
[JJ] Evening Poster | M (Multidisciplinary and Interdisciplinary) | M-IS Intersection

[M-IS09] Electromagnetic phenomena associated with seismic and volcanic activities

convener: Tetsuya Kodama (Research Unit I, Research and Development Directorate, Japan Space Exploration Agency), Toshiyasu Nagao (Institute of Oceanic Research and development, Tokai University), Yasuhide Hobara (電気通信大学 大学院情報理工学研究科)

Tue. May 22, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

This session deals with reviews and contributions on the recent studies of electromagnetic (EM) phenomena associated with earthquakes and volcanic eruptions. One of the main targets of the session is to clarify the mechanism of seismo-EM emission and Lithosphere-Atmosphere-Ionosphere (LAI) coupling.

[MIS09-P01] Construction of a hamster-observation network

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Keywords: macroscopic anomaly, anomalous animal behaviour

In order to discuss whether anomalous animal behavior can be applied for earthquake prediction, it is necessary to establish an animal behavior and prove it could be an earthquake precursor. To achieve above subjects, it is necessary to make a scientific research on the behavior and quantify it. Regarding the quantification of the behavior of animals, it is conceivable to use daily observation, quantification using a sensor, a method using numerical data such as the laid data of eggs which is already an animal husbandry field (Rikitake, 1978).

The progress of technologies such as personal computers, smart phones and IoT sensors in recent years has made it possible to monitor animals 24 hours a day on a global scale. Now we can be utilized as scientific data.

In the presentation, we introduce the construction of a network that uses personal computers, smartphones, IoT sensors which collecting and sharing the number of rotations of hamster wheels among the whole country.