The Global Terrorist Attacks Map

Since the 9/11, terrorist attacks have been a major global concern. A clear interactive map of terrorist attacks around the world can help the public to gain a clear understanding of past terrorist attacks and may provide some valuable reference for counter–terrorism operations. Therefore, in this visualisation project, I created an interactive global terrorist attacks map.

The University of Maryland's Global Terrorism Database provides data on over 200,000 terrorist attacks or suspected terrorist attacks since 1970, of which I selected 137,000 records where no doubt about being classified as terrorist attack, with accurate time and coordinate records, and the attack was successfully conducted.

I used the Mapbox base map and added the terror attacks tileset from Mapbox as layer to the base map by javascript. I also used the EventListener in javascript to monitor the page button and slider actions and to interact with the map.

Firstly, the interactive map shows the spatial distribution of terrorist attacks, there are some notable terrorist hotspots such as the Levant or the Sahel, hence I created buttons to locate the corresponding locations conveniently. Secondly, the interactive map shows the temporal distribution of terrorist attacks, I designed a double slider to filter the time interval shown, for example by comparing the distribution of terrorist attacks that occurred before and after 2001 in Afghanistan, the user is aware of the rapid increase in the number of terrorist attacks as the Afghanistan war began. Finally, at the level of each terrorist attack, I show whether the terrorist attack was fatal or injured by different fill colors. When mousing over a terrorist attack the popup window shows the country where the attack occurred, the date, a brief description, and the source of the information.

When users take the time to explore this interactive map they can get a comprehensive overview of the terrorist attacks that have taken place over the last 50 years, as well as an idea of the security conditions in a particular country or at a particular timeframe, or a detailed study of a specific terrorist attack.

I also created a webpage base on W3.CSS website templates to show some of my personal thoughts on the terrorist attacks and created Mapbox based comparison maps to support my views. I also used the Plotly API to embed an interactive bar chart showing the temporal distribution of the terrorist attacks on the webpage.

Please note that this project is designed for 13" monitors, Safari, and Chrome browsers, there may be typographical issues for other screen sizes and browsers.

Reference

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