

UAA R Code

This doc illustrates the R code used to generate UAA system scores.

The code is divided into two parts: *score calculation* and *loss prediction*.

Important Note: *All the files inside the folder cannot be renamed and moved, they must stay exactly the same as they were. Otherwise, R might report errors and lead to execution failure.*

Below is a step-wise instruction for each of them.

1. Score Calculation

Step 1: Under the folder: CompiledRCode/R, open the file: auto_preparation.R with R or RStudio(recommend RStudio).

Step 2: Locate line 3, this is the working directory, it is **imperative** to change the directory to where the CompiledRCode folder is stored.

Step 3: Run the entire chunk of code, this would generate the folder of UAA scores.

2. Loss Prediction

Step 1: Under the folder: CompiledRCode, open the file: LossPredictionCompile.r with R or RStudio(recommend RStudio).

Step 2: There are three packages used in this chunk of code: dplyr, lavaan, pscl, install them if your R hasn't yet.

Step 3: Locate line 6, this is the working directory, it is **imperative** to change the directory to where the CompiledRCode folder is stored.

Step 4: Run the code, two files: flood_cost.csv, drought_cost.csv will be generated.