WorldPop – Malawi 2018 Census Data

The 2018 population grid was created in Spring 2020 following protocols from the open-source WorldPop Random Forests population modeling scripts: <https://github.com/wpgp/wpgpRFPMS/blob/master/docs/Dependencies.md>

The data were created following these scripts. This database includes:

wpgpRFPMS-master folder:

* **README.md**: from GitHub site for wpgpRFPMS
* **wpgpRFPMS.R**: main executing script, includes original authorship and date of creation (2018). Takes inputs from other setup files.
* **config.R**: Configurations for main script, including some naming conventions and inputs for the model.
* **inputs.R**: Includes custom covariates from Malawi 2018 census data and small administrative areas with census counts (Traditional Authorities & sub-areas within Lilongwe)
* docs folder: from wpgpRFPMS GitHub; no modifications made after download
* src folder: Contains executing functions/scripts. No modifications made after download.\*
  + \*\*A few modifications may have been made if there was a break in the script due to input shapefiles.

In the main PopGrid folder:

* **0\_set\_up.R**: Download and install packages required for the models
* **Install\_R\_apr13.R**: installing covariate datasets from wpgp GitHub
* MWI subfolder: Contains downloaded covariate data
* **Malawi\_TA\_2018 census match pop count.shp**: Shapefile of c 2018 census counts (+ count of people over 5 years old and people under 5 years) used as underlying population 🡪 converted to
* **mwi\_subnational\_admin\_2000\_2020**: rasterized census; values are TA CODES
* **mwi\_subnational\_admin\_2000\_2020\_ta**: rasterized census areas; values have no meaning, just a row ID
* **MWI\_PopTable.shp**: Shapefile with TA CODE and associated population – important for running the wpgpRFPMS

The folder also includes output folder containing files for total population modeling, and models just including people over 5 years and under 5 years.

Other auxiliary files in the main folder were used to create some of the files outlined above.