

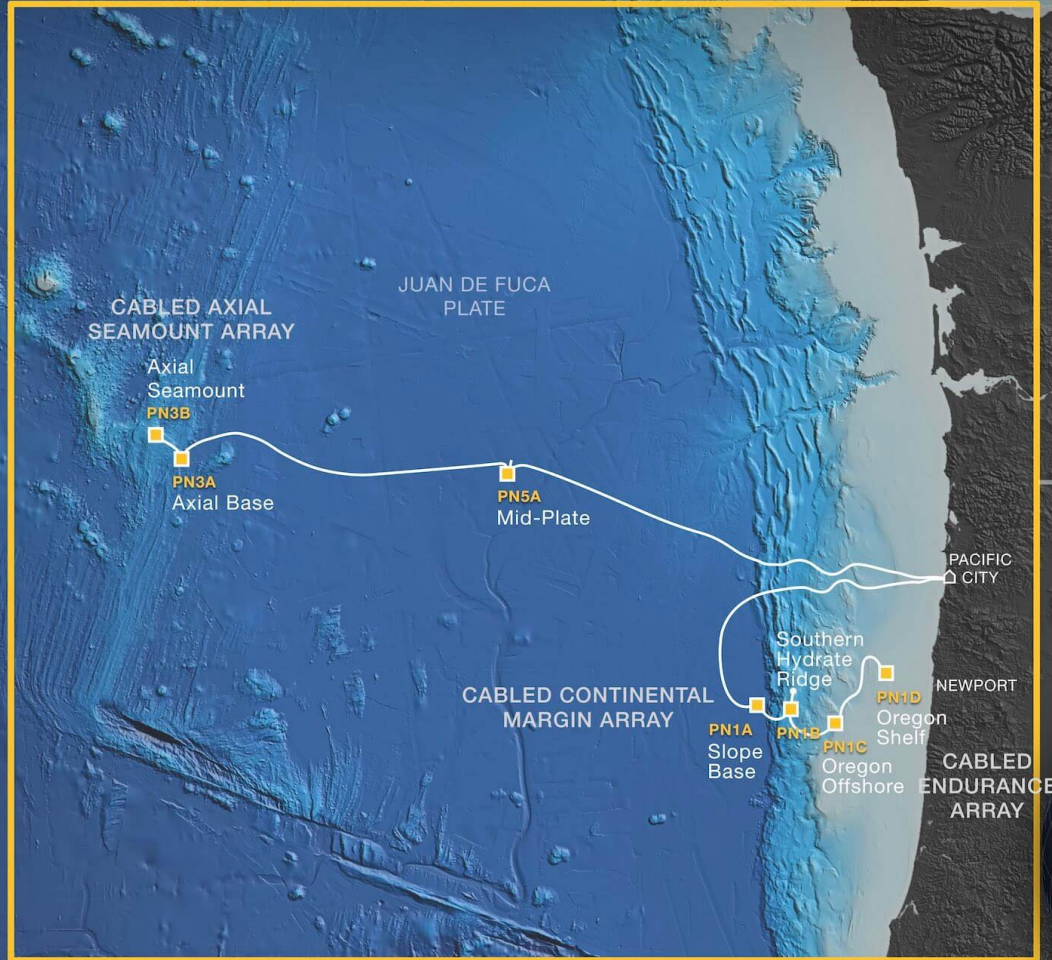
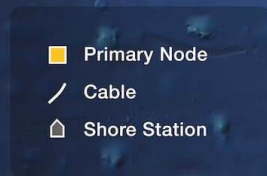
Multiplexed DAS on the OOI RCA

