

Chapter 1

METplus System Configuration

This chapter is a guide on configuring METplus.

1.1 Config Best Practices

Below is a list of Best Practices:

1. Set your log level to an appropriate level.
 - (a) Debug is the most verbose and is useful for developers and when you are troubleshooting problems
 - (b) Info is the less verbose than Debug and is the recommended level to initially set your log level
 - (c) Warning - only logs warnings, error or critical events
 - (d) Error - only logs errors or critical events
 - (e) Critical is the least verbose
2. Direct your logging either to stdout or to a log file.
3. Review your log file to verify that all your processes ran cleanly.
4. The order in which you list your METplus config files matter. The last config file on the command line will over-ride any key-values defined in an earlier config file.
5. Check the master_metplus.conf file, as it contains all the key-values based on what you have specified. This will help you determine whether you forgot to replace any */path/to* with valid paths or to verify that you have defined things as you expected.

1.2 Config File Structure

METplus employs a hierarchy of configuration files employed in METplus. At the lowest level are the “set-and-forget” type configuration files that reside in the *METplus_installation_dir/parm/metplus_configl*. At the next level are the configuration files that pertain to a user’s specific needs in the *METplus_installation_dir/parm/use_cases/specific_use_case*.

- Four configuration files are required for METplus to be fully configured (i.e. all keywords are defined by either whitespace or a valid value):
 - metplus_system
 - metplus_data
 - metplus_logging
 - metplus_runtime

By default, key-values that require the user’s input are set to */path/to*. Make sure to replace these with the appropriate directory for your project.

- Additional configuration files are optional and the key-values defined there will over-ride any values defined in the four mandatory METplus configuration files. These additional configuration files enables users to use a common set of configuration files and to create customized environments for their verification tasks.

1.3 Config Quick Start Example

Track and Intensity Use case with sample data

- Create a directory where you wish to store the sample data
- Retrieve the sample data from the GitHub repository:
 - In your browser, navigate to <https://github.com/NCAR/METplus/releases>
 - locate the latest release and click on the sample_data.tar.gz link associated with that release
 - save it to the directory you created above, hereafter referred to as INPUT_DATA_DIRECTORY
 - cd to your \$INPUT_DATA_DIRECTORY and uncompress the tarball: `tar xvfz sample_data.tar.gz`
 - when you perform a listing of the sample_data directory, the INPUT_DATA_DIRECTORY/sample_data/GFS contains the data you will need for this use case
- Set up the configuration file:
 - Your METplus install directory will hereafter be referred to as METplus_INSTALL

- Verify that all the *path/to* values are replaced with valid paths in the METplus_INSTALL/parm/metplus_conf/mc and METplus_INSTALL/parm/metplus_conf/metplus_system.conf files
- Two configuration files are used in this use case, track_and_intensity.conf file and tcpr_mean_median.conf to take cyclone track data, and using tc_pairs_wrapper.py which wraps the MET TC-Pairs tool (to match ADeck and BDeck cyclone tracks to generate matched pairs and error statistics). The tcpr_plotter_wrapper.py is then used (wraps the MET tool plot_tcpr.R) to generate a mean and median plots for these matched pairs.
- In your editor, open the METplus_INSTALL/METplus/parm/use_cases/track_and_intensity.conf file:
 - * You will replace any */path/to* with actual paths by setting the following:
 - * METPLUS_BASE to the path to where you installed METplus with 'ush': METplus_INSTALL/all_users/METplus
 - * PARM_BASE to the path to where you installed METplus, appended with with 'parm': METplus_INSTALL/all_users/METplus/parm
 - * OUTPUT_BASE to where you wish to save the output:
 - ADECK_TRACK_DATA_DIR to INPUT_DATA_DIRECTORY/sample_data/GFS/track_data
 - * save your changes and exit your editor
 - * In your editor, open the METplus_INSTALL/METplus/parm/use_cases/track_and_intensity/examples/tcpr_mean_median.conf file
 - * Verify that PROCESS_LIST is set to TcPairs, TCMRPlotter. This instructs METplus to run the TcPairs wrapper first (TC-Pairs) followed by the TCMR plotter wrapper (plot_TCMR.R).
 - Run the use case:
 - Make sure you have set the following environment in your .cshrc (C shell) or .bashrc (Bash):
 - * csh: setenv RSCRIPTS_BASE \$MET_BASE/scripts/Rscripts
 - * bash: export RSCRIPTS_BASE \$MET_BASE/scripts/Rscripts
 - * Refer to Section 2.7 for the full instructions on setting up the rest of your environment
 - * on your command line, run:
 - master_metplus.py -c use_cases/track_and_intensity/track_and_intensity.conf -c use_cases/track_and_intensity/examples/tcpr_mean_median.conf
 - * When complete, you will have a log file in the output directory you specified, and under the tc_pairs directory you will see .tst files under the 201412 subdirectory. These are the matched pairs created by the MET tool Tc-pairs and can be viewed in any text editor.
 - * Plots are generated under the tcpr_plots subdirectory, in .png format. You should have the following plots which can be viewed by any graphics viewers such as 'display' on Linux/Unix hosts:
 - AMAX_WIND-BMAX_WIND_mean.png
 - AMAX_WIND-BMAX_WIND_median.png
 - AMSLP-BMSLP_mean.png
 - AMSLP-BMSLP_median.png
 - TK_ERR_mean.png
 - TK_ERR_median.png

1.4 A-Z Config Glossary

This glossary was created from the two commands:

```
$ cat METplus/parm/metplus_config/*.conf METplus/parm/use_cases/**/*.conf METplus/parm/use_cases/**/*.conf
> allopts.conf
$ grep = allopts.conf | grep -v \# | sort | uniq > uniqueopts.conf
```

General form of glossary entry:

CONFIG_NAME_HERE

...Some description here...

Used by: Which METplus utility is this used by?

Family: Which family? [dir], [config], [filename_templates], [exe], [regex_pattern], etc...

Default: If it makes sense to include a default value (or value shipped in a release), do it here

1.4.1 A

ADECK_FILE_PREFIX

Prefix of the files in ATCF format containing tropical cyclone forecast data (“adeck” matched pairs).

Used by: tc_pairs_wrapper.py

Family: [config]

Default: Varies

ADECK_TRACK_DATA_DIR

Directory that contains the ATCF formatted files containing tropical cyclone forecast data (“adeck” matched pairs).

Used by: tc_pairs_wrapper.py

Family: [dir]

Default: Varies

AMODEL

The model name of the ADeck model data

Used by: cyclone_plotter_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default:

ANLY_ASCII_REGEX_LEAD

The regular expression describing the analysis (obs) file name (in ASCII format) of the intermediate file generated when running a series by lead case.

Used by: series_by_lead_wrapper.py

Family: [regex_pattern]

Default:

ANLY_NC_TILE_REGEX

The regular expression used to search the input files that are in netCDF format and used in the series by analysis task.

Used by: series_by_lead_wrapper.py, series_by_init_wrapper.py

Family: [regex_pattern]

Default:

ANLY_TILE_PREFIX

The prefix to the filename for the analysis file that is created as part of a series analysis.

Used by: feature_util.py

Family: [regex_pattern]

Default:

ANLY_TILE_REGEX

The regular expression for the analysis input file the file is in GRIB2.

Used by: series_by_lead_wrapper.py, series_by_init_wrapper.py

Family: [regex_pattern]

Default:

1.4.2 B

BACKGROUND_MAP

Control whether or not a background map shows up for series analysis plots. Set to 'yes' if background map desired.

