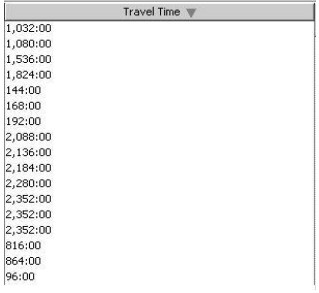
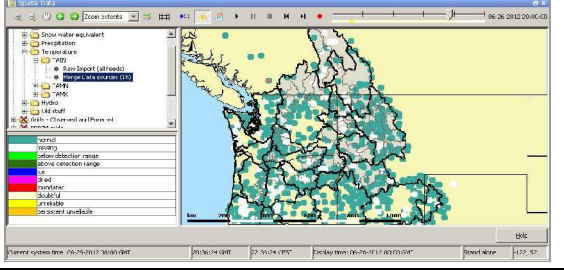
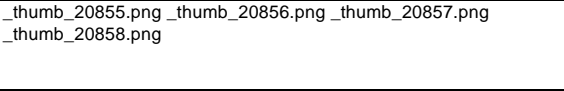
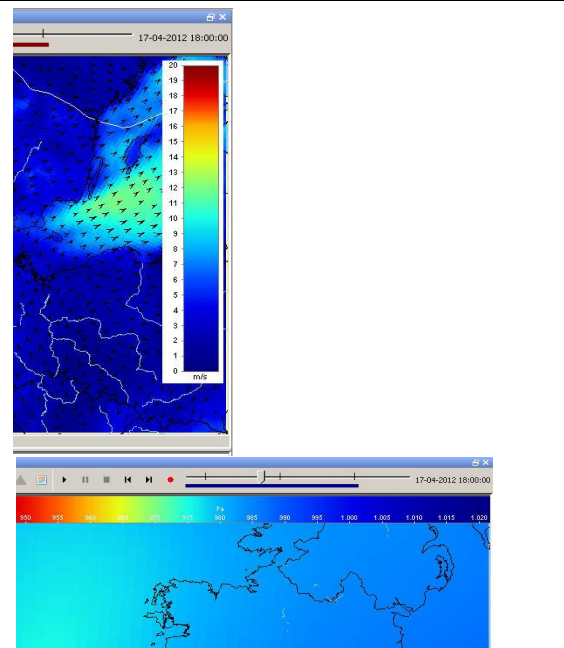


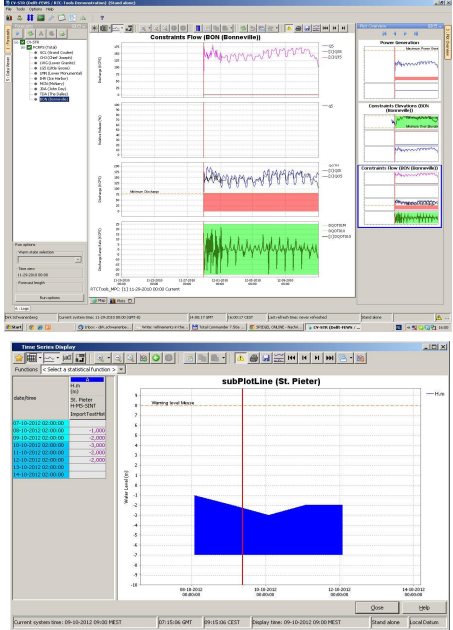


Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
App - Admin Web User Interface	FEWS-8237				
App - Admin Web User Interface	FEWS-7866	Fix indentation of ScheduledTasks.xml included in collected log files	Fix indentation of ScheduledTasks.xml included in collected log files		
App - Admin Web User Interface	FEWS-7624	Workflow-FSS mappings included as csv in Collected Logs via Admin Interface. Only mappings from "local" MC are included.	Workflow-FSS mappings included as csv in Collected Logs via Admin Interface		
App - Admin Web User Interface	FEWS-7610		Sorting functionality on several columns in the Admin interfaces that was missing has been added.		
App - Configuration Manager Gui, System	FEWS-7867	New map layers imported by the ConfigManager are now stored compressed in the database. In case an uncompressed version of a config file was already present, no new version will be generated. This way the configuration in the local datastore can remain smaller. Map layer files that were already compressed as determined by their extension are not compressed twice. The ConfigManager decompresses the compressed files again when exporting them to the file system.	New Map layers imported by the ConfigManagers are now stored compressed in the database.		
App - Configuration Manager Gui	FEWS-7519	Firstly, export by the ConfigManager and OC will make that the timestamp of related shape files on disk produced by config exports will have a corresponding timestamp. Secondly, a popup will be presented when the ConfigManager detects that the timestamps of the shape files that should match are not equal before importing them. The user should start the OC standalone with a local config and open the spatial display which will regenerate the properly corresponding shape files, which can then be imported by the ConfigManager for upload. Within the standalone OC for all layers the sll/dbz files should be regenerated in case of mismatching timestamps.	Functionality was added to prevent the ConfigManager from uploading inconsistent shp/sll or dbt/dbz files.		
App - Data Import Module (DIM)	FEWS-8000	<p>Import type MeiClimateIndex</p> <p>-----</p> <p>MeiClimateIndex imports MEI climate indices from website or from same file in import folder.</p> <p>Data block with climate indices starts with this header line: YEAR DECJAN JANFEB FEBMAR MARAPR APRMAY MAYJUN JUNJUL JULAUG AUGSEP SEPOCT OCTNOV NOVDEC</p> <p>The keywords in the header line are separated with blanks This line is followed by one or more data lines, each with a year and 12 indices for 12 months. Values in data line are separated with Tabs and are stored as 01-01-<year> for DECJAN, as 01-02-<year> for JANFEB , etc. Missing values should be specified with -999.99.</p> <p>Data block may be preceded and/or followed by any other lines. The reader uses header line keywords to identify the beginning of data block, and reads the data lines as long as there is a valid year identification at the beginning of the line.</p>	Import type MeiClimateIndex to import MEI climate indices from website or from same file in import folder	<p>Example for reading from website:</p> <pre>. <import> <general> <importType>MeiClimateIndex</importType> <serverUrl>http://www.esrl.noaa.gov/psd/enso/mei/table.html</serverUrl> {code}</pre> <p>Example for reading from import folder:</p> <pre>. <import> <general> <importType>MeiClimateIndex</importType> <folder>\$IMPORT_FOLDER\$/mei/table.html</folder> {code}</pre>	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
App - Data Import Module (DIM)	FEWS-7994	<p>MIS import type</p> <p>This import type is created for forecasting system in Colombia and imports scalar timeseries.</p> <p>File example:</p> <pre><STATION>0011037030</STATION><SENSOR>0230</SENSOR><DATEFORMAT>YYYYMMDD</DATEFORMAT> 20120620;21:00:00;2.71 20120620;22:00:00;2.78 20120620;23:00:00;[15] <STATION>0011037030</STATION><SENSOR>0231</SENSOR><DATEFORMAT>YYYYMMDD</DATEFORMAT> 20120620;21:00:00;270.7 20120620;21:58:00;278.4</pre> <p>From the header line the following information are read: location id specified by tag STATION parameter id specified by tag SENSOR format of the date string to be used in parsing the data, specified by tag DATEFORMAT</p> <p>There can be multiple blocks of data in each file, with each time series started by a STATION tag In some cases the value is give between square brackets - these are interpreted as missing data. The file can contain blank lines.</p>	This import type is created for forecasting system in Colombia and imports scalar timeseries.		
App - Data Import Module (DIM)	FEWS-7208	<p>If this option is set to true, the files with unmappable timeseries will be moved to the failedFolder, and a warn message will be logged.</p> <p>Unmappable timeseries are the series whose header id's (parameter, location, ...) cannot be converted to internal id's. If the option "disableImportOnMissingUnitConversion" is set to true, then also series, whose external unit cannot be converted to internal , will be marked as unmappable.</p>	TimeSeriesImport configuration option "failOnUnmappableTimeSeries"	<pre>TimeSeriesImportRun.xml: <import> <general> <importType>PI</importType> <folder>\$IMPORT_TEST_FOLDER_HIST</folder> <failedFolder>\$IMPORT_FAILED_FOLDER</failedFolder> <failOnUnmappableTimeSeries>true</failOnUnmappableTimeSeries> <unitConversionsId>ImportUnitConversions</unitConversionsId> <disableImportOnMissingUnitConversion>true</disableImportOnMissingUnitConversion> </general> {code}</pre>	
App - Forecasting Shell Server	FEWS-7714	<p>Previously It was in the configuration possible to choose either a minimum forecast length or a minimum end day. Now both can be used at the same time. The forecast length will be choosen so that the minimum forecast length and the minimum end day are both complied.</p>	It is now possible to combine a minimum forecastLength with a minimum end day		
App - Forecasting Shell Server, App - Master Controller Server, System - Synchronisation, Third Party	FEWS-7492	Added support for JBoss 7 AS as JMS server.	Added support for JBoss 7 AS as JMS server		
App - Launcher Gui	FEWS-8106		customizing the fews launcher application		
App - Master Controller Server	FEWS-7979				
App - Master Controller Server	FEWS-7963	<p>The CompactCacheFiles WorkflowPlugin has been extended so that it will remove expired external Warmstate files on an FSS machine. This behaviour is independent of the Rolling Barrel and uses the Warmstate cache.</p>	The CompactCacheFiles WorkflowPlugin has been extended so that it will remove expired external Warmstate files on an FSS machine.		
