The file **admin\_info.csv** includes, for each admin unit considered, the

* country code
* country name
* admin1 unit code
* admin1 unit name
* admin1 unit area (km2)
* latitude of admin1 centroid (°E)
* longitude of admin1 centroid (°N)

**Each** .csv file in **data/** includes, for each admin1 unit (first column) and year (2001, 2002, …, 2020) (remaining columns) the value of the variable specified in the file name.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **File name** | **Description** | **Unit** | **Source** | **Notes** |
| SocioEconomic\_netmig | Net migration (= total in-migration into area minus total out-migration from area) | Number of persons | <https://zenodo.org/record/7997134> |  |
| SocioEconomic\_pop | Population count | Number of persons |
| SocioEconomic\_pcgdp | GDP per capita | $2015 | <https://www.nature.com/articles/sdata20184> | Only available for years until 2015.  (HDI is a composite index based on income, life expectancy, and education: <https://en.wikipedia.org/wiki/Human_Development_Index>) |
| SocioEconomic\_hdi | Human Development Index | Index between 0 and 1 |
| AgeSex\_female0to19 | Proportion of females aged 0 to 19 (among total (= all sexes, all ages) population) | Fraction between 0 and 1 | <https://sedac.ciesin.columbia.edu/data/set/gpw-v4-basic-demographic-characteristics-rev11> | Only available for the year 2010. |
| AgeSex\_female20to64 | Proportion of females aged 20 to 64 | Fraction between 0 and 1 |
| AgeSex\_female65p | Proportion of females aged 65 and above | Fraction between 0 and 1 |
| AgeSex\_male0to19 | Proportion of males aged 0 to 19 | Fraction between 0 and 1 |
| AgeSex\_male20to64 | Proportion of males aged 20 to 64 | Fraction between 0 and 1 |
| AgeSex\_male65p | Proportion of males aged 65 and above | Fraction between 0 and 1 |
| Climate\_maxtmp | Mean temperature of the warmest month | Degrees Celsius | <https://crudata.uea.ac.uk/cru/data/hrg/cru_ts_4.05/> | More information about the aridity index used here can be found at <https://en.wikipedia.org/wiki/Aridity_index#United_Nations_Environment_Programme> |
| Climate\_mintmp | Mean temperature of the coldest month | Degrees Celsius |
| Climate\_avgtmp | Mean annual temperature | Degrees Celsius |
| Climate\_minpre | Precipitation of the driest month | Millimetres per month |
| Climate\_maxpre | Precipitation of the wettest month | Millimetres per month |
| Climate\_totpre | Annual precipitation | Millimetres per year |
| Climate\_totwet | Annual number of wet days | Number of days |
| Climate\_aridity | Aridity (annual precipitation ÷ potential evapotranspiration) | Millimetres per millimetres |
| FoodInsecurity\_avg | Mean annual food insecurity | Annual mean across the following quarterly indices:  1: Minimal, 2: Stressed, 3: Crisis, 4: Emergency, and 5: Famine | <https://sedac.ciesin.columbia.edu/data/set/food-food-insecurity-hotspots> | Only available from 2010 to 2018. |
| HazardRisk\_heatwave | Land fraction at risk of heatwave | Fraction between 0 and 1 | <https://data.isimip.org/10.48364/ISIMIP.924045> | All hazard risk variables are *model outputs* (average across a large set of different climate impact models coupled with different climate models) - they are *not observed data*. The outputs quantify the overall (modelled) risk of an area being exposed to a given climate hazard at a given year (10-year resolution), not whether the hazard was actually present in that area in that year. Climate impact models are subject to important uncertainties. In summary, the fact that the data suggest small or large exposure of a land area to a hazard at a certain time must be taken with a grain of salt. These data are merely provided because suitable *observational* datasets of the set of hazards considered are not available.  Only available for 2001, 2010, 2020; however, particants should feel free to interpolate these time slices (e.g., linearly) to obtain coverage for the remaining years. |
| HazardRisk\_wildfire | Land fraction at risk of wildfire | Fraction between 0 and 1 |
| HazardRisk\_drought | Land fraction at risk of drought | Fraction between 0 and 1 |
| HazardRisk\_riverflood | Land fraction at risk of river flood | Fraction between 0 and 1 |
| HazardRisk\_tropicalcyclone | Land fraction at risk of tropical cyclone | Fraction between 0 and 1 |
| HazardRisk\_cropfailure | Land fraction at risk of crop failure | Fraction between 0 and 1 |
| LandUse\_cropland | Land fraction covered by cropland | Fraction between 0 and 1 | <https://essd.copernicus.org/articles/9/927/2017/essd-9-927-2017.html> | *Pasture area* and *rangeland* are defined as grazing land that *is* and *is not* intensively managed, respectively . (Hence, the sum of these two fractions is the total land fraction used for grazing.) More information about the land use data is available in the readme file at <https://easy.dans.knaw.nl/ui/datasets/id/easy-dataset:74467/tab/2> .  LandUse\_builtup can be used as a proxy for the degree of urbanisation of an area. |
| LandUse\_pasture | Land fraction covered by pasture | Fraction between 0 and 1 |
| LandUse\_rangeland | Land fraction covered by rangeland | Fraction between 0 and 1 |
| LandUse\_builtup | Land fraction covered by built-up land (cities, towns, …) | Fraction between 0 and 1 |