

Plotting GOES-9 Sounding Retrievals on RAMSDIS

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Steps 2-5 are done once, while steps 6 and 7 are done each time you wish to plot retrieval data. Steps for plotting GOES-9 retrieval data:

- 1) Contact Kevin Schrab to get executables so plotting will function.
- 2) Set up ingest of GOES-9 retrieval file. Enter the following on the McIDAS command line:

```
SKE 96300 16:5?:00 999999 01:00 TOL=00:05 "GETRETS
```

where ? in 16:5?:00 is a number 0-5, this is so not everyone ingests the data at the same time.

NOTE: GOES-9 retrievals are ingested hourly. For example, the 15Z retrieval is ingested at 15:5?.

- 3) Set up conversion of retrieval file into a file that a skewt can be plotted from by entering:

```
SKE 96300 16:58:00 999999 01:00 TOL=00:05 "RETSRAOB
```

- 4) On McIDAS command line enter:

```
SCHE DCIRAB
```

this will allow the creation of the SKEWT type files by the RETSRAOB program

- 5) Enter SKL on the McIDAS command line to see that these entries have been added to the schedule. They should look something like:

| T# | ID | XS | NEXT | EXECUTN | # | REM | INTERVAL | TOL | NAME | PROJ | COMMAND | TEXT |
|----|----|----|-------|---------|------|-----|----------|-----|------|------|----------|------|
| 1 | 29 | | 96300 | 165100 | MANY | | 10000 | 500 | MTR | 5000 | GETRETS | |
| 1 | 30 | | 96300 | 165800 | MANY | | 10000 | 500 | MTR | 5000 | RETSRAOB | |

the ID may be different, the main thing to check is #REM and INTERVAL and the COMMAND TEXT.

6a) To plot a GOES-9 derived parameter on a single satellite image enter:

SOUNDONE param time

where, param is parameter to plot, param can be (click to get sample plot):

[LI](#) lifted index
[WV](#) total precipitable water
[WV1](#) low level (1000-900mb) precipitable water
[WV2](#) mid level (900-700mb) precipitable water
[WV3](#) high level (700-300mb) precipitable water
[IDN](#) identification number of sounding (used in skewts)
ALL plot LI,WV,WV1,WV2,WV3 in a station plot

and, time is hour (hh format) of sounding to plot (defaults to match time of image, so can usually be omitted)

6b) To plot a GOES-9 derived parameter on all images in a loop enter:

SOUNDALL param time

where, param is parameter to plot, param can be (click to get sample plot):

[LI](#) lifted index
[WV](#) total precipitable water
[WV1](#) low level (1000-900mb) precipitable water
[WV2](#) mid level (900-700mb) precipitable water
[WV3](#) high level (700-300mb) precipitable water
[IDN](#) identification number of sounding (used in skewts)
ALL plot LI,WV,WV1,WV2,WV3 in a station plot

and, time is hour (hh format) of sounding to plot (defaults to match time of image, so can usually be omitted)

CAUTION: Since soundings come from 2 different sounder scan sectors the idn may not be unique. This problem is being worked on.

7a) To plot a skewt of GOES-9 sounding over the Pacific (west of 125W) enter:

[SKEWTG9 idn time](#) (click to get sample plot)

where, idn is identification number of sounding (use SOUNDONE to locate the idn you wish to plot)

time is hour (hh format) of sounding to plot

7b) To plot a skewt of GOES-9 sounding over WR (east of 125W) enter:

[SKEWTG99 idn time](#) (click to get sample plot)

where, idn is identification number of sounding (use SOUNDONE to locate the idn you wish to plot)

time is hour (hh format) of sounding to plot

NOTE: Use a blank frame to plot skewt. So, before doing SKEWTG9 enter: SF 250;EG 250;EU REST BLACK 250

NOTE: You may wish to make a loop of skewts by entering numerous SKEWTG9 commands. You could use frames 1-16 for this purpose.

NOTE: The idn for a particular location changes for every time since they are numbered by of many sounding are produced (which is dependent on cloud cover).

- 8) If SOUNDONE does not plot anything click [here](#).
If SKEWTG9 does not plot anything click [here](#).

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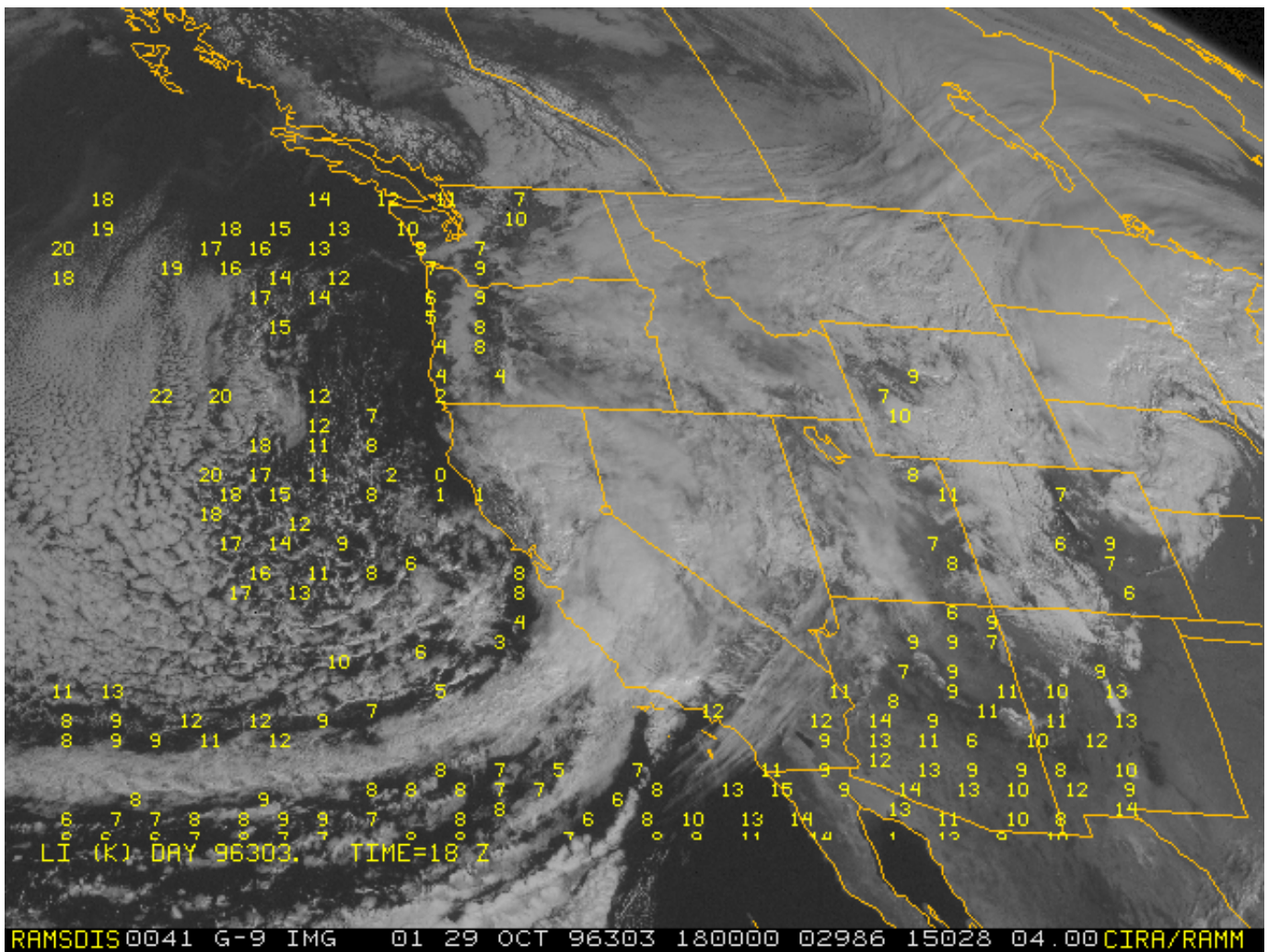
Image References are below

