



The fossil record is (not) more compatible with the model of creation than the model of evolution.

- The “creation model” is a myth based on the Bible.
- There is not such thing as a “model of evolution.”
- Many illustrative examples



The Mythical “Creation Model” based on the Bible

- The Earth and the whole universe were created by a supernatural person.
- Two contradictory versions:
 - Genesis 1.1 through 1.31
 - Genesis 2
- There was a world-wide “flood” that accounts for known geological formations.



Genesis 1 Myth

- Day 1: Sky, Earth, light
- Day 2: Water, both in ocean basins and above the sky(!)
- Day 3: Plants
- Day 4: Sun, Moon, stars (as calendrical and navigational aids)
- Day 5: Sea monsters (whales), fish, birds, land animals, creepy-crawlies (reptiles, insects, etc.)
- Day 6: Humans (apparently both sexes at the same time)
- Day 7: Nothing (the Gods took the first day off anyone ever did)



Contradictory Genesis 2 Myth

- Earth and heavens (misty)
- Adam, the first man (on a desolate Earth)
- Plants
- Animals
- Eve, the first woman (from Adam's rib)



The Bible Accounts for the Fossil Record

- No mention of continents or anything beyond a 400 mile radius.
- No plate tectonics.
- No mention of fossils at all.
- Trilobites are completely absent.
- Whatever happened to the dinosaurs?
- To say nothing of Australopithecus.
- The Bible is a complete dud in explaining the fossil record.



What is the mythical “Model of Evolution?”

- Disappointingly—it’s only science.
- “Model of evolution” is a hoax created by creationists to attack mainstream science.
- Surprise! Evolution and modern geology were developed by creationists!!!
 - James Hutton
 - Charles Lyell
 - Charles Darwin!!



What is True

■ Not the Bible

- Adam and Eve—fictitious
- Noah—a fictitious character with no purpose
- Abraham—a mythical figure
- Moses—actually Charlton Heston

■ Science is true. Here is what is true:



What is True

- The Sun was formed by the collapse of hydrogen (and helium) gas.
- The Earth was formed by accretion of heavy elements from a supernova.
- The Earth is about 4.5 billion years old.
- Life started spontaneously on Earth about 3.8 billion years ago.
- We are all descended from that first life.



What is True

- The fossil record reflects this great lineage without contradiction:
 - Fossils of ancient forms in ancient formations
 - Fossils of more modern forms in more recent formations.
- Biochemistry reinforces this lineage without contradiction:
 - Analysis of DNA
 - Protein sequences



Why is the “creation model” false?

■ Because creationism wants a young Earth. But the Earth is old.

- Origins of Layered Sediments, Including Varves
- Green River Formation
- Multiple Glaciations: Incompatible With "Noah's Flood"
- Angular Unconformities
- Weathering and Erosion
- Origin of Salt Deposits
- http://home.austarnet.com.au/stear/henke_refutes_sarfati.htm

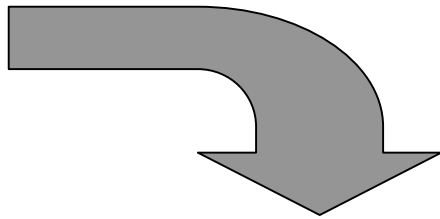


Evidence of Old Earth

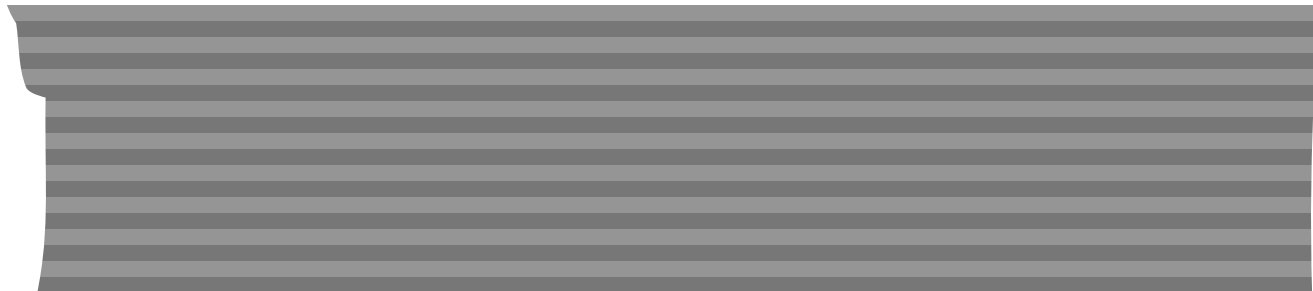
Varves

- Varves show yearly dates like tree rings do.

