A Look at the Fundamental Hypothesis of Global Warming

By Guy K. Mitchell, Jr. September 26, 2023

In <u>my book</u>, I strongly advocate for the concept of adhering to the scientific method of inquiry and the first principles of science, *ab initio*, as a discipline in the conduct of scientific research. The scientific method has been the foundation of legitimate scientific research for over 400 years and has served to advance man's understanding of the natural world. To conduct scientific research in any other manner is at best erroneous and at worst duplicitous. The goal of scientific research should be to pursue the truth, not confirm a personal or institutional bias, as much of climate science research does today.

The scientific method requires that its practitioners follow a discipline for conducting research:

- 1. Careful observation of a scientific phenomenon, applying rigorous skepticism about what is observed, given that cognitive assumptions can distort how one interprets the observation i.e., the observer presupposes a desired outcome due to bias.
- 2. Construction of a hypothesis or set of hypotheses that clearly and accurately state a supposition or proposed explanation made based on limited evidence as a starting point for further investigation.
- 3. Develop a framework for an experiment or other investigation to verify or falsify the hypothesis.
- 4. Measure the results of the experiment or investigation. Implicit in the validity of the scientific method to conduct research is the ability of the researcher (and others) to objectively confirm or refute (falsify) the hypothesis by replicating results of the experiment.
- 5. Refine or eliminate the hypothesis. The results of the experiment or investigation may cause one to refine the hypothesis to include (or eliminate) factors that do or do not appear to have a causative effect on the phenomena observed.
- 6. *The hypothesis should be eliminated (discarded) if the results of the experiment disprove (falsify) the hypothesis.*

If the scientific method were to be rigorously employed in an unbiased manner in the conduct of climate research regarding the man-made global warming claim, it would be expected that a climate scientist who believed that man may have caused global warming that would adversely affect life on Earth in the future would construct the following hypothesis. "Man has caused global warming, which will result in future climate conditions that will adversely affect life on Earth." However, the hypothesis above actually contains three conjectures that must be developed into a complex hypothesis:

- 1. "Global warming has occurred that is, the temperature of the world's relevant atmosphere, oceans, and land mass has increased during the period under investigation by a statistically significant amount."
- 2. "Man's activities are responsible for the global warming that has occurred."
- 3. "The extent to which global warming has occurred, or is reasonably projected to occur in the future, will adversely affect life on Earth."

If any of the conjectures in the complex hypothesis above is found to be invalid, the complex hypothesis is rendered null. If so, the investigator must either modify the hypothesis or discard it.

If an unbiased climate scientist were to take the necessary steps to test the complex hypothesis above, it should be undertaken in a sequential fashion. He would first begin an investigation to determine if the

temperature of the world's relevant atmosphere, oceans, and land mass has increased during the period under investigation by a statistically significant amount.

In 1979, the U.S. National Oceanic and Atmospheric Administration (NOAA) began to launch a series of satellites to circumnavigate the globe, using microwave sounding units (MSU) to measure the temperature of various layers of the lower troposphere. The MSU readings are analyzed using spectrographic analysis and mathematically converted to a temperature record. The temperature readings are then used to calculate what is known as a temperature anomaly.

The temperature anomaly for a period (day, month, or year) is calculated by averaging the high and low temperatures for the period and then comparing that average to the average of the same period in a prior time frame. For example, if the average temperature for the troposphere in a given month is measured to be -50° C, and the average temperature for the same month the prior year was measured to be -50.5° C, the temperature anomaly would be $+0.5^{\circ}$ C — it *warmed* by 0.5° C. In the case of the UAH temperature record, the monthly averages are compared to a base period, which is the average of the prior thirty-year temperature anomalies. The data are then analyzed by scientists at the University of Alabama-Huntsville to prepare a graph of the results.

It should be noted from the UAH graph that for the period 1979–1998, there was a constant cooling of the lower troposphere of around 0.3°C per year. From 1999 to 2009, an overall cooling trend can be observed. Finally, from 2020 to present, there has been an overall cooling trend of around 0.3°C. All of these cooling periods occurred during a time in which the concentration of CO2 in the Earth's lower troposphere increased from about 335 ppm to 420 ppm (25%).



This fact falsifies the man-made global warming hypothesis, rendering it null and void.

In the field of scientific investigation, if the data invalidate a hypothesis, the hypothesis is falsified. Clearly, the data prove the global warming hypothesis wrong.

These data have been in the public domain since the U.N. formed the IPCC in 1990. The question is, "why do IPCC scientists continue to promote a failed hypothesis?" The legal definition of fraud is intent to deceive.