

Part 14

What caused the Ice Age?

Two Theories of Origins

View #1 – God created the heavens and the earth. (in six days, thousands of years ago)

View #2 – The heavens and earth evolved without God. (millions and billions of years ago)

What was the earth like after the flood?

Were the catastrophes over?





What is the Ice Age?

A long period of reduction in the temperature of Earth's surface and atmosphere, resulting in the presence or expansion of continental and polar ice sheets and mountain glaciers.

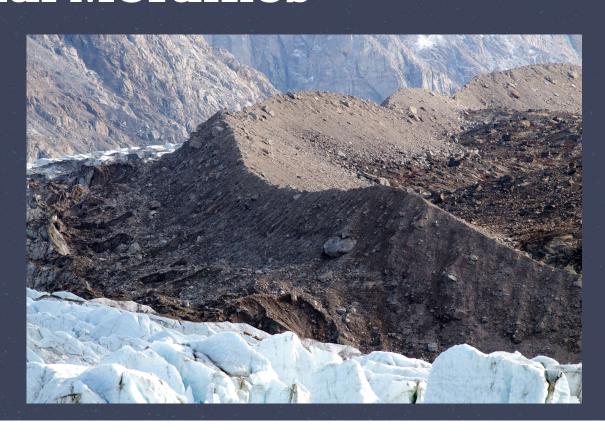


Evidence for the Ice Age: 1. Striations (rock scratching)





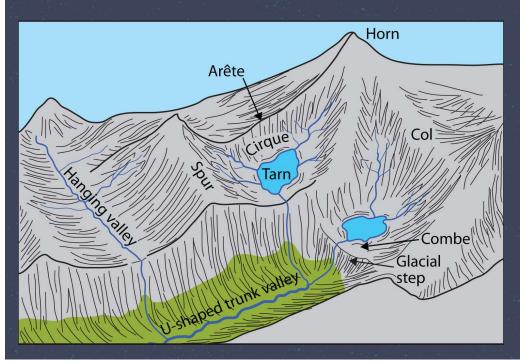
Evidence for the Ice Age: 2. Glacial Moraines



Evidence for the Ice Age: 3. Glacial Valley Cutting



Evidence for the Ice Age: 4. Glacial Erratics





Ice Age Statistics:

-30% of the continents were covered with ice (compared to 10% today).
-Average ice thickness was 2.0-2.5

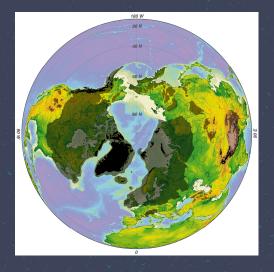
miles.

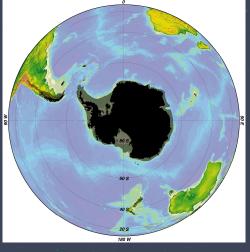


Stats on the Ice Age:

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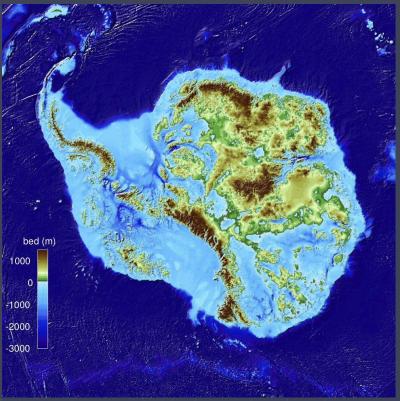
miles.



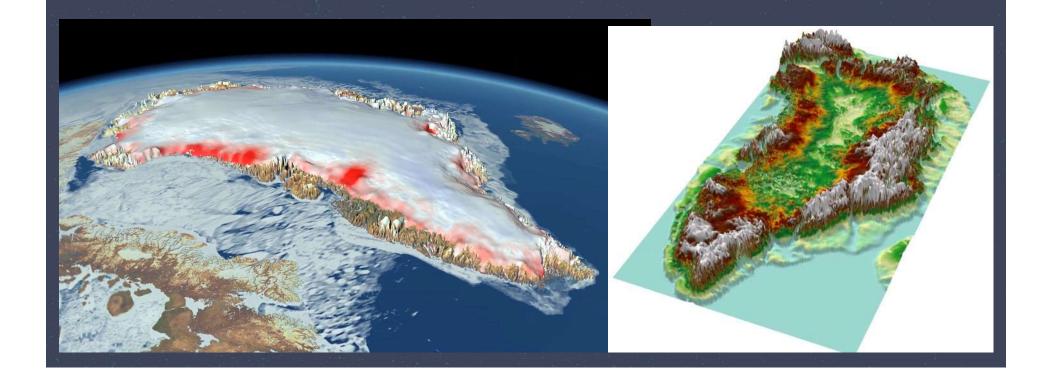


Antarctica with and without Ice:





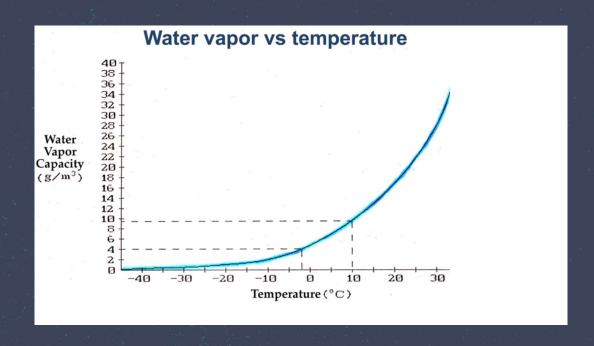
Greenland with and without Ice:



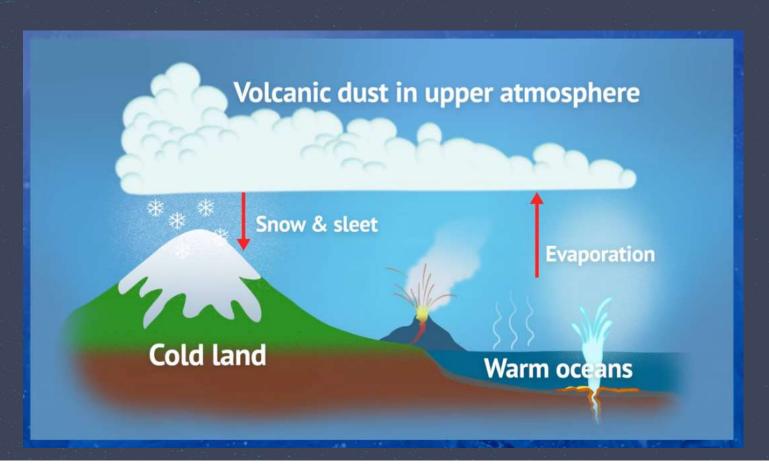
North American Ice Sheet: Isostatic rebound



What caused the Ice Age? Cold, kind of....



What caused the Ice Age?

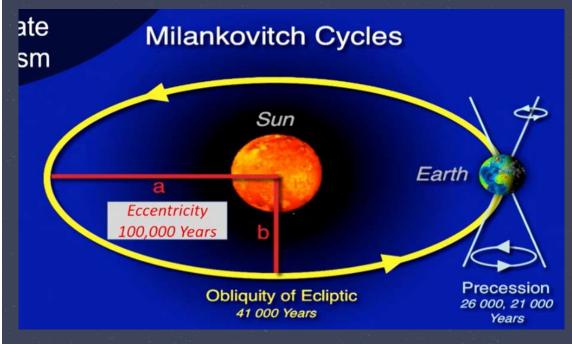


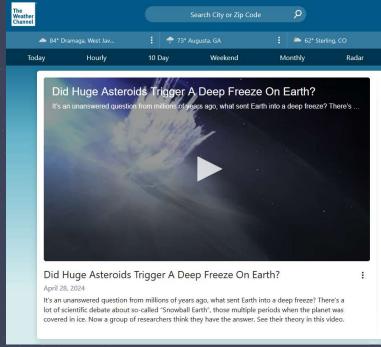
Secular Ice Age Timelines:

<u>Huronian Ice Age</u>

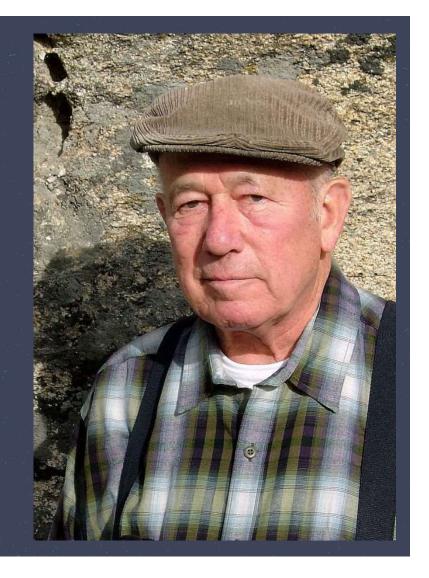
- 2.5 to 2.2 billion years ago
- Cryogenian Ice Age
- 720 to 635 million years ago
- Andean-Saharan Ice Age
- 460 to 420 million years ago
- Late Paleozoic Ice Age
- 360 to 255 million years ago
- Latest Quaternary Ice Age
- 2.5 million years ago

60 Secular Theories for Ice Ages:





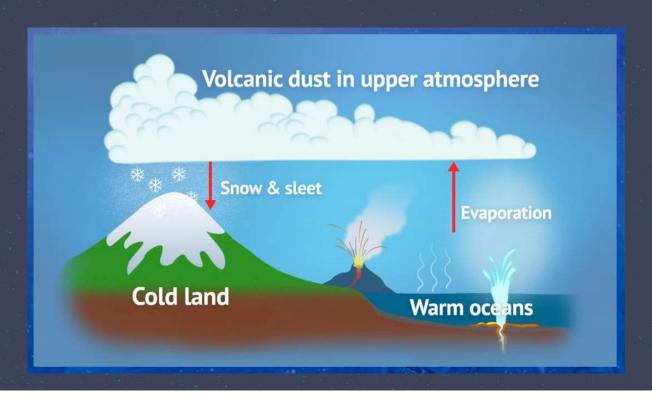
"Although theories abound, no one really knows what causes ice ages."
- David Alt, Geology Professor



If you don't have a mechanism to stop the Ice Age...

