

The Genesis Flood: A Tectonic Cataclysm

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Why do most educated people today regard the Flood merely as a naïve myth instead of as an actual part of earth history?

The Flood was regarded as genuine history throughout the Western world up to about 250 years ago. What happened to change that?

The short answer:

It was the (atheist) intellectual movement in the 1700's known as the Enlightenment.

James Hutton (1727-1797)

Hutton is regarded as the founder of modern geology. Why? Because he introduced the ideas of **uniformitarianism** and **deep time** in his book, Theory of the Earth, in 1795.



Hutton's famous quote regarding earth history:
"no vestige of a beginning, no prospect of an end."

Charles Lyell (1797-1875)

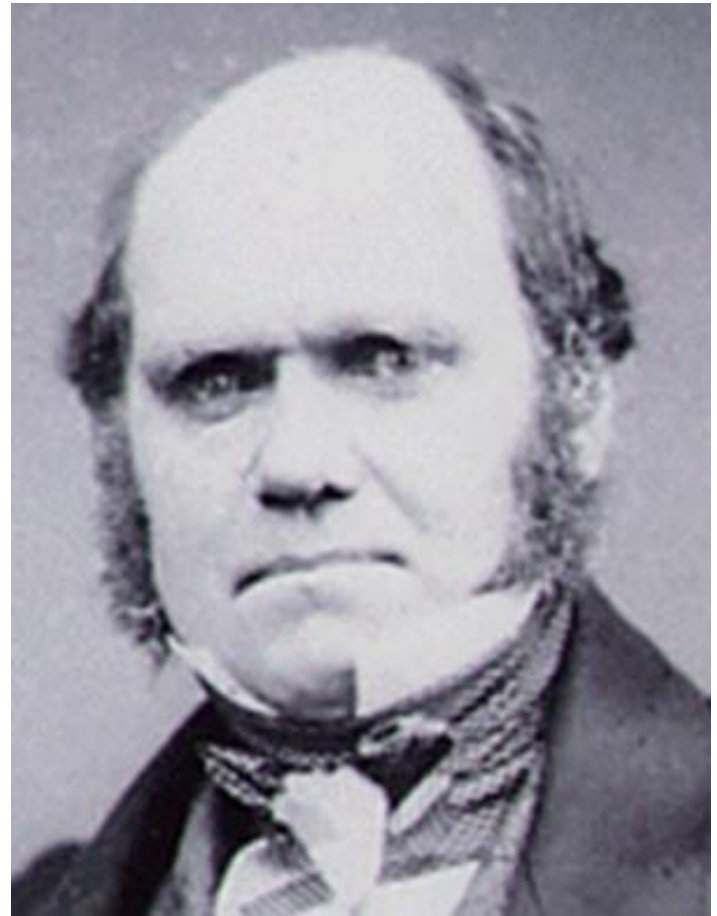
Lyell is considered the father of modern geology. He is famous for his book [Principles of Geology](#) first published in 1830, but updated in 11 subsequent editions.



Lyell was zealous in his advocacy of uniformitarianism, summarized in the slogan, ["The present is the key to the past."](#)

Charles Darwin (1809-1882)

The concepts advanced by Lyell in his book *Principles of Geology* were foundational to Darwin's speculations on how life might possibly have arisen with no action on God's part.



Darwinian evolution is merely a logical extension of uniformitarianism to the realm of biology.

2 Peter 3

3 Know this first of all, that in the last days mockers will come with their mocking, following after their own lusts,

4 and saying, "Where is the promise of His coming? For ever since the fathers fell asleep, all continues just as it was from the beginning of creation."

2 Peter 3

5 For they are willfully ignorant of this fact, that by the word of God the heavens existed long ago and the earth was formed out of water and by water,

6 through which the world at that time was destroyed, being flooded with water.

Here Peter is predicting that scoffers (that is, atheists, who reject the very concept of God) also will reject the claim that Jesus will return, with the excuse that "all continues just as it was from the beginning of creation."

In effect, they will be saying, because there have been no interventions by God in the past, what reason is there to expect any in the future?

Peter counters this logic by pointing out two major interventions by God in the past, namely, His creation of the heavens and the earth and His later destruction, by means of the Flood, of a world filled with violence and evil.

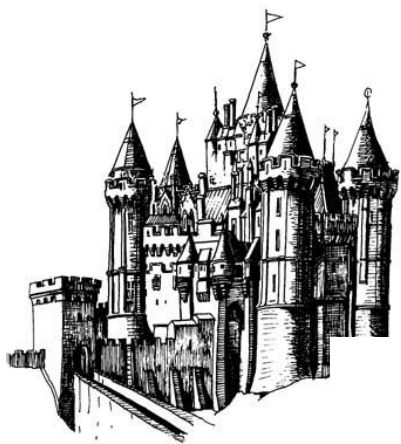
Peter points out that these scoffers will willfully ignore these two major events in the actual history of the world.

The view that "all continues just as it was from the beginning of creation" is known today as uniformitarianism.

It is the proposition that the world's physical history can be correctly reconstructed by extending presently observed physical processes operating at approximately presently observed rates into the indefinite past.

More briefly, it is the claim that "the present is the key to the past."

Modern strongholds raised against the knowledge of God



Darwinian evolution



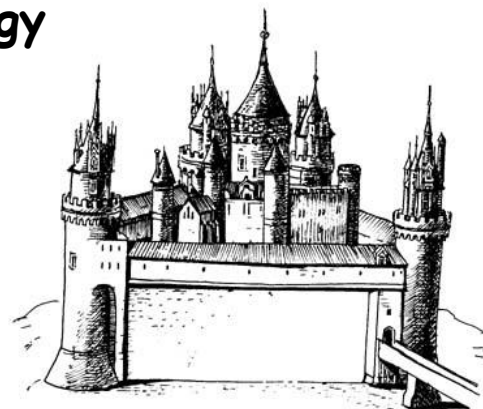
Uniformitarian geology



Big Bang cosmology



Materialist philosophy



Radioisotope dating methods

Despite the scoffing by the skeptics during the past 220 years, **the Bible itself allows no room for uncertainty** that a global world-destroying Flood cataclysm truly occurred.

Genesis 6

¹¹ Now the earth was corrupt in the sight of God, and the earth was filled with violence.

¹³ Then God said to Noah, "The end of all flesh has come before Me; for the earth is filled with violence because of them; and behold, I am about to destroy them with the earth.

¹⁷ Behold, I, even I am bringing the flood of water upon the earth, to destroy all flesh in which is the breath of life, from under heaven; everything that is on the earth shall perish.

Genesis 7

¹¹ In the six hundredth year of Noah's life, in the second month, on the seventeenth day of the month, on the same day all the fountains of the great deep burst open, and the floodgates of the sky were opened.

¹² The rain fell upon the earth for forty days and forty nights.

The Biblical text is emphatic and clear that the judgment of God in the Flood was **global** in extent, one that destroyed all the land-welling, air-breathing life on earth, apart from the animals and humans that were saved inside the ark.

Genesis 7

¹⁹ The water prevailed more and more upon the earth, so that all the high mountains everywhere under the heavens were covered.

²¹ All flesh that moved on the earth perished, birds and cattle and beasts and every swarming thing that swarms upon the earth, and all mankind; ²² of all that was on the dry land, all in whose nostrils was the breath of the spirit of life, died.

Genesis 7

²³ Thus He blotted out every living thing that was upon the face of the land, from man to animals to creeping things and to birds of the sky, and they were blotted out from the earth; and only Noah was left, together with those that were with him in the ark.

²⁴ The water prevailed upon the earth one hundred and fifty days.

Key issue for our day—does
God actually judge the wicked?

The Flood reveals—with no room
for uncertainty—that the answer
to this crucial spiritual and moral
question is an unqualified yes!

A cataclysm of the scope and intensity as described in Genesis 7 logically must have left an abundance of physical evidence.

Question

What sort of physical evidence
ought an event as described in
Genesis 7 leave behind?

What about “billions of dead things buried in rock layers laid down by water all over the earth”?

When we examine the rock record what do we actually observe?

Billions of dead things buried in sediment layers all over the earth!



Just how much of this sort of evidence is there?

More than a mile (6000 ft), on average, of fossil-bearing sediment blanket today's continents.

Why are fossils so special and significant?

