

This document attempts to provide instructions on one method to download seamless USGS 1-meter digital-elevation-model (DEM) 10-km x 10-km tiles from Amazon Web Services (AWS). This may be useful for times when TNM Download and/or the USGS Rockyweb server are down, or it may better fit your method of working.

You will need a GIS program capable of handling GeoPackage (.gpkg) files and a text editor with column mode, such as the free-for-the-downloading Notepad++.

You will likely also want to have a download manager such as the open-source uGet (for Windows and Linux) or some other way of downloading a group of files the URLs for which are listed in a TXT file (such as wget command in Linux). USGS provides instructions on downloading and using uGet [here](#).

Please advise Glenn Borkehenagen <glenn@inlandgps.com> via email if you encounter any broken links or have suggestions on how to make this document more usable.

1. The first order of business is to get an index to allow defining the desired tiles. An index in GeoPackage format is named **S1M\_Products.gpkg** and is available [here](#). Download that file and open it in your GIS software. Examining the attribute information for this layer shows that the field named **dataset** contains the actual TIFF file names as well as a partial path to the individual files.
2. Select the layer created in Step 1 and select the desired tiles. Remember how many tiles are selected. Then export the selected features to a CSV or TXT file, exporting only the **dataset** field.
3. Create a new TXT file that will be used in uGet, wget, or other similar tool. May as well turn off wordwrap in your text editor at this time. Now we need to start that TXT file with the beginning of the path to get to the TIFF files listed in the file created in Step 2.

The beginning partial URL is –

<https://prd-tnm.s3.amazonaws.com/StagedProducts/Elevation/>

Copy and paste that beginning partial URL into the new TXT file. Make sure to include the forward slash at the end.

4. Duplicate the beginning partial URL to match the number of tiles selected in Step 2.

If using Notepad++ and the number of selected tiles is small, simply place the cursor anywhere in the first line and execute **Ctrl + D** as many times as needed to generate the required number of lines.

If using Notepad++ and the number of selected tiles is larger, place the cursor anywhere in the first line and use **Macro > Start Recording**, then **Ctrl + D**, then **Macro > Stop Recording**, then **Macro > Run a Macro Multiple Times...** In the dialog enter the number of tiles minus 2 in the **Run \_\_ times** field and click **Run**.

5. Now append the final path information from the CSV or TXT file from Step 2 to the beginning partial URLs in the TXT file from Part 4.

If using Notepad++, open the file from Step 2, hold down the **Alt** key to put Notepad++ into column mode, then left-click and drag to select all the **dataset** values, then **Ctrl + C** to copy to clipboard.

Then switch to the TXT file from Part 4, again hold down the **Alt** key to put Notepad++ into column mode, then left-click at far-right end of top line of beginning partial URLs, drag down to the last line and one column to the right, then **Ctrl + V** to paste in the **dataset** values. Make sure you did not leave any blank spaces. Save the TXT file, which is now ready for use with uGet, wget, or other similar tool.