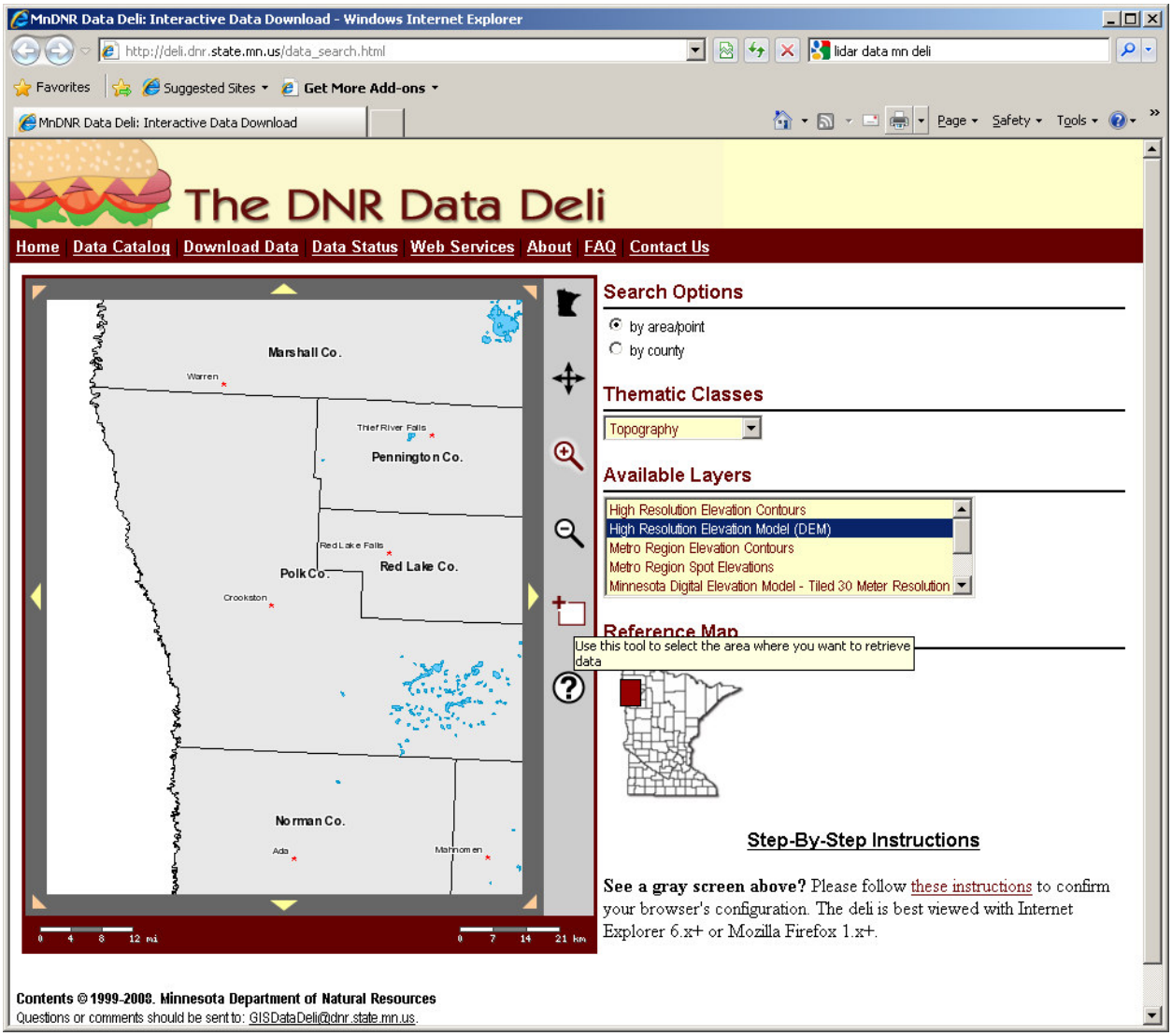
Downloading & Processing LIDAR Data

LIDAR (Light Detection and Ranging) data is elevation taken using an airplane. The data is collected using a laser and measuring the reflectance. The accuracy is within 6 inches and the resolution is 2 meters.

