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Community Strategy Board
Anwendertreffen 2024

Delft-FEWS Product Management

CSB
Delft-FEWS
Community
Strategy Board

enabling delta life

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Who is the FEWS Strategy Board

- **Bureau of Meteorology (Australia)**
  Justin Robinson

- **Dutch Waterboards**
  Roger de Crook

- **Federal Office for the Environment (Switzerland)**
  Martin Ebel

- **Rijkswaterstaat (Netherlands)**
  Marc Philippart

- **Environment Agency (UK)**
  Ian Clayton

- **Scottish Environment Protection Agency**
  Amy Tavendale

- **National Weather Service (USA)**
  Trey Flowers

- **Tennessee Valley Authority (USA)**
  Gabe Miller

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CSB-meeting

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CSB Meetings

- 3 times a year
  - Online
  - Hybrid

- Agenda
  - Community
  - Presentation topic
  - Discussion topic
  - AOB

- Minutes available on [Delft-FEWS portal](#)

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FEWS Community Talks

- 14th of March: Web OC
  - Deltares: Tom Bogaard

- 7th of June: Flood Tags
  - Floodtags: Jurjen Wagemaker
  - Deltares: Marc v Dijk
  - Environment Agency: Rob Cowling

- 3rd October: Artifical Intelligence

Community Talk

14 Mar
FEWS Community Talk 6 - March, 14, 2024
14 March 2024
09:00 - 10:00 CET online
> Read more

11 Jun
FEWS Community Talk 7 - June 11, 2024
11 June 2024
16:00 - 17:00 CET online
> Read more

03 Oct
FEWS Community Talk 8 - October 3, 2024
03 October 2024
09:00 - 10:00 CET online
> Read more

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Delft-FEWS Vision & Roadmaps so far

Roadmap theme	2020	2021	2022	2023	2024
Backlog old roadmaps (vision 2020)		Finished			
Code clean-up					
Code quality				Finished	
Release process and test automation					
Security				Finished	
What-if scenario's / computational framework					
Cloud developments					
Python integration					
Web operator client				MVP	
Open Archive		MongoDB		New vision	

Code Clean-up

- **Goal**: maintainability of our code
  - Remove old/outdated code
  - Develop new/better alternative (before removal old parts!)

- **Always** assess your configuration by using the <F12> **Option T + Log obsolete modules and explorer plugins**

- [This WIKI page](#) will contain information about the end-of-life configuration options and in which version.

- Approach Delft-FEWS Support if you need help!!

- Main changes:
  - EoL postponed to 2025.01 (instead of 2024.01)
  - Remaining *Transformation* functions
  - *Performance Indicator* Module
  - Migration plan for what-if scenarios
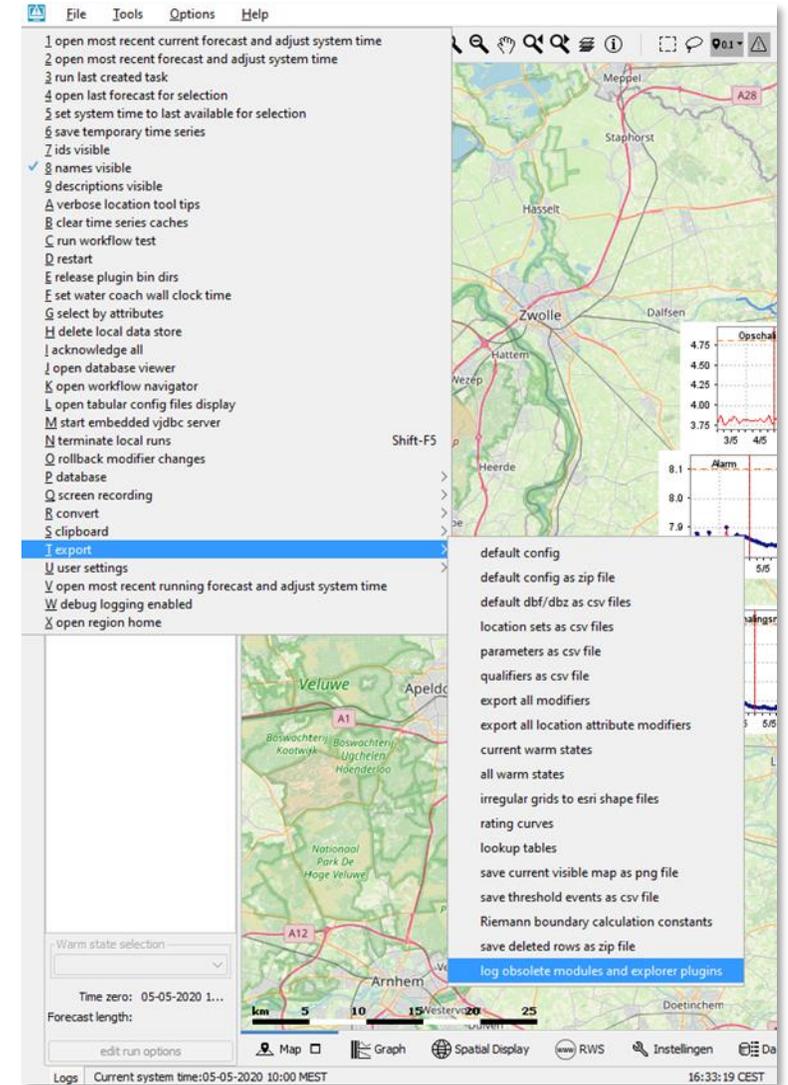
Security