Ethan F. Williams

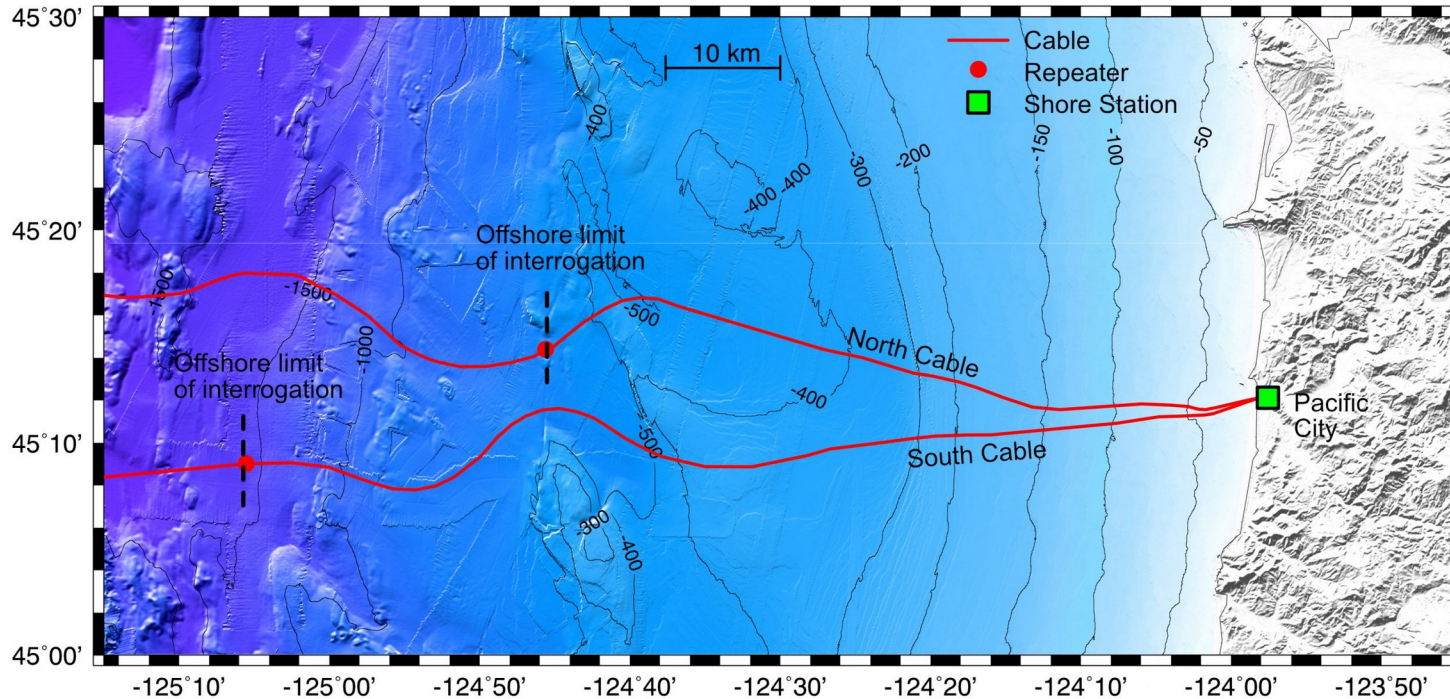
Qibin Shi, Brad Lipovsky, William Wilcock, Marine Denolle,
Deb Kelley, and UW/APL OOI team

