

# Inputs for MyLake-Sediment Model

## Lake Erie

I. Markelov, B. McNeil

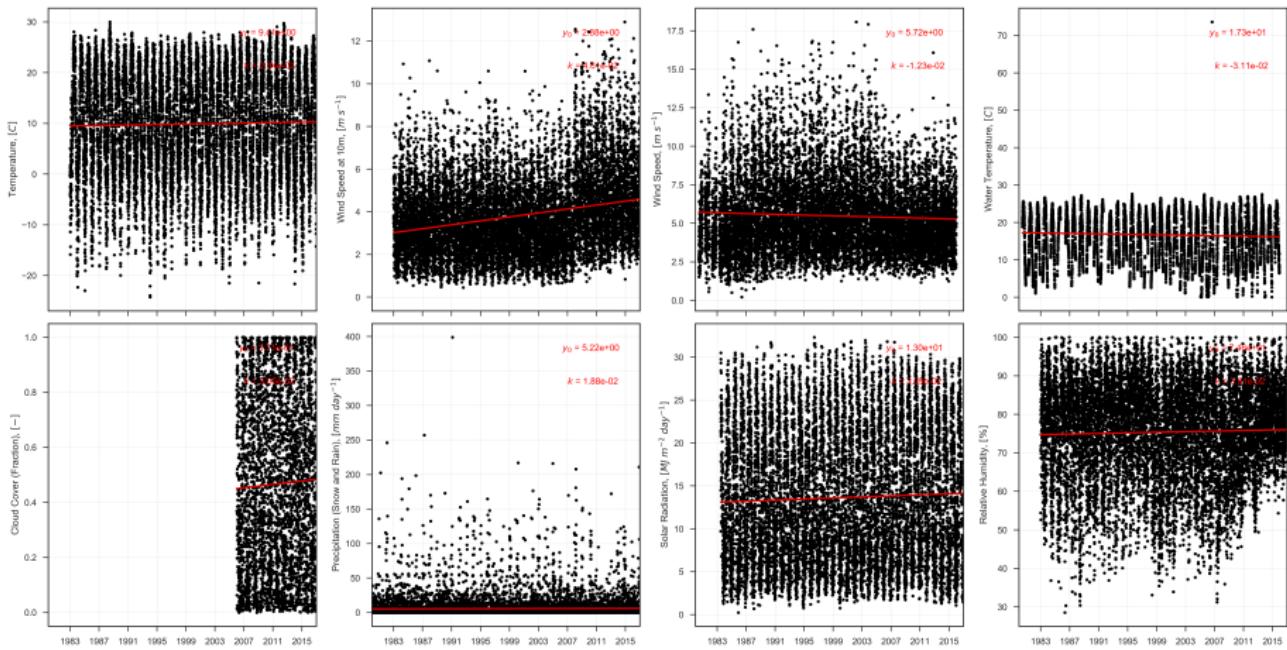
Ecohydrology

March 7, 2017

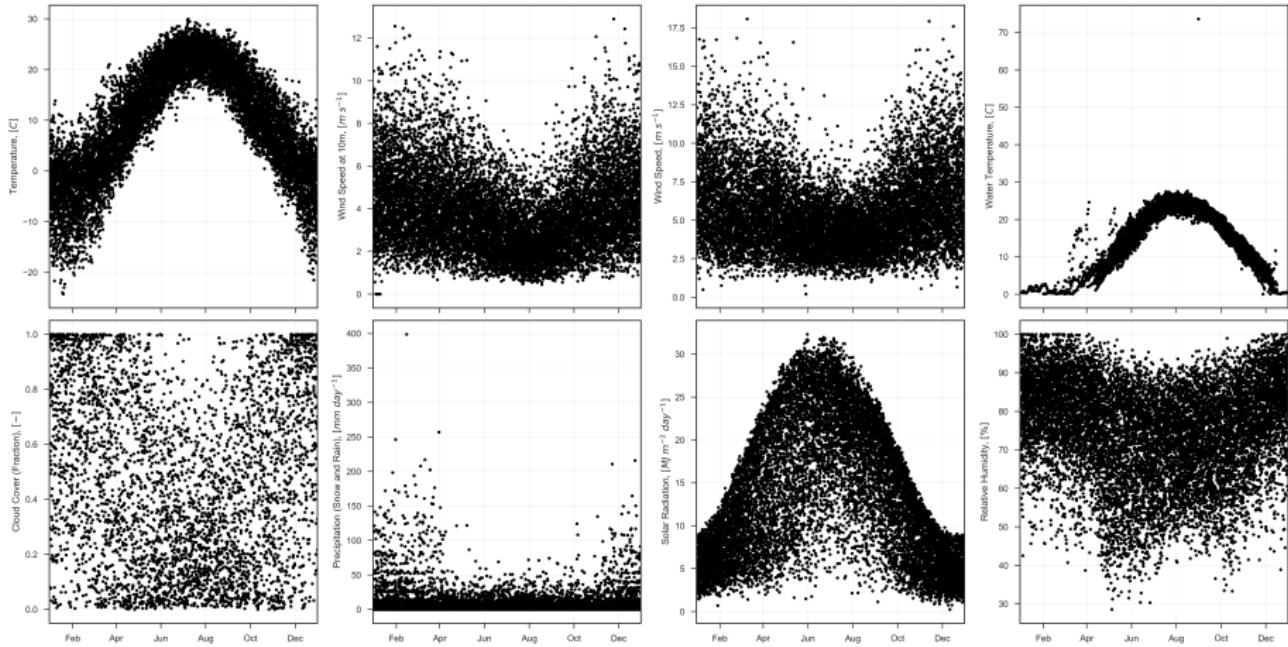
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  - Eastern Basin
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    - Central Basin
    - Western basin

# Weather

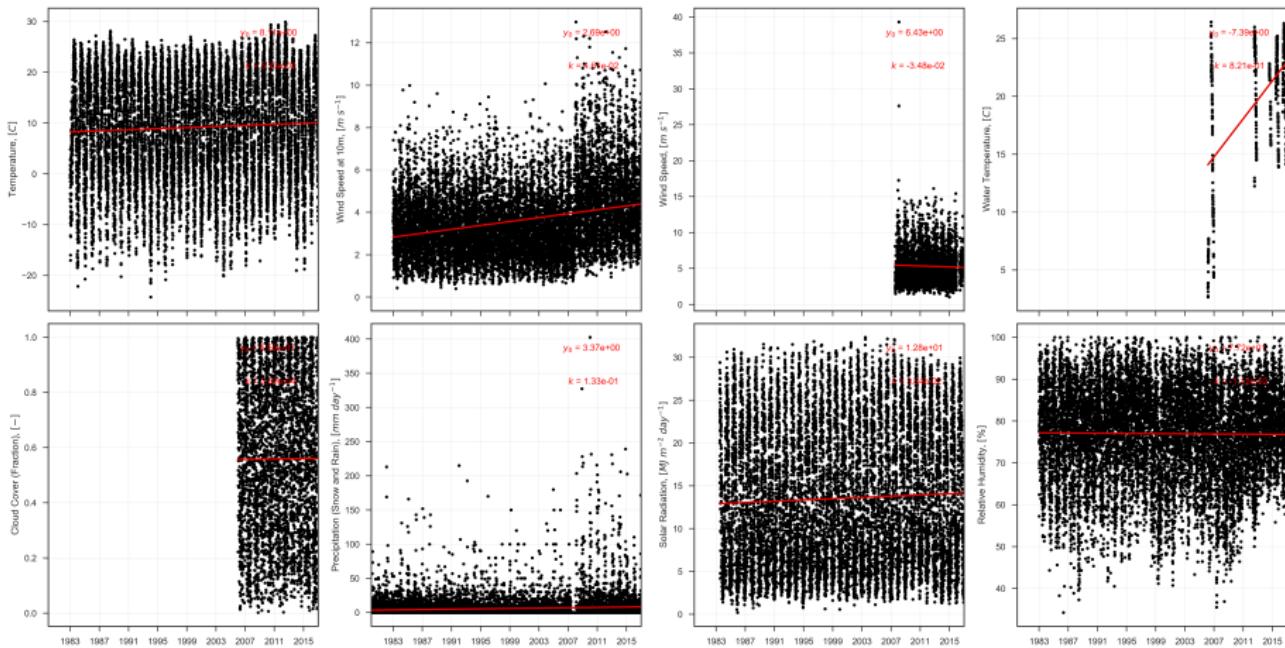
# Western Basin: All years



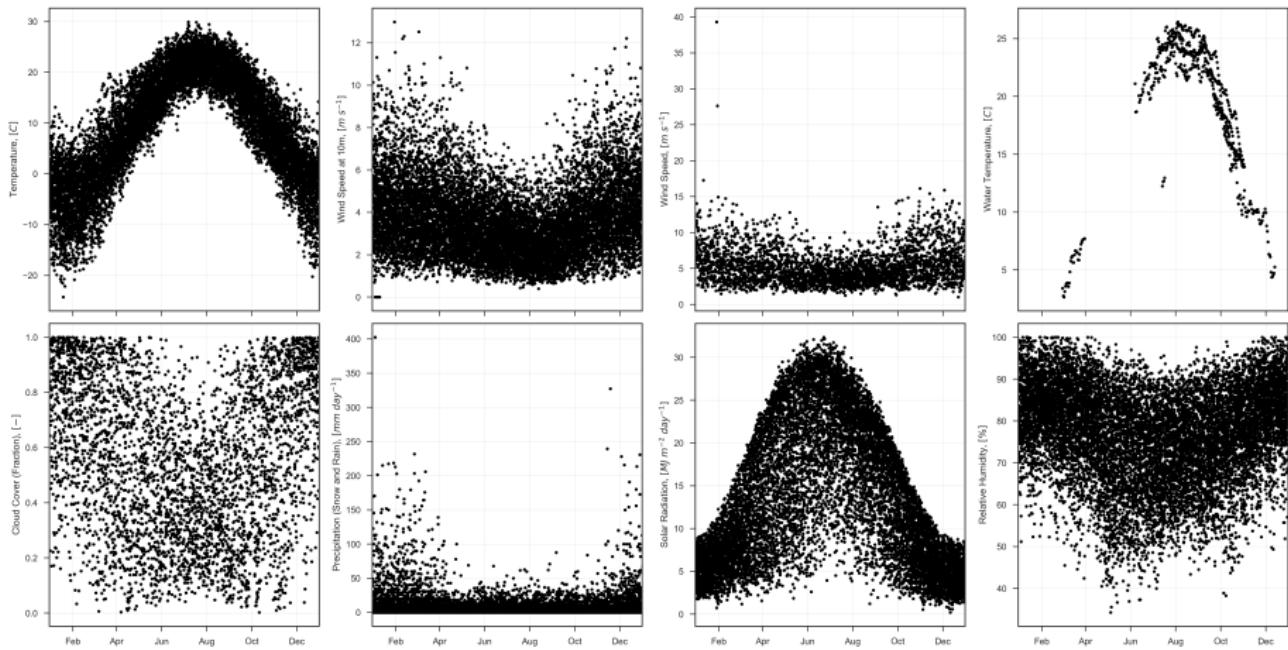
# Western Basin: 1 year



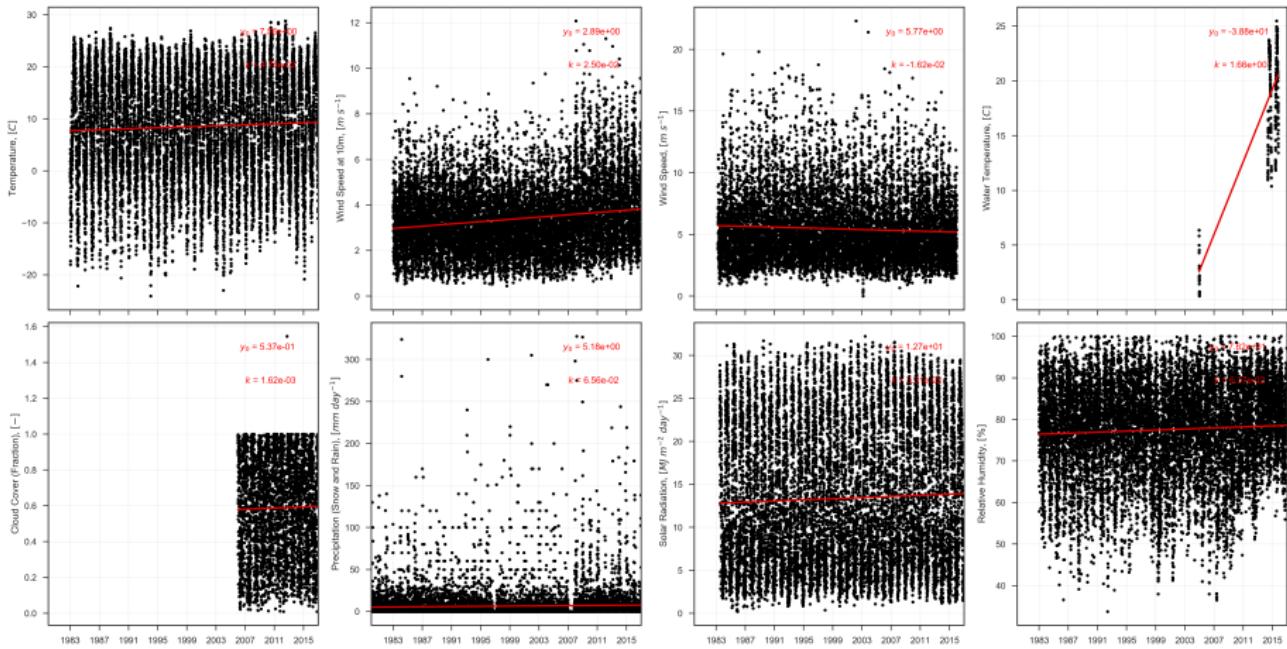
# Central Basin: All years



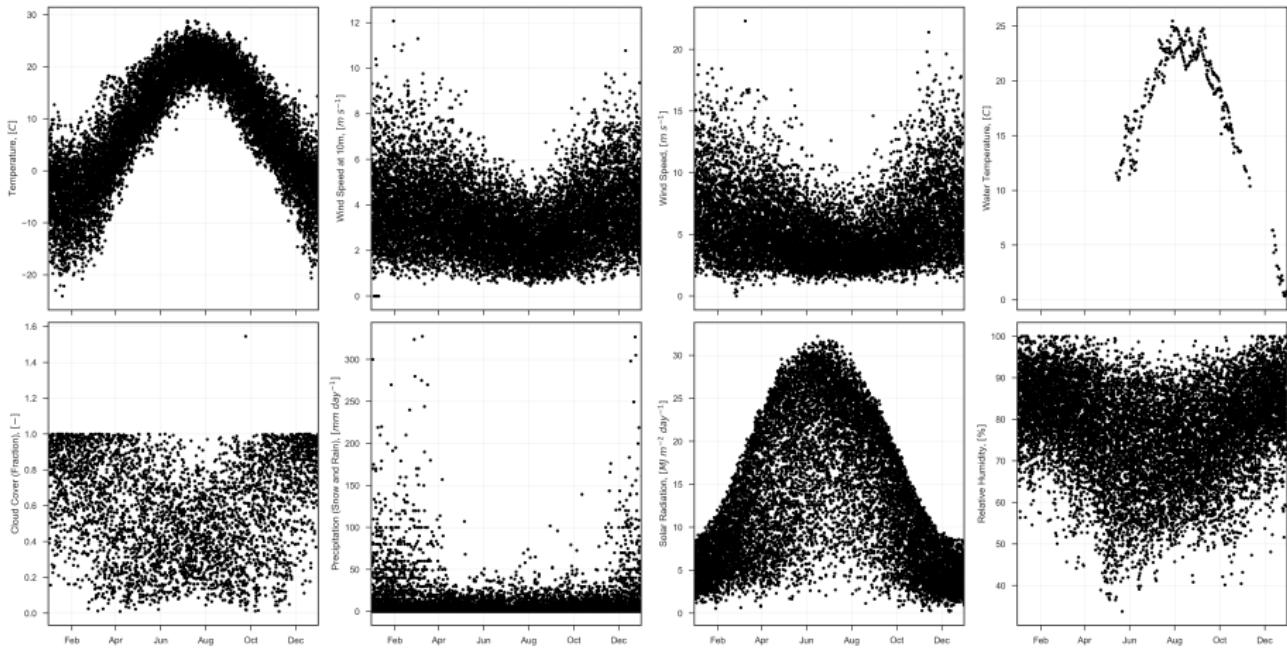
# Central Basin: 1 year



# Eastern Basin: All years

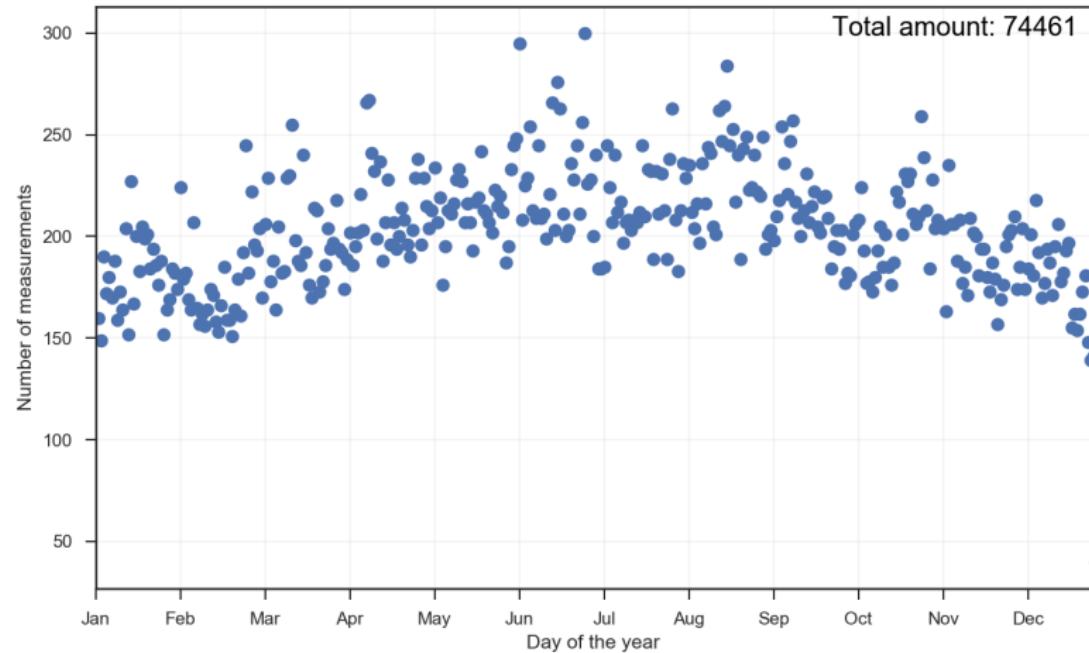


# Eastern Basin: 1 year

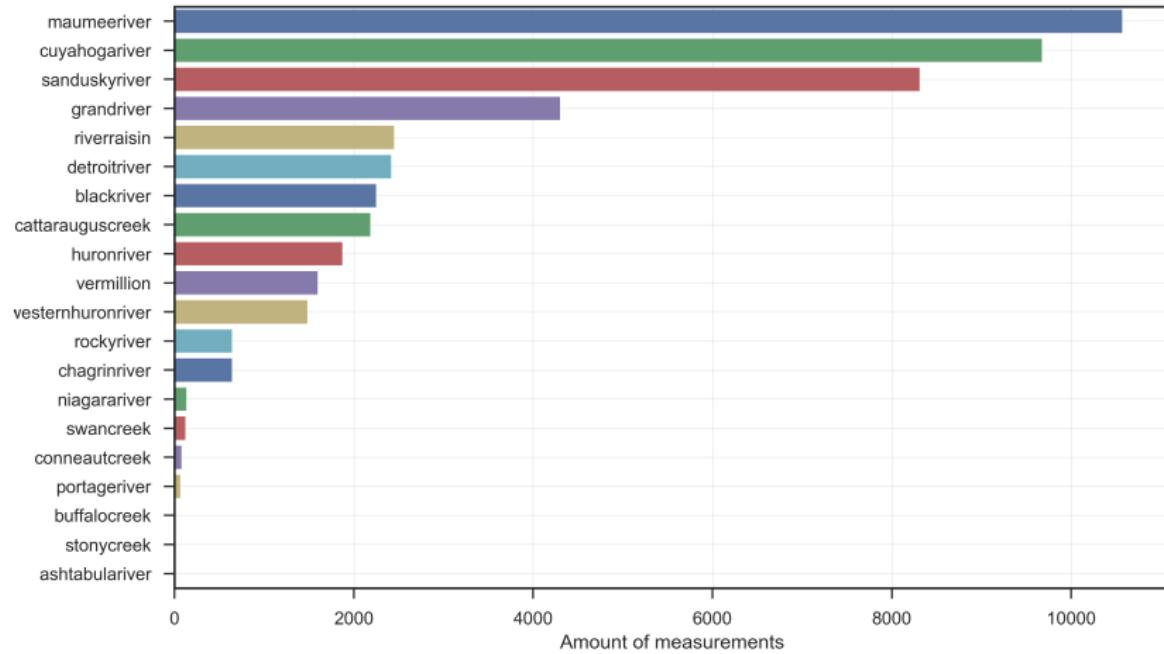


# River Inputs

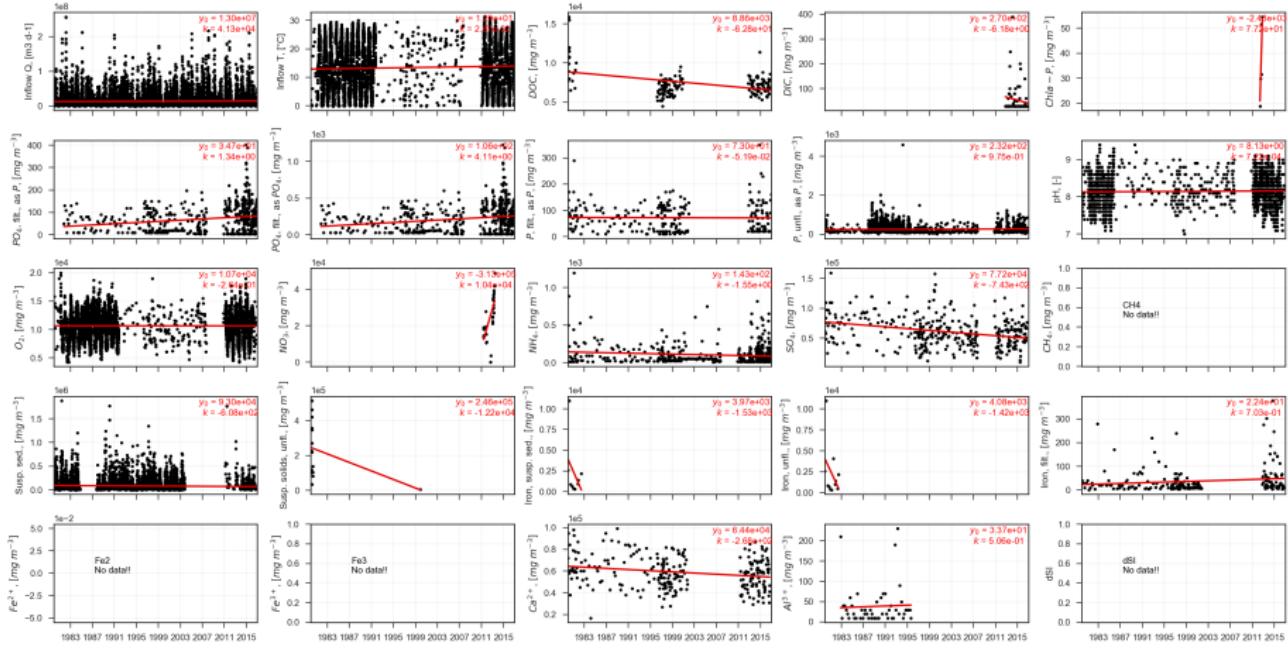
# Density of data (does not include Q and T)



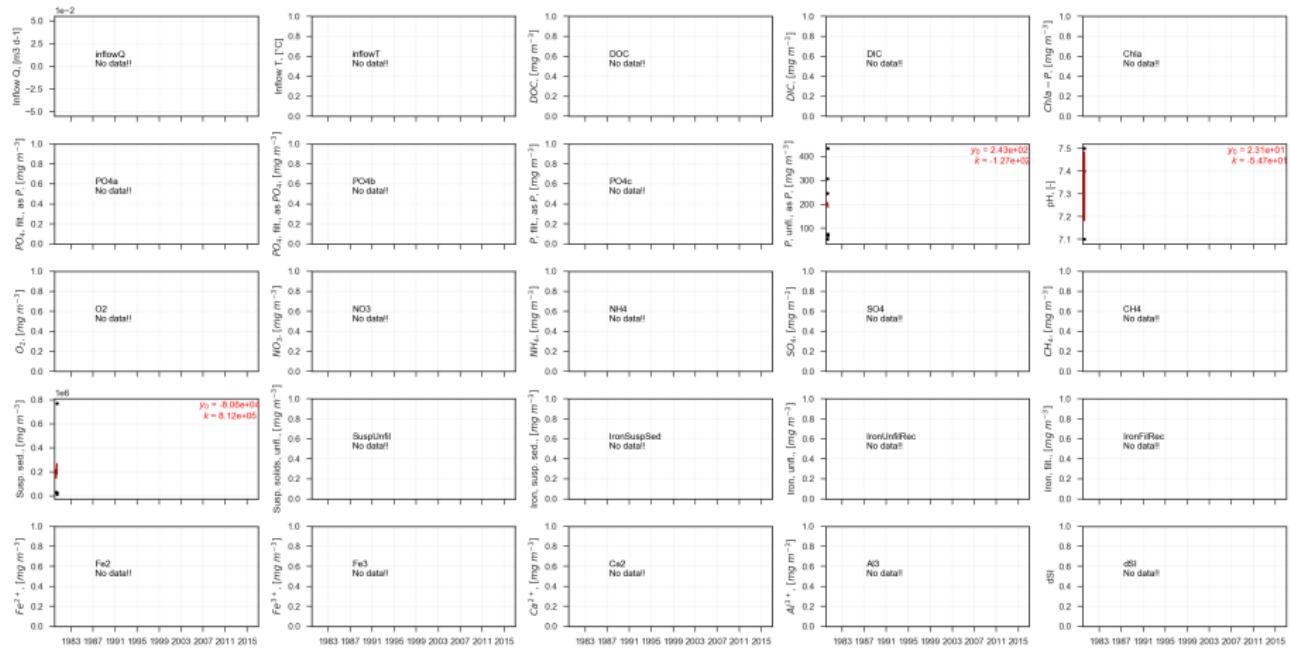
# Completeness of data (does not include Q and T)



# Example: Maumee River

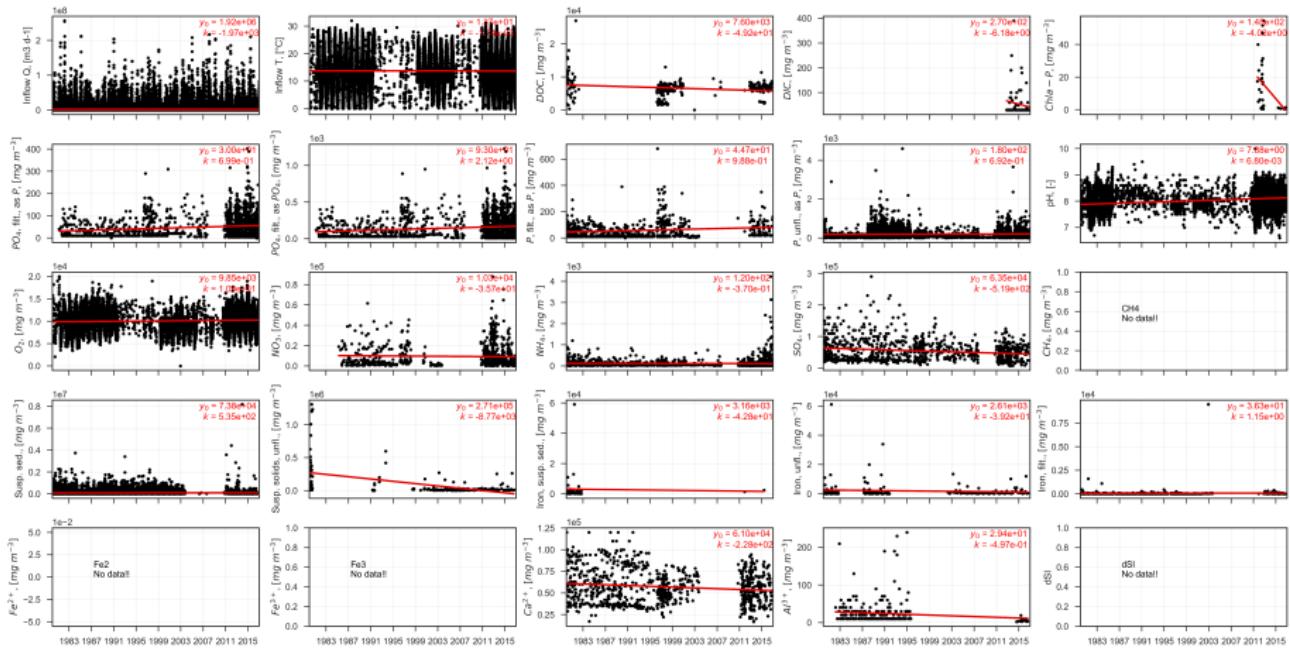


# Example: Ashtabula River

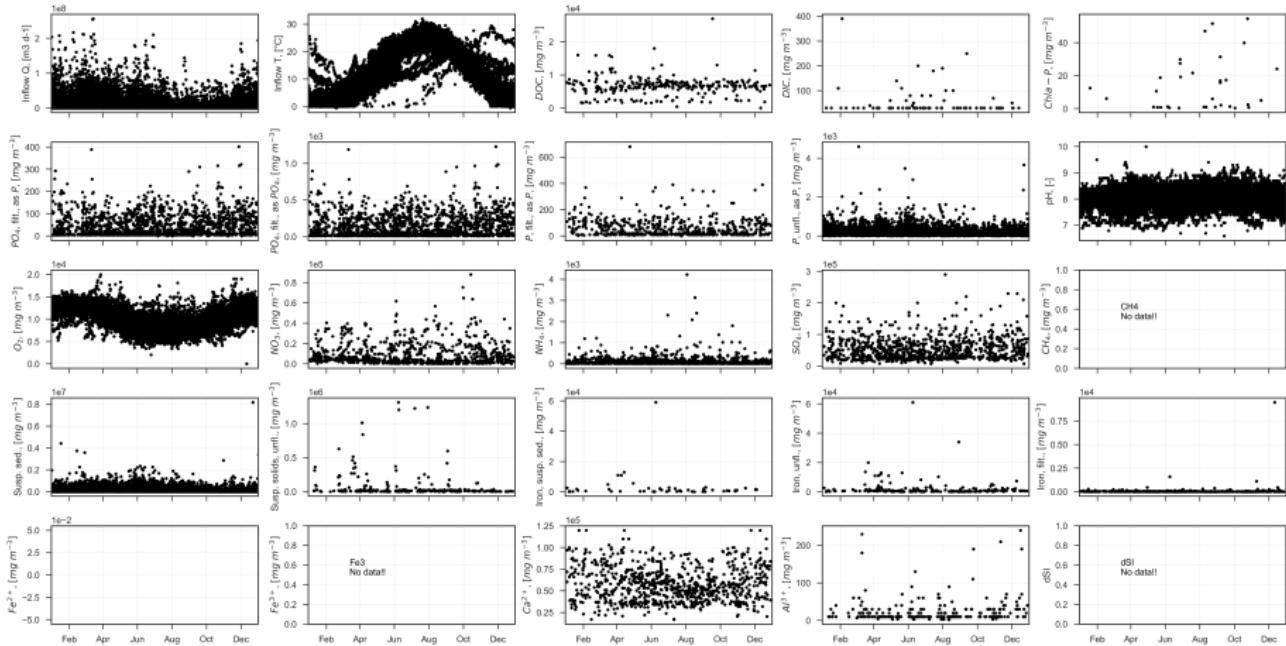


# River Input Combined

# River Input Combined: All rivers to see the trends



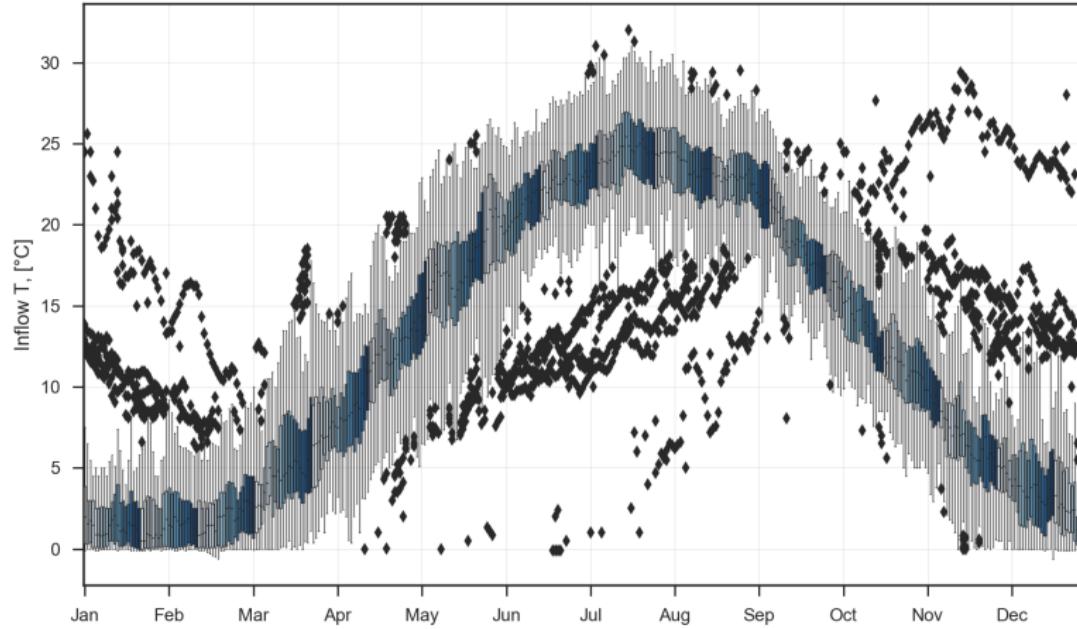
# River Input Combined: All rivers, all years to see the pattern