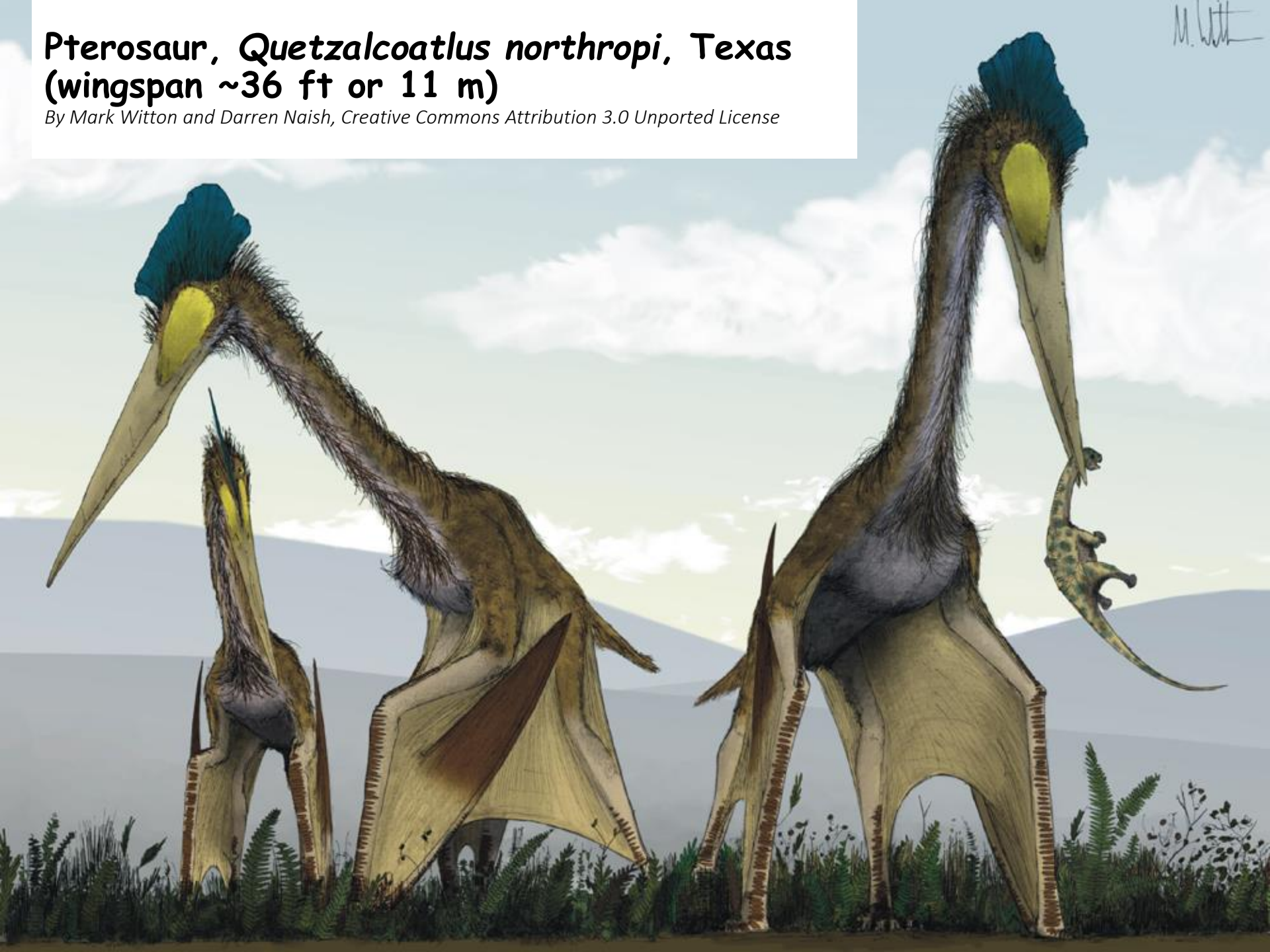


Plesiosaur, *Dolichorhynchops osborni*, Kansas

Photo by Ryan Somma, Wikipedia, distributed under Creative Commons Attribution ShareAlike 3.0 License.

Pterosaur, *Quetzalcoatlus northropi*, Texas (wingspan ~36 ft or 11 m)

By Mark Witton and Darren Naish, Creative Commons Attribution 3.0 Unported License



M. Witton

Fossils are so significant
because to be transformed into a
fossil, an organism requires rapid
and complete burial.

Fossils testify to catastrophic
conditions!

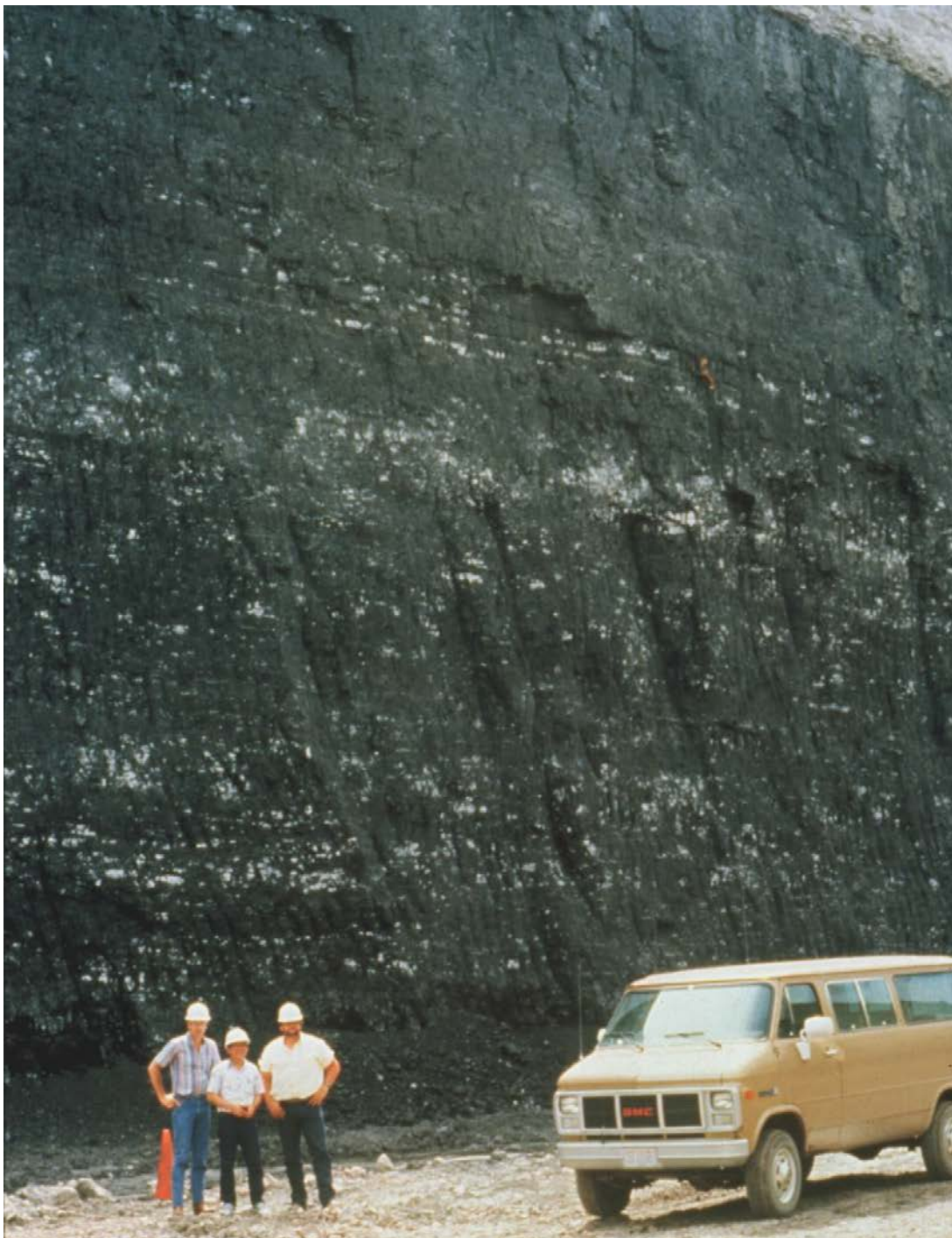
The fact that **fossils** are so common throughout the **Cambrian-Cenozoic** sediment record argues that this entire record is the product of catastrophic conditions on a global scale.

Fossilized plants also testify
to global-scale catastrophism.



**Powder
River Basin
coal
—northern
Wyoming,
southern
Montana.**

**40% of all
the coal
used in the
U.S. comes
from this
single
deposit.**

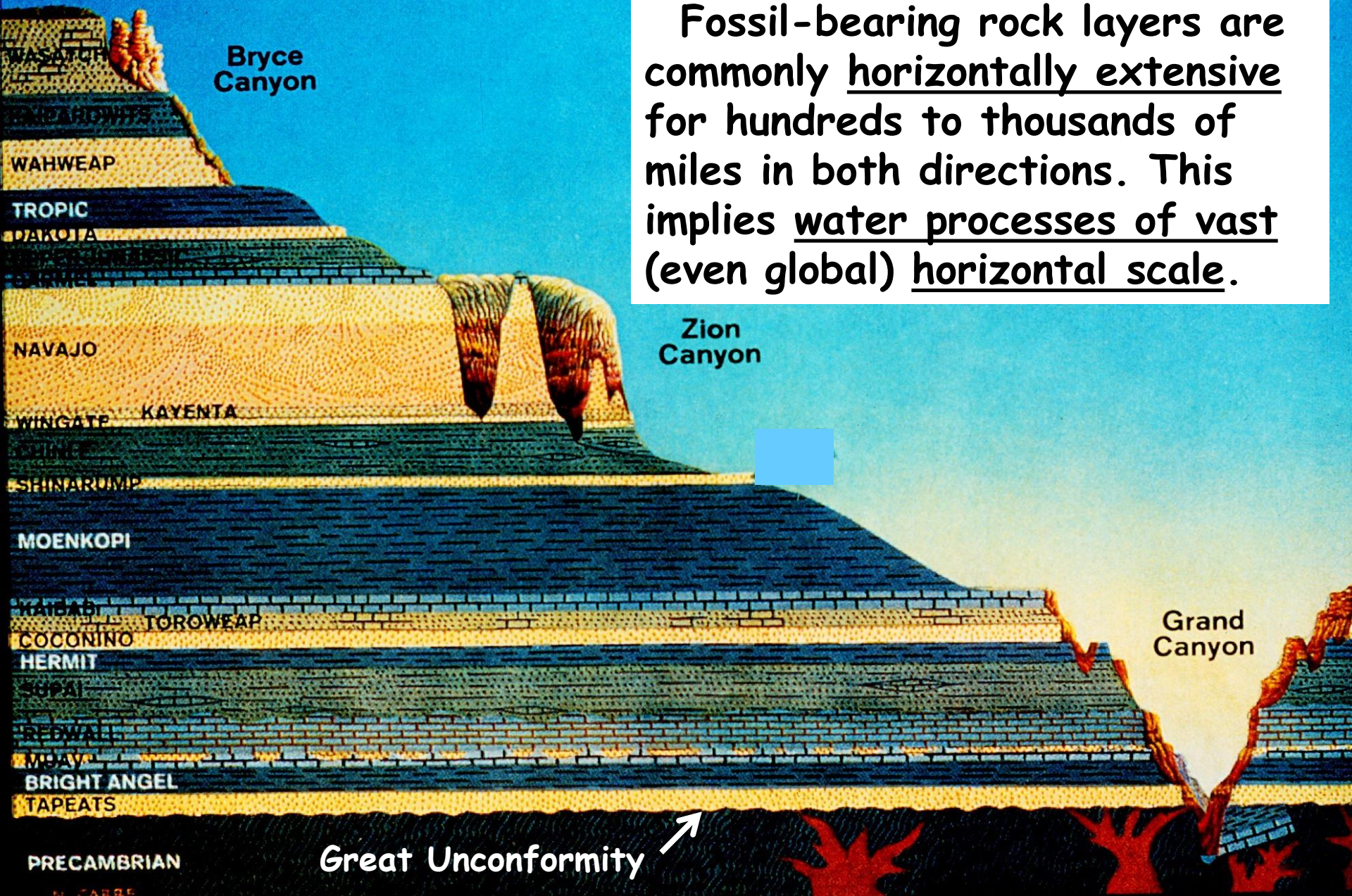


Powder River
Basin coal seam,
~ 90 feet in
thickness.

