

insurity SpatialKey | Accumulations Quick Start Guide

Whether you're new to SpatialKey or new to our accumulations solution, this guide will help you get oriented and get the most out of your accumulations analyses. We value your feedback. Reach out to your account manager with questions or email support@spatialkey.com.

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Accumulations 101

Watch this companion tutorial video to get a jump start on using the Accumulations application.



More Quick Start Guides

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Run a Ring, Grid or Target Accumulation Analysis

With SpatialKey, you can identify peak exposure accumulations within overlapping rings, uniform grid sizes, or use a target dataset to identify areas of accumulation within a specific radius of those points.

1. **Select the dataset** you want to analyze.
2. **Select the configuration** you want to use.
 - a. **Create a configuration** if you don't have one setup or want to create a new one. Select from available models for your organization. Each model has its own configuration options.
3. **Select a metric** and **minimum threshold** to use in the analysis. The minimum threshold can be left at 0 to have all accumulation results returned.

TIP! If your dataset has an associated policy file or facultative reinsurance file, you will have the option to run accumulations based on policy limits.

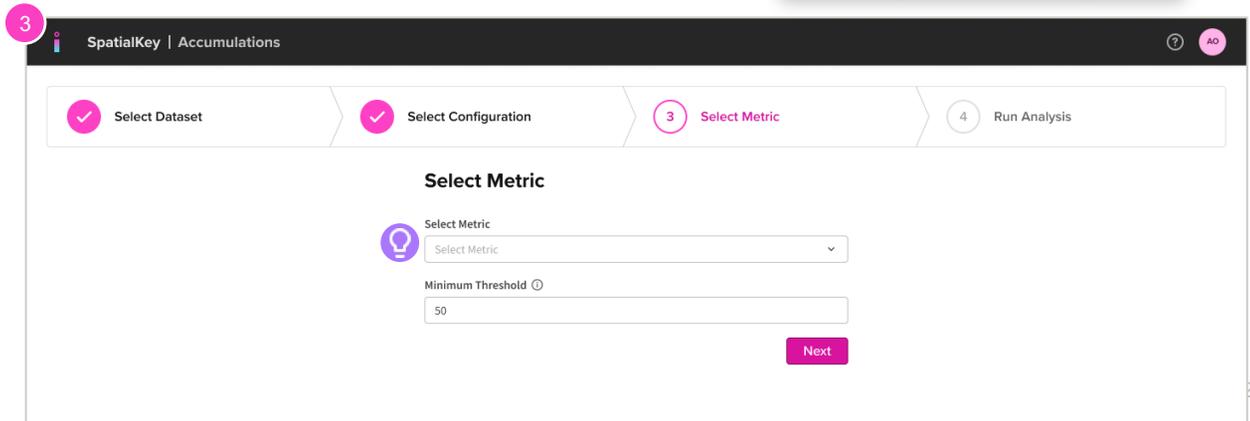
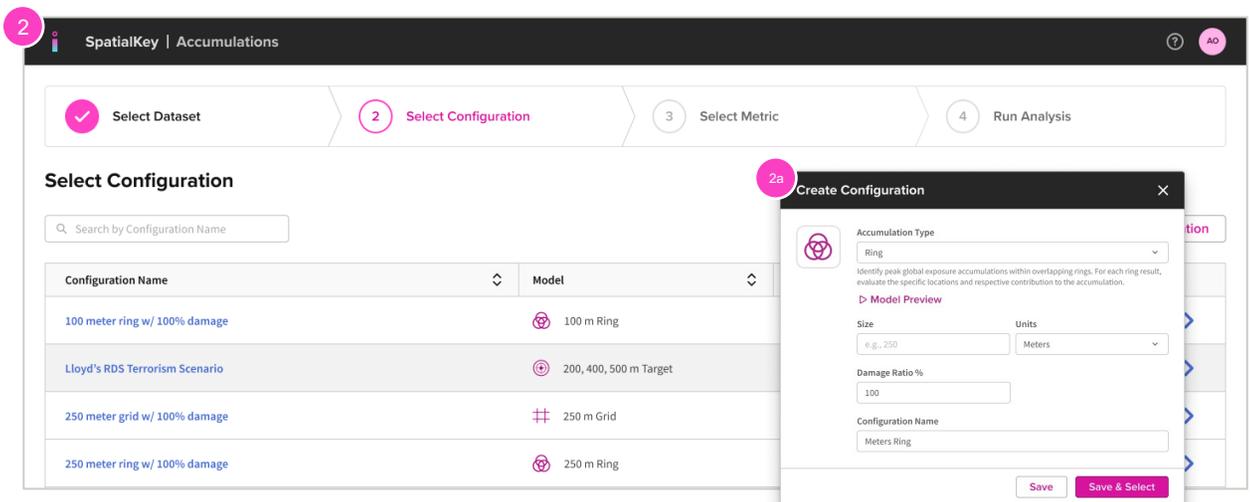
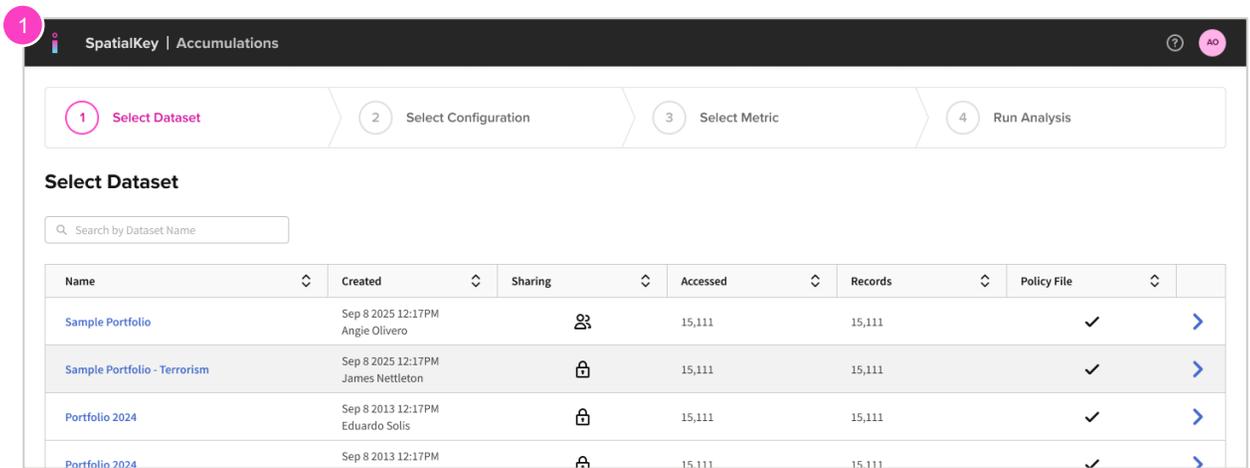
Models

