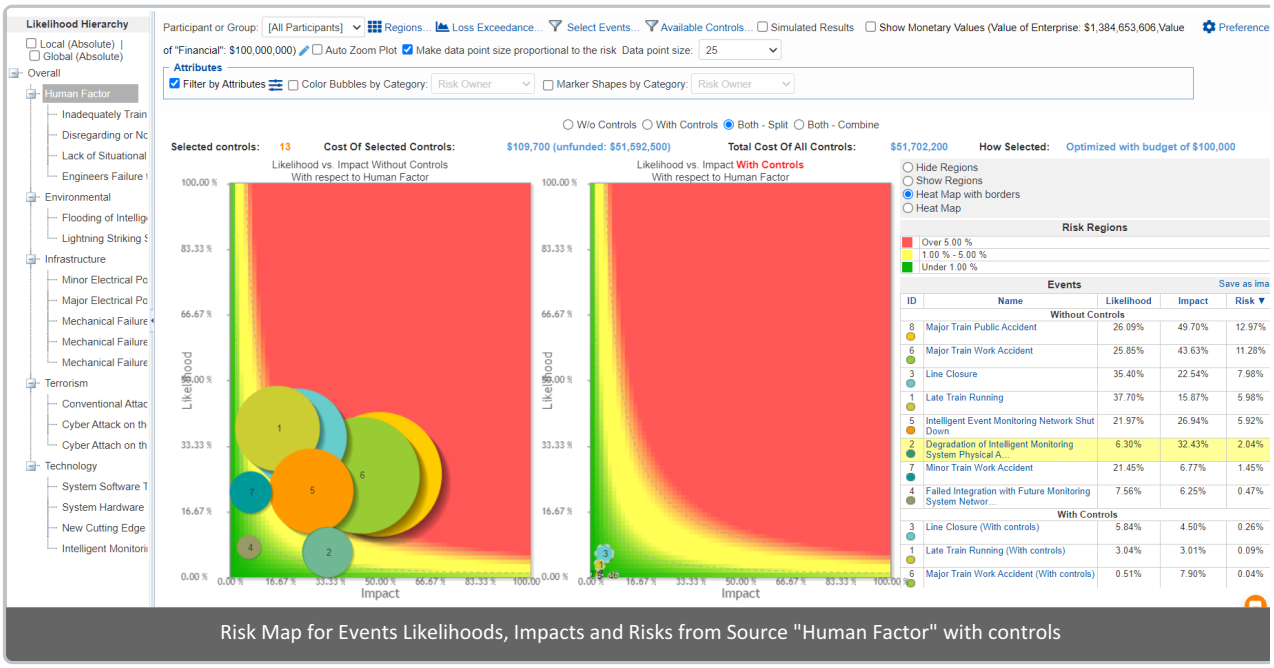
Risk Map From Sources with Controls

Overview

This page displays the same diagram as with the Risk Map From Sources (without controls) -- with additional options to show the Risk Map when controls are in effect.

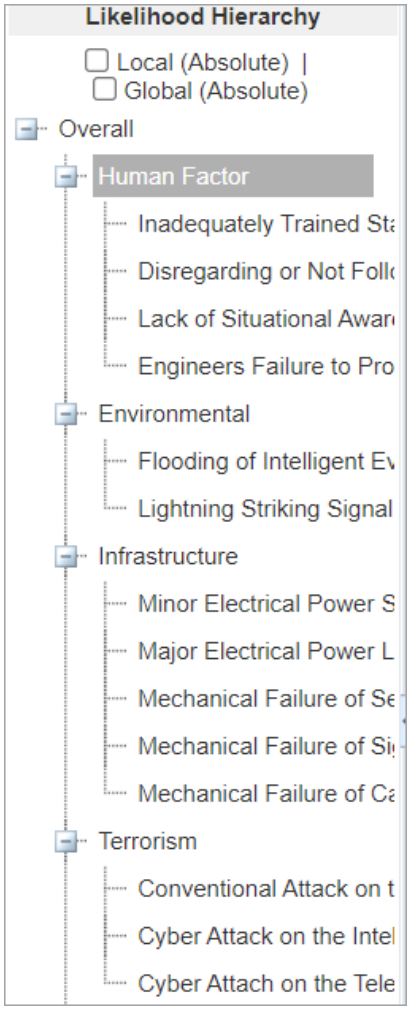
In Riskion, we refer to **threats**, **causes**, **hazards**, and **sources** interchangeably. While they may have slightly different nuances depending on the context in which they are used, they serve the same purpose -- they are all threats/sources of risk (for Risk Events) or sources of opportunity (for Opportunity Events). In our sample model, we are using the terminology "Source(s)".

