Put it in Writing!

Date - 11-17-58

Dear Dr Reber: -

Thanks for the letter, but sorry I overlooked getting in those checks -

Your new observatory sounds quite thrilling. Hope you have a lot of success with it. "Termite Drilling"

I, too, am sorry that we are not to have further opportunity to compare the Borograph records -

Sincerely

P. L. Mean -

September - 1958 - Kole Kole

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Hr	B-read	i	di	P_1	q_1	p_2	q_2
	01	648.3	0	+7.7	+7.70	0.00	+7.70	0.00
	02	638.3	1	-2.3	-2.22	-0.60	-1.99	-1.15
	03	630.2	2	-10.4	-9.01	-5.20	-5.20	-9.01
	04	629.5	3	-15.1	-10.68	-10.68	0.00	-15.10
	05	624.8	4	-15.8	-7.90	-13.69	+7.90	-13.69
	06	626.7	5	-13.9	-3.60	-13.43	+12.04	-6.95
	07	633.4	6	-7.2	0.00	-7.20	+7.20	0.00
	08	642.8	7	+2.2	-0.57	+2.13	-1.90	-1.10
	09	650.9	8	+10.3	-5.15	+8.82	-5.15	-8.82
	10	657.4	9	+16.8	-11.88	+11.88	0.00	-16.80
	11	659.3	10	+18.7	-16.20	+9.35	+9.35	-16.20
N	12	654.3	11	+13.7	-13.24	+3.55	+11.86	-6.85
	13	649.3	12	+8.7	-8.70	0.00	+8.70	0.00
	14	639.5	13	-1.1	+1.06	+0.28	-0.95	-0.55
	15	630.7	14	-9.9	+8.57	+4.95	-4.95	-8.57
	16	625.9	15	-14.7	+10.39	+10.39	0.00	-14.70
	17	624.8	16	-15.8	+7.90	+13.69	+7.90	-13.69
	18	625.0	17	-15.6	+4.04	+15.08	+13.51	-7.80
	19	630.2	18	-10.4	0.00	+10.40	+10.40	0.00
	20	640.3	19	-0.3	-0.08	+0.29	+0.26	+0.15
	21	650.0	20	+9.4	+4.70	-8.24	-4.70	-8.24
	22	655.9	21	+15.3	+10.82	-10.82	0.00	-15.30
	23	657.3	22	+16.7	+14.47	-8.36	+8.35	-14.47
MN	24	652.6	23	+13.0	+12.57	-3.37	+11.26	-6.50
			Sum+	132.5	82.22	90.81	116.43	0.15
	Sum	15374.4	Sum-	132.6	89.23	81.58	24.84	185.49
	Ave	640.6	Net	-0.1	-7.01	+9.23	+91.59	-185.34
			Net/12	-0.008	-0.584	+0.769	+7.632	-15.445
					P_1	Q_1	P_2	Q_2

$A_1 = 322° 47.2'$
$322.8°$

$A_2 = 153° 51'$
$153.8°$

$a_1 = 0.966$

$a_2 = 17.317$

Time 9.48 Hr.

Time - 10.87 Hr.

Sept. 1958. K. K

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Hr.	B-read.	i	dl	p_3	q_3	p_4	q_4
	01		0	+7.7	+7.70	0.00	+7.70	0.00
	02		1	-2.3	-1.63	-1.63	-1.15	-1.91
	03		2	-10.4	0.00	-10.40	+5.20	-9.01
	04		3	-15.1	+10.69	-10.69	+15.10	0.00
	05		4	-15.8	+15.80	0.00	+7.90	+13.69
	06		5	-13.9	+9.83	+9.83	-6.95	+12.04
	07		6	-7.2	0.00	+7.20	-7.20	0.00
	08		7	+2.2	+1.56	-1.56	+1.10	+1.90
	09		8	+10.3	+10.30	0.00	-5.15	+8.92
	10		9	+16.8	+11.89	+11.89	-16.80	0.00
	11		10	+18.7	0.00	+18.70	-9.35	-16.19
IV	12		11	+13.7	-9.69	+9.69	+6.85	-11.87
	13		12	+8.7	-8.70	0.00	+8.70	0.00
	14		13	-1.1	+0.78	+0.78	-0.55	-0.95
	15		14	-9.9	0.00	+9.90	+4.95	-8.57
	16		15	-14.7	-10.40	+10.40	+14.70	0.00
	17		16	-15.8	-15.80	0.00	+7.90	+13.69
	18		17	-15.6	-11.04	-11.04	-7.80	+13.51
	19		18	-10.4	0.00	-11.40	-10.40	0.00
	20		19	-0.3	+0.21	-0.21	-0.15	-0.26
	21		20	+9.4	-9.40	0.00	-4.70	+8.20
	22		21	+15.3	-10.83	-10.83	-15.30	0.00
	23		22	+16.7	0.00	-16.70	-8.35	-14.46
MN	24		23	+13.0	+9.19	-9.19	+6.50	-11.26
			Sum+		77.95	78.89	86.60	71.95
	Sum	15374.4	Sum-		77.49	82.65	93.85	74.48
	Ave	640.6	Not		+0.46	-4.26	-7.25	-2.53
			Not/12		+0.0383	-0.355	-0.604	-0.211
					P_3	Q_3	P_4	Q_4

