

Manual for Package: aux

Revision 1:4M

Karl Kästner

October 20, 2019

Contents

1	aux	1
1.1	Expanding_Double	1
2	adaptor	1
2.1	Keller	1
3	aux	1
3.1	arabic2roman	1
3.2	autocat	1
3.3	bplus	1
3.4	btimes	2
3.5	centre_axis	2
3.6	circshift_fractional	2
3.7	colormap3	2
3.8	colormap_byr	2
3.9	copy_fields	2
3.10	count_occurence	2
3.11	cummax	2
3.12	cummean	2
3.13	cumstd	2
3.14	cumvar	3
3.15	cvec	3
3.16	diag3	3
3.17	down	3
3.18	dspace	3
3.19	field_range	3
3.20	finite	3
3.21	flat	3
3.22	frac	3

3.23	getfield_deep	3
3.24	getout	4
3.25	imagesc_	4
3.26	innerspace	4
3.27	isfield_deep	4
3.28	isprop_deep	4
3.29	issym	4
3.30	iterate_cell	4
3.31	jmemory	4
3.32	leftdiff	4
3.33	leftmean	4
3.34	limits	5
3.35	linspace_man	5
3.36	linspace_man2	5
3.37	logspace_trimmed	5
3.38	matlab_messages	5
3.39	maxid	5
3.40	memsize	5
3.41	mlint_all	5
3.42	myhot	5
3.43	none	6
3.44	objcopy	6
4	plot	6
4.1	addx	6
4.2	addy	6
4.3	adjust_quiver_arrowhead_size	6
4.4	area_man	6
4.5	arrow	6
4.6	axis_equal_man	6
4.7	candlestick_man	6
4.8	circle	7
4.9	cmap	7
4.10	colormap_man	7
4.11	colormap_man2	7
4.12	colormap_man_old	7
4.13	columnlegend	7
4.14	copyaxes	7
4.15	datetick_man	7
4.16	daytick	7
4.17	dcolormap	7
4.18	dots	8
4.19	errorarea	8
4.20	errorbar_man	8

4.21	errorlines	8
4.22	fetchsubplot	8
4.23	fillmarker	8
4.24	freezeColors	8
4.25	get_coordinates	9
4.26	hatch	9
4.27	hline	9
4.28	hold_color	9
4.29	hourspace	9
4.30	hourtick	9
4.31	interpplot	9
4.32	legendtitle	9
4.33	line_fewer_markers	10
4.34	monthspace	10
4.35	monthtick	10
4.36	mycolourmap	10
4.37	namedfigure	10
4.38	nansurf	10
4.39	nmcolormap	10
4.40	patch_man	10
4.41	pdfprint	11
4.42	percenttick	11
4.43	plot2svg	11
4.44	plot_ellipse	12
4.45	plot_style	12
4.46	plotshaded	12
4.47	ploty4	12
4.48	plotyyy	12
4.49	quadsurf	12
4.50	quadsurf2	13
4.51	quadsurf3	13
4.52	quiver3_man	13
4.53	quiver_man	13
4.54	quiver_man2	13
4.55	quiver_man3	13
4.56	rectangles	13
4.57	scaleplot	13
4.58	setfontsize	13
4.59	shade_night	13
4.60	splitfigure	14
4.61	turtle	14
4.62	velplot	14
4.63	vline	14
4.64	vline_man	14

4.65	workspace	14
4.66	weektick	14
4.67	xtick	14
4.68	xticklabel	14
4.69	ytick	14
4.70	yticklabel	15
5	aux	15
5.1	relpos	15
5.2	rightdiff	15
5.3	rmfield_optional	15
5.4	rvec	15
5.5	select	15
5.6	setfield_deep	15
5.7	setfields	15
5.8	sign2str	15
5.9	signs	16
5.10	simplifyignore	16
5.11	str_cell_reverse_index	16
5.12	struct2obj	16
5.13	struct_flat	16
5.14	sub2ind_man	16
5.15	subsall	16
5.16	swap	16
6	system	16
6.1	alloc	16
6.2	basename	17
6.3	cbrt	17
6.4	dirname	17
6.5	head	17
6.6	headstr	17
6.7	tail	17
7	aux	17
7.1	toInt32	17
7.2	unique_columnwise	17
7.3	unpack_struct	17
7.4	unwrap_periodic	18
7.5	up	18
7.6	zoomaxis	18

1 aux

1.1 Expanding_Double

2 adaptor

adaptors for backward compatibility for renamed files

2.1 Keller

3 aux

3.1 arabic2roman

3.2 autocat

3.3 bplus

3.4 btimes

3.5 centre_axis

3.6 circshift_fractional

3.7 colormap3

3.8 colormap_byr

3.9 copy_fields

3.10 count_occurence

3.11 cummax

3.12 cummean

3.13 cumstd

3.14 cumvar

3.15 cvec

3.16 diag3

3.17 `down`

3.18 `dspace`

3.19 `field_range`

3.20 `finite`

3.21 `flat`

3.22 `frac`

3.23 `getfield_deep`

3.24 `getout`

3.25 `imagesc_`

3.26 `innerspace`

3.27 `isfield_deep`

3.28 `isprop_deep`

3.29 `issym`

3.30 `iterate_cell`

3.31 `jmemory`

3.32 `leftdiff`

3.33 `leftmean`

3.34 `limits`

3.35 `linspace_man`

3.36 `linspace_man2`

3.37 `logspace_trimmed`

3.38 `matlab_messages`

3.39 `maxid`

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

3.40 `memsize`

3.41 `mlint_all`

3.42 `myhot`

3.43 `none`

3.44 `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 `errorbar_man`

4.21 `errorlines`

4.22 fetchsubplot

4.23 fillmarker

4.24 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
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

4.25 get_coordinates

4.26 hatch

4.27 hline

4.28 hold_color

4.29 hourspace

4.30 hourtick

4.31 interpplot

4.32 legendtitle

4.33 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
```

4.34 monthspace

4.35 monthtick

4.36 mycolourmap

4.37 namedfigure

4.38 nansurf

4.39 nmcolormap

4.40 patch_man

4.41 pdfprint

4.42 percenttick

4.43 plot2svg

```
" height="100%" viewBox="0 0 %0.3f %0.3f" ',paperpos(3),paperpos(4)
    );
    fprintf(fid,' <filter x="%0.3f%" y="%0.3f%" width="%0.3f%" 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
```

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

%%

4.44 plot_ellipse

4.45 `plot_style`

4.46 `plotshaded`

4.47 `ploty4`

4.48 `plotyyy`

4.49 `quadsurf`

4.50 `quadsurf2`

4.51 `quadsurf3`

4.52 `quiver3_man`

4.53 `quiver_man`

4.54 `quiver_man2`

4.55 `quiver_man3`

4.56 `rectangles`

4.57 `scaleplot`

4.58 `setfontsize`

4.59 `shade_night`

4.60 `splitfigure`

4.61 `turtle`

4.62 `velplot`

4.63 `vline`

4.64 `vline_man`

4.65 `weekspace`

4.66 `weektick`

4.67 `xtick`

4.68 `xticklabel`

4.69 `ytick`

4.70 `yticklabel`

5 `aux`

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_flat`

5.14 `sub2ind_man`

5.15 `subsall`

5.16 `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 `headstr`

6.7 tail

7 aux

7.1 toInt32

7.2 unique_columnwise

7.3 unpack_struct

7.4 unwrap_periodic

7.5 up

7.6 zoomaxis