



To the Flat Earth Movement

Why has the Flat Earth Movement become so prominent in recent years? Who is behind it and what is the purpose of this movement, and are its arguments valid?

In this article I analyse some of the claims of this movement and then try to work out answers to the other questions above.

1. About myself and Motivation

I myself am an engineer, worked in the space industry for 20 years and have always had a flair for geography, astronomy and the basics of astrology. I have observed the course of the Sun, Moon and stars from various places on Earth and found that the heliocentric model, i.e. the Sun as the central star of our solar system with currently 8 planets orbiting it, is one of the most perfect models I know. The positions of the stars, planets, Moon and Sun are calculated by astronomy programmes today with arc-second precision; solar and lunar eclipses can also be predicted exactly. I am therefore a clear advocate of the heliocentric world view.

When I entered the space industry in 1995, I believed the Apollo Moon landings were real. Then in 2008 I started researching and 10 years later wrote the book "50 Jahre Apollo 11 Mond-(F)üge" where I show how these Moon landings were faked. So with the Moon landings, I changed my mind. However, with the Flat Earth, no presentation could convince me - quite the opposite, as we will see.

The Flat-Earth (FE) movement has apparently grown a lot in the last 10 years. [KlaTV, 5:50]
The first FE conference was held in North Carolina/USA in November 2017. [fox5] [Galileo] The same year also saw the first YouTube videos I know of about the Flat Earth. I myself followed this movement only sporadically at first. However, when I noticed that some acquaintances of mine really took this theory seriously and wondered whether the Earth was flat or spherical, or whether it had a different shape at best, I began to research it more closely in 2022.

2. Shape of the Flat Earth

The shape of the Flat Earth is often in the background. Often only arguments are put forward as to why the Earth is not a sphere. It is legitimate to reduce a theory to absurdity without offering an alternative. But at least one clear contradiction must be presented. Even if this were possible, i.e. if one could show that the Earth cannot be a sphere, then it does not necessarily follow that it is flat, and certainly not that it has the shape of a disc. One could just as well claim that if it is not a sphere, then it is a cube, or it could have any other shape.

But since many arguments against the spherical shape are countered by the flat shape, a Flat Earth would have to result from unambiguous arguments.

As a model, the disc appears most frequently. It is identical to the UN symbol, which is sometimes used as further evidence for the disc shape. However, I consider the UN symbol to be a pure mapping of the surface of the sphere onto a circular disc. It shows the whole surface of the Earth at a glance. Like any map, it is flat or level. [KlaTV, 1:54:50, bottom left]

