EIA structure and its relation to plasma bubble occurrence along longitude 100° E in 2012

*Kornyanat Watthanasangmechai[1], Mamoru Yamamoto[2], Tatsuhiro Yokoyama[1], Michi Nishioka[1], Mamoru Ishii[1]

1.National Institute of Information and Communications Technology, 2.RISH, Kyoto Univ.

To reveal a relationship between EIA structure and plasma bubble occurrence along longitude 100° E in 2012, the ground-based observations i.e., GNU Radio Beacon Receivers (GRBR), GPS, ionosonde, and Equatorial Atmospheric Radar (EAR), are employed. GRBR is used to capture the precise structure of EIA. The Rate Of TEC change Index (ROTI) of GPS is used to monitor the plasma bubble occurrence. Temporal variation of the bottom side of the F layer is measured by the ionosonde. The EAR is for detecting Field Aligned Irregularities (FAI). In this paper, we will answer the following questions:
(1) What does the EIA structure look like on the plasma bubble on and off day?
(2) Is it necessary that plasma bubble will occur only when EIA is symmetric?
(3) How does the plasma bubble structure look like on the GRBR TEC?

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