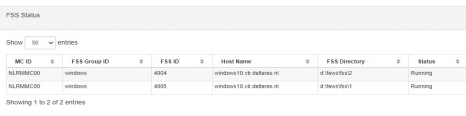

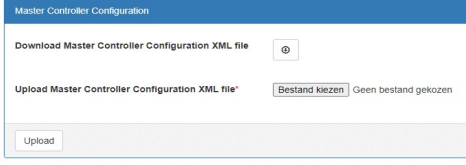
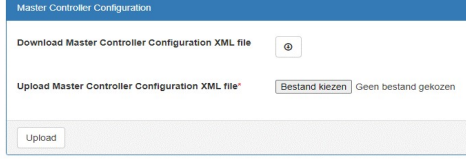
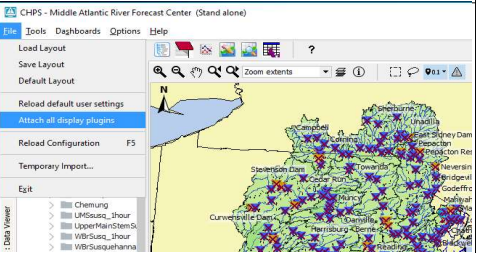
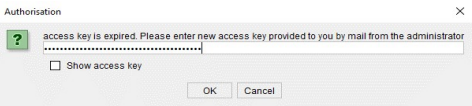
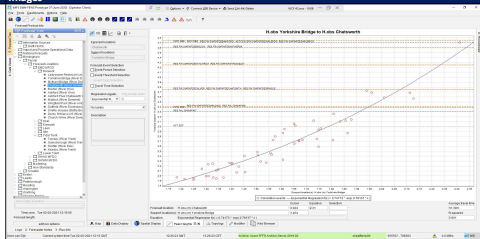
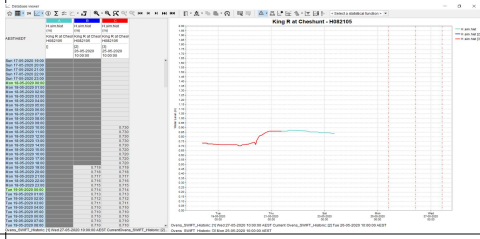
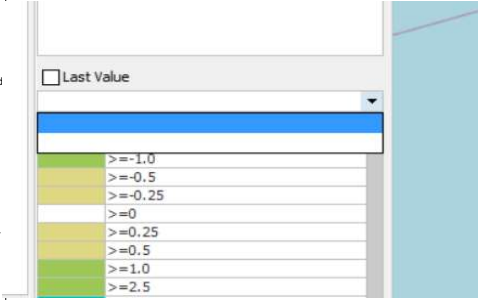
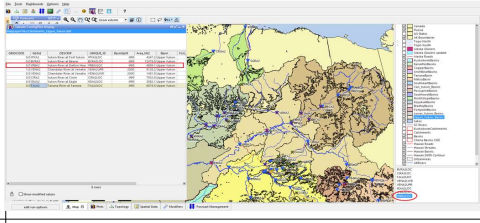
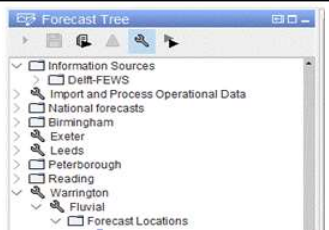
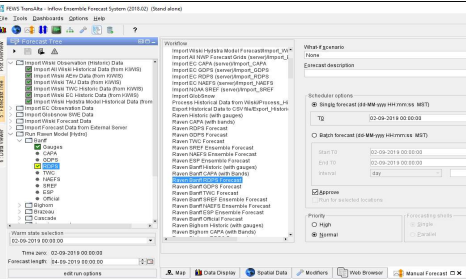
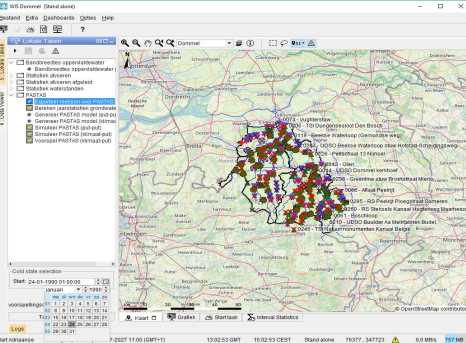
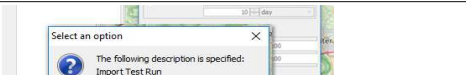
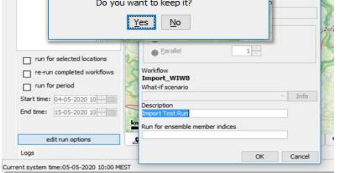


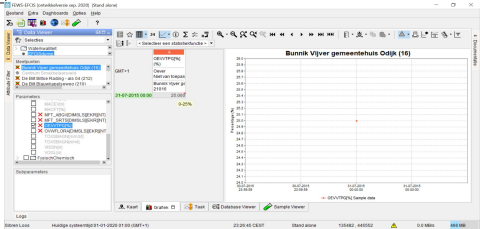
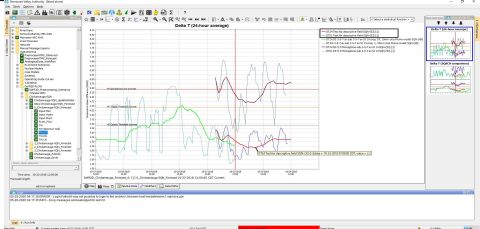
Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
App - Admin Interface, App - Master Controller Server	<a href="#">FEWS-17890</a>	Deltares	FEWS-22594 AI: MC Configuration files in one XSD	The Master Controller now has a new schema, see <a href="http://fews.widelft.nl/schemas/version1.0/mc.xsd">http://fews.widelft.nl/schemas/version1.0/mc.xsd</a> .				
App - Admin Interface	<a href="#">FEWS-22809</a>	RWS	FEWS-22594 AI: Enable Config.zip upload	Via AI and F12 option in CM a config zip can be uploaded containing the whole config revision	Via AI and F12 option in CM a config zip can be uploaded containing the whole config revision.  Within the zip a directory called config should be present.  It will replace the whole config revision without extra GUI steps in between.  It will check whether the file is a zip and whether it contains at least some System, Root and Region config files.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Admin+interface+-+Software+Management#Delft-FEWSAdminInterface-SoftwareManagement-Delft-FEWSConfiguration(since2020.02)">https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Admin+interface+-+Software+Management#Delft-FEWSAdminInterface-SoftwareManagement-Delft-FEWSConfiguration(since2020.02)</a>		
App - Admin Interface	<a href="#">FEWS-23814</a>		FEWS-22594 Admin Interface upload mc config file should do migration.	The admin interface mc config upload api can migrate the old mc.conf file	The admin interface mc config upload api can migrate the old mc.conf file.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Admin+Interface+-+Software+Management#Delft-FEWSAdminInterface-SoftwareManagement-MasterControllerConfiguration(since2020.02)">https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Admin+Interface+-+Software+Management#Delft-FEWSAdminInterface-SoftwareManagement-MasterControllerConfiguration(since2020.02)</a>		
App - Admin Interface	<a href="#">FEWS-21452</a>	WS de Dommel	Yearly scheduling on a set date Admin Interface	Yearly scheduling supported in the Admin Interface	In the admin interface yearly scheduling is supported. On or more month/days can be configured that will be triggered each year.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Scheduled+Tasks+-+New+Task">https://publicwiki.deltares.nl/display/FEWS/DOC/Scheduled+Tasks+-+New+Task</a>		
App - Admin Interface	<a href="#">FEWS-22366</a>	NRW	FEWS-18387 FEWS forecast schedules should be available to the Forecast Web Service	scheduled forecasts are available in the API	scheduled forecasts are available in the API	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Scheduled+Tasks">https://publicwiki.deltares.nl/display/FEWS/DOC/Scheduled+Tasks</a>		
App - Admin Interface	<a href="#">FEWS-22464</a>	RWS	FEWS-22594 Allow Admin Interface to run with ENV variables without configuration files.	Admin Interface can be started with ENV variables only	Admin Interface can be started with ENV variables only. It is required that the master controller configuration has been uploaded or migrated by the MC before the Admin Interface can be used.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Deploy+Admin+Interface+since+2020.02">https://publicwiki.deltares.nl/display/FEWS/DOC/Deploy+Admin+Interface+since+2020.02</a>		
App - Admin Interface, App - Forecasting Shell Server	<a href="#">FEWS-22685</a>	TVA	FEWS-21927 TVA: AI suggestions - how to identify FSS slot number from FSS ID	Show FSS directory on FSS overview in Admin interface	Show FSS directory on FSS overview in Admin interface	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Forecasting+Shell+Servers">https://publicwiki.deltares.nl/display/FEWS/DOC/Forecasting+Shell+Servers</a>		
App - Admin Interface	<a href="#">FEWS-22808</a>	RWS	FEWS-22594 AI: Add API call for uploading Config.zip	API call for uploading config zip is available	The Admin Interface API has support for uploading a complete Delft-FEWS configuration in a zip file.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Admin+Interface+REST+API+Usage">https://publicwiki.deltares.nl/display/FEWS/DOC/Admin+Interface+REST+API+Usage</a>		
App - Admin Interface	<a href="#">FEWS-22805</a>	RWS	FEWS-22594 AI: Add button (+checks) for uploading server config	Master Controller server config can be uploaded with the admin interface	Master Controller server config can be uploaded with the admin interface	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Admin+Interface+-+Software+Management#Delft-FEWSAdminInterface-SoftwareManagement-MasterControllerConfiguration(since2020.02)">https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Admin+Interface+-+Software+Management#Delft-FEWSAdminInterface-SoftwareManagement-MasterControllerConfiguration(since2020.02)</a>		
App - Admin Interface	<a href="#">FEWS-22804</a>	RWS	FEWS-22594 AI: Add button (+checks) for downloading all server config	MC Server config download	From the Admin Interface the current mc configuration xml file can be downloaded.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Admin+Interface+-+Software+Management#Delft-FEWSAdminInterface-SoftwareManagement-MasterControllerConfiguration(since2020.02)">https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Admin+Interface+-+Software+Management#Delft-FEWSAdminInterface-SoftwareManagement-MasterControllerConfiguration(since2020.02)</a>		
App - Archive	<a href="#">FEWS-23752</a>	Deltares	FEWS-21449 Incremental Harvester did not update the Products in Elastic Catalogue					

Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
App - Configuration Manager Gui	<a href="#">FEWS-23550</a>	Deltares	Config Manager must not be able to connect with newer Delft-FEWS version.	Since the 2020.02 CM it is not possible anymore to connect to newer Master Controllers to prevent possible database corruptions in the future.	Since the 2020.02 CM it is not possible anymore to connect to newer Master Controllers to prevent possible database corruptions in the future.  Warnings about other version differences remain.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/20.1+Configuration+Manager+-+2017.02+and+later#id.20.1ConfigurationManager-2017.02andlater-NotpossibletoconnectwithCMtonewerMasterController%27since2020.02">https://publicwiki.deltares.nl/display/FEWS/DOC/20.1+Configuration+Manager+-+2017.02+and+later#id.20.1ConfigurationManager-2017.02andlater-NotpossibletoconnectwithCMtonewerMasterController%27since2020.02</a>		
App - Configuration Manager Gui, System - Logging	<a href="#">FEWS-22800</a>	EA	FEWS-18050 IMFS-CM: No audit log messages for config Manager	Add audit log message for the Save All button	When the "Save All" button is pressed, an audit log message is provided as the following:  {color:#008000}CM.SaveAll: User <user> created a new revision with id <id> with comment <comment> {color}	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/20.1+Configuration+Manager+-+2017.02+and+later">https://publicwiki.deltares.nl/display/FEWS/DOC/20.1+Configuration+Manager+-+2017.02+and+later</a>		
App - Data Import Module (DIM)	<a href="#">FEWS-22746</a>	RWS	FEWS-22250 Import NetCDF with two location lists	Import type NETCDF-CF_TIMESERIES : importing NC files with multiple location(station) lists	{color:#000000}Since 2020.02 the import type NETCDF-CF_TIMESERIES is able to import from the NC file that contains more than one location list. {color}  {color:#000000}For example, {color}{color:#172b4d}NC file contains water level and discharge and these two parameters are defined on different locations. NC file contains then two location lists. {color}  {color:#172b4d} {color}  {color:#172b4d}Important: {color}  {color:#172b4d}to be able to read the NC with multiple location(station) lists, the location(station) variable must have attribute {color}{color:#000000}:cf_role = "timeseries_id";{color}  {color:#172b4d} {color}			
App - Master Controller Server	<a href="#">FEWS-23628</a>		FEWS-22594 Create Master Controller in FEWS build	add Delft-FEWS_MasterController.jar, mcrecoverytool.jar, database-intialization-tool and database scripts in bin folder. Purpose is to support the mclauncher, patch mechanism and a single build for both MC and OC.				
App - Master Controller Server	<a href="#">FEWS-22284</a>	Deltares	FEWS-21828 Remove obsolete Master Controller code					
App - Master Controller Server	<a href="#">FEWS-22612</a>	RWS	FEWS-22594 MCLauncher / autostart MC for better recovery after failed reconnections.	Like the FSS and OC it is now possible to patch/upgrade an existing MC installation in the admin interface	FEWS-22335 shows a situation where the MCD1 was not re-detecting the remote MC restarting after reconnections / and failover and therefore kept running failover tasks. A daily restart of the MC could help restore it automatically.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Installation+-+Configure+MasterController+Launcher+-+2020.02+and+later">https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Installation+-+Configure+MasterController+Launcher+-+2020.02+and+later</a>		
App - Master Controller Server	<a href="#">FEWS-22807</a>	RWS	FEWS-22594 MC: read new properties/uploaded server config (new tables/CLOB)	The Master Controller now starts up using the uploaded configuration. When not present, the fews.master.mc.conf is migrated and uploaded automatically and renamed.				
App - Master Controller Server	<a href="#">FEWS-22890</a>	Deltares	review mcrecoverytool build.xml for further use in master-controller / fews					
App - Master Controller Server	<a href="#">FEWS-23852</a>		FEWS-22594 MC Distributions should become Admin Interface Distribution	admin interface zip is separate artifact	Admin interface zip is now a separate artifact.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Deploy+Admin+interface+since+2020.02">https://publicwiki.deltares.nl/display/FEWS/DOC/Deploy+Admin+interface+since+2020.02</a>		
App - Operator Client Gui (Explorer), Plugin - GUI - IFD - Dataviewer, Plugin - GUI - IFD - Forecasts	<a href="#">FEWS-21411</a>	NWS	FEWS-22536 NWS: #67670 Loading default layout only restores Plots window	FewsExplorer - menu "Attach all display plugins"	{color:#000000}Sometimes it might be handy to quickly redock all displays with a single button click. For this purpose a menu item File -> Attach all display plugins can be used{color}			
App - Operator Client Gui (Explorer)	<a href="#">FEWS-23784</a>	RWS	Verwijderen checks database URL					
App - Operator Client Gui (Explorer), Plugin - Module - Data Export	<a href="#">FEWS-23707</a>	Rijkswaterstaat	FEWS-22250 allow \$TASK_RUN_IDS as predefined global property					
App - Operator Client Gui (Explorer), Plugin - Module - Thresholds	<a href="#">FEWS-21945</a>		Validating threshold values sets on SA takes minutes when having large module instance sets					
App - Operator Client Gui (Explorer)	<a href="#">FEWS-24210</a>	WS Dommel	Always give a confirmation dialog when applying small config updates using CM instead of refreshing					

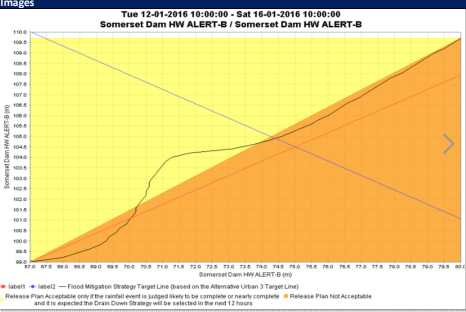
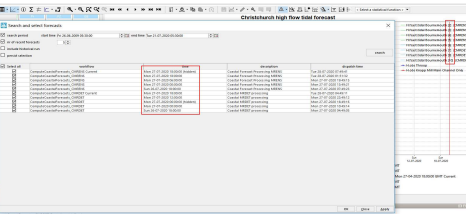

Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
App - Operator Client Gui (Explorer)	<a href="#">FEWS-23068</a>	Deltares	Password visible when connecting via HTTPS Proxy	access key is hidden by default when using the https database proxy	access key is hidden by default when using the https database proxy. If required, the access key can be displayed using a checkbox.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Https+Database+Access+Proxy">https://publicwiki.deltares.nl/display/FEWS/DOC/Https+Database+Access+Proxy</a>		
Configuration	<a href="#">FEWS-23351</a>		FEWS-17145 coldStatesDirectory in clientConfig file				<pre>[code:xml] &lt;clientConfiguration 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/clientConfig.xsd"&gt; &lt;clientType&gt;Stand alone&lt;/clientType&gt; &lt;jvmOption&gt;Xmx2024m&lt;/jvmOption&gt; &lt;coldStatesDirectory&gt;d:/t/cold&lt;/coldStatesDirectory&gt; &lt;autoExportModuleDataSet name="jcel" exportDir="Modules"/&gt; &lt;/clientConfiguration&gt; [code]</pre>	
Configuration	<a href="#">FEWS-23364</a>		FEWS-17145 unzip ModuleDataSets - set execute permissions for files with .hydra extension					
Configuration, Plugin - Module - General Adapter	<a href="#">FEWS-22727</a>	WarmingUp	FEWS-21063 warmingUP: populate model parameter groups by looping over locationset					
Database - Central Database	<a href="#">FEWS-22280</a>	WarmingUp	FEWS-22129 Database schema extension - add parentWhatifId to whatif table when required for performance	Added parentWhatifId column in database scripts	Added parentWhatifId column in database scripts			
Database - Dastore	<a href="#">FEWS-22141</a>	WarmingUp	FEWS-22129 ComposedWhatif: store dynamic composed whatif-data	Whatif.xsd to store data entered in Whatif templates	Whatif stores selections, values and references that has been entered in the Whatif templates .	<a href="https://publicwiki.deltares.nl/display/SoftwareArchitecture/Software+Architecture+Home">https://publicwiki.deltares.nl/display/SoftwareArchitecture/Software+Architecture+Home</a>		
Module Adapter - All	<a href="#">FEWS-21080</a>	WarmingUp	FEWS-21063 Joint development - CHESS model adapter	For the WarmingUP project, support has been provided to TNO for the development of a FEWS adapter for the CHESS model.	For the WarmingUP project, support has been provided to TNO for the development of a FEWS adapter for the CHESS model. For more information see <a href="https://https://www.warmingup.info/">https://https://www.warmingup.info/</a>	<a href="https://www.warmingup.info/">https://www.warmingup.info/</a>		
Module Adapter - All	<a href="#">FEWS-23495</a>	RWS	Extend DIMR adapter with partitioning function of DFlowFM	The DIMR adapter has been extended to support the partitioning function of DFlowFM	The DIMR adapter has been extended to support the partitioning function of DFlowFM	<a href="https://publicwiki.deltares.nl/x/hrPRBw">https://publicwiki.deltares.nl/x/hrPRBw</a>		
Module Adapter - All	<a href="#">FEWS-23450</a>	RWS	SWAN adapter migrate to DIMR adapter	Code for conversion of boundary conditions data has been migrated from the SWAN adapter to the DIMR FEWS adapter	As part of the migration of SWAN adapter functionality to the FEWS DIMR adapter, the code for conversion of boundary conditions data has been migrated to the DIMR adapter	<a href="https://publicwiki.deltares.nl/x/hrPRBw">https://publicwiki.deltares.nl/x/hrPRBw</a>		
Module Adapter - All	<a href="#">FEWS-22434</a>	WaterTechnology	develop EPA-SWMM model adapter for Delft-FEWS	A FEWS model adapter has been developed for the EPA SWMM Storm Water Management Model (version 5)	A FEWS model adapter has been developed for the EPA SWMM Storm Water Management Model (version 5).  This adapter consists of separate pre- and post adapters that can be used to import and export timeseries data to/from the SWMM model and control the simulation period. The FEWS general adapter is used to configure both the pre- and post adapter and execute the SWMM simulation using the SWMM5 command line executable.	<a href="https://publicwiki.deltares.nl/x/voPHCQ">https://publicwiki.deltares.nl/x/voPHCQ</a>		
Module Adapter - DFlow-FM	<a href="#">FEWS-23044</a>		Import 3D z-layer output from Delft3D-FM				<pre>[code:xml] .nl/fews http://fews.wldelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"&gt; &lt;import&gt; &lt;general&gt; &lt;importType&gt;NETCDF- CF_GRI2&lt;/importType&gt; &lt;folder&gt;SIMPORT_FOLDERS&lt;/folder&gt; &lt;fileNamePatternFilter&gt;*.nc&lt;/fileNamePatternFilter&gt; &lt;deleteImportedFiles&gt;false&lt;/deleteImportedFiles&gt; &lt;idMapId&gt;idimport_matroos&lt;/idMapId&gt; &lt;dataFeedId&gt;dscm_v5_hirlam&lt;/dataFeedId&gt; &lt;/general&gt; &lt;properties&gt; &lt;bool key="layerIndexAsLocationId" value="true"/&gt; &lt;/properties&gt; [code]</pre>	
Plugin - GUI - ComposedWhatif	<a href="#">FEWS-22163</a>	WarmingUp	FEWS-22154 caseMan: Copy button to copy meta data					

Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Gui - Correlation	<a href="#">FEWS-24337</a>	EA	FEWS-18050 IMFS-SA: Disable thresholds in correlation display	Within scatterPlotOptions of the correlationDisplay thresholds can be made invisible. This will apply to scatter plot as well as travel times plot	Within scatterPlotOptions of the correlationDisplay thresholds can be made invisible. This will apply to scatter plot as well as travel times plot	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/05+Correlation+Display">https://publicwiki.deltares.nl/display/FEWS/DOC/05+Correlation+Display</a>	<pre>(code:xml) &lt;scatterplotOptions&gt; &lt;preferredColor&gt;red&lt;/preferredColor&gt; &lt;markerStyle&gt;circle&lt;/markerStyle&gt; &lt;markerSize&gt;8&lt;/markerSize&gt; &lt;markerFilled&gt;false&lt;/markerFilled&gt; &lt;thresholds visible="false"/&gt; &lt;/scatterplotOptions&gt; (code)</pre>	
Plugin - Gui - Dashboard	<a href="#">FEWS-23000</a>	RWS	Option to disable dashboard menu item in GUI	It is possible to hide dashboards from the menu bar.	It is now possible to hide dashboards from the menu bar by configuring the following in "Explorer.xml": <pre>[[&lt;userDashboards&gt;]] [[ &lt;enabled&gt;false&lt;/enabled&gt;]] &lt;/userDashboards&gt;</pre>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/33+Dashboard+Display">https://publicwiki.deltares.nl/display/FEWS/DOC/33+Dashboard+Display</a>	In Explorer.xml <pre>[[&lt;userDashboards&gt;]] [[ &lt;enabled&gt;false&lt;/enabled&gt;]] &lt;/userDashboards&gt;</pre>	
Plugin - Gui - Forecast Manager, Plugin - Gui Time Series, Plugin - Module - Archive	<a href="#">FEWS-22958</a>	TVA	After archive Simulated Historical time series download not chained in TSD			<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Configuration+of+the+Delft+FEWS+Archive+Server">https://publicwiki.deltares.nl/display/FEWS/DOC/Configuration+of+the+Delft+FEWS+Archive+Server</a>		
Plugin - Gui - Grid Display, System - FEWS webservices	<a href="#">FEWS-23621</a>		pre loading next time step of sigma and z layers in spatial display and WMS					
Plugin - Gui - Grid Display, Plugin - Module - Transformation	<a href="#">FEWS-22128</a>	WarmingUp	FEWS-21063 warmingUP: Show difference of series between two runs in Spatial Display	Comparing the results of two simulated forecasts spatially.	It is now possible to compare the results of two simulated forecasts spatially by opening two simulations from the forecast manager.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/01+Grid+Display#id-01GridDisplay:_Toc154574473_Toc95297306comparetwoifereentsimulatedforecastsspatiallySince2020.02">https://publicwiki.deltares.nl/display/FEWS/DOC/01+Grid+Display#id-01GridDisplay:_Toc154574473_Toc95297306comparetwoifereentsimulatedforecastsspatiallySince2020.02</a>	<pre>(code:xml) &lt;defaults&gt; &lt;plotid&gt;Meteo - Air Temperature&lt;/plotid&gt; &lt;absoluteDifferenceClassBreaksid&gt;abs_id&lt;/absoluteDifferenceClassBreaksid&gt; &lt;relativeDifferenceClassBreaksid&gt;relative_id&lt;/relativeDifferenceClassBreaksid&gt; (code)</pre> <pre>(code:xml) &lt;panelsize&gt; &lt;loggingPanelSize&gt;0&lt;/loggingPanelSize&gt; &lt;listsPanelSize&gt;22&lt;/listsPanelSize&gt; &lt;filterListSize&gt;38&lt;/filterListSize&gt; &lt;locationListSize&gt;45&lt;/locationListSize&gt; &lt;parameterListSize&gt;19&lt;/parameterListSize&gt; &lt;forecastListSize&gt;20&lt;/forecastListSize&gt; &lt;/panelsize&gt; (code)</pre>	
Plugin - Gui - Grid Display	<a href="#">FEWS-22730</a>	WarmingUp	FEWS-21063 SpatialDisplay: hideEmptyGridPlot					
Plugin - Gui - Grid Display	<a href="#">FEWS-24274</a>	BOS NZV	Allow precipitation on top of clouds (RGB layer) in the spatial display	Allow precipitation on top of clouds (RGB layer) in the spatial display	The true color grid layers are now using a separate "pixel to grid cell mapping" so one pixel can be assigned to a image cloud layer and a precipitation layer. Memory usage increases with 4 bytes per pixel in the spatial display when both layer types are used	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/01+Grid+Display#id-01GridDisplay:_Displaytruecolorimagery(Bands)since2019.02#93400">https://publicwiki.deltares.nl/display/FEWS/DOC/01+Grid+Display#id-01GridDisplay:_Displaytruecolorimagery(Bands)since2019.02#93400</a>		
Plugin - Gui - Grid Display	<a href="#">FEWS-22728</a>	WarmingUp	FEWS-21063 SpatialDisplay: allow one display configuration composed of multiple config files					
Plugin - Gui - Grid Display, Plugin - Gui - Map	<a href="#">FEWS-22607</a>	NWS	FEWS-22536 NWS: #64550 Add attribute table option to layers in Spatial Viewer	Tabular config files display is connected to layers of map and grid display	The Tabular config files display is connected to layers of map and grid display. This means that when you select a layer attribute in the layer panel, the config files display will show it's attributes and v.v.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/20+Tabular+Config+Files+Display">https://publicwiki.deltares.nl/display/FEWS/DOC/20+Tabular+Config+Files+Display</a>		
Plugin - GUI - IFD - Dataviewer	<a href="#">FEWS-22729</a>	WarmingUp	FEWS-21063 Filters: hideEmptyFilters					

Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - GUI - IFD - Forecasts	<a href="#">FEWS-23533</a>	EA	FEWS-18050 IMFS-SA: Show in Topology where modifiers are applied	Show in Topology where modifiers are applied	Added a new button to the topology tree. If this button is selected a modifier icon will be shown for a topology node if active modifiers are visible in the modifiers panel if that topology node is selected. This means that if you disable for a topology node that modifiers are visible in the modifiers panel that the modifier icon will also not be visible.	<a href="https://publicwiki.deltare.nl/display/FEWS/DOC/23+Interactive+Forecasting+Displays+Buttonbar">https://publicwiki.deltare.nl/display/FEWS/DOC/23+Interactive+Forecasting+Displays+Buttonbar</a>		
Plugin - GUI - IFD - Forecasts	<a href="#">FEWS-21235</a>	TransAlta	FEWS-20126 no yellow IFD status icon if state selection from Topology is similar to default selection in GA	state selection in the workflow descriptors is taken into account for the forecast icons.	The selected state for a forecast can now also be derived from the workflow descriptors. If a state selection is defined and no state was selected in the GUI then the configured state will be used to determine the status of the icons.			
Plugin - GUI - IFD - Forecasts	<a href="#">FEWS-21451</a>	WS de Dommel	Fixed start time in Topology	When configuring a workflow to be run from the topology tree, a cold state start time can now be specified as a fixed date / time	When configuring a workflow to be run from the topology tree, a cold state start time can now be specified as a fixed date / time using the coldStateStartTime XML element in topology.xml	<a href="https://publicwiki.deltare.nl/x/n4CE#-24Topology.Coldstateselection">https://publicwiki.deltare.nl/x/n4CE#-24Topology.Coldstateselection</a>	<pre>&lt;{{-}}(nodes) {{id}}(={{}}("WAPNGHUD_calb")) {{name}}(={{}}("WAPNGHUD"))&gt;   &lt;{{-}}(workflowid){{-}}(WAPNGHUD_Stats_calibration-)}}(workflowid)&gt;   &lt;{{-}}(coldStateStartTime) {{date}}(={{}}("2019-01-01")) /&gt;   &lt;{{-}}(node) {{id}}(={{}}("WAPNGHUD_Waterbalance_Multi-year")) {{name}}(={{}}("Waterbal_MY"))&gt;</pre>	
Plugin - GUI - IFD - Forecasts	<a href="#">FEWS-23190</a>		FEWS-22443 Extend the bin reader with the possibility to read a long table column property					
Plugin - GUI - IFD - Forecasts	<a href="#">FEWS-22874</a>	TVA	FEWS-21927 TVA: Change default behaviour of description field for workflows	If the same workflow node is selected more than once, and a description is specified, then a notification dialog pops up after the OK button is clicked.	If the same workflow node is selected more than once, and a description is specified, then a notification dialog pops up after the OK button is clicked. If the user chooses to change the description, then the edit run options dialog comes back, and the description text would be selected (which indicates the description text is ready to be edited).	<a href="https://publicwiki.deltare.nl/display/FEWS/DOC/24+Topology">https://publicwiki.deltare.nl/display/FEWS/DOC/24+Topology</a>		
Plugin - Gui - Longitudinal Profiles	<a href="#">FEWS-21255</a>		FEWS-21187 Support Time Dependent Chainage Attributes for chainageLocationSets	Since 2020.02 it is possible to use time dependent chainage attributes to determine a longitudinal profile.	Since 2020.02 it is possible to use time dependent chainage attributes to determine a longitudinal profile.  The longitudinal profile will be visualized with all chainage locations that are part of the profile at any time in the period of the time slider.  When at a specific moment in time a location is not part of the profile a missing value will be shown in the table, but the graph will just connect the line to the next location that is part of the profile.	<a href="https://publicwiki.deltare.nl/display/FEWS/DOC/21+Time+Dependent+Locations+ChainageLocationSets+since2020.02">https://publicwiki.deltare.nl/display/FEWS/DOC/21+Time+Dependent+Locations+ChainageLocationSets+since2020.02</a>		

Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Gui - Manual Forecast	<a href="#">FEWS-22968</a>	RWS	Possibility to define workflowDescriptor elements in the rootNode/Node directly	WorkflowDescriptors - possibility to directly plug a workflowDescriptor definition in a workflow tree node.	<p>(color:#172b4d)In WorkflowDescriptors.xml it is possible to organize the workflows by referencing their id's in a node set-up . Since 2020.02 it is also possible to include the full workflowDescriptor definition in a node. (color:#172b4d)The workflowDescriptors, defined in a node, can be also referred in other nodes using their id's. (color)</p> <p>(color:#172b4d)Additionally, there is also the possibility to use patterns to refer the workflows in the nodes. For this purpose the element "workflowidPattern" can be used(color)</p> <p>(color:#172b4d) (color)</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/13+WorkflowDescriptors">https://publicwiki.deltares.nl/display/FEWS/DOC/13+WorkflowDescriptors</a>	<pre>&lt;rootNode&gt; &lt;node name="ImportExternal"&gt; &lt;node name="ImportScalar"&gt; &lt;workflowDescriptor id="ImportStage" forecast="false" visible="true" autoApprove="false"/&gt; &lt;workflowDescriptor id="ImportDischarge" forecast="false" visible="true" autoApprove="false"/&gt; &lt;/node&gt;  &lt;node name="ImportGrids"&gt; &lt;workflowid=ImportGrids/workflowid&gt; &lt;/node&gt;  &lt;/node&gt;  &lt;node name="ImportAll"&gt; &lt;workflowidPattern=Import*&lt;/workflowidP attern&gt; &lt;/node&gt; &lt;/rootNode&gt;</pre>	
Plugin - GUI - Sample Viewer	<a href="#">FEWS-22651</a>	HDSR	FEWS-22632 Samples.Remark: Vrij veld invullen bij Samples ipv fixed qualifiers - sprint 2 - prio 2	Comment column has been added to sample viewer	Comment column has been added to sample viewer	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/18+Sample+Viewer">https://publicwiki.deltares.nl/display/FEWS/DOC/18+Sample+Viewer</a>		
Plugin - Gui - Schematic Status Display, System - FEWS webservices	<a href="#">FEWS-23170</a>	RWS	FEWS-22250 SSD Service - additional Information Get Action response	The SSD web service has a new feature to provide relevant configuration information for the display of timeseries plots in web applications	The SSD web service has a new feature to provide relevant configuration information for the display of timeseries plots in web applications. In requests for user click actions a new option (OPTION=config) can be used to request information from the configuration that will help to provide a presentation of time series plots that looks more similar to those provided in the desktop explorer UI.	<a href="https://publicwiki.deltares.nl/s/OwXtC">https://publicwiki.deltares.nl/s/OwXtC</a>		
Plugin - GUI - Sample Viewer	<a href="#">FEWS-23452</a>		Split valueProperties from sampleProperties based on SampleMetaDataSetSchema.xml config	It is possible to import properties for values independently from sample properties.	Previously all properties were always applied for the whole sample. It is now possible to distinguish which properties should be applied to the whole sample and which only to individual values within the sample.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/28+Sample+Metadata+Schema">https://publicwiki.deltares.nl/display/FEWS/DOC/28+Sample+Metadata+Schema</a>		
Plugin - Gui - System Monitor	<a href="#">FEWS-22596</a>		OC: when saving log messages, enclose text fields in quotation marks	OC: when saving log messages, enclose text fields in quotation marks	OC: when saving log messages, enclose text fields in quotation marks	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Home">https://publicwiki.deltares.nl/display/FEWS/DOC/Home</a>		
Plugin - Gui - Time Series	<a href="#">FEWS-22752</a>	TVA	FEWS-21927 TVA: tooltip text description option for time series and legends	Additional functionality has been added to customize tooltips for legend items in timeseries plots.	Additional functionality has been added to customize tooltips for legend items in timeseries plots, HTML format and the use of @attribute@ and/or %property% tags can be used to add specific pieces of information to the tooltip that would take up too much space when shown in the legend captions.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/02+Time+Series+Display+Configuration+Legend+Tooltips+Config">https://publicwiki.deltares.nl/display/FEWS/DOC/02+Time+Series+Display+Configuration+Legend+Tooltips+Config</a>	<pre>{{&lt;tooltipConfig&gt;}} {{ }}{{&lt;legendTooltip&gt;}} {{ }}{{&lt;timeSeries&gt;}} {{ }}{{&lt;valueType&gt;scalar&lt;/valueType&gt;}} {{ }}{{&lt;parameterId&gt;DT24&lt;/parameterId&gt;}} {{ }}{{&lt;timeSeriesType&gt;external historical&lt;/timeSeriesType&gt;}} {{ }}{{&lt;/timeSeries&gt;}} {{ }}{{&lt;tooltip%LOCATION_ID% %PARAMETER_NAME% %QUALIFIER_NAME%&lt;/tooltip&gt;}} {{ }}{{&lt;/legendTooltip&gt;}} {{&lt;/tooltipConfig&gt;}}</pre>	
Plugin - Gui - Time Series	<a href="#">FEWS-23676</a>	SEQWater	FEWS-10487 Add vertical lines for (systemTime/T0/displayTime) to long term scroller.					
Plugin - Gui - Time Series	<a href="#">FEWS-23541</a>	Deltares	Small correction: thresholdGroupSelectionButton (buttonsetting/default)	The use of <thresholdGroupSelectionButton> outside of <buttonSettings> is deprecated.	The use of thresholdGroupSelectionButton should happen from within the <buttonSettings> element. This element is by default visible.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/02+Time+Series+Display+Configuration">https://publicwiki.deltares.nl/display/FEWS/DOC/02+Time+Series+Display+Configuration</a>		
Plugin - Gui - Time Series	<a href="#">FEWS-23104</a>	Deltares	Check if additional time series in display groups still work and add unit test					
Plugin - Gui - Time Series	<a href="#">FEWS-23267</a>		FEWS-21187 Show additional time series that match at any point in time	Match time series based on any view period in the visibility dialog.	Previously the time series would be matched based the system time. It is now possible to match them based on any specified view period.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/03+Display+Groups+Additional+Timeseries">https://publicwiki.deltares.nl/display/FEWS/DOC/03+Display+Groups+Additional+Timeseries</a>		

