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Final Project Outline

Radiation Mapping

Overall Goal: Analysis and determine the sources of radiation on the university campus as well as determine the effects of urban terrain on source detection.

Variable Considerations:

* Collect data at each location for the same duration of time.
* Collect data at the same time of day at each location to eliminate weather and temperature interference as much as possible.
* Maintain the same collecting methods.
* Perform data collection away from established pedestrian travel and congregation on campus in order to limit human interference with the detector without disrupting other activities on campus.

Procedure:

1. Start with a test detection cycle to ensure that all sensors are functioning properly, and that the data collected is being stored in the correct files on the raspberry pi.
2. Set the detector to collect data for 15 minutes with a 2 second collection interval and set the data to be stored in an established file.
3. Two files should be collected in the form of csv, one with data from all of the sensors and another with the spectrum.
4. Repeat the collection process if results are unclear or if faults are found during the detection process.

Procedure Analysis:

Description of the site

Tentative location List:

* The Faculty Club
* Foothill Parking Lot
* Outside Etcheverry Hall
* College of Chemistry near Hildebrand Hall
* Stu Gordon Stadium
* Construction near Davis Hall
* Construction near Hilgard Hall

Conclusions:

Least number of counts at the baseball stadium

Most Coc and the activity Construction site near Hilgard Hall