

Deltares

Enabling Delta Life



Deltares

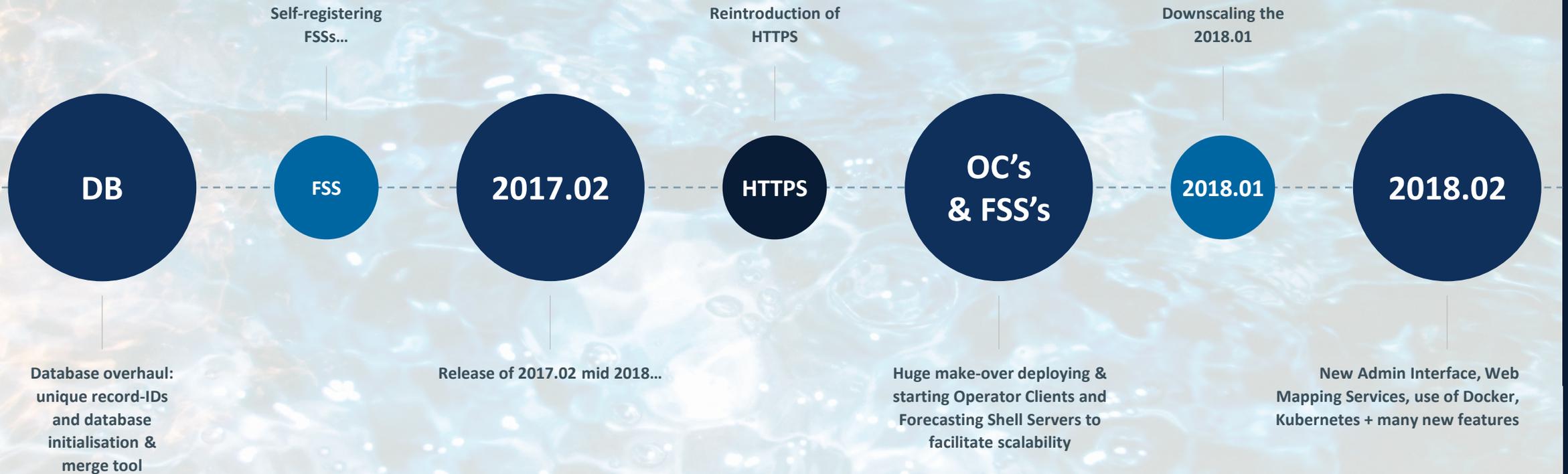
Enabling Delta Life



What's new in Delft-FEWS...

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

Time line of a 'very exciting and very special year...'



Delft-FEWS in 2018: It's been a challenge...

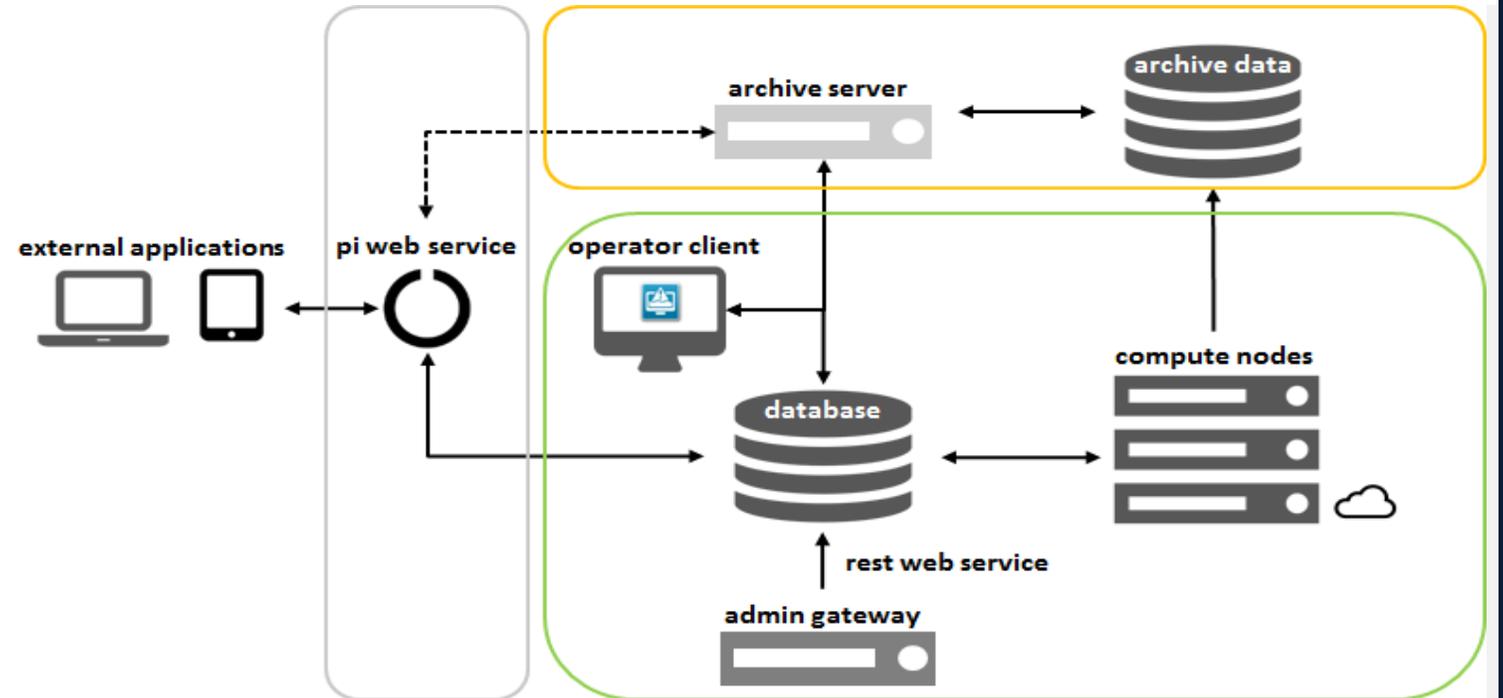
- Implementing the Delft-FEWS 2020 roadmaps AND doing all the implementation projects AND developing the regular features requests felt like...

“Visiting the DIY store and replace all the plumbing, heating and electricity cables in the (Delft-FEWS) house and avoiding a hot water toilet flush, preventing the shower electrocutes you and making sure the kitchen wastewater does not end up in your bath tube...”

And all this while the (Delft-FEWS) house was being lived and slept in...and oh not to forget, the WIFI should be on 100% of the time (for the kids)....

Delft-FEWS 2020

- 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	
New install procedure	Improved install procedure	Simplified install procedure
New upgrade procedure	Improved upgrade procedure	Simplified upgrade procedure
New (WIKI) documentation		

Roadmap Backend features – 2019 (in projects...)

2019.01
Full integration MC/AI
Cloud-ready Amazon
Finalise security
(almost) Automatic install procedure
(almost) Automatic upgrade procedure
Automatic system documentation

More Backend ...

- Only Database & Tomcat needed
- Database functionality now ensures uniqueness of database records
- MC/AI in one (Tomcat) file
- FSS is self-registering, FSS ID generated for scalability
- Use of Docker/Kubernetes enabled
- Delft-FEWS base build has Java *inside* (windows & linux)
- OC points to URL (no initial root config)
- OC (FSS) Patch now determines build
- 64b only



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
- Security
- Documentation

The screenshot shows the Delft-FEWS Admin Interface. At the top, there is a navigation menu with the following items: Dashboard, System Status, Files, Forecast Tasks, Workflow and FSSs, User Administration, System Control, Database Analysis, Configuration Management, Examples, and Logout admin. Below the menu is the Deltares logo with the tagline "Enabling Delta Life".

The main content area features several status cards and a table:

- MC01 Database Status:** A green card showing "OK" status for the MC01 Database. A "View Details" link is provided.
- Error Logs:** A blue card showing "26 Error Logs last hour". A "View Details" link is provided.
- FSS Status Table:** A table with columns: MC ID, FSS ID, Status, Last Workflow Status, and Last Run Work. The data is as follows:

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:** A section with two status cards: "Task Run Manager Status" (OK) and "MC Rolling Barrel Status" (Warning).



