PLASMA BLOB EVENTS OBSERVED BY KOMPSAT-1 AND DMSP F15 IN THE LOW LATITUDE NIGHTTIME UPPER IONOSPHERE

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We report the plasma blob events that were observed from KOMPSAT-1 (2250 LT, 685-km altitude) and from DMSP F15 (2130 LT,840-km altitude) in the low-latitude ionosphere. The global distribution of blobs showed a season-longitudinal dependence similar to the distribution of the equatorial plasma bubbles, although they were observed along the $\pm 15^{\circ}$ dip latitudes. The blobs drifted upward relative to the ambient plasmas, and the electron temperatures and H^{+} proportions were lower within the blobs compared to those in the background. These characteristics of the plasma blobs are very similar to the characteristics of the equatorial plasma bubbles. Then, we suggest that the blobs were originated from the lower altitudes by the mechanism that drives an upward drift of the plasma bubbles. The blob events did not occur in a correlated way with the magnetic activity or daily variation of the solar activity.