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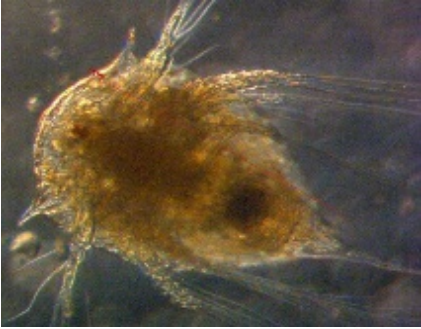
THE ARCTIC  
UNIVERSITY  
OF NORWAY

# The spatial distribution of meroplankton in an arctic fjord

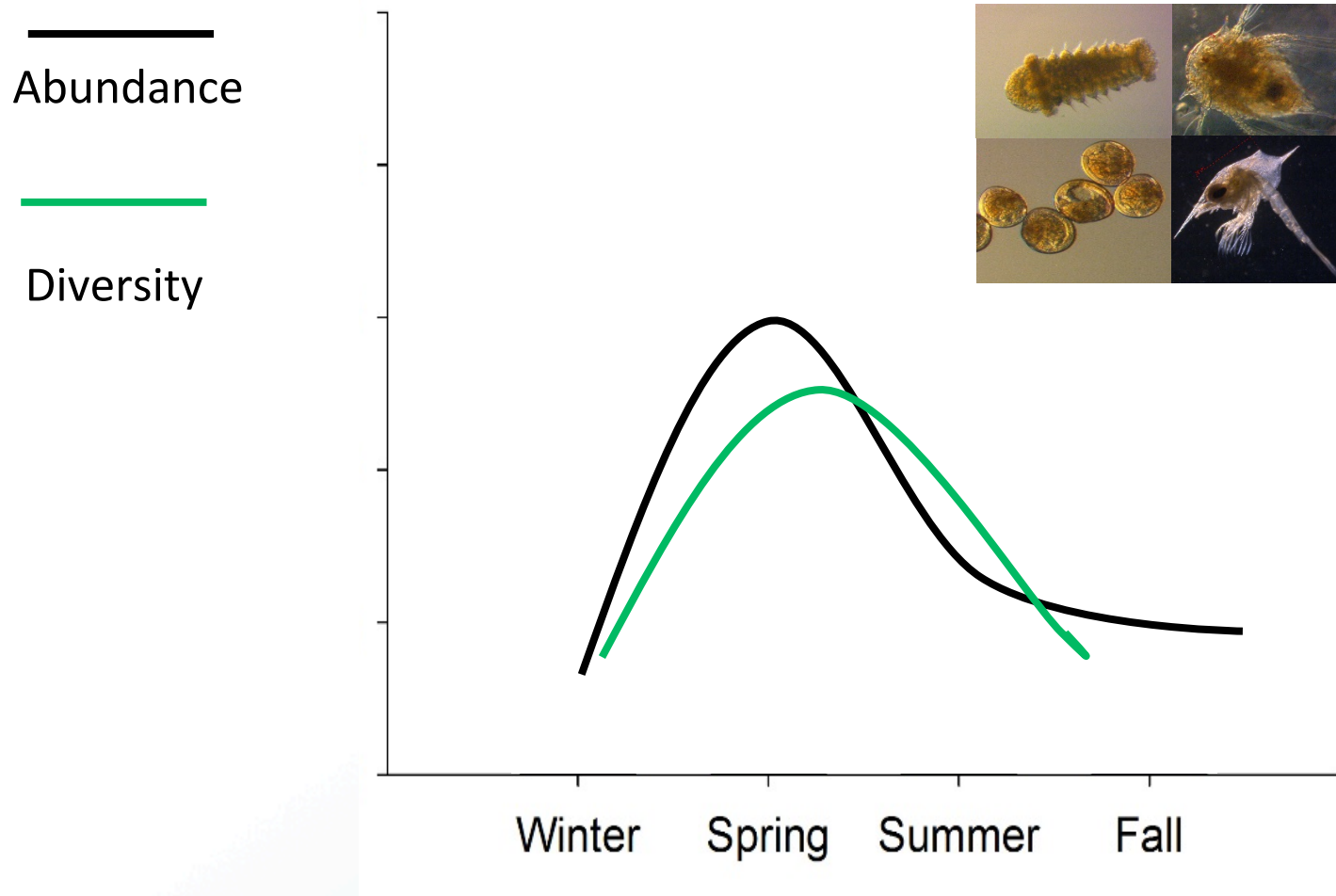
Helena Kling Michelsen and Camilla Svensen



