

Hell On Earth

Volcanoes

Volcanoes Active/ Inactive

While it is easy to see the Earth as very solid as implied in the TV Sitcom “Third Rock from the Sun,” it actually more like “Third Egg from the Sun.”

Unfortunately our “Egg” is badly cracked and spewing its “guts” all around the globe. One could think our planet is “sick to it’s stomach” the way it acts.

Several active volcanoes are featured on the internet. You can Google “Active Volcanoes” and see for yourself. Here are a few. Note: for your convenience, this eBook is interactive, just click on the link.

Active Volcanoes

Wikipedia “Active Volcanoes”

https://en.wikipedia.org/wiki/Active_volcano

Kīlauea

Kīlauea is an active shield volcano in the Hawaiian Islands. Located along the southeastern shore of Hawai'i Island, the volcano is between 210,000 and 280,000 years old and emerged above sea level about 100,000 years ago

Wikipedia

Mount Vesuvius

Mount Vesuvius is a somma-stratovolcano located on the Gulf of Naples in Campania, Italy, about 9 km east of Naples and a short distance from the shore. It is one of several volcanoes forming the Campanian volcanic arc. Wikipedia

Mount Merapi

Mount Merapi, is an active stratovolcano located on the border between the province of Central Java and the Special Region of Yogyakarta, Indonesia. It is the most active volcano in Indonesia and has erupted regularly since 1548.

Wikipedia

Mount Etna

Mount Etna, or simply Etna, is an active stratovolcano on the east coast of Sicily, Italy, in the Metropolitan City of Catania, between the cities of Messina and Catania. It is located above the convergent plate margin between the African Plate and the Eurasian Plate. Wikipedia

Taal Volcano

Taal Volcano is a large caldera filled by Taal Lake in the Philippines. Located in the province of Batangas about 50 kilometers south of Manila, the volcano is the second most active volcano in the ... Wikipedia

Mount Nyiragongo

Mount Nyiragongo is an active stratovolcano with an elevation of 3,470 m in the Virunga Mountains associated with the Albertine Rift. It is located inside Virunga National Park, in the Democratic Republic of the Congo, about 12 km north of the town of Goma and Lake Kivu and just west of the border with Rwanda. Wikipedia

Mauna Loa

Mauna Loa is one of five volcanoes that form the Island of Hawaii in the U.S. state of Hawaii in the Pacific Ocean. The largest subaerial volcano in both mass and volume, Mauna Loa has historically been considered the largest volcano on Earth, dwarfed only by Tamu Massif. Wikipedia

Mount Yasur

Mount Yasur is a volcano on Tanna Island, Vanuatu, 361 m high above sea level, on the coast near Sulphur Bay, northeast of the taller Mount Tukasmera, which was active in the Pleistocene. It has a largely unvegetated pyroclastic cone with a nearly circular summit crater 400 m in diameter. Wikipedia

Pacaya

Pacaya is an active complex volcano in Guatemala, which first erupted approximately 23,000 years ago and has erupted at least 23 times since the Spanish conquest of Guatemala. It rises to an elevation of 2,552 metres. Wikipedia

Forbes

The 27 Most Active Volcanoes In The World And What Could Erupt Next

<https://www.forbes.com/sites/jimdobson/2021/04/09/the-27-most-active-volcanoes-in-the-world-and-what-could-erupt-next/?sh=470950637836>

You Tube

You Tube has some spectacular video footage. (Search on the title or click the link.)

5 Stunning Volcano Eruptions Caught On Camera

https://www.youtube.com/watch?v=EmJv_eOfrDc

HUGE LAVA FLOWS LEAVE PEOPLE IN AWE-MOST AWESOME VIEW ON EARTH-Iceland Volcano Throwback -May31 2021

<https://www.youtube.com/watch?v=ReOIJFFT9kw>

Lava Lakes – Magma

Lava Lakes don't present the same excitement as a volcanic eruption, but are spectacular in their own right. Lava lakes are volcanoes which retain their lava in a pool, or lake. Some of the more notable lakes are:

Mount Nyiragongo:

The World's Largest Volcano Lava Lake. Imagine a place straight out of fantasy and mythology: a portal to the centre of the earth. A fiery pit, spewing red-hot smoke and flames and boiling molten rock. Now imagine you can actually trek there and see it with your own eyes. Passport & Pixels

<https://www.passportandpixels.com/hiking-mount-nyiragongo-lava-lake/>

You Tube Videos

Erta Ale |

Immensely Powerful LAVA LAKE, Erta Ale | Earth: The Power of the Planet | BBC Earth Lab https://www.youtube.com/watch?v=WBpsigmUf_A

Eight permanent lava lakes of the Earth!

https://www.youtube.com/watch?v=fXd4lMU_8zs

Lava lakes are super rare and this is why.

<https://www.youtube.com/watch?v=IXw2wCyisQA>

Submarine Volcanoes – Tsunamis

Volcanoes are awesome displays of power, heat and destruction. Not all volcanoes are visible, some are under water and the effects are very different, although awesome in power and destruction. In these submarine volcanoes, the water absorbs the heat and transforms it into a massive, destructive wall of water whose devastation is legendary. Here are a few you may like to reference:

Devastating Tsunamis in the Pacific

- Chile Tsunami Event 1 April 2014.

On April 1st 2014, a Mw 8.2 earthquake ruptured the subduction zone plate boundary offshore of the city of Iquique, Chile, generating strong shaking and a tsunami along the coast of southern Peru and northern Chile.

<https://www.google.com/search?q=Chile+Tsunami+Event+1+April+2014.&sourceid=chrome&ie=UTF-8>

YouTube: The Grand Earthquake of Iquique, Chile: 1st April, 2014

<https://www.youtube.com/watch?v=o5BZSunfseY>

- Solomons Tsunami Event 6 February 2013.

The tsunami claimed the lives of 10 people and injured 15, destroyed 588 houses and partially damaged 478 houses, affecting 4,509 people in 1,066 households corresponding to an estimated 37% of the population of Santa Cruz Island.

https://www.google.com/search?q=%E2%80%A2%09Solomons+Tsunami+Event+6+February+2013.&sourceid=chrome&ie=UTF-8&sv=584875080&sxsrf=AM9HkKnoDU8UAuyikfnYNXKPX_3sBaTVfA%3A1700755152338&ei=0

YouTube: Solomon Islands Tsunami February 6 2013 ||

[WOFHZfZZCsE6ioqtsP1PCL8A8&ved=0ahUKEwiQ1NDVvtqCAxUolGoFHVT4Av4Q4dUDCBE&oeq=%E2%80%A2%09Solomons+Tsunami+Event+6+February+2013.&gs_l=lgp=Egxnd3Mtd2l6LXNlcnAiK-KAogITb2xvbW9ucyBUc3VuYW1pIEV2ZW50IDYgRmVicnVhcnkgMjAxMy5IAFAAWABwAHgBkAEAmAEAAoAEAggEAuAEMyAEAA-AEC-AEB4gMEGAAGQQ&scient=gws-wiz-serp](https://www.youtube.com/watch?v=WOFHZfZZCsE6ioqtsP1PCL8A8&ved=0ahUKEwiQ1NDVvtqCAxUolGoFHVT4Av4Q4dUDCBE&oeq=%E2%80%A2%09Solomons+Tsunami+Event+6+February+2013.&gs_l=lgp=Egxnd3Mtd2l6LXNlcnAiK-KAogITb2xvbW9ucyBUc3VuYW1pIEV2ZW50IDYgRmVicnVhcnkgMjAxMy5IAFAAWABwAHgBkAEAmAEAAoAEAggEAuAEMyAEAA-AEC-AEB4gMEGAAGQQ&scient=gws-wiz-serp)

- Japan Tsunami Event 11 March 2011.

