

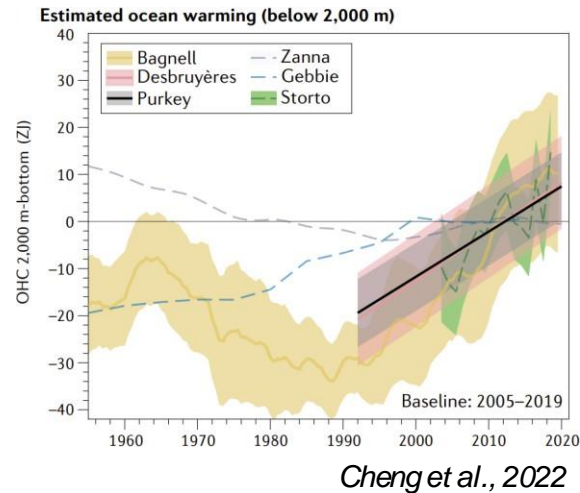
Detecting abyssal ocean warming using Scholte waves

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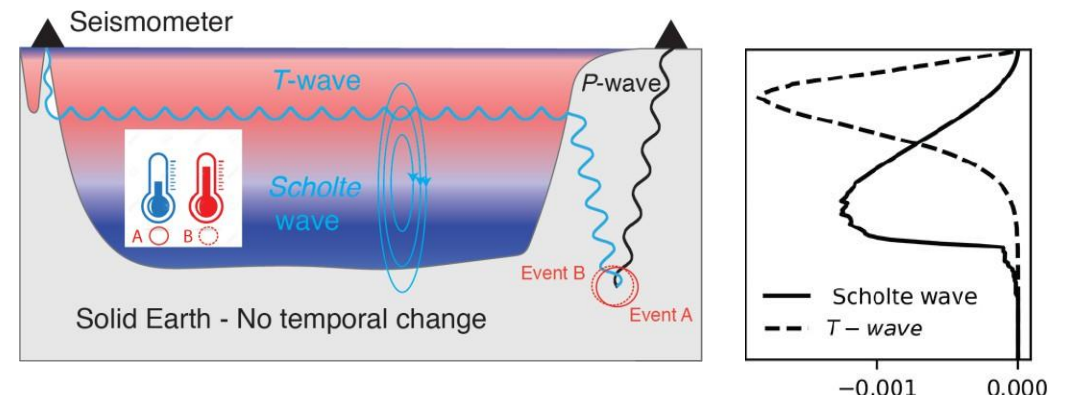
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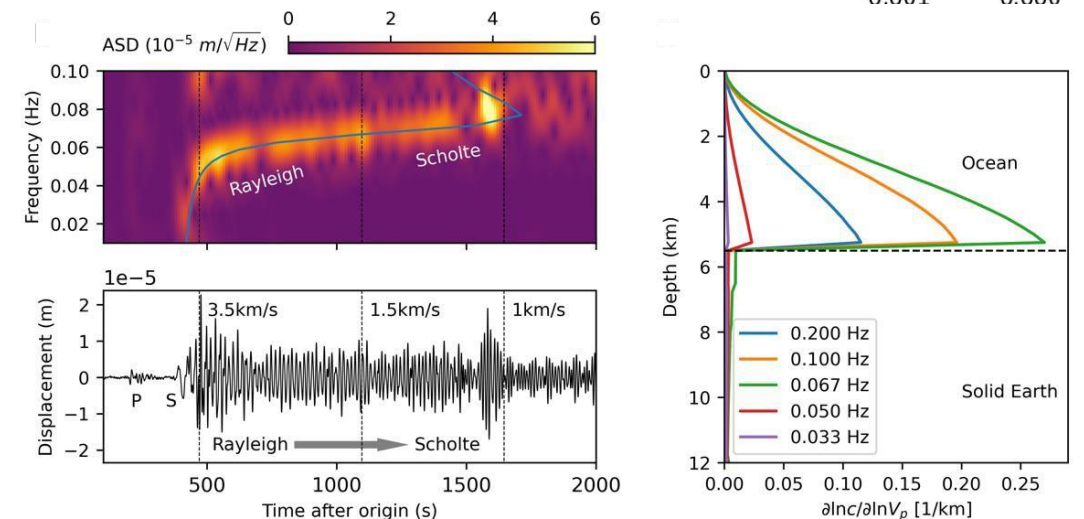
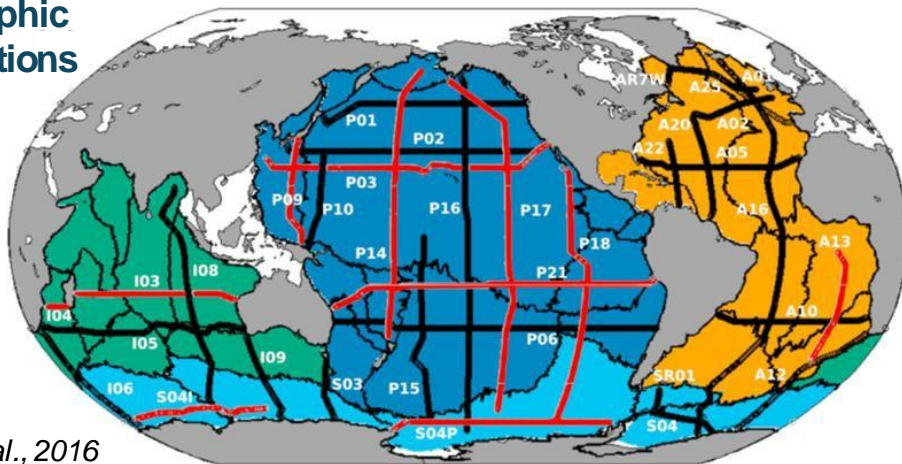
The abyssal ocean is warming, with large uncertainty due to sparse spatiotemporal samplings of hydrographic surveys.



