

Check if job file or calibration error on HGNSS

A way to confirm whether or not is job file or calibration related is to check the “local antenna position” with a rover as close as possible (obviously not possible to be exactly correct due to antenna casing etc, but if you are chasing a discrepancy of 1m this can help...) to the **primary antenna position** (rear if mounted in “pitch mode”) of the VR500 (or, the LHS antenna if VR1000 excavator)



### Raw Position Information

Latitude: S26°41'58.9228"  
Longitude: E153°07'08.0862"  
Height: 49.623m  
Separation: 43.408m  
Orthometric: 6.215m  
Speed: 0.011m/s  
Solution: RTK Fixed  
SATS Used: 15  
Visible SATS: 33

### Local Antenna Position

Northing: 7,046,819.438m  
Easting: 511,829.143m  
Elevation: 5.751m  
Separation: 43.872m

- The **WGS84 height** should = **Separation** + **Local Elevation**
- Note: ignore “raw position information – Separation”, this uses a ‘default geoid’ loaded into the receiver and is not relevant when a third party geoid file is loaded. We will be looking to remove or modify this to prevent confusion in future.
- The elevation value from your rovers shot should be within roughly 50mm (the easiest way to do this is place rover directly ontop of primary antenna location with a 0 pole height, don’t stress too much about levelling it since you are chasing metres here not mm at this stage
- If this information does not match, it is job file (projection OR geoid, OR base station/localisation) related