

MAPCIS Crater

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About MAPCIS Crater:

- It is classified as a **nonconcentric complex crater**, and could provide invaluable insights into Earth's geological and biological evolution.
- It spans an astonishing 600 kilometers across **central Australia**.
- The newly discovered structure, named as **Massive Australian Precambrian-Cambrian Impact Structure (MAPCIS)**.
- The impact is believed to have occurred at the end of the **Ediacaran period**.
- It includes massive deposits of **pseudotachylite breccia** (melt rock) near the crater's center, presence of shocked minerals, including **lonsdaleite (shocked diamond)**, and impact-level concentrations of iridium.

Key facts about the Ediacaran Period

- It is an interval of geologic time ranging **635 to 541 million years** ago.
- It is the uppermost division of the **Proterozoic Eon of Precambrian** time and latest of the three periods of the Neoproterozoic Era.
- This period produced some of the earliest known evidence of the evolution of **multicellular animals**.
- It was a time of immense geological and biological change, and records the transition from a planet largely dominated by **microscopic organisms**, to a Cambrian world **swarming with animals**.

Q1: What is the Proterozoic Eon?

It is the most recent division of the Precambrian. It is also the longest geologic eon, beginning 2.5 billion years ago and ending 541 million years ago. During this Eon modern plate tectonics became active, and the ancient cores of the continents moved over wide areas of the globe, accumulating smaller fragments of crust and sometimes colliding with other large landmasses.

Source: Massive 600-km-wide crater found in Australia points to ancient cataclysm

Source: <https://vajiramandravi.com/current-affairs/mapcis-crater/>

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