REPUBLIKA HRVATSKA
Državna geodetska uprava

DGU

NATIONAL REPORT OF CROATIA

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CROPOS

- 33 Croatian reference stations, 18 stations of neighbouring countries

1. EU Project (ERDF):

   Improvement of the CROPOS by connecting to Galileo (1.000.000 EUR)

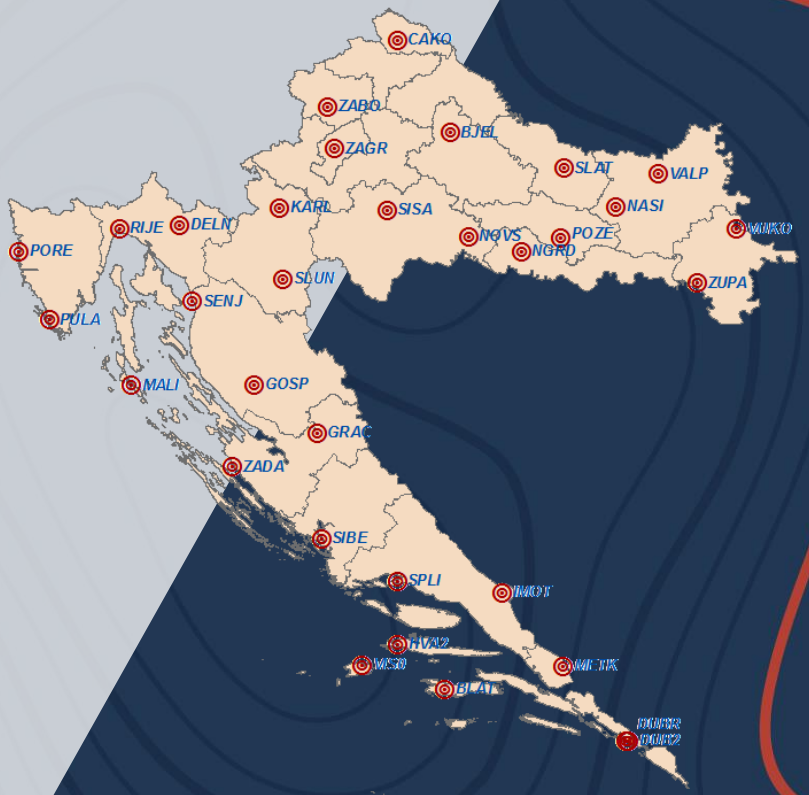
   ✓ 34 new receivers and antennas

   ✓ Control Center upgrade (software)

2. World Bank loan:

   ✓ New servers in the Control Center (full backup)

3. Reference stations coordinates analysis

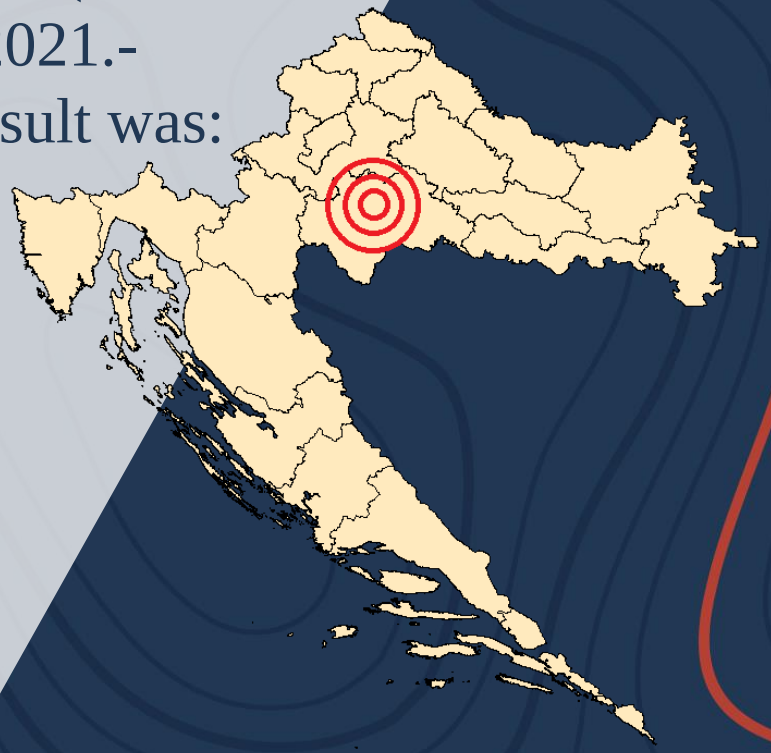


Earthquake

- 29th December 2020 – Magnitude 6,2 Richter scale (Central Croatia)

- Reference station in Sisak

- After data processing of GNSS measurements (7 GPS weeks: 29.11.2020.-26.12.2020. and 03.01.2021.-23.01.2021.), using precise ephemeris the result was:

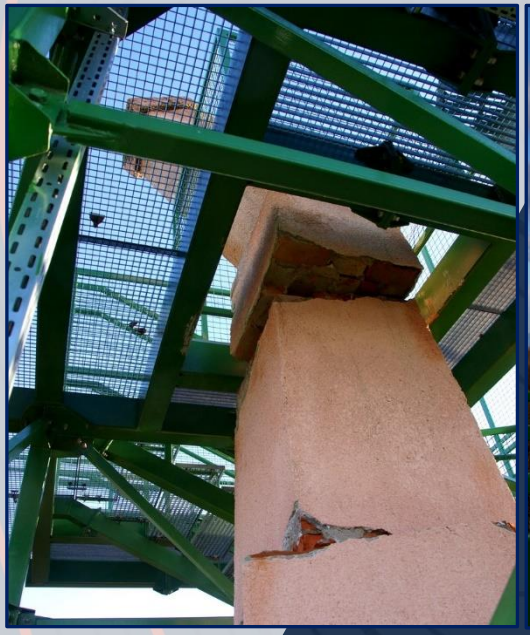


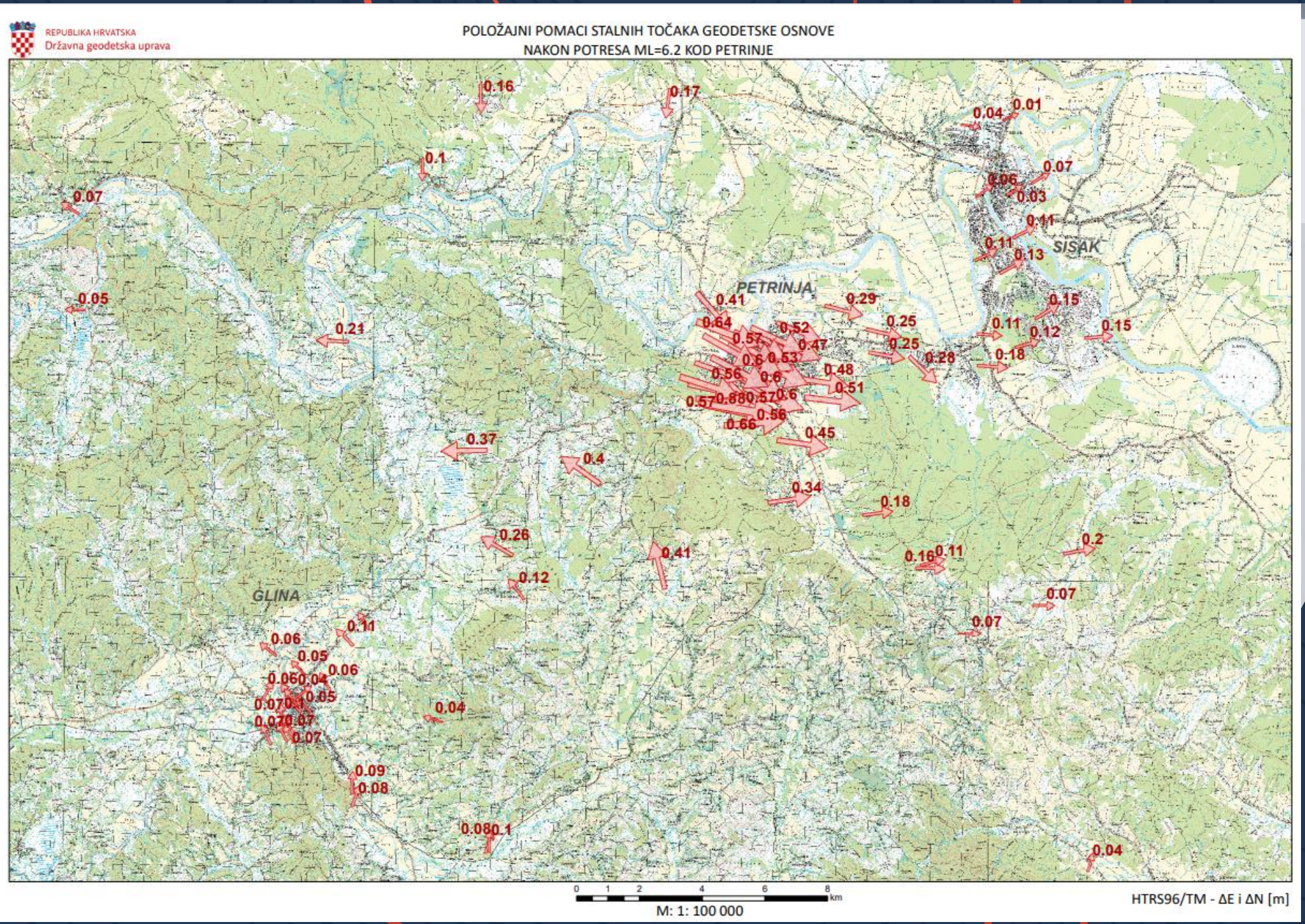
- $\Delta E = -49{,}9$ mm
- $\Delta N = 20.3$ mm
- $\Delta H = 25.0$ mm

- In January 2021 State Geodetic Administration performed precise GNSS measurements in the field of the earthquake area on 84 ponits already measured in previous epochs (Glina, Petrinja, Sisak)

- Analysis of the movements of geodetic points showed:

1) The biggest movement was in Petrinja – 45 cm SE
2) Sisak – 10 cm E
3) Glina – 10 cm NW
   – height 10 cm (downlift)





Horizontal displacements of measured GNSS points

EU project: **Increasing the capacity of SGA employees through education on the application of measurement methods and new official geodetic reference frame**

- ESF
- Education of SGA employees on field measurements with new methods and services - January-February 2020
- 10 workshops in 5 SGA education centers:
  Zagreb, Split, Rijeka, Požega i Čakovec

EU Project: **Multisensory aerial capturing of the Republic of Croatia for disaster risk reduction evaluation**

- ERDF
- 18.000.000 EUR (85% EU, 15% State budget)
- Main goals:
  - to produce DTM and DSM based on LiDAR data
  - to produce spatial data for more efficient risk management
  - to develop a methodology for earthquake risk management (Zagreb pilot area) that will be applicable to all big cities in Croatia

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Thank you

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