A polyclinally folded biotite grain in micro-scale

Supporting figure

A kinked polyclinally folded biotite grain with gently curved limbs of approximately the same thickness (parallel fold geometry). Its four axial traces converge at the core at a box fold (similar to one of the oldest accounts of such folds from field such as Buxtorf (1916). The *supporting figure* zooms the axial part of the fold (also compare with fig. 16.18d of Fossen 2010). Since the underlying mica grain is not folded, whereas the overlying biotite is, it can also be called a detachment- or a décollement fold (see Fossen 2010; also see fig. 7–81 of Ramsay 1967). Since the supporting photo was taken at an extremely high magnification, additional yellow light was made incident on the thin-section to gain clarity (but at the cost of yellowing). Kinking of biotite grains is a common micro-structural phenomenon and has been attributed to bend-gliding of crystals (Hills

1965) or due to dislocation gliding (Spry 1969). Notice that Mukherjee (2011a) recently reported a duplex structure defined by mica grains in micro-scale (also Mukherjee 2007, 2010a, b, 2011b; Mukherjee and Koyi 2010a, b). Rock: sandstone; photo in plane polarized light, photo length: 0.25 mm. Location: Mohand, Uttarakhand, India.

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