

Dinosaurs Belittled



The new-look Australian Museum is a dino lover's dream.

<https://australian.museum/exhibition/dinosaurs/>

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Introduction.

The movie Jurassic Park opened the world of dinosaurs to a broad public. People were excited, horrified, and shocked. We are still baffled by the huge sizes of these ancient creatures. Millions of people visit the [museums](#) to see the skeletons of fossilized T-Rex and his companions in real.



<https://australian.museum/exhibition/dinosaurs/>

For all those people, this article will be a big disillusion. We present our conclusion that the dinosaurs were not that big and not that heavy. On the other hand, we have even more baffling news. The fossilized skeletons are a strong indication (even proof) for a mind-blowing new insight: that all matter is growing along with AN expanding earth and along with an expanding universe. The boy in this picture above is carrying his expanded history.

Summary of a few “Expanding Earth” theories.

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

“In 1888 Ivan Osipovich Yarkovsky suggested that some sort of aether is absorbed within Earth and transformed into new chemical elements, forcing the celestial bodies to expand. This was connected with his mechanical explanation of gravitation. Also the theses of Ott Christoph Hilgenberg and Nikola Tesla were based on absorption and transformation of aether-energy into normal matter.

Samuel Warren Carey

After initially supporting continental drift, the late Australian geologist S. Warren Carey advocated expansion from the 1950s (before the development of plate tectonics provided the generally accepted explanation of the movement of continents) to his death, demonstrating that subduction and other events could not balance the sea-floor spreading at oceanic ridges, and piling yet unresolved paradoxes that continue to plague plate tectonics. Starting in 1956, he proposed some sort of mass increase in the planets and said that a final solution to the problem is only possible in a cosmological perspective in connection with the expansion of the universe....

The remaining proponents after the 1970s, like the Australian geologist James Maxlow, are mainly inspired by Carey's ideas.”

The expansion theories have been firmly rejected by mainstream geologists and cosmologists. However, there are still a number of theories that keep on supporting the expansion of the earth. The revival of “Earth Expansion” is closely related to the observed data from James Webb Space Telescope and Hubble Space Telescope. Increasing numbers of publications doubt the Big Bang Theory and interpret the new data as convincing evidence that the universe grows in a process of Continuous Creation. This continuous creation can also be applied to our earth today: a growing earth in an expanding universe. This paper reloads the convictions of authors that the legendary Dinosaurs could be seen as clear proof of expansion, just because the fossilized bones have been growing, along with the layers in which they are found.
<https://www.dinox.org/wikiwars.html>

Stephen Hurrell “Dinosaurs and the Expanding Earth”.

<https://www.dinox.org/dinogravity.html>

“Have you ever wondered why dinosaurs were so big?

One of the most enduring mysteries about the dinosaurs is their massive size. The largest dinosaurs were several times the mass of the largest Elephant. It wasn't just dinosaurs that were massive on the ancient Earth, there were giant insects and plants that were all much larger than we would expect. In this world of giants all life was shifted towards a larger size.

Calculations indicate that the dinosaurs' bones, muscles and ligaments were too weak to support such massive animals, unless something dramatic had changed.

In 1987, I realized my engineering knowledge of scale effects on structures revealed a startling answer to this mystery of the dinosaurs' massive size: an ancient reduced gravity.

A reduced gravity would make life lighter, so all land-based life could increase in scale with seemingly weak bones, muscles and ligaments. A reduced gravity explains life's large size during the dinosaurs' time.

This theory allowed me to calculate that dinosaurs' gravity would need to be about half the present force of gravity to explain their large size – a truly astonishing conclusion.

*Among a number of possible reasons I considered for this reduced gravity was the prospect that the ancient Earth was much smaller in diameter and mass to create a **Reduced Gravity Earth**.*

*At first it seemed unlikely that the ancient Earth could have been so small during the dinosaurs' time, but I soon discovered that a number of geologists had already proposed that the ancient Earth was smaller in diameter, later expanding over hundreds of millions of years until it reached its present size. Their reasoning had nothing to do with dinosaurs: it was based purely on geological evidence. This is commonly known as the **Expanding Earth theory** and a number of geologists are still promoting and refining this*

theory today.

Based on their geological evidence the geologists propose that the ancient Earth was about the same size predicted by the Reduced Gravity Earth. Both theories predict the same astonishing conclusion using completely different reasoning and evidence”.

<https://www.dinox.org/publications/Hurrell2018-Palaeogravity%20Giraffatitan.pdf>

“The confusion about the large size of prehistoric life has generated many different ad hoc hypotheses to account for the large size of sauropod dinosaurs, including specimens such as Giraffatitan (=Brachiosaurus) brancai. An early popular hypothesis, widely accepted for the sauropod dinosaurs until the 1960s, proposed that they were slow and lumbering animals that supported their massive bulk with the buoyancy effect of water. Subsequent research indicated that these animals were land animals and the hypothesis was widely abandoned by the 1980s, although the problem of their large size still remained. The wide adoption of this early water supported hypothesis means that mass estimates of sauropod dinosaurs produced before the 1970s are often much larger than many present-day estimates.”... “In complete contrast to many of these multitude of hypotheses that only affect small portions of life, often in a restricted time period, the hypothesis of reduced gravity is a grand theory of all life, since it affects all life in all time periods. It replaces a multitude of ad hoc hypotheses with one all-encompassing hypothesis.”

In this paper and in the referrers list you can find detailed research reports on the estimated sizes of different dinosaurs. This research is mostly surprisingly detailed and supported by biological evidence.

Eugene Ellis, Ionic Expanding Earth.

(Eugene Ellis <https://bit.ly/IonicGrowingEarth>)

“We are conditioned to believe the Earth formed with its present size; was born warm and was bathing in water. This is what one "sees" and "hears" today and thinks the world was always this way. We believe the impossible size of dinosaurs because we can see the largeness of their fossils, and yes, reduced gravity on a smaller planet would explain some, but not all, of the perceived largeness. We do not believe or even suspect that the elements of those petrified bones and fossils (Ca, Si, Mg, or Fe) could grow. We tend to believe water was always here or imported from space because we do not truly know when hydrogen joined oxygen for the first time to become a molecule of water. Would not the mechanism (ionization?) that produces water be universal and be responsible for the water on comets, asteroids, or other planets? Before ionization, the elements were unable to chemically bond and form molecules or compounds. With the ionization potential of an element defined as a measure of its ability to enter into chemical reactions, the timing of those potentials (and limits) as presented herein, tells us when water arrived. The enigma of having so much water on a smaller Earth is easily reconciled when one considers the oxygen in water growing along with the other seven elements. We believe assumptions and accept them as authoritative. Perhaps we should question our beliefs by questioning the assumptions and follow Professor Samuel

Warren Carey's advice ... "We are blinded by what we think we know, therefore disbelieve if you can."

Why were the dinosaurs so large?

By Eugene A. Ellis (August 2015)

<https://ionic-expanding-earth.weebly.com/dinosaurs.html>

"It appears that dinosaur bones fossilized in areas of the earth where certain elements are prevalent.

Most of the fossil elements are the same elements that comprise 98% of Earth's matter.

[https://ionic-expanding-](https://ionic-expanding-earth.weebly.com/uploads/2/6/6/5/26650330/ionic_growing_earth_98.8percent_11182017.pdf)

[earth.weebly.com/uploads/2/6/6/5/26650330/ionic_growing_earth_98.8percent_11182017.pdf](https://ionic-expanding-earth.weebly.com/uploads/2/6/6/5/26650330/ionic_growing_earth_98.8percent_11182017.pdf)

The Ionic Growing Earth and its Eight Element Supplement postulate these elements are growing and expanding the Earth. The Supplement indicates magnesium doubles in mass every 36.56 MY; sulfur-every 48.22 MY; iron-every 84.0 MY; silicon-every 42.24 MY; and calcium every 60.28 MY. Table 3r of the supplement provides the time each element is growing (or heating), i.e. magnesium grew between 0 and 24.3 MYA and between 129.4 and 593.5 MYA. Calcium grew between 0 and 19.2 MY and between 82.2 and 341.1 MY. Silicon grew between 0 and 72.9 MY and between 269.3 and 845.3 MYA. If 250 million year old bone did not fossilize and assumes the decay rate of calcium they would grow for 187.0 MY (250 - 82.2 + 19.2) and double 3.102 times (187.0 / 60.28). Doubling 3.102 times is $23.102 = 8.587$; and the reciprocal of 8.587 is 11.65%.

Therefore, an 80-ton dinosaur 250 MYA would equivalently weigh 9.32 tons (80×0.1165) today and much less when gravity is factored. A recent article concerning The World's Biggest Dinosaur discovered in South America is described as 65 feet tall, 130 feet long, weighing 77 tons and aged at ~100MY. How could such a gigantic dinosaur, a 6.4 to 1 scale ratio, survive during the Cretaceous? This scale ratio tellingly reveals gravity should have been ~6.4% of present for that dinosaur to exist 100 MYA. Let's assume the calcium from this 77 ton dinosaur's bones grew for 17.8 MY between 82.2 MYA to 100 MYA, and silicified from 72.9 MYA to the present. Calcium would double 0.2953 times ($17.8/60.28$) and $20.2953 = 1.2271$, the reciprocal of which is 81.49%. The 77-ton dinosaur's equivalent weight would be 62.75 tons 72.9 MYA. The same bones then silicified for 72.9 MY and $72.9 / 42.24 = 1.7259$; $21.7259 = 3.308$ and its reciprocal would equal 30.2%. The 62.75 tons would then reduce to 18.85 tons (62.75×0.302). Applying a 68% gravity factor from IGE Supplement Figure 4r produces ~12.88 tons and indicates the dinosaur would not have survived. Although, if the fossil was dated at 105 MYA and the slightly less 67% gravity factor from Figure 4r is applied, the equivalent weight today would be 11.98 tons, indicating survival. [$22.8 / 60.28 = 0.37823$; $20.37823 = 1.30$; $1.3-1 = 76.94\%$; $0.7694 \times 77 \text{ t.} = 59.24 \text{ t.}$; $59.24 \text{ t.} \times 30.2\% = 17.89 \text{ t.}$; and $17.89 \text{ t.} \times 67\% \text{ g.} = 11.98 \text{ tons}$]. All fossils and even footprints would likewise be proportionally smaller in times past because Earth's matter has been

growing and expanding the fossils and the terrain. To an uninformed public or to the P-T adherents, this analysis means nothing. To those who think the Earth is expanding/growing, it may have some profound meanings regarding the how and the why. Overall, it appears we were seeking answers to the wrong question when asking... why the dinosaurs were so large. We should have been asking... why are their fossils so large? Think about it.”

Eugene Ellis: [“Ionic Expanding Earth-A Mass and Entropy Theory for an Expanding Earth in an Expanding Universe”](#) Quote: “In an expanding universe, the orbits of planets (with or without moons) are becoming larger. An increase in Earth’s mass would slow the rotational velocity and, according to Newton’s inverse square law, would also increase the orbital distance from the Sun. In essence, the leap second quantifies additional mass and verifies a growing Earth with an expanding orbit. The totality of expanding orbits of all the other planets would expand the universe.”.