Seasonal changes produce
different shades of sediment



Each cycle represents one year.
Some formations show 10,000,000
couplets





Evidence of Old Earth

Multiple Glaciations

- Geological record shows multiple glaciations.
- ..[N]umerous examples of Ordovician and Late Paleozoic glacial deposits that are sandwiched between Paleozoic rocks that YECs would like to attribute to the "Flood." [Henke]
- Hambrey, M.J. and W.B. Harland, 1981, "Earth's Pre-Pleistocene Glacial Record," International Geological Correlation Programme, Project 38: Pre-Pleistocene Tillites, Cambridge University Press, Cambridge.



Evidence of Old Earth

Multiple Glaciations

In another example, Late Ordovician tillites of the Tamadjert Formation of the Central Sahara of Africa are sandwiched between overlying 500 meter-thick graptolite-rich Silurian marine shales and underlying sandstones and clay beds of the 300 to 400 meter-thick Lower Ordovician Ajjers and In Tahouite formations (Biju-Duval et al., 1981, p. 100-101). The tillites range from a few meters to 200 meters thick. [Henke]

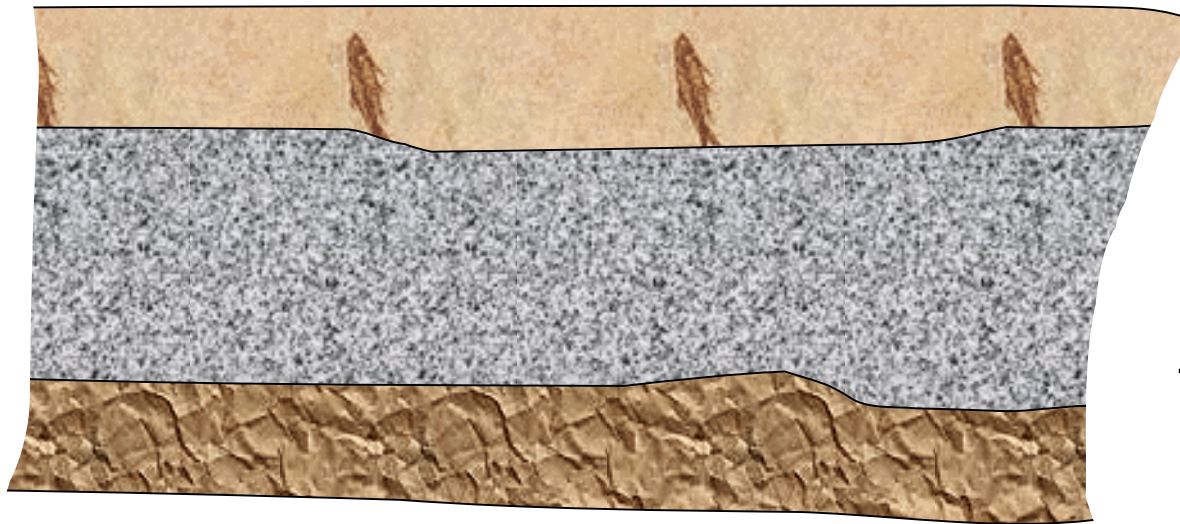
Biju-Duval, B.; M. Deynoux and P. Rognon, 1981, "Late Ordovician Tillites of the Central Sahara," in M.J. Hambrey and W.B. Harland (eds.), "Earth's Pre-Pleistocene Glacial Record," Cambridge University Press, Cambridge, p. 99-107.



Evidence of Old Earth

Multiple Glaciations

These tillite (and other) layers between other formations produce a real problem for creationists. They could not have been produced during the 100 days “flood.”



