

Brady Geothermal Field 2010-2015 Microearthquake Hypocenter Relocations and Three-Dimensional P- and S Velocity Models

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Simultaneous inversion for 3D P- and S-velocity structure and hypocenter locations was carried out using the LBNL program SimulCR. Total of 476 hand-picked events are used for the inversion, out of which 347 are relocated and rest are rejected by SimulCR. Rejected events are either outside the study area or provide a poor fit to the data. For the simultaneous inversion, we have used data only from the Brady telemetered network (see GDR submission number 469, Dec. 21, 2014 for network details).

File *BradyHypocenters.txt* contains hypocenter locations of local microearthquakes recorded by the Brady network during the period Nov. 13, 2010 – April 24 2015. In addition to latitude, longitude and depth below mean sea level, epicenter locations are given in km East (X) and North (Y) of a local coordinate origin at 39.776444N, 119.039917W. Event magnitudes are from the routine LBNL catalog. Fields NO and RMSRES give the number of P and S phases used in the inversion and the root-mean-square residual of the final solution, respectively.

Files *Vp.txt* and *Vs.txt* contain the P and S-wave 3D velocity models, respectively. Velocities are given in km/s at node locations specified by both latitude-longitude-depth and the local coordinate system described above. Node spacing is 0.5 km in X, Y and Z.