

NZCLIMATE & ENVIRO TRUTH NO 162
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THE FLAT EARTH SOCIETY

Chapter 1 of "Climate Change 2007" contains the following statement under "Frequently Asked Questions 1.1" page 96

“A common confusion between weather and climate arises when scientists are asked how they can predict climate 50 years from now when they cannot predict the weather a few weeks from now. The chaotic nature of weather makes it unpredictable beyond a few days. Projecting changes in climate (i.e., long-term average weather) due to changes in atmospheric composition or other factors is a very different and much more manageable issue. As an analogy, while it is impossible to predict the age at which any particular man will die, we can say with high confidence that the average age of death for men in industrialised countries is about 75.”

This statement, while admitting that the weather cannot be predicted "more than a few weeks from now", pretends that you can predict the weather 50 years ahead if you call it "the climate", because, somehow, it is no longer "chaotic" and therefore "more manageable".

The last sentence is particularly rich. The age of death is a fairly reliable fact, and there are proper statistics from every country. It is therefore possible to provide an "average" age of death, that possesses a level of "confidence".

"Weather" is another matter. It is not a clearly defined, statistically treatable quantity. There is no way of obtaining a figure for "average weather" in which any "confidence" could be placed. The same applies if you change the word and try to claim that there is such a thing as "average climate".

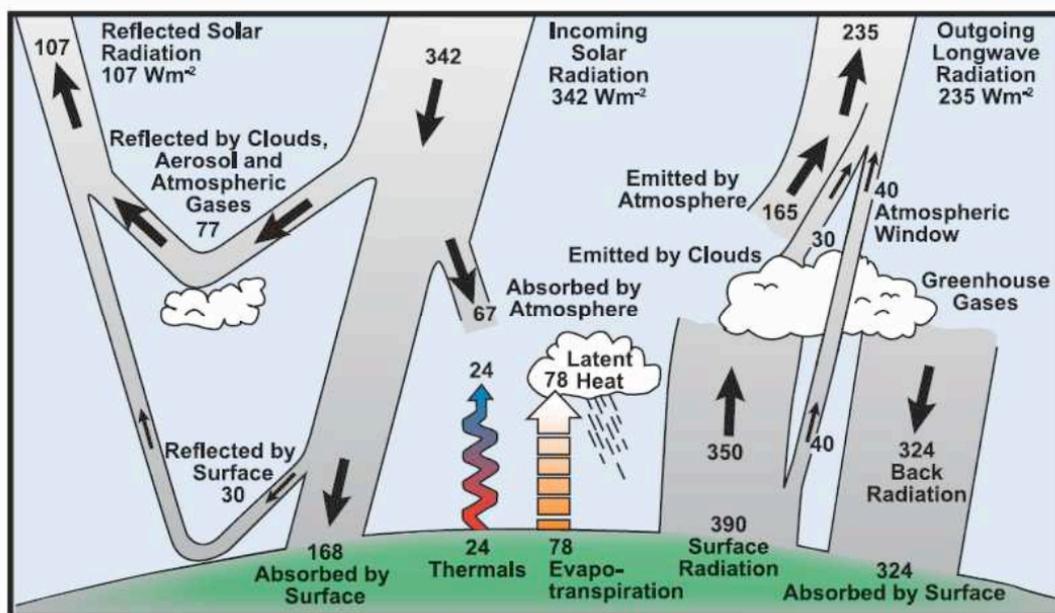
Insurance companies try to guess future changes in the average age of death, and perhaps they may have computer models. Forecasting 50 years, or 100 years ahead would, however, be very uncertain.

Forecasting "climate" 50 years ahead is obviously impossible. Yet most of the climate forecasts are even 100 years ahead.

The difference between weather forecasts and climate forecasts is simple. Weather forecasts can be checked to see whether they are right. Climate forecasts are always so far ahead that few if any of us will survive to realise that they are all wrong

So, how have they bamboozled us into believing that the world will inevitably get warmer by as much as 6.4°C by 2100 if nobody knows what might happen in a few months' time?

The answer lies in the theory of the earth's "energy balance" which is the basis of all the computer models. The attached graph originates with Kiehl and Trenberth 1997 Bull Amer Meteor Soc 78 197-208, and has been repeated ad nauseam in every IPCC Report and in many newspapers. This version is from "Climate Change 2007"



The theory is a gross over-simplification of what happens in the climate. It assumes that you can study the earth entirely from average quantities. This means you get all the right answers if you assume that the earth is flat, has a constant energy from the sun, has a constant temperature, and that everything else is constant. The system is "balanced", and the only

thing that alters the balance is the increase in greenhouse gases produced by humans. The diagram tries to pretend that the earth's surface pictured is curved, but none of the quantities shown make any allowance for this, so it should be flat.

None of the assumptions are correct. There is no part of the earth's surface where the energy received equals the energy emitted, and these two quantities change all the time. In daytime, the sun supplies more energy than is emitted. At night, the earth emits but none is received. The imbalance fluctuates on all time scales with the time of day, seasons, latitude, cloud cover and local weather. The earth has a high thermal capacity, so there can be long periods when there is an overall imbalance, one way or another. Long term changes are possible. A change to the next ice age could be slow or fast.

The "averages" used are either unknown or unpredictable. The incident radiation from the sun can now be measured, and its variability measured, but its past behaviour is uncertain and future changes are unknown.

The average temperature of the earth is unknown. "Wikipedia" recently held a public opinion poll for this quantity. This is presumably how Kiehl and Trenberth and the IPCC obtained their figure.

Even if the averages are correct, you cannot carry out calculations unless you know the distribution curve of the quantity involved, which is usually unknown. If this curve is skewed, a simple average is wrong. If you use non-linear mathematics you must apply it to the whole set, not just the average.

Everybody knows that heat is transferred by four ways, conduction, convection, radiation and latent heat. Conduction in the atmosphere and oceans is probably small, but convection is large, and is ignored by the models. Latent heat is mentioned in the diagram, but it is subject to great and unknown variability.

The "greenhouse effect" is assumed to be constant, only changing as "emissions" rise. The variability of carbon dioxide concentration in the atmosphere is concealed and the many earlier measurements which showed this, recently recovered by Beck 2007 Energy and Environment 18, 259-281, have been suppressed, so that they can use an oversimplified formula to calculate "radiative forcing"

The flat earth theory is therefore complete nonsense. If there were anything in it the meteorologists would be using it.

The IPCC admit that the theory, and the models based on it, cannot predict the future, for they refer to the results only as "projections". They are careful never to have a "projection" sufficiently close that somebody can check whether it is right, and the "likelihood" and "probability" levels that they place on their "projections" are based purely on the "opinions" of the "experts" who created the models, not on any evidence at all that they are capable of predicting the future climate.

I once attended a meeting addressed by Dr Pachauri, Chairman of the IPCC, and when I expressed doubts about his claims he accused me of being a supporter of the equivalent of the Flat Earth Society. The opposite is true. Dr Pachauri is Chairman of the body whose pronouncements depend entirely on computer models based on the belief that the Earth is Flat.