## THE CONCEPT AND SYSTEM DESIGN FOR "SPACE APPLICATIONS FOR ENVIRONMENT (SAFE)"

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## ABSTRACT

Space Applications For Environment (SAFE) is JAXA's new project to monitor the environmental change led by climate change and human activities in Asia-Pacific Region. From 2004, JAXA has promoted Sentinel Asia project for disaster monitoring by using of earth observation satellites and GIS-based information portal in cooperation with partner agencies in Asia-Pacific. Though originally SAFE was considered as the expansion of Sentinel Asia to the environmental issues, the experience of feasibility studies shows the concept and system design for environmental monitoring should be different from the disaster monitoring. The key components of SAFE are local customized datasets, start-up trainings and the data distribution portal shared with Sentinel Asia. From summer 2008, JAXA, University of Tokyo and Asian Institute of Technology started to develop prototypes for Land Use Management and Water Resources Management in cooperation with the partner agencies in Vietnam. JAXA will propose SAFE as the official activity in the upcoming 15th Asia Pacific Region Space Agency Forum in Hanoi and Ha Long Bay, Vietnam. (9 Dec 2008-12 Dec 2008)