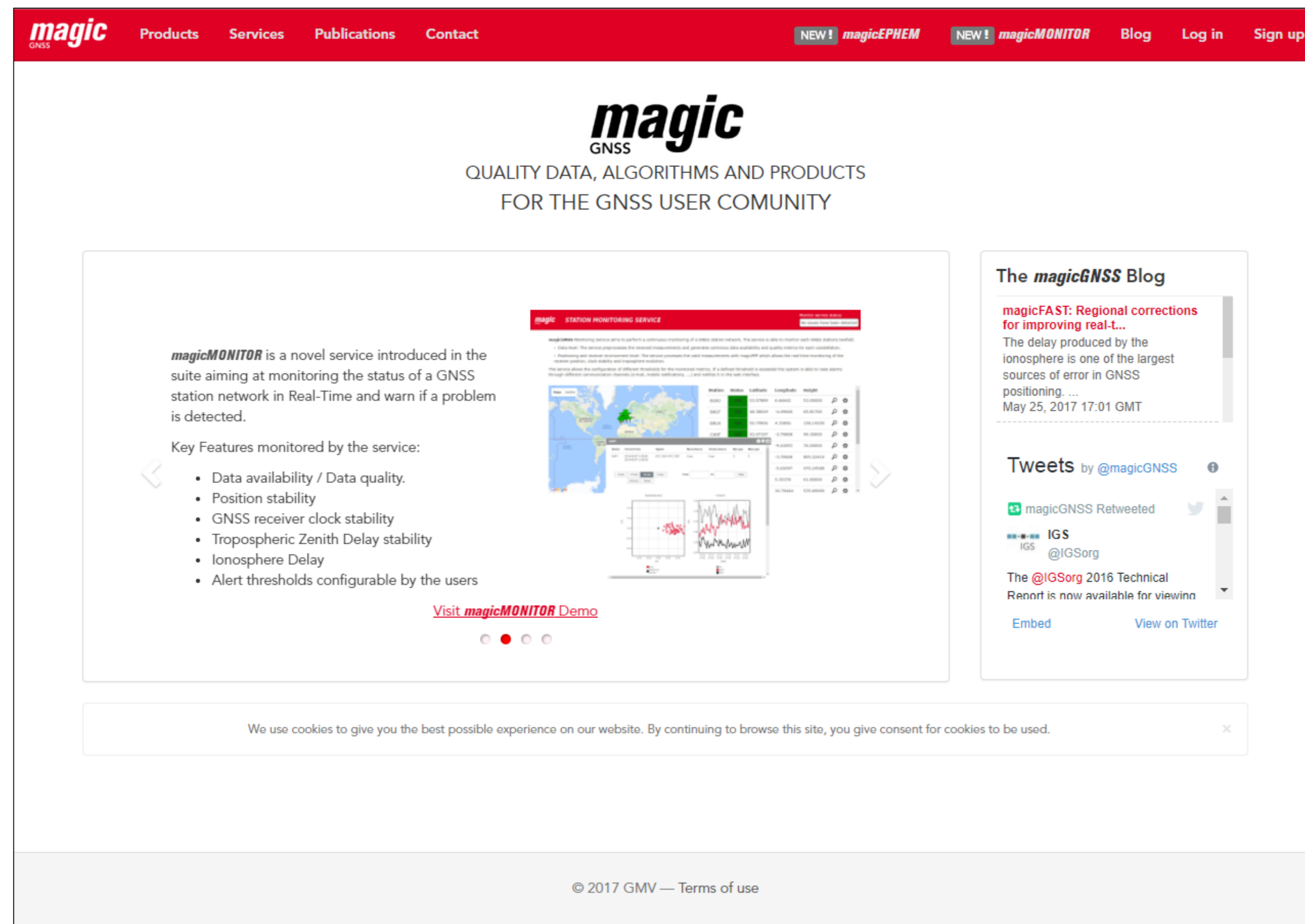


magicGNSS' WEB SERVICE

8 YEARS OF LESSONS LEARNED FROM THE GNSS COMMUNITY

Guillermo Tobias, Pedro F. Navarro, Irma Rodriguez, Jose Luis Carretero, David Calle, Pedro J. Roldán, Laura Martínez/ GMV

