

## Geomagnetic conjugate observations of airglow images and neutral winds in the low and middle latitude thermosphere

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In 2010-2011, we have installed four Fabry-Perot interferometers and four all-sky cooled-CCD airglow imagers at two pairs of geomagnetic conjugate stations at low and middle latitudes. The pairs are Kototabang, Indonesia (0.2S, 100.3E, magnetic latitude (MLAT): 10.6S) and Chiang Mai, Thailand (18.8N, 98.9E, MLAT: 8.9N) at low latitudes, and Darwin, Australia (12.4S, 131.0E, MLAT:22.1S), and Sata/Shigaraki, Japan (Sata: 31.0N, 130.7E, MLAT: 21.2N, and Shigaraki: 34.8N, 136.1E, MLAT: 25.4N) at middle latitudes. These pairs are suitable for investigation of hemispheric coupling of ionospheric structures. In this presentation, we show some initial results of conjugate observations of plasma bubbles and medium-scale traveling ionospheric disturbances and associated neutral winds at these two pairs of conjugate stations.

Keywords: magnetic conjugate points, plasma bubble, MSTID, airglow imaging, Fabry-Perot interferometer, thermospheric wind