TRACKING SEVERE WEATHER IN REAL-TIME WITH WDSS-II BY NOAA

Photo by NOAA of May 3rd 1999 Tornado near Anadarko

Getting Started Guide

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1. About This Guide

This guide was not written to be a step by step beginner's guide to using a computer with a windows type operating system or Google Earth. It assumes that the user has at least an average computer experience that includes basic operating system functions and familiar with terms such as drag-and-drop, Sidebar and Menubar. In addition, there are many other features in Google Earth that are not used or covered within this Getting Started Guide. The emphasis of this guide is to cover those areas that are related to using the WDSS-II application.

As with most window operating systems, there are several ways to complete a task and the same goes with most of the options used in WDSS-II. They too can be accessed in several different ways, including hot-keys, menu options, and by right-clicking on an item and making a selection from the drop-down menu. This system is very simple to learn and it is HIGHLY recommended that you play around with the system and practice with real data from events occurring outside of your local area. When the time comes that you will need to use these skills to track a real tornado within your community, valuable information will not be lost.

2. What is WDSS-II?

WDSS-II or "Warning Decision Support System - Integrated Information" is an application that was developed by the National Severe Storms Laboratory (NSSL) of the National Oceanic and Atmospheric Administration (NOAA) to provide real-time decision making information during severe weather. WDSS-II is a suite of weather related displays in Google Earth that include: reflectivity, processed velocities, hail, VIL (Vertically Integrated Liquid: large hail), spotter reports, watches, warnings, mesoscale discussions, day 1-3 outlooks, surface observations, and satellite overlays. The unique part of this system is that it can be used to track radar indicated tornadoes and other severe weather at street-level directly into Google Earth for disaster assessment and real-time situational awareness.

When an overlay in WDSS-II is activated, the weather information is displayed on a map that can be marked up for reference after the weather moved out of the area. For example, if you use the application to track tornadoes, you can later use the track information to zoom into the street level to determine staffing needs, estimate damage, and help determine boundaries to quickly deploy DDA teams into the field.

It is important to note that the tracking tools in WDSS-II are for Doppler radar indicated tornadoes and requires trained storm spotter reports for confirmation of an actual tornado on the ground. The integrated tornado spotter reports are updated hourly and help to provide confirmation of a tornado on the ground quickly and directly onto a Google Earth versus a listing on the NWS web pages. The WDSS-II application is experimental, subject to outages and should not be used to make life or death decisions. If an application is turned ON and is offline, a red mark will appear on the folder icon next to the feature indicating it is not working.

When the tools in WDSS-II are combined with the other sources of information, the DA process and workload will be dramatically reduced, insuring a more timely delivery of goods and services to the public following a tornado event and better situational awareness.

WDSS-II will you help to:

Ÿ   Maintain situational awareness of severe weather at the street level in Google Earth
Ÿ   Determine damage boundary information for DA
Ÿ   Gather more accurate PDA information quickly
Ÿ   Make informed DDA staffing deployment decisions
Ÿ   Prepare DDA deployment preparation packets in minutes
Ÿ   Deploy DDA teams with maps and aerials of damaged area for quick reference
Ÿ   Share and update the maps with everyone working the DRO.

The FREE application is simple to use and available for download over the web. By following the steps below, you can be up and running in the matter of a few minutes and expert with a little practice.

IMPORTANT NOTICE: The 2 Radar: Rotation: Max Az Shear applications included in this document are currently unavailable due to budget cuts and their future is uncertain when it was written. The information on these products has been included in this document in the event they receive funding at a later date.

3. Downloading, Installing and Configuring the Applications

Installing and configuring the each of the applications are straight forward by following the instructions below.

    A. Installing Google Earth
        1. Go to http://www.google.com/earth
        2. Download and install Google Earth by following the instructions they provide.

    B. Download the WDSS-II Portal application.
        1. Go to http://wdssii.nssl.noaa.gov/
        2. Click on the **"KML/KMZ Products"** tab located in the top left corner.
        3. Select the options as shown below and click on "**Create My KML**" button.
        4. Save the application on your desktop.

WARNING: Loading more than one loop at a time is not recommended, and likely won't function as expected anyway due to time syncronization issues. Please limit your looping to no more than one field. Thanks!

Radar
All Radar Products:

All On | All Off

- Off On Loop| Reflectivity Composite from 3D
- Off On Loop| Lowest Altitude Reflectivity
- Off On Loop| VIL
- Off On Loop| Maximum Expected Hail Size
- Off On Loop| 30 Minute Hail Swath
- Off On Loop| 120 Minute Hail Swath
- Off On Loop| Probability of Severe Hail
- Off On Loop| Echo Top: 18 dBZ
- Off On Loop| Echo Top: 30 dBZ
- Off On Loop| Echo Top: 50 dBZ
- Off On Loop| Reflectivity on 0C Isosurface
- Off On Loop| Reflectivity on -10C Isosurface
- Off On Loop| Reflectivity on -20C Isosurface
- Off On Loop| Rotation: Max Az Shear 0-2km AGL
- Off On Loop| Rotation: Max Az Shear 3-6km AGL
- Off On Loop| 120 Min 0-2km AGL Rotation Track
- Off On Loop| 30 Min 0-2km AGL Rotation Track
- Off On Loop| 120 Min 3-6km AGL Rotation Track
- Off On Loop| 30 Min 3-6km AGL Rotation Track

Satellite
All Satellite Products:
All On | All Off

- Off On Loop | IR Satellite
- Off On Loop | Water Vapor Satellite
- Off On Loop | Visible Satellite

NWS Watch/Warn/SPC Outlook/LSR Products
All Watch/Warn Products:

☑ All NWS Warning Products

NWS Storm Reports
All Storm Report Products:

☑ SPC Daily Storm Logs   ☑ SPC Hourly Storm Logs

Surface Observations
All Surface Observation Products:

☐ Hourly METAR Observations   ☑ 10 Minute METAR Observations

Contrast/Colorbar Controls
All Products:

☑ Contrast and Color Bars

Create My KML

C. Loading and configuring WDSS-II
1. Double-click on the WDSS-II application that you just saved on your desktop and it should load into Google Earth.
2. If a "Start-Up Tip" window is displayed, click on "**Close**" after viewing tips.
3. Turn on the Google Earth Sidebar and Toolbar by clicking on "**View**" and then "**Sidebar**" and again on "**Toolbar**" from the drop down menu.
4. Turn on each of the following by clicking in the Box located to the left each in the Sidebar.
   a. Warnings: NWS Warning Products
   b. Reports: NWS Hourly Storm Reports
   c. Borders and Labels
   d. Roads
5. Save the WDSS-II application to "My Places", so it will always be available on startup by clicking on "Temporary Places" to highlight in the Sidebar and then click on "**File**", "**Save**", and then "**Save to My Places**" in the Menubar.
6. Exit Google Earth to save the configuration. If you receive a notice that says. "You have unsaved items in your "Temporary Places" folder. Would you like to save them in your "My places" folder?" Click on "**Save**".

D. Loading Google Earth with WDSS-II
1. Click on the Google Earth Icon that was created during the installation process.
2. After Google Earth and WDSS-II have been configured, they will load as it was when you last exited the program.
3. If a "Start-Up Tip" window is displayed, click on "**Close**" after viewing tip (Note: you can turn this feature OFF by unchecking the box "Show Tips at Start-up").

4. **Navigating Around the Map**

A. Navigating
Moving around the map is done by grabbing and dragging the map with the mouse, the **Up/Down Arrow Keys**, or by clicking on one of the four direction arrows on the second from the top navigation tool, located in the top right corner of the main display.

B. Tilting and Rotating
1. Tilting is done by clicking on the **Up or Down Arrows** within the top navigation compass tool located in the top right corner of the main display window.
2. Rotating is done by clicking on the **Left or Right Arrows** within the top navigation compass tool located in the top right corner of the main display window.
3. Reset the Tilt and Compass by selecting the "**View – Reset - View and Compass**" menu options.

C. Zooming In and Out
Zoom In and Out with the mouse scroll wheel or the with the scroll bar located at the bottom of the four navigation tools in the top right corner of the main display window.

D. Walking Around Street Level/View
1. Either zoom down to the street level or drag the little yellow man icon located in the four navigation tools in the top right corner of the main display window.
2. Use the Navigation keys to walk around.
3. Use the Rotating keys to turn either direction at street level.
4. Click on "Exit Street View" located in the top right corner of the main display window to return map display.

5. Navigating Within the Sidebar

The Sidebar is organized with folders that can be expanded and collapsed to reveal or hide the contents. Folders can contain individual items and/or other folders, depending on the organization. If there are items within a folder, a small white arrow will be located on the line to the left.

