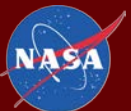




# Running the example Basin

Xianwu Xue  
April 2<sup>rd</sup>, 2012



# Table of Contents

- Organization of the Files and Folders
- Follow the steps



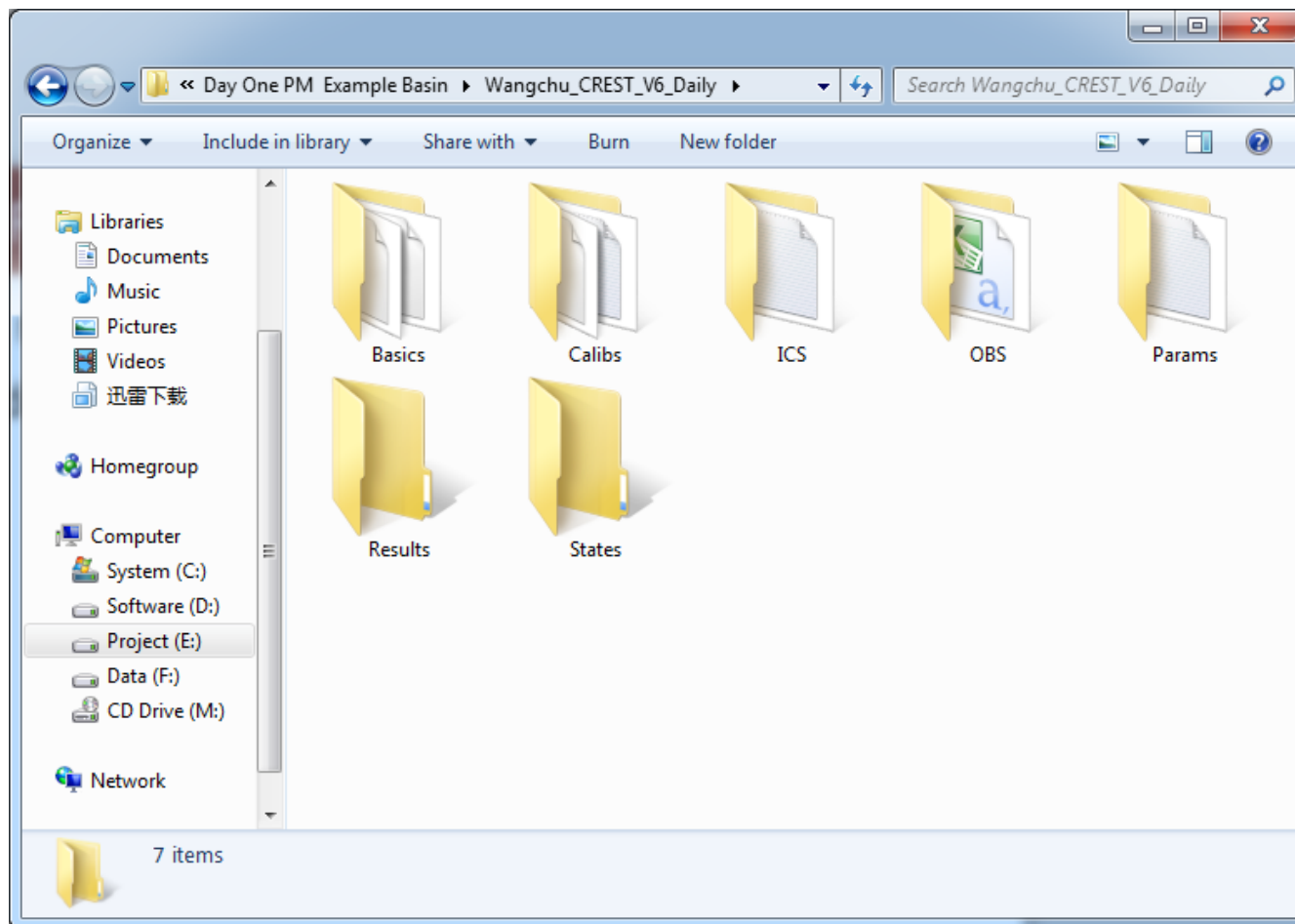
# Organization of the Files and Folders



# First Step: Create Folders

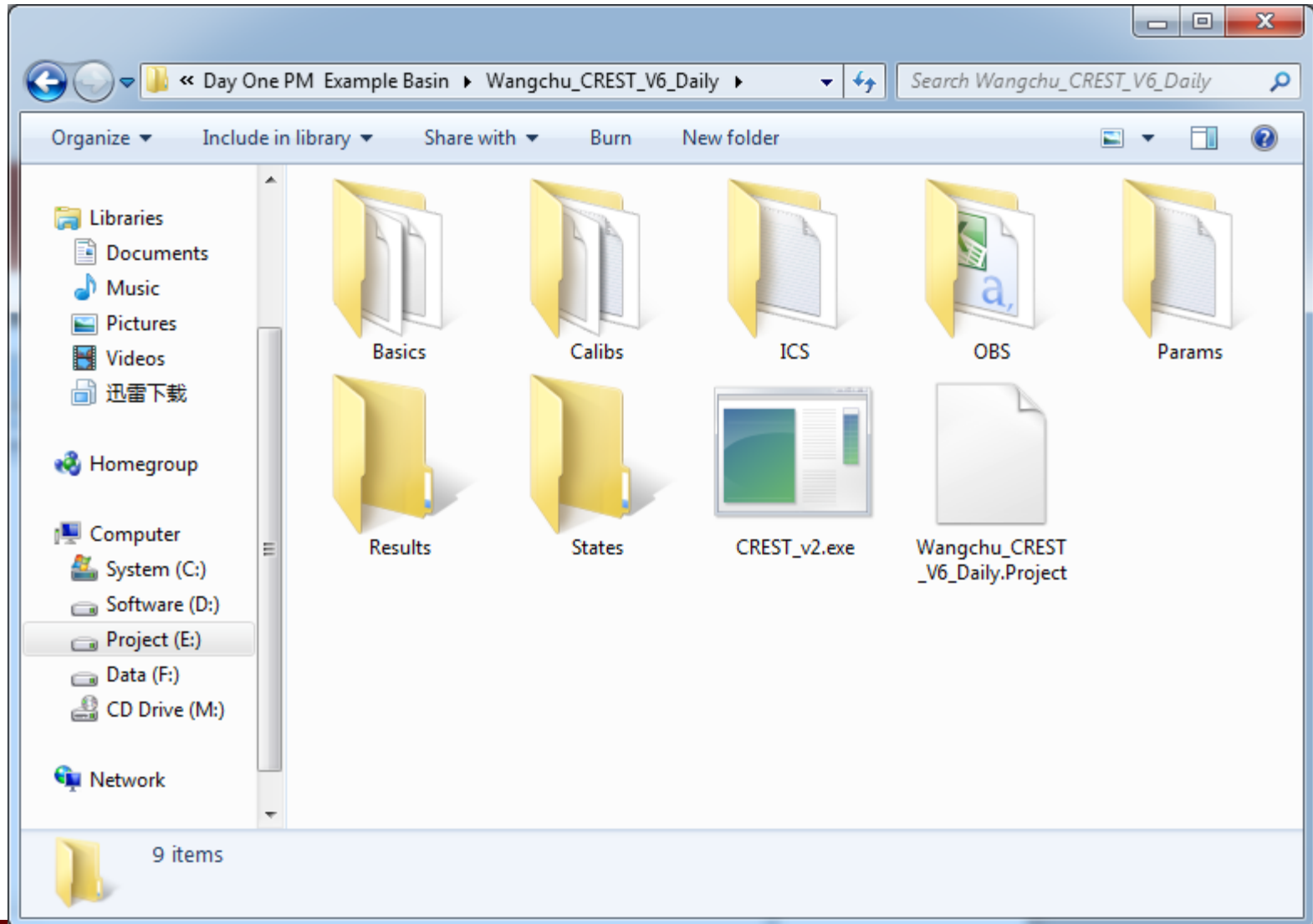
- Create a folder named as “Wangchu\_CREST\_V6\_Daily”
- Create Sub-Folders Like below