6a) To plot a GOES-9 derived parameter on a single satellite image enter:

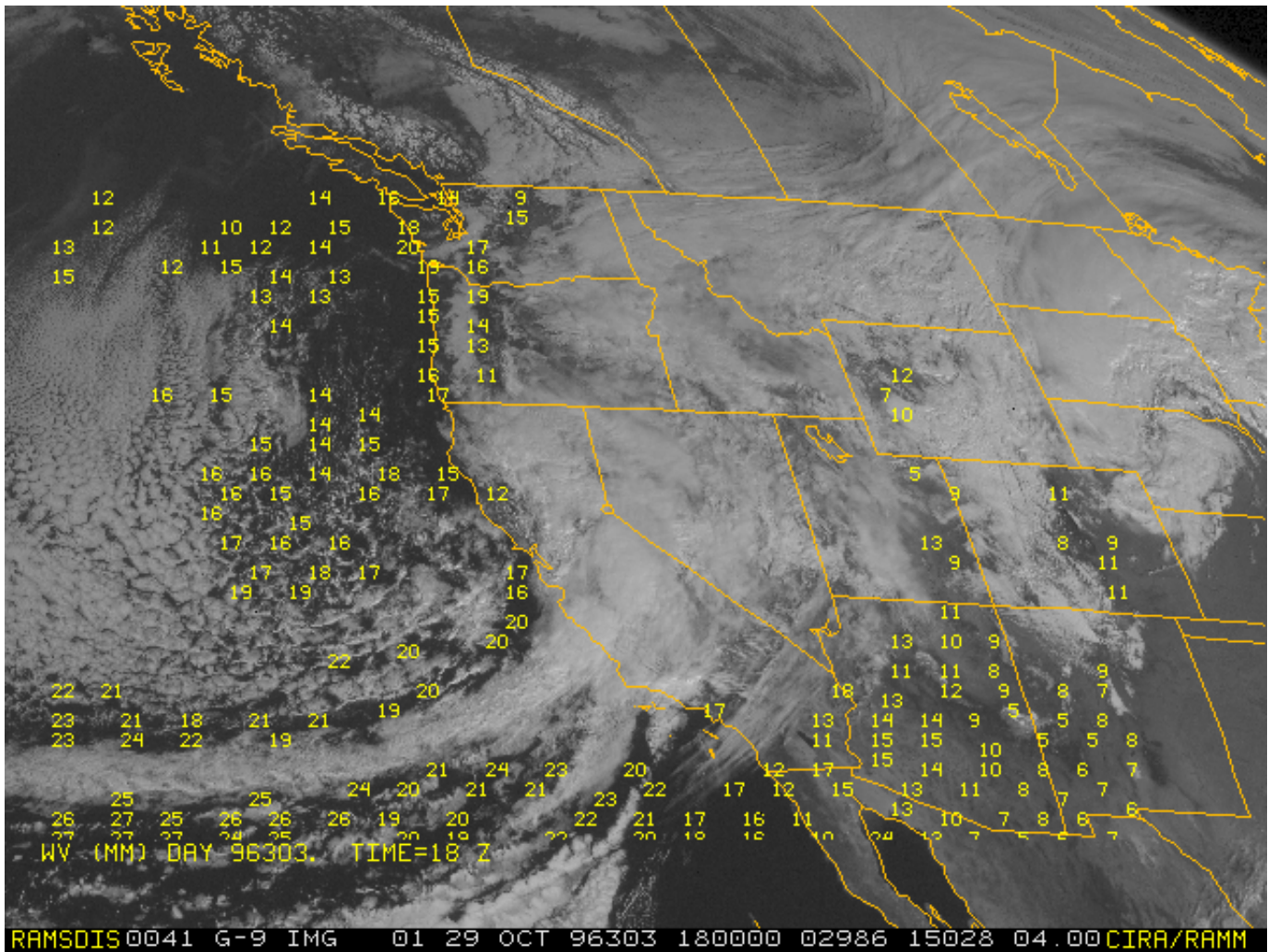
SOUNDONE param time

where, param is parameter to plot, param can be (click to get sample plot):