Glacial tillite
between two
other
formations.



Evidence of Old Earth

Angular Unconformities

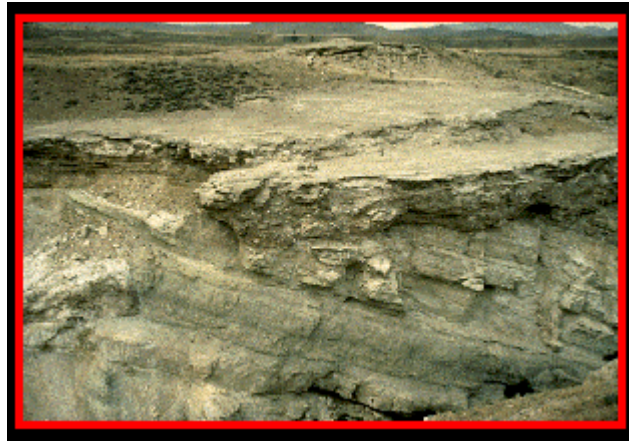


Photo by S. M. Richardson, Iowa State University



Evidence of Old Earth

Angular Unconformities

- The exposure shown above, along a stream bank at Coulter's Hell in Wyoming, is similar to what Hutton saw.
- Sedimentary rocks at the surface are horizontal, as they should be according to Steno, but those below tilt at a high angle.
- The plane of contact between the upper and lower sediment is the angular unconformity.
- Hutton correctly deduced that the following sequence of events must have occurred:

http://www.ge-at.iastate.edu/courses/Geol_100/angular.html



Evidence of Old Earth

Angular Unconformities

- 1. The lower sediments were deposited as horizontal layers in a body of water.
- 2. The lower sediments were raised above water level and tilted during a tectonic event.
- 3. Streams or other erosional forces carved a nearly horizontal surface across the tilted beds.
- 4. The land surface subsided (or the water level raised), submerging the erosion surface.
- 5. A new series of sediments deposited in horizontal layers on the erosion surface.
- 6. The complicated sequence of tilted and horizontal rocks was again uplifted, exposing them to erosion and producing the outcrop we see today.

http://www.ge-at.iastate.edu/courses/Geol_100/angular.html



Evidence of Old Earth

Angular Unconformities

James Hutton's interpretation of an angular unconformity was thus a watershed in the history of geology as a science, often cited as the event that opened the door to our modern view of the Earth.

http://www.ge-at.iastate.edu/courses/Geol_100/angular.html



Evidence of Old Earth

Angular Unconformities

If God's purpose was to make the Earth's crust on the first day, why go to all the bother of producing 12,200 meters of sediments and volcanics and then destroy them with not one, but at least two, separate metamorphic events? Why not just precipitate the crust from a simple granitic melt and get the job done as YEC Gentry (1988) suggests? Even more to the point, why should any scientist invoke miracles to explain away the complex history of the Vishnu Schist when the geology offers a logical history without miracles? Scientists don't see miracles occurring today and they don't see any evidence for miracles in the geologic record, so why should we invoke them to explain the past when the geologic evidence presents a clear and logical history that doesn't depend on unverified supernatural events? [Henke]



Evidence of Old Earth

Weathering and Erosion

- It is certainly possible that catastrophic local floods could erode rocks very quickly. However, erosion is not usually that fast and many silicate rocks are a lot harder than concrete and cement. Furthermore, the presence of well developed Precambrian and Phanerozoic weathering profiles or ancient soils (paleosols) utterly refute YEC.
- Ancient soils with good horizons could not have formed during a "Flood" and often not even in 10,000 years.
- As examples, Meyer (1997, p. 120) lists several paleosols and other soil phenomena that would exceed YEC time frames. Specifically, a one meter alterite in India is estimated to have taken 55,000 years to develop. [Henke]



Evidence of Old Earth

Weathering and Erosion

- **Silcrete takes 100,000 to 1 million years to form. An iron-rich bauxite in Hawaii formed over a period of 10,000 years. A complex iron-rich duricrust in Senegal took 6 million years to form.**
- **A one meter thick calcrete with good drainage typically takes about 1 million years to develop.**
- **In other examples, Retallack (1986) describes a Precambrian paleosol in a complex series of metamorphosed sedimentary rocks and basalts. Retallack (1986) estimated that the one soil, alone, took 7,000 years to form. [Henke]**



