

Deltares

Enabling Delta Life



Deltares

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What's new in Delft-FEWS...

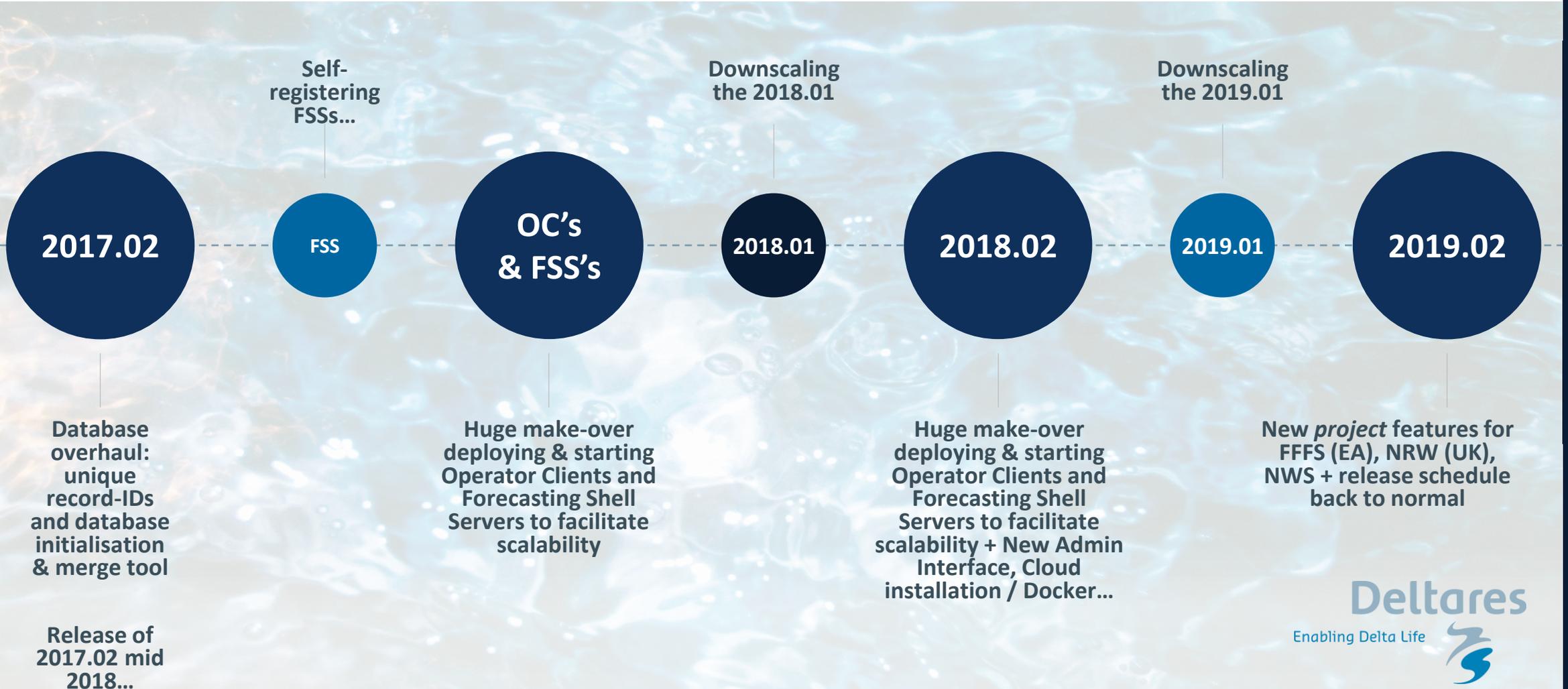
Gerben Boot & Marcel Ververs (Delft-FEWS Product Management)

Overview

- Update Roadmap status (Gerben)
- New features Waterboards (Gerben)
- New features RWS and International clients (Marcel)
- Community news (Marcel)
- Outlook & sneak preview (Marcel)



Time line of a 'very exiting and an exceptional period of the roadmaps FEWS 2020...'



Roadmaps in Delft(-FEWS)...

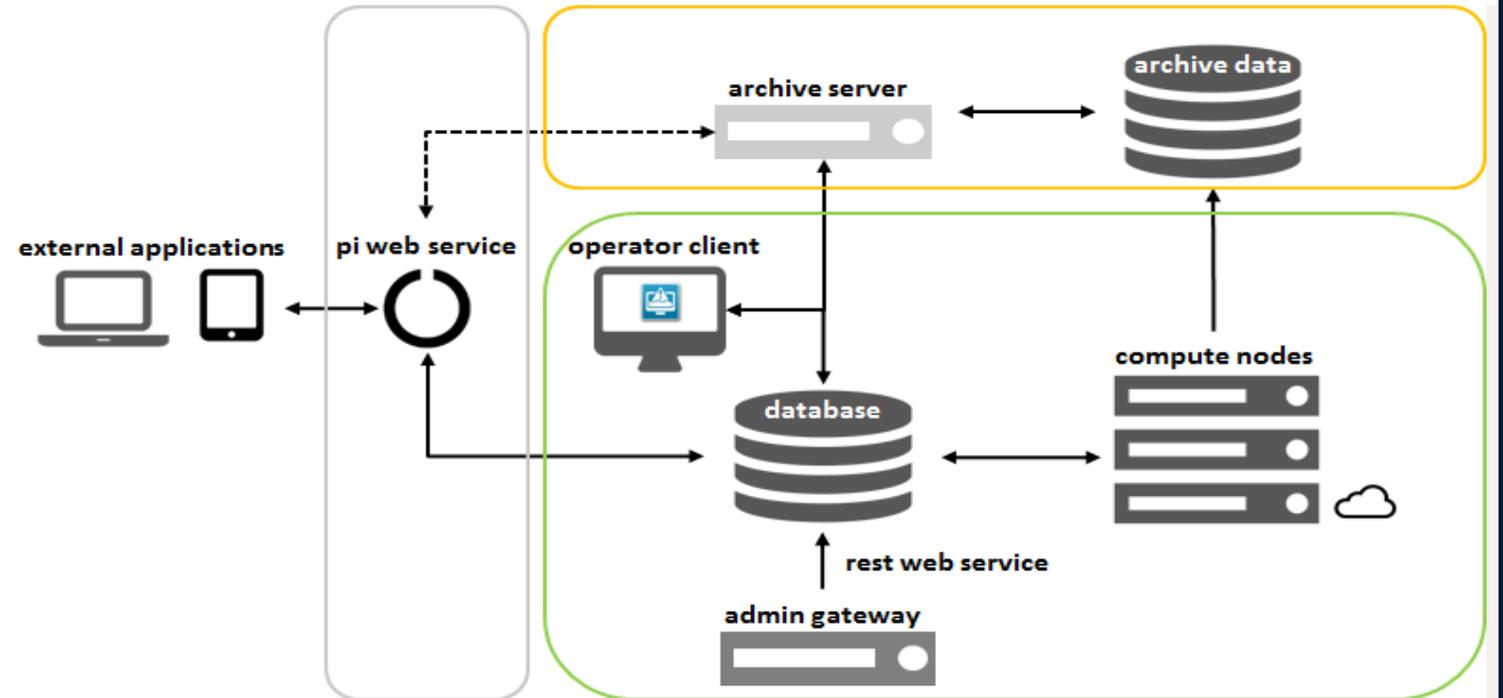


Roadmaps in Delft(-FEWS)...



Delft-FEWS 2020: Status update of the roadmaps...

- Update per roadmap (May 2019)
 - What is ready, what is not (yet)?
 - Next steps...



Roadmap Delft-FEWS backend

Roadmap Delft-FEWS PI webservice

Roadmap Deltares Open Archive

Roadmap Backend features - planned

2017.02	2018.01	2018.02
JMS removed		
New MC		
New Database Schema		
Current Admin Interface adjusted	New Admin Interface	
New (MC-MC) Synchronisation		New Admin Interface webservice
New RollingBarrel		
	Secure login/https	
	Scalability	Improved scalability
	Cloud-ready: Azure	Cloud-ready Amazon
	Improved security	
New install procedure	Improved install procedure	(almost) Automatic install procedure
New upgrade procedure	Improved upgrade procedure	(almost) Automatic upgrade procedure
New (WIKI) documentation		Automatic system documentation

Roadmap Backend features - realised

2017.02	2018.01	2018.02
JMS removed		
New MC		Prepare integration MC/AI
New Database Schema		
Current Admin Interface adjusted		New Admin Interface
New (MC-MC) Synchronisation		New Admin Interface webservice
New RollingBarrel		
	Secure login/https	
	Basic Scalability	Improved scalability
	Cloud-preparation Azure	Cloud-ready Azure
	Improved security	Cloud-ready Amazon
New install procedure	Improved install procedure	Simplified install procedure
New upgrade procedure	Improved upgrade procedure	Simplified upgrade procedure
New (WIKI) documentation		

More Backend ...

- Only **Database & Tomcat** needed
- Database functionality now ensures **uniqueness** of database **records**
- FSS is **self-registering**, FSS ID generated for **scalability**
- Use of **Docker/Kubernetes** possible
- Delft-FEWS base build has **Java inside** (windows & linux) – **Amazon JDK 11.03**
- OC points to **URL** (no initial **root config**)
- OC (FSS) **patch** now **determines build**
- **64b** only



Deltares

New Admin Interface

- New **look & feel**
- New **technologies** (HTML5, etc.)
- **Responsive GUI** (tablet, phone)
- **AI web service** (system admin tooling)
- **Roles** (Admin, View)
- **Import** base **build / patch**
- **Security**
- **Documentation**

Delft-FEWS Admin Interface

Dashboard

- System Status
- Files
- Forecast Tasks
- Workflow and FSSs
- User Administration
- System Control
- Database Analysis
- Configuration Management
- Examples
- Logout admin

Deltares
Enabling Delta Life

MC01 Database OK
View Details

Error Logs last hour 26
View Details

FSS Status

MC ID	FSS ID	Status	Last Workflow Status	Last Run Work
COREMC00	FSS01	Failed	Unknown	Update_System
COREMC00	FSS02	Failed	unknown	ImportExternal
COREMC00	FSS03	OK	unknown	Ovens_Rainfa

MC Components status

- Task Run Manager Status OK
- MC Rolling Barrel Status

Roadmap PI-webservice features - planned

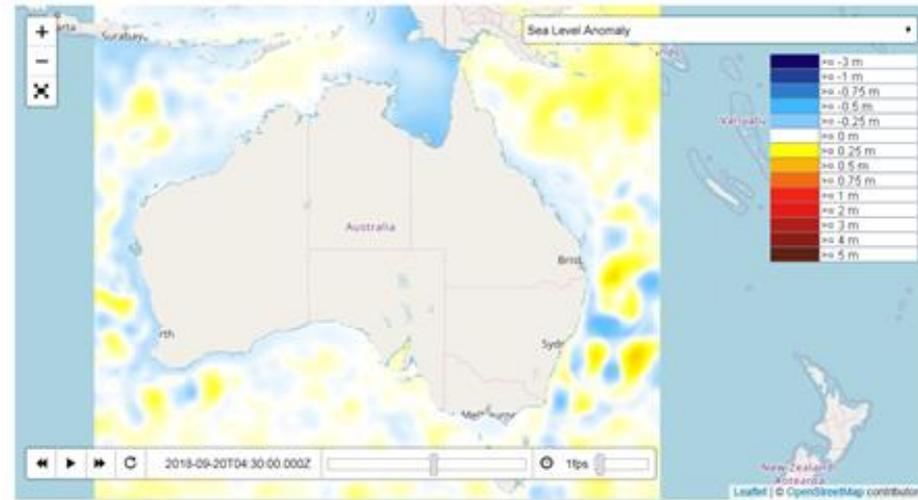
2017.02	2018.01	2018.02
Simplify installation and configuration	Option in installation procedure Delft-FEWS	Part of install procedure Delft-FEWS (optional)
Improved testability	Improved performance and stability	
PI-XML SOAP/REST alignment	Data streaming/chunking/thinning	
	Improved security and authentication	
	JSON Support	
		Seamless integration of grid data
		Web Mapping Tile Service (WMTS)
Improved documentation	Improved documentation	Improved documentation

Roadmap PI-webservice features - realised

2017.02	2018.01	2018.02
Simplify installation and configuration	Option in installation procedure Delft-FEWS	Part of install procedure Delft-FEWS (optional)
Improved testability	Improved performance and stability	
PI-XML SOAP/REST alignment		Data streaming/chunking/thinning
Improved security and authentication		
JSON Support		
		Seamless integration of grid data
		Web Mapping Tile Service (WMS-T)
Improved documentation	Improved documentation	Improved documentation



Delft-FEWS Web Mapping Service (WMS-T)

