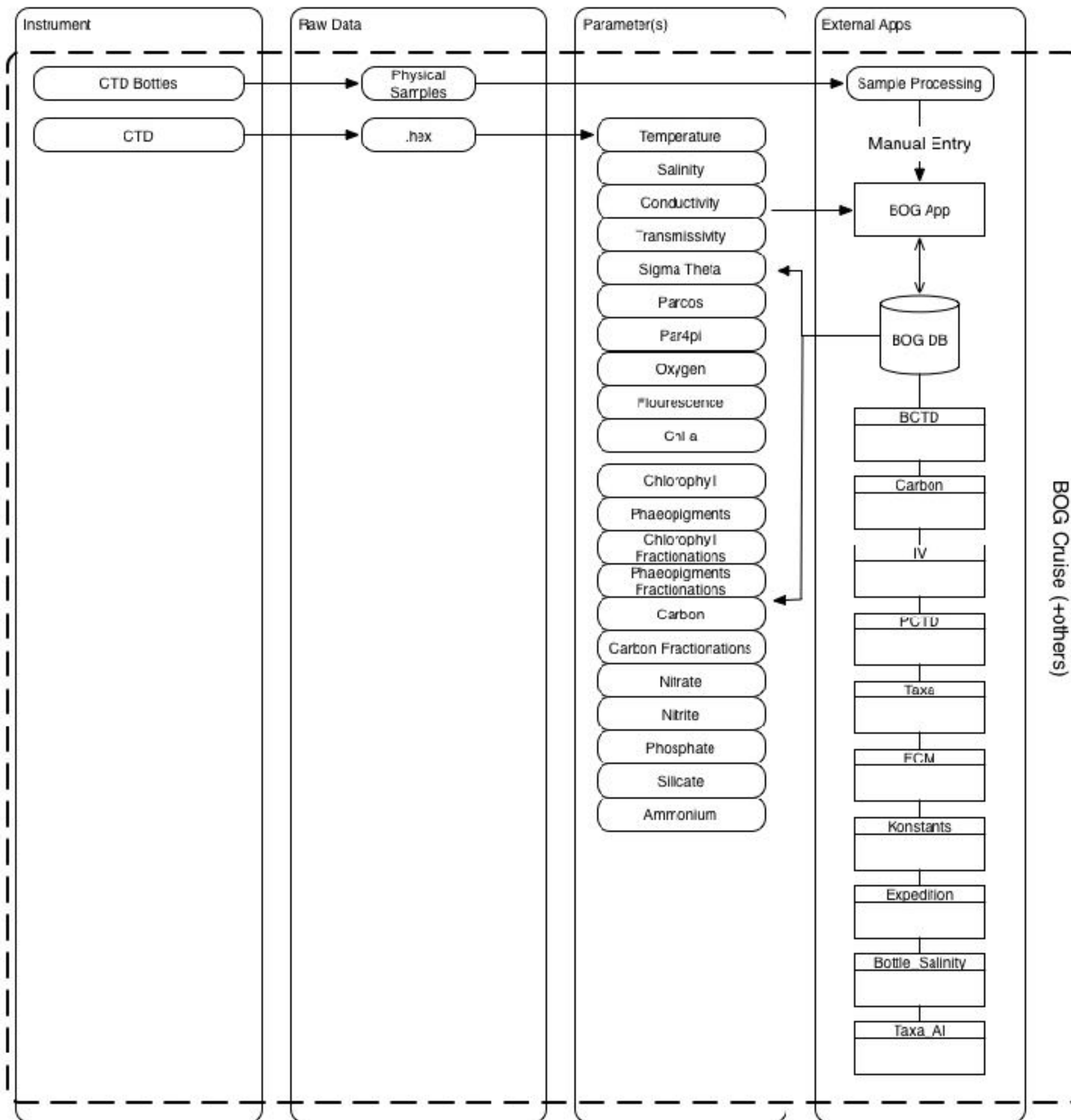
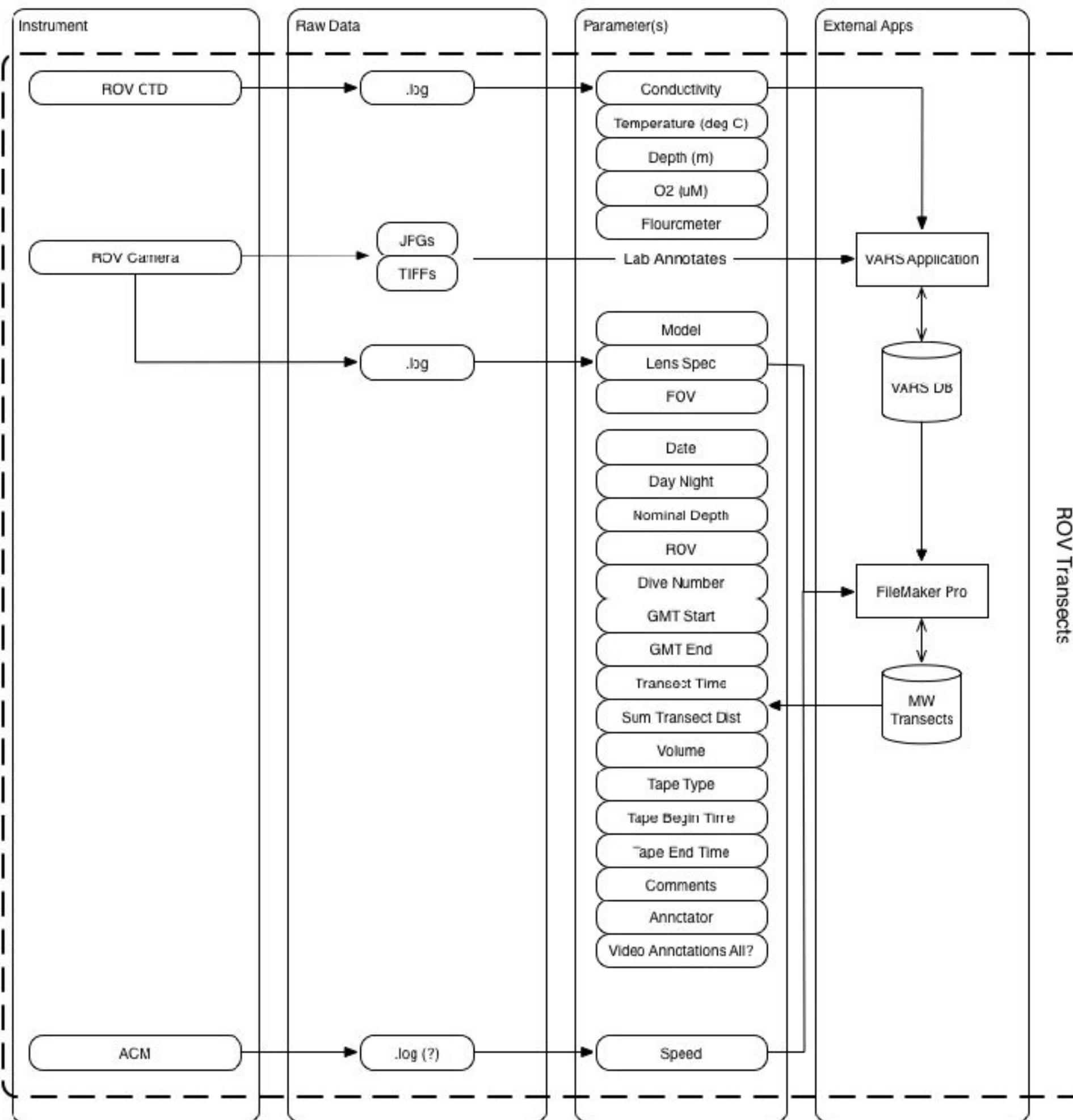
