

NAME

mtbestfit – helper function autogenerates run2.csh script to produce finalized moment tensor solution in the MTINV workflow. Also autogenerates a mteig.csh script to produce Network Sensitivity Solution (NSS) projected on lune.

SYNOPSIS

mtbestfit [no]force_best_vred evid={long} [no]gmt5 [no]pretty_plot [no]db [no]mteig decimate_factor={float} [no]use_ts0 [no]help

DESCRIPTION

reads a file named automt.txt and autogenerates scripts to make plots for real-time version See mtbestfit.c
fit_max_threshold = 20 vred_diff_threshold = 30

The script run.csh cleans out automt.txt after every run. At each iteration, mtinv appends new entry to automt.txt. mtbestfit reads automt.txt and creates a custom file run2.csh. The helper application also autogenerates a template web page file index.html using fixed output file names.

for mtdegfree = 1 and mtdegfree = 6, the metric used in variance reduction (VR)
for mtdegfree = 5, the metric used is $VR / (100 - \%DC)$
the metric types and actual values are printed at the top of the run2.csh script comments

REQUIRED PARAMETERS

none

OPTIONAL PARAMETERS

[no]force_best_vred

(boolean) the use of max variance reduction instead of $VR/(100-\%DC)$.

evid={long}

carry along the EventID (default -1 off)

[no]gmt5

(boolean) use gmt5+ instead of default gmt4

[no]db (boolean) load the database insert.sql script default on

[no]mteig

(boolean) creates mteig.csh script to do NSS lune plots default off (note only valid when mtdegfree=6) default off

decimate_factor={float}

decimation factor, only allows 1,2,4,8 default 2 so if nt=1024 then nt=512 (default 1)

[no]use_ts0

in mteig mode, use station time-shifts, default true, otherwise reset to zero (default on)

[no]help

(boolean) prints usage default off. Since program runs normally with no args need help to force usage print.

EXAMPLE

```
mtbestfit gmt5 evid=-1 db pretty_plot noforce_best_vred mteig decimate_factor=2
```

SEE ALSO

mkgrnlib(1), glib2sac(1), mtinv(1)