

Coastal Nitrogen Drives Respiration Quotient in the Southern California Bight

Allison R. Moreno^{1,2}, Adam J. Fagan³, and Adam C. Martiny^{2,3}

Affiliations:

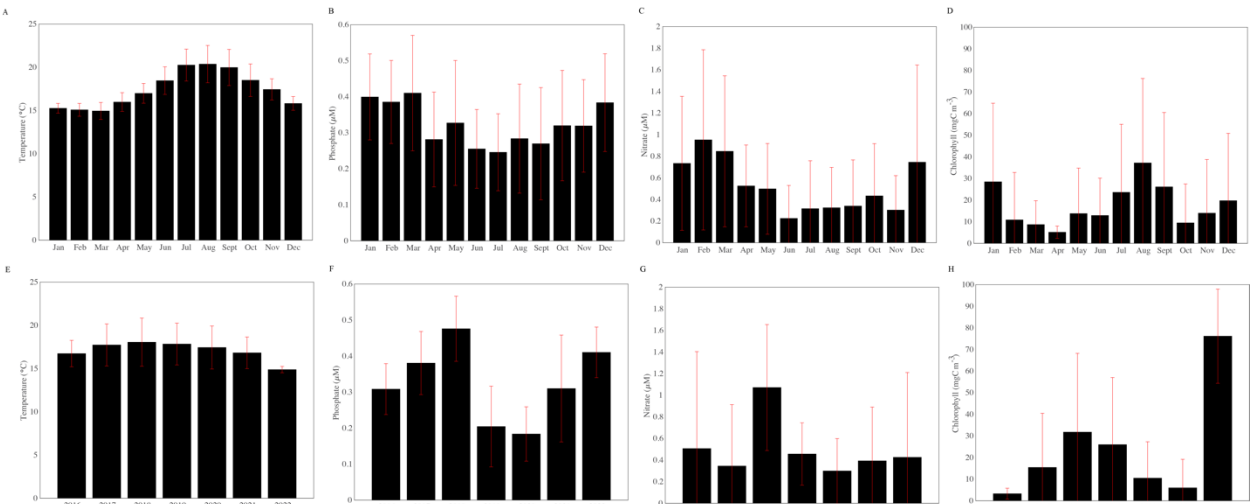
¹ Department of Ocean Sciences, University of California, Santa Cruz, CA, USA

² Department of Ecology and Evolutionary Biology, University of California, Irvine, CA, USA

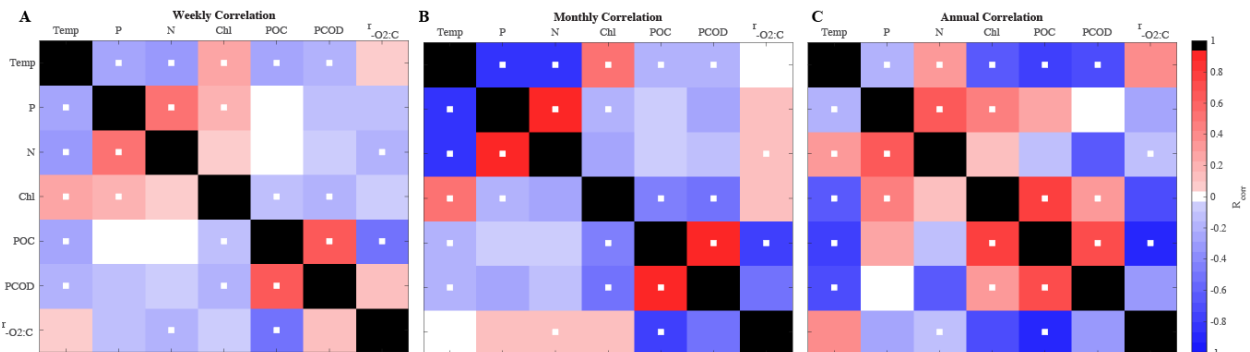
³ Department of Earth System Science, University of California, Irvine, CA, USA

