

KG
11366
v.621

No. 7

W. C. DEMAIN & SON,
STEAM PAPER RULERS,

AND DEALERS IN BLANK MUSIC PAPER.

8 HAWLEY AND 9 ARCH STREET.

Passenger Elevator at 21 MILK STREET. Freight Elevator on ARCH STREET.



1870 June 18 1875

Contents Collection of Results

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- 36-~~81~~⁷⁷ Inclination i in order of dates 1879-1881 Fund. Stars
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adopted values)

Dec. +19° 604

collection of results in order of dates.

Polaris 1879

1879	Feb. 16	45	51.42	5	25.52	4	56.22	4	27.72	3	56.72	3	27.72	2	56.82	2	28.52	1	59.52	1	28.92	0	59.12	0	28.32	0	10.2	40
	" 21	40.15	53.15	23.25	57.05	(29.55)	57.55	28.85	57.15	27.95	56.05	28.35	58.35	28.35	58.35	28.35	58.35	28.35	58.35	28.35	58.35	28.35	58.35	28.35	58.35	28.35	40	
	" 24	14	53.94	26.44	55.34	27.34	56.44	26.24	58.54	28.44	57.64	28.24	58.24	1	0.64	30.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	40	
	" 27	13	53.96	25.46	55.36	24.66	54.76	23.96	57.26	28.36	58.26	28.36	58.26	30.06	0.26	58.59	58.59	58.59	58.59	58.59	58.59	58.59	58.59	58.59	58.59	58.59	40	
	Mar 3.	12	51.45	22.95	(52.95)	25.65	57.45	27.05	57.55	26.65	57.65	26.65	(20.5)	31.05	0.05	58.55	58.55	58.55	58.55	58.55	58.55	58.55	58.55	58.55	58.55	58.55	40	
	" 5	11	52.92	24.92	56.72	27.62	57.02	28.42	58.12	27.72	58.52	27.72	58.52	27.72	58.52	27.72	58.52	27.72	58.52	27.72	58.52	27.72	58.52	27.72	58.52	27.72	40	
	" 10	13	54.36	25.96	56.66	26.06	56.66	26.86	58.46	27.56	58.26	28.76	1	0.26	28.06	58.06	58.06	58.06	58.06	58.06	58.06	58.06	58.06	58.06	58.06	58.06	40	
	" 12	9	53.98	26.08	54.98	24.78	56.88	27.38	57.58	26.98	58.78	28.78	0	58.08	28.58	58.58	58.58	58.58	58.58	58.58	58.58	58.58	58.58	58.58	58.58	58.58	40	
	" 18	8	52.76	24.56	54.06	25.76	58.26	25.66	58.36	28.46	58.26	28.06	57.76	28.16	58.16	58.16	58.16	58.16	58.16	58.16	58.16	58.16	58.16	58.16	58.16	58.16	40	
	" 20	7	54.16	27.36	57.46	28.76	56.76	27.76	58.76	28.16	58.46	29.36	57.66	30.46	58.46	58.46	58.46	58.46	58.46	58.46	58.46	58.46	58.46	58.46	58.46	58.46	40	
	" 25	5	55.12	26.22	55.62	29.12	57.02	27.72	58.32	28.52	58.62	29.02	1	0.02	28.02	58.02	58.02	58.02	58.02	58.02	58.02	58.02	58.02	58.02	58.02	58.02	40	
			376.75	178.05	388.45	187.75	402.05	190.85	405.15	194.55	408.85	199.65	408.85	205.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	58.35	40	
			53.82	23.44	55.49	26.82	57.44	27.26	57.88	27.79	58.44	28.52	59.74	29.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	40	
	Apr. 6.		58.22	27.72	(58.72)	28.82	56.72	25.02	(54.12)	27.72	56.72	28.42	0	58.62	30.42	58.62	58.62	58.62	58.62	58.62	58.62	58.62	58.62	58.62	58.62	58.62	40	
	" 15		57.37	28.37	56.47	25.77	54.27	26.87	58.07	28.97	58.77	27.97	58.97	28.97	58.97	28.97	58.97	28.97	58.97	28.97	58.97	28.97	58.97	28.97	58.97	28.97	40	
	" 19		55.77	25.97	53.87	23.77	56.97	27.57	58.27	28.57	57.97	32.07	58.17	28.57	58.57	28.57	58.57	28.57	58.57	28.57	58.57	28.57	58.57	28.57	58.57	28.57	40	
	" 20		55.44	25.24	55.64	26.44	57.44	26.64	56.34	26.64	59.34	28.64	58.54	29.64	58.54	29.64	58.54	29.64	58.54	29.64	58.54	29.64	58.54	29.64	58.54	29.64	40	
	" 22		(52.84)	29.64	56.04	23.24	54.34	28.34	58.44	26.54	58.04	27.74	57.94	30.04	58.04	27.74	58.04	27.74	58.04	27.74	58.04	27.74	58.04	27.74	58.04	27.74	40	
	" 23		58.41	23.51	52.81	27.71	53.71	25.61	57.61	(24.41)	56.61	27.71	57.71	30.21	58.21	28.21	58.21	28.21	58.21	28.21	58.21	28.21	58.21	28.21	58.21	28.21	40	
	" 26		58.76	23.26	(49.16)	24.66	53.26	26.86	56.96	26.76	(52.06)	32.06	58.66	30.96	58.66	30.96	58.66	30.96	58.66	30.96	58.66	30.96	58.66	30.96	58.66	30.96	40	
	" 30		(58.75)	28.75	57.25	26.75	56.65	27.75	57.65	28.25	54.95	23.15	58.85	28.85	58.85	28.85	58.85	28.85	58.85	28.85	58.85	28.85	58.85	28.85	58.85	28.85	40	
	May 6		54.07	22.87	54.97	22.67	56.47	26.37	57.37	25.77	56.87	27.87	59.07	28.47	58.47	28.47	58.47	28.47	58.47	28.47	58.47	28.47	58.47	28.47	58.47	28.47	40	
			49.63	23.07	49.83	23.08	50.83	24.13	51.43	24.33	51.93	25.63	52.93	26.83	53.83	27.83	54.83	28.83	55.83	29.83	56.83	30.83	57.83	31.83	58.83	32.83	40	
			55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	55.30	25.30	40	
	June 26		58.23	24.73	55.23	24.93	56.43	25.93	56.63	26.83	57.83	28.83	58.23	29.23	58.23	29.23	58.23	29.23	58.23	29.23	58.23	29.23	58.23	29.23	58.23	29.23	40	
	" 30		52.11	24.61	54.61	25.71	53.31	27.21	56.81	27.31	58.31	28.11	1	0.11	28.91	58.91	58.91	58.91	58.91	58.91	58.91	58.91	58.91	58.91	58.91	58.91	40	
	July 1.		54.67	24.47	53.47	25.77	58.87	29.27	57.97	26.07	57.07	28.07	0	58.97	28.47	58.97	28.47	58.97	28.47	58.97	28.47	58.97	28.47	58.97	28.47	58.97	40	
	" 2		50.19	23.69	53.59	25.19	56.69	27.09	56.59	26.89	57.59	28.59	57.59	28.59	58.29	29.19	58.29	29.19	58.29	29.19	58.29	29.19	58.29	29.19	58.29	29.19	40	
	" 3.		55.84	23.84	55.44	25.64	53.14	25.54	56.14	27.14	57.04	28.84	58.24	28.04	58.24	28.04	58.24	28.04	58.24	28.04	58.24	28.04	58.24	28.04	58.24	28.04	40	
	" 10		52.28	23.48	53.58	25.38	54.68	27.18	57.98	26.98	58.78	28.28	58.78	28.28	58.78	28.28	58.78	28.28	58.78	28.28	58.78	28.28	58.78	28.28	58.78	28.28	40	
			32.032	14.482	32.792	15.262	33.112	16.222	34.212	16.422	34.622	17.442	35.362	17.522	35.362	17.522	35.362	17.522	35.362	17.522	35.362	17.522	35.362	17.522	35.362	17.522	40	
			53.99	24.14	54.65	25.84	55.69	27.04	57.02	27.37	57.77	28.40	58.85	29.86	58.85	29.86	58.85	29.86	58.85	29.86	58.85	29.86	58.85	29.86	58.85	29.86	40	
	Aug 24		53.46	27.86	53.06	26.36	58.86	26.86	59.56	29.46	57.16	27.26	58.66	28.86	58.66	28.86	58.66	28.86	58.66	28.86	58.66	28.86	58.66	28.86	58.66	28.86	40	
	Sep 14.		53.54	24.54	53.14	26.14	56.04	26.24	58.44	27.14	58.44	28.44	58.54	28.44	58.54	28.44	58.54	28.44	58.54	28.44	58.54	28.44	58.54	28.44	58.54	28.44	40	
	" 23		(58.65)	25.65	52.25	24.75	53.75	27.05	57.05	28.15	58.45	27.05	58.45	27.05	58.45	27.05	58.45	27.05	58.45	27.05	58.45	27.05	58.45	27.05	58.45	27.05	40	
	" 24		57.50	26.00	53.70	26.70	57.40	27.30	58.70	27.50	58.80	28.90	58.90	28.90	58.90	28.90	58.90	28.90	58.90	28.90	58.90	28.90	58.90	28.90	58.90	28.90	40	
	" 29		(58.50)	27.00	56.70	27.70	58.40	28.30	59.70	28.50	58.80	30.90	59.90	30.90	59.90	30.90	59.90	30.90	59.90	30.90	59.90	30.90	59.90	30.90	59.90	30.90	40	
			281.65	131.05	274.85	131.35	286.45	135.75	293.45	141.75	293.65	143.55	295.45	146.75	295.45	146.75	295.45	146.75	295.45	146.75	295.45	146.75	295.45	146.75	295.45	146.75	40	
			54.88	26.21	54.97	26.33	57.29	27.15	58.89	28.35	58.73	28.71	58.09	29.35	58.09	29.35	58.09	29.35	58.09	29.35	58.09	29.35	58.09	29.35	58.09	29.35	40	

12	40	15.2	-5	55.38	-5	26.88	-4	58.38	-4	26.28	-3	56.28	-3	26.98	-2	57.88	-2	26.88	-1	57.28	-1	28.58	-0	58.38	-0	28.88
13	41	14.9		57.05		27.15		55.65		26.22		56.05		27.15		57.85		30.35		56.85		28.15		56.75		30.15
14	42	13.6		53.96		25.96		53.06		30.56		58.16		26.86		59.66		29.36		56.06		26.46	-1	1.16		29.46
15	43	12.8		55.44		24.74		55.64		27.14		56.44		27.04		56.54		26.94	-2	0.64		27.94	-0	57.24		29.94
16	44	56.3	222.03	104.73	224.73	110.23	224.73	108.03	231.93	113.53	230.83	111.13	233.53	118.43	227.03	113.53	230.83	111.13	233.53	118.43	227.03	113.53	230.83	111.13	233.53	
17	45	14.1	55.51	26.18	56.18	27.56	56.72	27.01	57.98	28.38	57.74	27.78	58.38	29.61	57.74	27.78	58.38	29.61	57.74	27.78	58.38	29.61	57.74	27.78	58.38	
18	46	11.9	57.05	25.45	56.85	26.95	57.35	27.45	58.85	28.25	59.65	24.75	54.95	28.55	57.65	30.08	59.48	29.98	1.18	57.65	30.08	59.48	29.98	1.18		
19	47	11.5	54.28	25.58	55.88	26.48	58.08	27.98	57.38	27.88	57.68	30.08	59.48	29.98	1.18											
20	48	10.1	53.74	26.84	57.14	26.94	57.14	26.94	57.54	27.74	58.44	27.44	58.84	29.44	1.52											
21	49	9.5	55.82	26.12	53.32	25.12	56.02	25.72	55.82	27.62	56.82	28.12	58.52	31.32	1.52											
22	50	7.9	57.14	25.54	54.34	24.24	57.54	25.04	56.04	27.54	58.14	28.64	58.44	29.24	1.52											
23	51	7.3	55.44	25.04	59.14	27.94	57.14	27.34	59.14	29.84	58.94	31.64	56.84	28.54	0.4											
24	52	5.7	54.78	24.78	54.48	25.18	56.98	28.18	55.98	28.68	59.8	27.58	59.78	30.98	2.08											
25	53	63.9	386.875	179.34	392.15	182.45	397.25	188.65	400.75	197.55	410.65	198.25	407.85	207.45	29.64											
26	54	9.1	55.25	25.62	56.02	26.12	56.74	26.84	57.25	28.22	58.66	28.32	58.22	29.64	29.64											
27	55	2.0	55.58	27.38	56.68	27.18	56.18	27.98	56.98	27.08	56.28	27.38	56.18	30.08	2.13											
28	56	39	59.1	54.93	26.23	55.23	24.93	56.63	29.23	57.33	27.43	57.93	30.13	29.83	2.13											
29	57	57.8	54.53	27.33	56.33	26.83	57.53	26.23	57.33	27.53	57.93	28.53	57.53	30.33	1.93											
30	58	57.4	55.76	27.56	54.96	26.26	56.66	24.66	58.26	27.76	58.36	28.76	58.96	28.56	30.33											
31	59	56.8	54.06	26.06	54.96	25.96	54.56	22.66	59.36	27.56	58.06	25.86	57.16	27.66	30.33											
32	60	56.5	53.69	22.79	54.39	25.79	57.69	26.09	57.39	26.69	57.09	28.59	57.09	26.69	30.33											
33	61	53.7	50.74	22.84	54.04	25.04	56.04	30.34	55.34	27.64	55.74	27.14	57.54	28.04	0.04											
34	62	54.7	52.75	25.95	57.05	27.55	55.95	25.75	56.75	24.25	59.05	30.25	59.05	30.55	30.33											
35	63	53.0	57.53	23.13	53.53	26.03	55.23	27.53	54.53	27.03	57.53	27.73	57.53	29.33	29.33											
36	64	53.0	48.297	229.17	499.17	235.57	57.247	240.47	513.27	242.97	578.97	253.97	532.37	261.97	29.01											
37	65	56.0	53.66	25.48	53.46	26.17	56.94	26.94	57.03	26.99	57.03	28.37	58.15	29.01	29.01											
38	66	46.4	54.47	24.47	54.97	24.77	55.97	26.57	56.87	27.57	58.27	28.87	58.87	29.47	30.33											
39	67	46.4	55.19	26.19	55.99	24.59	57.09	25.69	55.99	27.79	56.89	27.99	56.89	29.89	30.33											
40	68	46.4	57.53	21.73	55.03	25.43	56.33	28.43	56.53	27.73	59.33	27.53	59.33	30.93	0.73											
41	69	46.5	54.01	23.91	54.31	24.91	56.31	27.01	56.31	27.01	57.01	26.01	58.71	30.11	30.33											
42	70	46.6	53.06	24.26	54.06	24.76	56.86	25.96	57.06	27.66	57.56	27.86	58.26	30.66	30.33											
43	71	47.0	55.12	24.02	55.52	24.22	55.42	24.22	56.92	27.42	57.92	28.82	58.72	28.72	30.33											
44	72	47.3	32.338	144.58	329.88	148.68	337.98	157.88	339.68	163.18	346.48	167.68	352.38	179.78	29.96											
45	73	46.6	53.89	24.80	54.98	28.78	56.33	26.81	56.61	27.53	57.75	27.95	58.75	29.95	29.95											
46	74	58.4	55.74	25.54	57.94	26.64	55.04	25.84	58.34	25.84	53.04	29.24	57.24	31.64	0.34											
47	75	2.2	53.86	25.86	57.16	25.96	57.26	25.76	57.66	26.06	57.16	26.46	59.06	29.76	0.26											
48	76	5.4	57.55	24.35	55.15	26.35	58.65	27.25	59.15	27.55	57.55	28.95	57.55	26.95	0.35											
49	77	5.8	56.10	25.00	56.50	25.50	56.20	26.00	57.40	31.80	0.80	29.60	0.80	28.40	0.20											
50	78	7.7	55.10	25.00	55.50	24.50	55.20	25.00	56.40	30.80	58.80	28.60	59.80	27.40	63.53											
51	79	6.5	52.35	125.75	282.25	128.95	282.35	149.85	288.95	142.05	290.35	142.85	301.95	144.15	25.53											
52	80	3.3	54.47	25.15	56.65	25.79	56.47	28.97	57.79	28.41	58.07	28.57	0.57	28.83	25.53											

Collection of results in order

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1879

Feb 22	75	56.75	26.75	53.95	28.45	56.35	25.65	57.35	28.05	55.55	28.15	56.95	31.45	+0.95	40.
" 24		56.10	24.80	57.40	25.70	56.40	23.30	57.40	27.70	56.80	29.10	1 0.10	27.90	+0.70	
Mar 2		57.90	27.70	58.10	29.40	4 4.10	29.90	59.00	30.60	2 0.50	27.90	0.60	31.70	+1.30	
" 5		56.31	27.31	56.91	29.31	3 56.71	25.41	54.57	26.11	1 55.31	28.31	0 59.91	28.61	+0.59	
" 8		56.70	24.30	58.70	28.10	59.80	26.30	3 0.60	28.60	2 1.60	29.90	54.30	29.00	+2.20	
" 13		57.56	26.86	57.86	26.66	56.26	26.26	2 57.76	26.76	0.26	30.16	1 0.76	28.46	-1.14	
" 18		56.28	26.68	57.68	26.08	55.38	26.78	57.18	26.48	1 57.78	29.08	0 59.18	30.98	+3.6	
" 19		57.29	(30.82)	55.79	29.39	56.49	28.39	3 4.69	31.29	59.39	30.39	57.39	27.59	-2.31	
" 23		57.48	25.28	55.28	27.08	56.48	27.28	2 57.18	28.18	57.88	27.98	59.98	28.58	+1.88	
" 30		56.70	26.40	54.90	25.50	56.30	27.50	56.50	26.80	58.60	28.60	58.10	28.80	+0.80	
Apr 6		58.21	24.81	56.21	24.61	56.57	25.61	56.11	28.21	58.71	27.71	59.41	28.61	+0.29	
" 8		57.32	26.52	55.22	24.92	55.32	24.52	57.42	29.32	57.82	27.72	59.12	29.02	+2.55	
" 13		54.78	25.58	55.38	25.18	56.08	27.88	58.38	28.38	58.58	29.48	59.08	30.08	+0.18	
" 14		53.31	25.81	55.81	23.51	56.41	25.31	55.81	26.61	58.01	29.61	59.41	27.71	-2.29	
" 19		54.56	25.76	55.86	22.86	55.46	28.06	59.76	29.56	58.96	27.86	57.66	30.86	-0.74	
" 20		56.94	27.14	55.94	25.64	55.04	25.04	55.84	26.04	55.54	27.84	57.94	29.14	+1.94	
" 22		55.62	25.32	54.72	24.32	54.32	28.62	56.02	26.32	58.42	28.92	1 0.02	30.02	-1.68	
" 23		56.07	23.37	55.47	23.67	55.27	26.97	58.07	25.17	57.67	28.07	0.27	29.17	-0.83	
May 1		54.38	24.18	55.28	29.48	57.58	27.18	59.48	27.78	56.48	28.98	57.58	29.18	+0.68	
" 5		53.50	25.40	55.20	24.20	56.20	25.40	57.50	27.50	58.00	29.20	58.70	30.30	+0.20	
" 6		56.24	26.24	55.04	25.74	56.84	26.44	57.64	27.94	58.34	28.74	57.94	28.84	+0.04	
" 7		56.02	24.12	56.72	25.12	56.02	27.22	57.12	27.42	58.72	28.12	59.02	28.02	+0.42	
" 29		52.90	26.10	55.10	25.20	56.10	28.50	57.90	27.20	58.60	28.40	58.90	29.70	-0.70	
June 1		54.17	23.97	54.27	24.87	56.37	26.27	57.27	27.67	58.67	29.37	59.07	29.67	+0.17	
" 26		53.74	23.54	53.74	23.74	54.44	24.64	56.14	26.24	58.84	27.94	58.74	28.74	-0.06	
July 1		55.92	25.92	55.92	25.12	54.92	24.72	55.52	28.72	57.62	28.12	58.12	28.82	+0.32	
" 2		54.31	23.81	55.71	25.71	55.21	25.31	57.21	26.31	57.91	27.81	58.01	28.71	+0.41	
" 4		55.37	24.57	55.57	25.77	57.67	27.17	56.97	27.97	56.77	28.27	58.57	29.27	-0.03	
" 9		56.16	24.76	56.36	22.86	56.96	27.36	58.86	28.96	59.36	28.76	58.66	26.86	-0.14	
" 9		55.17	25.77	54.97	25.47	56.27	26.77	57.07	29.17	58.97	28.27	58.67	28.37	+0.27	
" 10		53.97	23.27	56.17	25.87	55.97	26.17	57.47	27.27	57.37	27.97	58.57	29.27	-0.33	
Aug 4		56.50	26.50	55.50	25.60	57.40	25.50	55.40	26.00	58.70	28.90	57.90	28.50	-1.50	
" 14		53.18	24.78	55.55	25.23	56.58	26.58	57.33	27.61	58.08	28.33	58.56	28.56		

of date

L.B. 1879

95	40.140	5866	2236	5796	2435	3715	2695	3895	2575	3605	9155	5885	2885	
90	13.5	(5260)	(2330)	5340	2220	5780	2860	3600	2890	030	2880	1(160)	2870	
0	12.0	6 080	2780	5680	2410	5730	2850	3 (310)	(3530)	(260)	30.00	080	3110	
59	11.3	5399	2479	5559	2709	5939	26.69	2 5619	2589	1 6859	2949	0 5879	2769	0.59
20	10.5	5760	2760	5800	2800	5680	2830	3800	2720	5890	2950	5870	3140	
14	9.1	5574	2774	5674	2694	5634	2794	5884	2734	5694	2994	1 044	2824	1.14
8	7.8	5762	2862	5762	2792	5792	2682	5812	(30.72)	36.42	2742	0 3692	2702	
1	7.5	5891	2891	5991	2791	5891	(2421)	5681	2601	5791	2721	1 (3.01)	3061	2.31
8	6.2	5622	2622	5722	2522	5682	2712	5852	2752	5792	2822	0 5862	3042	
0	4.0	5820	2620	5620	2520	5470	2690	5730	2790	5830	2870	5920	2840	
95	9.5	5683	2635	5743	2593	5731	2720	5818	2628	5893	2948	5969	2934	
90	9.6	5683	2635	5743	2593	5731	2720	5818	2628	5893	2948	5969	2934	
90	1.8	5349	2349	5449	2429	5509	2679	5439	2779	2 029	(30.99)	1 (169)	2949	0.29
85	1.2	5538	2438	5538	(2248)	5538	2598	5538	2638	1 5888	2868	0 5808	(31.98)	2.48
5	39.395	5652	2652	5652	2642	5752	2682	5862	2722	5882	2872	5802	2742	
9	58.1	5419	2319	5319	2389	5479	2649	5619	2689	5749	2629	5869	2969	0.29
4	57.6	5674	2674	5674	2704	5654	2704	5654	2804	5604	2904	1 0.04	2814	0.74
8	57.2	5376	2676	5476	2536	5416	2806	5626	2616	5636	2766	0 5866	2966	
8	56.7	5508	2508	5608	2468	5548	2648	5668	2598	5788	2838	5908	3008	1.68
3	56.3	5333	2633	5633	2603	5583	2653	5653	2533	5853	2883	5893	2723	0.83
0	46.4	4404	2064	4454	2001	4447	2130	4505	2138	4642	2285	4631	2336	
0	57.8	5506	2581	5581	2521	5559	2683	5632	2663	5678	2728	5769	2679	
0	54.3	5612	2662	5712	2772	5702	2782	5772	2752	5602	2842	5862	2882	
0	53.2	5300	2500	5300	2610	5300	2620	5800	2730	5830	2920	1 0.40	2990	
0	52.9	5666	2466	5666	2516	5616	(2446)	5796	2726	5766	3006	0 5866	3026	
2	52.7	5378	2378	5378	2468	5388	2828	5588	2778	5778	2828	5898	2908	
2	51.3	5389	2552	5514	2592	5552	2667	5747	2746	5767	2899	5892	2939	
0	48.4	5680	2480	5680	2880	5390	2510	5690	2730	5360	2860	5920	2930	0.70
0	47.9	5613	2513	5613	2473	5513	2613	5753	2683	5743	2873	5863	2923	
0	46.4	5336	2406	5436	2436	5436	2386	5606	2716	5736	2646	5696	2996	0.06
2	46.4	5608	2508	5308	2518	5548	2518	5678	2718	5778	2758	5898	2878	
0	47.3	5559	2479	5559	2382	5527	2357	5682	2712	5704	2784	5854	2932	
0	46.5	5349	2449	5449	2439	5519	2629	5679	2709	5769	2839	5959	2979	
0	46.8	5713	2523	5673	2483	5393	2733	5783	2893	5773	2823	5853	2873	3.03
0	46.8	5764	2264	(5294)	2424	(5094)	27814	5854	(30.24)	2104	2814	1 (3.34)	3004	0.44
0	46.9	5573	2573	5573	2523	5633	2703	5643	2763	1 5833	2943	5873	2893	
0	47	5523	2523	5523	2403	5463	2503	5733	2733	5843	2853	5893	2783	0.33
0	52.9	(5250)	(2210)	5440	2610	5770	2830	5810	2910	5720	2840	5680	3010	1.50
0	52.6	3317	2454	3269	2482	3307	1621	3450	1703	3504	1713	3559	2174	2.42
0	42.8	5529	2424	5449	2480	5512	2702	5750	2859	5797	2859	3932	2980	

Collections of results in

G. 1253
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+98° 32'

478°32	15	5	4	4	1879	3	2	2	1	1	0	0	40	
5688	2718	5398	2618	5658	2688	5878	2788	5858	3088	5908	2978	-1.02 ✓	13	
0.46	(33.46)	5676	2756	5696	(31.16)	5696	2636	5886	2666	5916	2986	-0.84 ✓	12	
5740	3170	5340	(30.90)	4 (31.0)	2680	3 (1.40)	(23.60)	2 (3.00)	(31.00)	1 (7.30)	(22.80)	+7.2	11	
5773	2753	5673	2833	3 5493	2713	2 5973	2823	1 5863	2823	53.03	2963	+2.13 ✓	10	
5568	2618	5638	2558	5688	2578	5828	2808	5888	3148	1.68	30.78	+0.85 ✓	9	
5792	2682	5672	2662	5812	2792	5912	2832	2 0.62	31.32	0 5882	2982	+1.12 ✓	8	
346.07	173.27	335.97	165.17	348.57	65.67	354.27	163.47	355.57	179.67	362.07	181.67	29.97	+0.31	7
5708	2893	5808	2753	5809	2761	5904	2724	5926	2934	5836	3044	29.97	+0.01	6
73	26	58.51	26.85	58.69	26.93	58.57	27.97	58.51	27.71	58.95	29.97	29.97	+0.01	5
5621	2571	5571	2741	5571	2811	5751	2971	1 59.61	(30.91)	59.91	3031	+0.61 ✓	2	
5838	2678	5598	2628	5668	2518	5748	2858	5768	2708	5918	2948	+0.58 ✓	2	
0.65	2685	5715	2885	5645	2635	5705	2915	5765	2895	1 0.15	28.85	-1.05 ✓	2	
5971	2801	5 0.31	2781	5811	2961	3 5771	2861	5851	2831	5881	2901	-2.19 ✓	2	
5766	2596	5706	2636	5696	2766	3 0.76	2846	5996	3096	276	3176	+1.80 ✓	2	
5542	2712	5452	2672	5842	2782	3 5812	2742	5802	2982	6 25.2	2712	-1.28 ✓	2	
348.03	160.43	341.03	163.43	342.33	164.73	348.63	172.93	351.43	176.03	343.33	176.03	29.34	29.34	1
58.00	26.74	58.84	27.24	57.05	27.45	58.10	28.82	58.57	29.34	57.05	29.34	29.34	29.34	0
5638	2668	5768	2778	5688	2808	5778	2798	5898	2768	0 27.58	2958	+0.08 ✓	8	
5698	2738	5728	2718	5738	2908	5768	2828	5848	2818	1 0.28	2738	+0.78 ✓	3	
5806	2576	5726	2746	5736	2866	5846	2916	5866	3016	5896	2896	+0.36 ✓	3	
5703	2523	5783	2443	5693	2783	5743	2773	5933	2883	5923	3183	+0.33 ✓	3	
5602	2962	5 (1.32)	2952	5932	2742	5692	2722	2 0.82	3172	5752	2772	-2.78 ✓	9	
5898	2598	4 5718	2688	5748	2898	5888	3128	5988	2938	5998	3038	+1.08 ✓	9	
5888	2588	5648	2518	5938	2828	5998	2868	5868	(36.28)	5748	3238	+0.88 ✓	9	
5775	2455	5765	2525	5725	2645	3 0.85	2915	5845	2805	5875	3125	+0.75 ✓	9	
5925	2885	5835	2985	5855	(31.15)	2 5935	2915	5855	2995	5925	2805	+0.05 ✓	3	
0.69	2789	5869	(23.89)	4 0.69	2849	3 0.89	3189	5749	2729	1.49	3189	-3.01 ✓	9	
5920	2840	5650	2630	5760	2710	5820	2920	2 0.60	3070	1.90	2690	+2.00 ✓	9	
5737	2677	5677	2607	5877	2757	5857	2657	1-56.07	3037	1-56.57	3157	-2.43 ✓	9	
698.59	322.99	689.06	319.79	697.59	338.49	704.99	346.29	704.79	358.59	710.99	358.59	29.83	29.83	0
5785	2692	5746	2685	5813	2821	5892	2886	5873	2982	5844	2983	29.83	29.83	0
58.05	26.92	57.46	26.85	58.13	28.21	58.92	28.86	58.73	29.82	58.44	29.83	29.83	29.83	0

order of date ¹¹⁶ Lib 1879 (Cont.)⁷

	40	-3	-4	-3	1879	-2	-1	-1	-0					
12 ✓	13.6	55.52	26.22	55.52	25.52	56.92	28.82	58.52	27.62	58.82	28.12	1.52	30.22	1.02
84 ✓	15.2	57.24	26.44	58.14	28.84	59.64	27.14	57.24	31.14	-2 1.14	26.34	-0 57.34	29.34	0.84
72 ✓	17.6	-6 0.90	28.90	-5 0.90	28.80	59.00	32.60	3 1.30	31.80	-2 1.00	31.00	55.80	30.10	1.70
243 ✓	18.0	-5 56.77	25.27	-4 56.47	28.27	57.97	25.77	-2 57.77	28.37	-1 59.47	28.47	-1 1.77	30.37	
18 ✓	19.0	57.12	27.92	56.92	26.62	57.62	27.42	57.92	28.32	57.12	28.42	59.52	30.92	
12 ✓	19.3	56.58	27.78	57.18	27.58	58.48	29.58	58.78	27.88	-2 0.58	29.48	-1 0.78	28.68	
+031 +0.01	116 18 17.0	34.44	162.53	34.5.13	165.63	350.63	171.33	352.53	175.13	358.13	172.03	356.93	179.63	
	57.40	27.09	57.52	27.60	58.44	28.55	58.85	29.19	59.69	28.69	59.49	29.94	29.94	
	56.71	26.73	55.85	27.37	58.33	27.75	58.2	28.67	59.45	28.21	59.23	29.91	29.91	
61 ✓	23.3	56.89	27.99	57.49	27.59	57.89	28.19	56.79	30.39	-1 58.99	30.19	-0 57.79	27.29	
8 ✓	24.4	56.22	26.02	55.52	27.12	(54.52)	27.82	56.52	27.82	59.22	28.82	58.82	29.72	
5 ✓	28.0	(54.25)	25.55	57.55	28.65	57.65	27.05	59.45	28.45	58.85	26.65	-1 0.85	30.35	1.05
19 ✓	28.2	57.29	28.59	57.99	29.69	58.99	28.19	58.49	28.59	58.49	28.89	0.59	29.79	2.19
10 ✓	28.5	57.84	(23.94)	59.14	29.94	57.84	29.34	-3 0.54	31.34	58.34	30.94	0.34	29.14	
8 ✓	29.7	54.08	26.58	53.08	(24.58)	4 0.48	29.48	-2 57.88	29.48	59.48	27.68	-0 58.08	29.68	1.28
	336.54	158.67	342.77	168.57	347.37	170.07	349.47	176.07	353.27	173.17	356.47	176.17	29.36	
	56.04	26.44	57.13	28.84	57.84	28.34	58.24	29.34	58.84	28.54	59.44	29.36	29.36	
8 ✓	30.0	57.42	26.02	56.12	27.52	-3 56.42	27.92	58.02	27.52	59.22	29.32	59.52	30.22	
8 ✓	30.9	(54.32)	27.42	57.42	27.52	55.52	26.12	57.82	28.62	58.92	30.42	-1 0.42	29.22	
36 ✓	31.6	56.54	26.54	56.34	27.84	57.54	28.14	58.74	29.74	59.24	29.84	58.84	29.94	
33 ✓	32.0	58.27	25.87	54.97	26.77	59.47	26.97	58.77	29.27	56.27	27.07	58.87	30.37	
8 ✓	32.7	58.08	24.68	56.98	29.98	56.08	27.28	59.08	26.68	59.58	30.18	-1 0.18	(33.68)	2.78
28 ✓	34.0	58.12	27.52	56.12	30.52	59.92	28.82	-30.72	29.82	58.22	29.22	-0 57.22	30.02	
8 ✓	34.1	56.22	25.82	57.42	29.92	-4 1.72	30.92	(1.92)	28.52	-2 1.22	(24.52)	-1 1.52	28.72	
75 ✓	34.5	55.15	28.15	58.55	28.45	57.95	27.85	56.15	(25.65)	-1 58.25	28.75	59.05	(33.95)	
5 ✓	34.9	58.35	27.25	-5 1.75	28.05	58.55	29.85	-3 0.35	28.75	57.25	28.75	-1 0.65	29.95	
118 ✓	35.3	56.91	24.11	58.361	27.01	58.01	(31.01)	-2 59.91	(24.71)	57.71	29.71	-0 59.91	28.81	3.01
00 ✓	35.5	56.80	25.30	56.80	28.60	59.30	29.30	-2 59.70	29.40	-2 0.30	31.80	59.50	28.60	
43 ✓	35.9	57.63	26.33	59.53	29.73	58.53	30.83	58.73	27.13	0.13	30.13	59.93	32.63	2.43
	682.81	310.01	675.61	341.81	699.01	344.51	710.91	335.31	706.31	349.21	715.61	366.11	29.85	
	56.40	25.83	56.30	28.48	58.25	28.71	59.24	27.94	58.86	29.10	59.63	30.51	29.85	
	57.13	26.13	57.13	28.48	58.25	28.71	59.24	27.94	58.86	29.10	59.63	30.51	29.85	

Collection of results in order

L.C. 1879.

Sept 6	+5	53.98	+5	27.08	+4	57.88	+4	25.08	+3	59.78	+3	28.08	+2	56.98	+2	(23.48)	+1	54.78	+1	23.08	0	57.78	0	29.38	-5	-0.52	+1.88	+1.58
" 18		(49.26)		27.66		55.46		25.66		55.96		26.76		55.16		27.26		58.06		29.06		58.96		29.86		+0.16	+0.38	+0.38
" 19		51.19		25.89		54.39		26.49		57.69		28.79		59.09		28.89		58.59		28.29		1.19		30.09		+1.19		
" 26		53.33		24.23		58.13		27.33		54.33		26.43		55.63		(31.93)		56.33		29.13		59.73		30.63		-0.87		
" 30		55.42		24.62		56.02		26.02		55.82		28.02		58.62		25.72		57.12		27.22		58.52		31.12		+1.92		
		263.18		129.48		281.88		130.58		283.58		138.08		288.48		137.28		284.88		136.78		296.18		150.48				
		52.64		25.90		56.38		26.12		56.72		27.62		57.70		27.76		56.98		27.36		59.24		30.10				
		53.48																										
Oct 1		(57.87)		25.37		56.87		25.87		55.97		26.57		57.47		27.97		56.87		29.47		1.0.67		28.87		-0.03		
" 2		53.18		24.98		55.08		26.08		56.08		28.28		59.18		28.08		58.18		29.48		0.58.78		30.38		+0.58		
" 4		57.55		25.15		56.95		28.25		58.55		26.95		56.25		28.65		57.55		28.15		1.0.25		27.65		-1.85		
" 5		55.68		24.98		57.48		25.88		55.28		25.98		56.58		27.08		57.68		(24.58)		0.56.88		27.88		-2.32		
" 6-7		58.63		(22.93)		53.23		24.33		56.03		25.63		53.83		26.43		57.33		28.63		1.0.43		29.33		-1.07		
" 7-8		56.64		25.14		55.74		25.24		57.44		26.54		57.34		27.44		57.74		28.44		0.58.64		28.44		-1.36		
" 19		54.16		27.06		56.16		26.06		59.26		27.46		57.56		29.86		59.66		28.16		56.76		31.46		-0.84		
" 20.21		55.70		25.90		54.70		26.90		58.00		25.70		56.40		28.50		59.10		29.40		57.60		28.70		-0.10		
" 24		(57.07)		27.97		53.67		25.07		57.27		27.97		58.07		27.07		58.57		26.77		58.57		28.57		-0.53		
" 25		(59.06)		26.56		56.96		27.76		56.26		27.76		57.46		28.56		56.16		27.96		57.56		27.96		-0.54		
" 26		54.41		(30.21)		53.71		26.21		59.21		28.21		58.71		28.01		58.41		28.81		1.0.51		27.71		-0.09		
" 28		54.60		26.10		55.70		27.10		58.10		26.30		56.10		29.90		58.40		28.60		0.59.20		29.90		-0.40		
		677.05		312.35		668.25		316.75		687.45		323.35		686.95		339.55		695.65		338.85		707.85		346.85				
		56.42		26.03		55.69		26.40		57.29		26.95		57.25		28.28		57.97		28.24		58.99		28.90				
		55.62		25.92																								
Nov 4		56.70		26.20		57.90		27.00		58.40		26.30		57.80		30.80		59.30		27.20		57.20		30.60		-1.10		
" 15		56.86		27.36		58.26		28.16		57.76		28.46		59.26		28.86		58.36		29.66		59.86		30.46		+0.36		
Dec 8		53.90		27.40		57.30		26.20		56.80		27.60		59.20		30.10		58.30		29.20		59.90		29.80		-0.60		
" 12		55.70		27.70		54.30		27.10		53.10		27.10		59.50		30.80		57.20		27.80		58.70		29.50		+0.40		
" 20		56.84		26.54		58.64		26.44		56.14		28.24		58.04		27.34		(1.24)		27.14		58.44		29.54		+0.44		
" 25		59.52		26.12		55.52		(30.32)		55.02		27.32		0.32		27.92		57.32		28.42		1.0.72		29.82		-0.68		
		339.52		161.32		344.92		165.22		337.22		165.02		354.12		175.82		353.72		169.42		354.82		184.02				
		56.54		26.89		56.99		27.54		56.20		27.50		59.02		29.30		58.95		28.24		59.14		30.74				
		55.62		25.92																								

of date.

L.C. 1879.

0.62	-5 55.32	-5 26.62	-4 52.02	-4 (21.62)	-3 57.52	-3 27.52	-2 58.52	-2 26.22	-1 56.72	-1 27.82	0 58.12	0 28.82
0.16	56.74	25.04	54.74	26.34	56.64	26.84	56.24	25.14	56.14	28.04	57.74	32.74
1.19	54.11	26.01	54.61	27.51	57.71	27.01	58.31	28.41	59.21	30.31	58.41	30.21
2.87	53.37	24.17	55.07	27.27	55.07	28.07	56.87	28.97	2 18.57	29.87	57.57	27.87
1.92	51.98	23.78	55.78	25.38	57.98	28.38	58.38	27.78	1 57.88	29.78	59.48	29.58
	271.52	125.62	272.22	128.12	284.92	137.82	288.32	136.52	291.52	145.82	297.32	149.22
	54.30	25.12	54.44	25.62	56.98	27.56	57.66	27.30	58.30	29.16	58.26	29.84
0.03	54.23	25.63	55.23	25.93	55.63	27.73	58.13	29.03	59.83	29.13	-1 0.33	29.03
0.58	54.72	26.02	55.22	25.02	54.82	28.62	59.62	27.32	57.92	29.32	-0 59.92	27.72
1.85	55.95	26.75	56.55	24.05	55.45	26.05	56.65	29.45	-2 0.55	28.65	58.15	29.75
2.32	54.22	(22.52)	53.92	24.42	53.92	26.92	57.72	27.22	-1 59.62	29.62	57.82	29.22
1.07	(50.54)	23.84	54.44	25.67	58.37	26.47	57.47	28.17	-2 0.37	27.97	57.47	28.77
1.36	55.36	25.86	55.96	26.86	57.56	27.86	57.86	25.76	-1 55.76	29.46	56.76	28.36
2.84	54.94	26.24	57.24	26.04	57.74	25.14	58.94	28.84	59.84	28.74	58.74	30.24
2.10	53.70	24.80	56.60	26.60	57.70	28.10	58.40	27.20	59.90	27.10	58.20	28.10
2.53	55.63	25.13	55.73	(25.13)	56.33	26.63	58.73	27.83	55.93	(33.33)	-1 0.33	27.63
2.54	54.84	27.04	55.14	25.54	57.64	26.84	57.74	27.34	58.54	28.84	0.84	30.94
2.09	53.99	26.59	55.99	27.89	55.59	26.39	58.59	28.39	59.39	29.29	0.59	29.39
4.0	55.50	25.50	58.10	26.40	57.90	25.90	57.10	(30.10)	58.30	30.00	0 55.70	29.00
	653.65	305.75	670.15	312.55	678.65	322.65	695.95	336.85	705.95	351.45	704.85	348.15
	54.44	25.78	55.85	26.05	56.55	26.89	58.00	28.04	58.83	29.24	58.74	29.01
10	50.50	24.90	57.30	29.70	4 0.10	31.40	57.40	29.00	57.80	25.70	1 0.20	28.70
1.36	54.94	24.84	55.94	26.44	57.84	28.04	58.04	27.74	58.14	29.34	0 59.54	29.74
1.60	56.50	26.80	57.50	27.80	58.20	26.10	58.00	27.80	59.70	28.70	58.80	30.30
4.0	59.70	29.10	55.00	27.30	56.80	29.20	58.00	26.30	59.70	28.20	57.50	28.50
4.11	55.16	26.66	57.06	25.76	59.46	28.76	54.86	27.36	57.56	(32.26)	58.76	31.46
6.8	58.28	28.88	57.18	26.08	56.78	28.28	59.08	26.88	59.98	27.98	58.08	29.08
	334.08	159.18	339.98	163.08	349.18	169.78	345.38	165.08	352.88	172.18	353.28	178.18
	55.68	26.53	56.66	27.18	58.20	28.30	57.56	27.51	58.81	28.70	58.88	29.70

Red. 4253
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 483.44

Collection of results

U.C. 1880.

Jan 1	+5	57.52	+5	27.02	+4	58.52	+4	25.72	+3	59.32	+3	28.22	+2	59.32	+2	29.42	+1	59.62	+1	29.32	+1	(2.92)	+0	28.12
" 2	6	(1.26)		(31.26)	5	(0.26)		(31.26)		56.76		29.46		58.58		28.46		59.66		28.56		38.36		29.26
" 3		0.58		26.38	4	57.88		29.78		(0.58)		29.78	3	(1.48)		57.78		59.18		28.68		0.68		29.98
		179.36		84.66		176.66		86.76		176.66		87.46		179.36		82.66		173.46		86.56		181.96		87.36
		59.79		28.22		58.89		25.92		58.89		29.15		59.79		27.55		57.82		28.85		0.65		29.12
		26.70		26.70		26.70		26.70		26.70		26.70		26.70		26.70		26.70		26.70		26.70		26.70
March 1	+5	58.32		26.42		56.92		28.12		57.42		26.82		56.32		27.32		58.32		30.12		0.72		31.12
" 18		58.66		25.66		53.96		27.76		56.86		27.56		57.66		28.46		59.56		(31.96)		57.76		31.76
		116.98		52.08		112.88		55.88		114.28		54.78		113.98		55.78		117.88		62.08		118.48		62.88
		58.49		26.04		56.44		27.94		57.14		27.39		56.99		27.89		58.94		31.04		59.24		31.44
April 9		58.00		27.80		57.40		26.00		57.70		26.70		56.20		25.50		56.50		29.50		58.30		30.90
" 11-12		54.78		27.49		52.49		25.29		56.69		27.69		58.79		28.69		56.69		32.29		59.39		29.09
" 12-13		56.58		26.48		58.88		27.48		58.78		24.38		55.68		28.68		58.08		27.98		59.68		31.48
" 20		56.54		24.94		57.94		28.04		58.84		28.54		57.24		27.14		58.94		28.64		58.64		30.44
" 21		56.34		25.84		57.04		25.84		58.24		29.04		58.54		26.84		59.04		25.54		59.74		30.34
" 27		55.75		25.65		56.15		27.35		56.35		27.95		57.05		29.25		57.25		30.85		58.15		29.35
		338.80		158.20		338.90		160.00		346.00		164.30		343.50		166.10		346.50		174.80		353.90		181.60
		56.38		26.37		56.48		26.67		57.67		27.38		57.25		27.68		57.75		29.13		58.98		30.27
May 4		57.01		25.91		53.41		28.11		59.11		26.51		56.41		27.51		57.81		28.81		1.31		31.21
" 6		57.78		27.98		57.58		26.28		56.08		28.08		58.18		27.18		57.68		26.98		0.57		31.28
" 9	6	0.28		28.38		57.08		26.28		58.08		27.38		57.58		27.48		58.48		29.68		0.08		29.38
" 20		53.94		(23.04)		56.74		26.74		56.74		27.74		57.74		27.94		58.64		26.24		0.54		30.24
" 23		54.58		24.38		53.28		27.68		58.28		26.78		57.58		28.88		58.18		28.48		0.68		30.68
" 24		53.53		25.35		57.75		24.05		53.75		26.65		57.05		29.15		57.95		30.65		57.55		28.75
" 27		55.41		25.51		53.31		26.31		58.11		27.21		57.61		28.31		58.51		28.71		59.71		29.81
" 31		57.32		27.72		57.22		27.32		53.52		25.92		57.52		28.62		58.52		28.82		1.02		28.92
		45.38		208.27		45.23		214.77		45.76		216.27		45.67		22.50		46.57		232.37		47.86		24.02
		56.73		26.03		56.53		26.85		57.21		27.03		57.46		28.13		58.22		29.05		59.58		30.03
June 2		56.48		26.38		55.68		26.28		57.38		26.78		57.88		29.48		58.28		29.98		0.88		29.38
" 3		55.61		26.61		55.91		26.71		56.31		27.71		57.01		29.81		58.61		27.51		59.01		28.81
" 10		54.57		24.87		55.67		25.17		58.17		26.97		58.77		28.37		58.37		27.87		58.67		28.97
" 15		56.74		26.14		55.24		(22.44)		56.34		27.34		56.74		27.14		58.74		29.14		0.34		29.14
" 17		58.03		25.63		57.83		28.03		58.63		25.63		56.13		28.13		58.33		27.73		0.83		29.43
" 21		55.76		28.86		56.56		26.86		56.86		27.06		57.36		28.06		58.86		29.96		0.86		29.86
" 24		58.68		25.68		54.58		26.88		56.78		26.68		57.78		27.88		57.78		28.28		58.98		30.08
" 26		54.57		25.57		56.17		26.37		56.17		26.67		57.47		28.37		58.07		28.57		59.27		29.67
" 27		56.19		25.99		56.19		25.39		56.39		26.89		57.69		27.79		57.99		29.39		59.19		29.89
" 28		56.43		26.33		56.83		26.53		57.33		27.83		57.93		28.53		58.93		28.13		58.63		29.43
		55.706		25.906		56.066		26.066		57.036		26.956		57.476		28.356		58.396		28.656		59.316		29.436
		55.71		25.91		56.07		26.07		57.04		26.96		57.48		28.36		58.40		28.66		59.32		29.44

in order of date.