You may have one or more of the following models enabled for your organization.

Ring – the ring model places overlapping (25%) rings over your locations, removes duplicates, and returns a list of your top accumulations. The ring radius size can be customized.

Grid – the grid model places overlapping (50%) grids over your locations, removes duplicates, and returns a list of your top accumulations. The grid size can be customized.

Target – the target model places rings centered around a reference dataset of your choice (e.g., terror targets, sinkholes), calculates the total locations within a specified radius, and returns a ranked list of accumulations. The ring size can be customized.



Visualize and Understand Results

1. You'll initially see an **overview of your peak exposures** based on the accumulation type selected. This view provides a high-level look at where to focus.
2. Use the **map** to visualize top accumulations, colored by exposure.
3. The **list report** shows a row for each accumulation and includes details like location count, closest city and distance, along with the metric you selected, and policy count.
4. Click the **report icon** in each row or on the accumulation point on the map to **dive into an accumulation** and see a zoomed in view of the accumulation along with a detailed list of all the locations, policies, and your total exposure.
5. At the top of the left of the map, you'll see statistics that summarize your accumulation. You can add **custom stats** to your report.

Download Results

6. Export a **CSV** list of the accumulation areas or export a **shapefile** of the accumulation results.
7. With our **Advanced Export** option, you can download a list of accumulation areas, a list of impacted locations per area and a list of impacted policies per area (if applicable).



TIP!

- To limit the data created by the advanced export, apply a filter to the overview list to focus.
- Click the Filter & Chart icons to expand/collapse the view. Drag the blue vertical bar to resize the right panel and get a better view of your data.
- Use your mouse to drag & pan the map. Use your mouse wheel or the "+" & "-" buttons to zoom.

The screenshot displays the SpatialKey Accumulations interface. The top view shows a map of the United States with numerous colored markers representing accumulations. A 'Stats' panel on the left shows 'Accumulation... 1 K' and 'Sample Portfolio'. A 'Data & Filters' panel on the right shows 'Accumulations - 500 meters ring' and a table with columns for 'Exposed Limit' and 'Closest City'. The bottom view is a zoomed-in map of Philadelphia, showing a specific accumulation area circled in black. A 'Stats' panel on the left shows 'Locations 75', 'Location TIV (SUM) 1.5 M', and 'Gross Exp (SUM) 21.5 K'. The 'Data & Filters' panel on the right shows a table with columns for 'Locations' and 'Policies', listing streets like '4524 Beach Ct' and the city 'Philadelphia'. Callouts 1-7 and A-C are placed throughout the interface to highlight key features.

Layers, Base Map & Legend

When analyzing each individual accumulation, you can use the **layers** to adjust the visualization of the data and accumulation shape layers in your dashboard. Toggle the layers on/off or adjust the opacity of layers to make different elements stand out on your map.

1. Use the **Advanced** options to adjust the visualization of any point dataset in your dashboard.
 - a. **Visualization Options:** Point datasets will have 4 display options: individual points, graduated circles, heatmap, and thematic.
 - b. **Color By:** Color your data by any column on your dataset e.g., TIV or City. When visualizing by graduated circles, heatmap, or thematic, only aggregate numeric values will apply.
 - c. **Size:** Adjust how large points render.
 - d. **Shape:** Select from 6 different shapes when viewing your data as individual points.
 - e. **Color:** Select from various preset color family options or create your own with the “+” icon.
 - f. **Bins:** Select from between 2 to 9 bins to color and group your data.

Adjust the **base map** visualization from satellite to street view. If you have more than one base map enabled, you could switch between them here.

The **legend** helps you make sense of all the data that is being visualized.

The screenshot displays the SpatialKey | Accumulations interface. The main map shows a street view of Manhattan with a purple ring accumulation and several yellow and orange point accumulations. The 'Layers' panel on the left shows 'Geneva, Switz...' and 'Ring Layer' layers. The 'Advanced' settings panel is open, showing options for visualization (graduated circles), color by (LocationTIV), size (6px), shape (circle), color (red), and bins (3). A legend at the bottom of the 'Advanced' panel shows three bins: ≥ 64.26 K (red), 30.26 K - 64.26 K (orange), and < 30.26 K (yellow).

Labels

Add custom labels to any point dataset in your dashboard. By default, the first column on your data will be used to label the top 10 values.

Click the "Advanced" link in the layer panel to find the toggle for labels along with other visualization options.

1. **Select a column** (numeric or text) to quickly add top labels to your dataset.
2. Use the **Advanced option** to create your own formula to fully customize the labels.
3. Label up to **20 top values**.
4. Change the **background color** to help the labels stand out on the map. Labels default to a white background.
5. Adjust the **text size** between 1-30px. Text size defaults to 15px.

TIP! Drag labels around to position them to your liking. Double-click a label to customize each one individually. Deleting the text within a label will return it to its default state.

TIP! Select "Filter by visible map" if you'd like to narrow what is labeled to only locations you can see on your screen (vs. top values across the dataset).

