Notes

AAFB CRB Damage Survey

These notes describe mapping of AAFB CRB survey data. These notes and all files associated with the mapping project are available on GitHub. <https://github.com/aubreymoore/AAFB-CRB-Damage-Survey>.

# Data Collection

The data were collected on smart phones using a custom designed Epicollect Plus App ( <http://plus.epicollect.net/crb_tree_inspection/crb_tree_inspection> ).

# QGIS Map

The free, open-source Quantum GIS v2.8.1 was used to map damage levels for trees included in the survey:

* All survey data were downloaded from the Epicollect+ database as a CSV file.
* The CSV file was imported as a vector layer (Layer > Add layer > Add delimited text layer)
* Points outside of AAFB were excluded from analysis (Vector > Analysis tools > Points in polygon)
* Rules were developed to categorize points based on observations recorded in the attribute table. Colored placemark icons were used to visualize point categories.
* The resulting map was exported as a PDF ( <https://github.com/aubreymoore/AAFB-CRB-Damage-Survey/blob/master/AAFB-CRB-Damage-May2015.pdf> ).

# Google Earth Map

Unfortunately, with the current version v2.8.1, all styling is lost when exporting point layers to KML or KMZ files. As a work around, an IPython notebook was developed to do the job ( <https://github.com/aubreymoore/AAFB-CRB-Damage-Survey/blob/master/make-kml.ipynb> ):

* In QGIS, the tree point layer was saved as an SQLite database.
* The Ipython notebook reads the database and writes a KMZ file containing color-coded points for display using Google Earth ( <https://github.com/aubreymoore/AAFB-CRB-Damage-Survey/blob/master/aafb-crb-damage.kmz> ).

# GIS Data Sources

GIS polygons for DOD land in northern Guam from <http://north.hydroguam.net/map-infrastructure-military-areas.php>