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SMART SURVEYORS FOR LAND AND WATER MANAGEMENT
CHALLENGES IN A NEW REALITY

FIG NL THE NETHERLANDS

e WORKING WEEK 2021
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Investigation of the Kinematic PPP-AR Positioning Performance with Online CSRS-PPP Service

Session 5.4 GNSS Augmentation Services - Tuesday 22 June 10:30-12:00 CET

ORGANISED BY FIG GIN Geo-Informatie Nederland kadaster ITC UNIVERSITY OF TWENTE.

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Keynotes

- Traditionally precise point positioning method offers an ambiguity-float solution
- The implementation of AR needs additional hardware bias informations
- There are different approches for AR on PPP
- Natural Resources Canada made transition to PPP-AR at the end of 2020 (CSRS-PPP version 3)
- CSRS-PPP's AR method is based on «Decoupled Satellite Clock» model
- AR is only used with GPS satellites

Summary and Conlusion

- A comparision was made between CSRS-PPP-FLOAT and CSRS-PPP-AR with 6 days of data of KNY1 station
- The ambiguity fixing rates were over 99%
- The AR improved the kinematic PPP-AR, particularly at the east component

Thank you for your attention.