App - Master Controller Server	FEWS-7877	<p>Added UNIQUE constraint to localIntId column of TimeSeries Table. Added tests to data_update scripts which test for any duplicate localIntId values. The scripts will not continue when duplicate localIntId values are present (will only occur when a backup was incorrectly restored); if this happens the customer will need to contact support.</p>	Added UNIQUE constraint to localIntId column of TimeSeries Table.		
App - Master Controller Server, Database	FEWS-7117				
App - Master Controller Server	FEWS-7077				
App - Operator Client Gui	FEWS-8184				
App - Operator Client Gui, System - Synchronisation	FEWS-8001				
App - Operator Client Gui	FEWS-7871				
App - Operator Client Gui	FEWS-7764				
App - Operator Client Gui	FEWS-7703	<p>When a configuration file is changed that effects one of the open displays the FEWS explorer is reinitialized. In docking mode all the displays are started by default are reopened. All displays that are not open by default or when using a non docking environment are closed. There no longer display or panels left open that use obsolete configuration. On stand alone systems pressing F5 is still required to trigger the config change.</p>	Displays are now always in synch with active configuration	no configuration required	

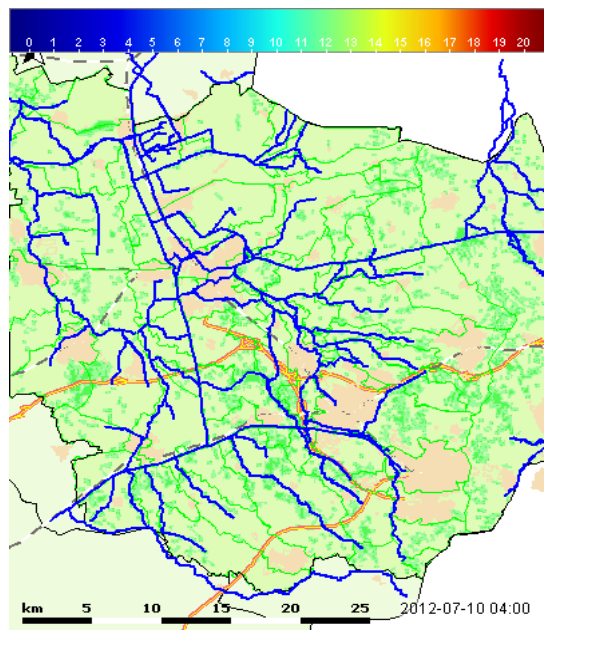
Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
App - Operator Client Gui	FEWS-7292				
App - Operator Client Gui	FEWS-7139	Shortcuts in TimeSeriesDisplay have a new icon. A 'star' has been chosen since it is usually used for 'favorites'	New shortcuts icon in TimeSeriesDisplay		
Configuration	FEWS-7801				
Database	FEWS-8112				
Database	FEWS-7942	Significant speed-up of worst case rolling barrel. Logging is generated when rolling barrel is taking beyond the logging threshold (30s on OC, 60s on MC). A timeout of 2 minutes is set on the initial OC RollingBarrel task that may take before the synchronisation. This means no RollingBarrel subtasks are initiated after this timeout. This can be overridden by the global property rollingBarrelTimeoutSeconds (minimum of 10 seconds).	Significant speed-up of worst case rolling barrel and timeout option on OC.	Global.properties {code} rollingBarrelTimeoutSeconds=120 {code}	
Database	FEWS-7381				
Database	FEWS-6416				
Module Adapter - All	FEWS-7844				
Module Adapter - Delft3D	FEWS-7765	The Delft3D adapter was made more robust in closing file handles in case of exceptions.	The Delft3D adapter was made more robust in closing file handles in case of exceptions		
Module Adapter - SOBEK	FEWS-8087				
Plugin - Gui - Correlation	FEWS-8271	Sort on whole number not on first value		no config	
Plugin - Gui - Correlation	FEWS-8270	Show all event items in scatterplot		no config	
Plugin - Gui - Correlation	FEWS-8269	Changed format to include days		no config update	
Plugin - Gui - Forecast Manager, Plugin - Gui - Manual Forecast, Plugin - Gui - System Monitor, System	FEWS-8252				
Plugin - Gui - Grid Display	FEWS-8278				
Plugin - Gui - Grid Display, Plugin - Module - Secondary Validation	FEWS-8213				
Plugin - Gui - Grid Display	FEWS-7955	In case of vertical (left or right) legend the unit is placed at the legend bottom. In case of horizontal (top or bottom) legend the unit is placed along the axis.	GridDisplay: displaying unit in paint scale legend		
Plugin - Gui - Grid Display	FEWS-7467	In the grid display click the toggle button to switch on/off the spatial thumbnails panel. In the previous version of Delft-FEWS (2012.01), this panel was only visible when configured. Now for each given grid plot it is possible to configure whether the grid display should or should not show the spatial thumbnails panel at the moment that the user selects the given grid plot in the grid display. After the user has selected a grid plot, the user can switch on/off the spatial thumbnails panel for that grid plot manually, using the toggle button in the grid display. Backwards compatibility: In the previous version of Delft-FEWS (2012.01), this spatial thumbnails panel was only visible when the option numberOfRecentForecasts was present in the grid display configuration. Now this is controlled by the option showThumbnailsPanel. To keep the behaviour the same, in the grid display configuration need to add <showThumbnailsPanel>true</showThumbnailsPanel> for each grid plot that already has a numberOfRecentForecasts configured. E.g.: <showThumbnailsPanel>true</showThumbnailsPanel> <numberOfRecentForecasts>3</numberOfRecentForecasts>	New toggle button to switch on/off the spatial thumbnails panel in the grid display	In GridDisplay config file configure the following option set to true to make the thumbnails panel visible initially (has to be done for each gridPlot individually): {code} <showThumbnailsPanel>true</showThumbnailsPanel> {code} Optionally configure the number of recent forecasts that should be shown when the spatial thumbnails panel is visible, as follows (default is 1, this option has no effect for historical data): {code} <numberOfRecentForecasts>3</numberOfRecentForecasts> {code} Optionally configure the gap between thumbnails that is used when the spatial thumbnails panel is visible, as follows (default is 1). {code} <gapBetweenThumbnails>3</gapBetweenThumbnails> {code}	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Gui - Grid Display	FEWS-7440	<p>The MergeSimple and AccumulationSumInterval transformations work for grids. Only the profileTimeSeries transformation does not work for grids.</p> <p>In this case the profileTimeSeries transformation is used to create a time series with only zeros during the season December-March, which is merged with the data in a data hierarchy, so that the data becomes zero during the season December-March. This was done because the users in this case only want to see the data from the season April-November (hydrological season).</p> <p>Instead of taking all data and removing the data from the season December-March, it would be simpler to make sure that there is only data available for the season April-November in the first place. This can be done using a seasonal periodTransformation of type userSimple that copies the data to the displayed time series for the season April-November and writes zero or missing values for the season December-March. This way the profileTimeSeries transformation is no longer needed, therefore it should also work for grids.</p>	Config problem that was solved by using a seasonal userSimple transformation instead of a mergeSimple in combination with a profileTimeSeries transformation.		