Here we see the **Risk Map for the Likelihoods, Impacts, and Risks of the events from Source "Human Factor"** with and without controls.



Risk Map for Events Likelihoods, Impacts and Risks from Source "Human Factor" with controls

A source is selected from the Sources Hierarchy at the left.



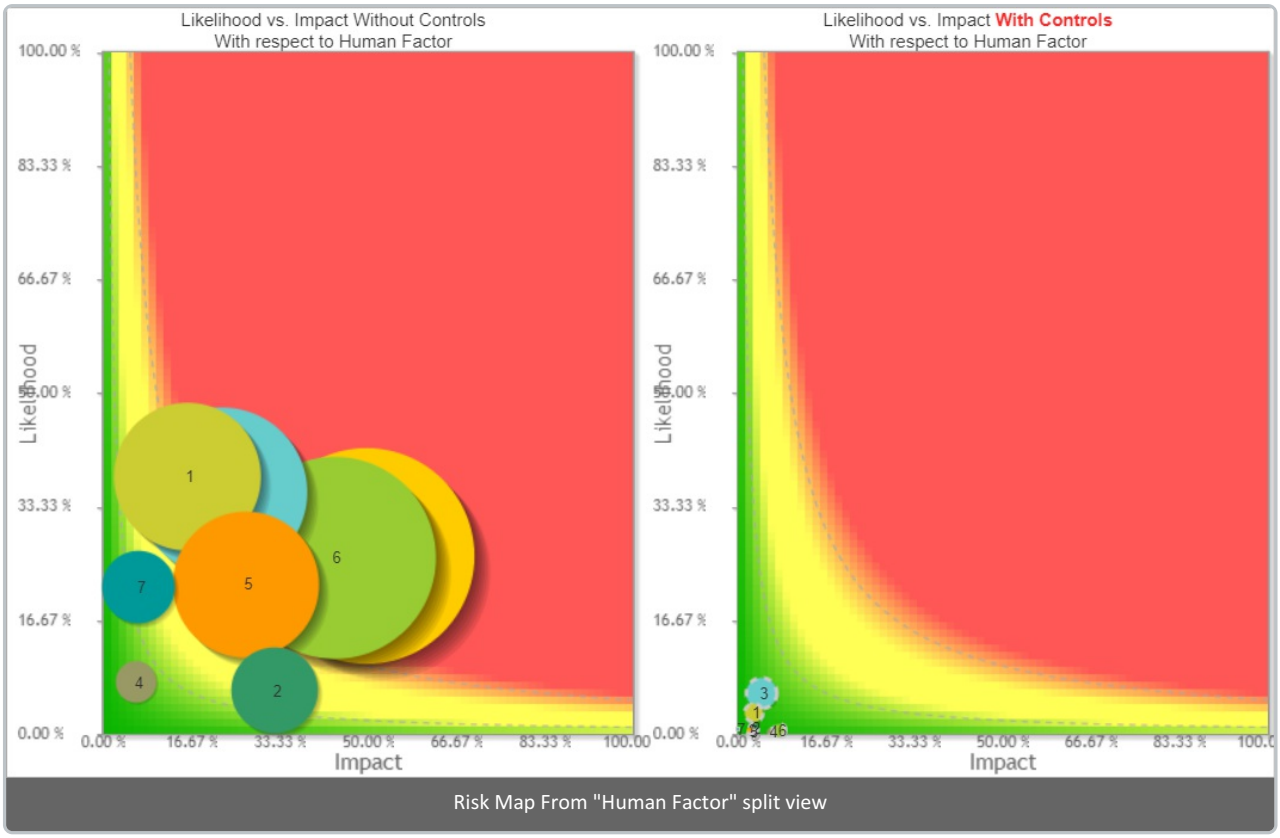
You can also select the top node "Overall" which will show the same results as with the Overall Risk Map with controls pag

The **X-axis** represents the likelihood of events, and the **Y-axis** represents the impact of events (Note: You can interchange the axes from the Preferences)

The **bubbles** represent the **Events**. By default, the size of the bubble is proportional to the risk of the event. The biggest bubble size represents the largest risk and the smallest bubble size represents the smallest risk. All values in between are sized proportionally in relation to the highest and lowest risk values. You can make all the bubble size the same by unchecking 

Each event has unique bubble color which doesn't have any meaning. You can choose to color the bubbles based on Event Attributes.

