

## GRIB2 TOOLS

These utilities (overdateg2, overmodelg2 and degrib2) are for GRIB2 Applications.

### 1. DEGRIB2

The utility degrib2 is an GRIB2 application for any user who wants to display the content of GRIB2 files.

For example:

```
degrib2 gfs.t00z.wafs_grb45f06.grib2
```

The content of grib2 file (gfs.t00z.wafs\_grb45f06.grib2) is following:

GRIB MESSAGE 1 starts at 1

SECTION 0: 0 2 47855

SECTION 1: 7 0 2 1 1 2010 9 27 0 0 0 0 1

Contains 0 Local Sections and 1 data fields.

FIELD 1

SECTION 0: 0 2

SECTION 1: 7 0 2 1 1 2010 9 27 0 0 0 0 1

SECTION 3: 0 41760 0 0 0

GRID TEMPLATE 3. 0 : 6 0 0 0 0 0 0 288 145 0 0 90000000 0 48 -90000000 358750000  
1250000 1250000 0

NO Optional List Defining Number of Data Points.

PRODUCT TEMPLATE 4. 0 : 3 5 2 0 96 0 0 1 6 100 0 10000 255 0 0

FIELD: HGT 100 mb valid 6 hr after 2010092700:00:00

NO Optional Vertical Coordinate List.

Num. of Data Points = 41760 NO BIT-MAP

DRS TEMPLATE 5. 40 : 1236375384 0 2 18 0 0 255

Data Values:

MIN= 14548.26953125 AVE= 16055.50683594 MAX= 16707.23046875

GRIB MESSAGE 2 starts at 47856

SECTION 0: 0 2 16446

SECTION 1: 7 0 2 1 1 2010 9 27 0 0 0 0 1

Contains 0 Local Sections and 1 data fields.

FIELD 1

SECTION 0: 0 2

SECTION 1: 7 0 2 1 1 2010 9 27 0 0 0 0 1

SECTION 3: 0 41760 0 0 0

GRID TEMPLATE 3. 0 : 6 0 0 0 0 0 0 288 145 0 0 90000000 0 48 -90000000 358750000  
1250000 1250000 0

NO Optional List Defining Number of Data Points.

PRODUCT TEMPLATE 4. 0 : 0 0 2 0 96 0 0 1 6 100 0 10000 255 0 0

FIELD: TMP 100 mb valid 6 hr after 2010092700:00:00

NO Optional Vertical Coordinate List.

Num. of Data Points = 41760 NO BIT-MAP

DRS TEMPLATE 5. 40 : 1156145152 0 1 9 0 0 255

Data Values:

MIN= 186.69999695 AVE= 206.69770813 MAX= 230.90000916

## 2. OVERDATEG2

This program OVERDATEG2 uses to change the date and time in identify section 1: Year, Month, Day and Hour.

For example:

The gfs.t00z.pgrb2f12.2p5deg has reference time is 20100921 at 00z with forecast hour 12-hr and We are changing the reference time to 20100922 at 12Z with forecast hour 12-hr.

The new output is following:

OLD SECTION 1 : 7 0 2 1 1 2010 9 21 0 0 0 0 1

OLD PDT 4.0 : 3 5 2 0 96 0 0 1 12 100 0 1000 255 0 0

NEW SECTION 1 : 7 0 2 1 1 2010 9 22 12 0 0 0 1

NEW PDT 4.0 : 3 5 2 0 96 0 0 1 12 100 0 1000 255 0 0

### **3.OVERMODELG2**

This program OVERMODELG2 uses to change generating process identified in product definition template (4.xx)

For example:

The GFS GRIB2 file (gfs.t00z.pgrb2f12.2p5deg) which it is a GFS MODEL (96) and we are changing to Climate Forecast System model (98)

The new output is following:

OLD PDT 4.0 : 3 5 2 0 96 0 0 1 12 100 0 1000 255 0 0

NEW PDT 4.0 : 3 5 2 0 98 0 0 1 12 100 0 1000 255 0 0

OLD PDT 4.0 : 0 0 2 0 96 0 0 1 12 100 0 1000 255 0 0

NEW PDT 4.0 : 0 0 2 0 98 0 0 1 12 100 0 1000 255 0 0