Hands-on Session: Comments for Setup CREST Model

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Setup the CREST Model using simulation Mode

1. Identify the outlet of this basin
2. Select a region bigger than all of this basin based on the streamflow network
3. Get the DEM, FDR and FAC of this big region by clipping the global DEM, FDR (DIR) and FAC (ACC)
4. Unzip “YourStationName_CREST_Model.zip” to your folder, the unzipped folder named as “YourStationName_CREST_Model”
5. Change the unzipped folder using your station name, such as “Wangchu_CREST_Model”
6. Delete all files in “Basics” folder of the unzipped folder
7. Copy the DEM, FDR and FAC of your big region to the “Basics” folder

Setup the CREST Model using simulation Mode (continued)

8. Create a "Stream.Def" file in the "**Basics**" folder and write **2** in this file
9. Rename the project name using your station name, like "Wangchu_CREST_Model.Project"
10. Modify the "RunCREST.bat" file using the last step project name, such as:

    ".\CREST_v2.exe Wangchu_CREST_Model.Project"
11. Modify the "MODEL AREA" in the project file based on your DEM File, make sure you have equal sign (=)
12. Change the date time in the project file based on your research period
13. Modify the outlet location in the project file
14. Change the precipitation and the PET path using your data or global data

Setup the CREST Model using simulation Mode (continued)

15. Rename the name of the observed file using your outlet name, like “Wangchu_Obs.csv”
16. Open the observed file and write your own data
17. Run CREST Model
18. You will see the results in the “Results” folder, also your will see the “Mask.X” file

Calibration your CREST Model

1. Delete the “CalibMask.asc” in the “Calibs” folder
2. Copy the “Mask.X” file from the simulation results folder into “Calibs” folder
3. Rename the “Mask.X” file as “CalibMask.X”
4. Modify the station name and location (long, lati) in “Calibrations.txt” using your outlet name and location
5. Modify the “RunStyle” in project file using “cali_SCEUA”
6. Run the CREST Model
7. You will see the model is calibrating

Thank you very much for your attention!

Thank NASA SERVIR-Africa and RCMRD!

I hope all of you have learned how to use CREST Model, if you have other questions, please feel free to email me!

please create your **dropbox** account using this link (http://db.tt/Ot3c9tWH), I will share a folder with you to store the new resources for CREST Model in the future!

You can see the applications in **NASA SERVIR** website, and you can also see the latest news for CREST model in websites: http://hydro.ou.edu and http://eos.ou.edu.

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