# Meroplankton

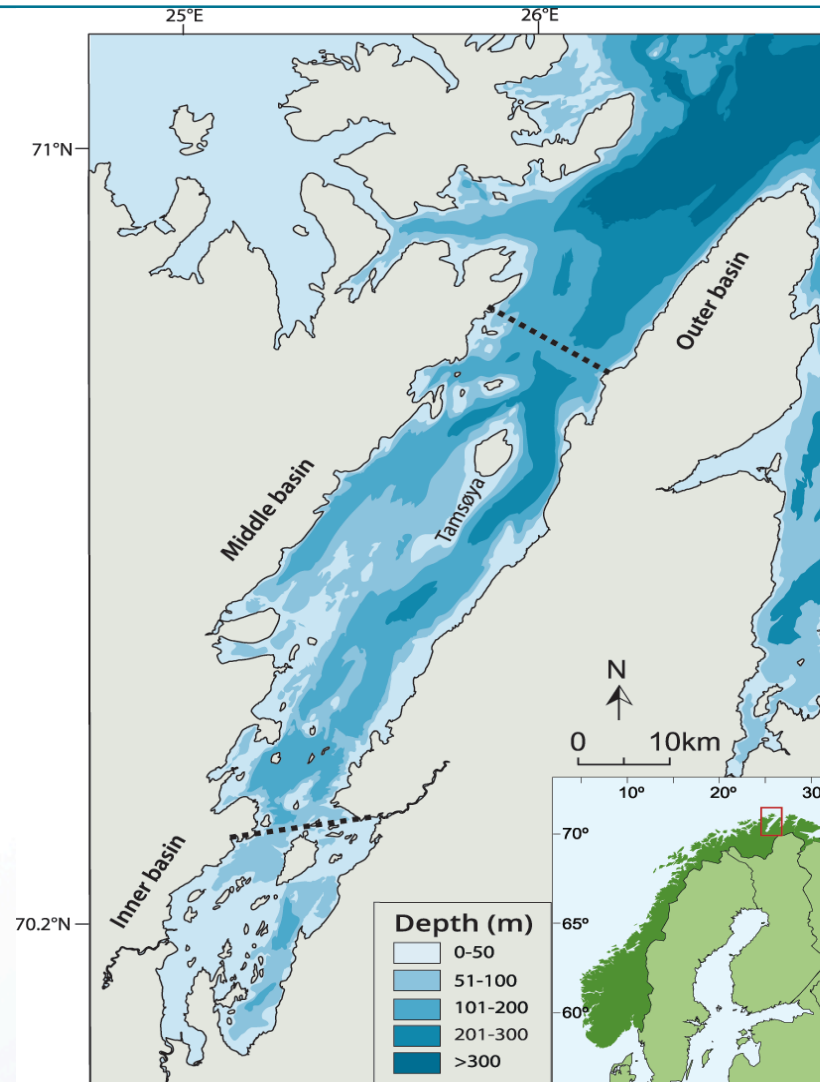


# Strong seasonal spawning in high-latitudes



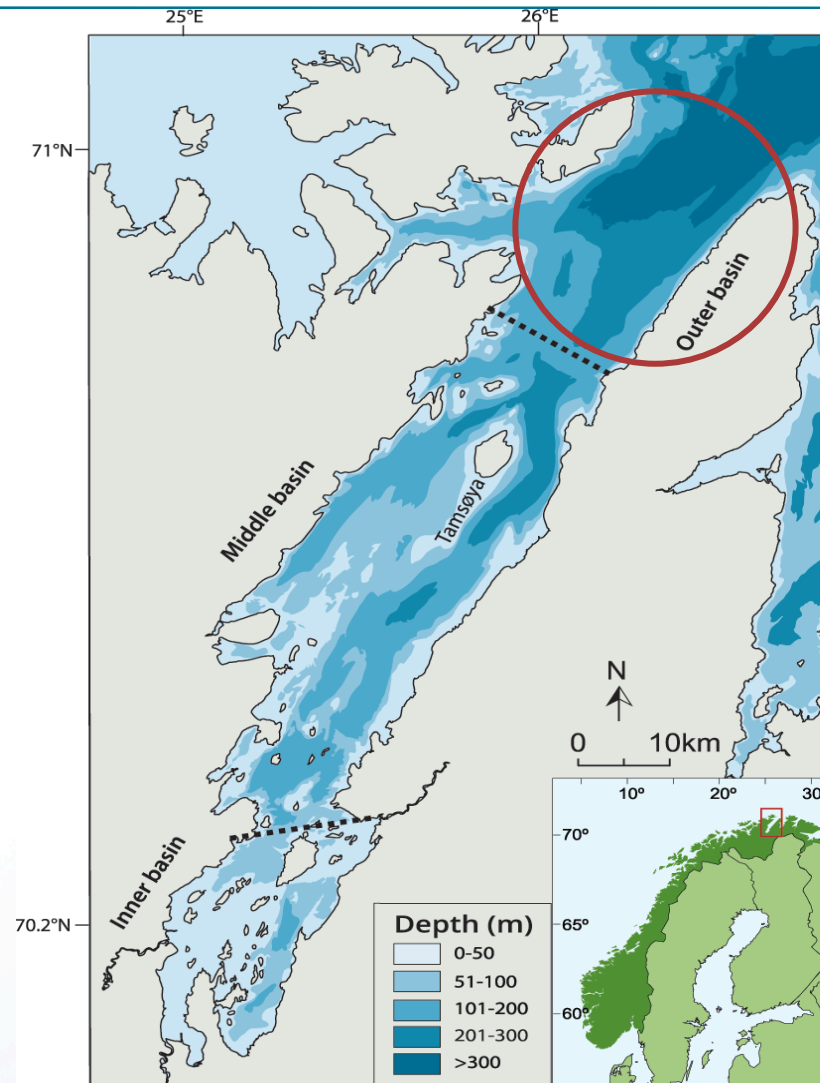


# Porsangerfjord

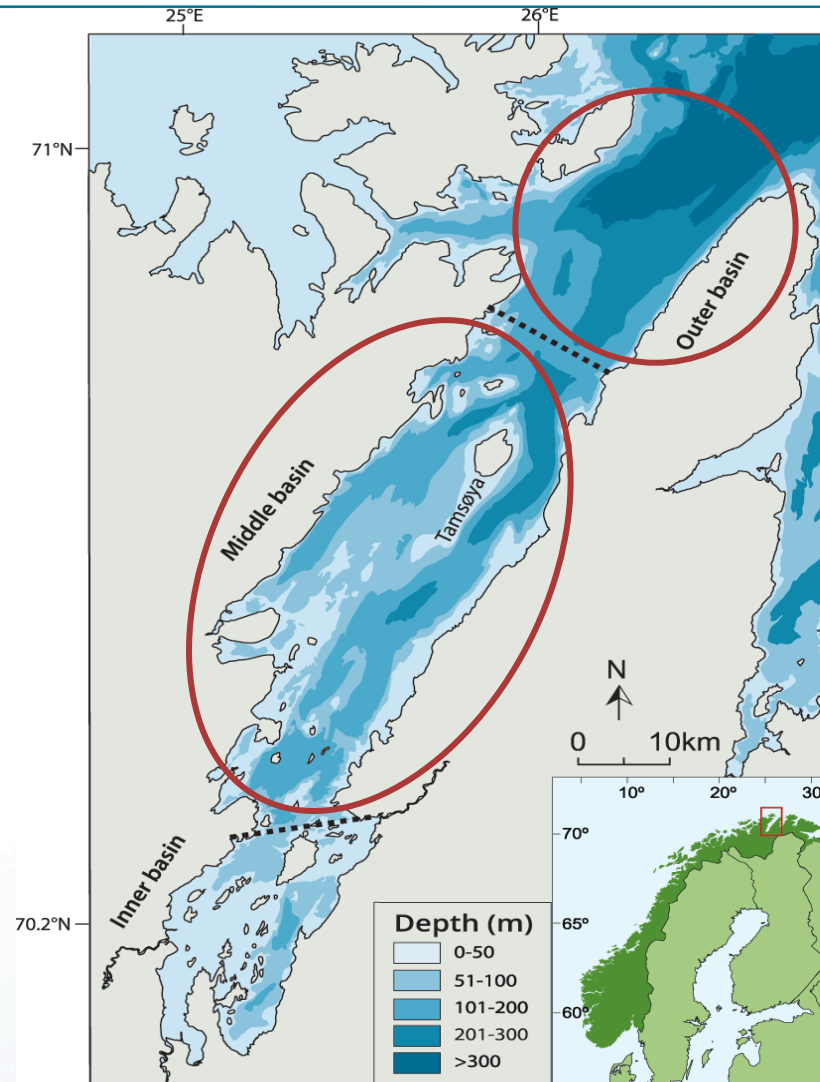




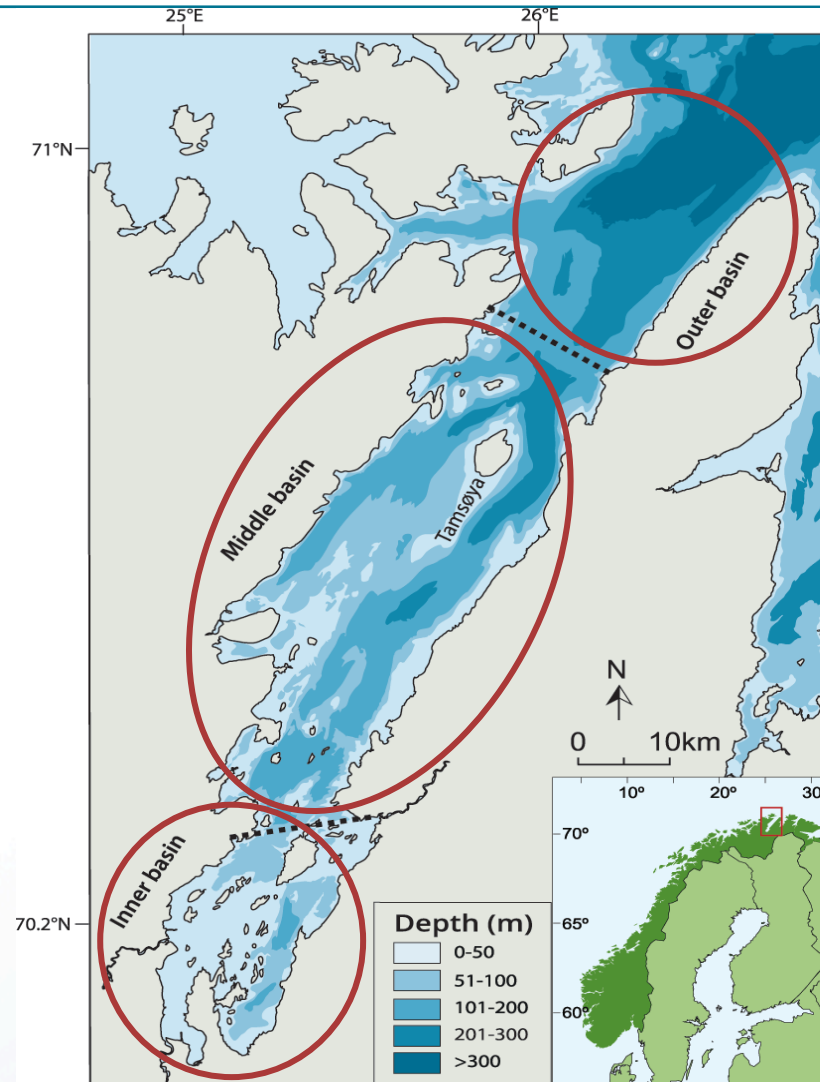
# Porsangerfjord



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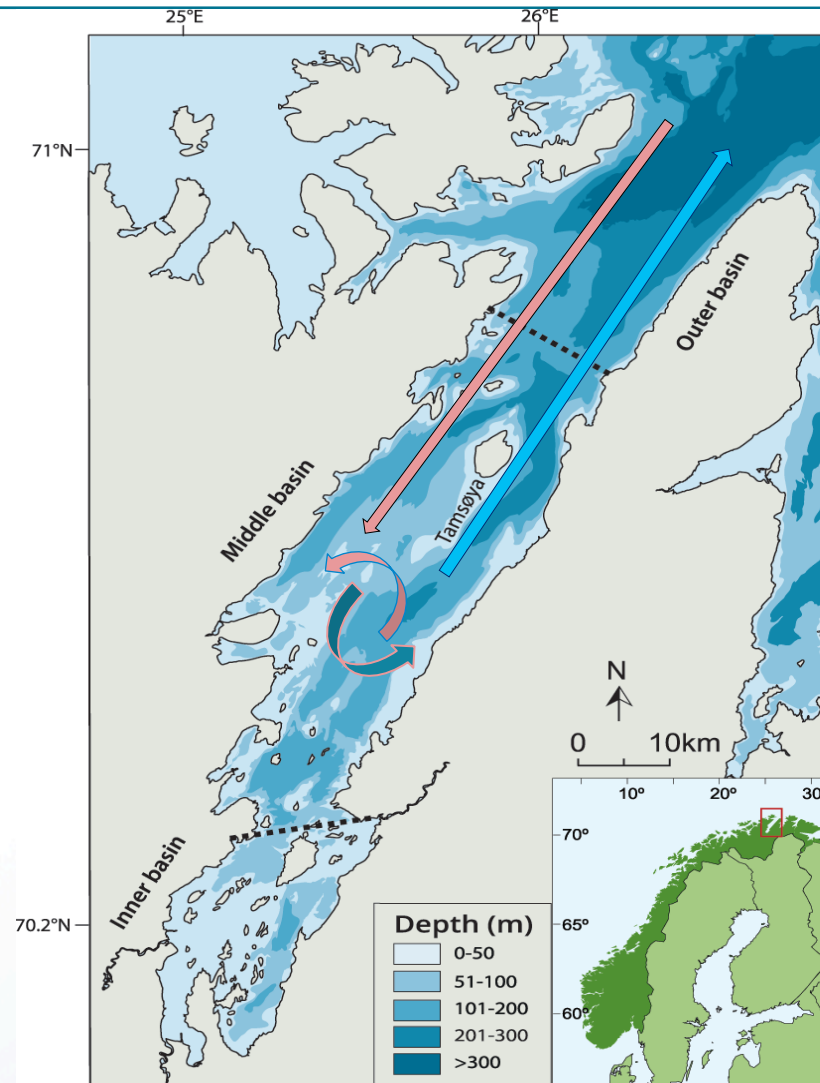


# Porsangerfjord





# Porsangerfjord



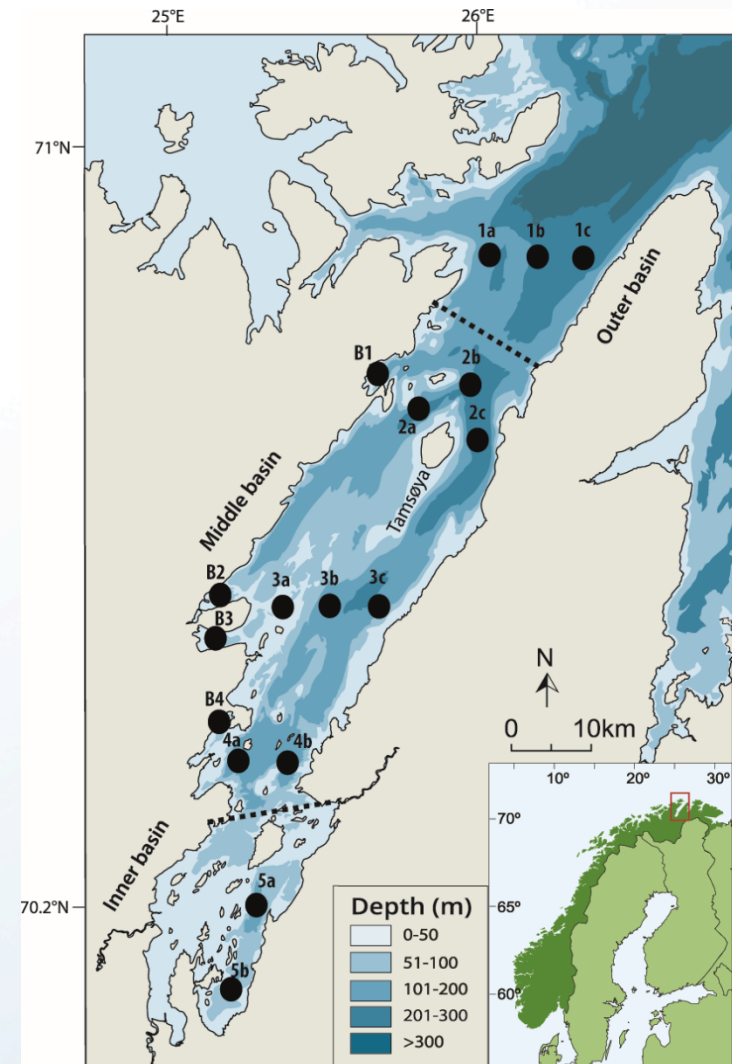
# Research questions

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- Are there spatial differences in abundance and composition of meroplankton during spring?
- Is the spatial difference correlated with environmental variables?
- What is the relative numerical role of meroplankton in the zooplankton community?

