

Climate Models

FAIL

Mother Nature's School of Climate Modeling

Student:	IPCC Modeling Group	
Models:	CMIP5 archive	F
Surface Temperature:	Land Surface:	F
	Sea Surface:	F
	Combined Land Plus Sea Surface:	F
Global Precipitation:		F
Sea Ice Area:		
Notes:	Models show no skill at being able to simulate coupled ocean-atmosphere processes that dictate temperature and precipitation on Earth.	
Teacher Comments:	Simplify, and concentrate on ocean-atmosphere processes like El Nino/La Nina and Atlantic Multidecadal Oscillation.	

Parent Signature: Mrs P.

By Bob Tisdale

Author of *Who Turned on the Heat?*

Climate Models Fail

The IPCC's Climate Models Show No Skill at Simulating Surface Temperatures,
Precipitation and Sea Ice Area

By Bob Tisdale – Author of *Who Turned on the Heat?*

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Foreword

AN INITIAL NOTE: My apologies to the conscientious climate scientists, who work without agendas to better our understanding of climate, especially those who I have exchanged off-the-record emails with over the years. Please understand, when I am discussing the climate science community in the following pages, I am speaking of those scientists with agendas who, by supporting and encouraging the IPCC’s propaganda, have blamed global warming on mankind, without first making the slightest effort to genuinely understand the fundamental processes through which nature contributes to climate change.

#

Climate Models Fail is an illustrated overview of observations-based data and the outputs of climate model simulations of surface temperature, precipitation, and sea ice area. The data and the model outputs are available to the public online in easy-to-use formats. By plotting the data and the model outputs on the same graphs, it becomes obvious that the models prepared for the Intergovernmental Panel on Climate Change’s 5th Assessment Report show no skill at being able to simulate those variables — no skill whatsoever. The model simulations are so different from the observations that in many cases you may begin to wonder if they are modeling a completely different planet. Now consider that many of the comparisons presented in *Climate Models Fail* cover only the past 3 to 3 ½ decades — a period to which many climate models were “tuned”.

Early in Section 1, *Climate Models Fail* includes a chapter about the findings of numerous peer-reviewed scientific studies. Those papers are very critical of climate models, highlighting the models’ many flaws.

Most chapters of *Climate Models Fail* include presentations and discussions of model-data comparison graphs. Dozens of graphs.

Since the turn of the century, the warming of global surface temperatures has stopped once again. That is, we’ve recently entered a period that is similar to the multidecadal period from the mid-1940s to the mid-1970s when surface temperatures did not warm. The current warming slowdown is known by many names: “the hiatus”, “the lull”, “the pause”, “the plateau”, and so on. The words “stoppage”, “halt” and “cessation” are used throughout this book, because the warming of global surface temperatures has stopped, it has halted, it has ceased, over the past 12 to 16 years, depending on the metric. I prefer “stoppage” because it sounds as if the surface temperatures have gone on strike

against the IPCC and their models. Maybe Mother Nature has.

Climate Models Fail also presents model-data comparisons of surface temperatures during this halt in warming. They show which regional land masses and which ocean basins have stopped warming — or have cooled since 2001. Obviously, because there has been a warming stoppage globally, most areas are not warming or they are cooling.

Climate Models Fail is intended for readers without technical or scientific backgrounds. There are introductory chapters that provide basic information. Because this book includes quotes from scientific papers and from political entities such as the IPCC (Intergovernmental Panel on Climate Change), *Climate Models Fail* also explains the scientific terms they use, or, at least, provides a general, non-technical, translation.

Example:

In climate research and modelling, we should recognise that we are dealing with a coupled non-linear chaotic system, and therefore that the long-term prediction of future climate states is not possible.

That quote is from the 3rd Assessment Report from the IPCC (Intergovernmental Panel on Climate Change) published in 2001 – Section [14.2.2.2 Balancing the need for finer scales and the need for ensembles](#).

The term “coupled” reflects the interrelationship between the oceans and atmosphere. “Non-linear” indicates that a simple proportional relationship between cause and effect does not exist. “Chaotic” in this sense refers to the climate’s sensitivity to an infinite number of possible disturbances, many of which are unknown in climate science.

Of course, the bottom line of that quote from the IPCC is “...long-term prediction of future climate states is not possible.” That requires no translation.

Some readers may find the results of *Climate Models Fail* to be unbelievable — that is, they may not believe the models perform as poorly as I’ve illustrated. For those readers, I have prepared a blog post that provides step-by-step instructions for creating a model-data comparison graph. (See my blog post [here](#).) I used the model-data comparison of global sea surface temperatures over the past 31 years as an example. Over that time period, the climate models used by the IPCC for their 5th Assessment Report estimated that global sea surface temperatures would warm twice as fast as they actually did.

Climate Models Fail has been proofread and edited by someone without a technical background. She has taken the content of this book, originally written in my technical/scientific style, and made it much easier to read and understand, while leaving the content intact. I appreciate the time and massive effort she has put into this work

and my sincerest thanks go out to her. If there are any residual typos, they are my doing.

My special thanks also to Josh of [Cartoons by Josh](#) for the cover artwork.

Thank you for purchasing *Climate Models Fail*.