Minnesota – Downloads

- http://deli.dnr.state.mn.us/data_search.html
- Once at the site select the settings like shown below.
- Use the Zoom Tools to get yourself to the location you want
- Finally select the location using the  to choose the area to "Retrieve Data"



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204 Fifth Street East
Halstad, MN
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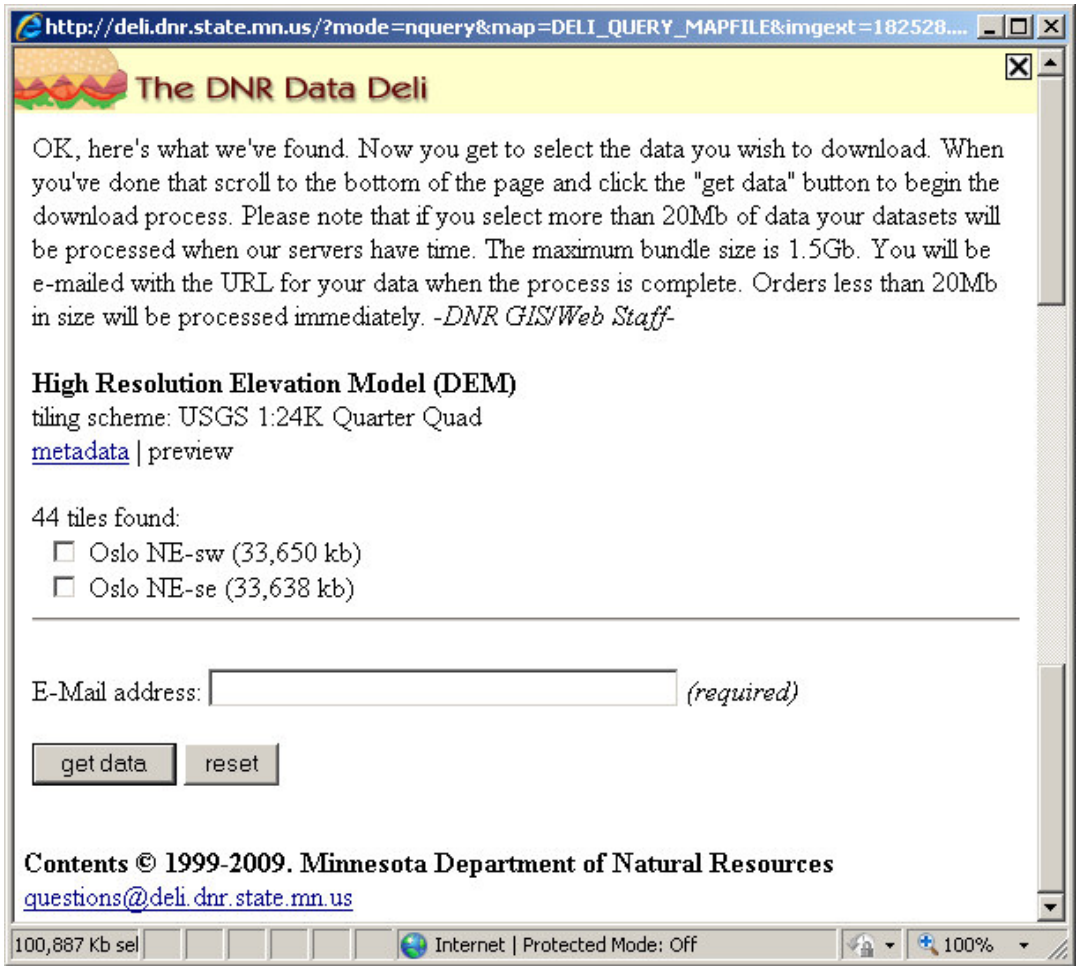
- Once you “Select” your area it will open a download page. It is recommend to download the “Quarter Quad metadata | preview”. This will help you get a geographic location of all the images.
- Check all the files you want to download. Type in you email address and wait for them to email you a download link.



GK Tech is still looking for data links for downloading ND data.

All the MN data is downloaded in UTM zone 15.

- All MN LIDAR images are originally projected into UTM 15
- When you open Ag Data Viewer, select yourself into the correct UTM. If you’re in UTM 14, turn on the elev_drgxxx.asc, “Right Click” and “Utilities” and “Re-Project to This UTM Zone”.
    - Re-projecting to UTM 14 type in “15” in the Re-Project Raster window

