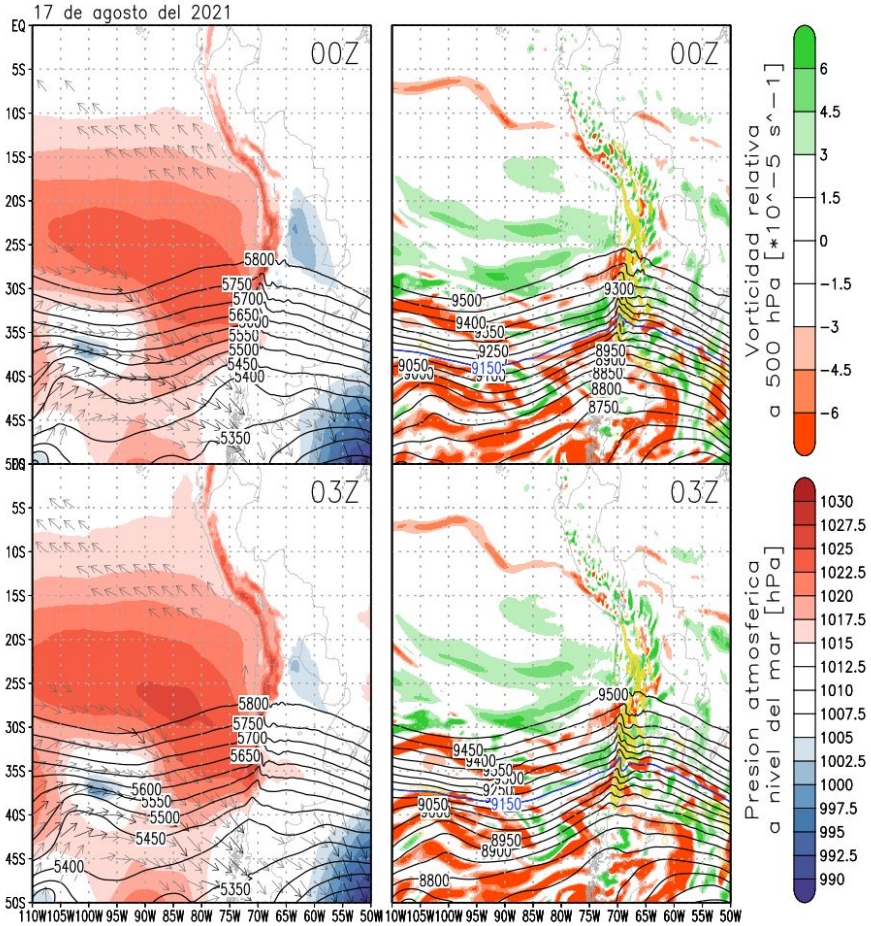


Grid Analysis and Display System

GrADS

Básico

Campos Sánchez, Kevin

Contenido

> Sintaxis básica
> Personalización de gráficas
> Búsqueda de funciones y comandos

Antes de iniciar…


```
dset ^gfs_4_%y4%m2%d2_%h200_000.grb2
index ^gfs_4_20190521_hh00_000.grb2.idx
*DSET  C:\PCGrADS\gfs_4_%y4%m2%d2_%h200_000.grb2
*INDEX C:\PCGrADS\gfs_4_20100123_hh00_000.idx
```

Modificar:

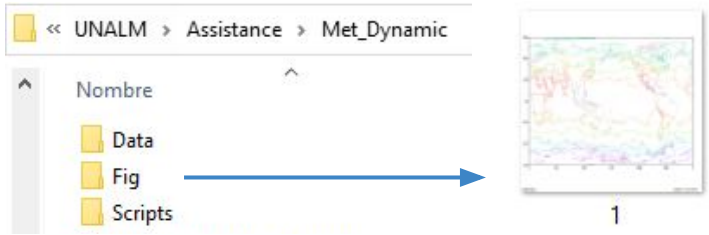
> dset: dirección de su carpeta de trabajo
> index: archivo con la configuración de grillado

