MAX-PLANCK-INSTITUT
FÜR METEOROLOGIE

Storm-Eddy-Biogeochem Interactions

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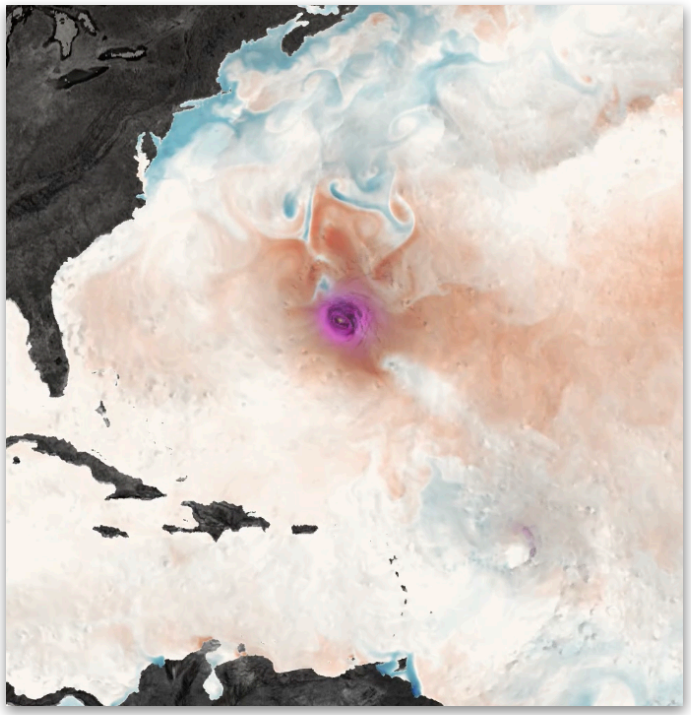
