



DORIS Cumulative Solution ids17d01

Guilhem Moreaux (IDS Combination Center)

- **First version of the DORIS position and velocity cumulative solution from the IDS Combination Center.**
 - Stacking of the IDS combined series ids 12 from 1993 doy 003 to 2015 doy 354.
 - Position constraints from the IGN DORIS-to-DORIS ties (2016/09/02).
 - Continuity velocity constraints.
 - Aligned to ITRF2014.
- **Available in SINEX (ids17d01.snx) format.**
- **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.
- **Can be downloaded from the IDS Data Centers (CDDIS, IGN).**
 - ftp://cddis.gsfc.nasa.gov/pub/doris/products/sinex_global/ids/
 - ftp://doris.ensg.ign.fr/pub/doris/products/sinex_global/ids/
- **Questions and/or comments: ids.combination@ids-doris.org**

- **Velocities must be constrained.**

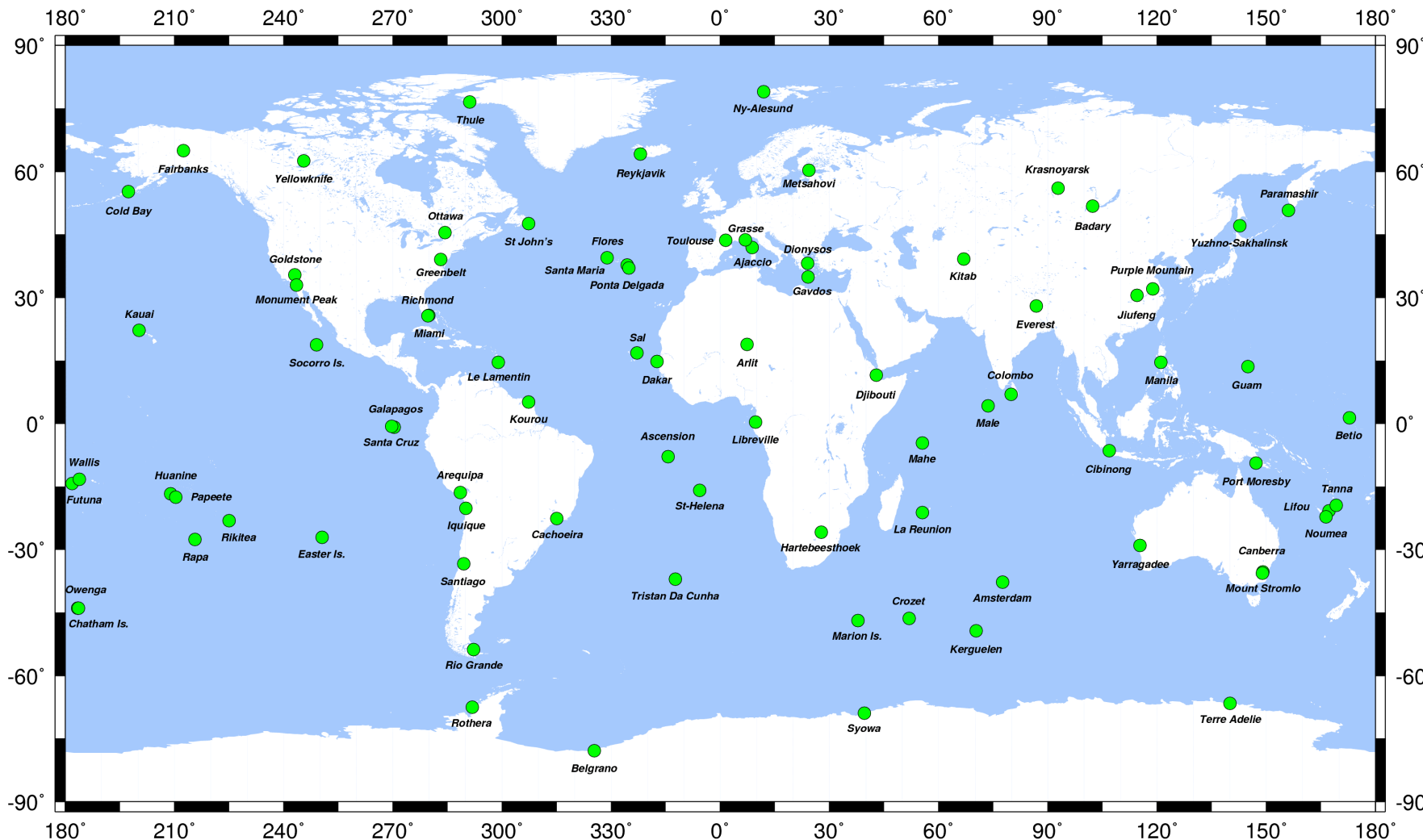
Site	DORIS station	Reference station	Technique	Source
Ajaccio	AJAB	AJAC	GNSS	ITRF2014
Flores	FLOA	FLOA	DORIS	DPOD2008 (1.14)
Huanine	HUAA	7123	Laser Ranging	ITRF2014
Iquique	No constraint since seismic active site and no colocation			
Le Lamentin	LAOB	LMMF	GNSS	ITRF2014
Lifou	LIFB	LPIL	GNSS	ITRF2014
Owenga	OWEC	CHTI	GNSS	ITRF2014
Tanna	TANB	TANB	DORIS	DPOD2008 (1.14)



