



eArthpIx

Geospatial consultant

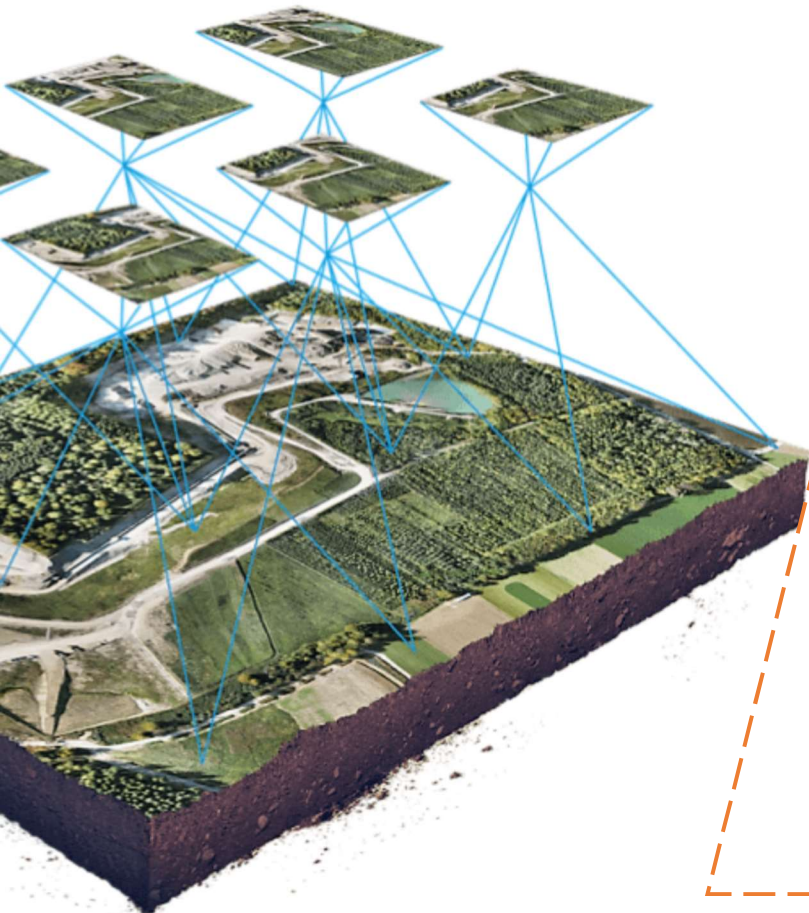
About us

We build and deliver world-class professional consultancy, advisory and solution services to both public and private sectors in the areas of geoinformatics where Artificial intelligence (AI) and GIS intersect. All our expertise also offers services in the automation of UAV drone/LiDAR surveying and mapping in infrastructure, agriculture, industrial, mining and surveillance sectors.



Aerial survey

An aerial survey refers to the capturing the aerial photos using unmanned aerial vehicle (UAV), with respective sensors, such as RGB or multispectral cameras, and LiDAR payload. In case of a drone survey with an RGB camera, the ground is photographed several times from different angles, and photogrammetry technique uses coordinates tagged in image and combines images that contain the same point on the ground from multiple vantage points to yield detailed 2D and 3D maps



MAIN ADVANTAGES

- ❖ Reduce field time (approx. 7x)
- ❖ Reduce survey cost
- ❖ Surveying in inaccessible area
- ❖ Accurate measurements at millions of points
- ❖ Different kind of data can be generated
 - ✓ Orthomosaic
 - ✓ DSM, DTM
 - ✓ Contours
 - ✓ 3D Models



SERVICES

- ❖ Topographical surveys
- ❖ Land management and development
- ❖ Urban Planning

- ❖ Assessing the impact of extreme events (cyclones/floods/tsunami)



- ❖ **CONSTRUCTION**

- Tracking construction progress
- 3D models of sites

- ❖ **INSPECTION**

- Structures like bridges, buildings and monuments inspection
- Road/Rail monitoring
- Slope monitoring

- ❖ **AGRICULTURE**

- Monitor plant health
- Perform plant count

- ❖ **MINING**

- Inventory and management of stockpile volume
- Mine or quarry monitoring and operation planning
- Assessment before drilling or blasting

BREAKWAKER ALIGNMENT ASSESSMENT



Deliverables

❖ **Orthomosaic**

This can be used to digitise the existing breakwater, port facilities.

❖ **Digital Surface Model (DSM)**

The DSM can be used to extract the model geometric properties such as slope of breakwater, top width, length of breakwater and it is possible to obtain the tetrapod mean diameter.

❖ **3D Model**

This will be very useful for virtual inspection of tetrapod's

❖ **Quality Report**

This summarises the data processed and accuracy of model outputs.