

*CoSOI Working Group on
Global 3D Seismic Model for Seismic Observatory Applications*

Progress since IASPEI meeting in Melbourne (2011)

Working group established in 2012

Initial focus on using 3D models for location

Two options for travel time computation identified

- 3D ray tracing

- Numerical Eikonal solvers

Approaches for implementation

- On-the-fly calculations

- Precomputation (3D lookup or corrections for each station/phase)

Other implementation issues

- The full list of IAPSEI phases may not be computed by all 3D models

- Rough and discontinuous travel time derivatives w.r.t. event location

- Path-specific uncertainty.

- Metrics for improved performance.

Steve Myers,

WG Chair