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Ka-Kit Tung* (ktung@uw.edu), Guggenheim Hall, Box 352420, Seattle, WA 98195. *Deducing anthropogenic global warming trend.*

Interest in man-made global warming draws attention to the extraction of anthropogenic global warming trend in observational data. Currently accepted value is approximately 0.17 C per decade since 1979. We show that the deduction of the warming trend is often contaminated by the presence of a multi-decadal oscillation. Analysis of such a low-frequency oscillation, of 70-year period, is hampered by the shortness of available of global climate record, the longest of which is 162 years, containing only 2.5 cycles. We discuss the mathematics and statistics involved in extracting multi-decadal oscillations in climate records, and the impact of the result on the deduced anthropogenic warming trend. (Received August 27, 2012)