U.C. 1880.

+1.02	-5	57.78	-5	29.68	-4	58.38	-4	28.18	-3	58.38	-3	28.98	-2	58.48	-2	29.08	-1	58.98	-1	28.58	-0	58.38	-0	29.58
-0.74		57.34		29.14		58.04		29.04		57.34		28.74		58.24		29.44		58.74		(33.74)	-1	0.74		29.74
+2.88		56.62		27.22		58.72		28.62		58.22		27.42		58.42		(31.82)		59.62		31.62		59.42		28.82
+3.16		57.14		28.04		58.14		28.84		57.94		28.34		58.74		29.34		59.44		30.14		59.54		29.38
+1.05		57.25		28.68		58.38		28.61		57.98		28.38		58.71		29.16		59.45		30.10		59.51		29.38
+0.52		57.18		26.88		58.88		27.68		58.68		28.88		57.98		28.48		59.98		30.38		58.68		27.78
+3.76		57.04		25.04		58.04		26.24		57.54		31.24		58.24		27.24		59.24		(32.14)		(1.74)		(33.24)
4.28		57.12		51.92		110.92		53.92		116.22		60.12		116.22		55.72		119.22		62.52		120.42		61.02
+2.14		55.61		25.96		55.46		26.96		58.11		30.06		58.11		27.86		59.61		31.26		58.68		30.57
-0.40		58.70		28.00		58.70		29.00		58.90		28.10		58.90		28.20	-2	0.80		29.10	-0	58.20		28.10
-0.91		58.81		28.21		57.11		26.21		58.41		28.21		57.81		29.21	-1	57.81		29.71		59.91		30.11
+2.08		56.02		24.52		58.52		26.22		56.52		29.62		57.82		28.02		59.32		28.42		59.02		31.32
+0.34		58.96		23.66		58.76		28.46		57.46		26.96		57.66		28.66		58.96		30.46		59.86		28.46
-0.66		57.46		28.46		57.76		25.46		59.66		26.16		58.16		27.76		58.56		28.26		58.06		29.46
+0.63		56.53		(22.73)		58.85		27.35		59.75		26.55		58.65		28.85		58.05		28.55	-1	0.35		28.35
+1.00		58.37		50.37		149.60		34.20		16.29		34.66		16.26		34.60		17.07		35.35		17.48		35.54
+0.17		56.25		25.37		57.00		27.15		57.78		27.10		57.67		28.45		58.92		29.13		59.23		29.35
-1.89		58.69		27.69		58.39		27.19		58.89		25.19		58.49		27.09		59.69		(33.39)	-0	58.29		30.19
-0.02		58.02		28.62		58.42		26.32		57.32		28.32	-3	(1.32)		26.52	-2	0.42		29.52		59.32		28.72
+1.08		(0.72)		(31.62)		57.22		28.02		58.52		26.82		(0.12)		28.82	-1	59.52		26.62		58.52		28.82
-1.26		58.76		28.86		58.96		26.96		57.36		26.46	-2	58.56		30.16		59.96		27.46		58.06		28.46
-0.32		58.82		26.32		58.82		26.22		57.02		26.42		58.92		29.12		58.62		28.62		57.42		28.42
-0.35		58.98		28.18		58.48		26.18		58.18		26.08		57.58		27.88		58.88		28.18		57.78		30.88
-0.69		58.39		28.09		58.89		28.69		58.79		28.19		59.19		30.59		57.79		28.69		59.09		28.89
-1.58		58.18		26.88		58.88		28.98		58.38		26.38		58.58		28.88		58.98		28.68		59.78		30.38
-5.03		58.44		21.42		45.16		21.26		45.36		21.36		46.67		23.10		47.38		23.13		46.62		23.47
-0.63		58.69		26.78		58.48		26.57		58.70		26.74		58.34		28.88		59.23		28.84		58.28		29.34
-1.12		58.92		26.42		58.12		26.72		57.72		27.82		57.72		28.82		58.62		27.72		59.22		30.92
+2.01		58.49		27.19		58.39		26.99		57.99		26.99		57.39		26.99		58.19		27.69		59.09		30.39
+0.37		58.93		28.53		57.33		26.73		58.83		26.33		58.73		26.63		57.33		28.63		59.33		30.13
+5.74		58.96		28.76		58.46		26.26		57.16		26.26		58.56		28.46		58.26		29.86		58.96		28.16
-1.07		58.37		28.27		58.27		27.47		58.97		28.37		57.07		27.57		58.67		27.97	-1	0.67		30.57
-1.54		58.24		26.84		57.34		26.74		57.04		27.64		58.94		28.74		58.34		28.74	0	59.24		28.84
-0.52		58.82		28.82		58.62		26.42		57.12		27.72		58.12		28.22		57.52		27.52	-1	0.52		28.22
-0.03		58.23		26.83		58.83		26.03		57.83		26.73		58.73		26.53		57.63		28.33	-0	59.13		28.73
-1.21		58.31		26.11		58.41		26.81		58.71		27.41		57.21		27.81		57.91		28.51		58.31		28.71
+0.13		58.47		28.87		58.27		27.37		58.57		27.47		58.47		29.07		58.17		29.07		59.47		29.67
-1.24		58.37		26.16		58.26		26.95		58.19		27.48		57.39		27.88		57.66		28.41		59.74		29.43
-0.18		58.37		26.16		58.26		26.95		58.19		27.48		57.39		27.88		57.66		28.41		59.74		29.43

collection of results

U.C. 1880

July 4	+5	55.47	+5	24.87	+4	55.57	+4	28.67	+3	56.27	+3	28.27	+2	57.47	+2	27.47	+1	58.27	+1	29.17	+0	58.77	+0	28.97
" 7		56.11		25.91		56.41		27.01	4	0.41		24.11		57.91		27.91		58.01		28.21		59.51		29.21
" 29		55.61		26.91		56.41		26.11	3	56.01		28.91		58.21		29.31		54.91		30.91		0.71		29.91
Aug. 1		57.60		26.90		57.30		26.70		56.00		25.00		57.90		27.80		58.30		28.50	0	59.80		30.00
" 5		57.08		25.08		57.38		26.08		57.78		28.88		57.88		29.18		59.28		27.38		56.18		30.68
		281.87		131.67		286.07		134.57		286.47		135.17		289.37		141.67		288.77		144.17		294.97		148.77
		56.37		26.33		57.21		26.91		57.29		27.03		57.87		28.33		57.75		28.83		58.99		29.75
Aug. 15		57.74		32.54		59.54		28.44		56.64		29.84		54.84		21.44		56.64		24.34		56.14		30.64
Sept 28		58.10		29.60	5	2.20		28.70	4	0.50		25.30		56.10		27.50		57.50		28.50		58.50		28.80
		115.84		62.14		121.74		57.14		120.14		110.94		114.14		114.14		114.64		114.64		59.64		59.64
		57.92		31.07	45	0.87		28.57	4	0.07		25.30		55.47		27.50		57.07		28.50		57.32		29.82
Oct. 3		54.50		29.50		54.50		29.40		55.10		29.50		58.10		29.30	2	1.20		28.70		58.50		30.80
" 5	6	0.78		27.58		59.78		27.38		54.98		22.28		56.98		29.78		0.48		30.78	1	2.58		31.38
" 11		0.12		28.12		57.52		27.32		59.72		28.52		58.82		29.12	1	58.72		28.52	0	0.02		29.12
" 20		4.70		28.20		59.50		27.70		59.20		26.90	3	2.10		27.50		33.90		29.00	0	58.70		29.50
		0.90		17.40		17.60		11.20		22.90		8.492		23.700		11.570		0.40		11.700		17.722		12.080
	6	0.30		28.35		58.93		28.00		57.25		28.31		59.25		28.92		0.13		29.25		59.07		30.20
Nov 3		59.39		30.09		58.69		23.39		59.29		30.29	3	0.99		30.19		57.09		28.09	1	0.49		30.99
" 8	6	0.85		24.95		56.35		29.55		59.15		28.65	2	59.65		29.75		56.95		31.55	0	58.55		31.15
" 11	5	58.23		30.03		59.13		27.73		57.33		27.83		58.93		29.03		59.93		28.43		59.03		30.23
" 14		58.16		29.26		56.86		26.46		57.06		29.66		58.76		26.26	2	2.26		33.36		2.26		30.06
" 16	6	0.22		28.12		58.92		26.72		59.82		30.32		58.22		27.22	1	57.32		29.52		59.72		29.22
" 18	5	58.68		27.98		58.18		27.88		58.88		29.78		59.58		29.78		58.58		28.68		58.88		30.18
" 22	6	1.73		29.43	5	0.43		30.63		57.73		26.33		59.43		27.63		59.03		30.83	1	0.83		28.03
" 25		0.78		27.68	4	57.18		27.48		57.48		28.98		58.78		27.78		59.78		29.48	0	59.08		28.18
" 27		0.16		26.56		59.46		26.06		57.66		27.56		59.36		28.96		59.36		30.06	1	0.36		30.46
" 29	5	57.93		27.18	5	0.03		29.03		59.03		29.83		59.13		29.43		59.83		29.13	0	58.93		30.83
		53.767		28.123		58.523		23.54		58.343		28.923		59.283		28.603		59.87		29.913		59.813		29.913
		59.74		28.12		58.52		26.16		58.34		28.92		59.28		28.60		58.87		29.91		59.81		29.91
Dec 7		59.75		27.45		57.05		28.05		58.85		29.55		59.45		29.95	2	0.25		29.65		59.95		29.85
" 9	6	0.09		34.59		58.19		31.49	4	0.89		28.69		59.59		32.79	1	58.79		32.09		59.59		32.49
" 16		1.50		29.90	5	0.50		29.50		0.10		29.90		58.30		29.10		59.20		30.70		57.80		29.30
	6	13.4		91.94		175.74		89.04		179.84		88.14		177.34		59.05		178.24		92.44		177.34		89.64
		0.67		30.65		58.58		29.68		59.95		29.38		59.11		29.52		59.41		30.81		59.11		29.88

in order of date.

U B 1880.

+0.47	54.63	25.03	55.73	27.73	56.63	27.43	56.93	28.33	59.73	28.93	59.23	29.33
-2.59	53.19	27.09	56.69	28.39	57.99	30.29	57.69	26.59	57.39	28.59	58.39	28.59
+0.11	56.99	29.19	59.19	27.99	55.49	26.69	58.49	28.09	58.79	29.49	58.09	31.19
+0.50	55.10	25.20	54.40	25.80	57.40	29.00	58.30	27.70	58.80	29.50	0.10	31.70
-1.72	56.22	25.62	53.62	25.22	57.62	28.32	57.02	28.32	59.52	30.32	59.22	30.12
-2.93	27.613	132.13	279.63	134.63	285.13	142.23	288.43	138.03	294.23	147.13	295.23	150.93
-0.59	55.23	26.43	55.93	26.93	57.03	28.45	57.69	27.61	58.85	29.43	59.05	30.19
+2.94	(52.66)	28.06	53.06	28.46	55.56	(32.46)	55.46	29.26	-2 0.86	30.06	-1 (1.56)	27.56
-2.10	57.20	26.00	58.30	28.20	58.70	27.50	56.90	28.50	-1 56.00	28.00	0.80	33.10
+0.84	54.06	111.36	56.66	114.26	59.96	112.36	57.76	116.86	58.06	(23.6)	60.66	30.33
+0.42	57.20	27.03	55.68	28.33	57.13	29.98	56.18	28.88	58.43	29.03	59.03	30.33
+0.60	57.50	27.50	57.10	27.10	58.00	26.60	58.30	30.70	58.40	30.10	58.00	30.30
+2.38	54.52	27.92	55.82	31.22	4 (2.22)	(31.72)	56.92	29.12	59.32	(35.92)	(57.32)	28.32
+0.52	56.58	(29.78)	58.98	26.18	3 59.48	27.68	57.18	28.98	2 0.88	29.28	59.58	30.28
+0.20	58.30	28.20	-5 0.50	26.20	57.50	28.10	58.00	31.30	-1 59.10	29.70	-1 0.00	29.30
+3.70	22.690	113.40	132.40	110.70	237.18	114.10	232.40	120.10	237.70	125.00	236.70	118.20
+0.92	56.72	28.35	58.10	27.68	59.29	28.52	58.10	30.02	59.43	31.25	59.68	29.58
+1.79	57.31	29.71	58.41	29.01	4 (9.51)	30.81	-3 0.31	29.81	58.51	27.31	58.81	28.81
-0.65	57.85	27.75	58.25	26.75	3 59.45	(32.35)	57.65	29.35	-2 0.85	30.55	-1 0.05	26.35
-0.24	57.47	28.67	57.47	28.67	57.87	28.67	58.77	31.47	1 59.17	27.27	59.37	30.77
+0.56	55.64	27.34	57.44	27.14	4 1.44	27.74	3 0.54	29.94	58.44	32.24	59.54	29.54
-2.48	57.98	26.08	57.88	26.58	(2.08)	25.48	2 57.68	28.68	2 0.48	29.78	59.38	28.78
+0.98	59.12	27.52	58.92	29.32	3 58.32	27.02	3 0.62	30.72	1 58.12	29.62	1 0.42	28.02
-2.27	56.77	28.87	57.87	25.87	58.37	27.77	0.07	31.37	2 2.97	29.47	0.17	30.27
-0.92	55.62	27.82	59.02	29.92	58.52	28.22	57.62	27.32	1 58.82	29.82	0.22	28.92
-0.04	56.64	27.84	57.44	30.34	59.44	28.04	57.44	27.74	59.84	30.34	0.54	30.44
+0.03	57.57	27.97	58.27	29.27	58.77	29.67	59.37	29.47	59.47	29.97	0.67	30.17
-3.27	56.917	27.917	58.417	28.817	59.597	28.577	59.207	29.607	59.667	29.637	59.917	29.207
-0.33	56.92	27.92	58.43	28.89	59.60	28.58	59.21	29.61	59.67	29.64	59.92	29.21
-0.38	58.75	30.35	58.65	29.15	58.35	28.55	59.75	29.85	59.85	28.15	59.35	29.05
-1.71	58.31	29.11	5 0.01	31.81	4 1.71	36.21	3 (2.71)	28.31	57.61	(31.91)	59.71	30.21
+0.09	59.40	29.10	59.10	29.40	3 59.60	29.80	2 58.80	30.20	2 0.40	30.60	1 0.50	30.80
-1.98	57.646	88.56	175.76	90.36	179.66	94.56	181.26	88.36	177.86	97.66	179.56	90.06
-0.66	58.82	29.52	58.52	30.12	59.89	31.52	59.42	29.45	59.29	30.55	59.85	30.02

Collection of results

L.C. 1880.

April 5	⁺⁵ 58.05	⁺⁴ 28.75	⁺⁴ 56.45	⁺³ 27.95	⁺³ 56.75	⁺² 27.25	⁺² 58.35	⁺¹ 29.75	⁺¹ 59.65	⁺⁰ 28.15	⁺⁰ 58.65	⁺⁰ 29.55	-0
" 7	58.10	28.10	57.90	27.20	58.10	28.70	57.20	27.70	56.70	31.40	58.70	28.70	-0
" 12	57.87	28.87	56.37	25.67	57.87	28.87	58.27	27.37	58.67	28.87	59.87	29.07	+1
" 20	⁶ 0.90	26.60	55.80	26.30	56.00	26.30	58.10	30.00	59.70	27.90	59.60	27.80	+0
" 30	⁵ 55.43	26.43	56.93	26.83	54.43	25.13	57.73	29.53	52.33	26.63	54.23	22.03	+1
	290.85	134.75	283.45	134.15	283.15	136.25	289.65	144.35	287.05	142.95	291.05	137.15	+0
	58.07	26.95	56.69	26.83	56.63	27.25	57.93	28.87	57.41	28.59	58.21	27.43	+0
May 3	55.42	27.02	58.42	27.62	58.12	27.12	58.32	29.42	58.92	30.22	0.62	30.42	+1
" 6	54.60	26.10	56.60	30.10	0.00	26.70	57.40	28.50	56.40	31.30	1.10	29.20	-0
" 9	56.58	28.28	56.28	26.88	58.18	28.58	59.58	27.18	57.78	27.98	57.48	30.18	+0
" 10	56.82	27.42	56.42	28.42	58.52	28.52	58.92	29.42	59.22	27.72	58.62	28.92	+0
" 15	58.50	28.80	56.30	28.30	57.00	27.80	57.90	29.10	58.70	29.20	59.40	29.20	-1
" 17	55.87	26.57	58.37	26.17	57.87	29.37	58.57	25.67	56.67	23.27	55.07	24.67	-1
" 21	56.32	24.02	54.32	25.72	58.32	25.12	56.72	26.82	54.92	29.52	0.42	30.22	+0
" 23	55.72	26.62	57.22	26.92	56.92	27.32	53.82	28.22	59.62	28.52	58.72	28.22	-1
	446.83	211.83	453.93	220.13	461.93	220.53	460.23	224.33	470.23	204.46	471.43	206.36	-2
	58.85	26.48	56.74	27.52	57.74	27.57	57.53	28.04	58.78	29.21	58.93	29.48	-0
June 4	51.50	25.80	53.90	28.50	58.50	26.60	58.80	30.70	58.60	29.80	59.70	30.80	-1
" 10	54.32	26.42	55.22	25.92	55.92	26.82	57.42	28.42	56.92	26.92	59.02	30.82	+0
" 17	54.94	26.44	56.24	26.04	56.84	27.24	57.14	26.64	57.94	27.14	56.94	27.64	-1
" 18	55.72	24.92	55.92	25.12	55.62	28.42	57.62	28.82	57.92	28.92	59.92	28.12	-1
" 19	54.28	24.58	56.68	27.98	56.98	28.48	58.78	29.18	58.28	28.68	59.28	27.68	-0
" 21	54.36	26.06	56.46	25.06	56.56	26.36	57.46	28.26	56.36	29.86	59.16	29.56	+0
" 22	54.57	25.97	55.87	25.37	56.27	26.47	58.07	28.47	58.47	29.67	59.17	29.97	+0
" 27	55.87	25.37	55.57	26.07	56.27	27.87	57.17	28.87	54.27	29.27	58.57	28.57	-0
" 29	55.75	26.85	55.95	26.25	56.55	26.35	57.25	27.45	57.35	27.85	59.75	29.55	-0
" 30	55.74	24.74	55.64	25.44	56.74	27.24	57.24	27.44	58.44	28.94	58.64	29.44	-0
	547.05	257.15	559.45	261.75	566.25	271.85	576.95	285.75	582.05	287.05	590.15	292.65	-5
	54.70	25.71	55.94	26.17	56.62	27.18	57.69	28.57	58.00	28.70	59.01	29.26	-0
July 1	55.26	26.06	54.86	26.36	56.26	26.36	56.46	26.26	57.86	28.26	0.46	30.36	-0
7	58.08	27.18	56.58	27.48	56.68	26.48	56.48	29.98	58.88	26.48	59.58	28.28	-0
8	54.67	25.17	55.67	26.37	55.77	26.47	56.67	27.67	57.37	31.73	58.27	28.77	-0
13	56.55	25.55	57.45	27.05	57.55	28.45	58.25	28.25	57.95	28.75	58.95	28.65	-0
18	55.78	26.58	55.18	26.28	56.28	27.18	56.58	28.08	57.28	28.08	57.18	28.28	+0
26	53.60	26.60	55.90	27.00	56.40	27.80	55.20	26.72	58.30	28.40	0.70	30.70	+0
28	58.43	25.93	56.13	26.03	56.43	26.93	57.23	27.63	58.13	28.60	59.53	29.63	-0
	394.37	183.07	391.47	186.57	395.57	189.67	396.87	194.59	403.77	142.09	414.67	204.67	-1
	56.34	26.15	55.97	26.65	56.48	27.10	56.76	27.80	57.68	28.42	59.24	29.24	-0

in order of date.

L.C. 1880

-0.95	56.05	27.55	57.05	27.05	59.35	28.65	56.85	29.45	58.65	29.75	0.45	27.75
-1.90	53.60	24.70	53.90	27.10	56.20	28.30	59.40	28.10	59.50	31.20	(2.00)	30.70
+1.67	56.33	(23.13)	58.03	28.43	57.93	28.13	58.23	29.23	57.13	28.63	0.73	30.03
+0.60	56.60	25.60	55.60	26.10	56.20	28.80	59.90	30.10	56.90	28.30	0.50	30.10
+1.13	57.07	24.07	53.37	(16.57)	53.77	(22.27)	56.47	29.87	(1.47)	27.47	(4.67)	27.77
+0.55	273.65	101.92	279.95	108.68	283.45	114.18	290.85	146.75	232.18	145.35	1.68	146.35
+0.11	54.73	25.48	55.99	27.17	56.69	28.54	58.17	29.35	58.04	29.07	0.56	29.27
+1.42	56.78	28.08	59.68	27.68	58.28	27.68	56.68	29.68	59.08	30.18	0.58	28.28
-0.80	53.80	27.00	57.30	24.50	58.50	(30.80)	(1.40)	19.20	58.70	(32.40)	59.80	(26.90)
+0.28	53.72	27.42	56.42	25.92	58.62	27.42	58.52	28.92	59.12	28.72	59.22	29.32
+0.12	53.58	26.38	57.28	26.38	56.98	28.28	58.68	28.68	59.28	29.88	0.78	30.78
-1.00	56.10	26.10	56.10	25.40	57.50	26.90	57.70	29.00	58.90	29.10	59.00	(31.40)
-1.63	53.33	22.93	53.83	(22.73)	53.33	25.63	54.43	26.13	58.33	27.13	59.63	30.93
+0.72	54.28	25.28	56.48	26.98	56.08	25.88	57.68	27.28	58.28	28.48	57.58	30.88
-1.78	59.58	25.38	57.08	25.68	55.68	25.18	58.68	28.28	0.08	28.28	1.08	27.98
-2.82	44.017	20.857	45.417	18.254	45.687	18.697	40.437	22.717	47.177	20.177	47.597	17.817
-0.36	55.02	26.07	56.77	26.08	57.11	26.71	57.77	28.40	58.97	28.82	59.50	29.69
-1.80	56.70	26.70	58.70	28.30	57.70	27.30	56.50	27.90	57.30	28.00	58.40	29.30
+0.52	56.78	25.08	53.28	24.88	56.78	27.28	57.78	28.38	58.18	27.78	58.38	30.48
-1.16	54.16	24.36	55.86	25.66	53.66	25.66	56.66	27.66	57.66	27.96	59.36	29.46
-1.68	53.98	25.18	53.68	26.28	57.68	27.58	57.88	27.38	57.08	27.68	58.78	29.98
-0.42	58.22	25.12	53.92	24.82	57.52	27.12	57.02	29.72	57.62	27.42	0.12	29.72
+0.06	54.74	25.74	56.44	24.94	56.94	28.14	57.04	27.74	57.74	29.24	(56.74)	30.04
+0.57	53.73	25.83	57.13	27.13	57.53	27.13	53.93	28.03	58.63	28.73	58.73	28.33
-0.43	54.93	26.13	53.63	26.73	53.73	26.03	58.93	28.03	57.43	27.53	57.43	29.73
-0.25	54.78	28.85	55.15	25.95	53.95	26.45	56.95	27.15	57.55	29.65	59.35	29.35
-0.56	53.06	26.16	53.86	25.66	56.46	26.86	57.76	28.86	58.16	28.06	58.66	28.46
-5.20	55.505	25.915	55.965	26.035	56.795	26.955	57.245	28.085	57.735	28.205	52.921	29.485
-0.53	55.50	25.91	55.96	26.03	56.79	26.95	57.24	28.08	57.73	28.20	58.80	29.48
-0.34	54.44	25.64	54.84	25.74	56.24	26.14	57.74	27.94	58.24	28.54	59.34	29.54
-0.52	56.52	24.72	53.92	27.92	57.22	26.62	57.32	28.62	59.32	29.62	59.32	29.92
-0.13	(52.73)	24.87	56.23	26.13	56.73	27.03	57.13	28.63	58.03	28.63	59.53	28.53
-0.35	55.45	25.45	53.75	27.45	57.35	27.95	57.75	28.55	57.85	29.35	0.45	29.75
+0.08	53.82	27.62	56.12	24.52	56.92	27.52	53.32	28.02	58.02	27.22	57.72	28.02
+0.50	56.20	25.60	57.00	26.70	57.20	28.00	58.50	27.90	58.70	29.30	0.10	27.90
-0.37	58.97	25.87	57.37	26.67	57.27	27.27	53.87	26.57	56.97	28.97	58.27	29.67
-1.13	33.740	17.977	39.323	18.513	39.893	19.053	39.963	19.623	40.713	20.163	41.473	20.333
-0.16	54.23	25.68	56.18	26.48	56.99	27.22	57.09	28.03	58.16	28.80	59.25	29.05

Collection of results

L 6 1880.

July 30	+5	56.99	+5	27.49	+4	56.79	+4	26.49	+3	55.59	+3	26.99	+2	56.69	+2	27.29	+1	57.39	+1	28.19	+1	0.79	+0	31.09	-1.5
" 31		57.82		27.72		57.22		27.62		57.32		26.72		56.92		28.42		58.02		28.42		59.02		30.32	+0.
Aug 1		56.25		25.25		56.85		25.65		57.05		27.15		57.35		28.95		58.15		29.25		0.85		29.75	+0.
" 9		55.72		26.22		55.02		27.12		58.12		28.12		57.52		27.32		58.82		29.32		59.12		30.82	+0.
" 16		55.73		25.53		56.43		27.83		56.63		27.13		57.23		27.73		56.83		27.43		59.83		31.83	+0.
" 23		58.15		27.85		58.05		27.15		57.15		26.95		57.35		26.25		57.25		29.35		(2.45)		29.65	+0.
" 24		56.21		27.71		56.61		28.41		56.31		27.51		57.91		30.01		58.01		27.11		(1.81)		30.71	-2.
"		39.407		18.777		39.697		19.027		39.817		19.057		40.197		19.597		40.447		20.007		29.961		30.56	-2.
		56.30		26.82		56.71		27.18		56.88		27.22		57.42		28.00		57.78		28.58		59.92		30.56	-0.
Sept 2		58.24		28.34		58.34		27.84		55.64		26.44		56.84		26.34		55.34		26.34		59.84		26.34	+0.
" 5		56.06		26.36		57.96		27.56		57.56		27.76		58.46		27.76		57.36		30.16		59.86		30.66	+2.
" 11		57.97		27.97		57.27		26.67		56.47		26.47		58.27		27.57		58.47		28.37		59.47		28.77	+1.
" 12		57.76		26.46		55.76		26.26		57.76		28.46		57.96		28.06		0.36		28.16		0.36		(32.26)	+0.
" 19		56.71		28.41		56.31		24.81		57.01		28.71		57.91		28.11		57.81		29.01		59.71		(31.21)	-0.
" 21		57.80		28.10		58.10		28.80		56.60		26.90		57.90		27.50		59.10		29.20		58.60		28.60	+0.
" 25		53.86		25.46		58.06		28.26		59.46		28.06		59.06		29.26		0.26		28.46		0.86		29.16	-1.
" 26		57.12		24.82		58.42		26.72		57.52		28.92		59.22		28.62		58.62		29.12		58.42		29.72	-1.
" 29		58.24		(30.54)		55.44		26.44		57.54		28.54		57.64		29.74		58.64		28.04		56.84		29.54	+0.
		51.186		21.592		51.566		24.276		51.556		25.126		52.326		25.296		53.096		25.776		53.396		20.279	+3.
		56.87		26.99		57.30		26.97		57.28		27.92		58.14		28.11		58.99		28.53		59.33		28.97	+0.
Oct 3		57.87		28.07		55.67		28.87		(54.47)		29.67		58.97		29.77		58.87		29.87		58.07		28.27	+0.
" 6		57.52		28.52		56.62		28.12		58.72		28.72		59.52		28.42		58.32		29.32		59.62		(32.82)	-1.
" 7		56.57		25.78		57.28		28.58		58.78		28.68		58.78		27.78		58.38		28.78		58.38		28.68	-0.
" 8		56.81		27.91		56.01		28.51		57.41		28.01		58.31		30.51		0.31		30.91		0.81		(33.81)	+2.
" 10		59.02		26.52		55.92		28.82		57.52		28.52		56.82		30.32		59.62		27.92		59.72		29.92	-0.
" 19(8)		57.37		(32.27)		59.17		28.07		57.57		28.07		59.67		30.57		57.77		29.47		0.27		31.27	-0.
" 24/25		57.74		27.14		56.84		27.94		58.74		27.74		58.84		28.64		0.14		29.94		57.84		28.24	-1.
Nov 1		57.99		27.99		57.49		26.39		57.99		27.79		58.39		28.59		57.89		29.19		0.19		29.49	-0.
		40.281		19.434		39.751		19.901		40.821		19.941		41.191		20.601		41.341		20.611		41.471		14.638	-0.
		57.56		27.36		58.79		28.43		58.31		28.49		58.84		29.43		59.06		29.44		59.24		29.28	-0.
Nov 1		57.99		27.99		57.49		26.39		57.99		27.79		58.39		28.59		57.89		29.19		0.19		29.49	-0.
Nov 6		58.73		28.43		57.93		29.13		58.83		29.43		58.93		28.63		59.13		29.43		59.73		(31.53)	+1.
" 13		58.96		29.16		58.56		29.56		58.46		27.96		57.46		29.36		59.06		30.46		59.46		30.06	+0.
Dec 18		2.68		30.98		(1.38)		29.28		57.48		28.38		59.68		28.48		0.58		26.18		0.18		27.98	-0.
		23.836		11.656		17.498		11.436		23.276		11.356		23.446		11.506		23.666		11.626		24.056		8.753	+1.
		59.59		29.14		58.33		28.59		58.19		28.39		58.81		28.76		59.16		29.06		0.14		29.18	+0.

in order of date.

L 6 1880.

-1.51	⁻⁵ 54.91	⁻⁵ 26.81	⁻⁴ 56.71	⁻⁴ 25.91	⁻³ 58.21	⁻³ 27.11	⁻² 57.91	⁻² 28.11	⁻¹ 58.51	⁻¹ 28.21	⁰ 59.51	⁰ 29.31
+0.02	✓ 56.28	27.18	57.28	27.08	56.18	26.88	57.98	28.38	57.08	28.78	58.58	29.88
+0.45	✓ 56.65	26.85	56.75	28.25	58.25	25.95	57.75	28.35	57.75	29.85	58.25	29.85
-0.08	✓ 55.78	25.68	57.98	26.08	58.28	26.98	56.48	27.88	58.68	29.58	59.88	30.48
+0.33	✓ 55.77	25.77	56.37	24.57	56.07	27.87	57.17	28.97	59.57	30.37	59.57	28.67
+0.25	✓ 57.55	28.85	56.75	27.45	58.05	27.85	56.55	29.65	59.15	28.35	58.65	28.85
-2.09	54.29	25.89	56.39	25.09	56.79	29.59	57.09	26.99	(1.99)	(27.19)	(4.14)	30.59
-2.43	53.123	18.703	39.823	18.443	40.83	19.153	40.093	19.833	35.304	17.514	35.444	20.743
-0.358	55.89	26.72	56.59	26.35	57.40	27.36	57.28	28.33	58.84	29.19	59.07	29.63
+0.84	✓ 54.86	26.06	56.16	26.76	58.26	26.96	59.06	28.16	57.26	27.56	59.36	29.46
+2.46	✓ 56.64	26.14	56.44	26.94	59.44	28.44	³ 0.54	28.74	59.14	28.84	58.44	30.34
+1.27	✓ 56.83	27.03	58.63	25.13	57.53	29.23	² 59.43	26.73	57.63	26.83	58.23	29.13
+0.56	✓ 56.54	28.44	56.54	27.84	57.04	26.84	58.84	26.94	² 0.24	29.74	1.84	29.14
-0.29	✓ 56.49	24.59	58.89	27.09	58.29	27.29	58.99	29.49	58.19	30.89	58.09	30.09
+0.70	✓ 56.00	27.60	57.00	26.70	55.20	27.40	57.50	29.20	² 1.00	29.60	0.30	30.50
-1.04	✓ 54.84	27.14	59.94	27.54	1.64	26.74	58.84	26.54	58.64	30.84	56.84	30.74
-1.18	✓ 56.18	29.98	58.48	28.98	56.68	(25.68)	53.98	28.38	59.18	29.78	59.48	29.18
+0.04	✓ 56.56	28.06	57.46	28.86	59.36	28.26	59.26	27.66	59.96	29.56	57.86	26.26
+3.36	56.30	49.4	24.504	51.654	24.584	52.344	22.116	52.844	25.184	52.924	26.364	53.044
+0.37	56.40	27.23	57.39	27.32	58.16	27.64	58.72	27.98	58.80	29.29	58.94	29.43
+0.47	✓ 56.03	29.23	57.73	27.13	57.63	27.93	³ 0.53	27.73	59.13	30.63	1.03	29.13
-1.38	✓ 58.08	27.88	58.38	27.88	⁴ 0.18	29.58	² 59.38	28.28	59.18	28.48	58.28	29.48
-0.12	✓ 57.02	26.82	56.82	27.42	³ 58.12	27.92	56.92	28.02	57.12	29.62	0.32	30.42
+2.01	✓ 57.09	27.99	57.39	(30.89)	58.39	(33.99)	58.69	29.49	58.99	(32.39)	59.39	27.69
-0.78	✓ 58.58	27.38	59.18	27.28	57.68	26.28	58.48	29.88	58.78	28.18	59.28	28.88
-0.13	✓ 57.73	26.83	57.03	26.63	56.73	27.83	³ 0.33	(33.43)	² (1.53)	30.83	0.93	29.53
-1.06	✓ 58.06	27.46	57.46	28.46	56.06	26.16	² 57.06	(36.16)	59.66	29.86	58.26	29.96
-0.99	58.11	26.11	57.21	26.71	57.91	27.21	58.61	29.21	59.71	29.91	0.11	28.81
-0.14	40.259	193.59	40.429	16.480	40.479	16.570	41.139	14.580	35.286	17.760	41.749	20.509
-0.14	57.57	27.64	57.78	27.47	57.83	27.62	58.77	28.76	58.81	29.60	59.64	29.30
-0.31	✓ 58.28	26.16	57.21	26.71	57.91	27.71	58.61	29.21	59.71	29.91	0.11	28.81
+1.03	✓ 58.97	27.87	58.17	28.87	57.47	29.47	58.97	29.47	59.97	29.07	0.37	28.87
+0.56	✓ 57.24	28.44	58.24	29.26	57.64	29.54	59.74	28.04	59.84	29.74	0.14	29.34
-0.12	✓ 0.42	28.02	58.82	26.72	58.22	29.02	³ 0.12	29.52	58.42	31.42	59.92	(32.62)
+1.16	23.664	110.44	23.244	11.156	23.324	11.574	23.744	11.624	23.794	12.014	24.054	8.702
+0.29	59.21	27.61	58.11	27.89	58.31	28.53	59.36	29.06	59.48	30.03	0.13	29.01

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-0.47	✓	⁵ (56.26)	27.83	"	56.93	⁴ (26.25)	³ 0.17	² 30.36	² 57.10	² 27.55	¹ 0.15	⁰ 29.06	⁰ 59.16	⁰ 32.11
-0.49	✓	57.40	29.55		58.50	28.10	³ 59.06	29.79	³ 0.87	28.92	¹ 59.53	29.10	¹ 0.23	31.30
-0.95	✓	⁶ 1.02	30.96		59.26	29.84	⁴ 0.44	(23.95)	0.06	30.67	² 1.12	30.16	⁰ 59.03	30.66
+1.99	✓	⁵ 57.24	27.81		56.84	28.82	(1.83)	30.01	² 58.77	29.73	¹ 57.17	29.73	¹ 0.25	31.60
-1.49	✓	58.92	28.56	⁴ (2.74)	33.34	(2.44)	30.17	59.60	(26.36)	59.91	29.49	1.07	30.02	
-1.35	✓	57.50	27.56	⁴ 58.06	29.56	³ 58.49	28.98	57.79	30.01	² 0.76	29.02	1.71	30.58	
-1.20	✓	⁶ 0.70	(31.46)	58.66	29.61	⁴ 0.24	29.11	57.66	30.38	¹ 59.86	29.76	1.35	30.93	
-3.96	✓	⁵ 58.03	29.69	57.64	27.64	³ 58.36	28.54	58.28	28.64	² 1.64	30.01	1.75	31.59	
-0.57	✓	59.13	28.77	58.04	28.16	59.58	29.16	58.84	29.54	² 1.64	30.01	1.75	31.59	
-1.35	✓	⁵ 58.03	29.69	57.64	27.64	³ 58.36	28.54	58.28	28.64	² 1.64	30.01	1.75	31.59	
-0.24	✓	57.39	27.39	58.49	(31.74)	59.80	29.10	³ 1.19	30.47	(2.78)	29.79	⁰ 59.01	29.72	
-0.14	✓	⁶ 1.91	29.04	⁵ 0.37	29.70	59.70	28.34	² 58.14	30.14	¹ 58.94	28.24	59.67	30.81	
+0.64	✓	⁵ 58.93	29.88	57.51	28.01	⁴ 0.68	30.26	58.57	30.10	² 0.85	28.81	¹ 0.25	29.56	
-1.30	✓	56.09	20.90	⁵ (1.54)	27.55	5.59	30.40	57.74	28.74	¹ 59.12	27.45	0.99	28.09	
-0.72	✓	59.62	30.92	59.12	27.92	³ 58.82	28.32	³ 1.62	28.22	² 1.02	28.92	0.72	29.52	0.72
-4.39	✓	⁵ 58.66	29.64	58.63	28.16	59.82	29.16	59.09	29.38	² 0.31	28.87	⁰ 59.01	29.88	0.72
-0.73	✓	58.66	29.64	58.63	28.16	59.82	29.16	59.09	29.38	² 0.31	28.87	⁰ 59.01	29.88	0.72
+0.23	✓	59.77	27.77	58.97	28.67	59.17	30.27	1.07	28.77	¹ 57.67	28.27	⁰ 57.97	30.57	
+0.58	✓	57.42	28.92	59.82	27.12	57.62	29.82	² 59.82	28.92	² 0.22	31.02	58.52	28.72	
+0.66	✓	⁶ 0.54	28.24	57.84	27.84	⁴ 0.04	29.24	59.04	29.04	0.54	29.84	57.04	30.14	
-0.90	✓	⁵ 57.80	28.80	59.40	29.40	³ 57.80	28.70	57.10	28.50	(2.40)	27.20	59.90	30.70	
-0.74	✓	57.34	30.84	57.44	28.74	58.84	29.44	58.04	31.34	¹ 57.54	30.84	57.74	(27.04)	
+0.73	✓	58.07	27.17	58.77	27.57	57.47	28.37	³ 0.27	29.17	58.17	30.37	¹ 0.07	31.57	
-0.34	✓	55.24	26.04	57.34	(25.24)	57.64	28.34	² 59.34	30.34	² 0.54	32.84	1.04	(33.64)	
-0.23	✓	55.13	27.43	58.33	29.83	⁴ (1.33)	26.63	57.03	28.73	¹ 58.73	30.73	⁰ 57.53	31.93	
-1.41	✓	55.01	27.71	57.21	29.01	³ 59.61	28.21	59.21	29.21	58.21	29.71	59.41	31.81	
+0.38	✓	57.02	27.12	(55.42)	28.02	58.32	27.52	59.52	30.62	² 0.32	28.52	¹ 0.82	30.12	
-1.04	✓	57.33	28.00	58.35	28.47	58.50	28.66	59.04	29.46	59.10	29.93	59.40	24.56	
-0.10	✓	57.33	28.00	58.35	28.47	58.50	28.66	59.04	29.46	59.10	29.93	59.40	24.56	
-2.84	✓	(53.84)	26.54	57.74	28.04	56.74	27.94	58.54	28.64	¹ 59.14	30.84	⁰ 57.94	30.14	
-1.53	✓	57.23	27.63	57.53	(30.03)	57.03	28.23	³ 0.43	30.03	57.03	28.23	58.93	30.13	
+0.60	✓	57.00	30.70	57.40	28.00	57.80	28.00	² 58.00	28.70	59.60	29.40	59.90	31.20	
+0.73	✓	57.77	27.77	54.87	28.07	59.17	28.17	³ (2.27)	28.17	58.47	29.27	57.67	30.37	
-3.04	✓	57.33	28.16	56.88	28.54	58.18	28.08	58.99	28.88	59.06	29.43	59.11	121.84	
-0.76	✓	57.33	28.16	56.88	28.54	58.18	28.08	58.99	28.88	59.06	29.43	59.11	121.84	

Collection of results

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April 1	⁴ 5	58.73	⁵ 29.03	⁴ 59.93	⁴ (30.93)	³ 59.43	³ 29.13	² 57.83	² 28.43	¹ 59.63	¹ 28.13	⁰ 59.93	⁰ 30.33
" 16	⁶	0.96	29.76	58.56	28.96	56.36	27.36	59.06	27.06	58.46	27.76	57.66	29.16
" 21		0.96	28.36	57.46	28.86	⁴ 0.16	30.36	59.66	29.46	58.86	28.16	59.86	29.26
" 23	⁵	58.10	28.20	58.40	28.70	³ 57.40	30.10	59.60	28.40	² 0.40	29.50	¹ 0.30	30.80
		23875	11535	23435	8652	23335	11725	23615	11385	23735	11355	23775	11955
		59.69	28.84	58.59	28.84	58.34	29.31	59.04	28.46	59.34	28.39	59.44	29.89
June 17		55.86	27.46	56.66	26.66	56.96	27.46	57.96	27.16	59.36	28.76	⁰ 0.96	30.36
" 21		56.25	28.85	58.25	27.25	58.05	27.75	58.95	28.55	59.05	28.95	⁰ 58.35	29.45
" 22		56.65	26.35	58.05	27.25	57.65	28.15	57.85	29.15	58.35	28.75	58.65	29.85
" 23		58.29	28.29	58.39	26.99	58.59	27.79	58.09	29.19	58.49	29.59	58.59	29.79
" 25	⁵	(57.92)	27.42	57.52	27.22	56.52	28.32	58.32	30.12	58.52	28.42	58.02	29.82
		22705	13887	28887	13537	28777	13997	29317	14417	29377	14447	29457	14917
		56.76	27.77	57.77	27.07	57.55	27.99	58.63	28.83	58.75	28.89	58.91	29.85
July 6		58.23	27.73	57.73	27.83	58.73	28.03	55.13	28.73	59.33	31.13	59.03	29.93
" 9		58.24	28.64	57.74	28.14	58.04	27.44	57.34	28.34	58.34	28.44	⁰ 0.24	29.04
" 14		57.60	26.60	56.90	26.70	57.00	28.50	58.40	28.70	58.50	28.60	59.70	30.20
" 15		56.31	25.11	56.41	27.91	56.91	28.01	58.21	28.21	59.01	30.31	¹ 1.51	30.71
		23038	10808	22878	11058	23068	11198	22927	11398	23518	11848	24018	11988
		57.59	27.02	57.19	27.64	57.67	27.99	57.32	28.49	58.79	29.62	0.04	29.97

in order of date.

L b. 1881.

