



Is the earth really warming?

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The term climate change evokes mainly the change in the earth's temperature. Particularly, since the hypothesis that the global temperature will increase due to man-made greenhouse gas emissions was formulated, literally, many thousands of studies have been contacted and published claiming that they have verified this hypothesis. Yet other studies also exist claiming that the observed increase in global temperature is insignificant and attributed to the climate's natural variability, and thus, climate actually has not changed or will not change in a predictable way. Clearly, the debate on global warming goes on. Aiming to answer the question, if the earth is really warming, one of the largest empirical analyses is performed here by studying the average annual temperature trends at several interannual time scales, ranging from 5 to 100 years, and at many thousands of stations worldwide. The target is to evaluate the percentage of stations worldwide having positive or negative temperature trends and assess these results.