Keith Wilson. Expanding Earth Knowledge.

<http://www.eearthk.com/>

<http://www.eearthk.com/expanding-earth-theory/#t15>

“Those who believe in Earth Expansion have had many hurdles placed in their way. One major hurdle can be stated as the need to prove a mechanism for expansion, not just to postulate and show it has occurred. The postulated primary cause of Earth Expansion is the creation of new matter or mass or, in some unknown way, the capture of matter in the Earth’s interior. Since the science of Physics currently believes all mass was in existence at the beginning of the Universe and at the initial explosion called the Big Bang, then expansion geologists would also have to overcome the objections of physicists before they could have their full day in court or the classroom. These are hurdles not encountered if you hold a belief in the standard science theories.... Within the Expanding Earth belief community there is not yet a consensus on growth causes, and there shouldn’t be. Debate leads to truth. There are currently four (4) primarily stated causal hypothesis to expansion:

Table 1. Causal Hypothesis to Expansion

- 1 Accretion of dust particles from space, perhaps at far greater rates than of today.
- 2 A change in the "G-gravity constant" over time leading to general expansion in the universe.
- 3 A “Phase Change” in the Density of the earth over time, from small and dense to larger and lighter but all with the same mass..
- 4 An actual increase in the mass of Earth, probably in the core or the core mantle interface. Either a "capture" or retention of unknown particles or energy, or the actual creation of new mass from some unknown method.

The primary reasons for doubt about hypothesis 4 — an increase in mass — (even within the EE community) is that it is unsupported by the current beliefs in Physics and mentally many just can’t get their minds around it being possible. The two greatest theorists of Expanding Earth were Sam Carey, and Ott Hilgenberg (now both deceased). Both believed in hypothesis 4 — the creation or capture of new mass inside the earth. Today’s two living and most published Expansionists (Maxlow and Scalera) state a

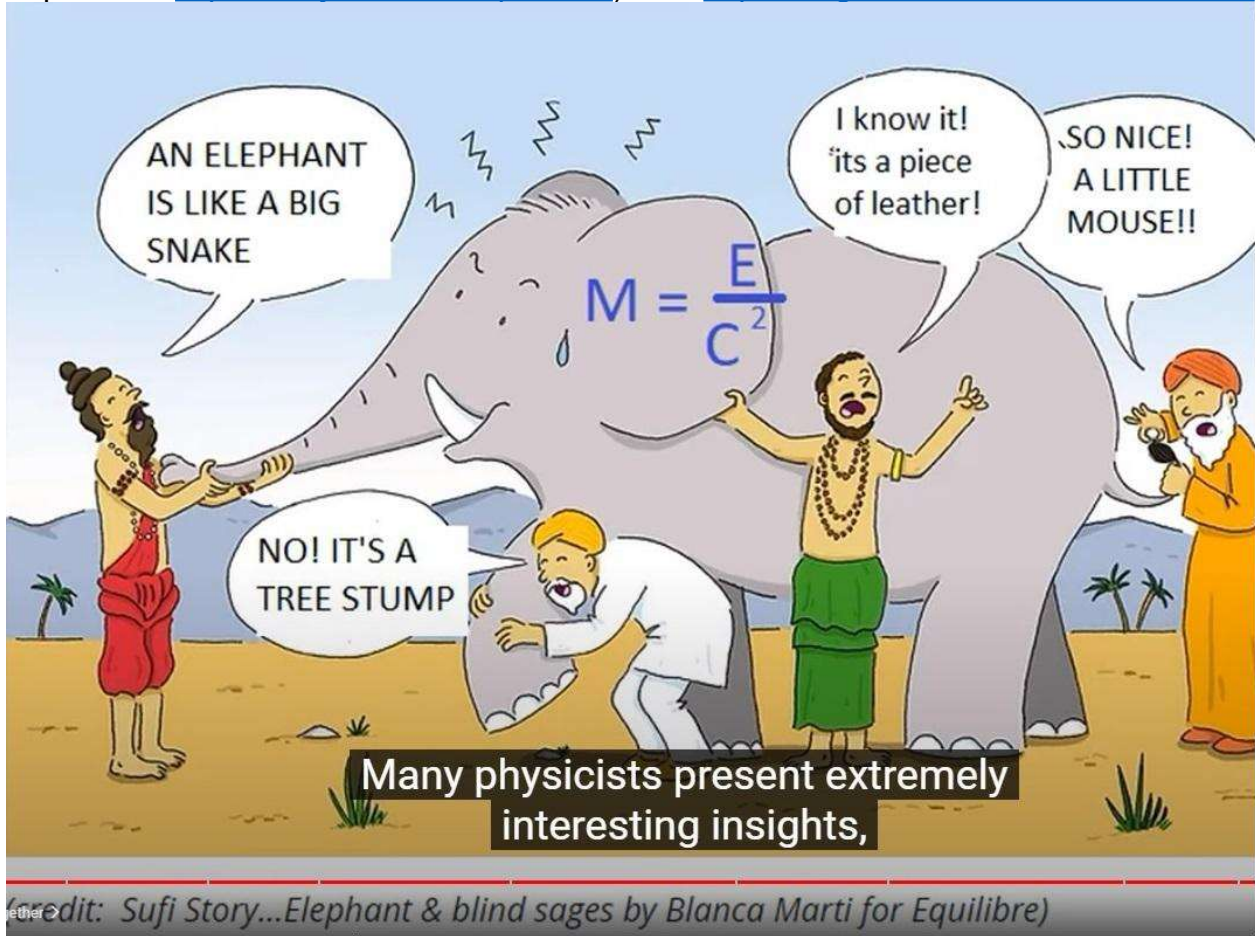
preference for hypothesis 4. These learned opinions, and other new evidence to be presented here, give hypothesis 4 the highest probability of cause. Studies on the gigantic size of dinosaur era fossils in relation to a changing gravity are vital but nearly unstudied within the standard science community. A smaller size earth with the same mass would have had a gravity 4 times stronger than today's. This would not explain dinosaur's large size and reduction in size over time. A smaller Earth with an increasing mass of 250 Million years ago, however, would potentially have a gravity of about 50% of today's. Gravity would increase over time as the Earth expanded. This helps explains the huge sizes, the high percentage of bi-pedal gaits, blood pressure systems needed, and the dominance for so long of the dinosaurs. As gravity progressively increased, their size decreased, as did the size of plants and insects. A lower gravity helps explain how huge pterodactyls and dragonflies could fly. 65 Million Years ago the Dinosaurs died out and at the same time the Earth has come to be continuously colder, until today. An increasing size Earth helps explain these temperature changes with increasing polar region sizes."

Ruud Loeffen, Expanding Matter in an expanding Universe

Not only the universe is expanding, but also the earth, all planets in our solar system, all atoms, electrons, and nuclei. All matter. Metoo. Youtoo. My convictions are based on **these indications**

- The universe is expanding
- Planets in protoplanetary discs are increasing in mass by accretion of dust and grains
- There are many indications that the surface areas of our planets and moons are more geologically active than previously thought
- There are many geologists and cartographers who calculated earth expansion, but were ignored and denied
- I can calculate an expanding earth, moons, and other planets based on the Lorentz Transformation of Mass-Energy. Mass absorbs energy from an aether-like universal energy field. Mass emerges in accordance with $M = E / c^2$. Read "Con-fusing Gravitation, applying the Lorentz Transformation of Mass Energy" <https://bit.ly/2CFGDlh> free download.
- The Hubble Parameter is related to space. All space. The Hubble Parameter works also inside the "empty" space inside atoms. The result of expanding electrons and nuclei is an increase of orbital distances between nuclei and orbiting objects As a result, the atoms themselves increase too. For a quick impression read "A Fair Tale about

Expansion” <https://bit.ly/FairTaleExpansion>) and [Expanding Matter. Overview of all links](#)



#expansion #gravitation

11 Scientific Reasons Why an Atom Is Like a Solar System

My video: <https://www.youtube.com/watch?v=EDbD-ANVFo>

Giancarlo Scalera, Can Geosciences relaunch the concept of ether?

“Paleogeographic reconstructions allow a rough quantitative evaluation of the amount of new ordinary matter that is added to the planet in the unity of time, and the consequent statement of some cosmological consequences and on the inner energy balance of the Earth. The concept of central flow of ether defended here is different from the Lorentzian stationary ether, but the two concepts could be made compatible.”

Samuel Carey, The Expanding Earth

The Expanding Earth- an Essay Review

“The Wegener bombshell of gross continental separation promptly triggered the concept of earth expansion as an alternative to drift, but books in German by Lidemann (1927), Bogolepow (1930), Hilgenberg (1933), and Keindl (1940) got little attention in the English literature. A second wave by Egyed (1956), Carey (1958), Heezen (1959), Barnett (1962), Brosske (1962), Neyman (1962), Creer (1965), Dearnley (1965), Jordan

(1966), Steiner (1967), and Meservey (1969) ran against the orthodox tide, which in geology, is lethal. Discovery that pan-global oceanic rifts had palaeomagnetic growth zones, and confirmation by JOIDES that all ocean floors are post-Palaeozoic, fit equally displacement or expansion models. The plate model combines ocean floor growth with "axioms" that orogenesis implies crustal shortening, that trenches are underthrusts, and that earth radius is constant. All three "axioms" are probably invalid".

Universe based on Hydrodynamic Gravity and Expanding Earth

"From Earth Sciences and geoneutrino experiments Borexino and KamLAND come clues on a role of the aether in the geological evolution of Earth and planets, and of all the structures of the universe. Through the problem of the storage of the aether arriving into the heavenly bodies, hydrodynamic explanation of gravitation is found closely related to the concept of the expanding Earth. Variable radius paleogeography allows a rough evaluation of the amount of ordinary matter that is added to the planet in the time unity, and the statement of some inferences on the Earth's inner energy balance. With the help of astrophysics the aether's density, flow rate, and velocity are computed."

See the video from Samuel Carey: "Planet Earth: A Question Of Expansion (1982)

<https://www.youtube.com/watch?v=Othb0xsvZb4>

Creer, K.M. An Expanding Earth?

https://www.nature.com/articles/205539a0.epdf?no_publisher_access=1&r3_referer=nature

"Among the few geologists and geophysicists who have tentatively proposed that the Earth's radius has expanded by a factor of nearly two, Carey has concluded from tectonic investigations that this large expansion has occurred since the Palaeozoic, while Egyed has argued that a slow expansion of about 0.5 mm/yr has been going on throughout the Earth's life. An expansion of this magnitude cannot be accounted for by known physical processes. I became interested in the expansion of the Earth while using paleomagnetic data to deduce the distribution of the continents in the upper Palaeozoic, using fibreglass shell models of the continents which could be slid over the surface of a 50-cm diameter globe. It has been argued that the present shapes of the continents are consistent with the supposition that they once comprised a complete outer shell of a smaller Earth. Usually, these arguments have been supported by rough sketches."

