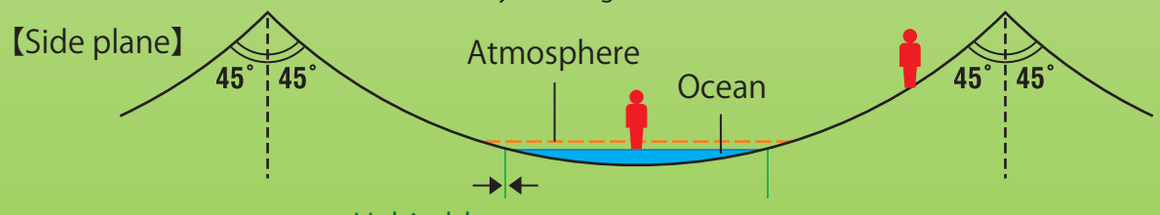
Cubic Earth

If the earth was cubic

"What would the earth's surface environment be like, if the earth was cubic?"
This is not how it actually is in the real world, but we can better understand the earth's environment, where we live, when constructed it using this hypothesis.

How the earth would look like as a cubic earth【equatorial plane with sea】

The earth's surface would be towering upwards to the corner or the edge depending on where you are, as the earth's surface is seen horizontally on the global earth.



Habitable zone
(life livable zone: 1,771 km - 1,789 km from the center and with a width of 18 km)
Area: 201,211 km^2 (about a half of the area of Japan, 378,000 km^2)
Average incline: 19.6 degree

For more information

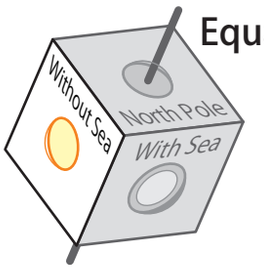
www.jss.or.jp

A video and descriptions of "Cubic Earth" are provided at the website of the Japan Science Society.

日本科学協会
The Japan Science Society

Diagram of Cubic Earth

【scale: 1/100 million】



Equatorial plane without sea

【Side plane】

Atmosphere
(the air pressure is 314,030 hPa and the altitude is 176 km at the center point)

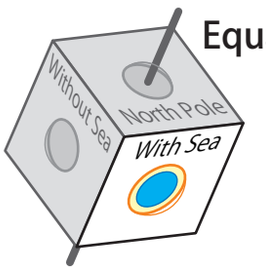
Habitable zone

(life livable zone: the pressure area between 506 and 1,013 hPa)
726 km - 769 km from the center and with a width of 43 km
Area: 201,855 km² (about a half of the area of Japan, 378,000 km²)
Average incline: 8.5 degree

Atmosphere
(Karman line)
2,680 km

【Front side】

10,000 km



Equatorial plane with sea

【Side plane】

Atmosphere
(sea level pressure of 9,117 hPa, sea level altitude of 141 km)

Ocean
(depth of sea: 285 km at the center part)

Ocean
3,424 km

Habitable zone

(life livable zone: the pressure area between 506 and 1,013 hPa)
1,771 km - 1,789 km from the center and with a width of 18 km
Area: 201,211km² (about a half of the area of Japan, 378,000 km²)
Average incline: 19.6 degree

Atmosphere
(Karman line)
4,214 km

【Front side】

10,000 km

■ Habitable zone

It is considered that appropriate temperature and the existences of gaseous oxygen and liquid water are necessary to preserve life. The area where life is supposed to survive is called habitable zone.

■ Karman line

Karman line is the threshold between the atmosphere and the outer space which is defined by the International Air Sports Federation, and is located at 100 km sea level altitude with an air pressure of 0.1 Pa for the global earth.