

# ***Interactive comment on “Sources of Fe-binding organic ligands in surface waters of the western Antarctic Peninsula” by Indah Ardiningsih et al.***

**Indah Ardiningsih et al.**

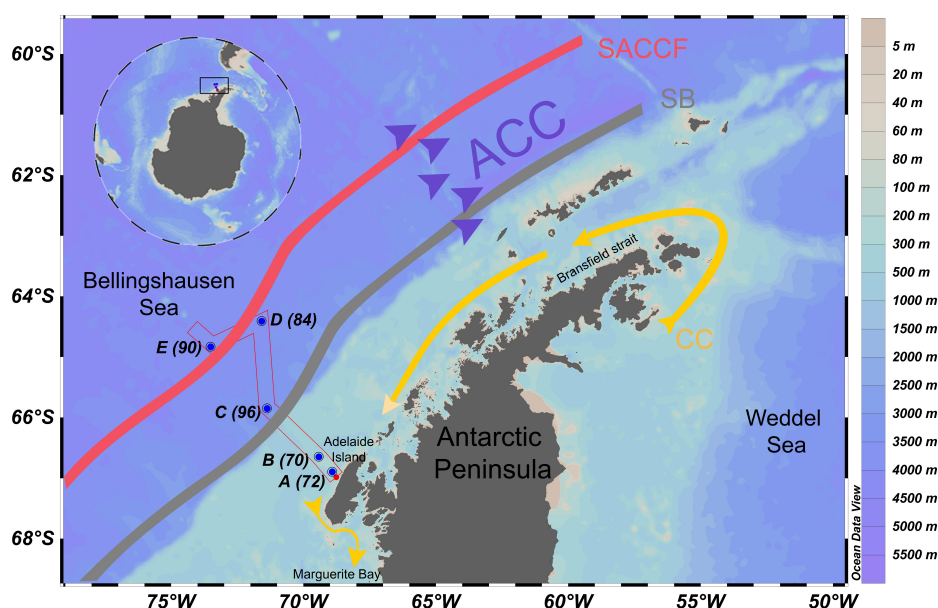
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## Figures

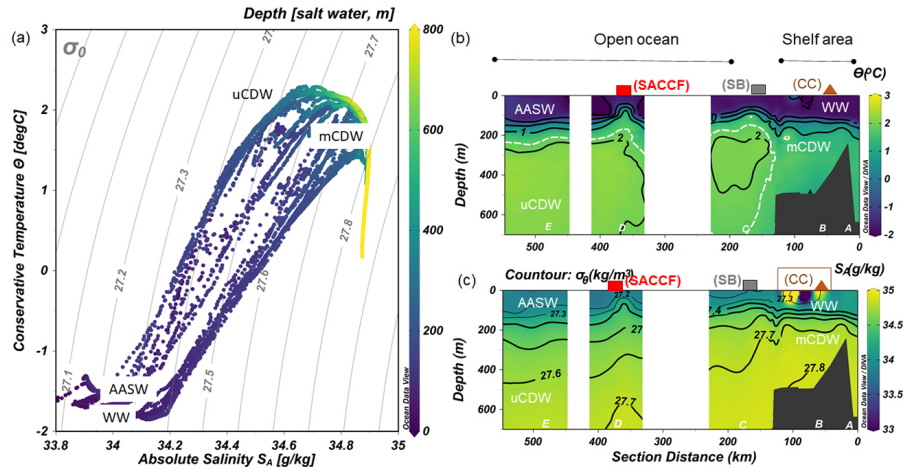
Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2020-357>, 2020.

C1



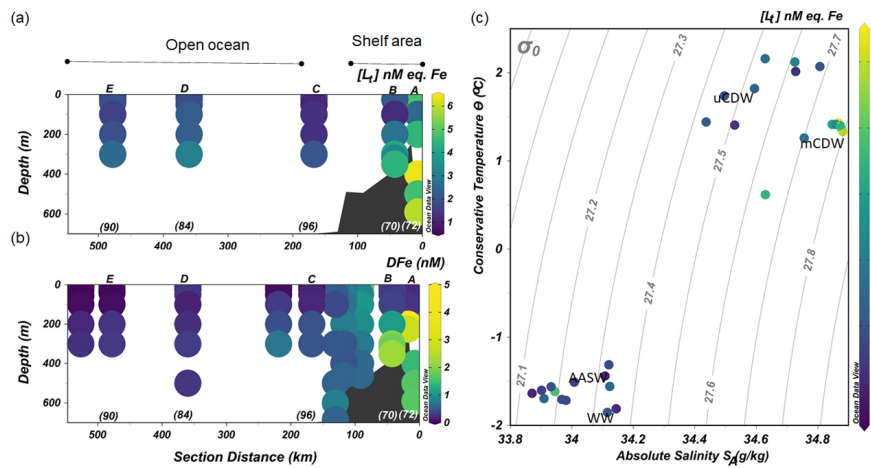
**Fig. 1.** Map of the sampling sites along our study transect near the Western Antarctic Peninsula.