The earth gets colder and colder.

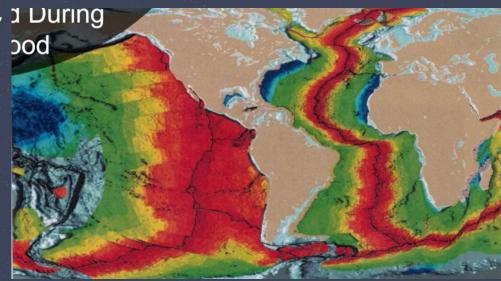




Warmer oceans, resulting in increased precipitation.

"4-10x precipitation." During

- Dr. Vardiman

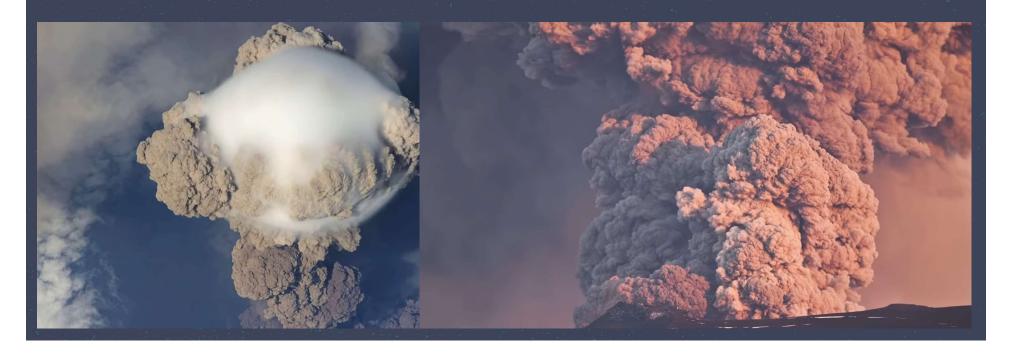


Warmer oceans, resulting in increased precipitation.

"4-10x precipitation." - Dr. Vardiman

	Current	Current	Ice Age	Ice Age	Ice Age	Ice Age
Annual	Rain (ft)	Snow (ft)	Rain (ft)	Snow (ft)	Rain (ft)	Snow (ft)
	-	100	4x	4x	10x	10x
Salt Lake City, Utah	1.4	4.9	5.5	19.5	13.8	48.8
Cottonwood Canyons, Utah		45.9		183.7		459.2
Mount Waialeale, Kaua'i	37.5					
Mount Rainier, Washington		53.8				
					7	

Increased volcanic activity (more aerosols).

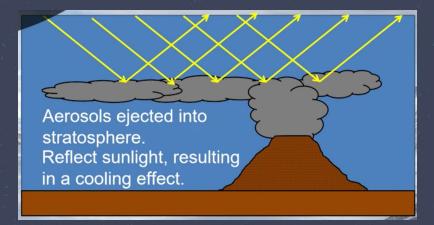


Increased volcanic activity (more aerosols).

Dr. Vardiman – Need a 34° F drop in

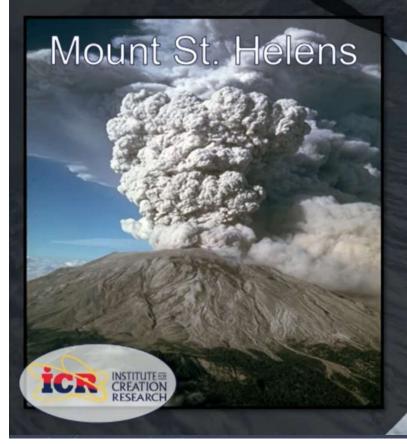
temperature to maintain the snow during the

summer.



Cooling After Recent Explosive Volcanic

Eruptions



Tambora (1815): 1816: "year without a summer"

Krakatoa (1883):

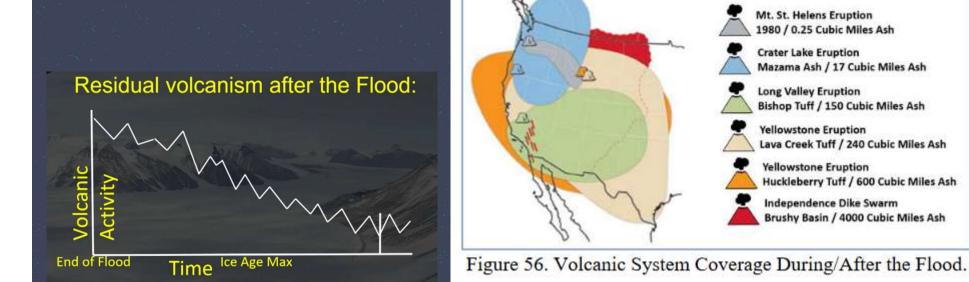
Ave. global temps. dropped by as much as 1.2° C.