SERVICE DESCRIPTION

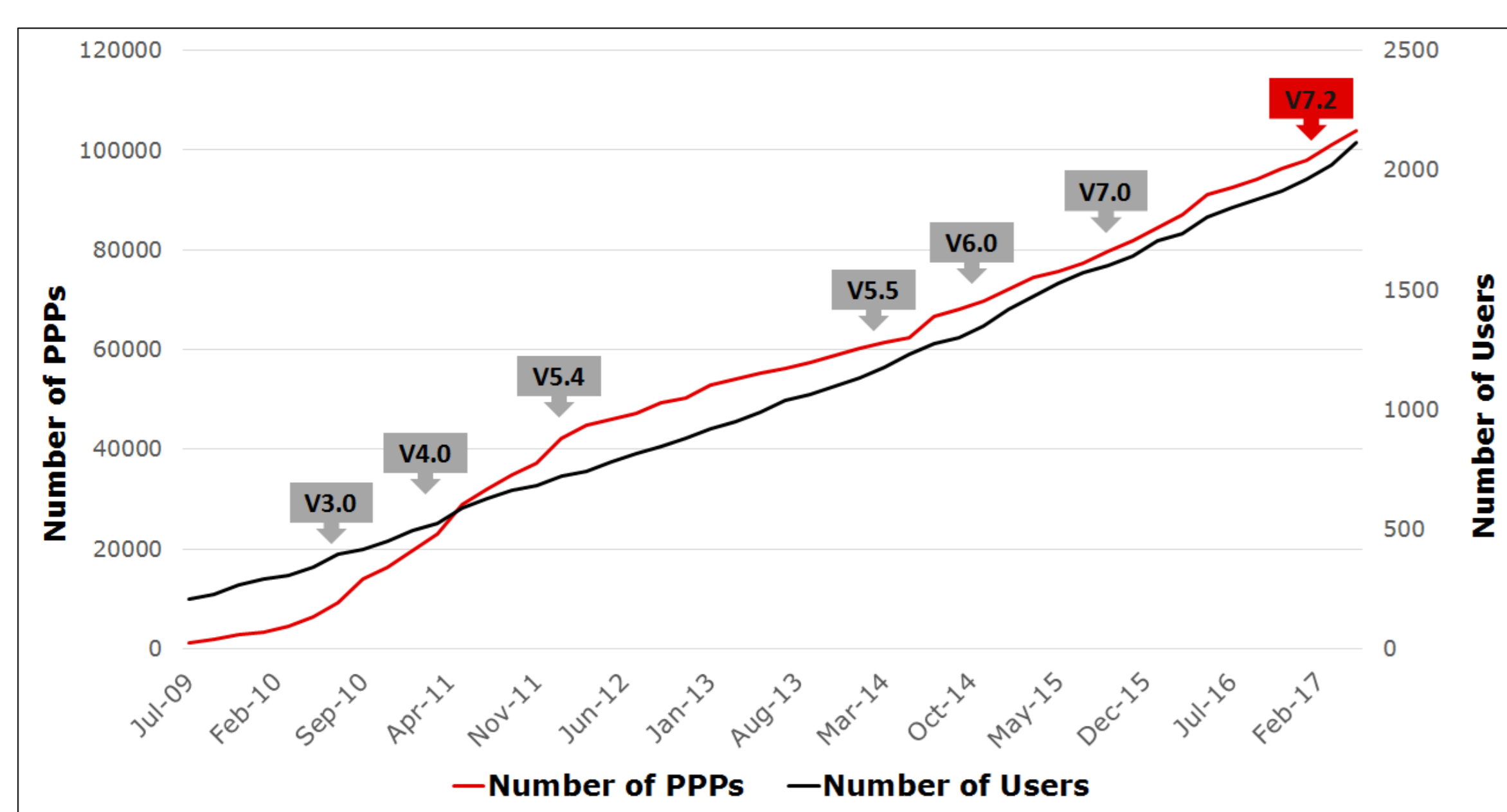


magicGNSS suite implements state-of-the-art GNSS algorithms developed by GMV as a result of 25 years' experience in the field.