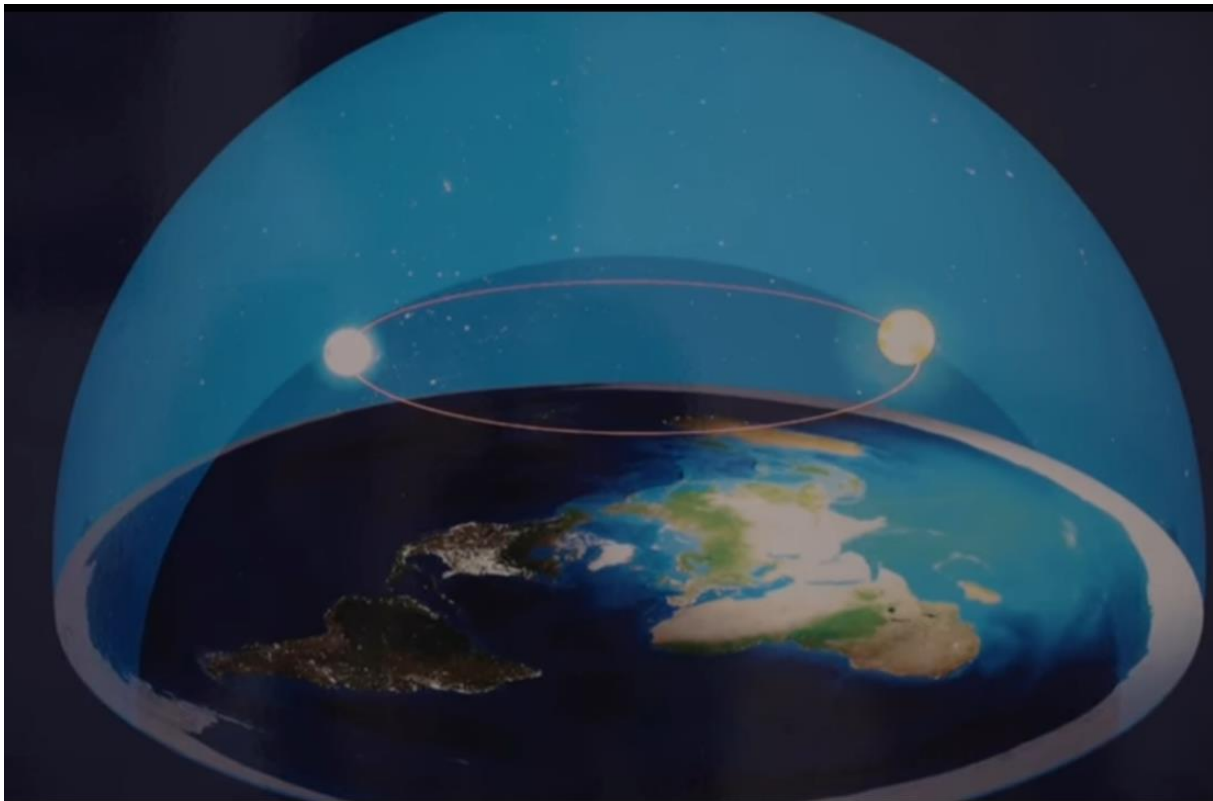


Figure 1 **Model of the Flat Earth with the Moon on the left and the Sun on the right** [faz]

The Sun and Moon are said to circle above the disc-shaped Earth; the distance to the Sun is about 5,000 km [Chnopfloch, 17:00].

There are said to be other models, or one is satisfied with the statement that the Earth is flat and its shape unknown. The Sun and Moon are not necessarily solid bodies; the Moon, for example, is also presented as transparent. [Chnopfloch, 1:14:00] [Planet Plane, 135, 1:17:49] [KlaTV, 135, 1:42:39]

What is striking about the above model is that one could **not observe sunrises and sunsets at the sea**, as the Sun is always above the Flat Earth. Furthermore, it is unclear which surface the Sun illuminates. It would need something like a **lampshade** to illuminate only the land below it during the day, which seems rather abstruse to me.

For a real sunset, the Sun would have to orbit the Earth from top to bottom, so it would be below the disc at night and above it during the day. But then you would have to define where the rising and setting points would be, which would cause problems with day and night zones of the Earth.

3. Analysis of two Arguments for a Flat Earth and against a Spherical Earth respectively

3.1 The Surface of stagnant Waters such as Lakes and Seas is Flat.

It is uniformly asserted that, apart from hills and mountains, the surface of the Earth is flat, so that one cannot detect any curvature of the Earth and could, for example, look at a ship on the sea from the beach as far as one wished, if only one possessed a good enough telescope [Planet Plane, 139, 1:21:10] [KlaTV, 139, 1:47:13].

I checked this statement and took some photo series both at Lake Zurich and Lake Constance. I present here the one from Lake Zurich, where I photographed the Lake Zurich ferry from Pfäffikon (SZ) before Meilen. The distance to the ferry is 13.4 km.

I took two photos. I varied the height of the camera above the lake level: once about 4 m and once about 1 m. The 4 m corresponds to a mast basket of a medieval ship, into which one went in order to be able to see further (above the curvature of the Earth). For a Flat-Earther, this would be useless, since he claims to be able to see the entire sea from the railing.

The surface of Lake Zurich represents part of the spherical surface of the Earth. So if I look from Pfäffikon to Meilen, I expect that a ship there is no longer completely visible and disappears behind the curved surface of the lake - depending on the camera height, of course.

I have calculated the visibility up to the lake horizon, i.e. the visibility on a perfect sphere, in the appendix. In an analogous way, I then calculated how much of the ship's hull is below this horizon, i.e. how much of a ship is no longer visible:

| Camera Height above Lake Level | Visibility to the Water Horizon | Invisible Height below the (Water) Horizon at a Distance of 13.4 km |
|--------------------------------|---------------------------------|---|
| 4 m | 7.1 km | 3.1 m |
| 1 m | 3.6 km | 7.6 m |

Table 1 Visibility & Maximum Height of Objects disappearing below the Horizon

Thus, at a camera height of 4 m, the lower 3.1 m of a ship are not visible; at a camera height of 1 m, there are 7.6 m that can no longer be seen from a ship.