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

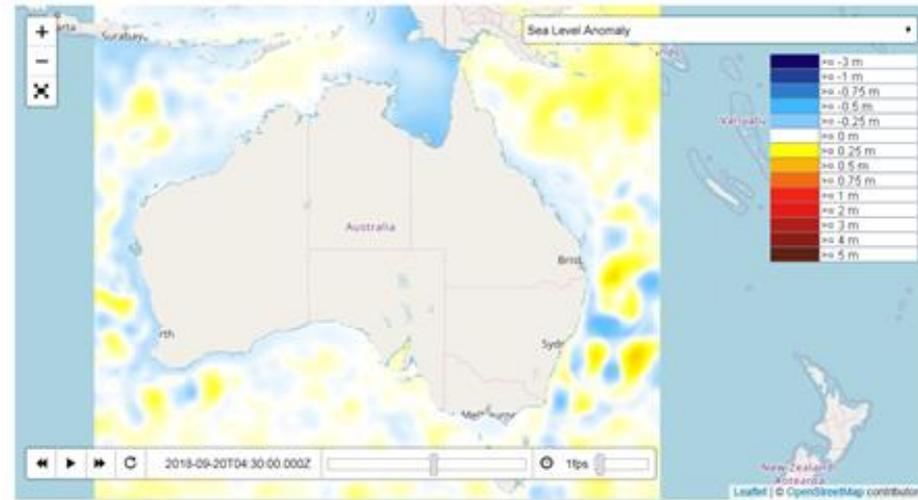
Roadmap PI-webservice features – 2019 (in projects...)

2019.01
Finalize security
Seamless integration of grid data
WMTS / improve WMS-T





Delft-FEWS Web Mapping Service (WMS-T)

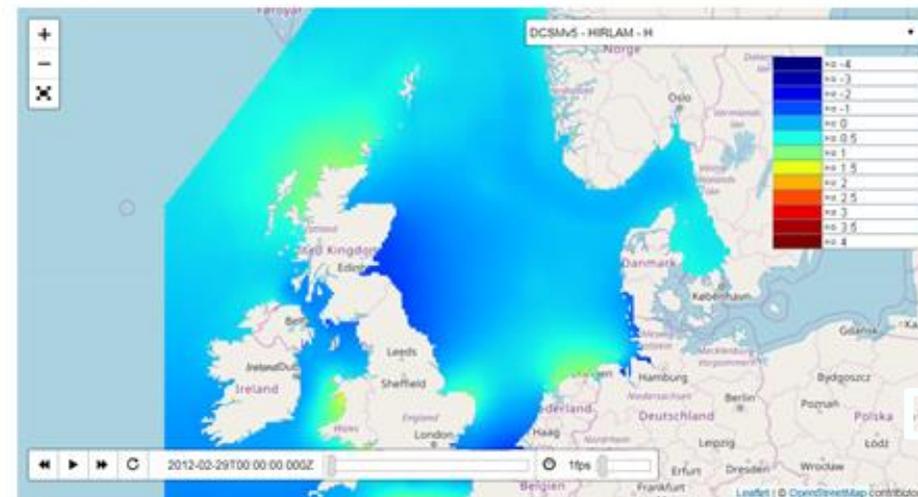


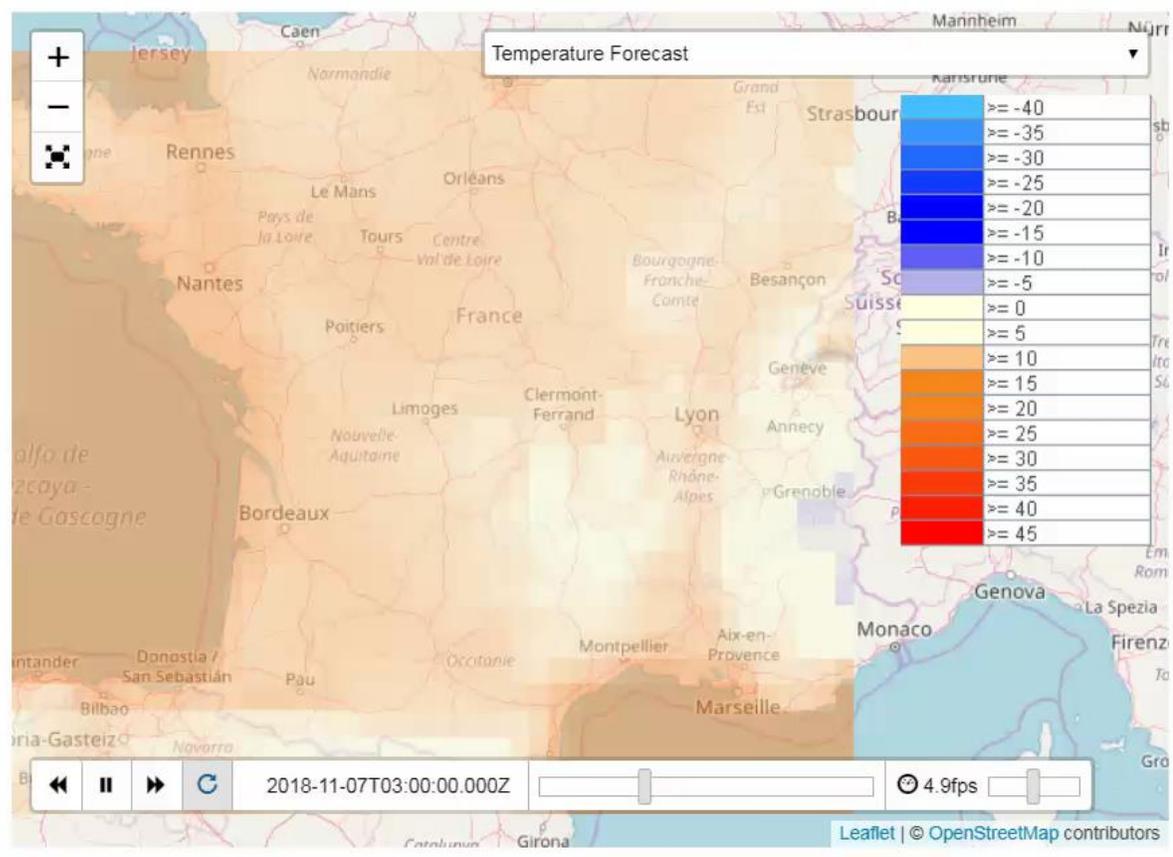
More PI webserver...

- 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

Logs 2 : Forecaster Notes

Rudie Ekkele... Current system time: Sun 04-11-2018... 12:11:39... 13:11:3... Archive: Delft-FEWS Roadmap Cour... Stand ... 46.240 , ... 0.0 ... 19...

Deltares

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
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

Roadmap **Open archive** features – 2019 (in projects...)

2019.01
Harvester for non-FEWS data
Example implementation Deltares Data Viewer
Seamless Integration for grids



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:
 - NWS Ensemble Verification System
 - TVA SSRS system
- Admin page improved

Archive Dialog

Archive Server

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

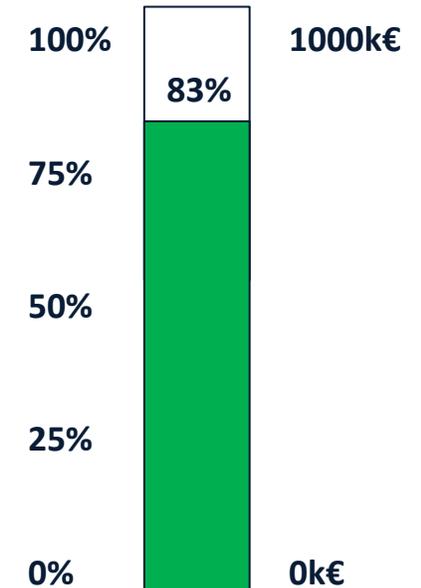
Forecast Management Dialog

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	KentuckyBerkley_Forecast	Kusmierczyk, Richard Adam	scalar	TVA_Forecast
	06-04-2017 18:00:00	06-04-2017 19:29:36	DuckEsk_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 56...	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

Finances: status update...

