

insurity SpatialKey | Event Response Quick Start Guide

This Quick Start Guide will help you get oriented and get the most out of your Event Response analyses. We value your feedback. Reach out to your account manager with questions or email support@spatialkey.com.

Contents

Automated Event Notifications	2
Bring a new level of speed to your event response with automated event alerts that let you know when and where you need to act.	
Run an Analysis	3-4
Select an event from our extensive catalog of perils and providers or use your own custom footprint to run against your portfolio.	
Visualize & Download Results	5
Learn how to use the Summary Report, Map and List Report.	
Layers, Base Map & Legend	6
Change hazard layers, use comparison mode, enable the elevation layer, adjust the base map and use the legend.	
Labels	7
Add labels to top values in your data and customize the placement, color, size, etc.	
Analysis Tools	8-9
Measure with the distance tool, get elevation profiles and see detailed information for impacted locations.	
Filtering Data	10
Filter by severity bands, data attributes, the visible map area or custom drawn shapes.	
Dashboard Templates	11
Create dashboard templates for repeatable analyses so they look just the way you need them to without any fuss.	
Save & Share Dashboards	12
Collaborate and share with others across your organization.	

Event Response 101

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



More Quick Start Guides

[SpatialKey 101](#) | [Analyst](#) | [Accumulations](#) | [Event Response](#) | [Underwriting](#) | [APIs](#)

Automated Event Notifications

Automated event notifications is an optional feature that your organization may license.

Notifications come directly into your inbox with details about the event and the impacted portfolio with a link to the dashboard where you can dive deeper into analysis.

1. Dataset editors can **enable automation** for any portfolio(s) via dataset settings.
2. Select which **event types** to subscribe the dataset to and select an **associated metric**.
3. **Subscribe users** (or groups) for each event type.
4. Select a **dashboard template** so automated dashboards look just the way you need them to without any fuss.
5. **Custom thresholds** can be set to alert you if a defined number of locations and/or total insured value is exceeded in a specified severity band. For example, you can set notifications for when either 10 locations or \$5M in total insured value is impacted by 3+ inch hail; and, this continues for as many severity bands and hazards as you wish to specify.

By defining custom thresholds, you can ensure you're always informed, but never inundated—enabling you to act immediately and proactively serve customers.

Event response reports can be viewed on iPhones, and detailed analyses can be completed on iPads or desktop computers. Android devices are also supported.

TIP! Analysis results are only as good as the inputs. Use SpatialKey's data import API so you always have the latest portfolio snapshot available for automated event response analyses and notifications.

The screenshot shows the SpatialKey interface for configuring automation. The left sidebar has 'Automation' selected (1). The main area is titled 'Automation' and contains instructions: 'To get an email notification and estimated exposure anytime an event impacts your dataset, select your event type, and associated financial metric.' Below this, there are sections for 'Severe Storm' and 'Hurricane'. Each section has checkboxes for event types (Hail, Wind, Surge) and dropdowns for metrics (TIV, Hurricane, Select a Metric (Optional)). There are also 'Edit 6 users' links and 'Template Selection' dropdowns (2, 3, 4). A 'View Notification Thresholds' button is highlighted in a pink box. A pink arrow points from this button to a modal window titled 'Edit Threshold: WeatherGuidance(Hail)' (5). The modal window shows a table with columns for Severity, TIV, and Locs. The 'Severity' column has radio buttons for 3.0+ in (checked), 2.5+ in, 2.0+ in, 1.5+ in, 1.0+ in, and 0.75+ in. The 'TIV' column has a text input with '5000000' and the 'Locs' column has a text input with '10'. There are 'Cancel' and 'Save' buttons at the bottom.

Run an Analysis

Automated notifications & dashboards can help you proactively manage active events, but you may still need to manually run an analysis, past scenario or a custom footprint. The Event Response application allows you to see all available hazard data across all perils in one place.

1. **Filter, sort, and search** to find an event from our extensive catalog.
2. Or choose your own **custom shapefile** to use as a footprint.

After selecting an event, when applicable, view all providers (public and commercial) and perils (e.g., hurricane and surge) that are available for your analysis.

3. Select which **hazards and perils to include**.
4. Click a provider/hazard type to **preview** the footprint.
5. Select from **past vintages** to review the point of landfall, or see how the storm has changed from prior forecasts.

