



## DPOD2020 version 1.0

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- **Based on the DORIS position and velocity cumulative solution ids22d01 (stacking of the IDS combined series ids 19 from 1993 doy 003 to 2021 doy 360).**
- **Available in SINEX and text formats.**
- **SINEX solution contains two additional (and unofficial) blocks:**
  - **SOLUTION/DISCONTINUITY: origin (ex: earthquake, beacon change, antenna problem...) of the position discontinuities.**
  - **SOLUTION/DATA\_REJECT: periods of time not included in the combination.**

# Constrained Velocities

Site	DORIS station	Reference station	Technique	Source
Ajaccio	AJAB	AJAC	GNSS	ITRF2020
Huahine	HUAA	7123	Laser Ranging	ITRF2020
Hofn	HOFC	HOFN	GNSS	ITRF2020
San Juan	SJUC	OAFA	GNSS	ITRF2020

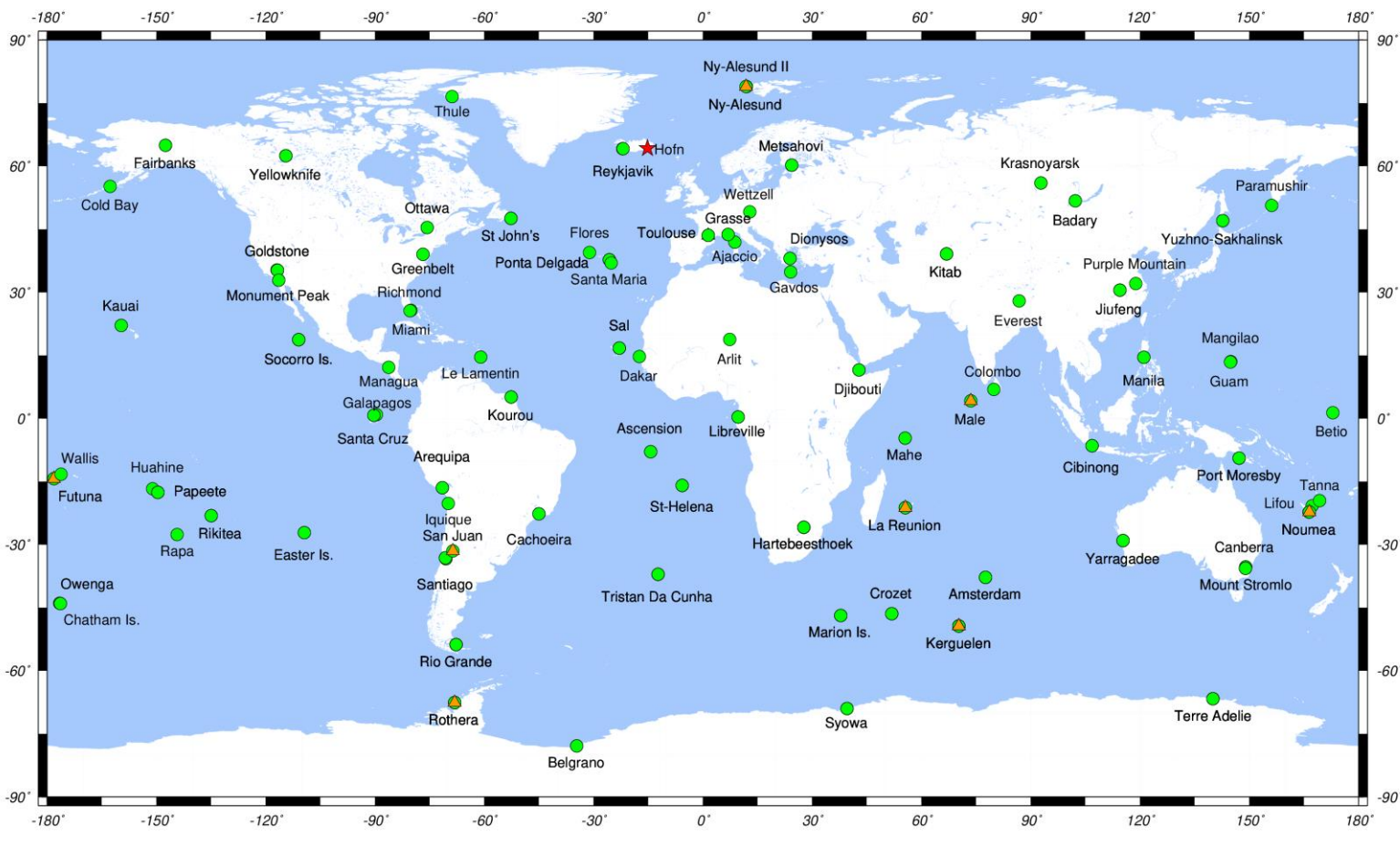


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# DPOD2020 v01 - Network

88 DORIS sites – 212 DORIS stations

New stations : HOFC (Höfn), FUUC (Futuna), KEXC-KEYC (Kerguelen), MALC (Male), NOXC (Nouméa), REVC (La Réunion), ROZC (Rothera), SJVC (San Juan), SVBC (Ny-Alesund II)