LI lifted index

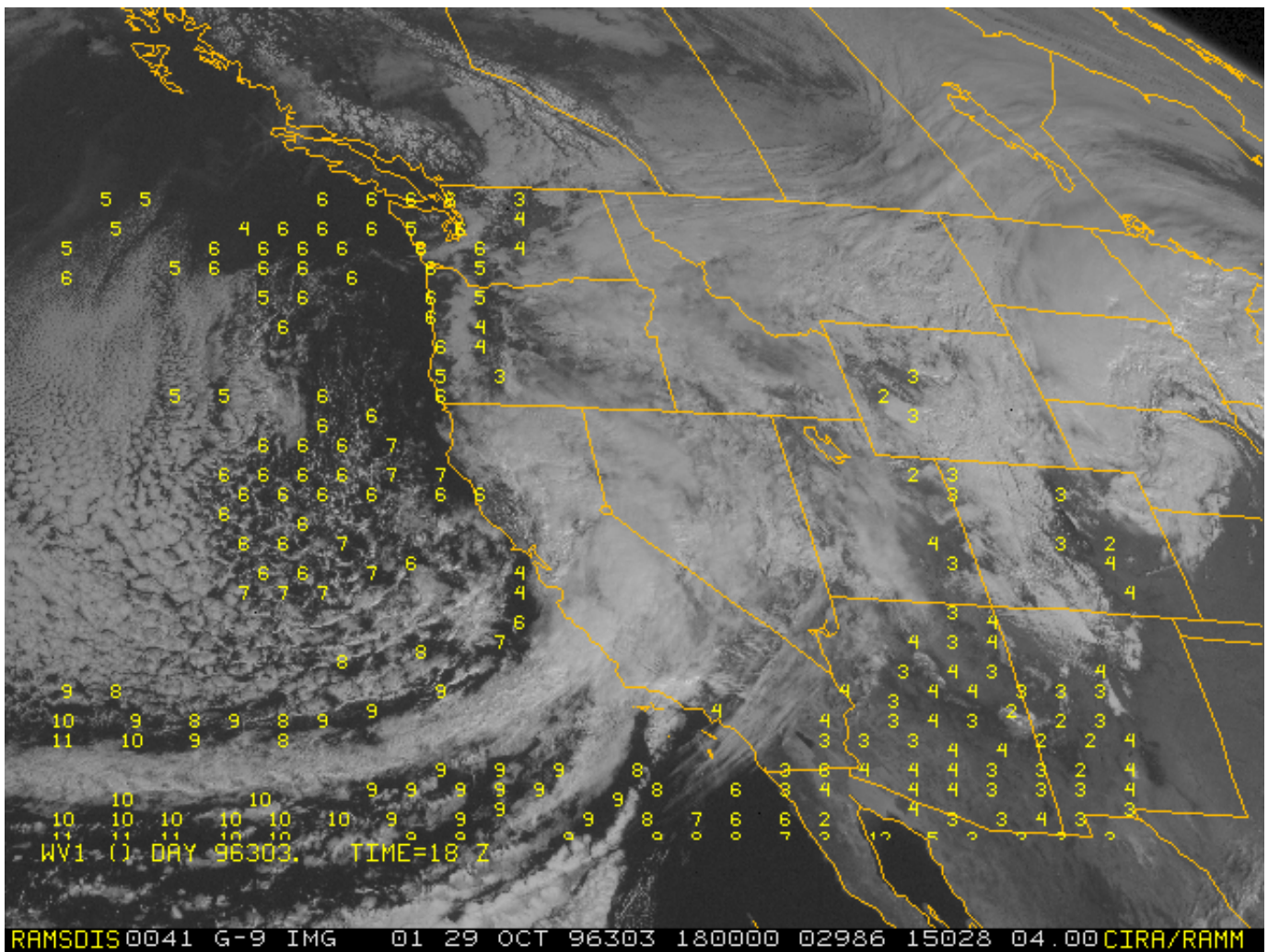


WV total precipitable water

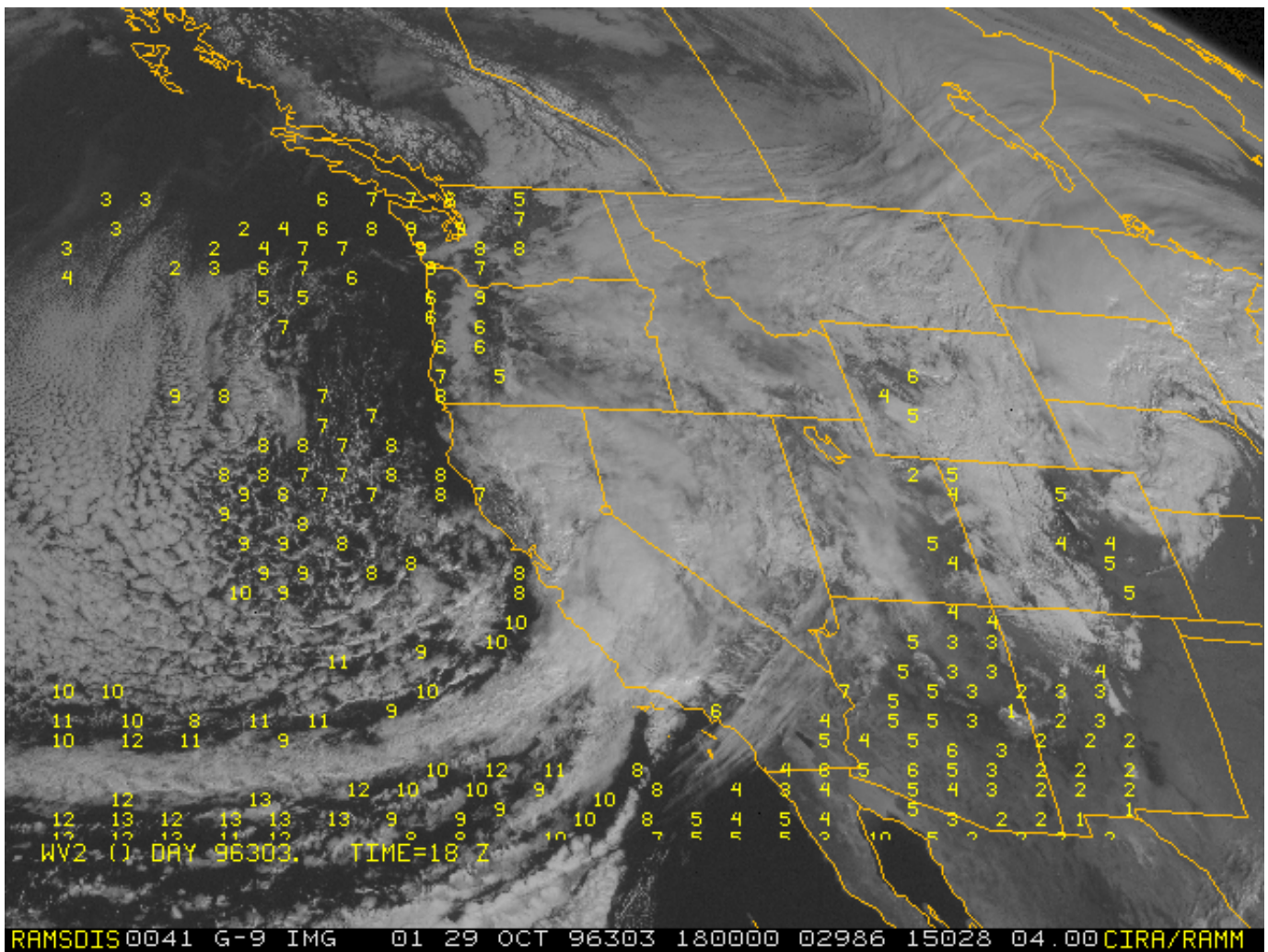


WV1 low level (1000-900mb) precipitable water

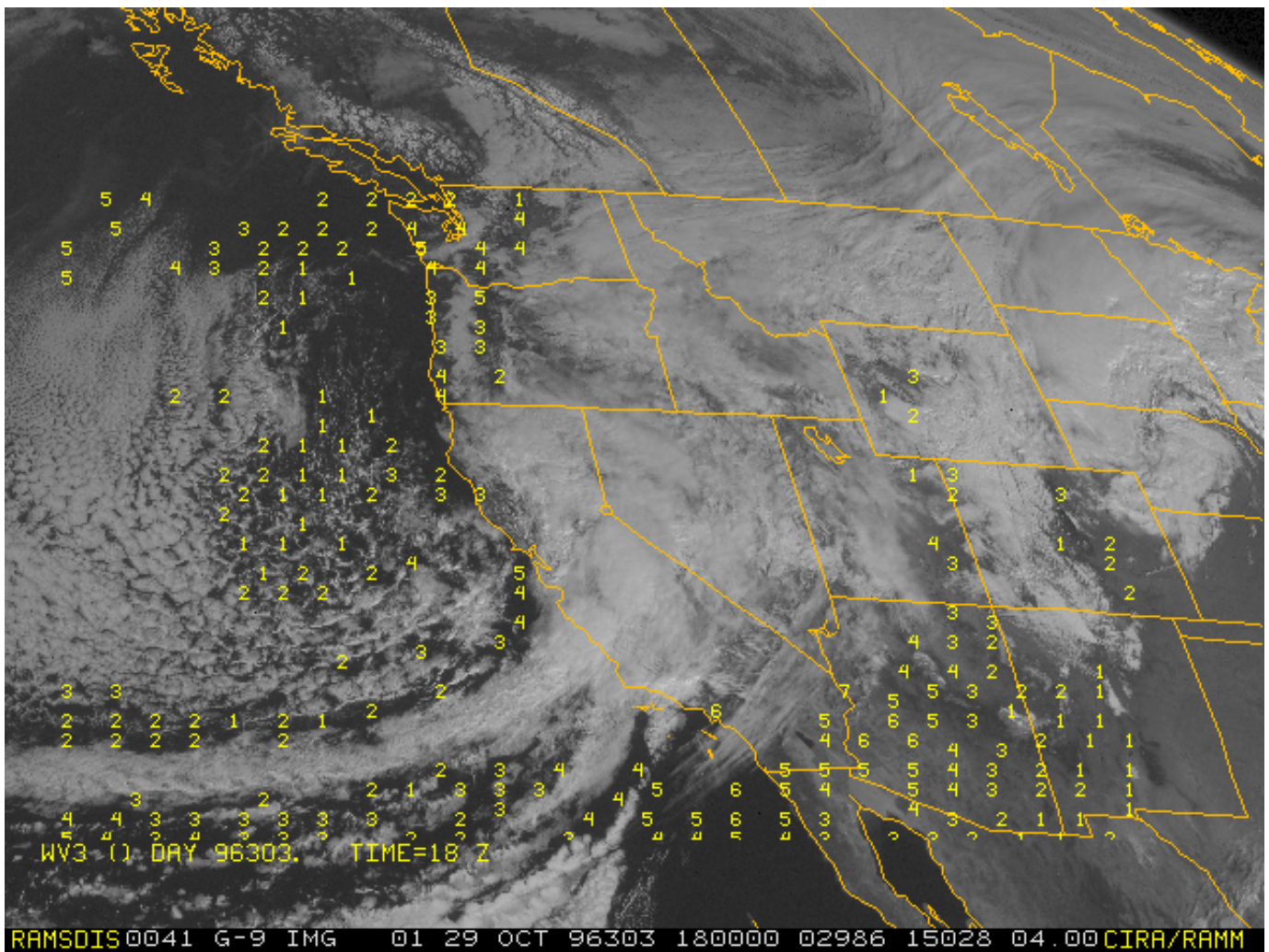




