

# Origins Geology

Our Earth and how it formed

Plates and how they move

Timeline of the two theories - Earth's History



Our Earth and how it formed

## *Creation*

Formed by God through Supernatural process covered in water, 6-10 thousand years ago

Land in and out of the water - gathered into one place - split at the time of the Flood event.

Gen 1.2 *earth was formless... face of the deep/ waters*

Gen 1.9 *waters gathered into one place, and let dry land appear*

## *Evolution*

Formed by only natural processes out of the gas/dust cloud which formed the sun and other planets.

A molten/fire beginning 4.5 billion years ago

Land in one place, but splitting and squashing back together multiple times. over billions of years

Plates and how they move

## Catastrophism

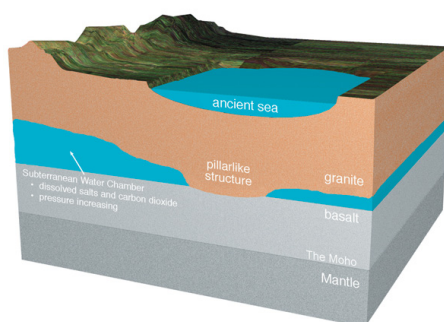
The present is a result of the past, often radical events

**Hydroplate Theory & Catastrophic Plate Tectonics Theory - runaway subduction**

The Flood could have greatly accelerated the rate at which the continents spread

## Hydroplate Theory

Originally the Crust was composed of three layers. The top layer resting upon a water layer, catacombed with support pillars resting upon the bottom layer.



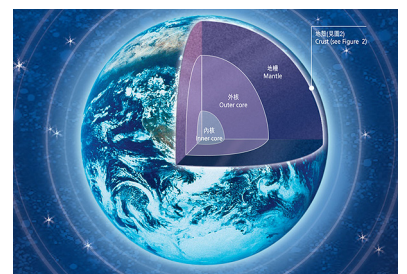
## Uniformitarianism

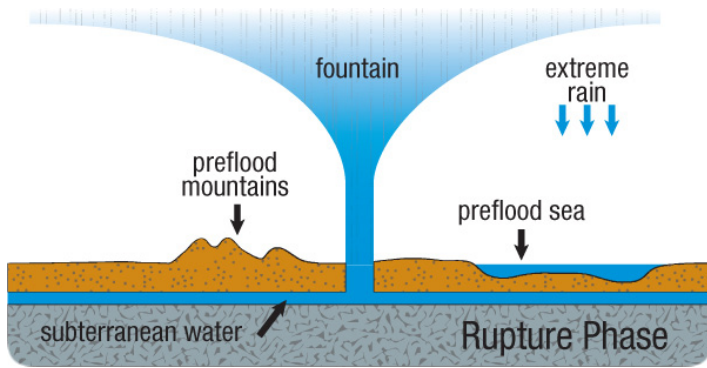
The present is the key to the past

**Plate Tectonics Theory - mantle convection**

Since we see the continents drifting only a few centimeters a year at present, then, according to uniformitarian thinkers, that must be the rate at which they have drifted for millions of years.

an exception-  
The split of Pangea began to take place in one huge, cataclysmic volcanic eruption. April 23, 1999 issue of Science, Paul R. Renne



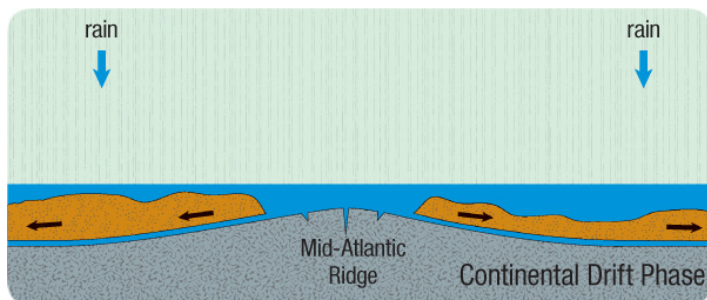


## Hydroplate Theory: Dr. Walt Brown— Summary

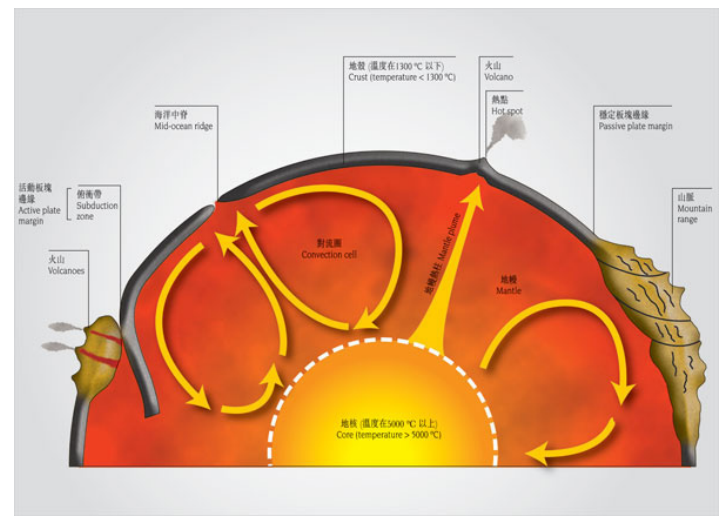
<http://www.creationscience.com/onlinebook/HydroplateOverview7.html>

