

MY PASSPORT/Klima

created by one of the **programs**

PINE

PineProj

- catchment1
 - input_obs
 - input_corr
 - input_delta
 - catchment1_obs.txt
 - catchment1_out.txt
 - output_corr
 - output PINE simulations for corrected data sets
 - output_delta
 - output PINE simulations for corrected data sets
- catchment2
- ...

Pinesys

bin

PINEHBV.exe
...

Scripts
R codes

INPUTS

Input_RCP

- catchment1
 - catchment1 shapefile
- catchment2
- ...

Input_BiasCorrect

- catchment1
 - hist_prec : precipitation historical values for every climate model
 - scenario_temp : temperature future values for every climate models
- catchment2
- ...

Input_plots

- catchment1
 - daily simulated discharge for every scenario/period
 - daily snowpacks for every scenario/period
- catchment2
- ...

OUTPUTS

Output_RCP

- catchment1
 - catchment1_hist
 - catchment1_rcp45
 - catchment2_rcp85
 - node_Shapefile
 - Grid_nodesD.txt
- catchment2 ...

Output_BiasCorrect

- catchment1
 - biascorrected prec and temp
 - deltachanged prec and temp
 - monthly evapotranspiration values
- catchment2
- ...

Output_plots

- catchment1
 - average year plots
 - associated .csv files
 - ...
- catchment2
- ...

RR : precipitation data

this is the main input of climate_models_RCP_sfVersion.R

- climate_model1
 - hist
 - daily values for each year (.nc files)
 - scenario1 (rcp45)
 - scenario2 (rcp85)
- climate_model2
 - ...
- ...

TM : temperature data

this is the main input of climate_models_RCP_sfVersion.R

- climate_model1
 - hist
 - daily values for each year (.nc file)
 - scenario1 (rcp45)
 - scenario2 (rcp85)
- climate_model2
 - ...
- ...

programs

1. csv_to_txt_Sildre_SeNorge.py
2. climate_models_RCP_sfVersion.R
3. climate_models_RCP_to_BiasCorrect.py
4. BiasCorrectPrecip.R & BiasCorrectTemperature.R
5. corrected_txt_pine_input.py & pine_files_creation.py
6. preplot.R
7. Plotting.R & AnnualMinFlows.R
8. check_pine_input.R

Klima_program_execution.png

order of programs execution and a few advices for their use

PINE_tutorial.pdf

steps to create the baseline setup and calibrate the model

others

- output files backup (the output of a script can be modified by another one, be careful)
- notes.txt : things that could be improved