Recent Advances in Low- and Mid-latitude Mesopause Region Studies

C. S. Gardner

Department of Electrical and Computer Engineering, University of Illinois, Urbana, IL 61822, USA (cgardner@uillinois.edu / Fax: 217 244-4770 / Phone: 217 333-3077)

During the past decade a new generation of remote sensing instruments have been developed and deployed to study the mesopause region in unprecedented detail. These observations have been combined with in situ and laboratory measurements and improved numerical models to provide important new insights into the chemistry, dynamics, and thermal structure of the upper mesosphere. In this presentation we focus on recent advances in characterizing the stability of the mesopause region and the influence of wave dissipation on the region's thermal balance and constituent structure.