

Configuration File for *mloc*

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Beginning with *mloc* v9.9.0 (release date 9/30/2013), the specification of certain environmental variables was moved out of the code, into a configuration file that is read when the program is launched. Experience showed that some aspects of that design were flawed. With *mloc* v10.2.9, release date 12/16/2015, the configuration file has been modified in important ways, such that previous configuration files will need to be edited. This document describes the configuration file as of *mloc* v10.2.9 (release date 12/16/2015).

The biggest change is that the configuration file now uses keywords to define the nature of each line, rather than requiring a specific number and order of lines. All elements have default values defined in the code itself, so it is not necessary to set all possible keywords if the default values are correct for your installation of *mloc*.

Filename and Path of the Configuration File

The name of the configuration file is ‘*mloc.conf*’ and it must be found in the same directory as the executable *mloc*.

Keywords

The currently-defined keywords are listed here. The keyword starts in column 1 of the configuration file and is always followed by a colon and a blank, before the argument.

WORKING_DIR:

Defines “*mloc_path*”: The full pathname of the directory in which the *mloc* executable and the configuration file reside. I refer to this directory as the “working” directory. Maximum 100 characters. The default value is ‘ ’, which will almost never be correct, so all configuration files should carry a line with the ‘**WORKING_DIR:** ’ keyword.

AUTHOR:

Defines “*mloc_author*”: a code for the person running *mloc*. This code will be written into the **.datf** file as the author of the location (“origin”) in the hypocenter record (MNF v1.3 format), and it will show up in the **.summary** file and perhaps some other output files. Maximum 8 characters. The default value is ‘**default**’; it is highly recommended that all users of *mloc* set an author code for themselves.

STATION_MASTER:

Defines the name of the file that is to be used as the master station file. This is only the name of the file, not the path. The master station file is expected to be found in the **tables/stn** subdirectory under the *mloc* working directory. If necessary, the path can be changed in *mloc.f90*, and the program will need to be re-compiled. The default value of the master station file is '**master_stn.dat**', the master station file normally distributed with *mloc*. Therefore, in a standard installation there is no need to use this keyword.

GMT_VER:

Defines the version of GMT that will be used for plots. The only acceptable arguments are '4' or '5'. GMT4 is deprecated, and recent development of the plotting capabilities, such as the empirical path anomaly plots (command '**epap**') are available only under GMT5. The default is GMT5, so it is only necessary to use this keyword if you are still using GMT4.

SHELL:

Defines the operating system shell to be used in formulating GMT scripts. Supported arguments are '**csh**' and '**bash**'. The default is '**bash**'. The command '**shel**', which formerly was used for this purpose, has been removed.

A Sample Configuration File

The *mloc.conf* file that I use is distributed with *mloc* but it must be customized for each new installation. My configuration file consists of only two lines:

```
WORKING_DIR: /Users/eab/Documents/Seismology/Projects/Software/mloc/  
mloc_working  
AUTHOR: EBergman
```

All other values (master station file, GMT version and shell) that could be set in the configuration file are satisfied by the defaults for my installation.