## Tags in report template

## Tags

The report template uses tags as placeholders to identify the location of objects in the report. Furthermore, these tags can also be used in report tables 'rowPerLocationHtmlTable' and 'rowPerLocationCvsTable'. In the following table the available tags are described.

For tags in snapshots or animations of the Schematic Status Display, please refer to the list of tags in the Schematic Status Display configuration documentation.

Тад	Description
\$CURRENTTIME (dateFormatId)\$	The actual time the report was generated. This is the local time. <b>Arguments: 1</b> - dateFormatId: specified in the configuration file, sets the formatting for the date to be displayed
\$LOCATIONNAME (variableld)\$	The location name associated with a time series. Arguments: 1 - variableId: refers to the variableId assigned to the time series in the report configuration.
\$LOCATIONATTRIBUTE( attribute; variableId; <numberformat>)\$</numberformat>	<ul> <li>Arguments: 2-3</li> <li>-attribute: the location attribute to put in the report.</li> <li>- variableld: refers to the variableId assigned to the time series in the report configuration.</li> <li>- numberFormatId: specified in the configuration file, sets the formatting for the values to be displayed</li> </ul>
\$TIMEZERO(variableId; dateFormatId)\$	The time zero of the forecast run in which the time series is created.  Arguments: 2 - variableId: refers to the variableId assigned to the time series in the report configuration dateFormatId: specified in the configuration file, sets the formatting for the date to be displayed
\$FIRSTVALUE(variableId; numberFormatId)\$	the first reliable or doubtful value in the time series  Arguments: 1 or 2  - variableld: refers to the variableId assigned to the time series in the report configuration  - numberFormatId: specified in the report configuration, sets the formatting for the value to be displayed. In case of enumeration parameter, the numberformatId can be omitted and the enumeration label will be displayed
\$FIRSTVALUETIME (variableId; dateFormatId)\$	the date and time of the first reliable or doubtful value present in given time series array <b>Arguments: 2</b> - variableld: refers to the variableId assigned to the time series in the report configuration - dateFormatId: specified in the report configuration, sets the formatting for the date to be displayed
\$FIRSTVALUECOMMENT (variableId)\$	the comment of the first reliable or doubtful value present in given time series array Arguments: 1 - variableId: refers to the variableId assigned to the time series in the report configuration
\$FIRSTVALUEATTRIBUTE (variableId; valueAttributeMapId)\$	The attribute of the first reliable or doubtful value present in given time series array           Arguments: 2           - variableld: refers to the variableId assigned to the time series in the report configuration           - valueAttributeMapId: valueAttributeMap id from configuration file ValueAttributeMaps.xml
\$LASTVALUE(variableId; numberFormatId)\$	the most recent reliable or doubtful value in the time series <b>Arguments: 1 or 2</b> - variableld: refers to the variableId assigned to the time series in the report configuration - numberFormatId: specified in the report configuration, sets the formatting for the value to be displayed. In case of enumeration parameter, the numberformatId can be omitted and the enumeration label will be displayed
\$LASTVALUETIME (variableld; dateFormatId)\$	the date and time of the most recent reliable or doubtful value present in given time series array          Arguments: 2         - variableld: refers to the variableId assigned to the time series in the report configuration         - dateFormatId: specified in the report configuration, sets the formatting for the date to be displayed