- A. To open and expand a folder, click on the closed file folder icon or white arrow.
- B. To collapse and close a folder, click on the open file folder icon or black arrow.
- C. It is possible to have multiple layers of groups that can also be expanded and collapsed in the same way.
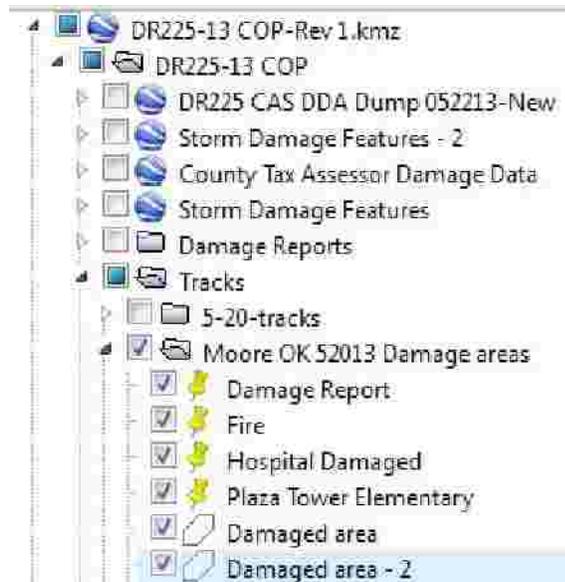
6. Create a Folder to Organize Markup Items.

When tracking tornadoes, you will need to use the various markup tools to create and save tracking information for when the weather has moved out of the area. To keep the markups that you will create organized, you must first create a folder. This will make it easy to transfer the data to other systems when you are finished.

- A. Click on **"My Places"** to highlight, located in the Sidebar.
- B. Create a folder with the **Add - Folder** menu option or **Ctrl + Shift + N** hotkeys.
- C. Enter in a name for the folder and click on **OK**.
- D. A folder will be created in the sidebar at the bottom of My Places with a small file folder icon.

TIP: Whenever you use a markup tool (placemark, path, or polygon), if you first highlight a folder within My Places in the Sidebar, the markups that you create will be placed within that folder. You can also drag and drop any item from the sidebar into the folder or create new folders within the folder that you just created to help with your organization.

7. Using the Markup Tools

There are 3 tools used to markup the map: Placemark, Polygon and Path. They can each be accessed by using the Menu Options, Hot Keys, or the Toolbar as shown below.

The Toolbar is located at the top left of the main display window. The first icon on the left with a yellow pushpin is the Placemark markup tool. The second icon from the left is the Polygon markup tool. And the third icon from the left is the Path markup tool.

A. Adding a Placemark
1. Click on the "**Add - Placemark**" menu options, the **Ctrl + Shift + P** Hotkeys, or by clicking the **Add Placemark Icon** in the Toolbar and a New Placemark properties window will be displayed defaulting in the name field.
2. Enter a name for the placemark.
3. Change properties (color, style, size, description, etc.)
4. Grab and drag the placemark to the desired location.
5. Save it by clicking on the "**OK**" button.

B. Adding a Polygon
1. Click on the "**Add - Polygon**" menu options, the **Ctrl + Shift + G** Hotkeys, or by clicking the **Add Polygon Icon** in the Toolbar and a New Polygon properties window will be displayed defaulting in the name field.
2. Enter a name for the polygon.
3. Change properties (description, style, color, etc.)
4. Begin drawing your polygon by clicking the locations of the polygon perimeter. You may have as many perimeter points as you wish, but do not hold down the mouse button to draw.
5. Save it by clicking on the "**OK**" button.

C. Adding a Path
1. Click on the "**Add - Path**" menu options, the **Ctrl + Shift + T** Hotkeys, or by clicking the **Add Path Icon** in the Toolbar and a New Path properties window will be displayed defaulting in the name field.
2. Enter a name for the path.
3. Change properties (description, style, color, etc.)
4. Begin drawing your path by clicking the locations of the path points. You may have as many points as you wish, but do not hold down the mouse button to draw.
5. Save it by clicking on the "**OK**" button.

D. Editing a Placemark, Polygon, or Path
1. Click on the item to highlight in the Sidebar.
2. Click on "**Edit – Properties**" and the edit window will appear.
3. For placemarks, grab the item with the hand by clicking and move it to the new location.
4. For Paths and Polygons, move any previously created perimeter or path point by hovering over it with the crosshairs until it changes into a hand then hold down the mouse button and drag it to the newly desired location
5. Save it by clicking on the "**OK**" button.

E. Deleting a Placemark, Polygon, or Path
1. Highlight the item to delete in the Sidebar
2. Click on "**Edit – Delete**" or use the **DEL** hotkey.

TIP: Anything that you enter into a description field of a markup tool will be displayed when you click on the item on the map.

TIP: If adding or editing a Placemark, Polygon or Path and the Add/Edit window is located over the area that you want to place or move an item, you will need to move it out of the way by grabbing the top of the window and dragging it off to the side.

TIP: To locate an item in Sidebar, click on the item located on the map and it will highlight the item in the Sidebar. This is helpful when you have many items with the same default name.

8. Turning ON/OFF the WDSS-II Applications

The WDSS-II applications are easily identified by the GREEN dot located on the file folder icon located to the left of the application name and directly under "NSSL/U. of Oklahoma Weather Products".

    A. Turn the applications ON or OFF by clicking in the Box located to the left of each application.
    B. If the green dot located on the file folder icon turns RED after clicking in the box, the application is "DOWN" or not operating.
    C. When an item is ON, a check will appear in the Box.

TIP: When you turn ON/OFF the top folder of a group, all of the other items within that folder or group will also be turned ON/OFF. If there is an item ON within that folder, the box will be colored blue.

9. Warnings: NWS Watch and Warning Products

WDSS-II comes with a file folder "Warnings: NWS Warning Products" that includes an array of NWS and SPC applications that are updated every minute. Expand the "Warnings: NWS Warning Products" by clicking in the Box located to the left of the file folder icon. These can be turned ON or OFF individually.

When any these applications are turned ON and there is a current Watch, Warning, Mesoscale Discussion or Outlook, it will be displayed on the map. You can read the text details by clicking on the Pushpin located near the border or corner of the area of concern. You should always keep the warning and watch products on.
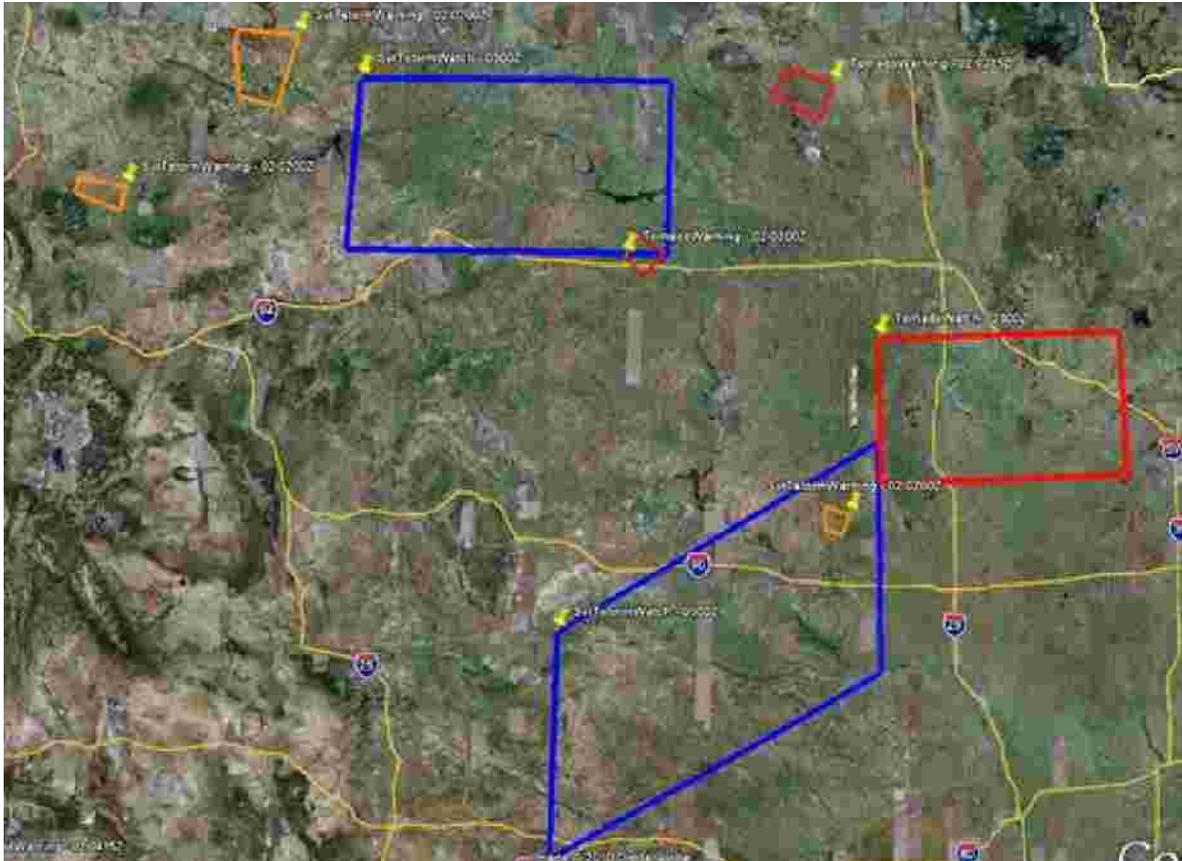

There are two Thunderstorm Watch boxes (blue), one Tornado Watch box (red), three Severe T-Storm Warning boxes (yellow), and two Tornado Warning boxes (red).