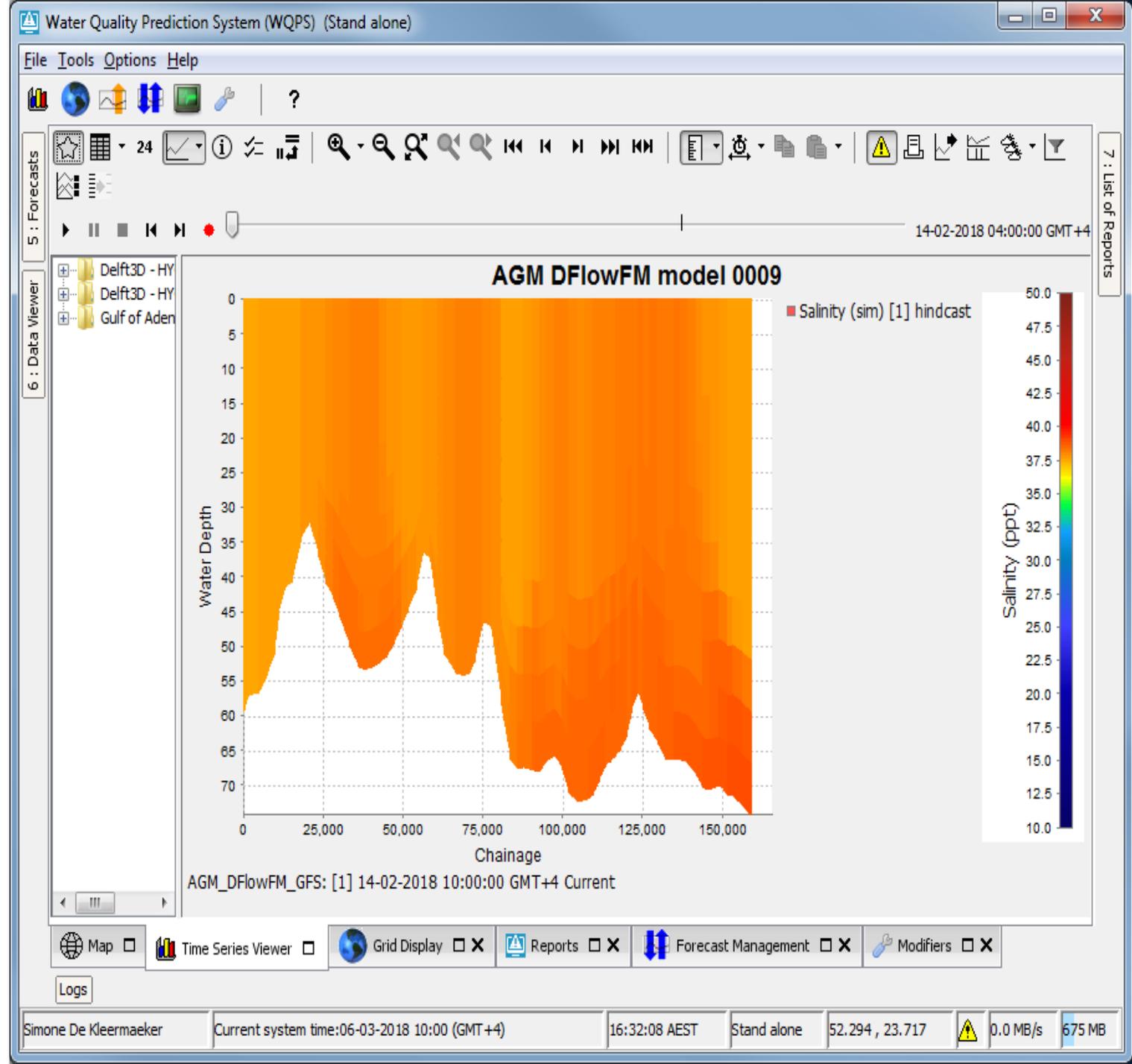
Source	(k€)	Status
NL (RWS)	58	guaranteed
NL (Waterboards / GO-FEWS)	175	guaranteed
NL Projects	5	guaranteed
Reservations (International)	227	guaranteed
Reservations (national)	34	guaranteed
Under negotiation (international)	126	negotiation
Deltares (internal, research, EU)	200	guaranteed
Total (target is 1000 k€)	825	



+ in kind contributions by consultants (NL: N&S, HKV / Int'l: Hydrotec (D), JBA (UK), BMT-WBM (Aus))

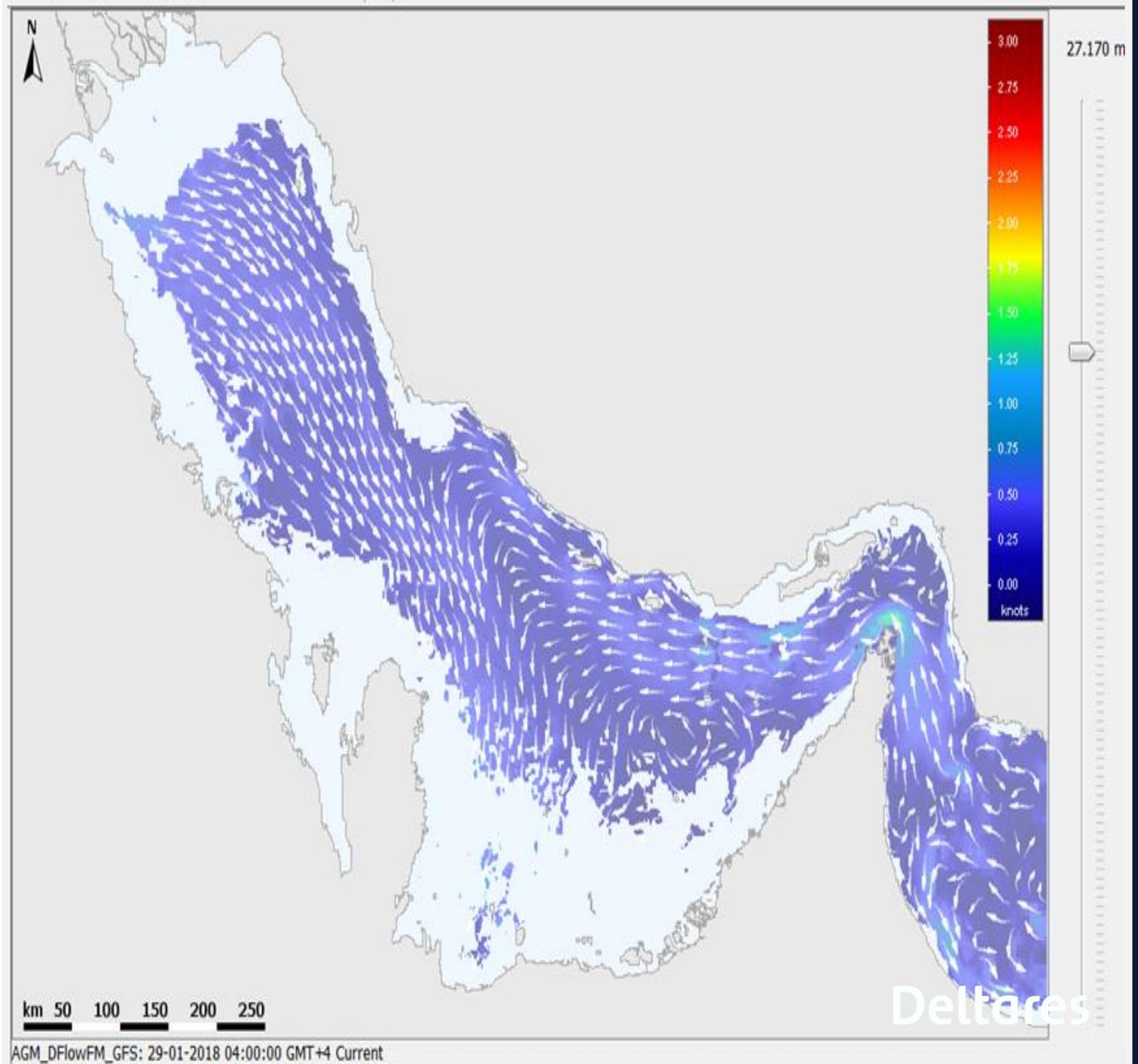
Cross section plot

- Display 3D model data results
- User defined cross section in spatial display
- Parameter in vertical profile (e.g. salinity over water depth)
- Animation over time