$A_3 = 173° 50.5'$
$173.8°$

$a_3 = 0.365$

Time 7.1 Hr

$A_4 = 250° 44.6'$
$250.7°$

$a_4 = 0.640$

Time - 4.32 Hr.

Sept. 1958 K K.

$\frac{P_1}{Q_1} = \frac{-0.584}{+0.769} = \tan A_1$ Quad IV

$\log 0.584 = 19.76641 - 20$
$\log 0.769 = \underline{9.88593 - 10}$
$\log \tan A_1 = 9.88048 - 10$
$A_1 = 37° 12.8'$
$A_1 = 322° 47.2'$
Time $= 8.48 + 1 = 9.48$ Hrs.

$\log 0.584 = 19.76641 - 20$
$\log \sin A_1 = 9.78109 - 10$
$\log a_1 = 9.98482 - 10$
$a_1 = 0.9656$

$\frac{P_2}{Q_2} = \frac{+7.632}{-15.445} = \tan A_2$ Quad. II

$\log 7.632 = 0.88264$
$\log 15.445 = \underline{1.19159}$
$\log \tan A_2 = 9.69105 - 10$
$A_2 = 26° 9'$
$A_2 = 153° 51'$
Time $= 9.87 + 1 = 10.87$ Hrs.

$\log 7.632 = 10.88264 - 10$
$\log \sin A_2 = \underline{9.64417 - 10}$
$\log a_2 = 1.23847$
$a_2 = 17.317$

$\frac{P_3}{Q_3} = \frac{+0.0383}{-0.355} = \tan A_3$ Quad II

$\log 0.0383 = 18.58320 - 20$
$\log 0.355 = \underline{9.55023 - 10}$
$\log \tan A_3 = 9.03297 - 10$
$A_3 = 6° 9.5'$
$A_3 = 173° 50.5'$
Time $= 6.14 + 1. = 7.14$ Hrs.

~~Time~~

$\log 0.0383 = 18.58320 - 20$
$\log \sin A_3 = \underline{9.03047 - 10}$
$\log a_3 = 9.55273 - 10$
$a_3 = 0.3654$

$\frac{P_4}{Q_4} = \frac{-0.604}{-0.211} = \tan A_4$ Quad III

$\log 0.604 = 19.78104 - 20$
$\log 0.211 = \underline{9.32428 - 10}$
$\log \tan A_4 = 10.45676 - 10$
$A_4 = 70° 44.6'$
$A_4 = 250° 44.6'$
Time $= 3.32 + 1. = 4.32$ Hrs.

$\log 0.604 = 19.78104 - 20$
$\log \sin A_4 = \underline{9.97499 - 10}$
$\log a_4 = 9.80605 - 10$
$a_4 = 0.6398$

Sept 1958 KK Time Comp.

Time T_1 -

$A_1 = 322° 47.2'$

$= 322.8°$

$\frac{450 - 322.8}{15} = \frac{127.2}{15} = 8.48$ Hr.

Since 01 Hr = 0.

$T_1 = 8.48 + 1.0 = 9.48$ Hr.

Time T_2

$A_2 = 153° 51'$

$= 153.8°$

$\frac{450 - 153.8}{30} = \frac{296.2}{30} = 9.87$ Hr.

$T_2 = 9.87 + 1.0 = 10.87$ Hr.

Time T_3.

$A_3 = 173° 50.5'$

$= 173.8°$

$\frac{450 - 173.8}{45} = \frac{276.2}{45} = 6.14$ Hr.

$6.14 + 1.0 = 7.14$ Hr.

Time T_4

$A_4 = 250° 44.6'$

$= 250.7°$

$\frac{450 - 250.7}{60} = \frac{199.3}{60} = 3.32$ Hr

$3.32 + 1.0 = 4.32$ Hr.

Sept- 1958 - Kole Kole