WV2 mid level (900-700mb) precipitable water

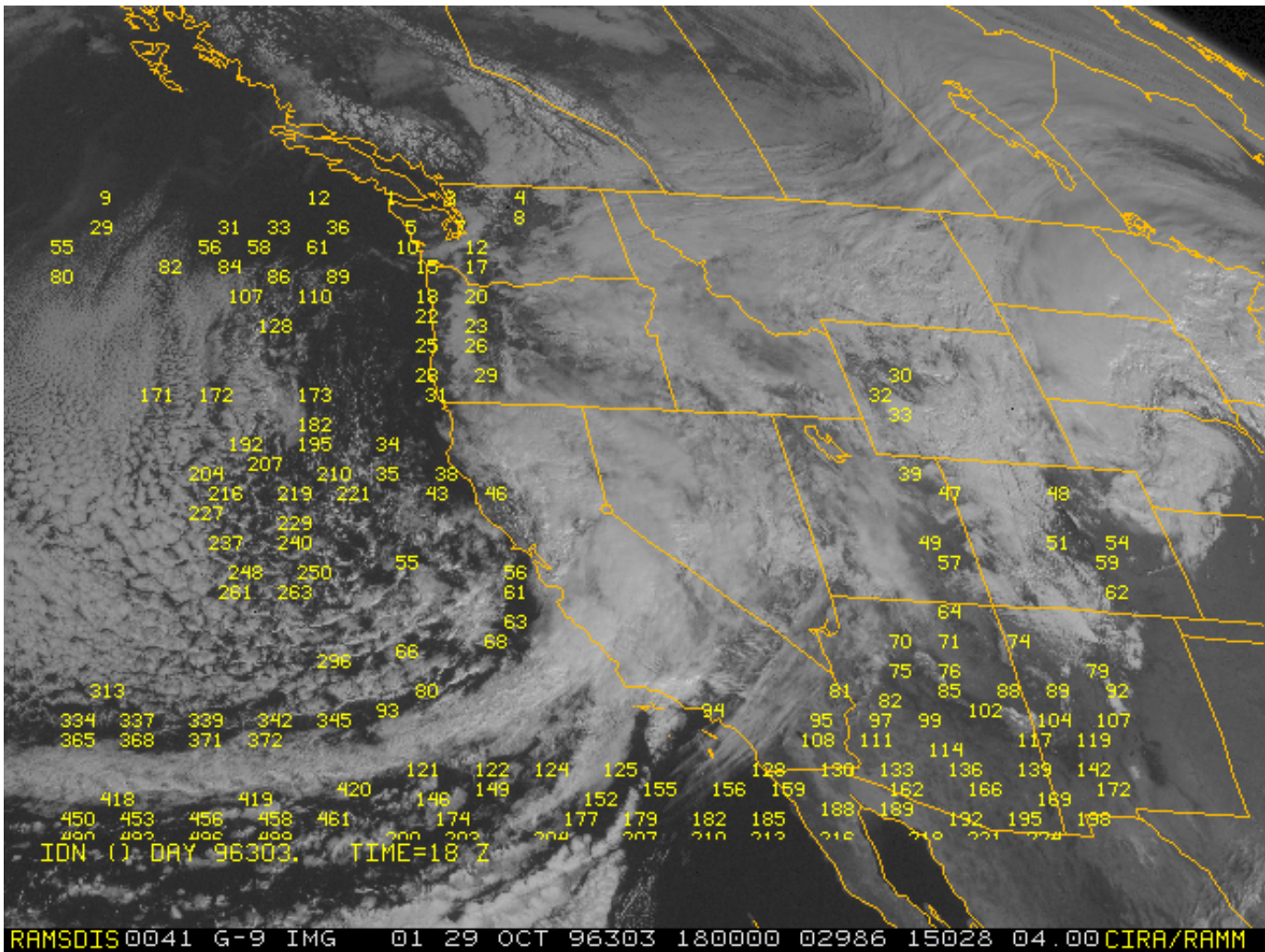


WV3 high level (700-300mb) precipitable water



IDN identification number of sounding (used in skewts)



