

Geb's Feature Matrix

(actualized 12.4.2013)

	Geb-PP (v. 0.9.0)	Geb-RT (1st half, 2013)	Geb (2nd half, 2013)
GNSS support	GPS *	GPS *	+ GLONASS, Galileo, ...
Processing modes	post-processing	real-time	(near) real-time, post-processing, multi-batch
Decoders	RINEXO, RINEXC, SP3, ATX *	BNC OBS, BNC RTCM, ATX *	+ BLQ, (JPL's DE), + RTCM (*)
Encoders	LOG, FLT	LOG, FLT	+ CRD, NEQ, ...
IOs	file	tcp, ntrip	file, tcp, ntrip (http, ftp,...)
IO server	-	-	YES
Ambiguity	float	float	+ (fixed)
DCB biases	-	-	YES
Adjustment models	kalman filter, sqrt, back-smoothing	kalman filter, sqrt modification	+ filter back-smoothing + LSQ and NEQ stacking
Preprocessing models	L4+Melbourne-Wuebenna	L4+Melbourne-Wuebenna	+ non-parametric screening
Antenna offsets, variations	phase center offsets	phase center offsets	+ phase center variations
Eclipse handling	-	-	YES
Satellite attitude	-	-	Kouba's model
Windup effect	YES	YES	YES
Solid Earth tides	Simplified model	Simplified model	IERS2010
Planetary ephemeris	Sun & Moon simplified model	Sun & Moon simplified model	JPL's DE
Pole tides	-	-	YES
Ocean loading	-	-	YES
Atmospheric loading	-	-	-
Higher order iono efects	-	-	-
Tropospheric models	ZHD Saastamoinen (GPT) ZWD estimated *	ZHD Saastamoinen (GPT) ZWD estimated *	+ GPT2, VMF1(G), gradients, slant delays
Tropospheric mapping functions	COSZ, GMF *	COSZ, GMF *	+ GPT2, VMF1(G)
Processing clusters	single station support *	single station support *	multi-station, multi-batch
Configuration	XML (simplified) *	XML (simplified)	XML (full)
Monitoring console	-	-	YES
Supported platforms	Linux *	Linux *	+ Windows, ...

* - features expected to be revised/extended in near future