SKPOS®

National report of Slovakia

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EUPOS
European Position Determination System

10th EUPOS Council and Technical Meeting

October 24-25, 2024, Skopje, North Macedonia

SKPOS stations infrastructure

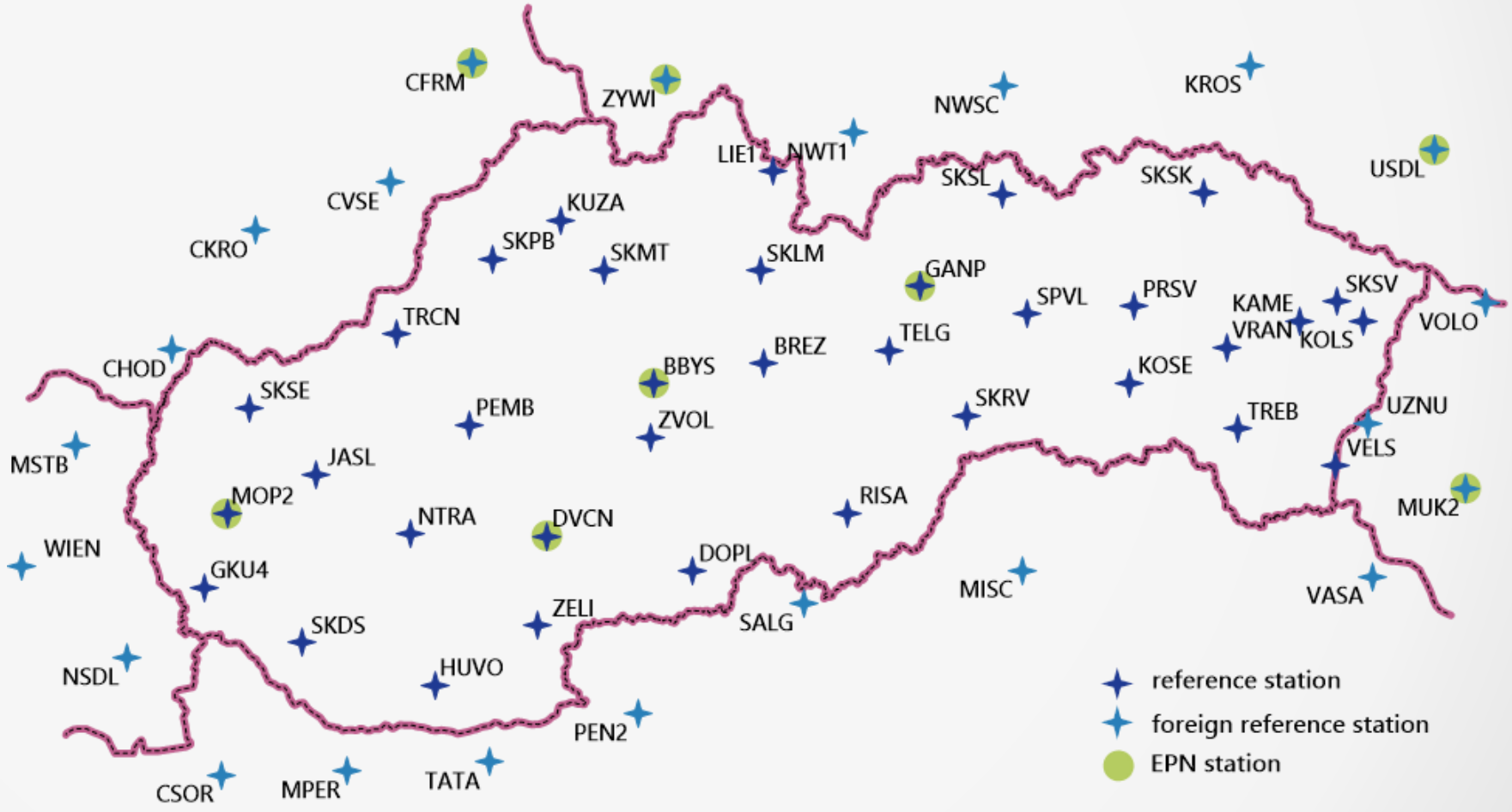
Status in October 2024

