The height of the Spirit of God above the Earth

In the beginning God created the heavens and the earth. The earth was without form, and void; and darkness was on the face of the deep. <u>And the Spirit of God was hovering over the face of the waters</u>. Then God said, "Let there be light"; and there was light. (Gen 1:1-3)

Then God said, "<u>Let the waters under the heavens be gathered together into one place</u>, and let dry land appear"; and it was so. And God called the dry land Earth, and <u>the gathering together of the waters He called Seas</u>. And God saw that it was good. (Gen 1:9-10)

<u>He drew a circular horizon on the face of the waters</u>, at the boundary of light and darkness. (Job 26:10)

<u>On the third day you commanded the water that covered the earth to come together in one place and cover a seventh of the earth's surface</u>. Then You dried out the rest of the earth's surface to make dry land, so that it might be cultivated and sown and used in Your service. Your word went out and completed the work immediately. (2Esdras 6:42-43)

"The Lord possessed Me at the beginning of His way, before His works of old. I have been established from everlasting, from the beginning, before there was ever an earth. When there were no depths I was brought forth, when there were no fountains abounding with water. Before the mountains were settled, before the hills, I was brought forth; while as yet He had not made the earth or the fields, or the primal dust of the world. When He prepared the heavens, I was there, <u>when He drew a circle on the face of the deep</u>, when He established the clouds above, when He strengthened the fountains of the deep, <u>when He assigned to the sea its limit</u>, <u>so that the waters would not transgress His command</u>, <u>when He marked out the foundations of the earth</u>, then I was beside Him as a master craftsman; and I was daily His delight, rejoicing always before Him, rejoicing in His inhabited world, and My delight was with the sons of men. Now therefore, listen to Me, My children, for blessed are those who keep My ways. Hear instruction and be wise, and do not disdain it. Blessed is the man who listens to Me, watching daily at My gates, waiting at the posts of My doors. For whoever finds Me finds life, and obtains favor from the Lord; but he who sins against Me wrongs his own soul; all those who hate Me love death." (Pro 8:22-36)

The earth is the Lord's, and all its fullness, the world and those who dwell therein. <u>For He has founded it upon the seas</u>, <u>and established it upon the waters</u>.
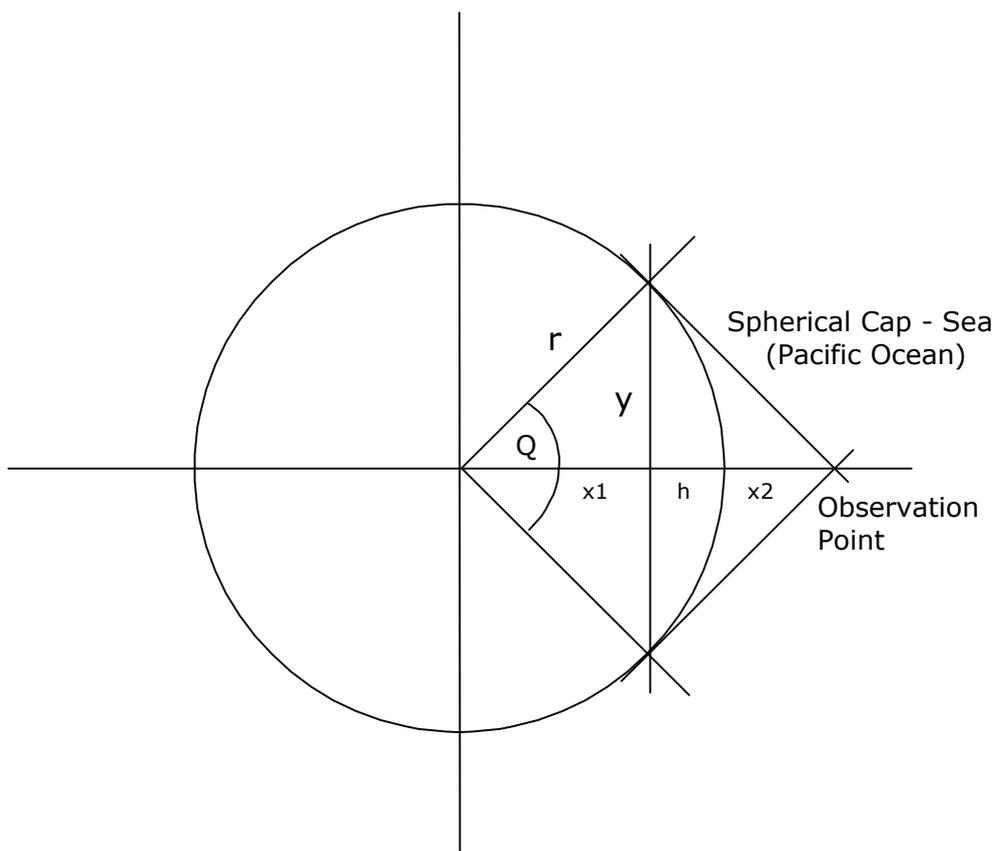(Psa 24:1-2)

