Instructions

20 minutes | Internet Connection Required | Not for official use Do not trust lives or property to this device

In this section you will download and setup the Pi-WRF application, and you to run the Weather Research and Forecasting Model (WRF), which is a modern numerical weather model that is actively used by scientists in the weather and climate communities.

Resources

w2.weather.gov/climate - Verify your forecast
mmm.ucar.edu/wrf/users/ - WRF documentation
meted.ucar.edu - Forecasting tips
github.com/ncar/pi-wrf - Modify the application (advanced users)

1. Launch Terminal

Click on this icon in the upper left of your screen to launch the terminal. If you do not see the icon then press the following keys:

CONTROL + **t**

2. Download & Install Docker

Type (case sensitive): **sudo curl -sSL https://get.docker.com | sh**

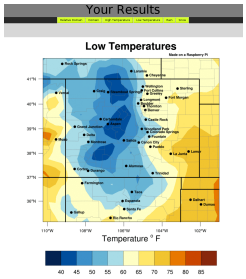
(you will have to wait a few minutes for it to finish downloading and installing. When it is finished, you will see a blinking cursor where you can add text.)

3. Download WRF

Type (case sensitive):

sudo docker run -it --rm --net=host -e "DISPLAY" -v $HOME/.Xauthority:/root/.Xauthority ncar/pi-wrf

4. Using the App



1) Homepage: Click “Run Forecast” to begin.
2) Choose Time: Choose the day and times to start and end the simulation. Then click “Confirm Selection” and then “Choose Domain” to continue. (Short duration forecasts are recommended)
3) Choose Domain: Click and drag to choose domain. Click confirm domain when you are satisfied. (Simulations less than 1,000 grid cells are recommended)
4) Run Model: Click the “Run Model” button to start. A “View Output" button will show when completed.
5) View Output: Click buttons to view output of model.