This coal is
composed of
water-transported
plant debris,
mostly trees, that
grew elsewhere.

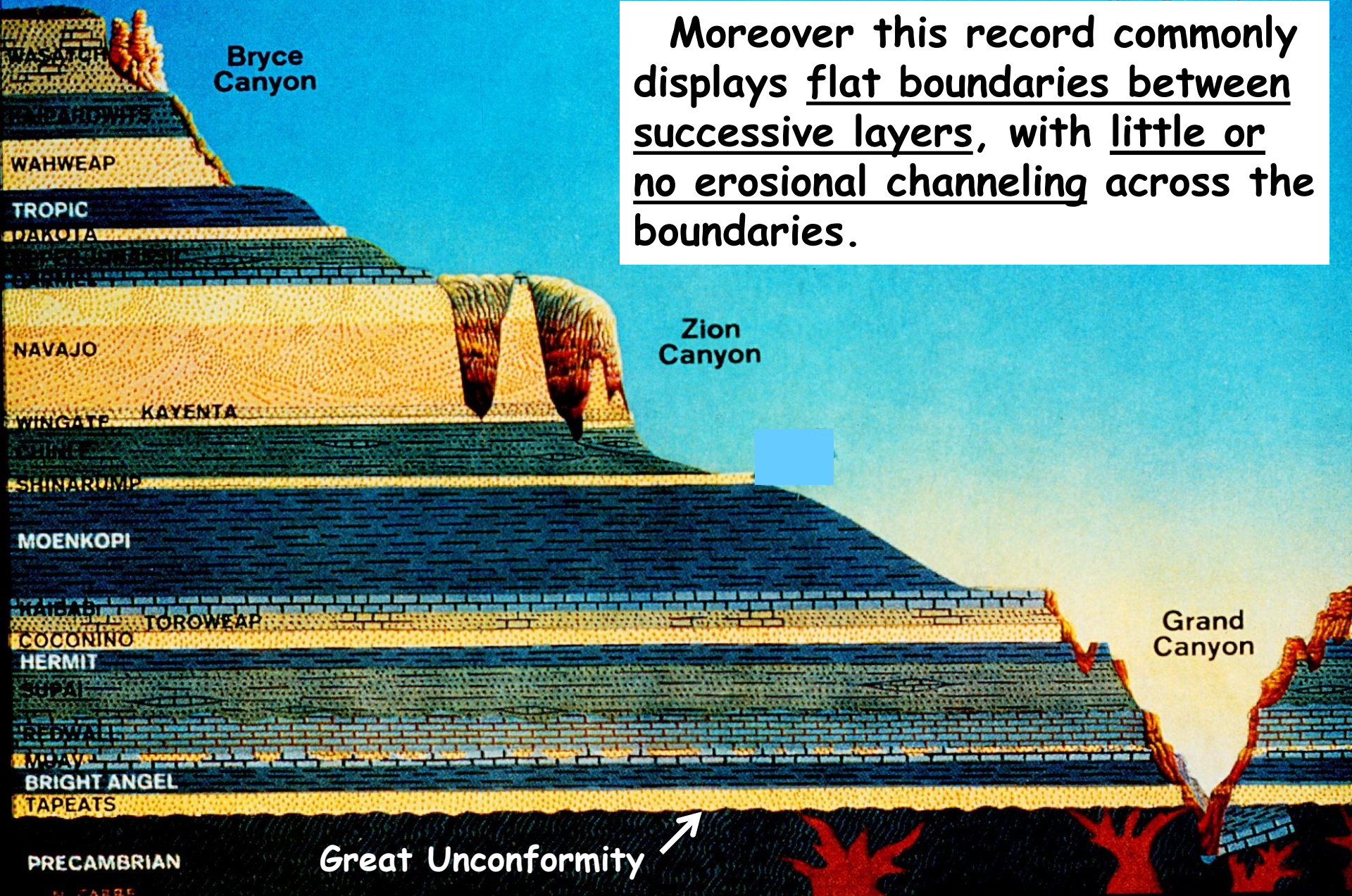
Even apart from their fossils, the **sediment layers themselves** testify to conditions radically different from those operating in our world today.

Fossil-bearing rock layers are commonly horizontally extensive for hundreds to thousands of miles in both directions. This implies water processes of vast (even global) horizontal scale.



Geological cross-section, north-south, north of Grand Canyon

Moreover this record commonly displays flat boundaries between successive layers, with little or no erosional channeling across the boundaries.



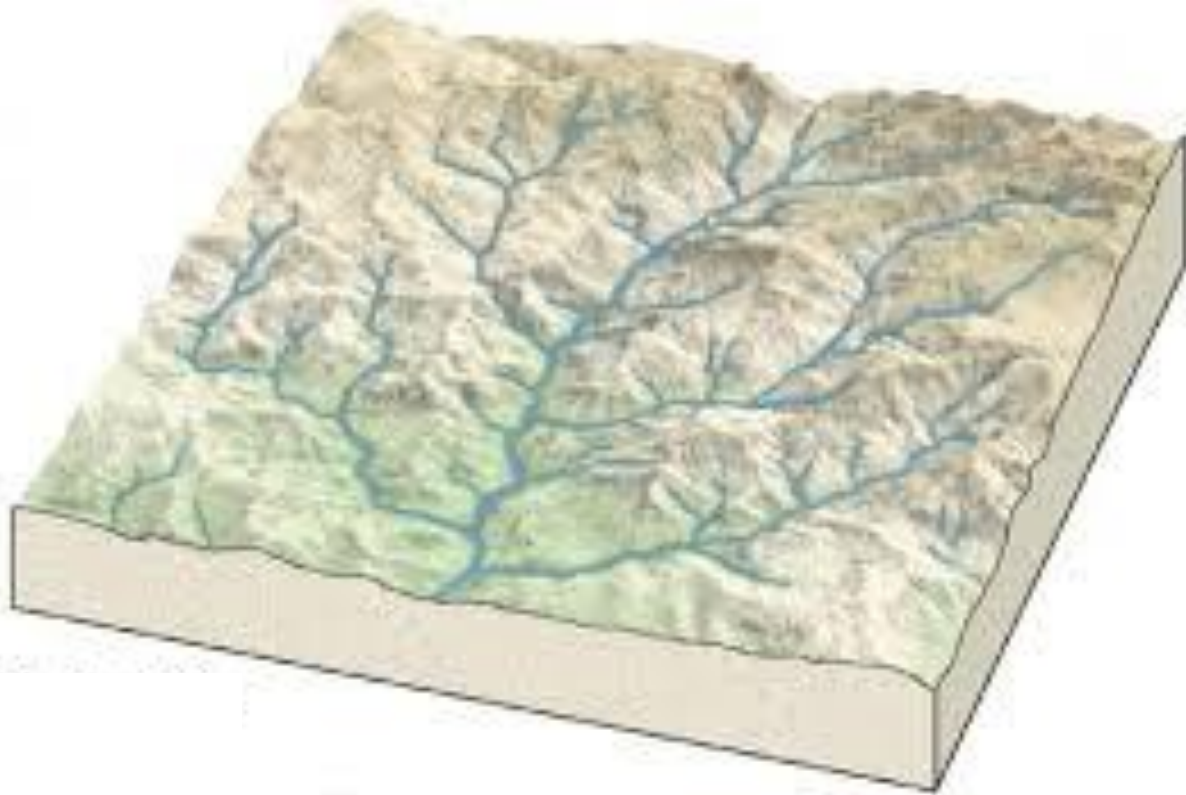
Geological cross-section, north-south, north of Grand Canyon

