

Synoptic CB: Porewater SO₄/Cl

2022-2024 Samples

2025-10-22

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0.1 Grab 2022 and 2023 All Data Files

```
#read in 2022 Dionex Data:
dat22 <- read.csv("2022/COMPASS_SynopticCB_SO4_Cl_2022.csv")
# head(dat22)

#read in 2023 Dionex Data:
dat23 <- read.csv("2023/COMPASS_SynopticCB_SO4_Cl_2023.csv")
# head(dat23)

#read in 2024 Dionex Data:
dat24 <- read.csv("2024/COMPASS_SynopticCB_SO4_Cl_2024.csv")
# head(dat24)

all_dat <- rbind(dat22, dat23, dat24)

all_dat <- all_dat %>%
  select(
    Project, Region, Sample_ID, Year, Month, Day, Time, Time_Zone,
    Site, Zone, Replicate, Depth_cm,
    SO4_Conc_mM, SO4_Conc_flag, SO4_QAQC_flag, Cl_Conc_mM, Cl_Conc_flag, Cl_QAQC_flag, salinity,
    Analysis_rundate, Run_notes, Field_notes
    # list columns in the order you want them
  )
```

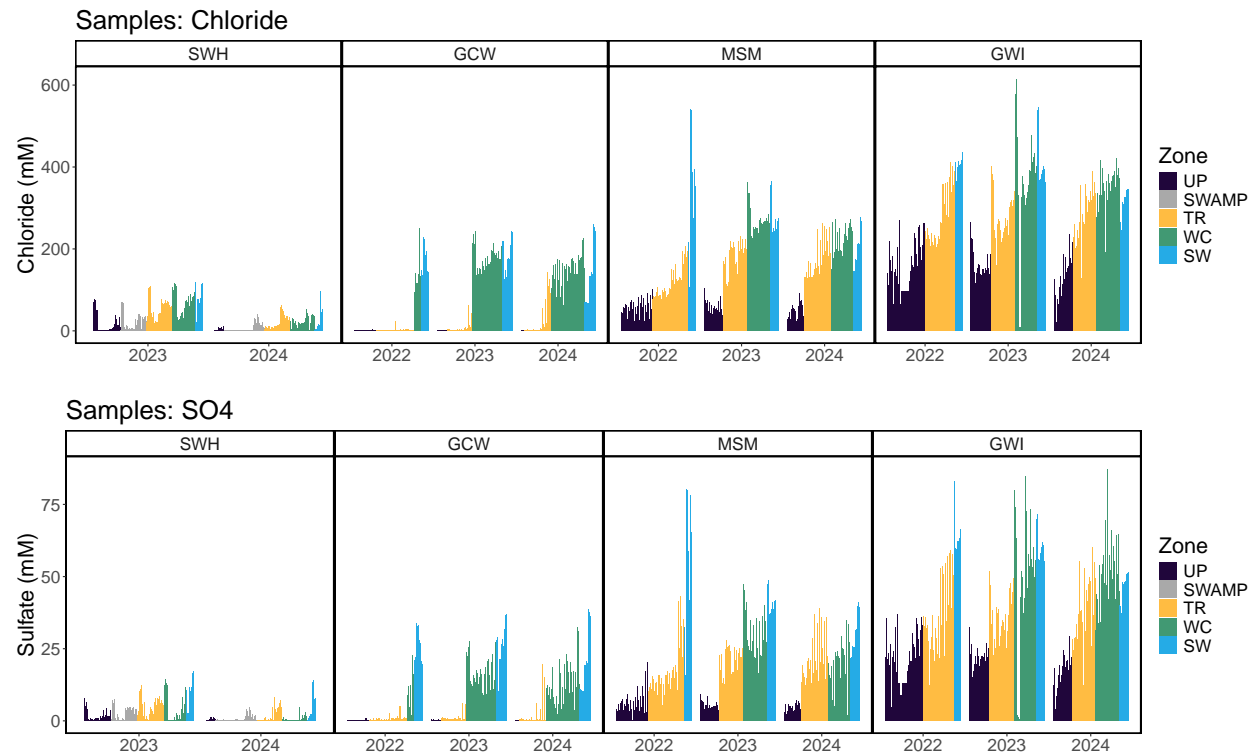
##Make Relevant Metadata Sheet

0.2 Write out files

```
#write out a csv of all the data to the main folder:
write.csv(all_dat, "COMPASS_SynopticCB_Dionex_AllData.csv")

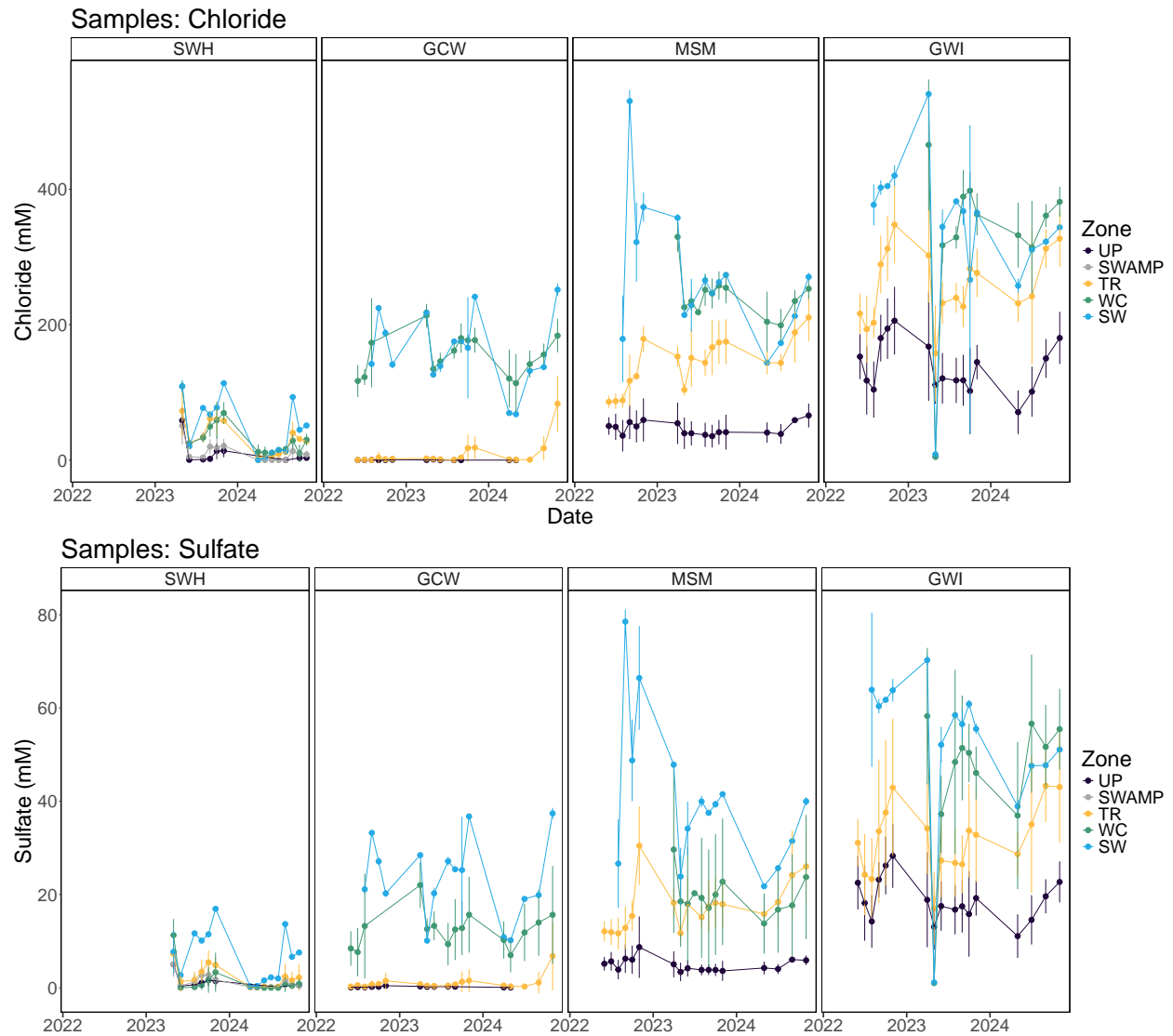
#write out a csv of the metadata associated with the data:
write.csv(metadata, "COMPASS_SynopticCB_Dionex_Metadata.csv")
```

