

Research Enhancement and System Establishment for Space Weather in Indonesia

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Space weather is a program to observe, assess, and forecast the space environment. Global and regional observations are both important for the space weather. The Equatorial Atmosphere Radar (EAR) is a VHF atmospheric radar located in Kototabang, West Sumatra, Indonesia. It is operated by collaboration between the Research Institute for Sustainable Humanosphere (RISH), Kyoto University of Japan and National Institute of Aeronautics and Space of Indonesia (LAPAN) since 2001. The EAR is not only used for the atmospheric studies, it has also been utilized for the studies of the ionosphere. The Grant-in-Aid for Scientific Research on Priority Areas "Coupling Processes in the Equatorial Atmosphere (CPEA)" led by Prof. S. Fukao (2001-2007) contributed a lot to fulfill the EAR site by installing number of supporting instruments, i.e., a meteor wind radar, an all-sky airglow imager, several lidars, 30MHz FAR radar, etc. From 2004, NICT started SEALION (SouthEast Asia Low-latitude Ionospheric Network) over Thailand, Vietnam, and Indonesia. One of the SEALION ionosondes is located at the EAR site. STE Laboratory, Nagoya University also supports us by providing several instruments of OMTI (Optical Mesosphere Thermosphere Imagers) to the SEALION and the EAR sites. Recently LAPAN runs their own project to start the space weather service in Indonesia. In relation to this movement, we have started a new project "Research Enhancement and System Establishment for Space Weather in Indonesia" since 2010 under the framework of Strategic Funds for the Promotion of Science and Technology. In the presentation we overview the project and current status, and discuss future expansion of the project.

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