

Non-OOI Moorings at Station P

*Resolving physical and biogeochemical processes across seasons,
years, and into the future*

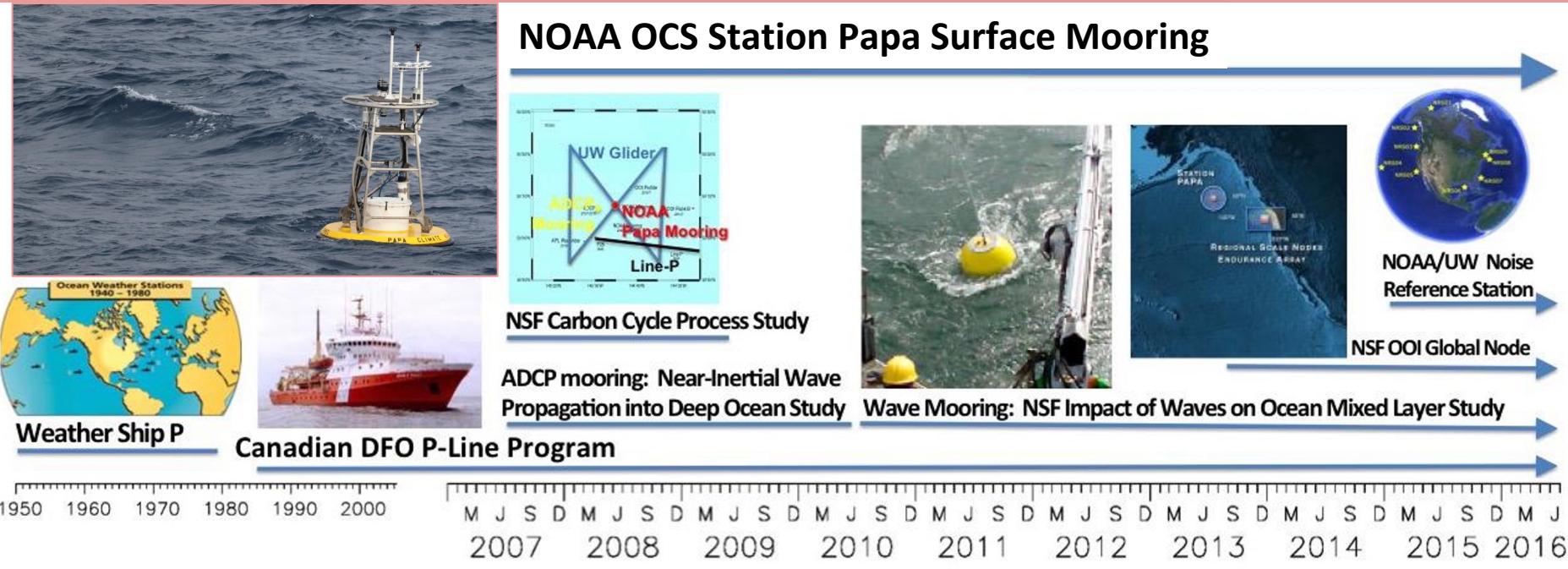
Meghan Cronin (NOAA PMEL)

With input from: **Jim Thomson (UW APL),**
Adrienne Sutton, Bob Dziak and Chris Meinig (all: NOAA PMEL), and
Patrick Berk (UW CICOES)

