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Corrigendum

Mouthereau, F., Lacombe, O. & Meyer, B., 2006. The Zagros folded belt (Fars, Iran): constraints from topography and critical wedge modelling (*Geophys. J. Int.,* **165,** 336–356)

In Mouthereau *et al.* (2006) there is an error in eq. (1), which provides the relationship between the wedge taper angle $\alpha + \beta$ and the basal shear stress τ_b and internal friction angle ϕ in the thrust wedge (after Davis & Engelder 1985). For clarity the correct eq. (1) is given here.

$$\alpha + \beta = \frac{\beta + \left(\frac{\tau_b}{\rho_{\text{sed}} g H}\right)}{1 + (1-\lambda)\left[\frac{2}{(1/\sin(\phi))-1}\right]} \quad (1)$$

This modification leads to different values of the topographic slopes derived from eq. (1) but does not change our conclusions and even emphasize them. The 'steepest' topography is negative -0.33° and is observed for the highest basal shear stress (443 kPa) and the lowest angle of internal friction (30°). The lowest topographic slope -0.39° is obtained for a lower basal shear stress (11 kPa) and a higher internal friction (40°) (Fig. 9). In Fig. 12 we show that the range of possible topographic slopes obtained for different values of the internal friction of rocks and pore fluid ratios (dry $\lambda = 0$ or lithostatic $\lambda = 0.9$) is still unable to fit the observed topographic slopes of 0.3°–0.5°.

ACKNOWLEDGMENTS

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Mouthereau, F., Lacombe, O. & Meyer, B., 2006. The Zagros folded belt (Fars, Iran): constraints from topography and critical wedge modelling, *Geophys. J. Int.*, **165**, 336–356.

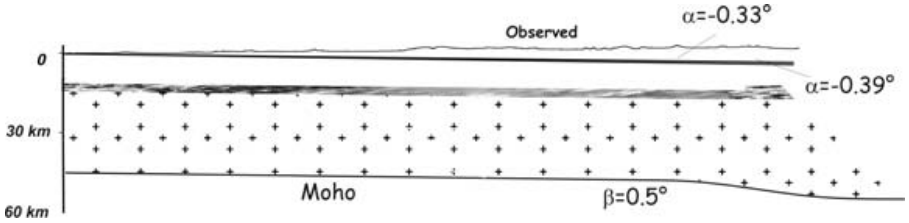

Figure 9. Plot in cross-section of the maximum and minimum topographic slopes α obtained for different viscosities and thickness of salts in cases of dry sediments. The topographic slopes predicted are low and negative. Comparison with the observed topography indicates that the hypothesis of salt-based critical wedges (Davis & Engelder 1985) is not able to reproduce the observed topography. The salt is too weak to maintain the observed topography.

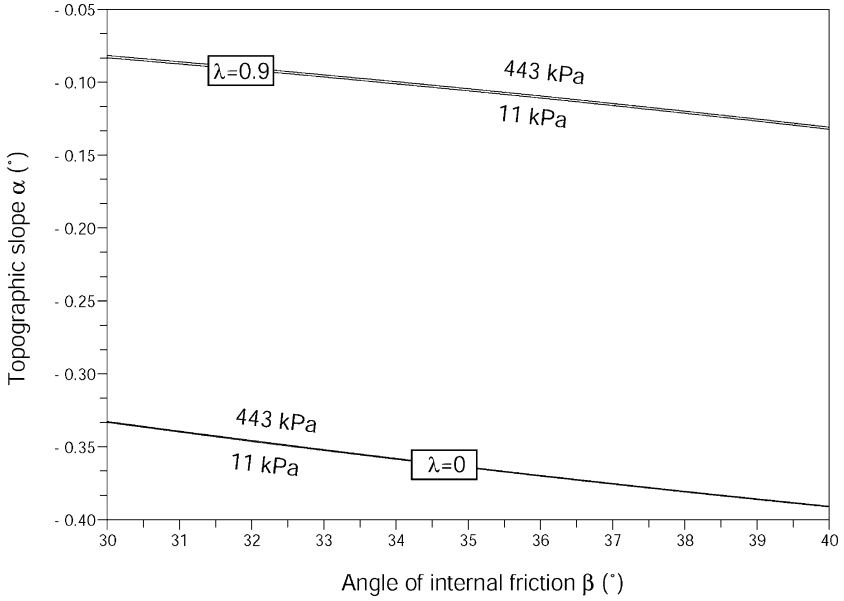

Figure 12. Range of possible topographic slopes α for brittle wedges overlying a plastic décollement (salt-based wedges) calculated for different values of the internal friction of rocks and pore fluid ratio (dry $\lambda = 0$ or lithostatic $\lambda = 0.9$). Two different cases are considered depending on maximum/minimum values of the basal shear stresses τ_b for the salt décollement. Only negative topographic slopes are predicted by the model. Note that increasing the pore fluid ratio increases the topographic slopes that may become nearly zero for low internal friction. It is clear that salt-based wedges are unable to fit the observed topographic slopes of 0.3°–0.5°.