James and Anita Maxlow. Dinosaurs on an Expanding Earth

https://www.dinox.org/publications/Maxlow2016-Dinosaurs_on_an_Expanding_Earth.pdf

"On an Earth increasing in surface area and radius over time the development of ancient continental seas and supercontinents, along with the modern continents and oceans is shown to be the prime cause of evolution of all life forms on Earth. The distribution, migration, and eventual demise of the dinosaurs on an Expanding Earth can be visualized in conjunction with a very involved period of crustal break-up, new ocean development, and changes in surface gravity. While the prolonged period of time involved during this crustal break-up allowed dinosaur species to migrate to more equitable locations, it also presented new physical and environmental barriers. The

draining of ancient continental seas, for instance, influenced distribution of the modern seas and oceans and hence adversely affected available dinosaur habitats, migration routes, and escape avenues. Migration away from these physical barriers may have then encouraged the dinosaurs to evolve into new species. In contrast, failing to evolve, migrate, or being land-locked may have also caused their localized demise. The unique provincial distribution of the earlier Permian ancestral reptiles and Mesozoic dinosaurs on an increasing radius Earth demonstrates consistent evolutionary links between Permian, Triassic, Jurassic, and Cretaceous species.”

How to measure the expansion rate of the earth?

We can look at [our earth and see how geologic processes](#) have occurred in history by analyzing the layers and fitting the data together. Geologists are doing this and some present pieces of evidence of an expanding earth.

Measured expansion by Wenbin Shen.

Wenbin Shen, Ziyu Shen, Rong Sun, Yuri Barkin, [Evidences of the expanding Earth from space-geodetic data over solid land and sea-level rise in recent two decades](#)

3.5E-04 radial expansion per year as calculated by Wenbin Shen (3.5 mm per annum)
 3.5E-04 SHEN: AVERAGE expansion earth radius in meter per year (a= annum)

$$v_{\text{expansion}} \left[\frac{m}{s} \right] = \frac{3.5E-04 [m]}{365.25 * 24 * 3600 [s]} = 1.11E-11 \left[\frac{m}{s} \right]$$

1.11E-11 meter per second
 Equation 1

Combining the expansion rates of land part and oceanic part, we conclude that the Earth is expanding at a rate of **0.35 ± 0.47 mm/a** in recent two decades. If the Earth expands at this rate, then the altimetry-observed SLR can be well explained

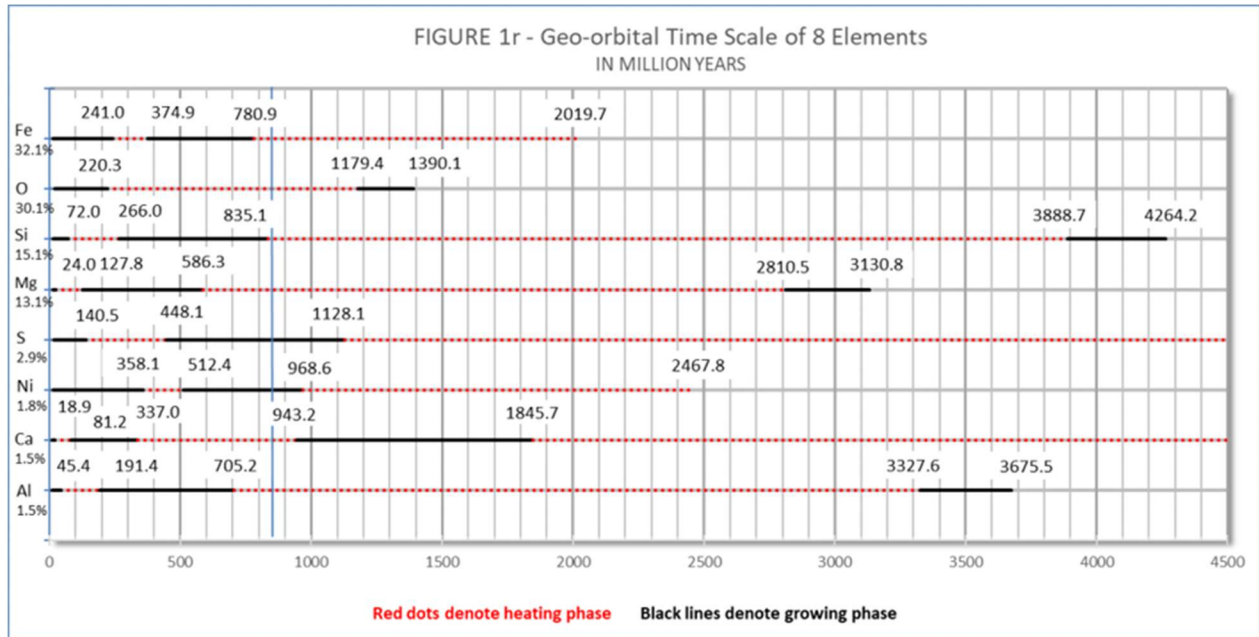
According to equation (8), though the accuracy is very low, the expansion rate over ocean region is comparable with the expansion rate over land. Combining the expansion rates over land and ocean, the whole Earth expansion rate is estimated as 0.35 ± 0.47 mm/a, as listed in Table 3. This estimate is a weighted result with taking the area as weight, namely

<https://www.sciencedirect.com/science/article/pii/S1674984715000518> “Evidences”

0.35	=	1.10984e-11
Millimetre / Calendar year		metre per second

Calculations by Eugene Ellis based on Ionic Earth Growth.

The Ionic Growing Earth (IGE) posits the same 8-elements that started the earth are growing at certain times and heating at other times as shown in Figure 1r



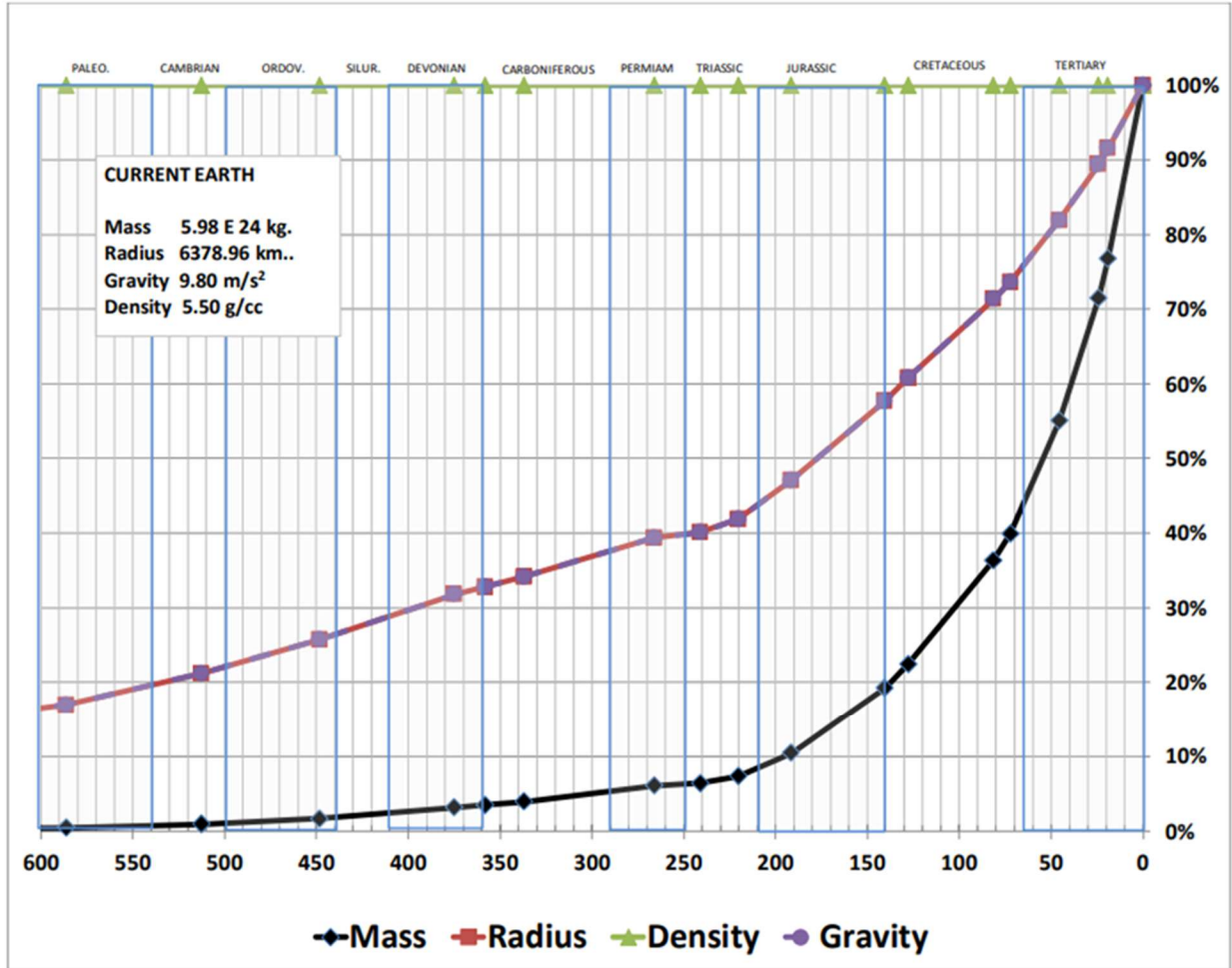
Note: The numbers on the chart are the effective Ionization Potential (I.P.) phase changing times (in million years) indicating the planet was predominantly heating until ~850 Ma. The I.P. Limit of oxygen (871.387 eV) indicates water initially formed ~1400 Ma.

For basic information about Ionization Potentials see:

<https://nvlpubs.nist.gov/nistpubs/Legacy/NSRDS/nbsnsrds34.pdf>

When the heating phases of each element is excluded, the mass, density and corresponding radius/gravity are revealed as shown in Figure 4R – Graph of Table 5R

EARTH FIGURE 4R – GRAPH of TABLE 5R



Reduced gravity (g) on a smaller planet permits larger life sizes but does not fully explain gigantic dinosaur sizes. The largest recorded land creature today is a 12-ton (10.8-tonne) elephant killed in 1956. Comparatively, this limits past life sizes to 10.8 tonnes. Gigantic sizes appear to be possible because we are finding and measuring dinosaur fossils and not considering the minerals that replaced the organic bone substances. However, surface gravity alone is insufficient in producing weights less than 10.8 tonnes, indicating that something more than surface gravity is involved.

