

Development of regional ionospheric map and ionospheric prediction over Southeast Asia

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Dates back to 2003, National Institute of Information and Communications Technology (NICT) initiated the ionospheric observation network in Southeast Asia, a so-called Southeast Asia low-latitude ionospheric network (SEALION). Since then, ionospheric data has been collected and researched for a decade for research purpose. Nowadays, ionospheric data users increase. One of the reasons is that ionospheric data will become a must use dataset for air transportation business in the near future. Even though NICT has much data, the data itself is not friendly to non-scientist users. Moreover, there is no effective tool for ionospheric prediction in Southeast Asia yet. Recently we have developed a regional ionospheric map, and a regional ionospheric prediction based on artificial neural network (ANN). This paper introduces progress, success, and problem in the development.

Keywords: Ionospheric map, SEALION, Artificial neural network (ANN)