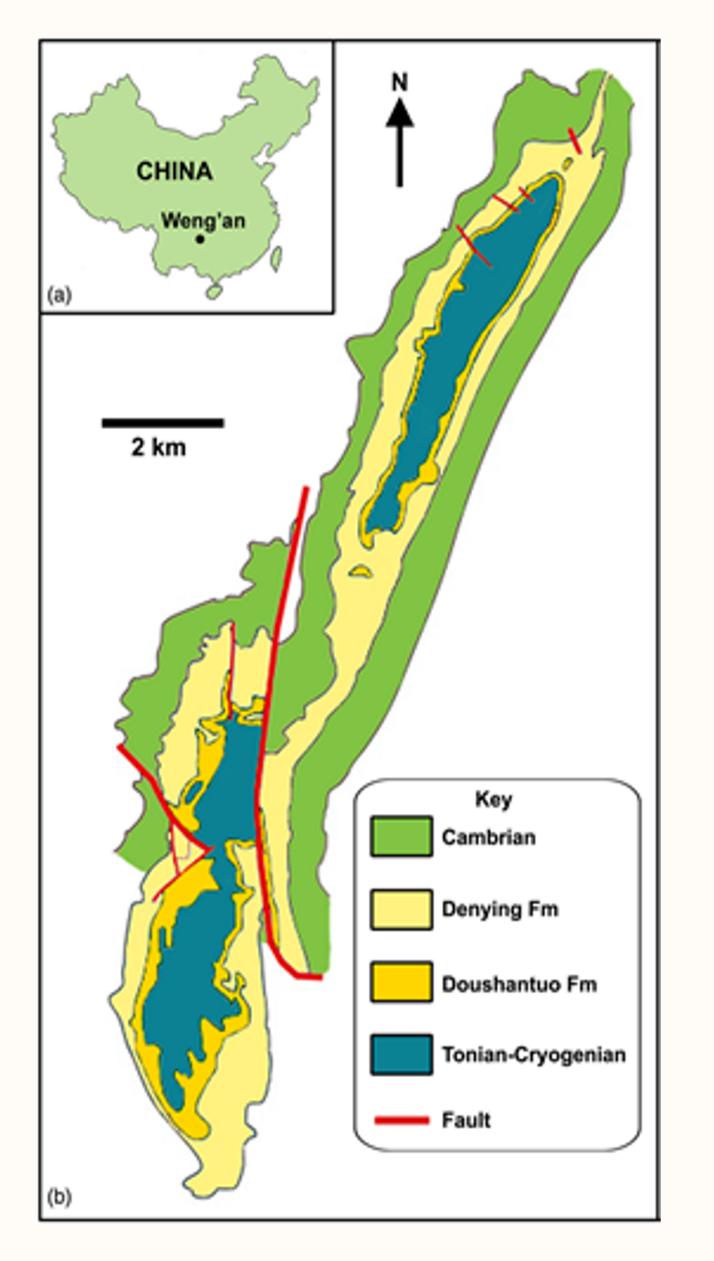
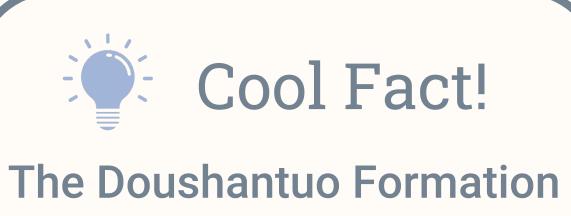
# The Doushantuo Formation The border between the Ediacaran and the Cambrian



The location and geological setting of the Weng'an Biota. (a) Map of China showing the location of Weng'an. (b) Geological map of the Weng'an are.<sup>1</sup>



shares similarities with sites in Oman, South Australia, Newfoundland, and the United States





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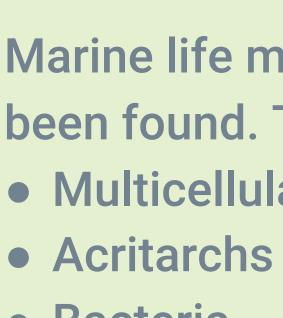
### **Special Thanks to:**

