The stability of D" layer and its influences to the topography at the core-mantle boundary

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We have conducted the thermo-chemical convection in a 2D cylindrical shell to examine the stability of D" layer and its influences to the topography at the core-mantle boundary. The D" layer is assumed to be generated as the chemical heterogeneties. We have simulated two cases varying with the viscosity structure which are a constant viscosity and a layered viscosity. We obtain that the amplitude of topography at CMB is estimated as less than 2km and characteristic structure is affected with the distribution of chemical heterogeneities.