

upper level clouds which permits infrared cooling.⁶⁸⁶ Since 65 % of the earth is covered with clouds, such cover will reflect the sun's ray keeping the earth cool and warming by trapping heat. The overall effect for low level clouds is a cooling of the earth, and more low level clouds would equal lower temperatures.⁶⁸⁷ Conversely a shorter sunspot cycle duration means more intense solar activity, less cosmic radiation, fewer low level clouds and higher temperatures. As well a recent study indicates that the increase in direct solar radiation would account for at least 40 % of warmer temperatures.⁶⁸⁸ The IPCC barely mentions solar forces or models of cloud feedback and their relationship with solar radiation.

Besides a lack of variable comprehension there exist some serious problems with IPCC model assumptions. The IPCC glibly lists many key assumptions without recourse to historical proof, experimental data or mapping theoretical models to field testing. Such key assumptions include: Global deforestation will not decrease; World gross domestic product (GDP) will increase by a factor of 10 by 2100; Most energy production will be from carbon-based fuels, with limited technology growth; Carbon dioxide emissions will nearly quadruple by 2100; Methane emissions will more than double by 2100; Carbon monoxide emissions will nearly triple by 2100; Volatile organic carbon emissions will nearly triple by 2100; and Fluorocarbon levels will rise dramatically by 2100, in some cases by a factor of 100.⁶⁸⁹ Volume 1 provided little justification for these assumptions, which were generated by a special working group of the IPCC and which were reviewed in an alternate, informal review process far less rigorous than the scientific review process used in either the Volume 1 or Volume 2 review processes.⁶⁹⁰ None of the assumptions, which are critical to the model's outcomes, can be proven empirically or scientifically to have even any links to real climate patterns or CO2 emissions.⁶⁹¹

As well the assumption that current temperatures are the warmest on record is also deeply flawed. IPCC modeling is premised on 'Mann et al.'s' climate study.⁶⁹² Mann's data, which analyzed temperature change over the past 1000 years, is largely based on North American tree ring data. However tree ring data from North America is obviously

not hemispheric. It is also limited to land data which means that 70 % of the earth's surface temperature record is not covered. As well the growth of trees is dependent on many sources and not just on climate conditions. Trees also grow during the summer and cannot be used to present annual temperature measures. These conditions include rainfall, temperature, atmospheric carbon concentrations, and so on. Singling out the temperature effect is a highly speculative business. The IPCC report, nonetheless, presents the 'hockey stick' temperature graph with the 20th century as the blade, to represent a global temperature trend and a frightening ramp up in climate change.

Yet there are scepticisms around the use of the hockey stick graph. The hockey stick represents a radical departure from the well-established historical temperature record, which has been derived from several proxies, including the written historical record, ice core samples, atmospheric data gathering and tree ring data, amongst others. Those records show that the earth was much warmer during the Medieval Warm Period [900-1400 AD] that spanned much of the first half of the millennium. This 'medieval optimum' saw an increase in the climate by 2.5 C, a huge rise in agricultural activity and trade and a marked decrease in human mortality. When the optimum period ended around 1350-1400 and the temperature decreased precipitating the 'Little Ice Age' [1400-1900], trade decreased, wars increased and mortality rates rose.⁶⁹³ In comparison it is clear that the 20th century was cooler than the Medieval Warm Period and the warming during the 20th century can more easily be explained by a natural emergence from the Little Ice Age than CO2 induced global warming.

Data seems to indicate that there are regular occurrences like the little ice age and the medieval warm period in a rough 1500 year cycle. This cycle has repeated itself endlessly over the past 140,000 years. In any event to refute such a cycle using only tree ring data from the past 1000 years would still make the data selection far too limited and specific to reveal significant climate patterns.⁶⁹⁴ There are serious limitations with presenting surface based readings as a general proxy for global climate patterns. The components of climate patterns are