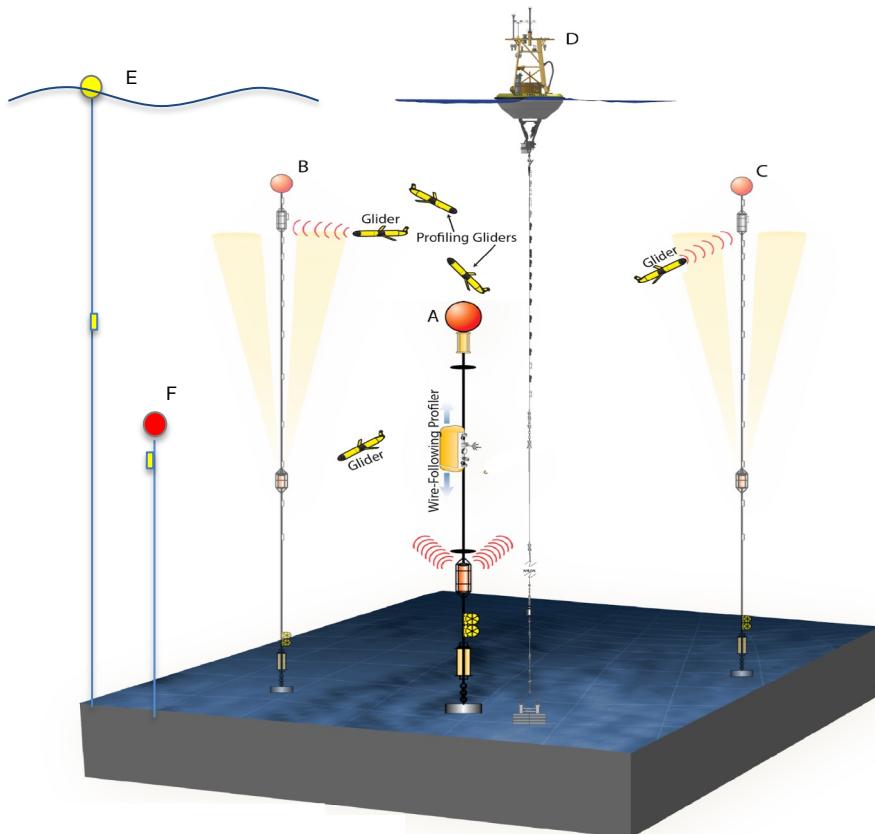


A 70+ year time series at Station P

of weather, climate, and the marine environment



Present ongoing mooring array at Station Papa



(A-C) NSF OOI (Jul 2014-)

Al Pleuddemann (WHOI)

(D) NOAA Surface Mooring (Jun 2007-)

Meghan Cronin (NOAA PMEL),
with BGC sensors provided by **Adrienne Sutton** (NOAA PMEL), and Signature ADCP provided by **Jim Thomson** and Passive Acoustic sensor currently provided by **Jie Yang** (UW APL)

(E) UW APL Waverider (Jun 2010-)

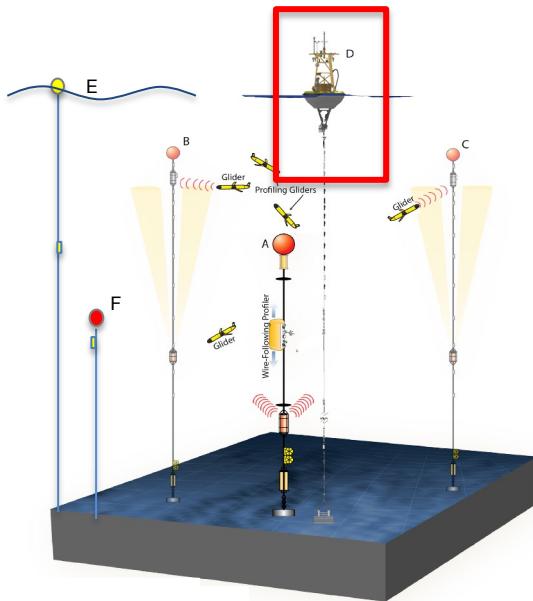
Jim Thomson (UW APL),
with Passive Acoustic sensor previously provided by
Jie Yang (UW APL)

(F) NOAA NPS Noise Reference Station

(Jan 2015-)

Bob Dziak (NOAA PMEL)

NOAA OCS Surface Mooring at Station Papa



Contact: Meghan.F.Cronin@noaa.gov

www.pmel.noaa.gov/ocs/Papa/

Ocean Climate Stations
Pacific Marine Environmental Laboratory

NATIONAL OCEANIC AND
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Research

Overview
Kuroshio Extension
Observatory
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Ocean Station Papa
Papa Background
Other Research at Papa
Aguilhas Return Current
ARC Background
Air-Sea Fluxes

