Radar rainfall nowcasting techniques for operational water management

An opportunity for your operational systems?

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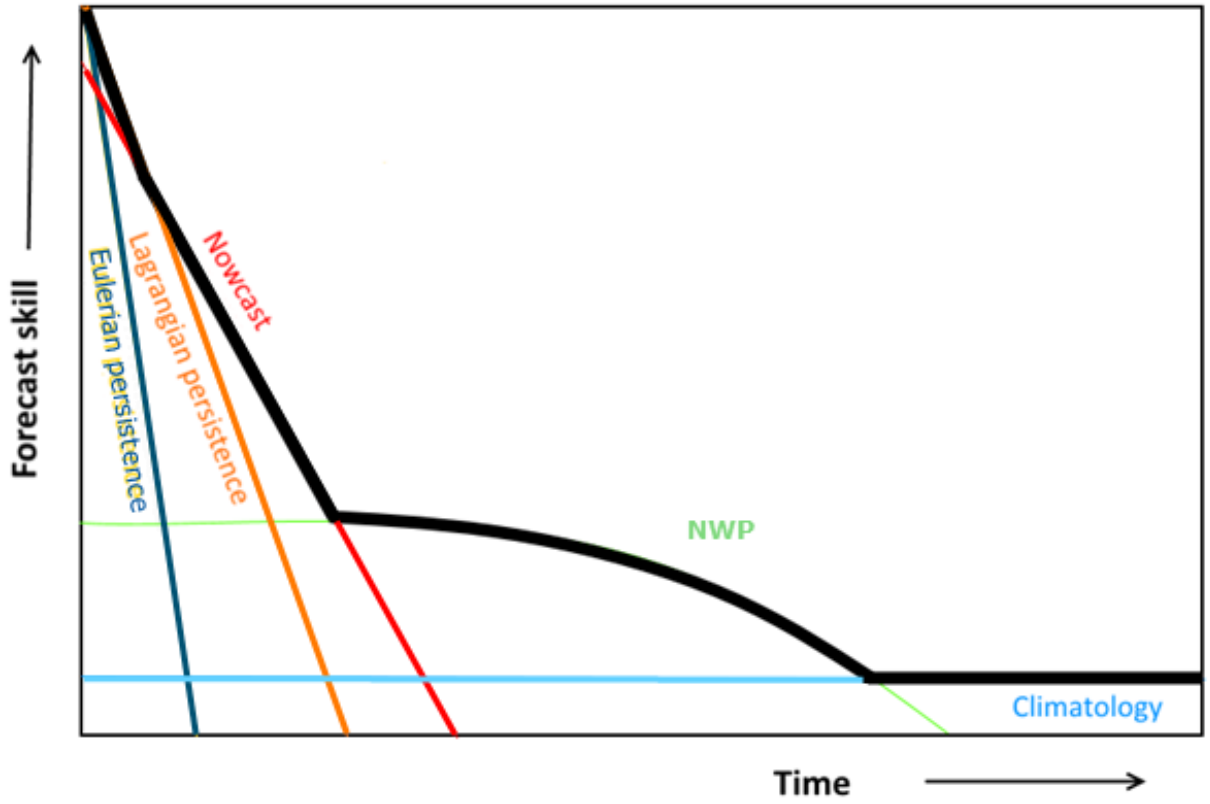
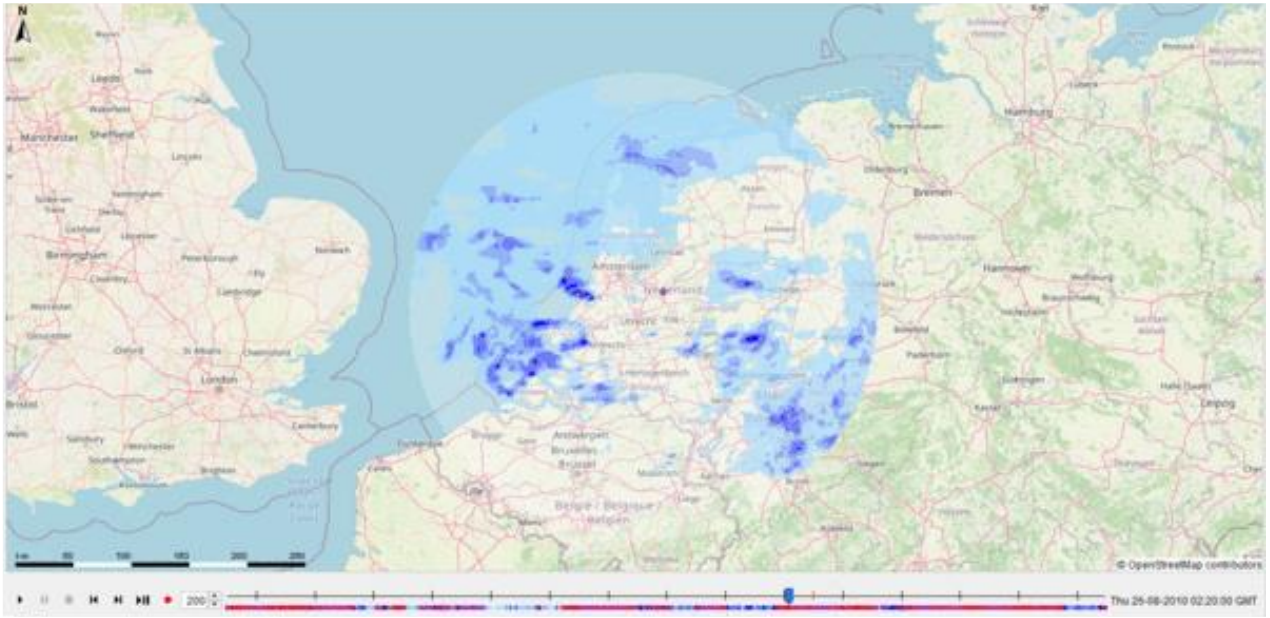
A short introduction to nowcasting

