

# Constraining Upper-Ocean Carbon Export with Biogeochemical Profiling Floats

## SCIENCE GOALS

1. Quantify the seasonal cycles and annual export of distinct biogenic carbon pools (POC, DOC, and PIC) over multiple years (~15).
2. Compare *in situ* results to estimates derived from satellite NPP and export efficiency algorithms. Gain insights about when the methods agree/disagree, and why.



## TEAM MEMBERS

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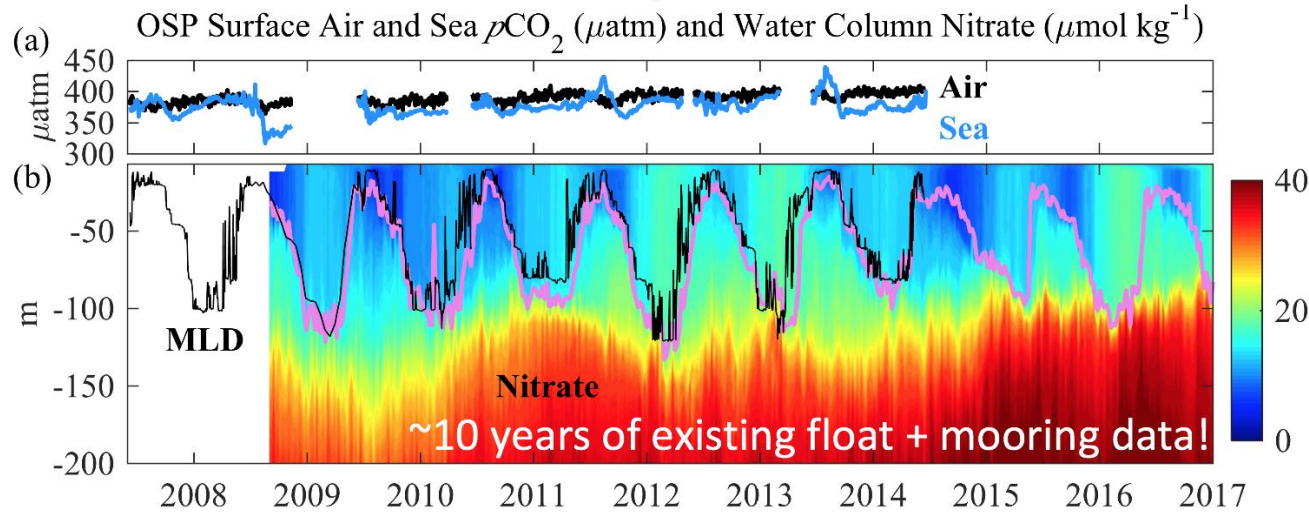


image credit: NOAA OCS

## LOGISTICS

- 2 BGC Profiling Floats
- NOAA Papa mooring
- Discrete sampling on 6 Line P Cruises

## MEASURED PARAMETERS

Floats: T/S, pH, nitrate, oxygen, Chl, backscatter, CDOM, downwelling irradiance

Mooring: T/S, surface air & sea  $p\text{CO}_2$ , pH, met.

Discrete: TOC, DOC, POC, PIC, CDOM, DIC, TA

