

Journée GINS

PPP static analysis with GPS and Galileo between 10/2018 – 04/2019 and 40 IGS stations

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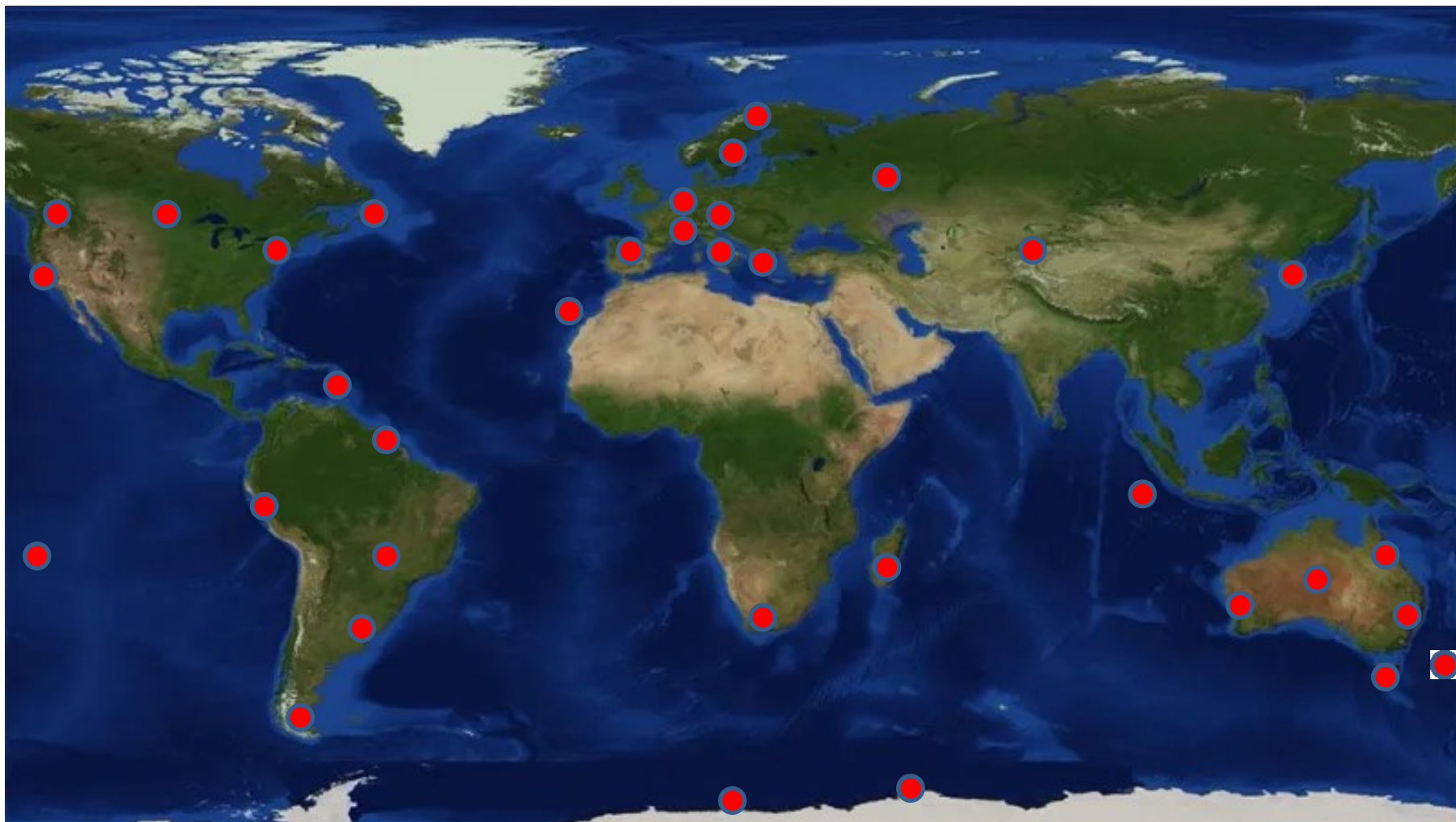
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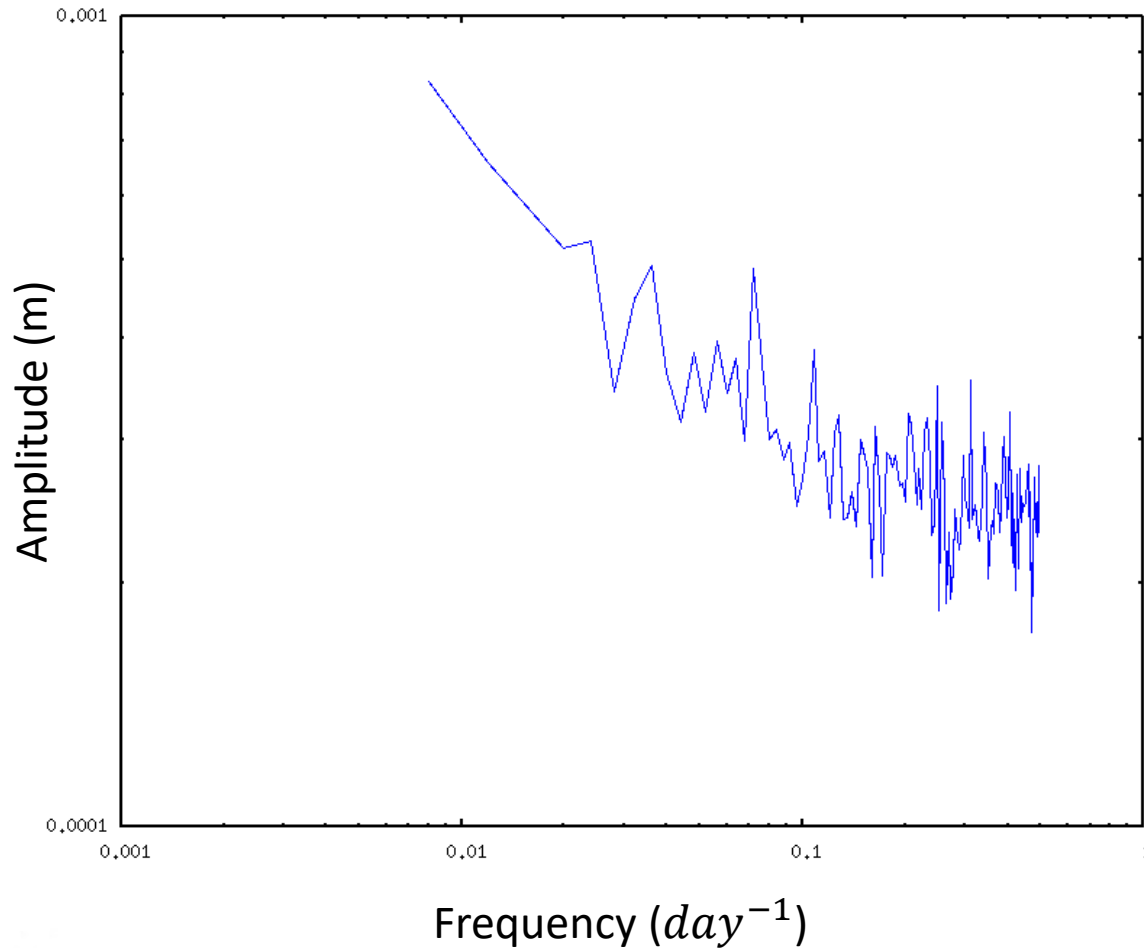
Analysis procedure