The screenshot displays the SpatialKey Accumulations interface. The main map shows 'Top Accumulations' in the Cairo, GA area, with three red circular markers and callout boxes displaying Total Individual Value (TIV): \$16,606,115.32, \$458,020, and \$1,259,521.65. A lightbulb icon is visible near the third marker. On the left, the 'Advanced' layer panel is open, showing 'Locationintiv' as the selected column, 'Highest values on top' checked, and 'Top values displayed' set to 3. A pink arrow points from the 'Advanced' link in the layer panel to the 'Advanced Labels' dialog box. The dialog box contains a text input field with the formula 'TIV: \${locationintiv}', a 'Reset to default label' link, a search bar for columns, and a list of available columns: Locid, Siteid, Accgrid, Streetname, Postalcode, and City. A 'Save' button is at the bottom right of the dialog. A smaller inset map shows a different location with a TIV of \$67,428.

Analysis Tools

Enhance your analysis with these reporting tools:

1. Statistics Panel

By default, you'll see a Stats pod in your dashboard with total location count and the sum of the metric selected for the analysis or TIV (if available).

You can add additional statistics to your dashboard by clicking the more menu icon in a stats pod or by clicking the "Stats" button under "Add Charts" in the right panel. Select from any numeric value in your dataset and aggregate by Sum, Avg, Min or Max.

The Stats pod will appear, and you can drag it anywhere on your map.

2. Unique Value Lists

Next to the Stats button in the Charts panel, you'll find the Unique Value List (UVL) button.

Click the button and then select any column from your location or policy file and the metric you want to aggregate.

The UVL will pop up with your unique values and aggregates. You can drag the pod anywhere on your map and use the rows to filter your data.

The screenshot shows the SpatialKey Analyst interface with a map dashboard. A Stats pod (1) is visible on the map, showing 10 K locations and a Locationiv (SUM) of 453.65... Below it is a Unique Values table (2) listing cities and their counts and sums. Two modal windows are shown: 'Add Statistic' (1a) and 'Add Unique Value List' (2a).

City	Count	Sum Location...
ATLANTA	613	30,378,867.14
COLUMBUS	458	27,797,202.53
DALLAS	377	24,224,474....
AURORA	781	22,571,858....
DENVER	564	22,164,328.01
CHICAGO	483	20,962,600....
PHOENIX	638	18,569,264....
DETROIT	277	17,798,884.5
KANSAS CITY	359	10,861,868....
FORT WORTH	131	8,417,522.99

Add Statistic (1a) Modal:

The Statistic chart displays the Sum, Avg, Min, or Max for any numeric field. The Value is kept to date as you filter your data.

Sample Portfolio (dropdown)
 Select a column... (dropdown) [Σ] Sum
 Show Aggregate as: Values (selected), % Percent, Chart
 Note: Count will be added automatically
 Save

Add Unique Value List (2a) Modal:

The Unique Value List groups your data by all the unique values for a particular field.

Sample Portfolio (dropdown)
 Select a column... (dropdown) [Σ] Sum
 Show Aggregate as: Values (selected), % Percent, Chart
 Note: Count will be added automatically
 Save