The implications of this are huge. It means that

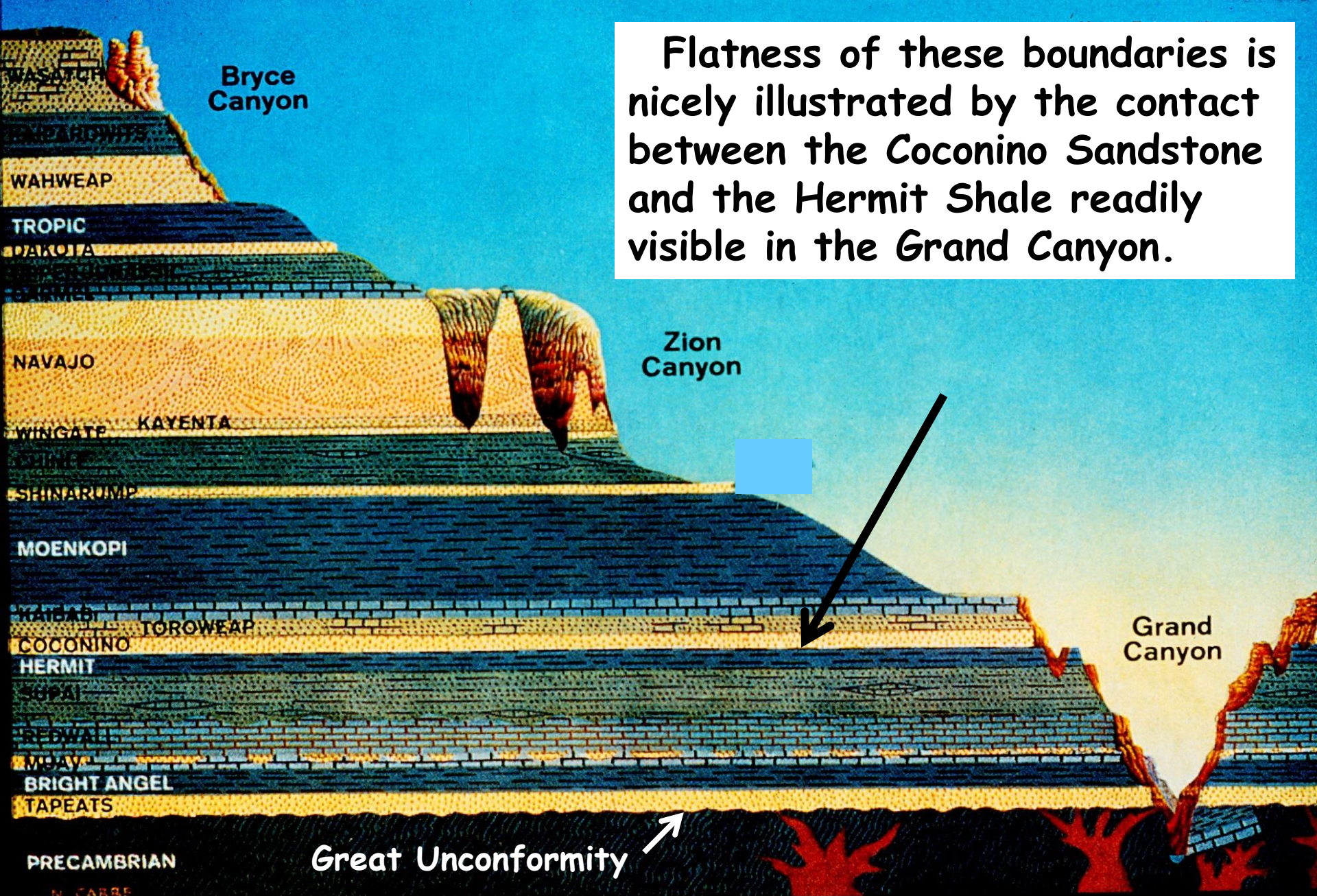
1. vast portions of the continental surface were covered by water,
2. depositional surfaces were smooth,
3. deposition was relatively uniform over vast horizontal scales.

—radically different from today!

Vivid contrast with today's world



Typical (dendritic) drainage pattern on the continents today. Higher topography is dissected by erosional channels. Sedimentation is localized to stream and river valleys.

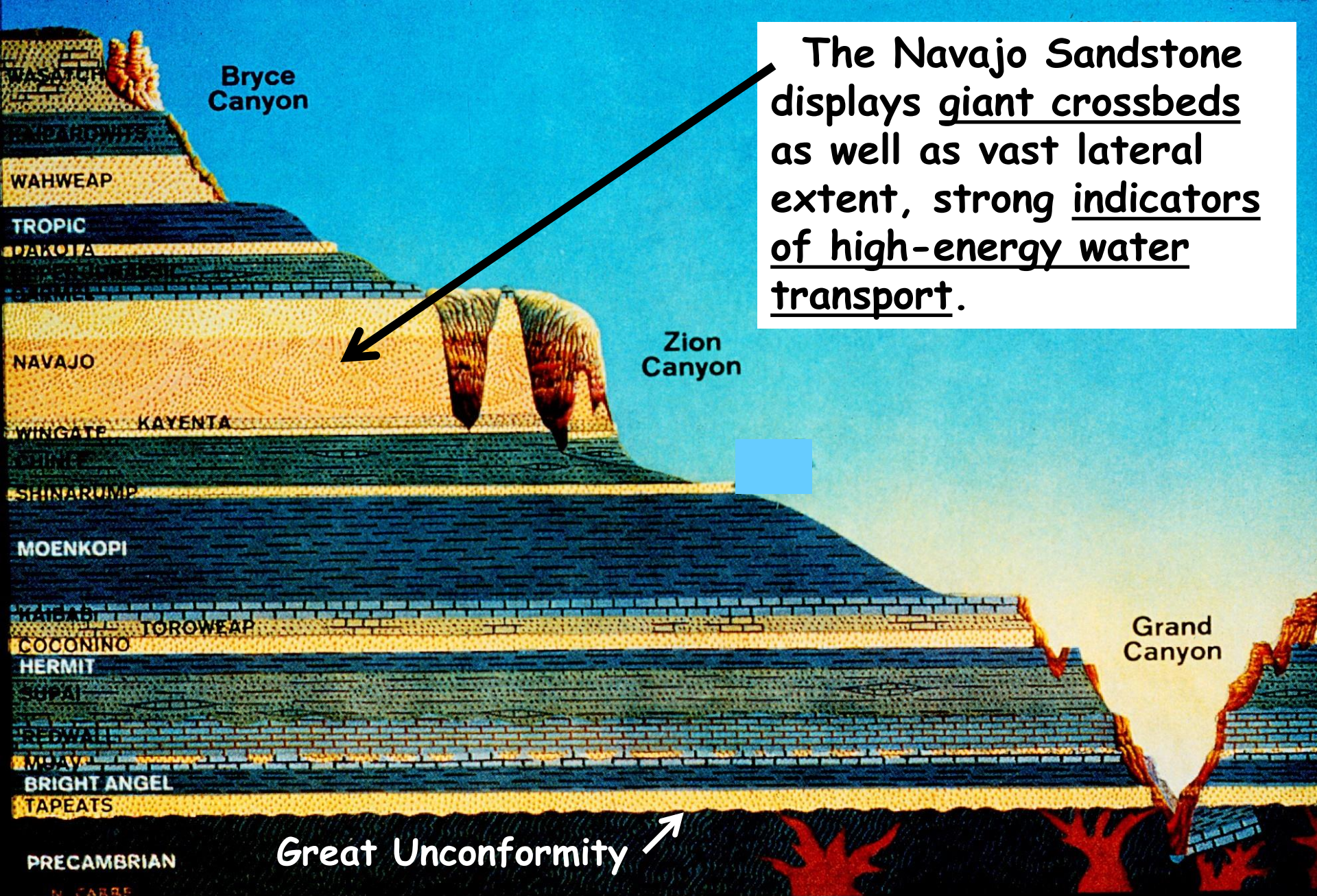


Flatness of these boundaries is nicely illustrated by the contact between the Coconino Sandstone and the Hermit Shale readily visible in the Grand Canyon.

Geological cross-section, north-south, north of Grand Canyon



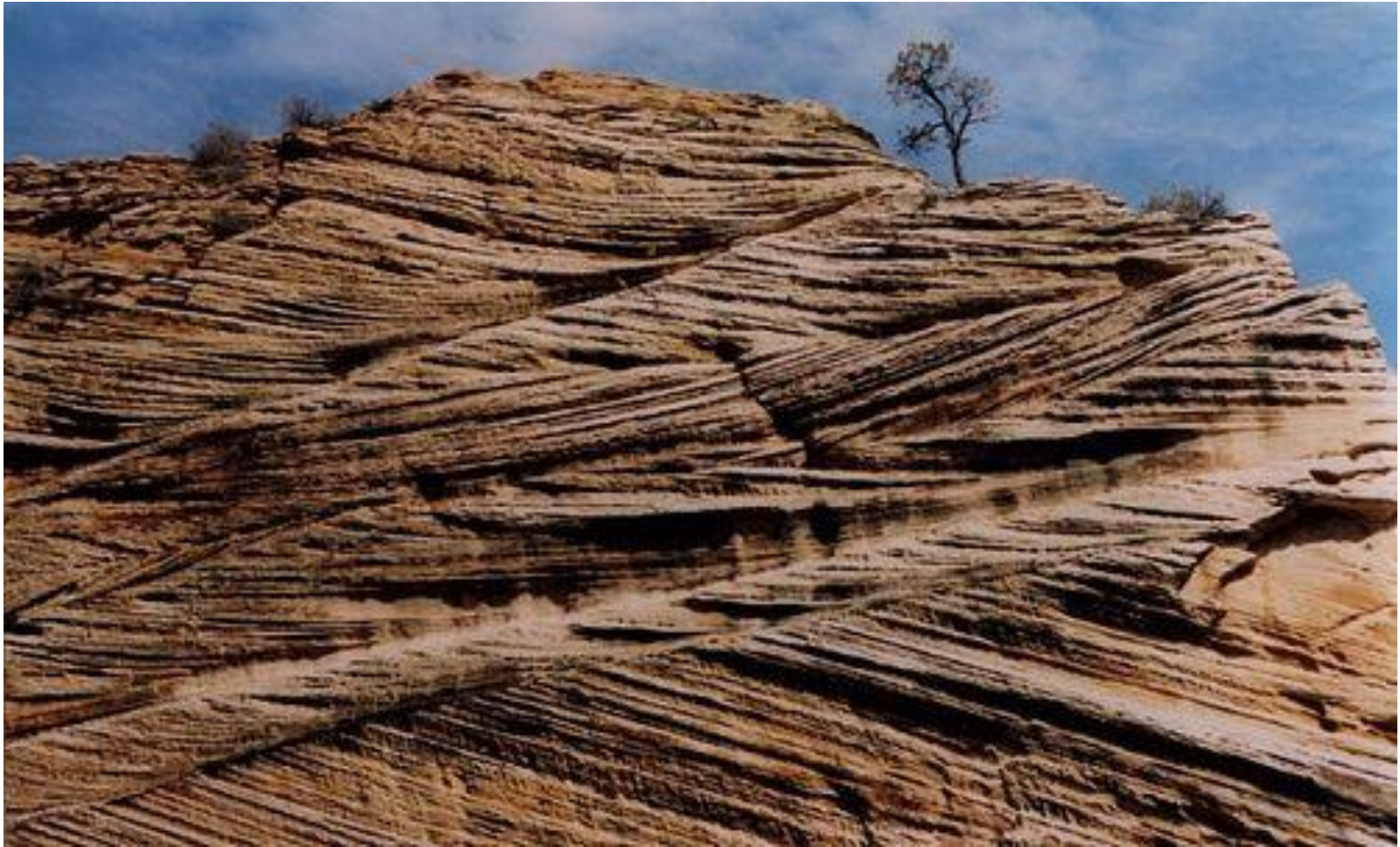
Knife-edge sharp contact of the Coconino Sandstone (above) with the Hermit Shale (below) along the Bright Angel Trail, Grand Canyon, Arizona.



