

Engaging Science and Faith with Confidence

Week 3: How Old is the Earth?

**Grace Chapel High School Ministry
November 30, 2014
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Topics

- **Week 1: Science and faith: do we have to choose?**
- **Week 2: What does Genesis tell us about creation?**
- **Week 3: How old is the earth?**
- **Week 4: Evolution and Christian faith**
- **Week 5: Whom do you trust in science?**

Active Volcanoes, Plate Tectonics, and the "Ring of Fire"



Tectonic Plate Reconstruction



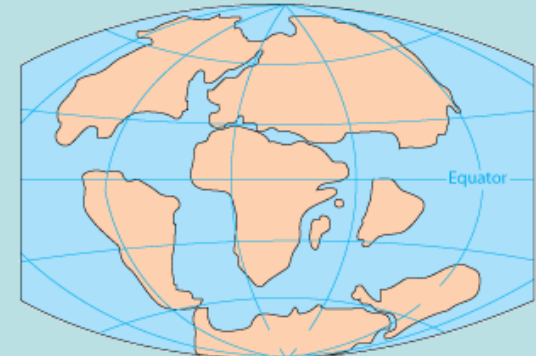
PERMIAN
250 million years ago



TRIASSIC
200 million years ago



JURASSIC
145 million years ago



CRETACEOUS
65 million years ago



PRESENT DAY

Interpretation: Bible and Natural World



How to interpret Scripture

- Can information from the natural world contribute to understanding the Bible?

How to interpret Nature

- Did the authors intend Bible to be used to understand the natural world?



Harmony of Bible & Nature

- **Two books of God:
the Word and the World;
Natural Revelation &
Scripture**

- **Origen** (186-254 AD)

- God as author - harmony

- **Thomas Aquinas** (1225-1274)

- Rightly understood, natural philosophy could not contradict theology or faith.

- **Francis Bacon** (1561-1626)

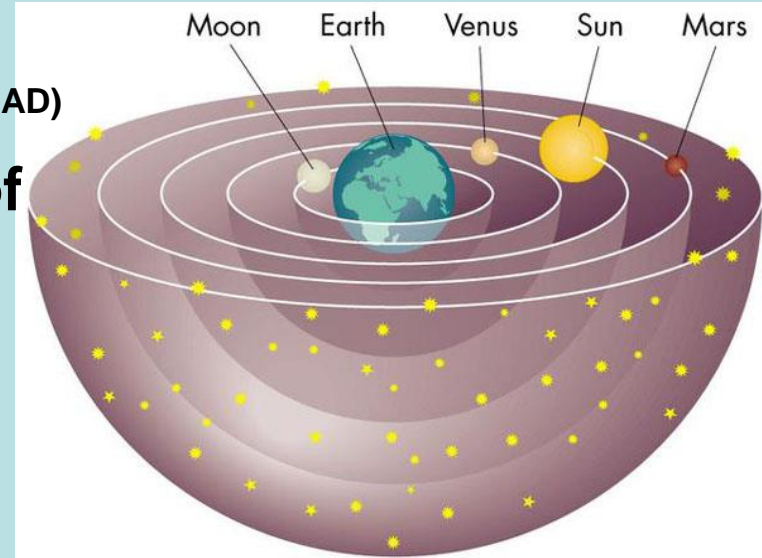
- Natural world worthy of study, a key to Scripture.
- The glory of God is revealed in the mechanisms of natural processes.



www.123rf.com

① **Astronomy** (1543-1700): **Geocentric worldview**

- **Based on teachings of Aristotle** (384–322BC) **and Ptolemy** (90-168AD)
- **Common sense of the day, lack of evidence to the contrary**
young earth, global flood,
7-day creation.
- **Interpretations of Scripture were consistent with this view**



Model wasn't working well:

- **Calendar problems**
- **Need for better ocean navigation**

Invention of telescope, provided data

Bible Interpretation

- **Ps 19:4b-6** In the heavens he has pitched a tent for the sun, ...It rises at one end of the heavens and makes its circuit to the other;
- **Ps 104:5** He set the earth on its foundations; it can never be moved.
- **Ecc 1:5** The sun rises and the sun sets, and hurries back to where it rises.