CRESCENT Offshore Observations Workshop
October 27, 2025

REGIONAL CABLED ARRAY



2021 pilot DAS experiment, PI: William Wilcock



4-day test: Nov 1-5, 2021

OptaSense QuantX DAS
Silixa iDASv2
Silixa Ultima DTS

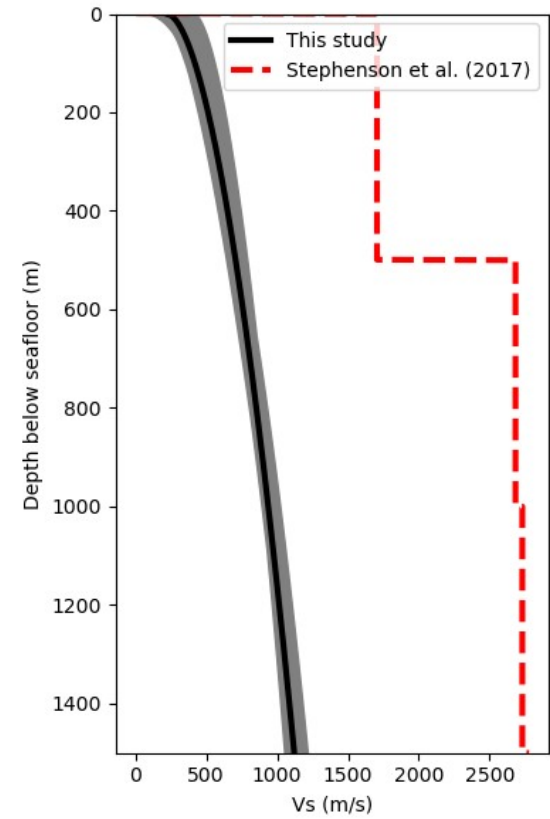
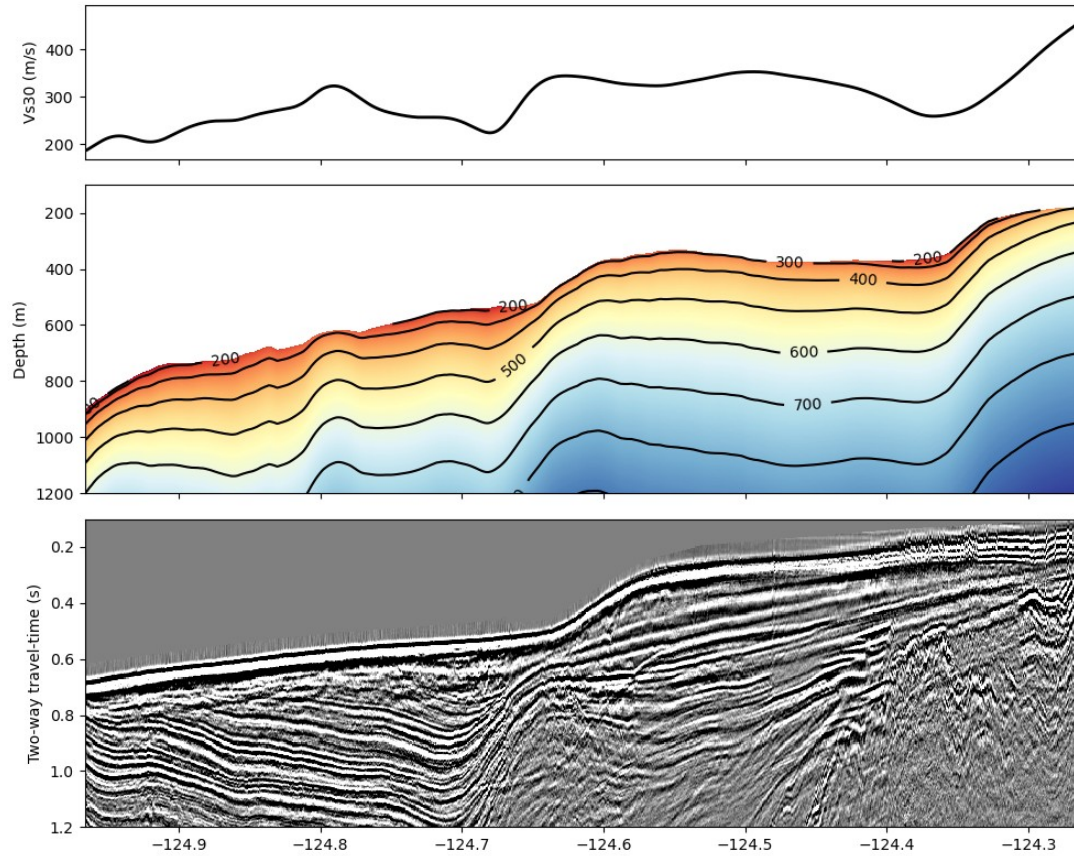
Continuous recording on
both north and south fiber