Pinatubo (1991):

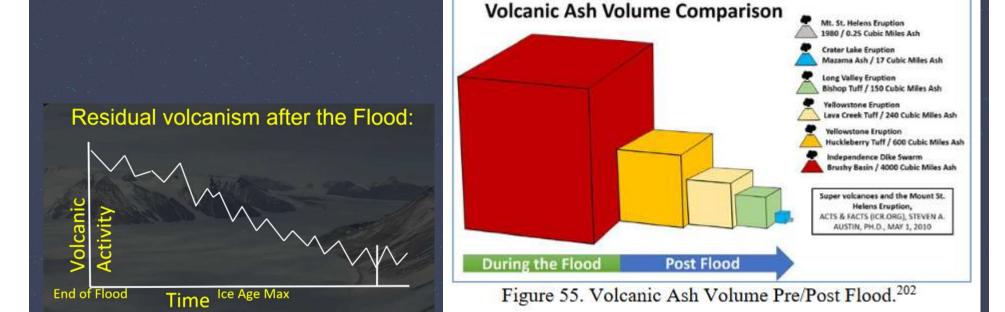
Global temp. drop of 0.5°

C.

Increased volcanic activity (more aerosols).



Increased volcanic activity (more aerosols).



Creation Ice Age Timeline:

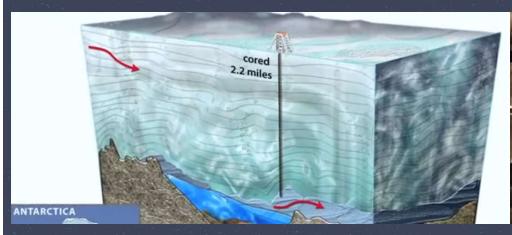
2500 BC - Flood Ends

2000 BC - Ice Age reaches maximum extent

1800 BC - Ice Age has melted significantly

https://www.youtube.com/watch?v=FfJd08lCoow&ab_channel=IsGenesisHistory%3F 0:00-3:21

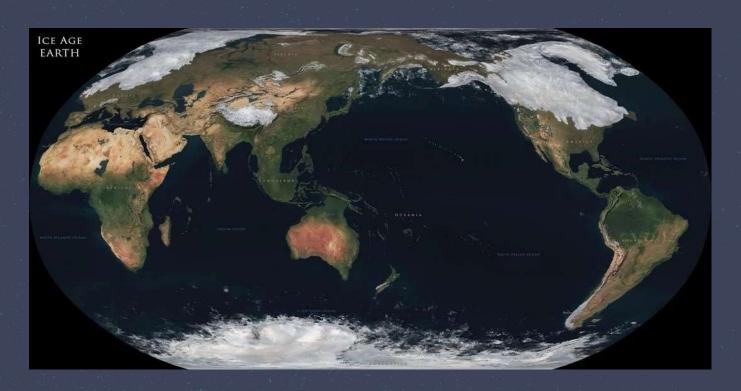
What about ice cores from Antarctica?





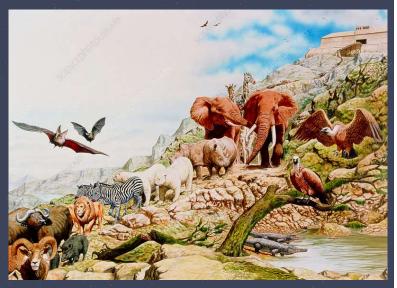
0:00-2:24

During the Ice Age, the ocean level dropped by 400 feet!

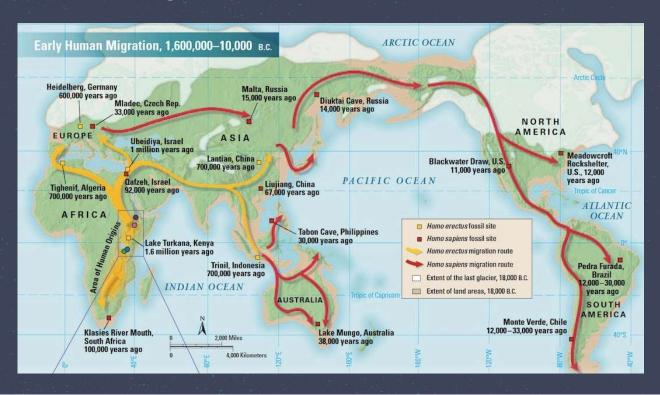


Genesis 8:15-17

Then God said to Noah, 16 "Go out from the ark, you and your wife, and your sons and your sons' wives with you. 17 Bring out with you every living thing that is with you of all flesh—birds and animals and every creeping thing that creeps on the earth—that they may swarm on the earth, and be fruitful and multiply on the earth."