Geological cross-section, north-south, north of Grand Canyon



The 2,300 ft. high cliffs at Zion National Park, shown above, represent the exposed edge of a gigantic sheet of sand, the Navajo Sandstone, that stretched originally from southern California to central Wyoming, and from Idaho to New Mexico. Its volume is sufficient to bury the entire state of Texas to a depth of 285 feet.



Giant crossbeds in Navajo Sandstone, Zion National Park, Utah.
The finer structure corresponds to layers deposited on the back sides of huge underwater sand dunes produced by rapidly flowing water. Bounding surfaces truncate this finer structure.

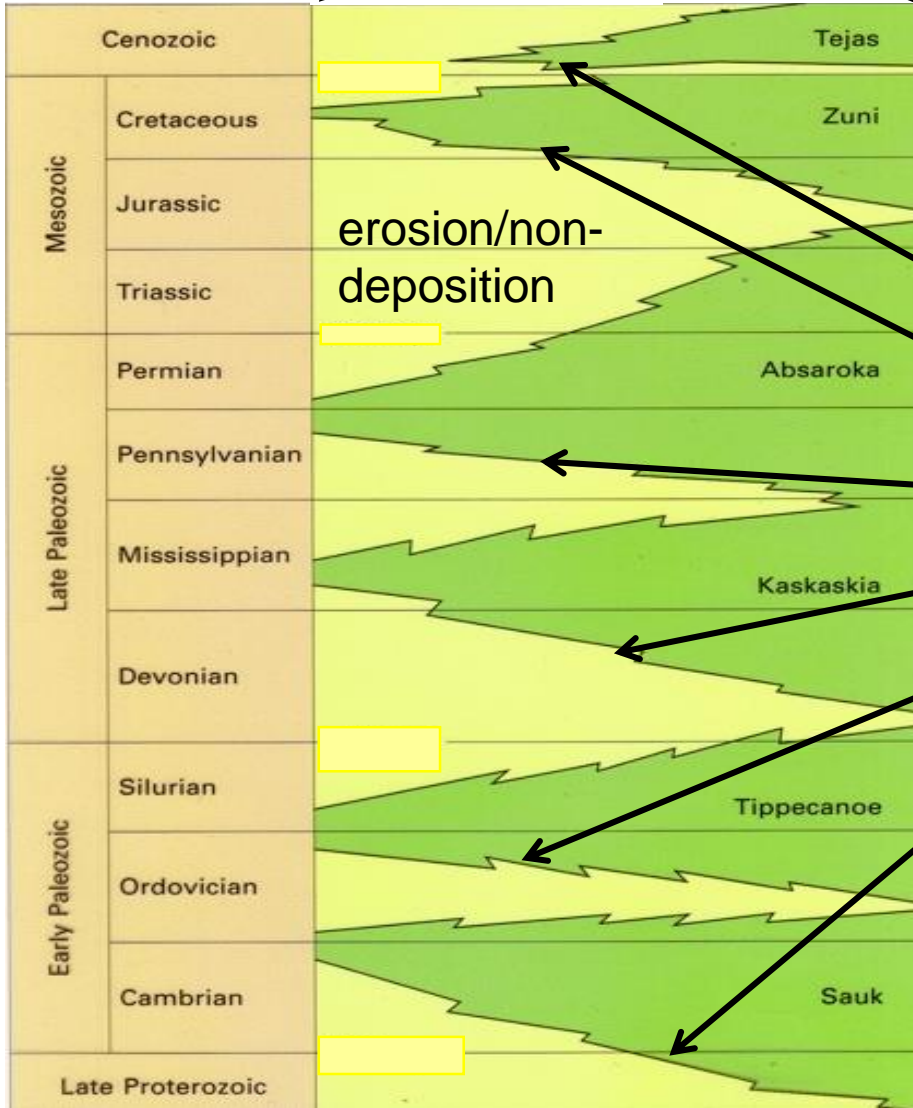
Another telling indicator

Major global-scale erosional boundaries, called unconformities, divide the total fossil-bearing record into a few large packages called mega-sequences.

Geological
Designation

Continent
Center

Continent
Margin



The Sloss Megasequences

Continent-wide
erosional
unconformities

Preserved
sediments are
indicated by green.

Implication

Global-scale physical processes,
likely involving the earth's interior,
were in operation to generate such
large-scale features.

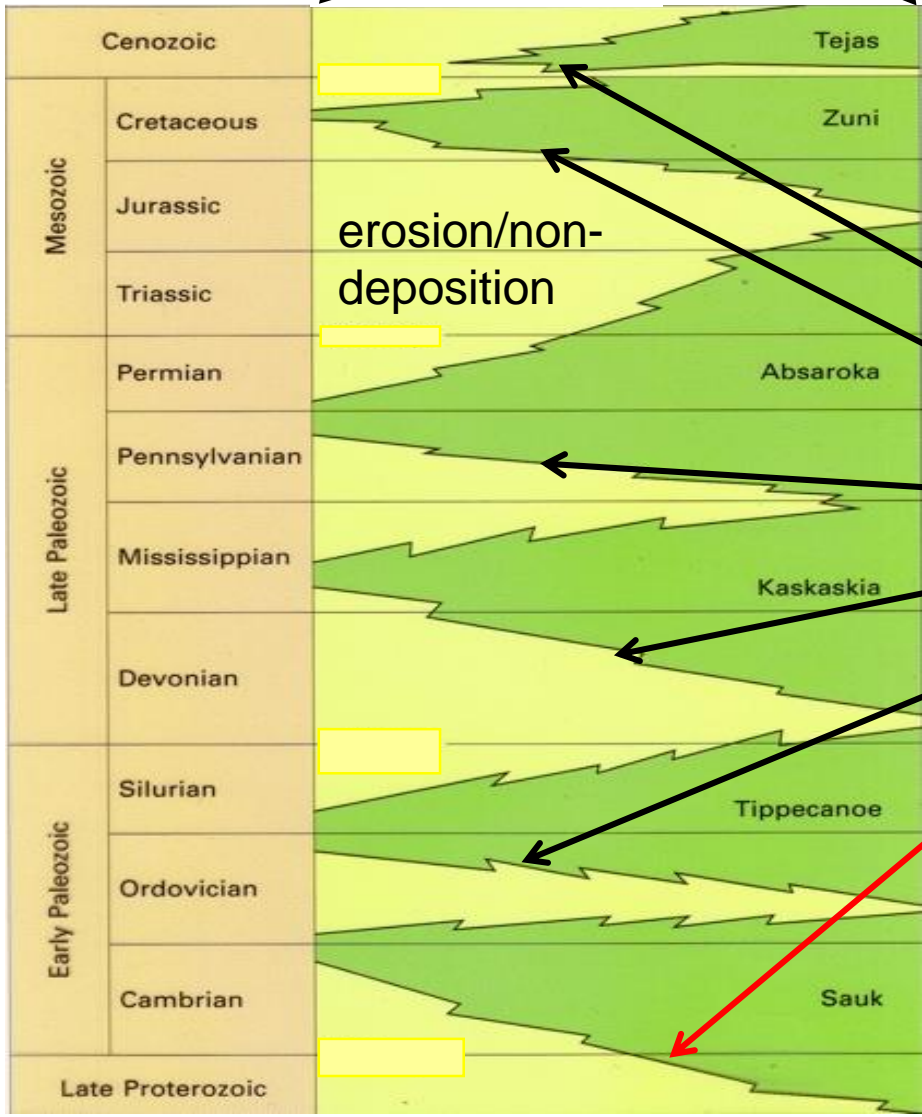
The bottommost unconformity marks the sudden first appearance of fossils of multicellular life in the rock record.

Since fossils are a trustworthy indicator of the Flood, this boundary logically must mark the onset of the Flood.

Geological
Designation

Continent
Center

Continent
Margin



The Sloss Megasequences

Continent-wide
erosional
unconformities

Preserved
sediments are
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This unconformity marking the onset of the Flood is known as the Great Unconformity.

The level of **violence** displayed at this point in the record is difficult for the human mind to imagine.



