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PEM08-P08

Room:Poster

Time:May 2 16:15-17:30

## On the influence of the luni-solar oscillation on the climate

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We have demonstrated a close relation between solar wind and regional temperatures, and suggested the participation of the Arctic oscillation. On the other hand, a link between the luni-solar oscillation and the Arctic oscillation has also been suggested [1]. Thus, both the sun and the moon appear to be important climatic factors to consider.

An interesting mechanism was proposed recently for the luni-solar oscillation cycle associated with the population change of the snowshoe hare in Canada [2]; that is, the position of the moon changes the intensity of the ionizing cosmic ray to induce changes in the activity of plants, which results in the changes in the forage quality.

This mechanism suggests a combination between the influences of the sun and the moon on the climate while their mutual independence is also possible. Thus, we try to examine the possible contribution of the luni-solar oscillation for establishing the effect of the solar wind on the climate.

- 1) Renato Ramos da Silva and Roni Avissar, The impacts of the Luni-Solar oscillation on the Arctic oscillation, Geophys. Res. Lett., VOL. 32, L22703 (2005)
- 2) Vidar Selås, Linking '10-year' herbivore cycles to the lunisolar oscillation: the cosmic ray hypothesis, Oikos, Volume 123, 194?202 (2014)

Keywords: Luni-solar oscillation, Arctic oscillation, Solar wind, Climate

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