

A Quick Overview of the xTerrain_tools Toolbox for ArcGIS 10.1

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Introduction

This job aid is designed to show how to open the ArcToolbox window, add the Toolbox, and open the help panel for more information. Users need ArcGIS 10.1 and the xTerrain_tools_10.1_0.4.tbx toolbox.

Topography was proposed as one of the five soil-forming factors by Jenny (1941). Numerous papers cite the use of various terrain derivatives in support of soil mapping investigations. This suite of scripts was assembled to provide users an efficient means of developing some of the more commonly used derivatives. In addition, several scripts perform data pre-processing operations such as smoothing or data normalization.

Adding the Toolbox to ArcGIS

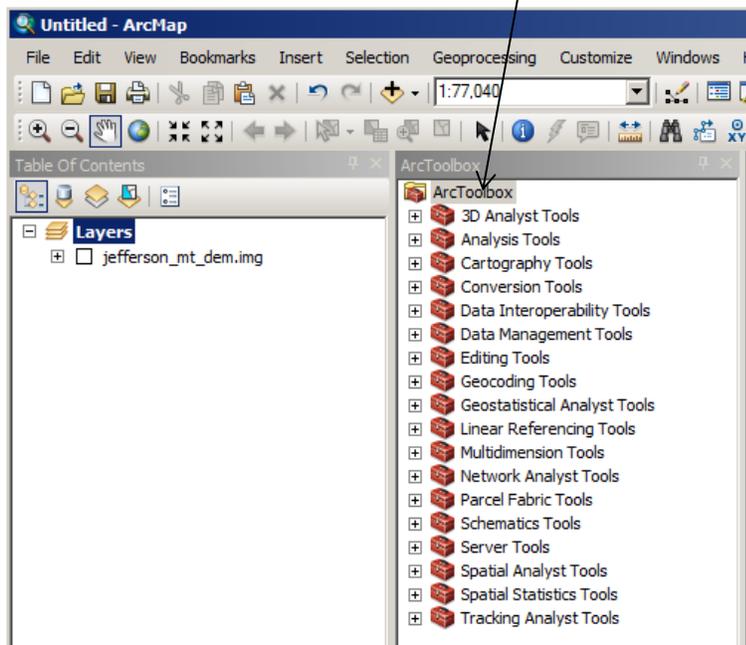
Objective

Show how to add the toolbox to ArcGIS.

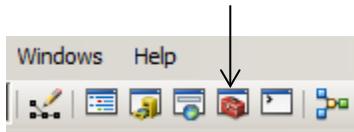
Procedure

Copy xTerrain_tools_10.1_0.4.tbx to a folder on your computer, for example, C:\workspace\scripts.

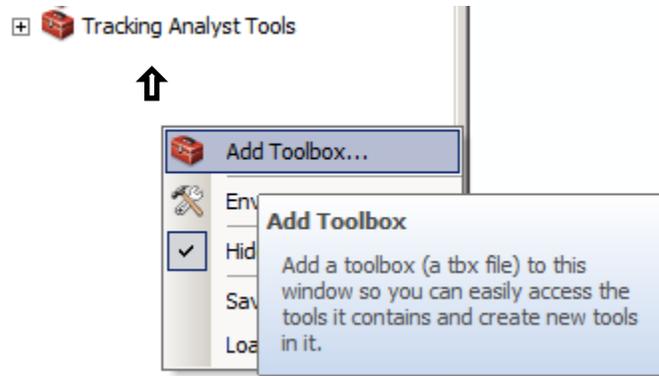
If you do not have the ArcToolbox window open,



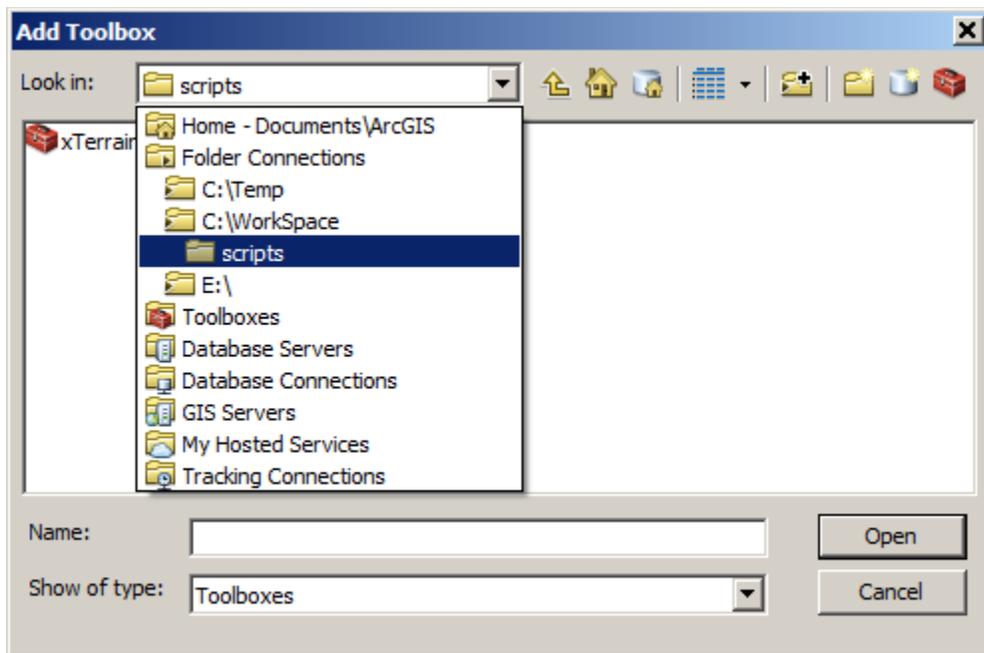
Click on the ArcToolbox button to add it to your GUI.



