

# Evaluation of the Seasonal Change in Canopy Function for *Q. agrifolia*, by combining AVIRIS-NG and Field Data Collected with the SBG High-Frequency Timeseries (SHIFT) Campaign in California February-May 2022

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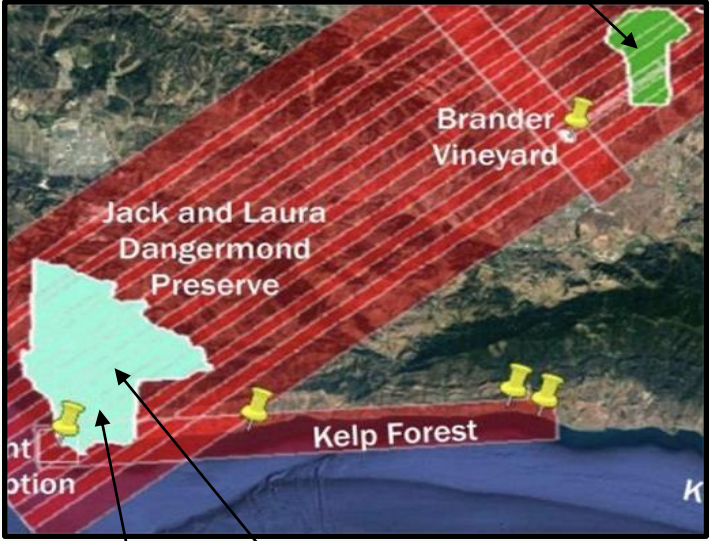


# DATA: AVIRIS-NG images, Field Survey, Leaf Samples

- sample collection, processing and laboratory measurements at NASA/GSFC

**FIELD SITES**

Sedgwick Reserve SR2



Brander Vineyard

Jack and Laura Dangermond Preserve

Kelp Forest

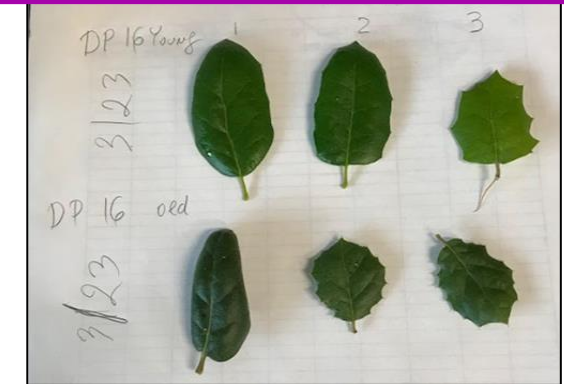
DP16 DP11  
Dangermond Preserve

**AVIRIS NG Time Series**

- February 24 – May 29, 2022
- Weekly/Bi-weekly repeat frequency



Leaf samples of *Q. agrifolia* containing young, mature and older leaves, which were measured separately.