<http://ids-doris.org>

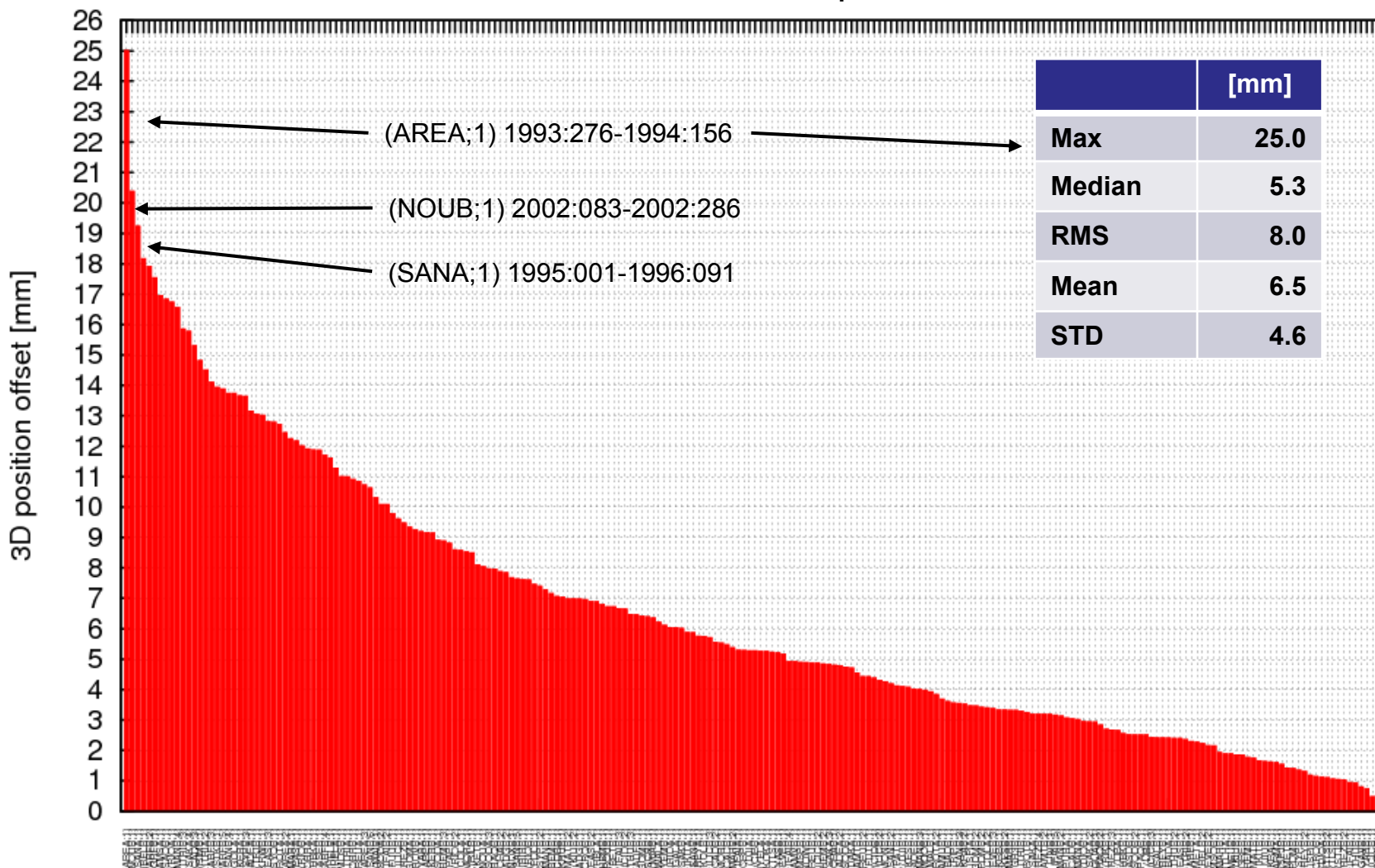
ids17d01 - Network

82 DORIS sites – 180 DORIS stations



