



PACE

Plankton, Aerosol, Cloud, ocean Ecosystem Science and Applications Team

PACE SAT Meeting

1:00 -1:10 Project Update and Points of Information (Werdell, Dierssen)

1:10-1:20 Vanderlei Martins – HARP2

1:20-1:45 Ivona Cetinic, NASA -- The EXPORTS project and how it relates to PACE

1:50-2:20 Kelsey Bisson, OSU – Seasonal bias in Rrs observations

PACE mission update

to the SAT on 16 April 2021

news

- launch no earlier than 30 Nov 2023
- OCI – engineering test unit & flight unit testing continues
- SPEXone – flight unit testing @ GSFC underway
- HARP2 – flight unit build underway @ UMBC
 - preparing for environmental testing @ GSFC
- applications – preparing for 2 summer focus sessions & fall workshop
 - announcement out to hire Joel’s replacement
 - <https://ssaihq.com/employment/Careers.aspx?req=21-3073>*
- simulators – pyTOAST data to be released ~end of next week
 - 5 days of OCI L1B, plus example geophysical products*



SPEXone

fun

- Fall AGU sessions (Dec 2021, New Orleans)
 - Advanced remote sensing in preparation for NASA's PACE mission (Cairns, Remer)
 - Advancing aerosol remote sensing in the next decade (Knobelspiesse, Sayer, Seidel, Natraj)
- Ocean Sciences session (Feb 2022, Honolulu)
 - Ushering in a new era of hyperspectral and polarimetric radiometry for remote sensing of global ocean ecosystems (Werdell, Cetinić, McKinna, Dierssen)
- Frontiers in Remote Sensing special issue (abstracts due 15 June 2021)
 - Polarization of Light as a Tool for Characterizing Different Facets of the Atmosphere-Ocean System

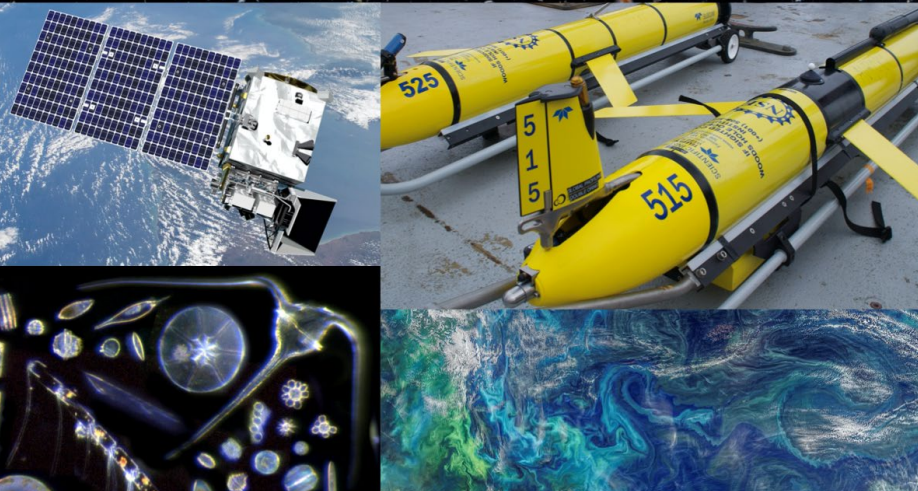
more fun

- Voice of the Sea EXPORTS / PACE watch party (<https://youtu.be/4rdrpxSIMG4>)

VOICE
of the
SEA

YouTube Watch Party
Tues, April 20th, 2021
@ 9am Hawai'i, 12pm Pacific, 3pm Eastern
voiceofthesea.org

EXPORTS
Export Processes in the Ocean from RemoTe Sensing



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EXPORTS
Export Processes in the Ocean from RemoTe Sensing