Scholte waves: sensitive to lowermost ocean

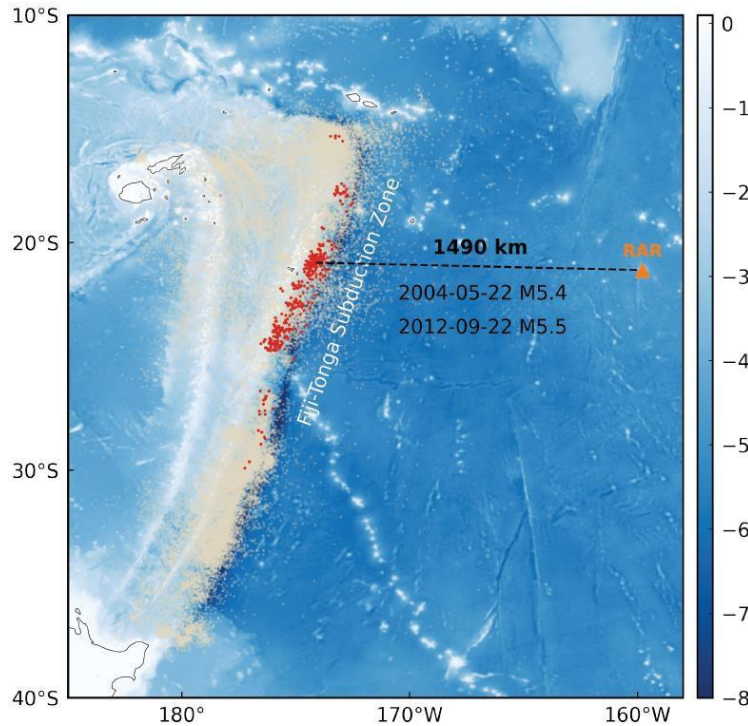


Hydrographic survey sections

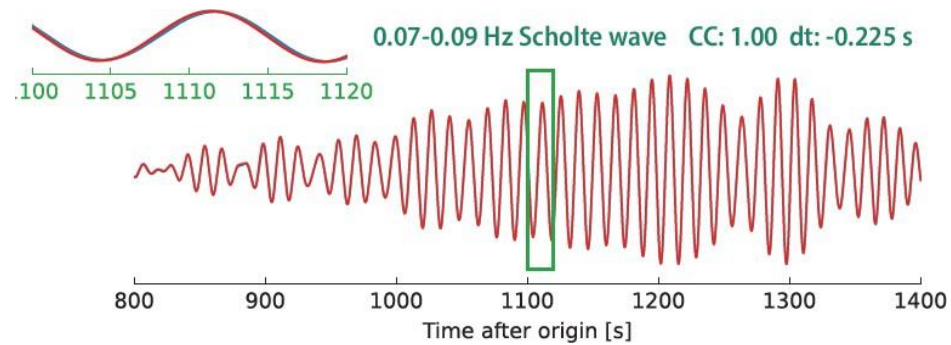


Repeating Scholte waves reveal abyssal ocean warming in the Southwest Pacific from 1992 to 2024

