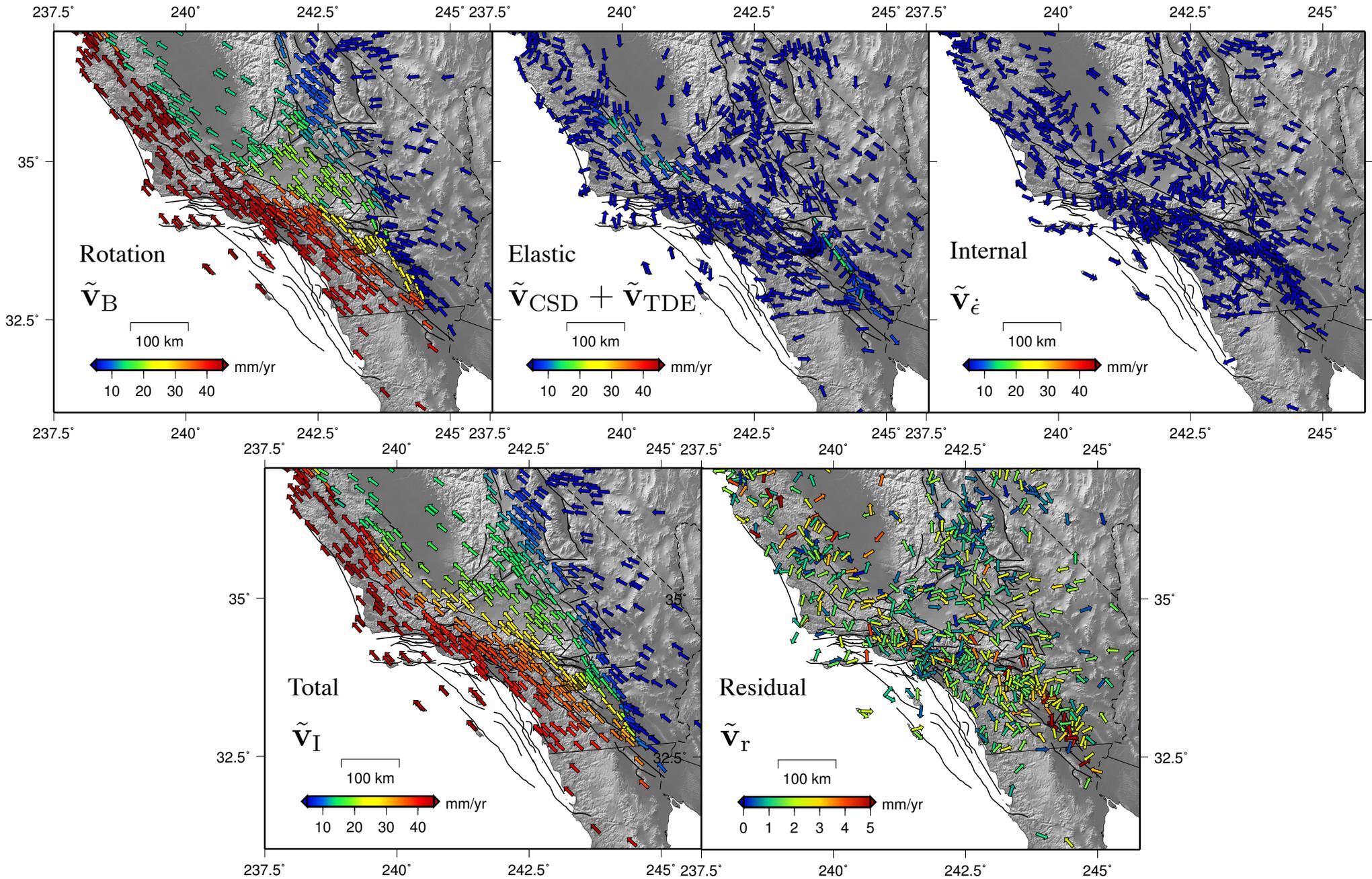