10. Reports: NWS Daily/Hourly Storm Reports

Located at the bottom of WDSS-II you will see the integrated storm Spotter Reports in both Hourly and Daily cycles. These are from certified spotters in the field and both provide confirmation of a Tornado on the ground, large hail and damaging winds.

The hourly reports are from the current day, while the daily reports are from the day before. These reports are from the same list that is on the NWS web page. It is important to note that during large breakouts, the NWS does not consider inputting tracker information a high priority and they will enter them in when the workload permits. Do not discard tracking information because you do not get a confirmation of a tornado within an hour.

Tornado (Red-T), hail (Green-H) and wind (Blue-W) spotter reports are shown here. Notice there are 2 tornado watch boxes but one watch box is in DARK RED. This indicates a PDS Tornado Watch. There are numerous tornado and severe T-storm warnings as well.

11. Colormaps: Weather Products Colormaps

Colormaps are available for each of the applications to gage the severity of radar returns. To see the Color Bar for any of the items, turn ON the "Colormaps: Weather Products Colormaps" by clicking in the Box and expand it by clicking on the arrow. Locate the Color Bar that represents the specific radar application and turn it ON by clicking in the Box.

12. Metars: 10 minute METAR observations

METAR observations are surface readings that include: wind barb (direction/speed), wind gusts, temperature, dew point, pressure and last hour of precipitation. Each of the items can be turned ON or OFF individually.

13. Radar: Reflectivity, VIL, Hail

WDSS-II includes several reflectivity products that provide standard precipitation returns, including Hail. These can be turned ON or OFF individually and should not be used at the same time. This is especially important when displaying multiple radar Loops. It creates an error within WDSS-II and the information is not reliable.

WDSS-II also includes four hail products that are very useful in tracking storms with severe hail damage. These can be marked up as you would for tracking tornadoes.
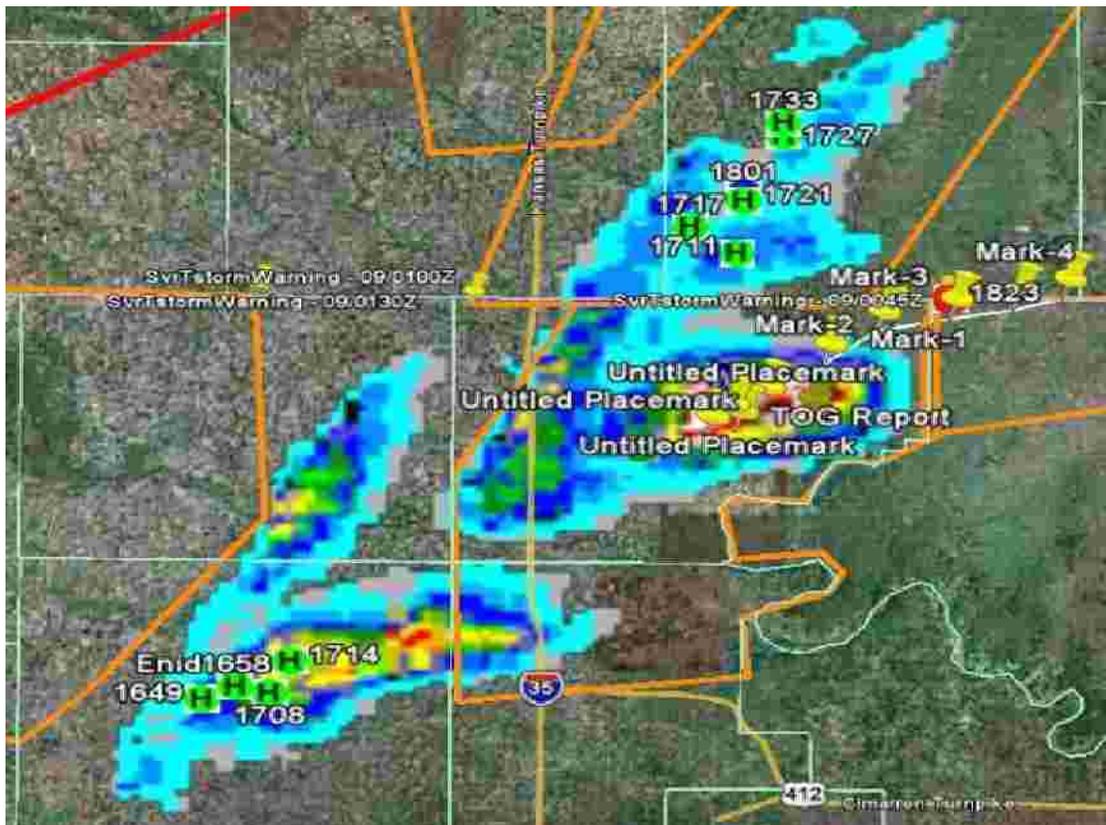
120 Minute Hail Swath. The reds are over 2" in diameter.

## 14. Radar: Rotation: Max Az Shear 0-2/3-6 km AGL

WDSS-II includes 2 Radar Rotation velocity wind shear displays: 0-2 km AGL and 3-6 km AGL. These 2 applications display radar indicated tornadoes via wind shear from lower (0-2 km AGL) levels and mid (3-6 km AGL) levels in the atmosphere (AGL: Above Ground Level). These displays are updated every 4 minutes and can be turned ON or OFF individually and should not be used together.
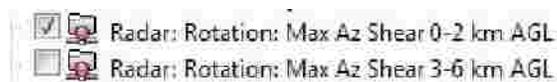
The 0-2 km AGL display is from the lowest radar tilt and samples the atmosphere closest to the ground where tornadoes are located.   When you are tracking tornadoes, zoom into the tornado warning box until it is displayed in the main window. Check the box located to the left of "Radar: Rotation Max Az Shear 0-2 km AGL". The main display will fill the main window with shades of greys, blues, reds, and whites. If you are viewing a new Tornado Warning, you will notice a white area located on the narrow end or "start" of the Tornado Warning box. If not, wait for the next display update. The white area is the area of rotation or "wind shear" that generated the tornado warning.

To start tracking, create a folder; zoom into the white area to make it easier to place a pushpin into the center of the white area to use as a reference. The display will be updated in real-time every 4 minutes, depending on your connection, and the white area will move in the direction the storm is moving within the warning box as long as the rotation is still present. The faster the storm is moving, the greater the distance will be between white areas. The greater the amount of rotation, the brighter the white area will appear. When the rotation dissipates, the white area will also dissipate and change back into the reds, blues and greys after a display update. You can add additional pushpins as the area of rotation moves to track the radar indicated tornado and create a tornado track. Make sure that you add a pushpin to the last known area of rotation to ensure an ending of the tornado track. After you have created a track, you can then delete the pins.

IMPORTANT NOTICE: The 2 Radar: Rotation: Max Az Shear applications included in this document are currently unavailable due to budget cuts and their future was uncertain when this was written. The information on these products has been included in this document in the event they receive funding at a later date.
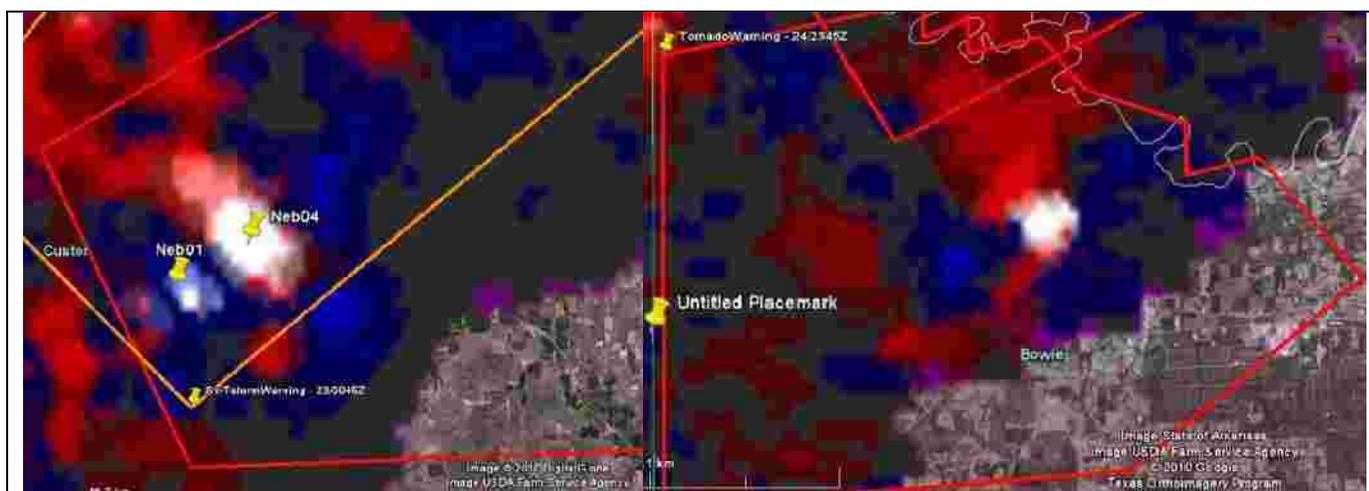
Each of the 2 pictures above show a tornado warning with a single area of wind shear located inside. The picture on the left has 2 yellow pushpins inserted for tracking and they will later be connected to create a track and removed. If a spotter reports a tornado on the ground with this storm, a Red T will be placed next to the track. After the weather moves out of the area, we can zoom in to see what structures may be located in a possible damage path.

