100m cannot keep time

The GPS on 100m seems to be acting weird. It has signal lock, currently slowing 9 or 10 satellites:

```
rs G
connecting to inet:localhost.localdomain:30002
connected to inet:localhost.localdomain:30002
sent:"/var/tmp/gps_pty0
"
line="OK"
parameters: 4800 none 8 1 "\n" 1 0 prompted=false
$GPRMC,152515,A,4003.0021,N,10500.2309,W,000.0,240.5,010415,008.9,E*68\r\n
$GPRGA,152516,4003.0021,N,10500.2309,W,2.10,1.0,1690.0,M,-18.0,M,,*46\r\n
$GPRGA,152516,4003.0021,N,10500.2309,W,2.09,1.0,1690.0,M,-18.0,M,,*40\r\n
$GPRGA,152516,4003.0021,N,10500.2309,W,2.09,1.0,1690.0,M,-18.0,M,,*40\r\n
$GPRGA,152517,A,4003.0021,N,10500.2309,W,000.0,240.5,010415,008.9,E*68\r\n
$GPRGA,152517,A,4003.0021,N,10500.2309,W,200.0,240.5,010415,008.9,E*6A\r\n
$GPRGA,152517,A,4003.0021,N,10500.2309,W,208,1.9,1690.0,M,-18.0,M,,*44\r\n
```

But its NTP offset has been wandering around. I added 50m as an NTP server for it, and the GPS clock on 100m is disagreeing with 50m:

ntpq								
ntpq -p remote	refid	st t	when	poll	reach	delay	offset	jitter
*192.168.0.5 LOCAL(0)	.GPS. .LOCL.	1 u 10 1	ι 45 . 64	===== 64 64	377 3	0.946 0.000	118.340 0.000	33.872 0.031
oGPS_NMEA(0)	.GPS.	0 1	. 15	16	377	0.000	-849.69	347.187

On flux, chronyc shows that the clock for 100m is off from the others:

Comparing the output of "data_dump i 2,10 A" on 100m with that from 50m shows intermittent data gaps of 1.269 seconds, whereas with 50m the two GPS records (\$GPRMC, and \$GPGGA) are reporting at 1 Hz, with quite consistent delta-Ts close to 0.85 and 0.15.

I updated /etc/ntp.conf, and changed the time2 parameter from 0.8 to 1.2 seconds:

time2 time

Specifies the serial end of line time offset calibration factor,

in seconds and fraction, with default 0.0.

Now the GPS is agreeing with 50m:

ntpq -p	mofid	a =	t uban	ma11	woogh	delerr	offact	
	reria	s.	======			ueray =========	orrset	JICCER =======
+192.168.0.5	.GPS.	1 1	u 61	64	377	0.941	-0.204	0.056
LOCAL(0)	.LOCL.	10	1 42m	64	0	0.000	0.000	0.000
OGPS_NMEA(0)	.GPS.	0	1 4	16	377	0.000	-0.118	0.031

So it appears that the serial data from the 100m GPS (which provides the time label for the precise pulse-per-second) was late from time to time, resulting in NTP having to struggle to figure out what time it is. So, for data up to today, I would not rely on the 100m data to have time-tags with any accuracy below 1 second. D'oh...