TIP! Download a PDF for each provider and hazard for more info, including when you can expect updates and what your dataset will look like after running the enhancement. [View all providers here.](#)

Pre-analysis customization options

After adding hazard data to your analysis, you'll **identify your portfolio, select metric(s)**, and if you ran a custom footprint, you'll also **select an enrichment column**.

6. Select the same metric across all hazards, or select different metrics for each (e.g. if you have separate flood vs. wind coverages).
7. Edit Default Damage Factors (See next page for detail)
8. If you selected a custom footprint, choose a column from the shape file to use in the analysis.

The screenshot illustrates the SpatialKey Event Response application interface, showing the workflow for running an analysis. The interface is divided into several sections:

- 1. Select Event:** A search bar and a table of events. The table has columns for Type, Event Name, Severity, and Date. Events listed include US Active Wildfires, UK Flood Events, Lac-374029, Nvlap, 312106, Martin, Lisa, Curd, Sweet Fire, Ward, I-4- #2, Nalgae, Laquey, and UK Flood Events.
- 2. Select Custom Shapefile:** A map view showing a topographic contour map.
- 3. Select which hazards and perils to include:** A list of providers and perils. Providers include NOAA, JBA, Katrisk, and Kinetic. Perils include Wind, Surge, and Inland Flood.
- 4. Click a provider/hazard type to preview the footprint:** A detailed view of the NOAA event "Michael - Oct 06 2018 to Mar 18 2020". It shows the event details, data produced by NOAA, and a map of the storm's path over the Atlantic Ocean.
- 5. Select from past vintages to review the point of landfall, or see how the storm has changed from prior forecasts:** A map view showing the storm's path over the Atlantic Ocean, with a green shaded area representing the footprint.
- 6. Set Up Financial Calculations:** A dialog box with options to "Use the same financial metrics for all perils" and "Send email when complete".
- 7. Edit Default Damage Factors:** A dialog box with an "Edit Default Damage Factors" button and an information icon.
- 8. Configure Enrichment Column:** A dialog box with a "Select Column" dropdown and buttons for "Select a Different Hazard" and "Select Dataset".

Run an Analysis (continued)

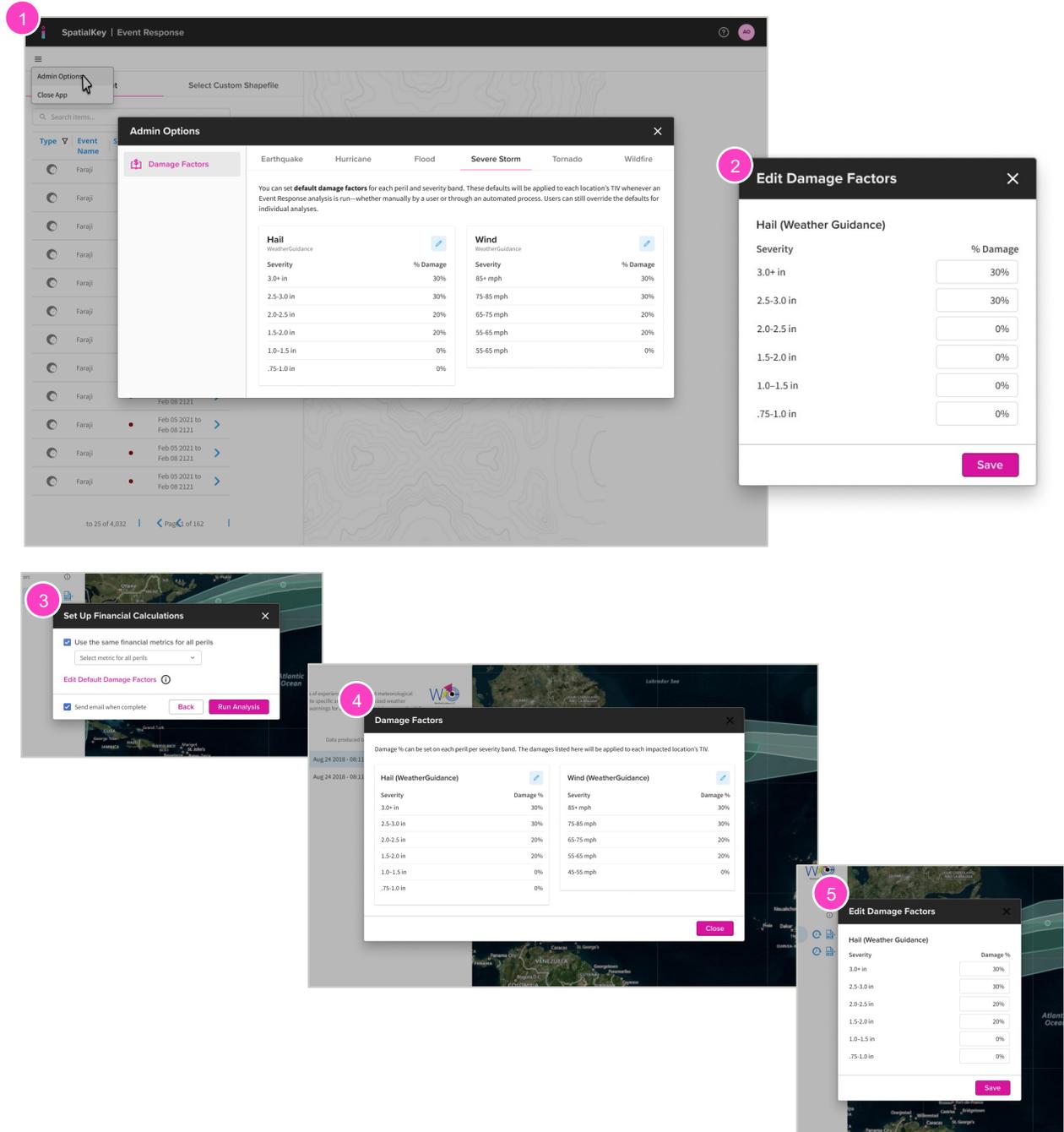
Set Default Damage Factors (Admins only)