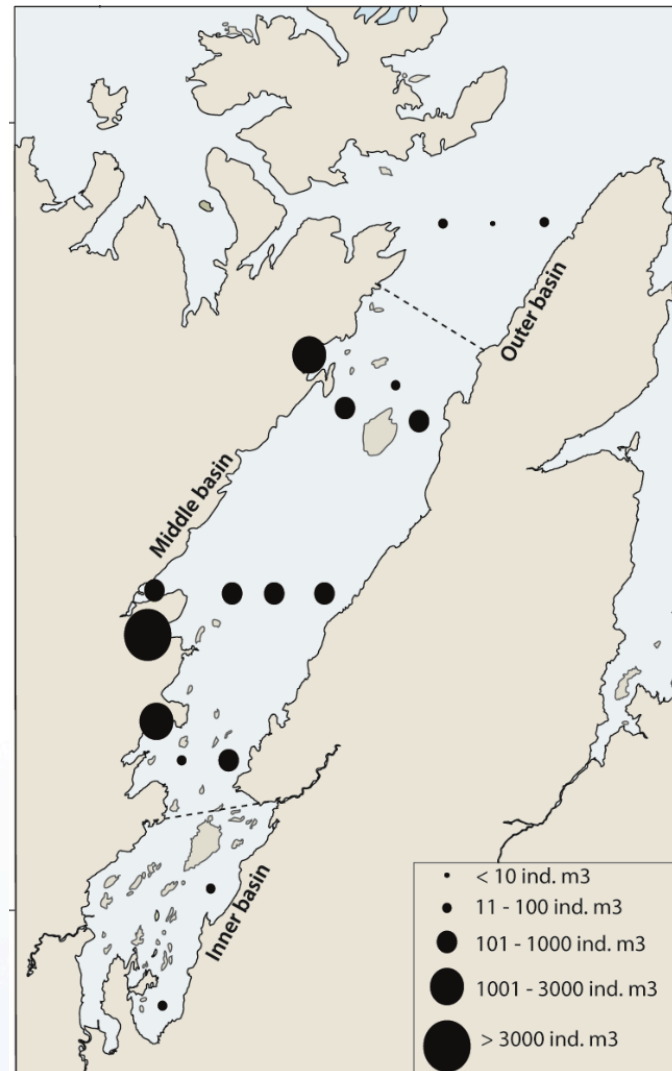
# Sampling regime

- WP2 samples and CTD-profiles collected 11-17 April, 2013
- Five transects
- Identification:
  - Meroplankton to the lowest taxonomic level
  - Holoplankton to phylum

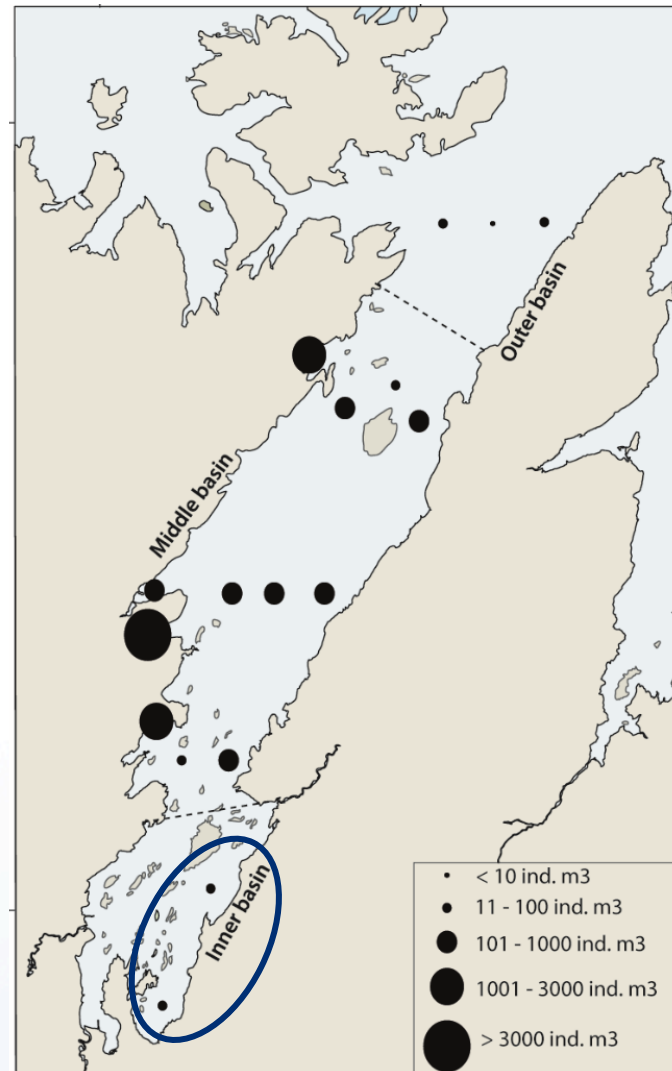




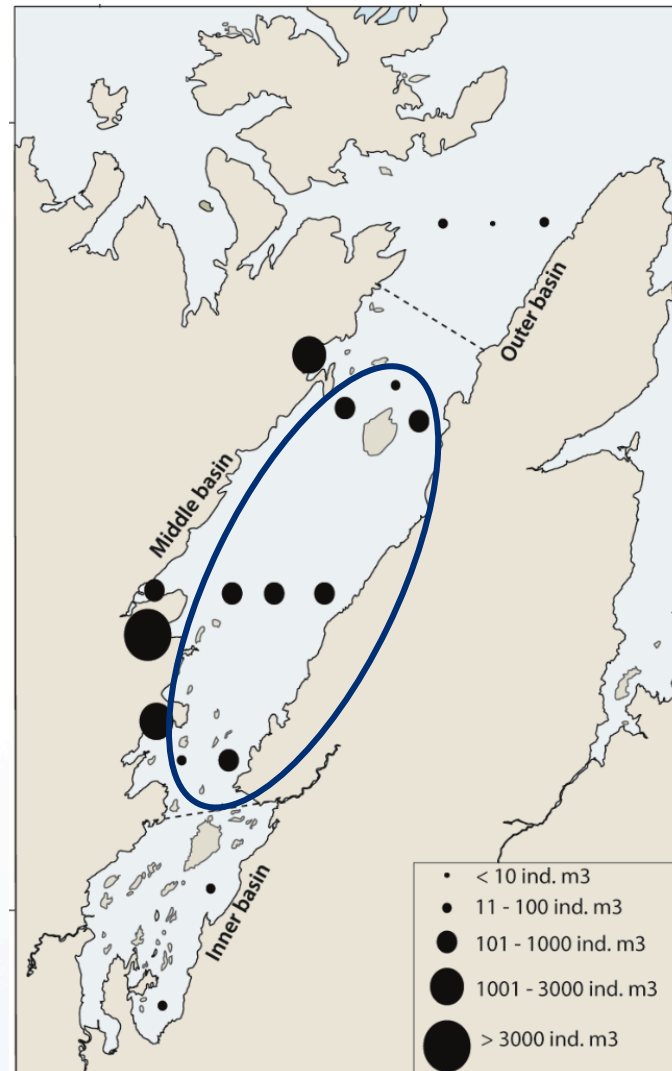
# Spatial abundance of meroplankton



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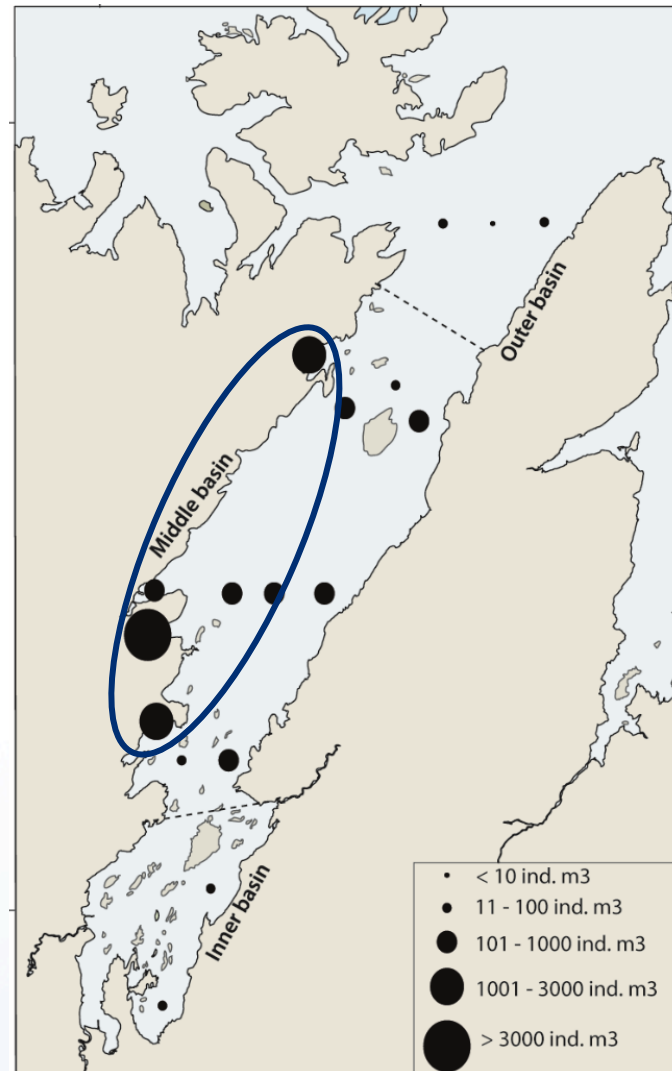