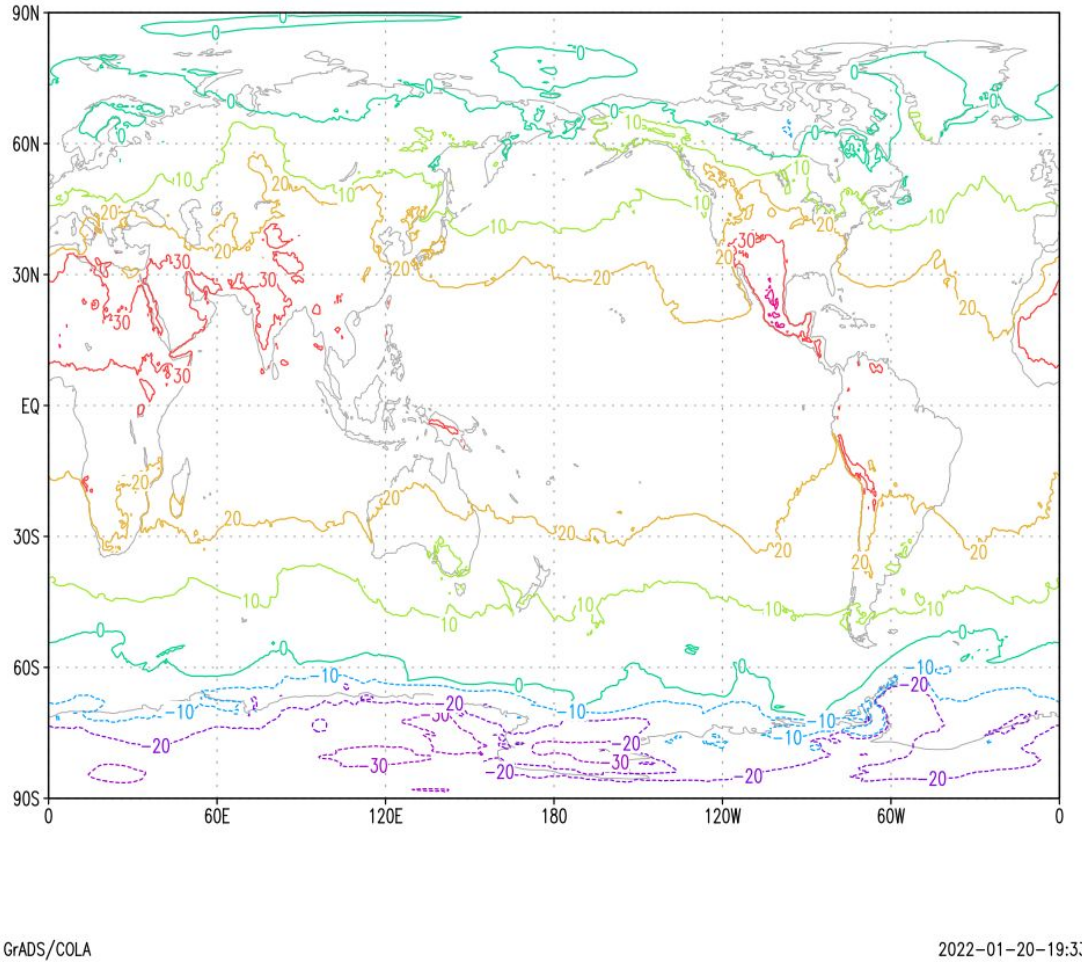
```
dset C:\Users\Kevin\Desktop\UNALM\Assistance\Met_Dynamic\Data\gfs_4_%y4%m2%d2_%h200_000.grb2
index C:\Users\Kevin\Desktop\UNALM\Assistance\Met_Dynamic\Data\gfs_4_20190521_hh00_000.grb2.idx
```