- Besides ongoing, daily ICT-operations, security is a standard aspect of Delft-FEWS software:
  - New installations at new end users (questionnaires)
  - Upgrading to secure infrastructure
  - Daily operations and vulnerabilities in third party libraries
  - Role and position of Forecasting Systems / Water Information systems in organizations, digesting all kind of external data and serving output via the internet.
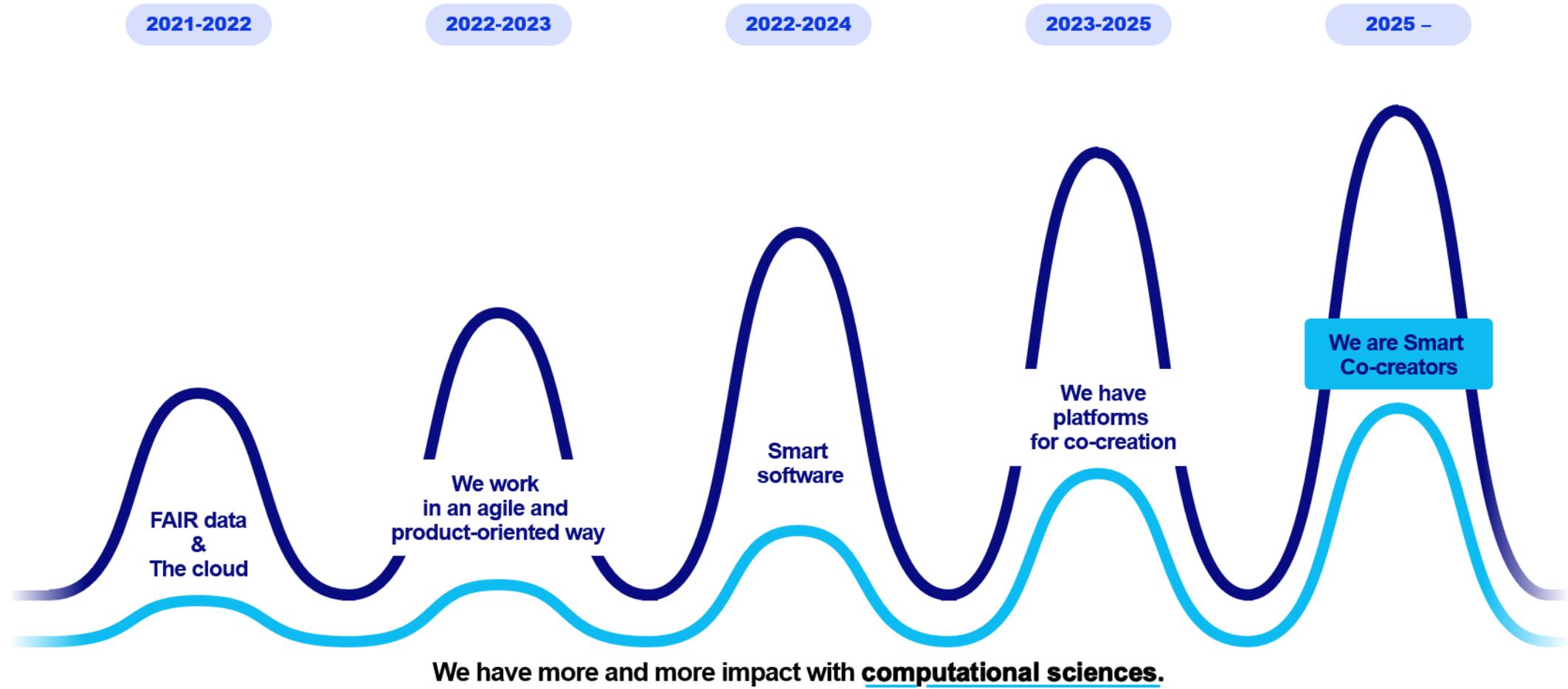
- Security as part of the Delft-FEWS 2025 Vision + yearly roadmaps

