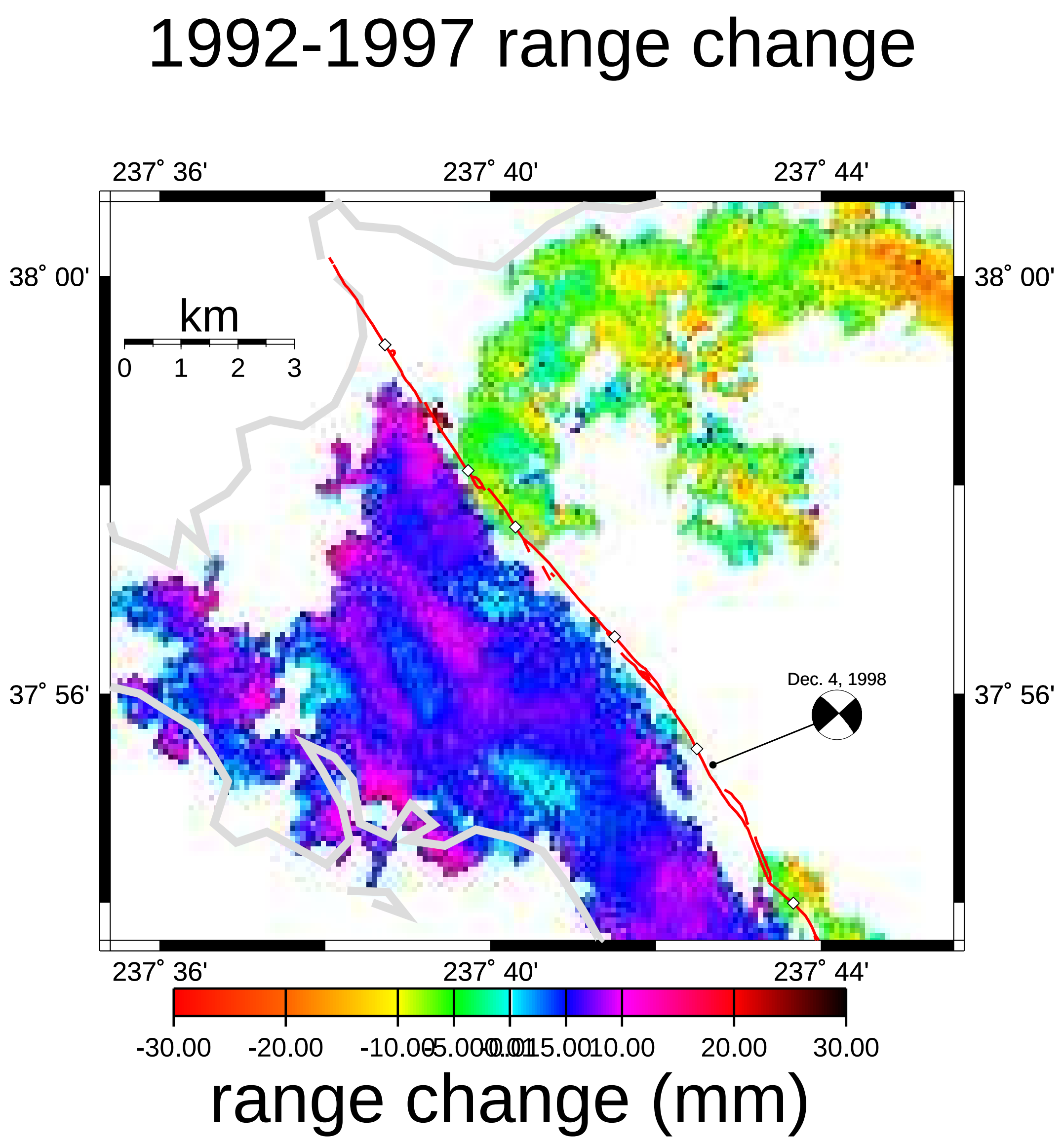


Figure 10.16: Unwrapped interferogram of two ERS images spanning 5.25-year period of faulting and strain accumulation near Hayward fault (ERS track 70, frames 2835 and 2853; June 10, 1992, ERS-1 orbit 4724, and September 06, 1997, ERS-2 orbit 12449). Range changes are computed from InSAR interferogram by unwrapping angular phase delays and converting from phase delay to range change. Steep topography and heavy vegetation cause decorrelation leading to loss of range change information (blank areas). Good correlation occurs almost exclusively in urban areas. An abrupt offset follows trace of recently active strands of Hayward fault indicated by thin red line.