Riskion provides the default risk map color based on the risk region. Red represents high-risk, green represents low-risk, yellow represents in between. You can modify the risk region color.



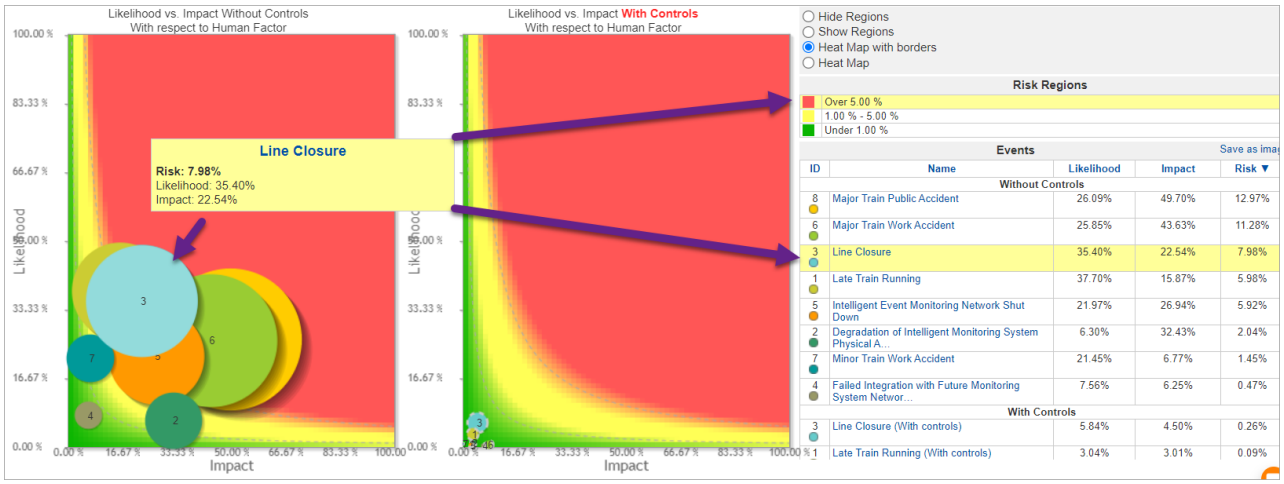
Risk Map From "Human Factor" split view

From the above example, we see the Risk map without (left) and with controls (right) on split view. The events bubbles with controls have a dashed outline.

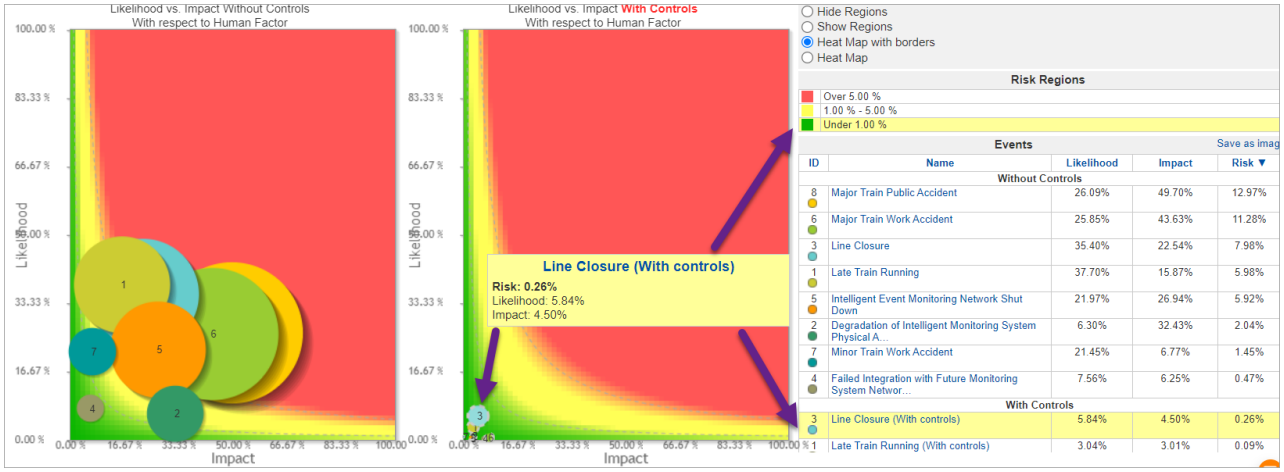
Notice how the size of the event bubbles and the plotting on the x and y-axis changed. The Likelihoods, Impacts, and Risks are reduced when the controls are in effect.