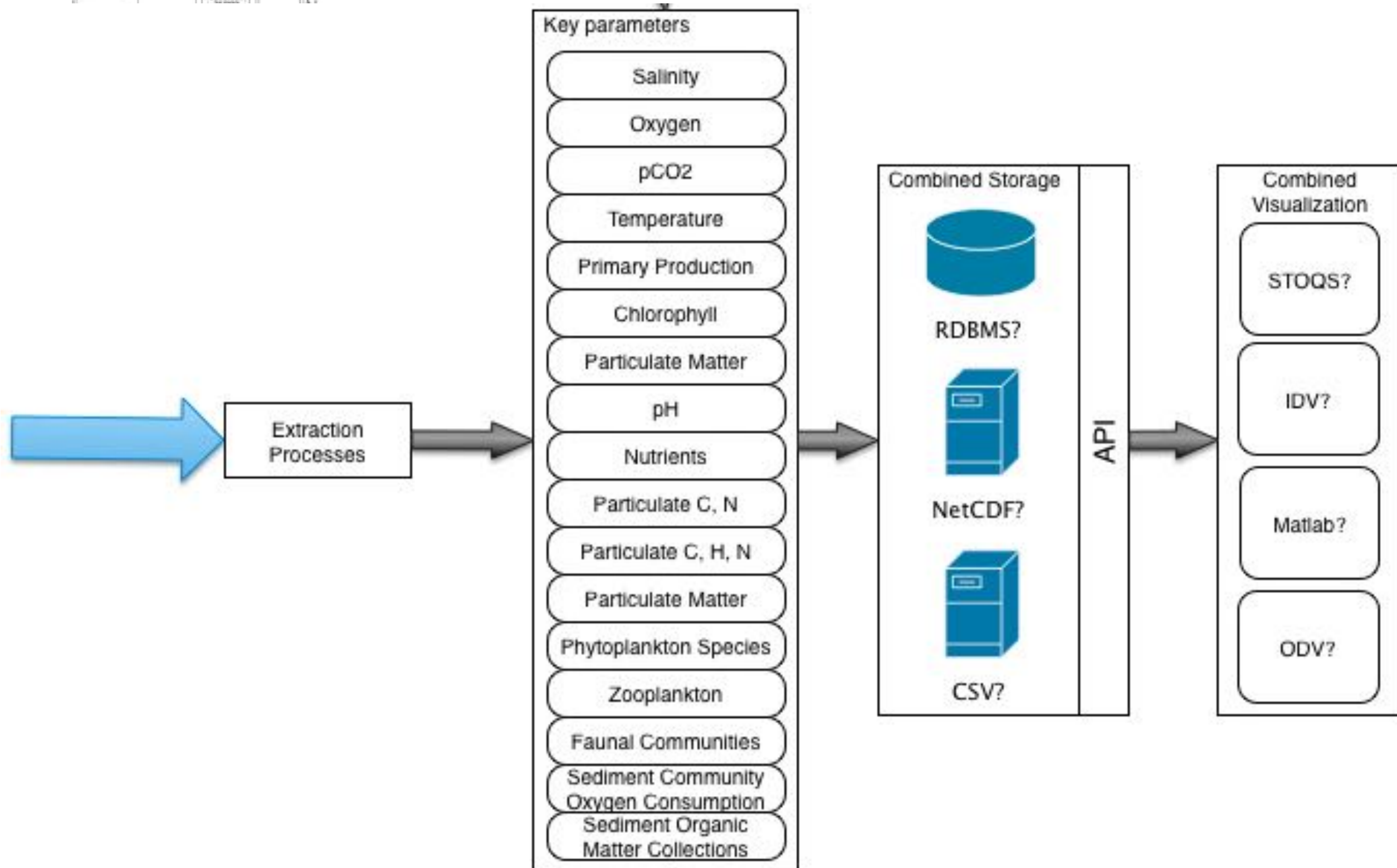
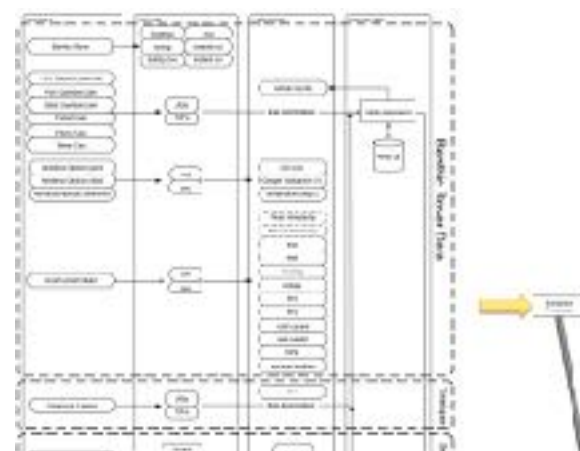










