

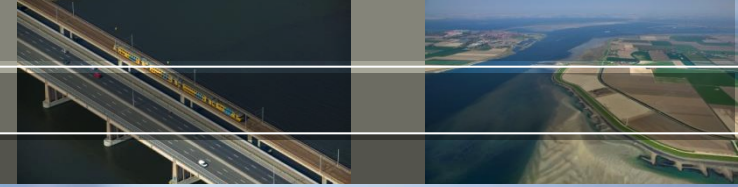


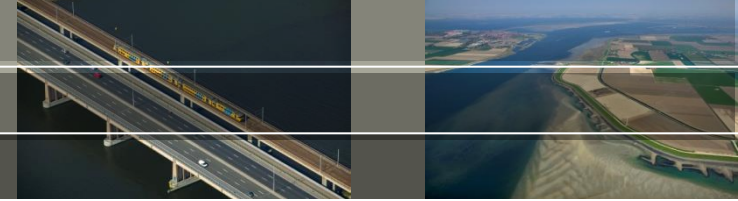
# Deltares en de wereld van [data] services

Daniel Twigt

Gert-Jan Schotmeijer

# The future of hydrological forecasting

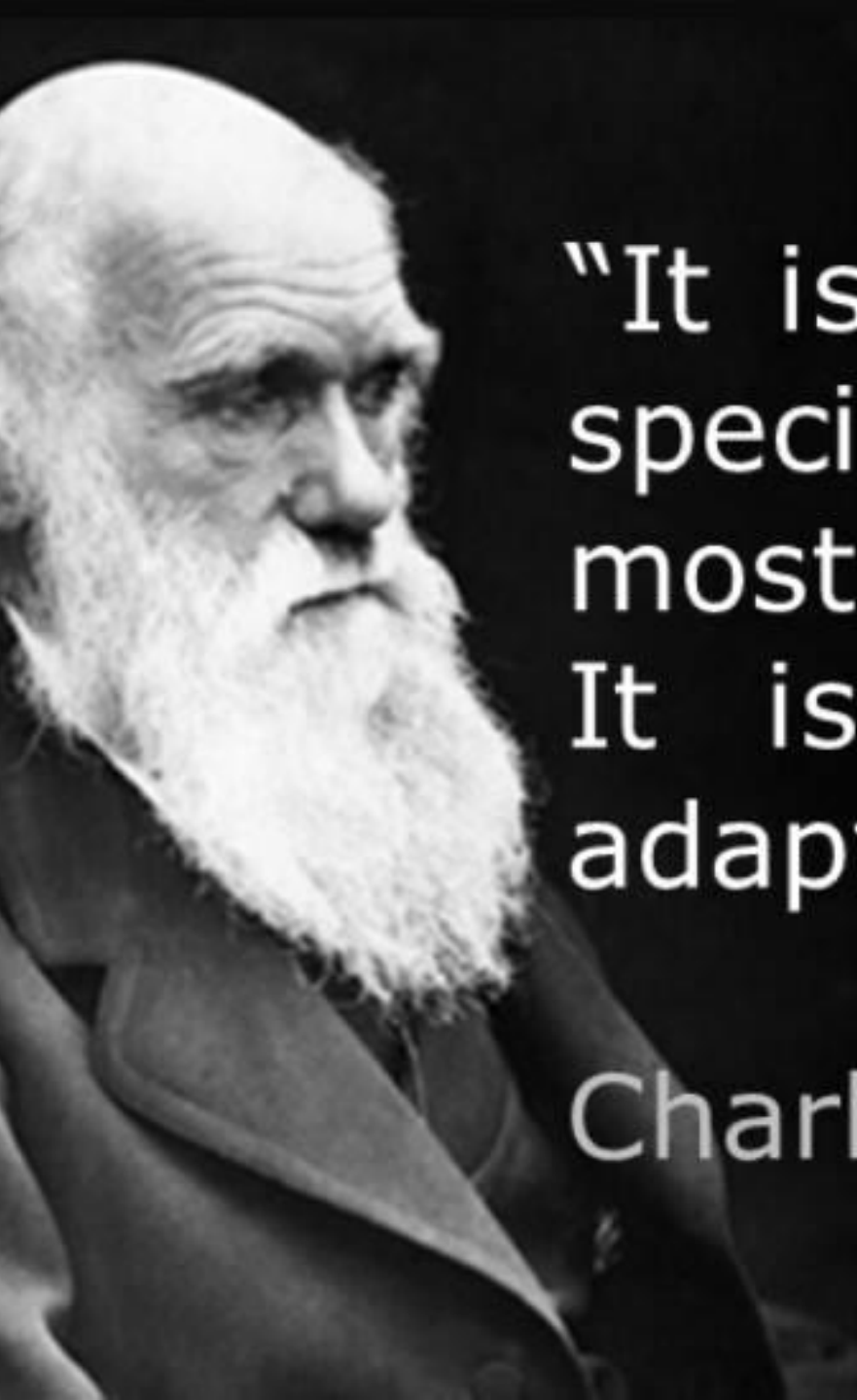




We don't know for sure, but... what we observe:

1. Increasing number of players  
(also nonobvious ones)
2. Increasing demand for (online) hydrological forecasting and information services
3. Increasing demand for data





"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change."

Charles Darwin (1809 – 1882)

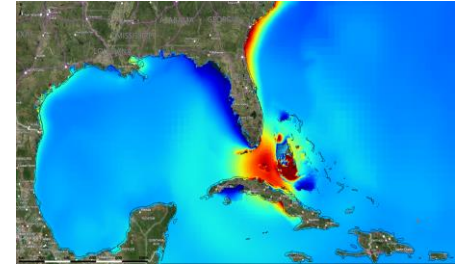


Which leads to questions:

1. Implications for Delft-FEWS