# Spatial abundance of meroplankton

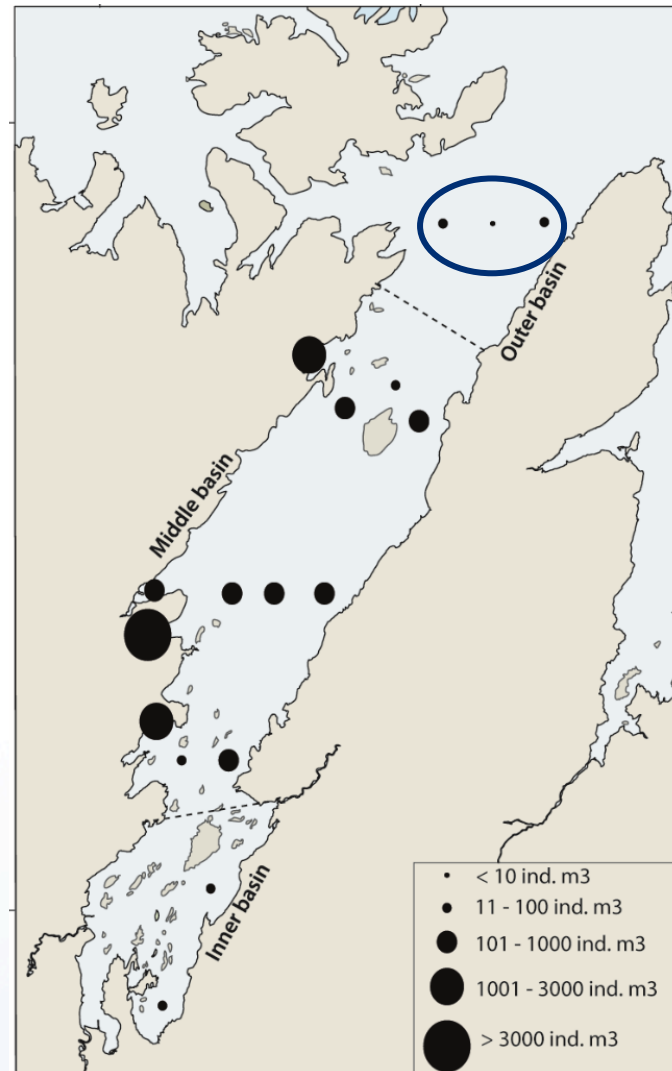




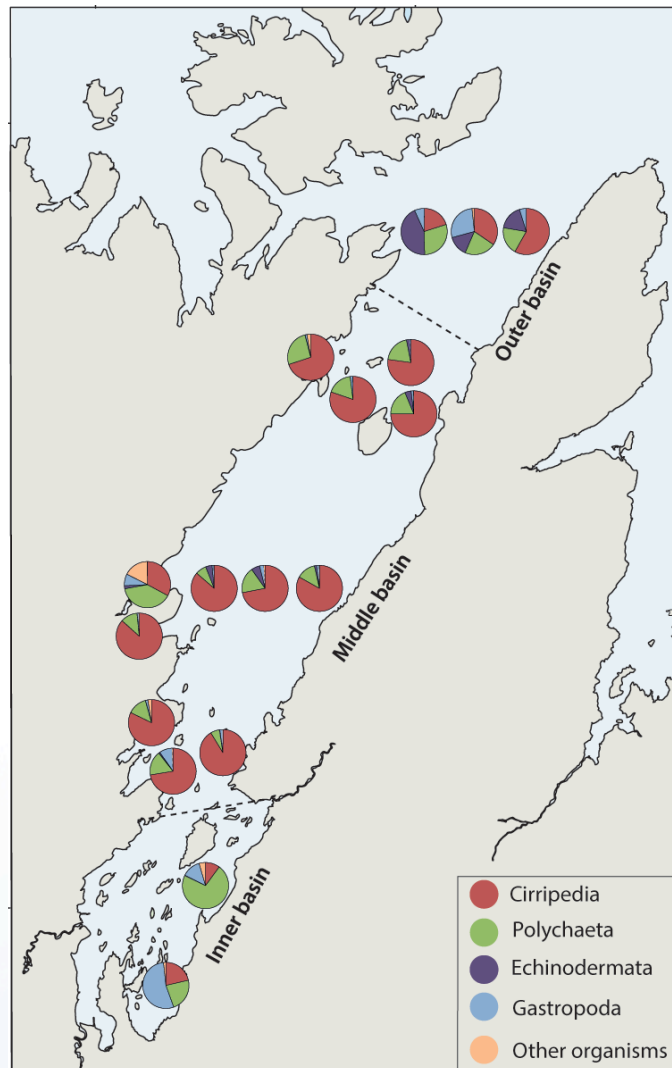
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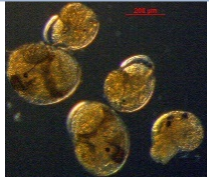


