

# Manual for Package: auxiliar

## Revision 22M

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## 1 @Compute\_Map

### 1.1 Compute\_Map

container class to store multiple scenarios

### 1.2 key

key for storing a scenario

function [key obj] = key(obj,varargin)

## 2 auxiliar

### 2.1 Container

## 2.2 Expanding Double

## 3 adaptor

adators for backward compatibility for renamed files

### 3.1 Constant

### 3.2 GSD

### 3.3 Keller

### 3.4 MMesh

### 3.5 SMesh

### 3.6 Slg

## 4 auxiliar

### 4.1 addpath\_recursive

recursively add a directory and sub-directories to the Matlab  
search path  
call `restoredefaultpath` to undo this

4.2 arabic2roman

4.3 autocat

4.4 bplus

4.5 btimes

4.6 centre\_axis

4.7 circshift\_fractional

4.8 cmap\_rolling

4.9 colormap3

4.10 colormap\_byr

4.11 copy\_fields



**4.12** `copyfields_deep`

**4.13** `count_occurence`

**4.14** `cummax`

**4.15** `cummean`

**4.16** `cumstd`

**4.17** `cumvar`

**4.18** `cvec`

make vector a column vector

**4.19** `dependencies_determine`

determine dependencies of a matlab function  
function dependencies\_determine(dep\_filename,profile\_filename,  
func\_C)

**4.20** `dependencies_fetch`

fetch the dependencies stored in other repositories

4.21 `diag3`

4.22 `diffn`

4.23 `dspace`

4.24 `field_range`

4.25 `fieldnames_deep`

4.26 `finite`

4.27 `fixnan3`

4.28 `flat`

reshape a (hyper)-matrix into a column vector

4.29 `folder_name_from_parameters`

4.30 `frac`

#### 4.31 getfield\_deep

function value = getfield\_deep(s,fieldname)

#### 4.32 getout

#### 4.33 hash\_float

#### 4.34 hash\_str

hash a string into a single number

#### 4.35 hashcode

#### 4.36 imagesc\_

#### 4.37 innerspace

linearly increasing vector sampled at mid-intervals

#### 4.38 int2byte

### 5 io/@IniFile

#### 5.1 IniFile

## **6 io**

### **6.1 Stream**

### **6.2 catXML**

### **6.3 csv2cell**

### **6.4 filewrite**

## **7 io/netcat**

### **7.1 nc**

### **7.2 nc\_read\_row**

### **7.3 nc\_read\_sequential**

### **7.4 nc\_read\_sequential\_column**

### **7.5 nc\_readall**

## 7.6 nc\_writeall

# 8 io

## 8.1 parseXML

## 8.2 printdef

## 8.3 printf

print values to standard output

## 8.4 save\_

## 8.5 xml2struct

# 9 auxiliar

## 9.1 isfield\_deep

## 9.2 isfieldorprop

## 9.3 isprop\_deep

## 9.4 issym

return true of variable is symbolic

## 9.5 iterate\_cell

## 9.6 jmemory

## 9.7 labelline

## 9.8 leftdiff

## 9.9 leftmean

## 9.10 limits

## 9.11 linspace\_man

## 9.12 linspace\_man2

## 9.13 logspace\_trimmed

## 9.14 matlab\_messages

## 9.15 maxid

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

## 9.16 memsize

## 9.17 mlint\_all

## 9.18 myhot

## 9.19 none

## 9.20 objcopy

# 10 plot

## 10.1 addx

## 10.2 addy

10.3 `adjust_quiver_arrowhead_size`

10.4 `area_man`

10.5 `arrow`

10.6 `axis_equal_man`

10.7 `candlestick_man`

10.8 `circle`

10.9 `cmap`

10.10 `colormap_man`

10.11 `colormap_man2`

10.12 `colormap_man_old`



**10.13**   **columnlegend**

**10.14**   **copyaxes**

**10.15**   **datetick\_man**

**10.16**   **daytick**

**10.17**   **dcolormap**

**10.18**   **dots**

**10.19**   **errorarea**

**10.20**   **errorarea2**

plot area around a curve

**10.21**   **errorbar\_man**

**10.22**   **errorlines**

**10.23**   **fetchsubplot**

**10.24**   **fillmarker**

**10.25**   **get\_coordinates**

**10.26**   **hatch**

**10.27**   **hline**

`plot a horizontal line`

**10.28**   **hold\_color**

**10.29**   **hourspace**

**10.30**   **hourtick**

**10.31**   **interpplot**

**10.32**   **legendtitle**

### 10.33 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
```

### 10.34 monthspace

### 10.35 monthtick

### 10.36 mycolourmap

### 10.37 namedfigure

```
create a figure and set its window title
```

### 10.38 nansurf

### 10.39 nmcolormap

### 10.40 patch\_man

## 10.41 pdfprint

print a pdf-file for a figure

10.42 percenttick

### 10.43 plot2svg

[illegible]

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

10.44 `plot_ellipse`

10.45 `plot_style`

10.46 `plotshaded`

10.47 `ploty4`

10.48 `plotyyy`

10.49 `quadsurf`

10.50 `quadsurf2`

10.51 `quadsurf3`

10.52 `quiver3_man`

10.53 `quiver_man`

10.54 `quiver_man2`

10.55 `quiver_man3`

10.56 `rectangles`

10.57 `scaleplot`

10.58 `setfontsize`

10.59 `shade_night`

## 10.60 splitfigure

combined figure and subplot

## 10.61 turtle

## 10.62 velplot

## 10.63 vline

plot a vertical line

## 10.64 vline\_man

## 10.65 weekspace

## 10.66 weektick

## 10.67 xtick

## 10.68 xticklabel

## 10.69 ytick

wrapper for setting yticks

## 10.70 yticklabel

# 11 auxiliar

## 11.1 relpos

## 11.2 reshape\_conditional

## 11.3 rightdiff

## 11.4 rmfield\_deep

## 11.5 rmfield\_optional

## 11.6 rvec

reshape input vector to a column vector

## 11.7 select

select columns of a vector along dimension dim



## 11.8 setfield\_behind

## 11.9 setfield\_deep

set values of a struct or object, fieldnames can have sub-fields indicated by dots

## 11.10 setfields

## 11.11 sign2str

## 11.12 signs

## 11.13 simplifyignore

## 11.14 str\_cell\_reverse\_index

# 12 strings

## 12.1 chomp

## 12.2 chomp1

### 12.3 num2str\_log10

### 12.4 num2str\_power\_10

### 12.5 strjoin

join a cell array of strings

### 12.6 strsplit\_man

### 12.7 suffix

## 13 auxiliar

### 13.1 struct2obj

### 13.2 struct\_avg

### 13.3 struct\_flat

### 13.4 structcopy\_deep

### 13.5 structfun\_deep

### 13.6 sub2ind\_man

### 13.7 subsall

### 13.8 swap

## 14 system

emulate POSIX and BASH functions

### 14.1 alloc

### 14.2 basename

strip the directory from a filename

### 14.3 cbrt

### 14.4 dirname

strip file-name from path

14.5 head

14.6 head\_str

14.7 tail

14.8 tail\_str

## 15 auxiliar

15.1 table2struc\_man

15.2 table2tex

15.3 toInt32

15.4 unique\_columnwise

15.5 unpack\_struct

15.6 `unwrap_periodic`

15.7 `zoomaxis`