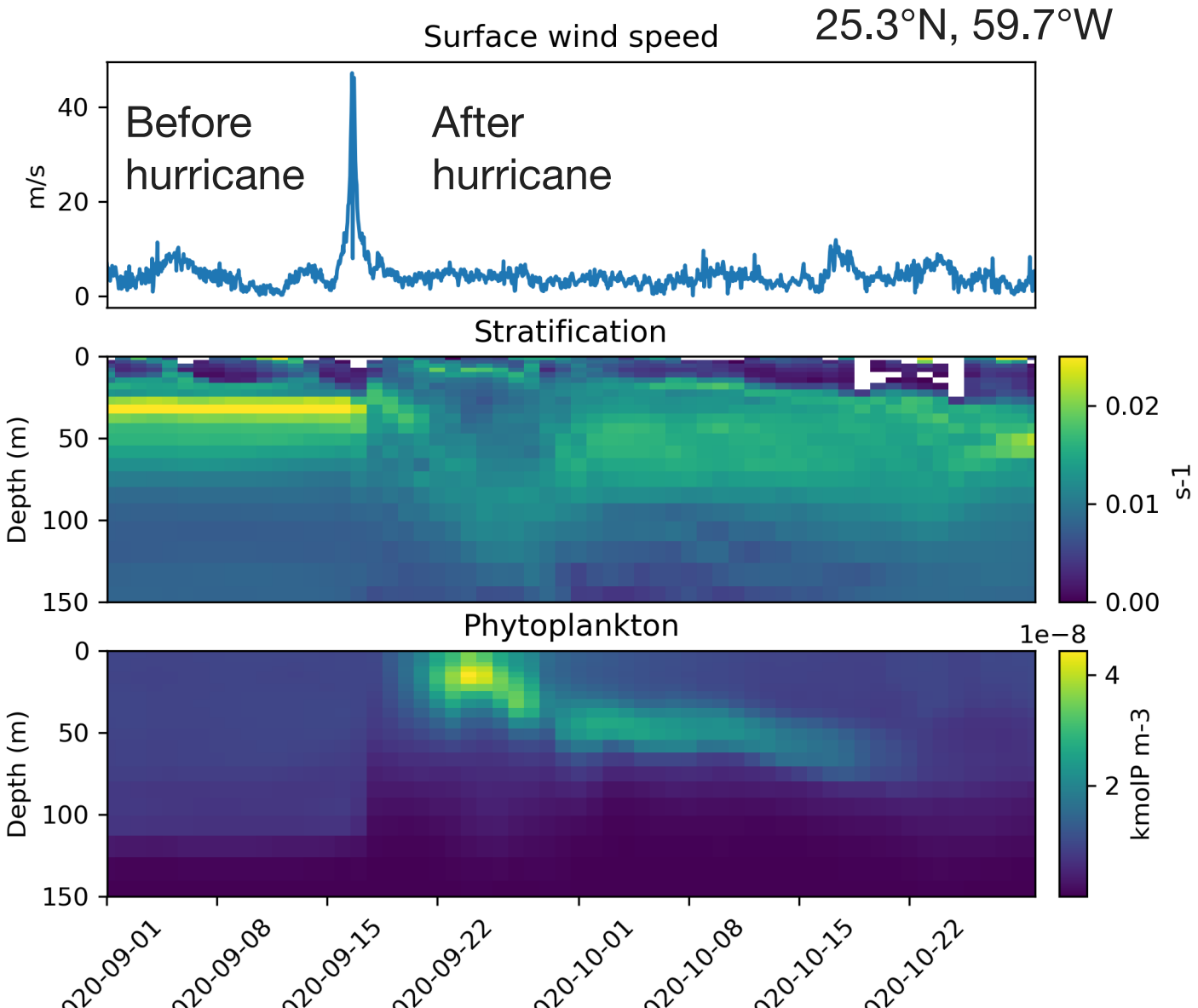
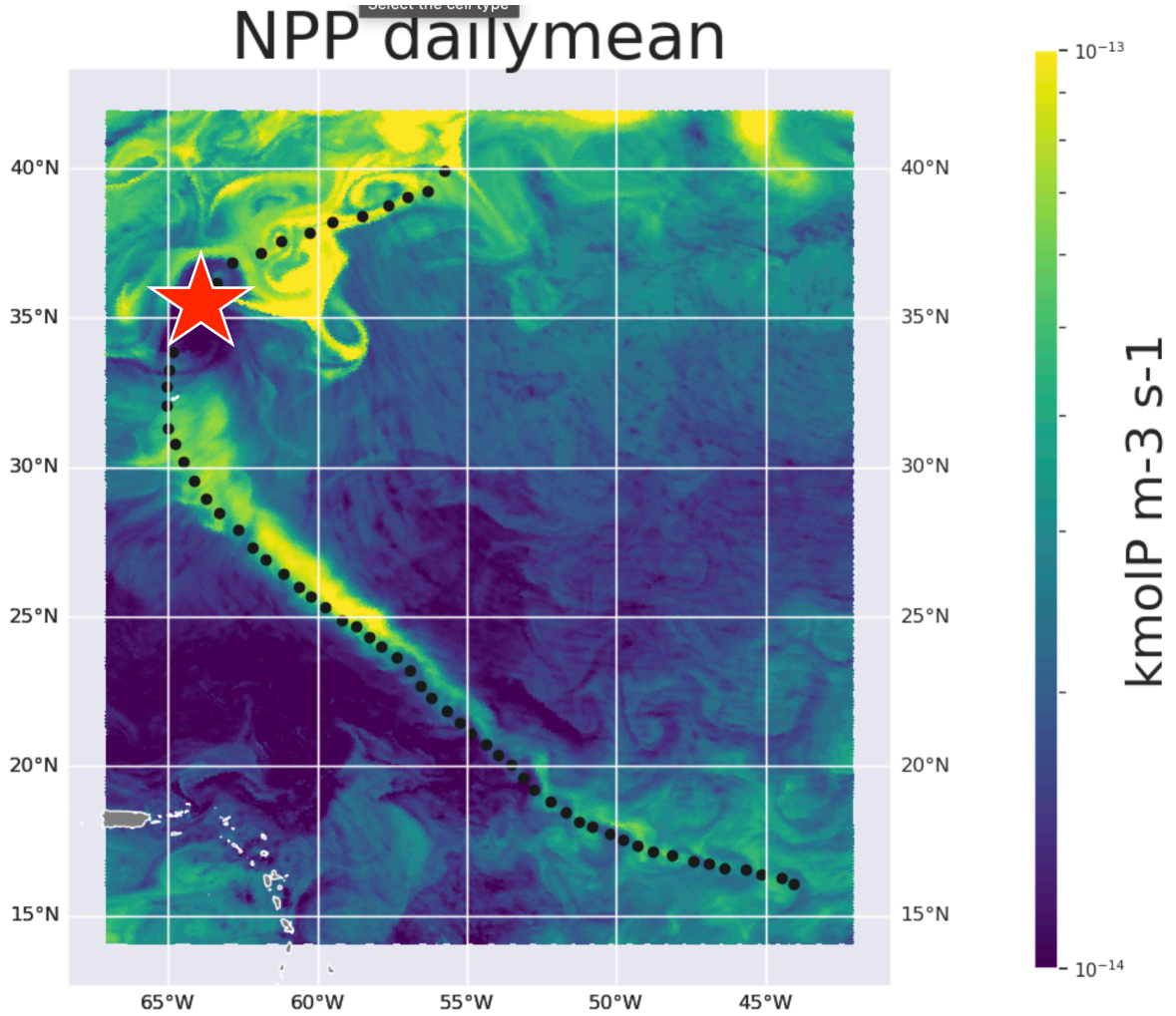
Hurricane drives production in non-productive region

