

## The Greenhouse Effect of Earth

Two thirds of the Earth is covered under clouds. We do not see this cloud cover over land all the time, because most of it is over oceans.

We live in a Greenhouse, but instead of a glass-top greenhouse it is a cloud-top greenhouse.

Any amount of Carbon Dioxide, Methane, Water Vapor, or any other gas under the cloud has no effect on the radiative balance. This is because clouds are an Outermost Opaque Layer. In Thermodynamics, it is well known that it is the outermost layer alone which controls the radiation.

It is due to this Outermost Layer principle that simplistic refutations of AGW such as “CO2 comprises a very tiny part of the atmosphere, it is as small as a carpet in one of the floors of a 20-floor building” are not valid – a thin layer of paint, thinner than a carpet, in fact is perfectly capable of altering the Thermodynamics properties of a 20-floor building.

Same with clouds. Nothing under the cloud is relevant. The opaque clouds trap all radiation going upward and turn it into heat. The clouds further release radiation upwards as per their own emissivity, and it has nothing to do with any radiative transfers that happens below the clouds.

The cloud cover is not over all of Earth, but it is over two thirds of Earth. Any calculation of radiative balance must include this cloud cover.

Any climate theory that does not include the cloud cover, and does not show understanding that any amount of Carbon Dioxide or Methane under the cloud cover is not relevant to radiative balance, is not a valid climate theory.

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