Let us now look at the following figures:



Figure 2 View of Lake Zurich from a Height of about 4 m

Figure 2 shows the photo as I took it with my camera (50 mm lens) from about 4 m above the ground. The section marked in yellow indicates what we will look at in more detail by zooming in.



Figure 3 View of Lake Zurich from a Height of about 1 m

Figure 3 is almost identical to Figure 2, but the camera height is now only 1 m. You can see this in the post on the left.



Figure 4 The Lake Zurich Ferry "Meilen" photographed in Figures 2 and 3

Figure 4 shows the ferry "Meilen" mooring in Meilen. Note the dark yellow stripes of bow and stern.



Figure 5 Detail from Figure 2, Camera Height ≈ 4 m. 3.1 m disappear below the Horizon.

Figure 5 now shows the section around the ferry, which is circled in dark yellow on the right. Bow and stern are visible and doubled due to a reflection. In the yellow oval on the left you can clearly see sailing ships. They seem a little further away than the ferry.



Figure 6 Detail from Figure 3, Camera Height ≈ 1 m. 7.6 m disappear below the Horizon.

In Figure 6, only the tips of the sails of the sailing ships in the yellow oval on the left can be seen and of the ferry, bow and stern have completely disappeared, i.e. they are below the water horizon, which, by the way, is about 3.6 km away (see Table 1).

This is clear evidence of the Earth's curvature. If the Flat-Earthers claim that this curvature cannot be proven, this is simply a lie.

3.2 The Ebb and Flow of the Tide were only caused by the Moon's Gravitational Pull.

Argument 117 in Eric Dubay's film, with its 200 "proofs" that the Earth is not a spinning ball, concerns the tides. Dubay claims that, according to the official explanation, the tides are caused by the gravitational effect of the Moon. He then suggests that it would be impossible for the much smaller Moon to have any effect on the surface of the Earth. [Planet Plane, 117, 1:04:15] [KlaTV, 117, 1:24:54]

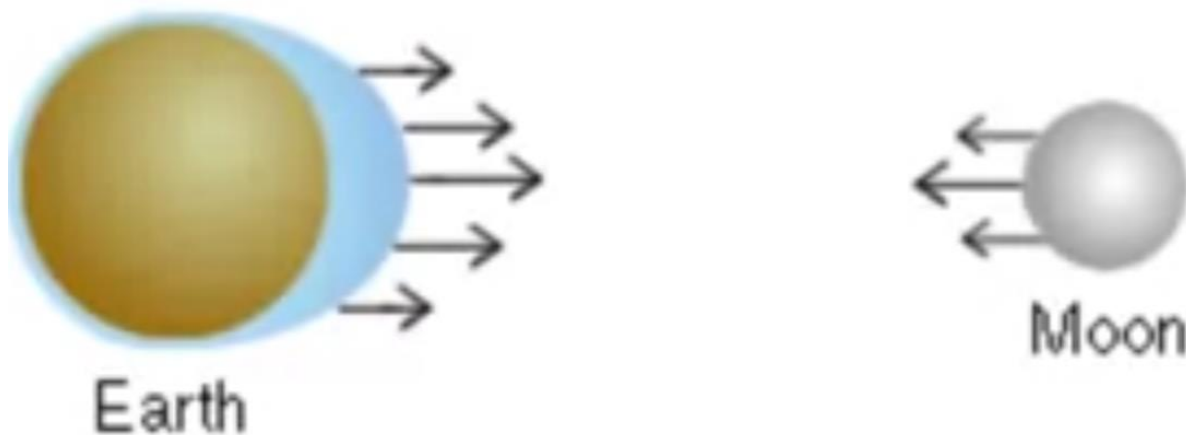


Figure 7 Extract from Dubay's 200 Proofs [Planet Plane, 117]

It must be said that the Moon does have a measurable gravitational effect on the Earth's surface. The tides demonstrate this: at full or new Moon they are stronger than at the other phases of the Moon, because then the gravitation of the Sun and/or the Moon and the centrifugal force pull in the same direction.

