



INSTITUTIONAL SETTING AND PURPOSE

The Norwegian Water Resources and Energy Directorate (NVE) under the Ministry of Petroleum and Energy is in charge of groundwater monitoring in Norway, especially regarding groundwater levels and temperature. The main objective of the NVE is to ensure an integrated and environmentally sound management of the country's water systems, promote efficient energy markets and cost-effective energy systems, and contribute to efficient energy use.

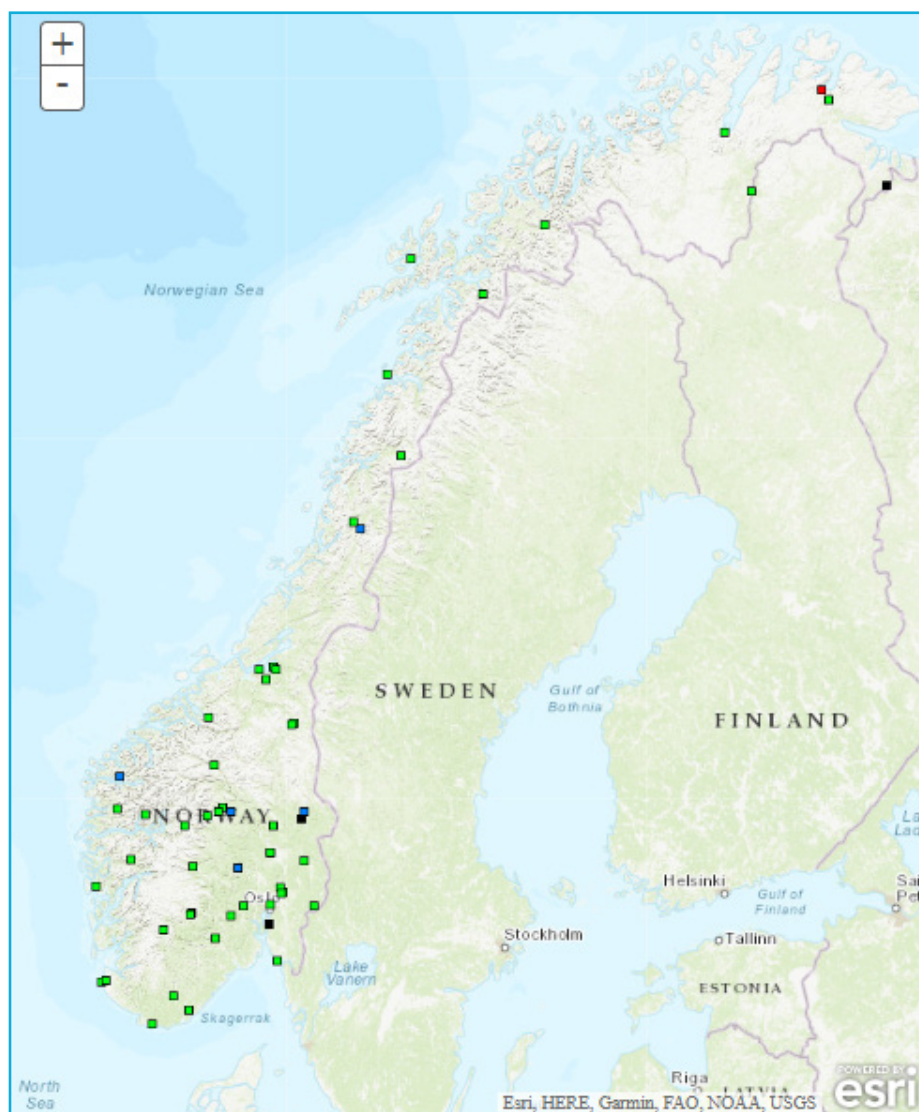
Groundwater monitoring system operated by the NVE is used to monitor hydrological conditions including flooding, to analyse water resources changes related to climate change and to implement the EU Water Framework Directive as well as provide flooding and landslide warnings.

CHARACTERISTICS OF THE NETWORK

The network has about 80 stations, some of them are depicted in Figure 1. All groundwater stations operated by the NVE are part of the National Groundwater Network (LGN), a collaboration with the Norwegian Geological Survey (NGU). NGU is responsible for mapping groundwater resources and recording the chemical state of the groundwater.

Figure 1 - Groundwater Monitoring Network of Norway. Source: NVE website*

- * Green = updated last week
- Blue = updated last 60 days
- Red = data older than last 60 days
- Gray = not updated



PROCESSING AND DISSEMINATION

Groundwater level data are analysed through median, 25% and 75% percentile and presented as a time series graph, Figure 2. The hydrological real-time data graphs show all measurements obtained in the displayed time period.

