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ERRATA: Geologically current plate motions

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1 ERRATA

A list of typographical and/or transcription errors in DeMets et al. (2010) follows and are accompanied by suitable corrections. (1) The GPS-derived angular velocities and covariances in Table 4 on page 58 were transcribed incorrectly into the original manuscript from their computer source files. Table 4 is amended herein and fully replaces the original Table 4. None of the transcription errors in Table 4 affect the MORVEL angular velocity estimates or any of the other calculations in the original paper. (2) All velocities given in Paragraph 2 of Section 5.8.2 (page 61) for the movement of the Caribbean plate relative to the South America plate along the Central Range fault of Trinidad (10.4°N, 61.2°W) instead specify motion of the South America plate relative to a fixed Caribbean plate. In the same paragraph, the 20.0±0.5 mm yr^{-1} (1σ), S78.2°W±1.3° velocity that is predicted at 10.4°N, 61.2°W by the MORVEL South America-Caribbean plate angular velocity was inadvertently determined using an out-of-date angular velocity estimate and should instead be 20.4±0.4 mm yr^{-1} (1σ) toward S76.5°W±1.4°. The new velocity resolves into fault-parallel and fault-normal components of 20.2±0.4 mm yr^{-1} and 3.0±0.5 mm yr^{-1} along the N68°E-striking Central Range fault, slightly different than the values of 19.6±0.5 mm yr^{-1} and 3.5±0.5 mm yr^{-1} that are cited near the end of the same paragraph. (3) The first sentence in Section 5.6.6 incorrectly states that there are 68 seafloor spreading rates from the Pacific-Cocos plate boundary. There are instead 61 spreading rates. (4) Finally, the exclamation point within the text string ”NA!SA” in Figure 25 should instead be a hyphen.

REFERENCES

DeMets, C., R. G. Gordon, and D. F. Argus, 2010, Geologically current plate motions, *Geophys. J. Int.*, **181**, 1–80, doi: 10.1111/j.1365-246X.2009.04491.x.

Table 4. Corrected best-fitting GPS angular velocities and covariances relative to ITRF2000 and ITRF2005

Plate	Num.	Angular velocity			Variances and covariances					
	stations	Lat. °N	Long. °E	ω (°/Myr)	σ_{xx}	σ_{xy}	σ_{xz}	σ_{yy}	σ_{yz}	σ_{zz}
AM-ITRF2000	20	-61.9	59.5	0.283	0.816	-1.286	-1.604	2.479	2.945	3.831
AU-ITRF2000*	20	-32.6	-142.5	0.626	0.125	-0.090	0.082	0.107	-0.071	0.107
CA-ITRF2005	16	36.9	-98.9	0.261	0.706	-1.561	0.484	4.459	-1.309	0.716
NA-ITRF2005*	457	-6.8	-84.8	0.189	0.001	0.000	0.000	0.032	-0.023	0.020
PA-ITRF2005*	21	-63.4	111.8	0.677	0.168	0.029	-0.010	0.035	-0.002	0.056
PS-ITRF2005	4	-47.1	-29.6	0.925	8.601	-9.486	-5.537	10.718	6.200	3.892
SU-ITRF2000	18	-48.5	86.1	0.326	0.746	-1.809	-0.434	7.799	1.800	0.565
YZ-ITRF2000	83	-61.9	65.3	0.320	0.382	-0.747	-0.468	1.561	0.967	0.628

* - Geodetic reference plate for MORVEL.

Plate abbreviations are defined in Fig. 1 of DeMets et al. (2010). Angular velocities describe counter-clockwise rotation of the given plate relative to either ITRF2000 or ITRF2005. All site velocities were adjusted for geocentral translation prior to the estimate of the best-fitting angular velocities, as described in the text. Cartesian covariances are propagated from the GPS velocity uncertainties and have units of 10^{-8} radians^2 per Myr^2. Additional information about the covariances is given in the footnotes to Table 1 of DeMets et al. (2010).