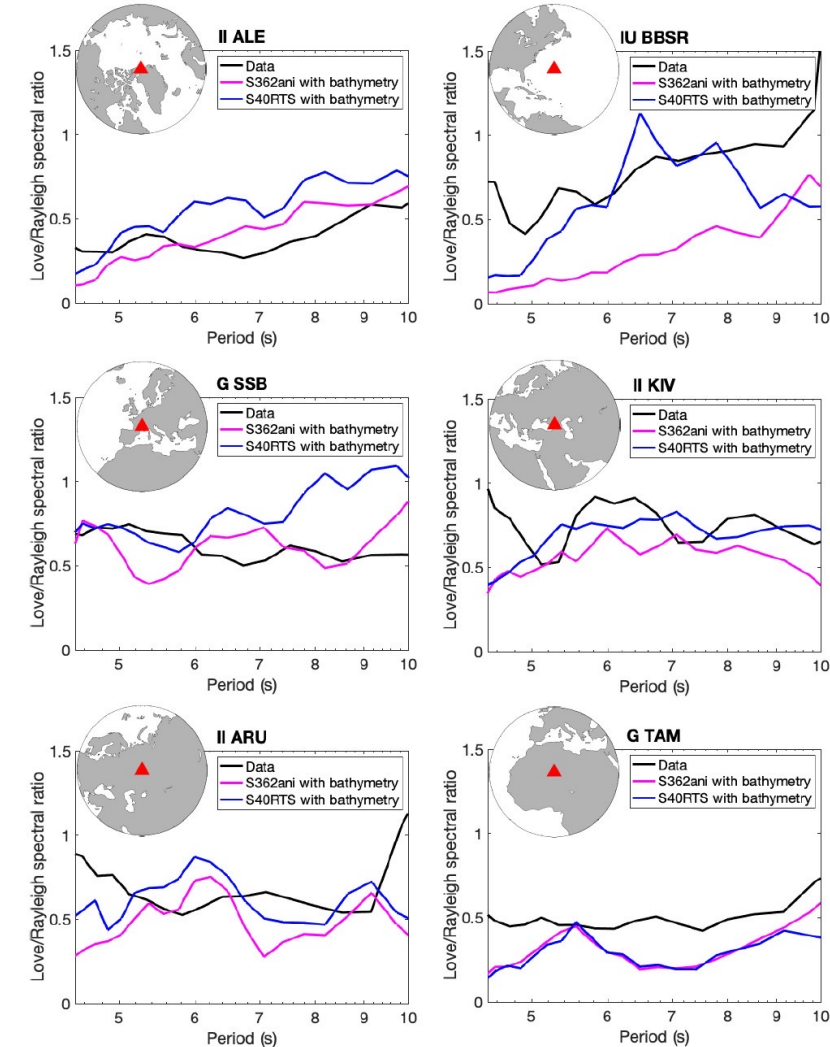
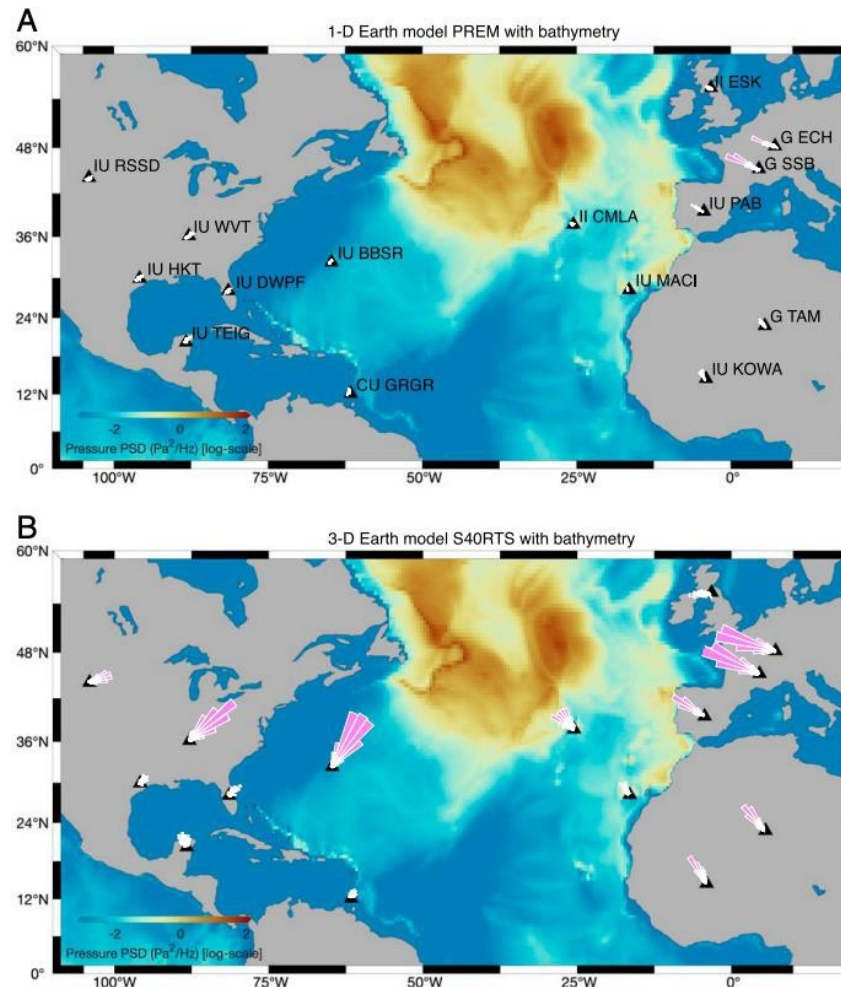


The Origin of Secondary Microseism Love Waves

Gualtieri et al., November 2020 in *Proceedings of the National Academy of Sciences*

The authors show that the previously unexplained Love waves of the secondary microseism (and the major part of seismographic data) can be modeled and explained due to a combination of bathymetric features and the interaction of the seismic wave field with 3D Earth structure.

The righthand figure compares the observed Love-to-Rayleigh ratio for the secondary microseism at selected stations (mostly GSN), with model predictions for two 3D Earth models. The lefthand figure shows how the use of a 3D (bottom) versus 1D (top) Earth model changes the amount of Love waves generated by the microseism.



Rupture Process of the 2020 Caribbean Earthquake Along the Oriente Transform Fault, Involving Supershear Rupture and Geometric Complexity of Fault

Tadapansawut et al., November 2020 in *Geophysical Research Letters*

The authors model the rupture of a MW7.7 earthquake that occurred on an oceanic transform fault using data from **52 global stations, many from the GSN**, to show unilateral but complex rupture reaching supershear speeds.

The figure on the far right shows modeled waveforms (red) and observed waveforms (black) **many recorded at GSN stations**.

The figure on the near right shows the resulting best fit model and complex rupture of the MW 7.7 earthquake. This rupture behavior is a new observation for this type of fault.