Surface ☐ Group by month?

Midwater ☒ Group by month?

Benthic

Search

☐ *Onychopus commensalis*

☐ *Sipuncula*

☐ *Striatodoma corrothea*

☐ *Synallactes*

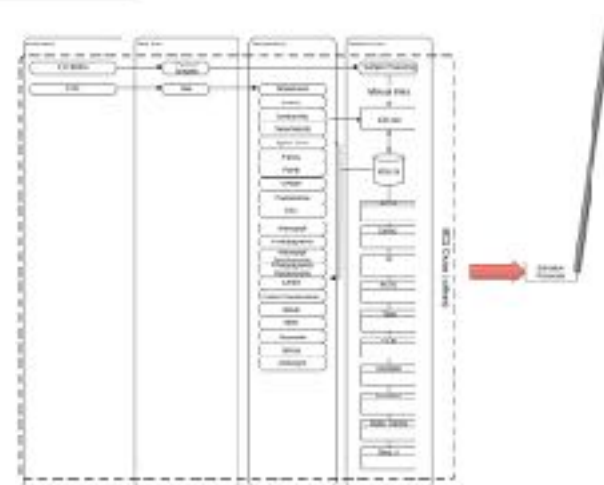
☐ *Tenebricola cukri*

☐ *Tergivalum baldwinae*

☐ *Tjalfiella tristoma*

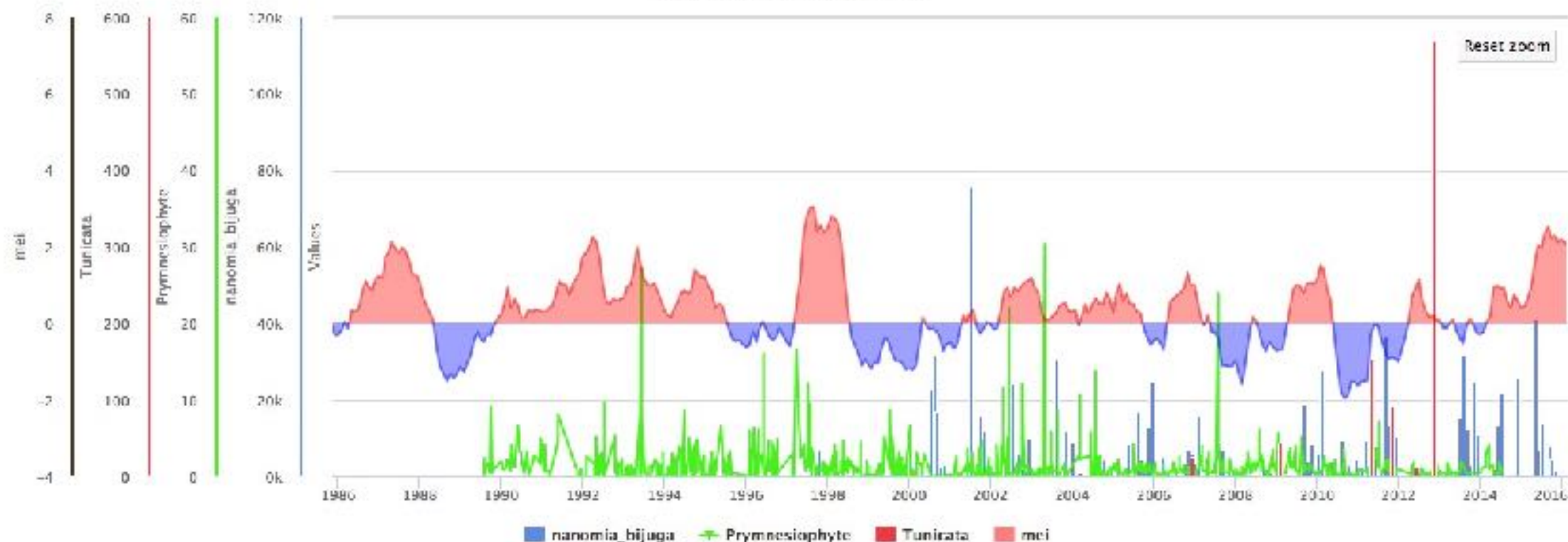
☒ *Tunicata*

MEI ☒ Plot data



Integrated Time Series

Surface, Midwater and Benthic Data



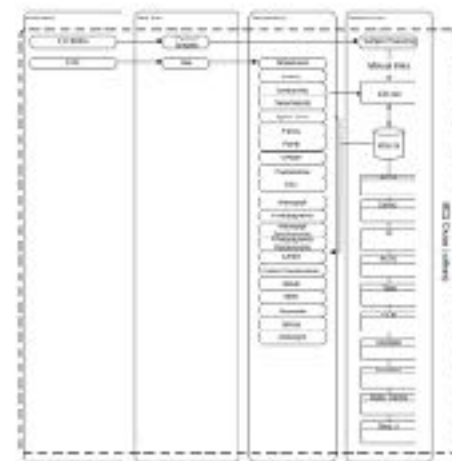
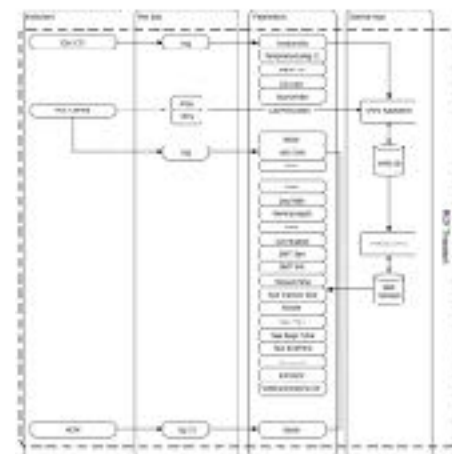
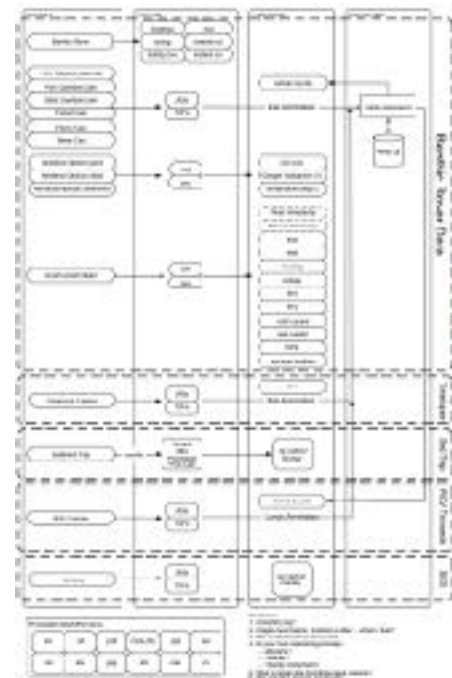
Highcharts.com