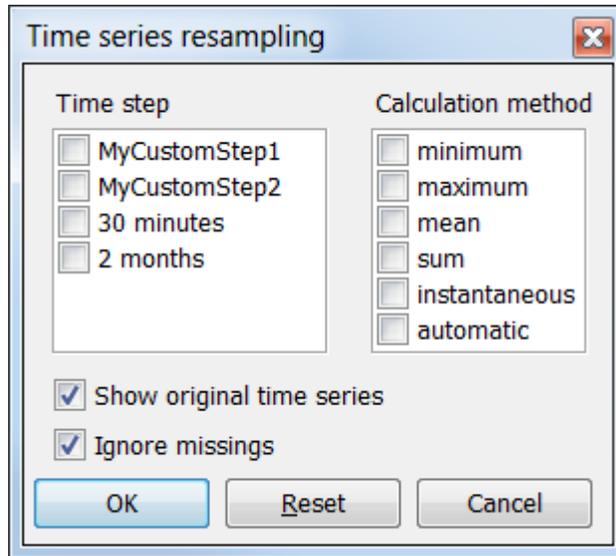
Vertical slider for 3D

- Spatial display has vertical slider
 - Shows 2D data at different depths
 - Dynamic interpolation for time step
 - Both Sigma layers and Z layers
- (e.g. Delft3D-FLOW or D-Flow FM grids)

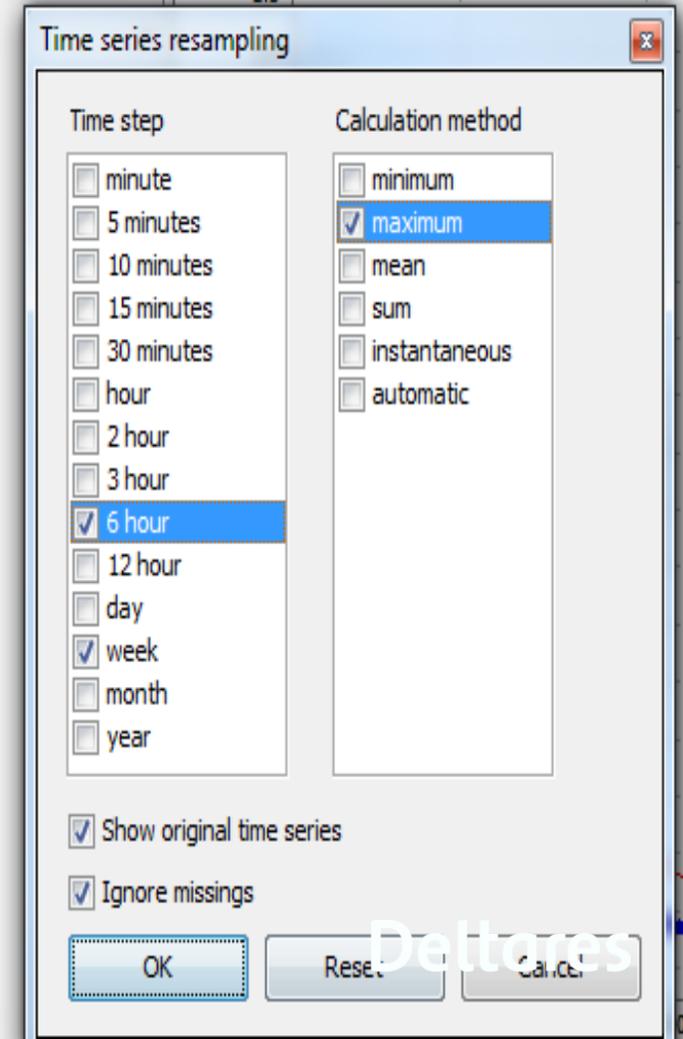


Resampling custom period

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

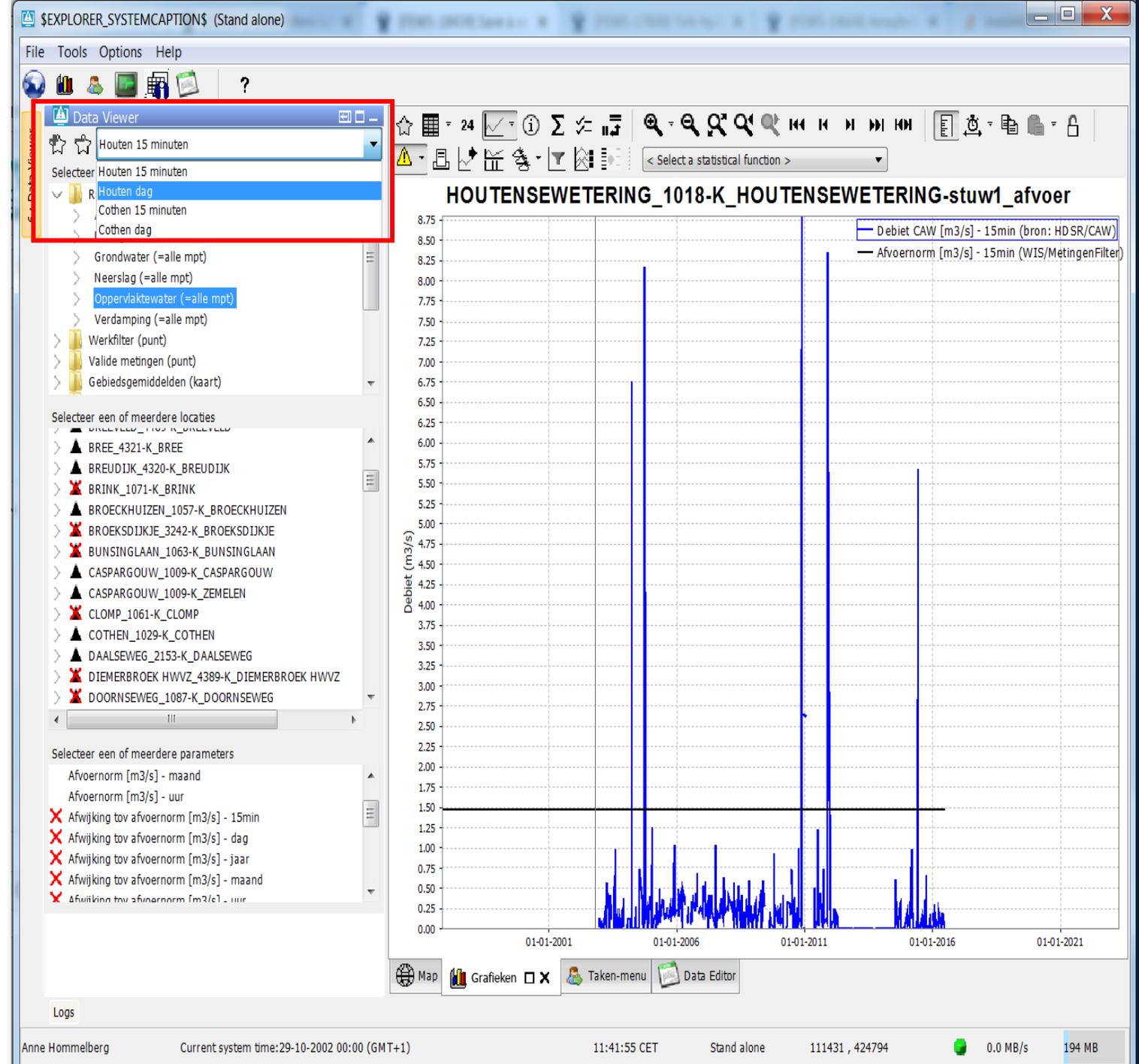


	A	B	C
	H_obs (m)	H_obs (m)	H_obs (m)
	opo	opo	opo
AEST	401216A - Joker: R_401216A	401216A - Joker: R_401216A	401216A - Joker: R_401216A
	ProcessHopo	ProcessHopo	ProcessHopo
		MAXIMUM (6 hou	MAXIMUM (week
Mon,27-03-2017 06:00		0.910	
Mon,27-03-2017 08:00	0.886		
Mon,27-03-2017 12:00		1.012	
Mon,27-03-2017 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	



