Manual for Package: auxiliar
Revision 7:8M

Karl Kästner

January 27, 2020

Contents

1 auxiliar **1**
1.1 Expanding_Double 1

2 adaptor **1**
2.1 Keller 1
2.2 MMesh 1
2.3 SMesh 1
2.4 Slg 1

3 auxiliar **2**
3.1 arabic2roman 2
3.2 autocat 2
3.3 bplus 2
3.4 btimes 2
3.5 centre_axis 2
3.6 circshift_fractional 2
3.7 cmap_rolling 2
3.8 colormap3 2
3.9 colormap_byr 2
3.10 copy_fields 3
3.11 copyfields_deep 3
3.12 count_occurence 3
3.13 cummax 3
3.14 cummean 3
3.15 cumstd 3
3.16 cumvar 3
3.17 cvec 3
3.18 diag3 3
3.19 down 3

3.20 dspace . . . 4
3.21 field_range . . . 4
3.22 finite . . . 4
3.23 flat . . . 4
3.24 frac . . . 4
3.25 getfield_deep . . . 4
3.26 getout . . . 4
3.27 hashcode . . . 4
3.28 imagesc_ . . . 4
3.29 innerspace . . . 4
3.30 isfield_deep . . . 5
3.31 isprop_deep . . . 5
3.32 issym . . . 5
3.33 iterate_cell . . . 5
3.34 jmemory . . . 5
3.35 leftdiff . . . 5
3.36 leftmean . . . 5
3.37 limits . . . 5
3.38 linspace_man . . . 5
3.39 linspace_man2 . . . 5
3.40 logspace_trimmed . . . 6
3.41 matlab_messages . . . 6
3.42 maxid . . . 6
3.43 memsize . . . 6
3.44 mlint_all . . . 6
3.45 myhot . . . 6
3.46 none . . . 6
3.47 objcopy . . . 6

4 plot **6**
4.1 addx . . . 6
4.2 addy . . . 7
4.3 adjust_quiver_arrowhead_size . . . 7
4.4 area_man . . . 7
4.5 arrow . . . 7
4.6 axis_equal_man . . . 7
4.7 candlestick_man . . . 7
4.8 circle . . . 7
4.9 cmap . . . 7
4.10 colormap_man . . . 7
4.11 colormap_man2 . . . 7
4.12 colormap_man_old . . . 8
4.13 columnlegend . . . 8
4.14 copyaxes . . . 8

4.15 datetick_man . . . 8
4.16 daytick . . . 8
4.17 dcolormap . . . 8
4.18 dots . . . 8
4.19 errorarea . . . 8
4.20 errorarea2 . . . 8
4.21 errorbar_man . . . 8
4.22 errorlines . . . 9
4.23 fetchsubplot . . . 9
4.24 fillmarker . . . 9
4.25 freezeColors . . . 9
4.26 get_coordinates . . . 9
4.27 hatch . . . 9
4.28 hline . . . 10
4.29 hold_color . . . 10
4.30 hourspace . . . 10
4.31 hourtick . . . 10
4.32 interpplot . . . 10
4.33 legendtitle . . . 10
4.34 line_fewer_markers . . . 10
4.35 monthspace . . . 10
4.36 monthtick . . . 11
4.37 mycolourmap . . . 11
4.38 namedfigure . . . 11
4.39 nansurf . . . 11
4.40 nmcolormap . . . 11
4.41 patch_man . . . 11
4.42 pdfprint . . . 11
4.43 percenttick . . . 11
4.44 plot2svg . . . 12
4.45 plot_ellipse . . . 13
4.46 plot_style . . . 13
4.47 plotshaded . . . 13
4.48 ploty4 . . . 13
4.49 plotyyy . . . 13
4.50 quadsurf . . . 13
4.51 quadsurf2 . . . 13
4.52 quadsurf3 . . . 13
4.53 quiver3_man . . . 14
4.54 quiver_man . . . 14
4.55 quiver_man2 . . . 14
4.56 quiver_man3 . . . 14
4.57 rectangles . . . 14
4.58 scaleplot . . . 14

4.59 setfontsize . . . 14
4.60 shade_night . . . 14
4.61 splitfigure . . . 14
4.62 turtle . . . 14
4.63 velplot . . . 15
4.64 vline . . . 15
4.65 vline_man . . . 15
4.66 weekspace . . . 15
4.67 weektick . . . 15
4.68 xtick . . . 15
4.69 xticklabel . . . 15
4.70 ytick . . . 15
4.71 yticklabel . . . 15

5 auxiliar **16**
5.1 relpos . . . 16
5.2 rightdiff . . . 16
5.3 rmfield_optional . . . 16
5.4 rvec . . . 16
5.5 select . . . 16
5.6 setfield_deep . . . 16
5.7 setfields . . . 16
5.8 sign2str . . . 16
5.9 signs . . . 16
5.10 simplifyignore . . . 17
5.11 str_cell_reverse_index . . . 17
5.12 struct2obj . . . 17
5.13 struct_avg . . . 17
5.14 struct_flat . . . 17
5.15 sub2ind_man . . . 17
5.16 subsall . . . 17
5.17 swap . . . 17

6 system **17**
6.1 alloc . . . 17
6.2 basename . . . 18
6.3 cbrt . . . 18
6.4 dirname . . . 18
6.5 head . . . 18
6.6 head_str . . . 18
6.7 tail . . . 18
6.8 tail_str . . . 18

