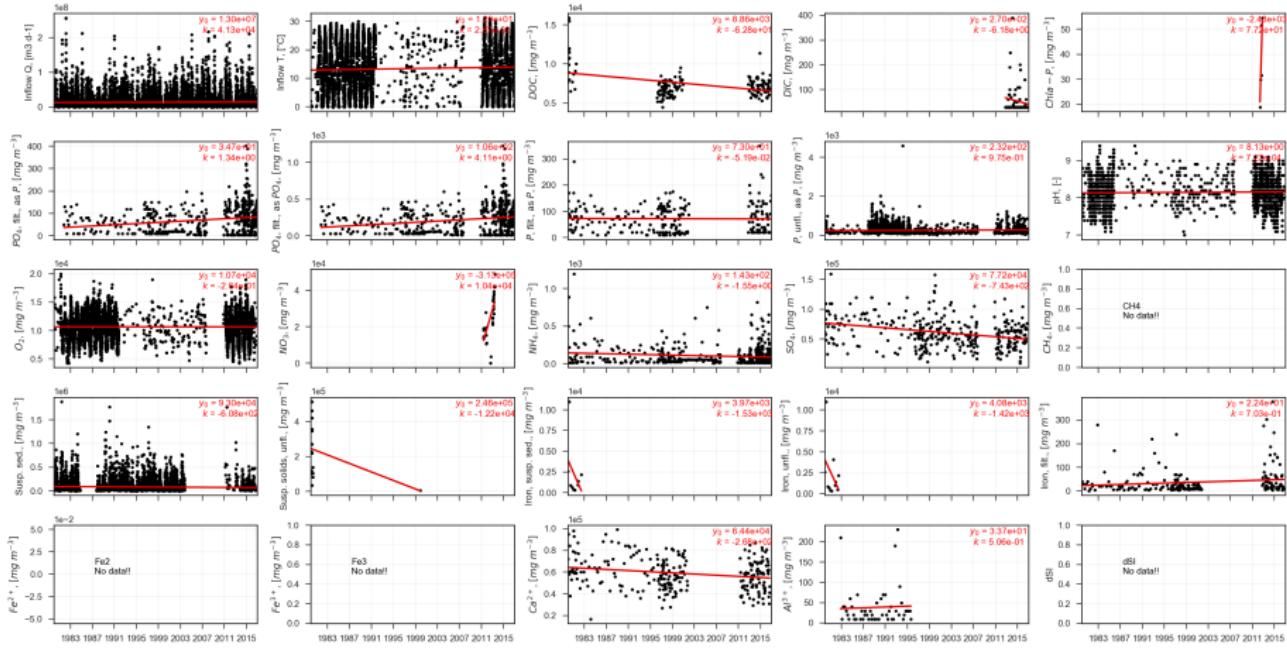
Density of data (does not include Q and T)



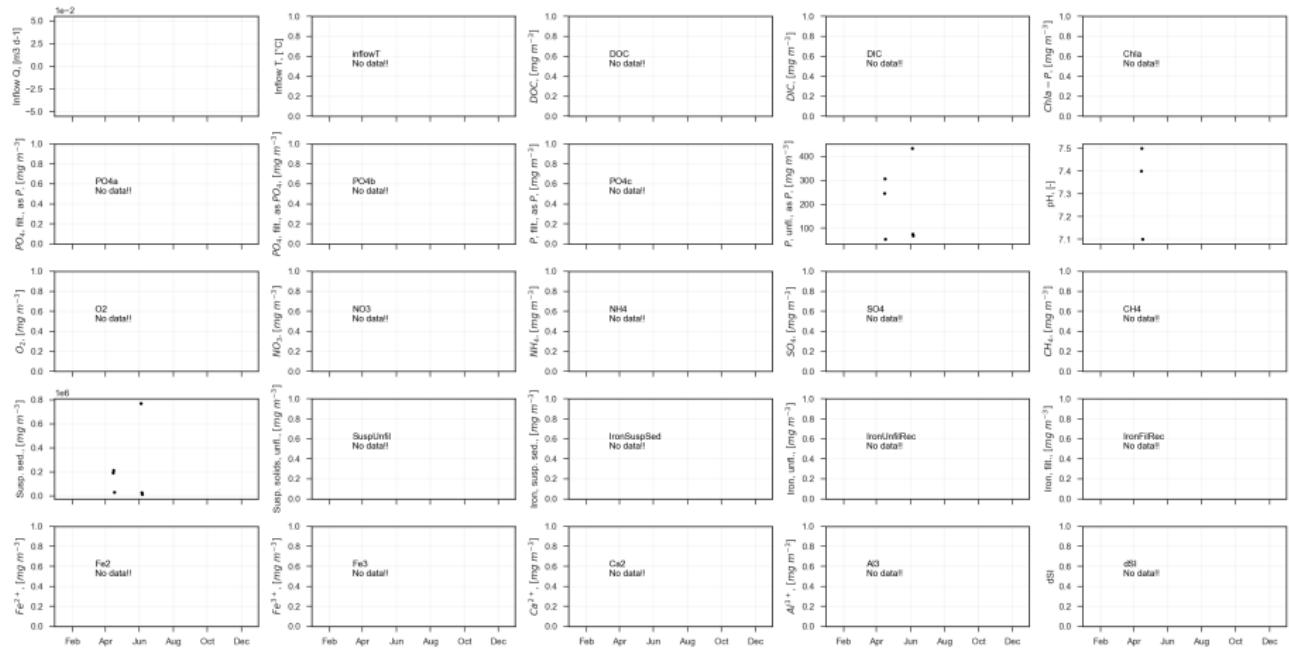
Completeness of data (does not include Q and T)



Example: Maumee River

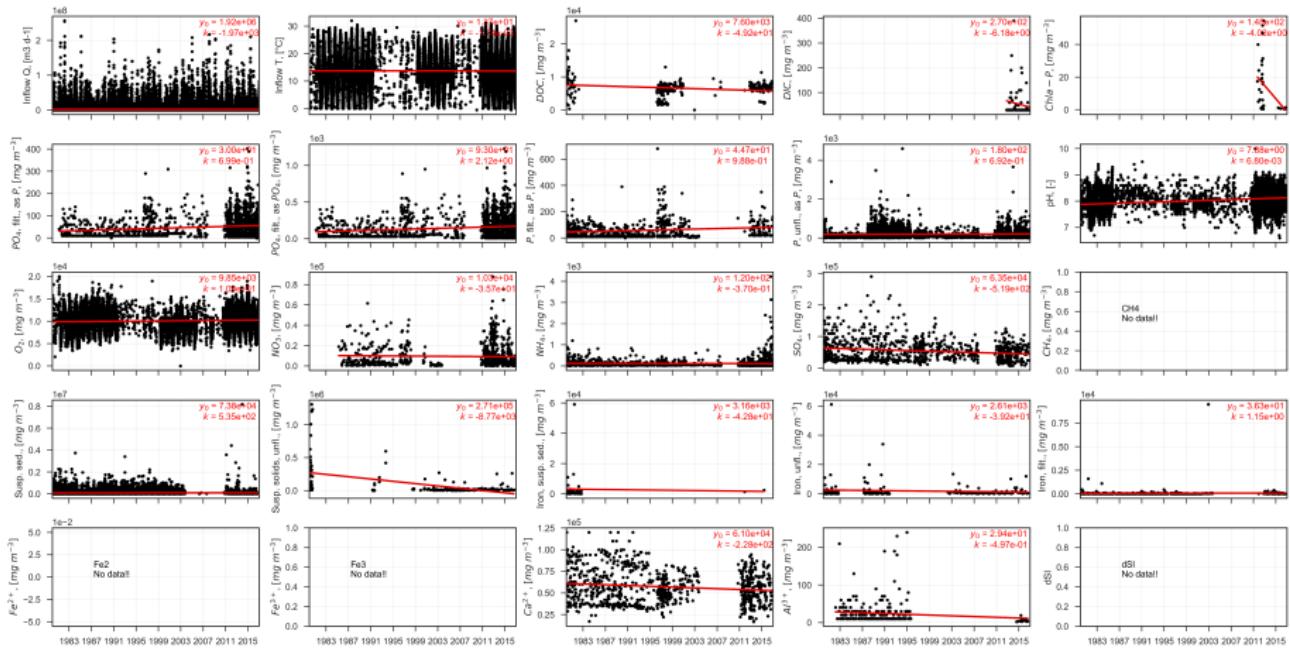


Example: Ashtabula River

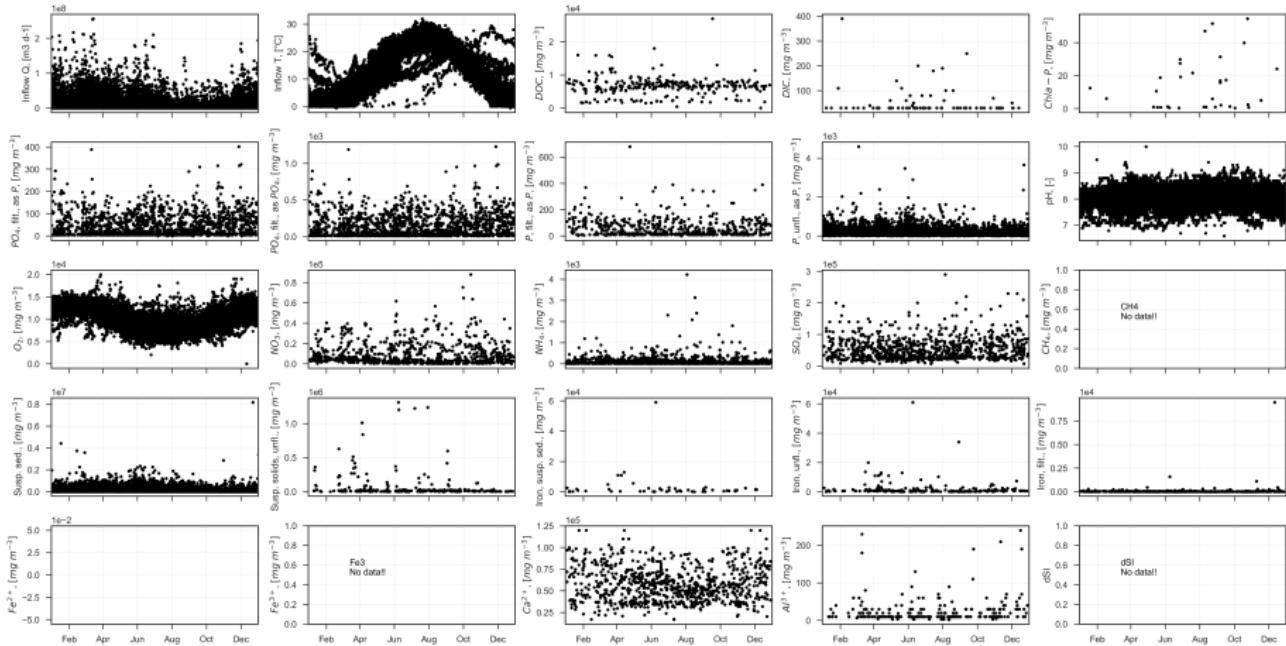


River Input Combined

River Input Combined: All rivers to see the trends



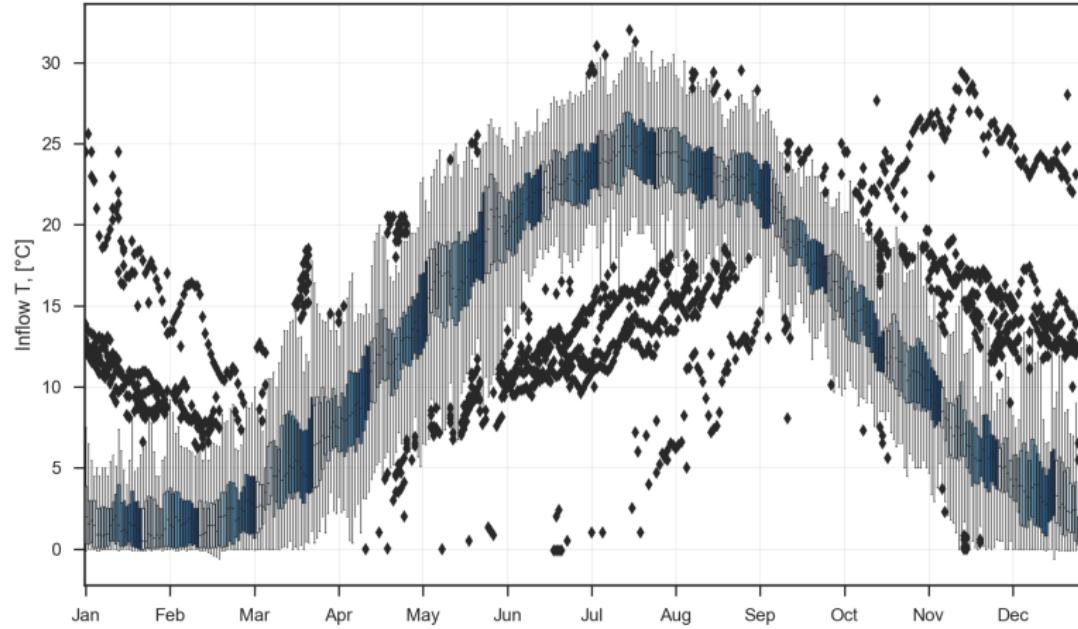
River Input Combined: All rivers, all years to see the pattern