The rupture of the pre-flood crust released super critical liquid (water under lots of heat and pressure) from over five miles deep. The explosive force of this eruption eroded away the sides of the split continents, catapulting debris— organic material, rock and water/ ice into space. This eruption created vast sediments, lime deposits, etc. as well as much debris in space we now know as comets and meteorites, affecting the surfaces of the Moon as well as Mars.

As this explosive rupture tore around the planet, it separated the content pieces and removed tons of rock and water. The crust below buckled up and rose, helping to create an angled floor upon which the upper contents slid away from each other (mid Atlantic ridge). This formed mountains and trenches.



The contents spread opposite the upraised mid Atlantic ridge, gravity pulls the ocean / lower plates down creating the trenches. The contents rest high upon the crust having more landmass/surface exposed. With the warmer oceans via volcanism, the planet enters



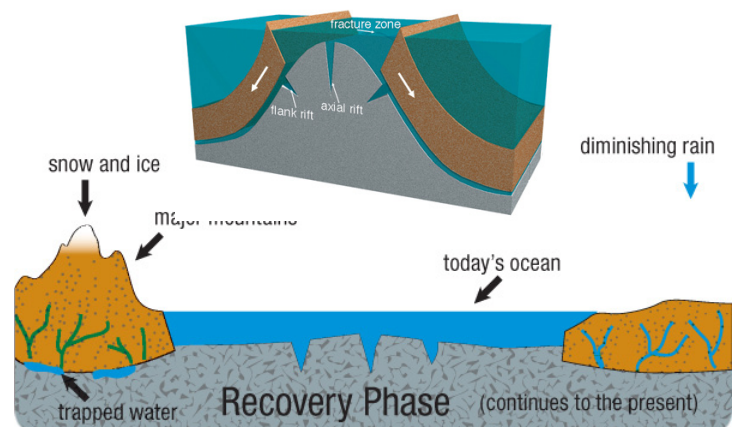
## What drives Plate Tectonics?

Plate tectonics could be driven by the internal heat energy of the Earth. The heat left over from the initial formation of the Earth, combined with heat from the decay of radioactive minerals contained in the rocks.

