

On the Importance of the Cross-body Approach in Planetary Aeronomy

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The International heliophysical year is dedicated to the development of basic science of heliophysics through cross-disciplinary studies of universal processes. Similar processes occur in magnetospheric, interplanetary, and heliospheric plasmas, all of low density. A cross-disciplinary approach is of great relevance for a universal understanding of the processes occurring within these various plasmas. On the other hand, the upper atmospheres of planets and moons are a highly collisional medium acting differently compared to a collisionless plasma. Therefore, the comparative study between solar system bodies hosting atmospheres under different settings is a more suitable approach for assessing universal processes in aeronomy. For the past 5 years the aeronomy community has undertaken many initiatives in comparative studies of solar system atmospheres. We will highlight the maturity of this field and illustrate its relevance by applying the comparative approach to the study of atmospheric emissions. We would like to encourage aeronomers interested in comparative studies to consider participating to IHY focused activities. More information on comparative aeronomy initiatives can be found at the IHY website (<http://ihy.gsfc.nasa.gov/>) as well as at:

<http://www.bu.edu/csp/uv/cp-aeronomy/aeronomy-sol-sys.html>.

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