

Sensor Deployment Plan

Goals:

1. Strategically deploy sensors in order to model classroom temperatures in different microclimates and building types.
2. Establish baseline conditions in schools with planned projects in order to evaluate the impact of heat abatement efforts.
3. Optimize deployment in schools while maintaining representation of each building type in each climate zone on each island.

Selection Criteria:

- Select sites in each of Hawaii's microclimates.
- Select sites with a diversity of building types.
- Select sites targeted for heat abatement projects.
- A subset of monitored schools will feature extra sensors to measure the performance of photovoltaic air conditioners.



"Ribbon" building



"Donut" building



Portable classroom

Climates Zones:

Zone 1: Arid

Severe lack of water that limits plant growth.

Zone 2: Dry

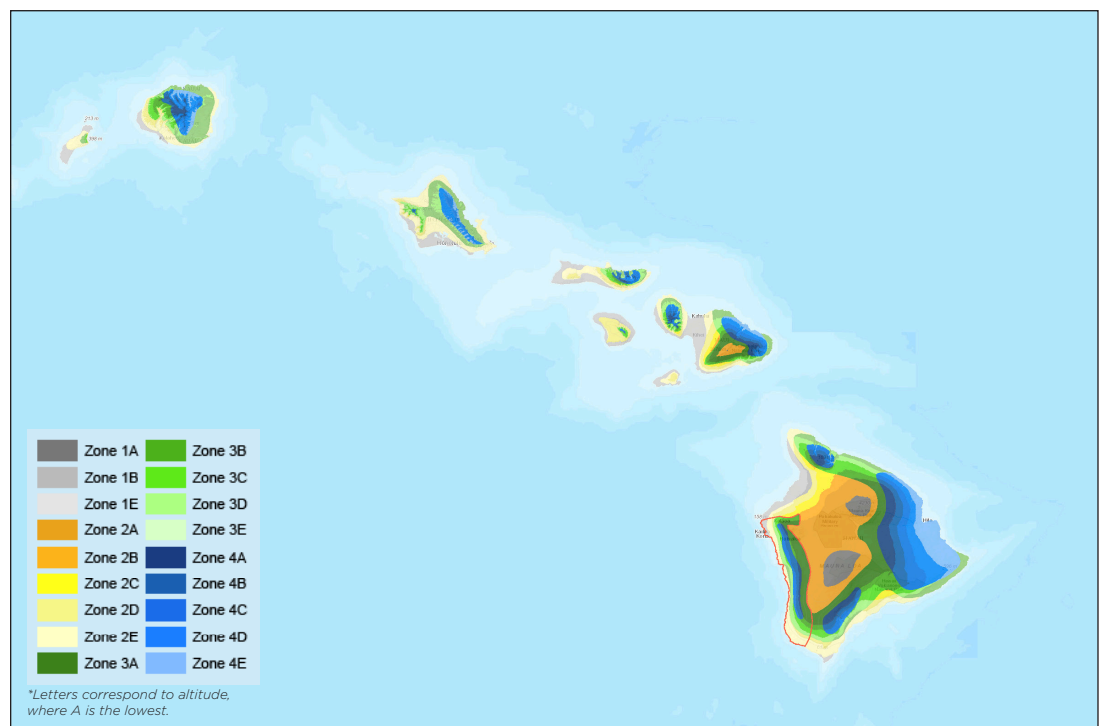
Limited water due to rainshadow effect.

Zone 3: Mesic

Moderate moisture with a balance of wet and dry weather.

Zone 4: Wet

Humid conditions with frequent rainfall.



Climate zones adapted from the Koahala Center's Plant Hardiness Zone Map:

<http://kohalacenter.org/hpsi/svst/map>

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