Change to Heliocentric Worldview

- **Copernicus published in 1543**
- **Galileo (1564-1642): opposition from astronomers and church**
 - God's two books; appealed to Augustine on interpretation of Scripture. “**How to go to heaven, how the heavens go**”
- **Re-interpretation of Scripture & universal worldview**
- **150 years before widely accepted**

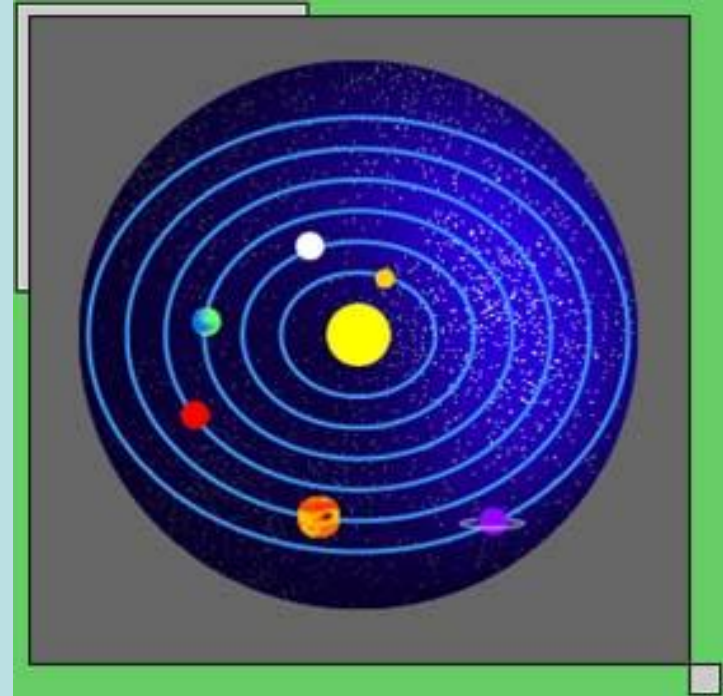
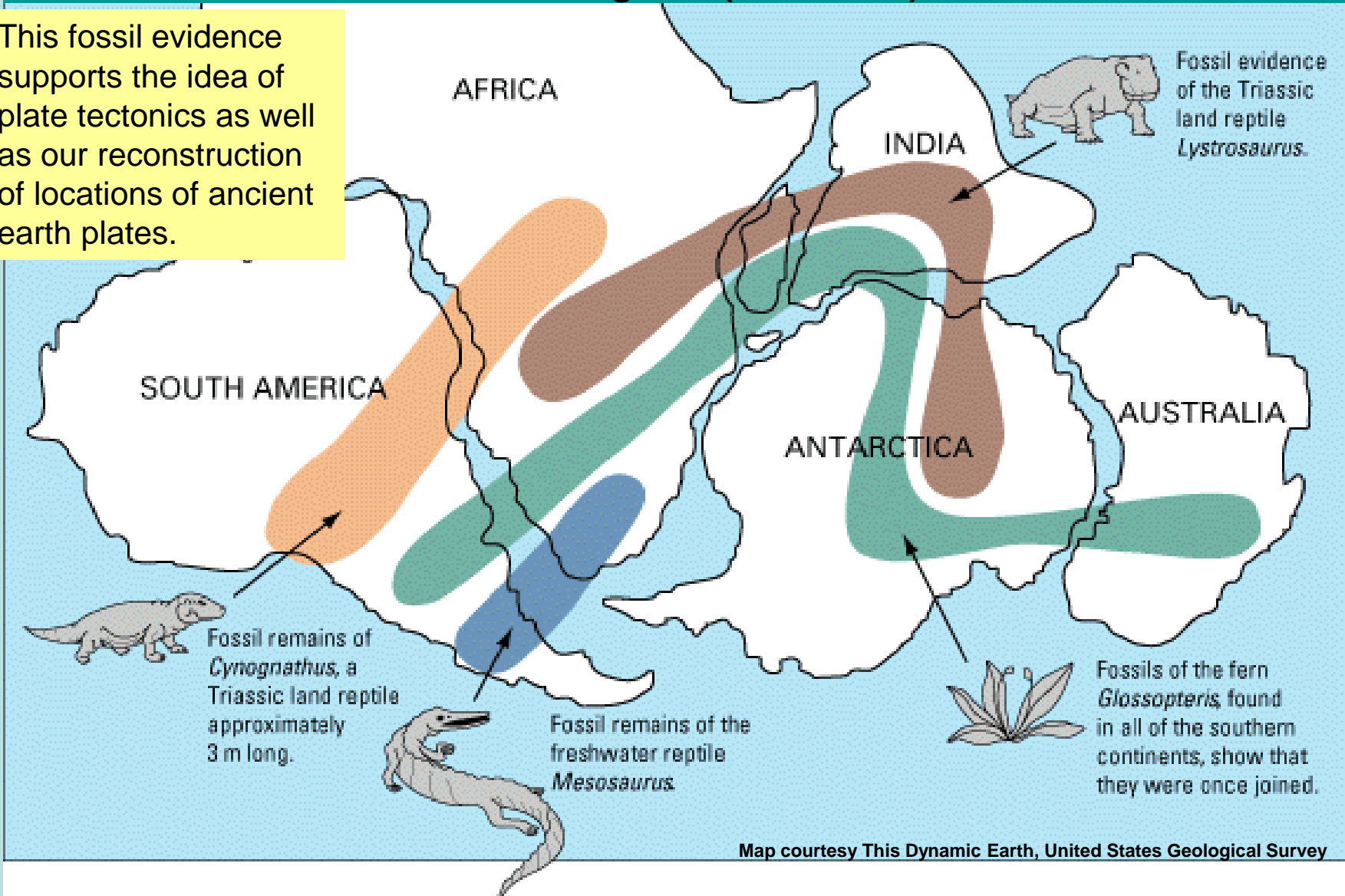


