

## **International session at JpGU 2012**

Dates: May 20-25, 2012

Venue: Makuhari international convention center, Tokyo, Japan

### **Session title:**

Mesosphere-Thermosphere-Ionosphere (MTI) coupling in the Asian sector

### **Session description:**

This international session focuses on the coupling between the thermosphere-ionosphere-mesosphere (MTI) in the Asia-Oceania sector.

Physicswise, the Asia-Oceania longitude sector plays a central role in the global coupling process. This is easily understood with the fact that deep convection activity over Indonesia is the strongest on the globe and is thus the essential driver of the global coupling between the lower and upper atmosphere. Facilitywise, the Asian sector has recently enjoyed a huge increase in ground instruments probing the MTI regions. These include many meteor/MF/HF/VHF radars, all sky imagers, magnetometer chains, GPS receiver networks in India, Indonesia, China, Korea, Japan and Australia, if just to mention a few. The overall observation area covers nearly all latitudes from equator to mid-latitude and extending to the pole. However, in comparison to the American sector, much less progress has been achieved in the Asian-Australian sector in terms of coordinated observation. To maximize the scientific returns, it is vital to coordinate various Asian facilities to form an "All-Asia" network instead of viewing them on a point by point basis.

In responding to this need, this international session focuses on recent achievements pertaining to the MTI coupling in the Asian sector. Presentations on observations/modeling of regional features obtained from the above local facilities or the combination of them are particularly welcome. Presentations on global features which provide global context to Asian studies are also highly valued. Introduction about new instrument or new observing capabilities are strongly encouraged.

This session wishes to serve as a forum to exchange views and information among Asian/Australia scientists in the field of MTI, and to foster collaborations among young scientists.

Session convenors: Huixin Liu (Kyushu university), Y. Otsuka (Nagoya university)  
W. Wan (Chinese Academy of Science)