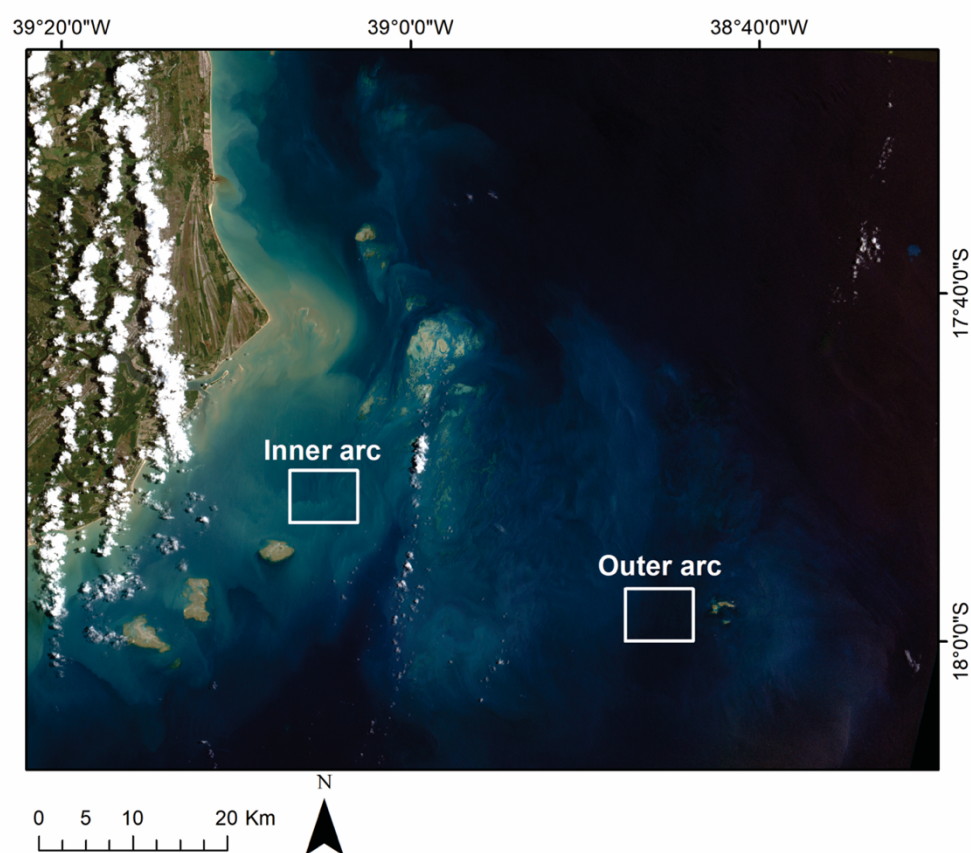
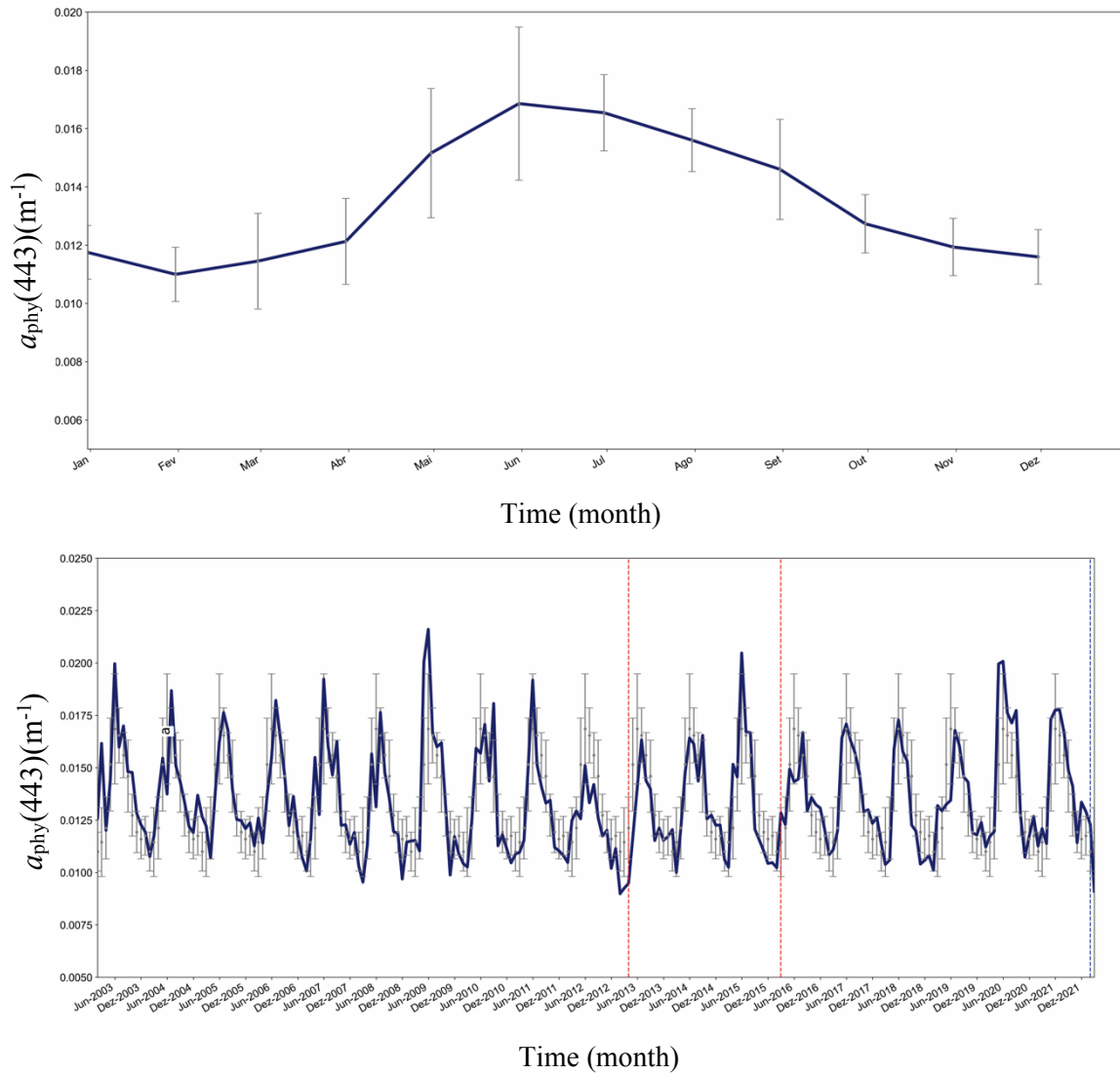


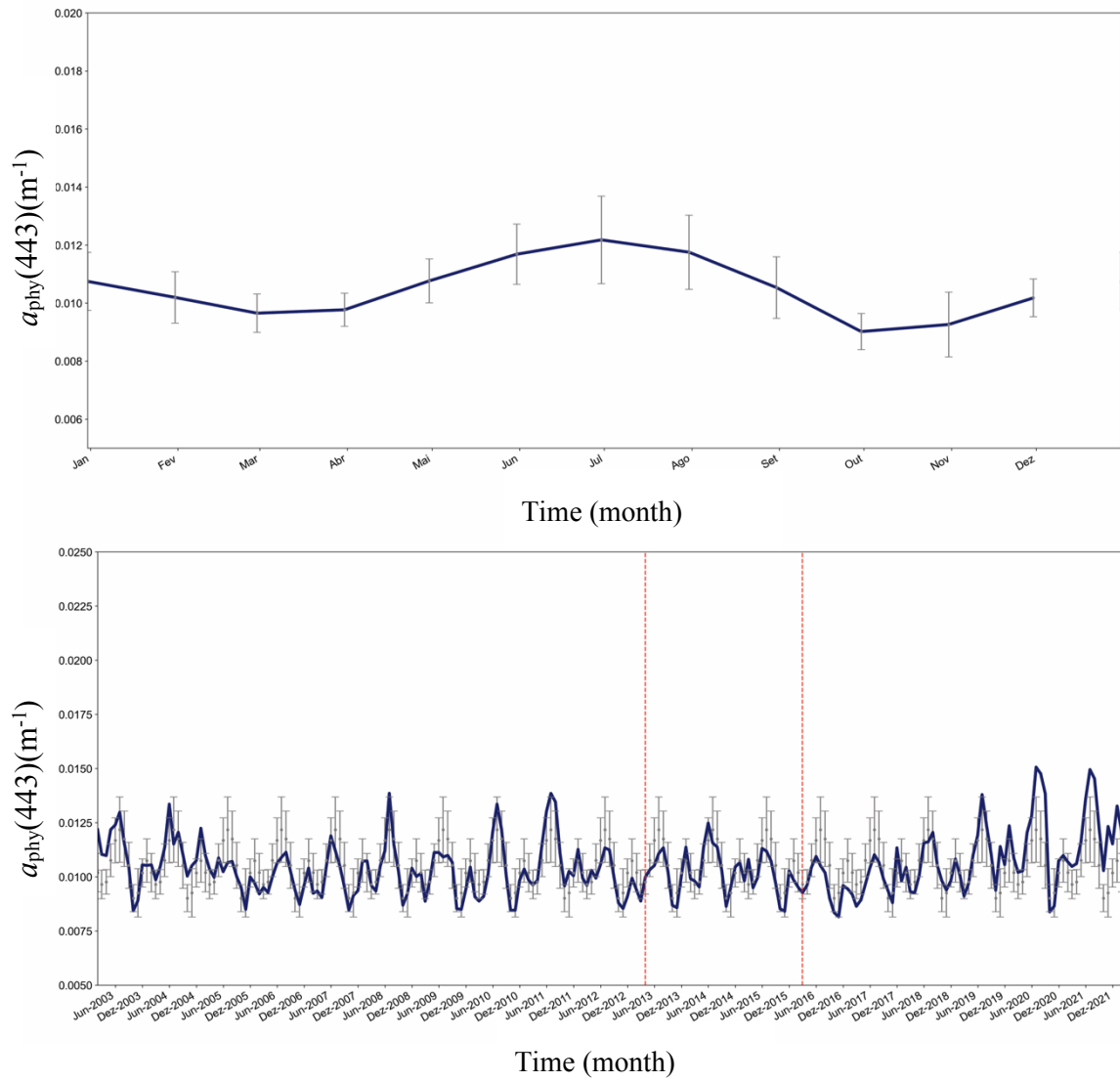
Supplementary Material



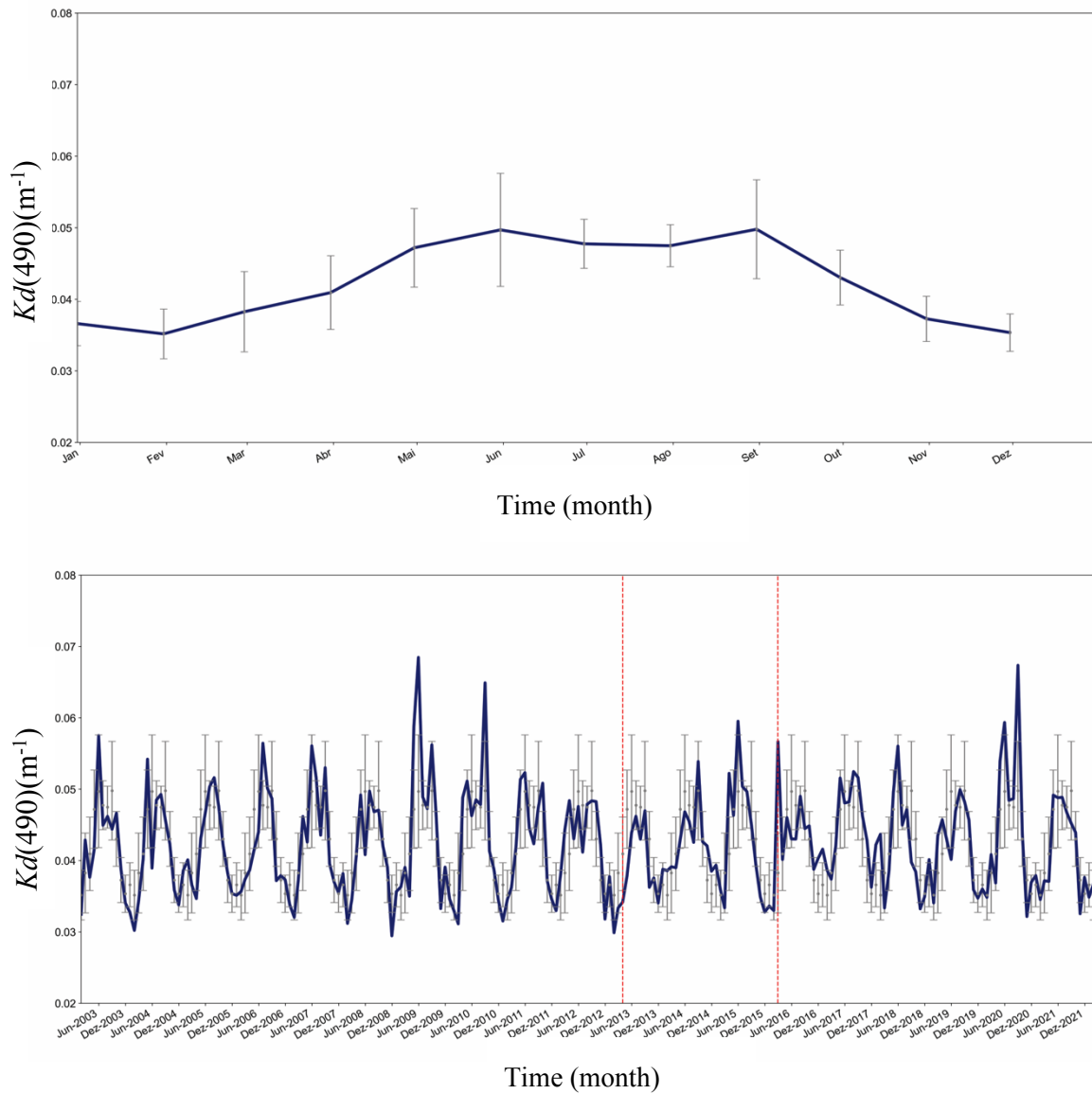
Supplementary Figure 1. Localization of the areas where the $a_{phy}(443)$ and $Kd(490)$ time series were extracted from Aqua-MODIS data, shown here on a CBERS-2 image (True color composition) from 21/02/2020.



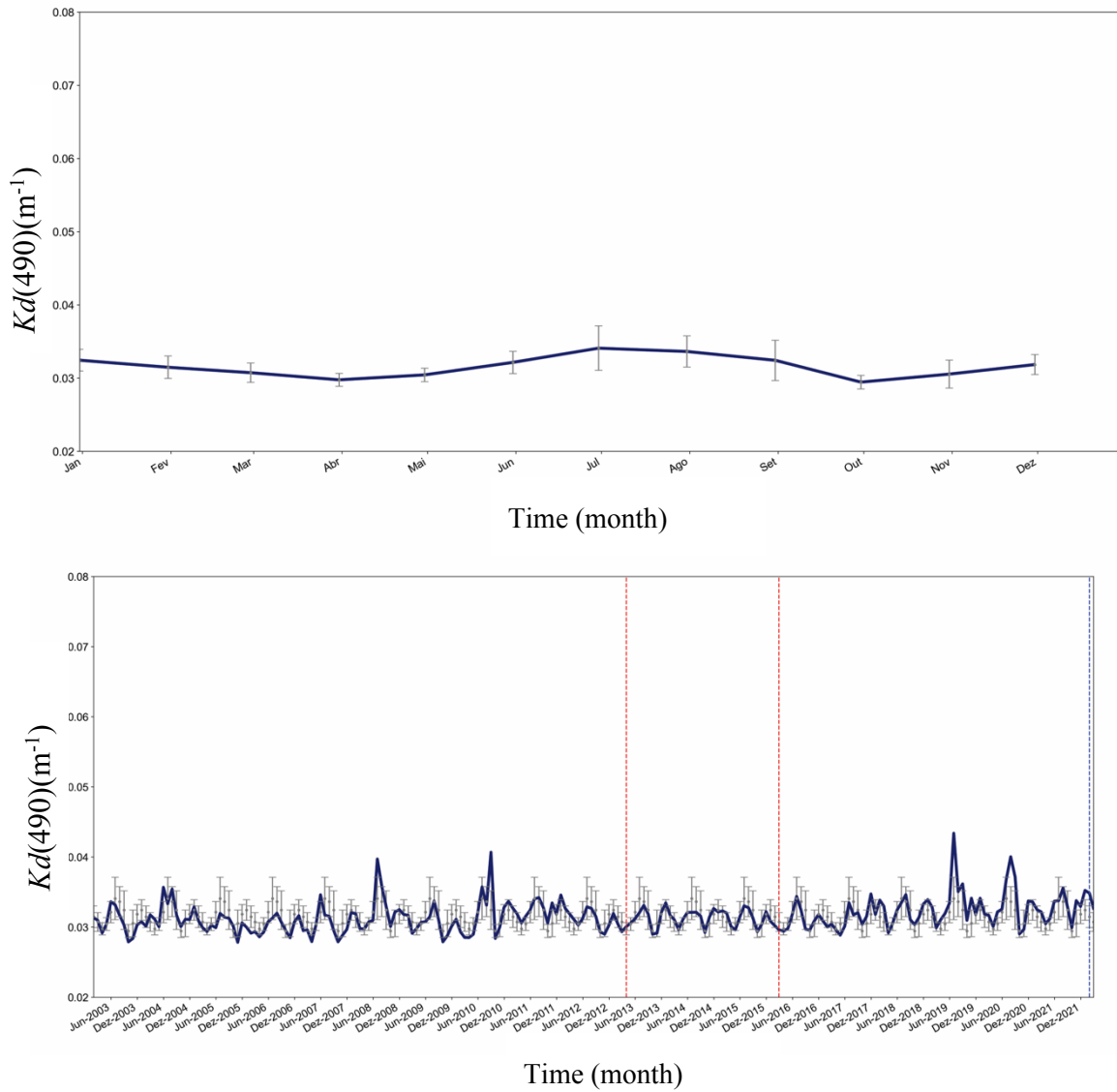