Delft-FEWS 2020.02 Resolved Features

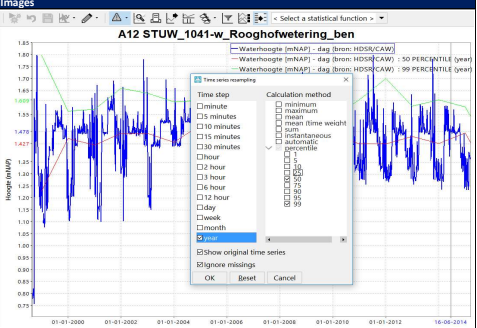
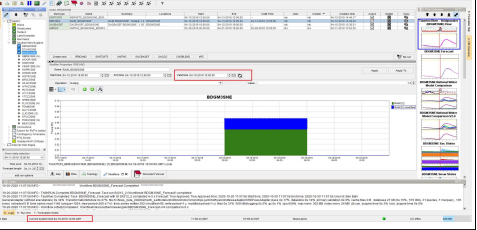
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Gui - Time Series	<a href="#">FEWS-22291</a>	Seqwater	Seqwater: Improvements to (existing) scatter plot	draw colored areas, adding legends next to the plot, visible interaction line, automatic pairing of time series are supported.	<p>It is now possible to draw colored areas based on configured points. Also, in the plot, the grid lines in the background and the interaction line are visible, and legends are added next to the plot. Below is an example of how a coloredBackgroundArea could be configured:</p> <pre>[code:java] &lt;coloredBackgroundAreas&gt; &lt;label&gt;Release Plan Acceptable only if the rainfall event is judged likely to be complete or nearly complete and it is expected the Drain Down Strategy will be selected in the next 12 hours&lt;/label&gt; &lt;color&gt;yellow&lt;/color&gt; &lt;opaquenessPercentage&gt;50&lt;/opaquenessPercentage&gt; &lt;point&gt; &lt;x&gt;67&lt;/x&gt; &lt;y&gt;99&lt;/y&gt; &lt;/point&gt; &lt;point&gt; &lt;x&gt;67&lt;/x&gt; &lt;y&gt;109.7&lt;/y&gt; &lt;/point&gt; &lt;/code&gt;</pre>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/03+Display+Groups+id-03DisplayGroups+Shows+ScatterPlot">https://publicwiki.deltares.nl/display/FEWS/DOC/03+Display+Groups+id-03DisplayGroups+Shows+ScatterPlot</a>		
Plugin - Gui - Time Series	<a href="#">FEWS-22184</a>	TVA	FEWS-21927 TVA: Ability to toggle off/on multiple simulation traces directly in plot	Since 2020.02 it is possible to hide all time series belonging to the same forecast.	<p>Since 2020.02 it is possible to hide all time series belonging to the same forecast.</p> <p>When time series are selected, with the dropdown button or ctrl+alt+shift+X all time series sharing a forecast with one of the selected forecasts will be hidden.</p> <p>In the search and select forecasts there will be a postfix stating (hidden) behind their forecast time.</p> <p>All hidden forecasts can be made visible again by the "Show all hidden forecasts" dropdown menu item or with ctrl+alt+shift+Z.</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/04+Data+Display+and+Data+Editor#HideWholeForecasts(since2020.02)">https://publicwiki.deltares.nl/display/FEWS/DOC/04+Data+Display+and+Data+Editor#HideWholeForecasts(since2020.02)</a>		
Plugin - Gui - Time Series	<a href="#">FEWS-23055</a>	WS De Dommel	TSD: Extra on-the-fly statistiek functies (min/max/percentiel etc.)	an extra statistic type long term periodic function has been added to timeSeriesDisplayConfig.xsd	<p>This functionality adds periodic time series based on the long term scroller (see highlighted in red). It is a very handy functionality to compare values of time series compared to what is "normal" on that date of different years.</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/02+Time+Series+Display+Configuration">https://publicwiki.deltares.nl/display/FEWS/DOC/02+Time+Series+Display+Configuration</a>	[code:xml]	 <pre>&lt;statisticalFunction function="longTermPeriodic" label="Long Term Periodic Minimal" ignoreMissings="true"&gt; &lt;statisticType type="MIN"/&gt; &lt;statisticType type="MAX"/&gt; &lt;statisticType type="PERCENTILEEXCEEDENCE" value="95"/&gt; &lt;/statisticalFunction&gt; &lt;statisticalFunction function="longTermPeriodic" label="Long Term Periodic All" ignoreMissings="true"&gt; &lt;statisticType type="MIN" label="minimum"/&gt; &lt;statisticType type="MAX" label="maximum"/&gt; &lt;statisticType type="PERCENTILEEXCEEDENCE" value="25" label="25%"/&gt; &lt;statisticType type="PERCENTILEEXCEEDENCE" value="50" label="50%"/&gt; &lt;statisticType type="PERCENTILEEXCEEDENCE" value="75"</pre>
Plugin - Gui - Time Series	<a href="#">FEWS-22544</a>	NWS	FEWS-22536 NWS: #67622 When adding new timeseries to plots, all previously combined plots are split	WFN popup menu "Add timeseries to plots" adds time series to the plots and keeps the configured plot layout	<p>The time series are added to the existing subplot, if possible. Otherwise a new subplot is created.</p> <p>An example: Picture1 shows the plots as configured in DisplayGroups. In WFN two time series are selected to add to the plots (Picture2). Picture3 shows the plots after adding the time series selected in WFN. The hourly time series "STG EBZNG" is added to the existing subplot. To show "QIN", a new subplot is created. The added time series are shown only in plots, not in the Thumbnails, and disappear again when we switch to another thumbnail, or when we select another display in Shortcuts, or if we select any time series in DataViewer</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Workflow+Navigator">https://publicwiki.deltares.nl/display/FEWS/DOC/Workflow+Navigator</a>		



Delft-FEWS 2020.02 Resolved Features

Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Gui - Time Series	<a href="#">FEWS-23185</a>	EA	FEWS-18050 IMFS-SA: group thresholds in graph threshold lable	When multiple threshold labels belong to the same threshold id and have the same value, they will be grouped together and the threshold id plus the amount of thresholds will be shown between [ ].	When multiple threshold labels belong to the same threshold id and have the same value, they will be grouped together and the threshold id plus the amount of thresholds will be shown between [ ].	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/09+Thresholds#id-09Thresholds-Groupingthresholdlabels(since2020.02)">https://publicwiki.deltares.nl/display/FEWS/DOC/09+Thresholds#id-09Thresholds-Groupingthresholdlabels(since2020.02)</a>		
Plugin - Gui - Time Series	<a href="#">FEWS-23252</a>	RWS	Display groups: plot a different specific datum on the right axis	It is possible to configure local datum label in a display group.	It is possible to configure local datum label to specifically set the reference level of a certain axis in a display group	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/01+FEWS+Explorer#id-01FEWSExplorer-localDatum">https://publicwiki.deltares.nl/display/FEWS/DOC/01+FEWS+Explorer#id-01FEWSExplorer-localDatum</a>	<localDatum>ErikTest</localDatum> <globalDatum>AHD</globalDatum>	
Plugin - Gui - Time Series	<a href="#">FEWS-23062</a>	Deltares	Prevent legend items from overlapping					
Plugin - Gui - Time Series	<a href="#">FEWS-22888</a>	WarmingUP	FEWS-21063 STD: DisplayGroups hideEmptyPlot					
Plugin - Gui - Time Series	<a href="#">FEWS-22375</a>	BPA Hermes	FEWS-16132 Show full column headers in 24H setting, also with just one location					
Plugin - Gui - Time Series	<a href="#">FEWS-22758</a>	TVA	FEWS-21927 TVA: Ability to toggle off/on time series directly from TSD legend	Checkboxes in legend to hide/unhide time series	It is now possible to show checkboxes in the legend to quickly hide/unhide time series in the time series dialog. You can find the option to show legend checkboxes in the chart dropdown button in the toolbar.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/04+Data+Display+and+Data+Editor">https://publicwiki.deltares.nl/display/FEWS/DOC/04+Data+Display+and+Data+Editor</a>		
Plugin - Gui - Time Series	<a href="#">FEWS-23880</a>	Noorderzijvest WAM	Option in TSD to undelete removed nonequidistant values					
Plugin - Gui - Time Series	<a href="#">FEWS-23050</a>	RWS	TSD: Make defined min/max in subplot fixed or auto-scale within these bounds	Implement yAxisScalingType for subplots.	New attribute for subplots: yAxisScalingType. Default is scaleOutsideMinAndMax. If it is set to scaleOutsideMinAndMax, the y axis will scale to the data available. If it is set to fixedBetweenMinAndMax, the min and max of the y axis will always be the configured values, regardless of the data. This could make the entire data set fall of the visible chart. If all the data is in the middle of min and max withing a small range, the axis will ot scale to the data, it will appear as a small line in the middle. If it is set to scaleBetweenMinAndMax, the min will never be smaller than what is configured, and the max will never be greater than configured, but if the available data falls between these values, the axis will scale so that the data fills the whole area. If the data falls entirely outside of min and max, it will not be visible.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/03+Display+Groups#id-03DisplayGroups-yAxisScalingType">https://publicwiki.deltares.nl/display/FEWS/DOC/03+Display+Groups#id-03DisplayGroups-yAxisScalingType</a>	yAxisScalingType can be configured as: fixedBetweenMinAndMax scaleBetweenMinAndMax scaleOutsideMinAndMax (default)  <code>&lt;code&gt;xml&lt;/code&gt; &lt;plot id="import"&gt; &lt;subplot min="15" max="15"&gt; yAxisScalingType="scaleBetweenMinAndMa x"&gt; &lt;logarithmic=true&lt;/logarithmic&gt; &lt;/line&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;import&lt;/moduleInstanc eId&gt; &lt;valueType&gt;scalar&lt;/valueType&gt; &lt;parameterId&gt;H.m&lt;/parameterId&gt; &lt;locationSetId&gt;AllLocations&lt;/locationSetId&gt; &lt;timeSeriesType&gt;external historical&lt;/timeSeriesType&gt; &lt;timeStep unit="hour"/&gt; &lt;readWriteMode&gt;add originals&lt;/readWriteMode&gt; &lt;/timeSeriesSet&gt; &lt;/line&gt; &lt;/subplot&gt; &lt;/plot&gt;</code>	
Plugin - Gui - Time Series	<a href="#">FEWS-22794</a>	TVA	FEWS-21927 TVA: Ability to display a log scale on the y-axis of a plot	Implement logarithmic axis for TSD	A logarithmic axis can be configured in two places: in the display config xml in the subplot and in theTimeSeriesDisplayConfig.xml parameter display options. The subplot setting has priority. If a parameter is set logarithmic true, but the subplot it appears in is configured logarithmic-false, the axis will not be logarithmic. It is also possible to confige a mixture of logarithmic and non-logarithmic subplots in the same plot. Logarithmic axis can also be turned on and off manually, using the Chart menu bar. If you do so, the setting will effect all subplots the same way. Should you wish to reset the subplots to the configured version, use the reset domain axis to configured button.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/03+Display+Groups#id-03DisplayGroups-subplot">https://publicwiki.deltares.nl/display/FEWS/DOC/03+Display+Groups#id-03DisplayGroups-subplot</a>	DisplayGroup.xml subplot: <code>&lt;code&gt;xml&lt;/code&gt; &lt;plot id="import"&gt; &lt;subplot min="15" max="15"&gt; &lt;logarithmic=true&lt;/Logarithmic&gt; &lt;/line&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;import&lt;/moduleInstanc eId&gt; &lt;valueType&gt;scalar&lt;/valueType&gt; &lt;parameterId&gt;H.m&lt;/parameterId&gt; &lt;locationSetId&gt;AllLocations&lt;/locationSetId&gt; &lt;timeSeriesType&gt;historical&lt;/timeSeriesType &gt; &lt;timeStep unit="hour"/&gt; &lt;readWriteMode&gt;add originals&lt;/readWriteMode&gt; &lt;/timeSeriesSet&gt; &lt;/line&gt; &lt;/subplot&gt; &lt;/plot&gt; &lt;/code&gt; TimeSeriesDisplayConfig.xml parameter display options &lt;code&gt;xml&lt;/code&gt; &lt;parameterDisplayOptions id="H.m"&gt; &lt;preferredColor&gt;medium</code>	