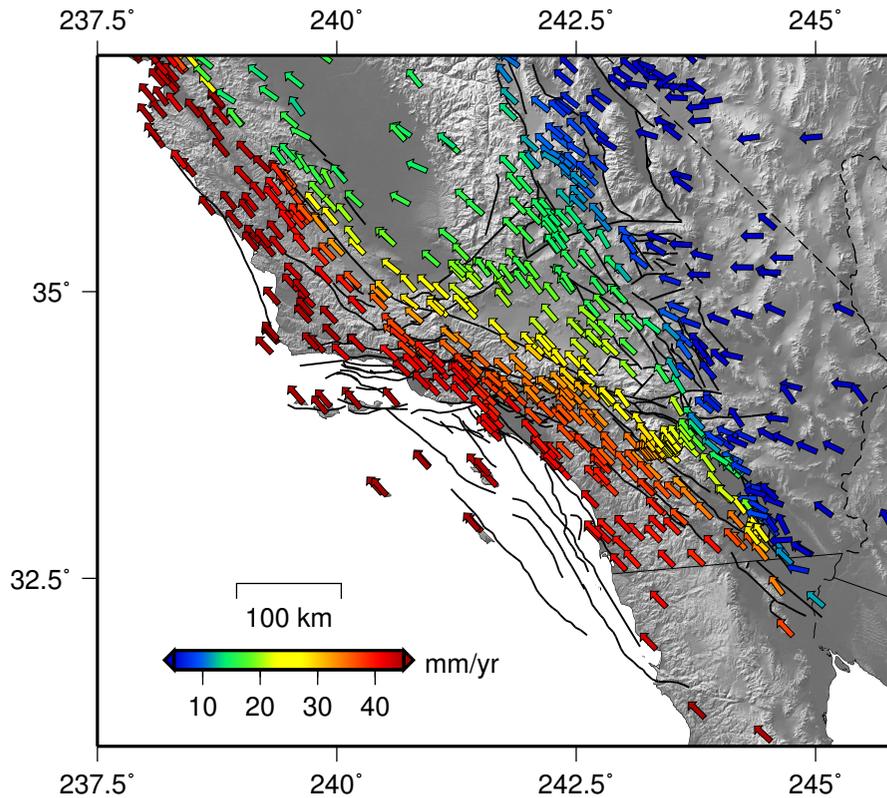


