

Dynamics in the mesosphere- lower thermosphere (MLT) observed with meteor and MF radar in the Asia-Oceania region

Takeshi Matsushima^{1*}

¹RISH, Kyoto University

There are a number of existing and new MF (medium frequency), meteor and VHF radars for studies of the dynamics in the Mesosphere-Lower Thermosphere (MLT) region and the lower ionosphere in India, Indonesia, Thailand, China, Korea, Japan and Australia. However, operation and coordination of studies using these radars have not been fully implemented. It is required now to establish a firm radar network in the Asia-Oceania region in order to contribute to the CAWSES-II project.

Considering this situation, we organized a workshop on MLT radar observations on 8-9 March 2010 at the Ngee Ann Adelaide Education Centre, a joint venture between the University of Adelaide and the Ngee Ann Kongsi.

This paper reports a summary from the workshop, consisting of new scientific results on the behavior of atmosphere dynamics, such as long-term variations of the mean winds, atmospheric tides, planetary waves, gravity waves and so on. We will also discuss plans for the future research collaboration, coordination of MLT radars in the Asia-Oceania region, as well as data archive and exchange.

Keywords: CAWSES, MLT, meteor radar, MF radar, dynamics, atmospheric waves