Save graph as Favourite

- Each user has its own favourite graphs
- Dataviewer has option to save favourites
- Saved in user_settings
- Available in next session(s)
- Toolbar can be hidden / shown



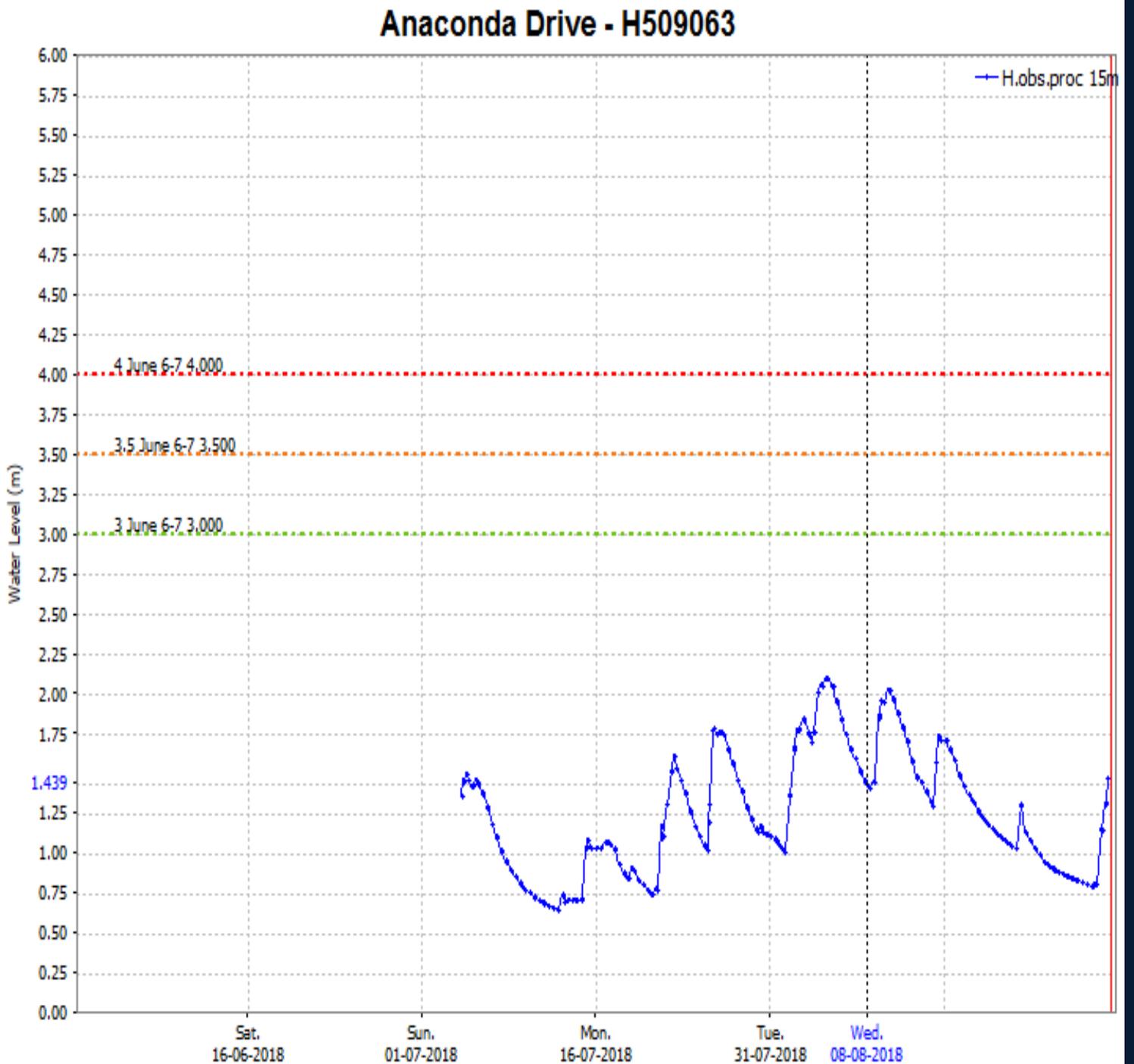
Copy set of modifiers

- Copy modifiers to other scenarios
- Time series modifiers copied to another moduleInstanceId
- Under right mouse button → menu option to choose scenario

The screenshot displays the Delft3D software interface. At the top, a table lists various modifiers with columns for Mod type, Name, Summary, Co..., Det..., Re..., Sta..., W..., Loc..., Start, End, Valid..., User, and Creat... The first row is highlighted in blue and contains the text: Edit Delft3D TW, TW_Gun..., TW Gunt..., Guntersv..., 07-09-..., 07-12-..., 07-13-..., Boy..., 07-10-... Below the table, a 'Copy modifiers' dialog box is open, showing a list of scenarios: Scenario 0, Scenario 1, Scenario 2, and Scenario 3. The dialog has 'OK' and 'Cancel' buttons. In the background, the 'Modifier Properties' panel for 'Edit Delft3D TW' is visible, with fields for Name (TW_Guntersville Dam) and Start time (07-09-2018 24:00:00). The 'Locations' panel on the left shows 'Guntersville Dam' selected. The main plot area shows a time series graph for 'Guntersville Dam' with 'Temperature Water (DEGF)' on the y-axis and time on the x-axis. The graph shows a sharp drop in temperature from approximately 400 DEGF to 100 DEGF around 07-09-2018 24:00. A legend indicates two series: 'TW [1]' (blue line) and 'TW [1] modified' (red line). The 'Operation' dropdown is set to 'Time series'. At the bottom, the 'Delft3D_Preprocessing_Scenarios' panel shows scenario [1] with details: [1] Delft3D_Preprocessing_Scenarios 07-13-2018 11:00:00 CDT Curren.

Seasonal Thresholds

- Thresholds have a validity period (e.g. a season)
- Viewperiod graph determines visibility
- Defined in thresholdValueSets
- (e.g. `<season startMonthDay="0103" endMonthDay="3006"/>`)
- Threshold icon is also affected



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

The screenshot shows the CHPS - North Central River Forecast Center (Stand alone) interface. The main window displays a data table with columns for time (GMT) and various forecast variables (MAP, MAPX, MAP, MAT). Below the table are controls for warm state selection, time zero, and forecast length. To the right, a plot titled "North Fork Maquoketa River - Fulton 3WNW IA (FLN14)" shows precipitation (in) and discharge (cfs) over time. A "Time series visibility" dialog box is open, showing a list of time series with checkboxes, where "QIN FLN14" is highlighted. A "Logs" window at the bottom shows system information and workflow completion messages.

