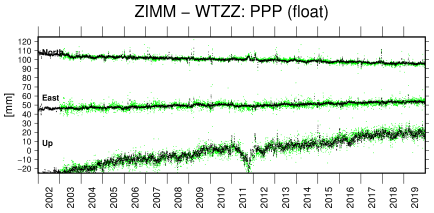
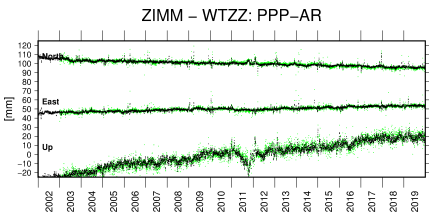
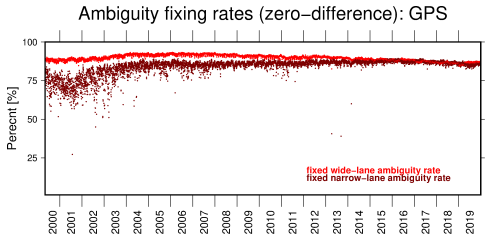
CODE contribution to the IGS Repro3: Status and assessment of the reprocessing products for integer-ambiguity precise point positioning.

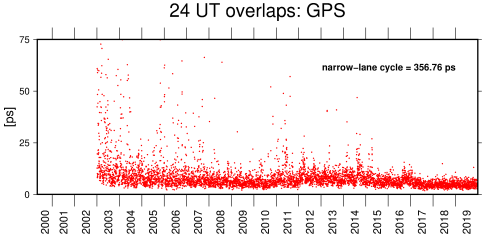
- CODE is producing integer-fixed clock products since mid of 2018 for GPS and Galileo
- Repro3 including IAR clocks which will enable PPP-ambiguity resolution (PPP-AR)
- Double-difference processing approach for geometry (orbits) and zero-difference processing approach for clocks
- IAR approach Common Clock - Observable-specific Signal Bias (CC-OSB) apporach
  [Schaer et al. 2020, submitted to JoG]

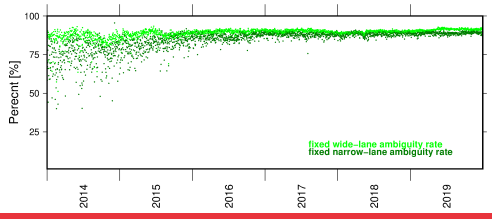


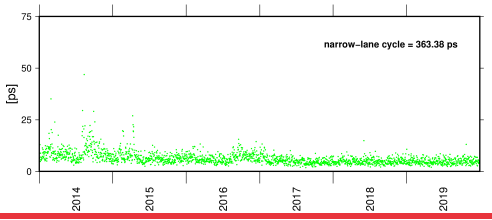


More than 80% of possible narrow-lane ambiguities solved; midnight clock misclosures at a level of 5 ps (2019)









PPP-ambiguity resolution for GPS and Galileo using CODE's new reprocessing products (repro3)

- Average overlapping clock differences at midnight in 2019 are for GPS and Galileo 5 ps in time (approx. 1.5 mm)
- This is the first repro from CODE including IAR clocks for PPP-AR
- Covering geometry/orbits (1994−) and IAR clocks for GPS and Galileo (2000−)
- Includes consistent GLONASS (ambiguity-float) clocks

GPS narrow-lane cycle ≈ 357ps

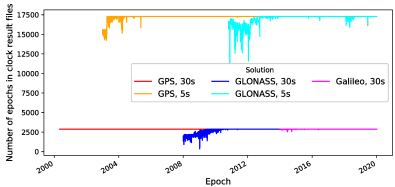


Figure: Clock product completeness

Product available at ftp://ftp.aiub.unibe.ch/REPRO_2020
Short description: ftp://ftp.aiub.unibe.ch/CODE/IAR_README.TXT

Product contact: code@aiub.unibe.ch *Author contact: arturo.villiger@aiub.unibe.ch*