2. How to share Deltares data, forecasting models and knowledge
3. ...

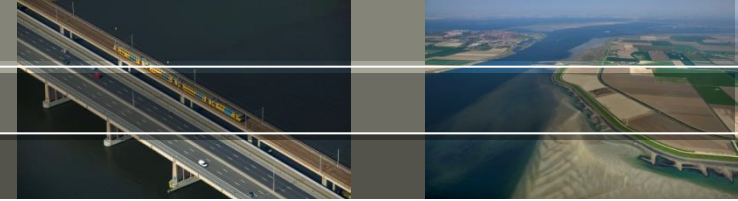
And opportunities:

- New ways to share our knowledge with the outside world
- New ways for participation and contributions of others (“the crowd”) in our knowledge development
- ...



**Deltares**





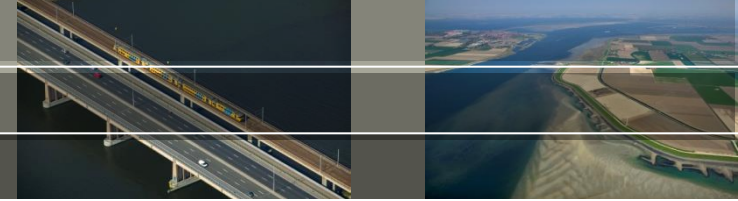
## 1. Consequences Delft-FEWS

Delft-FEWS Roadmap: make Delft-FEWS cloud ready, improve web-service, ... (not the focus of this talk)

## 2. How to best share Deltares data, forecasting models and knowledge

Developing and experimenting with online data and information services (focus of this presentation)