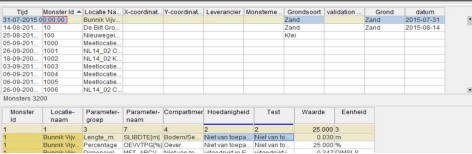


Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Gui - Time Series Interval Statistics	<a href="#">FEWS-23063</a>	WS De Dommel	Add percentiles to resampling function in TSD	Percentile resampling has been added to the resampling dialog.	Percentile resampling is also a handy functionality for comparing values to what is "normal" but then compared to the current month or year (or other chosen interval)	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/27+Resampling+Dialog">https://publicwiki.deltares.nl/display/FEWS/DOC/27+Resampling+Dialog</a>		
Plugin - Gui - Time Series Modifier	<a href="#">FEWS-22532</a>	NWS	FEWS-22536 NWS: #64395 Add a button (or make configurable) to change modifier valid time to T0 or date relative to T0	It is possible to reset the valid time to the current system time (default valid time) or a configured offset valid time by clicking on the 'curved-arrows' button.	If configured, it is possible to enter a valid time for modifiers. It is possible to reset the valid time to the current system time (default valid time) or a configured offset valid time by clicking on the 'curved-arrows' button.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/25+ModifierTypes">https://publicwiki.deltares.nl/display/FEWS/DOC/25+ModifierTypes</a>		
Plugin - Gui - Time Series Visibility	<a href="#">FEWS-22743</a>	TVA	FEWS-21927 TVA: Time series visibility pop-up selection connected to bolded selection in time series display	Since 2020.02 time series selected via the tree will be selected in the same way as if they were selected via the graph or table.	Since 2020.02 time series selected via the tree will be selected in the same way as if they were selected via the graph or table.  When statistical functions are active be aware that changing the selected time series will affect the time series for which statistics are calculated.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/30+Visibility+Dialog+and+On+The+Fly+Expression+Series+Id+30+Visibility+Dialog+and+On+The+Fly+Expression+Series+Selection+of+Time+Series+Since+2020.02">https://publicwiki.deltares.nl/display/FEWS/DOC/30+Visibility+Dialog+and+On+The+Fly+Expression+Series+Id+30+Visibility+Dialog+and+On+The+Fly+Expression+Series+Selection+of+Time+Series+Since+2020.02</a>		
Plugin - Module - Archive	<a href="#">FEWS-22695</a>		FEWS-22250 Archive - opendap support for external storage harvester		It now possible to harvest an external netcdf archive and use it as part of the Deltares Open Archive. The external archive needs to be managed by THREDDS. The harvester for the netcdf storage will harvest the THREDDS catalogue.			
Plugin - Module - Archive	<a href="#">FEWS-23046</a>	Deltares	FEWS-22675 archive: archived log-messages have no timestamp	Export to Open Archive: logMessagesExportActivity exports also event time of the log messages	Since 2020.02 the logMessagesExportActivity writes also the event time of the log messages to the pi_diag.xml An example of the archived file:  {code:xml} <?xml version="1.0" encoding="UTF-8"?> <Diag xmlns="http://www.wldelft.nl/feWS/PI" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/feWS/PI http://feWS.wldelft.nl/schemas/version1.0/pi-schemas/pi_diag.xsd" version="1.3"> <timeZone>GMT</timeZone> <line level="0" eventCode="Config.Error" date="2020-01-01" time="01:00:00" description="Config error ..."/> <line level="3" eventCode="Import.Error" date="2020-01-01" time="04:00:00" description="Import error ..."/> </Diag>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/22-2+Export+to+Deltares+Open+Archive#id-22-2+Export+to+Deltares+Open+Archive+To+386122334+Messages+archiving+by+Delft-FEWS">https://publicwiki.deltares.nl/display/FEWS/DOC/22-2+Export+to+Deltares+Open+Archive#id-22-2+Export+to+Deltares+Open+Archive+To+386122334+Messages+archiving+by+Delft-FEWS</a>		
Plugin - Module - Archive	<a href="#">FEWS-22960</a>		Archiveimport: states are imported but not recognized by DbViewer					

Delft-FEWS 2020.02 Resolved Features

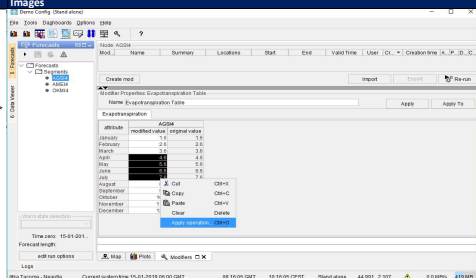
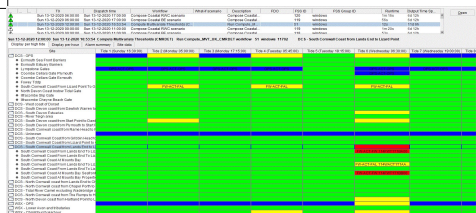
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Data Export	<a href="#">FEWS-23219</a>	UAE Navy	FEWS-17145 Export 3D Grid Z-Layer to NetCDF (GA export)				<pre> &lt;code&gt;&lt;xml&gt; &lt;exportNetcdfActivity&gt; &lt;exportFile&gt;netcdf1.nc&lt;/exportFile&gt; &lt;timeSeriesSets&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;ExportActivityNetcdf&lt;/moduleInstanceId&gt; &lt;valueType&gt;grid&lt;/valueType&gt; &lt;parameter&gt;id&lt;/parameterId&gt; &lt;locationSet&gt;S&lt;/locationSetId&gt; &lt;timeSeriesType&gt;external historical&lt;/timeSeriesType&gt; &lt;timeStep unit="nonequidistant"/&gt; &lt;relativeViewPeriod unit="day" start="-10" end="2"/&gt; &lt;readWriteMode&gt;read only&lt;/readWriteMode&gt; &lt;/timeSeriesSet&gt; &lt;/exportNetcdfActivity&gt; &lt;/code&gt; &lt;/xml&gt; &lt;timeSeriesExportRun</pre>	
Plugin - Module - Data Export	<a href="#">FEWS-23196</a>	RWS	FEWS-22250 possibility to add variable attributes for netCDF export	Implement <export attribute> for netcdf parameter attributes	Location, Parameter or Qualifier attribute that can be used for export. Specification is needed to include it in the data available for export. For parameter attributes it is supported for the following export types:	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/Export+module#Exportmodule-exportAttribute">https://publicwiki.deltares.nl/display/FEWSDOC/Export+module#Exportmodule-exportAttribute</a>	<pre> &lt;code&gt;&lt;xml&gt; &lt;export&gt; &lt;general&gt; &lt;exportType&gt;NETCDF- CF_TIME_SERIES_MATROOS&lt;/exportType&gt; &lt;folder&gt;%REGION_HOME%/Export&lt;/folder&gt; &lt;exportFileName&gt; &lt;name&gt;export.nc&lt;/name&gt; &lt;prefix&gt; &lt;timeZeroFormattingString&gt;yyyyMMddHH mm&lt;/timeZeroFormattingString&gt; &lt;/prefix&gt; &lt;/exportFileName&gt; &lt;idMapId&gt;idExportLMW&lt;/idMapId&gt; &lt;exportMissingValueString&gt; 999&lt;/exportMissingValueString&gt; &lt;exportTimeZone&gt; &lt;timeZoneName&gt;GMT&lt;/timeZoneName&gt; &lt;/exportTimeZone&gt; &lt;/general&gt; &lt;metadata&gt; &lt;title&gt;Variable attribute export test using LMW&lt;/title&gt; &lt;institution&gt;Deltares&lt;/institution&gt; &lt;source&gt;variable_export_test&lt;/source&gt; &lt;summary&gt;Test variable attribute</pre>	
Plugin - Module - Data Export	<a href="#">FEWS-22790</a>	RWS	FEWS-22250 Export: add %COLD_STATE_START_TIME% tag as nc-metadata attribute	Enable %COLD_STATE_TIME% tag as nc-metadata attribute during export	Enable %COLD_STATE_TIME% tag as nc-metadata attribute during export	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/Export+module#Exportmodule-metadata">https://publicwiki.deltares.nl/display/FEWSDOC/Export+module#Exportmodule-metadata</a>	<pre> % COLD_STATE_TIME (yyyy/MM/dd HH:mm:ss z)%</pre>	
Plugin - Module - Data Export	<a href="#">FEWS-22788</a>	Rijkswaterstaat	FEWS-22250 Export: allow externalForecastTimeId as nc-metadata	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/Export+module#Exportmodule-metadata">https://publicwiki.deltares.nl/display/FEWSDOC/Export+module#Exportmodule-metadata</a>	Export: allow externalForecastTimeId as metadata	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/Export+module#Exportmodule-metadata">https://publicwiki.deltares.nl/display/FEWSDOC/Export+module#Exportmodule-metadata</a>	<pre> %EXTERNAL_FORECAST_TIME(thisIsTheId),( yyyy/MM/dd HH:mm:ss z)%</pre>	
Plugin - Module - Data Import	<a href="#">FEWS-23479</a>	Rijkswaterstaat	FEWS-22250 RWSOS: workflow import of latest/current forecast from external NetCDF storage	This import can be used to import the latest forecast from a THREDDS server.	This import can be used to import the latest forecast from a THREDDS server.			
Plugin - Module - Data Import	<a href="#">FEWS-23093</a>	Deltares	Support import of GPM data (time, X, Y) with NETCDF-CF_GRID parser	The FEWS NetCDF OpenDAP importer (type NETCDF-CF_GRID) has been improved to support the downloading and importing of NASA GPM (Global Precipitation Monitoring) satellite data	The FEWS NetCDF OpenDAP importer (type NETCDF-CF_GRID) has been improved to support X, Y order of dimensions in order to fully support the downloading and importing of NASA GPM (Global Precipitation Monitoring) satellite data. Subsets of the data for a specific region can now be downloaded using OpenDAP more efficiently.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/NETCDF-CF_GRID">https://publicwiki.deltares.nl/display/FEWSDOC/NETCDF-CF_GRID</a>		