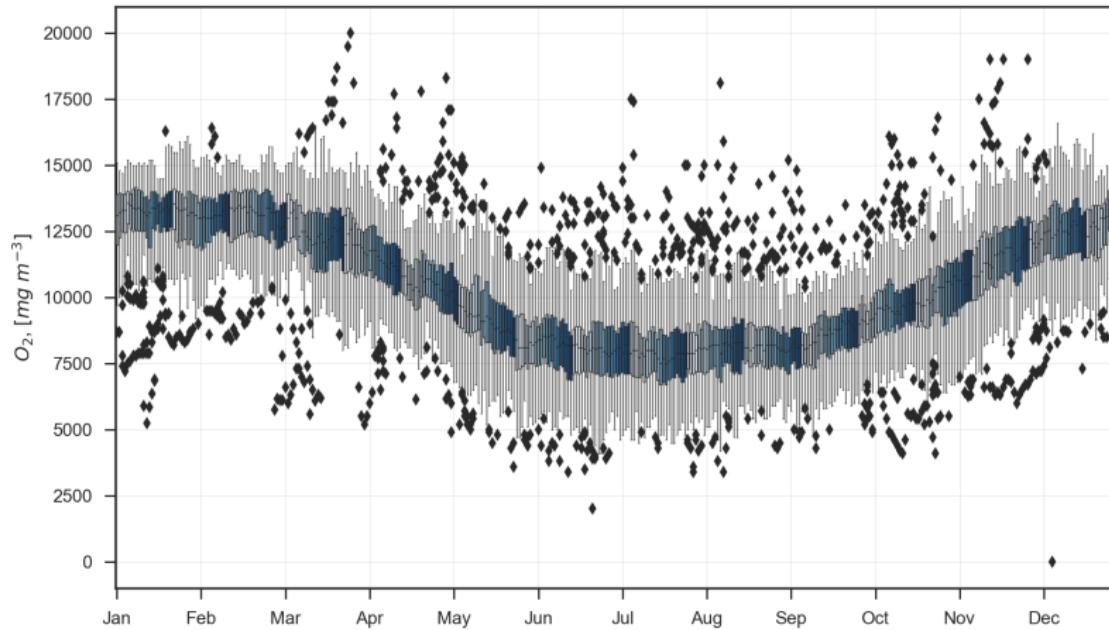
# Supplemental information

# Boxplots of river input

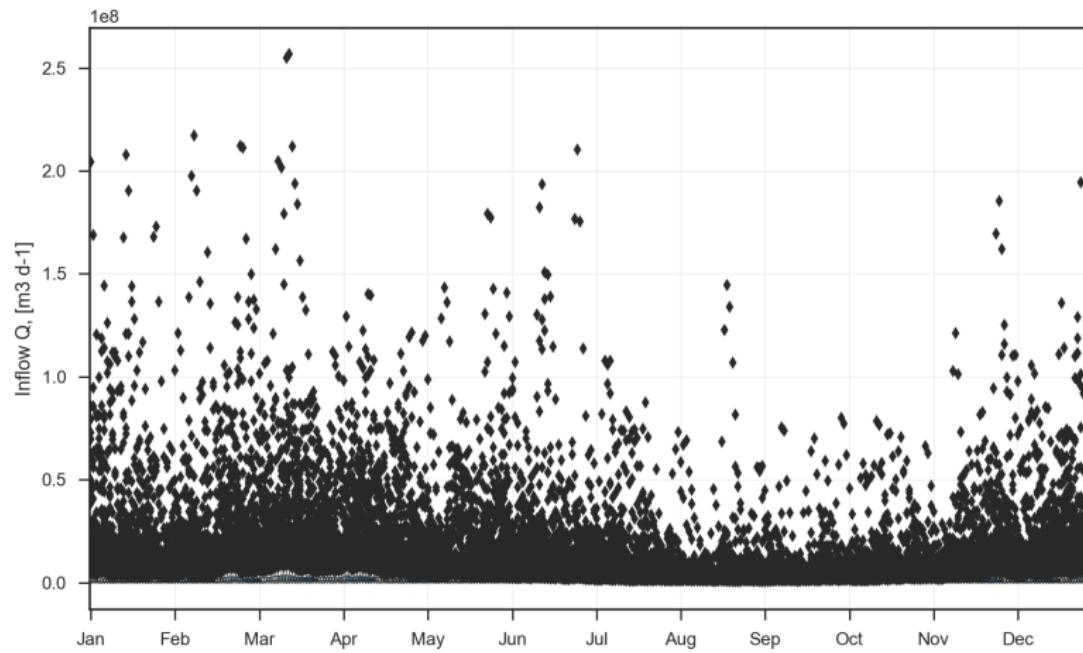
# inflow T



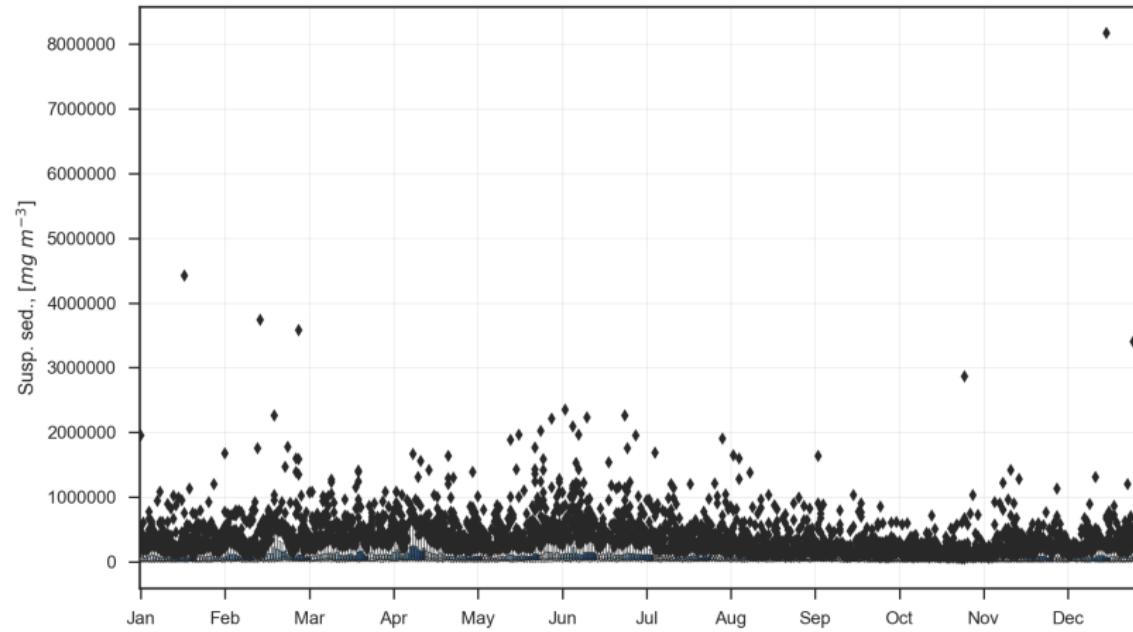
# O<sub>2</sub>



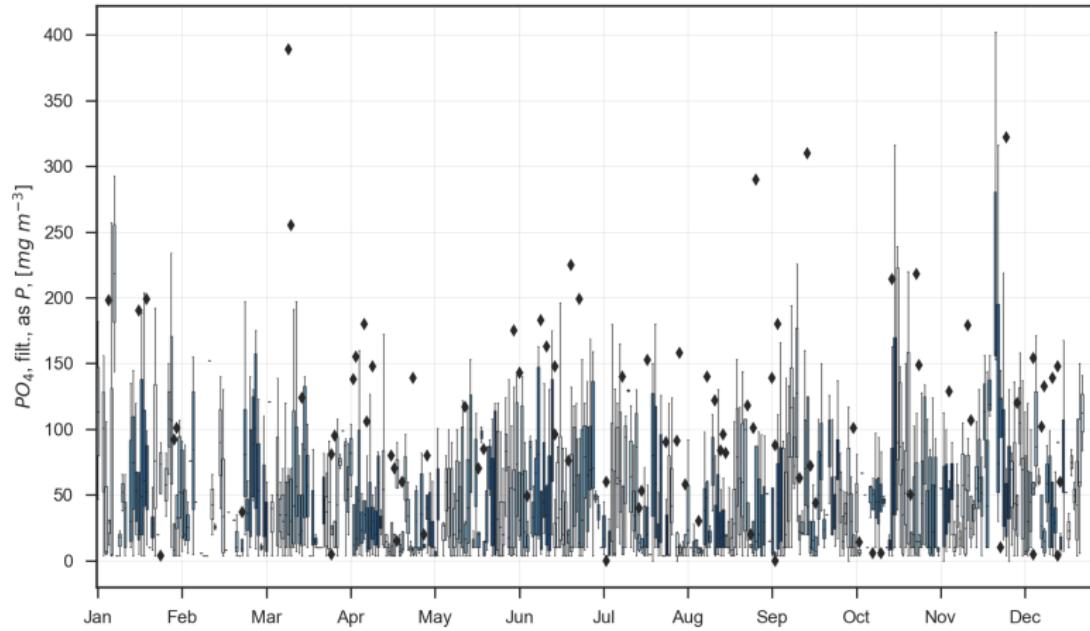
# inflowQ



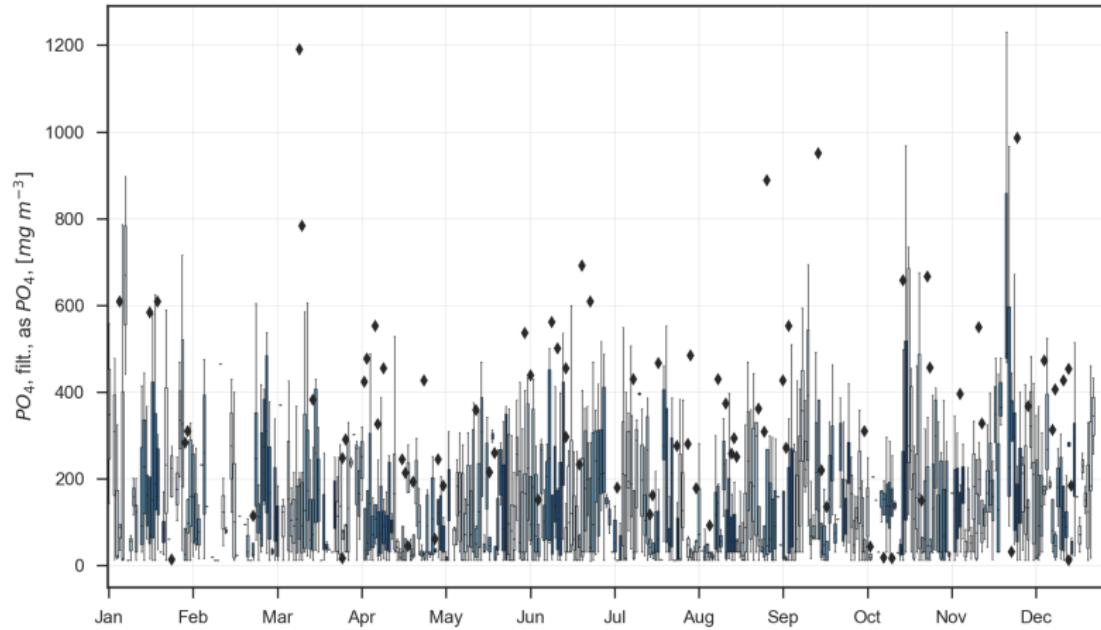
# Susp



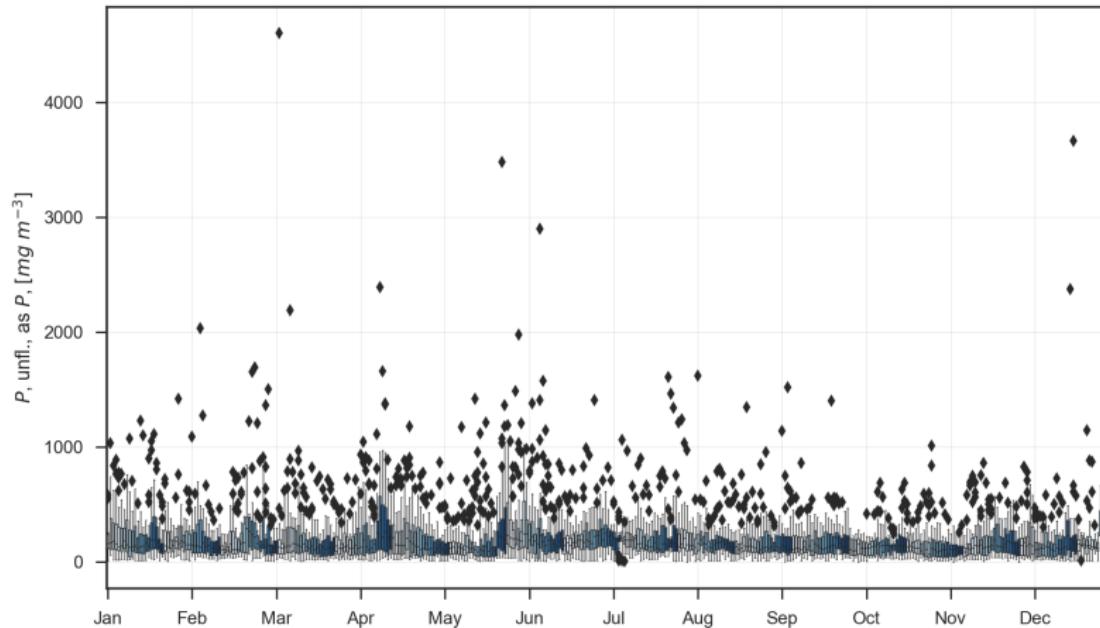
# PO4a



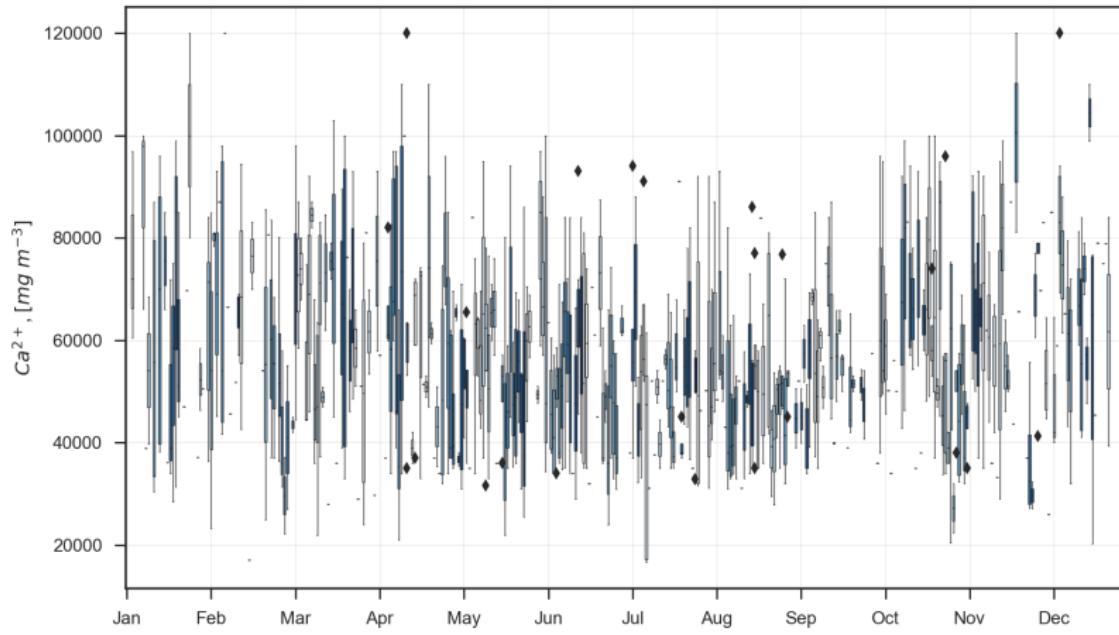
# PO4b



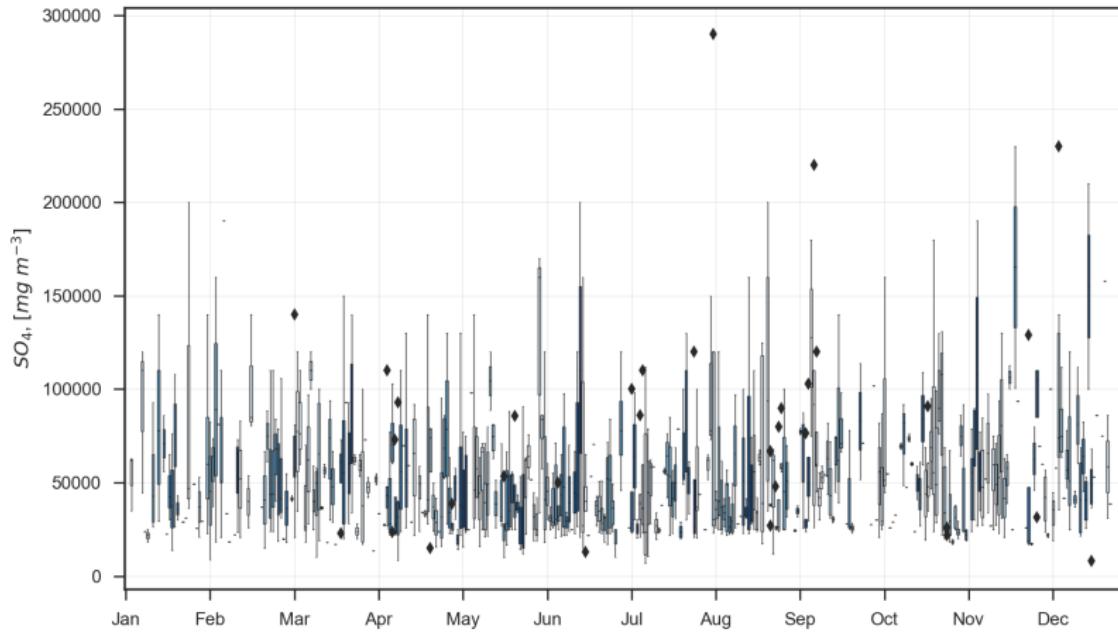
# PO4d



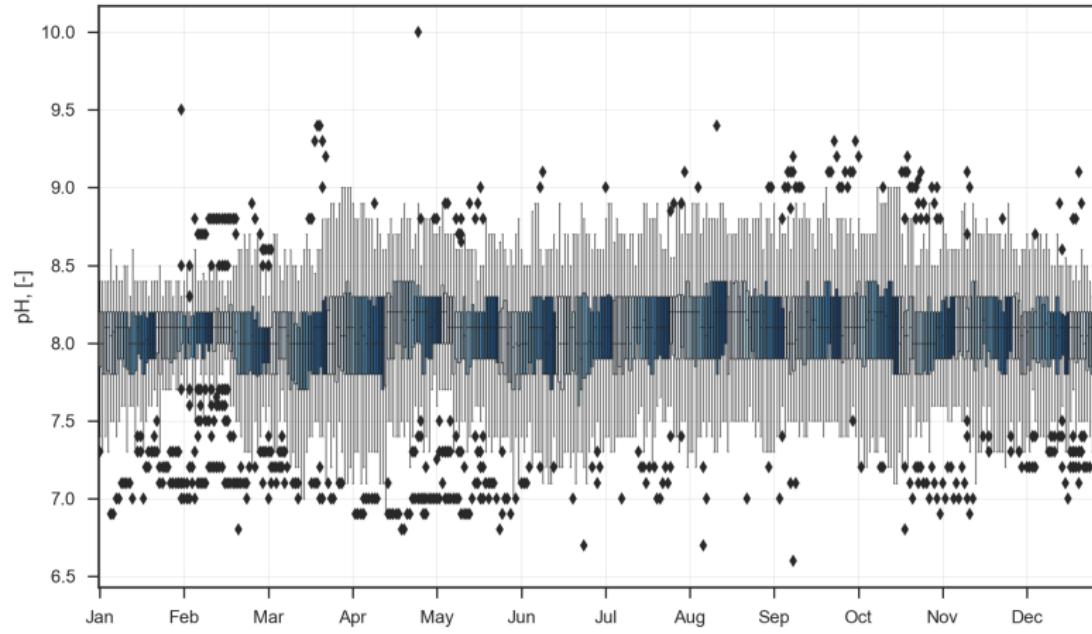
# Ca2



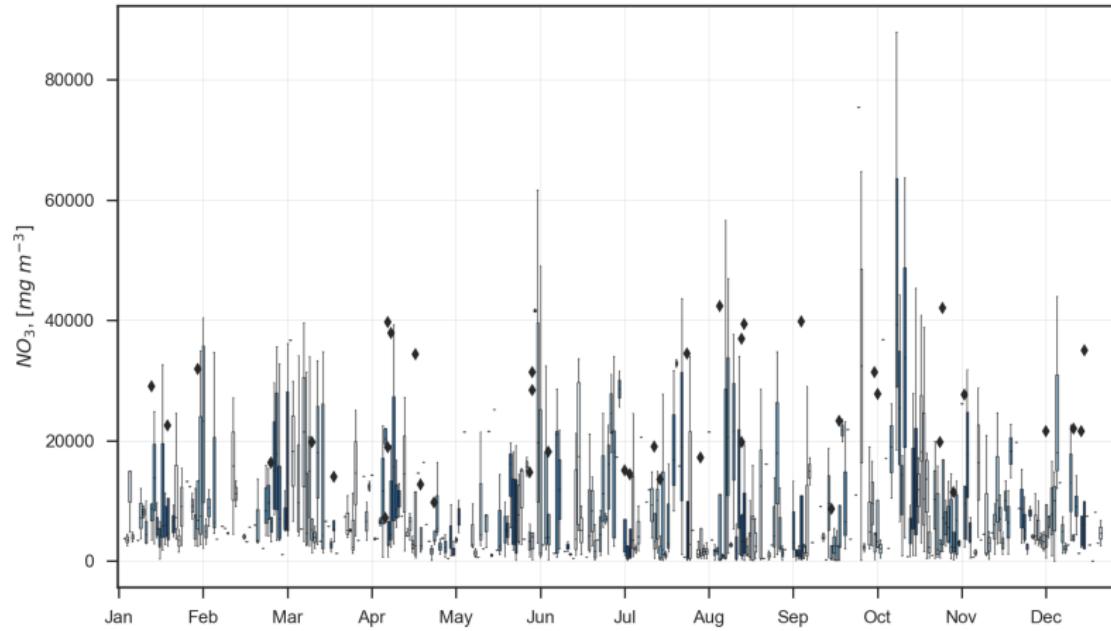
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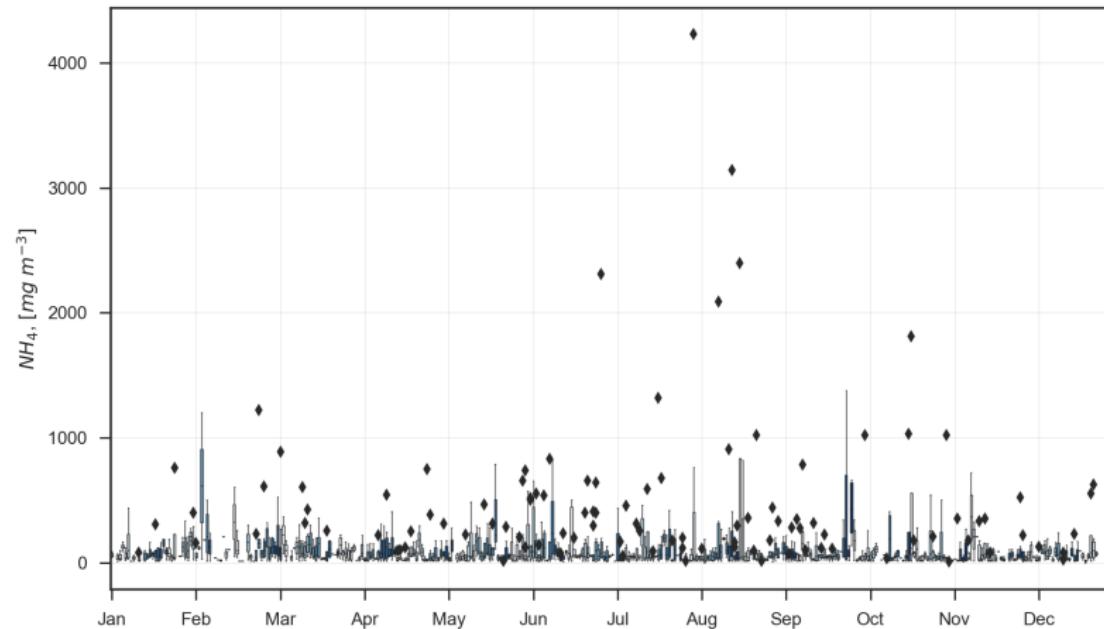
# pH



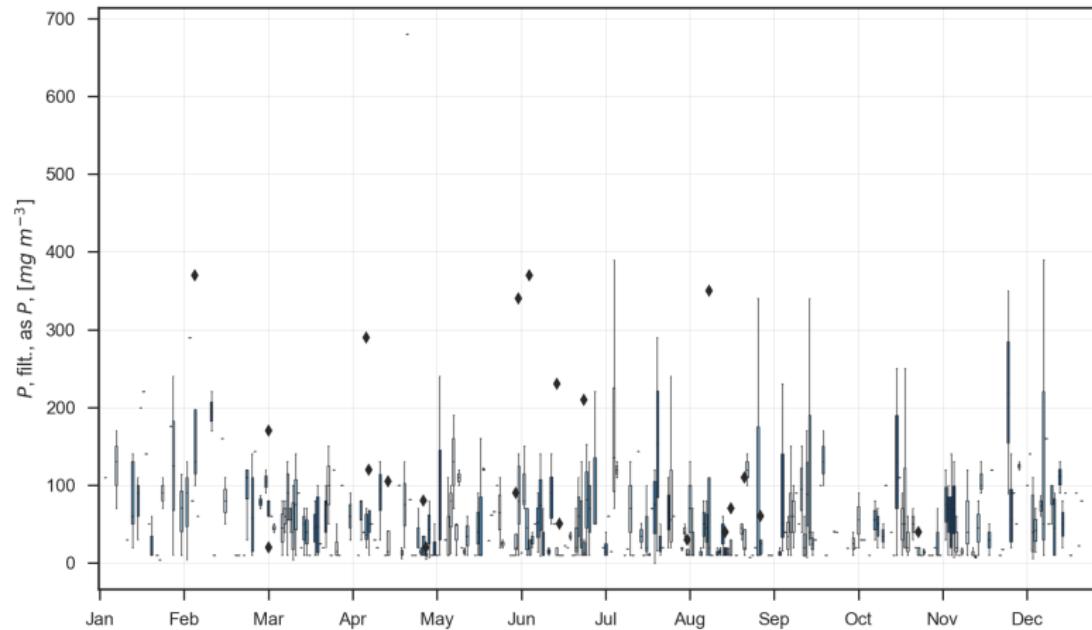
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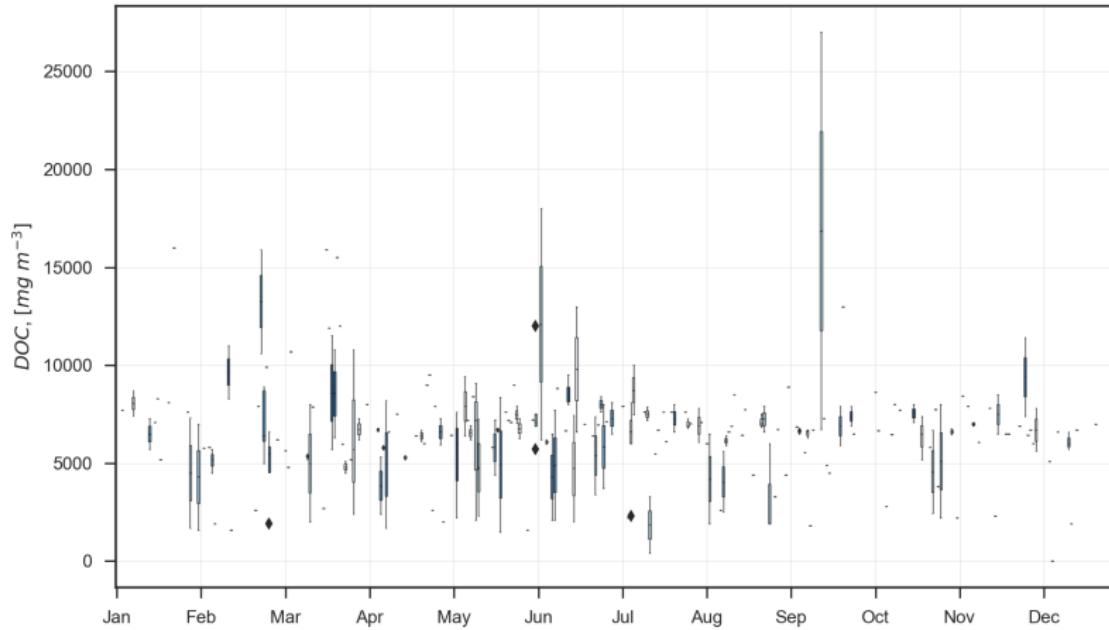


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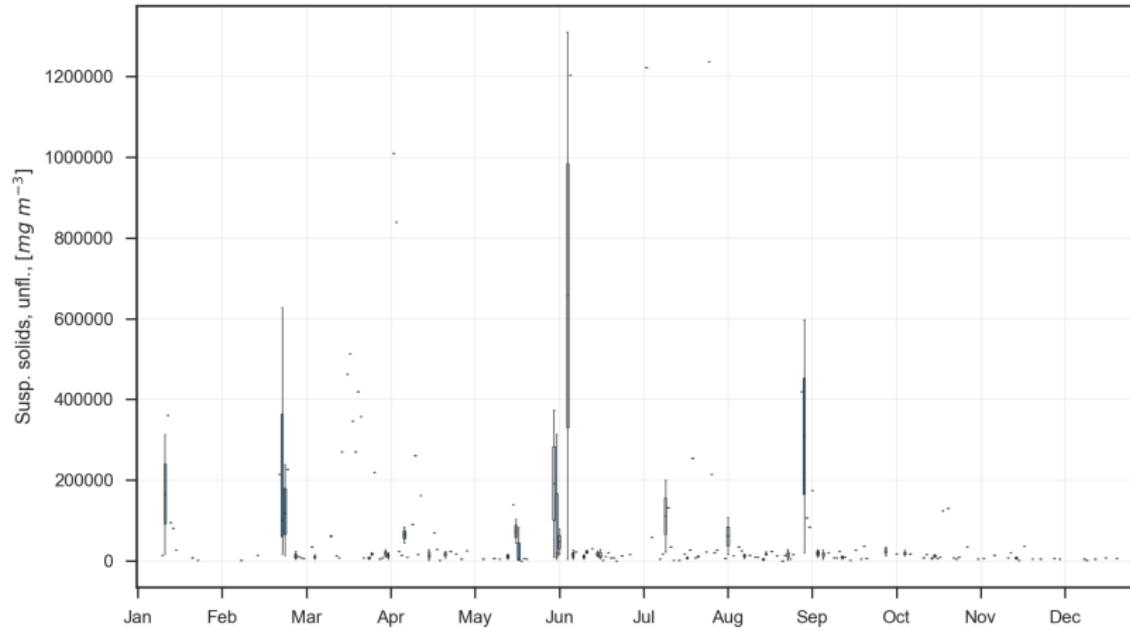


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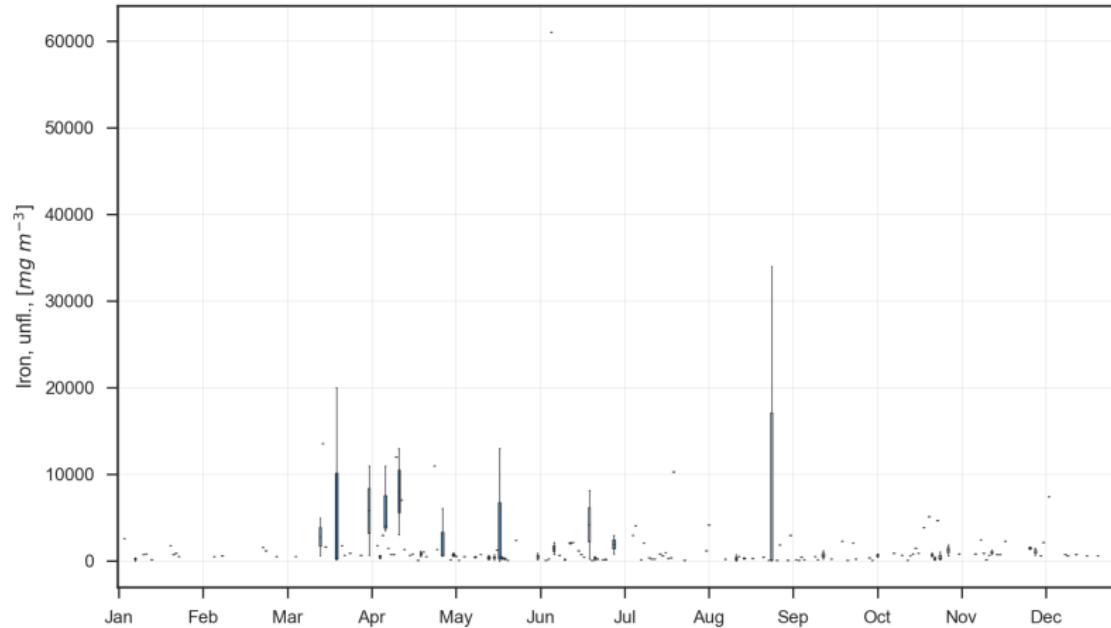




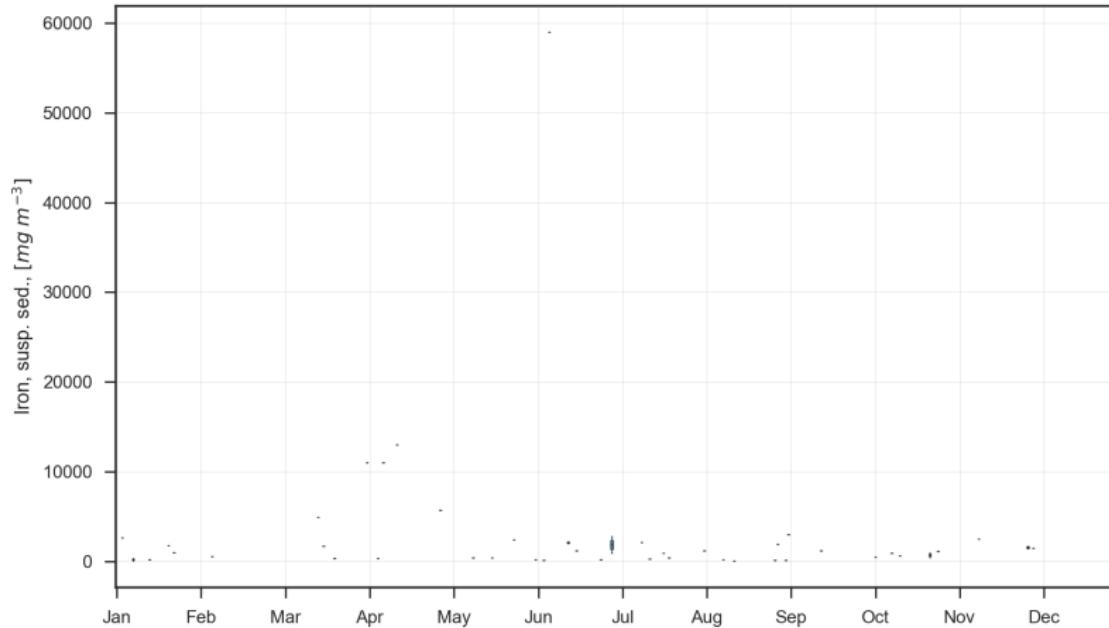
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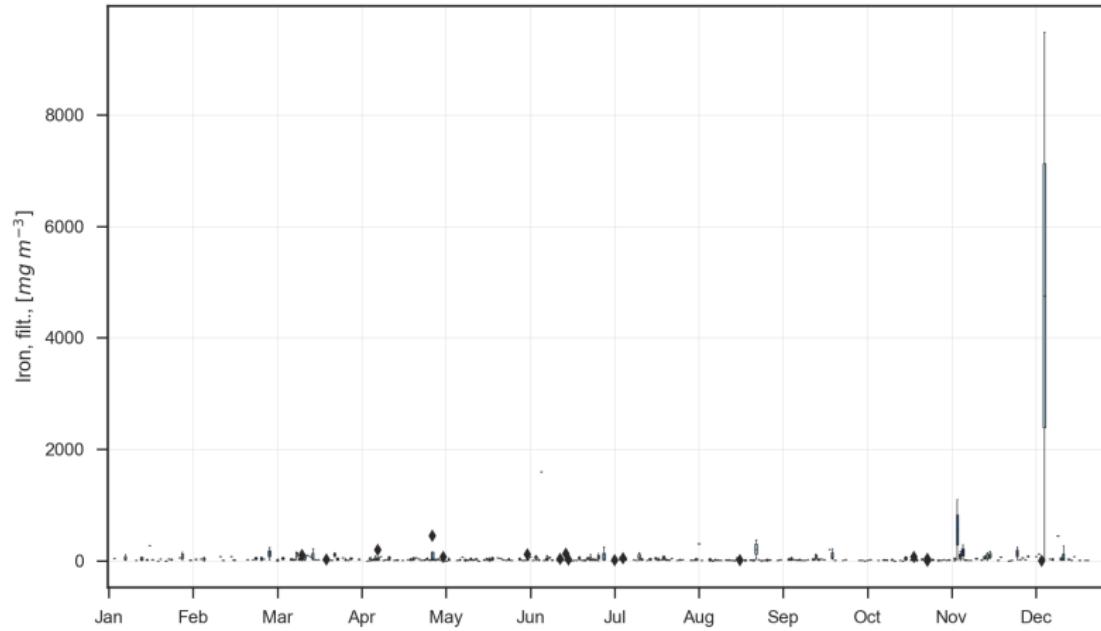


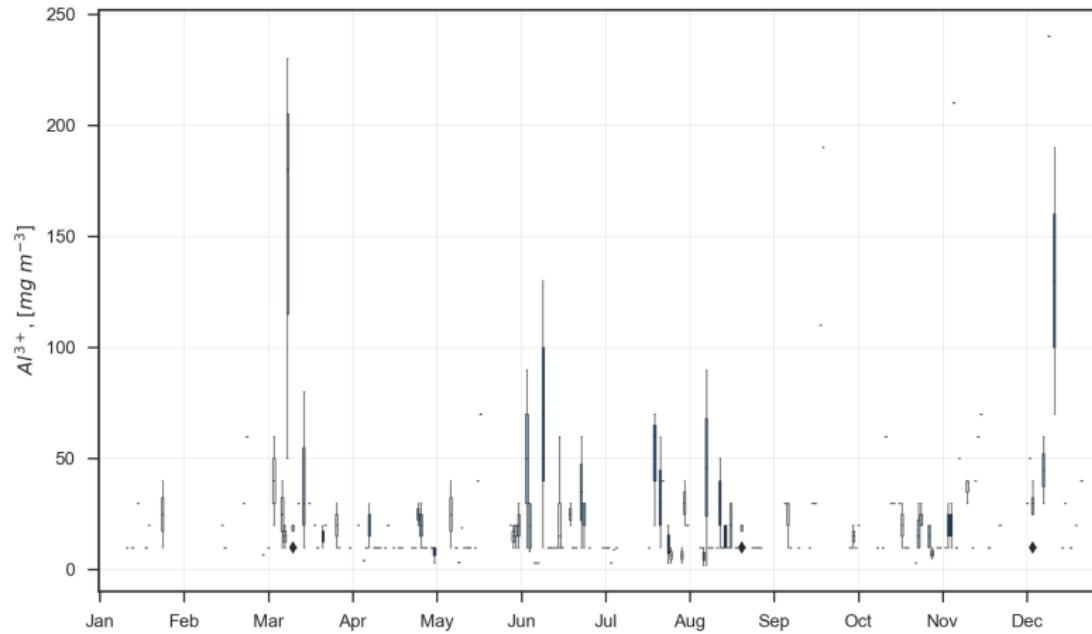
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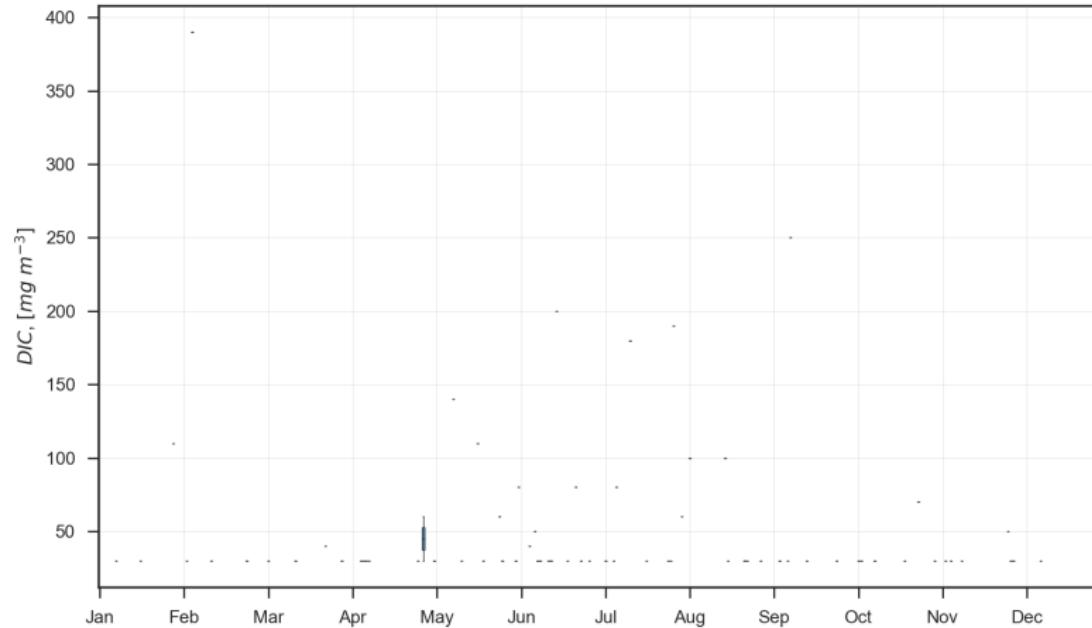