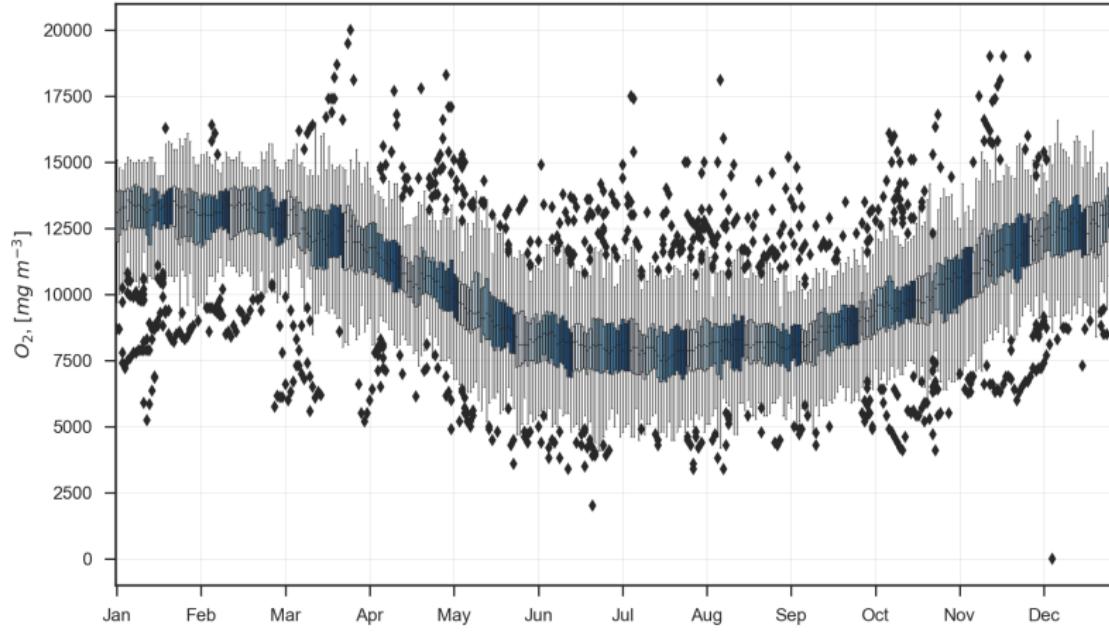
Supplemental information

Boxplots of river input

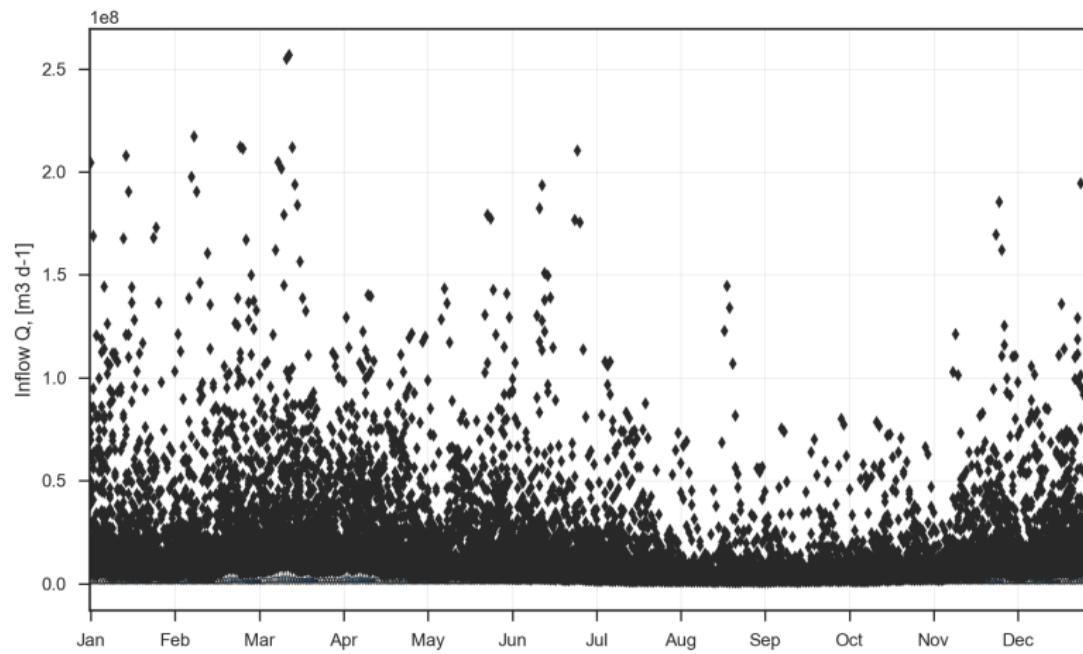
inflow T



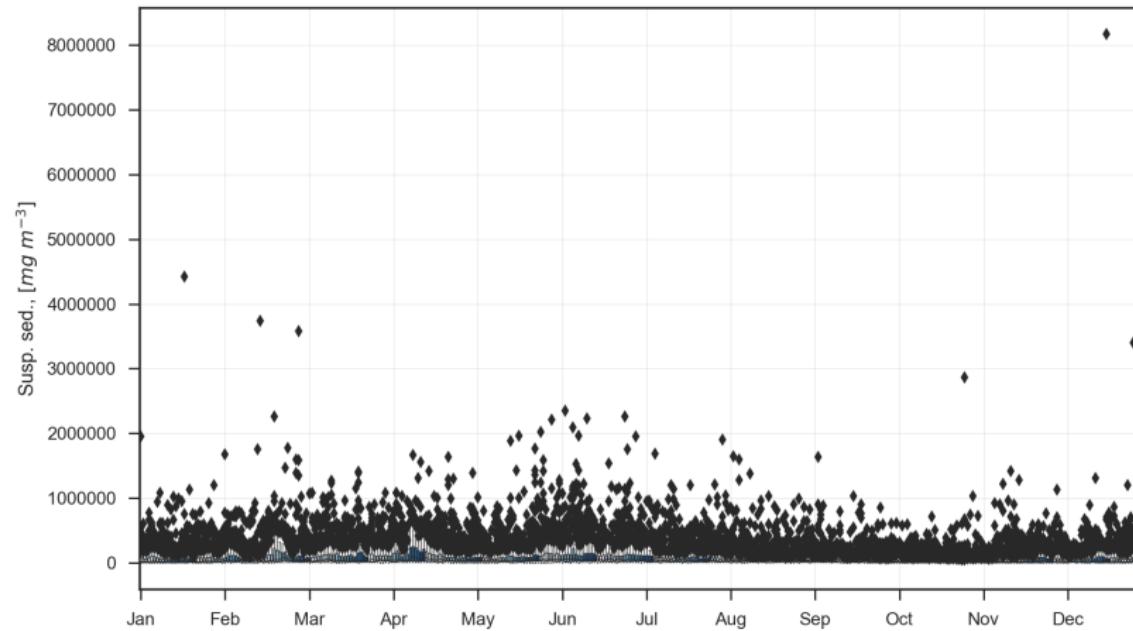
O₂



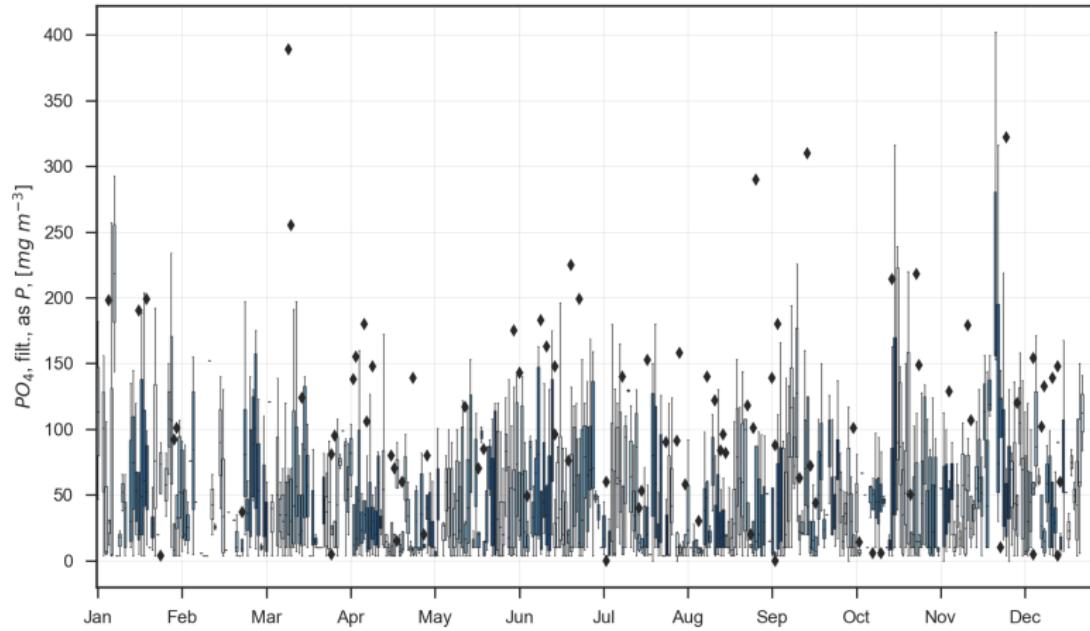
inflowQ



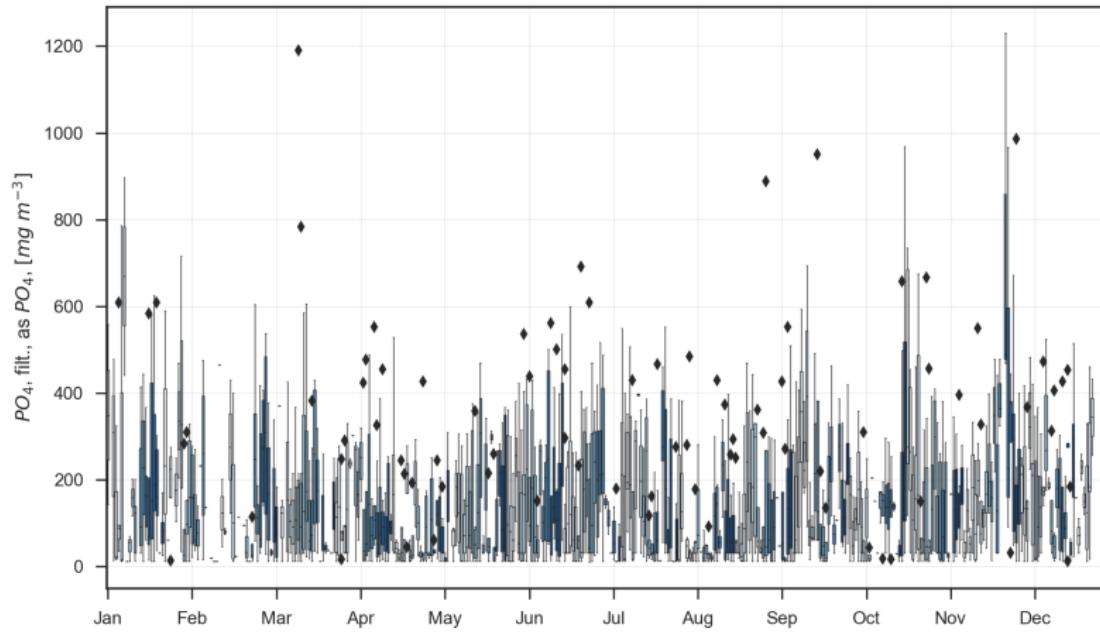
Susp



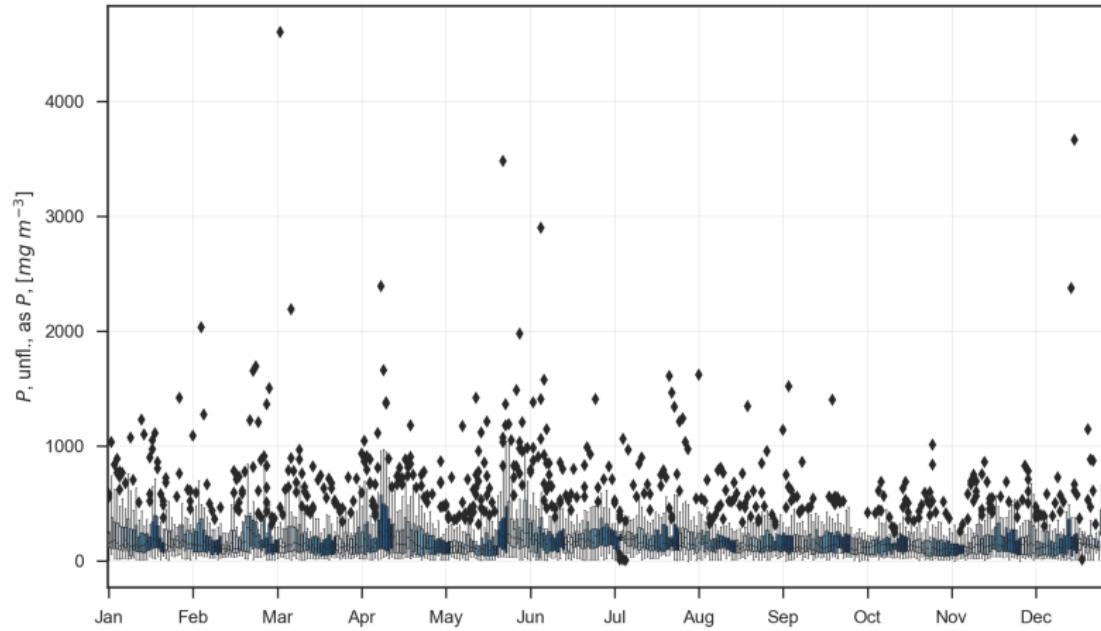
PO4a



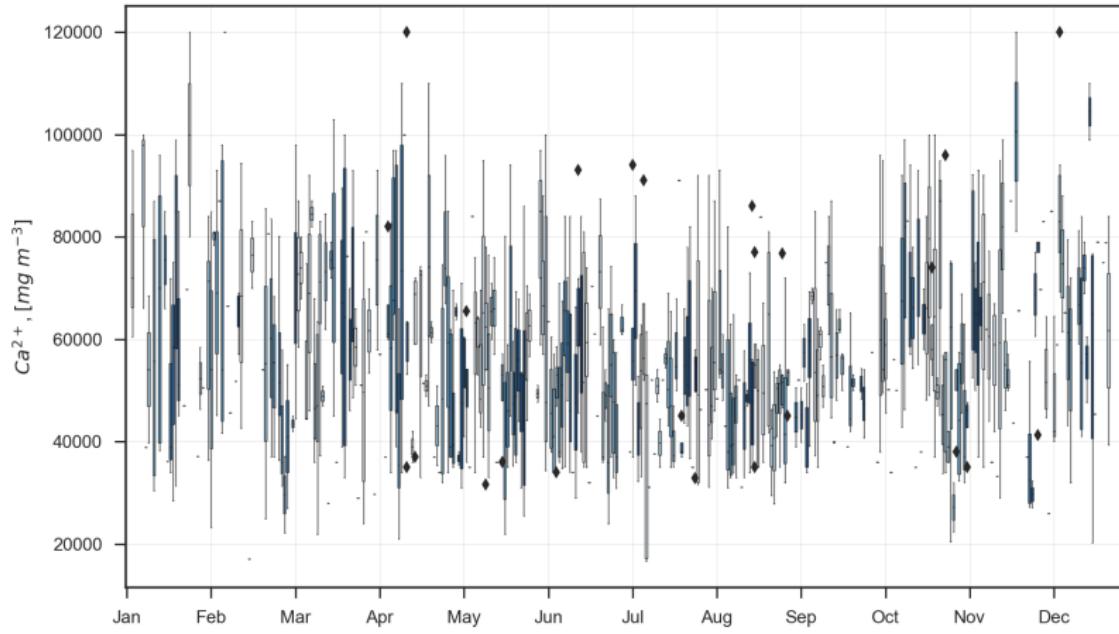
PO4b



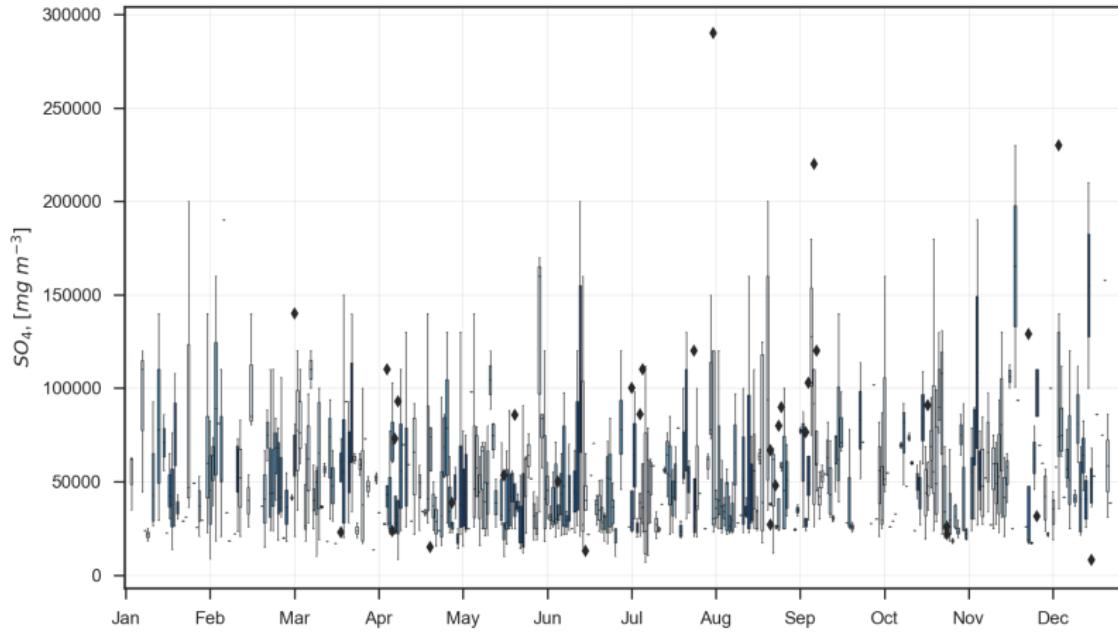
PO4d



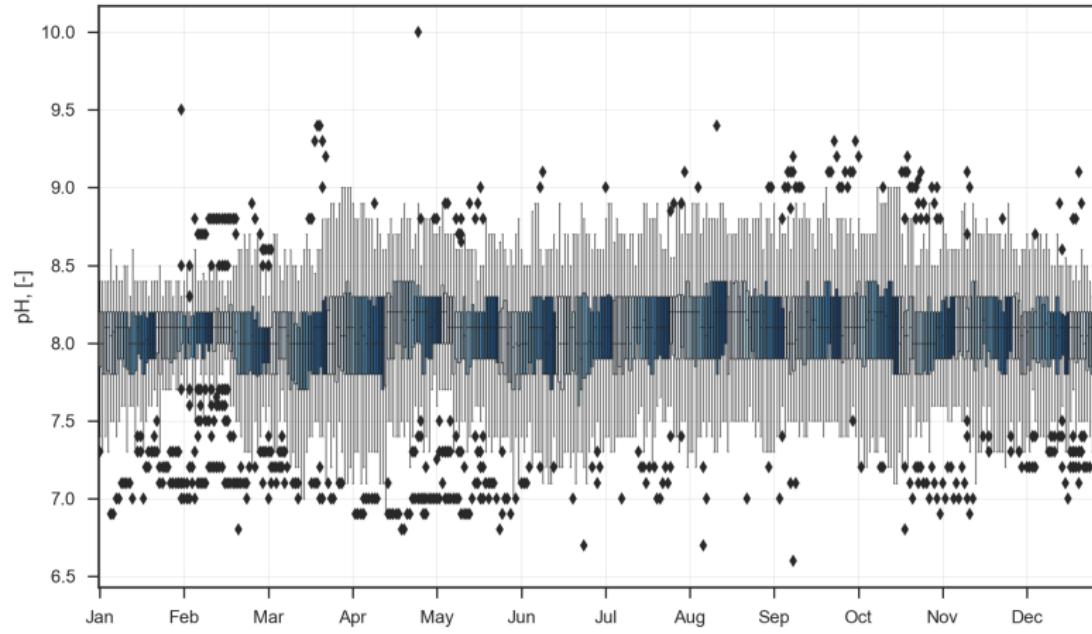
Ca2



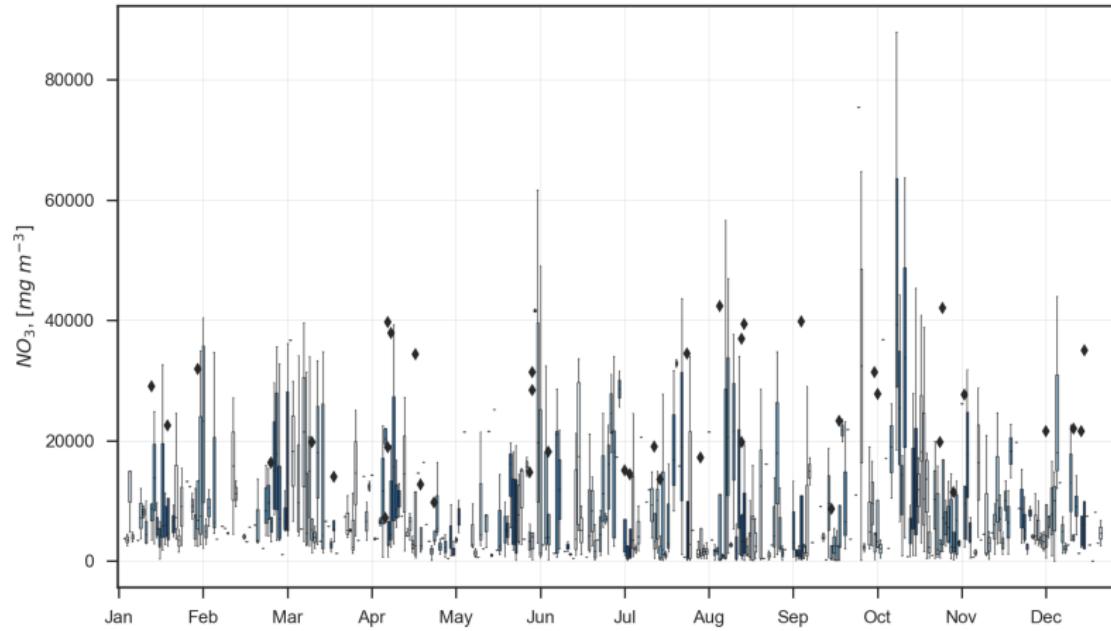
SO₄



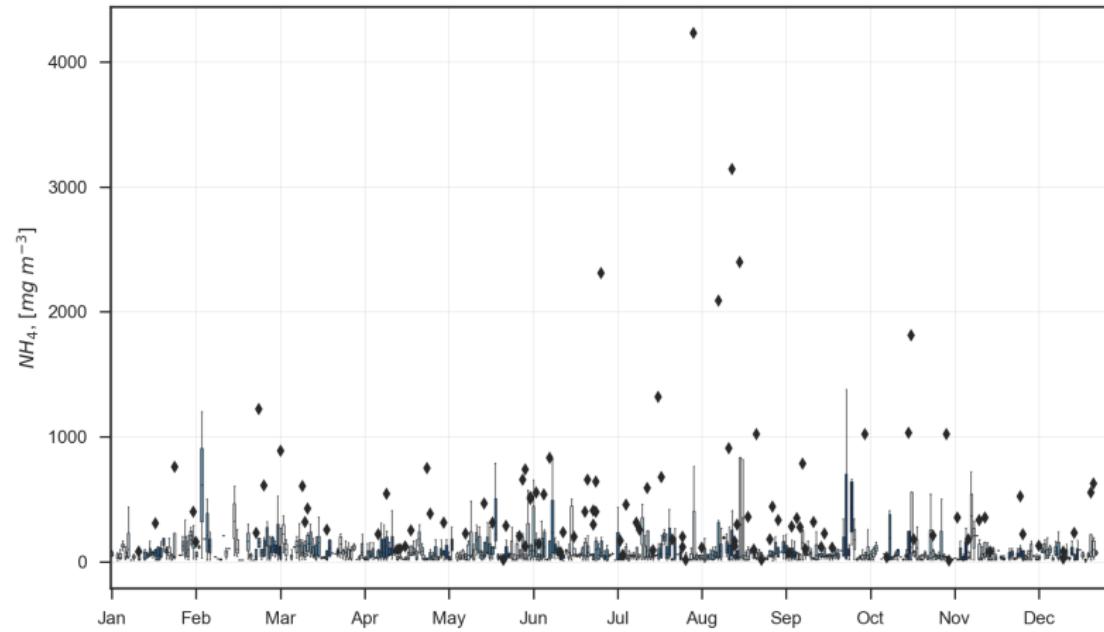
pH



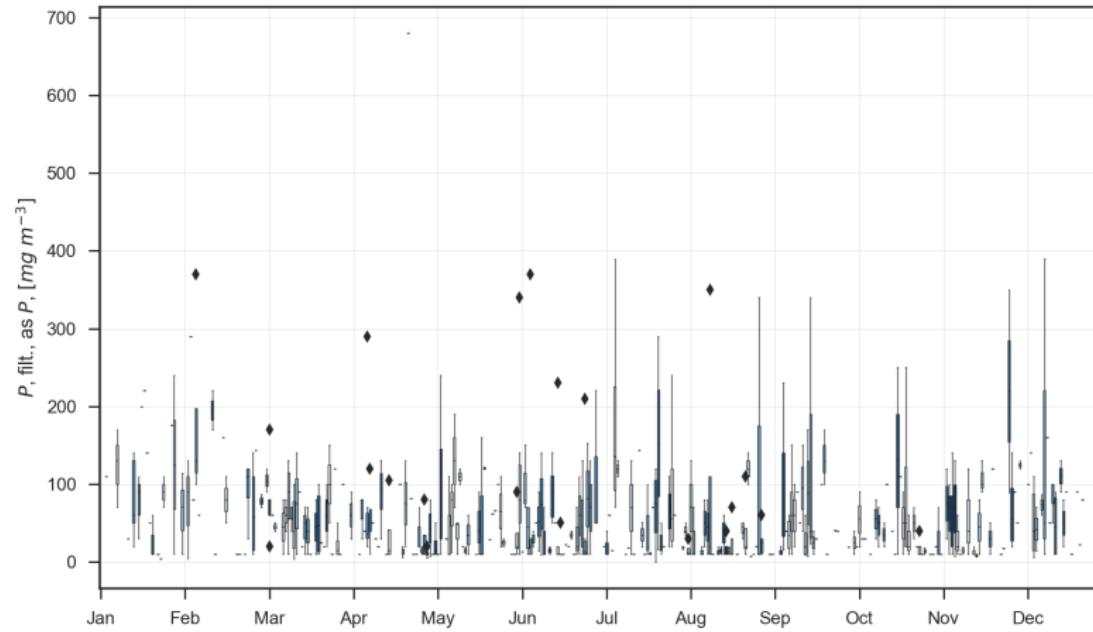
NO₃

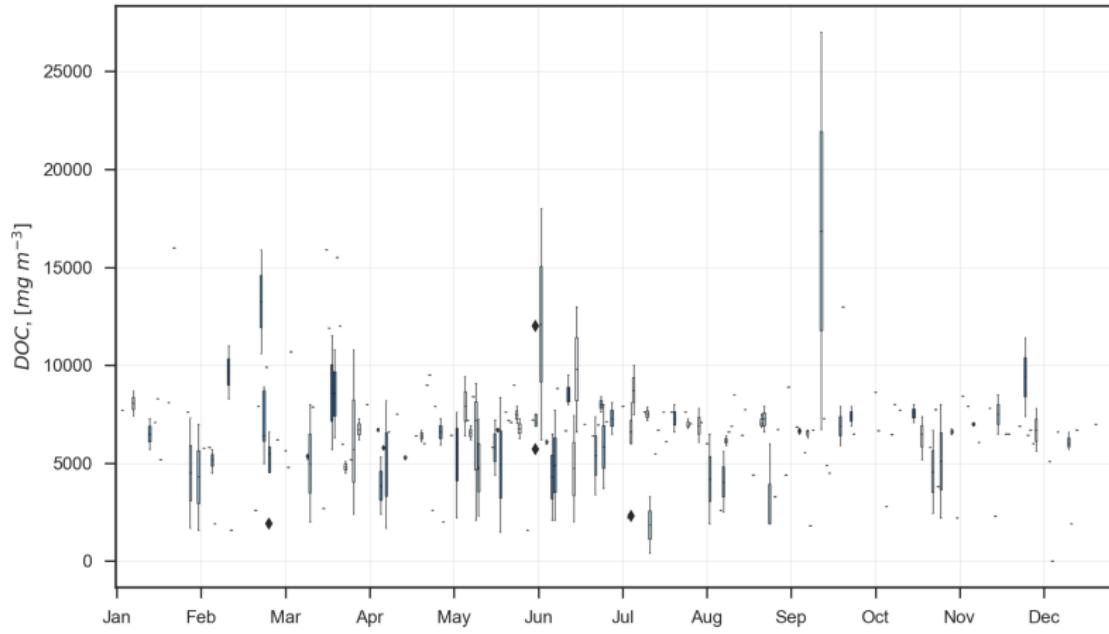


NH₄

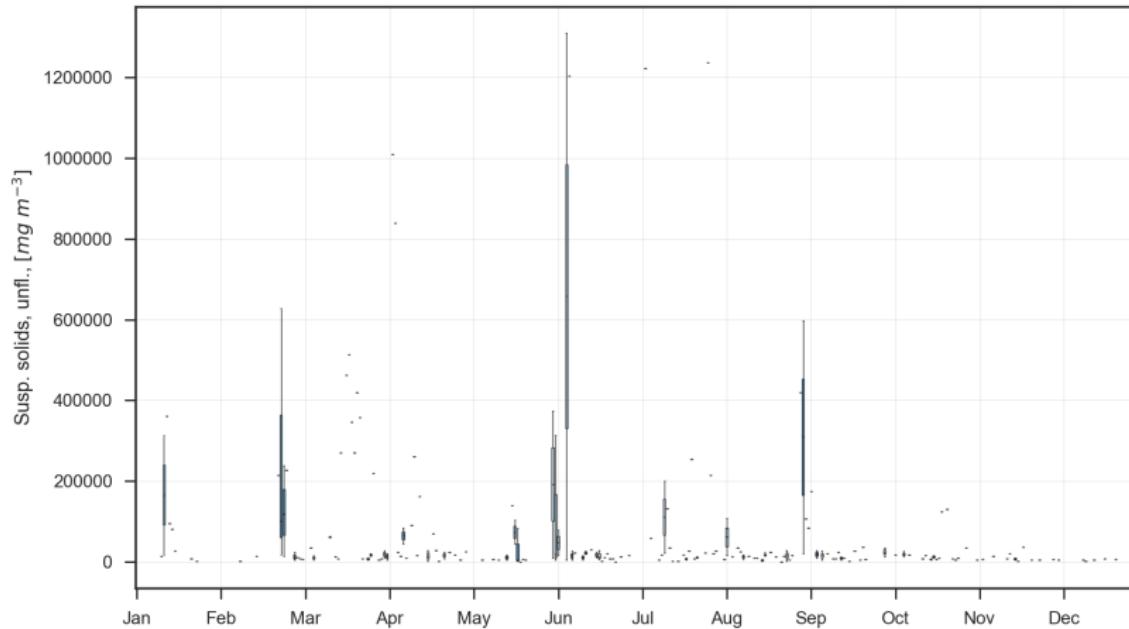


PO4c

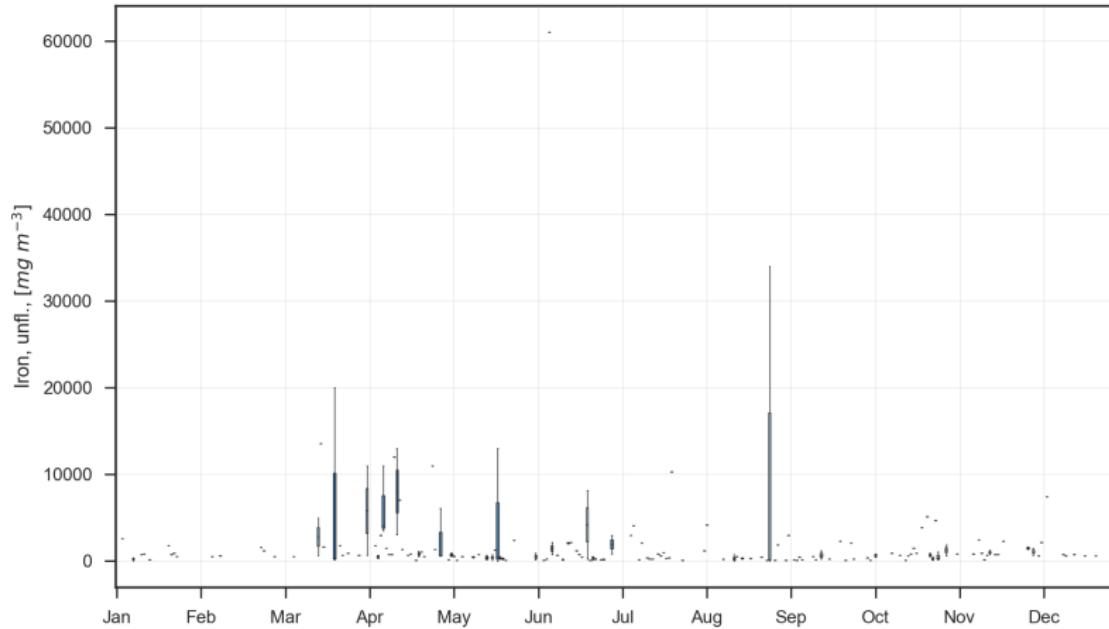




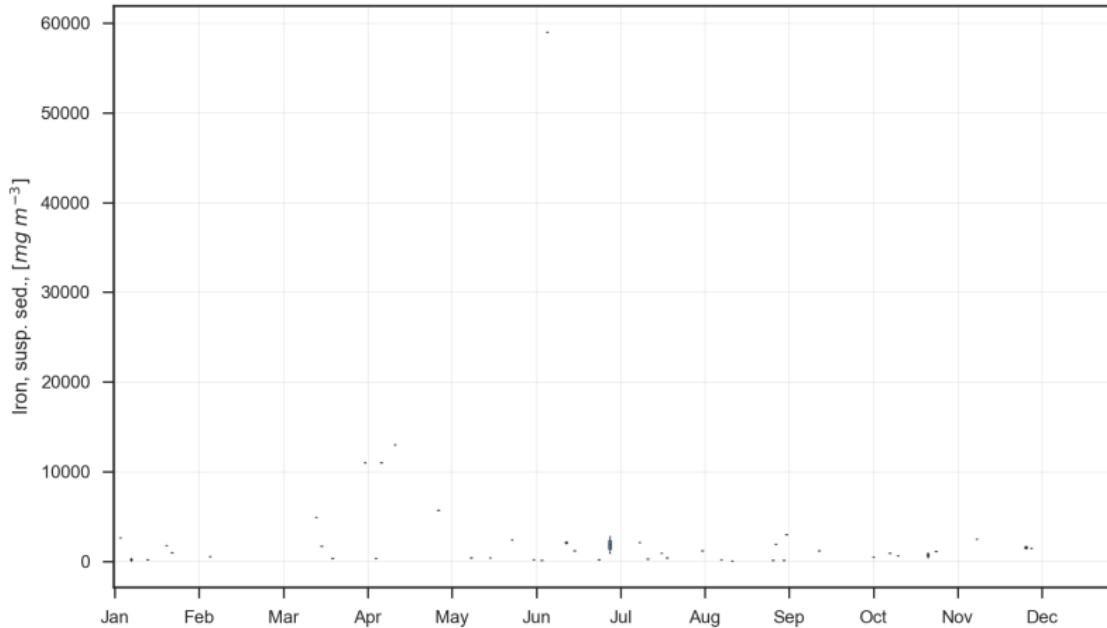
SuspUnfil

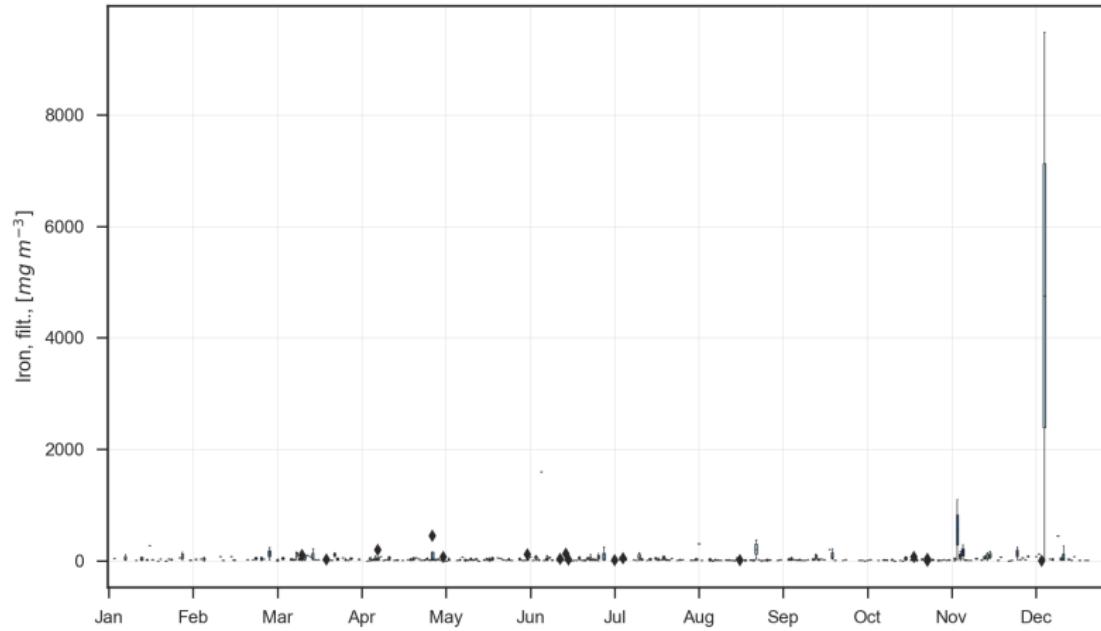


