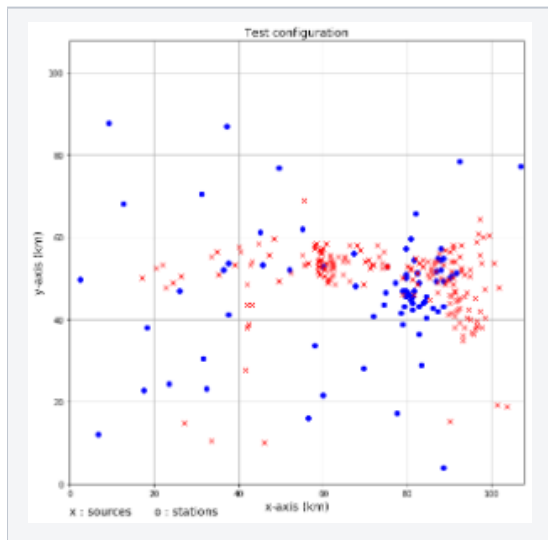
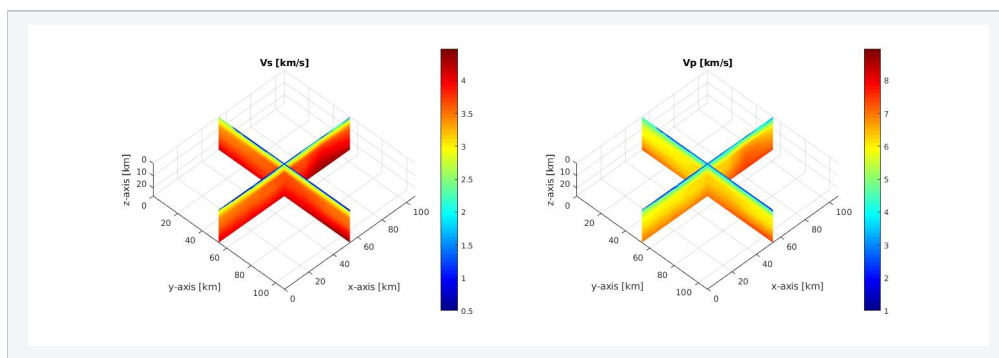


Test configuration for the Canterbury region

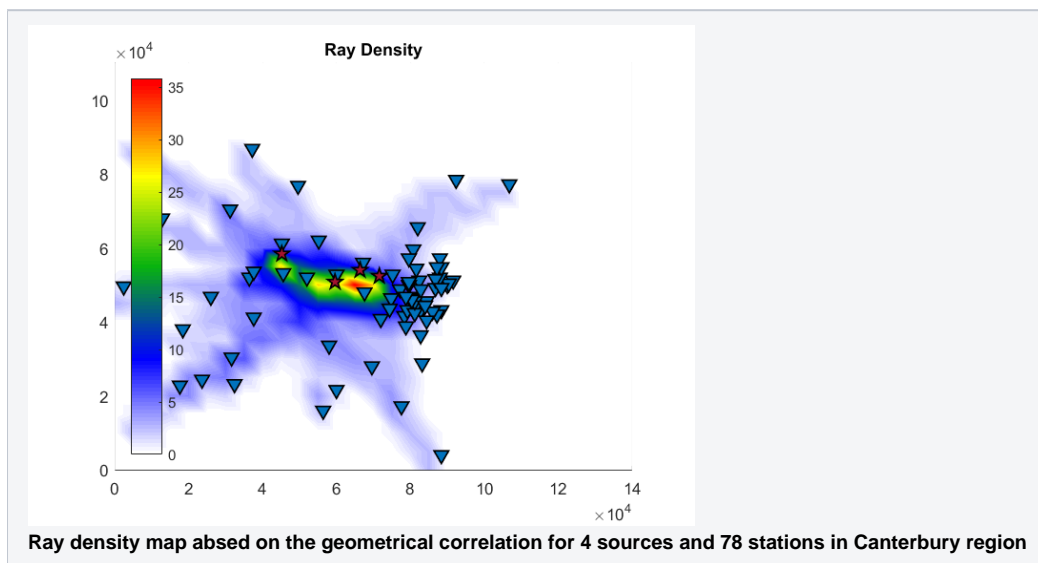
Locations of sources and stations in a 2D grid. The depths of sources are not mentioned.