1. Execute in GINS all the rinex files under the study case (40 stations, 7 months time span, GRG products)
2. Align solutions since reference coordinates in GINS are not well defined.
3. Retrieve ENU corrections and residuals for every epoch from the solution files.
4. Obtain periodogram of the residuals for each coordinate and station, and average them.

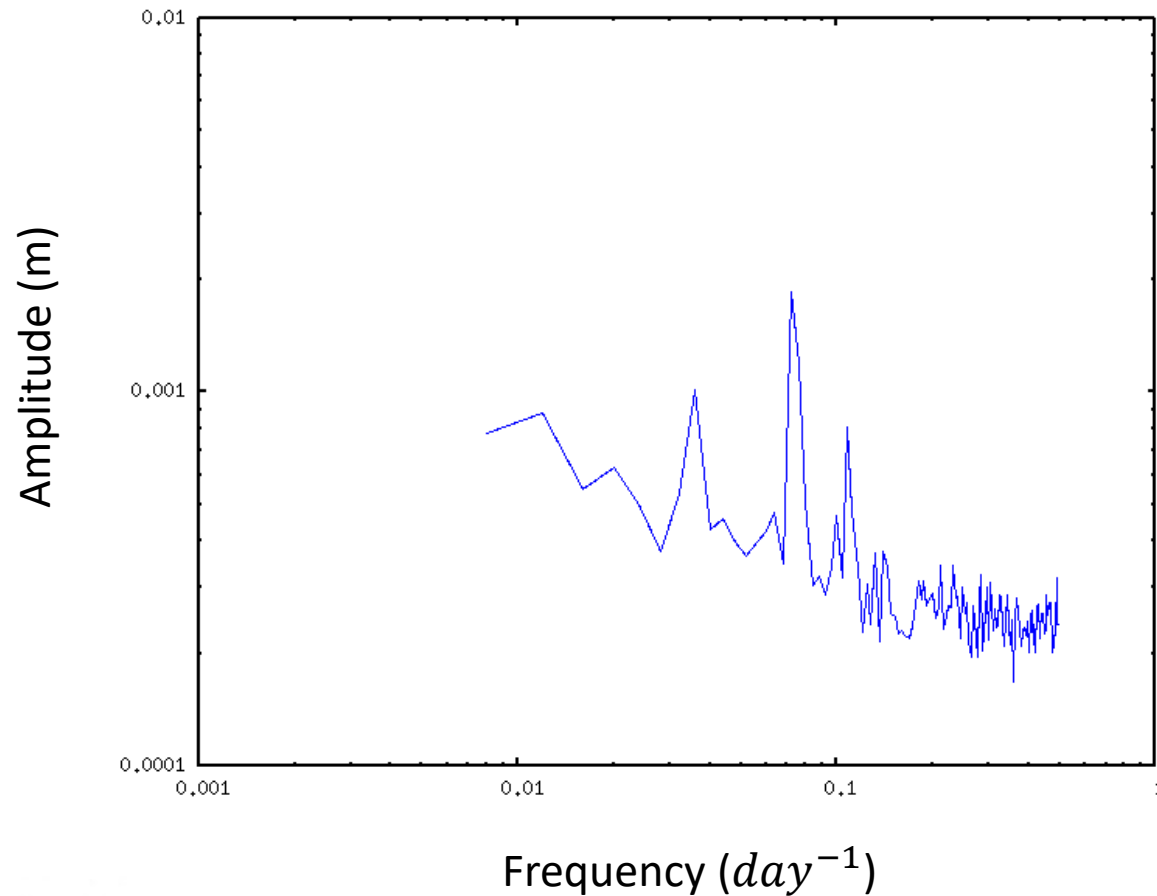
IGS stations for GPS



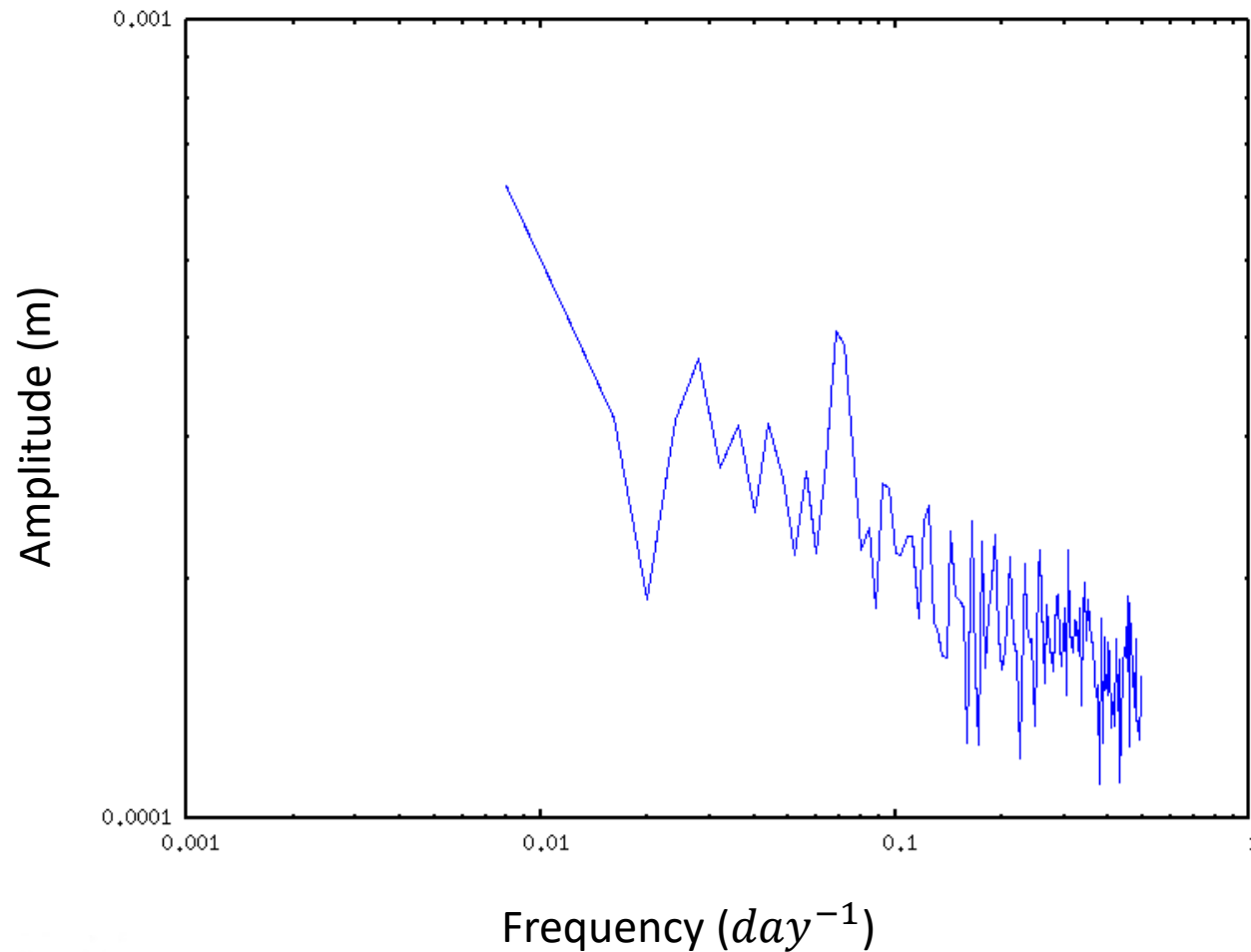
GPS analysis – E coordinate



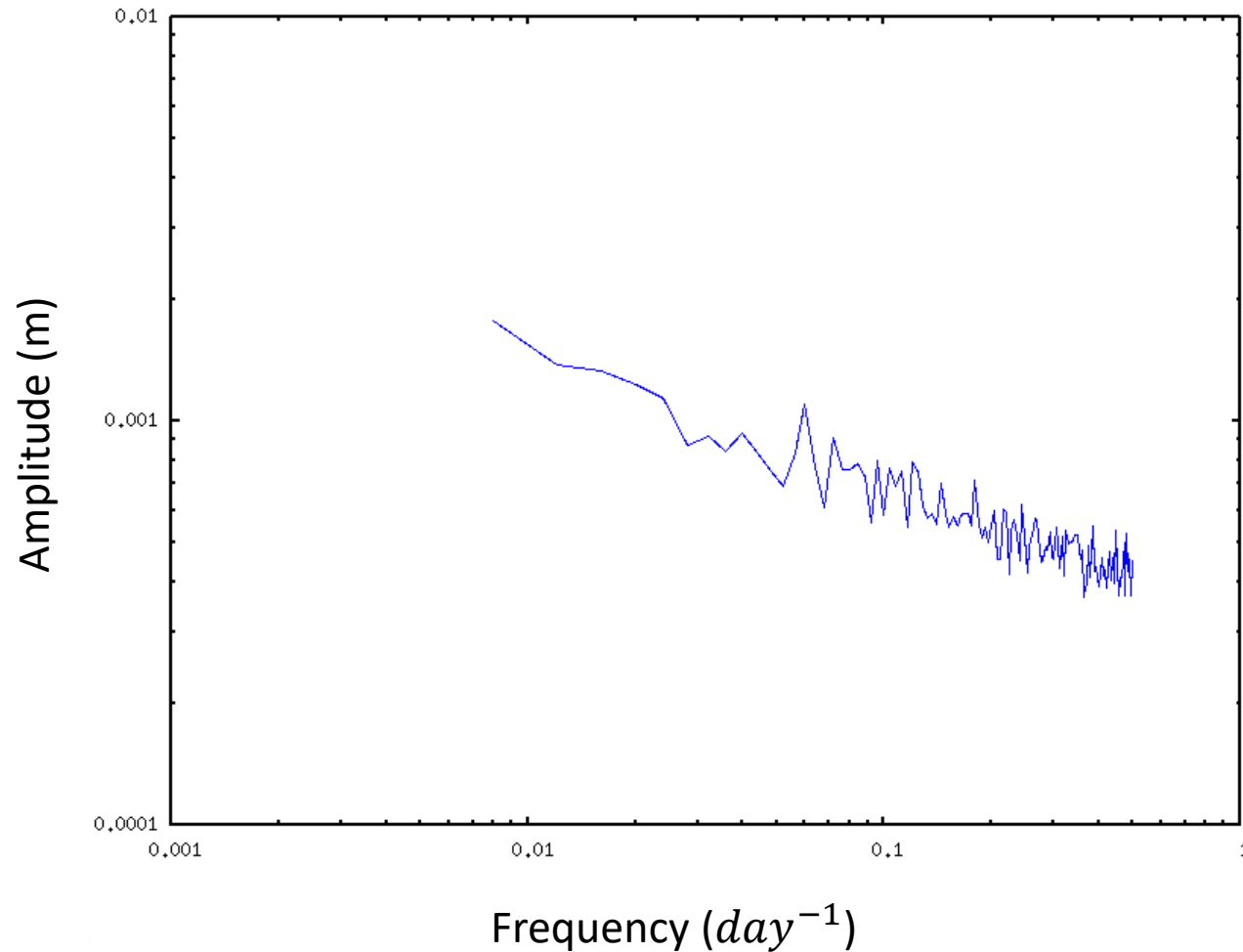
GPS analysis – E coordinate (but without corrections)



