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National Report - Finland

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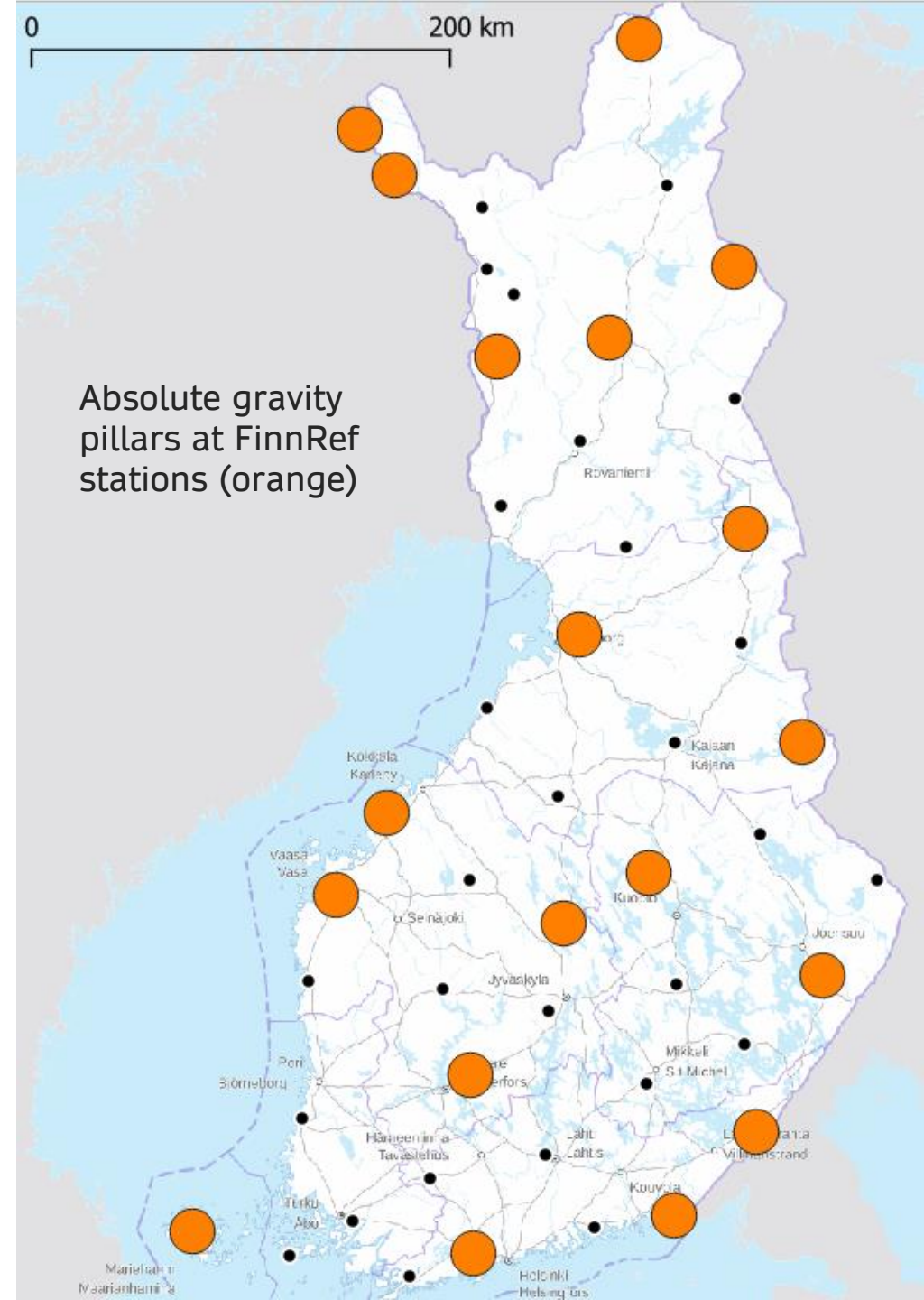
Metsähovi

- 30.8.2022 Official opening of Metsähovi (after renewal) by the Minister of Agriculture and Forestry Antti Kurvinen
- New Metsähovi main building was taken into use
- Work on completing the SLR and VLBI continues