15. Radar: 120/30 Minute 0-2/3-6km AGL Rotation Track

WDSS-II includes 4 Radar Rotation Track velocity displays: 120 min 0-2km AGL, 30 min 0-2km AGL, 120 min 3-6km AGL, and 30 min 3-6km AGL. Like the 2 wind shear applications, these 4 applications also display radar indicated tornadoes via wind shear from lower (0-2 km AGL) levels and mid (3-6 km AGL) levels in the atmosphere. These displays essentially string radar indicated tornado couplings into 120 and 30 minute long tracks. They are also updated every 4 minutes, can be turned ON or OFF individually but should not be used together.

The 0-2 km AGL display is from the lowest radar tilt and samples the atmosphere closest to the ground where tornadoes are located. When you are tracking tornadoes, zoom into the warning box until it is displayed in the main window. Check the box located to the left of "Radar: 120 or 30 Minute 0-2km AGL Rotation Track". The main display will fill the main window with shades of grey, yellows, reds, whites and blues (in order of least to highest rotation). If this is a long track tornado, you will see what looks like a long string of pearls that are essentially radar couplings at 4 minutes apart. The faster the tornado is moving, the longer the distance between tracks. If you are viewing a new Tornado Warning, it will take some time to create a tornado rotation track and you might want to switch to a 30 minute track.

To start tracking, create a folder, zoom into the rotation track and using the path tool or pushpins, begin to mark the center of the tracks. To make it easier to center the pushpins or path, zoom closer to the ground. The display will be updated in real-time every 4 minutes and the track will grow for as long as the rotation is still present and limit of the 30 or 120 minutes have not been exceeded. When the track has reached its limit, it will add to the front and delete from the back. The greater the amount of rotation, the brighter the colors will appear in grey, yellow, red, white and blue with dark blue being the strongest. When the rotation dissipates, the track will also dissipate and change back into the normal map display. Make sure that you add a pushpin on the last known area of rotation to ensure an ending of the tornado track. After you have created a track, you can then delete the pins.

While this product does not work as well as the wind shear application with short lived tornadoes, it is very good for long track tornadoes and the data is available for up to 2 hours.
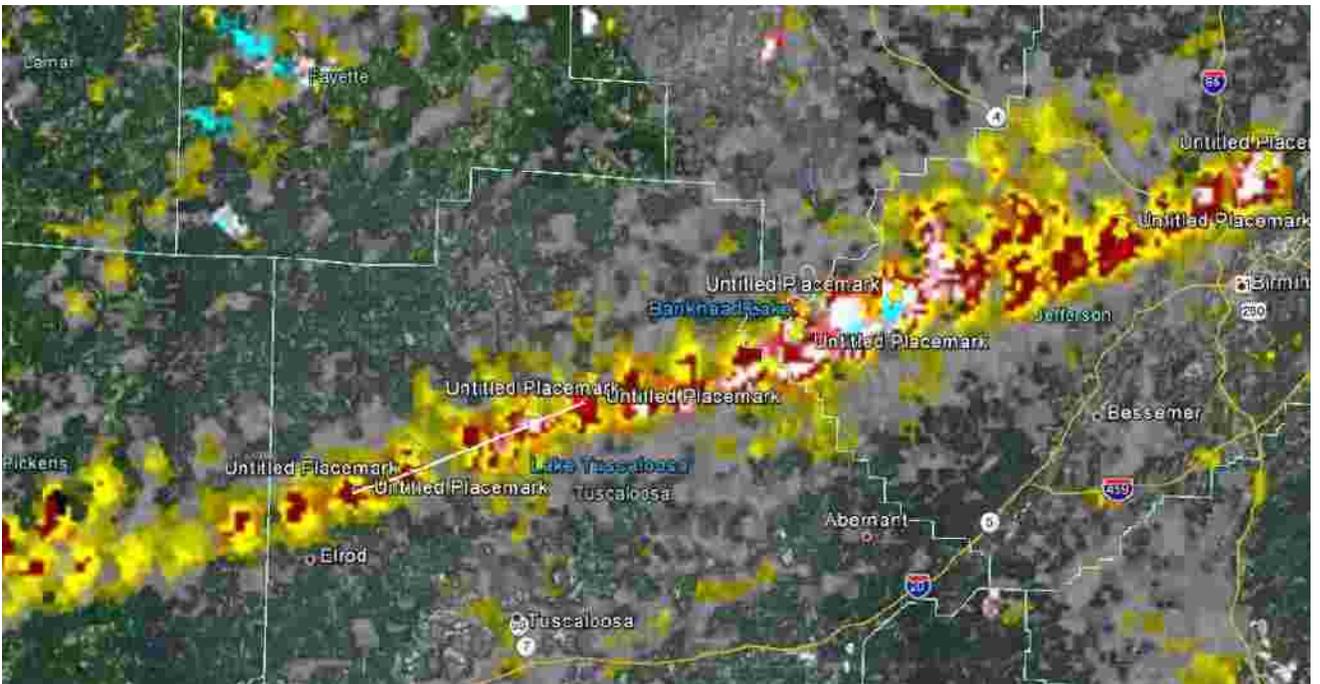
TIP: Since the application already creates a track, you can skip the pushpins by using the path tool to draw a path the center of the rotation.


Joplin MO, 2012
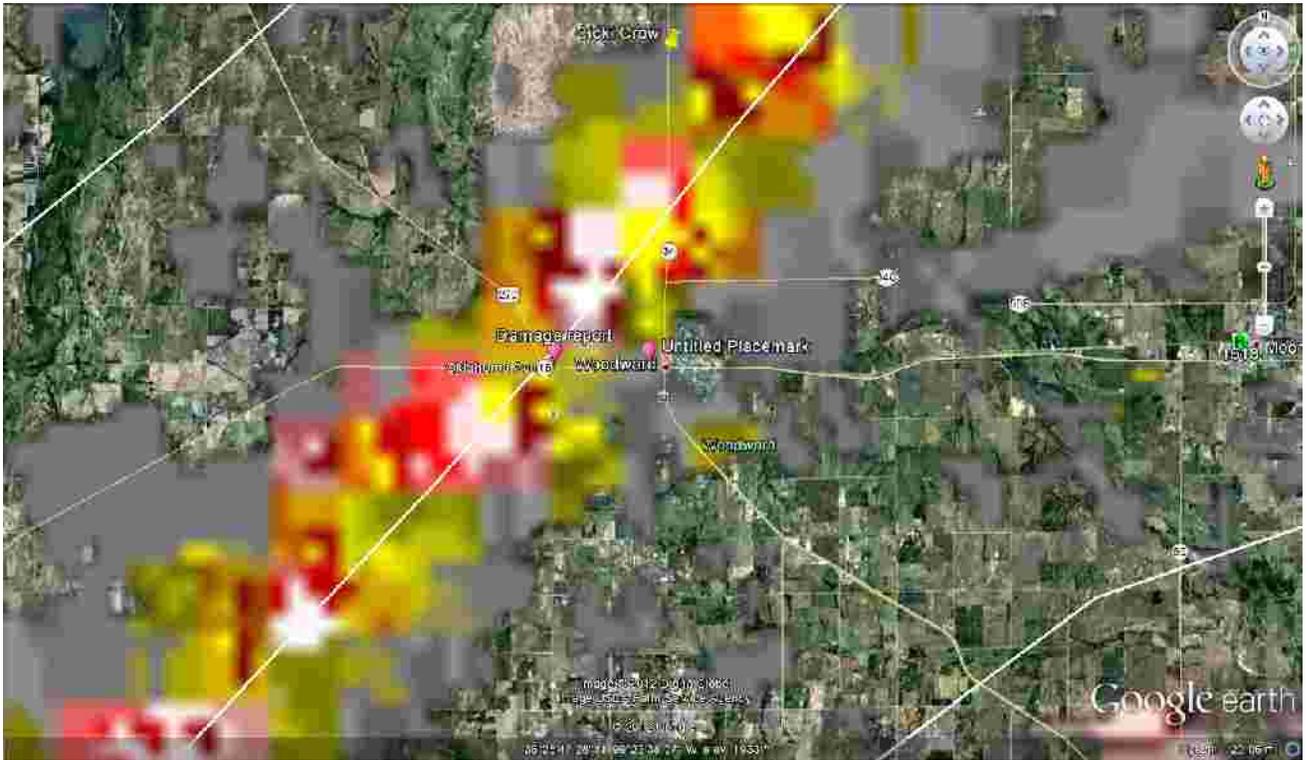
This is a 30 minute 0-2km AGL Rotation Track of the Woodward, OK tornado in 2010.

This is a 120 minute 0-2km AGL Rotation Track from the tornado that went through Tuscaloosa, AL in 2011.