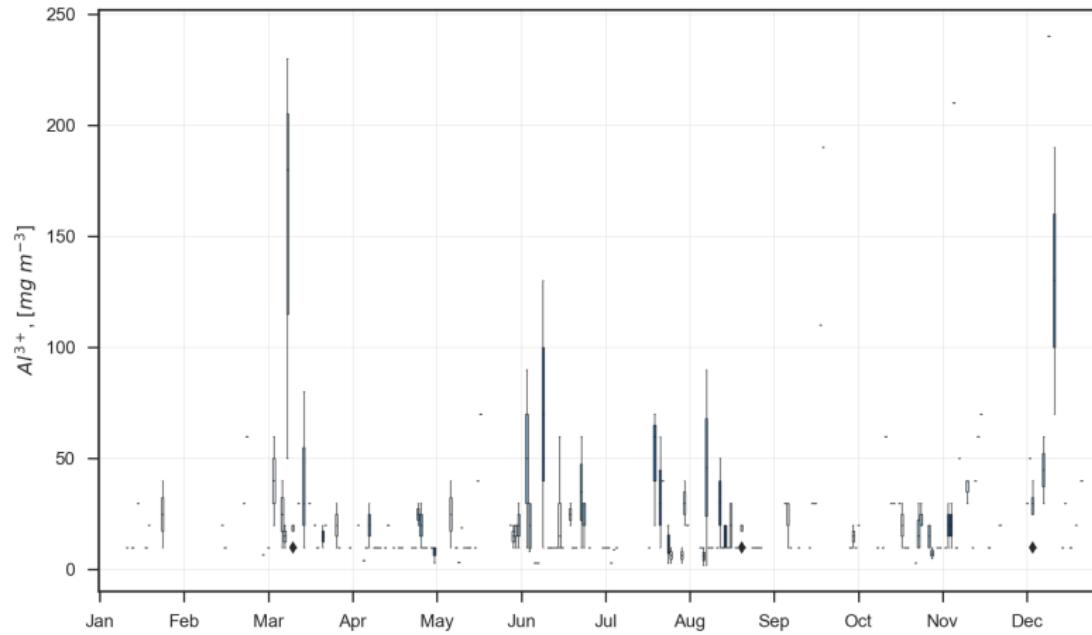
IronUnfilRec



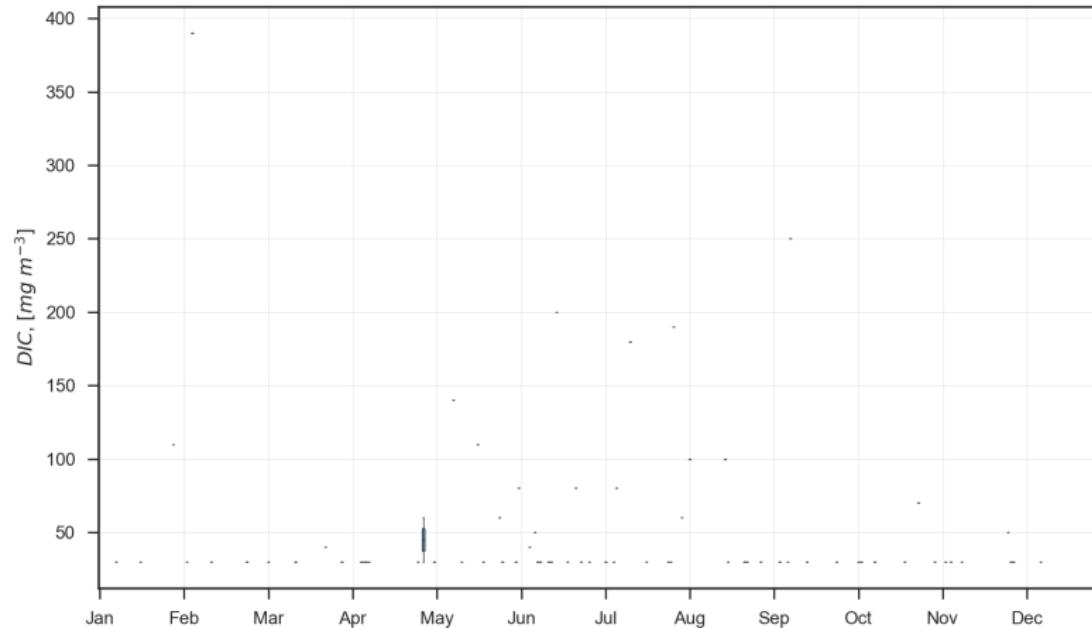
IronSuspSed

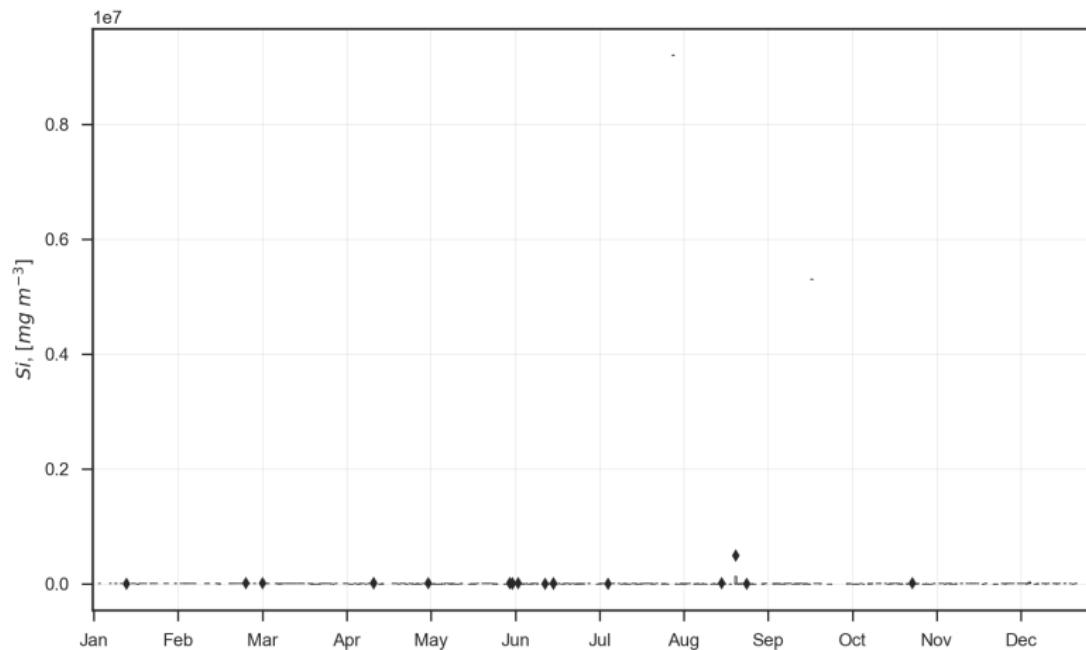




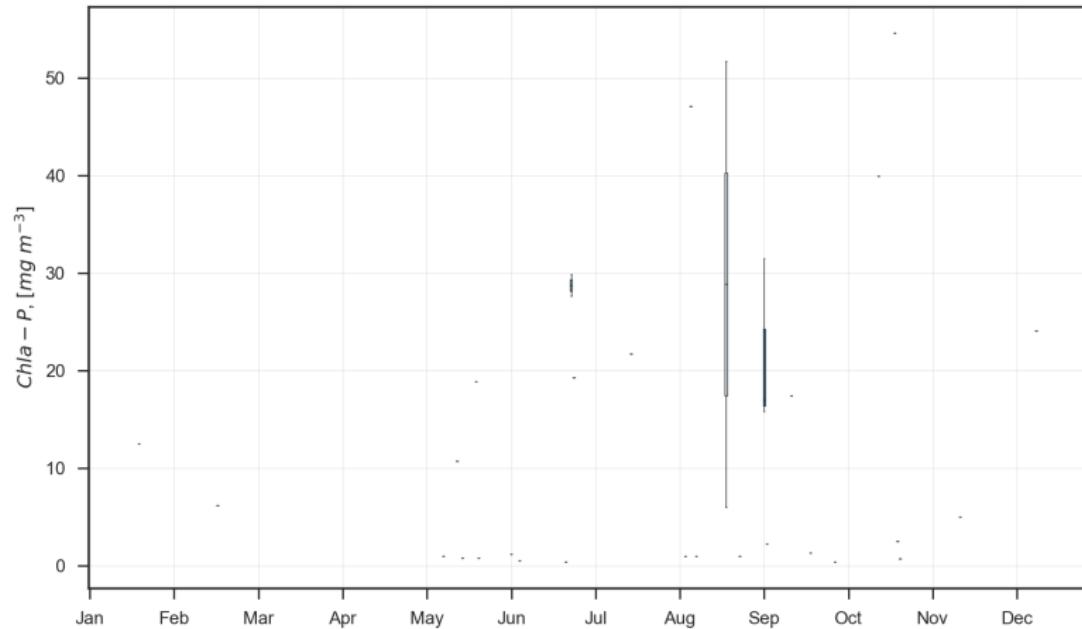


DIC

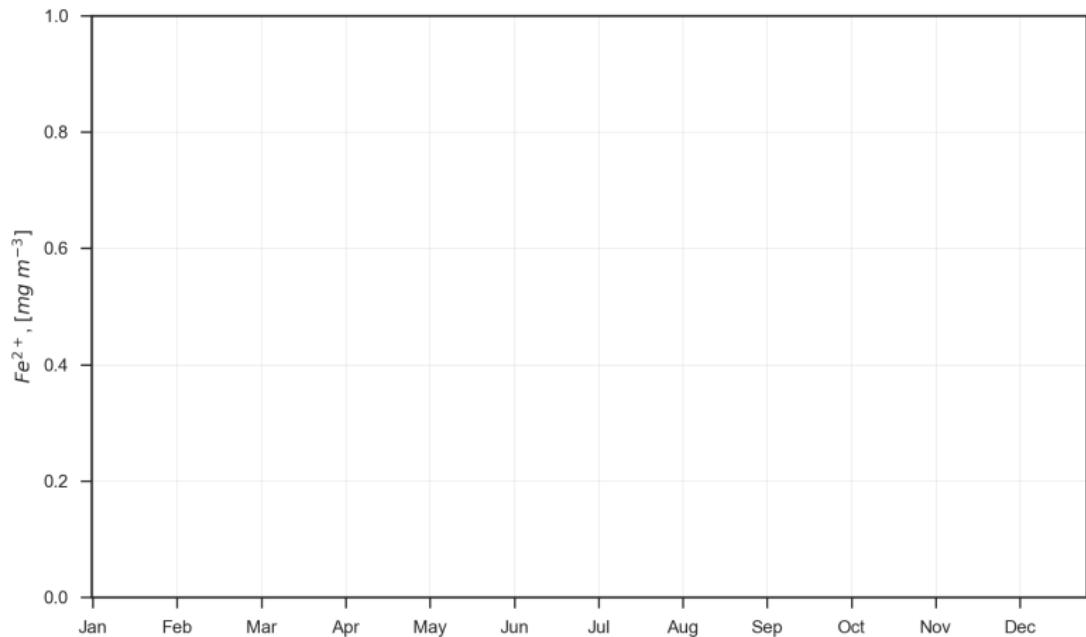




Chla

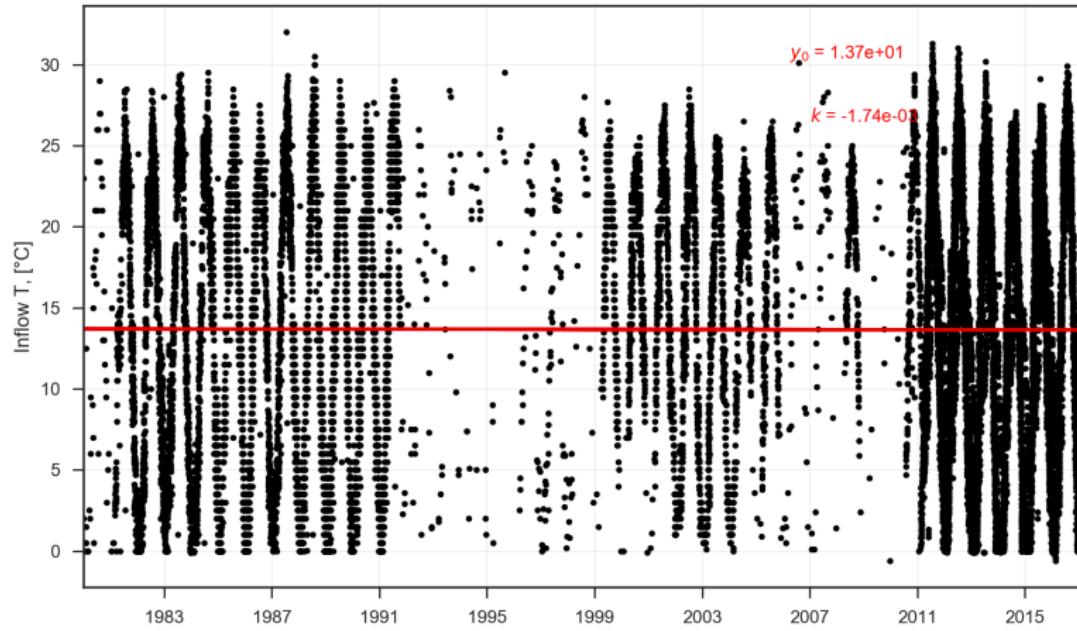


Fe2

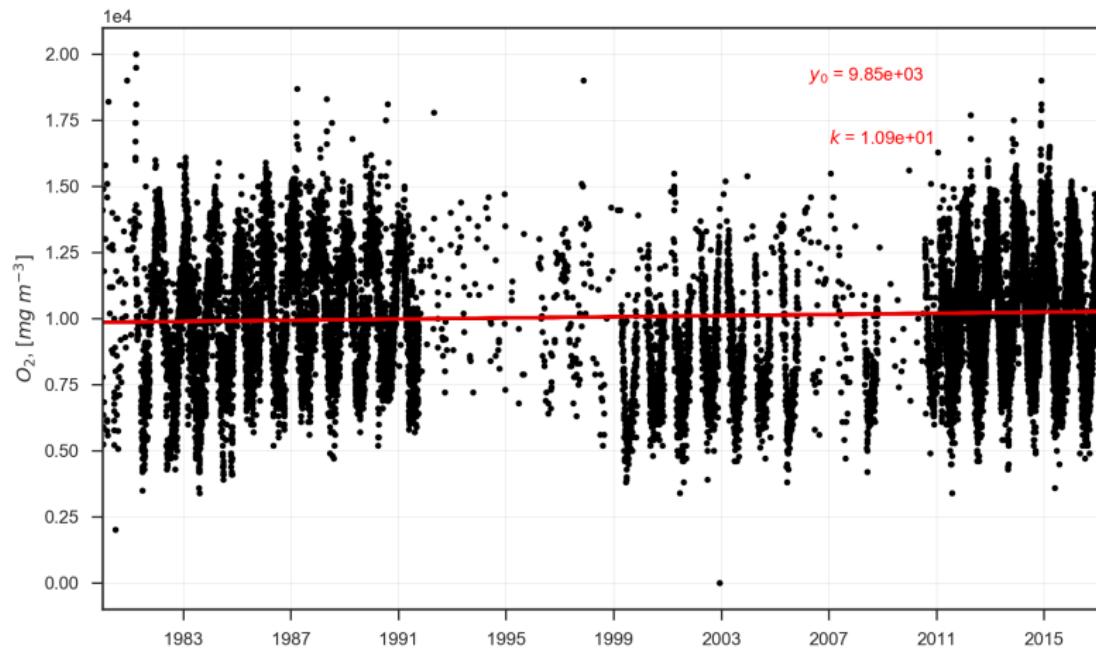


All year trend

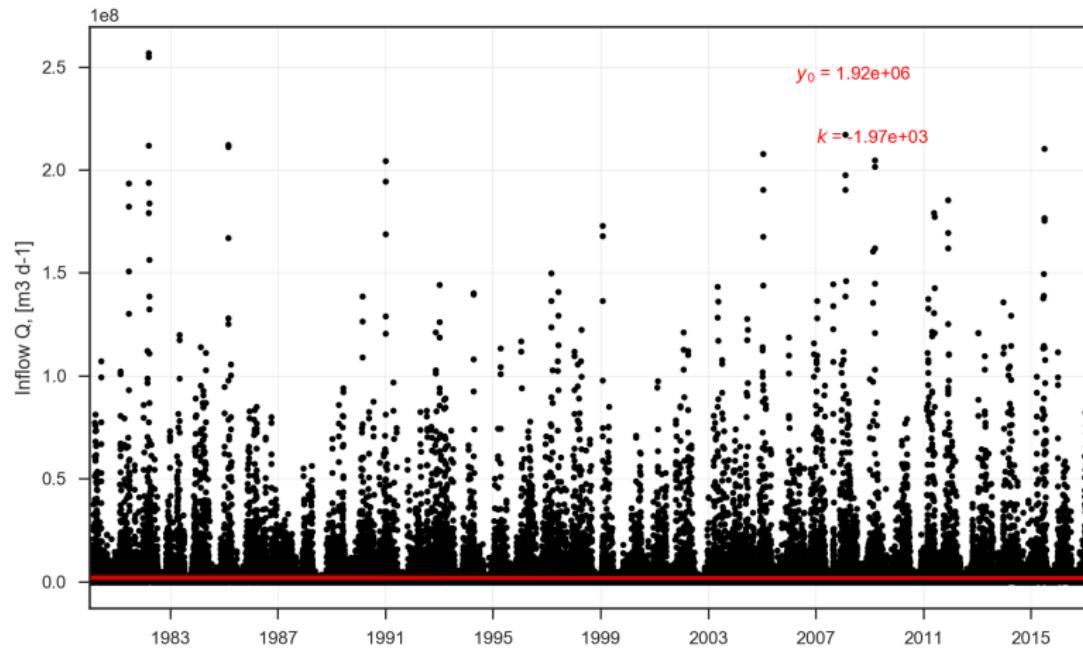
inflow T



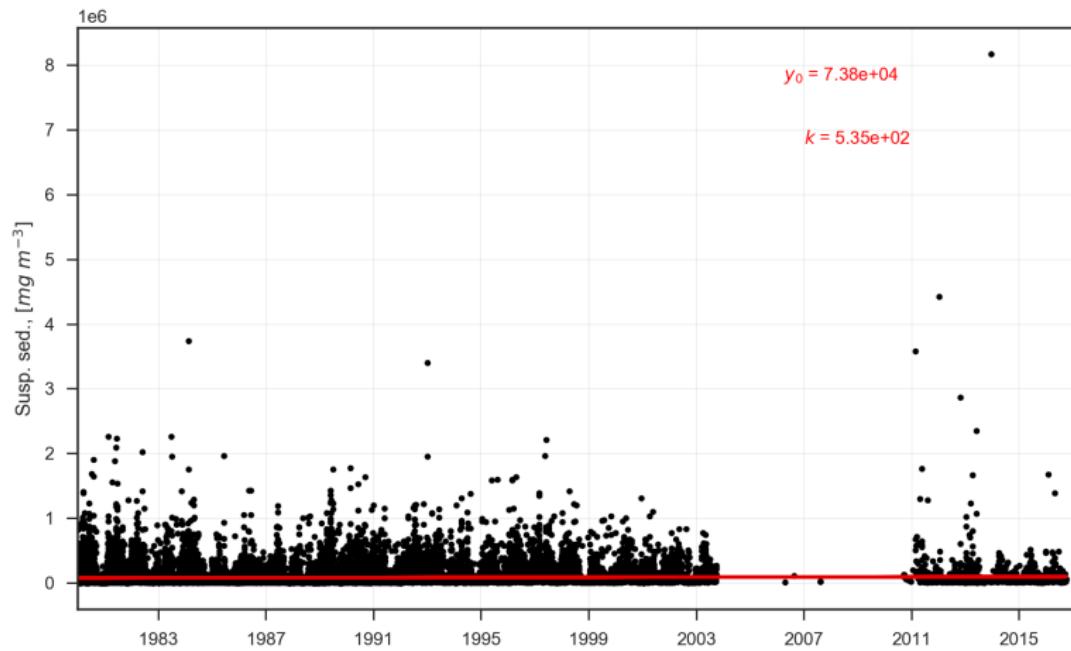
O₂



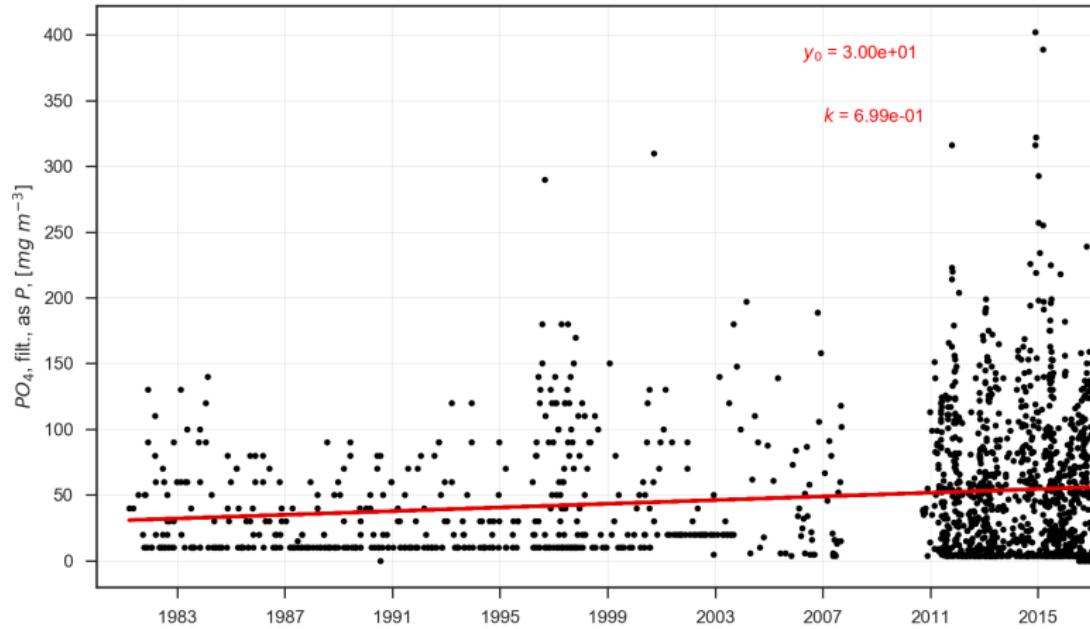
inflowQ



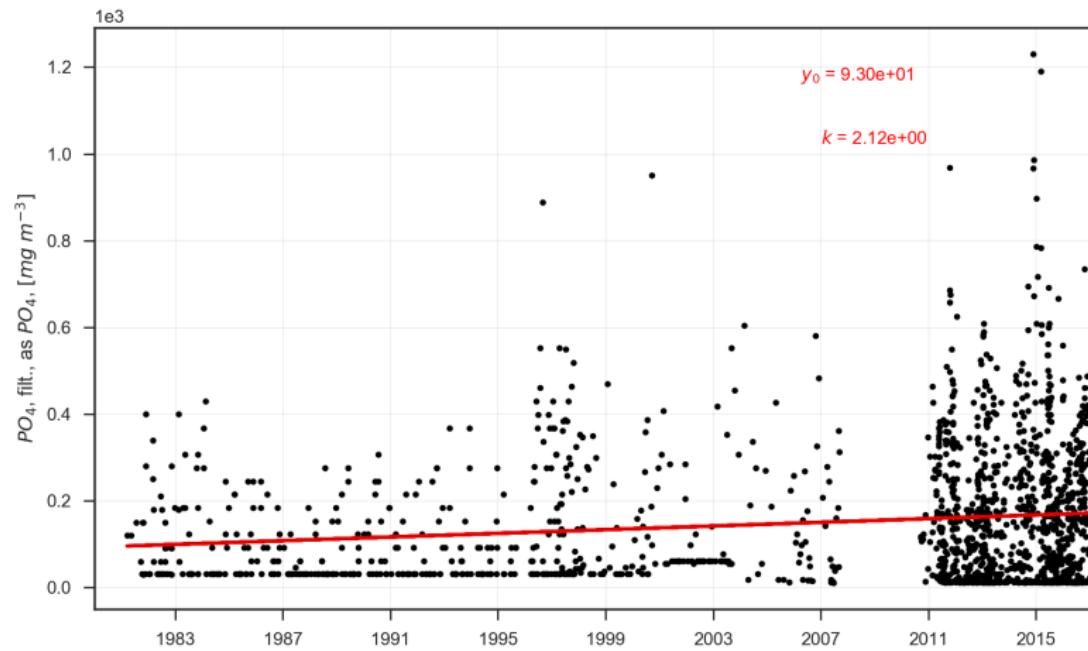
Susp



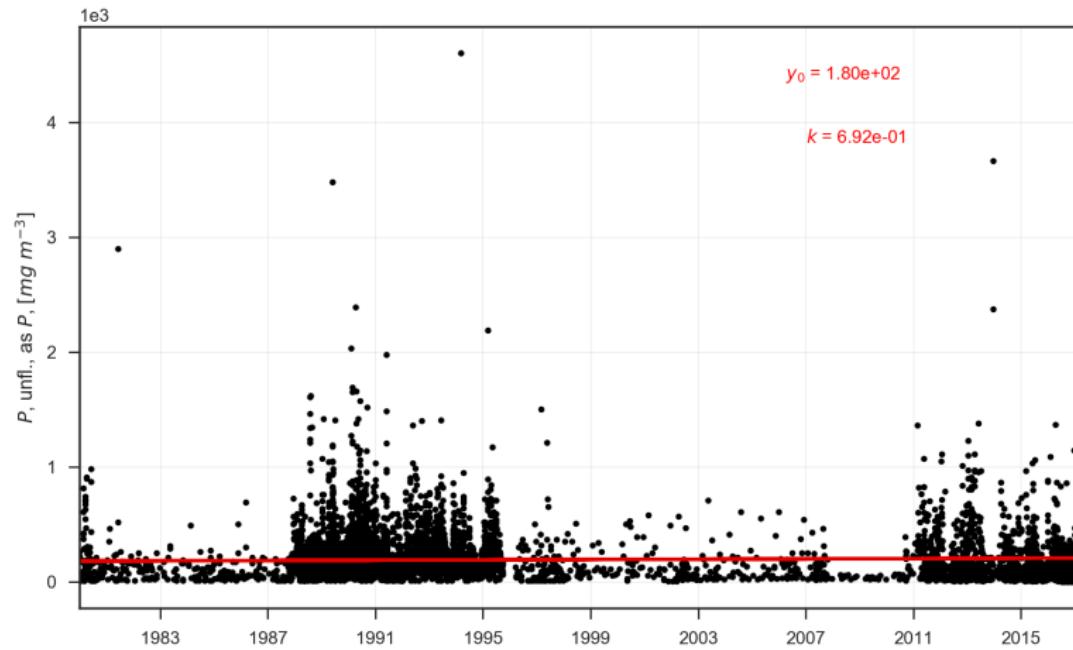
PO4a



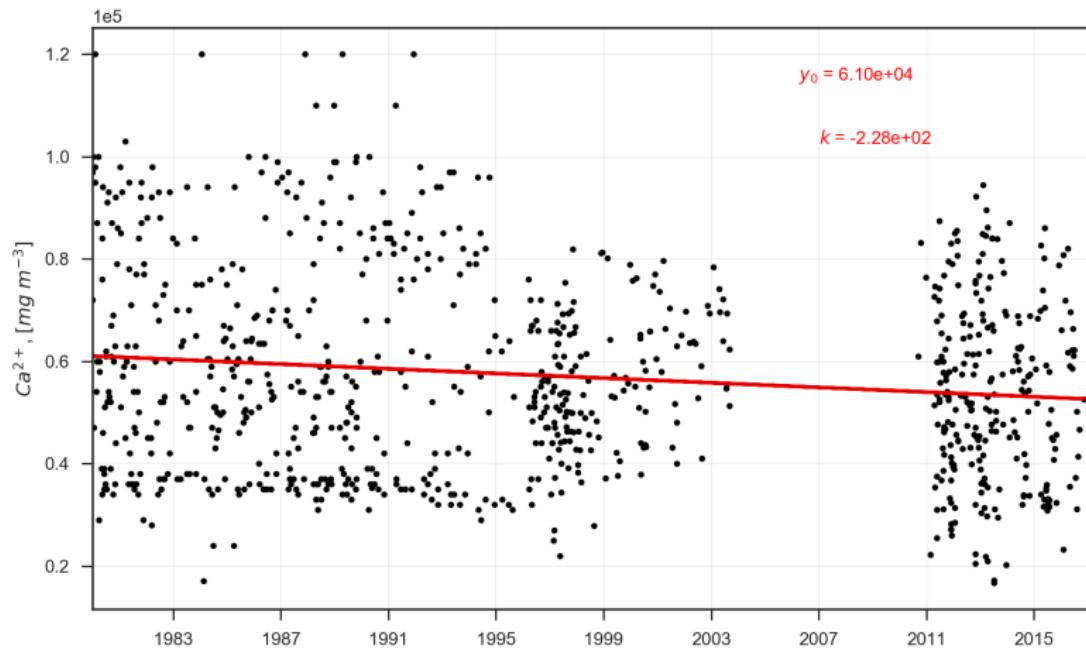
PO4b



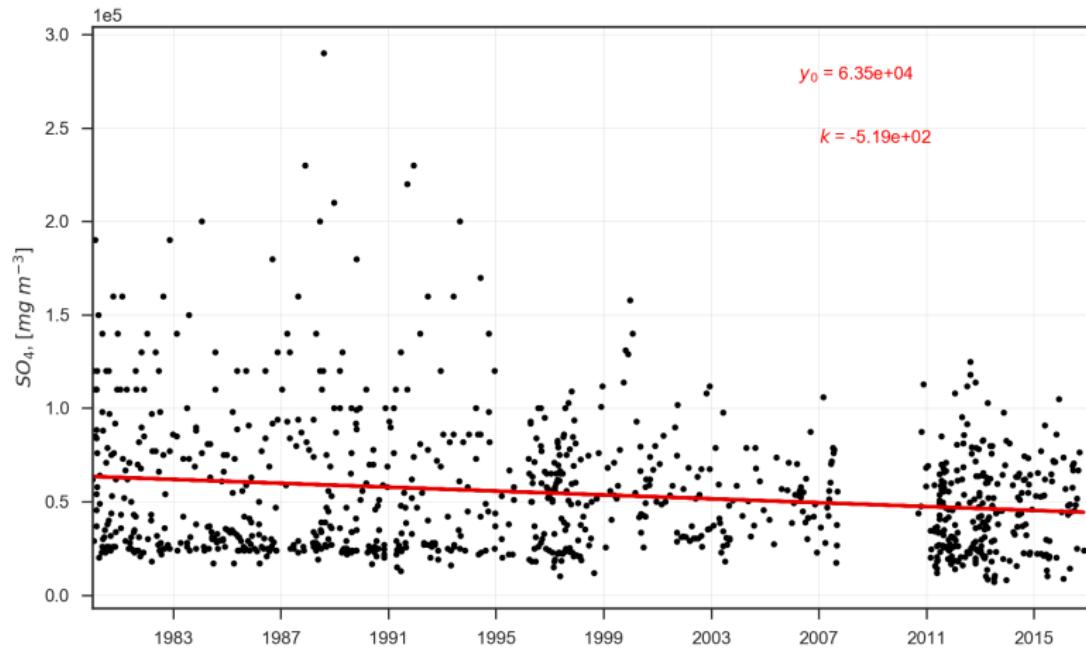
PO4d



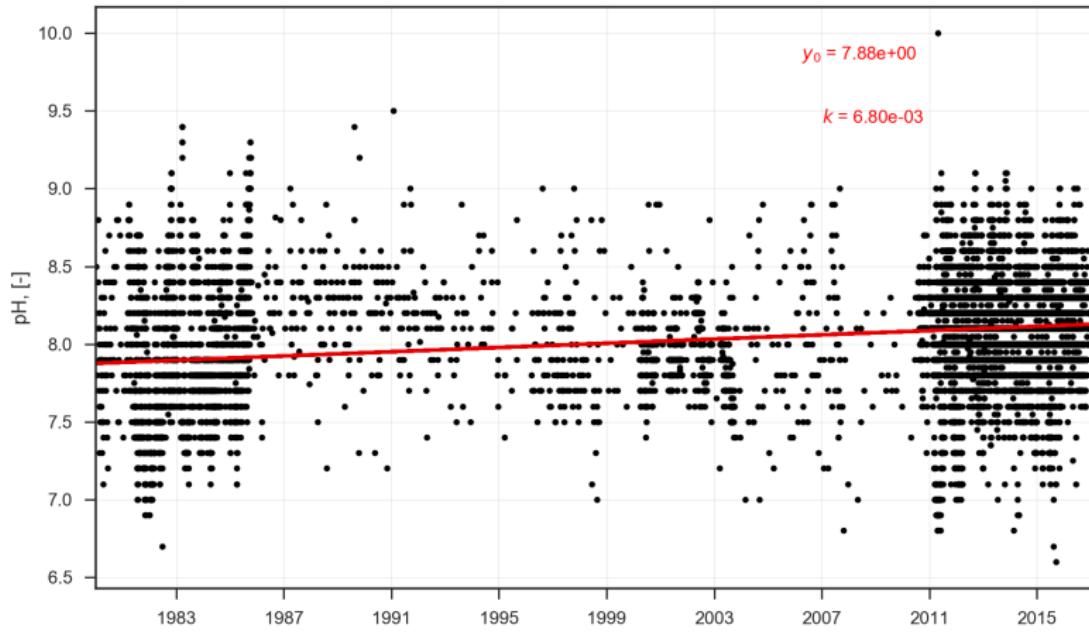
Ca2



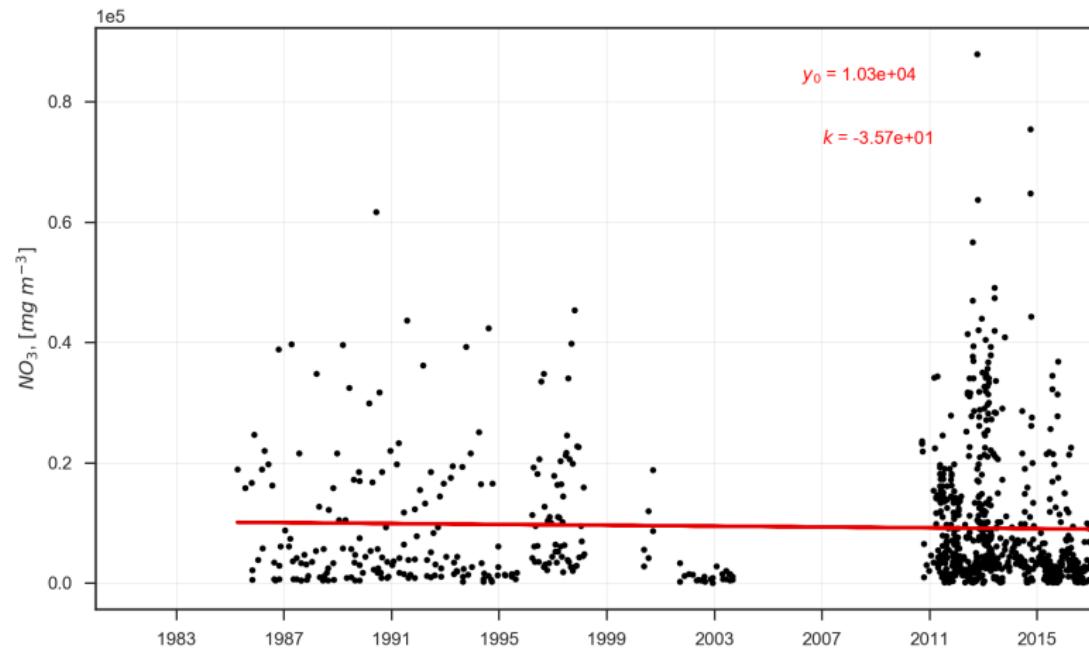
SO₄



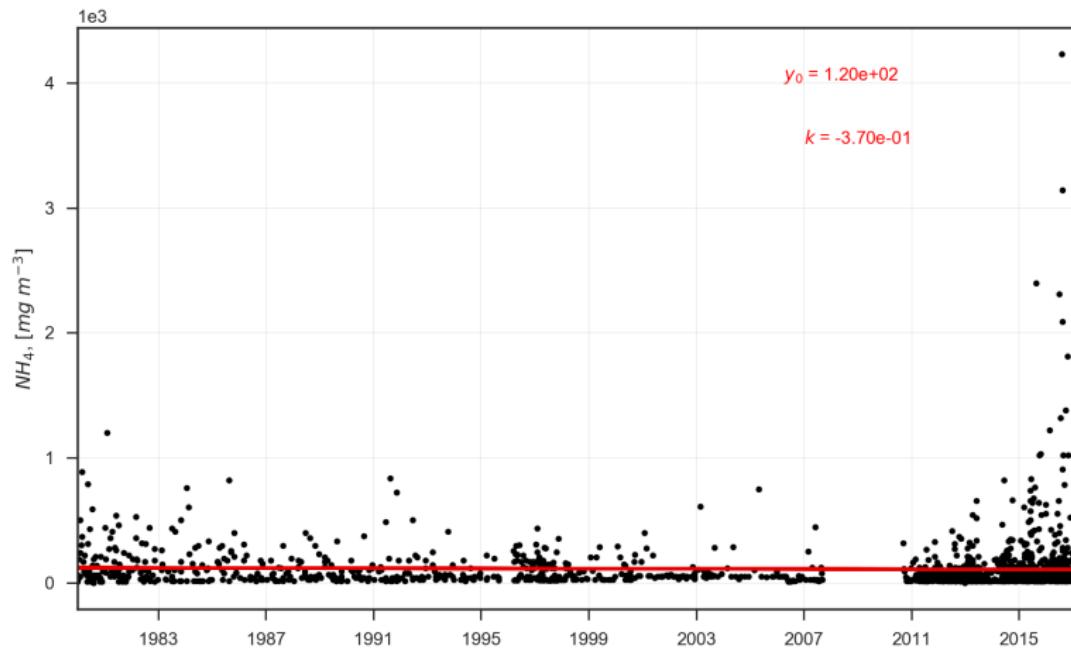
