TRIANGLE ASSOCIATION for the SCIENCE of CREATION

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TASC

TASC's mission is to rebuild and strengthen the foundation of the Christian faith by increasing awareness of the scientific evidence supporting the literal Biblical account of creation and refuting evolution.

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December 2007

EVIDENCES AND EVENTS OF THE FLOOD

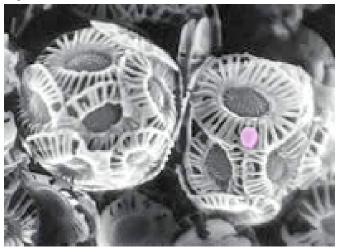
By David Plaisted, PhD

eological structures give considerable evidence about the sequence of events during the world-wide flood described in Genesis and also give evidence for the flood itself. These structures include the chalk deposits during the Cretaceous period, paleocurrents, which indicate the direction of water flow when fossils were deposited, coral formations, and others. Astronomical findings also give us information about the flood and its development.

The geological time scale including most of the fossils is divided into three eras, the Paleozoic, Mesozoic, and Cenozoic eras. A few fossils are also found in pre-Cambrian strata, which are believed to have been formed before the Paleozoic era. These eras are subdivided into geological periods. The last period in the Mesozoic era is the Cretaceous period. This period is conventionally dated at between 145.5 million years ago to 65.5 million years ago, when it is commonly believed that the dinosaurs became extinct, possibly due to the impact of an asteroid. During the Cretaceous period, chalk deposits formed over most or all of the surface of the earth. These deposits indicate much about conditions existing at the time.

Chalk deposits form from the microscopic skeletons of plankton called coccolithophores, which accumulate on the sea floor when they die (Fig. 1). Coccolithophores are a kind of algae that have calcium structures called coccoliths around them. These structures fall off and accumulate on the ocean floor, forming chalk. Coccolithophores only survive in warm, sunny water. The chalk deposits are believed to have formed near the end of the Cretaceous period, and are dated from 100 million to 60 million years ago. The fact that chalk deposits are so widespread indicates that most or all of the earth was covered by warm water during this time. However, chalk deposits only form in relatively shallow water, because the skeletons of plankton dissolve if the water is too deep. The chalk had to have formed in water 200 to 300 meters deep, because this is the only way the skeletons of the plankton could have been so well preserved. The chalk is also very pure, indicating that land was far away and there were no sediments washing off the land to mix with the chalk (Fig. 2).





The skeletons of plankton called coccolithophores form chalk deposits on the sea floor.

From a creationist viewpoint, these findings show that much of the earth was covered by water during the Cretaceous period. For example, geologists state that "most of Britain was under water and evidence of shorelines was scanty even in the western outcrops and near Scotland". The fact that the land was far away from these chalk deposits shows that essentially the whole earth was under water. Therefore this period must have taken place before or at the end of the flood, because afterward the Lord promised that there would no more be a flood to cover the surface of the earth (Genesis 9:11). This also raises the question how land animals could have survived in the conventional model when all or almost all of the earth was under water.

How could so much chalk have formed so quickly? After the flood the oceans would have been warm and filled with organic matter. Thus conditions would have been favorable for plankton blooms and chalk could

¹ Graham B (2006) The Cretaceous Chalk in Southern England http://courses.washington.edu/uwtgeo06/papers/BrieannaGraham_Paper.htm Accessed 2007 Nov 15

Figure 2



Massive chalk deposit at Peacehaven, England.

have accumulated rapidly. In fact, it is hard to see how the chalk could have formed slowly. Even if the chalk formed far from land, in water only 200 to 300 meters deep one would expect many clam shells, snail shells, worm holes, and fish bones to accumulate on the bottom and be mixed with the chalk. The purity of the chalk shows that it had to have formed quickly. Sometimes well-preserved and large fossils are found in the chalk, consistent with its rapid formation. It is believed that some asteroids hit the earth at the close of the Creta-

ceous period and led to the extinction of the dinosaurs. Probably asteroids were striking during the flood but only those that hit near the end have left any evidence.

Paleocurrents are currents that were flowing when geological layers were formed. From the structure of these layers, geologists can infer the direction of water flow. During the Paleozoic era, in North and South America, paleocurrents flowed

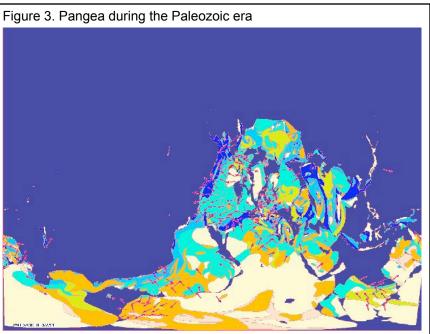
predominantly southwesterly. During the Mesozoic era, especially near the end, paleocurrents flowed west to east. During the Cenozoic era, the currents did not have

any predominant direction of flow, and this is also true of the Precambrian era.²

It is difficult to account for these paleocurrents in the conventional geological model. Water tends to flow from high elevations to low elevations and towards rivers from both directions. For the currents to be in one predominant direction for millions of years, the continent would have to be tipped in one direction, and all the rivers would have to flow parallel in that direction. Then the continent would have to tip in the other direction for the flow to reverse. Or else the continents were under water and the current flowed in one direction.