FinnRef: Backbone of Finnish reference systems

- Finnish [Geodesy strategy](#) 2017-2026: FinnRef will be the backbone of the national coordinate, height and gravity reference systems
- **Precise levelled N2000 (EVRIS) heights** for all (or most of the) stations by ~2025
 - Now 32/47
- **Centering measurements** (heights from the reserve markers to the GNSS antenna)
 - now 32/47
- **Repeated absolute gravity measurements**
 - 20/47 stations with AG pillar
 - Measured every 3 years



Levelling 2022

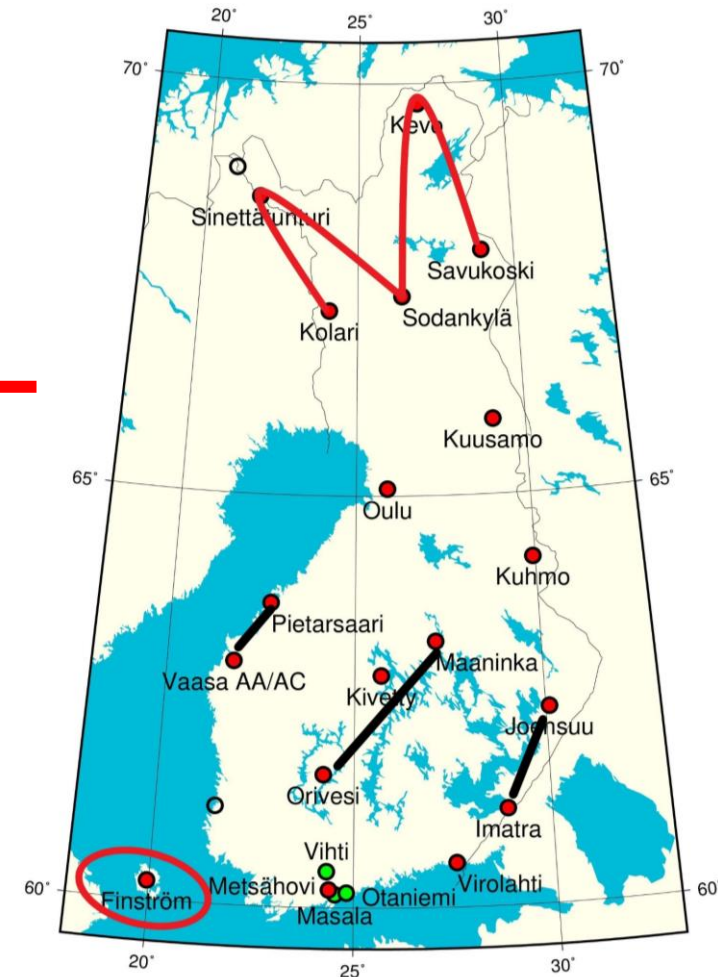
- Levelling to the tide gauges (every 3 years) ▲
- Connection of FinnRef station to the precise levelling network ▲
 - MIK3 (Mikkeli)
 - ROM2 (Romuvaara)
 - RAAS (Raasepori)
 - OUL2 (Oulu)
 - TUO2 (Tuorla)
 - OLK2 (Olkiluoto)
- Rod and levelling system calibration laboratory moved to new laboratory space in Otaniemi

Total 112.6 km (double run)



Gravimetry

- Absolute Gravity
 - 2022: 6 stations: Lapland + Finnström — NKG CAG 2022 – AG comparison
 - 2023: 7 stations: Central Finland — CCM.G-K2.2023 - ICAG
- Otaniemi – (Masala –) Vihti calibration line for relative gravimeters
 - 2022: AG & RG: Masala – Otaniemi – Vihti
RG Otaniemi tie & gradient
 - 2023: AG & RG: Otaniemi – Vihti
RG: Otaniemi tie & gradient