Google: The March 11, 2011 earthquake generated a tsunami with a maximum wave height of almost 40 meters (130 feet) in the Iwate Prefecture. Researchers also determined that a 2,000-kilometer (1,242-mile) stretch of Japan's Pacific coast was impacted by the tsunami.

https://www.google.com/search?q=%E2%80%A2%09Japan+Tsunami+Event+11+March+2011.&sca_esv=584875080&sxsrf=AM9HkKlOWxiQmWEj65kAgP2XMrrU1GbMQg%3A1700755341791&ei=jXdfZfrdL9zdqtsP7eaCgAI&ved=0ahUKEwi62Pyvv9qCAxXcrmoFHW2zACAQ4dUDCBE&oq=%E2%80%A2%09Japan+Tsunami+Event+11+March+2011.&gs_l=Epnd3Mtd2l6LXNlcnAiJuKAogIKYXBhbiBUc3VuYW1pIEV2ZW50IDExIElhcmlNoIDlwMTYuMgYQA BgWGB4yBhAAGBYHkiFbID5TVj5TXABeACQAQCYAZIBoAGSAaoBAzAuMbgBDMgBAPgBAfgBAqgCCsIC BxAjGOoCGCfiAwQYACBBiAYB&scient=gws-wiz-serp

YouTube: SCARIEST 2011 JAPAN TSUNAMI FOOTAGE COMPILATION (PART 5/5) <https://www.youtube.com/watch?v=qolId9Fy3WE>

- Chile Tsunami Event 27 February 2010.

The 27 February 2010 8.8 Mw South-Central Chile earthquake (3:34 am Chile time) generated a tsunami with wave heights up to 29 m and coastal uplift of 2 m. International Tsunami Information Center

https://www.google.com/search?q=%E2%80%A2%09Chile+Tsunami+Event+27+February+2010.&sca_esv=584875080&sxsrf=AM9HkKm8X-daRvOXoOMvX6PO5IHJpn-wKg%3A1700755731988&ei=E3lfZanxO-KzqtsPoOiNyAI&ved=0ahUKEwjpxoTqwNqCAxXimWoFHSB0AykQ4dUDCBE&oq=%E2%80%A2%09Chile+Tsunami+Event+27+February+2010.&gs_l=Epnd3Mtd2l6LXNlcnAiKeKAogIDaGlsZSBUC3VuYW1pIEV2ZW50IDB3IEZlYnJlYXJ5IDlwMTAuMgYQA BgWGB5lpiZQAFgAcAB 4AZABAjgBzQGgAc0BqgEDMi0xuAEMyAEA-AEC-AEB4gMEGAAGQ

YouTube: Magnitude 8.8 Earthquake in Chile Feb. 27, 2010 Compilation - Part 1 [YgGAQ&scient=gws-wiz-serp](https://www.youtube.com/watch?v=YgGAQ&scient=gws-wiz-serp)

- South Pacific Tsunami Event 29 September 2009. A Tsunami of Deadly Proportions. On September 29, 2009, two large earthquakes struck midway between Samoa and American Samoa, a U.S. territory.

<https://www.ncei.noaa.gov/news/2009-Samoa-Tsunami>

YouTube: Earthquake 8.1° And Tsunami Samoa September 29, 2009 Compilation <https://www.youtube.com/watch?v=5X2S6LU1j6g>

Volcanic Islands Formation

Google: As volcanoes erupt, they build up layers of lava that may eventually break the water's surface. When the tops of the volcanoes appear above the water, an island is formed. While the volcano is still beneath the ocean surface, it is called a seamount. Oceanic islands can form from different types of volcanoes. See graphic: Google:

https://www.google.com/search?q=volcanic+islands+formation&sca_esv=584875080&sxsrf=AM9HkKmgQIoI2G2cKs58q95sc9wQG0UIzw%3A1700763231468&ei=X5ZfZf-PHP61qtsPkJuWiAk&oq=Volcanic+Islands+Formation&gs_l=Egxnd3Mtd2l6LXNlcniAIGlZvbGNhbmljIElzbGFuZHMgRm9ybWF0aW9uKgIIADIFEAAyYgAQYBhAAGAgYHjIGEAAyCBgeMgYQABgIGB4yBhAAGAgYHjIGEAAyCBgeMgYQABgIGB4yBhAAGAgYHjIGEAAyCBgeMgsQABiABBiKBRiGA0j3vQFQ7RpYgmVwAXgBkAEAmAGPAaAB4QOqAQOMwLjS4AQHIAQD4AQH4AQK0AhLCAgcQIxiqAhgnwgIUEAAyYgAQY4wQY6QQY6gIYtALYAQHCAgYQABgWGB7CAggQABgWGB4YCsICBBAAAGB7CAgYQABgHGB7CAggQABgIGAcYHuIDBBgAIEGIBgG6BgYIARABGA&scient=gws-wiz-serp

Ironically, not all volcano-tsunamis are bad, yes, at first, but there is an upside, beautiful islands, namely:

- Google:The Hawaiian Islands were formed by volcanic activity. The Hawaiian Emperor seamount chain is a well-known example of a large seamount and island chain created by hot-spot volcanism. Each island or submerged seamount in the chain is successively older toward the northwest.

https://www.google.com/search?q=islands+formed+by+volcanic+activity&sca_esv=584912597&sxsrf=AM9HkKk9OdM5DB_eVqxbzW0X10jvAtgTnA%3A1700766285201&ei=TaJfZdfbC6-tqtsPoJKNsAo&oq=islands+formed+by+volcanic+&gs_l=Egxnd3Mtd2l6LXNlcniAIG2lzbGFuZHMgZm9ybWVkiGJ5IHZvbGNhbmljICoCCAAyBRAAGIAEMgUQABiABDiGEAAyFhgeMgYQABgWGB4yCBAAGBYHhgPMgYQABgWGB4yBhAAGBYHjILEAAyYgAQYigUYhgNI3OcBUABYtIYBcAB4AZABAjgBxRegAZ-ZAAoBETAuMS40LTEuMC4xLjAuNi4zuAEBYAEA-AEB-AECwgIGEAAyBxgewgILEAAyYgAQYigUYkQLiAwQYACBBiAYB&scient=gws-wiz-serp

List of islands created since the 20th Century.

From Wikipedia, the free encyclopedia

Below is a list of new islands created since the beginning of the 20th century by volcanism, erosion, glacial retreat, or other mechanisms. One of the most famous new volcanic islands is the small island of Surtsey, located in the Atlantic Ocean south of Iceland. It first emerged from the ocean surface in 1963. Two years later, Surtsey was declared a nature reserve for the study of ecological succession; plants, insects, birds, seals, and other forms of life have since established themselves on the island.

- EarthSky: Surtsey, volcanic island, emerged in 1963
Surtsey is an uninhabited volcanic island located in the Vestmannaeyjar archipelago off the southern coast of Iceland. At 63°18'11"N 20°36'18"W / 63.303°N ... <https://earthsky.org/earth/surtsey-and-the-birth-of-new-islands/>

- Another noted new island is Anak Krakatau (the so-called "child of Krakatoa", which formed in the flooded caldera of that notorious volcano in Indonesia), which emerged only in 1930. Ample rainforests have grown there, although they are often destroyed by frequent eruptions. A population of many wild animals, including insects, birds, humanborne rats, and even monitor lizards, have also settled there. Wikipedia <https://en.wikipedia.org> › wiki ›
- Didicas Volcano off the northern coast of Luzon Island in the Philippines, was first created during a four-year eruption from 1856 to 1860 but eventually got washed away. In 1900, three tall rock masses were left by another eruption. During the 1952 eruption, the island finally became permanent which was further bolstered by subsequent eruptions in 1969 and 1978 into a 228 metres (748 ft)-high island.[1] Wikipedia <https://en.wikipedia.org> › wiki › Didicas_Volcano
- Uunartoq Qeqertoq is an island off the east coast of Greenland that appeared to have split from the mainland because of glacial retreat between 2002 and 2005; however, it is believed to have been a true island, with or without glacial covering, for many thousands of years.
Islands are disappearing worldwide. But a new one has formed from Hawaii's Kilauea volcan. www.washingtonpost.com › morning-mix › 2018/07/18
- In February and March 2009, a vigorous eruption created a new island[2] near Hunga Ha'apai in the Tongan Islands of the southwest Pacific. By the end of the activity, however, the new land mass was connected to Hunga Ha'apai.[3] Similar activity occurred again in December 2014 and January 2015.
The Hunga Tonga-Hunga Ha'apai Eruption, a Multi-Hazard Event www.nesdis.noaa.gov › news › the-hunga-tonga-hunga-ha'apai
- On September 24, 2013 a new island Zalzala Koh emerged off the coast of Gwadar, as a result of a strong earthquake that hit south and southwest Pakistan measuring 7.8 on the Richter magnitude scale.[4]
Zalzala Koh, a small island that had been created as a result of an intense earthquake in 2013 www.facebook.com › ... › EOS Data Analytics › Videos
- On November 21, 2013 an unnamed islet emerged off the coast of Nishinoshima, a small, uninhabited island in the Ogasawara chain, which is also known as the Bonin Islands. Less than four days after the new islet's emergence, it was about 200 metres (660 ft) in diameter.[5] Wikipedia <https://en.wikipedia.org> › wiki › Nishinoshima_(Ogasa.