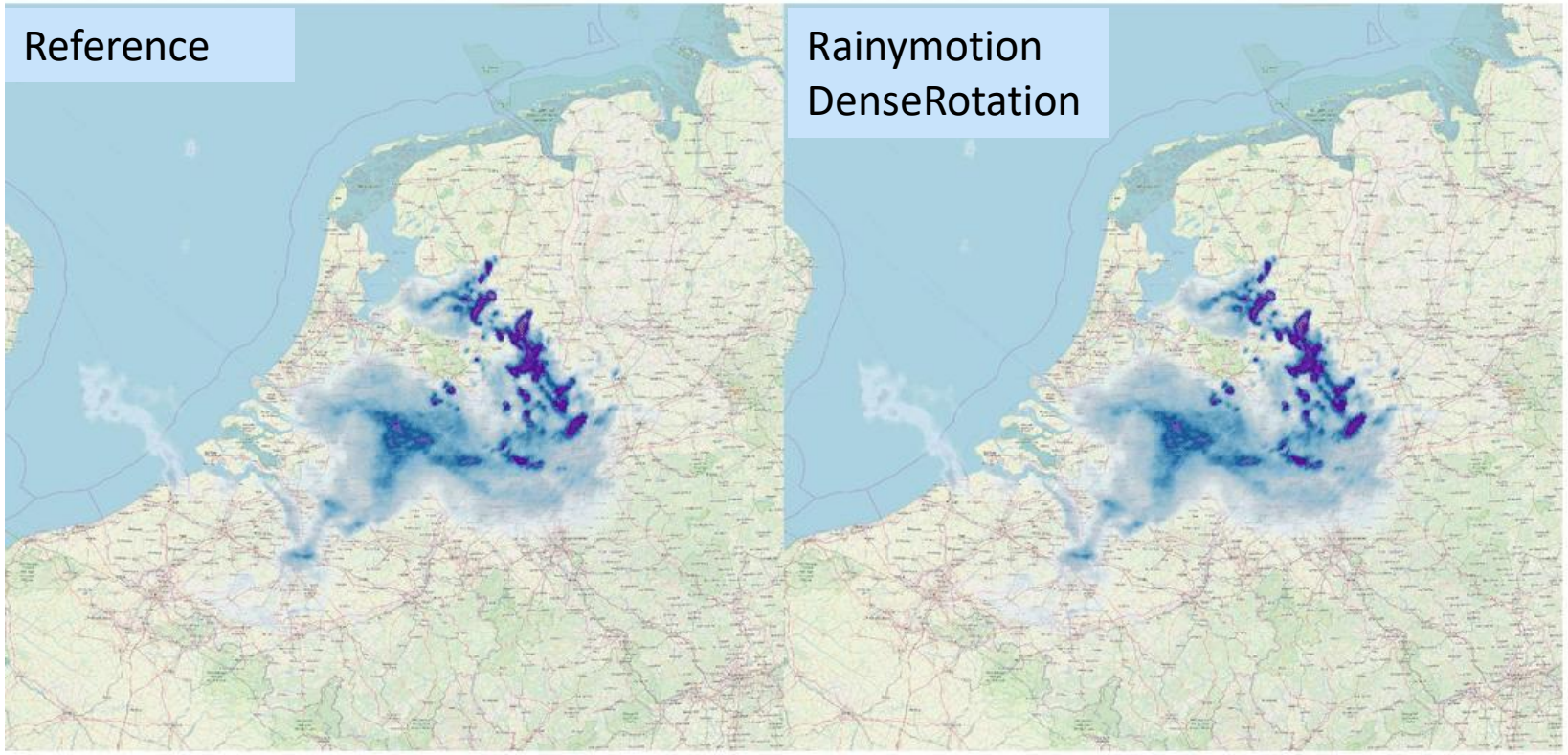




Aangepaste versie van : Germann et al., J. Atmos. Sc., 2006

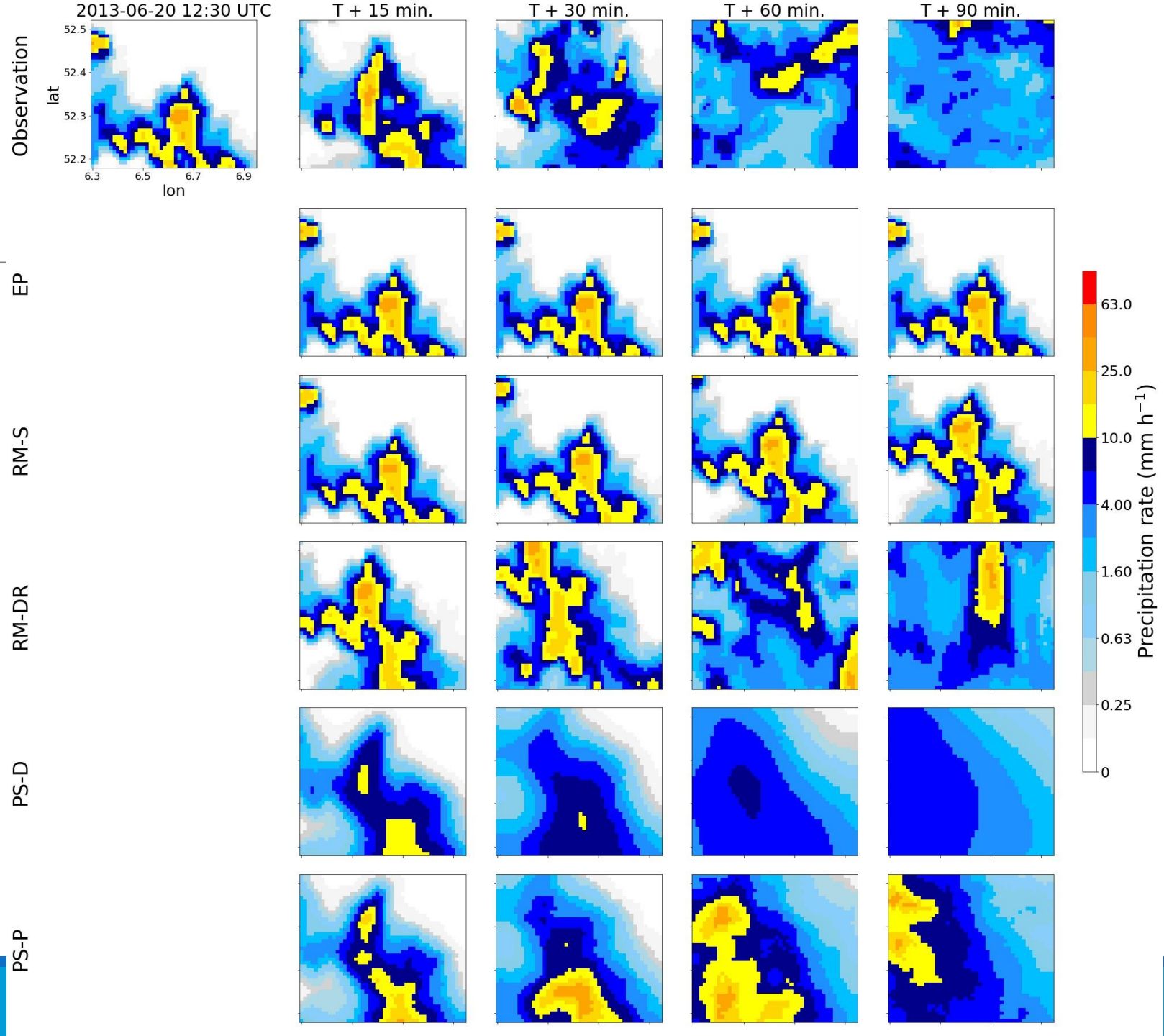
An example nowcast for the Netherlands

20 June 2013, 12:30 UTC +0 min