GMT	A	B	C	
	MAP (IN)	MAPX (IN)	MAP (IN)	MAT (DEG)
	FLN14	FLN14	FLN14	FLN14
	FLN14	FLN14	FLN14	FLN14
	ta_north_Merge [1]	QPE_to_MAPX [2]	MERGETS_FLN14 [1]	ta_n [1]
07-28-2015 12:00:00	0.000	0.000	0.000	0.000
07-25-2015 06:00	0.007	0.011	0.007	0.000
07-25-2015 06:00	0.000	0.000	0.000	0.000
07-25-2015 12:00	0.000	0.000	0.000	0.000
07-25-2015 18:00	0.000	0.000	0.000	0.000
07-26-2015 00:00	0.000	0.000	0.000	0.000
07-26-2015 06:00	0.000	0.000	0.000	0.000
07-26-2015 12:00	0.093	0.024	0.093	0.000
07-26-2015 18:00	0.535	0.967	0.967	0.000
07-27-2015 00:00	0.012	0.001	0.001	0.000
07-27-2015 06:00	0.000	0.000	0.000	0.000
07-27-2015 12:00	0.000	0.000	0.000	0.000
07-27-2015 18:00	0.000	0.000	0.000	0.000
07-28-2015 00:00	0.000	0.000	0.000	0.000
07-28-2015 06:00	0.000	0.000	0.000	0.000
07-28-2015 12:00	0.000	0.000	0.000	0.000
07-28-2015 18:00	0.218	0.218	0.218	0.000
07-29-2015 00:00	0.376	0.376	0.376	0.000
07-29-2015 06:00	0.518	0.518	0.518	0.000
07-29-2015 12:00	0.191	0.191	0.191	0.000
07-29-2015 18:00	0.000	0.000	0.000	0.000
07-30-2015 00:00	0.000	0.000	0.000	0.000
07-30-2015 06:00	0.000	0.000	0.000	0.000
07-30-2015 12:00	0.000	0.000	0.000	0.000
07-30-2015 18:00	0.000	0.000	0.000	0.000
07-31-2015 00:00	0.000	0.000	0.000	0.000
07-31-2015 06:00	0.000	0.000	0.000	0.000
07-31-2015 12:00	0.000	0.000	0.000	0.000
07-31-2015 18:00	0.000	0.000	0.000	0.000
08-01-2015 00:00	0.000	0.000	0.000	0.000
08-01-2015 06:00	0.000	0.000	0.000	0.000
08-01-2015 12:00	0.000	0.000	0.000	0.000
08-01-2015 18:00	0.000	0.000	0.000	0.000
08-02-2015 00:00	0.000	0.000	0.000	0.000

Warm state selection: 07-18-2015 12:00:00

Time zero: 07-28-2015 12:00:00

Forecast length: 08-25-2015 12:00:00

edit.run options

Map Plots Topology Modifiers Document Viewer

Logs

10-03-2018 12:17:51 INFO - ***** Workflow IDP14_Forecast Completed *****

10-03-2018 12:17:51 INFO - TaskRun.Completed: Task IDP14_Forecast with ID SA10_8 completed in 1s Start time: 2018-10-03 12:17:50 End time: 2018-10-03 12:17:51 User Id: Ben.Balk

TransformationModule: 1s 48% GeneralAdapter (without executables) 0s 38% file:C:\fews_beta_201702\ncrc_sa\Models\ohd\bin\ohdcommonchps.jar\ohd\hse\ohdhdfewsadapter\OHDFewSadapter.class 0s 10% datastore 0s 40% primary validation 0s 0% cache files 0 B database 0s 42% (5 ms/query, 115 KB, 240 KB/s, 89 queries, 150 rows) reloaded 0 B time series read 82 (unique=41, view period=115y 266d 12h) time series written 109 (modified=45, write period=39d, modified period=39d) files 1s 47% 85 KB 158 KB/s logging 0s 2% gc 0s 0% cpu 200% max mem. 255 MB index mem. 62 MB db con. acquire time 0s 1% lock. acquire time 0s 0%

10-03-2018 12:17:51 INFO - Workflow.ActivityCompleted: Workflow IDP14_Forecast completed in 1s

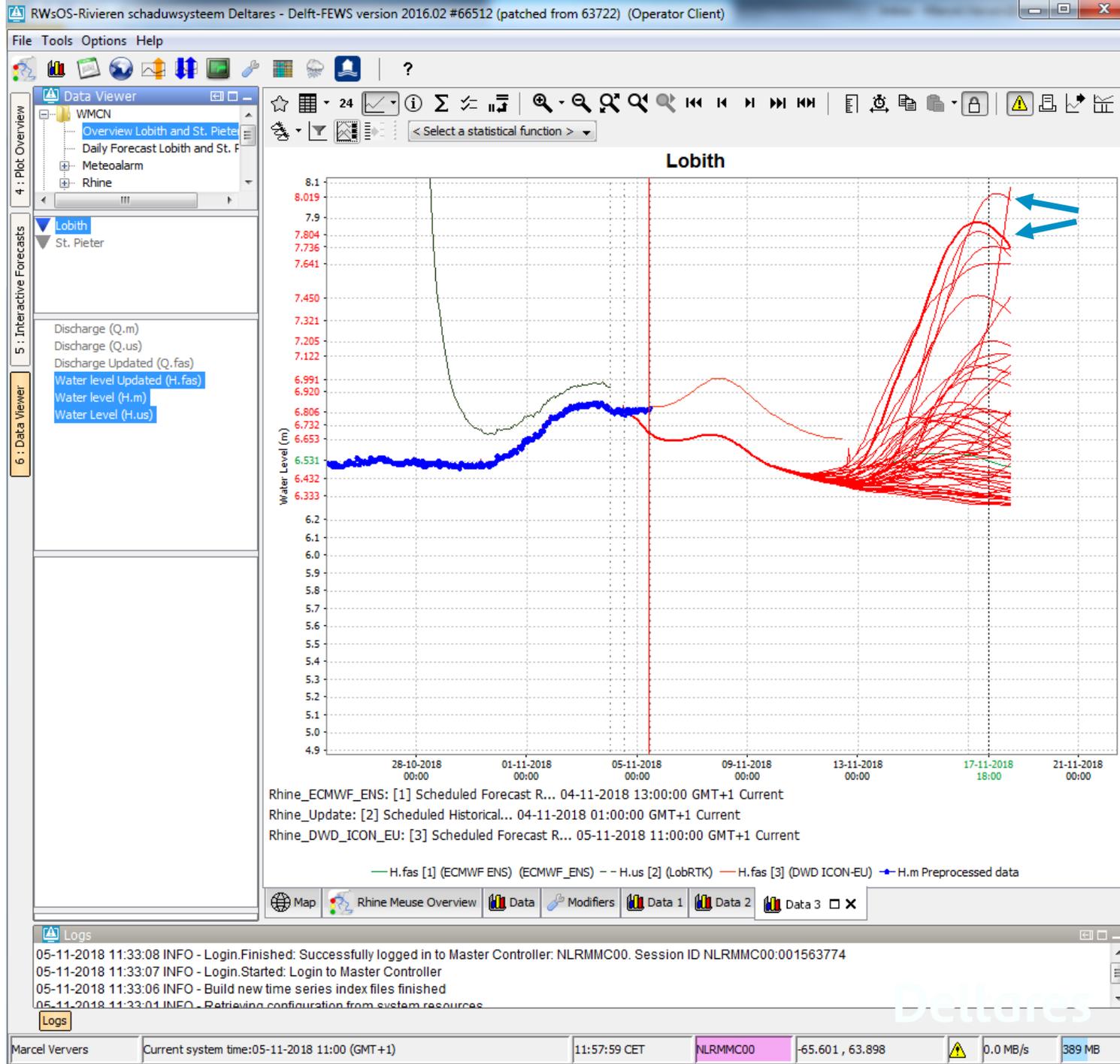
10-03-2018 12:17:51 INFO - Workflow.ActivityCompleted: Workflow IDP14_Flow_Forecast completed in 1s

Logs 8: Run Info

Ben.Balk Current system time: 07-28-2015 12:00 GMT 12:21:14 EDT 08:21:14 EDT Stand alone 0.0 MB/s 258 MB

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



Other aspects...

