EOARCHEAN ERA (4000-3600 Ma)

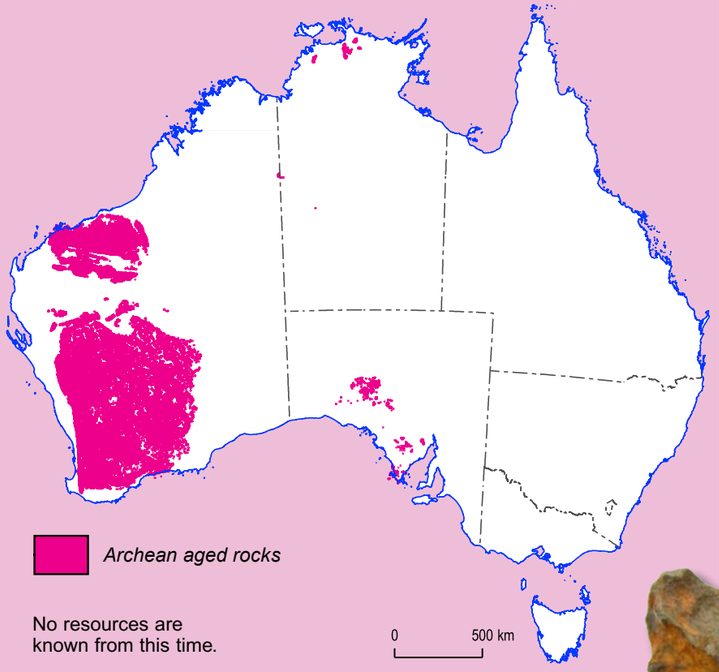
Geological TimeWalk

The intense meteorite bombardment continued, with some meteorite impacts causing the entire **ocean to boil**. This forced water vapour into the atmosphere. Some impacts were large enough to melt the surface of the Earth.

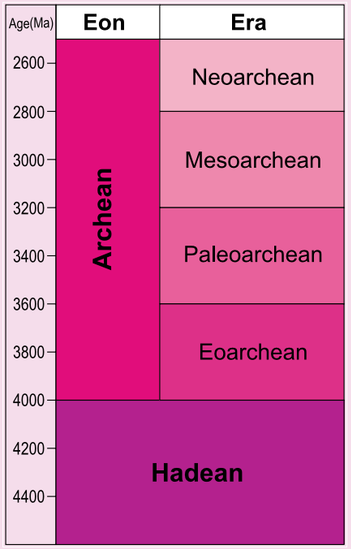
The Sun was dimmer during this era, so less solar radiation reached the Earth's surface. The atmosphere continued to have high concentrations of greenhouse gases, yet still had no free oxygen.

The meteorite bombardment ceased. **Continental blocks began** to form and rocks from these early continents can still be found in Western Australia, Canada and Greenland.

Archean rocks and resources in Australia



Eoarchean Timescale



Meteorite fragments found in the Henbury Craters, Northern Territory, were originally used to date the formation of the Earth at about 4 560 million years old.

Studies of the Moon and other planets show that during the meteorite bombardment, the equivalent of a 50 kilometre-wide meteorite hit the Earth every century.

Australian Government
Geoscience Australia