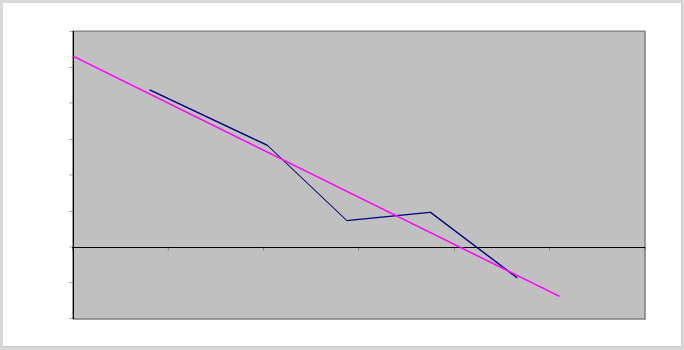
Daytime Jupiter Ex-Meridian/ M.P. /LOP Exercise

	t	H(t)	H(t) + e	t_av (t_i, t_i+1)	H'(t_av) = dH/dt
1	0:41:25	53,54	3212,4000	0:43:02	1255,918
2	0:44:39	53,587	3215,2200	0:45:30	813,176
3	0:46:21	53,603	3216,1800	0:47:10	211,592
4	0:47:59	53,607	3216,4200	0:48:55	277,714
5	0:49:51	53,613	3216,7800	0:50:44	-244,528
6	0:51:37	53,608	3216,4800		
7					
8					
9				-271377,8727	9333,438578
10				40657,60104	1331,128996
	41,41666667			0,936910921	168,4607907
	44,65000000			44,55181153	3
	46,35000000			1264337,553	85137,11404
	47,98333333				
	49,85000000				
	51,61666667			0:40:24	1720,410
				0:52:38	-586,302

time of transit 0:49:32

Position estimation without prior estimation of latitude



amplitude of error e 0
(error = e * amplitude * 0.1')

t	H(t)	H(t) + e	t_av (t_i, t_i+1)	H'(t_av) = dH/dt
0,00		3212,400	1,62	0,872
3,23		3215,220	4,08	0,565
4,93		3216,180	5,75	0,147
6,57		3216,420	7,50	0,193
8,43		3216,780	9,32	-0,170
10,20		3216,480		

this part is used to monitor the effect of different time formats

0,00	1,0612387	-0,130872817	1,061238743	
10,20	-0,273664	0,019607254	0,122572782	
		0,936910921	0,11698666	
		44,55181153	3	
		0,609730687	0,041057636	

a estimated 3,93
(as in "Bowditch", estimated from the data, without DR as in knowledge of latitude)

time of transit 0:49:32

L estimated	34,0906
d	-2,2964
a	2,739

-0,09129

t_av (t_i, t_i+1)	dH/dt-a*t_av
1,62	1,019757267
4,08	0,937490604
5,75	0,671880526
7,50	0,877563774
9,32	0,680746472

0,00 0,8374877
10,20 0,8374877

average of the above
0,837487728

time of transit 0:50:35
altitude at time of transit 53,63801

Resulting fix: 34° 9.0' N , 119° 5.0' W

position estimation after estimation of L and "a"