Related

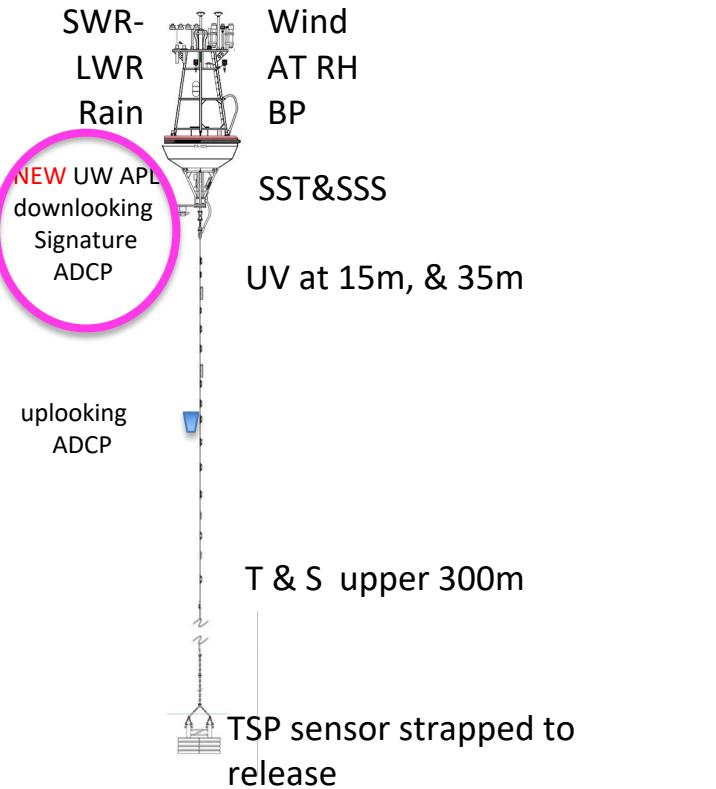
 Data Overview
It is the OCS project policy that timely, free, and unrestricted access shall

 Moorings

 Measurement Heig...
The tables below describe the nominal heights of meteorological measurements,

 Current Anchor Position: 50° 3.3'N, 144° 52.4'W
Nominal Location: 50.1°N, 144.9°W
Mooring Type: Taut-Line
Scope: 0.965 (2015 -), 0.985 (2007 - 2014)
Watch Circle: 1.25km Radius
Avoidance Area: Ships working in the area are requested to observe an avoidance area of at least 3NM radius (5.5km) from the stated anchor position.