-1.17	✓	-5	58.87	28.77	4	58.27	27.07	3	58.67	29.37	3	0.67	2	30.87	57.97	1	28.97	1	2.37	0	30.37
-2.83			58.24	26.54		57.64	28.14		57.54	28.24	2	58.14	2	29.24	2	0.04	29.14	0	59.54		28.54
-1.94	✓		54.94	29.14		59.74	29.94		59.14	(31.54)		58.44		29.14		0.64	28.64		58.34		29.64
+0.26	✓		(2.70)	28.30		39.30	27.60	4	0.00	29.60		56.90		29.60	1	58.60	31.40	1	0.30		27.50
+1.00	✓	6	170.05	112.75		234.95	112.75		235.35	87.21		234.45		118.85	237.25		118.15		240.55	0.14	116.05
-0.88	✓	1	56.68	28.19		58.74	28.19	2	58.84	29.07		58.61		29.71	59.31		29.54	29.54	0.14	29.01	29.01
-0.84	✓		56.14	25.34		58.04	26.94	3	56.94	27.74		57.14		29.14	59.14		29.34		0.14		29.64
+0.85	✓		56.35	27.85		56.55	27.15		57.55	27.65		58.65		28.65	59.65		29.45		0.25		30.25
+1.05	✓		58.15	28.15		56.45	28.45		58.65	27.75		58.65		29.05	58.45		29.45	0	58.85		29.35
+0.49	✓		58.81	27.31		56.91	28.41		58.51	28.41		58.51		28.41	59.01		29.91		58.91		29.41
+0.02	✓		(54.88)	26.98		55.48	27.48		55.88	26.48		57.58		28.98	58.88		27.38		57.08		30.18
+1.57	✓		22.845	13.563		28.73	13.843		28.773	13.803		29.253		14.423	29.513		14.553		29.823		14.883
+0.31	✓		57.11	27.13		56.75	27.69		56.95	27.61		58.51		28.85	59.03		29.11		59.65		29.77
+2.43	✓		56.17	26.57		55.87	30.57		59.47	29.57		58.87		28.07	59.77		30.67		57.37		29.77
-0.16	✓		57.86	27.26		56.16	27.76		57.96	28.86		58.46		28.26	58.16		28.76		59.16		29.96
+0.30	✓		58.40	26.90		57.80	27.00		58.40	28.20		59.50		28.40	59.50		29.60		59.70		29.30
-0.49	✓		58.09	27.65		56.79	28.29		57.29	27.99		58.49		26.29	58.69		29.29		58.69		30.39
+2.08	✓		22.852	10.842		22.662	11.362		23.312	11.462		23.532		11.102	23.612		11.832		23.492		11.942
+0.52	✓		57.13	27.10		56.65	28.40		58.28	28.65		58.83		27.75	59.03		29.58		58.73		29.85

Book 6

Im. +82 872
 19 8 44
 +82 7

Collection of results

L.C. 1881

July 25	⁺ 5	57.62	⁵ 26.52	⁴ (55.32)	⁴ 28.12	³ 57.52	³ 28.22	² 58.32	² 28.72	¹ 59.52	¹ 30.42	⁰ 0.42	29.92	-
Aug. 21		59.76	25.76	58.66	(32.76)	59.06	28.36	³ 1.76	(25.16)	57.96	30.66	59.86	29.06	-
" 27		(54.47)	25.57	56.67	27.67	59.27	27.97	² (56.37)	28.77	(52.77)	31.47	0.97	(32.97)	+
" 29		56.38	26.88	58.28	26.28	58.48	(24.28)	³ 1.58	31.08	² (2.08)	31.38	58.98	31.08	-
" 30		59.23	(29.63)	57.93	26.33	58.73	28.53	² 59.33	29.03	59.43	(26.93)	56.23	28.63	-
" 31		55.24	26.34	57.94	27.14	58.74	27.64	58.24	30.14	59.04	28.54	59.64	29.74	+
		288.23	161.00	344.80	355.21	352.10	141.02	299.23	147.74	236.25	152.47	356.10	148.43	+
		57.65	26.83	57.47	27.11	58.68	28.20	59.85	29.55	59.06	30.49	59.35	29.69	+
Sept. 7		59.53	27.13	58.03	27.63	59.53	28.13	57.93	27.83	58.13	28.63	59.83	30.43	+
" 8	⁶	(7.77)	31.27	⁵ 1.27	30.27	0.17	28.37	56.37	28.67	² 0.97	31.37	58.17	26.87	-
" 13		58.16	28.86	57.26	27.66	58.66	28.76	57.56	28.76	59.26	29.96	59.26	28.66	+
" 14		56.94	28.04	57.94	29.14	57.54	(26.94)	58.94	26.74	58.34	29.74	1.54	30.44	+
" 15		57.93	(27.53)	57.73	26.53	56.93	31.63	³ (2.23)	31.43	56.83	30.03	59.23	29.53	+
" 17	⁶	0.16	36.16	(54.16)	29.06	58.76	30.56	59.06	(25.06)	² 0.26	29.36	56.56	28.46	-
" 18		56.32	(32.42)	56.32	25.92	56.82	28.32	57.72	30.12	59.92	29.12	58.42	27.02	+
" 21		58.48	28.58	59.68	28.48	0.38	29.08	58.48	27.08	57.98	28.58	58.08	29.68	-
" 25		57.77	28.07	(56.47)	28.67	58.77	27.17	³ 1.17	28.37	57.77	27.57	58.77	31.17	-
		465.29	262.36	408.23	253.36	527.56	258.96	467.53	229.00	529.46	264.36	529.56	262.26	+
		58.16	29.15	58.32	28.15	58.62	28.77	58.44	28.62	58.53	29.37	58.57	29.14	+
Oct. 1	⁺ 6	0.02	29.22	59.52	29.22	58.82	29.72	59.42	29.42	58.52	27.92	58.52	28.92	-
" 4-5		59.65	29.65	57.25	29.65	59.05	29.15	59.45	30.75	59.55	(31.95)	0.35	29.35	+
" 5-6		58.86	27.46	59.96	28.86	1.46	30.36	³ 0.76	31.96	² 1.66	28.96	59.96	27.86	-
" 6-7	⁶	0.42	28.32	58.52	29.32	57.12	27.12	58.72	27.22	0.12	(26.02)	58.62	27.32	-
" 9-10		58.42	29.72	58.32	29.22	59.72	28.92	58.92	30.62	59.72	27.02	59.72	29.72	+
" 20		(56.26)	31.06	57.06	28.46	59.06	27.66	58.56	27.76	59.26	29.46	0.56	31.36	-
" 26	⁶	0.68	30.48	⁵ 0.68	28.18	58.58	28.98	59.98	28.28	² 1.58	31.28	58.48	27.48	+
" 27	⁵	59.61	30.21	0.11	28.71	⁴ 0.11	29.01	59.11	28.91	59.11	29.41	58.91	29.41	-
		417.66	236.12	417.42	231.62	417.392	230.92	417.492	234.92	417.52	234.05	417.52	231.42	-
		59.67	29.51	58.93	28.95	59.24	28.86	59.35	29.36	59.44	29.01	59.39	28.93	-
Nov. 5	⁶	0.20	28.90	59.80	29.60	0.40	30.90	59.80	29.90	58.90	29.50	59.80	31.20	+
" 9	⁵	58.86	29.26	59.66	29.66	59.56	29.06	59.26	29.26	59.36	29.36	56.46	29.86	+
" 10	⁶	1.88	32.48	59.68	30.78	⁴ 0.98	29.28	³ 0.38	29.98	² 0.38	29.58	58.38	29.18	+
" 13	⁶	0.52	29.62	⁵ 0.32	29.42	59.82	29.62	² 59.92	28.82	¹ 59.02	30.42	⁰ 0.12	30.72	-
" 15	⁶	0.04	31.24	⁵ 1.14	31.74	58.94	29.34	³ 1.14	29.44	58.24	30.14	⁰ 59.74	29.54	-
" 16	⁶	(2.75)	31.85	⁵ 1.35	30.85	57.75	28.05	59.15	30.85	² 0.55	29.85	58.65	30.15	-
" 19	⁶	1.71	32.01	59.11	31.01	(2.41)	31.21	59.71	30.01	0.71	29.61	59.61	28.91	+
Dec. 7	⁵	58.00	31.30	⁵ 0.30	30.40	58.90	28.70	³ 0.20	31.20	59.90	28.80	58.90	30.40	+
" 25		58.41	31.41	58.11	(27.21)	58.81	26.91	57.01	28.71	56.51	26.71	1.91	(35.41)	-
		477.62	278.07	539.47	243.46	475.76	263.07	536.57	268.17	533.87	263.97	533.07	239.96	-
		59.79	30.90	59.94	30.43	59.39	29.23	59.62	29.80	59.37	29.33	59.23	26.66	-

in order of date.

L.C. 1881.

-0.08	59.98	27.88	56.68	27.48	57.68	(27.58)	59.28	(26.38)	58.98	29.68	58.88	30.78
-0.54	59.44	25.54	59.44	(29.64)	57.44	30.14	58.24	29.54	56.94	31.04	0.74	30.04
+0.77	58.23	(24.53)	(55.53)	27.03	57.43	27.33	59.23	28.53	56.53	30.73	59.43	31.13
(-5.42)	57.12	27.62	57.12	26.92	59.52	29.42	58.22	28.52	(54.72)	(32.52)	58.22	31.52
-0.37	59.57	26.47	57.77	26.27	57.67	29.47	(56.27)	29.57	58.57	29.77	0.97	27.47
+1.34	57.86	26.56	56.36	28.86	57.46	28.36	58.36	28.66	58.66	30.06	58.86	29.76
+1.12	35.220	158.60	34.290	166.20	34.720	172.30	34.980	171.20	34.470	183.80	35.710	180.70
+0.22	58.70	26.43	57.15	27.70	57.87	28.72	58.27	28.53	57.45	30.63	59.52	30.12
+1.13	57.37	27.87	58.47	27.47	58.07	28.27	57.77	28.77	58.67	29.97	0.57	30.57
-1.53	0.13	(30.83)	0.53	28.63	58.03	29.23	1.33	29.13	58.53	28.43	(57.13)	31.13
+0.56	57.34	27.64	58.74	27.74	57.14	29.14	58.64	28.94	58.14	28.34	1.44	30.24
+0.64	57.26	(26.86)	58.86	27.16	57.56	29.36	0.66	28.66	58.96	28.46	58.46	30.46
+1.13	59.77	28.47	58.67	30.17	59.37	27.77	0.87	27.87	58.47	28.17	58.87	30.57
-0.54	57.24	29.14	59.34	29.24	57.74	28.14	59.94	(26.24)	59.44	28.24	57.54	30.54
+0.92	56.88	27.88	57.48	28.28	58.68	26.28	59.28	26.38	59.18	27.88	1.38	29.78
-0.62	56.12	28.92	57.62	28.12	57.42	28.12	58.92	29.82	57.42	(32.22)	0.62	28.52
-0.23	59.23	28.93	59.23	28.53	59.13	28.53	(55.63)	(24.43)	59.43	30.23	58.93	29.53
+1.86	52.1321	225.71	528.94	255.34	523.44	254.54	47.531	225.81	529.54	261.94	535.24	271.34
+0.21	57.93	28.21	58.77	28.37	58.16	28.32	29.41	28.23	58.84	29.10	59.47	30.15
-1.38	58.68	27.28	58.58	30.38	59.38	29.68	58.48	29.08	58.38	28.78	58.68	30.38
+0.15	0.45	30.15	58.15	28.65	58.85	30.55	0.25	31.95	58.25	28.55	59.85	30.35
-2.34	56.84	29.54	56.54	28.24	58.64	30.64	0.44	29.84	(2.54)	30.54	1.04	30.54
-1.48	56.78	27.18	56.58	(25.88)	(53.08)	29.08	58.38	28.98	57.28	28.28	0.08	(33.68)
+2.02	58.88	27.18	59.28	30.68	1.48	28.38	58.58	29.18	58.98	29.28	0.58	29.18
-1.24	56.84	27.64	59.64	28.34	59.34	29.24	59.24	28.44	58.74	29.54	58.24	30.14
+1.28	58.82	29.12	0.42	29.62	58.92	28.72	0.52	29.82	0.32	30.22	0.82	28.72
-0.69	59.49	29.49	56.69	(25.79)	59.29	28.69	1.09	30.19	59.89	30.79	1.29	29.09
-3.68	46.678	22.758	46.588	22.758	41.610	23.498	47.728	23.748	41.184	23.598	48.058	20.870
-0.46	58.35	28.45	58.23	28.45	59.44	29.37	59.66	29.68	58.83	29.50	0.07	29.81
+0.10	59.70	29.40	1.50	30.40	59.50	29.30	59.00	29.20	59.70	28.40	1.10	31.30
+0.46	58.34	27.84	59.34	28.94	59.44	28.54	58.34	28.94	0.54	29.04	59.14	29.54
+0.68	(2.32)	30.32	58.82	29.12	58.82	30.52	58.42	(31.62)	0.72	(31.82)	0.52	30.52
-0.58	57.68	30.98	59.18	29.08	59.88	29.08	59.88	30.58	0.88	29.28	59.58	(31.68)
-0.96	59.76	29.86	0.36	28.66	58.96	29.86	0.96	29.36	0.66	29.46	1.56	30.36
-1.75	59.95	28.25	59.75	30.45	59.85	30.75	59.85	(32.06)	58.25	29.55	59.25	31.75
+0.31	58.89	28.69	59.69	30.89	1.09	29.59	59.69	29.59	57.89	30.49	0.49	29.39
+0.40	0.70	30.40	58.50	29.30	1.40	30.50	58.70	28.90	58.70	30.90	0.20	29.20
-0.19	(57.29)	27.39	0.19	30.19	58.49	29.59	1.89	28.39	56.99	27.49	0.29	28.99
-1.53	47.231	263.13	53.733	268.03	53.743	267.71	53.673	268.63	53.423	266.73	54.213	271.53
-0.19	59.04	29.24	59.70	29.56	59.71	29.75	59.64	29.85	59.55	29.637	0.24	30.140

Book 6.

Collection of results.

U.C. 1881

July 19	⁺ 5	5687	⁵ 30.07	⁴ 5667	⁴ 2677	³ 5657	³ 3017	² 5967	² 2807	0.37	3077	0.27	27.07	+0.67	+
Aug 22		5685	2795	5725	2835	5805	2865	5755	2655	0.95	3035	5875	3035	-5.15	+
" 29		5867	2937	5857	2687	5827	2727	5617	2817	0.27	2807	0.47	3227	+0.97	+
		17239	8759	17249	8199	17289	8609	17339	8279	1.59	8919	17949	6664	8969	+
		5746	2920	5750	2733	5763	2876	5780	2760	0.53	2973	5983	3131	2990	+
													2990		

Book 1 Polaris

U.C.

Date	P	A+1					A-1				
		1	2	3	4	5	1	2	3	4	5
1879											
Apr. 9							-8 578	-10 293	-11 551	-13 226	-14 539
" 15		+14 479	+13 19.3	+11 49.4	+10 205	+8 582	52.9	19.5	49.0	14.9	46.4
" 19		47.7	16.9	49.0	19.9	51.3	52.3	--	49.4	18.6	46.2
" 30		45.6	18.3	45.6	--	--	52.5	19.1	48.8	18.3	43.1
May 6		435	175	48.7	186	52.9	49.8	215	480	17.0	46.4
		189.9	78.0	182.7							
		46.2	18.0	45.8							
May 8							-8 55.0	-10 216	-11 48.4	-13 16.3	-14 46.9
" 11		+14 47.2	+13 18.0	+11 51.6	+10 21.9	+8 51.3	48.3	19.0	45.8	18.2	43.8
" 14		45.0	--	46.2	16.3	49.4	50.7	21.9	49.1	18.7	47.9
" 29							50.7	--	47.0	20.8	--
" 31		446	--	42.7	17.7	49.7	47.0	15.19	44.6	17.54	37.06
		7.215	90.0	33.32	11.59	307.8	51.5	20.4	48.9	19.5	48.3
		45.9	18.0	47.6	19.1	51.3			2	17.8	45.8
June 1		+14 45.3	+13 16.1	+11 48.1	+10 19.2	+8 51.2					
" 7		44.7	16.6	47.1	18.6	49.4	-8 50.9	-10 19.1	-11 --	-13 16.0	-14 42.3
" 8							49.8	17.7	47.8	18.6	43.3
" 12		44.8	16.1	49.7	--	--					
" 16		44.3	14.9	46.3	18.6	49.7					
" 17		43.6	18.6	47.2	17.9	51.0					
June 18		+14 44.7	+13 16.4	+11 45.7	+10 18.8	+8 49.3					
" 19		43.8	17.1	46.5	18.7	51.1					
" 21		45.4	15.4	47.2	28.7	50.1	-8 --	-10 16.5	-11 47.7	-13 17.3	-14 --
" 22		44.3	14.5	47.0	19.6	48.6					
" 23		44.3	14.0	45.9	18.8	48.6					
" 24								21.1	49.2	19.8	46.9
" 25		44.5	15.9	47.0	--	50.2			47.4		
" 26		42.5	15.5	47.2	17.4	50.3	50.5	18.9	47.4		42.1
		53.38	186.7	66.49	19.63	53.97	50.4	9.33	23.93	6.87	17.56
		44.4	15.6	47.1	19.6	49.7		18.7	47.9	17.3	43.9

in order of date.

U. C. 1881.

267	+ 0.67	53.63	25.93	57.93	29.23	58.13	27.63	59.73	30.13	0.43	31.03	58.23	29.83
15	(5.15)	59.25	27.53	57.63	28.75	(52.95)	(25.85)	(55.15)	28.25	- 0.25	29.05	59.65	(32.15)
97	+ 0.97	57.93	25.33	55.23	26.03	59.03	28.43	0.43	28.83	57.63	(34.83)	1.23	30.73
9	+ 1.64	172.81	78.81	170.81	84.01	117.16	56.06	120.16	87.21	175.31	62.05	179.11	92.71
0	+ 0.82	57.60	26.27	56.94	28.00	58.58	28.03	0.08	29.07	59.44	30.04	59.70	30.90
	+ 0.82	57.60	26.27	56.94	28.00	58.58	28.03	0.08	29.07	59.44	30.04	59.70	30.90

U. C.

		A+1					U.C.		A-1										
Date	S	1	2	3	4	5	1	2	3	4	5								
1879																			
July 1	+14	+13	14.8	+11	47.9	+10	19.6	+8	48.5	-8	49.7	-10	19.9	-11	47.4	-13	15.5	-14	46.2
" 2	44.9	15.4	46.1	17.9	49.9			49.8	19.5	48.0	15.6								
" 3	46.4	--	46.0	18.6	--			12.1	18.9	46.6	17.3	45.2							

Book 2

Aug 19	+14	+13	+11	+10	+8	-8	50.9	-10	15.9	-11	45.8	-13	15.0	-14	44.1
" 24	49.7	21.0	49.3	18.9	51.2	54.4	19.1	46.6	13.9	45.4					
	49.7	21.0	49.3	18.9	51.2	20.8	18.7	46.9	13.5	44.5					
Oct. 15	48.4	19.9	49.1	24.7	53.7	54.8	23.1	53.3	23.9	54.8					
Nov. 17	54.1	23.6	54.8	24.7	56.6										

Book 3 1880

Mar. 23	+14	53.6	+13	22.4	+11	59.5	+10	25.5	+8	53.8	-8	56.1	-10	26.4	+11	53.4	-13		-14	56.6
" 24				23.3		53.6				56.4										
" 25				20.1		50.7		21.5		53.9										
Apr. 8																				

Apr 8-9 -- -- +11 51.3 +10 20.4 +8 52.3

" 10-11	+14	54.6	--			52.4				-8		-10		-11		-13	23.1	-14	50.9
" 24										54.9		25.6		52.9		22.1		51.9	

May 5 +14 50.7 +13 19.9 +11 53.7 +10 22.2 +8 53.3

" 9		51.5		21.2		53.2		21.5		-8	50.3	-10	22.3	-11	52.8	-13	20.6	-14	50.1
-----	--	------	--	------	--	------	--	------	--	----	------	-----	------	-----	------	-----	------	-----	------

ex minute

" 11	+10	53.1			+8	53.6		+4	56.3	-9	53.2	-11	22.8	-12	53.5	-14	17.2	-15	50.5
------	-----	------	--	--	----	------	--	----	------	----	------	-----	------	-----	------	-----	------	-----	------

" 27					+11	50.6	+10	22.8	+8	53.9	26.85	11.92	26.99	10.69	31.98	53.7	24.0	58.0	52.5
------	--	--	--	--	-----	------	-----	------	----	------	-------	-------	-------	-------	-------	------	------	------	------

		20.99	4.11	314.8	86.9	21.55													
		53.8	20.5	52.3	21.7	53.1													

Collection of Results -

Book-3

A+1

U.C.

A-1

Date 1880.	1	2	3	4	5	1	2	3	4	5
June 12	+14 509	+13 207	+11 575	+10 233	+8 537	-8	-10	-11	-13	-14
" 16	49.7	20.4	57.0	20.2	53.7					
" 18							24.9	51.9	19.7	48.4
" 21	50.9	20.2	57.3	22.2	52.4					

June 27	+14 478	+13 202	+11 506	+10 223	+8 523					
July 3	199.3	81.5	204.4	88.0	213.1	-8 52.4	-10 22.6	-11	-13 19.5	-14 50.3
" 9	99.8	20.4	51.1	22.0	58.9	52.2	22.1	50.9	17.7	47.5
						107.6	69.6	103.8	57.1	146.2
						58.6	28.3	51.4	19.0	58.8
						2.				

Nov 2	+14 536	+13 283	+11 579	+10	+8 580					
" 11	57.0	28.1	56.0	27.8						
" 14	56.3	26.7	54.3	26.8	54.7					

Dec 27	+15 07	+13 289	+11 593	+10 258	+9 44					
" 28	1.5	30.3	+12 0.1	32.4	0.2					
" 30		32.5	2.5	32.4	0.5					
	289.1	169.8	550.1	145.2	397.8					
	57.8	28.3	58.4	29.0	59.7					
					.6					

1881 Jan. 2	+13 30.7	+12 1.2	+10 31.1	+9 0.7	+7 46.0	-8 55.1	-10 27.2	-12 5.1	-13 27.3	-14 54.3
" 8	+15 3.2	+13 34.0	+12 0.9	+10 31.0	+9 2.6	56.7	26.0	-11 58.9	26.3	58.1
" 12	30.8	14 2.2	30.4	11 1.0	31.0					

Feb. 15	+14 59.1	+13 28.0	+11 57.8	+10 28.5	+8 58.9					
Feb. 16	59.1	28.8	58.7	28.7	+9 0.8	-8 55.8	-10 25.2	-11 56.8	-13 25.4	-14 54.1
Feb. 17	58.1	28.7	57.0	26.4	0.5	59.4	28.3	58.2	28.7	58.6
Feb. 18							29.1	58.6	-12 27.3	57.0
Feb. 23	68.9	29.1	57.9	27.5	+8 58.1	57.4	26.0	58.6	-13 27.9	55.8
Feb. 24	+15 4.5	38.2	+12 0.4	27.8	+2 7.7					
Feb. 26	+14 57.8	29.6	+11 57.8	27.9	+8 59.7	58.8	27.5		30.6	52.0
	333.7	217.4	521.5	212.8	524.8	343.2	189.2	355.6	193.5	389.9
	62.4	37.1	62.2	30.4	61.8	57.2	27.0	59.1	27.6	55.7
								.3		
			172	140	47.5					
	1.6	152	546	278	155					
	57.9	58								

Polaris

27

Date. 1881	S	A+1					U.C.					A-1				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Mar. 7	+14 63.5	+13 28.5	+11	+10 26.6	+8 56.8							-8 58.2	-10 27.6	-12 0.1	-13 29.4	-14 56.9
Mar. 8	57.6	27.9	57.2	27.9	58.4							56.0		-11 55.2	21.7	54.0
Mar. 16	-----	-----	-----	-----	-----							57.5	26.9	56.9	25.8	56.9
Mar. 23												57.4	27.9	57.4	20.4	
Mar. 25		27.7										57.3	25.6	56.7	23.3	4.8
Mar. 29	+15 0.6	31.6	59.5													
Mar. 31	+14 58.3	27.9	56.8	26.9	58.1							57.6	24.2	54.8	24.1	54.8
	230.9	143.6	173.5	84.4	173.3							343.0	133.1	339.1	145.7	287.9
	57.5	38.7	57.7	28.1	57.7							57.2	26.3	56.5	34.3	57.5
			8	6.8												
April 2	+14 54.4	+13 23.7	+11 56.5	+10 29.1	+8 56.5							-8 56.8	-10	-11 52.6	-13 25.1	-14 52.8
" 4		27.8	56.2	27.0	59.2							54.1	26.1	52.2	22.8	54.6
" 8	57.9	26.0	+12 0.3	29.6	59.1							52.8	23.6	-12 4.4	25.1	53.4
" 11	57.5	26.9	+11 56.5	29.3	0.6											
" 16	50.1		56.4	26.8								56.8	26.8	-11 53.4	24.9	55.6
" 17	55.0			27.8	+8 59.8							52.0	24.8	53.7	24.5	54.1
	274.9	104.4	283.9	168.6	297.7							35.1	24.8	53.7	24.5	54.1
	55.0	36.3	57.0	28.1	57.5											
April 18	+14 56.0	+13 26.7	+12 4.9	+10 26.4	+8 56.3							-8 52.0	-10 23.7	-11 55.1	-13 21.3	-14 52.9
" 20	58.4	26.4	+11 57.1	28.0	57.7							53.5	21.2	52.4	25.4	49.1
" 24	59.0	25.7	57.1	29.0	58.6							55.3	21.2	52.5	23.8	50.4
" 27	59.2	25.4	56.7	28.1	59.5							53.2	23.9	52.0	24.4	51.2
May 2	54.8	24.7	56.0	27.8	55.7							53.0	23.4	53.4	23.2	45.3
" 4	38.2	+12 0.1	27.8	57.6								55.0	23.3	56.3	21.0	54.5
	374.9	138.9	350.9	166.1	345.5							32.6	15.6	32.2	13.8	30.6
	56.6	35.8	58.3	37.7	57.5							33.7	20.8	33.7	23.0	51.1
					6											
May 11	+14 56.0	+13 26.9	+11 56.2	+10 27.8	+8 57.5							-8	-10	-11	-13	-14
" 13	54.5	24.6	52.6	25.4	56.9							52.6	23.1	44.2	22.5	57.0
" 22	54.6	22.7	54.8	25.0	55.3							56.4	21.2	53.3	21.8	51.2
" 23			53.3	21.9	56.3											
" 26	52.7	20.5	50.5	25.7	54.7							54.3	25.4	64.0	23.3	55.4
" 30				25.4	55.2											
" 31	53.5	23.9	53.8	29.9	55.4											
June 5	+14	+13	+11	+10	+8							-8 56.1	-10 26.3	-11	-13 22.9	-14 52.9
" 14													23.2	52.7	22.7	52.3
" 15			52.1	22.9	54.6							56.6	26.7	56.0	23.4	57.5
" 17	52.6	23.6	54.7	26.0	56.3							54.3	23.8	54.6	22.5	52.4
" 19	53.9	22.5	54.4	25.4	57.0							54.2	23.8	55.6	22.2	53.7
	378.0	175.9	434.4	255.5	559.9							382.5	192.3	365.3	182.2	427.9
	54.0	35.1	54.3	25.5	55.9							58.6	24.2	52.6	22.4	53.5

Collection of Results

Date 1881.	S	A+1					U. L.					A-1				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
June 21		+14 52.9	+13 23.9	+11 54.3	+10 26.2	+8 54.9	-8 55.0	-10 22.9	-11 53.7	-13 23.5	-14 50.9					
" 23		53.9	24.7	53.7	24.4	54.8	55.1	24.1	52.6	22.8	52.3					
" 28		+15 11.6	41.7	+13 13.1	44.1	9 13.4	36.7	6.3	36.3	4.8	33.9					
" 29		+14 50.9	24.5	+11 54.8	27.0	+8 54.4	54.7	24.1	51.9	22.8	51.3					
July 1		+14	+13	+11	+10	+8 56.5	-8 55.0	-10 22.4	-11 53.0	-13 21.1	-14 52.9					
" 3		56.0	23.1	53.5	22.9	+8 55.9										
" 8		56.8	23.2	53.7	24.6	57.0	54.2	21.3	54.9	23.0						
" 13							59.3	24.2	53.5	24.8	51.2					
" 14		53.5	22.5	52.0	23.9	53.3	54.8	25.2	53.9	23.4	53.5					
" 17			24.1	54.9	27.0	53.1	57.5	27.8	53.7	24.4	57.9					
" 18		54.1	21.4	55.4	25.9	56.7	56.5	22.5	53.7	21.6	54.2					
" 21		57.7	25.4	53.3	20.9	49.8	50.1	21.4	52.7	23.9	41.5					
" 22		53.9	25.4	54.2	25.2	55.4	55.1	23.9	53.1	23.0	52.0					
" 23		51.1	21.5	55.1	25.7	55.4	6.7	8	3.5		54.3					

Polaris.

A+1.

L₆

A-1

Date	5	1	2	3	4	5	1	2	3	4	5
1879. May 7.		+14	+13 17.6	+11 49.4	+10 21.5	+8 49.8					
" 8							-8 46.1	-10 14.5	-11 16.2	-14 44.7	
" 10		47.3	16.7	48.3	20.1	49.5	51.3	20.1	48.1	19.1	49.0
" 13							47.7	18.4	46.6	16.2	44.3
" 14			19.6	47.9	19.8	50.7	49.0	20.7	47.0	15.0	44.2
" 31		37.3	53.9	145.6	61.4	150.0	50.9	17.9	46.4	15.2	44.8
			18.0	48.4	20.5	50.0	34.5	91.6	18.9	23.5	22.0
							49.0	18.3	52.9	18.4	55.5
									41	6	41
									49		
June 5.		+14	+13	+11	+10	+8	-8	-10 16.6	-11 45.4	-13 16.2	-14 44.7
" 19				27.4	28.3	49.8		47.6		16.2	42.9
" 19.			17.0	44.9	20.8	52.2					
" 20				48.3	18.3	51.0					
" 23		46.8		49.0	19.8	50.6			45.9	15.0	43.1
" 34		46.3	17.7	48.4	21.0	50.9	49.3	18.3	45.6	14.4	44.1
" 26		45.0		47.8	19.5	51.0					
" 30		42.7	14.8	47.7	17.5	50.4	50.4	19.6	47.1		
		180.8	49.5	286.1	116.9	306.1	99.7	44.3	184.6	43.6	133.1
		45.2	16.5	47.7	19.5	51.0	49.9	14.8	46.0	15.2	44.0
								7.			
July 1.		+14 45.4	+13 15.3	+11 47.3	+10 20.7	+8 52.3	-8	-10 17.2	-11 45.8	-13 12.8	-14 42.9
" 8					19.3		50.6	18.3	47.1	16.7	45.0
Aug 14		+13 43.8	+13 14.8	+10 47.9	+9 16.2	+7 51.1					
" 20.		8.2	50.1	95.2	56.4	103.5	-9 47.4	-11 19.6	-12 42.5	-14 16.7	-15 44.7
" 23.		49.6	13.6	47.6	18.8	51.7		-10 21.6	-11 49.4	-13 17.6	-14 49.3
							50.6	7.67	190.6	63.8	181.6
								19.2	47.5	15.9	45.4
									16.0		
Sept 10		+14	+13	+11	+10	+8	-8 50.9	-10 20.7	-11 51.7	-13	-14
" 12							50.0	17.8	48.0	16.7	49.6
Oct. 14.		+14	+13	+11	+10	+8	-8	-10 21.1	-11 54.9	-13 20.7	-14 48.3
" 23		46.6		48.1			100.8	59.6	154.8	37.5	97.9
							50.5	51.6	51.6	18.7	48.2
								12.8			
								19.9			

nothing

✓

Sch. 1172
 $\begin{matrix} 19 & 29 & 48 \\ + & 83 & 13 \end{matrix}$

Collection of Results

	<u>A+1</u>					<u>L. 6</u>					<u>A-1.</u>				
Date	8	1	2	8	4	5	1	2	3	4	5				
1879 Dec 4.		+14 498	+13 30.6	+11 56.1	+10 34.4	+8 48.2									
1880 April 30		+14	+13 25.6	+11 57.9	+10 34.7	+8									
May 22		+14	+13	+11	+10	+8	-8 51.3	-7 21.4	-11 47.9	-13 16.6	-14 46.6				
" 25							50.4	---	48.4	18.7	48.4				
June 9							51.8	17.0	48.1	17.4	47.8				
" 28							53.4	-10 19.5	---	28.5	50.1				
" 29							<u>206.9</u>	<u>21.1</u>	<u>50.4</u>	<u>15.7</u>	<u>49.3</u>				
							51.7	20.9	49.7	18.8	48.3				
July 14		+14	+13	+11	+10	+8	-8 54.1	-10 23.9	-11 51.3	-13 21.2	-14 48.7				
Aug. 5							55.5	23.8	53.0	21.2	51.0				
" 11							54.9	25.6	53.4	25.4	49.7				
" 12				55.0	21.9	---									
" 18		<u>1449.8</u>	<u>46.2</u>	<u>164.0</u>	<u>71.0</u>	<u>48.2</u>									
		23.1	54.7	23.7											
							<u>164.5</u>	<u>73.3</u>	<u>187.7</u>	<u>67.8</u>	<u>149.4</u>				
							54.8	24.4	52.6	22.6	47.4				
							53.3	22.3	50.6	20.7	49.0				
Sept 3.		+14	+13	+11	+10	+8	-8 56.4	-10 26.0	-11	-13	-14				
" 30		53.0	---	54.5	29.5	56.4									
Oct 4.		53.2	32.7	53.3	26.4	---									
" 11									28.2	12 53.6	28.2				
" 12		+12 52.8	20.8				55.6	---	---	---	---				
Nov. 3		+14	+13 25.3	+11 56.7	+10 35.5	+8 56.1	-8	-10	-11	-13	-14				
Dec 14							56.4	27.1	56.2	26.6	57.6				
" 15		50.6		+12 58.1	27.1	58.4									
		50.7	36.3	63.0	27.7	55.5									
1881 Jan 3.		+14	+13	+11	+10	+8	-8 59.9	-10 28.9	-12 0.4	-13 29.8	-14				
" 10		<u>106.5</u>	<u>84.3</u>	<u>58.7</u>	<u>48.3</u>	<u>50.3</u>	<u>756.0</u>	<u>57.0</u>	<u>12 29.5</u>	<u>56.4</u>	<u>119.0</u>				
		48.8	28.1	50.9	19.25	50.3	32.83	8.20	116.6	38.2	50.3				
		51.5		57.3	3.21	56.6	57.1	27.3	58.8						

Polaris

	A +1					L. 6					A -1					
Date 1881	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Mar. 24		+14 56.3	+13 25.0	+11 56.7	+10 25.2	+8 57.2	-8	-10	-11	-13	-19					
" 28							56.1	27.7	57.4	27.1	58.0					
April 1			29.1	55.5	26.8	54.5	57.1	27.7	55.9	27.4	56.6					
" 16		56.7	26.8	57.2	27.3	56.7	55.8	27.1	57.4	25.1	56.7					
" 31		55.5	25.0	55.0	26.8	57.2	55.0	25.3	57.8	26.3	55.5					
" 28		52.0	23.8				53.9	24.1	55.9	23.4	54.5					
		220.5	104.7	224.3	106.1	225.6	277.9	131.9	284.4	131.3	281.5					
		55.1	26.2	56.1	26.5	58.4	55.6	26.4	56.9	26.2	56.3					
										3						
May 3.		+14 53.9	+13 25.6	+11 56.9	+10 26.5	+8 56.2	-8 56.1	-10 21.0	-11 53.9	-13 24.0	-14 51.9					
" 4		56.5	20.6	56.9	25.7	+9 1.1	56.6	25.4	56.6	22.5	52.8					
" 7							56.3	21.5	53.3	28.1	52.6					
" 10.		-----	24.2	53.3	26.1	+8 58.3										
" 13		140.9	72.4	166.1	78.3	173.6	52.6	31.5	51.6	31.6	53.3					
		55.8	24.1	55.2	26.1	58.5	52.1	29.4	51.4	26.2	51.6					
		50.8		4			55.4	23.6	53.8	24.1	52.7					
									.6							
June 4.		+14 44.4	+13 23.8	+11 53.1	+10 25.3	+8 57.1	-8	-10	-11	-13	-14					
" 6		-----	24.8	53.4	24.2	54.9	-----	23.1	54.4	23.5	54.3					
" 11.		-----	-----	-----	-----	55.6	---56.5	28.6	53.4	28.9	51.8					
" 15		52.6	22.6	53.7	26.4	55.0	-----	-----	-----	-----	-----					
" 16		52.6	23.5	54.1	25.0	55.6	-----	-----	-----	-----	-----					
" 17		-----	-----	-----	23.0	50.6	55.2	24.0	-----	-----	-----					
" 18		52.2	22.3	53.6	23.6	54.7	53.1	23.5	52.5	23.5	52.8					
" 31		-----	22.1	53.8	14.1	45.1	55.3	24.4	57.7	23.3	51.6					
" 22		49.8	22.7	52.8	23.2	54.8	54.5	24.2	53.3	22.0	51.0					
" 23		52.6	25.1	55.1	25.5	54.3	54.8	23.7	52.2	24.5	54.8					
" 29		-----	23.4	53.5	24.7	54.9	53.9	24.3	53.8	22.8	52.2					
		304.2	310.3	483.1	235.0	319.2	383.3	144.8	375.3	165.3	368.5					
		50.7	23.4	53.7	23.5	53.8	54.8	24.4	53.6	23.6	53.6					
						54.0			9							
July 2.		+14	+13	+11	+10	+8	-8 54.2	-10 24.3	-11 52.6	-13 23.5	-14 52.6					
" 19.							54.5	24.4	53.9	23.6	52.6					
" 25		-----	24.7	54.0	-----	56.0	56.5	-----	-----	-----	-----					
							55.1	24.4	53.3	23.6	52.6					
								24.4	53.6	23.6	53.6					
Sept. 8		+14	+13	+11	+10	+8	-8 56.5	-10 28.5	-11 59.9	-13 29.7	-14 53.8					
" 23.		-----	-----	55.7	26.7	56.9										
Oct. 18			24.7	102.7	26.7	102.9	57.1	28.5	56.0	26.7	56.0					
				54.8		31.3	27.8	105.7	28.4	103.5	31.7					
							55.8	26.6	56.1	28.6	55.3					

Collection of Results

Date	A + 1					L. b.					A - 1				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1881															
Dec 10	+15	5.5	+13	22.5	+12	2.9	+10	32.9	+8	59.6	-8	-8	-11	-13	-14
" 16	6.5	29.9	3.3	30.6	19	2.7									
" 17	6.8	83.8	6.9	22.2	2.6										
" 18	3.2	27.8	+11	58.5	29.4	1.5									
	31.4	121.0	189.6	185.1	243.4										
	6.3	30.3	63.8	31.8	60.6										
			62.4	3											

$\Delta m. + 88^{\circ} 112$
h m s
19 34 48
+ 88^{\circ} 56

Book 1 1879

Collection of Results in order of date

Date	Feb. 15	1879		
Name of Star	R.A.	Dec.	i	
γ Orionis	5 ^h 19 ^m	+6 14	4 53 48	
ρ Orionis	5 26	-0 24	4 55 27	
α Columbae	5 35	-34 8	5 1 00	
κ Orionis	5 42	-9 43	5 4 28	
λ Orionis	5 49	+7 23	4 54 54	
τ Virginis	13 55	+2 8	5 7 38	
β Scorpii	15 58	-19 28	5 3 40	
ρ Ophiuchi	16 8	-3 23	4 56 15	
ζ Ophiuchi	16 30	-10 19	4 57 40	

1879 4 59 26 X
4 59 50

Date	Feb. 22	1879		
Name of Star	R.A.	Dec.	i	
λ Bootis	14 ^h 10 ^m	+19 49	5 3 46	
λ Serpentis	15 58	+6 48	ex	
ρ Scorpii	15 53	-22 17	5 1 26	
β Scorpii	15 58	-19 28	5 2 52	
ζ Ophiuchi	16 30	-10 19	4 55 18	
λ Ophiuchi	17 29	+12 39	4 57 32	
α Centauri			5 50 11 X 3 50 58	

Date	Feb. 26	1879		
Name of Star	R.A.	Dec.	i	
β Orionis	5 ^h 9 ^m	-8 21	4 49 54	
γ Orionis	5 19	+6 14	4 53 12	
κ Orionis	5 42	-9 43	4 52 19	
λ Orionis	5 49	+7 23	5 7 16	
α Argus	19 45	+8 33	4 56 19	
			4 57 16 X 19 49 6	

Date	Feb. 23	1879		
Name of Star	R.A.	Dec.	i	
λ Arietis	2 ^h 0 ^m	+22 54	4 58 33	
λ Scorpii	16 22	-26 10	5 5 37	
ζ Ophiuchi	16 30	-10 19	5 2 21	
η Ophiuchi	17 3	-15 34	4 52 34	
λ Ophiuchi	17 29	+12 39	5 5 8	
			5 50 51 X 25 4 18	

Date	Feb. 27	1879		
Name of Star	R.A.	Dec.	i	
ρ Eridani	3 ^h 37 ^m	-10 11	4 56 47	
ϵ Orionis	5 30	-1 17	4 57 14	
λ Orionis	5 49	+7 23	5 6 59	
α Can. Maj.	6 40	-16 33	4 58 41	
			4 59 45 55 19 58 41	

Date	Feb. 16	1879		
Name of Star	R.A.	Dec.	i	
β Orionis	5 ^h 9 ^m	-8 21	4 58 36	
γ Orionis	5 19	+6 14	4 58 13	
ρ Orionis	5 26	-0 24	4 56 59	
λ Serpentis	15 58	+6 48	5 1 32	
β Scorpii	15 58	-19 28	4 58 50 X 19 58 20	

Date	Feb. 24	1879		
Name of Star	R.A.	Dec.	i	
λ Ceti	2 ^h 56 ^m	+3 37	5 0 6	
γ Eridani	3 52	-13 51	4 57 40	
γ Orionis	5 19	+6 14	4 55 17	
ρ Orionis	5 26	-0 23	4 54 11	
ϵ Orionis	5 30	-1 17	5 2 46	
κ Orionis	5 42	-9 43	5 1 6	
λ Orionis	5 49	+7 23	5 8 36	
ρ Virginis	12 49	+4 3	5 0 59	
ϵ Virginis	12 56	+11 37	4 57 6	
			8 4 58 39 X 37 49 11	

Date	Mar. 1	1879		
Name of Star	R.A.	Dec.	i	
λ Ophiuchi	17 ^h 29 ^m	+12 39	5 5 11	

Date	Feb. 18	1879		
Name of Star	R.A.	Dec.	i	
β Scorpii	15 ^h 58 ^m	-19 28	5 8 20	
λ Scorpii	16 22	-26 10	5 5 57	
ζ Ophiuchi	16 30	-10 19	4 55 23	
			5 0 40 10 1 20 X	

Date	Mar. 2	1879		
Name of Star	R.A.	Dec.	i	
β Eridani	3 ^h 52 ^m	-13 51	5 0 35	
γ Orionis	5 19	+6 14	5 3 56	
ρ Orionis	5 26	-0 23	5 5 13	
			5 2 16 X 10 4 81	

Date	Mar. 3	1879		
Name of Star	R.A.	Dec.	i	
β Eridani	3 ^h 52 ^m	-13 51	4 58 31	
β Orionis	5 9	-8 21	4 54 57	
γ Orionis	5 19	+6 14	5 4 27	
ρ Orionis	5 26	-0 23	4 58 51	
κ Orionis	5 42	-9 43	5 0 44	
λ Orionis	5 49	+7 23	5 3 32	
α Can. Maj.	6 40	-16 33	4 57 28	
ϵ Can. Maj.	6 54	-28 48	5 3 16	
λ Scorpii	16 22	-26 10	5 4 15	
η Ophiuchi	17 3	-15 34	4 56 7 X 10 5 0 13 50 2 8	

Date	Feb. 21	1879		
Name of Star	R.A.	Dec.	i	
λ Ceti	2 ^h 56 ^m	+3 37	5 2 44	
γ Eridani	3 52	-13 51	4 57 2	
			4 59 53 X 9 59 46	

for Fundamental Stars.

Date	Mar. 4	1879		
Name	R.A.	Dec.	i	
η Serpens	^h 18 ^m 15	⁰ -2 ['] 56	4 55 50	
γ Aquilae	19 40	+10 19	[4 49 53]	
α Aquilae	19 45	+8 33	4 58 59	
			<u>2</u> 4 57 25 X	

Date	Mar. 5	1879		
α Arctis	^h 2 ^m 0	⁰ +22 ['] 54	4 52 59	
α Boet	2 56	+3 37	5 1 26	
ϵ Eridani	3 27	-9 52	4 53 3	
δ Eridani	3 37	-10 11	4 56 34	
γ Eridani	3 52	-13 51	5 2 15	
κ Orionis	5 42	-9 43	4 59 40	
α Orionis	5 49	+7 23	[4 37 58]	
α Com. Maj	6 40	-16 33	4 59 1	
ϵ Com. Maj	6 54	-28 48	4 55 56	
δ Com. Maj	7 3	-26 12	4 57 50	
γ Virginis	12 36	-0 47	5 5 8	
δ Virginis	12 49	+4 3	[5 7 49]	
			<u>10</u> 4 58 23 X	

Date	Mar. 8	1879		
κ Orionis	^h 5 ^m 42	⁰ -9 ['] 43	5 0 36	
α Orionis	5 49	+7 23	5 3 44	
α Com. Maj	6 40	-16 33	4 59 4	
ϵ Com. Maj	6 54	-28 48	4 50 25	
δ Com. Maj	7 3	-26 12	5 0 4	
β Com. Min.	7 21	+8 32	[4 33 21]	
α Com. Min.	7 33	+5 32	5 2 22	
δ Virginis	12 49	+4 3	4 54 29	
ϵ Virginis	12 56	+11 27	4 57 38	
α Bootis	14 10	+19 49	[4 41 24]	
			<u>8</u> 4 58 33 X	
			59 48 22	

Means of separate Dates			
1879			
Feb-15	4 59	26	
" 16	4 58	50	
" 18	5 0	40	
" 21	4 59	53	
" 22	5 0	11	
" 23	5 0	57	
" 24	4 58	39	
" 26	4 57	16	
" 27	4 59	45	
Mar. 2	5 2	16	
" 3	5 0	13	
" 4	4 57	25	
" 5	4 58	23	
" 8	4 58	33	
Mean.	4 59	27	

Constant - 0.11724

~~28# Cornelops
6 2 3
19 3 13.
+ 99° 26~~

Book 2 1879

Collection of Results in order of Date

<u>Date.</u>	<u>Mean.</u>	<u>11</u>	<u>1872</u>	
<u>Name of Star</u>	<u>R.A.</u>	<u>Dec.</u>	<u>i</u>	
α Orionis	5 ^h 49 ^m	+7. 23	5 0 0	
α Com. Maj.	6 40	-16 33	5 2 53	
ϵ Com. Maj.	6 54	-28 48	4 57 3	
β Com. Maj.	7 3	-26 12	4 56 45	
α Scorpii	16 22	-26 10	5 5 59	
γ Alphardii	17 3	-15 34	[4 57 21]	
α Alphardii	17 29	+12 39	4 57 0	
γ Argemone	19 40	+10 19.6	5 0 17	X

Mar. 12 - 1879

α Ceti	$\frac{2}{2}$ $\frac{36}{36}$	$+3$ 37	0 0 1
α Columbae	5 35	-34 8	4 53 20
α Aphrodisi	17 29	$+12$ 39	4 53 1
		3	4 56 9
			14 48 20

Mar. 13 1879

α Com. Maj	6	40	-16	33	5	1	47
β Com. Min.	7	21	+8	22	4	58	33
ϵ Argens	8	2	-23	57	4	59	50
ρ Corvi	12	23	-15	49	5	0	0
β Corvi	12	28	-22	49	4	53	46
γ Virginis	12	36	-0	47	4	52	59
ρ Virginis	12	49	+4	3	4	59	20
ϵ Virginis	12	56	+11	37	5	3	8
α Virginis	13	19	-10	32	4	48	42

Mar-15

y Aguilae	19	40	+10	19	4	56	6
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Date	Mar. 16 - 1879									
Name of star	R.A.		Dec.		i					
2. Orionis	5	30	-9	17	4	56			47	
2. Columbae	5	35	-34	8	5	3			87	
K Orionis	5	42	-9	43	5	1			59	
2 Orionis	5	49	+7	32	4	59			37	
2 Com. Virg.	6	40	-16	33	5	0			49	
1 Com. Virg.	7	3	-26	12	4	55			53	

Mar. 17 - 1879⁴

<i>N. serpentina</i>	18	15	-	2	56	4	57	35
<i>N. angulosa</i>	19	0	-	5	4	4	56	34

Mar. 18 1879

K Primis	5 ^h	42 ^m	-9 ^s	43	5 ^h	0 ^m	23 ^s	"
Σ Com. Maj	6	54	-28	48	4	57	31	
N Com. Maj	7	3	-26	12	4	56	6	
B Com. Min.	7	21	+8	32	4	55	29	
Δ Com. Min.	7	33	+5	32	5	0	9	
i Argus.	8	2	-23	57	4	57	26	
N Carin	12	23	-15	49	5	0	11	
γ Virginis	12	36	-0	47	5	4	48	
α Virginis	12	49	+4	3	5	5	53	
ε Virginis	12	56	+11	37	4	58	46	
δ Virginis	13	19	-10	32	4	54	19	
Δ Aquilae	19	45	+8	33	(4	21	20)	

Mar. 19 1877

	^h	^m	⁰	^s	⁰	^s	["]
i Argus.	8	2	-23	57	5	5	29
S Carv.	12	23	-15	49	5	3	30
B Carv.	12	28	-22	44	5	0	8
E Virginis	12	56	+11	37	5	0	26
α Virginis	13	19	-10	32	4	56	46
γ Aquilae	19	40	+10	19	4	56	27
α Aquilae	19	45	+8	33	5	5	5

<u>Date.</u>	<u>Mar. 20-1879</u>		
<u>Name</u>	<u>R. A.</u>	<u>Dec.</u>	<u>i</u>
<u>if star</u>			
β Orionis	$5^h 2^m$	$-5^{\circ} 15'$	$5^{\circ} 0' 11''$
β Orionis	$5^h 9^m$	$-8^{\circ} 21'$	$4^{\circ} 57' 33''$
α Leporis	$5^h 27^m$	$-17^{\circ} 15'$	$4^{\circ} 58' 39''$
κ Orionis	$5^h 42^m$	$-9^{\circ} 43'$	$5^{\circ} 0' 46''$
α Orionis	$5^h 49^m$	$+7^{\circ} 23'$	$4^{\circ} 58' 32''$
			$4^{\circ} 58' 44''$
			$5^{\circ} 24' 58''$
			$4^{\circ} 58' 44''$

Mar. 23 - 1879

B. Corv.	^h 12	^a 28	-22	^o 44	^o 4	ⁱ 56	ⁱⁱ 44
M. Virginis	12	49	+4	3	4	57	30
E. Virginis	12	56	+11	37	4	58	4
d. Virginis	13	19	-10	32	4	56	54
					4	57	18 X
					4	58	18

Mar. 25 1879

α Orionis	5 49	+7 23	5 23
γ Geminae	6 31	+16 30	5 0 30
			2 10 2 17 X

Mar-26 187

		h	m	0	1	0	1	"
U. Lemnina	6	16		+22	34	4	57	50
Y. Lemnina	6	31		+16	30	4	53	57
i. Argus	8	2		-23	57	5	0	43
x. Hydrea	9	22		-8	8	5	-2	35
z. Leonis	9	39		+24	20	5	1	5
x. Leonis	10	2		+12	33	4	58	53
y. Leonis	10	13		+20	27	5	-1	8

Mar-30 1879

	h	m	D	i	0	i	
Σ Virginia	12	56	+11	37	5	0	17
Σ Virginia	13	19	-10	32	4	57	24
					4	58	51
					2	9	57

Four Fundamental Stars.