EARTH DAY

FROM BIG TO SMALL,
WE'RE ALL CONNECTED



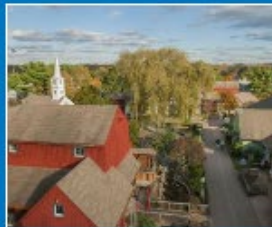
1. Second Meeting Logistics

- Mystic CT and University of Connecticut
- Proposed HYBRID/IN PERSON & ONLINE
- **6-8 October 2021. Wed.-Fri.**



Connecticut[®]

MYSTIC CONNECTICUT




Mystic CT

- Amtrak to Mystic, CT from New York and Boston airport
- Flights to Providence, RI (PVD) closest (45 min drive to mystic) or BDL or New York
- Carpool to campus (15 min drive)
- Bike ~45 min to campus
 - Group rental possible
- Paddleboarding on Mystic River 😊



- Hotels \$100 and up
- Location:
 - Big box near highway 95
 - Smaller inns in town
- I am looking to arrange group rate
- But ok to book what you want.




Sponsored

Hyatt Place Mystic
Mystic

1/2 Mi To Mystic Aquarium & Dining
Mins to Rhode Island Beaches. Free Parking, Shuttle, 24 Hr Dining, Outdoor Pool, Bar, Gym, Starbucks, Free Bfast Rates Avail.

4.5/5 Wonderful (1,931 reviews)

\$125
per night
\$250 for 2 nights



Sponsored


Holiday Inn Express Mystic
Mystic

Simple, Smart Travel
Featuring everything you need for a simple, engaging place to rest, recharge and get things done.

Breakfast included

4.4/5 Excellent (1,369 reviews)

\$177
per night
\$355 for 2 nights



The Taber Inn & Suites
Mystic

Free Cancellation
Reserve now, pay later


4.3/5 Excellent (287 reviews)

We have 3 left at 10% off at

~~\$149~~ **\$134**
per night
\$268 for 2 nights

You could be seeing lower prices
With member prices, you could save 10% or more right now on thousands of properties.

Sign up, it's free Sign in




The Whaler's Inn
West Mystic

Free Cancellation

4.6/5 Wonderful (411 reviews)

We have 2 left at


\$255
per night
\$510 for 2 nights



Hyatt Place Mystic
Mystic

4.5/5 Wonderful (1,931 reviews)

\$125
per night
\$250 for 2 nights



Howard Johnson by Wyndham Mystic
Mystic

3.9/5 Good (1,953 reviews)

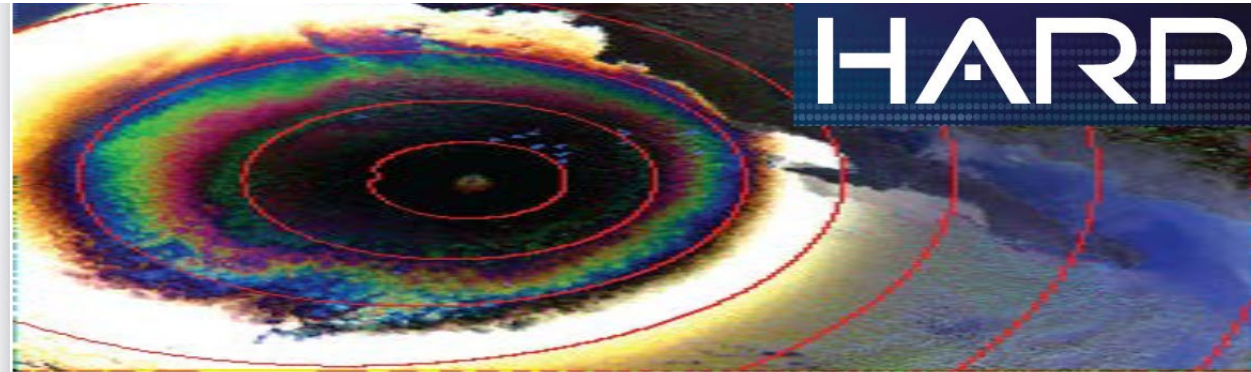
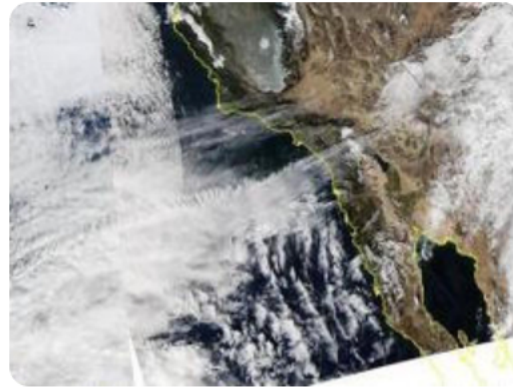
\$101
per night
\$202 for 2 nights