Zooming in on a catchment

Example for the area around catchment the Regge (957 km^2 - east of the Netherlands)



Some conclusions: *based on a large sample analysis of nowcasting techniques for 1,533 events*

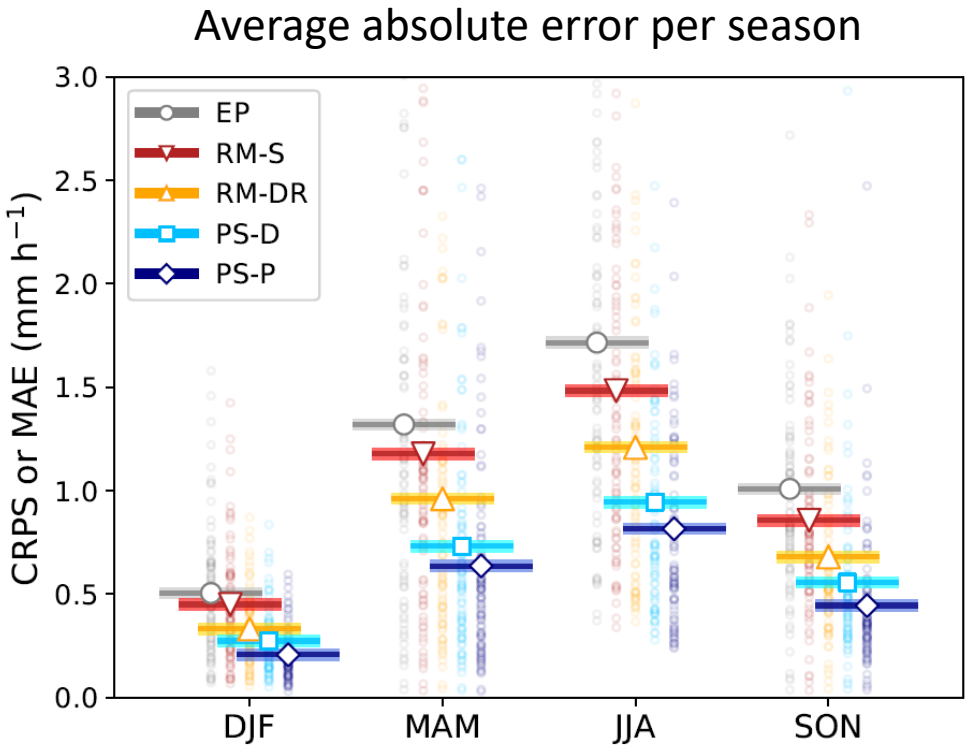
Skill was found to depend on:

1) **Event type and duration:** Increasing for longer events, skilfull lead times range from 25 min (1-h events) to 116 min (24-h)