# Spatial composition of meroplankton

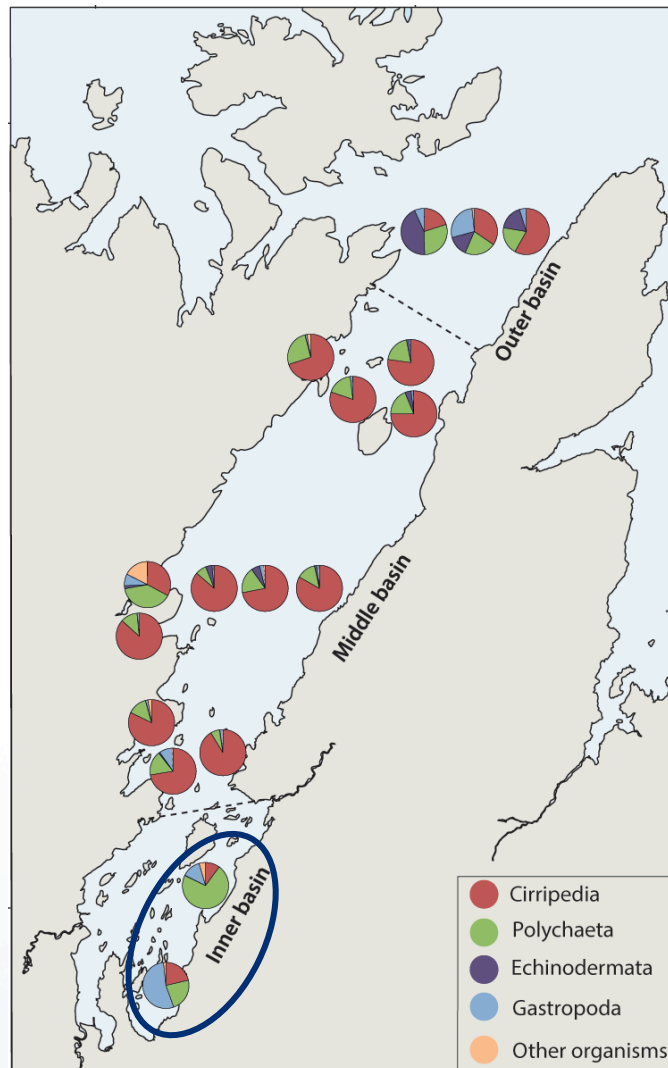


# Spatial composition of meroplankton

Gastropoda



Polychaeta

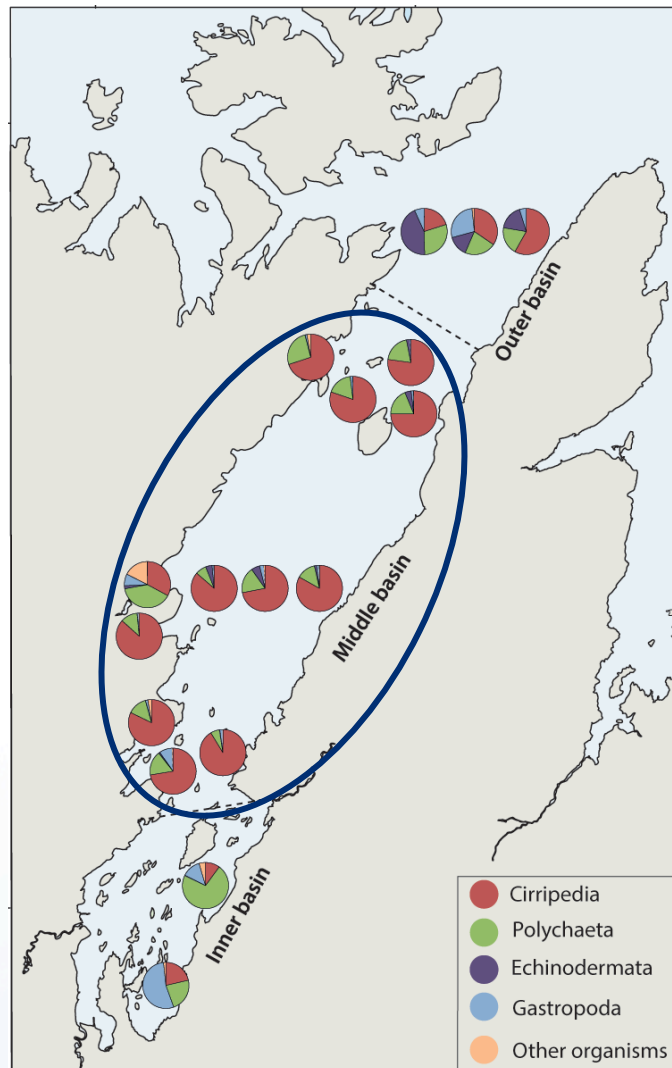


# Spatial composition of meroplankton

Cirripedia

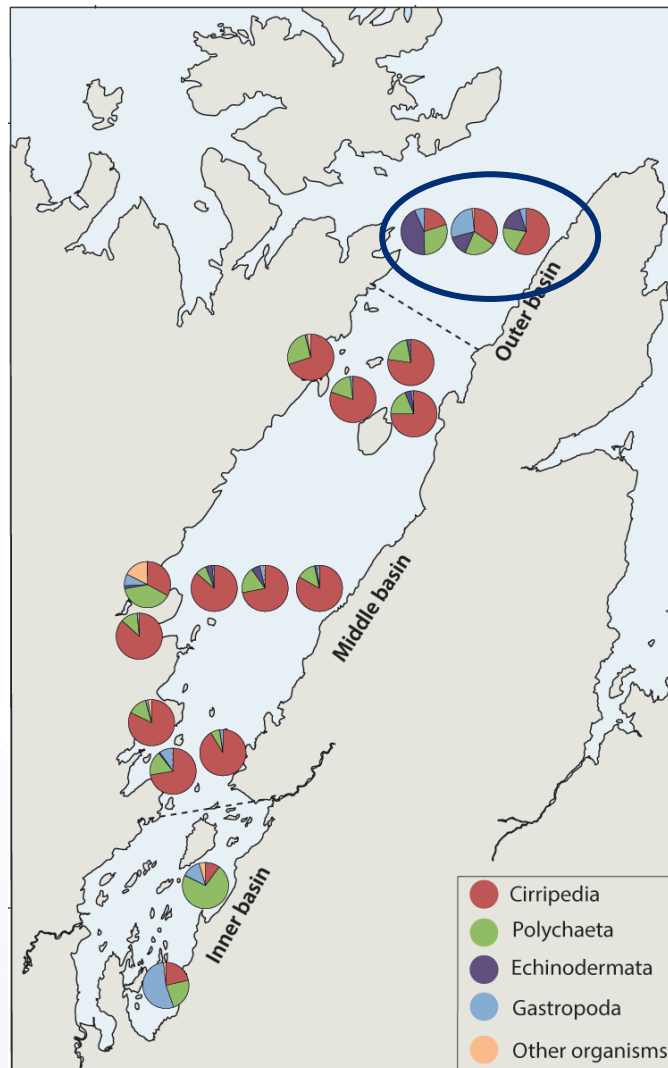


Polychaeta

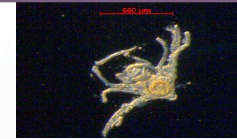




# Spatial composition of meroplankton



Echinodermata



Cirripedia



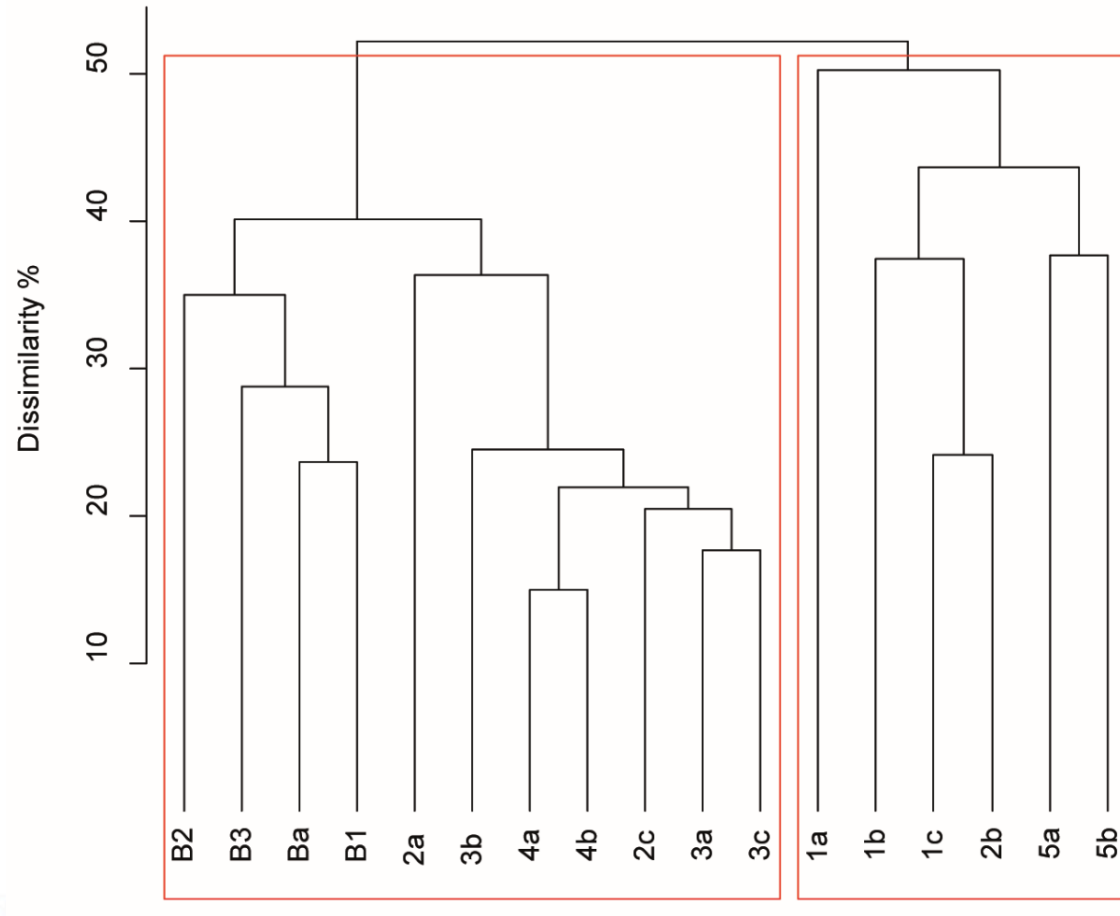