Hence it is possible to compare the current levels with the values on the same day in previous years, the reference period is from 1984 till 2002. In the portal, there is an option to download the data in textual or spreadsheet format for the last two years.

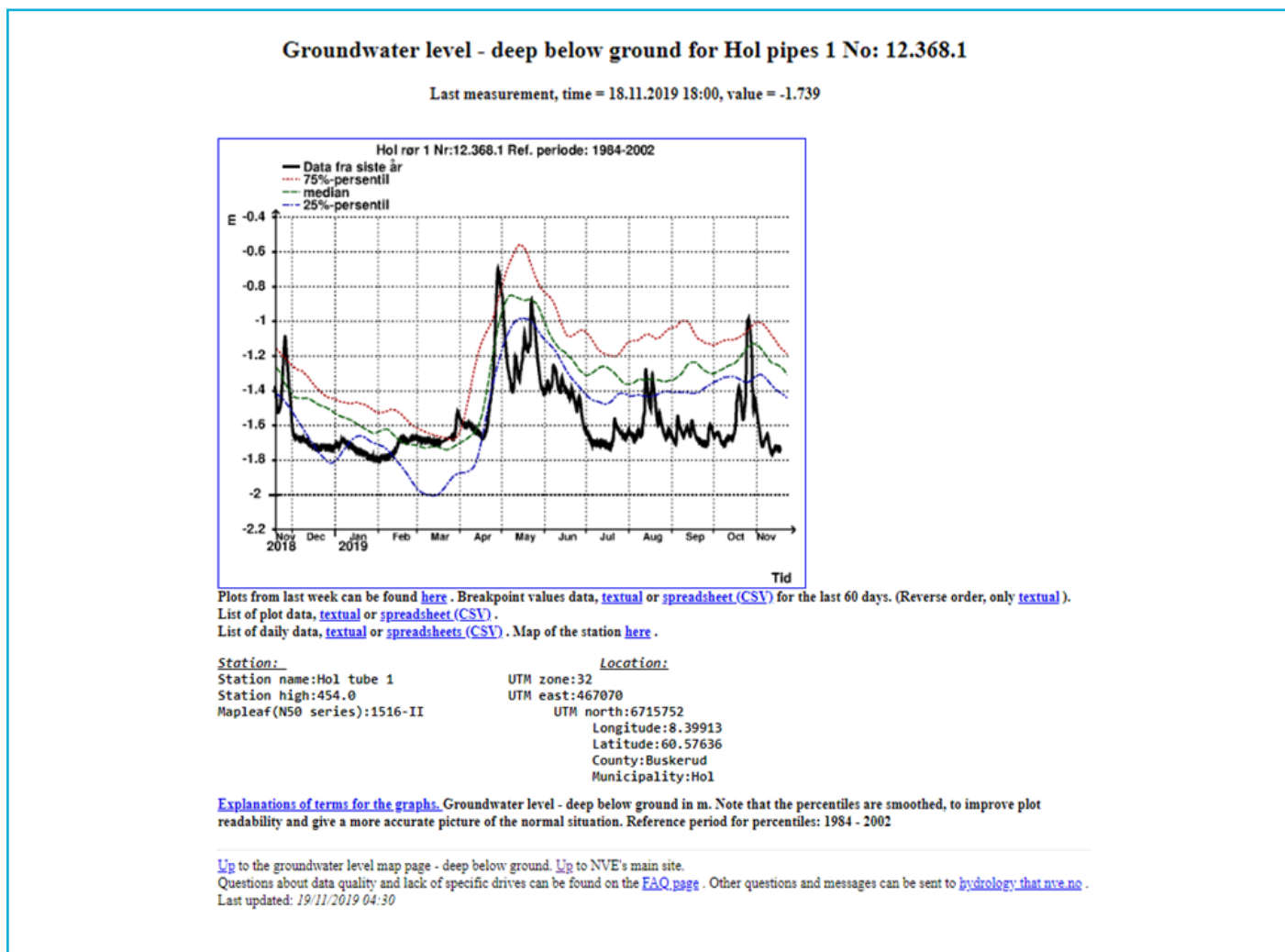


Figure 2 - Groundwater level data viewer. Source: NVE website

Sources

- **Feedback from the Norwegian Water Resources and Energy Directorate (NVE)** - received on 07-10-2020;
- **Groundwater level monitoring stations, deep wells** - <http://www2.nve.no/h/hd/plotreal/GRW/index.html>;
- **The Norwegian Water Resources and Energy Directorate (NVE), ground and groundwater** - <https://www.nve.no/hydrologi/grunn-og-markvann/?ref=mainmenu>; and
- **Geological Survey of Norway, Map viewers** - https://www.ngu.no/emne/kartinnsyn?field_temagruppe_tid=2358.