



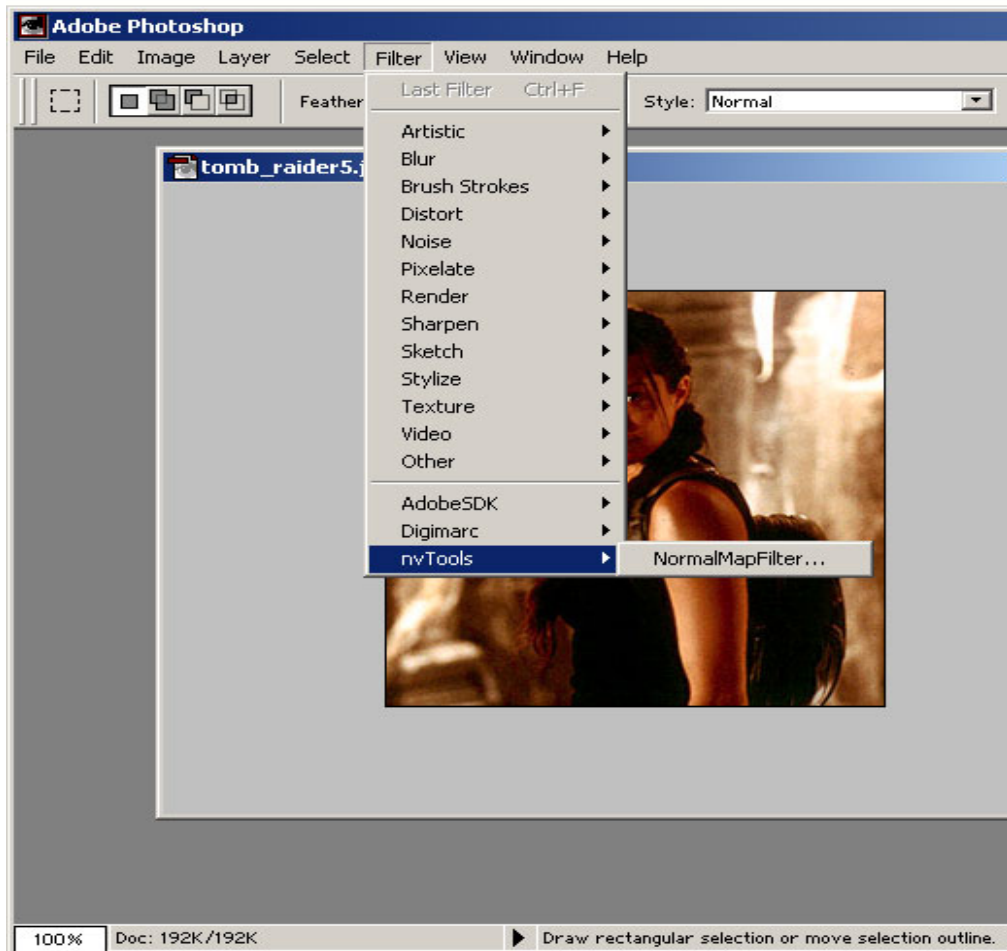
# User Guide

Normal Map Creation Filter  
Plug-in for Adobe Photoshop

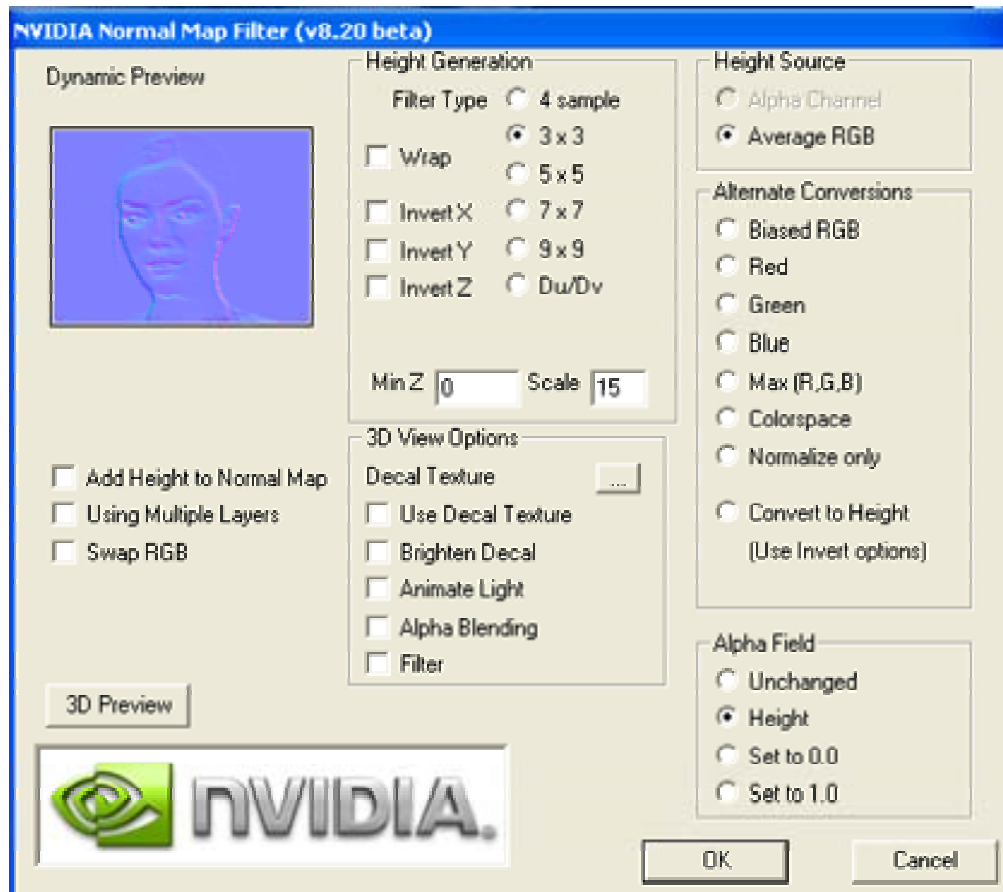
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# Introduction

The normal map filter plug-in generates a normal map from images. The normal maps generated are useful for per-pixel lighting. To get started select Filter->nvTools->NormalMapFilter in Adobe Photoshop.



## Usage



This is the dialog to create normal maps from height information. The height can come from the alpha or color channels.

The normals are created by using adjacent texels. You can specify how many in the "Height Generation" area.

**Scale** - Specifies how much to scale the height values

**MinZ** - Forces the "up" direction to be a minimum value

**3D Preview** - 3D rendered version using the normal map

**Du/Dv** - Use this to create EMBM maps

**Alternate conversions**

Biased RGB subtracts average color of image from each texel

Red - Use the red channel as height

Green - Use the green channel as height

Blue - Use the blue channel as height

Max - Use the maximum value from the R,G and B channel

Color space - Height =  $1.0 - [(1.0 - r) * (1.0 - g) * (1.0 - b)]$

Normalize Only – Image is already a normal map, just renormalize it

Convert to Height – This converts a normal map to a height field. Use Invert X, Invert Y and Scale of affect the output. This code has been provided by Fabio Policarpo.

**Alpha Field** - Specifies what is placed in the alpha channel after normal map generation

Select 'Using Multiple Layers' if you are are using Layers and cannot get the alpha channel to work

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## Notes

If your image does not have an alpha channel, the features relating to the alpha channel will be disabled and you will get this popup window.




The filter can only access what is currently selected, so be sure to have all channels selected.

Under Window->Show Channels select the alpha channel if you want to create normal maps from the alpha field.

## Contact

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Please send comments, feature requests, and bug reports to [texturetools@nvidia.com](mailto:texturetools@nvidia.com).



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