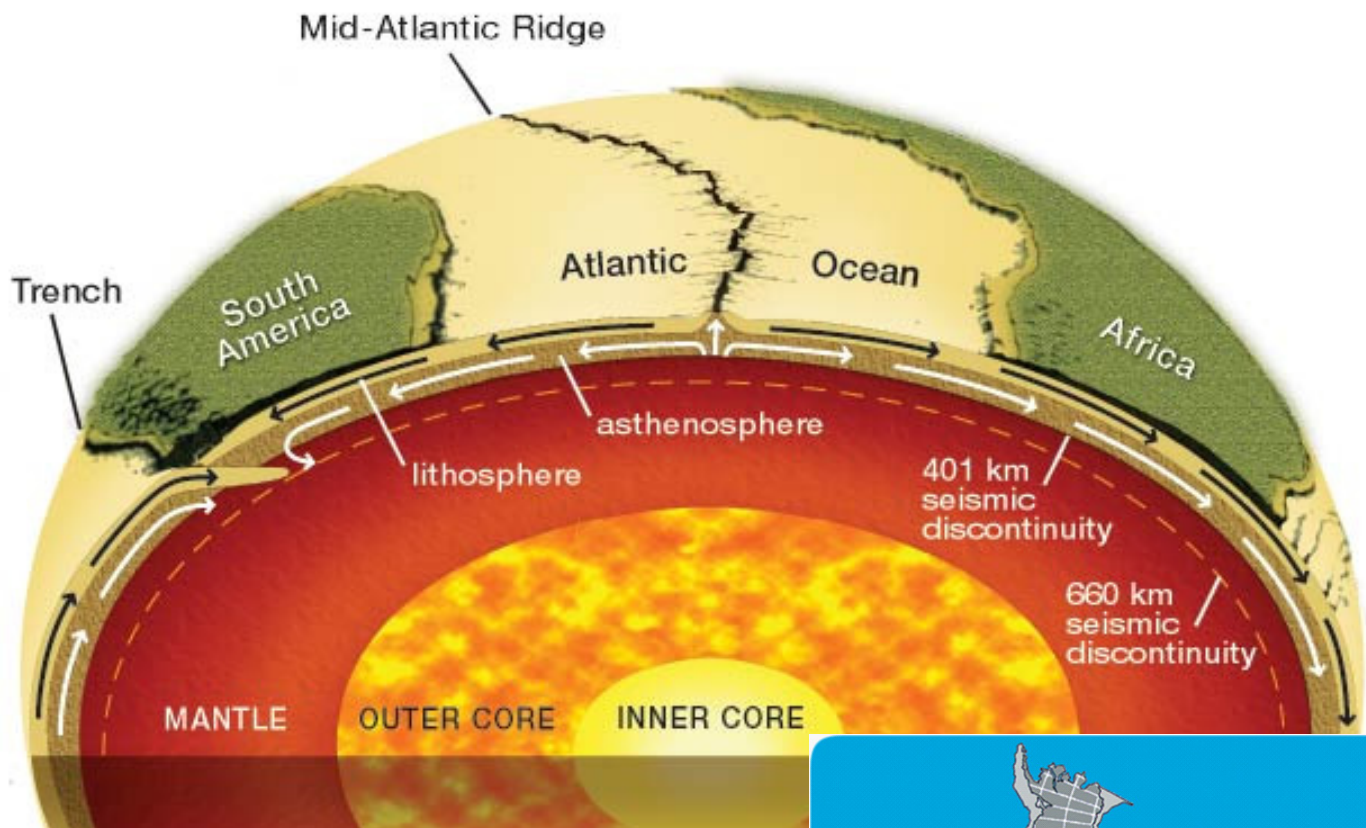
Heat from the Earth's lower mantle rises as plumes (hot magma pockets) toward the upper mantle where cooling occurs. The plumes spread out, then sink back into the interior (see picture). This process is called mantle convection. It is theorized that these convection currents propel the motion of plates.

It is thought that heat drives mantle convection and the motion of plates. The mantle is mostly solid. The rock forming the mantle, however, is thought to behave in a semi-plastic manner, which enables the slow transfer of materials. This is not directly observed.

## End: PT Theory







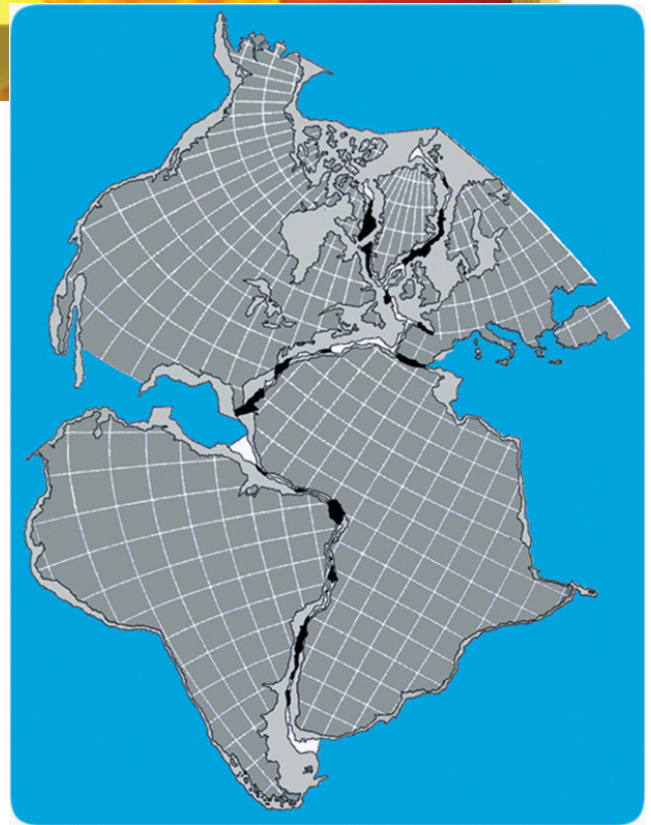
super evaporation and condensation which creates an ice age. The higher contents gather large snow packs, glaciers and ice sheets. As the contents settle into the crust ocean levels rise, early coastal settlements/cities are flooded. Immigration routes and animal migration is cut off. Snow packs begin to melt and further raise ocean levels. This is why Australia holds mostly prey animals.

