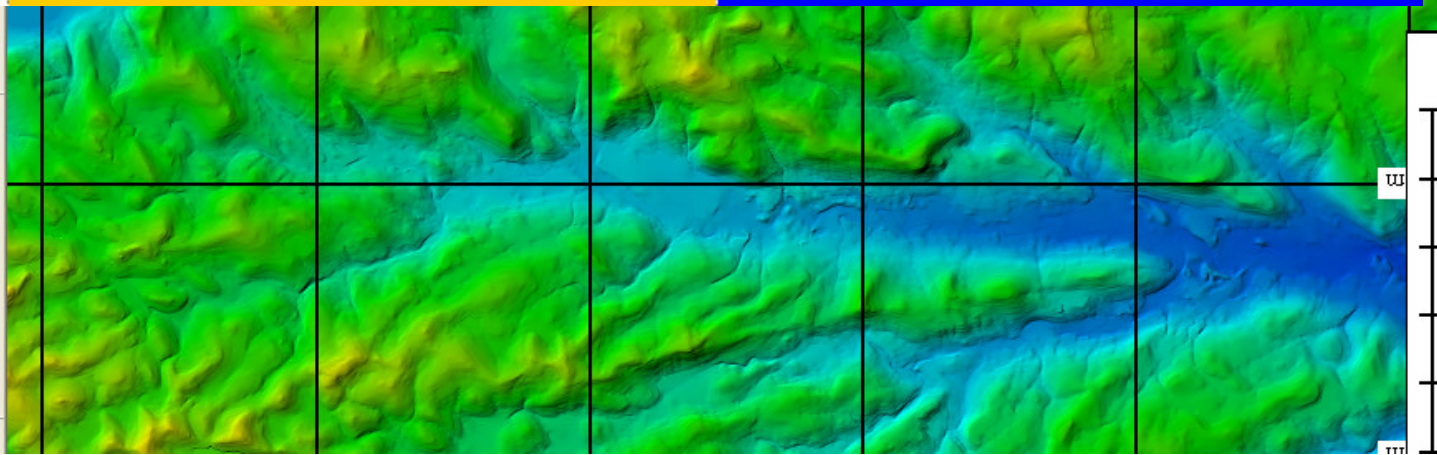
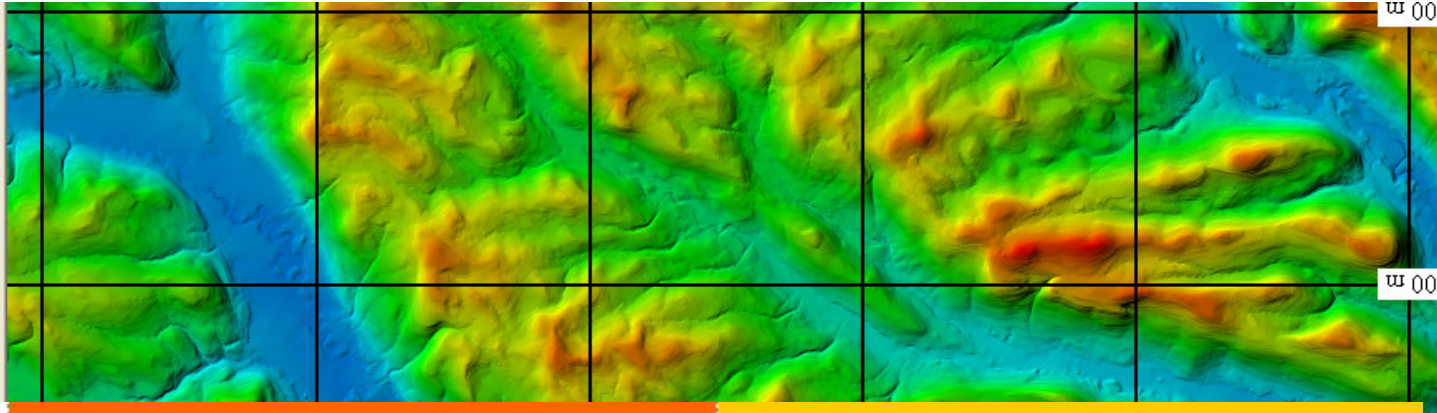


Global Mapper: An Introduction
to a User-Friendly GIS Package



Dr. Leslie Hasbargen
Assistant Professor
SUNY Oneonta

Thursday, November 8, 2007 at 12pm
Physical Science Bldg.
Room 121



Mapping this talk...

- Finding and downloading spatial data from the USGS Seamless Server
- Viewing data layers in Global Mapper (GM)
- Measuring features in GM
- Adding features to GM
- Overlaying geology maps

Seamless Data Distribution System - Windows Internet Explorer

http://seamless.usgs.gov/

Google Go Bookmarks Popups okay Check AutoLink

Seamless Data Distribution System

USGS
science for a changing world

USGS Home
Contact USGS
Search USGS

Seamless Data Distribution System, Earth Resources Observation and Science (EROS)

Home Background List of Products Frequently Asked Questions Links Contact Us

What this Site Offers:

- Free Data Downloads
- User Defined Datasets and Area
- Acquire Data From Different Hosts
- Elevation Point and Profile Tools
- [Tutorial](#)
- and much more...

System Status:

The Seamless Data Distribution System is **running**.

Posted 06-26-2007: We are currently experiencing intermittent problems with downloads requested in BIL and GridFloat formats. The problem is being investigated by our staff. Since the problem is intermittent, please try your request again if you experience a problem. A more long-term fix for these format problems is currently in development. We apologize for any inconvenience. Thank you for your patience during this time.

News:


Latest Announcements (updated 08-7-2007)

- **New Delivery Method -- Tiled Data Distribution System (TDDS)** Starting August 7, 2007, a new delivery method called Tiled Data Distribution System (TDDS) was released for accessing historical imagery. The concept of SDDS is to provide access to the "best available" geospatial data. In the case of High Resolution Orthoimagery data, there are several generations of imagery available. The older "historical" data for High Resolution Orthoimagery will be migrated from SDDS to TDDS. TDDS allows access to the original tiles or chips of imagery from EROS storage systems. The download includes a zip file containing the images files, metadata, and index. There is a new button under the Download section on the left side of the viewer. Refer to the **TDDS Tutorial** for instructions pertaining to this delivery method.

The list of data available for TDDS is within the "Products" drop down on the



View and Download United States Data



View and Download International Data

Access GIS data
at
<http://seamless.usgs.gov/>

Be sure to enable pop ups!

Internet Explorer has some additional "security" features to overcome when it's time to download data...

Upon clicking N. America, you will zoom to this view. Drag a box to zoom. Note the tools in the icons at left

Seamless Data Distribution System Viewer - Windows Internet Explorer

http://seamless.usgs.gov/viewer.htm

Seamless Data Distribution System ...