Plugin - Gui - Grid Display	FEWS-7185				
Plugin - Gui - Grid Display	FEWS-7184				
Plugin - Gui - Manual Forecast	FEWS-7746	Only use full in very specific situations. Feature can only be enabled by manually adjusting task properties before uploading to admin interface	Scheduled workflow that runs from fixed point in time to dynamic scheduled time	<pre> <?xml version="1.0" encoding="UTF-8"?> <taskProperties xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/taskProperties.xsd" xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <userId??/></userId> <workflowId>Severn_Lsev_Forecast</workflowId> <taskSelection> <scheduledTask> <schedulingPeriod> <startDate>2012-10-24T14:00:00.000Z</startDate> <endDate>3000-10-24T14:00:00.000Z</endDate> </schedulingPeriod> <schedulingInterval unit="hour"/> </scheduledTask> </taskSelection> <forecastPriority>Normal</forecastPriority> <makeForecastCurrent>false</makeForecastCurrent> <stateSelection> <coldState> <fixedStartTime date="2012-10-24" time="14:00"/> </coldState> </stateSelection> <makeStateCurrent>false</makeStateCurrent> </taskProperties> {code} </pre>	
Plugin - Gui - Manual Forecast	FEWS-7625				
Plugin - Gui - Manual Forecast	FEWS-7608		The shortcut to open the Manual Forecast Display (CNTR-N) does not work when the Data Display or the Data Editor are in the foreground		
Plugin - Gui - Manual Forecast	FEWS-7228	<p>The availability of the Macro option can be managed using configuration element <runningPredefined> in ManualForecastDisplay.xml</p> <p>Both SA and OC can have macro option. The functionality is accessible through Macro button.</p> <p>The possible configurations are :</p> <p>A) no <runningPredefined> configured no access to macro button</p> <p>B) <runningPredefined> configured with <buttonVisible>true</buttonVisible> macro button is always visible</p> <p>C) <runningPredefined> configured with <buttonVisible>false</buttonVisible> no access to macro button by default However, the user can occasionally show/hide macro button using F12 debug menu.</p>	Configuration of Macro option in ManualForecastDisplay:	<pre> <manualForecastDisplay ... <runningPredefined> <directory>%REGIN_HOME%\</directory> <buttonVisible>true</buttonVisible> </runningPredefined> </manualForecastDisplay> {code} </pre>	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Gui - Map, Plugin - Gui - Time Series	FEWS-7875				
Plugin - Gui - ScenarioEditor (NGMS)	FEWS-7896	This filtering functionality is activated by a selection of location ids in the taskProperties.	The General Adapter TimeSeriesImport can now internally filter on selected locations.		
Plugin - Gui - Schematic Status Display	FEWS-5232	Added possibility to open timeseriesdialog at a pre configured display in the shortcuts tree. In the scada configuration you must configure a display item instead of a variable. The display item must consist of a valid displayGroupName and displayName. It is optional to add an overrulingRelativeViewPeriod. Note the overrulingRelativeViewPeriod is overruled if a relativeViewPeriod has been configured for the display in the DisplayGroups file.	Possible to click to open to display plot in shortcut tree	<pre>{code} <leftSingleClickAction> <openDisplay> <timeSeriesDisplay> <title>Afvoer RG Numansdorp Noord</title> <display> <displayGroupName>Gemalen</displayGroupName> <displayName>De Boezemloozende Strijen-sas</displayName> <overrulingRelativeViewPeriod unit="day" start="-5" end="0"/> </display> </timeSeriesDisplay> </openDisplay> </leftSingleClickAction> {code}</pre>	
Plugin - Gui - Time Series, Plugin - Module - Data Export	FEWS-8158	In the time series dialog the time zone used is now visible in the table header. This time zone name is now also copied to the clipboard and written in a exported csv file. The timezone used is always the same as the time zone displayed after the system time in the explorer status bar	Timezone name in time series dialog	no configuration required	
Plugin - Gui - Time Series	FEWS-8120	DisplayGroups, configuration of difference areas using <area> : <area> has a new element <defaultReferenceValue>. This option is only relevant if <area> has uneven number of series. For the last series, the difference area is drawn between the last series and the reference value. If the reference value is not configured, 0 is used. Note: the value configured with <defaultReferenceValue> should be included in the y-axis range. If it is not included for some reason, you should configure or amend the plot minimum and/or maximum, e.g. <subplot min="4.0">	New configuration element 'defaultReferenceValue' to customize drawing difference areas in TimeSeriesDisplay	Example 1: the difference area will be drawn between H-MS-LUIK series and -4.0 <pre>{code:xml} <subplot> <area> <defaultReferenceValue>-4.0</defaultReferenceValue> <timeSeriesSet> <moduleInstanceId>ImportTestHistorical</moduleInstanceId> <valueType>scalar</valueType> <parameterId>H.m</parameterId> <locationId>H-MS-LUIK</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="day" /> <relativeViewPeriod unit="day" start="-2" end="2"/> <readWriteMode>read only</readWriteMode> </timeSeriesSet> </area> </subplot> {code}</pre> Example 2: the last difference area will be drawn between H-MS-SINT series and -4.0 <pre>{code:xml} <subplot> <area> <defaultReferenceValue>-4.0</defaultReferenceValue> <timeSeriesSet> <moduleInstanceId>ImportTestHistorical</moduleInstanceId> <valueType>scalar</valueType> <parameterId>H.m</parameterId> <locationId>H-MS-LUIK</locationId> <locationId>H-MS-RORR</locationId> <locationId>H-MS-SINT</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="day" /> </timeSeriesSet> </area> </subplot> {code}</pre>	
Plugin - Gui - Time Series	FEWS-7874		PCA plot: switch content on x- and y-axis		
Plugin - Gui - Time Series	FEWS-7856	The Time Series Display has now an option that you can show a location attribute (or any other valid description) in the header of the table.		<pre>{code:xml} <generalDisplayConfig> <convertDatum>true</convertDatum> ... <headerLine>External ID: @TAG@</headerLine> </generalDisplayConfig> {code}</pre>	
Plugin - Gui - Time Series	FEWS-7669	This is a BUG FIX, since the functionality was broken in Stable2012.01. Problem description was: When I try to enter a time series using the display, and press OK or Toepassen in the pop-up box, nothing much happens (i.e. no time series is added in the plot box).	Entering values in Gate display (Fews RMM).		
Plugin - Gui - Time Series	FEWS-7412				
Plugin - Gui - Time Series	FEWS-7411	A new button is added to the toolbar of the TimeSeriesDialog. This button zooms out automatically so that all data available in the database for a the timeseries shown in the display is shown in the graph.	New button added to the TimeSeriesDialog which zooms out so that all data is visible		
Plugin - Gui - Time Series	FEWS-6706	The ensemblePercentileExceedence plot (a statistical function in the timeseriesdialog) previously showed all data available in the plot. Now by default no data is shown. Only after selecting a timestep data will be shown for the selected timestep. It is possible to select more timesteps.	The ensemblePercentileExceedence plot now offers the option to select a timestep		
Plugin - Module - Data Export, Plugin - Module - Data Import	FEWS-8076				

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Module - Data Export	FEWS-7853	<p>When Delft-FEWS exports data to netcdf files, then the metadata that is written in the exported netcdf files can be configured in the timeSeriesExportRun configuration file. See the config example for the metadata options that can be configured. For each of these options it is possible to use the following tags:</p> <ul style="list-style-type: none"> %TIME_ZERO% the T0 of this time series export run. %CURRENT_TIME% the current time. %MODULE_INSTANCE_ID% the id of this module instance. %MODULE_INSTANCE_NAME% the name of this module instance. %MODULE_INSTANCE_DESCRIPTION% the configured description of this module instance. %WORKFLOW_ID% the id of the workflow in which this export runs. %WORKFLOW_NAME% the name of the workflow in which this export runs. %WORKFLOW_DESCRIPTION% the configured description of the workflow in which this export runs. %USER_ID% the id of the user by which this export run is executed. <p>Furthermore it is now possible to configure the cellMethod (only for time dimension) for a given parameter in the parameters configuration file. This cellMethod is added as an attribute to the data in the exported netcdf file.</p> <p>For forecast data the forecast reference time is now also added to the data.</p> <p>For data that is part of an ensemble, the ensemble id is added to the data.</p>	Option to configure metadata for export to netcdf files	<pre>{code:xml} <metadata> <title>title</title> <institution> institution </institution> <source>source</source> <history>Exported at time zero = %TIME_ZERO(yyyy/MM/dd HH:mm:ss z)% in module instance %MODULE_INSTANCE_ID% as part of workflow %WORKFLOW_NAME% by user %USER_ID%.</history> <references>references</references> <comment>The actual time of writing was %CURRENT_TIME(yyyy-MM-dd HH:mm:ss z)%</comment> <summary>A summary of the data</summary> <keyword>keyword1</keyword> <keyword> keyword with lots of spaces </keyword> <keyword>keyword 3</keyword> <customAttributes> <string key="emptyAttribute" value=" " /> <int key=" custom2 " value="123456"/> <string key="custom_3" value="This is a custom attribute with 'quotes' in it." /> <string key=" " value="attribute with empty key specified is not written"/> <float key="just_another_float" value="3.5"/> <bool key="truth" value="true"/> </customAttributes> </metadata> {code}</pre>	
Plugin - Module - Data Export	FEWS-7468				
Plugin - Module - Data Import	FEWS-8227	<p>As part of the Goulburn-Murray Water project (Victoria, Australia) we need to create three new import routines. This is 3 of 3.</p> <p>Example of the data to be imported and a description of the format will be provided on or before the 05/11/12.</p> <p>Project number is 1207257. The budget for this activity is 3 days including testing and documentation. Please let me know if it will be more.</p>			
Plugin - Module - Data Import	FEWS-8226	Theiss CSV format import routine for Goulburn-Murray Water project	Theiss CSV format import routine		
Plugin - Module - Data Import	FEWS-8225	Water Data Transfer Format (WDTF) import routine for Goulburn-Murray Water project	Water Data Transfer Format (WDTF) import routine		
Plugin - Module - Data Import	FEWS-7948	Replace current DataTransfer module with a PiService webservice	Implement PiService connection for ControlMaestro		
Plugin - Module - Data Import	FEWS-7903				
Plugin - Module - Data Import	FEWS-7870	Toevoegen mogelijkheid om waardebepalingsmethode te mappen naar interne qualifier.	Uitbreiding umaquo qualifier mappings	volgt nog (in het Engels!!)	
