

WAVE2000:Preliminary results of atomic oxygen and airglows

Naomoto Iwagami[1], Hiroyuki Sekiguchi[2]

[1] Earth and Planetary Physics, U Tokyo, [2] Dept. of Physics,Rikkyo Univ.

WAVE2000:A coordinated nighttime rocket experiment was carried out successfully on 10 January 2000, and measured atomic O densities, OH and 558 nm airglow emission rates and electron densities in the 70-180 km region ; at the same time all-sky imaging of the OH and 558 nm airglows at 3 ground stations and wind measurements by a MF radar are operated. The main purpose of the experiment is to check our understanding about the formation mechanism of the wavy structure seen in those airglow displays. The validation of the triangulation technique for the airglow layer height by comparing with that obtained directly by the photometers onboard the rocket is another purpose.