

TO seminar Dec. 3rd - Victor Tsai

Seismological Imaging of Density Structure

Abstract:

The density structure of the Earth is of crucial importance for understanding Earth dynamics. Despite the common misconception that seismological data are insensitive to density structure, there have been a number of successful seismological studies that determine density in the Earth's interior. However, most of these results have been relatively low-resolution and confined to the deep Earth. Here, I discuss a couple of new approaches to constraining shallow density structure and show that we are able to obtain high resolution images of upper crustal density structure in the western United States. Applications to other datasets are ongoing.