



Disaster Risk Reduction: Deltares strategies, concepts and tools

SCOPE

Extreme & high impact weather

Climate events

Hazards	Impacts
Storm	Inundation
Earthquake/ > landslides	Erosion
Drought	Damage
Heat	Water shortage
	Water quality
	Health

economic damage (cost/benefit)
personal safety (fatalities/injury)

AMBITION

Pan-european = context dependent
Multi-hazard platform { climate
weather
earthquake

- Faster & more accurate analysis
- Anticipation of risks
- Space & time specific
- Coordination
- Self preparedness

pro-active
improved effectiveness

Topics

- Operational emergency responders needs
- Co-ownership
- State of the art impact forecasting
- Integrate local sensors & information
- Pilot sites
- Market implementation (challenges/barriers)
- Self protection tools/technologies
- Social awareness

Deltares Activities

- Open source software
- OpenMI, OpenEarth
- Policy analysis
- Decision support tools
- Operational tools
- IT tools, big data
- Social media

List of interesting websites

Subject	Website
Deltares home	www.deltares.nl/en/
ANYWHERE-Project	www.anywhere-h2020.eu/
FP7 RISC-KIT	www.risckit.eu/np4/project_information.html
Operational flood management	
Deltares	www.deltares.nl/en/topdossiers/operational-flood-management/
ID-Lab	www.deltares.nl/en/facilities/ldlab-integrated-service-facility/
SWITCH-ON: Sharing Water-related Information to Tackle Changes in the Hydrosphere - for Operational Needs	http://v-web002.deltares.nl/sterktenoodmaatregelen
WIKI Flood Emergency Response Measures (Dutch only)	
Global flood and storm surge forecasting models	
GLOSSIS (GLObal Storm Surge Information System)	www.deltares.nl/en/projects/global-storm-surge-information-system-glossis/
GLOFFIS (GLObal Flood Forecasting Information System)	www.deltares.nl/en/issues/global-data-tools-flood-risk-assessment/
GLOFRIS (Global Flood Risk with IMAGE Scenarios)	www.deltares.nl/en/news/quick-model-assess-current-future-global-river-flood-risk/

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Global flood and storm surge forecasting models	
Critical infrastructure Impact Assessment CIPRNET	www.ciprnet.eu
Circle (Critical Infrastructures: Relations and Consequences for Life and Environment)	www.deltares.nl/en/software/circle-critical-infrastructures-relations-and-consequences-for-life-and-environment-2/
Planning kit for the Dutch large rivers	
Levee Patroller	www.deltares.nl/en/software/levee-patroller/
RASOR (Rapid Analysis and Spatialisation Of Risk)	www.rasor-project.eu/
LIWO (Landelijk Informatiesysteem Waterkwaliteit en Overstromingen)	www.helpdeskwater.nl/secundaire-navigatie/english/
DAM-live (Dike strength Analysis Module)	www.deltares.nl/en/software/dam-dike-strength-analysis-module/
WIKI Noodmaatregelen (Dutch only)	
Deltares software	
Climate app	www.deltares.nl/en/software/climate-app/
	www.climateapp.nl/