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Interactive comment

Interactive comment on "Improved Spectral Angle Mapper applications for mangrove classification using SPOT5 imagery" *by* Xiu Su et al.

Anonymous Referee #2

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The manuscript titled "Improved Spectral Angle Mapper applications for mangrove classification using SPOT5 imagery" describes the weakness of Spectral angle mapper (SAM) to classify the mangrove species using SPOT5 imagery. The Authors tries a combination of object-oriented classification with SAM to classify and come up with a better result. The writing & presentation of the manuscript is good enough; however, the reviewer is concerned about the following issues and the stated modifications will be necessary:

1. Spectral Angle Mapper (SAM) is a physically-based spectral classification that uses an n-D angle to match pixels to reference spectra. Spectral angle mapper (SAM) is more useful for hyperspectral imagery; in the Multispectral image, the bandwidth is large. Though we can use it for the multispectral image, however, for a specific study

like this, using SAM is not advisable, at least in recent times. 2. Any combination of classification technique mostly comes with a better result, so to make the paper more interesting with some new findings, the following suggestions may be adopted: i) Try to apply the procedure on Hyperspectral image if not available, try on any other multispectral image, compare, and discuss the results. ii) Also, add at least another classification technique with SAM and apply both the method finally compare and consider the results.