Plate Tectonics, was initially ridiculed among scientists.

Alfred Wegener (1880-1930)

This fossil evidence supports the idea of plate tectonics as well as our reconstruction of locations of ancient earth plates.



-- Table Discussions --

Have you grown up with:

- a scientific world view?
- an anti-science or young earth worldview?
- or somewhere in-between?

Does the idea of two books of God make sense to you?



How God did it

Young Earth Creationism

(universe formed over six 24-hour days)

Old Earth Creationism

(universe formed over six long age periods)

Evolutionary Creationism

(evolution as a natural process within God's creation)

Massachusetts Geology



Multiple metamorphism events



Dinosaur footprints

How God did it

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② Geology

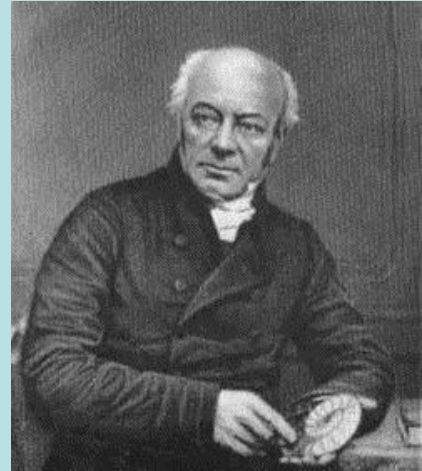
Early stratigraphy 17th Century

- **William Smith** (1769-1839)
 - Observations!
 - Rock layers had predictable pattern
- Layers could be identified by the fossils it contained



Early British Geologists

- **Many were theologians**
 - Rev. William Buckland (1784-1856) Oxford
 - Rev. Adam Sedgwick (1785-1873) Cambridge
 - theological conservative
 - John Pye Smith (1774-1851)
 - Reconciling geological time w Scripture



Early Geology Understandings

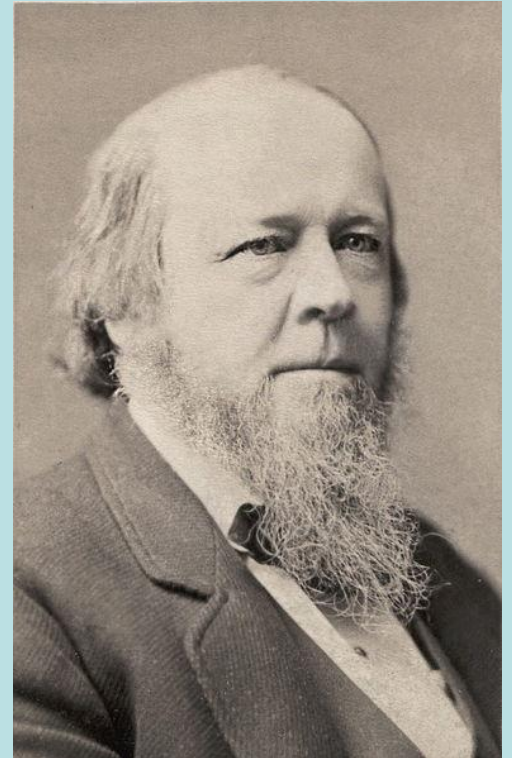
- Competing geological theories & models
 - Catastrophism.
 - Uniformitarianism
- Initially agreed w 6x24 hour days
- In 1790 4004BC date of creation, okay
- By 1810 all geologists accepted a vast age.

Early Geology in New England

Benjamin Silliman

(1779-1864, Yale)

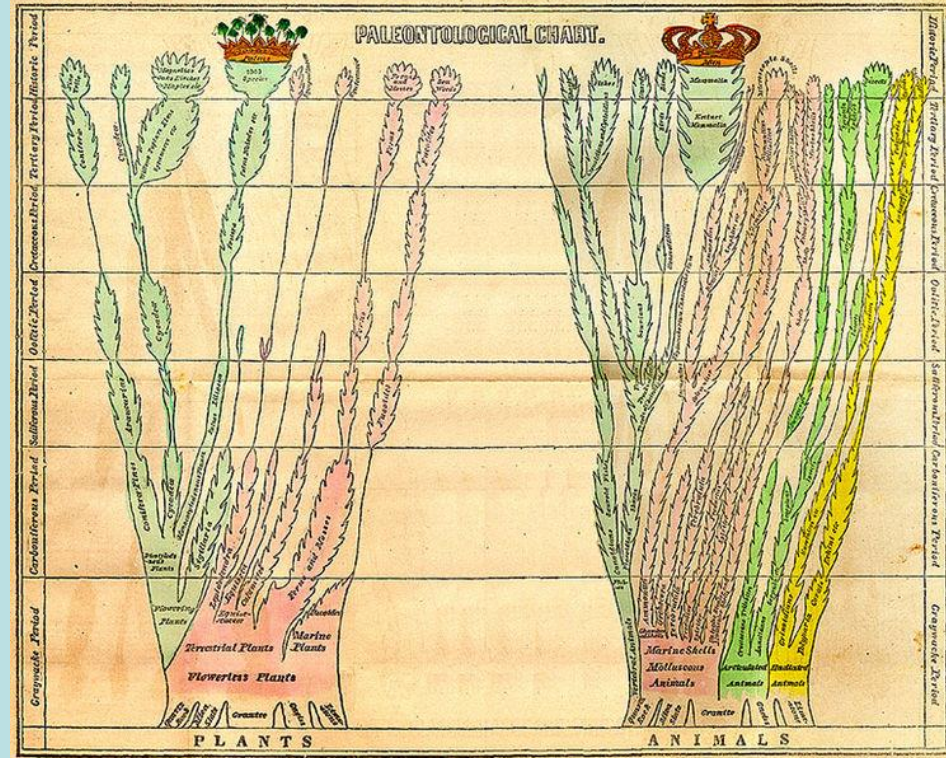
- Old-earth harmony with Bible
- Popular with general public as a lecturer with a love of science and obvious love for God.



www.picturehistory.com

Rev. Edward Hitchcock (1793-1864)

- Yale: prep for ministry
- Old-earth
- harmony with Bible



- **1851 *The Religion of Geology***
 - “the facts of science, rightly understood, should not contradict the statements of revelation, correctly interpreted.”
- Paleontological chart 1840 (Darwin’s *Origin of Species*, 1859)

By 1850s Christians in geology agreed:

- **Long time needed for geologic layers**
- **Earth extremely old; death in animals before Fall**
- **Geology did not support a global flood.**
- **Theologians need input from science for interpretation of the Bible.**

Early 20th Century Creationists

- Flood 'Geology'
- 7th Day Adventists - 'Diluvianists.'
first 50 years of 20th Century
- **George McCready Price (1870–1963).**
 - he could "barely tell one fossil from another"
 - 1923: *The New Geology*
- **The Genesis Flood, 1961, Whitcomb & Morris**

Perspectives on God's Two Books

Kingdom of God

OEC-ID

EC

Bible only

YEC

6x24-hour days
creation

Earth is young

No death before Fall.

Ken Ham - AIG

Creation Museum

Old Earth Creationism &
Intelligent Design

Hugh
Ross

God Created!
Big Bang
Common descent
Science shows
God's glory and awe

Francis Collins
Tim Keller
Billy Graham
Gordon College
GCTS ASA
N.T. Wright

Bible + science

Liberal and Mainline Churches

Atheists

- Total Random
- No direction
- We are alone
- Science explains

Science only

Philosophical
Naturalism

Biblical Worldview for today



WORK OF GOD

Ultimate cause/purpose is God
Accessible through experience/faith
Purpose: WHO/WHY

REALM OF SCIENCE

Natural cause only
Accessible only through experiment
No purpose: HOW/WHEN



Flood Geology Errors

- **1. Confuse evolution with geology**
- **2. Number of animals/plants represented in fossil record is far greater than today – we are zoologically impoverished?**
- **3. Flood ‘geologists’ do not understand physical & chemical conditions of how rocks form & fold.**
- **4. Later geologic discoveries show that flood geology was not possible.**

Conclusions / Suggestions

- **God's two books: Nature & Bible ought not contradict themselves.**
- **New information from Nature should cause a re-evaluation of Bible interpretation.**
- **We are all (YEC, OEC, EC) in the Kingdom of God. Our focus should be external, not in-fighting.**
- **Noah's flood may have been regional.**
(Rom.1:8 your faith is being reported all over the world.)
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