A Brief Geological History of Australia

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When people visit Australia, they often have a list of famous geological destinations they want to see. These include the monolith Uluru in the 'Red Centre', the amazing Wave Rock in Western Australia, the Three Sisters near Sydney, and the Glasshouse Mountains in Queensland.

A geological history is a sequence of geologic events that geologists determine by observing the rocks in the field. That is the science—the factual evidence. It does not matter whether you are a Christian or an Atheist, we can all observe the same evidence and come to the same conclusions.

However, when it comes to explaining what happened in the past, what we say will depend on what we believe. The geological features are almost always presented as millions of years old. Of course, no one was there to observe this, which means the story was invented. It comes out of what the person believes. Here I will present Australian geological history in terms of the biblical account of history. The most significant event for the rocks is Noah's Flood, which most geologists ignore.

We draw heavily on the maps and reports published by geological institutions, but we transform the story they tell into a biblical one. We use the geological column, which covers every situation encountered on Earth, but we add to this the biblical sequence. This geology transformation chart is a good first place to begin, but we need to be aware of its limitations. The Word of God is like a light that shows us a proper view of the world (Psalm 119:105).

A biblical geological history comprises three main sections: floodwaters rising, floodwaters falling, and the post-Flood era. Geological evidence from Creation Week and the pre-Flood era does not seem to have survived the Flood, but this possibility is something to keep in mind. If you would like more detail on the Geology Transformation Tool and the geological sites discussed, you can go to Creation.com. If you want to keep up to date, the email newsletter is an easy way to stay informed.

Floodwaters rising

The Flood involved enormous crustal movements which caused the water to rise and cover the whole planet. The movements were more violent at the beginning and reduced in intensity through the Flood year. First, we look at one of the earliest formed features in Australia, the Yilgarn Craton, in Western Australia's south west. We will show some of the evidence that speaks to enormous geological catastrophe.

Next, we travel to the Red Centre to examine Uluru and Kata Tjuta. The evidence for catastrophic geological events is incredible, including enormous boulder deposits. Then we move back to south west of Western Australia to a boulder displayed in the small town of Mingenew. The boulder deposit from which it came was interpretated as dropping from floating glacial ice, but floating glaciers do not make sense during the global Flood. It's more logical that these boulders were deposited by high energy water flows. The biblical perspective reveals these sorts of problems with geological interpretations. We always need to question what is said.

While the floodwaters are still rising, we travel to the eastern Australia to investigate the Great Artesian Basin, the last major sedimentary deposit as the floodwaters rose. Here we see the devastation to animal life, including dinosaurs and plesiosaurs. And we see some remarkable dinosaur footprints at Lark Quarry that show the animals were fleeing the rising waters.

Floodwaters Falling

After the floodwaters peaked, the ocean basins began to sink, and the continents began to rise. Hence, the waters on the continents began to flow into the oceans, a process that took some seven months. This caused enormous erosion on the continents. The Three Sisters in New South Wales illustrate the characteristic erosion patterns produced by the receding floodwater. Namely, erosion of flat plateaus when the water covered the whole land, and then erosion of large valleys when the water flowed in wide channels.

In Western Australia geological faulting broke up the basement rock. One fault involved a drop of 10 to 12 km. After that the receding floodwaters eroded sediment from the whole of the Yilgarn craton, which is some 800 km across.

In Queensland the receding floodwaters carved the spectacular Carnarvon Gorge, which displays stunning visual evidence of the erosion. This suggests that the erosion impacted the whole continent. The same applies to the Glasshouse Mountains, which demonstrate the classic erosion patterns and its enormity.

Post Flood

Due to the volcanic activity during the Flood, sea temperatures were warmer than today when it ended. Hence, thick ice sheets built up on some continents, lowering sea level by more than 50 metres. The lower sea level meant the coastline moved seaward. After several hundred years, the oceans cooled, the ice melted back, and sea levels rose to what they are today.

Landscape erosion, sedimentation, and volcanic eruptions have occurred in the 4,500 years since the Flood, but these have been minor compared with what happened during the Flood itself.

Ater the floodwaters had receded, the continent was vegetated by seeds and plants left on the surface. These plants have adapted to the changing climates that have occurred since. The oceans and waterways were colonized by marine animals that were left in the waters on and around the continent.

The air-breathing land animals and birds that now live in Australia originated from Mt Ararat in the Middle East, probably migrating through land bridges through the Indonesian Islands. Humans also came to Australia after dispersing from the Middle East through India and Indonesia. More recently, humans migrated from Europe. Humans have been responsible for some animal migration.

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