

Seismic Bright spots in Qiangtang Terrane from deep reflection surveying

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Deep seismic reflection profiling is one of the finest methods to probe the crustal structure. By a lot of deep seismic reflection survey, the scientists found that there are many “bright spots” with unusually high amplitude reflection characteristics in the crust. There are different from the “bright spots” reflecting the hydrocarbon accumulation in oil exploration. The “deep reflection bright spots” are usually located in the crustal scale structures, which often are related to subduction, crustal thickening and other geological events based on publicly reported in the literature. In the Qiangtang terrane, central Tibet, the “bright spots” on deep seismic reflection profiles occurs at upper crust. We think that it would be a hard crystallized basement marked by high amplitude, normal reflection polarity, increasing S wavevelocity and low Poisson ratio.

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