



# Sweden country update

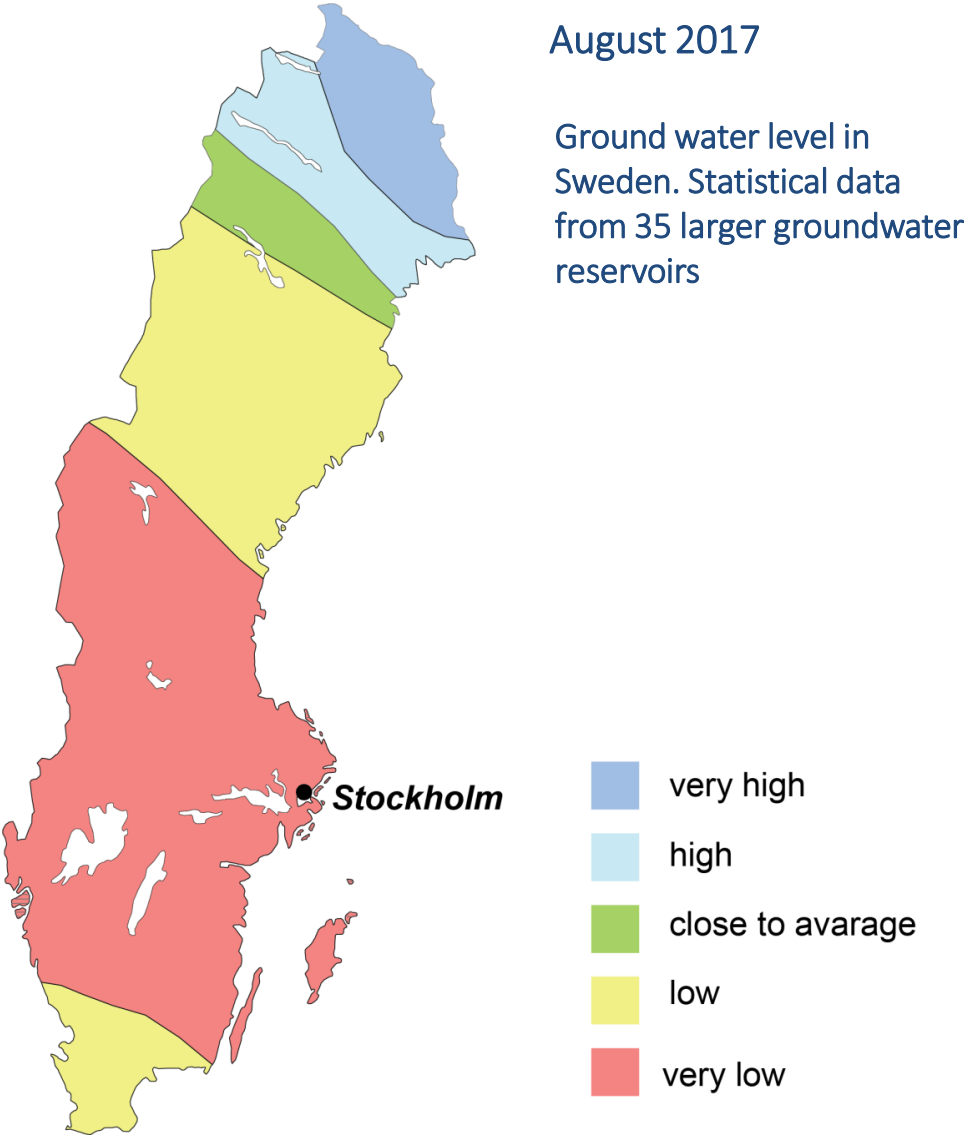
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# Ground water shortage in Sweden

Very low ground water levels have been recorded in Sweden in the recent years. In 2017 and 2018 there was an extreme situation with record-low groundwater levels in Southeastern Sweden and on the islands of Öland and Gotland, which may lead to a severe shortage of drinking water.