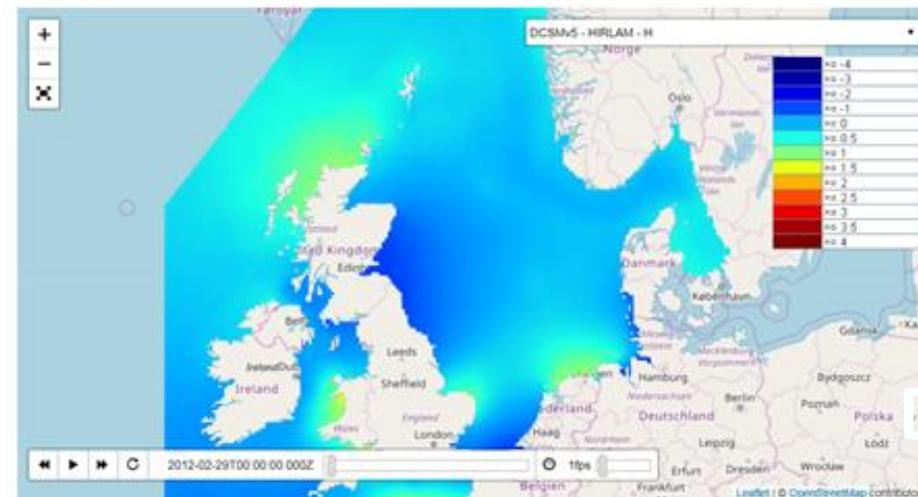


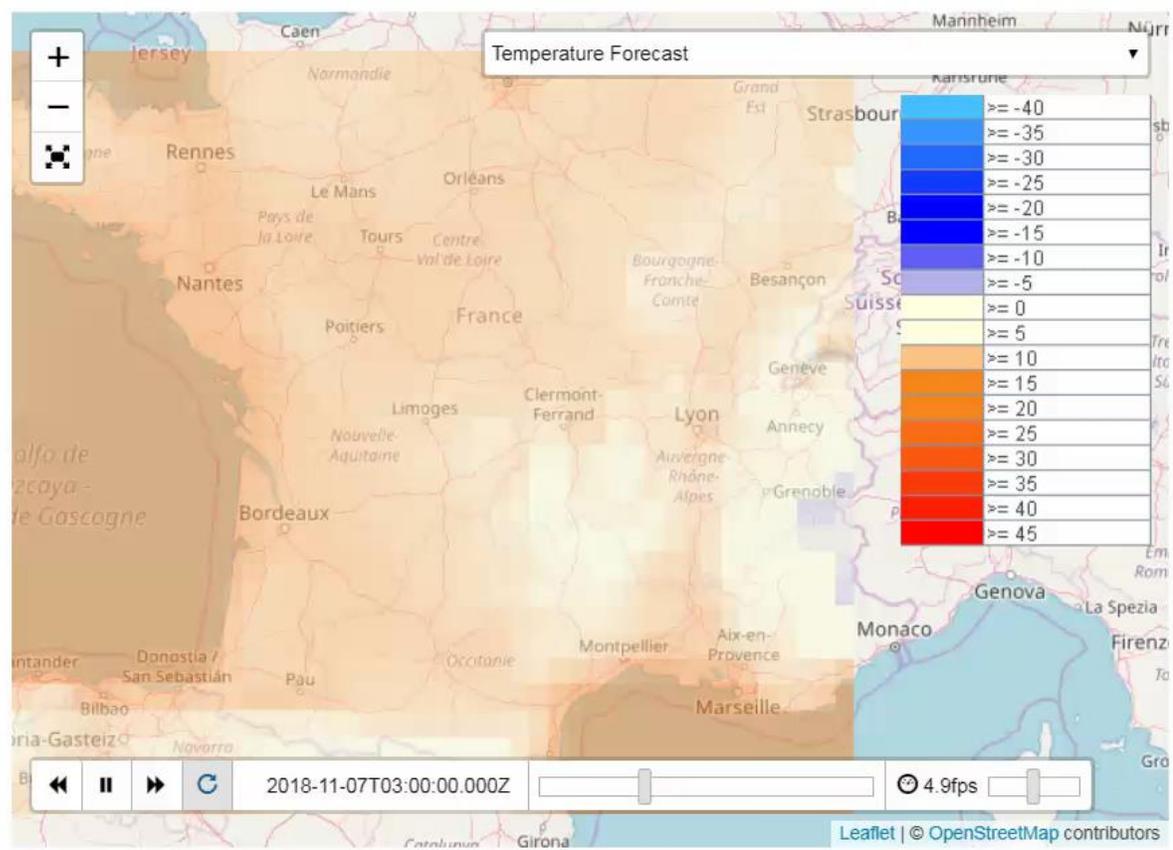
More PI webserver...

- WMS-T (**T=time**)
- **Plots** from the Spatial Display
- **Testpage** (included in package)
- **Applied** in **projects** (e.g. Covadem, ADOOS)
- Comparison with Spatial Display (refresh rate, animation) on the next slide



Delft-FEWS Web Mapping Service (WMS-T)





FEWS Loire (Stand alone)

File Tools Options Help

Loire

Sun 04-11-2018 19:00:00 CET

- Satellite precipitation
 - Precipitation GPM [mm]
 - Precipitation GSMAP [mm]
- GFS Forecasts
 - Rainfall Forecast
 - Temperature Forecast
 - Wind Forecast
- Earth 2 Observe
- WFLOW
- Live Satellite
 - HIMAWARI with GPM

Last Value

>= -40
>= -35
>= -30
>= -25
>= -20
>= -15
>= -10
>= -5
>= 0
>= 5
>= 10
>= 15
>= 20
>= 25
>= 30
>= 35
>= 40
>= 45

Map Data Display Spatial Data Web Browser

External: Sun 04-11-2018 01:00:00 CET

Forecast time: Sun 04-11-2018 01:00:00 CET
Time: Sun 04-11-2018 19:00:00 CET

15

Roadmap **Open archive** features - planned

2017.02	2018.01	2018.02
PI Webservice for Open Archive		
Improved harvester		Harvester for non-FEWS data
	Improved Data management Tool	Example implementation Deltares Data Viewer
	Health Checker	
Search & select forecasts/seamless integration	Search & select forecasts/seamless integration	
Improved documentation	Improved documentation	Improved documentation
Course materials		
	Restyled System Admin Page	
Improved installer	Option in installation procedure Delft-FEWS	Option in installation procedure Delft-FEWS

Roadmap Open archive features - realised

2017.02	2018.01	2018.02
PI Webservice for Open Archive		
Improved harvester		Harvester for non-FEWS data
Improved Data management Tool		Example implementation Deltares Data Viewer (Delft-FEWS web viewer)
Health Checker		
Search & select forecasts/seamless integration		
Improved documentation	Improved documentation	Improved documentation
Course materials		New Elasticsearch version
	Restyled System Admin Page	
Improved installer	Option in installation procedure Delft-FEWS	Option in installation procedure Delft-FEWS

More Open archive...

- **Archive** more **integrated** in OC
 - **Archive Catalog** Display (Query)
 - **Forecast Management** Display
 - **Status bar**
 - **System Monitor**
 - **Verification Display** (flood events)
- And **accessible** via **PI webservice**:
 - **Ensemble Verification System**
 - **TVA SSRS** system
- **Admin page** improved

Archive Dialog

Tasks	Repeat Time	Status
internal harvester	2 hour	pending
historical events exporter	2 hour	pending
system metrics	2 hour	pending
clear internal catalogue	-	pending

Forecast Management Dialog

Status	TO	Dispatch time	Workflow	FDO	Area	Source
	06-04-2017 18:00:00	06-04-2017 19:36:43	MainstemTennessee_Forecast	Reichert, Michael Jay	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:36:13	KentuckyBarkley_Forecast	Kusmierczyk, Richard Adam	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:29:36	DuckEel_Forecast	Kusmierczyk, Richard Adam	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:29:01	Bear_Forecast	Kusmierczyk, Richard Adam	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:27:39	Hwassee_Forecast	Kusmierczyk, Richard Adam	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:27:04	Ocoee_Forecast	Kusmierczyk, Richard Adam	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:26:43	LittleTennessee_Forecast	Kusmierczyk, Richard Adam	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:25:47	FrenchBroad_Forecast	Kusmierczyk, Richard Adam	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:25:37	ClinchPowell_Forecast	Reichert, Michael Jay	scalar	TVA_Forecast

TO	Dispatch time	Workflow	What-if scenario	Description	FDO	FSS ID	Runtime	Output Time S...
06-23-2017 15:00:00	06-23-2017 14:39:15	Calculate Water Order for Great Fal...					254d 15h 59...	1h
06-23-2017 14:00:00	06-23-2017 14:37:14	Calculate Water Order for Great Fal...					254d 12h 45...	1h
06-23-2017 12:00:00	06-23-2017 12:19:36	Calculate Water Order for Great Fal...					254d 15h 5m ...	1h
06-23-2017 12:00:00	06-23-2017 10:42:38	Calculate Water Order for Melton H...					254d 16h 42...	1h

Remaining roadmap features – 2019 (in projects...)

2019.0* - Backend

Full integration MC/AI

Finalise security

(almost) Automatic install procedure

(almost) Automatic upgrade procedure

Automatic system documentation

2019.0* – PI web service

Seamless integration of grid data

Finalize security

WMTS / improve WMS-T

2019.0* - Open archive

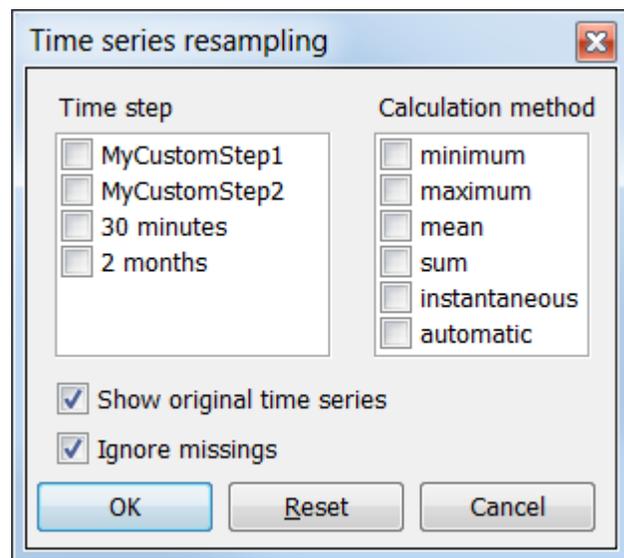
Seamless Integration for grids

Delft-FEWS web viewer based on PI web service

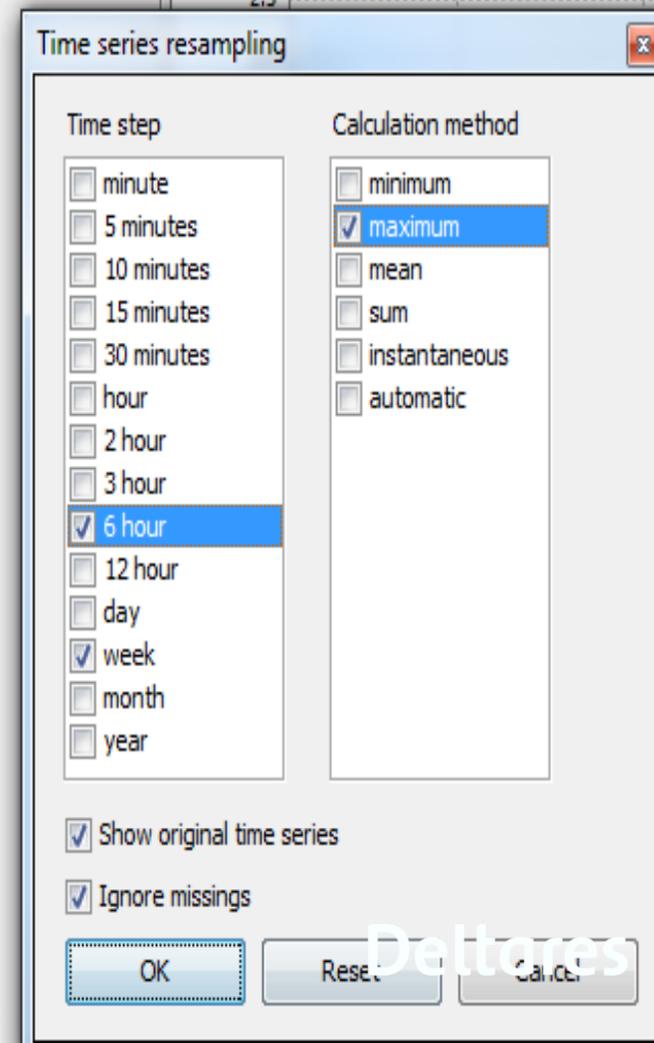
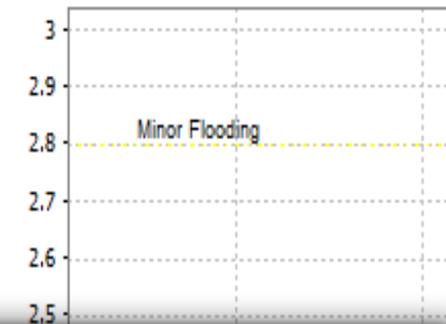
Harvester for non-FEWS data