Vanderlei Martins

Physics Prof. Martins discusses his climate satellite on NPR

Dr. Vanderlei Martins, UMBC Professor of Physics, was on NPR this week to discuss his CubeSat, a tiny satellite which measures atmospheric composition from space.

The NPR interview is available at <http://wypr.org/post/what-tiny-satellites-can-tell-us-about-our-climate>



HARP CubeSat – An innovative Hyperangular Imaging Polarimeter for Earth Science Applications

J. Vanderlei Martins, Tim Nielsen, Chad Fish, Leroy Sparr, Roberto Fernandez-Borda, Mark Schoeberl, Lorraine Remer

Small Sat Pre-Conference Workshop, Logan Utah – 3 Aug 2014

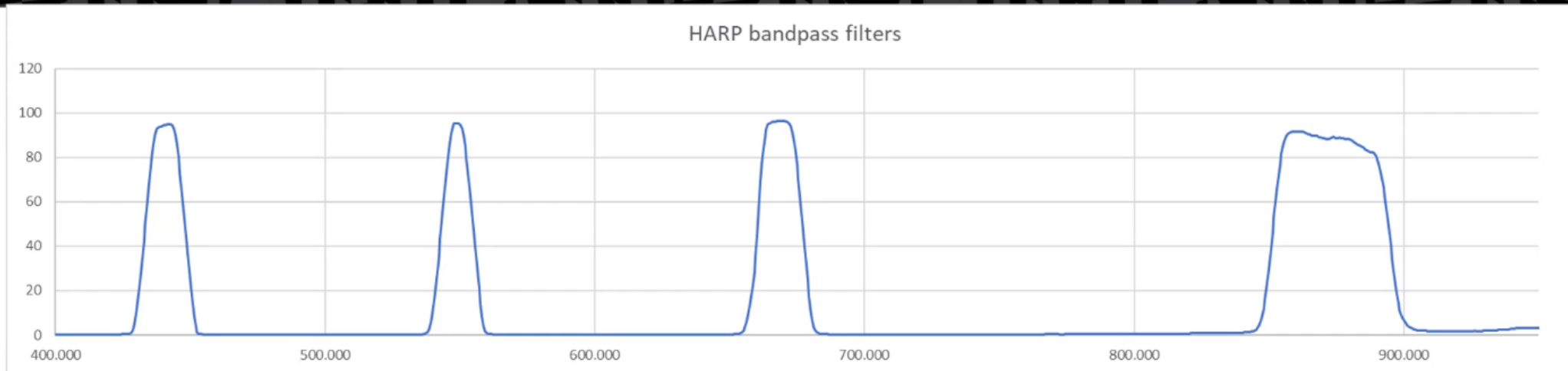
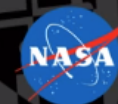


UMBC





Current bandpass filters for HARP2



HARP2 uses leftover resources from HARP CubeSat with some components “rebuilt” and re-worked for optimization when possible

Band Optimization is required to improve signal to noise ratio in all bands, to equalize wavelength x FOV for NIR band, and to reduce potential water vapor contamination in the NIR band.