- In November 2023, a new island formed as a result of volcanic activity off the coast of Iwo Jima, reaching a diameter of 100 meters.[6]

Google: The unnamed undersea volcano, located about half a mile off the southern coast of Iwo Jima, which Japan calls Ioto, started its latest series of eruptions on Oct. 21. Within 10 days, volcanic ash and rocks piled up on the shallow seabed, its tip rising above the sea surface.

https://www.google.com/search?q=volcanic+activity+off+the+coast+of+iwo+jima+japan&sca_esv=584912597&sxsrf=AM9HkKIR3WJMF5RnrAS3pGAzkUTnVIDspQ%3A1700771491822&ei=o7ZfZZ_XMf-lqtsP1_uD0Ac&oq=volcanic+activity+off+the+coast+of+iwo+jima&gs_lp=Egxnd3Mtd2l6LXNlcniAik3ZvbGNhbmljIGFjdGl2aXR5IG9mZiB0aGUgY29hc3Qgb2YgSXdvIEppbWEqAggAMgUQIRigATIFECEYOAeyBRAhGKsCSM81UABYAHAAeAGQAQCYAa8DoAGvA6oBAzQtMbgBAcgBAPgBAvgBAelDBBgAIEGIBgE&scient=gws-wiz-serp

CNN: Volcano forms new Island.

Magma and lava from a Japanese volcano is forming new geography in a remote part of the Pacific Ocean. The Japanese Coast Guard took video of it.
<https://www.cnn.com/videos/world/2015/02/28/pkg-orig-volcano-forms-new-island-japan.cnn>

- Iceland Google: Beginning about seventy million years ago -- long after the earth's other continents had formed -- lava from volcanic eruptions along the mid-ocean ridge cooled as basalt (a dark rock) to make all of Iceland's present-day land surface.

https://www.google.com/search?q=Iceland+formed+by+volcano&oq=Iceland+formed+by+volcano&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIJCAEQABgNGIAEMg0IAhAAGIYDGIAEGIoFMg0IAxAGIYDGIAEGIoF0gEJMTU2OThqMGo3qAIAAsAIA&sourceid=chrome&ie=UTF-8

Visit Iceland: Iceland sits on top of the Mid-Atlantic Ridge, a 40.000 km long crack in the ocean floor caused by the separation of the North American and Eurasian tectonic plates. Even today, the country is growing by about 2 cm per year, as it splits wider at the points where the two tectonic plates meet, and new magma fills up the gaps. Accordingly, the western part of Iceland belongs to the North American plate and the eastern region to the Eurasian plate, which means Iceland is split between two continents. <https://www.visiticeland.com/article/volcanos>

Pacific Ring of Fire

What is the "Ring of Fire"?

U.S. Geological Survey

One such area is the circum-Pacific Ring of Fire, where the Pacific Plate meets many surrounding tectonic plates. The Ring of Fire is the most seismically and volcanically active zone in the world. [https://www.usgs.gov › faqs › what-ring-fire](https://www.usgs.gov/faqs/what-ring-fire)

From Wikipedia, the free encyclopedia

The **Ring of Fire** (also known as the **Pacific Ring of Fire**, the **Rim of Fire**, the **Girdle of Fire** or the **Circum-Pacific belt**)^[note 1] is a **tectonic** belt, about 40,000 km (25,000 mi) long^[1] and up to about 500 km (310 mi) wide,^[2] which circumscribes the **Pacific Ocean**. It contains between 750 and 915 **volcanoes**, around two-thirds of the world total,^{[3][4]} and 90% of the world's earthquakes,^[5] including 81% of its largest,^{[6][7]} take place within the belt.

https://en.wikipedia.org/wiki/Ring_of_Fire#:~:text=The%20southwest%20section%20of%20the,in%20the%20center%20of%20its

Images:

Google: Ring of Fire: Images has many graphic depictions of our very fragmented planet.

https://www.google.com/search?q=ring+of+fire+images&scas_esv=585026838&sxsrf=AM9HkKIT6Ki5MgZMw6bDTYZpXNKrZHlgYQ%3A1700825576768&ei=6IlgZYW0LvypqtsPubS_0AU&oq=Ring+of+Fire&gs_lp=Egxnd3Mtd2l6LXNlcniAIDFJpbmcgb2YgRmlyZSoCCAgYDRAAGIAEGloFGLEDGEMyCxAAGIAEGloFGJECMgsQABiABBiKBRIRAjIFEAAAYgAQyCxAAGIAEGloFGJECMgsQABiABBiKBRIRAjILEAAAYgAQYigUYkQIyEBAuGIAEGloFGLEDGNQCGEMyChAAGIAEGloFGEMyBRAAGIAESNZMUABYAHAAeAGQAQCYAYcBoAGHAaoBAzAuMbgBACgBAPgBAcICHxAuGIAEGloFGLEDGNQCGEMyIwUY3AQY3gQY4ATYAQHiAwQYACBBiAYBugYGCAEQARgU&scient=gws-wiz-serp

Countries / Islands

The Pacific Ring of Fire stretches across 15 more countries including Indonesia, New Zealand, Papa New Guinea, Philippines, Japan, United States, Chile, Canada, Guatemala, Russia and Peru. Islands: Mariana Islands

YouTube: What If the Ring of Fire Erupted Right Now?

<https://www.youtube.com/watch?v=QniWayRs7pw>

Recent Active Earthquakes / Volcanoes / Watches

<https://www.ncei.noaa.gov/products/natural-hazards/tsunamis-earthquakes-volcanoes/tsunamis/recent-significant-events>

- The Hunga Tonga - Hunga Ha'apai

On January 15, 2022, a major explosive eruption from Hunga Tonga-Hunga Ha'apai in Tonga occurred. The volcano began actively erupting on Dec 20, 2021. The eruption generated a tsunami observed throughout the Pacific Ocean basin.

- Turkey–Syria Earthquake

AUG: On 6 February 2023, the Turkey–Syria strike-slip inland earthquake of Mw 7.7 mysteriously generated a small-scale tsunami in the southeastern Mediterranean Sea. Due to the complexity of the earthquake source and lack of underwater observation, how the tsunami waves were generated remains mysterious <https://doi.org/10.1029/2023GL103997>

- Chignik earthquake

On July 29, 2021, a magnitude 8.2 Mw Chignik earthquake hit the southeast of Perryville, Alaska, south of the Alaska Peninsula (55.325 N 157.841 W depth=32 km) at 06:15 Universal Time Coordinated (UTC) and generated a small tsunami.

- Central Chile Earthquake, Tsunami

On September 16, 2015 at 22:55 UTC, a magnitude 8.3 Mw earthquake hit Central Chile, 46km W of Illapel, Chile (31.570 S, 71.654 W depth=25.0 km) and generated a tsunami that was observed throughout the Pacific and caused local damage. Hazards Earthquake Event Reports

- Solomon Islands Tsunami

On February 6, 2013, a magnitude 7.9 Mw earthquake (10.766 S, 165.114 E, depth 24 km) in the Solomon Islands generated a tsunami that was observed throughout the Pacific region which caused deaths and local damage.

Volcano Watches

Here are two Volcano watch services which monitor active and inactive volcanos around the world. They offer considerable supplemental data if you are interested in further research.

YouTube: LIVE: 2023 Iceland Earthquake and Volcano Monitor –

https://www.google.com/search?q=iceland+volcano+watch&oq=Iceland+volcano+watch&gs_lcrp=EgZjaHJvbWUqBwgAEAAyGAQyBwgAEAAyGAQyBwgBEAAyGAQyCAGCEAAyFhgeMggIAxAAGBYHjINCAQQA BiGAXiABBiKBTINCAUQABiGAXiABBiKBTINCAyQABiGAXiABBiKBTINCAcQABiGAXiABBiKBagCALACAA&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:965e3a55,vid:l-5QeLln1FA,st:0

Euro News:WATCH: Steaming cracks in Iceland fishing village after weeks of small volcanic earthquakes <https://www.euronews.com/video/2023/11/24/watch-steaming-cracks-in-iceland-fishing-village-after-weeks-of-small-volcanic-earthquakes>

Earth's Crust

It is easy to assume that the earth is solid, however most of the seismic activity which attracts our attention is because the earth's crust is very thin in places.

