超高層大気イメージングシステムの 2014－2015 年度の成果

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Recent results of the Optical Mesosphere Thermosphere Imagers (OMTIs): 2014-2015

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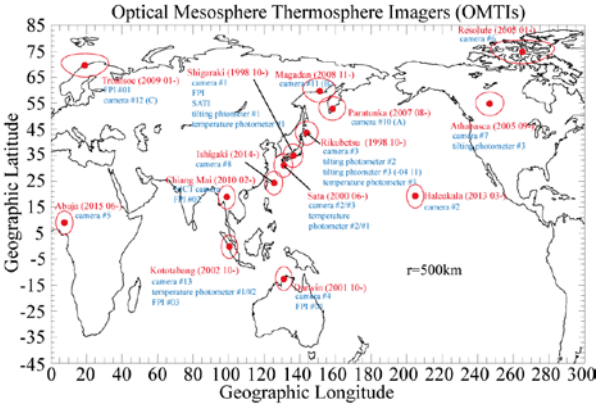

Figure 1. Current stations of OMTIs.

The Optical Mesosphere Thermosphere Imagers (OMTIs) consist of 14 all-sky cooled-CCD imagers, five Fabry-Perot interferometers (FPIs), three meridian scanning photometers, and four airglow temperature photometers. They measure two-dimensional pattern, Doppler wind, and temperature through airglow emissions from oxygen (wavelength: 557.7 nm) and OH (near infrared band) in the mesopause region (80-100 km) and from oxygen (630.0 nm) in the thermosphere/ionosphere (200-300 km). The OMTIs are in automatic operation at Norway, Australia, Indonesia, Thailand, far-eastern Russia, four stations in Japan, and two stations in Canada, Hawai, and Nigeria. The calibration of OMTIs has been carried out using 2-m integrating sphere and spectrometers of the National Institute of Polar Research. As shown in the reference list, many interesting results has been obtained in 2014-2015, which will be reviewed in this presentation.

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