pH



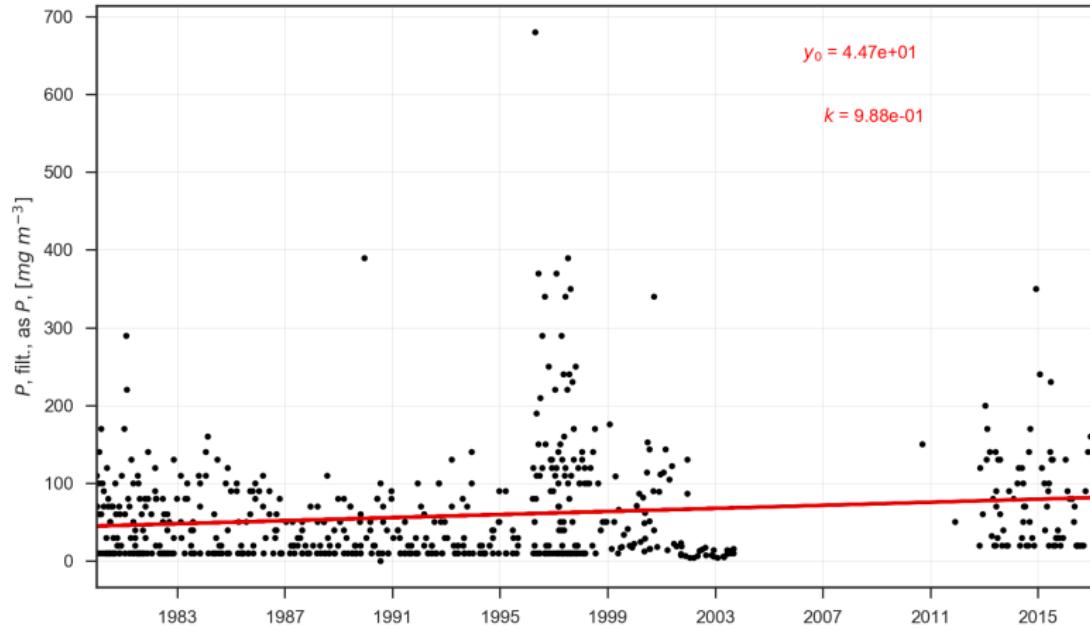
NO₃

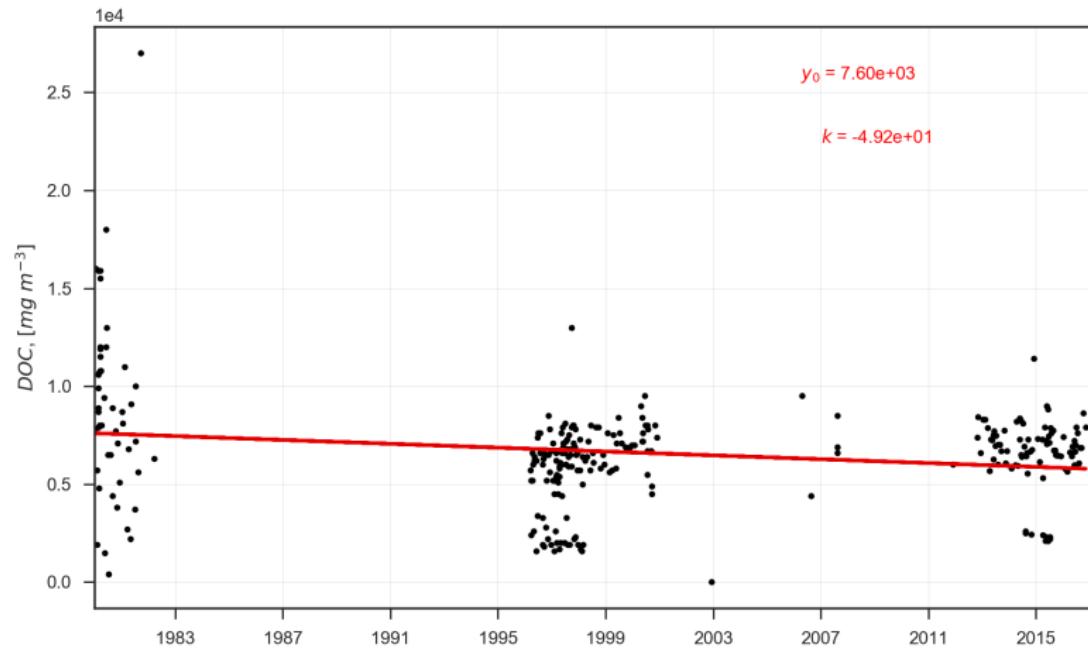


NH₄

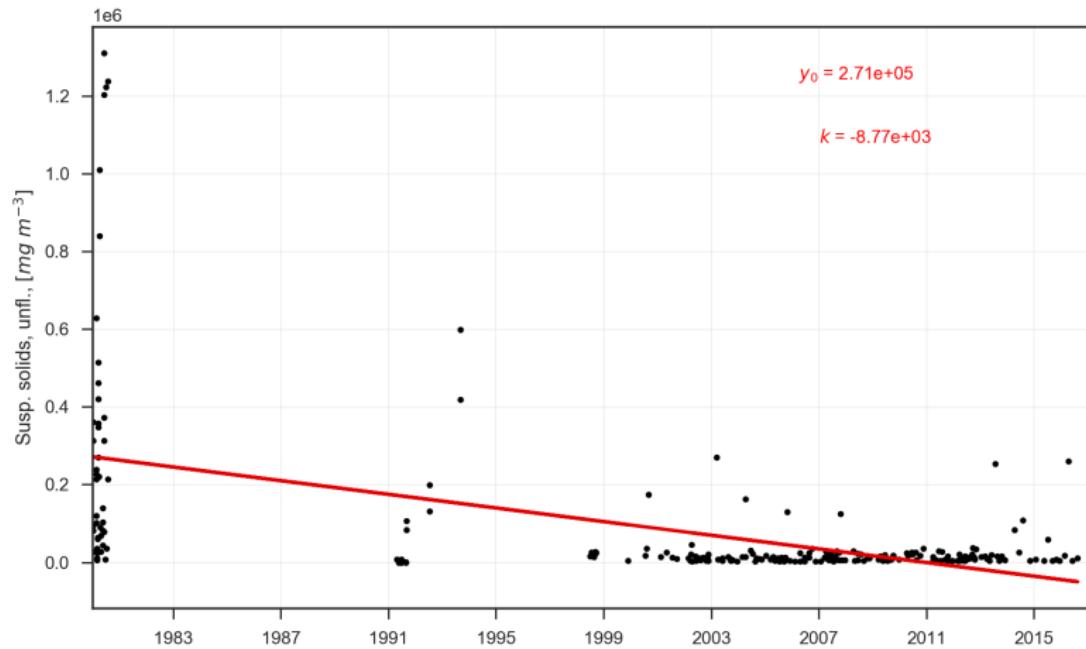


PO4c

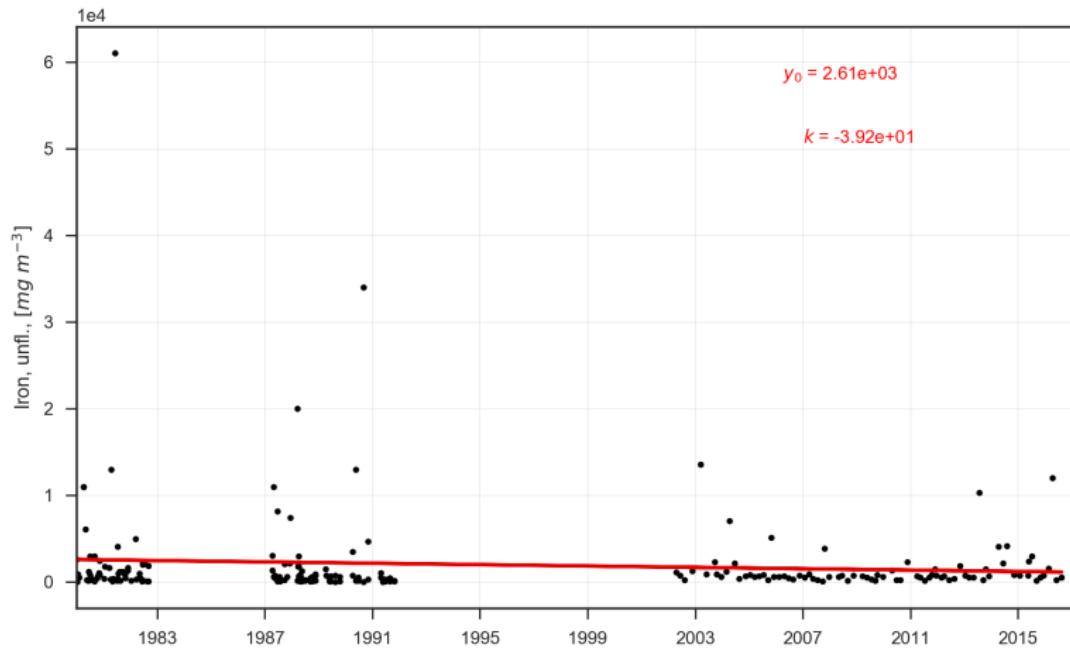




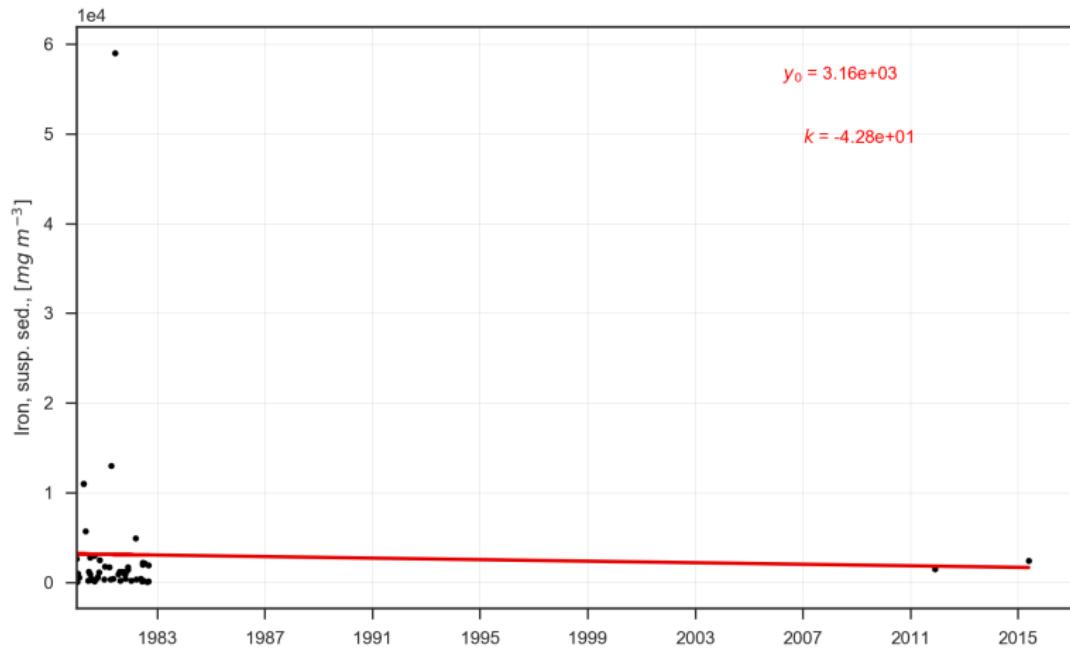
SuspUnfil

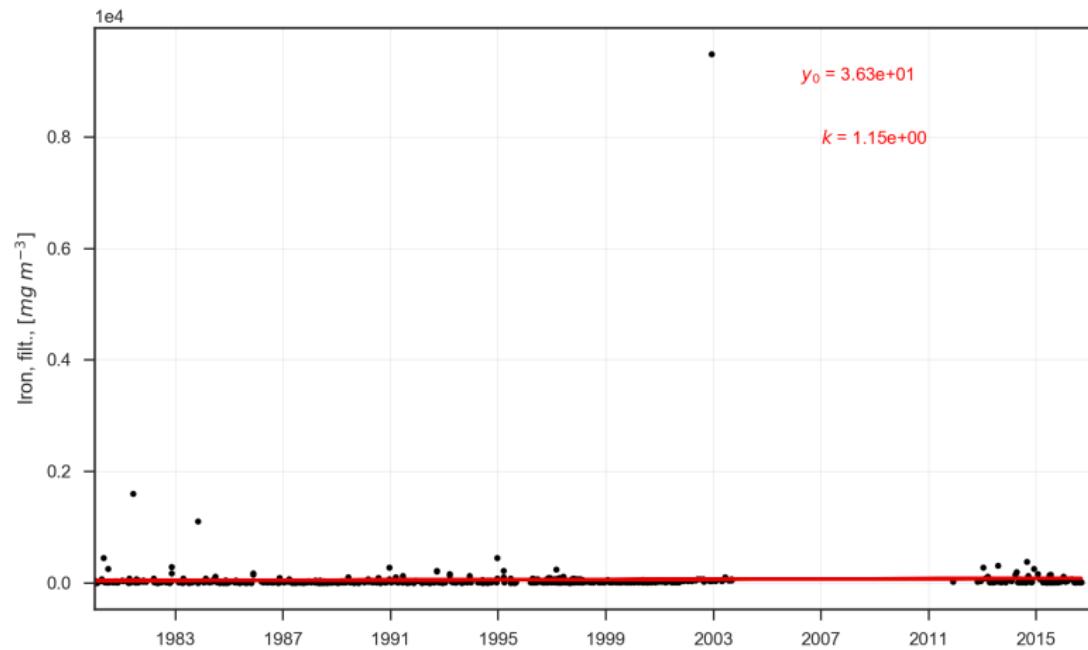


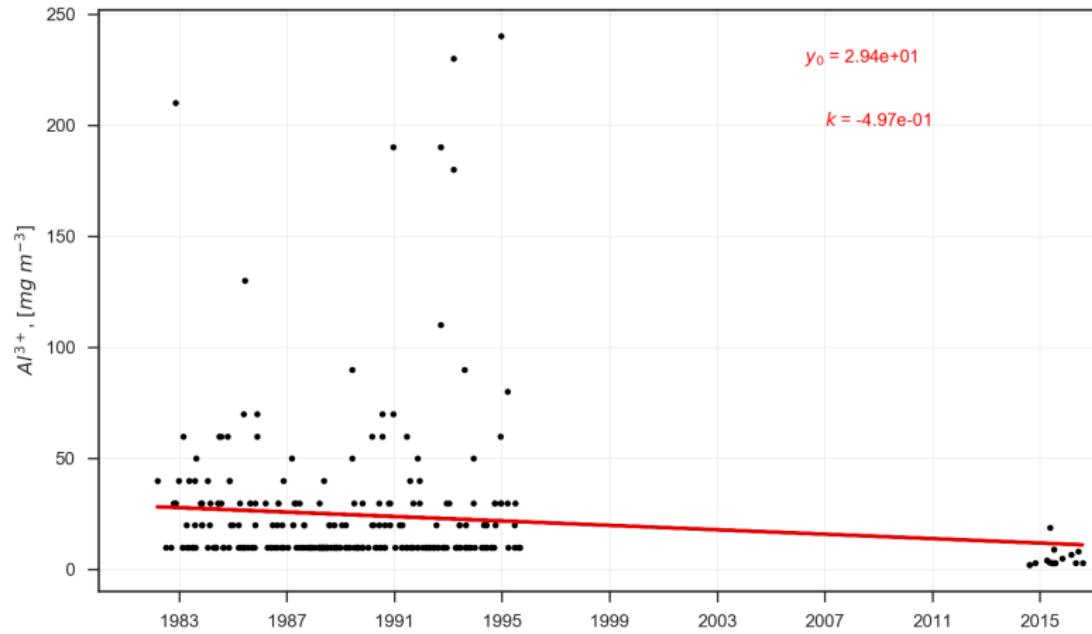
IronUnfilRec

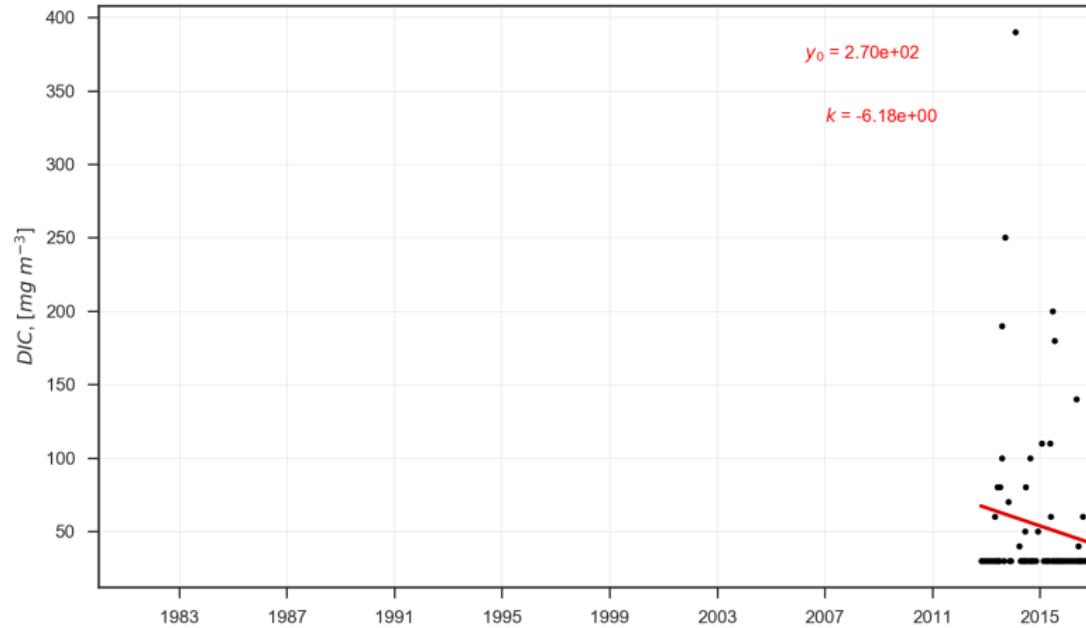


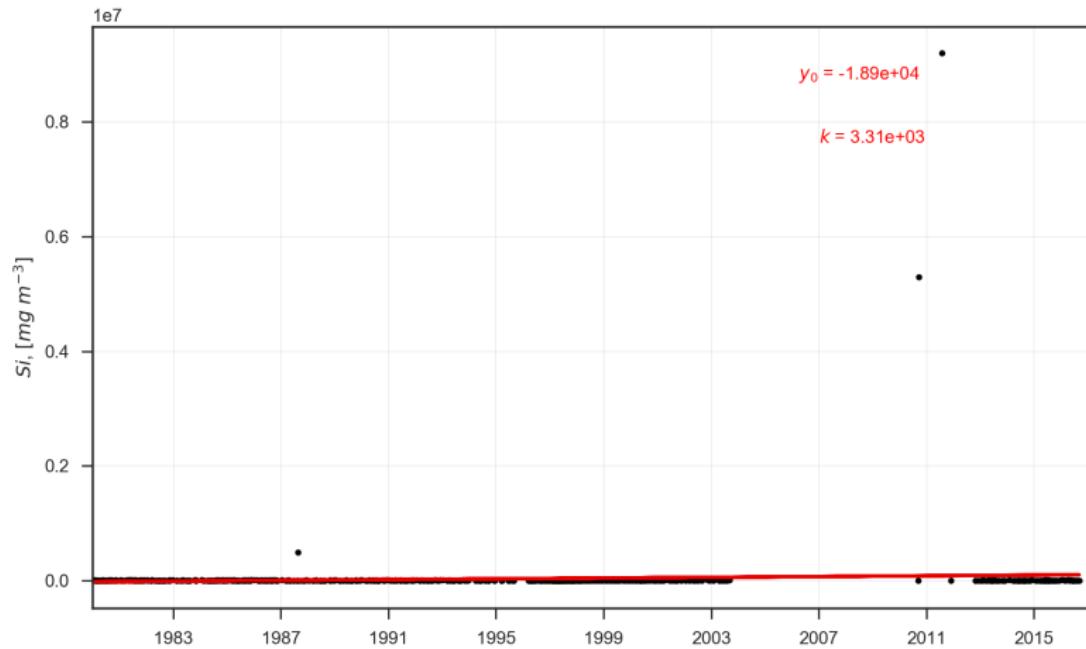
IronSuspSed



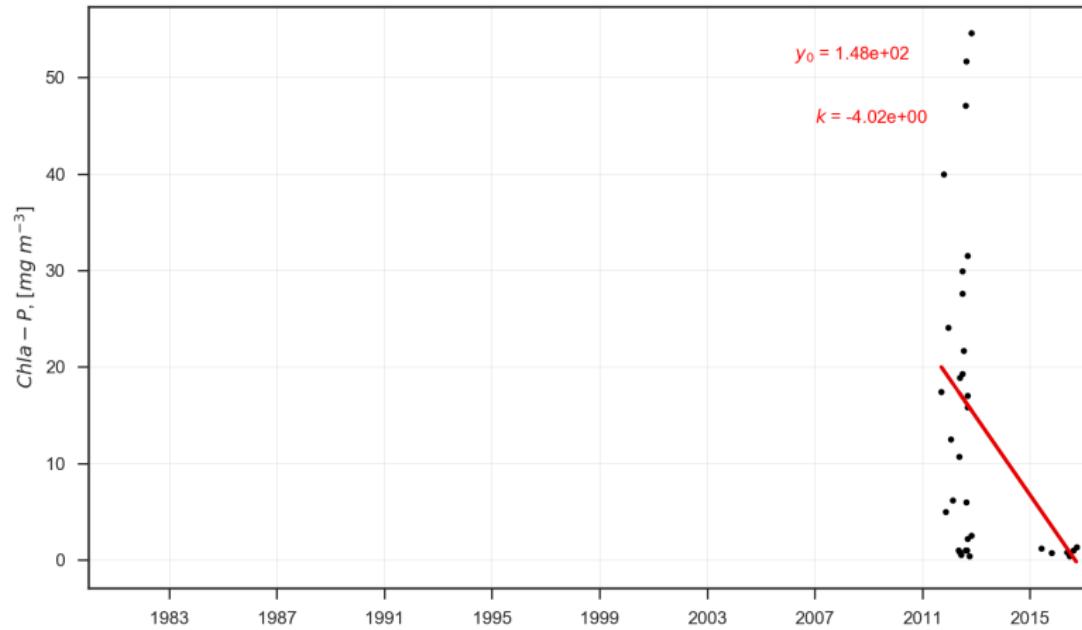




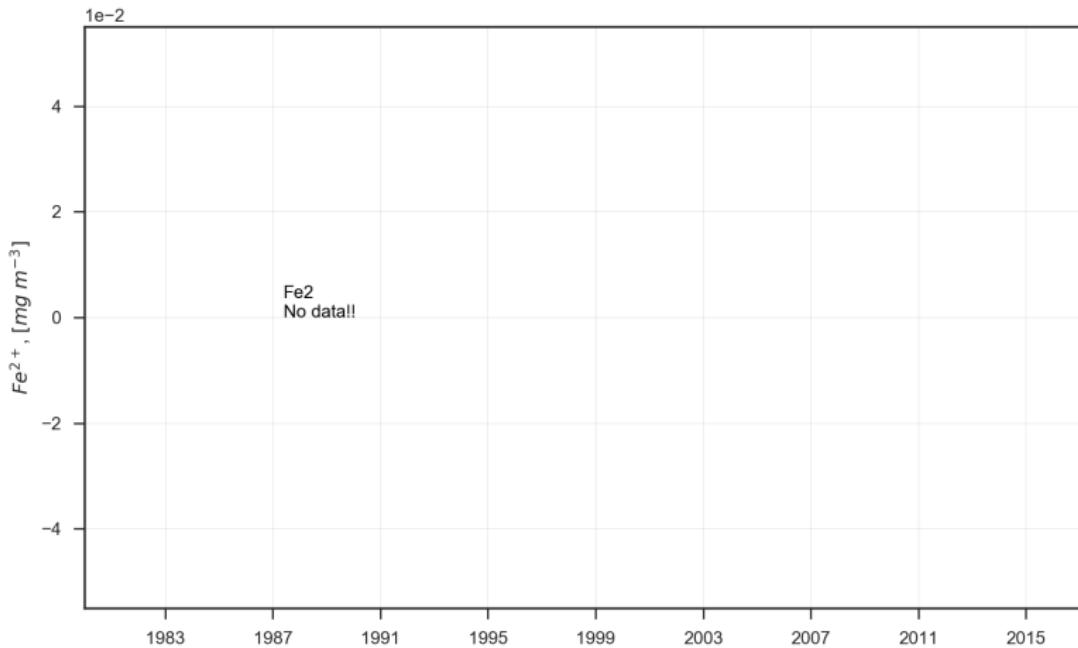




Chla

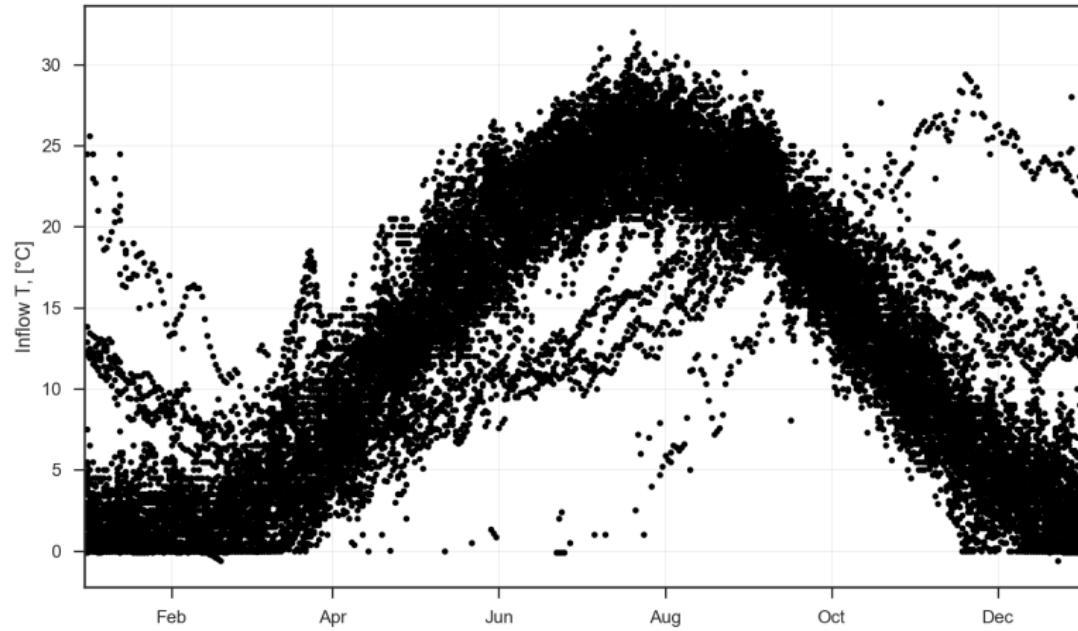


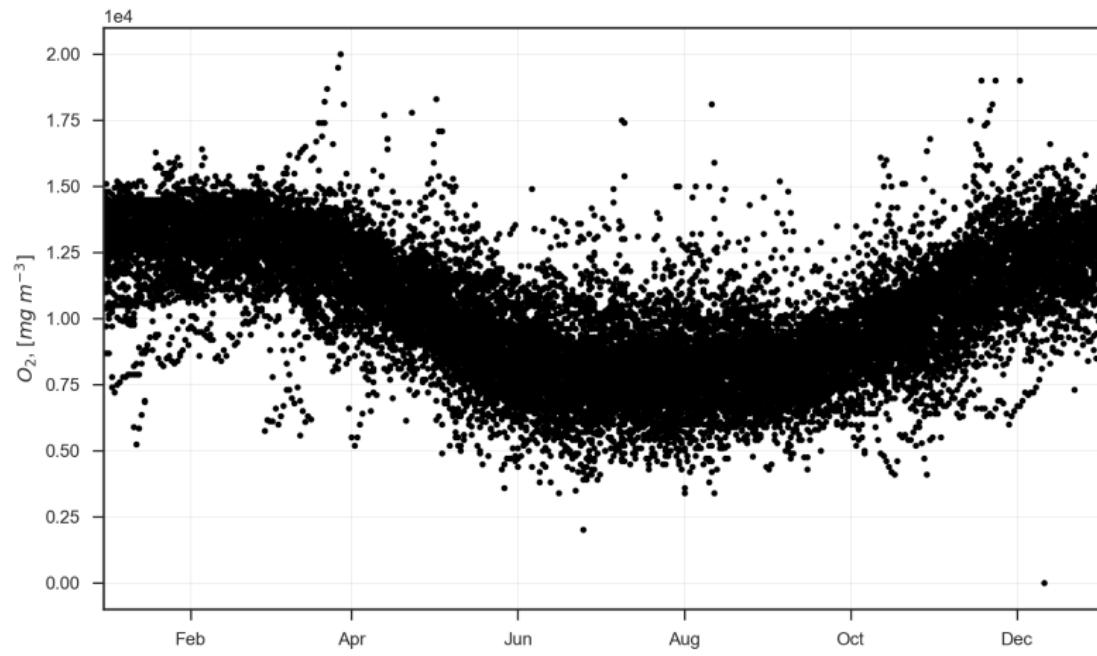
Fe2



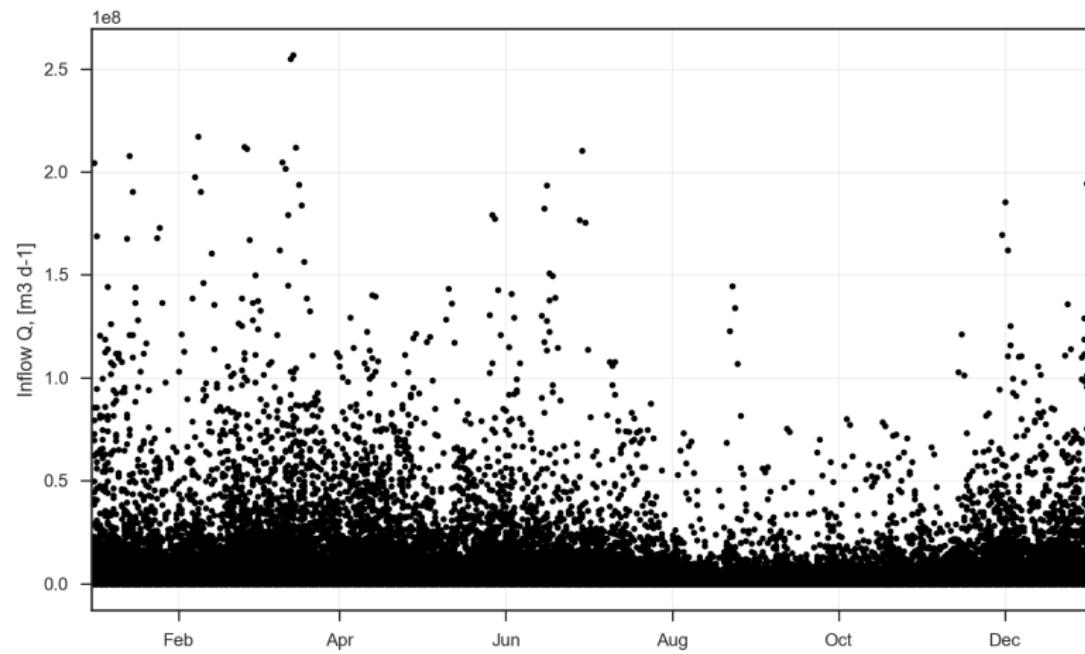
One year patterns

inflow T

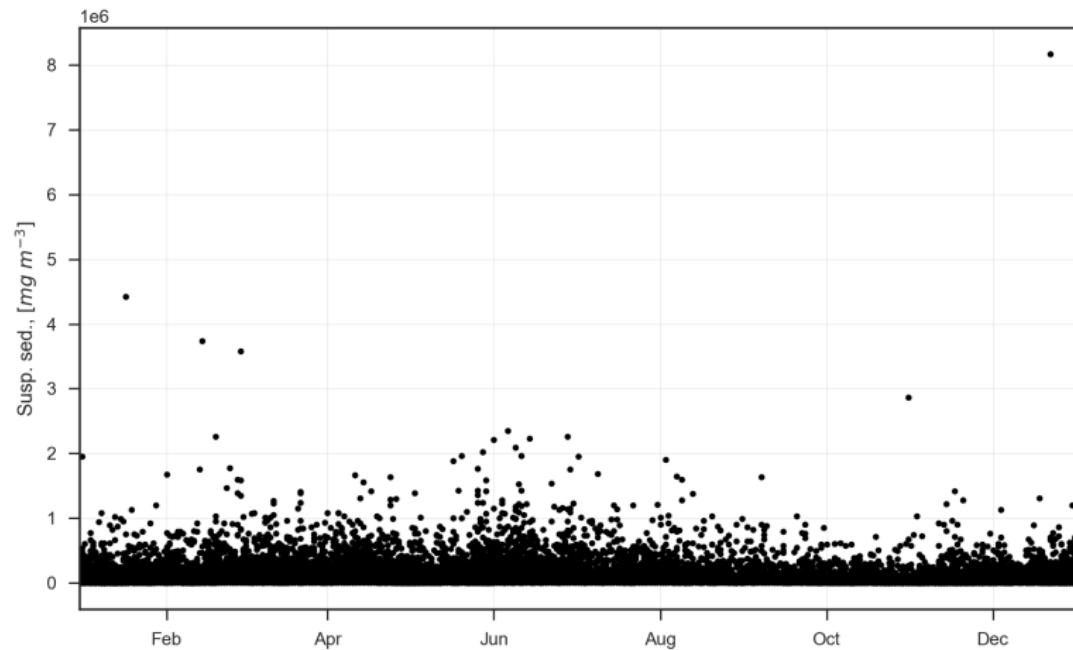




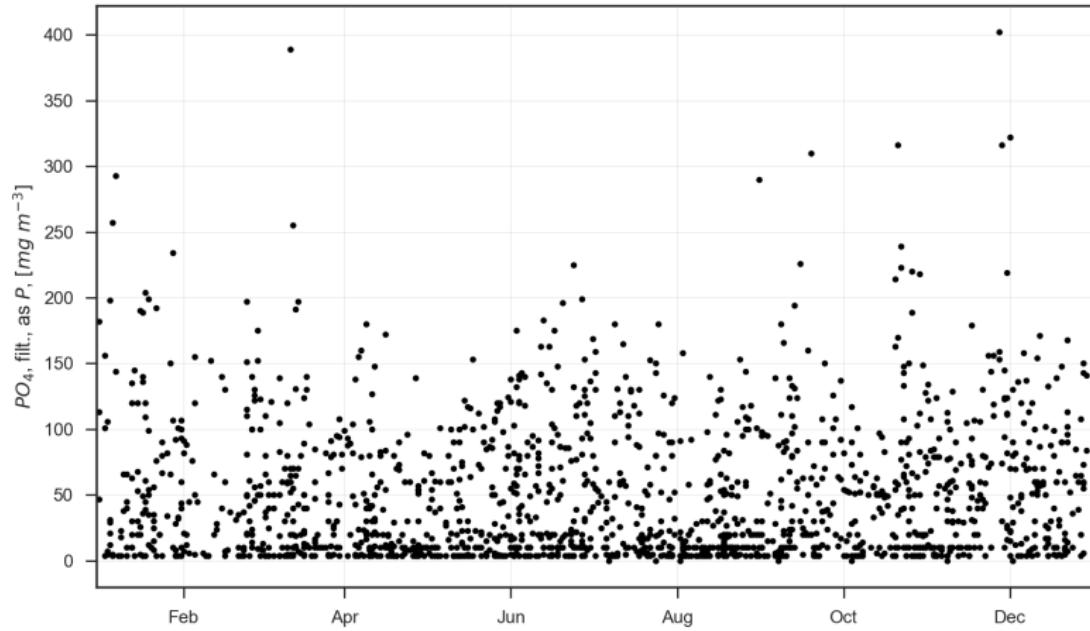
inflowQ



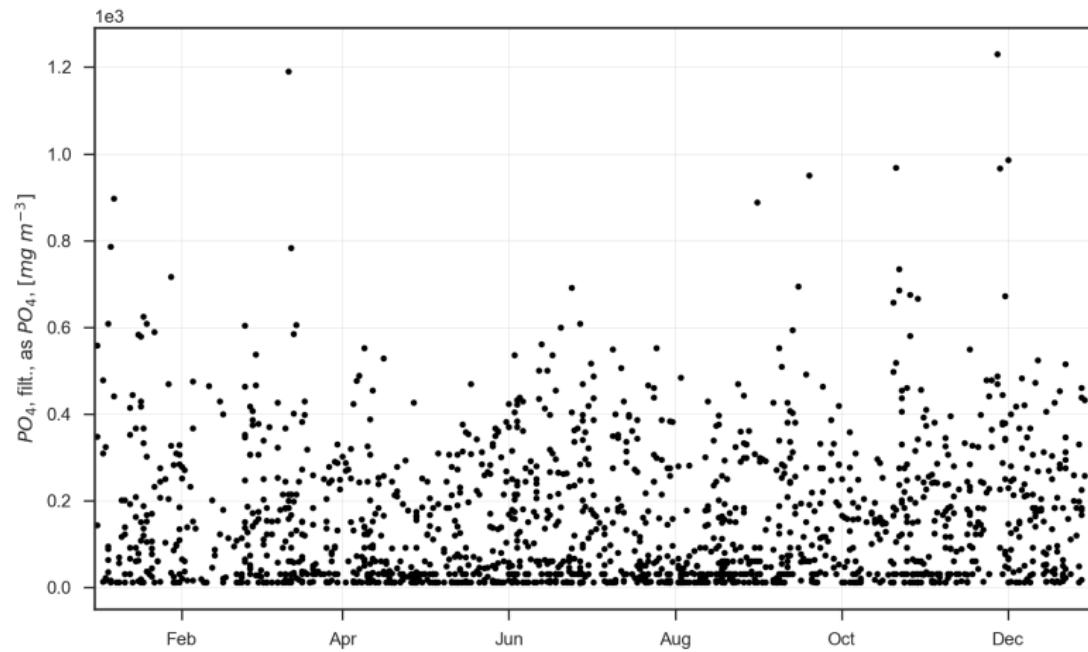
Susp