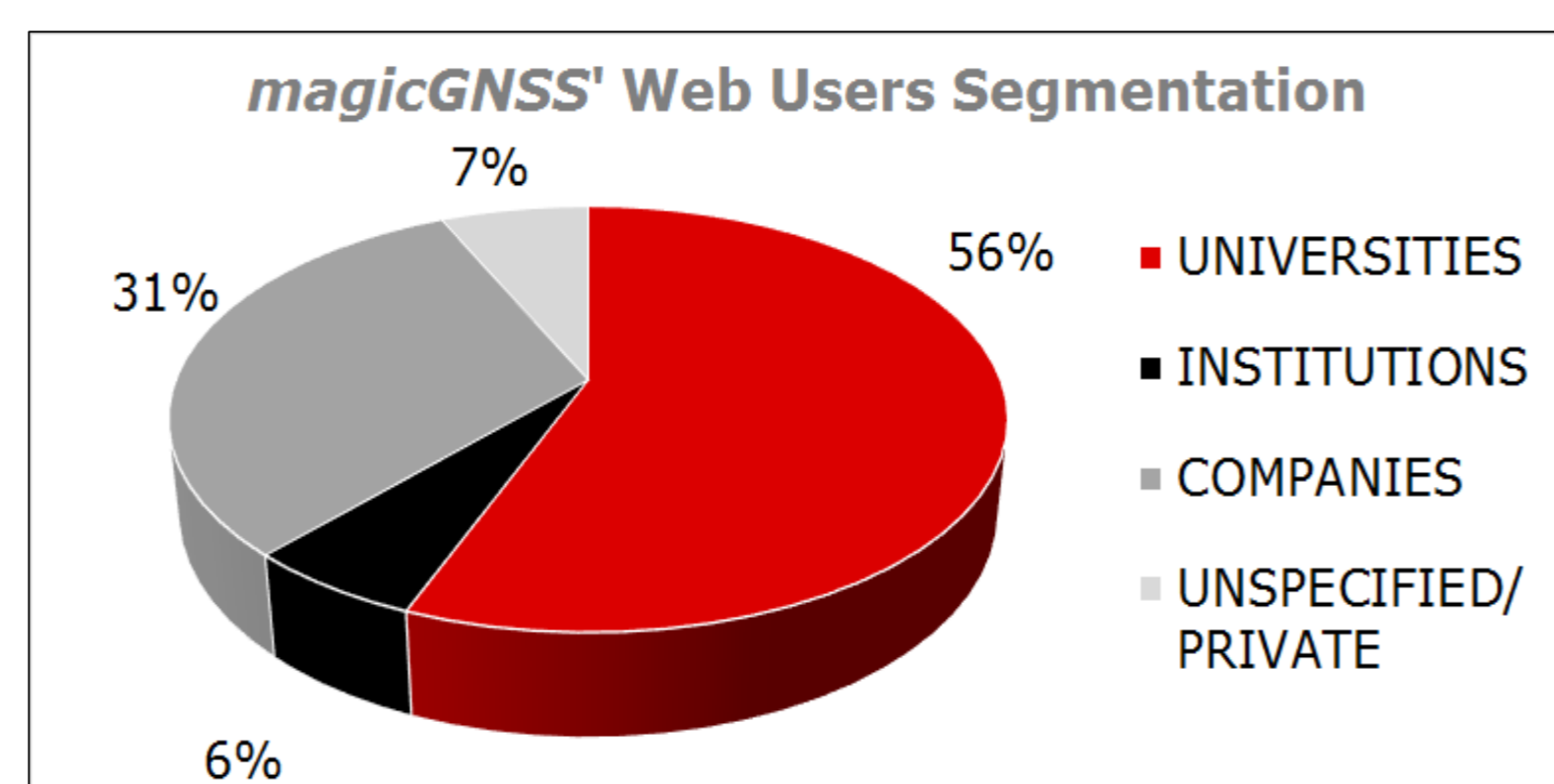
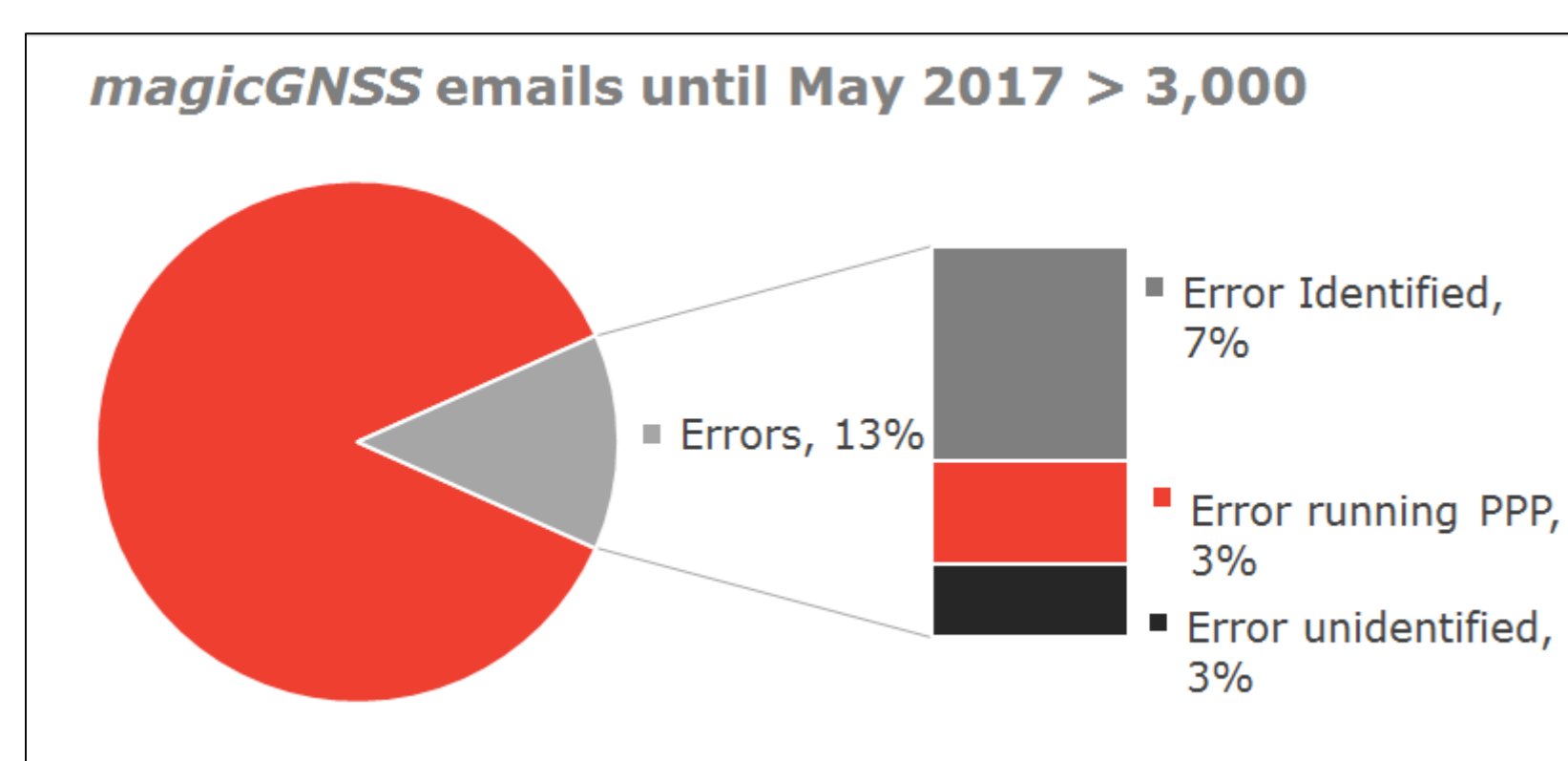
