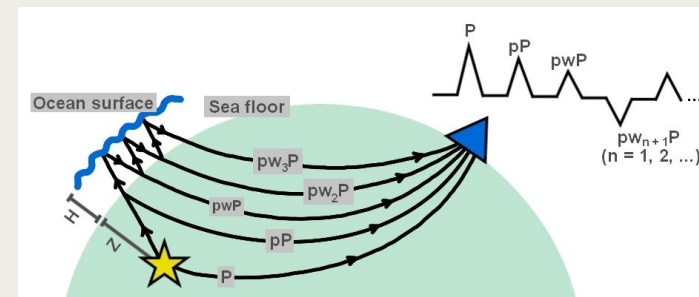


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- **Transform fault depths** are key for rupture dynamics, but accurate measurements at teleseismic distances are challenging.

- **Objective:** Use water reverberations (pwP) to determine focal depth (Z) and sea floor depth (H) and characterize the South-Equatorial Atlantic.



- **Method:** Huang et al.¹ approach to obtain Z and H by maximizing stacked amplitude in Python.
- Synthetic seismograms: **Z–H grid search** reliably recovers source parameters, but accuracy declines for $\Delta > 70^\circ$ or $N > 75\%$, and Z is most sensitive, especially for $H < 1.5$ km.
- Observed seismograms²: August 30, 2020 (Mw6.5) event demonstrated the method's potential with Z and H ranges consistent with other datasets.
- **Next steps:** validate Z estimates and integrate additional seismic source parameters with ISOLA^{3,4} software.

