

Development of an Unmanned Aerial Vehicle Assisted Monitoring System for Algal Bloom Monitoring

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The project aims to develop a practical remote sensing method for the monitoring of surface anomalies (i.e. algal blooms) in bodies of water through feature extraction from digital aerial images.

The technique involves taking aerial photos of a body of water from medium altitudes (~100m) using UAV's equipped with onboard camera/s. The spectral properties of these images are correlated with plankton levels in the water. The reliability of the system is determined by in situ water sampling and analysis using accepted analytical microscopy methods.