PRODUCT OVERVIEW

A SPECIALISED LiDAR PRODUCT



Aerial LiDAR point height data acquisition is a well established technology for determining accurate elevation models. This point data is traditionally collected in a square or rectangular pattern and specified in points per square metre. In specific use cases, such as corridor mapping or erosion gully monitoring, greater level of detail are required for intricate feature detection or vegetation penetration.

Fortunately, Outline has solution. super™XS takes advantage of proprietary aerial data collection methodology and advanced data processing techniques to deliver ultra high resolution cross-sectional point data, revealing the highest level of detail and accuracy. This level of detail far exceeds traditional square or rectangular based datasets.

super™XS data is collected in cross-sectional lines placing the data points at ~2cm apart along the section. The lateral distance between cross-sections is ~1m. The reliability of the super™XS LiDAR data is optionally improved through a proprietary smoothing algorithm. Smoothing generates a smaller point cloud with the removal of redundant LiDAR points making data management simpler.

super™XS product is optionally available at the time of quotation and must be selected prior to data collection to allow for specific flight planing and data collection protocols.

Powered by superXS technology

KEY LiDAR FEATURES

Data Integrity
Industry-leading accuracy and point density

Range
3D LiDAR point cloud captures over small or large areas

Bespoke Captures
Flexibility to target specific capture windows

Multiple Products
LiDAR elevation data delivered with optional fully co-registered aerial imagery. Delivery of DSM and DEM models plus automated derivatives such as vegetation height, vegetation canopy cover and building footprints

GIS Ready
Final images are ready for direct download into GIS systems or viewed directly in Outline's secure GMap™ web portal

Variety of Models
Range of models, including DEM, DSM, CHM, 3D and more

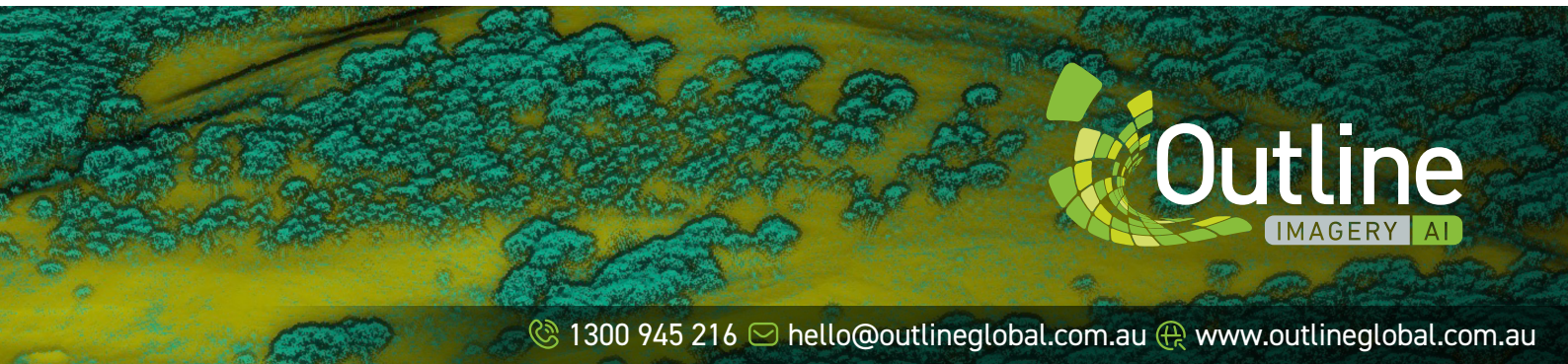
SPECIFICATIONS

Point spacing	from 2cm along section 1m between sections
Features	Good for intricate detail
	for survey strings
	Vegetation penetration
	Erosion gullies
	Corridors

INDUSTRIES

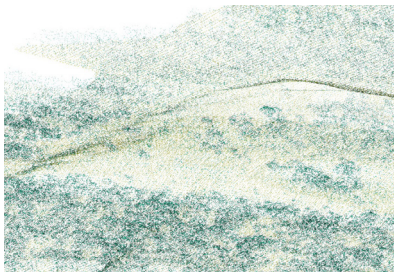
Oil & Gas · Mining · Environmental · Infrastructure · Forestry · Urban

The combination of flexible GTech™ Imagery and LiDAR capture platforms, quality data, advanced AI and easy to use cloud delivery platforms makes the choice simple, speak with Outline today!

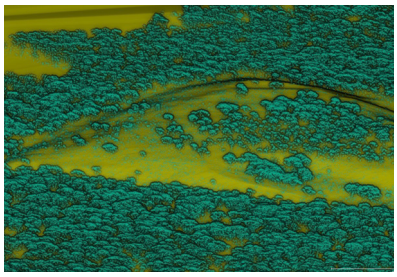


EXAMPLES OF LiDAR superXS™

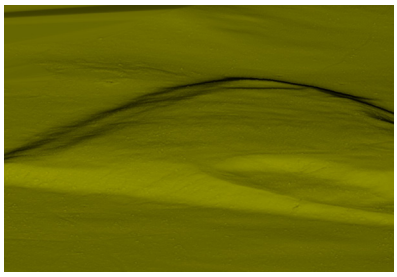
Example: super™XS forest canopy penetration



▲ Point cloud



▲ Precise clear tree and bare earth classification

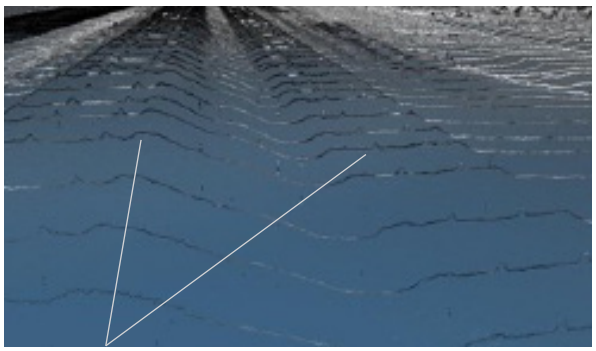


▲ Resulting 'clean' bare-earth model

Example: very high detailed rail line feature mapping



▲ Conventional point cloud data



▲ super™XS identifies exposes the finer detail the rail tracks



▲ High resolution colour image of railway line

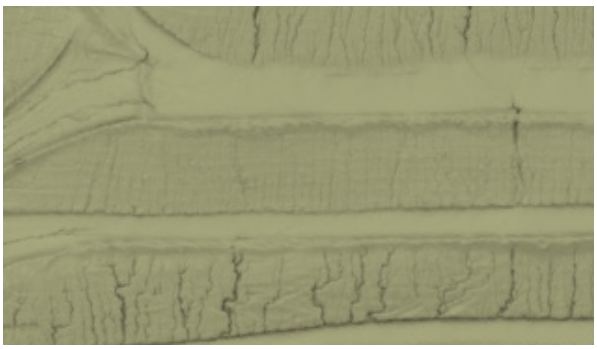


▲ super™XS cross sectional rendition of the point data

Example: super™XS high detail erosion gullies



▲ Colour image



▲ Detailed super™XS model

Outline IMAGERY AI