18 years
of continuous operation

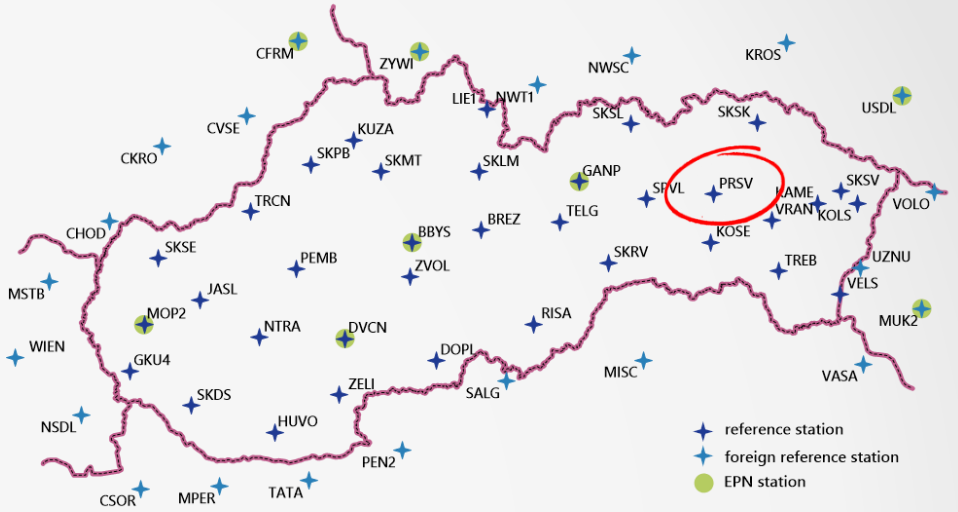
3 500+
active users

35+22
reference stations

GPS, GLONASS,
Galileo, BeiDou



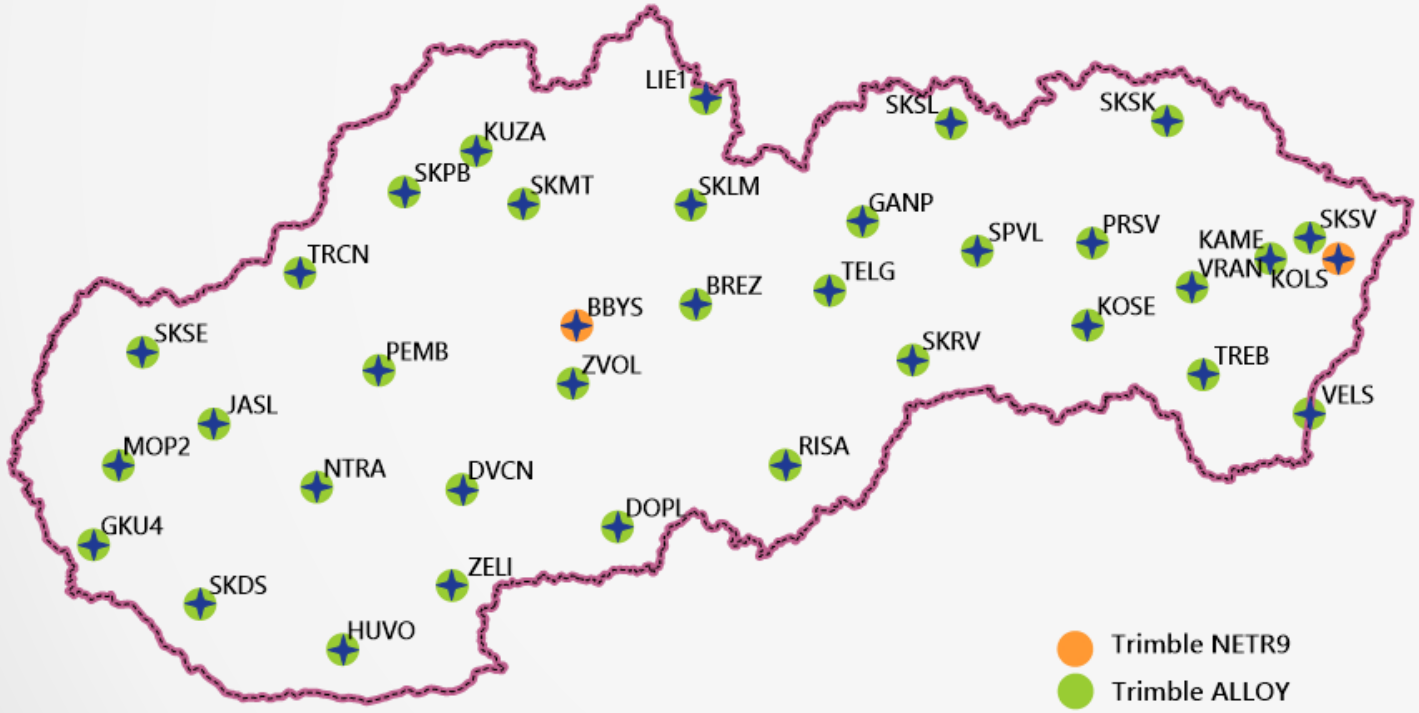
SKPOS stations infrastructure



- Prešov station relocation
  - reinforced concrete pillar instead of roof monumentation

