

Declination, east of north, 17 degrees + tabulated values in minutes of arc.

January 1968.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1 D	14.9	13.7	12.6	11.7	10.9	10.2	9.7	9.2	8.8	8.4	8.1	7.8	7.5	7.2	6.9	6.6	6.3	6.0	5.7	5.4	5.1	4.8	4.5	4.2	390.1	15.42	
2	15.1	13.9	12.8	11.9	11.1	10.4	9.9	9.4	9.0	8.6	8.3	8.0	7.7	7.4	7.1	6.8	6.5	6.2	5.9	5.6	5.3	5.0	4.7	4.4	338.5	14.10	
3 Q	15.1	13.8	12.7	11.8	11.0	10.3	9.8	9.3	8.9	8.5	8.2	7.9	7.6	7.3	7.0	6.7	6.4	6.1	5.8	5.5	5.2	4.9	4.6	4.3	307.0	12.54	
4 Q	15.7	13.7	12.6	11.7	10.9	10.2	9.7	9.2	8.8	8.4	8.1	7.8	7.5	7.2	6.9	6.6	6.3	6.0	5.7	5.4	5.1	4.8	4.5	4.2	294.0	12.25	
5 Q	15.4	13.6	12.5	11.6	10.8	10.1	9.6	9.1	8.7	8.3	8.0	7.7	7.4	7.1	6.8	6.5	6.2	5.9	5.6	5.3	5.0	4.7	4.4	4.1	290.1	12.09	
6	15.3	13.5	12.4	11.5	10.7	10.0	9.5	9.0	8.6	8.2	7.9	7.6	7.3	7.0	6.7	6.4	6.1	5.8	5.5	5.2	4.9	4.6	4.3	4.0	273.5	11.39	
7 Q	12.3	12.6	12.9	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.1	17.4	17.7	18.0	18.3	18.6	18.9	19.2	288.6	12.05	
8 Q	12.1	12.3	12.5	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1	14.3	14.5	14.7	14.9	15.1	15.3	15.5	15.7	15.9	16.1	16.3	16.5	16.7	259.5	10.81	
9	12.4	12.7	13.0	13.3	13.6	13.9	14.2	14.5	14.8	15.1	15.4	15.7	16.0	16.3	16.6	16.9	17.2	17.5	17.8	18.1	18.4	18.7	19.0	19.3	255.8	10.58	
10	13.3	11.2	10.6	10.0	9.4	8.8	8.2	7.6	7.0	6.4	5.8	5.2	4.6	4.0	3.4	2.8	2.2	1.6	1.0	0.4	-0.2	-0.8	-1.4	-2.0	277.2	11.58	
11	11.9	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	304.5	12.68	
12	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	300.7	12.53	
13	12.8	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	271.0	11.29	
14	14.3	13.4	12.5	11.6	10.7	9.8	8.9	8.0	7.1	6.2	5.3	4.4	3.5	2.6	1.7	0.8	-0.1	-1.0	-1.9	-2.8	-3.7	-4.6	-5.5	-6.4	334.0	13.92	
15	14.7	13.8	12.9	12.0	11.1	10.2	9.3	8.4	7.5	6.6	5.7	4.8	3.9	3.0	2.1	1.2	0.3	-0.6	-1.5	-2.4	-3.3	-4.2	-5.1	-6.0	289.1	12.05	
16	14.6	13.7	12.8	11.9	11.0	10.1	9.2	8.3	7.4	6.5	5.6	4.7	3.8	2.9	2.0	1.1	0.2	-0.7	-1.6	-2.5	-3.4	-4.3	-5.2	-6.1	298.9	12.37	
17 D	14.3	14.4	13.0	11.7	10.7	10.0	9.4	8.8	8.2	7.6	7.0	6.4	5.8	5.2	4.6	4.0	3.4	2.8	2.2	1.6	1.0	0.4	-0.2	-0.8	296.9	12.37	
18 D	12.2	14.9	14.7	12.4	14.6	12.1	10.5	14.0	17.5	14.6	16.2	10.1	12.0	15.7	17.3	19.5	20.5	21.8	21.2	20.2	17.2	15.7	13.7	11.6	346.8	14.45	
19	12.4	12.5	12.5	12.4	12.3	12.2	12.1	12.0	11.9	11.8	11.7	11.6	11.5	11.4	11.3	11.2	11.1	11.0	10.9	10.8	10.7	10.6	10.5	10.4	282.7	12.45	
20	11.9	13.5	13.7	12.0	11.5	10.8	10.2	9.6	9.0	8.4	7.8	7.2	6.6	6.0	5.4	4.8	4.2	3.6	3.0	2.4	1.8	1.2	0.6	0.0	310.9	12.95	
21 D	13.9	12.1	13.7	13.6	13.3	10.8	09.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	125.4	—	
22	13.0	13.2	13.0	12.0	12.7	11.4	10.6	09.1	08.9	08.5	08.7	07.8	12.0	13.8	17.6	17.5	19.4	20.1	19.8	16.7	15.7	13.8	12.9	12.7	316.7	13.20	
23 D	11.4	11.0	11.8	11.3	10.0	09.8	07.8	05.8	05.9	05.5	05.2	05.5	09.5	11.2	11.9	15.8	19.6	20.1	21.4	17.9	16.6	14.8	13.7	13.1	288.0	12.00	
24	12.9	12.2	12.8	12.8	12.3	11.5	10.3	08.8	08.2	08.4	07.7	08.6	12.4	11.2	09.9	15.7	17.5	19.1	19.4	18.7	17.1	14.8	13.0	11.9	305.1	12.71	
25	11.2	11.9	10.8	10.7	11.0	10.2	09.7	07.5	08.3	08.3	08.8	08.6	07.3	07.9	13.8	14.8	19.0	19.8	18.6	19.2	16.1	16.3	14.9	14.5	295.0	12.29	
26	13.7	12.9	11.9	09.5	07.0	02.8	04.9	08.1	07.4	08.5	10.1	09.8	09.3	08.5	10.0	12.9	17.4	19.3	19.0	18.6	18.4	17.1	15.1	13.1	284.9	11.87	
27	12.2	12.6	12.5	12.0	12.4	12.2	11.9	10.3	09.3	09.0	08.8	09.0	08.8	08.4	09.1	12.0	14.7	17.0	17.2	18.1	17.4	16.0	14.7	12.9	298.5	12.44	
28	12.3	11.9	11.8	11.6	11.3	10.4	09.2	08.2	07.3	06.4	06.9	05.2	06.2	08.6	10.4	12.0	13.9	16.6	17.9	17.6	16.0	14.9	13.4	12.8	276.0	11.50	
29	12.6	12.1	11.7	09.8	07.3	04.8	05.3	00.9	04.0	08.5	08.5	05.6	05.7	08.2	08.3	12.0	17.5	20.6	19.5	19.5	16.7	14.6	14.0	13.8	255.5	10.55	
30	13.3	12.9	12.5	11.3	09.3	08.7	06.9	06.8	05.2	05.5	05.7	05.6	07.4	08.6	10.9	14.0	16.3	18.3	19.9	19.2	16.6	15.0	13.0	13.3	274.0	11.42	
31	13.2	12.2	12.0	11.2	09.4	07.8	07.1	06.3	06.5	06.5	07.3	05.5	05.5	05.1	06.8	10.9	15.4	17.4	18.4	18.6	16.3	14.5	12.9	12.2	254.3	10.83	
Sum.	405.1	399.2	392.7	369.3	347.0	318.0	275.7	225.5	185.9	173.9	172.7	201.7	264.7	316.2	383.6	472.6	561.9	601.7	584.7	546.3	493.8	451.0	417.1	415.4	8972.2		
Mean.	13.07	12.85	12.67	11.91	11.19	10.26	08.89	07.45	06.20	05.80	05.76	06.72	08.82	10.54	12.79	15.75	18.73	20.06	19.49	18.21	16.46	14.55	13.45	13.40		12.29	

= 16 degrees + tabulated value.

Horizontal component, H, 2500 gammas +

January 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
01 D	596	587	591	551	544	559	556	545	557	542	546	525	505	475	455	474	498	521	550	546	551	556	560	552	12870	536.3	
02	597	581	579	572	579	555	552	557	552	552	552	521	515	518	525	558	547	558	572	584	581	584	577	582	15454	559.3	
03 Q	592	592	594	596	587	579	576	576	574	571	568	549	537	530	528	551	554	578	595	601	596	586	586	589	15765	573.5	
04 Q	590	591	595	595	595	592	595	591	586	584	572	557	537	526	535	560	570	583	595	597	585	585	583	615	15938	580.8	
05 Q	619	596	604	616	619	623	623	619	611	596	582	566	546	538	539	550	576	600	615	650	624	611	583	600	14398	596.7	
06	604	606	616	615	608	609	609	615	599	582	579	565	559	545	534	560	566	605	619	650	634	615	614	608	14350	597.1	
07 Q	597	605	616	627	618	616	617	610	599	588	576	568	558	549	539	566	585	600	619	629	619	606	601	595	14517	596.3	
08 Q	599	605	609	605	612	616	606	596	589	580	568	547	535	534	536	547	572	591	597	602	609	615	616	612	14099	587.5	
09	613	616	618	612	615	616	617	602	605	601	581	570	556	556	535	545	583	588	585	583	608	611	604	617	14200	592.7	
10	616	612	592	592	605	610	601	600	592	589	580	558	538	525	526	522	542	561	581	576	565	575	592	607	15862	577.5	
11	615	622	622	627	651	654	623	607	599	594	586	577	559	544	532	536	560	567	585	587	548	572	583	597	14100	587.5	
12	605	624	624	616	621	615	609	609	595	584	569	551	542	534	527	531	555	555	548	566	576	599	605	595	15911	579.6	
13	618	608	628	650	633	623	611	602	597	595	578	568	538	540	536	539	545	557	572	608	606	609	585	575	14109	587.9	
14	595	601	605	608	607	608	610	602	592	589	580	566	550	555	528	521	525	525	556	558	609	561	565	570	15819	575.8	
15	585	597	610	616	622	617	589	581	581	579	577	570	560	540	549	541	555	551	550	572	572	615	580	579	15956	576.6	
16	591	596	600	607	615	629	618	614	609	597	592	594	584	570	562	556	571	571	581	587	592	587	589	593	14215	582.2	
17 D	594	591	605	616	605	605	605	601	597	586	591	589	585	548	541	576	581	587	587	575	592	608	601	585	14061	586.7	
18 D	588	588	595	587	579	574	584	598	599	582	565	559	537	537	536	520	531	530	530	539	554	555	570	568	15939	566.5	
19	571	586	595	602	595	589	585	586	589	574	556	542	535	530	529	536	544	541	552	565	580	599	585	587	15663	568.9	
20	582	595	610	594	595	601	614	606	609	597	586	565	565	565	554	535	557	571	577	579	574	591	656	614	14121	582.4	
21 D	616	615	610	607	575	578	574	---	---	---	---	---	---	---	---	---	---	---	---	---	---	558	575	598	5884	---	
22	595	590	596	598	605	599	589	586	585	576	565	559	551	547	535	537	537	546	569	587	570	570	578	581	15641	583.4	
23 D	601	588	601	605	595	584	577	578	568	556	559	549	537	536	529	518	529	534	571	565	565	566	570	582	15668	584.8	
24	584	584	586	582	596	595	595	582	585	585	585	557	551	549	533	516	520	535	551	559	565	575	585	585	15877	569.9	
25	605	599	607	595	595	585	591	595	591	590	598	590	568	545	528	515	523	526	545	565	566	570	571	581	15753	572.5	
26	592	600	615	595	578	552	565	567	559	550	555	556	556	549	542	530	538	540	555	562	575	575	578	586	15551	564.6	
27	579	586	598	595	592	589	590	590	596	579	566	565	574	558	542	537	537	535	542	572	577	590	588	587	15765	573.5	
28	596	600	597	597	597	595	594	594	601	598	595	581	574	560	549	531	531	531	551	569	572	594	584	596	15954	580.6	
29	621	619	618	608	596	584	577	571	581	584	576	569	563	559	535	537	537	542	556	574	589	594	599	602	15858	577.4	
30	606	614	619	624	635	632	651	626	608	599	584	585	587	575	557	542	534	566	581	586	595	599	604	600	14507	596.1	
31	607	597	596	595	586	590	589	589	598	582	585	580	577	561	545	531	529	532	564	575	574	593	605	609	15965	577.7	
Sum.	18533	18588	18738	18695	18625	18555	18467	17807	17665	17479	17285	16919	16612	16228	16077	16044	14590	16699	17125	17457	17557	19274	18286	18554	422595		
Mean.	597.8	599.6	604.5	603.1	600.8	597.6	595.7	595.6	588.8	582.6	576.1	564.0	553.7	540.9	535.9	534.8	546.3	556.6	570.8	581.2	584.6	589.5	589.9	592.1		578.6	



Vertical component, Z - (5000+) gamma

January 1958

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1 D	1025	1002	982	971	963	955	944	934	925	917	908	899	890	880	870	861	851	841	831	821	811	801	791	781	771	25576	974.1
2	1021	1005	989	984	969	941	922	906	897	820	828	821	815	818	826	831	831	835	840	844	848	852	856	860	864	23880	953.3
3 Q	977	975	971	969	963	957	955	954	953	947	938	928	919	916	920	924	925	929	933	937	941	945	949	953	957	23839	950.4
4 Q	954	959	958	956	954	952	948	947	946	942	935	921	909	901	901	902	913	922	925	925	927	927	927	927	927	23335	939.0
5 Q	966	955	950	954	953	951	958	955	949	940	930	918	909	908	908	902	905	903	903	903	903	903	903	903	903	22594	941.4
6	946	945	955	954	950	950	947	945	953	955	928	915	911	908	911	907	918	922	923	923	923	923	923	923	923	22513	938.0
7 Q	945	945	949	953	949	948	948	942	951	928	922	913	904	900	904	903	910	919	920	920	920	920	920	920	920	22405	933.5
8 Q	949	949	953	952	954	953	945	933	927	927	928	918	901	890	895	898	902	907	923	937	945	952	953	950	22339	930.8	
9	947	946	947	948	948	949	944	937	934	929	916	903	893	887	891	900	912	924	934	947	966	976	974	976	22430	934.6	
10	977	979	960	953	951	950	947	945	942	936	928	913	903	897	898	891	901	917	928	947	959	942	948	958	22460	935.8	
11	966	961	965	958	954	950	943	942	937	929	921	909	908	905	899	891	898	918	938	952	945	966	968	967	22490	937.1	
12	957	963	963	952	952	946	946	943	940	935	926	909	900	901	895	887	899	910	917	930	937	952	967	960	22597	933.2	
13	975	968	968	961	953	943	939	937	935	932	924	915	907	905	909	904	901	910	920	932	942	950	955	944	22491	937.1	
14	949	953	950	949	944	941	939	936	924	909	913	911	903	905	908	905	904	911	925	936	949	973	962	953	22370	932.1	
15	955	959	961	958	957	944	921	922	929	929	924	915	901	899	908	899	899	895	913	934	939	974	950	940	22323	930.1	
16	947	949	949	951	949	951	957	953	954	951	925	919	905	901	901	898	905	911	923	941	956	957	961	964	22398	933.3	
17 D	952	944	950	955	944	939	942	943	934	924	911	900	905	901	899	897	910	925	937	944	966	967	990	989	22478	936.6	
18 D	982	967	961	952	944	944	951	945	914	898	891	907	896	896	900	914	917	926	942	935	950	956	954	955	22416	934.0	
19	982	966	963	962	953	945	939	933	939	934	924	911	905	901	907	917	911	916	935	942	946	956	942	945	22457	935.7	
20	946	942	953	946	945	945	949	945	957	920	918	915	915	915	908	901	908	911	927	939	947	963	986	982	22471	936.3	
21 D	991	968	977	924	916	945	951	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	949	9551	---
22	961	956	955	955	948	948	936	929	940	938	927	914	905	894	917	919	920	928	940	945	955	953	954	961	22494	937.5	
23 D	968	965	961	958	946	933	928	918	934	931	929	927	918	915	911	904	906	927	946	947	957	955	948	949	22481	936.7	
24	952	949	945	946	947	945	942	943	940	935	929	919	914	925	917	907	910	923	932	938	947	953	959	956	22473	936.4	
25	963	954	954	944	941	939	940	938	935	923	929	924	916	902	893	894	900	910	925	936	942	944	944	947	22337	930.7	
26	951	953	961	955	934	912	911	917	934	936	930	930	929	918	910	910	906	911	925	925	937	954	966	973	22386	932.8	
27	966	956	956	950	944	940	944	945	941	929	930	926	920	912	906	896	895	901	909	925	934	947	952	949	22373	932.2	
28	947	946	941	938	935	934	933	931	935	929	922	913	913	908	904	904	907	911	920	936	936	945	943	948	22281	928.4	
29	959	956	953	947	930	922	925	925	930	932	925	920	910	900	893	886	885	901	917	930	942	942	942	942	22216	925.7	
30	944	943	943	942	940	937	938	933	922	919	905	904	910	905	901	899	903	911	924	936	949	950	940	937	22235	926.5	
31	943	941	937	938	935	934	931	929	928	929	929	931	932	921	909	904	899	904	918	930	926	935	945	936	22284	928.5	
Sum.	29851	29734	29690	29545	29575	29231	29173	28166	28107	27911	27741	27535	27330	27191	27169	27153	27259	27567	27981	28310	28557	29752	29727	29711	685747		
Mean.	962.9	959.2	957.7	953.1	947.6	942.9	941.1	938.9	936.9	930.4	924.7	917.9	911.0	906.0	905.6	904.4	903.6	916.9	932.7	943.7	951.9	959.7	958.9	958.4	936.6		

Declination, D , east of north, 17 degrees + tabulated values in minutes of arc.

February 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	11.7	13.0	12.9	12.0	11.2	10.0	08.2	07.5	07.3	05.7	05.6	04.6	07.1	09.6	12.0	14.9	17.5	18.3	17.9	13.6	15.5	14.7	13.7	12.8	280.5	11.68	
2	12.0	11.2	11.9	11.3	10.7	09.1	05.4	05.4	05.7	05.5	05.0	05.3	04.2	05.4	09.1	12.4	14.9	16.7	16.5	16.2	14.6	13.7	13.1	12.6	247.9	10.53	
3 Q	12.0	11.9	11.1	11.4	10.4	09.3	08.5	07.3	05.4	05.7	05.3	04.5	04.8	10.3	11.4	14.3	15.7	18.5	17.4	15.1	14.2	12.9	12.3	12.2	259.1	10.80	
4	11.2	11.9	12.1	11.1	10.1	09.1	09.3	08.7	08.3	05.2	05.8	05.0	08.5	08.6	12.0	17.6	20.6	21.2	22.4	20.9	13.0	15.3	12.2	11.5	285.4	11.81	
5	12.1	15.6	12.7	10.0	12.0	12.6	09.0	05.7	07.2	08.0	04.4	08.0	09.6	14.7	13.7	17.1	19.4	18.5	16.8	17.0	14.9	14.3	15.3	12.2	295.0	12.29	
6 D	13.4	12.7	10.6	11.8	12.1	10.1	10.2	09.1	12.0	10.6	09.2	11.2	14.6	14.7	18.7	20.1	23.5	24.7	23.9	21.7	18.4	15.8	11.9	09.0	350.2	14.59	
7	12.9	12.7	10.7	12.3	12.8	13.5	12.9	11.1	10.1	09.0	07.6	08.0	10.5	11.0	12.0	14.9	18.6	18.6	19.3	19.3	14.8	13.5	13.6	11.9	311.5	12.98	
8	12.1	11.4	12.0	08.5	10.3	10.8	10.4	11.2	08.3	08.1	08.9	08.2	07.9	09.1	12.6	17.2	21.2	21.5	20.2	20.3	18.4	14.6	13.7	12.0	305.1	12.71	
9	12.6	11.4	12.2	10.2	10.1	12.0	11.3	11.0	10.1	08.4	08.2	08.2	08.5	07.6	10.3	14.6	20.0	21.0	24.0	25.1	24.1	22.2	17.3	14.2	335.6	14.08	
10	10.0	10.9	07.4	10.2	11.1	09.9	12.0	12.1	10.9	10.1	09.1	07.5	05.7	06.8	07.9	12.8	18.3	21.6	24.6	25.2	21.4	19.4	16.8	13.2	314.9	13.12	
11 D	12.1	05.2	55.0 <sup>x</sup>	41.0 <sup>+</sup>	47.4 <sup>+</sup>	33.4 <sup>+</sup>	33.1 <sup>+</sup>	33.8 <sup>+</sup>	01.9	38.9	24.1	29.4	24.8	28.6	25.2	24.7	25.5	27.3	30.1	29.8	27.6	24.0	23.0	16.9	283.0	11.79	
12 D	17.3	18.3	13.7	13.0	13.9	13.3	13.1	14.8	11.9	09.0	09.3	12.4	11.3	11.5	13.7	16.5	18.6	23.2	26.0	24.7	21.4	21.2	18.3	16.0	382.6	13.94	
13	14.8	13.8	14.7	14.9	14.6	14.4	14.0	13.6	12.9	13.7	12.2	10.3	09.8	12.6	12.2	15.7	20.5	22.7	24.5	23.2	21.0	18.4	16.5	15.5	376.5	13.69	
14	13.7	12.4	10.5	09.4	12.9	12.7	10.2	11.9	13.8	10.5	10.0	10.2	09.9	10.3	11.9	13.9	17.7	19.5	18.3	16.2	17.4	15.8	14.7	13.3	319.1	13.30	
15 Q	12.9	12.5	12.6	12.6	12.5	12.0	12.0	11.1	10.3	10.2	10.3	10.5	08.8	08.2	08.8	11.2	14.0	17.6	19.5	19.1	17.4	15.3	14.3	13.5	307.2	12.80	
16	11.8	11.6	12.0	11.9	11.0	10.1	09.4	09.1	07.4	08.4	05.6	04.6	08.8	08.7	10.9	12.9	14.9	17.2	19.4	17.9	17.5	15.6	14.9	13.6	281.2	11.72	
17 D	12.7	11.6	09.5	10.6	08.2	08.1	07.4	09.1	08.5	07.4	08.5	09.1	10.1	10.8	13.7	11.4	15.2	17.3	18.6	16.6	15.2	13.9	14.9	13.0	281.4	11.73	
18 D	10.1	10.4	10.1	08.4	07.8	09.4	10.2	07.3	07.5	09.3	12.5	09.2	10.1	11.9	12.9	13.5	19.0	21.2	23.0	21.1	19.5	16.8	13.7	12.3	309.0	12.88	
19	08.9	11.2	11.1	11.1	11.1	11.1	09.7	09.2	10.1	09.0	09.4	11.0	11.8	12.3	13.0	13.0	17.7	19.0	20.9	18.9	17.6	15.2	13.1	11.0	308.7	12.86	
20	12.8	10.3	11.5	11.3	12.0	10.2	09.8	10.2	09.1	09.1	11.4	11.1	11.1	11.1	13.9	13.5	16.8	18.4	20.2	20.3	21.1	13.7	13.2	14.3	325.4	13.56	
21	14.7	14.3	13.0	13.8	12.7	08.0	07.3	08.8	12.9	09.4	08.3	09.1	10.7	13.6	17.9	18.3	20.1	23.9	26.3	23.0	20.3	16.6	12.7	13.7	346.3	14.38	
22	13.9	07.0	09.1	12.1	13.3	12.9	11.4	11.3	10.2	09.7	09.6	09.8	10.3	11.1	12.1	14.9	19.1	20.3	21.3	19.4	18.3	13.0	13.0	12.1	316.3	13.19	
23	12.9	10.9	07.5	08.5	10.3	12.8	12.9	11.8	10.2	10.3	10.3	11.5	09.4	08.9	10.3	14.7	18.3	20.3	21.2	20.3	17.3	13.7	12.3	12.6	309.4	12.89	
24 Q	12.1	12.0	11.7	10.2	10.6	11.2	11.1	11.0	10.8	10.1	10.1	09.3	08.3	09.4	09.3	12.7	16.7	19.6	20.3	18.3	16.6	14.2	12.9	12.3	301.4	12.36	
25 Q	12.0	12.0	11.9	11.7	11.6	11.1	07.6	08.0	09.2	09.8	09.1	07.5	08.7	08.9	08.3	10.6	13.9	18.2	20.3	20.3	18.1	14.9	12.8	12.4	284.9	11.87	
26 Q	12.3	12.3	11.9	11.4	10.6	09.3	08.5	08.5	07.3	08.3	08.7	08.3	05.8	08.3	07.4	09.3	12.6	13.0	17.2	17.3	16.8	14.7	13.3	12.8	259.2	10.80	
27	12.0	11.3	11.9	11.3	10.4	10.3	09.5	09.0	08.2	07.6	08.9	08.0	04.4	04.7	06.3	09.1	12.6	13.1	19.4	20.2	20.3	17.6	13.2	13.8	273.3	11.39	
28	12.3	12.6	11.9	10.3	10.4	10.3	10.0	09.1	08.3	08.2	05.2	05.7	10.1	08.2	09.3	10.3	12.8	14.0	16.9	17.4	17.1	13.6	14.7	13.8	270.3	11.26	
Sum.	549.5	330.8	243.4	282.3	292.1	267.0	264.4	255.7	252.0	265.2	242.6	246.8	259.6	269.4	336.4	408.5	495.9	551.3	596.9	563.8	513.2	452.0	405.6	366.7	8521.6		
Mean.	12.48	11.81	08.69	10.09	10.43	09.54	09.44	09.13	09.00	09.47	08.66	08.81	09.27	10.34	12.01	14.59	17.71	19.70	20.93	20.14	18.33	16.14	14.49	13.10	12.68		

<sup>x</sup> 15 degrees + tabulated value.

<sup>+</sup> 16 degrees + tabulated value.



Horizontal component, H , 25000 gauss +

February 1958.