security

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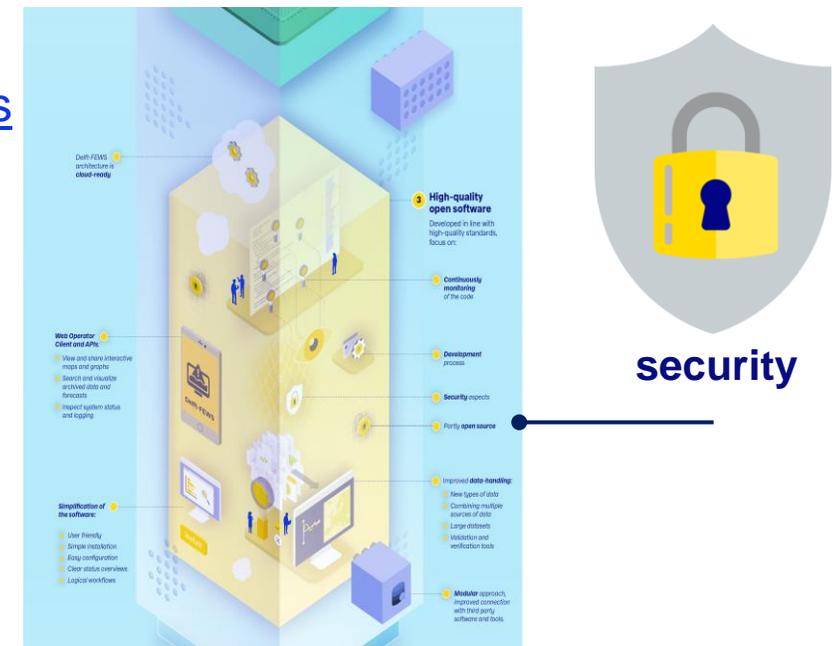
Web Operator Client MVP – What's next?

- Future feature requests
  - Where do we implement what?
  - Web-OC vs thick client?

- Support and maintenance → optional additional module?

- Dedicated sprints (Web-OC, Open Archive)