Evidence of Old Earth

Origin of Salt Deposits

- **Another great problem for YECs is how enormous amounts of water-soluble salts (evaporites) could form in the geologic record during a "Flood."**
- **Some salt deposits are very thick and pure. How were these thick deposits "stuffed" into a sediment column without contaminating them with silicate-rich muds or dissolving them with "Flood water"?**
- **Open marine carbonates are located at the bottom of the Silurian sequence of the Michigan Basin (Schreiber, 1988, p. 238-240) Above them are evaporites.**
- **Overlying the evaporites are more carbonates that formed when fresh seawater entered the basin. [Henke]**



Evidence of Old Earth

Origin of Salt Deposits

- Above these carbonates, are more layers of evaporites that were slowly produced by evaporating brines that were again trapped in the basin by the reefs.
- Next, another layer of carbonates formed as seawater once more entered the basin.
- Finally, more than 610 meters (2,000 feet) of very shallow water evaporites filled the basin (Schreiber, 1988, p. 238-240).
- Again, these features are entirely compatible with slow evaporation and periodic influxes of seawater over long periods of time. However, they are incompatible with a rapidly raging YEC "Flood." [Henke]



Minimum Nucleotide Differences

1. Human
2. Monkey
3. Dog
4. Horse
5. Donkey
6. Pig
7. Rabbit
8. Kangaroo
9. Duck
10. Pigeon
11. Chicken
12. Penguin
13. Turtle
14. Rattlesnake
15. Tuna
16. Screw worm
17. Moth
18. Neurospora
19. Saccharomyces
20. Candida

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Human																				
2. Monkey	1																			
3. Dog	13	12																		
4. Horse	17	16	10																	
5. Donkey	16	15	8	1																
6. Pig	13	12	4	5	4															
7. Rabbit	12	11	6	11	10	6														
8. Kangaroo	12	13	7	11	12	7	7													
9. Duck	17	16	12	16	15	13	10	14												
10. Pigeon	16	15	12	16	15	13	8	14	3											
11. Chicken	18	17	14	16	15	13	11	15	3	4										
12. Penguin	18	17	14	17	16	14	11	13	3	4	2									
13. Turtle	19	18	13	16	15	13	11	14	7	8	8	8								
14. Rattlesnake	20	21	30	32	31	30	25	30	24	24	28	28	30							
15. Tuna	31	32	29	27	26	25	26	27	26	25	26	27	27	38						
16. Screw worm	33	32	24	24	25	26	23	26	25	26	26	28	30	40	34					
17. Moth	36	35	28	33	32	31	29	31	29	30	31	30	33	41	41	16				
18. Neurospora	63	62	64	64	64	64	62	66	61	59	61	62	65	61	72	58	59			
19. Saccharomyces	56	57	61	60	59	59	59	58	62	62	62	61	64	61	66	63	60	57		
20. Candida	66	65	66	68	67	67	67	68	66	66	66	65	67	69	69	65	61	61	41	

Science, vol. 155, p. 281, Table 3. Copyright 1967 by AAAS.