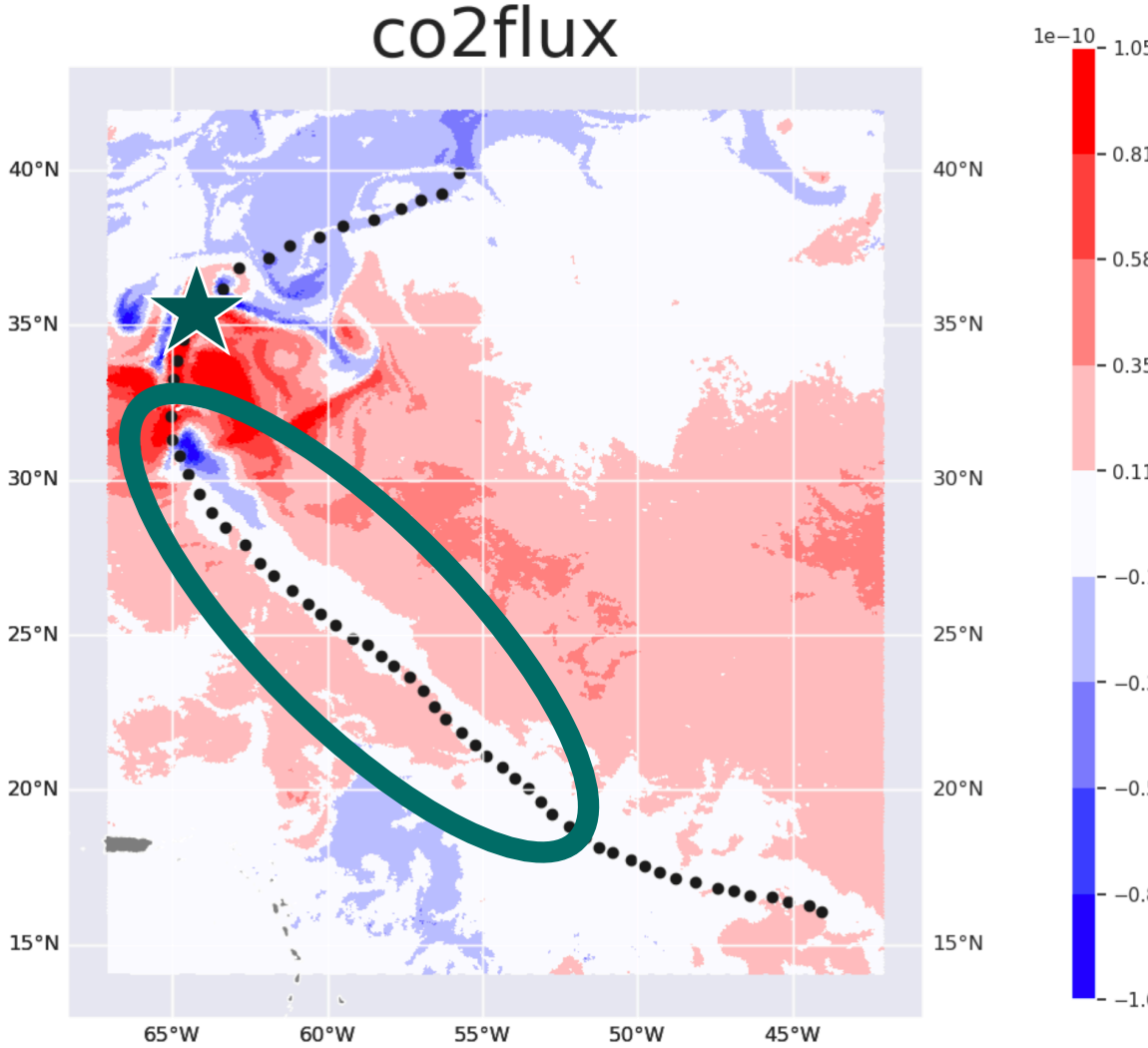
ICON (5km) with Ocean Biogeochemistry



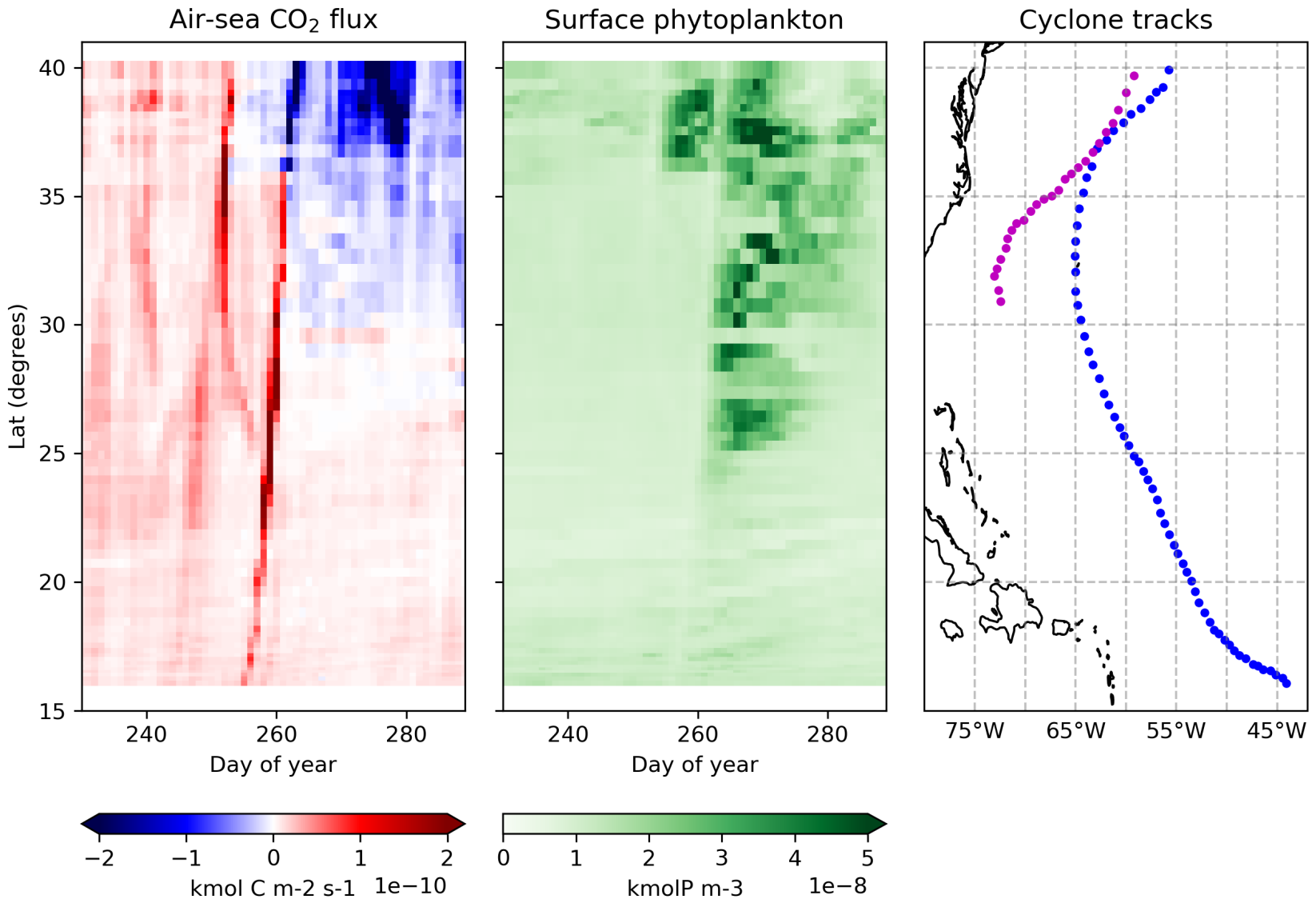


Long-lasting effect on production and carbon uptake

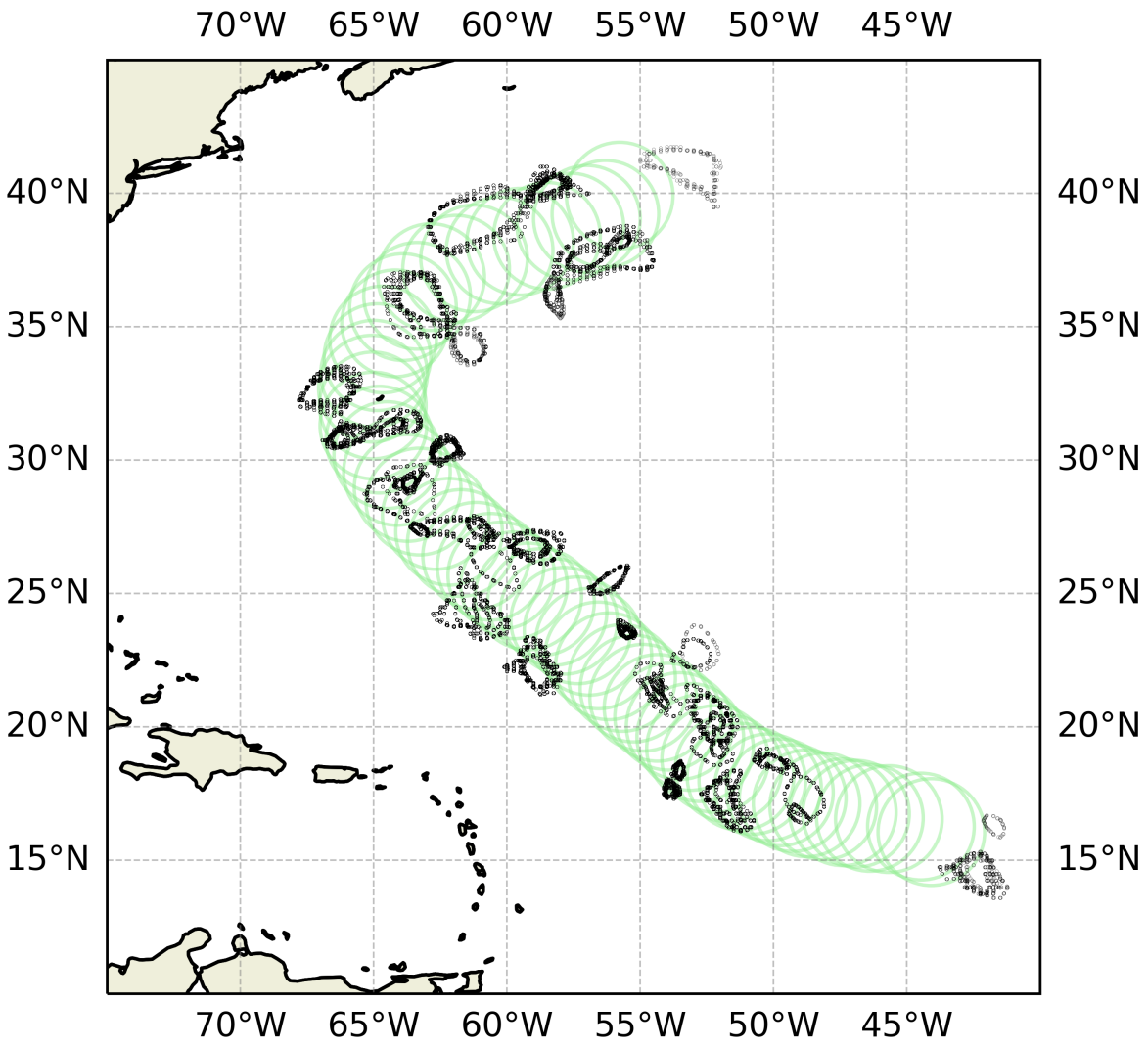




Immediate CO_2 and delayed productivity effects



Next steps



Paper 1: Tropical Cyclone case study (David Nielsen)

- Effects of cyclone on carbon cycle in global ESM for the 1st time.
- Link vertical transport in eddies with cyclone-induced biogeochemistry effect.

Paper 2: Storms in the Southern Ocean (Arjun Kumar)

- Effects of extra-tropical cyclones on carbon cycle in global ESM for the 1st time.

Paper 3: Global statistics of cyclones (Fatemeh Chegini)

- Census of global cyclone effect on carbon cycle.