

Crustal and uppermost mantle structure of Cape Verde from ambient noise tomography

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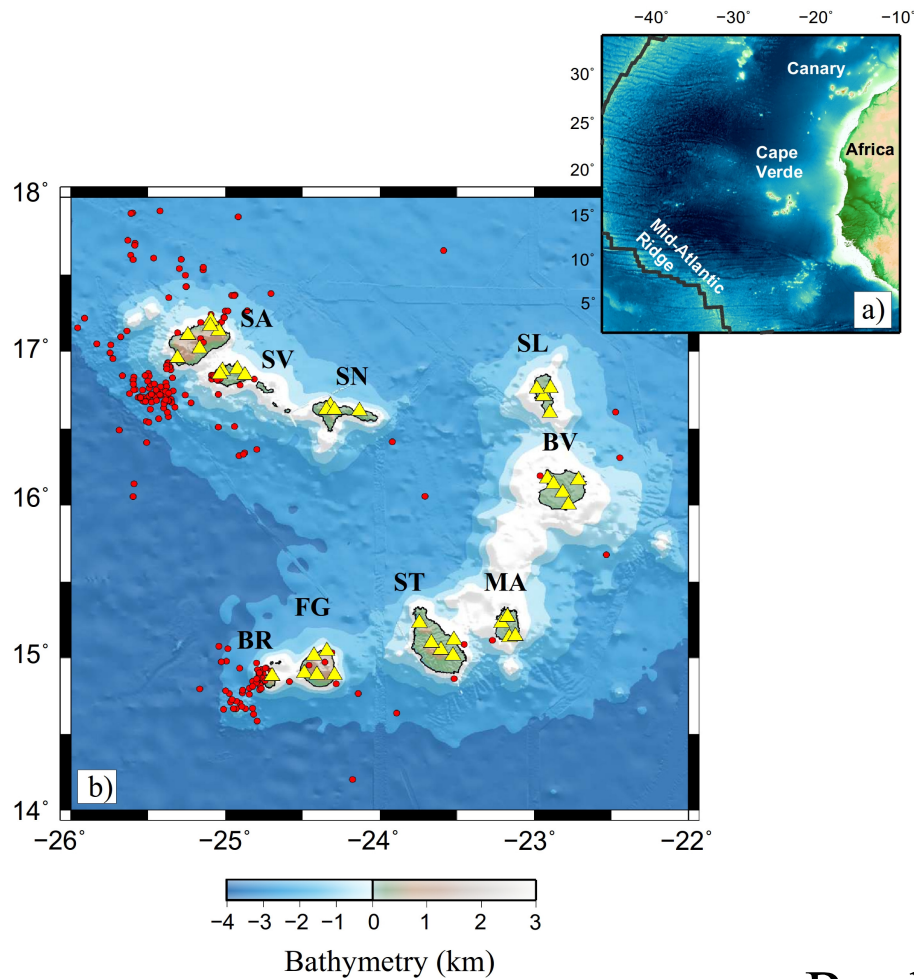
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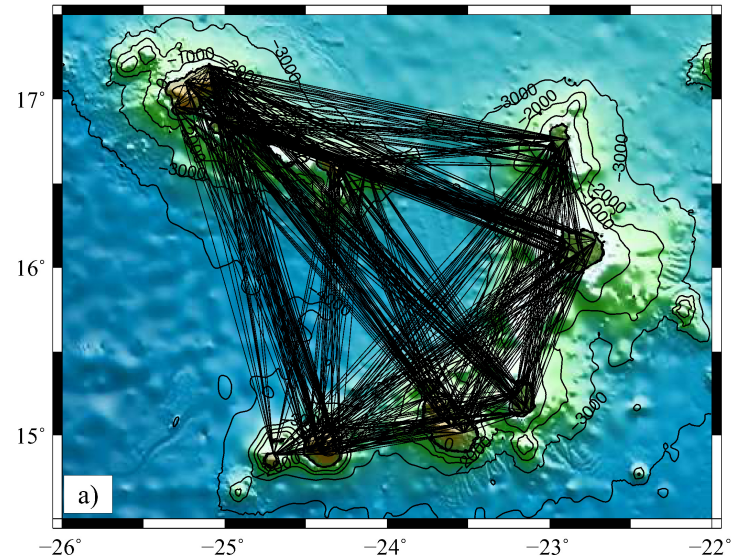
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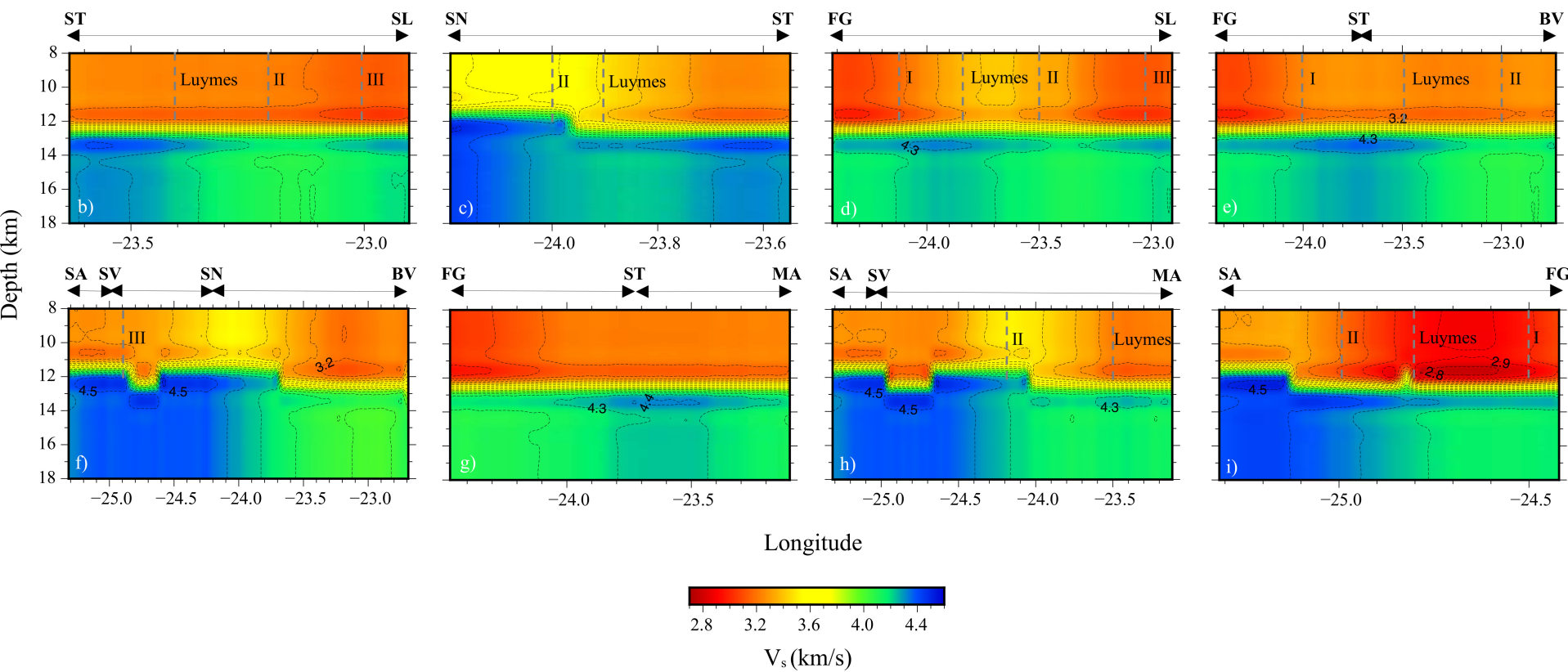
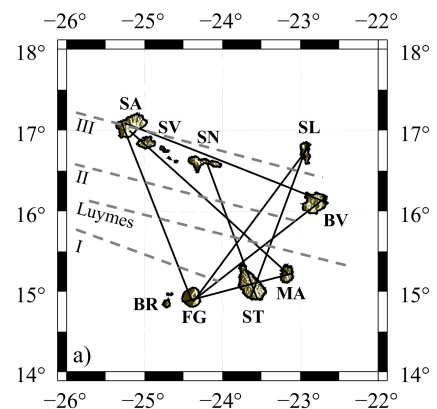
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- PCC + tf-pws
- Rayleigh wave group velocity dispersion curves
- Two step inversion
- 3D shear-wave velocity model



Key Points

- **Crust** – lowest velocities beneath and around **Fogo and Brava** attributed to **active volcanism** and predominance of **melt pockets**, or less possible to a stronger **hydrothermal alteration**.
- **Upper mantle** – **velocities** sharply **increase** especially beneath the Northwest islands, interpreted as **remnants of magma chambers**.
- **Shallower Moho** beneath the islands of Santo Antão and São Nicolau.
- Lenticular shaped **high-velocity layers below the crust** could be the result of **crustal underplating processes** that took place during the hotspot volcanism.

Thank you for your attention



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