THE EXPERIENCES OF USING ALOS IMAGERY FOR SUPPORTING THE NATIONAL FOOD SECURITY IN INDONESIA:
Case study in Java Island

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ABSTRACT

The Indonesian Government is now struggling to maintain the national food security, particularly focused on the rice field production. To achieve this effort, some policies are being assessed by the related governmental agencies, including the National Agency for Surveys and Mapping (BAKOSURTANAL) which has a responsibility to provide the spatial rice field data production. Since 2004, BAKOSURTANAL has cooperated with the several related governmental agencies to optimize the usage of the available spatial data concerning about the rice field production. In 2007, BAKOSURTANAL cooperated with the Bogor Agriculture University to conduct the feasibility study of using the ALOS/PALSAR imagery for identifying and monitoring the rice field in Java Island. The study concluded that the Synthetic Aperture Radar (SAR) of PALSAR is potential for detecting and measuring the area and productivity of the rice field at the lowland areas. In 2009, BAKOSURTANAL is applying the ALOS/PALSAR for mapping the rice field distribution and production in several districts as rice producers in Java Island. In this paper, the advantages and disadvantages of using the ALOS/PALSAR compared with the SPOT 4-5 imageries for mapping the rice field production will be discussed.