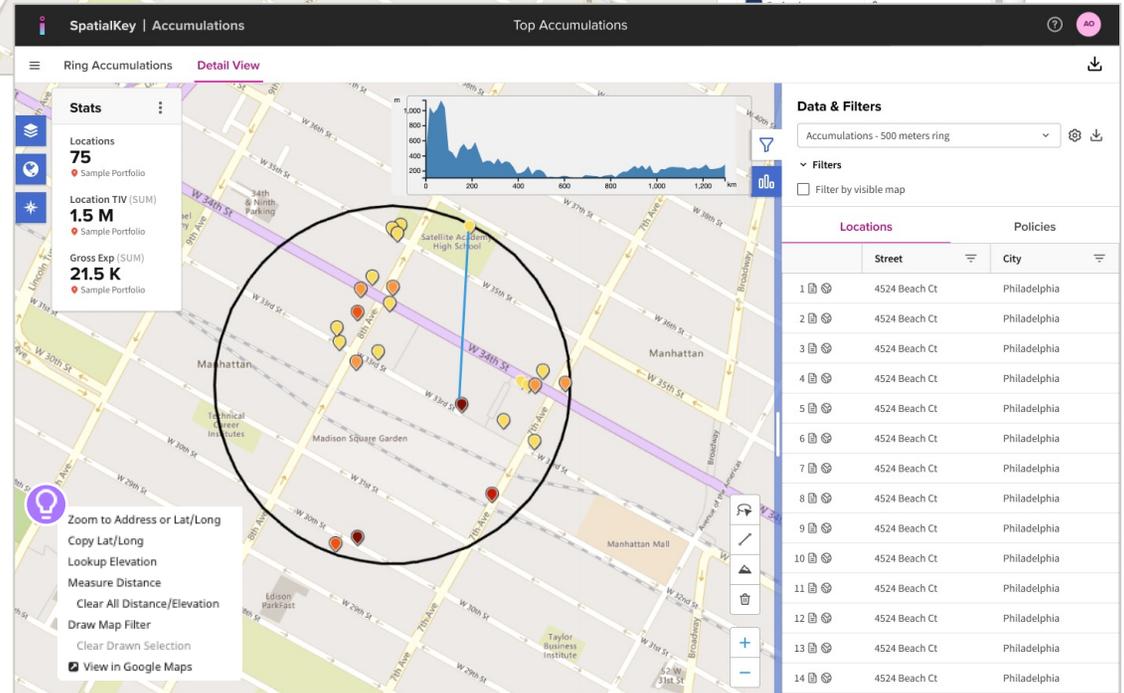
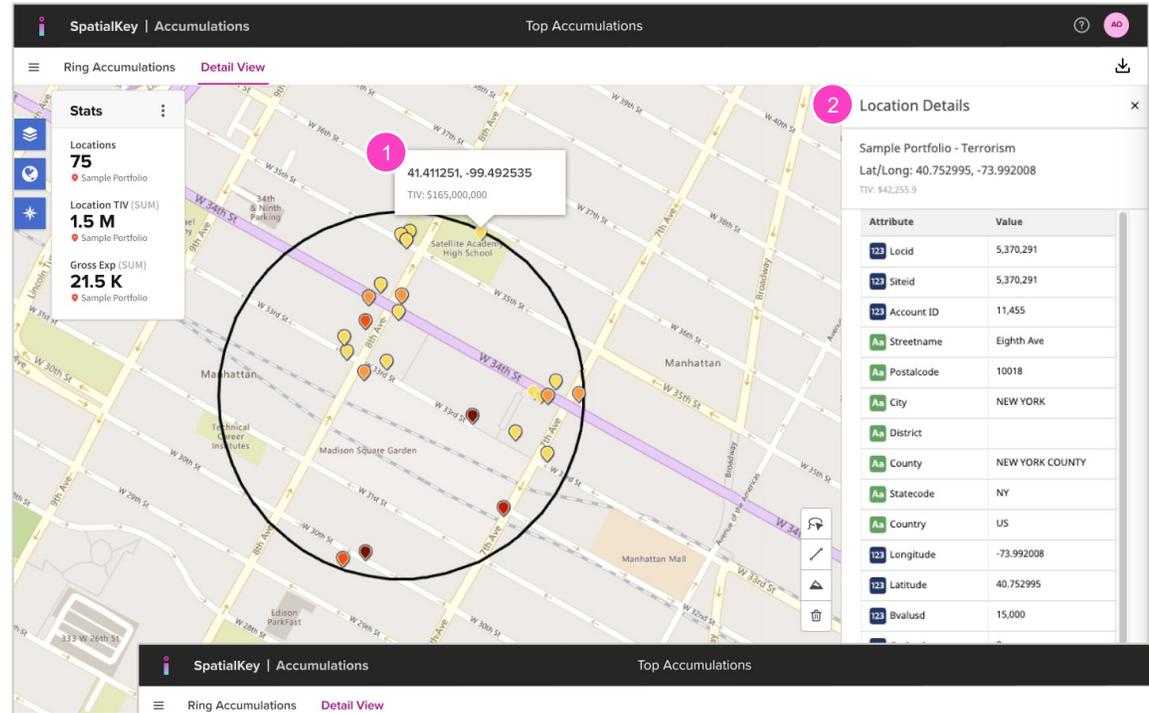
Analysis Tools (continued)