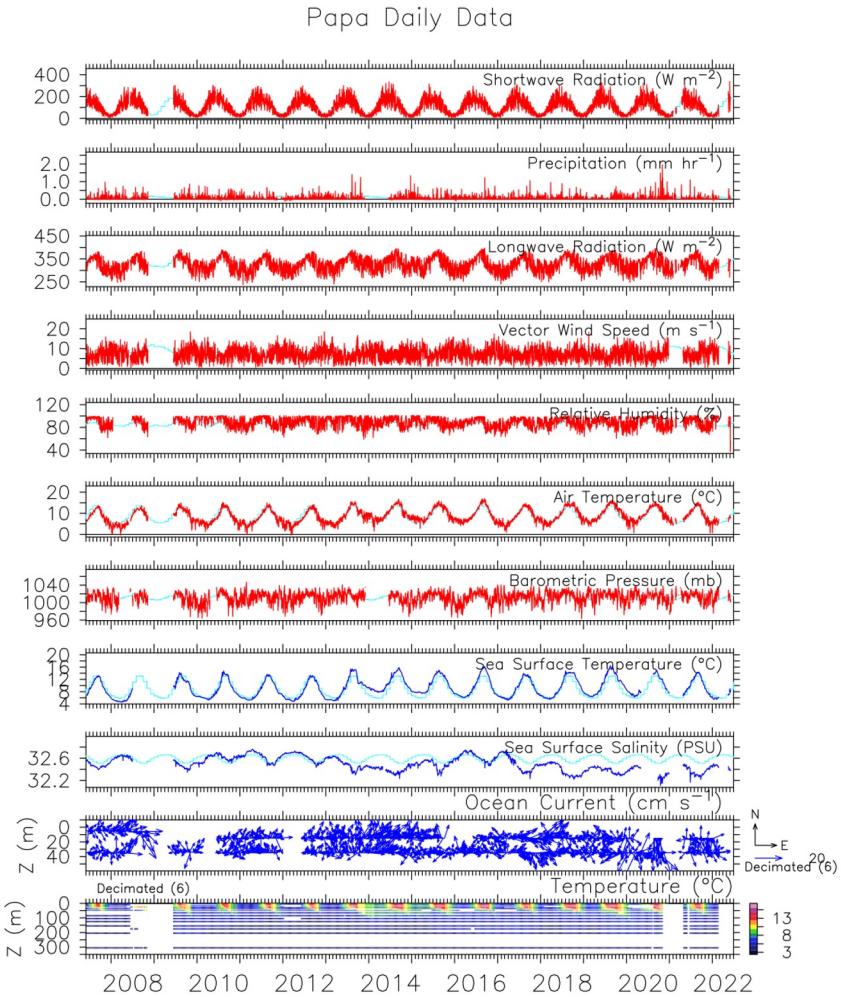




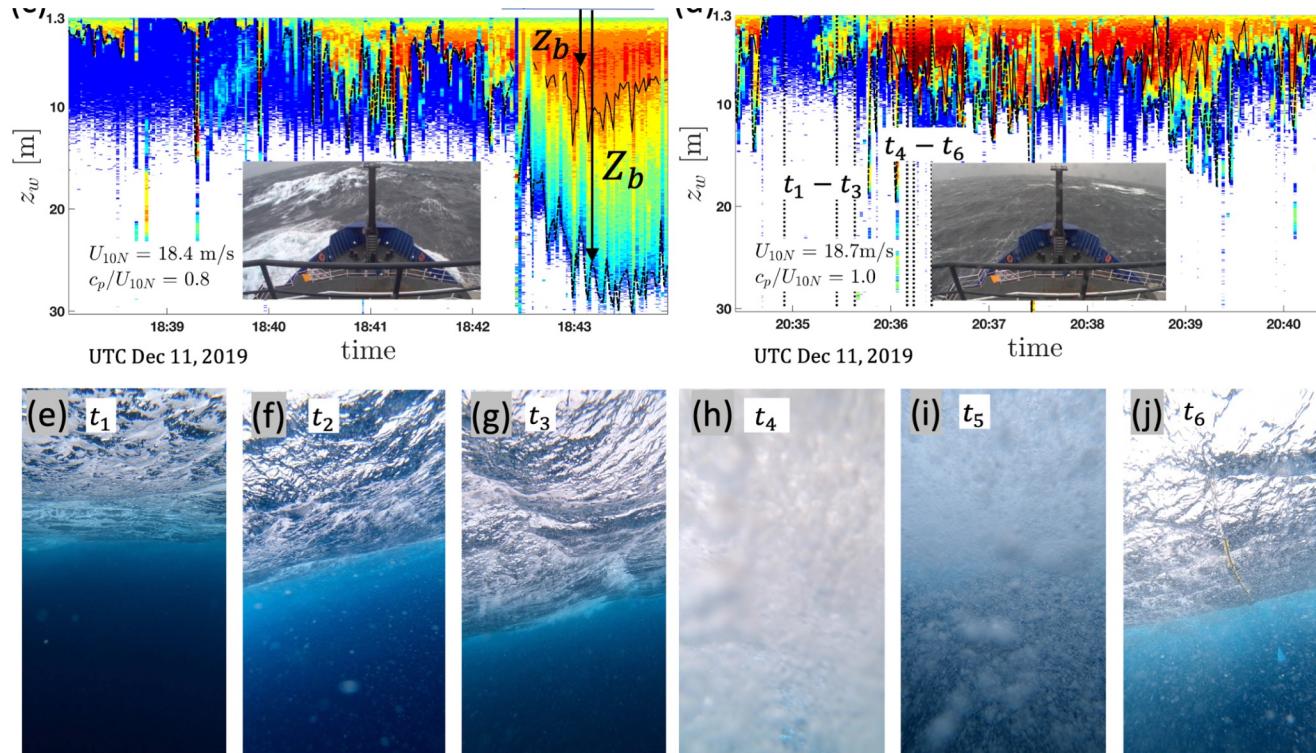
Met and physical sensors – Cronin

Contact: Meghan.F.Cronin@noaa.gov

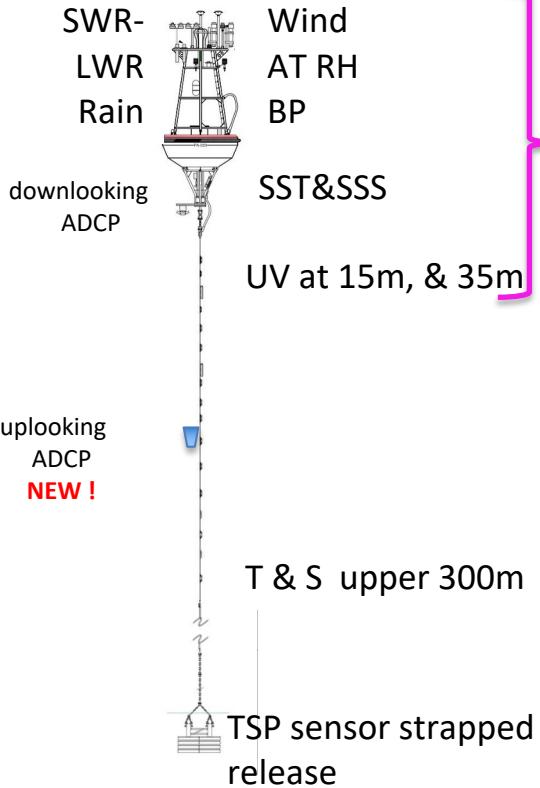