Plugin - Module - Data Import	FEWS-6199	<p>It often happens that on an OPeNDAP server there is data available for multiple forecasts with different forecast times. If the time periods of the forecasts overlap, then only one of the forecasts can be imported at a time. If there is a separate file for each forecast, then this can be done by specifying the URL of the required file in the import configuration. However, when such data is imported in an operational system, then the import URL should be changed each time a new forecast becomes available on the OPeNDAP server. If the URLs for the different forecasts contain the forecast time and only differ in forecast time, then the tags TIME_ZERO and/or RELATIVE_TIME_IN_SECONDS can be used to solve this problem. The import will replace any TIME_ZERO tags in the URL with the time zero (forecast time) of the current import run. Any RELATIVE_TIME_IN_SECONDS tags in the URL will be replaced with a time that equals (time0 + relativeTime), where time0 is the time zero (forecast time) of the current import run and relativeTime (specified in the tag) is a time relative to time0 in seconds (can be negative). The time is formatted using the date format.</p> <p>Note: If the import runs for a time zero for which there is no forecast data available, the import will fail.</p> <p>See documentation on wiki pages: http://publicwiki.deltares.nl/display/FEWSDOC/Import+Module+Data http://publicwiki.deltares.nl/display/FEWSDOC/Import+data+using+OPeNDAP</p>	In netcdf import from opendap added an option to import data for a given forecast time	<pre>{code:xml} <timeSeriesImportRun xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"> <import> <general> <importType>NETCDF-CF_GRID</importType> <serverUrl>http://nomads.ncep.noaa.gov:9090/dods/gfs/gfs%TIME_ZERO(yyyyMMdd)/gfs_%TIME_ZERO(HH)%z</serverUrl> <idMapId>NetcdfGridImportFromUrlWithTimeZeroTagsTest8IdMap</idMapId> </general> <timeSeriesSet> <moduleInstanceId>NetcdfGridImportFromUrlWithTimeZeroTagsTest8</moduleInstanceId> <valueType>grid</valueType> <parameterId>Pressure.msl</parameterId> <locationId>netcdfGridLocation8</locationId> <timeSeriesType>external forecasting</timeSeriesType> <timeStep unit="hour" multiplier="3"/> <readWriteMode>add originals</readWriteMode> </timeSeriesSet> </import> </timeSeriesImportRun> {code}</pre> <pre>{code:xml} <timeSeriesImportRun xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"> <import> <general> <importType>NETCDF-CF_GRID</importType> <serverUrl>http://nomads.ncep.noaa.gov:9090/dods/gfs/gfs%RELATIVE_TIME_IN_SECONDS(yyyyMMdd, -18000)%/gfs_%RELATIVE_TIME_IN_SECONDS(yyyyMMdd, -18000)%z</serverUrl> <idMapId>NetcdfGridImportFromUrlWithTimeZeroTagsTest8IdMap</idMapId> </general> <timeSeriesSet> <moduleInstanceId>NetcdfGridImportFromUrlWithTimeZeroTagsTest8</moduleInstanceId> <valueType>grid</valueType> <parameterId>Pressure.msl</parameterId> <locationId>netcdfGridLocation8</locationId> <timeSeriesType>external forecasting</timeSeriesType> <timeStep unit="hour" multiplier="3"/> <readWriteMode>add originals</readWriteMode> </timeSeriesSet> </import> </timeSeriesImportRun> {code}</pre>	
Plugin - Module - Error Correction	FEWS-7657				

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Module - General Adapter	FEWS-7816	The local datastore is now protected against badly written adapters that generate too many error and warning messages that are sent to the database via the General Adapter. If there are more than 100 error messages or more than 200 warnings or more than 10000 info messages are generated, a warning is issued about that the adapter might be badly written. Also after 200 warnings and 100 error messages, the messages will only log locally and no longer to the database.	The local datastore is now protected against badly written adapters of the General Adapter that generate too many log and warning messages that are sent to the database.		
Plugin - Module - Modifiers (TimeSeries)	FEWS-6709	Previously it was possible to connect a displaygroup to the topology by added a nodeId to the displaygroup. Now it is possible to connect 1 or more displaysgroup to a node in the topology by configuring 1 or more displayGroupId in the topology.	It now possible to refer to multiple displaygroups from the topology	<pre>{code:xml} <nodes id="qualitycontrol" name="Quality Control"> <nodes id="QC_snotel" name="QC Snow"> <node id="Preprocess_QC_SNWE" name="Preprocess SNWE"> <workflowId>Preprocess_QC_SNWE</workflowId> <displayGroupId>snowplots</displayGroupId> <displayGroupId>rainfallplots</displayGroupId> </node> {code}</pre>	
Plugin - Module - Reports	FEWS-8123	<p>Reports: rowPerLocationHtmlTable</p> <p>This table is a generic table type and contains for each configured location one row with several columns. The data displayed in a particular column are result of the function that is configured for that column.</p> <p>For each column the following elements can be configured:</p> <ul style="list-style-type: none"> - header : text to display in the column header, - format: format to use for this column. It refers to the styles that are available in the html template file - width: width of the column - function: function that determines/computes the value displayed in the column. <p>The functions</p> <p>The existing report functions, that are also used in html-templates, can be configured in the columns.</p> <p>For example MAXVALUE(variableId; numberFormat) or LASTVALUETIME(variableId; dateFormat).</p> <p>Furthermore the following functions are available:</p> <ol style="list-style-type: none"> 1. LOCATIONATTRIBUTE(attribute; <variableId>; <format>) <p>Argument attribute refers to the location attributes. The attributes differ per region.</p> <p>The other arguments are optional. For example, use argument 'f'.</p> <p>There are 3 attributes with a fix name: id, name and shortname. The attributes are not case sensitive.</p> <ol style="list-style-type: none"> 2. PARAMETERATTRIBUTE(attribute; variableId; <format>) <p>Argument attribute refers to the parameter attributes. The attribute format is optional. For example, use argument 'fo'.</p>	New HTML report type 'rowPerLocationHtmlTable'	<p>The rowPerLocationHtmlTable can be configured directly in <report> section, or in the <declarations> section and referred from the <report> section.</p> <p>Example of the configuration in <report> section:</p> <pre>{code:xml} <report> <locationSetId>AllLocations</locationSetId> <rowPerLocationHtmlTable id="tableA" tableStyle="tableStyle3" > <column> <header>Locatie id</header> <format>_data</format> <function>LOCATIONATTRIBUTE(id)</function> </column> <column> <header>Locatie name</header> <format>_data</format> <width>200</width> <function>LOCATIONATTRIBUTE(name)</function> </column> <column> <header>Eenheid</header> <format>_data</format> <function>PARAMETERATTRIBUTE(UNIT;Qobserved)</function> </column> <column> <header>Datum le overschreiding</header> <format>_data</format> <function>THRESHOLDCROSSING(FIRST_DATE;Qobserved;dateFormatThreshold)</function> </column></pre>	
Plugin - Module - Reports	FEWS-7968				
