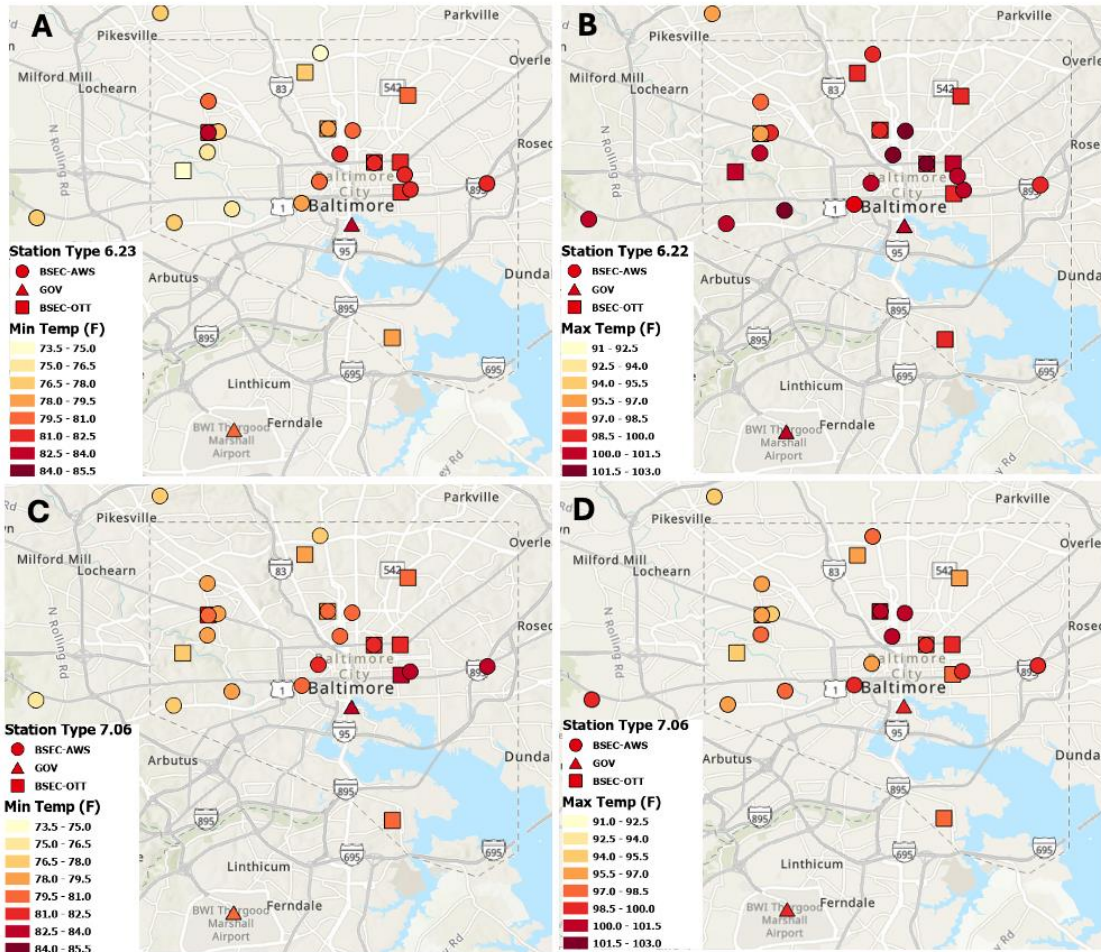


## June-July 2024 Heat Events

The weather in Baltimore over the last few weeks has been dangerously hot, with measured air temperature around or over 100 °F (with feels like temperature exceeding 110 °F) on the 22<sup>nd</sup> of June and then two weeks later on the 6<sup>th</sup> of July. Measurements from the BSEC weather station network show that while the temperature was high throughout the city and surrounding areas there were substantial spatial variations. In both the afternoon (the hottest time of day) and around dawn (the coolest time of day) there is a spread of over 7 °F among the stations, with stations located within inner Baltimore generally hotter than those near the outskirts of the city. This is shown in the maps below which show the (left) dawn and (right) afternoon temperatures for each station, for the June 22 and July 6 events. The locations with highest dawn temperatures all occur in the inner city and the values decrease as you move to the city edge and into the county (where the lowest temperatures are measured). The afternoon temperature shows more spatial variability, with high values occurring at some stations near the city edge. There are also some differences in spatial variation between events, but the inner city is still hotter than outer suburbs. We are continuing to monitor the temperatures as the hot weather persists and performing analysis to identify the cause of the spatial variations, with the goal of defining possible strategies to reduce the temperatures.



Maps showing (A,C) dawn and (B,D) afternoon temperature at each BSEC weather station for the (top row) June 22 and (bottom) July 6 heat events.