



ANALYSIS OF THE FEBRUARY 2002 STRATOSPHERIC WARMING USING SABER DATA

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The Sounding of the Atmosphere using Broadband Emission Radiometry (SABER) instrument began acquiring data in January 2002. Version 1.01 Level 2A LTE temperature data have been compared with various correlative data sources (e.g. satellites, lidar, and falling spheres). These results generally show good agreement in the stratosphere. Synoptic temperature distributions are being generated from the SABER data using a sequential estimation technique which was developed for the use with the Nimbus 7 LIMS data. From these temperature distributions, corresponding synoptic fields of geopotential height and geostrophic winds can be obtained. The evolution of the lower stratosphere of the Northern Hemisphere during the warming of February 2002 will be analyzed using these SABER data and compared with a similar analysis using assimilated data.