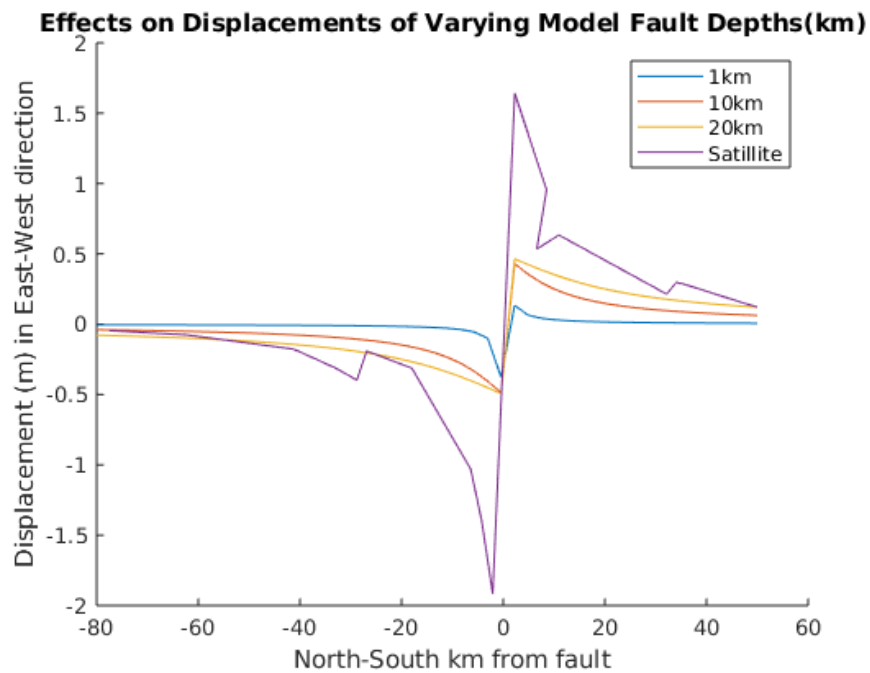


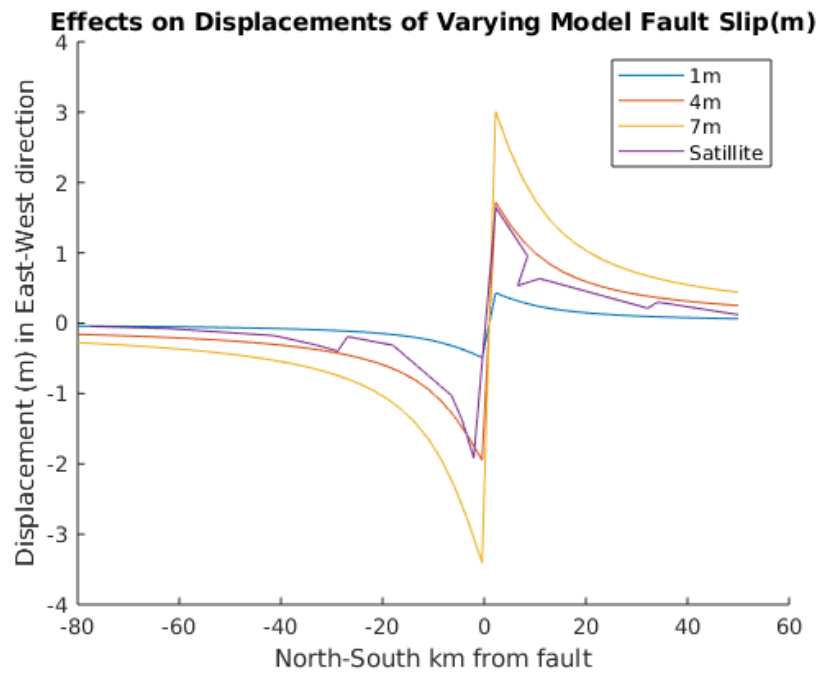
# Homework 5

Toby Harvey

February 19, 2020

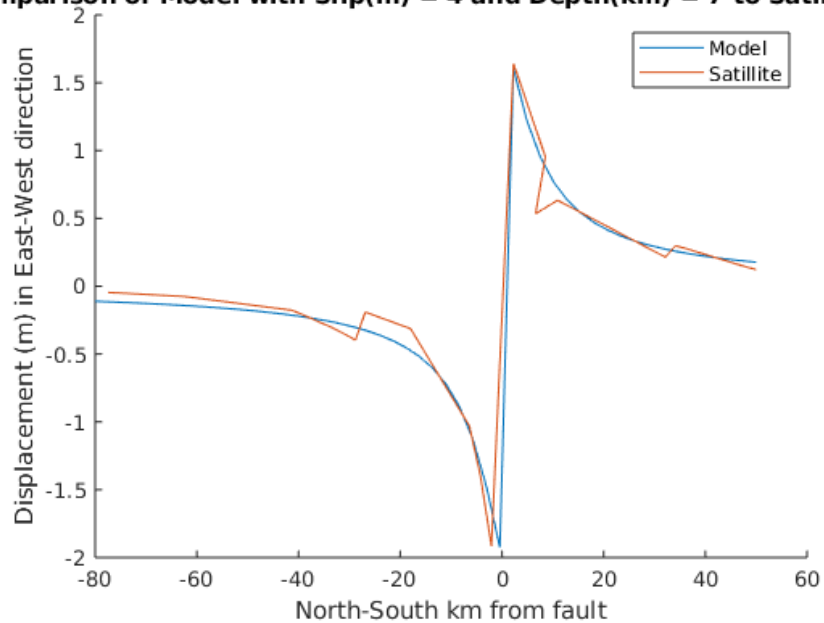


As the fault gets deeper the displacements in the east-west direction farther from the fault, in the north-south direction, grow. i.e. Fault depth effects the amount of displacement away from the fault, more than near the fault.



As slip increases, displacements near the fault grow faster than displacements far from the fault.

**Comparison of Model with Slip(m) = 4 and Depth(km) = 7 to Satellite Data**



Possible reasons why the model doesn't perfectly fit the Satellite data:

\*We are assuming isotropic media in our model (i.e. when we use Hookes law to derive our model we are assuming that  $\lambda$  and  $\mu$  are constant in space)

\*There is error in the Satellite measurements.