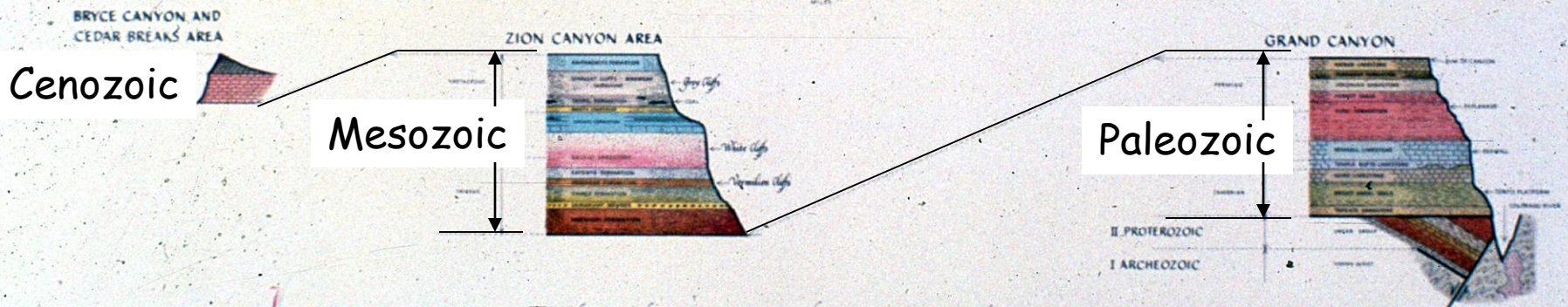
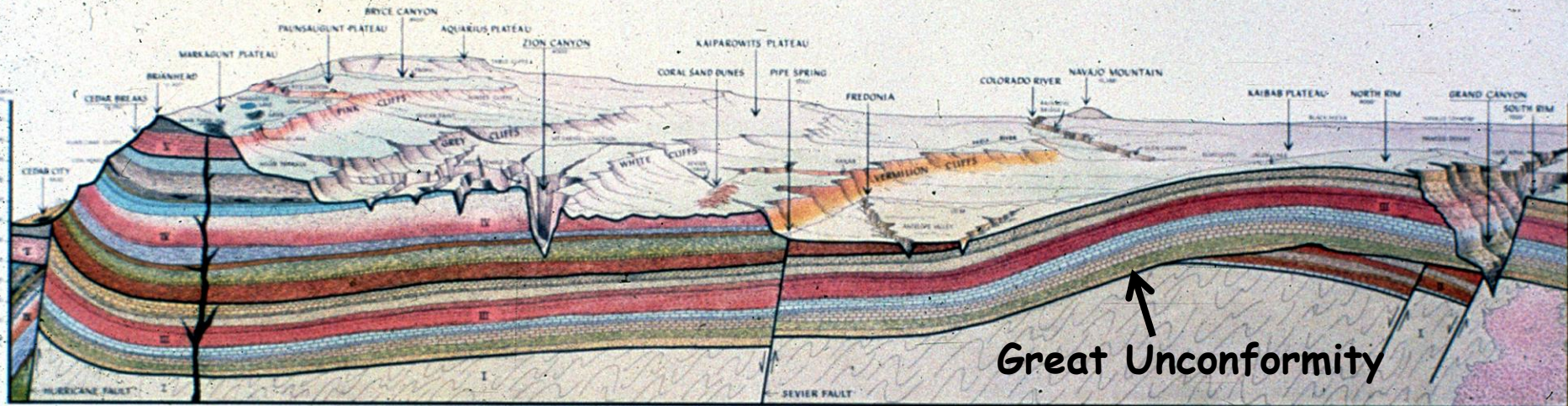
**Great
unconformity
in central
Wisconsin**

**Giant
Baraboo
quartzite
boulders
atop massive
Baraboo
Formation**



Great unconformity in central Wisconsin

GEOLOGICAL CROSS SECTION FROM THE CEDAR BREAKS AREA IN UTAH (LEFT) SOUTHWARD TO THE GRAND CANYON IN ARIZONA (RIGHT)



In this region the forces of erosion have laid bare 1 billion 500 million years of earth history. The oldest rocks, those of the Archeozoic, Proterozoic and Paleozoic are found in the walls of the Grand Canyon. The Mesozoic forms the temples and towers of Zion. The most recent, the Cenozoic, is exposed at Cedar Breaks and Bryce. Presumably all the layers of the Cenozoic and Mesozoic at Cedar Breaks and Zion once extended over the region of the Grand Canyon. The relentless wearing of the waters has striped the layers back to the north forming the celebrated "Great Rock Stairway" of the Vermilion Cliffs, the White Cliffs, the Grey Cliffs and the Pink Cliffs.

The horizontally extensive layers are continuous in E-W and N-S directions for hundreds of miles, contain fossils, and display internal evidence for high velocity water transport.



The Great Unconformity

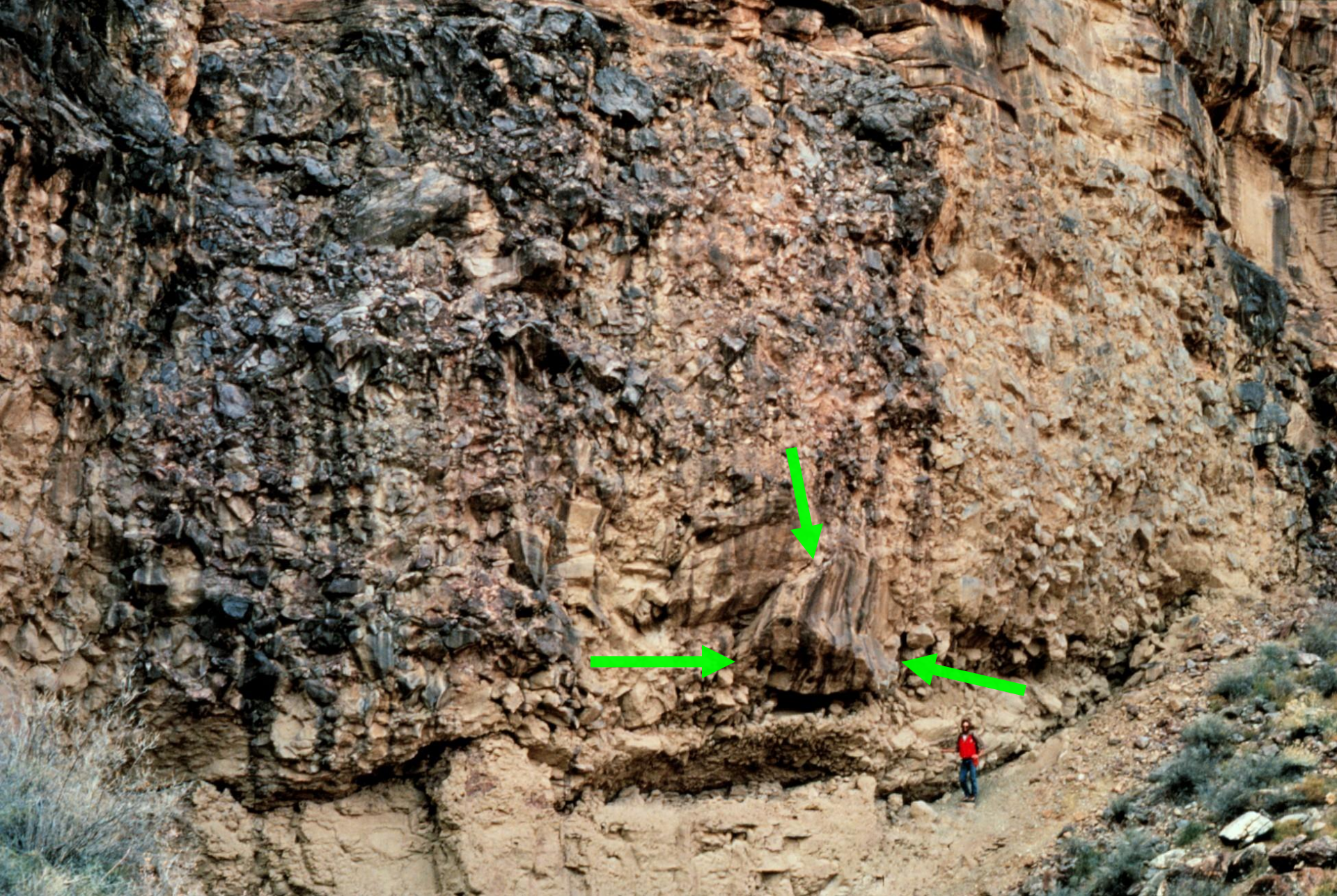
Tapeats Sandstone

Note the sizes
of these cobbles!

Great
Unconformity



Contact between Cambrian Tapeats Sandstone and
Precambrian Hakatai Shale, Grand Canyon, Arizona