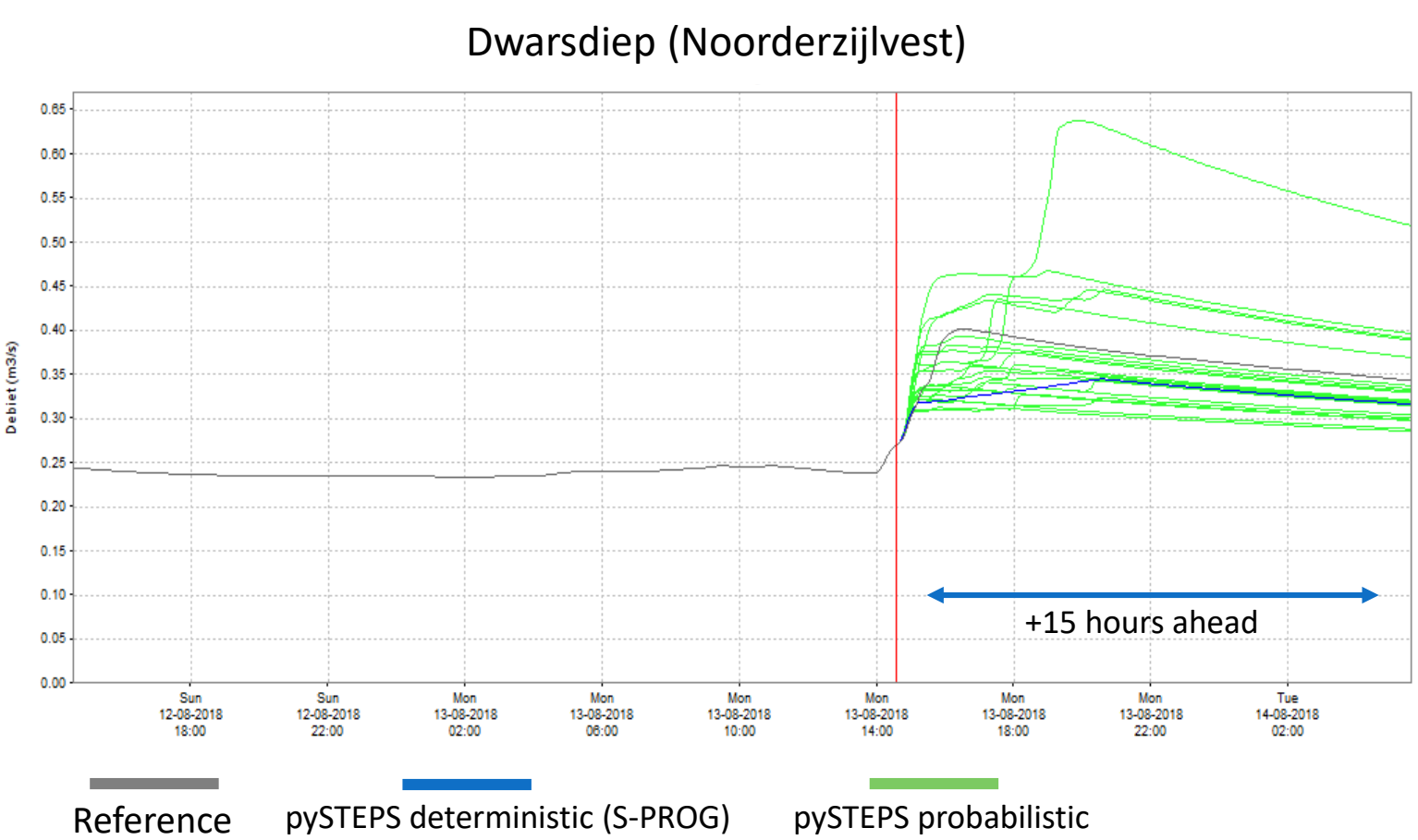
2) **Season**: Decreasing skill towards summer

3) **Location**: Increasing in the downwind direction

4) **Catchment size**: Increasing with larger catchment size



Current work: hydrological analysis of the 1533 events using Delft-FEWS



Do you want to know more?