Used by: series_by_lead_wrapper.py, series_by_init_wrapper.py

Family: [config]

Default: no

BASIN

Control what basins are desired for tropical cyclone analysis.

Per the MET users' guide, acceptable basin ID's are:

WP = Western Northern Pacific

IO = Northern Indian Ocean

SH = Southern Hemisphere
 CP = Central Northern Pacific
 EP = Eastern Northern Pacific
 AL = Northern Atlantic
 SL = Southern Atlantic

Used by: cyclone_plotter_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

BDECK_FILE_PREFIX

Relevant for non-ATCF tropical cyclone data. The filename prefix for the BDeck data.

Used by: tc_pairs_wrapper.py

Family: [config]

Default: Varies

BDECK_TRACK_DATA_DIR

The input directory where the BDeck track data resides.

Used by: tc_pairs_wrapper.py

Family: [dir]

Default: Varies

BEG_TIME

Beginning time for analysis in YYYYMMDD format.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

BMODEL

The model name of the BDeck model data.

Used by: tc_stat_wrapper.py

Family: [config]

Default:

1.4.3 C

CIRCLE_MARKER_SIZE

Control the size of the circle marker in the cyclone plotter.

Used by: cyclone_plotter_wrapper.py

Family: [config]

Default: 41

CONFIG_DIR

Directory containing config files relevant to MET tools.

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py

Family: [dir]

Default: Varies

CONFIG_FILE

Specific configuration file name to use for MET tools.

Used by: grid_stat_wrapper.py, mode_wrapper.py, tcmpr_plotter_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

CONVERT_EXE

Path to the ImageMagick “convert” executable.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py, series_by_init_wrapper.py, series_by_lead_wrapper.py

Family: [exe]

Default: /path/to

CROSS_MARKER_SIZE

Control the size of the cross marker in the cyclone plotter.

Used by: cyclone_plotter_wrapper.py

Family: [config]

Default: 51

CUT_EXE

Path to the Linux “cut” executable.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [exe]

Default: /path/to

CYCLONE

Specify which cyclone numbers to include in the tropical cyclone analysis. Per the MET users’ guide, this can be any number 01-99 (HH format). Use a space or comma separated list, or leave unset if all cyclones are desired.

Used by: tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

CYCLONE_INIT_DATE

Initialization date for the cyclone forecasts in YYYYMMDD format.

Used by: cyclone_plotter_wrapper.py

Family: [config]

Default: Varies

CYCLONE_INIT_HR

Initialization hour for the cyclone forecasts in HH format.

Used by: cyclone_plotter_wrapper.py

Family: [config]

Default: Varies

CYCLONE_INPUT_DIR

Input directory for the cyclone plotter. This should be the output directory for the MET TC Pairs utility.

Used by: cyclone_plotter_wrapper.py

Family: [dir]

Default: Varies

CYCLONE_MODEL

Define the model being used for the tropical cyclone forecasts.

Used by: cyclone_plotter_wrapper.py

Family: [config]

Default: Varies

CYCLONE_OUT_DIR

Specify the directory where the output from the cyclone plotter should go.

Used by: cyclone_plotter_wrapper.py

Family: [dir]

Default: Varies

CYCLONE_PLOT_TITLE

Title string for the cyclone plotter.

Used by: cyclone_plotter_wrapper.py

Family: [config]

Default: Varies

1.4.4 D

DEMO_YR

The demo year. This is an optional value used by the plot_TCMPR.R script, (which is wrapped by tcmpr_plotter_wrapper.py). Please refer to Chapter 21 in the MET User's Guide for more details.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

DEP_VARS

Corresponds to the optional flag -dep in the plot_TCMPR.R, which is wrapped by tcmpr_plotter_wrapper.py. The value to this flag is a comma-separated list of dependent variable columns to plot. Please refer to Chapter 21 in the MET User's Guide for more details.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

DLAND_FILE

The file generated by the MET tool tc_dland, containing the gridded representation of the minimum distance to land. Please refer to Chapter 18 of the MET User's Guide for more information about the tc_dland tool.

Used by: tc_pairs_wrapper.py

Family: [config]

Default: Varies

DLAT

The latitude value, in degrees.

Used by: met_util.py

Family: [config]

Default: 0.5

DLON

The longitude value, in degrees.

Used by: met_util.py

Family: [config]

Default: 0.5

1.4.5 E

EGREP_EXE

Path to the Linux “egrep” executable.

Used by: feature_util.py, pb2nc_wrapper.py, point_stat_wrapper.py

Family: [exe]

Default: /path/to

END_DATE

Ending time/date string for analysis with format YYYYMMDDHH.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

END_HOUR

Ending hour for analysis with format HH.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

END_TIME

Ending date string for analysis with format YYYYMMDD.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

EXTRACT_OUT_DIR

Set the output directory for the METplus extract_tiles utility.

Used by: extract_tiles_wrapper.py, series_by_init_wrapper.py, series_by_lead_wrapper.py

Family: [dir]

Default: Varies

EXTRACT_TILES_FILTER_OPTS

Control what options are passed to the METplus extract_tiles utility.

Used by: extract_tiles_wrapper.py

Family: [config]

Default: Varies

EXTRACT_TILES_VAR_LIST

Control what variables the METplus extract_tiles utility runs on.

Used by: feature_util.py

Family: [config]

Default: Varies

1.4.6 F

FCST_1_FIELD_NAME

This variable is used to define a 1 hour accumulation field in the forecast dataset used in the MET tool pcp_combine.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

FCST_6_FIELD_NAME

This variable is used to define a 6 hour accumulation field in the forecast dataset used in the MET tool pcp_combine.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

FCST_ASCII_REGEX_LEAD

Regular expression used to find the forecast file (ASCII format) generated as an intermediate step in the series by lead use case.

Used by: series_by_lead_wrapper.py

Family: [regex_pattern]

Default: Varies

FCST_GEMPAK_INPUT_DIR

Input directory for GEMPAK formatted forecast files.

Used by: pcp_combine_wrapper.py

Family: [dir]

Default: Varies

FCST_GEMPAK_TEMPLATE

Template used to specify input filenames for GEMPAK formatted forecast files.

Used by: pcp_combine_wrapper.py

Family: [filename_templates]

Default: Varies

FCST_GRID_STAT_INPUT_DIR

Input directory for forecast files to use with the MET tool grid_stat.

Used by: ensemble_stat_wrapper.py, grid_stat_wrapper.py

Family: [dir]

Default: Varies

FCST_GRID_STAT_INPUT_TEMPLATE

Template used to specify input filenames for the MET tool grid_stat.

Used by: grid_stat_wrapper.py, grid_stat_wrapper.py

Family: [filename_templates]

Default: Varies

FCST_HR_END

Specify the maximum forecast hour to use.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

FCST_HR_INTERVAL

Specify the stride for forecast lead times.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

FCST_HR_START

Specify the starting forecast hour to use.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

FCST_INIT_INTERVAL

Specify the stride for forecast initializations.

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py

Family: [config]

Default: Varies

FCST_INPUT_DIR_REGEX

Specify the regular expression used for searching for forecast file input directories.

Used by: point_stat_wrapper.py

Family: [regex_pattern]

Default: Varies

FCST_INPUT_DIR

Specify the input directory for the forecast files.

Used by: compare_gridded_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py, point_stat_wrapper.py, pcp_combine_wrapper.py

Family: [dir]

Default: Varies

FCST_INPUT_FILE_REGEX

Regular expression to use when identifying which forecast file to use.

