

Remote sensing and geoscience: current status and future challenges

N.N. MAHMOOD, K.F. LOH, J. BOLHASSAN AND A.T. JASMI

Malaysian Centre for Remote Sensing (MACRES)
No. 13, Jalan Tun Ismail
50480 Kuala Lumpur

The integrated use of remote sensing and related technologies is commonly applied to multi-disciplinary analysis in Malaysia. Many models and processing techniques have been developed for this purpose. MACRES, the focal point for providing as well as using remote sensing and related technologies to cover a wide spectrum of applications in the country, has developed among others the National Resources and Environmental Management System (NAREM) for interactive integrated spatial data analysis and modeling. NAREM is a dedicated system for the input, validation, management and analysis of integrated spatial data. Several integrated natural resources and environmental application packages have been developed under NAREM which will be put into operational use in the near future. This paper highlights the application of geo-science packages developed under NAREM which include groundwater potential zoning, soil erosion risk assessment and landslide hazard zonation. The paper also touches on the future directions in the use of remote sensing data for geo-hazard and geobotanical studies in line with the availability of new generation satellite data at present and in the near future.