16. Toggle Back and Forth Between Displays

After inserting a pushpin for use as a reference between radar displays, you can toggle back and forth between two or more displays to get a better picture and from different levels in the atmosphere. For example, you can toggle back and forth between the "Radar: Rotation Max Az Shear 0-2 km AGL" and "Radar: 30 Minute 0-2km AGL Rotation Track" options by turning them ON and OFF at the Sidebar.
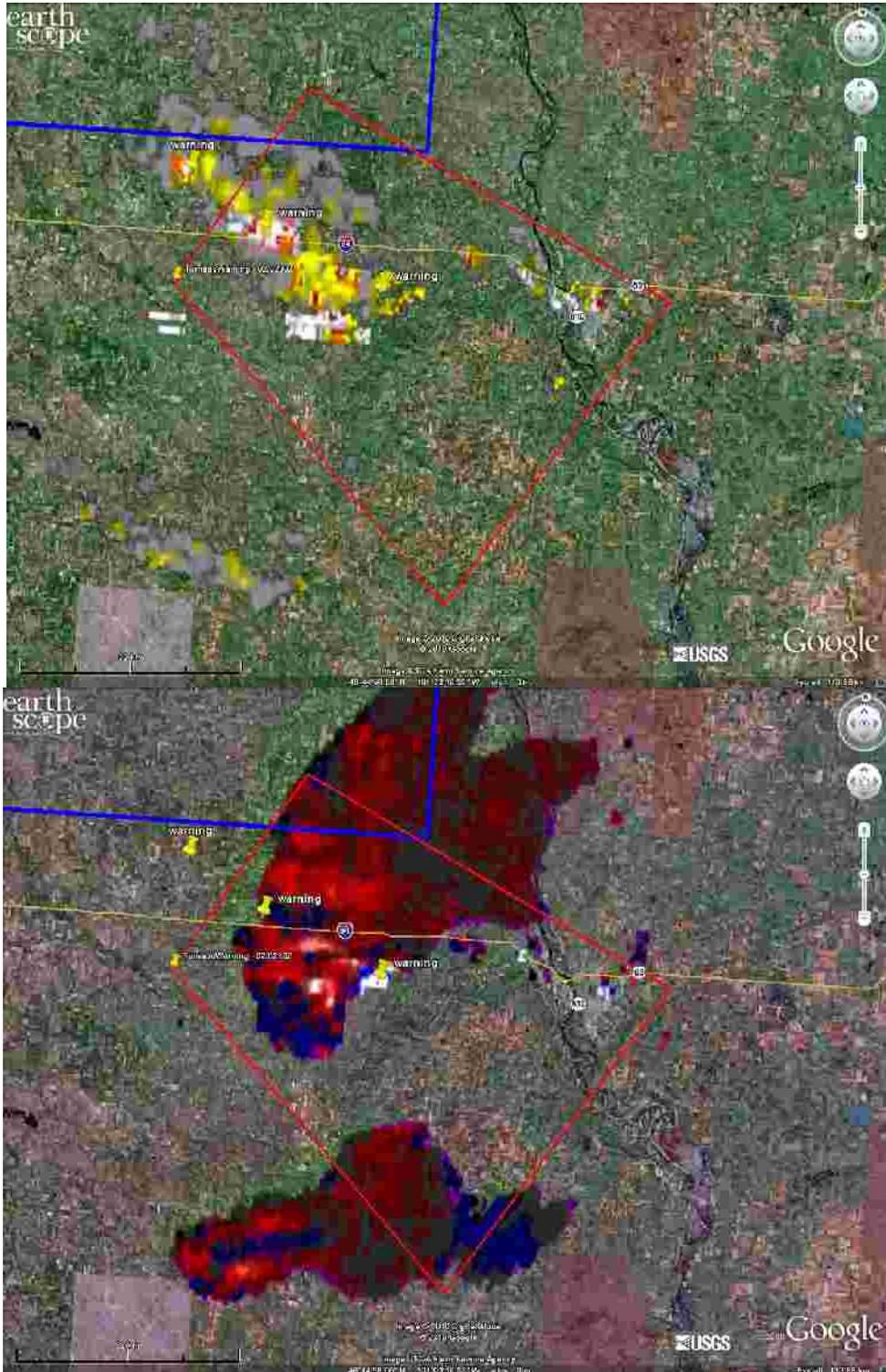
These 2 pictures are displays of the same tornado paths at the same time but in different displays. The top picture is of a 30 minute Rotation-Track. The bottom picture is of a Wind-Shear display.

## 17. Connecting the Pushpins to Draw a Tornado Path

When you are finished tracking an area of rotation, you can connect the pins with the Path markup tool to create a storm track. You can then delete the pushpins to eliminate clutter on your map.


The picture above shows a tornado track coming into Moore OK on May 19th, 2013 that was created by connecting the pushpins.

## 18. Analyzing the Doppler Radar Indicated Tornado Track

After a tornado track has been determined with the markup tools, the NSSL overlay can be removed to reveal the population centers under the track. To remove the NSSL overlay, uncheck the radar options located in the Sidebar. You now zoom into the radar indicated tornado track revealing more details.
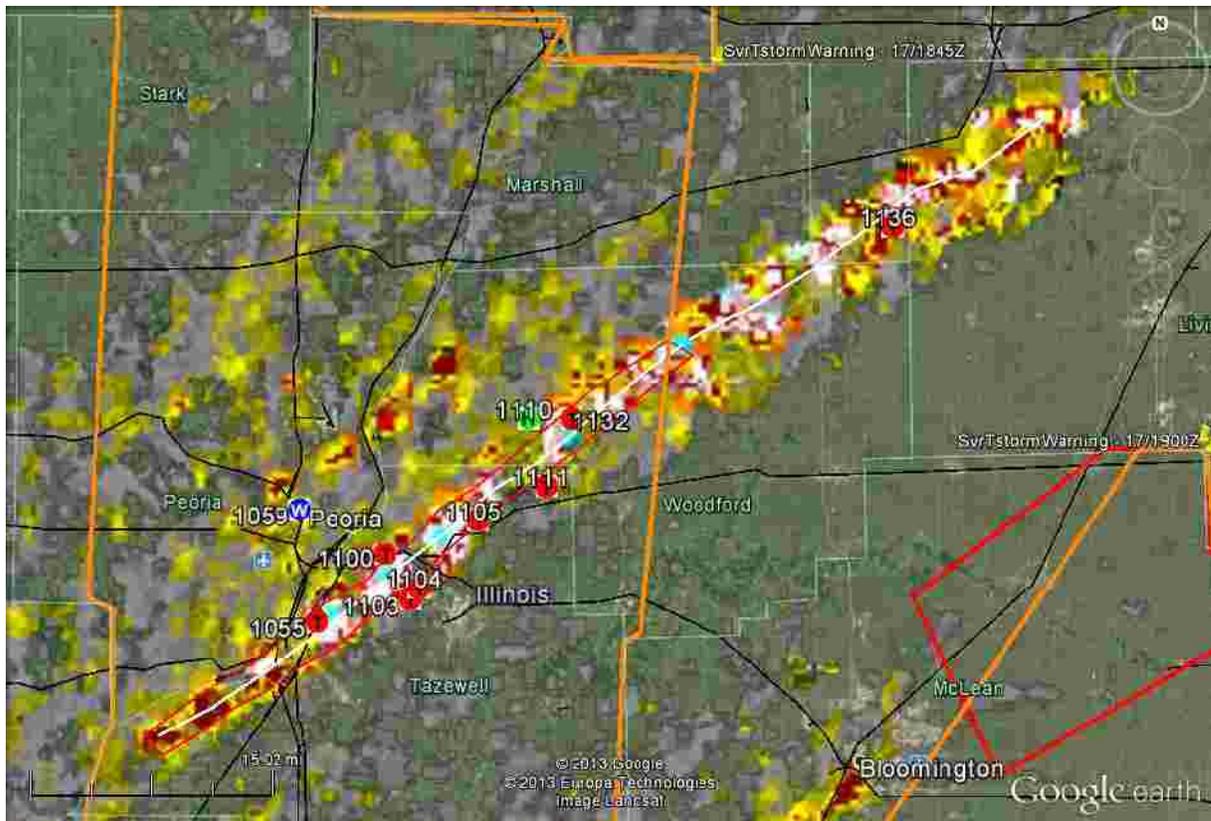

