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International Mercury Watch (IMW): Preliminary results of the 2006 Campaign

The International Mercury Watch (IMW) Team

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The International Mercury Watch (IMW) is an informal program recently organized to study the broad range of processes related to Mercury's surface-boundary-exosphere (SBR). Observational methods use groundbased telescopes to map patterns of exospheric species using primarily sodium emission; surface observations deal with composition variations, potential sputtering source regions and albedo patterns. Modeling investigations explore the sources and dynamics of overall SBE phenomena. The first coordinated IMW campaign was conducted in April (surface) and June (exosphere) 2006. For exospheric science, six separate telescopes/detector systems spanning longitudes from the Canary Islands, mainland USA and Hawaii were used to study sodium emission in "hemispheric hot spots" and anti-sunward "tail" effects. The IMW team members come from Tohoku University/Japan (S. Okano, M. Kagitani, M. Yoneda), the University of Padova/Italy (C. Barbieri), Service d'Aeronomie du CNRS/France (F Leblanc), Observatoire de Paris (A. Doressoundiram) and in the USA from the University of Maryland (R. Killen), NOAO (A. Potter), University of Arizona (A. Sprague, K. Hanna) and Boston University (M. Mendillo, J. Baumgardner, J. Wilson).