

## Response to Editorial Comments:

P7, L10: are complicated

[Response]: Done. Please see P2, L10.

P7, L26: A number of the phytoplankton-centric hypoxia

[Response]: Done. Please see P2, L26.

P8, L29: during 17–18 July

[Response]: Done. Please see P3, L29.

P8, L30: between 13–16 July

[Response]: Revised as between 13 and 16 July. Please see P3, L30.

P8, L31: between 19–27 July

[Response]: Revised as between 19 and 27 July. Please see P3, L31.

P9, L18: Please indicate the maximum differences in temperature between the bottom and surface waters, because temperature can significantly affect the microbial activity.

[Response]: Added as “Note that the maximum difference in temperature between the bottom and surface water was 3 °C during the incubation” . Please see P4, L18-20.

P17, L21: than in the CJE (-8.8 ‰, -24.4±0.2 ‰) at S<0.4.

[Response]: Added the salinity range for the end-members in the CJE as “S<0.2”

P17, L27: temperatures

[Response]: Done. Please see P12, L27.

P17, L28 in the PRE were

[Response]: Done. Please see P12, L28.

P28: Insert a space between  $\theta$  and (°C).

[Response]: Done. Please see P23.

P29: In references in Table 2, please use parentheses for the year published. For example, Hu et al. (2006).

[Response]: Done. Please see P24.

P36, P37: In the regression equations of Figures 7b, 7e and 8, please remove the space immediately after the symbol " $\pm$ ".

[Response]: Done. Please see P31, P32.

In addition, we determined not to specify the data points at  $\text{AOU} > 100 \mu\text{mol kg}^{-1}$  in Fig. 8, because the grey dots confused the comparison between those two systems.