Enhance your analysis with these analytic tools:

1. Hover over a location to see the **lat/long coordinates**.
2. Click on a location to see all the **details** of that location.

The **distance tool** allows you to measure the distance between any points on the map. You can add as many vertices to your ruler as you wish. To visualize the elevation across the ruler that you drew, use the **elevation profile**.

Use the **elevation tool** to look up the elevation for any single point on the map.



TIP! The distance tool and elevation tool can also be accessed by right clicking anywhere on the map.

Additional tools accessible in the right click menu include:

- Zoom to Address or Lat/Long
- Copy Lat/Long
- View in Google Maps

Filtering Data

There are many ways to filter your data to narrow your analysis:

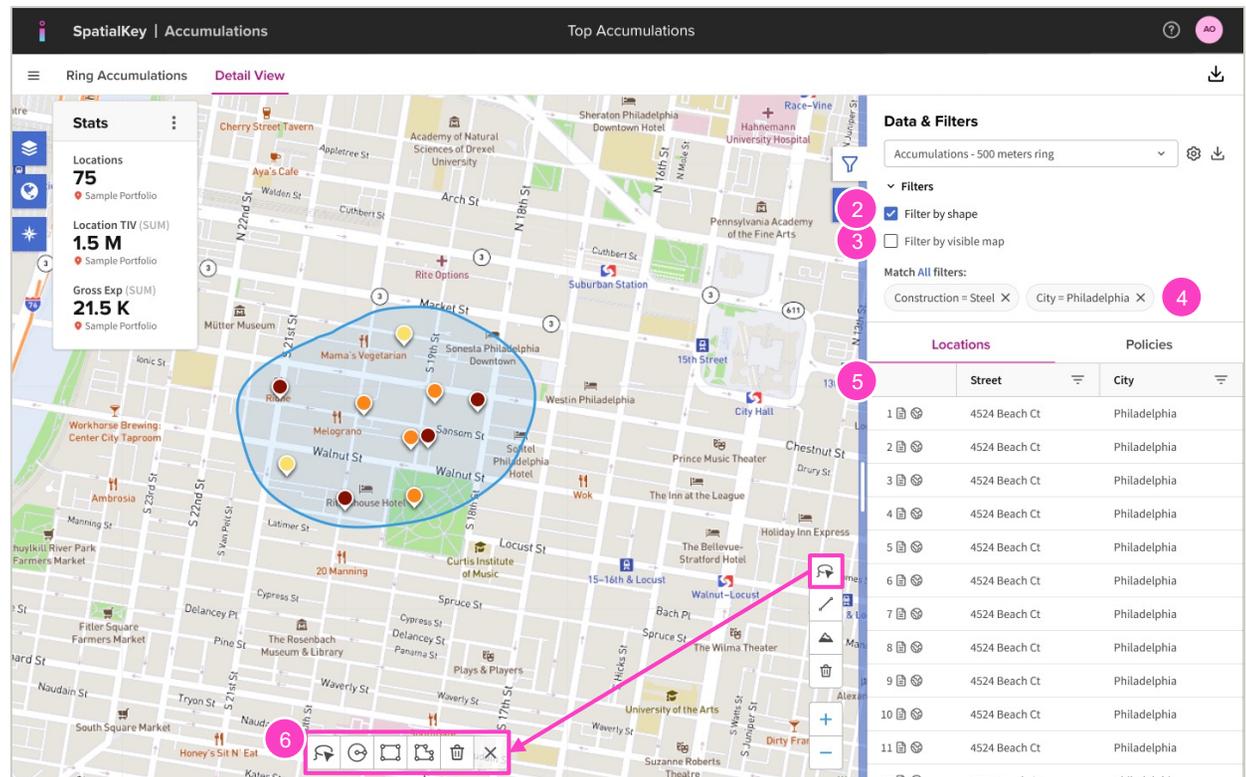
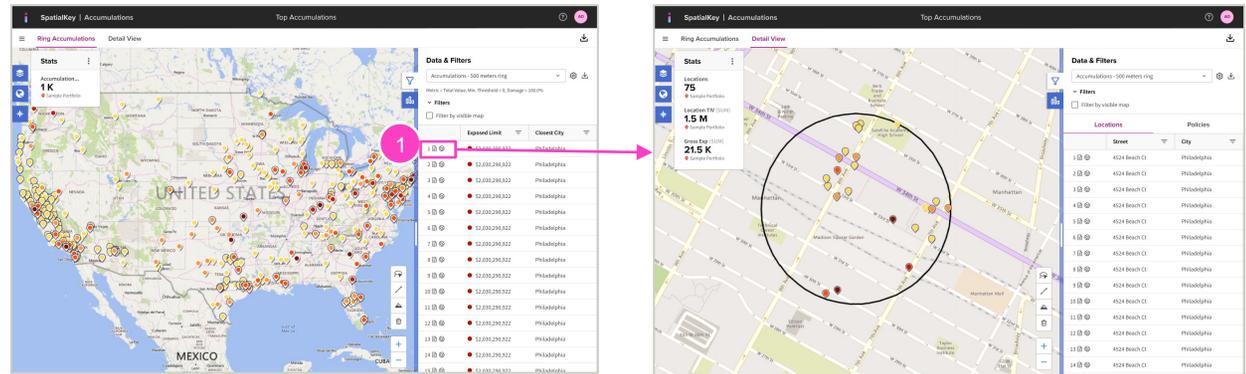
1. **Click on an accumulation** in the overview to be taken to a filtered list and zoomed-in view of all the locations that fall in that accumulation shape.
2. **Filter by Drawn Shapes:** When drawing custom shapes, this checkbox allows you to easily toggle to filter by the shape or not.
3. **Filter by Visible Map:** You can select to filter by visible map which will limit the locations in the List Report to only those visible on the map. This is helpful in keeping the List Report in sync with what you are currently visualizing.
4. **Filter Chips:** Filters applied from data columns will display as chips that can be removed here.