Plugin - Module - Reports	FEWS-7729	<p>Exporting charts as SVG</p> <p>To export a chart in SVG format, specify this format using configuration element "fileFormat" :</p> <pre><fileFormat>svg</fileFormat></pre> <p>Default <fileFormat> value is png.</p>		<p>This example creates two reports, one with png chart and one with svg chart:</p> <pre>{code:xml} <report> <locationId>M-1000</locationId> <chart id="chart" formatId="chartFormat1" width="500" height="300"> <timeSeries lineStyle="solid;thick" axis="left" visibleInLegend="true" label="ECMWF">Qobserved</timeSeries> <timeSeries lineStyle="solid;thick" axis="right" visibleInLegend="true" label="ECMWF">Hobserved</timeSeries> <fileName>chart_A</fileName> </chart> <template>ReportTemplate_Report_German.html</template> <outputFileName>flowplot_A.html</outputFileName> </report> <report> <locationId>H-2091</locationId> <chart id="chart" formatId="chartFormat1" width="500" height="350"> <timeSeries lineStyle="solid;thick" axis="left" visibleInLegend="true" label="ECMWF">Qobserved</timeSeries> <timeSeries lineStyle="solid;thick" axis="right" visibleInLegend="true" label="ECMWF">Hobserved</timeSeries> <fileName>chart_B</fileName> <fileFormat>svg</fileFormat> </chart> <template>ReportTemplate_Report_German.html</template> <outputFileName>flowplot_B.html</outputFileName> </report> {code}</pre>	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Module - Reports	FEWS-7419	<p>Default or customized Bar Legend can be added to the spatial snapshot and to the GridDisplay.</p> <p>Use <code><legendStyle>bar</legendStyle></code> if a default bar legend should be displayed. The default legend is shown in <code>spatial_plot_1.png</code></p> <p>To customize the legend , use element <code><barLegend></code>. The following legend properties can be changed:</p> <ol style="list-style-type: none"> 1. position: legend can be place on the right, on the left, at the top or at the bottom. Default is on the right. 2. width: width of the bar in pixels. Default is 40 pixels. 3. length: length of the bar in pixels. The defaults are: 400 for legend on the right/left, for the legend at the top/bottom the length equals the snapshot width. 4. labelsInside: if true , ticks and labels are displayed inside the legend bar . The default is outside. <p>Pictures <code>legend_right.png</code> and <code>legend_top.png</code> shows examples of customized legend</p> <p>Note:</p> <ul style="list-style-type: none"> - <code><legendStyle>table</legendStyle></code> is not supported in spatial snapshot, it is supported only in <code>GridDisplay</code> - In <code>GridDisplay</code>, <code><barLegend></code> is supported if configured under <code><defaults></code>. The configuration within 'gridPlot' is not supported yet 	Customized bar legend (painted legend) in spatial snapshots and GridDisplay.	<p>Legend as shown in <code>legend_right.png</code> is created with the following configuration:</p> <pre>{code:xml} <barLegend> <position>right</position> <width>35</width> <length>300</length> <labelsInside>true</labelsInside> </barLegend> {code}</pre> <p>Legend as shown in <code>legend_top.png</code> is created with the following configuration:</p> <pre>{code:xml} <barLegend> <position>top</position> <width>35</width> <labelsInside>true</labelsInside> </barLegend> {code}</pre>	
Plugin - Module - Reports	FEWS-7409	<p>Report attribute "singleLocation":</p> <p>This option makes possible to create a separate report 'copy' per location, using one report definition.</p> <p>If <code>singleLocation=true</code>, a separate report for single location will be created.</p> <p>Locations can be specified using <code>location(Set)Id</code> or <code>parentLocation(Set)Id</code> . By default the locations from configured <code>TimeSeriesSets</code> are used.</p> <p>The report may contain chart and/or <code>htmlTable</code> definitions.</p> <p>Other definitions (such as <code>avi</code>) are not supported yet in combination with this <code>singleLocation</code> option</p>	Reports: configuration element "singleLocation" to creating a separate report per location, using one report definition	<p>Configuration examples for <code><report singleLocation="true"></code></p> <ol style="list-style-type: none"> 1. This configuration creates two reports. Since no png filename is configured, <code>chart000.png</code> and <code>chart001.png</code> are created, according to this naming convention: "chart" + sequence of a report in the file + sequence of a chart in the report + copy nr. for that report The created html files are <code>flowplot_M-1000.html</code> and <code>flowplot_H-2091.html</code> <pre>{code:xml} <report singleLocation="true"> <locationId>M-1000</locationId> <locationId>H-2091</locationId> <chart id="flow" formatId="chartFormat1" width="500" height="300"> <timeSeries lineStyle="solid;thick" axis="left" visibleInLegend="true" label="ECMWF">Qobserved</timeSeries> <timeSeries lineStyle="solid;thick" axis="right" visibleInLegend="true" label="ECMWF">Hobserved</timeSeries> </chart> <template>template_flowplot.html</template> <outputFileName>flowplot.html</outputFileName> </report> {code}</pre> <ol style="list-style-type: none"> 2. This configuration creates n-reports for n-locations from the location set 'SelectedReportStations' The names of png-files are <code>flowchart_<location id>.png</code> , e.g. <code>flowchart_H-2091.png</code> The created html files are for example <code>H-2091_flowplot.html</code> and so on. <pre>{code:xml} <report singleLocation="true"> <locationSetId>SelectedReportStations</locationSetId> <chart id="flow" formatId="chartFormat1" width="500" height="300"> <timeSeries lineStyle="solid;thick" axis="left" visibleInLegend="true" label="ECMWF">Qobserved</timeSeries> <timeSeries lineStyle="solid;thick" axis="right" visibleInLegend="true" label="ECMWF">Hobserved</timeSeries> <fileName>flowchart</fileName> </chart> <template>template_flowplot.html</template> <outputFileName>%LOCATIONID%_flowplot.html</outputFileName> </report> {code}</pre>	
Plugin - Module - Reports	FEWS-7408	<p>In Reports and <code>ChartLayer</code> a fixed number of ticks can be configured using element <code><ticksNumber></code>.</p> <p>The tick values depend on the axis range, and can be optionally rounded using <code>scaleUnit</code>.</p>	Configuration of fixed number of ticks in Reports and <code>ChartLayer</code>	<pre>{code:xml} <chartFormat id="chartFormat1"> <includeTime0>true</includeTime0> <leftAxis> <min>100</min> <max>2000</max> <ticksNumber>5</ticksNumber> <scaleUnit>50</scaleUnit> <caption>Abfluss [m3/s]</caption> </leftAxis> <rightAxis> <tickUnit>100</tickUnit> <caption>Pegel [m]</caption> <format>##0.00</format> </rightAxis> <relativeWholePeriod start="-2" end="10" unit="day"/> </chartFormat> {code}</pre>	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Module - Reports	FEWS-7407	Tick label font can be configured in Reports and in ChartLayer. Each axis - horizontal, left and right - may have an own font configuration	Configuration of axis tick label font in Reports and ChartLayer	<pre> {code:xml} <chartFormat id="chartFormat1"> <includeTime0>true</includeTime0> <leftAxis> <caption>Abfluss [m3/s]</caption> </leftAxis> <thresholdAxisScaling>all thresholds</thresholdAxisScaling> <bottomAxis> <format>d.M.\nE</format>\ <tickUnit unit="day"/> <minorTickUnit unit="hour" multiplier="6"/> <centerLabelsBetweenTicks>true</centerLabelsBetweenTicks> </bottomAxis> <relativeWholePeriod start="-2" end="10" unit="day"/> </chartFormat> {code} </pre>	
Plugin - Module - Secondary Validation, Plugin - Module - Transformation	FEWS-7418	The search mechanism for neighbouring locations used in interpolation and spatial homogeneity test has been extended with options quadrant search and backup points. The search mapping is determined at the start of the search. This will allow for efficient searching. In case of missings, a predefined number of backup points can be used. The geodatumdistance parameter specified must be in meters and fit all points. When required, the coordinates of the locations can also be normalized for elevation using a X-, Y-, and Z- multiplier.	The search mechanism used in interpolation and spatial homogeneity test has been extended with options quadrant search, backup points and correction for elevation.		