U.T.-	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Data:																											
1	595	599	598	601	604	598	591	592	595	590	589	573	564	587	554	560	557	559	562	568	585	596	593	608	13988	582.8	
2	623	611	609	602	598	594	590	581	577	572	572	564	554	545	537	539	544	551	533	580	587	589	591	595	13898	577.8	
3 Q	602	609	608	613	605	595	590	589	590	581	588	589	542	338	536	542	556	577	585	594	603	601	608	608	14069	585.0	
4	604	605	607	608	608	613	608	604	602	588	573	563	560	555	541	525	557	572	621	592	580	575	566	574	14004	583.5	
5	580	584	585	600	595	605	595	581	587	584	577	553	516	544	560	538	564	579	575	596	604	595	546	553	13804	575.2	
6 D	579	594	599	610	616	595	596	595	590	588	561	531	532	511	496	499	512	538	562	576	576	591	584	593	13594	582.4	
7	577	592	588	592	588	582	584	583	574	575	567	538	537	524	519	498	503	538	560	591	597	598	595	583	13616	587.3	
8	589	583	582	605	601	590	591	582	584	584	583	563	549	508	482	479	501	527	537	571	579	587	576	587	13490	582.1	
9	587	584	585	585	585	583	586	589	589	585	584	574	562	539	515	496	491	510	527	561	574	581	577	575	13551	584.6	
10	591	590	602	605	605	598	591	589	584	582	584	335	572	533	530	510	499	514	531	531	561	576	580	553	13614	587.3	
11 D	575	651	661	712	606	498	141	215	224	278*	150	230	316	426	461	444	453	472	469	465	491	516	539	495	10408	433.7	
12 D	522	538	561	536	549	559	536	534	526	519	515	533	333	524	506	485	494	482	496	527	537	576	557	535	12720	330.0	
13	575	570	575	576	574	563	562	560	556	350	539	650	520	531	521	497	499	510	531	542	533	538	539	549	13142	547.6	
14	564	568	560	564	575	548	547	554	563	564	573	562	552	544	537	536	528	525	526	538	545	549	536	564	13242	551.8	
15 Q	572	577	581	584	581	580	581	585	580	577	577	572	564	533	541	527	523	543	557	572	582	576	583	591	13661	569.2	
16	595	601	606	607	608	607	605	604	596	594	591	575	562	552	547	542	546	551	567	576	585	574	587	609	13995	583.1	
17 D	628	638	632	631	624	605	591	601	604	600	594	595	581	567	538	533	532	519	527	542	542	551	566	571	13932	580.5	
18 D	582	584	575	586	575	563	580	572	573	568	572	565	542	516	508	500	502	518	525	540	554	560	563	561	13262	552.6	
19	570	578	577	572	581	579	566	565	564	559	562	563	538	527	520	514	505	517	534	534	549	561	563	525	13267	553.6	
20	562	562	563	582	590	574	572	573	560	572	576	566	547	529	520	531	537	543	548	531	542	534	535	568	13336	553.7	
21	583	583	590	599	582	556	560	553	580	587	557	543	526	517	514	517	517	529	522	529	548	552	534	536	13236	551.5	
22	573	576	599	587	590	594	572	574	572	571	566	564	548	532	522	511	513	525	540	549	553	566	573	551	13425	559.3	
23	555	578	573	578	582	587	583	578	571	563	566	558	548	527	505	486	492	501	528	545	564	569	566	566	13272	553.0	
24 Q	576	579	582	589	588	584	579	584	583	584	586	573	559	546	528	517	518	532	546	561	572	575	576	579	13598	566.5	
25 Q	586	589	591	590	595	594	397	585	585	589	586	582	573	551	532	516	513	528	545	568	572	580	582	591	13724	571.8	
26 Q	593	598	600	596	592	568	583	580	580	579	583	377	563	551	534	528	330	540	551	535	579	577	531	569	13736	572.4	
27	552	595	593	594	590	590	587	590	585	556	586	579	567	553	541	533	532	537	558	559	568	536	571	576	13720	571.7	
28	586	592	600	589	590	538	583	587	577	581	584	573	532	372	548	526	523	526	542	558	572	576	587	580	13727	572.0	

Sum. 16316 16511 16813 16701 16572 16298 15840 15885 15941 15322 15540 15497 15211 14990 14713 14453 14547 14873 15256 15601 15857 15963 16008 16077 376923

Mean. 582.7 589.7 600.5 596.5 591.9 582.1 565.7 567.3 565.7 554.4 558.6 553.5 543.2 535.4 525.5 516.2 519.5 531.2 544.9 557.2 553.3 570.1 571.7 574.2 561.0

\* 22000 + tabulated value

Vertical component, Z, - ( 35000 + ) gammas

February 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	944	958	952	954	956	952	950	950	928	919	919	917	915	914	904	900	900	909	920	950	942	951	942	948	22250	926.5	
2	962	955	945	957	955	950	921	924	928	950	921	915	911	905	905	915	916	920	925	934	937	955	955	955	22270	927.9	
3 Q	958	940	959	941	952	928	925	929	950	929	925	914	902	906	906	908	911	920	952	958	939	955	945	945	22251	927.1	
4	958	956	955	955	955	955	929	927	925	919	916	908	907	901	885	877	891	907	925	924	942	951	951	955	22152	925.0	
5	955	951	950	945	955	942	954	951	955	954	921	908	889	905	909	900	908	921	928	959	957	959	952	950	22382	932.6	
6 D	967	967	961	951	952	926	926	950	925	926	922	909	914	907	909	911	921	950	945	956	961	974	975	985	22550	958.8	
7	958	961	948	946	940	951	955	956	952	952	927	916	912	915	907	905	905	926	958	956	968	968	960	960	22480	953.7	
8	954	945	942	958	928	920	928	954	950	911	918	918	915	895	885	892	915	952	942	956	959	960	962	977	22564	951.8	
9	975	955	951	944	951	957	959	940	941	959	955	927	925	918	902	891	892	890	909	942	965	976	979	975	22456	955.8	
10	990	967	960	950	942	952	954	956	956	954	951	952	925	915	901	888	885	903	927	961	985	1000	989	986	22606	941.9	
11 D	980	1000	989	950	878	747	528	518	566	476	855	775	951	1009	1025	1010	1006	1019	1017	1025	1028	1018	1055	1015	21192	985.0	
12 D	1051	1018	1002	984	971	978	950	909	945	948	957	942	941	957	929	919	918	921	944	978	975	967	969	967	22996	958.2	
13	975	966	965	957	955	948	946	946	942	927	928	951	922	955	926	907	908	919	955	950	946	969	971	967	22655	944.0	
14	968	971	958	941	928	919	951	959	955	925	950	954	959	951	951	916	904	914	925	954	942	945	955	961	22472	956.5	
15 Q	959	959	955	951	947	945	945	944	941	958	954	929	929	925	919	910	904	912	917	928	940	941	945	947	22460	955.8	
16	942	950	947	945	945	940	958	957	955	952	928	922	915	910	907	905	910	910	915	925	955	954	945	952	22522	950.1	
17 D	957	962	952	946	944	950	926	955	954	927	911	911	916	912	922	912	909	907	917	958	955	960	958	951	22400	955.5	
18 D	967	959	944	955	954	925	917	922	950	950	910	912	909	906	904	900	894	905	914	945	956	965	975	966	22518	929.9	
19	967	955	949	940	958	954	918	921	954	959	956	957	925	919	920	916	908	915	929	952	947	964	966	972	22485	956.8	
20	964	954	952	949	945	950	955	955	952	957	955	950	926	917	911	925	924	925	955	955	950	979	978	974	22575	940.6	
21	965	957	956	959	950	905	916	911	929	951	950	922	914	910	914	912	911	915	920	944	969	990	969	964	22439	955.0	
22	960	959	946	941	958	925	924	955	940	941	952	929	919	915	914	908	911	919	955	949	959	971	961	977	22522	958.4	
23	968	957	944	958	955	952	954	916	912	915	927	925	929	925	912	909	910	922	959	956	975	979	966	954	22471	956.5	
24 Q	952	948	947	959	954	954	955	956	955	955	926	917	914	914	909	900	898	905	918	956	948	950	948	947	22519	950.0	
25 Q	946	944	940	957	958	955	920	919	927	927	921	924	922	915	911	908	905	909	918	956	944	952	950	947	22295	928.9	
26 Q	944	945	940	957	955	954	928	924	928	929	928	925	919	915	909	906	905	910	916	927	959	940	940	942	22255	927.5	
27	959	942	958	954	952	951	926	928	925	927	924	922	920	915	904	902	902	904	916	924	955	945	946	947	22226	926.1	
28	947	945	944	958	955	952	951	928	917	925	926	915	916	915	904	900	900	907	914	925	928	956	947	945	22212	925.5	
Sum.	26900	26802	26829	26420	26196	25927	25645	25618	25709	25576	25649	25684	25715	25692	25584	25446	25455	25695	26445	26117	26768	26940	26962	26925	626335		
Mean.	960.7	957.2	951.0	945.6	955.6	926.0	915.9	914.9	918.2	915.4	916.0	916.6	918.4	917.6	915.7	908.8	909.1	917.6	928.7	945.5	956.0	962.1	962.9	961.5	952.0		



Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

March 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1 Q	11.9	11.4	11.7	11.3	11.0	10.3	10.2	09.4	09.5	08.4	07.9	07.3	06.2	06.2	07.5	10.1	13.7	17.5	19.4	20.5	19.4	16.9	14.1	12.3	283.9	11.63	
2 Q	12.0	12.0	11.9	11.3	11.2	10.3	08.4	08.8	07.3	07.5	08.8	07.9	08.8	08.9	08.3	10.8	14.0	18.8	18.2	17.7	16.6	15.3	15.8	12.6	289.2	11.22	
3	11.8	11.6	11.3	11.3	10.8	10.1	09.1	07.0	07.4	05.7	05.4	05.9	08.3	08.0	09.2	12.6	15.7	19.8	21.8	22.0	20.1	15.6	15.7	13.7	285.3	11.93	
4	12.9	12.4	08.8	11.8	10.5	10.9	08.2	10.2	10.0	11.2	11.9	11.4	10.5	12.6	12.9	14.1	16.8	19.7	20.5	20.1	17.3	14.3	12.4	11.8	310.6	12.94	
5 D	11.6	11.3	08.8	08.3	09.3	08.0	04.4	08.3	08.1	10.4	12.0	10.2	09.2	08.3	09.3	12.8	16.3	19.9	20.3	20.2	18.6	15.9	11.3	11.2	279.8	11.66	
6	12.5	07.9	08.3	09.0	10.1	12.9	12.6	11.1	10.5	09.3	09.2	10.3	11.2	09.2	09.3	12.6	15.7	18.4	20.4	19.7	19.3	16.4	14.5	13.6	302.0	12.58	
7	12.0	09.3	11.1	08.5	07.8	07.3	07.6	11.3	13.5	12.6	11.0	08.3	07.9	09.9	09.2	11.4	16.0	19.8	22.1	22.3	21.1	17.5	16.4	13.4	308.0	12.83	
8	10.9	10.0	11.0	09.4	08.2	08.5	09.3	09.6	13.6	11.3	11.3	11.7	09.2	07.3	09.1	11.0	14.0	17.7	20.2	20.6	19.5	16.3	14.3	13.1	297.7	12.40	
9	10.6	08.7	10.1	12.1	11.1	09.1	07.4	08.3	10.2	10.4	11.3	09.1	09.3	07.6	09.1	12.0	14.3	17.5	20.3	21.2	18.3	13.4	13.7	12.9	288.2	12.01	
10	11.5	07.6	10.0	11.9	08.3	11.3	11.3	11.8	11.9	12.1	12.3	11.3	10.1	10.0	09.3	11.0	14.7	18.3	21.7	19.6	18.4	17.8	16.2	13.8	312.6	13.03	
11	12.4	10.1	11.2	12.3	11.3	10.9	11.0	10.6	10.3	09.3	08.7	08.0	06.2	09.3	10.1	12.0	16.4	20.4	22.7	22.0	20.6	19.3	16.1	12.3	313.1	13.05	
12 D	13.8	11.9	12.3	05.6	05.7	07.3	08.0	10.1	07.3	09.6	13.9	11.6	10.3	10.3	11.2	14.2	17.1	19.8	21.8	21.1	16.1	18.4	17.0	16.4	314.2	13.09	
13 D	13.8	13.3	13.7	11.9	09.7	08.3	08.2	03.1	03.3	11.3	10.7	13.7	14.3	16.4	17.6	18.3	19.2	20.2	22.3	20.3	20.6	17.8	14.3	13.3	323.8	13.70	
14	11.1	10.9	12.2	12.8	12.8	12.8	12.9	12.2	11.8	11.3	11.1	09.7	04.4	03.6	07.7	11.0	14.3	16.6	18.2	18.8	17.9	15.3	14.4	13.8	299.8	12.49	
15	13.7	13.1	12.3	11.4	08.9	05.7	03.6	08.3	09.1	08.3	08.2	10.6	10.2	11.2	12.1	13.7	17.4	19.4	18.3	18.7	16.6	14.6	13.6	13.2	292.6	12.19	
16 Q	10.7	07.1	08.3	08.3	09.3	09.2	10.3	11.9	12.1	11.1	09.4	07.6	08.4	06.8	08.8	10.0	13.1	16.6	18.3	17.7	17.2	15.9	14.2	13.3	269.2	11.22	
17	11.1	11.0	11.3	11.4	11.3	11.7	08.1	08.3	10.3	10.2	07.3	09.1	08.7	10.3	13.1	14.1	15.0	19.3	21.1	21.3	18.3	16.1	14.2	13.8	306.7	12.78	
18	13.0	12.0	08.0	08.3	09.4	10.1	08.3	07.3	08.4	08.8	10.2	10.3	09.1	12.3	12.3	13.8	16.6	19.3	21.0	20.6	22.2	20.1	16.1	13.3	311.6	12.98	
19 D	13.6	11.1	10.2	07.3	10.0	08.3	08.8	10.3	11.0	11.0	10.3	13.3	13.9	14.8	13.8	16.3	18.3	20.3	22.0	21.8	23.0	18.8	16.7	14.7	333.0	14.00	
20 D	11.0	12.0	13.7	07.9	10.2	10.3	11.2	11.9	13.0	12.8	12.8	11.3	08.4	09.1	10.3	12.9	16.3	16.6	19.7	21.1	19.6	14.3	13.4	17.2	321.4	13.36	
21	05.8	10.1	10.6	07.2	11.2	11.7	11.2	12.0	13.7	13.2	13.3	09.3	08.1	08.0	10.3	13.0	17.7	20.7	21.6	20.1	16.9	14.8	12.1	12.6	307.4	12.81	
22	07.2	10.4	11.3	08.6	10.3	12.1	12.0	11.7	11.4	11.2	10.9	10.0	08.7	08.4	10.1	12.9	16.1	18.3	19.3	18.9	16.9	14.7	11.4	09.1	290.3	12.10	
23	10.4	12.2	11.9	10.2	08.3	09.1	07.6	11.0	10.3	09.2	12.6	10.6	09.3	09.3	11.1	13.7	16.9	20.1	20.9	20.4	15.2	14.3	13.4	13.1	301.1	12.53	
24	13.9	12.4	12.3	09.7	09.7	11.2	08.1	11.1	11.3	09.1	09.4	09.8	10.1	08.3	10.0	13.7	13.1	20.2	21.3	21.0	19.3	13.6	14.3	16.6	314.7	13.11	
25	12.8	10.0	10.7	11.3	12.7	12.0	09.6	10.3	11.3	11.0	09.6	11.1	08.6	11.4	12.9	14.7	17.7	17.3	18.3	16.6	16.0	13.2	13.9	13.8	309.9	12.91	
26	13.8	14.0	12.9	11.9	11.4	09.2	09.2	08.2	07.3	07.8	07.4	05.3	07.4	07.3	07.4	12.2	16.6	18.6	19.7	19.2	17.1	13.3	13.2	13.9	288.9	12.04	
27	06.6	09.8	11.1	11.3	11.0	10.1	10.0	10.2	09.2	08.9	10.3	08.3	08.9	07.0	08.4	10.8	14.3	17.4	19.0	18.1	13.8	14.9	12.1	12.7	274.4	11.43	
28 Q	13.1	12.6	11.2	07.1	10.3	10.8	10.9	10.2	09.6	09.9	09.1	07.4	08.3	08.9	08.2	10.7	13.9	16.7	19.3	16.8	13.3	14.9	14.9	14.1	280.4	11.68	
29 Q	11.0	09.3	11.4	11.0	10.3	10.7	11.1	10.3	10.0	09.6	09.8	08.2	08.3	05.2	08.4	09.2	13.7	17.0	16.3	17.2	14.7	13.6	12.9	13.0	271.1	11.30	
30	12.7	12.3	11.7	11.1	10.8	10.3	09.8	09.1	09.4	05.6	07.4	04.9	04.7	06.8	09.3	11.4	16.1	18.3	21.4	21.1	20.2	16.4	14.4	12.8	287.2	11.97	
31	10.3	10.4	09.3	09.3	11.0	09.1	10.1	13.0	13.7	14.3	14.4	13.1	08.3	07.3	08.3	10.3	04.8	13.0	19.9	18.9	16.7	13.6	14.6	12.3	294.3	12.26	
Sum.	359.7	337.0	335.6	303.3	314.6	308.0	283.1	303.3	314.0	312.0	314.1	291.0	266.5	276.2	310.8	339.3	481.0	578.7	629.8	613.1	568.4	494.5	444.3	413.3	9251.8		
Mean.	11.60	10.87	10.83	09.85	10.15	09.94	09.13	09.78	10.13	10.06	10.13	09.39	08.66	08.91	10.03	12.56	13.52	18.67	20.32	19.87	18.34	13.95	14.33	13.43	12.43		

Horizontal component, H, 25000 gaussas +

March 1956.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1 Q	580	580	585	589	594	590	594	586	588	588	588	590	579	586	539	517	502	512	521	550	568	575	574	574	13629	587.9	
2 Q	577	585	585	585	593	595	581	589	572	575	581	577	569	551	535	520	519	527	539	552	554	577	588	590	13600	586.7	
3	591	599	590	591	590	581	577	575	570	573	571	571	577	552	533	527	532	558	550	569	556	558	556	535	13582	585.9	
4	559	556	555	579	567	570	569	565	567	565	566	564	558	549	546	536	532	529	539	534	554	570	569	556	13564	586.8	
5 D	580	562	573	585	580	605	607	551	545	568	582	578	584	534	499	475	474	489	513	540	551	557	545	545	13160	549.2	
6	568	579	581	548	547	554	555	560	565	561	574	552	541	524	497	480	476	491	508	518	541	529	548	562	12957	539.9	
7	559	571	585	587	580	563	561	564	573	574	572	570	544	523	513	495	485	482	517	539	542	545	551	567	13126	546.9	
8	552	555	551	555	548	552	570	564	565	566	567	558	537	518	490	489	483	502	516	533	547	544	539	562	13026	542.8	
9	557	553	557	570	581	581	561	559	570	561	576	566	561	544	516	495	482	500	524	548	533	563	570	574	13234	551.4	
10	574	563	564	571	570	566	568	571	574	584	595	599	584	551	534	508	504	504	511	536	542	532	552	562	13347	556.1	
11	547	561	576	583	587	585	585	582	582	561	587	582	571	556	541	526	500	499	505	515	534	543	537	545	13310	554.6	
12 D	529	517	502	494	492	485	482	514	543	543	548	545	542	530	503	513	515	499	511	534	544	562	557	565	12979	524.1	
13 D	568	564	567	558	544	538	507	518	536	537	582	553	514	495	482	456	479	467	478	485	516	531	542	548	12583	524.3	
14	545	558	552	587	565	533	559	539	554	555	556	559	544	542	528	488	486	517	530	544	564	577	578	583	13199	550.0	
15	587	587	596	587	589	556	552	550	557	558	574	572	556	530	516	494	480	495	505	531	547	549	549	554	13161	548.4	
16 Q	552	543	543	530	555	559	561	564	568	566	559	551	539	518	496	486	492	503	515	530	549	549	537	547	12952	535.8	
17	553	567	575	575	580	585	585	573	603	594	588	585	534	537	524	514	503	509	508	514	531	549	559	566	13327	555.3	
18	572	573	585	568	565	569	574	561	553	575	568	566	553	532	524	500	495	505	506	494	516	506	519	541	13017	542.4	
19 D	538	547	551	536	552	553	572	561	563	564	568	565	562	560	516	511	487	497	508	517	521	504	530	531	12932	538.8	
20 D	528	539	541	542	554	557	557	557	557	570	574	579	569	548	511	500	491	497	514	526	514	515	529	532	12899	537.5	
21	541	551	551	545	552	565	568	568	571	572	573	564	552	528	496	483	474	488	497	511	527	528	533	528	12866	536.1	
22	560	530	508	546	543	543	543	546	548	547	549	543	528	508	494	483	483	493	512	531	546	550	542	552	12730	530.4	
23	545	547	530	547	544	547	546	560	572	564	581	579	562	532	502	496	480	489	512	530	537	543	548	538	12963	540.1	
24	556	601	580	574	559	562	567	559	568	578	570	567	563	534	505	483	474	488	513	522	536	533	547	545	13084	545.2	
25	541	545	554	557	562	561	558	555	563	560	562	551	541	513	492	497	494	520	542	536	575	576	575	577	13137	547.4	
26	597	591	580	583	583	574	580	575	589	571	564	546	555	535	499	484	484	506	537	548	545	555	559	563	13288	553.7	
27	556	577	573	574	573	569	568	571	577	571	565	557	544	516	505	491	488	506	530	542	557	562	546	564	13184	549.3	
28 Q	572	582	571	570	569	570	570	571	573	574	570	564	547	529	511	502	501	496	524	549	559	569	565	565	13273	553.0	
29 Q	579	572	569	566	572	565	573	571	574	572	573	569	553	532	512	496	492	506	524	548	558	570	568	580	13298	554.1	
30	584	587	582	584	583	584	579	578	582	581	570	574	558	513	489	477	477	484	496	517	527	527	538	545	13126	546.9	
31	546	539	551	551	562	576	568	573	577	570	570	558	530	528	504	482	490	500	513	528	537	543	544	545	13005	541.9	
Sum.	17365	17487	17503	17525	17495	17523	17505	17430	17587	17658	17723	17534	17173	16530	15850	15402	15286	15568	16016	16522	16866	17008	17116	17266	406938		
Mean.	560.2	564.1	564.6	565.3	564.4	565.3	564.7	562.3	567.3	569.0	571.7	566.3	554.0	533.2	511.3	496.8	493.1	502.2	516.6	533.0	544.1	548.6	552.1	557.0		547.0	



Vertical component = Z = - ( 5600 + ) gammas

March 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1 Q	942	943	939	937	937	932	931	925	928	927	926	924	918	910	899	889	885	894	903	925	939	945	945	946	22196	924.8	
2 Q	944	939	936	933	936	933	918	912	919	924	925	922	920	912	902	894	893	900	909	919	928	937	943	942	22136	922.4	
3	939	937	931	928	928	924	923	917	921	923	925	925	923	916	904	898	901	913	909	932	936	961	960	962	22233	928.4	
4	939	939	938	927	939	931	919	926	927	933	930	928	924	926	930	928	922	922	929	948	954	967	972	963	22495	937.5	
5 D	939	937	949	937	935	938	900	779	871	912	925	932	927	918	910	905	904	913	931	945	959	936	972	963	22207	925.5	
6	962	953	917	922	933	936	912	925	937	938	945	926	925	919	911	910	911	921	930	940	956	962	965	965	22417	934.0	
7	937	934	932	931	909	921	919	920	924	925	932	936	925	924	928	916	900	907	921	939	932	937	936	962	22337	932.0	
8	939	936	945	925	930	931	925	928	918	921	928	929	934	933	924	924	916	913	919	936	949	952	963	964	22420	934.2	
9	960	949	945	945	940	928	905	915	931	919	923	918	929	923	911	900	900	911	925	941	953	962	961	954	22344	931.0	
10	933	947	939	938	927	929	930	933	933	930	927	921	920	919	916	906	905	908	920	940	954	954	954	964	22369	932.0	
11	939	935	949	945	940	933	933	932	933	932	935	937	923	914	913	904	890	900	914	930	933	967	969	961	22439	935.0	
12 D	962	962	936	934	903	906	911	854	905	941	934	947	947	940	928	930	928	921	935	937	969	962	976	972	22504	937.7	
13 D	968	960	938	947	934	891	897	888	877	883	878	894	899	902	908	907	930	928	936	951	962	970	973	970	22207	925.3	
14	968	965	938	933	948	943	941	940	938	937	939	941	933	932	917	893	900	911	922	934	949	957	951	951	22523	938.5	
15	947	945	946	946	931	922	923	926	923	916	937	932	922	914	915	912	907	929	933	950	960	959	952	952	22399	933.5	
16 Q	955	933	934	922	926	933	938	936	933	933	936	942	942	937	929	922	920	920	924	931	944	951	950	952	22471	936.3	
17	955	947	949	945	942	937	912	911	895	870	903	917	912	908	904	904	905	910	916	929	949	951	953	948	22170	923.8	
18	947	946	944	930	932	932	914	885	917	924	919	924	924	914	912	907	911	919	926	934	963	966	962	962	22320	930.0	
19 D	961	960	933	920	930	929	908	924	933	936	937	929	914	913	908	914	909	922	932	944	968	974	982	987	22499	937.5	
20 D	971	963	949	931	945	943	933	936	932	941	933	938	934	929	918	913	912	922	933	945	952	972	972	973	22396	941.6	
21	964	934	947	933	932	940	938	932	927	929	927	929	930	925	913	905	904	919	930	947	960	933	975	970	22495	937.3	
22	933	930	938	933	936	941	943	942	942	941	940	938	936	932	924	920	915	920	932	942	953	962	965	962	22343	939.3	
23	933	949	946	933	929	932	933	930	923	920	932	927	925	919	913	913	910	917	932	951	966	969	962	958	22448	935.3	
24	933	947	949	944	929	923	921	915	919	917	916	922	921	912	909	902	900	919	930	940	957	969	967	967	22350	931.3	
25	933	933	937	944	943	933	923	919	927	933	939	932	926	920	917	923	912	922	933	943	948	944	941	941	22425	934.4	
26	949	946	938	937	934	928	930	926	922	924	924	913	912	913	910	909	907	923	933	943	941	951	951	953	22321	930.0	
27	933	943	940	936	933	929	927	928	926	919	920	927	929	921	913	905	898	909	921	930	940	949	946	947	22295	929.0	
28 Q	943	943	939	928	926	929	927	926	922	916	921	922	928	923	916	908	901	900	917	933	939	946	944	938	22246	926.9	
29 Q	943	936	934	932	932	922	923	927	927	923	927	927	928	924	917	908	899	905	917	933	939	943	939	938	22247	927.0	
30	933	936	930	930	927	927	923	923	913	893	908	926	920	908	902	902	896	903	911	931	942	950	936	931	22145	922.7	
31	931	944	940	933	933	914	908	922	928	923	923	927	931	930	922	914	916	917	926	940	946	946	932	947	22343	931.0	
Sum.	29621	29455	29203	28939	28901	28796	28590	28400	28577	28614	28740	28749	28680	28533	28355	28185	28107	28338	28660	29101	29484	29706	29739	29703	693176		
Mean.	955.5	950.2	942.0	933.5	932.5	928.9	922.3	916.1	921.8	923.0	927.1	927.4	925.2	920.4	914.7	909.2	906.7	914.1	924.5	938.7	951.1	958.3	959.3	958.2	931.7		

Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

April 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	08.9	10.5	07.0	08.5	09.1	08.5	12.7	11.5	12.1	12.2	12.2	10.5	09.1	08.4	08.5	11.1	14.1	16.1	17.4	17.5	14.9	14.0	15.1	12.4	281.7	11.74	
2 D	11.1	11.0	10.2	09.2	07.5	08.2	05.5	11.4	07.4	10.5	15.1	11.3	09.5	08.7	09.5	11.9	14.9	17.5	17.8	16.7	15.5	15.6	15.2	15.2	284.0	11.83	
3	12.0	11.5	04.1	04.7	07.5	10.0	03.4	09.5	10.8	10.6	10.2	09.5	08.5	07.4	08.8	11.6	14.5	17.0	18.6	18.4	16.2	15.7	15.7	15.8	269.8	11.24	
4 D	12.0	10.4	10.4	07.8	09.0	08.9	08.2	10.5	10.9	12.6	10.5	09.1	08.8	07.6	10.4	15.0	14.5	17.6	19.0	19.2	21.5	19.6	12.9	15.2	298.4	12.45	
5	14.0	15.4	03.4	10.5	10.2	09.5	15.6	15.5	12.7	10.9	11.8	12.9	11.2	08.5	10.0	12.8	16.9	19.1	19.0	19.4	18.7	15.9	14.7	14.2	519.6	15.55	
6	12.9	07.6	09.5	10.1	09.9	08.0	08.5	10.0	10.1	11.5	15.2	09.7	07.4	08.9	07.8	11.1	16.0	16.7	18.4	16.8	16.2	14.4	15.2	08.5	276.4	11.52	
7	10.2	11.7	10.6	09.4	09.0	08.4	11.5	11.1	10.7	10.5	12.5	10.7	08.6	08.5	11.2	15.7	16.1	18.5	19.8	18.4	16.4	15.2	12.8	12.8	297.2	12.59	
8	12.1	12.0	09.2	07.9	10.5	11.9	12.1	12.0	11.7	12.0	10.2	09.1	07.6	07.1	09.0	10.7	14.5	16.6	16.8	16.7	14.9	14.6	12.9	12.4	285.5	11.80	
9	15.0	15.0	11.4	10.5	08.2	10.9	11.6	11.5	11.1	11.1	10.4	09.6	08.0	07.2	08.2	11.1	15.8	15.9	16.7	16.2	14.9	14.9	16.0	14.0	288.9	12.04	
10 Q	15.4	12.1	11.7	11.4	11.5	11.1	10.9	10.2	10.1	10.5	09.9	09.1	08.0	08.0	09.7	12.0	14.1	15.5	16.1	15.5	14.0	15.8	14.1	15.7	283.0	11.92	
11 Q	15.5	12.5	11.5	09.2	09.9	09.8	09.4	09.2	08.8	09.5	09.9	09.1	07.7	07.6	08.9	11.2	15.7	15.5	15.5	14.4	12.8	11.9	11.9	11.9	265.1	11.05	
12 Q	11.4	11.1	10.5	10.5	10.2	10.2	10.1	09.8	09.5	09.4	09.1	08.4	07.5	06.8	07.5	10.5	12.6	14.0	15.5	14.7	12.6	15.1	15.1	12.4	259.1	10.80	
13 Q	11.9	11.2	10.6	10.1	10.0	10.1	09.8	09.5	10.0	09.5	09.1	08.5	07.5	07.0	08.0	10.5	12.8	14.7	14.9	14.1	12.7	12.9	15.2	12.9	280.7	10.88	
14	12.7	11.9	11.1	10.6	10.0	08.2	08.4	09.5	09.4	08.4	08.9	07.9	08.4	08.2	09.2	11.4	14.0	14.9	15.9	17.5	15.5	15.5	16.1	14.9	275.5	11.48	
15	09.1	08.1	05.5	04.5	05.8	09.2	08.6	12.6	10.8	08.7	11.4	10.0	11.1	10.2	11.1	12.7	14.1	15.5	15.8	15.6	14.9	14.9	14.8	11.0	265.0	10.86	
16 D	11.4	08.7	05.5	05.4	08.6	07.6	10.2	10.5	10.2	12.4	10.5	14.0	15.7	12.5	11.4	12.9	14.2	16.4	17.2	15.4	15.6	16.0	17.8	10.5	286.0	11.92	
17 D	09.7	05.2	03.0	04.5	09.8	07.2	08.4	10.5	12.0	10.5	11.7	12.5	11.4	11.6	10.5	15.7	16.0	17.2	17.7	15.9	14.9	15.9	09.2	11.5	275.1	11.53	
18 D	12.5	07.4	03.7	01.0	08.6	10.1	08.5	08.8	12.8	12.6	14.9	15.5	15.7	15.5	14.5	14.9	16.6	17.5	17.5	16.8	16.5	16.9	14.0	10.7	501.5	12.45	
19	12.0	09.2	09.7	09.5	10.5	11.1	12.2	11.1	11.7	12.6	14.5	12.5	09.7	09.1	10.1	12.9	14.8	15.7	16.6	16.8	14.1	15.8	11.4	11.4	292.6	12.15	
20	12.5	12.4	09.4	08.0	09.5	09.4	09.7	12.5	11.4	11.5	10.5	10.1	09.5	09.1	10.5	12.1	15.8	16.0	16.4	15.7	14.8	09.7	09.1	12.9	275.1	11.46	
21	12.5	12.0	11.1	08.6	08.8	08.8	10.2	11.5	12.5	11.9	11.1	09.5	09.1	08.5	09.0	11.4	14.0	15.7	16.5	15.6	15.1	15.0	08.0	10.9	270.5	11.27	
22 Q	12.7	12.0	11.5	10.2	10.0	08.8	08.0	10.2	09.2	10.6	12.0	10.5	09.7	08.9	09.6	11.6	14.0	16.0	16.8	15.7	14.1	15.7	15.2	12.7	277.1	11.55	
23	12.0	11.6	11.2	11.2	11.1	11.1	10.9	10.6	10.4	10.2	09.9	08.5	08.6	08.5	08.9	11.0	15.0	15.2	17.0	18.0	16.2	15.0	14.7	12.8	288.5	12.01	
24	12.1	11.8	07.7	08.2	08.8	08.8	08.5	11.1	09.4	10.0	10.7	11.4	10.9	10.2	10.5	12.0	14.1	16.5	16.5	15.2	15.8	14.0	15.9	15.0	269.5	11.22	
25	12.0	12.0	07.5	07.1	07.6	10.8	12.5	12.5	12.0	11.8	12.0	11.8	09.9	08.5	09.2	11.1	15.7	15.8	16.5	15.5	15.9	15.2	15.0	12.5	281.6	11.75	
26	12.0	11.5	11.5	11.0	11.0	10.7	10.5	10.4	10.5	10.5	10.2	09.5	07.6	07.5	08.7	11.2	15.2	16.0	16.6	16.2	15.4	14.9	15.6	12.9	282.7	11.78	
27	12.2	11.4	10.6	11.0	11.0	11.1	10.9	11.0	11.4	10.5	10.2	09.4	08.5	07.6	09.1	11.1	15.0	15.8	14.8	16.1	16.4	14.5	14.0	15.7	285.1	11.80	
28	15.0	11.9	09.2	09.1	08.0	08.5	08.4	10.4	12.2	09.1	10.5	12.6	11.6	11.9	12.1	12.2	15.7	14.6	16.0	15.7	15.6	15.8	14.8	15.7	290.4	12.10	
29	12.5	09.1	08.4	07.4	07.2	01.8	08.1	09.9	12.1	12.6	11.1	12.8	15.1	11.5	11.4	12.8	14.8	16.7	15.8	15.1	15.8	15.7	15.0	15.7	282.2	11.76	
30	12.6	08.6	08.4	07.0	08.5	09.5	11.0	11.4	11.6	12.8	10.8	11.7	10.1	10.8	10.2	11.7	15.7	15.8	15.4	16.4	14.0	14.1	10.7	12.5	276.9	11.54	
Sum.	360.2	320.4	268.5	249.5	268.1	271.8	298.5	322.2	324.9	323.1	352.8	314.7	281.2	267.8	291.7	357.5	429.2	435.6	505.7	420.9	456.4	455.9	400.7	382.5	8459.1		
Mean.	12.03	10.63	08.94	08.51	08.94	09.06	09.95	10.74	10.85	10.87	11.09	10.49	09.57	08.95	09.72	11.92	14.51	16.19	16.79	16.56	15.21	14.46	15.56	12.75		11.72	



Horizontal component, H , 25000 Gauss +

April 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	544	558	542	551	549	553	570	574	584	565	565	565	552	555	511	494	495	498	515	521	535	537	538	547	12973	540.6	
2 D	558	537	561	568	535	570	564	571	585	587	587	575	553	552	512	496	495	508	530	542	550	547	541	556	13151	547.1	
3	559	563	557	552	558	559	569	582	554	560	563	559	544	528	498	485	484	498	515	540	542	536	564	557	12974	540.6	
4 D	594	578	584	571	560	567	587	579	581	578	585	581	558	519	508	498	480	485	495	308	318	518	518	518	13032	545.0	
5	515	518	539	522	528	551	558	558	550	549	539	543	544	523	491	478	480	498	519	541	540	545	545	538	12686	528.6	
6	555	529	546	558	561	575	569	570	562	567	575	587	558	558	519	498	499	517	529	528	528	536	544	541	13041	545.4	
7	549	555	557	550	552	542	563	566	559	555	555	555	538	518	497	495	490	499	508	522	534	545	551	549	12897	537.4	
8	551	540	563	557	558	569	563	567	567	567	564	559	545	518	498	482	481	499	518	539	541	540	548	560	13020	542.5	
9	562	565	558	562	553	557	563	569	569	570	572	570	554	532	510	501	505	525	537	551	555	554	542	548	13188	549.4	
10 Q	557	563	569	570	572	572	578	577	574	574	575	568	549	550	519	514	524	534	552	562	573	572	577	580	13453	559.7	
11 Q	590	590	589	585	592	588	592	588	587	577	581	574	559	542	524	512	519	538	553	568	574	578	574	585	13060	569.2	
12 Q	584	587	588	587	582	585	580	581	582	587	587	583	568	549	537	527	535	546	568	577	580	579	571	581	12726	571.9	
13 Q	581	585	586	585	585	594	584	583	585	585	584	580	570	554	539	533	538	548	557	567	571	572	575	579	12706	571.1	
14	582	585	579	584	585	577	587	579	582	581	587	586	582	554	537	535	545	551	551	546	548	537	555	540	13373	565.5	
15	514	532	543	549	537	565	565	578	563	570	558	564	550	543	532	528	524	532	536	535	523	536	539	539	13083	544.3	
16 D	532	525	534	528	549	551	570	571	546	569	588	606	579	548	532	526	521	523	527	529	532	528	532	528	13074	544.8	
17 D	516	481	502	531	528	537	551	555	563	558	555	548	546	535	508	456	484	489	486	498	512	514	513	515	12440	518.3	
18 D	512	523	509	510	524	544	565	552	554	548	574	584	554	523	515	498	491	497	505	514	512	532	504	545	12847	527.0	
19	540	552	546	550	557	562	582	553	557	559	563	564	552	525	505	466	482	501	517	513	512	521	522	541	12842	535.1	
20	548	553	568	574	559	564	580	585	582	554	552	558	549	538	528	508	503	507	518	551	540	525	544	558	13054	543.9	
21	562	566	569	567	562	562	565	562	568	567	565	572	559	538	524	508	508	520	535	544	548	533	538	541	13175	548.0	
22 Q	549	561	560	563	570	563	581	565	563	560	568	556	548	530	519	507	512	520	533	540	546	543	553	558	13152	548.0	
23	564	564	568	567	571	571	575	573	575	578	581	576	567	550	526	513	508	519	526	534	532	535	537	541	13254	552.3	
24	553	551	545	551	551	546	551	577	573	571	566	567	563	530	527	508	499	505	518	535	535	537	538	552	13050	545.8	
25	560	552	554	550	546	556	566	566	564	569	571	574	564	546	519	513	511	521	540	551	561	563	564	569	13216	550.7	
26	573	574	574	574	575	575	574	574	574	575	572	569	559	544	527	517	515	538	547	564	552	557	580	586	13432	559.7	
27	570	570	570	572	572	576	574	572	572	575	575	572	564	545	529	525	530	539	539	539	529	537	543	545	13328	555.3	
28	540	535	530	547	548	544	555	561	571	578	569	557	549	542	522	506	507	514	516	518	518	525	516	517	12833	536.8	
29	520	528	517	523	538	506	542	553	560	564	552	560	542	529	519	509	501	497	521	536	533	528	529	532	12739	530.6	
30	542	528	551	550	546	552	560	560	558	563	564	552	548	536	522	511	494	506	526	520	530	538	528	530	12916	538.2	
Sum.	16530	16590	16624	16668	16725	16802	17008	17042	17007	17048	17089	17034	16645	16068	15546	15157	15146	15486	15836	16108	16202	16248	16271	16424	393303		
Mean.	551.0	553.0	554.1	555.5	557.5	560.1	566.9	568.1	566.9	568.2	569.6	567.8	554.8	536.3	518.2	505.2	505.0	515.5	527.9	536.9	540.1	541.6	542.4	547.5	546.3		

Vertical component, Z, - ( 56000 + ) gamma<sub>22</sub>.

April 1956.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	950	948	951	956	955	952	928	916	920	928	950	957	957	957	927	919	921	924	954	940	954	958	955	951	27456	954.6	
2 D	952	942	940	955	915	925	907	893	900	904	907	898	915	920	919	919	918	921	938	945	947	944	941	940	72167	925.6	
3	949	945	957	922	922	920	910	913	921	928	950	952	955	951	921	914	909	915	925	955	941	941	950	945	22290	928.8	
4 D	944	941	929	924	924	920	915	907	910	908	911	916	918	909	909	909	905	912	922	955	949	957	958	952	22190	924.6	
5	965	966	957	914	955	951	918	912	920	917	918	920	954	952	921	918	916	917	952	944	950	949	952	951	22587	952.0	
6	957	945	950	946	940	954	916	924	915	915	918	925	954	951	925	909	909	924	954	958	941	944	949	945	22365	951.9	
7	946	944	941	954	918	922	928	925	909	915	916	921	925	922	916	910	911	916	926	938	944	948	950	945	22286	927.8	
8	942	942	954	927	951	929	928	928	928	924	924	926	951	926	920	912	910	921	951	959	945	948	948	946	22518	950.8	
9	944	941	939	956	926	929	931	929	927	928	928	928	929	924	916	915	914	920	928	955	957	954	956	955	22267	929.0	
10 Q	940	957	956	951	950	927	928	927	924	924	924	924	922	916	908	904	905	915	922	951	958	956	955	951	22211	925.5	
11 Q	934	955	955	950	927	922	925	918	918	912	915	918	919	915	908	908	908	917	925	952	955	952	926	929	22155	922.2	
12 Q	928	925	922	922	918	916	915	915	915	915	916	917	919	914	907	902	902	905	916	925	928	924	921	925	22008	917.0	
13 Q	925	924	925	921	917	916	915	915	914	912	912	915	914	907	901	898	900	904	915	921	922	921	921	925	21958	914.7	
14	924	921	919	919	920	911	910	911	915	917	910	907	910	904	900	896	905	912	910	915	920	925	928	957	21958	914.1	
15	945	955	927	908	904	926	917	896	880	898	912	925	920	917	917	915	914	919	924	925	926	957	957	959	22055	919.0	
16 D	950	926	929	925	928	921	905	882	905	909	897	891	897	907	911	915	915	915	922	951	957	955	959	945	22007	917.0	
17 D	940	924	958	950	910	901	906	905	890	909	917	925	950	950	922	894	925	925	950	949	952	951	949	944	22194	924.8	
18 D	952	945	911	907	907	925	908	892	891	895	915	905	911	916	921	915	916	928	957	948	948	945	950	951	22155	922.5	
19	947	955	928	950	921	916	909	918	921	899	905	915	924	924	919	915	911	922	927	953	940	945	945	945	22185	924.4	
20	944	941	955	920	900	910	900	907	914	917	917	920	920	920	916	912	912	914	917	929	955	952	955	954	22105	921.0	
21	956	952	950	918	916	914	915	915	914	910	916	921	921	918	915	905	904	910	914	921	928	926	929	951	22067	919.0	
22 Q	950	951	928	928	922	910	899	911	911	908	908	909	916	917	910	905	904	908	914	921	928	926	927	929	21996	916.5	
23	926	926	924	921	921	919	919	918	918	918	918	920	918	911	905	900	899	910	912	918	926	950	950	954	22059	918.5	
24	958	955	929	920	917	901	908	901	901	907	911	914	916	916	912	910	908	914	924	951	950	950	929	956	22052	918.0	
25	956	951	921	919	921	921	919	916	916	919	918	918	920	919	910	908	905	910	916	922	925	925	922	922	22057	919.0	
26	925	922	918	917	915	915	915	914	912	915	912	914	916	916	909	905	905	915	915	921	916	919	922	925	21968	915.5	
27	924	921	918	918	915	915	911	908	909	911	912	915	916	915	909	905	907	907	907	911	915	924	929	928	21944	914.5	
28	950	951	927	915	894	910	912	915	908	897	901	904	910	915	914	915	917	919	917	922	927	951	955	944	22002	916.8	
29	945	945	955	909	955	898	911	917	908	897	905	909	912	921	925	925	917	915	929	957	954	928	957	941	22149	922.9	
30	942	940	920	921	921	909	921	912	905	909	914	915	919	919	918	915	904	908	920	920	929	955	950	955	22047	918.6	
Sum.	28184	28064	27887	27717	27605	27545	27411	27350	27351	27355	27431	27501	27604	27565	27427	27276	27290	27454	27674	27902	28041	28064	28106	28144	655924		
Mean.	939.5	935.5	929.6	925.9	920.1	918.1	915.7	911.7	911.0	911.8	914.4	916.7	920.1	918.5	914.2	909.2	909.7	915.1	922.5	950.1	954.7	955.5	954.9	958.1		922.1	



Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

May 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	10.7	06.8	07.0	09.2	06.5	08.6	11.1	11.5	11.0	14.6	11.9	11.6	10.5	09.4	10.2	11.6	13.4	14.4	14.8	14.8	14.0	15.9	09.8	11.6	268.6	11.20	
2	12.0	07.8	08.0	05.7	07.1	09.8	07.5	04.7	10.2	12.6	12.0	12.1	10.2	09.1	09.1	10.3	12.2	15.7	14.6	15.6	15.7	14.1	11.9	11.9	252.9	10.54	
3	12.0	11.6	11.5	10.4	10.1	10.6	10.9	10.8	10.7	10.5	10.2	10.9	09.7	09.0	09.2	11.1	12.8	14.1	14.8	14.6	15.7	12.9	12.8	12.2	376.9	11.54	
4	08.5	11.5	11.4	10.9	08.4	07.4	09.5	09.8	09.6	08.6	09.1	09.7	09.7	09.4	10.1	11.5	12.7	15.1	15.7	15.6	15.1	15.1	12.7	15.0	258.5	10.77	
5	12.1	11.7	10.7	09.4	10.5	11.0	11.2	12.1	10.6	10.2	10.2	09.8	09.2	08.7	08.8	10.5	11.7	12.9	14.5	15.1	14.7	14.5	11.9	12.9	274.1	11.42	
6	12.1	12.1	10.2	09.9	09.2	07.2	09.1	09.9	10.8	10.7	10.7	10.4	09.6	09.0	09.1	10.8	15.0	14.0	14.2	14.0	15.7	12.9	12.6	12.4	267.6	11.15	
7 Q	11.9	12.1	11.4	11.0	10.2	09.9	10.2	10.2	10.7	10.6	10.6	10.0	09.5	08.9	09.1	10.5	12.6	15.4	15.8	15.8	15.7	12.9	12.8	12.5	272.1	11.34	
8	12.0	11.2	11.0	10.5	09.1	08.4	09.5	09.2	08.9	09.1	09.5	08.9	08.2	07.1	08.1	10.1	12.5	15.7	14.8	14.2	15.0	14.0	15.7	14.0	260.1	10.84	
9	12.2	11.5	11.0	10.5	09.7	09.9	09.9	09.6	10.4	10.4	10.5	09.4	08.5	08.4	08.6	10.5	12.0	12.9	15.7	12.9	12.0	12.0	12.2	12.6	260.7	10.86	
10	13.6	13.7	11.4	10.6	09.5	08.0	04.5	02.9	04.7	07.8	09.2	09.9	10.5	10.5	10.9	12.5	12.3	14.6	15.1	15.2	15.9	15.8	14.4	12.7	260.5	10.86	
11	12.2	11.5	11.1	11.1	11.1	11.0	09.9	07.7	04.5	07.2	08.4	10.7	10.2	10.0	10.1	11.4	12.5	14.2	14.8	14.9	14.1	15.7	12.9	12.2	267.2	11.15	
12	11.9	11.2	10.9	10.6	10.5	10.5	10.4	10.6	11.1	10.6	10.3	09.8	09.8	09.1	09.2	10.9	15.0	14.0	15.5	15.8	15.4	14.9	16.8	15.1	285.5	11.81	
13 D	13.1	11.1	11.2	10.9	10.2	09.5	10.2	10.1	11.1	10.2	09.5	11.1	15.0	11.2	10.2	12.9	15.8	15.9	14.5	13.0	16.6	19.6	18.8	12.6	501.5	12.55	
14 D	08.6	05.2	08.0	04.9	05.7	02.8	08.9	08.4	10.1	12.1	14.5	15.8	12.6	15.6	15.9	14.9	14.9	14.9	15.6	14.6	15.8	14.0	15.7	09.1	259.6	10.82	
15	10.0	08.5	09.1	04.1	01.5	05.0	10.1	09.1	10.5	11.9	12.0	11.7	11.5	12.9	15.2	15.2	15.7	14.1	12.9	15.7	15.7	15.5	12.6	09.2	259.1	10.75	
16	09.4	05.7	08.5	09.5	09.2	08.7	10.2	11.0	11.5	15.8	15.0	11.8	11.1	10.1	10.5	12.1	15.2	15.5	15.8	15.5	12.9	12.6	12.2	12.2	268.2	11.18	
17	12.2	11.0	06.4	07.4	06.5	08.0	10.8	10.9	10.7	10.5	11.6	10.4	10.6	11.9	14.2	15.5	15.6	14.2	14.8	14.5	15.7	15.9	12.1	06.2	268.4	11.18	
18	10.0	09.6	08.4	08.8	10.5	07.8	10.2	10.4	11.2	10.0	15.0	11.5	11.5	11.1	11.1	12.5	15.1	14.6	14.9	14.0	15.5	12.5	11.1	10.6	271.2	11.50	
19	11.8	11.8	11.1	09.7	07.7	05.5	04.6	08.4	10.8	11.9	12.0	11.4	11.0	10.2	10.5	11.2	12.2	15.4	15.8	15.4	12.7	12.5	12.8	12.1	252.5	10.84	
20 Q	09.9	10.1	09.9	10.4	10.1	10.6	10.8	10.8	10.6	10.8	11.8	10.8	10.6	09.7	09.9	10.8	12.0	15.0	15.4	15.0	12.7	12.5	11.5	10.6	266.5	11.10	
21	10.4	08.5	08.4	07.4	08.0	10.3	11.1	12.0	11.1	10.9	11.0	10.7	10.5	10.2	10.5	11.4	12.5	12.9	15.0	12.1	11.5	11.2	11.1	11.1	254.2	10.59	
22 Q	11.0	11.0	10.7	10.5	10.1	10.5	10.2	10.5	10.5	10.5	10.5	09.9	09.5	09.1	09.8	10.5	11.4	12.2	12.2	12.0	11.4	11.1	11.8	11.5	256.6	10.69	
23 Q	12.5	11.7	10.6	10.6	10.6	10.6	10.8	10.8	10.6	10.6	10.8	10.6	10.4	10.1	10.1	10.8	12.0	15.0	12.9	11.9	11.4	11.7	11.5	11.2	267.4	11.14	
24 Q	11.0	10.5	10.5	10.5	10.2	09.9	09.5	09.9	09.8	10.1	09.9	10.1	09.5	09.1	09.7	11.0	12.1	12.8	12.7	12.0	11.4	11.2	11.1	11.0	254.9	10.62	
25	11.0	10.7	10.5	10.5	10.2	09.9	09.5	10.2	10.5	10.5	10.2	10.0	09.5	09.1	09.2	10.2	11.2	12.0	11.4	10.9	10.9	11.6	12.9	12.9	254.7	10.61	
26	12.6	15.5	11.8	07.8	08.5	10.1	10.1	10.5	10.0	11.1	10.5	12.5	12.6	12.5	09.9	15.8	12.5	15.5	15.8	14.0	14.0	15.7	14.5	12.6	286.4	11.95	
27	11.1	09.4	09.1	10.0	09.6	09.5	10.7	10.6	12.1	11.4	10.1	11.6	14.4	10.9	11.0	11.4	12.6	15.7	14.9	17.1	15.6	15.0	15.1	12.0	296.7	11.95	
28	12.6	09.2	06.6	08.5	09.7	10.1	11.1	10.8	15.2	12.9	12.2	11.2	11.5	11.1	11.0	11.4	12.5	15.7	14.7	14.6	15.7	12.6	12.2	10.1	274.8	11.45	
29 D	02.8	58.8*	08.0	06.0	08.1	07.5	01.2	01.8	09.8	10.4	15.5	17.0	21.1	12.0	15.2	15.9	14.9	15.4	16.0	15.1	15.9	15.7	15.0	12.9	249.9	11.24	
30	12.5	12.1	12.6	10.1	08.0	10.1	10.4	10.5	10.5	12.5	11.1	10.6	10.5	10.6	11.7	12.5	15.7	14.0	15.8	15.4	12.6	11.5	11.4	12.6	278.7	11.61	
31 D	12.2	11.9	12.0	05.8	05.7	03.8	08.2	08.6	09.1	10.7	12.5	15.7	15.5	15.1	12.1	11.9	12.7	15.6	18.7	24.0	25.0	24.0	20.0	29.4	523.2	15.59	
Sum.	345.5	310.0	305.6	279.1	268.6	270.5	288.1	289.5	516.1	534.7	545.5	542.6	559.5	522.7	527.8	560.4	395.4	425.4	459.9	442.5	425.8	420.7	401.5	378.0	8568.8		
Mean.	11.68	10.00	09.86	09.00	08.66	08.75	09.29	09.54	10.20	10.80	11.07	11.05	10.95	10.41	10.57	11.65	12.75	15.68	14.19	14.27	15.74	15.57	12.95	12.19		11.25	

\* 16 degrees + tabulated value.

