

# taskmain

Page: 1

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#### Abstract

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# 1 User information

All the SAS tasks use the same main program. This means that they share most of their command line interface.

SAS tasks are also influenced by environment variables. Most of these variables can be overridden on the command line.

### 1.1 Command line options

### Common options

All SAS tasks support the following command line options:

-с

--noclobber No clobber; Datasets are not overwritten.

-d

--dialog Presents the user with a *Graphical Interface* for task specific parameters. Only available in SAS distribution with shared libraries!

-h

--help Provide information about the command line options.

-m

--manpage Displays the HTML documentation for the task. Requires Netscape.

-p

--param Print all parameters with their default and current value and exits the task. If any mandatory parameters, an error message is issued.

--trace Turn on tracing information from the libraries.

-V level

-verbosity level Set the verbosity level of the task, as handled by package error.

-v

--version Print the version number of the task.

-w [code-n]

--warning [code—n] Suppresses warning messages (handled by package error), and at the end of the task, it produces information about how many times a particular warning is silenced. Multiple occurrences of this option are allowed.

If no argument is given, this option suppresses all warnings.

The argument can be a warning code, e.g. NoAttitudeData will suppress all warnings of type NoAttitudeData.

If the argument is a number, only the first n warnings are showed for each type of warning; all subsequent warnings are silenced.

### Example:-w 10 -w LowDisk

This will suppress all warnings of type LowDisk; all other warnings are shown only the first 10 times each.

#### OAL specific options

If the task uses the ODF Access Layer (oal) the following command line option is recognized as well:

 $-\circ$  odf

--odf odf Specify the Observation Data File[1] that is to be accessed by the oal. odf can be the name of an ODF summary file as created by the task odfingest or merely the name of a directory containing one. In the latter case the summary file is assumed to have a name ending in either \*SUM.ASC or \*SUM.SAS. If both are present \*SUM.ASC is ignored. The parameter's value supersedes any assignments made to the environment variable SAS\_ODF (see Sect. 1.2) which is inspected by the oal for the ODF location if --odf is omitted.

## CAL specific options

If the task uses the Calibration Access Layer (cal) the following command line options are recognized as well:

-a *dir1*[:*dir2*:...]

--ccfpath dir1[:dir2:...] A colon separated list of directories that define a search path along which CCF constituents are to be sought. Please note: If a CCF replacement file is passed via --ccffiles with its full absolute path any specified search path is not considered in trying to access this constituent.



--ccffiles f1 ... White-space, comma, or colon separated list of CCF constituents to replace the corresponding ones in the CCF pointed at via the --ccf command line option or the environment variable SAS\_CCF (see below); each specified file must be a valid CCF constituent according to the CCF ICD[2].

Page:

3

#### -i cifname

--ccf cifname cifname is the name of a data set comprising a table with the name CALINDEX. This will normally be a Calibration Index File (CIF) created by the task cifbuild. cifname can also be the name of a directory. In this case the CALINDEX table is sought in a data set with the default name ccf.cif in the specified directory. The parameter's value supersedes any assignments made to the environment variable SAS\_CCF (see Sect. 1.2) which is inspected by the cal for the CIF location if --ccf is omitted.

### Task specific options

All tasks may have additional parameters in a parameter file, that can be set on the command line (more information can be found in package **param**).

param = value

--param =value Set the value of parameter param to value

### 1.2 Environment variables

The behavior of the tasks is modified by the following environment variables:

- SAS\_CCF This has the same meaning as the command line option --ccf (see above). A command line override supersedes any assignment made to SAS\_CCF, i.e., the CIF pointed at via SAS\_CCF is ignored in this case. Only of relevance for tasks making use of the Calibration Access Layer (see documentation of cal).
- SAS\_CCFFILES This has the same meaning as the command line option --ccffiles (see above). A command line override supersedes any assignment made to SAS\_CCFFILES, i.e., the list of CCF replacement constituents is ignored in this case. Only of relevance for tasks making use of the Calibration Access Layer (see documentation of cal).
- SAS\_CCFPATH This has the same meaning as the command line option --ccfpath (see above). A command line override supersedes any assignment made to SAS\_CCFPATH, i.e., the search path specified via SAS\_CCFPATH is ignored in this case. Only of relevance for tasks making use of the Calibration Access Layer (see documentation of cal).
  - SAS\_DIR The toplevel directory where the SAS is installed.
  - SAS\_ODF This has the same meaning as the command line option --odf (see above). A command line override supersedes any assignment made to SAS\_ODF, i.e., the ODF summary file specified in SAS\_ODF is ignored in this case. Only of relevance for tasks making use of the ODF Access Layer (see documentation of oal).
  - SAS\_PATH A list of colon-separated directories that contain SAS packages. Should at minimum contain SAS\_DIR.
- SAS\_RAND\_SEED If defined this environment variable has to be set to an integer value which will be used to initialize the single global random number generator that is being used throughout the SAS.

  Not setting SAS\_RAND\_SEED will cause the seed to be initialized by a pseudo-random number

4

that is based on the local time. Hence, processing the same dataset twice with identical command line arguments will not necessarily yield identical results unless SAS\_RAND\_SEED is defined. If the value cannot be converted to an integer number a warning message is issued and execution continues as if SAS\_RAND\_SEED had not not been defined at all.

SAS\_TRACER Determines the debug level of the libraries.

SAS\_VERBOSITY Determines the debug level of the task.

### 1.3 Output

- Messages, errors and warnings are written to standard error
- The list of accessed CCF constituents is written to the standard output channel if the task makes use of the **cal** and if the verbosity level is greater than or equal to **Verbose**.

# References

- [1] ESA. XMM Interface Control Document: Observation and Slew Data Files (XSCS to SSC) (SciSIM to SOCSIM). Technical Report XMM-SOC-ICD-0004-SSD Issue 2.5, ESA/SSD, June 2000. Found at the URL: ftp://astro.estec.esa.nl/pub/XMM/documents/odf\_icd.ps.gz.
- [2] ESA. Interface control document for the XMM current calibration file. Technical Report XMM-GEN-ICD-0005, ESA/SSD, Dec 2001. Issue 4.0.