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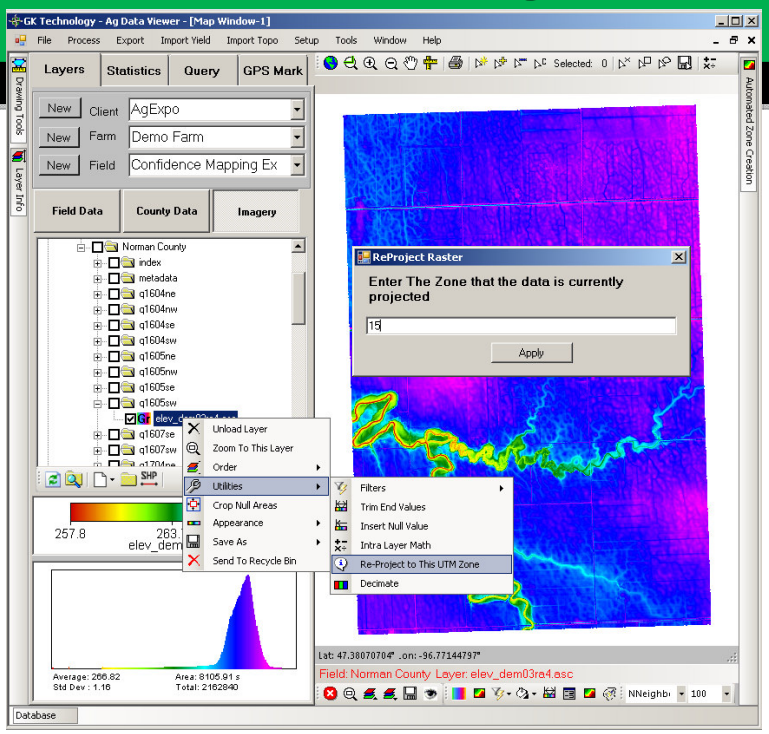
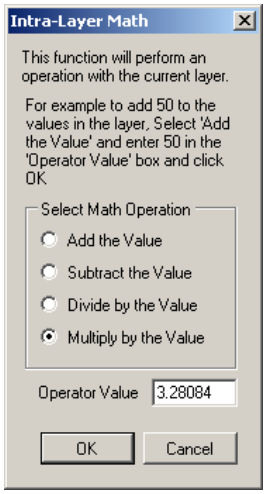
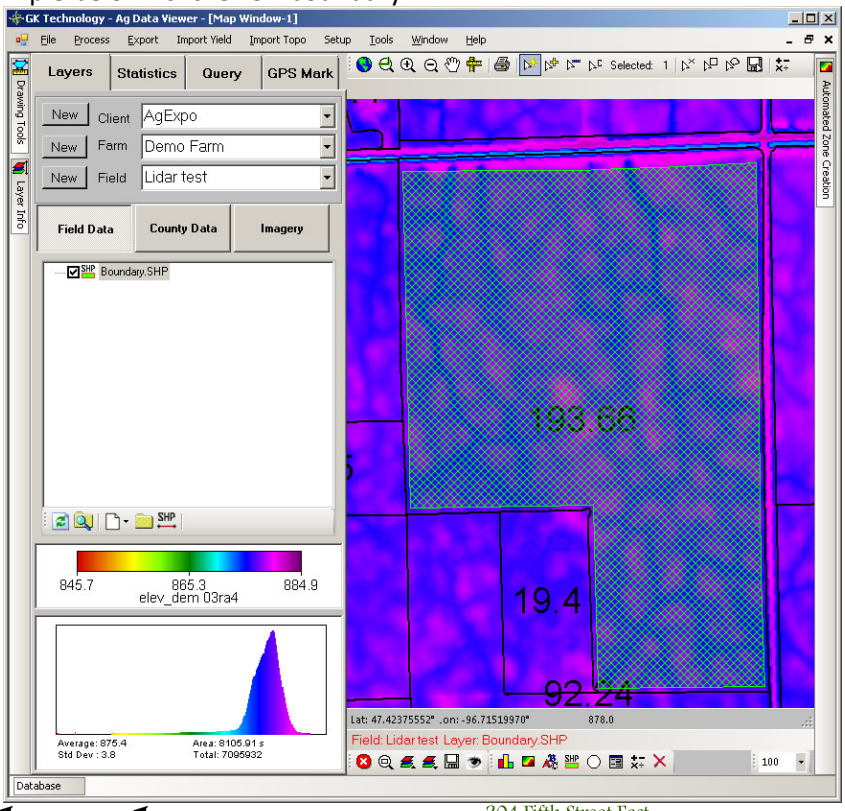




- The elevation data is in Meters. Click on and multiply by 3.28084 to get back to feet.
- Once projected to the correct UTM and in feet. Click on on the bottom toolbar.
- Save the "elev_demxxx.asc" as a .grd file format.
- Turn on your field boundary and select and click inside your boundary.
- Select your elev_demxxx.grd and go to the bottom toolbar "Crop Raster to Selected Polygon"
    - You may need to use a slightly smaller boundary due to resolution/ditches/dikes.
    - Notice the boundary in example below vs. the FSA boundary

- Save the elev_demxxx.grd back to the "Field" folder.
- Treat this data as you would any other topography data.



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