WRF-LES安装流程

https://www2.mmm.ucar.edu/wrf/OnLineTutorial/compilation\_tutorial.php

# **System Environment Tests**

## 安装gcc、gfortran、g++、make、m4、csh等 1.

which gfortran  
which cpp  
which gcc

which g++

gcc --version

## 2.

mkdir Build\_WRF（建立文件夹）

3.4.5.测试

# **Building Libraries** cd Build\_WRF

cd LIBRARIES

## 环境变量

gedit ~/.bashrc

# WRF

export DIR=/home/why/Build\_WRF/LIBRARIES

export CC=gcc

export CXX=g++

export FC=gfortran

export FCFLAGS=-m64

export F77=gfortran

export FFLAGS=-m64

#zlib

export LDFLAGS=-L$DIR/grib2/lib

export CPPFLAGS=-I$DIR/grib2/include

#netcdf

export PATH=$DIR/netcdf/bin:$PATH

export NETCDF=$DIR/netcdf

#mpich

export PATH=$DIR/mpich/bin:$PATH

#WPS

export JASPERLIB=$DIR/grib2/lib

export JASPERINC=$DIR/grib2/include

export WRF\_DIR=/home/why/Build\_WRF/WRF-4.1.2

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source ~/.bashrc

## step1. zlib:

tar xzvf zlib-1.2.9.tar.gz

cd zlib-1.2.9

./configure --prefix=$DIR/grib2

make -j4

make install

cd ..

## step2. libpng:

tar xzvf libpng-1.2.50.tar.gz

cd libpng-1.2.50

./configure --prefix=$DIR/grib2

make -j4

make install

cd ..

## step3. JasPer:

tar xzvf jasper-1.900.1.tar.gz

cd jasper-1.900.1

./configure --prefix=$DIR/grib2

make -j4

make install

cd ..

## step4.NetCDF:

tar xzvf netcdf-4.1.3.tar.gz

cd netcdf-4.1.3

./configure --prefix=$DIR/netcdf --disable-dap --disable-netcdf-4 --disable-shared

#./configure --prefix=$NETCDF CPPFLAGS="-I$HDF5/include" LIBS="-L$HDF5/lib" --enable-netcdf4

make -j4

make install

cd ..

## step5.mpich

tar xzvf mpich-3.0.4.tar.gz

cd mpich-3.0.4

./configure --prefix=$DIR/mpich

make -j4

make install

cd ..

# **Library Compatibility Tests**

# **Building WRFV4.1.2**

cd ..

tar xzvf WRF-4.1.2.tar.gz

cd WRF-4.1.2

./configure

33

1

./compile em\_les >& log.compile

ls -ls main/\*.exe

(出现2个exe安装成功)

cd ..

# **Building WPS**

tar xzvf WPS-4.1.tar.gz

cd WPS-4.1

./clean

./configure

1

./compile >& log.compile

ls -ls \*.exe

(出现3个exe即为成功，我的一般是2个缺少ungrib，需要进一步解决，问题和解决办法在<http://www2.mmm.ucar.edu/wrf/users/wpsv3.9/known-prob-3.9.html>，可以直接用我改好的read\_namelist.F，替换掉文件夹…/ WPS-4.1/ungrib/src下的read\_namelist.F

改完之后重新编译)（这里推荐气象家园网站，我有问题一般在这里搜索）

./compile >& log.compile（重新编译）

ls -ls \*.exe

完成！

参考：

WRF users page：http://www2.mmm.ucar.edu/wrf/users/

NetCDF安装摘记(包括c库和fortran库）<[*http://blog.sciencenet.cn/blog-2733016-1108521.html*](http://blog.sciencenet.cn/blog-2733016-1108521.html)>

气象家园<<http://bbs.06climate.com/forum.php>>