**Tapeats Sandstone, Grand Canyon, Arizona.
Note 5 m diameter, 200-ton boulder.**

The Cambrian Explosion

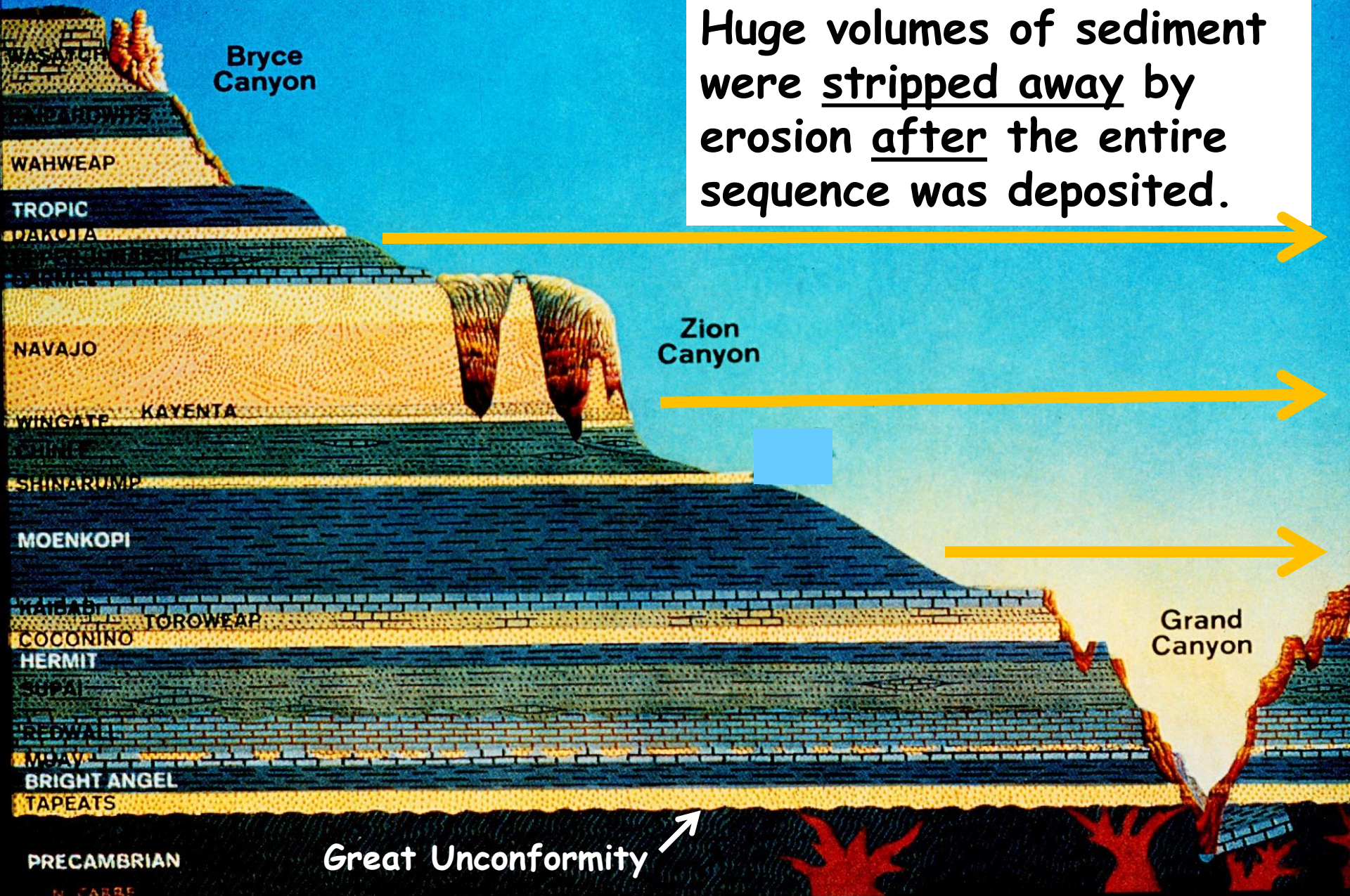
Representatives from 23 of the 27 animal phyla known from the entire fossil record are present in the sediment layers just above the Great Unconformity (in the Ediacaran and Cambrian sediments).

This feature is commonly known as the 'Cambrian Explosion'.

What about the end of the cataclysm?

After so vast an amount of sediment had been carried onto the continents and deposited in horizontally extensive layers, a significant fraction of that sediment was stripped away from the continent interiors and carried by runoff water to the continental shelves at the end of the Flood.

Huge volumes of sediment were stripped away by erosion after the entire sequence was deposited.



Geological cross-section, north-south, north of Grand Canyon

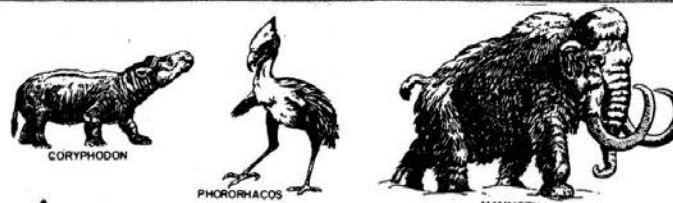
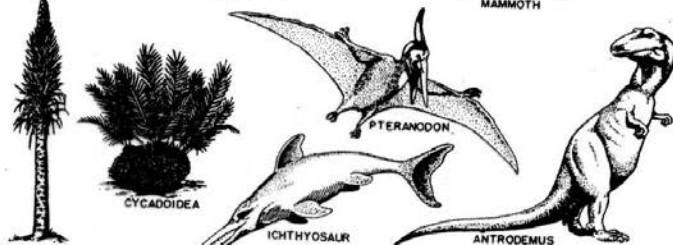
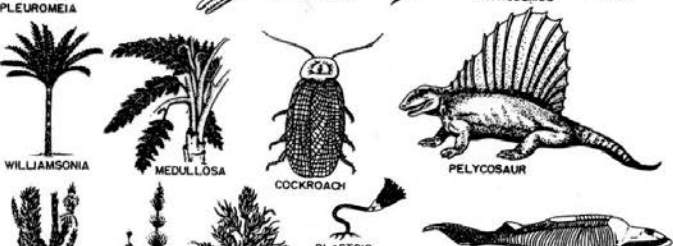
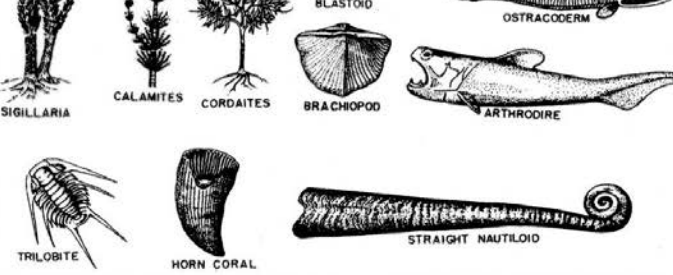


Result of rapid Flood runoff in Bryce Canyon, Utah

In summary, a staggering amount of geological change took place during this global cataclysm.

The Bible reveals that it all unfolded within the span of only a single year.

What is the correct interpretation of the fossil record?

EON	ERA	PERIOD	TYPICAL PLANTS AND ANIMALS
Phanerozoic	Cenozoic	Neogene	 CORYPHODON PHORORHACOS MAMMOTH
		Paleogene	
	Mesozoic	Cretaceous	 PTERANODON ICHTHYOSAUR ANUROTHEMIS
		Jurassic	
		Triassic	
	Paleozoic	Permian	 PLEUROMEIA CYCADOIDEA COCKROACH PELYCOSAUR
		Carboniferous	
		Devonian	
		Silurian	
		Ordovician	
		Cambrian	
pC	Ediacaran	 TRILOBITE HORN CORAL STRAIGHT NAUTILOID	

Absence of fossils
of multi-celled organisms

Is it the record
of some 580
million years of
evolution?

Or, is it tangible
documentation of
the destruction of
life by the Flood
during a single
year?

Which is it?

Key issue with regard to the Flood—

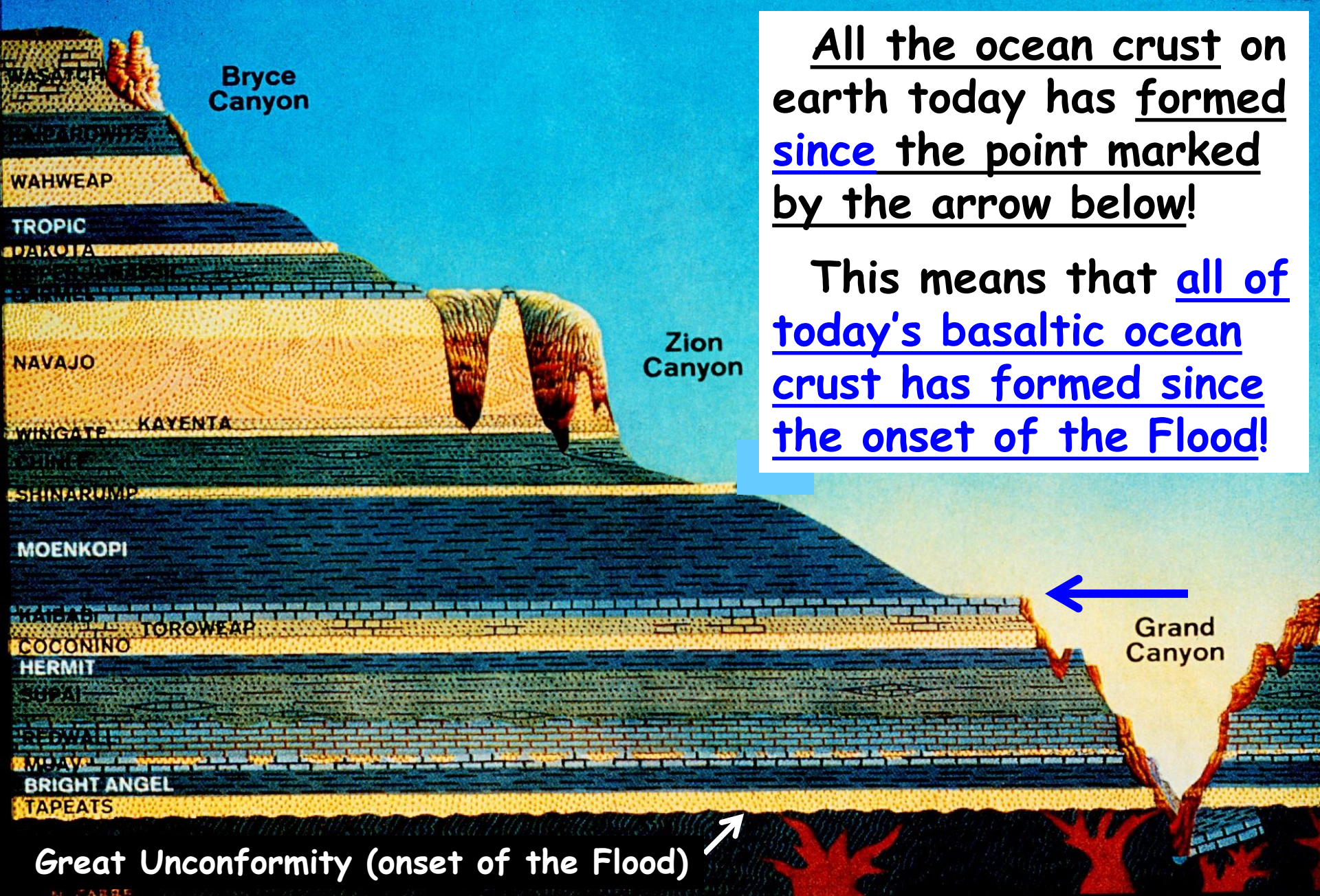
Physically how could so much geological change occur in a time span of only a single year?