1. Users with **Super Admin** or **Data Admin** permissions can manage their organization's default damage assumptions from the Event Response setup screens by opening the hamburger menu.
2. By default, impacted locations are assumed to be damaged at 100% when estimating exposure. Site Admins can customize these default damage factors, and those values will be applied automatically to all subsequent analyses.

Edit Default Damage Factors

3. Non-admin users can also adjust damage factors for an individual analysis during the Set Up Financial Calculations step. If no changes are made, the analysis will use the organization-level defaults described above.
4. You can define damage percentages for each peril selected in earlier steps. Click the pencil icon to edit a peril, then specify damage values for each severity level.
5. For example, hail events with severity 3.0+ inches may be assigned a higher damage percentage than 0.25 inches, improving the accuracy of exposed-limit calculations.

Any custom damage factors you apply will appear in the dashboard as calculated columns on the Locations tab. When custom damages are used, this will be clearly indicated in the header (for example, "Damaged TIV").



Visualize and Understand Results

- You'll initially see a **Summary Report** of your risks based on all hazards enabled for your analysis. This report provides high-level information for where to focus your analysis. You can:
 - Visualize impacted locations and hazard extents.
 - Quickly identify impacted locations, policies, insured value, and gross (or net) exposure by severity band.
- With the **map**, you can visualize the various hazard layers and your impacted portfolio locations in a single place.
- A **list** of impacted portfolio locations is available, enhanced with hazard information that you can sort and filter to enhance your analysis.

Download Reports

- Download a ZIP file of impacted locations & policies enhanced with hazard information along with the shapefile event footprint data.
- Separate files of your locations, policies, and unique value lists can be downloaded as CSV files.

Note: Both sets of data will reflect any filters or changes made to the dataset.



TIP!

- Click the Filter or Chart icons to expand or collapse the view. Drag the blue vertical bar to resize the right panel and get a better view.
- Use your mouse to drag & pan the map. Use your mouse wheel or the "+" & "-" buttons to zoom.

Summary Report | Map

Michael - Oct 06, 2018 to Oct 12, 2018
Impact to Sample Portfolio

Wind (NOAA)
Data produced by NOAA on Oct 06, 2018 12:00 PM (MDT)

Severity	Locations	Policies	TIV 2016	Gross
Within Cone	0	0	0	0
Locations and exposure are limited to Hurricane policies				
64+ knots	4,289	118	7.66 B	218.78 M
50+ knots	8,806	165	15.77 B	419.38 M
34+ knots	106,229	1,861	219.86 B	2.06 B

Locations and exposure are limited to Hurricane policies

Map

Layers

- Affected Locations
- Hazard Layer
- Event: Michael Oct 06, 2018 to Oct 12, 2018
- Hazard: Wind (NOAA) Oct 12, 2018...
- Aerial Imagery
- Elevation Layer

