

Summary – Team HunaTek-Kalman

Our visualization displays MODIS Burned Area, MODIS Active Fire, and EPA Air Quality System data to draw attention to the impact that wildfires have on the Eastern United States and Canada. The top portion of our visualization shows the cummulative area burned from September 2000 — November 2023 in square miles, and also displays a heat map of the total burned area, which shows the locations and frequency of wildfires in the Eastern US and Canada. In the bottom portion of the visualization we highlight the impact that wildfires have on air pollution across the Eastern US by displaying the relationship between MODIS Active Fire data and EPA Air Quality Index (AQI) measurements. Our visualization aims to further the Climate Action SDG by raising awareness of the devastating impact of wildfires on Eastern Norh America, which is under-studied and recieves less public attention than their counterparts in the West. In order to process the data from the three different sources our team utilized Python 3.9.13 run on Jupyter Notebooks and employed the pandas, numpy, osego, and os libraries. To construct our data visulization we used Microsoft Power BI to ingest the process data and build the set of visuals in our submission.