What conceivably could have been the main causal mechanism?

Some major clues to the answer come from the ocean bottom.



Huge discovery
of the 1960's:
All of today's
oceanic crust is
younger than
much of the
fossil-bearing
sediment record
on the
continents!



All the ocean crust on earth today has formed since the point marked by the arrow below!

This means that all of today's basaltic ocean crust has formed since the onset of the Flood!

Geological cross-section, north-south, north of Grand Canyon



This implies that the opening of the entire Atlantic Ocean occurred during the Flood and also that continents migrated by thousands of miles in only a few month's time!

What about the pre-Flood ocean floor?

It is missing from the earth's surface today. Taking cues from today's seafloor, it must have been recycled into the earth's interior.

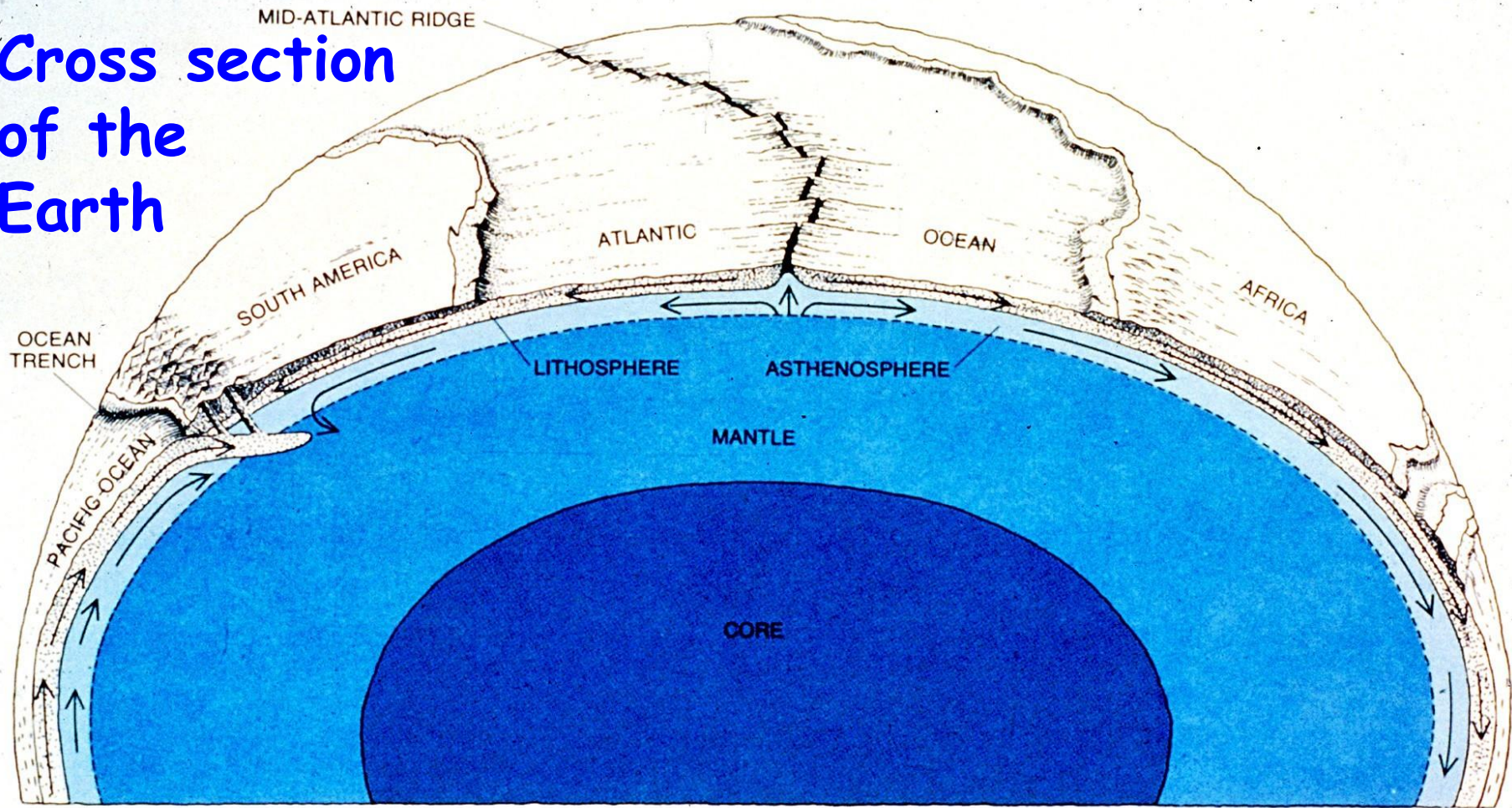
The firm conclusion that rapid, large-scale tectonic change must have been a fundamental aspect of the Genesis Flood has come to be known as catastrophic plate tectonics

The concept was presented in 1986 at the First International Conference on Creationism in Pittsburgh.

Such large-scale tectonic change at the earth surface implies that the earth's interior was also involved.

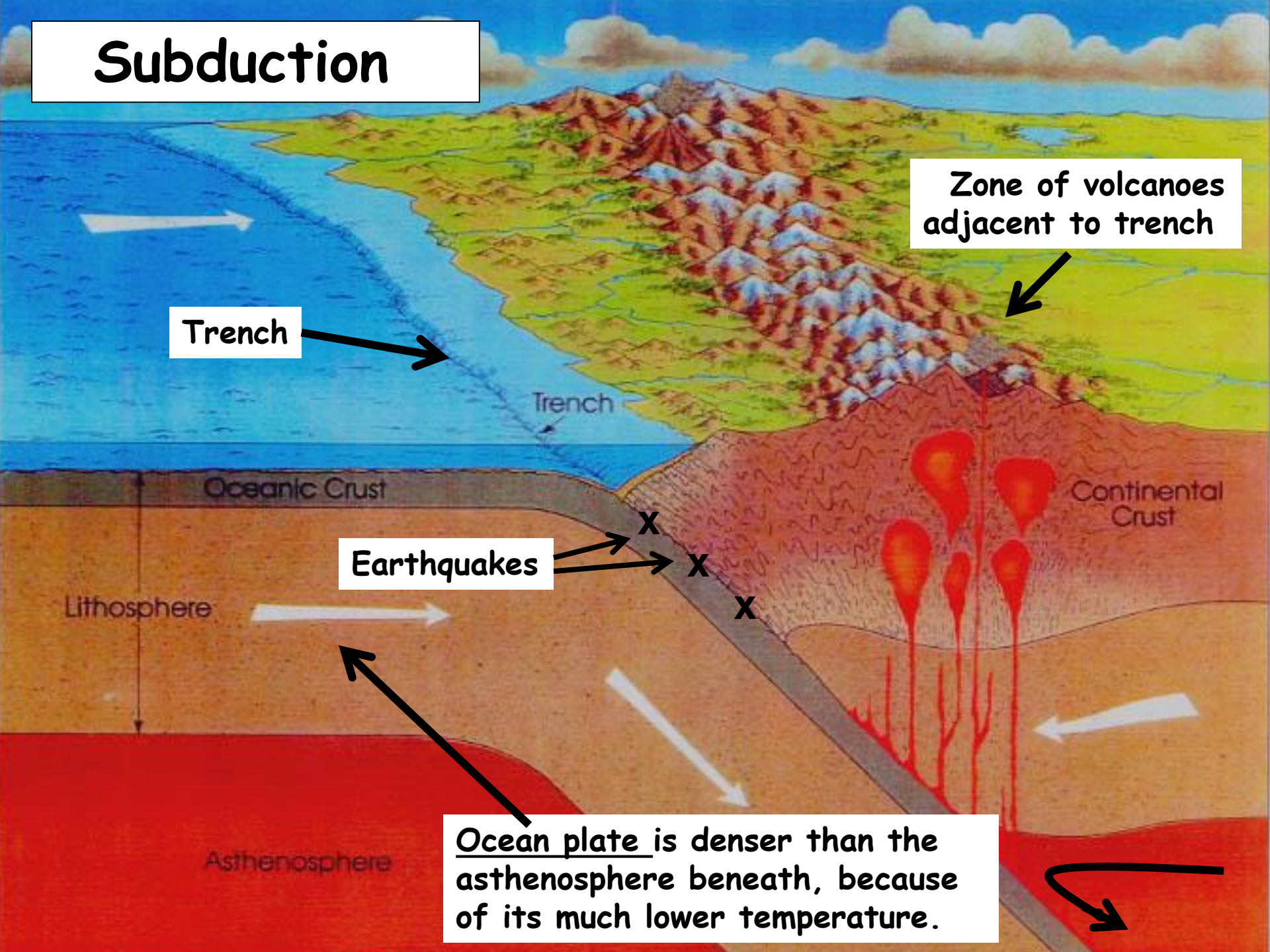
Let us review some basics of the earth's structure.

Cross section of the Earth



The two main parts of the earth are the core, which is mostly molten iron, and the mantle which is mostly solid silicate rock. The uppermost part of the mantle is the thin, cold, and mechanically rigid lithosphere, which is broken into about a dozen large plates. Just below the lithosphere is the much weaker asthenosphere.

Subduction



Zone of volcanoes adjacent to trench

Trench

Trench

Oceanic Crust

Continental Crust

Earthquakes

Lithosphere

Asthenosphere

Ocean plate is denser than the asthenosphere beneath, because of its much lower temperature.

Seafloor spreading

New ocean crust forms at a mid-ocean ridge where plates are moving apart.

Mid-oceanic Ridge

Transform fault

High heat flow

Oceanic Crust

Lithosphere

Magma

Asthenosphere

Molten basalt rises into the gap between the plates and solidifies to form new ocean crust.

