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

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