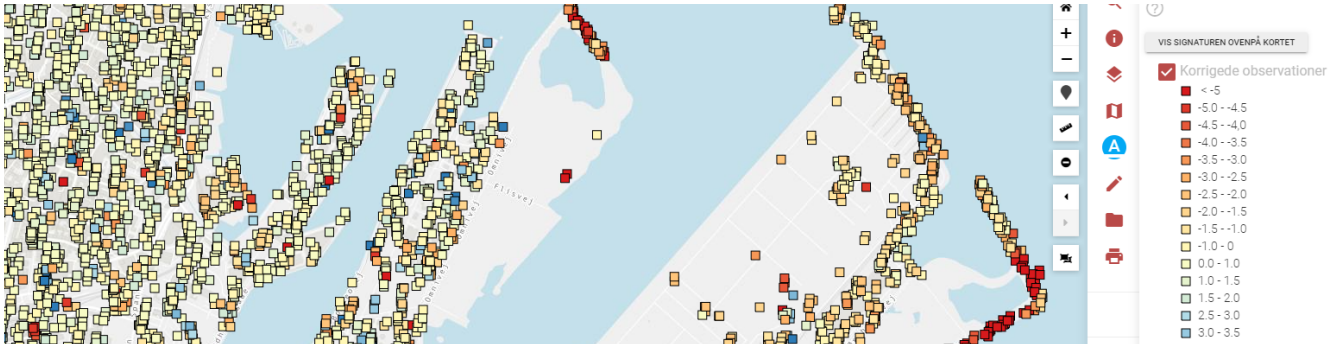
Map Ground motion

Map GM – Watch the progress of ground motion in Denmark

Access important new knowledge that can help you to assure your operations and construction projects, while protecting your investment.



The benefits of Map GM

- Easy to interpret maps that provide you with valuable knowledge about local ground motion
- Acquire a decision-making basis to assure your operations and construction projects
  - View external factors that are affecting pipe and supply lines
  - View areas where there is a risk of damage due to subsidence: building, roads and railways
- Data-driven decision-making basis for use in initiatives such as climate adaption.

Ground motion can be so extensive in some areas that it can be measured in centimetres per year. Ground motion can therefore be of great significance, such as when planning long-term coastal climate adaptation measures or operations/construction projects with a long service life, such as harbours, pipelines and other infrastructures.

Map GM's data and mapping of land uplift and subsidence provides you with important information about the dynamics of the landscape and keeps you informed about local ground motion right where you need to construct, maintain or build.

What can the data and Map GM be used for?

Information about ground motion can be used, for example, to indicate critical sections of road or railway, or to find out which buildings are at risk of subsidence. It can also be used alongside data about factors such as geology, sea level, storm surge statistics and groundwater to simulate and forecast potential future flooding scenarios. All Map GM products will therefore also be available as an add-on to the GeoAtlas Live data sharing portal, which contains drilling data and 3D models of Denmark's subsoil.

Information about ground motion is a necessary element of any robust data-driven decision-making basis with regard to, for example, climate adaptation measures, building and construction investments and investments in pipeline networks.

Satellites and radar reflectors are used to create the data

The data comes from repeat pass satellite recordings and reflections from radar targets located on land. Advanced calculation methods are used to convert the measurements into a time series of national, regional and local ground deformaition.

View and use data

Map GM gives you the ability to see local ground motion, which can help reduce your costs for precision levelling and similar surveying services. You are able to access data, both in its raw form, and as a grid, converted to average values.

Facts

- Access to calibrated, quality-controlled information about the vertical surface movement
- Access to raw satellite relative motion calculations (LOS data)
- This includes a map showing land uplift/subsidence rate and any changes
- Fully functional access to Geo-Atlas Live via add-on (requires a separate Map GM licence)
- All products are displayed as web services (WMS/WFS) for integration in your own CAD or GIS solution
- Annual calculations update. Option to purchase more frequent updates

Map GM is a result of the collaboration between Geopartner Landinspektører A/S, the engineering company Geo and DTU Space, with Klimatorium in Lemvig as strategic partner. The project is supported by ESA, the European Space Agency.

WOULD YOU LIKE TO FIND OUT MORE?
Lars Klindt Mogensen **+45 28 58 16 60** or **lkm@geopartner.dk**
Rasmus Hjorth **+45 42 72 99 32** eller **rha@geopartner.dk**
geopartner-inspections.com

ISO 9001 Management System Certification BUREAU VERITAS Certification

GEOPARTNER INSPECTIONS

ver 30.01.2023