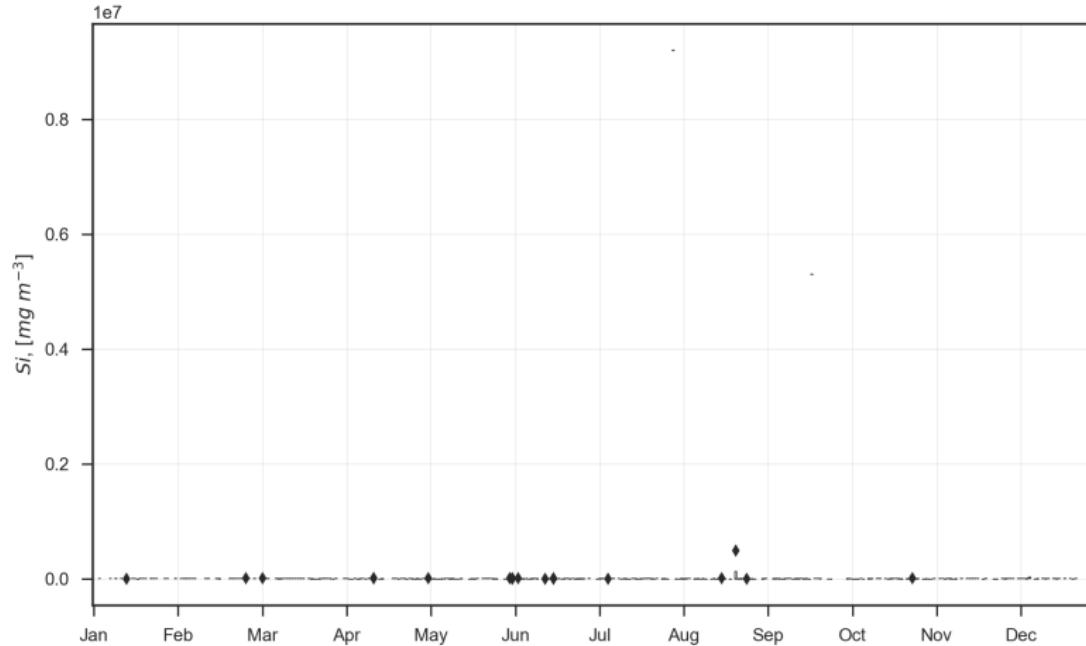
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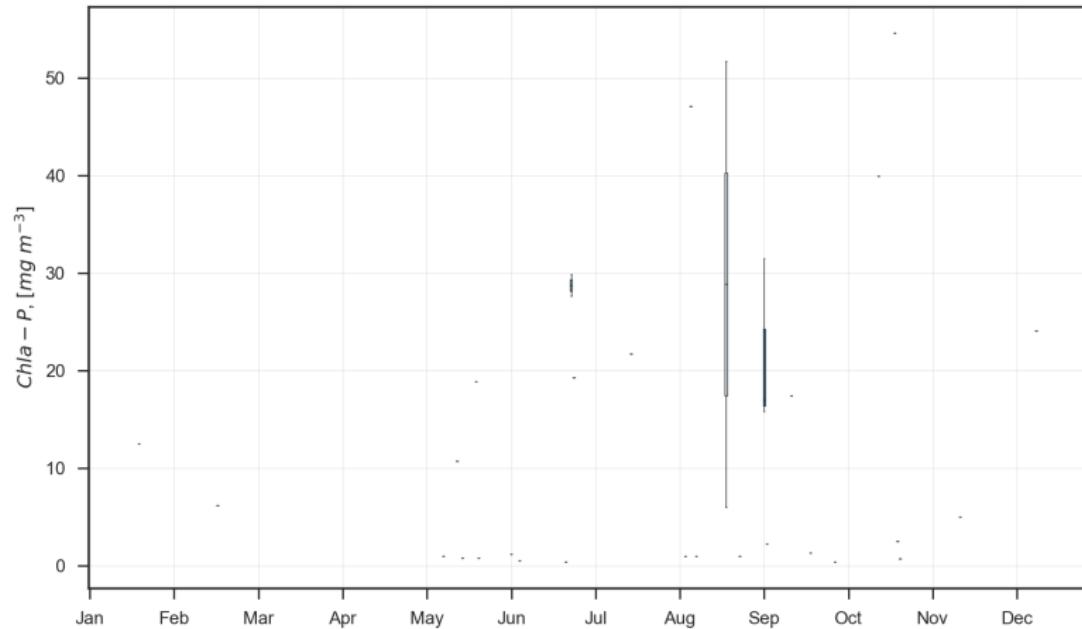




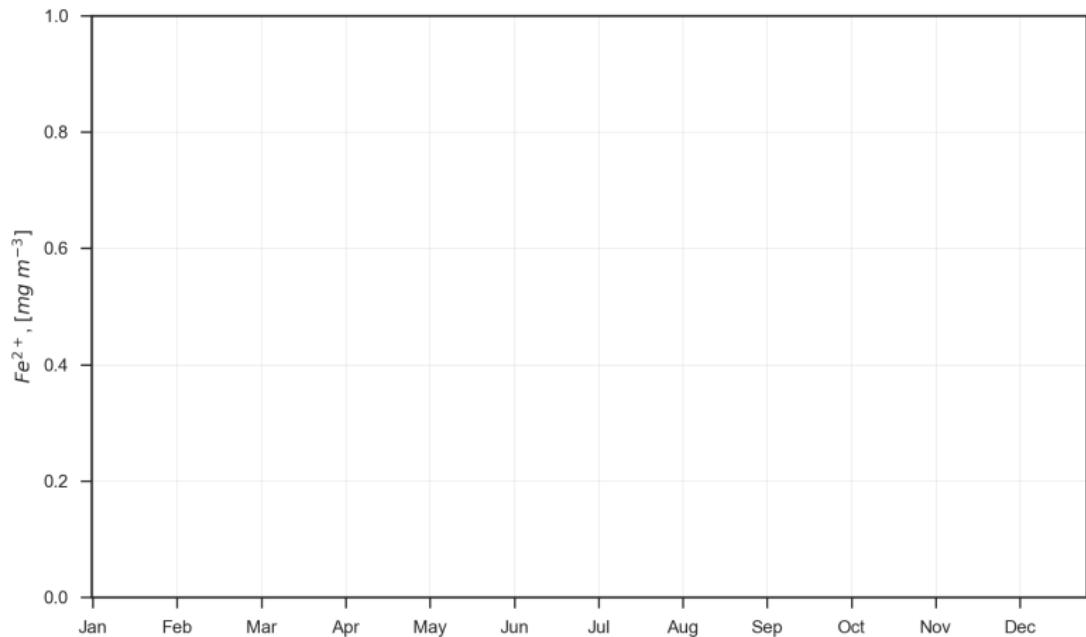




# Chla

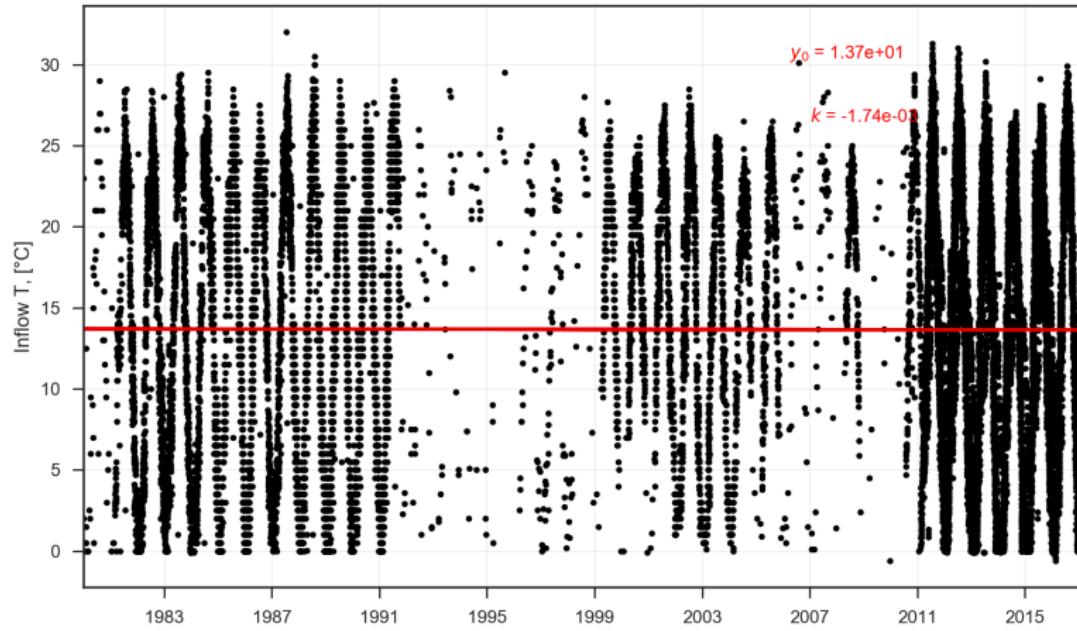


## Fe2

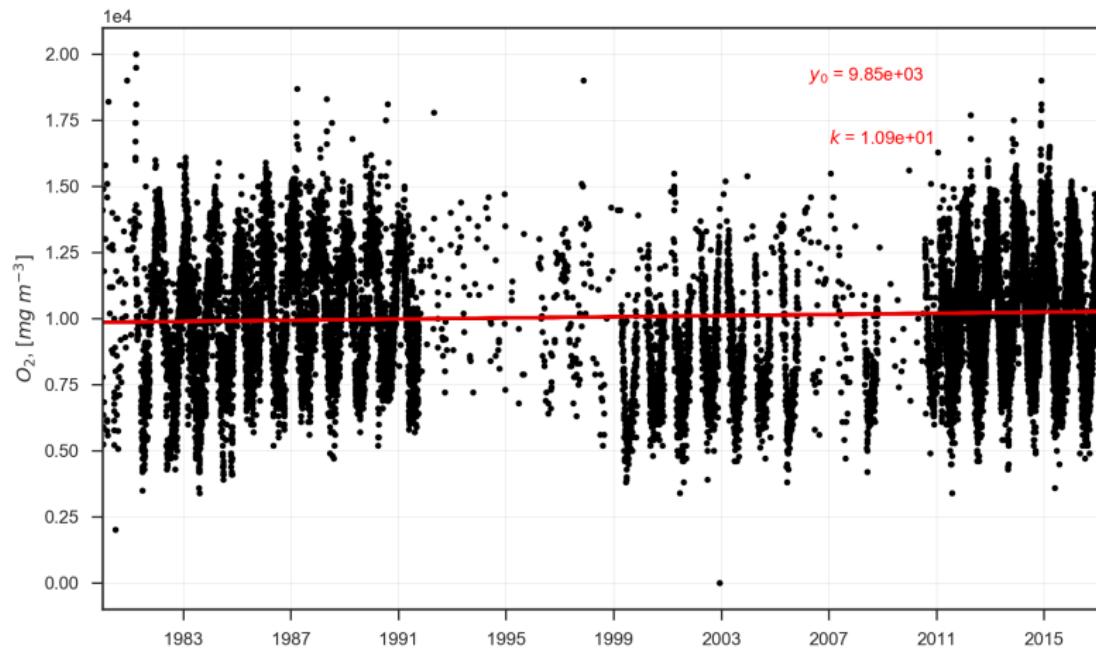


# All year trend

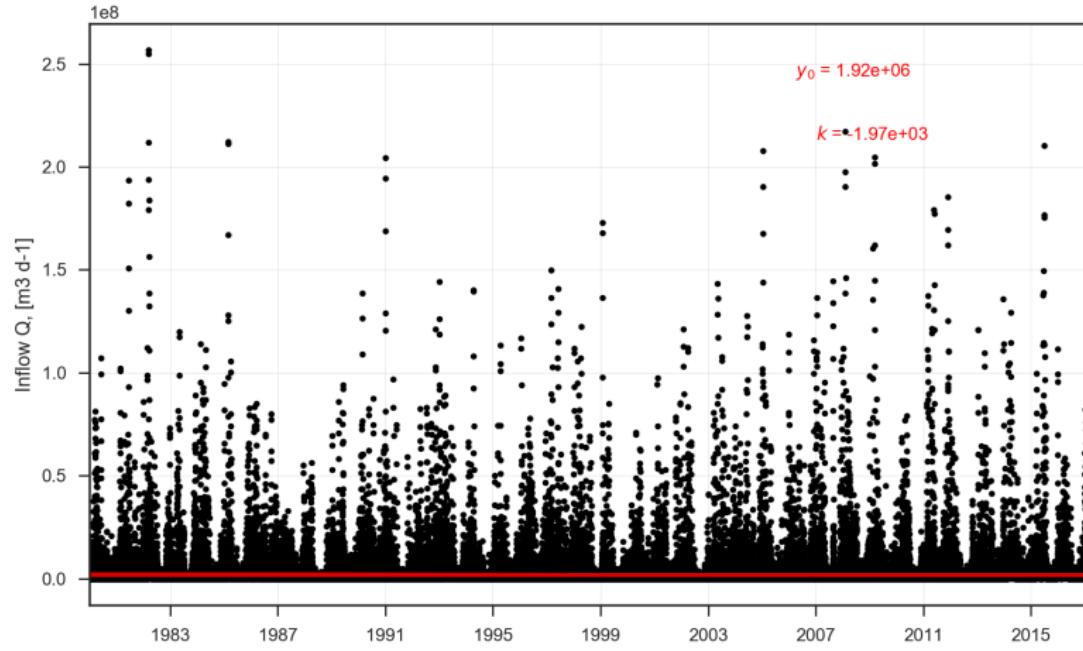
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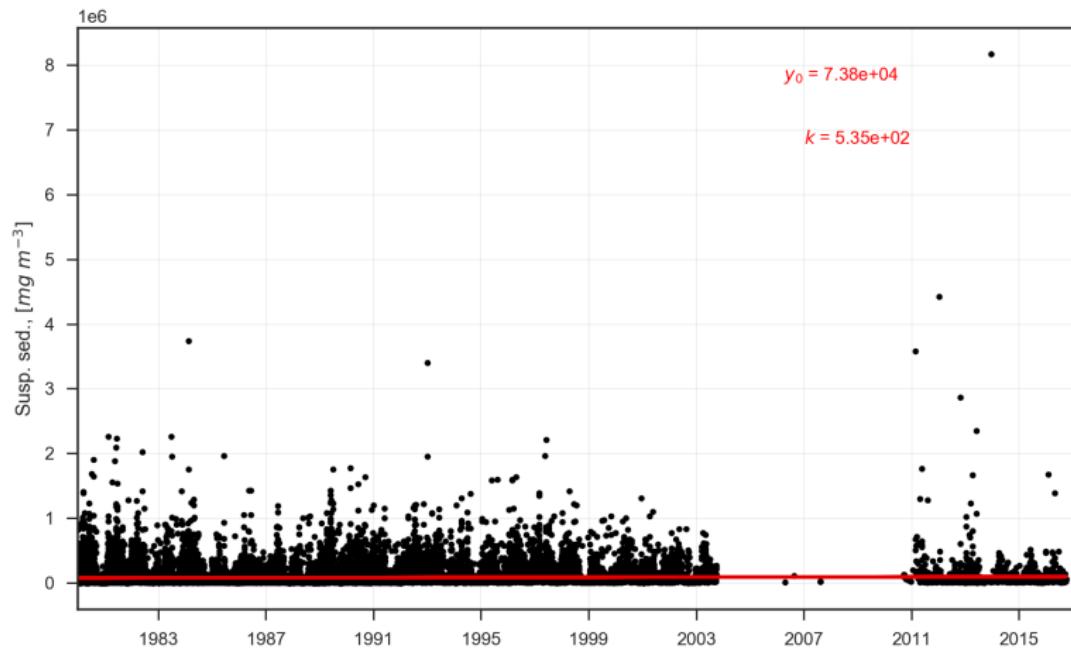
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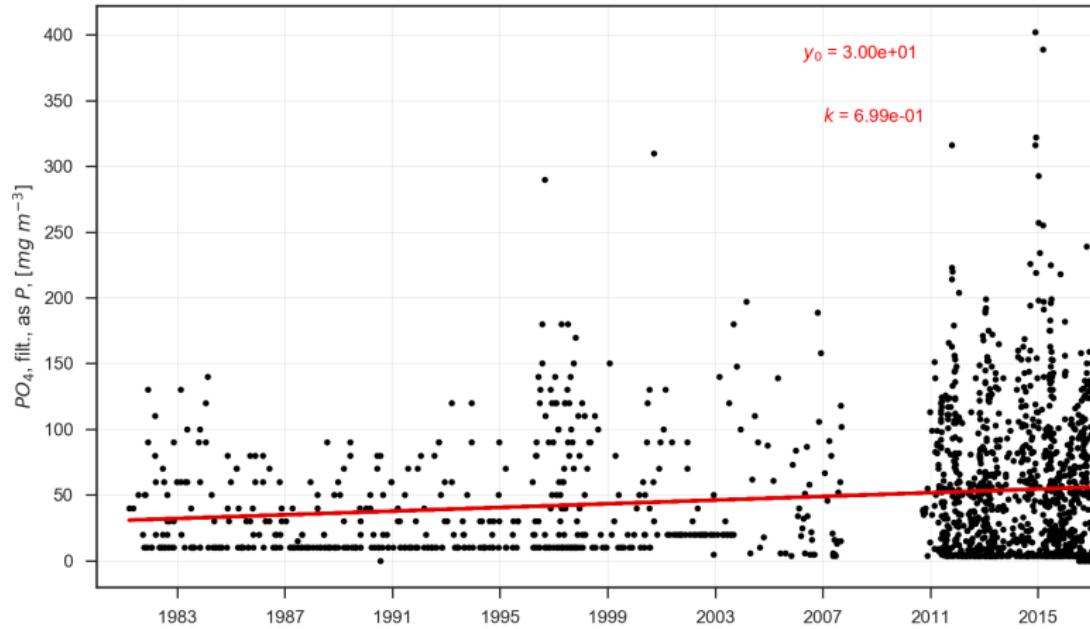
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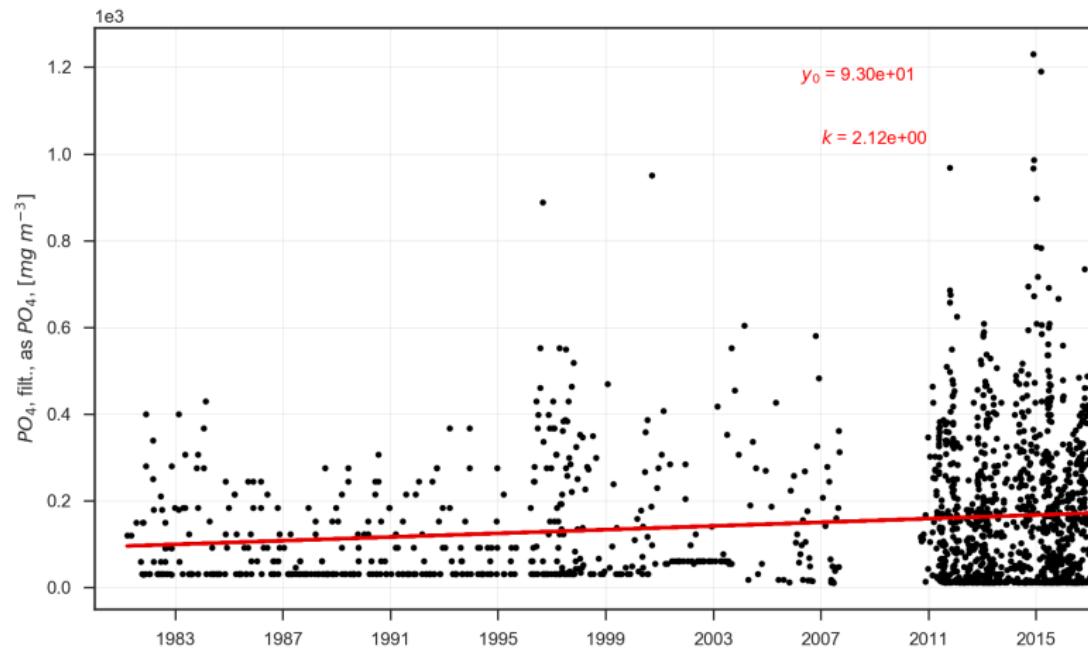
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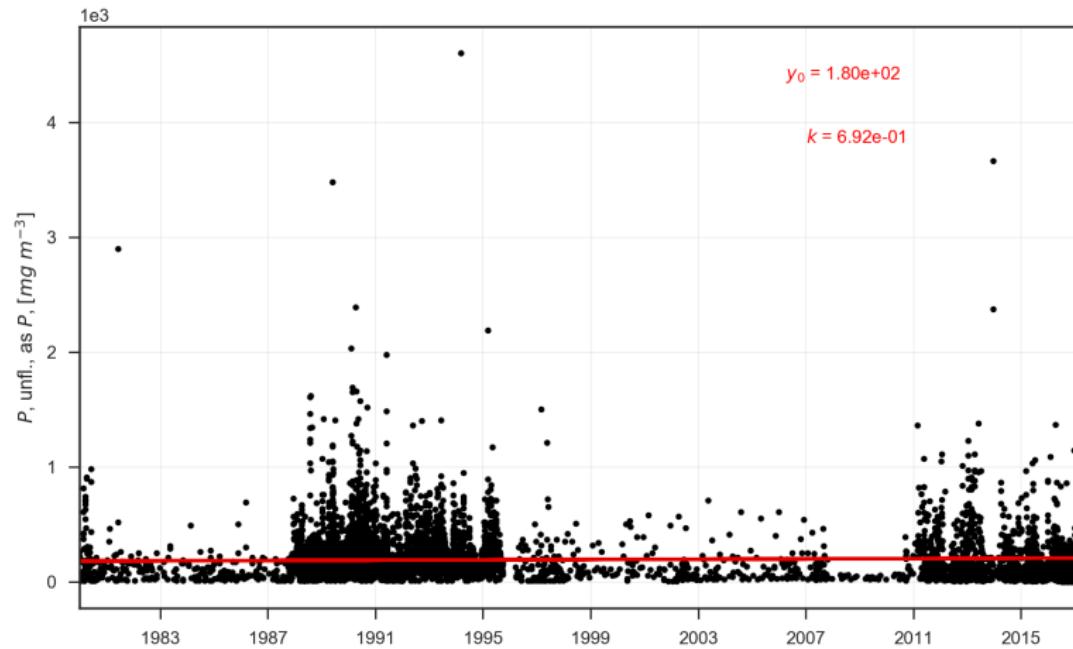
# PO4a



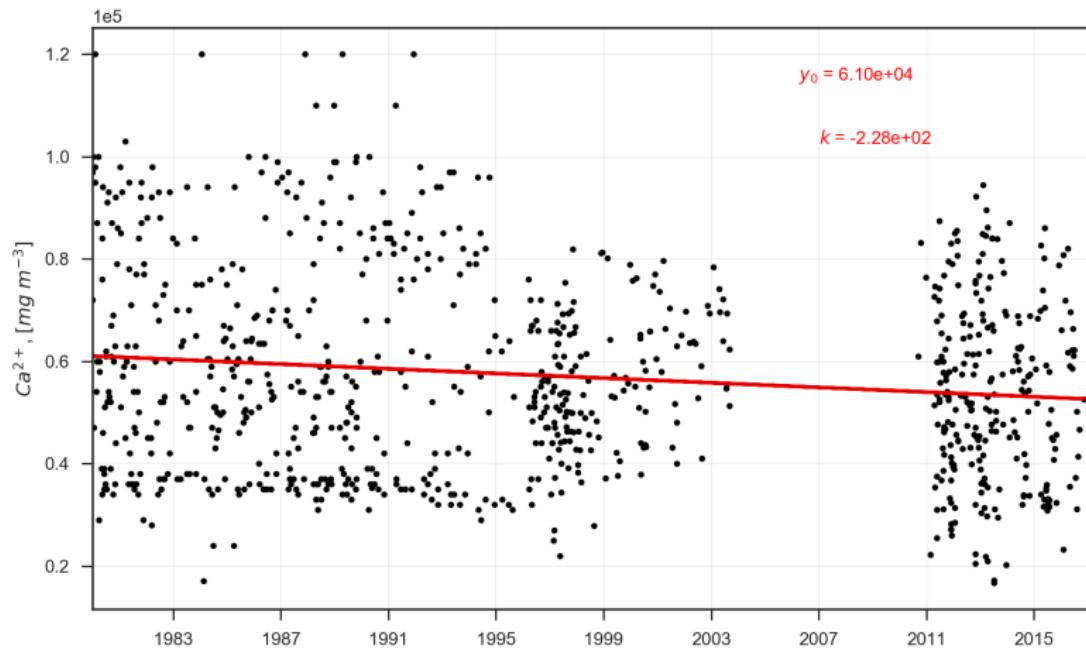
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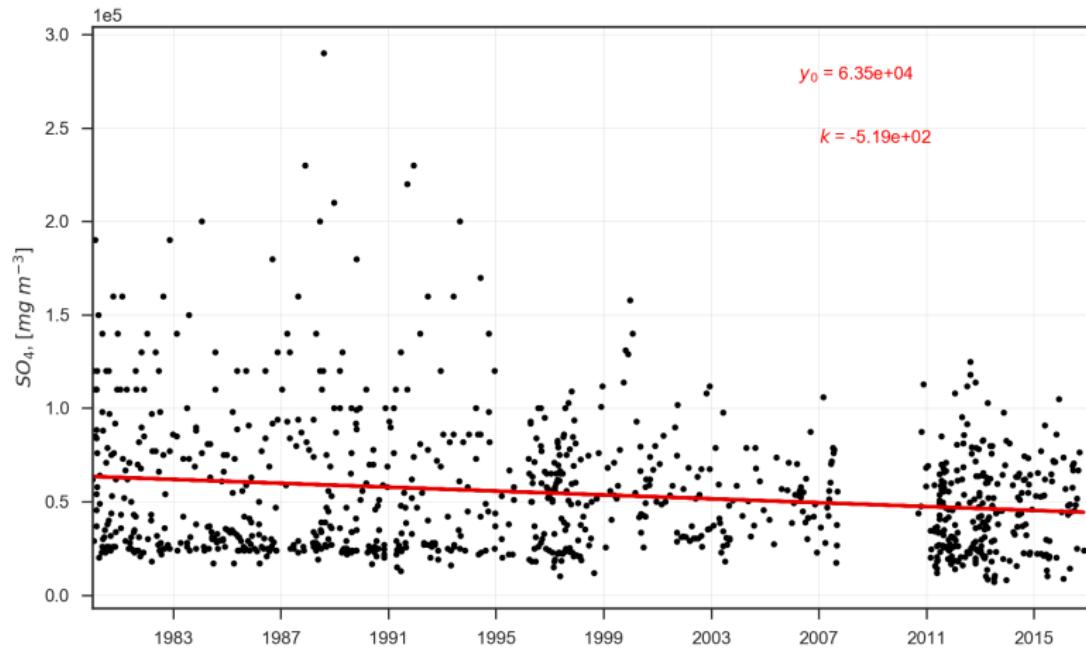
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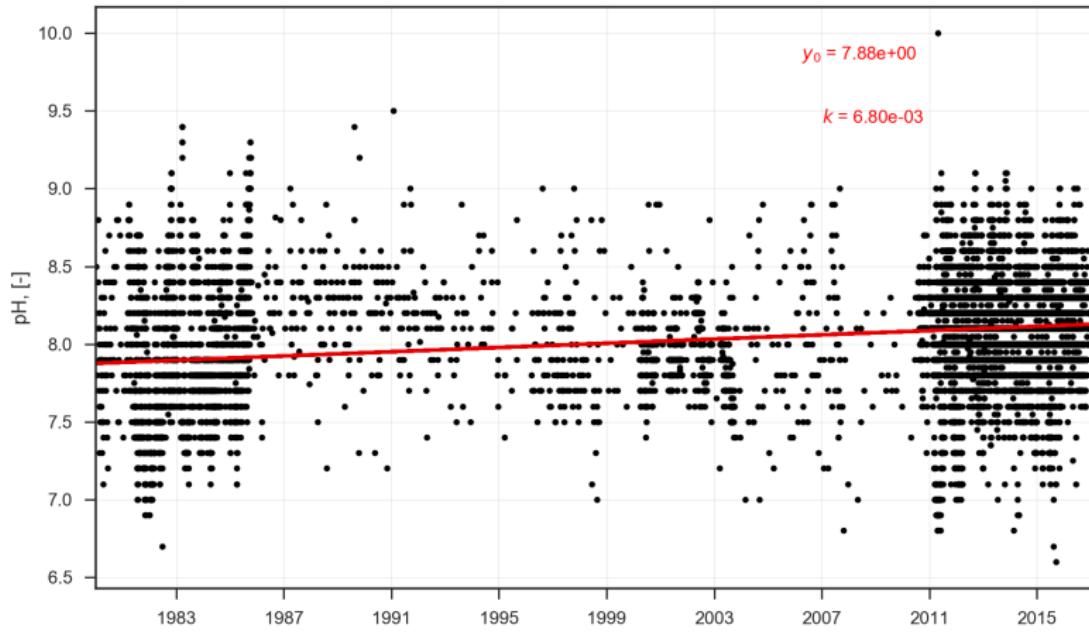
# Ca2



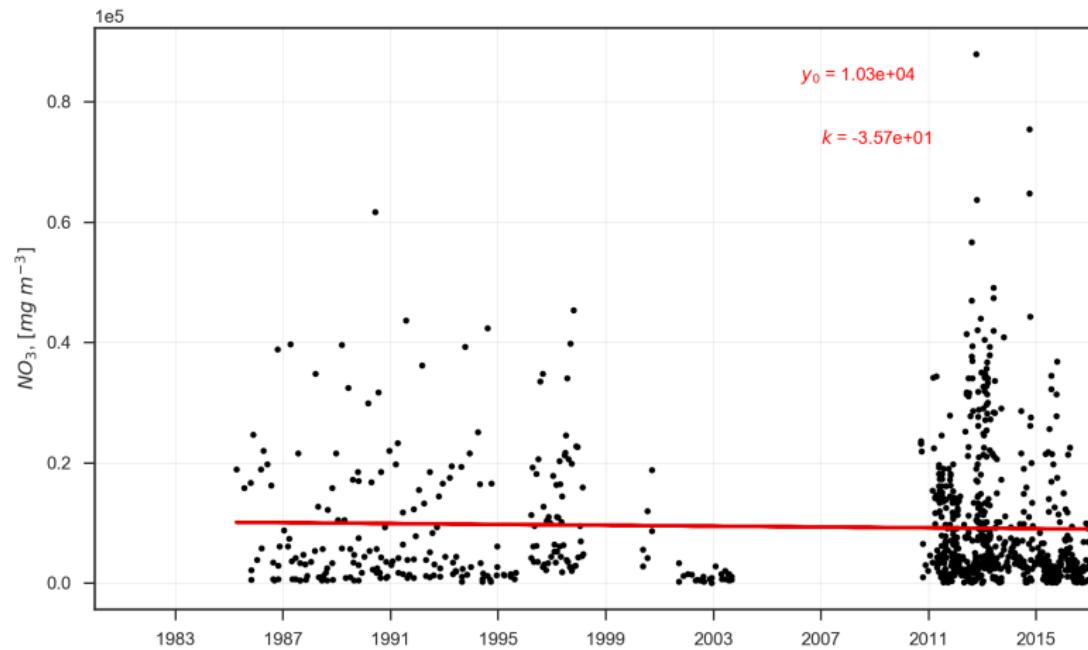
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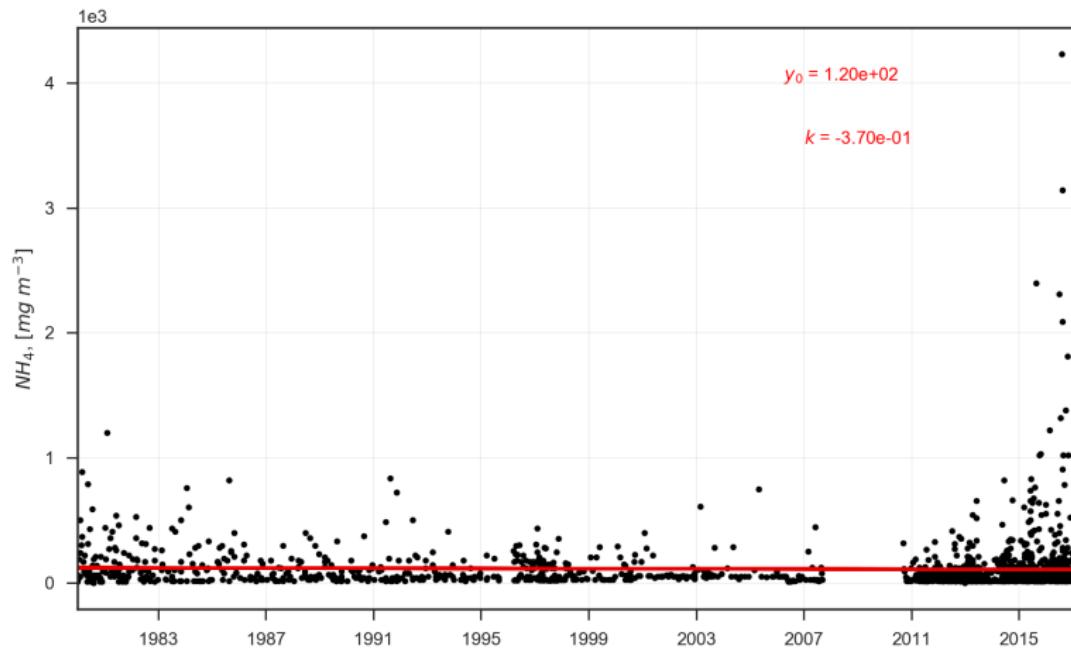
pH



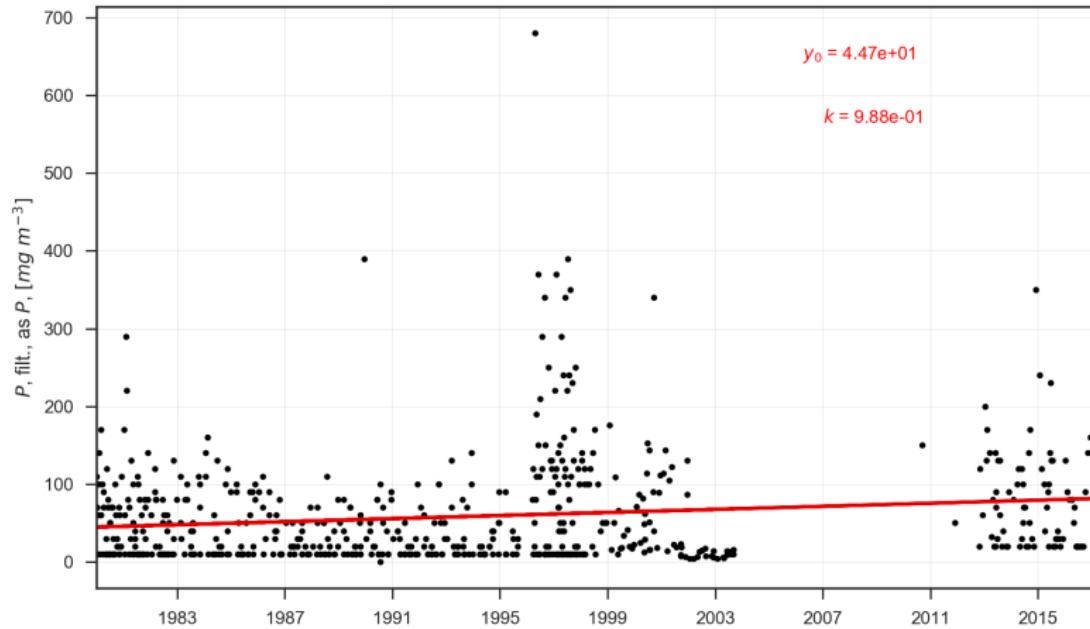
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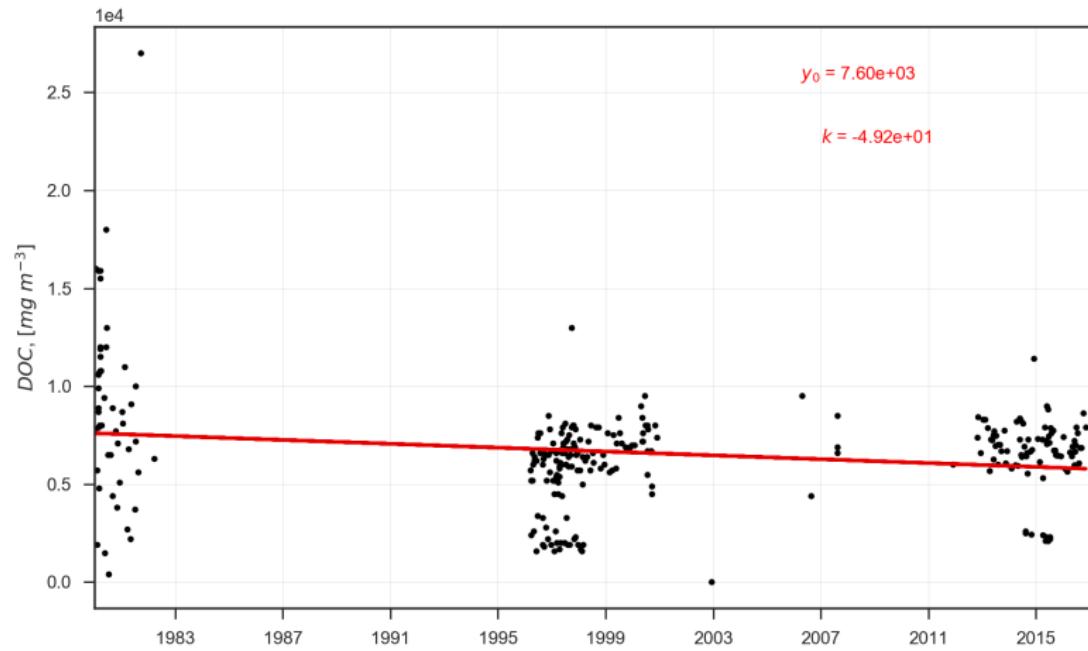