Horizontal component, H, 25000 gamma +

May 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	550	554	529	549	550	554	546	551	555	558	559	559	546	551	507	506	505	515	519	526	527	530	533	549	12888	556.2	
2	548	545	539	529	529	557	565	557	546	555	557	537	553	537	520	505	505	510	522	527	524	537	539	552	12915	558.0	
3	540	562	538	565	567	558	560	560	564	565	566	564	560	543	523	516	512	522	532	541	547	544	551	564	15194	549.8	
4	541	549	562	564	565	557	560	567	573	559	559	560	550	535	523	519	516	521	535	547	545	549	539	548	15139	547.5	
5	552	550	539	539	555	559	562	569	566	564	565	560	556	545	532	523	521	531	531	533	538	539	534	545	15104	546.0	
6	555	554	555	544	555	557	558	558	558	561	560	562	555	559	525	509	514	516	533	540	545	547	554	560	15076	544.9	
7	563	567	562	565	562	569	570	567	570	570	572	572	549	555	556	528	526	536	547	554	560	563	567	570	15433	559.7	
8	579	581	563	580	574	570	571	573	572	574	575	574	571	562	544	538	532	533	544	557	562	557	529	551	15493	562.2	
9	558	567	567	571	569	574	577	570	567	572	572	574	573	558	543	535	535	538	532	539	565	562	568	574	15500	562.5	
10	572	559	559	564	568	569	564	562	551	552	555	575	560	541	528	524	524	530	532	541	544	555	553	540	15226	551.1	
11	555	561	562	563	562	565	569	575	575	559	557	552	551	541	531	525	523	533	536	545	545	550	554	568	15244	551.9	
12	563	563	568	565	567	568	567	565	575	571	575	570	563	555	532	538	534	540	546	545	530	531	535	535	15300	564.2	
13	532	546	557	561	563	565	572	568	571	573	570	560	560	553	539	519	518	523	539	535	523	500	512	527	15092	545.1	
14	508	476	500	515	515	511	508	525	546	534	536	544	543	529	509	516	514	515	517	502	519	520	526	533	12481	530.8	
15	532	520	529	532	526	528	533	557	548	546	550	553	548	528	523	510	513	507	500	519	527	539	524	514	12715	529.8	
16	552	529	529	534	547	545	549	549	551	556	553	549	553	546	531	515	508	517	533	545	547	547	552	551	12568	540.5	
17	534	555	561	551	541	543	555	563	560	557	556	561	562	545	531	523	522	526	525	534	535	540	534	528	13014	544.5	
18	527	554	533	550	554	561	560	560	563	562	562	563	559	546	532	518	516	514	527	534	538	539	540	545	15057	544.0	
19	552	552	555	556	576	566	554	547	553	551	558	557	556	547	536	527	525	532	532	543	550	546	540	551	13162	542.4	
20	555	553	546	546	549	552	554	559	562	565	568	563	560	552	538	533	534	539	546	547	560	556	555	549	15229	551.2	
21	542	525	536	561	548	554	558	557	562	568	567	567	564	554	542	541	545	549	558	560	564	563	564	566	13317	554.9	
22	566	570	569	569	569	567	569	570	568	572	572	572	571	559	547	545	547	557	563	569	570	568	572	570	13571	565.5	
23	565	559	562	561	569	571	570	570	572	574	576	574	572	561	550	549	554	560	570	574	577	573	574	576	13613	567.2	
24	574	577	575	576	572	574	570	573	570	573	571	575	572	569	556	550	549	557	566	571	572	571	574	571	13633	569.1	
25	575	573	577	576	577	575	577	574	577	572	581	581	579	570	562	561	564	575	580	582	576	574	555	549	13750	572.9	
26	548	529	523	550	546	555	571	559	556	568	570	574	563	565	527	534	515	504	522	523	523	526	525	535	12982	540.8	
27	530	519	533	540	552	547	552	550	560	562	559	552	564	544	529	522	523	514	528	516	513	522	507	521	12871	536.3	
28	516	531	528	530	526	542	549	551	545	544	549	561	552	545	537	524	519	525	522	527	526	529	538	544	12850	535.4	
29	528	520	516	535	533	551	533	543	551	527	552	555	554	526	515	507	500	491	489	512	516	524	530	533	12843	523.6	
30	538	534	531	510	512	529	528	547	540	547	548	547	543	536	527	518	519	523	531	539	537	520	535	530	12769	532.0	
31	531	528	520	531	525	527	532	533	537	534	530	547	536	545	531	527	526	522	492	442	475	452	434	445	12562	515.1	
Sum.	16979	16919	16943	17032	17151	17220	17283	17355	17366	17377	17419	17408	17322	16950	16524	16305	16258	16390	16569	16385	16785	16762	16745	16364	403646		
Mean.	547.7	545.8	546.5	550.4	553.5	555.5	557.5	559.9	560.2	560.5	561.9	561.5	558.8	546.8	533.0	526.0	524.5	528.7	534.5	538.2	541.5	540.9	540.1	544.0	546.6		



Vertical component, Z, - (36000 +) gammas.

May 1959.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	936	930	928	924	909	911	914	918	911	905	908	917	921	922	915	915	908	909	911	918	925	928	935	935	22041	918.4	
2	929	925	918	912	909	903	903	897	904	915	917	919	920	920	919	912	911	906	908	912	918	924	927	930	21956	914.9	
3	927	924	920	920	910	912	915	916	913	915	917	914	915	914	914	912	909	915	912	920	925	919	924	925	22004	916.8	
4	919	924	925	921	917	905	915	908	902	904	908	908	910	915	917	916	915	920	921	921	925	924	922	926	21995	916.0	
5	925	925	922	921	924	921	921	915	912	915	915	914	917	917	914	909	915	915	908	912	920	922	925	929	22025	917.6	
6	939	922	926	927	924	916	914	915	916	915	915	917	918	916	909	905	905	907	914	918	921	922	925	924	22020	917.5	
7 Q	922	921	917	916	915	915	912	911	910	911	915	912	912	911	908	905	904	911	910	915	919	919	918	918	21921	915.4	
8	919	917	916	912	910	907	907	908	903	902	904	907	911	910	904	900	899	902	905	912	916	912	905	918	21808	908.6	
9	922	922	916	915	911	911	910	905	905	907	907	909	910	907	902	902	906	907	907	913	914	915	915	915	21949	910.4	
10	916	911	912	912	912	906	900	892	889	899	899	907	894	900	906	906	909	909	908	911	915	921	921	918	21765	906.8	
11	925	922	918	916	912	912	910	902	881	874	888	905	915	911	910	907	911	910	912	915	917	920	920	922	21851	909.6	
12	921	919	915	915	911	909	906	908	905	903	907	908	908	909	914	906	905	905	904	907	901	911	919	926	21836	909.8	
13 D	926	927	926	920	917	911	904	901	897	900	898	898	903	909	909	905	905	909	915	910	915	917	942	959	21865	912.2	
14 D	920	922	952	905	910	895	894	890	898	909	909	915	921	918	910	919	919	919	920	917	929	950	929	951	21965	915.2	
15	919	916	907	902	889	870	894	895	900	912	915	917	915	912	909	912	916	912	915	925	950	926	925	924	21851	910.5	
16	927	918	919	910	915	910	910	910	908	897	906	914	918	921	917	907	905	912	915	924	922	921	920	920	21942	914.5	
17	919	920	916	902	897	905	902	904	902	905	907	911	915	907	907	908	911	911	915	915	918	920	920	917	21859	910.8	
18	918	912	904	912	902	908	906	902	899	901	892	898	908	915	912	909	904	901	909	913	918	919	920	920	21800	908.5	
19	920	917	916	912	900	885	882	885	899	901	909	909	915	915	912	907	910	907	907	915	917	915	915	914	21762	907.5	
20 Q	915	912	915	912	911	911	911	911	912	910	909	909	911	912	911	909	908	910	911	912	915	915	915	914	21975	911.5	
21	909	910	916	912	905	910	909	909	911	910	909	910	910	909	908	906	907	908	911	915	914	915	912	911	21840	910.0	
22 Q	909	911	908	907	905	904	904	905	905	905	904	905	907	905	904	905	905	908	909	915	911	909	910	907	21756	906.5	
23 Q	909	909	911	909	907	906	905	905	905	905	905	902	905	905	902	899	900	902	907	908	910	905	905	906	21727	905.5	
24 Q	905	904	903	901	900	900	896	896	896	898	898	900	899	902	898	898	895	899	903	903	905	905	905	904	21821	900.9	
25	905	905	905	901	901	898	899	897	899	898	898	899	900	898	899	898	899	900	905	905	898	897	894	896	21589	899.5	
26 D	905	905	910	909	908	910	909	901	901	900	895	894	895	900	895	899	894	901	911	914	915	914	916	922	21715	904.8	
27	920	919	921	919	915	907	909	909	909	904	904	894	895	902	908	908	908	908	907	902	910	921	927	935	21855	910.5	
28	951	920	915	910	909	899	897	894	900	915	914	916	915	914	916	909	907	909	907	912	914	918	920	924	21865	911.8	
29 D	915	900	916	902	910	904	877	855	825	775	859	857	888	899	914	917	919	915	914	927	928	935	929	929	21506	896.0	
30	928	925	922	915	915	918	914	911	904	908	915	914	915	915	914	912	914	915	916	920	917	915	917	919	21968	915.5	
31 D	921	920	918	898	900	905	902	901	905	897	886	895	905	908	910	915	911	906	889	899	945	967	954	1025	21988	916.1	
Sum.	28597	28428	28404	28265	28172	28086	28061	27979	27929	27829	28011	28080	28181	28216	28185	28125	28122	28158	28200	28525	28457	28494	28518	28656	677443		
Mean.	919.6	917.0	916.5	911.8	908.8	906.0	905.2	902.5	900.9	900.9	905.6	905.8	909.1	910.2	909.2	907.5	907.2	908.5	909.7	915.6	917.5	919.2	919.9	925.7		910.5	

Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

June 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	<u>Sum.</u>	<u>Mean.</u>	
Date.																											
1 D	17.4	08.7	02.3	05.9	14.6	08.8	05.2	08.2	14.8	14.4	13.4	13.0	13.0	12.7	12.7	13.0	13.2	13.2	13.3	12.3	15.5	15.6	15.9	12.0	291.4	12.14	
2	12.1	11.1	08.5	09.0	08.3	04.9	06.6	11.7	11.2	11.1	13.0	16.0	16.6	16.6	16.0	16.6	16.8	16.0	14.9	14.3	13.6	13.1	12.9	12.6	298.5	12.44	
3 Q	12.0	12.0	12.0	11.8	11.8	12.0	11.3	11.3	10.4	10.5	10.3	10.1	10.9	11.0	11.3	12.1	13.2	13.8	13.8	13.0	12.3	12.0	11.7	11.5	291.9	11.73	
4 Q	11.3	11.2	11.2	11.0	10.1	10.1	09.8	10.2	10.3	10.6	10.5	11.1	11.0	10.5	10.9	11.8	12.8	13.1	12.6	12.0	11.4	11.3	11.1	10.9	288.8	11.12	
5	10.6	10.3	10.5	10.5	09.9	09.1	08.2	08.0	08.8	09.4	10.0	09.8	09.5	09.6	09.8	10.6	11.9	12.7	12.6	12.1	11.6	11.1	10.6	10.5	247.5	10.50	
6	10.3	10.2	10.1	09.9	09.7	09.2	08.2	08.7	07.4	09.7	08.8	09.4	09.7	09.8	10.2	11.4	12.6	13.0	12.8	12.1	12.7	13.7	11.1	15.2	253.9	10.39	
7 D	11.4	58.8 <sup>+</sup>	09.2	09.1	07.4	06.4	04.7	05.0	03.6	03.5	09.0	12.9	13.6	14.5	14.7	13.8	14.5	14.3	14.5	14.4	13.1	14.7	12.2	11.7	237.2	09.88	
8	12.5	12.5	12.0	11.8	11.5	10.6	10.6	10.4	10.1	10.6	10.8	10.8	10.8	11.1	11.1	12.3	12.7	12.7	12.7	13.0	12.0	11.3	12.3	11.3	278.0	11.58	
9	07.0	09.7	10.1	09.7	09.3	11.1	07.7	04.3	05.7	08.2	09.2	10.3	10.7	11.9	11.1	11.3	12.3	12.2	12.4	11.4	13.0	18.4	21.2	21.8	371.7	11.32	
10	17.2	08.5	58.8 <sup>+</sup>	02.9	05.5	04.6	09.7	12.1	13.3	12.3	13.7	12.2	12.1	11.8	12.1	12.8	13.0	14.0	14.6	13.3	13.7	14.0	10.7	11.9	262.2	10.95	
11	10.9	09.2	03.6	09.6	08.5	10.1	10.3	08.9	11.4	11.4	11.6	12.8	11.2	11.0	11.0	11.1	11.9	13.0	13.2	12.7	12.1	12.9	12.0	12.0	267.4	11.14	
12	11.0	10.3	10.3	09.1	05.7	04.7	09.1	09.6	09.3	08.3	08.6	10.9	10.9	11.1	10.9	11.3	11.9	12.1	12.7	12.6	12.0	10.0	09.3	11.1	240.8	10.03	
13	10.9	09.2	08.4	08.5	10.1	07.6	07.4	10.7	10.3	10.7	10.3	10.2	09.7	09.8	10.3	11.1	11.6	12.0	12.0	11.4	11.5	11.1	10.8	09.4	245.2	10.22	
14	09.8	09.7	09.4	09.5	10.0	02.6	08.1	08.2	09.1	10.3	10.2	09.3	10.0	09.9	10.2	10.3	11.1	11.9	11.9	11.8	11.6	12.0	10.9	10.6	245.6	10.23	
15	10.5	10.0	09.5	08.7	58.8 <sup>+</sup>	04.3	01.5	02.7	07.7	12.3	13.3	12.4	11.8	11.1	10.4	10.4	11.3	12.6	12.6	12.2	11.3	11.1	11.1	11.0	227.6	09.48	
16	09.4	08.4	10.2	09.3	09.3	09.2	09.2	05.3	07.7	10.5	10.7	10.3	10.2	11.2	11.0	11.5	12.1	12.9	12.5	12.0	11.4	11.0	10.9	10.6	247.0	10.29	
17 Q	10.5	10.7	10.8	10.2	08.3	08.3	08.2	10.0	10.1	09.9	10.0	10.1	10.2	09.3	09.3	10.6	11.7	12.0	11.7	11.1	10.3	10.2	10.2	10.5	245.2	10.22	
18 Q	10.6	09.6	10.1	10.1	09.5	09.9	10.0	09.7	08.6	09.4	09.4	09.3	09.1	08.8	09.1	10.1	11.0	11.6	11.9	12.0	12.0	12.9	11.2	10.6	247.5	10.31	
19	10.3	10.0	09.4	09.9	09.1	08.7	09.2	09.2	09.2	10.0	09.9	09.5	09.2	09.1	09.3	10.4	11.1	11.4	11.0	10.7	10.3	10.3	10.3	10.3	237.8	09.91	
20 Q	08.7	08.6	07.3	08.1	08.3	09.3	09.4	08.3	09.7	09.6	09.4	09.3	09.3	09.1	09.2	10.2	10.8	11.1	10.7	10.2	09.9	09.5	09.2	10.3	230.7	09.61	
21 D	10.1	08.4	58.8 <sup>+</sup>	02.3	02.9	03.0	08.1	07.2	07.5	08.0	13.3	25.7	13.4	11.9	12.1	13.5	13.7	16.3	13.8	16.5	15.0	17.8	13.4	13.6	269.6	11.23	
22	08.8	09.7	04.6	01.9	57.4 <sup>+</sup>	03.1	07.1	08.1	08.6	07.6	11.6	13.3	12.4	12.3	12.3	12.9	12.6	12.4	12.5	12.0	11.3	11.1	11.6	09.6	221.1	09.21	
23	09.5	09.5	07.7	07.9	07.4	08.7	08.5	10.6	11.1	10.8	10.3	10.1	09.9	09.7	09.6	10.3	11.3	12.1	11.8	11.4	11.3	10.4	10.4	10.1	238.6	09.94	
24	08.9	05.2	08.4	08.2	08.0	05.8	08.7	08.5	09.4	09.9	10.5	10.5	13.2	13.1	13.1	14.2	12.3	11.7	12.2	12.2	10.3	10.7	12.3	10.4	246.2	10.26	
25	09.1	09.3	07.6	04.1	05.1	09.0	09.3	09.7	09.5	12.2	10.6	09.6	09.1	09.3	09.8	10.4	11.3	12.4	12.3	12.2	10.3	10.4	10.6	10.4	233.7	09.74	
26	09.6	08.8	08.5	09.1	09.2	08.5	05.6	09.3	10.0	10.0	10.2	10.1	09.6	08.9	09.1	10.0	11.0	11.7	11.5	10.8	10.1	09.8	10.4	10.3	230.1	09.59	
27	09.9	10.3	10.3	09.3	08.3	08.4	08.1	09.3	10.3	09.4	09.7	10.0	09.2	08.6	08.7	09.6	10.3	10.7	11.1	10.3	10.0	10.9	10.6	12.2	236.6	09.93	
28 D	11.2	10.3	08.3	08.1	02.9	04.9	06.1	07.7	07.6	08.1	10.0	12.2	10.3	09.6	09.4	09.8	11.0	11.2	12.3	13.7	17.9	17.7	14.0	23.4	257.7	10.74	
29 D	13.2	05.0	05.5	10.6	10.3	13.9	05.3	58.5 <sup>+</sup>	56.3 <sup>+</sup>	05.0	06.9	09.6	13.3	14.3	17.8	17.7	13.8	17.6	13.9	13.8	13.3	13.1	14.0	14.1	265.8	11.09	
30	13.3	13.7	13.2	12.2	12.2	11.3	10.3	09.7	09.6	09.6	10.0	10.2	10.6	10.3	10.7	11.2	11.9	12.3	12.9	12.1	11.3	10.1	09.9	10.2	269.4	11.23	
<u>Sum.</u>	526.8	277.2	237.9	255.2	237.9	240.3	238.9	248.8	239.8	293.1	315.2	341.5	335.7	328.1	333.4	352.7	369.3	384.0	383.3	375.8	362.9	368.9	354.9	360.9	7592.5		
<u>Mean.</u>	10.89	09.24	07.93	08.51	07.93	08.01	07.96	03.29	08.99	09.77	10.51	11.33	11.19	10.94	11.11	11.76	12.31	12.80	12.78	12.53	12.10	12.30	11.83	12.03	10.53		

<sup>+</sup> 16 degrees + tabulated value.



Horizontal component, H , 25000 gammas +

June 1955.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1 D	410	416	470	475	497	478	500	479	461	507	508	513	515	516	510	503	507	505	508	505	505	503	500	515	11625	492.7	
2	530	518	487	507	514	496	512	518	532	532	540	552	559	551	518	516	517	515	515	527	525	527	530	534	12852	523.0	
3 Q	555	555	544	557	554	555	552	554	555	558	557	541	542	537	529	522	524	525	534	544	544	546	542	547	12957	534.1	
4 Q	550	550	551	548	541	542	542	549	549	551	551	554	550	546	536	531	531	537	533	537	561	558	562	561	13160	548.5	
5	564	562	561	563	562	559	562	557	555	559	562	562	560	556	550	542	536	545	556	562	565	565	566	567	13396	558.2	
6	558	557	558	566	566	574	566	569	558	558	562	559	556	561	544	540	544	552	557	557	552	552	555	526	13348	556.2	
7 D	515	539	422	453	495	507	502	491	505	482	513	504	504	504	496	501	511	514	516	517	525	530	530	530	12102	504.5	
8	557	555	557	557	553	555	555	540	535	535	537	538	537	535	532	529	533	541	539	535	535	542	542	517	12884	536.0	
9	515	526	532	535	540	551	551	550	554	553	554	552	549	545	542	543	551	541	549	563	553	524	515	493	12916	538.5	
10	482	480	493	486	502	507	512	522	531	539	541	544	553	528	508	517	517	522	513	514	521	508	506	519	12327	513.6	
11	521	505	504	521	535	540	540	545	545	549	553	560	566	547	538	530	520	528	532	537	537	531	524	539	12835	534.8	
12	542	545	548	530	535	549	542	530	537	538	542	550	551	545	539	535	530	530	534	535	535	539	549	549	13074	544.8	
13	543	540	545	542	557	562	555	553	551	555	555	559	553	551	542	539	539	542	544	551	549	548	547	551	13191	548.9	
14	553	549	548	548	551	558	559	561	555	552	555	556	556	546	543	542	538	544	532	536	546	542	545	526	13180	549.2	
15	551	550	545	545	524	550	550	545	545	545	557	547	544	540	535	535	530	530	537	545	544	544	544	545	12979	540.8	
16	545	538	542	542	544	547	557	553	551	547	552	552	549	545	537	529	529	530	535	537	538	540	544	545	13022	542.6	
17 Q	540	544	546	546	557	547	546	546	550	554	557	557	555	551	545	542	540	544	551	537	536	551	553	553	13190	549.6	
18 Q	557	560	563	562	563	563	563	568	565	565	563	565	565	568	564	559	552	552	554	551	550	550	537	541	552	13385	557.7
19	557	558	562	562	564	565	559	564	560	567	567	568	566	561	554	553	556	546	562	565	558	558	558	560	13460	560.8	
20 Q	560	563	547	562	565	566	567	567	567	566	569	563	567	560	551	549	549	537	561	566	566	564	548	560	13452	560.5	
21 D	557	545	534	505	497	529	540	557	535	561	553	583	549	530	528	518	516	520	514	504	496	490	476	490	12662	527.6	
22	517	506	521	515	498	491	511	528	538	530	530	521	536	528	513	511	513	516	525	528	534	536	515	506	12466	519.4	
23	513	525	534	533	543	526	540	532	537	539	541	546	547	545	533	528	527	533	530	532	542	544	547	547	12862	535.9	
24	542	528	533	529	540	533	533	537	533	549	550	554	558	552	537	528	529	528	531	538	533	533	529	527	12925	538.5	
25	535	545	537	534	526	543	543	546	548	537	564	550	551	542	537	528	530	525	531	529	543	545	545	533	12969	540.4	
26	538	541	533	539	546	550	546	545	547	530	533	545	554	547	534	529	530	533	542	530	534	532	530	542	13061	544.2	
27	540	541	547	554	554	552	551	553	556	559	559	543	561	554	541	538	538	542	547	554	554	544	532	531	13165	548.5	
28 D	540	546	543	527	544	539	544	537	537	563	571	576	558	549	548	542	541	542	541	522	484	452	459	457	12743	531.0	
29 D	409	436	401	405	401	408	400	412	424	467	486	475	492	519	488	495	493	502	514	518	524	525	526	527	11243	468.5	
30	523	517	510	508	504	510	509	514	513	521	524	526	526	525	527	522	525	525	536	541	546	545	543	540	12565	524.5	
Sum.	15869	15890	15797	15854	15964	16007	16051	16154	16228	16299	16428	16450	16406	16244	15994	15878	15878	15978	16103	16181	16150	16076	15973	13954	385786		
Mean.	529.0	528.7	528.6	527.8	532.1	533.6	535.0	538.5	540.9	545.3	547.6	548.3	546.9	541.5	535.1	529.3	529.5	532.6	536.3	539.4	536.3	535.9	532.4	531.8		535.6	

Vertical component, Z, - (36000 +) Gauss.

June 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
1 sta.																											
2	897	875	885	912	849	911	874	887	925	955	958	955	934	955	951	926	928	925	925	922	925	925	934	944	22580	882.5	
3	941	951	924	926	916	902	895	881	918	925	924	912	899	900	907	911	915	917	921	927	928	926	927	924	21991	913.3	
4	924	922	920	919	916	915	914	915	914	912	915	911	914	915	915	915	915	912	915	919	919	917	917	915	21979	915.6	
5	915	914	912	912	909	911	909	909	907	908	908	908	907	910	908	909	908	908	910	915	915	910	910	910	21854	909.6	
6	911	907	907	908	906	904	904	902	901	905	904	903	905	906	900	899	899	905	910	912	912	912	910	909	21735	905.8	
7	908	908	905	905	905	903	897	895	891	892	895	897	900	901	900	899	900	901	905	905	902	905	905	910	21821	903.0	
8	922	889	850	958	925	900	870	864	800	792	852	908	920	921	918	924	925	924	925	921	923	927	925	925	21565	898.5	
9	920	918	916	914	912	911	909	910	908	907	909	910	910	911	909	904	907	908	907	904	906	915	915	904	21858	909.9	
10	907	930	921	919	915	904	873	888	893	895	895	901	901	901	908	905	905	909	911	910	900	902	918	935	21751	905.5	
11	949	855	895	895	894	894	910	912	912	904	908	912	915	915	907	915	919	915	909	915	918	915	919	924	21896	912.3	
12	925	918	920	912	900	915	917	909	907	909	908	907	907	908	905	904	901	908	908	910	911	908	909	914	21850	907.5	
13	917	916	915	912	894	886	895	891	887	889	897	898	905	904	905	906	902	902	904	904	908	910	915	911	21671	903.0	
14	910	908	908	908	897	891	893	893	889	905	904	905	905	904	902	901	902	902	901	904	905	902	903	905	21656	902.3	
15	907	903	904	902	903	902	897	895	894	898	900	903	905	901	905	902	901	903	904	905	895	897	901	901	21622	900.9	
16	907	913	908	902	884	872	851	859	860	886	895	898	904	904	905	904	902	899	902	907	906	906	905	904	21502	895.9	
17	904	902	905	902	905	901	890	877	886	885	886	891	898	899	902	905	902	902	905	906	904	907	907	904	21575	898.9	
18	905	905	904	905	899	895	896	900	902	902	901	900	900	901	900	900	898	902	904	902	902	899	900	900	21622	900.9	
19	901	901	899	899	898	897	898	893	896	896	895	897	897	896	895	891	892	891	892	893	895	892	898	905	21509	896.2	
20	902	905	900	898	898	894	895	895	894	895	895	895	892	895	892	892	890	892	894	897	892	894	894	896	21476	894.8	
21	898	896	892	898	896	895	895	891	891	892	892	891	892	895	891	891	891	895	896	895	896	895	898	896	21429	892.9	
22	894	892	880	870	875	876	885	888	877	885	889	828	859	886	898	897	902	900	905	900	910	925	926	934	21545	889.5	
23	907	917	904	865	865	881	881	886	885	894	900	895	909	912	907	908	910	911	912	912	914	915	901	905	21550	897.9	
24	914	915	909	897	885	875	886	895	903	905	905	905	904	905	905	898	900	905	901	902	909	909	908	908	21642	901.6	
25	905	900	902	898	884	879	882	871	882	894	897	899	900	901	896	894	901	904	905	908	904	906	910	906	21528	897.0	
26	909	910	905	894	895	900	900	899	895	882	885	885	900	901	901	900	896	896	896	900	908	908	907	905	21577	899.0	
27	902	905	902	905	905	895	888	895	899	901	901	902	901	904	901	898	895	896	898	904	905	901	899	897	21589	899.5	
28	898	899	902	901	897	894	891	895	894	896	896	898	899	901	901	898	897	897	900	905	900	894	891	897	21597	897.4	
29	902	904	902	891	895	889	891	887	886	894	888	886	890	894	896	897	896	898	895	897	884	905	924	942	21512	896.5	
30	907	872	887	855	928	875	865	886	900	889	876	885	885	878	896	910	920	924	950	958	957	951	928	925	21741	905.6	
31	922	922	925	924	921	917	916	916	914	915	911	915	912	911	911	910	910	908	911	915	915	912	910	908	21945	914.5	

Sum.	27564	27291	27126	27174	27053	26877	26747	26776	26838	26855	26937	26964	27045	27105	27111	27114	27125	27153	27191	27238	27245	27260	27296	27346	650437	
Mean.	918.3	909.7	904.2	905.8	901.8	895.9	891.6	892.5	894.6	895.2	897.9	898.6	901.4	905.5	905.7	905.8	904.2	905.1	906.4	907.9	908.1	908.7	909.9	911.5		905.4



Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

July 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	10.4	05.5	08.5	09.7	09.5	07.1	06.1	06.2	05.9	06.6	06.6	08.6	10.5	10.5	11.3	12.3	12.7	13.0	13.1	12.4	12.0	11.9	10.9	11.1	234.6	09.78	
2 Q	10.9	10.8	10.5	09.7	09.2	09.3	09.7	09.3	08.5	09.0	08.7	08.7	09.7	10.2	10.5	11.4	11.9	12.0	12.5	11.7	11.9	11.8	13.1	13.4	243.5	10.57	
3	11.3	11.4	10.4	09.7	09.3	08.9	08.6	09.4	09.1	08.7	08.5	08.3	09.7	09.7	10.8	11.7	13.4	13.2	12.4	11.8	12.4	12.0	11.1	10.4	252.2	10.51	
4	09.9	09.8	09.7	09.8	08.2	07.9	09.3	08.8	04.3	03.3	07.7	08.8	09.7	10.5	11.2	12.0	12.9	13.4	14.5	14.2	13.7	12.3	10.9	12.3	242.3	10.10	
5	11.1	10.7	10.0	10.2	09.1	08.7	07.8	07.4	07.8	08.6	08.1	09.3	09.4	09.7	10.3	10.9	12.0	12.6	12.4	11.5	10.5	11.4	13.0	10.6	245.1	10.13	
6 Q	10.3	10.8	08.6	08.5	09.7	10.4	09.9	10.5	09.8	10.3	09.9	08.8	09.7	09.6	10.4	11.3	11.7	12.3	11.3	10.8	10.4	09.9	09.8	09.8	245.7	10.24	
7	10.0	10.0	10.0	09.3	08.4	08.0	08.7	08.0	08.7	07.9	07.7	07.8	08.0	08.6	08.9	09.6	11.3	12.0	11.3	10.3	09.7	09.7	10.4	06.4	223.9	09.33	
8 D	10.6	09.7	10.3	09.5	09.7	08.5	10.4	12.6	21.3	12.8	24.3	19.6	11.4	10.4	05.2	05.4	10.8	20.6	22.0	28.1	30.4	15.2	28.0	22.3	357.6	15.32	
9 D	21.7	13.1	12.0	11.3	08.5	06.1	06.0	08.4	08.9	05.6	11.6	18.9	21.3	24.3	19.3	13.8	17.7	17.7	16.6	15.7	14.2	13.4	13.4	13.2	334.5	13.94	
10	09.6	09.8	09.5	07.7	08.2	08.7	07.4	10.1	12.4	13.1	12.5	12.4	12.8	12.2	11.3	12.0	12.9	13.4	13.2	13.1	12.7	12.3	10.8	10.9	267.0	11.23	
11	11.6	12.3	07.1	09.3	10.8	10.4	11.1	10.9	10.8	11.3	12.1	10.3	10.2	10.7	11.2	11.5	12.9	12.9	12.2	12.1	13.1	10.9	12.3	11.3	269.2	11.22	
12	10.3	09.2	09.3	08.7	07.6	08.0	08.9	09.5	11.4	09.1	09.2	09.3	09.8	09.5	10.0	10.8	11.8	13.1	12.9	12.6	12.0	11.4	10.8	11.0	249.3	10.39	
13	10.7	10.5	08.8	07.4	08.3	07.5	05.2	08.0	09.2	09.7	10.8	09.5	09.6	09.7	10.4	11.6	12.8	13.1	12.3	11.3	10.6	10.5	10.0	10.9	238.4	09.93	
14	08.4	10.5	10.3	08.1	04.8	07.6	08.3	08.7	12.0	08.9	07.6	08.7	09.6	11.4	11.4	11.3	13.2	13.1	13.1	12.1	11.9	12.2	11.9	11.7	247.7	10.32	
15 Q	11.5	11.7	09.9	08.9	07.7	08.5	08.0	08.6	09.3	08.6	08.6	09.7	09.7	09.7	10.6	12.3	13.1	13.0	12.7	12.2	11.5	11.4	11.2	12.0	250.4	10.43	
16 Q	11.1	11.1	10.7	09.8	07.0	07.7	08.7	08.5	09.0	09.6	10.0	10.4	10.5	10.4	10.8	10.5	11.4	12.0	12.0	11.7	11.3	11.4	11.7	11.8	249.3	10.39	
17	10.5	09.1	07.6	09.1	04.4	53.6*	05.1	07.3	08.3	08.8	10.2	09.7	09.5	09.4	09.5	09.9	10.6	11.4	11.0	10.4	09.7	09.8	09.9	09.9	207.5	08.65	
18 D	10.5	11.6	09.3	08.8	07.3	08.3	03.5	07.5	04.3	08.2	08.9	10.5	13.2	10.6	10.9	11.3	11.0	11.3	11.3	12.3	11.8	10.3	11.6	06.4	229.7	09.37	
19	10.8	10.2	09.7	07.7	08.7	08.4	08.3	08.1	03.0	07.4	08.6	10.1	10.1	08.8	09.9	10.6	11.5	11.4	11.3	11.6	13.2	13.0	11.9	08.3	232.8	09.70	
20	10.6	08.7	06.0	08.6	09.6	04.3	06.7	04.7	04.4	09.5	10.7	11.3	13.1	12.1	11.3	11.1	11.7	11.9	11.4	11.3	10.6	11.1	10.5	10.3	226.7	09.37	
21 D	11.2	09.7	08.5	08.5	08.7	08.5	07.2	08.0	09.6	10.6	10.0	10.2	09.6	09.5	09.7	10.5	10.6	10.6	13.0	13.6	13.3	14.6	14.3	14.0	254.5	10.60	
22	11.3	08.9	08.4	10.2	10.5	08.6	09.2	09.5	09.1	09.6	08.3	08.3	10.4	10.3	11.2	11.3	11.4	11.9	11.3	11.3	10.5	10.4	10.3	10.4	243.6	10.13	
23 Q	10.2	10.0	09.9	09.9	09.7	09.8	09.8	09.7	10.0	09.9	10.1	09.6	09.6	09.1	09.5	10.4	11.4	12.0	12.0	11.3	10.5	10.1	10.4	09.7	244.6	10.19	
24	09.7	08.2	08.1	09.1	08.7	06.3	09.4	09.4	09.4	09.0	09.2	09.2	08.5	08.8	08.6	09.7	12.0	13.0	14.3	13.0	11.4	11.3	10.5	11.1	240.1	10.00	
25	09.5	09.5	09.1	09.0	08.9	08.4	07.6	05.1	01.2	04.9	10.2	11.3	10.9	10.4	10.6	11.7	12.9	13.3	12.2	11.0	12.1	12.6	10.0	08.9	231.8	09.66	
26	08.9	07.8	03.7	07.6	07.6	09.0	09.1	09.9	10.5	10.6	10.7	09.6	10.0	06.5	09.6	10.3	11.3	12.3	12.3	12.3	11.0	11.2	10.4	10.4	235.8	09.83	
27 D	10.1	08.2	07.5	07.0	06.9	02.5	02.4	01.1	03.6	03.1	03.8	08.2	10.6	12.5	12.3	11.6	13.1	14.6	16.1	17.0	17.5	17.3	14.8	12.0	236.8	09.87	
28	08.7	08.2	08.7	08.9	06.5	05.9	09.1	10.1	10.4	10.3	09.8	09.6	09.0	08.8	08.9	09.6	11.1	12.4	12.6	11.6	10.6	10.2	10.1	10.0	229.5	09.56	
29	10.0	10.0	09.8	10.0	09.8	09.7	09.6	09.6	09.6	09.6	09.5	09.4	08.8	08.2	08.9	10.3	11.6	12.7	12.8	11.7	10.5	09.8	09.9	09.9	241.7	10.07	
30	09.8	09.8	09.5	08.0	08.7	08.4	07.7	05.2	06.9	07.9	08.9	08.9	08.6	08.5	08.7	09.6	11.3	12.3	12.3	11.4	12.0	12.3	11.1	10.3	228.5	09.52	
31	10.6	09.8	09.4	09.0	08.9	07.5	04.9	05.2	05.0	05.1	08.1	08.7	08.5	08.7	09.1	10.5	11.8	13.3	11.9	11.2	11.2	10.7	10.3	11.0	232.4	09.27	
Sum.	552.3	502.6	279.0	278.0	257.9	241.0	244.7	251.3	263.6	254.8	306.9	315.7	322.6	323.5	323.5	340.7	375.8	404.2	401.6	393.0	384.4	362.7	365.8	345.4	7673.2		
Mean.	10.72	09.77	09.00	08.90	08.32	07.77	07.89	08.11	08.50	08.54	09.90	10.18	10.41	10.44	10.40	10.99	12.12	13.04	12.95	12.68	12.40	11.70	11.80	11.14	10.32		

\* 16 degrees + tabulated value.

Horizontal component, H, 25000 gauss +

July 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	542	522	510	512	526	520	555	526	526	555	552	540	552	557	551	525	516	555	557	541	545	540	541	545	12757	531.5	
2 Q	541	544	542	545	541	555	545	548	548	548	544	544	545	541	555	552	555	540	545	551	550	546	548	545	15055	543.1	
3	549	547	551	547	547	554	548	542	549	551	554	547	544	547	545	557	552	555	546	546	545	545	552	554	15110	546.5	
4	555	557	555	552	553	555	550	551	558	545	545	550	538	552	529	530	527	518	550	557	550	555	552	540	15002	542.8	
5	548	551	559	551	552	551	547	550	555	555	551	549	547	541	554	555	540	545	547	554	561	564	544	548	15172	548.8	
6 Q	558	554	540	558	550	554	554	554	554	554	554	554	551	546	540	542	547	552	557	558	558	559	559	558	15245	551.9	
7	560	559	557	554	558	559	558	558	558	555	567	574	571	585	551	544	551	562	566	560	561	561	545	545	15597	558.2	
8 D	548	557	555	549	547	545	550	561	595	575	588	502	508	517	474	555	557	405	429	428	566	477	556	550	11866	488.8	
9 D	587	551	558	555	571	575	578	549	581	592	429	455	454	452	452	458	455	470	484	491	495	499	504	475	10218	425.7	
10	489	498	497	476	490	496	497	501	505	509	515	518	515	504	498	497	497	504	504	504	506	512	505	511	12022	500.9	
11	499	495	507	501	511	516	526	534	526	551	541	538	537	527	514	512	511	519	528	530	521	515	518	522	12477	519.9	
12	529	526	530	534	545	537	539	536	540	548	556	555	552	525	518	511	519	522	526	529	537	535	535	536	12757	531.5	
13	559	537	541	546	534	555	546	555	550	534	539	542	540	555	526	517	514	528	535	534	555	559	541	537	12654	534.8	
14	551	554	555	551	521	526	532	555	554	544	555	555	555	559	554	519	516	528	529	551	558	555	555	552	12762	551.8	
15 Q	527	531	526	529	525	529	555	551	537	537	555	555	555	528	526	526	521	528	532	556	557	554	551	555	12746	551.1	
16 Q	554	526	552	552	545	529	556	558	557	545	542	544	559	559	555	526	525	526	554	552	552	555	550	521	12803	555.7	
17	529	536	548	544	556	545	527	537	558	556	556	557	556	555	551	529	526	550	529	555	554	555	554	556	12859	555.8	
18 D	555	550	517	524	534	544	546	551	544	557	547	555	550	554	542	559	556	529	550	522	524	521	518	514	12845	556.1	
19	552	552	556	551	547	555	540	575	545	559	548	547	546	557	526	528	554	557	540	540	495	509	505	515	12827	554.5	
20	515	509	496	515	532	558	528	555	537	550	555	556	559	556	525	514	511	522	554	540	545	552	527	551	12658	527.4	
21 D	556	555	529	552	558	547	559	541	556	559	545	542	540	555	528	522	529	556	526	521	555	549	545	556	12875	556.4	
22	555	551	555	552	546	555	555	551	552	551	556	526	555	545	556	525	524	552	558	540	541	540	542	540	12855	554.7	
23 Q	542	542	542	544	545	541	544	545	545	547	549	548	545	559	555	530	527	551	559	546	547	545	542	537	12968	542.2	
24	541	555	521	558	545	547	548	547	548	551	554	554	554	549	545	552	554	527	525	552	552	526	555	555	12951	559.6	
25	557	541	542	545	542	542	559	541	540	556	544	547	555	519	512	507	507	507	511	509	522	525	507	505	12656	527.5	
26	514	515	515	517	527	551	552	557	541	541	558	557	527	524	516	515	515	515	526	550	551	558	556	556	12950	527.1	
27 D	555	555	555	552	559	529	557	526	529	541	544	555	557	540	526	516	507	506	507	505	496	496	485	480	12508	521.2	
28	487	505	497	520	550	558	540	557	558	541	545	545	541	555	521	514	512	518	529	541	550	549	546	546	12717	529.9	
29	545	545	544	542	542	545	541	542	544	545	549	548	544	557	522	516	515	519	555	542	552	544	545	550	12947	559.5	
30	548	547	548	547	548	546	545	547	558	542	542	544	545	558	550	519	515	519	551	557	558	528	551	541	12912	558.0	
31	544	540	558	540	557	540	559	554	559	537	537	545	559	551	522	517	510	506	554	559	555	540	542	558	12825	554.5	
Sum.	16557	16559	16534	16571	16518	16516	16555	16569	16620	16645	16722	16685	16626	16517	16255	15985	15971	16144	16565	16459	16404	16505	16509	16289	394055		
Mean.	527.6	527.7	526.9	528.1	532.8	532.8	534.0	534.5	538.1	538.9	539.4	538.2	536.5	532.8	524.5	515.6	515.2	520.8	527.8	550.5	529.2	552.4	526.1	525.4	529.6		



Vertical component, Z, - ( 36000 + ) gauss.

July 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	907	901	899	906	909	902	895	893	900	899	899	896	899	906	906	904	908	909	908	911	911	905	907	906	21689	903.7	
2	906	905	905	904	900	901	905	899	895	895	894	896	898	897	896	899	900	900	901	904	901	899	902	906	21205	900.2	
3	907	905	902	900	900	898	895	895	895	898	897	890	889	891	889	898	887	891	901	905	901	905	905	906	21532	897.2	
4	906	905	900	900	897	897	892	892	875	899	875	880	889	892	891	895	896	890	897	905	902	906	910	911	21470	894.6	
5	911	908	907	901	900	898	896	896	895	895	891	892	892	891	899	894	897	898	901	904	906	904	894	902	21560	898.5	
6	905	902	898	900	900	898	898	895	895	895	895	895	894	895	892	892	895	897	900	902	902	901	899	897	21540	897.5	
7	896	895	895	894	894	892	895	891	891	889	889	887	891	892	889	886	889	894	894	899	892	896	891	892	21401	891.7	
8	898	900	898	899	894	892	898	879	894	892	846	702	817	895	899	851	879	975	964	1045	1009	1225	1070	1054	21977	915.7	
9	935	942	945	939	927	911	899	867	881	908	886	897	909	911	917	945	944	949	952	950	946	945	947	949	22244	922.9	
10	939	939	908	917	909	910	915	917	915	919	923	924	922	925	925	922	917	917	917	917	920	922	922	925	22082	920.1	
11	922	926	916	918	920	920	920	916	915	910	907	902	903	910	909	909	908	915	917	916	908	911	915	917	21935	915.9	
12	922	918	916	915	901	902	908	906	890	879	889	898	902	905	908	908	912	909	909	909	914	915	912	909	21755	908.4	
13	908	905	902	888	894	891	884	891	896	895	890	889	896	899	897	864	898	904	907	908	903	908	906	905	21589	898.5	
14	902	904	905	905	890	902	902	898	885	884	895	895	895	896	894	895	897	902	906	905	905	905	905	901	21569	898.5	
15	902	904	905	905	901	901	898	898	898	894	895	895	898	894	895	895	895	901	902	905	905	905	900	904	21591	899.6	
16	904	905	904	902	899	894	899	896	896	895	895	897	896	898	897	894	892	898	901	900	900	901	900	899	21560	898.5	
17	906	901	908	907	905	875	884	899	898	894	895	894	897	894	895	894	894	895	894	898	897	897	894	895	21508	898.1	
18	892	895	896	904	905	905	885	851	865	887	895	891	898	894	892	898	896	892	895	892	899	900	901	904	21418	892.4	
19	906	904	905	898	887	891	892	859	858	865	895	895	894	897	895	895	894	895	898	898	898	890	898	904	910	21427	892.8
20	908	904	896	897	905	901	892	895	875	891	898	890	890	896	894	895	897	904	907	907	905	896	896	902	21517	898.5	
21	905	901	901	899	891	887	888	885	884	894	893	895	895	898	895	890	895	895	887	915	910	904	908	905	21517	898.5	
22	901	904	902	905	901	895	896	894	895	889	889	886	892	896	895	895	897	905	902	905	901	901	899	899	21556	897.5	
23	899	896	897	896	894	895	895	895	896	895	895	894	897	895	891	889	889	895	898	899	898	896	894	891	21475	894.8	
24	898	895	892	894	891	891	895	895	894	894	894	894	895	894	891	886	888	882	882	890	892	892	897	895	21405	891.8	
25	897	895	894	895	891	899	885	875	897	888	870	872	880	885	892	869	886	888	894	896	905	905	900	902	31515	888.0	
26	905	906	899	892	899	879	895	892	889	886	890	892	995	899	896	895	891	891	896	898	899	901	899	897	21499	895.8	
27	899	899	895	890	897	884	875	842	847	858	886	885	888	890	889	891	886	886	892	896	902	910	916	918	21517	888.2	
28	918	907	906	915	906	892	901	901	899	900	898	897	897	896	892	886	888	891	896	901	902	898	895	895	21575	899.0	
29	892	892	892	891	889	889	889	889	888	889	890	890	892	895	886	884	888	891	895	899	900	895	895	895	21589	891.2	
30	892	895	892	891	891	888	889	880	884	895	885	888	887	889	888	886	885	885	894	895	896	889	895	899	21542	892.5	
31	899	896	895	894	895	892	896	890	878	880	885	885	885	885	864	864	865	878	874	896	896	898	897	895	21525	888.5	
Sum.	26101	26067	27965	27945	27955	27770	27710	27568	27468	27545	27617	27479	27665	27795	27769	27717	27762	27906	28000	26156	28103	28521	28171	28148	668615		
Mean.	906.5	905.4	902.0	901.4	898.9	895.8	895.9	889.5	886.1	888.5	890.9	886.4	892.4	896.5	895.8	894.1	895.5	900.2	905.2	908.5	906.7	915.6	908.7	908.0	898.7		

Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

August, 1958.

U.T.,	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21	22-23	23-24	Sum.	Mean.	
Date.																											
1	11.5	11.0	09.7	09.5	08.9	08.9	09.0	08.9	09.2	09.2	06.4	09.1	10.8	08.0	09.7	10.5	11.6	12.4	12.5	12.5	10.6	10.5	10.6	10.6	245.4	10.14	
2	09.6	09.5	08.7	09.3	08.8	08.7	08.2	08.0	07.7	07.7	07.8	07.7	08.6	08.9	08.4	10.7	11.5	12.5	12.6	12.6	10.7	10.6	10.5	09.9	229.1	09.55	
3	09.7	08.7	08.5	08.5	07.7	07.0	02.6	03.6	08.7	08.2	07.4	09.4	08.7	06.5	09.8	11.4	11.8	12.9	13.2	12.5	11.2	10.6	10.5	09.8	219.5	08.85	
4 Q	09.9	09.7	09.6	08.7	07.9	07.7	08.0	09.0	08.9	09.2	08.5	08.4	07.9	08.5	09.2	10.5	11.7	12.6	12.6	11.8	10.6	10.6	09.7	09.7	251.1	09.65	
5 Q	09.2	09.1	09.2	09.2	08.6	07.8	08.6	07.7	07.8	07.9	07.7	07.5	08.1	07.8	08.9	10.8	11.7	12.2	12.4	11.6	11.2	10.6	10.5	09.9	225.6	09.40	
6 Q	10.1	09.5	09.6	09.6	09.5	08.9	08.8	08.9	08.9	08.9	08.9	08.7	08.0	07.8	08.5	09.5	10.7	11.4	11.5	11.1	10.1	09.7	10.2	09.8	228.0	09.50	
7	08.7	08.8	07.8	07.0	07.8	08.7	08.5	07.7	07.1	08.7	07.4	08.9	10.2	10.0	09.5	10.5	11.8	12.8	12.7	12.2	10.9	10.6	10.5	10.0	228.2	09.51	
8 Q	09.7	09.5	08.9	08.4	08.8	08.9	08.9	09.5	09.0	08.9	08.9	08.5	07.7	08.9	08.0	10.5	11.5	12.4	12.4	11.6	10.9	10.4	09.8	09.4	228.8	09.55	
9	09.6	10.0	09.4	08.9	04.8	07.7	08.7	08.7	06.7	08.7	08.5	07.9	07.5	07.1	07.6	08.7	10.4	11.2	11.5	10.9	10.1	10.6	11.2	10.0	216.4	09.02	
10	09.3	08.1	08.6	08.9	08.2	06.1	05.6	02.7	08.9	07.6	06.9	08.7	08.5	07.8	08.4	09.6	10.0	11.5	12.5	13.5	12.4	10.8	11.5	12.5	219.5	09.14	
11	10.6	09.6	08.5	05.4	05.4	02.4	02.5	05.2	09.9	07.2	10.4	08.7	08.5	08.1	09.6	10.6	12.5	12.5	13.5	12.5	11.4	10.5	10.0	215.9	09.00		
12	10.2	10.0	09.6	08.7	07.7	06.5	04.1	08.7	08.1	08.1	08.5	08.9	08.9	08.1	09.7	09.9	11.0	11.6	12.0	11.5	10.6	10.0	09.9	216.9	09.12		
13	09.7	09.6	09.5	08.9	07.4	07.0	59.4+	04.0	08.9	07.7	09.5	08.7	08.5	07.5	07.8	09.0	10.6	11.7	12.1	11.6	10.7	09.8	09.6	210.2	08.78		
14	09.2	08.8	08.7	07.8	08.9	08.9	08.9	09.0	09.4	09.5	09.2	08.8	07.8	07.2	07.8	09.1	10.5	11.8	13.2	13.0	11.8	10.7	11.2	250.7	09.61		
15	10.0	09.1	09.1	08.4	04.2	08.9	08.7	08.5	08.4	08.5	08.8	07.9	07.8	08.9	07.8	09.1	11.0	11.7	11.8	11.6	10.5	09.8	09.5	215.5	08.98		
16	08.5	08.4	07.9	07.7	07.5	08.1	08.8	08.8	09.9	08.7	08.7	07.9	07.2	06.7	07.9	09.7	11.1	12.6	13.0	12.5	11.5	10.6	10.1	10.0	222.0	09.25	
17 D	09.7	09.7	09.6	09.6	08.9	08.0	07.8	07.9	08.6	09.2	08.7	07.7	08.2	07.5	08.5	10.7	12.8	15.8	16.8	19.9	15.5	17.1	18.8	14.5	269.5	11.22	
18 D	08.2	07.7	10.1	10.9	08.5	05.6	06.9	10.9	10.0	10.4	10.7	10.4	10.0	09.9	10.9	11.5	12.5	12.7	13.0	12.8	11.9	11.2	10.5	10.2	245.2	10.22	
19	07.9	08.9	08.8	07.2	09.6	10.0	10.0	10.2	09.8	09.6	10.6	09.7	08.8	08.5	07.9	09.7	11.6	13.1	13.4	12.5	11.2	10.5	09.7	09.2	256.4	09.65	
20 Q	08.1	08.7	09.1	09.0	09.5	09.5	09.2	09.7	10.0	09.6	08.8	08.2	07.7	08.9	07.7	09.2	10.9	13.5	12.8	12.5	11.1	10.1	09.7	09.6	229.7	09.57	
21	08.8	08.4	08.8	08.0	08.5	08.8	08.9	08.9	08.9	08.9	08.9	08.0	08.9	07.4	07.1	09.5	12.1	13.0	13.5	13.2	12.1	10.8	08.8	08.7	228.6	09.55	
22 D	09.7	09.8	04.6	59.5+	52.9+	00.7	57.1+	03.1	08.0	09.9	10.1	10.1	10.6	09.7	09.7	09.8	10.8	13.5	14.0	13.4	12.4	11.5	11.1	192.5	08.01		
23	10.8	10.8	10.4	09.9	09.6	07.1	05.0	08.0	08.7	09.5	09.1	08.8	08.5	07.7	08.0	09.2	10.9	12.4	12.7	13.0	12.5	11.5	10.1	254.0	09.75		
24 D	08.9	08.8	49.8+	53.5+	51.9+	59.0+	07.7	11.1	09.7	07.8	07.8	13.9	13.5	08.9	10.7	12.5	13.5	14.6	14.7	13.8	12.6	11.9	11.6	199.5	08.50		
25	12.0	08.7	08.5	09.1	08.1	02.9	05.1	08.5	07.8	08.4	08.8	09.5	08.8	09.6	10.0	11.6	13.4	14.5	15.2	15.0	13.5	12.5	11.7	11.4	240.8	10.05	
26	10.9	10.6	10.0	09.5	08.8	04.5	03.5	05.1	05.0	08.6	09.7	10.6	11.5	11.4	10.5	10.7	12.2	13.9	14.7	14.4	12.9	12.2	11.7	11.2	245.8	10.16	
27 D	10.5	10.7	09.8	06.4	05.0	58.0+	03.7	01.1	57.2+	59.5+	08.2	12.5	11.2	10.6	11.4	13.5	14.6	16.9	17.8	16.8	16.9	15.5	15.5	11.5	251.2	09.65	
28	12.5	10.8	11.4	10.5	09.6	07.8	08.0	09.8	09.6	09.5	10.6	09.9	07.9	08.5	10.8	12.2	13.4	15.7	16.9	17.4	15.7	13.4	11.2	276.6	11.53		
29	10.6	10.8	10.2	08.9	10.2	10.6	10.1	10.2	10.0	09.6	10.6	09.4	07.7	08.9	07.4	09.8	12.6	15.1	15.1	15.2	15.4	17.2	11.9	10.2	257.5	10.73	
30	08.4	10.0	09.8	09.1	07.7	09.5	10.0	10.4	09.7	08.8	08.9	07.8	06.6	05.6	07.1	09.7	12.8	15.2	16.2	15.1	12.7	10.3	10.8	10.8	245.7	10.15	
31	10.7	10.0	09.4	08.7	08.8	07.9	09.4	08.5	08.6	08.8	07.8	07.7	08.4	08.8	07.5	09.5	12.2	14.5	16.1	15.5	13.4	11.7	11.5	11.2	241.6	10.07	
Sum.	302.5	281.5	258.8	240.4	217.1	207.7	215.5	237.5	257.9	262.4	273.5	280.5	268.4	251.7	272.8	318.6	365.5	406.6	421.8	412.5	372.9	352.1	340.0	324.5	7145.8		
Mean.	09.76	09.45	08.28	07.75	07.00	06.70	06.69	07.66	06.52	08.46	09.92	09.05	08.66	08.12	08.80	10.28	11.78	13.11	13.61	13.51	12.05	11.56	10.97	10.46		09.60	

+ 16 degrees tabulated value.



Horizontal component, H , 23000 gammas +

August 1956.