Peoria IL 2013: 120 minute 0-2km AGL Rotation Track. The white line in the middle is the center line of the rotation track. The red polygon at the start of the track is a rough perimeter of the rotation track. Notice the Tornado spotter reports (Red T) all along the track.
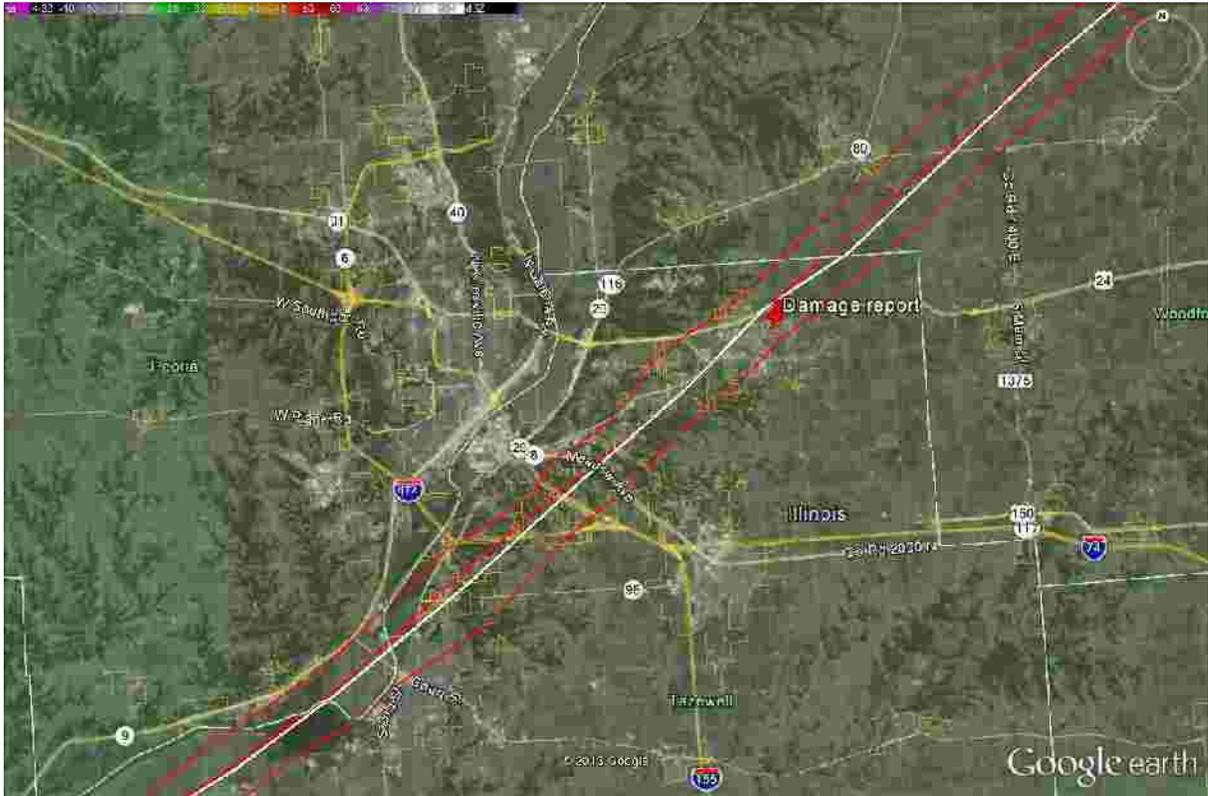
Peoria IL 2013: With the radar display turned off, you can now see the white center and red polygon of the rotation track. NOTE: A damage report from a news source is marked with a red pushpin.
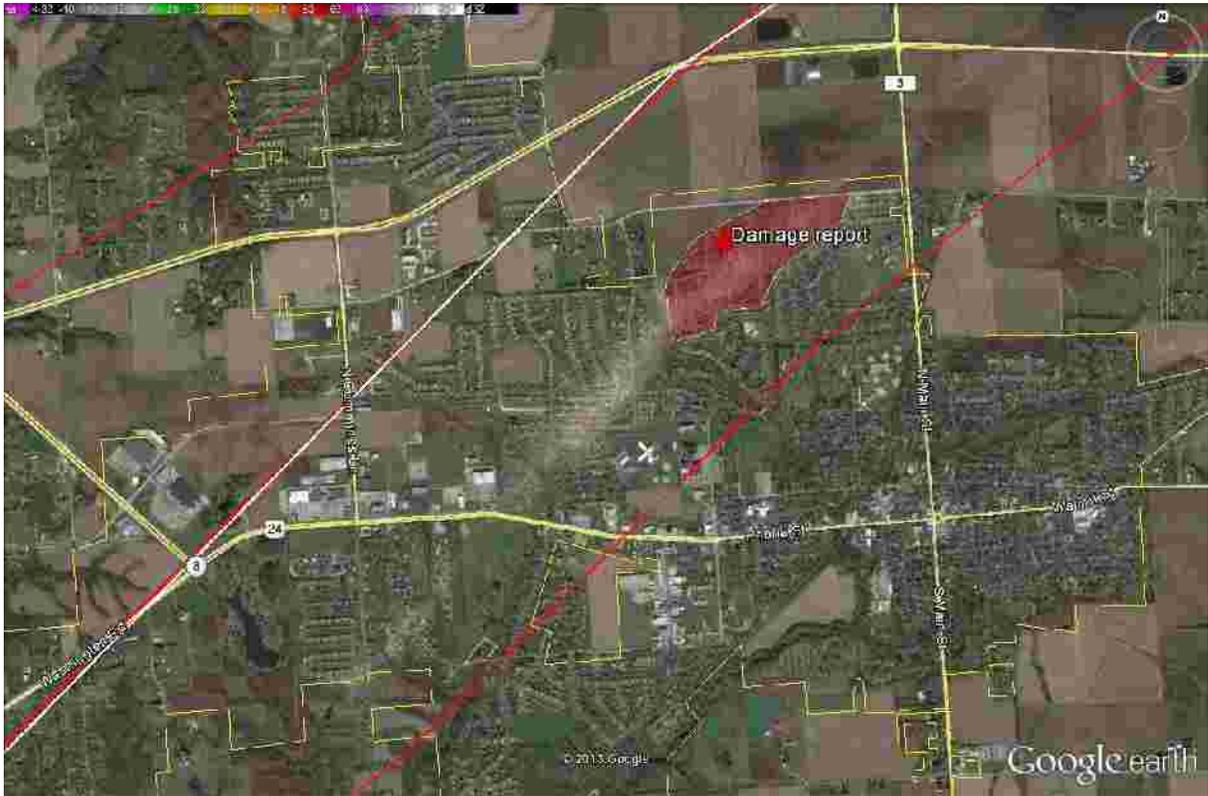