7 auxiliar **18**

7.1 toInt32 18
7.2 unique_columnwise 18
7.3 unpack_struct 19
7.4 unwrap_periodic 19
7.5 up 19
7.6 zoomaxis 19

1 auxiliar

1.1 Expanding_Double

2 adaptor

adators for backward compatibility for renamed files

2.1 Keller

2.2 MMesh

2.3 SMesh

2.4 Slg

3 auxiliar

3.1 arabic2roman

3.2 autocat

3.3 bplus

3.4 btimes

3.5 centre_axis

3.6 circshift_fractional

3.7 cmap_rolling

3.8 colormap3

3.9 colormap_byr

3.10 copy_fields

3.11 copyfields_deep

3.12 count_occurence

3.13 cummax

3.14 cummean

3.15 cumstd

3.16 cumvar

3.17 cvec

3.18 diag3

3.19 down

3.20 dspace

3.21 field_range

3.22 finite

3.23 flat

3.24 frac

3.25 getfield_deep

3.26 getout

3.27 hashcode

3.28 imagesc_

3.29 innerspace

3.30 isfield_deep

3.31 isprop_deep

3.32 issym

3.33 iterate_cell

3.34 jmemory

3.35 leftdiff

3.36 leftmean

3.37 limits

3.38 linspace_man

3.39 linspace_man2

3.40 logspace_trimmed

3.41 matlab_messages

3.42 maxid

```
index of maximum
if value is not required (e.g. use in other functions such as
    accummarray)
```

3.43 memsize

3.44 mlint_all

3.45 myhot

3.46 none

3.47 objcopy

4 plot

4.1 addx

4.2 addy

4.3 adjust_quiver_arrowhead_size

4.4 area_man

4.5 arrow

4.6 axis_equal_man

4.7 candlestick_man

4.8 circle

4.9 cmap

4.10 colormap_man

4.11 colormap_man2

4.12 colormap_man_old

4.13 columnlegend

4.14 copyaxes

4.15 datetick_man

4.16 daytick

4.17 dcolormap

4.18 dots

4.19 errorarea

4.20 errorarea2

4.21 errorbar_man

4.22 errorlines

4.23 fetchsubplot

4.24 fillmarker

4.25 freezeColors

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

 getCDataHandles -- get handles of all descendents with indexed
     CData
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

 getParentAxes -- return handle of axes object to which a given
     object belongs
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

 checkArgs -- Validate input arguments
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

4.26 get_coordinates

4.27 hatch

4.28 hline

4.29 hold_color

4.30 hourspace

4.31 hourtick

4.32 interpplot

4.33 legendtitle

4.34 line_fewer_markers

```
find marker spec in varargin and remove it; extract special params:
     LockOnMax,Spacing
input size check
a) once only the line with all points with the style
b) last time the markers, using fewer points with style
c) once with a visible handle, only the first point, using the
    complete style you specified
'x' -> marker delta-x constant; 'curve' : spacing constant along the
     curve length
```

4.35 monthspace

4.36 monthtick

4.37 mycolourmap

4.38 namedfigure

4.39 nansurf

4.40 nmcolormap

4.41 patch_man

4.42 pdfprint

4.43 percenttick

4.44 plot2svg

```
" height="100%%" viewBox="0 0 %0.3f %0.3f" ',paperpos(3),paperpos(4)
    );
            fprintf(fid,' <filter x="%0.3f%%" y="%0.3f%%" width="%0.3
                f%%" height="%0.3f%%" id="%s">\n', 0, 0, 100, 100,
                filterId);
            %    fprintf(fid,' <filter x="%0.3f%%" y="%0.3f%%" width
                ="%0.3f%%" height="%0.3f%%" id="%s">\n', -(offset *
                100), -(offset * 100), 100 + (offset * 200), 100 + (
                offset * 200), filterId);
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% SUBFUNCTIONS %%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

 Octave keeps s, d, p and h in the HandleGraphics object, for the
     square, diamond, pentagram, and hexagram markers, respectively
     -- Jakob Malm
```

```
 Octave keeps s, d, p and h in the HandleGraphics object, for the
     square, diamond, pentagram, and hexagram markers, respectively
     -- Jakob Malm
```

%%%

4.47 plotshaded

4.48 ploty4

4.49 plotyyy

4.50 quadsurf

4.51 quadsurf2

4.52 quadsurf3

4.53 quiver3_man

4.54 quiver_man

4.55 quiver_man2

4.56 quiver_man3

4.57 rectangles

4.58 scaleplot

4.59 setfontsize

4.60 shade_night

4.61 splitfigure

4.62 turtle

4.63 velplot

4.64 vline

4.65 vline_man

4.66 weekspace

4.67 weektick

4.68 xtick

4.69 xticklabel

4.70 ytick

4.71 yticklabel

5 auxiliar

5.1 relpos

5.2 rightdiff

5.3 rmfield_optional

5.4 rvec

5.5 select

5.6 setfield_deep

5.7 setfields

5.8 sign2str

5.9 signs

5.10 simplifyignore

5.11 str_cell_reverse_index

5.12 struct2obj

5.13 struct_avg

5.14 struct_flat

5.15 sub2ind_man

5.16 subsall

5.17 swap

6 system

emulate POSIX and BASH functions

6.1 alloc

6.2 basename

6.3 cbrt

6.4 dirname

6.5 head

6.6 head_str

6.7 tail

6.8 tail_str

7 auxiliar

7.1 toInt32

7.2 unique_columnwise

7.3 unpack_struct

7.4 unwrap_periodic

7.5 up

7.6 zoomaxis