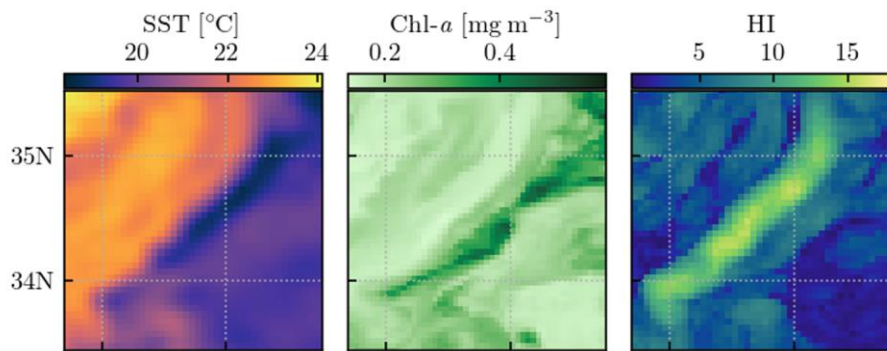


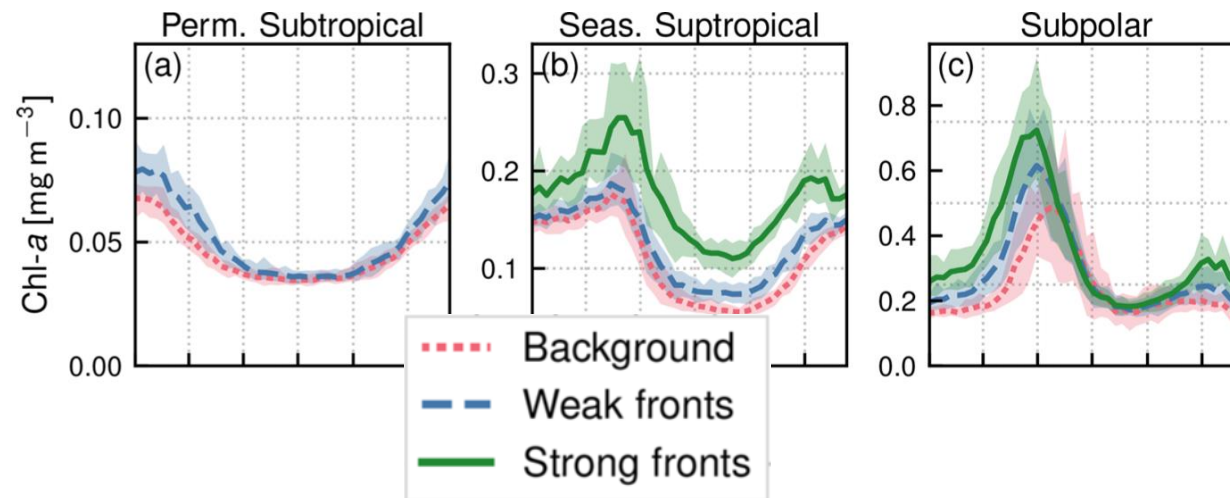
Estimate of Chl-a increase over fronts in the Gulf Stream region



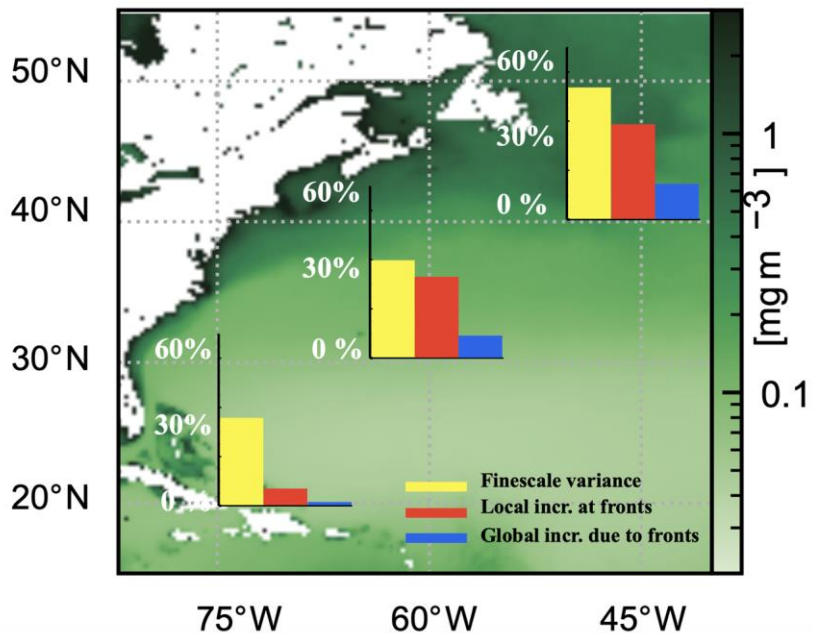
Front detection from SST



Chl-a seasonal cycle over fronts and outside fronts



Impact of fine-scales on phytoplankton



up to + 60% more Chl-a over fronts
But contributes to less than 10% of regional budget

nature geoscience

Article

<https://doi.org/10.1038/s41561-022-01057-3>

Annual variations in phytoplankton biomass driven by small-scale physical processes

Received: 14 September 2021

M. G. Keerthi¹, C. J. Prend², O. Aumont¹ & M. Lévy¹

Accepted: 22 September 2022

<https://doi.org/10.5194/egusphere-2022-1489>
Preprint. Discussion started: 6 January 2023
© Author(s) 2023. CC BY 4.0 License.



marina.levy@locean.ipsl.fr



Satellite data reveal earlier and stronger phytoplankton blooms over fronts in the Gulf Stream region

Clément Haëck¹, Marina Lévy¹, Inès Mangolte¹, and Laurent Bopp²

¹LOCEAN-IPSL, Sorbonne Université, CNRS, IRD, MNHN, Paris, France

²LMD-IPSL, École Normale Supérieure / Université PSL, CNRS, École Polytechnique, Paris, France