U.T. Date.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.
1	541	539	539	542	542	542	542	541	545	549	551	547	544	539	529	520	518	528	537	544	542	541	538	542	12955	539.0
2	539	545	542	541	544	538	537	538	545	547	541	546	545	535	528	520	512	520	538	540	545	541	545	552	12918	538.3
3	549	547	552	551	540	541	541	534	535	549	545	547	548	535	525	524	521	521	530	538	537	539	538	540	12897	537.4
4 Q	545	545	549	544	539	544	540	546	548	545	548	546	545	539	531	529	527	529	537	545	550	551	550	552	13018	542.4
5 Q	550	547	552	549	547	547	544	550	543	546	550	547	544	538	526	530	531	538	545	545	548	542	548	545	13047	545.6
6 Q	547	547	549	553	551	554	549	553	552	552	552	551	544	532	525	525	530	534	544	548	552	549	547	550	13088	545.5
7	551	555	549	547	549	558	559	555	554	557	568	555	549	545	529	518	521	527	529	535	540	545	541	545	13073	544.7
8 Q	548	545	547	552	552	554	552	554	552	555	557	555	554	540	527	520	528	534	544	548	548	547	547	548	13100	545.2
9	545	538	539	544	546	551	551	551	554	551	558	553	551	545	528	525	528	535	546	552	550	538	541	549	13084	544.5
10	553	547	548	554	560	563	568	555	555	561	558	551	549	540	529	525	528	539	540	553	552	558	557	550	13187	549.5
11	552	556	558	561	562	555	544	535	535	559	555	549	539	524	514	508	511	518	533	549	550	543	546	548	13019	542.5
12	549	553	550	544	555	558	551	549	553	551	552	551	545	538	531	525	525	538	544	559	559	560	558	555	13147	547.8
13	549	544	545	550	558	549	555	552	540	550	542	545	535	527	515	511	512	522	528	538	537	541	539	542	12880	538.7
14	545	544	545	546	552	548	550	551	555	558	560	559	551	534	518	517	524	532	528	535	538	542	530	525	12982	540.8
15	528	545	545	547	559	554	549	550	554	555	558	556	556	545	532	525	525	528	534	544	545	551	550	550	13081	545.0
16	540	535	519	542	545	552	552	552	555	558	557	555	550	538	528	521	522	525	540	537	542	545	546	552	12968	541.2
17 D	554	557	559	557	562	564	562	583	581	550	560	549	537	529	515	510	515	501	485	470	485	488	468	481	12738	530.8
18 D	490	518	519	524	527	511	514	520	521	522	524	525	522	507	497	495	496	504	510	515	522	525	524	522	12358	514.1
19	519	529	534	539	534	538	540	540	541	545	545	547	539	531	508	500	501	502	518	530	539	541	538	542	12724	530.2
20 Q	544	548	548	551	548	550	555	551	550	549	550	549	538	520	505	502	510	521	528	538	544	547	547	545	12954	538.9
21	547	551	552	551	555	552	555	555	554	555	556	557	550	538	517	510	514	524	538	542	545	546	548	554	13056	544.0
22 D	554	549	565	553	508	507	514	525	554	534	539	538	537	525	510	505	501	509	515	535	538	537	537	539	12699	520.1
23	538	542	545	545	548	544	545	539	537	540	540	537	534	524	515	507	504	510	517	529	527	530	538	534	12759	531.6
24 D	534	561	587	483	454	489	488	488	485	485	481	505	511	491	479	484	489	499	502	518	519	522	524	525	12079	505.5
25	533	518	521	515	515	501	508	525	511	519	518	518	508	505	504	482	480	500	507	518	524	530	530	537	12340	514.2
26	544	545	536	530	545	524	521	538	537	534	545	547	524	514	505	490	490	485	500	506	515	521	525	538	12381	525.4
27 D	538	545	539	550	548	490	492	500	474	474	470	492	498	492	485	492	489	476	485	499	497	508	508	520	12055	502.2
28	528	530	535	538	539	537	524	535	538	537	538	538	528	501	489	487	488	487	494	501	508	515	521	530	12458	519.0
29	531	538	539	538	539	540	542	546	547	555	555	551	538	511	495	484	484	498	509	520	525	528	538	538	12681	528.4
30	547	545	549	549	542	544	548	552	558	554	552	549	539	525	509	499	499	507	522	535	540	545	545	545	12891	537.1
31	550	548	554	551	552	547	547	545	547	558	551	548	537	529	511	499	495	501	511	522	535	537	542	544	12857	535.7
Sum.	16764	16836	16908	16799	16804	16722	16729	16790	16815	16842	16858	16860	16879	16812	15950	15789	15820	15990	16228	16480	16592	16650	16642	16731	397590	
Mean.	540.8	545.1	545.4	541.9	542.4	539.4	539.6	541.8	542.4	545.5	545.8	545.9	538.0	528.2	514.5	509.5	510.5	515.8	525.5	531.6	535.2	537.1	538.8	539.7	534.4	

Vertical Component , Z , - ( 30000 + ) gammas

August 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	893	893	894	895	890	889	888	888	887	889	887	877	878	885	885	878	879	885	880	894	895	895	889	892	21505	887.7	
2	891	891	890	891	891	887	886	888	887	882	883	887	883	882	885	879	879	868	894	898	898	894	896	898	21326	889.6	
3	896	895	882	881	881	886	875	875	878	885	885	881	879	880	878	880	879	879	886	890	895	882	882	892	21196	885.2	
4 Q	892	895	892	888	887	887	885	887	884	884	886	885	885	881	877	878	875	878	885	887	895	890	889	888	21252	885.5	
5 Q	887	885	887	884	884	885	882	885	881	880	881	879	885	882	880	878	870	874	881	886	885	886	887	885	21172	882.2	
6 Q	889	893	888	885	886	885	884	884	885	885	882	885	885	885	877	879	880	880	882	885	887	884	885	885	21204	885.5	
7	885	884	881	880	880	885	882	880	878	875	875	875	878	878	874	870	875	875	878	885	887	887	887	887	21109	879.5	
8 Q	887	888	887	886	886	885	881	882	880	882	882	884	884	882	879	874	875	879	885	885	888	885	887	886	21198	885.5	
9	886	885	887	887	882	885	885	885	882	882	885	884	885	884	874	875	871	875	881	881	882	878	881	887	21164	881.8	
10	887	885	884	886	887	885	881	888	878	880	878	878	879	879	877	875	876	882	882	886	888	888	888	884	21151	881.5	
11	882	888	884	871	872	885	882	880	885	887	887	885	875	876	875	875	875	877	881	888	888	887	885	884	21002	875.1	
12	886	885	885	882	881	886	881	889	875	874	878	877	879	878	879	875	875	876	881	886	885	885	880	881	21075	878.0	
13	879	880	880	882	881	885	888	882	877	877	877	880	885	880	876	875	875	878	880	887	887	889	886	887	21051	877.1	
14	886	886	882	885	885	881	879	880	880	880	882	882	885	879	875	875	875	872	871	879	887	888	886	892	21147	881.1	
15	895	895	890	890	874	878	878	882	879	879	879	879	881	877	873	888	870	872	879	882	884	885	884	885	21159	880.8	
16	879	880	881	887	886	887	882	881	879	880	878	879	879	877	870	885	888	870	878	879	886	886	886	887	21108	879.5	
17 D	884	885	882	881	882	879	886	878	851	852	847	882	872	871	882	864	881	859	875	884	905	909	924	927	21056	877.3	
18 D	914	915	910	906	886	849	882	882	884	895	891	894	895	888	881	881	888	889	889	894	899	897	897	896	21416	892.5	
19	896	897	892	887	886	881	879	885	886	887	885	886	886	881	878	871	872	873	885	891	897	894	892	892	21253	885.5	
20 Q	892	890	888	865	881	879	881	879	877	880	883	884	885	879	875	870	872	875	880	887	890	891	888	886	21175	882.5	
21	887	886	884	882	881	879	879	879	879	880	880	884	885	879	872	885	864	875	880	885	887	887	889	888	21150	880.4	
22 D	888	887	881	859	841	884	800	884	884	884	888	884	882	879	875	872	871	872	875	886	888	888	887	888	20995	874.8	
23	887	887	885	885	885	881	888	874	875	879	879	881	880	876	872	864	865	868	872	882	881	887	890	890	21089	887.9	
24 D	890	895	889	790	764	855	875	859	864	865	872	867	861	874	885	887	889	889	889	898	898	899	898	896	20900	870.8	
25	898	895	896	879	881	876	878	878	878	885	881	884	882	885	884	876	878	877	881	892	894	894	895	895	21258	884.9	
26	894	891	888	887	886	885	864	859	858	852	841	844	852	868	874	874	880	878	880	887	885	896	895	886	21004	875.2	
27 D	896	899	885	877	858	795	828	775	772	777	842	875	887	888	887	882	877	875	888	897	905	905	904	906	20770	865.4	
28	900	899	897	895	890	885	879	882	877	878	876	885	882	872	864	868	875	870	880	894	900	905	901	905	21249	885.4	
29	899	897	894	880	887	886	885	877	876	876	875	878	880	874	869	859	857	868	876	886	892	892	894	894	21157	881.5	
30	894	889	888	886	880	881	878	876	872	875	877	879	876	872	866	857	856	880	871	881	887	889	886	885	21057	877.4	
31	898	884	884	877	878	874	872	875	875	872	871	874	874	888	880	851	847	858	885	877	885	885	884	882	20952	875.0	
Sum.	27609	27589	27505	27318	27196	27067	27059	27076	27085	27086	27151	27252	27270	27256	27155	27050	27037	27114	27294	27487	27607	27614	27610	27625	655038		
Mean.	890.6	890.0	887.2	881.2	877.5	875.1	872.9	875.5	875.6	875.7	875.8	878.5	879.7	878.0	875.5	871.9	872.2	874.6	880.5	887.0	890.5	890.8	890.6	891.1	880.4		



Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

September 1956.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date:																											
1	10.5	10.1	09.9	09.7	09.6	09.6	09.5	09.1	08.9	08.7	08.5	08.3	05.4	05.1	07.8	10.6	12.7	13.6	14.6	14.6	13.6	11.6	10.7	10.5	241.5	10.06	
2	09.7	09.8	09.1	08.8	08.5	08.6	08.7	08.4	08.4	08.5	08.5	08.6	08.9	08.7	07.9	10.5	12.5	14.5	14.8	14.2	12.8	11.6	10.9	10.5	238.0	09.92	
3 D	10.6	09.8	10.3	09.7	08.9	08.6	08.5	07.8	07.1	06.9	07.7	08.3	04.5	05.1	11.5	10.5	11.5	13.1	14.8	16.9	16.4	18.1	16.6	13.4	254.4	10.60	
4 D	10.6	08.6	05.2	05.0	08.9	08.9	09.8	10.2	10.4	09.7	08.9	08.7	08.1	07.8	10.5	18.2	17.0	19.4	19.8	25.1	26.0	30.0	21.4	11.0	317.3	13.22	
5 D	21.5	04.2	08.8	10.2	09.1	08.9	13.2	13.7	13.5	13.6	12.8	12.7	12.1	13.2	14.1	16.1	16.9	18.4	20.7	19.6	17.0	15.1	13.5	12.9	325.0	13.54	
6	12.2	12.0	11.7	10.4	10.6	10.0	10.7	10.6	09.8	10.0	10.0	10.2	08.9	08.5	08.5	09.9	12.5	14.6	16.0	16.3	14.9	12.7	12.5	11.4	274.1	11.42	
7	10.7	10.0	09.4	09.6	08.1	10.5	09.1	08.8	07.9	09.5	10.9	08.7	08.8	08.0	08.6	10.6	13.5	16.1	16.1	17.0	13.1	12.9	19.8	15.6	267.3	11.14	
8	10.1	09.4	05.5	07.5	09.7	09.6	10.0	09.5	09.6	09.0	08.7	07.7	08.5	05.9	06.6	09.2	11.6	13.9	15.6	15.1	13.4	11.5	09.5	09.9	232.2	09.70	
9	11.4	09.5	07.6	09.7	09.8	09.7	10.2	09.7	10.0	09.6	09.9	08.5	07.0	05.4	08.7	11.4	12.7	14.9	17.0	16.5	15.2	13.4	08.6	08.9	255.1	10.63	
10	15.0	06.7	06.6	03.7	09.6	10.4	10.5	10.3	10.0	09.6	09.1	07.7	08.8	08.1	07.7	09.9	13.5	15.6	16.1	15.7	13.6	11.5	11.4	07.1	244.2	10.18	
11	09.7	09.6	07.5	07.8	08.6	09.2	09.8	10.1	09.7	08.9	09.7	07.6	05.5	04.8	05.4	08.5	12.2	14.7	16.1	15.4	13.5	11.5	11.2	10.5	237.3	09.69	
12	09.5	09.5	08.8	08.5	09.0	09.8	09.6	09.7	09.6	09.7	08.7	08.6	05.2	05.1	06.0	08.7	11.5	14.6	15.5	14.9	13.5	11.6	10.5	10.4	233.3	09.65	
13 Q	10.4	10.4	09.9	09.5	09.0	08.9	08.9	08.8	08.8	08.7	08.0	08.1	05.1	04.4	05.7	08.7	11.8	14.0	15.5	15.0	13.4	12.1	11.4	11.2	236.0	09.63	
14 Q	10.6	10.1	09.6	09.2	08.9	08.8	08.4	06.0	08.0	07.8	07.4	07.1	04.2	04.1	05.4	08.5	11.8	14.5	15.2	14.9	13.5	11.7	10.7	10.8	227.4	09.48	
15	09.6	09.5	09.5	09.1	08.9	08.5	08.5	07.9	07.7	07.7	06.9	06.8	05.5	02.9	04.5	07.9	11.6	14.2	14.6	14.1	12.8	10.8	10.0	09.4	215.0	08.96	
16 D	08.5	08.9	07.8	06.8	00.7	00.8	05.1	06.8	08.9	08.1	07.7	05.5	05.0	04.2	09.3	10.8	13.4	16.7	15.9	16.4	16.1	13.8	12.9	12.1	225.8	09.55	
17	07.2	08.0	09.6	10.3	10.7	09.9	10.9	11.1	10.9	11.4	09.6	07.9	08.7	07.7	09.5	11.4	14.5	15.8	16.0	13.2	13.5	11.6	10.6	10.5	230.1	10.64	
18 Q	10.4	10.0	09.9	09.7	09.8	09.5	09.5	09.5	09.2	08.7	07.7	08.2	04.8	04.2	05.4	07.8	10.7	12.8	15.1	15.9	13.4	11.6	10.6	10.5	232.1	09.67	
19	10.0	09.5	09.2	08.9	08.9	08.7	08.8	08.6	08.6	08.5	07.7	05.4	04.4	04.2	05.1	07.9	10.7	13.4	15.1	14.6	12.5	10.8	10.2	10.5	221.9	08.25	
20	09.8	09.5	08.5	07.7	08.0	08.7	08.1	08.7	08.5	08.0	07.0	05.6	04.5	04.1	04.9	08.8	10.6	13.5	15.2	14.4	13.2	10.9	09.9	09.8	215.5	08.99	
21 Q	09.5	08.9	08.7	08.9	08.9	08.8	08.7	08.6	08.5	08.1	07.6	06.0	04.9	04.5	05.1	07.1	09.8	12.7	14.5	14.5	12.5	11.1	10.3	09.5	217.5	09.06	
22 Q	09.5	09.5	09.0	08.6	08.7	08.4	06.4	08.2	07.9	07.8	07.1	06.3	04.5	04.5	05.7	08.2	11.5	13.7	15.2	14.2	12.5	10.5	09.9	09.7	217.8	09.08	
23	09.7	09.5	08.5	08.0	08.1	07.7	07.2	06.5	06.8	06.1	06.1	05.1	04.2	04.6	06.0	08.2	12.0	15.1	16.0	14.8	13.2	11.5	10.7	08.9	214.1	08.92	
24	07.5	06.6	06.9	08.8	08.1	07.6	07.6	08.2	08.7	08.0	06.9	06.0	04.6	04.5	05.9	08.6	11.4	14.1	15.8	15.4	14.4	12.5	10.9	08.7	219.5	09.15	
25 D	07.7	09.1	07.8	05.1	09.8	39.8 <sup>+</sup>	00.5	54.3 <sup>+</sup>	53.8 <sup>+</sup>	08.6	08.4	12.5	12.5	14.1	14.8	16.0	18.8	19.9	24.0	21.5	20.0	17.4	15.4	05.0	254.6	10.61	
26	09.9	12.9	10.5	10.0	11.4	09.1	08.8	07.9	05.1	08.1	09.9	08.9	09.7	12.5	12.4	14.0	16.5	17.1	18.8	17.6	15.8	13.8	12.4	11.5	285.2	11.80	
27	10.6	11.3	11.4	11.5	10.8	09.4	09.2	07.5	06.4	06.9	06.7	08.5	06.8	06.0	06.9	08.9	11.6	13.9	15.6	15.8	15.1	13.5	11.9	10.5	244.1	10.17	
28	09.5	10.0	09.1	09.6	07.9	07.9	07.6	07.0	05.9	05.2	06.9	06.9	05.9	06.4	07.0	08.9	11.5	13.5	15.5	15.2	14.5	12.7	11.9	11.1	226.9	09.45	
29	10.6	10.3	09.7	09.5	08.9	08.8	07.1	06.9	06.8	06.6	06.8	06.8	05.6	05.6	05.5	06.8	09.9	13.5	15.2	15.1	13.9	11.8	10.8	10.5	221.6	09.25	
30	10.4	09.8	09.7	09.0	08.8	08.4	08.5	07.1	06.9	06.5	05.6	05.5	05.2	05.2	06.0	08.1	13.1	17.1	18.5	17.7	16.8	16.2	14.5	12.9	242.9	10.12	
Sum.	507.3	284.9	265.5	265.0	257.5	255.5	260.6	250.9	242.5	256.5	247.2	215.2	185.0	185.1	226.0	298.5	378.5	446.5	488.2	483.6	458.9	395.4	361.2	310.6	7297.5		
Mean.	10.24	09.50	08.78	08.83	08.58	08.45	08.62	08.56	08.08	08.54	08.24	07.11	08.10	05.10	07.53	09.94	12.62	14.95	16.27	16.12	14.65	13.18	12.04	10.55	10.14		

<sup>+</sup> 16 degrees + tabulated value.

Horizontal component, H, 25000 gammas +

September 1958.

U.T. Date.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.
1	547	550	547	551	548	551	550	551	553	556	558	555	542	516	503	496	492	509	524	556	559	541	543	550	12913	538.0
2	550	555	550	550	548	548	550	551	552	553	559	555	550	550	514	499	503	515	522	552	540	544	545	553	12979	540.8
3 D	549	545	539	549	550	553	565	562	567	564	554	562	541	507	540	548	526	506	493	508	515	512	476	455	12807	533.6
4 D	448	445	478	513	525	530	524	525	520	527	528	529	520	502	452	383	380	353	365	391	399	440	393	284	10987	457.0
5 D	568	511	540	554	414	417	431	427	439	443	433	437	442	431	428	423	427	438	457	463	473	423	498	494	10287	428.6
6	498	499	502	506	499	493	491	492	494	500	504	514	511	492	474	461	460	469	461	496	509	511	517	522	11895	493.6
7	525	527	529	529	532	536	542	534	529	538	536	536	523	502	484	460	464	471	482	497	496	517	515	494	12297	512.4
8	508	514	493	514	532	534	538	536	535	535	534	534	525	509	489	484	484	495	508	526	538	545	531	518	12456	519.0
9	538	515	517	536	544	552	554	549	547	547	550	548	536	503	489	483	487	490	501	512	509	509	518	525	12361	523.4
10	553	535	533	533	535	535	535	539	543	541	546	549	528	500	483	473	470	482	505	528	534	530	532	534	13356	523.3
11	540	547	540	545	546	546	552	559	553	558	555	555	540	519	497	488	484	495	515	527	529	532	540	543	12799	533.3
12	542	551	554	552	547	551	548	551	551	557	560	559	543	529	510	496	482	505	522	530	533	537	541	543	12906	537.8
13 Q	548	552	553	536	534	552	532	532	532	535	359	534	539	519	499	490	491	500	515	530	543	542	547	551	12907	537.8
14 Q	553	558	558	559	558	559	553	535	560	563	567	560	547	527	512	504	506	516	527	535	538	546	547	550	13064	544.3
15	557	560	563	566	569	569	567	563	564	565	569	564	551	533	515	507	513	527	532	550	556	556	538	560	13243	551.8
16 D	553	563	559	574	563	556	533	549	551	561	569	562	547	525	513	516	513	514	496	497	502	492	489	490	12774	532.3
17	501	514	530	534	528	541	534	528	534	333	330	523	518	497	483	474	480	480	503	529	536	537	533	538	12455	519.0
18 Q	538	541	541	539	539	538	539	540	545	547	547	542	532	517	499	483	491	499	516	523	528	534	539	542	12708	529.3
19	544	547	548	552	558	553	553	551	559	560	560	560	540	524	507	492	497	504	520	537	540	548	547	554	12957	539.9
20	553	561	561	561	558	559	557	559	559	561	560	561	551	540	519	504	502	506	521	533	542	546	548	550	13074	544.8
21 Q	558	558	557	559	558	559	562	561	562	564	564	563	550	536	519	508	505	511	524	532	542	530	531	534	13107	546.1
22 Q	554	558	560	561	563	564	562	561	563	564	567	563	549	528	510	502	502	512	531	546	552	553	552	558	13133	547.3
23	562	564	565	564	559	559	560	556	558	560	566	561	546	531	511	503	503	513	526	541	551	553	556	560	13132	547.2
24	565	569	570	568	570	568	564	564	563	565	564	563	540	526	503	502	506	513	526	533	543	549	556	562	13143	547.8
25 D	565	560	559	551	579	504	530	471	506	493	527	500	457	466	438	427	448	444	460	463	476	462	468	473	11679	463.0
26	501	503	503	501	495	511	500	503	510	511	503	501	484	477	466	463	470	472	482	497	513	514	526	530	11943	497.6
27	552	557	551	552	551	514	512	514	512	519	520	519	510	505	484	469	465	491	500	507	520	518	520	533	12313	513.1
28	532	546	537	542	539	541	529	523	531	530	529	539	524	507	492	479	484	490	508	519	531	534	537	546	12368	523.7
29	548	552	552	551	549	551	551	541	542	541	542	542	539	527	516	498	485	500	519	529	541	542	547	550	12833	536.0
30	534	534	533	533	537	536	532	548	544	546	539	548	541	533	510	493	488	501	516	522	523	343	517	540	12980	536.7
Sum.	15969	15990	16026	16157	16247	16192	16190	16117	16200	16282	16322	16266	15866	15361	14866	14513	14557	14743	15113	13479	13696	13860	13812	13738	577572	
Mean.	532.3	533.0	534.2	538.6	541.6	539.4	539.7	537.2	540.0	542.7	544.1	542.2	528.9	512.0	495.5	483.8	485.2	491.4	503.8	516.0	523.2	528.7	527.1	525.3	524.4	



Vertical component, Z, - ( 36000 + ) gammas.

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U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	884	885	881	890	879	878	878	877	875	876	876	876	872	884	856	852	853	853	870	875	891	884	885	885	885	20985	874.4
2	882	883	879	879	876	877	875	877	874	873	871	859	868	861	856	854	856	861	868	875	880	880	879	883	883	20954	872.5
3 D	881	878	877	877	878	878	872	870	870	858	851	851	855	842	855	867	860	851	852	883	976	893	896	885	885	20824	867.7
4 D	892	893	891	881	888	898	892	892	885	886	885	886	883	879	851	802	821	861	903	947	935	1045	1011	1005	885	21664	901.0
5 D	1058	954	946	916	817	922	954	956	926	950	919	920	922	905	900	897	902	903	917	913	924	931	927	921	885	22123	921.9
6	918	912	911	906	902	902	900	902	903	902	901	902	902	900	892	881	882	884	886	897	905	905	906	905	885	21611	900.5
7	904	906	903	893	897	890	879	876	890	889	880	889	861	885	873	859	865	869	874	890	902	914	913	926	885	21552	889.7
8	922	913	900	902	903	896	897	890	889	869	883	891	891	885	877	874	877	877	881	889	896	901	896	889	889	21425	892.3
9	897	900	897	894	889	885	881	879	881	881	882	881	882	873	871	869	869	870	877	883	894	895	904	903	885	21237	884.9
10	900	893	887	884	885	885	882	882	882	883	885	887	860	869	869	865	860	867	876	885	893	896	885	890	885	21174	882.3
11	891	892	885	863	882	879	880	876	871	876	875	879	880	873	863	858	855	857	857	882	886	885	887	889	889	21051	877.1
12	887	888	883	879	878	877	874	874	875	877	877	878	875	863	853	850	850	857	856	872	883	888	884	882	882	20976	874.0
13 Q	882	881	880	880	877	875	874	874	873	874	876	876	874	870	861	853	850	853	854	873	885	883	861	860	885	20954	873.1
14 Q	881	881	879	877	875	875	872	873	873	874	874	873	870	861	854	846	843	849	850	868	874	879	878	877	885	20866	869.4
15	872	878	877	873	876	874	872	868	866	866	869	868	865	860	851	842	841	845	857	864	870	874	873	873	885	20766	866.2
16 D	874	874	876	878	880	844	852	863	870	872	873	867	861	854	853	851	848	848	841	860	831	887	894	897	889	20785	866.0
17	893	892	882	887	878	877	873	874	877	874	872	871	871	860	852	851	854	861	873	885	890	890	886	885	885	21019	873.8
18 Q	881	881	878	874	874	874	874	873	879	877	877	879	876	868	857	853	856	859	866	869	881	885	886	884	884	20866	873.6
19	883	883	881	879	876	873	874	869	874	872	874	875	871	863	852	848	850	850	860	873	863	882	878	878	885	20901	870.9
20	875	875	874	872	867	868	866	867	866	867	868	872	868	862	853	845	841	845	854	865	876	879	877	876	885	20779	863.8
21 Q	876	873	870	868	866	865	866	866	866	866	866	867	865	861	852	844	839	843	852	862	871	875	873	873	885	20725	863.5
22 Q	871	870	868	867	866	865	863	862	862	862	864	867	861	850	843	835	831	839	851	861	868	869	869	871	885	20635	859.8
23	889	888	869	865	831	859	860	856	858	858	860	859	855	853	844	837	830	838	848	861	871	875	873	873	885	20526	858.2
24	872	870	866	864	864	859	857	857	851	854	859	855	858	852	844	844	837	842	850	856	868	873	876	877	885	20605	858.5
25 D	873	873	870	861	807	800	792	763	760	763	795	807	813	835	838	848	875	879	890	904	912	930	936	925	885	20589	849.5
26	912	905	901	873	883	868	869	871	858	879	865	864	866	868	865	866	870	868	874	890	902	900	902	896	885	21115	879.8
27	894	887	883	861	860	875	873	874	873	876	876	875	875	873	862	856	852	852	865	865	872	887	888	890	891	21031	876.3
28	890	886	877	881	869	855	861	869	869	865	865	866	866	863	856	852	850	855	862	869	880	860	861	861	885	20950	868.8
29	879	879	876	875	873	872	861	861	864	865	866	869	867	861	859	848	844	846	856	865	875	877	877	875	885	20790	866.3
30	875	872	872	869	869	866	864	861	861	863	868	867	854	847	842	832	830	842	854	868	877	898	872	885	885	20710	862.9
Sum.	26758	26602	26529	26408	26290	26211	26185	26138	26131	26171	26137	26185	26155	25965	25759	25679	25606	25747	26016	26342	26658	26840	26785	26762	885	629650	
Mean.	891.9	886.7	884.3	880.3	875.3	873.7	872.8	871.3	871.0	872.4	871.2	872.9	871.2	865.5	858.6	852.6	853.5	858.2	867.2	878.1	888.5	894.7	892.8	892.1	885		874.8

Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

October 1952.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	08.1	08.9	09.5	08.7	08.4	07.8	04.1	04.2	08.8	06.4	08.6	05.1	05.8	05.9	07.9	11.1	14.5	16.1	16.5	16.2	14.2	12.4	10.6	08.4	227.0	09.46	
2	08.5	09.8	08.1	08.0	07.1	05.9	06.1	06.5	06.0	07.0	06.4	06.0	05.1	05.5	06.9	09.7	12.5	14.5	15.9	15.1	13.5	11.6	07.7	08.4	209.5	08.72	
3	09.4	09.7	08.0	08.7	08.6	02.7	06.4	08.1	08.1	08.1	06.6	04.9	04.7	08.9	08.5	11.5	15.5	18.9	20.9	18.2	15.9	13.2	12.3	11.1	242.5	10.10	
4 Q	10.5	10.4	08.8	09.4	09.3	08.4	07.2	08.5	08.1	08.7	05.9	05.2	04.2	04.5	06.7	10.0	13.4	15.9	16.9	15.7	13.5	11.6	10.9	10.3	228.0	06.50	
5	10.0	08.8	10.5	10.0	09.6	08.9	09.4	08.8	08.7	08.0	06.9	05.9	06.0	05.6	07.6	10.5	14.0	17.1	16.7	15.2	14.2	12.5	10.1	09.7	244.5	10.18	
6	09.0	09.5	09.6	09.6	07.8	07.8	08.1	08.2	07.9	07.2	06.4	05.9	05.0	05.9	08.5	11.0	14.6	16.9	17.0	15.7	13.5	11.2	09.8	10.5	256.0	09.65	
7	09.9	09.5	08.1	08.8	08.6	07.7	07.9	06.8	06.9	07.9	07.8	07.7	08.2	08.0	09.6	12.4	17.2	18.5	19.6	17.8	14.8	12.1	10.0	09.5	254.7	10.61	
8	09.8	08.6	08.1	08.8	08.9	10.6	09.6	09.2	10.8	08.9	07.9	07.4	07.9	08.0	09.8	12.4	15.2	16.9	17.0	15.8	13.3	11.2	09.9	09.7	252.1	10.50	
9 Q	09.7	09.8	08.7	07.5	08.9	08.9	08.4	08.8	08.1	08.2	07.8	08.6	05.5	06.2	08.2	10.8	14.2	16.1	16.5	15.4	13.2	11.1	10.2	10.1	258.1	09.92	
10 Q	09.7	09.7	09.7	08.9	07.9	08.5	08.5	08.2	07.4	08.3	05.7	04.7	04.1	05.1	07.0	09.8	13.5	16.1	16.9	16.0	13.9	12.5	11.2	10.3	251.2	09.65	
11 Q	09.6	09.7	09.6	08.7	08.7	08.4	07.6	07.7	06.9	08.0	06.5	04.2	04.9	05.1	08.5	08.4	11.2	13.5	15.4	15.8	14.2	12.1	10.0	10.4	221.1	09.21	
12 Q	10.8	10.8	10.2	09.7	08.9	08.3	07.7	07.2	08.8	08.1	05.8	05.1	04.5	04.7	08.0	09.4	11.0	13.5	14.7	15.4	14.4	12.9	11.6	11.1	225.0	09.58	
13	10.7	10.4	10.1	09.1	08.1	07.4	05.3	05.1	04.5	04.6	04.8	05.1	04.2	06.7	08.2	08.7	12.3	14.9	15.2	14.8	13.4	12.7	12.1	10.7	215.9	09.00	
14	10.1	09.6	08.8	07.8	08.1	07.5	08.9	08.2	08.8	05.7	08.0	05.9	06.0	05.9	08.4	08.2	11.5	15.2	17.0	16.8	15.0	13.2	11.5	10.5	225.4	09.59	
15	09.6	09.0	08.5	08.9	08.0	06.0	08.5	08.5	05.7	05.9	05.6	06.1	06.1	08.5	08.3	07.6	10.5	13.2	15.9	16.0	14.9	12.7	10.7	09.8	212.7	08.88	
16	09.7	08.8	07.7	07.8	08.0	07.4	05.9	08.8	08.2	08.0	05.6	05.0	05.0	05.4	08.3	07.9	10.7	13.4	14.5	14.5	12.4	11.5	10.1	09.8	204.1	08.50	
17	09.5	08.9	08.8	08.9	06.4	07.0	08.0	07.7	06.5	05.2	04.7	04.6	04.9	05.6	06.9	08.4	10.5	14.4	15.9	16.4	14.0	12.0	09.7	08.1	212.8	08.87	
18	08.8	08.6	07.6	07.9	08.2	08.8	07.8	07.7	07.7	06.5	05.4	04.1	03.4	03.4	05.7	08.8	11.8	14.2	14.8	14.5	13.5	11.5	10.6	09.5	211.0	08.79	
19	09.0	08.8	07.7	07.5	07.0	06.9	06.8	06.0	05.5	05.1	04.4	03.1	04.5	04.1	05.1	09.5	13.6	17.2	18.1	17.0	15.8	13.7	11.5	10.0	216.7	08.05	
20	08.6	08.7	08.9	08.5	08.2	07.5	07.4	08.8	08.2	06.5	04.8	04.1	04.1	04.8	06.0	08.7	12.5	16.5	18.1	17.2	15.4	13.2	10.9	09.7	220.1	09.17	
21	09.5	09.7	09.5	07.0	07.6	07.7	07.0	08.2	05.7	05.1	04.9	05.8	06.1	08.1	08.6	09.7	12.9	16.5	16.8	16.2	15.1	13.4	11.5	10.2	226.4	09.45	
22 D	09.5	08.9	08.9	08.7	05.9	05.7	59.2 <sup>+</sup>	01.8	08.2	08.4	04.1	05.2	07.7	10.5	11.1	13.4	17.1	20.7	20.9	21.6	19.6	19.4	15.9	13.9	259.1	10.80	
23 D	10.9	10.6	12.5	09.5	09.7	07.5	05.6	59.7 <sup>+</sup>	00.1	04.5	07.9	08.5	10.8	10.6	14.8	19.5	20.6	22.6	22.4	22.4	18.1	14.9	12.4	12.5	287.8	11.99	
24 D	10.7	11.5	10.5	08.8	07.6	04.9	02.5	05.1	59.8 <sup>+</sup>	03.5	08.6	08.9	14.5	17.8	18.0	20.9	25.2	26.7	22.7	25.1	20.7	23.5	19.2	14.5	524.0	13.50	
25	13.0	15.2	15.4	14.5	13.5	12.5	12.0	09.4	07.8	07.9	08.7	06.6	06.9	09.6	10.8	13.4	16.5	18.0	18.1	17.0	15.9	14.7	13.5	12.8	507.5	12.80	
26	12.2	11.9	11.5	10.7	09.9	08.9	08.0	06.9	04.6	03.5	04.5	04.9	06.9	08.2	09.8	13.0	16.1	18.1	17.5	17.9	16.6	15.8	13.7	12.4	261.9	10.91	
27 D	11.5	11.6	09.6	09.4	08.4	07.8	08.8	07.5	08.8	07.1	08.0	08.2	08.9	07.4	09.7	13.4	18.1	23.4	27.2	26.1	24.6	18.1	16.7	14.5	505.6	12.75	
28 D	13.4	15.3	12.6	12.4	11.2	09.7	08.7	05.7	04.4	06.2	08.1	05.9	06.9	10.1	12.5	16.5	17.7	21.0	21.5	20.0	18.0	15.9	11.2	10.7	295.2	12.50	
29	10.8	12.0	11.2	11.5	10.8	09.8	08.7	06.8	05.0	04.5	06.1	06.5	08.9	07.8	09.6	13.1	15.5	15.8	16.8	16.8	14.8	10.5	11.4	09.7	252.0	10.50	
30	08.6	07.1	09.9	10.2	09.4	08.5	07.9	07.6	05.1	03.5	02.9	04.5	06.0	07.8	09.8	13.5	16.0	16.1	17.6	15.8	15.2	14.5	12.9	11.5	242.9	10.12	
31	10.7	10.0	09.8	09.7	08.7	08.8	07.1	06.1	04.2	02.1	02.0	03.5	04.6	06.9	08.8	11.6	15.2	17.5	17.6	16.5	14.8	13.5	12.5	12.0	235.6	09.75	
Sum.	511.5	510.5	298.0	277.0	261.8	241.6	221.1	204.6	187.7	183.6	181.8	174.6	191.2	215.6	265.4	350.0	448.1	529.6	551.9	552.5	475.0	418.1	362.5	329.7	7525.8		
Mean.	10.04	10.01	09.61	08.94	08.45	07.79	07.13	06.60	06.05	05.02	05.86	05.63	06.17	08.95	08.50	11.29	14.45	17.08	17.80	17.17	15.32	13.49	11.69	10.64		10.11	

<sup>+</sup> 16 degrees + tabulated value.



Horizontal component, H , 25000 gauss +

October 1958.

U.T. Date.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.
1	549	555	564	575	559	555	555	555	541	559	558	551	519	502	487	478	485	496	515	530	551	527	545	526	12711	529.6
2	518	551	541	540	528	532	539	538	534	538	540	535	520	501	485	479	490	505	517	525	535	538	531	542	12576	524.0
3	546	551	552	547	549	548	542	552	538	537	541	542	517	501	483	477	475	492	508	525	529	535	540	547	12678	528.5
4 Q	558	559	555	554	555	547	546	544	539	544	545	540	524	505	465	477	462	497	517	532	541	549	560	575	12620	534.2
5	552	542	553	561	565	564	565	557	555	558	557	552	555	511	492	485	495	517	515	531	535	539	532	545	12906	537.8
6	552	558	558	565	579	568	562	559	559	560	559	555	536	517	502	488	495	508	517	540	546	545	542	559	15015	542.5
7	560	567	569	559	562	568	560	558	558	565	554	548	527	507	491	485	477	492	510	527	542	546	527	527	12855	535.6
8	559	540	552	541	542	540	550	541	547	546	541	538	525	509	496	491	495	507	525	537	541	545	546	548	12758	531.6
9 Q	554	558	545	560	554	557	556	559	560	559	557	551	530	509	490	482	488	508	528	542	550	555	554	558	12976	540.7
10 Q	565	565	570	569	566	564	565	565	564	564	561	550	551	515	497	492	484	508	537	549	554	556	559	565	15106	546.0
11 Q	560	561	568	567	567	562	560	562	562	561	559	555	544	524	509	501	502	514	534	546	547	558	556	558	15159	547.6
12 Q	562	565	567	566	564	565	565	566	566	565	559	552	540	525	510	501	504	517	532	552	556	555	557	567	15175	548.9
13	571	573	575	575	564	565	561	561	560	565	564	560	542	525	507	495	500	515	529	546	552	561	564	565	15189	549.5
14	568	575	572	571	575	565	566	565	565	567	567	560	554	538	518	507	505	514	531	546	555	564	566	565	15265	552.7
15	570	564	567	570	575	575	565	565	555	559	555	546	538	525	515	505	505	514	531	538	545	557	564	562	15155	549.0
16	566	570	575	571	575	565	554	557	555	555	562	550	542	527	507	495	496	504	519	538	546	555	557	558	15077	544.9
17	565	567	568	571	569	554	565	566	560	559	555	546	534	521	508	498	495	515	522	539	545	555	547	552	15086	544.4
18	562	575	568	561	565	568	562	562	561	559	556	544	524	507	490	485	486	500	525	541	555	547	550	554	12999	541.6
19	560	566	575	571	569	564	565	565	561	565	566	548	536	519	505	491	479	495	511	524	539	546	555	548	15008	541.8
20	555	568	572	564	566	565	564	565	555	552	547	538	518	501	485	475	480	494	520	535	552	567	556	566	12957	539.9
21	570	570	584	564	558	554	555	555	555	548	540	555	552	517	498	489	495	509	516	544	562	568	564	572	15048	545.7
22 D	570	568	570	592	575	576	559	551	540	554	555	504	492	465	478	471	468	486	496	511	530	528	511	505	12615	525.6
23 D	508	529	535	515	500	485	469	464	485	515	505	474	468	452	430	426	454	447	458	476	496	528	532	555	11620	484.2
24 D	519	525	522	508	497	489	482	520	518	485	427	425	415	389	406	378	404	456	459	469	484	485	496	485	11217	467.4
25	499	510	504	509	510	508	504	500	501	496	490	481	469	455	440	436	445	467	488	508	512	518	521	527	11789	491.2
26	529	551	552	541	555	555	524	516	521	517	502	486	468	454	466	471	486	506	516	525	525	527	527	535	12485	511.8
27 D	544	548	546	558	556	529	530	555	525	521	514	507	495	481	475	488	497	521	536	517	519	525	558	519	12478	519.9
28 D	511	529	551	527	526	529	528	545	527	529	552	527	507	485	466	457	453	479	490	494	509	520	518	529	12446	510.5
29	525	555	552	550	550	526	528	518	512	514	505	498	476	465	455	440	445	471	499	519	509	551	557	544	12158	505.8
30	555	529	555	541	554	537	555	554	525	524	515	498	488	474	454	454	461	472	495	507	555	547	520	544	12293	512.2
31	551	554	555	554	562	555	550	542	547	541	555	518	505	479	464	470	470	495	511	529	551	542	561	565	12679	529.5
Sum.	16985	17150	17197	17171	17105	16996	16881	16905	16844	16819	16657	16586	15951	15405	14984	14759	14676	15595	15895	16556	16606	16805	16815	16955	395328	
Mean.	547.9	552.6	554.7	555.9	551.8	548.5	544.5	545.3	545.4	542.5	537.5	528.6	514.5	496.9	485.4	476.1	479.9	496.5	512.7	527.0	535.7	542.0	542.4	546.5		529.5

Vertical component,  $Z$ , -- ( 56000 + ) gamma $\gamma$

October 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	884	880	880	879	883	883	850	852	863	863	861	861	858	859	852	845	846	856	868	881	881	880	888	886	20805	866.8	
2	887	888	882	889	884	869	861	855	862	869	873	870	868	863	855	851	852	858	870	876	883	888	885	886	20883	870.1	
3	880	877	876	867	865	848	847	845	851	866	868	868	859	855	853	854	828	837	851	869	860	861	879	851	20885	861.0	
4	882	878	873	870	867	866	865	861	860	867	866	865	870	848	848	855	837	844	856	867	875	877	880	886	20723	863.5	
5	876	870	869	869	868	865	862	859	860	861	861	862	857	849	845	837	838	849	855	866	877	883	881	873	20897	862.4	
6	876	871	868	867	864	854	857	858	859	861	858	854	847	840	835	832	835	845	853	869	881	881	877	875	20815	869.0	
7	872	872	866	864	862	854	842	845	854	847	850	850	844	840	837	834	830	840	854	866	877	888	884	861	20555	866.4	
8	879	877	868	861	852	855	861	854	859	863	861	860	853	846	843	841	844	853	863	872	876	876	873	871	20659	860.2	
9	871	870	868	859	858	859	859	859	859	857	854	853	848	842	835	830	830	840	854	865	871	871	869	869	20550	856.3	
10	867	864	863	863	859	856	856	857	857	856	854	853	849	841	833	826	828	834	843	861	865	865	867	869	20488	853.7	
11	868	863	864	862	860	857	856	857	857	852	850	849	847	840	833	829	827	831	839	849	853	866	871	865	20445	851.9	
12	861	860	859	859	858	856	857	856	855	853	851	850	848	839	834	833	832	833	837	847	853	856	860	863	20408	850.3	
13	864	862	861	861	857	853	851	851	849	848	837	835	833	830	828	822	817	825	835	847	849	858	859	861	20385	845.5	
14	862	863	860	858	857	853	853	851	850	848	842	837	836	833	833	832	829	832	840	851	856	862	859	861	20360	848.3	
15	867	858	859	859	857	852	849	851	845	844	840	836	834	834	830	824	819	822	835	847	853	863	868	864	20310	846.3	
16	861	861	860	856	847	832	827	846	850	850	847	844	838	832	827	825	825	828	837	851	861	863	864	861	20295	845.5	
17	861	861	857	858	851	847	853	854	853	851	847	842	837	834	830	824	821	825	832	845	855	866	864	865	20333	847.2	
18	863	864	857	852	853	853	851	851	847	845	845	845	841	834	830	819	818	826	842	851	858	864	863	862	20336	847.3	
19	862	861	858	855	851	850	850	850	849	848	843	842	836	832	823	814	802	810	826	843	858	863	870	867	20263	848.5	
20	870	866	861	858	854	850	851	850	847	846	844	839	835	831	824	818	814	813	826	840	853	868	861	864	20263	845.1	
21	859	856	860	847	845	844	847	846	846	842	840	837	837	835	827	817	814	822	832	845	858	864	861	864	20243	845.5	
22	860	856	853	862	850	838	805	799	787	797	819	821	827	829	828	819	821	844	849	866	895	906	910	895	20256	843.2	
23	890	885	878	865	856	842	839	836	820	819	817	820	831	824	820	831	839	856	869	886	911	926	914	910	20584	857.7	
24	896	892	875	848	852	855	849	821	752	739	718	736	785	810	852	832	854	882	902	918	936	937	955	959	20435	851.5	
25	911	891	881	882	882	881	878	878	876	870	867	866	861	854	849	848	832	861	871	877	881	883	881	882	20963	873.5	
26	884	880	877	879	875	874	865	853	842	842	847	847	845	848	846	845	848	855	861	868	880	884	883	878	20704	862.7	
27	884	878	873	867	860	855	853	864	857	852	848	846	843	838	831	829	830	845	855	862	900	929	911	895	20715	863.1	
28	878	876	872	869	870	869	871	881	870	857	844	835	820	825	826	829	833	849	875	882	902	913	918	914	20778	865.8	
29	902	888	873	867	861	857	860	858	860	861	861	862	856	849	840	830	829	843	862	877	881	909	905	908	20799	866.6	
30	892	881	874	870	865	862	850	854	852	860	852	847	839	834	825	828	826	836	850	857	876	886	877	879	20582	857.6	
31	877	874	868	866	867	854	849	846	849	846	843	833	831	826	821	819	816	827	842	854	857	862	870	867	20384	848.5	
Sum.	27148	27021	26892	26766	26654	26523	26434	26398	26297	26280	26203	26165	26101	25996	25881	25732	25732	26020	26386	26738	27092	27328	27307	27244	636363		
Mean.	875.7	871.6	867.5	863.4	859.8	855.6	852.7	851.5	848.3	847.7	845.4	844.0	842.0	838.6	834.9	830.1	830.1	832.4	831.2	833.2	873.9	881.5	880.9	878.8	855.3		



Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

November 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	11.4	11.1	10.5	09.5	08.9	08.3	07.4	06.1	05.5	05.0	04.0	05.3	05.1	06.4	08.4	11.2	15.1	17.7	18.6	17.1	16.1	15.8	11.9	11.4	245.8	10.16	
2 D	11.2	11.0	10.5	09.9	09.5	08.8	07.8	06.5	05.1	05.5	05.8	02.6	05.7	06.5	09.5	12.6	16.2	19.4	17.1	16.3	15.1	12.5	11.2	10.6	240.6	10.03	
3 D	10.6	10.4	09.7	11.1	07.9	08.9	09.2	07.9	05.5	04.1	04.2	05.8	05.8	09.9	10.6	12.7	14.5	15.2	15.0	15.1	15.0	11.6	10.1	10.0	256.6	09.83	
4	09.5	09.5	10.8	08.8	08.8	08.8	08.8	07.8	08.1	05.2	04.9	05.8	06.5	08.7	09.7	11.2	12.5	13.5	14.4	15.7	12.5	11.7	11.4	11.5	250.5	09.60	
5 Q	10.6	10.0	09.7	09.1	08.9	08.9	08.5	07.7	08.9	08.0	05.5	05.2	05.4	07.5	08.8	10.6	13.2	14.9	14.7	13.8	12.5	11.5	11.2	11.0	251.2	09.63	
6 Q	10.8	09.9	09.4	08.6	08.5	08.5	07.7	06.5	05.4	04.6	05.0	05.7	08.4	07.2	08.6	10.8	12.8	14.5	14.8	14.5	13.5	11.6	10.7	10.5	225.7	09.40	
7	09.7	09.2	09.0	08.9	08.7	08.2	07.0	05.9	04.6	04.7	05.6	05.5	06.2	07.7	09.6	11.7	12.8	14.5	15.2	15.4	12.7	11.4	10.7	10.4	225.1	09.30	
8 Q	10.1	10.2	10.1	09.9	08.9	07.0	08.0	05.0	04.6	04.4	05.1	05.8	05.9	08.4	07.9	10.4	12.5	14.2	14.4	15.5	12.4	11.6	11.7	10.6	218.8	09.12	
9	10.6	10.0	09.7	08.8	07.6	05.5	04.2	05.9	05.4	05.1	05.2	05.9	05.7	08.0	07.5	09.1	11.5	13.1	15.5	12.9	11.7	10.9	10.6	10.1	195.5	08.14	
10 D	09.8	09.6	08.9	07.8	08.6	04.0	01.4	59.8 <sup>+</sup>	58.4 <sup>+</sup>	58.8 <sup>+</sup>	00.0	08.5	04.6	05.6	08.8	11.8	14.9	16.1	15.1	15.6	15.4	12.5	11.9	11.5	191.0	07.96	
11 D	10.5	10.7	08.0	08.8	10.0	05.9	59.4 <sup>+</sup>	02.2	05.1	05.6	08.0	07.5	09.8	10.0	11.4	14.2	17.0	17.8	16.8	14.4	12.5	11.2	10.6	10.4	250.4	09.60	
12	10.1	10.0	09.2	09.7	09.5	07.5	06.9	08.0	04.8	03.9	05.5	04.4	04.7	05.8	09.5	12.5	14.1	15.6	15.5	15.2	10.9	10.0	09.7	10.2	216.9	09.04	
13	09.6	09.4	08.0	08.5	08.5	08.0	06.5	08.1	05.9	04.5	04.5	05.0	06.2	07.4	10.5	14.0	16.6	17.1	16.1	14.1	12.5	10.9	10.6	10.2	250.1	09.59	
14	09.7	09.0	08.8	09.5	08.8	07.9	07.1	08.5	05.9	05.1	05.9	04.2	05.1	08.5	09.0	11.9	14.2	15.5	15.3	14.1	12.5	11.1	10.6	10.6	222.4	08.87	
15	10.7	10.9	10.2	09.4	09.0	07.9	05.9	04.3	04.0	05.9	05.5	05.8	05.7	06.6	08.1	10.6	12.9	14.0	14.5	15.5	12.5	11.9	11.5	10.7	215.5	08.97	
16	10.0	10.1	09.7	08.2	07.0	06.0	05.5	02.0	01.6	01.3	02.9	05.1	04.2	07.5	08.8	10.6	12.1	12.7	12.4	11.6	12.1	11.5	11.5	10.5	190.5	07.95	
17	09.8	09.6	08.7	08.2	08.6	05.7	04.1	05.1	05.0	02.5	02.8	04.1	05.8	08.0	10.4	11.9	13.7	14.2	14.5	15.5	12.9	12.4	11.5	10.8	209.4	08.75	
18	10.2	09.7	09.5	08.9	07.8	08.8	05.7	05.7	07.1	05.9	04.5	04.5	06.5	07.7	09.8	12.4	15.0	16.6	18.1	17.0	16.9	14.6	12.6	11.4	245.5	10.25	
19	10.7	09.8	09.5	08.8	08.8	08.7	07.8	07.1	05.5	04.5	04.5	04.5	05.0	08.9	09.0	11.2	13.2	15.4	16.0	14.2	11.8	10.7	10.0	09.9	225.1	09.50	
20	09.6	09.0	07.8	07.4	07.8	07.6	06.4	05.7	04.9	05.7	02.6	05.2	04.2	05.2	07.7	11.4	14.1	15.2	15.2	14.6	15.4	11.9	10.9	10.0	209.5	08.75	
21	09.6	08.4	08.5	07.9	07.5	08.9	08.0	05.1	04.5	05.5	02.5	05.1	05.9	04.4	08.4	10.5	14.1	14.9	15.0	14.4	12.5	11.1	10.5	09.8	200.0	08.55	
22 Q	09.2	08.9	09.5	08.5	08.2	07.4	06.1	05.1	05.2	05.0	02.7	04.0	06.0	07.7	08.6	08.9	13.5	15.8	15.9	12.8	11.9	11.4	10.7	10.4	204.6	08.55	
23	09.7	09.2	09.1	08.7	07.1	08.4	05.1	02.8	02.1	01.5	00.5	01.5	05.8	08.8	10.5	12.5	15.1	15.8	15.1	14.5	15.0	11.8	11.2	10.8	205.4	08.56	
24	10.2	09.1	08.7	08.6	08.2	07.6	06.7	04.5	02.5	01.5	02.5	05.1	08.1	11.5	12.5	14.7	18.1	19.7	18.8	16.2	15.2	10.6	10.2	10.4	258.6	09.94	
25	10.2	09.8	09.7	09.1	06.5	07.8	06.0	04.5	02.4	01.6	02.1	05.1	04.0	06.9	08.9	12.5	16.4	18.9	21.0	19.8	18.1	15.1	12.9	10.5	238.6	09.94	
26	09.9	10.7	11.5	10.5	09.2	08.2	07.1	05.5	05.8	02.4	02.1	05.2	05.8	09.5	12.8	15.6	18.0	18.4	16.6	16.2	14.5	12.8	11.5	10.5	245.9	10.25	
27	10.5	09.8	09.7	08.9	07.1	05.9	05.5	04.2	04.1	05.7	02.9	04.5	04.5	05.7	06.9	13.7	17.1	19.1	19.8	18.2	16.4	15.1	12.7	10.6	258.4	09.95	
28 D	09.7	08.8	07.0	05.1	06.8	06.5	05.9	58.5 <sup>+</sup>	58.5 <sup>+</sup>	59.6 <sup>+</sup>	02.2	01.1	59.9 <sup>+</sup>	08.6	08.8	12.4	16.1	17.5	17.1	16.0	15.4	11.5	08.6	09.5	187.6	07.82	
29	09.8	09.9	08.7	09.3	07.9	05.9	05.9	05.2	04.5	05.5	02.5	05.1	06.0	09.1	11.2	15.4	14.5	16.6	17.9	17.2	14.7	12.4	10.7	09.7	225.5	09.51	
30 Q	08.7	08.4	08.1	08.6	09.1	08.7	08.9	06.0	05.7	04.2	05.5	05.0	05.6	08.1	08.8	12.4	16.1	17.9	17.6	15.1	12.5	10.0	09.6	09.9	220.0	09.17	
Sum.	502.9	292.1	277.8	287.1	247.1	215.6	180.1	145.7	125.5	102.2	101.7	121.5	156.1	218.4	280.7	537.0	457.7	479.4	479.2	444.1	599.8	556.5	529.9	514.0	6652.1		
Mean.	10.10	09.74	09.26	08.90	08.24	07.19	06.00	04.86	04.18	05.41	05.59	04.05	05.20	07.28	09.56	11.90	14.59	15.98	15.97	12.60	13.55	11.88	11.00	10.47		09.21	

+ 16 degrees + tabulated value.

Horizontal component, H , 25000 gammas +

November 1958.