Hovering over an Event bubble will show the likelihood, impact, and risk of the event on a tooltip -- Additionally, it will highlight the corresponding risk region and the likelihood, impact, and risk of the hovered event on the grid at the right.

For the event "**Line Closure**" without control -- its likelihood, impact, and risk are 35.40% 22.54% 7.98% respectively -- the bubble is in the red or high-risk region as shown below:

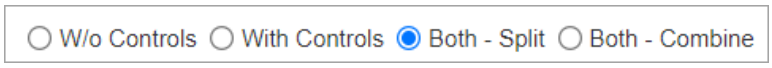


When controls are in effect, the likelihood, impact, and risk of the same event are reduced to 5.84% 4.50% 0.26% respectively -- the event bubble is now in the green or low-risk region.

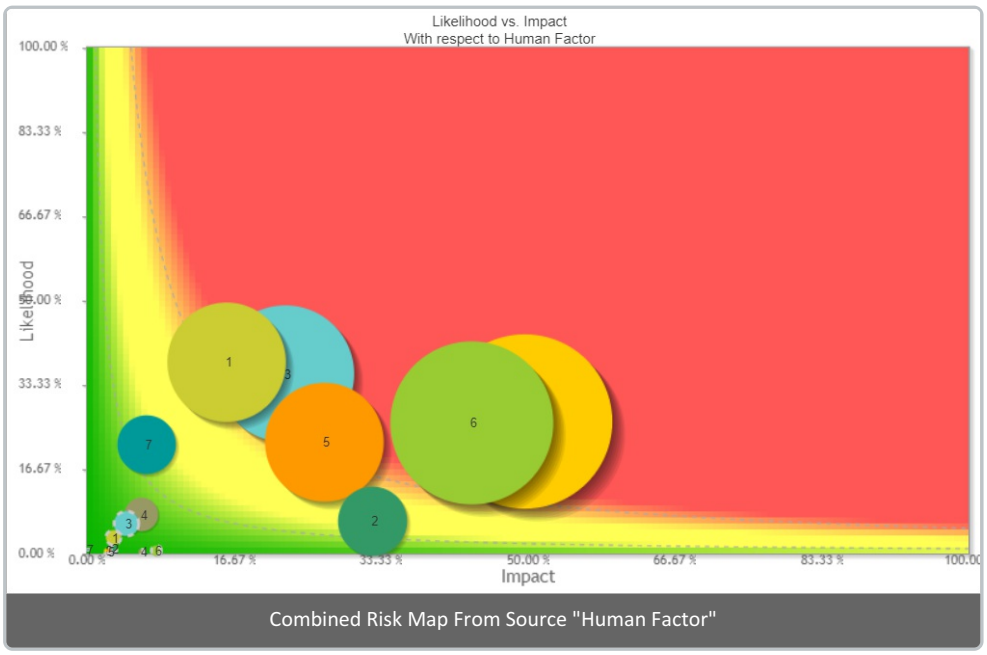


Clicking the Event name on the grid will redirect you to the corresponding bow-tie diagram from that event.

Other risk map views are available from the radio button at the top:



- **Without control** -- same as with the Risk Map From Sources (without controls)
- **With control** -- displays one risk map for mitigated events' likelihoods, impacts, and risks (with controls)
- **Both - split** -- 2 risk maps, one for without controls and another for with controls (as shown from our example above)
- **Both - combined** - one risk map showing the events both for without and with controls