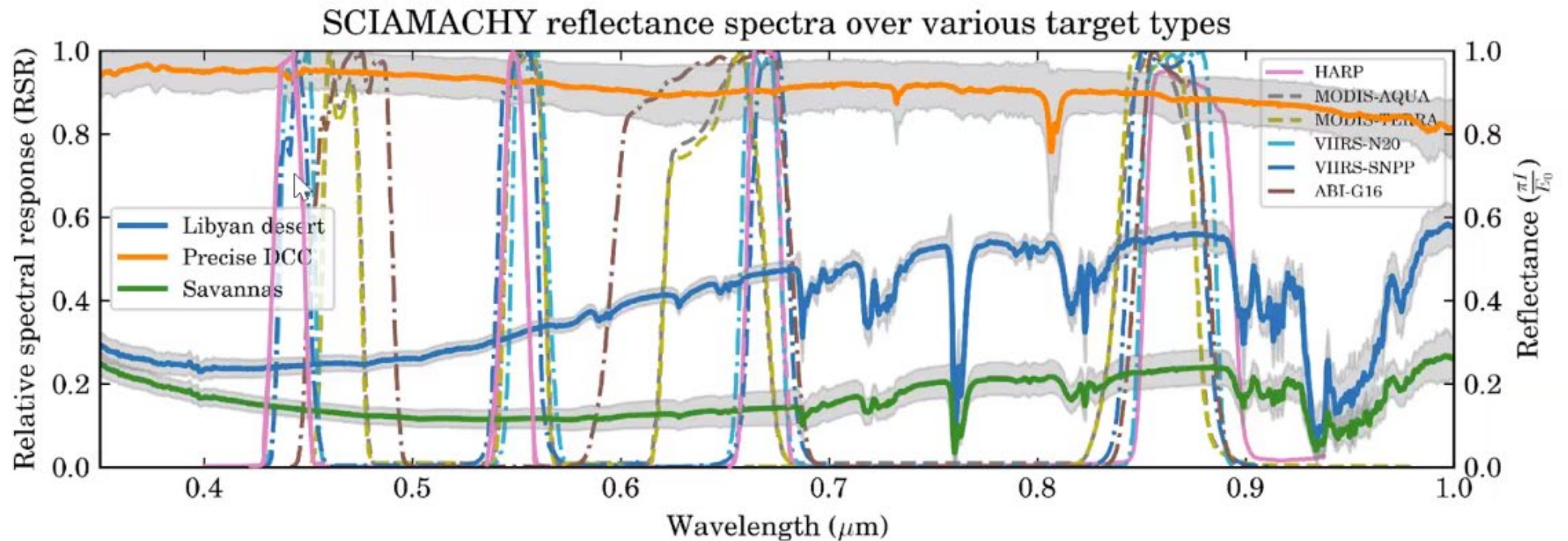
HARP2 Band optimization goal:

- All band would be narrowed around the same center wavelengths.
- Right edge of NIR band would move slightly to shorter wavelengths.