Resampling custom period

- Custom time steps in TimeSeriesDisplayConfig
- Custom start time accumulation period
- Time steps defined in TimeSteps.xml can be used

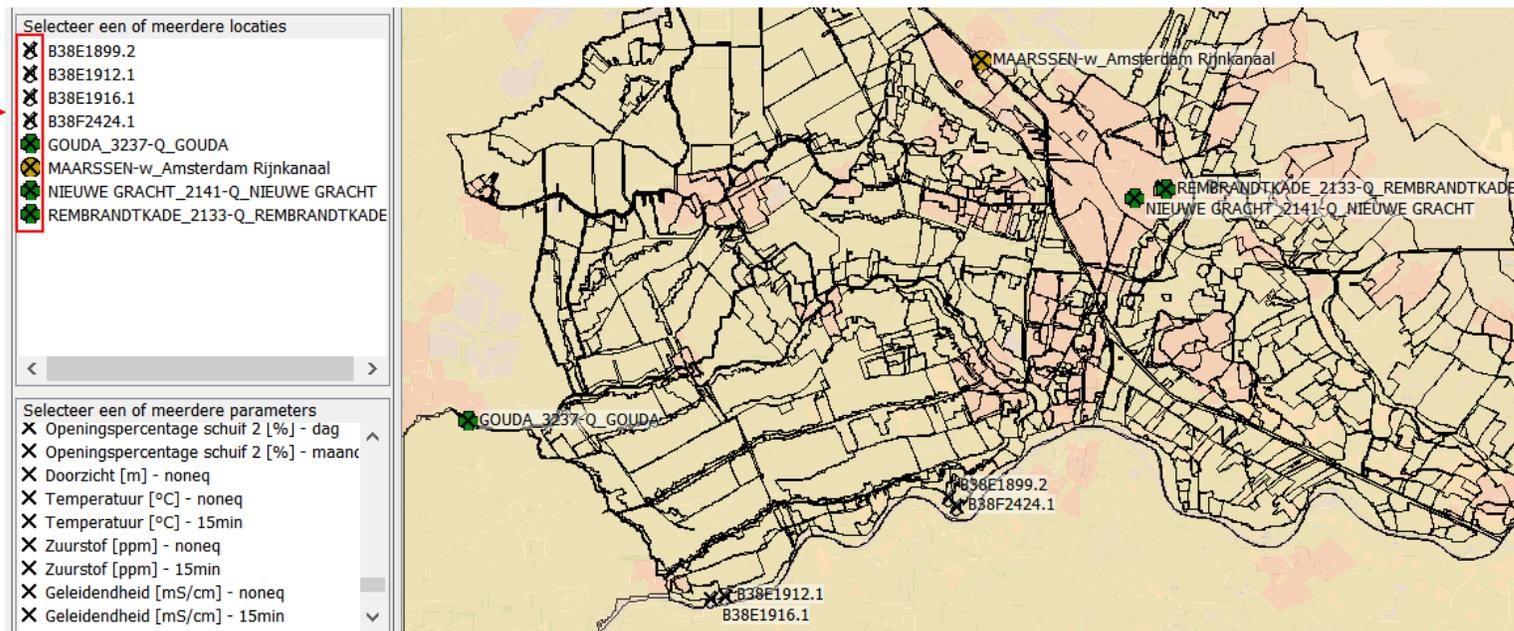
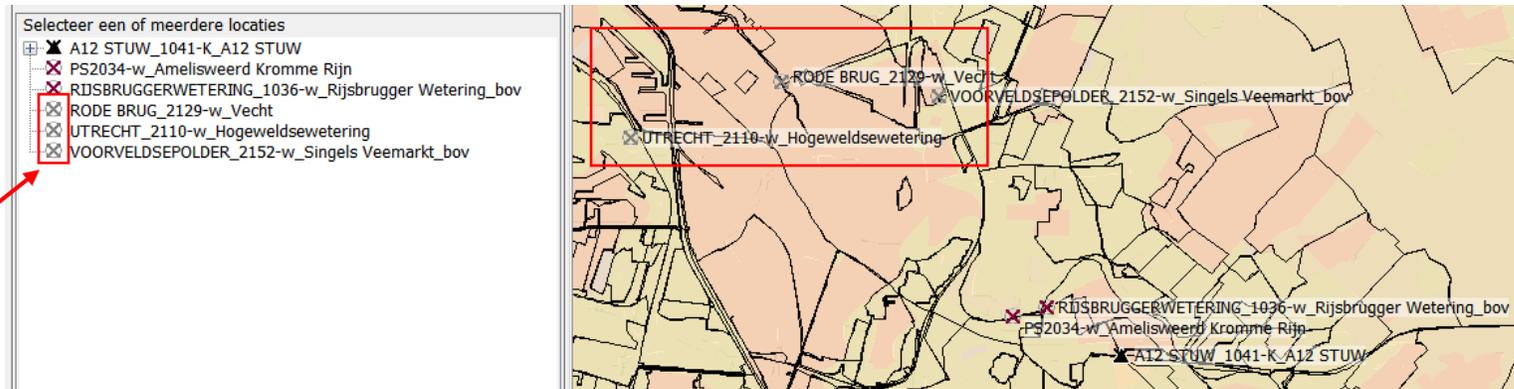


	A	B	C
H_obs (m)	H_obs (m)	H_obs (m)	H_obs (m)
opo	opo	opo	opo
401216A - Joker: R_401216A			
ProcessHopo	ProcessHopo	ProcessHopo	ProcessHopo
		MAXIMUM (6 hou	MAXIMUM (week
Mon,27-03-2017 06:00		0.910	
Mon,27-03-2017 08:00	0.886		
Mon,27-03-2017 12:00		1.012	
Mon,27-03-2017 18:00		0.886	
Tue,28-03-2017 00:00		0.886	
Tue,28-03-2017 06:00		0.886	
Tue,28-03-2017 08:00	1.012		
Tue,28-03-2017 12:00		1.012	
Tue,28-03-2017 18:00		1.012	
Wed,29-03-2017 00:00		1.012	
Wed,29-03-2017 06:00		1.012	
Wed,29-03-2017 08:00	0.904		
Wed,29-03-2017 12:00		0.904	
Wed,29-03-2017 18:00		0.904	
Thu,30-03-2017 00:00		0.904	1.012
Thu,30-03-2017 06:00		0.904	
Thu,30-03-2017 08:00	0.880		
Thu,30-03-2017 12:00		0.880	
Thu,30-03-2017 18:00		0.880	
Fri,31-03-2017 00:00		0.880	
Fri,31-03-2017 06:00		0.880	
Fri,31-03-2017 08:00	0.879		
Fri,31-03-2017 12:00		0.879	
Fri,31-03-2017 18:00		0.879	



Enable visualization of locations not existing at system time...

- Rationale: **time-dependency**
- Locations which do not exist at system time will be visible
- **Config option**
- **Grey** cross: **no data**
- **Black** cross: **data available**
- Client: HDSR
- (backported to: 2016.02, 2017.01, 2017.02)



```
<showLocationsOutsideVisibilityPeriod>true</showLocationsOutsideVisibilityPeriod>
```

Extension of the Interval Statistics Dialog...

- **New criteria** added
 - % soft min
 - % hard min
 - % hard min
 - % soft max
 - % rate of change
- **Hide** records/lines
- **Export** to MS Excel
- Client: WS De Dommel
- (available in special WIS 2017.02 version)

The screenshot shows an Excel spreadsheet with the following data table:

	A	B	C	D	E	F	G	H	I	J	K
17											
18	Locat	Parameter- naam	Grootheid	sep-2012	okt-2012	nov-2012	dec-2012	jan-2013	feb-2013	mrt-2013	apr-2013
19	0030	Gemeten klephoogte	% zacht min (SN)	0	12	0	29	38	1	0	0
20	0033	Gemeten klephoogte	% zacht min (SN)	0	0	0	5	5	0	0	0
21	0035	Gemeten klephoogte	% zacht min (SN)	0	0	0	20	2	4	0	0
22	0035	Gemeten klephoogte	% zacht min (SN)	54	0	0	0	0	0	0	0
23	0045	Gemeten klephoogte	% zacht min (SN)	2	6	0	39	14	41	0	0
24	0058	Gemeten klephoogte	% zacht min (SN)	1	1	1	1	1	1	0	0
25	0067	Gemeten klephoogte	% zacht min (SN)	0	0	1	20	0	0	0	0
26	0075	Gemeten klephoogte	% zacht min (SN)	0	0	0	0	0	0	0	0
27	0115	Gemeten klephoogte	% zacht min (SN)	0	0	0	7	0	0	0	0
28	0118	Gemeten klephoogte	% zacht min (SN)	0	0	0	31	20	12	0	0
29	0118	Gemeten klephoogte	% zacht min (SN)	0	0	0	4	0	0	0	0
30	0181	Gemeten klephoogte	% zacht min (SN)	0	0	32	22	33	33	0	0
31	0024	Gemeten klephoogte	% hard min (HN)	14	2	0	0	0	0	0	0
32	0033	Gemeten klephoogte	% hard min (HN)	0	0	0	0	0	1	0	0
33	0038	Gemeten klephoogte	% hard min (HN)	0	0	0	0	1	0	0	0
34	0038	Gemeten klephoogte	% hard min (HN)	0	0	0	0	1	0	0	0
35	0064	Gemeten klephoogte	% hard min (HN)	0	0	1	0	0	0	0	0

The spreadsheet interface includes a menu bar (File, Home, Insert, Page Layout, Formulas, Data, Review, View, Help), a formula bar (G17), and a task pane at the bottom with buttons for 'Kaart', 'Grafiek', 'Start taak', 'Interval Statistics', and 'Model Parameters'. The status bar at the bottom shows the user 'Erik Pelgrim', system time '13-09-2016 00:00 (GMT+1)', and other system information.

On-the-fly expression series...

- Creation of **new** series based on other series...
- Excel-like **formula**
- **Dialog** improved
- Create **new** based on existing **on-the-fly** series
- **Export/import** (xml)
- Client: GO-FEWS



The screenshot displays the Delft-FEWS software interface. The main window is titled '\$EXPLORER_SYSTEMCAPTION\$ (Stand alone)'. It features a menu bar (File, Tools, Options, Help) and a toolbar with various icons. The 'Data Viewer' panel on the left shows a tree view of data series, including 'Ruwte metingen (pr...)' with sub-items like 'Afvalwater (=alle...)', 'Ecologie', 'Grondwater (=alle...)', 'Neerslag (=alle m...)', 'Oppervlaktewater...', and 'Verdamping (=alle...)'.

Overlaid on the main window are two dialog boxes:

- Visibility and on-the-fly series:** This dialog has a title bar with a close button. It contains a list of series with checkboxes. The first series is 'Chart1' (checked), and the second is 'A: Waterhoogte [mNAP] - uur A12 STUW_1041-w_F' (checked).
- Open:** This dialog shows the file explorer interface. The 'Look in:' field is set to 'HDSR_wis4tst_36G_201801'. The file list includes 'config', 'localDataStore', 'temp', 'Alles.xml', 'ExportExpressionSeries.xml' (highlighted), 'Log4jConfig.xml', and 'test.xml'. The 'File name:' field contains 'ExportExpressionSeries.xml' and the 'Files of type:' dropdown is set to 'xml'. Buttons for 'Open' and 'Cancel' are visible.

At the bottom of the main window, there is a status bar with the following information: 'Erik Pelgrim', 'Current system time:10-10-2018 12:30 (GMT+1)', '16:50:31 CEST', 'Stand alone', '85041 , 457556', '0.0 MB/s', and '357 MB'.