In this regard, the mass as related in Newtonian celestial gravity may be contributing. This mass, comprised of earth's original 8-elements, was proportionally smaller in times past and when combined with surface gravity, further reduces life sizes. The combined effect is represented by % G x % g in this table:

% Big G	0.063	0.090	0.125	0.175	0.220	0.300	0.430
% small g	0.42	0.440	0.500	0.580	0.600	0.660	0.750
% G x % g	0.02646	0.040	0.063	0.102	0.132	0.198	0.323
Tonnes ↓	240 Ma	210 Ma	175 Ma	150 Ma	125 Ma	100 Ma	65 Ma
90	2.381	3.564	5.625	9.135	11.880	17.820	29.025
85	2.249	3.366	5.313	8.628	11.220	16.830	27.413
80	2.117	3.168	5.000	8.120	10.560	15.840	25.800
75	1.985	2.970	4.688	7.613	9.900	14.850	24.188
70	1.852	2.772	4.375	7.105	9.240	13.860	22.575
65	1.720	2.574	4.063	6.598	8.580	12.870	20.963
60	1.588	2.376	3.750	6.090	7.920	11.880	19.350
55	1.455	2.178	3.438	5.583	7.260	10.890	17.738
50	1.323	1.980	3.125	5.075	6.600	9.900	16.125
45	1.191	1.782	2.813	4.568	5.940	8.910	14.513
40	1.058	1.584	2.500	4.060	5.280	7.920	12.900
35	0.926	1.386	2.188	3.553	4.620	6.930	11.288
30	0.794	1.188	1.875	3.045	3.960	5.940	9.675

The reduced surface gravity and reduced mass in the past indicates dinosaur sizes and weights under 10.8 tonnes are equivalent to today's elephants.

When considering the effects of small g only:

% small g	0.42	0.440	0.500	0.580	0.600	0.660	0.750
Tonnes ↓	240 Ma	210 Ma	175 Ma	150 Ma	125 Ma	100 Ma	65 Ma
90	37.80	39.60	45.00	52.20	54.00	59.40	67.50
85	35.70	37.40	42.50	49.30	51.00	56.10	63.75
80	33.60	35.20	40.00	46.40	48.00	52.80	60.00
75	31.50	33.00	37.50	43.50	45.00	49.50	56.25
70	29.40	30.80	35.00	40.60	42.00	46.20	52.50
65	27.30	28.60	32.50	37.70	39.00	42.90	48.75
60	25.20	26.40	30.00	34.80	36.00	39.60	45.00
55	23.10	24.20	27.50	31.90	33.00	36.30	41.25
50	21.00	22.00	25.00	29.00	30.00	33.00	37.50
45	18.90	19.80	22.50	26.10	27.00	29.70	33.75
40	16.80	17.60	20.00	23.20	24.00	26.40	30.00
35	14.70	15.40	17.50	20.30	21.00	23.10	26.25
30	12.60	13.20	15.00	17.40	18.00	19.80	22.50

Surface gravity alone is insufficient in producing weights less than 10.8 tonnes

When considering the effects of Big G only:

% Big G	0.063	0.090	0.125	0.175	0.220	0.300	0.430
Tonnes ↓	240 Ma	210 Ma	175 Ma	150 Ma	125 Ma	100 Ma	65 Ma
90	5.67	8.10	11.25	15.75	19.80	27.00	38.70
85	5.36	7.65	10.63	14.88	18.70	25.50	36.55
80	5.04	7.20	10.00	14.00	17.60	24.00	34.40
75	4.73	6.75	9.38	13.13	16.50	22.50	32.25
70	4.41	6.30	8.75	12.25	15.40	21.00	30.10
65	4.10	5.85	8.13	11.38	14.30	19.50	27.95
60	3.78	5.40	7.50	10.50	13.20	18.00	25.80
55	3.47	4.95	6.88	9.63	12.10	16.50	23.65
50	3.15	4.50	6.25	8.75	11.00	15.00	21.50
45	2.84	4.05	5.63	7.88	9.90	13.50	19.35
40	2.52	3.60	5.00	7.00	8.80	12.00	17.20
35	2.21	3.15	4.38	6.13	7.70	10.50	15.05
30	1.89	2.70	3.75	5.25	6.60	9.00	12.90

These larger dinosaur sizes and weights are equivalent to today's larger African elephants and do not include additional effects from small g.

The Figure 4r graph above indicates that 175 Ma earth's mass was ~1/8th of present mass and at 50% gravity. This is useful in that % g = % r, therefore a halving of the radius or surface gravity results in an 8 fold decrease in volume or mass.

Herein, the cause for the increasing mass throughout the Age of the Dinosaurs (250 Ma - 65 Ma) is attributed to the original 8-abundance elements comprising 98.8 % of earth's mass, growing at certain times and heating at other times. The changing growth rates address the increasing mass while the heating part accounts for the original source of earth's high internal temperatures and subsequent heating.

This mass growing process is free and independent of [SRT](#), [GRT](#), [Aether Theories](#), and the [SMPP](#). (See this recent [Guardian](#) article regarding particles).

Finally, it should be noted that dinosaurs are aged by geologically dating the fossil surroundings. Such dating of the adjacent terrain, when combined with the above

analysis, demonstrates that gigantic dinosaurs provide the historical proof of an expanding earth caused by elemental atoms growing at specific times.

Educated guess by Ruud Loeffen

If we presume that our planet earth originates from a tiny whirling primordial elementary particle, then the radius of the earth has been growing during the life time of the earth from near zero to a grown up radius at 6371000 meters. The life time of the earth is estimated to be 4.6 billion years. The average growth is then Radius divided by the Time:

$$v_{\text{expansion}} \left[\frac{m}{s} \right] = \frac{R_{\text{earth}} [m]}{T_{\text{earth}} [s]}$$

Equation 2

We will use the MKS system and present values in meters, kilograms and seconds:

$$v_{\text{expansion}} \left[\frac{m}{s} \right] = \frac{6371000 [m]}{1.4425E + 17 [s]} = 4.42E - 11 \left[\frac{m}{s} \right]$$

Equation 3

This is quite close to the value from Wenbin Shen and the values from Eugene Ellis. (See before). The values from Wenbin Shen are based on observed data. The calculations from Eugene Ellis are based on ionization of the elements that built the earth in accordance with the data from geologists.

Calculating the expansion of fossil remnants per period.

First, we calculate the growth of earth's radius for every period (Cambrian, Silurian, Jurassic etcetera).

We know the average grow of the radius from previous:

$$v_{\text{expansion}} \left[\frac{m}{s} \right] = \frac{R_{\text{earth}} [m]}{T_{\text{earth}} [s]}$$

Equation 4

T-earth is the time that the earth exists.

In years: 4.571E+09

in seconds: 1.4425E+17

$$v_{\text{expansion}} \left[\frac{m}{s} \right] = \frac{6371000 [m]}{1.4425E + 17 [s]} = 4.42E - 11 \left[\frac{m}{s} \right]$$

Equation 5

I compared my “educated guess to the growth table from Eugene Ellis. I admire his knowledge of the development of earth-chemicals and his very detailed calculations. I directly calculated the growth of the radius of the earth by dividing the radius by the estimated age of the earth. The growth is then 1.3846990E-03 m/year (just radius at 6.3710E+06 meters divided by 4.6 billion years). It is the average expansion in that period of 4.6 billion years. Of course, there could be periods of higher and lower rates of growth depending on the conversion to heat and to growth.

Eugene calculated the growth in the period from 835 million years ago until now. Before that period the physical constitution of the earth is quite “nebulous”. The growth from 835 million years ago to now is somewhat bigger than the average growth of the period before. So, I used two values: one for the period until 835 million years ago and one for the period from 835 million years until now.

radius earth divided by time in years solar system	Radial growth	time in years	Growth / year
until 835 million years the AVERAGE INCREASE is:	6.97E+05	3.766E+09	1.8497E-04
after that THE AVERAGE INCREASE rate is:	5.68E+06	8.350E+08	6.8052E-03

It is encouraging to see that the calculated values are all in the same range of growth.

For detailed calculations see [EARTH RADIUS IONIC GROWTH SEPT 2022](#)

<https://bit.ly/EarthRadiusIonicGrowth>

Let's try to follow a dinosaur as in this link: [“Skeleton of huge dinosaur unearthed in Portugal”](#)

Length: 25 meters

Height: 12 meters

Mass: 60000 kg (60 tons)

Estimated weight at 9.8 m/s² gravity: 60000 kg (60 tons)

Mass in accordance with <https://en.wikipedia.org/wiki/Sauropoda>

<https://en.wikipedia.org/wiki/Argentinosaurus>

In accordance with the expansion theory as proposed by Eugene Ellis and Ruud Loeffen, the radius of the earth has been increasing during the life time of our earth.

We calculated the radius of the earth in the Jurassic time period to be 50% of the radius today.

The petrified fossilized bones that are found today have been increasing equally with the rock layers of the earth. The original size of the dinosaurs from Jurassic must be halved.

So we get:

Length: 12.5 meters

Height: 6 meters

That is still a huge dinosaur!

This dinosaur walked on the earth 200 million years ago. In that time the gravitational force was about 5 m/s². Also, just 50% of the gravitational force today.

The MASS of this dino would be also halved compared to the estimated mass today. This in SIZE “halved” dino has a MASS **also** halved: 15000 kg (15 tons).

Of course, you know this: “The difference between mass and weight is that **mass is the amount of matter in a material, while weight is a measure of how the force of gravity acts upon that mass**. Mass is the measure of the amount of matter in a body.”

<https://www.thoughtco.com/mass-and-weight-differences-606116>

So, the WEIGHT of the mass of a dino is subjected to a gravitational force that is just half of the force today. It means that this dino has to carry a weight of half of the recalculated mass.

This dino has a weight of 15000 kg or 15 tons. The weight of today’s [African Elephant](#) is about 7 tons.

Interesting to read this:

*“In 2016, [Mark Hallett](#) and [Matthew Wedel](#) stated that the eggs of *Argentinosaurus* were probably only 1 litre (0.26 US gal) in volume, and that a hatched *Argentinosaurus* was no longer than 1 meter (3.3 ft) and not heavier than 5 kilograms (11 lb). “.*

<https://en.wikipedia.org/wiki/Argentinosaurus> Paleobiology

The estimated size and weight of the eggs are quite surprising compared to the grown-up sizes and weights.

