

An aerial photograph of a coastal region, likely a river delta or estuary, showing a complex network of water channels and green land. A semi-transparent grey box is overlaid on the left side of the image, containing text. The word 'HydroLogic' is written in a stylized font across the top right, with 'Hydro' in blue and 'Logic' in green.

HydroLogic

Inundatie analyse  
Werkpakket 3: scripts

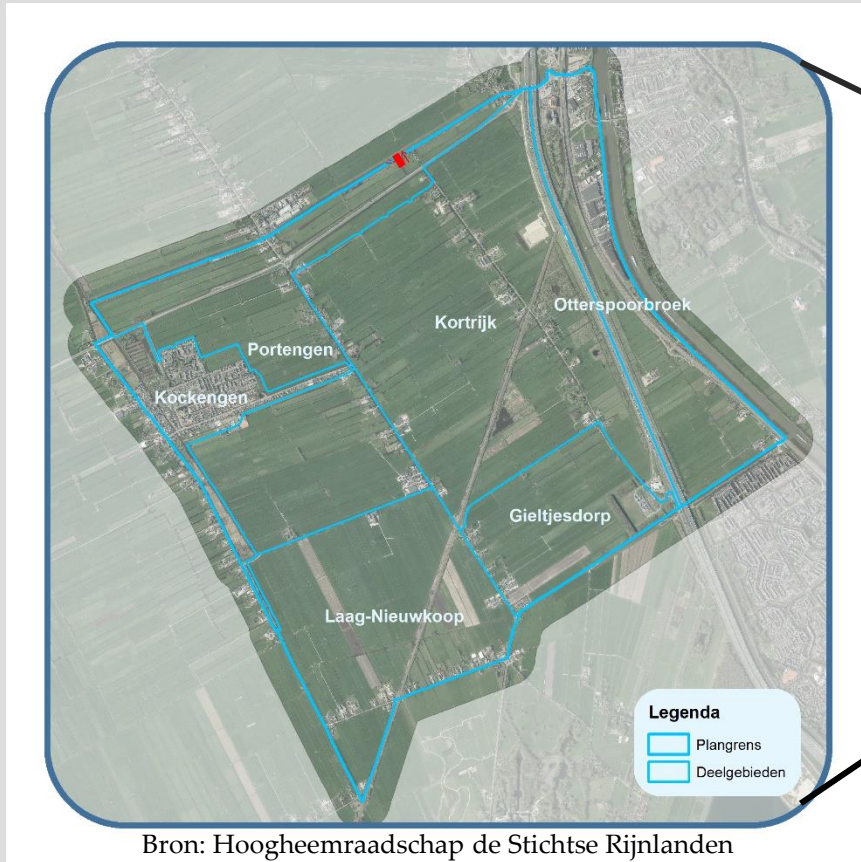
14-07-2022

# Inundatie analyse

- D-HYDRO simulatie
- Nabewerking
- Resultaten
- Vervolg



# D-HYDRO simulatie - Polder de Tol



# D-HYDRO simulatie

The screenshot displays the D-HYDRO Suite 2022.02 1D2D (2022.02) software interface. The main window shows a 2D hydraulic simulation map of a river network, overlaid on a satellite background. The map features a central river channel with a grid of computational cells and various hydraulic structures like bridges and weirs. The interface includes a top menu bar with File, Home, View, Tools, GIS, and Config. Below the menu is a toolbar with various simulation and editing tools. On the left, a Project tree shows the current project structure. On the right, a Map legend lists simulation parameters and their status. At the bottom, a Time Navigator shows the simulation time.

**Project1 - D-HYDRO Suite 2022.02 1D2D (2022.02)**

**Map Legend:**

- 1PT10
  - network
  - Computational 1D Grid
  - Roughness Data 1D
  - Initial Conditions 1D
  - Boundary Data 1D
  - Lateral Data 1D
  - Area
  - Unstructured Grid
  - Bed Level
  - Initial Water Level
  - Boundary Conditions
  - Boundaries
  - Estimated Grid-snapped
  - Roughness
  - Viscosity
  - Diffusivity
  - Infiltration
  - Sources and Sinks
  - 1D/2D links
  - Output 1D (map file)
  - Output 2D (map file)
  - Output (his)
  - Output (class map file)
  - Output (fou)
  - Open Street Map
  - Bing Aerial

