

Atka Bay - Antarctic Terrain Model



Necko

[VIEW IN BROWSER](#)

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Summary

3D Elevation Model of Atka Bay, located near Neumayer Station in Antarctica



4.62 hrs



1 pcs



0.20 mm



0.40 mm



PLA



33 g



Prusa
MK3/S/S+

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Tags: [antarctica](#) [southpole](#) [neumayer](#) [polarresearch](#) [atka](#)

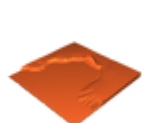
3D Elevation Model of Atka Bay, located near Neumayer Station in Antarctica.

The model is created from elevation data taken from REMA (Reference Elevation Model of Antarctica), which you can browse interactively here: <https://livingatlas2.arcgis.com/antarcticdemexplorer/> . The source data I used has a resolution of 8 m per pixel. I transformed the elevation mesh to an STL model using a custom Python script. The model is exaggerated in the z-axis to show more topographic details.

To print the model with a high surface resolution, you can use the variable layer height feature of your slicer. In the provided .3mf and .gcode files, the layer height varies between 0.20 mm and 0.07 mm. Insert a color change after 1.00 mm to distinguish the ocean from the iceshelf.

Data: Howat, I. M., Porter, C., Smith, B. E., Noh, M.-J., and Morin, P.: The Reference Elevation Model of Antarctica, The Cryosphere, 13, 665-674, <https://doi.org/10.5194/tc-13-665-2019>, 2019.

Model files



atkabay.3mf



atkabay.stl

Print files



atkabay_02mm_pla_mk3s_4h37m.gcode

PLA 0.40 mm 0.20 mm 4.62 hrs 33 g Prusa MK3/S/S+

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