



What are Urban Heat Islands?

Urban Heat Island effect (UHI) is when an urban area is significantly warmer than its surrounding rural area, the city itself soaks up heat from the day & keeps it (in the concrete, asphalt, and other materials). Being hotter means more energy demand, contributing to AC costs, greenhouse gas emissions, pollution, water quality, and public health dangers. The Phoenix mission is aimed at better understanding these affects and their relationship to people, measuring temperature with thermal imagery and building better knowledge about what UHI's mean to us.

CubeSat technology

Cube satellites are a kind of mini satellite that's put into orbit to collect data and scientific research; they're small, cheap, and easy to make (for a satellite). The Phoenix CubeSat is three cube units (3U), about the size of a loaf of bread. All the systems, components, and payload fit inside and collect their data, transmitting it back to us on Earth to be studied.



