

# **PMEL Poster Session**

#### Climate-Weather Theme

Title	Presenter(s)	PMEL Group
Autonomous Profilers in the Arctic	Kevin Wood	Arctic
Old Weather Arctic: Our Weather's Past, the Climate's Future	Kevin Wood	Arctic
How Different is the Arctic Sea-Ice Condition Revealed by CMIP6 Models	Muyin Wang	Arctic
Constraining change and variability in surface ocean CO2: A global network of autonomous time series	Adrienne Sutton	Carbon
Pacific Decadal Anthropogenic Carbon Storage	Brendan Carter	Carbon
New Preformed Properties for Marine Biogeochemistry	Brendan Carter	Carbon
Anthropogenic Carbon Concentration Along the West Coast of North America	Richard Feely, Brendan Carter, Simone Alin and Dana Greeley	Carbon
Recommendations for capturing subsurface carbonate system variability in U.S. coastal and coral ecosystems	Sophie Chu	Carbon
An outgoing-longwave-radiation perspective on El Nino and La Nina seasonal weather anomalies	Andy Chiodi	Climate Weather Interface
Diurnal Cycle Metrics for Validating NWP and Climate Models and Understanding Air-Sea Interaction in the Tropical Pacific	Dongxiao Zhang	Climate Weather Interface
Saildrone: Unoccupied Surface Vehicle for Surface Current and Air-Sea Flux Observations	Dongxiao Zhang	Climate Weather Interface
Arctic Air-Sea Energy Fluxes during Rapid Sea-Ice Reduction	Chidong Zhang, Dongxiao Zhang, and others	Climate- Weather Interface
Detection of the Equatorial Roll in the Mixed Layer of the Indian Ocean	Michael J McPhaden	Global Tropical Moored Buoy Array

Research Moored Array for African-Asian-Australia	Michael J	Global Tropical
Monsoon Analysis and Prediction	McPhaden	Moored Buoy
		Array
Deep Argo Quantifies Bottom Water Warming Rates	Greg Johnson	Large Scale
in the Southwest Pacific Ocean		Ocean Physics
Upper Ocean Warming 1993–2018: Regional Trends	John Lyman	Large Scale
and Variability		Ocean Physics
Air-Sea Fluxes with a Focus on Heat and Momentum	Meghan Cronin	Ocean Climate
		Stations
The Diurnal Cycle: Air-Sea Interaction's Clock and	Meghan Cronin	Ocean Climate
New Challenges Observed by Saildrone		Stations

#### Ocean and Coastal Processes Theme

Title	Presenter(s)	PMEL Group
Diversity of the Mariana biogeographic region with a	Dave Butterfield	Earth Ocean
closer look at Alviniconcha hessleri, the original		Interactions
"hairy snail"		
The Effects of the Solid Earth on Ocean	Joseph Resing	Earth Ocean
Biogeochemistry		Interactions
Estimates of chemical fluxes from Daikoku Seamount	Nathaniel Buck	Earth Ocean
- a shallow, erupting, submarine volcano on the		Interactions
Mariana Arc		
High resolution mapping of hydrothermal plumes in	Sharon Walker	Earth Ocean
the Mariana back-arc relate seafloor sources to		Interactions
above-bottom plumes		
The PMEL MAPR Program	Sharon Walker	Earth Ocean
		Interactions
NOAA Earth Ocean Interactions (EOI) efforts at	Jeff Beason	Earth Ocean
mapping the seafloor and, more recently, the water		Interactions
column, in multiple ocean environments		
including spreading centers, hot spots, arcs, back		
arcs, continental margins and oceanic trenches		
Chemical distribution of the Cascadia Margin	Tamara	Earth Ocean
methane seep bubbles	Baumberger	Interactions
Earth Ocean Interactions Program	Tamara	Earth Ocean
	Baumberger	Interactions
Equatorial transport of nitrous oxide from the	Bonnie Chang	Ocean Tracer
eastern tropical Pacific Ocean		
Temperature as Measured by Deep Ocean	Marie Eble	Tsunami
Assessment and Reporting of Tsunami Technology		
Propagation of Tsunami-Induced Infra-Gravity Waves	Yong Wei	Tsunami



Exploring the cause of catastrophic Caribbean	Yong Wei	Tsunami
Inundation in 1200-1400 C.E. using numerical models		
compared with geological evidence		