\$LASTVALUECOMMENT (variableId)\$	the comment of the most recent reliable or doubtful value present in given time series array  Arguments: 1  - variable d: refers to the variable d assigned to the time series in the report configuration
\$LASTVALUEATTRIBUTE	The attribute of the most recent reliable or doubtful value present in given time series array
variableId; valueAttributeMapId)\$	Arguments: 2
	<ul> <li>variableld: refers to the variableld assigned to the time series in the report configuration</li> <li>valueAttributeMapId: valueAttributeMap id from configuration file ValueAttributeMaps.xml</li> </ul>
\$MINVALUE(variableId; numberFormatId)\$	The minimum value found in the time series
	Arguments: 2 - variableld: refers to the variableld assigned to the time series in the report configuration. - numberFormatld: specified in the configuration file, sets the formatting for the values to be displayed. In case of enumeration parameter, the numberformatld can be omitted and the enumeration label will be displayed
\$MAXVALUE(variableId;	The maximum value found in the time series
	Arguments: 2 - variableld: refers to the variableId assigned to the time series in the report configuration. - dateFormatId: specified in the configuration file, sets the formatting for the date to be displayed. In case of enumeration parameter, the numberformatId can be omitted and the enumeration label will be displayed
\$MINTIME(variableId; dateFormatId)\$	The date/time of minimum value found in the time series (closest occurrence to T0)
αισι σπηαιιάζφ	Arguments: 2 - variableId: refers to the variableId assigned to the time series in the report configuration. - numberFormatId: specified in the configuration file, sets the formatting for the values to be displayed
\$MAXTIME(variableId; dateFormatId)\$	The date/time of maximum value found in the time series (closest occurrence to T0)
	Arguments: 2 - variableld: refers to the variableId assigned to the time series in the report configuration. - dateFormatId: specified in the configuration file, sets the formatting for the date to be displayed
\$MAXWARNINGLEVEL (variableId,	returns the name of the highest warning level threshold that has been crossed
\$MAXWARNINGLEVEL (variableId, defaultThresholdGroupId)\$	returns the name of the highest warning level threshold that has been crossed <b>Arguments: 2</b> - variableld: refers to the variableId assigned to the time series in the report configuration. - defaultThresholdGroupId: refers to the thresholdGroup in thresholds.xml for which the defaultThreshold shortName should be used in case no thresholds have been crossed (optional since 2012.01).
\$MAXWARNINGLEVEL (variableId, defaultThresholdGroupId)\$ \$INDEXVALUE (timeSeriesIndex; variableId;	returns the name of the highest warning level threshold that has been crossed Arguments: 2 - variableld: refers to the variableld assigned to the time series in the report configuration defaultThresholdGroupId: refers to the thresholdGroup in thresholds.xml for which the defaultThreshold shortName should be used in case no thresholds have been crossed (optional since 2012.01). Template function to insert the value at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero.
\$MAXWARNINGLEVEL (variableId, defaultThresholdGroupId)\$ \$INDEXVALUE (timeSeriesIndex; variableId; numberFormatId)\$	returns the name of the highest warning level threshold that has been crossed Arguments: 2 - variableld: refers to the variableld assigned to the time series in the report configuration defaultThresholdGroupId: refers to the thresholdGroup in thresholds.xml for which the defaultThreshold shortName should be used in case no thresholds have been crossed (optional since 2012.01). Template function to insert the value at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3
\$MAXWARNINGLEVEL (variableId, defaultThresholdGroupId)\$ \$INDEXVALUE (timeSeriesIndex; variableId; numberFormatId)\$	returns the name of the highest warning level threshold that has been crossed Arguments: 2 - variableld: refers to the variableld assigned to the time series in the report configuration defaultThresholdGroupId: refers to the thresholdGroup in thresholds.xml for which the defaultThreshold shortName should be used in case no thresholds have been crossed (optional since 2012.01). Template function to insert the value at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - timeSeriesIndex: time index relative to the index of time zero of the workflow run variableld: refers to the variableId assigned to the time series in the report configuration numberFormatId: specified in the configuration file, sets the formatting for the value to be displayed.
<pre>\$MAXWARNINGLEVEL (variableId, defaultThresholdGroupId)\$  \$INDEXVALUE (timeSeriesIndex; variableId; numberFormatId)\$  \$INDEXTIME (timeSeriesIndex; variableId; dateFormatId)\$</pre>	returns the name of the highest warning level threshold that has been crossed Arguments: 2 - variableld: refers to the variableld assigned to the time series in the report configuration defaultThresholdGroupld: refers to the thresholdGroup in thresholds.xml for which the defaultThreshold shortName should be used in case no thresholds have been crossed (optional since 2012.01). Template function to insert the value at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - timeSeriesIndex: time index relative to the index of time zero of the workflow run variableld: refers to the variablel assigned to the time series in the report configuration numberFormatld: specified in the configuration file, sets the formatting for the value to be displayed. Template function to insert the time at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero arguments: 3 - timeSeriesIndex: time index relative to the index of time zero is the report configuration numberFormatld: specified in the configuration file, sets the formatting for the value to be displayed. Template function to insert the time at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero.
<pre>\$MAXWARNINGLEVEL (variableId, defaultThresholdGroupId)\$  \$INDEXVALUE (timeSeriesIndex; variableId; numberFormatId)\$  \$INDEXTIME (timeSeriesIndex; variableId; dateFormatId)\$</pre>	returns the name of the highest warning level threshold that has been crossed Arguments: 2 - variableld: refers to the variableld assigned to the time series in the report configuration defaultThresholdGroupId: refers to the thresholdGroup in thresholds.xml for which the defaultThreshold shortName should be used in case no thresholds have been crossed (optional since 2012.01). Template function to insert the value at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - timeSeriesIndex: time index relative to the index of time zero is 0. Configure negative index should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure variableld: refers to the variableid assigned to the time series in the report configuration numberFormatId: specified in the configuration file, sets the formatting for the value to be displayed. Template function to insert the time at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - timeSeriesIndex: time index relative to the index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - timeSeriesIndex: time index relative to the index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - timeSeriesIndex: time index relative to the index of time zero of the workflow run variableId: refers to the variableId assigned to the time series in the report configuration dateFormattId: specified in the configuration fil
<pre>\$MAXWARNINGLEVEL (variableId, defaultThresholdGroupId)\$  \$INDEXVALUE (timeSeriesIndex; variableId; numberFormatId)\$  \$INDEXTIME (timeSeriesIndex; variableId; dateFormatId)\$  \$INDEXMAXWARNINGLE VEL(timeSeriesIndex; variableId; defaultThresholdGroupId)\$</pre>	returns the name of the highest warning level threshold that has been crossed Arguments: 2 - variableld: refers to the variableld assigned to the time series in the report configuration defaultThresholdGroupld: refers to the thresholdGroup in thresholds.xml for which the defaultThreshold shortName should be used in case no thresholds have been crossed (optional since 2012.01). Template function to insert the value at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - timeSeriesIndex: time index relative to the index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero variableld: refers to the variableld assigned to the time series in the report configuration variableld: refers to the variableld assigned to the time series in the report configuration numberFormatid: specified in the configuration file, sets the formatting for the value to be displayed. Template function to insert the time at a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - immSeriesIndex: time index relative to the index of time zero of the workflow run variableld: refers to the variableld assigned to the time series in the report configuration variableld: refers to the variableld assigned to the time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero. Arguments: 3 - immSeriesIndex: time index relative to the index of time zero of the workflow run variableld: refers to the variableld assigned to the time series in the report configurat

