**README for cleaner cookstoves scenario**

These variables are found in multiple files:

* ‘census\_id’: unique 4-character identifier code for each census geography (districts and local municipalities). These are not official geography codes.
* ‘geo\_name’: name of census geography
* country

Files in data folder:

1. SR\_PM25\_PRI\_ground.csv

* Source-receptor matrix for ground primary PM2.5
* The columns are sources and rows are receptors (they are ordered from lowest to highest ‘census\_id’)
* The values are marginal concentrations downwind from a source (µg/m3/tonne)

1. PM25-PRI\_ground\_damages.csv

* ‘mort\_pertonne’: marginal ground PM2.5 damages (mortalities/tonne) caused by a source

1. emis\_diff.csv

* ‘delta\_emis’: emission reduction (tonnes) from deploying cleaner cookstoves
* The sources are listed in order from lowest to highest ‘census\_id’ to match the source-receptor matrix. The emission vectors can be used as is and don’t need to be re-ordered.

1. base\_concentration.csv

* ‘base\_PM25’: 2018 annual average PM2.5 concentrations (µg/m3) estimated using REACH. The baseline emissions used are from EDGAR and include primary PM2.5, SO2, NOx, NH3, and volatile organic compounds.

1. southern\_africa (.shp, .prj, .dbf, .shx)

* Shapefile that contains census geography attributes for the Southern Africa region
* Note: all 4 files must be in your directory to use the shapefile (southern\_africa.shp)

1. plot\_concentrations.R

* This R script contains a function to plot PM2.5 concentrations. The arguments are defined in the script.