Used by: point_stat_wrapper.py

Family: [regex_pattern]

Default: Varies

FCST_INPUT_FILE_TMPL

Specify the filename template for input forecast files.

Used by: point_stat_wrapper.py

Family: [filename_templates]

Default: Varies

FCST_IS_DAILY_FILE

Specify whether the forecast file is a daily file or not.

Acceptable values: true/false

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

FCST_IS_PROB

Specify whether the forecast data are probabilistic or not.

Acceptable values: true/false

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py

Family: [config]

Default: Varies

FCST_LEVEL

Specify what accumulation level should be used from the forecast data for the analysis.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

FCST_MAX_FORECAST

Specify the maximum forecast lead time to use for the analysis.

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py

Family: [config]

Default: Varies

FCST_MXUPHL_5000-2000_THRESH

Deprecated.

Used by:

Family:

Default:

FCST_NATIVE_DATA_TYPE

Specify the data format of the forecast data.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

FCST_NC_TILE_REGEX

Define the regular expression for input forecast files that are in netCDF.

Used by: series_by_lead_wrapper.py, series_by_init_wrapper.py

Family: [regex_pattern]

Default: Varies

FCST_PCP_COMBINE_INPUT_DIR

Specify the input directory for forecast files used with the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [dir]

Default: Varies

FCST_PCP_COMBINE_INPUT_TEMPLATE

Template used to specify input filenames for forecast files used by the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [filename_templates]

Default: Varies

FCST_PCP_COMBINE_OUTPUT_DIR

Specify the output directory for forecast files generated by the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [dir]

Default: Varies

FCST_PCP_COMBINE_OUTPUT_TEMPLATE

Template used to specify output filenames for forecast files generated by the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [filename_templates]

Default: Varies

FCST_PCP_COMBINE_RUN

Specify whether to run the MET pcp_combine tool on forecast data or not.

Acceptable values: true/false

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

FCST_REFC_0_THRESH

Deprecated.

Used by:

Family:

Default:

FCST_REGRID_DATA_PLANE_TEMPLATE

Template used to specify filenames for forecast data used by the MET regrid_data_plane tool.

Used by: regrid_data_plane_wrapper.py

Family: [filename_templates]

Default: Varies

FCST_TILE_PREFIX

Prefix for forecast tile files. Used to create filename of intermediate files that are created while performing a series analysis.

Used by: feature_util.py

Family: [regex_pattern]

Default: Varies

FCST_TILE_REGEX

Regular expression for forecast input files that are in GRIB2.

Used by: series_by_init_wrapper.py, series_by_lead_wrapper.py

Family: [regex_pattern]

Default: Varies

FCST_VAR

Define the name of the forecast variable to be used in the analysis.

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, make_plots_wrapper.py, met_util.py

Family: [config]

Default: Varies

FCST_VAR1_LEVELS

Define the levels for the first forecast variable to be used in the analysis. There can be N number of these variables defined in configuration files, simply increment the “_VAR1_” string to match the total number of variables being used, e.g.:

FCST_VAR1_LEVELS

FCST_VAR2_LEVELS

.

.

.

FCST_VARN_LEVELS

Used by: make_plots_wrapper.py, met_util.py

Family: [config]

Default: Varies

FCST_VAR1_NAME

Define the name for the first forecast variable to be used in the analysis. There can be N number of these variables defined in configuration files, simply increment the “_VAR1_” string to match the total number of variables being used, e.g.:

FCST_VAR1_NAME

FCST_VAR2_NAME

.

.

FCST_VARN_NAME

Used by: make_plots_wrapper.py, met_util.py

Family: [config]

Default: Varies

FCST_VAR1_OPTIONS

Define the options for the first forecast variable to be used in the analysis. There can be N number of these variables defined in configuration files, simply increment the “_VAR1_” string to match the total number of variables being used, e.g.:

FCST_VAR1_OPTIONS

FCST_VAR2_OPTIONS

.

.

.

FCST_VARN_OPTIONS

Used by: make_plots_wrapper.py, met_util.py

Family: [config]

Default: Varies

FCST_VAR1_THRESH

Define the threshold(s) for the first forecast variable to be used in the analysis. There can be N number of these variables defined in configuration files, simply increment the “_VAR1_” string to match the total number of variables being used, e.g.:

FCST_VAR1_THRESH

FCST_VAR2_THRESH

.

.

.

FCST_VARN_THRESH

Used by: met_util.py

Family: [config]

Default: Varies

FHR_BEG

Specify the first forecast lead time to use in the analysis. Use in combination with FHR_END and FHR_INC.

Used by: series_by_lead_wrapper.py

Family: [config]

Default: Varies

FHR_END

Specify the last forecast lead time to use in the analysis. Use in combination with FHR_BEG and FHR_INC.

Used by: series_by_lead_wrapper.py

Family: [config]

Default: Varies

FHR_GROUP_BEG

Define which forecast lead time should be first in a group of forecast leads to use in the analysis. Use in combination with FHR_GROUP_END and FHR_INC.

Example:

FHR_GROUP_BEG = 24

FHR_GROUP_END = 42

FHR_INC = 6

List of forecast leads processed: [24, 30, 36, 42]

Used by: series_by_lead_wrapper.py

Family: [config]

Default: Varies

FHR_GROUP_END

Define which forecast lead time should be the last in a group of forecast leads to use in the analysis. Use in combination with FHR_GROUP_BEG and FHR_INC.

Example:

FHR_GROUP_BEG = 24

FHR_GROUP_END = 42

FHR_INC = 6

List of forecast leads processed: [24, 30, 36, 42]

Used by: series_by_lead_wrapper.py

Family: [config]

Default: Varies

FHR_GROUP_LABELS

Label strings to use for the forecast groups.

Used by: series_by_lead_wrapper.py

Family: [config]

Default: Varies

FHR_INC

Stride to use for incrementing forecast lead times used in the analysis. Use in combination with FHR_BEG and FHR_END or FHR_GROUP_BEG and FHR_GROUP_END.

Used by: series_by_lead_wrapper.py

Family: [config]

Default: Varies

FILTER

Corresponds to the optional -filter argument to the plot_TCMR.R script which is wrapped by tcmr_plotter_wrapper.py. This is a list of filtering options for the tc_stat tool.

Used by: tcmr_plotter_wrapper.py

Family: [config]

Default: Varies

FILTERED_TCST_DATA_FILE

Corresponds to the optional -tcst argument to the plot_TCMR.R script which is wrapped by tcmr_plotter_wrapper.py. This is a tcst data file to be used instead of running the tc_stat tool. Indicate a full path to the data file.

Used by: tcmr_plotter_wrapper.py

Family: [config]

Default: Varies

FOOTNOTE_FLAG

This corresponds to the optional -footnote flag in the plot_TCMR.R script which is wrapped by tcmr_plotter_wrapper.py. According to the plot_TCMR.R usage, this flag is used to disable footnote (date).

Used by: tcmr_plotter_wrapper.py

Family: [config]

Default: Varies

FORECAST_TMPL

Filename template used to filter forecast files.

Used by: tc_pairs_wrapper.py

Family: [filename_templates]

Default: Varies

FOURIER_HEIGHT_DECOMP

Specify whether to perform a Fourier height decomposition or not.

Acceptable values: true/false

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

1.4.7 G

GEMPAKTOCF_INPUT_DIR

Specify the input directory for the tool used to convert GEMPAK files to netCDF.

Used by: gempak_to_cf_wrapper.py

Family: [dir]

Default: Varies

GEMPAKTOCF_INPUT_TEMPLATE

Filename template used for input files to the tool used to convert GEMPAK files to netCDF.