\$INDEXMAXWARNINGLE VELCOLOR (timeSeriesIndex; variableId)\$	Template function to insert the html color code (e.g. #FFFF00) of the most severe warning level of all thresholds that have been crossed for a given timeIndex in a given timeSeries. The timeIndex should be specified relative to the index of timeZero of the workflow run. Index of time zero is 0. Configure negative index to get a value before time zero, and positive index to get a value after time zero.
	Arguments: 2 - timeSeriesIndex: time index relative to the index of time zero of the workflow run. - variableld: refers to the variableId assigned to the time series in the report configuration.
\$EXTERNALFORECASTIN GSTARTTIME(variableId; dateFormatId)\$	returns the start of the external forecast
	Arguments: 2 - variableld: refers to the variableld assigned to the time series in the report configuration. - dateFormatId: specified in the configuration file, sets the formatting for the date to be displayed
\$FORECASTNAME (variableId)\$	The name or description of the forecast.
	Arguments: 1 - variableId: refers to the variableId assigned to the time series in the report configuration.
\$DEFINITION(definitionId)\$	The definition tag provides a means to enter some additional textual information into a report. This information can be set for all reports at once, through the defineGlobal element of the declarations section or for each report through the defineLocal element in the reports section.
	Arguments: 1 - definitionId: refers to ID provided in either the defineLocal or defineGlobal elements. The defineLocalId takes preference over the defineGlobalId when both are the same.
\$FILERESOURCE (resourceId)\$	The fileresource tag provides a means to include an external file into the report. This may be any file, as long as it is permissible in the report file. The inclusion is
	Arguments: 1 - resourceld: Refers to the ID given to the fileResource element in the reports section. The fileResource element specifies the location of the file to be included relative to the region 'home' directory.
\$TABLE(tableId)\$	Inserts a table. The layout of the table is defined in the report configuration files.
	Arguments: 1 - tableId: ID of the table definition
\$CHART(chartId)\$	Inserts a reference to the filename of the chart. The chart is created in the same directory as the report file. The reference is inserted without any path prefixes. This feature will only be useful in XML or HTML report files.
	Arguments: 1 - chartId: ID of the chart definition ( <chart></chart> or <displaychart></displaychart> element)
\$SUMMARY(summaryId)\$	Inserts a map with overlying text, symbols or values of configured timeseries. This is a complex tag that requires substantial preparation in the configuration.
	Arguments: 1 - summaryId: ID of the summary definition
\$STATUS(statusId)\$	Inserts a table created using a SQL query on the database. The table may be additionally formatted.
	IMPORTANT: the HTML table header is not created by this TAG. The TAG only creates the records of the table. This has been made to enable the user to provide more user friendly header info than the field names.
	Arguments: 1 - statusId: ID of the status definition
\$LOGENTRY(eventCode)\$	Inserts a log message using the eventCode as a 'filter' to retrieve certain types or error messages.
	Arguments: 1 - logEntryEventCode: textual (case-sensitive) reference to a specific type of log message (e.g. TaskRun.Completed)
\$FILECONTENT (fileName)\$	The filecontent tag provides a means to merge a referenced file into the report. Intended use is the possibility to merge different reports into one report that can be imported in for example MS Word.
	Arguments: 1 - fileName: Name of the file whose content will be Included. The location of the file to be included has to be relative to the template output directory.
\$USERNAME()\$	Inserts the users display name.
	Arguments: 0

