Correction to “Newtonian versus non-Newtonian upper mantle viscosity: Implications for subduction initiation”

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Received 18 November 2005; published 31 December 2005.


[1] In the paper “Newtonian versus non-Newtonian upper mantle viscosity: Implications for subduction initiation” (Geophysical Research Letters, 32, L19304, doi:10.1029/2005GL023457, 2005), there was a typographical error in equation (2). The stress exponent, \( n \), is missing from the denominator in the exponential. The correct form of the viscosity law when no melt is present and water content is constant is given by

\[
\eta = \left( \frac{dp}{A C_{OH}} \right)^{\frac{1}{2n}} \dot{\varepsilon}^{-\frac{1}{n}} \exp \left[ \frac{E^* + PV^*}{nRT} \right]
\]

where \( A \) is the experimentally determined pre-exponential factor, \( d \) is the grain size, \( C_{OH} \) is the concentration of hydroxyl ions in the olivine, \( E^* \) is the activation energy, \( V^* \) is the activation volume and \( P \) is the lithostatic pressure.