ROLE OF SPATIAL THINKING ABILITY AND IMAGE INTERPRETATION STRATEGY TO THE ACCURACY OF INTERPRETATION RESULTS OF SPASIAL MULTI RESOLUTION IMAGERY IN STUDENTS OF GEOGRAPHY EDUCATION DEPARTMENT

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ABSTRACT

This study aims to: (1) obtain information about the student's spatial thinking ability (STA) aided remote sensing, (2) obtain information about the student's ability to implementing the remote sensing image interpretation strategy. (3) examining the difference in interpretation accuracy among student groups interpreting low, medium, and high spatial resolution images, and (4) testing the role of KBS and interpretation strategies for the accuracy of remote spatial multiresolution image sensing interpretation results.

This research uses comparative survey design. Research subjects were students of remote sensing subjects at UPI, UNY, and Unesa. Sampling was done purposively, each university was taken two classes (experiment and control). Research variables such as KBS, ability to use image interpretation strategy, and accuracy of interpretation result. The data collection method was done by KBS test and field check test. Data analysis techniques are descriptive statistics, Anova one way, and multiple linear regression.

The results showed that (1) students 'spatial thinking ability included in medium category, (2) students' ability in applying interpretation strategy included in high category, (3) difference of spatial thinking ability score between students studying with spatial resolution image high, medium, and low, but further poshoc test results show that STA scores of student groups studying with low and high resolution images are not significantly different, and (4) STA and the ability to implement interpretive strategies have a very important role. Interpretation strategy ability variable more influential than STA, because the student STA has not been developed optimally.

Kata Kunci: *spatial thinking, spatial multiresolution, interpretation strategy, accuracy*