WPS Cheat Sheet

WRF Preprocessing System

geogrid.exe

namelist.wps

Verify information in *share* and *geogrid* sections

See Experimental Design Variable Table for details

Run geogrid.exe

File Created*

geo_em.d01.nc

plotgrids.ncl

Plot data in above file to visually confirm experimental design

ungrib.exe

namelist.wps

Verify information in *ungrib* section

See Experimental Design Variable Table for details

link_grib.csh

Tell ungrib.exe where LBC data located

Designate a Vtable

Tell ungrib.exe names of variables in LBC data

Run ungrib.exe

File(s) Created*

FILE:YYYY-MM-DD_hh (WRF Intermediate Format)

rd_intermediate.exe

Inspect data in above file(s) to confirm their content

metgrid.exe

namelist.wps

Verify information in *metgrid* section

See Experimental Design Variable Table for details

Run metgrid.exe

File(s) Created*

met_em.d01.YYYY-MM-DD_hh:mm:ss.nc

Data in above file(s) will be used by real.exe in second step of WRF

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*File(s) for a single domain.
Nested grids will produce multiple files.

WRF Cheat Sheet

Weather Research & Forecasting

real.exe

namelist.input

Verify information

See Experimental Design Variable Table for details

Run real.exe

Files Created*

wrfbdy_d01.nc
wrfinput_d01.nc

ncdump & ncview

Inspect and view data in above files

wrf.exe

namelist.input

Verify information

See Experimental Design Variable Table for details

Run wrf.exe

File(s) Created*

wrfout_d01.YYYY-MM-DD_hh:mm:ss.nc

ncdump & ncview

Inspect and view data in above files

*File(s) for a single domain.
Nested grids will produce multiple files.

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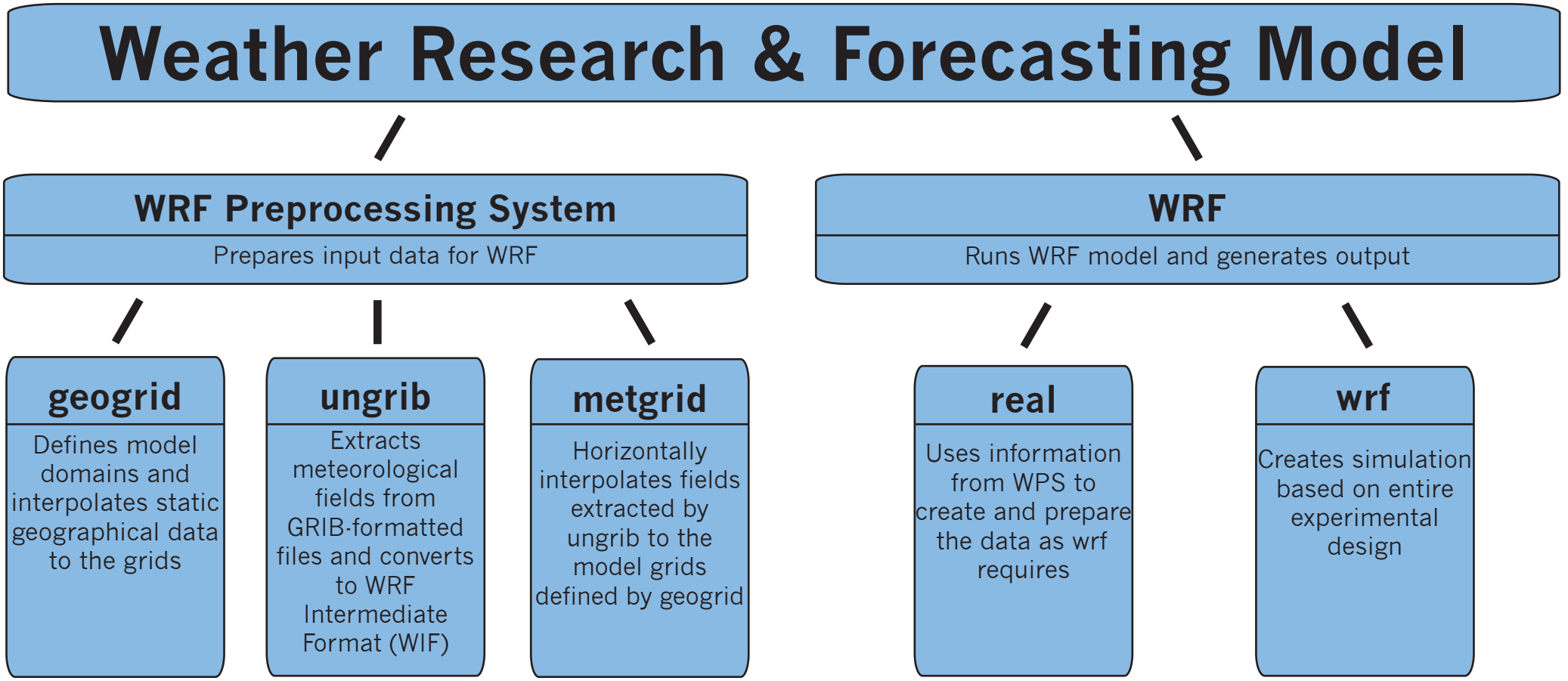
WRF Organizational Tree



Michelle Serino, Michel Mesquita, Morgan Yarker

NCAR. (2009). User's Guides for the Advanced Research WRF (ARW) Modeling System, Version 3.

WRF Experimental Design Variable Table

WPS			WRF	
namelist.wps*			namelist.input*	
geogrid.exe	ungrib.exe	metgrid.exe	real.exe	wrf.exe
&share	**&ungrib**	**&metgrid**	**&time_control**	You are ready to run your WRF simulation.
wrf_core max_dom start_date end_date interval_seconds io_form_geogrid	out_format prefix	fg_name io_form_metgrid	start_year start_month start_day start_hour end_year end_month end_day end_hour history_interval frames_per_outfile	
&geogrid			**&domains**	
parent_id parent_grid_ratio i_parent_start j_parent_start e_we e_sn geog_data_res dx dy map_proj ref_lat ref_lon truelat1 truelat2 stand_lon geog_data_path			time_step max_dom e_we e_sn dx dy e_vert p_top_requested	

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*See WRF User's Guide for more variable options.