**Time Navigator:** 01/01/0001 00:00:00

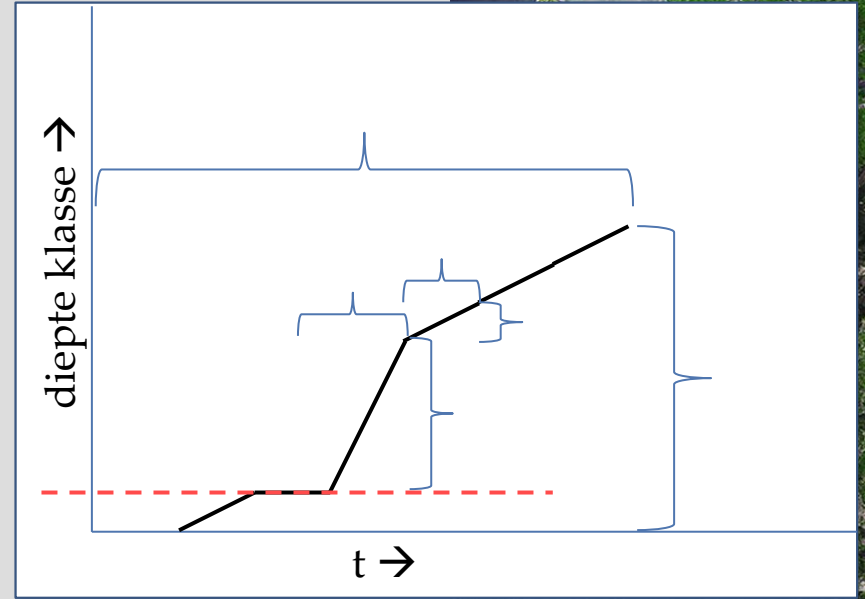
# D-HYDRO simulatie - output

Bestand	Frequentie	Variabele
_his.nc	2 minuten	dam break parameters
		structure parameters
_clm.nc	1 minuut	water depth (9 classes)
_map.nc	1 uur	water depth
		water level



