

Forward Model Discussion

What code should be used for forward model?

- Some agreement on what program(s) to use for the kinematic forward models
- For that purpose the results of the Greens fn tests will be necessary
- We should settle on a set of codes for the set of tests

An open test model before blind test

- After the Greens functions test, as first step, a revealed open model is suggested.
- Later on, with slight changes, we can turn it over to someone else who can turn it into a blind model.
- Someone can run a dynamic code to
- At this stage a lot of things about format issues, wrappers etc will be more clear.

Nature of the open models?

- Elliptical crack
- Is this acceptable
- Slip pulse model vs crack model
- kinematic slip pulse

Inversion of Forward Spontaneous Dynamic Source Models

- Two steps ?
 - a dynamic code runs the fault model
 - and then the time histories are put in to a kinematic code
- or one step to calculate the waveforms on a dynamic code.
- Fine grid
- Broadband synthetics
- High frequency up to 20 Hz
- In the forward model, should there be Q operator
- Any other suggestions

BLIND MODEL

- Geomterically compatible with the open forward model.
- The initial blind model should not be too different from the open models to make things faster and more convenient for modelers.
- start with no surface rupture. Codes cannot actually handle surface rupture.
- Wave number spectrum is something to be discussed. Do we want to make sure that it is consistent with observations, corner freq, k^{-2} decay.

- Eventually we would like to use a FEM forward model
- Eventually non planar geometries, geometrically realistic EQ