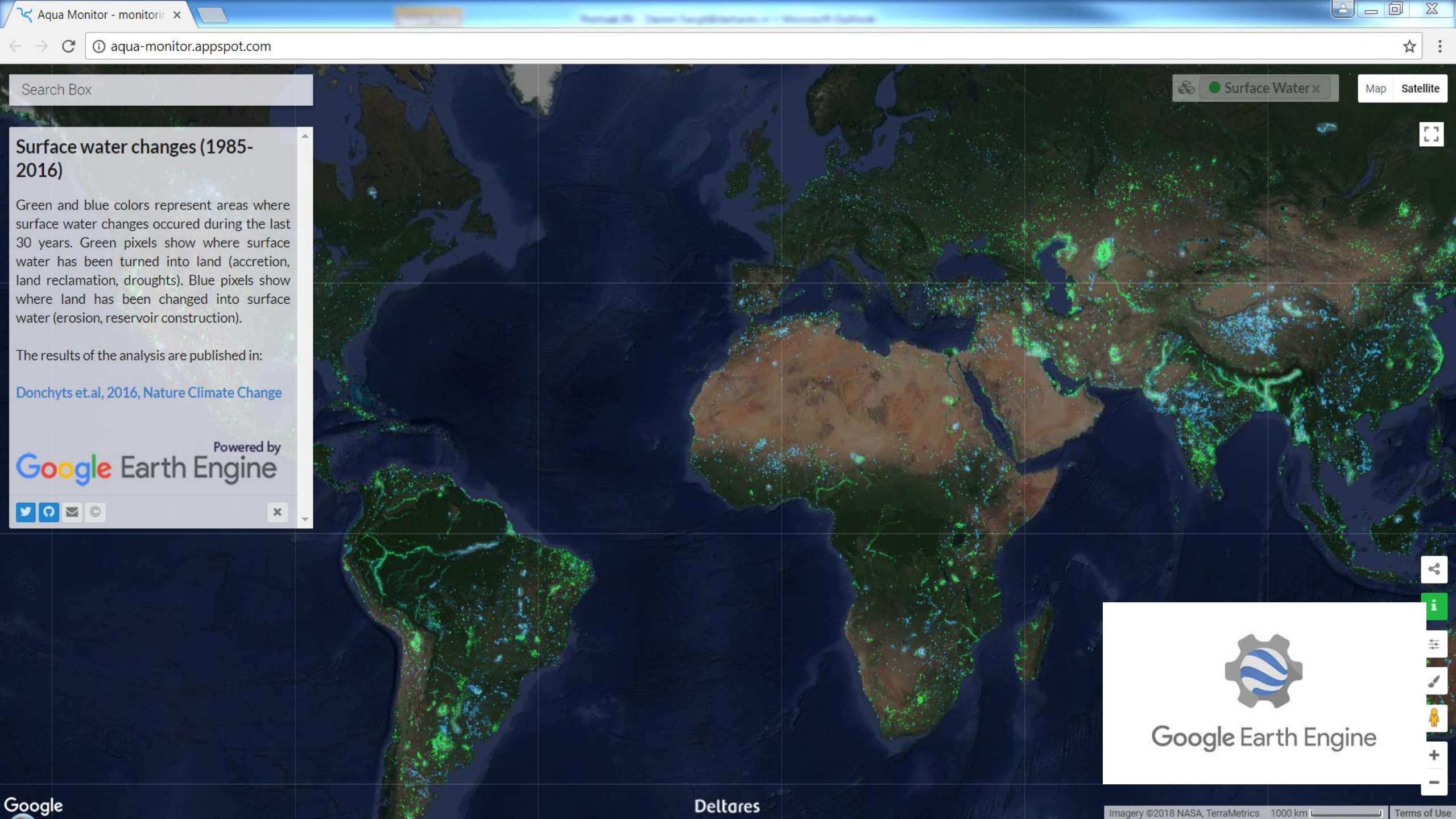




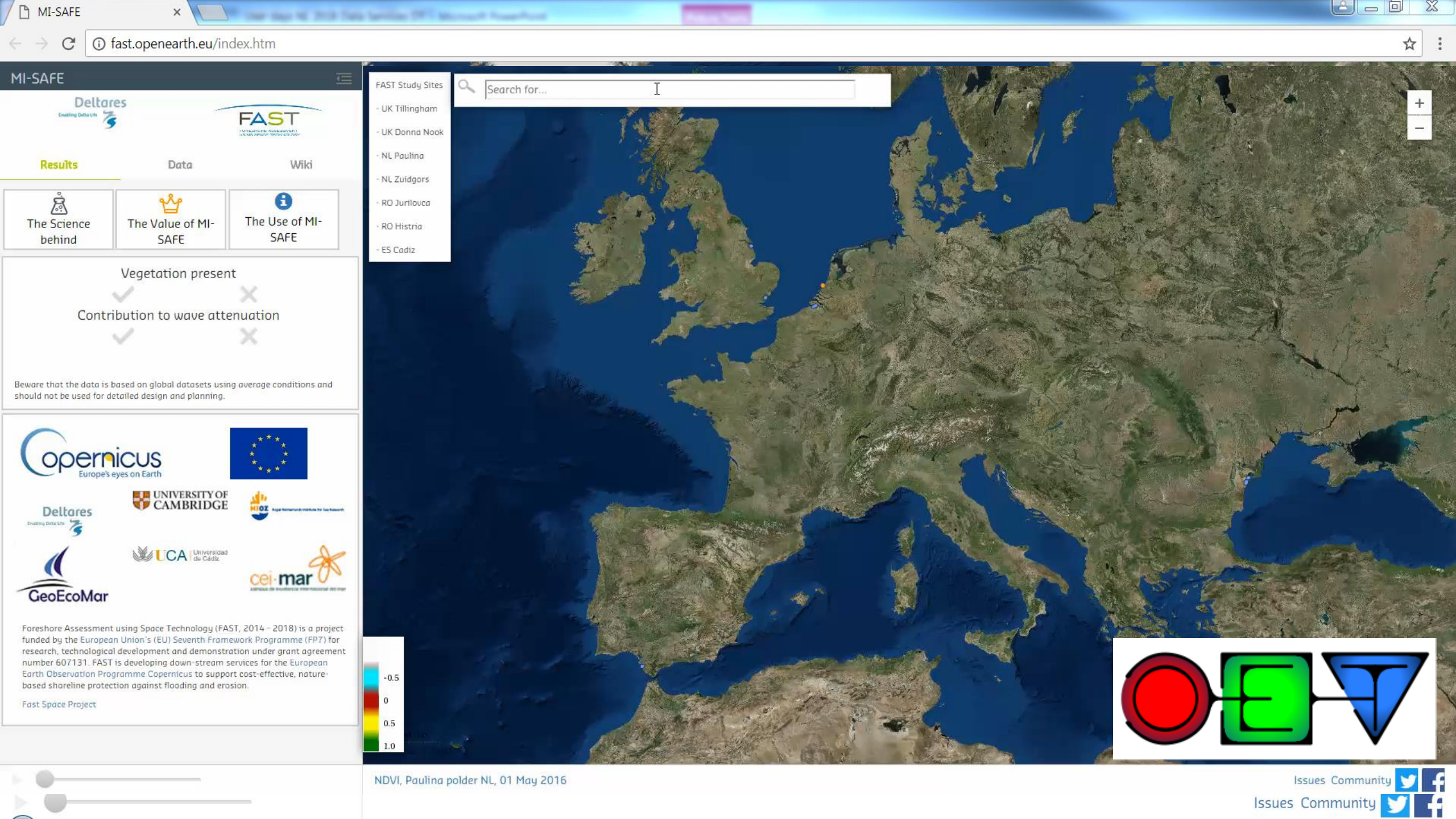
