Script for Hurricane Milton ensemble

* ------------- synopsis -- *
Let's explore the influence of model physics choices on the landfall of Hurricane Milton, which is currently heading for the west Florida coast. The simulations will use a pre-made 36 km domain, initialized with GFS from 10/8/2024 at 12Z. Outputs from ungrib, geogrid, and metgrid are provided, so the task is to **modify namelist.input, run real.exe and submit the WRF job**.
* ------------- preliminaries --- *
* make a directory in your lab space called **MILTON**, copy into it
$LAB/MILTON/SETUP.TAR   and unpack it (tar -xvf ...)

* execute **sh make_all_links.sh**
* ------------- CHOICES --- *
• **Choose a model configuration.**
      Some PBL/surface layer options
    (a) bl_pbl_physics=1, sf_sfclay_physics=1
    (b) bl_pbl_physics=2, sf_sfclay_physics=2 [NAM-like]
    (c) bl_pbl_physics=5, sf_sfclay_physics=5 [HRRR-like]
    (d) bl_pbl_physics=7, sf_sfclay_physics=7
    (e) bl_pbl_physics=11, sf_sfclay_physics=1
    Some microphysics options
    mp_physics = 1, 2, 3, 4, 8, 10
    Some radiation options
    ra_lw_physics= ra_sw_physics=both 1 or 4
    icloud=1 or 0
    Some land surface model options
    (a) sf_surface_physics= 2, num_soil_layers=4
    (b) sf_surface_physics= 3, num_soil_layers=6
    (c) sf_surface_physics= 7, num_soil_layers=2
    Some cumulus options
    cu_physics=1, 2, 3, 6, 10, or 16

• Execute real and wrf
    srun -p burst-daes -n 4 ./real.exe
    sbatch -p burst-daes submit_wrf

• When WRF run has finished, run **WRF_plot_MILTON.ipynb** on ARCC Jupyterlab.
• **EDIT YOUR SURNAME IN CELL #3**
This will generate output in a cell like [lat/lon/SLP] and two PNG files
    → LANDFALL at 26.942585 -82.0943 983.39233
• COPY yourlastname_*.png to $LAB/MILTON_ENSEMBLE/.

[If you run the animation cell and want to execute the notebook again, please restart kernel and clear all outputs first. Look in Kernel menu.]