

Present and future of HARIMAU radar-profiler network

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http://www.jamstec.go.jp/iorgc/harimau/HARIMAU_jp.html

The HARIMAU radar-profiler network over the Indonesia maritime continent is made up of an X-band Doppler meteorological radar (XDR) at MIA/Padang of Sumatera, a C-band Doppler meteorological radar (CDR) at Serpong/Jakarta of Jawa, and three wind profiler radars (WPRs) at Pontianak of Kalimantan, Manado of Sulawesi (to be installed in August 2008) and Biak of Papua. This network is also a part of MAHASRI and will be operated through the Asia Monsoon Years (AMY) starting in this year. Quick look data are being displayed on the HARIMAU webpage of which URL is shown above.

Scientifically the network will be mainly used for studies on intraseasonal variations (ISV) and monsoon, which are I and M of HARIMAU. Intraseasonal variations and their interaction with seasonal cycle (that is, monsoon), as well as diurnal cycle and interannual variations (such as ENSO and IOD) will be observed and investigated based on the HARIMAU network observations. Our earlier observations have suggested that the onset of monsoon or rainy season is triggered and by ISV, and that suppression of diurnal cycle is observed in the backside of ISV.

The internet display of realtime radar image will be also helpful for disaster prevention, which has been evaluated as an early achievement of GEOSS at the 4th Ministerial Summit on Earth Observation at Cape Town in November 30, 2007. In future the network will be operated mainly by Indonesian side with an ODA framework. A central facility will be constructed near the CDR site in Serpong/Jakarta, which will play roles of data center and also center of excellence (COE) of tropical earth sciences.