PD: yo no preparé los datos, cualquier funa no debe ser contra mí :v

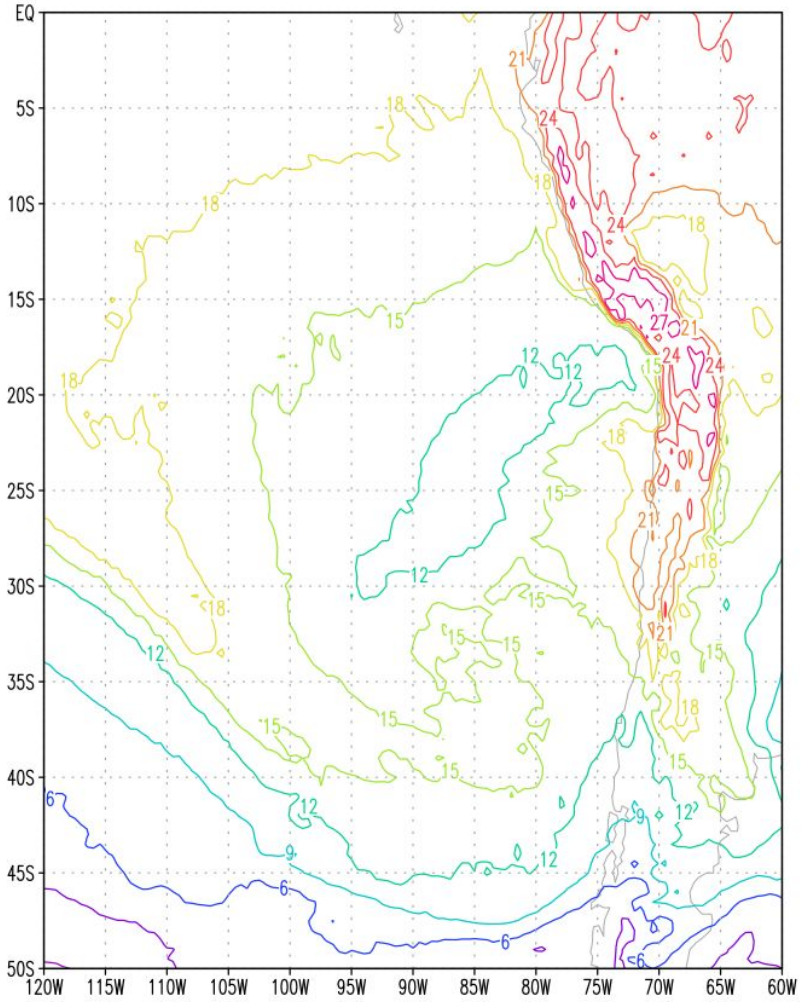
Gráfica básica

```
'reinit'
'set display color white'
'c'

### Cargar data
'open Data\jalaran.ctl'

### Temperatura del aire [°C]
'd T-273.15'

### Exportar gráfica
'printim Fig\Basic\1.png x960 y960'
```



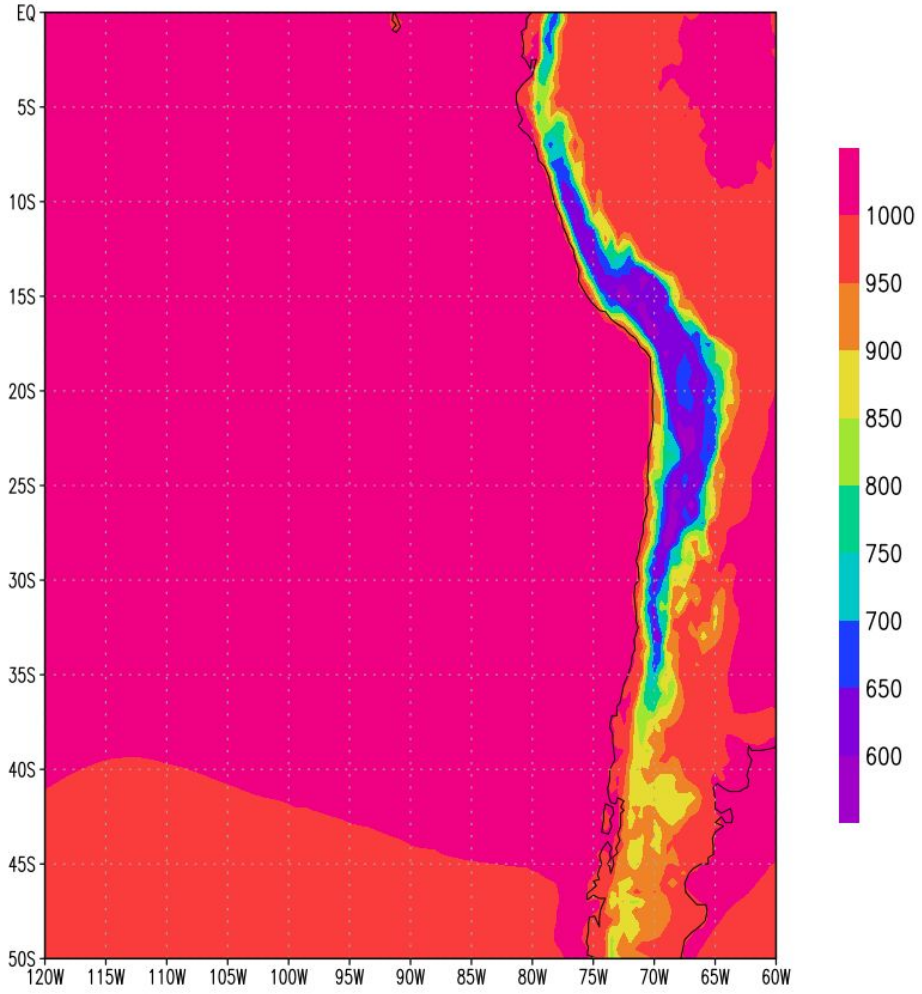


```
'reinit'
'set display color white'
'set grads off'
'c'

### Cargar data
'open Data\jalaran.ctl'

### Delimitar área
'set lat -50 0'
'set lon -120 -60'
'set lev 925'

### Temperatura del aire [°C]
'd T-273.15'
```