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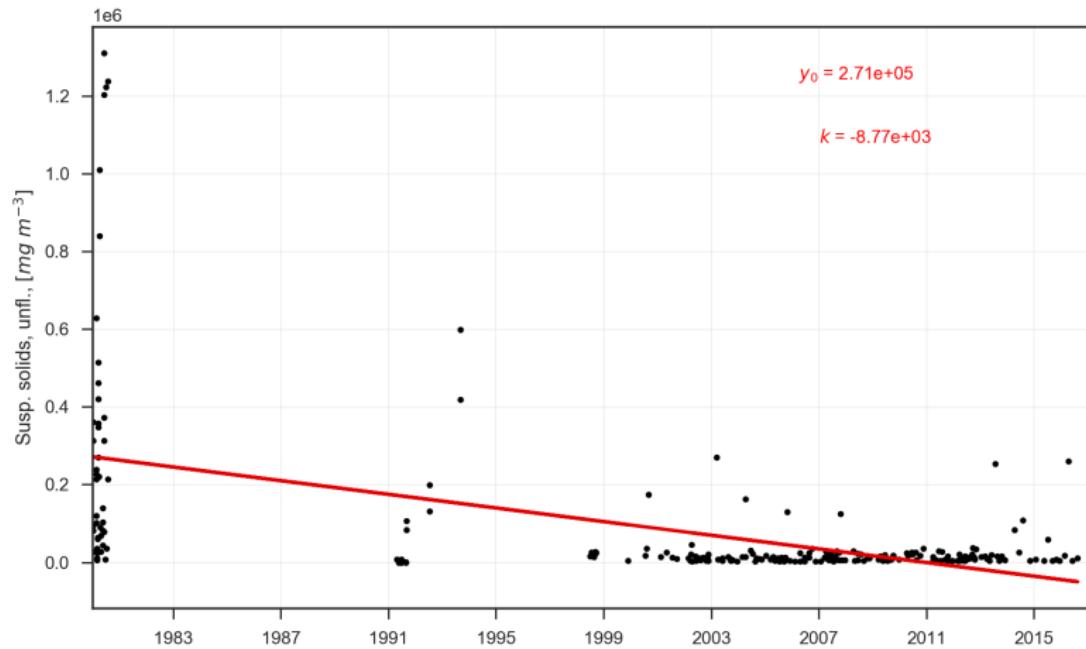


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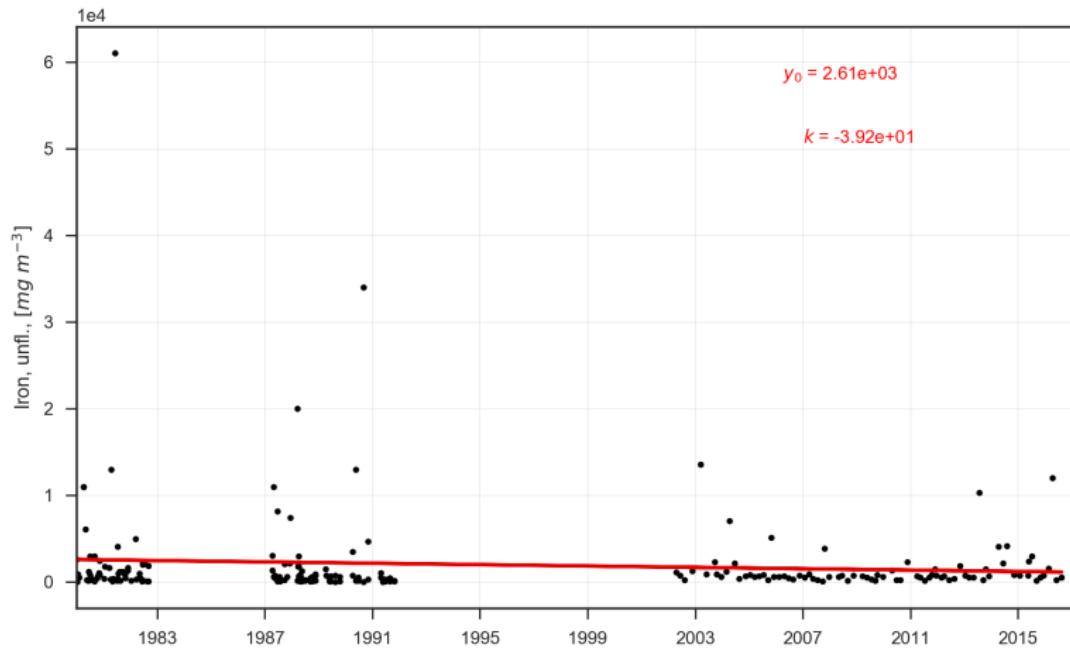




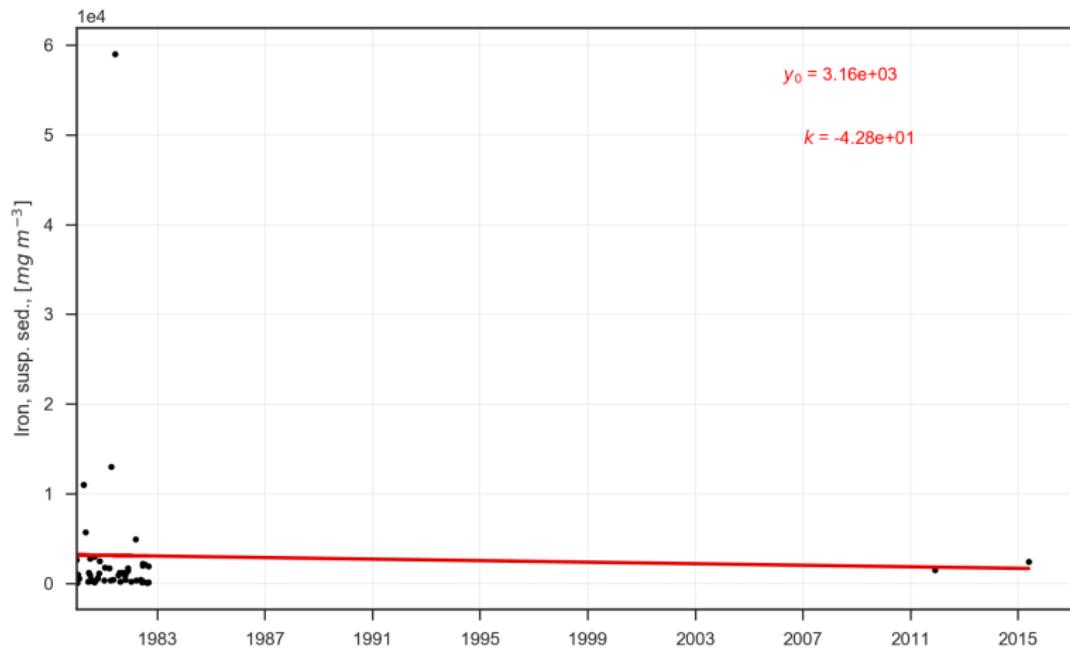
# SuspUnfil

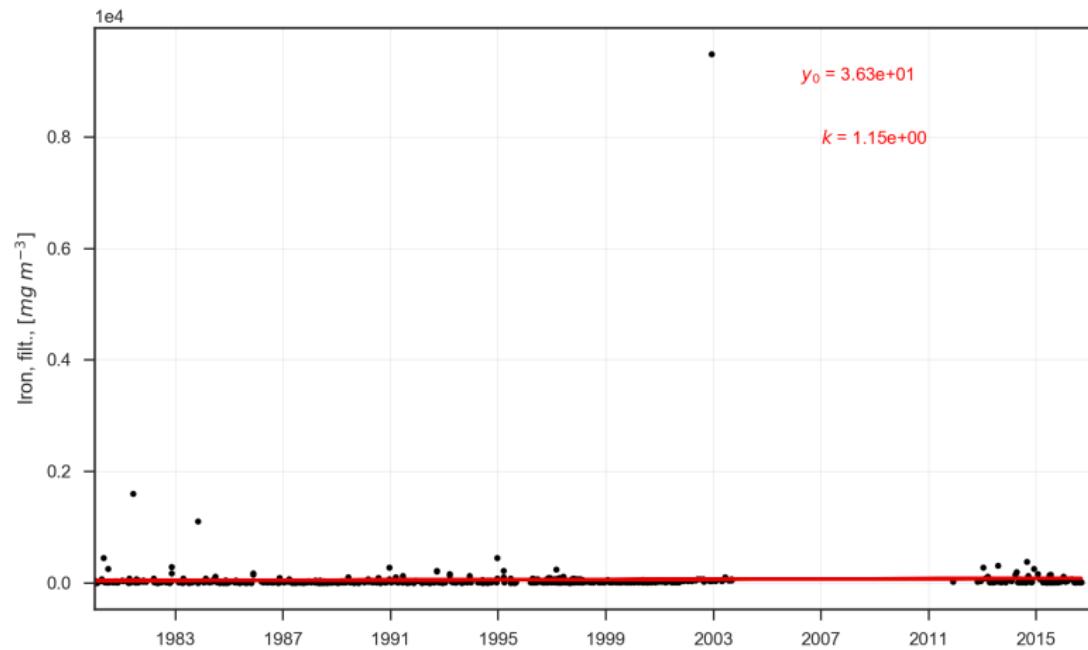


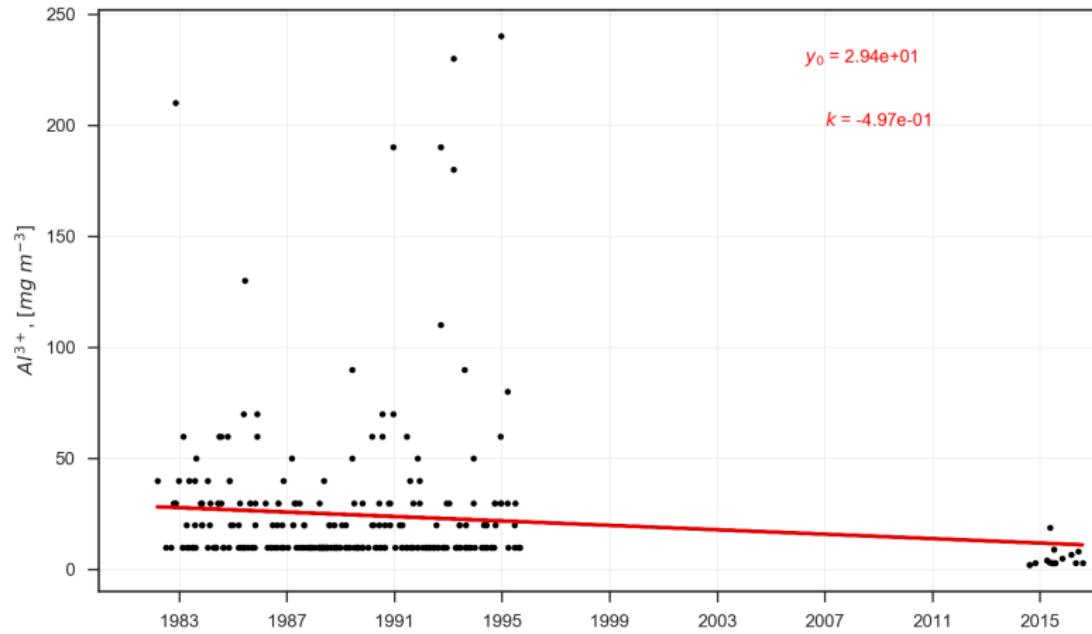
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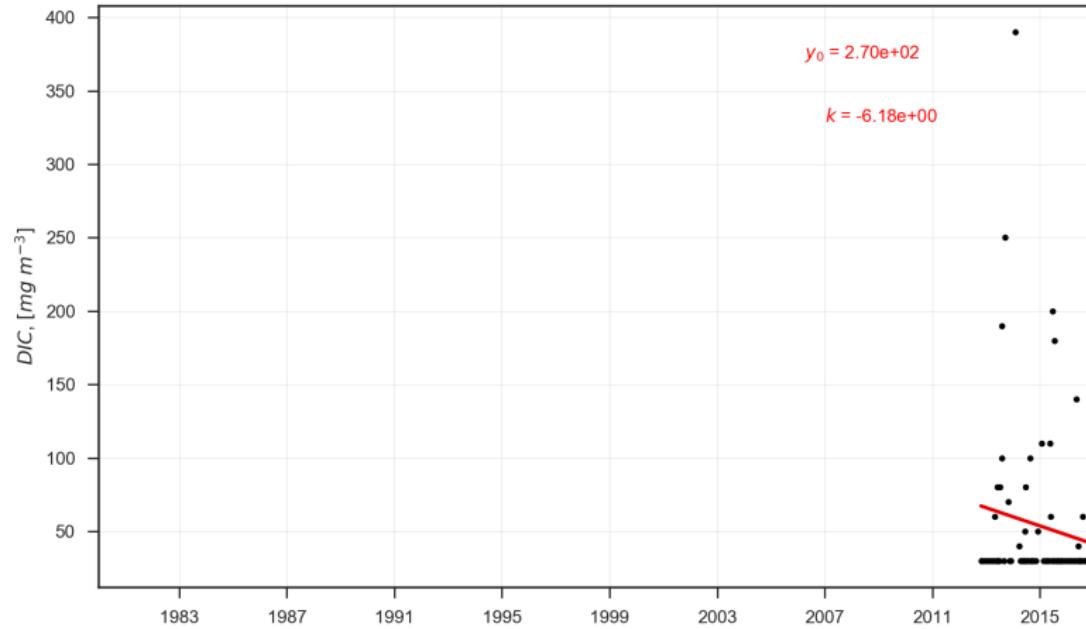


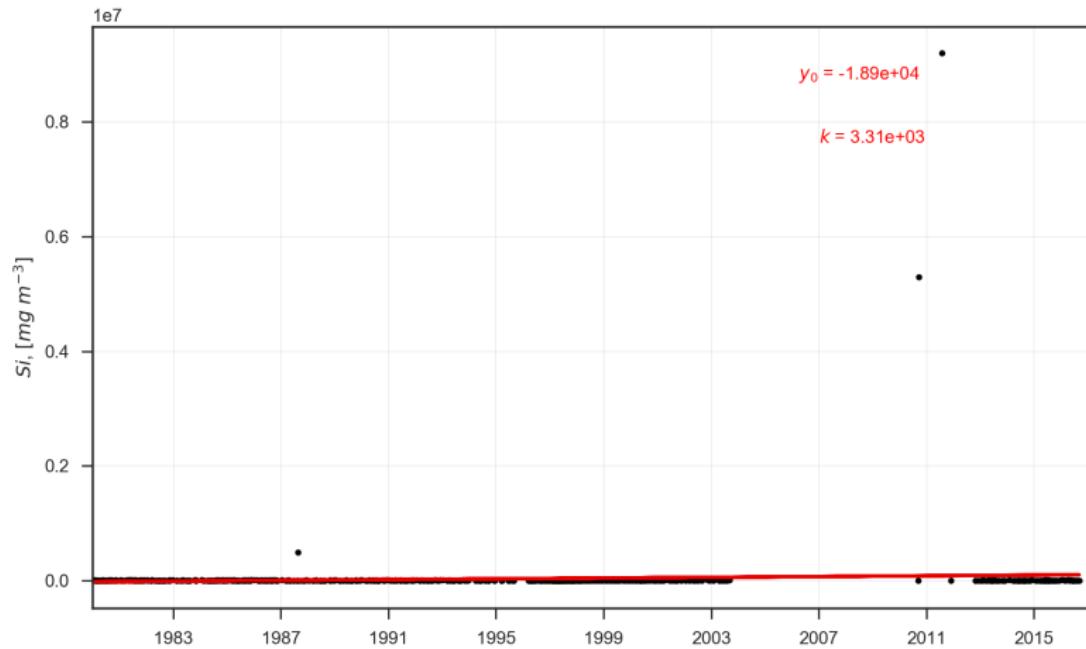
# IronSuspSed



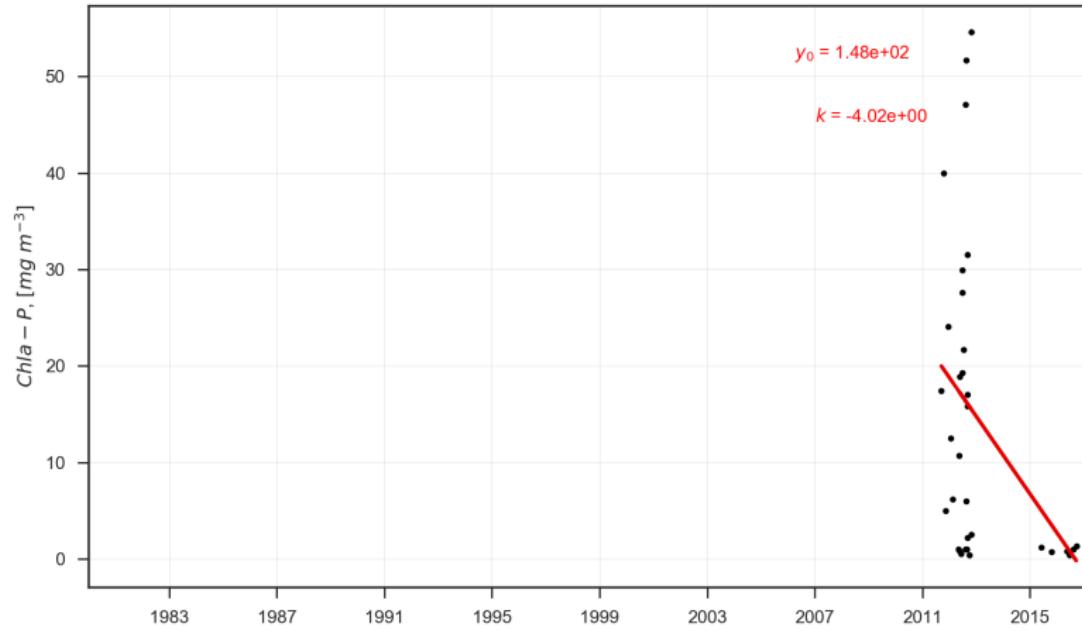




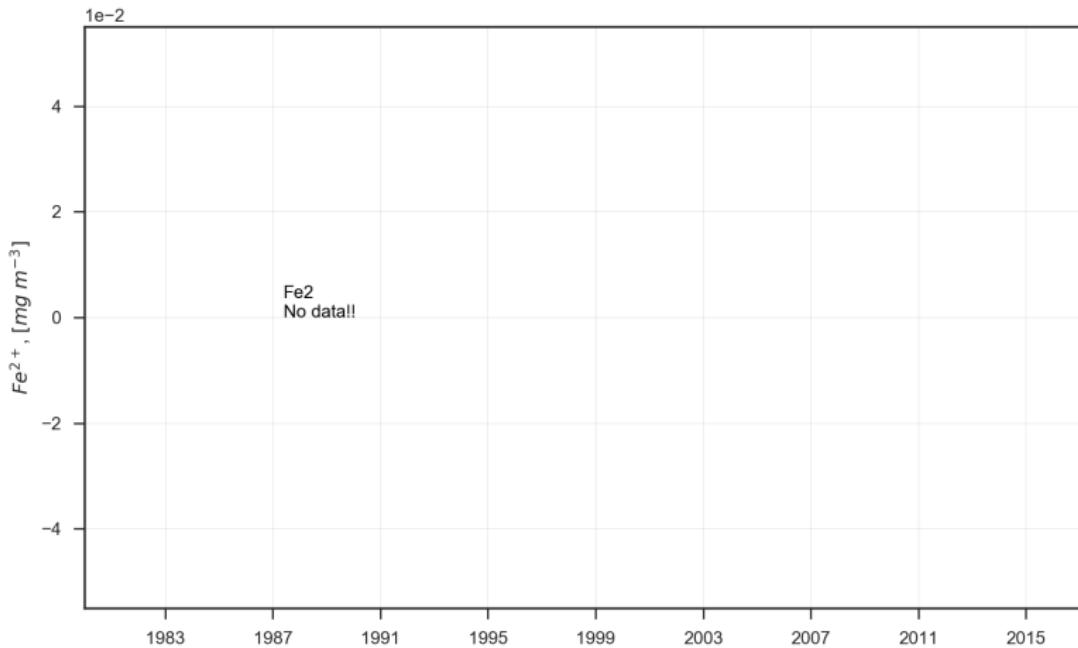




# Chla

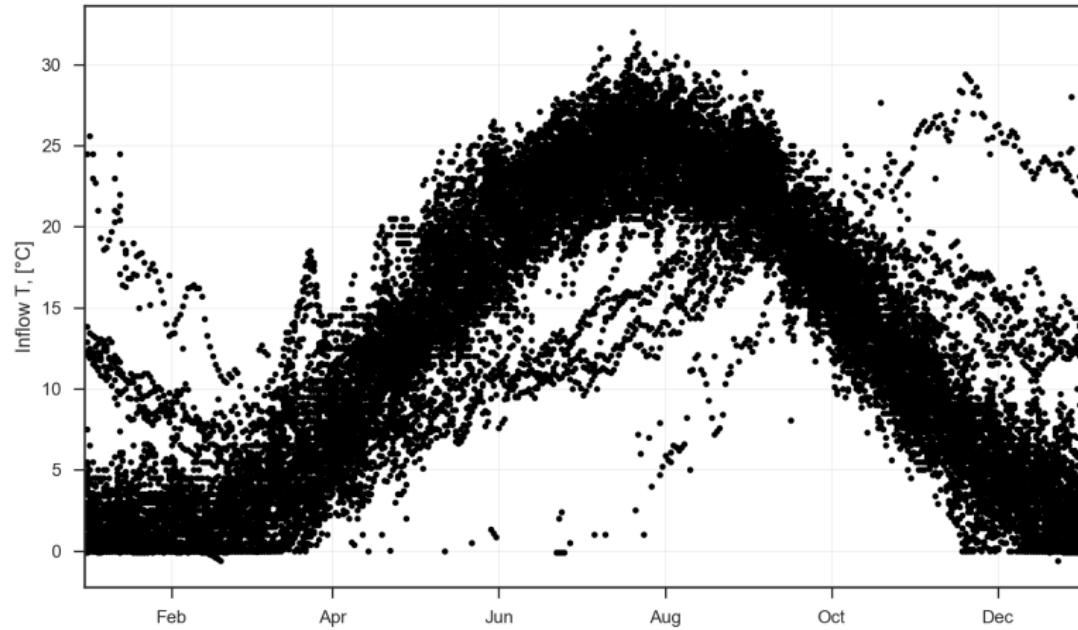


# Fe2

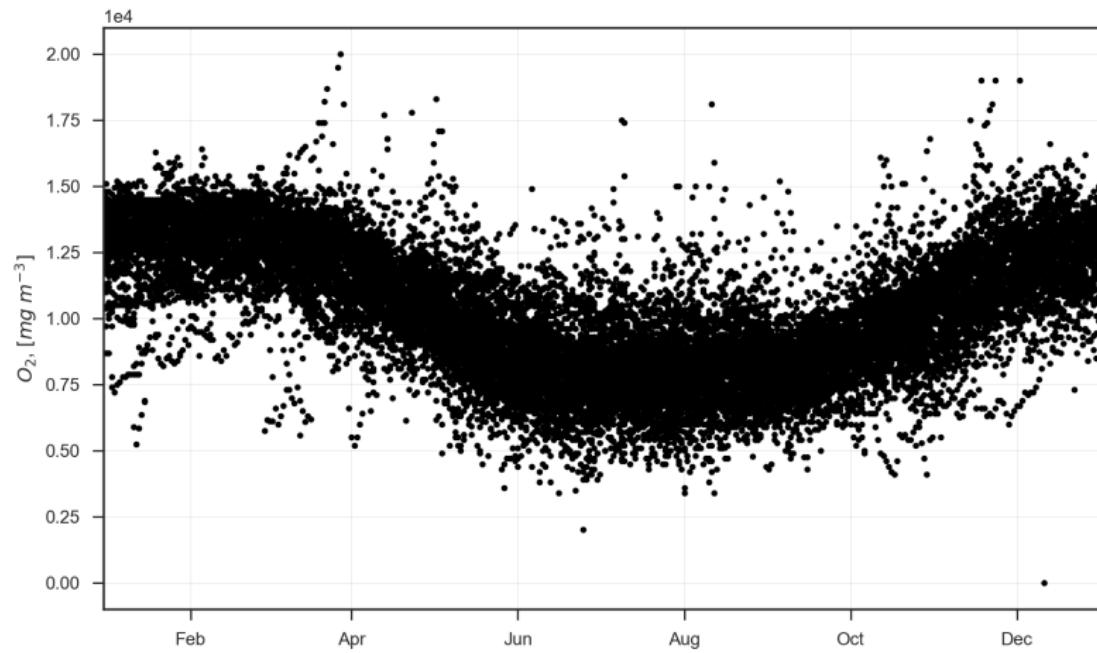


# One year patterns

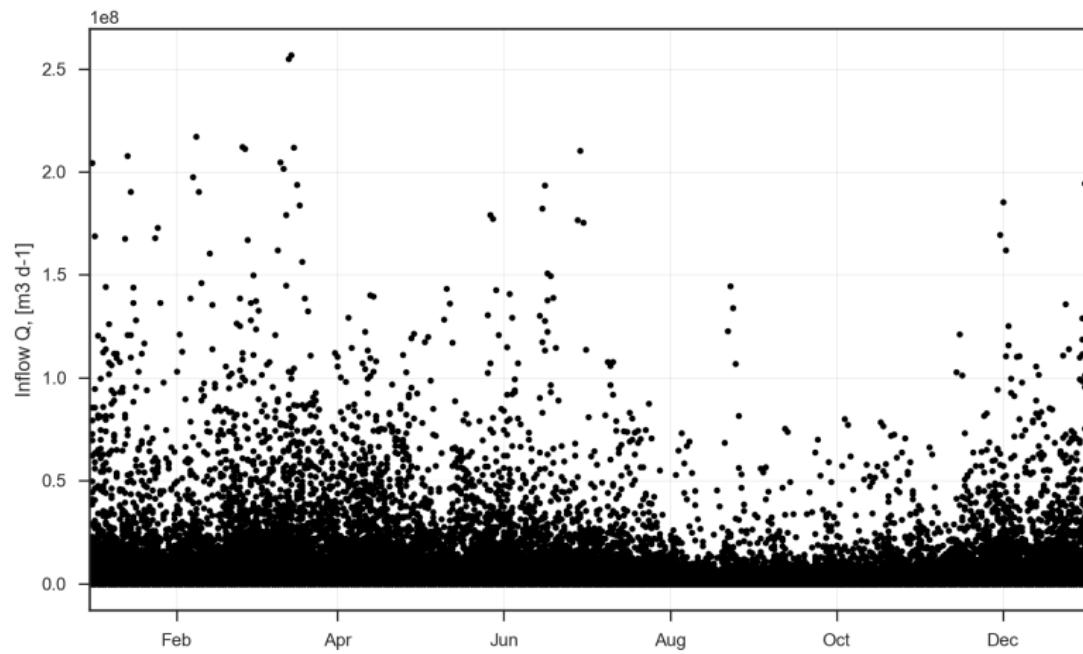
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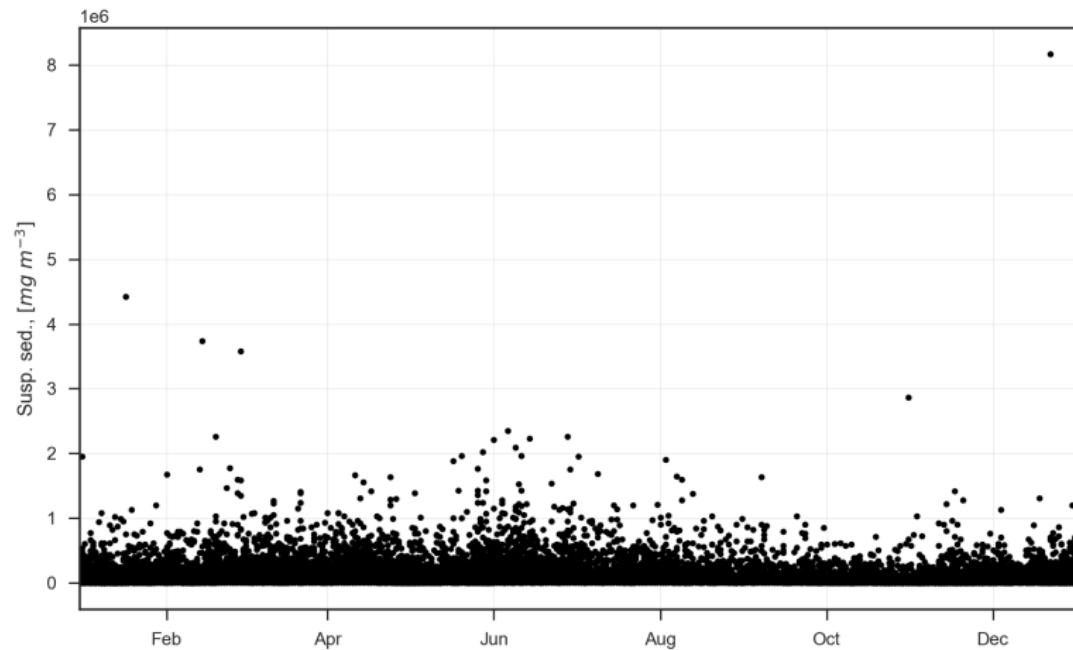
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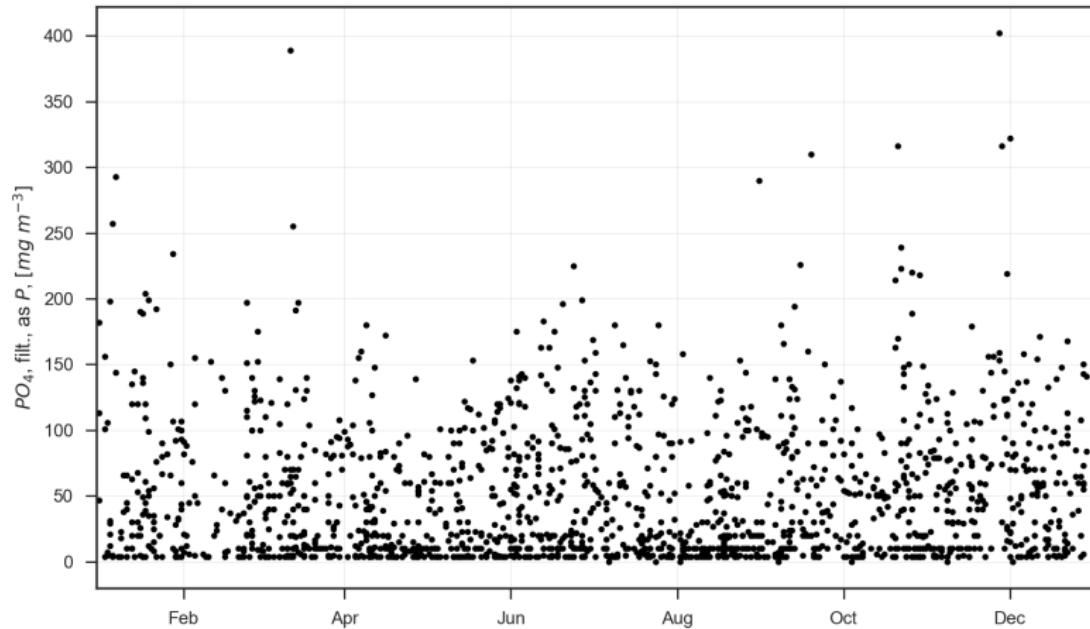
# inflowQ



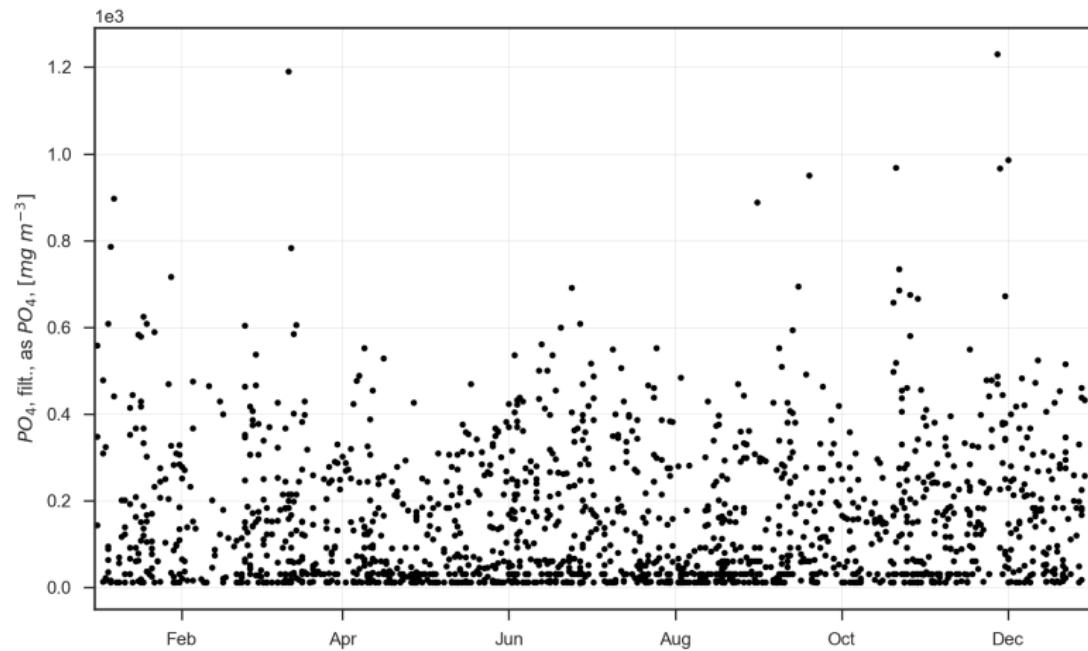
# Susp



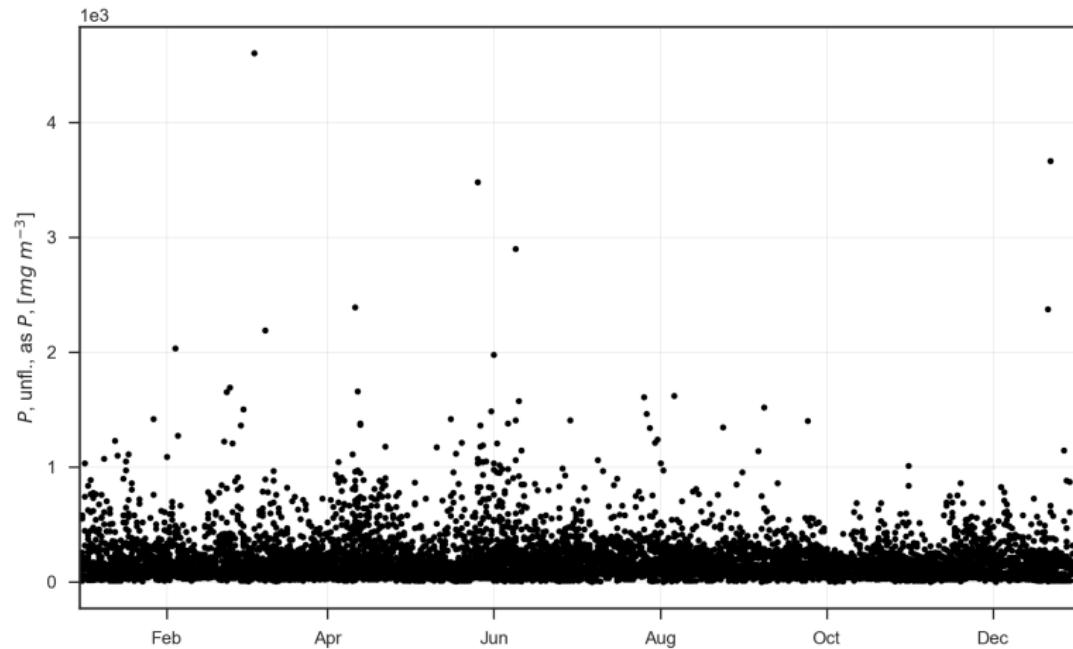
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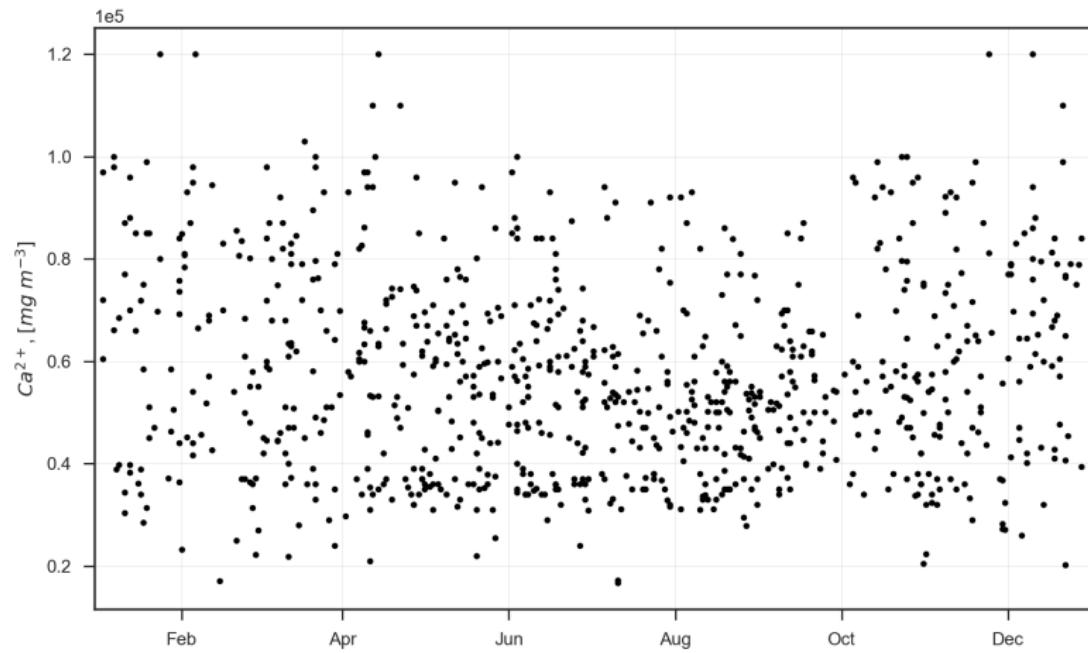
# PO4b