Open dataset



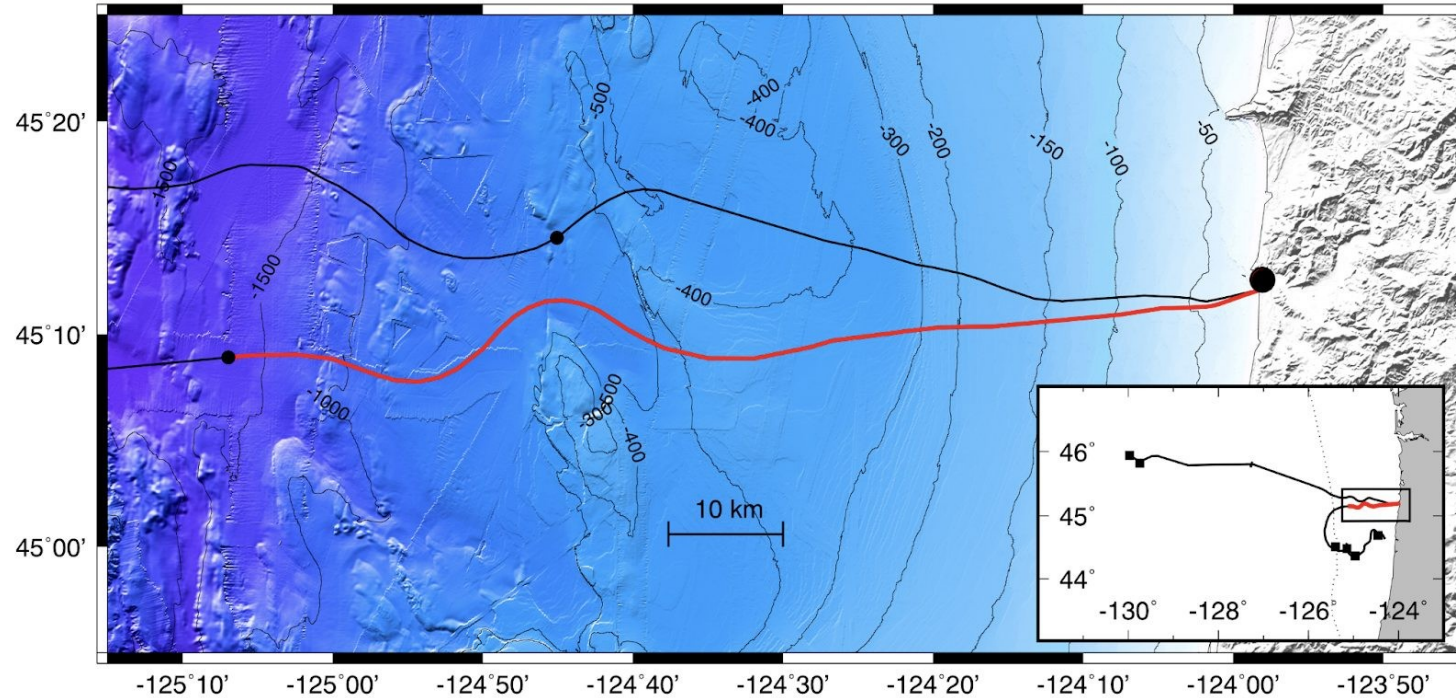
<https://doi.org/10.58046/5J60-FJ89>

Site amplification correlated with topography



Feng, Williams et al. (in prep)

2024 multiplexed DAS experiment, PI: Brad Lipovsky



4-day test: Nov 6-10, 2024

ASN OptoDAS (L-band)