SKPOS stations infrastructure

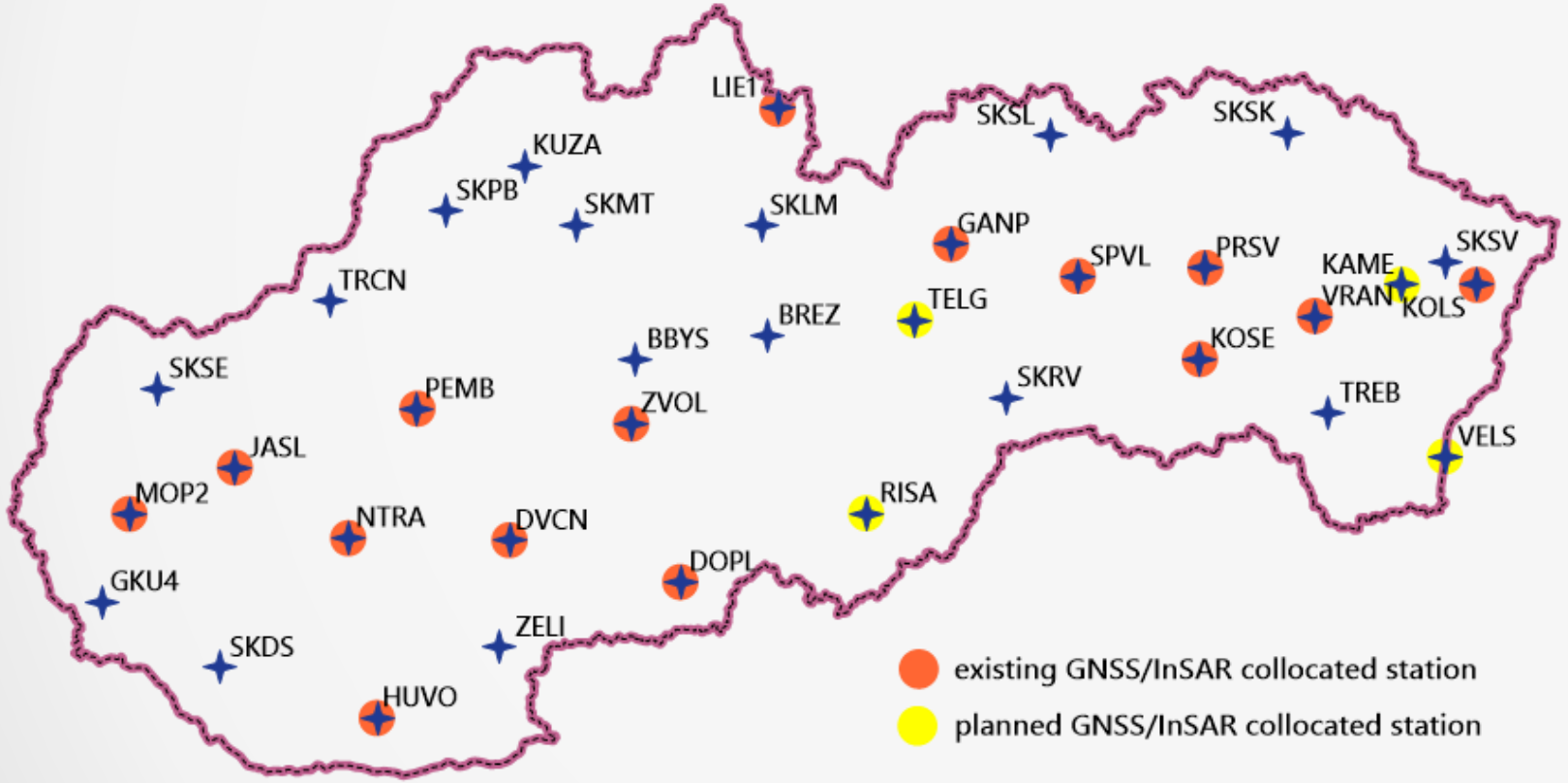
- 33/35 Trimble Alloy receivers

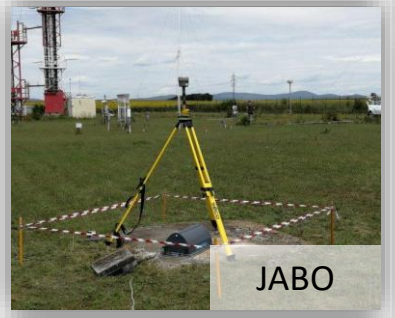


SKPOS stations infrastructure

- Antenna exchange on station SKPB and HUVO
  - Zephyr 3 Geodetic
  - TRM115000.00 NONE

SKPOS GNSS/InSAR collocation (15/35 stations)





Physical monitoring stations

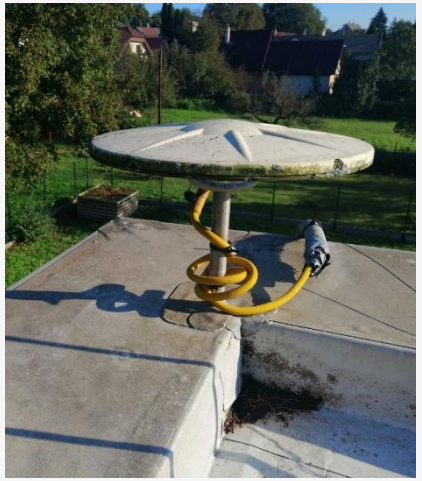
2013
Quality monitoring based on virtual stations

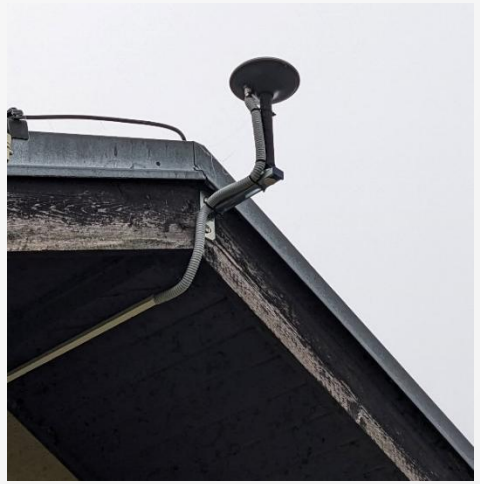
2020
New physical monitoring station SUT2

2022
Relocation of monitoring station SUT2 → AGOA

2023
Relocation of monitoring station AGOA → AGOC
New physical monitoring station TUZV

2024
New physical monitoring station PRES
New physical monitoring station MOPI
New physical monitoring station RISO
New physical monitoring station TUKE





SKPOS Infrastructure

- Control software:

  Trimble Pivot Platform

  - Version 5.1.1 (Primary server)
  - Version 5.2.0 RC5 (Backup server)