OpenJDK

- 2018.02 - Support Java 11 OpenJDK

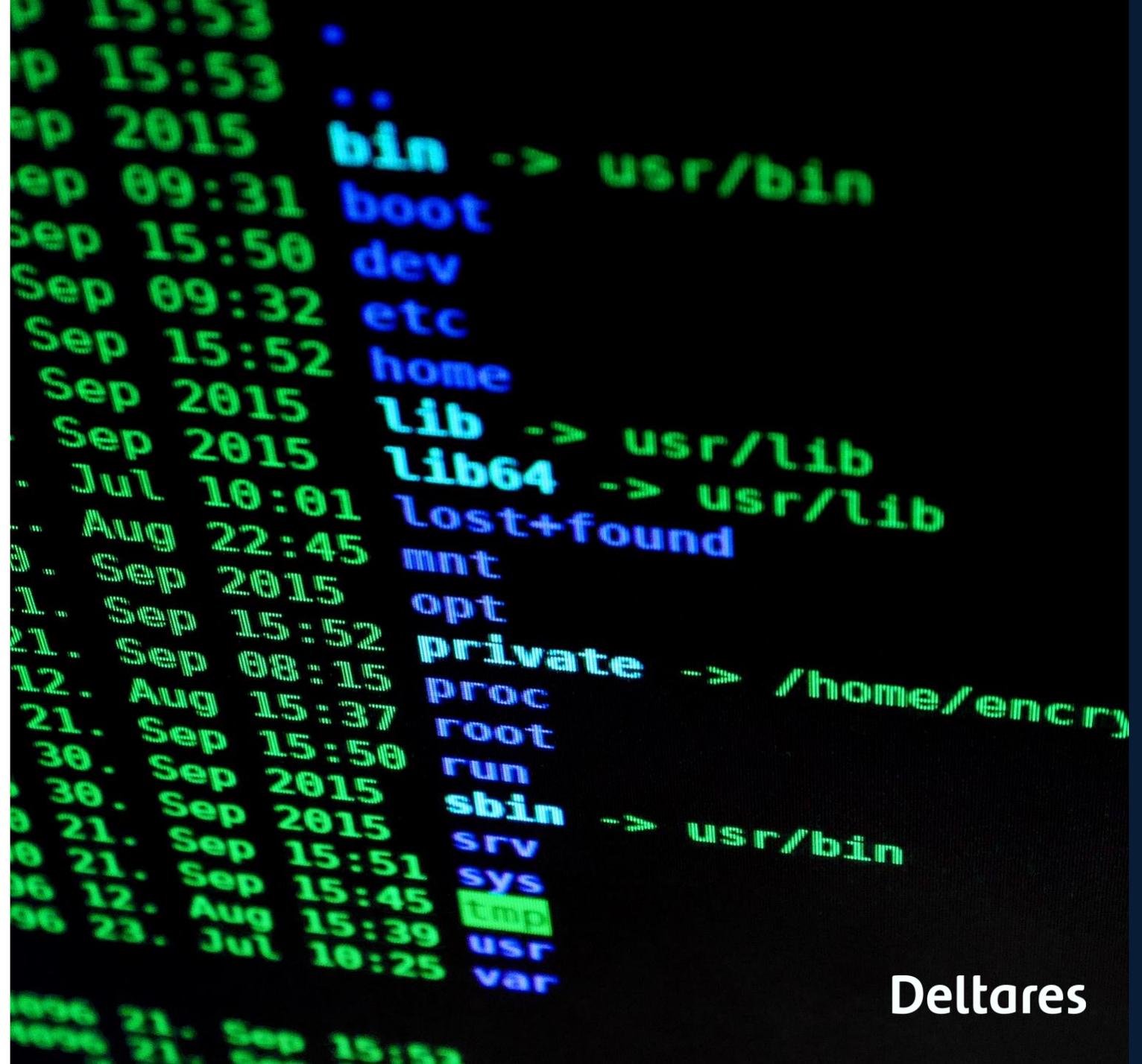


- New version Elastic Search (v6.4.2)



Apache Tomcat®

- New version Tomcat (v9.x)



Development Team...

- Stable core...
- Roadmap involvement & knowledge sharing
- New faces in 2018...



FEWS NEWS...

- 4 editions this year...
- 2500 recipients...
- Prominent place in the new portal



Forum

Blog

Best practice

New ideas

New Portal...

- With external assistance renewing the portal...
- New look & feel
 - New users: basics...
 - Regular users: forum, best practices, new ideas...
- Most important: Interaction...
- Break-out session...

Category

- Environment
- Flood risk
- Infrastructure
- Adaptive delta planning
- Water & soil resources

Blogs



It is dry this summer



Jan Verkade | 20 June 2018

It has been dry in the Netherlands for weeks. It is nice summer weather and we spray the garden every day. But we also see that brooks fall dry, that farmers have to irrigate, that there are ...

[Read more >](#)


Hidden secrets in the North Sea



Marc Hijma | 19 May 2018

The North Sea still hides many secrets. A joint team of researchers from the Royal NIOZ Sea Research, TNO, Delft, Utrecht University and VU University Amsterdam set out on an expedition with the ...

[Read more >](#)


Nature-based solutions: do we know how to do it?



Bregje van Wiesenbeck | 10 April 2018

Implementation of nature-based interventions is on the rise. Nature now often has new functional labels added, parks for 'water retention', mangroves 'for coastal resilience' and oyster 'living shorelines'...

[Read more >](#)


It is dry this summer



Jan Verkade | 20 Juni 2018

Deltares

User Meetings 2018...

- Delft-FEWS User Days Australia (May 2018)
- Dutch Delft-FEWS User Day (June)
- German “Anwendertreffen” (June)
- Delft Software Days – South East Asia
- All events in combination with trainings and/or hands-on break-outs...



28. Juni 2018: Anwendertreffen Delft-FEWS

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, Neuerungen kennenzulernen und offene Fragen mit den Entwicklern des Systems zu diskutieren.

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



Themen und Vortragende

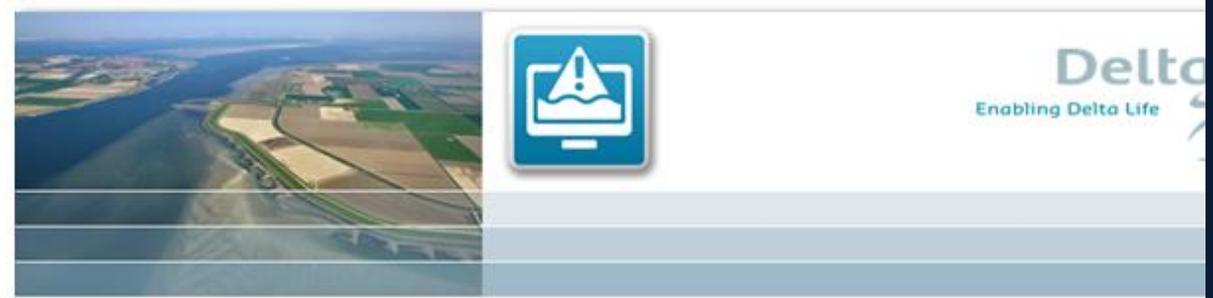
- Agenda
- Delft-FEWS neue Features, Roadmap, Marcel Ververs, Maarten Smoorenburg
- Delft-FEWS im Dauereinsatz zur Wasserstandsvorhersage und Informations Bundesamt für Seeschifffahrt und Hydrographie
- Delft-FEWS bei der Landestalsperrenverwaltung Sachsen, Malik Ulrich, Land
- Einbindung von Delft-FEWS in das Hochwasserportal des Wupperverbandes
- Frühwarnung mit Delft-FEWS, Integration von Sensor-Web-Date, Vladislav I
- Analyse der hydrologischen Modellnachführung für das operationelle Hoch Sachsen am Beispiel ausgewählter Talsperreneinzugsgebiete, Oliver Buchh

