**Using UPP for creating grib1 data from wrfout files to use in ungrib**

**UPP**

Use UPP to process the wrfout\* output from your model run to get grib1 files with required fields. Fields are contained within the new wrf\_cntrl.parm file.

The new wrf\_cntrl.parm can be downloaded from the UPP FAQs page (last FAQ):

<http://www.dtcenter.org/upp/users/overview/upp_faqs.php>

Run UPP for grib1 output as normal for grib1 format (\*Use new wrf\_cntrl.parm file)

wrf\_cntrl.parm: outputs 3 different “grids” or files for each forecast hour:

WRFTWO\* -- 2-d fields, soil, etc

WRFPRS\* -- Pressure level fields

WRFNAT\* -- Native model level fields

Email the UPP Help Desk for questions/problems running UPP: upp-help@ucar.edu

More information on UPP can be found at: <http://www.dtcenter.org/upp/users/>

**WPS – ungrib**

Run the UPP grib1 output files through ungrib use as input for the new WRF run. Requires running ungrib twice with two different Vtables and two prefixes for the ungrib/metgrid. First for WRFTWO\* and second for WRFPRS\*

WRFTWO\*

>> ln -sf ungrib/Variable\_Tables/Vtable.ARW.UPP Vtable

>> ./link\_grib.csh /path-to-upp-output/WRFTWO\* .

Edit the &ungrib section of the namelist.wps to prefix ‘TWO’

&ungrib

 out\_format = 'WPS',

 prefix = 'TWO',

>> ./ungrib.exe

WRFPRS\*

>> rm Vtable GRIB\*

>> ln -sf ungrib/Variable\_Tables/Vtable.ARWp.UPP Vtable

>> ./link\_grib.csh /path-to-upp-output/WRFPRS\* .

Edit the &ungrib section of the namelist.wps to prefix ‘PRS’

&ungrib

 out\_format = 'WPS',

 prefix = 'PRS',

 >> ./ungrib.exe

**WPS – metrid**

Run metgrid of the two sets of ungribbed data TWO\* and PRS\*

Edit &metgrid section of namelist.wps to include the two prefixes

&metgrid

 fg\_name = 'TWO','PRS'

 io\_form\_metgrid = 2,

/

>> ./metgrid.exe