Lower Ocean Levels Allows Animals and Humans to Migrate



Lower Ocean Levels Allows Animals and Humans to Migrate



Lower Ocean Levels Allows Animals and

Humans to Migrate

Doggerland



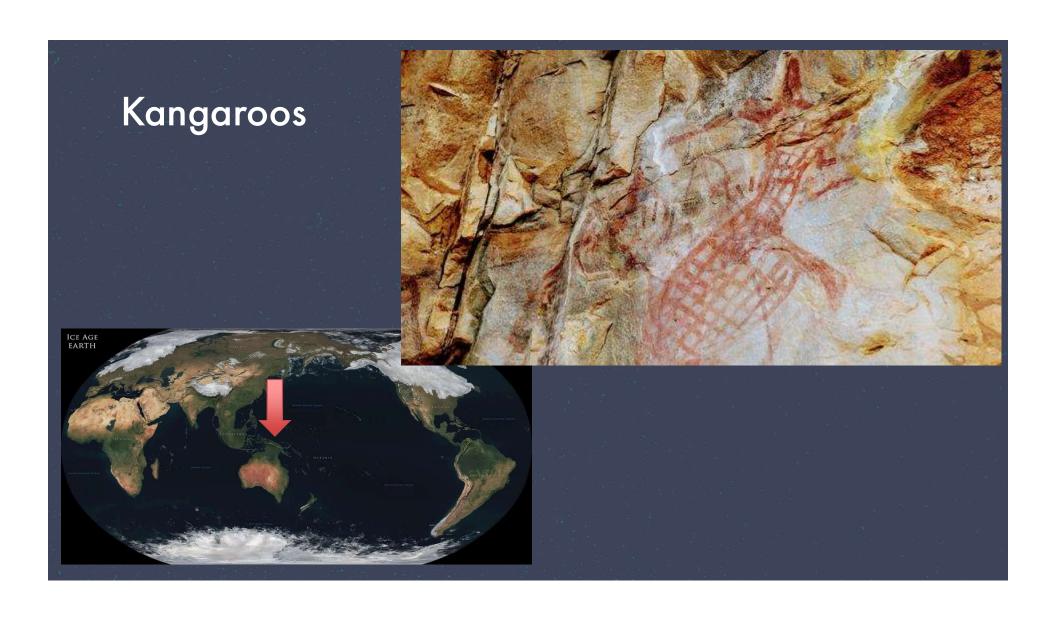
Lower Ocean Levels Allows Animals and Humans to Migrate Yonaguni Submarine Ruins, Japan (85 ft. deep)



Human Diversity

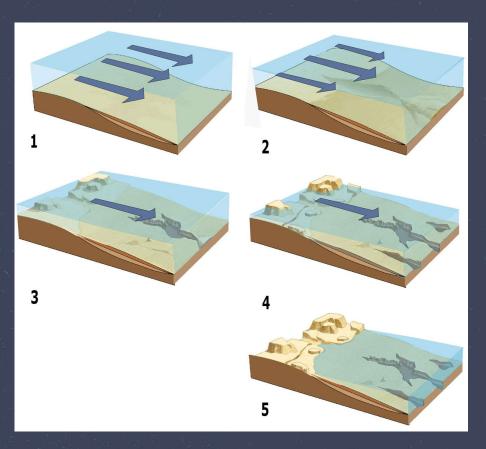






Sheet flow versus Channelized flow

Submarine Canyons





Pluvial Lakes
(relating to rain, much rain)
-increased precipitation leads to the formation of pluvial lakes

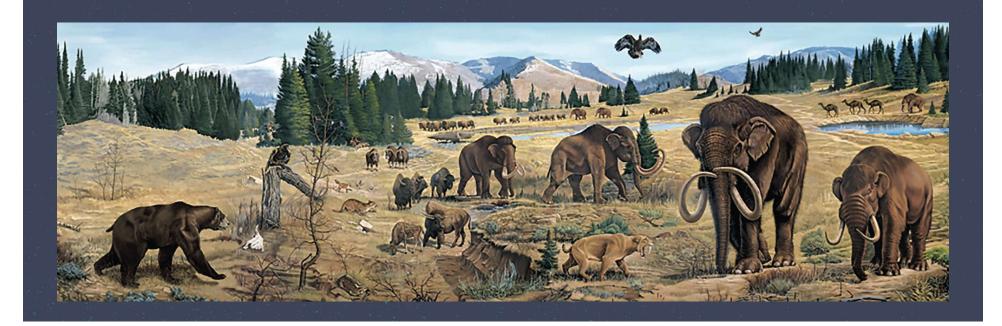


Pluvial Lakes Lake Bonneville





Ice Age Creatures



Ice Age Creatures Woolly Mammoths



Question: Is the Earth's climate fundamentally stable or unstable?

