SELF HEALING KIT FOR PROSPECTIVE FLATEARTHERS

About this document

Strange as it can look, there is are people right now (december 2016) who believe that Earth is actually flat. Some of those people are very active in social networks and YouTube, and there is the risk that people who are not scientifically trained could fall for their blatant false speculation and get attracted to that sort of scientific dark side. I decided to write this small guide for people who are not already convinced about the Earth being flat. The converts are usually out of the reach of any help. It is for the curious person who does not have the knowledge to debunk this stupidity by him
self.

So, if you have read something written by the Flat Earth defenders and begin to think it makes sense, follow me in a few, easy to do steps and ask yourself if flat earth still makes sense to you.

As per the document, I decided to not include any drawing. I give the instructions to do one simple drawing, and I don't want the reader to be influenced by anything drawn by me.

Antecedents.

We need a little bit of context. Please stay with me a little bit, since it won't take long.

First, the Flat Earthers believe Earth is a disc (not clear how thick),
with the North pole at its center. The radius of the disk is about 20.000 km (12.450 mi), which is the distance between North Pole and what in the flat model takes the place of the South pole (the Edge, or the Ice Wall, depending on proponent). Between the North Pole and the edge, with a 10 000kms radius, we find the Equator, and at appropriate distances we have the Tropics of Cancer and Capricorn.

In this model, the sun is a sphere (or a flashlight) that flies over the earth following a circular trajectory that coincides with the Cancer tropic in the (northern) summer solstice, the equator during the equinoxes and the Capricorn tropic in the (northern) winter solstice. The moon follows a similar route, but we don't need it in this discussion, so we'll ignore it.

Two days a year there are equinoxes. There is one in spring and another in autumn. In the equinoxes, both night and day last 12 hours, and sun rises due east and sets due west. That is true for every place in the world (except the poles) and they have been experienced by people everywhere. If you have read “The Mysterious Island”, by Jules Verne, the travelers use the elevation of the sun at midday in the equinox to compute their latitude without a sextant.

Having said that, let’s go into matter!

On to drawing!

You will need just four things to do this:

- A sheet of paper
- A pencil
- A drawing compass
- A triangle ruler

Now follow these steps:

1. Place a point approximately at the center of the sheet (no precision needed)
2. Draw a circle of 5 cms of radius (again, don’t worry about precision) centered at that point
3. Draw another circle, this time of 10 cms, centered at the same point

Now we have our basic “Earth”. The central circle is the equator. The outward one is the “edge” of the Flat Earth.

4. Now trace a vertical line crossing both circles and passing by the center. This will be our zero degrees meridian, which in the real world goes approximately through Greenwich
5. Mark the point where this line crosses the equator, at the bottom part of the drawing (you can use the top one if you want, but be advised I will refer at the bottom one throughout this document).

The point you have marked is at zero degrees latitude (it’s in the equator) and zero degrees longitude (it’s in the Greenwich meridian). In the real world it is somewhere in the Atlantic, in front of the African coast. But that does not matter.

6. Draw a line perpendicular to the “meridian” crossing the marked point. That line is the E-W reference for that point, while the already drawn meridian is the N-S.

We are almost there. Now, imagine you are standing in a boat, at that point (0deg N, 0 deg W) on an equinox day (doesn’t matter if it is spring or autumn) and you are watching the sunset.

You have no obstruction in sight, so you will see the sun to go out of view (and I won't elaborate right now on why it should not happen in a Flat Earth, but let's ignore that and stay with me a little bit more).

7. Using whatever model of sun in Flat Earth, please mark in the map where the sun is positioned at the time you'll see it disappearing. Remember: we are at an equinox, so it **must** be over the equator!
8. Draw a line from your position at 0,0 to the sunset position you have just marked.
9. Compare this line with the N-S and E-W references you have drawn before, and get an approximate bearing for the setting sun

Again, precision is not important. We don't need a degree number, just a direction. Depending on the sun shape you have chosen (the flat earthers don't agree even in the shape of sunlight!) you will get a bearing going from W-NW to NW-W

Now, remember our antecedents section? In the equinox days, the sun sets due west. Not N-NW. Not NW-W. Due W. This is not an opinion, this is not a guess, nor an approximation. West. 270 degrees. But **you**, using **your own hands**, have done a drawing that shows the sun setting more northerly than it should.

The flat earth is broken. It predicts something that does not adhere to reality.

Please ditch that model. It is wrong. And the ones who promote it don't want anything except self importance.

Don't be dumb.