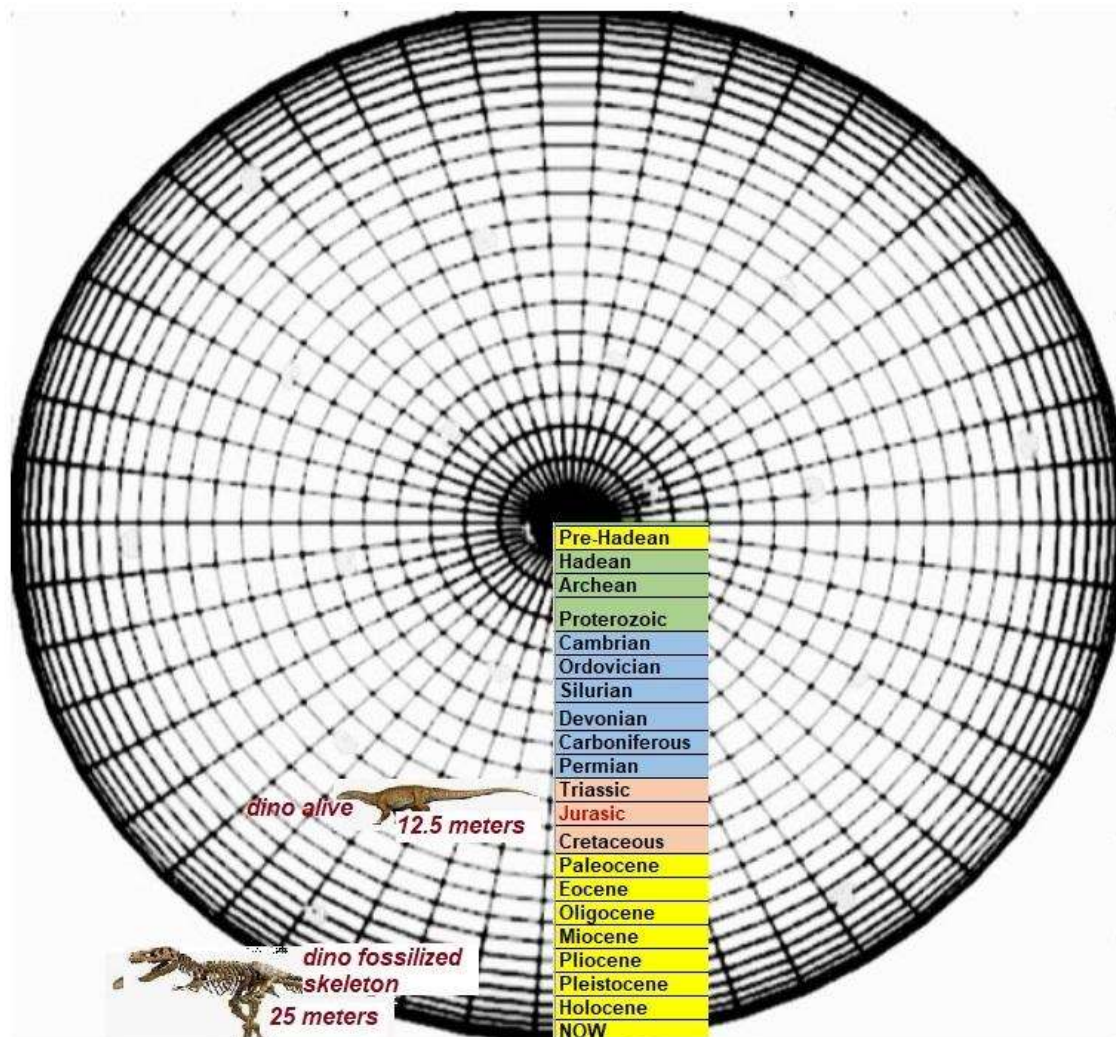
“The largest sauropods increased their size by five orders of magnitude after hatching, more than in any other [amniote](#) animals.^{[51]: 186 “.}

If we follow the expansion theory, then it is not surprising anymore. The smaller eggs have increased much less in 200 million years than the fossilized bones. The eggs were also half the size and a quarter of the estimated weight. The growth of anything small is also relatively small in 200 million years. The smallest fossilized warm-blooded mammals are just 13 centimeters. 200 million years ago they were 7 centimeters with a

weight of a quarter as estimated today. <https://eartharchives.org/articles/fossils-show-earliest-mammals-that-lived-in-trees-and-below-ground/index.html>

See also: <https://www.britannica.com/animal/Batodonoides#ref1278290>

Batodonoides, a genus of extinct insectivorous mammals that lived during the [Eocene Epoch](#) (56 to 33.9 million years ago) and of which the oldest species, [Batodonoides vanhouteni](#), may have been the smallest [mammal](#) that ever lived. [Batodonoides | Size & Facts](#)



The weight of this dino from Jurassic is about a quarter of the estimated weight.

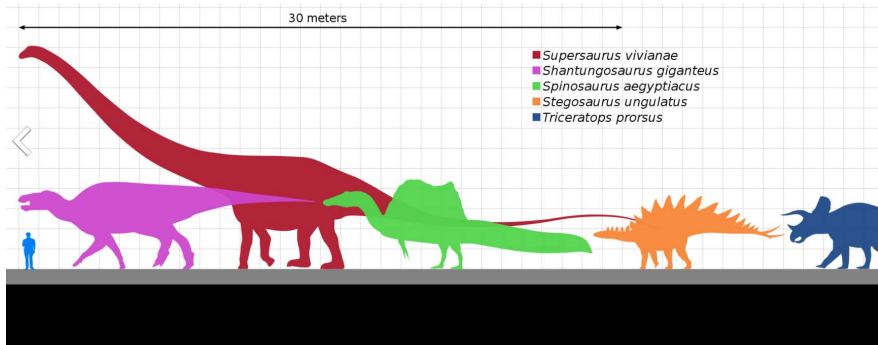
Other possible data for expansion.

We claim that the huge fossils from dinosaurs could be proof of the expansion of these fossils.

"The extinct family of dinosaurs has baffled the public, both children and grown-ups, both scientists and amateurs. The most astonishment is because of their sizes. Sizes

are determined by reconstructing the found fossils. The amazement has led to several science-fiction movies (Jurassic Park) and to specialized galleries with these incredible structures.”

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

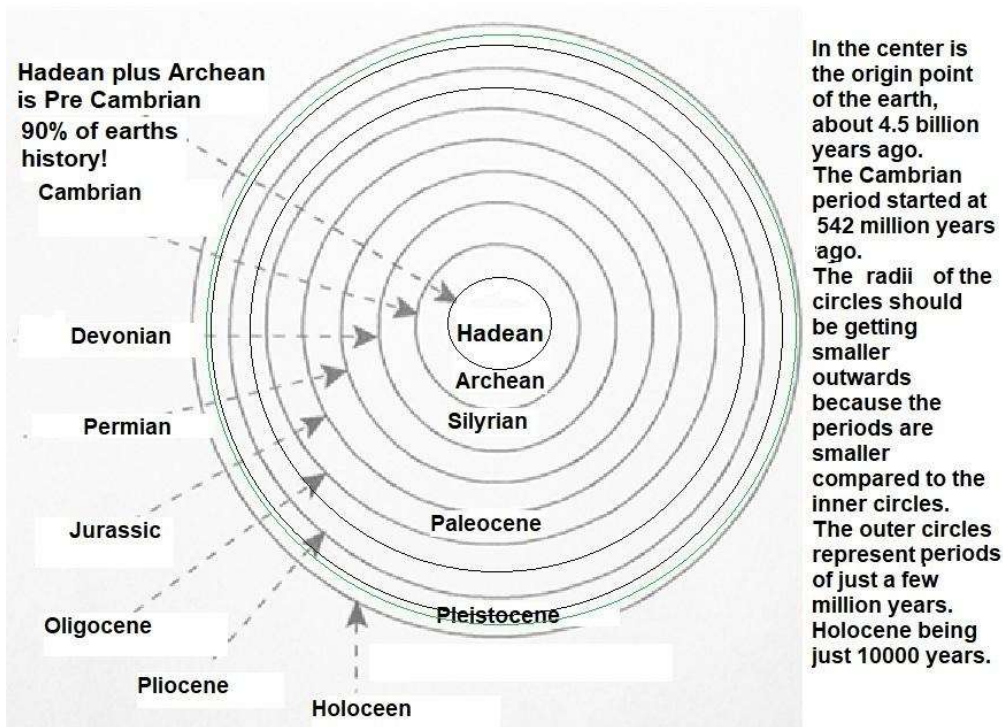


Scale diagram comparing a human and the largest-known dinosaurs of five major clades

Meer info

Not only do books and movies pay attention to these huge creatures but also different sciences are involved in determining the characteristics of these animals.

We calculate the expansion for all different periods. You can use our [Excel sheet](#) to fill in a found fossil size and the estimated weight in columns S and T

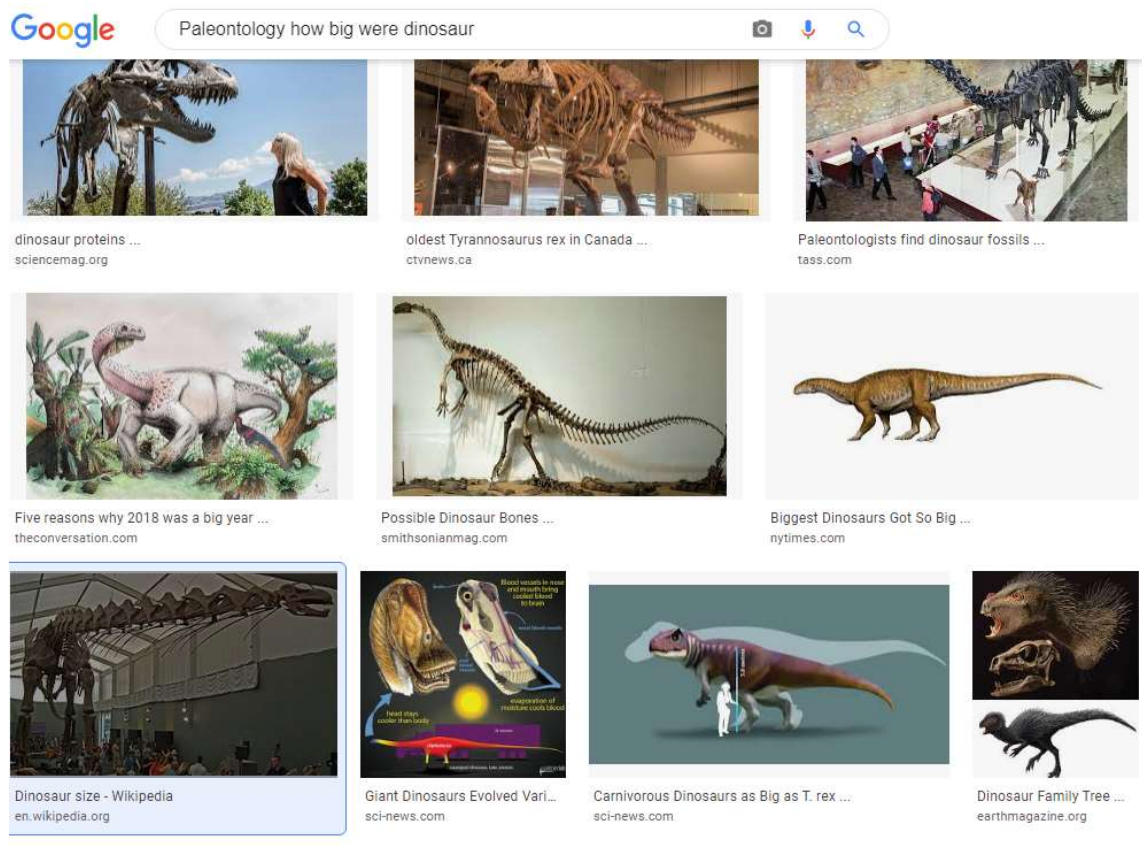


See also https://en.wikipedia.org/wiki/Geologic_time_scale

The Past Gravity Comparison web page (<https://ionic-expanding-earth.weebly.com/past-gravity-comparison.html>) indicates different takes on gravity.

