

Fig. 1: Example of the direct S-waves measurement at a target station ES33 with 20 (left) and 40 samples per second (right) for a station pair ES12 (reference station) - ES33 (target station).

Fig. 2: Plot of splitting parameters (ϕ and δt) as a function of inter-station spacing of the target and reference station for a particular event C101703B, CMT ID (-05.47°, +154.15°) which recorded at target stations ES04, ES34, ES36, ES38 and ES39 and their corresponding reference stations. We have used different symbols for these target stations.

Fig. 3. Lateral variation of station-averaged S-derived splitting parameters (left) resultant average splitting parameters when all events within an epicentral distance range of 30°-90° are in use (right) resultant average splitting parameters when a subset of event database within an epicentral distances range of 50°.-90°.

Fig 4. Scatter plot of station averaged splitting parameters (FPDs and TDs) inferred from both synthetic S and SKS phases. (top) apparent splitting results inferred from N-S and E-W horizontal components. (b) The same inferred from decomposed SV and SH horizontal components.

Fig. 5. Variation of split time delays with hypocentral depths of the events in this study.