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Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Data Import	<a href="#">FEWS-22852</a>	RWS	Optionally delete file from import directory when file is not matching specified file pattern	TimeSeriesImport option "importTriggeringFile" to start importing under condition	Use option "importTriggeringFile" to configure a path to one or more files that trigger the import. Import will only start when all triggering files are found. The triggering files will be deleted at the end of the import run.  Some examples:  <importTriggeringFile>p:\myProject\trigger</importTriggeringFile>  or  <importTriggeringFile>\$REGION_HOMES/import/external/trigger1/</importTriggeringFile>  <importTriggeringFile>\$REGION_HOMES/import/external/trigger2/</importTriggeringFile>  Restrictions on use: The triggering files cannot be located on the FTP			
Plugin - Module - Data Import	<a href="#">FEWS-22546</a>	Quebec	FEWS-16663 Québec: new import for custom file with .SHT extension	It is possible to import a custom formatted file with .SHT extension from the Ottawa River Regulation Planning Board.	It is now possible to import a custom formatted file from the Ottawa River Regulation Planning Board. The file has a .SHT extension and it is readable by a text editor.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/OttawaRiverRegulation+Import">https://publicwiki.deltares.nl/display/FEWS/DOC/OttawaRiverRegulation+Import</a>		
Plugin - Module - Data Import	<a href="#">FEWS-11739</a>	HDSR	FEWS-22632 UM-Aquo XML import, make current import flexible alike general CSV - sprint 2 - prio 1	It is possible to import properties for values independently from sample properties.	Previously all properties were always applied for the whole sample. It is now possible to distinguish which properties should be applied to the whole sample and which only to individual values within the sample.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/General+CSV">https://publicwiki.deltares.nl/display/FEWS/DOC/General+CSV</a>		
Plugin - Module - Data Import	<a href="#">FEWS-24080</a>	FOEN	FEWS-9563 FOEN: Improve parsing of filenames to extract location or parameter ID's			<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Import+Module+configuration+options+#importModuleconfigurationoptions-fileNameLocationIdPattern">https://publicwiki.deltares.nl/display/FEWS/DOC/Import+Module+configuration+options+#importModuleconfigurationoptions-fileNameLocationIdPattern</a>		
Plugin - Module - Data Import	<a href="#">FEWS-23293</a>	BOS NZV	fewsdatabase importtype should support grids and wanted headers					
Plugin - Module - Data Import	<a href="#">FEWS-24374</a>	Deltares	WIS: Bij migreren van oude WIS database naar nieuwe ook validatiestatus meenemen					
Plugin - Module - Data Import	<a href="#">FEWS-23508</a>	TVA	FEWS-21927 TVA: New EDS hydrothermal data file format	New import for EDS data in .csv format.	New import for EDS data in .csv format.  Csv file import. Format of the import:  SQN,32,2020-09-14T00:00+0000,AA93.0,AB65.0,AC37.0,/109.2,)=106.7,BA690.5  Where the first column is the Plant abbreviation (SQN), and it is disregarded by the parser, the second column (32) is the location ID, the rest of the columns (varying number of them) are the data. The first two characters are the parameter ID, the rest is the value. Parameter id can contain symbols, such as (, +, Times are in UTC.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/EDSHydrothermal">https://publicwiki.deltares.nl/display/FEWS/DOC/EDSHydrothermal</a>	<pre>&lt;code&gt;xml &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;timeSeriesImportRun   xmlns="http://www.wildelft.nl/fews"   xmlns: xsi="http://www.w3.org/2001/XMLSchema-instance"   xsi:schemaLocation="http://www.wildelft.nl/fews   http://fews.wildelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"&gt;   &lt;import&gt;   &lt;general&gt;   &lt;importType&gt;EDSHydrothermal&lt;/importType&gt;   &lt;/general&gt;   &lt;folder&gt;\$REGION_HOMES/import/EDSHydrothermal&lt;/folder&gt;   &lt;idMapId&gt;EDSHydrothermalMap&lt;/idMapId&gt;   &lt;/general&gt;   &lt;timeSeriesSet&gt;   &lt;moduleInstanceld&gt;EDSHydrothermal&lt;/moduleInstanceld&gt;   &lt;valueType&gt;scalar&lt;/valueType&gt;   &lt;parameterId&gt;parameterId&lt;/parameterId&gt;   &lt;locationId&gt;LocationA&lt;/locationId&gt;   &lt;timeSeriesType&gt;externalHistorical&lt;/timeSeriesType&gt; &lt;/code&gt;</pre>	
Plugin - Module - Data Import	<a href="#">FEWS-23320</a>	WaterTechnology	Hydronet API: add proxy server related headers to hydronet request	Hydronet API import new config option: add proxy server related headers to hydronet request	Implemented Hydronet API import new config option: add proxy server related headers to hydronet request.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/WIWB">https://publicwiki.deltares.nl/display/FEWS/DOC/WIWB</a>	<pre>&lt;code&gt;xml &lt;properties&gt;   &lt;string key="dataSource" value="BHP.Composite.Adjusted"/&gt;   &lt;string key="authentication" value="BearerToken"/&gt;   &lt;string key="keepDownloadDataInTempFolder" value="true" /&gt;   &lt;string key="XIBMClietId" value="ID"/&gt;   &lt;string key="XIBMClietSecret" value="Secret"/&gt; &lt;/properties&gt; &lt;/code&gt;</pre>	

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Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Data Import	<a href="#">FEWS-20804</a>	IBM Informix / ONS - Brasil	FEWS-20984 FEWS-ONS: Import from database IBM Informix	Import data from ONSWebService	<p>This import can download data from two different REST endpoints: PrecipitacaoObservada and Grandezas Hidrologicas. Both the URL params and responses are very similar, but there are some differences, detailed below.</p> <p>URL params for both:</p> <p>DataInicialMedicao --&gt; start date, filled in by FEWS based on the relative view period DataFinalMedicao --&gt; end date, filled in by FEWS based on the relative view period QualidadeDado --&gt; data quality flag, coming from general property "QD" of Delft-FEWS. Obligatory field with three options COO, CON or both (COO,CON) for Grandezas Hidrologicas and for PrecipitacaoObservada it should be CD or CT.</p> <p>AgregacaoTemporal --&gt; temporal aggregation. Obligatory field with two options possible, DI=daily data HO=hourly. FeWS fills this field in based on the timeseries time step. If the time step is</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/ONSWebService">https://publicwiki.deltares.nl/display/FEWS/DOC/ONSWebService</a>	<p>Username and password are needed to be able to access the auth token.</p> <p>The server url should end with the ?, all url parameters will be filled in by FEWS automatically, as described above.</p> <p>Properties:</p> <p>locationBatchSize - optional. Tells the data of how many locations should be asked in one call. Default is 20.</p> <p>QD - compulsory field.</p> <p>furoTemporal- optional field, only supported with PrecipitacaoObservada .</p> <p>addParamToUrl - optional field. As you can see above, only the Grandezas Hidrologicas endpoint needs a parameter in the URL. If this field is set to true, the import will assume you wish to import data from Grandezas Hidrologicas, and will try to parse the result accordingly.</p> <p>As you will see below, the structure of the responses differ, so it is important the field</p>	
Plugin - Module - Data Import	<a href="#">FEWS-22106</a>	FEWS-Uruguay	FEWS-22108 FEWS-UY UTE Web Service Import	Added UyUteTelemetric and UyUteConventional Imports	<p>Uy-Ute telemetric import. Imports data from aplicaciones.ute.com.uy/GestEmbPublico/service.asmx</p> <p>The service providing the data can only return 5 days worth of information in one call, but FEWS will loop through the configured period of time and make several calls if it is necessary. Response time of the service can be somewhat long, it is best not to set the connection timeout too low.</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/UyUte+Telemetric">https://publicwiki.deltares.nl/display/FEWS/DOC/UyUte+Telemetric</a>	<p>Telemetric import:</p> <pre>&lt;code&gt;xml &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;!-- edited with XMLSpy v2014 rel. 2 sp1 (http://www.altova.com) by Afdeling ICT (Stichting Deltares) --&gt; &lt;timeSeriesImportRun xmlns="http://www.wildelft.nl/feWS" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wildelft.nl/feWS http://feWS.wildelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"&gt; &lt;import&gt; &lt;general&gt; &lt;importType&gt;UyUteTelemetric&lt;/importType&gt; &lt;/general&gt; &lt;serverUrl&gt;http://aplicaciones.ute.com.uy/GestEmbPublico/service.asmx&lt;/serverUrl&gt; &lt;!-- this field is not used, but it is necessary to be able to configure connection timeout --&gt; &lt;backupServerUrl&gt;http://aplicaciones.ute.com.uy/GestEmbPublico/service.asmx&lt;/backupServerUrl&gt; &lt;!-- if this field is not configured, it will be set at 2000 automatically. --&gt;</pre>	
Plugin - Module - Data Import	<a href="#">FEWS-23760</a>	FOEN	FEWS-9563 FEWS-FOEN: New import for Minerve JSON forecasts	Minerver JSON file import	<p>Minerver JSON file import can import files in the Minerve JSON format.</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Minervejson">https://publicwiki.deltares.nl/display/FEWS/DOC/Minervejson</a>	<pre>&lt;code&gt; &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;timeSeriesImportRun xmlns="http://www.wildelft.nl/feWS" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wildelft.nl/feWS http://feWS.wildelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"&gt; &lt;import&gt; &lt;general&gt; &lt;importType&gt;Minervejson&lt;/importType&gt; &lt;folder&gt;\$IMPORT_FOLDER_ROOTS/Minerve&lt;/folder&gt; &lt;fileNameForecastCreationDateTimePattern&gt;yyyyMMddHH_FORECAST_CONTROL-CIE_ctrl_Stations_control.json&lt;/fileNameForecastCreationDateTimePattern&gt; &lt;/general&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;Import_Minerve&lt;/moduleInstanceId&gt; &lt;valueType&gt;scalar&lt;/valueType&gt; &lt;parameterId&gt;QDown&lt;/parameterId&gt; &lt;locationId&gt;Goneri-Oberwald OFEVJunction&lt;/locationId&gt;</pre>	
Plugin - Module - Data Import	<a href="#">FEWS-23259</a>	RWS	Run CMEMS import in parallel	improved logging on failes CMEMS service calls	improved logging on failes CMEMS service calls	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/CMEMS">https://publicwiki.deltares.nl/display/FEWS/DOC/CMEMS</a>		
Plugin - Module - Data Import	<a href="#">FEWS-24054</a>	WS Vallei & Veluwe	FEWS-24053 API import for SENCROP sensors	support imports with the Sencrop API	support imports with the Sencrop API	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Sencrop">https://publicwiki.deltares.nl/display/FEWS/DOC/Sencrop</a>		
Plugin - Module - General Adapter	<a href="#">FEWS-24240</a>		FEWS-21063 warmingUp: add ignoreNonExistingLocationSets in locationModelLoop					

