What is the height between each of the build lines (contour lines) on your model?

(There are 126 layers on the Cwm Idwal model and 68 Layers on the Long Mynd model)

- The highest point on the Cwm Idwal model is Glyder Fawr (1001m) 645581
- The base of the model is 0m (sea level)
- There are 126 printed layers between sea level and the top of Glyder Fawr (0m—1001m)
  \[
  \frac{1001}{126} = 7.94
  \]
- Therefore each printed layer is 7.94m high

How tall would you be if scaled to the same scale as your model landscape (1:50,000)

Can you find an object to compare this to?

- I am approximately 1.8m tall.
- The model is scaled at 1:50,000 in the x, y and z axes.
- 1cm on the model represents 500m on the ground
  - 0.2cm = 100m
  - 0.02cm = 10m
  - 0.002cm = 1m
  - I would be 0.002cm x 1.8 tall on the model
  - I would be 0.0036cm tall (or 0.036mm)

Alternatively you could reach the same result by the following method.

- Model scale is 1:50,000
- So my height (cm) x 1/50,000 would give me my scaled height.
  \[
  \frac{180}{50,000} = 0.0036cm \text{ (or 0.036mm)}
  \]
- A quick google search finds that a human hair has a diameter of 0.04—0.1mm.

Field Studies Council 3D model gallery - download and print your own, and share any models that you make at Thingiverse.com

https://www.thingiverse.com/Field_Studies_Council/

How-to-guide—creating 3D Printable landscapes


Using 3D printing to support landscape exploration and interpretation

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