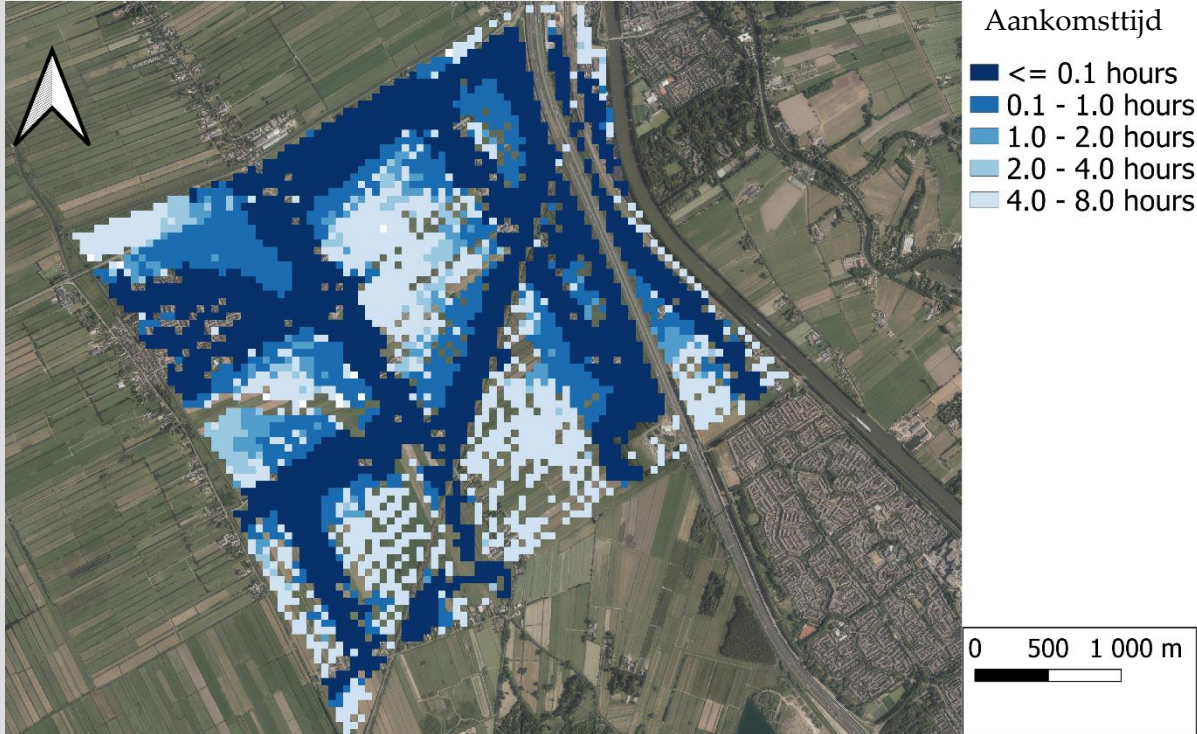
# Nabewerking

- Geautomatiseerde readers per bestand
- Aankomsttijd per cel
- Berekening stijgsnelheid  
→ tussen twee klassen met waterdiepten



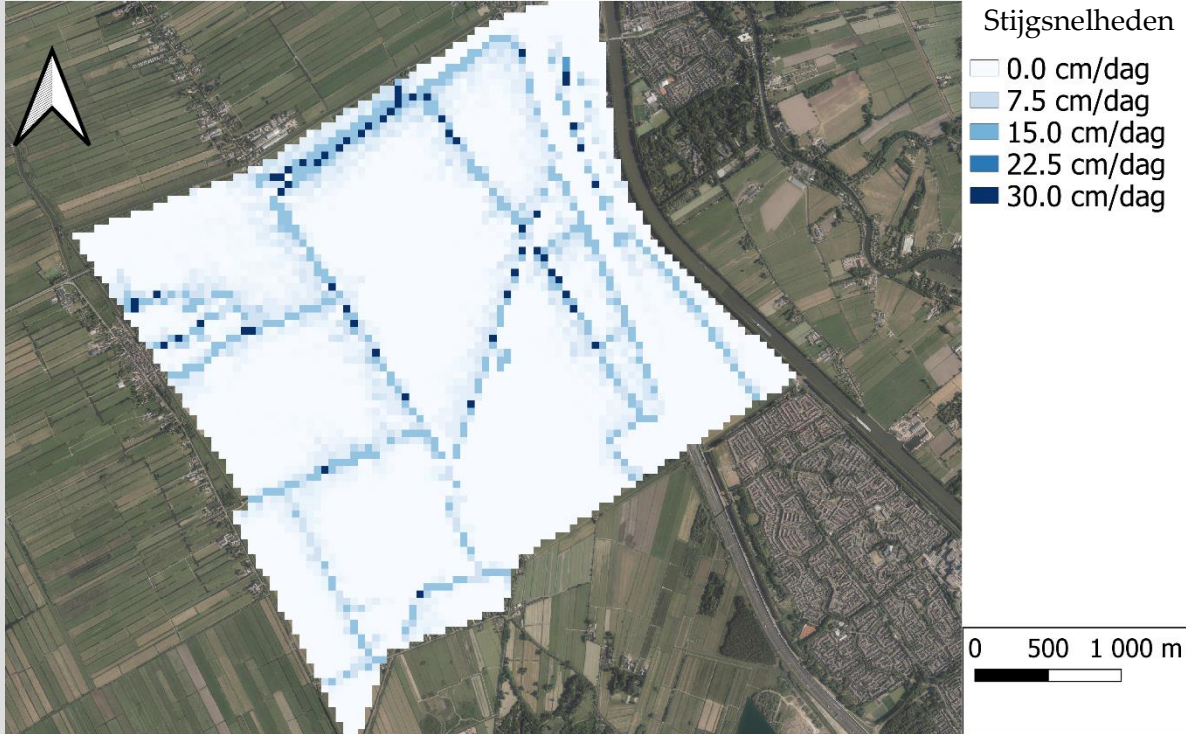
# Resultaten - Aankomsttijd

Aankomsttijd



# Resultaten - Maximale stijgsnelheid

Maximale stijgsnelheid  
tussen alle klassen





# Vervolg

- Aankomsttijd vanaf moment van doorbraak
- Metadata voor LDO
- HydroNET koppeling





HydroLogic

Vragen?

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