

# Sudden Vertical Shifts/Jumps

## Symptoms:

The elevations may suddenly and randomly jump (0.3 to 4m / 1 to 10ft), requiring going back and re-zeroing. This occurs at various times (minute to hours apart), but not predictably. RTK fix is sometimes dropped, but regained in 1-3 seconds, however, the elevations do not return to the original values. For smaller shifts in elevation, see [Vertical Performance Issues \(GPS drift\)](#).

**When investigating in detail:** In the GPS logs, these jumps only occur at the start of a new second when an RTK correction is applied.

## Possible Cause:

- **Base receiver has an intermittent failure.**

## Solutions:

- **Update the receiver software of the base and rover.**
  - **Swap the base receiver with a working receiver.**
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