## Marine Ecosystems Theme

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Title	Presenter(s)	PMEL Group
Combining near-field acoustic records and genetic identity of an individual eastern North Pacific blue whale off the central Oregon coast	Angela Sremba	Acoustics
Global sound levels and sources from 25 years of PMEL hydrophone deployments	Bob Dziak	Acoustics
The 2016 Nansen Ice-shelf collapse event: Hydroacoustic, meteorologic and seismic observations.	Bob Dziak	Acoustics
Acoustic glider surveys for cetaceans off Southern California and in the Gulf of Mexico	Dave Mellinger	Acoustics
The competing roles of vessels, wind and waves in Oregon's shallow water coastal soundscape	Joe Haxel	Acoustics
Passive acoustic monitoring reveals seasonal trends and primary contributors to the low-frequency ambient soundscape of the Cordell Bank National Marine Sanctuary	Samara Haver	Acoustics
Monitoring Long-Term Trends and Sources of Noise in U.S. Waters	Samara Haver	Acoustics
Underwater winch for polar region studies	Haru Matsumoto	Acoustics
Estimates of change since the pre-industrial in the frequency, duration, and intensity of acidified conditions along the Olympic Coast	Simone Alin	Carbon
Successes and challenges of interdisciplinary ocean acidification research in Alaska	Jessica Cross	Innovative Technologies for Arctic Exploration (ITAE)/Ocean Acidification
Winter Replenishment of Nitrate in the Chukchi Seas	Calvin Mordy	Ecosystems & Fisheries- Oceanography Coordinated Investigations
Regional models capture critical spatial patterns of marine ecosystem change	Darren J. Pilcher	Ecosystems & Fisheries- Oceanography Coordinated Investigations

Simulated impact of glacial runoff on CO2 uptake and aragonite saturation state in the coastal Gulf of Alaska	Darren J. Pilcher	Ecosystems & Fisheries- Oceanography Coordinated Investigations
Ice, Keels and Changing Seasons in the Chukchi Sea near Icy Cape, Alaska	Peggy Sullivan	Ecosystems & Fisheries- Oceanography Coordinated Investigations
Improved Biophysical Observations from a Profiling Moored Observing Platform in the SE Bering Sea	Shaun W Bell, Phyllis Stabeno	Ecosystems & Fisheries- Oceanography Coordinated Investigations
Downscaling global climate projections to the Bering Sea: a rapid hybrid dynamical statistical method	Albert Hermann	Ecosystems & Fisheries- Oceanography Coordinated Investigations
Intermittency of the Atlantic Meridional Overturning Circulation multi-decadal variability: quantification and mechanisms	Wei Cheng	Ecosystems & Fisheries- Oceanography Coordinated Investigations
Targeted Metabarcoding to Assess the Possible Effects of Ocean Acidification and Hypoxia in Olympic Coast National Marine Sanctuary	Chris Paight	Genetics and Genomics
Metagenomic Assays to Assess Marine Community Species Identities, Diversity, Representation, and Population Patterns from Salish Sea Zooplankton	Elizabeth Silkas, Carol Stepien	Genetics & Genomics
The Importance of Environmental Exposure History in Forecasting Dungeness Crab Megalopae Occurrence Using J-SCOPE, a High-Resolution Model for the US Pacific Northwest	Emily Norton	Genetics & Genomics

### Research Innovation Theme

Title	Presenter(s)	PMEL Group
Saildrone Science: Three Years of Arctic Missions	Edward (Ned) Cokelet	Innovative Technologies for Arctic Exploration (ITAE)
Innovative Technologies to Advance Ocean Observation	Heather Tabisola	Innovative Technologies for Arctic Exploration (ITAE)



A Common Platform for Oceanic Biogeochemical Carbon Data Assembly, QC, Access and Archival	Eugene Burger	Science Data Integration Group
The NOAA Observing System Monitoring Center	Eugene Burger	Science Data
		Integration Group
Find out how a few nerds manage a data collection of	Eugene Burger	Science Data
12,000+ data sets with open-source software, ingenuity		Integration Group
and a bit of custom software glue.		
PyFerret - An easier way to explore your data	Eugene Burger	Science Data
		Integration Group
Our Public Private Partnerships rapidly developed and	Noah Lawrence-	Engineering
deployed new drones to meet scientific regional	Slavas	Development
observing needs		Division
Preliminary Results of a 2019 Acoustics-trawl Survey	Steven Anderson	Engineering
in the U.S. Continental Region of the Chukchi Sea		Development
		Division