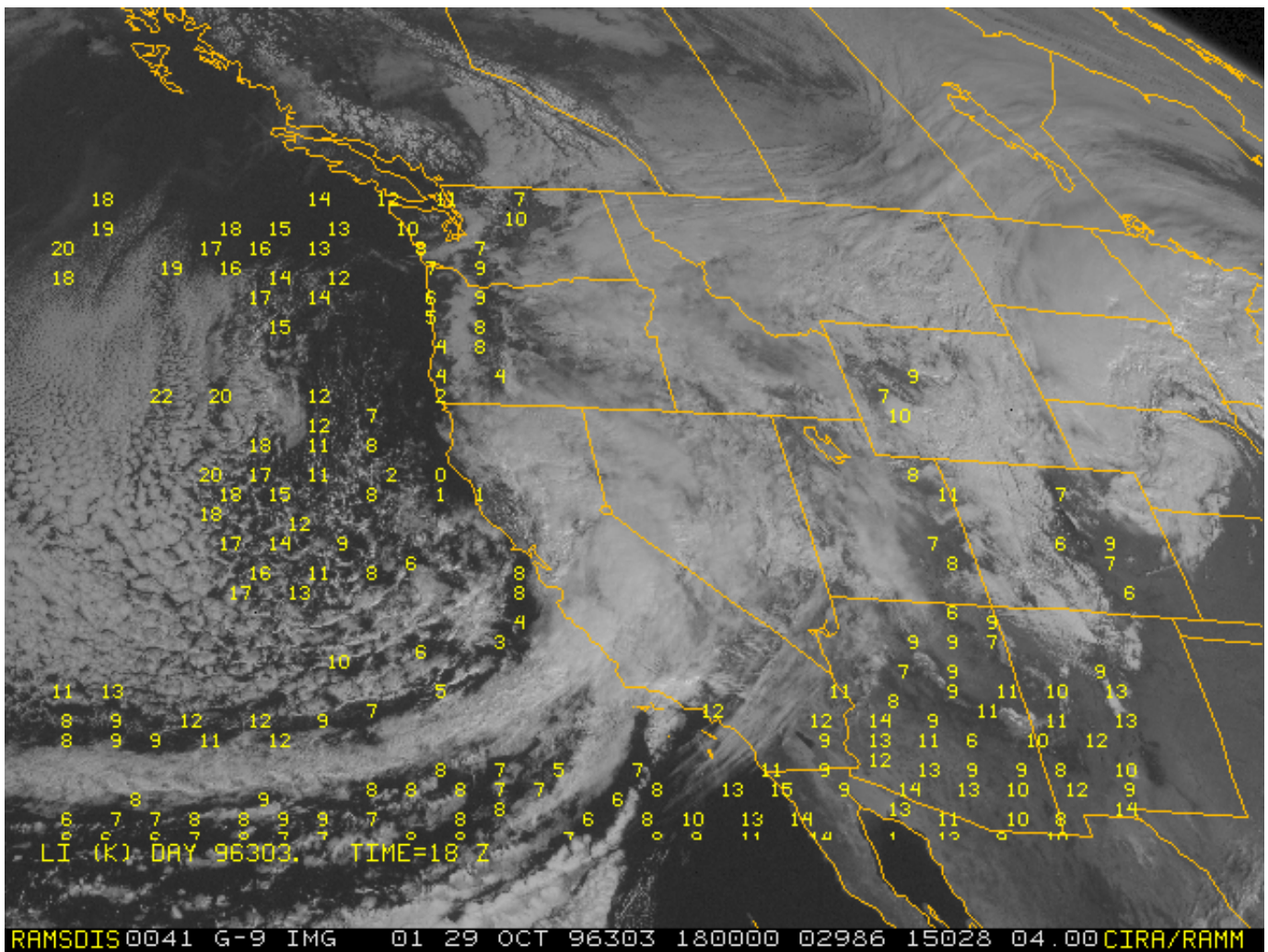


6b) To plot a GOES-9 derived parameter on all images in a loop enter:

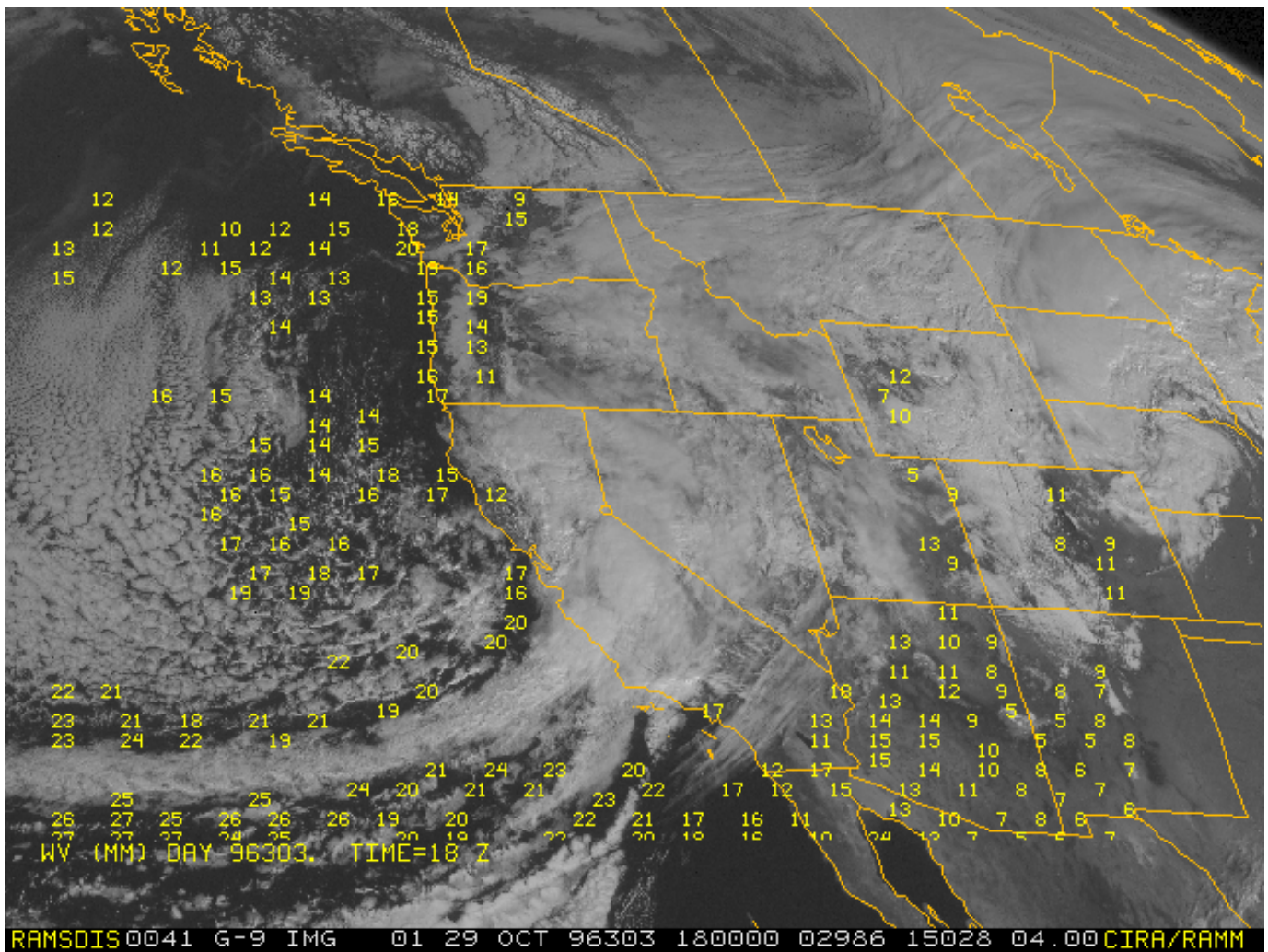
SOUNDALL param time

where, param is parameter to plot, param can be (click to get sample plot):