**Site not included ITRF2020 (# 1) – Site with new station(s) since ITRF2020 (# 8)**

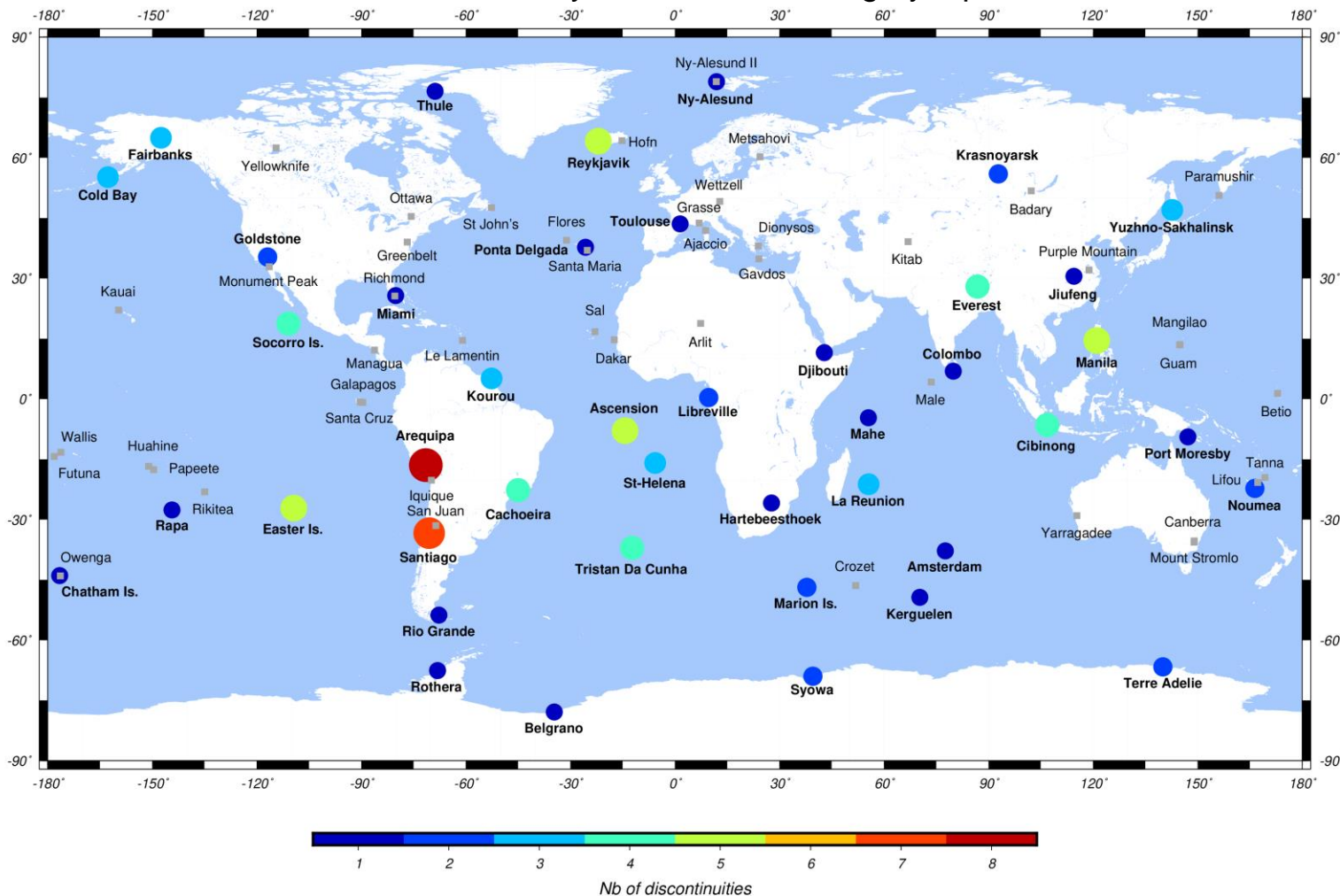




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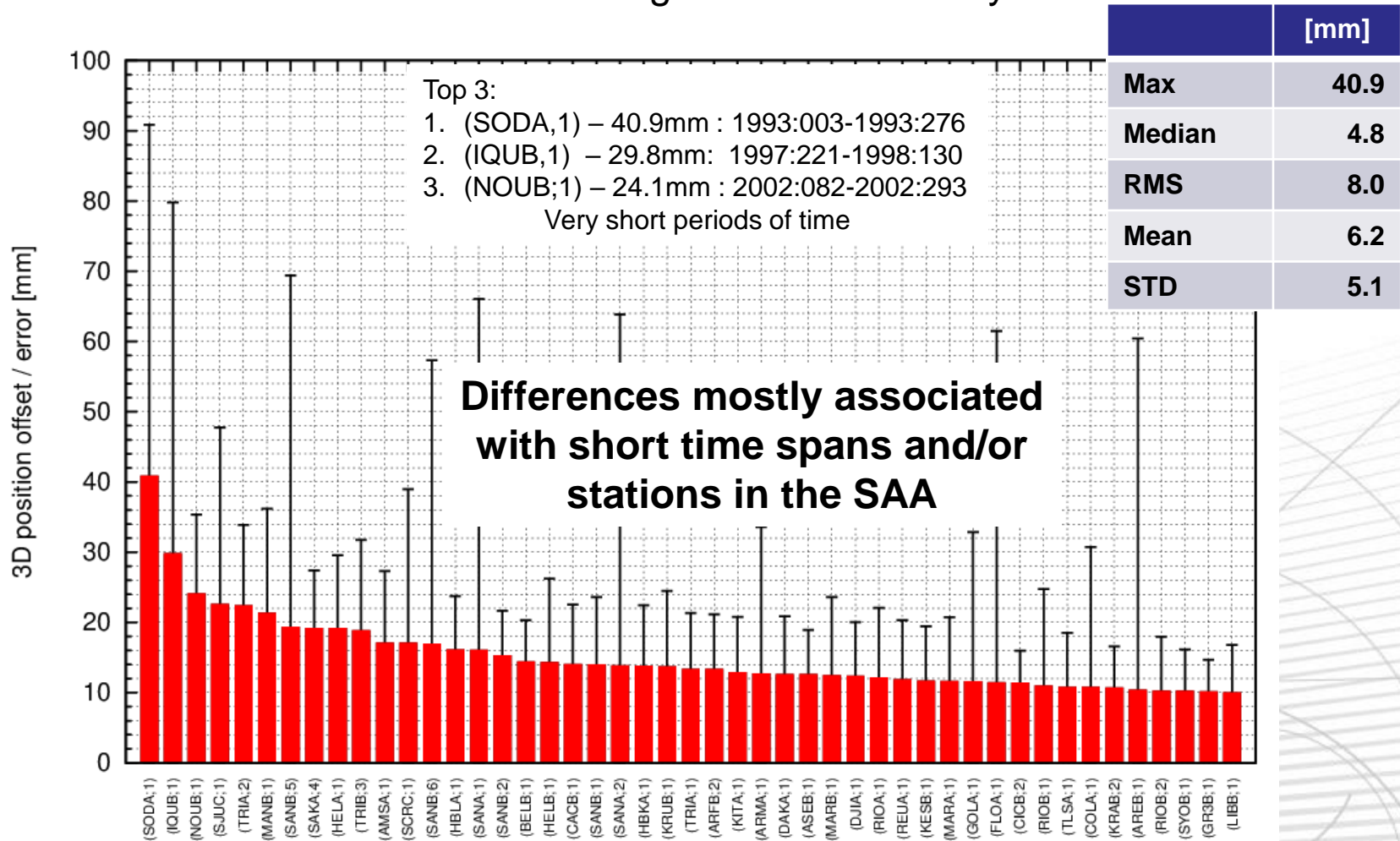
# DPOD2020 v01 – Position Discontinuities

Number of discontinuities by DORIS site. Sites with discontinuities are in boldface. Sites with no discontinuity are indicated with grey squares.



