

```
function main(args)
```

```
** This script makes grads plots of the :
```

```
** zonal mean temperature(y,z) (Celsius) (_version )
```

```
** zonal mean u(y,z) (m/s) (_version )
```

```
** zonal mean geopotential height (y,z) (gpkm) (_version )
```

```
** start this script with: eval "grads -bpc 'run zm_pd.gs ctrl'"
```

```
** or: eval "grads -bpc 'run zm_pd.gs exp'"
```

```
**to run the script, you need additional GrADS-scripts:
```

```
** cbar prints colorbars
```

```
** timestamp.gs prints the creation time on each page
```

```
**you can find these scripts on this site.
```

```
_version=subwrd(args,1)
```

```
*
```

```
*replace additional info by the information that should be printet
```

```
*in the header of each page.
```

```
*If you don't want GrADS to write anything there, just write:
```

```
* _additionalinfo=' '
```

```
*
```

```
_additionalinfo='additional info'
```

```
say 'additional info= '_additionalinfo
```

```
*
```

```
* positions of frames (3 frames per page: top, middle, bottom)
```

```
*
```

```
x1 = 1.0
```

```
x2 = 7.5
```

```
y1t = 7.0
```

```
y2t = 10.4
```

```
y1m = 3.7
```

```
y2m = 7.1
```

```
y1b = 0.4
```

```
y2b = 3.8
```

```
*
```

```
* positions for labels in a vp
```

```
*
```

xpos=1.1  
ypos=3.95

\*  
\*  
\* first page: temp(x,y,z) (C)

\*-----

'open '\_version'\_130.grb.seasmean.ctl'

'open '\_version'\_130.grb.mean.ctl'

'enable print zonmean\_pd'\_version'.gx'

'clear'

'reset'

'set vpage 0 8.5 0 11'

'set lat -90 90'

'set lon 0'

'set lev 1000 10'

'set cthick 2'

'set strsiz 0.15'

'set string 1 1 3'

'draw string 0.5 10.7 '\_version''

'set string 1 r 3'

'draw string 8. 10.7 '\_additionalinfo''

'set strsiz 0.15'

'set string 1 tc'

'draw string 4.25 10.45 zonal mean of temperature [<sup>3.</sup>°C]'

'run timestamp.gs'

'set vpage 'x1' 'x2' 'y1t' 'y2t''

'set grads off'

'set parea 1.0 7.5 0.5 3.7'

'set map 1 1 5'

'set gxout shaded'

'define varmean=mean(c130.1(t=1),x=1,x=128)-273.2'

'd varmean'

'run cbar 0.8 1'

'set string 1 tl'

'set strsiz 0.17'

'draw string 'xpos' 'ypos' djf'

'set vpage 'x1' 'x2' 'y1m' 'y2m''

'set grads off'

'set parea 1.0 7.5 0.5 3.7'

