



專題演講

Program for Earthquake Precursor Search in Ionosphere over Himalayas

Speaker : **Uma Das Assistant Professor**

Department of Physics, Indian Institute of Information Technology

Time : 106 年 1 月 3 日 星期二 10:00~11:00

Place : 健雄館(科四館)S4-810 教室

摘要/Abstract :

This project investigates the seismo-anomalous signals in the upper atmosphere and ionosphere above the Himalayan region during the earthquake preparation period, finds the link and causal mechanisms, and develops a system/software trying to locate and forecast a forthcoming earthquake. This project will have a huge impact on society, life and infrastructure. We will Generate regional and global maps of ionospheric GPS TEC (total electron content) with FORMOSAT-3/COSMIC data and analyze for temporal and spatial SIPs to identify the occurrence time and location of large earthquakes that have occurred in the Himalayan region during 2007-present.

Using TIE-GCM simulations with inputs from results of the above objective to identify SIPS in the model and to find associated causal mechanisms and the lithosphere-atmosphere-ionosphere coupling (LAIC) processes. Then, establishing statistics based on results from above two objectives for real-time monitoring of the Himalayan region. Finally, we shall be able to design and create automated software for continuously monitoring real-time electron density and TEC from FORMOSAT-3/COSMIC data to detect seismo-ionospheric precursors (SIPs) in the Himalayan and surrounding region by the statistics defined above.

※歡迎聽講※

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