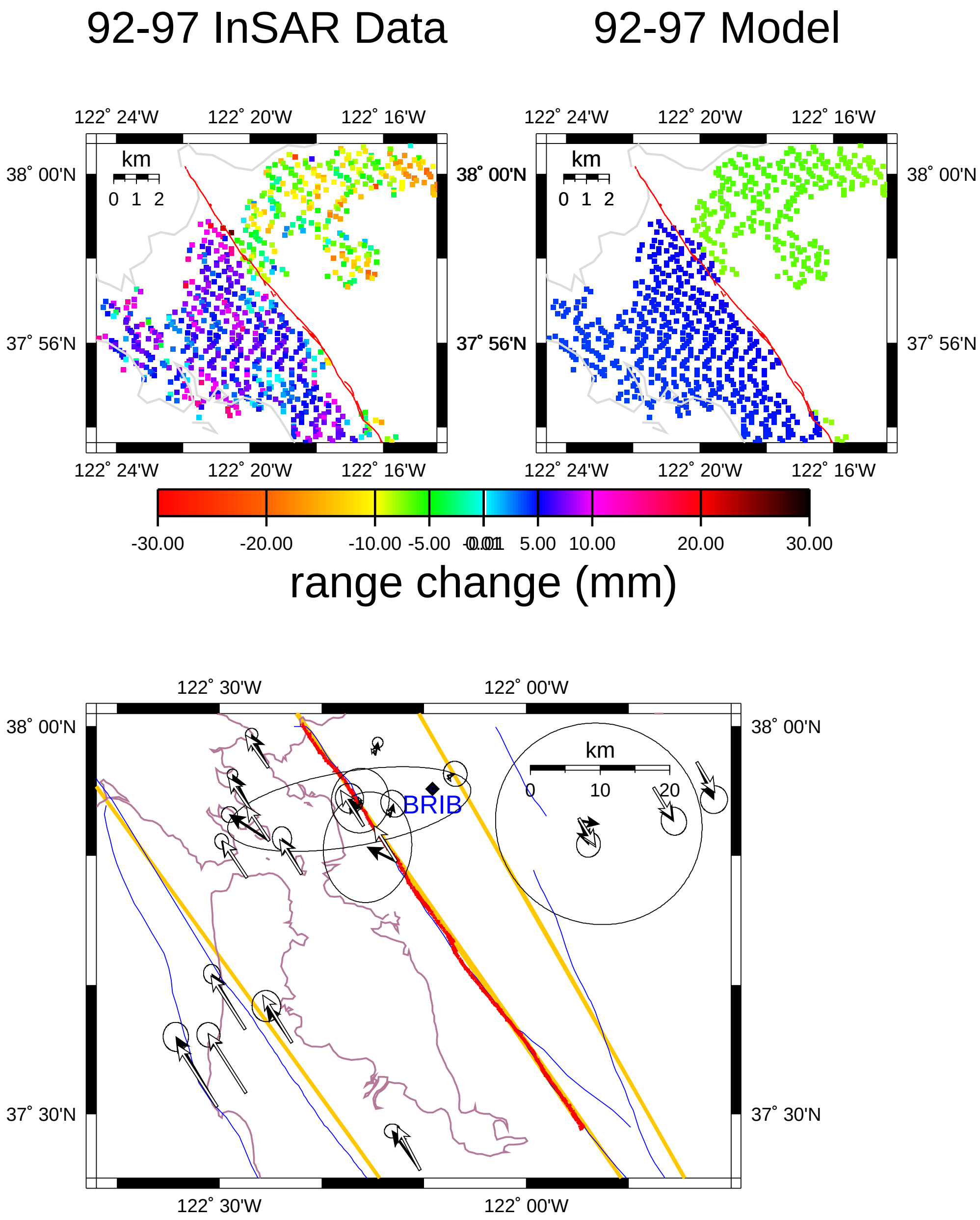


Figure 10.17: Joint inversion of GPS and InSAR data. We can now formally combine the two data sets in our model inversions. Preliminary results using the existing GPS data set shown in the bottom panel (solid arrows) and 1992-1997 InSAR data shown in the top left panel (subsampled to the number of data points shown) suggest a best fitting model with creep to 7 km. Additional GPS data and additional redundant InSAR data are required to better constrain our models.