WorldPop – Malawi 2018 Census Data

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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
* **2018 rasters**: folder with final 2018 population rasters for the total population, under 5s, and over 5s

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.