- Receivers firmware
  - Alloy: 6.23
  - NetR9: 5.63

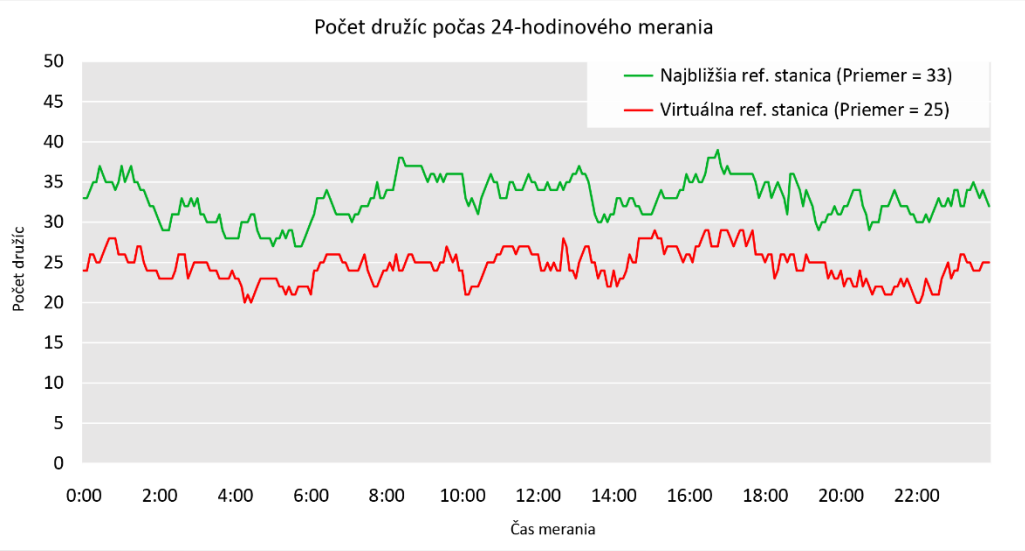
SKPOS portfolio
Data formats – content - charges

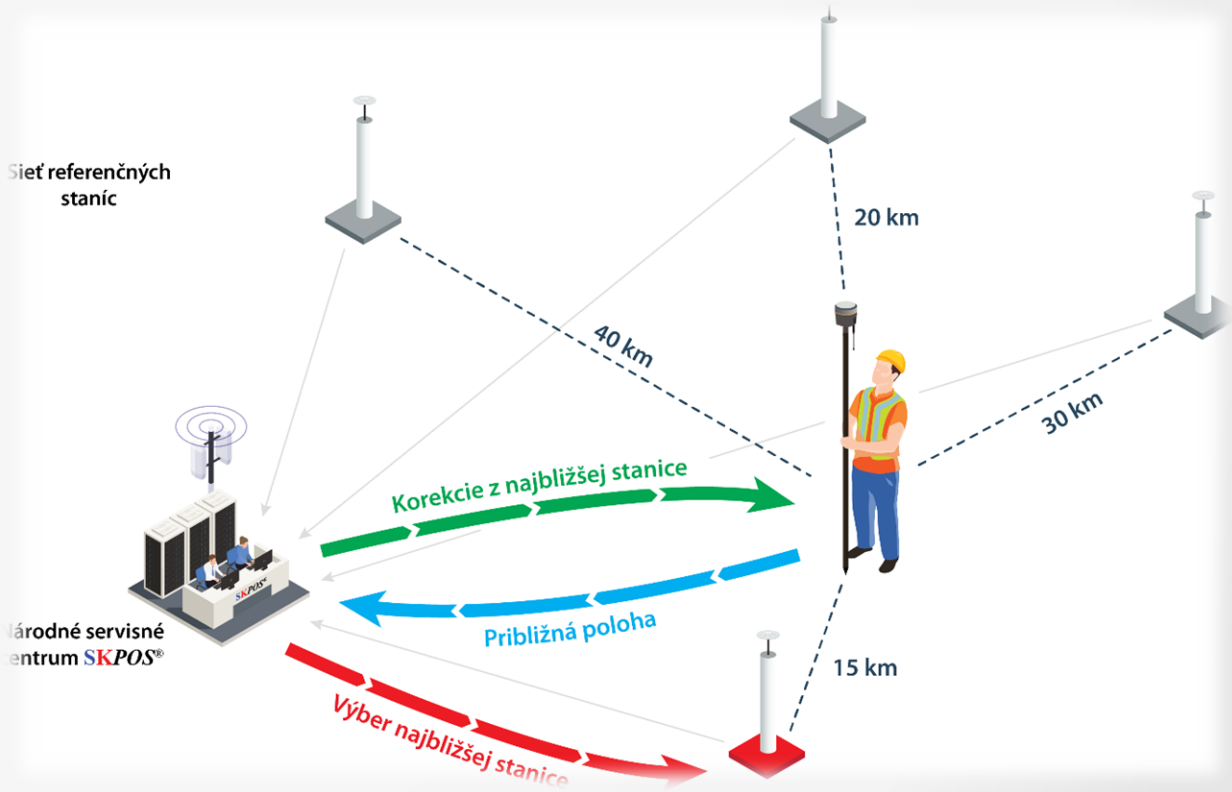
Package	Content	Duration	Format	Flat rate
SKPOS_mm	RINEX 1000 h	year	RINEX 2.x, 3.x	**70 €**
SKPOS_cm (year)	RTK unlimited + 50 h RINEX	year	RTCM 2.3, 3.1, RTCM 3.4, CMRx, CMR+	**70 €**
SKPOS_cm (month)	RTK unlimited	month	RTCM 2.3, 3.1 RTCM 3.4, CMRx, CMR+	**25 €**
SKPOS_dm	DGNSS unlimited	year	RTCM 2.1, 2.3	**25 €**