Gravity is only part of the explanation for the formation of high and low tides. Dubay has omitted the fact that the Earth and the Moon rotate around their common centre of gravity, which lies within the Earth. This rotation creates a centrifugal force on the side of the Earth opposite the Moon, which causes a second bulge of water. As the Earth rotates, there is high tide twice a day (towards the Moon as drawn in Figure 7 and in the opposite direction) and low tide twice a day (in between). So Dubay has taken only part of the official explanation of ebb and flow and then declared that part invalid.

This argument reminds me of the way Wikipedia glosses over the Moon landing. You must be familiar with the waving flag: in certain film recordings it can be observed that the flag moves when an astronaut passes by - i.e. only by the breeze and without touching [luogocomune2 from 2:07:58]. This was put forward as evidence of the studio environment. But the mainstream only picks up half of this evidence, which is that the flag moved on the Moon. Then the flag is examined after it had just been put up, so the astronauts had been fiddling with it [Wikipedia]. Yes, and in this constellation the flag would of course still resonate somewhat in a vacuum. So an originally correct argument for the studio environment was modified and then put into the mouths of "conspiracy theorists" to make them look stupid. This procedure can also be found with other topics, for example the assassination of John F. Kennedy or 9/11, and just here with Eric Dubay: he omits the fact that the Earth and the Moon revolve around their common centre of gravity, so that to the uninitiated listener even the official explanation seems blurred, although in correct form it is very accurate. Just look at the predictions for high and low tide at the sea!

Dubay is silent on how high and low tide should come about on a Flat Earth. I can't help you there either.



4. The Flat Earth (FE) Movement

The FE movement also takes a stand on other topics, for example on the Apollo Moon landings of the 1960s [Chnopfloch, 1:14:37] and on so-called live videos from the International Space Station ISS [FLAT EARTH LT] and shows with partly correct arguments how these were faked on Earth - and I can confirm these fakes. It earns the FE movement a lot of sympathy when it opposes the mainstream with correct arguments. Since there is also a lot of lying in the mainstream, i.e. in all the big newspapers, on television and in Wikipedia, especially about Corona, the truth seeker thinks he has found a reliable pole in the FE movement.

A sympathiser of the FE movement thus believes that because NASA lies about the Moon landing and films about the ISS crew, then NASA must also lie about the shape of the Earth and consequently the Earth is flat.

On the other hand, many opponents of the FE movement think that if the FE movement presents the Moon landing and the ISS films as fake, then it must be lying about these issues as well and believe NASA all the more.

Another possible way of looking at it is that the FE movement is asking us to question science, which is basically a positive aspect. But since the FE movement itself lies so much and twists the truth, I assume that this movement wants to divide society even more, into "Flat-Earthers" and "Bullet-Earthers". So far I have only found "Flat-Earthers" among people who consume alternative media (YouTube and Telegram). So the split is primarily among alternative thinkers.

A lot of money and manpower was probably provided for the strong growth of the FE movement. The similarity of the argumentation to that of Wikipedia (see above example with the flag) leads me to suspect that it is the same people who are behind the FE movement and behind Wikipedia.

5. Conclusion

As we have seen above, Flat Earth propagandists lie a lot and correct arguments for the spherical Earth are altered and reproduced in such a way as to confuse the listener. Basically, a single counter-example is enough to bring down a theory or a model. I consider 200 pseudo-arguments to be confusing. Since some seem plausible at first glance, many then apparently believe in them; or at least in their "favourite arguments". Due to the sheer number of arguments, however, none of them is examined closely any more - just as the truth-twisters would have it.

I therefore usually only discuss this topic with people I know well and with whom I notice that they really don't know whether the Earth is flat or spherical. With people from the FE movement, one must always expect to deal with professional spin doctors. I have experienced this in blog discussions about the Moon landing. Whenever there was a valid argument, the topic was immediately changed or some flimsy claim was pulled out of the hat.

However, if someone is hardly concerned with the shape of the Earth and celestial mechanics, i.e. the movement of the Sun and planets, then I can well understand that they consider the possibility of a Flat Earth. However, I would expect that person to be open to both variants.