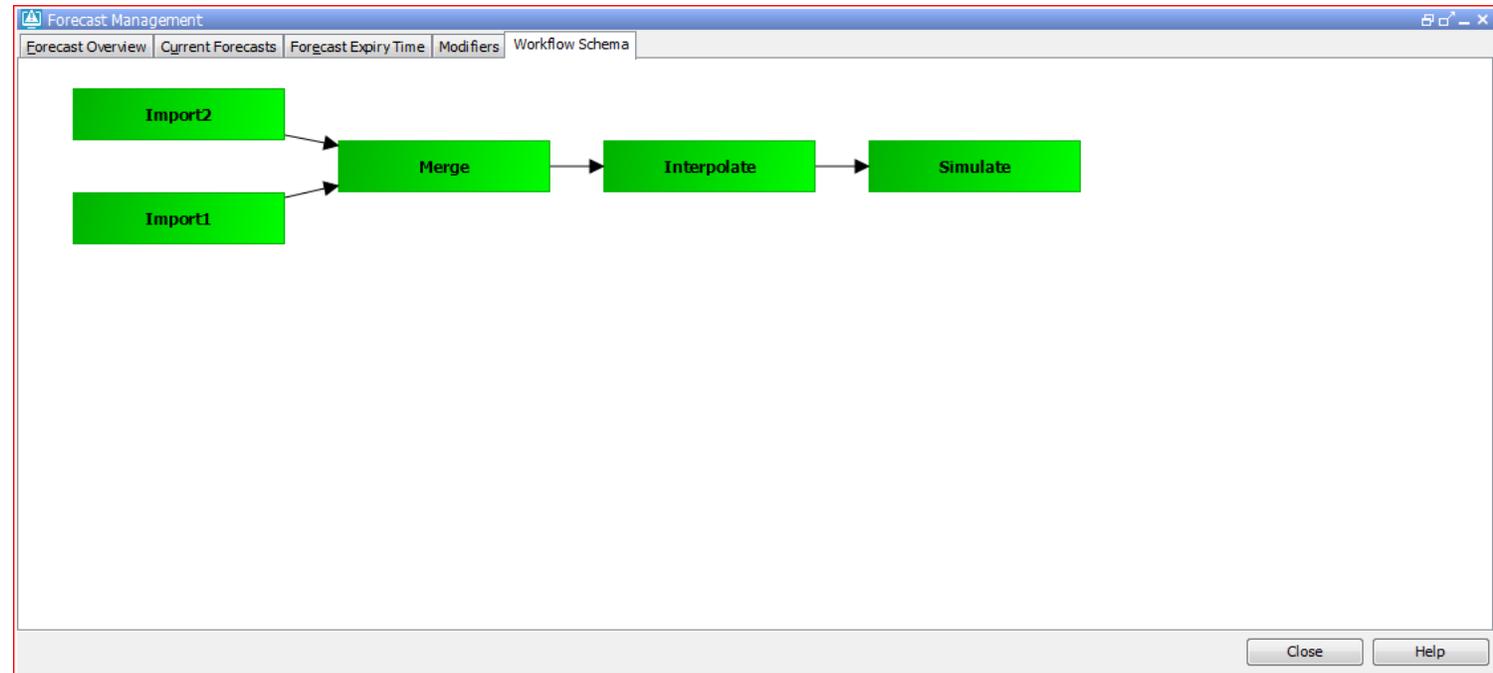
Miscellaneous developments for the NL Market...

- Development of the **KIWIS** webservice (Hunze & Aa's & Rijkswaterstaat)
- Improvements to **WIWB** – **data availability check** for scalar products (GO-FEWS)
- Improvements to **Delft-FEWS PI web service** (HKV)
 - Use of **context files** for redirecting to specific **filters**
 - Support of **decimal seconds** for high frequent data feeds
- **Riemann boundary** calculation in transformation module (Rijkswaterstaat)
- Development parser **Port of Rotterdam webservice** (Rijkswaterstaat)
- **3 dimensional dataset lookup** and **interpolation** module (Rijkswaterstaat)
- Improvements to **Sample data imports** (Waternet & NZV)
 - Add **ExplorerFilterId** option for time series export module
 - **Overwrite** existing samples with **new time / location**

```
<mergeWithExistingSampleData>false</mergeWithExistingSampleData>
```

Workflows in Forecast Manager link to log panel...

- Selecting workflow in Forecast Manager reveals **relevant logs**
- Easy insight in reason failing workflow
- Link to **Workflow Schema**
- Link to **Workflow Navigator**



Select columns

- In modifiers table option to select columns (**hide / show**) and **change order**
- Changed settings are **stored** in user settings

Mod type	User	Name	Start	End	Active
CHGBLEND	Anne Hommelberg	ADJUSTQ_BENM5_BEN...	--	--	<input checked="" type="checkbox"/>
SACCO	Anne Hommelberg	SACCO_BENM5	12-02-2017 12:00:00	12-02-2017 12:00:00	<input checked="" type="checkbox"/>
UNITHG	Anne Hommelberg	UNITHG_BENM5_BENM..	11-28-2017 12:00:00	12-07-2017 12:00:00	<input checked="" type="checkbox"/>

Select Visible Columns

- Regular
 - Mod type
 - Name
 - Summary
 - Locations
 - Start
 - End
 - Valid Time
 - User
 - Creation time
 - Active
 - Delete
 - Copy

OK Cancel

Create mod CHGBLEND IGNORETS SWITCHMAP Import Export Re-run

TSCHNGF UNITHG RATING SHIFT SACCO

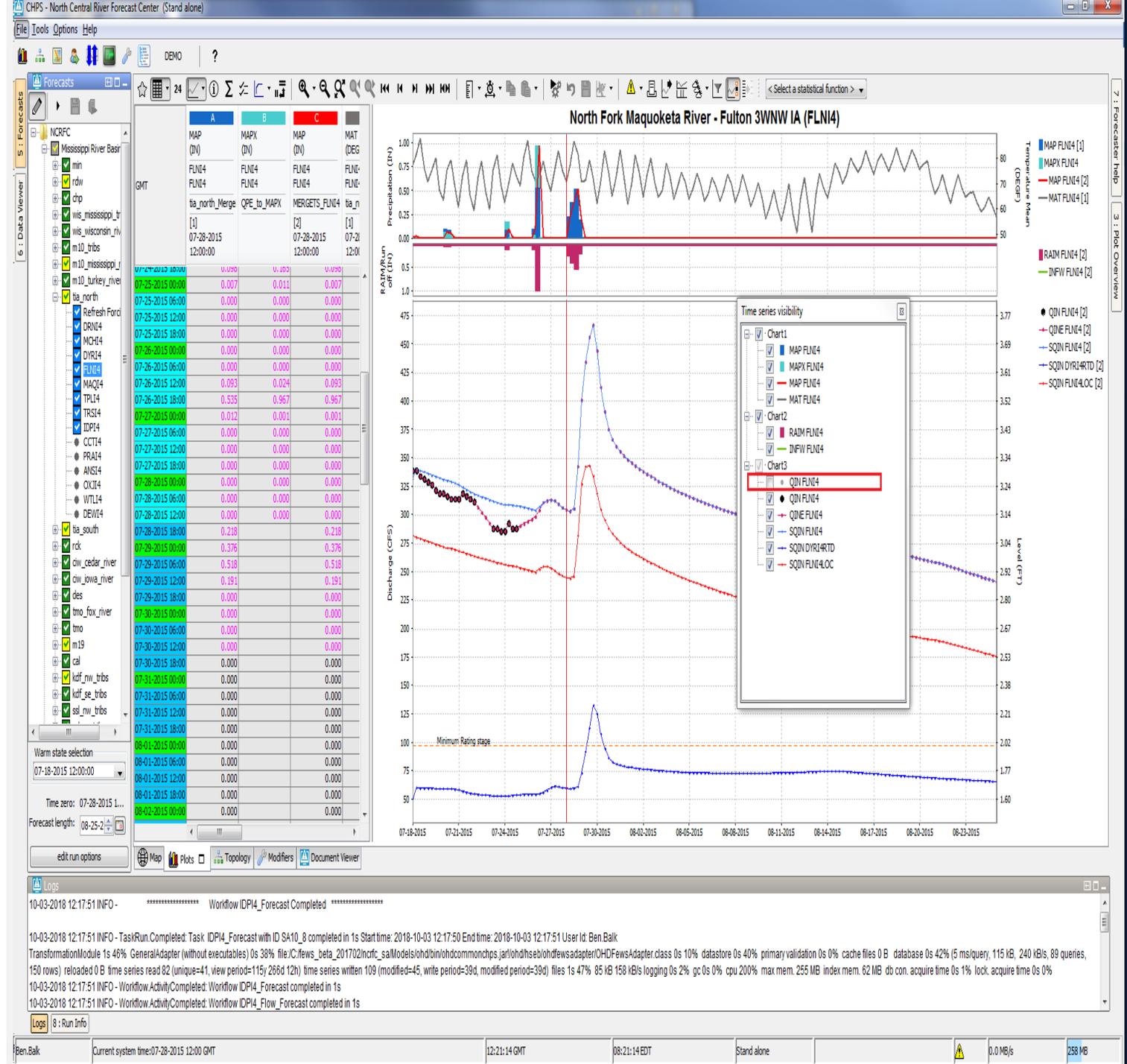
Modifier Properties: CHGBLEND
Name ADJUSTQ_BENM5_BENM5_UpdateStates Apply Apply To

Blending steps 6

Map Plots Topology Modifiers Document Viewer

Timeseries not in table

- Time series in displayGroups **only in plot** (not in table)
- Useful for plot with **different time steps** when you want to copy time series



Web browser display

- New **Web browser** Display
- Optional display
- Latest *chromium* technology
- Fast(er)
- Includes **whitelisting** for security

The screenshot shows a web browser window displaying the 'River Murray data' interface. The browser's address bar shows 'EN (FLS-Test) (Stand alone)'. The page title is 'River Murray data'. The interface includes a navigation menu with options like 'Spatial Display', 'Manual Forecast', 'Forecast Manager', 'System Monitor', 'LDD', and a help icon. A sidebar on the left lists various data sources and processing steps, with 'MDBA' highlighted. The main content area is titled 'The River Murray system' and provides an overview of water flow rates, release rates, and river heights. It also mentions weekly forecasts for storage levels, flows, and salinity. A section titled 'Murray River' shows flow rates for Biggara (1,462 ML/d), Bringenbrong (5,587 ML/d), and Pinegrove (1,449 ML/d). A 'Tooma River' section shows a flow rate for Pinegrove (1,449 ML/d). The interface is designed for system monitoring and data visualization.

Options Help

Spatial Display Manual Forecast Forecast Manager System Monitor LDD ?

Forecast Tree

- Switzerland
- Import
- QC and process Meteo O
- QC and process Hydro O
- cin
- Arandseen
- Feb
- FOEN Swiss
- Meteo Swiss
- Energy SFOE Swiss
- MDBA**
- Deltas
- Rijksoverheid (to test cer
- local html
- local pdf
- Blocks.org

System view List view Map view About

The River Murray system

System view provides a simple overview of water flow rates, release rates and river heights across the the most relevant data that is available to show water moving through the system.

Weekly forecasts are available for some sites for storage levels, flows and salinity of the River Murray.

See the [list view](#) for detailed information, including any alerts.

Click on a site name to view detailed information and historical data.

Murray River

Biggara	1,462 ML/d
Bringenbrong	5,587 ML/d
Pinegrove	1,449 ML/d
lingelic	1,927 ML/d