However, in the flood model, this pattern of flow is easy to explain. During the Paleozoic era, the continents were largely together in a supercontinent called Pangea, and flood waters were flowing from the center of Pangea in both directions towards the Pacific Ocean (Fig. 3).² This explains the flow from east to west. During the Mesozoic era, the continents split apart. Thus the water from the Pacific Ocean had to travel across the continents from west to east to reach and fill the Atlantic Ocean. This explains the pattern of flow during the Mesozoic Era, and geologists agree that the continents moved apart during the Mesozoic Era. After the continents had largely split, then the oceans became calm and the chalk deposits formed. During the Cenozoic era, the continents continued some motion but it soon stopped and

the pattern of flow became more conventional. This shows that the flood continued at least until the end of the Cenozoic era and perhaps longer. This also shows that when Genesis speaks of the earth being "divided" in the days of Peleg (Genesis 10:25), it does not refer to the separation of the continents. However, the flood was a complex event, and with the motion of the continents the surface of the earth may have buckled and considerable portions of the



Arrows show the direction of water flow from Pangea.

² Chadwick AV (2000) Megatrends in North American paleocurrents http://origins.swau.edu/papers/global/paleocurrents/default.html Accessed 2007 Nov 15

earth may have been above water at times.

It is interesting also that coral formations give evidence of the sequence of events in the flood. Most coral only grows in shallow water. Certain kinds of coral reefs, called atolls, form on top of submerged mountains (Fig 4). These formed as the mountains descended or the water level gradually rose. This shows that the oceans were shallower in the past, but the ocean floor sank slowly enough that the coral could keep up with it. Sometimes the ocean floor descended faster than this and the coral could not keep up.

Geologists are finding evidence of massive floods in the past. For example, Richard Kerr provides evidence that

Figure 4. Coral Reef Formation

Fringe Reef

Subsidence

Barrier Reef

A fringe reef forms around an island by the growth of coral. As

the island sinks or the sea level rises, the coral grows vertically

to keep up with the rising water and a larger area of water de-

velops between the remaining island and the coral. This results

in a barrier reef. Finally the island sinks altogether, leaving a ring

of coral or an atoll. Frequently portions of the coral become cov-

From: College of Exploration and the Bermuda Biological Station for

ered with sand and some vegetation grows on them.

Research. http://www.coexploration.org/bbsr/coral/html/

body_reef_formation.htm> Accessed 2007 Nov 16

the British Isles were separated from the continent by a massive flood.3 Also, geologists believe that great eruptions of magma on the sea floor caused the ocean to rise as the continents separated during the Cretaceous period, explaining why sediments are found on the continents and not on the floor of the ocean. In the flood model, this would be explained because the "fountains of the great deep" breaking up (Genesis 7:11) would have caused water levels in the ocean to rise as the rain fell, contain-

ing the sediments on the surfaces of the continents. A problem for conventional geology is that at current rates of erosion the continents should have eroded away many times during the time that they are assumed to have existed. Also, sometimes entire geological layers are missing for many miles in all directions with no evidence of erosion. Geologists believe these layers formed and then eroded away, but if so, why is there little or no evidence of erosion between the layers?

As for astronomical evidences, Kerr also gives evidence that the massive cratering on the moon and in other planets originated in the asteroid belt.⁴ Kerr suggests that a collision in the asteroid belt produced the asteroids that led to the extinction of the dinosaurs at the end of the Cretaceous period.⁵ He also points out that small

asteroids tend to be more widely dispersed than large ones in the asteroid belt, an effect of the sun's energy pushing away the smaller asteroids. However, this observation can also be explained if one assumes that this collision, or breakup of a planet, happened very recently and the small asteroids were propelled farther than the large ones. This breakup of a planet could have happened during the flood when rates of radioactive decay were accelerated, possibly due to an increase in radiation reaching the solar system. Another evidence for this is the tremendous energy emanating from Jupiter's moon Io; this is far too large to have continued for millions of years. This could have been caused by an increase in the decay rate heating up the moon Io. In fact, even on earth, more heat is found leaving the sur-

face of the earth where the concentration of radioactive rocks is highest. This should not be so if these rocks were slowly decaying for millions of years. Where could all this radiation reaching the solar system have come from? Astronomers have observed a star whose pole points almost directly at the earth.7 If such a star happened to become supernova, large quantities of radiation could have been directed at the earth, and such an event could also have a role in last day

events and the breakup of the earth at the second coming of Christ.

Thus there are geological evidences that are consistent with a flood scenario and even easier to explain in that way than in the conventional millions of years of geological time. Even astronomical findings can give insight into the mechanism and sequence of events in the flood.

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³ Kerr R (2007) Did a megaflood slice off Britain? *Science* **317**(5836):307

⁴ Kerr R (2005) Another hint of planetary marauders. *Science* **309**(5742):1800

⁵ Kerr R (2007) A big splat in the asteroid belt doomed Earth's dinosaurs. Science **317**(5843):1310

⁶ Coppedge DF (2007) Spewing Hot Rocks on Old Ideas http://www.icr.org/article/3477/ Accessed 2007 Nov 15

⁷ Quirrenbach A (2007) Seeing the surfaces of stars. *Science* **317**(5836):325-326

COMING EVENTS

Thursday, December 20, 7:00 P.M., Providence Baptist Church, 6339 Glenwood Ave., Raleigh, Room 631 Note the change from our usual meeting date. Our Creator, God: Mark Stephens, MCS, will provide an overview of scientific evidences that support God as our Creator to help us to strengthen our faith, hold fast to it, and help others to gain faith in God who have been influ-

enced by world views such as humanism, materialism, and naturalistic evolution. He will also share experiences on his recent trip to China. A questions and answers session will be provided to address current items of interest in general. Please plan now to come out and bring guests as we close out the year.

| Contributions may be mailed to: TASC, P.O. Box 12051, Research Triangle Park, NC 27709-2051 Name | | | |
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