Genesis 8:20-9:1

Then Noah built an altar to the Lord and took some of every clean animal and some of every clean bird and offered burnt offerings on the altar. 21 And when the Lord smelled the pleasing aroma, the Lord said in his heart, "I will never again curse the ground because of man, for the intention of man's heart is evil from his youth. Neither will I ever again strike down every living creature as I have done. 22 While the earth remains, seedtime and harvest, cold and heat, summer and winter, day and night, shall not cease." 9:1 And God blessed Noah and his sons and said to them, "Be fruitful and multiply and fill the earth."

Creation Ice Age Timeline:

2500 BC - Flood Ends

2000 BC - Ice Age reaches maximum extent

1800 BC - Ice Age has melted significantly

Creation Timeline Objections:

- 1. Is 500 years enough time for the ice to form?
- 2. Is 200 years enough time for the ice to melt?
- 3. Is this time period sufficient for the animals and humans to spread out?

Creation Timeline Objections:

1. Is 500 years enough time for the ice to form?

Greenland, 1942

6 P-38s

2 B-17s

1988 Discovered

250 feet of Ice!

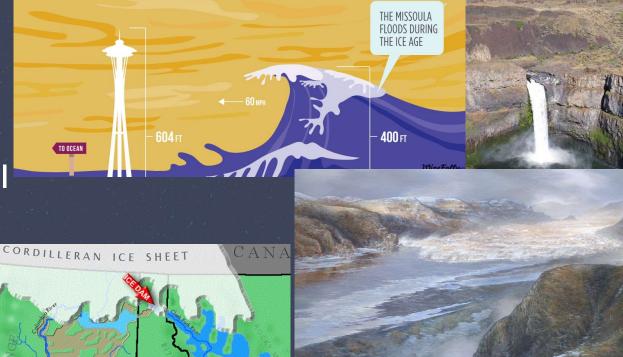
5.4 ft. per year.





Creation Timeline Objections: 2. Is 200 years enough time for the ice to melt?

Missoula Floods
Washington State
Harlen Bretz
Catastrophic Glacial
Lake Melting



Creation Timeline Objections:

3. Is this time period sufficient for the animals and humans to spread out?

European Starlings 150 million 1890 – 2017 North America



Creation Ice Age Timeline:

2500 BC - Flood Ends

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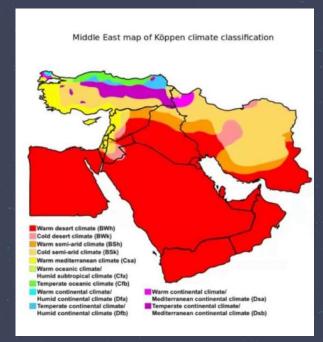
1800 BC - Ice Age has melted significantly

Mentions of Ice (3)

Job 6:16 Which are dark with <u>ice</u>, and where the snow hides itself.

Job 37:10 By the breath of God ice is given, and the broad waters are frozen fast.

Job 38:29 From whose womb did the <u>ice</u> come forth, and who has given birth to the frost of heaven?



Mentions of Snow (5)

Job 6:16 Which are dark with ice, and where the <u>snow</u> hides itself.

Job 9:30 If I wash myself with <u>snow</u> and cleanse my hands with lye.

Job 24:19 Drought and heat snatch away the <u>snow</u> waters; so does Sheol those who have sinned.

Job 37:6 For to the <u>snow</u> he says, 'Fall on the earth,' likewise to the downpour, his mighty downpour.

Job 38:22 "Have you entered the storehouses of the snow, or have you seen the storehouses of the hail."



Genesis 13:10

And Lot lifted up his eyes and saw that the Jordan Valley was well watered everywhere like the garden of the Lord, like the land of Egypt, in the direction of Zoar. (This was before the Lord destroyed Sodom and Gomorrah.)



Resources:

Michael Oard & Dr. Larry Vardiman



Mike Oard has an MS degree in atmospheric science from the University of Washington. After 30 years as a meteorologist with the US National Weather Service, he retired and now is fully devoted to research on the compelling evidence for Noah's flood and the post-flood ice age. He has done considerable study on the woolly mammoths in light of Noah's flood and the ice age. Mike has published several research papers in his field in journals of the American Meteorological Society. His creationist research has been published in technical books, laymen's books, and children's books, as well as in many creationist journals. He also lectures on these subjects and serves on the board of directors of the Creation Research Society in the US.