Google: How Thick is the Earth's Crust? Earth's crust has an average thickness of about 15 to 20 kilometers or 9 to 12 miles. The crust at its thinnest is about 5 kilometers thick (3 miles) and made of oceanic crust. At its thickest it is about 50 kilometers and made of continental crust.

https://www.google.com/search?q=earth%E2%80%99s+crust+thickness&oq=&gs_lcrp=EgZjaHJvbWUqCQgAEcMYJxjqAjiJC AAQIxnGOoCMgkIARajGCcY6gIyCQgCEcMYJxjqAjiJCAMQIxnGOoCMgkIBBAjGCcY6gIyCQgFEcMYJxjqAjiJCAY QIxnGOoCMgkIBxajGCcY6gLSAQkxMzE3ajBqMTWoAgiwAgE&sourceid=chrome&ie=UTF-8

Geo Thermal

Google: Geothermal energy is heat energy from the earth—Geo (earth) + thermal (heat). Geothermal resources are reservoirs of hot water that exist or are human made at varying temperatures and depths below the Earth's surface.

U.S. geothermal power plants are located in the West (western states) Most of the geothermal power plants in the United States are in western states and Hawaii, where geothermal energy resources are close to the earth's surface. California generates the most electricity from geothermal energy. The Geysers dry steam reservoir in Northern California is the largest known dry steam field in the world and has been producing electricity since 1960.

Geothermal power plants use hydrothermal resources that have both water (hydro) and heat (thermal). Geothermal power plants require high-temperature hydrothermal resources—300 degrees Fahrenheit (°F) to 700° F—that come from either dry steam wells or from hot water wells. We use these resources by drilling wells into the earth and then piping steam or hot water to the surface. The hot water or steam powers a turbine that generates electricity. Some geothermal wells are as much as 2 miles deep <https://www.eia.gov/energyexplained/geothermal/geothermal->

Winkopedia: Graphic: Geothermal power plants Geothermal US Map - https://upload.wikimedia.org/wikipedia/commons/5/52/Geothermal_resource_map_US.png

Hotspots / Hot Springs / Geysers

Google: Hot springs: Pools of hydrothermally heated water. Geysers: Hot springs with constrictions in their plumbing, which causes them to periodically erupt to release the pressure that builds up. Mudpots: Hot springs that are acidic enough to dissolve the surrounding rock, and typically also lack water in their systems.

10 incredible hot springs in the USA

- Iron Mountain Hot Springs, Colorado. ...
- Homestead Crater, Utah. ...
- Castle Hot Springs, Arizona. ...
- Chena Hot Springs, Alaska. ...
- Avalanche Ranch Hot Springs, Colorado. ...
- Orvis Hot Springs, Colorado. ...
- Hot Springs State Park, Wyoming. ...
- Benton Hot Springs, California.

Wikipedia: List of Geysers

- Beehive Geyser (Wyoming, United States)
- Beowawe (Nevada, United States)
- Bolshoi (Greater) Geyser (Kamchatka, Russia) - see Valley of Geysers
- Castle Geyser (Wyoming, United States)
- Coronel Mollinedo Geyser (Salta, Argentina)
- Daisy Geyser (Wyoming, United States)
- Diamond Geyser (Orakei Korako, New Zealand)

- El Tatio, Northern Chile
- Excelsior Geyser (Wyoming, United States)
- Fan & Mortar Geysers (Wyoming, United States)
- Floriano de Lemos Geyser (Minas Gerais, Brazil)[citation needed]
- Fly Geyser (Black Rock Desert, Nevada)
- Geysir (Haukadalur, Iceland)
- Giant Geyser (Wyoming, United States)
- Giantess Geyser (Wyoming, United States)
- Grand Geyser (Wyoming, United States)
- Great Fountain Geyser (Wyoming, United States)
- Ledge Geyser (Wyoming, United States)
- Kereru Geyser (Whakarewarewa, New Zealand)
- Lady Knox Geyser (Waiotapu, New Zealand)
- Maguarichi (Chihuahua, Mexico)
- Maly (Lesser) Geyser (Kamchatka, Russia) - see Valley of Geysers
- Minguini Geyser (Orakei Korako, New Zealand)
- Monarch Geyser (Wyoming, United States)
- Morning Geyser (Wyoming, United States)
- Old Faithful Geyser (Wyoming, United States)
- Pōhutu Geyser (Whakarewarewa, New Zealand)
- Prince of Wales Feathers Geyser (Whakarewarewa, New Zealand)
- Riverside Geyser (Wyoming, United States)
- Sakharny (Sugar) Geyser (Kamchatka, Russia) - see Valley of Geysers
- Sapareva Geyser (Sapareva Banya, Bulgaria)
- Sijarinska Geyser (Sijarinska Banja), Serbia)
- Splendid Geyser (Wyoming, United States)
- Steamboat Geyser (Wyoming, United States)
- Steamboat Springs, (Nevada, United States)
- Strokkur (Haukadalur, Iceland)
- Varvarco (Neuquén, Argentina)
- Velikan (Giant) Geyser (Kamchatka, Russia) - see Valley of Geysers
- Waimangu Geyser (Rotorua, New Zealand)
- Zhemchuzhny (Pearl) Geyser (Kamchatka, Russia) - see Valley of Geysers

https://en.wikipedia.org/wiki/List_of_geysers

Tectonic Plates / Drift

You might be surprised to find your view of Planet Earth is very outdated. Hopefully you have gained some understanding of how fragile our world actually is. I took a long time for scientist to “wrap their brain” around this one, so don’t feel alone.

Google: Plate tectonics is the theory that Earth's land masses are in constant motion. The realization that Earth's land masses move was first proposed by Alfred Wegener, which he called continental drift.

He hypothesized that all of the modern-day continents had previously been clumped together in a supercontinent he called Pangaea (from ancient Greek, meaning “all lands” or “all the Earth”). Over millions of years, Wegener suggested, the continents had drifted apart.

https://www.google.com/search?q=Tectonic+Plates+Drift&oq=Tectonic+Plates+Drift&gs_lcrp=EgZjaHJvbWUyCQgAEEUYORiABDIHCAEQABiABDIHCAIQABiABDIICAMQABgWGB4yCAgEEAAYFhgeMggIBRAAGBYYYHjICAYQABgWGB4yCAgHEAAYFhgeMggICBAAGBYYYHjICAKQABgWGB7SAQoxODEzNGowajElqAIAAsAIA&sourceid=chrome&ie=UTF-8

National Geographic: We don’t perceive that the continents we live on are moving. After all, it’s not as if an airplane flight between Europe and Africa takes five hours one year but only three hours the next. But the continents actually are shifting, very slowly, relative to one another. In the early 20th century, a scientific theory called continental drift was proposed about this migration of the continents. That theory was initially ridiculed, but it paved the way for another theory called plate tectonics that scientists have now accepted to explain how Earth’s continents move.

Wegener first presented his idea of continental drift in 1912, but it was widely ridiculed and soon, mostly, forgotten. Wegener never lived to see his theory accepted—he died at the age of 50 while on an expedition in Greenland.

<https://education.nationalgeographic.org/resource/continental-drift-versus-plate-tectonics/>

Here’s the irony: The first hint of “continental drift / plate tectonics” came from ancient Greek text: Apocalypse (13:8) translated: foundations of world in 1611.

<https://www.biblegateway.com/passage/?search=Revelation+13%3A8%29+&version=KJV>

Wikipedia: Apocalypse is a literary genre in which a supernatural being reveals cosmic mysteries or the future to a human intermediary.

<https://en.wiktionary.org/wiki/apocalypse>

It took 300 years before Alfred Wegener would notice this now universally accepted theory. Double Irony: It would take another fifty years to be accepted by

the scientific community. Wow! Some 350 years for science to “catch up” with the ancients. The continents are actually drifting around the same speed as your fingernails grow. Even at such slow speeds, earthquakes, volcanoes and tsunamis are the result. Picture a slow-speed freeway pileup.