Date.	Apr. 1	1879		
Name of Star	R.A.	Dec.	i	
β Com Win	7 21	+8 32	4 56 48	
α Lemina	7 27	+32 9	4 59 45	
α Com Win	7 33	+5 32	4 57 44	
β Lemina	7 38	+28 19	4 57 48	
ϵ Argus	8 2	-23 57	4 54 25	
α Hydrae	9 22	-8 8	(4 52 40)	
ϵ Leonis	9 39	+24 20	4 59 40	
α Leonis	10 2	+12 33	5 0 53	
γ Leonis	10 10	+24 1	5 0 51	
δ Leonis	10 13	+20 27	4 58 9	
δ Leonis	11 8	+21 11	4 55 43	
β Leonis	11 43	+15 15	4 57 7	
ϵ Corin	12 4	-21 57	4 59 39	
δ Corin	12 23	-15 50	(4 53 51)	
β Corin	12 28	-22 44	4 57 23	
δ Virginis	12 49	+4 3	5 2 39	
ϵ Virginis	12 56	+11 37	4 56 13	
α Virginis	13 19	-10 32	5 3 9	

Date.	Apr. 2	1879		
Name of Star	R.A.	Dec.	i	
β Eridani	5 2	-5 15	5 1 33	
β Orionis	5 9	-8 21	(4 53 44)	
κ Orionis	5 42	-9 43	4 59 6	
α Orionis	5 49	+7 23	5 2 43	
μ Lemina	6 16	+22 34	4 58 8	
β Com Win	7 21	+8 32	4 57 48	
β Lemina	7 38	+28 19	4 57 42	
ϵ Argus	8 2	-23 57	5 0 11	
γ Serpenti	18 15	-2 36	4 56 23	
δ Sagittarii	18 48	-26 27	5 3 24	
α Aquilae	19 0	-5 4	5 0 13	
γ Aquilae	19 40	+10 19	4 59 57	
β Aquilae	19 49	+6 6	5 0 40	

4 59 23.51 X
12 59 58.10

Date	Apr. 6	1879		
Name of Star	R.A.	Dec.	i	
κ Orionis	5 42	-9 43	4 57 1	
α Orionis	5 49	+7 23	4 58 5	
μ Lemina	6 16	+22 34	5 0 46	
γ Lemina	6 31	+16 30	4 59 4	
β Com Win	7 21	+8 32	4 58 45	
α Lemina	7 27	+32 9	4 58 1	
α Com Win	7 33	+5 32	4 57 58	
β Lemina	7 38	+28 19	4 57 47	
ϵ Argus	8 2	-23 57	4 56 44	
ϵ Corin	12 4	-21 57	(5 5 23)	
β Corin	12 28	-22 44	4 59 59	
δ Virginis	12 49	+4 3	4 58 48	
α Virginis	13 19	-10 32	4 54 27	

Date	Apr. 7	1879		
Name of Star	R.A.	Dec.	i	
β Orionis	5 9	-8 21	4 56 46	
β Leonis	5 19	+28 30	4 57 17	
α Leporis	5 27	-17 55	4 59 24	
γ Orionis	5 35	-2 0	4 57 21	
κ Orionis	5 42	-9 43	5 3 34	
α Orionis	5 49	+7 23	5 0 11	
γ Lemina	6 31	+16 30	4 58 8	
δ Sagittarii	18 48	-26 27	5 0 14	
γ Aquilae	19 0	+13 41	4 54 59	

4 58 39 X
4 56 48
4 57 44
9 4 58 39
Coul

Means of separate dates

1879			
Mar. 11	5 0 17		
Mar. 12	4 56 9		
Mar. 13	4 58 41		
" 16	4 59 47		
" 17	4 57 5		
" 18	4 59 11		
" 19	5 1 7		
" 20	4 58 44		
" 23	4 57 18		
" 25	5 1 17		
" 26	4 59 44		
" 30	4 58 51		
Apr. 1	4 58 20		
" 2	4 59 23		
" 6	4 58 41		
" 7	4 58 39		
Mean	4 58 57		

Constant = 0.11651

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Book 3 1879

Collection of Results in order of Date

Date.	Apr. 7-1879				Date.	April-9-1879				Date.	Apr. 14-1879			
Name of Star.	R.A.	Dec.	i		Name of Star.	R.A.	Dec.	i		Name of Star.	R.A.	Dec.	i	
β Cygni	19 26	+27 42	4 53 21		β Com Min.	7 20	+8 32	4 59 2		β Lami	5 18	+28 30	4 58 12	
γ Cygnae	19 40	+10 19	4 56 13		α Leonis	7 27	+32 10	4 56 52		γ Orionis	5 35	-2 0	5 0 8	
α Cygnae	19 45	+8 32	4 58 19		α Com Min.	7 33	+5 33	5 1 32		K Orionis	5 42	-9 43	5 1 59	
θ Cygnae	20 5	-1 11	4 57 19		β Leonis	7 38	+28 20	4 59 45		α Orionis	5 48	+7 23	4 59 14	
			4 58 55		ϵ Argus	8 2	-23 57	5 0 17		μ Leonis	6 15	+22 35	5 1 18	
	Apr. 8-1879				α Hydrae	9 21	-8 7	4 58 47		γ Leonis	6 31	+16 30	4 58 50	
	5 18	+16 30	5 5 11		ϵ Leonis	9 39	+24 21	4 57 15		β Com Min.	7 20	+8 32	4 59 17	
α Anolis	2 0	+22 52	4 55 49		α Leonis	10 2	+12 35	4 54 58		α Leonis	7 27	+32 10	4 57 10	
α Leporis	5 27	-17 58	5 2 2		γ Leonis	10 10	+24 1	4 57 20		α Com Min.	7 33	+5 33	4 57 52	
γ Orionis	5 35	-2 0	4 58 37		γ Leonis	10 13	+20 28	4 58 4		ϵ Argus	8 2	-23 57	4 58 43	
K Orionis	5 42	-9 43	4 59 16		β Leonis	11 8	+21 12	4 58 13		α Leonis	10 2	+12 35	4 56 53	
α Orionis	5 48	+7 23	5 0 37					4 58 22		γ Leonis	10 10	+24 1	4 59 39	
β Com Min.	7 20	+8 32	4 57 49					4 58 22		γ Leonis	10 13	+20 28	4 59 18	
α Leonis	7 27	+32 10	4 57 18		April 12 1879					β Leonis	11 8	+21 12	5 0 31	
α Com Min.	7 33	+5 33	5 0 37		β Aquarii	21 25	-6 7	5 1 21		β Leonis	11 43	+15 16	5 1 6	
β Leonis	7 38	+28 20	4 59 1		ϵ Pegasi	21 38	+9 18	5 1 37		ϵ Corvi	12 4	-21 58	5 0 41	
ϵ Argus	8 2	-23 57	5 0 33		α Aquarii	21 59	-0 56	4 58 14		β Corvi	12 23	-15 49	4 58 23	
α Hydrae	9 22	-8 7	5 1 52					5 0 24		β Corvi	12 28	-22 42	4 59 32	
α Leonis	10 2	+12 35	4 59 19					5 0 24		γ Virginis	12 35	-0 46	5 4 0	
ϵ Corvi	12 4	-21 55	5 2 2		β Virginis	12 49	+4 5	4 59 48		β Virginis	12 49	+4 5	4 58 47	
β Corvi	12 23	-15 49	4 56 51		ϵ Virginis	12 56	+11 38	4 59 48		ϵ Virginis	12 56	+11 38	4 57 24	
β Corvi	12 28	-22 42	5 4 14		α Virginis	13 19	-10 30	4 55 20		α Virginis	13 19	-10 30	4 53 33	
γ Virginis	12 35	-0 46	5 2 10					4 58 19					4 59 15	
α Virginis	12 49	+4 5	4 55 49		April 15 1879					April 16-1879				
ϵ Virginis	12 56	+11 38	4 59 48		α Androm	0 2	+28 24	4 56 30		β Orionis	5 19	-8 21	5 0 50	
α Virginis	13 19	-10 30	4 58 46							β Orionis	5 35	-2 50	4 57 55	
γ Cygnae	19 40	+10 19	4 56 45		April 18 1879					K Orionis	5 42	-9 43	5 2 2	
θ Cygnae	20 5	-1 11	4 58 45		β Corvi	12 23	-15 49	4 56 54		α Orionis	5 48	+7 23	4 56 55	
			4 59 41		β Corvi	12 28	-22 42	5 6 41		μ Leonis	6 16	+22 35	4 58 15	
					β Virginis	12 49	+4 5	4 55 10		γ Leonis	6 31	+16 30	4 55 40	
					ϵ Virginis	12 56	+11 38	4 47 31		β Com Min.	7 20	+8 32	5 2 50	
					α Virginis	13 19	-10 30	4 58 0		α Leonis	7 27	+32 10	4 58 54	
					γ Cygnae	19 40	+10 19	4 50 50		α Com Min.	7 33	+5 33	4 57 12	
					α Cygnae	19 45	+8 32	4 56 48		β Leonis	7 38	+28 20	4 53 28	
					γ Cygni	21 8	+29 43	5 0 33		ϵ Leonis	9 39	+24 21	4 56 14	
								4 57 17		α Leonis	10 2	+12 35	4 58 30	
										β Leonis	10 10	+24 1	4 56 46	
										γ Leonis	10 13	+20 28	4 56 3	
													4 57 55	

For Fundamental Stars

Date	Apr. 20 1879		
Name of Star	R.A. Dec. i.		
α Aries	2 0 + 22 53 4 58 23		
α Ceti	2 56 + 3 37 (5 7 24)		
β Eridani	5 2 - 5 15 5 0 33		
β Orionis	5 9 - 8 21 4 58 18		
β Tauri	5 19 + 28 30 (4 53 49)		
δ Orionis	5 26 - 0 23 4 58 41		
ϵ Orionis	5 30 - 5 59 (4 54 14)		
ζ Orionis	5 35 - 2 0 4 58 18		
κ Orionis	5 42 - 9 43 5 0 0		
λ Orionis	5 49 + 7 23 5 1 29		
μ Geminae	6 16 + 22 34 4 59 55		
ν Geminae	6 31 + 16 30 5 1 36		
β Com. Min.	7 20 + 8 32 4 56 2		
α Geminae	7 27 + 32 9 4 57 35		
α Com. Min.	7 33 + 5 32 4 57 12		
β Geminae	7 38 + 28 19 4 59 58		
γ Virginis pr.	12 36 - 0 47 5 2 7		
δ Virginis	12 49 + 4 3 5 0 35		
ϵ Virginis	12 56 + 11 37 4 58 49		
α Virginis	13 19 - 10 32 4 57 43		
α Aquilae	19 45 + 8 33 5 3 9		
β Aquilae	19 49 + 6 6 (3 5 29)		
δ Aquilae	20 5 - 1 11 4 59 15		
α^2 Capricorni	20 11 - 12 55 4 57 53		
ζ Cygni	21 8 + 29 44 4 57 32		
ϵ Pegasi	21 38 + 9 18 4 56 50		
α Aquarii	22 0 - 0 54 4 57 24		
	23 4 59 9		

Date	Apr. 21 1879		
Name of Star	R.A. Dec. i.		
μ Geminae	6 16 + 22 34 4 58 30		
ν Geminae	6 31 + 16 30 4 59 24		
β Com. Min.	7 21 + 8 32 5 2 5		
α Geminae	7 27 + 32 9 4 59 5		
α Com. Min.	7 33 + 5 32 4 58 9		
β Geminae	7 38 + 28 19 4 56 39		
α Hydrae	9 22 - 8 8 4 58 50		
ϵ Leonis	9 39 + 24 20 4 59 1		
ζ Leonis	10 10 + 24 1 5 0 59		
γ Leonis pr.	10 13 + 20 27 4 57 55		
β Cygni	19 26 + 27 42 (4 53 15)		
γ Aquilae	19 40 + 10 19 4 53 19		
α Aquilae	19 45 + 8 33 4 58 20		
β Aquilae	19 49 + 6 6 5 2 56		
ζ Cygni	21 8 + 29 44 4 56 49		
α Aquarii	22 0 - 0 54 4 58 11		
β Aquarii	21 25 - 6 6 4 58 23		
ϵ Pegasi	21 38 + 9 19 4 59 17		
α Androm.	0 2 + 28 25 4 57 13		

Date	Apr. 22 1879		
Name of Star	R.A. Dec. i.		
μ Geminae	6 16 + 22 34 4 58 31		
ν Geminae	6 31 + 16 30 5 0 7		
β Com. Min.	7 21 + 8 32 4 59 2		
α Geminae	7 27 + 32 9 5 1 3		
α Com. Min.	7 33 + 5 32 4 57 50		
β Geminae	7 38 + 28 19 (4 54 20)		
α Hydrae	9 22 - 8 8 5 0 18		
ϵ Leonis	9 39 + 24 20 4 57 33		
α Leonis	10 2 + 12 33 4 58 6		
ζ Leonis	10 10 + 24 1 4 56 44		
δ Leonis	11 8 + 21 11 4 59 19		
β Leonis	11 43 + 15 15 4 58 22		
ϵ Leonis	12 4 - 21 57 (5 6 4)		
γ Virginis	12 36 - 0 47 4 59 44		
ϵ Virginis	12 56 + 11 37 4 59 11		
α Virginis	13 19 - 10 32 4 57 43		

Date	Apr. 23		
Name of Star	R.A. Dec. i.		
ζ Orionis	5 35 - 2 0 4 55 32		
κ Orionis	5 42 - 9 43 4 56 39		
λ Orionis	5 49 + 7 23 4 56 58		
α Hydrae	9 22 - 8 8 5 0 53		
ϵ Leonis	9 39 + 24 20 4 56 49		
α Leonis	10 2 + 12 33 4 56 14		
δ Leonis	11 8 + 21 11 4 57 7		
β Leonis	11 43 + 15 15 (4 54 44)		
γ Virginis pr.	12 36 - 0 47 5 0 0		
ϵ Virginis	12 56 + 11 37 4 57 2		
α Virginis	13 19 + 10 32 4 57 43		

Date	Apr. 24		
Name of Star	R.A. Dec. i.		
ζ Orionis	5 35 - 2 0 4 55 0		
λ Orionis	5 49 + 7 23 4 56 5		
μ Geminae	6 16 + 22 34 4 57 56		
ν Geminae	6 31 + 16 30 4 59 48		
β Com. Min.	7 21 + 8 32 4 58 59		
α Geminae	7 27 + 32 9 4 56 40		
α Com. Min.	7 33 + 5 32 4 58 53		
α Hydrae	9 22 - 8 8 5 1 21		
α Leonis	10 2 + 12 33 4 59 51		
ζ Leonis	10 10 + 24 1 4 56 13		
γ Leonis pr.	10 13 + 20 27 4 58 51		

over.

Book 3 Continued

Collections of Results in order of Date.

1119
19 4 5-
4 21 1.

Date	Apr. 30. 1879
Name of Star	R.A. Dec. i.
α Hydrae	9 22 -8 8 4 58 13
θ Urs. Maj.	9 25 +52 14 4 59 27
ϵ Leonis	9 39 +24 20 4 55 41
δ Leonis	10 2 +12 33 4 56 41
β Leonis	10 10 +24 1 4 59 44
γ Leonis	10 13 +20 27 4 59 43
α Urs. Maj.	10 36 +62 24
ρ Leonis	11 8 +21 11 5 0 1
β Leonis	11 43 +15 15
α Androm.	0 2 +28 25 4 58 32
	8 4 58 30 X

Date	May 1. 1879
Name of Star	R.A. Dec. i.
θ Urs. Maj.	9 25 +52 14 4 57 51
ϵ Leonis	9 39 +24 20 4 58 7
α Leonis	10 2 +12 33 4 56 48
β Leonis	10 10 +24 1 4 59 4
γ Leonis	10 13 +20 27 4 58 37
μ Urs. Maj.	10 15 +42 6 4 58 37
	10 41 +1 15 4 57 15
ψ Urs. Maj.	11 3 +45 9 4 56 32
ρ Leonis	11 8 +21 11 5 1 53
β Leonis	11 43 +15 15 4 58 58
ϵ Corin	12 4 -21 56 5 1 38
γ Virginis	12 36 -0 47 5 0 36
ϵ Virginis	12 56 +11 37 4 57 57
α Virginis	13 19 -10 32 4 53 14
ϵ Cygni	20 41 +33 31 (4 52 17)
ϵ Pegase	21 38 +9 19 4 55 22
α Aquarii	22 0 -0 54 4 58 10
α Androm.	0 2 +28 25 (4 54 17)
	16 4 58 10 X

Date	May 5. 1879
Name of Star	R.A. Dec. i.
α Hydrae	9 22 -8 8 4 59 54
α Leonis	10 2 +12 33 4 59 33
β Leonis	10 10 +24 1 4 54 54
γ Leonis	10 13 +20 27 5 0 0
	4 4 58 35 X

For Fundamental Stars -

Book 4 1879

Collections of Results in order of Date.

Date. May 5 1879

Name of star	R.A.	Dec.	i
η Urs. Maj.	h m	+45 9	4 56 20
β Leonis	11 8	+21 11	4 58 47
ϵ Corvi	12 4	-21 57	4 57 35
γ Virginis, fol.	12 36	-0 47	4 56 16
δ Virginis	12 49	+4 3	5 1 16
ϵ Virginis	12 56	+11 37	5 1 45
α Virginis	13 19	-10 32	4 57 54
α Cygni	20 37	+44 51	4 54 54
ϵ Cygni	20 41	+33 31	4 58 23

May 6 1879

β Leonis	10 10	+24 1	5 0 54
η Urs. Maj.	11 3	+45 9	4 59 30
γ Virginis, pr.	12 36	-0 47	4 58 9
α Virginis	13 19	-10 32	4 57 48
ϵ Cygni	21 8	+29 44	4 59 37
α Cygni	22 0	-0 54	4 58 25
α Anetis	2 0	+22 53	4 58 6

May 7-1879

θ Urs. Maj.	9 25	+52 14	(4 54 46)
β Leonis	10 10	+24 1	4 58 8
γ Leonis	10 13	+20 27	5 0 3
η Urs. Maj.	11 3	+45 9	4 55 40
δ Leonis	11 8	+21 11	4 57 39
β Leonis	11 43	+15 15	4 58 20
ϵ Corvi	12 4	-21 57	4 58 35
γ Virginis, fol.	12 36	-0 47	4 57 0
ϵ Virginis	12 56	+11 37	5 0 51
α Virginis	13 19	-10 32	4 58 6

Date. May 8-1879

Name of star	R.A.	Dec.	i
ϵ Leonis	9 39	+24 20	4 58 44
α Leonis	10 2	+12 33	4 57 32
β Leonis	10 10	+24 1	5 3 5
γ Leonis	10 13	+20 27	4 54 35
η Urs. Maj.	11 3	+45 9	4 56 14
δ Leonis	11 8	+21 11	4 56 29
β Leonis	11 43	+15 15	4 53 53
ϵ Corvi	12 4	-21 57	4 59 1
γ Virginis, pr.	12 36	-0 47	5 0 8
ϵ Virginis	12 56	+11 37	4 59 27
ϵ Cygni	21 8	+29 44	4 58 32
β Cygni	21 25	-6 6	5 2 17
ϵ Pegasi	21 38	+9 19	4 59 27

May 10 1879

η Urs. Maj.	11 3	+45 9	4 57 42
δ Leonis	11 8	+21 11	5 1 45
γ Virginis, pr.	12 36	-0 47	5 1 0

May 12 1879

γ Virginis, fol.	12 36	-0 47	4 58 19
ϵ Virginis	12 56	+11 37	4 57 46

May 13 1879

δ Leonis	11 8	+21 11	4 55 7
η Urs. Maj.	11 47	+54 22	4 55 34
ϵ Virginis	12 56	+11 37	4 58 41

May 14 1879

η Urs. Maj.	11 3	+45 9	5 0 17
β Leonis	11 43	+15 15	4 58 54
η Urs. Maj.	11 47	+54 22	4 56 2
γ Virginis	12 36	-0 47	5 0 35
ϵ Virginis	12 56	+11 37	4 55 59

Date. May 29 1879

Name of star	R.A.	Dec.	i
δ Virginis	12 49	+4 3	4 57 8
η Urs. Maj.	13 43	+49 55	(4 50 19)
η Bootis	13 49	+19 0	4 57 42
γ Virginis	13 55	+2 8	5 1 21

May 30 1879

α Anigae	5 8	+45 52	4 57 41
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May 31 1879

η Urs. Maj.	13 43	+49 55	4 56 44
γ Virginis	13 55	+2 8	4 59 22
ϵ Bootis	14 40	+27 35	4 58 14
γ Pegasi	0 7	+14 31	(4 55 14)

June 1-1879

α Anigae	5 8	+45 52	4 57 25
α Orionis	5 49	+7 23	4 57 50
δ Virginis	12 49	+4 3	4 58 59
ϵ Virginis	12 56	+11 37	(4 53 59)
α Virginis	13 19	-10 32	4 59 9
η Urs. Maj.	13 43	+49 55	(4 51 7)
η Bootis	13 49	+19 0	4 57 58

June 4-1879

ϵ Virginis	12 56	+11 37	4 56 10
η Urs. Maj.	13 43	+49 55	4 54 37
η Bootis	13 49	+19 0	4 55 40
γ Virginis	13 55	+2 8	4 58 50
α Bootis	14 10	+19 49	4 58 35
γ Bootis	14 27	+38 50	4 55 50
ϵ Bootis	14 40	+27 35	4 56 50
β Librae	15 10	-8 56	4 55 27

Für Landammantel Stars.

<u>Date.</u>	<u>June 5 1879.</u>		
<u>Name</u> <u>of Star</u>	<u>R.A.</u>	<u>Dec.</u>	<u>i</u>
γ Virginis	12 36	-0 47	4 59 28
ϵ Virginis	12 56	+11 37	4 56 13
η Vir. Maj.	13 43	+49 55	4 57 13
η Bootis	13 49	+19 0	4 57 46
τ Virginis	13 55	+2 8	4 58 31
α Bootis	14 10	+19 49	4 58 26

29° 49' 88"

June 8-1879

γ Virginis	12 36	- 0 47	4 56 51
ϵ Virginis	12 56	+ 11 37	4 55 34
η Her. Maj.	13 43	+ 49 55	4 55 56
η Bootis	13 49	+ 19 0	4 56 33
τ Virginis	13 55	+ 2 8	4 57 52
α Bootis	14 10	+ 19 49	4 52 27
γ Bootis	14 27	+ 38 50	4 55 49
β Bootis	14 57	+ 40 52	4 57 24
β Librae	15 10	- 8 56	4 56 52
γ Androm.	1 56	41 45	4 55 8
α Arietis	2 0	+ 22 53	4 59 46

June 9-1879

B. Bortis.	14 57	+ 40 52	4 57 4
B. Libras.	15 10	- 8 56	4 53 26
A. Serpenti.	15 38	+ 6 48	4 53 30
		2	52 25
			56 47

June 16 1879

α Androm.	0 2	+28 25	4 59 9
α Persis.	3 16	+49 26	4 52 43
			7° 51' 63"
		2	4 55' 53"

June 17 1879.

<i>A. Cor. Bar.</i>	15-30	+ 27	7	4	54	46
<i>A. Serpentina</i>	15-38	+ 6	48	4	55	36

45012
45012

11

Date	From	1879						
Name	R.	A.	Dec.	i.				
W. L. L.	12	56	+11	37	4	55	40	
W. L. L.	13	43	+49	55	4	51	36	
W. L. L.	13	49	+19	0	4	55	5	
W. L. L.	14	10	+19	49	4	54	34	
W. L. L.	14	27	+38	50	4	58	25	
W. L. L.	14	40	+27	35	4	51	30	

6

<i>β Bootis</i>	14	57 + 40	52	4	50	22
<i>γ Bootis</i>	15	11 + 33	46	4	53	20
<i>α Com. Ber.</i>	15	30 + 27	7	4	56	27
<i>α Serpenti.</i>	15	38 + 6	48	4	56	56
<i>α Androm.</i>	0	2 + 28	25	4	57	53

June 19 - 1879

α Bootis.	14	10 + 19	49	4	57	47
γ Bootis.	14	27 + 38	50	4	56	12
ϵ Bootis.	14	40 + 27	35	4	54	36
β Bootis.	14	57 + 40	52	4	54	7
α Cor. Bn.	15	30 + 27	7	4	54	58
α Lepentis.	15	38 + 6	48	4	53	0
α Persai	3	16 + 49	26	4	56	19

June. 20 - 1879

γ Virginia. 12 $36 - 0$ 44 $\frac{4}{4}$ 54 39
 δ Virginia. 12 $56 + 11$ 37 $\frac{4}{4}$ 56 28
 δ 9 51 7.
 δ 55 84 7
 June 21 - 1879

June 21 - 1879

Y Mas. Maj.	13	43	+49	53	4	56	3
Y Bootie.	13	49	+19	0	4	57	12
T Virginia.	13	53	+2	8	4	53	54
d Bootie.	14	10	+19	49	4	59	15
Y Bootie.	14	27	+38	50	4	53	18
E Bootie.	14	40	+27	35	4	56	13
B Bootie.	14	57	+40	52	4	54	12
A Bootie	15	11	+33	46	4	53	14
L Can. Bar.	15	30	+27	7	4	52	48
Y Androm.	1	56	+41	45	4	53	38
d Androm.	2	0	+22	53	4	57	25

$$\begin{array}{r} 33 \\ 11 \end{array} \quad \begin{array}{r} 7 \ 3 \ 23 \\ 54 \ 8 \ 11 \end{array}$$

Date	R. A.	Dec.	i.
June 22 - 1879			
Name of Blin			
77 Bortis.	6 13 49	0 19 0	0 1 4
2 Bortis.	14 10	+ 19 49	4 57 38
3 Bortis.	14 57	+ 40 52	4 55 13
0 Bortis.	15 11	+ 33 46	4 54 81

June 23-1879

α Virginis	13 19	- 10 32	4 56 22
γ Mus Maj.	13 43	+ 49 55	4 56 33
τ Virginis	13 55	+ 2 8	4 58 7
β Bootis	14 57	+ 40 52	5 1 25
β Librae	15 10	- 8 56	4 57 22
α Cor. Bor.	15 30	+ 27 7	4 56 24
α Serpenti.	15 38	+ 6 48	4 58 25
α Antiquae	5 8	+ 45 52	4 55 57
		8	39 40 35
		X	4 57 30

13.73
~~19 40 50~~
 499.50

Book 5 1879

Collection of Results in order of Date.

Date.	June 24. 1879		
Name of Star	R.A. Dec. i.		
α Virginis	13 19 -10 32 4 55 27		
γ Virginis	13 55 + 2 8 4 59 46		
γ Bootis	14 27 + 38 50 4 55 50		
ϵ Bootis	14 40 + 27 35 4 54 55		
α Cor. Bor.	15 30 + 27 7 4 54 59		
γ Androm.	1 56 + 41 45 (4 48 39)		
γ Persei	2 56 + 53 2 4 53 49		
α Persei	3 16 + 49 26 4 54 27		
α Tauri	4 29 + 16 16 4 58 2		

Date.	June 25. 1879		
γ Virginis	13 55 + 2 8 4 56 57		
γ Bootis	14 27 + 38 50 4 56 56		
ϵ Bootis	14 40 + 27 35 4 55 41		
β Ophiuchi	16 8 - 3 23 4 54 26		

Date.	June 26. 1879		
α Virginis	13 19 - 10 32 4 59 18		
ϵ Bootis	14 40 + 27 35 4 55 53		
β Bootis	14 57 + 40 52 4 52 54		
α Cor. Bor.	15 29 + 27 7 4 56 59		
α Serpens	15 38 + 6 48 5 0 28		
β Ophiuchi	16 8 - 3 23 4 59 34		
α Androm.	0 2 + 28 25 4 54 19		
γ Pegasi	0 7 + 14 31 4 58 59		
α Tauri	4 29 + 16 16 4 54 20		

Date.	July 3. 1879		
β Lebrae	15 10 - 8 56 4 54 55		
β Ophiuchi	16 8 - 3 23 4 56 16		
γ Androm.	1 56 + 41 45 4 57 43		
α Arctis	2 0 + 22 53 (5 7 59)		

Date.	June 30 1879		
Name of Star	R.A. Dec. i.		
α Virginis	13 19 -10 32 4 58 8		
γ Bootis	14 27 + 38 50 4 56 2		
β Lebrae	15 10 - 8 56 4 57 15		
α Cor. Bor.	15 30 + 27 7 4 55 31		
α Serpens	15 38 + 6 48 4 56 35		
β Ophiuchi	16 30 - 10 19 4 56 1		
α Herculis	17 9 + 14 32 4 55 25		
α Arctis	2 0 + 22 53 4 58 59		
η Tauri	3 40 + 23 44 4 59 44		
γ Persei	3 47 + 31 31 4 53 50		
α Aurigae	5 8 + 45 52 4 54 16		
β Tauri	5 19 + 28 30 4 56 28		

Date.	July 1. 1879		
β Lebrae	15 10 - 8 56 5 1 28		
α Serpens	15 38 + 6 48 4 58 47		
β Ophiuchi	16 8 - 3 23 (4 46 10)		
β Herculis	16 25 + 21 45 (5 3 22)		
η Herculis	16 39 + 39 9 4 54 43		
α Herculis	17 9 + 14 32 4 53 40		
α Persei	3 16 + 49 26 5 2 36		
γ Persei	3 47 + 31 31 4 59 6		
ϵ Aurigae	4 49 + 32 58 4 54 1		
α Aurigae	5 8 + 45 52 4 55 37		
α Com. Min.	7 33 + 5 32 5 0 8		

Date.	July 2. 1879		
α Com. Min.	7 33 + 5 32 5 0 8		
β Bootis	15 11 + 33 46 4 57 21		
α Herculis	17 9 + 14 32 4 57 34		
γ Androm.	1 56 + 41 45 4 57 31		
α Arctis	2 0 + 22 53 5 0 47		

Date.	July 8 1879		
Name of Star	R.A. Dec. i.		
α Herculis	17 9 + 14 32 4 56 57		
α Aurigae	5 8 + 45 52 4 55 39		
β Tauri	5 19 + 28 30 4 56 28		
α Com. Min.	7 33 + 5 32 (4 47 9)		
γ Virginis	13 55 + 2 8 4 57 30		
β Persei	3 34 + 47 24 (4 53 15)		
γ Persei	3 47 + 31 31 4 57 14		
α Tauri	4 29 + 16 16 4 57 12		

Date.	July 10 1879		
β Virginis	12 49 + 4 3 4 58 38		
γ Androm.	1 56 + 41 45 4 55 45		
β Persei	3 34 + 47 24 4 57 49		
η Tauri	3 40 + 23 44 4 59 20		
γ Persei	3 47 + 31 31 4 56 59		
α Tauri	4 29 + 16 16 (4 53 33)		

Date.	Aug. 12. 1879		
α Tauri	4 29 + 16 16 5 27 14		
ϵ Aurigae	4 49 + 32 58 5 28 56		

Date.	Aug. 13. 1879		
α Herculis	17 9 - + 14 32 5 31 21		
γ Draconis	17 54 + 57 30 (5 16 49)		
η Serpens	18 15 - 2 56 5 27 57		
α Leporae	18 33 + 38 40 5 24 39		
β Cygni	19 26 + 27 42 5 30 55		

Date.	Aug. 14. 1879		
α Ophiuchi	17 29 + 12 39 5 28 46		
γ Draconis	17 54 + 57 30 5 29 7		
α Leporae	18 33 + 38 40 5 28 41		

For Fundamental Stars.

Date.	Aug. 19-1879		
Name of Star.	R.A.	Dec.	i.
α Lyrae	18 33	+38 40	5 25 44
β Cygni	19 0	+13 41	5 26 21
β Anketis	1 48	+20 13	(5 21 21)
γ Androm.	1 56	+41 45	5 29 50
α Anketis	2 0	+22 53	(5 15 49)
		3	16 21 53
			5 27 12

Date.	Aug. 20-1879		
α Virginis	13 19	-10 32	5 28 58
α Bootis	14 10	+19 49	5 29 16
ϵ Bootis	14 40	+27 35	5 30 51
α Herculis	17 9	+14 32	5 25 24
α Aphelion	17 29	+12 39	5 28 50
η Serpenti	18 15	-2 56	5 29 12
β Cygni	19 0	+13 41	5 30 56
ϵ Eridani	3 27	+9 52	5 35 38
δ Eridani	3 37	-10 11	5 32 57
γ Persei	3 47	+31 31	(5 15 25)
α Tauri	4 29	+16 16	5 28 18
		10	5 30 18
			5 30 18

Date.	Aug. 21-1879		
η Serpenti	18 15	-2 56	5 30 37
α Lyrae	18 33	+38 40	5 28 14
		2	5 29 26
			5 29 26

Date.	Aug. 23-1879		
η Serpenti	18 15	-2 56	5 29 10
α Lyrae	18 33	+38 40	5 26 33
β Cygni	19 0	+13 41	5 30 37
γ Cygni	19 40	+10 19	5 33 47
β Cygni	19 49	+6 6	5 30 6
β Cygni	20 5	-1 11	5 27 56
α Tauri	4 29	+16 16	5 27 21
β Eridani	5 2	-5 15	5 30 2
β Tauri	5 19	+28 30	5 25 56
		9	5 29 58
			5 29 58

Date.	Aug. 24-1879		
Name of Star.	R.A.	Dec.	i.
β Cygni	19 0	+13 41	5 29 4
γ Cygni	19 40	+10 19	5 32 35
β Anketis	1 48	+20 13	5 25 20
γ Androm.	1 56	+41 45	5 24 3
		4	5 27 43
			5 27 43

Date.	Sept. 5-1879		
α Bootis	14 10	+19 49	5 32 51
β Bootis	15 10	-8 56	5 27 38
		2	5 30 15
			5 30 15

Date.	Sept. 6-1879		
η Serpenti	18 15	-2 56	5 30 29
α Lyrae	18 33	+38 40	5 30 45
β Cygni	19 0	+13 41	5 31 50
β Cygni	19 26	+27 42	5 28 28
β Cygni	19 49	+6 6	5 33 6
		5	5 30 56
			5 30 56

Date.	Sept. 7-1879		
α Herculis	17 9	+14 32	5 30 21
α Optimetri	17 29	+12 39	5 31 40
		2	5 31 40
			5 31 40

Date.	Sept. 8-1879		
α Lyrae	18 33	+38 40	5 30 58
β Cygni	19 0	+13 41	5 27 16
β Cygni	19 26	+27 42	5 28 42
γ Cygni	19 40	+10 19	5 30 31
α Cygni	19 45	+8 33	5 30 35
β Cygni	19 49	+6 6	5 30 25
α Anketis	2 0	+22 53	5 26 4
α Ceti	2 56	+3 37	5 34 16
ϵ Eridani	3 27	-9 52	5 31 54
δ Eridani	3 37	-10 11	5 31 26
γ Persei	3 47	+31 31	5 34 25
		11	5 30 36
			5 30 36

Date.	Sept. 9-1879		
Name of Star.	R.A.	Dec.	i.
η Serpenti	18 15	-2 56	5 25 1
α Lyrae	18 33	+38 40	5 28 21
β Cygni	19 0	+13 41	5 28 51
α Eridani	7 27	+32 9	5 30 11
α Com. Min.	7 33	+5 32	5 28 46
β Eridani	7 38	+28 19	(5 35 42)
		5	5 27 10
			5 28 14

Date.	Sept. 10-1879		
α Tauri	4 29	-16 16	5 28 5
β Eridani	5 2	-5 15	5 26 8
α Leporis	5 27	-17 55	(5 32 49)
γ Orionis	5 35	-2 0	5 27 11
δ Orionis	5 42	-9 43	5 31 13
α Orionis	5 49	+7 23	5 27 14
		5	5 27 19
			5 27 58

Date.	Sept. 11-1879		
β Lyrae	15 10	-8 56	(5 30 24)
α Car. Bor.	15 30	+27 7	5 27 49
β Eridani	5 2	-5 15	5 26 53
β Orionis	5 9	-8 21	(5 20 52)
β Tauri	5 19	+28 30	5 26 18
γ Orionis	5 35	-2 0	(5 33 16)
δ Orionis	5 42	-9 43	5 27 57
α Orionis	5 49	+7 23	5 31 28
β Com. Min.	7 21	+8 32	5 23 47
α Com. Min.	7 33	+5 32	5 27 11
		7	5 34 37
			5 27 20

Collection of Results in order of Date.

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For Fundamental Stars.

Date Sept. 29-1879

Name of Star	R.A.	Dec.	i.
β Aquilae	19 49	+6 6	5 31 36
θ Aquilae	20 5	-1 11	5 30 35
α Capricorni	20 11	-12 55	5 31 21
β Arctis	1 48	+20 13	5 28 35
α Arctis	2 0	+22 53	5 30 58
α Leonis	10 2	+12 33	5 29 43

Sept. 30-1879

α Ophiuchi	16 8	-3 23	5 28 13
η Perseus	18 15	-2 56	5 32 49
α Leonis	18 83	+38 40	5 28 39
θ Sagittarii	18 48	-26 27	5 30 51
α Geminae	7 27	+32 9	5 30 3
β Geminae	7 38	+28 19	5 26 34
α Leonis	10 2	+12 33	5 31 16
γ Leonis	10 13	+20 27	5 33 40

Oct. 1-1879

α Scorpii	16 22	-26 18	5 35 22
β Hercules	16 25	+21 45	5 30 15
γ Ophiuchi	16 30	-10 19	5 25 47
γ Geminae	6 31	+16 30	5 28 59
β Com. Min.	7 21	+8 32	5 31 29
α Geminae	7 27	+32 9	5 30 19
α Com. Min.	7 33	+5 32	5 32 51
ϵ Leonis	9 39	+24 20	5 30 36
α Leonis	10 2	+12 33	5 29 19

Oct. 2-1879

α Cor. Br.	15 30	+27 7	5 31 57
β Hercules	16 25	+21 45	5 29 42
γ Ophiuchi	16 30	-10 19	5 26 43
η Ophiuchi	17 3	-15 34	5 30 49
δ Hercules	17 9	+14 32	5 31 49
α Ophiuchi	17 29	+12 39	5 32 10

Date Oct. 4, 1879

Name of Star	R.A.	Dec.	i.
λ Aquilae	19 0-5 4	5 30 54	
β Aquilae	19 49	+6 6	5 30 0
θ Aquilae	20 5	-1 11	5 30 21
α Capricorni	20 11	-12 55	5 32 32
ζ Cygni	21 8	+29 44	5 31 13
β Cygni	21 25	-6 6	5 29 34

ϵ Pegasi	21 38	+9 19	5 29 19
α Cygni	22 0	-0 54	5 29 30
β Com. Min.	7 21	+8 32	5 32 56
α Geminae	7 27	+32 9	5 32 35
β Geminae	7 38	+28 19	5 32 34

Oct. 5-1879

α Ophiuchi	17 29	+12 39	5 30 49
η Perseus	18 15	-2 56	5 29 56
θ Sagittarii	18 48	-26 27	5 29 44
γ Aquilae	19 0	-5 4	5 30 36

Oct. 7-1879

δ Herculis	17 9	+14 32	5 29 57
α Ophiuchi	17 29	+12 39	5 32 18
η Perseus	18 15	-2 56	5 33 3
θ Sagittarii	18 48	-26 27	5 28 51
β Cygni	21 25	-6 6	5 30 41
ϵ Pegasi	21 38	+9 19	5 31 39
α Cygni	22 0	-0 54	5 28 44
ζ Orionis	5 35	-2 0	5 27 10
κ Orionis	5 42	-9 43	5 31 15
α Orionis	5 49	+7 23	5 32 14

μ Scorpiae	6 16	+22 34	5 32 48
γ Geminae	6 31	+16 30	5 30 25
β Com. Min.	7 21	+8 32	5 30 12
α Geminae	7 27	+32 9	5 31 4
ϵ Leonis	9 39	+24 20	5 32 8
α Leonis	10 2	+12 33	5 31 0
γ Leonis	10 13	+20 27	5 29 46

Date Oct. 8-1879

Name of Star	R.A.	Dec.	i.
α Bootis	14 10	+19 49	5 30 26
α Ophiuchi	17 29	+12 39	5 29 12
η Perseus	18 15	-2 56	5 30 57
λ Aquilae	19 0	-5 4	5 33 16

Oct. 12-1879

ζ Cygni	21 8	+29 44	5 29 45
β Cygni	21 25	-6 6	5 30 24
α Cygni	22 0	-0 54	5 26 18

Oct. 13-1879

ζ Cygni	21 8	+29 44	5 32 26
β Cygni	21 25	-6 6	5 30 29
ϵ Pegasi	21 38	+9 19	5 29 12
α Cygni	22 0	-0 54	5 31 1
α Com. Min.	7 33	+5 32	5 29 22
α Hydrae	9 22	-8 8	5 28 16
α Leonis	10 2	+12 33	5 32 44
γ Leonis	10 10	+24 1	5 29 51
ρ Leonis	11 8	+21 11	5 34 27
β Leonis	11 43	+15 15	5 33 21

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Book. 7 1879 = 573

Collection of Results in order of Date.

Date.	Oct. 14 - 1879		
Forme of stars	R.A.	Dec.	i.
β Cygni	21 8	+29 44	5 30 41
β Aquarii	21 35	-6 6	5 33 55
ϵ Pegasi	21 38	+9 19	5 32 54
α Aquarii	22 0	-0 54	5 28 19
β Com. Min.	7 21	+8 32	5 34 22
α Com. Min.	7 33	+5 32	5 25 45
γ Leonis	10 13	+20 27	5 30 17
		6	53 10 28
			5 31 23

	Oct. 15 - 1879			
3 Cigni	21	8	+29	44 5 34 39
2 Pegasi	21	38	+9	19 5 28 5
2 Agnarii	22	0	-0	54 5 27 24
7 Pegasi	22	37	+29	35 5 37 41
2 Androm.	0	2	+28	25 5 29 14
7 Pegasi	0	7	+14	31 5 38 13
			4	8 15 8 22
				5 37 4

	<u>Oct. 18-1879</u>				
<i>Y. Agnilar</i>	19	40	+10	19	5 33 5
<i>α Agnilar</i>	19	45	+8	33	5 35 0
<i>β Agnilar</i>	19	49	+6	6	5 27 46
<i>δ Agnilar</i>	20	5	-1	11	5 31 32
<i>α Capricorn</i>	20	11	-12	55	5 27 7
<i>β Egeri</i>	21	8	+29	44	5 32 33
					6 58 7 8
					5 8 1 10

Oct. 19 - 1879					
Y Agulac	19 40	+ 10 19	5 32	6	
L Agulac	19 45	+ 8 33	5 35	28	
L Capicini	20 11	- 12 55	5 26	27	
G Cygn	21 8	+ 29 44	5 30	21	
P. Maxim	21 25	- 6 6	5 28	24	
E Pagar	21 38	+ 9 19	5 32	0	
			b	33 4 46	
				5 30 4	

<u>Date.</u>	<u>Oct.</u>	<u>20</u>	<u>1879</u>
<u>Name</u> <u>of Star</u>	<u>R.A.</u>	<u>Dec.</u>	<u>i</u>
<u>α Cor. Bore.</u>	15	30 + 27	5 30 57
<u>α Serpens.</u>	15	38 + 6	5 32 35
<u>β Aquarii.</u>	21	25 - 6	5 28 50
<u>ε Pegasi.</u>	21	38 + 9	19 (5 35 31)
<u>α Aquarii.</u>	22	0 - 0	5 31 15
<u>μ Gemin.</u>	6	16 + 22	5 27 30
<u>γ Gemin.</u>	6	31 + 16	5 28 40
<u>ε Can. Major.</u>	6	54 - 28	48 (5 35 21)

300. Maj. 7 3 - 26 12 5 26 33
 7 3 5 26 20
 5 29 29
Oct. 21 1879
 2 Cas. Bor. 15 30 + 27 7 5 33 53
 2 Ajizlar. 19 45 + 8 33 5 29 47
 2 11 2 46
 5 81 2
 50
Oct. 25 - 1879.
 4 Ajizlar 19 40 + 10 19 5 35 54

α Ceylanae	19	45 + 8	33	5	34	39
γ Lorisio	10	13 + 20	27	5	21	13
				3	11	20
				6	8	7
				5	10	11
<u>Oct. 26 1879,</u>						
ϵ Boobis	14	40 + 27	35	5	38	18
δ Aquarii	20	0 - 0	54	5	30	31
η Pegasi	22	37 + 29	35	5	31	17
α Perseus	22	51 - 30	16	5	32	2

2 Pegasi.	22	59 + 14	33	5	38	59
γ Pegasi.	0	7 + 14	31	5	30	12
α Hydrea.	9	22 - 8	8	5	34	31
α Leonis.	10	2 + 12	33	5	31	53
β Leonis	10	10 + 24	1	5	27	48
ρ Leonis	11	43 + 15	15	5	30	47
			8	4	4	8
				5	3	4

<u>Date.</u>	<u>W.</u>	<u>1879</u>		
<u>Name</u> <u>of Star.</u>	<u>R.A.</u>	<u>Dec.</u>	<u>L.</u>	
	^h ^m	[°] [']	[°] ['] ["]	
ε Pegasi	21 38	+ 9 19	5 30	4
α Pegasi	22 0	- 0 54	5 27	16
η Pegasi	22 37	+ 29 35	5 29	34
δ Pegasi	22 51	- 30 16	5 32	8
γ Pegasi	0 7	+ 14 31	5 31	21
		5	27 30	26
			5 30	4

Oct. 29 - 1879				
3 Cygni.	21 8	+ 29 44	5- 33 41	
β Cygni	21 25	- 6 6	5- 27 16	
ε Pegasi	21 38	+ 9 19	5- 27 57	
α Cygni	22 0	- 0 54	5- 27 28	
η Pegasi	22 37	+ 29 35	5- 29 17	
α Praesepe, And.	22 51	- 30 16	(5- 26 50)	
α Pegasi	22 59	+ 14 33	5- 34 21	
α Androm.	0 2	+ 28 25	(5- 50 32)	
γ Pegasi	0 7	+ 14 31	5- 30 7	
α Hydrea	9 22	- 8 8	(5- 20 50)	
ε Leonis	9 39	+ 24 20	(5- 26 43)	
β Leo	10. 10	+ ^{24 1} 17 33	5- 29 50	
β Leonis	11 43	+ 15 15	5- 29 0	
		9	15 19 27	
			5- 21 57	
			5- 29 53	

	<u>Oct. 30 - 1879</u>			
B Agnari	21 25	- 6 6	5 34 46	
77 Pegasi	22 37	+ 29 35	5 29 53	
α Roris, And.	22 51	- 30 16	5 29 51	
α Pegasi	22 59	+ 14 33	5 33 18	
α Androm.	0 2	+ 28 25	5 30 44	
γ Pegasi	0 7	+ 14 31	5 30 42	
α Leonis	10 2	+ 12 33	(5 43 20)	
β Leonis	10 10	+ 24 1	5 29 14	
α Virginis	13 19	- 10 32	(5 40 44)	
			7 38 38 50	
			5 31 16	

For Fundamental Stars.

