

Erratum to: A consistent combination of GNSS and SLR with minimum constraints

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The translations and translation rates from the transformation between the GNSS-only solution with respect to ITRF2008 presented in Table 5 of the original article are incorrect. The correct numbers can be found in Table 5 presented in the

following page. The newly provided values do not alter the conclusion presented in the original paper. The authors are very thankful to Matt King for his special attention and pointing to this issue.

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Table 5 Transformation parameters of a 14-parameter Helmert transformation (translation T_X , T_Y , T_Z , rotation R_X , R_Y , R_Z , scale D and their temporal changes with their corresponding standard deviations) at the reference epoch $t_0 = 01.01.2005$ and the standard deviation s_0 of

the transformation between the ITRF2008 (Altamimi et al. 2011) and the GNSS-only, SLR-only (top table) and the combined (GNSS+SLR) solution (bottom table)

ITRF2008		GNSS-only		SLR-only	
T_X (mm)	\dot{T}_X (mm/a)	1.41 ± 0.23	0.86 ± 0.01	1.00 ± 1.88	0.18 ± 0.00
T_Y (mm)	\dot{T}_Y (mm/a)	8.25 ± 0.23	-0.41 ± 0.01	0.08 ± 1.90	0.16 ± 0.01
T_Z (mm)	\dot{T}_Z (mm/a)	2.42 ± 0.22	0.61 ± 0.01	-0.93 ± 1.82	-0.21 ± 0.01
R_X (mas)	\dot{R}_X (mas/a)	-0.018 ± 0.008	-0.001 ± 0.000	-0.023 ± 0.077	-0.020 ± 0.001
R_Y (mas)	\dot{R}_Y (mas/a)	-0.009 ± 0.009	0.002 ± 0.000	0.094 ± 0.071	-0.005 ± 0.001
R_Z (mas)	\dot{R}_Z (mas/a)	0.005 ± 0.009	0.002 ± 0.000	-0.124 ± 0.069	-0.002 ± 0.001
D (ppb)	\dot{D} (ppb/a)	-1.14 ± 0.01	-0.01 ± 0.00	-0.21 ± 0.28	0.07 ± 0.00
s_0 (mm)		3.17		8.57	
ITRF2008		GNSS+SLR			
T_X (mm)	\dot{T}_X (mm/a)	1.02 ± 0.64	0.99 ± 0.03		
T_Y (mm)	\dot{T}_Y (mm/a)	8.28 ± 0.63	-0.78 ± 0.03		
T_Z (mm)	\dot{T}_Z (mm/a)	2.79 ± 0.62	0.21 ± 0.03		
R_X (mas)	\dot{R}_X (mas/a)	-0.026 ± 0.024	-0.002 ± 0.001		
R_Y (mas)	\dot{R}_Y (mas/a)	-0.008 ± 0.025	0.000 ± 0.001		
R_Z (mas)	\dot{R}_Z (mas/a)	-0.007 ± 0.025	0.003 ± 0.001		
D (ppb)	\dot{D} (ppb/a)	-1.07 ± 1.32	0.00 ± 0.00		
s_0 (mm)		5.15			

Reference

- Altamimi Z, Collilieux X, Métivier L (2011) ITRF2008: an improved solution of the international terrestrial reference frame. *J Geod* 85(8):457–473. doi:[10.1007/s00190-011-0444-4](https://doi.org/10.1007/s00190-011-0444-4)