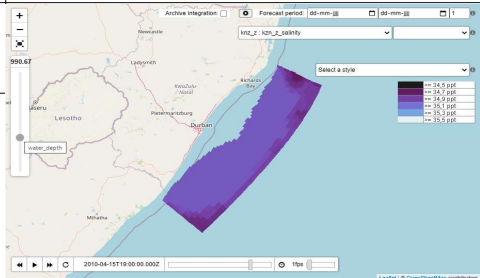
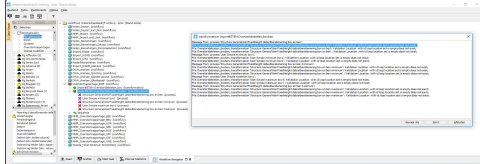
Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Modifiers (ModuleParameters)	<a href="#">FEWS-22608</a>	NWS	FEWS-22536 NWS: #64548 Modifier to adjust ET over a range of basins	Changing location attributes with math operands	<p>(color:#000000)To change the location attributes using math operands, select one or more attributes, open with right mouse click the popup menu and select menu item "Apply operation..." (Ctrl+O).(color)</p> <p>(color:#000000)An "Apply Operation" dialog will appear. Select an operand and enter a value. Use button "Apply" to apply the operation to the selected value(s). Use button "Apply to table" to apply the operation to all numeric values in the table.(color)</p> <p>(color:#000000)The (changed) location attribute modifier can be applied also to multiple locations. For this purpose the button "Apply to ..." can be used.(color)</p> <p>(color:#000000)Note that "Apply to ..." button can only be used if we are going to apply a location attribute for single location(color)</p>		<pre> &lt;attributeModifiers&gt; &lt;locationAttributeModifier id="EvapotranspirationTable" name="EvapotranspirationTable"&gt; &lt;modifiableGroup name="Evapotranspiration"&gt; &lt;locationSetId&gt;AllLocations&lt;/locationSetId&gt;  &lt;attribute id="January"/&gt; &lt;attribute id="February"/&gt; &lt;attribute id="March"/&gt; &lt;attribute id="April"/&gt; &lt;attribute id="May"/&gt; &lt;attribute id="June"/&gt; &lt;attribute id="July"/&gt; &lt;attribute id="August"/&gt; &lt;attribute id="September"/&gt; &lt;attribute id="October"/&gt; &lt;attribute id="November"/&gt; &lt;attribute id="December"/&gt;  &lt;tabularLayout&gt; &lt;showOriginalValues&gt;true&lt;/showOriginalValues&gt; &lt;/tabularLayout&gt; &lt;/modifiableGroup&gt; &lt;/locationAttributeModifier&gt; </pre>	
Plugin - Module - Modifiers (TimeSeries)	<a href="#">FEWS-18026</a>	NWS	FEWS-22536 NWS: #36285 Module Instance Sets not modifiable when supplied to template using workflow property keys (config quick scanner)	It is now possible to use properties in the moduleInstanceSet tag of the time series sets	It is now possible to use properties in the moduleInstanceSet tag of the time series sets			
Plugin - Module - Reports	<a href="#">FEWS-24078</a>	EA	FEWS-18050 IMFS: Add new functionality to reports for showing threshold Labels					
Plugin - Module - Spatial Modifiers	<a href="#">FEWS-22423</a>	Deltares	FEWS-18245 In SpatialDisplay, combine "Play", "Pause" and "Stop" buttons	The pause button is merged with the play button.	The pause button is merged with the play button. Therefore, the pause button appears if the play button is previously pressed and continuous play mode is already started.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/05+Spatial+Display">https://publicwiki.deltares.nl/display/FEWS/DOC/05+Spatial+Display</a>		
Plugin - Module - Thresholds	<a href="#">FEWS-22810</a>	EA	FEWS-18050 IMFS-SA: Add upActionLogEventTypeldFunction to ThresholdValueSets	Adding functions for two elements in the ThresholdValueSets: upActionLogEventTypeld and downActionLogEventTypeld	Adding two functions for "upActionLogEventTypeld" and "downActionLogEventTypeld", which are location dependent IDs of the action messages.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/10+ThresholdValueSets#id.10ThresholdValueSets.upActionLogEventTypeldFunction">https://publicwiki.deltares.nl/display/FEWS/DOC/10+ThresholdValueSets#id.10ThresholdValueSets.upActionLogEventTypeldFunction</a>		
Plugin - Module - Thresholds	<a href="#">FEWS-23186</a>	EA	FEWS-18050 IMFS-SA: Add comment element to thresholds	Add optional comment or comment function when a threshold is crossed.	Optional location dependent comment that is specified by a function, e.g. "@FLOOD_WATCH@", in which tags between "@" signs refer to location attributes that are defined in the locationSets config file. The tags are replaced by actual attribute values. These attribute values can be different for different locations. If an attribute is missing for a location, then the comment is ignored for that location. If a comment that has more than 50 characters specified, the comment is truncated up to 47 characters. The full comment is then shown in a tooltip.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/10+ThresholdValueSets">https://publicwiki.deltares.nl/display/FEWS/DOC/10+ThresholdValueSets</a>		
Plugin - Module - Transformation	<a href="#">FEWS-22636</a>	EA	FEWS-18050 IMFS: Coastal High Tide Correction function	Transformation to correct the first next peak of the astronomical tide based on differences with previously forecast and observed peaks	Transformation to correct the first next peak of the astronomical tide based on differences with previously forecast and observed peaks.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Tidal+Peak+Correction">https://publicwiki.deltares.nl/display/FEWS/DOC/Tidal+Peak+Correction</a>		
Plugin - Module - Transformation	<a href="#">FEWS-24360</a>	NGMS	XML schema value element under percentileExceedence does not accept template property					
Plugin - Module - Transformation	<a href="#">FEWS-23801</a>		FEWS-23777 Introduce bed level concept					

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Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Transformation	<a href="#">FEWS-22964</a>	TVA	FEWS-21927 TVA: AdjustQ transformation with negative values	Make correcting negative flow values to zero optional in AdjustQ transformation	Added an optional field to the transformation configuration, correctNegativeFlowValuesToZero. Default value is false. It can be used both in adjustQ and adjustQUsingObservedInstantaneousDischarge transformations.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/AdjustQMeanDailyDischarge">https://publicwiki.deltares.nl/display/FEWS/DOC/AdjustQMeanDailyDischarge</a>	<pre>(code:xml) &lt;transformation id="ADJUST_Q"&gt; &lt;adjust&gt; &lt;adjustQUsingObservedInstantaneousDischarge&gt; &lt;correctNegativeFlowValuesToZero&gt;false&lt;/correctNegativeFlowValuesToZero&gt; &lt;observedDischarge&gt; &lt;variableId&gt;observed&lt;/variableId&gt; &lt;/observedDischarge&gt; &lt;simulatedInstantaneousDischarge&gt; &lt;variableId&gt;simulated&lt;/variableId&gt; &lt;/simulatedInstantaneousDischarge&gt; &lt;coefficientSetFunctions&gt; &lt;blendingSteps&gt;@BLENDINGSTEPS@&lt;/blendingSteps&gt; &lt;interpolationType&gt;@INTERPOLATIONTYPE@&lt;/interpolationType&gt; &lt;/coefficientSetFunctions&gt; &lt;adjustedForecastDischarge&gt; &lt;variableId&gt;forecast&lt;/variableId&gt; &lt;/adjustedForecastDischarge&gt; &lt;/adjustQUsingObservedInstantaneousDischarge&gt; &lt;/adjust&gt; &lt;/transformation&gt; (code)</pre>	
Plugin - Module - Transformation	<a href="#">FEWS-22833</a>	BoM	Transformation Module: Select and copy ensemble member based on time series with member indices (flood maps)	Implement selection ensemble member by index transformation for grids	<p>This selection ensemble member by index transformation takes two inputs. One is a grid time series with different ensemble members. The other one is a scalar time series. The values of the scalar time series should be ensemble indices. The transformation uses the time of the indices for the output, and places the grid with the corresponding ensemble index into that time step.</p> <p>The transformation has one optional parameter, matchInputAndOutputGridTimes. Because the time of the output time series is determined by the time of the ensemble member indices, it can happen that the input grids do not have data at the given time. If matchInputAndOutputGridTimes is set to false, and the exact time step is unavailable, the first available grid data of the given ensemble member will be filled in the output. If it is set to true, output will only be filled if the data is available for the exact time. Default value for matchInputAndOutputGridTimes is false.</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/Selection+Grid+Ensemble+Member+by+index">https://publicwiki.deltares.nl/display/FEWS/DOC/Selection+Grid+Ensemble+Member+by+index</a>	<pre>(code:xml) &lt;transformation id="ensembleLookup"&gt; &lt;selection&gt; &lt;gridEnsembleMemberByIndex&gt; &lt;inputEnsembleIndices&gt; &lt;variableId&gt;inputIndex&lt;/variableId&gt; &lt;/inputEnsembleIndices&gt; &lt;inputTimeSeriesGrids&gt; &lt;variableId&gt;inputGrids&lt;/variableId&gt; &lt;/inputTimeSeriesGrids&gt; &lt;output&gt; &lt;variableId&gt;Output&lt;/variableId&gt; &lt;/output&gt; &lt;matchInputAndOutputGridTimes&gt;false&lt;/matchInputAndOutputGridTimes&gt; &lt;/gridEnsembleMemberByIndex&gt; &lt;/selection&gt; &lt;/transformation&gt; &lt;/transformationModule&gt; (code)</pre>	
Plugin - Module - Transformation	<a href="#">FEWS-23448</a>	Noorderzijvest	Select (range of) wavelengths time series from 1D (single domain axis) timeseries for use in transformations	Implement new transformation that can be used to extract a normal scalar time series from a scalar map time series set.	<p>This transformation can be used to extract a normal scalar time series from a scalar map time series set. Input and output location and ensemble ID should be the same.</p> <p>In the configuration minDomainValue and maxDomainValue need to be defined. These values determine which domain axis values should be used in the extracted time series. If you only wish to extract one value, use the same setting for min and max. You can also define a range, in this case the output amount will be the average of the values that belong to the different domain axis values.</p> <p>MinValueInclusive and MaxValueInclusive are optional fields that can be used when defining a range. Default value is true.</p>	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/SelectionScalarTimeSeriesFromScalarMap">https://publicwiki.deltares.nl/display/FEWS/DOC/SelectionScalarTimeSeriesFromScalarMap</a>	<pre>(code:xml) &lt;transformationModule version="1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.wildelft.nl/fews" xsi:schemaLocation="http://www.wildelft.nl/fews http://fews.wildelft.nl/schemas/version1.0/transformationModule.xsd"&gt; &lt;variable&gt; &lt;variableId&gt;input&lt;/variableId&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;SelectionScalarTimeSeriesFromScalarMapFunction&lt;/moduleInstanceId&gt; &lt;valueType&gt;scalar&lt;/valueType&gt; &lt;parameterId&gt;H.obs&lt;/parameterId&gt; &lt;domainParameterId&gt;H.obs&lt;/domainParameterId&gt; &lt;locationId&gt;H-2001&lt;/locationId&gt; &lt;timeSeriesType&gt;external historical&lt;/timeSeriesType&gt; &lt;timeStep unit="day"&gt;&lt;timeStep&gt; &lt;relativeViewPeriod unit="day" start="-1" end="10"/&gt; &lt;/timeStep&gt; &lt;readWriteMode&gt;add originals&lt;/readWriteMode&gt;</pre>	