Date.	Nov. 10-1879		
Name of Star	R.A.	Dec.	\bar{c} .
θ Cephei	$^h m$ 20 28	$+ 0 2 35$	$(5^{\circ} 26' 16")$
γ Leonis	10 10	$+ 24 1$	$(5^{\circ} 23' 18")$
η Bootis	13 49	$+ 19 0$	$5^{\circ} 33' 29"$

Date.	Nov. 15-1879		
α Aquarii	22 0	$- 0 34$	$5^{\circ} 32' 0"$
α Leonis	11 8	$+ 21 11$	$5^{\circ} 30' 24"$
			$5^{\circ} 31' 13"$
			$2 11 2 31$

Date.	Nov. 16-1879		
α Piscis. Auct.	22 51	$- 30 16$	$5^{\circ} 35' 8"$
α Androm.	$0 2$	$+ 28 25$	$5^{\circ} 33' 28"$
	22 59	$+ 14 33$	
γ Pegasi	0 7	$+ 14 31$	$5^{\circ} 29' 23"$
α Corvi	12 24	$- 15 50$	$5^{\circ} 32' 56"$
γ Virginis	12 36	$- 0 47$	$(5^{\circ} 38' 56")$
α Virginis	12 49	$+ 4 3$	$5^{\circ} 33' 20"$
ϵ Virginis	12 56	$+ 11 37$	$5^{\circ} 29' 59"$
α Virginis	13 19	$- 10 32$	$5^{\circ} 32' 14"$
			$5^{\circ} 34' 24"$
			$5^{\circ} 32' 21"$

Date.	Nov. 24-1879		
α Androm.	0 2	$+ 28 25$	$5^{\circ} 26' 57"$
γ Pegasi	0 7	$+ 14 31$	$5^{\circ} 33' 51"$
α Hydorae	9 22	$- 8 8$	$(5^{\circ} 25' 9")$
			$2 11 0 48$
			$5^{\circ} 30' 24"$

Date.	Nov. 25-1879		
ϵ Corvi	12 4	$- 21 57$	$5^{\circ} 32' 2"$
η Bootis	13 49	$+ 19 0$	$5^{\circ} 33' 40"$
ϵ Bootis	14 40	$+ 27 35$	$5^{\circ} 29' 50"$
α Serpenti	15 38	$+ 6 48$	$5^{\circ} 32' 9"$
			$4 22 7 31$
			$5^{\circ} 31' 53"$

Date.	Nov. 26-1879		
γ Pegasi	22 37	$+ 29 35$	$5^{\circ} 29' 28"$
α Piscis. Auct.	22 51	$- 30 16$	$5^{\circ} 26' 10"$
α Pegasi	22 59	$+ 14 33$	$5^{\circ} 36' 26"$
γ Pegasi	0 7	$+ 14 31$	$5^{\circ} 28' 30"$
			$4 22 0 34$
			$5^{\circ} 30' 8"$

Date.	Nov. 29-1879		
Name of Star	R.A.	Dec.	\bar{c} .
ϵ Corvi	$^h m$ 12 4	$- 21 57$	$(5^{\circ} 25' 36")$
β Leonis	12 28	$- 22 44$	$(5^{\circ} 24' 42")$
γ Virginis	12 36	$- 0 47$	$5^{\circ} 30' 49"$
ϵ Virginis	12 56	$+ 11 37$	$5^{\circ} 29' 59"$
			$2 21 51 6$
			$5^{\circ} 27' 47"$
			$50 24$

Date.	Nov. 30-1879		
α Piscis. Auct.	22 51	$- 30 16$	$5^{\circ} 30' 40"$
γ Pegasi	0 7	$+ 14 31$	$5^{\circ} 26' 43"$
			$2 10 57 28$
			$5^{\circ} 28' 42"$

Book 8 1879

Collection of Results in order of Date.

Date Dec. 1- 1879.

Name of Star	R.A.	Dec.	L.
α Ceti.	2 56	+3 37	5 27 32
β Corvi	12 28	-22 44	5 30 5
γ Virginis	12 36	-0 47	5 30 24
δ Virginis	12 49	+4 3	(5 37 45)
ϵ Virginis	12 56	+11 37	5 32 58

Dec. 4- 1879

α Arietis	2 0	+22 53	5 32 29
ϵ Eridani	3 27	-9 52	5 32 58
δ Eridani	3 37	-10 11	5 25 59
ζ Persei	3 47	+31 31	5 30 12
δ Corvi	12 24	-15 50	5 30 9
γ Virginis	12 36	-0 47	5 36 50
δ Virginis	12 49	+4 3	5 32 40
α Virginis	13 19	-10 32	(5 43 23)

Dec. 7- 1879

η Pegasi	22 37	+29 35	5 26 10
α Pisces Amb.	22 51	-30 16	5 31 2
β Arietis	1 48	+20 13	5 29 54
α Arietis	2 0	+22 53	5 30 36

Dec. 8- 1879

γ Virginis	12 36	-0 47	5 31 55
δ Virginis	12 49	+4 3	5 27 54
ϵ Virginis	12 56	+11 37	5 28 34

Dec. 9- 1879

β Arietis	1 48	+20 13	(5 24 53)
α Arietis	2 0	+22 53	5 32 8

Date Dec. 15- 1879

Name of Star	R.A.	Dec.	L.
α Arietis	2 0	+22 53	5 29 37
α Ceti.	2 56	+3 37	5 29 49
ϵ Eridani	3 27	-9 52	5 30 54
δ Eridani	3 37	-10 11	5 29 36
ζ Persei	3 47	+31 31	5 31 43
δ Virginis	12 49	+4 3	5 28 46

α Virginis	13 19	-10 32	5 33 52
β Librae	15 10	-8 56	5 31 21
α Serpenti	15 38	+6 48	(5 25 28)

Dec. 17- 1879

α Arietis	2 0	+22 53	5 32 59
α Ceti.	2 56	+3 37	5 29 31
ϵ Eridani	3 27	-9 52	5 31 43
δ Eridani	3 37	-10 11	5 29 13
ζ Persei	3 47	+31 31	5 30 20
δ Corvi	12 24	-15 50	5 26 33
β Corvi	12 28	-22 44	5 28 50
γ Virginis	12 36	-0 47	(5 25 40)
δ Virginis	12 49	+4 3	5 32 27

Dec. 18- 1879

β Arietis	1 48	+20 13	5 29 29
α Arietis	2 0	+22 53	5 27 14
α Ceti	2 56	+3 37	5 29 27
ϵ Eridani	3 27	-9 52	5 29 27
η Tauri	3 40	+23 44	5 35 38
ζ Persei	3 47	+31 31	5 30 32
ϵ Corvi	12 4	-21 57	(5 42 24)
δ Corvi	12 24	-15 50	(5 18 32)
δ Virginis	12 49	+4 3	(5 37 52)
ϵ Virginis	12 56	+11 37	5 29 54

Date Dec. 29- 1879

Name of Star	R.A.	Dec.	L.
α Arietis	2 0	+22 53	5 31 28
α Ceti.	2 56	+3 37	5 29 17
ϵ Eridani	3 27	-9 52	5 32 54
η Tauri	3 40	+23 44	5 32 37

Dec. 31- 1879

δ Corvi	12 24	-15 50	5 28 1
δ Virginis	12 49	+4 3	5 30 46
α Virginis	13 19	-10 32	5 32 24

For Fundamental Stars.

For Fundamental Stars.

Date April 6 1880

Name of Star	R.A.	Dec.	ι
	h^m	0^s	0^s
α Aquilae	19 45	+8 23	5 3 14
β Aquilae	19 49	+6 6	4 58 42
		2	10 1 38
			5 0 58

April 7- 1880

α Leonis	10 2	+12 33	5 0 8
γ Leonis	10 13	+20 27	5 1 42
δ Leonis	11 8	+21 11	5 0 23
ρ Corvi	12 24	-15 50	5 1 27
γ Virginis	12 36	-0 47	5 0 50
δ Virginis	12 49	+4 3	5 1 27
ϵ Virginis	12 56	+11 37	4 58 57
		7	35 4 24
			5 0 38
			5 0 42

Book 2 - 1880

Collection of Results in order of Date.

Date	April 8 - 1880		
Name of Star	R.A.	Dec.	L.
α Orionis	5 49	+7 23	5 3 20
γ Gem.	6 31	+16 30	5 0 37
β Can. Min.	7 21	+8 32	5 0 16
α Can. Min.	7 33	+5 32	5 1 10
β Scorpii	15 58	-19 28	5 2 54
ρ Ophiuchi	16 8	-3 23	5 2 29
α Scorpii	16 22	-26 10	5 0 54
η Herculis	16 39	+39 9	4 58 9
κ Ophiuchi	17 3	-15 34	4 54 40
α Herculis	17 9	+14 32	4 52 31
		10 48 57 0	4 54 2
		59	

Date	April 10 - 1880		
α Lyrae	9 22	-8 8	4 57 22
ϵ Leonis	9 39	+24 20	5 1 10
δ Leonis	10 2	+12 33	5 10 6
ζ Leonis	10 10	+24 1	4 58 29
ρ Leonis	11 8	+21 11	5 0 27
ρ Corvi	12 24	-15 50	4 56 6
γ Virginis	12 36	-0 47	5 0 37
ϵ Virginis	12 56	+11 37	4 59 50
		8 40 2 7	5 0 16

Date	April 11 - 1880		
α Sagittae	18 48	-26 27	4 55 14
ζ Aquilae	19 0	+13 41	4 58 31
β Cygni	19 26	+27 42	4 50 26
α Aquilae	19 45	+8 33	5 1 11
ζ Capricorni	20 11	-12 55	5 1 59
		4 34 47 51	4 54 6
		4 59 14	

Date	April 20 - 1880		
α Lyrae	9 22	-8 8	4 59 7
γ Leonis	10 13	+20 27	4 58 23
ρ Corvi	12 24	-15 50	4 54 44
ρ Virginis	12 49	+4 3	4 55 53
		4 19 48 7	4 57 2

Date	April 12 - 1880		
Name of Star	R.A.	Dec.	L.
β Eridani	5 2	-5 15	5 2 46
ρ Orionis	5 26	-0 24	4 54 6
ι Orionis	5 30	-6 0	4 57 38
ζ Orionis	5 35	-2 0	4 59 48
δ Orionis	5 49	+7 23	4 55 59
γ Gem.	6 31	+16 30	5 13 4
α Can. Min.	6 40	-16 33	4 58 36
α Lyrae	9 22	-8 8	4 54 45
α Leonis	10 2	+12 33	5 4 30
ζ Leonis	10 10	+24 1	4 58 40
	11 23	+1 23	4 55 10
	11 29	+0 52	4 58 0
ρ Corvi	12 24	-15 50	5 2 48
β Corvi	12 28	-22 44	5 4 20
γ Virginis	12 36	-0 47	4 57 37
ρ Virginis	12 49	+4 3	4 58 24
ϵ Virginis	12 56	+11 37	4 56 51
		14 84 45 12	4 56 29
		4 59 22	

Date	April 13 - 1880		
α Leonis	10 2	+12 33	5 4 32
ζ Leonis	10 10	+24 1	5 0 5
		2 10 8 37	5 2 19

Date	April 14 - 1880		
β Orionis	5 9	-8 21	4 58 7
δ Orionis	5 49	+7 23	4 58 42
γ Gem.	6 31	+16 30	4 57 59
		3 14 54 48	4 58 14

Date	April 18 - 1880		
α Leonis	10 2	+12 33	5 1 3
ζ Leonis	10 10	+24 1	5 0 7
γ Leonis	10 13	+20 27	4 56 10
		3 14 57 20	4 59 7

Date	April 21 - 1880		
Name of Star	R.A.	Dec.	L.
α Sagittae	18 48	-26 27	4 56 47
ζ Aquilae	19 0	+13 41	5 0 55
β Cygni	19 26	+27 42	5 0 7
γ Aquilae	19 40	+10 19	5 0 38
γ Cygni	20 18	+39 52	5 0 47
ϵ Cygni	20 41	+33 31	4 56 34
α Aquarii	22 0	-0 54	4 54 34
		7 84 50 24	4 58 38

Date	April 22 - 1880		
ϵ Orionis	5 30	-1 17	5 5 35
κ Orionis	5 42	-9 43	4 53 19
γ Gem.	6 31	+16 30	4 58 57
α Can. Min.	7 33	+5 32	4 58 50
		4 19 54 46	4 58 40

Date	April 23 - 1880		
β Orionis	5 9	-8 21	4 54 32
ζ Orionis	5 35	-2 0	5 6 58
δ Orionis	5 49	+7 23	4 59 38
		3 14 59 5	5 0 23

Date	April 26 - 1880		
ρ Leonis	11 8	+21 11	4 59 44
ρ Corvi	12 24	-15 50	4 59 58
γ Aquilae	19 40	+10 19	4 58 41
α Aquilae	19 45	+8 33	4 58 58
δ Aquilae	20 5	-1 11	4 54 32
γ Cygni	20 18	+39 52	4 57 15
ϵ Cygni	20 41	+33 31	4 59 5
α Aquarii	22 0	-0 54	4 59 25
η Pegasi	22 37	+29 35	4 53 27
		8 84 54 45	4 56 55
		4 58 34	

For Fundamental Stars.Date. May 2 1880

Name of Star	R.A.	Dec.	ϵ
β Leonis	11 8	+21 11	4 54 52
γ Mrs. May	11 47	+54 22	4 56 33
β Corvi.	12 28	-22 44	4 53 39
γ Virginis	12 36	-0 47	4 57 48
Σ Virginis	12 56	+11 37	4 56 7
		5 34 39 59	
		4 56 12	

May 4 - 1880

γ Cygni	20 18	+39 52	(4 48 21)
α Cygni	20 37	+44 01	4 53 11
		2 41 32	
		4 50 44	

May 8 - 1880

γ Virginis	12 36	-0 47	4 54 34
Σ Mrs. May	12 49	+56 37	4 51 11
Σ Virginis	12 56	+11 37	4 51 53
α Virginis	13 19	-10 32	4 55 31

4 12 31 9
 4 53 47
 4 53 17

May 10 - 1880

γ Mrs. May	11 47	+54 22	4 56 14
γ Virginis	12 36	-0 47	4 53 47
Σ Virginis	12 56	+11 37	4 52 27

3 4 43 25
 4 53 9
 4 54 9

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~~19 32 20~~
~~+ 99° 9'~~

Book 3 1880

Collection of Results in order of Date.

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Book 4 - 1880

For Fundamental Stars.

Date June 27 - 1880

Name of Star	R.A.	Dec.	i
η Urs. Maj.	13 43	+49 55	4 59 18
η Bootis	13 49	+19 0	4 59 12
γ Virginis	13 55	+2 8	5 3 14

June 28 - 1880

α Cor. Bor.	15 30	+27 7	5 1 58
β Scorpion	15 58	-19 28	5 0 53
α Scorpion	16 22	-26 10	4 59 19
γ Ophiuchi	16 30	-10 19	5 2 22
β Arietis	1 48	+20 13	5 0 59
γ Androm.	1 56	+41 45	5 1 49
α Arietis	2 0	+22 53	5 0 44

June 30 - 1880

γ Virginis	13 55	+2 8	5 2 36
γ Bootis	14 27	+38 50	5 2 38
ϵ Bootis	14 40	+27 35	5 3 49

July 7 - 1880

β Librae	15 10	-8 56	5 4 36
α Serpens	15 38	+6 48	5 3 80
β Scorpion	15 53	-22 16	5 2 14
β Scorpion	15 58	-19 28	4 58 45
α Scorpion	16 22	-26 10	(5 7 47)
η Herculis	16 39	+39 9	4 59 46
β Arietis	1 48	+20 13	4 58 16
γ Androm.	1 56	+41 45	4 57 32

Date July 8 - 1880

Name of Star	R.A.	Dec.	i
β Librae	15 10	-8 56	5 5 0
α Cor. Bor.	15 30	+27 7	5 3 24
α Serpens	15 38	+6 48	(5 6 33)
β Scorpion	15 53	-22 16	5 0 19
β Ophiuchi	16 30	-10 19	5 1 35

July 28 - 1880

α Herculis	17 9	+14 32	5 2 41
α Ophiuchi	17 29	+12 39	5 3 50
γ Aries	4 49	+32 58	5 4 40

July 29 - 1880

α Ceti	2 56	+3 37	5 6 56
η Tauri	3 40	+23 44	5 4 16
γ Tauri	3 47	+31 31	5 7 16
β Tauri	5 19	+28 30	5 3 44

July 31 - 1880

α Lyrae	18 33	+38 40	5 6 14
α Ceti	2 56	+3 37	5 1 13

Aug. 15 - 1880

α Androm.	1 56	+41 45	5 2 40
α Arietis	2 0	+22 53	4 59 47
α Ceti	2 56	+3 37	5 3 14
γ Aries	4 49	+32 58	5 5 16
β Tauri	5 19	+28 30	5 5 33
ϵ Orionis	5 30	-1 17	5 1 18

Date Aug. 16 - 1880

Name of Star	R.A.	Dec.	i
α Herculis	17 9	+14 32	5 0 27
γ Draconis	17 54	+51 30	(5 12 19)

Aug. 17 - 1880

α Lyrae	18 33	+38 40	5 6 8
δ Sagittarii	18 48	-26 27	5 8 47
γ Aquilae	19 0	-13 41	5 7 57
γ Aries	4 49	+32 58	5 3 52

Book 5 1880

Collection of Results in order of Date.

Date.	Aug 18-1880			
Name of Star	R.A.	Dec.	i	
η Bootis	13 48	+19 0	5	7 24
α Bootis	14 10	+9 49	5	7 11
δ Bootis	14 27	+38 50	5	8 8
ϵ Bootis	14 40	+27 35	5	8 55
α Cor. Bor.	15 30	+27 7	5	8 28
α Serpens	15 38	+6 48	5	6 27
β Scorpii	15 58	-19 28	5	8 38
α Ceti	2 56	+3 37	5	9 41
α Persii	3 16	+49 26	5	8 2
β Persii	3 34	+47 24	5	5 33
κ Lani.	3 40	+23 44	5	0 0
γ Persii	3 47	+31 31	4	58 51
α Tonini	4 29	-16 16	5	2 39

Aug. 22-1880

ϵ Eridani	3 27	-9 52	5	1 8
γ Persii	3 47	+31 31	5	4 14

Aug. 23 1880

α Ophiuchi	17 29	+12 39	5	7 44
γ Draconis	17 54	+51 30	5	8 51
α Lyrae	18 33	+38 40	5	4 44

Aug. 28-1880

γ Aquilae	19 0	+13 41	5	6 35
γ Aquilae	19 40	+10 19	5	8 34
β Aquilae	19 49	+6 6	5	8 37

Sept-1-1880

γ Draconis	17 54	+51 30	5	10 19
κ Serpens	18 15	-2 56	5	9 52
α Lyrae	18 33	+38 40	5	2 41
γ Aquilae	19 0	+13 41	5	6 57

Date. Sept. 2-1880

Name of Star	R.A.	Dec.	i	
α Lyrae	18 33	+38 40	5	4 42
γ Aquilae	19 0	+13 41	5	10 14
ϵ Eridani	3 27	-9 52	5	4 15
ι Antares	4 49	+32 58	5	5 14
β Orionis	5 9	-8 2	5	12 17
β Lani.	5 19	+28 30	5	8 21
ϵ Orionis	5 30	-1 17	5	7 59
γ Orionis	5 35	-2 0	5	4 14
α Orionis	5 49	+7 23	5	5 55
α Lem.	7 27	+32 9	5	5 57
α Om. Min.	7 33	+5 32	5	5 49
β Gem.	7 38	+28 19	5	4 53

Sept. 4-1880.

η Serpens	18 15	-2 56	5	13 0
α Lyrae	18 33	+38 40	5	5 59
γ Aquilae	19 0	+13 41	5	9 14
β Cygni	19 26	+27 42	5	6 46
β Aquilae	19 49	+6 6	5	16 33
γ Aquilae	19 40	+10 19	4	59 28
γ Cygni	20 18	+39 52	5	6 1

Sept. 5-1880

κ Draconis	16 22	+61 47	5	3 23
ϵ Eridani	3 27	-9 52	5	7 2
κ Lani.	3 40	+23 44	5	12 5
γ Persii	3 47	+31 31	5	4 26
κ Lani.	4 29	+16 16	5	3 53
ι Antares	4 49	+32 58	5	1 32
κ Orionis	5 42	-9 43	5	4 47

Date. Sept. 11-1880

Name of Star	R.A.	Dec.	i	
δ Sagittarii	18 48	-26 27	5	11 1
β Cygni	19 26	+27 42	5	5 30
α Aquilae	19 45	+8 33	5	5 6
δ Aquilae	20 5	-1 11	5	10 23
α Capricorni	20 11	-12 55	5	7 13
α Cygni	20 37	+44 51	5	3 17

Sept. 16-1880

γ Orionis	5 35	-2 0	5	7 53
α Hydreae	9 22	-8 8	5	6 37
α Her. Maj.	9 25	+52 14	5	2 0
ϵ Leonis	9 29	+24 20	5	2 49

Sept. 21-1880

β Librae	15 10	-8 56	5	8 56
α Cor. Bor.	15 30	+27 7	5	9 29
α Serpens	15 38	-22 16	5	6 10
γ Ophiuchi	16 30	-10 19	5	10 33
η Herculis	16 39	+39 9	5	8 27
α Herculis	17 9	+14 32	5	8 47
γ Draconis	17 54	+51 30	5	7 52
ϵ Eridani	3 27	-9 52	5	9 19
δ Persii	3 34	+47 24	5	3 54
δ Eridani	3 37	-10 10	5	13 13
α Eridani	3 52	-13 51	5	6 38
α Lani.	4 29	+16 16	5	10 9
ι Antares	4 49	+32 58	5	2 39
β Eridani	5 2	-5 15	5	9 30
ι Orionis	5 30	-6 0	5	12 53
κ Orionis	5 42	-9 43	5	6 9
α Orionis	5 49	+7 23	5	12 12
μ Gem.	6 16	+22 34	5	6 20

Continued on next page.

For Fundamental Stars.

Date. Sept. 21 - Continued

Name of Star	R.A.	Dec.	i
γ Gem.	6 31	+16 30	5 3 54
α Com. May	6 40	-16 33	(4 59 15)
β Com. May	7 3	-26 12	5 8 20
β Com. Min.	7 21	+8 32	5 7 16
δ Gem.	7 27	+32 9	5 6 45
α Com. Min.	7 33	+5 32	5 4 55
β Gem.	7 38	+28 19	5 6 31

8 35 36 56
5 5 17
23 5 7 43

Sept. 22, 1880

κ Orionis	5 42	-9 43	5 10 17
α Orionis	5 49	+7 23	5 3 0
γ Gem.	6 31	+16 30	5 3 8
α Com. May	6 40	-16 33	(5 19 9)
α Gem.	7 27	+32 9	5 2 2
α Com. Min.	7 33	+5 32	5 6 5
ϵ Leonis	9 39	+24 20	5 8 2
μ Vir. May	10 15	+42 6	5 13 53

7 41 5 36
5 5 12
5 6 38

Sept. 23 - 1880

ζ Ophiuchi	16 30	-10 19	5 9 2
η Herculis	16 39	+39 9	5 10 10
δ Sagittarii	18 48	-26 27	5 11 21
λ Aquilae	19 0	-5 3	5 5 42
β Cygni	19 26	+27 42	5 6 56
γ Aquilae	19 40	+10 19	(5 12 32)
α Aquilae	19 45	+8 33	5 6 47
θ Aquilae	20 5	-1 11	5 8 21
ϵ Leonis	10 2	+12 33	5 9 22
μ Vir. May	10 15	+42 6	5 6 46

9 46 10 34
5 7 52
5 8 17

For Fundamental Stars.

Date	Oct-6	1880	
Name of Star	R.A.	Dec.	i
β Scorpii	15 58	-19 28	5 5 25
ρ Ophiuchi	16 8	-8 23	5 8 49
α Capri.	20 11	-12 53	(5 12 23)
α Cygni	20 37	+44 57	5 4 37
ϵ Cygni.	20 41	+33 31	5 6 7
ρ Com. Virg.	7 3	-26 12	(4 53 36)
ρ Com. Virg.	7 21	+8 32	5 7 53
α Com.	7 27	+32 9	(4 58 39)
α Com. Virg.	7 33	+5 32	5 10 16
β Com.	7 38	+28 19	5 6 9
γ Leonis	10 10	+24 1	5 9 0
μ Virg.	10 15	+42 6	5 3 9
ρ Leonis	11 8	+21 11	5 11 42
γ Cygni.	21 2	+29 44	5 3 39
β Cygni		10	5 1 5 46
			5 6 33 X

Date	Oct-7	1880	
β Aquarii	21 25	-6 6	5 5 38
ϵ Pegasi	21 38	+9 19	5 1 36
α Aquarii	22 0	-0 54	5 1 18
ρ Com. Virg.	7 3	-26 12	5 11 1
ρ Com. Virg.	7 21	+8 32	5 5 46
μ Virg.	10 15	+42 6	5 7 17
		6	30 32 31
			5 5 24 X

Date	Oct-9	1880	
δ Aquarii	20 5	-1 11	5 5 15
χ Cygni	20 18	+39 52	5 4 9
γ Cygni	21 8	+29 44	5 2 39
β Aquarii	21 25	-6 6	5 8 41
ϵ Pegasi	21 38	+9 19	5 6 4
		5	25 27 8
			5 5 24 X

Date	Oct-11	1880	
Name of Star	R.A.	Dec.	i
δ Aquarii	20 5	-1 11	5 7 25
α Capri.	20 11	-12 53	5 4 10
χ Cygni	20 18	+39 52	5 2 44
		5	15 14 19
			5 4 86 X

Date	Oct-12	1880	
γ Cygni	21 8	+29 44	5 3 14
β Aquarii	21 25	-6 6	5 12 49
ϵ Pegasi	21 38	+9 19	5 2 10
α Aquarii	22 0	-0 54	5 5 29
ρ Leonis	11 8	+21 11	5 10 23
		5	26 34 5
			5 6 49 X

Date	Oct-13	1880	
β Aquarii	19 49	+6 6	5 2 20
α Cygni.	20 37	+44 57	5 4 43
ϵ Cygni.	20 41	+33 31	5 5 45
β Aquarii	21 25	-6 6	5 3 4
ϵ Pegasi.	21 38	+9 19	5 2 16
α Virg. And.	22 53	-30 16	5 5 56
β Virg. Virg.	10 53	+57 2	5 7 58
χ Virg. Virg.	11 3	+45 9	(4 58 51)
		7	35 31 12
			5 4 27 X

Date	Oct-14	1880	
η Bootis.	13 49	+19 0	5 9 15
β Aquarii	21 25	-6 6	5 4 48
ϵ Pegasi	21 38	+9 19	5 8 19
α Aquarii	22 0	-0 54	5 0 12
η Pegasi	22 37	+29 35	5 5 12
ρ Com. Virg.	7 21	+8 32	(4 57 36)
α Com.	7 27	+32 9	5 4 32
α Com. Virg.	7 33	+5 32	5 3 14
β Com.	7 38	+28 19	5 2 56
ρ Argus.	8 2	-23 57	5 2 48
		9	45 41 16
			5 4 35

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Collection of Results in order of Date,

Date	Oct. 17-1880
Name of Star	R.A. Dec. i
X Mrs. Maj.	11 3 +45 9 5 6 19
β Leonis	11 8 +21 11 5 11 43
	10 18 2
	1 5 18 19
Date	Oct. 18-1880
α Aquarii	22 0 -0 54 5 1 35
η Pegasi	22 37 +29 35 5 7 33
X Mrs. Maj.	11 3 +45 9 5 0 42
β Leonis	11 8 +21 11 5 3 21
	4 2 1 3 11
	5 3 18

Date	Oct. 19-1880
X Mrs. Maj.	11 3 +45 9 5 7 18
β Leonis	11 8 +21 11 5 10 14
β Leonis	11 43 +15 15 5 2 28
	3 1 5 20 0
	5 6 40

Date	Oct. 20-1880
η Pegasi	22 37 +29 35 5 7 48
X Mrs. Maj.	11 3 +45 9 5 2 23
	2 10 10 11
	5 5 6

Date	Oct. 24-1880
α Hydreae	9 22 -8 8 5 1 39
β Mrs. Maj.	9 25 +52 14 5 4 2
β Mrs. Maj.	10 55 +57 2 5 3 16
X Mrs. Maj.	11 3 +45 9 5 4 50
β Leonis	11 43 +15 15 5 3 51
	5 2 5 19 38
	5 3 32

Date	Oct. 25-1880
β Aquarii	21 25 -6 6 5 1 1
ε Pegasi	21 38 +9 19 5 7 36
α Aquarii	22 0 -0 54 5 8 17
η Pegasi	22 37 +29 35 5 5 23
α Pavois	22 51 -30 16 5 6 46
α Pegasi	22 59 +14 33 5 1 47
β Leonis	11 43 +15 15 5 5 49
	7 3 5 38 39
	5 5 14

Date	Oct. 31-1880
Name of Star	R.A. Dec. i
α Hydreae	9 22 -8 8 5 1 4
β Mrs. Maj.	9 25 +52 14 5 2 13
ε Leonis	9 39 +24 20 4 59 51
	2 10 5 15
	5 1 38

Date	Nov. 1-1880
α Hydreae	9 22 -8 8 5 2 54
ε Leonis	9 39 +24 20 5 10 53
	2 10 13 47
	5 6 54

Date	Nov. 2-1880
ε Pegasi	21 38 +9 19 5 1 43
α Aquarii	22 0 -0 54 5 4 22
α Androm.	0 2 +28 35 5 3 14
α Hydreae	9 22 -8 8 5 2 5
	4 20 12 34
	5 8 6
	2 51

Date	Nov. 3-1880
α Aquarii	19 40 +10 19 5 5 17
α Aquarii	19 45 +8 33 5 5 25
β Aquarii	19 49 +6 6 5 0 40
α Cygni	20 37 44 51 5 9 2
ε Cygni	20 41 33 31 5 11 8
	5 2 5 81 32
	5 6 18

Date	Nov. 7-1880
α Hydreae	9 22 -8 8 5 9 43
α Leonis	10 2 +12 33 5 8 1
ε Leonis	10 10 +24 1 5 4 57
α Virginis	13 19 -10 32 5 5 27
	4 20 28 8
	5 7 2

Date	Nov. 8-1880
α Androm.	0 2 +28 25 5 3 14
α Pegasi	0 7 +14 31 5 8 20
	2 10 13 47
	5 6 47

Date	Nov. 8-1880
α Androm.	0 2 +28 25 5 3 14
α Pegasi	0 7 +14 31 5 8 20
	2 10 13 47
	5 6 47

Date	Nov. 11-1880
Name of Star	R.A. Dec. i
α Pavois	22 51 -30 16 5 8 45
α Pegasi	22 59 +14 33 5 4 58
α Androm.	0 2 +28 25 5 7 27
ε Leonis	10 10 +24 1 5 3 48
	4 20 23 18
	5 5 18
	6 15

Date	Nov. 15-1880
ε Leonis	10 10 +24 1 5 1 35
α Leonis	10 13 +20 27 5 8 15
	2 10 9 58
	5 4 55

Date	Nov. 16-1880
α Cepheus	21 16 +62 4 5 3 6
α Androm.	0 2 +28 25 5 7 43
α Pegasi	0 7 +14 31 5 5 25
	3 15 16 18
	5 5 25

Date	Nov. 18-1880
α Androm.	0 2 +28 25 5 4 21
ε Leonis	10 10 +24 1 5 6 46
α Virginis	12 56 +11 37 5 10 47
	3 15 21 32
	5 7 18

Date	Nov. 21-1880
β Mrs. Maj.	10 55 +57 2 5 0 44
ε Virginis	12 56 +11 37 5 10 15
α Virginis	13 19 -10 32 5 8 56
	3 16 19 55
	5 6 38

Date	Nov. 22-1880
α Androm.	1 57 +41 45 5 0 45
η Bootis	13 49 +19 0 5 0 58
	2 10 1 3
	5 0 52

Date	Nov. 23-1880
α Virginis	13 19 -10 32 4 57 57
η Bootis	13 49 +19 0 5 1 40
	1 3 1 10

For Fundamental Stars.Date. Dec 9-1880

Name of Star	R.A.	Dec	L
γ Pegasi	0 7	+14 31	5 3 58
γ Androm.	1 56	+41 45	5 4 42
α Arietis	2 0	+22 53	4 53 51

$$\begin{array}{r} 2 \ 10 \ 8 \ 50 \\ 5 \ 4 \ 20 \end{array}$$
Dec. 13-1880

ϵ Corvi.	12 4	-21 57	5 7 5
ρ Corvi.	12 24	-15 50	5 3 33
β Corvi.	12 28	-22 44	5 5 52

$$\begin{array}{r} 3 \ 15 \ 14 \ 30 \\ 5 \ 5 \ 20 \end{array}$$
Both 8-1880Dec. 16 1880

β Arietis	1 48	+20 13	5 2 54
γ Androm.	1 56	+41 45	5 9 37
γ Mus. Maj.	11 47	+54 22	5 6 53
ϵ Virginis	12 56	+11 37	5 10 11
ρ Bootis	15 11	+33 46	5 7 56

$$\begin{array}{r} 5 \ 55 \ 37 \ 33 \\ 5 \ 7 \ 31 \end{array}$$
Dec. 18 1880

γ Androm.	1 56	+41 45	5 6 57
α Arietis	2 0	+22 53	5 5 56

$$\begin{array}{r} 2 \ 10 \ 12 \ 53 \\ 5 \ 6 \ 27 \end{array}$$
Dec. 19-1880

β Bolesonis.	11 43	+15 15	5 2 59
ρ Corvi	12 24	-15 50	5 1 0
γ Virginis	12 36	-0 47	5 4 40

$$\begin{array}{r} 3 \ 15 \ 10 \ 39 \\ 5 \ 3 \ 31 \end{array}$$
Dec. 21-1880

γ Mus. Maj.	11 47	+54 22	5 7 5
ϵ Corvi.	12 4	-21 57	5 1 57
ρ Bootis	15 11	+33 46	5 2 42

$$\begin{array}{r} 3 \ 15 \ 11 \ 44 \\ 5 \ 3 \ 55 \end{array}$$
Date Dec 22 1880

Name of Star	R.A.	Dec	L
β Arietis	1 48	+20 13	5 2 58

γ Androm.	1 56	+41 45	5 3 50
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α Arietis	2 0	+22 53	5 5 53
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ρ Corvi	12 24	-15 50	5 4 37
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γ Virginis	12 36	-0 47	5 4 10
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ϵ Virginis	12 56	+11 37	5 6 18
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ρ Bootis	15 11	+33 46	5 2 24
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$$\begin{array}{r} 7 \ 35 \ 32 \ 40 \\ 5 \ 4 \ 40 \end{array}$$
Dec. 25 1880.

γ Androm.	1 56	+41 45	4 58 42
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α Arietis	2 0	+22 53	4 58 6
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α Ceti	2 56	+3 37	5 0 15
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$$\begin{array}{r} 1 \ 5 \ 0 \ 15 \end{array}$$
Dec. 30-1880

β Arietis	1 48	+20 13	5 7 3
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α Ceti	2 56	+3 37	5 3 31
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$$\begin{array}{r} 2 \ 10 \ 10 \ 34 \\ 5 \ 5 \ 17 \end{array}$$

$\Delta M. + 79^{\circ} 660$
 $20 \ 8 \ 5$
 $+ 79^{\circ} 25$

Book 1 1881

Collection of Results in order of Date

Date	Jan-1-1881
Name of Star	R.A. Dec. i
β Androm.	1 59 -12 26 5 5 17
α Ceti.	2 56 +3 27 4 59 41
α Persae	3 16 +49 26 5 9 33
	3 18 14 31
	5 4 50

Date	Jan-3-1881
Name of Star	R.A. Dec. i
β Androm.	1 59 -12 26 (4 58 23)
γ Virginis	13 55 +2 8 5 3 46
	3 1.0

Date	Jan-12-1881
Name of Star	R.A. Dec. i
Hall's No. 12	2 12 +56 46 5 5 6
β Librae	15 10 -8 56 (4 57 22)
	1 5 5

Date	Jan-15-1881
Name of Star	R.A. Dec. i
γ Persae	2 56 +53 2 5 3 49
α Persae	3 16 +49 26 5 9 3
ϵ Androm.	3 27 -9 52 (4 59 43)
β Androm.	3 37 -10 10 5 3 24
η Tauri.	3 40 +23 44 5 8 38
	4 20 25 54
	5 6 8 14

Date	Feb-11-1881
Name of Star	R.A. Dec. i
β Arietis	1 48 +20 13 5 6 51
γ Androm.	1 56 +41 45 5 6 52
α Arietis	2 0 +22 53 5 8 37
	3 13 32 20
	5 7 27

Date	Feb-13-1881
Name of Star	R.A. Dec. i
η Mus. Maj.	13 43 +49 55 5 3 28
η Bootis	13 49 +19 0 5 4 23
α Bootis	14 10 +19 49 5 8 7
ϵ Bootis	14 40 +27 35 5 5 12
β Librae	15 10 -8 56 (4 57 50)
α Serpentis	15 38 +6 48 5 10 10
γ Ophiuchi	16 30 -10 19 5 2 3
η Herculis	16 39 +39 9 5 6 56
	6 30 30 9
	5 3 5

Date	Feb-14-1881
Name of Star	R.A. Dec. i
β Arietis	1 48 +20 13 5 8 9
γ Androm.	1 56 +41 45 5 2 43
α Tauri.	4 29 +16 16 5 3 3
γ Orionis.	5 19 +6 14 5 7 59
κ Orionis.	5 42 -9 43 5 6 45
α Lyrae	18 33 +38 40 5 5 45
	6 30 34 29
	5 5 44

Date	Feb-15-1881
Name of Star	R.A. Dec. i
α Tauri	4 29 +16 16 5 7 43
ϵ Virginis	4 49 +32 58 5 7 35
β Androm.	5 2 -5 15 (5 10 47)
γ Orionis.	5 19 +6 14 5 4 25
ϵ Orionis	5 30 -1 17 5 7 0
α Columbae	5 35 -34 8 5 8 58
	5 25 34 38
	5 6 58
	7 8

Date	Feb-16-1881
Name of Star	R.A. Dec. i
ϵ Virginis	12 56 +11 37 (4 58 47)
α Virginis	13 19 -10 32 5 7 22
η Mus. Maj.	13 43 +49 55 5 8 5
η Bootis	13 49 +19 0 5 8 47
γ Virginis	13 55 +2 8 5 4 25
γ Bootis.	14 27 +38 50 5 4 41
ϵ Bootis.	14 40 +27 35 5 8 41
γ Librae	14 44 -15 32 5 5 5
β Bootis	14 57 +40 52 5 9 26
β Librae	15 10 -8 56 5 4 45
α Scorpis	15 53 -22 16 5 3 42
β Scorpis.	15 58 -19 28 5 6 39
α Ophiuchi	16 8 -3 23 5 5 28
γ Ophiuchi	16 30 -10 19 5 5 52
η Ophiuchi	17 3 -15 34 5 7 57
	14 71 30 55
	5 6 29

for Fundamental Stars.

Book 2 - 1881

Collection of results in order of Date.

Date	Feb. 17 - 1881
Name of Star.	R.A. Dec. i
β Arietis	1 48 +20 13 5-8 14
χ Androm.	1 56 +41 45 (5 10 36)
α Tauri	4 30 +16 16 5-4 37
i Aurigae	4 49 +32 58 5-3 52
β Eridani	5-2 -5 15 5-9 22
i Aurigae	5-8 +45 52 5-8 2
χ Orionis	5-19 +6 14 5-6 9
ϵ Orionis	5-30 -1 17 5-6 56
κ Orionis	5-42 -9 43 5-4 57
	8 50 47 9 5 5 54 +

Date	Feb. 19 - 1881
α Tauri	4 29 +16 16 5-5 43
i Aurigae	4 49 +32 58 5-5 31
β Eridani	5-2 -5 15 (5-12 58)
β Orionis	5-9 -8 21 5-8 55
χ Orionis	5-19 +6 14 5-6 46
ϵ Orionis	5-30 -1 17 5-6 1
κ Orionis	5-42 -9 43 5-6 3
	6 38 38 59 5 5 54 +

Date	Feb. 21 - 1881
χ Bootis	14 27 +38 50 5-7 17
ϵ Bootis	14 40 +27 35 5-8 14
β Bootis	14 57 +40 52 5-7 38
α Car. Bor.	15-30 +27 7 5-5 42
β Scorp.	15-53 -22 16 5-11 46
β Scorp.	15-58 -19 28 5-7 25
α Ophiuchi	16 8 -3 23 5-2 33
γ Ophiuchi	16 30 -10 19 5-8 39
η Heren.	16 39 +39 9 5-5 20
α Ophiuchi	17 29 +12 39 5-7 46
	10 51 18 20 5 7 14 +

Date	Feb. 22 - 1881
Name of Star.	R.A. Dec. i
β Arietis	1 48 +20 13 5-6 44
χ Androm.	1 56 +41 45 5-9 11
α Arietis	2 0 +22 53 5-5 16
β Eridani	5-2 -5 15 5-4 46
α Leporis	5-27 -17 55 5-8 19
ϵ Orionis	5-30 -1 17 5-6 35
κ Orionis	5-42 -9 43 (4 56 13)
α Orionis	5-49 +7 23 5-4 55
	7 35 35 46 5 6 32 x

Date	Feb. 24 - 1881
χ Androm.	1 56 +41 45 5-9 3
α Arietis	2 0 +22 53 5-4 7
β Eridani	3 37 -10 10 5-9 30
η Tauri	3 40 +23 44 5-4 15
γ Persei	3 47 +31 31 5-10 16
	5 25 36 41 5 7 20 x

Date	Mar. 14 - 1881
μ Gem.	6 16 +22 34 5-6 25
χ Gem.	6 31 +16 30 5-7 8
α Com. Mag.	6 40 -16 33 5-0 50
ϵ Com. Mag.	6 54 -28 48 5-3 21
α Com. Mag.	7 3 -26 12 5-5 9
Com. Min.	7 21 +8 32 5-1 29
α Gem.	7 27 +32 9 (4 58 40)
α Com. Min.	7 33 +5 32 5-8 18
β Gem.	7 38 +28 19 5-5 19
β Argus.	8 2 -23 57 5-0 54
γ Ophiuchi	16 30 -10 19 5-6 17
η Heren.	16 39 +39 9 5-3 43
α Lepor.	18 33 +38 40 5-3 53
α Argill.	18 48 -26 27 (5 11 16)
γ Argulus	19 0 +13 41 5-8 52
	13 66 2 58 5 4 51 x

Date	Mar. 15 - 1881
Name of Star.	R.A. Dec. i
α Persei	3 34 +47 24 5-5 45
η Tauri	3 40 +23 44 5-5 58
γ Persei	3 47 +31 31 5-7 11
α Tauri	4 29 +16 16 5-5 11
i Aurigae	4 49 +32 58 5-8 9
β Eridani	5-2 -5 15 5-8 36
α Columba	5-35 -34 8 5-7 3
κ Orionis	5-42 -9 43 5-8 8
α Gem.	7 27 +32 9 5-3 43
α Com. Min.	7 33 +5 32 5-6 12
β Gem.	7 38 +28 19 5-5 57
	11 56 11 63 5 6 32 +

Date	Mar. 16 - 1881
i Aurigae	4 49 +32 58 (5-9 39)
β Tauri	5 19 +28 30 (4 53 3)

Date	Mar. 20 - 1881
γ Argulus	19 0 +13 41 5-4 52
ϵ Argus.	20 41 +33 31 5-1 31
γ Argus.	21 8 +29 44 5-6 54
	3 16 11 17 5 4 26 (+)

For Fundamental Stars.