Nearest reference station

2006
VRS concept

2024
Nearest reference stations concept





BeiDou-3

2018
Galileo and BeiDou-2

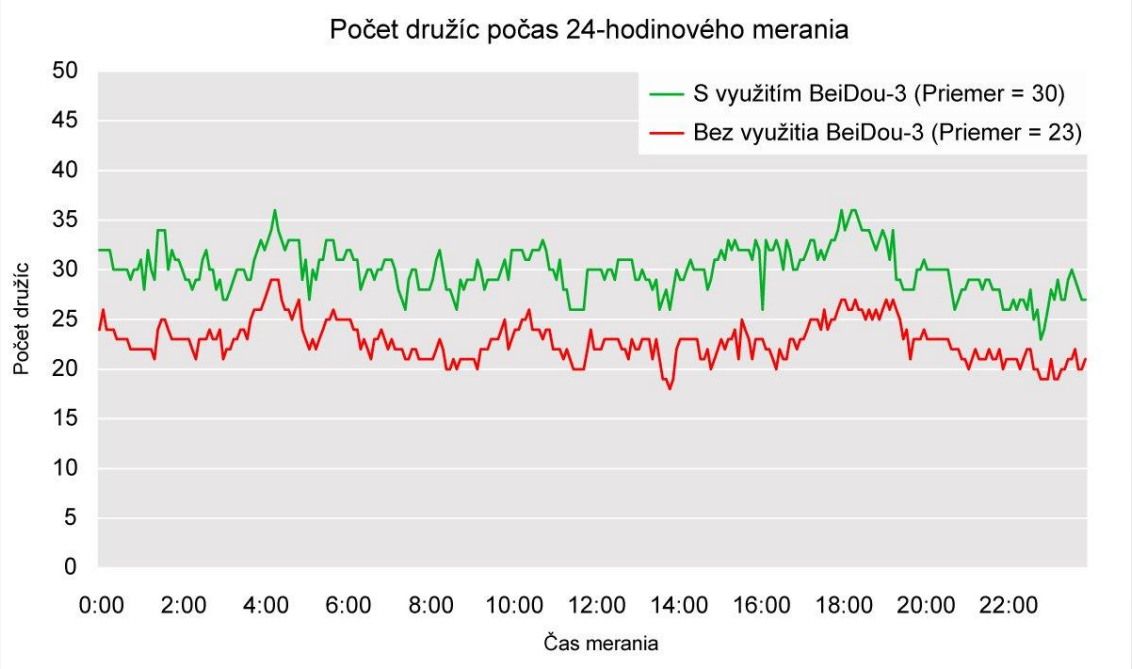
2021
Replacement of Trimble NetR9 with Trimble Alloy (3 unit)

2022
Replacement of Trimble NetR9 with Trimble Alloy (2 unit)

2023
Replacement of Trimble NetR9 with Trimble Alloy (14 unit)

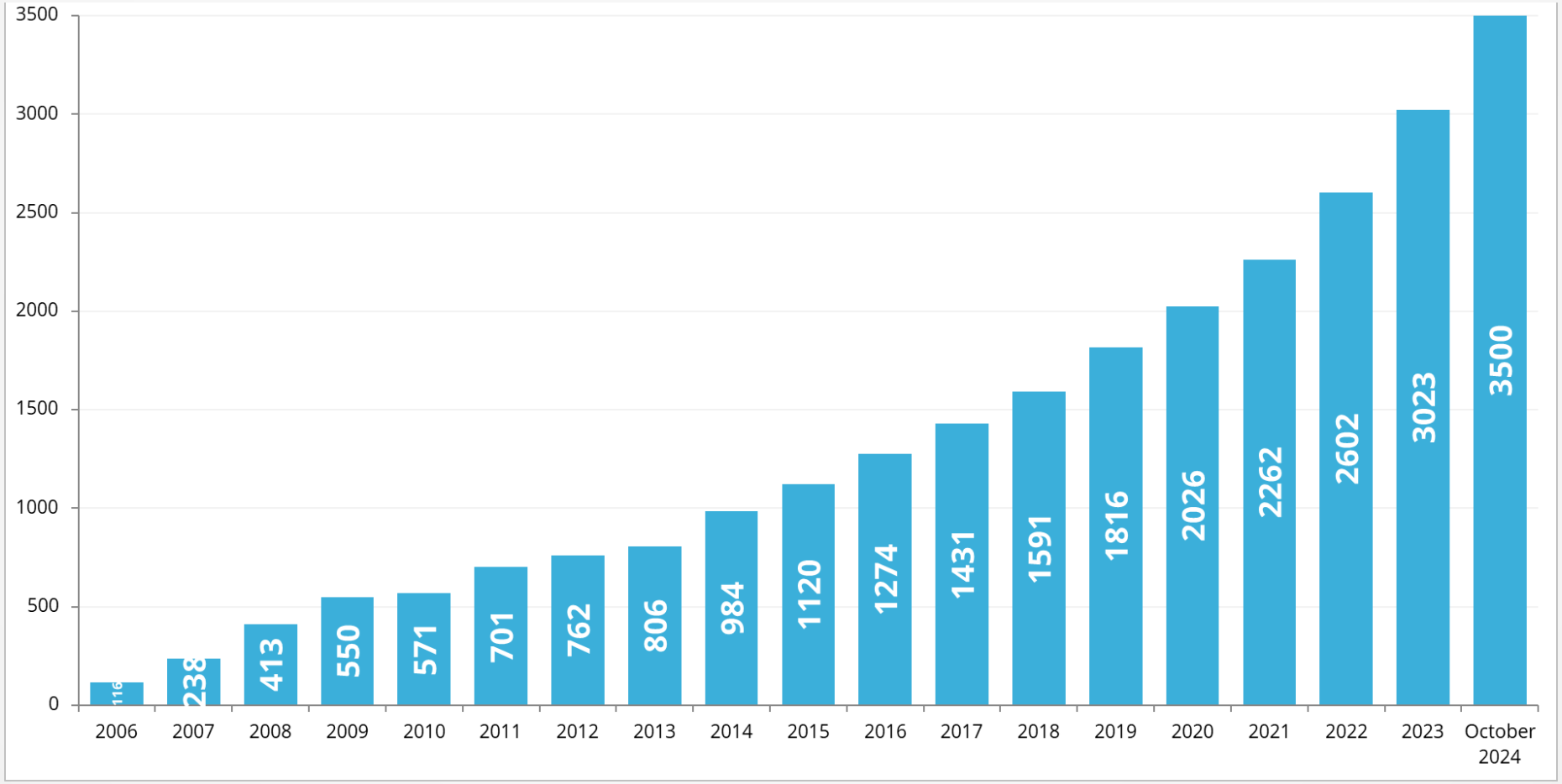
2024
Replacement of Trimble NetR9 with Trimble Alloy (14 unit)

