

Characteristics of sporadic Na layers over the equatorial region

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Characteristics of the sporadic sodium (Nas) layers in the mesopause region over the equator observed with the resonance scattering lidars installed at Kototabang, Indonesia (0.2S,100.3E) are reported. The Nas layers were often observed during the intensive observation from July to August 2005. But during the intensive observation from January to February 2006, Nas events were observed only a few. During July to August, the Nas occurrence frequency before the midnight is about 25% and after the midnight is 92%. During January to February, Nas occurrence frequency before the midnight is about 36% and after the midnight is about 24%. In order to investigate the relation between Nas and the wind shear, the meteor radar wind data observed in Kototabang is used. The Nas generated at dawn (2-4H LT) and wind shear have no correlation, but the Nas generated before midnight and wind shear have good correlation. The result suggests that the formation mechanism of Nas is different in generation time.