Seamless Data Distribution (Return to start page) Tutorial

Zoom

Query

Tools

Downloads

Documents

Scale Information

Out In

Scale ~ 1:137,623,048

Display

- Places (Names)
- Layer Extent
- Structures
- Transportation
- Boundaries
- Hydrography
- Orthoimagery
- Land Cover
- Elevation

The visible layers can be controlled at right under "Display"

Click download button (lower left)

Drag the area of interest

The image shows a screenshot of a web browser displaying the USGS Seamless Data Distribution System. The main window is titled "Seamless Data Distribution System Viewer - Windows Internet Explorer" and shows a map of a region with a green box highlighting an area of interest. The URL is <http://seamless.usgs.gov/viewer.htm>. A secondary window titled "USGS Seamless Request Summary Page" is open, showing the "SDDS Request Summary Page" for a National Elevation Dataset (NED) 1 Arc Second. The page includes a "Download" button and a "Modify Data Request" button. The map on the right shows a scale of 1:741,882 and a list of data layers including Places (Names), Layer Extent, Structures, Transportation, Boundaries, Hydrography, Orthoimagery, Land Cover, and Elevation.

Seamless Data Distribution System Viewer - Windows Internet Explorer
<http://seamless.usgs.gov/viewer.htm>

USGS Seamless Request Summary Page - ...
<http://extract.cr.usgs.gov/Website/distreq/RequestSummary.jsp?AL=42.53008>

Seamless Data Distribution System
SDDS Request Summary Page
You are logged in as Default Seamless User.

Modify Data Request Tutorial HELP!

Data Extraction Request Pieces:			
Area	Output Parameters	Size (MB)	Download Links
National Elevation Dataset (NED) 1 Arc Second			
(WGS 84) N: 42.53008 W: -75.09594	Output Format: ArcGRID NAD 83 Geographic X cell Size: 00.00028 Degrees Y cell Size: 00.00028 Degrees	1	 EROS Data Center Download

[U.S. Department of the Interior](#) || [U.S. Geological Survey](#) || [EROS Data Center](#)
URL: <http://extract.cr.usgs.gov/Website/distreq/RequestSummary.jsp>
Maintainer: webmapping@usgs.gov || [Comments and Suggestions](#)
Last Modified: Wed 13 April 2005
[Privacy Statement](#) || [Disclaimer](#) || [FOIA](#) || [Accessibility](#)

Click and drag to select area to download

Default data set is a DEM.
Click "modify data request"
for more...

Select your data from the dozens of data types...

The image shows a screenshot of a web browser displaying the Seamless Data Distribution System (SDDS) interface. The main window is titled "Seamless Data Distribution System Viewer - Windows Internet Explorer" and shows a map of a region with a green box indicating a selected area for download. The URL is <http://seamless.usgs.gov/viewer.htm>. The interface includes a "Zoom" panel, a "Query" panel, and a "Downloads" panel.

A secondary window titled "USGS Data Extraction Options Page - Windows Internet Ex..." is open, showing the "SDDS Request Options Page". The URL is <http://extract.cr.usgs.gov/Website/distreq/RequestOptions.jsp?AL=42.53008170184556,42.45037500>. The page includes a "Tutorial" button and a "HELP!" button.

The "Order Options:" section shows the "Output Coordinate System" set to "Native". The "Requested Product(s):" table lists various data products, with "24k DRG - UTM Zone 18" selected. The "Data Format" is set to "GeoTIFF", the "Archive Format" is "ZIP", and the "Metadata Format" is "HTML".

Requested Product(s):	Data Format:	Archive Format:	Metadata Format:
<input type="checkbox"/> 100k DRG - UTM Zone 18	Not selected.		
<input checked="" type="checkbox"/> 24k DRG - UTM Zone 18	GeoTIFF	ZIP	HTML
<input type="checkbox"/> 250k DRG - UTM Zone 18	Not selected.		
<input type="checkbox"/> ARMI - Ecoregions (USEPA, Level III)	Not selected.		
<input type="checkbox"/> ARMI - Land Ownership	Not selected.		
<input type="checkbox"/> ARMI - National Wildlife Refuge Boundaries	Not selected.		
<input type="checkbox"/> ARMI - National Wildlife Refuge Locations	Not selected.		
<input type="checkbox"/> ARMI - Natl Inventory Dams - 2005	Not selected.		
<input type="checkbox"/> ARMI - North American Ecoregions (USEPA, Level I)	Not selected.		
<input type="checkbox"/> ARMI - North American Ecoregions (USEPA, Level II)	Not selected.		
<input type="checkbox"/> ARMI - NPS 2007 Park Boundaries	Not selected.		
<input type="checkbox"/> ARMI - U.S. Mine Locations - 2005	Not selected.		
<input type="checkbox"/> Bureau of Transportation Statistics (BTS) Roads	Not selected.		
<input type="checkbox"/> DOQQ 1.0m B&W - UTM Zone 18	Not selected.		
<input type="checkbox"/> DOQQ 1.0m Color - UTM Zone 18	Not selected.		
<input type="checkbox"/> FEWS NDVI	Not selected.		
<input type="checkbox"/> FEWS RFE	Not selected.		
<input type="checkbox"/> LANDFIRE 13 Anderson Fire Behavior Fuel Models	Not selected.		
<input type="checkbox"/> LANDFIRE 40 Scott and Burgan Fire Behavior Fuel Models	Not selected.		
<input type="checkbox"/> LANDFIRE Aspect	Not selected.		

The "Display" panel on the right shows a list of layers to be displayed, including "Places (Names)", "Layer Extent", "Structures", "Transportation", "Boundaries", "Hydrography", "Orthoimagery", "Land Cover", and "Elevation". The "Scale Information" panel shows a scale of 1:741,882.

Select your data, and click “Save Changes and Return to Summary” (bottom of dialog page)

The screenshot shows the Seamless Data Distribution System Viewer interface. On the left, a map displays a terrain with red lines representing roads and a green square indicating a selected area for data extraction. The main window is titled "USGS Data Extraction Options Page" and contains a table of data products with checkboxes and dropdown menus for format and delivery options.

<input type="checkbox"/>	National Atlas Vegetation Growth - Peak: 1999	Not selected.
<input type="checkbox"/>	National Atlas Vegetation Growth - Peak: 2000	Not selected.
<input type="checkbox"/>	National Atlas Vegetation Growth - Peak: 2001	Not selected.
<input type="checkbox"/>	National Atlas Vegetation Growth - Peak: 2002	Not selected.
<input type="checkbox"/>	National Atlas Vegetation Growth - Peak: 2003	Not selected.
<input type="checkbox"/>	National Atlas Vegetation Growth - Peak: 2004	Not selected.
<input type="checkbox"/>	National Atlas Vegetation Growth - Peak: 2005	Not selected.
<input type="checkbox"/>	National Atlas Volcanoes	Not selected.
<input type="checkbox"/>	National Atlas Waterbodies	Not selected.
<input type="checkbox"/>	National Atlas Wilderness Preservation System Areas	Not selected.
<input checked="" type="checkbox"/>	National Elevation Dataset (NED) 1 Arc Second	ArcGRID ZIP HTML
<input checked="" type="checkbox"/>	National Elevation Dataset (NED) 1/3 Arc Second	ArcGRID ZIP HTML
<input type="checkbox"/>	National Elevation Dataset (NED) 1/9 Arc Second	Not selected.
<input type="checkbox"/>	National Land Cover Dataset 1992 - Land Cover	Not selected.
<input type="checkbox"/>	National Land Cover Dataset 2001 - Canopy	Not selected.
<input type="checkbox"/>	National Land Cover Dataset 2001 - Impervious Surface	Not selected.
<input type="checkbox"/>	National Land Cover Dataset 2001 - Land Cover	Not selected.
<input type="checkbox"/>	Orthoimagery - Central New York - 1.0 ft Color 2003	Not selected.
<input type="checkbox"/>	Orthoimagery - Eastern New York - 1.0 ft Color 2005	Not selected.
<input type="checkbox"/>	Orthoimagery - Eastern New York - 2.0 ft B&W 2004	Not selected.
<input type="checkbox"/>	Orthoimagery - Eastern New York - 2.0 ft B&W 2005	Not selected.
<input type="checkbox"/>	SRTM 1 arc sec - Shuttle Radar Topography Mission [Finished]	Not selected.
<input type="checkbox"/>	SRTM 3 arc sec - Shuttle Radar Topography Mission [Finished]	Not selected.

