Blog Post 3: City Scenarios – Tailoring Data for Athens and Vienna

Every city faces unique threats. PANTHEON's data delivery scheme is customized to meet the specific needs of our two pilot cities, Athens and Vienna, focusing on their most pressing disaster scenarios.

Athens: Fire and Earth

The Greek capital is highly vulnerable to seismic activity and summer wildfires.

- **Wildfire Scenario:** Our platform integrates real-time weather data from NOA stations, satellite-based vegetation indices from Copernicus, and 3D terrain models to simulate fire propagation. During an event, UAVs provide live thermal feeds to track hotspots.
- **Earthquake Scenario:** We focus on pre-event data, utilizing detailed building inventories from the Hellenic Statistical Authority and historical seismicity data to model potential structural damage and casualties, aiding in preparedness planning.

Vienna: Heat and Malice

Vienna's challenges are different, focusing on climate change impacts and complex human-made threats.

- **Heatwave Scenario:** We utilize diverse meteorological data to model urban heat islands, helping authorities identify vulnerable populations (like the elderly) and optimize the deployment of cooling centers when regular services are strained by summer vacations.
- **Cyber-Physical Attack:** A complex scenario involving a cyber-attack on a power plant triggering a wildfire. This requires fusing data from IT security systems with standard wildfire modeling tools to understand cascading effects across both digital and physical infrastructure.