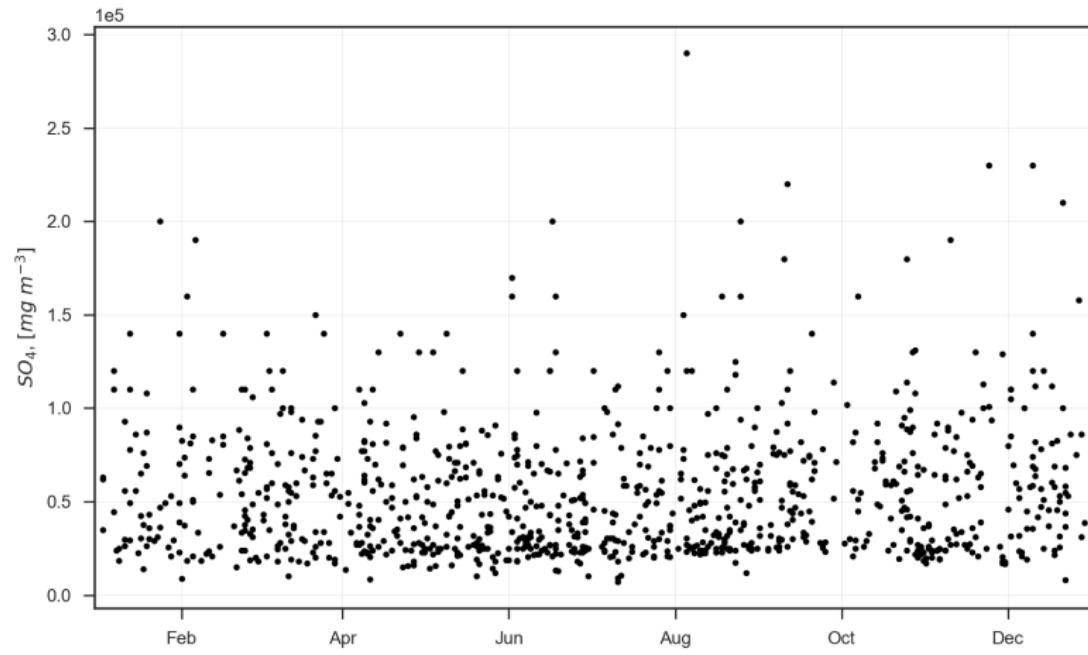
# PO4d



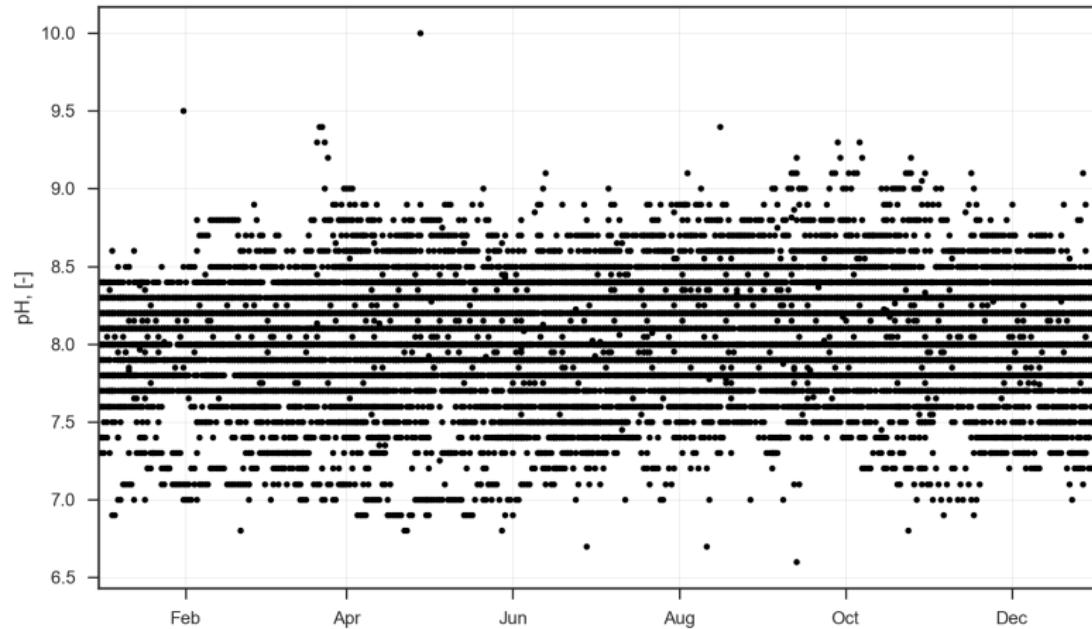
# Ca2



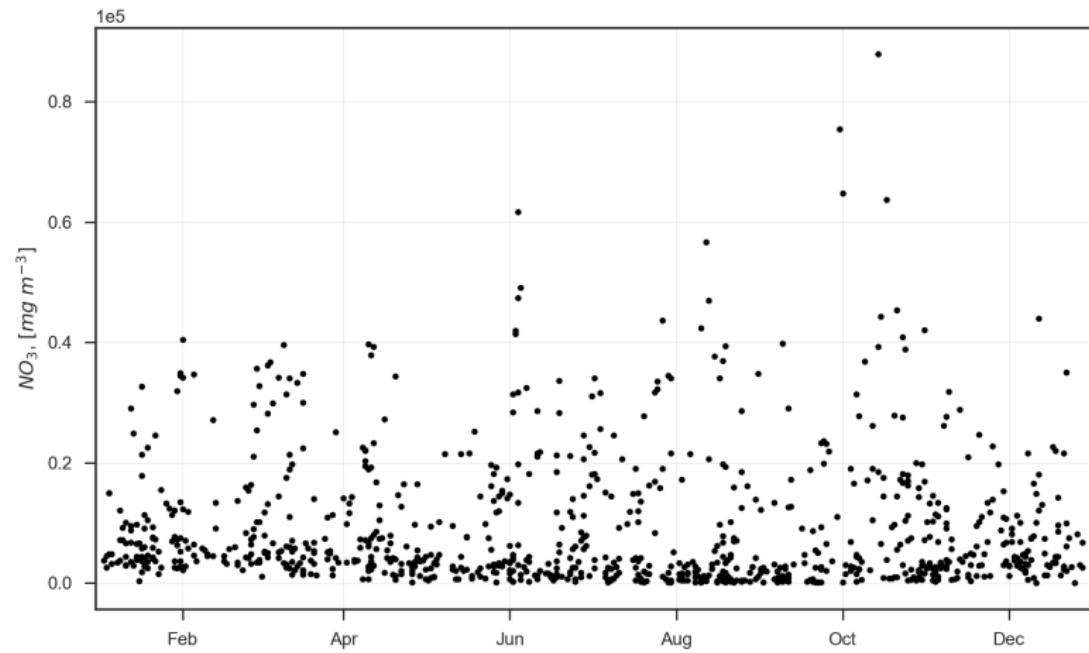
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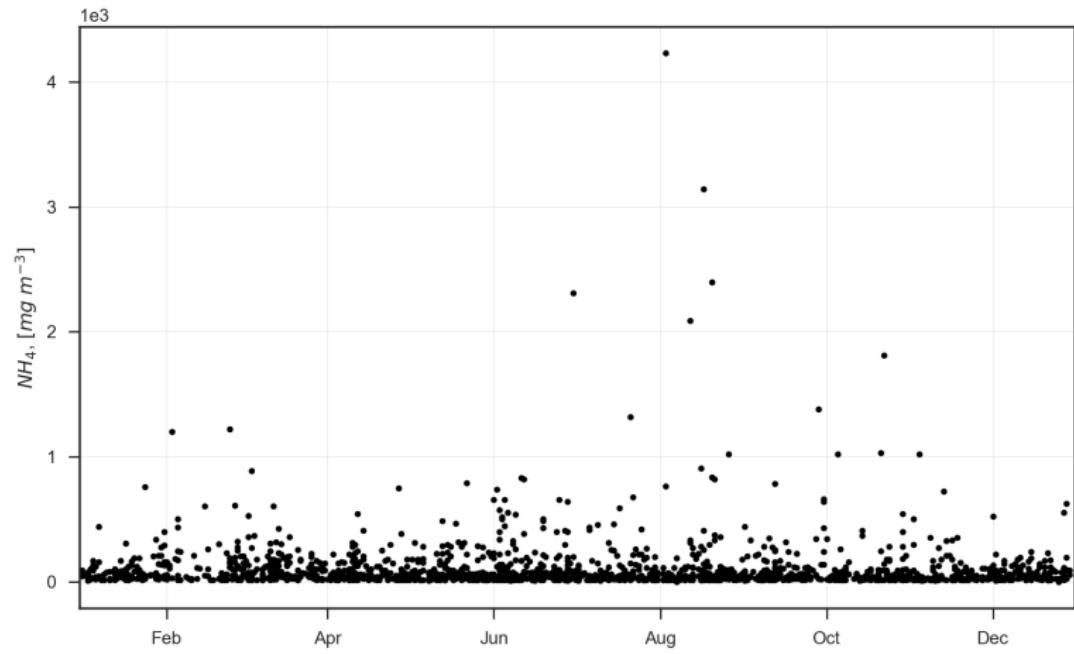
pH



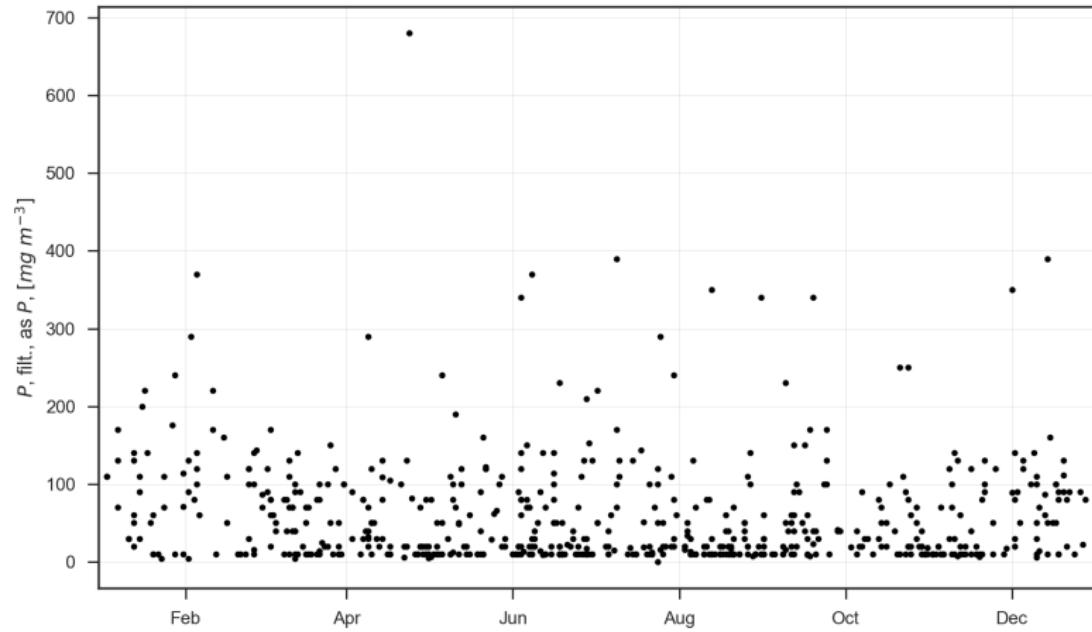
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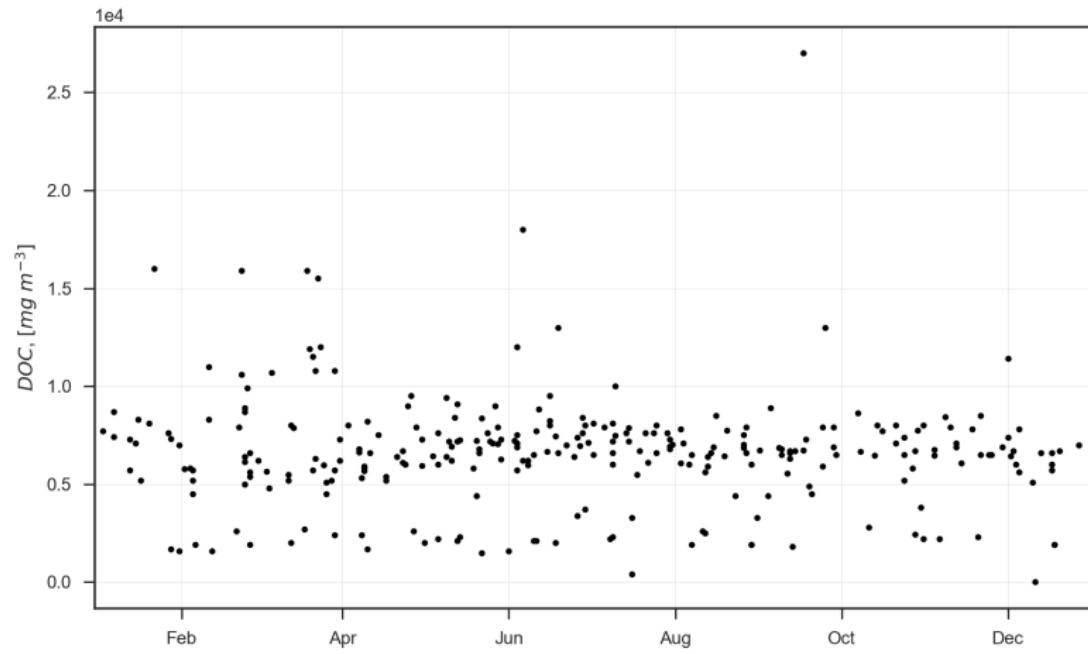
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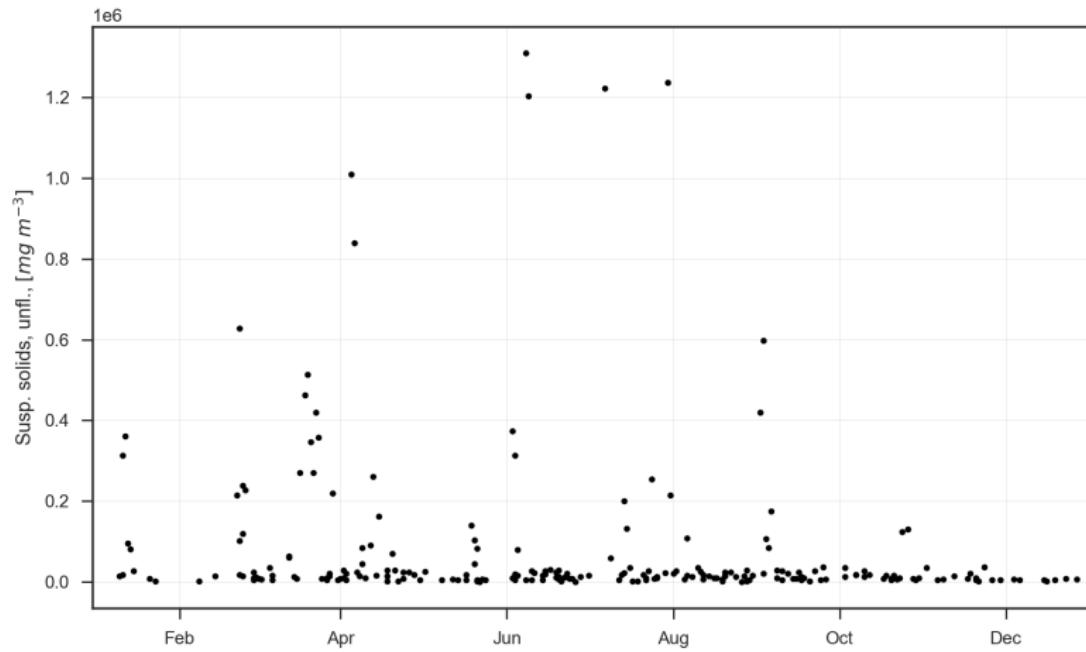
# PO4c



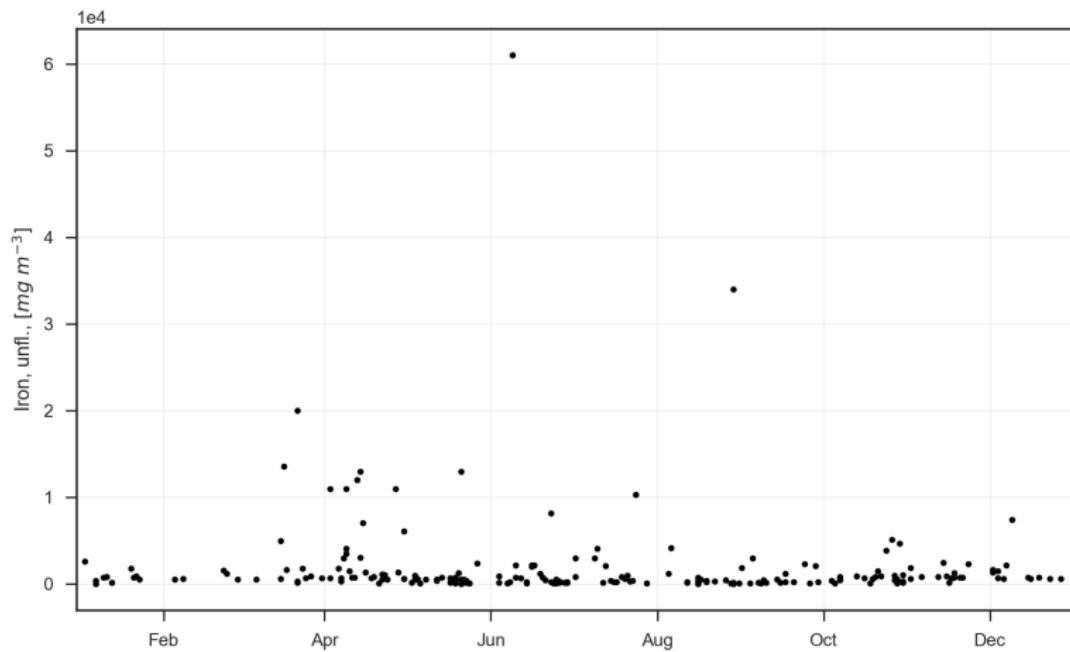
# DOC



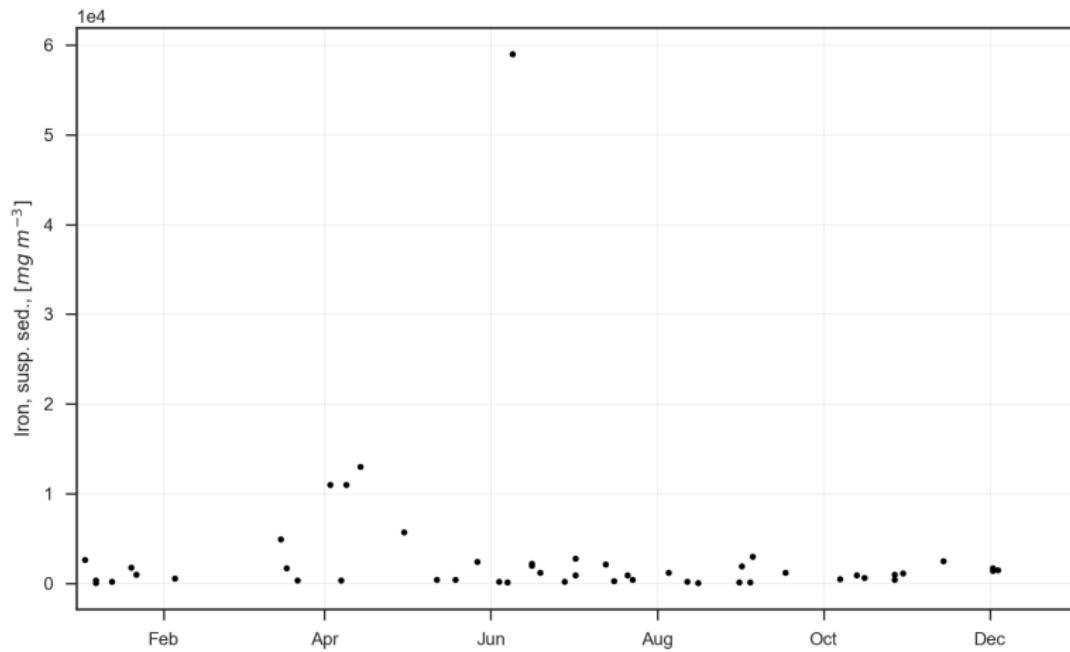
# SuspUnfil

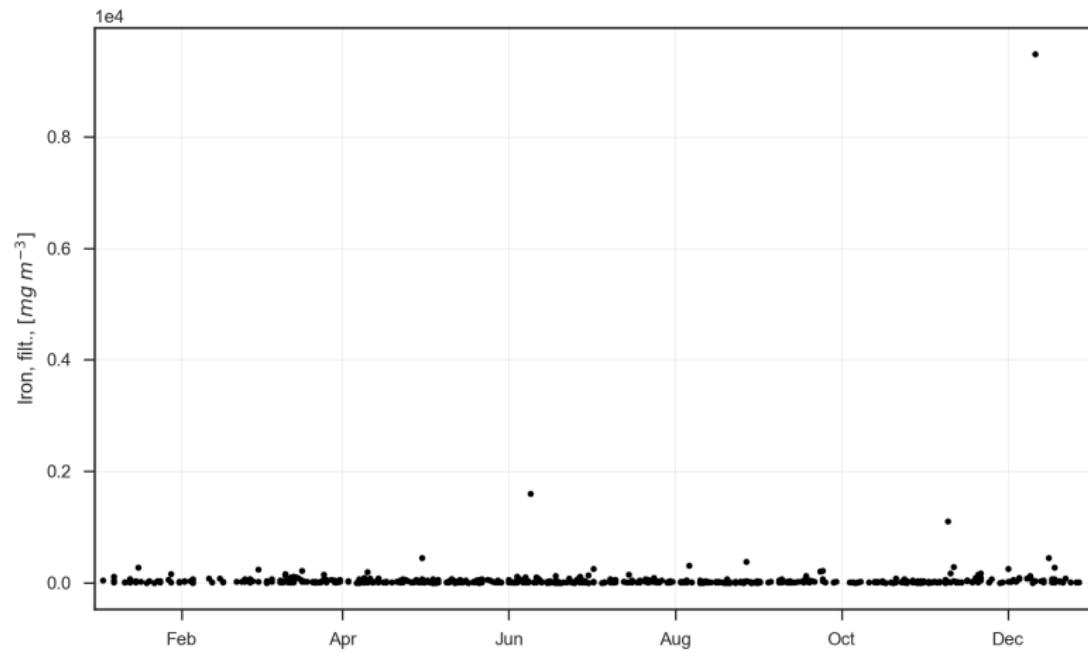


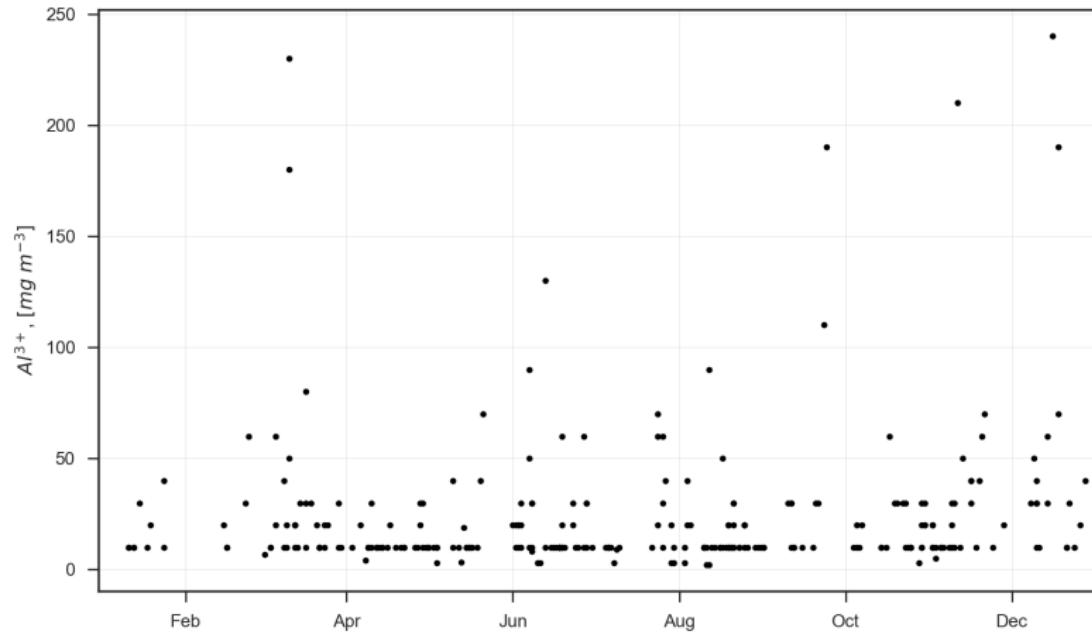
# IronUnfilRec



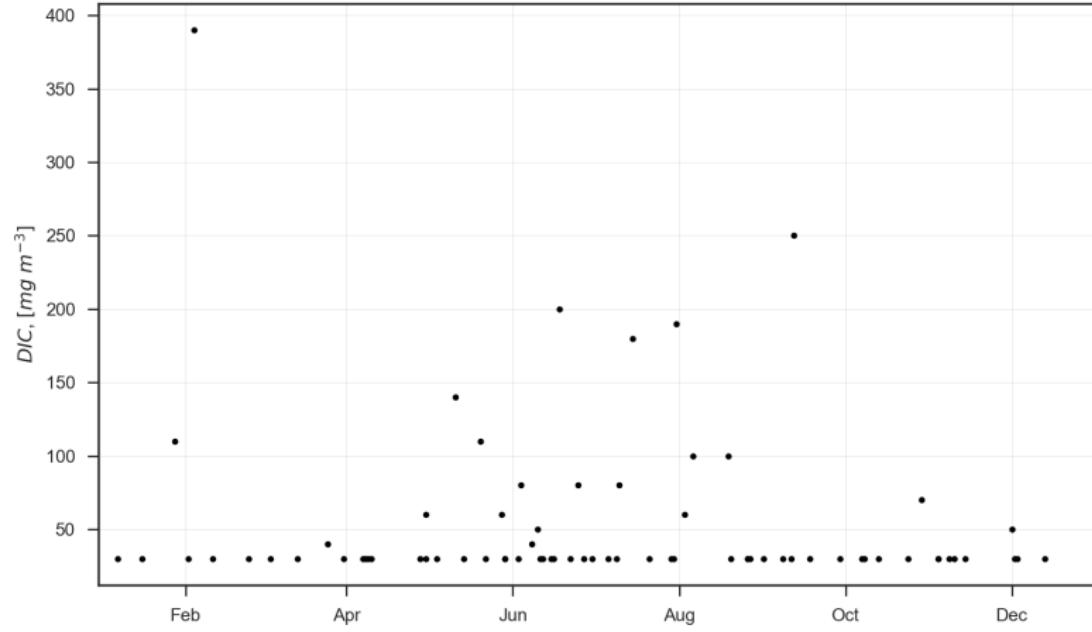
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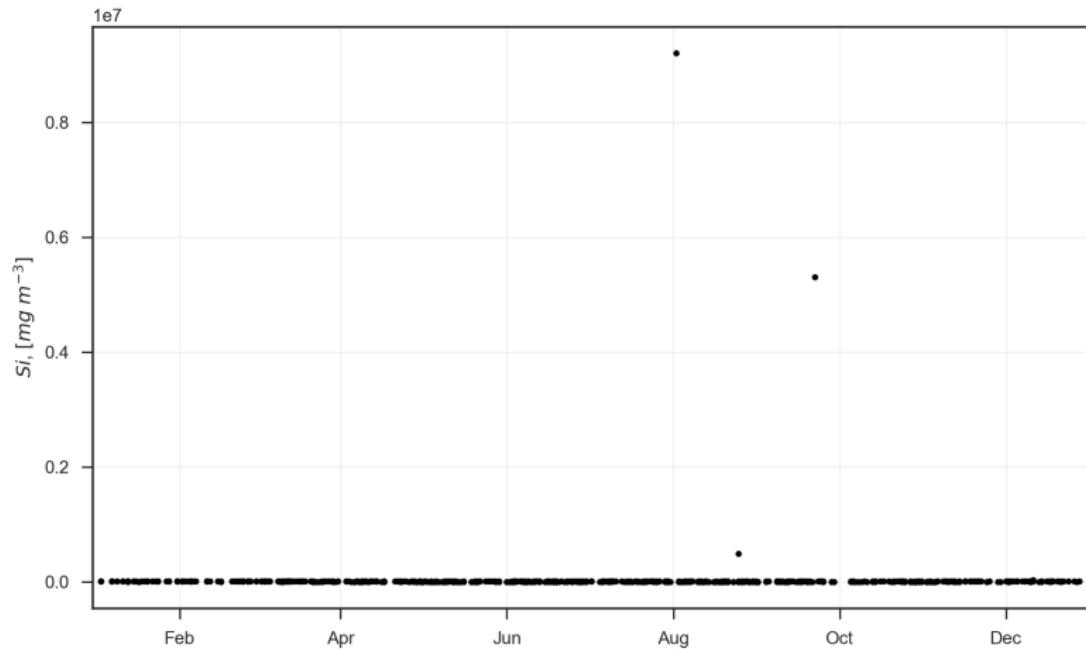