1. Supplementary Information

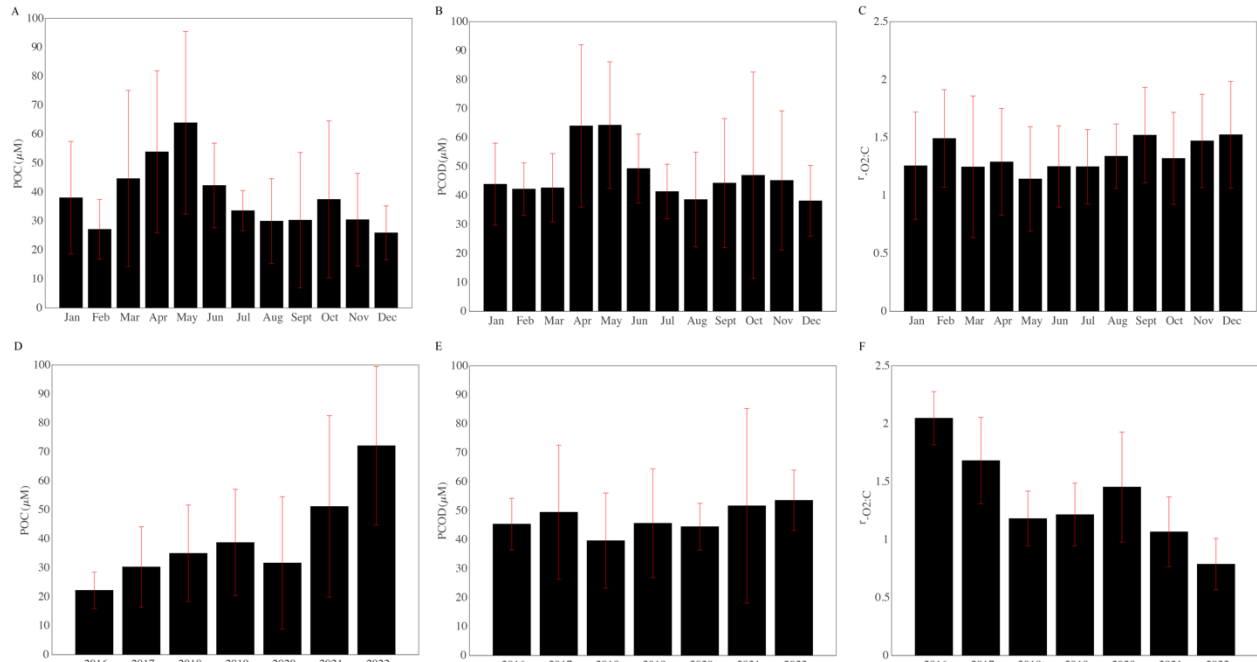
1.1. Supplementary Figures



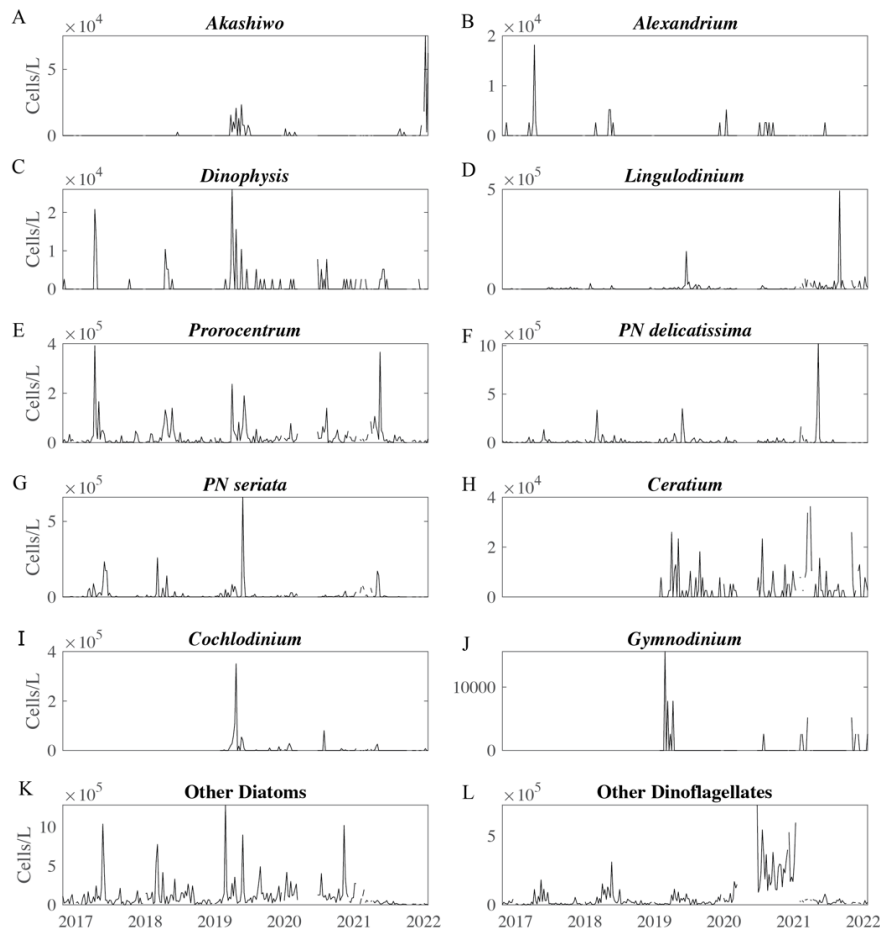
Sup Figure 1. Average monthly and annual environmental parameter trends. A/E. Temperature. B/F. Phosphate. C/G. Nitrate. D/H. Chlorophyll. Red lines represent the standard deviation from the average.