- Basics
- Calibs
- ICS
- OBS
- Params
- Results
- States



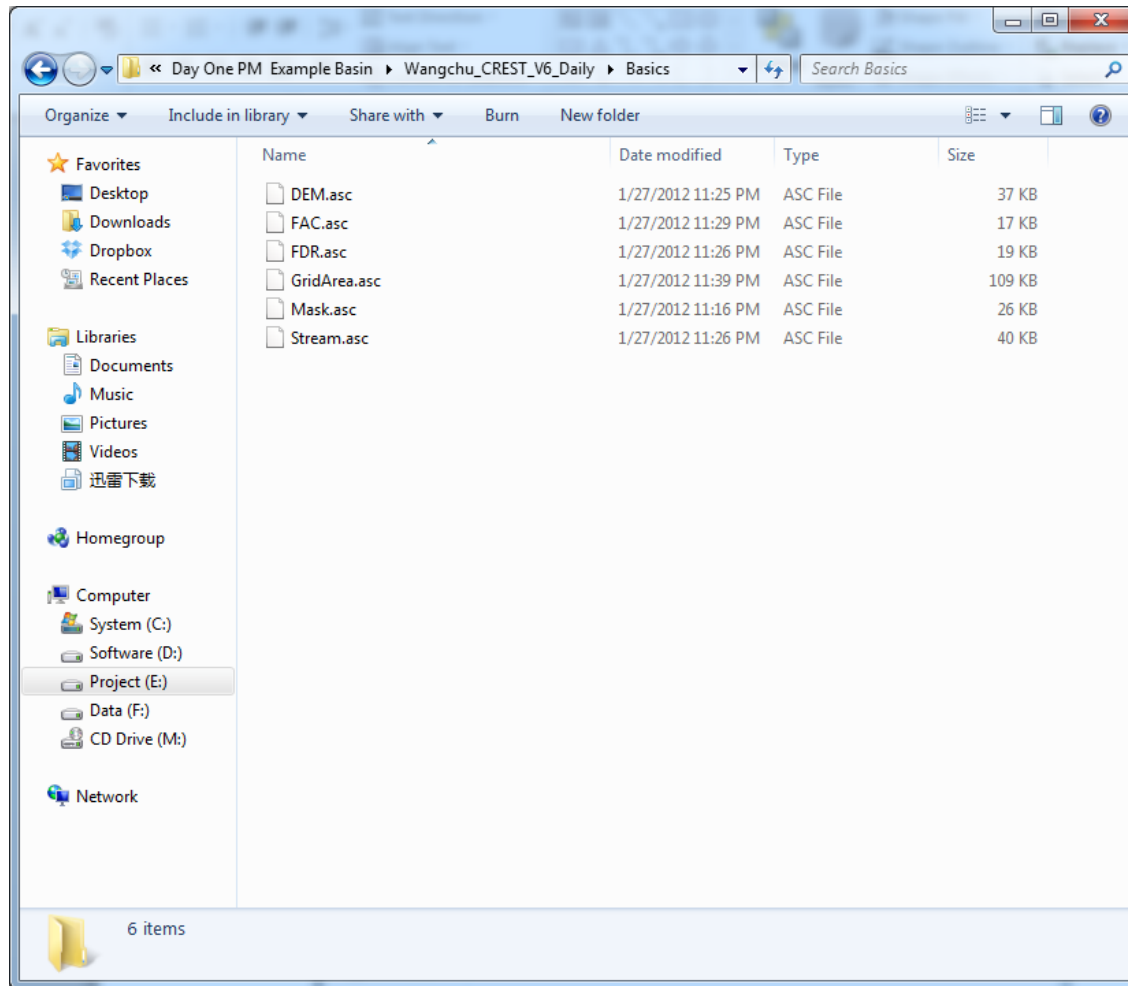
# Second Step

Copy files (“CREST\_v2.exe” and “Wangchu\_CREST\_V6\_Daily.Project”) in to the folder