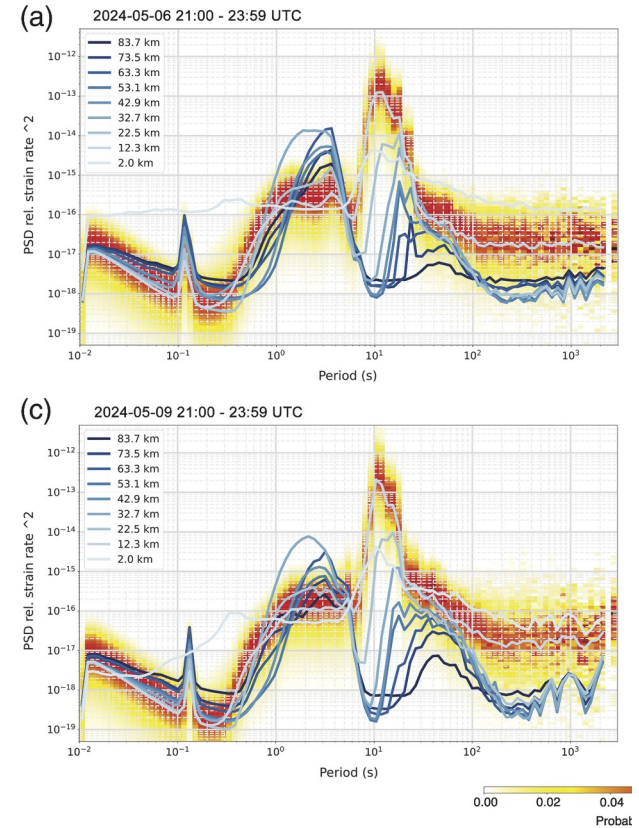
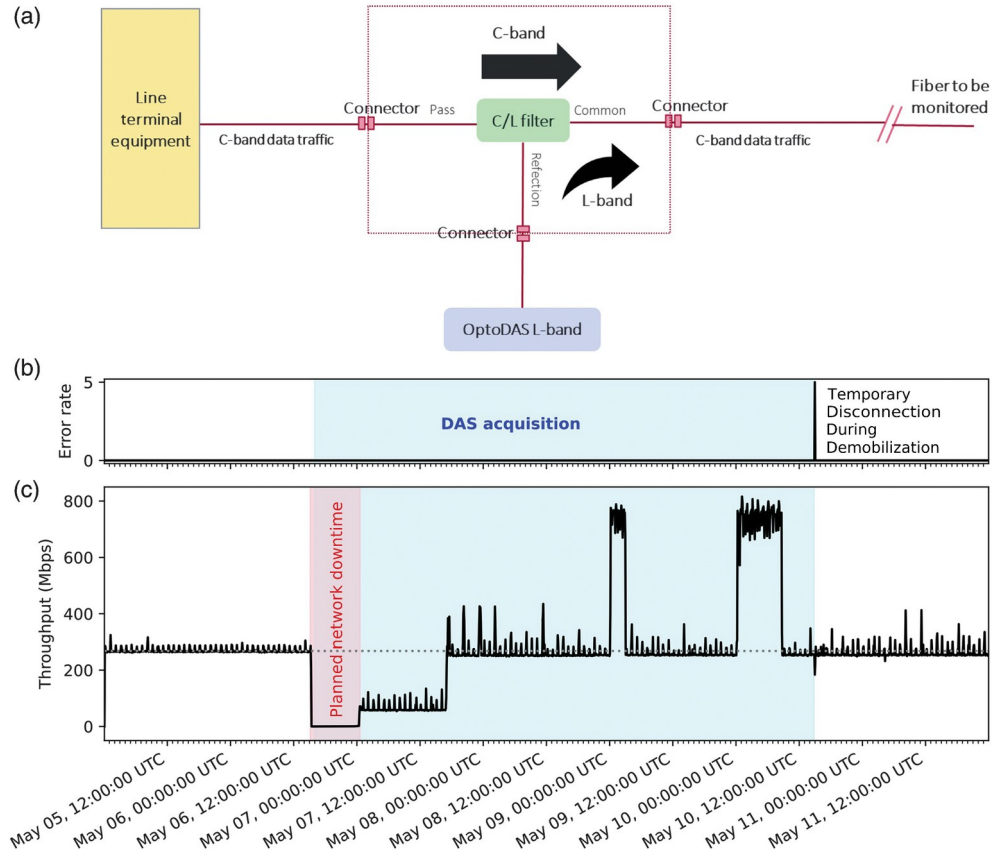
Continuous recording on
south fiber only

