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Title: (OA17) SPOT IMAGES FOR SOUTHEAST ASIAN COASTAL STUDY

Abstract: Southeast Asia has more than 92,000 km of coastlines or 16% of the world's total. Indonesia and the Philippines, the world's two largest archipelagic nations, account for nearly 60% and 25%, respectively, of the region's coastlines. In terms of major coastal ecosystems, the region has 33% and 30% of the world's mangroves and coral reefs, respectively. Almost all types of coastal features are present in SE Asia and they can be represented by various classifications. In geomorphology, coastal classifications have progressed from an emphasis on geological heritance to more consideration for the hydrodynamic processes, recognizing the interaction of wave processes, tidal processes and fluvial processes. Satellite images have been increasingly used for coastal studies. This paper discusses the methodology and some results of an on-going joint project using SPOT images to produce suites of coastal features representative of SE Asian coasts. The SPOT images have the advantage of a consistent and near real-time database to cover the entire region. A working classification of coastal features was established initially, based on available coastal classifications in SE Asian countries and modern coastal classifications. Next, suitable examples from the SPOT catalogue of images were further studied, supplemented by study of topographic maps and field work where possible. In some cases, the SPOT images highlighted features that were not in the working classification or evident on the maps. The selected SPOT images will include but not be exclusive to the following coastal types : volcanic coasts, cliffs, beaches and dunes, mangroves, coral reefs, coral islands and deltas. The end product of the project serves as a useful reference base for scientific purposes (e.g. coastal classification) and for management (e.g. vulnerability studies).

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