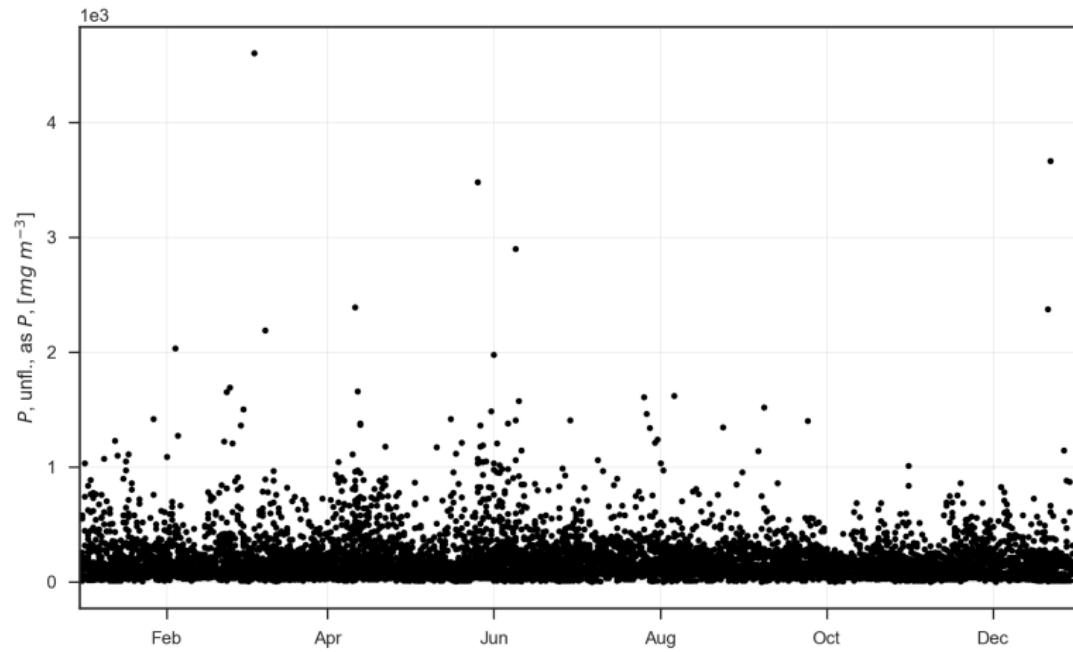
PO4a



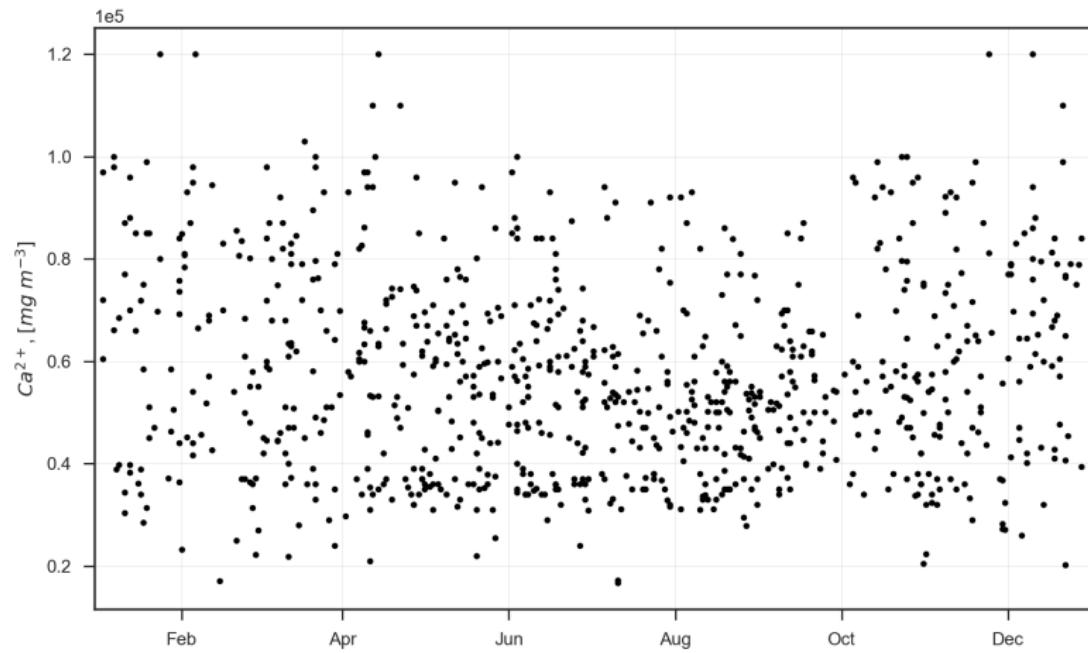
PO4b



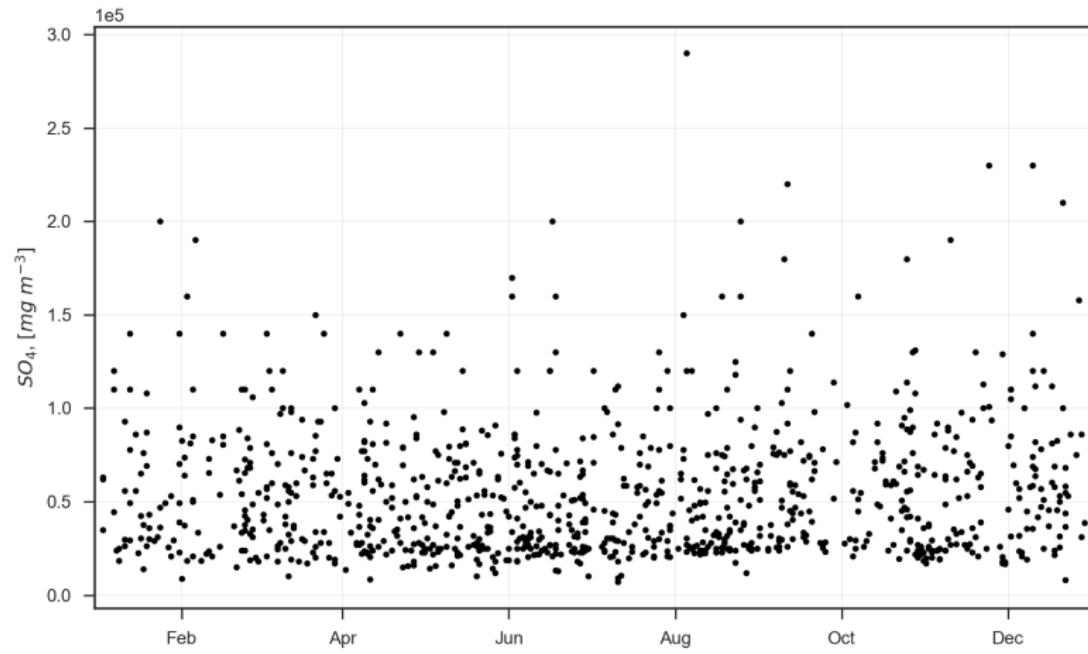
PO4d



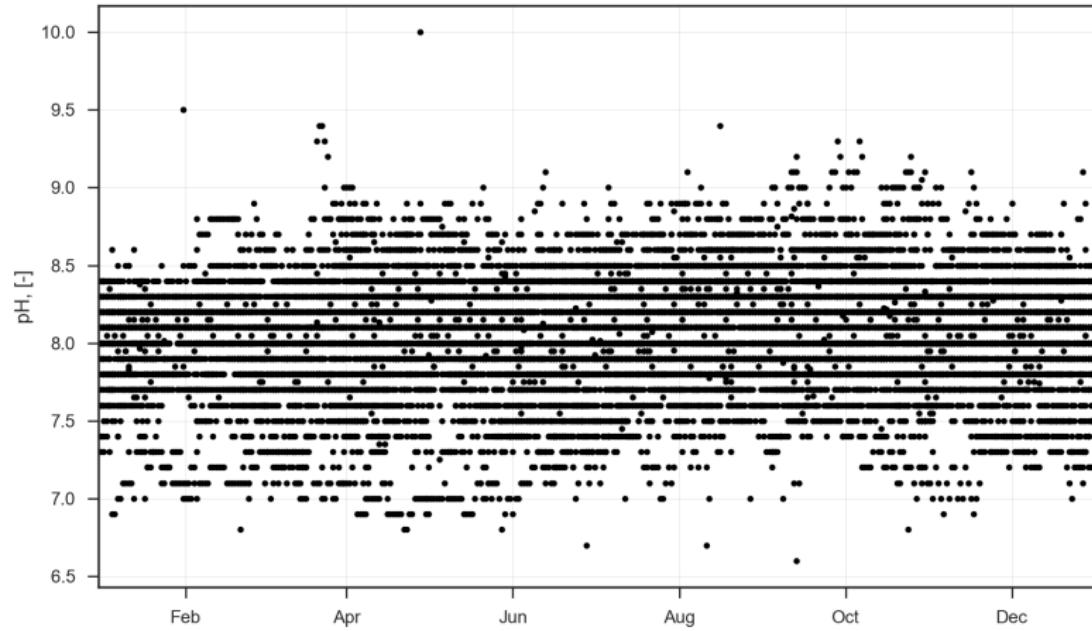
Ca2



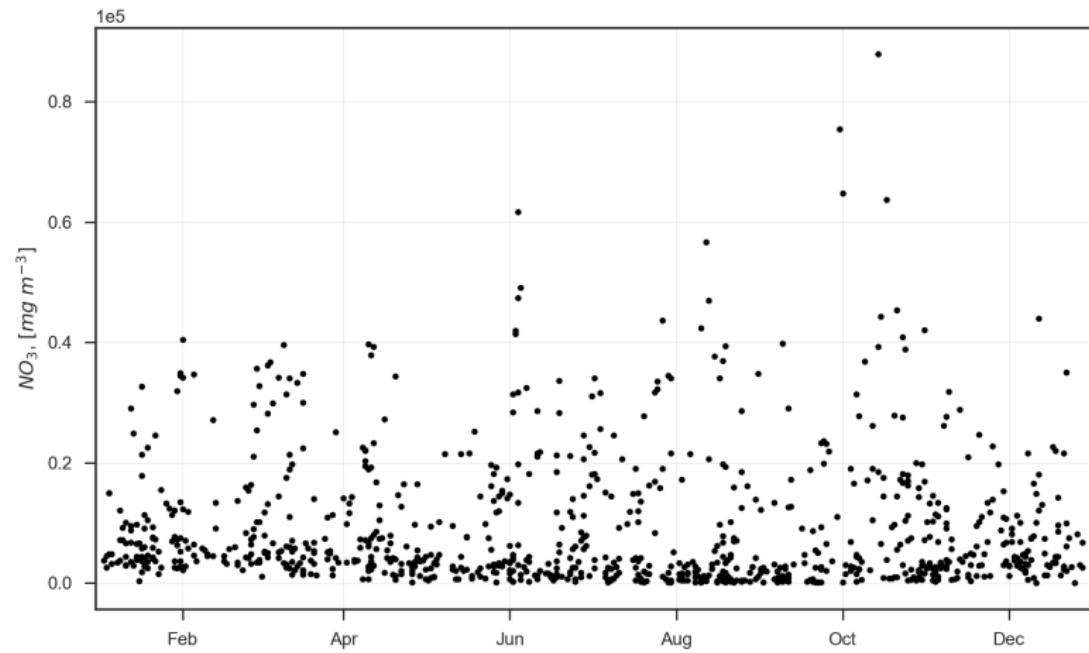
SO₄



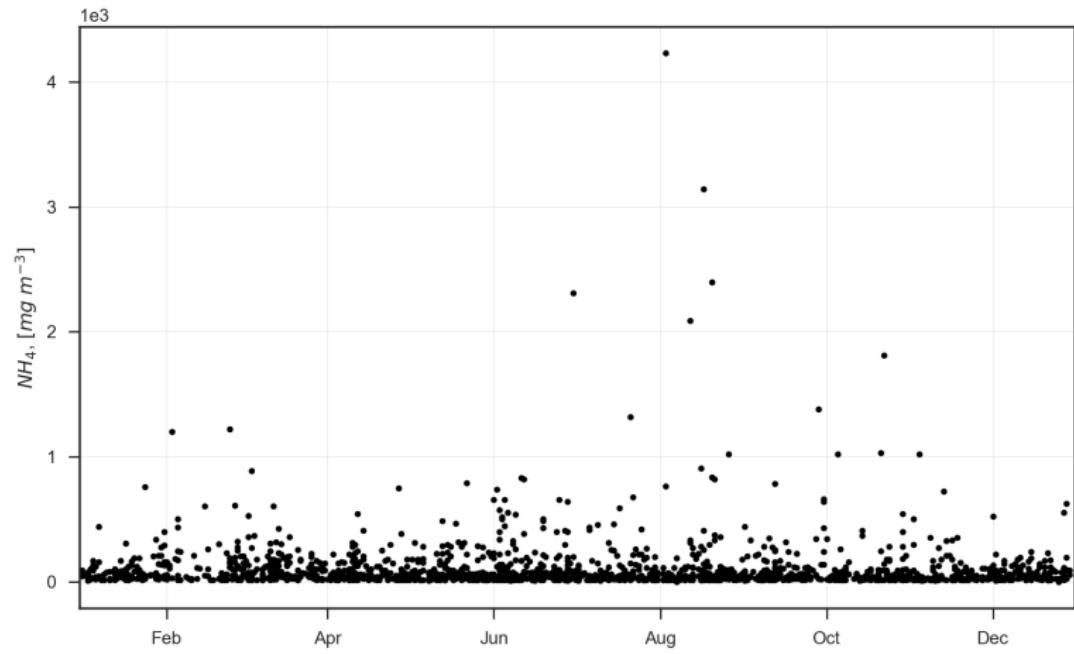
pH



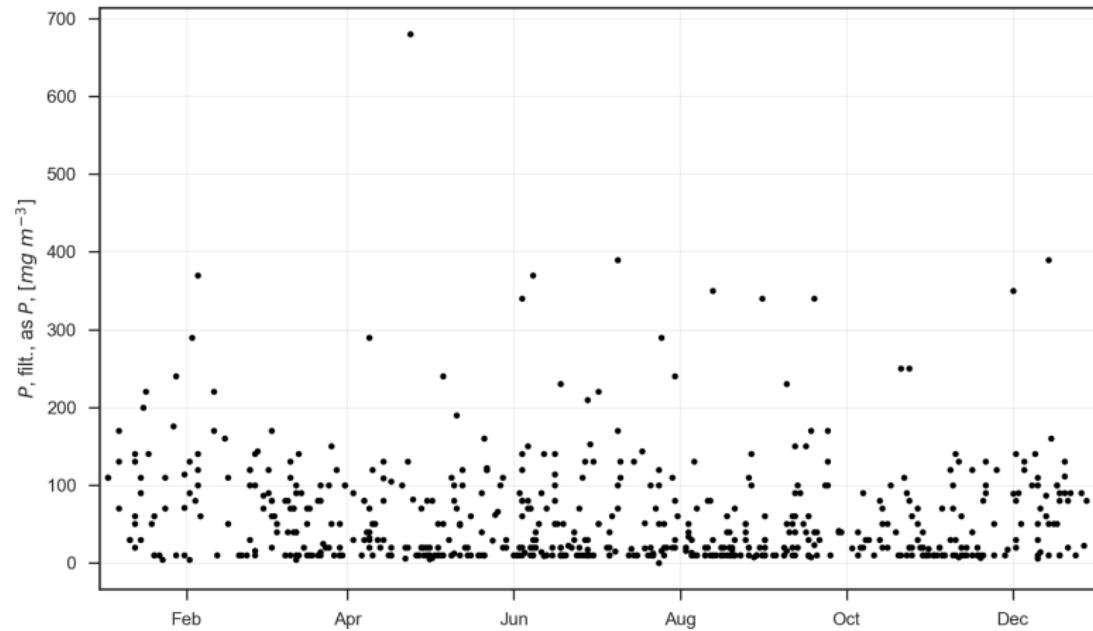
NO₃



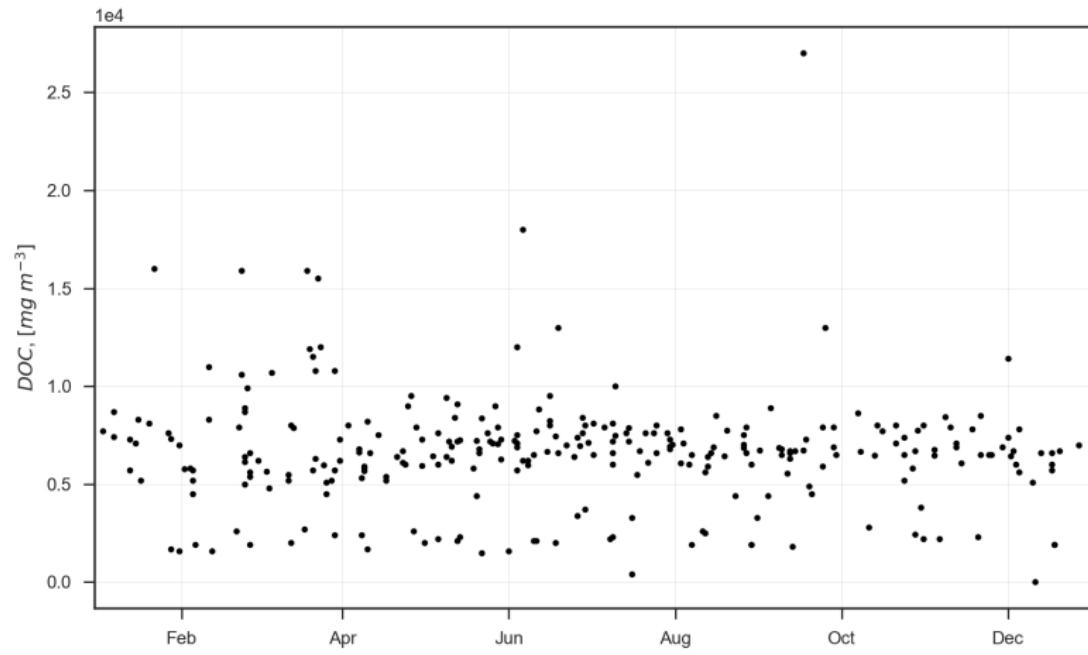
NH₄



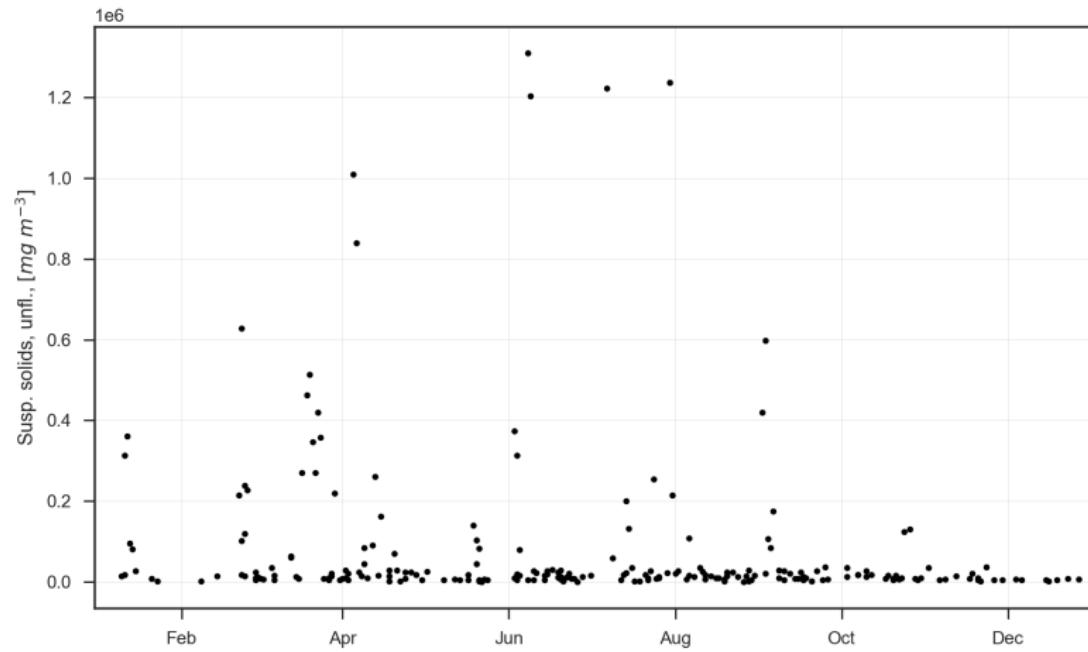
PO4c



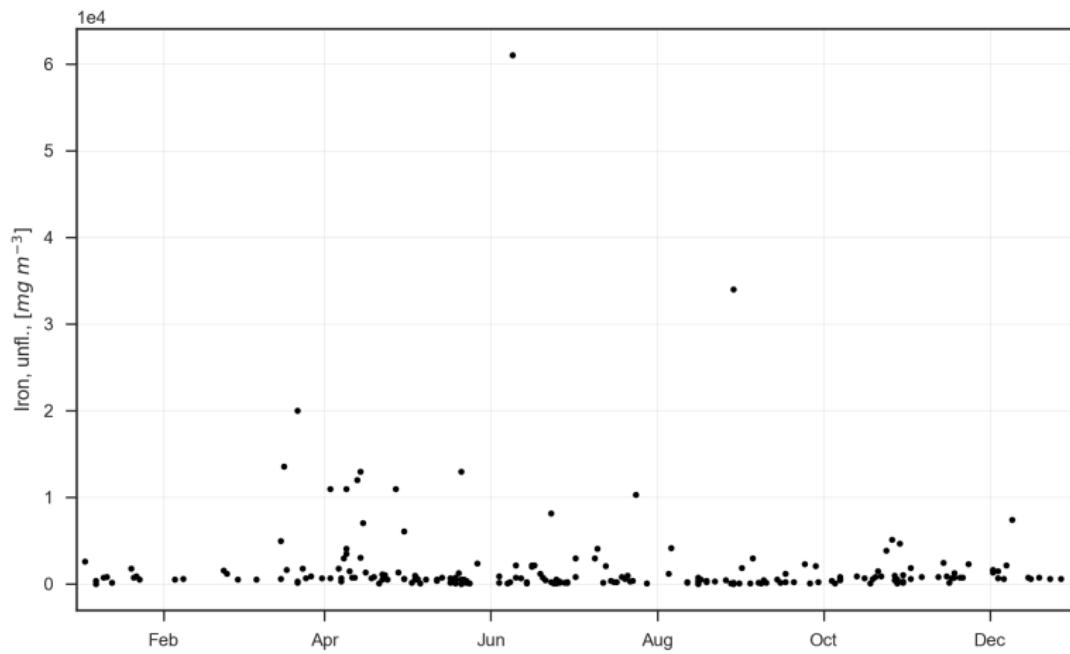
DOC



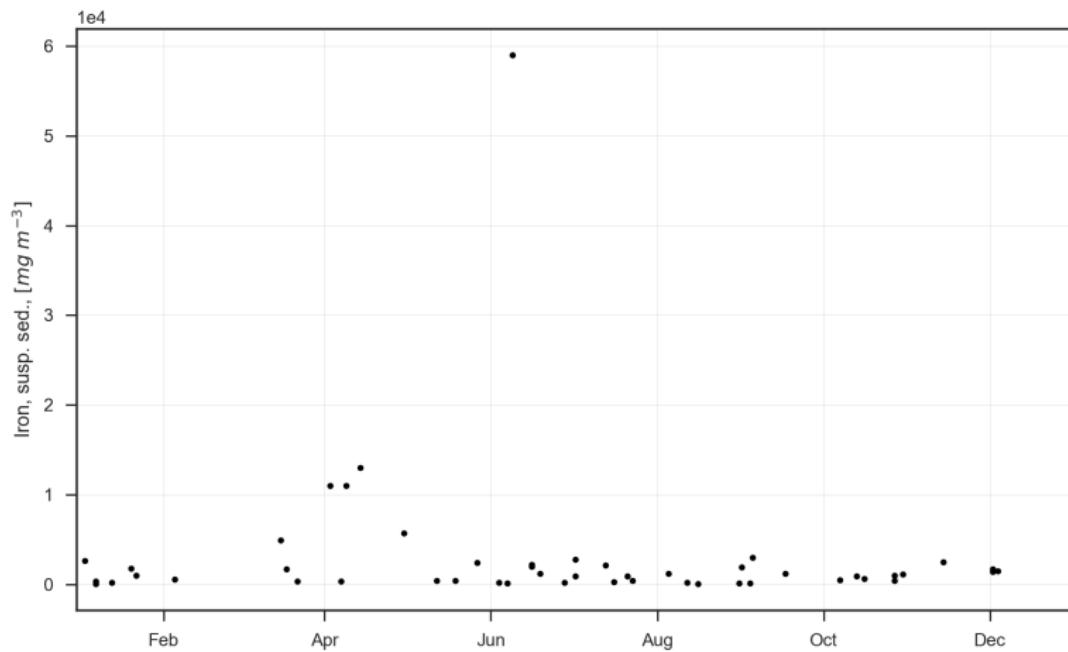
SuspUnfil



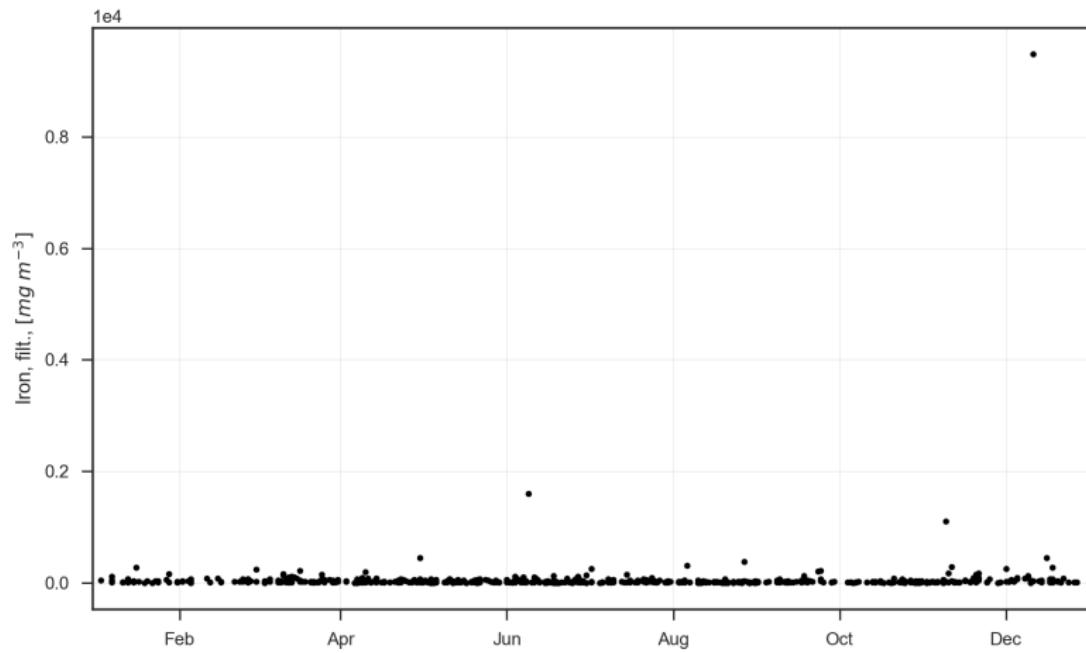
IronUnfilRec

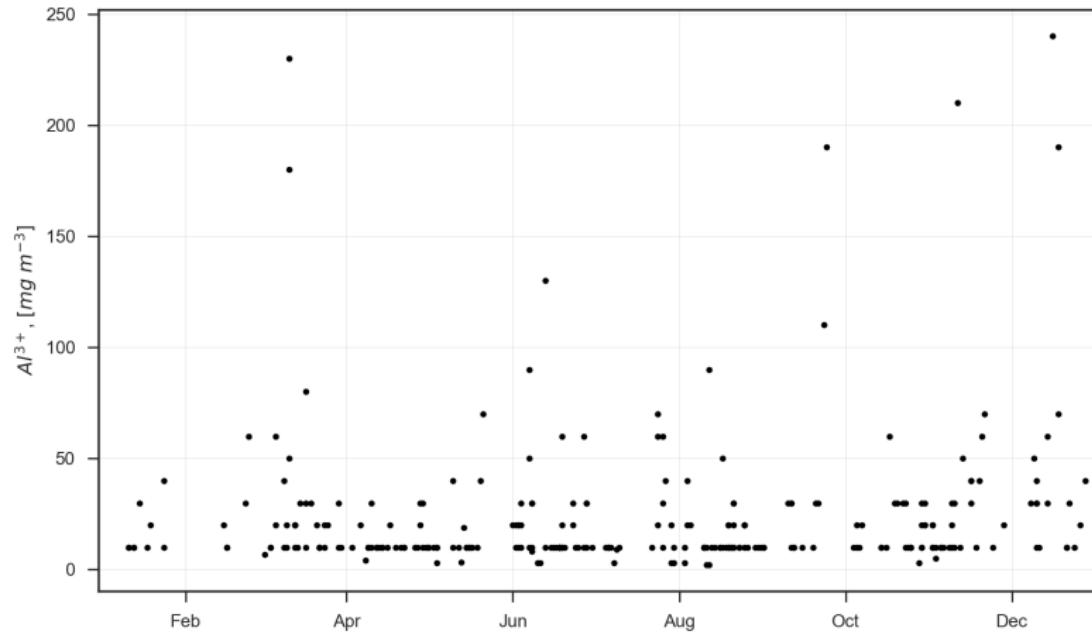


IronSuspSed

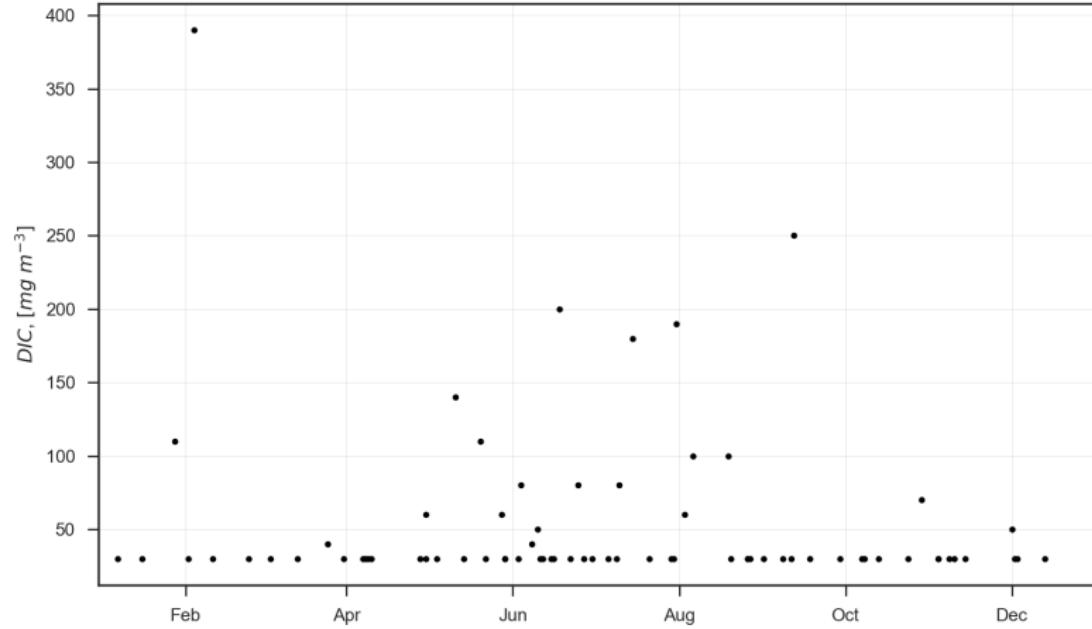


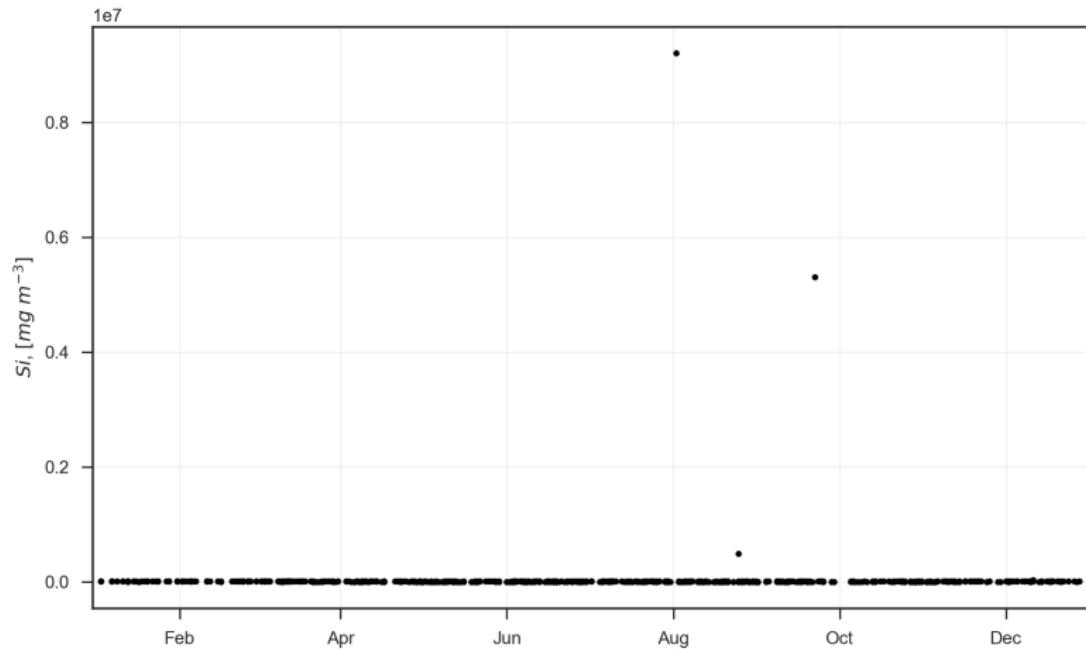
IronFilRec



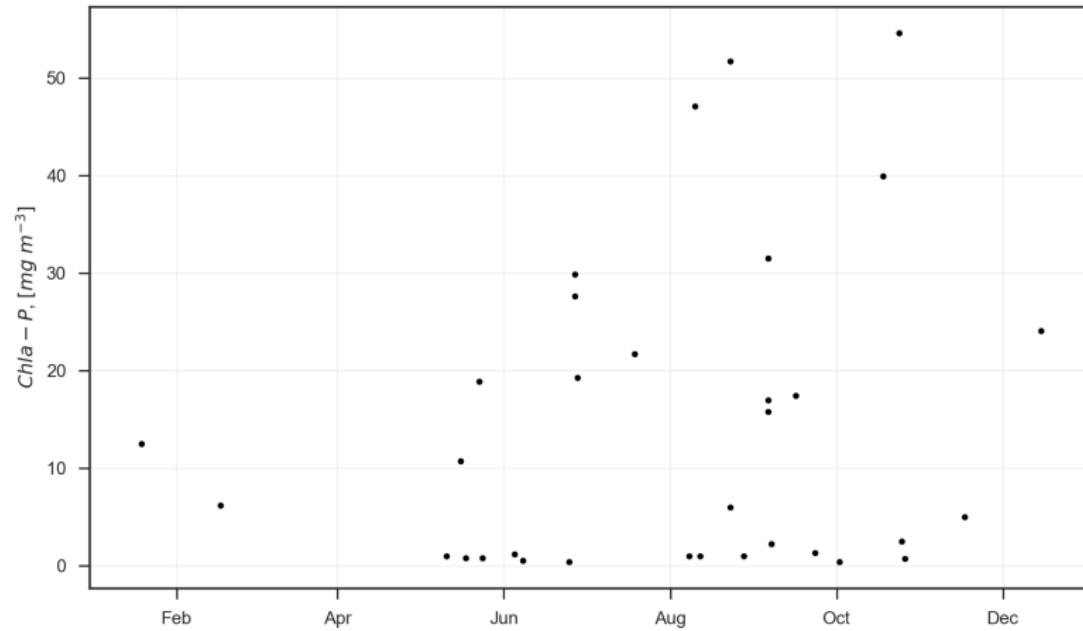


DIC

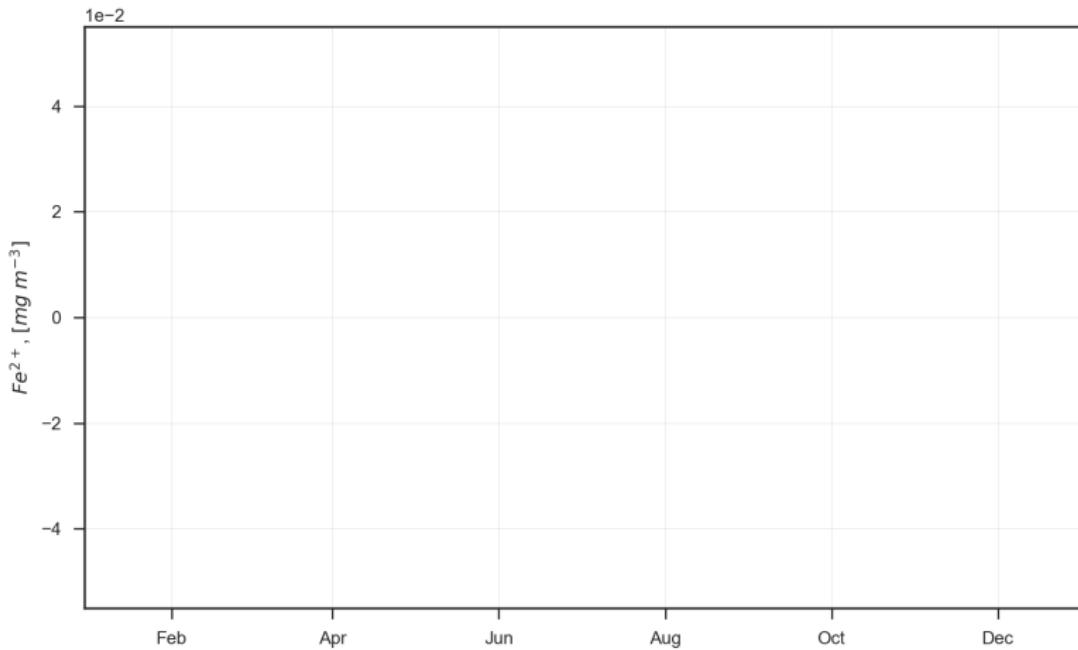




Chla