ids17d01 vs ITRF2014 (PSD included)

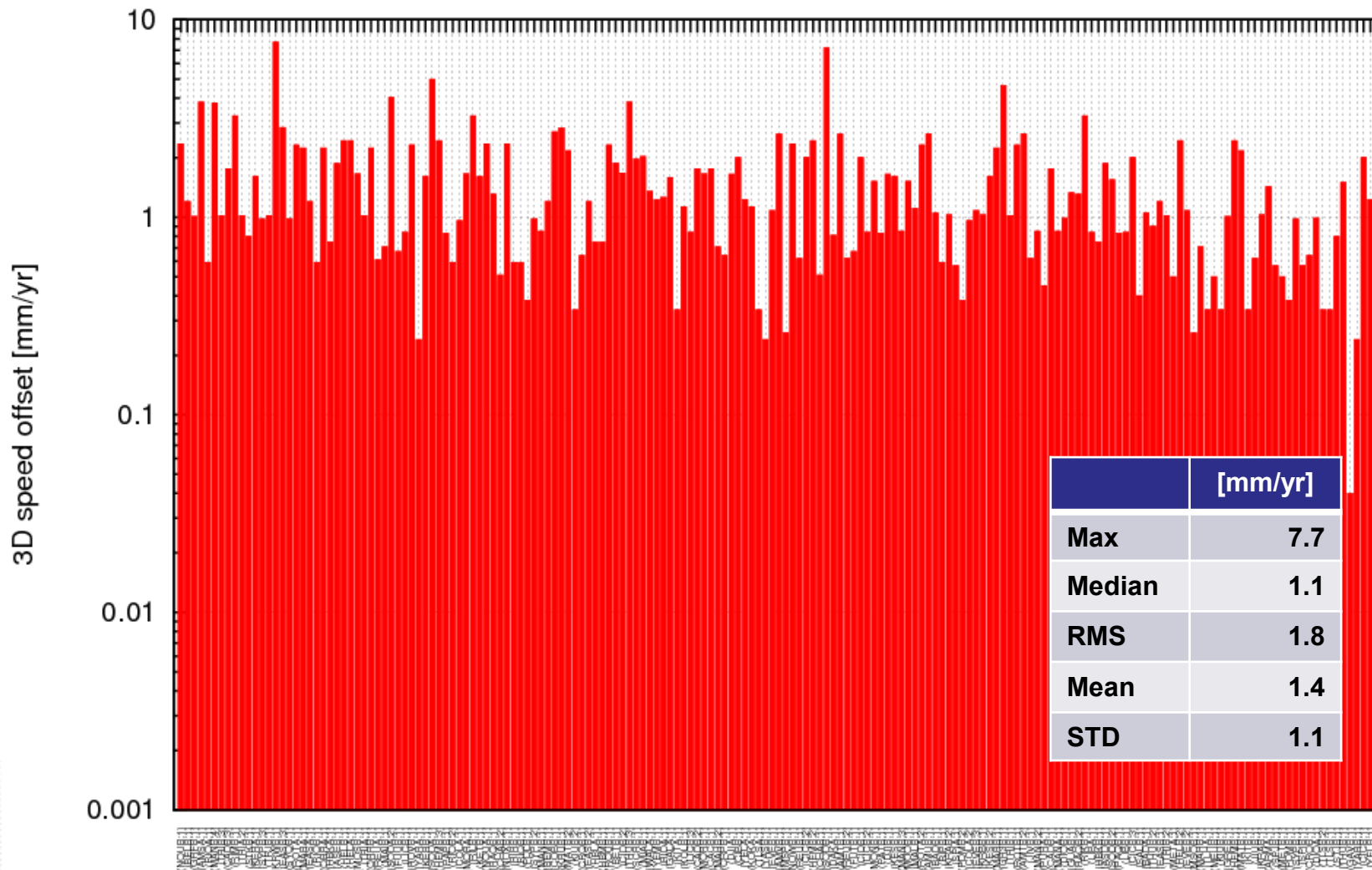
Position differences at the mean epoch of the observations