## Airborne transient electromagnetic surveys (ATEM)

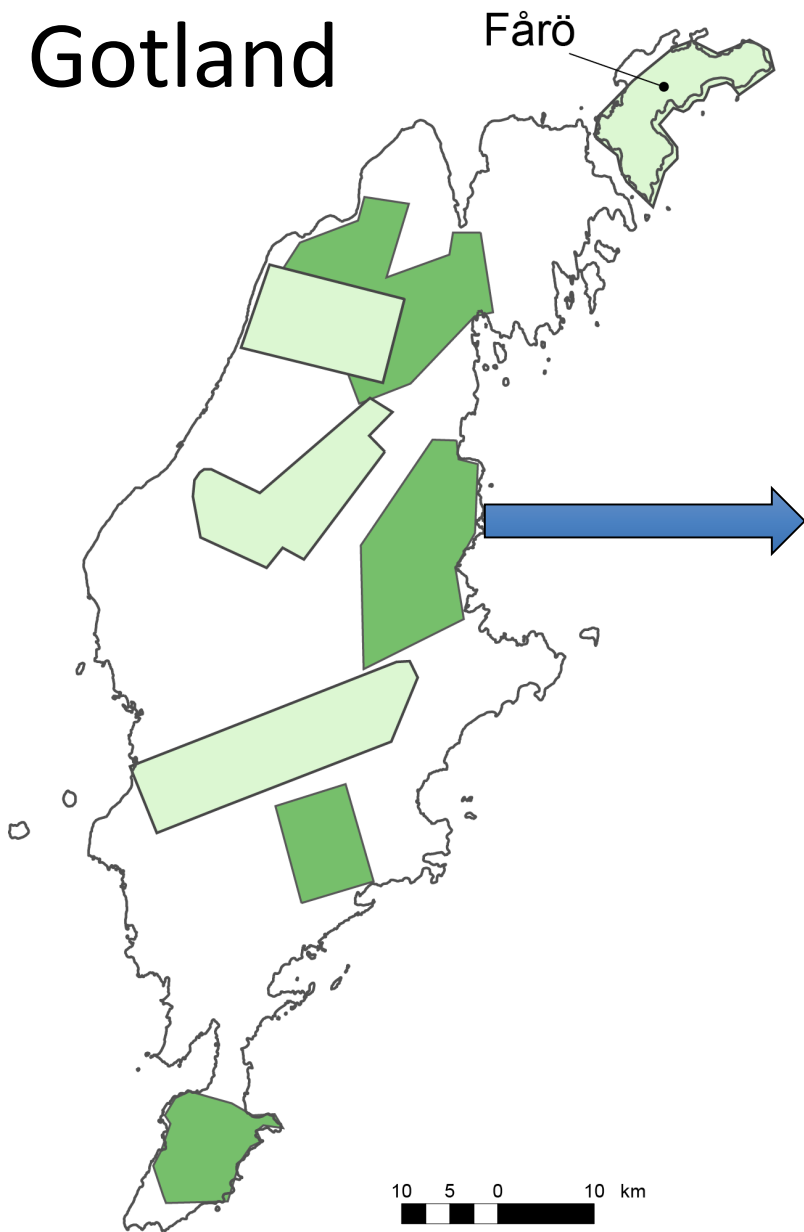
The Geological Survey of Sweden (SGU) has conducted intensive hydrogeological investigations in the recent years. They include several campaigns of airborne transient electromagnetic surveys (ATEM) in the southern part of Sweden and on the islands of Gotland and Öland situated in the Baltic Sea.



The aim of the investigations is to find new groundwater resources and in addition, identify the depth to saline groundwater in the investigated areas.