Plugin - Module - Secondary Validation	FEWS-7186	Spatial HomogeneityCheck secondary validation that flags timeseries doubtful or unreliable by comparison with an estimation based on observations from neighbouring locations. Neighbouring locations can be selected with a search radius and a number of points. There is also functionality for backuppoints whenever the reference points contain missings. The check can either absolute or relative. The absolute check will update the reliability flags of timeseries when the absolute difference between observed and estimated exceeds a threshold. The relative check will update the reliability flags when the value differs more than the specified factor times the standard deviation.	Spatial HomogeneityCheck secondary validation that flags timeseries doubtful or unreliable by comparison with observations from neighbouring locations.	<pre> {code:xml} <spatialHomogeneityCheck id="spatialHomogeneityCheck_locationSet"> <inputVariableId>locationSet1</inputVariableId> <outputVariableId>locationSet2</outputVariableId> <searchRadius>10000</searchRadius> <numberOfPoints>4</numberOfPoints> <distancePower>2</distancePower> <threshold> <absolute>5</absolute> <outputFlag>unreliable</outputFlag> <logLevel>WARN</logLevel> <logEventCode>SecondaryValidation.spatialHomogeneityCheck</logEventCode> <logMessage>%AMOUNT_CHANGED_FLAGS% flags set to %OUTPUT_FLAG% by %CHECK_ID%, header=%HEADER%, location(s)=%LOCATION_NAME%</logMessage> </threshold> <relative>1.5</relative> <outputFlag>doubtful</outputFlag> <logLevel>INFO</logLevel> <logEventCode>SecondaryValidation.spatialHomogeneityCheck</logEventCode> <logMessage>%AMOUNT_CHANGED_FLAGS% flags set to %OUTPUT_FLAG% by %CHECK_ID%, header=%HEADER%, location(s)=%LOCATION_NAME%</logMessage> </threshold> </spatialHomogeneityCheck> {code} </pre>	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Module - Secondary Validation	FEWS-7172	MannKendallCheck secondary validation that flags timeseries doubtful or unreliable whenever either a trend is detected or the maximum drift is exceeded. Drift is defined as the slope times the duration of the relative view period. Functions only for more than 10 non missings.	MannKendallCheck that performs secondary validation whenever a trend is detected.	<pre>{code:xml} <secondaryValidation xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/secondaryValidation.xsd"> <mannKendallCheck id="MannKendallCheck1"> <variable> <timeSeriesSet> <moduleInstanceId>MannKendallCheckTest</moduleInstanceId> <valueType>scalar</valueType> <parameterId>H.meting</parameterId> <locationId>Nue_0015_01_01</locationId> <timeSeriesType>simulated forecasting</timeSeriesType> <timeStep unit="hour" multiplier="1"/> <relativeViewPeriod unit="day" start="100" end="0"/> <readWriteMode>read only</readWriteMode> </timeSeriesSet> </variable> <checkRelativePeriod unit="day" start="100" end="0"/> <threshold> <testTrend>two-tailed</testTrend> <confidenceCoefficient>0.01</confidenceCoefficient> </threshold> <logLevel>WARN</logLevel> <logEventCode>SecondaryValidation.MannKendallCheck</logEventCode> <logMessage>trend detected in %HEADER% by %CHECK_ID%.</logMessage> </mannKendallCheck> </secondaryValidation> {code}</pre>	
Plugin - Module - Transformation	FEWS-8228	Still to add	Still to add		
Plugin - Module - Transformation	FEWS-8166	Implementation chosen is different. At the beginning of a transformation it is now possible to choose a runperiod or a fixed start daymonth and a fixed end daymonth			
Plugin - Module - Transformation	FEWS-7962				
Plugin - Module - Transformation	FEWS-7938	A new transformation is added to FEWS. This transformation which is located in the merge-group and is named selectDatasource allows to select a datasource based on an attribute of the outputlocation. The attribute should be equal to the variableId of on of the configured input source. The input source which has a matching variableId will be selected.	New transformation which selects a datasource based on an attribute of the output location.	<pre>{code:xml} <?xml version="1.0" encoding="UTF-8"?> <transformationModule version="1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.wldelft.nl/fews" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/transformationModule.xsd"> <variable> <variableId>source1</variableId> <timeSeriesSet> <moduleInstanceId>SelectLocationFunctionTest</moduleInstanceId> <valueType>scalar</valueType> <parameterId>H.m</parameterId> <locationId>location1</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="day"/> <relativeViewPeriod unit="day" start="0" end="30"/> <readWriteMode>editing visible to all future task runs</readWriteMode> </timeSeriesSet> </variable> <variable> <variableId>source2</variableId> <timeSeriesSet> <moduleInstanceId>SelectLocationFunctionTest</moduleInstanceId> <valueType>scalar</valueType> <parameterId>H.m2</parameterId> <locationId>location1</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="day"/> <relativeViewPeriod unit="day" start="0" end="30"/> <readWriteMode>editing visible to all future task runs</readWriteMode> </timeSeriesSet> </variable> <transformation id="example"> <merge> <selectDataSource> <input> <variableId>source1</variableId> </input> </selectDataSource> </merge> </transformationModule> {code}</pre>	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Module - Transformation	FEWS-7893	<p>Transformation "GenerationEnsemble", function "selectWithSeries"</p> <p>-----</p> <p>This transformation function generates a new ensemble by making the sub-selection of members. For the sub-selection the scalar timeseries are used, that can be configure with "selectVariable".</p> <p>Typically, this function is used to reduce ensemble members using climate indices, when climate index series is used as "selectVariable".</p> <p>The function requirements are:</p> <ul style="list-style-type: none"> - in input ensemble , the years should be used as ensemble member id's c.q. member indices - the timeseries, specified with selectVariable, should be scalar timeseries - in output ensemble, only EnsembleID should be configured, since the output members are determined automatically <p>The working of the function will be explained using climate index series as "selectVariable".</p> <p>The inputs for the function are :</p> <ul style="list-style-type: none"> - full ensemble where EnsembleMemberId c.q. EnsembleMemberIndex is the historical meteo year, - one or more scalar time series with climate indices, - per climate index series maximum number of members that sh <p>The transformation steps for each configured climate index are:</p>	New transformation "GenerationEnsemble", function "selectWithSeries"	<pre> {code:xml} <variable> </variable> <variableId>inputEnsembles</variableId> <timeSeriesSet> <moduleInstanceId>InputModuleInstance</moduleInstanceId> <valueType>scalar</valueType> <parameterId>Q.m</parameterId> <locationId>H-2001</locationId> <locationId>H-2002</locationId> <timeSeriesType>external forecasting</timeSeriesType> <timeStep unit="day"/> <readWriteMode>read complete forecast</readWriteMode> <ensembleId>EnsembleA</ensembleId> </timeSeriesSet> </variable> <variable> <variableId>ENSO</variableId> <timeSeriesSet> <moduleInstanceId>InputModuleInstance</moduleInstanceId> <valueType>scalar</valueType> <parameterId>ENSO</parameterId> <locationId>climateIndexLocation</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep id="climateIndexMonthlyTimeStep"/> <relativeViewPeriod unit="day" start="-2000" end="0"/> <!-- since the smallest unit is day, use an estimation , i.e. -2000 --> <readWriteMode>read only</readWriteMode> </timeSeriesSet> </variable> <variable> <variableId>PDO</variableId> <timeSeriesSet> <moduleInstanceId>InputModuleInstance</moduleInstanceId> </pre>	
Plugin - Module - Transformation	FEWS-7830	The StatisticsPeriodic transformation now also supports output time steps monthlyTimeStep, daysOfMonth and SimpleEquidistantTimeStep of one day in length.		<pre> {code} <?xml version="1.0" encoding="UTF-8"?> <transformationModule version="1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.wldelft.nl/fews" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/transformationModule.xsd"> <!-- input variables --> <variable> <variableId>input</variableId> <timeSeriesSet> <moduleInstanceId>StatisticsPeriodicWithSimpleEquidistantTimeStepDayTest</moduleInstanceId> <valueType>scalar</valueType> <parameterId>Q.obs</parameterId> <locationId>H-2001</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="day" multiplier="1"/> <relativeViewPeriod unit="day" start="0" end="1461"/> <readWriteMode>read only</readWriteMode> </timeSeriesSet> </variable> <!-- output variables --> <variable> <variableId>output</variableId> <timeSeriesSet> <moduleInstanceId>StatisticsPeriodicWithSimpleEquidistantTimeStepDayTest</moduleInstanceId> <valueType>scalar</valueType> <parameterId>Q.mean</parameterId> <locationId>H-2001</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="day" multiplier="1"/> <cycle unit="year" multiplier="1"/> <!-- relativeViewPeriod of outputVariable is ignored for StatisticsPeriodic functions --> <relativeViewPeriod unit="day" start="0" end="365"/> <readWriteMode>add originals</readWriteMode> </timeSeriesSet> </variable> <!-- transformations --> <transformation id="StatisticsPeriodicWithSimpleEquidistantTimeStepDayTest"> <statisticsPeriodic> </pre>	