29. Juni 2018: FEWS Hands-On Workshop

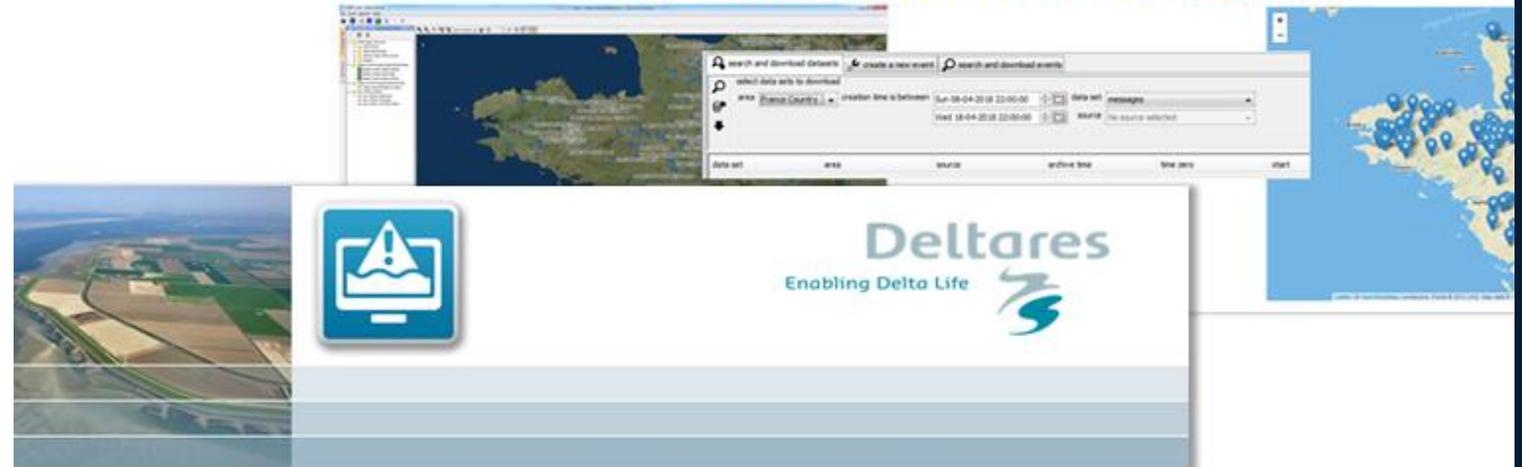
Im Anschluss an das Treffen fand am 29. Juni ein „FEWS Hands-On Workshop“ mit verschiedenen praktischen Themen statt.

New online courses...

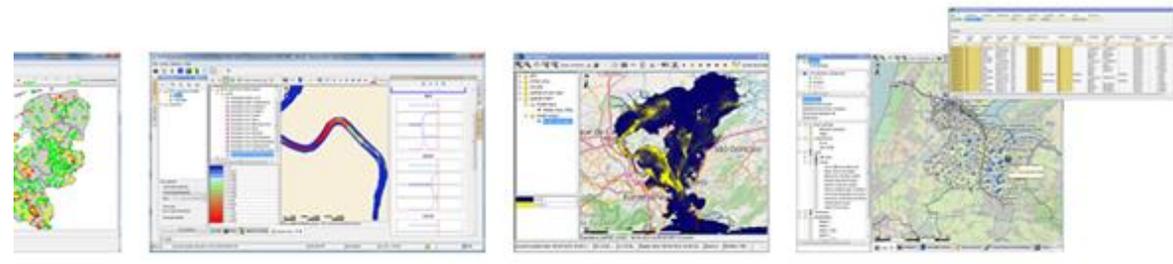
- Basic Configuration course (2017.01)
- Water Quality & Samples (2017.01)
- PI webservice and open archive (2017.02), extended to 'Roadmap Course' during DSD
- Many download requests...
- Soon to be upgraded to 2018.02...



Delft-FEWS Configuration Course Open Archive and PI Web Service



Delft-FEWS Configuration Course Water Quality & Samples



FEWS in the NEWS...

- **NRC:** Dutch daily newspaper about the Drought Monitor from the RWS Waterkamer
- **The Examiner:** TasWater's David Krushka is being interviewed and quoted about dam and weather monitoring



Concerns...

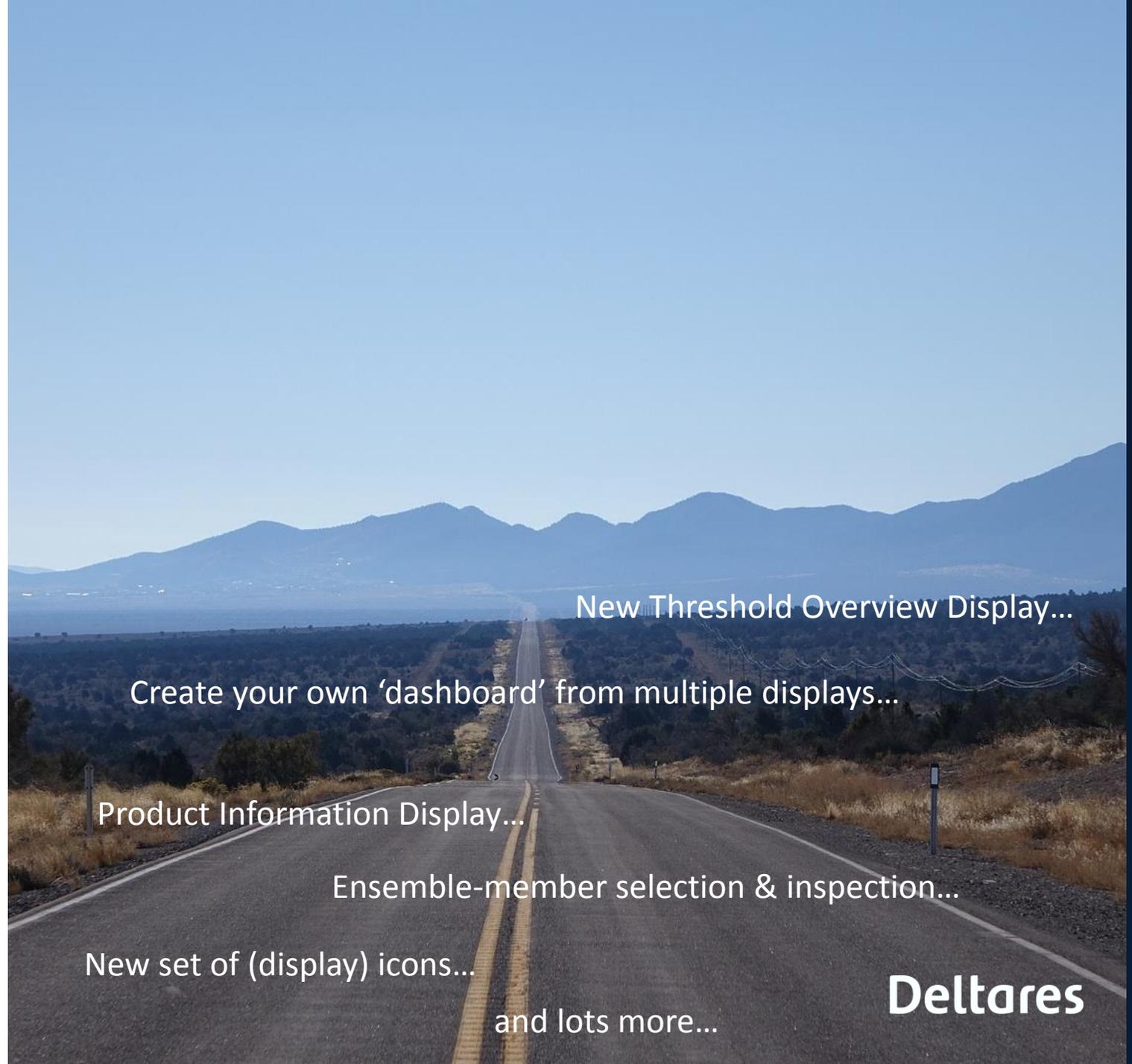
- Did everything go without hick-ups...?
- No...
 - Upgrade (to 2017.02) without downtimes of a (dual) system...
 - (New) Maintenance mode while upgrading was not sufficient...
 - Duplicate globalRowIds found while they should be unique...
 - Too drastic reduction in (MC) log message event codes...

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



Outlook 2019...

- Finalizing roadmap features (in projects)
- 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...

Deltares



Thank you for your attention

Deltares



fews.info@deltares.nl



www.delft-fews.com