Delivery Options:
Maximum size (MB) per piece: 250

Buttons: Cancel All Changes & Return to Summary, Save Changes & Return to Summary

Now, press the Ctrl key, and click Download

The screenshot displays the Seamless Data Distribution System Viewer interface. On the left, a map shows a terrain with red lines representing roads and a green square indicating a selected area. Below the map, the text reads: "Click and drag to select area to download".

The main content area is titled "USGS Seamless Request Summary Page" and displays the following information:

Seamless Data Distribution System
SDDS Request Summary Page
You are logged in as Default Seamless User.

[Modify Data Request](#) [Tutorial](#) [HELP!](#)

Data Extraction Request Pieces:			
Area	Output Parameters	Size (MB)	Download Links
24k DRG - UTM Zone 18			
(WGS 84) N: 42.53008 W: -75.09594 S: 42.45038 E: -75.01103	Output Format: GeoTIFF NAD 27 UTM Zone 18N X cell Size: 02.4384 Meters Y cell Size: 02.4384 Meters	74	 EROS Data Center Download
National Elevation Dataset (NED) 1 Arc Second			
(WGS 84) N: 42.53008 W: -75.09594 S: 42.45038 E: -75.01103	Output Format: ArcGRID NAD 83 Geographic X cell Size: 00.00028 Degrees Y cell Size: 00.00028 Degrees	1	 EROS Data Center Download
National Elevation Dataset (NED) 1/3 Arc Second			
(WGS 84) N: 42.53008 W: -75.09594 S: 42.45038 E: -75.01103	Output Format: ArcGRID NAD 83 Geographic X cell Size: 00.00009 Degrees Y cell Size: 00.00009 Degrees	4	 EROS Data Center Download

At the bottom of the page, there are links for "U.S. Department of the Interior", "U.S. Geological Survey", and "EROS Data Center". The URL is: <http://extract.cr.usgs.gov/Website/distreq/RequestSummary.jsp>. Other links include "Maintainer: webmapping@usgs.gov", "Comments and Suggestions", "Last Modified: Wed 13 April 2005", "Privacy Statement", "Disclaimer", "FOIA", and "Accessibility".

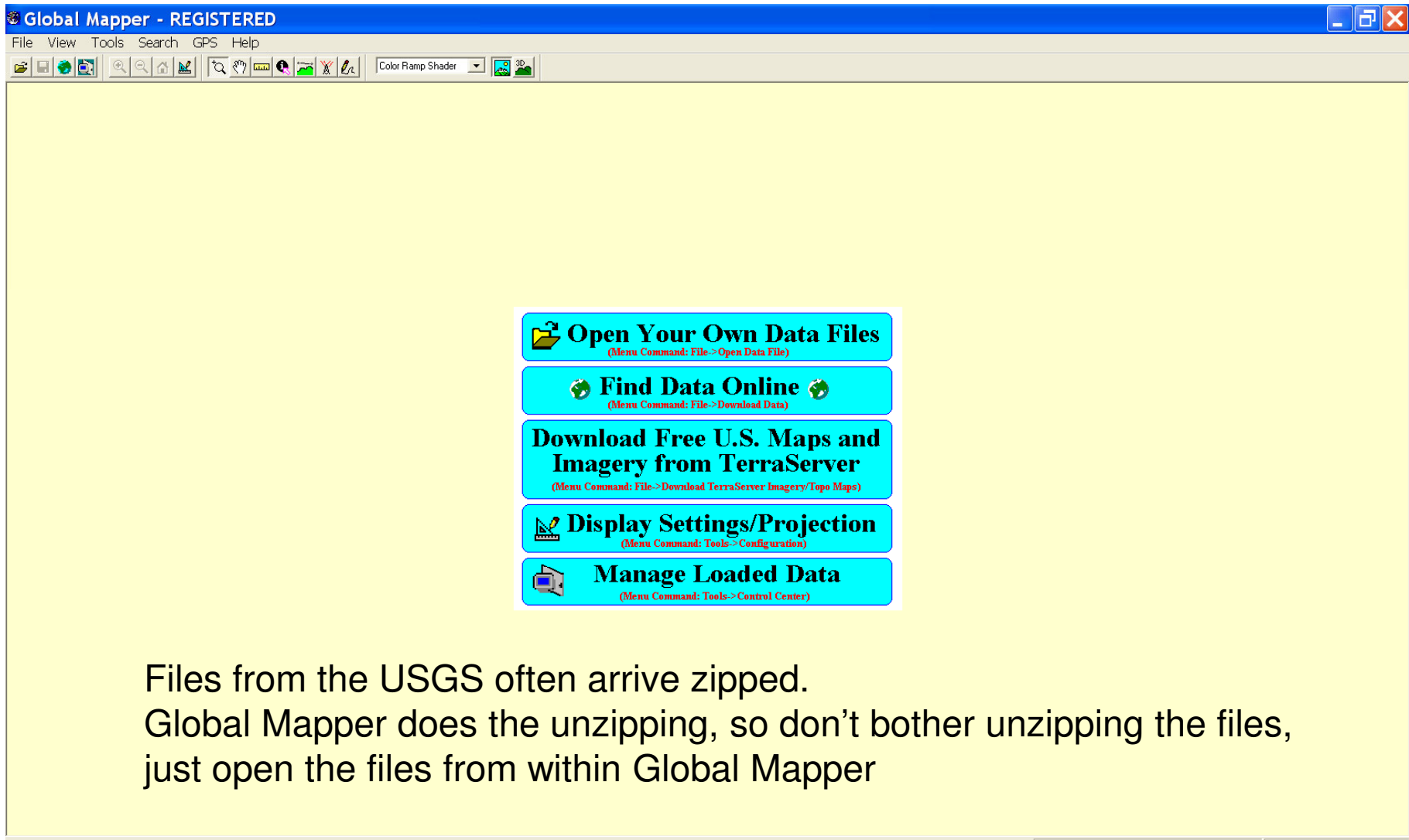
The right side of the interface shows a "Scale Information" section with a scale of 1:1741,882 and a "Display" menu with options: Places (Names), Layer Extent, Structures, Transportation, Boundaries, Hydrography, Orthoimagery, Land Cover, and Elevation.

