Attention: The model output depicted on these pages are experimental and may not be available at all times. The accuracy or reliability of the data is not guaranteed nor warranted in any way. The data is provided as is and should not be used as the sole resource for decision making. Mesoscale forecast guidance is best interpreted by a professional meteorologist who is familiar with the particular modeling system, including any model biases. This version of the WRF model is greatly influenced by the NAM12 analyses and the model output that provides the boundary conditions.

Model Computational Domain Configuration for WRF_ARW

WRF Core……..Advanced Research WRF (ARW)
Number of Domains ……1
MOAD Grid Dimensions (W-ExS-N)…..150x132
MOAD Grid Spacing……..3.0 km
Map Projection……lambert
MOAD Center Lat/Lon……..37.3,-122.5
MOAD Time step……..18 seconds
Vertical ETAP Levels……31
Pressure at Model Top……..100 mb

WRF Run Dynamics Configuration

Model Dynamics……Non Hydrostatic
Time Integration……Runge-Kutta 3rd Order
Turbulence and Mixing Option…… Evaluates Mixing Terms in Physical Space
Eddy Coefficient Option……Horizontal Smagorinsky First Order Closure
Upper Level Damping……..Off
Vertical Velocity Damping……On

WRF Run Physics Configuration

Cumulus Scheme……..NAM Kain-Fritsch Scheme
Cumulus Time step……5 Minutes
Microphysics Scheme……WSM Single-Moment 6-Class Graupel Scheme
Moisture (Q) Threshold Plan……Set All Q Fields to Threshold
Moisture Threshold……1.e-8
Boundary Layer Scheme……..Yonsei University Scheme
Land-Surface Scheme……..Noah 4-Layer Land Surface Model
Number of Soil Layers……..4
Source of Landuse and Soil Data…….Standard Initialization (SI)
Surface Layer Scheme……..Monin-Obukhov Scheme
Include Surface Fluxes……..Yes
Long Wave Radiation……Rapid Radiative Transfer Model (RRTM)
Short Wave Radiation……Dudhia Scheme
Radiation Time step……Auto Minutes
Include Cloud Effects……Yes

Additional Monterey 3-km WRF-ARW Model Information

- Output is available at 1-hr forecast increments to 36 hours and is usually available by 0600 UTC (00z run) and 1800 UTC (12z run).
- The model is compiled on an Intel Dual-Core Xeon Processor 5140 2.33 GHz with 4 GB RAM running Red Hat Enterprise Linux WS release 4.0.
- A 1200 UTC model run starts the download of boundary conditions at 1400 UTC and completes the download around 1420 UTC. Model begins compiling and usually takes around 3.5 hrs to complete. There is then another half hour of post processing. The completed model cycle usually occurs by 1830 UTC.
- We use GEMPAK 5.10 to create the graphics to post to the web page.
- Final Web Graphics are posted at ~0630 UTC and ~1830 UTC.