Date - Mar. 21 - 1881

Name of Star	R.A.	Dec.	i
Com. Min.	7 21	+8 32	5 4 38
α Gem.	7 27	+32 9	(4 54 54)
α Com. Min.	7 33	+5 32	5 6 12
β Gem.	7 38	+28 19	5 6 0
15 Argus.	8 2	-23 57	5 5 48
δ Scorpi.	15 53	-22 16	5 5 10
β Scorpi.	15 58	-19 28	5 5 57
γ Ophiuchi	16 8	-8 23	5 2 47
α Scorpi.	16 22	-26 10	5 5 0
γ Ophiuchi	16 30	-10 19	5 1 3
η Hercules	16 39	+39 9	5 3 30
η Ophiuchi	17 3	-15 34	5 2 16
α Hercules	17 9	+14 32	5 3 39
ϵ Pegasi	21 38	+9 19	5 4 12
		13	5 5 20
			5 4 20 X

Mar. 22 - 1881

ϵ Com. Min.	6 54	-28 48	5 4 5
δ Com. Min.	7 3	-26 12	5 6 12
Com. Min.	7 21	+8 32	5 5 34
α Gem.	7 27	+32 9	5 4 40
β Draconis	17 28	+52 23	5 1 14
η Serpente	18 15	-2 56	5 9 36
		6	5 5 21
			5 5 4 X

Mar. 23 - 1881

α Ophiuchi	17 29	+12 39	5 6 32
γ Draconis	17 54	+51 30	5 0 10
η Serpente	18 15	-2 56	5 5 53
α Lyrae	18 33	+38 40	5 9 8
α Sagitt.	18 48	-26 27	5 4 57
α Aquilae	19 0	-5 3	5 1 57
β Cygni	19 26	+27 42	5 5 15
α Aquilae	19 45	+8 33	5 4 30
β Cygni	19 49	+6 6	5 6 10
γ Cygni	20 18	+39 52	5 5 51
		10	5 5 45
			5 5 24 X

Date - Mar. 24 - 1881

Name of Star	R.A.	Dec.	i
β Larii.	5 19	+28 30	5 7 53
α Leporis.	5 27	-17 35	5 4 14
γ Orionis	5 30	-6 0	5 5 31
α Columbae	5 35	-34 8	5 0 52
κ Orionis	5 42	-9 43	5 10 48
α Orionis	5 49	+7 23	5 3 1
ϵ Pegasi	21 38	+9 19	5 6 8
Mercury.	22 56	-6 18	5 1 48
		8	5 5 15
			5 4 47 X
			5 5 2

Mar. 25 - 1881

μ Gem.	6 16	+22 34	5 4 45
ϵ Com. Min.	6 54	-28 48	(4 59 57)
Com. Min.	7 21	+8 32	5 7 35
α Gem.	7 27	+32 9	5 4 18
α Com. Min.	7 33	+5 32	5 1 17
β Gem.	7 38	+28 19	5 7 7
15 Argus.	8 2	-23 57	5 6 27
		5	5 5 44
			5 5 22 X
			5 5 21

G. 3212
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 20 16 2
 +84° 19'
 Book 3-1881

Collection of results in order of Date

Date	Mar. 28-1881
Name of Star	R.A. Dec. i
γ Persei	3 47 +31 31 5 4 34
α Tauri	4 29 +16 16 5 5 43
β Orionis	5 26 -0 24 5 0 45
ι Orionis	5 30 -6 0 5 5 37
α Orionis	5 49 +7 23 5 7 3
μ Gem.	6 16 +22 34 5 5 1
ϵ Leonis	9 39 +24 20 5 5 42

Date	Mar. 31-1881
Name of Star	R.A. Dec. i
γ Aquilae	19 40 +10 19 5 10 29
χ Cygni	20 18 +39 52 5 3 39
α Cygni	20 37 +44 51 5 8 29

Date	Apr. 2-1881
Name of Star	R.A. Dec. i
β Argus	8 2 -23 57 5 5 10
ϵ Leonis	9 39 +24 20 5 6 48

Date	Apr. 3-1881
Name of Star	R.A. Dec. i
χ Draconis	17 54 +51 30 5 3 49
β Aquilae	19 49 +6 6 5 7 18
θ Aquilae	20 5 -1 11 5 6 50
ζ Capricorn	20 11 -12 55 5 7 35
χ Cygni	20 18 +39 52 5 3 30
Mercury	23 17 -6 18 5 9 8

Date	Apr. 4-1881
Name of Star	R.A. Dec. i
β Com. Virg.	7 3 -26 12 5 7 17
ϵ Leonis	9 39 +24 20 5 6 48
χ Draconis	17 54 +51 30 5 3 49
η Lepantis	18 59 -2 56 5 6 46
α Lepus	18 33 +38 40 5 4 22
λ Aquilae	19 0 -5 3 5 0 8
β Cygni	19 26 +27 42 5 2 6
α Aquilae	19 45 +8 33 5 6 48
β Aquilae	19 49 +6 6 5 7 18
χ Cygni	20 18 +39 52 5 3 39
α Cygni	20 37 +44 51 5 8 29
ϵ Cygni	20 41 +33 31 5 7 41

Date	April 7-1881
Name of Star	R.A. Dec. i
χ Androm.	1 56 +41 45 5 8 44
β Tauri	5 19 +28 30 5 5 39
ζ Orionis	5 35 -2 0 5 9 36
η Lepantis	18 59 -2 56 5 6 46
α Lepus	18 33 +38 40 5 4 22
θ Argitt.	18 48 -26 27 5 3 24
ζ Aquilae	19 0 +13 41 5 10 13
α Aquilae	19 45 +8 33 5 6 48
β Aquilae	19 49 +6 6 5 7 18
χ Cygni	20 18 +39 52 5 3 39
α Cygni	20 37 +44 51 5 8 29
ϵ Cygni	20 41 +33 31 5 7 41
η Regiae	22 37 +29 35 5 5 30
Mercury	23 31 +5 20 5 2 21

Date	Apr. 9-1881
Name of Star	R.A. Dec. i
β Argus	8 2 -23 57 5 5 10
α Lygae	9 22 -8 8 4 48 53
ϵ Leonis	9 39 +24 20 5 6 48
α Leonis	10 2 +12 33 4 59 40
ζ Leonis	10 10 +24 1 5 4 35

Date	Apr. 10-1881
Name of Star	R.A. Dec. i
ζ Aquilae	19 0 +13 41 5 10 13
β Cygni	19 26 +27 42 5 2 6
β Aquilae	19 49 +6 6 5 7 18
θ Aquilae	20 5 -1 11 5 6 50
χ Cygni	20 18 +39 52 5 3 39
α Cygni	20 37 +44 51 5 8 29
ϵ Cygni	20 41 +33 31 5 7 41

Date	Apr. 11-1881
Name of Star	R.A. Dec. i
β Orionis	5 26 -0 24 5 0 45
ι Orionis	5 30 -6 0 5 5 37
ζ Orionis	5 35 -2 0 5 9 36
α Orionis	5 49 +7 23 5 7 3
μ Gemm.	6 16 +22 34 5 5 1
χ Gem.	6 31 +16 30 5 1 8
β Com. Virg.	7 3 -26 12 5 7 17
Com. Virg.	7 21 +8 32 5 3 43
ϵ Leonis	9 39 +24 20 5 6 48
α Leonis	10 2 +12 33 4 59 40
ζ Leonis	10 10 +24 1 5 4 35
μ Mus. Virg.	10 15 +42 6 5 1 50

For Fundamental Stars.

Date - Apr. 16 - 1881

Name of Star	R.A.	Dec.	i
α Leonis	10 2	+12 33	4 58 41
γ Leonis	10 10	+24 1	4 52 28
ϵ Leonis	10 18	+20 27	4 53 1
		3	24 44 10
			4 54 43

Apr. 17 - 1881

α Cygni	19 0	-5 3	5 2 8
β Cygni	19 26	+27 42	5 0 2
δ Cygni	19 45	+8 83	5 1 16
θ Cygni	19 49	+6 6	4 59 33
ϕ Cygni	20 5	-1 11	4 58 4
ζ Capricorn	20 11	-12 55	4 56 6
χ Cygni	20 18	+39 52	4 58 19
ϵ Cygni	20 41	+33 31	4 59 55
ζ Cygni	21 8	+29 44	4 58 11
β Capricorn	21 25	-6 6	5 3 14
		10	4 59 56 58
			4 58 29
			4 59 41

Apr. 18 - 1881

α Hydrae	9 22	-8 8	4 58 54
α Leonis	10 2	+12 33	4 56 26
μ Ursae	10 15	+42 6	5 2 33
λ Ursae	11 3	+45 9	5 1 31
β Cygni	19 26	+27 42	4 49 45
χ Cygni	19 40	+10 19	5 1 2
δ Cygni	19 45	+8 33	5 0 8
θ Cygni	20 5	-1 11	5 3 17
χ Cygni	20 18	+32 52	5 0 13
α Cygni	20 37	+44 57	5 0 12
ζ Cygni	21 8	+29 44	5 0 39
ϵ Pegasi	21 38	+9 19	4 57 37
		11	5 3 08 2
			5 0 3

Date - Apr. 19 1881

Name of Star	R.A.	Dec.	i
ϵ Ursae	6 54	-28 48	4 57 18
μ Ursae	7 21	+8 32	5 0 52
α Ursae	7 33	+5 32	4 59 13
α Hydrae	9 22	-8 8	4 54 4
ϵ Leonis	9 39	+24 20	4 58 15
α Leonis	10 2	+12 33	4 58 6
γ Leonis	10 10	+24 1	4 59 25
μ Ursae	10 15	+42 6	4 59 34

Apr. 20 - 1881

γ Leonis	10 10	+24 1	5 4 35
μ Ursae	10 15	+42 6	4 59 45
λ Ursae	11 3	+45 9	5 3 42
θ Sagittae	18 48	-26 27	5 1 52
χ Cygni	19 40	+10 19	5 0 26
α Cygni	19 45	+8 33	4 59 27
α Cygni	20 37	+44 57	5 0 43
ϵ Cygni	20 41	+33 31	4 59 59
ζ Cygni	21 8	+29 44	5 2 20
		7	34 12 42
			4 57 15
			5 0 39

Book 4-1881

Collection of results in order of Date.

Date. April 21-1881

Name of Star	R.A.	Dec.	\bar{c}
ϵ Leonis	9 39	+24 19	$\begin{smallmatrix} 0 & 1 & 11 \\ 4 & 56 & 12 \end{smallmatrix}$
ζ Leonis	10 10	+24 1	$\begin{smallmatrix} 5 & 1 & 9 \\ 1 \end{smallmatrix}$

Apr. 23-1881

ζ Leonis	10 10	+24 1	5 3 13
μ UMa	10 15	+42 6	4 58 30

Apr. 24-1881

δ Cygni	20 5	-1 11	5 1 0
χ Cygni	20 18	+39 52	4 59 37
α Cygni	20 37	+44 51	5 1 20
Mercury	0 55	+3 8	$\begin{smallmatrix} 4 & 50 & 37 \\ 3 & 15 & 15 \\ 5 & 0 & 5 \end{smallmatrix}$

Apr. 25-1881

ζ Leonis	10 10	+24 1	4 59 8
μ UMa	10 15	+42 6	5 1 50
δ Cygni	20 5	-1 11	4 58 56
ζ Capricorn	20 11	-12 55	4 58 44
ϵ Cygni	20 41	+33 31	$\begin{smallmatrix} 4 & 56 & 57 \\ 5 & 24 & 54 \\ 4 & 59 & 7 \end{smallmatrix}$

Apr. 28-1881

α Leonis	10 2	+12 33	5 1 2
ζ Leonis	10 10	+24 1	5 2 28
ϕ UMa	11 3	+45 8	4 58 57
ρ Leonis	11 8	+21 11	$\begin{smallmatrix} 4 & 57 & 32 \\ 4 & 19 & 59 \\ 4 & 59 & 5 \\ 5 & 0 & 0 \end{smallmatrix}$

May 9-1881

β UMa	10 55	+57 2	5 2 25
ρ Leonis	11 8	+21 11	$\begin{smallmatrix} 5 & 0 & 43 \\ 2 & 10 & 3 \\ 5 & 1 & 34 \end{smallmatrix}$

Date- May 23-1881

Name of Star	R.A.	Dec.	\bar{c}
β Corvi	12 28	-22 44	$\begin{smallmatrix} 0 & 1 & 13 \\ 4 & 56 & 13 \end{smallmatrix}$
χ Virginis	12 36	-0 47	$\begin{smallmatrix} 4 & 57 & 8 \\ 4 & 53 & 81 \\ 4 & 51 & 34 \\ 4 & 56 & 40 \end{smallmatrix}$

May 24-1881

β Leonis	11 43	+15 15	4 54 16
χ Virginis	12 36	-0 47	4 54 51
ϵ Virginis	12 56	+11 37	4 59 56
η Pegasi	22 37	+29 35	$\begin{smallmatrix} 4 & 55 & 2 \\ 3 & 14 & 48 \\ 4 & 56 & 16 \\ 4 & 56 & 36 \end{smallmatrix}$

May 26-1881

β Leonis	11 43	+15 15	4 55 51
χ UMa	11 48	+54 21	4 56 50
ϵ Corvi	12 4	-21 56	4 59 57
α Corvi	12 24	-15 50	5 5 59
β Corvi	12 28	-22 44	5 0 43
ϵ Virginis	12 56	+11 37	$\begin{smallmatrix} 4 & 53 & 55 \\ 5 & 24 & 49 \\ 4 & 57 & 38 \\ 4 & 57 & 47 \end{smallmatrix}$

For Fundamental Stars.

$\frac{h}{m} = 12.13$
 $\frac{h}{m} = 20.22.58$
 $+ 80.10$

Book 5-1881

Collection of results in order of Date.

Date	Aug. 21-1881			
Name of Star	R.A.	Dec.	i	
α Orionis	5 49	+ 7 23	4 43	39
μ Gem.	6 16	+22 34	4 43	53
χ Gem.	6 31	+16 30	4 42	0
α Com. Virg.	6 40	-16 33	4 47	35
β Com. Virg.	7 3	-26 12	4 43	12
α^2 Gem.	7 27	+32 9	4 44	6
α Com. Min.	7 33	+5 32	4 43	30
β Gem.	7 38	+28 19	4 45	46
			83 14 59	
			4 44 52	+

Date	Aug. 22-1881			
γ Bootis	14 27	+38 50	4 45	16
α Lickiae	14 44	-15 33	4 48	56
β Bootis	14 57	+40 52	4 43	18
α Cor. Bor.	15 30	+27 7	4 48	43
α Serpente	15 38	+6 48	4 46	5
α Com. Min.	7 33	+5 32	4 42	46
			6 28 55	
			4 45 51	+

Date	Aug. 30-1881			
α Bootis	14 10	+19 48	4 49	4
γ Bootis	14 27	+38 50	4 42	0
β Bootis	14 57	+40 52	4 39	32
α Cor. Bor.	15 30	+27 7	4 41	25
α Serpente	15 38	+6 48	4 41	46
β Scapin	15 53	-22 17	4 40	17
β Scapin	15 59	-19 29	4 43	59
β Orionis	5 9	-8 20	4 44	23
α^2 Gem.	7 27	+32 19	4 41	36
α Com. Min.	7 33	+5 32	4 44	21
β Gem.	7 38	+28 19	4 41	5
			11 57 49 25	
			4 42 41	+

Date	Aug 31-1881			
Name of Star	R.A.	Dec.	i	
β Draconis	17 28	+52 24	4 42	53
η Serpente	18 15	-2 56	4 45	24
α Lyrae	18 33	+38 41	4 41	46
			3 18 22	
			4 43 21	
Date	Sept. 1-1881			
γ Draconis	17 54	+51 31	4 46	33
η Serpente	18 15	-2 56	4 44	0
γ Ugrulae	19 0	+13 42	4 42	49
			3 14 18 22	
			4 44 27	+

Date	Sept. 6-1881			
α Com. Min.	7 33	+5 32	4 48	46
β Gem.	7 38	+28 19	4 42	44
α Cor. Bor.	15 30	+27 7	4 48	35
			2 7 31 30	
			4 45 43	+

Date	Sept. 7-1881			
α Cor. Bor.	15 30	+27 7	4 45	35
β Scapin	15 59	-19 29	4 47	17
γ Ophiuchi	16 31	-10 20	4 42	14
η Herculis	16 39	+39 9	4 42	26
η Ophiuchi	17 3	-15 34	4 42	40
α Herculis	17 9	+14 32	4 44	48
α Tami	4 29	+16 16	4 45	5
β Eridani	5 2	-5 14	4 38	1
β Tami	5 19	+28 30	4 41	5
			8 48 59 27	
			39 58 7	
			4 44 28	+
			4 43 53	

Date	Sept. 8-1881			
Name of Star	R.A.	Dec.	i	
β Eridani	15 11	-8 57	4 47	10
α Cor. Bor.	15 30	+27 7	4 41	24
α Serpente	15 38	+6 48	4 38	3
β Scapin	15 53	-22 17	4 42	9
β Scapin	15 59	-19 29	4 43	25
β Ophiuchi	16 8	-3 23	4 43	47
β Herculis	16 25	+21 45	4 41	22
γ Ophiuchi	16 31	-10 20	4 40	44
η Herculis	16 39	+39 9	4 46	1
η Serpente	18 15	-2 56	4 45	11
α Lyrae	18 33	+38 41	4 41	58
δ Sagitt.	18 48	-26 26	4 40	48
γ Aquilae	19 0	+13 42	4 37	33
			12 56 41	
			4 42 55	+
Date	Sept. 12-1881			
η Serpente	18 15	-2 56	4 44	2
α Lyrae	18 33	+38 41	4 39	8
δ Sagitt.	18 48	-26 26	4 42	49
γ Aquilae	19 0	+13 42	4 40	9
β Cygni	19 26	+27 43	4 42	33
γ Aquilae	19 41	+10 20	4 40	20
α Aquilae	19 46	+8 34	4 41	59
β Aquilae	19 50	+6 7	4 46	34
δ Aquilae	20 5	-1 10	4 43	10
α Leporis	20 12	-12 54	4 43	55
α Tami	4 29	+16 16	4 37	15
α Antares	4 49	+32 59	4 45	6
β Eridani	5 2	-5 14	4 41	41
γ Orionis	5 19	+6 15	4 43	49
α Leporis	5 28	-17 54	4 45	19
α Orionis	5 30	-1 17	4 43	6
γ Orionis	5 35	-2 0	4 43	24
			14 50 7 12	
			4 42 36	+

For Fundamental Stars.

Date	Sept. 13 - 1881			
Name of Star	R.A.	Dec.	i	
α Bootis	14 10	+19 48	4 42 35	
β Cygni	19 26	+27 43	4 39 36	
γ Arginiae	19 41	+10 20	4 33 44	
α Arginiae	19 45	+8 34	4 44 7	
β Arginiae	19 50	+6 7	4 42 7	
δ Arginiae	20 5	-1 10	4 40 49	
ζ Capricorni	20 12	-12 54	4 42 50	
ι Antares	4 49	+32 59	4 44 23	
β Eridani	5 2	-5 14	4 37 9	
γ Orionis	5 19	+6 15	4 38 32	
α Leporis	5 28	-17 54	4 33 56	
ϵ Orionis	5 30	-1 17	4 38 59	
ζ Orionis	5 35	-2 0	4 43 56	
κ Orionis	5 42	-9 43	4 42 21	
λ Orionis	5 49	+7 23	4 40 11	

Date	Sept. 15 - 1881			
α Cor. Bor.	15 30	+27 7	4 41 47	
α Serpentes	15 38	+6 48	4 46 8	
β Scorpion	15 53	-22 17	4 39 46	
β Scorpion	15 59	-19 29	4 41 10	
δ Ophiureti	16 8	-3 23	4 41 22	
ζ Ophiureti	16 31	-10 20	4 39 48	
κ Herculis	16 39	+39 9	4 40 53	
η Ophiureti	17 3	-15 34	4 41 20	
λ Herculis	17 9	+14 32	4 44 42	

9 42 16 53
4 41 39

Date	Sept. 17 - 1881			
Name of Star	R.A.	Dec.	i	
α Lyrae	18 33	+38 41	4 35 47	
δ Sagittae	18 48	-26 26	4 48 40	
β Cygni	19 26	+27 43	4 40 42	
γ Arginiae	19 41	+10 20	4 42 38	
α Arginiae	19 45	+8 34	4 39 32	
β Arginiae	19 50	+6 7	4 44 22	
δ Arginiae	20 5	-1 10	4 44 21	
ζ Capricorni	20 12	-12 54	4 35 18	
γ Cygni	20 18	+39 53	4 37 17	

Sept. 19 - 1881

α Serpentes	15 38	+6 48	4 43 19
β Scorpion	15 53	-22 17	4 39 40
β Scorpion	15 59	-19 29	4 35 48
δ Ophiureti	16 8	-3 23	4 45 24
ζ Ophiureti	16 31	-10 20	4 40 53
η Herculis	16 39	+39 9	4 42 35
η Ophiureti	17 3	-15 34	4 40 44
λ Herculis	17 9	+14 32	4 46 29
α Ophiureti	17 29	+12 39	4 45 10
α Arginiae	19 0	-5 3	4 43 46
β Cygni	19 26	+27 43	4 43 49
γ Arginiae	19 41	+10 20	4 43 26
α Arginiae	19 45	+8 34	4 42 3
β Arginiae	19 50	+6 7	4 46 21
δ Arginiae	20 5	-1 10	4 40 57
ζ Capricorni	20 12	-12 54	4 42 14
γ Cygni	20 18	+39 53	4 44 57
β Eridani	5 2	-5 14	4 40 28
β Tauri	5 19	+28 30	4 43 27
κ Orionis	5 42	-9 43	4 37 15
α Orionis	5 49	+7 23	4 45 14
μ Gem.	6 16	+22 34	4 42 30

19 82 38 57

4 48 4
4 42 31

Date	Sept. 20 - 1881			
Name of Star	R.A.	Dec.	i	
α Arginiae	19 0	-5 3	4 46 51	
β Cygni	19 26	+27 43	4 46 30	
γ Arginiae	19 41	+10 20	4 42 54	
δ Arginiae	20 5	-1 10	4 42 18	
ζ Capricorni	20 12	-12 54	4 36 52	
γ Cygni	20 18	+39 53	4 39 51	
δ Herculis	9 25	+52 13	4 42 44	

Sept. 21 - 1881

β Scorpion	15 59	-19 29	4 39 0
ζ Ophiureti	16 31	-10 20	4 41 48
η Herculis	16 39	+39 9	4 36 59
η Ophiureti	17 3	-15 34	4 40 29
λ Herculis	17 9	+14 32	4 39 49
α Ophiureti	17 29	+12 39	4 42 49

Sept. 25 - 1881

ζ Orionis	5 35	-2 0	4 42 10
α Orionis	5 49	+7 23	4 42 1
γ Gem.	6 31	+16 30	4 41 1
α Com. Hyg.	6 40	-16 33	4 44 28
δ Com. Hyg.	7 4	-26 12	4 40 56
α Hydrae	9 22	-8 9	4 45 55
α Leporis	10 2	+12 33	4 39 2
ζ Leporis	10 13	+20 26	4 40 2

8 82 38 57

4 41 54

Book 6-1881

Collection of results in order of Date.

Date. Sept. 26-1881.

Name of Star	R.A.	Dec.	i
η Ophiuchi	17 3	-15 34	4 39 4
α Hercules	17 9	+14 32	(4 33 7)
δ Ophiuchi	17 29	+12 39	4 41 56
γ Draconis	17 54	+51 31	4 43 10
β Cygni	19 26	+27 43	4 41 27
γ Aquilae	19 41	+10 20	4 42 25
		5 23 28	4 41 36 +

Sept. 28-1881

κ Orionis	5 42	-9 43	4 42 13
α Orionis	5 49	+7 23	4 42 47
μ Gem.	6 16	+22 34	4 41 50
		3 14 6 50	4 41 57 +

Oct. 1-1881

γ Cygni	20 18	+39 53	4 40 3
δ Cygni	20 37	+44 52	4 42 33
ϵ Cygni	20 41	+33 32	4 38 44
		3 14 1 20	4 40 20 +

Oct. 3-1881

η Hercules	16 39	+39 9	4 36 46
β Cygni	19 26	+27 43	4 40 58
γ Aquilae	19 41	+10 20	4 39 47
δ Aquilae	19 45	+8 34	4 37 25
β Aquilae	19 50	+6 7	4 43 51
θ Aquilae	20 5	-1 10	(4 49 32)
ζ Capri.	20 12	-12 54	4 41 4
γ Cygni	20 18	+32 53	4 39 36
δ Cygni	20 37	+44 52	4 41 49
ϵ Cygni	20 41	+33 32	4 41 27
ϵ Can. Vig.	6 54	-28 49	4 35 34
		16 58 15	4 39 51 +
		17 39 50	

Continued

Date. Oct. 3-1881 Cont.

Name of Star	R.A.	Dec.	i
α Can. Vig.	7 4	-26 12	4 40 7
β Can. Min.	7 21	+8 31	4 40 58
α Gem.	7 27	+32 9	4 37 53
α Can. Min.	7 33	+5 32	4 40 14
β Gem.	7 38	+28 19	4 39 19
15 Argus	8 3	-23 58	4 40 19
ϵ Leonis	9 39	+24 19	4 40 39
δ Leonis	10 2	+12 33	4 45 41
ζ Leonis	10 10	+24 0	4 40 12
η Leonis	10 13	+20 26	(4 55 20)
		19 42 52	4 40 36 +
		4 40 36	4 40 36 12

Oct. 4-1881

α Can. Min.	7 33	+5 32	4 41 6
β Gem.	7 38	+28 19	4 41 16
15 Argus	8 2	-23 58	4 37 28
ϵ Leonis	9 39	+24 19	4 37 20
		4 18 37 10	4 39 18 +

Oct. 5-1881

β Cygni	19 26	+27 43	4 36 47
γ Aquilae	19 41	+10 20	4 36 21
δ Aquilae	19 45	+8 34	4 37 0
β Aquilae	19 50	+6 7	4 40 45
β Orionis	5 9	-8 20	(4 48 27)
β Leonis	5 19	+28 30	4 34 13
α Can. Min.	5 35	-34 8	(4 31 34)
κ Orionis	5 42	-9 43	4 36 42
δ Orionis	5 49	+7 23	4 45 4
μ Gem.	6 16	+22 34	4 40 18
γ Gem.	6 31	+16 30	4 42 45
α Can. Vig.	7 4	-26 12	4 33 22
β Can. Min.	7 21	+8 31	4 38 57
α Gem.	7 27	+32 9	4 45 51
α Can. Min.	7 33	+5 32	4 41 22
β Gem.	7 38	+28 19	4 34 51
η Leonis	10 13	+20 26	4 40 53

For Fundamental Stars.

Date	Oct. 6 - 1881		
Name of Star	R.A.	Dec.	i
η Herculis	16 39	+39 9	4 36 29
η Ophiuchi	17 2	-15 24	4 34 25
δ Herculis	17 9	+14 32	4 38 56
α Ophiuchi	17 29	+12 39	(4 45 11)
γ Draconis	17 54	+51 31	4 40 16
α Lyrae	18 33	+38 41	4 36 4
α Lyrae	18 48	-26 26	4 40 7
ϵ Leonis	9 39	+24 19	4 36 22
α Leonis	10 2	+12 33	4 43 13

Oct. 7 - 1881

δ Ophiuchi	16 8	-3 23	4 44 26
η Herculis	16 39	+39 9	4 39 41
η Ophiuchi	17 2	-15 24	4 38 7
δ Herculis	17 9	+14 32	4 37 31

Oct. 9. 1881

ϵ Com. May	6 54	-28 49	4 36 45
δ Com. May	7 4	-26 12	4 41 29
γ Leonis	10 10	+24 0	4 37 59
γ Leonis	10 13	+20 26	4 42 52
δ Leonis	11 8	+21 10	4 40 11

Oct. 10 - 1881

α Serpens	15 38	+6 48	4 40 24
β Com. Min.	7 21	+8 31	4 34 46
α Com. Min.	7 33	+5 32	4 39 23
α Leonis	10 2	+12 33	4 38 59
γ Leonis	10 10	+24 0	4 40 33
γ Leonis	10 13	+20 26	4 40 24
χ Urs. May	11 3	+45 8	4 37 19

Date - Oct. 11 - 1881

Name of Star	R.A.	Dec.	i
η Serpens	18 15	-2 56	4 36 44
α Lyrae	18 33	+38 41	4 40 13
δ Lyrae	18 48	-26 26	4 35 46
δ Lyrae	19 0	-5 3	(4 45 57)

Oct. 12 - 1881

ϵ Leonis	9 39	+24 19	4 41 3
α Leonis	10 2	+12 33	4 41 34
γ Leonis	10 10	+24 0	4 36 20
γ Leonis	10 13	+20 26	4 38 21

Oct. 13 - 1881

α Lyrae	18 33	+38 41	4 38 1
ϵ Pegasi	21 38	+9 20	4 36 7
β Com. Min.	7 21	+8 31	4 42 2
α^2 Gem.	7 27	+32 9	4 34 43
μ Urs. May	10 15	+42 6	4 40 38
δ Leonis	11 8	+21 10	4 36 2

Book - 7.

Dec. 17 - 1881

γ Pegasi	0 7	+14 32	4 57 34
β Androm.	1 48	+20 14	5 2 35
γ Androm.	1 57	+41 46	4 59 31

Dec. 18 - 1881

δ Corvi	12 24	-15 50	5 2 34
γ Virginis	12 36	-0 48	4 51 33

Collection of Results for inclination i .

From Feb. 15 to June 1 1879

Date	No of Obs.	i
Feb. 15	9 4	59 26
" 16	4 4	58 50
" 18	23 5	0 40 4 55 35
" 21	2 4	59 53
" 22	5 5	0 11
" 23	5 5	0 51 5 0 15
" 24	8 4	58 39
" 26	11 4	57 16
" 27	4 4	59 55 4 58 37
Mar 2	2 5	2 16
" 3	10 5	0 13
" 4	2 4	57 25 4 55 58
" 5	10 4	58 23
" 8	8 4	58 23
" 11	6 5	0 17 4 55 04
" 12	3 4	56 9
" 13	8 4	58 41
" 15	1 4	56 6 4 50 57
" 16	6 4	59 17
" 17	2 4	57 5
" 18	11 4	59 11 4 58 41
" 19	7 5	1 7
" 20	5 4	58 44
" 23	4 4	57 18 4 55 03
" 25	2 5	1 17
" 26	7 4	59 44
" 30	2 4	58 51 4 55 57
Apr 1	16 4	58 34
" 2	12 4	59 51
" 6	12 4	58 7 4 55 55
" 7	13 4	58 5
" 8	22 4	59 41
" 9	11 4	58 22 4 55 41
33	225 140 1454 931	4 55 42

From Feb. 15 to June 1, 1879.
continued.

Date	No obs	i
Apr 12	3 5	0 24
" 13	3 4	58 19
" 14	20 4	59 15 4 55 15
" 16	13 4	58 19
" 19	6 4	59 1
" 20	23 4	59 9 4 45 50
" 21	18 4	58 44
" 22	13 4	58 59
" 23	10 4	57 42 4 58 28
" 24	11 4	58 5
" 30	8 4	58 30
May 1	16 4	58 10 4 58 15
" 5	13 4	58 8
" 6	7 4	58 56
" 7	9 4	58 16 4 55 27
" 8	13 4	58 31
" 10	3 5	0 9
" 12	2 4	58 3 4 55 51
" 13	3 4	56 29
" 14	5 4	58 25
" 29	3 4	58 44 4 55 53
" 30	1 4	57 41
" 31	2 4	58 7
June 1	5 4	58 16 4 55 1
24	210 98 1275 562	4 54 247
33	225 140 1454 931	4 55 42
57	435 238 2729 1493	4 55 42
7	4 58 19	4 55 42
1107	55	4 55 15

From June 4 to July 10

Date	No obs	i
June 4	8 4	56 30
" 5	6 4	57 56
" 8	10 4	56 44
" 9	2 4	56 17
" 14	26 16	225 147

From June 14 to July 10 1879
Continued.

Date	No obs	i
June 16	2 4	55 56
" 17	2 4	55 11
" 18	8 4	56 3
" 19	7 4	55 34
" 20	2 4	55 33
" 21	11 4	55 23
" 22	4 4	55 13
" 23	8 4	57 35
" 24	8 4	55 54
" 25	4 4	56 00
" 26	9 4	56 58
" 30	12 4	56 30
July 1	8 4	57 30
" 2	5 4	58 40
" 3	3 4	56 18
" 8	1 4	56 57
" 9	3 4	57 19
" 10	5 4	57 42
18	102 72 1007 556	
4	26 16 225 147	
22	128 88 1232 703	
+	6 4 56 32	

From Aug 12/79 to Sept 10/80

Date	No obs	i
Aug 12	2 5	28 5
" 13	4 5	28 41
" 14	3 5	28 51
" 19	3 5	27 18
" 20	10 5	30 1
" 21	2 5	29 26
" 23	9 5	29 5
" 24	4 5	27 43
8	37 40 226 190	

From Sept 12/79 to Sept 25/80.
Continued.

Date	Noobs.	i
Sept 5	2 5	30 15
" 6	5 5	30 56
" 7	2 5	31 1
" 8	11 5	30 36
" 9	5 5	28 14
" 10	5 5	27 58
" 11	7 5	27 20
" 14	14 5	29 24
" 15	2 5	30 44
" 16	4 5	28 9
" 17	4 5	27 0
" 19	5 5	30 6
" 20	9 5	28 33
" 23	6 5	30 12
" 24	9 5	30 36
" 25	11 5	29 11
16	101 80	464 375
8	37 40	226 190
24	138 120	690 565
	6 5	29 9

From Sept 26/79 to March 10/80
Dates No. Obs. i

Sept 26	9 5	30 25
" 27	7 5	29 51
" 29	6 5	30 28
" 30	8 5	30 16
Oct 1	8 5	29 57
" 2	6 5	30 31
" 4	11 5	31 2
" 5	4 5	30 16
" 7	17 5	30 46
" 8	4 5	30 58
10	85 80	299 320

From Sept 26¹⁷⁷ to March 10/80
Continued

Date	No. Obs.	i
Oct 12	2 5	30 5
" 13	9 5	30 45
" 14	6 5	31 45
" 15	4 5	29 48
" 18	6 5	31 10
" 19	6 5	30 47
" 20	7 5	29 29
" 21	2 5	31 50
" 25	3 5	30 35
" 26	8 5	31 4
" 27	5 5	30 5
" 29	9 5	29 53
" 30	7 5	31 16
Nov 15	2 5	31 14
" 16	7 5	32 31
" 24	2 5	30 34
" 25	4 5	31 53
" 26	4 5	30 8
" 29	2 5	30 34
" 30	2 5	28 42
Dec 1	4 5	30 15
" 4	8 5	31 37
" 7	4 5	30 31
" 8	3 5	29 28
" 9	1 5	32 8
" 15	8 5	30 43
" 17	8 5	30 13
" 18	7 5	30 14
" 29	4 5	31 34
" 31	3 5	30 20
1880		
Jan 1	4 5	32 39
Mar 10	4 5	31 14
32	155 160	970 882
10	82 50	299 330
42	237 210	1269 1212
	5 30	42

From March 16 to April 23/80

Mar 15	3 4	59 30
" 17	5 5	0 14
" 21	6 5	0 55
" 22	2 5	0 41
" 25	8 5	3 11
" 30	10 5	2 6
" 31	7 5	1 33
April 1	11 5	0 47
" 4	4 5	2 40
" 5	8 5	0 29
" 6	2 5	0 58
" 7	7 5	0 43
" 8	10 4	59 42
" 10	8 5	0 16
" 11	4 4	59 14
" 12	14 4	59 22
" 13	2 5	3 19
" 14	3 4	58 16
" 18	3 4	59 7
" 20	4 4	57 2
" 21	7 4	58 38
" 22	4 4	59 40
" 23	3 5	0 23
23	135 106	536 645
	6 5	0 17

From April 26 to June 9/80

April 26	8 4	58 34
May 2	5 4	56 12
" 4	1 4	53 11
" 8	4 4	53 17
" 10	3 4	54 9
" 11	3 4	55 19
6	24 24	329 102

Collection of Results for inclination i

From April 26 to June 7/80

continued

Date	h.	m.	s.	i.
May 12	2	4	51	4
" 16	3	4	53	16
" 20	1	4	52	31
" 23	2	4	50	21
" 29	2	4	53	22
" 23	2	4	50	18
June 9	6	4	58	44
7	17	28	367	176
6	24	24	329	102
13	41	52	696	278
	3	4	33	54

From June 10 to Aug 15/80

June 10	7	5	1	44
" 13	7	4	59	7
" 17	6	4	58	1
" 21	4	5	0	3
" 22	8	5	1	11
" 27	3	5	0	35
" 28	7	5	1	9
" 30	3	5	3	1
July 7	7	5	0	38
" 8	4	5	2	35
" 28	3	5	4	24
" 29	4	5	5	33
" 31	2	5	3	44
Aug 15	6	5	2	58
74	71	68	139	343
	5	5	1	46

From Aug 17/80 to April 7/81

Date h. m. s. i.

Aug 17	4	5	6	41
" 18	13	5	6	9
" 22	2	5	2	41
" 23	2	5	8	17
" 28	3	5	7	55
Sept 1	4	5	7	27
" 2	11	5	6	8
" 4	5	5	5	30
" 5	6	5	4	10
" 11	6	5	7	5
" 16	4	5	4	55
" 21	23	5	7	43
" 22	7	5	6	38
" 23	9	5	8	17
" 24	5	5	8	56
" 25	8	5	6	52
" 28	4	5	6	34
" 29	19	5	6	53
" 30	11	5	6	35
Oct 1	3	5	5	4
" 2	6	5	7	11
" 4	3	5	7	23
" 5	5	5	5	54
" 6	10	5	6	33
" 7	6	5	5	26
" 9	5	5	5	26
" 11	3	5	4	46
" 12	5	5	6	49
" 13	7	5	4	27
" 14	9	5	4	35
" 17	1	5	6	19
" 18	4	5	3	18
" 19	3	5	6	40
" 20	3	5	5	6
34	218	170	193	1043
	6	5	6	11

From Aug 17/80 to Apr 7/81

continued

Date	h.	m.	s.	i.
Oct 24	3	5	3	32
" 25	7	5	5	14
" 31	2	5	1	38
Nov 1	2	5	6	54
" 2	4	5	2	51
" 3	5	5	6	18
" 7	4	5	7	2
" 8	2	5	6	47
" 11	4	5	6	15
" 15	2	5	4	55
" 16	3	5	5	25
" 18	3	5	7	18
" 21	3	5	6	38
" 22	2	5	0	53
" 23	1	5	1	40
Dec 9	2	5	4	20
" 13	3	5	5	30
" 16	5	5	7	31
" 18	2	5	6	27
" 19	3	5	3	31
" 21	8	5	3	50
" 22	7	5	4	40
" 28	1	5	0	15
" 30	2	5	5	17
Jan 1	3	5	4	50
" 3	1	5	3	46
" 12	1	5	5	6
" 15	4	5	6	14
Feb 11	3	5	7	27
" 13	6	5	5	1
" 14	6	5	5	44
" 15	5	5	7	8
" 16	14	5	6	29
33	120	165	150	990

From Aug 17 to Oct 7/81

continued

Date No. of Obs. i.

Oct. 17	8	5	5	54
" 19	6	5	6	30
" 21	10	5	7	14
" 22	7	5	6	32
" 24	5	5	7	20
Nov. 14	13	5	4	51
" 15	11	6	6	32
" 20	3	5	4	26
" 21	13	5	4	20
" 22	6	5	5	4
" 23	10	5	5	4
" 24	8	5	5	2
" 26	5	5	5	21

" 28	7	5	4	56
" 31	3	5	7	32

April 2	2	5	5	54
" 3	6	5	6	22
" 4	11	5	5	19

" 7	14	5	5	42
19	148	95	101	535
34	218	170	193	1043
33	120	165	150	990
86	486	430	444	2568
	6	5	5	40

From April 9 to May 26/81

April 9	4	4	5	6	41
" 10	7	4	5	9	12
" 11	12	4	5	9	40
" 16	3	4	5	4	43
" 17	10	4	5	9	41
" 18	11	5	0	3	
" 19	8	4	5	8	21
" 20	7	5	0	39	
8	62	34	345	140	

From April 9 to May 26/81

continued

Date No. of Obs. i.

April 21	1	5	1	9	
" 23	2	5	1	2	
" 24	3	5	0	39	
" 25	5	4	5	9	7
" 28	4	5	0	0	
May 9	2	5	1	24	
" 23	2	4	5	6	40
" 24	3	4	5	6	36
" 26	5	4	5	7	47
9	27	41	231	204	
8	62	34	345	140	
17	89	75	576	444	
	5	4	59	1	

Aug 31 to Sept 28/81

Aug 21	8	4	4	4	52
" 22	6	4	4	5	51
" 30	11	4	4	2	41
" 31	3	4	4	3	21

Sept 1.

" 6	2	4	4	5	45
" 7	8	4	4	3	53
" 8	12	4	4	2	55
" 12	17	4	4	2	36
" 13	14	4	4	0	48
" 15	9	4	4	1	39
" 17	8	4	4	0	
" 19	19	4	4	2	31
" 20	6	4	4	3	31
" 21	6	4	4	0	9
" 25	8	4	4	1	54
" 26	5	4	4	1	36
" 28	3	4	4	1	57
18	148	72	759	686	
	8	4	42	48	

From Oct 15 to Oct 13/81

Date No. of Obs. i.

Oct 1.	3	4	4	0	27
" 3	17	4	4	0	12
" 4	4	4	4	3	16
" 5	15	4	4	3	1
" 6	8	4	4	3	16
" 7	4	4	4	3	55
" 9	5	4	4	3	31
" 10	7	4	4	3	50
" 11	3	4	4	3	38
" 12	4	4	4	3	19
" 13	6	4	4	3	56
" 78	41	425	342		
7	4	39	9		

From Dec 17 to Dec 18/81

Dec. 17.	3	4	5	9	53
" 18	2	4	5	7	4
2	5	8	116	57	
2	4	58	28		

From Oct. 16 to end of 1881

Oct. 16	4	5	9	25
" "	4	5	3	7
" "	4	5	2	32

x Biquet	Dec. 17	4	5	7	34
x Paces	" "	4	5	0	20
B. Anthesis	" "	5	2	3	5
x Androm	" "	4	5	9	31
E. Corvix					
x P. Corvix	" 18	5	2	3	4
x Arig	" 18	4	5	1	33
x Arig	" 18	38	391	251	
B. Anthesis	" 19	29	11		
x Androm	" 19	4	5	6	35
x Ceti	" 19				

$\begin{matrix} h & m & s \\ 20 & 26 & 20 \\ +84^{\circ} 11' \end{matrix}$

Final values of inclination i

See pp 78 - 81 for vals in groups.

<u>Intervals</u>	<u>i</u>	<u>$\log \tan i$</u>	<u>$\log 15 \tan i$</u>
1879 Feb. 15 to June 1	$4^{\circ} 58' 19''$	8.93950	0.11539
June 4 to July 10	4 56.32	8.93688	0.11297
Aug. 12 to Sept. 25	5 29.9	8.98245	0.15854
Sept. 26 to Mar. 10, 1880	5 30.42	8.98447	0.16056
Mar. 15 to Apr. 23	5 0.17	8.94237	0.11846
Apr. 26 to June 9	4 53.54	8.93299	0.10908
June 10 to Aug. 15	5 1.46	8.94451	0.12060
1880 Aug. 17 to Apr. 7, 1881	5 5.40	8.95012	0.12621
1881 Apr. 9 to May 26	4 59.1	8.94052	0.11661
Aug. 21 to Sept. 28	4 42.48	8.91619	0.09228
Oct. 1 to Oct. 13	4 39.9	8.91052	0.08661
Dec. 17 to Dec. 18	4 58.28	8.93972	0.11581

L.C.
Date interval
1879Collection of Results for Thread intervals from
L.C.

Feb 22 - Mar 30

1	2	3	4	5	6	7	8	9	10	11	12	13
+5 56.91	+5 26.15	+4 56.86	+4 27.57	+3 57.03	+3 26.68	+2 57.82	+2 28.06	+1 58.37	+1 28.96	+0 58.63	+0 29.31	+0.70
356.91	326.15	296.86	267.57	237.03	206.68	177.82	148.06	118.37	88.96	58.63	29.31	
2.55256	2.51342	2.47255	2.42744	2.37480	2.31530	2.24998	2.17044	2.07324	1.94919	1.76812	1.46702	0.284510
0.91843	0.87929	0.83842	0.79331	0.74067	0.68117	0.61585	0.53631	0.43911	0.31506	0.13399	9.83289	8.21097
8.288	7.573	6.893	6.213	5.504	4.799	4.129	3.438	2.749	2.066	1.361	.681	+0.16

Apr. 6 - Apr. 23

55.85	25.49	55.58	24.58	55.93	26.50	57.18	27.45	57.96	28.40	59.11	29.26	-0.77
355.85	325.49	295.58	264.58	235.93	206.50	177.18	147.45	117.96	88.40	59.11	29.26	
2.55127	2.51254	2.47067	2.42256	2.37278	2.31492	2.24841	2.16864	2.07173	1.94645	1.77166	1.46627	0.288649
0.91814	0.87941	0.83754	0.78943	0.73965	0.68179	0.61528	0.53551	0.43860	0.31332	0.13853	9.83314	8.25336
8.282	7.575	6.879	6.158	5.491	4.806	4.124	3.432	2.745	2.057	1.376	.681	-0.18

May 1 - May 7

55.53	24.98	55.56	25.98	56.66	26.61	57.93	27.66	57.88	28.76	58.31	29.08	+0.33
355.53	324.98	295.56	265.98	236.66	206.61	177.93	147.66	117.88	88.76	58.31	29.08	
2.55088	2.51186	2.47065	2.42485	2.37412	2.31518	2.25025	2.16926	2.07144	1.94822	1.76574	1.46359	0.285185
0.91829	0.87927	0.83806	0.79226	0.74153	0.68254	0.61766	0.53667	0.43885	0.31563	0.13315	9.83100	7.88592
8.285	7.573	6.887	6.198	5.515	4.814	4.146	3.441	2.747	2.068	1.359	.678	+0.08

May 29 - July 1

54.18	24.88	54.76	24.73	55.21	26.03	56.71	27.46	58.43	28.46	58.71	29.23	-0.07
354.18	324.88	294.76	264.73	235.21	206.03	176.71	147.46	118.43	88.46	58.71	29.23	
2.54922	2.51172	2.46947	2.42280	2.37146	2.31393	2.24726	2.16867	2.07346	1.94675	1.76871	1.46583	0.284510
0.91786	0.87976	0.83751	0.79089	0.73950	0.68147	0.61530	0.53677	0.44150	0.31470	0.13675	9.83357	7.21374
8.265	7.582	6.878	6.178	5.488	4.808	4.128	3.440	2.764	2.064	1.370	.682	-0.02

July 2 - Aug 14

55.25	24.78	55.55	25.23	56.58	26.38	57.33	27.61	58.08	28.33	58.56	28.51	-0.22
355.25	324.78	295.55	265.23	236.58	206.38	177.33	147.61	118.08	88.33	58.56	28.51	
2.55033	2.51159	2.47063	2.42362	2.37398	2.31467	2.24878	2.16911	2.07218	1.94611	1.76760	1.45500	0.284242
0.91839	0.87945	0.83849	0.79148	0.74184	0.68253	0.61664	0.53697	0.44004	0.31397	0.13546	9.82286	7.71028
8.287	7.576	6.894	6.187	5.519	4.814	4.137	3.443	2.754	2.060	1.366	.665	-0.05

observations of Polaris. 27 Wires. A.C. and L.C.