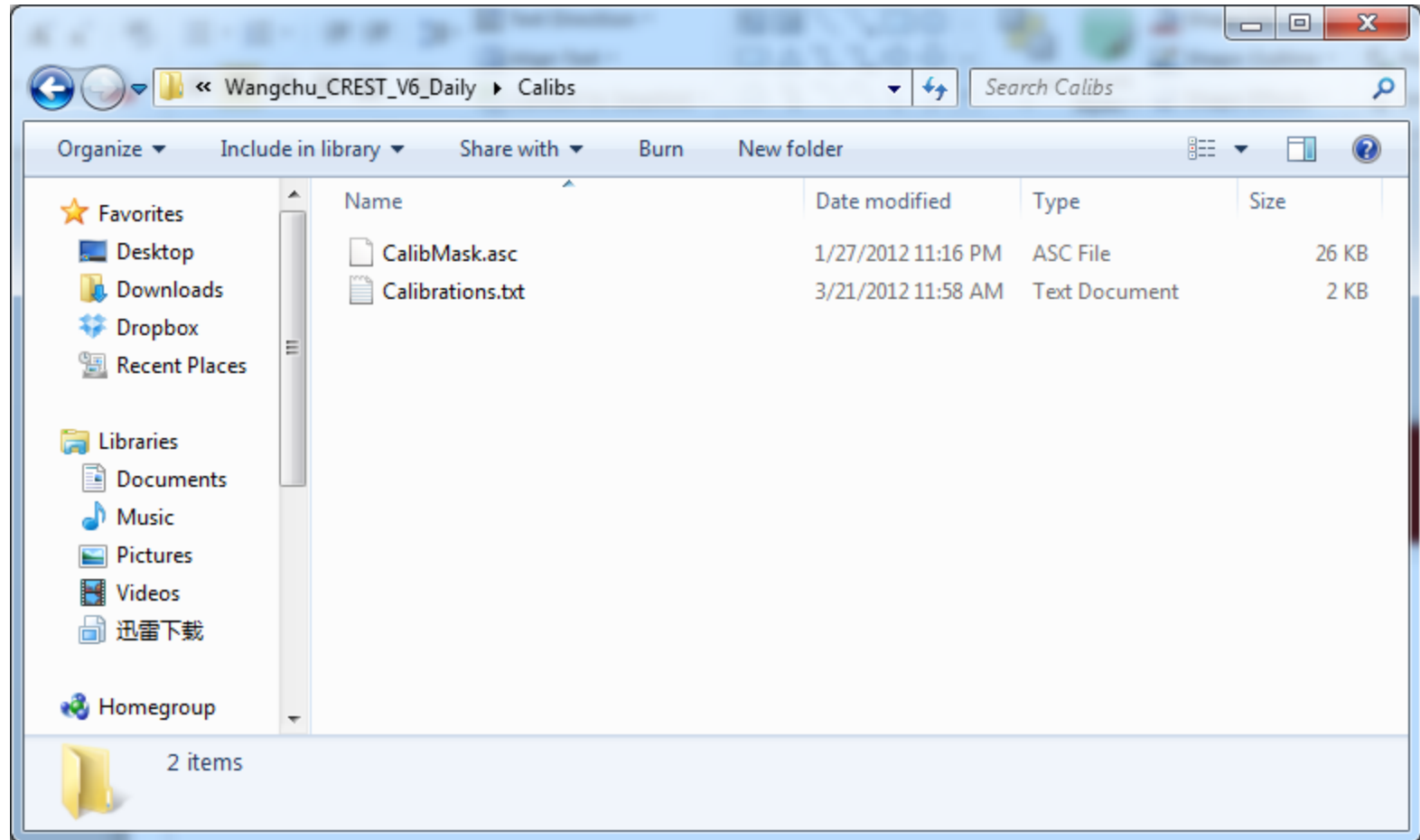
# Third Step

Put DEM.asc, FAC.asc, FDR.asc, GridArea.asc, Mask.asc and Stream.asc into “**Basics**” Folder