Knowledge added



Viz

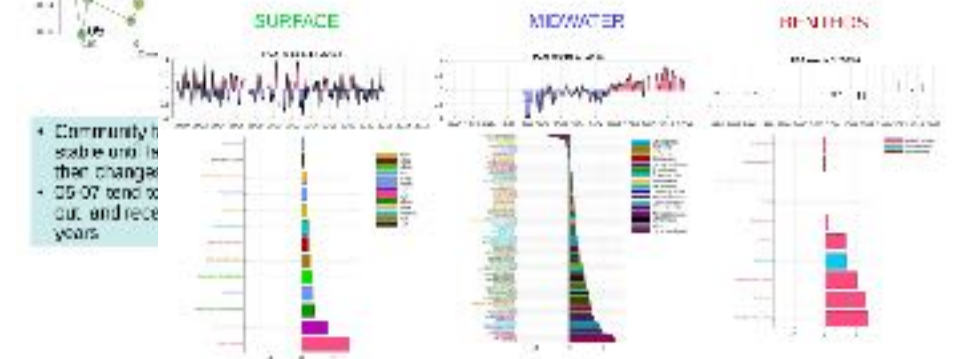
Analysis
Stats



Ecosystem indices (MDS)



Ecosystem indices (PCA)



- Different time scales of variability (frequency decreases with depth?)
- Surface: mode 1 = diatoms bloom, mode 2 = dinoflagellates/diatoms dominance
- Midwater: mode 1 = diatoms, in 94-96 and in 05-07, mode 2 = seasonal & interannual species abundance
- Benthic: mode 1 = big increases in recent years, mode 2 = community shift (?)

Surface ☐ Group by month?

Midwater ☒ Group by month?

Benthic ☐ Group by month?