- What is the preferred release scheme?
  - Twice a year (same as Delft-FEWS)
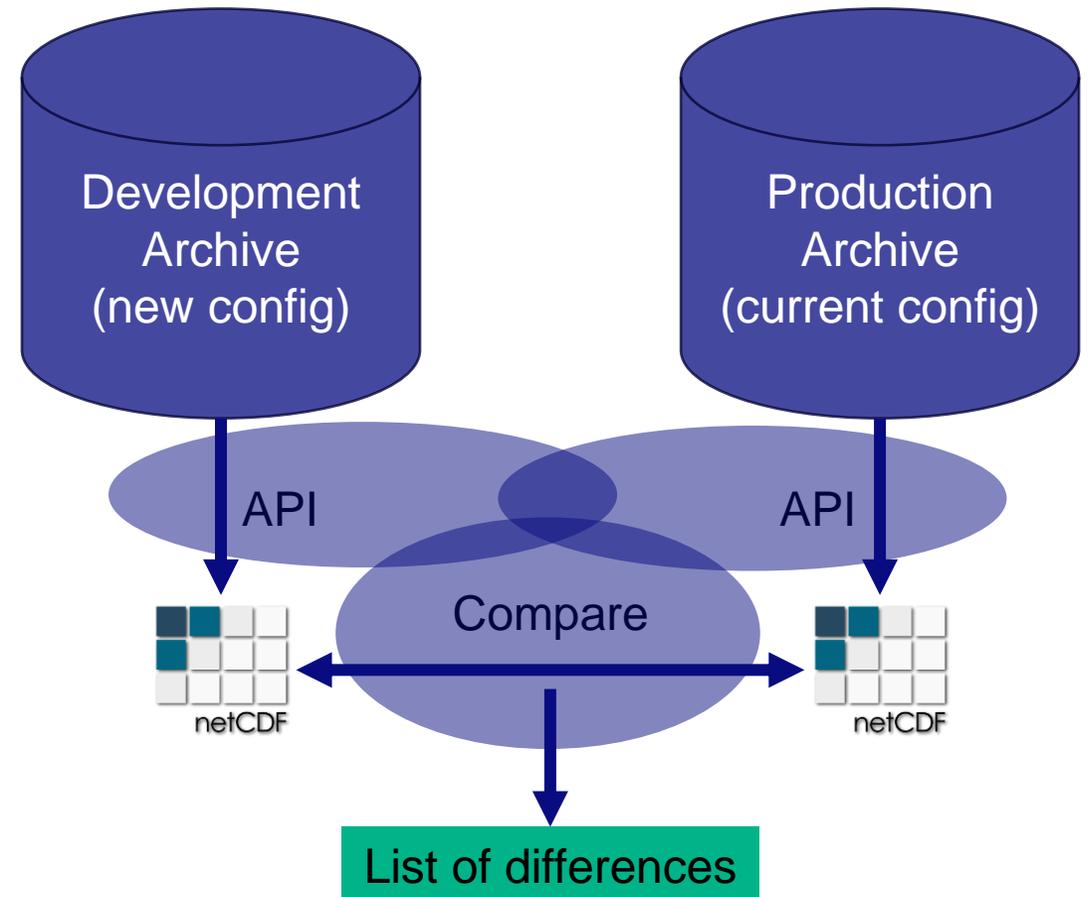 - After each Web-OC sprint?
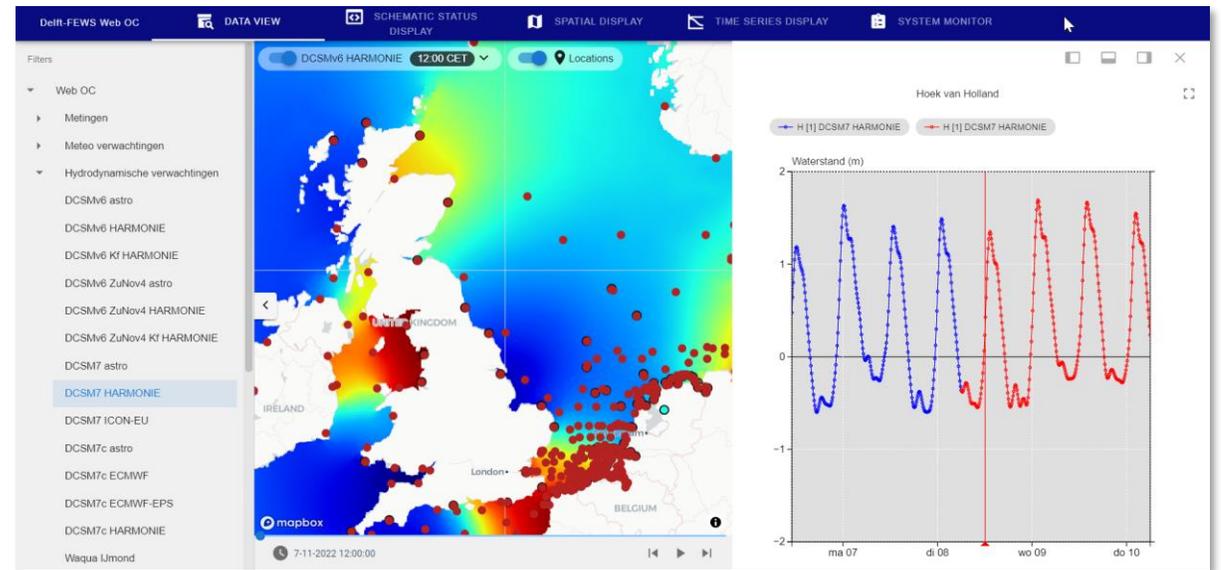
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Digital Transformation at Deltares:
From *Excellent Knowledge* to *Smart Co-creation*