Sup Figure 2. Covariations between all physical, chemical, and biological parameters. A. Weekly correlations. B. Monthly correlations. C. Annual correlations.

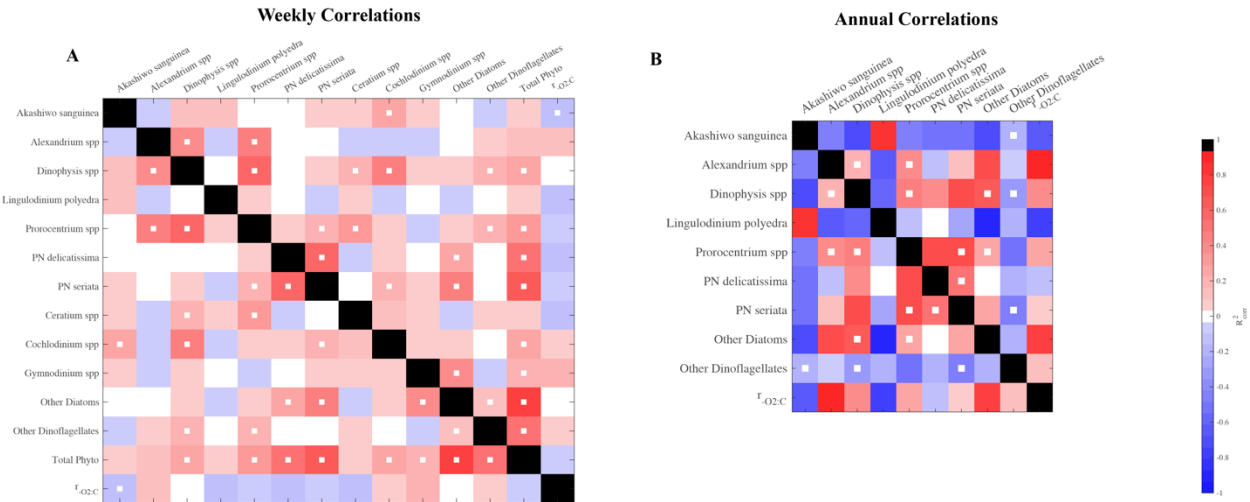


Sup Figure 3. Average monthly and annual particulate organic matter and ratio trends. A/D POC concentrations. B/E. PCOD concentration. C/F. $r_{\text{O}_2:\text{C}}$. Red lines represent the standard deviation.

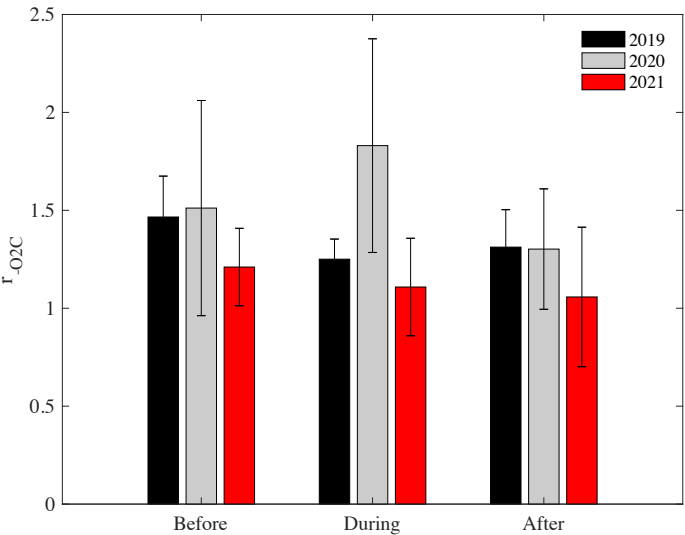


Sup. Figure 4. Primarily large phytoplankton (diatoms and dinoflagellates) abundance over time.

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Sup Figure 5. Correlations between all large phytoplankton species and $r_{O_2:C}$. A. Weekly and B. Annual correlations. White squares represent statistically significant correlations (p-value ≤ 0.05).



Sup Figure 6. Annual differences in $r_{O_2:C}$ during the oil spill timeframes. Average $r_{O_2:C}$ in 2019 (black), 2020 (grey), and 2021 (red). Error bars represent the standard deviation.