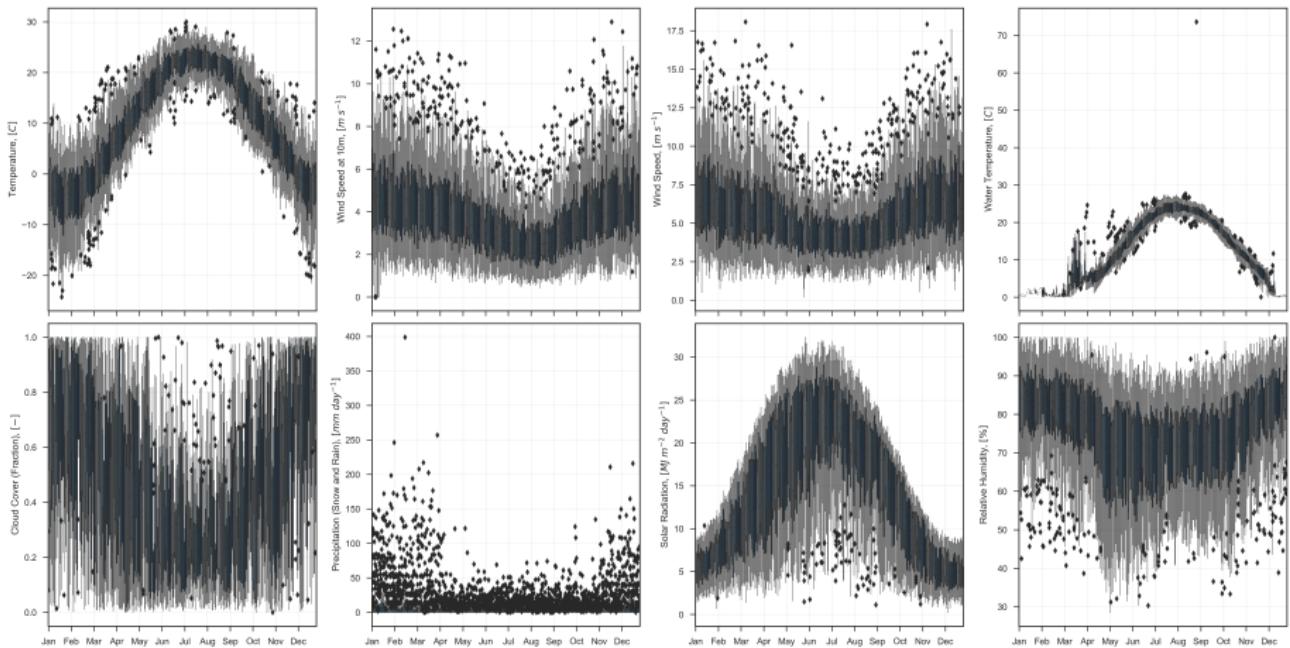


Fe2

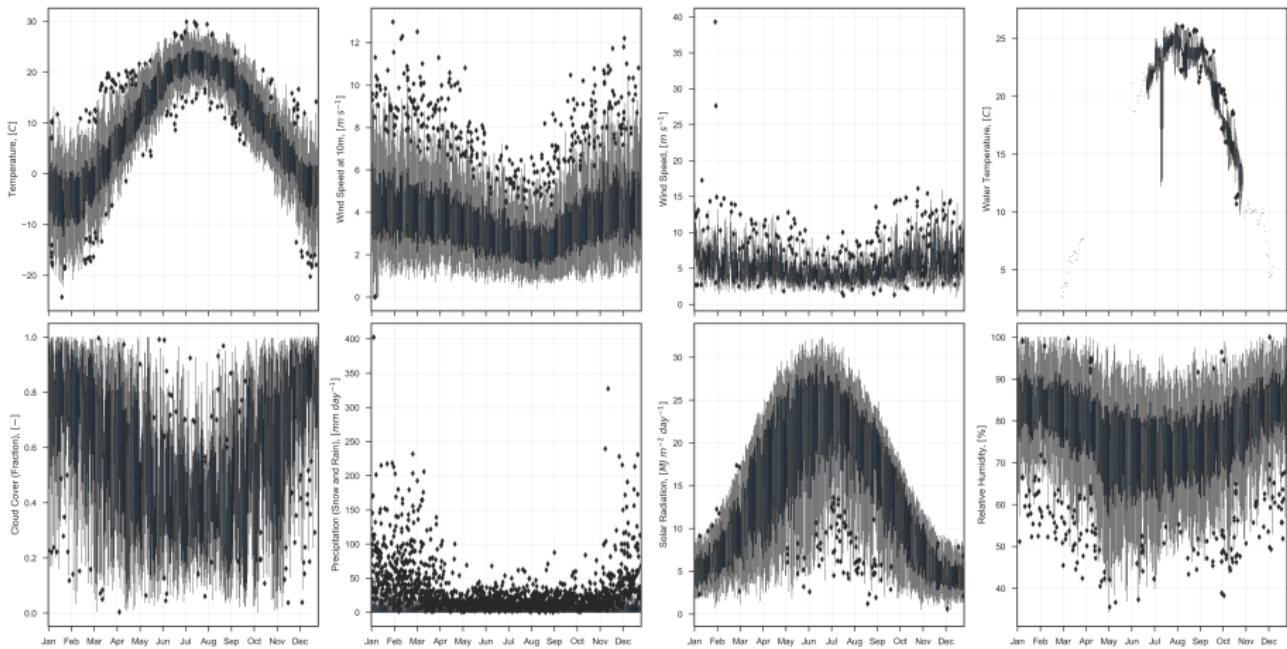


Weather Boxplots

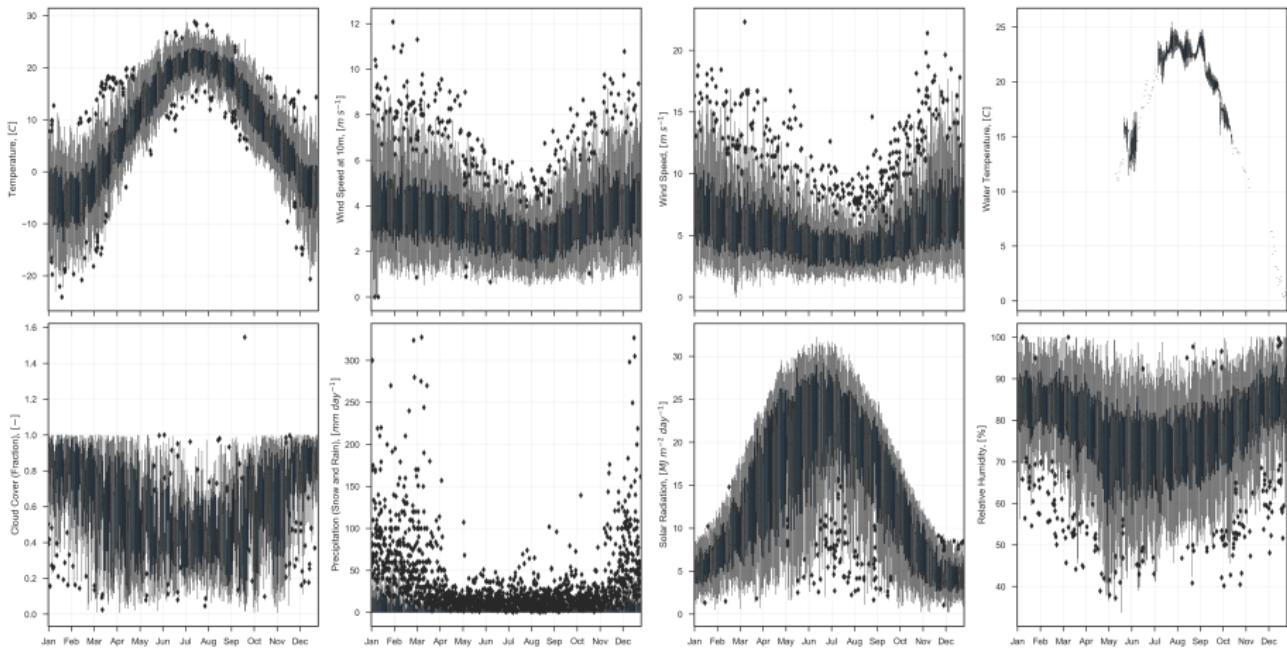
Western Basin: 1 year boxplot



Central Basin: 1 year boxplot



Eastern Basin: 1 year boxplot

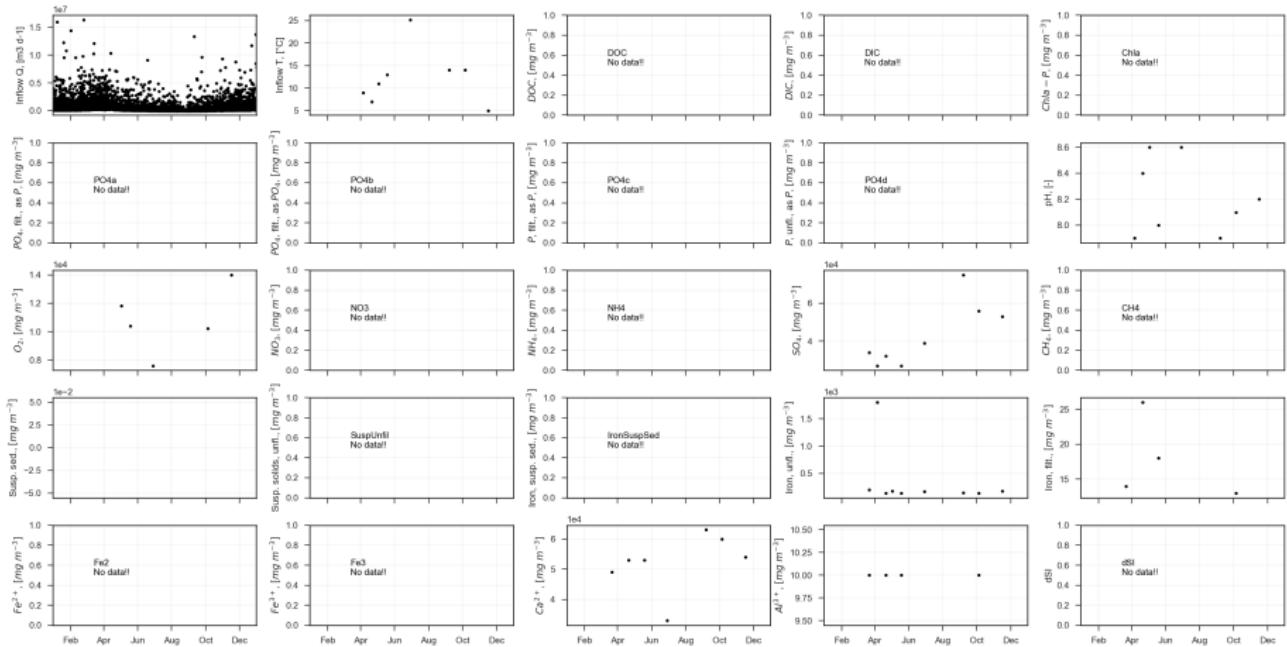


Separate plots of Rivers

Eastern basin

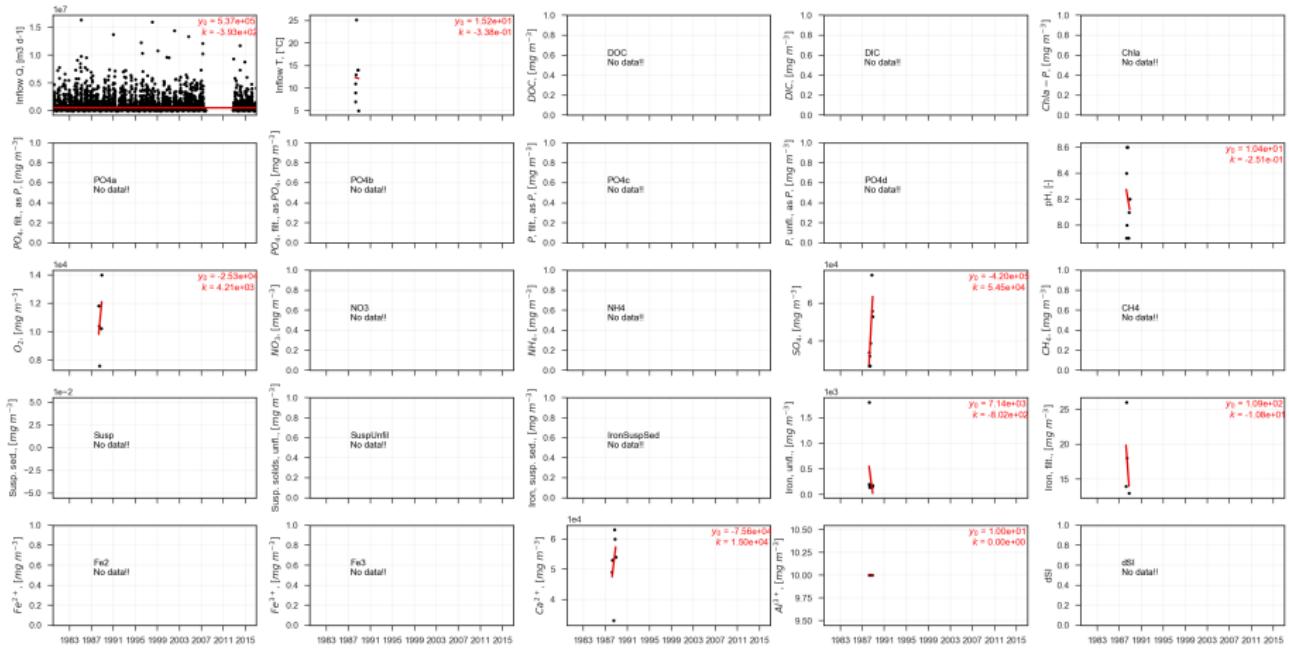
Eastern Basin: Buffalo Creek

One year plot



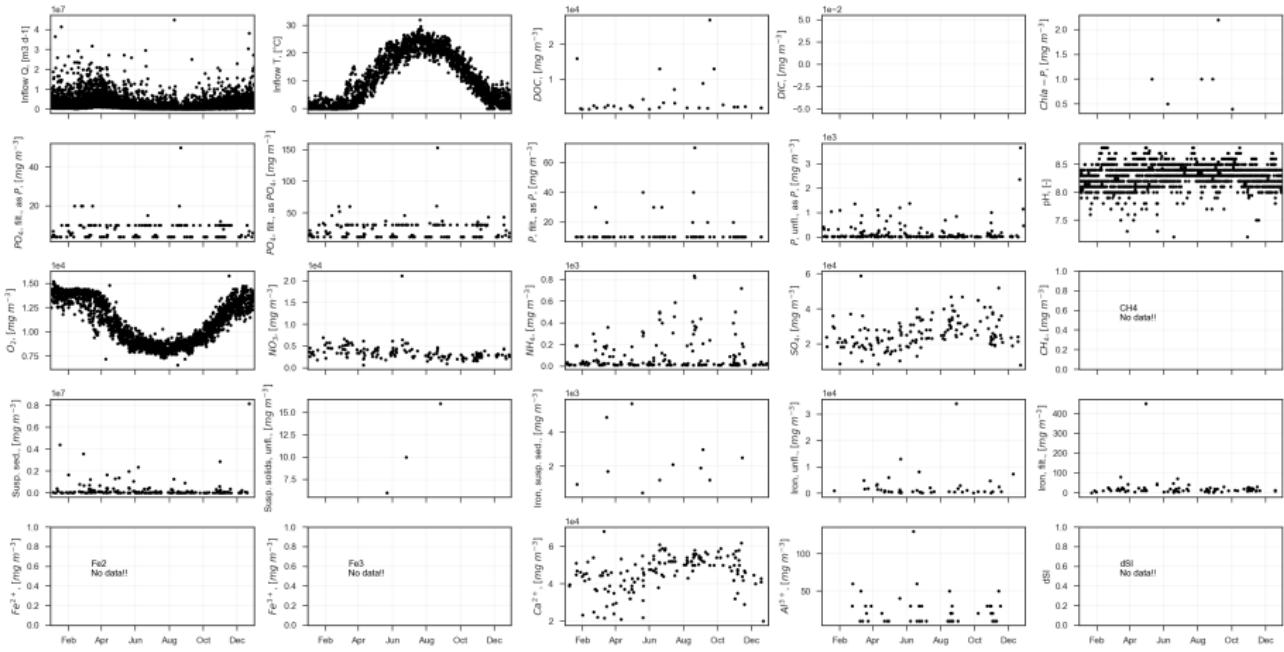
Eastern Basin: Buffalo Creek

All years plot



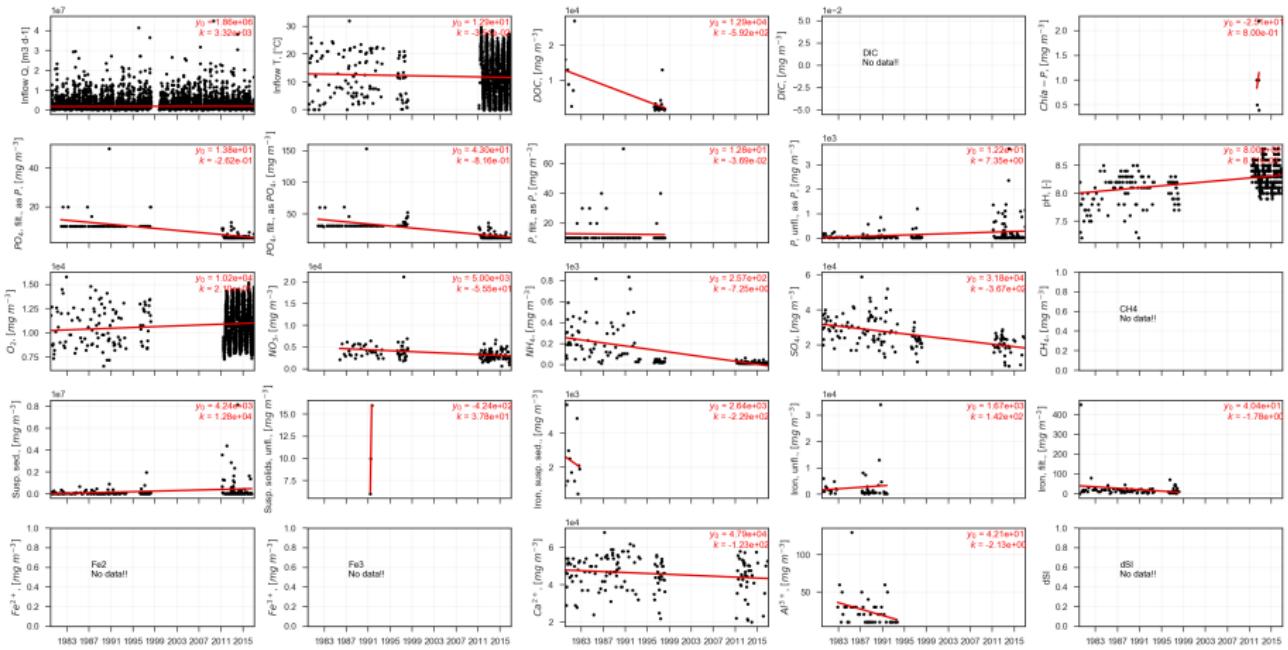
Eastern Basin: Cattaraugus Creek

One year plot



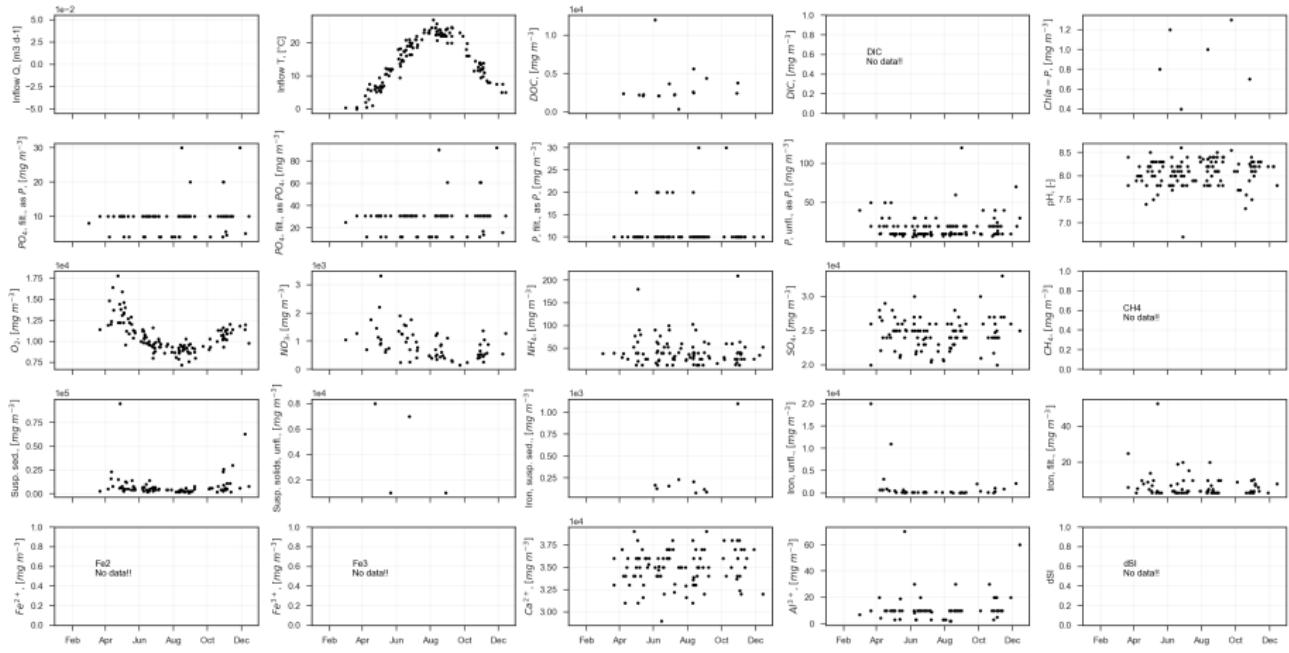
Eastern Basin: Cattaraugus Creek

All years plot

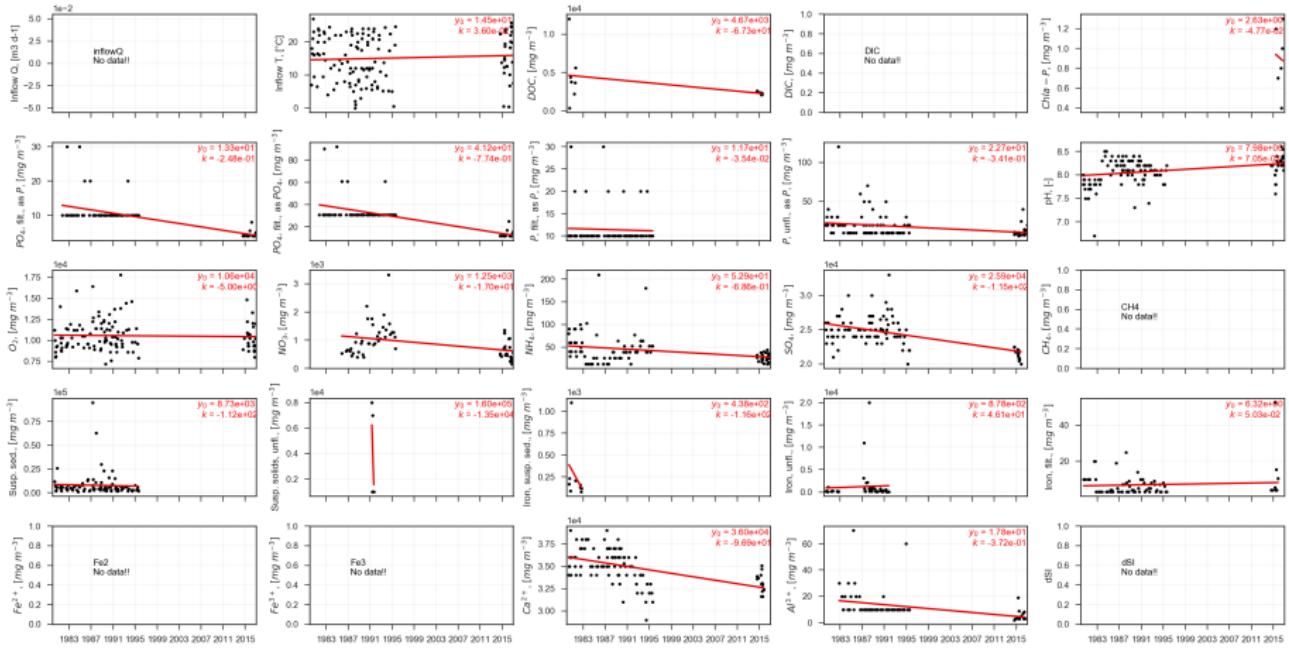


Eastern Basin: Niagara river

One year plot



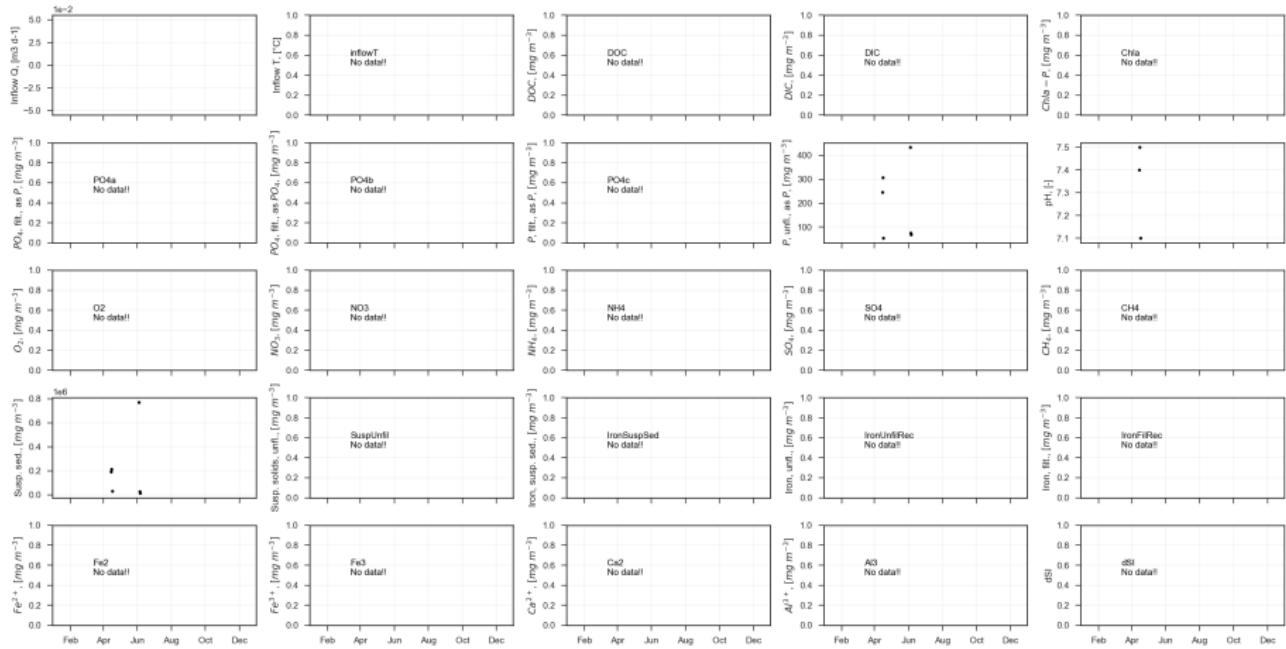
Eastern Basin: Niagara river river All years plot



