Guidelines For Plotting Maps On The Reanalysis Webpages

Lat begin box: typically start with the **southernmost** latitude
Lon begin box: typically start with the **westernmost** latitude
You can use a minus sign (-) to indicate longitude **degrees W** and latitude **degrees S.** (Positive values are used for degrees E and degrees N)
You can also enter w*est longitudes* in positive degrees going EAST from **0° E in a full circle of 360°** as in the chart below.
For **Polar Stereographic Projections**, the beginning longitude will be plotted at the *top* of the circular projection; see the chart below for beginning and ending longitudes to center a given location at the *bottom* of the circular projection.

Equivalent ways to express the same west longitude:			
10 W	-10	350 E	350
20 W	-20	340 E	340
30 W	-30	330 E	330
40 W	-40	320 E	320
50 W	-50	310 E	310
60 W	-60	300 E	300
70 W	-70	290 E	290
80 W	-80	280 E	280
90 W	-90	270 E	270
100 W	-100	260 E	260
110 W	-110	250 E	250
120 W	-120	240 E	240
130 W	-130	230 E	230
140 W	-140	220 E	220
150 W	-150	210 E	210
160 W	-160	200 E	200
170 W	-170	190 E	190
180 W	-180	180 E	180

Beginning & Ending Longitudes (polar stereographic or cylindrical full-globe maps) to center on:		
	Begin	**End**
0° E (Greenwich, Prime Meridian)	-180	180
100 W (center lon. of North America)	-280	80
25E (center lon. of Europe)	-155	205
90E (center lon. of Asia)	-90	270
60 W (center lon. of South America	-240	120
20E (center lon. of Africa)	-160	200
135E (center lon. of Australia)	-45	315
170W (center lon. of Pacific Ocean	-350	10
40W (center lon of N. Atlantic Ocean)	-220	140
20W (center lon. of S. Atlantic Ocean)	-200	160
75 E (center lon of Indian Ocean)	-105	255
90 E (center lon of Antarctica)	-90	270

For Maps Centered on Specific Continents or Regions *(may need to be adjusted somewhat)*

Continent / Region	**Projection ***	**"Center" Lat/Lon**	**Longitude**		**Latitude**	
			Begin	**End**	**Begin**	**End**
North America	polar	45 N / 100 W	-180	-20	10	90
United States (contiguous)	polar	35 N / 100 W	-150	-50	20	60
Central America	cylindrical	20 N / 100 W	-120	-65	5	35
Europe	polar	45 N / 25 E	-25	50	30	75
Asia	polar	40 N / 90 E	35	175	0	80
South America	cylindrical	20 S / 60 W	-95	-25	-60	20
Africa	cylindrical	0 N / 20 E	-25	65	-40	45
Oceania	cylindrical	25 S / 135 E	100	180	5	100
Antarctica	polar	90 S / 90 E	-180	180	-90	-55
N. Pacific Ocean	cylindrical	25 N / 170 W	-260	-80	-10	60
S. Pacific Ocean	cylindrical	25 S / 170 W	-240	-60	-70	10
N. Atlantic Ocean	cylindrical	25 N / 40 W	-100	20	-10	80
S. Atlantic Ocean	cylindrical	25 S / 20 W	-70	30	-70	15
Indian Ocean	cylindrical	20 S / 75 E	20	130	-60	30

* polar = **polar stereographic projection** (for single hemisphere maps of areas poleward of ~20°N or S latitude)
cylindrical = **cylindrical equidistant projection** (default; for mapping low latitudes & in both N & S hemispheres)

North American Time Zones and GMT (Z)

http://www.geocities.com/SunsetStrip/7033/time.html

Weather observations are always taken with respect to time. Thus all observations have a corresponding time, and that time is reported along with the measurement. By convention, weather scientists use the twenty four hour clock, and use one time zone, Greenwich Mean Time (GMT). This time is also known as Universal Time (UTC). To convert to local time, we must know the time difference between GMT and local time for both standard time and summertime (daylight savings time). Not all states use daylight savings time in the summer.

The Time Zones across North America and Pacific from East to West are:

	Standard Time	Daylight Savings Time
Atlantic		
Eastern	EST	EDT
Central	CST	CDT
Mountain	MST	MDT
Pacific	PST	PDT

GMT	TUCSON TIME (MST)
0z	5 pm (previous day)
6z	10 pm (previous night)
12z	5 am
18z	10 am

Standard time:

GMT	ATL	EST	CST	MST	PST	ALA	HAW
difference	-4	-5	-6	-7	-8	-9	-10
00	8P*	7P*	6P*	5P*	4P*	3P*	2P*
01	9P*	8P*	7P*	6P*	5P*	4P*	3P*
02	10P*	9P*	8P*	7P*	6P*	5P*	4P*
03	11P*	10P*	9P*	8P*	7P*	6P*	5P*
04	12A	11P*	10P*	9P*	8P*	7P*	6P*
05	1A	12A	11P*	10P*	9P*	8P*	7P*
06	2A	1A	12A	11P*	10P*	9P*	8P*
07	3A	2A	1A	12A	11P*	10P*	9P*
08	4A	3A	2A	1A	12A	11P*	10P*
09	5A	4A	3A	2A	1A	12A	11P*
10	6A	5A	4A	3A	2A	1A	12A
11	7A	6A	5A	4A	3A	2A	1A
12	8A	7A	6A	5A	4A	3A	2A
13	9A	8A	7A	6A	5A	4A	3A
14	10A	9A	8A	7A	6A	5A	4A
15	11A	10A	9A	8A	7A	6A	5A
16	12P	11A	10A	9A	8A	7A	6A
17	1P	12P	11A	10A	9A	8A	7A
18	2P	1P	12P	11A	10A	9A	8A
19	3P	2P	1P	12P	11A	10A	9A
20	4P	3P	2P	1P	12P	11A	10A
21	5P	4P	3P	2P	1P	12P	11A
22	6P	5P	4P	3P	2P	1P	12P
23	7P	6P	5P	4P	3P	2P	1P

* represents previous day
(i.e. 03 hours 23 January 93 is 8PM-MST 22 January)