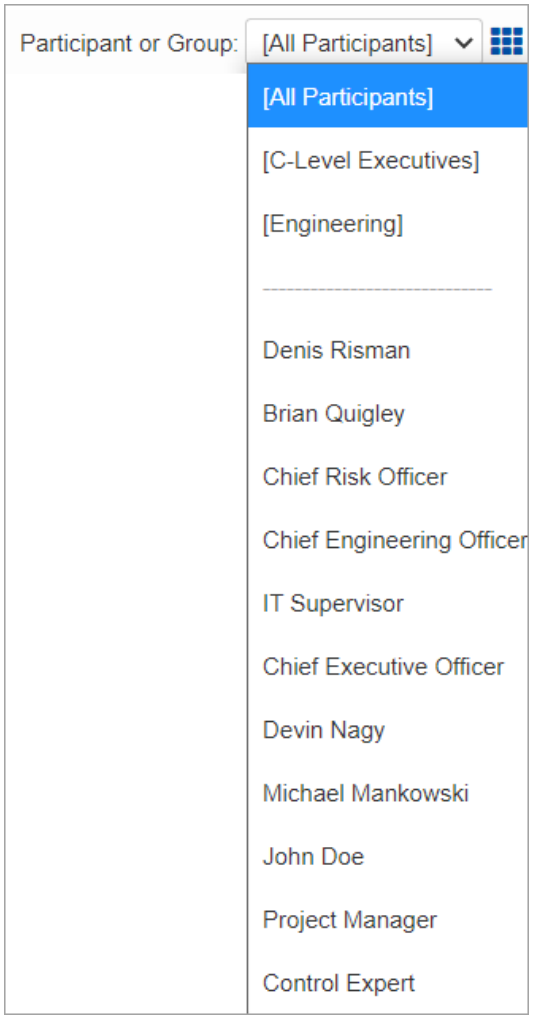
Combined Risk Map From Source "Human Factor"

The events bubbles with controls have a dashed outline.

Select Participant and Group

The results for the "All Participants" group are displayed by default as shown above.

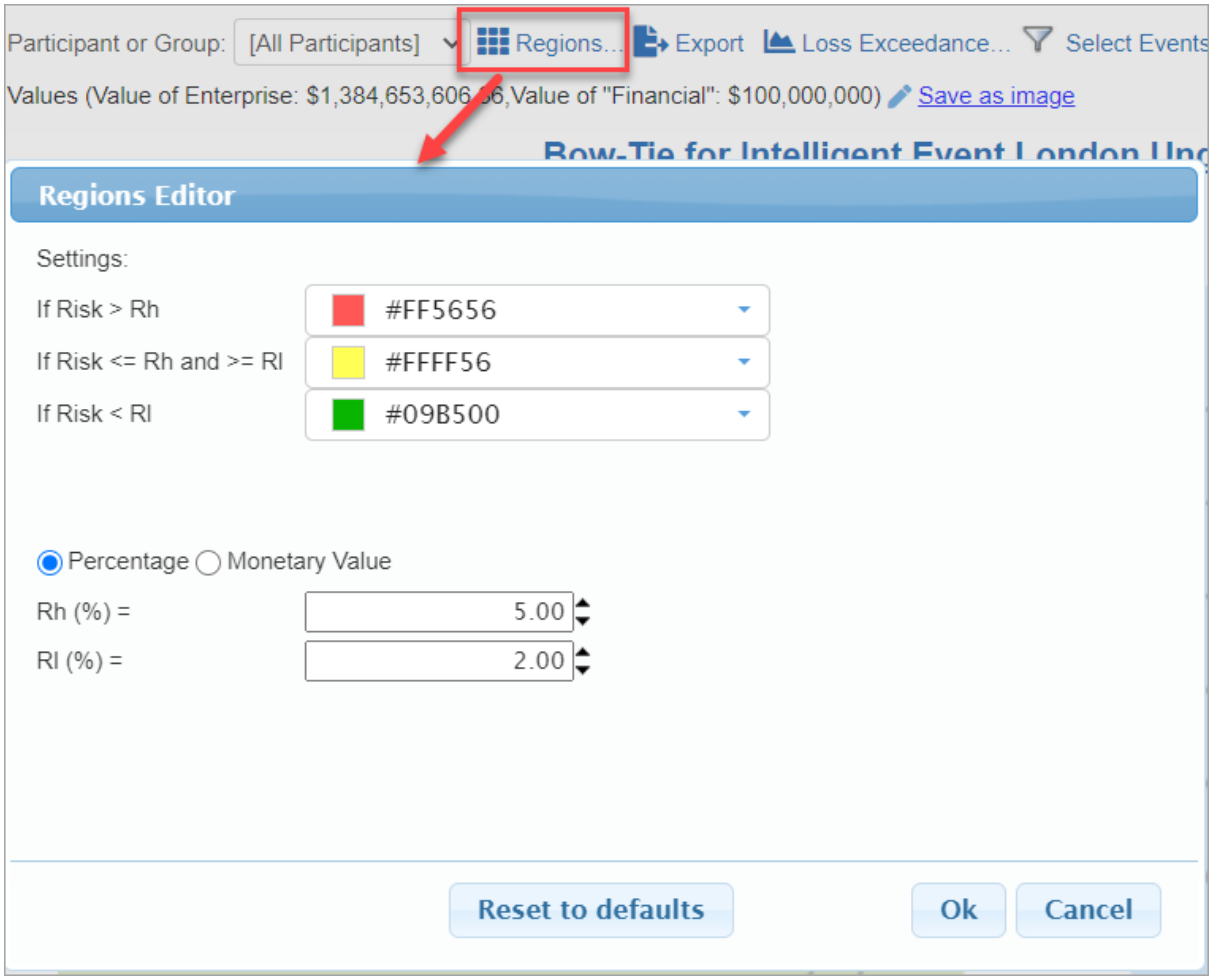
By selecting from the participants and groups menu, you can also see the risk map for an individual participant or a group.