## Some examples



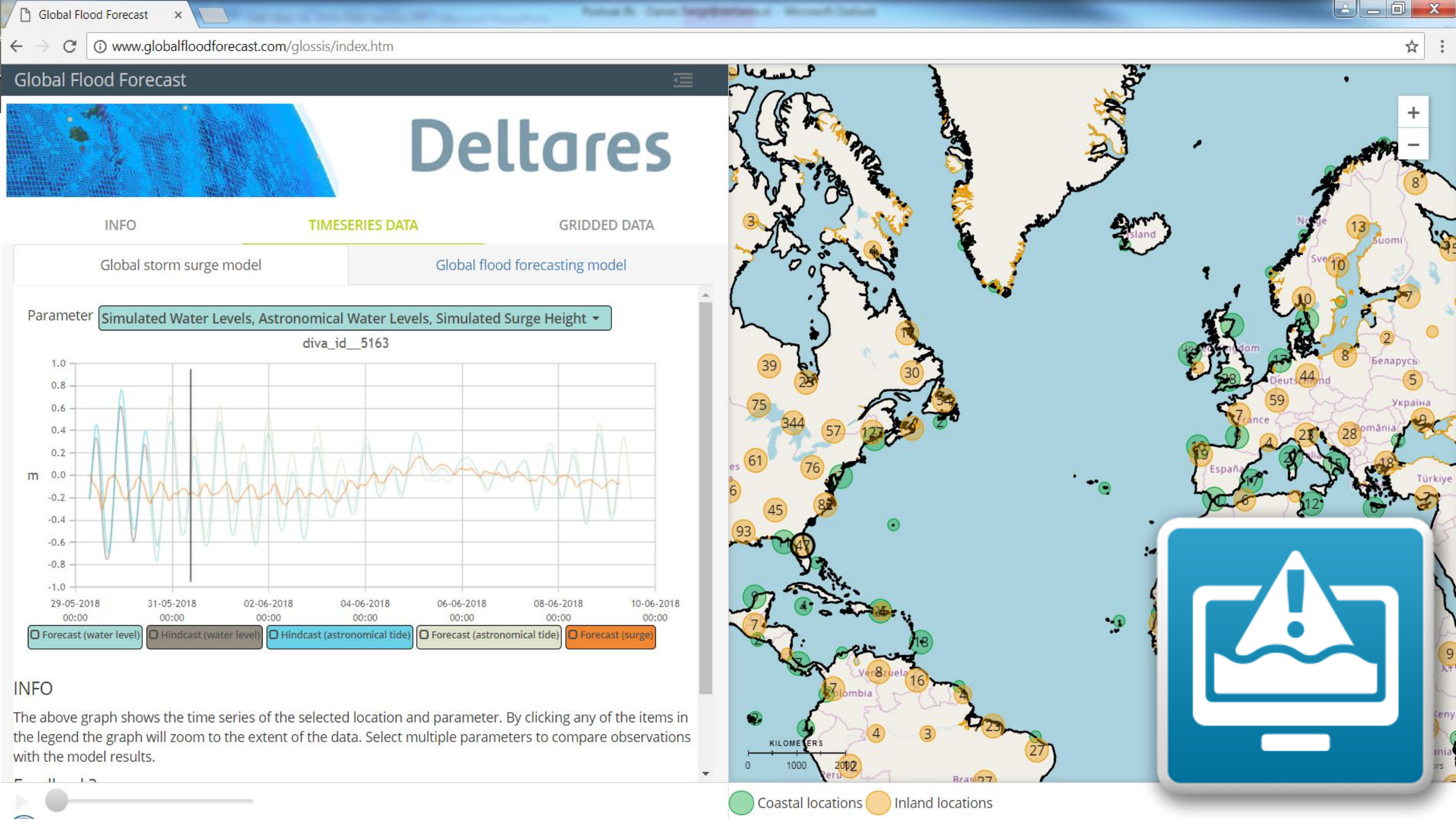




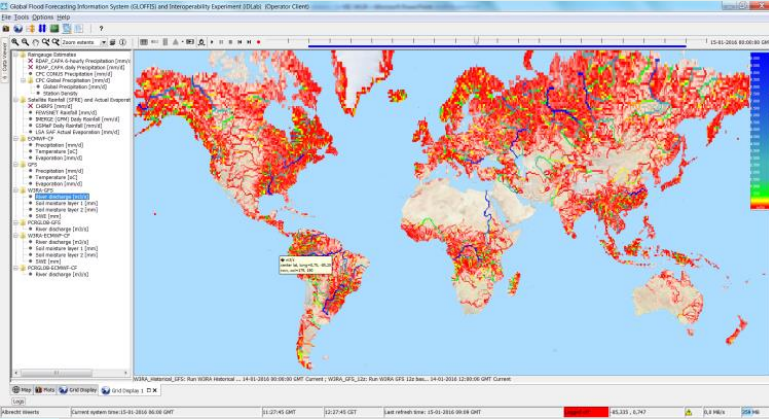