# Components of an interseismic velocity field

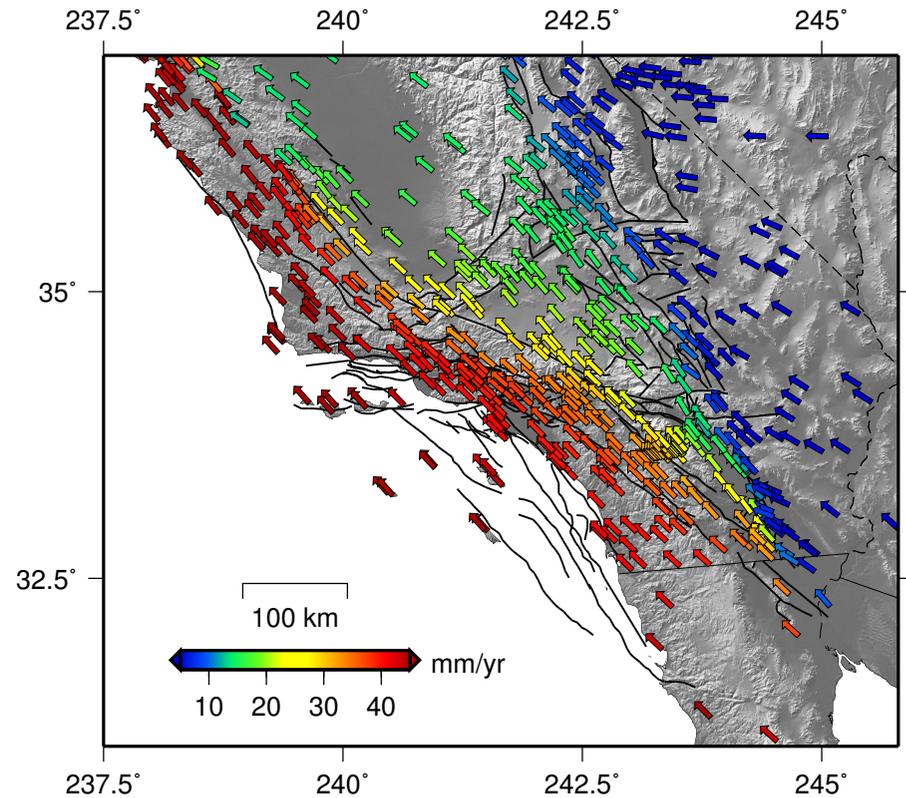


# Observed and modeled interseismic velocity fields

## Observed velocities



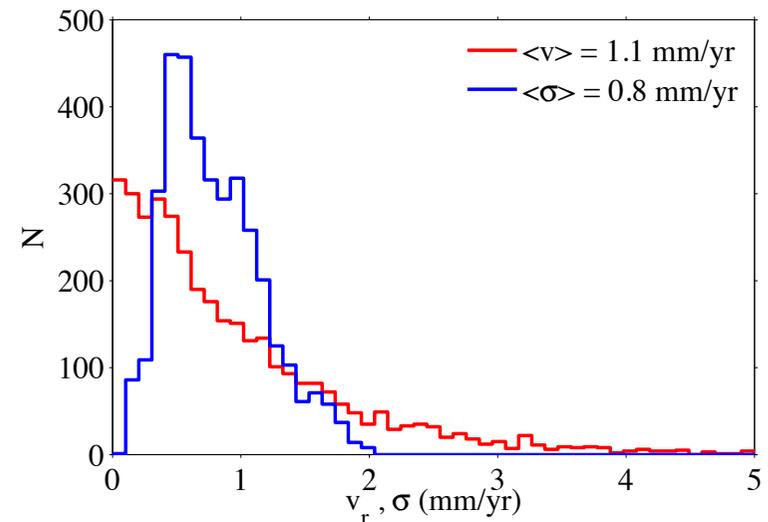
