"The Bou-Azzer glaciation: Evidence for an Ediacaran glaciation on the West African Craton (Anti-Atlas, Morocco)"

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Abstract

This work reports for the first time evidence for an Ediacaran glaciation in Morocco on the West African Craton that we have named the Bou-Azzer glaciation. It is represented by glacially eroded surfaces and sedimentary features observed in Precambrian outcrops in two inliers of the Anti-Atlas Belt. The commonly accepted stratigraphic framework constrains the glacially eroded surfaces to post-date a regionally defined D2 deformational age known to be between 605 and 595 Ma. A minimum age for the glaciations is less certain but likely pre-dates the end of Ouarzazate Group deposition at 560 Ma. This age range permits two possible correlations to glacial events known from elsewhere: the Bou-Azzer glaciation could be equivalent to the Gaskiers glaciation (~580 Ma), which has not been recognised previously in the West African Craton, or it could be a late Ediacaran glaciation (~560 Ma), which has been suspected in different places on the Craton.