



Prospectus: A Trans-EurAsian Megatransect (TEAM)

L. Brown

Institute for the Study of the Continents, Cornell University, Ithaca, NY, 14853, USA
(ldb7@cornell.edu / FAX 001-607-254-4780 / Phone 001-607-254-4780)

Deep seismic profiling of the continental lithosphere has been most effective when it is sufficiently extensive to provide regional context to the features being imaged. Long profiles have thus tended to have more scientific impact than short surveys. An excellent example of this perspective is provided by the recent compilation of LITHO-PROBE deep seismic results into a transcontinental profile of North America. An opportunity for an even more extensive compilation is represented by the accumulated deep seismic results in Europe. In particular, deep reflection profiling results from a variety of groups now extend from the Baltic Shield across the East European craton, across the Urals and onto to the Siberian craton. At the same time, deep seismic results near Lake Baikal, and proposed new transects that extend from Baikal to the North China craton (Central Asian Orogenic Belt), suggest that completion of a geophysical transect of the entire Eurasian tectonic collage is within sight. The concept of a Trans-EurAsian Megatransect (TEAM) provides a new framework in which to a) synthesize existing geophysical data, cored by deep reflection profiling and the older PNE DSS results, and b) focus attention on the work that is needed to complete this unique supercontinental perspective.