L	Script for Supercell thunderstorm demonstration
2	ATM419/563 Fall 2024
3	
ł	This demo runs the WRF idealized splitting supercell storm case
5	
5	* setup [slide 3] *
7	* move to your lab space
3	\$ lab
)	
	* make a directory in your lab space called SUPERCELL , and move into it
	\$ mkdir SUPERCELL
	\$ cd SUPERCELL
	* copy this SETUP.TAR file to your SUPERCELL directory [the space and dot are
	important]
	\$ cp \$LAB/SUPERCELL/SETUP.TAR .
	* unpack the tar file.
	\$ tar -xvf SETUP.TAR
	* this unpacks these files into your directory: <i>make_all_links.sh, namelist.input,</i>
	input_sounding, read_wrfinput.py, submit_wrf, plot_SUPERCELL.ipynb
	* initialize and run [slide 10] *
	* this script sets up the model environment
	\$ sh make_all_links.sh
	* the program ideal.exe constructs the model initial condition
	\$ srun ideal.exe
	* typing 'trsl' displays the contents of the file rsl.out.0000 as ideal.exe runs, or the
	tail of the file if execution has completed. Type CTRL-c to break out .
	\$ trsl
	* inspect the model vertical coordinate. 'dopython' invokes a more modern python
	install. The read_wrfinput.py script reads wrfinput_d01 and displays model
	coordinate. See slide 11
	\$ dopython
	\$ python read_wrfinput.py wrfinput_d01
	* submit the WRF job to the batch system
	\$ sbatch -p burst-daes submit_wrf
	* check on your job
	\$ myjobs

47	* typing 'trsl' displays the contents of the file rsl.out.0000 as ideal.exe runs, or the
48	tail of the file if execution has completed. Look for SUCCESS COMPLETE WRF .
49	Type CTRL-c to break out.
50	\$ trsl
51	
52	* visualize output [slide 34+] *
53	
54	* from your web browser, go to this link:
55 56	https://jupyterlab.its.albany.edu/
57	→ if presented with a drop-down menu, select "batch 1 core, 4 GB, 8 hours "
58	
59	* you may start in your home directory. If so,
60	\rightarrow click the LAB link
61	ightarrow click on your SUPERCELL folder
62	→ launch plot_SUPERCELL.ipynb
63	
64	* if you see this error, you can either ignore it or run 1^{st} cell again:
65	EDDOD 1. DDOL wasi waste from detal and Orace of
66	ERROR 1: PROJ: proj_create_from_database: Open of
6/ ()	/network/rit/lab/showclus/anaconda3_2021/envs/nov22/share/proj falled
60	, nomember to go to File menu and coloct Close and Halt to finish dome
09	• remember to go to rne menu and select close and hait to missi demo
70 71	If you need to reinitialize your lunyterbub corver do this
/ I 72	Costo Filo monu & Hub Control Donol
72	Go to File lifeliu > Hub Collici of Faller On the negative energy collect Step My Server
13	Then close your windows and log into https://iuputorlab.its.clhorey.edu/
/4 75	inen ciose your windows and log into <u>nttps://jupyteriab.its.aibany.edu/</u>
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