Polychaeta



Gastropoda



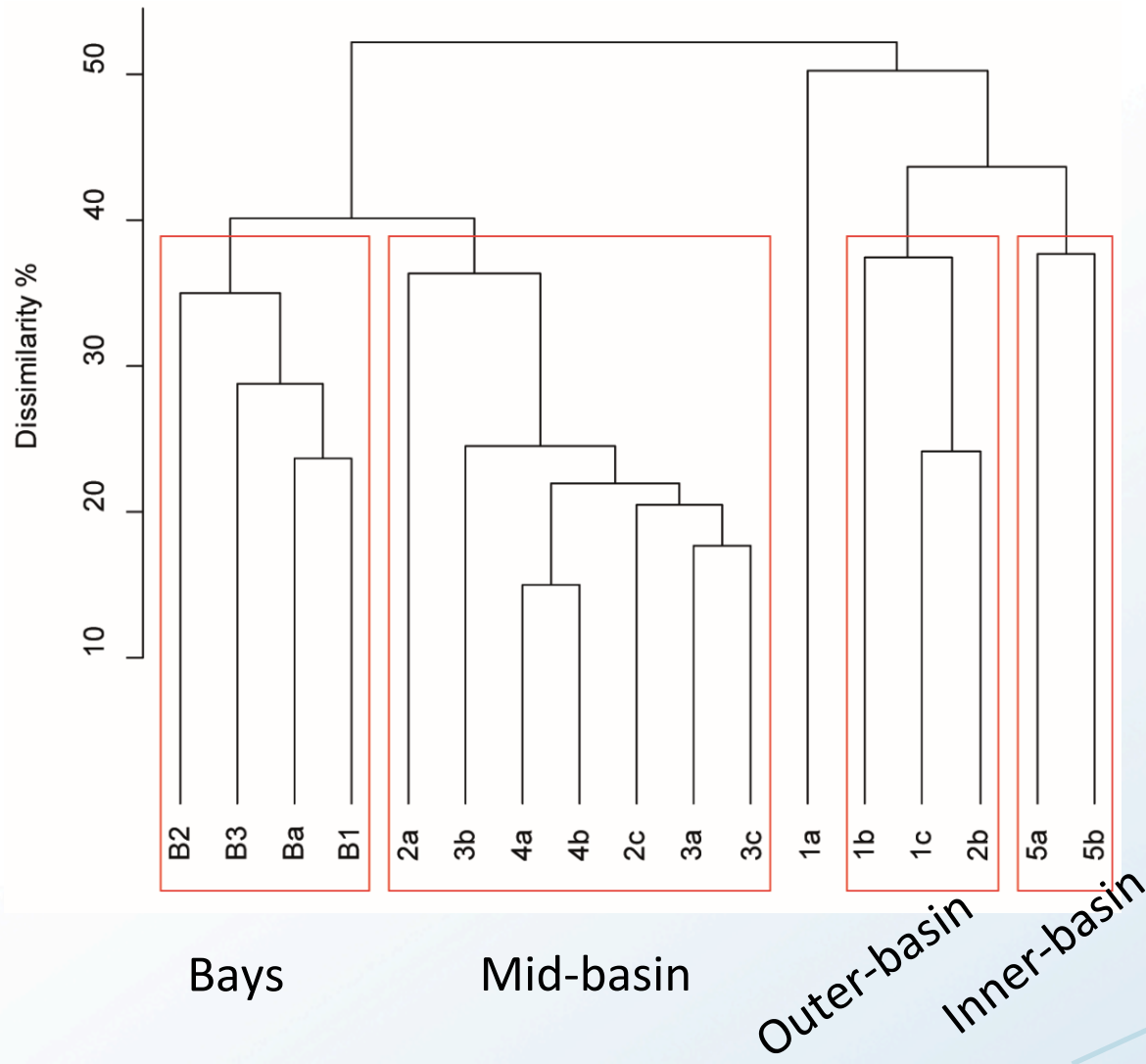
# Station dissimilarity – Bray Curtis



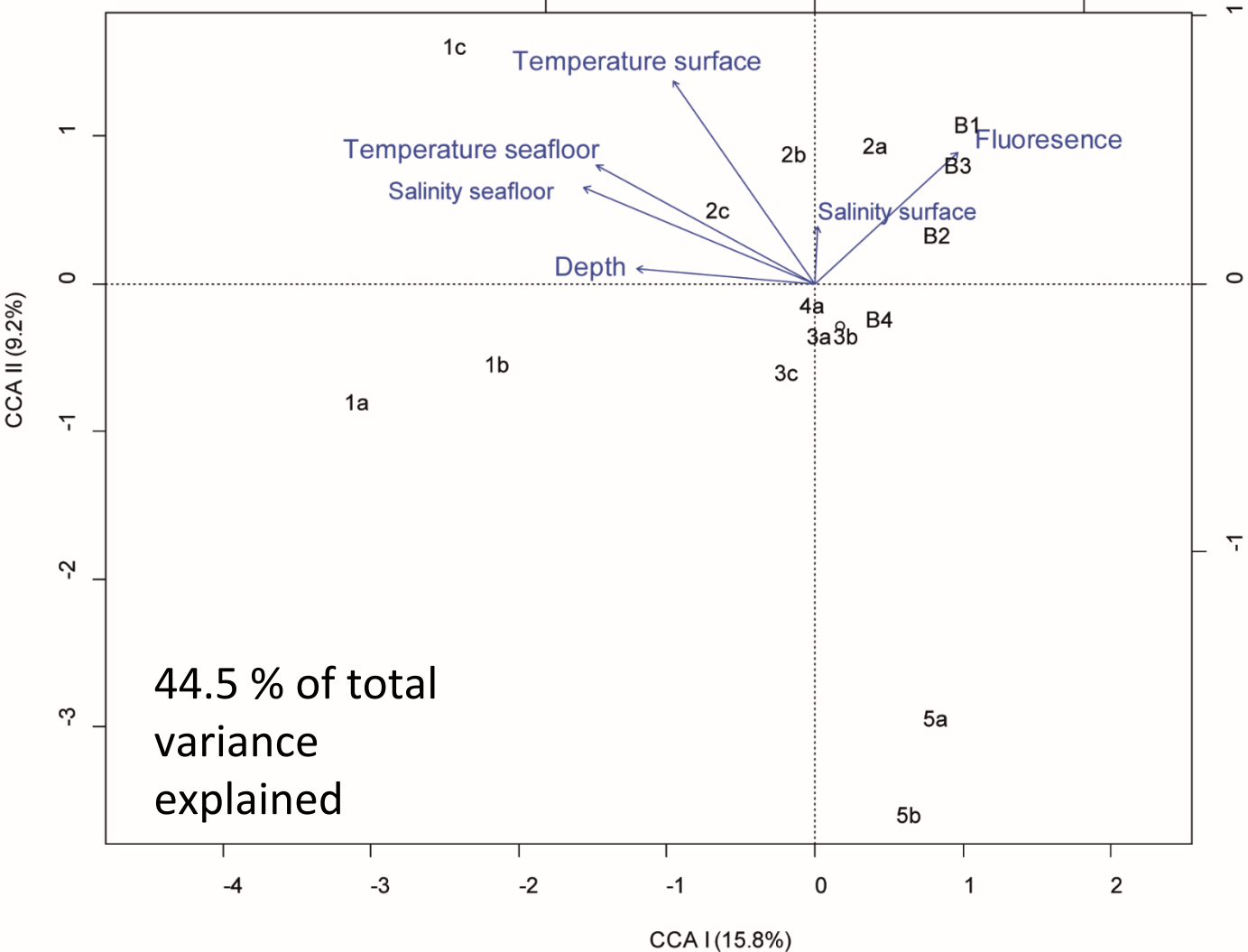
Bays and mid-basin

Inner- and outer-basins

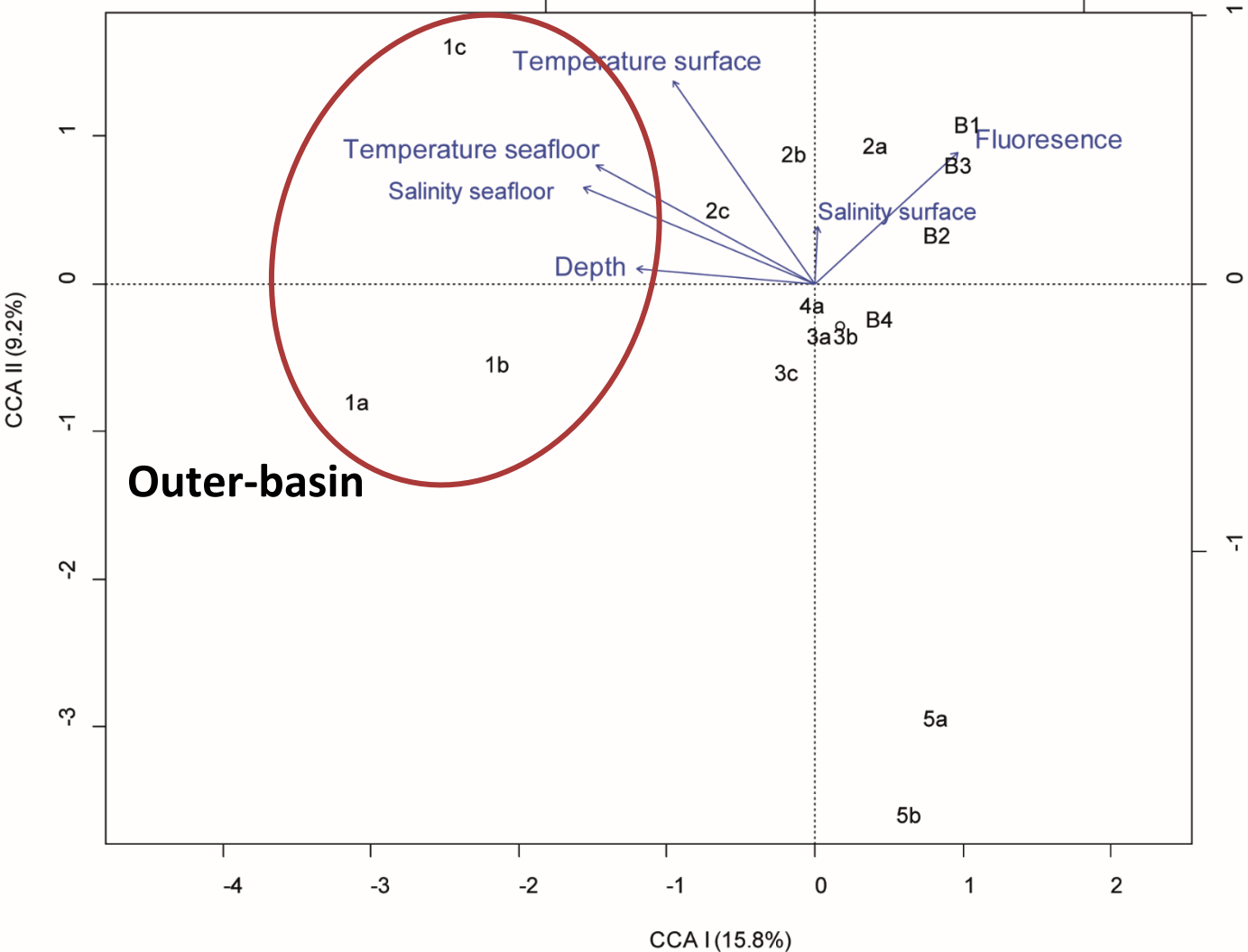
# Station dissimilarity – Bray Curtis



# Environmental factors - stations

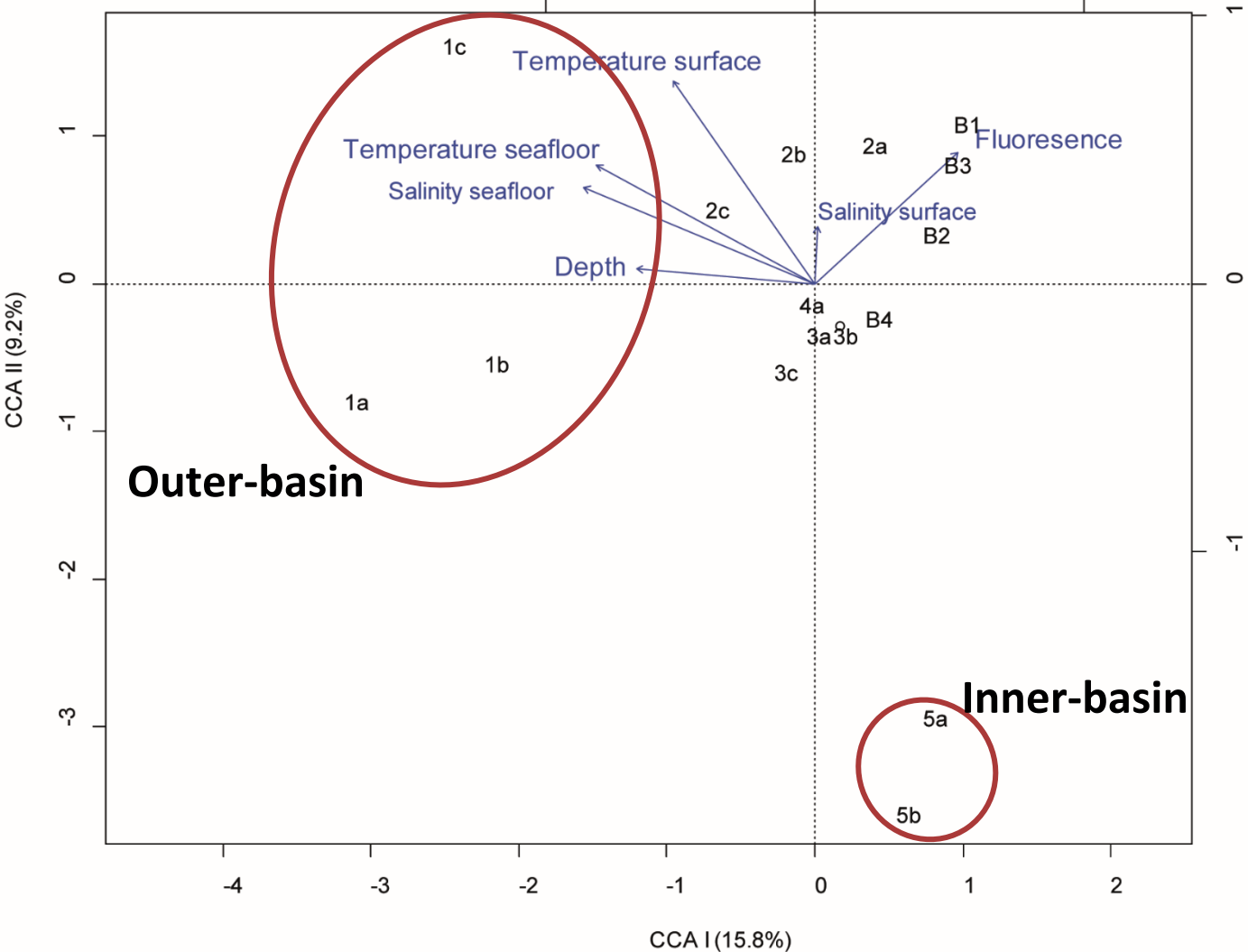


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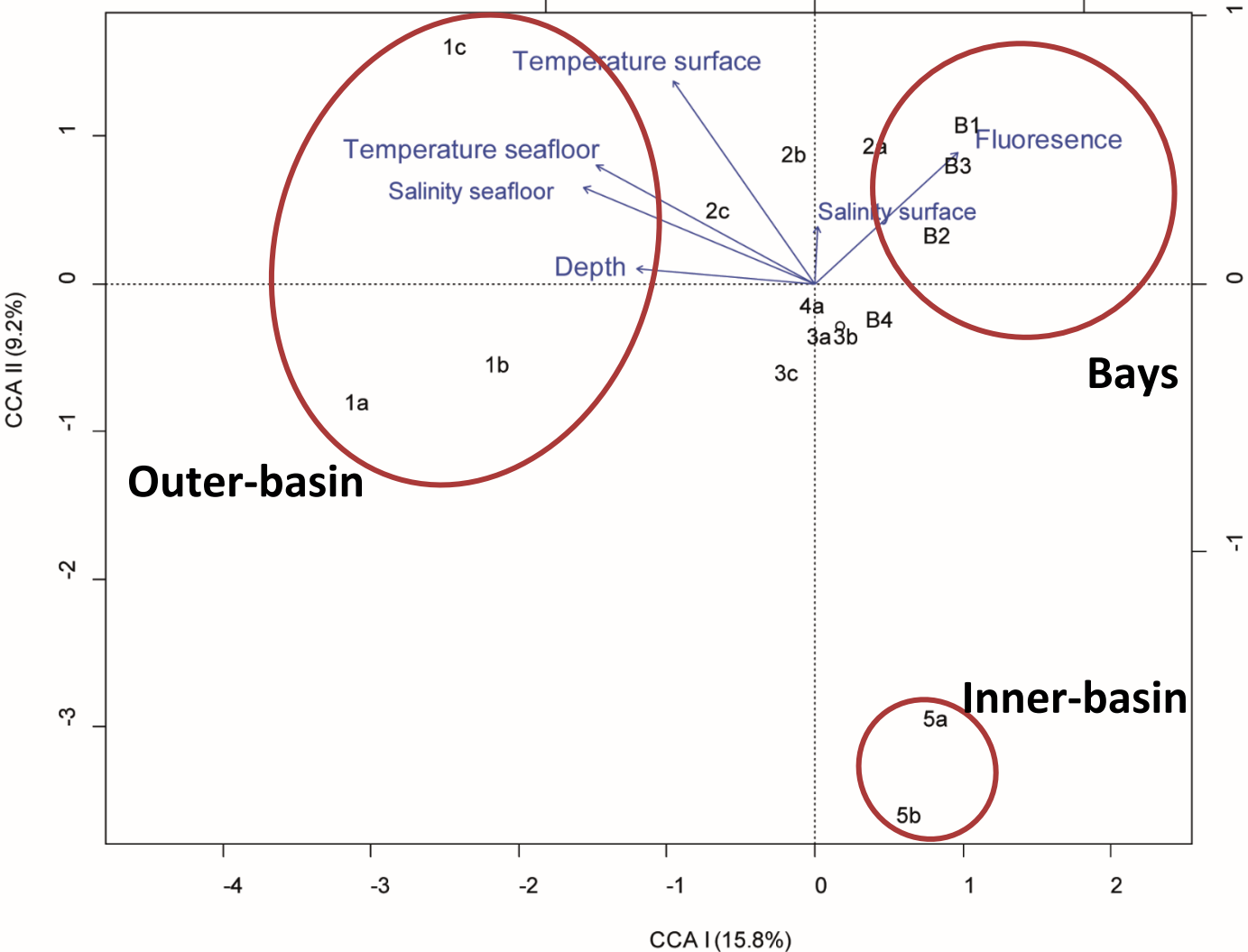