Longest sauropodomorphs

1. *Barosaurus lentus*: 26–48 metres (85–157 ft)^{[42][45]}
2. *Maraapunisaurus fragilimus* (*Amphicoelias fragilimus*) : 30.2–40 metres (99–131 ft)^{[36][23]}
3. *Puertasaurus reuili*: 27–40 metres (89–131 ft)^{[46][38]}
4. *Argentinosaurus huinculensis*: 27–39.7 m (89–130 ft)^{[47][21][46]}
5. *Patagotitan mayorum*: 31–37 m (102–121 ft)^{[10][17][18][48][23]}
6. *Supersaurus vivianae*: 32–35 m (105–115 ft)^{[10][19][18]}
7. *Ruyangosaurus giganteus*: 30 – 35 m (98–115 ft)^{[49][50]}
8. *Diplodocus hallorum*: 27–35 m (89–115 ft)^{[18][19][51][52]}
9. *Alamosaurus sanjuanensis*: 26–35 m (85–115 ft)^{[53][18][54][51]}
10. *Sauroposeidon proteles*: 28–34 m (92–112 ft) ^{[51][55]}



It is not just these dinosaurs that are impressing by their sizes. Also, birds and insects have been baffling scientists and the public.

Giant insects.

<https://earthsky.org/earth/why-were-prehistoric-insects-so-huge>

Hundreds of millions of years ago, giant insects were common on Earth. Consider Meganeura, a genus of extinct insects from approximately 300 million years ago, related to modern-day dragonflies. One member of this group – M. permiana – was first described by researchers in Kansas in 1937 as having a wingspan of over 2 feet (0.6 meters). It's still considered one of the largest known insects that ever lived.

If you were reading my book [“Con-fusing Gravitation. Applying the Lorentz Transformation of Mass-Energy”](#) then you may have noticed, understand, and perhaps accepted, that all matter from atoms (electrons and nucleus), and molecules to planets have been expanding all along with the expanding universe. Yes, including an expanding earth. I (RL) search for proof that confirms this theory of expanding matter. Recently I came to this proposition:

If the earth is expanding with all atoms and molecules, then the earth layers with their geological time-based strata must have been expanding too with all material that also has been expanding for millions of years. If we find fossilized remnants of creatures that lived millions of years ago, then the molecules must have been expanding too. The radius of the earth has doubled in size since the time period of Jurassic. It means that a fossil of an insect grew (as a fossil) from about two centimeters to 4 centimeters. It means that if we find a fossil of a lizard that grew (as a fossil) from about 10 centimeters it grew to 20 centimeters. We made an [extended Excel sheet](#) and recalculated the size that it probably originally had. Of course, these are educated guesses because we don't know the exact size of the fossil 190 million years ago. A petrified dino found as a skeleton of 35 meters, was 190 million years ago just half that size: 17.5 meters. Still impressive, but less “impossible” than 35 meters. So, the mass of that dino in kilograms was also half of the estimated 60 tons that we attribute to the T-rex today. But there is one more important difference between THEN and NOW. Not only **the sizes** are reduced, but also the gravitational “attraction”: **the weight**. The force of gravity is also halved. So, the weight of the T-rex is one time more halved and **just 25%** from the estimated weight today: **15 tons instead of 60 tons**. We invite scientists of Paleontology, Archeology, and Stratigraphy to think about it.



Fossil remains of *M. monyi*, a member of the extinct insect genus *Meganeura*. Their wingspans could reach 2 feet (0.6 meters). This specimen is housed at the Fossil at the [Museum of Natural History in Toulouse](#). Image via [Wikimedia Commons](#).

The change in insect size is gradual. This gradual change fits quite nicely with the gradual evolution in birds at the time.

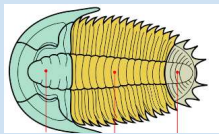
[Reign of the giant insects ended with the evolution of birds](#)

“Insects reached their biggest sizes about 300 million years ago during the late Carboniferous and early Permian periods. This was the reign of the predatory griffin flies, giant dragonfly-like insects with wingspans of up to 28 inches (70 centimeters). The leading theory attributes their large size to high oxygen concentrations in the atmosphere (over 30 percent, compared to 21 percent today), which allowed giant insects to get enough oxygen through the tiny breathing tubes that insects use instead of lungs.”

If the earth is expanding, then this fossil has been expanding too for hundreds of million years

<https://en.wikipedia.org/wiki/Trilobite>

Morphology of trilobites



When trilobites are found, only the exoskeleton is preserved (often in an incomplete state) in all but a handful of locations. A few locations ([Lagerstätten](#)) preserve

identifiable soft body parts (legs, gills, musculature & digestive tract) and enigmatic traces of other structures (e.g. fine details of eye structure) as well as the exoskeleton.

Trilobites range in length from minute (less than 3 millimetres (0.12 in)) to very large (over 30 centimetres (12 in)), with an average size range of 3–10 cm (1.2–3.9 in). Supposedly the smallest species is *Acanthopleurella stipulae* with a maximum of 1.5 millimetres (0.059 in).^[64] The world's largest-known trilobite specimen, assigned to *Isotelus rex* of 72 cm, was found in 1998 by Canadian scientists in Ordovician rocks on the shores of Hudson Bay.^[30]

[How Did Dinosaurs Get So Huge?](#)



Two giant *Arambourgiania* pterosaurs sharing a small theropod for dinner. Credit: Mark Witton.

Pterosaurs were the very first vertebrates to evolve powered flight nearly 230 million years ago. Previously, only insects were capable of flying. But these first fliers were a bit clumsy, and it took a while before pterosaurs could reach their full potential. According to a new study published today in the journal *Nature Communications*, the ancient flying reptiles became better fliers at a constant rate until they went extinct 65 million years ago.

<https://www.zmescience.com/medicine/anatomy/pterosaur-flight-evolution-0523/>

'Treasure trove' of dinosaur footprints found in southern England



More than 85 well-preserved dinosaur footprints – made by at least seven different species – have been uncovered in East Sussex, representing the most diverse and detailed collection of these trace fossils from the Cretaceous Period found in the UK to date. [Click here](#) to find out more.

<https://www.cam.ac.uk/research/news/treasure-trove-of-dinosaur-footprints-found-in-southern-england>

<https://www.cam.ac.uk/dinotracks>

Giant birds

Antarctica yields oldest fossils of giant birds with 21-foot wingspans

By Robert Sanders, Media relations | OCTOBER 27, 2020

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An artist's depiction of ancient albatrosses harassing a pelagornithid — with its fearsome toothed beak — as penguins frolic in the oceans around Antarctica 50 million years ago. (Image courtesy of Brian Choo)

<https://news.berkeley.edu/2020/10/27/antarctica-yields-oldest-fossils-of-giant-birds-with-21-foot-wingspans/>

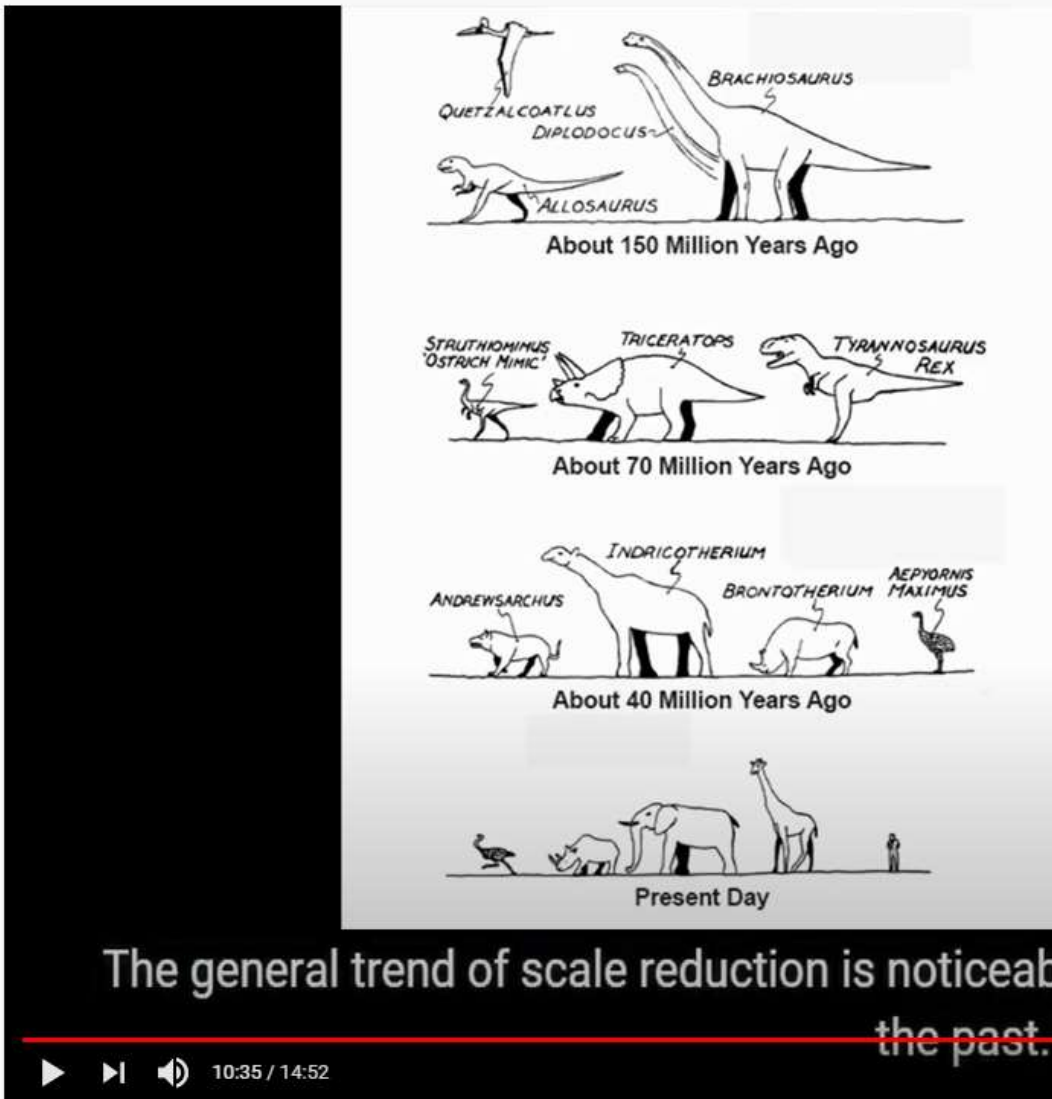
“Our fossil discovery, with its estimate of a 5-to-6-meter wingspan — nearly 20 feet — shows that birds evolved to a truly gigantic size relatively quickly after the extinction of the dinosaurs and ruled over the oceans for millions of years,” said [Peter Kloess](#), a graduate student at the University of California, Berkeley.

The last known pelagornithid is from 2.5 million years ago, a time of changing climate as Earth cooled, and the ice ages began.”

A warm Antarctica was a bird playground

Fifty million years ago, Antarctica had a much warmer climate during the time known as the Eocene and was not the forbidding, icy continent we know today, Stidham noted. Alongside extinct land mammals, like marsupials and distant relatives of sloths and anteaters, a diversity of Antarctic birds occupied the land, sea, and air.

