

Ground-based GNSS data. Access and processing.

- **The NMA uploads hourly 30 s files to DMI shortly after the full hour. The files are available with a very small delay.**
- **The Danish GNSS data are processed by ROB and NGA**
- **The Danish GNSS data currently come from one source, the national Danish mapping agency.**
- **Potentially data from private networks are available, but currently there is no agreement on access to those data.**
- **There's a potential for more data from Greenland, as DTU Space (technical university) has now faster access to more sites.**
- **These two potentials will be investigated during the next half year.**



GPSnet (green, names) + Trimble network (red, numbers)



- **O-B derivation and use of ZTDs in DMI NWP has been hibernating for a period, due to lack of good quality data from Scandinavia.**
- **The quality of ROBH and NGA1 ZTDs is good, according to UKMO Global model O-Bs.**
- **Derivation of error statistics against DMI models, followed by assimilation is now being set up (again).**
- **The main DMI operational NWP use 3DVar and has a cut-off of around 90 min.**
- **The DMI NWP-nowcasting system also use 3DVar and 90 min cut-off, but followed by assimilation (nudging) of some observations of importance to convective phenomena in the first part of the forecast. Currently cloud data from geostationary satellites and radar data from the Danish weather radar network. We speculate how to include much more of the most recent humidity information, which is primarily GNSS delay estimates.**
- **We are not certain the way forward is very short cut-off times for NWP-nowcasting.**