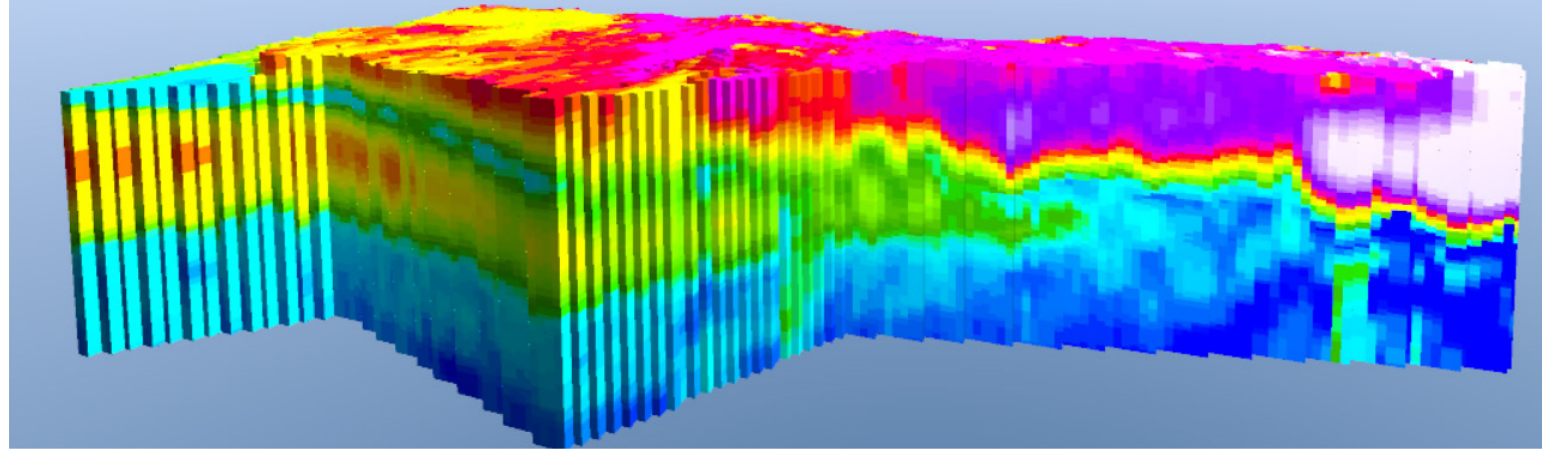


# Gotland

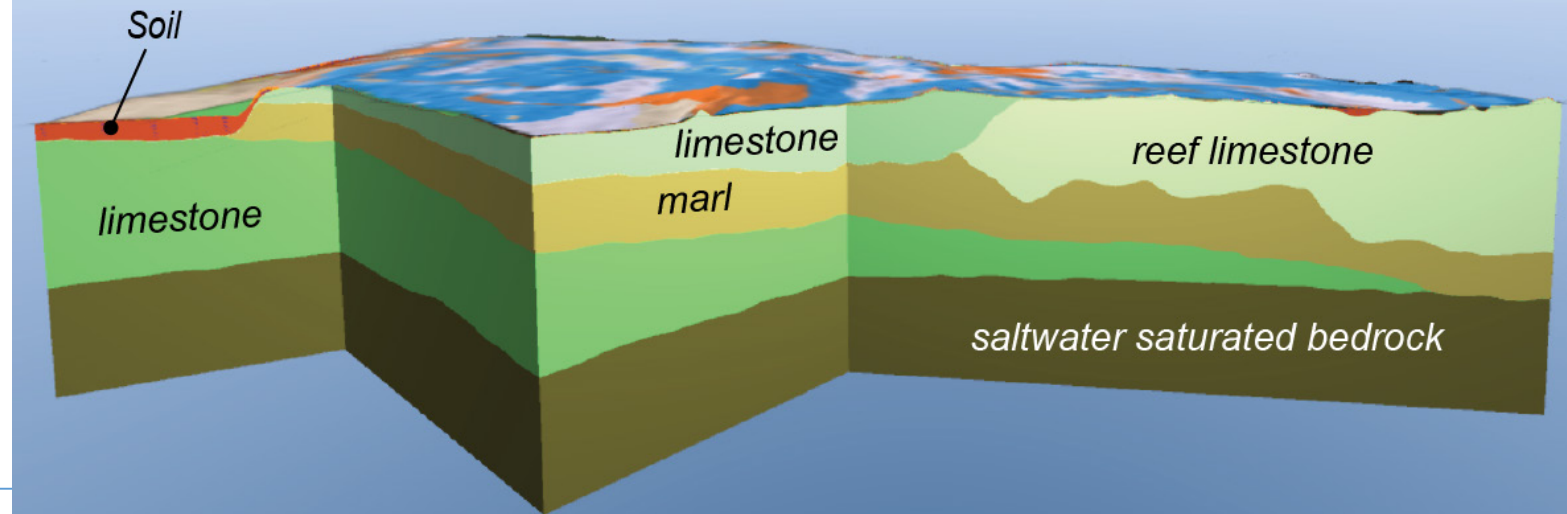


Fårö

## 3D resistivity model



## 3D geological model



# Co-operation with other surveys:

## GEUS:

- Processing and interpretation of ATEM data
- Nordic co-operation on testing of central database to store 3D geological models

## GTK:

- Modelling of ground water in eskers

## BGS:

- Modelling of ground water in eskers
- Further development of BGS Groundhog desktop GIS software for modelling of ground water resources including ability of Groundhog to calculate realistic 3D geological models from inputs
- Framework for storage and indexing of the models at SGU.



# Development of 3D visualisation

- Groundhog web
- Geovisionary
- Cityplanner web
- Cityplanner VR using HTC-VIVE and Oculus Rift
- New 3D room

