Observations of atmospheric waves from airglow measurements

Young-In Won, Jong-Kyun Chung, Yeadong Kim, and Bang-Yong Lee Polar Scieces Laboratory, KORDI

One important space weather problem involves the effects of the Earths ionosphere on radio wave traversing it. In this arena, gravity waves propagated upward from the dense lower atmosphere plan a key role. TID provided the clear evidence for internal wave interactions with the ionospheric plasma and much of ionospheric irregularities are known to be caused by internal gravity waves. The intensity and temperature fluctuations related to gravity waves have been the subject of numerous theoretical and experimental investigations. In this report, we present our preliminary results from OH temperature and intensity variations at high latitudes, with emphasis on the characteristics of waves retrieved from the observed oscillation.