# National Report of Iceland

Finland March 15<sup>th</sup> 2023

Dalia Prizginiene

National Land Survey of Iceland



#### Main projects in 2022

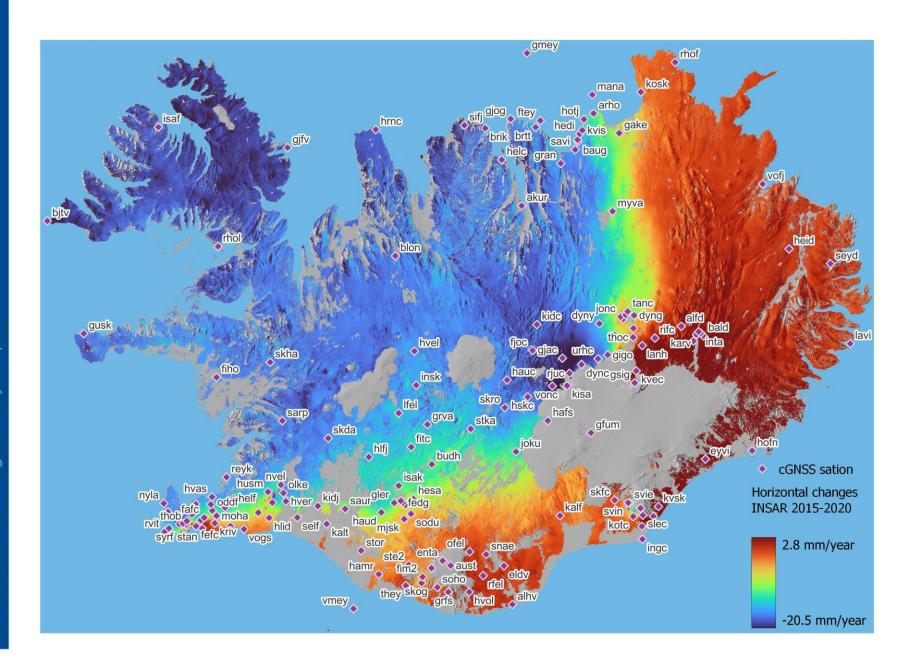
- Processing of all GNSS data in Iceland from 1999 to 2022 with Bernese NKG AC style
- Participation in EPOS ÍSLAND
- Small changes in RTK network service