Data & Filters

Affected Locations

Filters

- Filter by visible map
- Filter by affected locations

Match All filters: Wind (NOAA): 2 of 4 bins

Locations

Michael Oct 06, 2018 to Oct 12, 2018		+
Wind (NOAA) Sept 13, 2017...	Con...	Con...
1	98.7mph	1.4ft
2	124.5mph	1.4ft
3	88.1mph	1.4ft
4	83.2mph	1.4ft
5	56mph	1.4ft
6	116.1mph	1.4ft
7	101.mph	1.4ft
8	112.9mph	1.4ft
9	114.2mph	1.4ft
10	110.2mph	1.4ft

Layers, Base Map & Legend

Use the **layers** to adjust the visualization of your data. 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.
2. Enable the **aerial imagery** layer if available.
3. Enable **comparison mode** to visualize two different hazard layers or aerial imagery layers side-by-side, helping you compare two different models or points in time in the same view.
4. Change the **hazard layer** visualized on the map.
 - a. When visualizing NOAA Hurricane, there is an option to **Label Track Points** on the map.
5. Enable the **elevation layer** to view global contours.

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 Event Response interface. The main map shows a satellite view of Florida with several layers overlaid: Aerial Imagery, Hazard Layer (Wind (NOAA) Oct 12, 2018...), and Elevation Layer. A tooltip is visible over a location, showing coordinates (31.02397, -84.46313) and event details for Hurricane Michael. The 'Advanced' settings panel is open on the right, showing options for visualization (Color by, Size, Shape, Color, Invert Color Scheme, Bins) and a 'Labels' toggle. The 'Layers' panel on the left shows the 'Affected Locations' layer is active and 'Advanced' options are selected. The 'Hazard Layer' panel shows the 'Wind (NOAA) Oct 12, 2018...' layer is selected. The 'Elevation Layer' is also enabled. A 'Tip!' box at the bottom states: 'Hazard layer visuals can also be adjusted via the tooltip that appears over individual locations.'

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 shows the SpatialKey Event Response interface. The main map displays a satellite view of Cairo, GA, with several red circular markers representing data points. Each marker has a white label with a red border indicating its Total Incident Value (TIV). The labels are:

- TIV = \$16,606,115.32
- TIV = \$458,020
- TIV = \$1,259,521.65

 A purple lightbulb icon is visible on the map. On the left, the 'Advanced' layer panel is open, showing configuration options for labels. 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: ${locationtiv}`
- A search bar for columns with a list of available attributes:
 - 123 Locid (Add +)
 - 123 Siteid (Add +)
 - 123 Accgrid (Add +)
 - Aa Streetname (Add +)
 - 123 Postalcode (Add +)
 - Aa City (Add +)
- A 'Save' button at the bottom right.

 The 'Advanced' layer panel includes:

- Color by: 123 Locationtiv
- Checkmark for 'Highest values on top'
- Size: 11px
- Shape: Circle selected
- Color: White selected
- Checkmark for 'Invert Color Scheme'
- Bins: 5
- Legend for value ranges:
 - ≥ 1.26 M (Dark Red)
 - 458.02 K - 1.26 M (Red)
 - 178.8 K - 458.02 K (Orange)
 - 23.1 K - 178.8 K (Light Orange)
 - < 23.1 K (Yellow)
- Labels: Toggled on
- 123 Locationtiv selected
- Advanced: Selected (highlighted with a pink box)
- Top values displayed: 3
- Background Color: Toggled on
- Text Size: 14px

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.

Stats

Locations: **10 K**

Locationiv (SUM): **453.65...**

Unique Values

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

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

Select a column...

Select a column... **Σ Sum**

Show Aggregate as: Values % Percent Chart

Note: Count will be added automatically

Add Unique Value List

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

Sample Portfolio

Select a column...