Search

☐ Onychopoda corinthis

☐ Sipuncula

☐ Sphalodoma corothae

☐ Synalaxis

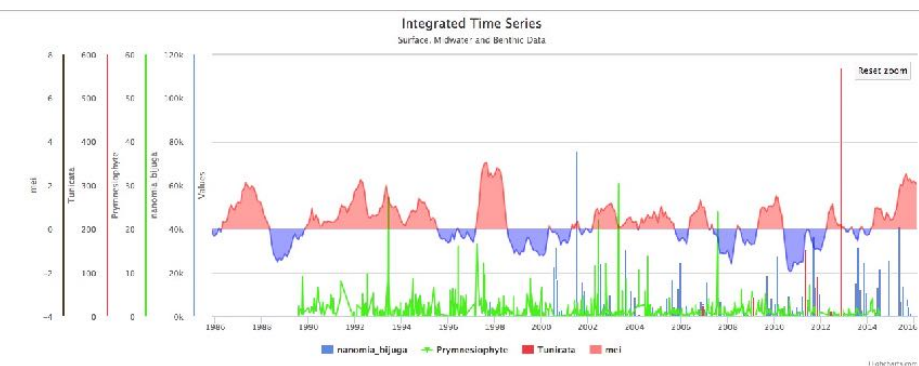
☐ Terebricola eukii

☐ Tergivolum belchenae

☐ Tjallioella trifloris

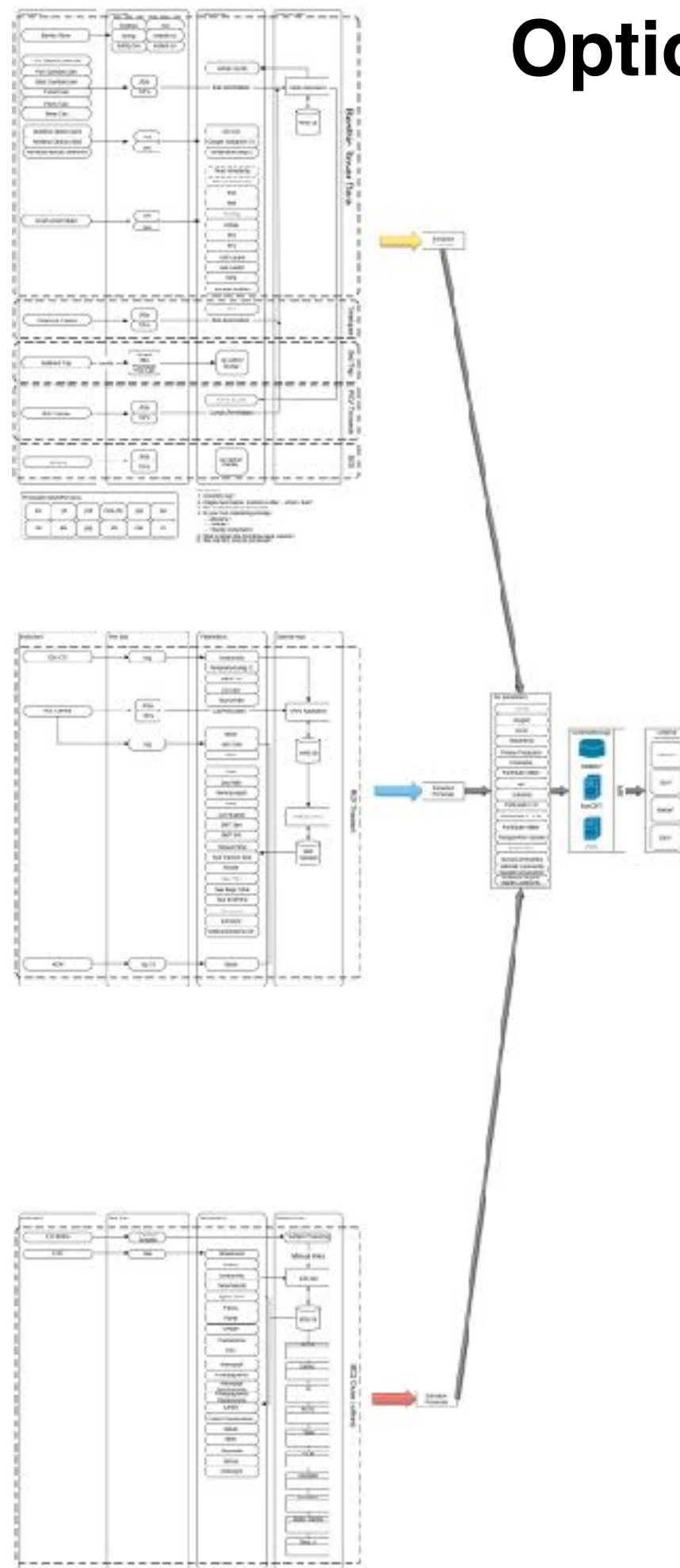
☒ Tunicata

MEI ☒ Plot data

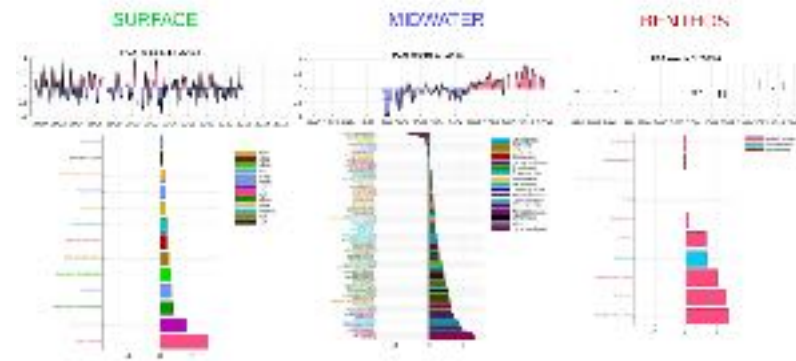


Options for Technical Deliverables

Standard Products (updated periodically)

