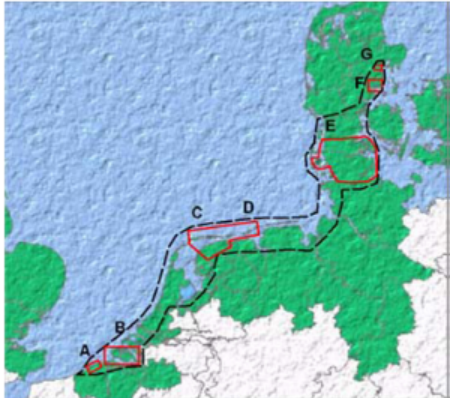


# CLIWAT project effect climate change on water quantity and quality

## CLIWAT: CLimate change in relation to WATer quantity and quality

|                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>The Interreg IVB<br/>North Sea Region<br/>Programme</b></p> <p><i>Investing in the future by working together<br/>for a sustainable and competitive region</i></p> | <p>CLIWAT is a transnational project in the North Sea Region with the main objective to evaluate the physical and chemical impacts of climate change on groundwater and surface water systems, and to provide data for adaptive sustainable water management and infrastructure. Seventeen institutes from Denmark, Germany, The Netherlands and Belgium work together in this project.</p> |
|                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                           |



Movie about the Sense of Urgency:

[short \(4min9sec\)](#)

[long \(13min30sec\)](#)

In this Interreg IV-B project, Deltares focusses on the topic of salt water intrusion. Tools and methods are presented that are used in the research to increase our knowledge of the present physical system in the coastal water system (via monitoring) and to assess the future changes (via modelling).

[CLIWAT Handbook](#)

Harbo, M.S., Pedersen, J. Johnsen, R. and Petersen, K. 2012. (Eds) *The CLIWAT handbook: Groundwater in a future climate*, [www.cliwat.eu](http://www.cliwat.eu). 184 p.

### Newsletters:

[Cliwat Newsletter March 2009](#): a.o. on mapping the salt-freshwater interface

[Cliwat Newsletter April 2010](#): a.o. on salt water intrusion in coastal aquifers

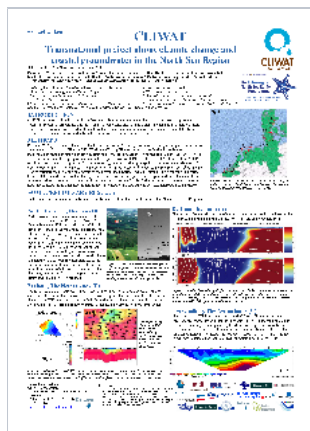
### SWIM21 contribution

Airborne Geophysics: a powerful tool to start up fresh groundwater management in the coastal zone

**Poster:** [poster](#)

**Abstract:** [abstract](#)

**Authors:** Gualbert Oude Essink, Perry De Louw, and many others!



[CLIWAT website](#)