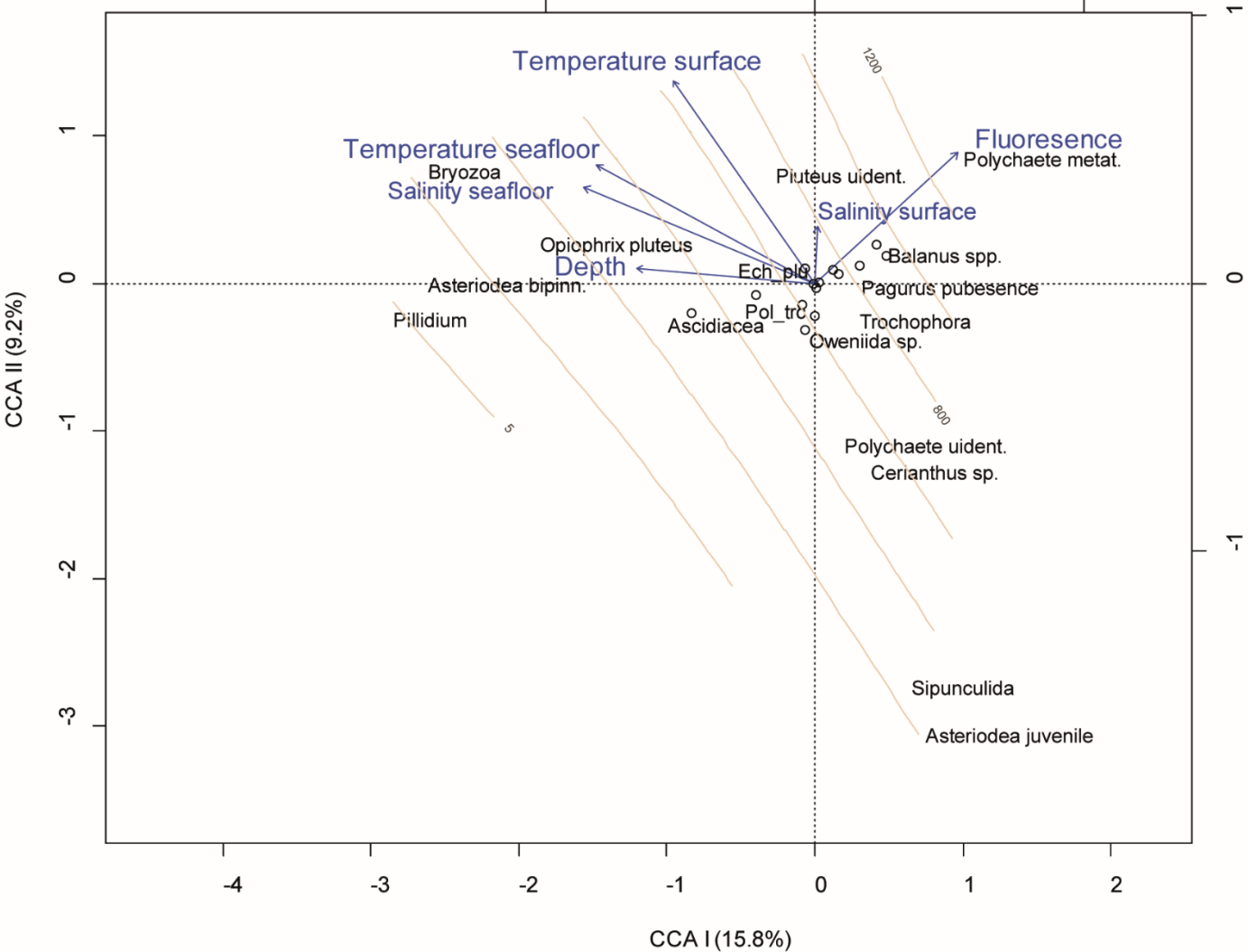
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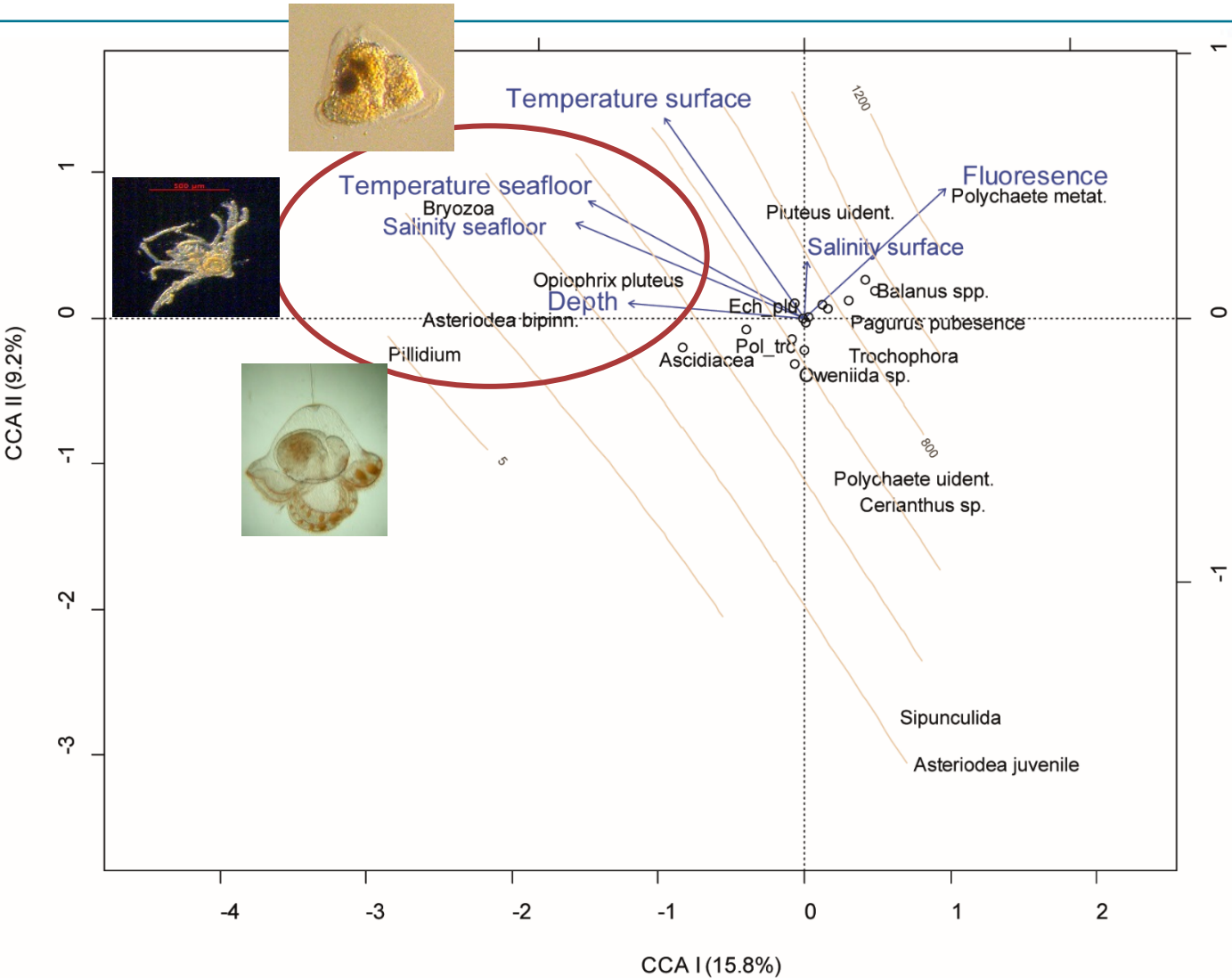
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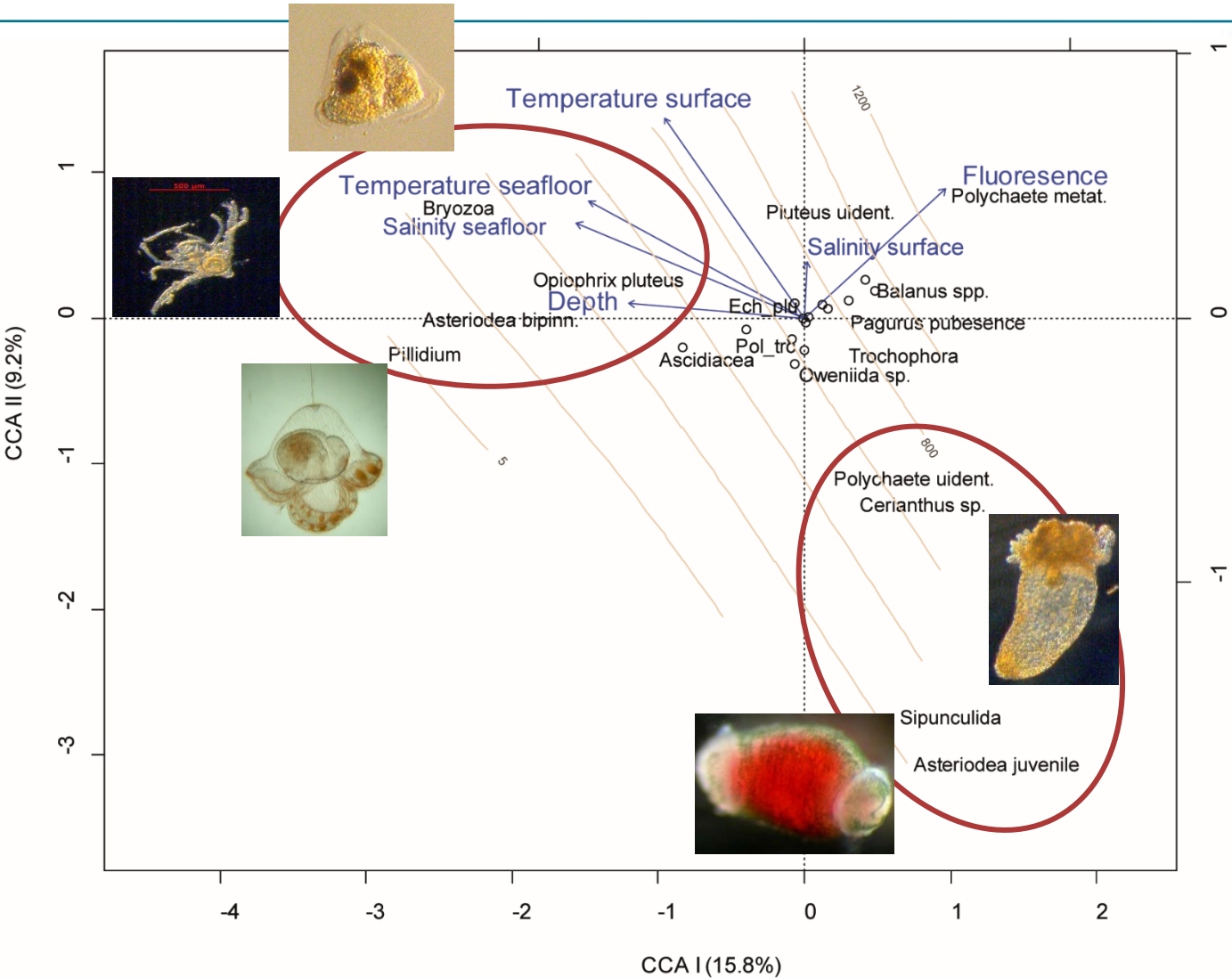
# Environmental factors - species



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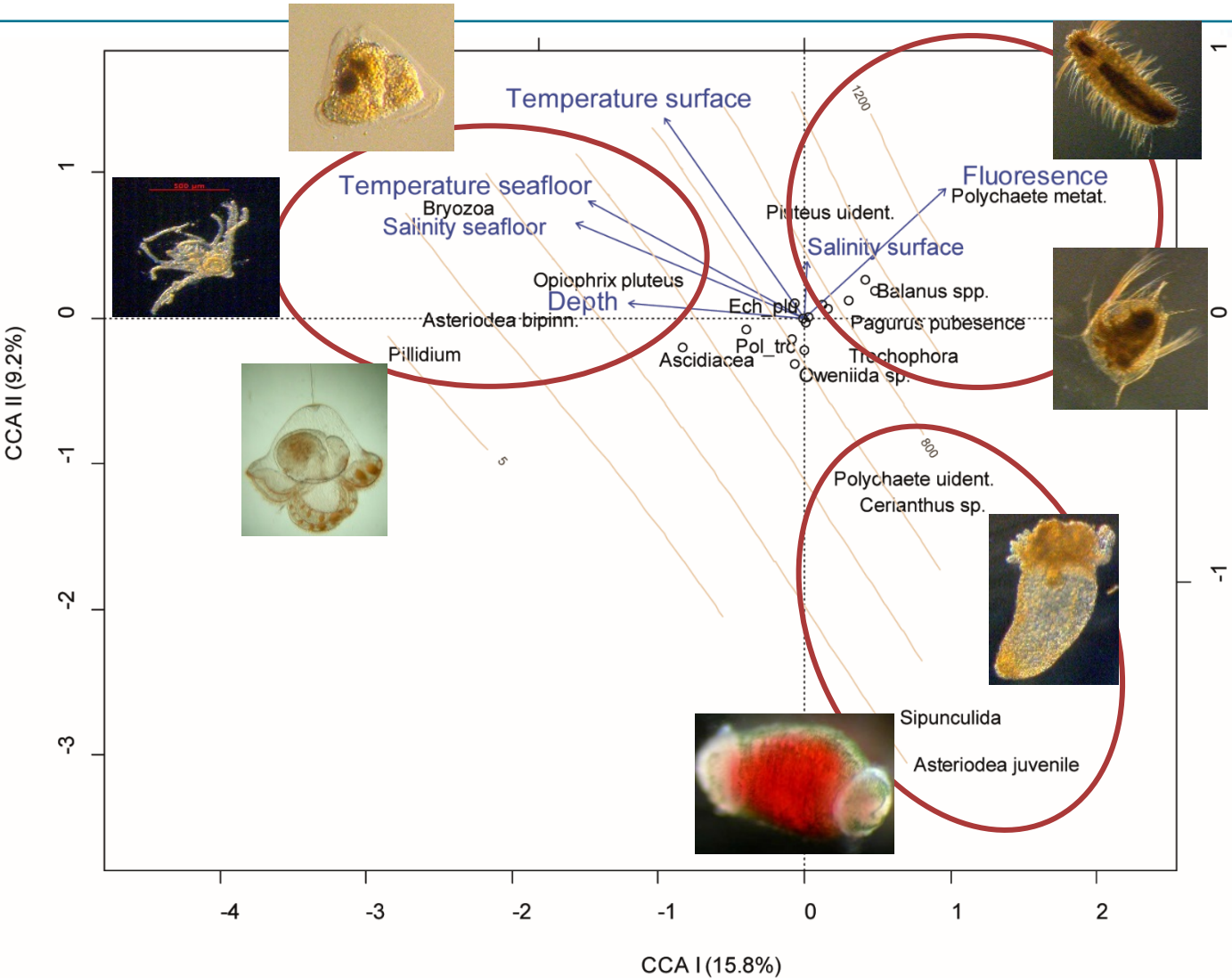