Supplementary Figure 2 (A) Monthly climatology \pm standard deviation of $a_{\text{phy}}(443)$ from MODIS-Aqua vs time, between January/2003 and February/2022 in the inner arc waters. (B) Monthly $a_{\text{phy}}(443)$ average from MODIS-Aqua vs time, between January/2003 and February/2022 (in blue) in the inner arc waters. Grey points and error bars represent monthly climatology \pm standard deviation. Vertical dashed red lines show the dates of field campaigns, while the dashed blue line shows the date of the PRISMA image acquisition.



Supplementary Figure 3 (A) Monthly climatology \pm standard deviation of $a_{phy}(443)$ from MODIS-Aqua vs time, between January/2003 and February/2022 in the outer arc waters. (B) Monthly $a_{phy}(443)$ average from MODIS-Aqua vs time, between January/2003 and February/2022 (in blue) in the outer arc waters. Grey points and error bars represent monthly climatology \pm standard deviation. Vertical dashed red lines show the dates of field campaigns, while the dashed blue line shows the date of the PRISMA image acquisition.



Supplementary Figure 4 (A) Monthly climatology \pm standard deviation of $K_d(490)$ from MODIS-Aqua vs time, between January/2003 and February/2022 in the inner arc waters. (B) Monthly $K_d(490)$ average from MODIS-Aqua vs time, between January/2003 and February/2022 (in blue) in the inner arc waters. Grey points and error bars represent monthly climatology \pm standard deviation. Vertical dashed red lines show the dates of field campaigns, while the dashed blue line shows the date of the PRISMA image acquisition.



Supplementary Figure 5 (A) Monthly climatology \pm standard deviation of $K_d(490)$ from MODIS-Aqua vs time, between January/2003 and February/2022 in the outer arc waters. Monthly $K_d(490)$ average from MODIS-Aqua vs time, between January/2003 and February/2022 (in blue) in the outer arc waters. Grey points and error bars represent monthly climatology \pm standard deviation. Vertical dashed red lines show the dates of field campaigns, while the dashed blue line shows the date of the PRISMA image acquisition.