

Accuracy of Fast-PPP Corrections

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Confidence bounds
(sigmas) are provided
for all corrections.

**These sigmas must be
used** to properly weight
the corrections.

Correction	Content	Figures of Merit
Fast (30s)	Satellite Clocks	RMS 0.17 ns (5 cm) (discrepancy w.r.t. IGS-Rapid Product)
Slow (300s)	Orbit Corrections	RMS 3D (4 cm) (discrepancy w.r.t. IGS-Rapid Product)
	Satellite Differential Code Biases (DCBs)	0.07 ns (2 cm L1) (1 σ stability over 2014)
	Fractional part of ambiguities	B1: 0.1 cycles (2 cm) (RMS of day-to-day discontinuity, over 2014)
		BW: < 0.01 cycles (< 1 cm) (RMS of day-to-day discontinuity, over 2014)
Ionosphere (GIM: 900s)	Dual Layer TECs	GIM (MODIP format): 1.8 TECU (29 cm L1) [*]
		GIM (IONEX format): 2.7 TECU (43 cm L1) [*]
Ionosphere Ref. values (STEC: 30s)	From unambiguous L1-L2 carriers (after removing DCBs)	Accuracy: STEC <0.7 TECU (<10 cm L1) Precision: STEC <0.07 TECU (< 1 cm L1) [*]

[*] See details in: Rovira-Garcia A., Juan J. M., Sanz J., González-Casado G., D. Ibáñez-Segura (2016). "Accuracy of ionospheric models used in GNSS and SBAS: methodology and analysis", Journal of Geodesy, Volume 90, Issue 3, pp 229-240, March 2016. DOI: [10.1007/s00190-015-0868-3](https://doi.org/10.1007/s00190-015-0868-3)