Plugin - Module - Transformation	FEWS-7413				

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Plugin - Module - Transformation	FEWS-6381	The jackknife method is an alternative method for calculating the rmse in the pca-analysis function. When the pca is applied to a set of data for lets say 10 years than the calculation method will be as follows. First the best equation is found when the first year is left out of the dataset. With this equation an estimate is made for that year by using the observed data for that year. Same procedure is done for the other years. At the end of the procedure for all years an estimate is available. The rmse is calculated from these estimates. The equation which will be used as the best equation is the one which found by using all years.	PCA Function in the transformation module and in statistical functions library is extended with the JackKnife method	<pre> <code>xml //config example timeseriesdialog.xml </statisticalFunction> <statisticalFunction function="principalcomponentanalysisJackKnife"> <observedParameterId>SNWE</observedParameterId> <simulatedParameterId>SWE</simulatedParameterId> </statisticalFunction> //config example transformation <transformation id="PCAFunction"> <regression> <principalComponentAnalysis> <historicalObserved> <variableId>historicalInputA</variableId> </historicalObserved> <historicalObserved> <variableId>historicalInputB</variableId> </historicalObserved> <historicalSimulated> <variableId>simulatedHistorical</variableId> </historicalSimulated> <currentObserved> <variableId>currentObservedA</variableId> </currentObserved> <currentObserved> <variableId>currentObservedB</variableId> </currentObserved> <currentSimulated> <variableId>currentSimulated</variableId> </currentSimulated> <enableCombinationAnalysis>true</enableCombinationAnalysis> <rmseCalculationMethod>jackKnife</rmseCalculationMethod> <estimatedCurrentSimulated> <variableId>estimatedCurrentSimulated</variableId> </estimatedCurrentSimulated> <errorStatistics> <variableId>errorStatistics</variableId> </errorStatistics> </pre>	
System, System - Synchronisation 2.0	FEWS-7865				
System - Workflow	FEWS-8143	Every loop iteration (ensemble member) should write to output time series not used by other loop iterations at the same time. Prevent loop iterations overwrite each other results. This gives unpredictable result in multi-treading mode. Not ensemble related transformations should be moved outside the loop.	Ensemble loop configuration errors detection	Configuration should be fixed by user when this error appears	
System - Workflow	FEWS-7675	Sometimes a module in FEWS which should run quickly can "hang", e.g. an Import is waiting for some server, blocking the Forecasting Shell from other activities. Whereas the TaskChaser can be used to terminate "hanging" tasks using a global timeout setting, this new optional timeout is configurable in the workflowDescriptor and can be used to terminate a specific FSS task whenever the timeout is exceeded..	The Forecasting Shell has been extended to automatically terminate a taskrun when a timeout that was specified in the workflowDescriptor has been exceeded.	The following section added to the workflowDescriptor enforces that the Forecasting shell taskrun times out after five minutes and is automatically terminated when the timeout is exceeded. This functionality allows for much finer-grained control over termination of tasks in the Forecasting Shell than the MC Chaser, since the chaser has one timeout for all available tasks. <pre> <code>xml <timeout unit="minute" multiplier="5"/> </code> </pre>	
Utilities	FEWS-7678				
Utilities	FEWS-7623	Non integer ensemble ids are supported since 2012.01. By default the non integer ensemble ids are replaced by an integer when exported from the general adapter.	Support for ensemble ids (non integer index) in pi.xml.	<pre> <code>xml <?xml version="1.0" encoding="UTF-8"?> <generalAdapterRun xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/generalAdapterRun.xsd"> <general> <description>Import configuration config bestanden</description> <piVersion>1.10</piVersion> <rootDir>%REGION_HOME%/Import/ImportConfiguratie</rootDir> <workDir>%ROOT_DIR%/workDir> <exportDir>%ROOT_DIR%/exportDir> <exportDataSetDir>%ROOT_DIR%/exportDataSetDir> <importDir>%ROOT_DIR%/importDir> <dumpFileDir>%REGION_HOME%/DumpFiles</dumpFileDir> <dumpDir>%ROOT_DIR%/dumpDir> <diagnosticFile>%ROOT_DIR%/Waterbalans/Logs/Diagnostics.xml</diagnosticFile> <missVal>NaN</missVal> <timeZone> <timeZoneOffset>+01:00</timeZoneOffset> </timeZone> </general> <activities> <exportActivities> <exportTimeSeriesActivity> <exportFile>series.xml</exportFile> <ensembleMemberFormat>name</ensembleMemberFormat> <timeSeriesSets> <timeSeriesSet> <moduleId>Waterbalans_Processing_3201_Sim</moduleId> <valueType>scalar</valueType> <parameterId>NEERSG</parameterId> <locationId>3201</locationId> <timeSeriesType>simulated forecasting</timeSeriesType> <timeStep id="dag"/> <relativeViewPeriod unit="day" start="-1461" end="0" startOverrulable="true"/> <readWriteMode>read only</readWriteMode> </timeSeriesSet> </pre>	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
Utilities	FEWS-7599	Since 2012.02 it is possible to use non integer ensemble member ids. In this case it not possible to specify a integer ranger to select a sub set of an ensemble. In this case the ensembleMemberIdRegularExpression can be used	Run only members with match an specified id pattern in an ensemble loop	<pre>{code:xml} <activity> <runIndependent>true</runIndependent> <moduleInstanceId>Sobek_RDR_Forecast</moduleInstanceId> <ensemble> <ensembleId>M</ensembleId> <ensembleMemberIdRegularExpression>^A.*</ensembleMemberIdRegularExpression> <runInLoop>true</runInLoop> </ensemble> </activity> {code}</pre>	
	FEWS-8229	This new report should be still designed and implemented	Customised web report for Goulburn Murray Water Project, Australia		
	FEWS-8163	A new flag is added to FEWS. The persistent unreliable flag. When the data delivered by a station is suspected to be unreliable from a certain point in time the value can be set to persistent unreliable from the TimeSeriesDialog. Second step in this procedure is to run the secondary validation module FlagPersistencyCheck. This module will set all values from this station to unreliable from the time where the flag was set. The values will be set to unreliable until the time at which a manual reliable is set for this station.	It is now possible to disable stations for certain period of time	<pre>{code:xml} <?xml version="1.0" encoding="UTF-8"?> <secondaryValidation xmlns="http://www.wldelft.nl/feWS" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/feWS file:///D:/feWS_trunk/xml-schemas/secondaryValidation.xsd"> <!-- variableDefinitions can be global or nested --> <variableDefinition> <variableId>flagPersistencyInput1</variableId> <timeSeriesSet> <moduleInstanceId>FlagPersistencyCheckTest</moduleInstanceId> <valueType>scalar</valueType> <parameterId>H.obs</parameterId> <locationId>location1</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="hour" multiplier="1"/> <readWriteMode>read complete forecast</readWriteMode> </timeSeriesSet> </variableDefinition> <flagPersistencyCheck id="FlagPersistencyCheck"> <input><variableId>flagPersistencyInput1</variableId></input> <logLevel>WARN</logLevel> <logEventCode>SecondaryValidation.flagPersistency</logEventCode> <logMessage>%AMOUNT_CHANGED_FLAGS% flags set to unreliable persistence for location=%LOCATION_NAME%</logMessage> </flagPersistencyCheck> </secondaryValidation> {code}</pre>	
	FEWS-8103	When importing a NetCDF-CF file that contains variable standard names can be mapped using the standard name configured in the parameters.xml.	Use of standard name mapping instead parameter id map (NetCDF-CF)	<pre>{code:xml} <import> <general> <importType>??? </pre>	
	FEWS-8102	When a import parser provides the location coordinates the locations can now be mapped based on x y coordinates. For now only the Swan spectrum parser provided coordinates. Custom time series parsers can also provide the coordinates by filling in the the TimeSeriesHeader object	TimeSeriesImport. Allow locations mapping based on coordinates instead of location id	<pre>{code:xml} <import> <general> <importType>??? </pre>	
	FEWS-8095				
	FEWS-8046	The statistical serial functions now also take into account the aggregationPeriod is this configured in the timeSeriesSet of the output timeseries.	Extension of the statistical serial functions		

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
