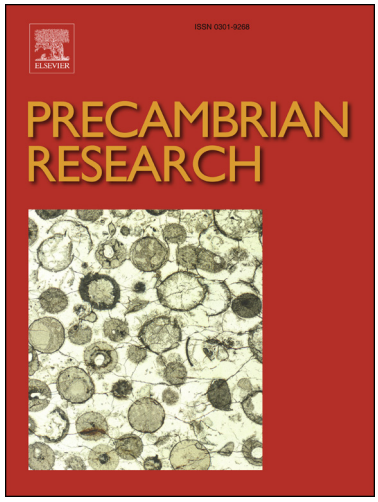

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The stratigraphic complexity of the middle Ediacaran carbon isotopic record in the Yangtze Gorges area, South China, and its implications for the age and chemostratigraphic significance of the Shuram excursion

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ABSTRACT: The middle Ediacaran Shuram excursion represents the most pronounced negative carbon isotopic shift in Earth history, and has been considered as evidence for a profound disturbance to the global carbon cycle and proposed as a key chemostratigraphic marker for Ediacaran stratigraphic subdivision and global correlation. Previous study has revealed a pronounced negative $\delta^{13}C$ shift (EN3) in the upper Doushantuo Formation of South China, which has been interpreted as an equivalent of the Shuram excursion. Detailed $\delta^{13}C$ investigation of multiple sections of the Ediacaran Doushantuo Formation around the Huangling Anticline, western Hubei Province, South China, indicates that the $\delta^{13}C$ variation in the upper