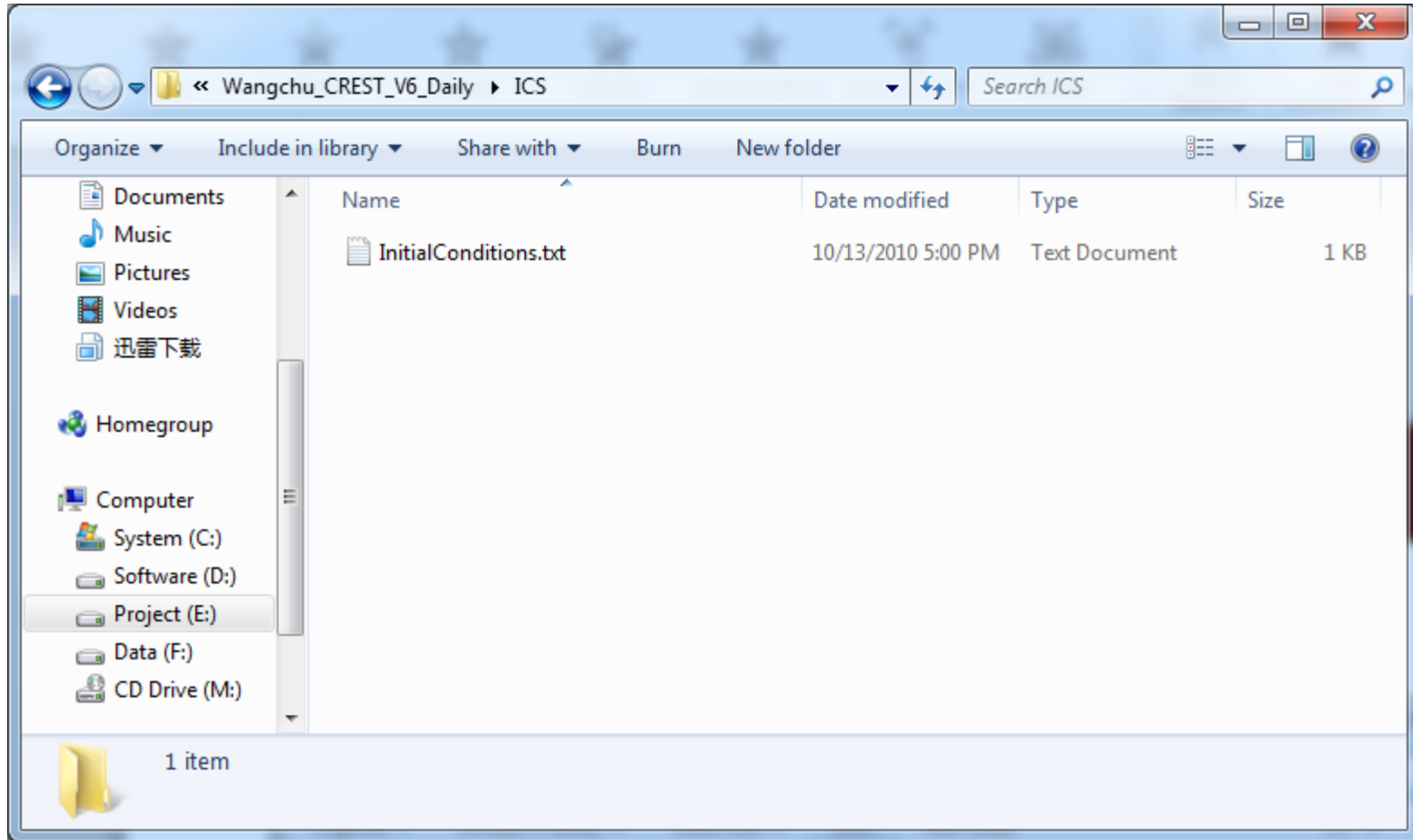
# Forth Step

- Put CalibMask.asc and Calibrations.txt into “Calibs” Folder



# Fifth Step

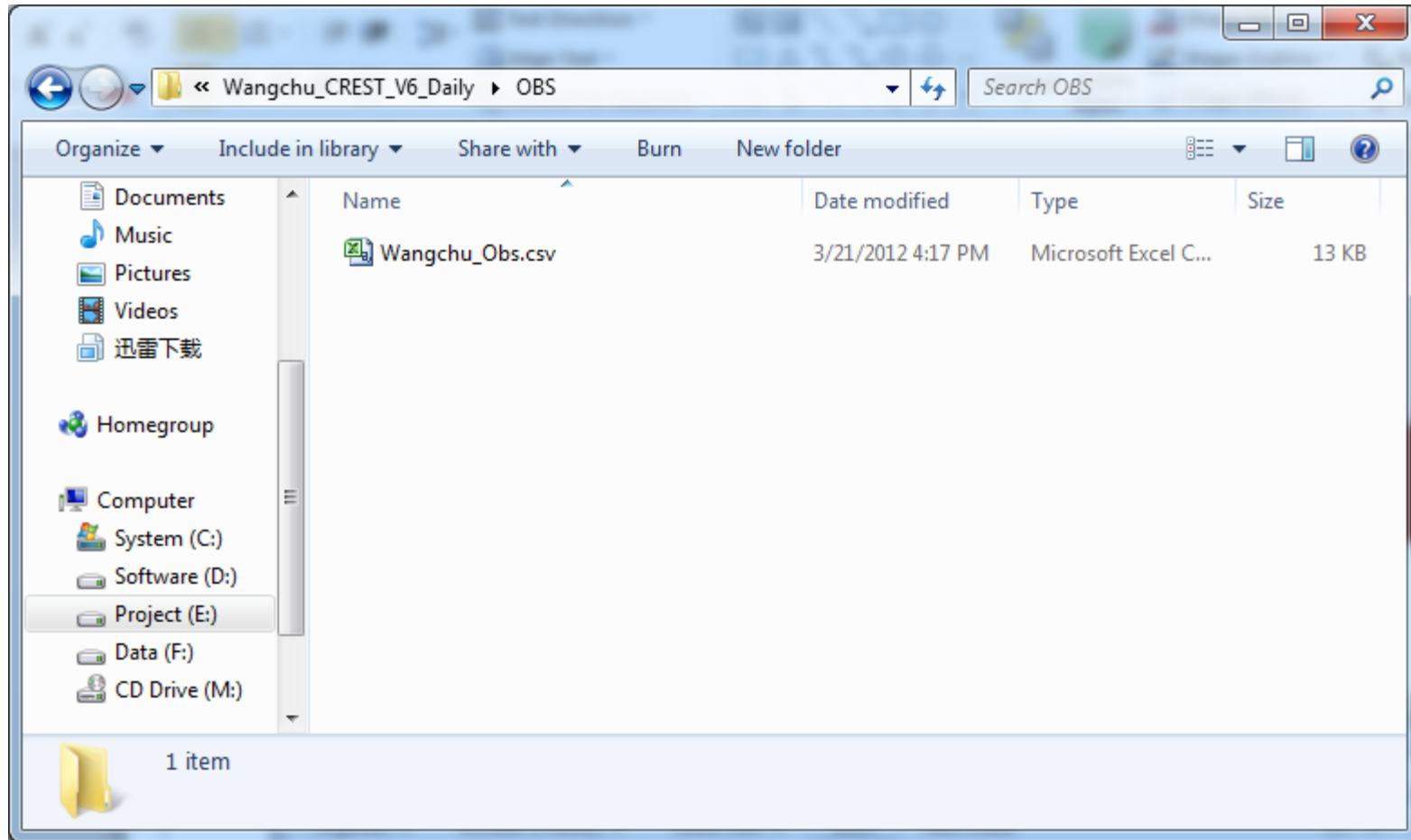
- Put InitialConditions.txt into “ICS” folder