LI lifted index

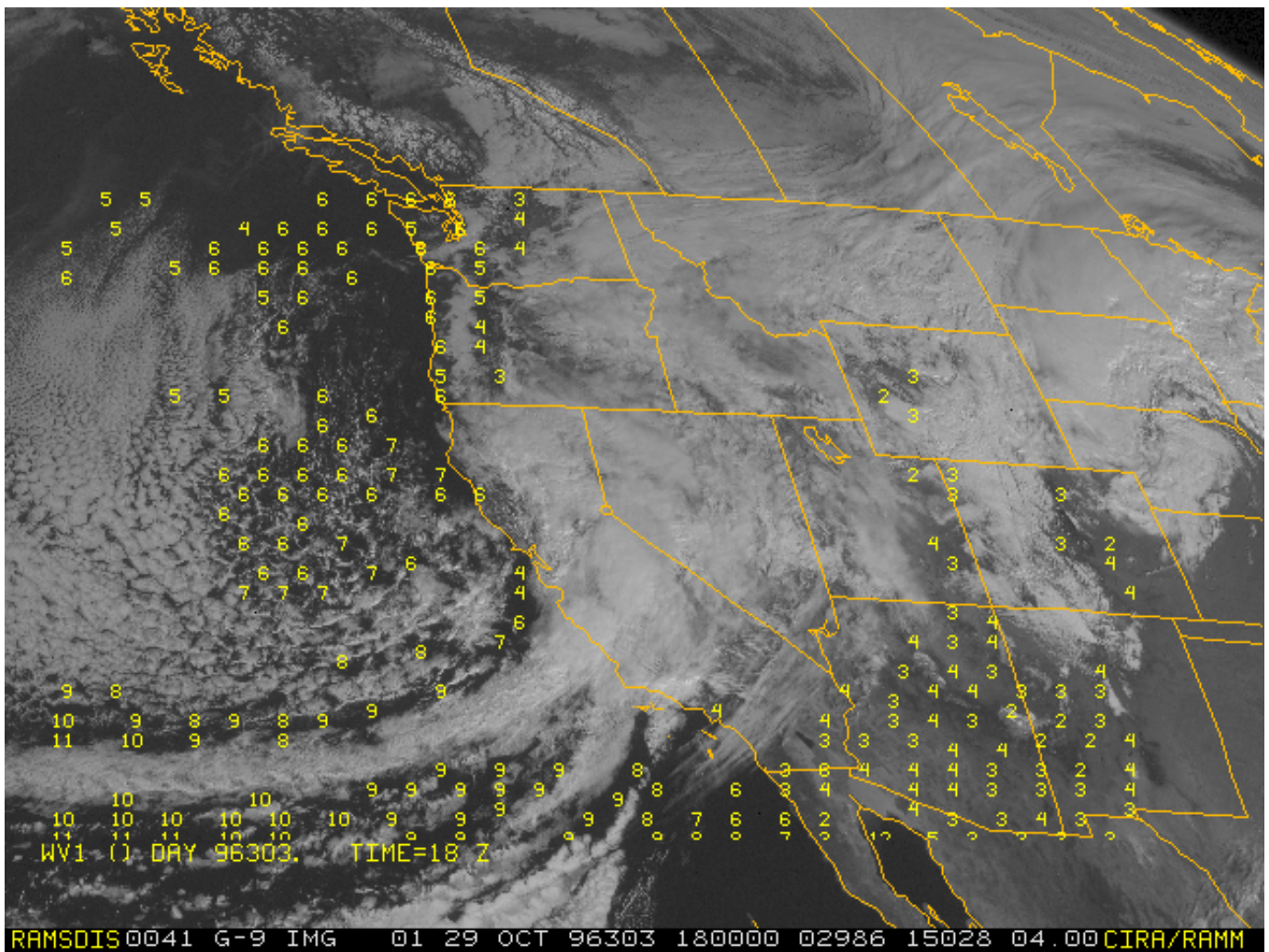


WV total precipitable water



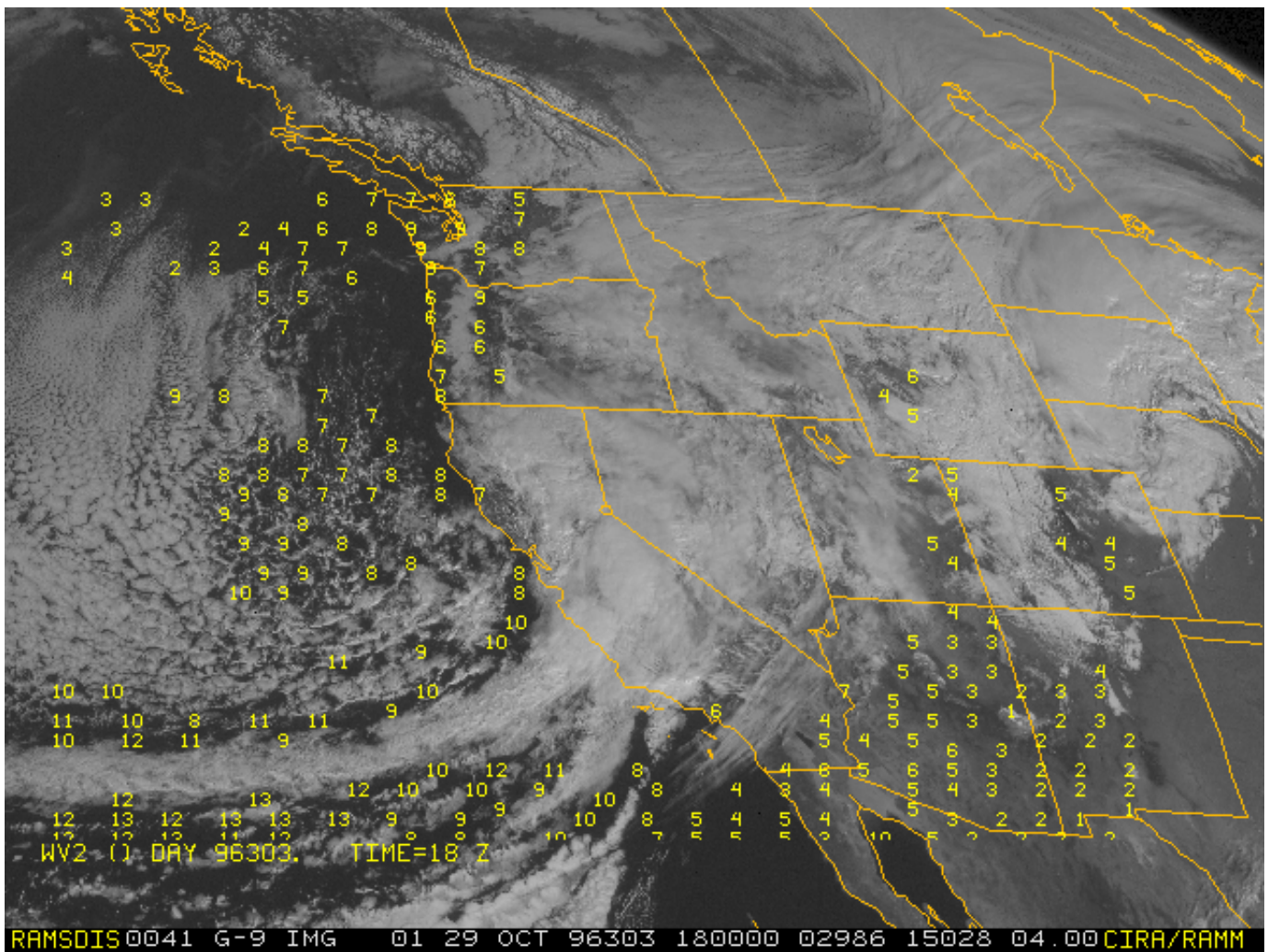
WV1 low level (1000-900mb) precipitable water