# DPOD2020 v01 vs ITRF2020 Position differences

Position differences at the mean epoch of the observations  
Differences larger than 10mm only





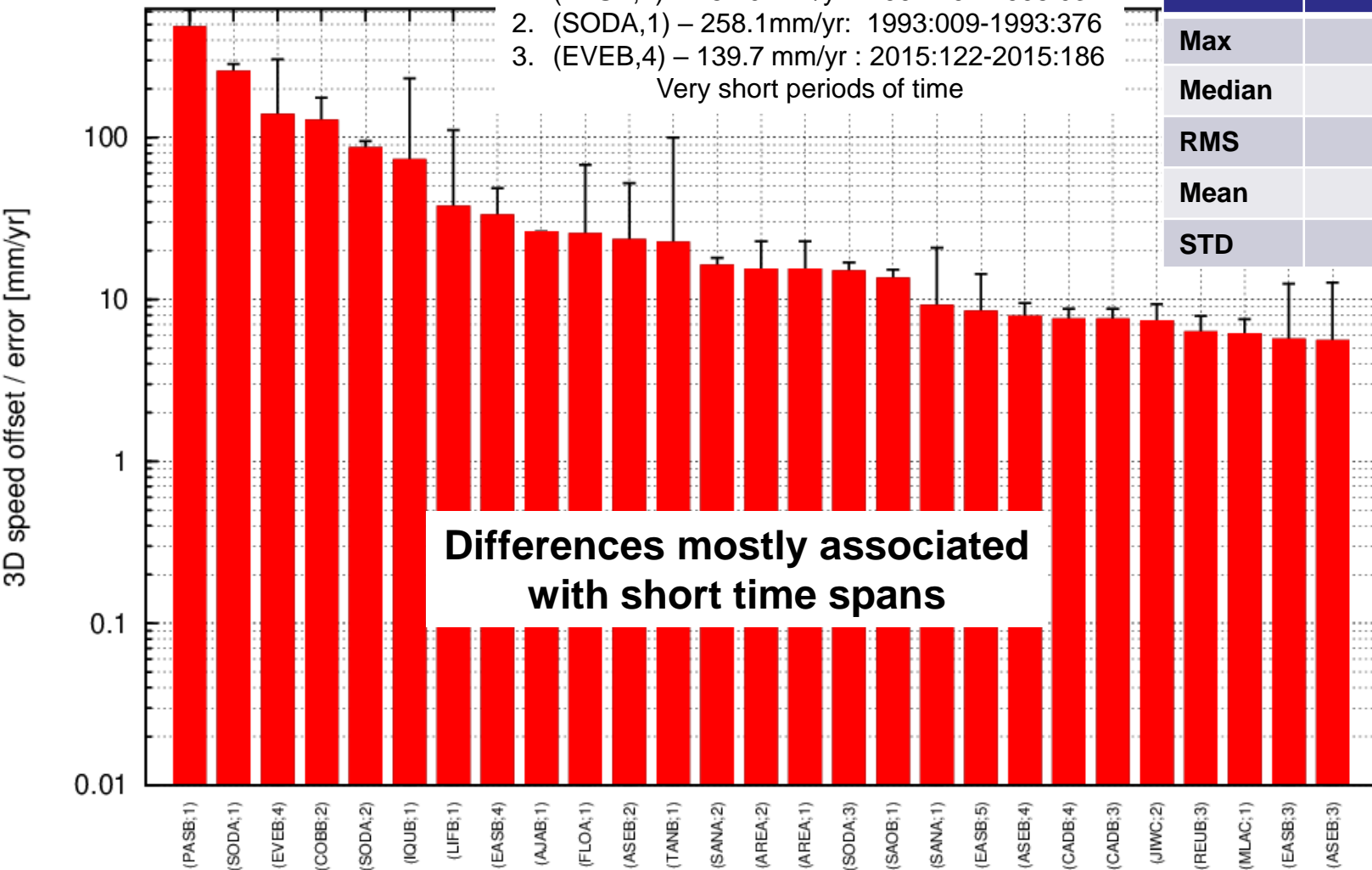
# DPOD2020 v01 vs ITRF2020

## Velocity differences – PSD sites excluded

Top 3:

1. (PASB,1) – 484.0 mm/yr : 1997:291-1998:032
2. (SODA,1) – 258.1mm/yr: 1993:009-1993:376
3. (EVEB,4) – 139.7 mm/yr : 2015:122-2015:186

