

1 **Script for WRF Real-data workflow demonstration**
2 *ATM419/563 Spring 2024*
3
4 *This demo runs the WRF/WPS system end-to-end on the Albany batch system*
5 *via a Jupyter notebook, executed via ARCC's Jupyterhub service*
6
7 * ----- **preliminaries** ----- *
8 * move to your lab space
9 \$ lab
10
11 * make a directory in your lab space called **DEMO**, and move into it
12 \$ mkdir DEMO
13 \$ cd DEMO
14
15 * copy demonstration notebook to your DEMO directory [the space and dot are
16 important]
17 \$ cp \$LAB/DEMO_batch/run_WRF_DEMO_batch.ipynb .
18
19 * ----- **jupyter notebook** ----- *
20
21 * from your web browser, go to this link:
22 <https://jupyterlab.its.albany.edu/>
23
24 → if presented with a drop-down menu, select "**batch 12 cores, 16GB, 8**
25 **hours**"
26
27 * you should start in your home directory
28 → click the LAB link
29 → click on DEMO folder
30 → launch run_WRF_DEMO_batch.ipynb
31
32 * if you see this error, you can either ignore it or run 1st cell again:
33
34 ERROR 1: PROJ: proj_create_from_database: Open of
35 /network/rit/lab/snowclus/anaconda3_2021/envs/nov22/share/proj failed
36
37 • **remember to go to File menu and select Close and Halt to finish demo**
38
39 If you need to reinitialize your Jupyterhub server, do this:
40 Go to File menu > Hub Control Panel
41 On the page that opens, select Stop My Server
42 Then close your windows and log into <https://jupyterlab.its.albany.edu/>
43 again