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/metplus_data.conf 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 tcmp_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 tcmpr_plotter_wrapper.py is then used (wraps the MET tool plot_tcmpr.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/tcmpr_mean_median.conf
  * Verify that PROCESS_LIST is set to TcPairs, TCMPRPlotter. This instructs METplus to run the TcPairs wrapper first (TC-Pairs) followed by the TCMPR plotter wrapper (plot_TCMPR.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 RSCIPTS_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/tcmpr_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 .tcst 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 tcmpr_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_TCMPR.R script which is wrapped by tcmpr_plotter_wrapper.py. This is a list of filtering options for the tc_stat tool.

Used by: tcmpr_plotter_wrapper.py
Family: [config]
Default: Varies

FILTERED_TCST_DATA_FILE
Corresponds to the optional -tcst argument to the plot_TCMPR.R script which is wrapped by tcmpr_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: tcmpr_plotter_wrapper.py
Family: [config]
Default: Varies

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

Used by: tcmpr_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_ANLY_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_TCMPR.R script which is wrapped by tcmpr_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: tcmpr_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. If set to false, the processes will loop by valid time.

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 order method for METplus. Valid options are "times" or "processes". If set to "times" it will loop over each process for each time, then increment the time. If set to "processes" it will loop over every time for a given process, the increment to the next process.

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

1.4.16 P

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. Valid options are "SUM", "SUBTRACT", and "ADD."

Used by: pcp_combine_wrapper.py
Family: [config]

Default: ADD

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 tcmpr_plotter_wrapper.py). This is the output file name prefix.

Used by: tcmpr_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

This corresponds to the optional -rp_diff flag of the plot_TCMPR.R script (which is wrapped by tcmpr_plotter_wrapper.py). This a comma-separated list of thresholds to specify meaningful differences for the relative performance plot.

Used by: tcmpr_plotter_wrapper.py
Family: [config]
Default: Varies

1.4.19 S

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_TCMPR.R (which is wrapped by tcmpr_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: tcmpr_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 YYYYYMMDDHH.

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_HHmmss

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_HHmmss

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_HHmmss

Used by: tc_stat_wrapper.py
Family: [config]
Default: Varies

TC_STAT_INIT_HOUR
The beginning hour (HH) of the initialization time of interest.

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_HHmmss

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_HHmmss

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_HHmmss

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