Once the File Download window pops up, Save the file (release the Ctrl key once Save is clicked)

The screenshot displays a Windows Internet Explorer browser window titled "Seamless Data Distribution System Viewer". The address bar shows the URL <http://seamless.usgs.gov/viewer.htm>. The main content area features a map of a region with red lines and a sidebar with various tools and layers. A "USGS Distributed Download Request Status" window is open, displaying the message "Raster Extract has completed." and "This window can be closed after saving the file." Below this message are links for "U.S. Department of the Interior", "U.S. Geological Survey", and "EROS Data Center", along with a URL, maintainer information, and last modified date. A "File Download" dialog box is also open, asking "Do you want to open or save this file?" for a file named "84133875.zip" (1.26MB). The dialog includes "Open", "Save", and "Cancel" buttons, and a checkbox for "Always ask before opening this type of file". A warning message states: "While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. [What's the risk?](#)" The background map interface includes a "Downloads" section with a "Download Links" button and a "Display" section with a "Download" button. The map shows a terrain with red lines and a scale of 1:1741,882. The status bar at the bottom indicates "Internet" and "100%" zoom.

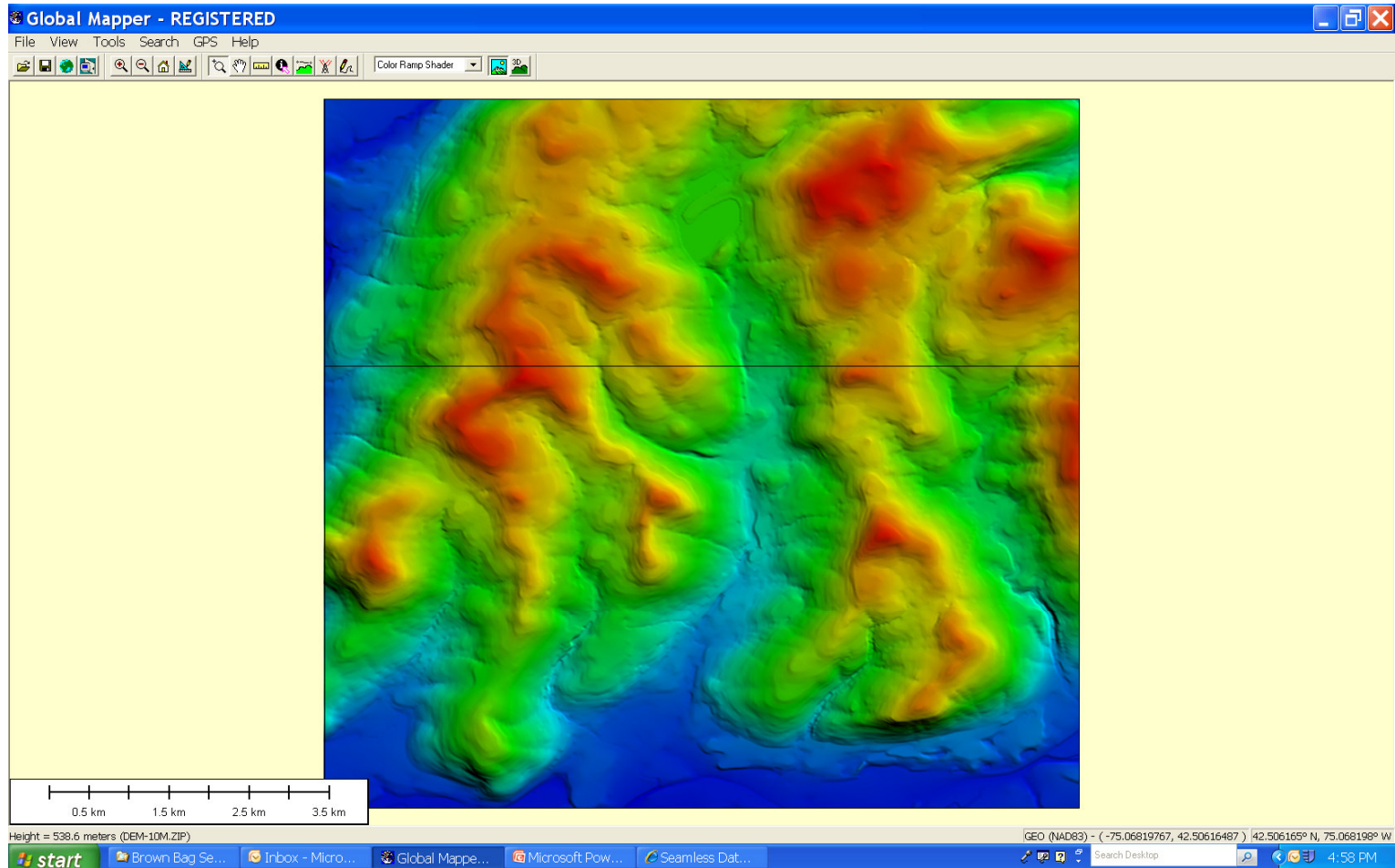
Open Global Mapper

Click “Open your own Data Files”



Files from the USGS often arrive zipped.
Global Mapper does the unzipping, so don't bother unzipping the files,
just open the files from within Global Mapper

Voila! We can now visualize...



Check out your options...

The image shows a screenshot of the Global Mapper software interface. The title bar reads "Global Mapper - REGISTERED". The menu bar includes "File", "View", "Tools", "Search", "GPS", and "Help". The "File" menu is open, displaying the following options:

- Open Data File(s)... Ctrl+O
- Open Generic ASCII Text File(s)...
- Open All Files in a Directory Tree...
- Open ECW File from the Web...
- Unload All... Ctrl+U
- Create New Map Catalog...
- Download Data from the Web...
- Download TerraServer Imagery/Topo Maps...
- Load Workspace... Ctrl+W
- Save Workspace... Ctrl+S
- Save Workspace As...
- Run Script...
- Capture Screen Contents to Image...
- Export Global Mapper Package File...
- Export Raster and Elevation Data
- Export Vector Data
- Batch Convert/Reproject...
- Generate Contours...
- Rectify (Georeference) Imagery...
- Print... Ctrl+P
- Print Preview...
- Print Setup...
- 1 C:\DEMs\...\dem-10m.zip
- 2 Milford Canyon workspace.gmw
- 3 SilverCreek-GIS-workspace.gmw
- 4 C:\DEMs\...\NED_test-30m.zip
- Exit Ctrl+X

The main window displays a 3D topographic map with a color ramp from blue (low elevation) to red (high elevation). A scale bar at the bottom left indicates distances of 0.5 km, 1.5 km, 2.5 km, and 3.5 km. The status bar at the bottom right shows the coordinate system "GEO (NAD83)" and coordinates "(-75.10498846, 42.53171403) 42.531714° N, 75.104988° W". The Windows taskbar at the bottom shows the Start button and several open applications: "Brown Bag Se...", "Inbox - Micro...", "Global Mappe...", "Microsoft Pow...", and "Seamless Dat...". The system clock shows "5:01 PM".

