

1 **Script for diffusion and instability demonstration (BATCH version)**

2 *ATM419/563 Spring 2024*

3

4 *This demo re- runs the WRF idealized splitting supercell storm case*

5

6 **IMPORTANT:** Log onto **head.arcc.albany.edu**. At the command prompt for
7 each session you open, type the “new” command to activate the newer software
8 libraries.

9 **\$ new**

10

11 * ----- **new experiment** ----- *

12 • start in your SUPERCELL directory

13

14 • edit the namelist.input file as follows [see slide 5]

15

16 rk_ord = 2,

17 h_mom_adv_order = 4,

18 v_mom_adv_order = 2,

19 h_sca_adv_order = 4,

20 v_sca_adv_order = 2,

21

22 • run ideal and wrf on batch system

23 \$ srun ideal.exe

24 → look for “SUCCESS COMPLETE IDEAL INIT” at end of rsl.out.0000

25

26 \$ sbatch submit_wrf

27

28 * ----- **after simulation finishes** ----- *

29

30 • Copy this notebook into your SUPERCELL directory

31 \$ cp \$LAB/SUPERCELL/plot_SUPERCELL_DIFFUSION.ipynb .

32

33 • Launch ARCC Jupyterlab. Minimal resources suffice, batch or snow.

34 • See slides 48-53

35