Name:

Dr. Larry Vardiman

Title:

Senior Research Scientist, Astro/Geophysics

Specialty:

Atmospheric Studies, Climate Change, Ice Age, Age of the Earth's Atmosphere

While obtaining his Ph.D., Dr. Larry Vardiman served as a research assistant at Colorado State University's Department of Atmospheric Science (1970-74) and as a consulting meteorologist at Western Scientific Services (1973-74). After receiving his degree in Atmospheric Science, he worked as site director for a cloud seeding research program for the Department of Interior's Bureau of Reclamation in Denver, Colorado (1974-82). He also served as a consultant to the Colorado Governor's Advisory Panel on Weather Modification. Dr. Vardiman was an officer in the United States Air Force with the Air Weather Service in the Aerospace Modification Division at Scott Air Force Base, Illinois. Before coming to ICR, he taught at Christian Heritage College as a Professor of Natural Sciences from 1982 to 1989, serving as Academic Dean from 1987 to 1989. From 1989 to 2009, he was Chairman of the Astro/Geophysics Department at the ICR Graduate School, also serving two years as Chief Operating Officer. Dr. Vardiman was a major participant and director of ICR's Radioisotopes and the Age of the Earth (RATE) research project. He has authored many technical papers and books. Much of his scientific contributions have been in the areas of ice crystal growth and evolution, rain from "the windows of heaven" (Genesis 7:11), the age of the earth's atmosphere, the Ice Age and the Genesis Flood, and catastrophic hurricane formation. His most recent research focused on the Ice Age in Yosemite and Yellowstone National Parks, and giant typhoons in the Middle East.

Lake Blanche, Utah Glacial striations



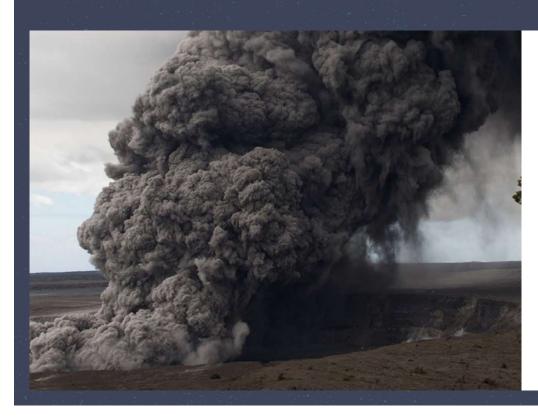
Tooele, Utah Marine fossils



St. George, Utah Basalt (lava)

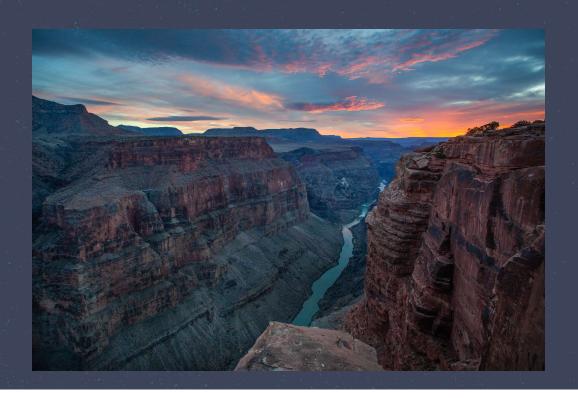


Park City, Utah Volcanic Ash

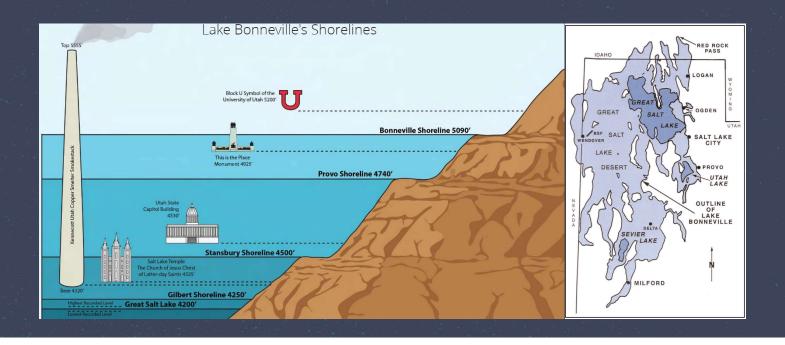




Grand Canyon, Arizona Layers and erosion



Utah, Nevada and Idaho Lake Bonneville



Vernal, Utah Dinosaur National Monument



What does Genesis 1 actually teach? CLASS 2 What does the Bible teach about astronomy? CLASS 3, 7 Does distant starlight present a problem? CLASS 3, 7 What is science? What can science teach us about origins? CLASS 4 Did people evolve from primates? CLASS 4 How old is the earth? CLASS 5 What about radiocarbon/radiometric dating? CLASS 6 What about shared DNA? CLASS 8 Aren't there examples of evolution happening around us? CLASS 8 Did Adam have a belly button? CLASS 8 Who did Adam and Eve's children marry? CLASS 8

Did the flood happen? Do we see any evidence of it? CLASS 9, 10, 11, 12

How do we explain the geological column? CLASS 10 How did we get the different races and languages? ARK & DARKNESS MOVIE