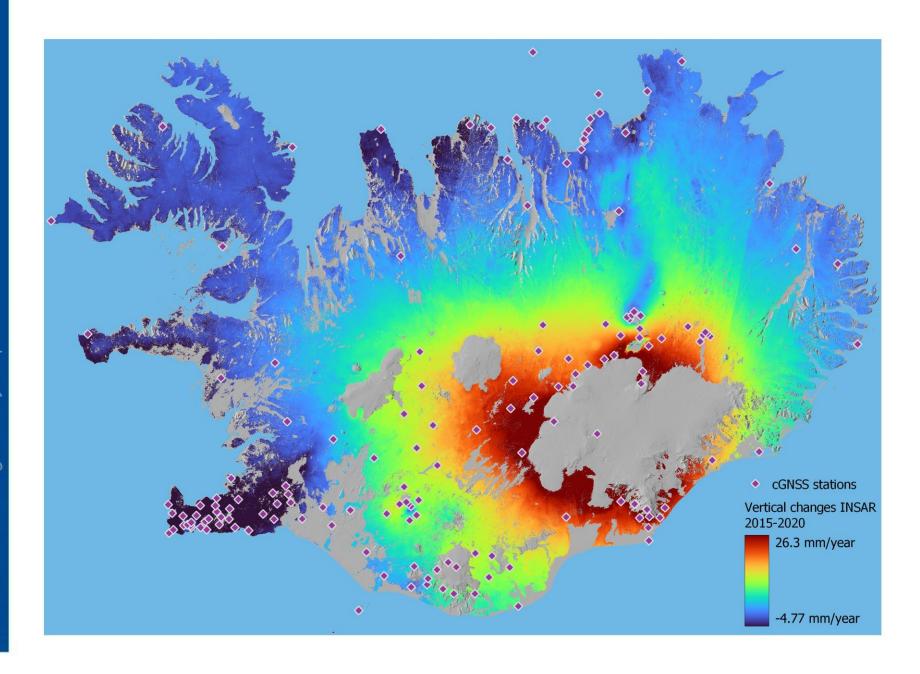


## Processing of all GNSS data in Iceland from 1999

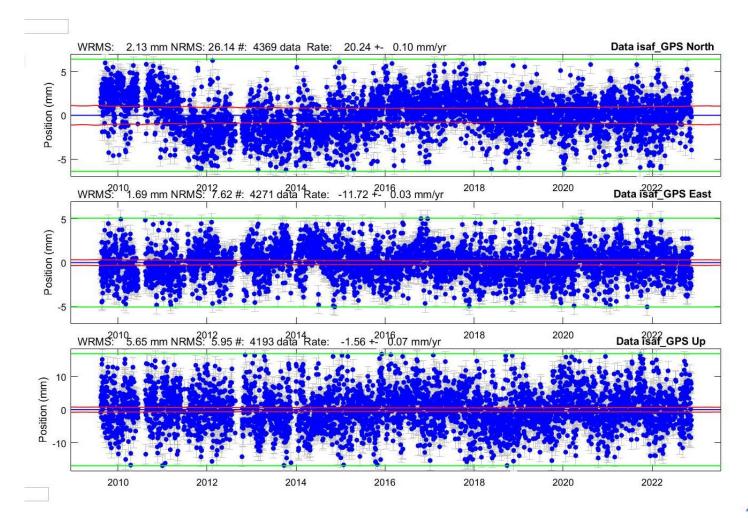
- Processing in Bernese with NKG AC settings
- 157 stations in Iceland
- Data range from 1 to 25 years
- Plans to analyse the data with various software
  - TSView, Hector, FODITS etc.
  - Special focus on discontinuities and velocity changes
- Plans to develop an interface to view the timeseries data in our geodetic database



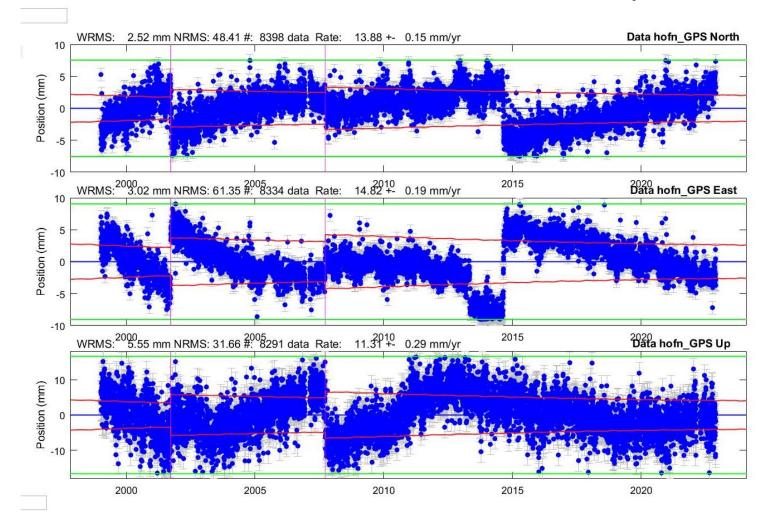




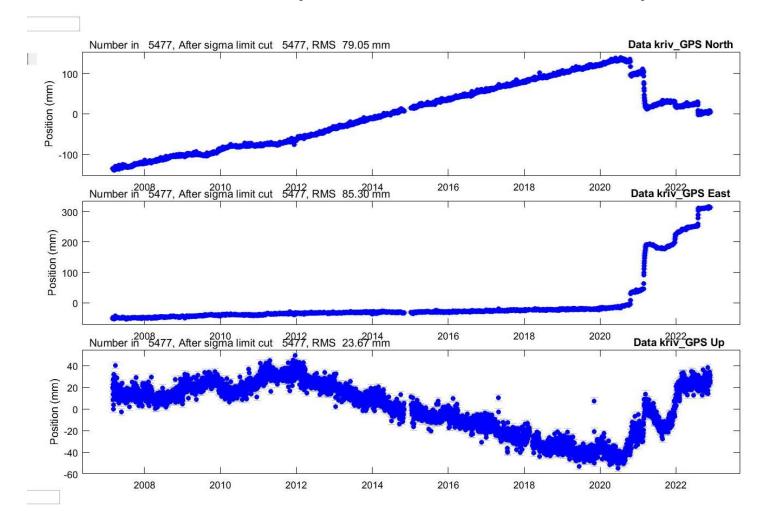
#### ISAF rather stable



#### HOFN, variations in velocity



#### KRIV, earthquakes and eruption

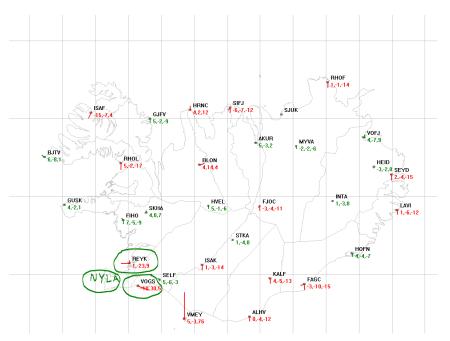


## GNSMART RTK networking service

- REYK,VOGS,NYLA have been affected by eruption and these stations do not fit ISN2016 frame anymore.
- The coordinates of three reference stations are corrected by dx,dy,dz values before processing in GNNET