See: “Ancient Life’s Gravity” on YouTube: <https://www.youtube.com/watch?v=YHvhTu-FCr8>



Ancient Life's Gravity (with English subtitles) HD

Earliest fossils of giant-sized bony-toothed birds

https://www.zmescience.com/science/fossil-friday-big-bird-leg-fragment-6346745634/?goal=0_3b5aad2288-00f0386cf3-242708965



Dinosaur fossil collector...
theguardian.com



Dinosaur skeleton auctions mean that ...
qz.com



Dinosaur DNA and proteins found in ...
newatlas.com



Create your own Dinosaur Fossils With ...
osc.org



5 Most Impressive Dinosaur Fossils Ever ...
catawiki.com



child dinosaur or an adult dinosaur ...
theconversation.com



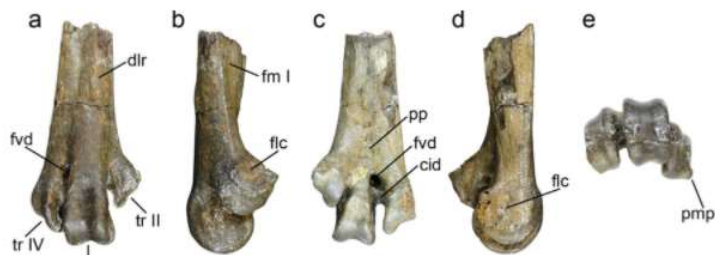
Montana dinosaur fight ...
latimes.com

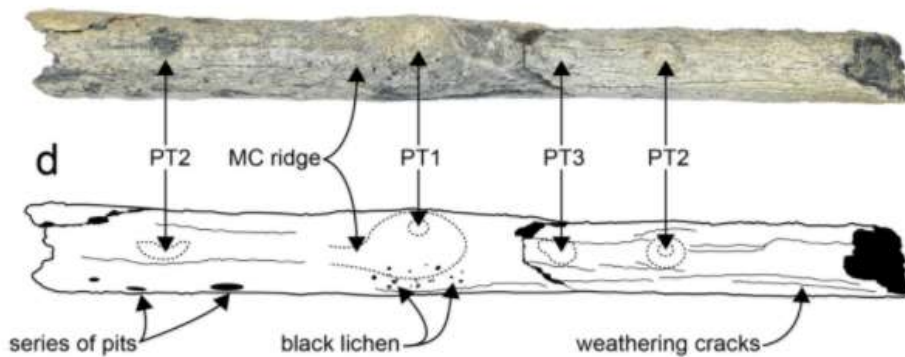
Fossil Friday: leg fragment points to huge, toothy bird with a wingspan of up to 21 feet

Imagine how many nuggets you could make from one of these.

 by Alexandru Micu — October 30, 2020 in Biology, Fossil Friday, News, Science

Fossils recovered from Antarctica four decades ago belonged to an ancient, massive too bird.





The fossilized jaw fragment. Pseudoteeth depicted as dashed outlines. Image credits Peter A. Kloess, Ashley W. Poust, Thomas A. Stidham, *Scientific Reports*.

Of course, what was most striking about this extinct bird is its sheer size. Large flying animals have made several appearances in the Earth’s past, with the largest known being the pterosaurs, dinosaurs with wingspans of up to 33 feet.

The newly-discovered pelagornithid grew even larger than teratorns — an extinct family of very large birds of prey native to North and South America, which included some of the largest flying birds ever found.

“[Teratorns] evolved wingspans close to what we see in these bony-toothed birds (pelagornithids),” said Poust. “However, in terms of time, teratorns come in second place with their giant size, having evolved 40 million years after these pelagornithids lived. The extreme, giant size of these extinct birds is unsurpassed in ocean habitats.”

The fossils were first discovered in the mid-1980s on Seymour Island, close to the Antarctic Peninsula by UC Riverside paleontologists. They were transferred to UC Museum of Paleontology, where Kloess stumbled upon them as a graduate student in 2015.

To the best of our knowledge, the last pelagornithid died off around 2.5 million years ago as the last Ice Age began.

Archaic trees found that are extremely large

Petrified giant ancient trees found in Thailand

Posted by Heisenberg on March 26, 2013 at 04:05 UTC (7 years ago)

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Category: Biodiversity



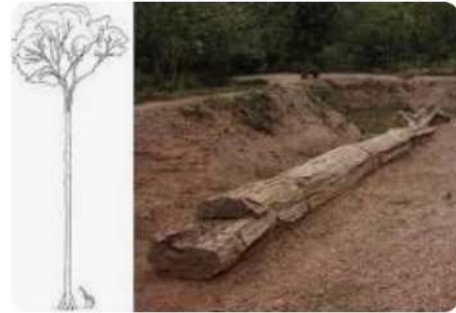
In 2003, a small section of a large petrified log was found in a reserve forest at Ban Tak District, Tak Province, Thailand, by a villager. This led to investigation in this area by officials of the National Park, Wildlife and Plant Conservation Department and many such logs were discovered, leading to a name change of this forest to Petrified Forest Park, in 2006. The region where these fossils were discovered could be traced 1,000,000 years ago from the fossils and stone tools found in Northern Thailand, giving insights to not only prehistoric trees but also the prehistoric man, *Homo erectus*.



The longest petrified log measured 72.2 meters (237 feet), which suggested the original tree to be more than 100 meters (330 feet) in a wet tropical forest some 800,000 years ago. Interestingly,

[Dinosaur Bonsai Apocalypse](#)
a tree 72 meters high.

Fossil **trees** that approached the heights of today's **tallest** redwoods have been **found** in northern **Thailand**. The longest **petrified** log measures 72.2 meters (237 feet), which suggest the original **tree** towered to more than 100 meters (330 feet) in a wet tropical forest some 800,000 years ago. Mar 20, 2013



www.livescience.com > 28052-giant-trees-found-in-thailand

Ancient Giant Trees Found Petrified in Thailand | Live Science

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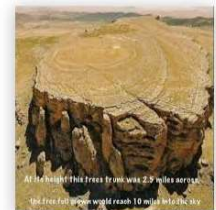
Ancient Giant Trees Found Petrified in Thailand | Thai Embassy in Denmark
thaiembassy.dk



Petrified giant ancient trees found in Thailand | Watchers News
watchers.news



The Earth Story – The World's Largest Petrified Tree Found in Thailand | The Earth Story
the-earth-story.com



FACT CHECK: Is This a Petrified Tree? | Snopes.com
snopes.com



Saving Fossil Trees Thailand - Home | Weebly.com
savingfossiltreesthailand.weebly.com



Biggest Petrified Tree ever Discovered in Thailand | Pinterest.com
pinterest.com



Taiwan artworks take inspiration from petrified trees | Taiwan Today
taiwantoday.tw



Cave in Thailand looks like a giant petrified tree | Reddit.com
reddit.com

As usual: there may be some fake ancient trees, but there are many trees that are confirmed to be petrified wood-trees from ancient times.

[12 Most Amazing Finds In The Desert](#)

[The Most Important Discoveries in Paleontology - Part 1](#)

If the earth has been expanding, then the rock layers with included fossils must have been expanding too.



<https://www.enchantedlearning.com/subjects/dinosaurs/dinofossils/Fossilhow.html>

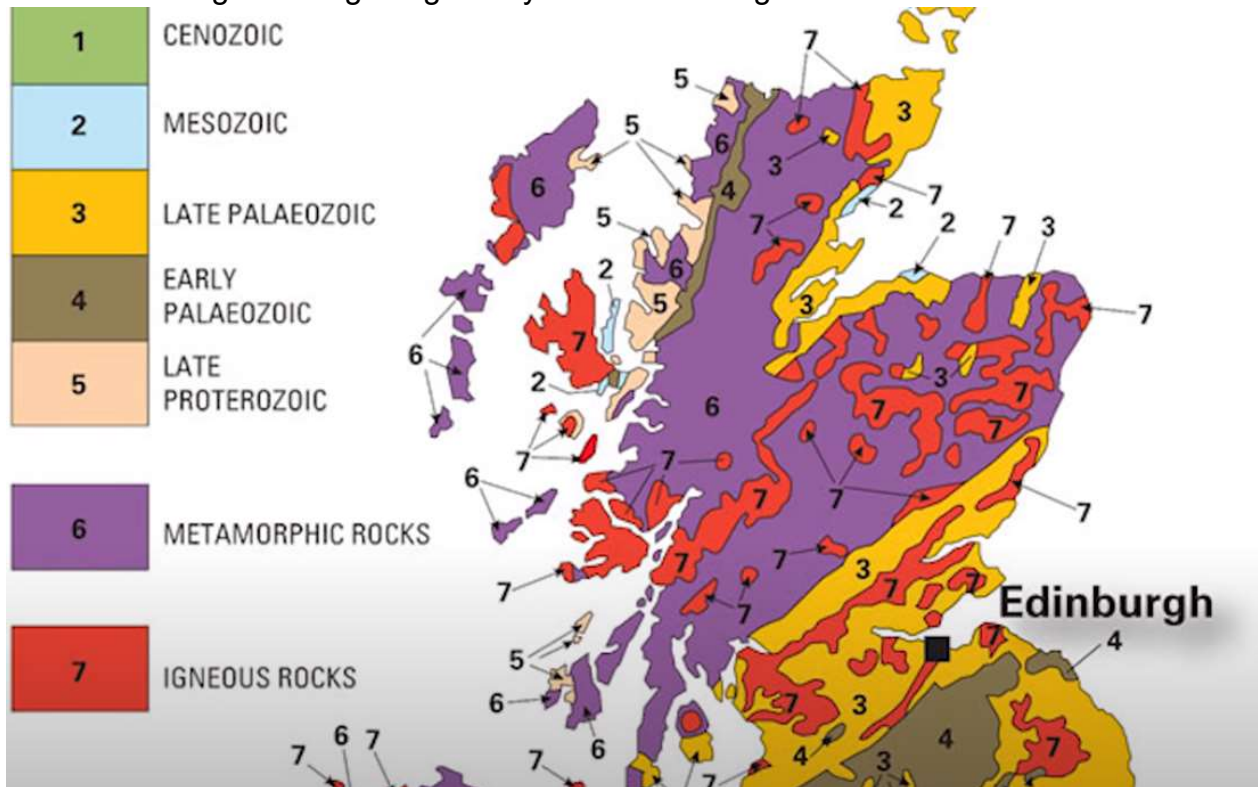
“Most animals did not fossilize; they simply decayed and were lost from the fossil record. Paleontologists estimate that only a small percentage of the dinosaur genera that ever lived have been or will be found as fossils.”



[Extraordinary Petrified plants, trees, forests, animals](#)

At 9 minutes: Look also at the rock. They show a pattern of expansion.

Here is an image of the geological layers in North-England:



Fossils that are found range in size from very small (some millimeters) to extraordinary big (up to 40 meters). Biologists have wondered how the incredibly big creatures could stand the gravity on earth.

