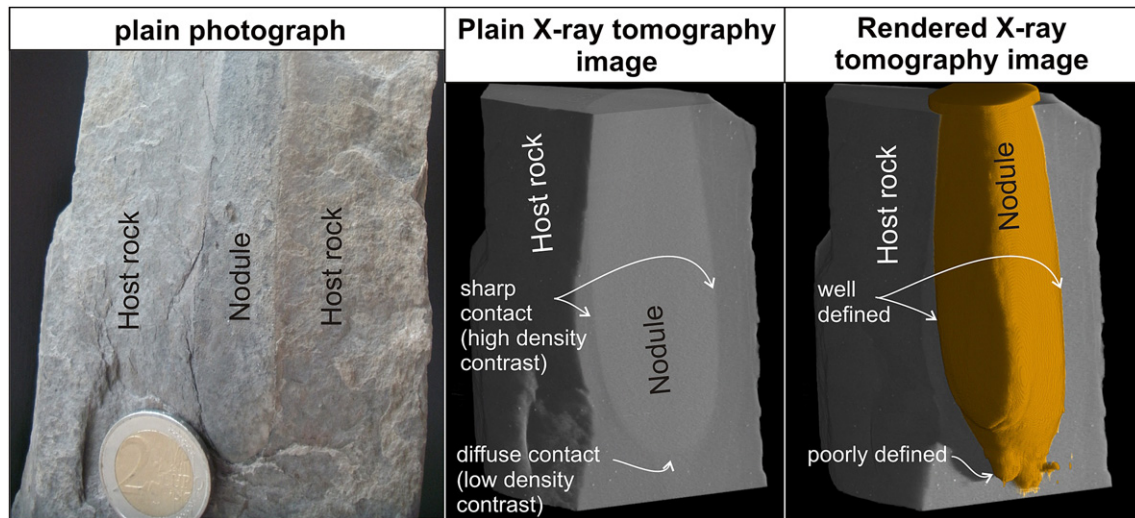


Photograph of the month



3D reconstructed X-ray computed tomography image, acquired at the Centre for X-ray Tomography (UGCT; www.ugct.ugent.be; Ghent University, Belgium), of a prolate Fe-dolomite nodule within a pelitic turbidite e-interval of the lower Ludlow Ronquières Formation within the Anglo-Brabant Deformation Belt (Belgium). The nodule formed diagenetically during the single-phase, progressive Brabantian deformation, which took place from the late Ilandoverly to the Eifellian (Dewaele et al., 2002; Debacker et al., 2005). The nodule long axis is subparallel to the cleavage/bedding intersection and to the regional fold hinge line. The very pronounced prolate shape reflects an increased permeability parallel to the long axis of the Silurian turbidite basin (cf. Verniers and Van Grootel, 1991) and results from ongoing tectonic shortening during and after deposition of the Ronquières Formation. This initial, elongated nodule shape was later modified slightly by compaction and by further progressive shortening during cleavage development after lithification. The latter shortening resulted in pressure solution along the lateral edges and reprecipitation along the tips of the nodules. The former process gives rise to a pronounced density contrast and clearly defined nodule edges, whereas the latter results in a poorly defined tip zone, with a small density contrast with the host rock.

Technical specifications: Tube voltage 130 KeV; X-ray detector: Varian 2520V Paxscan; source: Feinfocus®, FXE-160.51; scan resolution: 145.16 μm .

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Available online 29 December 2011