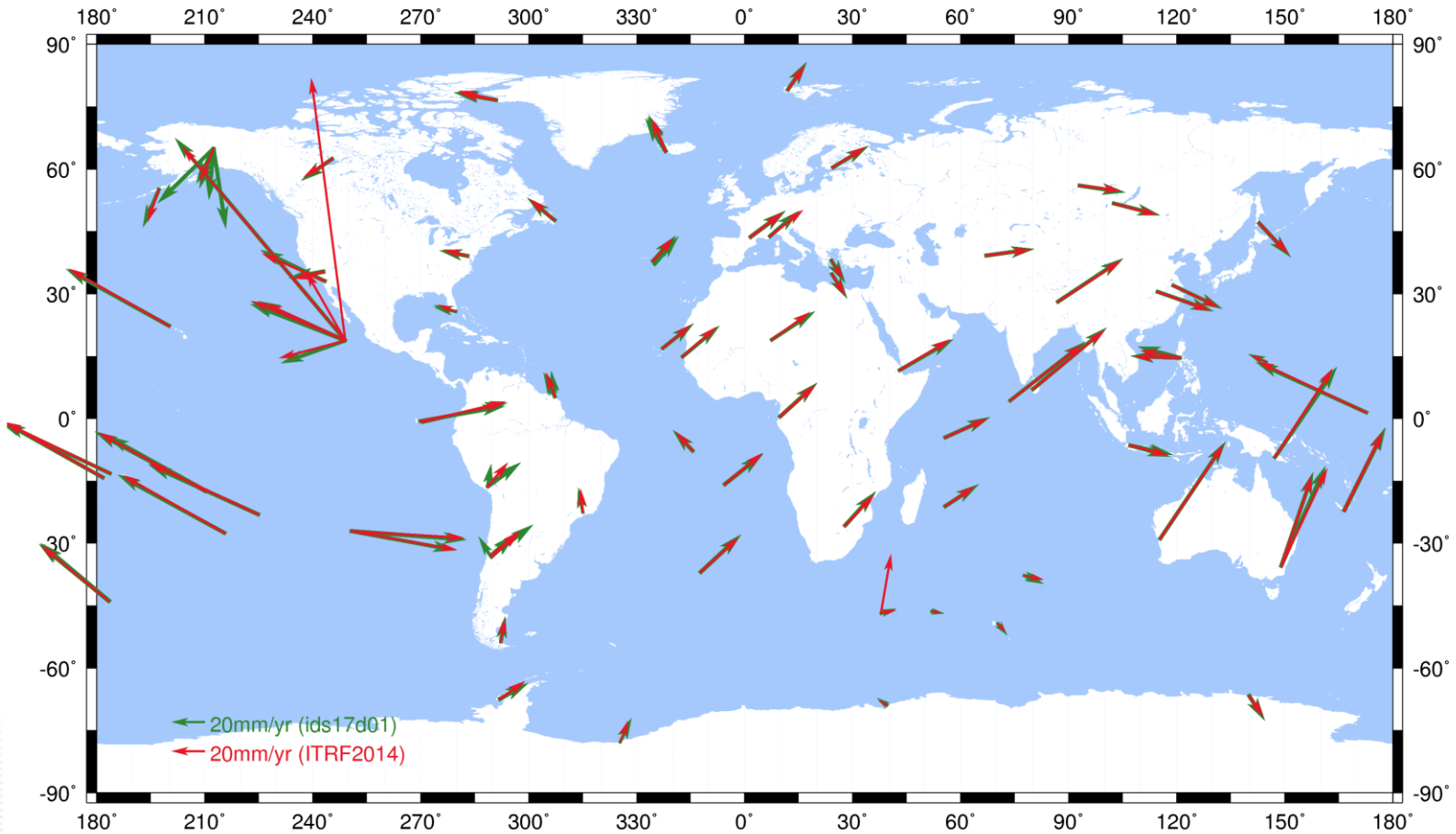


<http://ids-doris.org>

