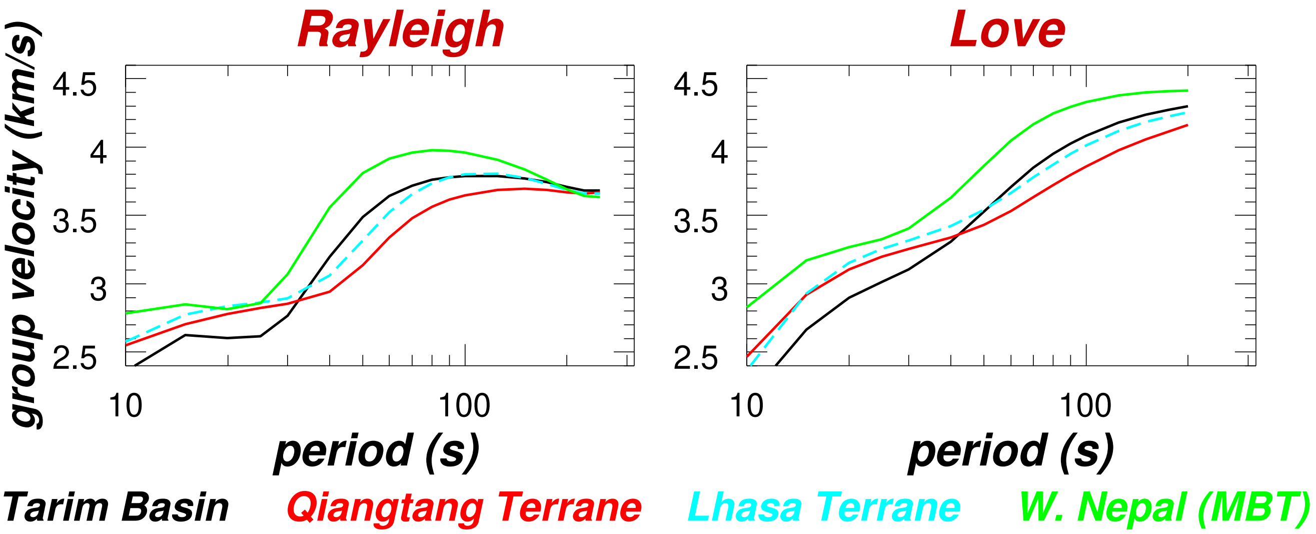
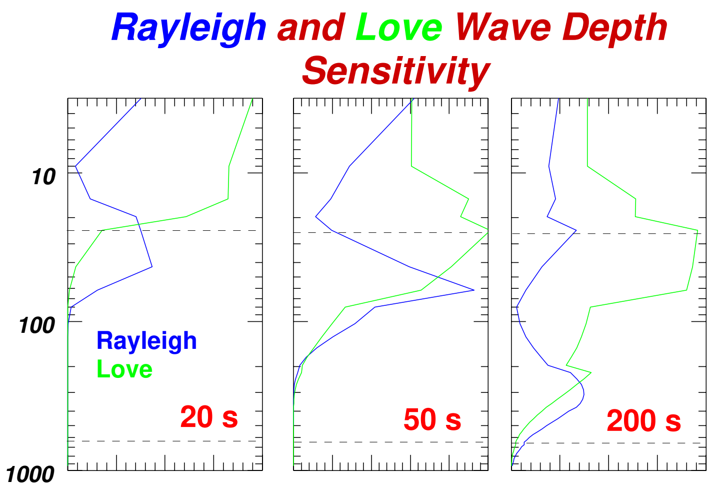
Group Velocity Curves:

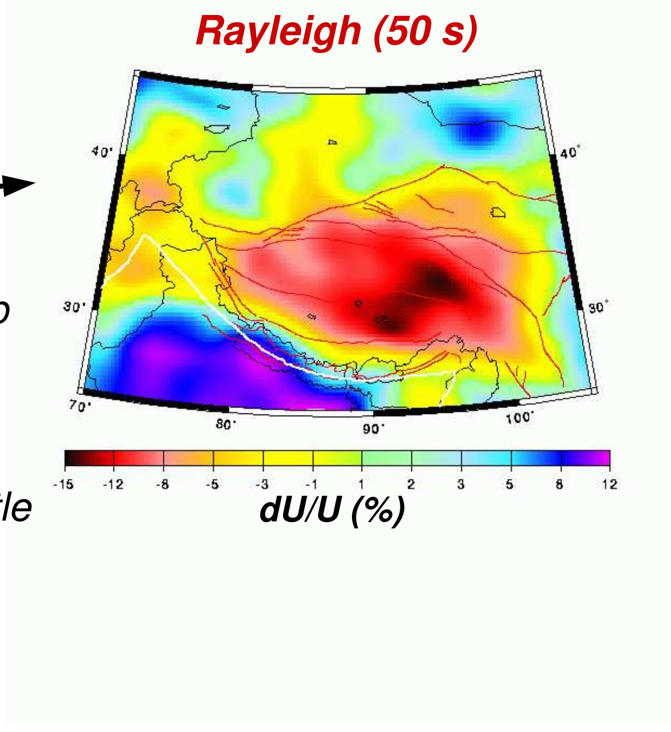


Depth Sensitivity:



Rules of Thumb

1. Rayleigh waves sample deeper than Love waves at the same period.
2. 15 - 30 s → sediments and crust
3. ~50 s → crustal thickness.
4. > 80 s → lower lithosphere, upper mantle.
5. > 150 s → upper mantle.



Inversion:

Step 1: Tomography

Invert measured group velocity curves for a group velocity map at each period (10 - 200 s).

Step 2: Inversion

Invert group velocity maps for vs model of the crust and mantle at each spatial point.