Tooma River

Pinegrove	1,449 ML/d
-----------	------------

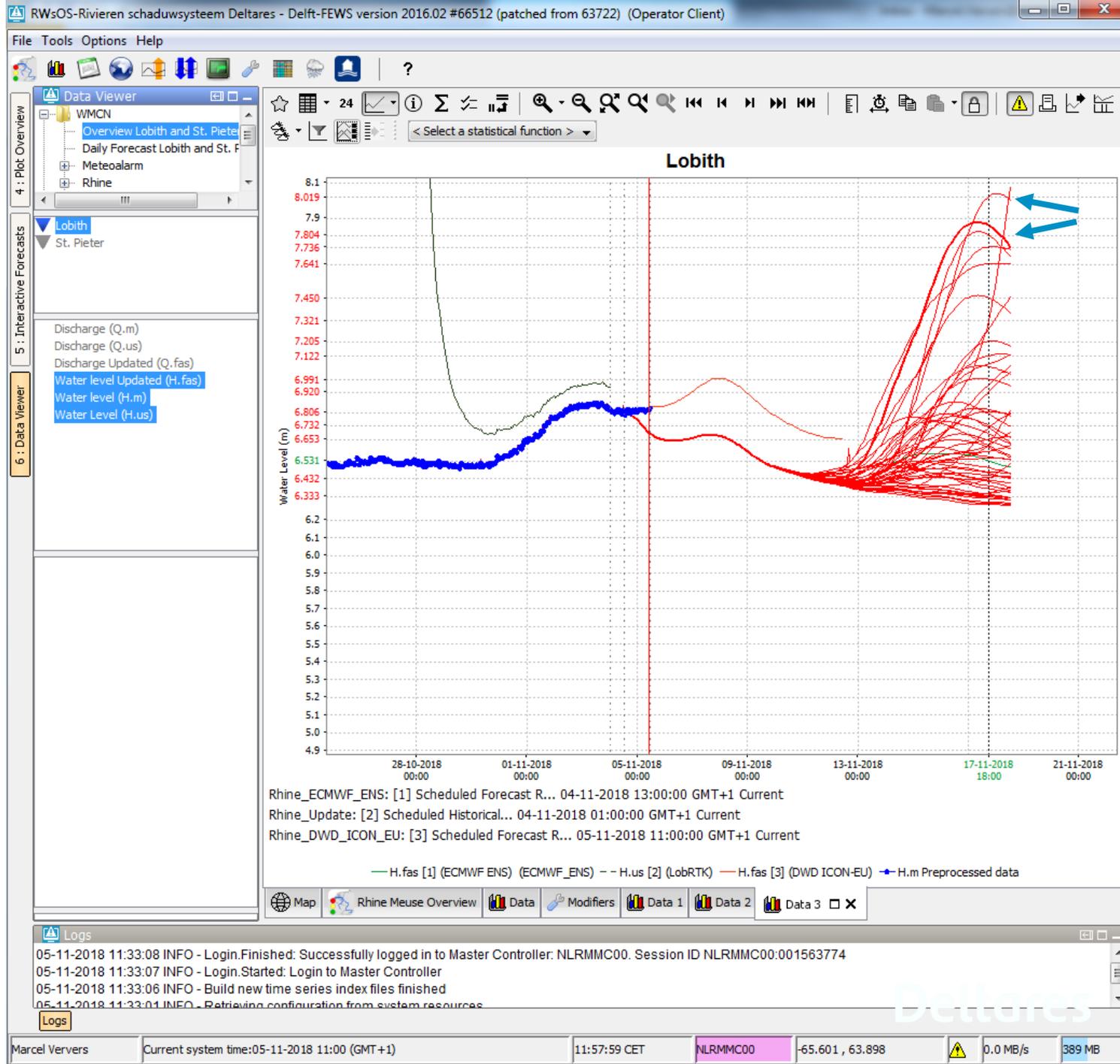
edit run options

Map Graph and Table Modifier Spatial Display Web Browser Display

Current system time: 29-05-2019 12:00 (GMT+1) 11:02:11 GMT 13:02:11 CEST

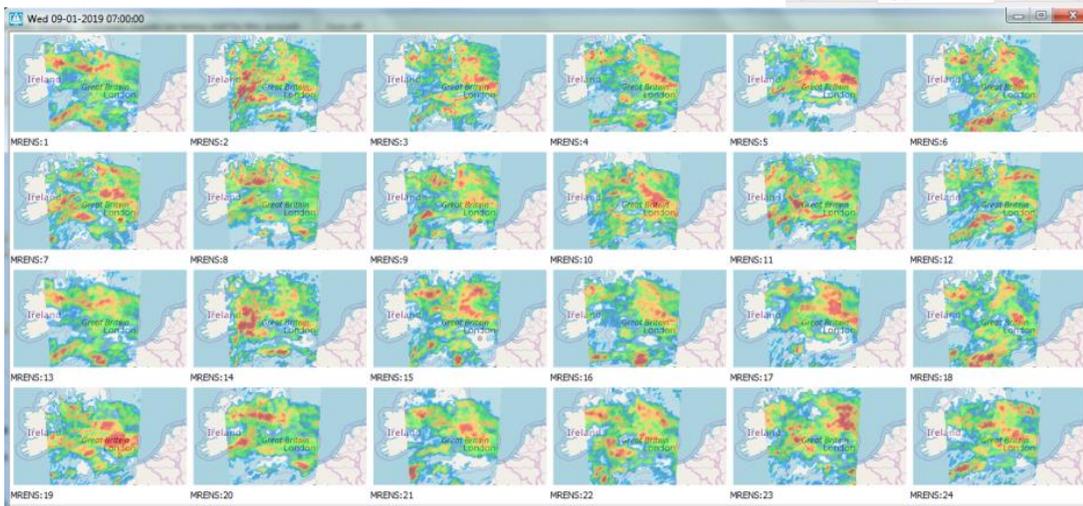
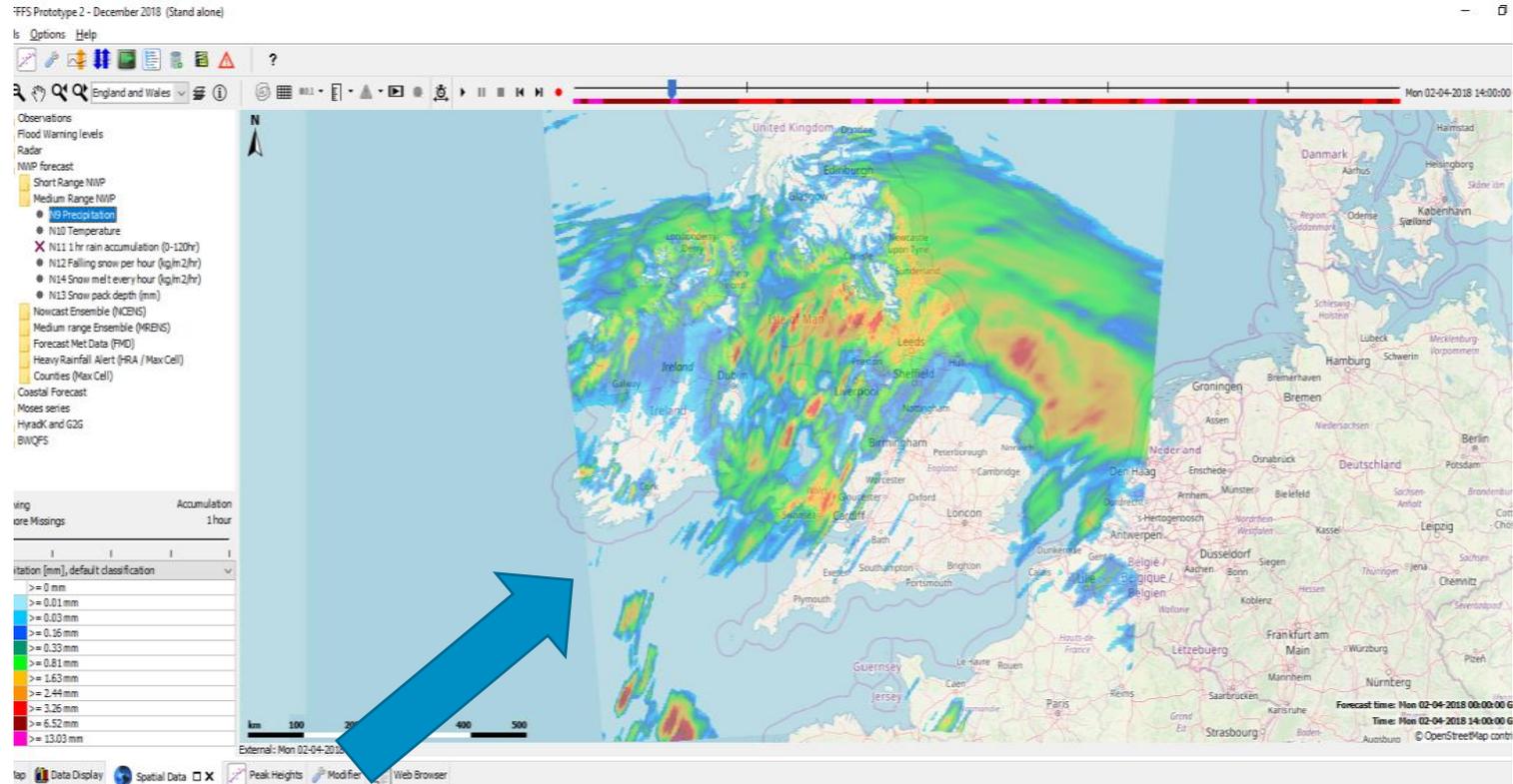
Select ensemble members

- Perform **statistical** analysis each member (e.g. min, max, ave, ...)
- **Order** Ensemble members on this rankingVariable
- Define **how many members** to use from top of list <numberOfMembers>
- Use **only** these members in further **processing**



Ensemble display

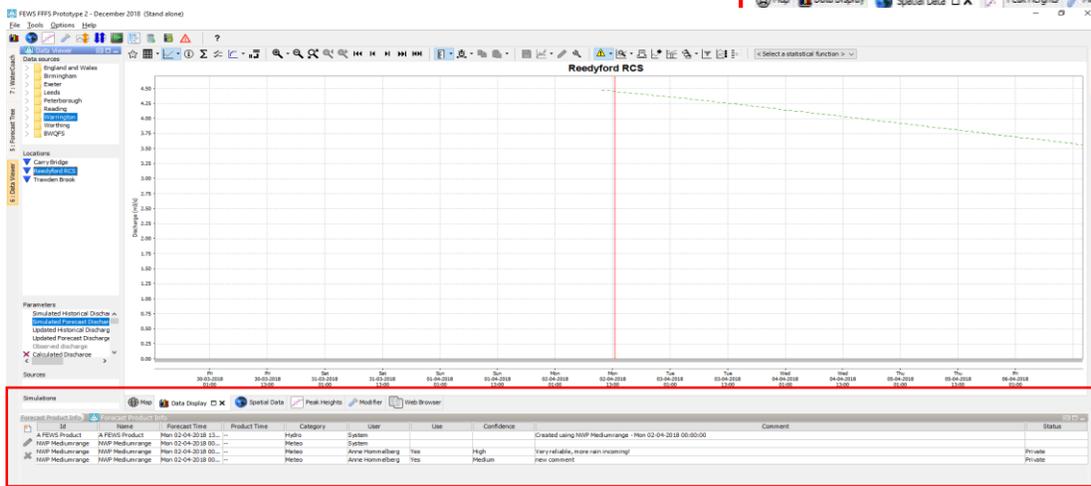
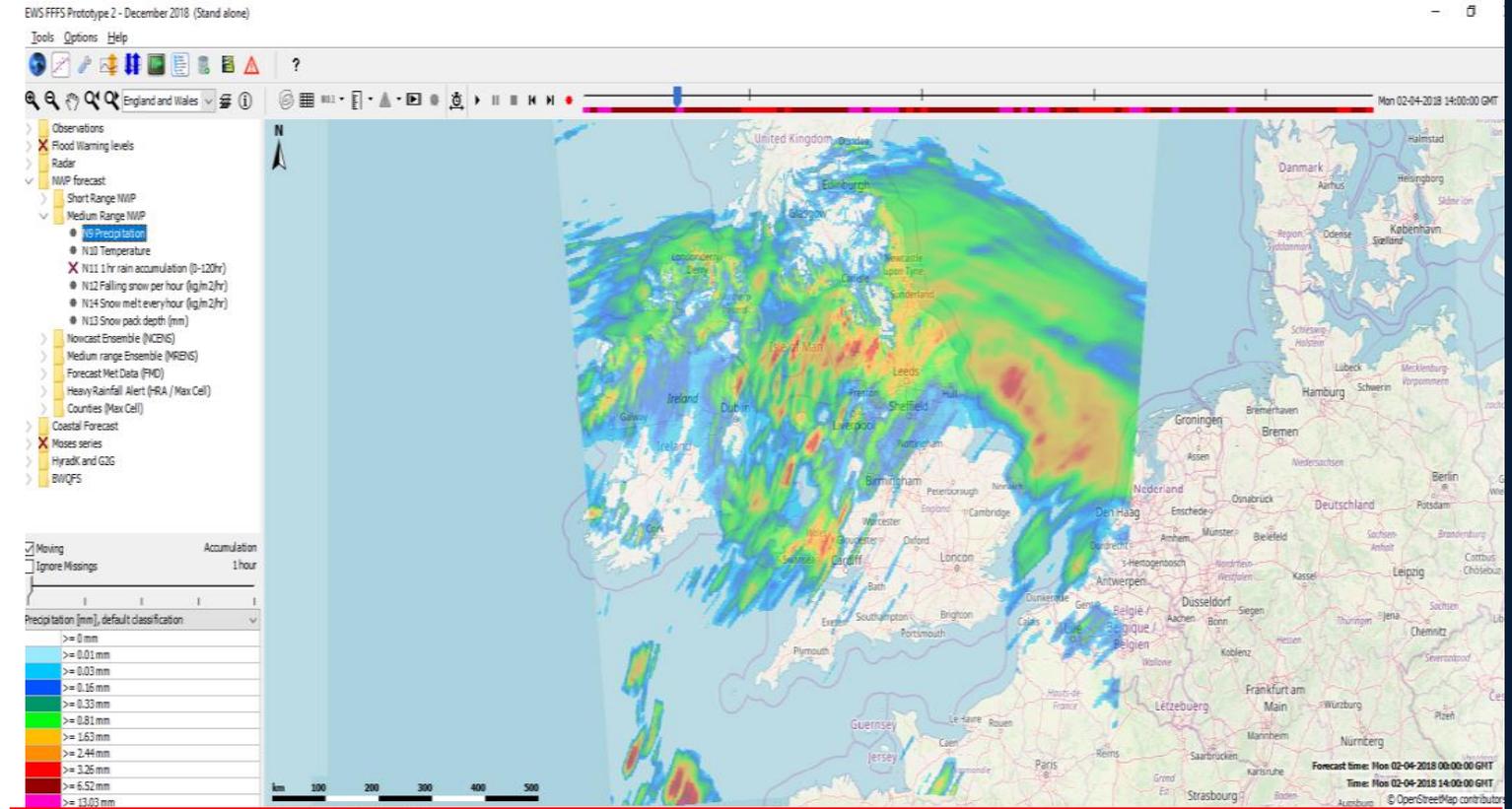
- Postage stamps of all ensembles
- Using slider, aggregation and zooming from main Spatial display
- Ensemble member **selection** and ensemble member **comparison**



Time	Category	User	Use	Confidence	Comment	Status
	Meteo	System				
	Meteo	Anne Hommelberg	Yes	High	Very reliable, more rain incoming!	Pinned
	Meteo	Anne Hommelberg	Yes	Medium	new comment	Pinned
13:30 GMT				10:10+42 GMT	11:10+42 CET	Stand alone
				-761924, 9122		0.0 MB/s 423 MB

