VantagePoint Heatmap Instructions

Stephen Carley (via the VantagePoint Institute) is pleased to offer a heatmap program for viewing VantagePoint records in heatmap format. Maps are rendered using a color scheme of the user's choice, with areas that exhibit more intense activity correlating with user designated hot colors (or hotspots). The following instructions provide guidance for installing and using this tool.

Installing the Heatmap Tool

1. The Heatmap tool operates using 2 files: (1) VP_to_HeatMap.vpm and (2) Generate_GM_Code.xlsm. These files should be available for download on the VP Institute website. Save these files to any empty folder on your computer. Also save the VantagePoint file you are interested in using this script with to the same folder.
2. Excel macros need to be enabled to use this program. To enable macros in Excel see Appendix A.

Using the Heatmap Tool

1. In VantagePoint open a field you are interested in mapping –e.g. *Affiliation (City and Country)* highlight list items[1] you want to map.
2. In the menu-bar click: **Scripts -> Run Script… -> Browse**, and after selecting the folder you saved your setup files in (from step #2 of <u>Installing the Heatmap Tool</u>), select VP_to_HeatMap.vpm, click "Open" and then click "Run". This will activate a series of pop-up boxes to respond to, most of which are self explanatory.
3. After responding to the all prompts your map file will be saved to the same folder you saved your setup files in (from step #2 of <u>Installing the Heatmap Tool</u>). To display this in VantagePoint drag and click the file into the address bar of your web browser.

Working with Heatmaps

1. After stepping through this process a heatmap similar to what appears in Figure 1 (below) will be generated. Four radio buttons will be present at the top of your screen. Of interest to this analysis is the (1) *Change gradient* button, which adjusts the color scheme based on user selected inputs (when the map file was being generated), and (2) *Change radius* button, which adjusts icon radius size (also based on user selected inputs when the map file was being generated). Default icon radius size is 100.

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[1] By selecting items with different record counts you will obtain variation in color gradients.
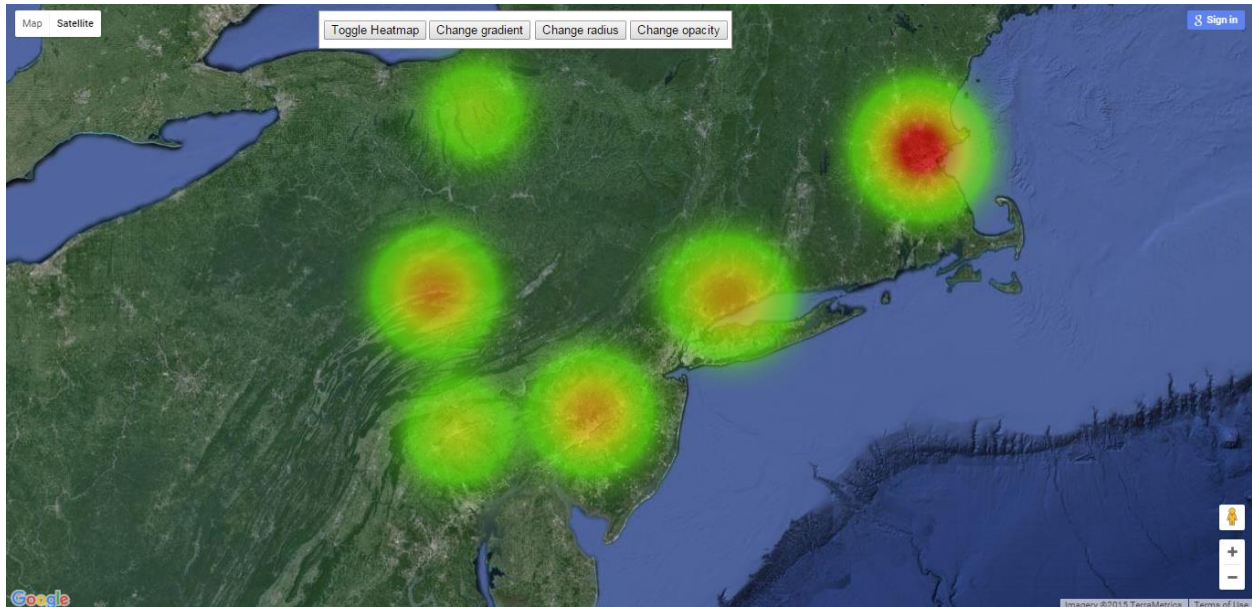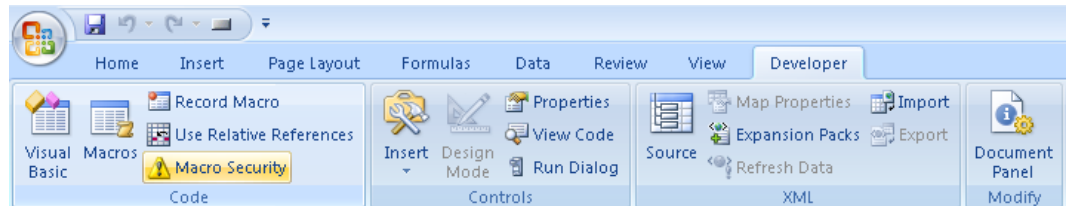
Figure 1. Sample Heatmap

<u>**Coverage Statistics**</u>

Every time you run this script the Excel file (in the directory you saved your setup files to) populates a sheet (Items_not_Mapped) that lists any items (from your VantagePoint list of interest) not mapped by this procedure (if such items exist). The user has the option to provide coordinates for these by adding to the Coordinates sheet[2] of Generate_GM_Code.xlsm, saving and closing Generate_GM_Code.xlsm, and then rerunning the script.

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[2] Sites like http://www.gpsvisualizer.com/geocoder provide latitude/longitude coordinates for user selected inputs

Appendix A: How to Enable Macros in Excel

1. Open the macro security settings dialog box from the **Developer** tab in the Ribbon. If the

    Developer tab is not visible, click the **Microsoft Office Button** (it looks like this:), then click **Excel Options**. Under the **Popular** option select the **Show Developer tab in the Ribbon** check box. Once the **Developer** tab is visible, click the Macro Security icon:

2. Select: "Enable all macros," then click "OK" (note: this allows Excel to run potentially harmful scripts on your computer. If you are not familiar with, or do not trust the source of a given Excel file, scan it for viruses and/or disable macros before opening it).