

# **Deriving MLT tides based on observations from a slowly-precessing satellite: a comparison of methods**

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The SABER instrument on TIMED provides unprecedented geographical coverage for the determination and study of atmospheric tides. However, the slow local time precession rate of TIMED can cause longer-term temperature variations to alias into the tidal signals. Two new methods of analyzing satellite data for tides has been developed to circumvent this difficulty, but at the expense of temporal resolution of the tidal fields, i.e., either 60-day mean or 120-day mean tidal structures are obtained. In this work, we compare the advantages and disadvantages of these two methods in the context of deriving tides from SABER temperature data. This work also includes a brief scientific interpretation of the results.