85

14	15	16	17	18	19	20	21	22	23	24	25	26
-0 29.34	-0 59.04	-1 28.81	-1 57.93	-2 27.06	-2 57.64	-3 27.54	-3 57.31	-4 25.89	-4 58.94	-5 27.23	-5 57.30	88 40 10
29.34	59.04	88.81	117.93	147.06	177.64	207.54	237.31	265.89	296.94	327.23	357.30	8.36587
1.46746	1.77115	1.94846	2.07162	2.16749	2.24954	2.31710	2.37532	2.42470	2.47267	2.51485	2.55303	
9.83333	0.13702	0.31433	0.43749	0.53336	0.61541	0.68297	0.74119	0.79057	0.83854	0.88072	0.91890	
.681	1.371	2.062	2.738	3.415	4.125	4.819	5.511	6.174	6.895	7.598	8.297	
-0 28.86	58.79	28.23	58.04	26.72	56.32	26.64	55.60	25.39	55.69	25.81	55.06	88 39 59
28.86	58.79	88.23	118.04	146.72	176.32	206.64	235.60	265.39	295.69	325.81	355.06	8.36687
1.46030	1.76930	1.94562	2.07203	2.16649	2.24630	2.31521	2.37217	2.42388	2.47084	2.51296	2.55030	
9.82717	0.13617	0.31249	0.43890	0.53336	0.61317	0.68208	0.73904	0.79075	0.83771	0.87983	0.91717	
.672	1.368	2.053	2.747	3.415	4.104	4.809	5.483	6.177	6.882	7.583	8.264	
29.39	59.16	28.99	57.44	27.46	57.39	27.43	55.52	25.76	56.14	25.52	55.89	88 39 53
29.39	59.16	88.99	117.44	147.46	177.39	207.43	235.52	265.76	296.14	325.52	355.89	8.36741
1.46820	1.77203	1.94934	2.06982	2.16867	2.24892	2.31687	2.37203	2.42449	2.47150	2.51258	2.55132	
9.83561	0.13944	0.31675	0.43723	0.53608	0.61633	0.68428	0.73885	0.79190	0.83891	0.87999	0.91873	
.685	1.379	2.074	2.737	3.436	4.134	4.834	5.481	6.193	6.901	7.586	8.293	
29.32	58.44	27.84	57.04	27.12	56.82	25.57	55.27	24.52	55.59	24.77	55.59	88 39 47
29.32	58.44	87.84	117.04	147.12	176.82	205.57	235.27	264.52	295.59	324.77	355.59	8.36795
1.46716	1.76671	1.94369	2.06833	2.16767	2.24753	2.31296	2.37157	2.42246	2.47069	2.51158	2.55095	
9.83546	0.13478	0.31173	0.43637	0.53571	0.61557	0.68406	0.73967	0.79050	0.83873	0.87962	0.91849	
.684	1.364	2.056	2.731	3.433	4.126	4.797	5.496	6.172	6.898	7.577	8.295	
29.40	58.52	28.55	58.40	28.02	57.50	27.02	55.96	24.80	55.37	24.66	55.84	88 39 48
29.40	58.52	88.55	118.40	148.02	177.50	207.02	235.96	264.80	295.37	324.66	355.84	8.36786
1.46835	1.76730	1.94719	2.07335	2.17032	2.24920	2.31601	2.37284	2.42292	2.47037	2.51143	2.55125	
9.83621	0.13516	0.31505	0.44121	0.53818	0.61706	0.68387	0.74070	0.79078	0.83823	0.87929	0.91911	
.686	1.365	2.066	2.762	3.453	4.141	4.829	5.504	6.177	6.890	7.573	8.301	

Collection of Results for Thread intervals from

1879

Sept 6 - Sept 30

1	2	3	4	5	6	7	8	9	10	11	12	13
+5 53.48	+5 25.90	+4 56.38	+4 26.12	+3 56.72	+3 27.62	+2 57.70	+2 27.29	+1 56.98	+1 27.36	+0 59.24	+0 30.10	+0.38
+ 353.48	325.90	296.38	266.12	236.72	207.62	177.70	147.29	116.98	87.36	59.24	30.10	
2.54836	2.51308	2.47185	2.42508	2.37423	2.31727	2.24969	2.16817	2.06811	1.94131	1.77261	1.47557	9.857978
0.91477	0.87949	0.83826	0.79149	0.74064	0.68368	0.61610	0.53458	0.43452	0.30772	0.13902	9.84498	7.94619
8.218	7.577	6.891	6.187	5.503	4.827	4.131	3.424	2.720	2.031	1.374	.700	+0.09

Oct 1 - Oct 28

55.62	25.92	56.69	26.23	57.29	26.95	57.25	28.30	57.97	28.53	58.99	28.90	-0.71
355.62	325.92	295.69	266.23	237.29	206.95	177.25	148.30	117.97	88.53	58.99	28.90	
2.55099	2.51311	2.47084	2.42526	2.37528	2.31586	2.24859	2.17114	2.07177	1.94709	1.77078	1.46090	9.855126
0.91650	0.87862	0.83635	0.79077	0.74079	0.68137	0.61410	0.53665	0.43728	0.31260	0.13629	9.82641	8.21677
8.251	7.562	6.860	6.177	5.505	4.801	4.112	3.441	2.737	2.054	1.369	.670	-0.16

Nov 4 - Dec 25

56.00	26.89	56.99	26.98	56.20	27.50	59.02	29.30	58.50	28.24	59.14	30.00	-0.20
356.00	326.89	296.99	266.98	236.20	207.50	179.02	149.30	118.50	88.24	59.14	30.00	
2.55145	2.51440	2.47274	2.42648	2.37328	2.31702	2.25290	2.17406	2.07372	1.94566	1.77188	1.47712	9.830103
0.91550	0.87845	0.83679	0.79053	0.73733	0.68107	0.61695	0.53811	0.43777	0.30971	0.13593	9.84117	7.36508
8.232	7.559	6.867	6.174	5.462	4.798	4.139	3.452	2.740	2.040	1.367	.694	-0.02

Apr 5 - Apr 30 1880.

58.07	26.95	56.69	26.83	56.63	27.25	57.93	28.87	57.41	28.59	58.21	27.43	+0.11
358.07	326.95	296.69	266.83	236.63	207.25	177.93	148.87	117.41	88.59	58.21	27.43	
2.55397	2.51448	2.47230	2.42623	2.37407	2.31649	2.25025	2.17281	2.06970	1.94738	1.76500	1.43823	9.804139
0.91921	0.87972	0.83754	0.79147	0.73931	0.68173	0.61549	0.53805	0.43494	0.31262	0.13024	9.80347	7.40663
8.302	7.581	6.879	6.187	5.487	4.805	4.126	3.452	2.722	2.054	1.380	.636	+0.02

May 3 - May 23

55.85	26.48	56.74	27.52	57.74	27.57	57.53	28.04	58.78	29.21	58.93	29.48	-0.36
355.85	326.48	296.74	267.52	237.74	207.57	177.53	148.04	118.78	89.21	58.93	29.48	
2.55127	2.51386	2.47238	2.42736	2.37610	2.31716	2.24927	2.17038	2.07474	1.95041	1.77034	1.46953	9.855639
0.91714	0.87973	0.83825	0.79323	0.74197	0.68303	0.61514	0.53625	0.44061	0.31628	0.13621	9.83540	7.92217
8.263	7.581	6.890	6.212	5.520	4.820	4.122	3.438	2.758	2.071	1.368	.684	-0.08

observations of Polaris. 27 Wires. U b. and L b.
L. b.

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14	15	16	17	18	19	20	21	22	23	24	25	26	"
-0 29.84	-0 58.26	-1 29.16	-1 58.30	-2 27.30	-2 57.66	-3 27.56	-3 56.98	-4 26.62	-4 54.44	-5 25.12	-5 54.30	88 40 4	
- 29.84	58.26	89.16	118.30	147.30	177.66	207.56	236.98	266.62	294.44	325.12	354.30	8.36554	
1.47480	1.76537	1.95017	2.07298	2.16820	2.24959	2.31714	2.37471	2.42589	2.46900	2.51204	2.54942	8.37	
9.84121	0.13178	0.31658	0.43939	0.53461	0.61600	0.68355	0.74112	0.79230	0.83541	0.87845	0.91583		
- .694	1.354	2.073	2.750	3.425	4.130	4.826	5.510	6.199	6.846	7.559	8.238		
29.01	58.74	88.92	118.83	147.89	178.00	208.59	238.55	268.86	298.85	328.77	358.62	88 40 14	
29.01	58.74	88.92	118.83	147.89	178.00	208.59	238.55	268.86	298.85	328.77	358.62	8.36551	
1.46255	1.76893	1.94900	2.07493	2.16994	2.25042	2.31574	2.37392	2.42465	2.47107	2.51291	2.55001		
9.82806	0.13444	0.31451	0.44104	0.53545	0.61593	0.68125	0.73943	0.79016	0.83658	0.87842	0.91552		
- .673	1.362	2.063	2.757	3.431	4.130	4.801	5.483	6.168	6.864	7.558	8.232		
29.70	58.88	87.98	118.81	147.51	177.56	208.30	238.20	267.01	296.66	326.53	356.68	88 40 30	
29.70	58.88	87.98	118.81	147.51	177.56	208.30	238.20	267.01	296.66	326.53	356.68	8.36405	
1.47276	1.76997	1.94438	2.07485	2.16882	2.24934	2.31869	2.37694	2.42653	2.47226	2.51392	2.55106		
9.83681	0.13402	0.30843	0.43890	0.53287	0.61339	0.68274	0.74099	0.79058	0.83631	0.87797	0.91511		
- .687	1.362	2.034	2.747	3.411	4.106	4.817	5.508	6.174	6.860	7.550	8.224		
29.27	60.56	89.07	118.04	149.35	178.17	208.54	238.69	267.17	295.99	325.48	354.73	88 40 17	
29.27	60.56	89.07	118.04	149.35	178.17	208.54	238.69	267.17	295.99	325.48	354.73	8.36524	
1.46642	1.78219	1.94973	2.07203	2.17420	2.25083	2.31919	2.37418	2.42679	2.47128	2.51252	2.54990		
9.83166	0.14743	0.31497	0.43727	0.53944	0.61607	0.68443	0.73942	0.79203	0.83652	0.87776	0.91514		
- .679	1.404	2.065	2.737	3.463	4.131	4.835	5.481	6.195	6.863	7.546	8.225		
29.69	59.50	88.82	118.97	148.40	177.77	206.71	237.11	266.08	296.77	326.07	355.02	88 40 10	
29.69	59.50	88.82	118.97	148.40	177.77	206.71	237.11	266.08	296.77	326.07	355.02	8.36587	
1.47261	1.77482	1.94851	2.07544	2.17143	2.24986	2.31536	2.37495	2.42501	2.47242	2.51331	2.55025		
9.83848	0.14039	0.31438	0.44131	0.53730	0.61573	0.68123	0.74082	0.79088	0.83829	0.87918	0.91612		
- .689	1.382	2.062	2.763	3.446	4.128	4.800	5.506	6.178	6.891	7.571	8.244		

Collection of Results for Thread intervals from

Date interval

L.C.

1880 2

June 4 - June 30

1	2	3	4	5	6	7	8	9	10	11	12	13
+5 54.70	+5 25.71	+4 55.94	+4 26.17	+3 56.62	+3 27.18	+2 57.69	+2 28.47	+1 58.00	+1 28.70	+0 59.01	+0 29.26	- 0.51
354.70	325.71	295.94	266.17	236.62	207.18	177.69	148.47	118.00	88.70	59.01	29.26	
2.54986	2.51283	2.47120	2.42516	2.37405	2.31635	2.24966	2.17164	2.07188	1.94792	1.77092	1.46627	9.873239 _n
0.91618	0.87915	0.83752	0.79148	0.74037	0.68267	0.61598	0.53796	0.43820	0.31424	0.13724	9.83259	8.09671 _n
8.245	7.571	6.879	6.187	5.500	4.816	4.130	3.451	2.743	2.062	1.372	1.680	- .012

July 1 - July 28

56.34	26.15	55.97	26.65	56.48	27.10	56.70	27.80	57.68	28.42	59.24	29.24	- 0.16
356.34	326.15	295.97	266.65	236.48	207.10	176.70	147.80	117.68	88.42	59.24	29.24	
2.55186	2.51342	2.47125	2.42594	2.37379	2.31618	2.24724	2.16967	2.07078	1.94655	1.77261	1.46398	9.820412 _n
0.91809	0.87965	0.83748	0.79217	0.74002	0.68241	0.61347	0.53590	0.43695	0.31278	0.13884	9.83221	7.57035 _n
8.281	7.580	6.878	6.197	5.496	4.813	4.106	3.435	2.735	2.055	1.377	1.679	- .004

July 30 - Aug. 24

56.30	26.82	56.71	27.18	56.88	27.22	57.42	28.00	57.78	28.58	59.92	30.50	- 0.38
356.30	326.82	296.71	267.18	236.88	207.22	177.42	148.00	117.78	88.58	59.92	30.50	
2.55182	2.51431	2.47233	2.42680	2.37453	2.31643	2.24900	2.17026	2.07107	1.94734	1.77757	1.48430	9.857978 _n
0.91769	0.88018	0.83820	0.79267	0.74040	0.68230	0.61487	0.53613	0.43694	0.31321	0.14344	9.85017	7.84565 _n
8.273	7.589	6.890	6.204	5.500	4.812	4.120	3.437	2.735	2.057	1.391	1.708	- .007

Sept 2 - Sept. 29

56.87	26.99	57.30	26.97	57.28	27.92	58.14	28.11	58.99	28.53	59.33	28.97	+ 0.37
356.87	326.99	297.30	266.97	237.28	207.92	178.14	148.11	118.99	88.53	59.33	28.97	
2.55251	2.51453	2.47319	2.42646	2.37526	2.31790	2.25076	2.17058	2.07551	1.94709	1.77327	1.46195	9.856820
0.91738	0.87940	0.83806	0.79133	0.74013	0.68277	0.61563	0.53545	0.44038	0.31196	0.13814	9.82682	7.93367
8.268	7.575	6.887	6.185	5.497	4.817	4.127	3.431	2.757	2.051	1.374	1.671	+ .009

Oct 3 - Oct 24/25

57.56	27.36	56.79	28.43	58.31	28.49	58.84	29.42	59.06	29.44	59.24	29.28	- 0.14
357.56	327.36	297.79	268.43	238.31	208.49	178.84	149.42	119.06	89.44	59.24	29.28	
2.55335	2.51503	2.47391	2.42883	2.37714	2.31908	2.25246	2.17441	2.07577	1.95153	1.77261	1.46657	9.814613 _n
0.91722	0.87790	0.83778	0.79270	0.74101	0.68295	0.61633	0.53828	0.43964	0.31540	0.13648	9.830441	7.51000 _n
8.265	7.549	6.883	6.204	5.508	4.819	4.134	3.454	2.752	2.067	1.369	1.677	- .003

observations of Plaris. 27 lines. U.C. and L.C.

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L.C.

14	15	16	17	18	19	20	21	22	23	24	25	26
-0 29.48	-0 58.80	-1 28.20	-1 57.73	-2 28.08	-2 57.24	-3 26.95	-3 56.79	-4 26.03	-4 55.96	-5 25.91	-5 55.50	88 40 5
29.48	58.80	88.20	117.73	148.08	177.24	206.95	236.79	266.03	295.96	325.91	355.50	8.366 24
1.46953	1.76938	1.94547	2.07089	2.17050	2.24856	2.31586	2.37436	2.42493	2.47123	2.51310	2.55084	
9.83585	0.13570	0.31179	0.43721	0.53682	0.61488	0.68218	0.74068	0.79125	0.83755	0.87942	0.91716	
.685	1.367	2.050	2.737	3.442	4.120	4.810	5.504	6.184	6.879	7.576	8.263	
29.05	59.25	28.80	58.16	28.03	57.09	27.22	56.99	26.45	56.18	25.68	56.23	88 40 6
29.05	59.25	88.80	118.16	148.03	177.09	207.22	236.99	266.45	296.18	325.68	356.23	8.366 23
1.46315	1.77269	1.94841	2.07247	2.17035	2.24819	2.31643	2.37473	2.42562	2.47156	2.51279	2.55173	
9.82938	0.13892	0.31464	0.43870	0.53658	0.61442	0.68266	0.74096	0.79185	0.83779	0.87902	0.91796	
.675	1.377	2.064	2.746	3.440	4.115	4.816	5.508	6.192	6.883	7.569	8.279	
29.63	59.07	29.19	58.84	28.33	57.28	27.36	57.40	26.35	56.89	26.72	55.89	88 40 10
29.63	59.07	89.19	118.84	148.73	177.28	207.36	237.40	266.35	296.89	326.72	355.89	8.36587
1.47173	1.77137	1.95032	2.07496	2.17123	2.24866	2.31672	2.37548	2.42545	2.47260	2.51418	2.55132	
9.83760	0.13724	0.31619	0.44083	0.53710	0.61453	0.68259	0.74135	0.79132	0.83847	0.88005	0.91719	
.688	1.372	2.071	2.759	3.444	4.116	4.815	5.512	6.185	6.894	7.587	8.264	
29.43	58.94	29.29	58.80	27.98	58.72	27.64	58.16	27.32	57.39	27.23	56.10	88 40 21
29.43	58.94	89.29	118.80	147.98	178.72	207.64	238.16	267.32	297.39	327.23	356.10	8.36487
1.46879	1.77041	1.95080	2.07482	2.17020	2.25217	2.31731	2.37687	2.42703	2.47333	2.51485	2.55157	
9.83366	0.13528	0.31567	0.43969	0.53507	0.61704	0.68218	0.74174	0.79190	0.83820	0.87972	0.91644	
.682	1.365	2.069	2.752	3.428	4.140	4.810	5.517	6.193	6.890	7.581	8.250	
29.30	59.64	29.60	58.81	28.68	58.77	27.62	57.83	27.47	57.76	27.66	57.51	88 40 32
29.30	59.64	89.60	118.81	148.68	178.77	207.62	237.83	267.47	297.76	327.66	357.51	8.36387
1.46687	1.77554	1.95231	2.07485	2.17225	2.25229	2.31727	2.37627	2.42727	2.47387	2.51542	2.55329	
9.83074	0.13941	0.31618	0.43872	0.53612	0.61616	0.68114	0.74014	0.79114	0.83744	0.87929	0.91716	
.677	1.378	2.071	2.746	3.436	4.132	4.799	5.497	6.182	6.882	7.573	8.263	

Collection of Results for Thread intervals from

L. C.

Date interval

1880

Nov 1 - Dec 18

1	2	3	4	5	6	7	8	9	10	11	12	13
+5 59.59	+5 29.14	+4 58.33	+4 28.59	+3 58.19	+3 28.39	+2 58.61	+2 28.76	+1 59.16	+1 29.06	+0 0.14	+0 29.18	+0.29
+ 359.59	329.14	298.33	268.59	238.19	208.39	178.61	148.76	119.16	89.06	60.14	29.18	
2.55581	2.51738	2.47470	2.42909	2.37692	2.31888	2.25190	2.17249	2.07613	1.94968	1.77916	1.46508	0.846240
0.92222	0.88379	0.84111	0.79550	0.74333	0.68529	0.61831	0.53890	0.44254	0.31609	0.14557	9.83149	7.82881
8.360	7.652	6.936	6.244	5.538	4.845	4.152	3.459	2.774	2.071	1.398	.678	+0.07

Apr 1 - Apr 23. 1881.

59.69	28.84	58.59	28.84	58.34	29.31	59.04	28.16	59.34	28.39	59.44	29.89	-0.46
359.69	328.84	298.59	268.84	238.34	209.31	179.04	148.46	119.34	88.39	59.44	29.89	
2.55593	2.51698	2.47507	2.42949	2.37720	2.32079	2.25295	2.17161	2.07679	1.94640	1.77408	1.47553	0.866276
0.91935	0.88040	0.83849	0.79291	0.74062	0.68421	0.61637	0.53503	0.44021	0.30982	0.13750	9.83895	8.02618
8.305	7.593	6.894	6.207	5.503	4.833	4.134	3.428	2.756	2.041	1.372	.690	-0.11

June 17 - June 25

58.76	27.77	57.77	27.07	57.55	27.99	58.63	28.83	58.75	28.89	58.91	29.85	+0.31
358.76	327.77	297.77	267.07	237.55	207.99	178.63	148.83	118.75	88.89	58.91	29.85	
2.55238	2.51557	2.47388	2.42662	2.37575	2.31804	2.25195	2.17269	2.07463	1.94885	1.77019	1.47494	0.849136
0.91707	0.88026	0.83857	0.79131	0.74044	0.68273	0.61664	0.53738	0.43932	0.31354	0.13488	9.83963	7.85605
8.262	7.590	6.896	6.185	5.501	4.816	4.137	3.446	2.750	2.058	1.364	.691	+0.07

July 6 - July 15

57.59	27.02	57.19	27.64	57.67	27.99	57.32	28.49	58.79	29.62	0.04	29.97	+0.52
357.59	327.02	297.19	267.64	237.67	207.99	177.32	148.49	118.79	89.62	60.04	29.97	
2.55338	2.51457	2.47303	2.42755	2.37597	2.31804	2.24876	2.17170	2.07478	1.95240	1.77844	1.47669	0.871600
0.91798	0.87917	0.83763	0.79215	0.74057	0.68264	0.61336	0.53630	0.43938	0.31700	0.14304	9.84129	8.08060
8.279	7.571	6.881	6.197	5.503	4.815	4.105	3.438	2.750	2.075	1.390	.694	+0.12

July 25 - Aug. 31

57.65	26.83	57.47	27.11	58.68	28.20	59.85	29.55	59.06	30.49	59.35	29.69	+0.22
357.65	326.83	297.47	267.11	238.68	208.20	179.85	149.55	119.06	90.49	59.35	29.69	
2.55346	2.51432	2.47344	2.42669	2.37782	2.31848	2.25491	2.17479	2.07577	1.95660	1.77342	1.47261	0.834242
0.91761	0.87847	0.83759	0.79084	0.74197	0.68263	0.61906	0.53894	0.43992	0.32075	0.13757	9.83676	7.70637
8.272	7.559	6.880	6.178	5.520	4.815	4.160	3.459	2.754	2.093	1.373	.687	+0.05

observations of Polaris. 27 Wires. U.C. and L.C.

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L.C.

14	15	16	17	18	19	20	21	22	23	24	25	26
29.01	-0 0.13	-1 30.03	-1 39.48	-2 29.06	-2 59.36	-3 28.93	-3 58.31	-4 27.89	-4 58.8	-5 27.61	-5 59.21	88 40 41
29.01	60.13	90.03	119.48	149.06	179.36	208.93	238.31	267.89	298.11	327.61	357.21	8.366 41
1.46255	1.77909	1.95439	2.07729	2.17336	2.25372	2.32000	2.37714	2.42796	2.47438	2.51536	2.55535	
9.82896	0.14550	0.32080	0.44370	0.53977	0.62013	0.68641	0.74355	0.79437	0.84079	0.88177	0.92176	
.674	1.398	2.093	2.778	3.465	4.170	4.857	5.541	6.228	6.931	7.617	8.351	
29.01	0.14	29.54	59.31	29.71	58.61	29.07	58.84	28.19	58.74	28.19	56.68	88 40 37
29.01	60.14	89.54	119.31	149.71	178.61	209.07	238.84	268.19	298.74	328.19	356.68	8.363 42
1.46255	1.77916	1.95202	2.07668	2.17525	2.25190	2.32029	2.37811	2.42844	2.47529	2.51612	2.55228	
9.82597	0.14258	0.31544	0.44010	0.53867	0.61532	0.68371	0.74153	0.79186	0.83871	0.87954	0.91570	
.670	1.389	2.067	2.755	3.457	4.124	4.827	5.515	6.192	6.898	7.578	8.236	
29.77	59.65	29.11	59.03	28.85	58.51	27.61	57.55	27.69	56.75	27.13	57.1	88 40 23
29.77	59.65	89.11	119.03	148.85	178.51	207.61	237.55	267.69	296.75	327.13	357.11	8.364 69
1.47378	1.77561	1.94993	2.07566	2.17275	2.25166	2.31725	2.37575	2.42763	2.47239	2.51472	2.55280	
9.83847	0.14030	0.31462	0.44035	0.53744	0.61635	0.68194	0.74044	0.79232	0.83708	0.87941	0.91749	
.689	1.381	2.064	2.756	3.447	4.134	4.808	5.501	6.199	6.872	7.575	8.270	
29.85	58.73	29.58	59.03	27.75	58.83	28.65	58.28	28.40	56.65	27.10	57.13	88 40 29
29.85	58.73	89.58	119.03	147.75	178.83	208.65	238.28	268.40	296.65	327.10	357.13	8.364 60
1.47494	1.76886	1.95221	2.07566	2.16953	2.25244	2.31942	2.37709	2.42878	2.47224	2.51468	2.55283	
9.83954	0.13346	0.31681	0.44026	0.53413	0.61704	0.68402	0.74169	0.79338	0.83684	0.87928	0.91743	
.6912	1.360	2.074	2.756	3.421	4.140	4.831	5.517	6.214	6.868	7.573	8.269	
30.12	59.52	30.63	57.45	28.53	58.27	28.72	57.87	27.70	57.15	26.43	58.70	88 40 29
30.12	59.52	90.63	117.45	148.53	178.27	208.72	237.87	267.70	297.15	326.43	358.70	8.364 15
1.47885	1.77466	1.95727	2.06985	2.17181	2.25108	2.31956	2.37634	2.42765	2.47298	2.51379	2.55473	
9.84300	0.13881	0.32142	0.43400	0.53596	0.61523	0.68371	0.74049	0.79180	0.83713	0.87794	0.91888	
.697	1.377	2.096	2.716	3.435	4.123	4.827	5.502	6.192	6.873	7.550	8.296	

Collection of Results for Thread intervals from

L. C.

Date interval
1881

Sept. 7- Sept. 25.

1	2	3	4	5	6	7	8	9	10	11	12	13
58.16	29.15	58.32	28.15	58.62	28.77	58.44	28.62	58.83	29.37	58.87	29.14	+0.21
358.16	329.15	298.32	268.15	238.62	208.77	178.44	148.62	118.83	89.37	58.87	29.14	
2.55408	2.51739	2.47468	2.42838	2.37771	2.31967	2.25149	2.17208	2.07493	1.95119	1.76989	1.46749	9.832222
0.91722	0.88053	0.83782	0.79152	0.74085	0.68281	0.61463	0.53522	0.43807	0.31433	0.13303	9.82763	7.68536
8.265	7.595	6.884	6.187	5.506	4.828	4.117	3.429	2.742	2.062	1.358	.672	+0.05

Oct 1- Oct 27

59.67	29.51	58.93	28.95	59.24	28.86	59.36	29.36	59.94	29.01	59.39	28.93	-0.46
359.67	329.51	298.93	268.95	239.24	208.86	179.36	149.36	119.94	89.01	59.39	28.93	
2.55590	2.51787	2.47557	2.42967	2.37883	2.31985	2.25373	2.17423	2.07896	1.94944	1.76971	1.46135	9.866276
0.91822	0.88019	0.83769	0.79199	0.74115	0.68217	0.61604	0.53655	0.44128	0.31176	0.13603	9.823677	8.02508
8.284	7.589	6.885	6.194	5.510	4.810	4.131	3.440	2.762	2.050	1.368	.666	-0.11

Nov 5- Dec 25

59.70	30.90	59.94	30.43	59.39	29.23	59.62	29.80	59.32	29.33	59.23	29.99	-0.17
359.70	330.90	299.94	270.43	239.39	209.23	179.62	149.80	119.32	89.33	59.23	29.99	
2.55594	2.51970	2.47703	2.43205	2.37911	2.32062	2.25435	2.17551	2.07671	1.95100	1.77254	1.47698	9.823045
0.91698	0.88074	0.83807	0.79309	0.74015	0.68166	0.61539	0.53655	0.43775	0.31204	0.13358	9.83802	7.59149
8.260	7.599	6.888	6.210	5.497	4.805	4.125	3.440	2.740	2.051	1.360	.689	-0.04

observations of Polaris. 27 Wires. U.C. and L.C.

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L.C.

14	15	16	17	18	19	20	21	22	23	24	25	26
30.15 -0	59.47 -1	29.10 -1	58.84 -2	28.23 -2	59.41 -3	28.32 -3	58.16 -4	28.37 -4	58.77 -5	28.21 -5	57.93	88 40 40
30.15	59.47	89.10	118.84	148.23	179.41	208.32	238.16	268.37	298.79	328.21	358.93	8.363 14
1.47929	1.77430	1.94988	2.07496	2.17094	2.25385	2.31873	2.37687	2.42873	2.47537	2.51615	2.55622	
9.84243	0.13744	0.31302	0.43810	0.53408	0.61699	0.68187	0.74001	0.79187	0.83851	0.87929	0.91936	
.696	1.372	2.056	2.742	3.420	4.140	4.807	5.496	6.193	6.895	7.573	8.305	

29.81	60.07	29.50	58.83	29.68	59.66	29.37	59.44	28.45	58.23	28.45	58.35	88 40 49
29.81	60.07	89.50	118.83	149.68	179.66	209.37	239.44	268.45	298.23	328.45	358.35	8.362 32
1.47436	1.77866	1.95182	2.07493	2.17516	2.25445	2.32091	2.37920	2.42886	2.47455	2.51647	2.55431	
9.83668	0.14098	0.31414	0.43725	0.53748	0.61677	0.68323	0.74152	0.79118	0.83687	0.87879	0.91663	
.687	1.384	2.061	2.737	3.447	4.138	4.822	5.515	6.183	6.869	7.564	8.253	

30.30	60.24	29.64	59.37	29.85	59.64	29.75	59.71	29.67	59.70	29.24	59.04	88 41 3
30.30	60.24	89.64	119.37	149.85	179.64	209.75	239.71	269.67	299.70	329.24	359.04	8.360 16
1.48144	1.77988	1.95250	2.07689	2.17566	2.25440	2.32170	2.37969	2.43083	2.47669	2.51751	2.55514	
9.84248	0.14092	0.31354	0.43793	0.53670	0.61544	0.68274	0.74073	0.79187	0.83773	0.87855	0.91618	
.696	1.383	2.058	2.741	3.441	4.125	4.827	5.505	6.193	6.882	7.560	8.245	

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Collection of Results for thread interval from
A.C.

Feb. 1235

Date interval.

1879

Feb. 16 - Feb 27

1	2	3	4	5	6	7	8	9	10	11	12	13
+5 52.62	+5 25.17	+4 56.02	+4 26.24	+3 56.87	+3 27.19	+2 68.02	+2 28.32	+1 38.12	+1 28.89	+0 59.59	+0 29.47	+0.47
353.62	325.17	296.02	266.24	236.87	207.19	178.02	148.32	118.12	89.39	59.59	29.47	0.47
2.54854	2.51211	2.47132	2.42527	2.37451	2.31637	2.25047	2.17120	2.07232	1.95129	1.77517	1.46938	9.67210
0.91405	0.87762	0.83683	0.79078	0.74002	0.68188	0.61598	0.53671	0.43783	0.31680	0.14068	9.83489	8.03761
8.205	7.544	6.868	6.177	5.496	4.807	4.130	3.441	2.741	2.074	1.383	0.683	0.0109

Mar 2 - Mar 25

+ 53.82	25.44	53.92	26.82	57.44	27.26	57.88	27.79	58.36	28.52	59.18	29.34	-0.36
353.82	325.44	295.92	266.82	237.44	207.26	177.88	147.79	118.36	88.52	59.18	29.34	-0.36
2.54878	2.51247	2.47117	2.42622	2.37534	2.31652	2.25013	2.16965	2.07320	1.94709	1.77217	1.46746	9.55630
0.91474	0.87843	0.83713	0.79218	0.74157	0.68248	0.61609	0.53561	0.43716	0.31300	0.13813	9.83342	7.92226
8.218	7.559	6.872	6.197	5.515	4.814	4.131	3.432	2.749	2.056	1.374	0.6814	0.00836

Apr. 6 - May 6

+ 53.30	25.25	53.29	25.65	53.76	26.78	57.89	27.44	57.41	28.40	58.85	29.86	+0.57
353.30	325.25	295.29	265.65	235.76	206.78	177.59	147.44	117.41	88.40	58.85	29.86	0.57
2.55060	2.51222	2.47025	2.42431	2.37247	2.31551	2.24942	2.16862	2.06970	1.94645	1.76975	1.47509	9.75587
0.91765	0.87927	0.83730	0.79136	0.73952	0.68256	0.61647	0.53567	0.43676	0.31350	0.13680	9.84214	8.12292
8.273	7.573	6.875	6.185	5.489	4.815	4.135	3.433	2.734	2.058	1.370	0.6952	0.01327

June 26 - July 10

+ 53.39	24.14	54.65	25.44	53.69	27.04	57.02	26.87	57.77	28.90	58.94	28.59	+0.19
353.39	324.14	294.65	265.44	235.69	207.04	177.02	146.87	117.77	88.90	58.94	28.59	0.19
2.54825	2.51073	2.46931	2.42377	2.37234	2.31605	2.24802	2.16693	2.07103	1.94890	1.77041	1.45621	9.27875
0.91530	0.87778	0.83636	0.79102	0.73939	0.68316	0.61507	0.53398	0.43808	0.31595	0.13746	9.82326	7.64380
0.91620	0.87865	0.83726	0.79192	0.74029	0.68400	0.61597	0.53488	0.43898	0.31685	0.13836	9.82416	7.64670
8.245	7.563	6.875	6.193	5.499	4.831	4.130	3.427	2.748	2.074	1.375	0.6671	0.00443

Aug 24 - Sept 29

54.83	26.21	54.97	26.33	57.28	27.15	58.69	28.35	58.73	28.71	59.09	29.35	-0.29
354.83	326.21	294.97	266.33	237.29	207.15	178.69	148.35	118.73	88.71	59.09	29.35	-0.29
2.55002	2.51350	2.46978	2.42542	2.37528	2.31628	2.25210	2.17129	2.07456	1.94797	1.77151	1.46761	9.46240
0.91653	0.88001	0.83629	0.79193	0.74179	0.68279	0.61861	0.53780	0.44107	0.31448	0.13802	9.83412	7.82891
8.251	7.586	6.859	6.193	5.518	4.817	4.155	3.450	2.761	2.063	1.374	0.6825	0.00674

observations of Polaris. 27 Uris -
U.C.

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14	15	16	17	18	19	20	21	22	23	24	25	26
-0 29.61	-0 58.38	-1 27.78	-1 57.73	-2 28.38	-2 57.98	-3 27.01	-3 56.88	-4 27.68	-4 56.18	-5 26.18	-5 55.51	-8 40 14
- 29.61	- 58.38	- 87.78	117.73	148.38	177.98	207.01	236.88	267.68	296.18	326.18	353.51	8.36551
1.47144	1.76626	1.94340	2.07089	2.17137	2.25037	2.31597	2.3622	2.42762	2.47156	2.51346	2.55085	
9.83695	0.13177	0.30891	0.43640	0.53688	0.61388	0.68150	0.74004	0.79313	0.83707	0.87897	0.91636	
-0.6870	-1.354	-2.037	-2.731	-3.443	-4.129	-4.803	-5.496	-6.211	-6.872	-7.568	-8.248	

14	15	16	17	18	19	20	21	22	23	24	25	26
- 29.64	58.26	28.82	58.66	28.22	57.25	26.95	56.75	26.12	56.02	25.62	55.25	-8 40 9
- 29.64	58.26	88.32	118.66	148.22	177.25	206.95	236.75	266.12	296.02	325.62	355.25	8.36596
1.47188	1.76537	1.94606	2.07430	2.17091	2.24859	2.31587	2.36596	2.42508	2.47132	2.51271	2.55053	
9.83784	0.13133	0.31202	0.44026	0.53687	0.61455	0.68183	0.74025	0.79192	0.83728	0.87867	0.91649	
-0.6884	-1.353	-2.051	-2.756	-3.442	-4.117	-4.807	-5.499	-6.181	-6.875	-7.563	-8.250	

14	15	16	17	18	19	20	21	22	23	24	25	26
- 29.01	59.15	28.26	57.66	27.55	57.03	26.72	56.94	26.17	55.46	25.47	53.66	-8 39 57
- 29.01	59.15	88.26	117.66	147.55	177.03	206.72	236.94	266.17	295.42	325.47	353.66	8.36705
1.46255	1.77195	1.94576	2.07063	2.16894	2.24805	2.31538	2.3634	2.42516	2.46785	2.51251	2.54859	
9.82960	0.13900	0.31281	0.43768	0.53579	0.61510	0.68243	0.74169	0.79221	0.83670	0.87956	0.91564	
-0.6755	-1.377	-2.055	-2.740	-3.435	-4.122	-4.813	-5.517	-6.197	-6.879	-7.578	-8.235	

14	15	16	17	18	19	20	21	22	23	24	25	26
- 28.96	58.73	27.95	57.75	27.53	56.61	26.31	56.33	24.78	54.98	24.10	53.90	-8 39 47
- 28.96	58.73	87.95	117.75	147.53	176.61	206.31	236.33	264.78	294.98	324.10	353.90	8.36795
1.47654	1.76886	1.94424	2.07096	2.16888	2.24702	2.31452	2.36512	2.42288	2.46979	2.51068	2.54888	
9.84359	0.13591	0.31129	0.43801	0.53573	0.61407	0.68157	0.74017	0.78998	0.83684	0.87773	0.91593	
9.84449	0.13681	0.31218	0.43871	0.53683	0.61497	0.68247	0.74147	0.79083	0.83774	0.87863	0.91683	
-0.6970	-1.370	-2.052	-2.747	-3.442	-4.121	-4.814	-5.514	-6.178	-6.882	-7.579	-8.257	

14	15	16	17	18	19	20	21	22	23	24	25	26
- 28.83	60.39	28.57	58.07	28.41	57.79	25.97	56.47	25.79	56.45	25.15	54.47	-8 40 3
- 28.83	60.39	88.57	118.07	148.41	177.79	205.97	236.47	265.79	296.45	325.15	354.47	8.36651
1.45984	1.78096	1.94729	2.07214	2.17146	2.24991	2.31380	2.36540	2.42454	2.47195	2.51208	2.54958	
9.82635	0.14747	0.31380	0.43865	0.53797	0.61642	0.68031	0.74029	0.79105	0.83846	0.87859	0.91609	
-0.6704	-1.404	-2.060	-2.746	-3.451	-4.134	-4.790	-5.499	-6.181	-6.894	-7.561	-8.243	

Collection of Results for thread intervals

Date interval
1879

U.C.

Oct. 15 - Oct. 30

1	2	3	4	5	6	7	8	9	10	11	12	13
+5 5773	+5 2693	+4 5651	+4 2685	+3 5669	+3 2693	+2 5857	+2 2797	+1 5851	+1 2971	+0 5986	+0 2997	+0.31
35773	32693	296.51	266.85	236.69	206.93	178.57	147.97	118.51	89.71	59.85	29.97	0.31
2.55356	2.51445	2.47204	2.42627	2.37418	2.31582	2.25181	2.17017	2.07325	1.95284	1.77706	1.47669	9.49136
0.91880	0.87969	0.83728	0.79151	0.73942	0.68106	0.61705	0.53541	0.43899	0.31808	0.14230	9.84193	7.85660
8.295	7.580	6.875	6.187	5.488	4.798	4.140	3.431	2.748	2.081	1.388	0.695	+0.007

X

Nov. 10 - Nov. 30

+ 5800	2674	5684	2724	5705	2745	5810	2882	5857	2902	+1 053	2934	-0.24
35800	32674	296.84	267.24	237.05	207.45	178.10	148.82	118.57	89.02	60.55	29.34	-0.24
2.55388	2.51420	2.47252	2.42690	2.37484	2.31691	2.25066	2.17266	2.07397	1.94949	1.75211	1.46746	9.38021
0.91890	0.87862	0.83694	0.79132	0.73926	0.68133	0.61508	0.53708	0.43899	0.31391	0.14653	9.83188	7.74463
8.285	7.562	6.840	6.185	5.486	4.801	4.122	3.444	2.744	2.057	1.401	0.679	-0.005
	58	67	2	4	799	0	3	3	9			

Dec 1 - Dec 29

+ 5805	2692	5715	2690	5813	2794	5875	2886	5875	2939	5925	2983	-0.16
35805	32692	297.15	266.90	238.13	207.94	178.75	148.86	118.75	89.39	59.25	29.83	-0.16
2.55394	2.51444	2.47298	2.42635	2.37681	2.31794	2.25225	2.17278	2.07463	1.95129	1.77267	1.47465	9.20412
0.91772	0.87822	0.83676	0.79013	0.74059	0.68172	0.61603	0.53656	0.43841	0.31507	0.13647	9.83843	7.56790
8.274	7.555	6.867	6.168	5.503	4.805	4.131	3.440	2.744	2.066	1.369	0.689	-0.004

Jan. 1 - Jan. 3 - 1880

+ 5805	2670	5820	2775	5804	2915	5894	2894	5782	2885	5952	2912	+1.05
35805	32670	298.20	267.75	238.04	209.15	178.94	148.94	117.82	88.85	59.52	29.12	+1.05
2.55515	2.51415	2.47451	2.42773	2.37665	2.32046	2.25271	2.17301	2.07122	1.94866	1.77466	1.46419	0.02119
0.91866	0.87766	0.83802	0.79124	0.74016	0.68397	0.61622	0.53652	0.43473	0.31217	0.13814	9.82770	8.38470
8.292	7.545	6.887	6.184	5.497	4.830	4.133	3.440	2.721	2.052	1.375	0.672	+0.024

Mar 1 - Mar 18

+ 5849	2604	5644	2794	5714	2739	5699	2789	5894	3104	5924	3144	+214
35849	32604	296.44	267.94	237.14	207.39	176.97	147.89	118.94	91.04	59.24	31.44	+214
2.55448	2.51327	2.47194	2.42804	2.37500	2.31677	2.24795	2.16974	2.07533	1.95923	1.77261	1.49748	0.33041
0.91863	0.87742	0.83609	0.79219	0.73915	0.68094	0.61210	0.53409	0.43948	0.32338	0.13676	9.86163	8.69456
8.291	7.541	6.856	6.197	5.485	4.797	4.093	3.420	2.751	2.106	1.370	0.727	+0.049
	72											

Date interval.

Feb 529
 $\begin{array}{r} 20\ 38\ 56 \\ + 46\ 52 \\ \hline 1880 \end{array}$

Collection of Results for thread intervals

U.C

Apr. 9 - Apr. 27

1	2	3	4	5	6	7	8	9	10	11	12	13
+5 3633	+5 2687	+4 5648	+4 2667	+3 5773	+3 2738	+2 5725	+2 2768	+1 5775	+1 2913	+0 5898	+0 3027	+0.17
356.33	326.37	296.48	266.67	237.73	207.33	177.25	147.68	117.75	89.13	58.98	30.27	+0.17
2.55185	2.51371	2.47199	2.42597	2.37608	2.31666	2.24859	2.14050	2.07096	1.95002	1.77070	1.48101	9.23045
0.91718	0.87904	0.83732	0.79130	0.74141	0.68199	0.61392	0.50583	0.43629	0.31535	0.13603	9.84634	7.59578
8.264	7.569	6.876	6.184	5.513	4.808	4.111	3.405	2.731	2.067	1.368	0.702	+0.004

May 4 - May 31

1	2	3	4	5	6	7	8	9	10	11	12	13
+ 5673	2646	5655	2685	57.21	27.03	5746	28.13	58.22	29.05	59.58	30.03	-0.63
356.73	326.46	296.55	266.85	237.21	207.03	177.46	148.13	118.22	89.05	59.58	30.03	-0.63
2.55234	2.51383	2.47210	2.42627	2.37513	2.31603	2.24910	2.14065	2.07269	1.94963	1.77510	1.47755	9.79934
0.91830	0.87979	0.83806	0.79223	0.74109	0.68199	0.61506	0.50661	0.43865	0.31559	0.14106	9.84351	8.16530
8.285	7.582	6.887	6.198	5.509	4.808	4.121	3.418	2.746	2.068	1.384	0.697	-0.015

June 2 - June 28

1	2	3	4	5	6	7	8	9	10	11	12	13
+ 5571	2591	5607	2647	57.04	26.96	5748	28.36	58.39	28.66	59.32	29.44	-0.12
355.71	325.91	296.07	266.47	237.04	206.96	177.48	148.36	118.39	88.66	59.32	29.44	-0.12
2.55110	2.51310	2.47139	2.42565	2.37482	2.31589	2.24915	2.17132	2.07231	1.94773	1.77320	1.46894	9.07918
0.91782	0.87982	0.83781	0.79217	0.74134	0.68241	0.61567	0.53784	0.43888	0.31425	0.13972	9.83546	7.44570
8.272	7.578	6.885	6.194	5.512	4.813	4.128	3.415	2.747	2.062	1.379	0.685	-0.003

July 4 - Aug 5.

1	2	3	4	5	6	7	8	9	10	11	12	13
+ 5637	2633	5721	2691	57.29	27.03	5787	28.33	57.75	28.83	58.99	29.75	-0.59
356.37	326.33	297.21	266.91	237.29	207.03	177.87	148.33	117.75	88.83	58.99	29.75	-0.59
2.55190	2.51366	2.47306	2.42636	2.37528	2.31603	2.25010	2.17123	2.07096	1.94856	1.77078	1.47349	9.77085
0.91813	0.87989	0.83929	0.79255	0.74151	0.68226	0.61633	0.53746	0.43719	0.31479	0.13701	9.83972	8.13708
8.282	7.584	6.907	6.203	5.514	4.811	4.134	3.447	2.736	2.064	1.371	0.691	-0.014

Aug 15 - Sept 28

1	2	3	4	5	6	7	8	9	10	11	12	13
+ 3792	31.07	2857	2857	25.30	55.47	27.50	57.07	28.50	57.32	29.82	+0.42	
357.92	331.07	300.87	268.57	240.07	205.30	175.47	147.50	117.07	88.50	57.32	29.82	+0.42
2.55379	2.51992	2.47838	2.42906	2.38034	2.31239	2.24420	2.16879	2.06845	1.94694	1.75831	1.47451	9.62325
0.91884	0.88497	0.84343	0.79411	0.74539	0.67744	0.60925	0.53384	0.43350	0.31199	0.12336	9.83956	7.98830
8.295	7.673	6.973	6.225	5.564	4.758	4.067	3.418	2.713	2.051	1.328	0.691	+0.000

from observations of Polaris. 27 wires.

U.C.

