

# Summary of techniques developed

## Use Multiple Sensor Inputs

DGPS (WAAS)

IMU: Inertial  
Measurement  
Sensors

## Algorithms

Kalman Filter  
Kalman Smoothing

## Outputs

Direction & Roll  
Calculations  
For Cross-track Pixel  
Shifts or Image  
Resampling

Image Corrected for  
Platform **Directional**  
Changes and **Roll**  
Motion

See: Bostater, C. Coppin, G., Levaux, F., Jones, J., Frystacky, H., *Mobile Platform Pushbroom Sensor Motion Control, Image Corrections and Spectral Band Selection: Examples of Hyperspectral Imagery Using Low Flying Aircraft and Small Vessels in Coastal Littoral Areas*, In Proceedings: Robots for Risky Interventions and Environmental Surveillance-Maintenance (RISE-2011), International Robotics Programme Workshop, Sponsored by the International Advanced Robotics Programme (IARP), E. Colon, (ed.), Royal Military Academy, Brussels, Belgium, 19 pp. (invited talk & paper).