

More Guidelines For Plotting Maps On The Reanalysis Webpages

Lat begin box: *always* start with the **southernmost** latitude

Lon begin box: *always* start with the **westernmost** longitude

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 *west 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)