

# How Settled is the Science at the IPCC?

Let's review The IPCC's discussion on forcing allocations (page 48-49, Climate Change 2014 Synthesis Report)

## 1.3.1 Attribution of climate changes to human and natural influences on the climate system

<https://www.ipcc.ch/report/ar5/syr/>

### First Full statement

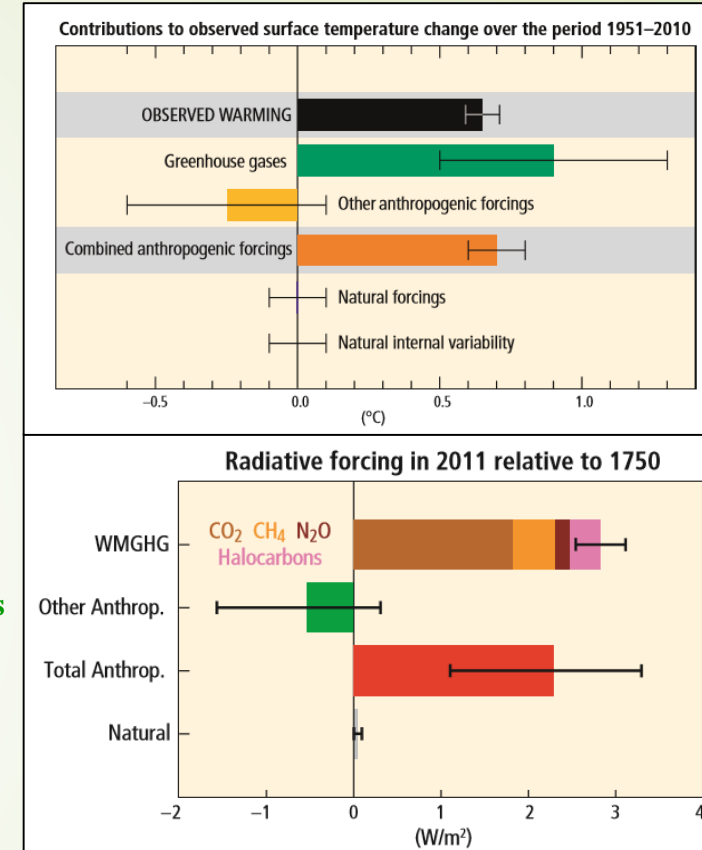
**“It is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcings together (Figure 1.9).”**

Let's break this statement down. “It is extremely likely that more than half” is not very definitive. “More than half” can be any value between 50 and 100% and even with the “extremely likely” designation the actual value could be less than 50%. The IPCC has also decided to focus on just the “1951 to 2010” period for this discussion. If it is “extremely likely that more than half” of the 1951 to 2010 period is due to anthropogenic forcings how likely is anthropogenic forcing contributing to the 1850 to 1950 period? A period that accounts for roughly half of the 1850 to 2010 temperature increase despite containing only a small percentage of the human CO<sub>2</sub> emissions over that whole period. Not bloody likely comes to mind. Most human CO<sub>2</sub> emissions occurred post-1950.

Figure 1.9 (radiative forcing estimates) is included to the right (top graph covering 1951 to 2010). The lower graph is the IPCC estimate over the longer term (1750 to 2011). These graphs highlight the IPCC's somewhat disingenuous approach to determining forcings. Their starting point is to assume that the only solar forcing comes from the Total Solar Irradiance (TSI). Once you make that assumption, the total forcings arbitrarily get lumped into the anthropogenic category. The TSI is a very representative proxy for the solar forcings, but it is qualitative versus quantitative. Actual solar forcings are higher than the TSI alone.

Presenting the natural forcings over the 1750 – 2011 period as virtually zero is ludicrous. To say (as the graph does) that the only forcing over the last 266 years has been the “Greenhouse Gases” ignores all the temperature fluctuations from 1750 to 1950. Since most of the anthropogenic CO<sub>2</sub> emissions occurred after 1950, the earlier temperature fluctuations were due almost exclusively to natural forcings (forcings which did not suddenly cease to exist post 1950). Starting the Radiative forcings review in 1750 also conveniently avoids having to incorporate the Maunder and Sporer Minimums into the discussion. These very cold periods were directly associated with the lowest TSI values over the last 7,000 years (not atmospheric CO<sub>2</sub> concentrations). The IPCC's choice to focus on the 1950 – 2010 period is also interesting. Solar Activity was relatively constant over that time frame, so direct solar forcings would be small. In addition, the 60 year time frame would take the ocean cycles out of the forcing estimates (since they cycle between warm and cold every 30 years). Historical temperatures fluctuated in sync with the Atlantic Multi-decadal Oscillation (AMO, refer back to OPS-8 graphs) over the 1950 – 2010 period rather than following the steady rise of atmospheric CO<sub>2</sub> concentrations.

**One quick observation.** The IPCC uses the word likely 13 times in the one page discussion (with a variety of adjectives (i.e.: no adjective (7 times), very (5 times) or extremely (once))). Likely is not a very strong defense of any position regardless of the adjective. Confidence levels (related to understanding aspects of climate change) were cited as low (4 times), medium (3 times) and high (once). Doesn't come across as settled.



**The IPCC is making the argument that most of the warming from 1950 – 2010 is due to CO<sub>2</sub> (TSI and AMO are muted over that period). That argument is plausible if you use the “homogenized” (i.e.: manipulated) surface data sets (GISS, HadCRUT4, etc.) rather than the more accurate satellite datasets (UAH, RSS). But if you apply the same arguments/forcings prior to 1950, they don't work!!! Nature doesn't work that way.**

**More related comments on OPS-13b**

More detail?  
Google “Ronald Davison climate”

Settled Science  
IPCC (???)

The sun, (not CO<sub>2</sub>)  
is the primary  
climate driver!