Central basin

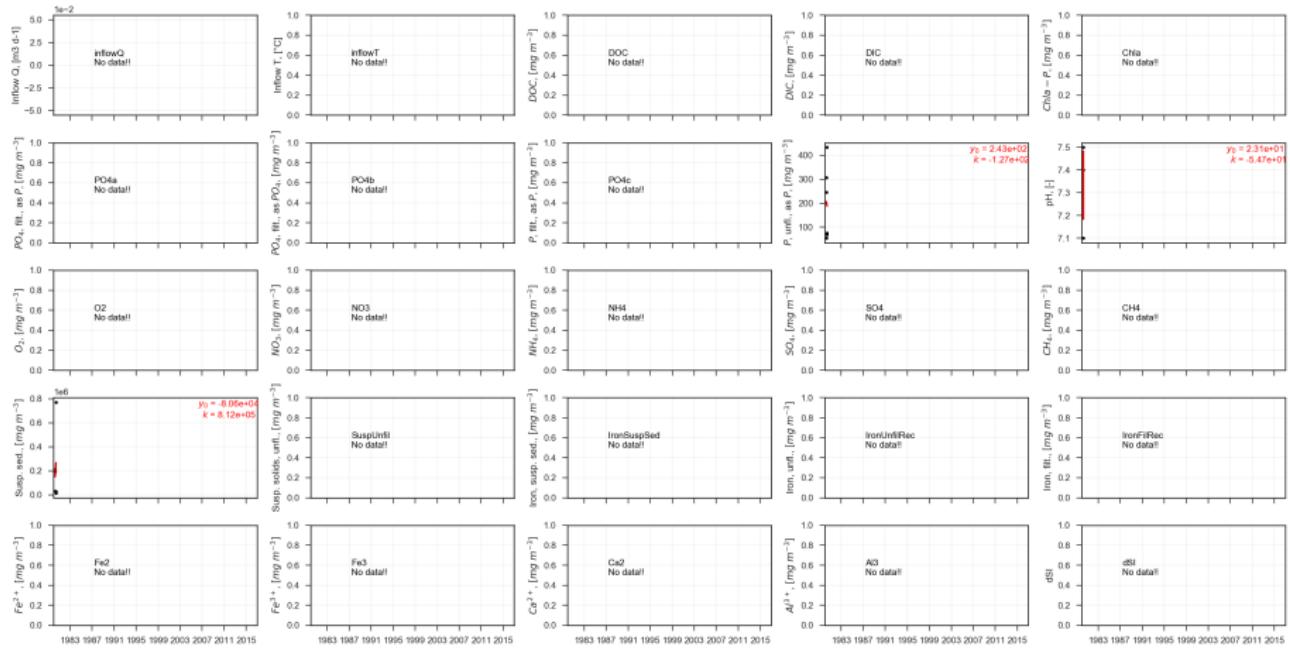
Central Basin: Ashtabula River

One year plot



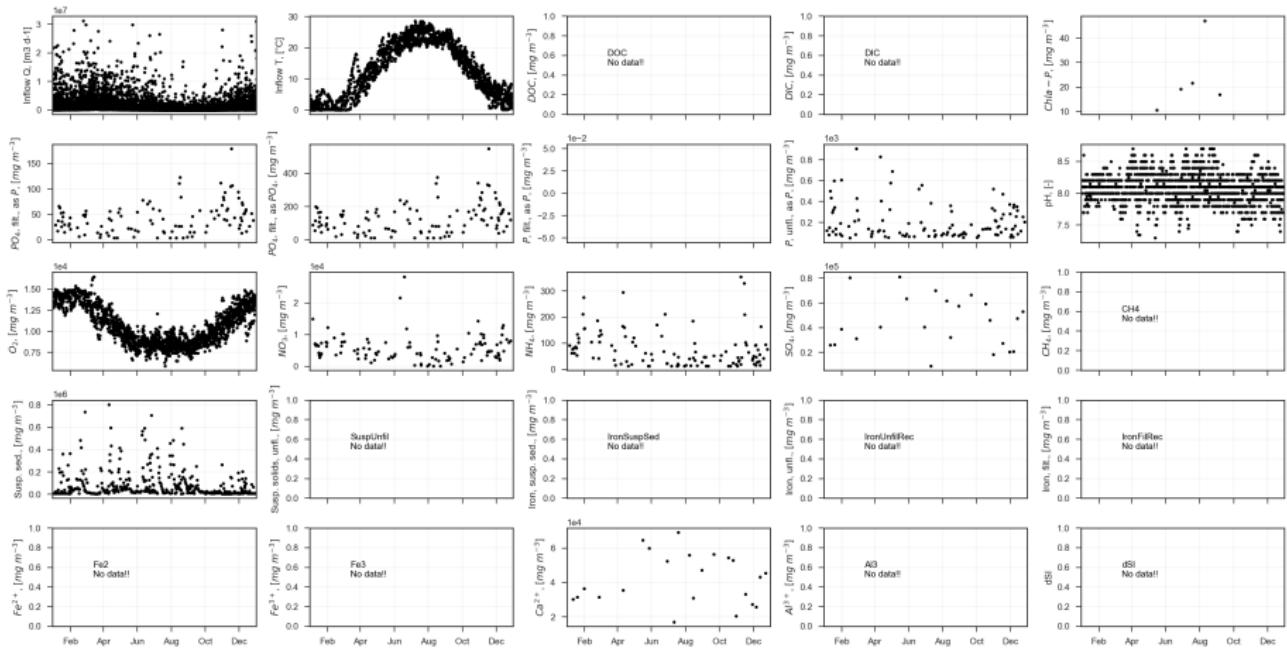
Central Basin: Ashtabula River

All years plot



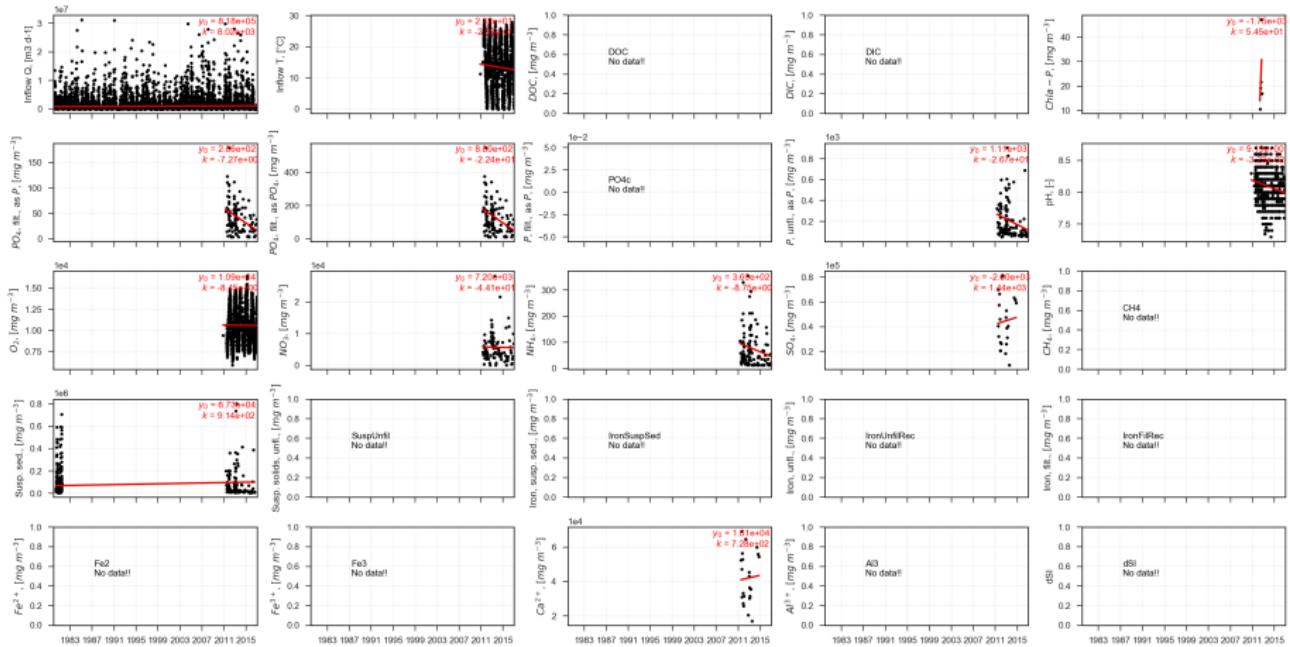
Central Basin: Black River

One year plot



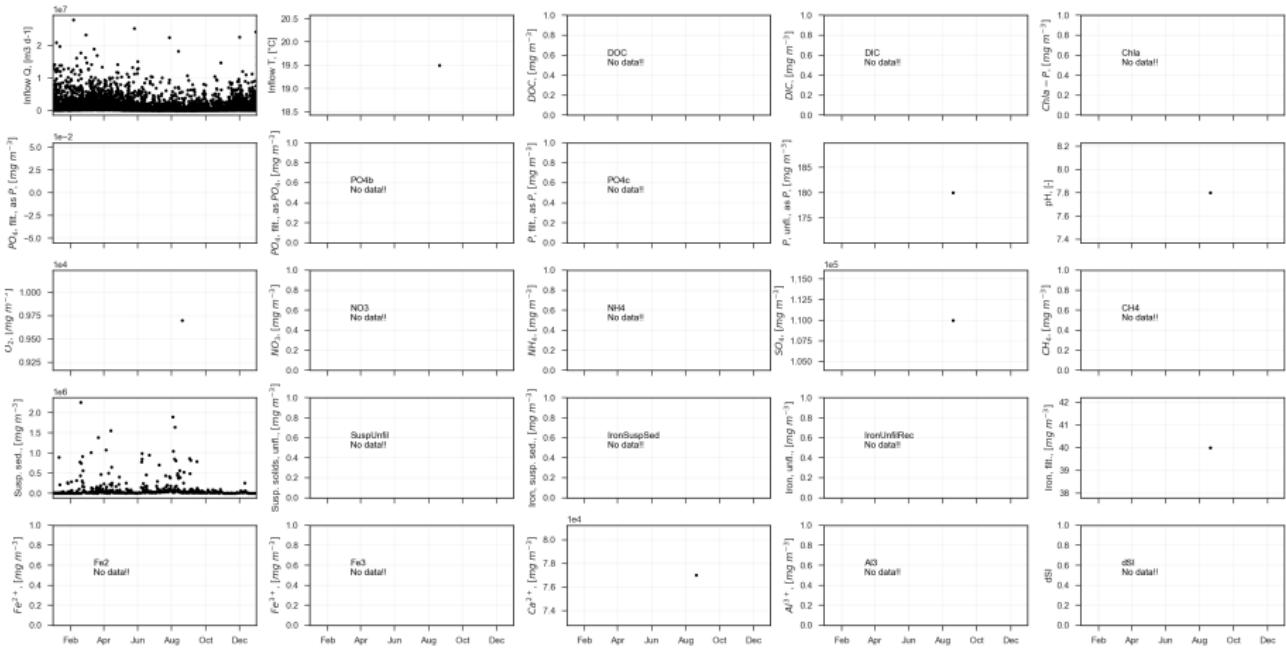
Central Basin: Black River

All years plot



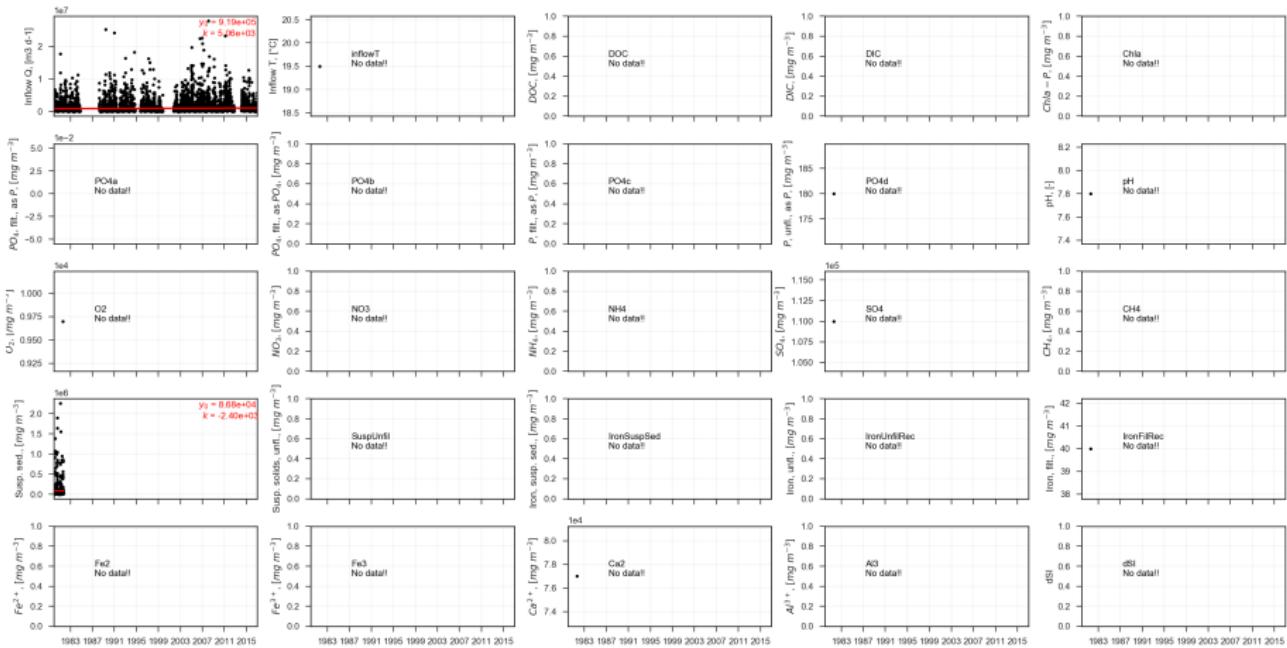
Central Basin: Chagrin River

One year plot



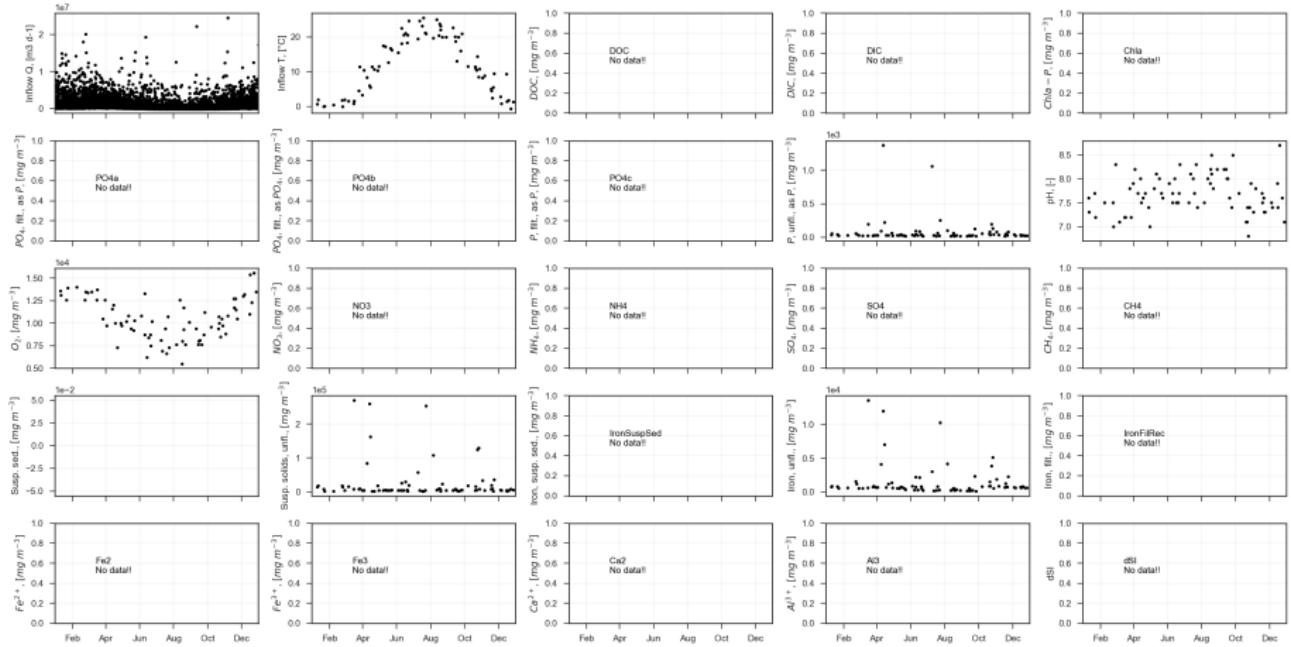
Central Basin: Chagrin River

All years plot



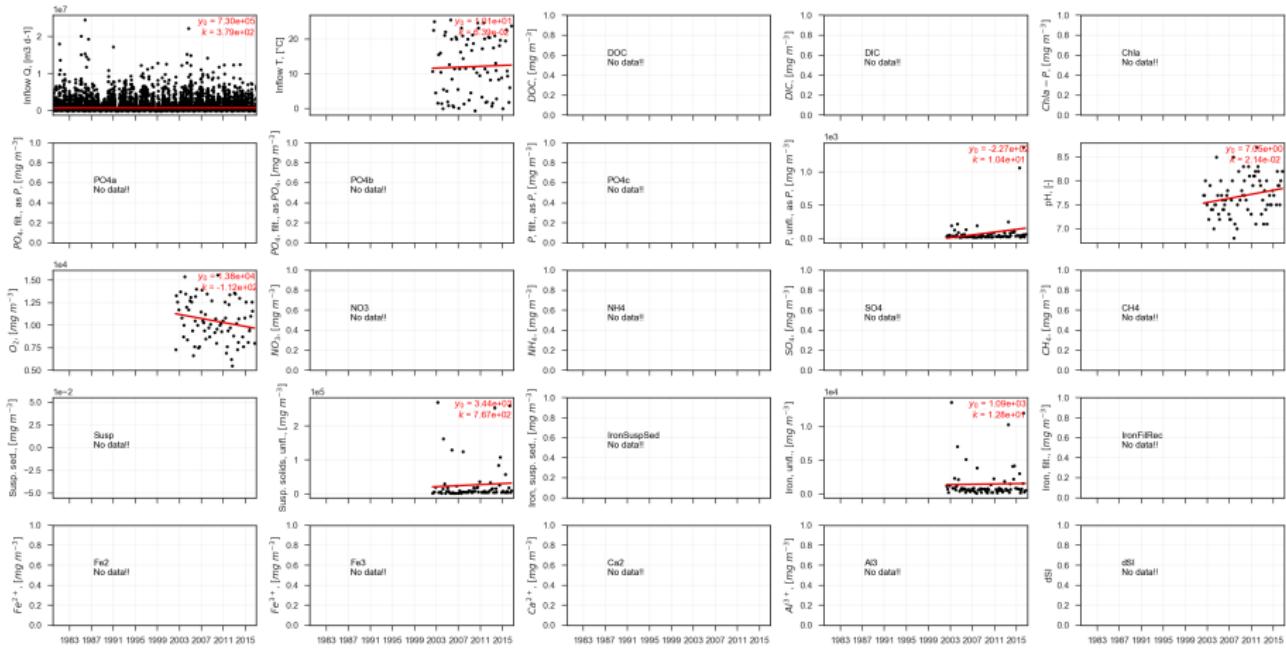
Central Basin: Conneaut Creek

One year plot



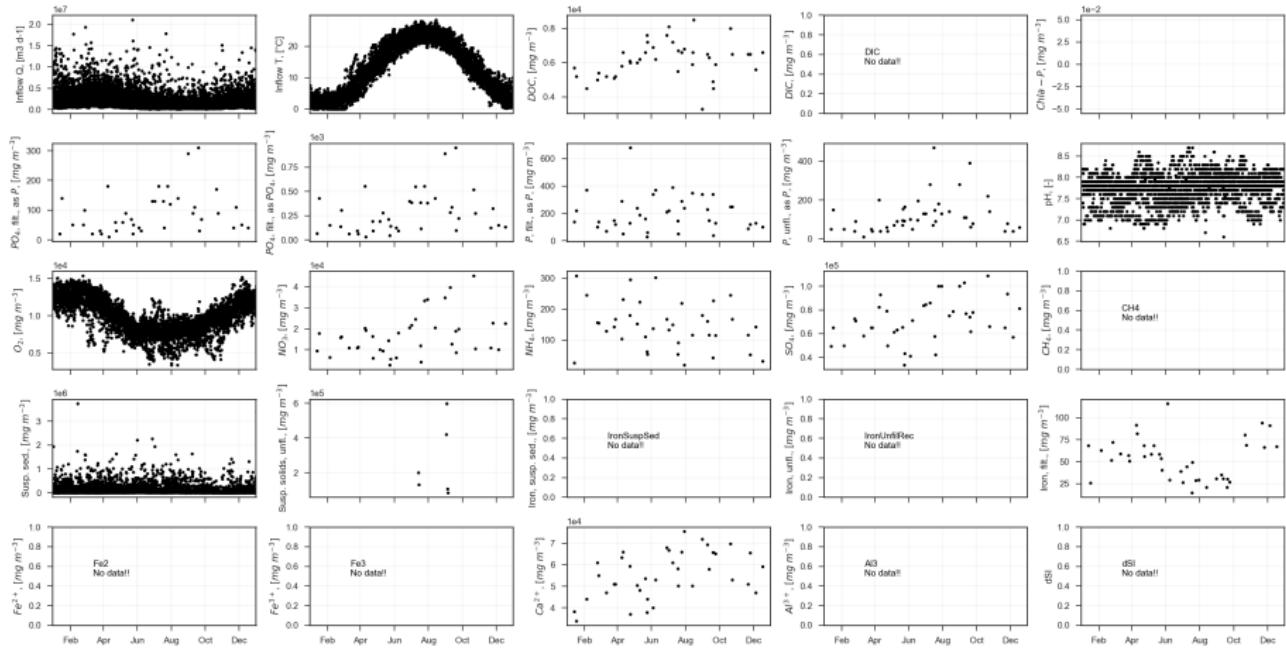
Central Basin: Conneaut Creek

All years plot



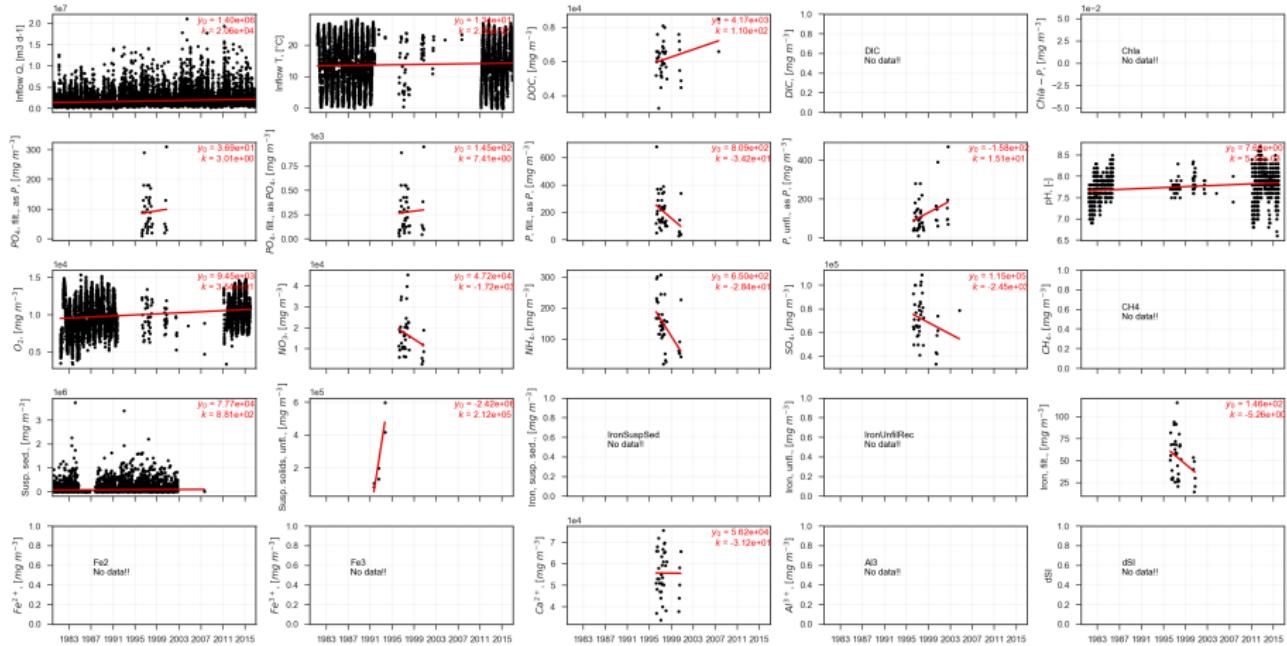
Central Basin: Cuyahoga River

One year plot



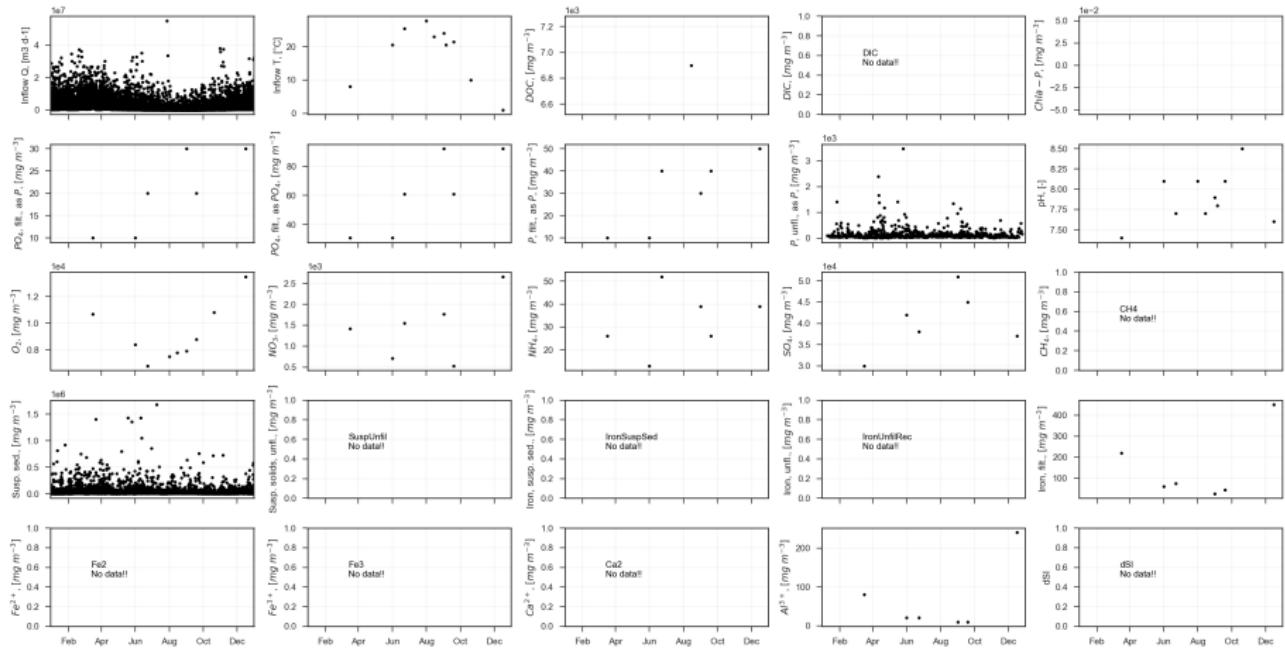
Central Basin: Cuyahoga River

All years plot



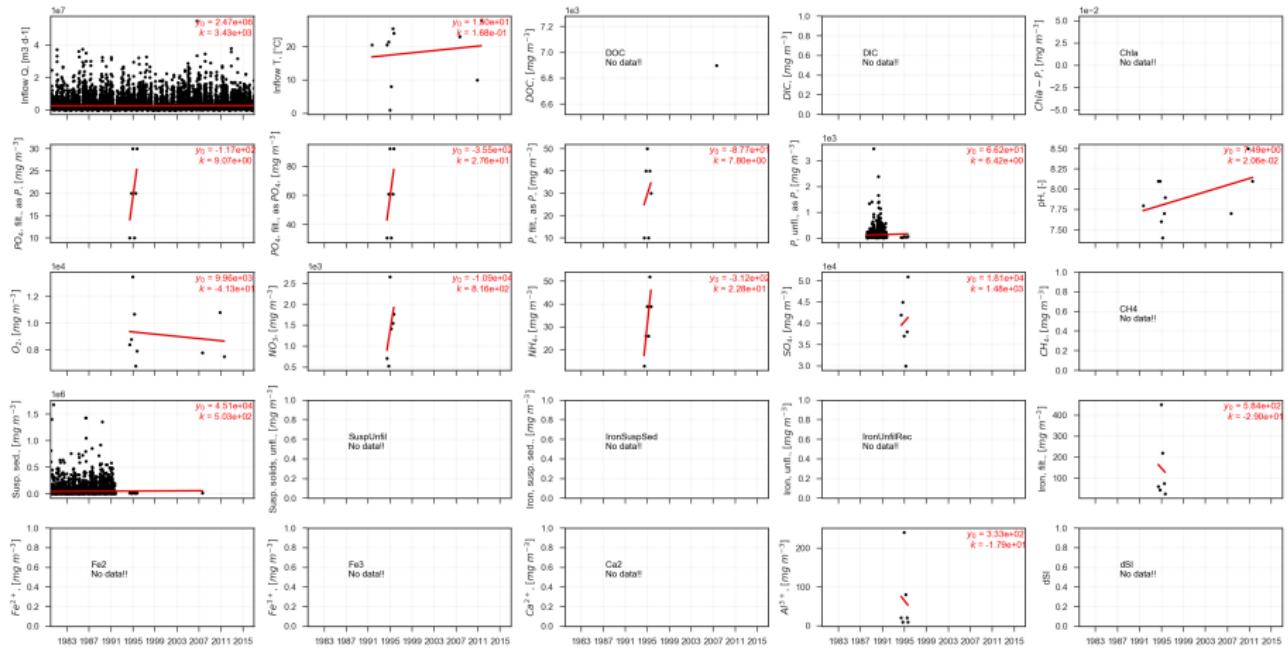
Central Basin: Grand River

One year plot



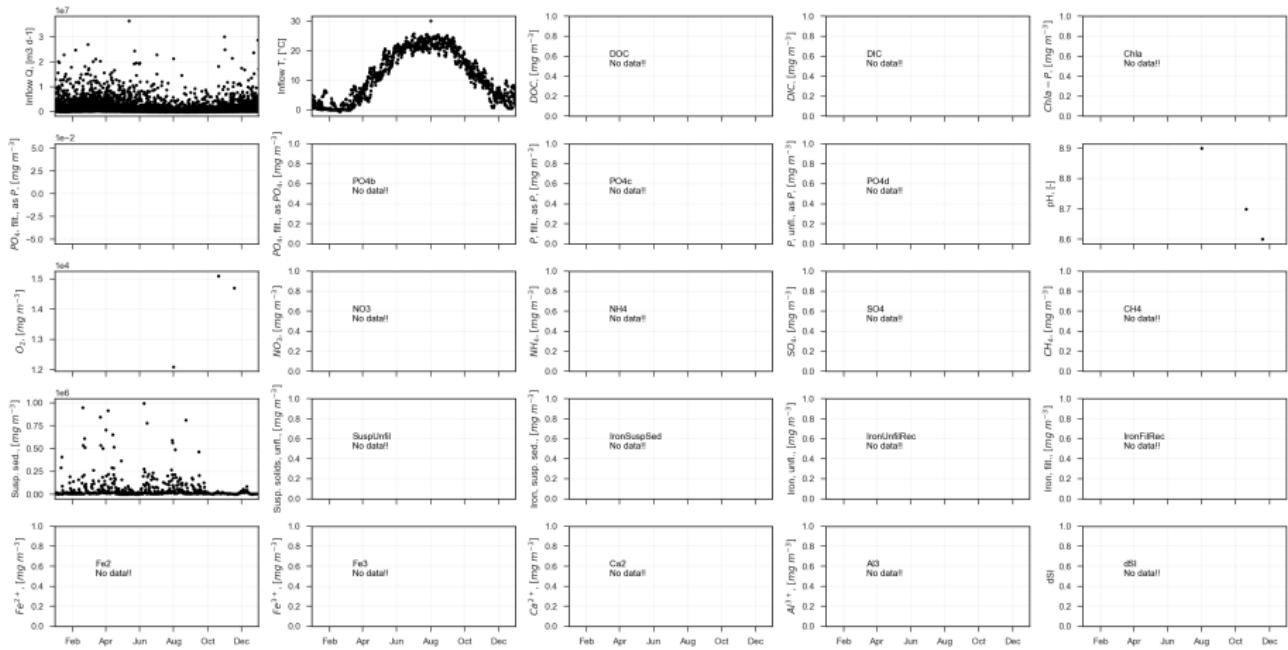
Central Basin: Grand River

All years plot



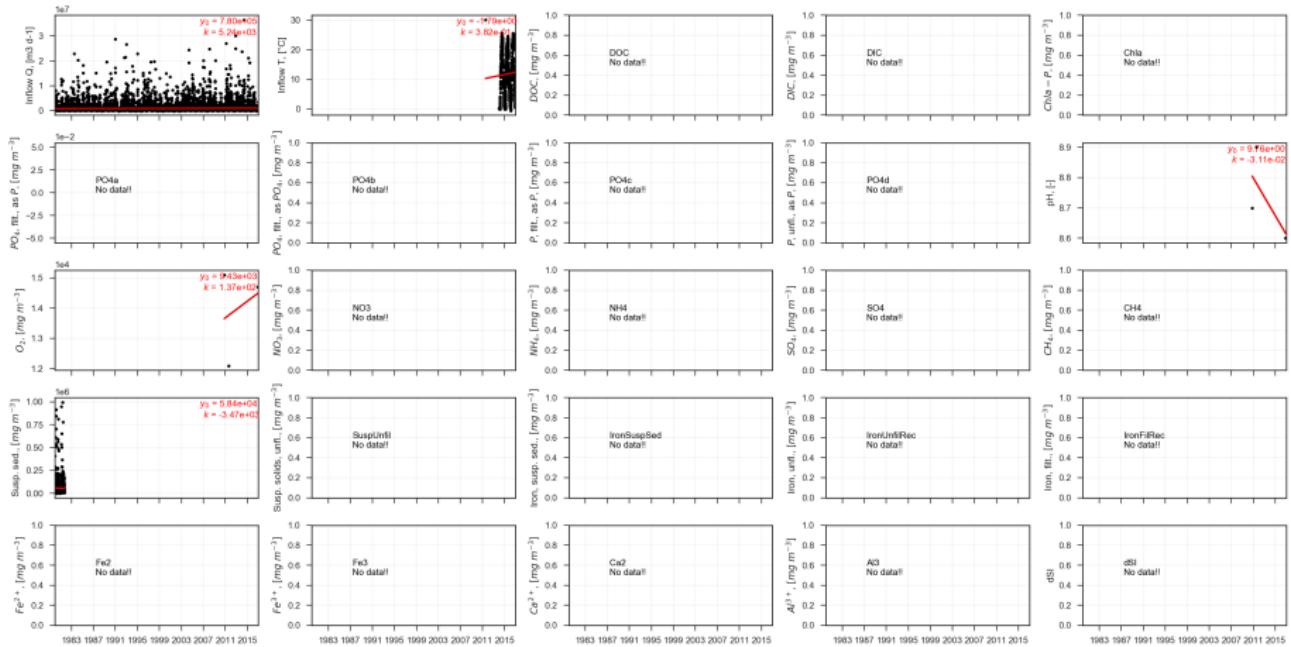
Central Basin: Rocky River

One year plot



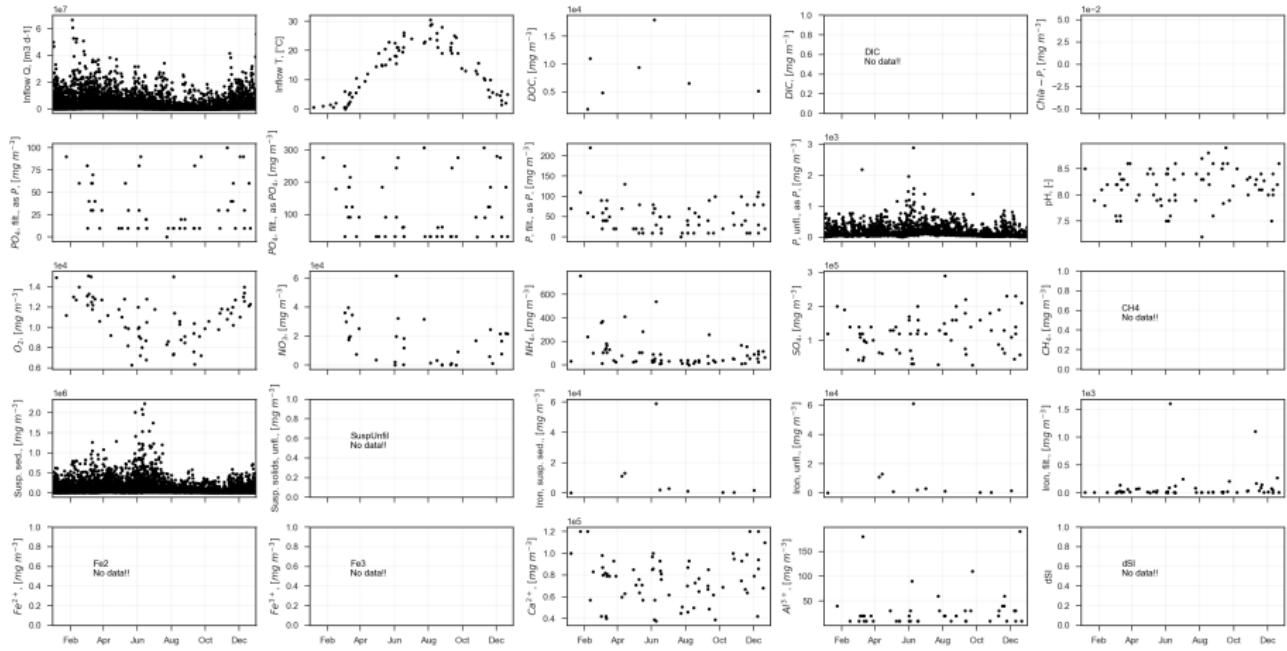
Central Basin: Rocky River

All years plot



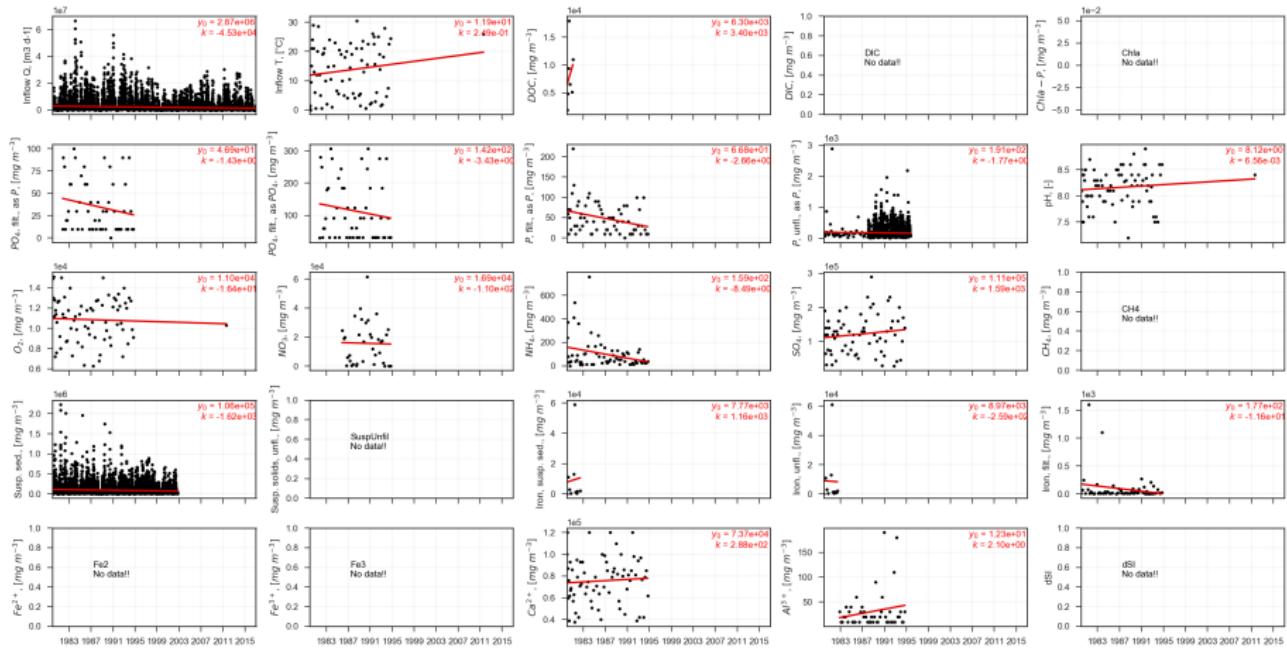
Central Basin: Sandusky River

One year plot



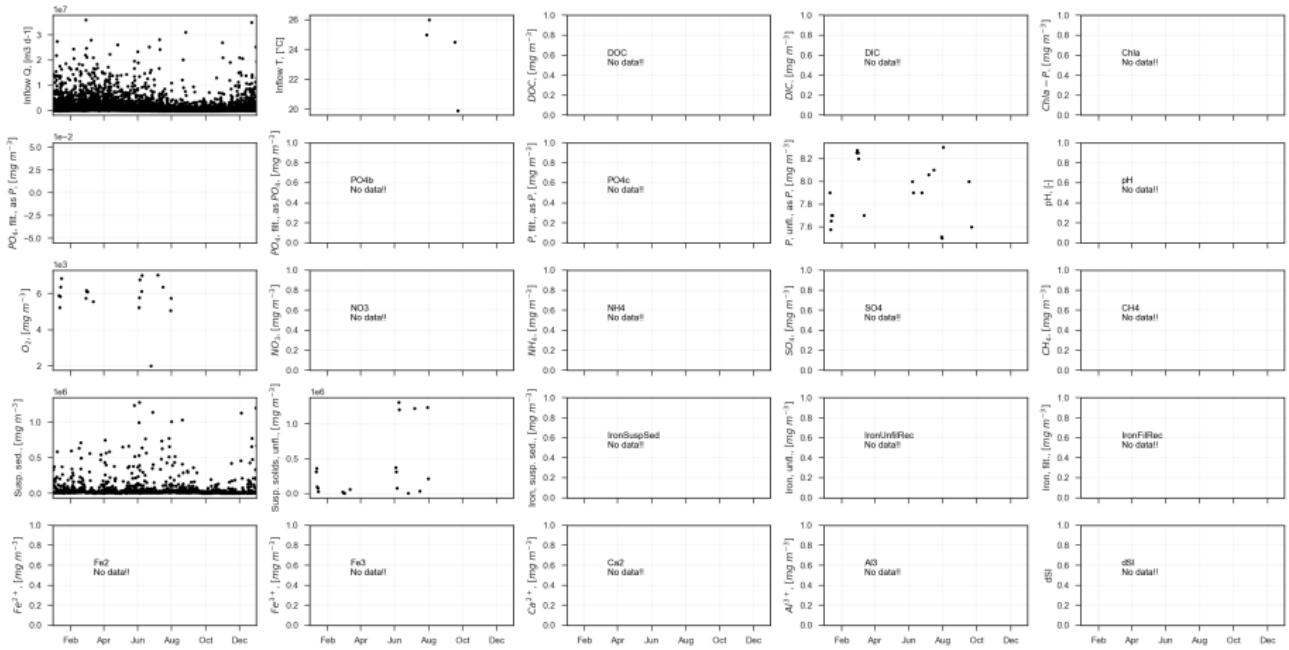
Central Basin: Sandusky River

All years plot



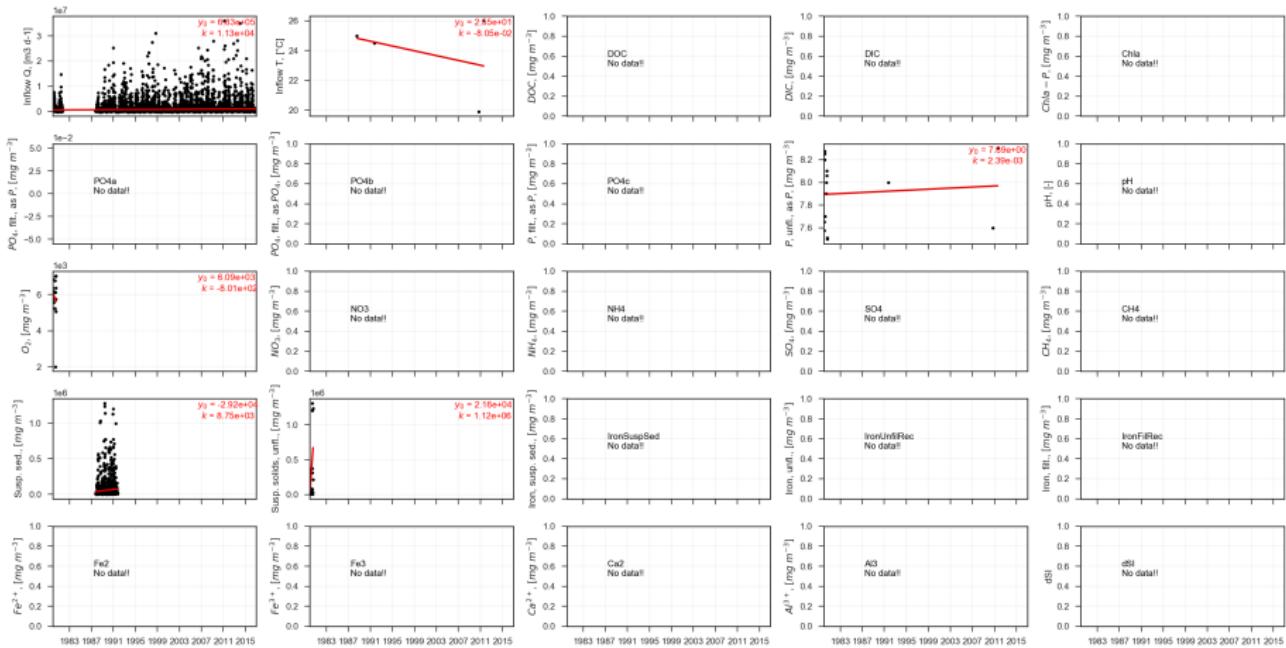
Central Basin: Southwesternhuron River

One year plot



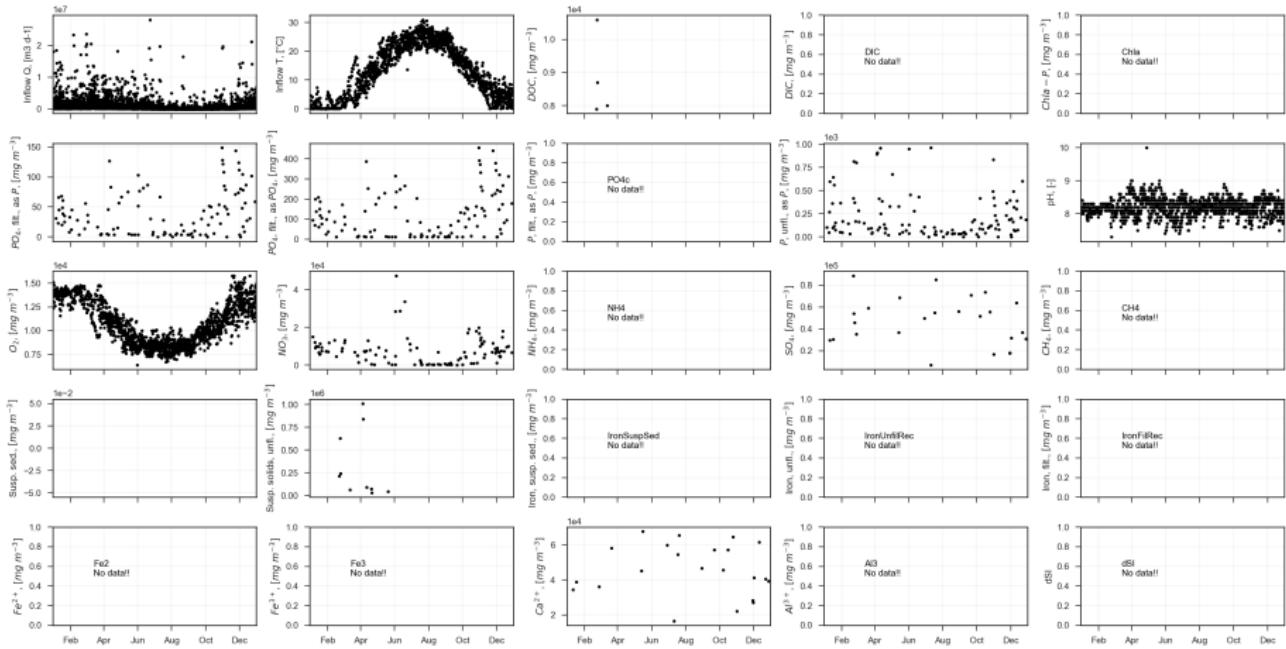
