

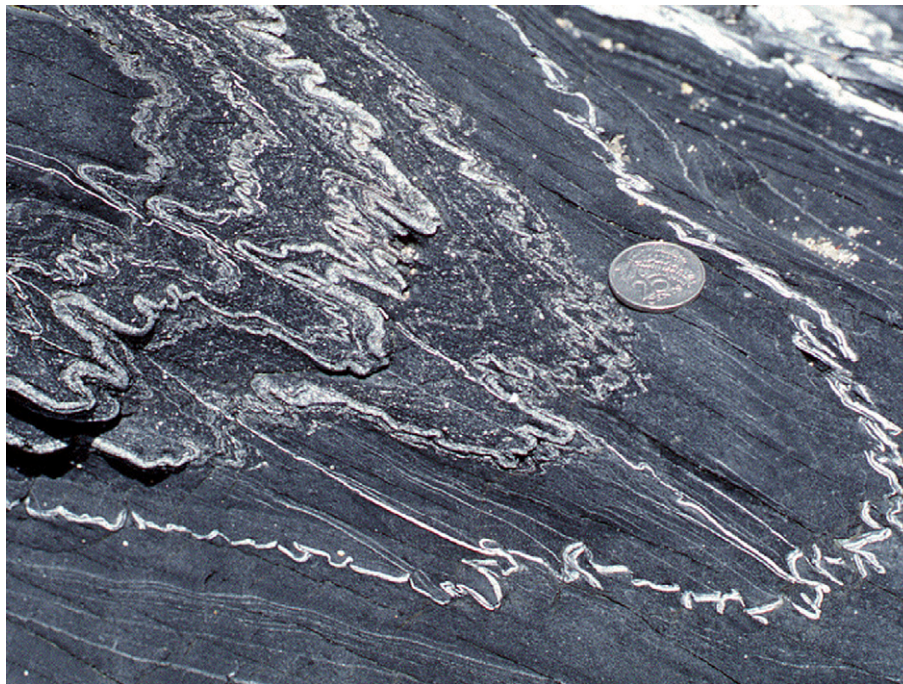
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Photograph of the Month

Folded veins and lamination in slate



Photograph D. A. Ferrill © D. A. Ferrill.

This field photograph, from Tompire Bay at the eastern end of the Northern Range, Trinidad, illustrates cleavage, veins, and folds in a graphitic slate that contains thin sandstone laminae and quartz veins. This synformal mesofold is a meter-scale wavelength buckle fold that contains smaller wavelength (millimeters to centimeters) parasitic and asymmetric folds of thin sandstone beds and early bedding-parallel veins. The ptygmatic geometry of many of the small folds reflects the high competence contrast between layers. Absence of some limbs of the folded vein around outer arc of the synformal mesofold suggests removal by pressure solution. The fold system is cut by an axial-planar slaty cleavage, and late cleavage-parallel quartz veins. This deformation was produced by local contraction during oblique collision and dextral transpression (mid-Cenozoic) within the Caribbean–South American plate boundary zone, which has switched to and is currently experiencing transform (strike-slip) motion (Weber et al., 2001a). For additional information, see Weber et al. (2001b) and Weber and Ferrill (2002). A version of this photograph was previously adjusted by the photographer (D.A. Ferrill), and adopted for use as the base image for the cover of the Journal of Structural Geology starting in 2004.

Please send comments to jsg@uni-mainz.de.

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