The Model

quasistatic

elastic

3D geometry

fault patch (small dislocations with an associated area)

Green's function stress transfer

event sequences

The Interface

constructing and editing model geometry and physical parameters

running simulations, saving/reloading simulation state

graphically displaying observables (stress, slip, failures)

Larger Issues

modularization

modification

development versus long runs

web-based interaction

standardization versus flexibility

interfaces to programming environments