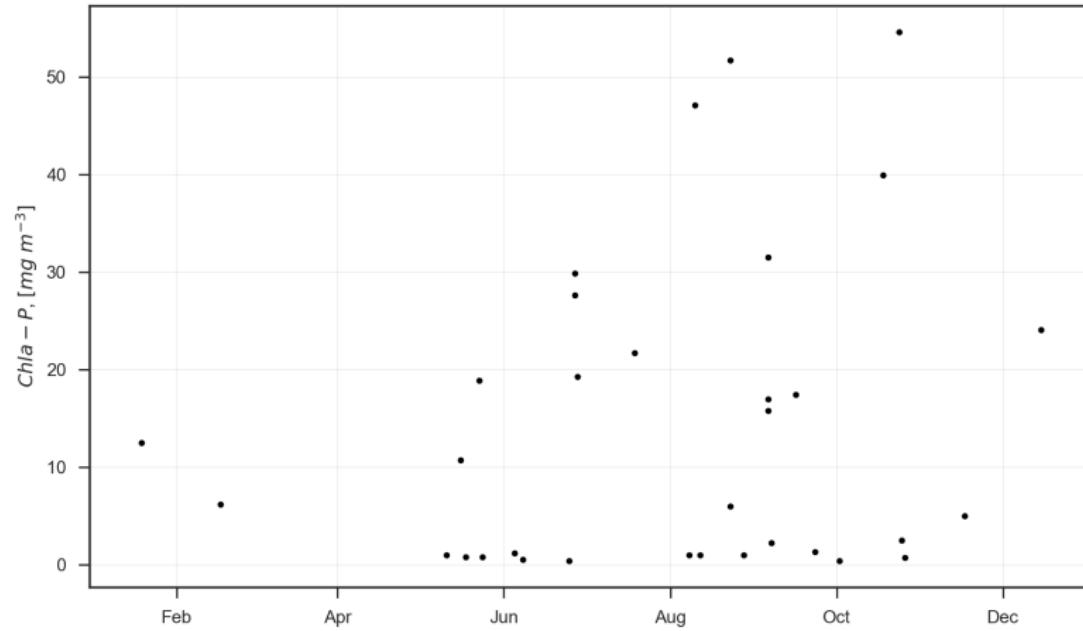


DIC

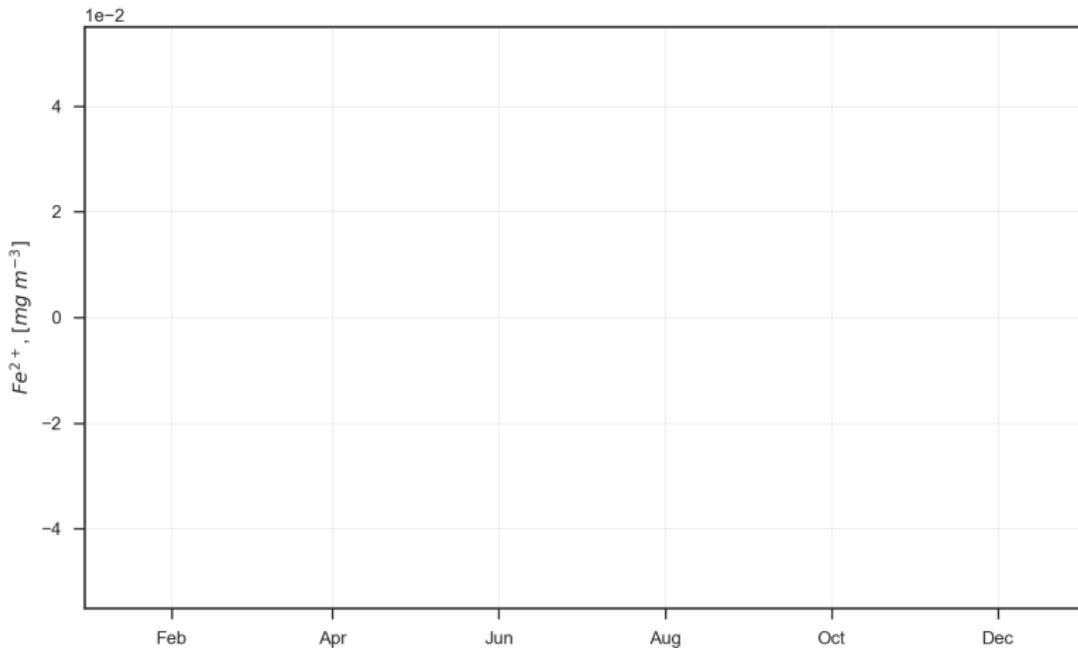




# Chla

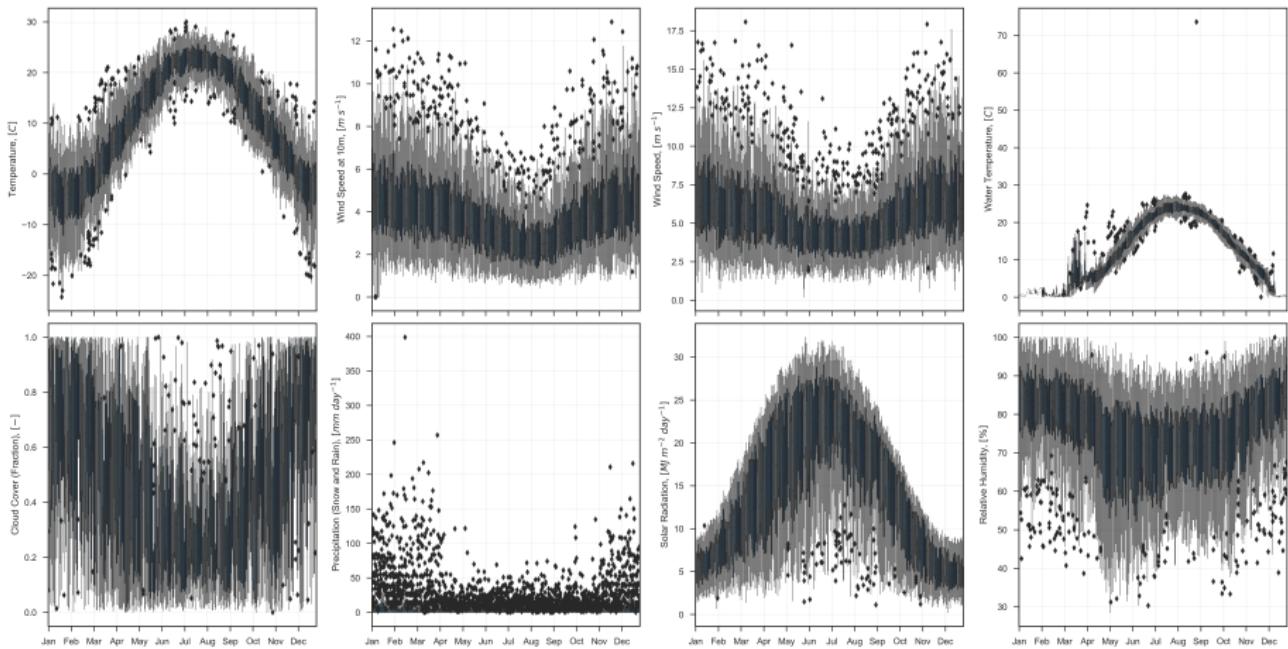


# Fe2

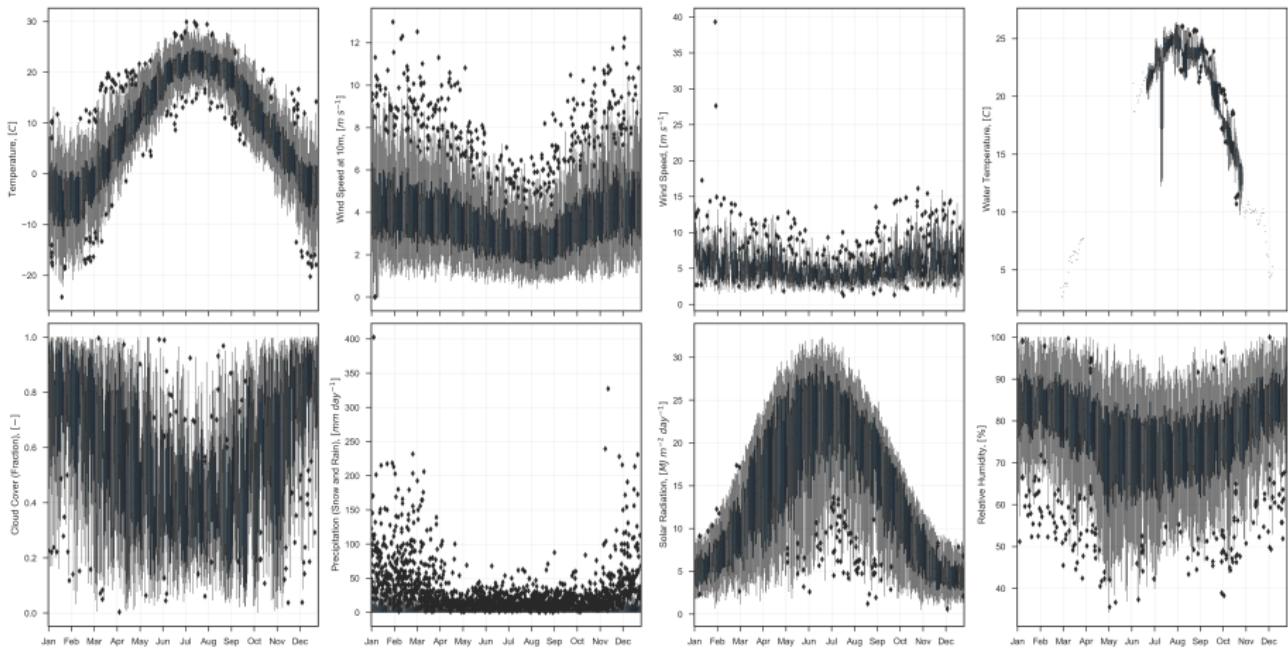


# Weather Boxplots

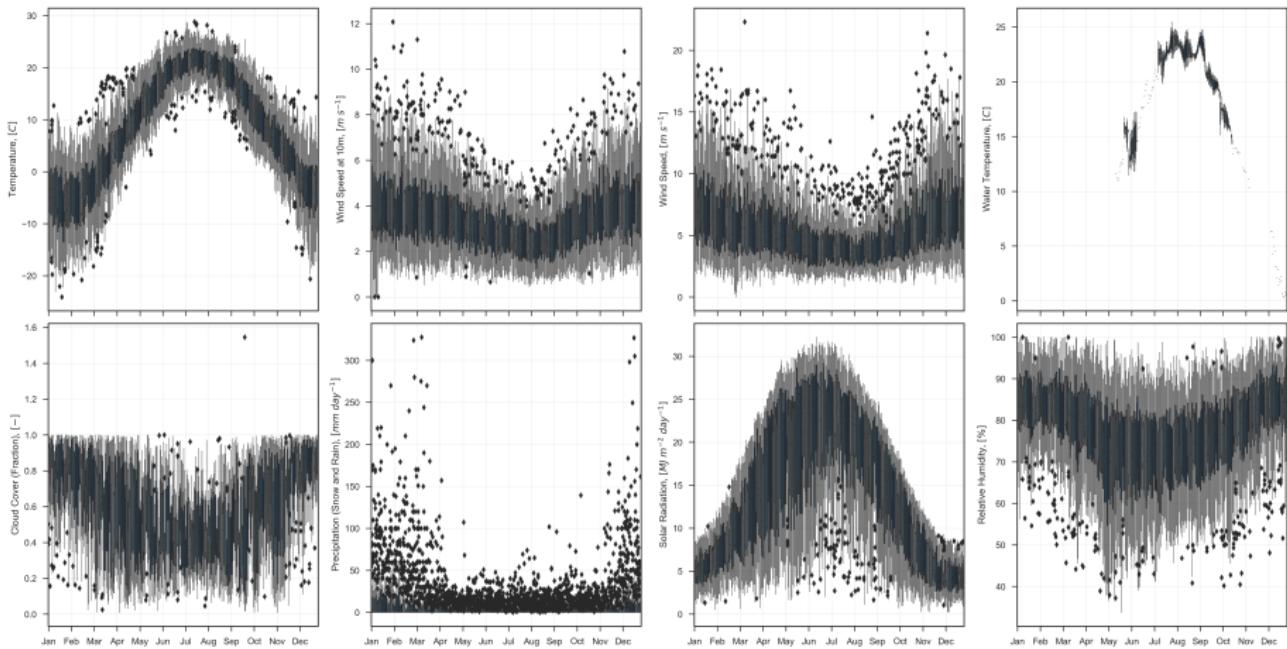
# Western Basin: 1 year boxplot



# Central Basin: 1 year boxplot



# Eastern Basin: 1 year boxplot

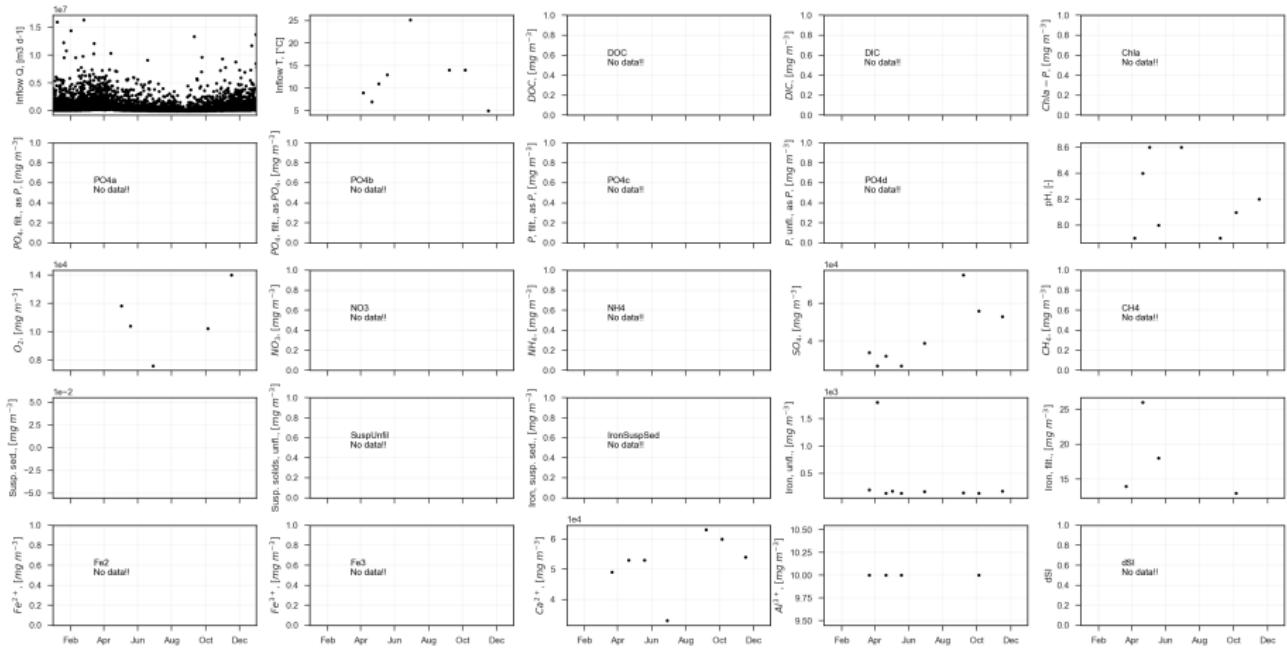


# Separate plots of Rivers

# Eastern basin

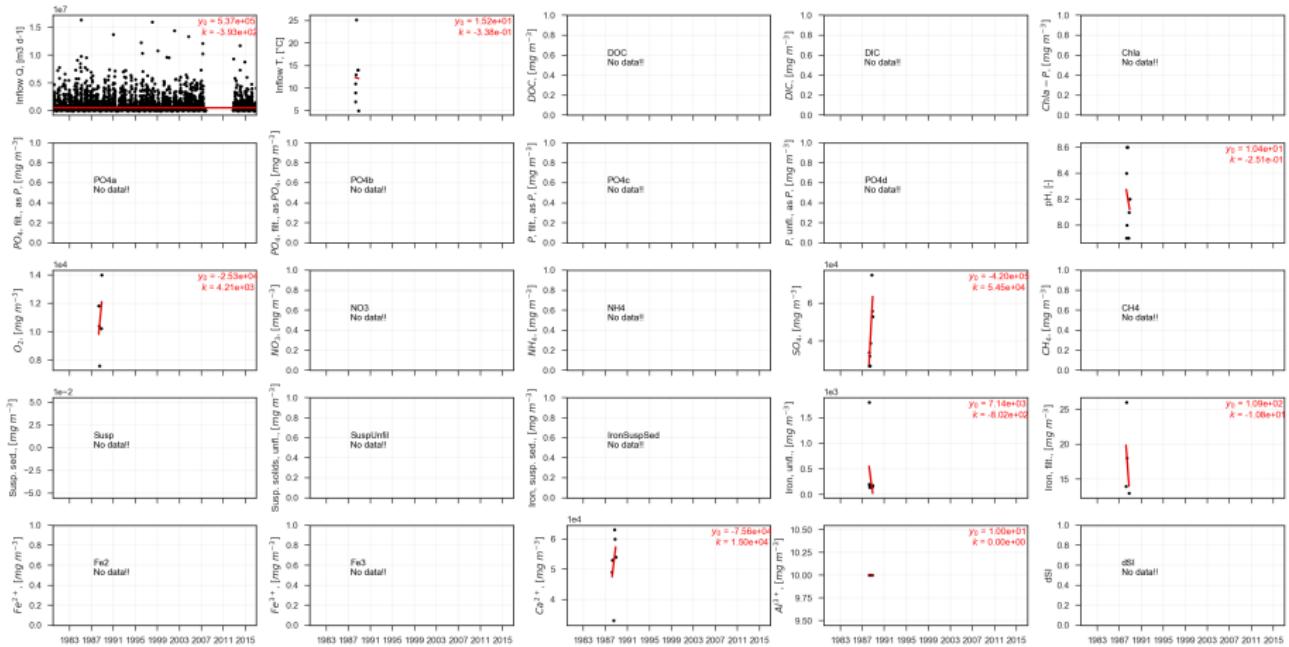
# Eastern Basin: Buffalo Creek

## One year plot



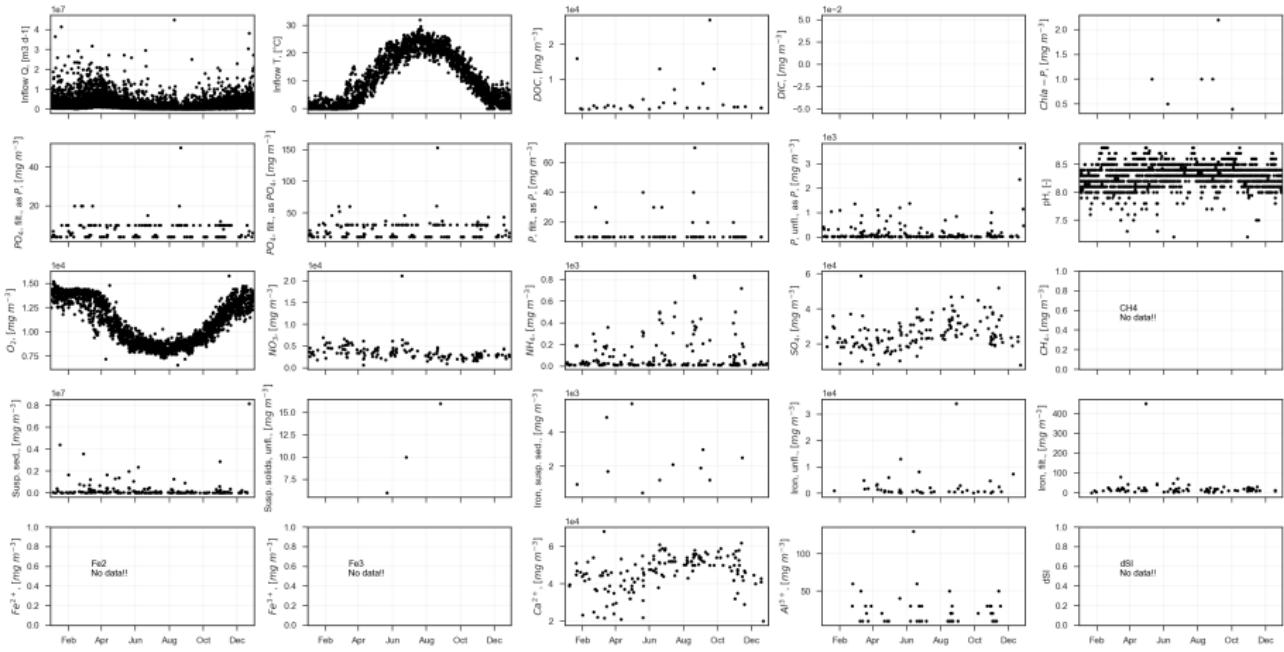
# Eastern Basin: Buffalo Creek

## All years plot



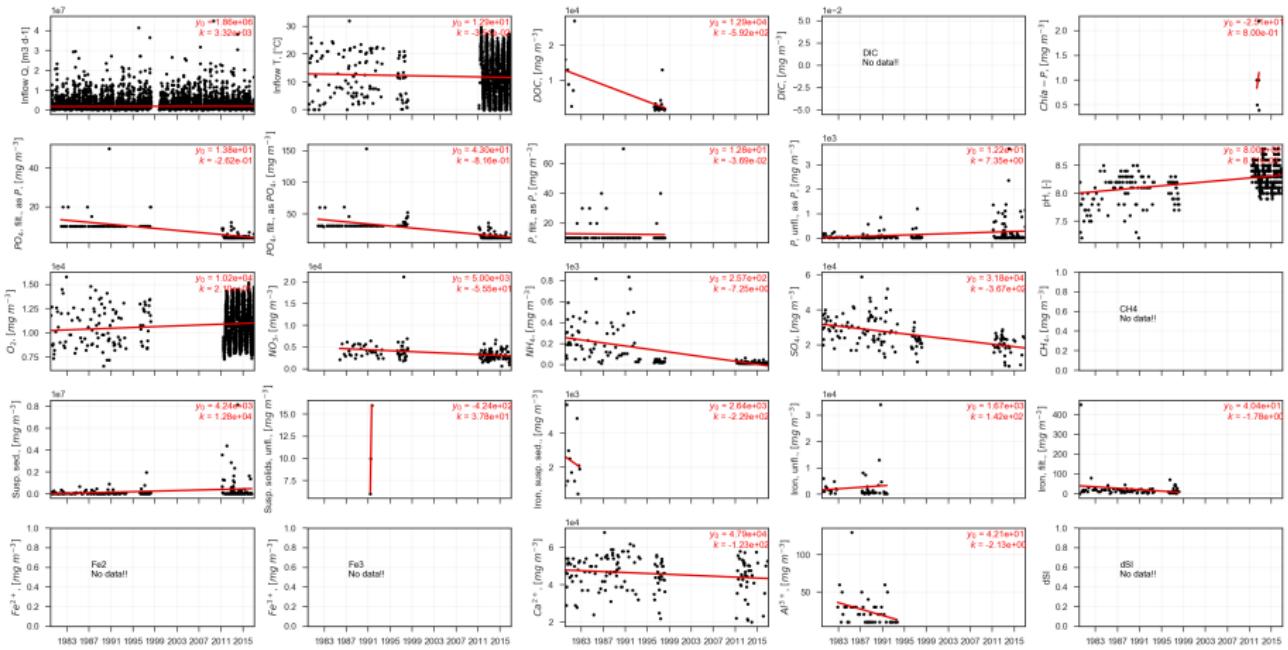
# Eastern Basin: Cattaraugus Creek

## One year plot



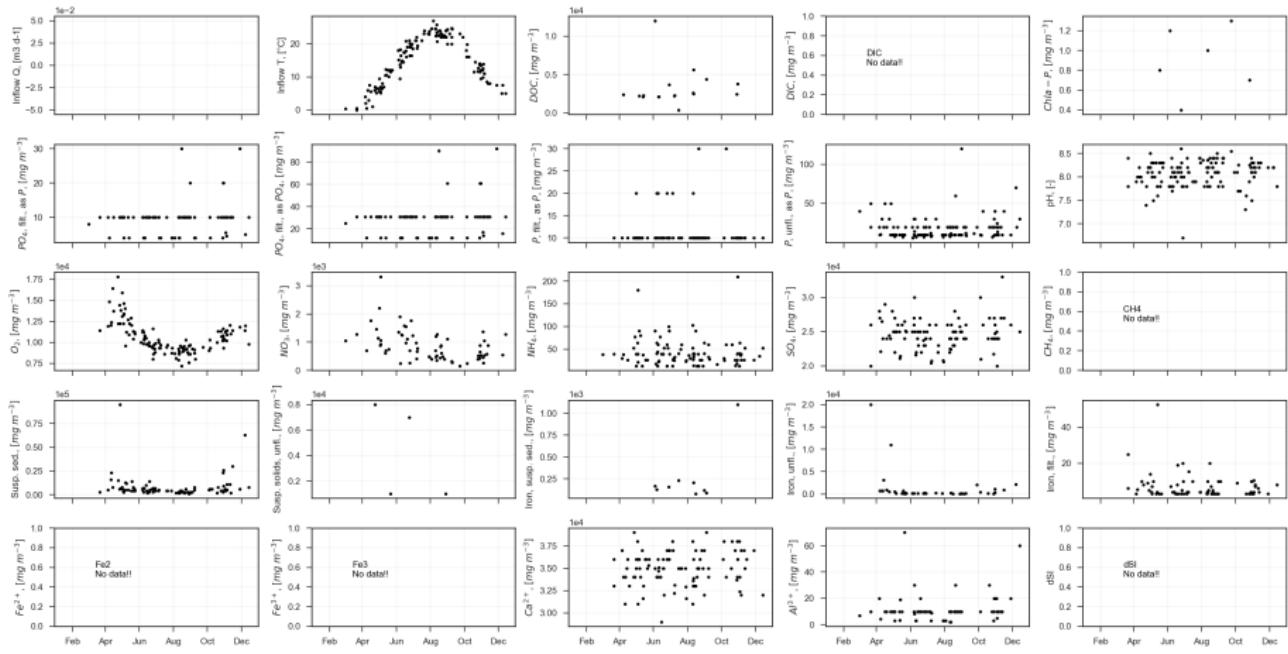
# Eastern Basin: Cattaraugus Creek

## All years plot



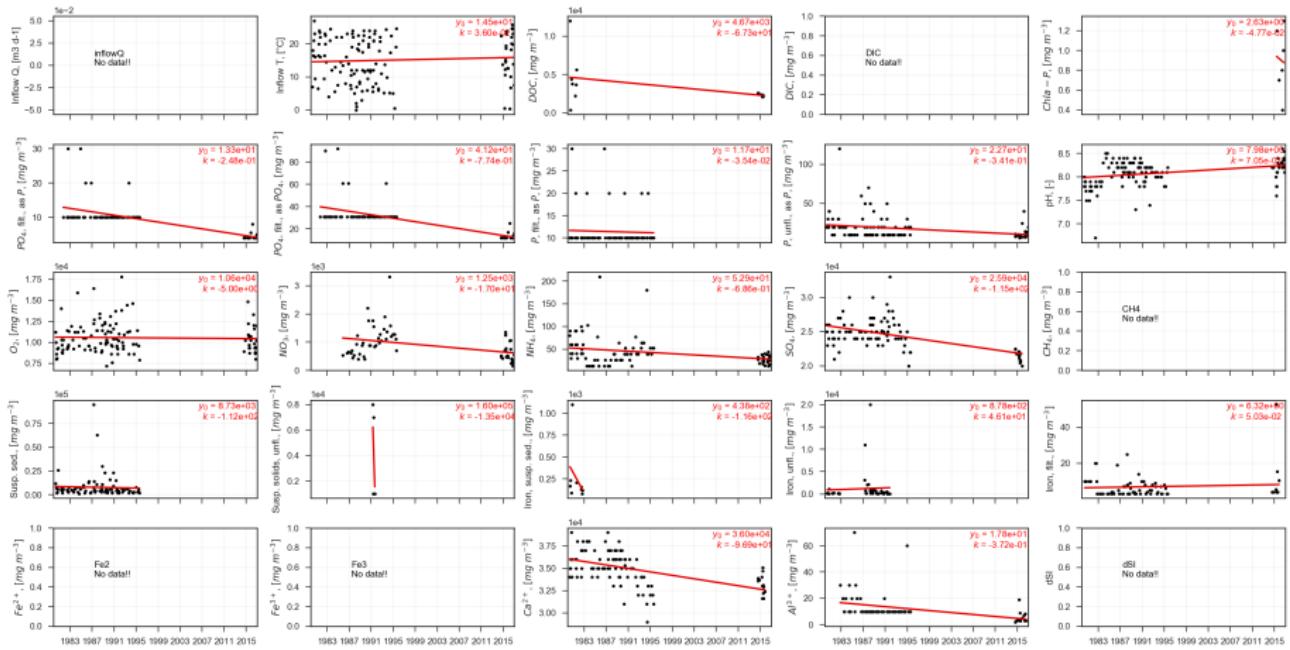
# Eastern Basin: Niagara river

## One year plot



# Eastern Basin: Niagara river

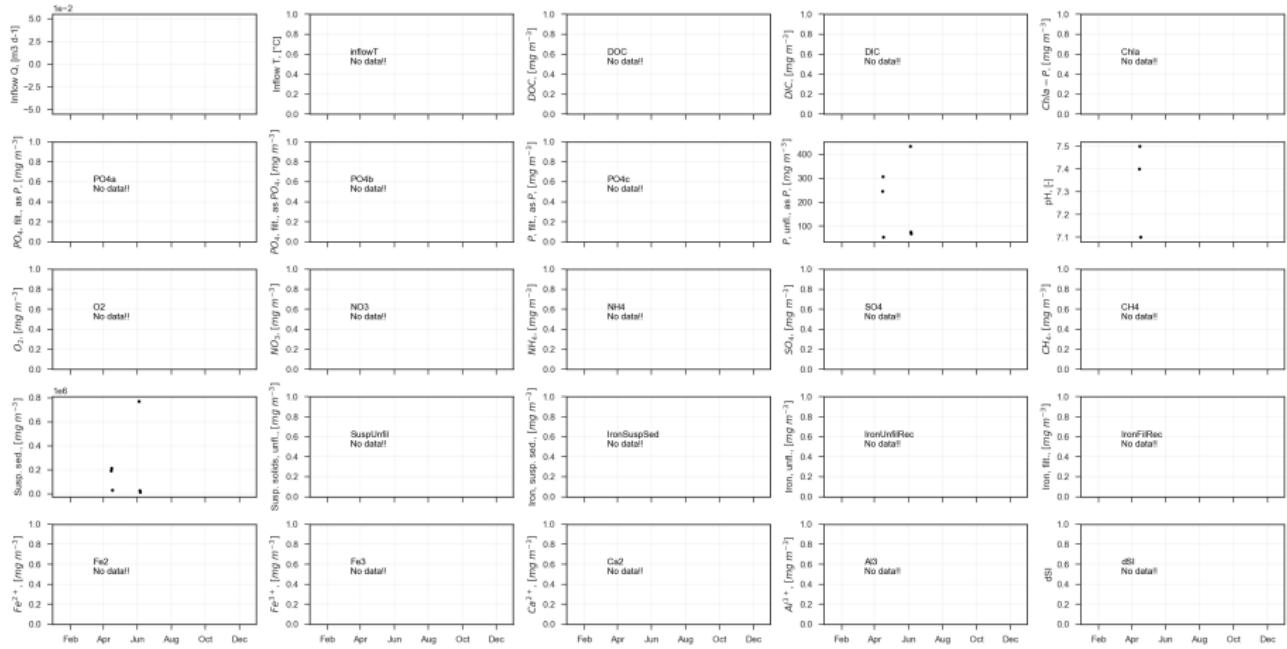
## All years plot



# Central basin

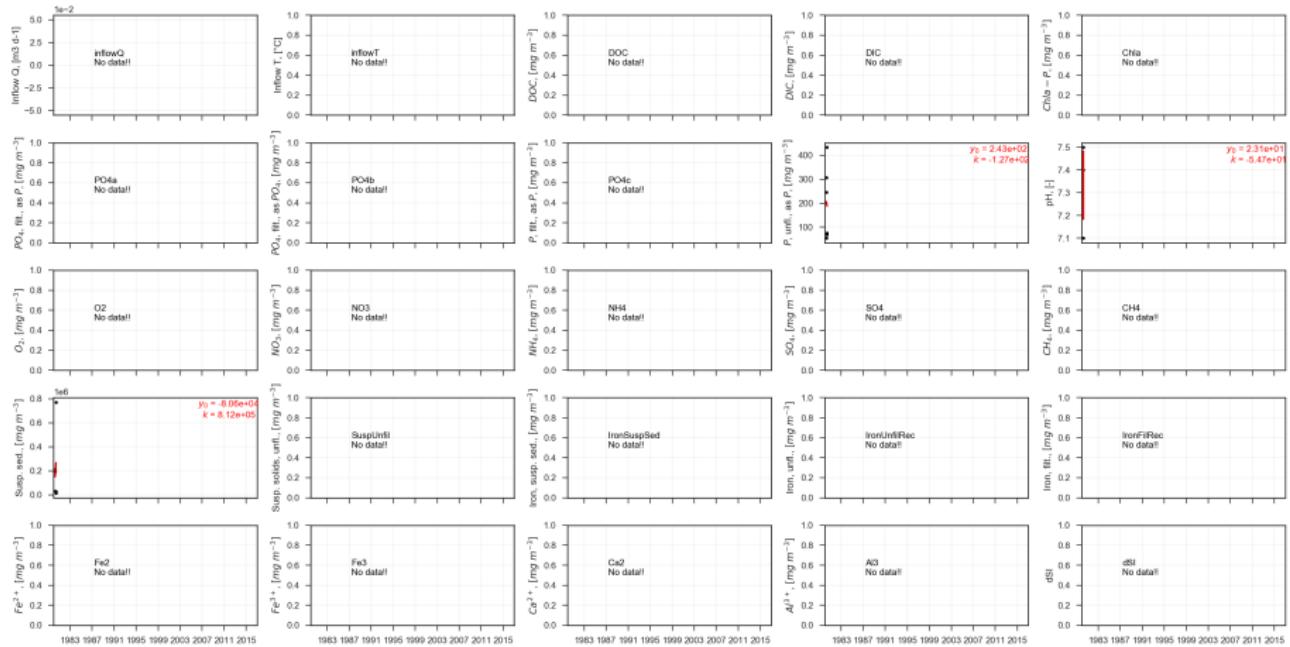
# Central Basin: Ashtabula River

## One year plot



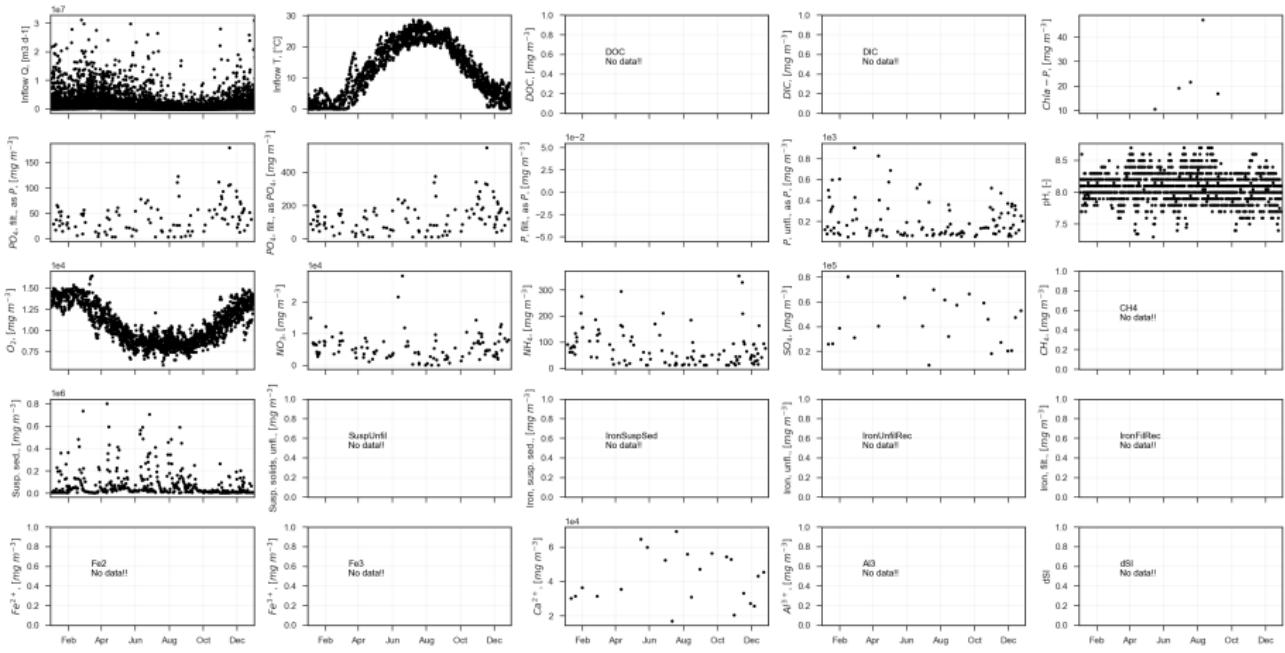
# Central Basin: Ashtabula River

## All years plot



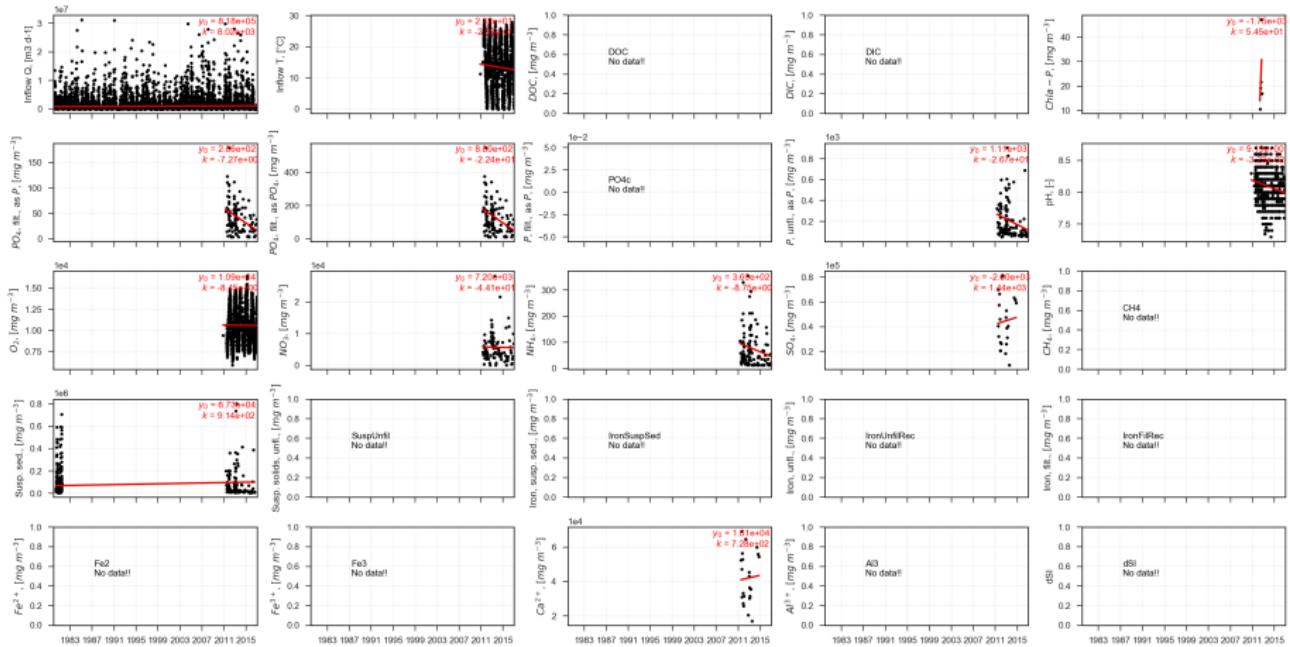
# Central Basin: Black River

## One year plot



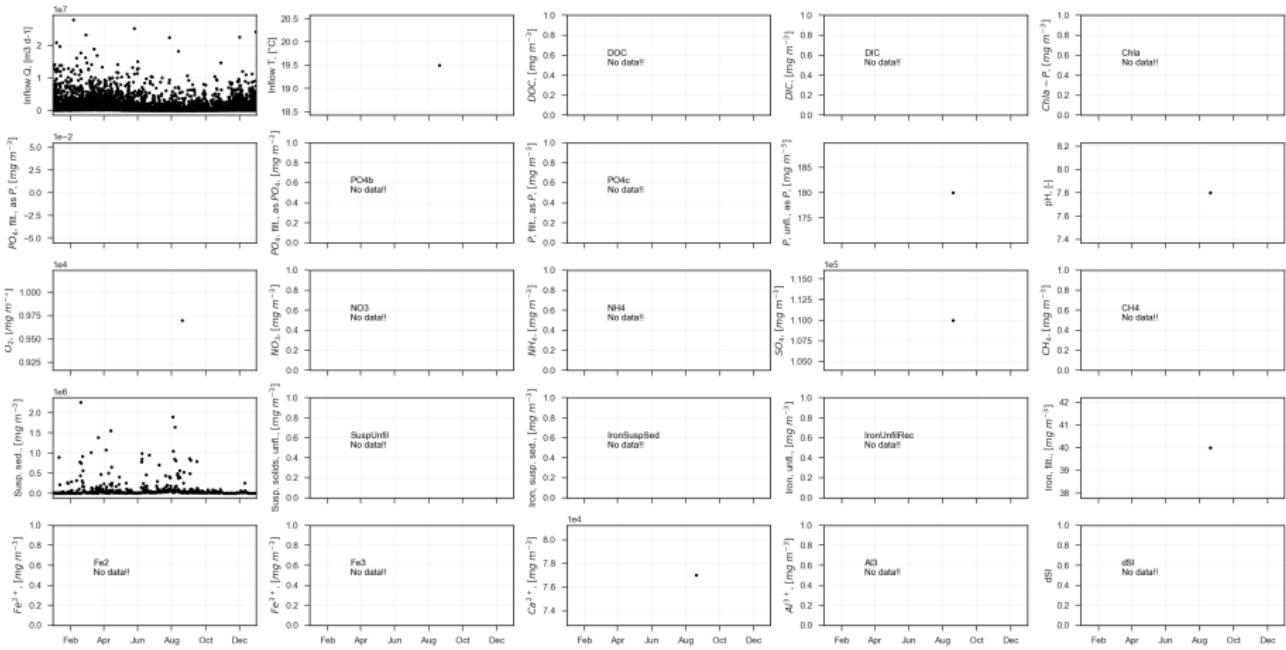