Sombreado

```
'reinit'
'set display color white'
'set grads off'
'c'

### Cargar data
'open Data\jalaran.ctl'

### Delimitar área
'set lat -50 0'
'set lon -120 -60'
'set lev 925'

### Sombreado (shaded): presión superficial [hPa]
'set gxout shaded'
'd PRESsfc/100'  ;# Pa/100 = hPa'
'cbar'           ;# Barra de colores
```

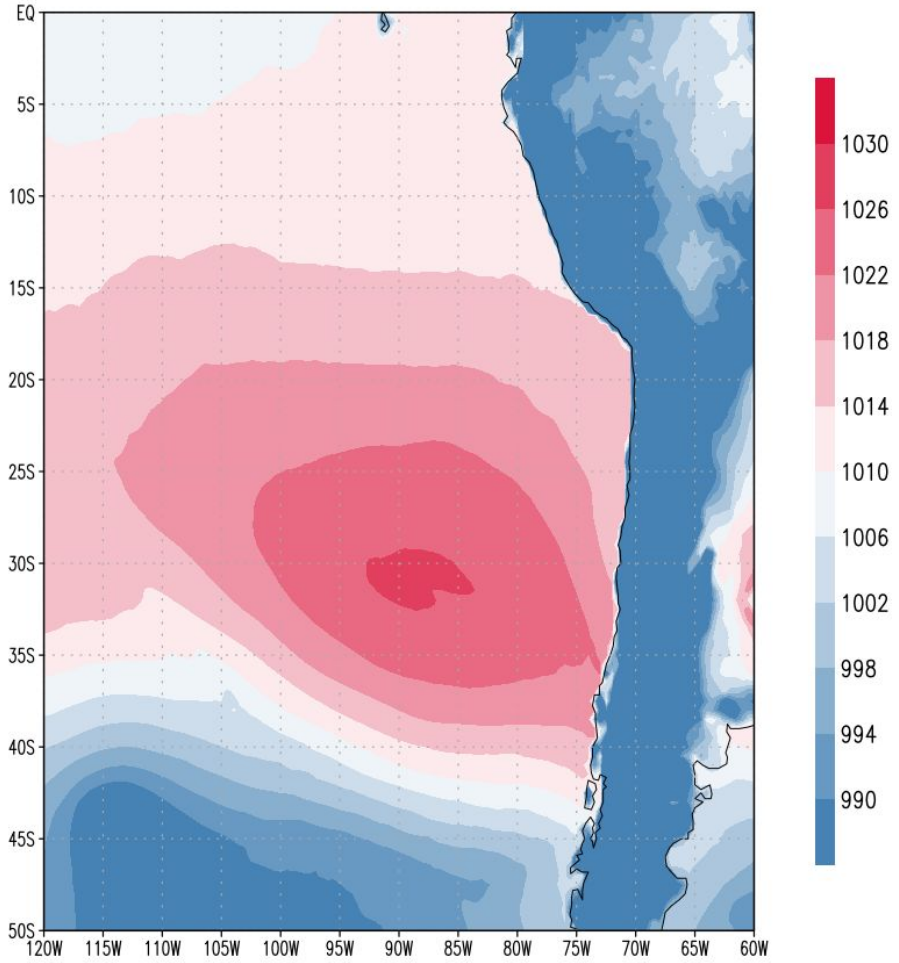


Sombreado

```
'reinit'
'set display color white'
'set grads off'
'c'

### Cargar data
'open Data\jalaran.ctl'

### Delimitar área
'set lat -50 0'
'set lon -120 -60'
'set lev 925'
```

