Automatic picking (AIC) to get reference time for correlation on each trace reference station.

Alignment and stacking of traces on reference station based on cross-correlation coefficient beam.

Automatic or manual picking of first motion on high SNR beam trace beam.

Shift each trace $i$ by $\Delta t_i$ to align it to the beam trace and calculate pick correction time $\Delta t_i$.

Correction of onsets by difference to beam trace onset and estimation of uncertainty corrected onset AIC onset $\Delta t_1$. 

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