By the word of the Lord the heavens were made, and all the host of them by the breath of His mouth. <u>He gathers the waters of the sea together as a heap</u>; <u>He lays up the deep in storehouses</u>. Let all the earth fear the Lord; Let all the inhabitants of the world stand in awe of Him. For He spoke, and it was done; He commanded, and it stood fast. (Psa 33:6-9)

To Him who <u>laid out the earth above the waters</u>, for His mercy endures forever.
(Psa 136:6)

For this they willfully forget: that by the word of God the heavens were of old, and <u>the earth standing out of water and in the water</u>, <u>by which the world that then existed perished</u>, <u>being flooded with water</u>. (2Pe 3:5-6)

For the spherical cap, to be $1/7^{th}$ of the earths surface area, the angle must be equal to 88,8°

Cos Q = x1 / r   Q = 88,8° / 2 = 44,4°   So if r = 1

x1 = r . Cos Q   x1 = 1 . Cos 44,4   x1 = 0,71447

h = r − x1   h = 1 − 0,714   h = 0,286

y = r . Sin 44,4°   y = 0,69966   Now y = h + x2

So x2 = y - h   x2 = 0,7 − 0,286   x2 = 0,414

The Polar radius is 6356,7523 km and the Equatorial radius 6378,1370 km

So height (x2) = radius x 0,414

Height = 6378,137 km x 0,414 = 2640 km.

Now are there any other properties / effects, noted at this altitude of 2640km?

Curvature of the horizon

From a point above the surface the horizon appears slightly bent (it is a circle, after all). There is a basic geometrical relationship between this visual curvature κ, the altitude and the Earth's radius. It is

$$\kappa = \sqrt{\left(\frac{R+h}{R}\right)^{2} - 1}\,.$$

The curvature is the reciprocal of the curvature angular radius in radians. A curvature of 1 appears as a circle of an angular radius of 45° corresponding to an altitude of approximately 2640 km above the Earth's surface.

At an altitude of 10 km (33,000 ft, the typical cruising altitude of an airliner) the mathematical curvature of the horizon is about 0.056, the same curvature of the rim of circle with a radius of 10 m that is viewed from 56 cm. However, the apparent curvature is less than that due to refraction of light in the atmosphere and because the horizon is often masked by high cloud layers that reduce the altitude above the visual surface.

At what height above the surface does one's weight become half?

Mass always remains constant. So the variation in weight because of height will wholly and solely depend upon the acceleration due to gravity.
Change in g is given by:

g(changed) = g(Re/Re+h)^2 (Re = radius of earth and h = height raised)

We want the height at which g becomes half, so: g/2 = g(Re / Re+h)^2

Cancel g on both sides   1/2 = (Re / Re+h)^2

Taking the square root of both sides   (1/2)^1/2 = Re / Re+h

1 / (Sq.rt of 2) = Re / Re+h   Re + h = (Sq.rt of 2) x Re

h = (Sq.rt of 2) x Re – Re   { Sq.rt of 2 = 1,414 }

So, h = 1,414 x Re – Re   h = (1,414 – 1) x Re   h = 0,414 Re

We know that the radius of earth is 6378,137 kms

So, h = 0,414 * 6378,137   h = 2640 Km

So, at a height of 2640 km above the earth, a body's weight becomes half of its value on the surface of the earth. Coincidence?

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