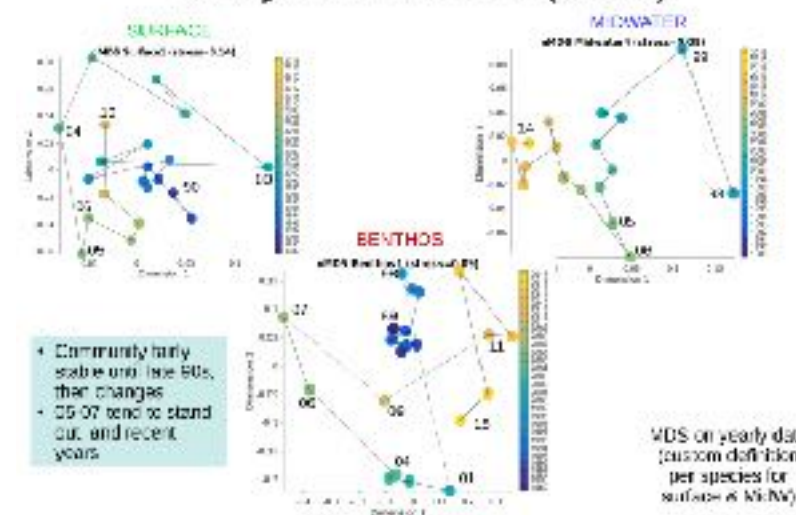


Ecosystem indices (PCA)



- Different time scales of variability (frequency decreases with depth?)
- Surface: mode 1 = diatoms bloom, mode 2 = dinoflagellate bloom alternance
- Midwater: mode 1 = decreases in 94-96 and in 06-07, mode 2 = seasonal & interannual changes in biomass
- Benthos: mode 1 = big increases in recent years, mode 2 = community shift (?)

Ecosystem indices (MDS)

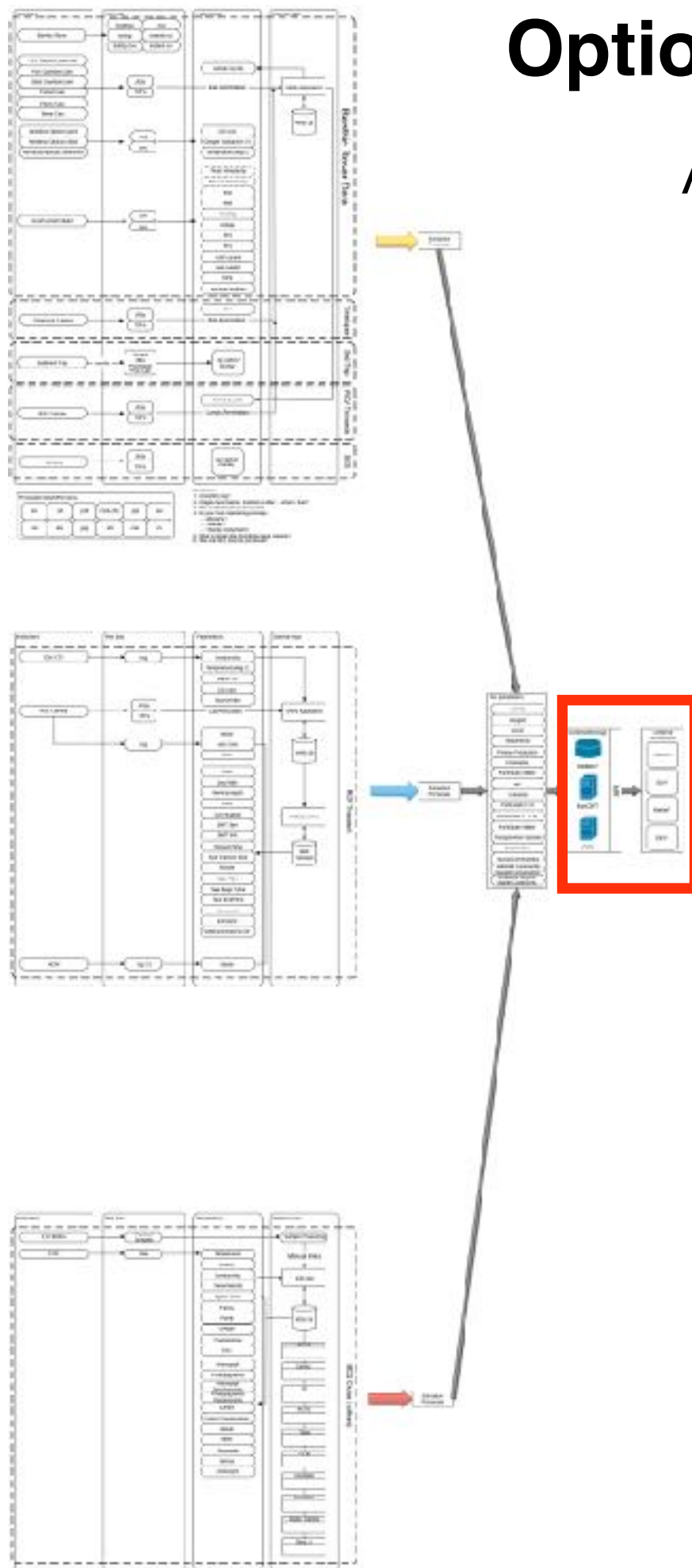


- Community fairly stable until late 90s, then changes
- 05-07 tend to stand out, and recent years

MDS on yearly data (custom definition per species for surface & MidW)