## Modeled velocities



1862 GPS stations

3 rotation rate and 3 strain rate  
parameters for each of 23 blocks

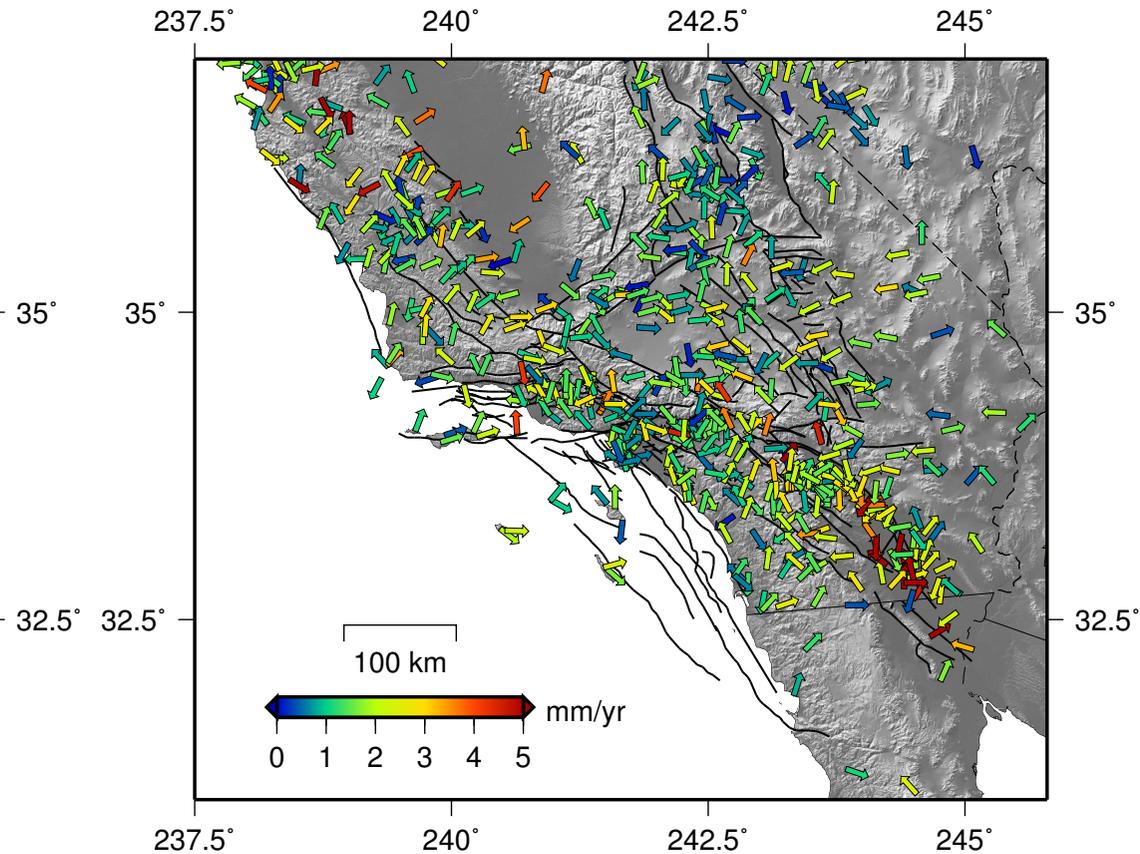
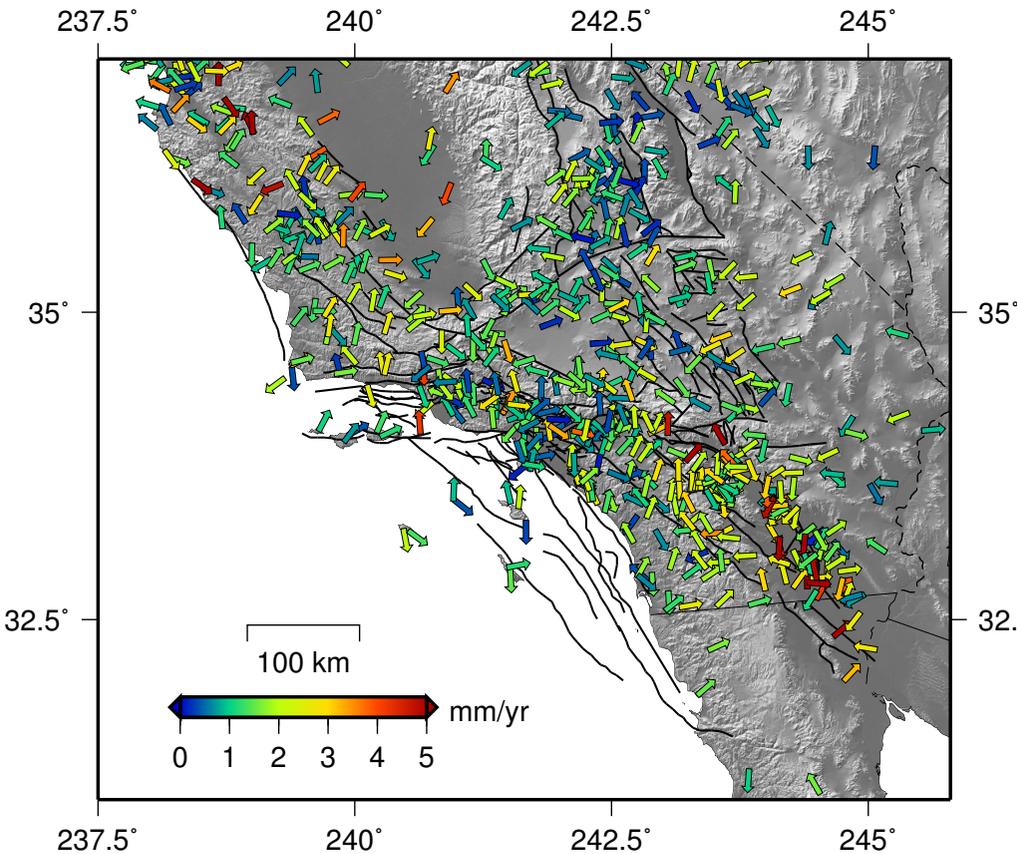
Fault slip rates are the predictions