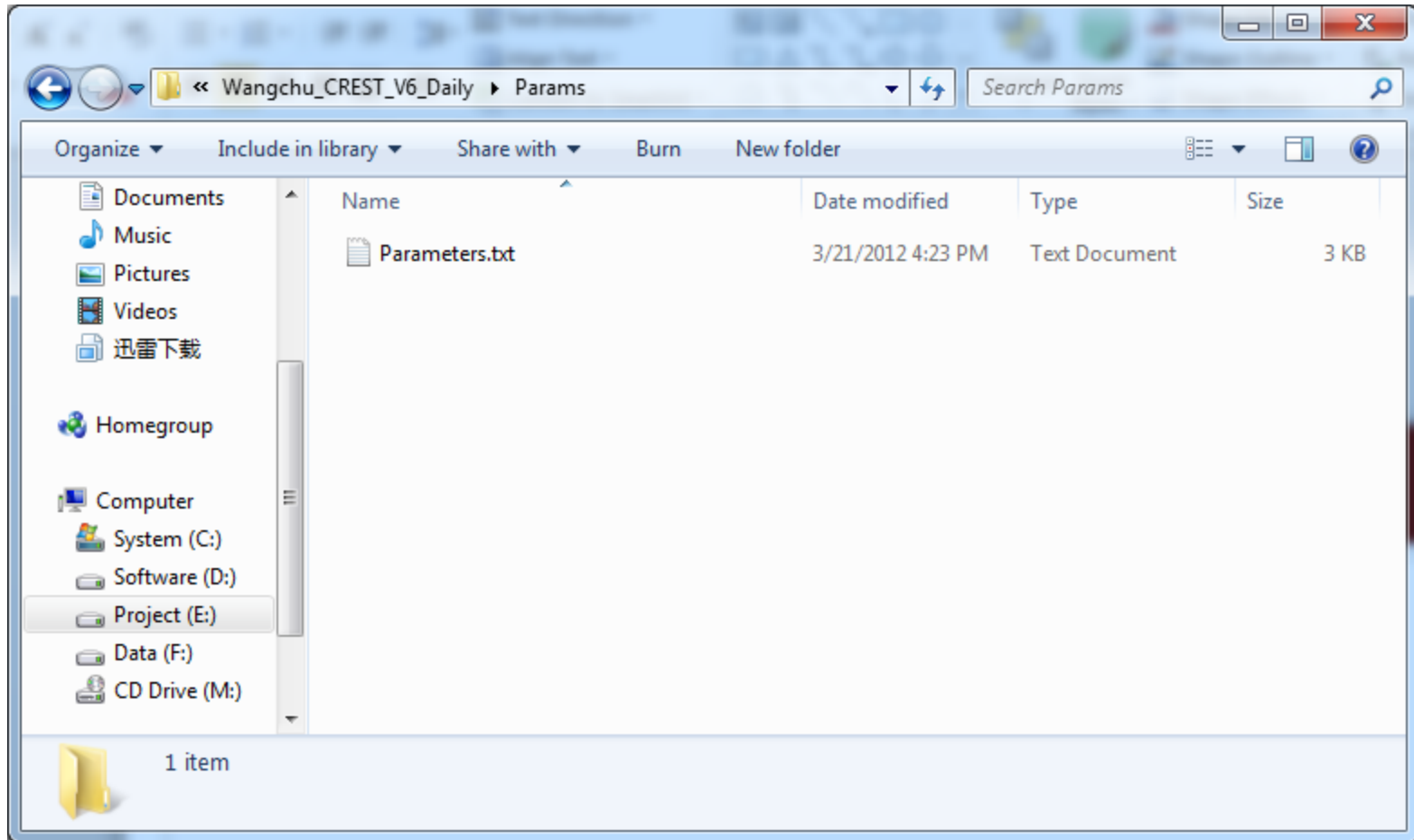
# Sixth Step

- Put Wangchu\_Obs.csv into “OBS” Folder



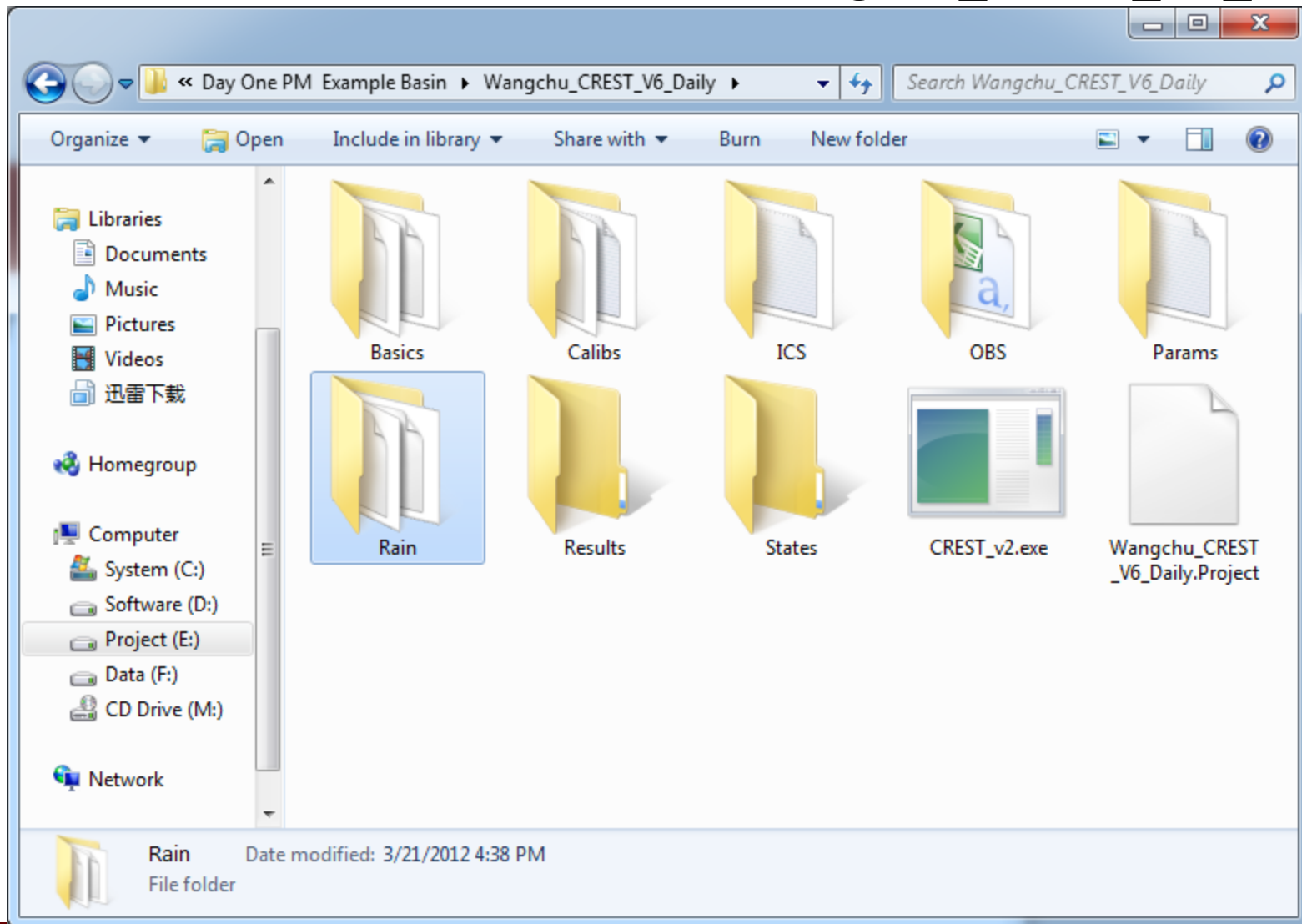
# Seventh Step

- Put Parameters.txt into “Params” Folder