<http://www.pmel.noaa.gov/ocs/data/disdel>



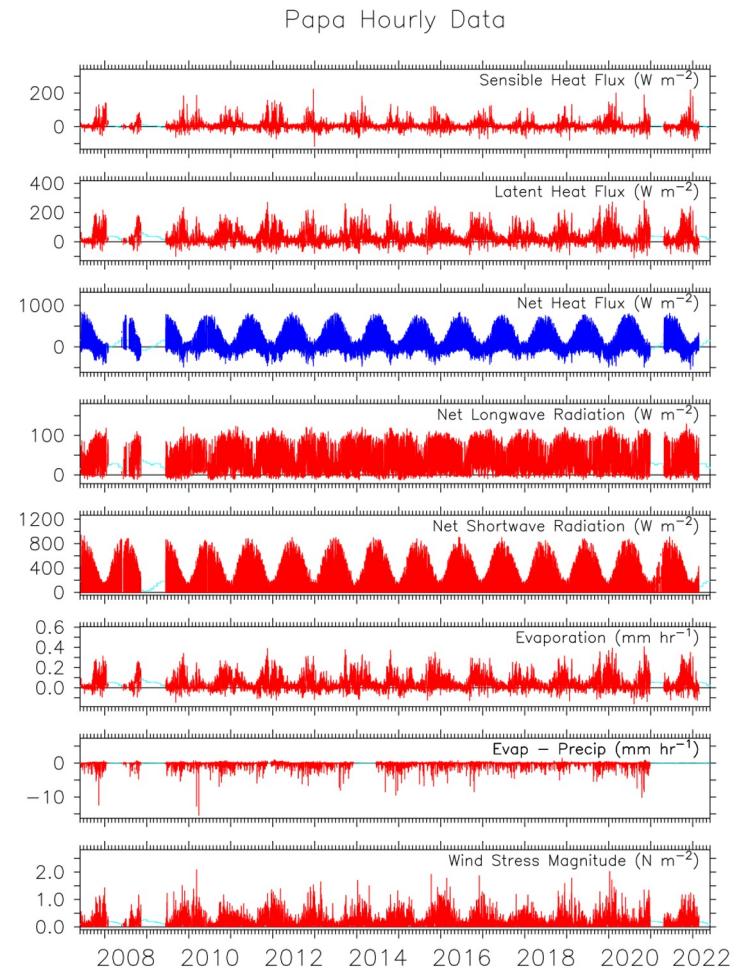
Signature ADCP can be used to also measure depth of bubble penetration (z_b)