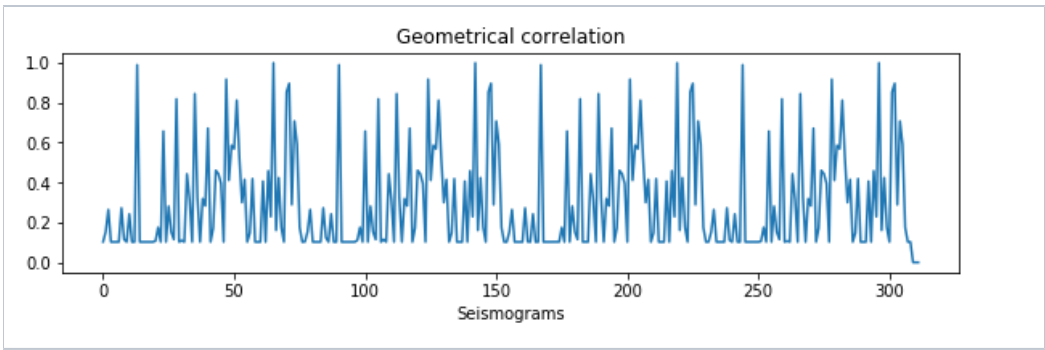


The 3D geological velocity model of Canterbury region

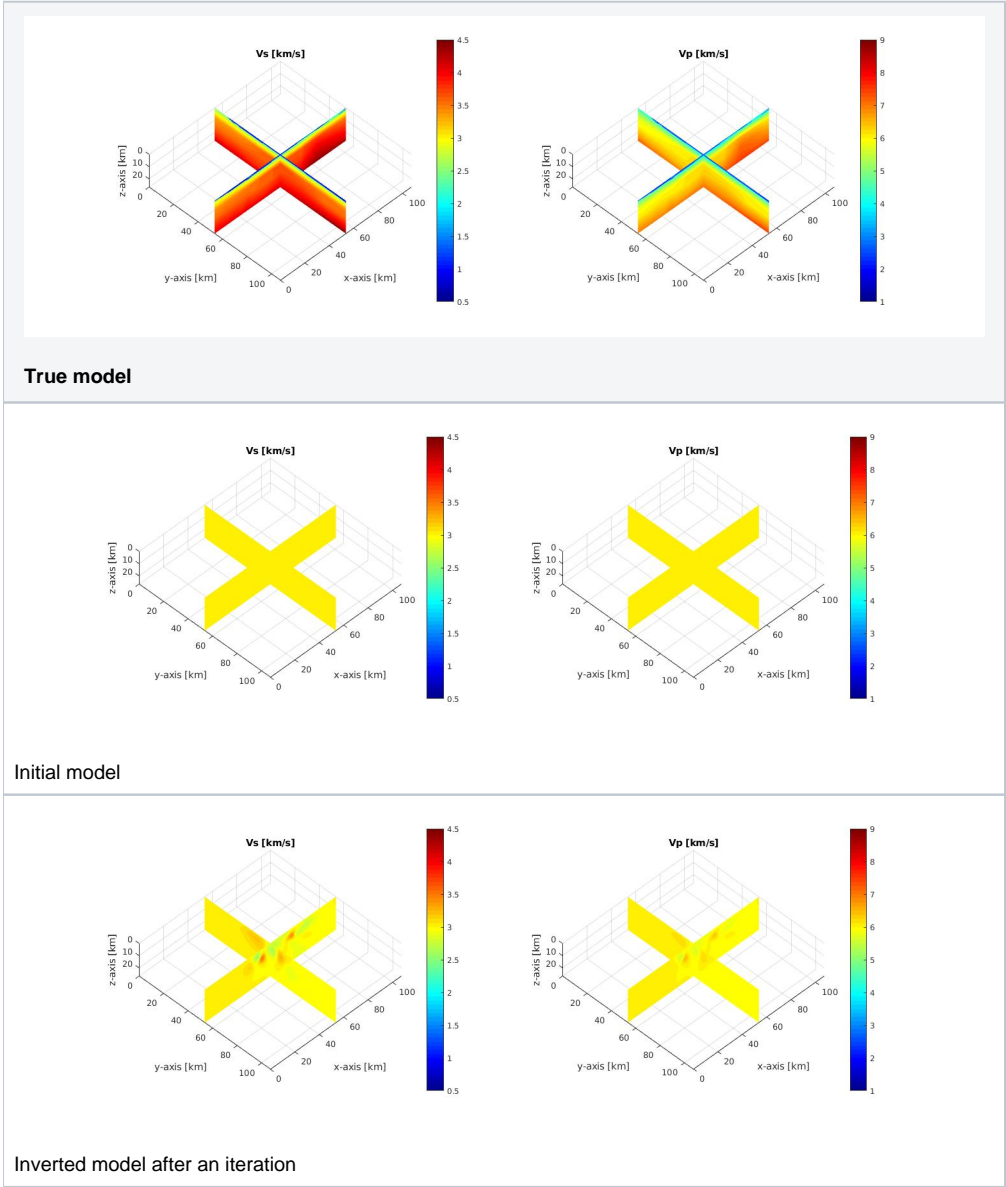


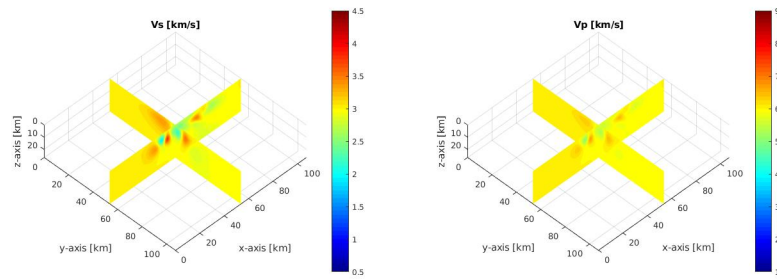
Geometrical correlation among 312 seismogram channels for 4 sources and 78 stations. This value can be used as weight function for measuring the redundancy of data usage.





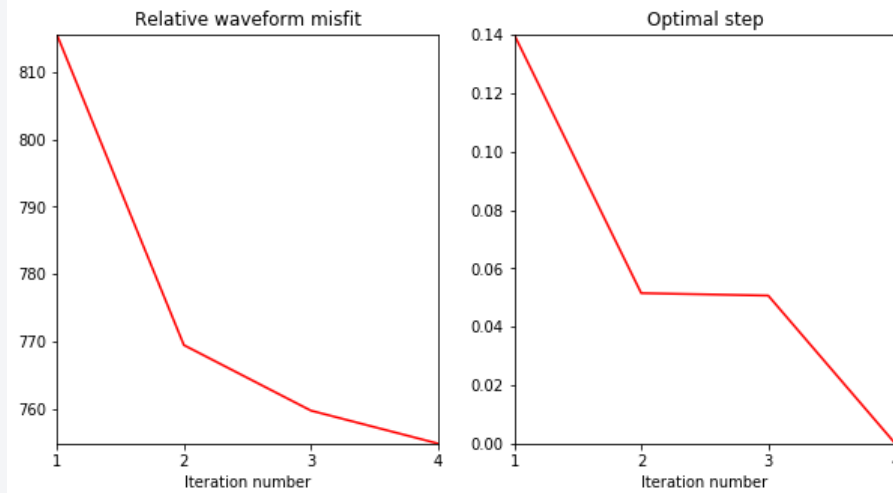
