

# Brandberg Mountain/Konigstein Elevation Survey

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## Introduction

On Aug 5, 2025 I used a differential GNSS unit capable of sub-meter vertical accuracy to measure the location and elevation of the summit of Brandberg Mountain/Konigstein. I measured the true summit is the boulder 60m south of the trig pillar. The summit has elevation 2573.17m +/-0.11m (orthometric height, EGM2008, 95% confidence interval).

## Methodology

I mounted a Trimble DA2 differential GNSS unit on a tripod on the highest rock on the trig pillar summit of Brandberg Mountain/Konigstein and logged data for 30 minutes. I then moved the receiver to the top of the highest boulder, 60m south of the trig pillar, and logged data for 30 minutes (Fig 1). I accounted for antenna height above ground and post-processed the data using TrimbleRTX.

Additionally, I used a 10-arcminute 5x Sokkia Abney level to measure relative angular inclinations and declinations between these two locations.

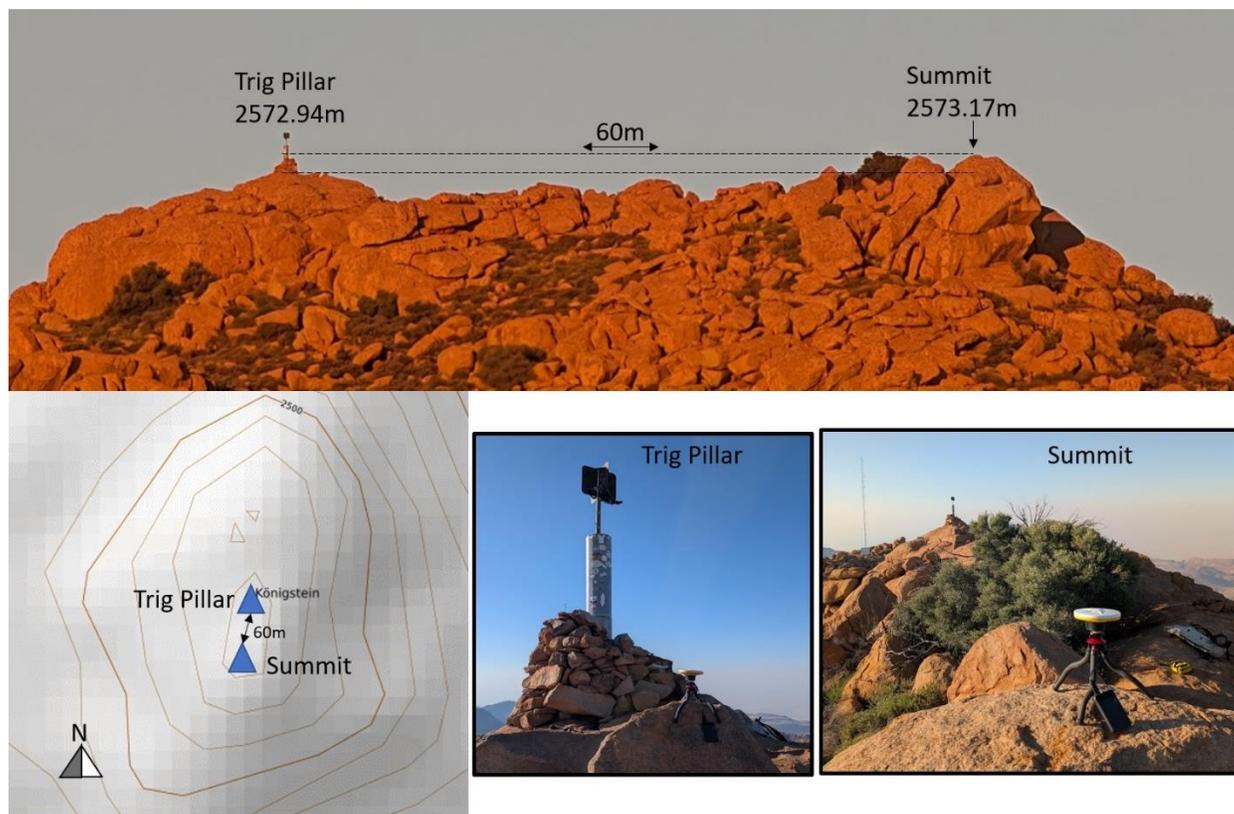


Figure 1: Top – view looking East at trig pillar (left) and true summit (right). Bottom left – location of Trig Pillar and true summit. Bottom right – the DA2 mounted on the Trig Pillar location and on the summit.

## Results

Results will be reported as orthometric height using EGM2008 geoid.

I measured the elevation of the trig pillar location is 2572.94m +/-0.16m and the elevation of the summit location, 60m south of the trig pillar, is 2573.17m +/-0.11m (95% confidence intervals) (Fig 2). With the Abney level I measured the summit is approximately 0.3m taller than the trig pillar location, which is consistent with the DA2 data.

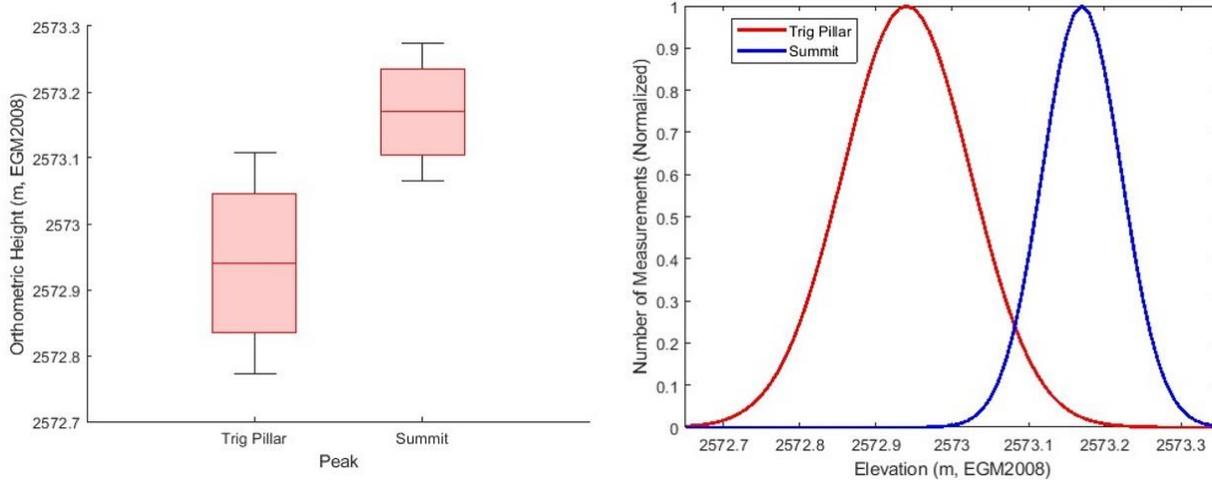


Figure 2: Left – box-and-whisker plot of elevation data for trig pillar and summit. Box edges at one-sigma errors and whisker at two-sigma errors (95% confidence intervals). Right – histograms of elevation data assuming normal distributions.

## Discussion

The true summit of Brandberg Mountain/Konigstein is the boulder 60m south of the trig pillar, with elevation 2573.17m. This is 0.23m taller than the trig pillar location.