

On the cause of low velocity zone in the D" layer

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D" layer contains various types of heterogeneities with various amplitudes. Among these ultra-low velocity zone is a most fascinating structural unit here. Abnormally large reduction of S wave velocity in this zone indicate is partial melting (Revenaugh & Meyer 1997). In this report we propose that ULVZ is caused by the partial melting of basaltic component of the subducted slab. This model is consistent with the high velocity reflector in D" layer.