

## APPLICATION EXAMPLE: POSITIONING IN THE FOREST



- Finding historic landmarks with the help of the A07-NAV -

### Task

It is intended to evaluate the A07's positioning accuracy under non-ideal conditions. Therefore, historic landmarks should be found in a forest. The landmarks' coordinates have been already set on a digital map using a GIS software (shapefiles).



### What is needed



- Alberding A07 receiver (NAV mode)
- SIM card with mobile Internet contract
- L1 GNSS antenna
- Survey pole
- Notebook or tablet
- GIS software

- **L1 GNSS multi-constellation receiver** (GPS, GLONASS, Galileo, SBAS)
- The A07 represents a **low-cost alternative** to existing GNSS systems on the market providing accuracies of **~1m**
- Computation of a **DGNSS solution** also in the forest
- Working with the A07 is quick and comfortable due to the **wireless connection** (Bluetooth) and a **weight of 190g only**

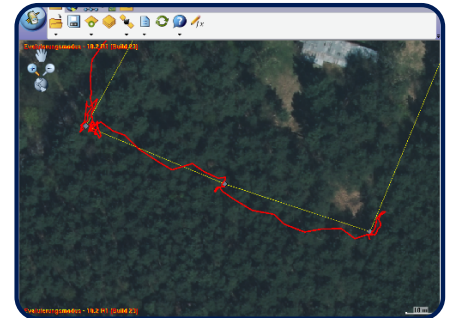
### Procedure

#### In advance

- Import shapefiles in your GIS software
- Configure the A07's basic settings via the configuration tool: data rate, filtering, server providing DGNSS reference data (e.g. Alberding Caster)

#### In the field

- Start A07-NAV and connect it to your notebook/ tablet via Bluetooth
- Wait until DGNSS quality is displayed in your GIS. Additionally, the A07's GNSS status LED indicates a DGNSS quality
- Start heading towards the landmarks on the digital map with the help of the displayed real-time position



### Results



With the help of the A07 and a proper GIS software historic landmarks can be found even under dense canopy. The A07 directly sends the DGNSS position to the GIS software in NMEA format. Additionally, the DGNSS track can be displayed in the GIS software (red track) or stored on the A07's internal SD card. Amongst others, the positioning accuracy depends on the canopy density and on the proximity to tree trunks (shadowing effects).

**A07 - Your low-cost and portable solution for positioning applications.  
Please, contact us!**