## CASE STUDY CHCNAV LIDAR STOCKPILE



## CLIENT MAAS GROUP HOLDINGS LOCATION ORANGE, NSW

Equipment: Drone: DJI Matrice 350 RTK Scanner: CHCNAV AlphaAir450

Software: CoPre 2.0, Cyclone3DR, Pointerra3D, 12d

YOUTUBE LINK

The client had requested a stockpile survey to determine its volume for the purpose of monetary claiming period. Precise Spatial Services Pty. Ltd. took the opportunity to conduct a drone LiDAR flight alongside the conventional method of a surveyor using a GNSS rover to showcase the results between LiDAR and conventional.

With the collection of both data sets (LiDAR and conventional methodology), Precise Spatial found a variation of only 0.5% between the two datasets with the LiDAR dataset having a larger volume.

A point to surface comparison was also undertaken with 90% of the conventional dataset falling within 50mm of the LiDAR surface and 74% within 30mm. Using a drone equipped with LiDAR offered advantages in terms of time, repeatability and most importantly safety. This is by removing the surveyor needing to be physically on the stockpile, but also in situations where a stockpile or an area in general, is inaccessible due to contaminated material such as asbestos or if the integrity of the stockpile is compromised.