John Blanton 30 March 2002



DNA of Humans and Other Animals

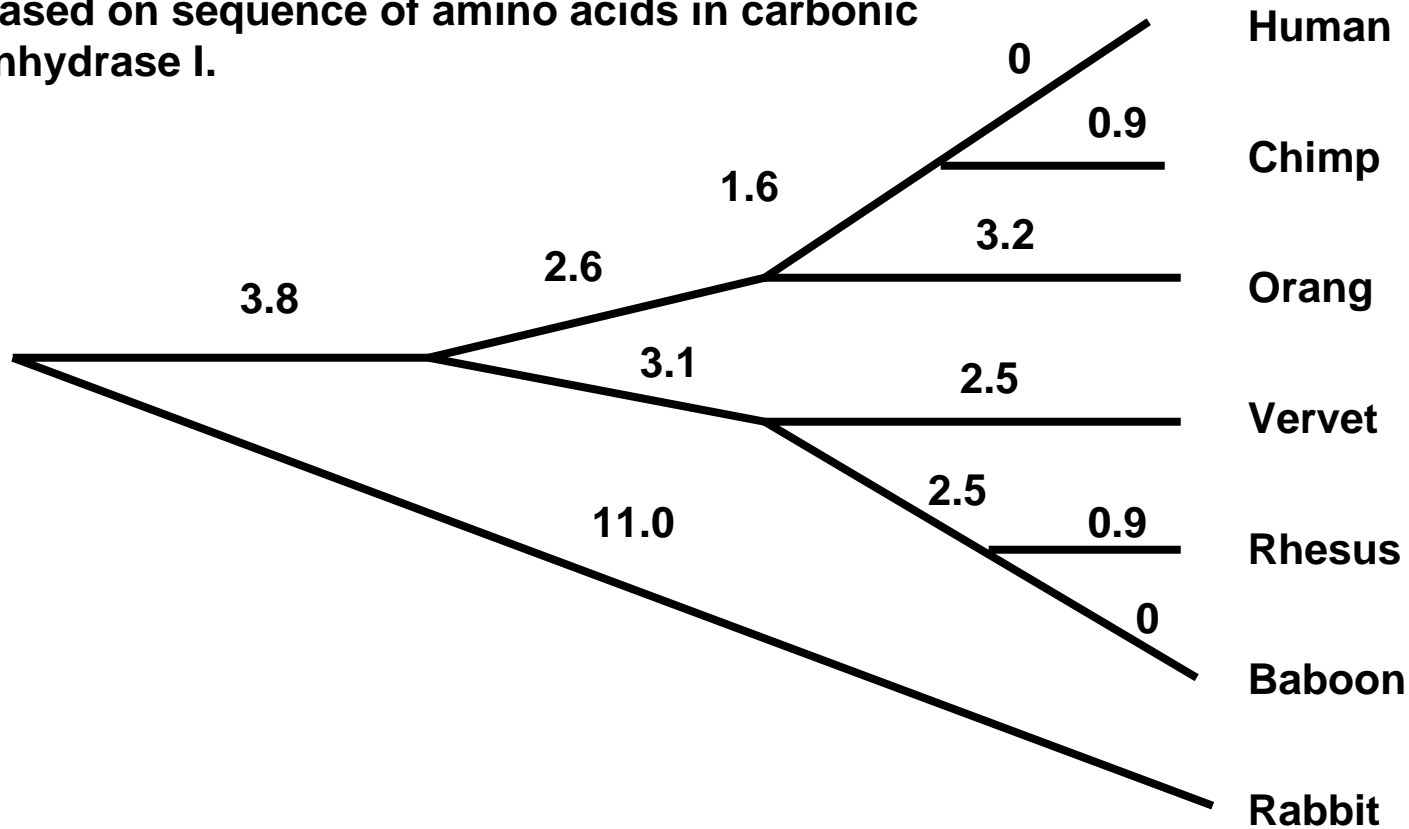
	Taxonomic Differences	Percent DNA Binding
Man	Family	100
Chimpanzee	Family	100
Gibbon	Super family	94
Rhesus monkey	Super family	88
Capuchin monkey	Suborder	83
Tarsier	Suborder	65
Slow loris	Suborder	58
Galago (loris)	Suborder	58
Lemur	Suborder	47
Tree shrew	Suborder	28
Mouse	Order	21
Hedgehog	Order	19
Chicken	Class	10

Based on data of B. H. Hoyer and R. B Roberts, pp. 425-79 in H. J. Taylor, ed., *Molecular Genetics*, Academic Press, New York.



Phylogeny of Primates and Rabbit

Based on sequence of amino acids in carbonic anhydrase I.



Based on data of R. E. Tashian, M. Goodman, R. E. Ferrell, and R. J. Tans, in Molecular Anthropology, M. Goodman, R. E. Tashian, and J. H. Tashian, eds. Copyright 1976 Plenum Press New York.

John Blanton 30 March 2002