2024-05-13
BeiDou-3



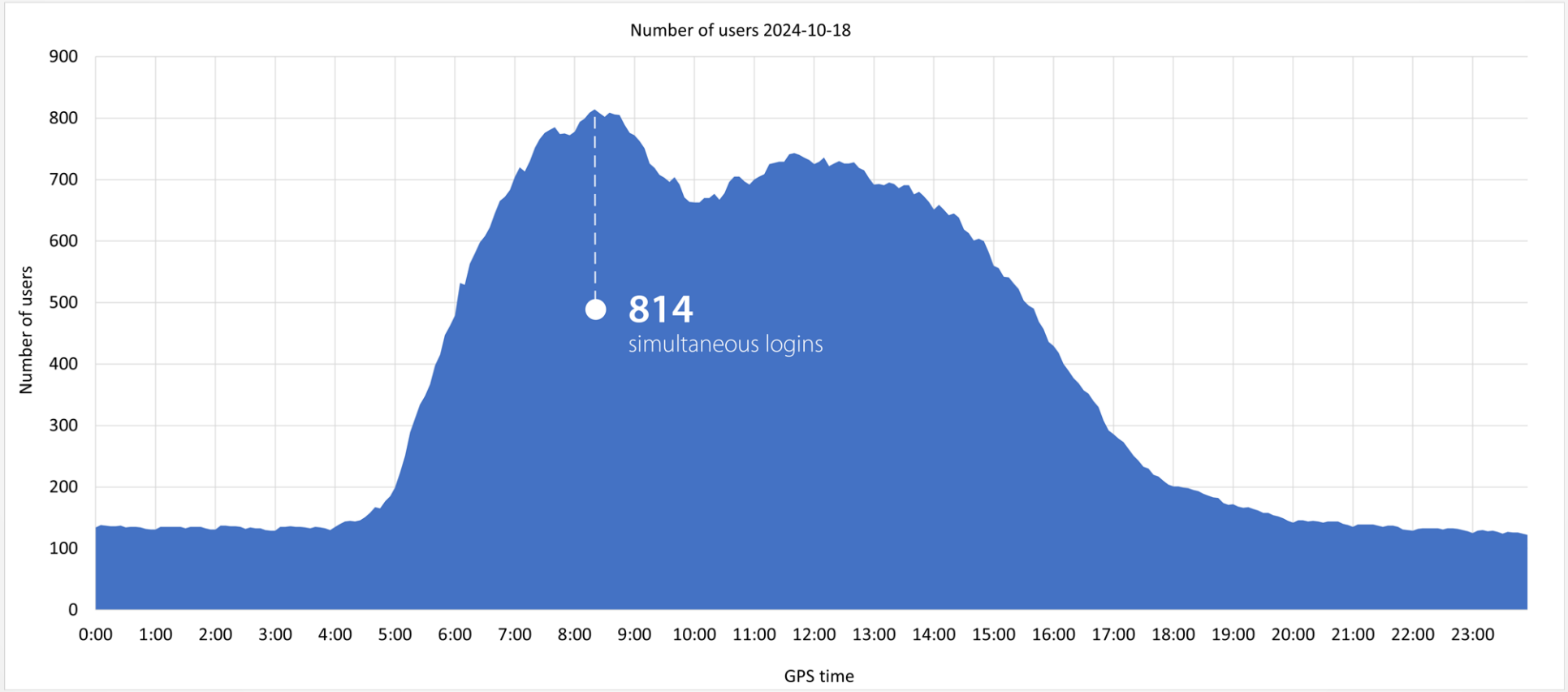
Number of users

- Number of users: 3500 (Oct. 2024)