U.T. Date.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.
1	574	576	580	572	586	584	585	580	554	560	552	546	524	499	494	489	499	516	531	541	561	555	559	567	13082	545.1
2 D	569	578	574	578	577	575	574	574	575	569	560	550	532	512	504	502	507	504	488	509	525	529	537	541	13055	543.1
3 D	552	548	554	557	554	546	537	536	526	522	518	507	484	477	477	482	485	501	518	534	530	537	544	548	12832	525.4
4	555	554	559	560	548	541	546	552	552	547	540	524	511	495	489	490	496	508	518	533	536	535	540	542	12789	532.0
5 Q	560	558	565	562	561	561	557	555	550	545	538	529	514	502	498	497	505	521	535	541	545	547	546	552	12955	538.9
6 Q	558	559	561	561	564	565	564	561	558	555	545	534	520	510	509	515	520	530	537	546	556	556	554	559	15091	545.5
7	562	569	571	573	570	572	571	569	565	558	549	545	531	519	509	510	514	526	537	545	566	565	565	564	15219	550.8
8 Q	561	564	565	561	558	552	551	552	552	545	539	530	519	503	498	495	506	525	541	551	554	560	565	564	13007	542.0
9	570	572	575	574	567	566	559	561	560	557	553	545	530	521	517	518	526	541	554	571	579	581	582	582	15559	556.6
10 D	568	561	565	561	569	564	567	560	554	547	538	561	525	496	488	499	519	532	535	542	553	555	545	565	15232	551.5
11 D	555	563	549	561	561	529	498	507	525	510	504	492	485	477	485	496	511	529	538	545	550	561	555	554	12648	526.9
12	557	560	566	572	571	557	561	561	558	550	540	524	501	484	470	484	495	517	530	530	545	542	557	556	12866	536.1
13	562	567	565	564	556	555	552	546	542	535	527	507	486	469	469	480	482	514	532	537	545	548	554	556	12758	531.6
14	565	564	557	560	558	556	561	561	561	559	548	526	507	495	484	486	496	520	535	547	559	567	570	566	12998	541.6
15	559	572	574	571	575	575	575	564	562	564	554	559	516	497	489	492	507	525	536	548	556	560	566	570	15144	547.7
16	584	574	595	595	584	585	567	556	556	556	542	524	508	509	508	510	515	517	527	534	547	546	558	568	15159	548.5
17	567	570	570	561	564	556	549	541	542	545	538	524	510	501	495	495	502	512	525	535	555	565	568	574	12960	540.0
18	572	575	574	574	565	561	557	556	562	561	559	548	532	522	517	514	518	522	539	544	559	565	550	555	15199	550.0
19	566	565	572	567	559	556	555	549	545	541	541	532	520	509	502	504	514	526	538	552	545	552	558	554	13021	542.5
20	557	560	561	556	556	555	558	559	557	550	538	520	512	505	501	500	501	519	532	550	557	560	565	565	12990	541.5
21	569	569	565	566	569	569	565	562	560	552	539	527	517	506	507	504	509	518	535	551	538	567	575	574	15155	547.2
22 Q	585	575	577	576	570	569	569	565	557	557	548	538	526	512	504	498	502	521	542	552	557	559	572	575	15205	550.2
23	581	586	596	589	585	577	572	571	569	575	560	540	525	526	519	518	524	525	536	552	555	564	557	556	15546	556.1
24	565	568	569	566	564	558	555	551	561	541	527	527	515	505	505	489	494	511	528	549	551	542	551	562	12940	539.2
25	560	576	582	586	580	584	580	575	570	561	552	544	524	509	500	495	503	526	538	537	541	538	548	554	15160	548.5
26	557	556	555	555	545	538	538	538	530	531	525	511	489	478	476	484	494	509	519	534	546	556	551	554	12665	527.7
27	558	565	575	570	570	555	552	560	544	546	545	539	515	498	480	482	491	501	525	535	541	550	555	564	12904	537.7
28 D	565	566	560	571	565	565	559	549	541	536	530	526	487	475	471	484	469	484	516	532	551	566	568	565	12824	534.5
29	578	582	571	566	554	558	557	552	555	551	516	499	485	477	475	465	478	501	516	529	554	558	548	559	12656	526.5
30 Q	557	561	560	555	569	569	552	565	562	555	548	526	507	491	477	478	491	511	534	556	558	560	560	562	12980	540.8
Sum.	16948	17079	17092	17079	16950	16827	16709	16658	16575	16449	16229	15884	15557	14977	14801	14828	15085	15518	15909	16255	16520	16614	16692	16814	589825	
Mean.	564.9	569.5	569.7	569.5	565.0	560.9	557.0	554.5	552.4	548.5	541.0	529.5	511.9	499.2	495.4	494.5	502.8	517.5	530.5	541.8	550.7	553.8	556.4	560.5		541.4



Vertical component , Z , - (36000 + ) gammas.

November 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	870	866	866	860	856	855	855	854	850	848	848	845	835	825	817	811	814	825	851	843	859	862	866	865	20522	846.8	
2 D	860	861	858	859	856	854	854	855	854	847	838	836	831	821	815	815	815	825	854	855	878	877	879	881	20555	848.1	
3 D	865	877	866	864	851	859	857	865	861	861	856	848	842	836	836	845	845	849	856	867	868	875	879	876	20615	858.9	
4	877	870	867	862	852	852	861	864	865	857	850	844	839	832	834	835	836	845	851	858	859	857	860	859	20482	855.4	
5 Q	860	862	865	859	856	855	855	852	849	846	841	836	832	826	827	828	826	834	843	850	855	858	858	858	20525	846.9	
6 Q	858	859	858	856	855	855	854	855	850	847	841	837	834	830	828	827	829	834	846	854	859	859	857	856	20558	847.4	
7	859	861	858	856	855	855	852	852	848	844	842	838	834	827	822	826	830	838	848	854	866	870	869	864	20565	848.5	
8 Q	859	857	855	855	855	852	852	850	847	845	838	835	831	828	825	821	822	832	842	848	848	854	859	857	20261	844.2	
9	859	858	858	857	854	849	848	849	847	842	835	827	822	818	814	815	818	827	834	841	847	849	850	846	20162	840.1	
10 D	848	849	850	848	847	842	835	836	836	834	819	808	800	797	796	804	815	825	830	842	855	854	849	835	19884	852.7	
11 D	862	877	861	865	859	822	820	838	846	841	834	831	829	828	829	828	832	845	848	858	864	864	864	860	20531	845.9	
12	861	859	860	862	860	851	855	852	848	841	832	824	819	818	812	816	825	859	852	858	865	868	858	861	20294	845.6	
13	865	865	852	852	849	849	845	845	844	836	832	827	824	818	818	825	829	859	851	855	858	855	855	855	20257	845.2	
14	858	859	852	851	848	848	850	848	844	842	835	825	817	809	804	808	817	827	837	844	851	850	865	851	20144	859.5	
15	864	855	855	851	852	851	846	834	824	829	827	825	819	819	817	820	826	834	844	852	856	858	856	854	20156	859.8	
16	865	852	859	856	848	841	832	834	838	836	824	814	806	811	817	822	826	850	855	842	849	849	852	857	20095	857.2	
17	858	857	854	848	846	836	830	825	826	830	825	819	811	811	808	806	815	825	834	840	849	855	854	857	20015	854.0	
18	855	851	849	845	841	839	837	834	824	821	819	816	810	808	804	804	805	812	826	842	853	870	856	850	19974	852.5	
19	855	851	850	847	841	838	834	834	835	832	828	822	811	808	807	811	812	817	850	859	848	855	851	848	20000	855.3	
20	848	848	847	844	845	845	845	842	841	837	831	825	820	815	808	799	804	815	822	855	845	845	845	845	19974	852.5	
21	847	848	845	845	845	841	837	834	834	832	827	821	818	812	802	801	804	815	828	859	846	851	855	852	19975	852.5	
22 Q	856	849	848	844	841	840	840	837	832	828	820	815	812	810	807	807	812	821	829	855	858	857	845	844	19945	851.0	
23	847	850	848	845	841	835	831	825	820	817	808	801	796	802	799	800	805	807	819	854	859	854	845	838	19780	824.2	
24	845	846	845	841	837	833	831	824	819	815	806	805	795	789	795	788	795	805	826	850	857	852	852	851	19794	824.8	
25	849	856	857	855	847	844	841	839	834	825	815	811	808	805	800	795	800	819	835	848	862	865	875	861	20056	855.7	
26	871	860	855	848	842	840	845	842	840	832	826	821	815	808	808	810	818	832	842	848	852	860	857	856	20126	858.6	
27	855	856	855	851	844	834	845	841	836	831	821	816	815	809	805	807	808	819	859	854	861	871	875	879	20125	858.5	
28 D	871	872	865	857	848	847	838	815	819	826	821	824	799	800	790	789	799	817	835	844	849	856	862	854	19965	855.0	
29	858	858	855	847	841	835	838	835	827	814	817	815	812	808	805	805	812	819	827	838	845	850	855	856	19962	851.6	
30 Q	852	851	848	846	846	845	839	840	841	838	831	825	818	812	805	802	810	825	840	851	856	855	849	848	20065	856.0	
Sum.	25759	25758	25657	25569	25452	25356	25292	25242	25177	25074	24885	24724	24550	24452	24342	24358	24500	24785	25110	25416	25658	25715	25745	25726	604214		
Mean.	852.5	857.9	855.2	852.5	846.4	844.5	843.1	841.4	839.2	836.5	829.4	824.1	818.5	814.4	811.4	811.9	816.7	826.1	837.0	847.2	854.6	857.1	858.1	857.5		859.2	

Declination, D, east of north, 17 degrees + tabulated values in minutes of arc.

December 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1	09.9	09.4	08.8	08.8	07.9	07.0	05.7	04.5	05.1	02.4	02.5	04.2	05.0	07.7	10.6	14.1	16.0	16.5	16.0	14.9	13.4	11.7	10.7	09.7	220.5	09.18	
2	08.3	08.3	08.7	09.4	09.3	08.7	07.9	05.2	05.7	02.8	02.5	07.0	09.0	11.6	15.2	16.9	17.1	20.0	20.4	19.8	18.1	14.9	10.5	10.0	266.0	11.08	
3	09.9	10.3	08.9	10.1	09.7	09.7	07.8	06.8	04.6	04.2	02.8	05.3	05.4	07.7	09.8	13.2	16.1	17.3	16.9	13.2	14.0	12.4	11.2	11.0	258.8	09.95	
4	10.8	09.7	08.8	08.4	08.5	05.4	05.4	05.5	01.5	00.8	00.4	02.6	05.9	06.6	13.0	15.1	20.8	25.3	26.4	23.5	21.2	21.1	21.8	15.0	280.9	11.70	
5	10.0	09.5	12.7	14.2	13.7	14.0	14.4	13.5	10.7	08.7	08.6	07.1	09.5	10.5	12.2	14.7	18.2	20.5	20.6	18.4	16.3	14.3	12.3	11.5	515.8	13.08	
6	10.8	10.6	11.0	10.4	09.6	09.0	09.9	08.0	07.2	05.0	06.9	06.8	05.9	08.3	10.8	12.5	15.4	17.9	18.9	16.6	14.5	13.5	12.6	11.7	285.1	11.05	
7	10.7	09.9	09.7	08.8	07.7	08.0	05.4	05.9	05.6	05.4	04.5	05.2	07.1	09.0	10.4	12.1	15.0	16.4	16.1	15.1	14.2	13.3	11.6	10.7	335.6	09.82	
8	10.0	09.6	09.4	09.4	09.1	08.7	07.7	08.6	05.5	04.9	04.5	05.1	08.1	07.5	10.6	12.6	15.0	15.5	15.7	15.2	13.5	10.0	10.0	08.9	230.3	09.60	
9	09.9	08.8	08.8	08.7	08.9	07.8	08.5	08.9	05.5	05.4	04.2	06.1	06.2	09.7	10.0	12.2	15.0	17.0	16.6	15.2	13.4	11.4	10.0	08.8	254.8	09.78	
10	08.4	08.7	06.2	08.9	09.7	09.6	08.9	05.2	05.0	04.5	04.4	05.4	06.6	07.6	08.9	11.5	14.2	15.3	14.6	13.4	12.2	10.8	09.7	09.5	221.2	09.22	
11	08.8	08.7	08.9	08.2	07.1	08.7	08.5	05.0	05.1	04.1	04.5	04.5	05.2	07.0	10.5	13.7	18.1	19.0	18.9	17.0	14.4	12.5	11.4	10.0	255.2	09.80	
12	10.5	10.5	09.7	09.7	09.2	08.5	08.7	04.5	05.4	05.2	05.1	05.9	07.1	07.6	09.6	11.2	14.6	16.4	16.9	15.9	14.6	13.7	13.0	12.4	240.1	10.00	
13	10.9	10.9	08.5	08.7	09.5	07.8	05.2	05.2	00.8	00.5	00.4	00.5	08.7	08.1	13.5	15.5	18.0	19.2	23.5	21.5	19.6	19.3	17.0	14.4	255.6	10.57	
14	13.4	12.6	10.5	09.6	07.2	08.0	07.7	06.0	05.5	04.2	02.5	02.9	04.9	08.9	12.4	17.1	20.7	21.0	21.5	19.8	18.6	15.1	10.9	10.5	271.7	11.52	
15	11.1	11.0	10.6	09.8	08.9	07.6	07.5	05.7	04.5	03.0	01.7	05.1	06.9	09.6	12.1	14.8	16.9	16.8	14.9	13.6	14.4	13.4	13.1	12.6	245.4	10.14	
16	12.1	11.4	10.7	08.9	08.6	07.0	05.2	04.9	02.4	02.1	01.4	00.2	07.1	11.6	10.8	11.6	12.1	12.5	13.4	15.0	12.5	12.6	13.5	13.5	220.5	09.18	
17	12.2	10.6	09.5	08.4	07.7	06.1	06.0	05.9	04.1	04.2	05.8	05.7	07.5	09.6	11.5	13.0	16.5	20.4	27.7	21.4	18.9	20.2	16.0	19.8	285.5	11.90	
18	11.6	13.4	11.2	12.0	10.4	06.7	09.2	07.5	05.9	04.5	04.4	03.9	06.9	08.5	09.6	10.5	11.5	11.6	11.6	12.1	11.8	11.4	11.2	11.5	252.7	09.70	
19	10.0	09.7	08.1	09.0	10.5	05.4	05.2	05.0	02.5	08.0	04.9	05.8	08.7	11.5	13.1	13.5	14.5	16.2	16.1	15.1	14.2	11.8	11.2	11.5	255.5	09.50	
20	10.7	09.8	08.9	08.6	06.0	04.2	02.4	02.5	04.7	04.6	03.2	04.5	05.6	07.7	11.2	14.5	17.0	19.9	18.1	16.9	15.8	12.4	11.4	11.2	228.2	09.51	
21	10.6	10.5	09.0	08.9	07.8	08.7	05.9	06.5	05.6	05.2	03.2	05.9	06.7	07.7	08.8	12.2	15.5	16.4	18.1	16.1	15.4	11.5	10.7	11.1	252.7	09.70	
22	10.6	09.6	09.6	09.9	09.1	07.7	04.9	02.5	02.1	01.7	04.2	05.0	05.8	04.5	07.8	10.5	12.5	14.5	15.5	14.7	13.5	11.4	10.6	10.9	204.9	08.54	
23	11.2	10.6	09.9	09.6	08.5	06.6	04.8	02.8	04.0	01.1	01.1	01.5	05.4	07.0	11.2	13.5	15.6	16.9	16.5	14.5	12.5	10.6	09.8	09.9	212.5	08.85	
24	10.5	09.9	09.5	08.7	07.2	06.8	05.5	04.5	04.5	03.2	02.2	02.0	05.4	07.1	09.1	12.5	15.8	16.5	15.2	12.9	11.1	10.5	09.5	09.6	208.5	08.60	
25	10.6	10.5	09.7	08.9	08.0	07.1	05.8	04.7	05.7	03.0	03.2	03.2	05.5	07.4	10.5	13.4	16.1	16.5	18.0	14.5	13.5	11.2	09.9	09.4	221.5	09.25	
26	10.5	10.0	09.7	09.6	08.7	07.9	06.5	05.0	05.7	02.1	05.1	05.1	05.9	06.8	10.5	11.5	16.2	19.7	18.1	14.5	12.5	10.4	09.4	09.2	221.8	09.24	
27	10.0	09.5	09.7	09.8	08.7	04.4	05.1	04.9	04.8	05.1	05.5	08.2	10.0	08.7	06.9	11.4	15.4	18.1	17.9	15.8	12.6	09.8	07.6	07.2	226.9	09.54	
28	06.5	06.8	08.8	08.3	08.8	07.7	04.9	05.1	02.1	00.5	00.9	05.8	08.1	07.0	09.5	13.6	15.2	16.1	16.8	15.8	12.9	09.9	08.9	08.5	207.4	08.64	
29	07.6	06.7	08.6	08.6	09.6	08.9	06.9	04.9	03.2	05.0	02.5	02.2	04.1	05.5	08.7	11.5	15.4	17.2	17.6	16.8	13.9	11.4	09.9	09.7	217.7	09.07	
30	10.4	10.5	09.7	10.0	09.7	08.9	06.7	08.8	04.8	03.5	01.9	01.5	04.0	07.9	08.9	12.5	16.1	18.1	18.9	17.8	16.0	12.2	10.0	09.4	257.6	09.51	
31	09.5	08.9	09.5	08.9	08.5	07.6	07.1	04.4	04.6	03.6	03.2	02.8	02.9	05.9	05.5	08.9	13.5	17.2	16.7	15.5	13.0	10.5	08.9	08.6	205.5	08.48	
Sum.	517.9	511.0	297.5	290.7	272.5	256.2	205.7	167.2	151.2	111.1	102.3	127.3	182.7	248.0	324.8	401.9	489.8	540.6	552.1	501.8	449.7	325.0	352.9	337.5	7347.7		
Mean.	10.25	10.05	09.59	09.38	08.79	07.62	06.34	05.59	04.25	05.58	03.52	04.11	05.89	08.00	10.48	12.96	15.80	17.44	17.61	16.19	14.51	12.74	11.58	10.89	09.88		

\* 16 degrees + tabulated value.



U.T. Date.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.
1 Q	560	568	573	576	575	575	575	568	562	558	550	540	518	495	492	492	501	516	530	546	560	566	570	568	15159	547.5
2	575	584	584	589	598	598	597	589	579	567	551	519	498	486	505	498	501	515	506	527	564	577	542	561	15187	549.5
3	568	561	573	576	575	578	574	568	555	545	532	511	490	471	489	481	502	519	537	544	562	566	566	564	12995	541.4
4 D	576	584	584	614	605	600	591	584	556	551	529	520	500	475	462	452	440	436	485	545	581	585	541	526	12950	538.8
5 D	501	495	486	506	518	527	534	525	503	494	484	476	459	447	437	455	446	449	475	489	505	518	524	537	12767	490.5
6	546	540	549	550	550	544	538	535	531	527	519	522	509	486	480	476	490	505	518	515	530	544	547	555	12394	524.6
7 Q	554	560	565	561	561	555	549	556	547	535	525	511	501	490	490	485	492	509	520	535	556	544	548	554	12775	532.5
8	555	567	564	572	576	574	570	562	555	545	536	529	516	500	486	495	511	522	535	543	555	547	564	566	13055	545.0
9	570	575	564	584	576	575	571	549	556	527	519	514	509	501	500	509	518	518	525	534	545	561	554	561	12955	559.7
10 Q	560	554	554	564	557	562	564	558	552	559	535	521	505	492	488	465	498	515	531	549	567	560	555	554	12905	537.6
11	556	569	574	572	566	565	568	564	561	557	548	529	515	500	486	487	502	516	535	547	569	575	562	547	13062	544.5
12 Q	556	576	571	565	572	574	574	564	551	538	527	515	497	484	490	492	501	525	546	555	568	576	569	578	13046	545.6
13 D	605	596	587	584	575	585	578	564	554	552	549	535	499	455	455	455	465	465	482	471	466	522	519	520	12650	526.5
14	542	567	578	584	582	547	556	551	550	525	520	508	498	486	450	487	478	506	529	507	525	521	530	546	12565	523.5
15	538	544	555	555	555	549	547	547	545	559	525	500	477	469	471	481	476	492	519	531	562	571	579	577	12698	529.1
16	589	585	624	599	601	585	581	579	564	561	561	550	530	522	505	488	487	505	537	556	548	558	568	577	13542	555.9
17 D	593	595	601	598	581	570	558	546	542	542	549	542	531	519	504	499	520	518	576	529	566	515	530	598	13807	554.5
18 D	570	562	556	517	494	502	497	502	507	507	505	495	488	487	481	476	485	485	484	482	492	512	524	541	12155	506.4
19	559	540	519	527	529	525	510	500	498	500	466	485	466	451	467	469	485	509	509	528	556	555	550	556	12270	511.5
20	571	555	558	557	549	540	551	529	534	525	505	484	479	472	466	467	472	495	505	517	552	557	550	554	12476	519.8
21	559	561	557	565	556	550	549	540	534	534	519	511	505	499	488	482	490	498	519	525	551	558	560	562	12770	532.1
22	577	561	550	547	547	544	541	538	534	531	527	508	496	485	482	489	497	517	535	526	547	552	566	569	12764	531.8
23	568	567	557	556	561	558	564	551	554	542	541	520	505	496	482	485	500	507	518	539	548	565	560	552	12892	537.2
24	558	560	558	550	554	555	547	540	536	532	525	506	494	489	490	486	508	505	518	535	545	561	546	562	12756	531.5
25 Q	566	565	562	558	556	555	554	550	547	542	532	522	510	504	497	496	508	527	556	570	580	566	562	595	15080	545.0
26	595	590	589	590	576	574	572	566	564	562	561	549	527	505	511	505	504	515	519	546	566	578	565	547	15280	552.5
27	559	564	561	565	559	545	530	530	526	534	536	532	534	514	497	486	488	506	522	542	555	534	558	578	12881	536.7
28	564	548	568	560	558	552	556	559	557	557	542	532	524	508	491	476	495	517	535	554	571	541	580	566	12909	537.9
29	561	559	552	555	555	550	547	545	542	542	537	522	510	499	499	507	514	521	531	545	559	555	556	548	12886	536.9
30	554	564	560	565	561	564	559	550	544	541	541	535	524	516	518	508	515	531	535	534	547	545	574	554	13087	545.2
31	566	559	562	556	556	557	562	560	558	545	537	531	527	515	505	501	507	521	545	549	559	564	567	565	13072	544.7
Sum.	17462	17481	17495	17461	17454	17322	17202	17025	16835	16670	16450	16068	15625	15204	15040	14984	15236	15691	16215	16505	16972	17241	17176	17328	398128	
Mean.	565.5	565.9	564.5	565.3	562.4	558.8	554.9	549.2	545.1	537.7	530.0	518.5	504.0	490.5	485.2	485.4	492.5	506.2	525.1	532.4	547.5	556.2	554.1	559.0	555.1	

Vertical component,  $\gamma$ , - ( 56000 + ) gammas.

December 1958.

U.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Sum.	Mean.	
Date.																											
1 Q	845	847	848	848	846	845	840	836	850	822	819	815	805	799	798	798	808	812	825	828	834	836	845	844	19861	827.5	
2	844	847	845	845	845	841	840	836	828	821	811	807	799	795	805	807	809	815	829	849	880	904	890	879	20085	836.0	
3	871	871	861	855	847	845	841	839	834	824	820	816	812	808	805	807	815	825	836	845	847	850	848	844	20056	855.7	
4 D	849	855	848	858	848	845	838	837	816	791	767	784	785	779	788	787	797	822	875	962	1016	1008	1022	992	20565	856.8	
5 D	842	804	881	882	881	885	882	877	872	865	861	855	842	855	851	829	828	856	855	836	875	880	883	884	20821	867.5	
6	877	868	867	861	858	855	848	844	841	838	824	820	822	816	825	831	829	829	834	840	858	874	876	871	20502	845.9	
7 Q	867	865	860	855	850	848	845	846	841	836	831	825	818	814	812	808	808	819	831	848	853	857	859	854	20141	859.2	
8	848	848	849	852	851	847	845	838	834	832	816	814	811	812	811	815	828	837	848	859	857	866	875	20107	857.8		
9	861	870	859	855	854	849	842	816	807	819	820	818	820	822	824	819	815	817	827	859	848	850	851	850	20050	855.4	
10 Q	855	845	844	850	844	844	844	842	838	828	820	815	820	808	810	807	809	818	824	836	840	845	844	841	19959	851.6	
11	859	845	847	847	845	842	840	834	828	820	816	808	805	800	801	794	792	804	821	836	851	854	854	841	19858	827.4	
12 Q	841	852	849	844	845	841	840	834	826	818	807	805	802	801	805	797	804	815	826	835	851	860	847	861	19897	829.0	
13 D	881	871	864	850	852	854	849	840	835	831	828	816	798	780	778	789	805	827	845	859	880	910	908	890	20259	845.5	
14	880	874	870	862	857	856	850	851	855	855	850	832	817	810	800	808	817	840	855	846	869	879	882	884	20285	844.4	
15	854	846	849	845	845	842	845	845	841	840	829	810	798	792	798	798	800	814	828	831	846	850	846	840	19928	850.5	
16	846	845	860	846	844	855	858	858	852	828	825	805	791	797	798	794	797	815	829	828	851	852	855	841	19822	825.9	
17 D	846	846	846	837	832	828	820	816	814	807	804	805	800	795	796	795	798	805	824	825	852	882	842	888	19805	825.2	
18 D	901	878	860	854	841	845	849	852	858	854	848	838	829	828	824	824	829	835	839	841	841	855	868	875	20584	849.5	
19	885	885	858	849	851	829	820	852	851	817	816	816	810	811	821	821	819	827	829	842	850	865	856	855	20069	856.2	
20	867	851	854	845	857	855	851	828	826	822	816	810	815	810	808	807	801	810	824	837	849	852	855	850	19958	850.8	
21	851	851	848	850	845	857	852	825	816	816	816	817	814	811	808	810	815	819	829	836	854	857	855	852	19958	851.6	
22	859	850	840	840	838	838	855	851	850	825	825	816	807	801	801	800	808	810	822	829	848	852	856	849	19904	829.5	
23	840	858	855	854	858	857	840	829	820	804	802	800	795	790	788	794	802	804	814	855	846	858	854	842	19757	822.4	
24	841	859	859	856	855	855	851	828	825	821	818	808	799	795	792	780	794	807	822	836	840	848	846	856	19756	825.2	
25 Q	856	855	855	855	852	852	850	826	821	816	811	804	797	794	796	799	805	812	821	850	842	859	858	845	19729	822.0	
26	858	852	841	841	851	850	829	826	819	809	808	805	799	791	804	785	790	798	810	855	852	866	860	845	19754	825.1	
27	849	847	841	859	852	815	814	817	814	816	809	798	804	805	797	788	785	801	818	835	849	861	854	864	19748	822.8	
28	856	857	845	841	852	827	819	821	815	812	816	810	802	791	790	788	805	818	850	844	860	846	859	861	19625	828.0	
29	849	847	859	858	854	850	828	828	826	825	820	811	802	795	792	788	789	802	817	857	842	856	857	846	19796	824.8	
30	845	845	841	857	851	852	827	821	817	811	815	810	798	792	792	784	785	795	809	816	850	855	857	842	19865	819.4	
31	845	857	855	850	827	827	825	821	818	811	805	802	801	798	791	785	786	792	807	821	834	859	842	858	19617	817.4	
Sum.	26604	25465	26574	26251	26120	26017	25929	25852	25686	25509	25355	25177	25002	24862	24885	24846	24950	25265	25684	26092	26527	26755	26749	26685	619617		
Mean.	858.2	855.7	850.8	846.8	842.6	839.5	836.4	835.3	828.6	822.9	817.9	812.2	806.5	802.0	802.7	801.5	804.8	814.9	825.5	841.7	855.7	865.1	862.9	860.8	852.8		