The Geological Society: Wegener’s theory of Continental Drift was met with scepticism by many scientists. Although he had a lot of evidence to support the theory, he could not explain how the plates moved. It would be almost half a century before this problem began to be solved. <https://www.geolsoc.org.uk/Plate-Tectonics/Chap1-Pioneers-of-Plate-Tectonics/Alfred-Wegener>

In fact there are many ancient concepts foreign to modern scientists, and thus the general population, particularly young people, are very impressionable, sometimes to a fault. Thus this book(let.) It is about some ancient concepts, long understood, but like “continental drift” are “like news” to modern thinking. So, consider.

The Chaos of Outer Space

Meteors

Not only is the earth very unstable, but so is outer space. However, the stuff in space is moving exponentially faster than the continental drift. Later, we will pursue what happens when the “fast” of space meets the “slow” of continental plates, but for now, meteors.

Lunar Craters

If you looked thru a telescope you could easily see it. The moon looks like a teenager with a bad case of acne. Those are not “zits,” however, but craters left from asteroid crashes on the moon’s surface, as in the face of the moon. On rare occasions you might see a meteor streak through the sky. When asteroids break apart upon entering the earth’s atmosphere they produce a meteor shower.

Google: An asteroid is a small rocky object that orbits the Sun. A comet is a ball of ice and dust that orbits the Sun. A meteoroid is a small piece of an asteroid or a comet. A meteor is a streak of light in the sky that appears when a meteoroid burns up upon entering Earth's atmosphere.

https://www.google.com/search?q=meteors+asteroids+and+comets&scas_esv=585258922&sxsrf=AM9HkKkuNL3SeP-IHjmw-57BTRAXNY7MQ%3A1700925586029&ei=khBiZYSnAfSfqtSP_sWM2A8&oeq=meteors%2C+asteroids&gs_l=EGxnd3Mtd2l6LXNlcnAiEmIldGVvcnMsIGFzdGtVyb2lkcyoCCAAyBRAAGIAEMgUQABiABDIFEAAyGAQyBhAAGBYyHjIIEAAyFhgeGAoyBhAAAGBYyHjIIEAAyFhgeSKUvUABYAHAAeAGQAQCYAc4BoAHOAoBAZltMbgBAcgbAPgBAvgBAeIDBBgAIEGIBgE&scient=gws-wiz-serp

Since there is no atmosphere on the moon, all such “space rocks” are direct hits, thus the craters. All heavenly bodies enjoy a constant barrage of projectiles of small to huge and sometimes enormous asteroids.. If you don’t have a telescope, there are many pictures of moon craters on the internet:

https://www.google.com/search?q=Asteroids%2C+Comets+and+Meteors%3F&oq=Asteroids%2C+Comets+and+Meteors%3F&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQABiABDIHCAIQABiABDIHCAMQABiABDIHCAQQLhiABDIHCAUQABiABDIHCAYQABiABDIHCACQABiABDIHCAGQABiABDIHCAKQABiABNIBCjEwMDMwajBqMTWoAgCwAgA&sourceid=chrome&ie=UTF-8

On earth, however, most such burn up as meteorites with some large, when starting, but small when striking the ground. Since the earth's surface is about three quarters water, most fall into the oceans

4 Vesta

Wikipedia: Vesta is one of the largest objects in the asteroid belt, with a mean diameter of 525 kilometres. It was discovered by the German astronomer Heinrich Wilhelm Matthias Olbers on 29 March 1807 and is named after Vesta, the virgin goddess of home and hearth from Roman mythology. https://en.wikipedia.org/wiki/4_Vesta

Earth Craters

Vredefort Impact Structure

Wikipedia: The Vredefort impact structure is one of the largest verified impact structures on Earth. The crater, which has since been eroded away, has been estimated at 170 kilometres to 300 km across when it was formed.

The asteroid that hit Vredefort is estimated to have been one of the largest ever to strike Earth since the Hadean Eon some four billion years ago, originally thought to have been approximately 10–15 km (6.2–9.3 mi) in diameter.[4] As of 2022, the bolide was estimated at between 20 and 25 kilometres (12 and 16 mi) in diameter and to have impacted with a vertical velocity of 15–25 kilometres per second (34,000–56,000 mph).[3] https://en.wikipedia.org/wiki/Vredefort_impact_structure

The Hadean

Wikipedia: The Hadean (IPA: /heɪˈdiːən, ˈheɪdiən/ hay-DEE-ən, HAY-dee-ən)[discuss] is the first and oldest of the four known geologic eons of Earth's history. The Hadean eon started with the planet's formation about 4.54 Bya,[3][4] now defined as (4567.30 ± 0.16) Mya[1] set by the age of the oldest solid material in the Solar System found in some meteorites about 4.567 billion years old.[5] The proposed interplanetary collision that created the Moon occurred

early in this eon, and the Late Heavy Bombardment is hypothesized to have occurred at the end of the eon. The Hadean ended 4.031 billion years ago, and was succeeded by the Archean eon. <https://en.wikipedia.org/wiki/Hadean>

Note: In the early eons of the earth formation, the conditions were described as “hellish,” thus, the title of the book, “Hell on Earth.” Not unlike the Hawaiian Islands, which began as barren, lava rock, which later would acquire dust, ash, migratory bird feces, laden with a variety of seeds, which would sprout and grow, dead and decaying marine life, over millions of years to become the lush, tropical paradise we know today. We might not recognize our planet from our modern perspective of what it is today. For example: What would the Colorado River have looked like before it became the Grand Canyon?

Etymology

Wikipedia: "Hadean" (from Hades, the Greek god of the underworld, and the underworld itself) describes the hellish conditions then prevailing on Earth: the planet had just formed and was still very hot growing to its recent accretion, the abundance of short-lived radioactive elements, and frequent collisions with other Solar System bodies. <https://en.wikipedia.org/wiki/Hadean>

Chicxulub Crater

Wikipedia: The Chicxulub crater (IPA: [tʃɪkʃuˈlub] ⓘ) is an impact crater buried underneath the Yucatán Peninsula in Mexico. Its center is offshore, but the crater is named after the onshore community of Chicxulub Pueblo.[3] It was formed slightly over 66 million years ago when a large asteroid, about ten kilometers (six miles) in diameter, struck Earth. The crater is estimated to be 180 kilometers (110 miles) in diameter and 20 kilometers (12 miles) in depth. It is the second largest confirmed impact structure on Earth, and the only one whose peak ring is intact and directly accessible for scientific research.[4]

https://en.wikipedia.org/wiki/Chicxulub_crater#:~:text=The%20crater%20is%20estimated%20to,directly%20accessible%20for%20scientific%20research.

Effects

An animation showing the Chicxulub impact and subsequent crater formation. <https://en.wikipedia.org/wiki/File:Chicxulub-animation.gif>

The impactor's velocity was estimated at 20 kilometers per second (12 mi/s).[29] The kinetic energy of the impact was estimated at 72 teratonnes of TNT (300 ZJ).[30] The impact generated winds in excess of 1,000 kilometers per hour (620

mph) near the blast's center,[31] and produced a transient cavity 100 kilometers (62 mi) wide and 30 kilometers (19 mi) deep that later collapsed. This formed a crater mainly under the sea and covered by 600 meters (2,000 ft) of sediment by the 21st century.[32] The impact, expansion of water after filling the crater, and related seismic activity spawned megatsunamis over 100 meters (330 ft) tall, with one simulation suggesting the immediate waves from the impact may have reached up to 1.5 kilometers (0.93 mi) high.[33][34] The waves scoured the sea floor, leaving ripples underneath what is now Louisiana with average wavelengths of 600 meters (2,000 ft) and average wave heights of 16 meters (52 ft), the largest ripples documented.[35][36] Material shifted by subsequent earthquakes and the waves reached to what are now Texas and Florida, and may have disturbed sediments as far as 6,000 kilometers (3,700 mi) from the impact site.[37][33][38] The impact triggered a seismic event with an estimated magnitude of 9–11 Mw at the impact site.[39]

Is the Chicxulub crater What killed the dinosaurs?

Google: Evidence supports dynamic collapse theory of peak ring formation.