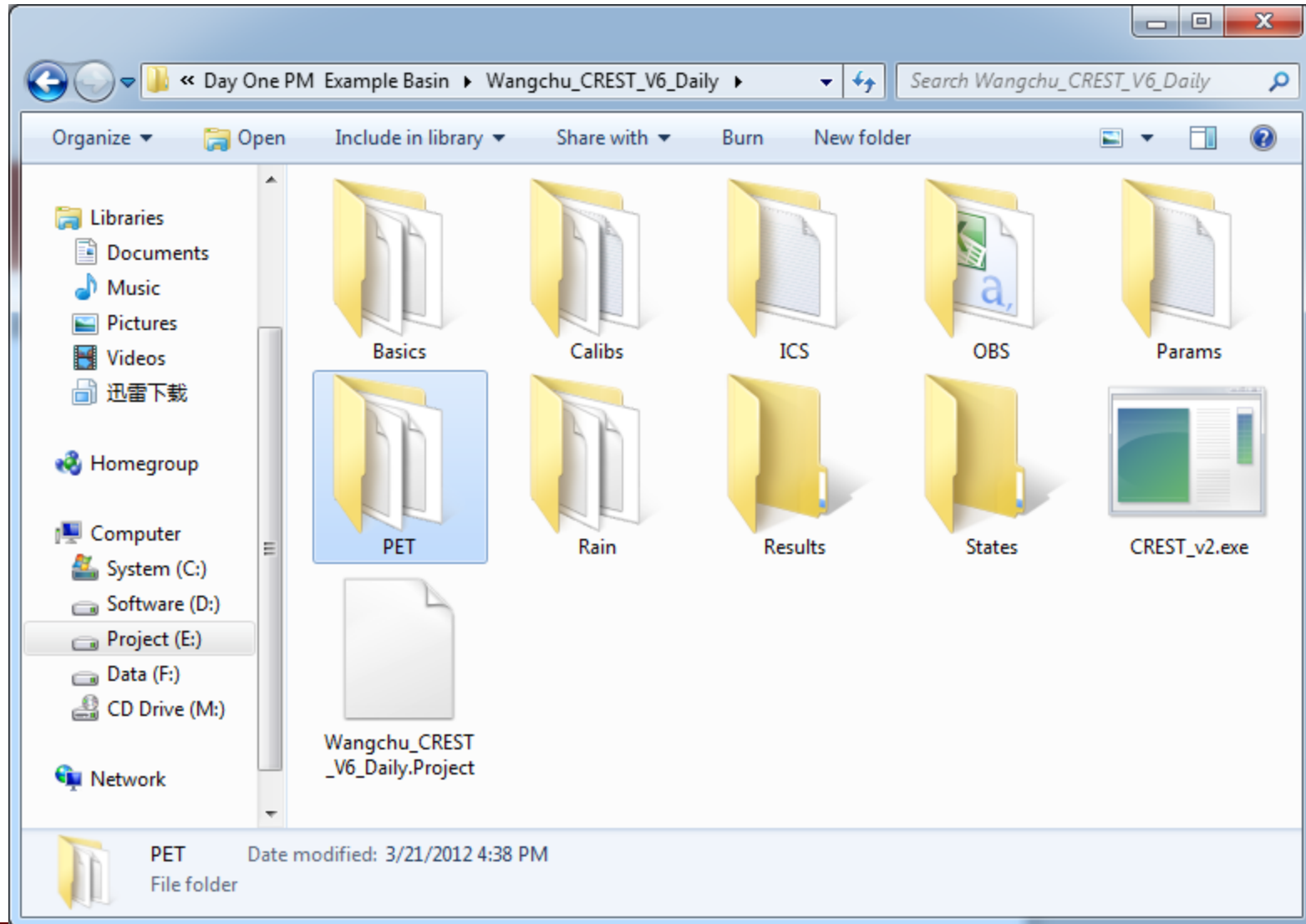
# Eighth Step

Move “Rain” folder in to the folder “Wangchu\_CREST\_V6\_Daily”



# Ninth Step

Move “PET” folder in to the folder “Wangchu\_CREST\_V6\_Daily”

