

plot hovmuller

Categories: PNG hoevmuller AMSU OLR

Params: dataset : *in, required, type='string'*

dataset to plot

canal : *in, optional, type='string'*

canal of AMSU

only used if AMSU dataset

iyear : *in, required, type='integer'*

year

Keywords: DATASETTYPE : *default='for AMSU ++, for OLR ++'*

dataset type name. For each dataset, there are several file type (year vs total, global vs regional). ++

AXE : *default='latitude'*

geographical axe to be use for hovmuller can be either 'latitude' or 'longitude'

OVERWRITE : *default=false*

to overwrite the output image file if exists.

Useless if NOSAVE is set.

NOSAVE : *default=false*

to NOT save the output image in a file

might be usefull if several plots are needed on the same figure.

file if exist might be overwritten if OVERWRITE is set to 1.

EXTRA :

Used to declare that this routine accepts inherited keywords

see example with SMALL keyword

Restrictions:

- Requires SAXO

Returns: [pltt](#)

[cm_4cal](#)

[forout.pro](#)

Pre: [varamma_profile.sh](#)

for AMSU dataset be sure to have *cx.anyyyy.nc* in the directory defined in `${VARAMMA_ID}/`

for OLR dataset be sure to have *olr.day.mean_yyyy_ng.nc* in the directory defined in `${VARAMMA_ID}/`

Post: [varamma_profile.sh](#)

Todo:

++ parametrisation date début date fin

++ exploitation du champ info des fichiers OLR

++ gros souci avec les longitude OLR !!!!

```
++ split read and plot
++ saveimage or openps (for image to provide to publisher)
++ filename si small idiot car peu contenir plusieurs figures donc pas
canal+year...
```

To plot AMSU a4 hovmuller latitude plot for 2006 and produce a PNG file:

Examples: IDL> hovmuller, 'AMSU', 'a4', 2006L, AXE='latitude'

To plot AMSU a4 and a5 hovmuller latitude plots for 2006 on the same figure:

```
IDL> hovmuller, 'AMSU', 'a4', 2006L, AXE='latitude', /nosave,small=[2,1,1]
IDL> hovmuller, 'AMSU', 'a5', 2006L, AXE='latitude', /noerase,/nocolorbar,small=[2,1,
```

++ les deux dessins n'occupent pas la même taille.

To plot OLR hovmuller latitude plot for 2006 and produce a PNG file:

```
IDL> hovmuller, 'OLR', 'n.a.', 2006L, AXE='latitude'
```

To plot OLR hovmuller longitude plot for 2006 and produce a PNG file:

```
IDL> hovmuller, 'OLR', 'n.a', 2006L, AXE='longitude'
```

To plot AMSU a4 hovmuller latitude plot climatology and produce a PNG file:

```
IDL> hovmuller, 'AMSU', 'a4', 0000L, DATASETTYPE='varamma_t3',AXE='latitude'
```

- History:**
- fplod 2008-08-14T15:31:11Z aedon.locean-ipsl.upmc.fr (Darwin)
 - j'ajoute la possibilité de travailler avec les fichiers de climato en ajoutant un motcle datasettype (ceux qui peut permettre même pour OLR par exemple de travailler soit avec les fichiers splités soit avec le fichiers original ... enfin c'est l'idée.
 - j'ai compris que 1) il faut /timestep pour AMSU (parce l'axe des temps ne fait pas partie de ceux gérés par ncdf_gettime) 2) qu'il y a un gros avec les longitudes OLR
 - fplod 2008-08-13T08:02:19Z aedon.locean-ipsl.upmc.fr (Darwin)
 - replace hovmuller_latitude by hovmuller
 - add AXE keyword
 - change terminology of latitude image file hov by hovy
 - check parameters (type and value)
 - parametrization of xaxisname, yaxisname and timevar

- fplod 2008-08-12T14:17:14Z aedon.locean-ipsl.upmc.fr (Darwin)
 - add `_EXTRA` keyword
 - change format of colorbar f5.1 to I3.3, 1/10th is useless in legend and I rather like have a *big* font than a dot.
 - add `OVERWRITE` keyword
 - add `NOSAVE` keyword
 - subtitle = '' to avoid text between plot and color bar
 - usage of `_forout`
- fplod 2008-08-05T09:59:15Z aedon.locean-ipsl.upmc.fr (Darwin)
 - change font
- fplod 2008-07-31T12:59:17Z aedon.locean-ipsl.upmc.fr (Darwin)
 - Start to add OLR dataset
 - add dataset parameter
- fplod 20080718
 - extract from ananewvaramma3.pro 20080718 :

```

hovmuller latitude
canal='a7'
mois=['Jan','Feb','Mar','Apr','May','Jun','Jul','Aug','Sep','Oct','Nov','Dec']
mo_lon=[31,28,31,30,31,30,31,31,30,31,30,31]

imo=4 &im1=10 ; no du mois
file='stagiaire/'+canal+'.an2006.nc'
initncdf, file, xaxisname = 'xlon', yaxisname = 'ylat'
domdef,-10,5,-30,45 ;domdef,0,5,-30,45
j1=total(mo_lon(0:imo-2)) & J2=total(mo_lon(0:im1-1))
data=read_ncdf('moyenne_tb', j1,j2,/timestep,timevar = 'jours', file = file)
time=julday(imo,1,2006)+lindgen(jpt) ; redefinition axe temps
plt,window=0, data, 'yt',title='latitude - time '+canal;,min=250,max=295
saveimage, 'sorties/'+canal+'20060410-hov-10-5.png',/png ;capture d'ecran

```

Version: \$Id: hovmuller.pro 2 2008-12-18 16:56:52Z pinsard \$