Package 'HiddenSafetynet2025'

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Type Package

Title US Farm Safety Net Lab

Version 0.0.0.9000

Author Francis Tsiboe [aut, cre] (<https://orcid.org/0000-0001-5984-1072>)

Maintainer Francis Tsiboe <ftsiboe@hotmail.com>

Contributor -

Reviewer -

Creator Francis Tsiboe

Description This repository centralizes research outputs, analytical tools, and resources for exploring and evaluating the United States agricultural safety net programs. It supports analysis of key programs including the Federal Crop Insurance Program (FCIP), the Noninsured Crop Disaster Assistance Program (NAP), Price Loss Coverage (PLC), Agricultural Risk Coverage (ARC), and various ad-hoc disaster assistance programs.

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URL <https://github.com/you/HiddenSafetynet2025>

BugReports <https://github.com/you/HiddenSafetynet2025/issues>

Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

VignetteBuilder knitr

Depends R (>= 4.1.0)

Imports data.table, rfcip, future.apply

Remotes github::dylan-turner25/rfcip, github::UrbanInstitute/urbnmapr, github::dylan-turner25/rfsa

Suggests dplyr, tidyr, knitr, rmarkdown, testthat (>= 3.0.0)

LazyData true

Cite-us If you find it useful, please consider staring the repository and citing the following studies
- Tsiboe, F. and Turner, D. (2025). ``Incorporating buy-up price loss coverage into the United States farm safety net.'' Applied Economic Perspectives and Policy.
- Tsiboe, F., et al. (2025). ``Risk reduction impacts of crop insurance in the United States.'' Applied Economic Perspectives and Policy.
- Gaku, S. and Tsiboe, F. (2024). Evaluation of alternative farm safety net program combination strategies. Agricultural Finance Review.

Contents

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clean_rma_sobtpu   *Clean and enrich RMA Statement of Business (SOB) data*

Description

Processes RMA Statement of Business (SOB) data to produce an analysis-ready dataset with aggregated core insurance metrics and **shares** of Supplemental Coverage Option (SCO) and Enhanced Coverage Option (ECO) by coverage level.

Usage

```
clean_rma_sobtpu(
  study_env = setup_environment(),
  output_directory = "data-raw/data"
)
```

Arguments

study_env   A list-like environment produced by [setup_environment()](#) that must include
                 year_beg and year_end (inclusive integers). Defaults to setup_environment().

output_directory
                 Character string specifying the directory where the processed .rds file should be
                 saved. Defaults to "data-raw/data". The file will be named "cleaned_rma_sobtpu.rds".

Details

The output file will be written to file.path(output_directory, "cleaned_rma_sobtpu.rds").
The directory is created if it does not exist.

Value

A character message describing the processed year range and number of output rows; the main side
effect is writing an .rds file to disk.

setup_environment   *Setup Project Environment*

Description

Loads required libraries, initializes directories, R options, random seed, and analysis year range for the supplemental protection project.

Usage

```
setup_environment(year_beg = 2015, year_end = 2024, seed = 1980632)
```

Arguments

year_beg	Integer. Beginning year of the analysis (default: 2015).
year_end	Integer. Ending year of the analysis (default: 2024).
seed	Integer. Random seed for reproducibility (default: 1980632).

Details

This function:

- Loads the following packages: - future.apply - rfcip - data.table - rfcipCalcPass
- Detects the operating system and sets the root fastscratch directory: - Windows - "C:/fastscratch/" - Linux/Mac - "/fastscratch/<username>"
- Creates subdirectories for simulation, expected values, draw-farm, and draw-cost outputs.
- Ensures data/ and output/ directories exist in the project root.
- Sets R options: - scipen = 999 - disables scientific notation - future.globals.maxSize - increases memory for the future package - dplyr.summarise.inform = FALSE - suppresses summarise messages
- Sets a random seed for reproducibility.

Value

A named list containing:

wd List of working directory paths (fastscratch + subfolders).

year_beg The starting year.

year_end The ending year.

Examples

```
env <- setup_environment(year_beg = 2015, year_end = 2024, seed = 42)
env$wd$dir_sim
env$year_beg
```

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