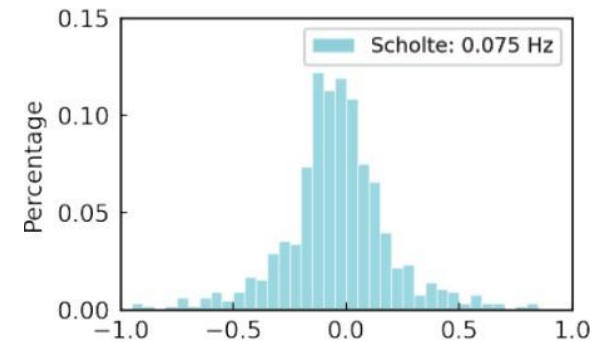
650 pairs from ~48,000 events



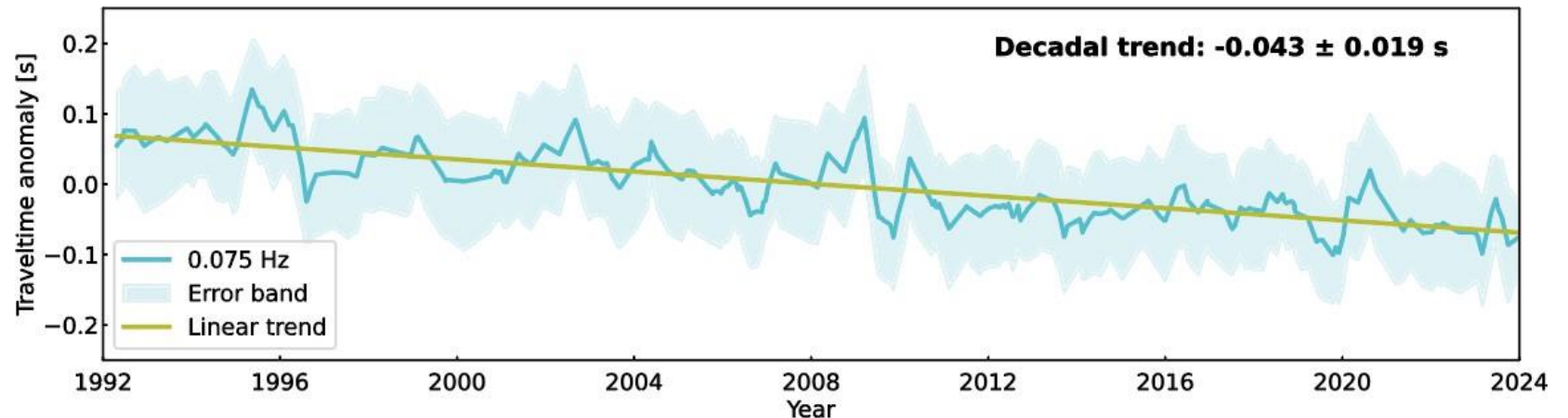
Repeating Scholte data example



dt_Scholte histogram



A long-term abyssal ocean warming trend



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our posters and talks at



Tuesday (Dec. 10)
13:40 - 17:30

S23D-3533 Detecting Abyssal Ocean Warming Using Scholte Waves

Monday (Dec. 9)
16:40-16:50

S14A-05 Genesis and Propagation of Low-frequency Abyssal T-waves

Thursday (Dec. 12)
10:30-10:40

NS42A-02 Fiber-optic Seismic Sensing of Vadose Zone Soil Moisture Dynamics

Thursday (Dec. 12)
16:20 - 16:30

S44B-03 Ocean Bottom Distributed Acoustic Sensing for Seismoacoustic Monitoring: Opportunities and Challenges