UPDATE: Today, scientists published their first results from a drilling expedition into Chicxulub crater, the buried remnants of an asteroid impact off the Yucatán Peninsula in Mexico that killed off the dinosaurs 66 million years ago.

https://www.google.com/search?q=dinosaur+crater+yucatan&oq=dinosaur+crater&gs_lcrp=EgZjaHJvbWUqCQgCEAAAYChiABDIGCAAQRRg5MgkIARAAGAoYgAQyCQgCEAAAYChiABDIJCAMQABgKGIAEMgkIBBAAGAoYgAQyCQgFEAAAYChiABDIJCAYQABgKGIAEMgkIBxAGAGAoYgAQyDQgIEAAAYhgMYgAQYigUyDQgJEAAYhgMYgAQYigXSAQkyNDMwNGowajeoAgCwAgA&sourceid=chrome&ie=UTF-8

If the earth has experienced several asteroid impact events, one of which is believed to have killed the dinosaurs and changed life on earth, then what about the possibility of future cataclysmic impacts, and how devastating could they be.

The Impact that gave Us our Moon

What Is Earth's Axial Tilt or Obliquity?

Timeanddate.com

By Vigdis Hocken

When an object the size of Mars is thought to have crashed into the newly formed planet Earth around 4.5 billion years ago, it knocked our planet over and left it tilted at an angle.

Illustration: Earth's axis drawn as an imaginary red line. @timeanddate.com

Earth's Axis Is Imaginary In astronomy, an axis refers to the imaginary line that an object, usually a planet, rotates around. Earth's rotational axis is an imaginary straight line that runs through the North and South Pole. In our illustrations, Earth's axis is drawn as a straight red line.

Giant Impact Hypothesis

The impact around 4.5 billion years ago is described in the Giant Impact Hypothesis, which is the current prevailing theory on how the Moon was formed and how Earth got its tilt. Ever since this impact, Earth has been orbiting the Sun at a slant. This slant is the

The impact around 4.5 billion years ago is described in the Giant Impact Hypothesis, which is the current prevailing theory on how the Moon was formed and how Earth got its tilt. Ever since this impact, Earth has been orbiting the Sun at a slant. <https://www.timeanddate.com/astronomy/axial-tilt-obliquity.html>

Recent Meteor Events

Meteorite impacts are still often occurring. These are recorded by the American Meteor Society events for the last two years.

- Kingsport, TN; 02 Aug 2023 0613 UTC August 2, 2023 Possible small meteorite fall northwest of Kingsport, TN.
- Hopewell NJ; May 8, 2023 This was a low-mass daytime fireball. A meteorite landed on a house, causing minor damage to the roof and interior structures.
- Colorado Debris De-Orbit; April 27, 2023 De-orbit of the Dragon capsule trunk from SpaceX Crew-5 Dragon capsule.
- Waite ME; April 8, 2023 Meteorite fall from a daytime fireball seen over eastern Maine
- El Sauz TX; February 15, 2023 This event was a late-afternoon fireball northwest of McAllen, TX which generated sonic booms heard across the region. This was a naturally occurring meteorite fall.

- Muskogee, OK; January 20, 2023 This is a preliminary description of the event in the interest of getting the strewn field map out quickly
- Grimsby, Ontario; November 19, 2022 Probable meteorite fall east of Grimsby, Ontario. Remarkably, Grimsby was the site of another meteorite fall in 2009.
- Junction City, GA; September 26, 2022 This event is a meteorite fall observed on four weather radars. Meteorites have been recovered from this event.
- Coalmont, CO; August 24, 2022 This event was a bright fireball that was accompanied by no reports of sonic booms. This is recorded as American Meteor Society event number 5337 for year 2022.
- Great Salt Lake, UT; August 13, 2022 This is recorded as American Meteor Society event number 4942 for 2022. It was a daytime fireball and meteorite fall that was accompanied by 16 reports of sonic booms.
- Cranfield, MS; April 27, 2022 This event was a bright daytime fireball east of Natchez, MS that was accompanied by reports of sonic booms. This is recorded as American Meteor Society event number 2591 for year 2022.
- Patch Grove, WI; January 20, 2022 This event was an early morning bolide seen over SW Wisconsin at 6:48 AM CST on 20 Jan 2022 or 12:48 UTC. At the time of this writing 131 eyewitnesses reported the event to American Meteor Society.
- Yakima, WA Debris De-Orbit; March 26, 2021 This event was debris re-entry over Washington state that was accompanied by eleven reports of sonic booms and many video recordings. This is recorded as American Meteor Society event number 1916

Near Earth Orbit Meteors /NASA

There are plenty of bodies orbiting our world. In order to detect larger ones, over 450 feet across, NASA has established the Near-Earth Object (NEO) Observations Program. The question remains if we are able to intercept or divert these units.

Wikipedia: A near-Earth object (NEO) is any small Solar System body whose orbit brings it into proximity with Earth. By convention, a Solar System body is a NEO if its closest approach to the Sun (perihelion) is less than 1.3 astronomical units (AU).[2] If a NEO's orbit crosses the Earth's orbit, and the object is larger than 140 meters (460 ft) across, it is considered a potentially hazardous object (PHO).[3] Most known PHOs and NEOs are asteroids, but a small fraction are comets.[1]

https://en.wikipedia.org/wiki/Near-Earth_orbit

The Near-Earth Object (NEO) Observations Program is a key element of NASA's Planetary Defense Program, funding efforts to search for undiscovered NEOs using observatories around the world, calculate and refine NEO orbits, determine NEO physical properties and composition, and study NEO deflection and mitigation technologies. To achieve these objectives, the NEO Observations Program issues annual solicitations for proposals through NASA's Yearly Opportunities for Research in Planetary Defense (YORPD) element of the Research Opportunities in Space and Earth Science (ROSES) solicitation. Major activities are currently funded by the NEO Observations program.

<https://science.nasa.gov/planetary-defense-neoo/>

Near Earth Misses

Our Near-Earth Object (NEO) Observations System doesn't always work that great. Here are some recent events:

Close calls: How many asteroids have narrowly missed Earth?

Astronomy.com

By Jake Parks | Published: October 9, 2023

Rogue space rocks come closer to Earth than you may realize. Just how dangerous are they, and how likely are they to hit our planet?

With the US Department of Energy-fabricated Dark Energy Camera at NOIRLab's Cerro Tololo Inter-American Observatory in Chile have enabled astronomers to spot three near-Earth asteroids (NEAs) hiding in the glare of the Sun, illustrated in this artist's impression.

With the US Department of Energy-fabricated Dark Energy Camera at NOIRLab's Cerro Tololo Inter-American Observatory in Chile have enabled astronomers to spot three near-Earth asteroids (NEAs) hiding in the glare of the Sun.

The vastness of space is often romanticized in sci-fi tales, with depictions of interstellar journeys and distant galaxies. However, closer to home, we find a more sobering narrative. Our planet's history is punctuated by violent encounters with rogue space rocks, and every so often, the cosmos makes sure to remind us of the fragility of our world. <https://www.astronomy.com/science/close-calls-how-many-asteroids-have-narrowly-missed-earth/>

- In the past decade alone, Earth has had several close encounters with asteroids. The Chelyabinsk meteor event in 2013 is a haunting reminder of these cosmic threats. An asteroid, approximately 65 feet (20 meters) in diameter, entered Earth's atmosphere and exploded over Russia, causing more than 1,500 injuries as well as widespread property damage.
- Another significant near-miss was 2019 OK, a city-block-sized asteroid that zipped within 45,000 miles (72,000 kilometers) of Earth in 2019 — a cosmic hair's breadth in the grand scheme of things. Traveling at some 55,000 mph (88,500 km/h), if the asteroid had struck our planet, it could have really wreaked havoc.

Saturn's Rings / Shepherd Moons

NASA: Rings

Saturn's rings are thought to be pieces of comets, asteroids, or shattered moons that broke up before they reached the planet, torn apart by Saturn's powerful gravity. They are made of billions of small chunks of ice and rock coated with other materials such as dust. The ring particles mostly range from tiny, dust-sized icy grains to chunks as big as a house. A few particles are as large as mountains. The rings would look mostly white if you looked at them from the cloud tops of Saturn, and interestingly, each ring orbits at a different speed around the planet. Note: Size: as large as mountains. <https://science.nasa.gov/saturn/facts/>

Shepherd Moons

Google: Saturn has a number of shepherd moons. They are so called because they deflect material trying to leave the ring back into place. They are responsible for the gaps in the rings. Jul 2, 2017

https://www.google.com/search?q=shepherd+moons+saturn&oq=Shepherd++Moons&gs_lcrp=EgZjaHJvbWUqDAGCEAAYFBiHAIABDIKCAAQABjjAhiABDIHCAEQLhiABDIMCAIQABgUGIcCGIAEMgcIAxAGIAEMgcIBBAAGIAEMgcIBRAAGIAEMgcIBhAAGIAEMgcIBxAAGIAEMgcICBAAGIAEMgcICRAAGIAE0gEJMTQ4MjhqMGo0qAIAAsAIA&sourceid=chrome&ie=UTF-8

Environmentalism vs Ancient Prophetic World Views

Environmentalism Science vs Propaganda

- YouTube: Inconvenient Truth: 32 Climate Predictions Proven False

Facts Matter with Roman Balmakov Premiered Mar 30, 2023

Climate change refers to long-term shifts in temperatures and weather patterns, mainly caused by human activities, especially the burning of fossil fuels.

