

Moho Phase Equalisation

Tau-Register Boundary Conditions at the Crust-Mantle Interface

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Phase equalisation at the Moho represents the tau-field achieving resonance between two distinct registers: the crustal lattice and the mantle lattice. The seismic velocity jump $8.1/6.5 = 5/4$ is a tau-register frequency ratio, not an accidental boundary condition.

Figure 1: Phase-Equalised Waves at Moho Boundary

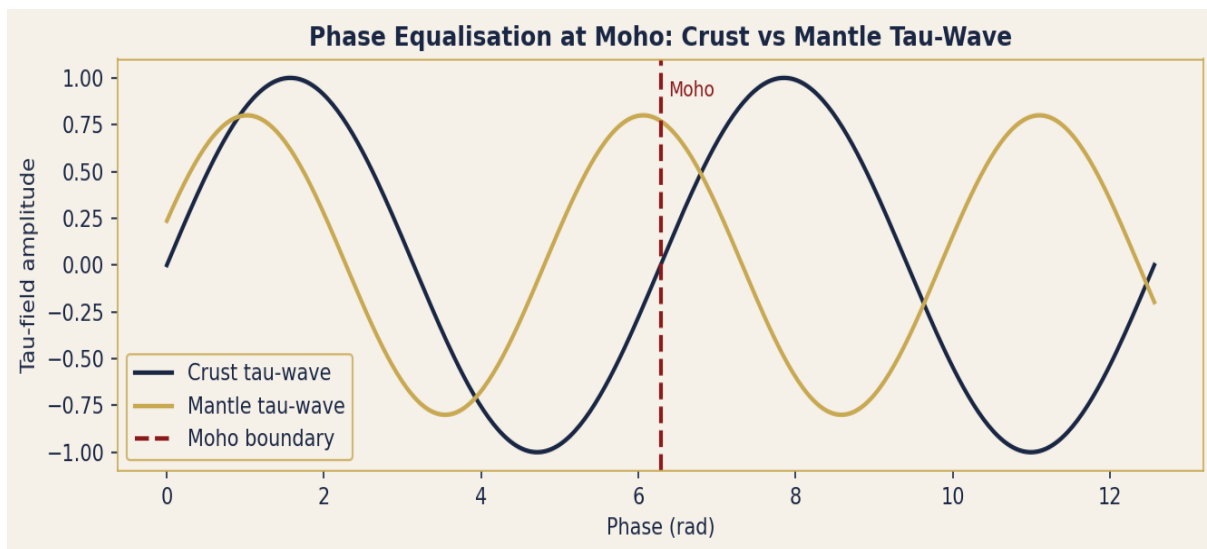


Fig. 1 - Crust and mantle tau-waves achieve phase equalisation at the Moho boundary (dashed red line).

Figure 2: P-Wave Speeds Across Earth Layers

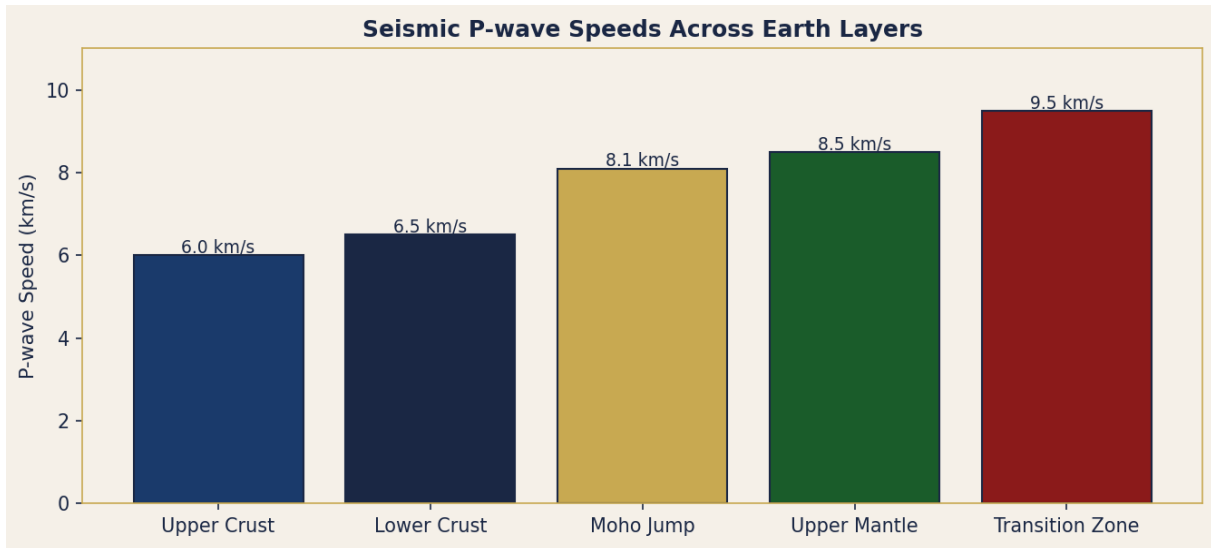


Fig. 2 - P-wave speeds showing the jump at Moho (6.5 to 8.1 km/s). Ratio $8.1/6.5$ approx $5/4$ is a tau-register frequency ratio.