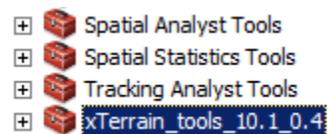
Right-click in the ArcToolbox window to add a toolbox.



Navigate to the folder location, select "xTerrain_tools_10.1_0.4.tbx," and click on "Open."



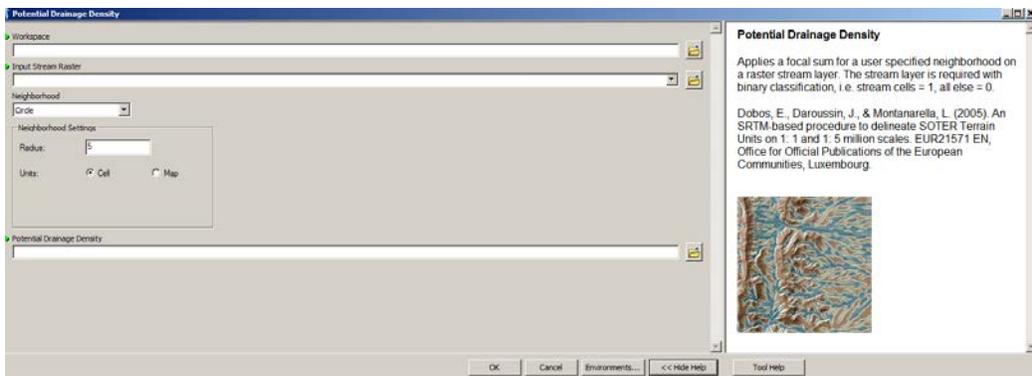
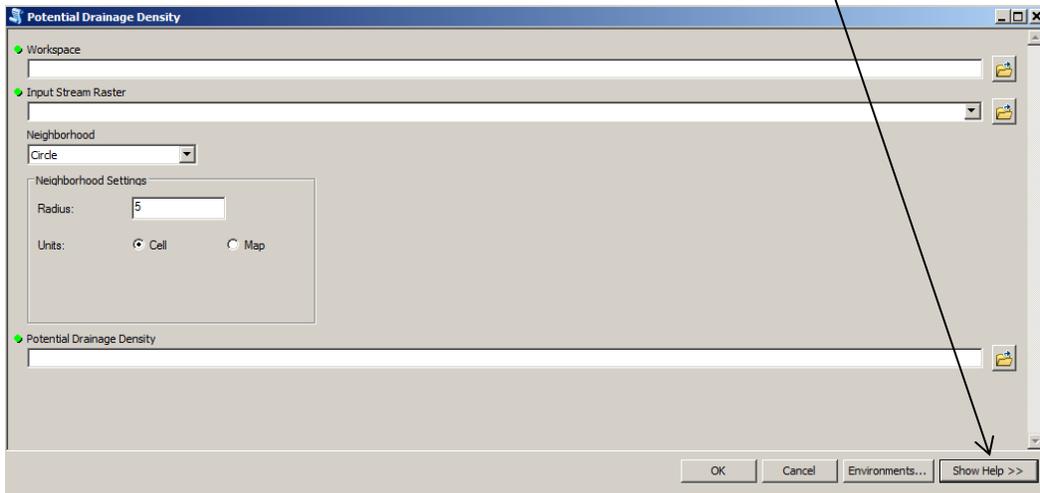
The toolbox is now added to the Arc Toolbox window.



Contents of the Toolbox

- xTerrain_tools_10.1_0.4
 - aspect_processing
 - Northness and Eastness
 - Northwestness and Northeastness
 - Create a Painted Relief
 - DEM Gaussian Smoothing and Slope Creation
 - Depression Cost Surface
 - Depression Depth
 - Fill No Data Gaps -floating point
 - Iterative focal smoothing
 - Linear Normalization
 - Potential Drainage Density
 - Relative Position
 - Relief
 - Relief Ratio
 - Roughness By Relief And Aspect
 - Roughness by std dev of relief
 - Slope Heterogeneity
 - Surface Area Factor

A description of the tools are provided in the Show Help>> panel.



Citations

Jenny, H. 1941. Factors of soil formation. McGraw-Hill, New York.