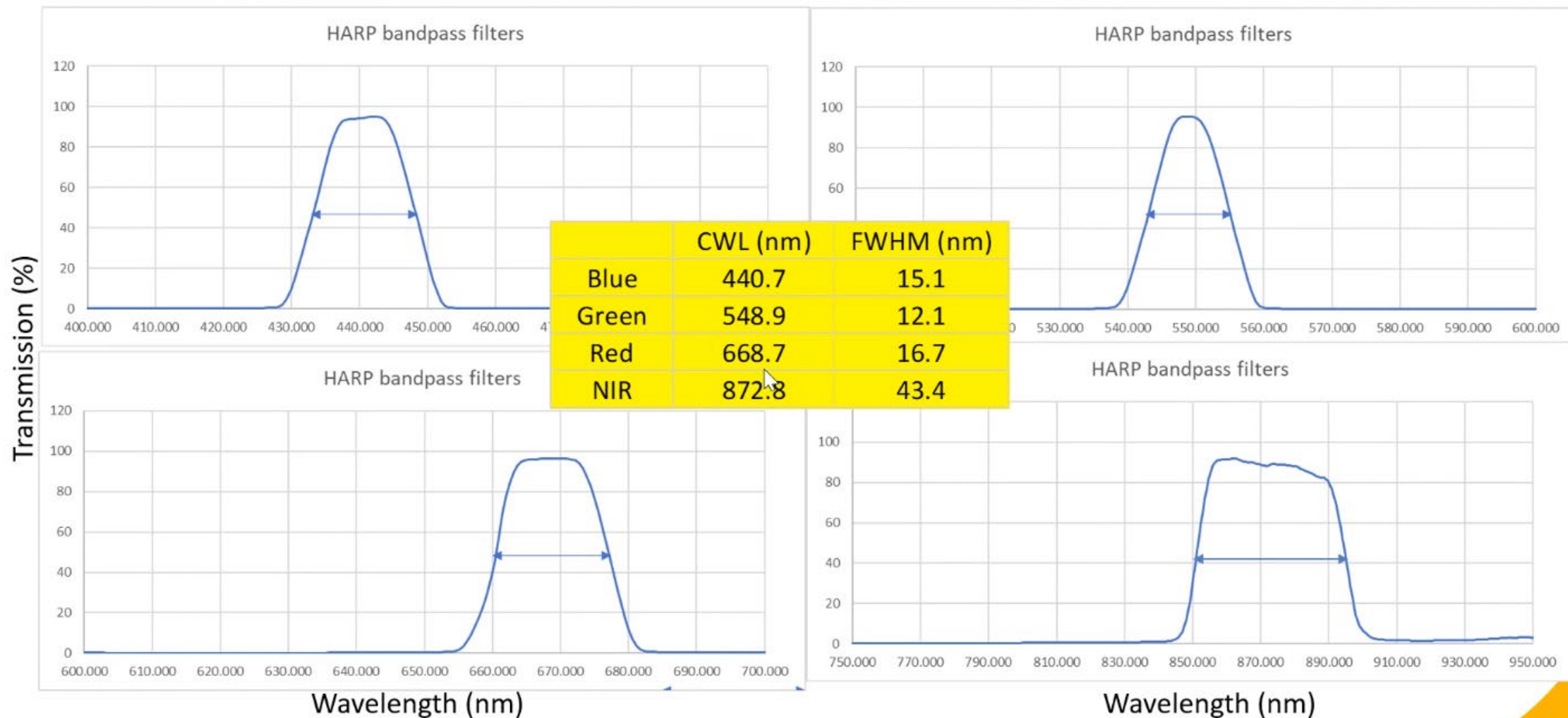


HARP CubeSat Intercomparisons

Spectral band differences between HARP CubeSat and other sensors:
MODIS-AQUA, MODIS-Terra, VIIRS-N20, VIIRS NPP and ABI-G16



Current HARP2 bands



Ivona Cetinic EXPORTS



NASA Ocean @NASAOc... · 3/8/21 ...

Scientist Ivona **Cetinic** loves being on the water. She uses optical tools to shed light on the role that phytoplankton diversity plays in the ocean. schmidtocean.org/cruise/sea-spa...



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32



EXPORTS links

- <https://oceanexports.org/projectoffice.html>

Kelsey Bisson

Kelsey Bisson

View

Contact



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At OSU

Affiliated with: Ag Botany / Plant Path

Career Links:

[Department of Botany and Plant Pathology](#)



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NEXT PACE SAT Meeting 21 May 2021

1:00 -1:10 Project Update and Points of Information (Werdell, Dierssen)

1:10-1:20 Annette deCharon – PACE Website

1:20-1:45 Dave Haffner. NASA. Ozone products from OCI

1:50-2:20 Liane Guild. NASA Ames. Aircraft Ocean Color Validation