

## Downloading LiDAR—MN DNR—FTP: Site

On this site, you will be downloading right from the Minnesota DNR FTP website. This site contains LiDAR for Eastern & Central & Southern Minnesota (counties that are not in the RED RIVER BASIN). We strongly suggest using Internet Explorer for navigating this site, due to the fact that other browsers can corrupt the "Unzipping Tools". On this site, you will be downloading "LAZ" files (Zipped up .las files). These files can not be unzipped by standard zipping tools.



**Note: All of the data on this site is in UTM 15**

Starting Point for Downloading—

<ftp://ftp.lmic.state.mn.us/pub/data/elevation/lidar>

When you first enter the site, it will look like the window below.

The screenshot shows an Internet Explorer browser window displaying an FTP directory listing. The address bar shows the URL: <ftp://ftp.lmic.state.mn.us/pub/data/elevation/lidar>. The menu bar includes File, Edit, View, Favorites, Tools, and Help. The main content area shows the title "FTP directory /pub/data/elevation/lidar at ftp.lmic.state.mn.us" and a list of files and folders:

Name	Size	Type
12/17/2012 03:09PM	711,872	<a href="#">LAS File Processing Using LASTOOLS.pdf</a>
03/27/2012 12:00AM	44,276	<a href="#">about_this_data.rtf</a>
12/14/2012 07:10PM	Directory	<a href="#">county</a>
06/06/2012 07:02PM	000,000	<a href="#">projects</a>
	3 KB	<a href="#">raw_data_readme_first.rtf</a>

The "Page" menu is open, showing options such as "New Window", "Cut", "Copy", "Paste", "Blog with Windows Live", "E-mail with Windows Live", "Translate with Bing", "All Accelerators", "Save As...", "Send Page by E-mail...", "Send Link by E-mail...", "Edit with Microsoft Word", "Compatibility View", "Compatibility View Settings", "Zoom", "Text Size", "Style", "Encoding", "Caret Browsing", "Properties", "View Source", and "Open FTP Site in Windows Explorer".

If you prefer to navigate like you are in Windows "File Explorer"

Using the "Command Bar" go to "Page" & "Open FTP Site in Windows Explorer"

Using the "Menu" bar" go to "View" & "Open FTP Site in Windows Explorer"

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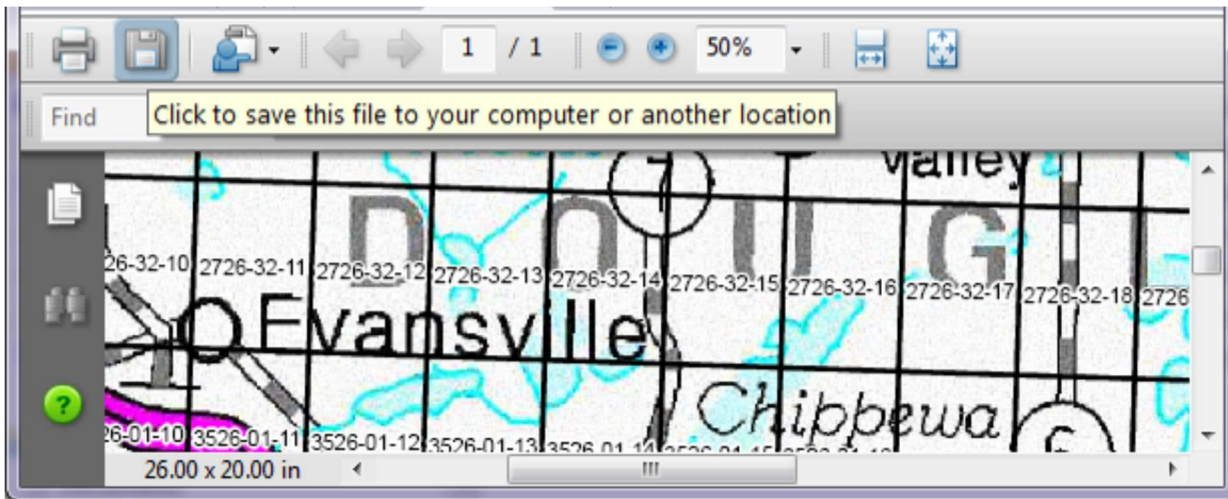
You are now ready to "Download" data from the MN DNR LiDAR Site.



