



Discontinuities in the late 1960's in different atmospheric data products

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One challenge in the study of climate is that among long records there are discontinuities owing to changes in measurement methods. In reanalysis projects observations are combined with a numerical weather prediction model to obtain homogeneous atmospheric data sets in the sense that the model and the assimilation technique do not change. However, discontinuities exist also in these data sets. For example, the introduction of satellite data in the late 1970's has lead to systematic errors notable in the tropical troposphere. Here we show that the data sets reveal also strong discontinuities in the late 1960's being in some details even stronger than those of the late 1970's.