# QGIS Application - Bug report #19845
# Projection Issue with 3D Points

2018-09-13 09:32 PM - Matthew Jackson

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| **Status:** | Open | | |
| **Priority:** | Normal | | |
| **Assignee:** | | | |
| **Category:** | 3D | | |
| **Affected QGIS version:** | 3.2 | **Regression?:** | No |
| **Operating System:** | Windows 10 | **Easy fix?:** | No |
| **Pull Request or Patch supplied:** | No | **Resolution:** | |
| **Crashes QGIS or corrupts data:** | No | **Copied to github as #:** | 27669 |

**Description**

Good Afternoon,

I encountered a bug in QGIS 3.2 where the relative altitude clamping option for a 3D poinnt does not work as intended if the elevation raster is not in the same coordinate system as the project coordinate system.

To replicate:

1. Create a 3D point with say a 200m Z value(can be in either project coordinate system or other)
2. Choose an elevation raster (in my example I used a DTED map (EPSG:4326))
3. Set Project CRS to something that does not match (2). In my case I used EPSG:3857.
4. Determine elevation at 3D point generated in (1), and create a second 3D point that has height = 200 + elevation just calculated
5. Compare heights in 3D view (use relative altitude clamping for (1), and absolute for (2))

If elevation raster is reprojected, the elevation seems to be interpreted as zero, resulting in (1) being rendered at a lower height than (2). I did verify that if one re-projected the elevation raster to the project CRS and used it as your base elevation map, then the relative clamping worked as intended.