Used by: gempak_to_cf_wrapper.py

Family: [filename_templates]

Default: Varies

GEMPAKTOCF_OUTPUT_DIR

Specify the output directory for files generated by the tool used to convert GEMPAK files to netCDF.

Used by: gempak_to_cf_wrapper.py

Family: [dir]

Default: Varies

GEMPAKTOCF_OUTPUT_TEMPLATE

Filename template used for output files from the tool used to convert GEMPAK files to netCDF.

Used by: gempak_to_cf_wrapper.py

Family: [filename_templates]

Default: Varies

GENERATE_TRACK_ASCII

Specify whether or not to produce an ASCII file containing all of the tracks in the plot.

Acceptable values: true/false

Used by: cyclone_plotter_wrapper.py

Family: [conf]

Default: Varies

GEN_SEQ

Deprecated.

Used by:

Family:

Default:

GFS_ONLY_FILE_TMPL

Filename template used to identify the GFS analysis file.

Used by: feature_util.py

Family: [filename_templates]

Default: Varies

GFS_FCST_FILE_TMPL

Filename templated used to identify the GFS forecast files.

Used by: feature_util.py

Family: [filename_templates]

Default: Varies

GRID_STAT_CONFIG

Specify the absolute path to the configuration file used by the MET grid_stat tool.

Used by: grid_stat_wrapper.py

Family: [config]

Default: Varies

GRID_STAT_OUT_DIR

Specify the output directory where files from the MET grid_stat tool are written.

Used by: grid_stat_wrapper.py

Family: [dir]

Default: Varies

1.4.8 H

HFIP_BASELINE

Corresponds to the optional -hfip_bsln flag in the plot_TCMR.R script which is wrapped by tcpr_plotter_wrapper.py. This is a string that indicates whether to add the HFIP baseline, and indicates the version (no, 0, 5, 10 year goal).

Used by: tcpr_plotter_wrapper.py

Family: [config]

Default: Varies

1.4.9 I

INIT_BEG

Specify the beginning initialization time to be used in the analysis. Format can be controlled by INIT_TIME_FMT.

Used by: command_builder.py, extract_tiles_wrapper.py, make_plots_wrapper.py, master_metplus.py, stat_analysis_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

INIT_BEG_HOUR

Specify the beginning initialization hour to be used in the analysis. Format is HH.

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

INIT_END

Specify the ending initialization time to be used in the analysis. Format can be controlled by INIT_TIME_FMT.

Used by: command_builder.py, extract_tiles_wrapper.py, make_plots_wrapper.py, master_metplus.py, stat_analysis_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

INIT_END_HOUR

Specify the ending initialization hour to be used in the analysis. Format is HH.

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

INIT_EXCLUDE

Specify which, if any, forecast initializations to exclude from the analysis.

Used by: tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

INIT_HOUR_END

Specify the ending initialization hour to be used in the analysis. Format is HH.

Used by: extract_tiles_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

INIT_INCLUDE

Specify which forecast initializations to include in the analysis.

Used by: tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

INIT_INCREMENT

Control the increment or stride to use when stepping between forecast initializations. Units are seconds.

Used by: command_builder.py, extract_tiles_wrapper.py, make_plots_wrapper.py, master_metplus.py, stat_analysis_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

INIT_TIME_FMT

Specify a formatting string to use for INIT_BEG and INIT_END.

Used by: command_builder.py, master_metplus.py

Family:

Default:

INTERVAL_TIME

Define the interval time in hours (HH) to be used by the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

1.4.10 J

1.4.11 K

1.4.12 L

LAT_ADJ

Specify a latitude adjustment, in degrees to be used in the analysis.

Used by: met_util.py

Family: [config]

Default: Varies

LEAD

For cyclone_plotter_wrapper.py, this refers to the column of interest in the input ASCII cyclone file.

In the tcmpr_plotter_wrapper.py, this corresponds to the optional -lead argument in the plot_TCMPR.R script (which is wrapped by tcmpr_plotter.py). This argument is set to a comma-separated list of lead times (h) to be plotted.

In feature_util.py, this corresponds to the name of the column of interest in the input ASCII data file.

In tc_stat_wrapper.py, this corresponds to the name of the column of interest in the input ASCII data file.

Used by: cyclone_plotter_wrapper.py, tcmpr_plotter_wrapper.py, feature_util.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

LEAD_LIST

Specify a list of forecast leads to include in the analysis. Comma separated list format, e.g.:

0, 24, 48, 72, 96, 120

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

LEAD_SEQ

Specify the sequence of forecast lead times to include in the analysis. Comma separated list format, e.g.:

0, 6, 12

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, gempak_to_cf_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py, reformat_gridded_wrapper.py

Family: [config]

Default: Varies

LEGEND

The text to be includede in the legend of your plot.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

LOG_DIR

Specify the directory where log files from MET and METplus should be written.

Used by: command_builder.py, met_util.py

Family: [dir]

Default: Varies

LOG_LEVEL

Specify the level of logging.

Everything above this level is sent to standard output. To quiet the output to a comfortable level, set this to “ERROR”.

Options (ordered MOST verbose to LEAST verbose):

NOTSET

DEBUG

INFO

WARNING

ERROR

CRITICAL

Used by: met_util.py

Family: [config]

Default: Varies

LOG_METPLUS

Control the filename of the METplus log file. Control the timestamp appended to the filename with LOG_TIMESTAMP_TEMPLATE. To turn OFF all logging, do not set this option.

Used by: master_metplus.py, met_util.py

Family: [config]

Default: Varies

LOG_MET_OUTPUT_TO_METPLUS

Control whether logging output from the MET tools is sent to the METplus log file, or individual log files for each MET tool.

Used by: command_runner.py

Family: [config]

Default: yes/no

LOG_MET_VERBOSITY

Control the verbosity of the logging from the MET tools.

0 = Least amount of logging (lowest verbosity)

5 = Most amount of logging (highest verbosity)

Used by: command_builder.py

Family: [config]

Default: 2

LOG_TIMESTAMP_TEMPLATE

Set the timestamp template for the METplus log file. Use Python strftime directives, e.g. %Y%m%d for YYYYMMDD.

Used by: met_util.py

Family: [config]

Default: %Y%m%d

LON_ADJ

Specify a longitude adjustment, in degrees to be used in the analysis.

Used by: met_util.py

Family: [config]

Default: Varies

LOOP_BY_INIT

Control whether the analysis is processed across initialization times or not.

Used by: command_builder.py, compare_gridded_wrapper.py, ensemble_stat_wrapper.py, grid_stat_wrapper.py, make_plots_wrapper.py, master_metplus.py, mode_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: true

LOOP_METHOD

Control the looping method for METplus. Valid options are “times” or “processes”.

Used by: master_metplus.py, pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

1.4.13 M**METPLUS_BASE**

Set the base directory for the METplus installation.

Used by: config_launcher.py, grid_stat_wrapper.py, pb2nc_wrapper.py, point_stat_wrapper.py, tc_stat_wrapper.py

Family: [dir]

Default: /path/to

METPLUS_CONF

Provide the absolute path to the METplus final configuration file. This file will contain every configuration option and value used when METplus was run.

Used by: config_launcher.py

Family: [config]

Default: Varies

MET_BASE

The base directory where your MET installation resides.

Used by: cyclone_plotter_wrapper.py, extract_tiles_wrapper.py, master_metplus.py, met_util.py, pb2nc_wrapper.py, point_stat_wrapper.py, series_by_init_wrapper.py, series_by_lead_wrapper.py, tcmpr_plotter_wrapper.py, tc_pairs_wrapper.py, usage_wrapper.py

Family: [dir]

Default:

MET_BIN

The location of MET binaries.