The contents continue to move, slowing down to the rate we see today. Europe and North America 2cm /yr - ocean plate 10 cm/yr

### Evidence: sub-continental water

- Deep ocean thermal water vents/ black smokers (hot water coming up)
- “Salty” waters found at great depths when drilled 5-7 miles deep under land crust
- The Moho (the boundary between the Earth’s crust and the mantle) and Black Smokers.
- Salt Domes. 100,000 square miles in area, and 1,000 feet thick
- Vast water reservoir beneath eastern Asia that is at least the volume of the Arctic Ocean.

<http://www.creationscience.com/onlinebook/HydroplateOverview6.html>



**Continental Fit** Proposed by Edward Bullard. Can you identify four distortions in this popular explanation of how the continents once fit together? First, Africa was shrunk in area by 35%. Second, Central America, southern Mexico, and the Caribbean Islands were removed. Third, a slice was made through the Mediterranean, and Europe was rotated counterclockwise and Africa was rotated clockwise. Finally, North and South America were rotated relative to each other. (Justifications are not given for these rotations.) Notice the rotation of the north-south and east-west lines. Overlapping areas are shown in black.

# Catastrophic Plate Tectonics Theory

This model requires a sudden trigger large enough to “crack” the ocean floor adjacent to the supercontinent, so that zones of cold, heavy ocean-floor rock start sinking into the upper mantle. <http://www.answersingenesis.org/articles/am/v2/n2/a-catastrophic-breakup>

As the ocean floor in the areas of the ocean trenches sink into the mantle, it drags the rest of the ocean floor with it in a conveyor-belt-like fashion.

A runaway process causes the entire pre-Flood ocean floor to sink to the bottom of the mantle in a matter of a few weeks.

The rapidly sinking ocean floor slabs cause large-scale convection currents, producing a circular flow throughout the mantle.

Liquid rock vaporizes huge volumes of ocean water to produce a linear curtain of supersonic steam jets along the entire 43,500 miles (70,000 km) of seafloor rift zones. Perhaps this is what is meant by the “fountains of the great deep” in Genesis 7:11.

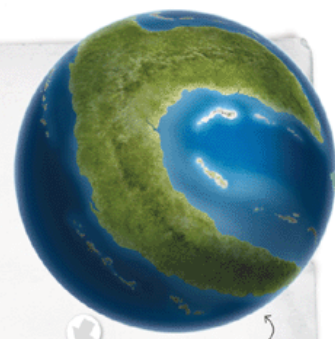
As the ocean floor warms during this process, the rock expands, displacing sea water, forcing a dramatic rise in

PART 2: WORLD UNDEWATER? | TIME FOR AN UPGRADE?

## PIECING TOGETHER THE CONTINENTS

Certain minerals in rocks can “capture” and “preserve” information about the earth’s magnetic field. By studying rock magnetism, geologists can estimate the latitude of the continents when the rocks were initially deposited. After comparing such information from many different rocks, geologists attempt to reconstruct the original arrangement of the earth’s continents.

The earliest supercontinent that has been reconstructed from Flood sediments is called Rodinia (from the Russian word for “motherland”). According to the theory of catastrophic plate tectonics, this supercontinent probably represents something similar to the original pre-Flood configuration of the world’s landmass. At the beginning of the Flood, Rodinia broke apart and briefly came together again to form another supercontinent called Pangaea, before finally breaking apart to produce the familiar present-day continents.



START OF THE FLOOD  
Rodinia breaks up.



EARLY IN FLOOD  
Pangaea forms underwater.



LATE IN FLOOD  
Pangaea breaks apart.

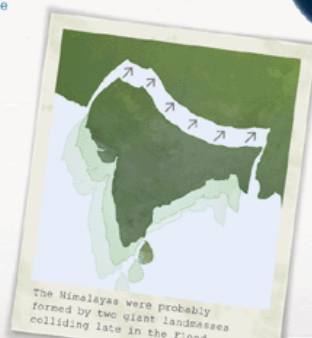


TODAY

## WHERE DID THE HIMALAYAS COME FROM?

Catastrophic plate tectonics proposes that, during the Flood, the continents were dragged around at speeds of feet-per-second by the rapidly moving plates.

When two continents collided, mountain belts were thrown up as the earth’s crust buckled and warped. The energy involved in these collisions must have been enormous, accounting for cases where huge slabs of crust have ridden over the top of other rocks. The highest mountains today, such as the Alps and the Himalayas, were probably formed in this way late in the Flood.



The Himalayas were probably formed by two giant landmasses colliding late in the Flood.

sea level. Ocean water would have swept up over the continental land surfaces, carrying vast quantities of sediments and marine organisms with them to form the thick, fossiliferous sedimentary rock layers we now find blanketing large portions of today’s continents.

## A COMPARISON OF THE TWO THEORIES IN TIMELINE