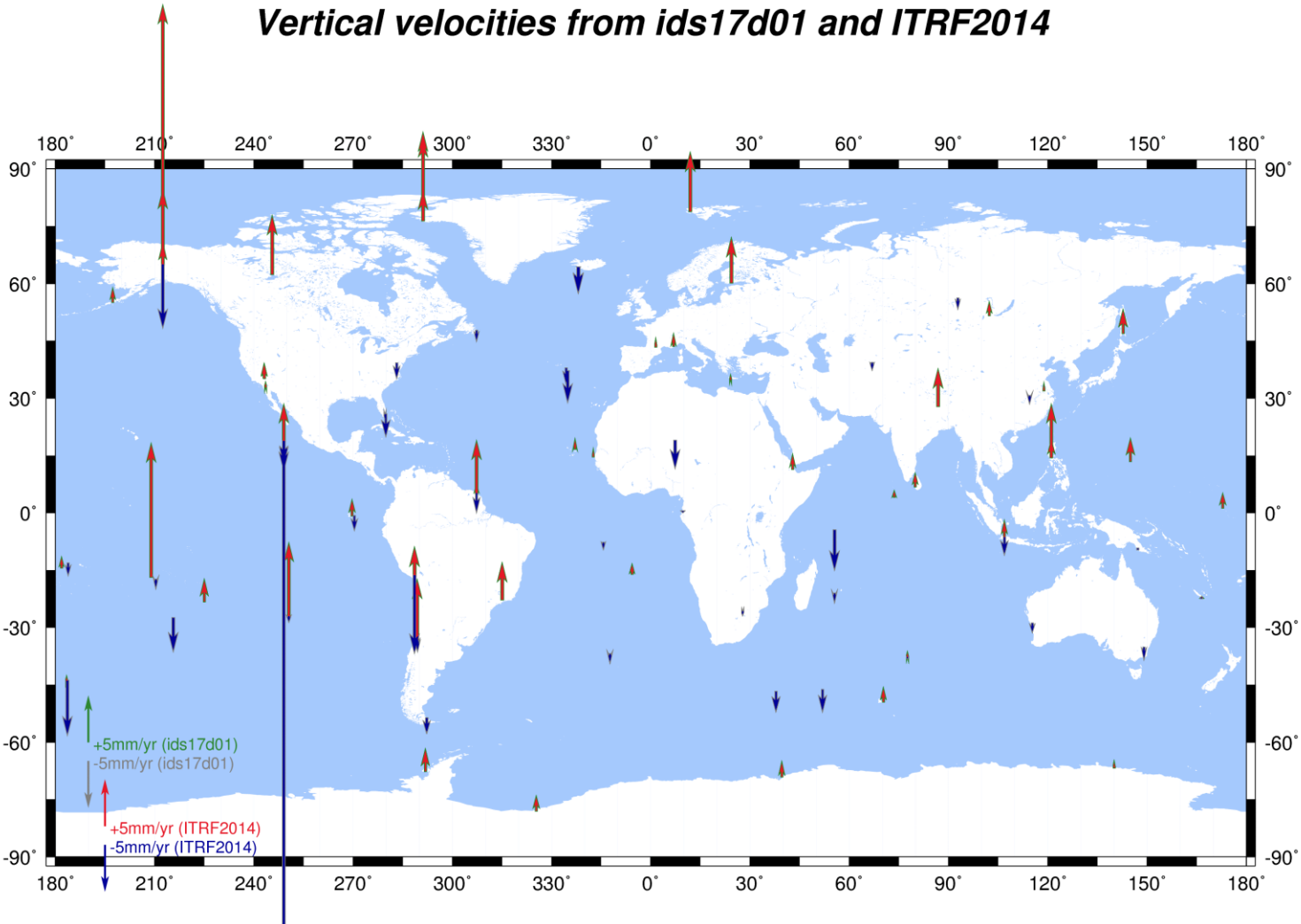
ids17d01 vs ITRF2014 Velocity differences – PSD sites excluded