Used by:

Family:

Default:

MET_BUILD_BASE

The base directory of the MET install. Only needed if using MET version 6.0

Used by: tcmpr_plotter_wrapper.py

Family: [dir]

Default: Varies

MET_INSTALL_DIR

The base directory of the MET install. To be defined when using MET version 6.1 and beyond

Used by: compare_gridded_wrapper.py, cyclone_plotter_wrapper.py, ensemble_stat_wrapper.py, extract_tiles_wrapper.py, feature_util.py, grid_stat_wrapper.py, mode_wrapper.py, pb2nc_wrapper.py, pcp_combine_wrapper.py, point_stat_wrapper.py, regrid_data_plane_wrapper.py, series_by_init_wrapper.py, series_by_lead_wrapper.py, stat_analysis_wrapper.py, tcmpr_plotter_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py, wavelet_stat_wrapper.py

Family: [dir]

Default: Varies

MISSING_VAL

Specify the missing value code.

Used by: tc_pairs_wrapper.py

Family: [config]

Default: Varies

MISSING_VAL_TO_REPLACE

Specify the missing value code to replace.

Used by: tc_pairs_wrapper.py

Family: [config]

Default: Varies

MODEL

Specify the model name.

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, stat_analysis_wrapper.py, tc_pairs_wrapper.py

Family: [config]

Default: Varies

MODEL_DATA_DIR

Specify the directory where the model data are located.

Used by: feature_util.py

Family: [dir]

Default: Varies

MODEL_LIST

Specify the list of models that were used in the analysis.

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

MODEL_NAME

Specify the model name.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

MODEL_TYPE

Specify the model name.

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

1.4.14 N

NCAP2_EXE

Path to the “ncap2” executable.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py, series_by_lead_wrapper.py

Family: [exe]

Default: /path/to

NCDUMP_EXE

Path to the “ncdump” executable.

Used by: met_util.py, pb2nc_wrapper.py, point_stat_wrapper.py, series_by_lead_wrapper.py

Family: [exe]

Default: /path/to

NC_FILE_TMPL

File template used to match netCDF files used for analysis.

Used by: pb2nc_wrapper.py

Family: [filename_templates]

Default: Varies

NLAT

The number of latitude points.

Used by: met_util.py

Family: [config]

Default: Varies

NLON

The number of longitude points.

Used by: met_util.py

Family: [config]

Default: Varies

NO_EE

Set the “NO_EE” flag for the TC Matched Pairs plotting utility.

Acceptable values: yes/no

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: no

NO_LOG

Set the “NO_LOG” flag for the TC Matched Pairs plotting utility.

Acceptable values: yes/no

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: no

1.4.15 O

OBS_12_FIELD_NAME

This variable is used to define a 12 hour accumulation field in the observation dataset used in the MET tool pcp_combine.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_1_FIELD_NAME

This variable is used to define a 1 hour accumulation field in the observation dataset used in the MET tool pcp_combine.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_24_FIELD_NAME

This variable is used to define a 24 hour accumulation field in the observation dataset used in the MET tool pcp_combine.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_3_FIELD_NAME

This variable is used to define a 3 hour accumulation field in the observation dataset used in the MET tool pcp_combine.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_6_FIELD_NAME

This variable is used to define a 6 hour accumulation field in the observation dataset used in the MET tool pcp_combine.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_BUFR_VAR_LIST

Specify which BUFR codes to use from the observation dataset when using the MET pb2nc tool. Format is comma separated list, e.g.:

PMO, TOB, TDO

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

OBS_DATA_INTERVAL

Specify the accumulation interval of the observation dataset used by the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_GEMPAK_INPUT_DIR

Specify the input directory for GEMPAK formatted observation files.

Used by: pcp_combine_wrapper.py

Family: [dir]

Default: Varies

OBS_GEMPAK_TEMPLATE

Filename template used to filter GEMPAK formatted observation files.

Used by: pcp_combine_wrapper.py

Family: [filename_templates]

Default: Varies

OBS_GRID_STAT_INPUT_DIR

Specify the directory where the input observation files are for the MET grid_stat tool.

Used by: grid_stat_wrapper.py

Family: [dir]

Default: Varies

OBS_GRID_STAT_INPUT_TEMPLATE

Filename template used to filter input observation files used by the MET grid_stat tool.

Used by: grid_stat_wrapper.py

Family: [filename_templates]

Default: Varies

OBS_INPUT_DIR

Specify the input directory for observation files.

Used by: compare_gridded_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py, point_stat_wrapper.py

Family: [dir]

Default: Varies

OBS_INPUT_DIR_REGEX

Specify the regular expression to use when searching for observation file input directories.

Used by: point_stat_wrapper.py

Family: [regex_pattern]

Default: Varies

OBS_INPUT_FILE_REGEX

Regular expression used to filter observation input files used in the analysis.

Used by: point_stat_wrapper.py,

Family: [regex_pattern]

Default: Varies

OBS_INPUT_FILE_TEMPL

Specify the filename template to use for observation input files.

Used by: point_stat_wrapper.py,

Family: [filename_templates]

Default: Varies

OBS_IS_DAILY_FILE

Specify whether the forecast file is a daily file or not.

Acceptable values: true/false

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_LEVEL

Specify what accumulation level should be used from the observation data for the analysis.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_MXUPHL_500_THRESH

Deprecated.

Used by:

Family:

Default:

OBS_MergedReflectivityQCComposte_500_THRESH

Deprecated.

Used by:

Family:

Default:

OBS_NAME

Provide a string to identify the observation dataset name.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

OBS_NATIVE_DATA_TYPE

Specify the data format of the observation data.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_PCP_COMBINE_INPUT_DIR

Specify the input directory for the observation data used by the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [dir]

Default: Varies

OBS_PCP_COMBINE_INPUT_TEMPLATE

Filename template used to filter input observation files used by the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [filename_templates]

Default: Varies

OBS_PCP_COMBINE_OUTPUT_DIR

Specify the output directory where files from the MET pcp_combine tool are written.

Used by: pcp_combine_wrapper.py

Family: [dir]

Default: Varies

OBS_PCP_COMBINE_OUTPUT_TEMPLATE

Filename template used for writing output files from the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [filename_templates]

Default: Varies

OBS_PCP_COMBINE_RUN

Specify whether to run pcp_combine on the observation data or not.

Acceptable values: True/False

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

OBS_REGRID_DATA_PLANE_INPUT_DIR

Specify the input directory for observation files used by the MET regrid_data_plane tool.

Used by: regrid_data_plane_wrapper.py

Family: [dir]

Default: Varies

OBS_REGRID_DATA_PLANE_OUTPUT_DIR

Specify the output directory where files are written from the MET regrid_data_plane tool.

Used by: regrid_data_plane_wrapper.py

Family: [dir]

Default: Varies

OBS_REGRID_DATA_PLANE_RUN

Specify whether to run regrid_data_plane on the observation data or not.

Acceptable values: True/False

Used by: regrid_data_plane_wrapper.py

Family: [config]

Default: Varies

OBS_REGRID_DATA_PLANE_TEMPLATE

Specify the filename template to use for observation files (input and output) used by the MET regrid_data_plane tool.

Used by: regrid_data_plane_wrapper.py

Family: [filename_templates]

Default: Varies

OBS_VAR

Specify the string for the observation variable used in the analysis.