# Residual velocity fields

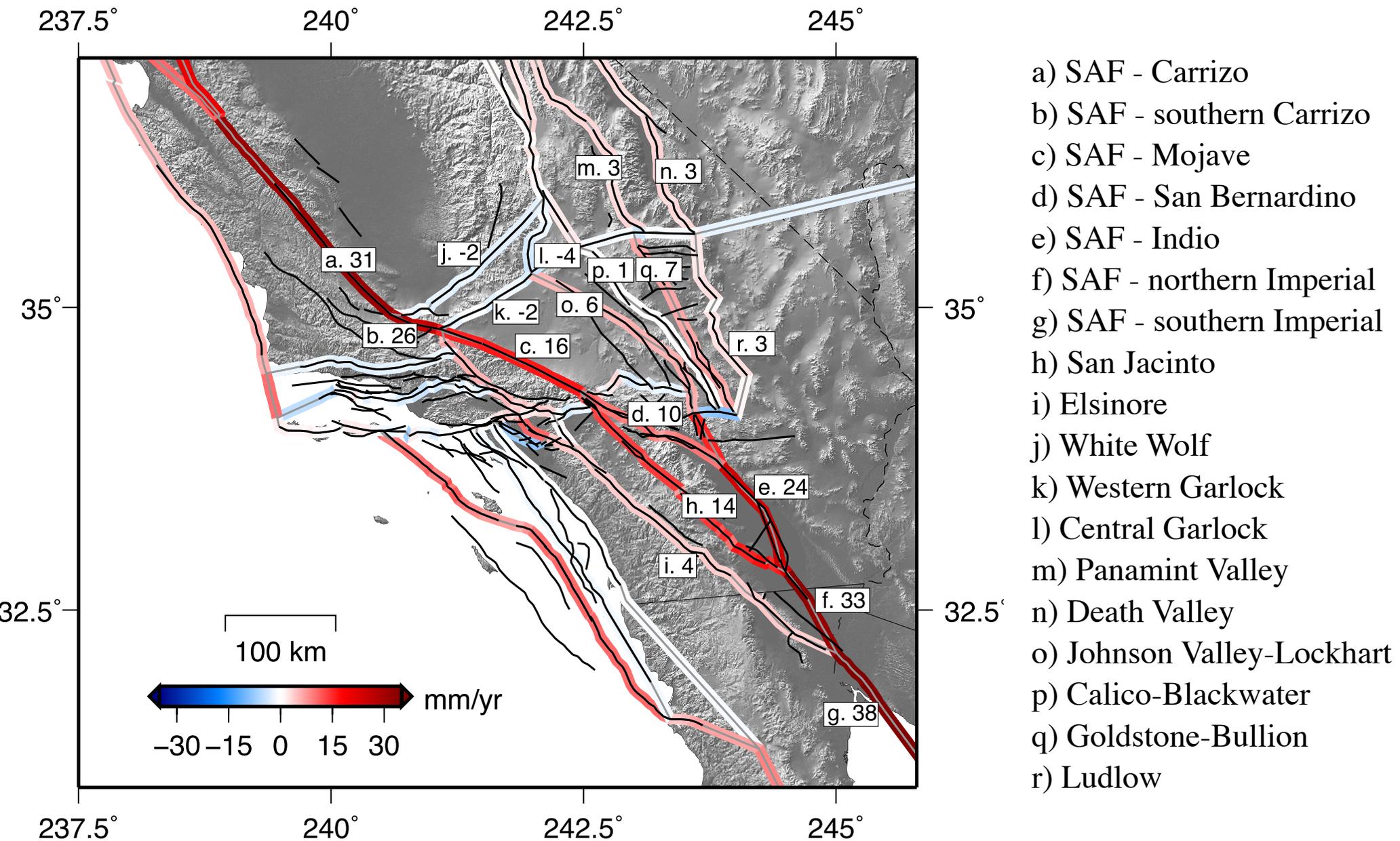
No internal block strain  
mean residual magnitude:  
1.76 mm/yr

Internal block strain  
mean residual magnitude:  
1.67 mm/yr



F-tests suggest that doubling the number of free parameters (adding strain rate tensors) has a 50% probability of accounting for the observed increase in the goodness of fit statistic

# Estimated strike slip rates in southern California



Formal slip rate uncertainties range from 0.4 to 3.5 mm/yr