Delft-FEWS 2020.02 Resolved Features

Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Transformation	<a href="#">FEWS-23148</a>		Transformation: selection-minimum also for grids	Transformation: implement selection-minimum also for grids	Transformation: implement selection-minimum also for grids	<a href="https://publicwiki.deltare.nl/display/FEWS/DOC/Selection+of+maximum">https://publicwiki.deltare.nl/display/FEWS/DOC/Selection+of+maximum</a>	<pre>(code:xml) &lt;transformation id="maximum function test"&gt; &lt;selection&gt; &lt;maximum&gt; &lt;inputVariable&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;import&lt;/moduleInstanceId&gt; &lt;valueType&gt;grid&lt;/valueType&gt; &lt;parameterId&gt;H_obs&lt;/parameterId&gt; &lt;locationId&gt;H-2010&lt;/locationId&gt; &lt;timeSeriesType&gt;external historical&lt;/timeSeriesType&gt; &lt;timeStep unit="minute" multiplier="15"/&gt; &lt;relativeViewPeriod unit="day" start="0" end="365"/&gt; &lt;readWriteMode&gt;editing visible to all future task runs&lt;/readWriteMode&gt; &lt;/timeSeriesSet&gt; &lt;/inputVariable&gt; &lt;outputVariable&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;SelectionMaximumFunctionTest&lt;/moduleInstanceId&gt; &lt;valueType&gt;grid&lt;/valueType&gt;</pre>	
Plugin - Module - Transformation	<a href="#">FEWS-22712</a>	NWS	FEWS-22536 NWS: #59578 Request to use floats/integers property keys as tokens within transformation modules	Implementing the use of floats/integers property keys as tokens within transformation modules	Implementing the use of floats/integers property keys as tokens within transformation modules In range transformations upper and lower limits can be configured as a float value or as a token.	<a href="https://publicwiki.deltare.nl/display/FEWS/DOC/User+Transformations">https://publicwiki.deltare.nl/display/FEWS/DOC/User+Transformations</a>	<pre>(code:xml) &lt;transformation id="QME_above_threshold"&gt; &lt;rangeTransformation&gt; &lt;range&gt; &lt;limitVariable&gt;QIN_hourly&lt;/limitVariableId&gt; &lt;lowerLimit&gt;\$MIN_PEAKS&lt;/lowerLimit&gt; &lt;upperLimit&gt;10000000&lt;/upperLimit&gt; &lt;/range&gt; {code}</pre>	
Plugin - Module - Transformation	<a href="#">FEWS-23478</a>	Rijkswaterstaat	FEWS-22250 new transformation HW/LW calculation	New transformation HW/LW calculation	The input of the transformation is two time series. The first one contains the times of the astronomical high or low tide. The values are not the levels, but the tide number. The second input is a continuous time series that contains water levels. This can be a forecast, an observed or hindcast series. The transformation will use the time steps of the astronomical tide number input, and it will search for peaks in the continuous time series around each of those times. For every timeStep of the continuous series the slope of the data curve is determined. A minimum or maximum is found if the slope is horizontal (thus the value of the angle is 0). If the slope value changes from positive to negative, it is a maximum, if it changes from negative to positive, it is a minimum. There are two output time series: both are non-equidistant, the time steps are the times of the actual high tide. The values in one are the tide numbers, in the other the water level.	<a href="https://publicwiki.deltare.nl/display/FEWS/DOC/selectNumberedTidalPeaks">https://publicwiki.deltare.nl/display/FEWS/DOC/selectNumberedTidalPeaks</a>	<pre>(code:xml) &lt;transformation id="SelectionTideNumbersAndLows"&gt; &lt;selection&gt; &lt;selectNumberedTidalLows&gt; &lt;numberedTidalLows&gt; &lt;variableId&gt;numberedTidalLows&lt;/variableId&gt; &lt;/numberedTidalLows&gt; &lt;continuousLevelSeries&gt; &lt;variableId&gt;continuousLevelSeries&lt;/variableId&gt; &lt;/continuousLevelSeries&gt; &lt;minutesBeforeTidalExtreme&gt;50&lt;/minutesBeforeTidalExtreme&gt; &lt;minutesAfterTidalExtreme&gt;50&lt;/minutesAfterTidalExtreme&gt; &lt;regressionPeriodInMinutes&gt;30&lt;/regressionPeriodInMinutes&gt; &lt;validDifferenceExceedence&gt;0.02&lt;/validDifferenceExceedence&gt; &lt;lowWaterLevelOutput&gt; &lt;variableId&gt;outputTideValue&lt;/variableId&gt; &lt;/lowWaterLevelOutput&gt; &lt;lowWaterTideNumberOutput&gt; &lt;variableId&gt;outputTideNumber&lt;/variableId&gt;</pre>	
System	<a href="#">FEWS-22169</a>	WarmingUp	FEWS-21063 Accommodate client-type CF (Computational Framework)	New Client Type: Computational Framework	New Client Type: Computational Framework  The CF (Computational Framework) client type is intended for desk studies with strong emphasis on scenario analysis, scenario management and comparison. Client type CF works as a stand-alone desktop application with access to the archive.  ClientType CF is introduced to protect the live system functionality from Computational Framework functionality which may use displays that do not work in client-server systems or may use features (e.g. not configured files on the file system) that do not work in a client-server environment. Most of the times, the CF client type has similar behaviour to an SA.	<a href="https://publicwiki.deltare.nl/display/FEWS/DOC/01+Root+Configuration+Files+for+Operator+Client">https://publicwiki.deltare.nl/display/FEWS/DOC/01+Root+Configuration+Files+for+Operator+Client</a>	<pre>(code:xml) &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;clientConfiguration xmlns="http://www.widelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.widelft.nl/fews http://fews.widelft.nl/schemas/version1.0/clientConfig.xsd"&gt; &lt;clientType&gt;Computational Framework&lt;/clientType&gt; &lt;/clientConfiguration&gt; {code}</pre>	



Delft-FEWS 2020.02 Resolved Features								
Component/s	Key	Customer name	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
System - FEWS webservices	<a href="#">FEWS-22789</a>	Rijkswaterstaat	FEWS-22250 PI service: get forecast availability time	It is now possible to retrieve the time when a forecast became available in the netcdf storage	It is now possible to retrieve at which time a forecast became available in the netcdf storage of the open archive. More information can be found here.  <a href="https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+PI+REST+Web+Service">https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+PI+REST+Web+Service</a>			
System - FEWS webservices	<a href="#">FEWS-23726</a>		FEWS-22250 PI Service - Support documentVersion for netcdfstorageforecasts endpoint	documentVersion is accepted for netcdfstorageforecasts endpoint	documentVersion is accepted for netcdfstorageforecasts endpoint	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+PI+REST+Web+Service#FEWSPI-RESTWebService-GETTachewInetcdStorageforcasts">https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+PI+REST+Web+Service#FEWSPI-RESTWebService-GETTachewInetcdStorageforcasts</a>		
System - FEWS webservices	<a href="#">FEWS-23187</a>	EA	FEWS-18050 IMFS-PI: Add label, description and comment element to PI Service timeseries thresholds	support for comment and description for thresholds in pi timeseries endpoint	support for comment and description for thresholds in pi timeseries endpoint	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+PI+REST+Web+Service#FEWSPI-RESTWebService-GETTimeseries">https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+PI+REST+Web+Service#FEWSPI-RESTWebService-GETTimeseries</a>		
System - FEWS webservices	<a href="#">FEWS-23154</a>	Deltares	PI service should use clientConfig localCacheSizeMB	localCacheSizeMB in clientConfig.xml used by PI service as well	The localCacheSizeMB configuration option in the clientConfig.xml that can be configured for an OC or FSS, is now also available to the PI Service.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+Web+Services#FEWSWebServices-Cacheconfiguration">https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+Web+Services#FEWSWebServices-Cacheconfiguration</a>	<pre>(code) &lt;localCacheSizeMB&gt;500&lt;/localCacheSizeMB&gt; &lt;/code&gt;</pre>	
System - FEWS webservices	<a href="#">FEWS-19944</a>	RWS	FEWS-22250 WMS Service: GetLegend (classbreaks) as JSON	WMS GetLegend as JSON	The WMS GetLegend can now return JSON with the legend information of the specified layer.	<a href="https://publicwiki.deltares.nl/pages/viewpage.action?pageId=134482048#FEWSWebMappingServiceWithTimesupport(WMS-T)-GetLegendGraphic">https://publicwiki.deltares.nl/pages/viewpage.action?pageId=134482048#FEWSWebMappingServiceWithTimesupport(WMS-T)-GetLegendGraphic</a>		
System - FEWS webservices	<a href="#">FEWS-19942</a>	UAE Navy	FEWS-22250 WMS Service: Support vendor parameter depth level for 3D datasets	WMS supports elevation dimension for 3D data sets.	WMS supports the elevation dimension for 3D data sets. They are reported in the GetCapabilities and a specific elevation can be requested with the GetMap method.	<a href="https://publicwiki.deltares.nl/pages/viewpage.action?pageId=134482048#FEWSWebMappingServiceWithTimesupport(WMS-T)-GetCapabilitiesElevationDimension(2020.02)">https://publicwiki.deltares.nl/pages/viewpage.action?pageId=134482048#FEWSWebMappingServiceWithTimesupport(WMS-T)-GetCapabilitiesElevationDimension(2020.02)</a>		
System - FEWS webservices	<a href="#">FEWS-22463</a>		FEWS-22594 Allow PI Service to run with ENV variables without configuration files.	Delft-FEWS Web Services can be started with ENV variables only	It is now possible to start the Delft-FEWS Web Services with ENV variables only. It is required to add a ClientConfig file of type "Web Services" to the root config files of your Delft-FEWS configuration.	<a href="https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+Web+Services#FEWSWebServices-DirectDatabaseAccessingENVVariables(since2020.02)">https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+Web+Services#FEWSWebServices-DirectDatabaseAccessingENVVariables(since2020.02)</a>		
System - Workflow	<a href="#">FEWS-24191</a>	WBL	Allow loopLocationSet in workflow to be empty					
Water Coach	<a href="#">FEWS-19417</a>	RWS	FEWS-21093 Use correct TO for prerequisite model "A" based on the TO of subsequent model "B"	Batch Tool – new option overrulingActiveModuleInstanceRuns	<pre>(color:#000000)When any overrulingActiveModuleInstanceRun is configured, then the batch tool will search for an associated run with a TO before or at the TO of the batch task. The found module run will be used instead of current module run .(color)  (color:#000000)Note that the found module run will also overrule any activeModuleInstanceRun that has been configured within taskProperties in the taskPropertiesPredefined config file. (color)  (color:#000000)(color)  (color:#000000)Typically , this functionality is useful when we run first a batch with model A, and then another batch with model B, whereby the model B needs output of model A. Without the option overrulingActiveModuleInstanceRuns, (color)  (color:#000000)every Model B run will take the latest run of model A. With the option</pre>	<pre>Example from taskPropertiesPredefined.xml :  (color:#000000)&lt;batchTask&gt; (color) (color:#000000) &lt;period&gt;(color) (color:#000000) &lt;startDate&gt;2019-01-15T08:00:00&lt;/startDate&gt;(color) (color:#000000) &lt;endDate&gt;2019-01-15T12:00:00&lt;/endDate&gt;(color) (color:#000000) &lt;/period&gt;(color) (color:#000000) &lt;interval unit="hour" multiplier="2"/&gt; (color) (color:#000000) (color) (color:#000000) (color:#000000) &lt;overrulingActiveModuleInstanceRuns workflowId="Preprocess"&gt;(color) (color:#000000) (color:#000000) &lt;moduleInstanceId&gt;Preprocess&lt;/moduleInstanceId&gt;(color)</pre>		
Xml Schemas for Configuration	<a href="#">FEWS-19460</a>	NWS	FEWS-22536 NWS: #53505 xjc (XML to Java class converter) duplicate properties error	Extra jax ws attributes have been added to the xsd's of fews to make them compatible with jax ws tooling	Extra jax ws attributes have been added to the xsd's of fews to make them compatible with jax ws tooling	<a href="http://fews.widelft.nl/schemas/version1.0/">http://fews.widelft.nl/schemas/version1.0/</a>		
	<a href="#">FEWS-23135</a>		FEWS-22443 Enabled expression field					
	<a href="#">FEWS-23184</a>		FEWS-22443 extend the bin reader with the option to read single series value					
	<a href="#">FEWS-23175</a>		FEWS-22443 extend the binary reader with option to read single table property					
	<a href="#">FEWS-22166</a>		FEWS-22165 CaseEdit: generic whatif property editor					



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