# Central Basin: Black River

## All years plot



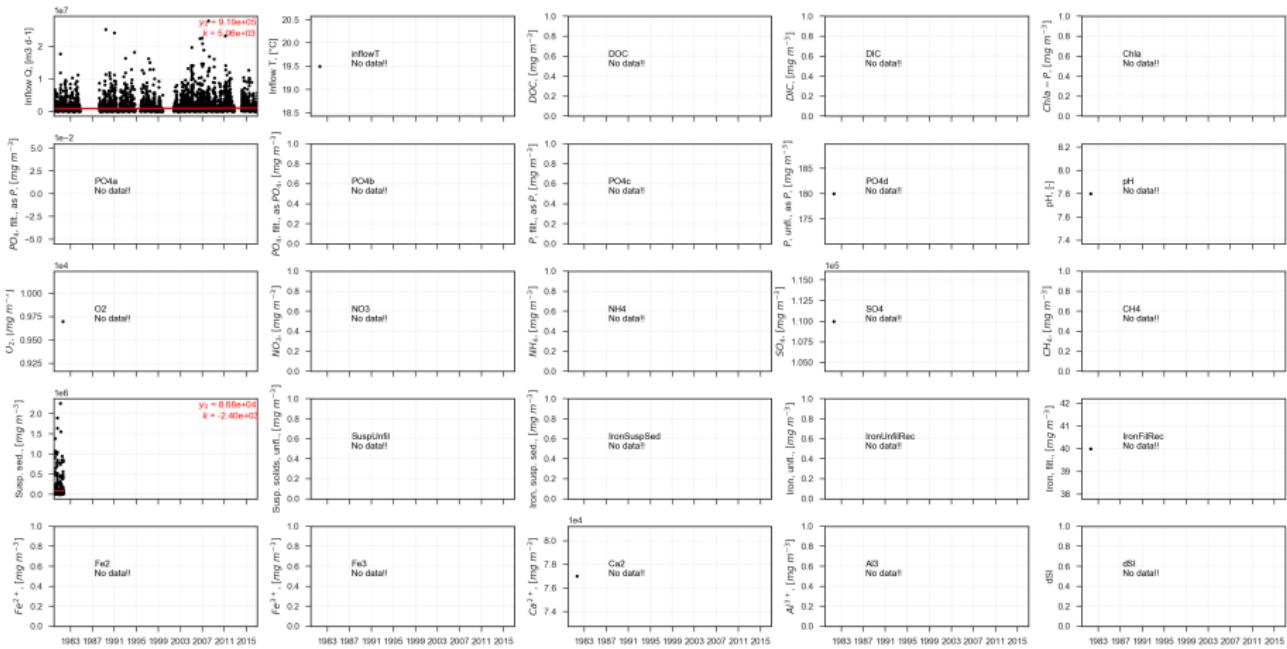
# Central Basin: Chagrin River

## One year plot



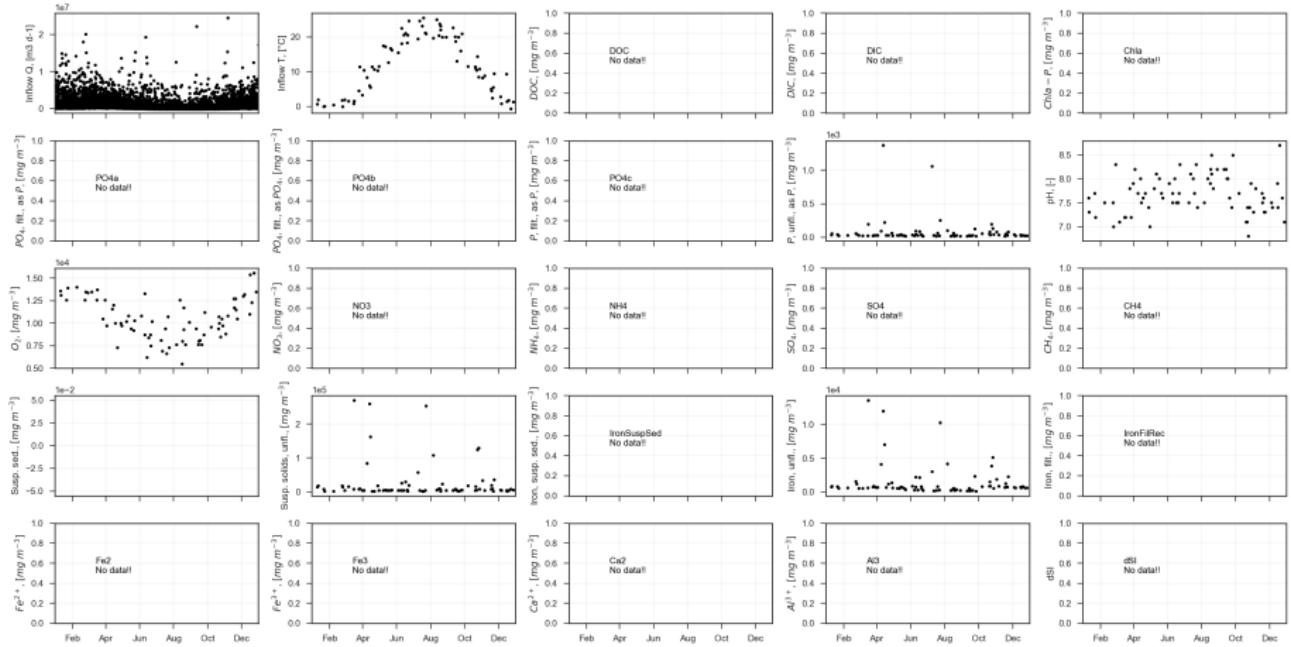
# Central Basin: Chagrin River

## All years plot



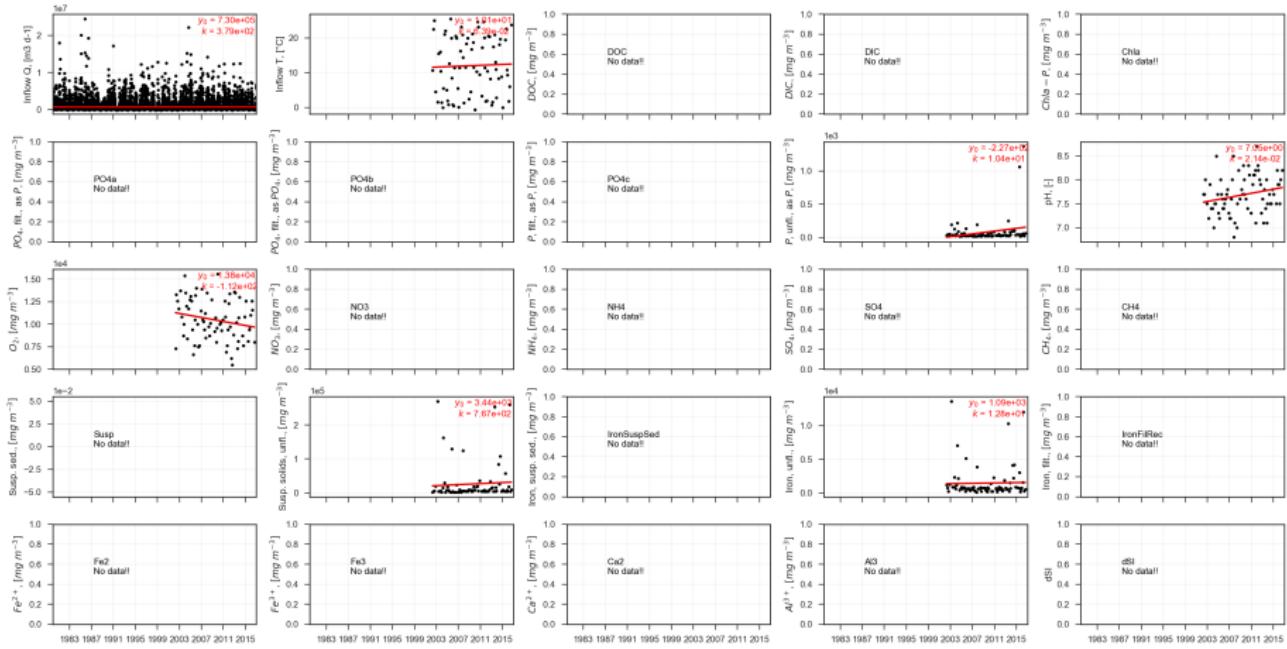
# Central Basin: Conneaut Creek

## One year plot



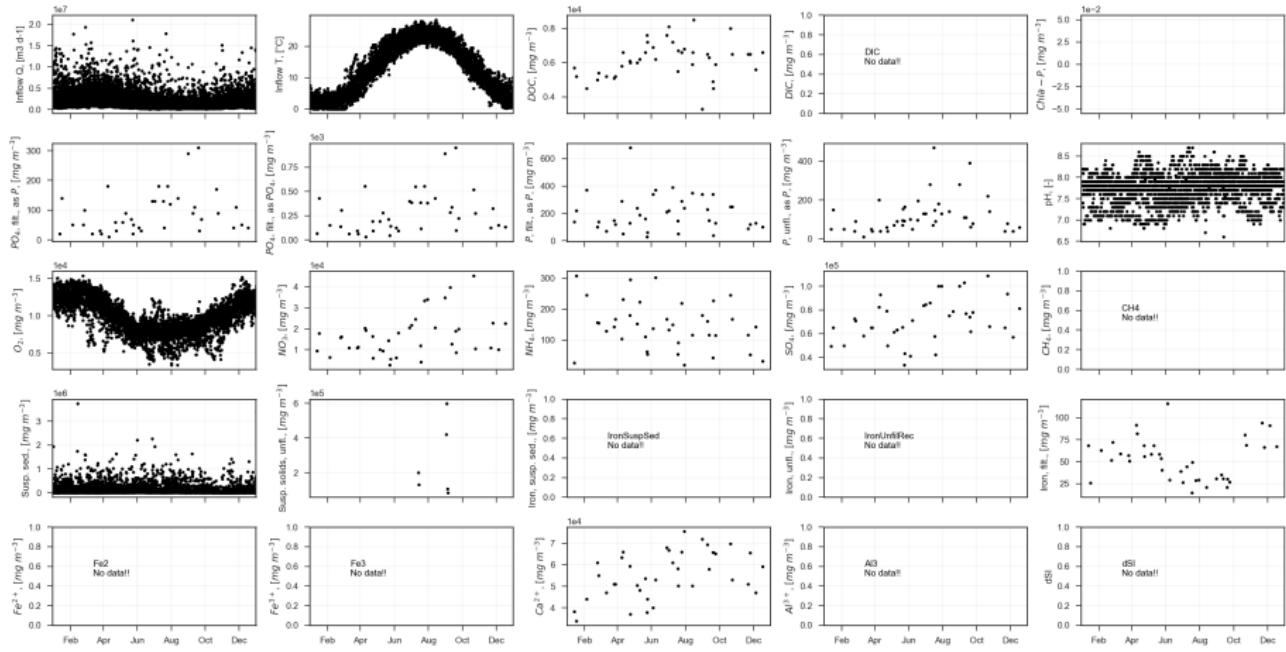
# Central Basin: Conneaut Creek

## All years plot



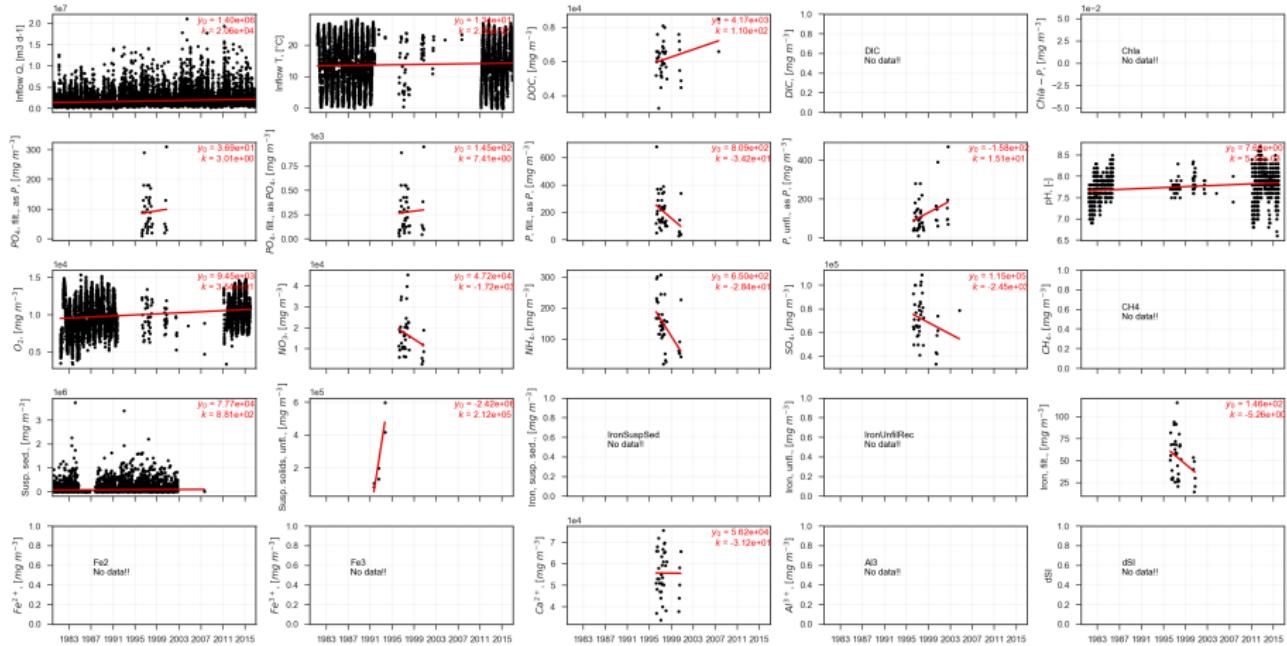
# Central Basin: Cuyahoga River

## One year plot



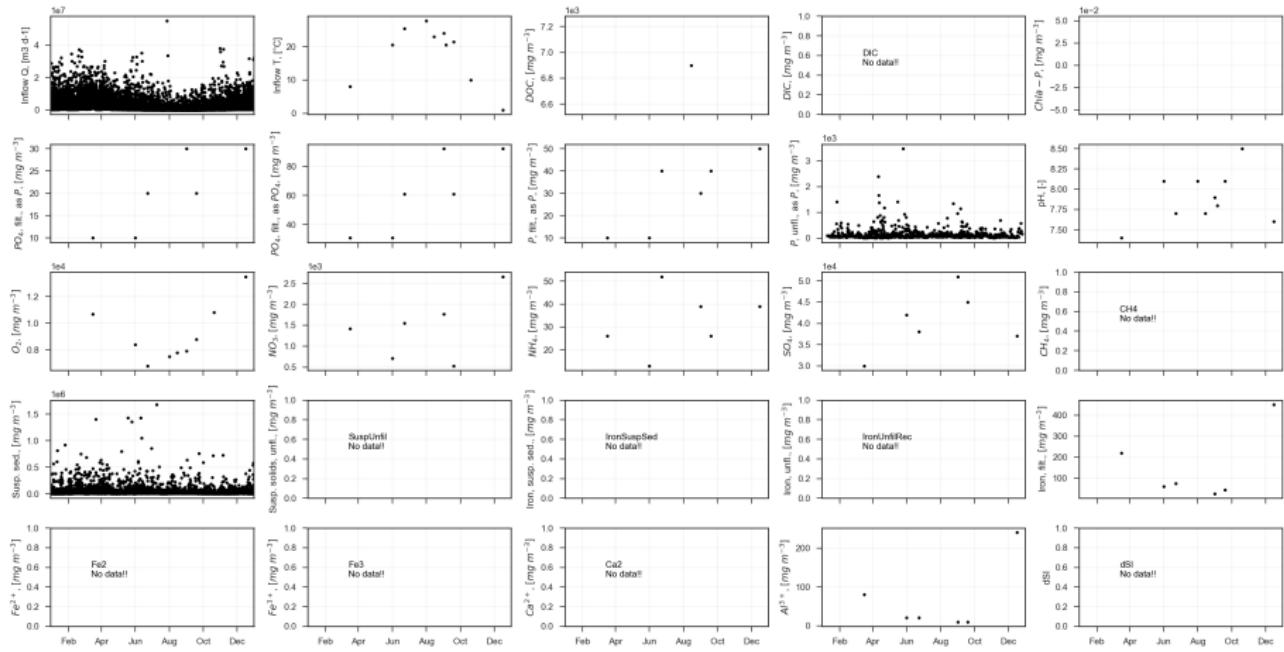
# Central Basin: Cuyahoga River

## All years plot



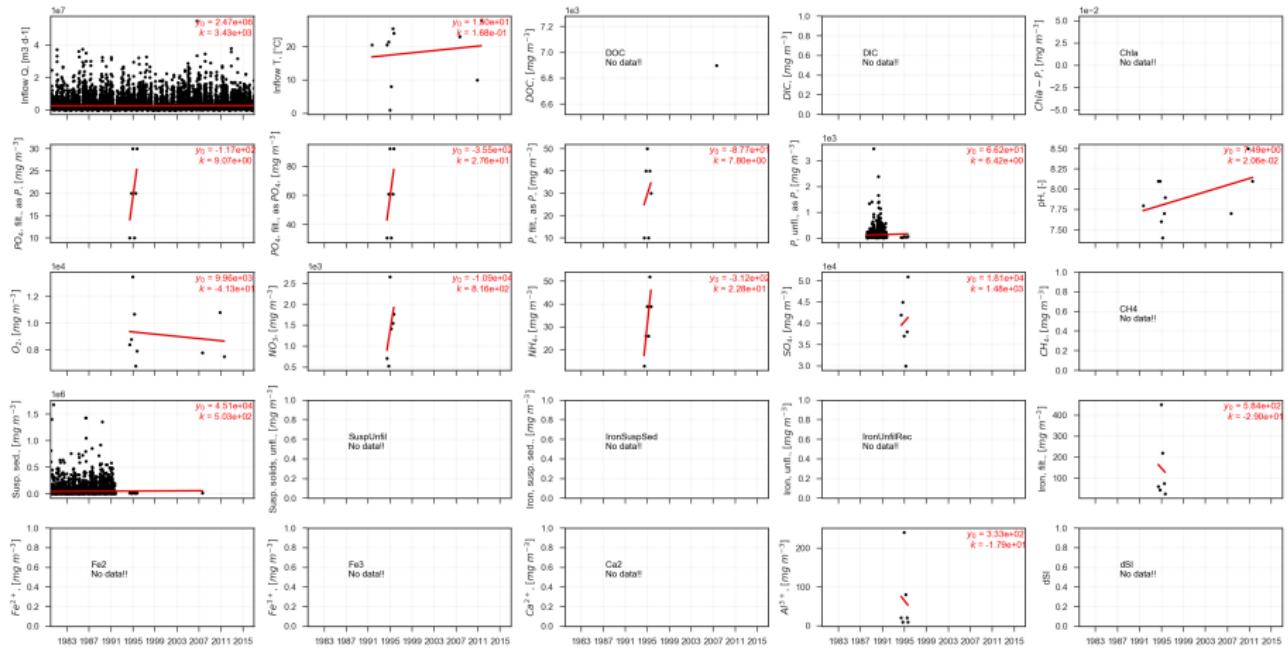
# Central Basin: Grand River

## One year plot



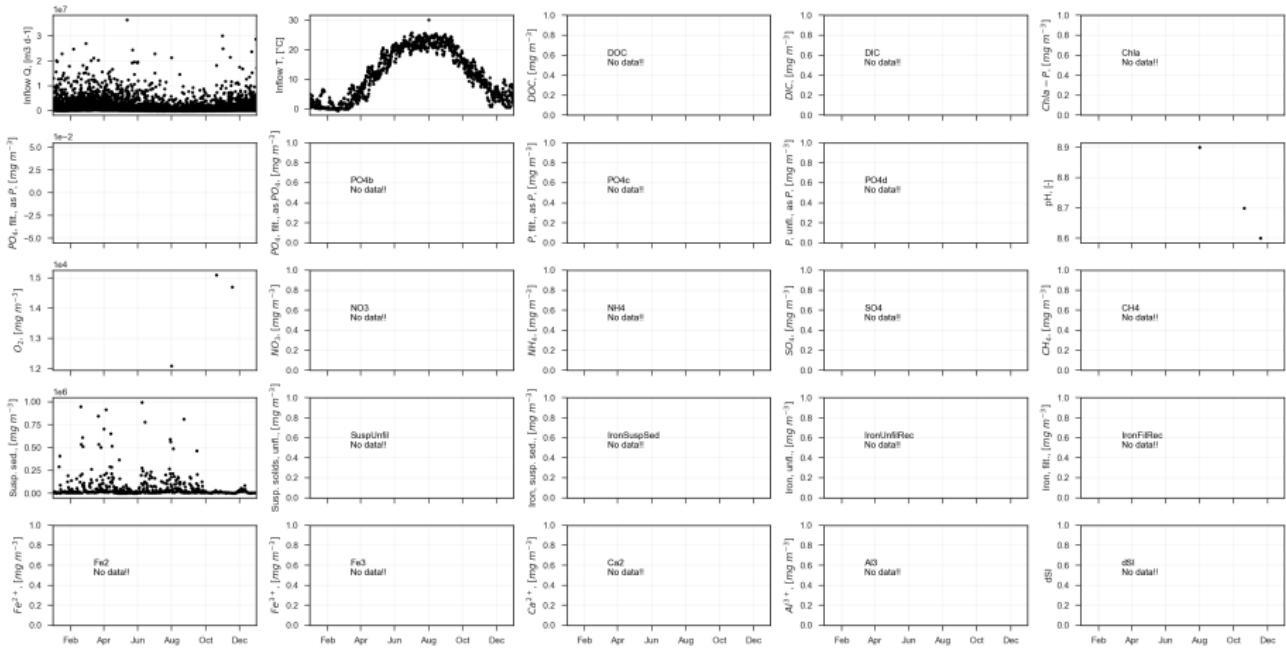
# Central Basin: Grand River

## All years plot



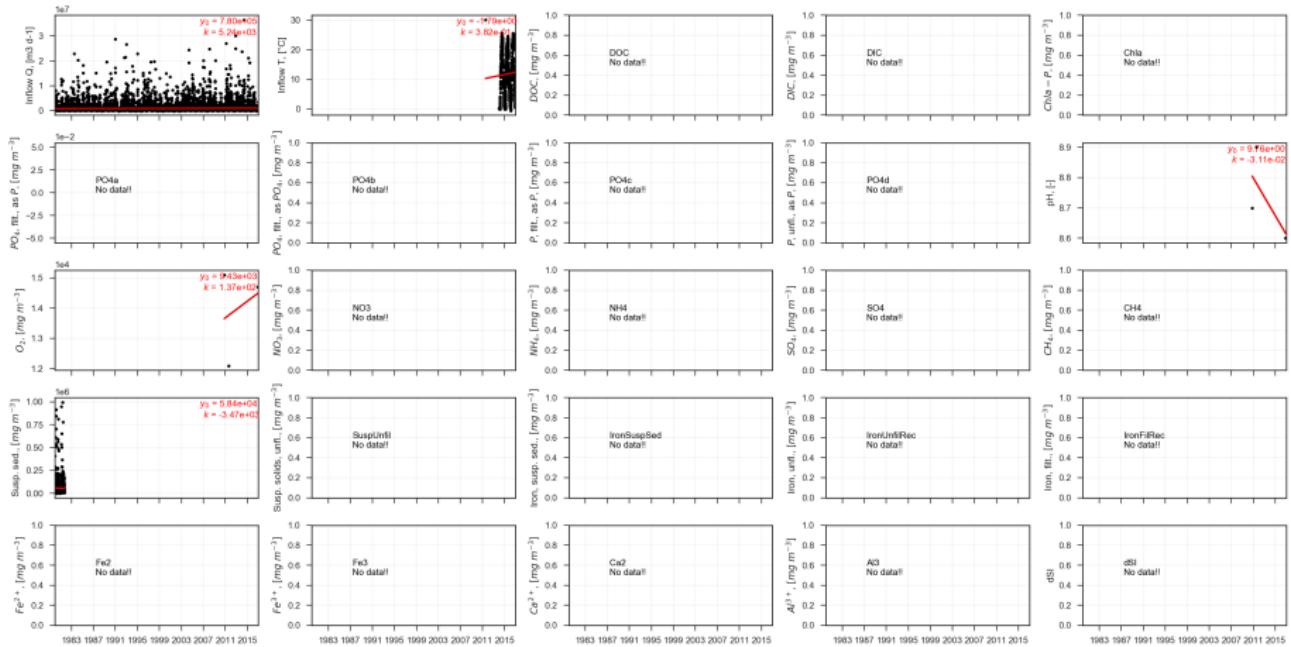
# Central Basin: Rocky River

## One year plot



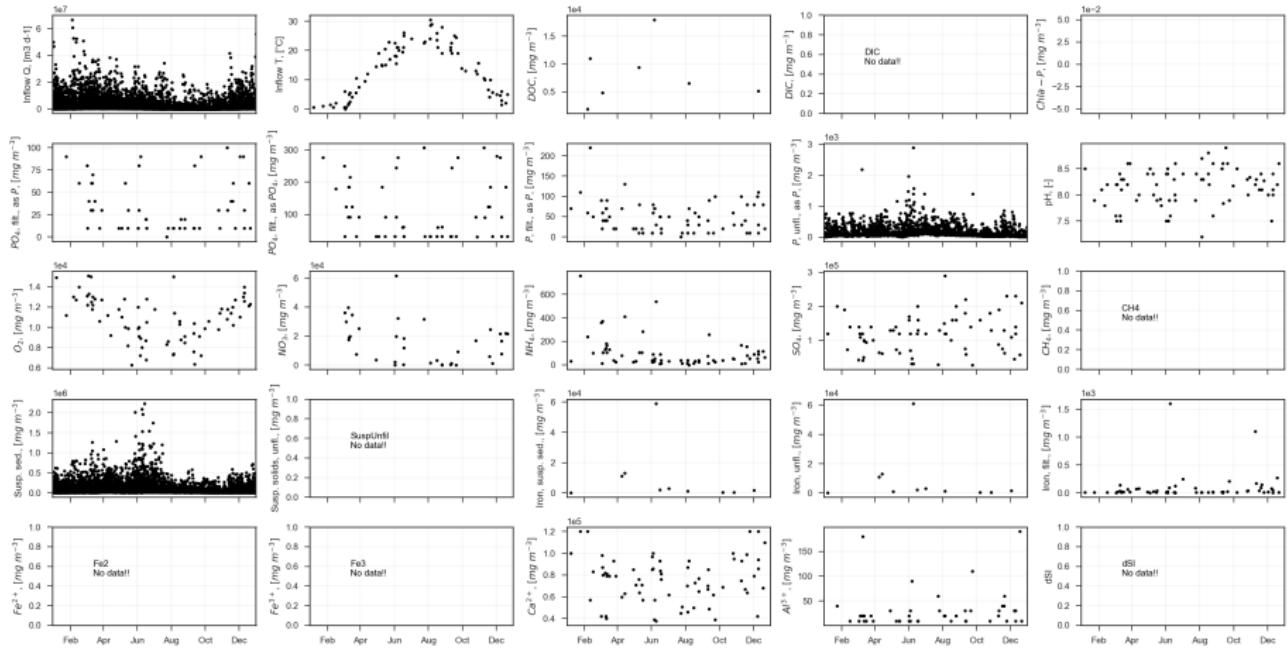
# Central Basin: Rocky River

## All years plot



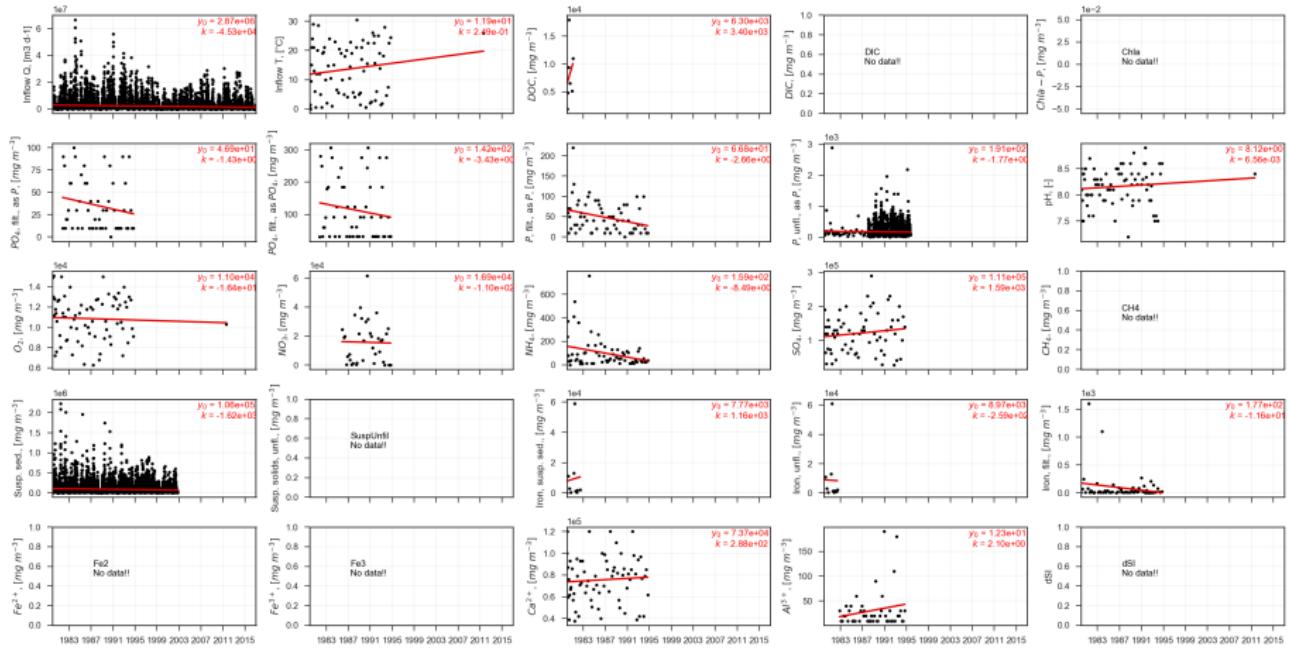
# Central Basin: Sandusky River

## One year plot



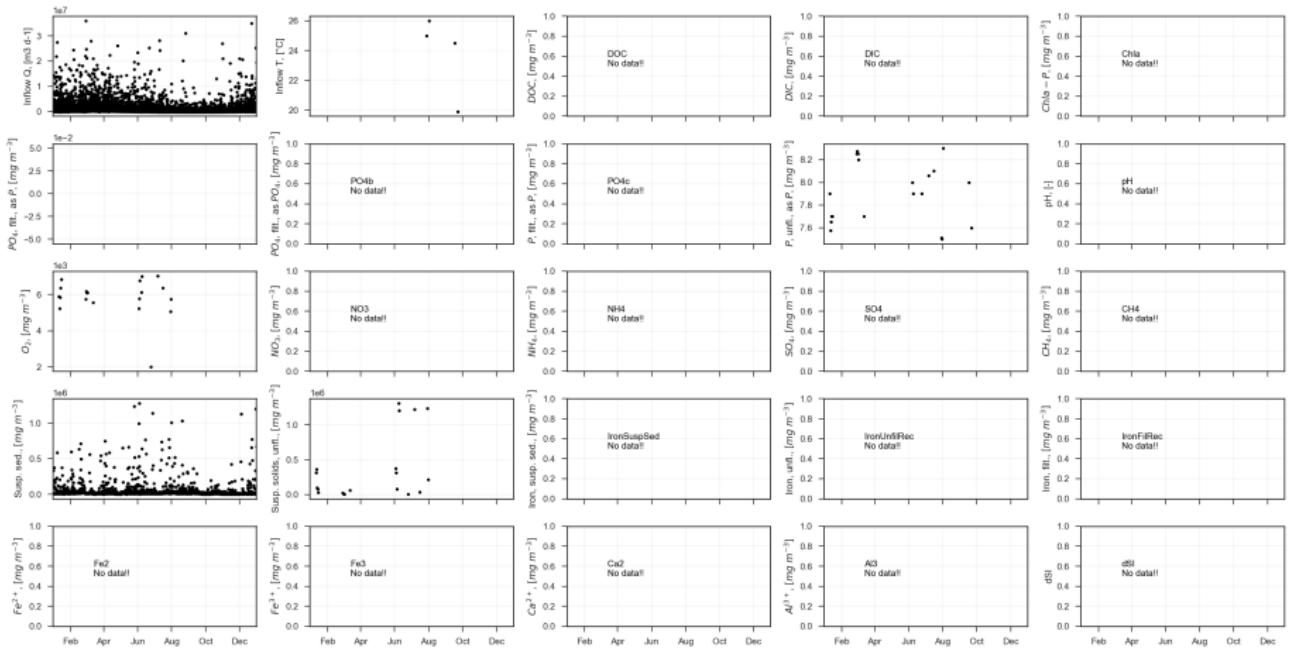
# Central Basin: Sandusky River

## All years plot



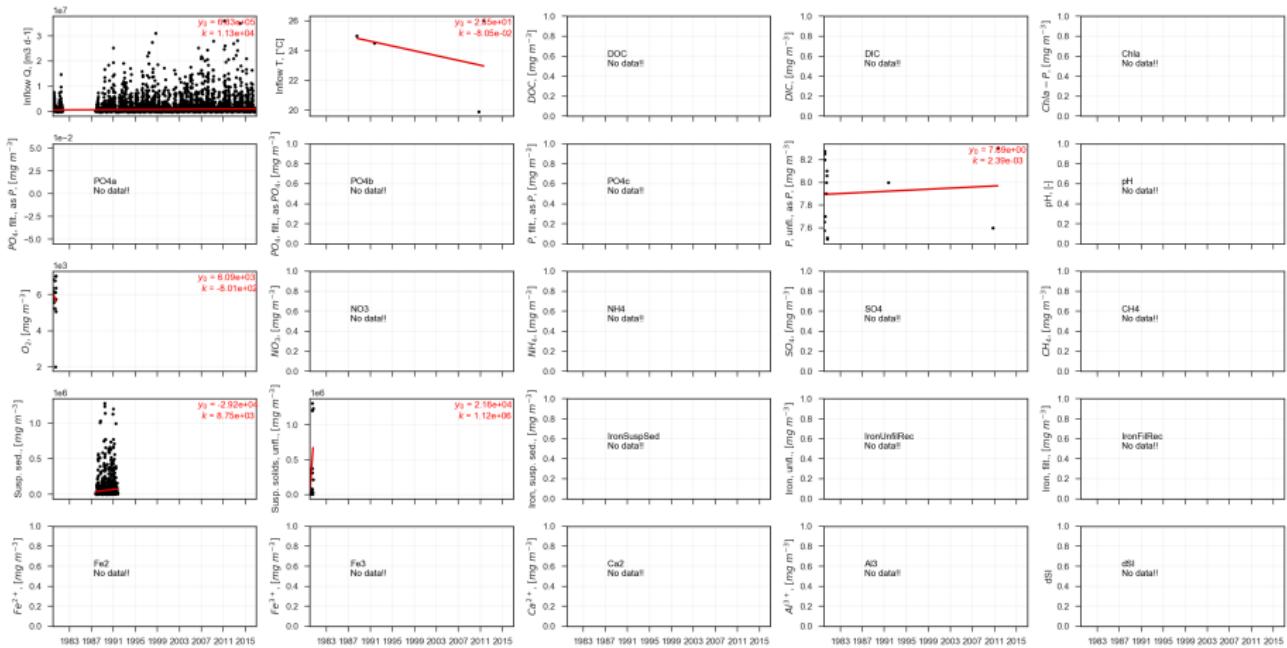
# Central Basin: Southwesternhuron River

## One year plot



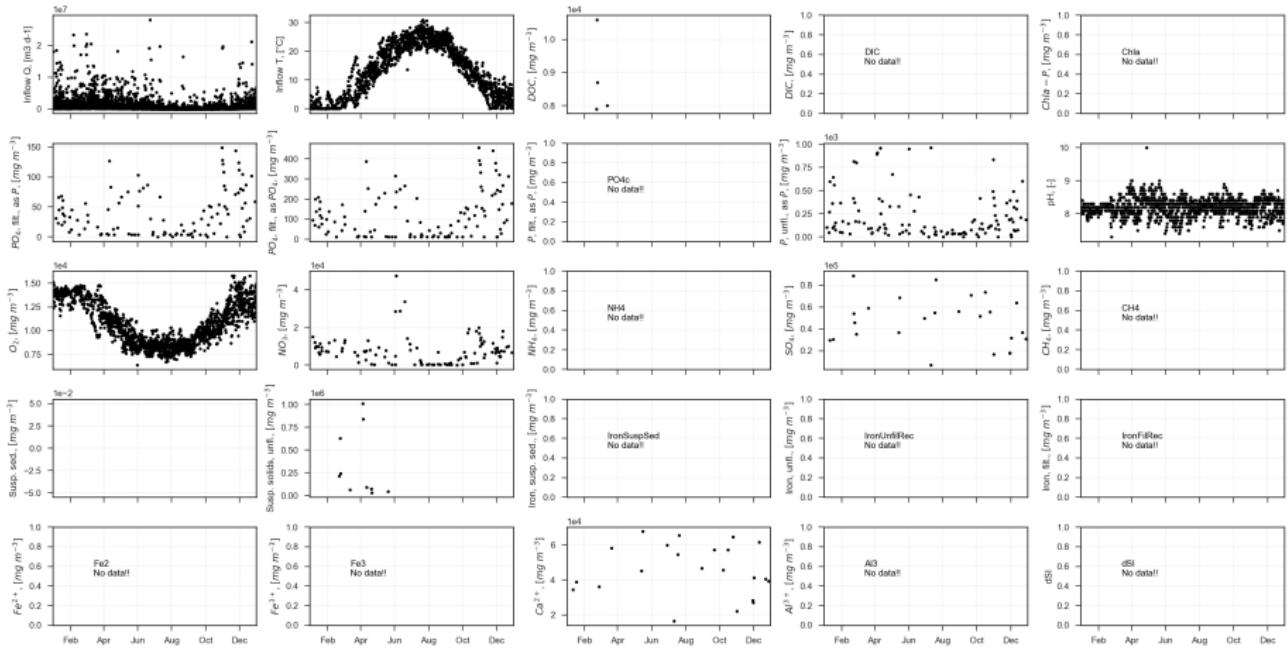
# Central Basin: Southwesternhuron River

