

Opportunity: QA4UAV – Quality Assurance for UAV Data

Project Leader Dr Nathan Quadros, CRCSI
Research Team Jess Keyzers, CRCSI; Riyas Deen, CRCSI
Project Participants Approaching potential partners
Objective An automated quality assurance (QA) software tool for unmanned aerial vehicle (UAV) imagery and photogrammetric products
Outcomes QA4UAV could deliver quality assurance by:

- An online Form Editor for Tender and Report Form creation, summarising the acquisition specifications and final project report respectively
- Desktop
- UAV QA software that runs a set of automated checks
- A point cloud viewer for visual checks
- A standard online QA Report providing the results

ACQUIRING ACCURATE MLS DATA WITH QA4MOBILE



Innovation

A software product for automated UAV data quality assurance, leveraging the CRCSI developed QA4LiDAR & QA4MOBILE software.

Standard Checks

- ✓ Delivery completeness and file corruption
- ✓ File naming, attributes and coordinate system
- ✓ Form comparison
- ✓ Classification statistics
- ✓ Accuracy of control network

UAV Data Checks

- ✓ Imagery resolution and overlap
- ✓ Imagery survey control alignment
- ✓ Point cloud quality & vertical accuracy
- ✓ DSM quality & accuracy
- ✓ Visual review platform

Transformation

Low barriers for entry to the UAV market have resulted in many novice suppliers with little understanding of spatial products. QA4UAV will provide an easy method for QA checks leading to improved quality and reliability of UAV data acquired in Australia.

UAV point cloud acquired by Australian UAV using an ebee UAV to capture cliff erosion at Clifton Springs