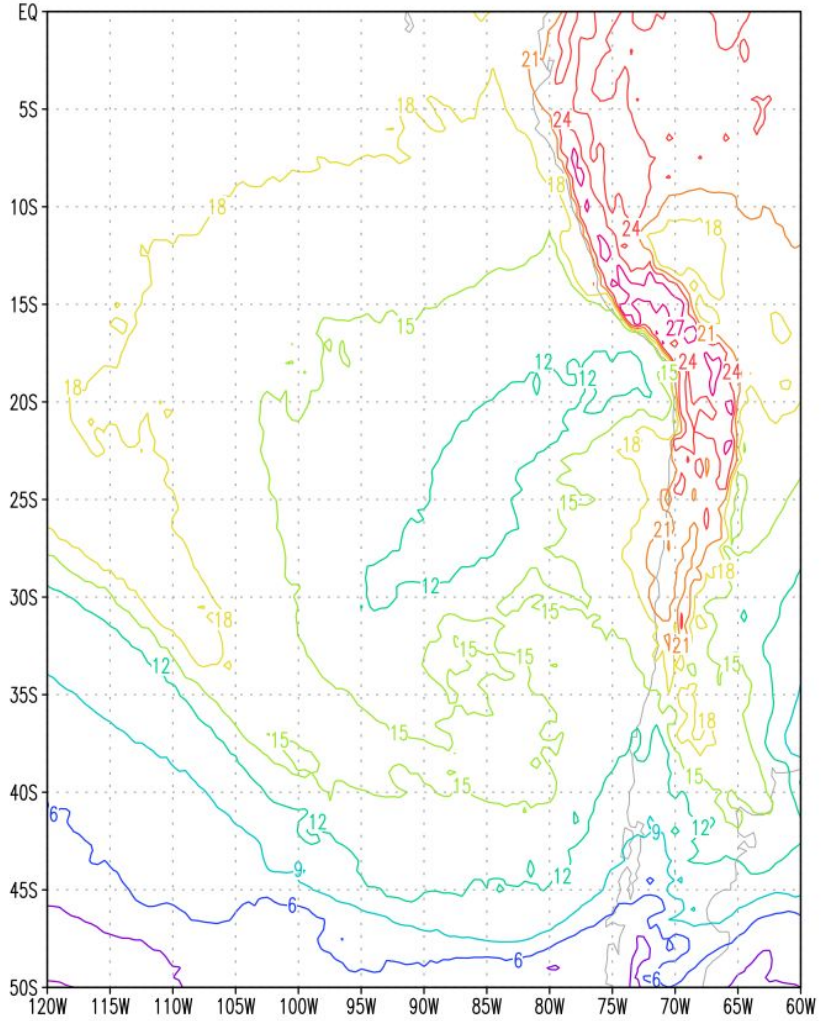
(1030 - 990)/10 = 4 hPa

```
### Sombreado (shaded): presión superficial [hPa]
'set gxout shaded'

'Scripts/color 990 1030 -div 10 -kind steelblue->white->crimson'

'd PRESsfc/100'  ;# Pa/100 = hPa'
'cbar'           ;# Barra de colores
```



Contorno

```
'reinit'
'set display color white'
'set grads off'
'c'

### Cargar data
'open Data\jalaran.ctl'

### Delimitar área
'set lat -50 0'
'set lon -120 -60'
'set lev 925'

### Contorno (contour): temperatura del aire [°C]
'set gxout contour'
'd T-273.15'
```