99

14	15	16	17	18	19	20	21	22	23	24	25	26
-0 2935	-0 5923	-1 2913	-1 5892	-2 2845	-2 5767	-3 2710	-3 5670	+4 2715	-4 5700	-5 2537	-5 5625	88° 40' 16"
- 2935	5923	89.13	118.92	148.45	177.67	207.10	238.70	267.15	297.00	325.37	356.25	8.36533
1.46761	1.77254	1.94500	2.07525	2.17158	2.24961	2.31618	2.37785	2.42675	2.47276	2.51238	2.55175	
9.83294	0.13787	0.31535	0.44105	0.53691	0.61494	0.68151	0.74318	0.79208	0.83809	0.87777	0.91708	
-0.681	-1.374	-2.067	-2.758	-3.443	-4.120	-4.803	-5.536	-6.195	-6.888	-7.546	-8.262	
- 2934	59.28	88.25	119.23	148.88	177.55	206.74	236.68	265.7	296.50	326.09	354.97	88° 40' 9"
- 29.34	59.28	88.25	119.23	148.88	177.55	206.74	236.68	266.57	296.50	326.09	354.97	8.36596
1.46746	1.76552	1.94571	2.07638	2.17284	2.24932	2.31542	2.37416	2.42581	2.47202	2.51334	2.55019	
9.83342	0.13148	0.31167	0.44234	0.53880	0.61528	0.68138	0.74012	0.79177	0.83798	0.87930	0.91615	
-0.681	-1.354	-2.050	-2.769	-3.458	-4.124	-4.802	-5.497	-6.191	-6.886	-7.574	-8.244	
- 29.43	59.39	88.40	119.66	147.88	177.29	207.28	237.19	266.75	296.20	326.16	355.37	88° 40' 5"
- 29.43	59.39	88.40	119.66	147.88	177.29	207.28	237.19	266.75	296.20	326.16	355.37	8.36652
1.46879	1.77371	1.94645	2.07063	2.16991	2.24868	2.31626	2.37510	2.42610	2.47158	2.51343	2.55068	
9.83594	0.14023	0.31294	0.43745	0.53643	0.61520	0.68255	0.74161	0.79262	0.83810	0.87995	0.91720	
-0.684	-1.381	-2.066	-2.736	-3.439	-4.123	-4.818	-5.518	-6.203	-6.888	-7.585	-8.264	
- 30.19	59.01	89.43	118.85	147.61	177.69	208.45	237.03	266.93	295.93	326.43	355.23	88° 40' 6"
- 30.19	59.01	89.43	118.85	147.61	177.69	208.45	237.03	266.93	295.93	326.43	355.23	8.36623
1.47936	1.77093	1.95148	2.07500	2.16912	2.24966	2.31900	2.37480	2.42640	2.47119	2.51379	2.55051	
9.84559	0.13716	0.31771	0.44123	0.53535	0.61559	0.68522	0.74103	0.79263	0.83742	0.88002	0.91674	
-0.701	-1.371	-2.078	-2.762	-3.434	-4.129	-4.844	-5.508	-6.203	-6.877	-7.586	-8.255	
- 30.33	60.80	89.03	118.43	148.88	176.18	207.50	237.13	268.33	295.68	327.03	357.20	88° 40' 19"
- 30.33	60.80	89.03	118.43	148.88	176.18	207.50	237.13	268.33	295.68	327.03	357.20	8.36505
1.48184	1.78390	1.94954	2.07346	2.17284	2.24596	2.31702	2.37499	2.42867	2.47082	2.51459	2.55291	
9.84692	0.14895	0.31459	0.43851	0.53789	0.61101	0.68207	0.74004	0.79372	0.83587	0.87964	0.91796	
-0.703	-1.409	-2.063	-2.745	-3.451	-4.083	-4.809	-5.496	-6.219	-6.853	-7.579	-8.279	

100

Date interval

Collection of Results for thread intervals

U.C.

1880

Oct 3 - Oct 20

1	2	3	4	5	6	7	8	9	10	11	12	13
+6 0.45	+5 28.35	+4 58.93	+4 27.95	+3 57.25	+3 28.31	+2 58.25	+2 28.92	+2 0.13	+1 29.25	+0 59.07	+0 30.20	+0.92
360.45	328.35	298.93	267.95	237.25	208.31	179.25	148.92	120.13	89.25	59.07	30.20	+0.92
2.55684	2.51634	2.47557	2.43056	2.37521	2.31871	2.25346	2.17295	2.07965	1.95061	1.77137	1.48001	9.96379
0.92060	0.88030	0.83953	0.79452	0.73917	0.68267	0.61742	0.53691	0.44361	0.31457	0.13533	9.84397	8.32775
8.333	7.591	6.911	6.230	5.485	4.816	4.144	3.443	2.777	2.063	1.366	0.698	+0.021

Nov. 3 - Nov 29

+6 58.38	28.12	58.52	27.95	58.34	28.92	59.28	28.60	58.87	29.91	59.81	29.93	-0.33
359.58	328.12	298.52	267.95	238.34	208.92	179.28	148.60	118.87	89.91	59.81	29.93	-0.33
2.55579	2.51603	2.47497	2.42805	2.37720	2.31998	2.25353	2.17202	2.07507	1.95381	1.77677	1.47611	9.51851
0.91893	0.87917	0.83811	0.79119	0.74034	0.68312	0.61667	0.53516	0.43821	0.31695	0.13991	9.83925	7.88165
8.297	7.571	6.888	6.183	5.500	4.821	4.137	3.429	2.743	2.075	1.380	0.691	-0.008

Dec. 7 - Dec. 16

+6 0.45	+5 30.65	+4 58.58	29.68	58.95	29.38	58.11	29.52	59.41	30.81	59.11	30.55	-0.66
360.45	330.65	298.58	269.68	239.95	209.38	179.11	149.52	119.41	90.81	59.11	30.55	-0.66
2.55684	2.51937	2.47506	2.43085	2.38011	2.32093	2.25312	2.17470	2.07704	1.95813	1.77166	1.48501	9.81954
0.92316	0.88569	0.84138	0.79717	0.74644	0.68725	0.61944	0.54102	0.44336	0.32445	0.13798	9.85133	8.18586
8.378	7.686	6.940	6.269	5.577	4.867	4.163	3.475	2.776	2.118	1.374	0.701	-0.015

1881
Jan. 15 - Jan 31

+6 59.47	29.01	59.69	29.26	58.61	29.44	59.45	30.67	59.52	29.63	59.40	30.39	-0.57
359.47	329.01	299.69	269.26	238.61	209.44	179.45	150.67	119.52	89.63	59.40	30.39	-0.57
2.55566	2.51721	2.47667	2.43085	2.37769	2.32106	2.25394	2.17803	2.07744	1.95243	1.77379	1.48273	9.75587
0.91743	0.87898	0.83844	0.79194	0.73946	0.68283	0.61571	0.53980	0.43921	0.31420	0.13556	9.84450	8.11764
8.269	7.568	6.893	6.194	5.489	4.818	4.128	3.466	2.749	2.062	1.366	0.699	-0.013

Feb. 2 - Apr. 1

+6 1.76	+5 29.70	59.27	28.34	59.16	29.09	58.69	30.04	59.26	29.42	58.96	28.94	-0.73
361.76	329.70	299.27	268.34	239.16	209.09	178.69	150.04	119.26	89.42	58.96	28.94	-0.73
2.55842	2.51812	2.47606	2.42868	2.37869	2.32033	2.25210	2.17621	2.07649	1.95143	1.77056	1.46160	9.86332
0.92065	0.88035	0.83829	0.79091	0.74092	0.68256	0.61433	0.53844	0.43872	0.31366	0.13279	9.82373	8.22555
8.330	7.592	6.891	6.179	5.507	4.815	4.114	3.455	2.746	2.059	1.422	0.666	-0.017

from observations of Polaris. 27 miles.

U.C.

101 4

14	15	16	17	18	19	20	21	22	23	24	25	26	"
- 29.55	- 0 58.66	- 1 29.69	- 1 59.42	- 2 30.02	- 2 58.10	- 3 27.46	- 3 58.33	- 4 27.68	- 4 58.10	- 5 27.87	- 5 56.72	88° 40' 31"	
- 29.55	59.66	89.69	119.42	150.02	178.10	207.46	238.33	267.65	298.10	327.87	356.72	8.36396	
1.47056	1.77568	1.95274	2.07708	2.17615	2.25066	2.31693	2.37509	2.42762	2.47436	2.51570	2.55233		
9.83452	0.13964	0.31670	0.44104	0.54011	0.61462	0.68089	0.74205	0.79158	0.83832	0.87966	0.91629		
- 0.632	- 1.379	- 2.073	- 2.761	- 3.468	- 4.117	- 4.796	- 5.521	- 6.188	- 6.892	- 7.580	- 8.247		
- 0.683													
- 29.21	59.92	89.64	119.67	149.59	179.21	208.16	239.05	268.69	298.43	327.96	356.90	88° 40' 40"	
- 29.21	59.92	89.64	119.67	149.59	179.21	208.16	239.05	268.69	298.43	327.96	356.90	8.36314	
1.46583	1.77757	1.95250	2.07798	2.17490	2.25336	2.31840	2.37849	2.42925	2.47484	2.51582	2.55255		
9.76477	0.14071	0.31564	0.44112	0.53804	0.61650	0.68154	0.74163	0.79239	0.83798	0.87896	0.91569		
- 0.582	- 1.383	- 2.068	- 2.761	- 3.452	- 4.135	- 4.803	- 5.516	- 6.200	- 6.886	- 7.568	- 8.235		
- 0.654													
- 30.02	59.88	89.38	119.29	149.45	179.27	211.52	239.89	270.12	299.25	329.52	358.82	88° 40' 5"	
- 30.02	59.88	89.38	119.29	149.45	179.27	211.52	239.89	270.12	299.25	329.52	358.82	8.36632	
1.47741	1.77706	1.95124	2.07660	2.17450	2.25351	2.32535	2.38001	2.43156	2.47603	2.51788	2.55488		
9.84373	0.14338	0.31756	0.44292	0.54082	0.61983	0.69167	0.74633	0.79788	0.84235	0.88420	0.92120		
- 0.698	- 1.391	- 2.078	- 2.773	- 3.474	- 4.167	- 4.917	- 5.576	- 6.279	- 6.956	- 7.659	- 8.341		
- 31.03	60.40	89.47	119.79	149.54	178.84	209.74	239.68	269.89	298.04	328.71	359.13	88° 40' 53"	
- 31.03	60.40	89.47	119.79	149.54	178.84	209.74	239.68	269.89	298.04	328.71	359.13	8.36177	
1.49178	1.78104	1.95168	2.07842	2.17476	2.25246	2.32168	2.37963	2.43119	2.47427	2.51681	2.55525		
9.85365	0.14281	0.31345	0.44019	0.53653	0.61423	0.68345	0.74140	0.79296	0.83604	0.87858	0.91702		
- 0.714	- 1.389	- 2.058	- 2.755	- 3.440	- 4.114	- 4.824	- 5.513	- 6.208	- 6.856	- 7.561	- 8.261		
- 29.88	60.40	89.87	120.31	149.38	179.09	209.16	239.82	268.16	298.63	329.64	358.66	88° 40' 50"	
- 29.88	60.40	89.87	120.31	149.38	179.09	209.16	239.82	268.16	298.63	329.64	358.66	8.36223	
1.47538	1.78104	1.94875	2.08030	2.17429	2.25807	2.32048	2.37988	2.42839	2.47513	2.51804	2.55468		
9.83761	0.14327	0.31098	0.44253	0.53652	0.61530	0.68271	0.74211	0.79062	0.83736	0.88027	0.91691		
- 0.688	- 1.391	- 2.048	- 2.770	- 3.440	- 4.124	- 4.816	- 5.522	- 6.175	- 6.861	- 7.590	- 8.259		

102

Date interval

Rad. 4796

$$\begin{array}{r} 20^{\circ} 48' 28'' \\ + 83^{\circ} 14' \\ \hline 103^{\circ} 62' 42'' \end{array}$$

1881

Collection of Results for thread intervals

Apr. 2 - Apr. 30

1	2	3	4	5	6	7	8	9	10	11	12	13
+5 5924	+5 2872	+4 5883	+4 2849	+3 5780	+3 2880	+2 5881	+2 2879	+1 5939	+1 2935	+0 5940	+0 2917	-0.10
359.24	328.72	298.83	268.49	237.80	208.80	178.81	148.79	119.39	89.35	59.40	29.17	-0.10
2.55538	2.51683	2.47542	2.42893	2.37621	2.31973	2.25239	2.17257	2.07697	1.95109	1.77379	1.46494	9.00000
0.91898	0.88043	0.83902	0.79253	0.73981	0.68333	0.61599	0.53617	0.44057	0.31469	0.13739	9.82854	7.36360
8.298	7.593	6.903	6.202	5.493	4.823	4.130	3.437	2.758	2.064	1.372	0.674	-0.002

May 24 - July 12

+ 5883	2736	5794	2781	5729	2846	5884	2881	5914	2849	+ 911	+0 2989	-0.76
358.83	327.36	297.94	267.31	237.29	208.46	178.84	148.81	119.14	88.49	60.11	29.89	-0.76
2.55489	2.51503	2.47413	2.42701	2.37528	2.31903	2.25246	2.17263	2.07606	1.94689	1.77895	1.47553	9.88081
0.91958	0.87972	0.83882	0.79170	0.73997	0.68372	0.61715	0.53732	0.44075	0.31158	0.14364	9.84022	8.24550
8.310	7.581	6.900	6.190	5.495	4.827	4.141	3.446	2.759	2.049	1.392	0.692	-0.018

from observations of Polaris.

27 wires.

103

5

14	15	16	17	18	19	20	21	22	23	24	25	26
-0 3069	-0 5240	-1 2223	-1 5810	-2 2946	-2 5904	-3 2863	-3 5830	-4 2847	-4 5835	-5 2800	-5 5733	88° 40' 35"
30.69	59.40	89.93	119.10	148.46	178.04	208.65	238.50	268.47	298.35	328.00	357.33	8.36360
1.48700	1.77379	1.95390	2.07591	2.17452	2.25295	2.31942	2.37749	2.42890	2.47473	2.51587	2.55307	
9.85060	0.13739	0.31750	0.43951	0.53812	0.61462	0.68302	0.74109	0.79250	0.83833	0.87947	0.91667	
-0.709	-1.372	-2.074	-2.751	-3.452	-4.136	-4.820	-5.509	-6.202	-6.892	-7.576	-8.254	

14	15	16	17	18	19	20	21	22	23	24	25	26
-0 3046	-0 5211	-1 2243	-1 5806	-2 2888	-2 5899	-3 2808	-3 5818	-4 2804	-4 5788	-5 2816	-5 5733	88° 40' 23"
30.46	59.11	89.43	119.06	148.88	178.99	208.08	238.18	268.04	296.88	328.16	357.33	8.36469
1.48373	1.77166	1.95148	2.07576	2.17284	2.25101	2.31823	2.37690	2.42820	2.47258	2.51609	2.55307	
9.84842	0.13635	0.31617	0.44045	0.53753	0.61570	0.68292	0.74159	0.79289	0.83727	0.88078	0.91776	
-0.705	-1.369	-2.071	-2.757	-3.448	-4.129	-4.819	-5.516	-6.207	-6.875	-7.599	-8.274	

U.C.

Final results for thread intervals

1879	1	2	3	4	5	6	7	8	9	10	11	
Feb. 16 - Feb. 24	+8.204 8.224	+7.544	6.868	6.177	5.495	4.807	4.130	3.441	2.740	2.074	1.382	+0.
Mar. 3 - Mar. 25	+8.218	7.558	6.873	6.197	5.514	4.814	4.131	3.432	2.749	2.056	1.374	+0.
Apr. 6 - May 6	+8.273	7.573	6.875	6.185	5.489	4.814	4.135	3.423	2.734	2.058	1.370	+0.
June 26 - July 10	+8.245	7.563	6.875	6.193	5.499	4.821	4.130	3.427	2.748	2.074	1.375	+0.
Aug. 24 - Sept. 29	+8.251	7.586	6.859	6.193	5.518	4.817	4.155	3.450	2.761	2.063	1.374	+0.
Oct. 15 - Oct. 30	+8.295	7.580	6.875	6.187	5.488	4.798	4.140	3.431	2.748	2.080	1.388	+0.
	+49.306 8.218	45.404	41.225	37.132	33.003	28.881	24.821	20.614	16.480	12.405	8.263	4.
	+8.218	+7.567	+6.871	+6.189	5.500	4.813	4.137	3.436	2.747	2.067	1.377	0.
1879 Nov. 10 - Nov. 30	+8.282	7.558	6.867	6.182	5.484	4.799	4.120	3.443	2.743	2.059	1.401	+0.
Dec. 1 - Dec. 29	+8.274	7.555	6.867	6.168	5.503	4.805	4.131	3.450	2.744	2.066	1.369	+0.
1880 Jan. 1 - Jan. 3	+8.292	7.545	6.887	6.184	5.497	4.830	4.133	3.440	2.721	2.052	1.375	+0.
Mar. 1 - Mar. 18	+8.272 8.291	7.523 7.541	6.840 6.872	6.185 6.197	5.472 5.485	4.784 4.797	4.084 4.074	3.415 3.420	2.745 2.750	2.100 2.106	1.367 1.370	0. +0.
	1139	2199	3493	731	1969	3281	478	1743	2958	283	1515	2.
	8.2848	7.5498	6.8732 ok	6.1828	5.4922	4.8202 x	4.1195	3.4358	2.7395	2.0708	1.3788 x ok	0.
Apr. 9 - Apr. 27	+8.264	7.569	6.875	6.184	5.513	4.810	4.111	3.425	2.731	2.067	1.368	+0.
May 4 - May 31	+8.285	7.582	6.887	6.198	5.509	4.808	4.122	3.440	2.746	2.068	1.384	+0.
June 2 - June 28	+8.268	7.576	6.882	6.194	5.510	4.811	4.125	3.449	2.752	2.061	1.379	+0.
July 4 - Aug. 5	+8.282	7.584	6.907	6.203	5.515	4.811	4.134	3.447	2.736	2.064	1.371	+0.
	1099	2311	3551	779	2047	3240	492	1761	2965	260	1502	2.
	8.2748	7.5778	6.8878	6.1948	5.5118	4.8100	4.1230	3.4403	2.7412	2.0650	1.3755 x	+0.
Aug. 15 - Sept. 28	+8.295	7.673	6.973	6.225	5.564	4.758	4.067	3.419	2.713	2.057	1.328	+0.
Oct. 3 - Oct. 20	+8.283	7.591	6.910	6.194	5.485	4.816	4.144	3.443	2.775	2.063	1.366	+0.
Nov. 3 - Nov. 29	+8.297	7.571	6.888	6.183	5.500	4.821	4.137	3.429	2.743	2.075	1.380	+0.
Dec. 7 - Dec. 16	+8.378	7.686	6.940	6.269	5.577	4.867	4.163	3.475	2.776	2.111	1.374	+0.
	1303	2521	3711	871	2126	3262	511	1766	3007	300	1448	2.
	8.3258 ok	7.6302	6.9278 x	6.2178	5.5315 x	4.8155	4.1278	3.4415	2.7518	2.0750	1.3620	0.
1881 Jan. 15 - Jan. 31	+8.269	7.568	6.893	6.194	5.489	4.818	4.128	3.466	2.749	2.062	1.366	+0.
Feb. 2 - Apr. 9	+8.330	7.592	6.891	6.179	5.507	4.815	4.115	3.454	2.746	2.059	1.368	+0.
Apr. 2 - Apr. 30	+8.298	7.593	6.903	6.202	5.493	4.823	4.130	3.437	2.758	2.064	1.372	+0.
May 24 - July 12	+8.310	7.581	6.899	6.190	5.495	4.827	4.141	3.446	2.739	2.049	1.392	+0.
	1207	2334	3586	765	1984	3283	514	1803	3012	234	1488	2.
	+8.3018	7.5835	6.8965	6.1912	5.4960	4.8208	4.1265	3.4508	2.7530	2.0585	1.3720	+0.

from observations of Polaris.

U.C.

12	13	14	15	16	17	18	19	20	21	22	23	24	25
+0.684	+0.011	-0.687	-1.354	-2.036	-2.731	-3.442	-4.129	-4.803	-5.495	-6.210	-6.872	-7.568	-8.248
+0.681	-0.008	-0.688	1.353	2.057	2.756	3.442	4.117	4.806	5.499	6.181	6.875	7.563	8.251
+0.695	+0.013	-0.675	1.377	2.055	2.740	3.435	4.122	4.813	5.517	6.197	6.879	7.578	8.235
+0.667	+0.004	-0.699	1.370	2.052	2.747	3.442	4.121	4.814	5.514	6.178	6.882	7.562	8.257
+0.682	-0.007	-0.670	1.404	2.060	2.745	3.451	4.134	4.790	5.499	6.181	6.894	7.561	8.243
+0.677	+0.007	-0.693	1.396	2.045	2.769	3.447	4.133	4.817	5.526	6.199	6.883	7.576	8.271
4.088	+0.020	-4.112	8.254	12.269	16.288	20.259	24.175	28.043	31.850	35.606	39.315	42.978	46.595
0.684	+0.003	-0.685	-1.376	-2.045	-2.743	-3.4432	-4.1260	-4.8072	-5.5083	-6.1910	-6.8808	-7.5680	-8.2508
+0.679	-0.005	-0.679	1.374	2.056	2.750	3.435	4.123	4.820	5.519	6.218	6.874	7.564	-8.246
+0.689	-0.004	-0.690	1.378	2.069	2.747	3.434	4.136	4.818	5.506	6.204	6.866	7.530	8.253
+0.672	+0.024	-0.678	1.374	2.081	2.759	3.447	4.127	4.812	5.496	6.203	6.891	7.591	8.269
0.725	+0.049	0.641	1.384	2.085	2.760	3.412	4.110	4.848	5.494	6.160	6.818	7.522	8.206
+0.727	+0.049	-0.642	1.357	2.090	2.766	3.420	4.120	4.860	5.507	6.174	6.834	7.539	8.225
2767	+064	2689	1483	296	3022	1756	506	3310	2028	799	3465	2224	993
0.6918	+0.0160	-0.6722	-1.3708	-2.0740	-2.7555	-3.4390	-4.1265	-4.8275	-5.5070	-6.1998	-6.8662	-7.5560	-8.2482
+0.702	+0.004	-0.681	1.374	2.067	2.758	3.443	4.120	4.803	5.536	6.196	6.888	7.546	8.262
+0.697	-0.015	-0.681	1.384	2.050	2.769	3.458	4.124	4.801	5.497	6.191	6.886	7.574	8.244
+0.684	-0.003	-0.684	1.380	2.053	2.735	3.437	4.121	4.818	5.514	6.200	6.885	7.581	8.260
+0.691	-0.014	-0.702	1.371	2.078	2.762	3.431	4.129	4.844	5.508	6.203	6.877	7.586	8.255
2774	-028	2748	1479	250	3024	1769	494	3266	2055	790	3536	2287	1021
+0.6935	-0.0070	-0.6870	1.3698	2.0625	2.7560	3.4422	4.1235	4.8165	5.5138	6.1975	6.8840	7.5818	8.2552
+0.691	+0.010	-0.703	1.409	2.063	2.745	3.451	4.083	4.809	5.496	6.219	6.853	7.579	8.279
+0.698	+0.021	-0.683	1.379	2.073	2.761	3.468	4.117	4.796	5.570	6.188	6.892	7.580	8.247
+0.691	-0.008	-0.674	1.383	2.068	2.761	3.452	4.135	4.803	5.576	6.200	6.886	7.588	8.235
+0.710	-0.015	-0.698	1.391	2.078	2.773	3.474	4.167	4.916	5.576	6.279	6.956	7.659	8.341
2790	+008	2758	1562	282	3040	1845	502	3324	2098	886	3587	2386	1102
0.6975	+0.0020	-0.6895	-1.3905	-2.0705	-2.7600	-3.4612	-4.1255	-4.8310	-5.5245	-6.2215	-6.8968	-7.5965	-8.2755
+0.699	-0.013	-0.714	1.389	2.058	2.755	3.440	4.114	4.824	5.513	6.208	6.855	7.561	8.261
+0.666	-0.017	-0.688	1.391	2.046	2.770	3.440	4.124	4.816	5.522	6.175	6.876	7.590	8.259
+0.674	-0.002	-0.709	1.372	2.077	2.751	3.452	4.136	4.821	5.509	6.202	6.892	7.577	8.254
+0.692	-0.018	-0.705	1.369	2.071	2.757	3.448	4.145	4.819	5.516	6.207	6.875	7.599	8.275
2731	050	2816	1521	252	3033	1780	519	3280	2060	792	3498	2327	1049
+0.6828	-0.0125	-0.7040	-1.3802	-2.0630	-2.7582	-3.4445	-4.1298	-4.8200	-5.5150	-6.1980	-6.8745	-7.5818	-8.2622

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Sch. 533

L.C.

Final results for thread intervals

1879	20 41 38 +96.50	1	2	3	4	5	6	7	8	9	10	11
Feb. 22 - Mar 30	+8.288	7.573	6.893	6.213	5.504	4.799	4.129	3.438	2.749	2.066	1.361	
Apr. 6 - Apr. 23	+8.282	7.575	6.879	6.158	5.491	4.806	4.124	3.432	2.745	2.057	1.376	
May 1 - May 7	+8.285	7.573	6.887	6.198	5.515	4.814	4.146	3.441	2.747	2.068	1.359	
May 29 - July 1	+8.264	7.580	6.877	6.177	5.488	4.807	4.123	3.440	2.763	2.064	1.370	
July 2 - Aug. 14	+8.287	7.576	6.894	6.187	5.519	4.814	4.137	3.443	2.754	2.060	1.366	
	1406	2877	4430	933	2517	4040	659	2194	3758	315	1832	
	+ 8.2812	7.5754	6.8860	6.1866	5.5034	4.8080	4.1318	3.4388	2.7516	2.0630	1.3664	
Sept. 6 - Sept. 30	+8.218	7.577	6.891	6.187	5.503	4.827	4.131	3.424	2.720	2.031	1.377	
Oct. 1 - Oct. 28	+8.251	7.562	6.860	6.177	5.505	4.801	4.112	3.441	2.737	2.054	1.369	
Nov. 4 - Dec. 25	+8.232	7.559	6.867	6.174	5.462	4.798	4.139	3.452	2.740	2.040	1.367	
1880 Apr. 5 - Apr. 30	+8.202	7.581	6.879	6.187	5.487	4.805	4.126	3.452	2.722	2.054	1.350	
May 3 - May 23	+8.263	7.581	6.890	6.212	5.520	4.820	4.122	3.438	2.758	2.071	1.368	
June 4 - June 30	+8.245	7.571	6.879	6.187	5.500	4.816	4.130	3.451	2.743	2.062	1.372	
	1511	3431	5266	1124	2977	4867	760	2658	4420	312	2203	
	+ 8.2518	7.5718	6.8777	6.1873	5.4962	4.8112	4.1267	3.4430	2.7367	2.0520	1.3672	
July 1 - July 28	+8.281	7.580	6.878	6.197	5.496	4.813	4.106	3.435	2.735	2.055	1.377	
July 30 - Aug. 24	8.273	7.589	6.890	6.204	5.500	4.812	4.120	3.437	2.735	2.057	1.391	
Sept. 2 - Sept. 29	8.268	7.575	6.887	6.185	5.497	4.817	4.127	3.431	2.757	2.051	1.374	
Oct. 3 - Oct. 24/25	8.265	7.549	6.883	6.204	5.508	4.819	4.134	3.454	2.752	2.067	1.369	
1881 Nov. 1 - Dec. 18	8.360	7.652	6.936	6.244	5.538	4.845	4.152	3.459	2.774	2.071	1.398	
Apr. 1 - Apr. 23	8.305	7.593	6.894	6.207	5.503	4.833	4.134	3.428	2.756	2.041	1.372	
	1752	3538	5368	1241	3042	4939	773	2644	4509	342	2281	
	8.2920	7.5897	6.8947	6.2068	5.5070	4.9878	4.1288	3.4407	2.7515	2.0570	1.3802	
						8231						
June 17 - June 25	8.262	7.590	6.896	6.185	5.501	4.816	4.137	3.446	2.750	2.058	1.364	
July 6 - July 15	8.279	7.571	6.881	6.197	5.503	4.815	4.105	3.438	2.750	2.075	1.390	
July 25 - Aug. 31	8.272	7.559	6.880	6.178	5.520	4.815	4.160	3.459	2.754	2.093	1.373	
Sept. 7 - Sept. 25	8.265	7.595	6.884	6.187	5.506	4.828	4.117	3.429	2.742	2.062	1.358	
Oct. 1 - Oct. 27	8.284	7.589	6.885	6.194	5.510	4.810	4.131	3.440	2.762	2.050	1.368	
Nov. 5 - Dec. 25	8.260	7.599	6.888	6.210	5.497	4.805	4.125	3.440	2.740	2.051	1.360	
	1622	3503	5314	1151	3037	4889	775	2652	4498	389	2213	
	+ 8.2703	7.5838	6.8857	6.1918	5.5062	4.8148	4.1292	3.4420	2.7497	2.0648	1.3688	

from observations of Polaris - L.C.

12	13	14	15	16	17	18	19	20	21	22	23	24	25
-0.681	+0.016	-0.681	-1.371	-2.062	-2.738	-3.415	-4.125	-4.819	-5.511	-6.174	-6.895	-7.598	-8.297
0.681	-0.018	-0.672	1.368	2.053	2.747	3.415	4.104	4.809	5.483	6.177	6.882	7.583	8.264
0.678	+0.008	-0.685	1.379	2.074	2.737	3.436	4.134	4.834	5.481	6.193	6.901	7.586	8.293
0.682	-0.002	-0.684	1.364	2.049	2.731	3.433	4.126	4.796	5.489	6.172	6.827	7.578	8.295
0.665	-0.005	-0.686	1.365	2.066	2.762	3.453	4.141	4.829	5.504	6.177	6.820	7.573	8.301
3387	- .001	3408	1847	304	3715	2152	630	4087	2468	893	4465	2918	1450
0.6774	-0.000	-0.6816	-1.3694	-2.0608	-2.7430	-3.4304	-4.1260	-4.8174	-5.4936	-6.1786	-6.8930	-7.5836	-8.2900
+0.700	+0.009	-0.694	-1.354	-2.073	-2.750	-3.425	-4.130	4.826	5.570	6.199	6.846	7.559	8.238
0.670	-0.016	-0.673	1.362	2.063	2.757	3.431	4.130	4.801	5.483	6.168	6.864	7.558	8.232
0.694	-0.002	-0.687	1.362	2.034	2.747	3.411	4.106	4.817	5.508	6.174	6.860	7.550	8.224
0.636	+0.002	-0.679	1.404	2.065	2.737	3.463	4.131	4.835	5.481	6.195	6.863	7.546	8.225
0.684	-0.008	-0.689	1.382	2.062	2.763	3.446	4.128	4.800	5.506	6.178	6.891	7.571	8.244
0.680	-0.012	-0.685	1.367	2.050	2.737	3.442	4.120	4.810	5.504	6.184	6.879	7.576	8.263
4064	-.027	-4107	-2231	-347	-4491	-2618	-745	-4889	-2992	-1098	-5203	-3360	-1426
0.6773	-0.0045	-0.6845	-1.3718	-2.0578	-2.7485	-3.4363	-4.1242	-4.8148	-5.5084	-6.1830	-6.8672	-7.5600	-8.2377
									5.4987				
0.679	-0.004	0.675	1.377	2.064	2.746	3.440	4.115	4.816	5.508	6.192	6.883	7.569	8.279
0.708	-0.007	0.688	1.372	2.071	2.759	3.444	4.116	4.815	5.512	6.185	6.894	7.587	8.264
0.671	+0.009	0.682	1.365	2.069	2.752	3.428	4.140	4.810	5.517	6.193	6.890	7.581	8.250
0.677	-0.003	0.677	1.378	2.071	2.746	3.436	4.132	4.799	5.497	6.182	6.882	7.573	8.263
0.678	+0.007	0.674	1.398	2.093	2.778	3.465	4.170	4.857	5.541	6.228	6.931	7.617	8.351
0.690	-0.011	0.670	1.389	2.067	2.755	3.457	4.124	4.827	5.575	6.192	6.898	7.578	8.236
4103	-.009	-4066	-2279	-435	-4536	-2670	-797	-4924	-3090	-1172	-5378	-3505	1643
0.6838	-0.0015	-0.6777	-1.3798	-2.0725	-2.7560	-3.4450	-4.1328	-4.8207	-5.5150	-6.1953	-6.8963	-7.5842	8.2738
0.691	+0.007	0.689	1.381	2.064	2.756	3.447	4.134	4.808	5.501	6.199	6.872	7.575	8.270
0.694	+0.012	0.691	1.360	2.074	2.756	3.421	4.140	4.831	5.517	6.214	6.868	7.573	8.269
0.687	+0.005	0.697	1.377	2.096	2.716	3.435	4.123	4.827	5.502	6.192	6.873	7.550	8.296
0.672	+0.005	0.696	1.372	2.056	2.742	3.420	4.140	4.807	5.496	6.193	6.895	7.573	8.305
0.666	-0.011	0.684	1.384	2.061	2.737	3.447	4.138	4.822	5.515	6.183	6.869	7.564	8.253
0.689	-0.004	0.696	1.383	2.058	2.741	3.441	4.125	4.827	5.505	6.193	6.882	7.560	8.245
4099	+014	-4156	2257	-409	-4448	-2611	-800	-4922	-3036	-1174	-5259	-3395	-1638
0.6832	+0.0023	-0.6927	-1.3762	-2.0682	-2.7413	-3.4352	-4.1333	-4.8203	-5.5060	-6.1957	-6.8765	-7.5658	-8.2730

108

U C

	1	2	3	4	5	6	7	8	9	10	11
Feb 16 - Oct 30	8.248	7.567	6.871	6.189	5.500	4.813	4.137	3.436	2.747	2.067	1.377
Nov 10 - Mar 18, mo	8.285	7.550	6.873	6.183	5.492	4.808	4.119	3.436	2.739	2.071	1.378 ⁹
Apr 9 - Aug 5	8.275	7.578	6.888	6.195	5.512	4.810	4.123	3.440	2.741	2.065	1.378 ⁹
Jan 15 '81 - July 12 '81	8.302	7.583 ⁵	6.896	6.191	5.496	4.821	4.128	3.449 ^{4,5,1}	2.753	2.058	1.372 ⁴
	33.110	30.378 ²	27.523	358	2000	52	107	164 ³	180	261	25
	8.277	7.574 ⁷⁰	6.881	6.189	5.500	4.813	4.127	3.441	2.745	2.065	1.376

Aug 15 - Dec 16 8.326 7.630 6.928 6.218 5.531 4.815 4.128 3.441 2.752 2.075 1.362

L C

Feb 22 - Aug 14	8.252	7.572	6.878	6.187	5.496	4.811	4.127	3.443	2.737	2.052	1.367
Sept 6 - June 30	8.292	7.590	6.895	6.207	5.507	4.823	4.129	3.441	2.751	2.057	1.380
July 1 - Apr 23 '81	8.270	7.584	6.886	6.192	5.506	4.815	4.129	3.442	2.750	2.065	1.369
June 17 - Dec 23	8.281	7.575	6.886	6.187	5.503	4.808	4.132	3.439	2.752	2.063	1.366
Feb. 22 - Aug 14	295	321	345	773	2012	57	117	165	190	237	282
	8.274	7.580	6.886	6.193	5.503	4.814	4.119	3.441	2.748	2.059	1.373

8.277 7.574⁷⁰ 6.881 6.189 5.500 4.813 4.127 3.441 2.745 2.065 1.376
 +8.269 +7.573 +6.883 +6.188 +5.503 +4.818 +4.124 +3.437 +2.747 +2.065 +1.374

Diff +.008 +.021⁰⁰³ -.002 +.001 -.003 -.005 -.002 +0.03⁴ -.002 +0.00 +.002

+8.273 +7.573⁷⁰ +6.882 +6.188 +5.502 +4.816 +4.128 +3.439 +2.746 +2.065 +1.375

For logs of these values of
thread intervals which
have been used in
reductions of the Fund
Hais see MSS

the above note found
between pgs 108 & 109 on examination
by J.A.D. Feb 1954 and
quoted by him here
very likely the above note refers to
results given on pgs 118-119

19	20	21	22	23	24	25
-4.126	-4.807	-5.508	-6.191	-6.881	-7.568	-8.251
4.126	4.827	5.507	6.200	6.866	7.556	8.248
4.123	4.816	5.514	6.197	6.884	7.572	8.255
4.130	4.820	5.515	6.198	6.874	7.582	8.262
105	70	44	78	6	305	278
-4.126	-4.818	-5.511	-6.196	-6.876	-7.569	-8.254

-4.125	-4.831	-5.524	-6.221	-6.897	-7.596	-8.275
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4.124	4.815	5.499	6.183	6.867	7.560	8.238
4.133	4.821	5.515	6.195	6.896	7.584	8.274
4.133	4.820	5.506	6.196	6.876	7.566	8.273
126	4.817	5.498	6.179	6.893	7.584	8.290
116	73	201	353	332	294	275
4.127	4.818	5.503	6.188	6.883	7.573	8.269

0.688	0.000	-0.688	-1.374	-2.062	-2.754	-3.442	-4.126	-4.818	-5.511	-6.196	-6.876	-7.569	-8.254
+0.684	-0.001	-0.680	-1.373	-2.059	-2.748	-3.441	-4.119	-4.814	-5.503	-6.193	-6.886	-7.580	-8.274
+0.004	-0.001	-0.008	-0.001	-0.003	-0.006	-0.001	-0.007	-0.004	-0.008	-0.003	+0.010	+0.011	+0.020
+0.686	-0.001	-0.684	-1.373	-2.060	-2.751	-3.441	-4.123	-4.816	-5.507	-6.195	-6.881	-7.574	-8.264

	19	20	21	22	23	24	25
0.684 +0.003 -0.685 -1.376 -2.050 -2.748 -3.443 -4.126 -4.807 -5.508 -6.191 -6.881 -7.568 -8.251							
0.692 +0.016 -0.672 1.371 2.074 2.755 3.439 4.126 4.827 5.507 6.200 6.866 7.556 8.248							
0.693 -0.007 -0.688 ⁴⁸ 1.370 2.062 2.756 3.442 4.123 4.816 5.514 6.197 6.884 7.572 8.255							
0.683 -0.012 -0.704 ⁴⁸ 1.380 2.063 2.758 3.445 4.130 4.820 5.515 6.198 6.874 7.582 8.262							
352 0.000 2750 297 249 217 169 105 70 44 786 305 278 216							
0.688 0.000 -0.688 ⁴⁸ -1.374 -2.062 -2.754 -3.442 -4.126 -4.818 -5.511 -6.198 -6.876 -7.569 -8.254							
0.697 +0.002 -0.689 -1.390 -2.070 -2.760 -3.461 -4.125 -4.831 -5.524 -6.221 -6.897 -7.596 -8.275							
0.677 -0.004 -0.684 -1.372 -2.058 -2.748 -3.436 -4.124 -4.815 -5.499 -6.183 -6.867 -7.560 -8.238							
0.684 -0.001 0.678 1.380 2.072 2.756 3.445 4.133 4.821 5.515 6.195 6.896 7.584 8.274							
0.683 +0.002 0.693 1.376 2.068 2.741 3.435 4.133 4.820 5.506 6.196 6.876 7.566 8.273							
0.677 -0.000 0.682 1.369 2.061 2.743 3.430 4.126 4.817 5.498 ⁴⁸ 6.179 6.893 7.584 8.290							
321 -0.003 337 297 259 188 146 116 73 201 ⁴⁸ 353 332 294 275							
0.680 -0.001 -0.684 -1.374 -2.065 -2.747 -3.437 -4.127 -4.818 -5.508 -6.188 -6.883 -7.573 -8.269							
0.688 0.000 -0.688 -1.374 -2.062 -2.754 -3.442 -4.126 -4.818 -5.511 -6.196 -6.876 -7.569 -8.254							
+0.684 -0.001 -0.680 -1.373 -2.059 -2.748 -3.441 -4.119 -4.814 -5.503 -6.193 -6.886 -7.580 -8.274							
+0.004 -0.001 -0.008 -0.001 -0.003 -0.006 -0.001 -0.007 -0.004 -0.008 -0.003 +0.010 +0.011 +0.020							
+0.686 -0.001 -0.684 -1.373 -2.060 -2.751 -3.441 -4.123 -4.816 -5.507 -6.195 -6.881 -7.574 -8.264							

~~D.M. + 79° 294
h m s
20 49 32.
- + 100° 13'~~

1879

1829 Apr 15 - May 31	20.626	18.577	16.482	14.418	12.353	12.367	14.457	16.506	18.594	20.658
June 1 - June 20	20.630	18.558	16.508	14.447	12.363	12.382	14.445	16.514	18.591	20.685
July 1 - Aug 24	20.668	18.576	16.498	14.434	12.366	12.394	14.430	16.494	18.546	20.629
1834 Dec 4 - Aug 18 ¹⁸⁴⁰	20.643	18.555	16.490	14.417	12.367	12.370	14.458	16.509	18.592	20.653
June 12 July 9	20.683	18.605	16.491	14.458	12.396	12.403	14.486	16.536	18.573	20.660
1850 Sept 3 - Jan 10 ¹⁸⁵¹	20.682	18.618	16.547	14.469	12.400	12.361	14.448	16.524	18.616	20.537
Jan 2 - Feb 26	20.672	18.609	16.530	14.464	12.410	12.357	14.423	16.545	18.577	20.603
Mar 7 - Apr 28	20.679	18.617	16.538	14.447	12.372	12.405	14.442	16.513	18.564	20.684
Apr 2 - Apr 18	20.665	18.615	16.555	14.503	12.457	12.356	14.426	16.525	18.576	20.645
Apr 18 - May 13	20.691	18.616	16.562	14.458	12.406	12.400	14.442	16.525	18.584	20.655
1861 May 11 - June 29	20.686	18.626	16.530	14.474	12.396	12.373	14.446	16.514	18.598	20.659
June 21 - July 25	20.684	18.605	16.528	14.469	12.394	12.420	14.446	16.528	18.615	20.656
Dec 10 - Dec 18	20.785	18.584	16.568	14.472	12.385	12.399	14.479	16.568	18.584	20.763
	8794	7761	6827	5830	5065	4987	628	6803	7.610	8.487
Mean	20.676	18.597	16.525	14.448	12.390	12.389	14.448	16.523	18.585	20.653

and A-1

112
1879

From Feb 22 - Mar 30

$$D = 88^{\circ} 40' 10''$$

$$\cos D = 8.86687$$

i	$\log i$	$\frac{\log i}{\cos D}$
-----	----------	-------------------------

+8.273	0.91766	2.55179	256.28
--------	---------	---------	--------

+7.583

+6.882

+6.188

+5.502

+4.816

+4.128

+3.439

+2.746

+2.065

+1.375

+0.686

-0.01

-0.684

-1.373

-2.060

-2.751

-3.441

-4.123

-4.816

-5.507

-6.195

-6.881

-7.574

-8.264

L.P.

From Apr 6 - Apr 23

$$D = 88^{\circ} 39' 59''$$

$$\cos D = 8.36687$$

$\log i$	$\frac{\log i}{\cos D}$
----------	-------------------------

0.91766

From May 1 - May 7

$$D = 88^{\circ} 39' 53''$$

$$\cos D = 8.36741$$

$\log i$	$\frac{\log i}{\cos D}$
----------	-------------------------

0.91766

Hann May 29 - July 1

$$N = 88^{\circ} 39' 47''$$

$$\cos N = 8.36795$$

$$\log i \quad \frac{\log i}{\cos N}$$

$$0.91766$$

L.C.
Hann July 2 - Aug. 14

$$N = 88^{\circ} 39' 48''$$

$$\cos N = 8.36786$$

$$\log i \quad \frac{\log i}{\cos N}$$

$$0.91766$$

Hann Sept 6 - Sept. 30

$$N = 88^{\circ} 40' 47''$$

$$\cos N = 8.36641$$

$$\log i \quad \frac{\log i}{\cos N}$$

$$0.91766$$

14
879

From Oct. 1 - Oct. 28

Rad. 2218

$$\begin{array}{r} 20 \text{ } 57 \text{ } 11 \\ + 93 \text{ } 22 \\ \hline \end{array} \quad \rho = 88^\circ 40' 14''$$

$$\cos \rho =$$

$$\log i \quad \frac{\log i}{\cos \rho}$$

$$0.91766$$

L.C.

From Nov. 4 - Dec. 25

$$\rho = 88^\circ 40' 30''$$

$$\cos \rho =$$

$$\log i \quad \frac{\log i}{\cos \rho}$$

$$0.91766$$

1880

From Apr. 5 - Apr. 30

$$\rho = 88^\circ 40' 17''$$

$$\cos \rho =$$

$$\log i \quad \frac{\log i}{\cos \rho}$$

$$0.91766$$

Le.C.

115 2

From May 3 - May 23

$$P = 88^{\circ} 40' 10''$$

$$\cos P =$$

$$\log i \quad \frac{\log i}{\cos P}$$

$$0.91766$$

From June 4 - June 30

$$P = 88^{\circ} 40' 5''$$

$$\cos P =$$

$$\log i \quad \frac{\log i}{\cos P}$$

From July 1 - July 28

$$P = 88^{\circ} 40' 6''$$

$$\cos P =$$

$$\log i \quad \frac{\log i}{\cos P}$$

$\begin{array}{r} 2.1480 \\ h \quad m \quad s \\ 20 \quad 54 \quad 0 \\ +98^{\circ} 43' \end{array}$

Collection of Results for $A+1$, A and $A-1$.

$A+1$

	1	2	3	4	5	1	2
From Fundamental Stars. 1879/1880	20.611	18.540 ⁸	16.504	14.437	12.366	8.252	6.180
Mean of HC & LC for 1879 1880.	20.634	18.517	16.515	14.448	12.377	8.243	6.190
Polaris for 1879, 1880.	20.676	18.597	16.525	14.448	12.390		
Fundamental Stars. for 1881.	20.635	18.578	16.516	14.444	12.376	8.259	6.189
Mean of HC & LC for 1881.	20.645	18.586	16.524	14.478	12.388	8.262	6.206
	201						
	104251	2318	2584	2255	1897	1016	765
	20.850	18.568 ⁴	16.517	14.451	12.379	8.203	6.191
	20.640					8.254	

A

A₁

	3	4	5	6	7	8	9	1	2	3	4	5
280	4.122	2.046	-0.004	-2.060	-4.123	-6.190	-8.264	-12.369	-14.431	-16.492	-18.559	-20.639
90	4.124	2.001	-0.005	-2.072	-4.125	-6.192	-8.257	-12.387	-14.430	-16.498	-18.557	-20.618
								-12.383	-14.448	-16.523	-18.585	-20.653
89	4.125	2.061	-0.005	-2.058	-4.128	-6.192	-8.271	-12.379	-14.443	-16.516	-18.582	-20.662
06	4.122	2.059	-0.003	-2.044	-4.135	-6.192	-8.268	-12.383	-14.458	-16.520	-18.581	-20.658
65	495 ²	167	017	234	511	766	1060	1901	2210	2549	2864	3260
91	4.122 ³	2.042	-0.004	-2.058	-4.128	-6.191	-8.265	-12.380	-14.442	-16.500	-18.573	-20.652

120

Sch. 1258
h m s
21 8 43.
+80° 42'

26

Sch. 1260
h m s
21 11 40
+ 80° 33'

Rad. 5218
h m s
21 17 16.
+80° 19'

Rad 5228
h m s
21 18 4
+80° 45'

136

G. 3548
h m s
21 22 23
+86° 34'

142

G. 3371
h m s
21 28 11
+80° 1

146

 $DM + 79^{\circ}$ $h \sim 9$ 21.32 ± 0.48 $+100 \pm 20$

Rad. 2404
h m s
21 50.1
+95° 32'

$DM. + 79^{\circ} 72'$
 $h \approx 3$
 $21 \ 58^{\circ} 50'$
 $+ 79^{\circ} 44'$

58

Rad. 2407
h m s
21 58 25
+92° 9'

160

1679bbae, proj. 1625.