Select a column... **Σ Sum**

Show Aggregate as: Values % Percent Chart

Note: Count will be added automatically

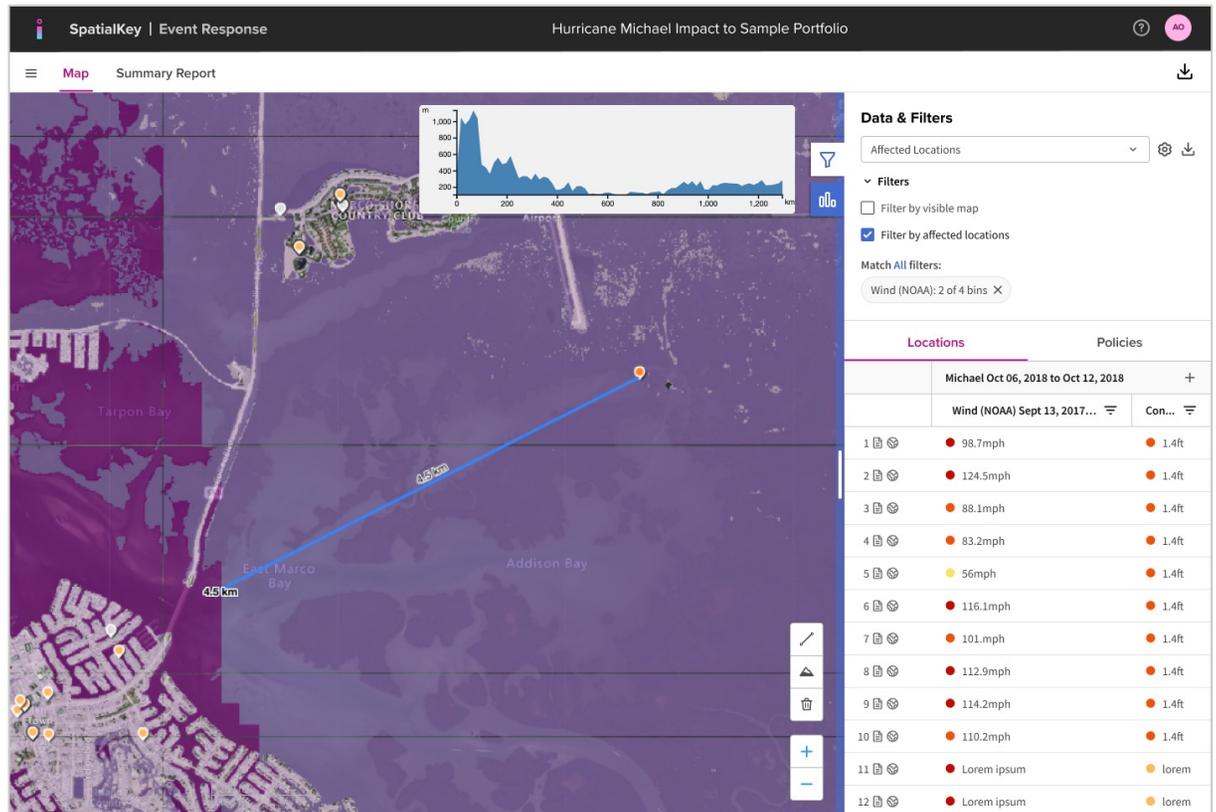
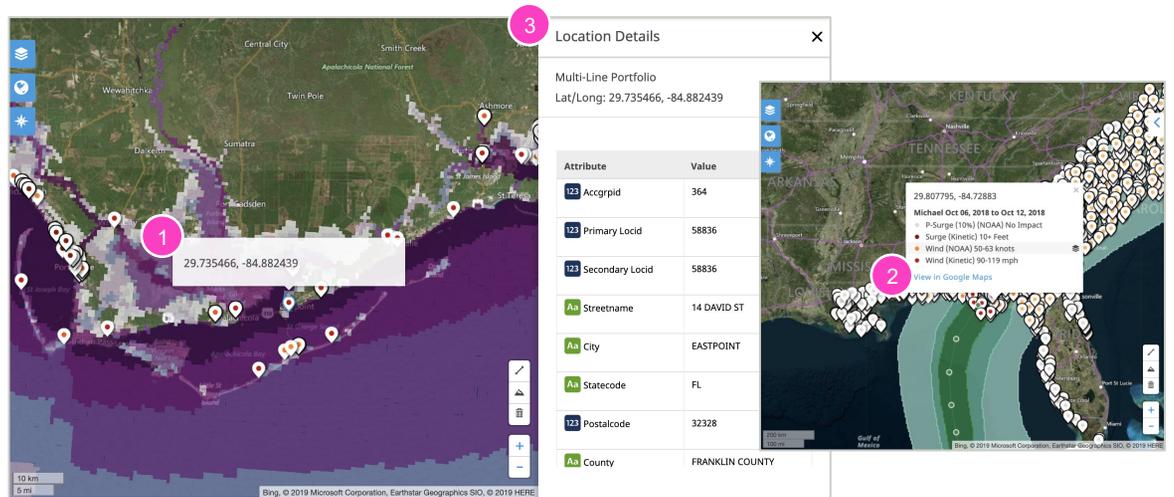
Analysis Tools (continued)