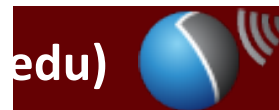


# Tenth Step

Replace the path

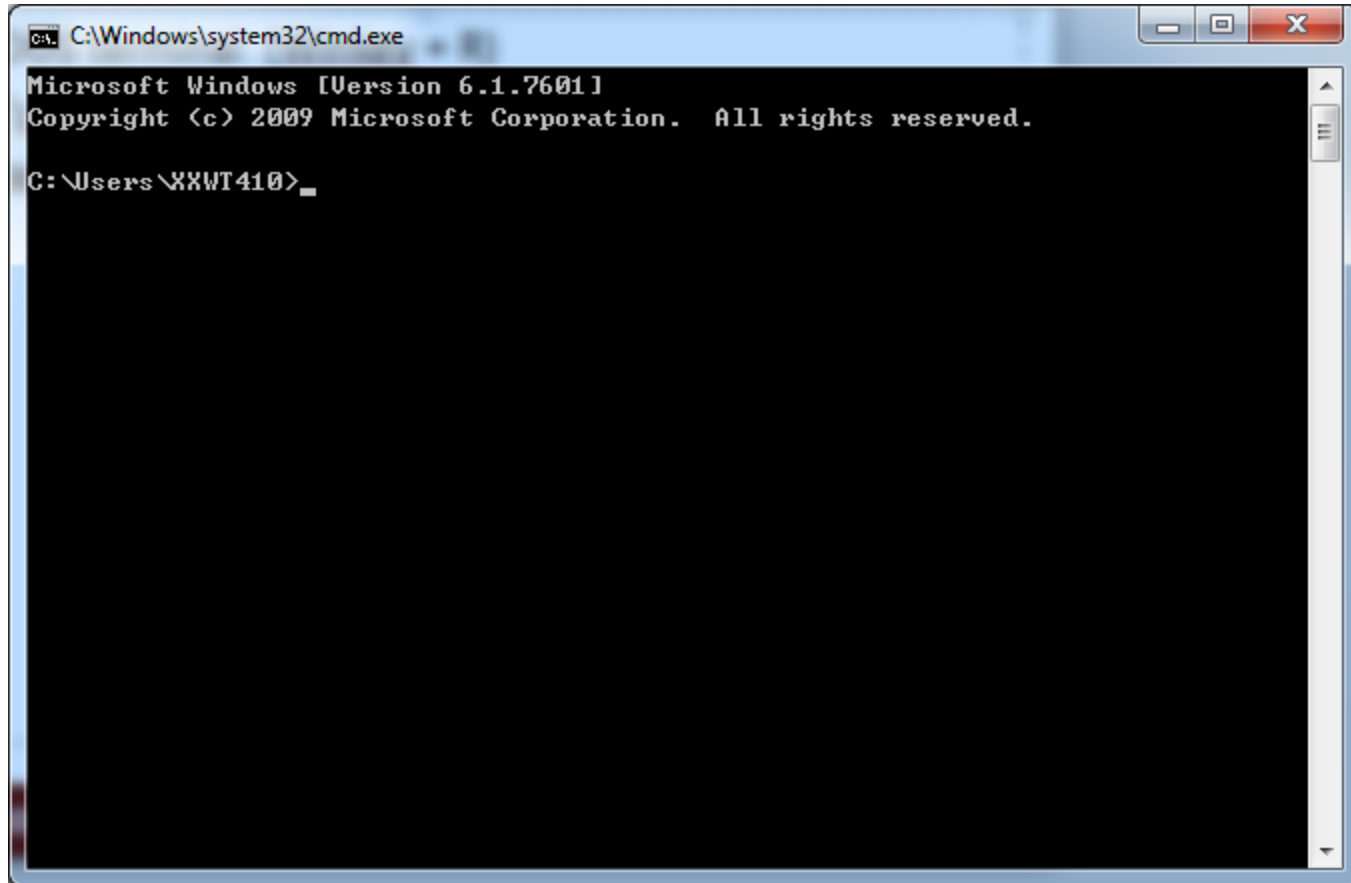
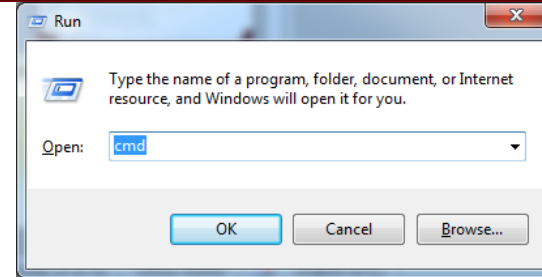
“E:\CREST\_Workshop\CREST\_Model\Wangchu\_CRESt\_V6\_Daily\_OriginalData” using your own path

```
13 NODATA_value = -9999.
14 #####
15 # MODEL Run Time Information
16 #####
17 TimeMark = d #y(year);m(month);d(day);h(hour);u(minute);s(second)
18 TimeStep = 1
19 StartDate = 20010101
20 LoadState = no
21 WarmupDate = 20010101
22 EndDate = 20021231
23 SaveState = no
24 #####
25 # MODEL Directory
26 #####
27 RunStyle = simu # simu, cali_SCEUA, RealTime
28 #####
29 BasicFormat = asc #asc,txt,biffit, dbif,ASBIMO,BIBIMO,TRMMRT,TRMMV6,NMQBIN
30 BasicPath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\Basics\"
31 #####
32 ParamFormat = asc
33 ParamPath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\Params\"
34 #####
35 StateFormat = asc
36 StatePath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\States\"
37 #####
38 ICSFormat = asc
39 ICSPath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\ICS\"
40 #####
41 RainFormat = biffit
42 RainPath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\Rain\XXW_Wangchu_TRMMV6_Daily_"
43 #####
44 PETFormat = biffit
45 PETPath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\PET\XXW_Wangchu_FEWSPET_Daily_"
46 #####
47 ResultFormat = asc
48 ResultPath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\Results\"
49 #####
50 CalibFormat = asc
51 CalibPath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\Calibs\"
52 #####
53 OBSFormat = asc
54 OBSPath = "E:\CREST_Workshop\CREST_Model\Wangchu_CRESt_V6_Daily_OriginalData\OBS\"
55 #####
56 # The below data are optional. when RunStyle=cali_SCEUA, they can be omitted
57 #####
58 #OutPix Information
59 #####
60 NOutPixs = 0 # Number of pixels for which output should be produced
61 OutPixColRow = no
62 OutPixName1 = Wangchu
63 OutPixLong1 = 89.530485
```



# Final Step: Run the Model

- Open DOS terminal (Winkey + R)
- Input “cmd”
- Click **OK**



# Final Step: Run the Model

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\XXWT410>cd "E:\CREST_Workshop\CREST_Model\Day One PM Example Basin\Wangchu_CREST_U6_Daily"

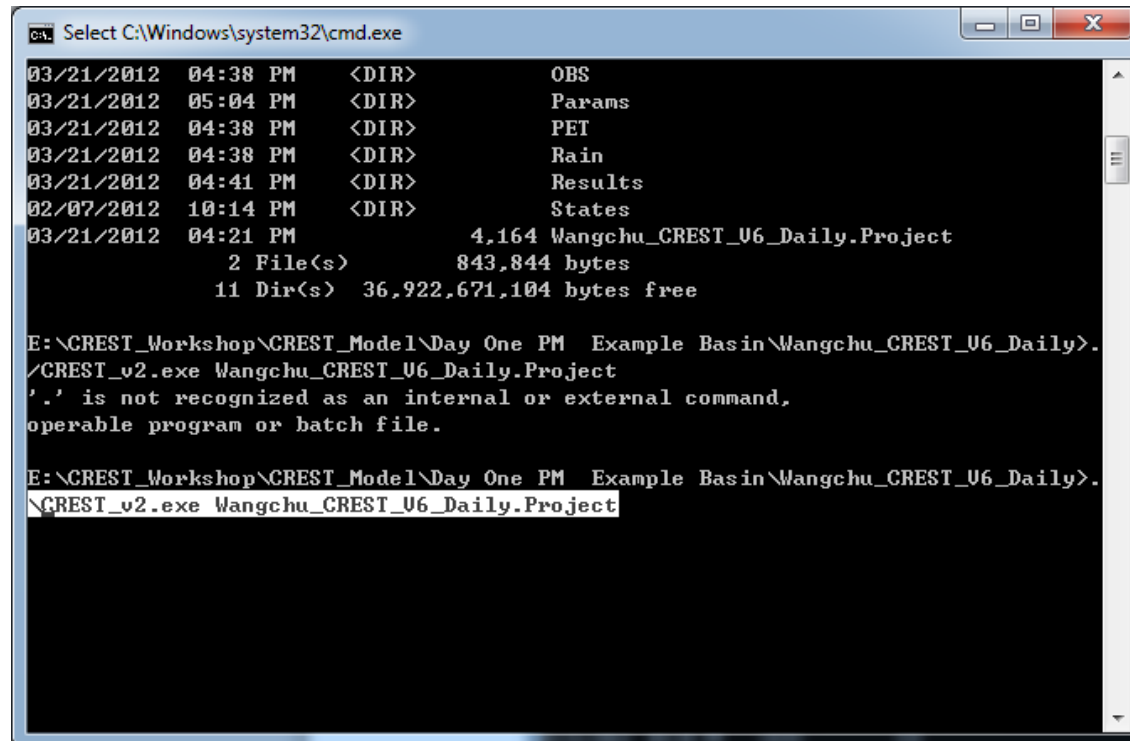
C:\Users\XXWT410>E:

E:\CREST_Workshop\CREST_Model\Day One PM Example Basin\Wangchu_CREST_U6_Daily>
```



# Final Step: Run the Model

- Open DOS terminal (Winkey + R)
- Input “cmd”
- Click **OK**
- Type “.\CREST\_v2.exe Wangchu\_CREST\_V6\_Daily.Project”



```
cmd: Select C:\Windows\system32\cmd.exe
03/21/2012  04:38 PM    <DIR>          OBS
03/21/2012  05:04 PM    <DIR>          Params
03/21/2012  04:38 PM    <DIR>          PET
03/21/2012  04:38 PM    <DIR>          Rain
03/21/2012  04:41 PM    <DIR>          Results
02/07/2012  10:14 PM    <DIR>          States
03/21/2012  04:21 PM                4,164 Wangchu_CREST_U6_Daily.Project
                2 File(s)          843,844 bytes
                11 Dir(s)  36,922,671,104 bytes free

E:\CREST_Workshop\CREST_Model\Day One PM Example Basin\Wangchu_CREST_U6_Daily>.
./CREST_v2.exe Wangchu_CREST_U6_Daily.Project
'.' is not recognized as an internal or external command,
operable program or batch file.

E:\CREST_Workshop\CREST_Model\Day One PM Example Basin\Wangchu_CREST_U6_Daily>.
.\CREST_v2.exe Wangchu_CREST_U6_Daily.Project
```



# Results

```
C:\Windows\system32\cmd.exe

719  2002-12-20
720  2002-12-21
721  2002-12-22
722  2002-12-23
723  2002-12-24
724  2002-12-25
725  2002-12-26
726  2002-12-27
727  2002-12-28
728  2002-12-29
729  2002-12-30
730  2002-12-31

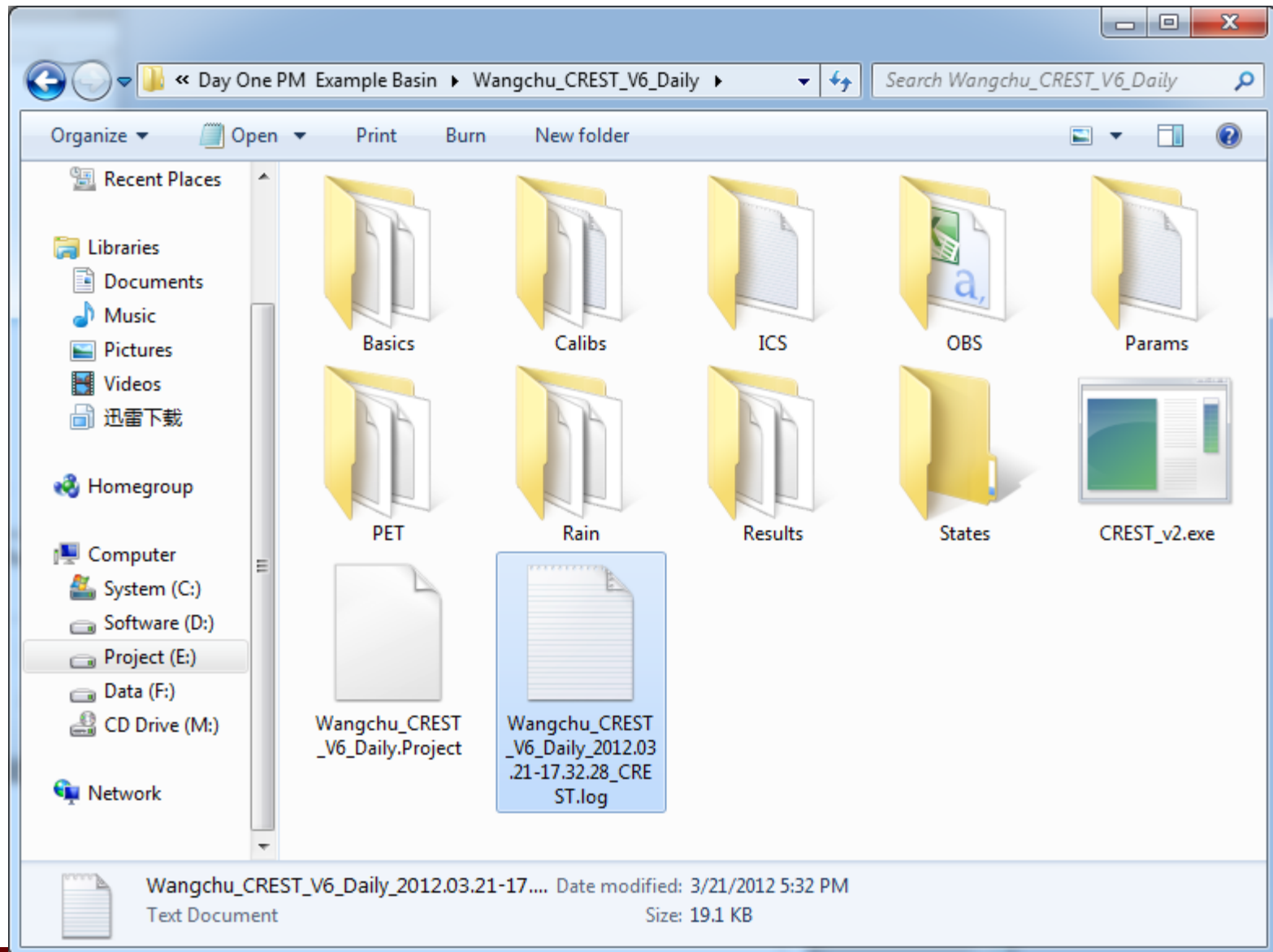
The results of the Outlet is:
      NSCE:      0.72448925
      Bias(%):   2.77653323
      CC:       0.85994316

Run end date and time (yyyy/mm/dd hh:mm:ss): 2012/03/21 17:32:29
Elapsed run time:  1.623 Seconds

Project: Wangchu_CREST_U6_Daily is finished!

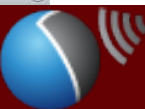
E:\CREST_Workshop\CREST_Model\Day One PM Example Basin\Wangchu_CREST_U6_Daily>
```

# Results (Continued)



# Results (Continued)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	NSCE	0.724489																			
2	Bias (%)	2.776533																			
3	OC	0.859943																			
4																					
5																					
6																					
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9																					
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- Do you get the same results?
- Please have a rest, and think about the steps

# Thanks for attention!



- Ladies and Gentlemen, could you practice again?
- **Until you can run the model by yourself.**
- If you have other questions, please feel free to ask me.