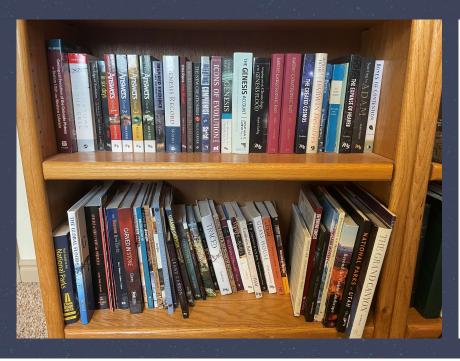
How did Noah fit all the animals on the ark? ARK & DARKNESS MOVIE

How was the Grand Canyon formed? CLASS 11
How does plate tectonics fit into all of this? CLASS 12
How do we get fossils? CLASS 13
What happened to the dinosaurs? CLASS 13
Where are the human fossils? CLASS 13
What about the ice age? CLASS 14
How did the animals spread over the earth after the flood? CLASS 14

THANK YOU!

Books

The New Answers Books 1-4, ~\$50

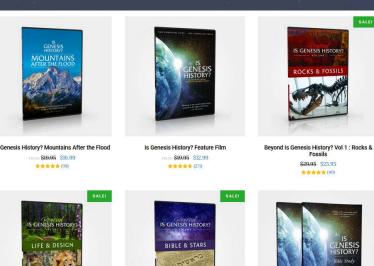




Films

Beyond Is Genesis History Vol. 1-3, ~\$60



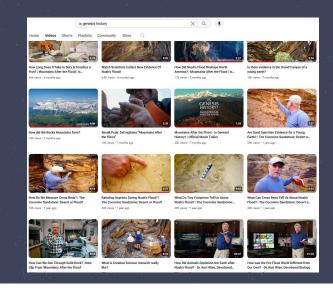


Bible Study Set

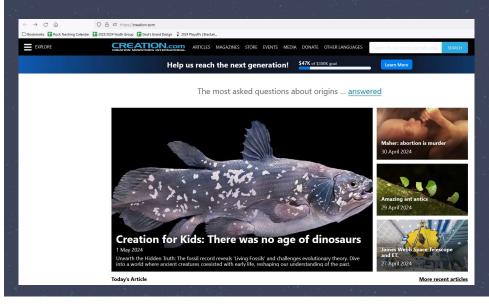
\$24.99

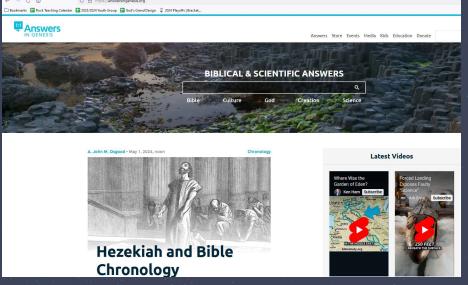
Youtube Videos: FREE!

- 1. Is Genesis History 510 videos
- 2. Answers in Genesis Canada 365 videos
- 3. Creation Ministries International 785 videos
- 4. Answers in Genesis 2,043 videos
- 5. Genesis Apologetics 437 videos
- 6. Institute for Creation Research 573 videos



Websites: Creation.com Answersingenesis.com



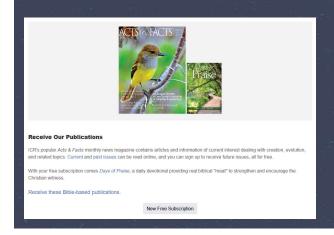


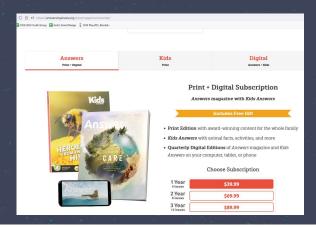
Email Lists: Creation.com Answersingenesis.com





Magazines: Acts and Facts (Free) Answers (\$40) Creation (\$25)







Podcast: The Creation Podcast 70+ episodes



The Creation Podcast is a show where we discuss the science that confirms Scripture. Find answers to some of the most pressing questions of faith and science, and listen to science and Bible experts examine the latest discoveries from a biblical worldview.















Revelation 4:9-11

And whenever the living creatures give glory and honor and thanks to him who is seated on the throne, who lives forever and ever, 10 the twenty-four elders fall down before him who is seated on the throne and worship him who lives forever and ever. They cast their crowns before the throne, saying, 11 "Worthy are you, our Lord and God, to receive glory and honor and power, for you created all things, and by your will they existed and were created."

https://www.youtube.com/watch?v=UM82qxxskZE&t=5532s&ab - channel=IsGenesisHistory% 3F

1:39:15-1:41:30

Discussion Questions:

- 1. What did you learn tonight/what stood out to you?
- 2. What was your favorite class and why?
- 3. What is the biggest lesson you will take away from this class?
- 4. Have a few people pray.