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 a tooltip with the option to view in **Google Maps**. This will save you the step of re-entering the location in another browser if you want to explore the risk from an on-the-ground street view.
3. 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

- Filter by Severity Band:** Click on a severity band in the Summary Report (e.g., 64+ knots) to be taken to the map with the list filtered to the band you selected.
- Filter by Affected Locations:** For Hurricane (NOAA & Kinetic only) and Wildfire analyses, a buffer of locations near the footprint are included in the analysis but filtered out by default. Toggling this checkbox off allows you to view those locations.
- Filter by Drawn Shapes:** When drawing custom shapes, this checkbox allows you to easily toggle to filter by the shape or not.
- 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 see.
- Filter Chips:** Filters applied from data columns will display as chips that can be removed here.
- 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").
- 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.

The screenshot displays the SpatialKey Event Response interface for Hurricane Michael. It includes a Summary Report, a Map view, and a Data & Filters panel. The map shows a large blue polygon drawn over a satellite view of a coastal area. The Data & Filters panel on the right shows a table of filtered locations and policies.

Severity	Locations	Policies	TIV 2016	Gross
64+ knots	4,289	118	7.66 B	218.78 M
50+ knots	8,806	165	15.77 B	419.38 M
34+ knots	106,229	1,861	219.86 B	2.06 B

Michael Oct 06, 2018 to Oct 12, 2018		+
Wind (NOAA) Sept 13, 2017...	Con...	
1	64 knots	1.4ft
2	64 knots	1.4ft
3	64 knots	1.4ft

Dashboard Templates

Templates allow you to set up a dashboard with the view you need to best analyze an event and use that same setup for future dashboards.

Prep a dashboard and customize it the way you need it. E.g., set visualization options, filter the data, create a unique value list to display any attribute on your dataset (like state or construction type).

1. Once you've set up your dashboard, click the hamburger menu to select **"Save as Template"**.
2. Use templates for automated or manual analyses. Select **"Apply Template"** any time you want to use a template on an open dashboard. See p. 2 for more info on setting up templates on automated analyses.

SpatialKey | Event Response Hurricane Michael Impact to Sample Portfolio

Summary Report **Map**

New
Save Dashboard
Save as Template **2**
Apply Template
Close App **1**

Stats

Locations
3
Sample Portfolio

Location TIV (SUM)
1.25 B
Sample Portfolio

Gross Exp (SUM)
21.5 M
Sample Portfolio

Sample Portfolio

	Count	Sum TIV
<input checked="" type="checkbox"/> Construction		
<input checked="" type="checkbox"/> Reinforced Concrete	390	21,672,275.86
<input checked="" type="checkbox"/> Reinforced Masonry	390	21,672,275.86
<input checked="" type="checkbox"/> Masonry	390	21,672,275.86
<input checked="" type="checkbox"/> Steel Frame	390	21,672,275.86
<input type="checkbox"/> Wood	390	21,672,275.86
Total	15675	121,672,275.86

Data & Filters

Affected Locations

Filters

Filter by affected locations
 Filter by visible map

Match All filters:
Wind (NOAA): 2 of 4 bins X

Locations Policies

	Michael Oct 06, 2018 to Oct 12, 2018	+
	Wind (NOAA) Sept 13, 2017...	Con...
1	64 knots	1.4ft
2	64 knots	1.4ft
3	64 knots	1.4ft

Save & Share Dashboards

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

Save

Event Response dashboards are **automatically saved** for 90 days.

1. Access your dashboards via the "Dashboards" tab in the home interface.
2. Reset the 90-day expiration clock, or remove it completely, so your dashboard won't expire.

Share

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.

The screenshots illustrate the process of sharing a dashboard in SpatialKey:

- Step 1:** Access the "Dashboards" tab in the home interface. A table lists dashboards with columns for App, Name, Expires In, Created, and Accessed. A settings gear icon is highlighted for the "Event analysis" dashboard.
- Step 2:** Open the dashboard settings for "Event Analysis - Michael". The "Open Dashboard" button is highlighted.
- Step 3:** Access the "Dashboard Sharing" settings. The "Add Owner" button is highlighted to share the dashboard with other users.