Join the break-out session on radar rainfall estimation and nowcasting tools (today 17:05 – 18:00)!

- From reflectivity to rainfall rate
- Pre- and post-processing of radar images
- Nowcasting
- Usage in Delft-FEWS

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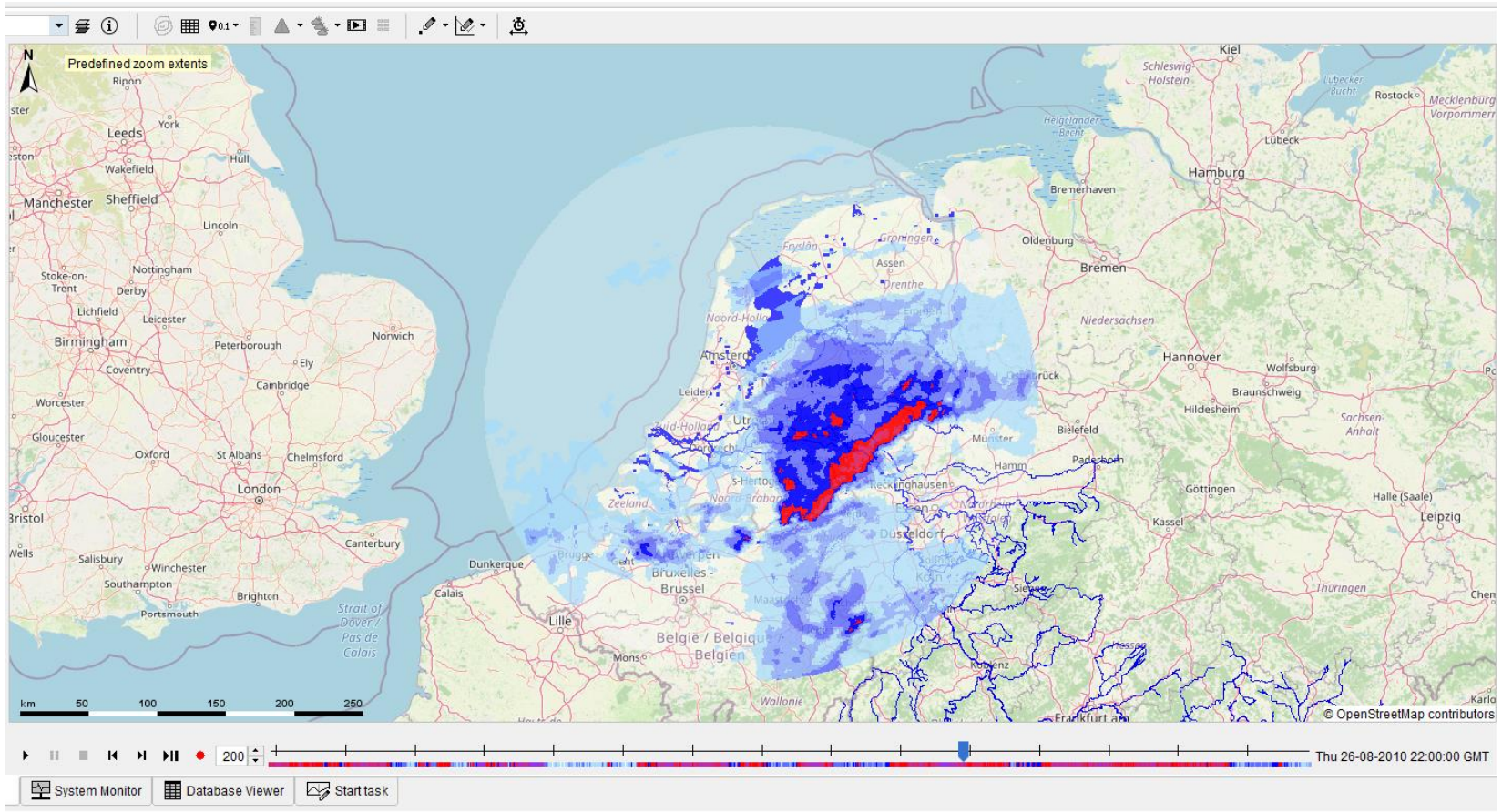

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