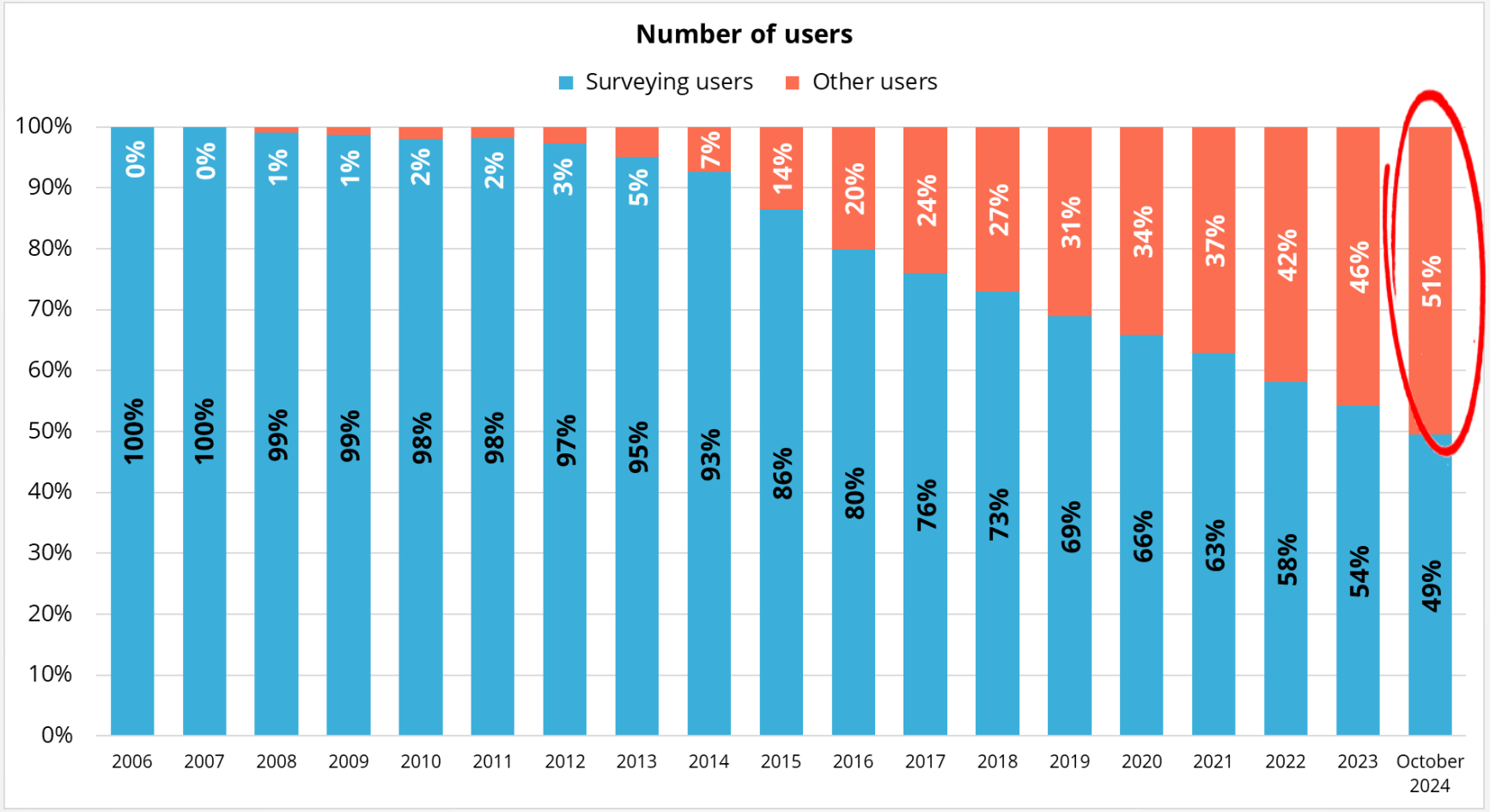
Maximum simultaneous logins

- Maximum 814 simultaneous logins (2024-10-18)