Generate contours

The screenshot displays the Global Mapper - REGISTERED application window. The main map area shows a topographic map with a color ramp from blue (low elevation) to red (high elevation). A dialog box titled "Contour Generation Opti..." is open, showing the "GENERATED CONTOURS" description. The "Contour Interval" is set to 10 METERS. The "Resolution" section shows X-axis: 9.2592592600000 arc degrees and Y-axis: 9.2592592600004 arc degrees. The "Interpolate to Fill Small Gaps in Data" and "Append Unit Labels ('m' or 'ft') to Elevation Labels" options are checked. A scale bar at the bottom left indicates 0.5 km, 1.5 km, 2.5 km, and 3.5 km. The Windows taskbar at the bottom shows the start button and several open applications: "Brown Bag Se...", "Inbox - Micro...", "Global Mapp...", "Microsoft Pow...", and "Seamless Dat...". The system tray shows the time as 5:02 PM and the date as GEO (NAD83) - (-75.10136512, 42.53078497) 42.530785° N, 75.101365° W.

Global Mapper - REGISTERED

File View Tools Search GPS Help

Color Ramp Shader

Contour Generation Opti...

Contour Options | Simplification | Contour Bounds

Description: GENERATED CONTOURS

Contour Interval: 10 METERS

Only Generate Contour Lines at Specified Height

Resolution: The resolution affects fidelity with which contours are generated. Larger numbers result in less detailed contour lines that take up less space. Typically you'll just want to accept the defaults.

X-axis: 9.2592592600000 arc degrees

Y-axis: 9.2592592600004 arc degrees

If you wish to change the ground units that the resolution is specified in, you need to change the current projection by going to Config->Projection.

Generate Area Features: Colored Based on the Current Elevation Shader in Addition to Contours

Generate Spot Elevations at Min/Max Elevations

Interpolate to Fill Small Gaps in Data

Append Unit Labels ('m' or 'ft') to Elevation Labels

OK Cancel Apply Help

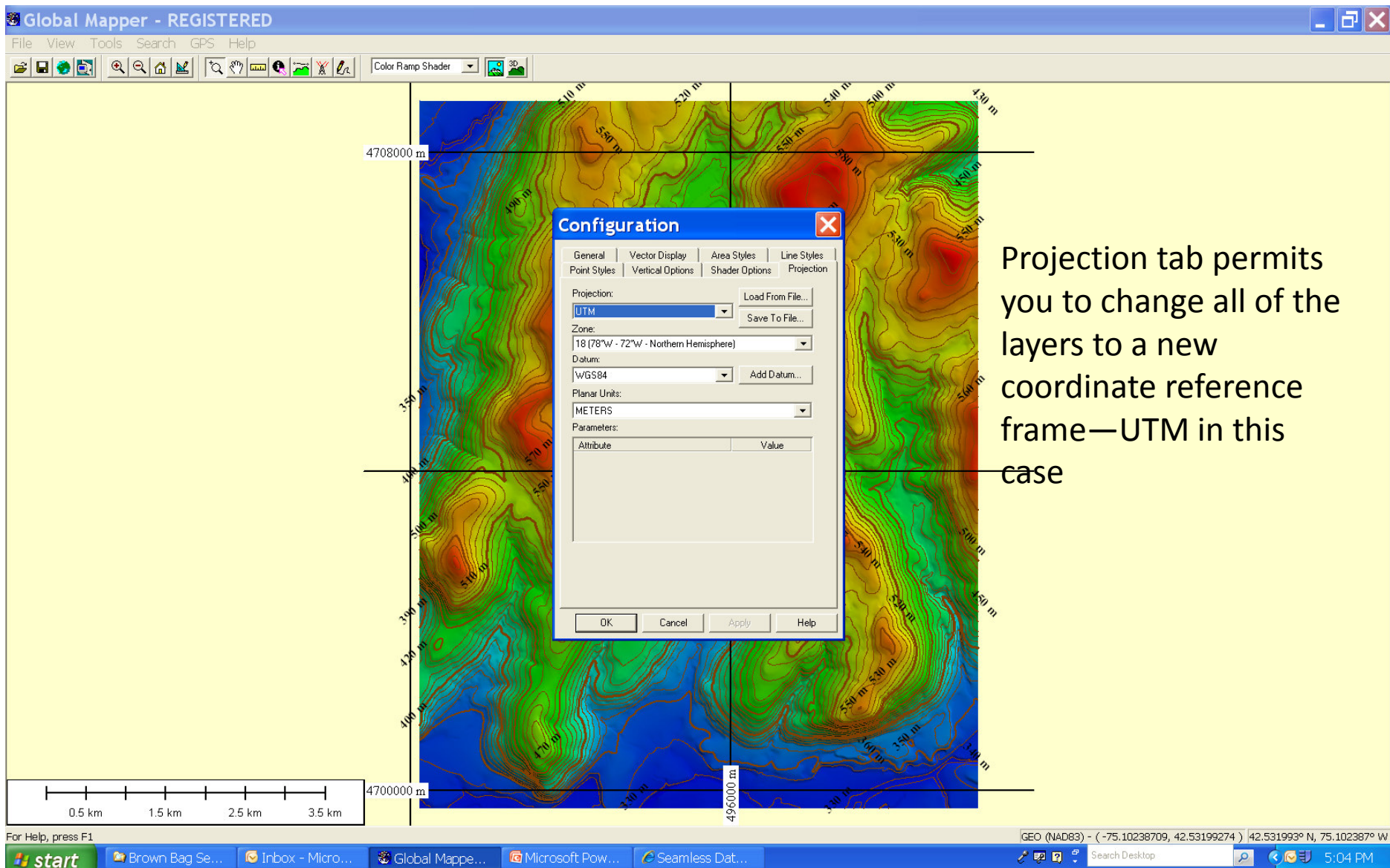
0.5 km 1.5 km 2.5 km 3.5 km

For Help, press F1

GEO (NAD83) - (-75.10136512, 42.53078497) 42.530785° N, 75.101365° W

start Brown Bag Se... Inbox - Micro... Global Mapp... Microsoft Pow... Seamless Dat... Search Desktop 5:02 PM

Configuration tool: note the tabs



The screenshot displays the Global Mapper software interface. The main window shows a topographic map with contour lines and elevation data. A Configuration dialog box is open, with the Projection tab selected. The dialog box contains the following settings:

- Projection: UTM
- Zone: 18 (78°W - 72°W - Northern Hemisphere)
- Datum: WGS84
- Planar Units: METERS
- Parameters: (Empty table)

The dialog box also includes buttons for Load From File..., Save To File..., Add Datum..., OK, Cancel, Apply, and Help.