Product information display

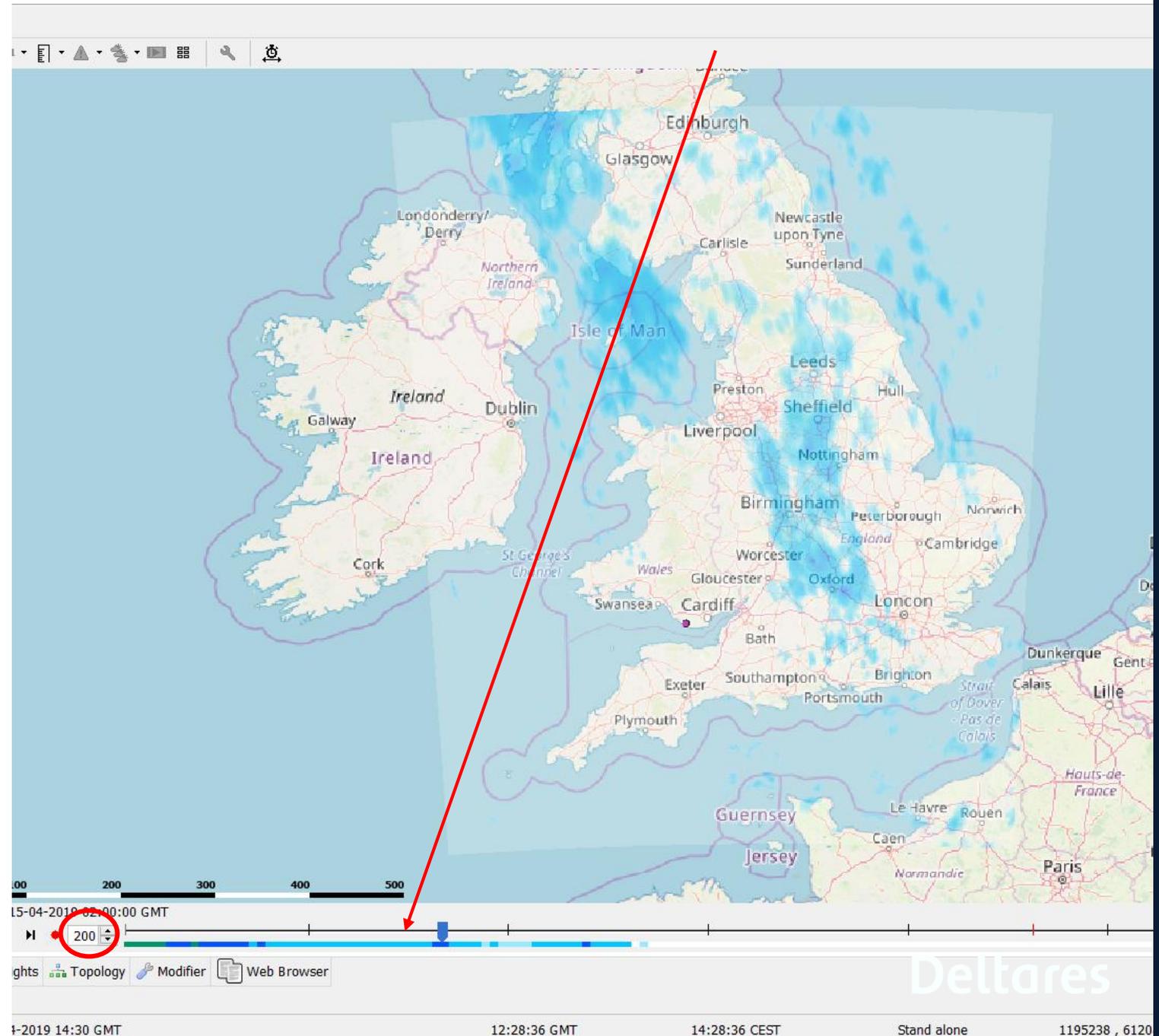
- View forecast product information
- Add additional comments to forecasts
- For imported 'external' forecasts
- Or internally produced forecasts
- Spatial display & data display



Category	User	Use	Confidence	Comment	Status
Meteo	System				
Meteo	Anne Hammelberg	Yes	High	Very reliable, more rain incoming!	Private
Meteo	Anne Hammelberg	Yes	Medium	new comment	Private

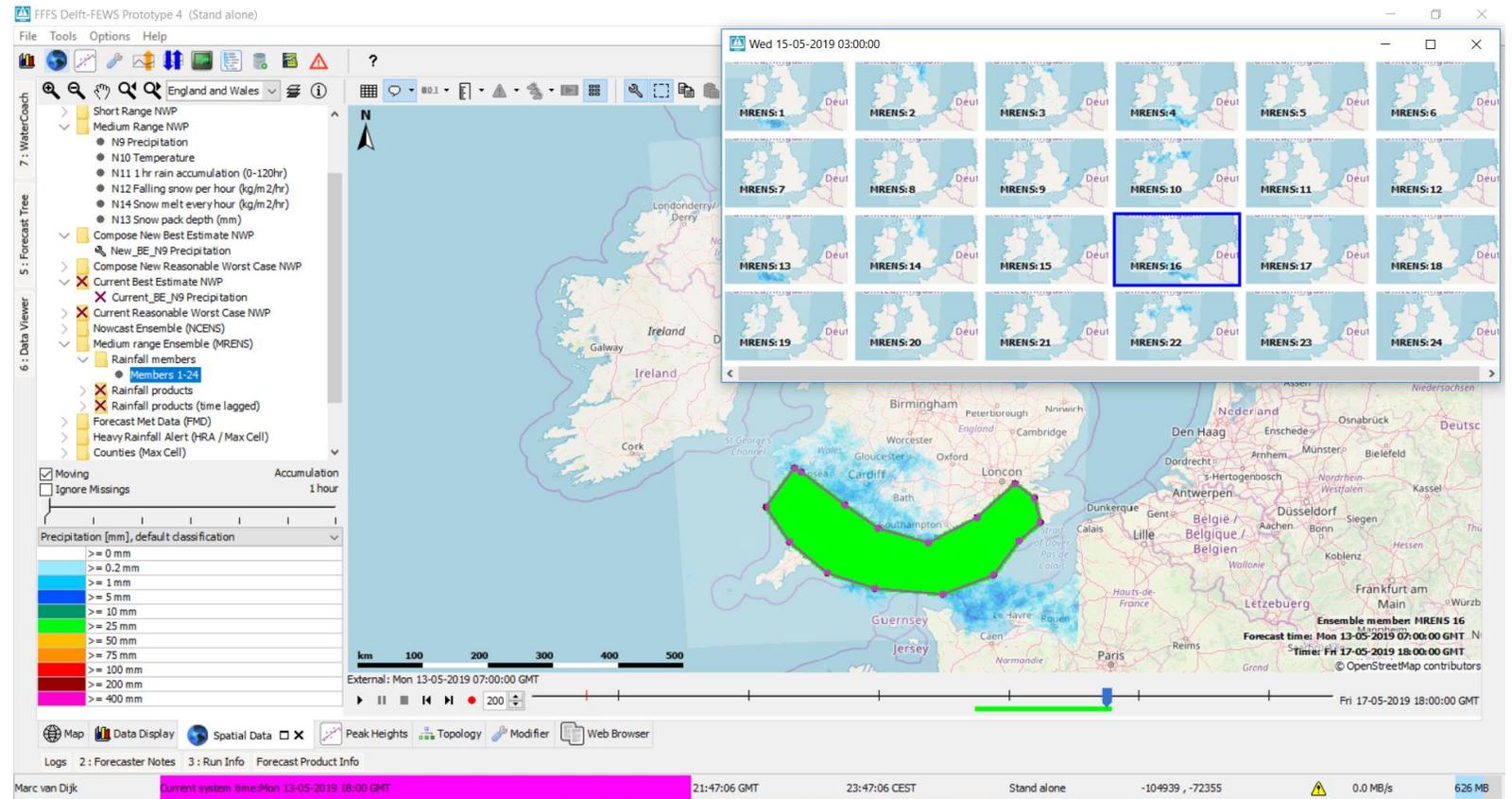
Spatial Display slider

- Spatial display slider will be moved to **underneath** the plot...
- Set the **framerate**



Best Estimate Rainfall Scenario – Spatial Modifiers

- Spatial selection
- Select Time period
- Make current & apply



Clickable Elements SSD to manipulate data...

RWOS-IWP Deltares teststelsysteem (OC) - Delft-FEWS versie 2018.02 #84826 (patched from 83929) (Operator Client)

Bestand Extra Opties Help

6 - Data Viewer

5 - Operationeel Waterbeheer

4 - Plot Overview

Stuw/sluis Linne (uur)

Periode 17-06-2019 van 09:00 tot 10:00

Waterbalans Stuwpannd Linne

Balans in (m3/s):	
Maasbracht	1,10
Stevensweert	-
Panheel	0,00
Totaal in	1,10
Balans uit (m3/s):	
Maasbracht	0,00
Panheel	0,00
Heel	0,00
Linne	-
Totaal uit	0,00
Balans totaal(in-uit)	1,10

Object Linne

WKC:	
Turbine-1 =	-
Turbine-2 =	-
Turbine-3 =	-
Turbine-4 =	-
Q-Schutten =	0,00
Q-Lekverlies =	0,00
Q-Vispassage =	-
Q-WKC =	-
Q-Stoney-1 =	-
Q-Stoney-2 =	-
Q-Stoney-3 =	-
Q-Poirée =	-
Q-Totaal=	0,00

Legenda

Aan- en afvoer	Actuele waarden	Schuiven en pompen	Schotten	Regeling
<ul style="list-style-type: none"> normale aan- of afvoer geen aan- of afvoer externe aan- of afvoer onbekend 	<ul style="list-style-type: none"> Debiet in m³/s - Geen data Waterstand in m NAP 3Y Handmatige invoer 	<ul style="list-style-type: none"> storing / onderhoud dicht / uit open / aan onbekend 	<ul style="list-style-type: none"> schot geplaatst schot verwijderd onbekend 	<ul style="list-style-type: none"> normaal gebruik onderstroom regeling getrokken schuiven

Maas (St. Pieter-Lith, 10 min)
 Hoogwaterkaart (10 min)
 Maas (St. Pieter-Lith, uur)
 Hoogwaterkaart (uur)
 Eijsden - Maasbracht (uur)
 Maasbracht - Lith (uur)
 Objecten Bosscherveld en Smeermaas (uur)
 Stuw Borgharen (10 min)
 Object Born (uur)
 Object Maasbracht (uur)
 Sluis Heel en Panheel (uur)
Stuw/sluis Linne (uur)
 Stuw/sluis Roermond (uur)
 Stuw/sluis Belfeld (uur)
 Stuw/sluis Sambeek (uur)
 Stuw/sluis Grave (uur)
 Stuw/sluis Lith (uur)
 Sluis Weurt en Heumen (uur)

Olav van Duin Huidige systeem tjd: 17-06-2019 10:10 CEST

NLRIMCOO 0,0 MB/s 453 MB

2018.02

User Meetings '18/'19...

- German “Anwendertreffen” (June '18)
- Delft Software Days – South East Asia (Sept '18)
- International User Days (Nov '19)
- Delft-FEWS User Days NA (March '19)
- Delft-FEWS User Days AUS (May '19)
- All events in combination with trainings and/or hands-on break-outs...



28. Juni 2018: Anwendertreffen Delft-FEW

Das Vorhersagesystem Delft-FEWS wird im deutschsprachigen Raum für ein großes Spektrum von Aufgabenstellungen eingesetzt und erhält laufend neue Funktionen zur Datenaufbereitung, Modellierung oder Ergebnisausgabe.

Mit dem diesjährigen regionalen Anwendertreffen Delft-FEWS in Aachen erhielten die Anwender Gelegenheit, sich über die Einsatzmöglichkeiten des Vorhersagesystems auszutauschen, Neuungen kennenzulernen und offene Fragen mit dem Entwicklungsteam des Systems zu diskutieren.

