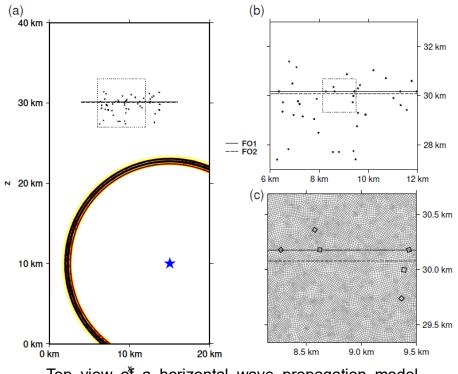
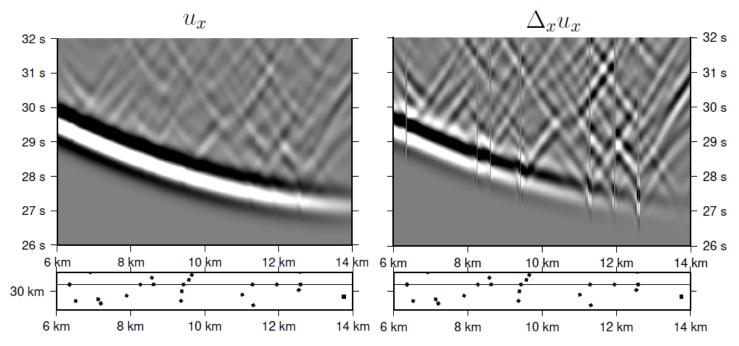
## DAS sensitivity to heterogeneity scales much smaller than the minimum

**Distributed Acoustic Sensing (DAS):** Turning optical fiber into dense linear seismometer (actually strain-meter) array along the fiber. An emerging promising technology, useful for detecting small-scale heterogeneities.



Top view of a horizontal wave propagation model. The horizontal solid line is a fiber. the black points are stones lying on the ground top.



Space-time amplitude measurement of displacement (left) and strain (right). The left correspond to many seismometers and the right to a DAS. The displacement is not sensitive to local stones near the cable, but the strain on the right is strongly affected.

Capdeville, Y., and Sladen, A., Seismica, January 2024, DOI: 10.26443/seismica.v3i1.1007