

Current status of the Ground networks of the PWING Project and the Optical Mesosphere Thermosphere Imagers (OMTIs)

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The PWING stands for "study of dynamical variation of Particles and Waves in the INner magnetosphere using Ground-based network observations." The PWING project started on April 2016 as a 5-year project of the Grant-in-Aid for Specially Promoted Research of the Japan Society for the Promotion of Science (JSPS) (16H06286). The PWING project deploy all-sky cooled-CCD airglow imagers, 64-Hz sampled induction magnetometers, 40-kHz VLF receivers, and 64-Hz riometers at 8 stations at magnetic latitudes of ~60 degree around the north pole to cover longitudinal variation of aurora and electromagnetic disturbances in the inner magnetosphere. Details can be seen at

http://www.isee.nagoya-u.ac.jp/dimr/PWING/PWING_web_e.htm. The OMTIs consist of twenty all-sky cooled-CCD imagers, five Fabry-Perot interferometers, three airglow temperature photometers, and three meridian-scanning photometers. They measure two-dimensional airglow images in the mesopause region and in the thermosphere, wind and temperatures in the lower thermosphere, and airglow rotational temperatures in the mesopause region. These PWING and OMTIs instruments are in automatic operation at various locations from high to equatorial latitudes in Canada, US (Alaska), Russia, Norway, Finland, Iceland, Japan, Thailand, Indonesia, Nigeria, and Australia.

PWING Team: <http://www.isee.nagoya-u.ac.jp/dimr/PWING/en/>

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