Very short periods of time



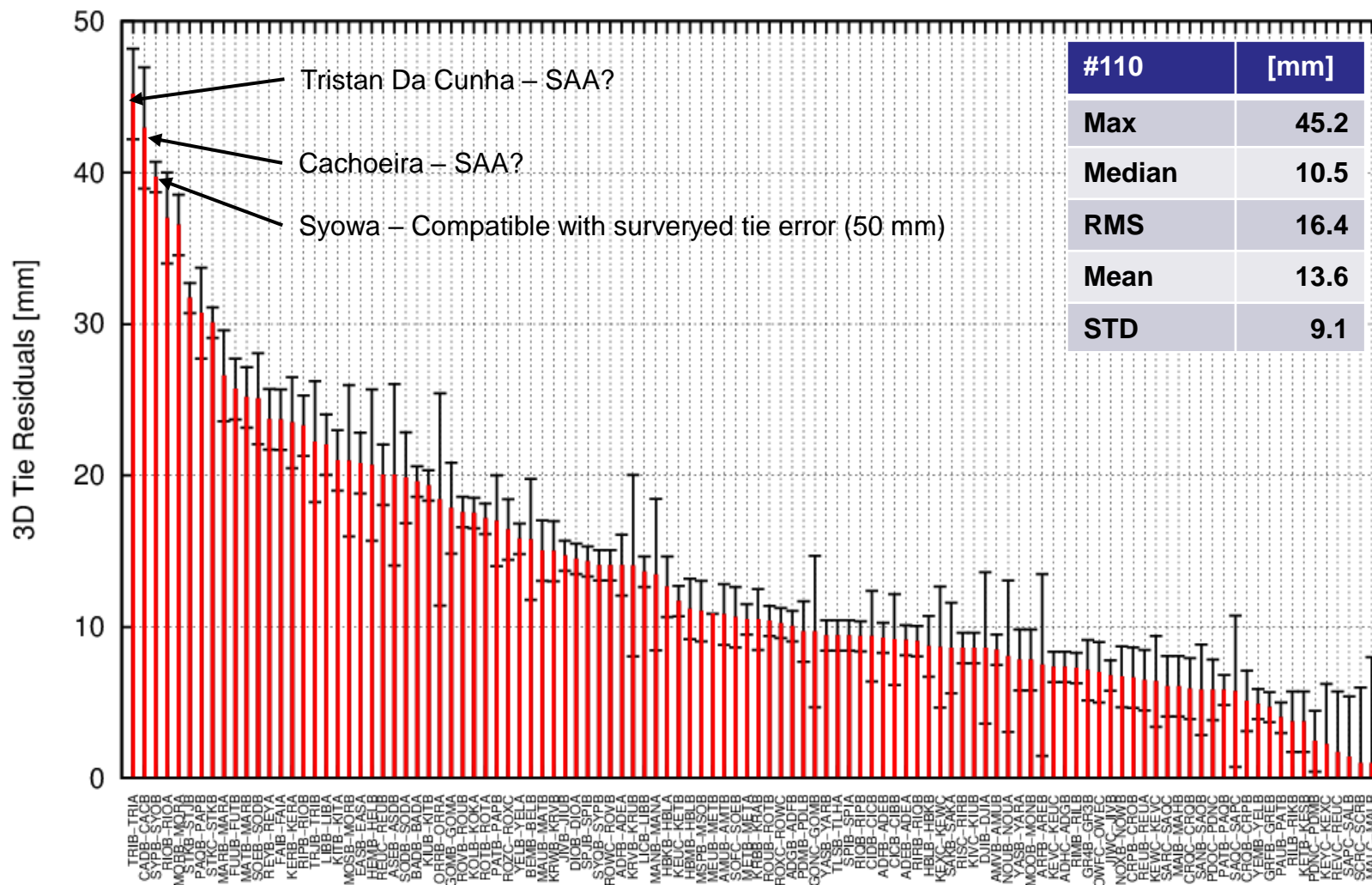
	[mm/yr]
<b>Max</b>	<b>484.0</b>
<b>Median</b>	<b>1.2</b>
<b>RMS</b>	<b>37.0</b>
<b>Mean</b>	<b>6.9</b>
<b>STD</b>	<b>36.4</b>



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# DPOD2020 v01 vs IGN DORIS-to-DORIS ties

Coordinate differences estimated at the date of the surveyed ties







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# DPOD2020 v01 vs IGN DORIS-to-GNSS ties

Coordinate differences estimated at date of the surveyed ties.  
GNSS positions are estimated from ITRF2020 with PSD corrections.

