

AGS .stl Store

Simplified 3D Provincial Geological Framework Model of Alberta, Version 1, 3D Print

In 2017, a high-resolution provincial-scale 32-layer 3D geological model was created in Petrel software as part of AGS' Geological Framework. The [3D Provincial Geological Framework Model of Alberta, Version 1](#) was published in 2018 (Figure 1).

The high-resolution model was converted to a simplified 9-layer version in 2018 (Figures 2 and 3). The layers were exported to STL-format files for 3D printing (Figure 4).

Vertical exaggeration: 50x

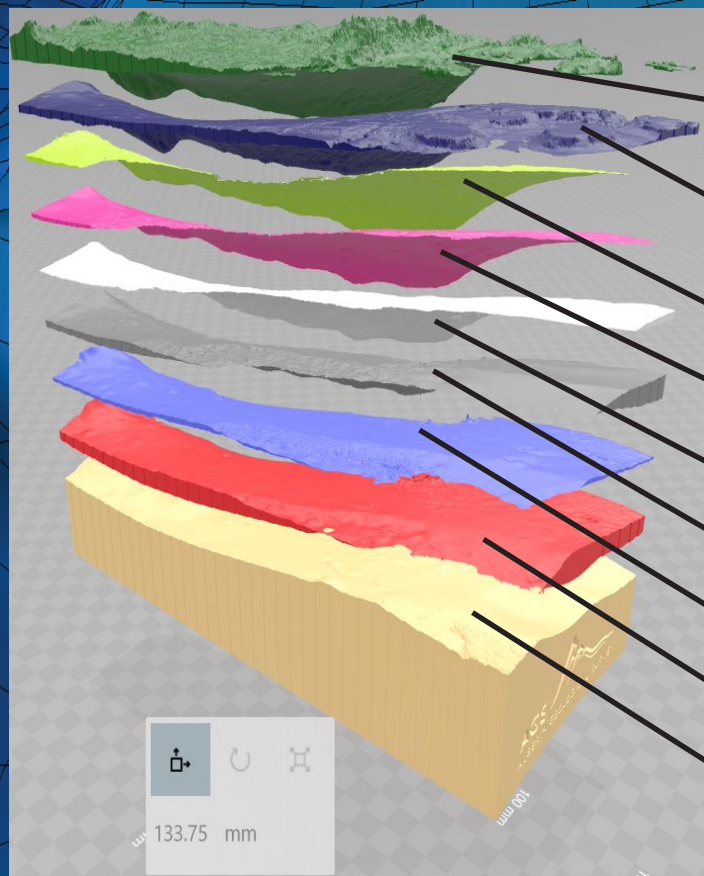
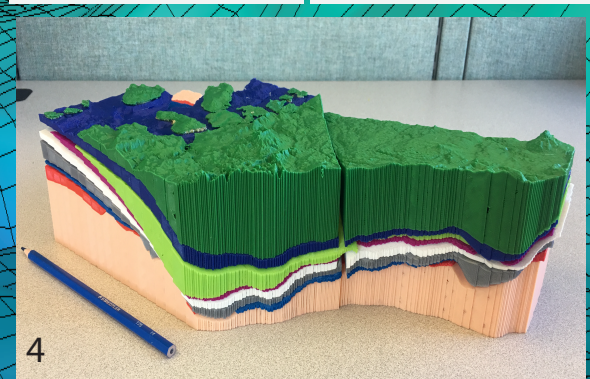
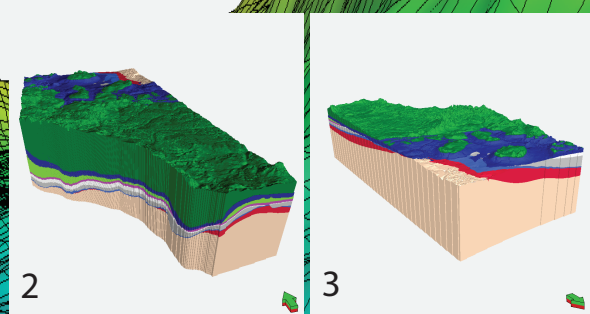
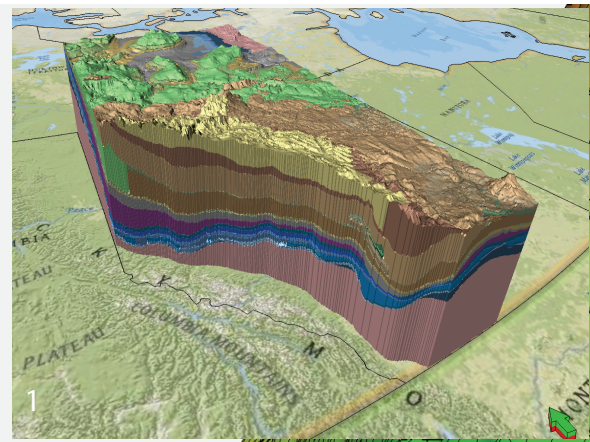
Number of layers: 9 (see legend below)

Actual geospatial representation:

~650 km x 1200 km x 5 km depth

Size of print bed required: X = 600, Y = 400, Z = 400 (note: if your print bed is smaller, you will need to slice the model in (at least) two due to the thinness and complexity of the layers).

Amount of filament required: Layer 1: 193000 mm, Layer 2: 104000 mm, Layer 3: 50000 mm, Layer 4: 48000 mm, Layer 5: 61000 mm, Layer 6: 90000 mm, Layer 7: 79000 mm, Layer 8: 81100 mm, Layer 9: 260600mm



Layers/Intervals:

- 1) Bedrock surface to the base of the Fish Scales Formation
- 2) Base of the Fish Scales Formation to sub-Cretaceous unconformity
- 3) Sub-Cretaceous unconformity to Banff Formation top
- 4) Banff Formation to Wabamun Group top
- 5) Wabamun and Winterburn groups
- 6) Woodbend Group
- 7) Beaverhill Lake Group
- 8) Elk Point Group to Precambrian top
- 9) Precambrian top to arbitrary flat base at 5000 m below sea level