Peoria IL 2013: We have zoomed in on the track and can see the damage report located to the East of the centerline. NOTE: This Google Earth base layer has been updated since the tornadoes and you can see a clear damage path from the tornado on the ground.
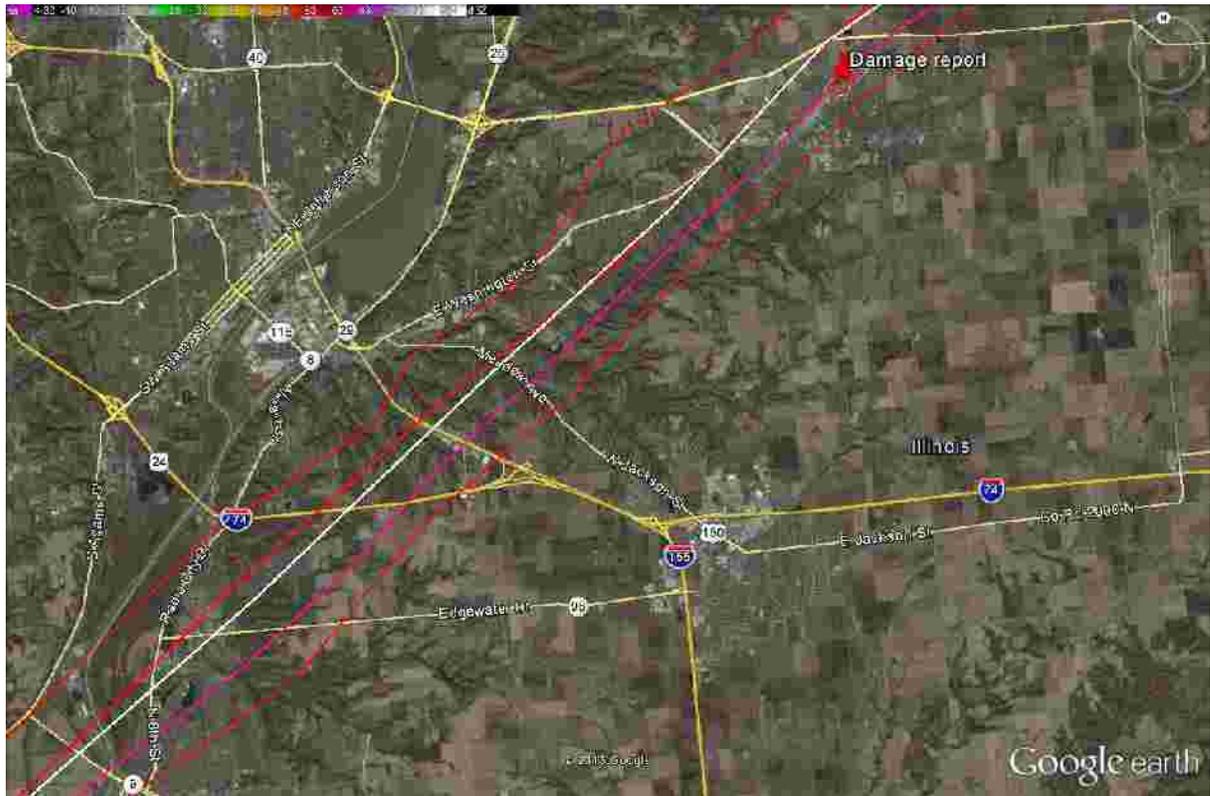
Peoria, IL 2013: Because of the curvature of the Earth, storm tilt, and other factors the damage path will not always match the storm track but will always run parallel to the track. The damage report suggests a damage search path will be east of the centerline. Now we have marked a new search track in purple.
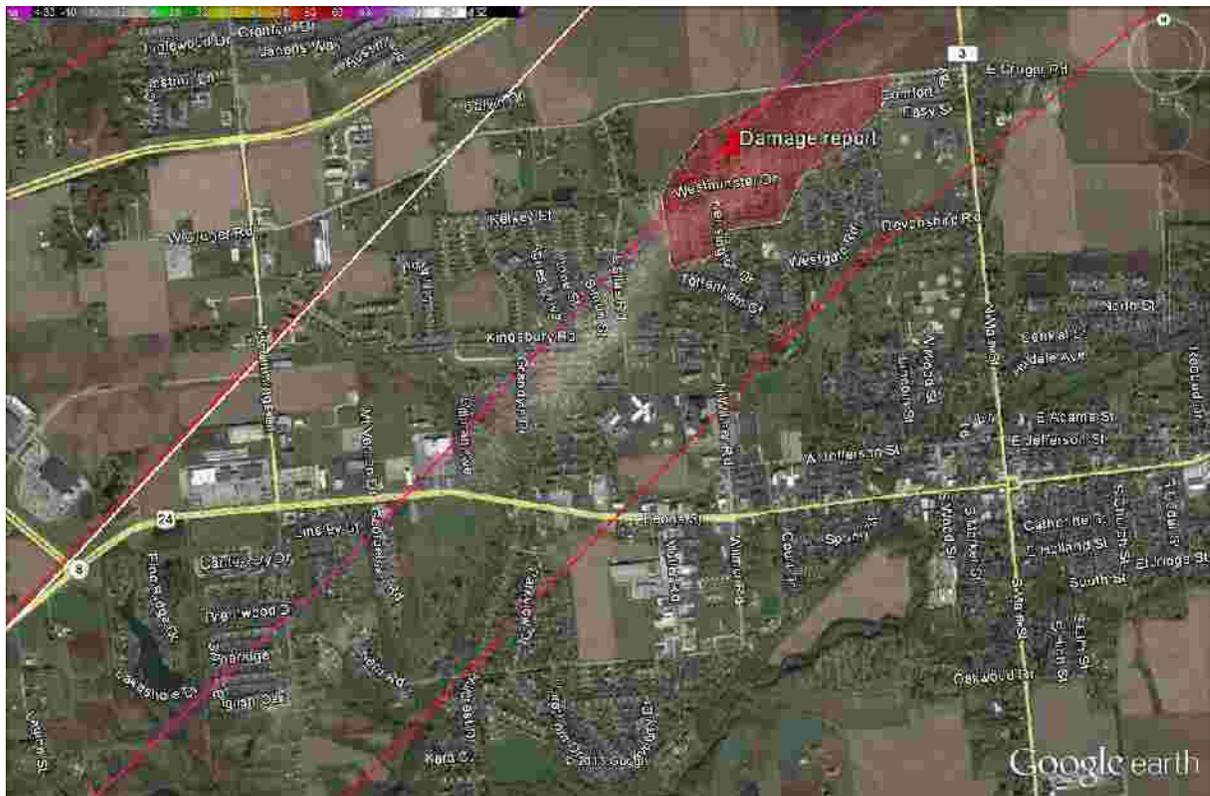
Peoria, IL 2013: We fly over the search path in Google Earth and look for neighborhoods and homes. We determine the number of DDA teams it would take to complete DDA within a day by dividing the path into sectors. We assign a team to each sector for deployment.
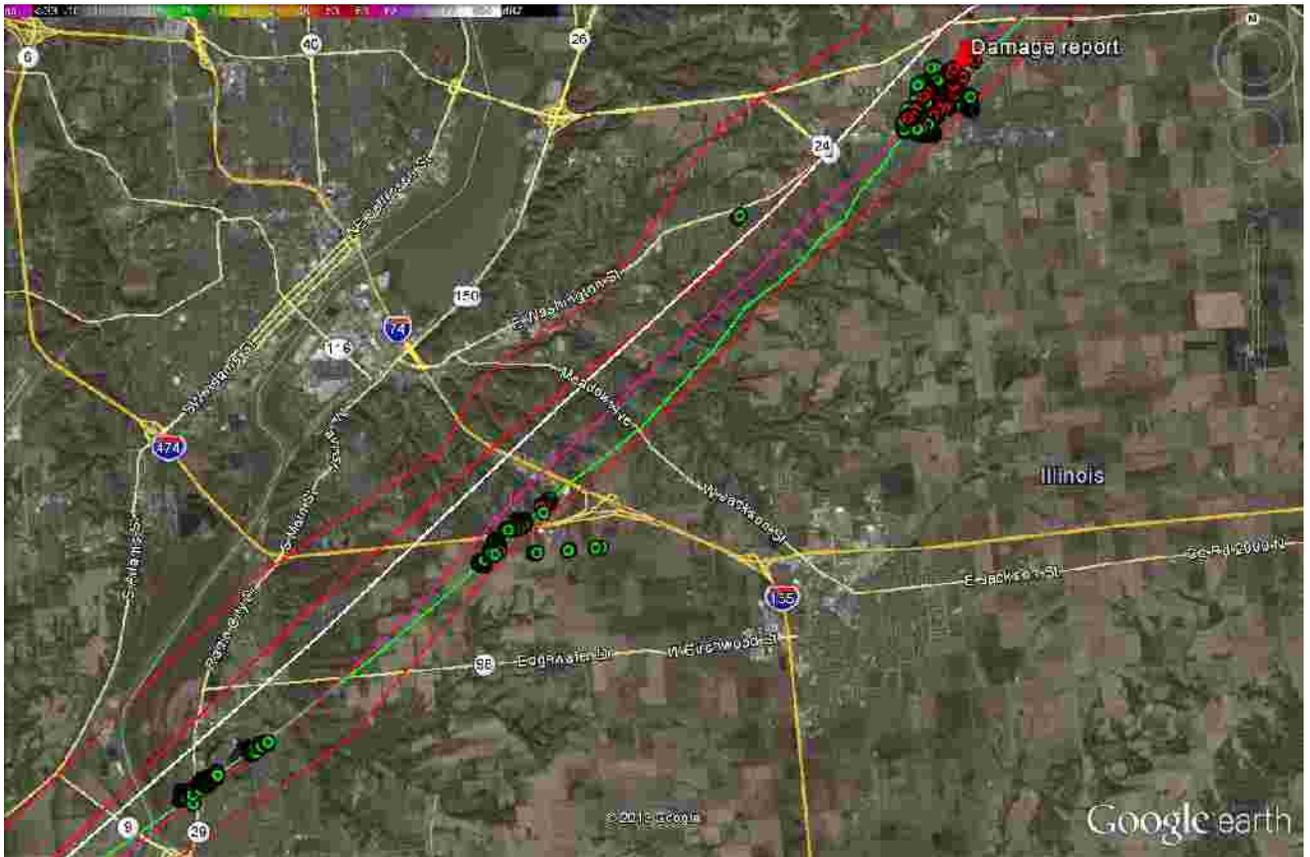
Peoria, IL 2013: After DDA was completed the addresses were batch geocoded and plotted on the map with Fusion Tables. The RED pins are destroyed/major and the GREEN pins are minor/affected. The green line is the actual storm track that was created with the updated base layer and the tornado swirl marks that were visible on the ground.
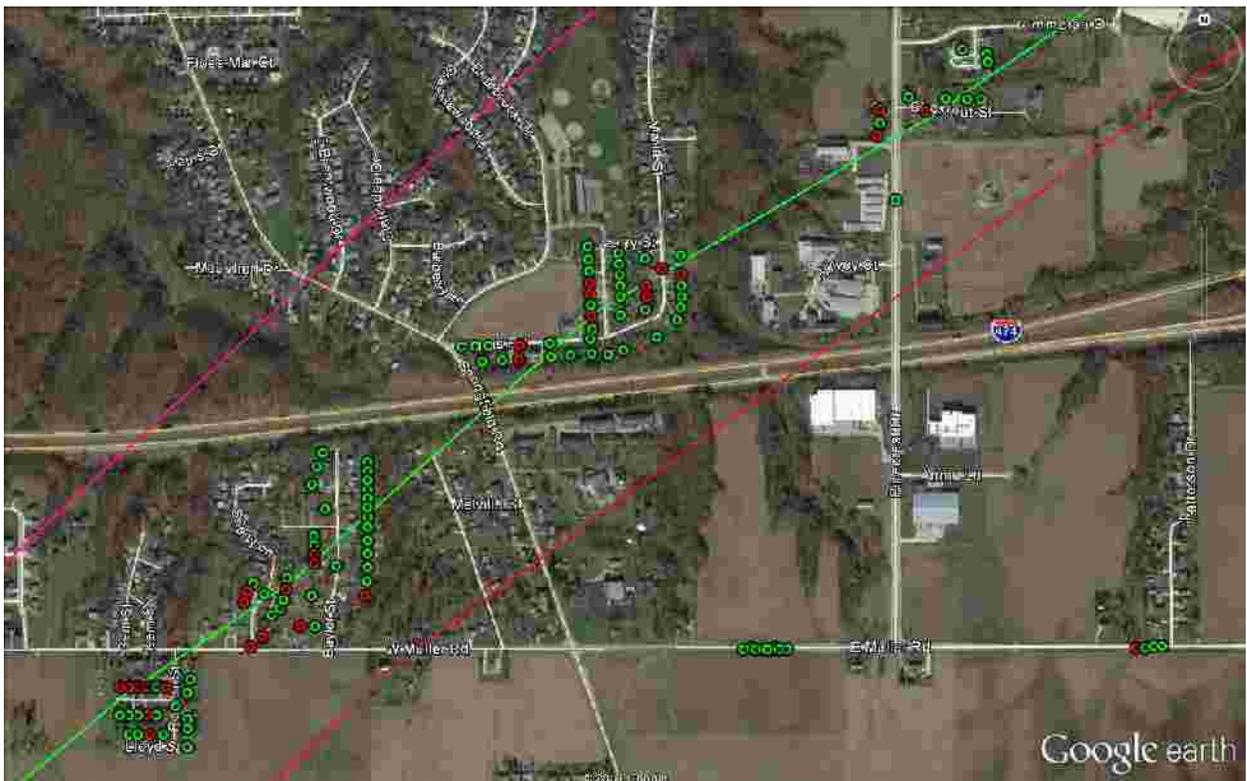

