

# CATASTROPHE SERVICES

# Catastrophe Blog

## Use PLRB's Hail Risk Web App for Policyholder Risk Information

From the PLRB Homepage, at <u>www.plrb.org</u>, perform the following (please sign in first):

Hover your mouse over **Weather/Cats** on the top navigation bar then hover over **Weather Research**.

Click on Maps & Apps Portal Home.



PLRB Homepage

Click on the thumbnail for the Hail Risk web app.



Once the web app loads, please read the splash screen information/disclaimer then click the OK button.



Two layers are available for display. By default, the hail report optimized hot spot analysis layer is displayed. Preliminary hail reports (1 inch hail or larger reports) from 1-1-2002 to 12-31-2016 (15 years) from the National Weather Service (NWS) were used to create this layer. For more information about the two data layers, please click on the About widget ("i" icon) near the top left corner.

You may zoom into an area and click on a polygon to view the confidence level of the hot/cold spot as well as how many hail reports were reported within the area over the 15 year period. Areas without hexagonal polygons did not contain any reports to the NWS of hail of 1 inch or larger.



To upload a CSV file to plot on the map, click on the GeoLookup widget icon (third widget from the left). Select a CSV file (must contain latitude and longitude fields). The points will be plotted on the map, and a spatial query will

be conducted on the map layers. If you only wish to plot the points without conducting the spatial query, select the **Only Plot Points** checkbox.



After the spatial query, you may download the CSV file. The newly downloaded CSV file will have the risk layer data for the location appended.

To view the emerging hot spot analysis layer, click on the Layer List icon in the top right corner. Then click on the check box to make the layer visible.



### About the Hail Risk Layers

Preliminary hail reports (1 inch hail or larger reports) from 1-1-2002 to 12-31-2016 (15 years) from the National Weather Service were used to create these layers.

#### **Hot Spot Analysis**

Optimized Hot Spot Analysis geoprocessing tool from ArcGIS Desktop was used to create this layer. Creates a map of statistically significant hot and cold spots using the Getis-Ord Gi\* statistic. It evaluates the characteristics of the input feature class to produce optimal results. For more information please see the <u>ArcGIS documentation</u>.

#### **Emerging Hot Spot Analysis**

Emerging Hot Spot Analysis geoprocessing tool from ArcGIS Desktop was used to create this layer. Identifies trends in the clustering of point densities (counts) in a space time cube created using Create Space Time Cube. Categories include new, consecutive, intensifying, persistent, diminishing, sporadic, oscillating and historical hot and cold spots. For more information please see the <u>ArcGIS documentation</u>. For more information regarding the category descriptions please see <u>ArcGIS category descriptions</u>.

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