Open dataset



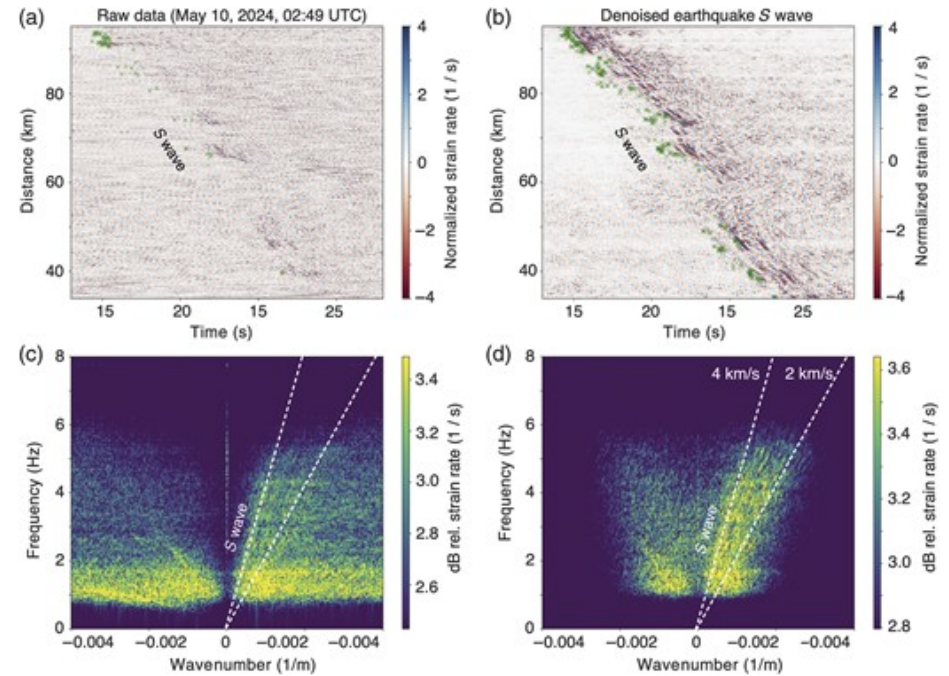
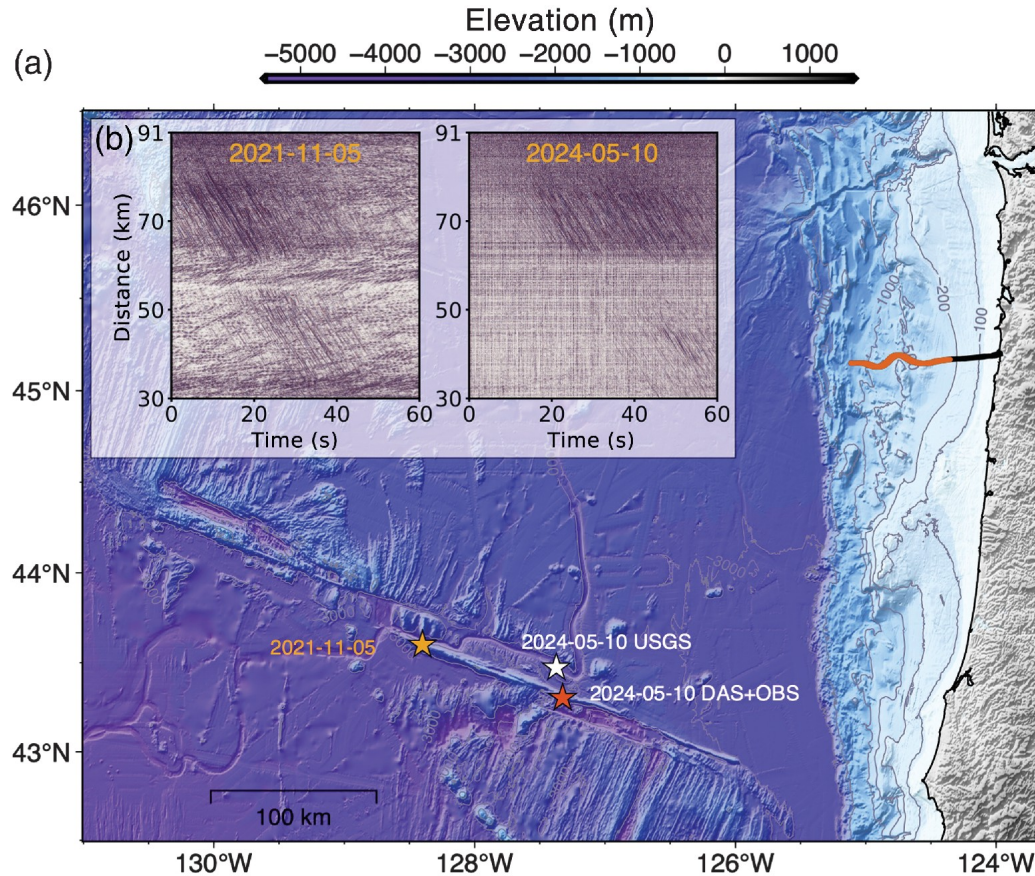
<https://doi.org/10.58046/4WEF-A282>

