



A pair of stromatolites within the Cryogenian Trezona Formation near Trezona Bore in the Flinders Ranges, South Australia. These carbonate rocks precede the younger Marinoan glacial succession  $\sim 635$  Ma and record a  $\sim 18\%$  negative shift in the  $\delta^{13}\text{C}$  around the world. This 'Trezona' isotopic anomaly is the largest  $\delta^{13}\text{C}$  shift in Earth history. Left stromatolite is  $\sim 70$  cm in height, and the intra-stromatolite wackestone contains putative fossils of sponge-grade animals. Photograph by Blake Dyer, Princeton University.

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