From Signature ADCP on SWIFT drifting buoy deployed at Papa. Courtesy J. Thomson, from Derakhti et al, JGR (in prep).



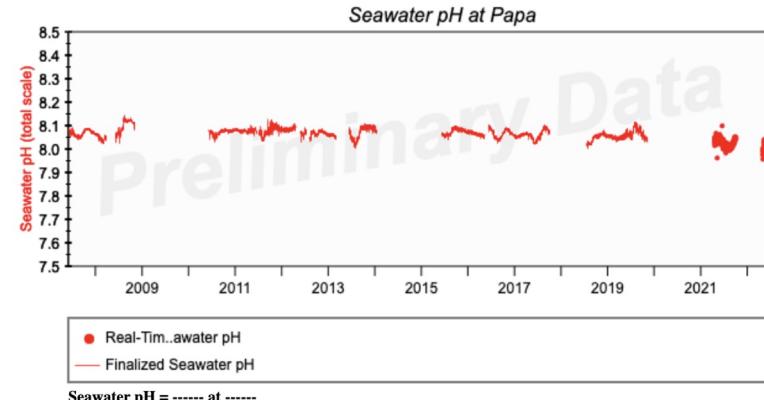
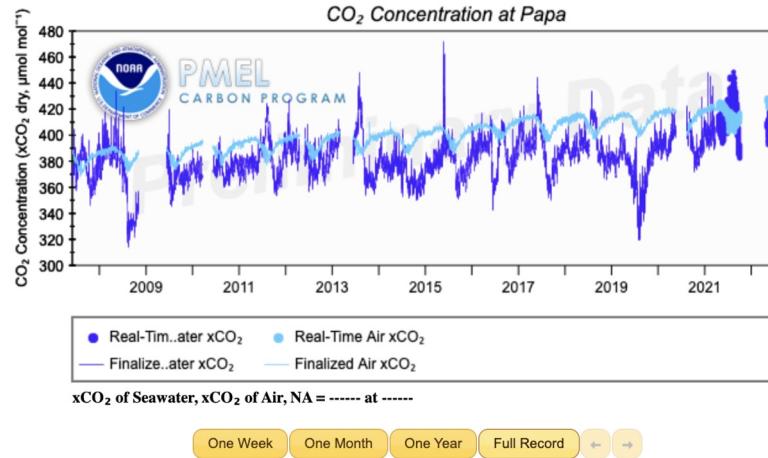
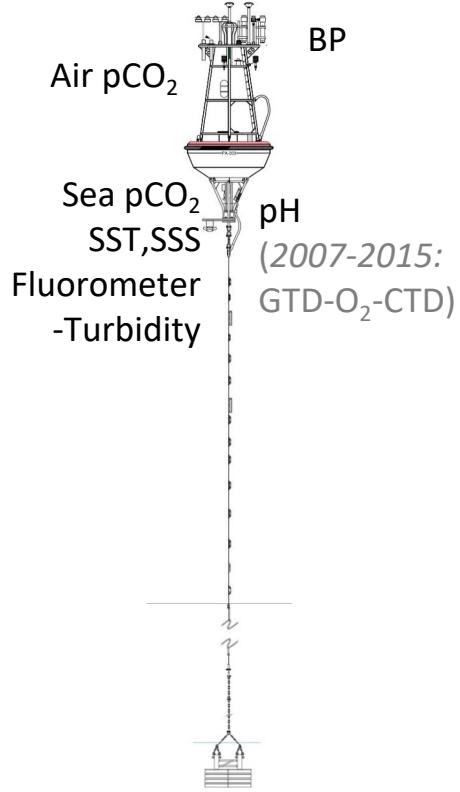
Surface data are used to compute net surface heat flux and its components