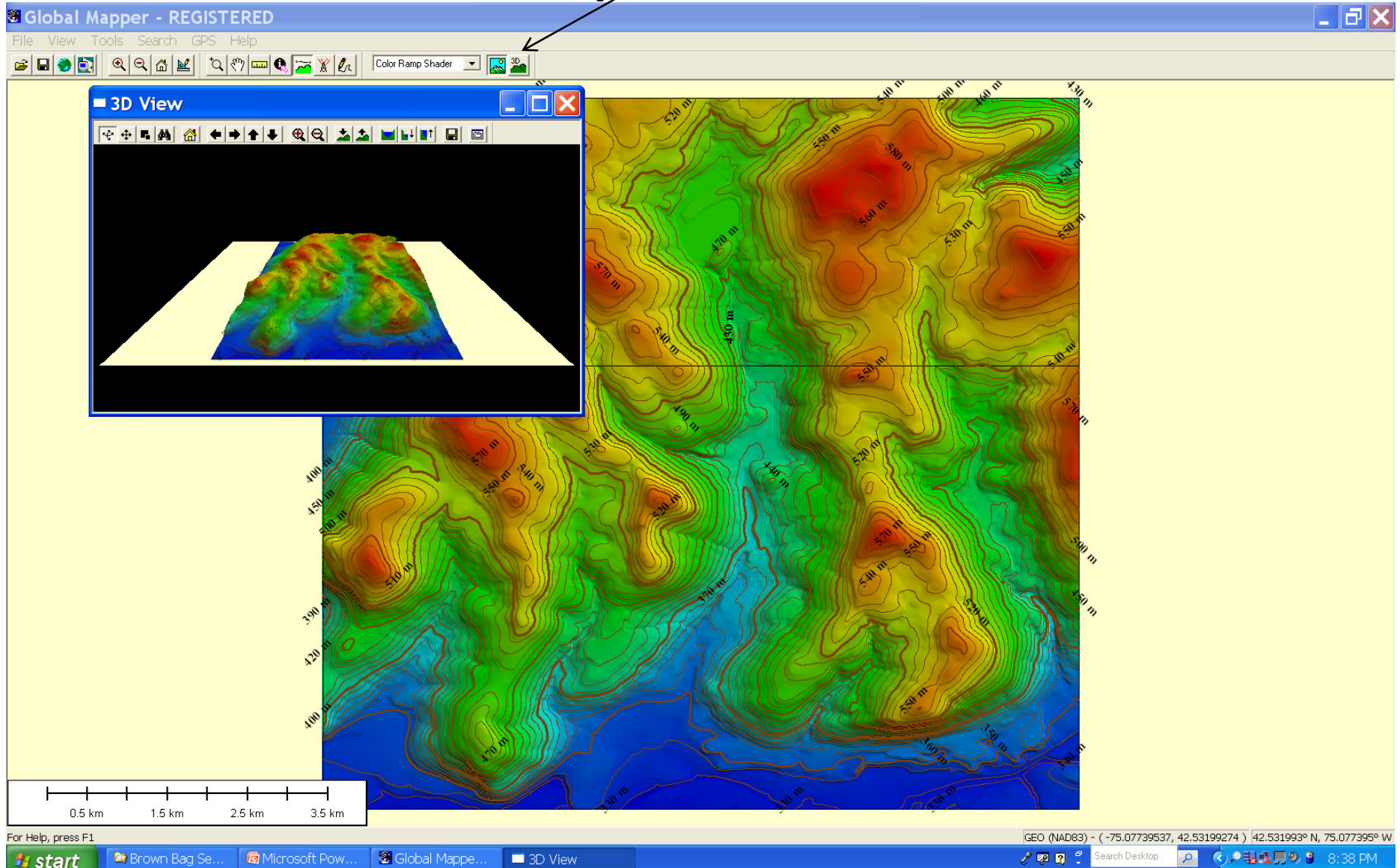
Projection tab permits you to change all of the layers to a new coordinate reference frame—UTM in this case

For Help, press F1

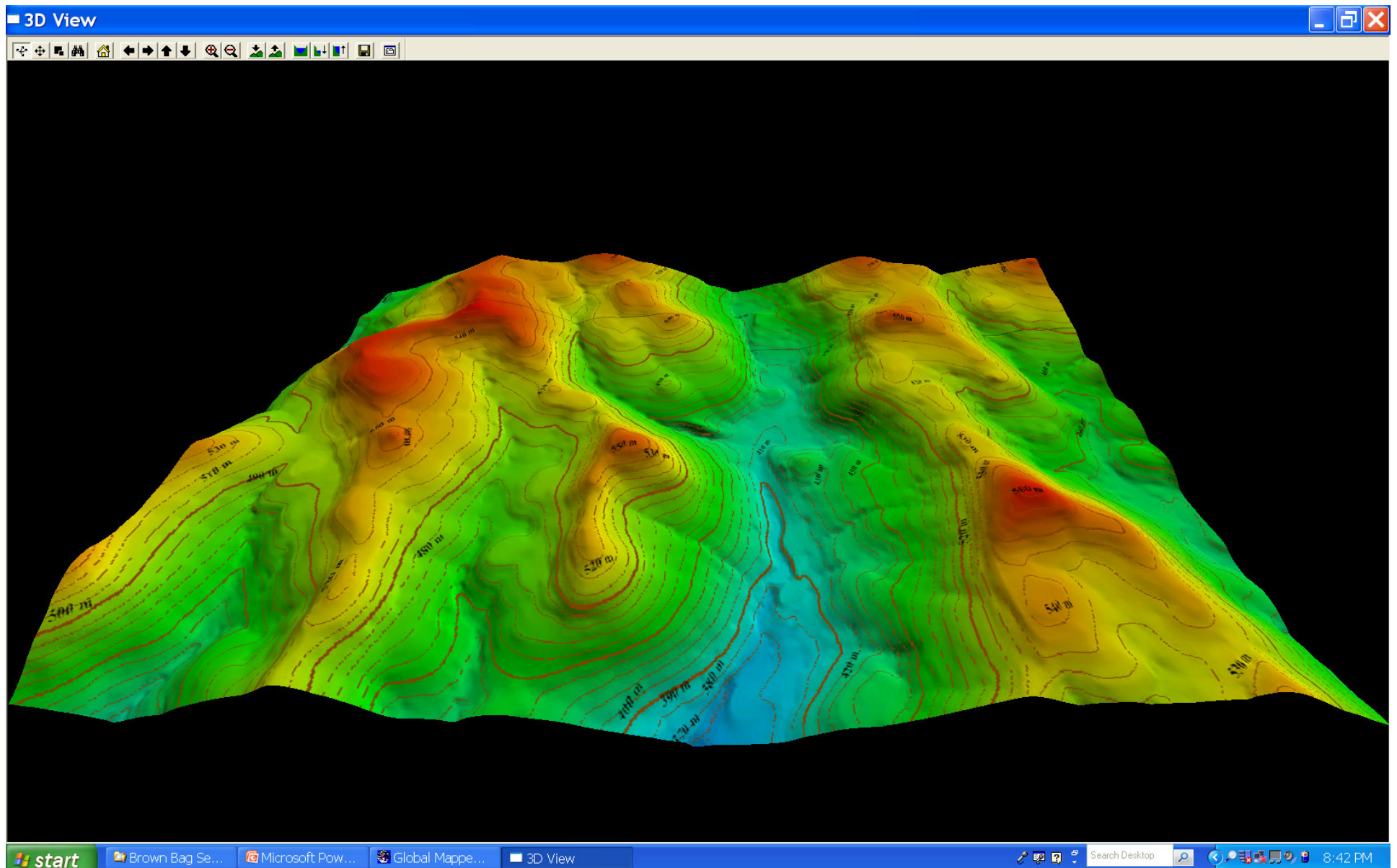
GEO (NAD83) - (-75.10238709, 42.53199274) | 42.531993° N, 75.102387° W

start | Brown Bag Se... | Inbox - Micro... | Global Mapp... | Microsoft Pow... | Seamless Dat... | Search Desktop | 5:04 PM