Used by: compare_gridded_wrapper.py

Family: [config]

Default: Varies

OBS_WINDOW_BEG

Corresponds to the OBS_WINDOW_BEG in the MET config file for pb2nc. Please refer to Chapter 4 of the MET User's Guide.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

OBS_WINDOW_END

Corresponds to the OBS_WINDOW_END in the MET config file for pb2nc. Please refer to Chapter 4 of the MET User's Guide.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

OB_TYPE

Provide a string to represent the type of observation data used in the analysis.

Used by: compare_gridded_wrapper.py, ensemble_stat_wrapper.py, grid_stat_wrapper.py, mode_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

OUTPUT_BASE

Provide a path to the top level output directory for METplus.

Used by: config_launcher.py, pb2nc_wrapper.py, point_stat_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [dir]

Default: Varies

OVERWRITE_NC_OUTPUT

Specify whether to overwrite the netCDF output or not when using the MET pb2nc tool.

Acceptable values: yes/no

Used by: pb2nc_wrapper.py

Family: [config]

Default: yes

OVERWRITE_TRACK

Specify whether to overwrite the track data or not.

Acceptable values: yes/no

Used by: extract_tiles_wrapper.py, feature_util.py

Family: [config]

Default: no

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PARM_BASE

Specify the top level METplus parameter file directory.

Used by: config_launcher.py, pb2nc_wrapper.py, point_stat_wrapper.py, tc_stat_wrapper.py

Family: [dir]

Default: Varies

PB2NC_CONFIG_FILE

Specify the absolute path to the configuration file for the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

PB2NC_GRID

Specify a grid to use with the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

PB2NC_MESSAGE_TYPE

Specify which PREPBUFR (PB) message types to convert using the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

PB2NC_OUTPUT_DIR

Specify the directory where files will be written from the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [dir]

Default: Varies

PB2NC_POLY

Specify a polygon to be used with the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

PB2NC_STATION_ID

Specify the ID of the station to use with the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

PCP_COMBINE_METHOD

Specify the method to be used with the MET pcp_combine tool.

Used by: pcp_combine_wrapper.py

Family: [config]

Default: Varies

PLOTTING_OUT_DIR

Specify the output directory where plots will be saved.

Used by: make_plots_wrapper.py

Family: [dir]

Default: Varies

PLOTTING_SCRIPTS_DIR

Specify the directory where the plotting scripts are located.

Used by: make_plots_wrapper.py

Family: [dir]

Default: Varies

PLOT_CONFIG_OPTS

Specify plot configuration options for the TC Matched Pairs plotting tool.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

PLOT_STATS_LIST

Specify which statistics should be plotted in a comma separated list, e.g.:

acc, bias, rmse

Used by: make_plots_wrapper.py

Family: [config]

Default: Varies

PLOT_TYPES

Specify what plot types are desired for the TC Matched Pairs plotting tool.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

POINT_STAT_CONFIG_FILE

Specify the absolute path to the configuration file to be used with the MET point_stat tool.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

POINT_STAT_GRID

Specify the grid to use with the MET point_stat tool.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

POINT_STAT_MESSAGE_TYPE

Specify which PREPBUFR message types to process with the MET point_stat tool.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

POINT_STAT_OUTPUT_DIR

Specify the directory where output files from the MET point_stat tool are written.

Used by: point_stat_wrapper.py

Family: [dir]

Default: Varies

POINT_STAT_POLY

Specify a polygon to use with the MET point_stat tool.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

POINT_STAT_STATION_ID

Specify the ID of a specific station to use with the MET point_stat tool.

Used by: point_stat_wrapper.py

Family: [config]

Default: Varies

PREFIX

This corresponds to the optional -prefix flag of the plot_TCMPR.R script (which is wrapped by tcpr_plotter_wrapper.py). This is the output file name prefix.

Used by: tcpr_plotter_wrapper.py

Family: [config]

Default: Varies

PREPBUFR_DATA_DIR

Specify the directory where the PREPBUFR data are located for the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [dir]

Default: Varies

PREPBUFR_DIR_REGEX

Regular expression to use when searching for PREPBUFR data.

Used by: pb2nc_wrapper.py

Family: [regex_pattern]

Default: Varies

PREPBUFR_FILE_REGEX

Regular expression to use when searching for PREPBUFR files.

Used by: pb2nc_wrapper.py

Family: [regex_pattern]

Default: Varies

PREPBUFR_MODEL_DIR_NAME

Specify the name of the model being used with the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

PROCESS_LIST

Specify the list of processes for METplus to perform, in a comma separated list.

Used by: master_metplus.py

Family: [config]

Default: Varies

PROJ_DIR

A directory for generic use. The user can store input files (if INPUT_BASE is not defined), intermediate files, and any other project-related files.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py, tc_stat_wrapper.py

Family: [dir]

Default: Varies

1.4.17 Q

1.4.18 R

REFERENCE_TMPL

The filename template describing the observation/reference data.

Used by: tc_pairs_wrapper.py

Family: [filename_templates]

Default: Varies

REGION_LIST

A list of the regions of interest.

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

REGRID_TO_GRID

If supported, provide the output grid that is desired from the MET tool being used in the analysis.

Used by: make_plots_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

REGRID_USING_MET_TOOL

Specify whether to regrid using the MET regrid_data_plane tool or not.

Acceptable values: yes/no

Used by: feature_util.py, met_util.py, series_by_init_wrapper.py, series_by_lead_wrapper.py

Family: [config]

Default: yes

RM_EXE

Specify the path to the Linux “rm” executable.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py, series_by_lead_wrapper.py

Family: [exe]

Default: /path/to

RP_DIFF

...Some description here...

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

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SAVE

Corresponds to the optional -save flag in plot_TCMPR.R (which is wrapped by tcmpr_plotter_wrapper.py). This is a yes/no value to indicate whether to save the image (yes).

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

SAVE_DATA

Corresponds to the optional -save_data flag in plot_TCMPR.R (which is wrapped by tcmpr_plotter_wrapper.py). Indicates whether to save the filtered track data to a file instead of deleting it.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

SCATTER_X

Corresponds to the optional -scatter_x flag in plot_TCMPR.R (which is wrapped by tcmpr_plotter_wrapper.py). This is a comma-separated list of x-axis variable columns to plot.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

SCATTER_Y

Corresponds to the optional -scatter_y flag in plot_TCMPR.R (which is wrapped by tcmpr_plotter_wrapper.py). This is a comma-separated list of y-axis variable columns to plot.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

SERIES

Corresponds to the optional -series flag in plot_TCMPR.R (which is wrapped by tcmpr_plotter_wrapper.py). This is the column whose unique values define the series on the plot, optionally followed by a comma-separated list of values, including: ALL, OTHER, and colon-separated groups.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

SERIES_ANALYSIS_BY_INIT_CONFIG_FILE

Specify the absolute path for the configuration file to use with the MET series_analysis tool by initialization time.

Used by: series_by_init_wrapper.py

Family: [config]

Default: Varies

SERIES_ANALYSIS_BY_LEAD_CONFIG_FILE

Specify the absolute path for the configuration file to use with the MET series_analysis tool by lead time.

Used by: series_by_lead_wrapper.py

Family: [config]

Default: Varies

SERIES_ANALYSIS_FILTER_OPTS

Filtering options to be applied during series analysis. Filter options are performed by invoking the MET tc_stat tool within the METplus wrapper.