- As Climate Experts Warn of Looming Catastrophe, Past Bad Predictions Hurt Their Message <https://ept.ms/3M6yC22>

https://www.theepochtimes.com/science/as-climate-experts-warn-of-looming-catastrophe-past-bad-predictions-hurt-their-message-5148630?&utm_medium=FactsMatter&utm_source=YouTube&utm_campaign=Climate&utm_content=03-30-2023

Recent Freak Hail/Snowstorm Saudia Arabia

- You Tube: Saudi Arabia freezes! The desert sands, the streets and the people are battered. world has changed <https://www.youtube.com/watch?v=JjE40tZ2QM0>
- Bill Gates Major Reverse on Climate jChange. <https://www.youtube.com/shorts/Rc4RBSacito>

What Do You Believe?

Perhaps you believe “The Science.” What if they kept changing “The Science.” How many failed scientific “prophcies” i.e., predictions would have to prove untrue for you to doubt “the Science?”

Ancient Prophecies

Fulfilled Prophecy: Evidence for the Reliability of the Bible (Prophecies)

by Hugh Ross

August 22, 2003

Unique among all books ever written, the Bible accurately foretells specific events-in detail-many years, sometimes centuries, before they occur.

Approximately 2,500 prophecies appear in the pages of the Bible, about 2,000 of

which already have been fulfilled to the letter—no errors.

<https://reasons.org/explore/publications/articles/fulfilled-prophecy-evidence-for-the-reliability-of-the-bible>

The Ancient Writings for This Generation

What about the 500 prophecies that haven't been fulfilled? These prophecies are for you and your generation and beyond. Are you aware of these, are they true? What if you didn't know about these prediction?

Eschatology / End Times

It is obvious if a prediction comes true, either it does or it doesn't. If something is predicted to happen by a certain time or year, then all you have to do is wait. However, if there is no set date or season, then how does one know if it is true? We would then look to the reputation, that is the reliability of past predictions that have proven true or failed.

Prediction, or prophecy, if you prefer, is like credit. The financial and business sector rely on credit. If a business displays on its delivery truck "In Business Since (___) year," then you know they have credibility. If someone is starting a business out of their garage, not so much. Credit scores are a numerical system to reflect how you have handled finances in the past. Businesses have to make a profit or they can't stay in business. If you don't make your payments, they lose money and fear going out of business. So, they give you a low credit score because you are unreliable so you don't get very good credit, so also with predictions.

Differing Interpretations / Agreement

Until the end comes, we can disagree, hold differing opinions and theories. As illustrated before, modern science leans toward climate change, formally global warming, the result being melting of ice caps, glaciers etc. People who hold to the biblical world view hold to cataclysmic destruction by fire, which has been demonstrated. Now: Agreement,

Here's the problem, what if both sides of the argument disagreed on HOW but agreed on WHAT? What if both science and ancient academics agreed the world as we know it will be destroyed? What would you do?

To Hope or Not To Hope – That is the Question

If we have an agreement between scientific and religious communities that an end is coming, then can we look for a hope beyond the end? That's where the ancient predictions and prophecies really shine! What if the end was also the beginning of the new?

First, let's rehearse the "scientific" position: Global warming, rising sea levels, islands shrinking to nothing, coastal villages flooded to oblivion and displacement, coastal cities flooded with buildings rendered useless and homes destroyed by water. Cutting back on energy production, travel restricted, food production limited, crime rampant, civil unrest, personal security disappearing, medical services overrun. Need I go on? despair, depression, lack of hope for the future, marriage and family outdated, suicide prevailing? The end will come, but at your own hand? What of those you leave behind? Why relationships, just everyone for themselves? For What?

Prophecies You Might Want to Know About

- The Earth will end in Fire.
<https://www.biblegateway.com/quicksearch/?quicksearch=therein+Burned+up&version=KJV>
- All surface structures, vegetation, animal and human life destroyed.
<https://www.biblegateway.com/quicksearch/?quicksearch=therein+Burned+up&version=KJV>
<https://www.biblegateway.com/passage/?search=Revelation%208%3A7&version=KJV>
- The Earth will wobble in orbit before it collapses.
<https://www.biblegateway.com/quicksearch/?quicksearch=earth+drunkard&version=KJV>
- Earth's Destruction will be an asteroid from space. Note: Saturn's rings.
<https://www.biblegateway.com/quicksearch/?quicksearch=burning+mountain&version=KJV>
- Earth and its atmosphere will be gone.
<https://www.biblegateway.com/passage/?search=Matthew%2024%3A35&version=KJV>

Major World Religions End Time Scenarios

History Chanel: Did you know? The planet's major religions each have their own beliefs about the end of the world, the triumph of good over evil and Judgment Day.

The planet's major religions each have their own beliefs about the end of the world, the triumph of good over evil and Judgment Day.

- In **Christianity**, the Book of Revelation, the last chapter of the Bible's New Testament, mentions Armageddon, the final battle on Earth between the forces of God and Satan. The word Armageddon is thought to come from the Hebrew for "mount of Megiddo." Located in present-day Israel, Megiddo, an ancient, strategically positioned city, was the site of a number of battles. Some Christians interpret the Book of Revelation as a roadmap that lays out exactly how the world will end. They contend that Judgment Day will take place on Armageddon and Jesus will save the true believers, while non-believers left behind will face enormous suffering.
- In **Islam**, the end of the world is referred to as the Hour and involves Jesus returning to Damascus to slay an anti-Christ who has put the planet in peril. With the anti-Christ out of the picture, a period of perfect harmony will ensue. Jesus will later die a natural death, which will usher in a time of destruction that leads directly to the Hour.
- In **Judaism**, there is no term for Armageddon, but there are references in the Hebrew bible to events that could be compared with Armageddon, including the Day of the Lord (in which God causes death and destruction to people who deserve to be punished) and the War of Gog and Magog (in which Israel and its god fight their enemies, rather than an anti-Christ).
- In **Hinduism**, there is the story of the god Vishnu coming back in the last cycle of time as a figure called Kulki, who rides a white horse, carries a sword that looks like a comet and destroys the forces of evil.
- In some **Buddhist** prophecies, the equivalent of Armageddon is Shambhala, in which good triumphs over evil; however, the planet is restored rather than destroyed so people can pursue enlightenment.

Despite the many theories and religious interpretations, the only thing that's certain about the end of the world is that no one can know for sure what will happen. And until that day arrives—if it arrives—people will no doubt continue to speculate endlessly about when it will all be over. <https://www.history.com/topics/religion/religions-on-the-end-of-the-world>

Citation Information: Article Title Religion on the End of the World

AuthorHistory.com Editors: Website Name History: Date accessed December 1, 2023

URL <https://www.history.com/topics/religion/religions-on-the-end-of-the-world>

PublisherA&E Television Networks Last UpdatedAugust 21, 2018

Original Published DateNovember 6, 2009 Fact Check

NotAll Bad Prophecies – Some good!

- A New Planet Will Replace this Present
<https://www.biblegateway.com/passage/?search=Revelation+21%3A1&version=KJV>
- NASA: Possible Planet X
Astronomers studying the Kuiper Belt have noticed some of the dwarf planets and other small, icy objects tend to follow orbits that cluster together. By analyzing these orbits, the Caltech team predicted the possibility that a large, previously undiscovered planet may be hiding far beyond Pluto. <https://science.nasa.gov/solar-system/planet-x/>
- The new planet Will not depend on the sun for heat or light
<https://www.biblegateway.com/quicksearch/?quicksearch=no+need+of+the+sun%2C+neither+of+the+moon%2C+to+shine+in+&version=KJV>
- The new planet will be free of the problems plaguing this earth
<https://www.biblegateway.com/quicksearch/?quicksearch=former+passed+tears&version=KJV>

Possible End Time Scenario

What if the “burning mountain” mentioned in the rings of Saturn and in the ancient prophecies,

<https://www.biblegateway.com/quicksearch/?quicksearch=burning+mountain&version=KJV>
were to impact somewhere along the the Ring of Fire, disrupting that very fragile tectonic plate structure, the upheaval could be catastrophic, rendering the planet uninhabitable, even permanently, then these ancient prophecies could prove true.