The true, initial and inverted models involved in the inversion process using 4 given sources and 78 stations. The adjoint-wavefield method uses reversed-in-time displacement residual as adjoint source.



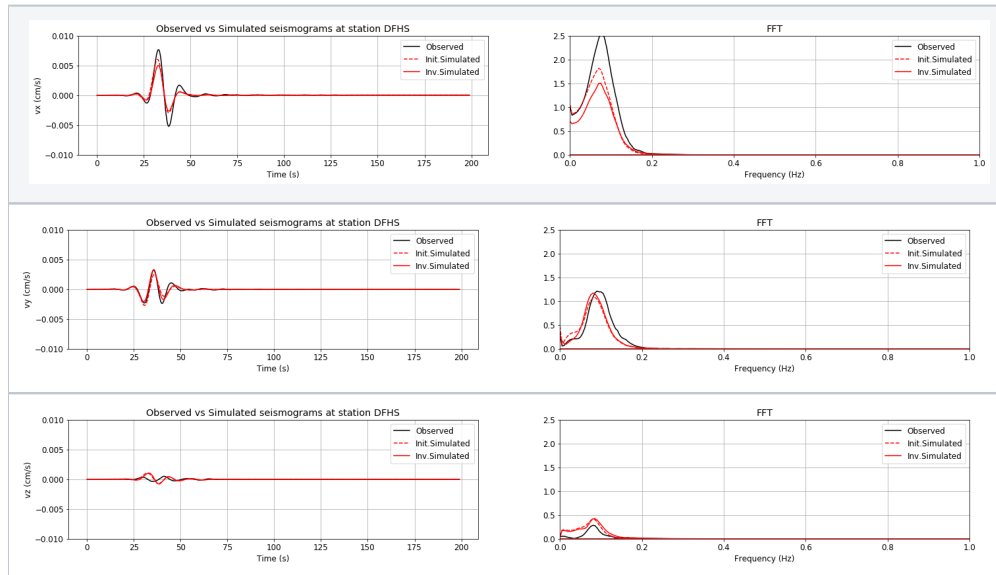


Inverted model after 3 iterations

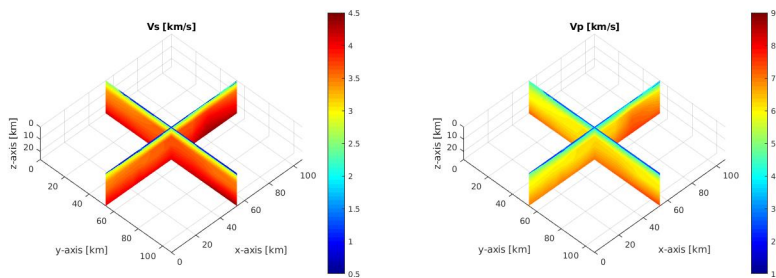
Misfit function and step length:



