Subject: Landscape prints: Mt. Rainier, Zion, Yosemite
Posted by TinyMtn on Thu, 17 Jan 2013 03:05:15 GMT
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I love mountains. I grew up in Michigan and now live in Massachusetts, so I don't get to see serious mountains much, but everything about them entrances me. Every nook and cranny exists because of some combination of forces of nature applied over time; every photo shows the strong influence of such monstrous objects on the atmosphere; every climb brings micro-landscapes into and then out of view. Mountains represent solidity, permanence, resistance to external forces. In their absolute massiveness, they remind us how small---and fortunate---we are.

As a computational physics student, I learned how to write software to simulate natural phenomena. I still do that, and it brings me a lot of joy. But never in my decade of work have I been able to recreate the real physics that generate mountains. No fractal would do. No simulation had enough fidelity. Thankfully, where I had failed, the USGS (and other worldwide government mapping agencies) had succeeded. Many years ago I began playing with their digital elevation data and rendering the aspect of mountains that they had captured. I focused on the shape only, with no other information to distract from the forms that nature took so long to create.

Shapeways now lets me turn all those years of virtual exporation into real items. Last year I wrote the code to make these models, and finally I am happy to begin sharing the fruit of that labor with the world. Say hello to TinyMtn. http://www.shapeways.com/shops/TinyMtn

Models with photos are:

Zion National Park (main valley, from tunnel up to start of Virgin River Narrows)
Printed at 100mm in "White, Strong, Flexible"
http://shpws.me/n83U

Yosemite National Park (central area, from bend in Merced to just past Clouds Rest)
Printed at 150mm in "White, Strong, Flexible"
(note: photos are of prototype model with support structure at the edge of the model)
http://shpws.me/n83k

Mt. Rainier (peak, from 4000' to 14000')
Printed at 200mm in "White, Strong, Flexible"
http://shpws.me/n829

I owe a lot to Shapeways' thorough descriptions of the materials and the often-mysterious modeling guidelines for making good, printable models. It's obviously the work of some number of

talented and curious people. I don't think I could have done it better. The knowledge that they collected and share worked its way into every step of my process flow. In addition, I found the forums filled with people who had the detailed knowledge necessary to solve some of my odd problems. I lurked there for a while, so I now should extend my thanks and gratitude to everyone who contributes thier experience there.

I hope you like TinyMtn models as much as I enjoy making them. There will be many more in the future.

-Mark

File Attachments

1) Rainier200_IMG_6916.JPG, downloaded 114 times

Subject: Re: Landscape prints: Mt. Rainier, Zion, Yosemite
Posted by thekarolina on Thu, 17 Jan 2013 06:37:50 GMT
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These are magnificent! Quiet and poetic, and the details on them are just exquisite.

I remember having a plastic-extruded topo map when I was young, and how satisfying it was to graze your hand over and around all the bumps and dimples. This is like a sophisticated, grown-up version of that.

Great work!