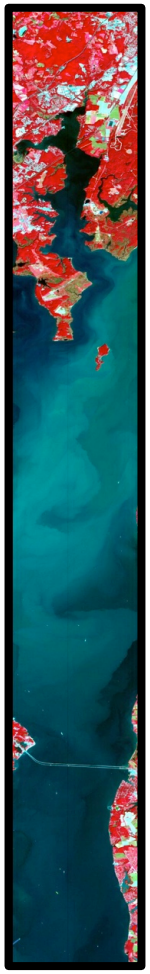
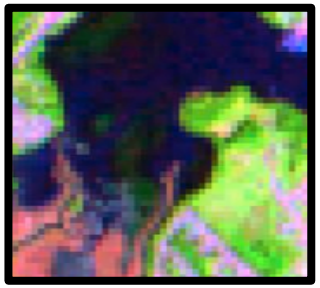
NASA GSFC 2013 HyspIRI Symposium

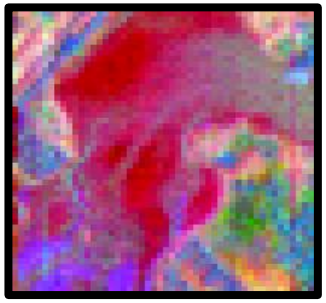
Remote Sensing Techniques for Monitoring Aquatic Vegetation



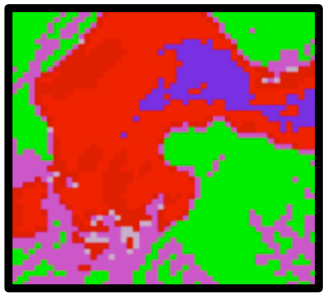
Hyperion image
collected 7-20-2011



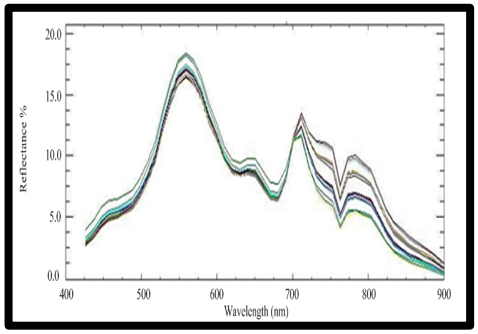
QUAC



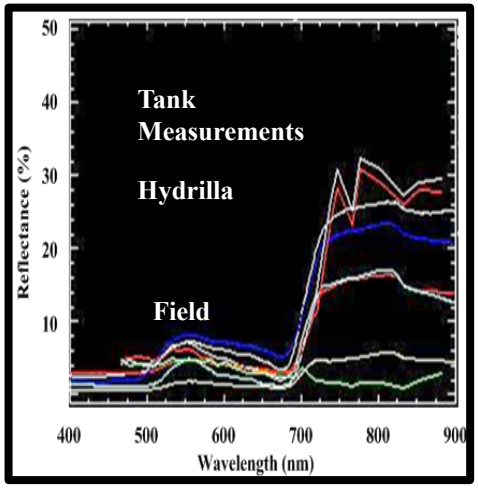
MNF



SAM



Spectral Z Profile



Spectral Z Profile

Conclusions

- Blue-green algae can be identified by collecting the endmember spectra
- Hyperion sensor identified the hydrilla canopy from the MNF and SAM images results and the spectral signatures were matched to the spectral library
- In-situ tank and field measurements established a baseline for determining the spectral signatures of hydrilla.
- Field measurements determined whether the hydrilla was emergent (floating) or submergent by the peak reflectance of 16 % and 6 %. A reflectance less than 10 % indicates that the hydrilla is submerged.

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