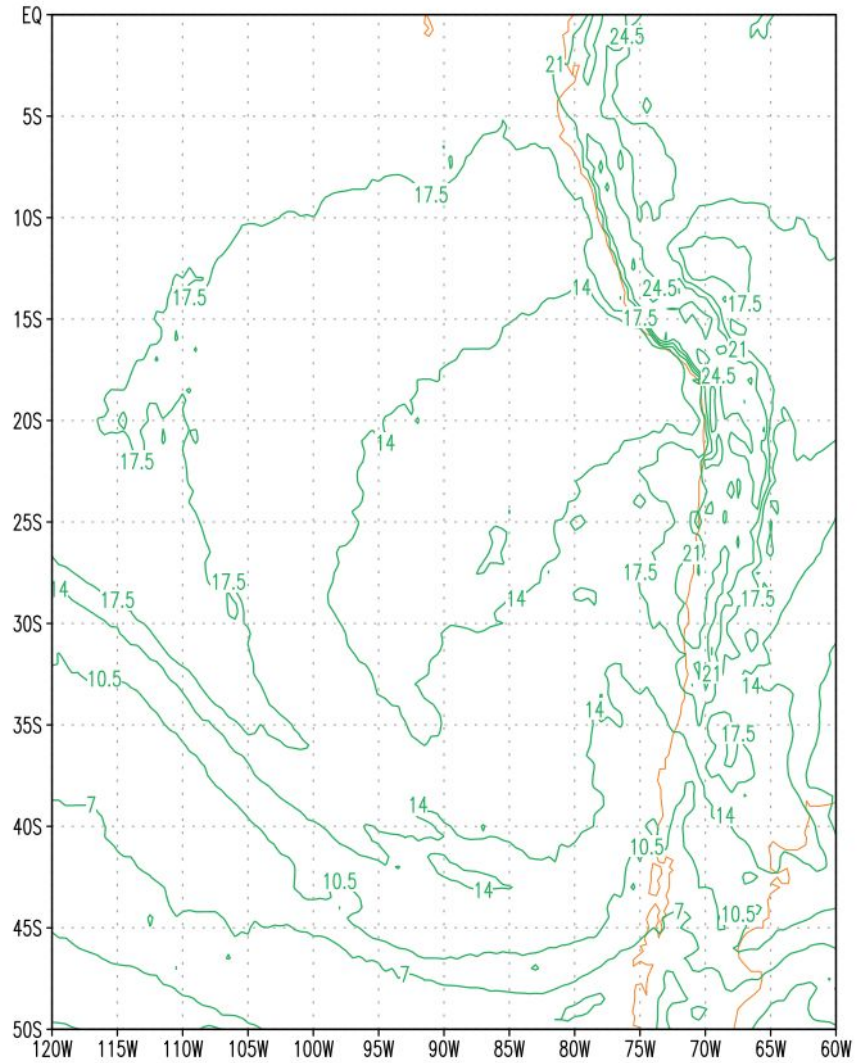


Contorno

```
'reinit'
'set display color white'
'set grads off'
'c'

### Cargar data
'open Data\jalaran.ctl'

### Delimitar área
'set lat -50 0'
'set lon -120 -60'
'set lev 925'
```

0	background	0 0 0	(black by default)
1	foreground	255 255 255	(white by default)
2	red	250 60 60	
3	green	0 220 0	
4	dark blue	30 60 255	
5	light blue	0 200 200	
6	magenta	240 0 130	
7	yellow	230 220 50	
8	orange	240 130 40	
9	purple	160 0 200	
10	yellow/green	160 230 50	
11	medium blue	0 160 255	
12	dark yellow	230 175 45	
13	aqua	0 210 140	
14	dark purple	130 0 220	
15	gray	170 170 170	

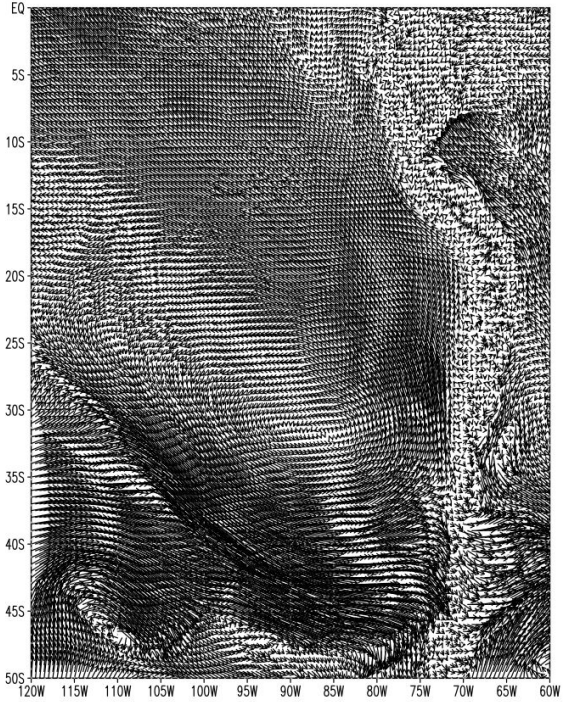
```
### Contorno (contour): temperatura del aire [°C]
'set gxout contour"
'set cint 3.5'          ;# Cada 3.5 °C
'set cstyle 1'          ;# Estilo de línea: 1 (continuo)
'set cthick 4'          ;# Grosor de contorno

'set rgb 101 39 174 96  ;# Definir color 101
'set ccolor 101'        ;# Seleccionar color 101

'd T-273.15'
```



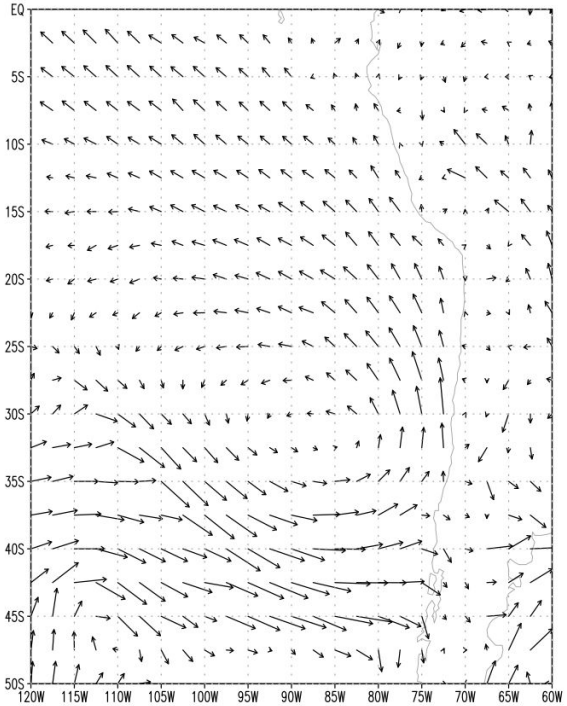
Vectores

Vectores: viento [m/s]
'set gxout vector'