Met and physical sensors – M. Cronin

Contact: Meghan.F.Cronin@noaa.gov

<http://www.pmel.noaa.gov/ocs/data/disdel>

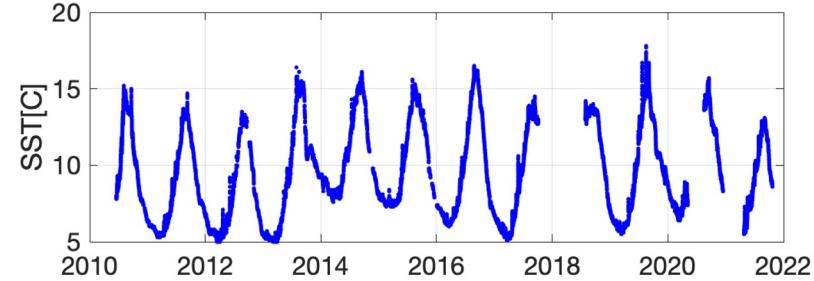
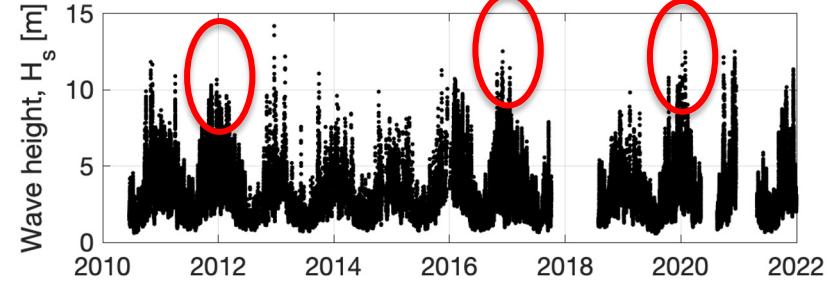
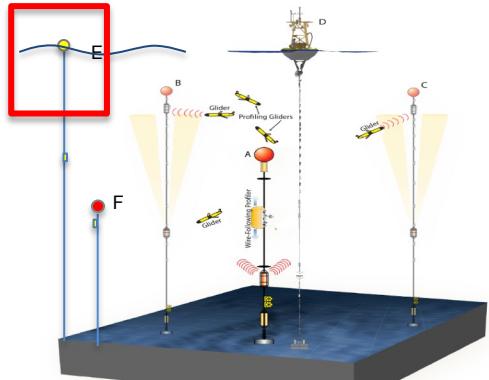


Biogeochemical sensors – A. Sutton
Contact: Adrienne.Sutton@noaa.gov
<http://www.pmel.noaa.gov/co2/story/Papa>



Global Ocean Monitoring and Observing
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