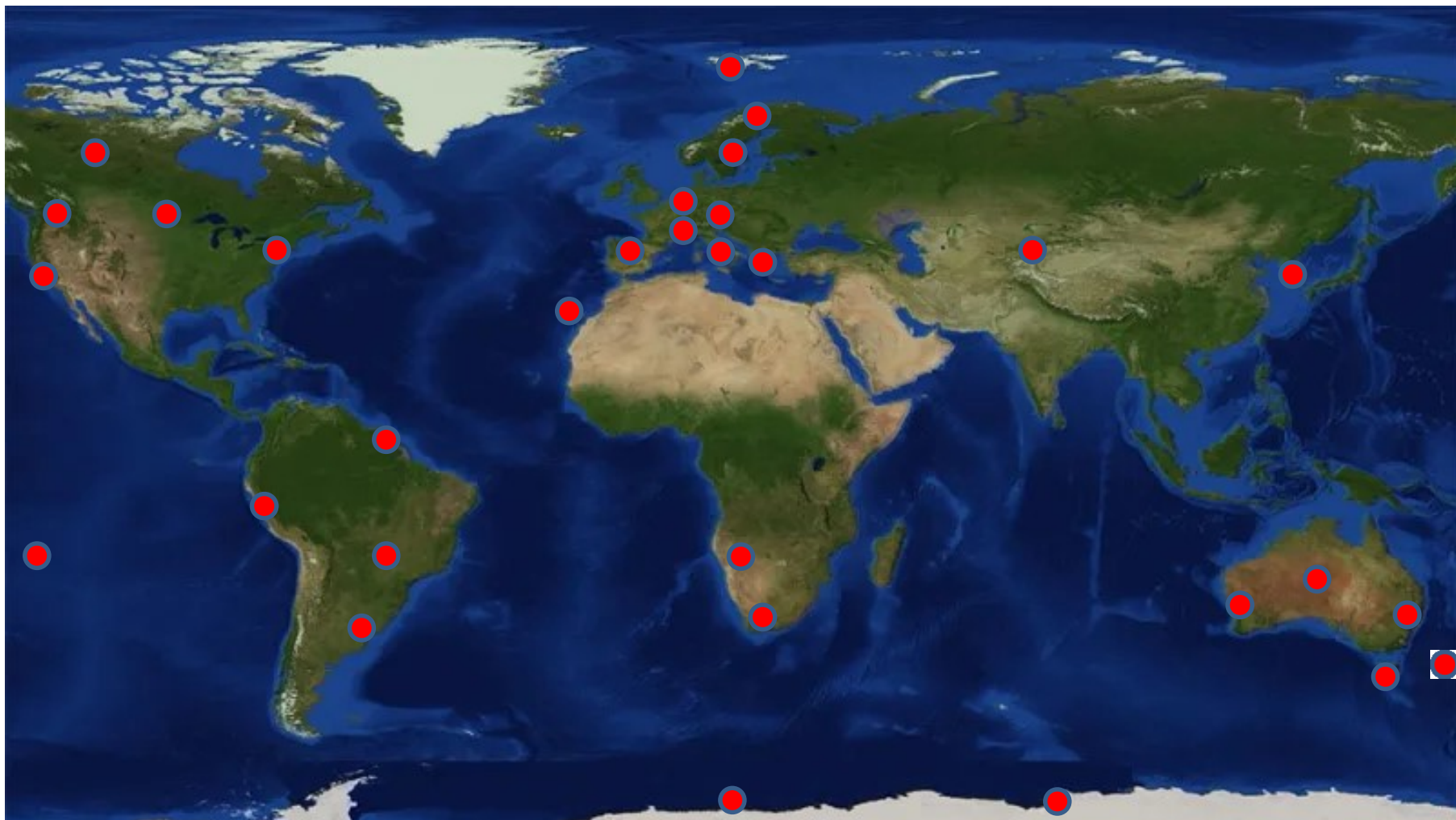
GPS analysis – N coordinate



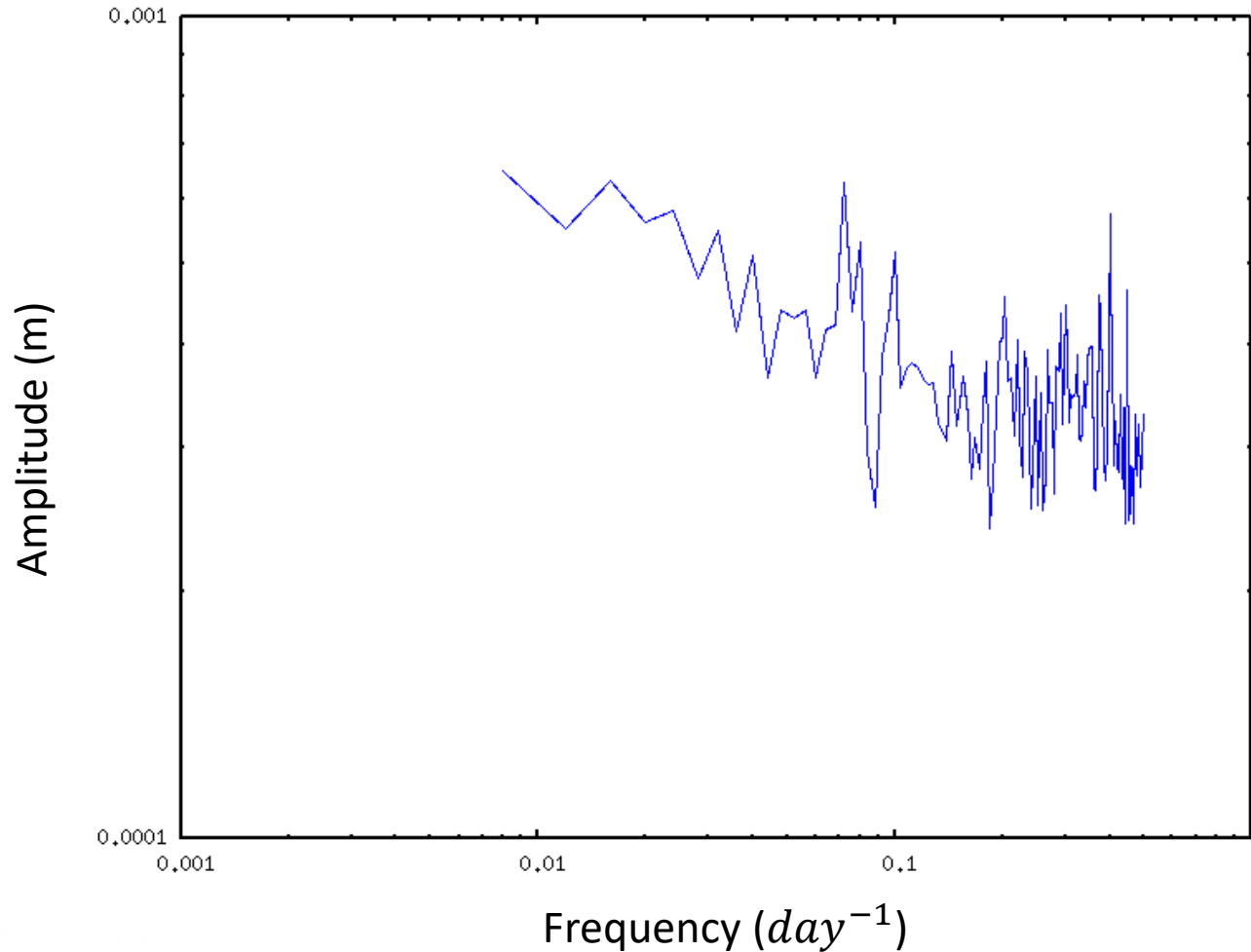
GPS analysis – U coordinate



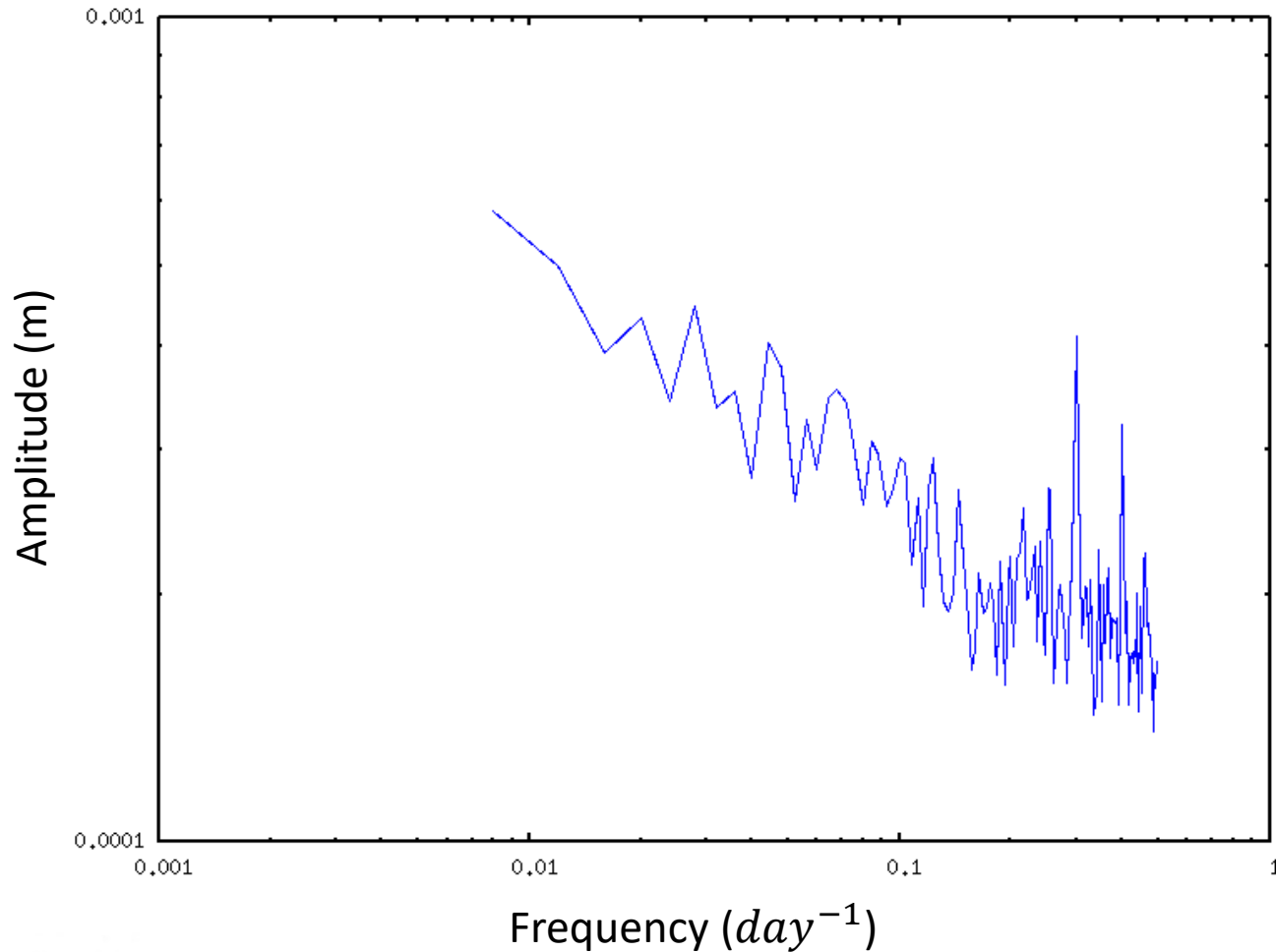
IGS stations for Galileo