Die Teilnehmer von acht verschiedenen Organisationen repräsentierten ein breites Spektrum von Delft-FEWS-Anwendungen, das von



Themen und Vortragende

- Agenda
- Delft-FEWS neue Features, Roadmap, Marcis Verviers, Maarten Smoorenburg
- Delft-FEWS im Dauereinsatz zur Wasserstandsvorhersage und Informations Bundesamt für Seeschifffahrt und Hydrographie
- Delft-FEWS bei der Landestalsperrenverwaltung Sachsen, Malik Ulrich, Lutz
- Einbindung von Delft-FEWS in das Hochwasserportal des Wuppertalverbandes
- Frühwarnung mit Delft-FEWS, Integration von Sensor-Web-Daten, Vladislav I
- Analyse der hydrologischen Modellschulung für das operationelle Hoch Sachsen am Beispiel ausgewählter Talsperrenausgabebiete, Oliver Buchs

29. Juni 2018: FEWS Hands-On Workshop

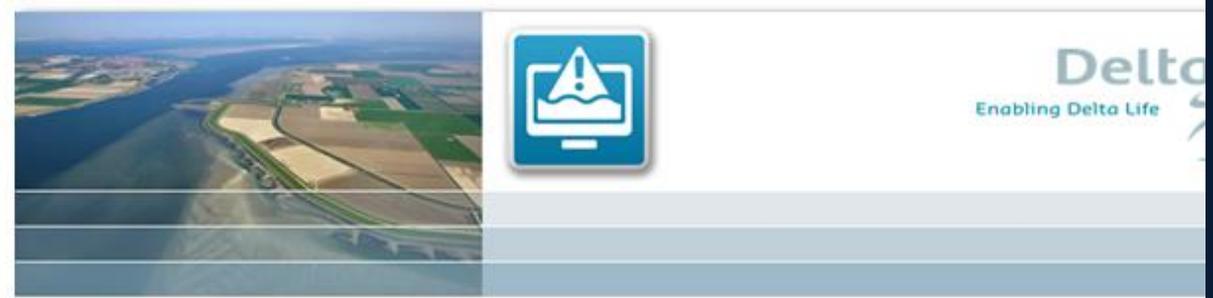
Im Anschluss an das Treffen fand am 29. Juni ein „FEWS Hands-On Workshop“ zu verschiedenen praktischen Themen statt.



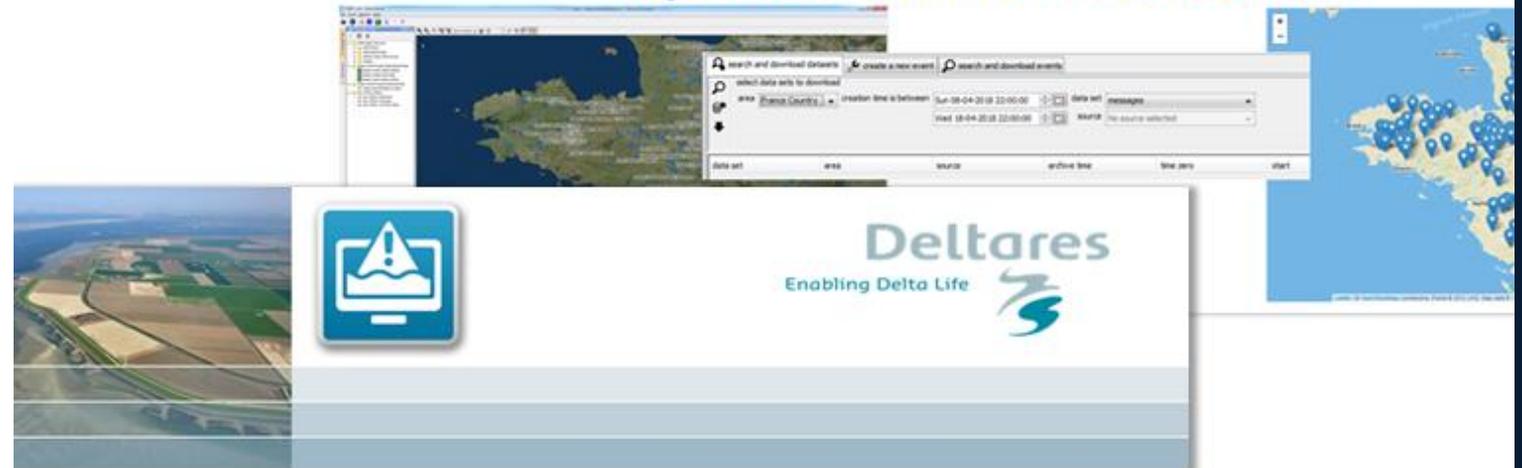
DFUD-NA 2019
Deltares

New online courses...

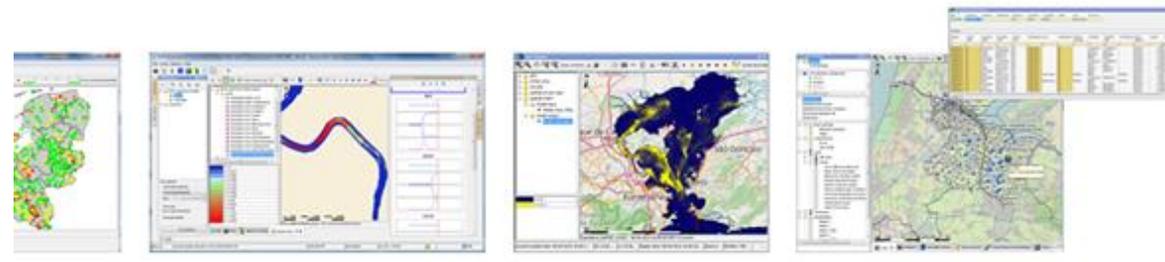
- Basic Configuration course (2017.02)
- Water Quality & Samples (2017.01)
- PI webservice and open archive (2017.02), extended to 'Roadmap Course' during DSD
- Many download requests...
- Soon to be **upgraded to 2018.02...**



Delft-FEWS Configuration Course Open Archive and PI Web Service



Delft-FEWS Configuration Course Water Quality & Samples



Concerns...

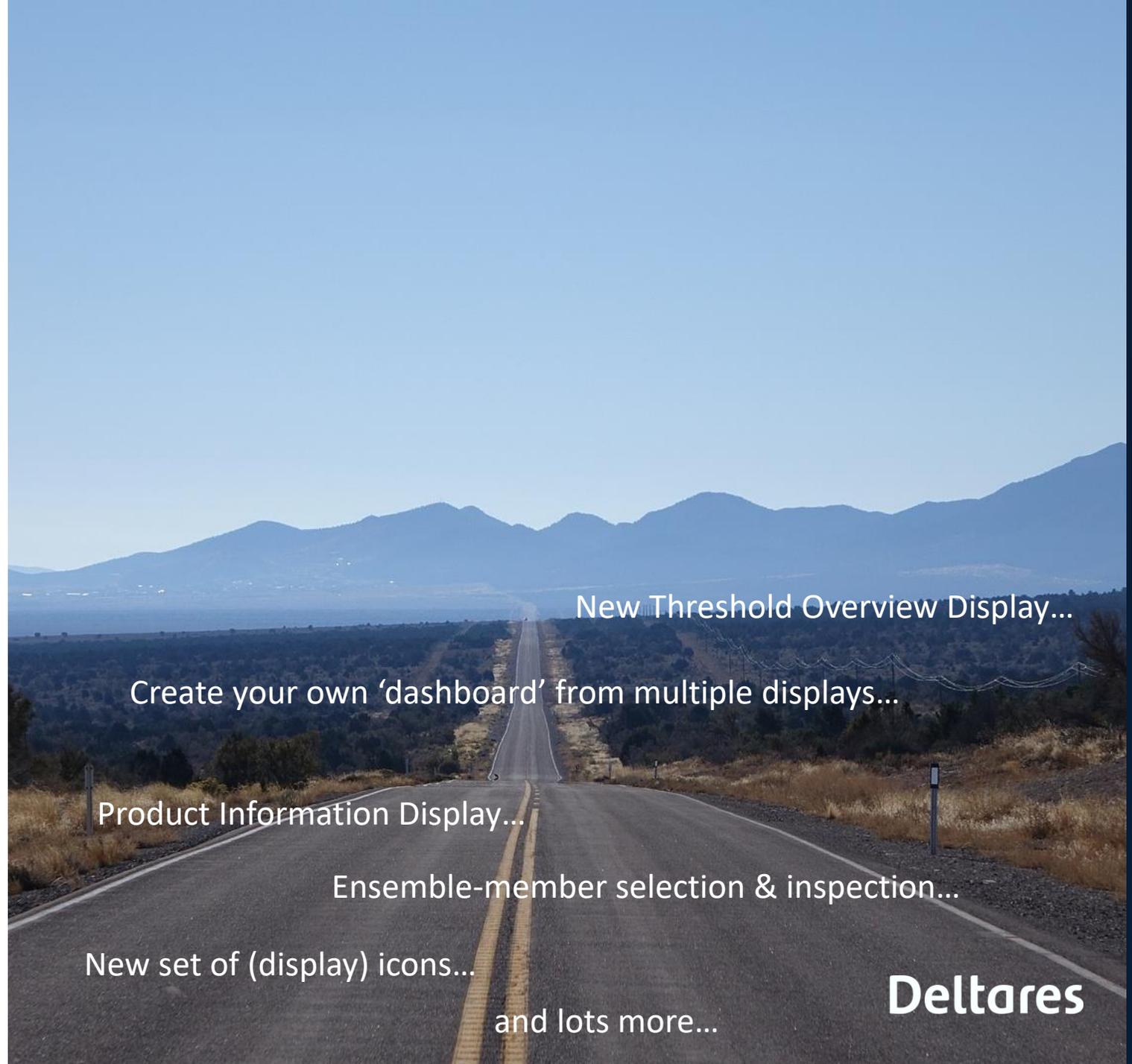
- Did everything go without **hick-ups**...?
- No...
 - Upgrade (to 2017.02) without downtimes of a (dual) system...
 - (New) Maintenance mode while upgrading was not sufficient...
 - Duplicate globalRowIds found while they should be unique...
 - Too drastic reduction in (MC) log message event codes...
 - Multi MC failover options (2018.02)
 - 2018.02 mostly in acceptance and some production systems

Resolving these issues took substantial additional (development & bugfixing) time which resulted in pushing acceptance dates...



Outlook 2019...

- **'dots on the i'** for roadmap features
- Large and small feature requests...
- Assistance in installs & upgrades...
- **New community portal...**
- Implementing FFFS (EA) with a lot of new features...
- So many things to look forward to...



New Threshold Overview Display...

Create your own 'dashboard' from multiple displays...

Product Information Display...

Ensemble-member selection & inspection...