2021-2022   2022-2023   2022-2024   2023-2025   2025 –

We are Smart Co-creators

FAIR data & The cloud

We work in an agile and product-oriented way

Smart software

We have platforms for co-creation

We have more and more impact with **computational sciences.**

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Automatic Testing

- End to end testing
  - Final netCDF's from the Archive
  - Includes impact of all underlying steps
- Comparing development and production
  - Production is regarded as the truth/correct
- Python based
- Coupled to Matroos API
- Runs daily, and upon change

Development Archive (new config)

Production Archive (current config)

API

API

Compare

netCDF

netCDF

List of differences

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New Delft-FEWS vision – start in 2025…

- Towards a new vision for Delft-FEWS (successor of current Delft-FEWS 2025 vision)
  - Current vision "Delft-FEWS 2025" has an end…
  - Evaluate & share what did we accomplish?
  - Start preparing/thinking about successor…
  - Content: Strategic agenda, Digital Transformation, OWM Strategy…
  - **Involvement of the Delft-FEWS community, CSB…**
  - Community will be part of new vision…
  - Get information from end-users, consultants…$\rightarrow$ input partly available
  - Co-creation, external guidance (process)…
  - Storytelling…

  - Reach out if you have ideas, contributions!!

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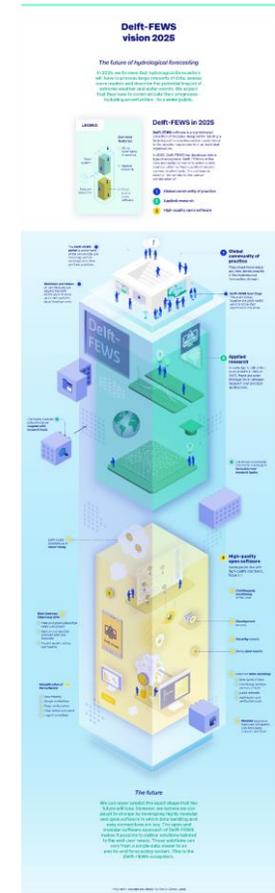
Topics Delft-FEWS Vision 2030?

- November 2022 (during International Delft-FEWS User Days)
  - Every CSB Member presented their *Top 3* of concerns, trends, opportunities etc they observe in their domain, country, organization for both 2023 and the next 2-3 years ahead (which can be input for next vision').

Top 7 topics

1. Cyber security
2. Ensemble/probabilistic forecasting irt data volume and multi-model
3. Machine learning / AI – nowcasting
4. Cloud hosting
5. Quality improvements: verification, track-and-trace trail
6. Performance: evaluation, multi-model, complex models
7. Inundation and impact forecasting

Not in the top 7, but mentioned often too…

- Drought forecasting: low flows, water supply
- Multiple use of one system: forecasting, decision makers, emergency responders
- Web portals
- Tendency towards outsourcing: SaaS, "…less in-house bespoke developments."
- How do we keep up with the state-of-the-art-science?

