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Editorial

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Composition and Structure of the Earth's Atmosphere

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Editorial

The atmosphere is an admixture of feasts that surrounds the earth. On Earth, the atmosphere helps make life possible. Besides furnishing us with commodity to breathe, it shields us from utmost of the dangerous ultraviolet (UV) radiation coming from the Sun [1], warms the face of our earth by about 33 °C (59 ° F) via the hothouse effect, and largely prevents extreme differences between day and night time temperatures. The other globes in our solar system also have an atmosphere, but none of them have the same rate of feasts and layered structure as Earth's atmosphere [2].

We all know that earth is a unique earth due to the presence of life. The air is one among the necessary conditions for the actuality of life on this earth. The air is a admixture of several feasts and it encompasses the earth from all sides [3]. The air girding the earth is called the atmosphere.

Composition of the atmosphere

• The atmosphere is made up of different feasts, water vapour and dust patches.

• The composition of the atmosphere isn't stationary and it changes according to the time and place.

• The atmosphere is an admixture of different types of feasts.

• Nitrogen and oxygen are the two main feasts in the atmosphere and 99 chance of the atmosphere is made up of these two feasts.

• Other feasts like argon, carbon dioxide, neon, helium, hydrogen etc. form the remaining part of the atmosphere.

• The portion of the feasts changes in the advanced layers of the atmosphere in such a way that oxygen will be nearly negligible volume at the heights of 120 km.

• Also, carbon dioxide (and water vapour) is plant only over to 90 km from the face of the earth.

Carbon Dioxide

• Carbon dioxide is meteorologically a veritably important gas.

• It's transparent to the incoming solar radiation (insolation) but opaque to the gregarious terrestrial radiation.

• It absorbs a part of terrestrial radiation and reflects back some part of it towards the earth's face.

• Carbon dioxide is largely responsible for the hothouse effect

Ozone Gas

• Ozone is another important element of the atmosphere plant substantially between 10 and 50 km above the earth's face.

• It acts as sludge and absorbs the ultra-violet shafts radiating from the sun and prevents them from reaching the face of the earth [4].

• The quantum of ozone gas in the atmosphere is veritably little and is limited to the ozone sub caste plant in the stratosphere.

Water Vapour

• Feasts form of water present in the atmosphere is called water vapour.

• It's the source of all kinds of rush.

• Its maximum quantum in the atmosphere could be over to 4 which is plant in the warm and wet regions.

Structure of the atmosphere [5].

The atmosphere can be divided into five layers according to the diversity of temperature and viscosity. They are

1. Troposphere

• It's the bottommost sub caste of the atmosphere.

• The height of this sub caste is about 18 km on the ambit and 8 km on the poles.

2. Stratosphere

• Stratosphere is plant just above the troposphere.

• It extends up to a height of 50 km [6].

3. Mesosphere

• It's the third sub caste of the atmosphere spreading over the stratosphere.

• It extends up to a height of 80 km.

4. Thermosphere (Ionosphere)

• This sub caste is located between 80 and 400 km above the mesopause.

• The temperature then starts adding with heights [7].

5. Exosphere

• The exosphere is the upmost sub caste of the atmosphere.

• Feasts are veritably meagre in this sphere due to the lack of gravitational force. Thus, the viscosity of air is veritably less then [8].

Earth's atmosphere stretches from the surface of the planet up to as far as 10,000 km (6,214 miles) above. After that, the atmosphere blends into space. Not all scientists agree where the actual upper boundary of

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the atmosphere is, but they can agree that the bulk of the atmosphere is located close to Earth's surface-up to a distance of around eight to 15 km (five to nine miles) [9].

While oxygen is necessary for most life on Earth, the majority of Earth's atmosphere is not oxygen. Earth's atmosphere is composed of about 78 percent nitrogen, 21% oxygen, 0.9 % argon, and 0.1 % other gases. Trace amounts of carbon dioxide, methane, water vapor, and neon are some of the other gases that make up the remaining 0.1 % [10, 11].

Conflict of Interest

None

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None

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