0.3 Visualize Data by Plot



0.4 Summarized data for Site and Zone

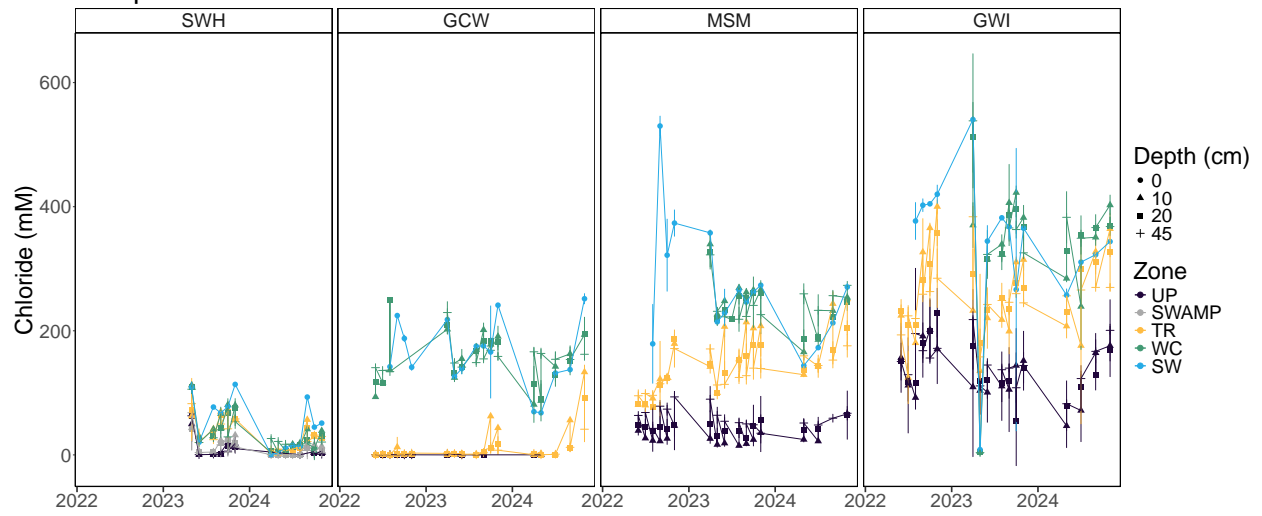
```
## 'summarise()' has grouped output by 'Month', 'Year', 'Site'. You can override
## using the '.groups' argument.
```



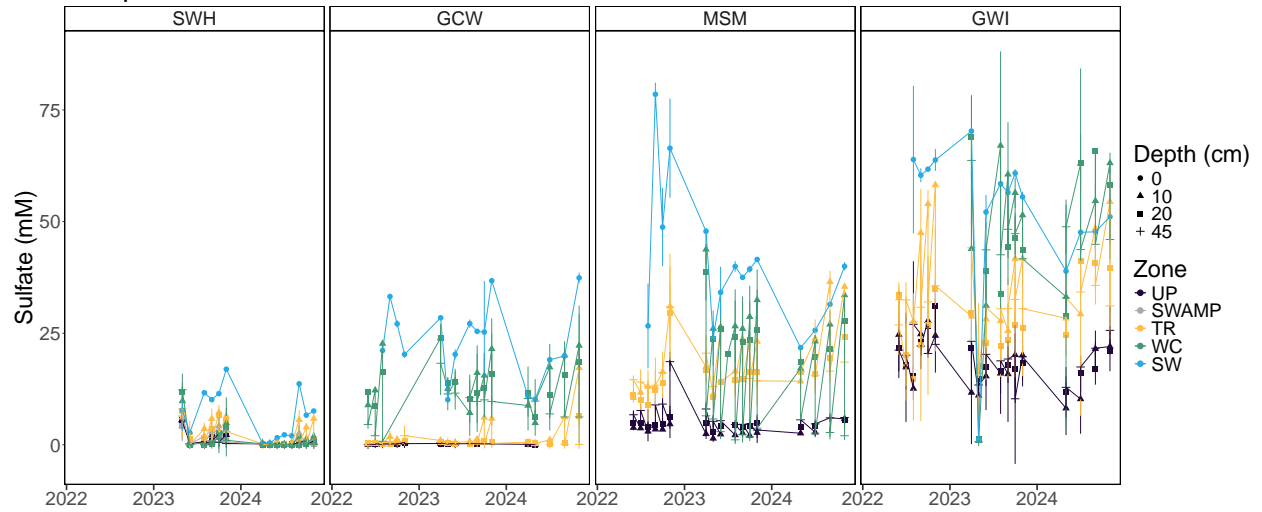
0.5 Summarized data for Depth, Site and Zone

```
## 'summarise()' has grouped output by 'Month', 'Year', 'Site', 'Zone'. You can
## override using the '.groups' argument.
```

Samples: Chloride



Samples: Sulfate



0.6 Boxplot summary