## All years plot



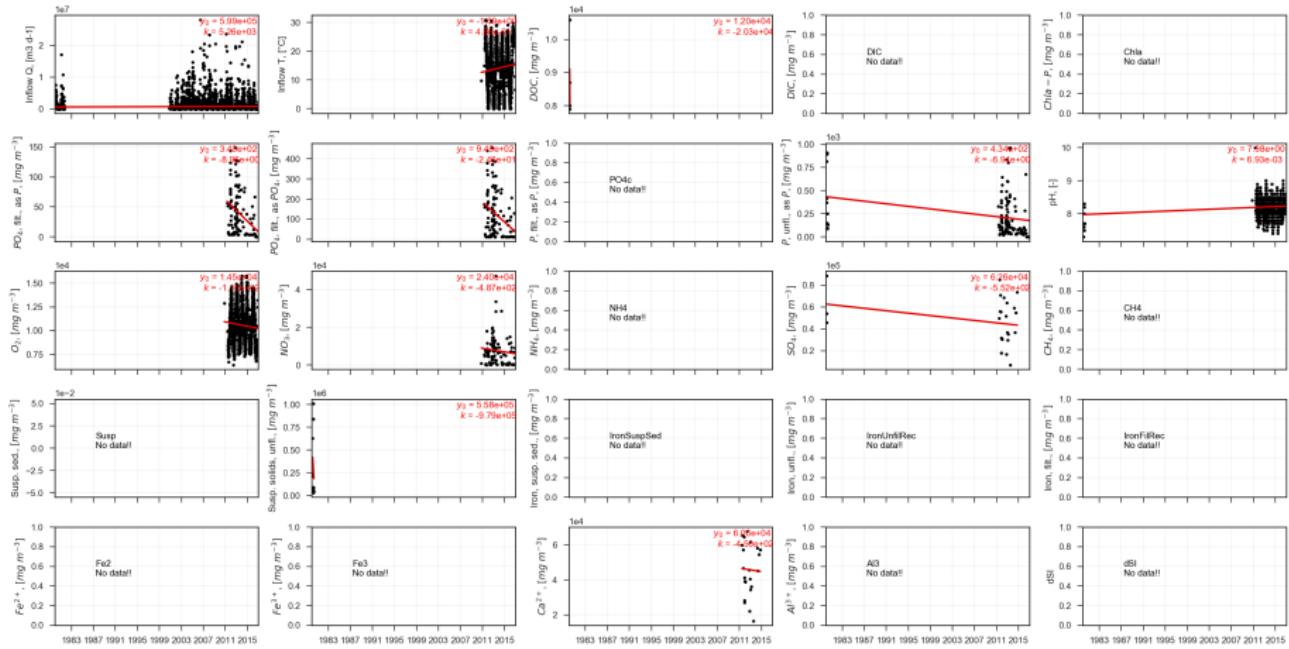
# Central Basin: Vermillion river

## One year plot



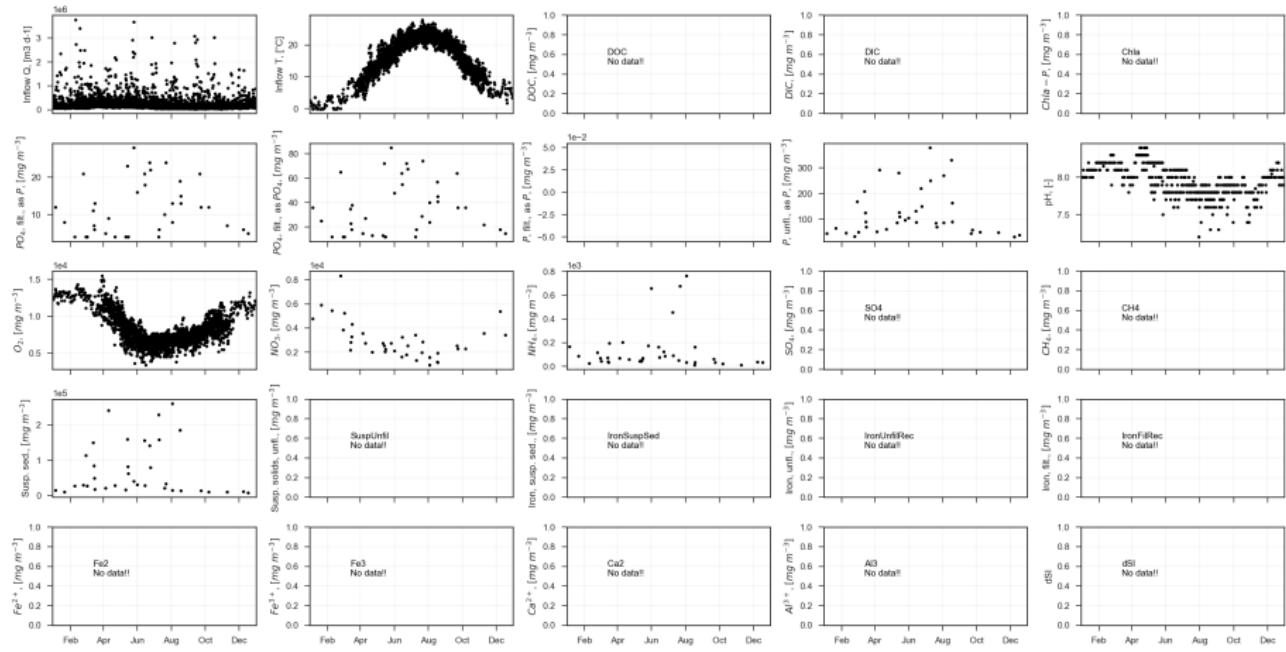
# Central Basin: Vermillion river

## All years plot



# Western Basin: Detroit River

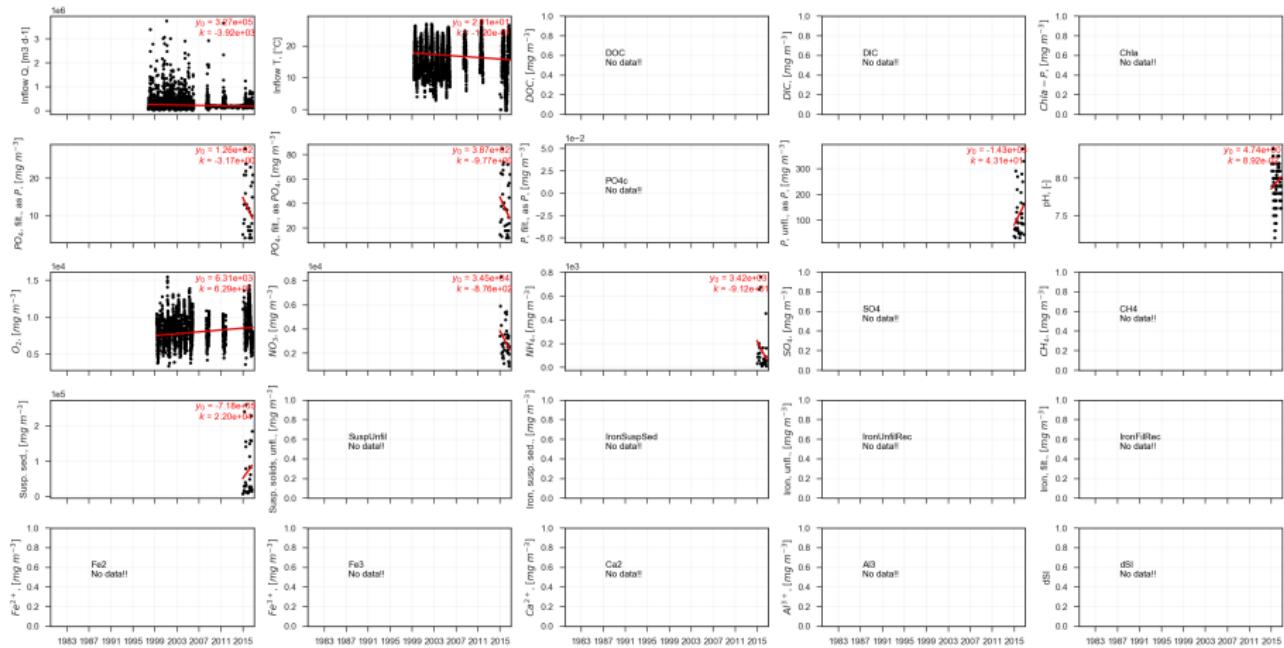
## One year plot



# Western basin

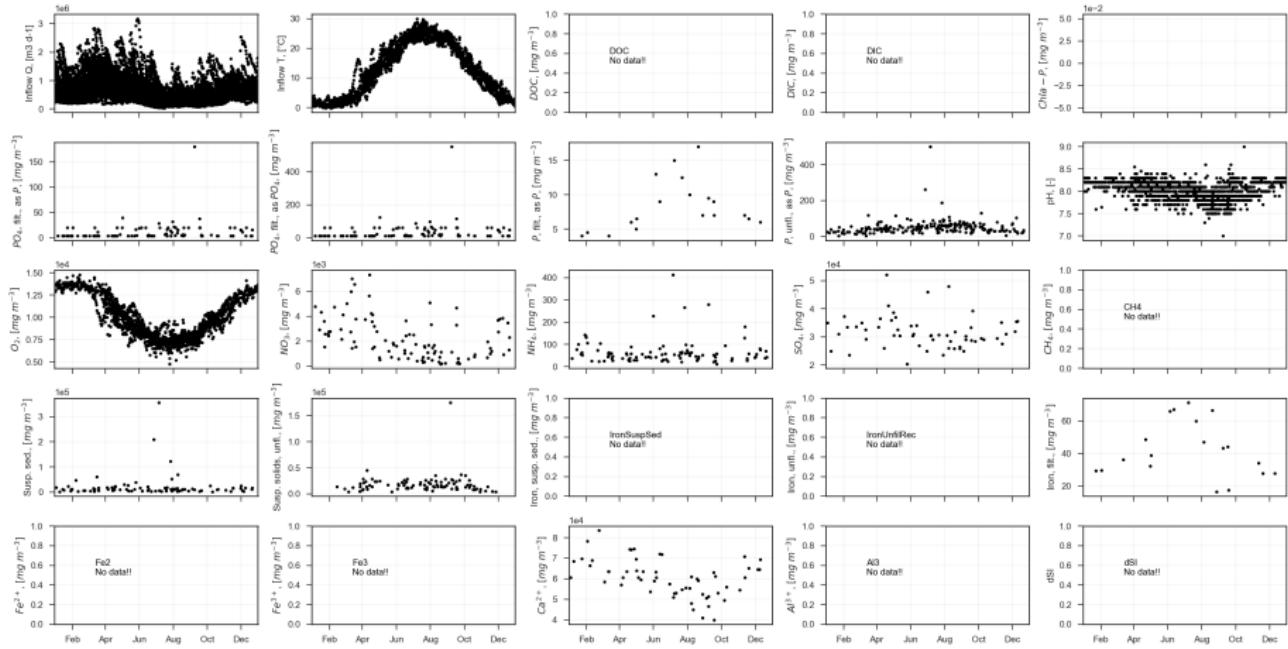
# Western Basin: Detroit River

## All years plot



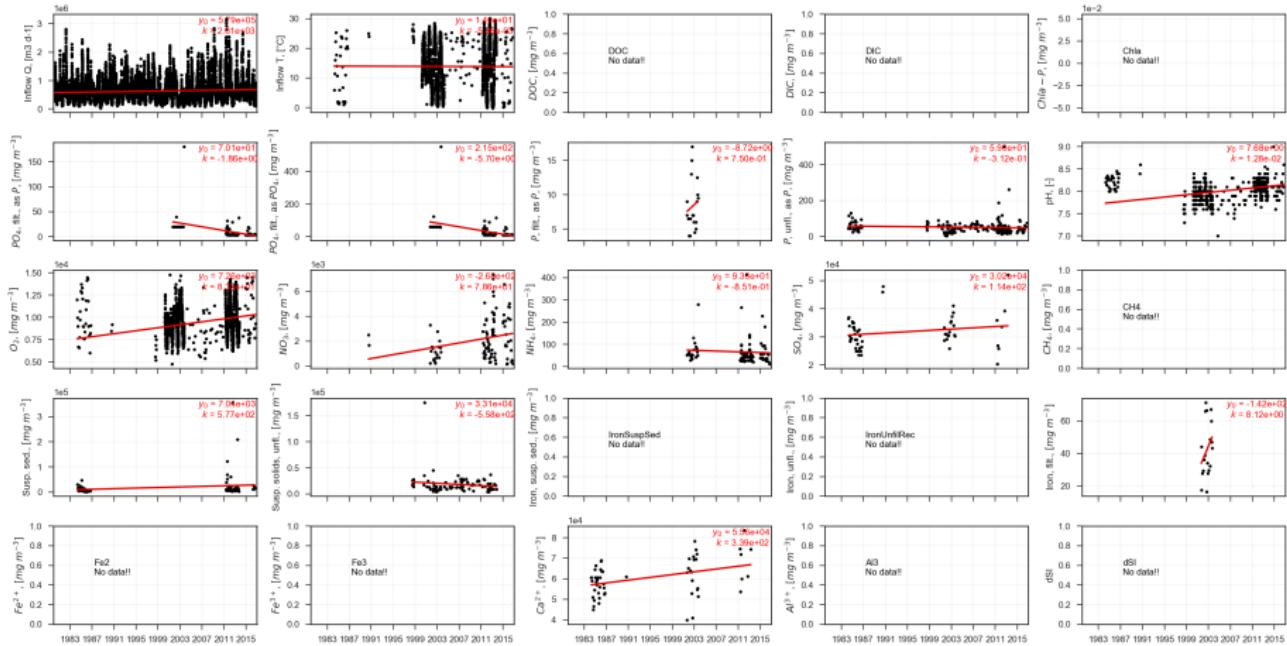
# Western Basin: Huron River

## One year plot



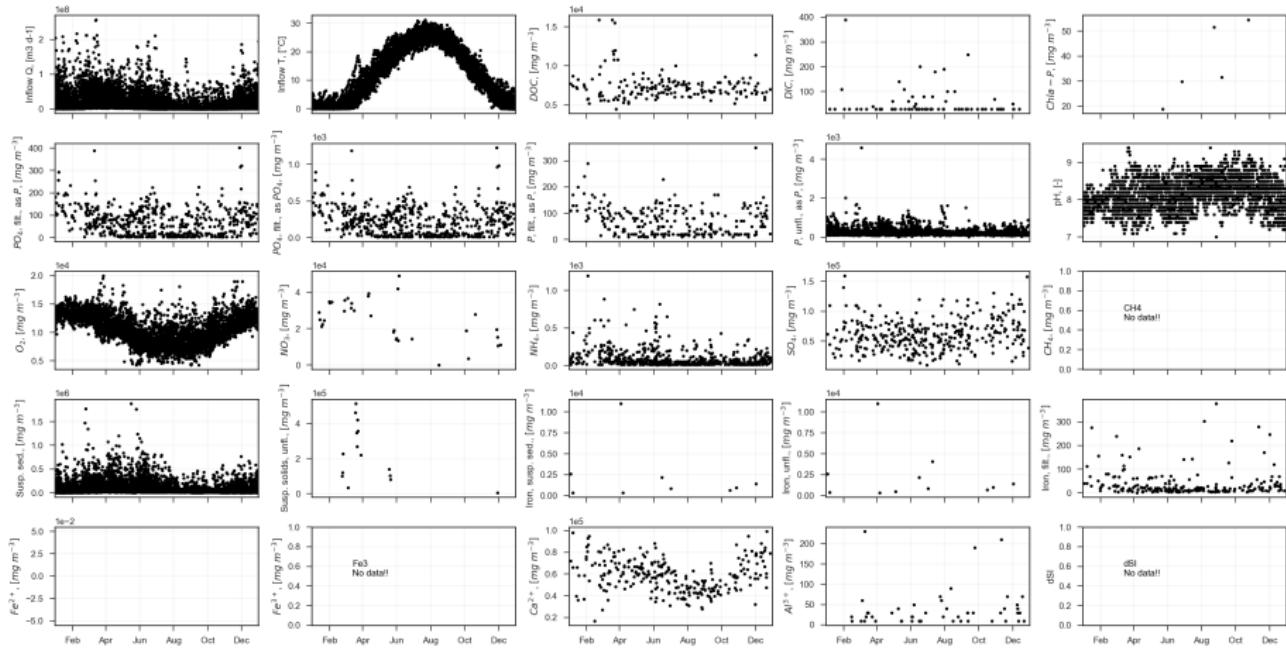
# Western Basin: Huron River

## All years plot

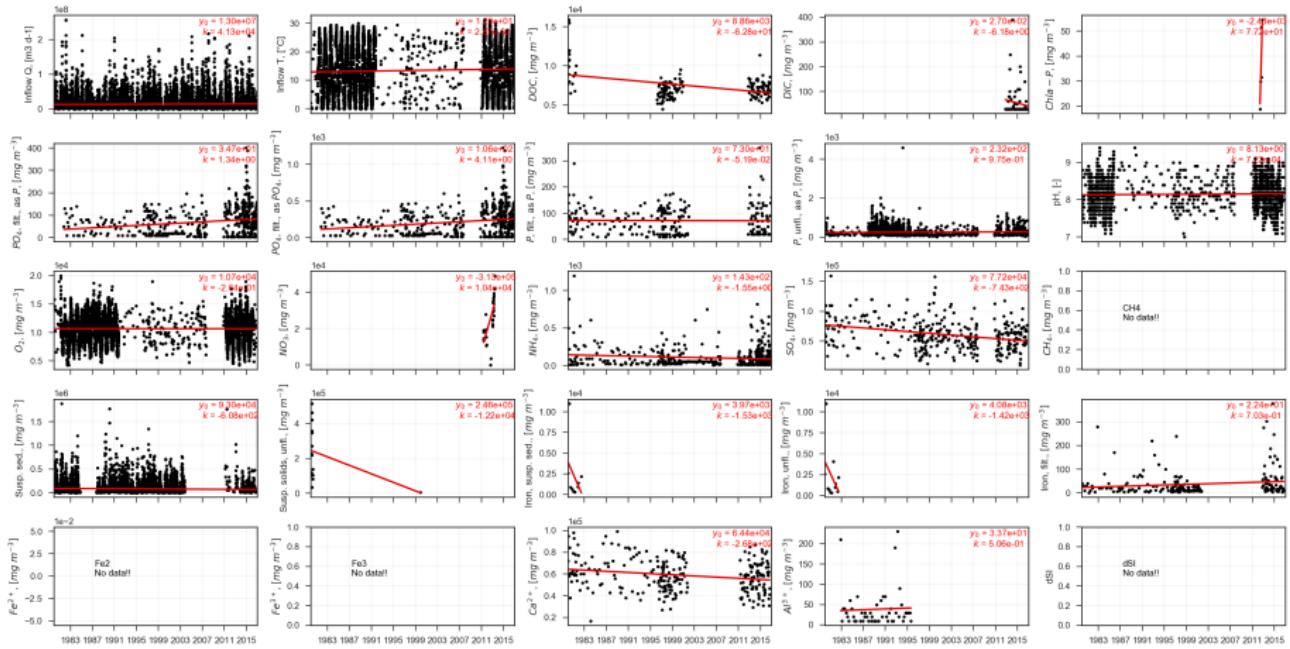


# Western Basin: Maumee River

## One year plot

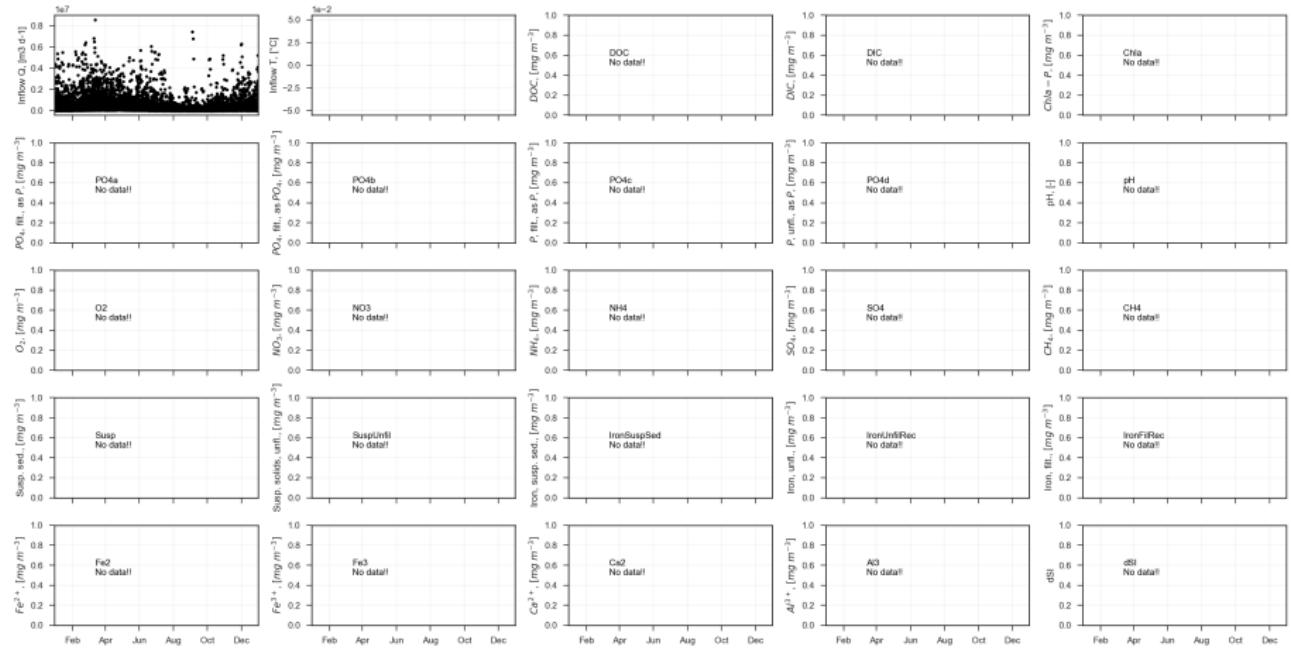


## Western Basin: Maumee River All years plot

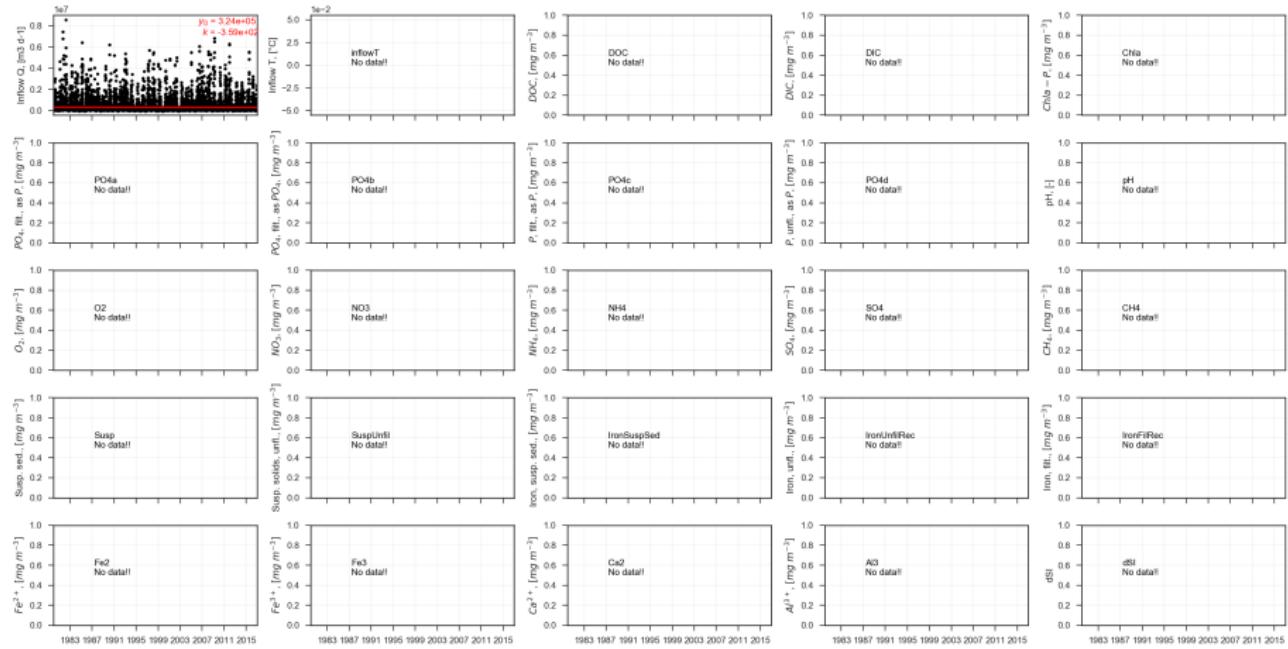


# Western Basin: Ottawa River

## One year plot

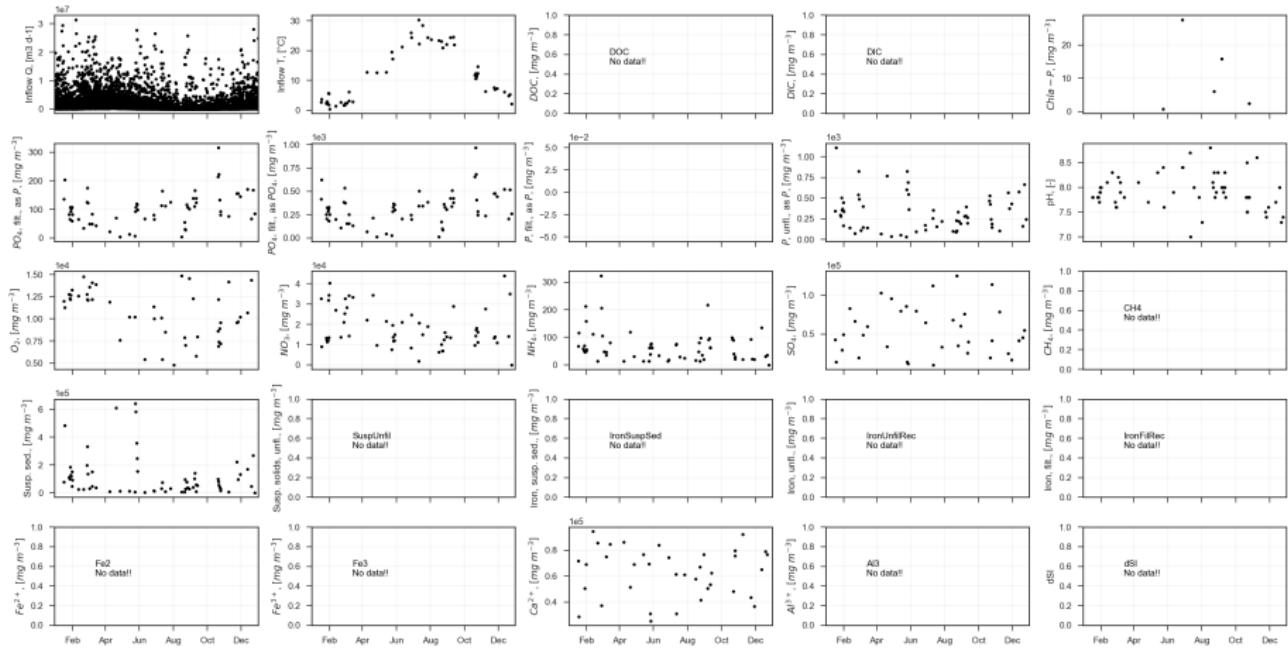


# Western Basin: Ottawa River All years plot



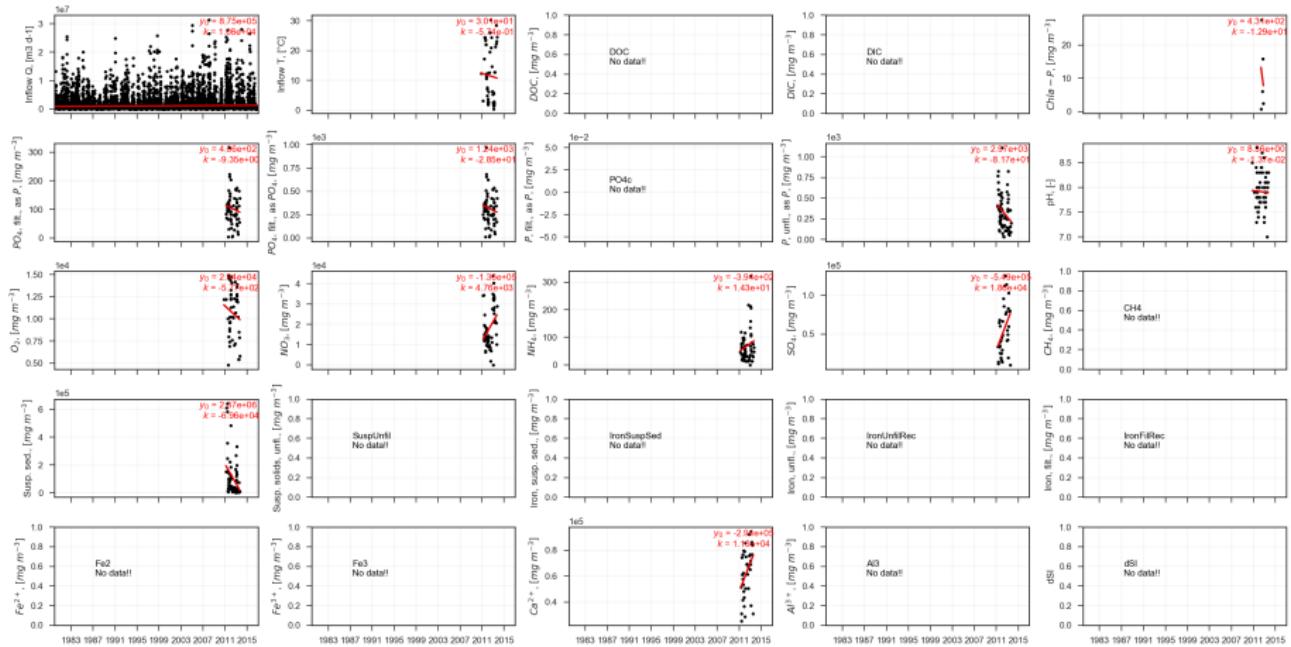
# Western Basin: Portage River

## One year plot



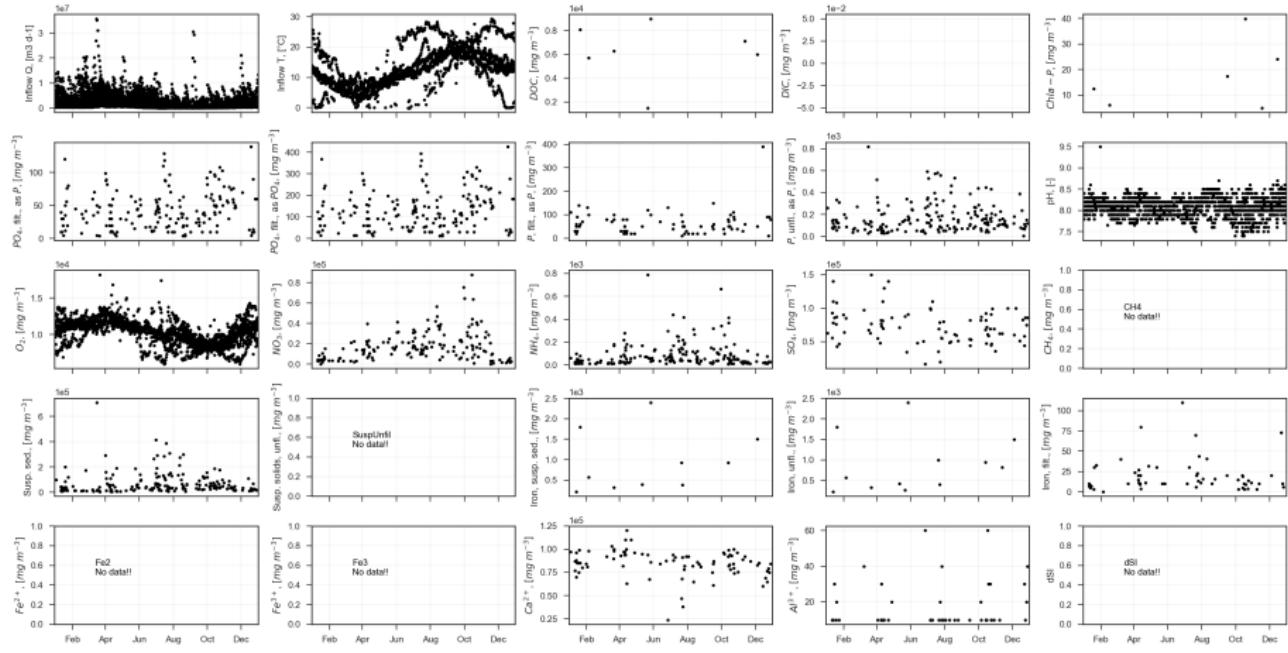
# Western Basin: Portage River

## All years plot



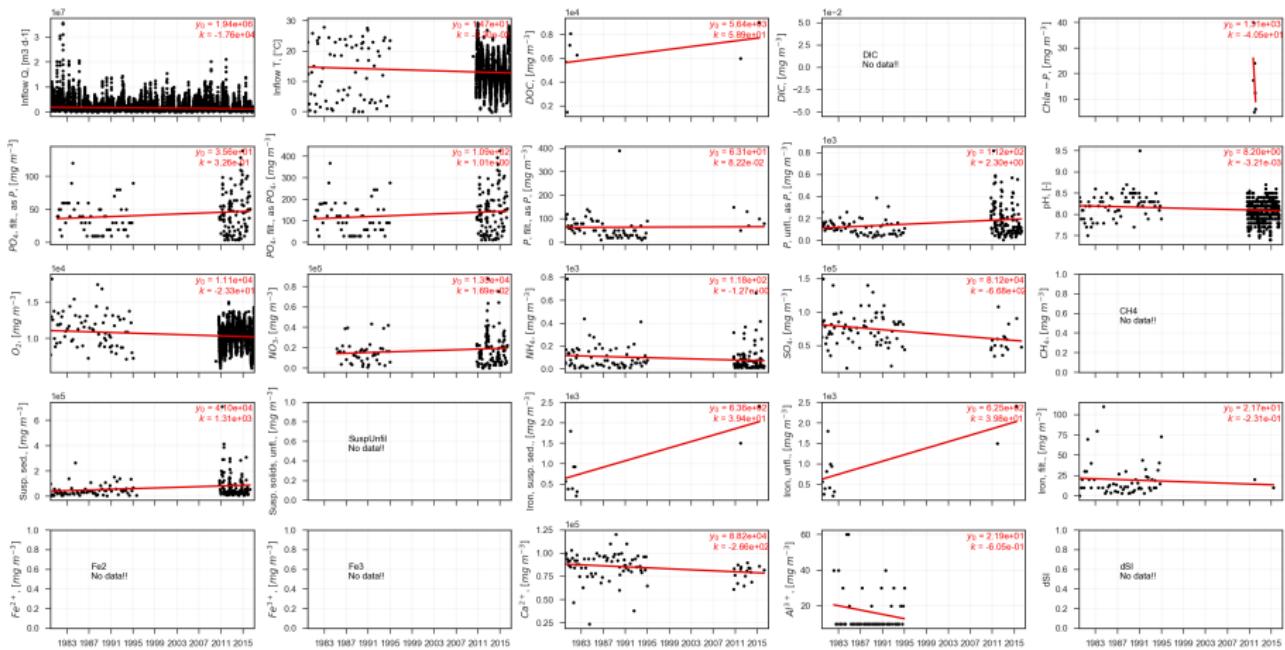
# Western Basin: Riverraisin river

## One year plot



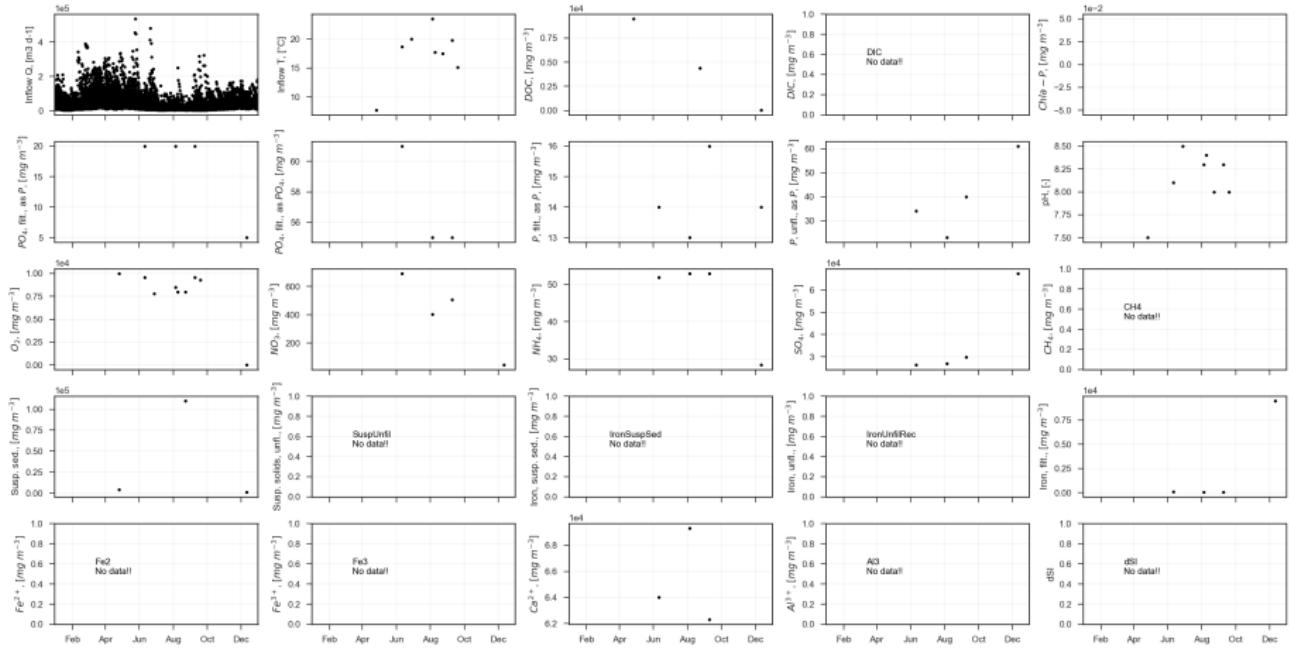
# Western Basin: Riverraisin river

## All years plot



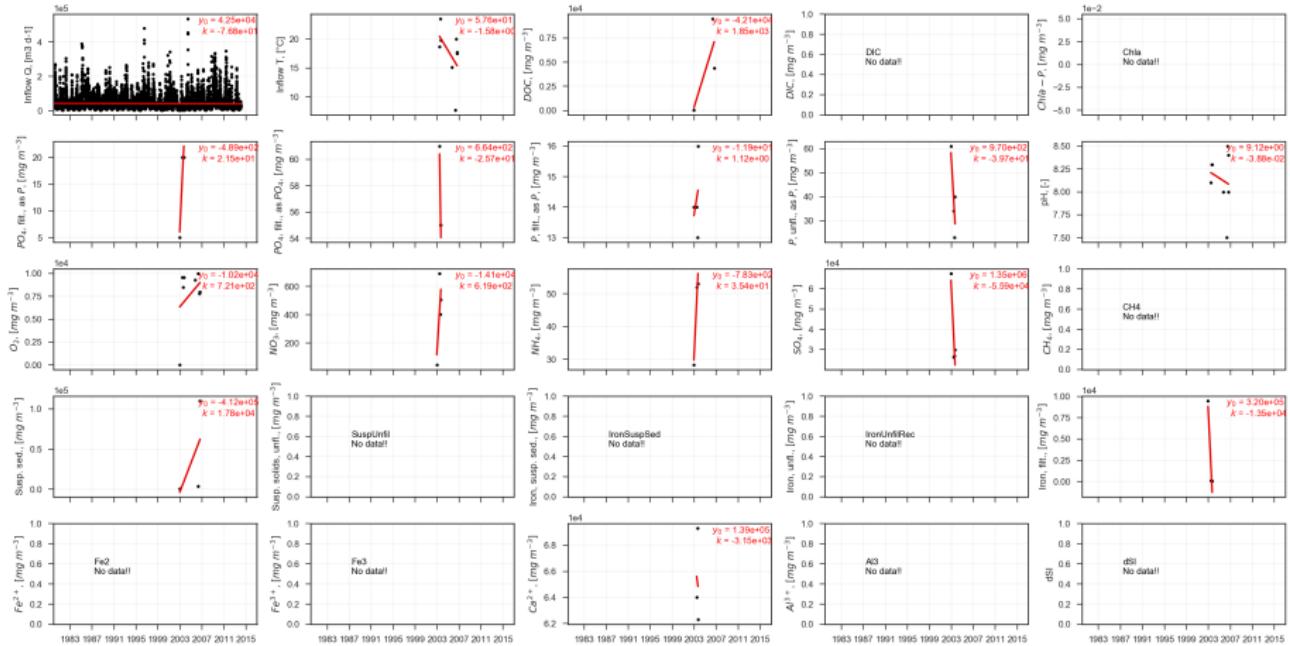
# Western Basin: Stony Creek

## One year plot



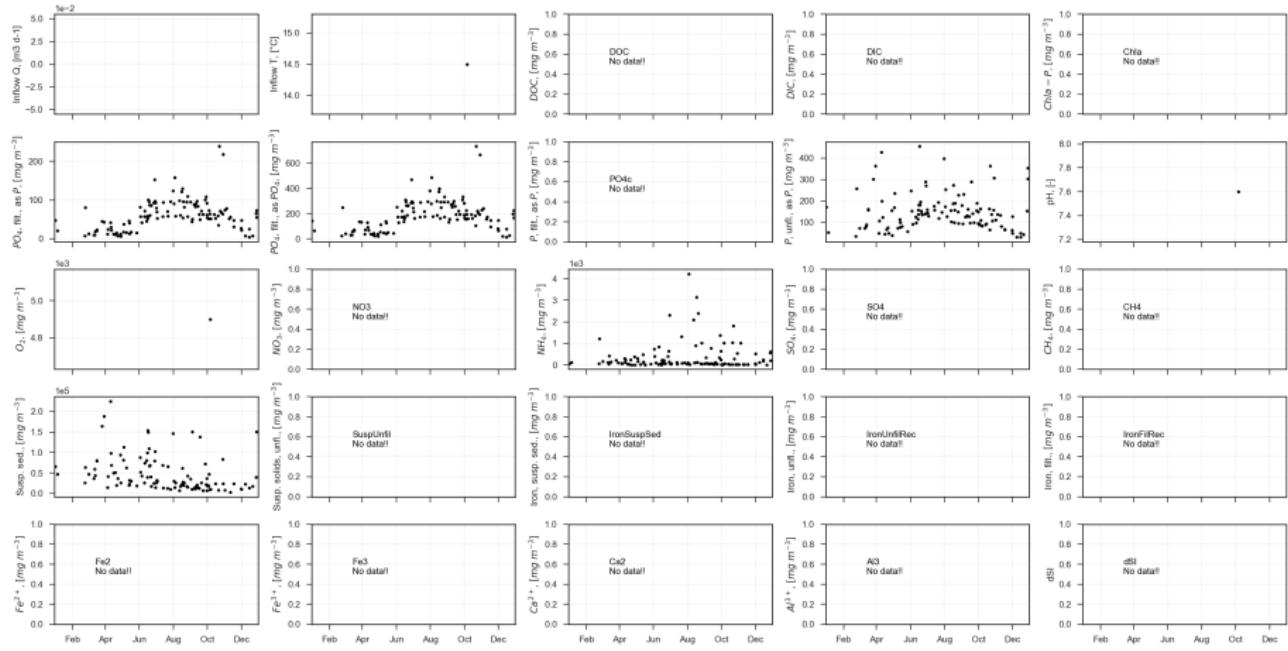
# Western Basin: Stony Creek

## All years plot



# Western Basin: Swan Creek

## One year plot



# Western Basin: Swan Creek

## All years plot