Believer / Unbeliever

I have no idea what you might believe, but I wanted to write this little interactive e-book that I could provide at no cost at first and later at very low cost, so I could tell you some things found in ancient texts to give you a hope in the future, your future. It seems that science doesn't offer hope along with the doom and gloom..

I want to share things I've learned over many years which I hope will encourage you.

- After many centuries of observation three entities from another realm devised a plan to intervene in the human condition.
<https://www.biblegateway.com/passage/?search=John%203%3A17&version=AMP>
- An extraterrestrial Being would visit planet Earth and make contact with a young single woman who agrees to the plan.
<https://www.biblegateway.com/quicksearch/?quicksearch=conceive+virgin&version=KJV>

- She will willingly agree to be impregnated with a supernatural sperm to give rise to the first such hybrid humanoid, that is with normal human features and super human powers.
<https://www.biblegateway.com/passage/?search=Luke+1%3A26-35&version=MSG>
- He becomes the first person of future third (hybrid) humanoid race.
<https://www.biblegateway.com/quicksearch/?quicksearch=+don%E2%80%99t+have+to+wait+for+the+End.+I+am%2C+right&version=MSG>
- The Progenitor of the Third Human Race
<https://www.biblegateway.com/passage/?search=1+Corinthians+15%3A19-22&version=AMP>
- A new planet is being created that will support this new hybrid race.
<https://www.biblegateway.com/passage/?search=Isaiah%2065:16-18&version=MSG>
- Race The first Human Race will continue on in the New Planet Earth
<https://www.biblegateway.com/passage/?search=Matthew+25%3A31-40&version=AMP>
- Another prophet sees the new planet in place as the old is destroyed
<https://www.biblegateway.com/passage/?search=Revelation%2021%3A1&version=KJV>

Three Phases of Salvation

- Salvation of Earth creation of a new Planet Earth (repeat)
<https://www.biblegateway.com/passage/?search=Isaiah%2065:16-18&version=MSG>
- Salvation of the First Human Race (repeat)
<https://www.biblegateway.com/passage/?search=Matthew+25%3A31-40&version=AMP>
- Salvation of Individuals <https://www.biblegateway.com/passage/?search=Acts+16%3A30-31&version=NKJV>
 - What Must You Do to be Saved?
<https://www.biblegateway.com/passage/?search=Romans%2010%3A8%2D10&version=NKJV>
 - Believe in Your Heart (repeat)
<https://www.biblegateway.com/quicksearch/?quicksearch=+from+the+dead%2C+you+will+be+saved.+&version=NKJV>
 - Confess (tell) somebody you believe in Jesus. (repeat)
<https://www.biblegateway.com/quicksearch/?quicksearch=+from+the+dead%2C+you+will+be+saved.+&version=NKJV>
 - Invite, ask Jesus into your Heart
<https://www.biblegateway.com/passage/?search=Revelation+3%3A20&version=NKJV>
 - Two Prayers
<https://www.biblegateway.com/passage/?search=Luke+23%3A42-43&version=NKJV>
<https://www.biblegateway.com/quicksearch/?quicksearch=merciful+sinner&version=NKJV>

Hybrid Body Implications

The first living prototype of this new race was almost two thousand years ago, many “implants” have been successful. These are set to activate with a audio signal at a future. This activation will “trigger” a response from impacted human persons, both dead and alive. We take our expectations from the first “demonstration” prior to the departure. The Exit was perhaps the most important to escaping the destruction of this present planet. Some of the features are listed:

- Life Expectancy: Eons Unrestricted by Solid Matter
<https://www.biblegateway.com/passage/?search=John+11%3A25-26&version=NKJV>
- Impervious to Pain
<https://www.biblegateway.com/passage/?search=Revelation%2021%3A4&version=NKJV>
- Incognito Mode <https://www.biblegateway.com/passage/?search=Luke+24%3A13-16&version=CEV>
- Unrestricted by Solid Matter
<https://www.biblegateway.com/passage/?search=John+20%3A26&version=AMP>

Gravity Neutralized

- Released from former boundaries Mentally Activated Space Travel
<https://www.biblegateway.com/passage/?search=Acts+17%3A26&version=RSV>
- Released from Gravity <https://www.biblegateway.com/passage/?search=Acts%201:9-11&version=AMP>
- Mental Teleportation <https://www.biblegateway.com/passage/?search=Acts%208:38-40&version=CEV>
- Mentally Activated Space Travel
<https://www.biblegateway.com/passage/?search=1+Thessalonians+4%3A16-17&version=NIV>

Escaping Earth's Gravitational Pull

I'm sure you are aware of the moon's gravitational pull which causes the ocean tides to rise and fall, creating an important consideration for many marine operations near the coastline. Eventually, the tides fall because Earth's gravity is pulling the water back. The gravity pulls on you and you can measure it on a bathroom scale. But if the ancients are correct and the Earth is on fire, how will you escape? <https://www.biblegateway.com/passage/?search=2+Peter+3%3A10&version=AMP> Here's the bottom line, How are you going to get off this planet?

Answer: Three Phases of Salvation

- Salvation of Earth creation of a new Planet Earth (repeat)
<https://www.biblegateway.com/passage/?search=Isaiah%2065:16-18&version=MSG>

- Salvation of the First Human Race (repeat)
<https://www.biblegateway.com/passage/?search=Matthew+25%3A+31-40&version=AMP>
- Salvation of Individuals <https://www.biblegateway.com/passage/?search=Acts+16%3A30-31&version=NKJV>
 - What Must You Do to be Saved?
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 - Believe in Your Heart (repeat)
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 - Confess (tell) somebody you believe in Jesus. (repeat)
<https://www.biblegateway.com/quicksearch/?quicksearch=+from+the+dead%2C+you+will+be+saved.+&version=NKJV>
 - Invite, ask Jesus into your Heart
<https://www.biblegateway.com/passage/?search=Revelation+3%3A20&version=NKJV>
 - Two Prayers
<https://www.biblegateway.com/passage/?search=Luke+23%3A42-43&version=NKJV>
<https://www.biblegateway.com/quicksearch/?quicksearch=merciful+sinner&version=NKJV>

Last Days turns to Unbeliever

Ancient prophets speak clearly about the end of the world. As mentioned before, there is a great divide between modern science and the ancient prophecies, so current data is interpreted differently, respectively, It is something like the glass half empty / half full discussion. Two YouTube videos in the next section bear this out in the discussion of increase in earthquake frequency: yes/no. There are some ancient prophecies specifically referencing the last days/times.

- These were written for us in the end times.
<https://www.biblegateway.com/passage/?search=1+Corinthians+10%3A11&version=NLV>
- Things are going to be increasingly worse
<https://www.biblegateway.com/passage/?search=2%20Timothy%203:1-2&version=MSG>
- Knowledge will increase in the last times – Internet?
<https://www.biblegateway.com/passage/?search=Daniel%2012:3-5&version=ESV>
- Sign to look for in the end times.
<https://www.biblegateway.com/passage/?search=Mark+13%3A7-8&version=AMP>

As time progresses toward the end of the age, physical activity will increase which will provoke thought – a decision. Is the world going to continue as before, or are cataclysmic occurrences going to require you to re-think your position. How long will it take? What event will change your mind? Will you

reason through the issue, or, just wait you wake up to a world that has changed overnight. The purpose of this book is simply to get you thinking.

Signs: Wars, Earthquakes, Famines, Volcanoes, Tsunamis

- Are Earthquakes Increasing Worldwide? Should I be Worried? What Is An Earthquake? Why Do They Occur? <https://www.youtube.com/watch?v=kP-l-RH4GOE>
- YouTube: Are Earthquakes Increasing? | Sean O'Rourke
<https://www.youtube.com/watch?v=-LpaBPcSMRU&t=10s>

Fear

Love



Timeline of Predictions:

Resurrection / Resurrections

Resurrection Body Implications

Gravitational Release