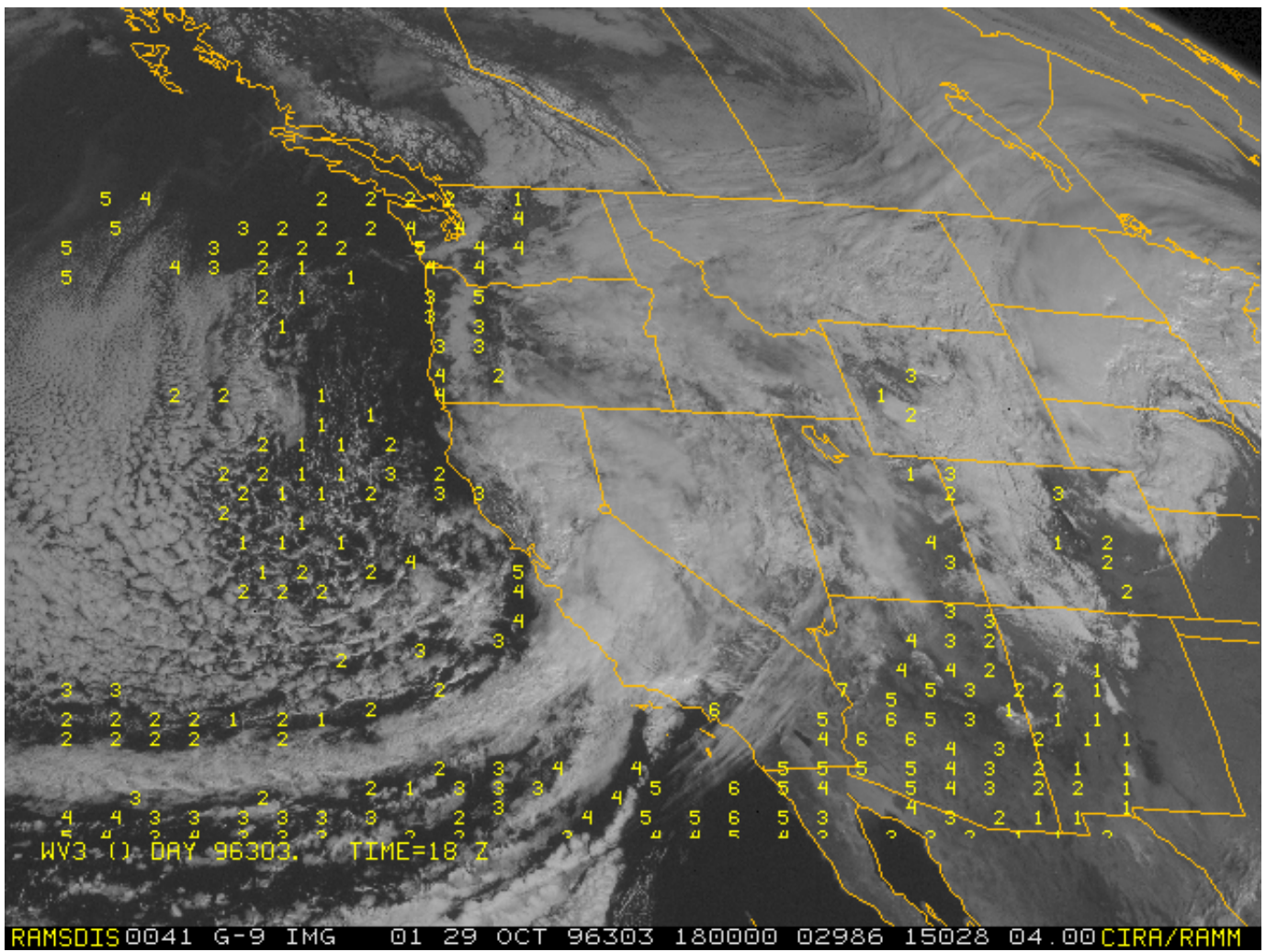


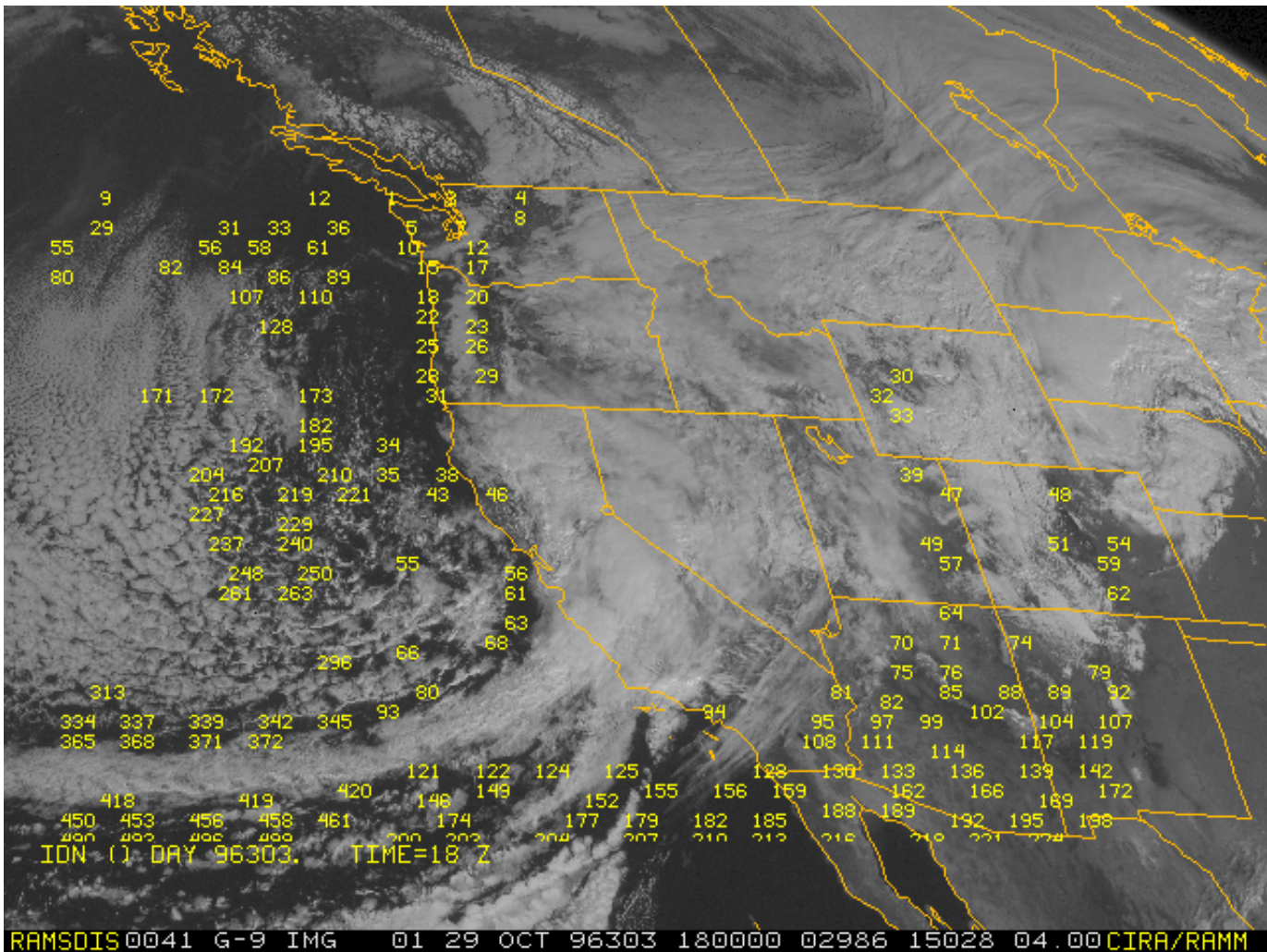
WV2 mid level (900-700mb) precipitable water