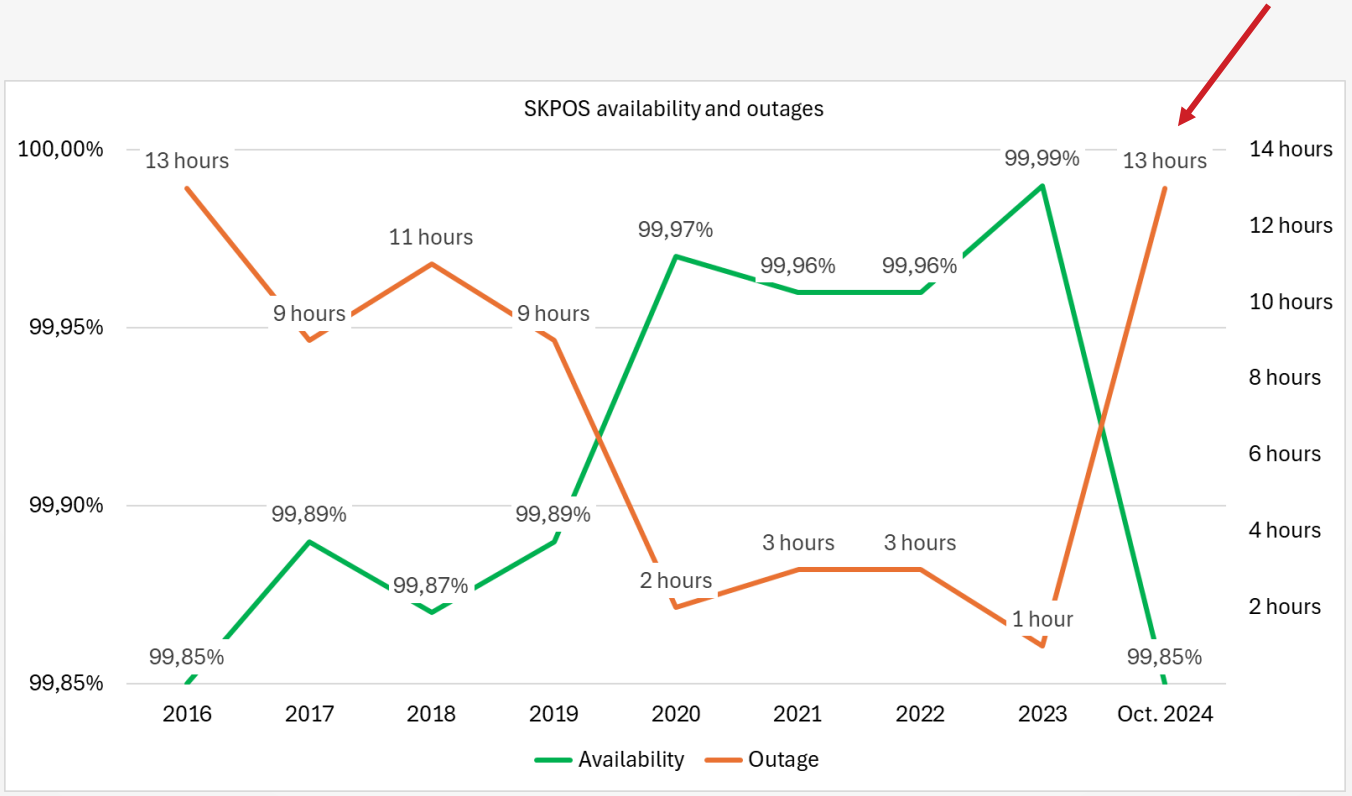
Type of users

- From Oct. 2024 more non-geodetic users



Power outage + motor generator failure

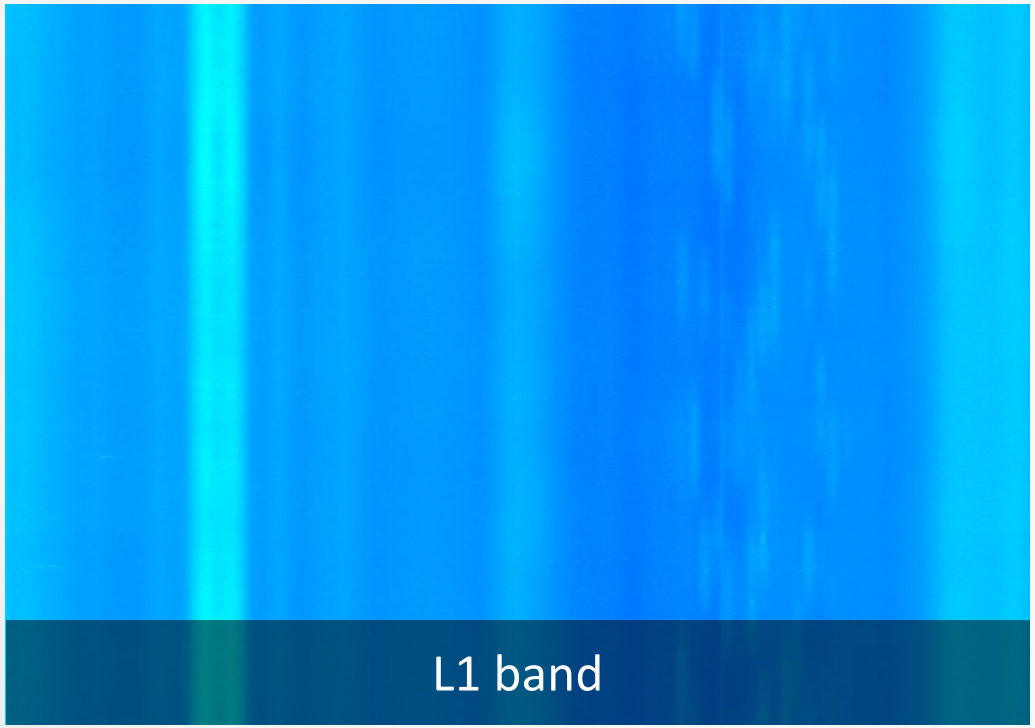
- Primary and backup solution on the same infrastructure = big problem
- Separate locations are necessary

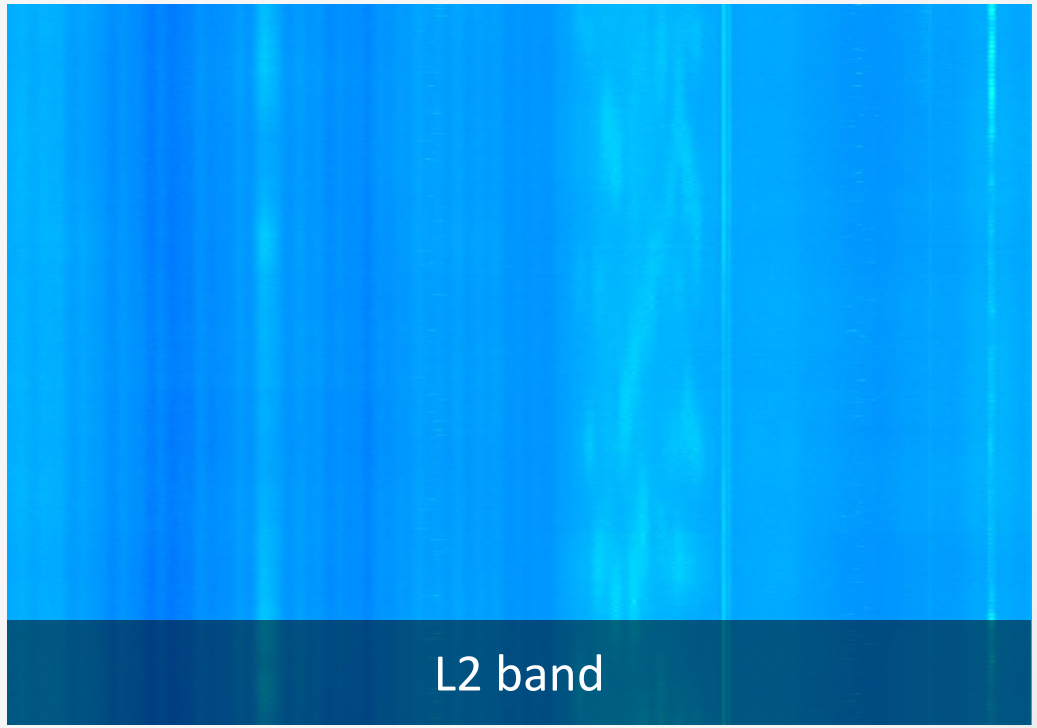


Interference monitoring

Trimble Alloy - Spectrum Analyzer

- automatic download as image
- ready for further analysis





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Thank you for your attention

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