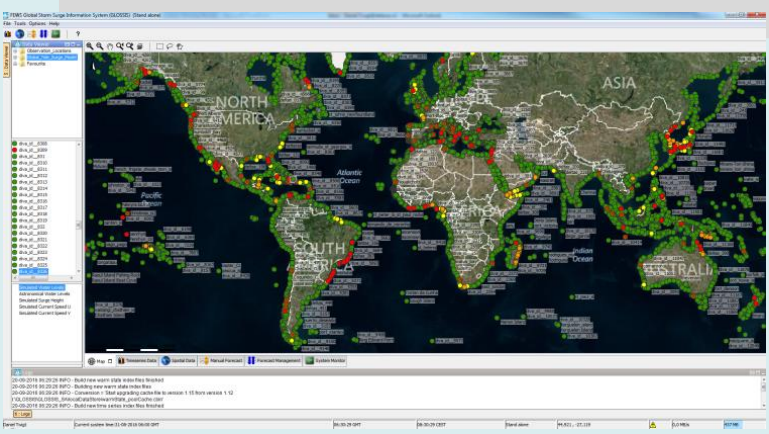




# Delft-FEWS applications running in iD-Lab

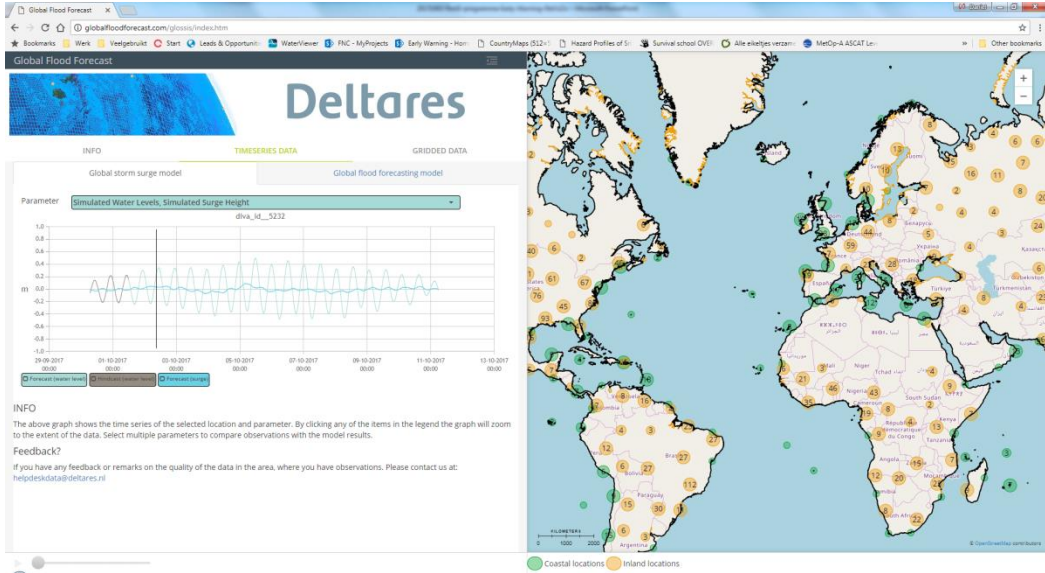


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