WV3 high level (700-300mb) precipitable water



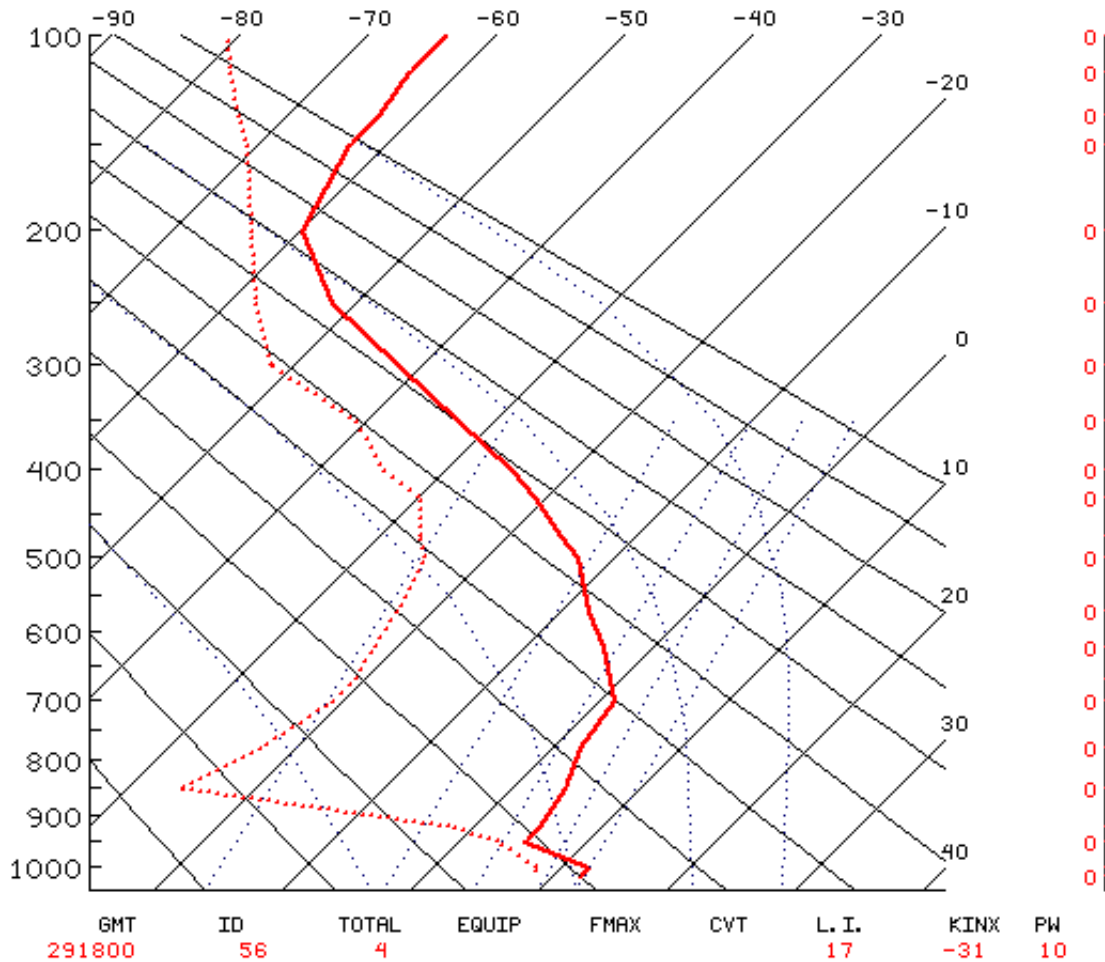


and, time is hour (hh format) of sounding to plot (defaults to match time of image, so can usually be omitted)

7a) To plot a skewt of GOES-9 sounding over the Pacific (west of 125W) enter:

SKEWTG9 idn time (to get sample plot)





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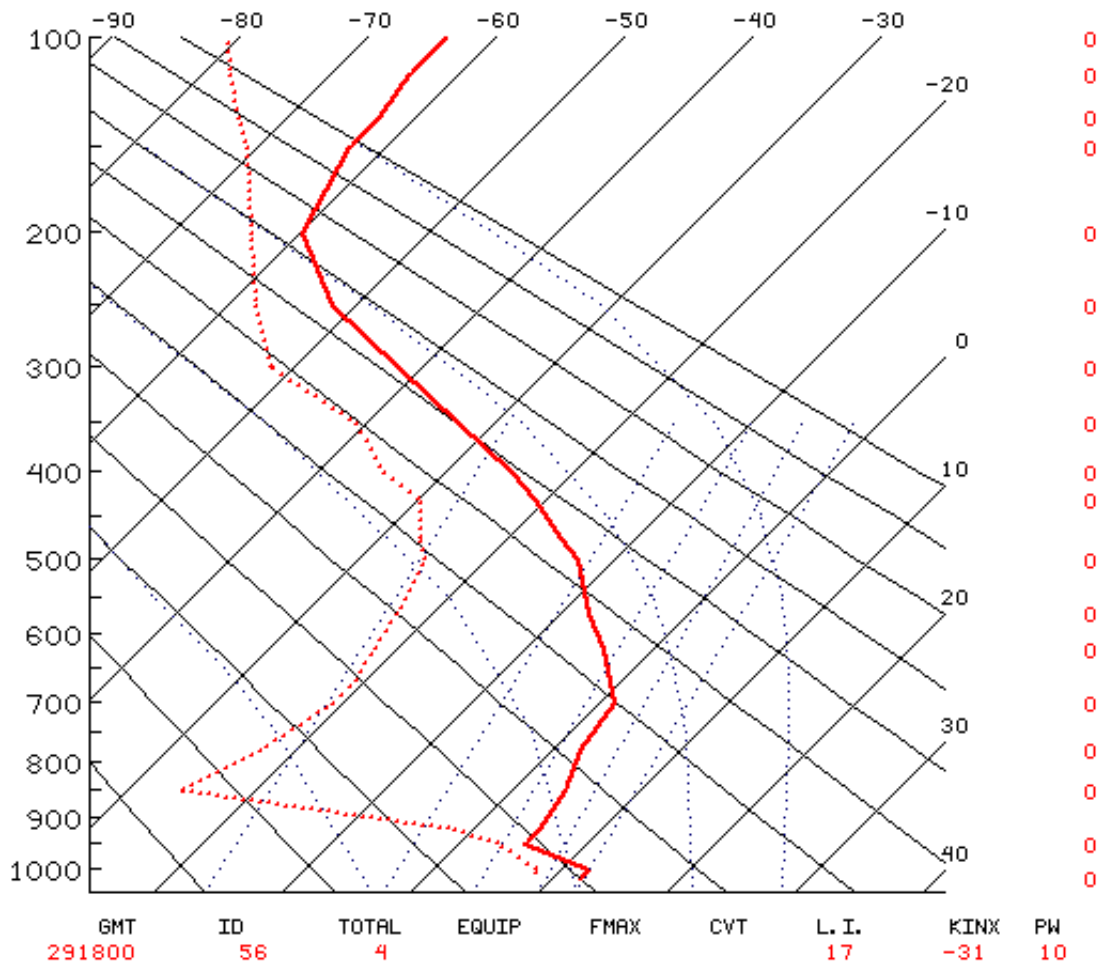
where, idn is identification number of sounding (use SOUNDONE to locate the idn you wish to plot)

time is hour (hh format) of sounding to plot

7b) To plot a skewt of GOES-9 sounding over WR (east of 125W) enter:

SKEWTG99 idn time (to get sample plot)





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where, idn is identification number of sounding (use SOUNDONE to locate the idn you wish to plot)

time is hour (hh format) of sounding to plot