Horizontal velocities from ids17d01 and ITRF2014



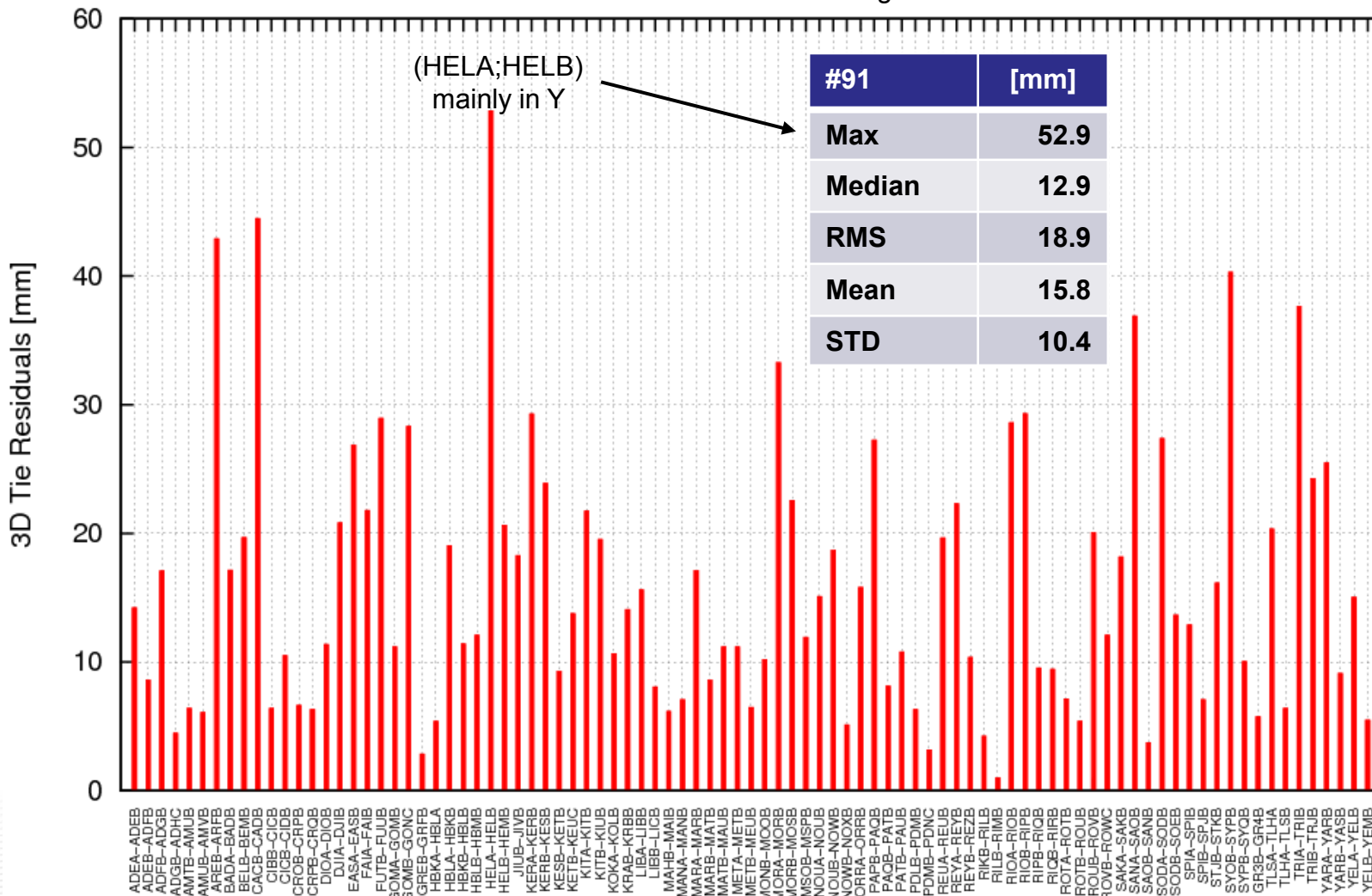
Vertical velocities from ids17d01 and ITRF2014





ids17d01 vs IGN DORIS-to-DORIS ties

Coordinate differences estimated at the begin of the most recent station



(HELA;HELB)
mainly in Y

AREA-AREB removed due to earthquakes in between

OTTA-OTTB removed due to more than 18 months in between

Ids17d01 vs IGN DORIS-to-GNSS ties

Coordinate differences estimated at max(time_beg_GNSS, time_beg_DORIS)