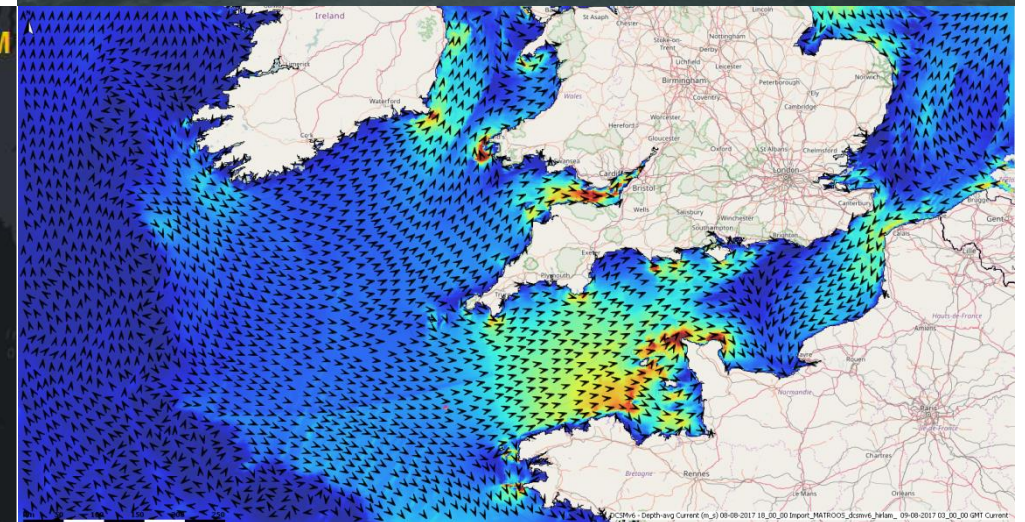
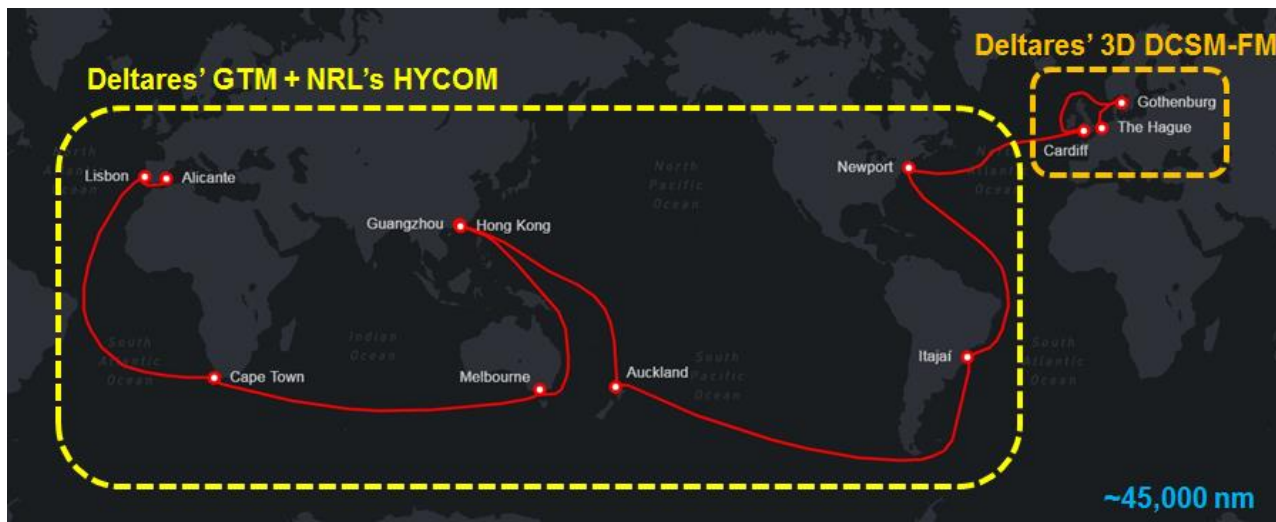
Delft-FEWS web service



