

PEM032-06

会場:103

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## DEMETER 衛星で観測された夜間電離圏電子密度・温度の経度構造季節変化 Night time annual variation of longitudinal structure in the topside ionosphere observed by the DEMETER satellite

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Night time longitudinal structure of electron density (Ne) and temperature (Te) in the topside ionosphere are examined using data observed by the DEMETER satellite from 2006-2007 under geomagnetically quiet condition ( $K_p < 3$ ). Distribution of Ne show complex structure due to longitudinal structure excited by latent heat release in troposphere as well as middle latitude enhancement and the Weddell sea anomaly. On the other hand, Te does not show clear longitudinal structure. A spectrum analyses are performed with the DEMETER data around magnetic equator. Wavenumber 1 of Ne dominates other wavenumbers during May-July and December-January. Wavenumber 4 of Ne becomes dominant in March and August-October. Meanwhile, wavenumber 1 of Te is pronounced in all months except December. Wavenumber 4 of Te only becomes dominant in October. These features of Ne and Te are significantly different from those in the daytime. In this paper, mechanism of longitudinal structures of Ne and Te are discussed comparing daytime distributions.

キーワード: 電離圏, 経度構造, 電子密度, 電子温度, DEMETER, wave-4

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