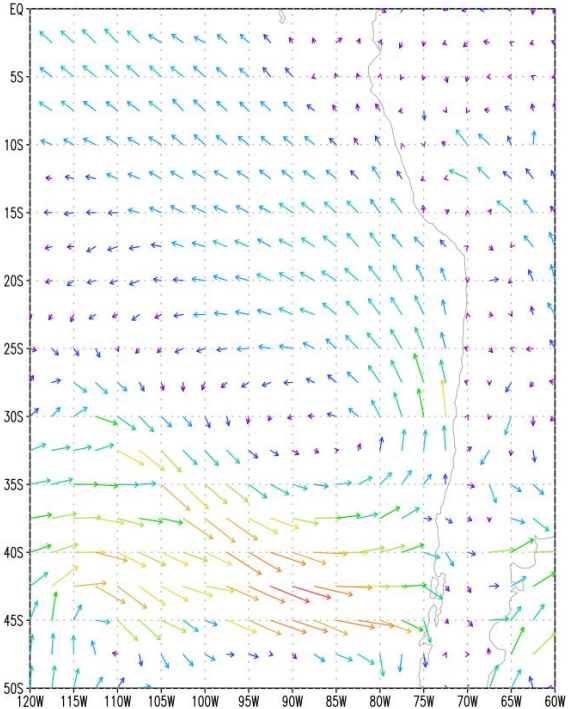
'd u;v'



'd skip(u,5);v'

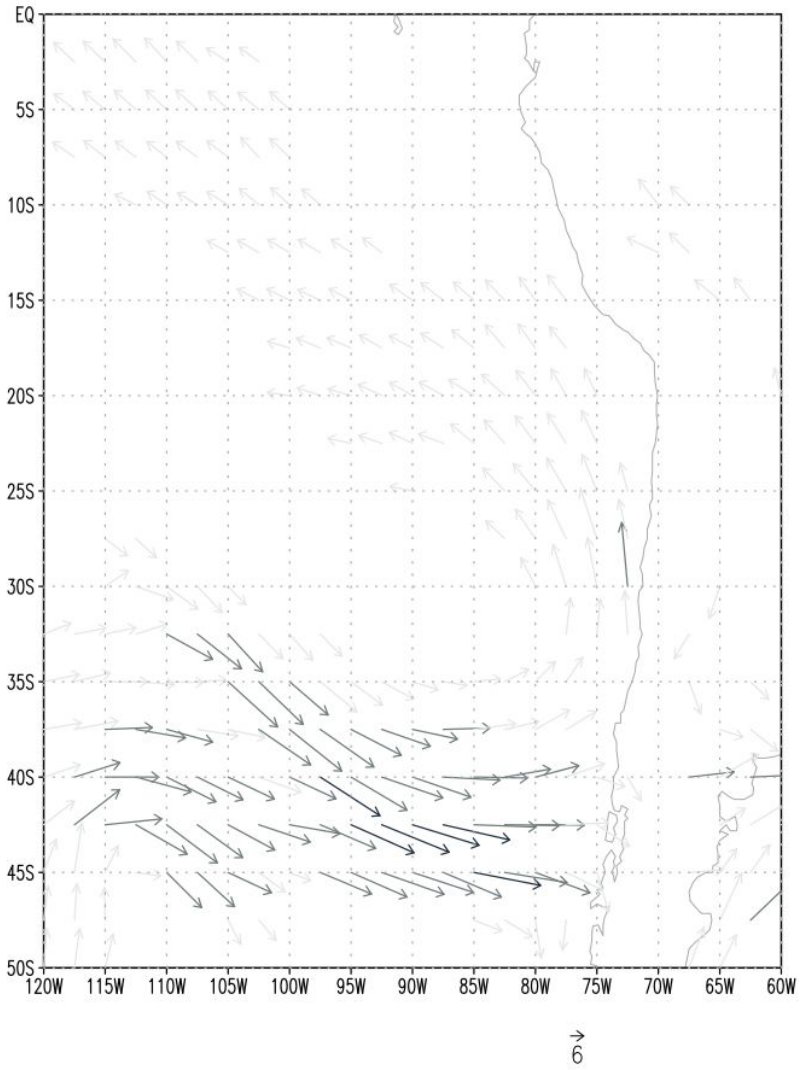


'd skip(u,5);v;mag(u,v)'



