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Answers In Creation Website
www.answersincreation.org/iceage.htm

For many years the young earth community has argued that the one single ice age occurred as a result of the aftermath of Noah's Flood. While it is obvious that the recent Ice Age deposited sediments that are on top of all the ancient rock layers, what is not so obvious is the periods of glaciation which occurred in the geologic past.¹

They have made an attempt to explain these away. Michael Oard (a meteorologist) has an article on the Answers In Genesis website, claiming that these ancient deposits are submarine debris flows (see answersingenesis.org/docs/1188.asp). He is right in that one geologist thinks the Bigganjargga is a debris flow. However, it's poor science for a meteorologist to assume that this can translate to ALL ancient glacial deposits. He does not address the others. If he had evidences against the rest, he would definitely write about them. Instead, he has only weak evidence which can plainly be interpreted by a geologist as being glacial or non-glacial. This lack of evidence speaks volumes to the weakness of his conclusions.

Definitions

Glacial features are easy to spot in the geologic record because of these easily-identified features;

Drift – general term referring to glacially-deposited sediment

Till - unsorted and unstratified glacial drift; usually contains both local rock material, and rock material transported from a distant source. Typical glacial till is unsorted, unstratified, has a variety of particle sizes, and a wide range of particle lithology

Outwash – Till deposited from a melting glacier onto a continental mass

Glaciolacustrine – Deposits in a lake formed at the end of a melting glacier

Glaciomarine – Deposits from a glacier contacting a marine boundary

Tillite – Lithified version of glacial till

Clasts – Rock composed of fragmented material

Glacial Straiton – linear excavations (generally small) that are formed by the sediment-laden ice as it passes over bedrock. The larger grooves may be several meters deep in soft rocks.

Crescentic Gouges – Gouge cut into bedrock by an ice sheet, in the form of a crescent, usually several centimeters in length

Ice Rafting – Large pebbles dropped by melting ice. They are dropped into a soft-mud surface as the ice melts

Late Paleozoic Glaciation

Widespread, well-known glacial deposits occur throughout the Southern Hemisphere Gondwanaland landmasses, ranging from Carboniferous to Permian in Age (354 to 248 million years ago).

Dwyka Formation

These glacial deposits occur throughout southern Africa. The Dwyka is about 1300 meters of sediment, with the middle 800+ containing tillite units. These units rest on widespread striated pavements, and contain striated and faceted clasts. Well-preserved glacial valleys are exposed throughout the area. The tills are typical, including clast orientations, and contain both local and remotely-derived gravel particles.

Permian of Australia

Glaciers were widespread over all of Australia during the Late Carboniferous, with continental ice sheets reaching maximum coverage during Permian time. The evidences for this ice exists throughout the entire spectrum of glacial sediments, which includes outwash, glaciolacustrine, and glacial marine deposits. Glacial pavements with striations, grooves, and crescentic gouges abound.

At Hallett Cove and Fleurieu Peninsula, there are clasts of various plutonic and metamorphic sources. Ice rafting was also common, as evidenced by the large dropstones scattered throughout.

It is estimated that there were dozens of glacial advances in southeastern Australia during the Permian.

Why Does It Matter?

The above two examples of Carboniferous/Permian glaciation occurs in rocks that are 248 to 354 million years old. According to the young earth Flood model, deposits put down during this time are considered as being deposited during the early part of Noah's Flood.² How could there be widespread glaciers at a time when the entire globe was underwater?

The young-earth model cannot give any explanation for the existence of these glacial deposits and features. Because these rocks are Permian in age, the Flood could not possibly have deposited them. As such, this is enough evidence to disprove the global flood model proposed by young earth scientists.

Even More Evidence!

Tillites are well-documented on all continents except Antarctica, with dating to the Precambrian, 650 to 700 million years ago. By the young-earth model, these glacial deposits are considered as creation week rocks, however it seems odd that during the intense mountain building, volcanic-ridden creation week, that glaciers dominated six of the seven continents!

The Varangian Ice Age deposits are found throughout northern Europe, the British Isles, and Greenland. Pebbly mudstones (from ice rafting) are common, with some striated pavements. The Port Askaig Tillite in Scotland and Ireland is over 700 meters thick, and contains glacial marine, glacial fluvial, and nonglacial sediments. In Norway, the Upper and Lower Tillite Formations contains tillites deposited in a glacial marine environment.

In Canada, the Gowganda Formation, also Precambrian, displays typical glacial till features; poor sorting, unstratified, varying particle sizes and sources. Sandstone lenses show evidence of ice rafting. The base of the formation contains striations and grooves in the underlying bedrock. The age of this formation is considerably older, at 1,300 million years old.

Conclusion

The existence of glacial deposits in early Noah's Flood rocks shows that the young-earth model for the Flood is inadequate. There could not have been glacier deposition when the entire world was under water. Nor could there be glacial deposition during the rapid mountain building of the creation week. Clearly the young-earth model is flawed. But the old-earth model, with God creating the earth over the last 4.5 billion years, fits perfectly with the evidence of the rock record.

¹ *Depositional Systems*, Chapter 7, Richard A. Davis Jr., Prentiss-Hall Inc., 1983

² *Grand Canyon: Monument to Catastrophe*, Figure 4.1, Page 58, Institute for Creation Research, 1994