2024 multiplexed DAS experiment, PI: Brad Lipovsky



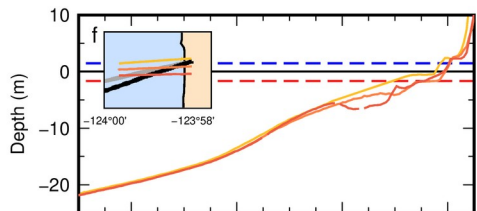
Shi, Williams, et al. (2025) *SRL*

Earthquake and T-wave detection with machine learning denoising

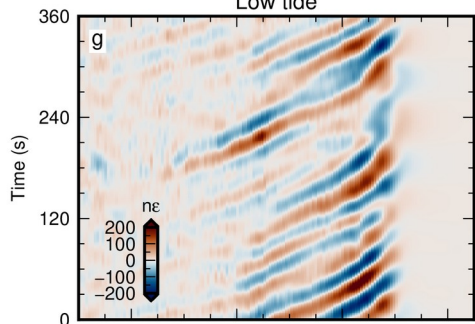


Shi, Williams, et al. (2025) *SRL*

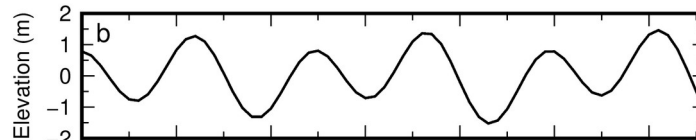
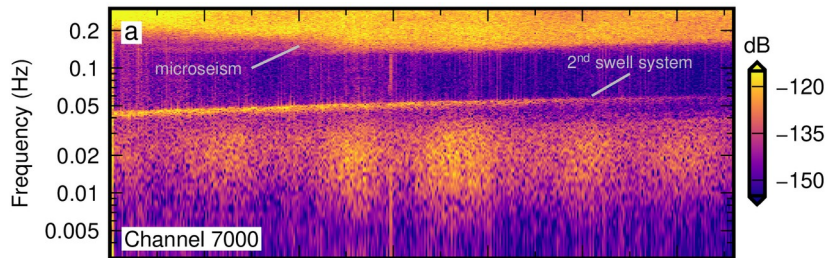
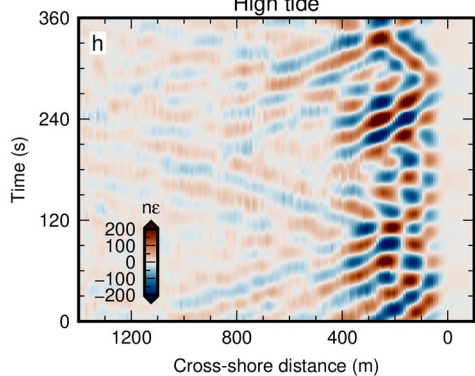
Tidal modulation of infragravity waves



Low tide



High tide



Outer shelf directional energy