	FEWS-8036	<p>Import type TeleconnClimateIndex</p> <p>-----</p> <p>TeleconnClimateIndex imports climate indices from website or from same file in import folder.</p> <p>Teleconn tabel contains several indices. The names (Id's) of the indices are specified in the header line.</p> <p>The Id's are: NAO, EA, WP, EP/NP, PNA , EA/WR, SCA, TNH, POL, PT, Expl. Var.</p> <p>Note that the last id is "Expl. Var."</p> <p>Use these Id's in Id-mapping as external parameter Id's, to specify which indices should be imported.</p> <p>Data lines has fixed format. The columns widths are column 1: 4 column 2: 4 column 3 through 12: 6 column 13: 7</p> <p>Data line with "*" marks the end of data block.</p> <p>File example: STANDARDIZED NORTHERN HEMISPHERE TELECONNECTION INDICES (1981-2010 Clim)</p> <p>column 1: Year (yy) column 2: Month (mm) column 3: North Atlantic Oscillation (NAO) column 4: East Atlantic Pattern (EA) column 5: West Pacific Pattern (WP) column 6: EastPacific/ North Pacific Pattern (EP/NP) column 7: Pacific/ North American Pattern (PNA) column 8: East Atlantic/West Russia Pattern (EA/WR) column 9: Sea Surface Temperature (SST)</p>	<p>Import type TeleconnClimateIndex to import climate indices from website or from same file in import folder</p>	<p>Example for import type TeleconnClimateIndex. Note that you should also configure one or more external parameter id's in the id-mapping.</p> <p>Reading from website: {code:xml} <import> <general> <importType>TeleconnClimateIndex</importType> <serverUrl>ftp://ftp.cpc.ncep.noaa.gov/wd52dg/data/indices/tele_index.nh</serverUrl> {code}</p> <p>Reading from import folder: {code:xml} <import> <general> <importType>TeleconnClimateIndex</importType> <folder>\$IMPORT_FOLDER\$/teleconn</folder> {code}</p>	
	FEWS-8035	<p>Import type NinoClimateIndex and TniClimateIndex</p> <p>-----</p> <p>NinoClimateIndex and TniClimateIndex import climate indices from website or from same file in import folder.</p> <p>The data format is the same for both import types.</p> <p>File example: 1948 2012 1948 -99.99 -99.99 -99.99 -99.99 -99.99 -99.99 -99.99 -99.99 -99.99 99.99 -99.99 -99.99 -99.99 1949 -99.99 -99.99 -99.99 -99.99 -99.99 -99.99 -99.99 -99.99 -99.99 99.99 -99.99 -99.99 -99.99 1950 24.83 25.20 26.03 26.36 26.19 26.52 26.42 25.98 25.78 25.96 25.64 25.50 2012 25.77 26.14 26.92 27.47 27.73 27.79 27.25 -99.99 - 99.99 -99.99 -99.99 11.11 -99.99 Nino 3.4 Index from CPC</p> <p>Data block starts with a header line with begin and end year. This header line is followed by data lines with year specification and 12 indices for each month. The fields in both header and data lines are separated by blanks Missing value is specified as -99.99</p>	<p>Import type NinoClimateIndex and TniClimateIndex to import climate indices from website or from same file in import folder</p>	<p>Example for import type NinoClimateIndex.</p> <p>Reading from website: {code:xml} <import> <general> <importType>NinoClimateIndex</importType> <serverUrl>http://www.esrl.noaa.gov/psd/data/correlation/nina34.data</serverUrl> {code}</p> <p>Reading from import folder: {code:xml} <import> <general> <importType>NinoClimateIndex</importType> <folder>\$IMPORT_FOLDER\$/nino</folder> {code}</p> <p>TniClimateIndex can be configured in the same way.</p>	

Component/s	Key	Release Note Text Description	Release Note Text	Config Example	Images
	FEWS-8034	<p>Import type QboClimateIndex and SoiClimateIndex</p> <p>----- QboClimateIndex and SoiClimateIndex import climate indices from website or from same file in import folder. The data format is the same for both import types, except for the column width of the month values.</p> <p>There are one, two or three data blocks in the file: ORIGINAL, ANOMALY, STANDARDIZED . These keywords should be configured as external parameter id, to specify which block(s) should be read.</p> <p>Each data block starts with this header line: YEAR JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC</p> <p>The keywords in the header line are separated with blanks . The reader uses header line keywords to identify the beginning of data block, and reads the data lines as long as there is a valid year identification at the beginning of the line. The header line is followed by one or more data lines, each with a year and 12 indices for 12 months. The month values are specified using fixed column width. Column width for QBO is 7, and 6 for SOI. Missing values are specified as -999.99 or -999.90 for QBO, and</p>	<p>Import type QboClimateIndex and SoiClimateIndex to import climate indices from website or from same file in import folder</p>	<p>Examples for import type QboClimateIndex. Note that you should also configure one or more external parameter id's ORIGINAL, ANOMALY, STANDARDIZED in the id-mapping.</p> <p>Reading from website: {code:xml} <import> <general> <importType>QboClimateIndex</importType> <serverUrl>http://www.cpc.ncep.noaa.gov/data/indices/qbo.u30.index</serverUrl> {code}</p> <p>Reading from import folder: {code:xml} <import> <general> <importType>QboClimateIndex</importType> <folder>\${IMPORT_FOLDERS}/qbo/qbo.u30.index</folder> {code}</p> <p>SoiClimateIndex can be configured in the same way.</p>	
	FEWS-8019			<p>SG 3/9 Functionality will be added to the "spatial thumbnails". Selection of what-ifs to open will be more generic so that multiple what-ifs can be selected. This selection will then be viewable in both the TSD and the Spatial Display.</p>	
	FEWS-8018				
	FEWS-7980				
	FEWS-7924				
	FEWS-7916	<p>The export from the Scenario Editor shows missing when not a correct relativeViewperiod is chosen. A configuration example is available to resolve this problem.</p>	<p>Configuration example for problem with scenario editor exporting missing data</p>	<pre><basicScenarioTemplate description="Modified recharge scenarios" name="Drought Scenario"> <variableTransformation description="Modify precipitation rates of existent precipitation" name="Modify precipitation rates of existent precipitation"> <duoSpecificationVariable> <userDefinedFunctionVariable calculatorTip="Please note that rainfall is in mm/d"> <variable variableId="udfSWSX_RAIN.Historic" variableType="typicalgridprofile"> <timeSeriesSet> <moduleInstanceId>SWSX_run4R_Historic</moduleInstanceId> <valueType>grid</valueType> <parameterId>RAIN.Historic</parameterId> <locationId>SWSX</locationId> <timeSeriesType>simulated historical</timeSeriesType> <timeStep unit="day" multiplier="1"/> <relativeViewPeriod unit="day" start="-14600" end="365" endOverrutable="true" /> <readWriteMode>read only</readWriteMode> </timeSeriesSet> </variable> </userDefinedFunctionVariable> </duoSpecificationVariable> </variableTransformation></pre>	
	FEWS-7897	<p>Two exports have been added to the General Adapter for generating PiMapStack masks: ExportAreaSelection via one base64 encoded polygon in TaskProperties and ExportLocationArea via locationSelection of multiple location ids in TaskProperties.</p>	<p>The general adapter has been extended so that internally PiMapStack masks can be generated.</p>		
	FEWS-7787	<p>When exporting multiple scalar time series to a single file load one time series into memory at a time. Supported for example NetCDF en PI. Not supported for export formats where every column represents a different time series. Note: The time series import is already streaming. Time series export of grids was also already streaming.</p>	<p>Reduce memory usage on export time series.</p>	<p>No configuration required</p>	
	FEWS-7766				
	FEWS-7753				
	FEWS-7724				

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	FEWS-7690 FEWS-7219	In the locations sets was already possible possible to reference a dbase III file in the MapLayers config dir. It is now also possible to reference table in a centrally maintained database. Every time FEWS starts-up a snap shot is created from the referenced table and stored in the root of the config dir. This snap shot is used as backup when the database is temporarily unreachable.	Reference a locations database table in locationSets.xml	The configuration is almost the same as referencing dbf file. {code:xml} <locationSet id="grondwater_ultimo"> <table> <databaseServer> <dbServerType>sqlserver</dbServerType> <dbServerName>???<dbServerPort>1433</dbServerPort> <dbInstanceName>???<dbInstanceUser>???<dbInstanceEncryptedPassword>4211ifkK/+qPuA3l=</dbInstanceEncryptedPassword> </databaseServer> <name>PEILBUISEN</name> <geoDatum>Rijks Driehoekstelsel</geoDatum> <id>ult_?FEWS_ID?</id> <name>?NAAM?</name> <description>Gebiedsnaam: %GEBIEDSNAAM% (%NNP_CODE%), Meetpuntcode: %MEETPUNTCO%, Datum: %DATUM_INR%, Opmerking: %OPMERKINGE%, Maaiveldniveau: %MAAIVELD?</description> <x>%X_COORDINA?</x> <y>%Y_COORDINA?</y> <attribute id="DOMMEL_ID"> <text>%MEETPUNTCO?</text> </attribute> <attribute id="TMX_ID"> <text>%TMX?</text> </attribute> <attribute id="NITG_ID"> <text>%NITG_ID?</text> </attribute> <attribute id="HEEFT_DOMMEL_ID"> <text>1</text> </attribute> <attribute id="GEBIEDSNAAM"> <text>%GEBIEDSNAAM?</text> </attribute> <attribute id="NNP_CODE"> <text>%NNP_CODE?</text> </attribute>	
	FEWS-6758	Map layers imported by the ConfigUpdateScript are now stored compressed in the database. This way the configuration in the (local) dataStore takes up less space.	Map layer files imported by the ConfigUpdateScript are now stored compressed in the database		
	FEWS-6474				