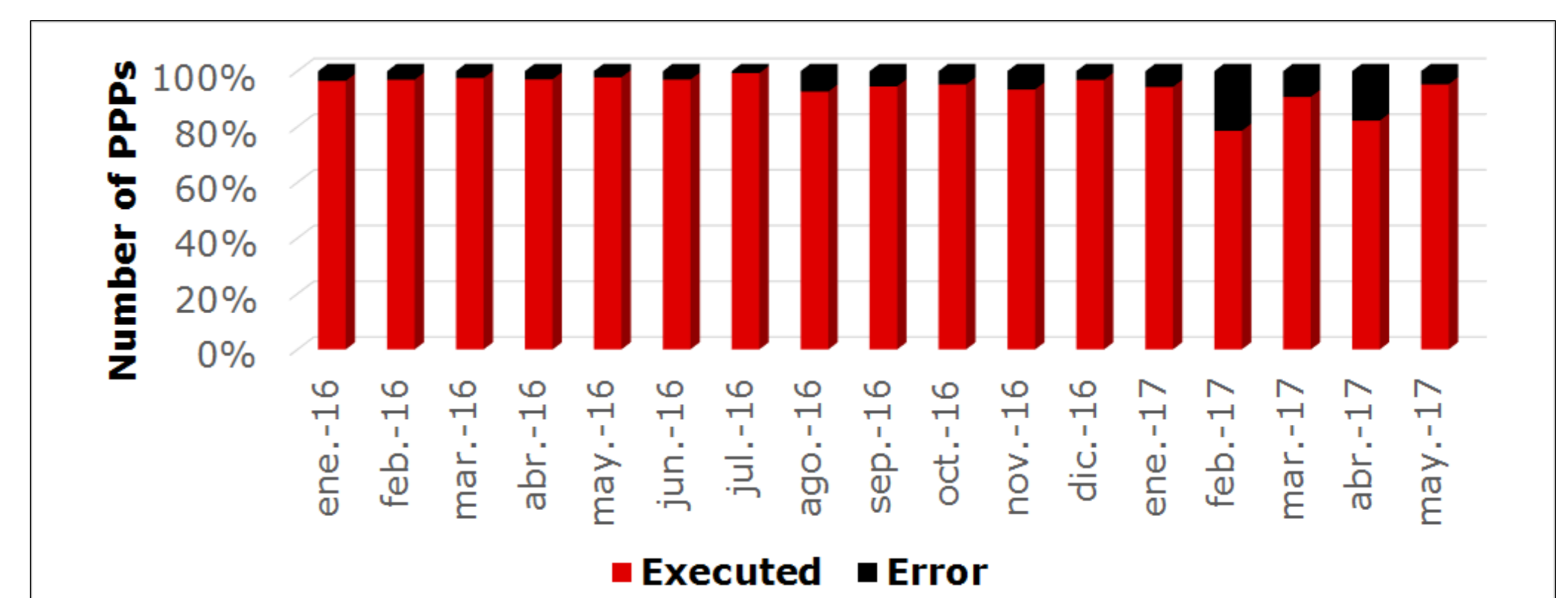
magicGNSS' web service provides the following services:

- **Multi-constellation Precise Orbit and Clock Determination Service.**
- **Multi-constellation Single and Double-frequency Precise Point Positioning (PPP) Service.**
- **Multi-constellation Long-Term Ephemeris Service,** providing high-accuracy GNSS orbit and clock predictions suitable for Assisted-GNSS (A-GNSS) applications.
- **Station Monitoring Service,** allowing real-time monitoring of a configured network of reference stations according to predefined KPIs.

USAGE OF magicGNSS



REPORTED ISSUES



- Submission of RINEX files with wrong formatting
- Non-supported data rates in input files
- Poor quality input data
- Unavailability of multi-constellation PPP products prior to 2014
- Non-integer timestamps in submitted RINEX files
- Submission of too short RINEX files
- LITE users calling for PRO functionalities

MOST FREQUENT QUESTIONS

- Which SRP model used for the generation of long-term ephemeris.
- Availability of toolkit/sdk/library to improve the quality of the position of the GPS included in the device (phone, tablet).
- Types of compatible receivers.
- Support of different constellations, many questions about QZSS processing capabilities.
- Availability of RTK solution.
- Differences between *magicPPP* service and RTK
- Availability of PPP residuals information for scientific purposes (multipath characterisation, tomography,...).

MAIN IMPROVEMENTS

- New *magicGNSS* web responsive, accessible and friendly
- New *magicEPHEM* service
- New *magicMONITOR* service
- Improve the pre-validation tool to solve most issues related to RINEX formatting
- Notice message when the quality of the output results is not considered satisfactory