C2



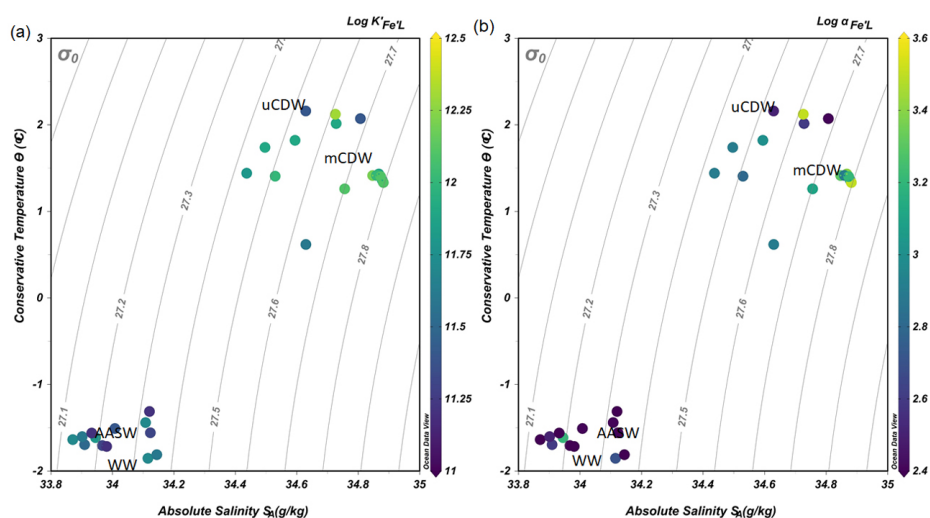
**Fig. 2.** (a) Diagram of absolute salinity ( $S_A$ ) versus conservative temperature ( $\Theta$ ) with isopycnal lines and colors denoting depth in m. The distribution along the transect shown in Figure 1 of (b)  $\Theta$  and (c)  $S_A$

C3



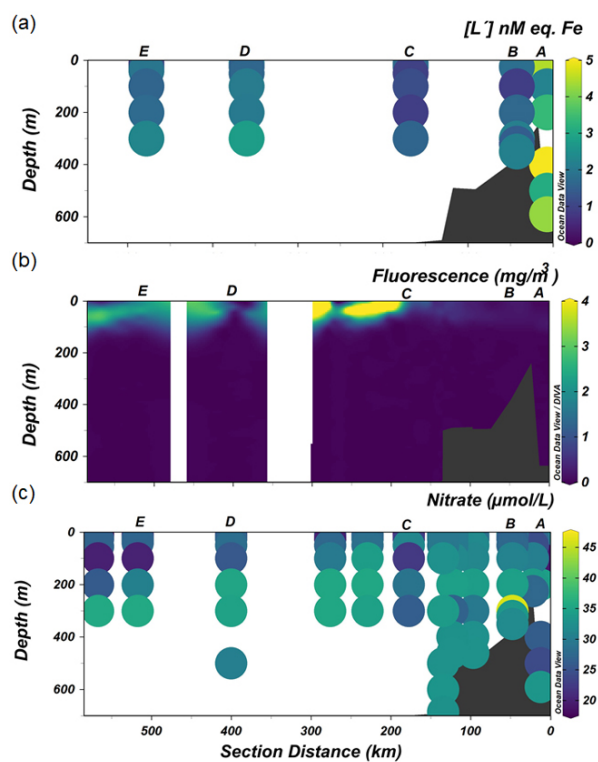
**Fig. 3. :** The distribution along the transect shown in Figure 1 of (a) the concentrations of total Fe-binding ligand  $[Lt]$  and (b) concentrations of dissolved-Fe (DFe) and (c) a  $\Theta$ -  $S_A$  diagram

C4



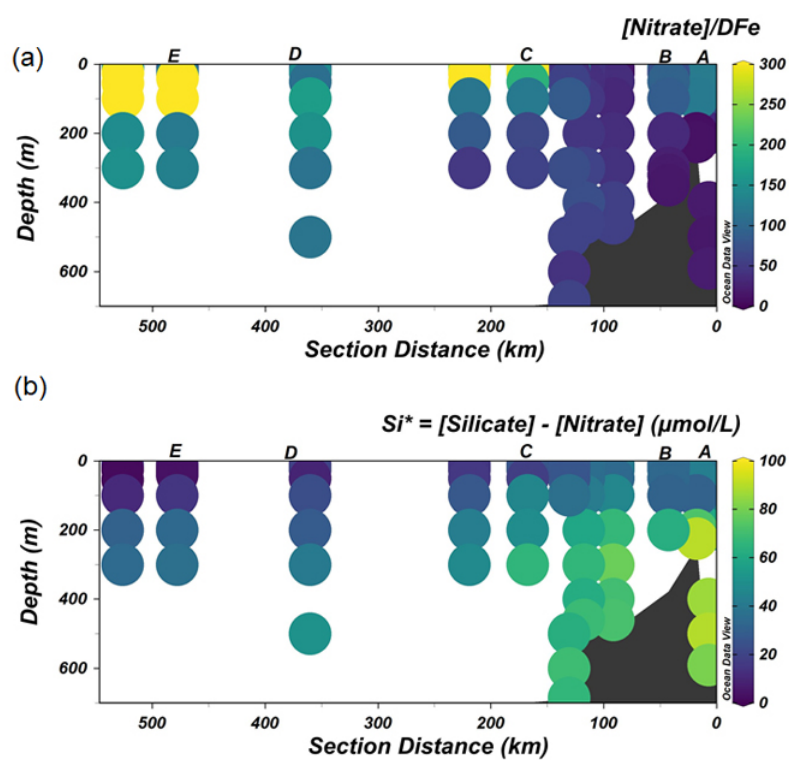
**Fig. 4.** (a) The binding strength, log "K"  $_{Fe'L}$   $^{cond}$  and (b) complexation capacity, log  $\alpha_{Fe'L}$  plotted in a  $\theta$ - $S_A$  diagram. The color scale indicates the values of log "K"  $_{Fe'L}$   $^{cond}$  and log  $\alpha_{Fe'L}$ .

C5



**Fig. 5.** The distribution along the transect shown in Figure 1 of (a) excess ligand concentrations  $[L]$ , (b) Fluorescence, and (c) Nitrate.

C6



**Fig. 6.** The distribution of  $Si^*$ (a) and the ratio of  $[Nitrate]/DFe$  (b) along the transect shown in Figure 1.