'set map 1 1 5'

```
'set gxout shaded'  
'define varmean=mean(c130.1(t=3),x=1,x=128)-273.2'  
'd varmean'  
'run cbar 0.8 1'  
'set string 1 tl'  
'set strsiz 0.17'  
'draw string 'xpos' 'ypos' jja'  
  
'set vpage 'x1' 'x2' 'y1b' 'y2b"  
'set grads off'  
'set parea 1.0 7.5 0.5 3.7'  
'set map 1 1 5'  
'set gxout shaded'  
'define varmean=mean(c130.2(t=1),x=1,x=128)-273.2'  
'd varmean'  
'run cbar 0.8 1'  
'set string 1 tl'  
'set strsiz 0.17'  
'draw string 'xpos' 'ypos' annual mean'  
  
'print'  
'close 2'  
'close 1'  
*  
*  
* second page: u(x,y,z) (m/s)  
*-----  
'open '_version'_131.grb.seasmean.ctl'  
'open '_version'_131.grb.mean.ctl'  
  
'clear'  
'reset'  
'set vpage 0 8.5 0 11'  
'set lat -90 90'  
'set lon 0'  
'set lev 1000 10'  
'set cthick 2'  
'set strsiz 0.15'  
'set string 1 1 3'  
'draw string 0.5 10.7 '_version"  
'set string 1 r 3'  
'draw string 8. 10.7 '_additionalinfo"  
'set strsiz 0.15'  
'set string 1 tc'  
'draw string 4.25 10.45 zonal mean of zonal velocity [m/s]'  
'run timestamp.gs'
```

```
'set vpage 'x1' 'x2' 'y1t' 'y2t'  
'set grads off  
'set parea 1.0 7.5 0.5 3.7'  
'set map 1 1 5'  
'set gxout shaded'  
'define varmean=mean(c131.1(t=1),x=1,x=128)'  
'd varmean'  
'run cbar 0.8 1'  
'set string 1 tl'  
'set strsiz 0.17'  
'draw string 'xpos' 'ypos' djf'
```

```
'set vpage 'x1' 'x2' 'y1m' 'y2m'  
'set grads off  
'set parea 1.0 7.5 0.5 3.7'  
'set map 1 1 5'  
'set gxout shaded'  
'define varmean=mean(c131.1(t=3),x=1,x=128)'  
'd varmean'  
'run cbar 0.8 1'  
'set string 1 tl'  
'set strsiz 0.17'  
'draw string 'xpos' 'ypos' jja'
```

```
'set vpage 'x1' 'x2' 'y1b' 'y2b'  
'set grads off  
'set parea 1.0 7.5 0.5 3.7'  
'set map 1 1 5'  
'set gxout shaded'  
'define varmean=mean(c131.2(t=1),x=1,x=128)'  
'd varmean'  
'run cbar 0.8 1'  
'set string 1 tl'  
'set strsiz 0.17'  
'draw string 'xpos' 'ypos' annual mean'
```

```
'print'  
'close 2'  
'close 1'  
*  
*  
* third page: geopotential height(x,y,z) (gpkm)  
*-----  
'open '_version'_156.grb.seasmean.ctl'  
'open '_version'_156.grb.mean.ctl'
```

```
'clear'  
'reset'  
'set vpage 0 8.5 0 11'  
'set lat -90 90'  
'set lon 0'  
'set lev 1000 10'  
'set cthick 2'  
'set strsiz 0.15'  
'set string 1 1 3'  
'draw string 0.5 10.7 '_version"  
'set string 1 r 3'  
'draw string 8. 10.7 '_additionalinfo"  
'set strsiz 0.15'  
'set string 1 tc'  
'draw string 4.25 10.45 zonal mean of geopotential height [gpkm]'  
'run timestamp.gs'
```

```
'set vpage 'x1' 'x2' 'y1t' 'y2t"  
'set grads off'  
'set parea 1.0 7.5 0.5 3.7'  
'set map 1 1 5'  
'set gxout shaded'  
'define varmean=mean(c156.1(t=1),x=1,x=128)/1000.'  
'd varmean'  
'run cbar 0.8 1'  
'set string 1 tl'  
'set strsiz 0.17'  
'draw string 'xpos' 'ypos' djf'
```

```
'set vpage 'x1' 'x2' 'y1m' 'y2m"  
'set grads off'  
'set parea 1.0 7.5 0.5 3.7'  
'set map 1 1 5'  
'set gxout shaded'  
'define varmean=mean(c156.1(t=3),x=1,x=128)/1000.'  
'd varmean'  
'run cbar 0.8 1'  
'set string 1 tl'  
'set strsiz 0.17'  
'draw string 'xpos' 'ypos' jja'
```

```
'set vpage 'x1' 'x2' 'y1b' 'y2b"  
'set grads off'  
'set parea 1.0 7.5 0.5 3.7'  
'set map 1 1 5'
```

```
'set gxout shaded'  
'define varmean=mean(c156.2(t=1),x=1,x=128)/1000.'  
'd varmean'  
'run cbar 0.8 1'  
'set string 1 tl'  
'set strsiz 0.17'  
'draw string 'xpos' 'ypos' annual mean'  
  
'print'  
'close 2'  
'close 1'  
  
'disable print'  
'!gxps -c -i zonmean_pd_'_version'.gx -o zonmean_pd_'_version'.ps'  
'quit'  
quit
```