



## **Analysis of Regional Scale Vegetation Variations and the Asian Monsoon Climate**

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Vegetation growth depends on local climate. Significant anthropogenic land use and land cover changes over Asian changes vegetation as well. On the other hand, vegetation is one of the important land surface variables that influence the Asian Monsoon variability through controlling atmospheric energy and water vapor conditions. In this presentation, the mean and variations of vegetation index of last decade at regional scale resolution (5km and higher) from MODIS have been analyzed. Regions with significant variations are identified. Results indicate that the vegetation index has been reduced significantly during last decade over some fast urbanization areas in east China, such as Yangtze River Delta, Beijing-Tianjing regions. Possible relationships between anomalous vegetation index over some non-urban region and anomalous monsoon climate are also studied. In supporting Monsoon Asian Integrated Regional Study (MAIRS) program, the land surface data in this study have been made available in the online visualization and analysis system at NASA GES DISC (<http://disc.gsfc.nasa.gov/giovanni>).