Water When It Counts: Reducing Scarcity through Irrigation Monitoring in Central Mozambique

Replication files for Water When It Counts: Reducing Scarcity through Irrigation Monitoring in Central Mozambique by Paul Christian, Florence Kondylis, Valerie Mueller, Astrid Zwager and Tobias Siegfried

How to use this repository

This repository contains all the files necessary to replicate the results shown in the paper. To do so, follow the instructions below.

- 1. **Download the replication folder**
- 1. **Use the Main do-file to replicate the results.** Results can be replicated by running `main.do` in the `Do-files` folder. It is only necessary to add your computer's username and path to the downloaded replication folder as described in *PART 2* of `main.do`. You can select which sections to run by editing the globals in *PART 1*. Make sure to run the *packages* section to install all necessary packages before running the other sections.
- 1. **Necessary data sets can be found in the Data folder.** Data sets used for analysis are aggregated in different levels and described below. Master data sets in Data/Master data sets contain records of all households and plots listed during surveys and are also required to run the analysis.
- 1. **Outputs will only be created one you run the Main do-file.** The Output folder and its subfolders will be empty until then. They are only included in this folder to reflect the folder structure in `main.do` so it can run without errors.

Data sets description
Panel data sets

hhwater_plotcropgs.dta: Main dataset. Household-plot-crop-growth stage-round observations of water availability and requirement and reports of conflict and water sufficiency. ID variables: *scheme_id*, *plot_id*, *hh_id*, *crop_id*, *gs*, *round*.

water_plot_long.dta: Weekly water availability per plot-household combination. ID variables: *week*, *round*, *scheme_id*, *plot_id*, *hh_id*.

plotweek_watergap.dta: Similar to *hhwater_plotcropgs.dta*, but disaggregates growth stages into weekly observations. ID variables: *scheme_id*, *plot_id*, *hh id*, *crop id*, *round*, *week*.

furrow_week.dta: Weekly water availability and requirement at catchment area level. ID variables: *scheme id*, *furrow id*, *week*.

Master data sets

master_hh.dta: Includes all households listed and surveyed across all rounds of data collection. ID variable: *hh_id*.

master_plot.dta: Includes all plots listed across all rounds of data collection. ID variable: *plot_id*.

plot_tracker.dta: Includes all household-plot combinations listed in each round of data collection. ID variables: *hh_id*, *plot_id*, *round*.