

Wind and Temperature Measurements in the Thermosphere and Mesosphere Using Three Channel Fabry-Perot Interferometer - 3

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We are developing a three-channel imaging Fabry-Perot interferometer to measure atmospheric wind and temperature in the mesosphere and the thermosphere through nocturnal airglow emissions. The interferometer measures two-dimensional wind and temperature for wavelengths at 630.0 nm (OI, altitude: 200-300 km), 557.7 nm (OI, 96 km), and 839.9 nm (OH, 86 km) simultaneously using three cooled-CCD cameras. In the presentation we discuss the accuracy of wind and temperature measurements on the basis of model calculation and comparison with the wind data obtained by the MU meteor radar.

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