3-D Perspective viewer



Full screen 3-D



Profile Tool

Global Mapper - REGISTERED

File View Tools Search GPS Help

Daylight Shader 3D

Path Profile/Line of Sight

File Options Calculate

From Pos: -75.04782028, 42.48277835 To Pos: -75.03336823, 42.48120928

575 m
550 m
525 m
500 m
475 m
450 m
425 m
400 m

Profile data can be saved to a text file, then imported into Excel

250 m 500 m 750 m 1000 m 1199 m

Line of Sight... Cut-and-Fill Volumes... Help OK

0 m 250 m 750 m 1250 m 1750 m

Left click to add points, right click to finish.

GEO (NAD83) - (-75.03336823, 42.48120928) | 42.481209° N, 75.033368° W

start | Brown Bag Se... | Microsoft Pow... | Global Mappe... | Search Desktop | 8:45 PM

Measure Tool

Global Mapper - REGISTERED

File View Tools Search GPS Help

Atlas Shader

Measure areas, line lengths, etc

Save the measurement as a vector layer

- Close Polygon and Stop Measuring
- Stop Measuring
- Save Measurement
- Always Display Base Units (Meters or Feet)
- Measure Volume (Cut-and-Fill)
- Use Metric Distance Units
- Use Nautical Distance Units
- Use Statute Distance Units
- Use Acres For Area Units
- Use Hectares For Area Units
- Use Square Feet For Area Units
- Use Square Kilometers For Area Units
- Use Square Meters For Area Units
- Use Square Miles For Area Units

0.0 km 0.5 km 1.0 km 1.5 km 2.0 km 2.5 km

Seg Len: 870 m, Seg Brg: 216.9°, Total Len: 7.44 km, Enclosed Area: 3.03 sq km

GEO (NAD83) - (-75.06536920, 42.47281676) 42.472817° N, 75.065369° W

start Brown Bag Se... Microsoft Pow... Global Mapped... Search Desktop 8:49 PM

Clicking the Info icon, then clicking a feature, highlights the feature

Feature Information

Name: 440 m
Description: Contour Line, Minor
Geometry: 7063 vertices, Length: 31 km
Map Name: GENERATED CONTOURS
Right click on an entry for more options (i.e. open URL, etc.)

Attribute	Value
-----------	-------

Edit Feature... Delete Feature Copy to Clipboard

<440 m> Contour Line, Minor - (Height = 441.0 meters - DEM-10M.ZIP)

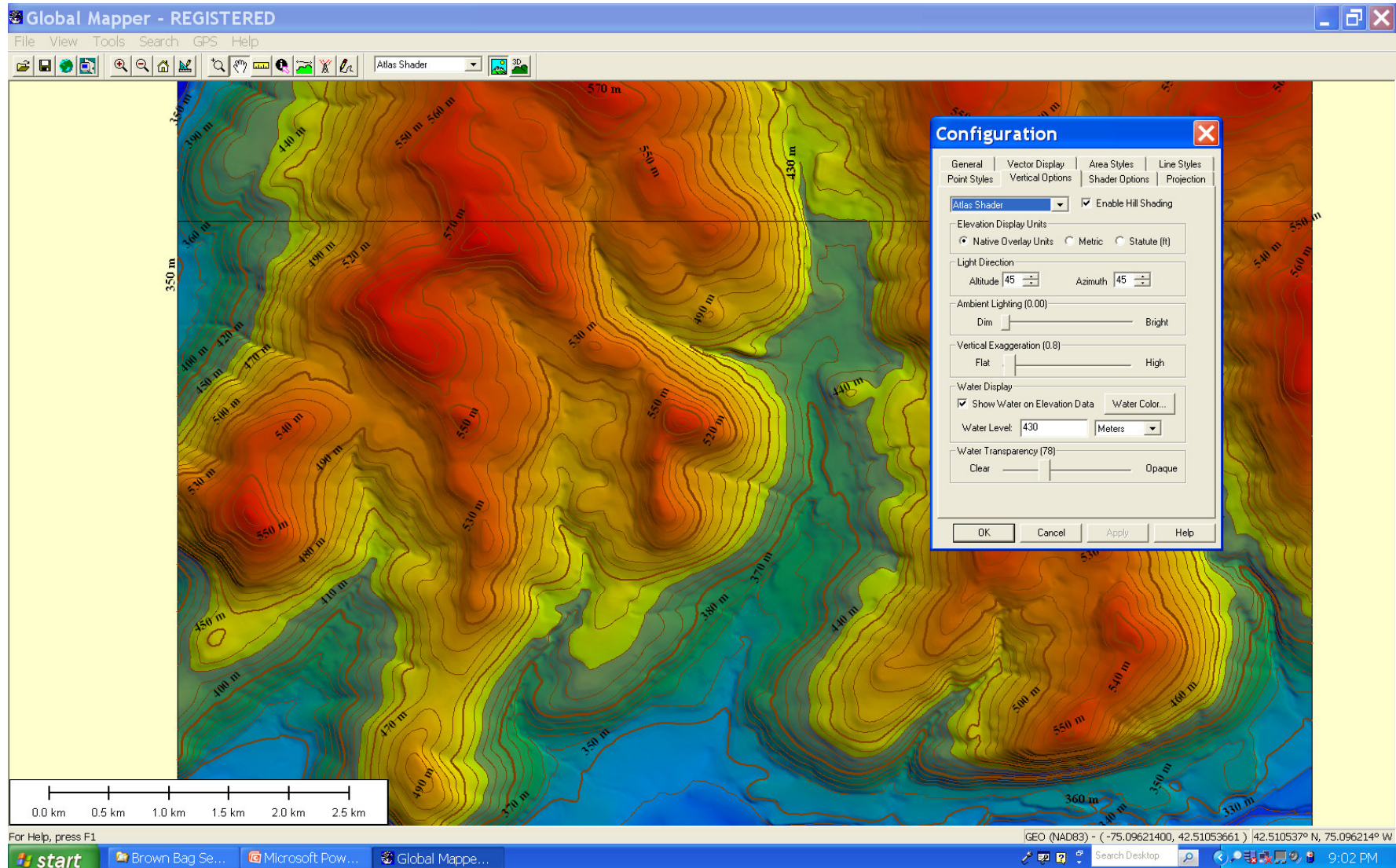
GEO (NAD83) - (-75.06295364, 42.47046314) 42.470463° N, 75.062954° W

start | Brown Bag Se... | Microsoft Pow... | Global Mapp... | Search Desktop | 8:55 PM

