Model Parameterization
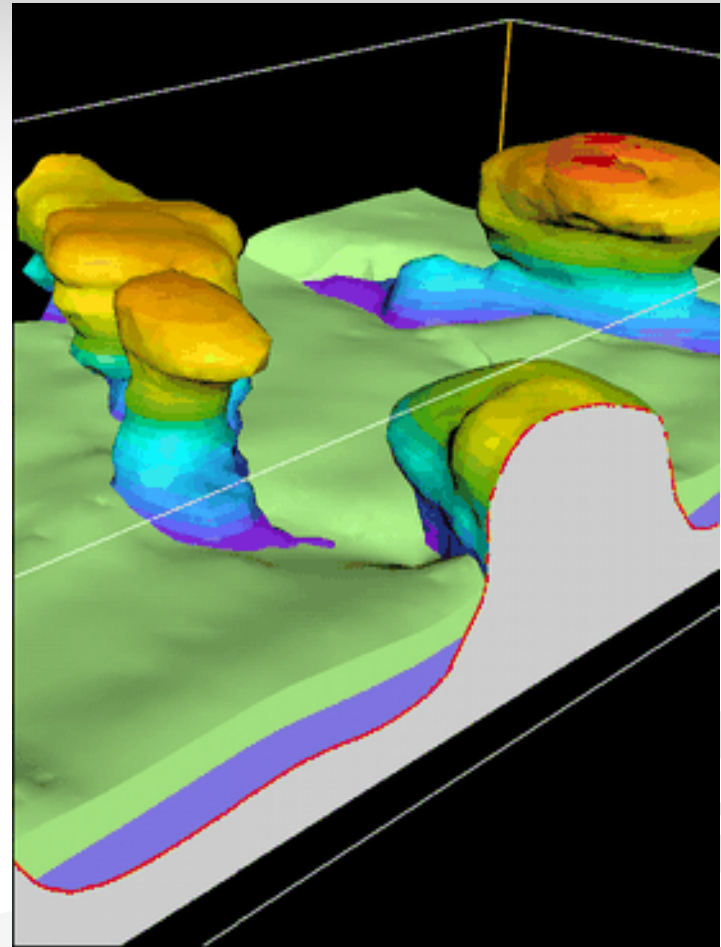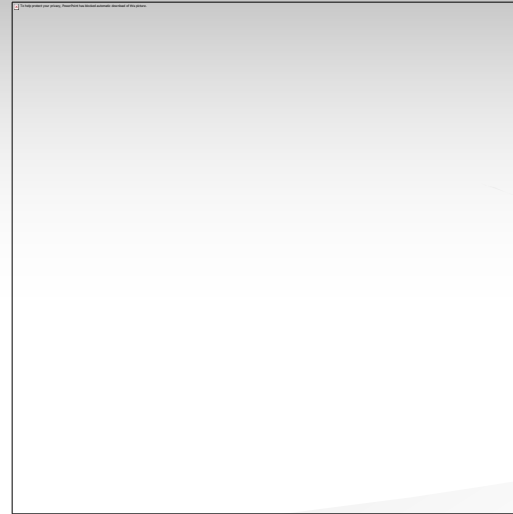
- Standardized input and interpolation of α, β, ρ

- Geophysical constraints and relations between parameters

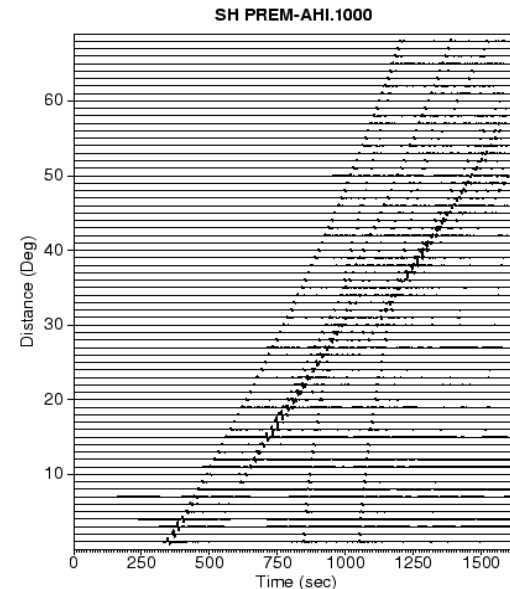# Unfriendly Code Input

- Ray codes
- Integration paths
- Filtering, instruments, source-time functions

```
C       NOTE. IN THE FOLLOWING, THERE ARE NLEGS+NDISC LINES
C    EACH JSEG LINE, UNLESS NUMBER(JSEG) IS NEGATIVE (IN WHICH
C    CASE THE NLEGS+NDISC LINES FROM THE PREVIOUS JSEG ARE
IMPLIED).
C    DO 100 JSEG=1,NSEG
C    READ(KR,*)
BOTTOM,TOP,NUMBER,KIIN,KPULSE,IFRSHF,NLEGS,NDISC,
C    2  IDEL,LDEL
```
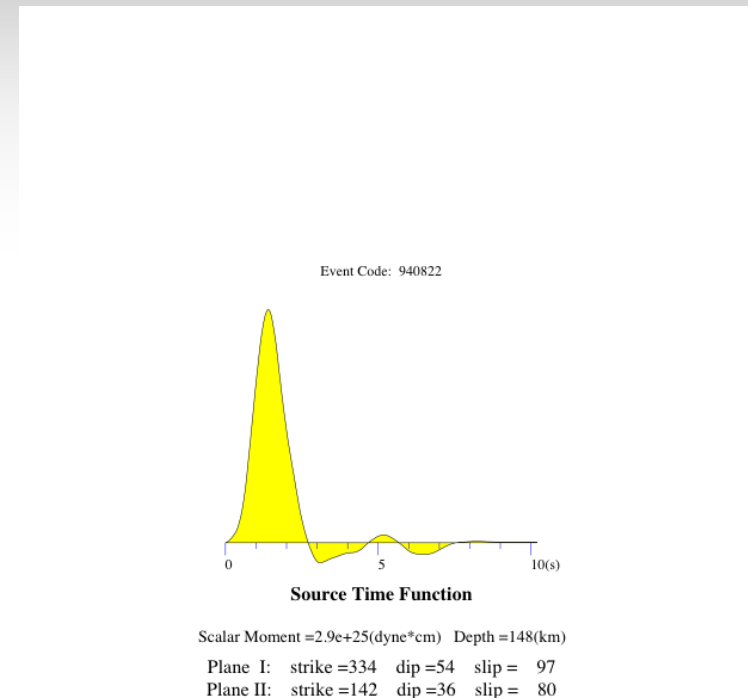
Reference Green's functions

- Seismograms in 1-D models 0.001 to 2 Hz, 0 to 180 degrees

- Candidate algorithms: Modes, SPECFEM, FD/pseudospectral

SH PREM-AHI.1000

Source-time functions

- Reference far-field source time functions for Mw 5.0 to 6.8

- Standard parameterization and digitization; downloadable

Event Code: 940822

Source Time Function

Scalar Moment =2.9e+25(dyne*cm)   Depth =148(km)

Plane I: strike =334   dip =54   slip =   97
Plane II: strike =142   dip =36   slip =   80

Who will do this and how will it be funded?

Problem: providing a research tool is not research