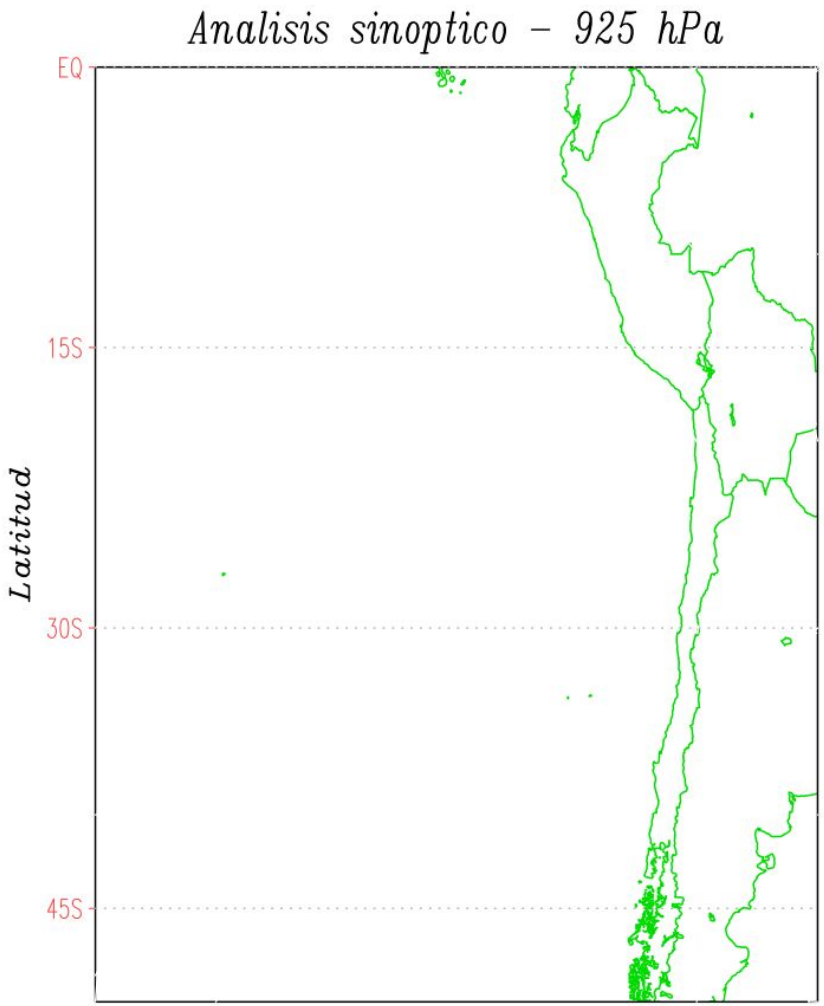
Vectores

```
'reinit'
'set display color white'
'set grads off'
'c'

### Cargar data
'open Data\jalaran.ctl'

### Delimitar área
'set lat -50 0'
'set lon -120 -60'
'set lev 925'

### Vectores: viento [m/s]
'set gxout vector'
'set cmin 6'                ;# Mínimo valor
'set arrowhead 0.075'       ;# Escala de la cabeza
'set arrscl 0.125 6'        ;# Escala: scale value

'set rgb 102 229 232 232'   ;# Definir color 102
'set rgb 103 112 123 124'   ;# Definir color 103
'set rgb 104 33 47 60'      ;# Definir color 104
'set rbcols 0 102 103 104'  ;# Paleta de colores

'd skip(u,5);v;mag(u,v)'
```



Base

```
'reinit'
'set display color white'
'set grads off'
'c'

'open Data\jalaran.ctl'

### Mapa
'set mpdset hires'  ;# Países
'set map 3 1 5'     ;# Mapa: color estilo grosor

### Ejes
'set xlab off'      ;# Desactivar eje x

'set ylab on'               ;# Activar eje y
'set ylopts 4 0.1 0.15'     ;# color grosor tamaño
'set ylint 15'              ;# Separación eje y

'set ccolor 0'
'd skip(u,20);v'

### Título
'set font 2'        ;# Fuente
'draw title Analisis sinoptico - 925 hPa'

### Subtitulo de eje
'draw ylab Latitud'
```



¿Qué observamos?

Presión a nivel de mar [hPa] = shaded

Temperatura del aire [°C] = contour

Viento mayor a 12 m/s = vector

¿Qué información obtenemos?

Anticiclón del Pacífico Sur Oriental

Jet Costero de Bajos Niveles (JCBN)

Afloramiento costero