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CSB-meeting #28 (05.09.2023)

Scope Delft-FEWS Vision 2030

- What if you would **develop** a forecasting system from scratch…what would it look like?

- What should really be **included** in the vision for 2030?

- How would you (as CSB member) like to be **involved** in creating the new vision?
  - Brainstormer, Writer, Reviewer, Interviewer…

- …

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Delft-FEWS vision 2025-2030

- Send out evaluation

- Process evaluation feedback

- Gather input new vision

- Draft document

- Present vision at Delft-FEWS international User days (November 2024)

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Discussion Topic:
Evaluation of Delft-FEWS 2025 Vision

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Evaluation Delft-FEWS 2025 Vision

- Format: Microsoft form

- Starting with a summary of the plans

- Overview of things achieved

- Currently 9 questions (open and multiple choice)

- Date for finalization summary: end of April 2024
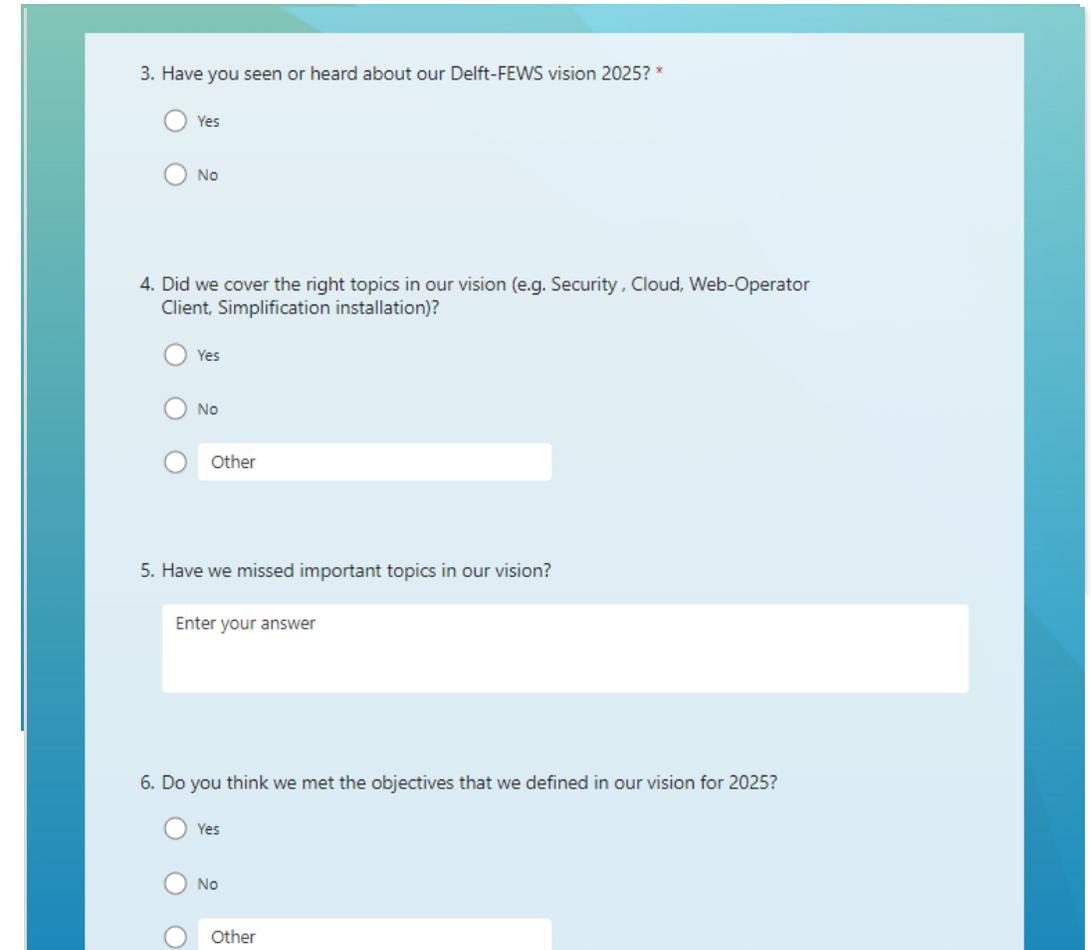
3. Have you seen or heard about our Delft-FEWS vision 2025? *
- Yes
- No