You can edit the feature

Highlighting a contour can help identify terraces at same height

Or, you can flood an area



Adding GPS data

The screenshot displays the Global Mapper software interface. The title bar reads "Global Mapper - REGISTERED". The menu bar includes "File", "View", "Tools", "Search", "GPS", and "Help". The "File" menu is open, showing options such as "Open Data File(s)...", "Open Generic ASCII Text File(s)...", "Open All Files in a Directory Tree...", "Open ECW File from the Web...", "Unload All...", "Create New Map Catalog...", "Download Data from the Web...", "Download TerraServer Imagery/Topo Maps...", "Load Workspace...", "Save Workspace...", "Save Workspace As...", "Run Script...", "Capture Screen Contents to Image...", "Export Global Mapper Package File...", "Export Raster and Elevation Data", "Export Vector Data", "Batch Convert/Reproject...", "Generate Contours...", "Rectify (Georeference) Imagery...", "Print...", "Print Preview...", "Print Setup...", and a list of recent files. The main map area shows an aerial view of a road intersection with several red dots representing GPS data points. A scale bar at the bottom left indicates distances from 5 m to 45 m. The status bar at the bottom right shows the coordinate system as "UTM (WGS84) - (494529.686, 4702190.969)" and the location as "42.472043° N, 75.066547° W". The Windows taskbar at the bottom shows the Start button and several open applications, including "Brown Bag Se...", "Microsoft Pow...", and "Global Mappe...".



Rectifying a
geologic
map...

Global Mapper - REGISTERED (Ventura-Geology-topo-workspace.gmw)

File View Tools Search GPS Help

Daylight Shader

3800000 m

288000 m

292000 m

0.0 km 0.5 km 1.0 km 1.5 km 2.0 km 2.5 km

Global Mapper

Global Mapper was unable to determine earth reference coordinates for the image VENTURA-GEOLOGIC-MAP.PNG.

Would you like to manually rectify the image, fake some coordinates for it automatically just to view it, or abort the load?

YES - Manually rectify the image
NO - Fake coordinates to allow viewing
CANCEL - Abort the load

Yes No Cancel

UTM (NAD83) - (281537.782, 3622393.009) (34.341119° N, 119.574278° W)

Search Desktop

start Ventura area Microsoft Pow... Global Mapper...

9:56 PM

Manual image rectification

Global Mapper - REGISTERED (Ventura-Geology-topo-workspace.gmw)

File View Tools Search GPS Help

Image Rectifier (VENTURA-GEOLOGIC-MAP.PNG)

File Options

Entire Image Zoomed View (Click for Pixel Coordinates)

Reference Images (Load into Main View First)

3804000 m
3800000 m
2840000 m 2880000 m 2920000 m

Ground Control Point (GCP) Entry

Pixel X X/Easting/Lon Add GCP to List

Pixel Y Y/Northing/Lat Update Selected GCP

Ground Control Point (GCP) Projection
Geographic (Latitude/Longitude) / WGS84 / arc de...
Select Projection ...

Ground Control Points (Double-click to Center on GCP)

Point Name	Pixel X	Pixel Y	Projected X	Projected Y	Longitude	Latitude	Error	Delete

OK
Cancel
Help

0.0 km 0.5 km 1.0 km 1.5 km 2.0 km 2.5 km

2880000 m 2920000 m

UTM (NAD27) - (281537.782, 3802339.009) 34.341119° N, 119.374878° W

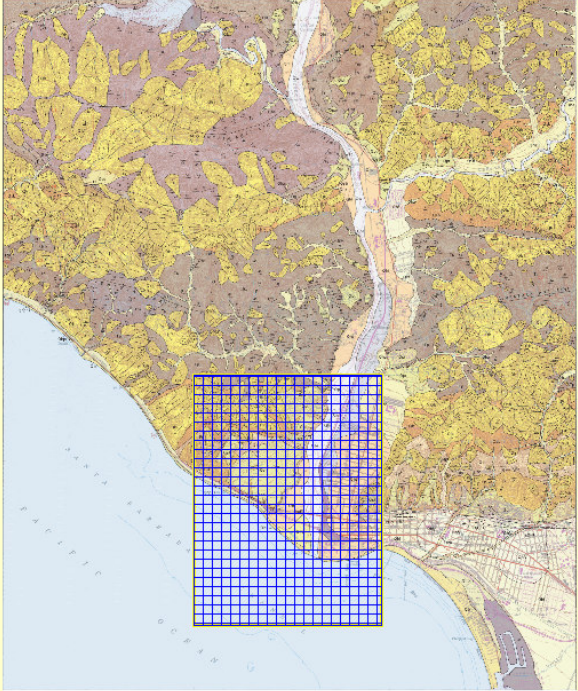
start Ventura area Microsoft Pow... Global Mapped... Search Desktop 9:56 PM

Zoom in to an area, select points common in both layers (DEM at right); Need 2 points for rectification


Image Rectifier (VENTURA-GEOLOGIC-MAP.PNG)

File Options

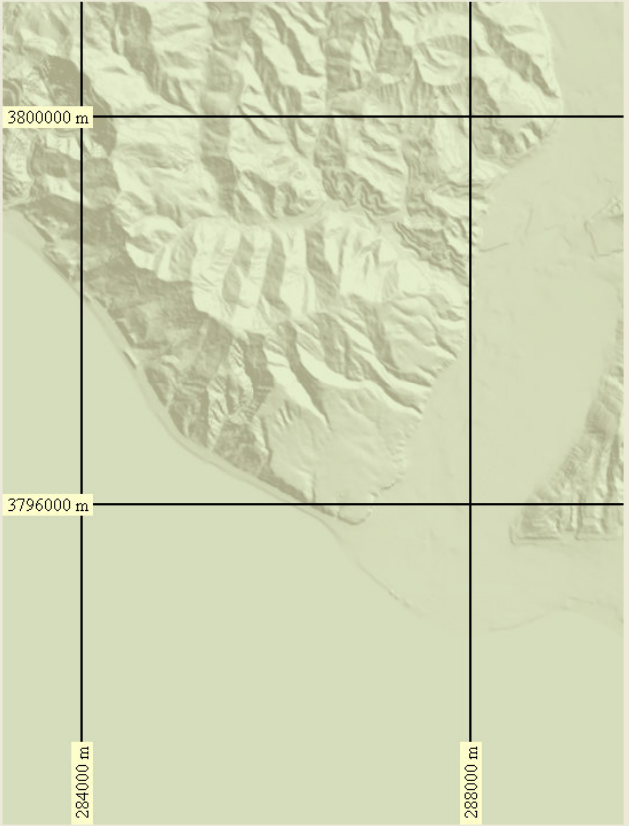
Entire Image



Zoomed View (Click for Pixel Coordinates)



Reference Images (Load into Main View First)



Ground Control Point (GCP) Entry

Pixel X: X/Easting/Lon: Add GCP to List

Pixel Y: Y/Northing/Lat: Update Selected GCP

Ground Control Point (GCP) Projection

Geographic (Latitude/Longitude) / WGS84 / arc deg

Select Projection ...

Ground Control Points (Double-click to Center on GCP)

Point Name	Pixel X	Pixel Y	Projected X	Projected Y	Longitude	Latitude	Error	Delete

OK

Cancel

Help

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Topo + Geo => virtual landslide investigation

