



Y - Convective inhibition (CIN)

P – Pressure Surface (PRES), Pressure Mean Sea level (MSLMA)

Z - (Refer to GRIB PDS)

- Storm Relative Helicity (HLCY)

- Simulated Composite Reflectivity (REFC)

- A1 specifies the grid id as follows:

D - 13 km grid over CONUS (Lambert Conformal)

- A2 specifies the forecast hours as follows:

A = 00; B=01; C=02; D=03; E=04; F=05; G=06; H=07; I=08; J=09; K=10;

L=11; M=12; Z=13; Z=14; Z=15; Z=16; Z=17; N=18, Z=19, Z=20, Z=21.

- ii specifies level as follows:

99 = 1000mb; 93=975mb; 95=950 mb;92=925mb; 90=900mb; 91=875mb; 85=850mb; 82=825mb;

80=800mb; 77=775mb; 75=750mb; 72=725mb; 70=700mb; 67=675mb; 65=650mb; 62=625mb;

60=600mb; 57=575mb; 55=550mb; 52=525mb; 50=500mb; 47=475mb; 45=450mb; 42=425mb;

40=400mb; 37=375mb; 35=350mb; 32=325mb; 30=300mb; 27=275mb; 25=250mb; 22=225mb;

20=200mb; 17=175mb; 15=150mb; 12=125mb; 10=100mb; 07=75 mb; 05=50mb

00 = Entire Atmosphere

86 = Boundary Layer (SPDY)

89 = Reduced to Sea Level (MSL)

94 = Level of 0 Degree Isotherm

96 = Level of the Maximum wind

97 = Level of the Tropopause

98 = Surface, 10 m above ground, 80 m above ground, 2 m above ground

73 = Cloud base level

74 = Cloud top level

#### 4. Additions

The F19, F20, and F21 data are new. The data for hours F00 to F18 are unchanged.

#### 5. Changes

The headers for helicity are changed from 'LZD\*98 KWBG' to 'LZD\*86 KWBG'

The headers for 0-255 mb cape is changed from 'LWD\*98 KWBG' to 'LZD\*86 KWBG'

The headers for 0-255 mb convective inhibition is changed from 'LYD\*98 KWBG' to 'LYD\*86 KWBG'  
where \* is A2.

#### 6. Total volume of data per day

Was .011 GB (16 files/per cycle) x 24 = 5.0 GB per day.

New .027 GB (19 files/per cycle) x 24 = 12.3 GB per day

7. RAP Sample test files and WMO headers are on Tide or Gyre:

- RAP sample test files are in the directory:

`/pcom2/para/rap`

- A list of the additional WMO headers for hourly RAP output can be found at:

`/meso/save/Corey.Guastini/nwprod/rap.v3.0.0/util/parm/wmoheaders_rap130new.txt`