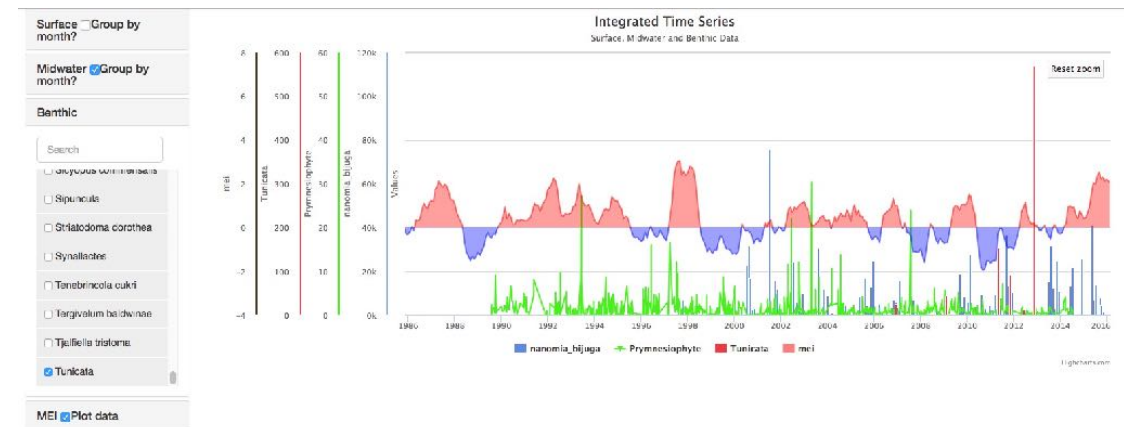
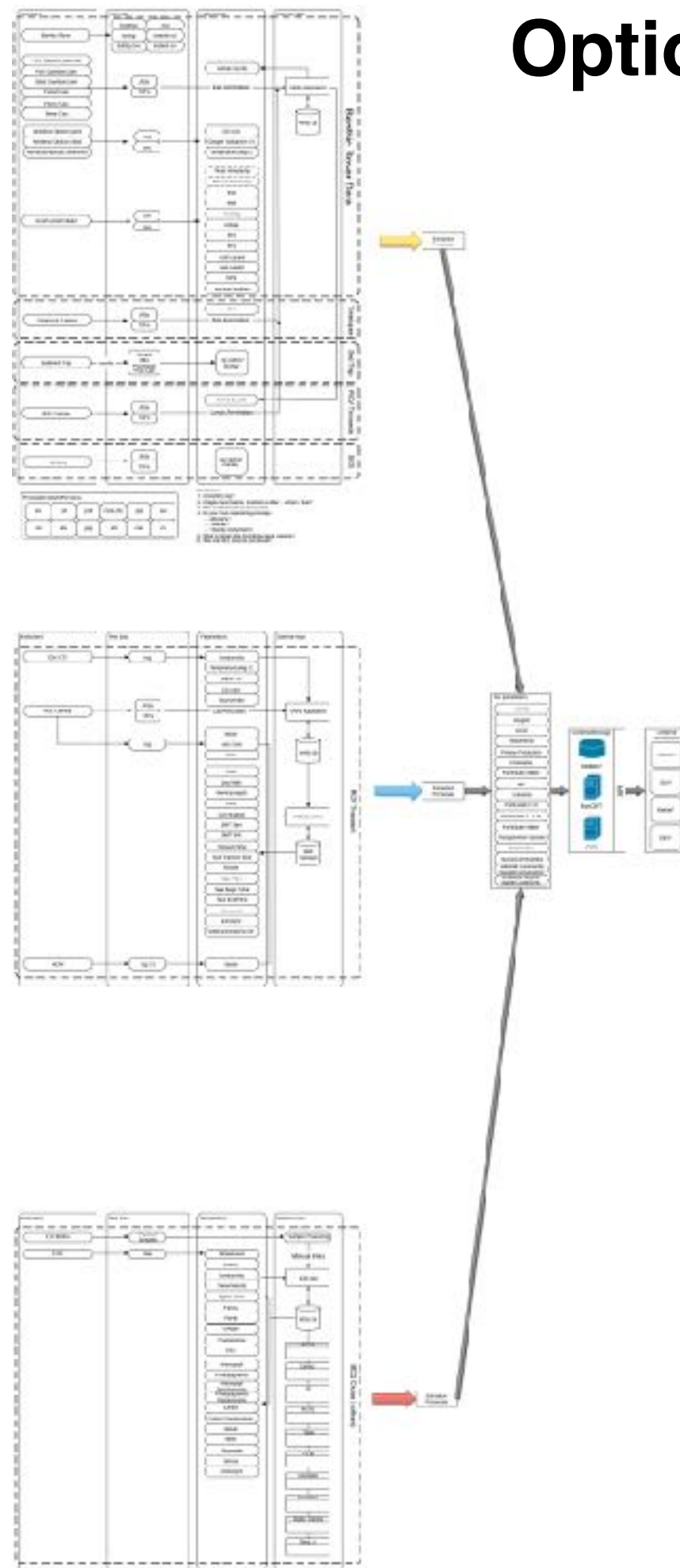
Options for Technical Deliverables

Application Programming Interfaces (APIs)