Dr. Thomas R. Holtz, Jr, Professor Christiana Hoff, Teaching Assistant

## Age and Location

The Doushantuo Formation (Weng'an Biota) is located in Weng'an county, Southern China<sup>1</sup>

The site is famous for its abundance and quality of preserved fossils dating 570-609 myr old<sup>1</sup>



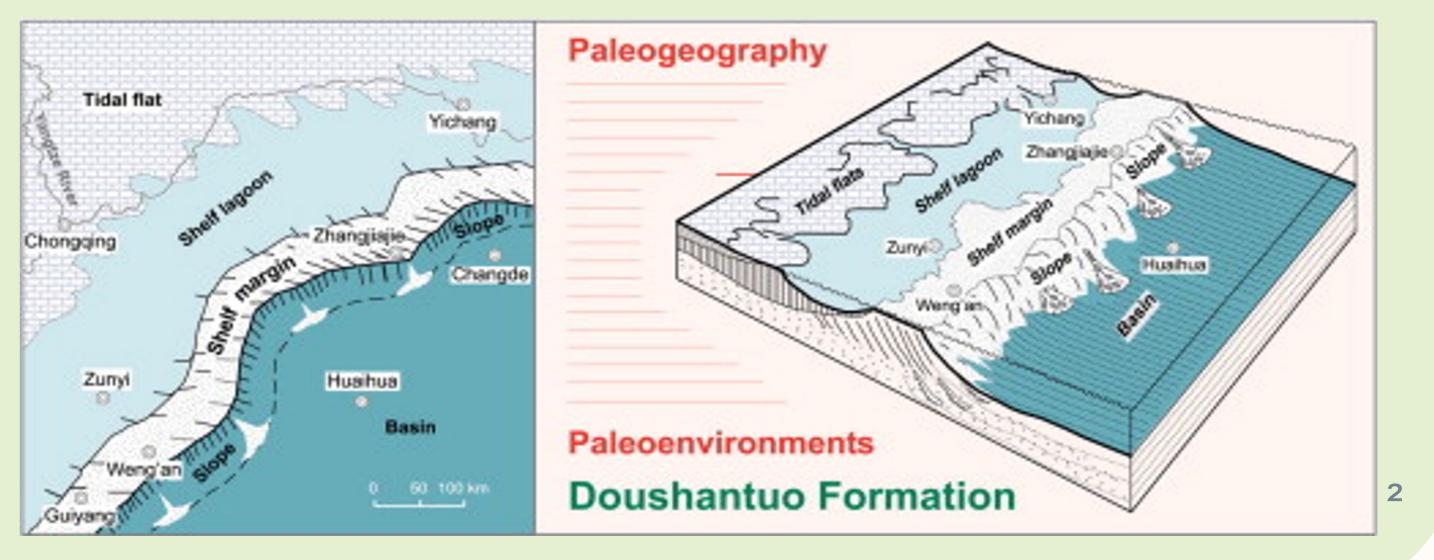
### Importance

Has a record of some of the oldest animal fossils

**Recorded geochemical** changes in the later Precambrian world.

Is a Lagerstätte (easily preservable environment)

Shows oxidation of **Proterozoic oceans** occurred in episodes<sup>3</sup>



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### Fossils

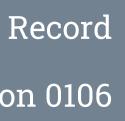
Marine life microfossils and macrofossils have been found. This includes **21 total taxa**<sup>3,4</sup>, such as:

- Multicellular Algae
- Bacteria
- Animal Eggs and Embryos

### Paleoenvironment

Various stratigraphic methods imply the formation was once a shelf lagoon protected from the open ocean by a shelf margin shoal complex<sup>2</sup>

Analyzation of this formation relies heavily on two distinct marker beds ("cap carbonate at the base and organic-rich black shale at the  $top'')^2$ 





Gesna Aggarwal





John Mattingly