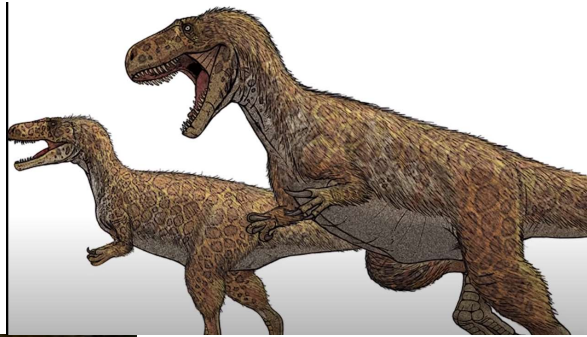
Please use our [Excel sheet](#) to recalculate size and weight in different time periods by



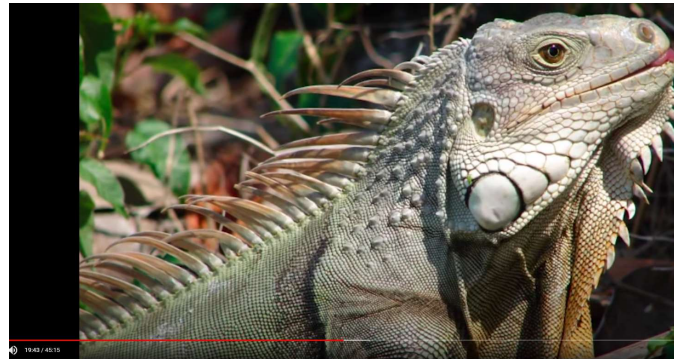
Cannibal Lizard Snags a Mouthful ...

hakaimagazine.com

using cells S32 and T32.



Tuatara 'lizard' genome sequence is ...
dailymail.co.uk



The Most Important Discoveries in Paleontology - Part 1

Up next

https://youtu.be/Kj_eSURwGas?t=1174

Transcript:

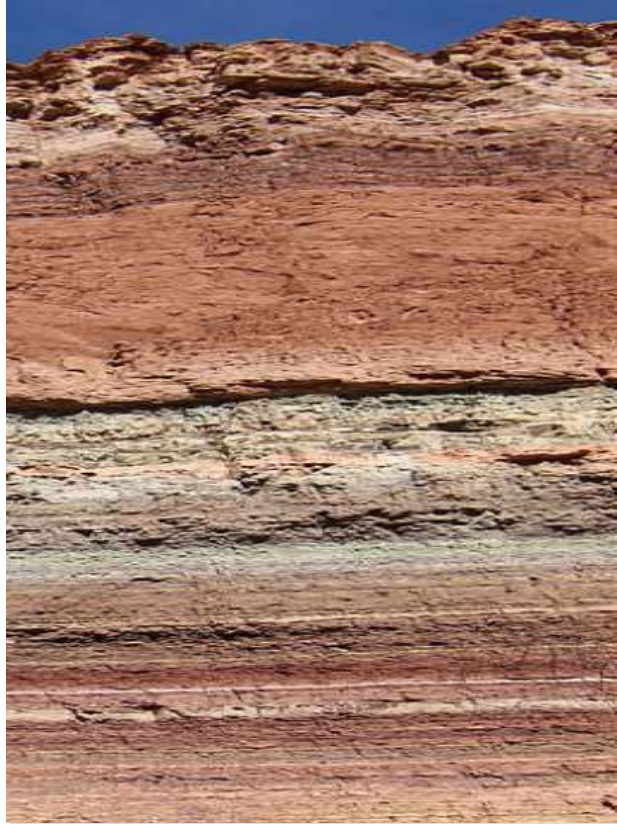
Cuvier eventually admitted his mistakes

*19:26 and acknowledged **the similarities that Mantell's teeth had to living reptiles and that they must have belonged to some massive herbivorous animal. After further research Mantell noticed the similarities the teeth had to modern-day iguanas. The only difference being that they were 20 times larger***"

In our view, this means: the fossil was the same as a modern-day iguana and that fossil has been expanding for millions of years.



[Cleveland-Lloyd Dinosaur Quarry](#)



“Variation in rock units, most obviously displayed as visible layering, is due to physical contrasts in rock type (lithology). This variation can occur vertically as layering (bedding), or laterally, and reflects changes in environments of deposition (known as facies change). These variations provide a lithostratigraphy or lithologic stratigraphy of the rock unit. Key concepts in stratigraphy involve understanding how certain geometric relationships between rock layers arise and what these geometries imply about their original depositional environment.”

<https://en.wikipedia.org/wiki/Stratigraphy>

Millipedes ‘as big as cars’ once roamed Northern England, fossil find reveals

“The fossil – the remains of a creature called Arthropleura – dates from the Carboniferous Period, about 326 million years ago, over 100 million years before the Age of Dinosaurs. The fossil reveals that Arthropleura was the largest-known invertebrate animal of all time, larger than the ancient sea scorpions that were the previous record holders.... “It was an incredibly exciting find, but the fossil is so large it took four of us to carry it up the cliff face,” said Davies.”

“The great size of Arthropleura has previously been attributed to a peak in atmospheric oxygen during the late Carboniferous and Permian periods, but because the new fossil comes from rocks deposited before this peak, it shows that oxygen cannot be the only explanation.”

<https://www.eurekalert.org/news-releases/938378>

Fossil of Arthropleura (IMAGE)

UNIVERSITY OF CAMBRIDGE



CAPTION

Fossilised section of the giant millipede Arthropleura, found in a sandstone boulder in the north of England.

CREDIT

Neil Daves

Conclusion and way forward.

From 1920 to now there have been a lot of disputes between geologists about the way the earth has developed in its 4.6 billion years of history. Theories about drifting continents were criticized by theories about the expansion of the crust of the earth. And vice versa. There are some reasons to review this dispute. In this paper, we presented a few reasons why we should focus on the possibility of the expansion of planets and moons. And consequently, on the possible expansion of matter in general (from electron to galaxy) along with an expanding universe.

There are many theories that support the expansion of matter. In the reference list, we refer to a few of these theories.

We enlarged our perception of space and time considerably because we use recording equipment, by which nearly the whole electromagnetic spectrum can be converted into perceptible information. We can view the results of infrared photography, Sloan Digital Sky Survey (SDSS), James Webb Space Telescope, Hubble Space Telescope, Hard X-ray Modulation Telescope, Dark Energy Spectroscopic Instrument (DESI), new satellite missions like Euclid, and the results from experiments in the Large Hadron Collider). In the last decade, we used this equipment to research planets and moons. Many observations indicate an increase in the surface, volcano activity, and fault lines. In contrast, we find little, if any, evidence of subduction. The moon Europa shows impressing streams of fluid filling the gaps between older parts of the surface. We will need some perseverance to find confirmation for expanding planets and moons.

If we peer into the universe with telescopes, we look back in time and we enlarge the history of star systems and (proto)planetary systems.

We invite researchers in the fields of paleontology, paleomagnetism, paleoclimatology, geology, and cosmology to keep an open eye on the possibility of the expansion of all matter along with the expansion of the universe.

The expanding universe is often compared to the analogy of “baking raisin bread”. These concepts can be found in nearly every book in which the expansion of the universe is explained. However, an observer HIMSELF with all equipment would become evenly larger. He would NOT determine that the bread was rising along with the raisins. How to determine that all matter is expanding along with an expanding universe? How to prove that the raisins are increasing too?

There are 4 ways that can be used to confirm if there is an expansion of matter and expansion of the earth and planets.

1. We can peer into the universe. We see our history. We see protoplanetary star systems. We look back in time. See the images of the hydrogen atom and the protoplanetary system on the internet. Many new equipment systems (telescopes, probes, quantum-microscopes) are developed and will provide answers about that history. If the matter is expanding for billions of years, we will see this expansion, and we can measure it.

2. We can look at our earth and see how geologic processes have occurred in history by analyzing the layers and fitting the data together. Real scientists are doing this and present pieces of evidence of an expanding earth.

3. Also, paleontology could bring forward new insight into the development of life and the size of creatures.

4. We will analyze the dynamic processes of the planets and moons. We may discover the expansion of planets and moons by observations of the surface area. If planets and moons slowly increase in size, then there must be a tiny increase in the orbitals. NASA about the increasing orbital of the moon: "The Moon is slowly moving away from Earth, getting about an inch farther away each year. BBC-news reports: The Moon continues to spin away from the Earth, at the rate of 3.78cm per year". Not only our moon spins away:

["The Mystery of Titan's Expanding Orbit"](#).

"Titan's 11-centimeter-a-year orbital expansion indicates that Saturn has to be "responding" to Titan's gravitational pull far, far more than we might have expected. More specifically, the critical measure of how much energy is being dissipated by Titan-Saturn tides is more than 100 times larger than standard theory would predict (and possibly even 1,000 or 10,000 times larger)."

So, we can analyze the past and observe the expansion (if any) at a distance. History is telling.

There are many brand-new theories about the universe with extremely difficult-to-understand concepts and mathematical reasoning. Many of these concepts will never be provable because the required data are unobservable. In contrast: the expansion theories are related to observable data. Sure. It is exceedingly difficult to calculate the data and it is difficult to draw conclusions from these facts and figures. But with new equipment, we will improve observations and get new pieces of backgrounds that fit like a puzzle. For example, the moon Europa clearly shows areas that are split by streams that break the surface. The two sides of the stream fit perfectly. The subduction seems to be much less than the observed expansion. We will find extraordinary evidence for extraordinary claims.

Eugene Ellis, Ruud Loeffen September 25, 2022.

Enya The Humming. A song about the properties of the universe.

https://youtu.be/FOP_PPavoLA

This song finds Enya musing on the cycle of the universe and how change affects everything. Her producer Nicky Ryan recalled: "It began when, after writing the melody line, Enya started humming a small part of the melody."

It is obvious that what the lyrics of "The Humming" are speaking to, most simply put, is existence. As Enya has described this piece in her own words, it is based on "the change that happens within the universe" or the cycle of life, as some people may put it. But she doesn't actually mention life forms but rather the likes of "light", "the sea", "the waves" and what have you. Read more at: <https://www.songmeaningsandfacts.com/enya-the-humming-lyrics-meaning/>

The song also makes a pretty notable statement in asserting that “all is dust”. In making that assertion, she is not necessarily being metaphorical but rather alluding to a concept like the beginning of the universe.

Lyrics

And all the light, will be, will be
And all the future prophecy
And all the waves, the sea, the sea
And on the road, are you and me

Hmmmmmmmm
And all the wings are like a kiss
And all the years are nemesis
And all the moments fall in mist
And all is dust, remember this

Hmmmmmmmm
And all the dust will drift away (ooh)
And all the nights and all the days
And all the heavens go their way
And only change is here to stay

Hmmmmmmmm
And all the stars, without a name
And all the skies, that look the same
And all the clouds, that fade, and then
Then all of this, begins again

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<https://www.youtube.com/watch?v=z1oza6jybOA> Neal Adams - Science: 10 - Proof Positive! Earth Grows!

<https://www.youtube.com/playlist?list=PLOdOXoiGTICldHkIMhj9AI8G-1ZLXGEP2> Neal Adams playlist
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