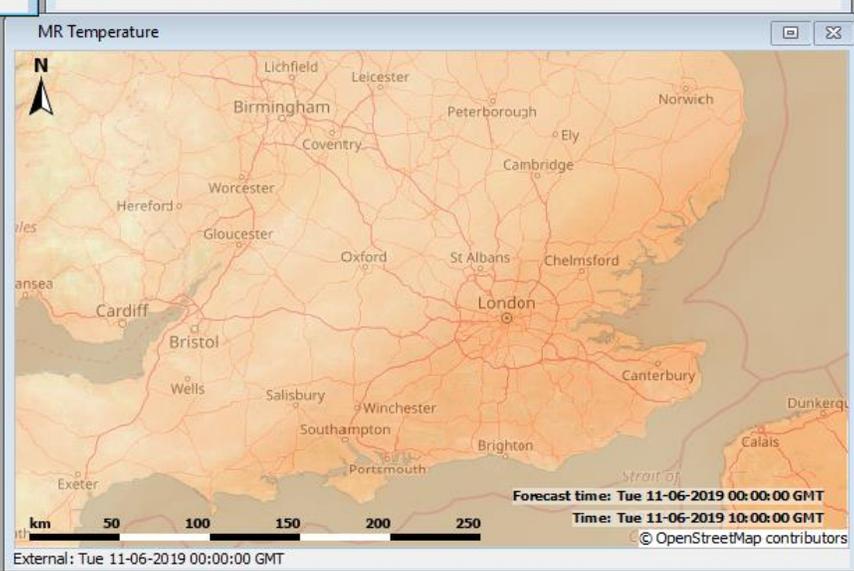
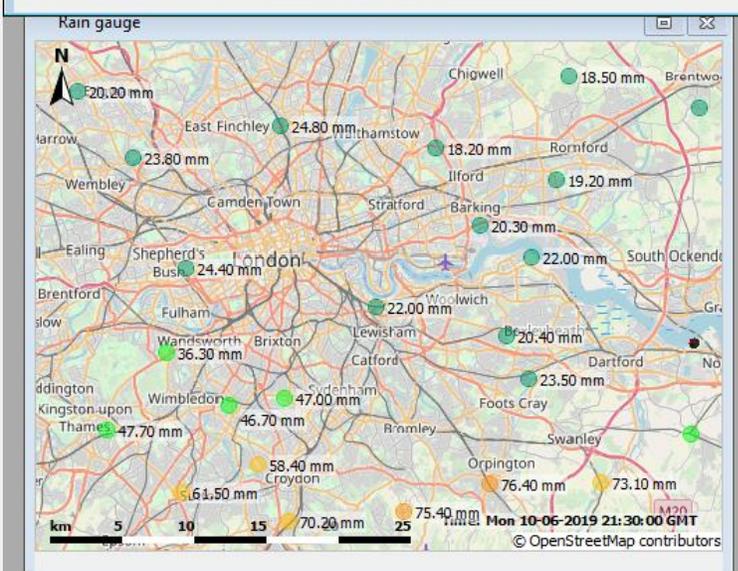
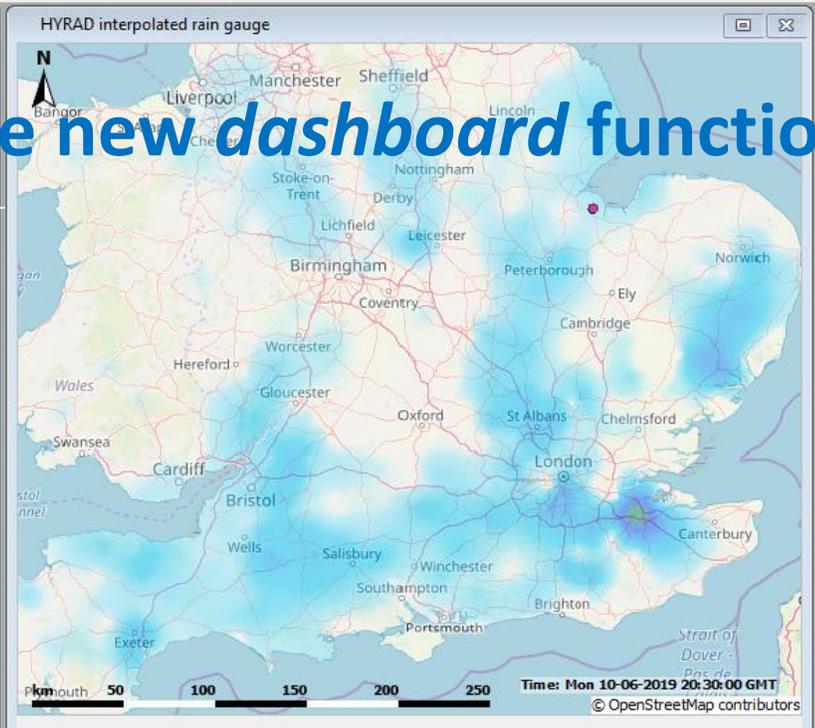
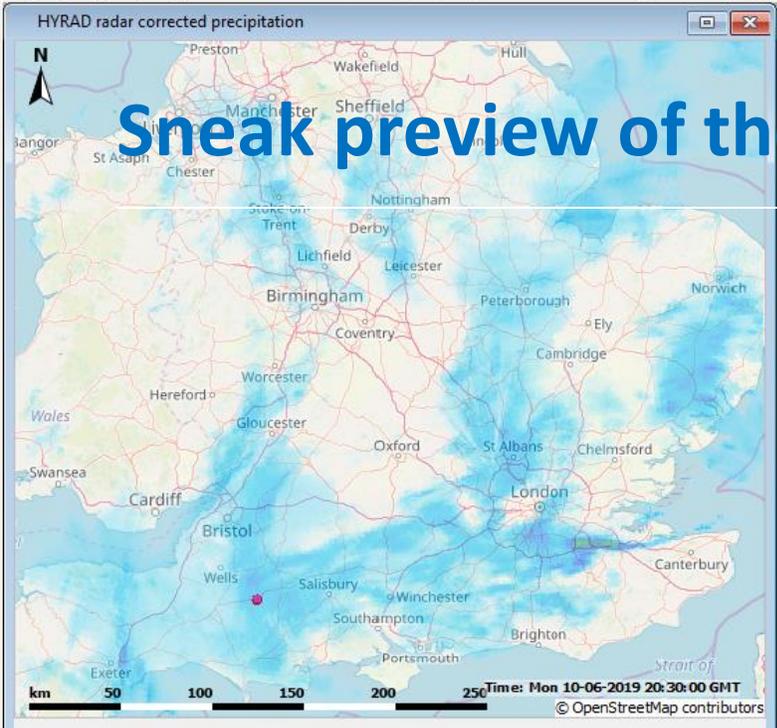
New set of (display) icons...

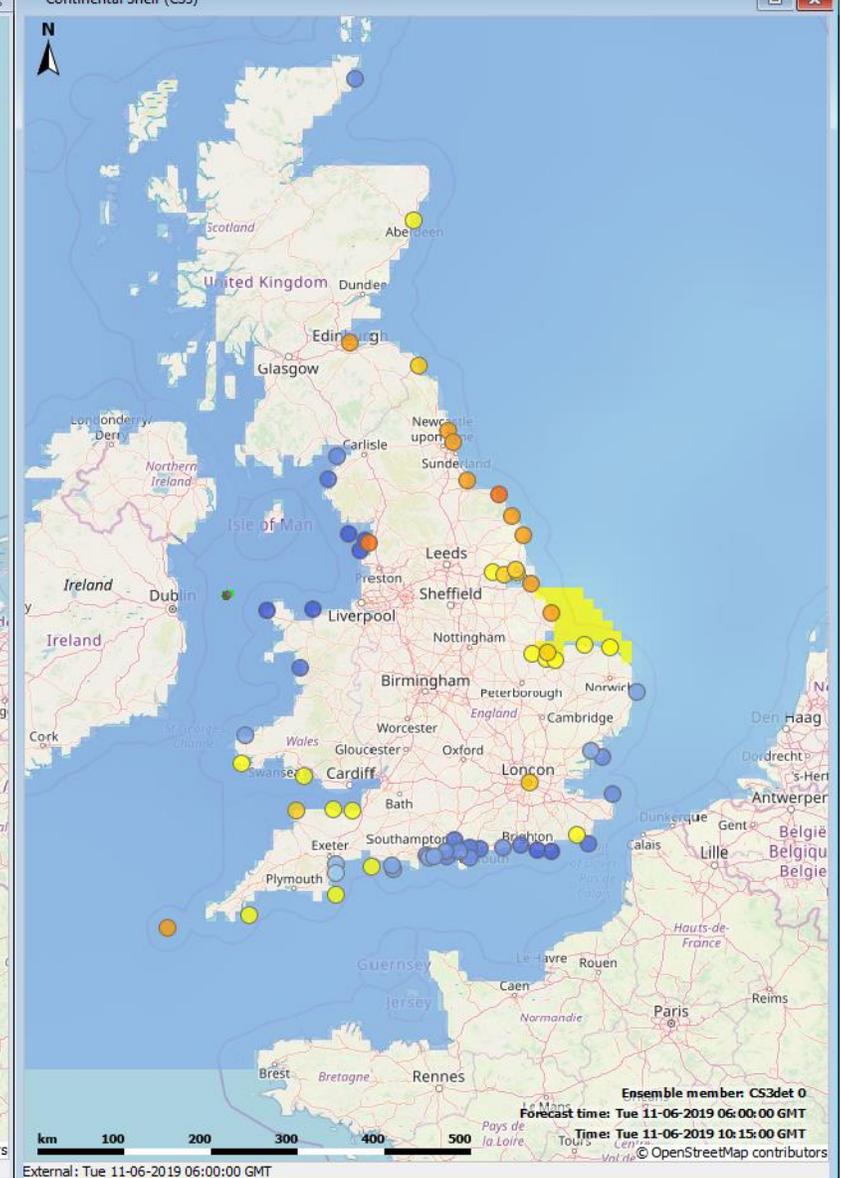
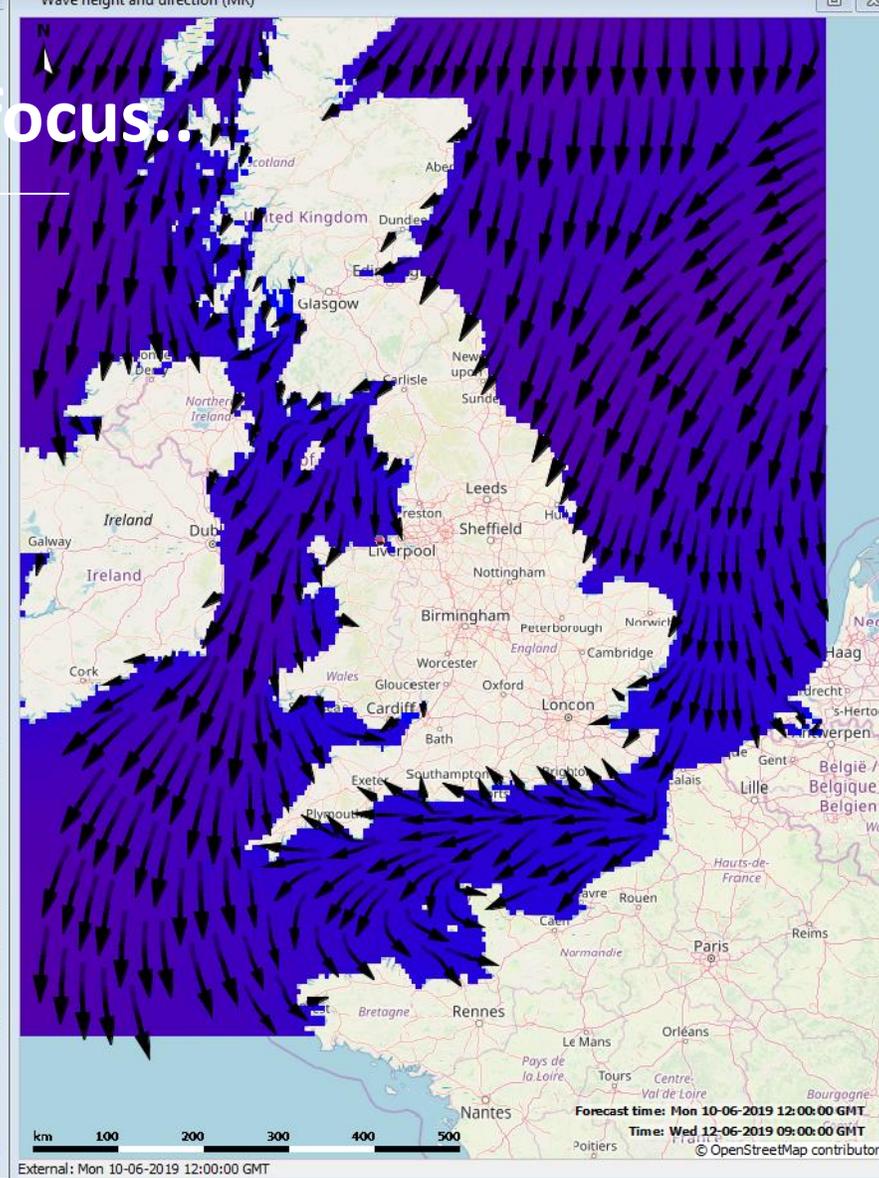
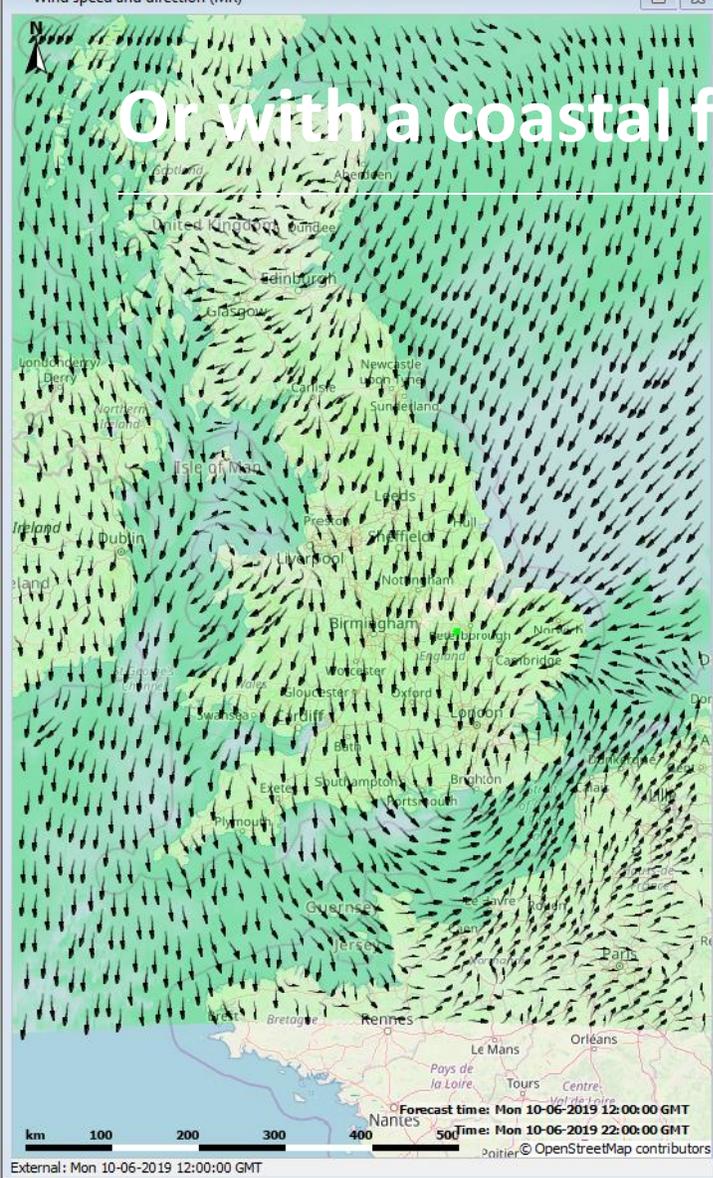
and lots more...

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Sneak preview of the new dashboard functionality...





Or with a coastal focus...



Delft-FEWS Gebruikersdag NL 2019

Thank you for your attention

Deltares



fews.info@deltares.nl



www.delft-fews.com

