

Wacol Emesent MLS Range - Results Summary



DOCUMENT CONTROL

Project Number: 3206
Project Name: 3206 – Wacol Emesent MLS Range
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1. Introduction:

Date of capture: June 2024

For the purposes of testing the accuracy of the Vehicle RTK solution, Emesent captured data along a 2km stretch of road in Wacol, Brisbane. Vehicle RTK was mounted to the back of a van to give good visibility of the road surface. 6 passes in either direction at approximately 50km/h were completed with a total capture time of 50 minutes. The baseline length was a maximum of 1km, with the Emlid RS3 rover connected to a local base station.

The data was reprojected to GDA2020 MGA Zone 56 and a geoid applied (AHD). No ground control was used in the processing of this dataset.



2. Accuracy assessment:

Control Network

To assess the accuracy, the dataset was compared against 75 quality control points which Orion Spatial Solutions established on the 2km stretch of road using a Leica TS13 Total Station and Leica LS15 Digital Level, in accordance with Queensland Government Transport and Main Roads Surveying Standards.



Example Control/QA Point (Tip of Arrow / Corner of Continuity Linemarking)



Example group of Control/QA points

For a full copy of the survey control network report, please contact Emesent.

Global Accuracy

The Vehicle RTK solution achieved the following global accuracy:

**Horizontally 68% of the results were within 31mm and 95% of the results were within 51mm.
Vertically 68% of the results were within 18mm and 95% of the results were within 26mm.**

	Horizontal	Vertical
RMSE	0.030m	0.016m

See below tabulated results demonstrating Orion Spatial Solutions results:

