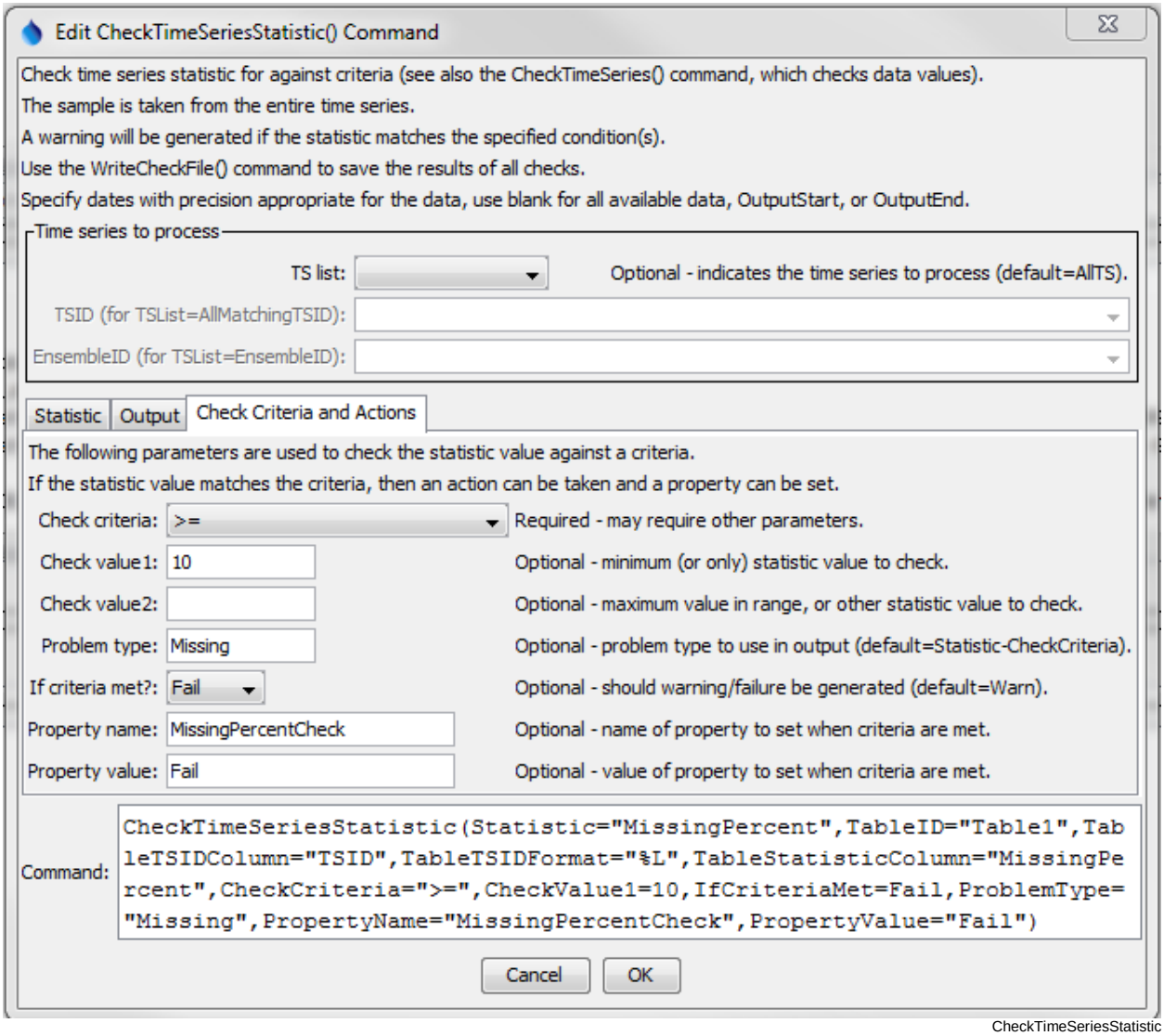
Command Reference: CheckTimeSeriesStatistic()

Check time series statistic against criteria

Version 10.00.01, 2011-04-26

The `CheckTimeSeriesStatistic()` command checks a time series statistic against criteria, for example to perform quality control using full-period statistics. This command is essentially a combination of the `CalculateTimeSeriesStatistic()` command with features similar to the `CheckTimeSeries()` command; however, the latter checks individual data values and this command checks a statistic computed from the entire time series. The `WriteCheckFile()` command can be used to write a summary of the warnings.

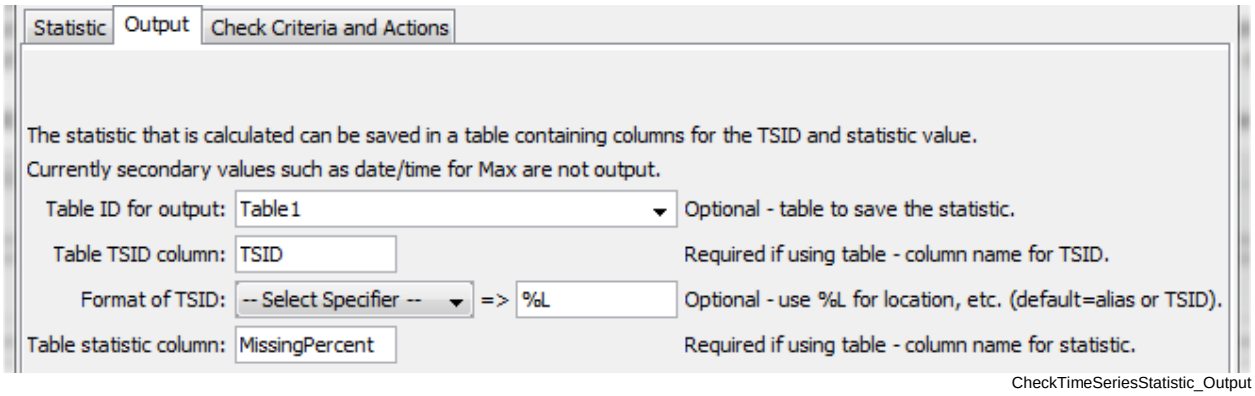
The following dialog is used to edit the command and illustrates the command syntax, in this case to check for time series that have >= 5% missing data values.



CheckTimeSeriesStatistic

CheckTimeSeriesStatistic() Command Editor for Statistic Parameters

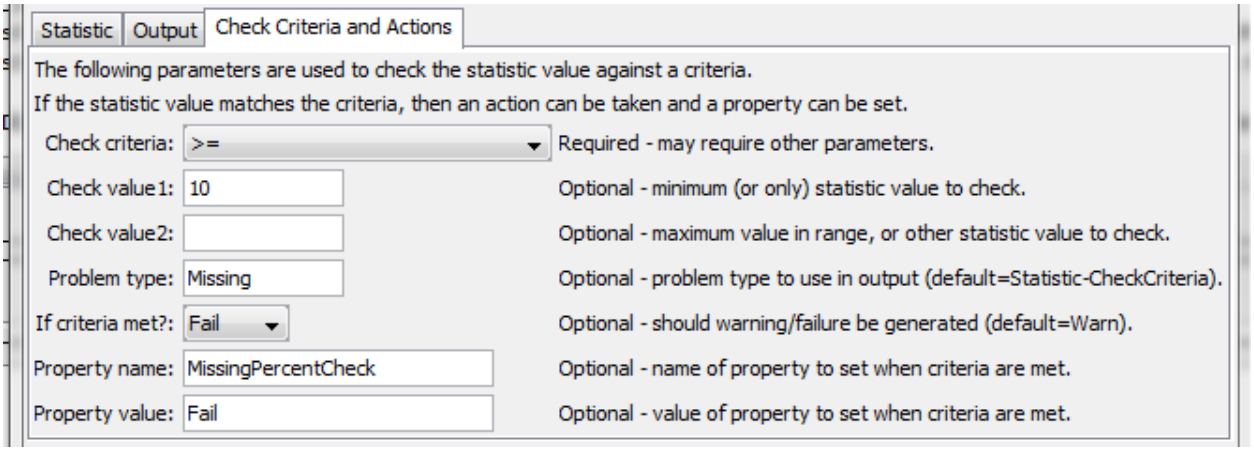
The following parameters will output the location part of the TSID to a column named `TSID` and the missing percentage to a column named `MissingPercent` in the output table named `Table1`.



CheckTimeSeriesStatistic_Output

CheckTimeSeriesStatistic() Command Editor for Output Parameters

The percentage of missing values is then checked to see if `>= 10` and if so the command will fail and the time series will have a property set `MissingPercentCheck=Fail`.



CheckTimeSeriesStatistic_Output

CheckTimeSeriesStatistic() Command Editor for Check Criteria and Action Parameters

The command syntax is as follows:

```
CheckTimeSeriesStatistic(Parameter=Value,…)
```

Command Parameters

Parameter	Description	Default
TSList	Indicates the list of time series to be processed, one of: • AllMatchingTSID – all time series that match the TSID (single TSID or TSID with wildcards) will be processed. • AllTS – all time series before the command will be processed. • EnsembleID – all time series in the ensemble will be processed. • FirstMatchingTSID – the first time series that matches the TSID (single TSID or TSID with wildcards) will be processed. • LastMatchingTSID – the last time series that matches the TSID (single TSID or TSID with wildcards) will be processed. • SelectedTS – the time series selected with the SelectTimeSeries() command will be processed.	AllTS
TSID	The time series identifier or alias for the time series to be processed, using the * wildcard character to match multiple time series.	Required if TSList=*TSID.
EnsembleID	The ensemble to be modified, if processing an ensemble.	Required if TSList= EnsembleID.
Statistic	Statistic to compute. Refer to the CalculateTimeSeriesStatistic() command documentation.	None – must be specified.
StatisticValue1	Input data required by the statistic. Currently the dialog does not check the value for correctness – it is checked when the statistic is computed.	See the Calculate TimeSeries Statistic() command documentation.
StatisticValue2	Input data required by the statistic. Currently the dialog does not check the value for correctness – it is checked when the statistic is computed.	to the Calculate TimeSeries Statistic() command documentation.
StatisticValue3	Input data required by the statistic. Currently the dialog does not check the value for correctness – it is checked when the statistic is computed.	to the Calculate TimeSeries Statistic() command documentation.
AnalysisStart	The date/time to start analyzing data.	Full period is analyzed.
AnalysisEnd	The date/time to end analyzing data.	Full period is analyzed.

Parameter	Description	Default
TableID	Identifier for table that receives the statistic.	Optional – table output is not required.
TableTSIDColumn	Table column name that is used to look up the time series. If a matching TSID is not found, a row will be added to the table. If a TSID is found, the statistic cell value for the time series is modified.	Optional – table output is not required.
TableTSIDFormat	The specification to format the time series identifier to insert into the TSID column. Use the format choices and other characters to define a unique identifier.	Time series alias if available, or the time series identifier.
TableStatistic Column	Table column name to receive the statistic value. If not found in the table, a new column is added automatically.	Optional – table output is not required.
CheckCriteria	The criteria that is checked, one of: • InRange – check for value >= Value1 and <= Value2. • OutOfRange – check for value < Value1 or > Value2. • < – check for values < CheckValue1. • <= – check for values <= CheckValue1. • > – check for values > CheckValue1. • >= – check for values >= CheckValue1. • == – check for values equal to CheckValue1.	None – must be specified.
CheckValue1	A parameter that is used for specific CheckCriteria values.	
CheckValue2	A parameter that is used for specific CheckCriteria values, currently only needed for InRange and OutOfRange criteria.	
ProblemType	The problem type that will be shown in warning messages.	Statistic-CheckCriteria
IfCriteriaMet	Indicate whether to set the command status if the statistic meets the criteria, one of: • Ignore – do not set the command status • Warn – set the command status to Warning • Fail – set the command status to Failure	The command status will not be changed.
PropertyName	If the statistic meets the criteria, set the property identified by PropertyName to PropertyValue.	No property is set.
PropertyValue	If the statistic meets the criteria, set the property identified by PropertyName to PropertyValue.	No property is set.