Waverider mooring at Station Papa



Data: CDIP 166 / NBDC 46246

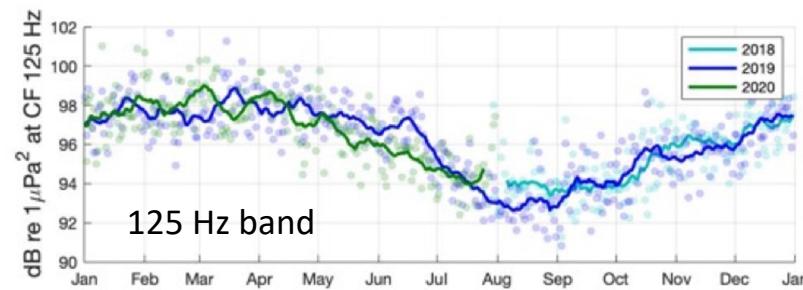
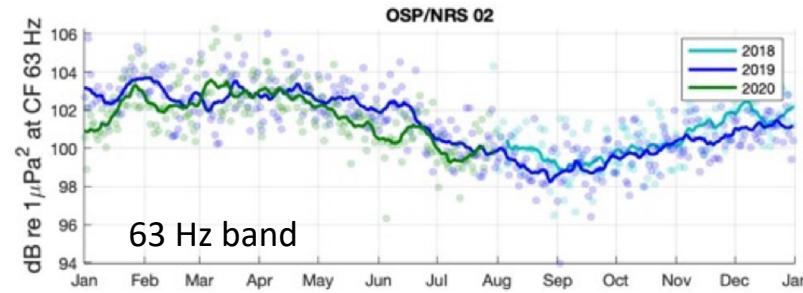
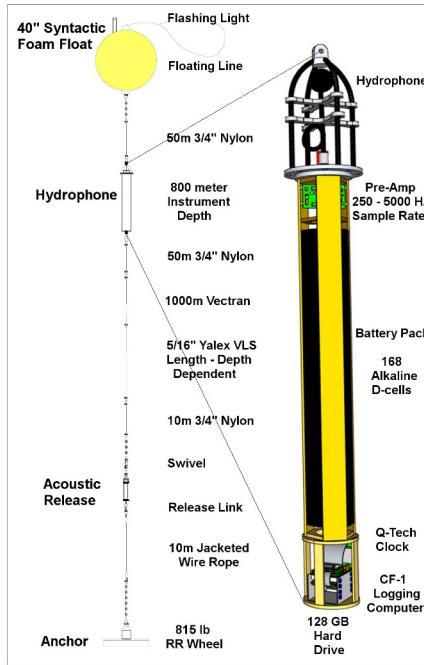
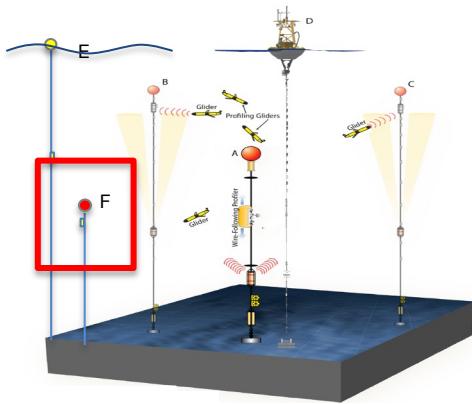
<https://cdip.ucsd.edu/themes/cdip?d2=p70&u2=s:166:v:parameter>

Contact: Jim Thomson <jthomson@apl.uw.edu>



Noise Reference Station Mooring at Station Papa

Soundscape data provide economic indicators (e.g. global container ship traffic) and indicators of marine mammals (e.g., blue whale, sperm whale)

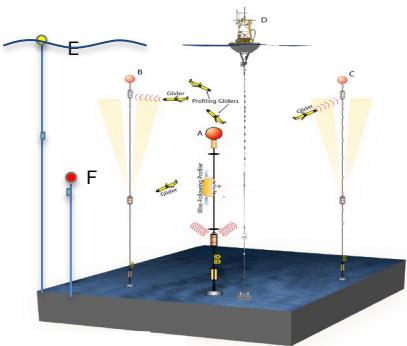


Ocean Station Papa sound levels declined 30-40% (1-2 dB) during COVID pandemic

Data available at NOAA NCEI

Contact: Robert.P.Dziak@noaa.gov



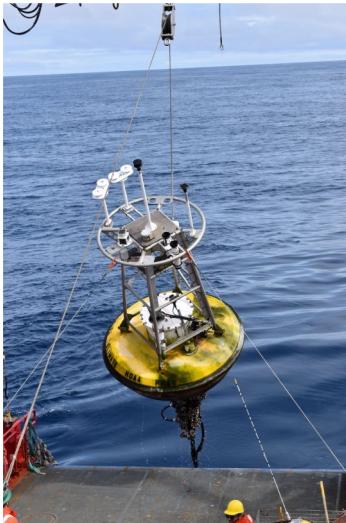


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(F) NOAA NPS Noise Reference Station
(*Jan 2015-*) Bob Dziak (NOAA PMEL)



Thank you OOI!

All Moorings turned-around as piggy-back operations on R/V Sikuliaq May 2022 OOI Papa cruise



Photo credits: Rebecca Travis (WHOI)