4. Did we cover the right topics in our vision (e.g. Security , Cloud, Web-Operator Client, Simplification installation)?
- Yes
- No
- Other

5. Have we missed important topics in our vision?

Enter your answer

6. Do you think we met the objectives that we defined in our vision for 2025?
- Yes
- No
- Other

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CSB-meeting

Evaluation Delft-FEWS 2025 Vision

- Any questions that should at least be addressed in this evaluation?

Input Delft-FEWS community for CSB

- Feedback from Community on support and services
- Topics that should be addressed in CSB
- Input for Delft-FEWS software vision

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Input from community for CSB
Suggestions…

Large scale datasets

Machine Learning / AI

Security & pentesting

IP on configuration…

Basic Model Interface approach

Database management and optimization

Impact on forecasting change in legislation

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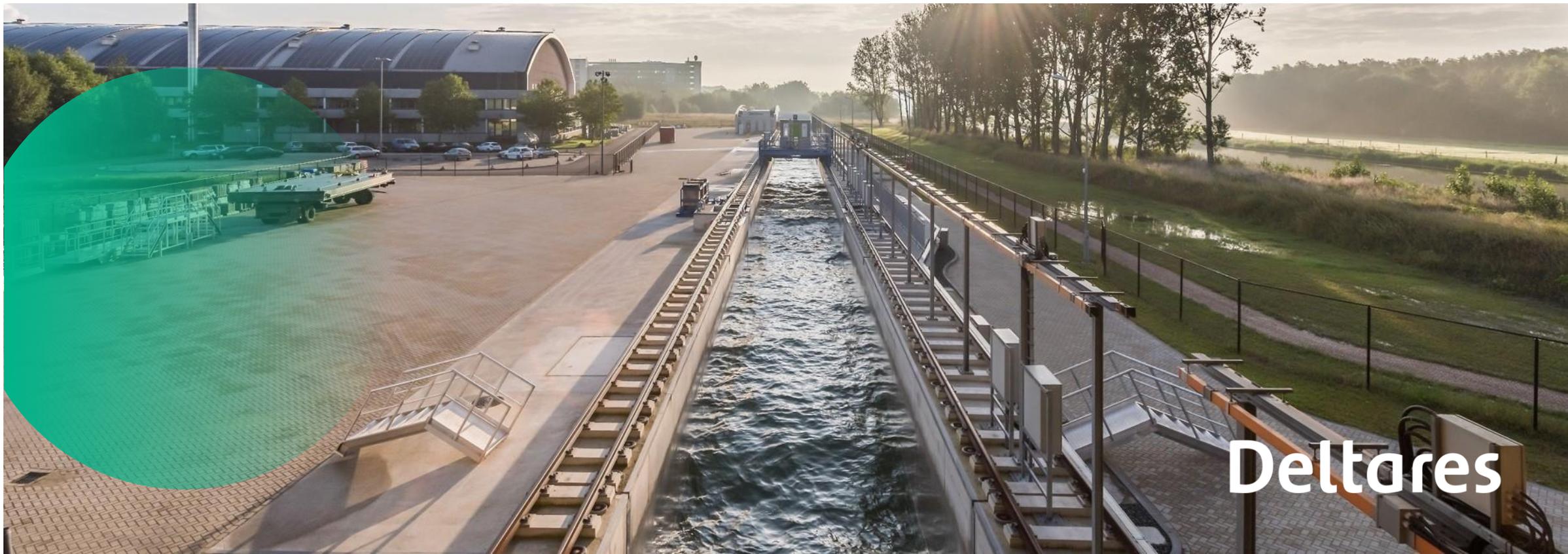🏠 www.deltares.nl   🐦 @deltares   in linkedin.com/company/deltares

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