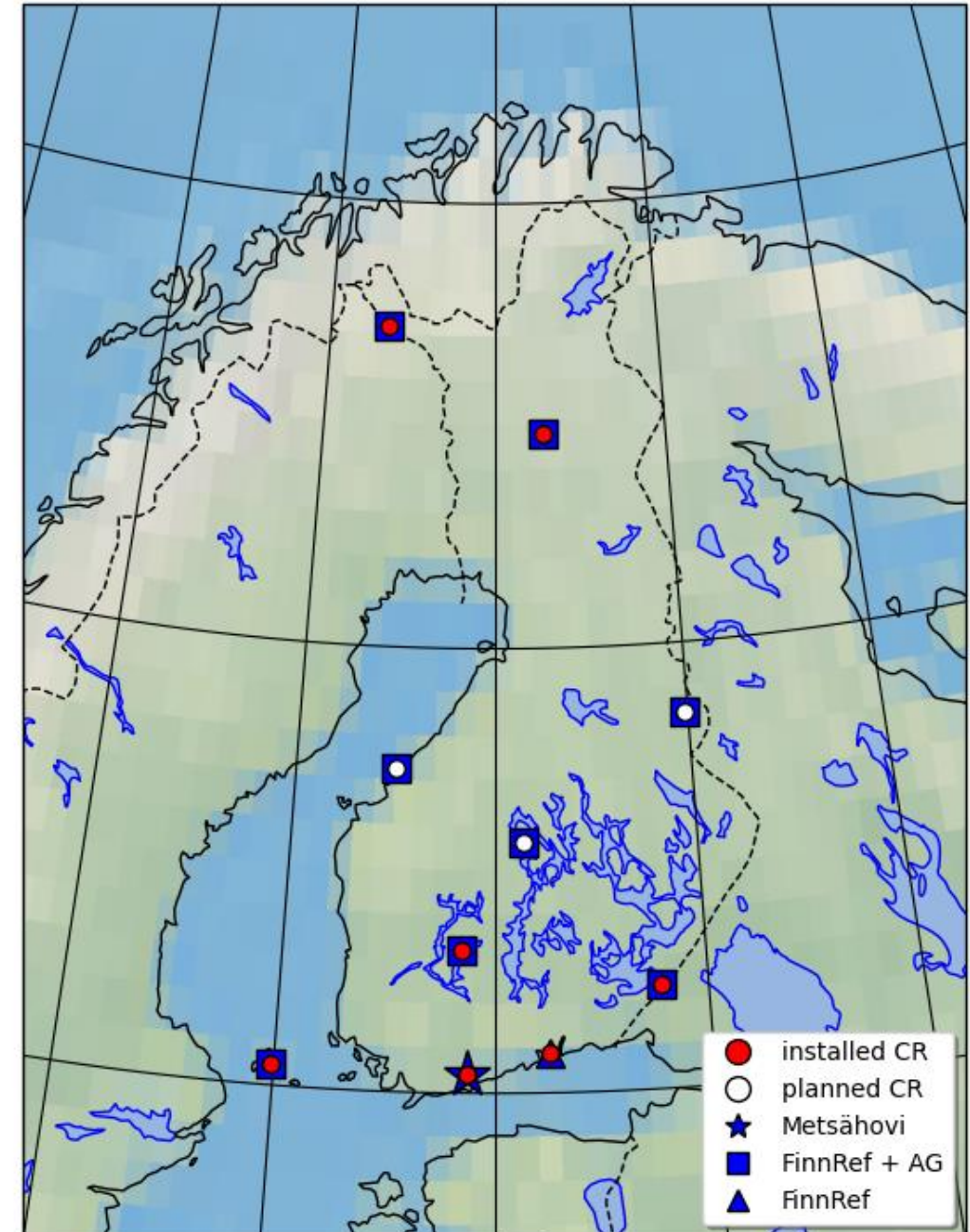
Geoid

- 2022-2023 GeoVaPaa project – Requirements of future geoid models for gravity data – *Funded by the ministry of Agriculture and Forestry*
- 2023: New geoid model fit to GNSS/levelling → New and better national height conversion surface
- 2022-2024 BalMarGrav project – Homogenized marine gravity maps of southern and eastern Baltic Sea for modern 3D applications in marine geodesy, geology and navigation
– *Co-funded by the European Union under the Interreg Baltic Sea Region Program*

SAR reflectors

- Installed
 - Sodankylä – Zarges
 - Sinettätunturi – MK3D
 - Imatra – MK3D
 - Orivesi – MK3D
 - Finnström – MK3D
 - Loviisa – Zarges
 - Metsähovi – Zarges
- Planned
 - Metsähovi – Zarges & MK3D
 - Kuhmo – Zarges
 - Pietarsaari – Zarges
 - Kivetty – Zarges

FGI SAR targets



Advancing together