5. **Column Filters:** Use the column filters from your location or policy file (if available) in the List Report to narrow down your locations. Apply filters across multiple columns and then set the filter to require **ALL** or **ANY** of the criteria to be met (e.g. "and" vs. "or").
6. **Custom Shapes:** Draw custom shapes to filter your data, show the square feet or miles and, where relevant, radius, distance, and perimeter.

Click individual shapes to **edit**, **drag** them to a new position, or hit the **delete** key to remove them.

Use the **trash can to clear all** drawn shapes at once.

Drawing filters have 4 different options:

- Use the **freehand lasso** tool to draw a custom shape around locations to filter your data.
- Draw a **circle** to see how many locations fall within a certain radius.
- The **rectangle** tool can help you quickly calculate a perimeter.
- Use the **polygon** tool for irregular perimeters or to estimate square footage.



Save & Share Dashboards

Easily collaborate and share dashboards across your organization to ensure seamless communication.

Save

Accumulations dashboards are **automatically saved** when the analysis is first run.

1. Access your dashboards via the “Dashboards” tab in the home interface.

Share

2. Click the settings icon to get to Dashboard Sharing.
3. A dashboard owner can share it with other SpatialKey users by clicking “Add Owner” in dashboard settings.

Adding an owner allows you to select specific users or groups and give them access to your dashboard and your underlying data all in one step. Anyone who didn't already have access to the underlying data will be given Viewer permissions on the data.

Shared dashboards will show for those users in the Dashboard tab.