# Environmental factors - species

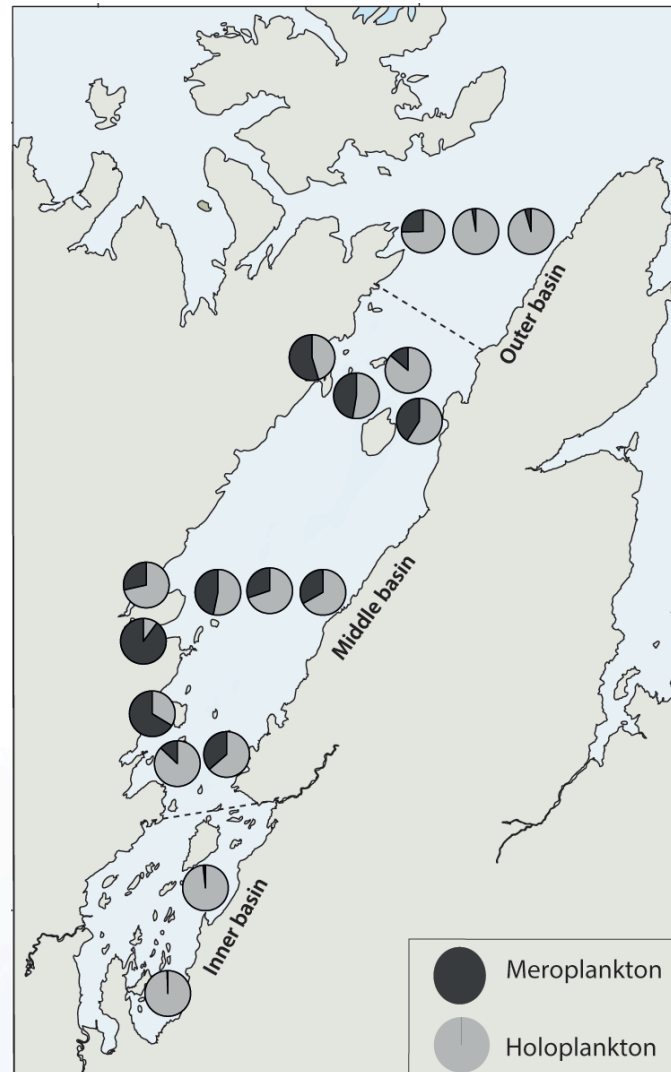




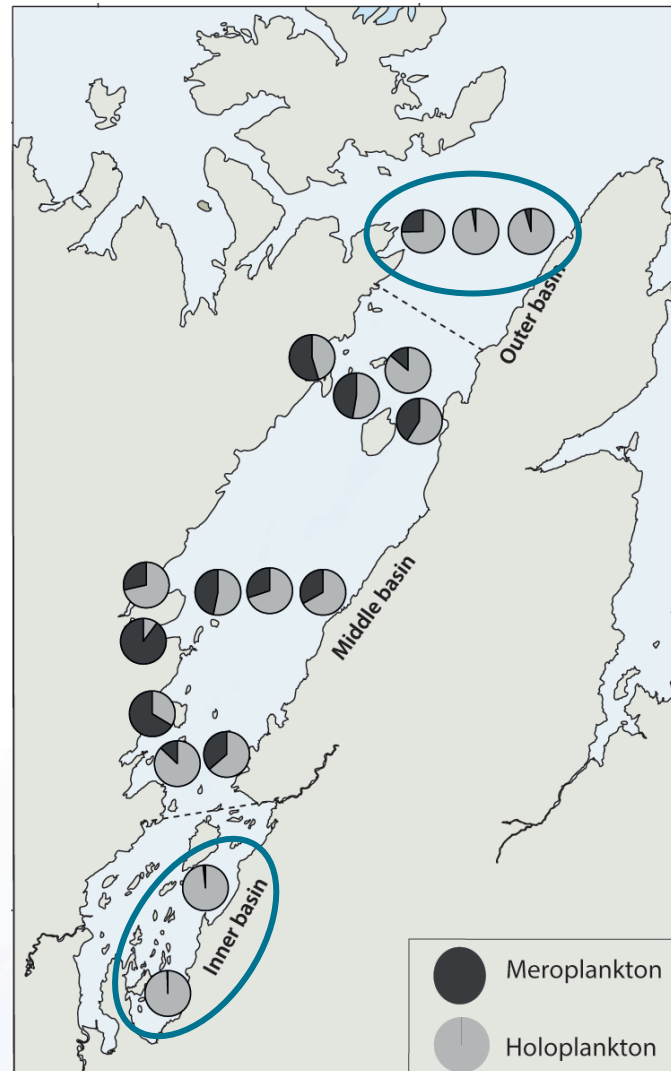
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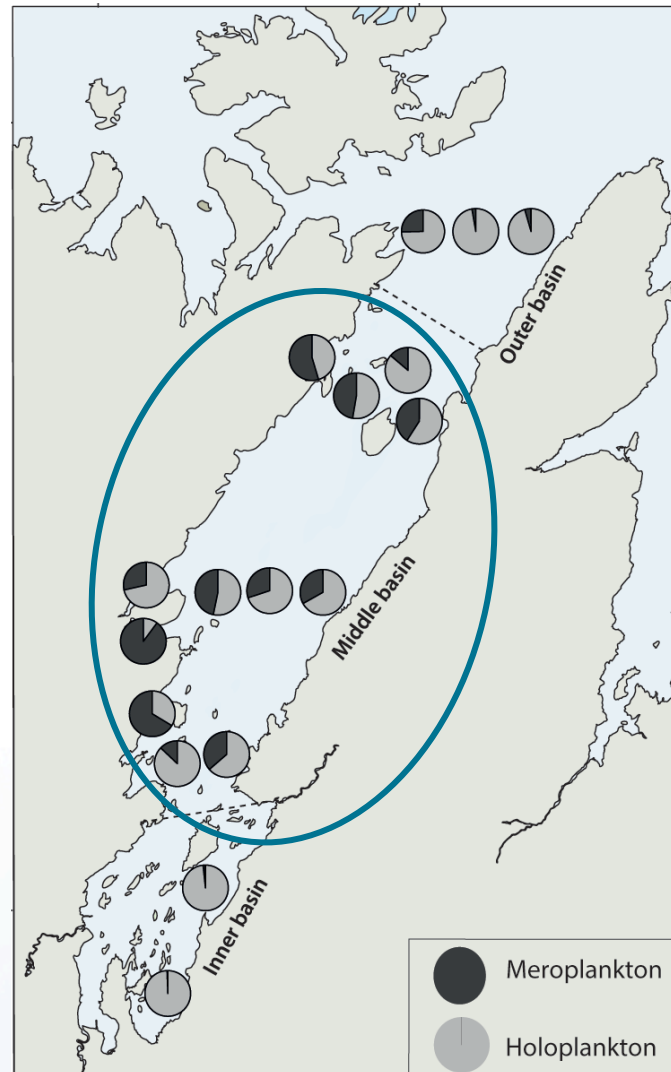
# Relative abundance of holoplankton and meroplankton



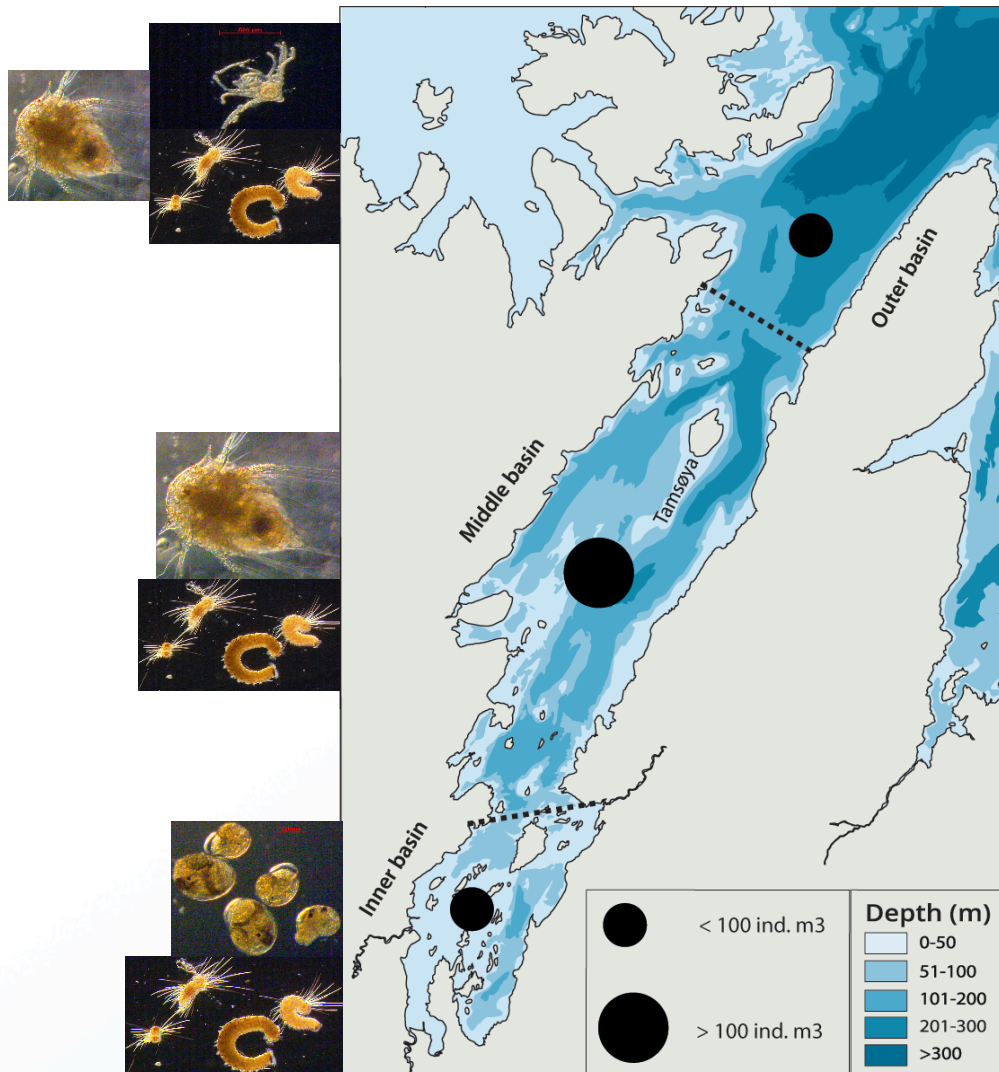
# Relative abundance of holoplankton and meroplankton



# Relative abundance of holoplankton and meroplankton



# Summary and conclusions



Meroplankton play an important role in high-latitude fjord systems