Central Basin: Southwesternhuron River

All years plot



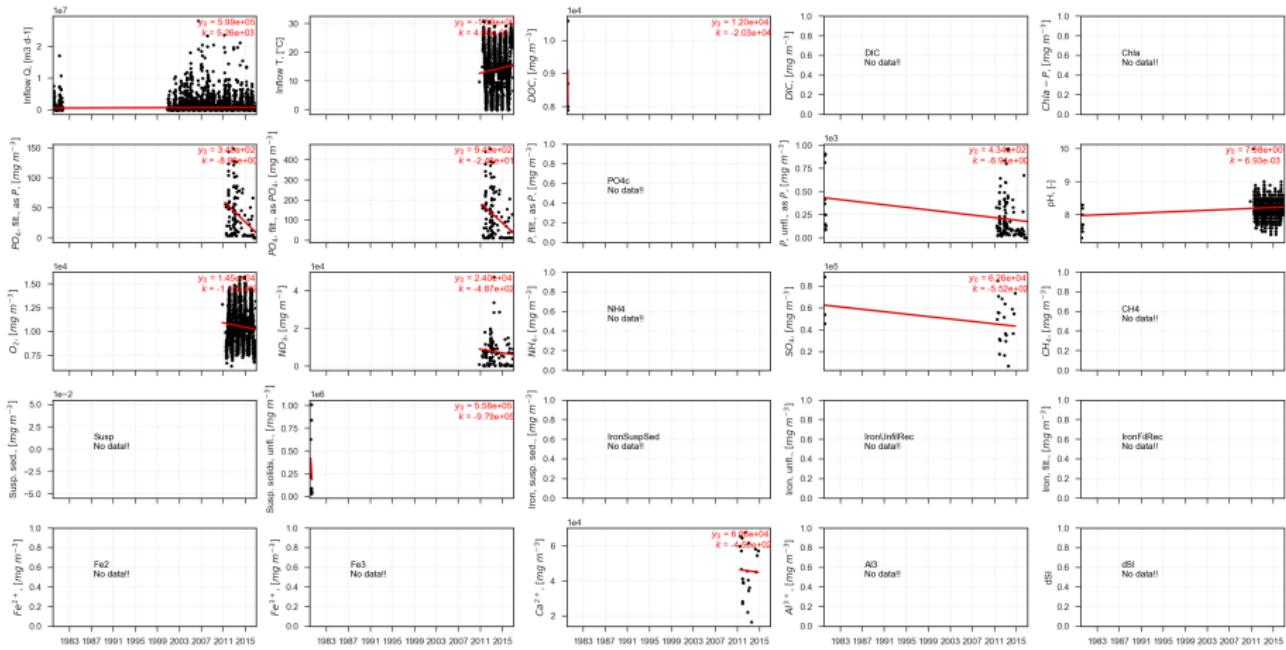
Central Basin: Vermillion river

One year plot



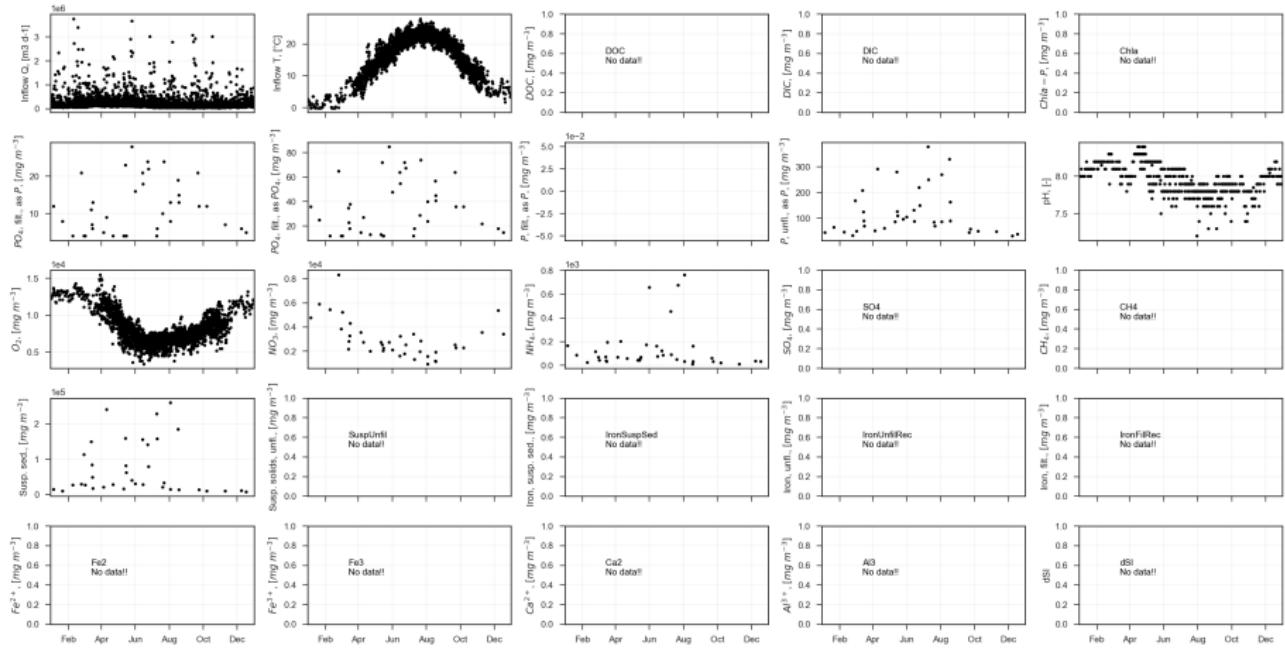
Central Basin: Vermillion river

All years plot



Western Basin: Detroit River

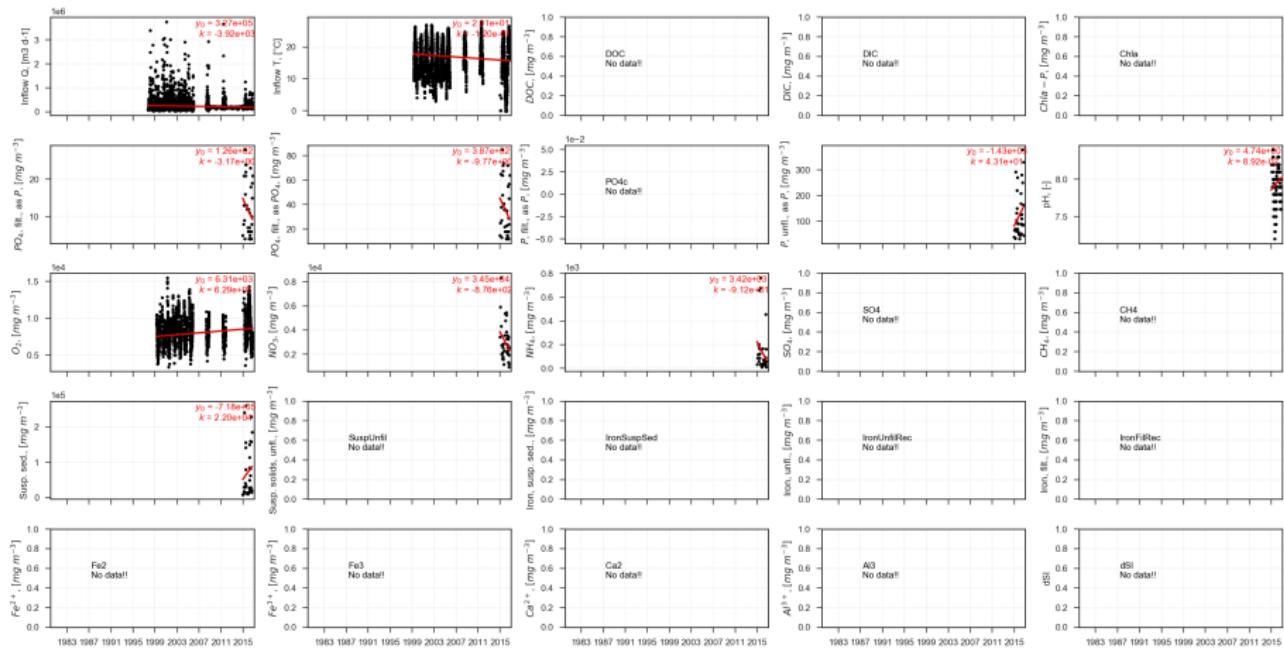
One year plot



Western basin

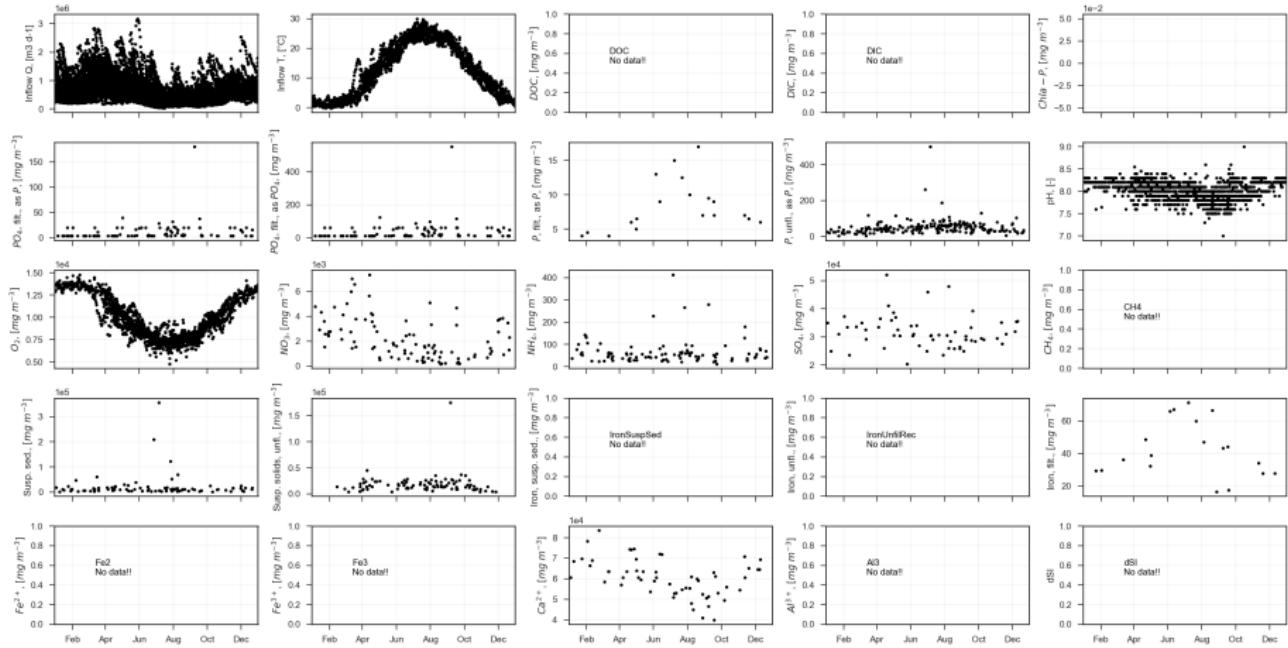
Western Basin: Detroit River

All years plot

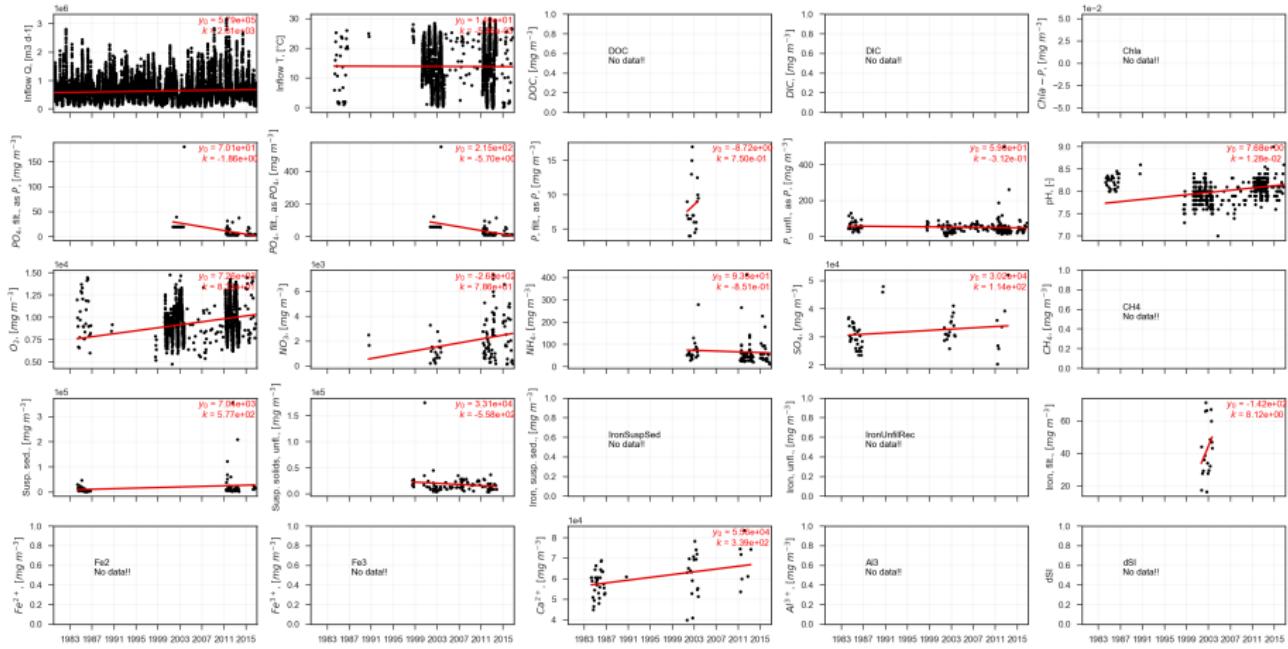


Western Basin: Huron River

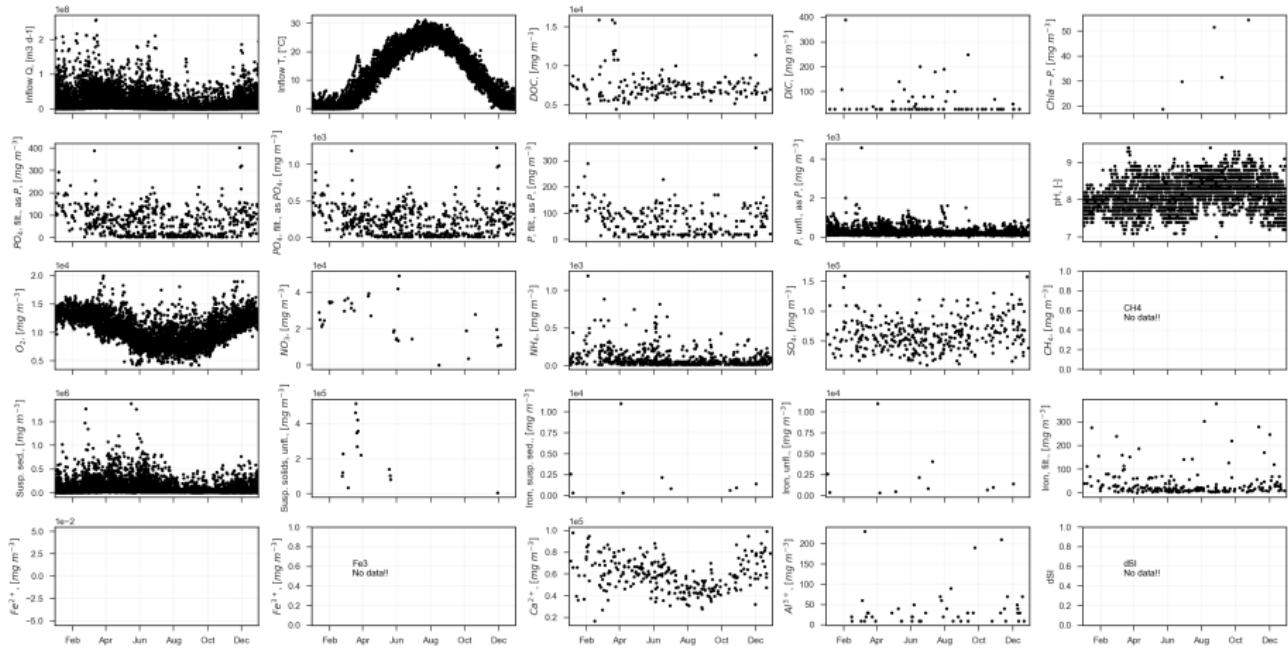
One year plot



Western Basin: Huron River All years plot

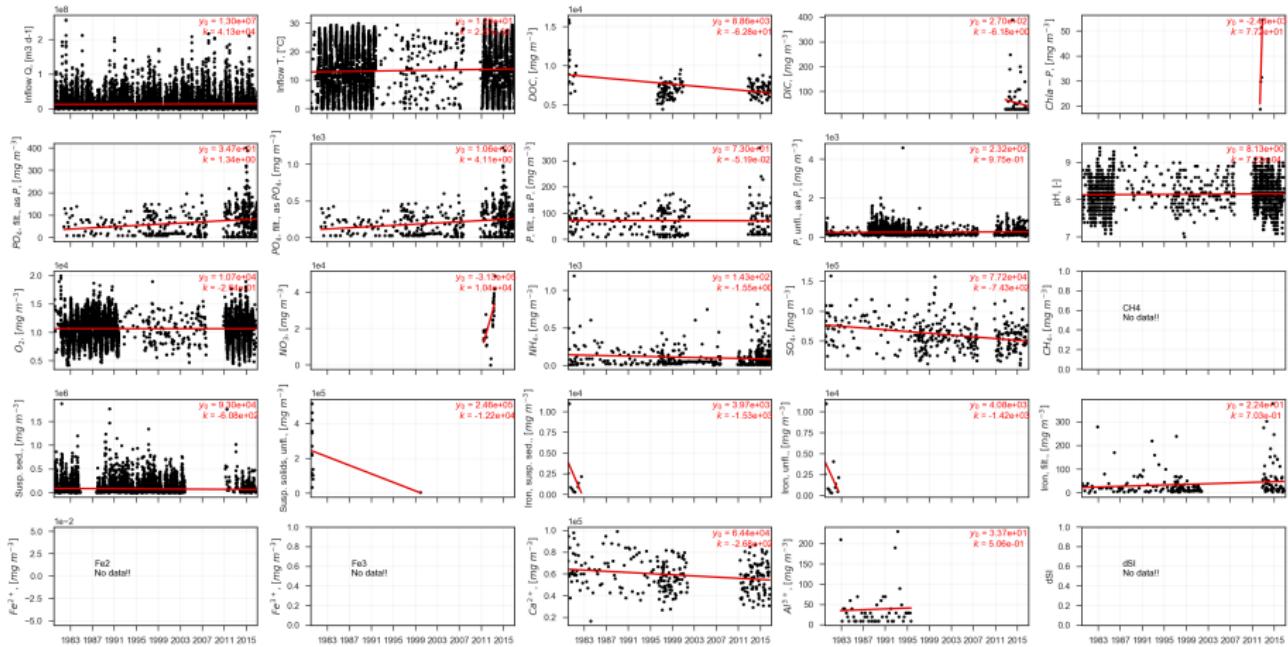


Western Basin: Maumee River One year plot



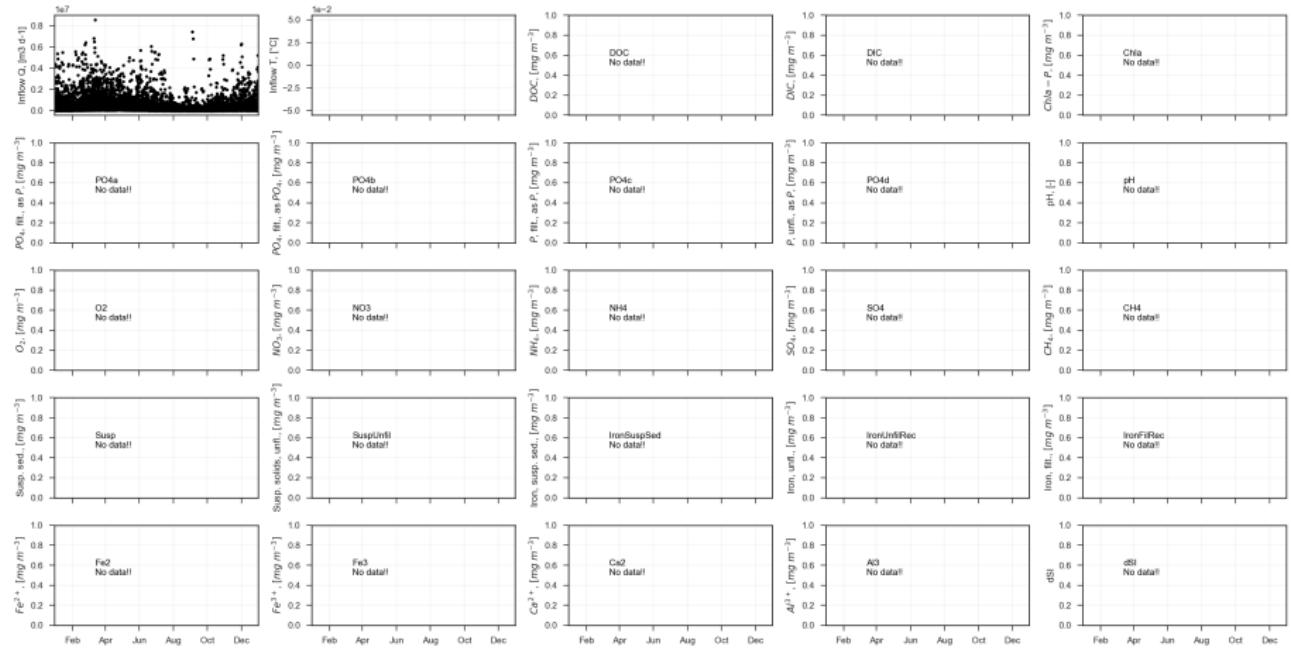
Western Basin: Maumee River

All years plot



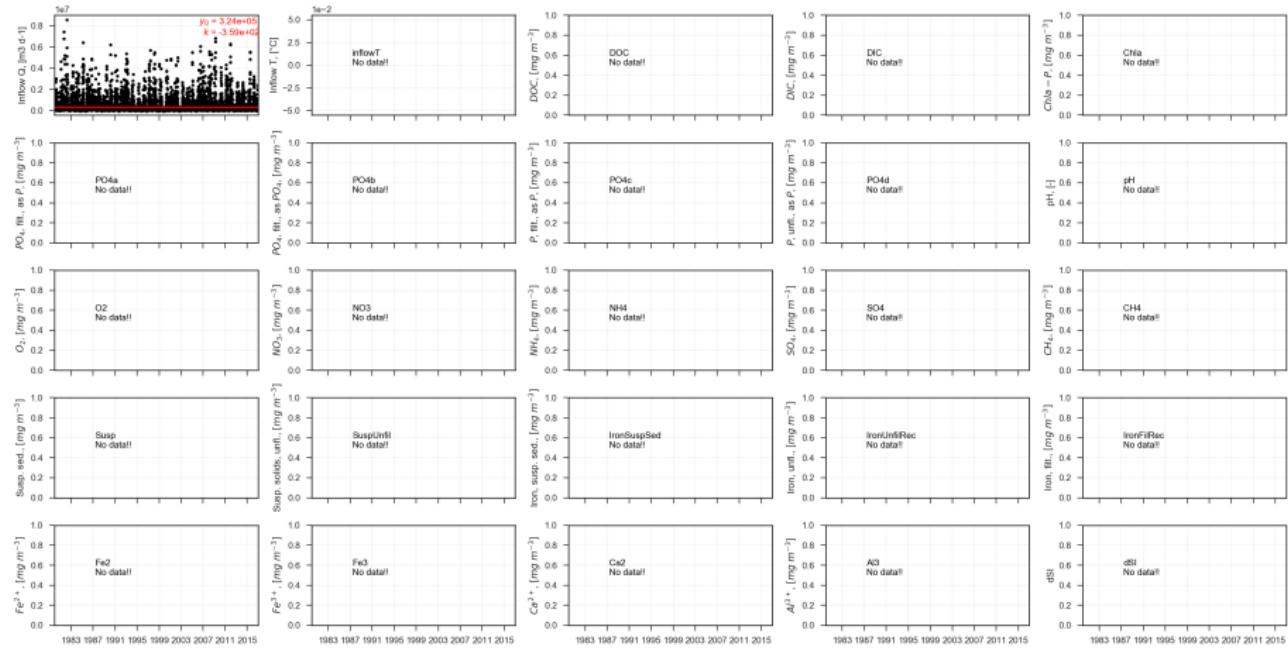
Western Basin: Ottawa River

One year plot



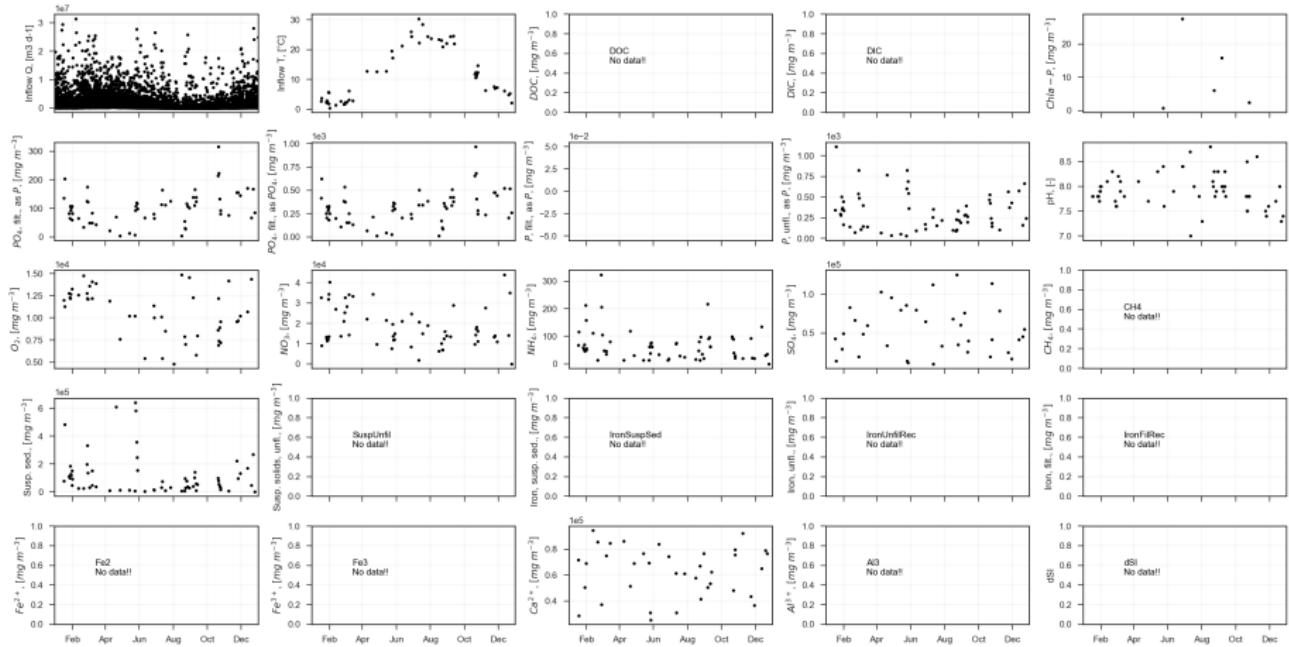
Western Basin: Ottawa River

All years plot



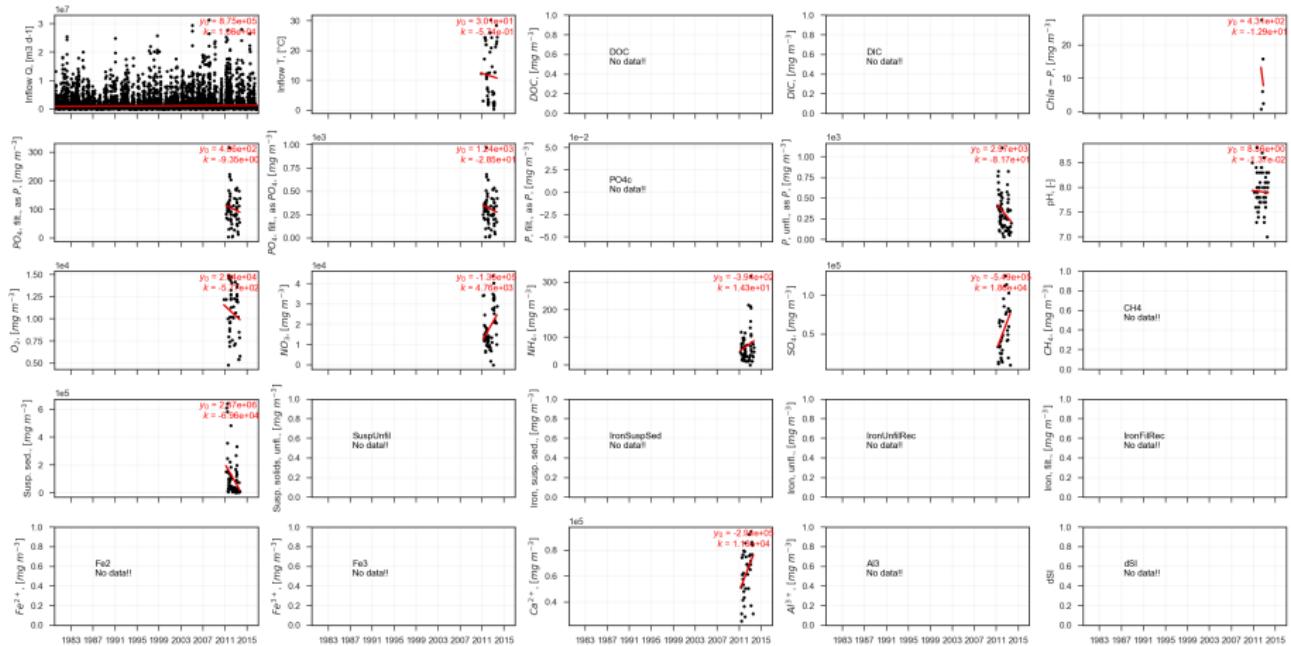
Western Basin: Portage River

One year plot



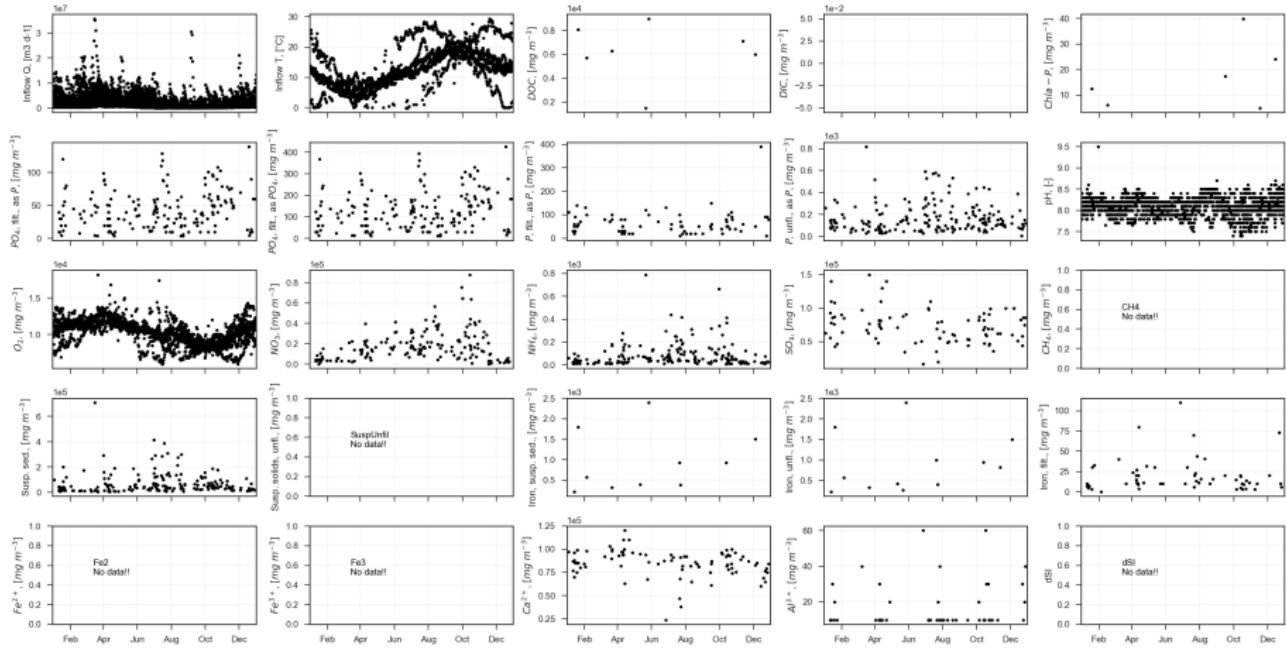
Western Basin: Portage River

All years plot



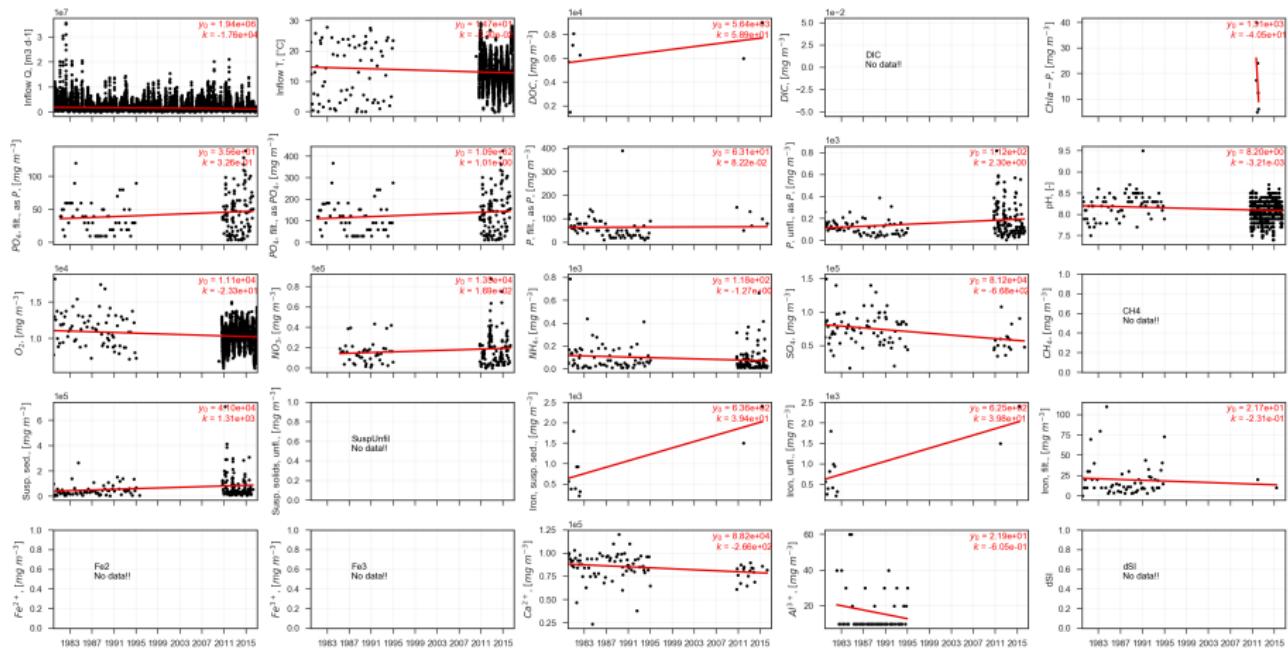
Western Basin: Riverraisin river

One year plot



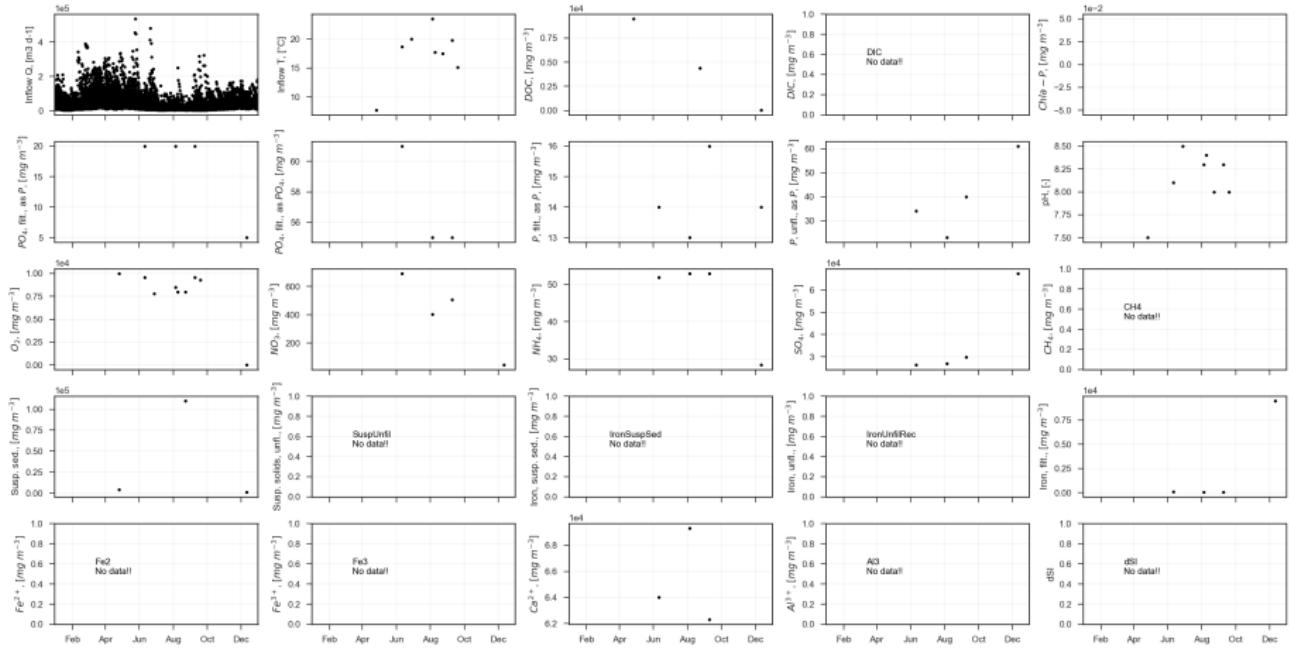
Western Basin: Riverraisin river

All years plot



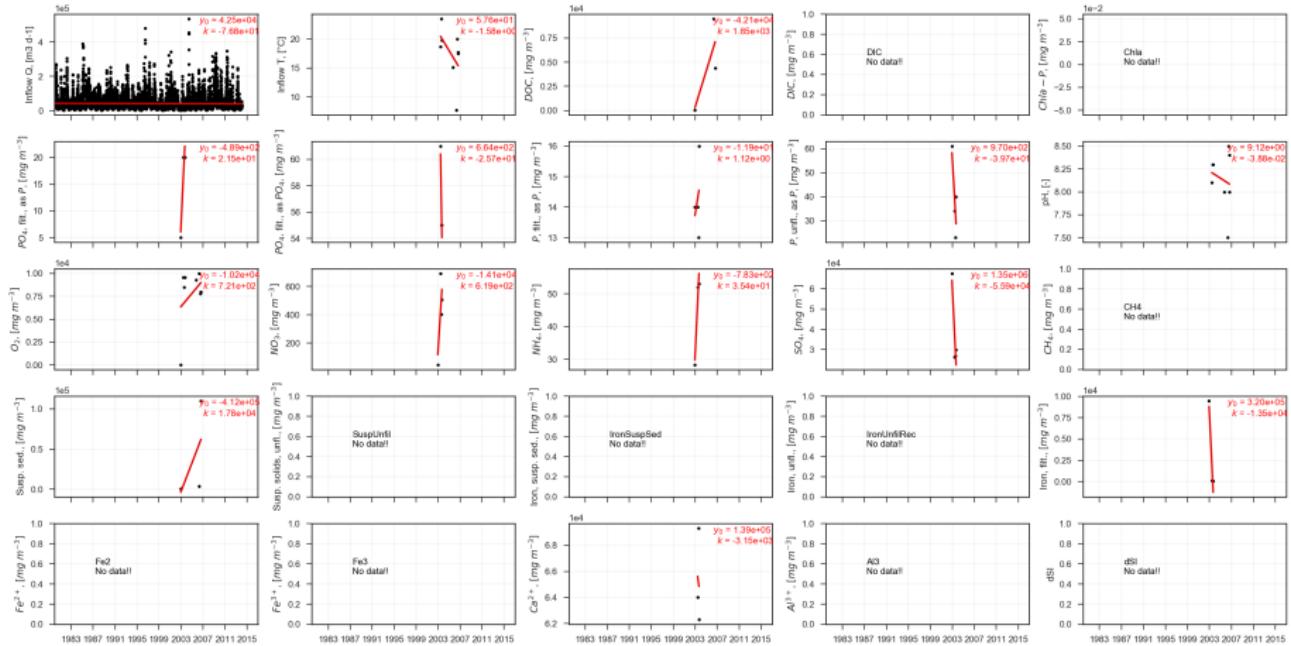
Western Basin: Stony Creek

One year plot



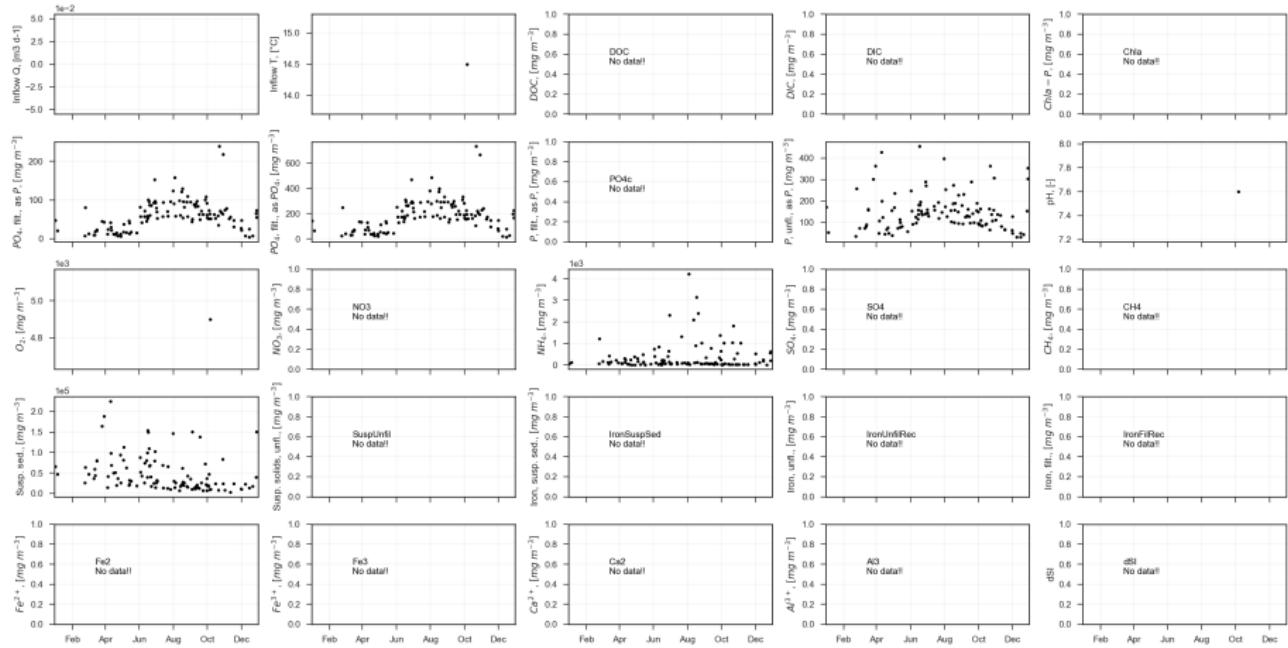
Western Basin: Stony Creek

All years plot



Western Basin: Swan Creek

One year plot



Western Basin: Swan Creek

All years plot