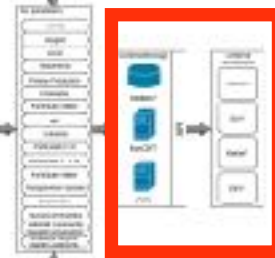
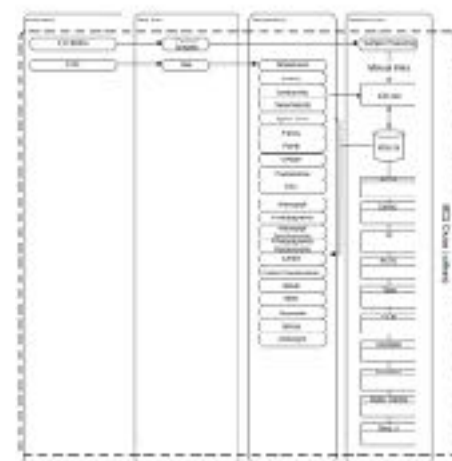
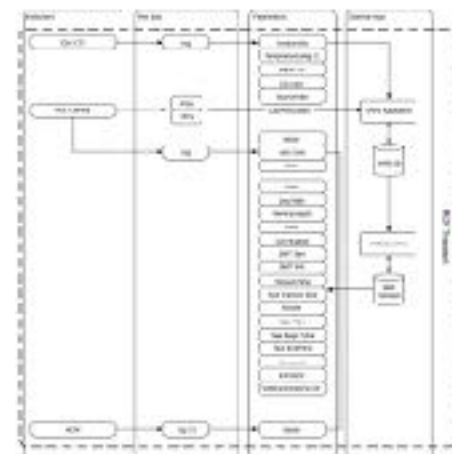
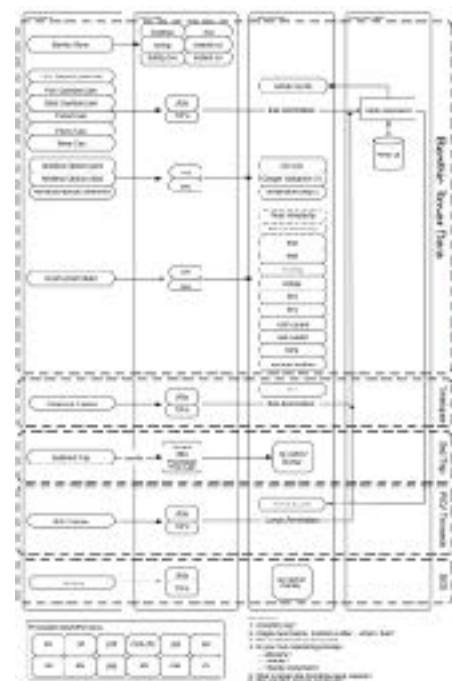
Options for Technical Deliverables

Visualization/Exploration Application



Options for Technical Deliverables

Combination



Surface ☐ Group by month?

Midwater ☒ Group by month?

Benthic

Search

☐ All species with no data

☐ Sipuncula

☐ Striatodoma corathea

☐ Synalactae

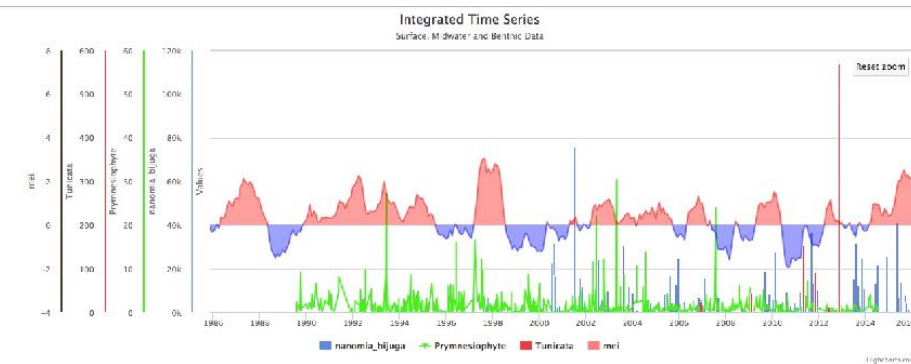
☐ Terebricola cuki

☐ Targuiolum bechmanni

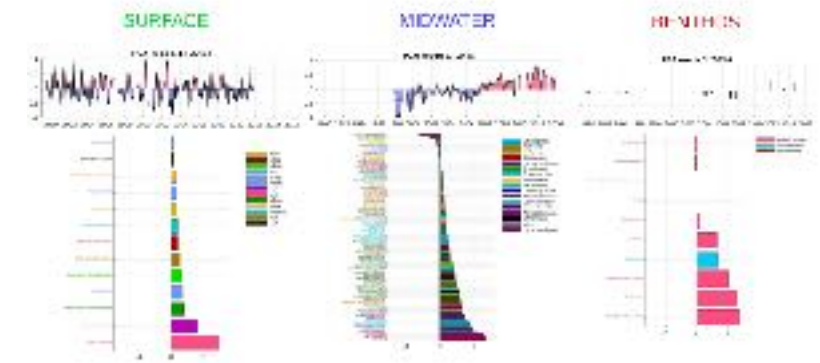
☐ Tjellieila bifrons

☒ Tunicata

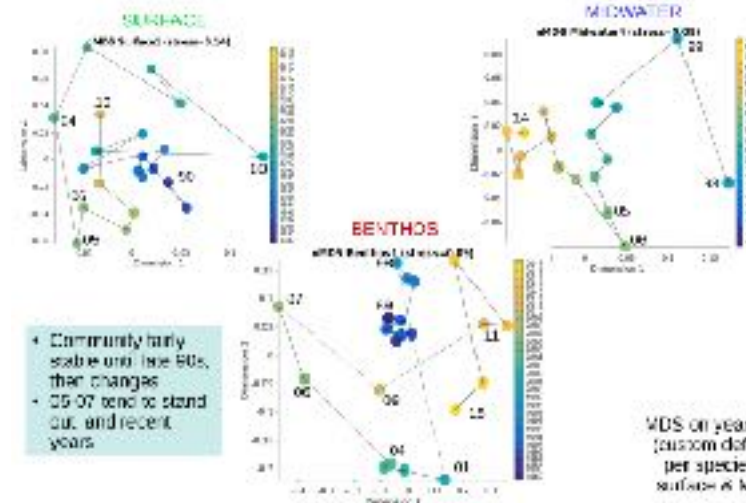
MEI ☒ Plot data



Ecosystem indices (PCA)



Ecosystem indices (MDS)



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MDS on yearly data (custom definition per species for surface & MidW)

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