Used by: series_by_lead_wrapper.py, series_by_init_wrapper.py

Family: [config]

Default: Varies

SERIES_CI

Corresponds to the optional -series_ci flag in plot_TCMR.R (which is wrapped by tcmr_plotter_wrapper.py). This is a list of true/false for confidence intervals. This list can be optionally followed by a comma-separated list of values, including ALL, OTHER, and colon-separated groups.

Used by: tcmr_plotter_wrapper.py

Family: [config]

Default: Varies

SERIES_INIT_FILTERED_OUT_DIR

Specify the directory where filtered files will be written from the MET series_analysis tool when processing by initialization time.

Used by: series_by_init_wrapper.py

Family: [dir]

Default: Varies

SERIES_INIT_OUT_DIR

Specify the directory where files will be written from the MET series analysis tool when processing by initialization time.

Used by: series_by_init_wrapper.py

Family: [dir]

Default: Varies

SERIES_LEAD_FILTERED_OUT_DIR

Specify the directory where filtered files will be written from the MET series_analysis tool when processing by lead time.

Used by: series_by_lead_wrapper.py

Family: [dir]

Default: Varies

SERIES_LEAD_OUT_DIR

Specify the directory where files will be written from the MET series analysis tool when processing by lead time.

Used by: series_by_lead_wrapper.py

Family: [dir]

Default: Varies

SKILL_REF

This corresponds to the optional -skill_ref flag in plot_TCMPR.R (which is wrapped by tcmpr_plotter_wrapper.py). This is the identifier for the skill score reference.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

START_DATE

Specify the start data for the analysis time period. Format is YYYYMMDDHH.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

START_HOUR

Specify the start hour for the analysis time period. Format is HH.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [config]

Default: Varies

STAT_ANALYSIS_CONFIG

Specify the absolute path for the configuration file used with the MET stat_analysis tool.

Used by: stat_analysis_wrapper.py

Family: [config]

Default: Varies

STAT_ANALYSIS_LOOKIN_DIR

Specify the input directory where the MET stat_analysis tool will find input files.

Used by: stat_analysis_wrapper.py

Family: [dir]

Default: Varies

STAT_ANALYSIS_OUT_DIR

Specify the output directory where files will be written from the MET stat_analysis tool.

Used by: stat_analysis_wrapper.py

Family: [dir]

Default: Varies

STAT_FILES_INPUT_DIR

Specify the directory where stat files exist that plots can be generated from.

Used by: make_plots_wrapper.py

Family: [dir]

Default: Varies

STAT_LIST

Specify a list of statistics to be computed by the MET series_analysis tool.

Used by: series_by_init_wrapper.py, series_by_lead_wrapper.py

Family: [config]

Default: Varies

STORM_ID

The identifier of the storm(s) of interest.

Used by: cyclone_plotter_wrapper.py, met_util.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

STORM_NAME

The name(s) of the storm of interest.

Used by: tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

SUBTITLE

The subtitle of the plot.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

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TCMPR_DATA

Provide the input directory for the track data for the TC Matched Pairs plotting tool.

Used by: tcmpr_plotter_wrapper.py

Family: [dir]

Default: Varies

TCMPR_PLOT_OUT_DIR

Provide the output directory where the TC Matched Pairs plotting tool will create files.

Used by: tcmpr_plotter_wrapper.py

Family: [dir]

Default: Varies

TC_PAIRS_CONFIG_FILE

Provide the absolute path to the configuration file for the MET tc_pairs tool.

Used by: tc_pairs_wrapper.py

Family: [config]

Default: Varies

TC_PAIRS_DIR

Specify the directory where the MET tc_pairs tool will write files.

Used by: tc_pairs_wrapper.py

Family: [dir]

Default: Varies

TC_PAIRS_FORCE_OVERWRITE

Specify whether to overwrite the output from the MET tc_pairs tool or not.

Acceptable values: yes/no

Used by: tc_pairs_wrapper.py

Family: [config]

Default: no

TC_STAT_AMODEL

Specify the AMODEL for the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_BASIN

Specify the BASIN for the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_BMODEL

Specify the BMODEL for the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_CMD_LINE_JOB

Specify expression(s) that will be passed to the MET tc_stat tool via the command line.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_COLUMN_STR_NAME

Specify the string names of the columns for stratification with the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_COLUMN_STR_VAL

Specify the values for the columns set via the TC_STAT_COLUMN_STR_NAME option for use with the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_COLUMN_THRESH_NAME

Specify the string names of the columns for stratification by threshold with the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_COLUMN_THRESH_VAL

Specify the values used for thresholding the columns specified in the TC_STAT_COLUMN_THRESH_NAME option for use with the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_CYCLONE

Specify the CYCLONE of interest for use with the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_DESC

Specify the DESC option for use with the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INIT_BEG

Specify the beginning initialization time for stratification when using the MET tc_stat tool.

Acceptable formats: YYYYMMDD_HH, YYYYMMDD_HHmms

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INIT_END

Specify the ending initialization time for stratification when using the MET tc_stat tool.

Acceptable formats: YYYYMMDD_HH, YYYYMMDD_HHmms

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INIT_EXCLUDE

Specify the initialization times to exclude when using the MET tc_stat tool, via a comma separated list e.g.:

20141220_18, 20141221_00

Acceptable formats: YYYYMMDD_HH, YYYYMMDD_HH:mm:ss

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INIT_HOUR

...Some description here...

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INIT_INCLUDE

Specify the initialization times to include when using the MET tc_stat tool, via a comma separated list e.g.:

20141220_00, 20141220_06, 20141220_12

Acceptable formats: YYYYMMDD_HH, YYYYMMDD_HH:mm:ss

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INIT_MASK

This corresponds to the INIT_MASK keyword in the MET tc_stat config file. For more information, please refer to Chapter 20 in the MET User's Guide.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INIT_STR_NAME

This corresponds to the INIT_STR_NAME keyword in the MET tc_stat config file. Please refer to Chapter 20 in the MET User's Guide for more details.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INIT_STR_VAL

This corresponds to the INIT_STR_VAL keyword in the MET tc_stat config file. Please refer to Chapter 20 in the MET User's Guide for more information.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_INPUT_DIR

Specify the input directory where the MET tc_stat tool will look for files.

Used by: tc_stat_wrapper.py

Family: [dir]

Default: Varies

TC_STAT_JOBS_LIST

Specify expressions for the MET tc_stat tool to execute.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_LANDFALL

Specify whether only those points occurring near landfall should be retained when using the MET tc_stat tool.

Acceptable values: True/False

Used by: tc_stat_wrapper.py

Family: [config]

Default: False

TC_STAT_LANDFALL_BEG

Specify the beginning of the landfall window for use with the MET tc_stat tool.

Acceptable formats: HH, HHmmss

Used by: tc_stat_wrapper.py

Family: [config]

Default: -24

TC_STAT_LANDFALL_END

Specify the end of the landfall window for use with the MET tc_stat tool.

Acceptable formats: HH, HHmmss

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_LEAD

Specify the lead times to stratify by when using the MET tc_stat tool.

Acceptable formats: HH, HHmmss

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_LEAD_REQ

Specify the LEAD_REQ when using the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_MATCH_POINTS

Specify whether only those points common to both the ADECK and BDECK tracks should be written out or not when using the MET tc_stat tool.

Acceptable values: True/False

Used by: tc_stat_wrapper.py

Family: [config]

Default: false

TC_STAT_OUTPUT_DIR

Specify the output directory where the MET tc_stat tool will write files.

Used by: tc_stat_wrapper.py

Family: [dir]

Default: Varies

TC_STAT_RUN_VIA

Specify the method for running the MET tc_stat tool.