Figure 3: Phase Equalisation Derivation

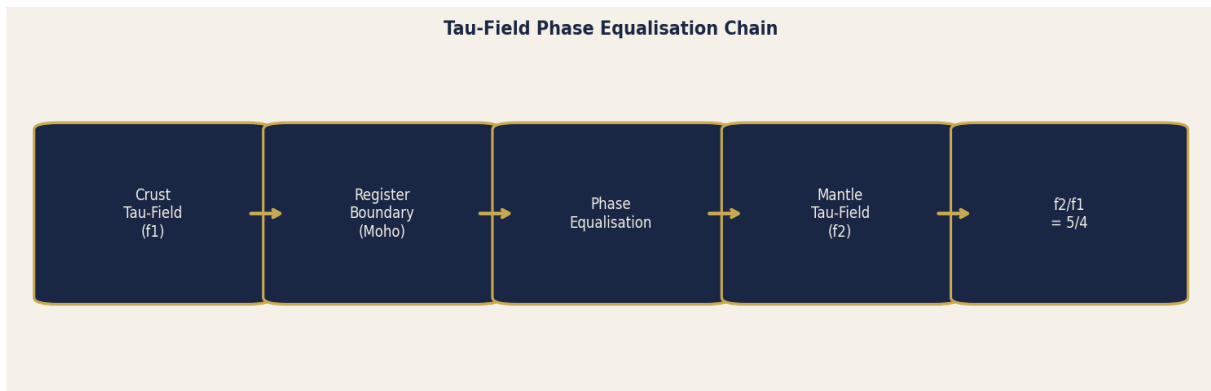


Fig. 3 - Derivation of phase equalisation from tau-field register boundary conditions.

Figure 4: Register Frequency Comparison

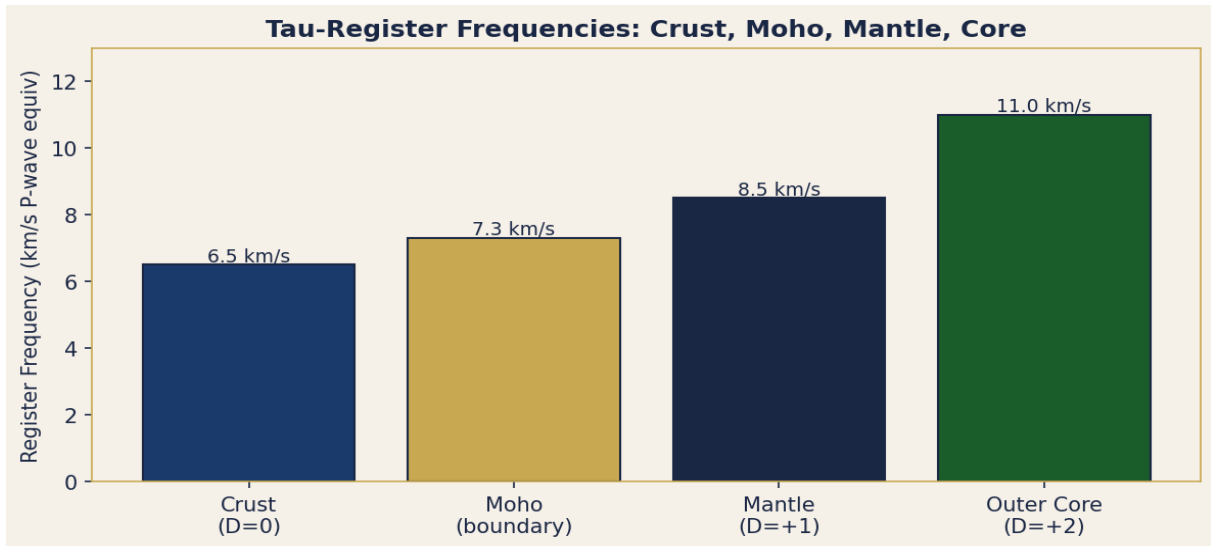


Fig. 4 - Register frequency (P-wave proxy) increases with depth, each step a tau-register transition.

Propositions

P-MPE-1

The Moho is the locus at which tau-fields from the crust and mantle achieve phase equalisation. The discontinuity is a tau-register boundary condition.

P-MPE-2

Seismic velocity jump at Moho = tau-register frequency ratio $8.1/6.5$ approx $5/4$. This ratio emerges from the $\{2,3,5\}$ lattice structure without free parameters.