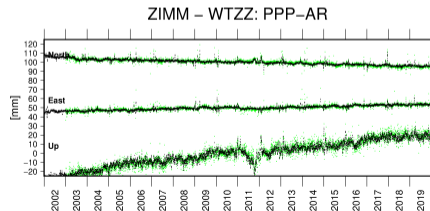
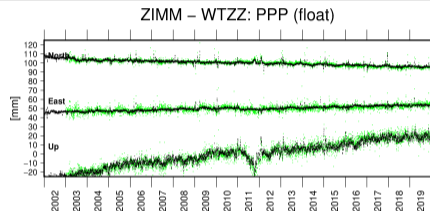


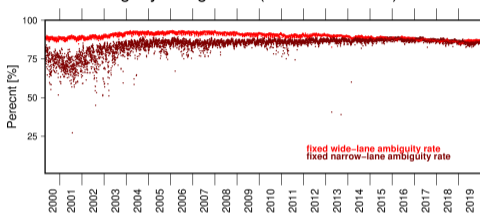
# CODE contribution to the IGS Repro3: Status and assessment of the reprocessing products for integer-ambiguity precise point positioning.

- 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**) approach  
*[Schaer et al. 2020, submitted to JoG]*

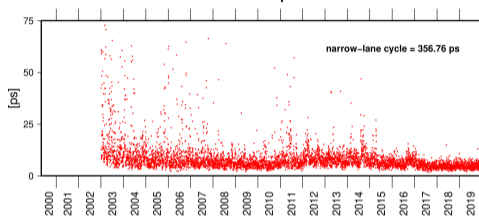


# More than 80% of possible narrow-lane ambiguities solved; midnight clock misclosures at a level of 5 ps (2019)

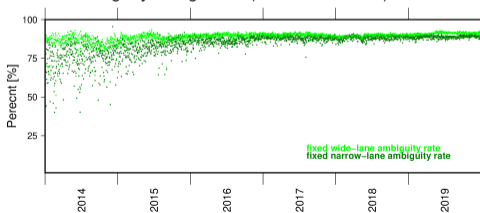
Ambiguity fixing rates (zero-difference): GPS



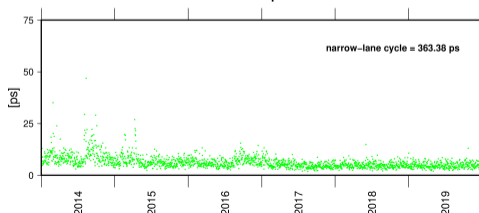
24 UT overlaps: GPS



Ambiguity fixing rates (zero-difference): Galileo



24 UT overlaps: Galileo



# 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  $\approx 357$ ps

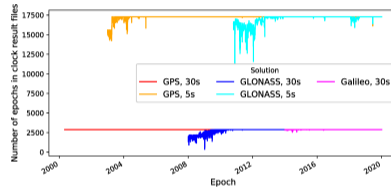


Figure: Clock product completeness

Product available at [ftp://ftp.aiub.unibe.ch/REPRO\\_2020](ftp://ftp.aiub.unibe.ch/REPRO_2020)

Short description: [ftp://ftp.aiub.unibe.ch/CODE/IAR\\_README.TXT](ftp://ftp.aiub.unibe.ch/CODE/IAR_README.TXT)

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