Sincerely,

Bob Tisdale

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Closing – When Will Climate Models Be Credible Tools?

Closing – When Will Climate Models Be Credible Tools?

Climate Models Fail illustrated and discussed the many flaws inherent in climate models. These included the fact that they do not properly simulate surface temperatures, precipitation, and sea ice area.

You may be asking yourself, “*If the models perform so poorly, how can there be hundreds, if not thousands, of climate studies which show models performing well?*”

First, not all climate model-based studies include the model runs stored in the archives that are used by the IPCC. Some papers are based on special model runs that are tuned specifically for a given study, so they are different than the simulations used for the IPCC hindcasts and projections. Second, the CMIP archives include the model outputs from dozens of modeling groups, and some of the modeling groups submit more than one type of model to the CMIP archives. Each model performs some functions well in specific regions — with some models performing better than others. But, that does not mean any of the models simulate all metrics well in all regions...or globally. The modelers understand the strong points of individual models. So, for any particular climate study, they pick and choose from a smorgasbord of climate models and runs. One study about metric “a” in location “a” may include 3 different models, the next study of metric “b” in location “a” may utilize 2 other models, while yet another study of metric “b” in location “b” may be based on a completely different model that wasn’t presented in the other two studies. The climate modeling groups are obviously only going to present their models in favorable lights.

Thankfully, there are scientific research papers that expose climate models’ serious flaws. As presented in *Climate Models Fail*, those studies found that current climate models (CMIP5) are not able to properly simulate:

- The coupled ocean-atmosphere processes of El Niño and La Niña, the largest contributors to natural variations in global temperature and precipitation on annual, multiyear, and decadal timescales.
- Responses to volcanic eruptions, which can be so powerful that they can even counteract the effects of strong El Niño events.
- Precipitation — globally or regionally — including monsoons.
- Cloud cover.
- Sea surface temperatures.
- Global surface temperatures.

- Sea ice extent.
- Teleconnections, the mechanisms by which a change in a variable in one region of the globe causes a change in another region, even though those regions may be separated by thousands of kilometers.
- Blocking, which is associated with heat waves.
- The influence of El Niños on hurricanes.
- The coupled ocean-atmosphere processes associated with decadal and multidecadal variations in sea surface temperatures, which strongly impact land surface temperatures and precipitation on those same timescales.

According to one of the papers, the current generation of climate models (CMIP5) are worse at simulating past global climate than the previous generation of models (CMIP3); i.e., the models are making giant leaps, but in the wrong direction.

Additionally, I showed quite clearly that the models cannot accurately simulate:

- Polar Amplification.
- Daily maximum and minimum temperatures and the diurnal temperature range.

And I illustrated and discussed why it is of paramount importance for models to accurately simulate the coupled ocean-atmosphere processes that express themselves as:

- Multidecadal variations in the sea surface temperatures of the Northern Hemisphere.
- El Niño and La Niña events — and the multidecadal variations in the dominance of those phases.

I also prepared a blog post that presents step-by-step instructions for creating a model-data comparison graph. That post is linked within *Climate Models Fail*. Using those instructions, anyone can verify the results presented in this book. [See the post [here](#).]

Climate models have a number of tremendous hurdles to overcome, and the highest are coupled ocean-atmosphere processes. Satellite-enhanced sea surface temperature data reveals that two ocean basins are responsible for the cessation of global warming: the Southern Ocean surrounding Antarctica and the largest ocean basin on Earth, the Pacific. The fundamental coupled ocean-atmosphere processes that are driving the warming plateau are associated with ENSO (El Niño-Southern Oscillation). Yet, it is well-known that climate models cannot simulate ENSO.

Because El Niño and La Niña processes are the primary causes of the variations in surface temperature and precipitation on annual, multiyear, decadal, and multidecadal bases, and because the instrument temperature record shows that sunlight-fueled El Niño and La Niña processes are the primary causes of the long-term warming of the oceans, ENSO should be an area of intense modeling efforts.

The coupled ocean-atmosphere processes that drive multidecadal variations in sea surface temperatures will be more of a problem. The sea surface temperature record is globally complete only during the satellite era — the last 30 years. Further, the subsurface temperature and salinity records of the oceans are globally complete for only the past decade or so; moreover, the subsurface data are riddled with problems. It will be decades before the climate science community can hope to **begin** to have a data-based understanding of subsurface ocean “weather” and its interactions with ocean-atmosphere processes.

Growth in climate science has been stunted by the IPCC’s politically-driven addiction to conjectures about anthropogenic climate change. Decades after it began, climate science is still in its infancy. Yet, it is portrayed as a well-established, noble, bastion of solid research, the flawless jewel of Earth sciences that can do no wrong. Worse, climate science has been ruthlessly exploited by environmental groups and politicians and even by many of the scientists themselves.

The primary obstacles for the climate science community in the years and decades to come are: (1) the expectations of government funding agencies, which are obviously tied to political agendas; and (2) the anchoring effect of the fanatical beliefs of those members whose careers and funding skyrocketed as a result of their drum beating for the IPCC.

The people of the world rely on the findings of the climate science community, and in order for climate science to move forward, that community will have to be honest within itself and with the public. Hopefully, that will occur in my lifetime, but I’m not holding my breath.