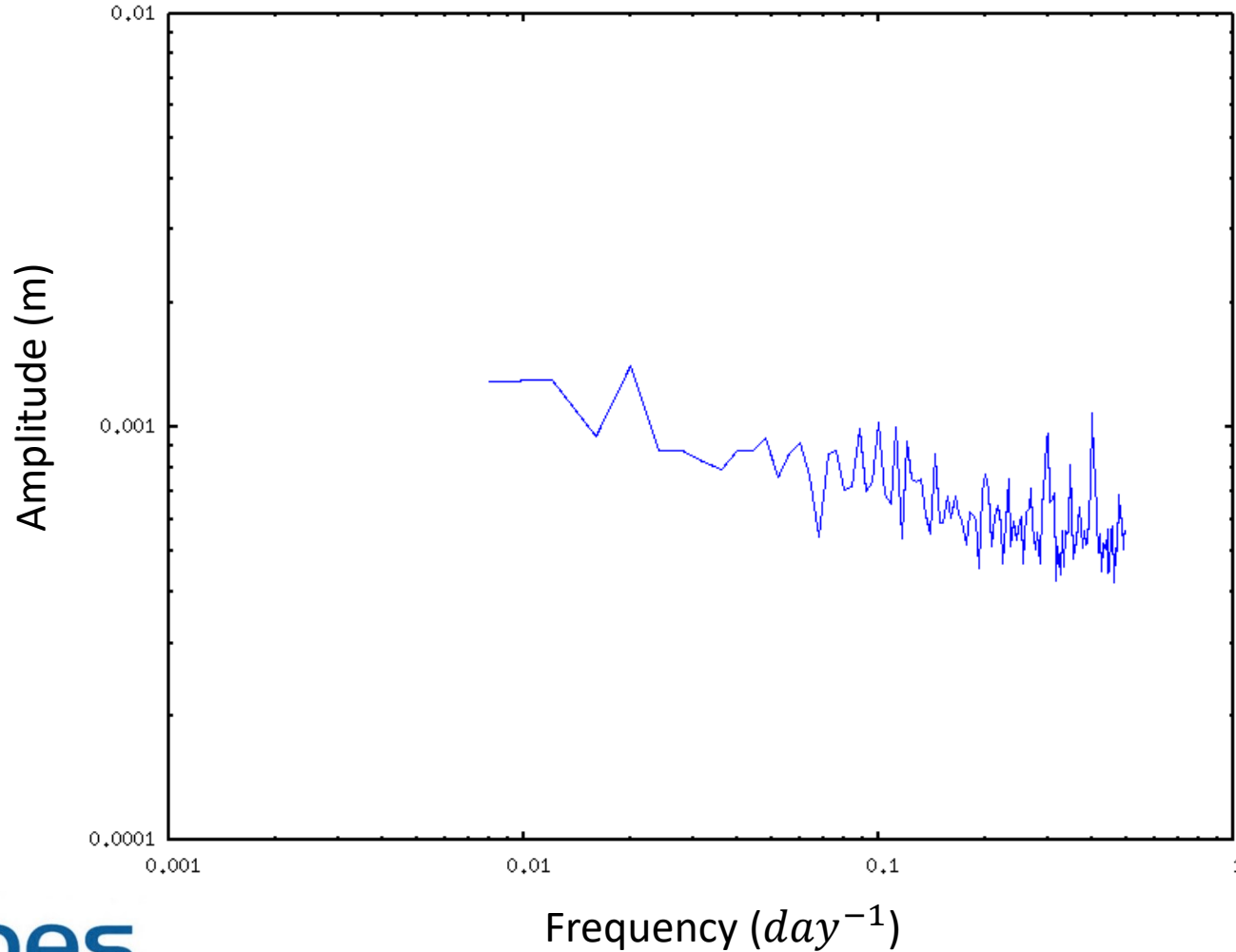
Galileo analysis – E coordinate



Galileo analysis – N coordinate



Galileo analysis – U coordinate



Conclusions and future work

1. GPS yields good periodograms and solutions over the time span under study since no 'big' spikes are shown.
2. Galileo solutions are not that good...yet. We need to:
 - Use BRA products between 2018/322 DOY et 2019/033 DOY
 - Use the correct Galileo alignment
 - Fix ambiguities to the integer value (IPPP)
3. Multi-GNSS analysis (GPS, Galileo, GLONASS)
4. **Overall, highlight the importance of GINS when it comes to PPP and IPPP analysis.**