\$THRESHOLDCROSSING (key; variableId; numberFormatId>)\$	Template function to insert threshold crossing information for the given time series.  Arguments: 2-3
	- key: specifies which threshold crossing information should be given. The following keys can be used:
	FIRST_THRESHOLDNAME: name of the first level threshold that has been crossed FIRST_THRESHOLDWARNINGLEVELID: id of the first level threshold that has been crossed FIRST_VALUE: value of the first crossing FIRST_DATETIME: date/time of the first crossing FIRST_DATE: date of the first crossing MAX_THRESHOLDNAME: name of the highest level threshold that has been crossed MAX_THRESHOLDNAME: name of the highest level threshold that has been crossed MAX_THRESHOLDWARNINGLEVELID: id of the highest level threshold that has been crossed MAX_OATETIME date/time of the maximum crossing MAX_DATETIME date/time of the maximum crossing MAX_DATE: date of the maximum crossing MAX_TIME: time of the maximum crossing
	<ul> <li>variableId : refers to the variableId assigned to the time series in the report configuration.</li> <li>numberFormatId : optional, specified in the configuration file, sets the formatting for the values to be displayed</li> </ul>
\$INDEXMAXWARNINGLE VELCOLOR_TIDENUMBE R(timeSeriesIndex; referenceVariableId:	This function is used to create a warning map containing colored coastal areas based on expected exceedances for certain high water levels. This function is not supported in SSD display
tideVariableId, variableId)\$	Arguments: 4
	<ul> <li>timeSeriesIndex: time index relative to the index of time zero of the workflow run</li> <li>referenceVariableId: time series with 'referenced' tide numbers. Using timeSeriesIndex, the relevant tide number is picked up from this time series.</li> <li>tideVariableId: time series with tide numbers that correspond with the data in variableId. Using the tide number (found in referenceVariableId), an associated time is picked up from this time series</li> <li>variableId: time series with water levels. Using the time found in tideVariableId, a value is picked up from this time series.</li> </ul>
\$THRESHOLDCROSSING LABEL (key; variableld; label)\$	Template function to insert threshold crossing information for the specific threshold, that meets the following condition: the label must match the 'targetLocatiold' of the thresholdValueSet. This 'targetLocatiold' is a result of the solving the
	Arguments: 3
	key: specifies which threshold crossing information should be given. The following keys can be used: FIRST_THRESHOLDNAME: name of the first level threshold that has been crossed FIRST_THRESHOLDNAME: name of the highest level threshold that has been crossed MAX_THRESHOLDNAME: name of the highest level threshold that has been crossed MAX_THRESHOLDWARNINGLEVELID: id of the highest level threshold that has been crossed variableld: refers to the variableld assigned to the time series in the report configuration. label: label that should match the resolved <targetlocationidfunction></targetlocationidfunction>
\$STATISTICS(statistical	Template function to insert the result of the given statistical function for the given timeSeries.
function; variableId; numberFormatId)\$	Arguments: 2-3 - statistical function : name of the statistical function to evaluate. Presently the followig functions are available: COUNT, KURTOSIS, MEAN, MEDIAN, MIN, RMSQ, RSQUARED, SKEWNESS, STANDARD_DEVIATION, SUM, VARIANCE - variableId : refers to the variableId assigned to the time series in the report configuration. - numberFormatId : optional, specified in the configuration file, sets the formatting for the values to be displayed