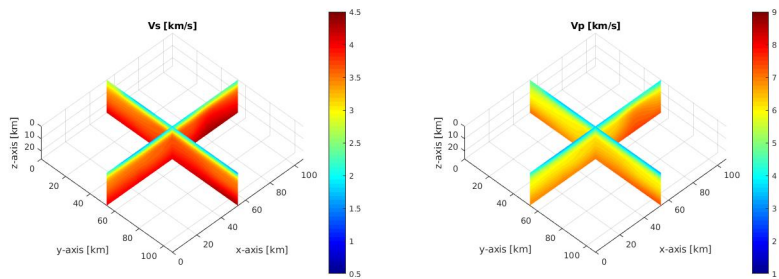
Waveform comparison between observed and simulated seismograms after one iteration for source 4 (event **3550173m4pt7**) at station **DFHS**



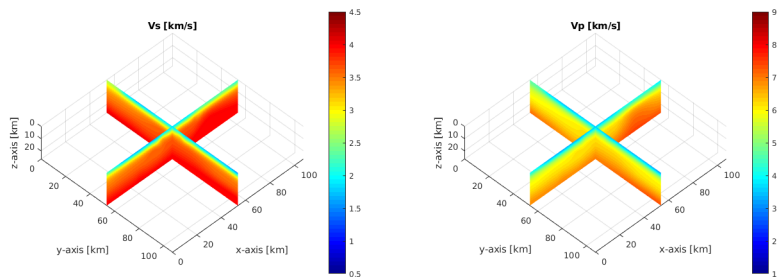
Inversion starting with a smooth model from true model using 4 given sources and 78 stations.



True model

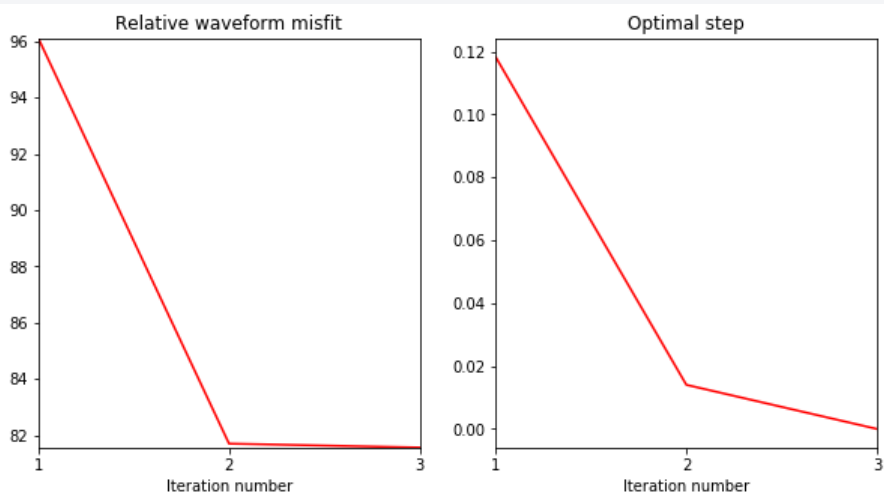


Smooth initial model

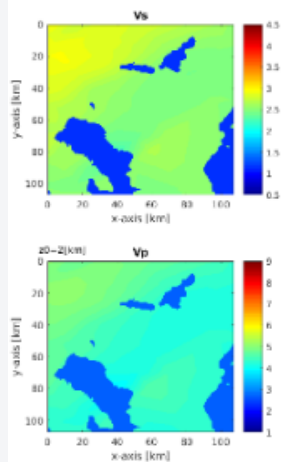


Inverted model after 2 iterations

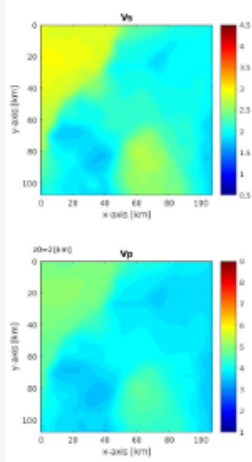
Misfit function and step length:



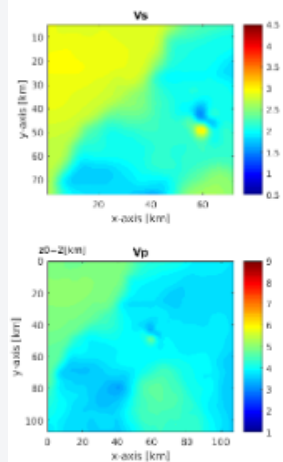
Cross-session comparison at z=2km



True model



Smooth initial model



Inverted model