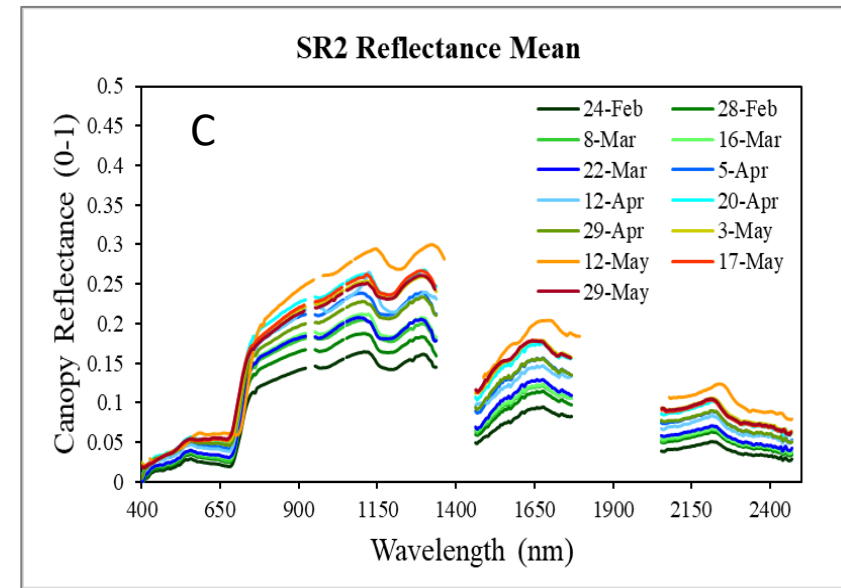
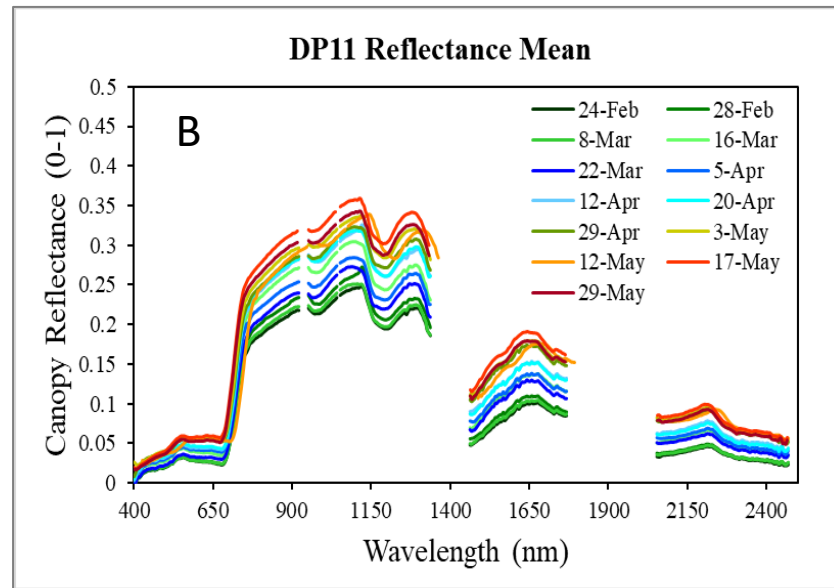
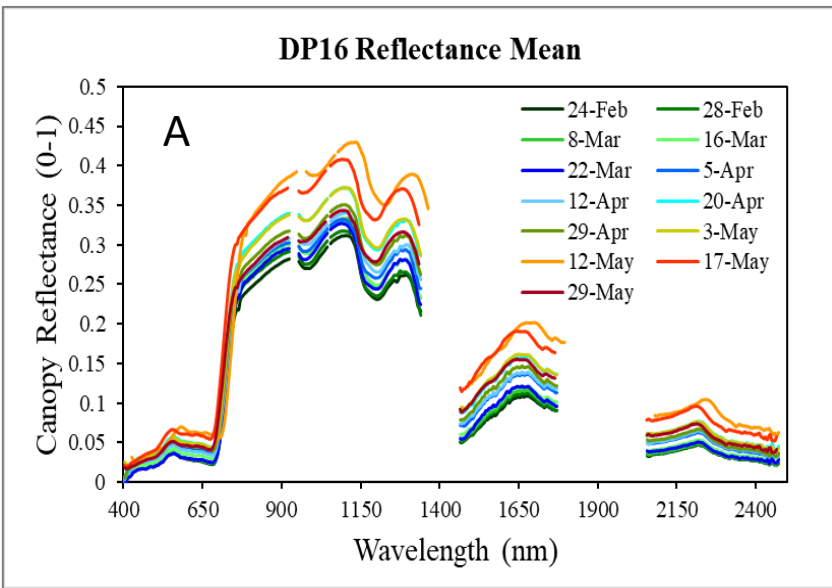
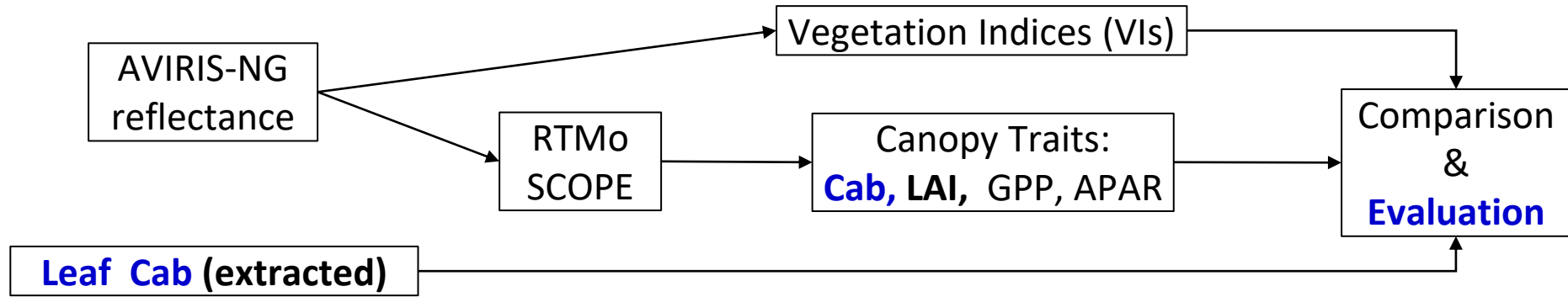


Lab measurements oak species and other representative plants included optical properties, fresh and dry weight and photosynthetic pigments.





# Seasonal changes in AVIRIS NG reflectance representative for the study sites (A. DP16, B. DP11, C. SR2)



# Conclusions and Future Steps

- The derived canopy traits and VIs captured the change in functionality throughout the season.

Further, we will use the leaf and canopy LAI, derived leaf and canopy traits, to simulate photosynthesis (GPP) at leaf and canopy level for each date and site, to thus complete the picture/prototype of vegetation function for each date.

DATA - getting published on the ORNL ([daac.ornl.gov](http://daac.ornl.gov))

***Acknowledgements:*** *we gratefully acknowledge the SHIFT team for making this campaign and our participation possible; the AVIRIS team for collecting the novel time series; NASA/GSFC Biospheric Sciences Laboratory and SBG for their support making the participation of Sara McKnight possible; and the field team from University of Wisconsin for their camaraderie and help during the field measurements and collections.*

See you at my poster - thank you!



*Please e-mail questions to:*

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