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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EXPORTS
EXport Processes in the Ocean from RemoTe Sensing

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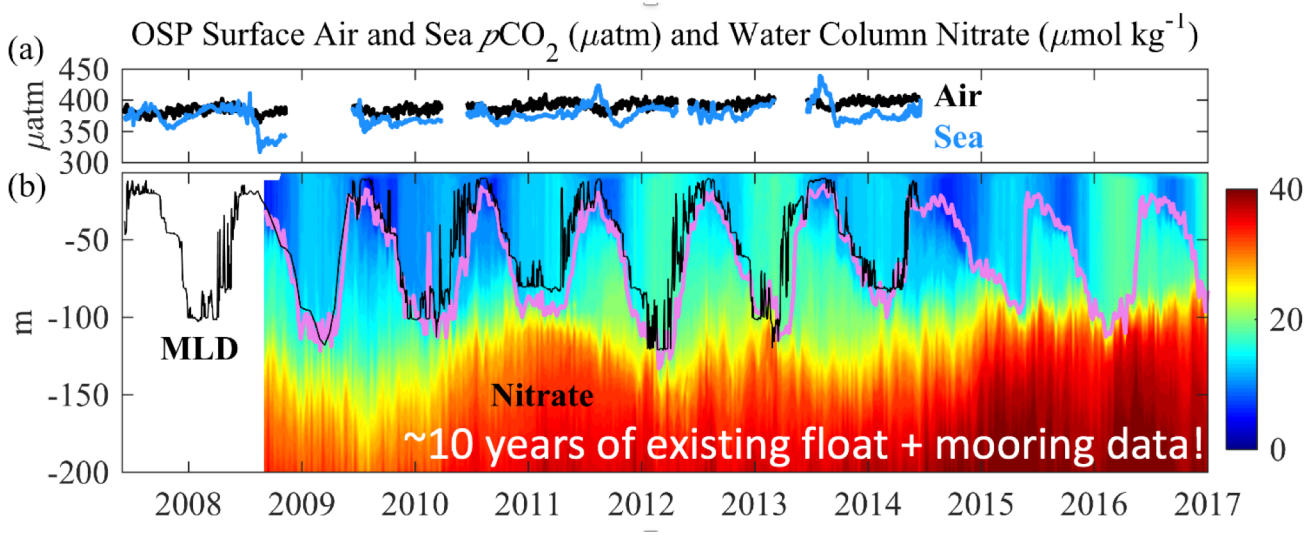

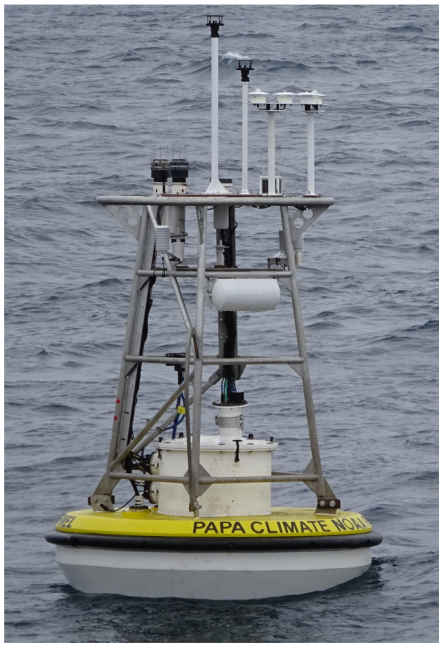

image credit: NOAA OCS

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 pCO_2, pH, met.

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

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