Risk Map Region

Default colors are already provided for the risk map region.

You can change this by clicking 



Here you can specify the limits: Rh (risk high) and Rl (risk low) both for percentage or monetary.

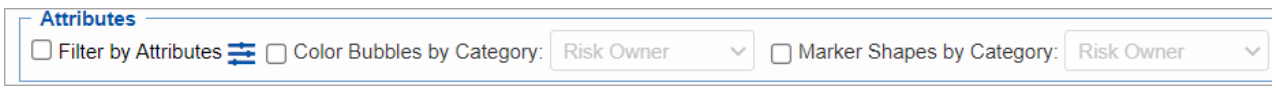
Given the limits, you can specify the 3 regions/colors:

- High Risk
- Mid (in-between) Risk
- Low Risk

The color specified here is used on the Event's color on the bow-tie diagram.

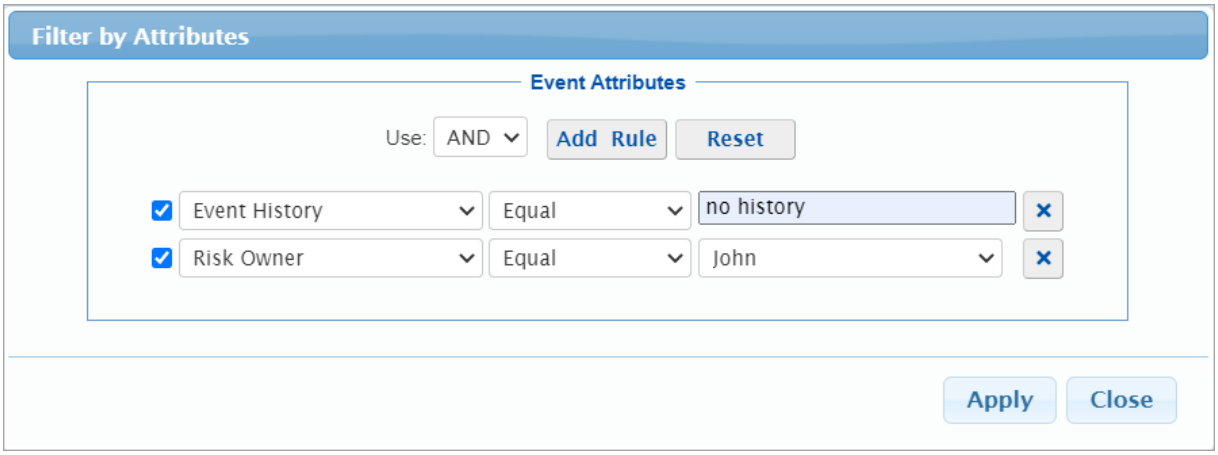
Risk Map with Event Attributes

When Event Attributes are defined in the model, additional options are available on the toolbar.



Here you can filter, color, and use shapes other than bubble based on the event attributes.

- **Filter by Attributes** - checking this option will filter the events on the risk map based on the conditions specified. You need to click  to define the conditional statement for the attributes.



- **Color Bubbles by Category** - checking this allows you to select an event attribute in the dropdown. Selecting a category will have the event of the same attribute to have the same color.
- **Marker Shapes by Category** - similar to Color bubbles by category, but this option will have the events of the same attribute to have the same shape (instead of a bubble).

Show Monetary Values

Simulated vs Computed Event Likelihoods, Impacts, and Risks (Flaw of Averages)

Preferences