1. Click on the "county" folder (directory)
2. Click on the "county name" folder (directory) you want to download.
3. Click on the "tile\_index\_map.pdf".

Name	Size	Type	Date modified
geodatabase		File folder	2/22/2011 11:22 AM
lasinfo		File folder	9/2/2011 11:15 AM
laz		File folder	9/10/2011 4:48 AM
douglas_county_validation_report...	552 KB	Adobe Acrobat Document	4/26/2011 2:14 AM
Minnesota Department of Natural ...	43 KB	Rich Text Format	11/4/2009 2:20 AM
raw_LiDAR_Data_README.rtf	53 KB	Rich Text Format	3/24/2011 6:10 AM
tile_index_map.pdf	3,718 KB	Adobe Acrobat Document	3/23/2011 9:28 AM

4. Once the PDF opens. "SAVE" this back to your C:/GKData/Imagery/LIDAR/County Name folder. This will require you to Create some new folders (Douglas in this example)



5. Browse / navigate this map to find your "rough field location"
6. Take note of the "Tile Numbers" that it will take to cover the area you want to download. Suggest writing these ##'s down on a piece of paper.
  - For our example here—Tile #'s 2726-32-12 & 2726-32-13
7. Go back to your "FTP" File Explorer Window & Open the "laz" folder (directory)
8. Choose (highlight) the Tile # you want to download & "Right Click" & "Copy To Folder"
  - Note: Save these back to your C:/GKData/Imagery/LiDAR/County Name folder (Douglas)
  - Download all the "tile #'s" you need for your project before going to the next step.

Name	Size	Type	Date modified
2726-32-12.laz	15,862 KB	LAZ File	9/2/2011 9:31 AM
2726-32-13.laz		File	9/2/2011 9:31 AM
2726-32-14.laz		File	9/2/2011 9:31 AM
2726-32-15.laz		File	9/2/2011 9:32 AM

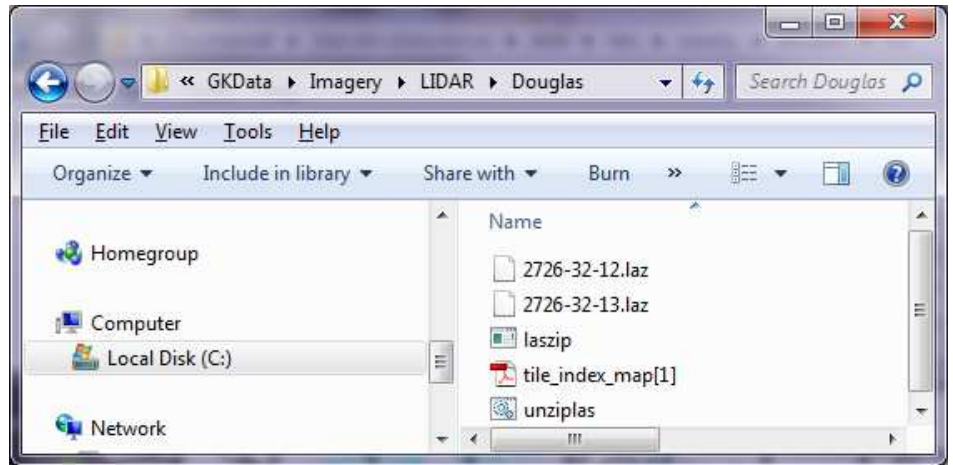
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9. Choose (highlight) the "laszip.exe" & "unziplas.bat" files & Right Click" & "Copy To Folder"  
 - Note: Save these back to your C:/GKData/Imagery/LiDAR/County Name folder (Douglas)  
**-IMPORTANT!!!! These files have to be in the same "Folder" as the LAZ files!!!!**

10. Double Click on the "unziplas.bat" file

11. A "DOS" window will open up like below. **DO NOT CLOSE IT**. It will close automatically.

Note: It takes up to 30 seconds per LAZ file, so be patient.



12. When finished, you will have a folder that looks something like this.

13. Suggest creating new folder named "Processed LAZ" and moving all your Processed LAZ file here so you don't have the "laz extractor" re-processing these files.

14. Go back to the "Processing Lidar" section of the user manual.