NYLA	dx	-0.062	REYK	dx	-0.013	VOGS	dx	0.027
	dy	-0.040		dy	-0.017		dy	0.025
	dz	0.026		dz	-0.007		dz	-0.001

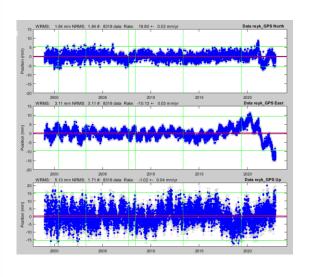
 Transit from GNSMART version 1 to version 2

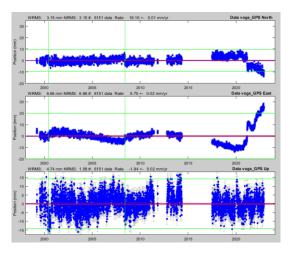


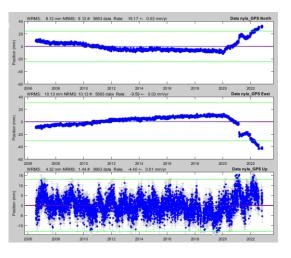


## GNSMART RTK networking service

REYK VOGS NYLA









#### **EPOS ÍSLAND**

https://epos-iceland.is

#### Structure

- Led by the Icelandic Meteorological Office
- Participants:
  - Institute of Earth Sciences of the University of Iceland
  - The National land Survey of Iceland
  - The Icelandic Institute of Natural History
  - The Iceland geo survey

#### Funded

- By the Icelandic Infrastructure fund
- And the Icelandic Centre for Research (Rannís)

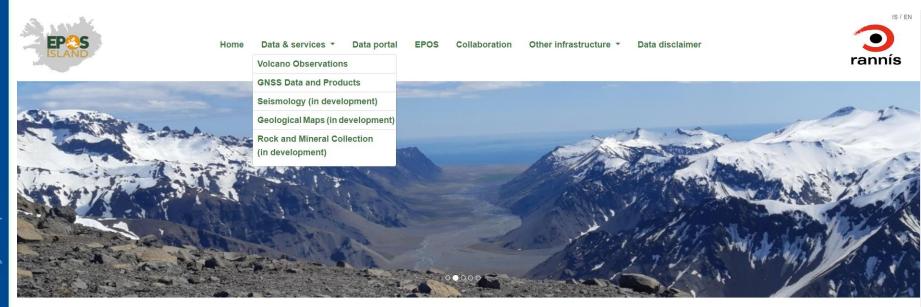
#### Idea

- Collect and provide seismic data: various volcanic data like ash-, gas- and radar measurements from volcanic plumes, volcanic activity reports and guidelines, rock simples, geological maps, and collections of photographs and web camera images for main eruptions of last decades.
- Collect and provide GNSS data for last decades.
- All data are quality checked and standardized.
- The data are intended to be for research and education.



## **EPOS ÍSLAND**

https://epos-iceland.is



#### Welcome to EPOS Iceland

The first Roadmap for research infrastructure was published on July 2021 by the Ministry of Education and Culture (now Ministry of Higher Education, Science and Innovation) in cooperation with the board of Infrastructure Fund and

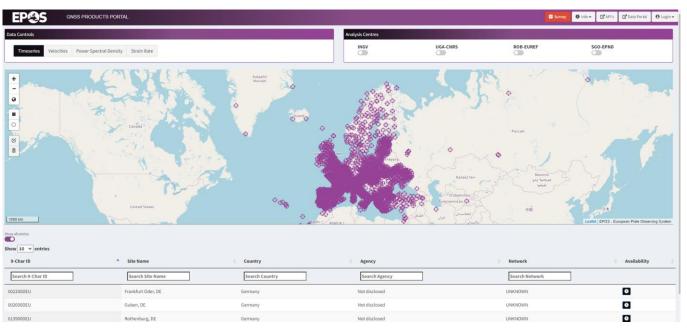


#### **GNSS EPOS EUROPE**

https://gnssproducts.epos.ubi.pt/

In 2024 the GLASS will be installed and EPOS-Iceland services will be compliant with EPOS standards.

Then we could find Icelandic GNSS data in EPOS Europe main portal





## Thank you