But when I meet people who consider themselves woke because they realised that Corona was a planned action and that the injection is harmful, and when these people then claim that the Earth is flat, I think in each case that their judgement is very selective after all.

I had the impression for a long time that the alternative media, especially Telegram, was infiltrated and contained a lot of disinformation.

With the Flat Earth Movement, I have hereby exposed an obvious disinformant.

Appendix: Calculating the Visibility on a Sphere

The visibility is calculated as follows (idealised, i.e. without refraction):

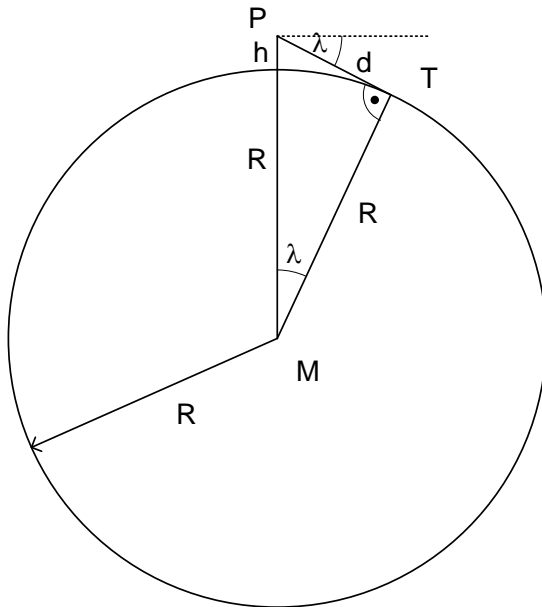


Figure 8 Determining the Horizontal Visibility on a Sphere

Visibility d from height h

(from observer P to T , the furthest visible point on the sphere):

$$R^2 + d^2 = (R + h)^2$$

$$\Rightarrow d = \sqrt{2 \cdot R \cdot h + h^2} \approx \sqrt{2 \cdot R \cdot h}$$

Example Earth globe with $h = 1$ m: $d \approx \sqrt{2 \cdot 6370 \text{ km} \cdot 0.001 \text{ km}} \approx 3.6 \text{ km}$

Example Earth globe with $h = 4$ m: $d \approx \sqrt{2 \cdot 6370 \text{ km} \cdot 0.004 \text{ km}} \approx 7.1 \text{ km}$

Calculation of the angle of inclination λ (opposite the horizontal):

$$\cos(\lambda) = \frac{R}{R + h} \Rightarrow \lambda = \arccos\left(\frac{R}{R + h}\right)$$

Example $h = 4$ m:

$$\lambda = \arccos\left(\frac{6370}{6370.004}\right) = 0.064^\circ = 3.5 \text{ arc minutes} = 1.1 \text{ mrad}$$

The deviation from the horizontal is therefore so small that one does not notice that one is looking very slightly downwards towards the water horizon.



References:

[Chnopfloch] Die Geschichte der flachen Erde (Mirror) – Chnopfloch

<https://www.youtube.com/watch?v=YdteJXQg4TA>

[faz] Die Erde ist eine Scheibe - glauben immer mehr Brasilianer

<https://www.youtube.com/watch?v=sflxJGy-oiE>

[FLAT EARTH LT] NASA ISS FAKE - 3

<https://www.youtube.com/watch?v=MT3UtX1by3E>

[fox5] Flat Earth conference held in North Carolina

<https://www.fox5atlanta.com/news/flat-earth-conference-held-in-north-carolina>

[Galileo] Flatearther: "Die Erde ist eine Scheibe!" | Galileo | ProSieben

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

[KlaTV] Was, wenn sie doch flach ist? <https://www.kla.tv/11705>

Note: This film is a German translation of [Planet Plane] supplemented with an introduction.

[luogocomune2] American Moon (English Version)

<https://www.youtube.com/watch?v=KpuKu3F0BvY>

[Planet Plane] Eric Dubay: 200 Proofs Earth is Not a Spinning Ball

https://www.youtube.com/watch?v=-Ax_YpQsy88

[Wikipedia] Die wehende Flagge

https://de.wikipedia.org/wiki/Verschw%C3%B6rungstheorien_zur_Mondlandung#Die_wehende_Flagge