



SECOND DAY OF CREATION AN ATMOSPHERE BUILT FOR LIFE

God said, "Let there be an expanse between the waters to separate water from water." So God made the expanse and separated the water under the expanse from the water above it. And it was so. God called the expanse "sky." And there was evening, and there was morning — the second day. Genesis 1:6-8.

Our Earth is exactly the size needed to maintain a stable atmosphere



If our Earth were only a little smaller, like Mars, its gravitational field would be too weak to retain a suitable atmosphere. If the Earth were larger, like Saturn, its gravitational field would be so strong it would also retain large quantities of hydrogen and helium, making the air unfit for breathing.

Our atmosphere has an ideal composition for life

- **Too little carbon dioxide** would slow the growth of the plants and produce wide variations of temperature. **An excess of carbon dioxide** would be toxic and produce a greenhouse effect.
- **Too little oxygen** would restrict breathing. **An excess of oxygen** would be toxic and cause raging fires.
- 78% of our atmosphere is composed of nitrogen, a harmless and relatively inert gas. This dilutes the oxygen so that it is safe to breathe. Nitrogen is also an essential nutrient for plants.

Unlike the other planets, Earth's atmosphere is suitable for breathing. Venus and Mars both have toxic concentrations of carbon dioxide, while Saturn and Jupiter have toxic concentrations of hydrogen and helium. Venus also has toxic sulfur dioxide at about 10,000 times the concentration in the earth's atmosphere, while Saturn has clouds of ammonia and ammonium hydrosulfide.

Our Earth is the only planet of our solar system which possesses a transparent atmosphere. Our Creator took care not only to meet our basic needs, but also to offer us the possibility to study the Universe.