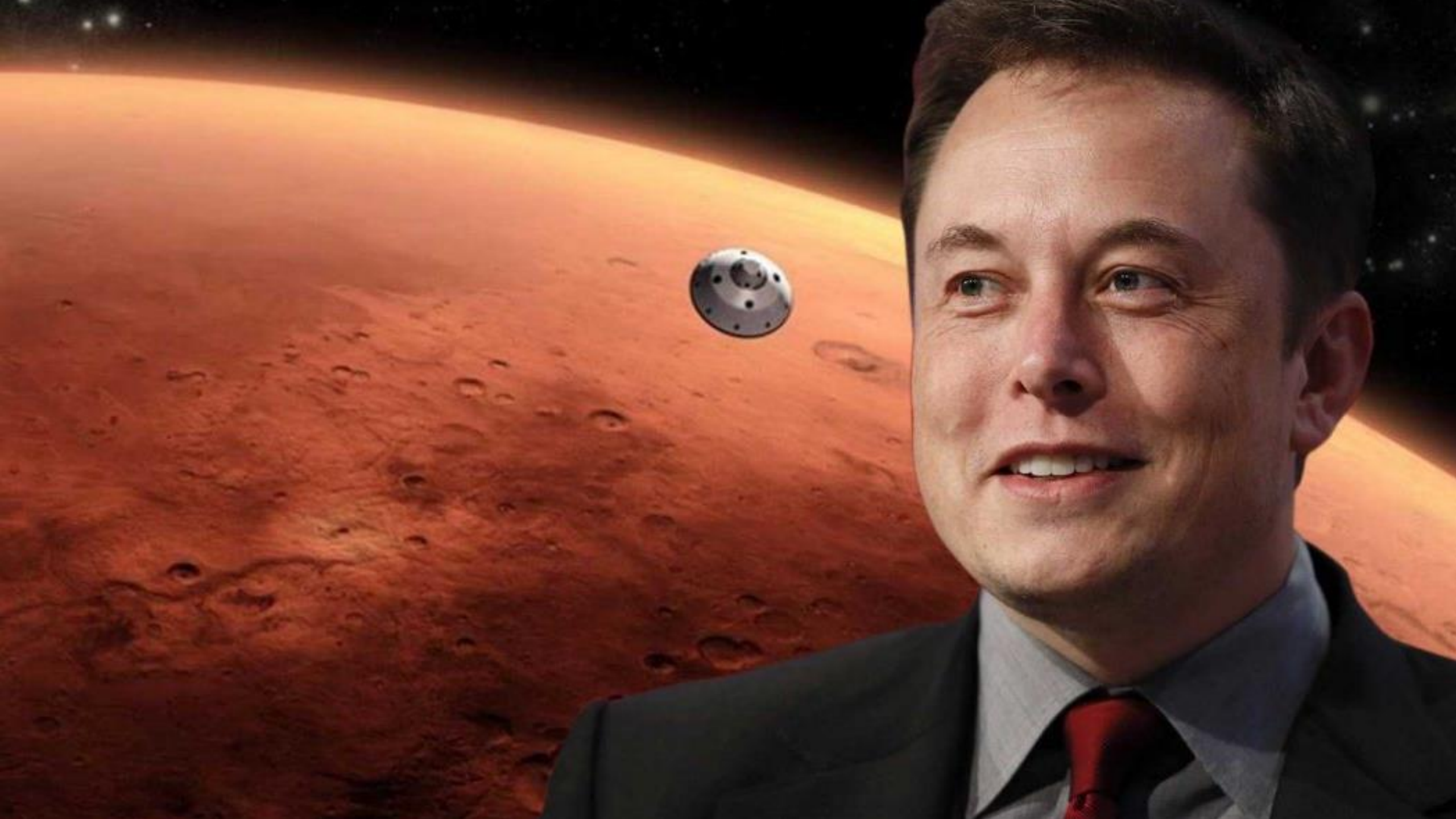


# Supporting team AkzoNobel

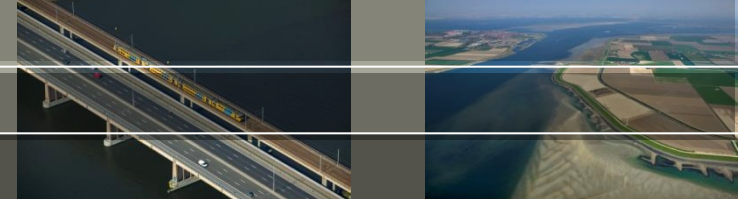
“Deltares have been instrumental in giving team AkzoNobel, an in depth and independent view of the currents and tidal models for the 2017-18 Volvo Ocean Race. This has allowed the Navigator and on shore weather team, to compare tidal patterns and also interpret how currents interact with wave height and sea conditions giving valuable strategic and tactical analysis in many difficult offshore racing scenarios.”





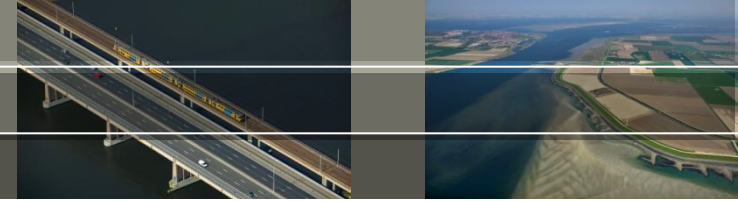


# Some key challenges



- How to provide continuity to services developed in projects?  
How to develop a sustainable business model for the continued maintenance and development of these services, while also maintaining our “dare to share” principle?
- How to deal with service levels which go beyond what Deltares can offer?
- How to best provide added value to local and regional flood services developed by others, instead of competing with them?





- Biedt Deltares [data] services meerwaarde voor jullie of voor anderen?
- Hoe kunnen we jullie betrekken?
- Welk niveau van support is gewenst/acceptabel?
- Wat zijn voor jullie acceptabele betaalmodellen?
- Is Delft-FEWS voldoende uitgerust voor een toekomst waar meerdere partijen hydrologische verwachtingen en informatie services gaan leveren?





A satellite image of Earth from space, showing the eastern part of Africa, the Indian subcontinent, and Southeast Asia. The Indian Ocean is visible to the south and east. The text "Time for discussion!" is overlaid in the center.

# Time for discussion!

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