Peoria, IL 2013: Close up of the damage track. The RED pins are destroyed/major and the GREEN pins are minor/affected.

19. Creating a Common Operating Picture "COP"

WDSS-II is one tool that when combined with other sources of information can jump start your DA process by providing weather data directly into an easy to use GIS application. Locating the boundary of the affected area is the first step in every disaster response. You can enter additional pieces of information into your map with labeled pushpins from various sources (NEWS, fire departments, etc.) for future reference as you build the foundation for a COP. Later you can use the markup tools to add fixed feeding sites, shelters, bulk distribution sites, MARCs, Service Centers, and others.

To change an Icon, after clicking on the Add Placemark icon in the Toolbar, click on the icon to the right of the Name field and a pop-up window will appear with several different styles if icons. Select the icon to use and change the color, size and opacity in the appropriate fields and click on OK to save.
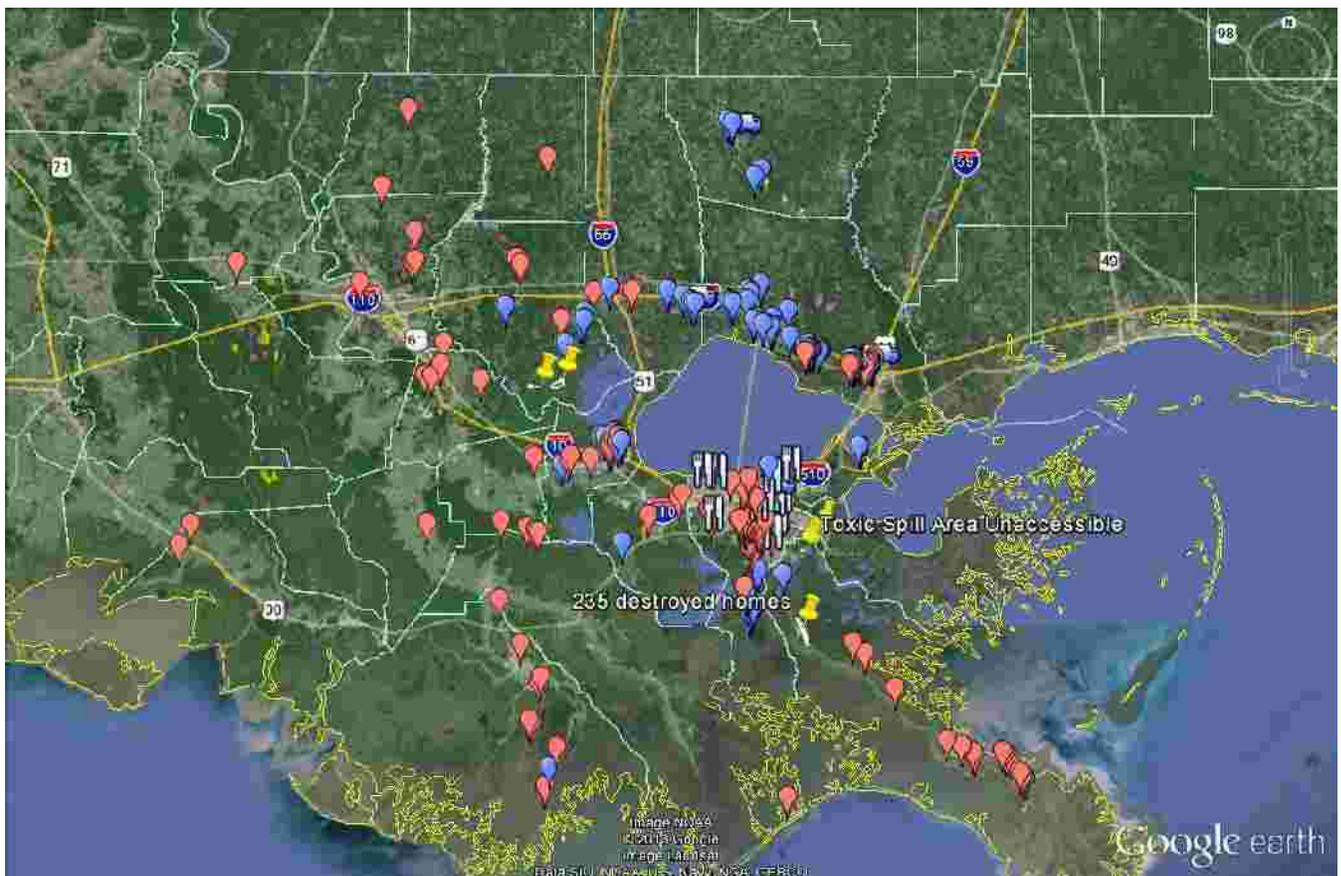
COP from Hurricane Isaac in 2012. The RED balloons are destroyed/major wind damage and the BLUE balloons are destroyed/major flooding damage. There are also other damage areas, feeding sites, and bulk distribution sites.

20. Save a Google Earth Overlay ".KMZ/.KML" File to Transfer the Data

To save a Google Earth overlay ".KMZ" file for transferring to other computers, all of the items must first be in folder on the sidebar. If not, you will have to create a folder and drag and drop the items into the folder that you want to include in your file. If you move a folder into the main folder, all of the contents of that folder will also be moved. When the folder contains all of the components of the event that you wish to save, highlight the folder and save it by selecting **File – Save – Save Place As** or the **Ctrl + S** hotkeys. A pop-up window will appear defaulting with the folder name and a file-type as KMZ. Browse to the desired location to save the file, type in a name and click on **SAVE**.

21. Save Satellite Images

To save an image, center the area to save in the main display window. When the appropriate display in within the map window view, click on **File – Save – Save Image** or **Ctrl + Alt + S** hotkeys. A pop-up "Save As" window will appear. Browse to the location that you wish to save the file, enter in the filename and click **SAVE**.

For questions, suggestions, or comments regarding this document, please contact Steven Klapp at the American Red Cross of Central and Western Oklahoma Steve.Klapp@Redcross.org

Google Earth Quick Reference Guide

Add a Folder:

ADD – FOLDER – Type a Name – OK

CTRL + SHIFT + N – Type a Name – OK

Place Objects in a Folder:

Drag and drop objects into folder.

HINT: If the folder is highlighted when an object is added, it will automatically be placed in the folder.

Add a Placemark:

ADD – PLACEMARK – Position the pushpin – Type a name – OK

CTRL + SHIFT + P – Position the pushpin – Type a name – OK

Click on "Add Placemark" button – Position the pushpin – Type a name – OK

Add a Path:

ADD – PATH – Position at start CLICK – Repeat – Type a name – OK

CTRL + SHIFT + T – Position at start CLICK – Repeat – Type a name – OK

Click on "Add Path" button – Position at start CLICK – Repeat – Type a name – OK

Add a Polygon:

ADD – POLYGON – Position at start CLICK – Repeat – Type a name – OK

CTRL + SHIFT + G – Position at start CLICK - Repeat – Type a name – OK

Click on "Add Polygon" button – Position at start CLICK – Repeat – Type a name – OK

Save an Image:

FILE – SAVE – SAVE IMAGE – Browse to location – Type a name – SAVE

CTRL + ALT + S – Browse to location – Type a name – SAVE

Save a Place "Map Overlay":

Add a Folder – Place objects in a folder - Highlight the folder (or object) to save – FILE – SAVE – SAVE PLACE AS – Browse to location – Type a name – SAVE

Add a Folder – Place objects in a folder - Highlight the folder (or object) to save – CTRL + S – Browse to location – Type a name (folder name default) – SAVE