Acceptable values: CONFIG

If left blank (unset), tc_stat will run via the command line.

Used by: tc_stat_wrapper.py

Family: [config]

Default: CONFIG

TC_STAT_STORM_ID

Set the STORM_ID(s) of interest with the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_STORM_NAME

Set the STORM_NAME for use with the MET tc_stat tool.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_TRACK_WATCH_WARN

Specify which watches and warnings to stratify over when using the MET tc_stat tool.

Acceptable values: HUWARN, HUWATCH, TSWARN, TSWATCH, ALL

If left blank (unset), no stratification will be done.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_VALID_BEG

Specify a comma separated list of beginning valid times to stratify with when using the MET tc_stat tool.

Acceptable formats: YYYYMMDD_HH, YYYYMMDD_HHmss

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_VALID_END

Specify a comma separated list of ending valid times to stratify with when using the MET tc_stat tool.

Acceptable formats: YYYYMMDD_HH, YYYYMMDD_HHmss

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_VALID_EXCLUDE

Specify a comma separated list of valid times to exclude from the stratification with when using the MET

tc_stat tool.

Acceptable formats: YYYYMMDD_HH, YYYYMMDD_HHmmss

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_VALID_HOUR

This corresponds to the VALID_HOUR keyword in the MET tc_stat config file. For more information, please refer to Chapter 20 of the MET User's Guide.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_VALID_INCLUDE

Specify a comma separated list of valid times to include in the stratification with when using the MET tc_stat tool.

Acceptable formats: YYYYMMDD_HH, YYYYMMDD_HHmmss

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_VALID_MASK

This corresponds to the VALID_MASK in the MET tc_stat config file. Please refer to Chapter 20 of the MET User's Guide for more information.

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TC_STAT_WATER_ONLY

Specify whether to exclude points where the distance to land is ≤ 0 . If set to TRUE, once land is encountered the remainder of the forecast track is not used for the verification, even if the track moves back over water.

Acceptable values: true/false

Used by: tc_stat_wrapper.py

Family: [config]

Default: Varies

TIME_METHOD

Specify which time method to use with the MET pb2nc and point_stat tools.

Acceptable values: BY_VALID, BY_INIT

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family:

Default:

TIME_SUMMARY_BEG

Specify the starting time of the summary when using the MET pb2nc tool.

Acceptable formats: HHMMSS

Used by: pb2nc_wrapper.py

Family: [config]

Default: 000000

TIME_SUMMARY_END

Specify the ending time of the summary when using the MET pb2nc tool.

Acceptable formats: HHMMSS

Used by: pb2nc_wrapper.py

Family: [config]

Default: 235959

TIME_SUMMARY_FLAG

Specify whether to receive a time summary from the MET pb2nc tool or not.

Acceptable values: True/False

Used by: pb2nc_wrapper.py

Family: [config]

Default: False

TIME_SUMMARY_TYPES

Specify a comma separated list of time summary types to receive from the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

TIME_SUMMARY_VAR_NAMES

Specify a comma separated list of time summary variable names to receive from the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

TITLE

Specify a title string for the TC Matched Pairs plotting tool.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

TMP_DIR

Specify the path to a temporary directory where the user has write permissions.

Used by: extract_tiles_wrapper.py, pb2nc_wrapper.py, point_stat_wrapper.py, series_by_init_wrapper.py, series_by_lead_wrapper.py, tc_stat_wrapper.py

Family: [dir]

Default: Varies

TOP_LEVEL_DIRS

Specify whether to use top-level directories when using the MET tc_pairs utility or not.

Acceptable values: yes/no

Used by: tc_pairs_wrapper.py

Family: [config]

Default: no

TRACK_DATA_DIR

Specify the directory where track data are located for use with the MET tc_pairs tool.

Used by: tc_pairs_wrapper.py

Family: [dir]

Default: Varies

TRACK_DATA_MOD_FORCE_OVERWRITE

Specify whether to force an overwrite of the track data or not.

Acceptable values: yes/no

Used by: tc_pairs_wrapper.py

Family: [config]

Default: no

TRACK_DATA_SUBDIR_MOD

Specify the sub-directory where modified track data files are stored for use with the MET tc_pairs tool.

Used by: tc_pairs_wrapper.py

Family: [dir]

Default: Varies

TRACK_TYPE

Specify the track type to filter by when using the MET tc_pairs tool.

Used by: tc_pairs_wrapper.py

Family: [config]

Default: Varies

TR_EXE

Specify the path to the Linux “tr” executable.

Used by: pb2nc_wrapper.py, point_stat_wrapper.py

Family: [exe]

Default: /path/to

1.4.21 U**1.4.22 V****VALID_BEG**

Specify a begin time for valid times for use in the analysis.

Acceptable formats: YYYYMM[DD[_HH]]

Used by: command_builder.py, make_plots_wrapper.py, master_metplus.py, stat_analysis_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

VALID_BEG_HOUR

Specify a beginning hour for valid times for use in the analysis.

Acceptable formats: HH

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

VALID_END

Specify an end time for valid times for use in the analysis.

Acceptable formats: controlled via VALID_TIME_FMT

Used by: command_builder.py, make_plots_wrapper.py, master_metplus.py, stat_analysis_wrapper.py, tc_pairs_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

VALID_END_HOUR

Specify an end hour for valid times for use in the analysis.

Acceptable formats: controlled via VALID_TIME_FMT

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

VALID_INCREMENT

Specify the time increment for valid times for use in the analysis.

Acceptable formats: seconds

Used by: command_builder.py, make_plots_wrapper.py, master_metplus.py, stat_analysis_wrapper.py, tc_stat_wrapper.py

Family: [config]

Default: Varies

VALID_TIME_FMT

Specify a strftime formatting string for use with VALID_BEG and VALID_END.

Used by: command_builder.py, master_metplus.py

Family: [config]

Default: Varies

VAR_LIST

Specify a comma separated list of variables to be used in the analysis.

Used by: feature_util.py, pb2nc_wrapper.py, series_by_init_wrapper.py, series_by_lead_wrapper.py

Family: [config]

Default: Varies

VERIFICATION_GRID

Specify the absolute path to a file containing information about the desired output grid from the MET regrid_data_plane tool.

Used by: regrid_data_plane_wrapper.py

Family: [config]

Default: Varies

VERIF_CASE

Specify a string identifying the verification case being performed.

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

VERIF_TYPE

Specify a string describing the type of verification being performed.

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

VERTICAL_LOCATION

Specify the vertical location desired when using the MET pb2nc tool.

Used by: pb2nc_wrapper.py

Family: [config]

Default: Varies

1.4.23 W

WAVE_NUM_BEG_LIST

Specify a comma separated list of desired beginning wave numbers.

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

WAVE_NUM_END_LIST

Specify a comma separated list of desired ending wave numbers.

Used by: make_plots_wrapper.py, stat_analysis_wrapper.py

Family: [config]

Default: Varies

WGrib2

Specify the path to the “wgrib2” executable.

Used by: feature_util.py, pb2nc_wrapper.py, point_stat_wrapper.py

Family: [exe]

Default: /path/to

1.4.24 X

XLAB

Specify the x-axis label when using the TC Matched Pairs plotting tool.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

XLIM

Specify the x-axis limit when using the TC Matched Pairs plotting tool.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

1.4.25 Y

YLAB

Specify the y-axis label when using the TC Matched Pairs plotting tool.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

YLIM

Specify the y-axis limit when using the TC Matched Pairs plotting tool.

Used by: tcmpr_plotter_wrapper.py

Family: [config]

Default: Varies

1.4.26 Z