

Среднемесячн.  $6^{\circ}44'46''$

Ведомство ДН Каз. ЦСР

Обсерватория Н. Козакинск

Широта  $45^{\circ}46'$  Долгота  $62^{\circ}07'$

Элемент Склонение  $\alpha$

Месяц сентябрь Год 1969

$\alpha = 6^{\circ}30'00'' + \epsilon \alpha = 0.159 \text{ мм } \alpha_0 = 6^{\circ}35'40''$

Дни	Время																	Средн. суточн.	Время макс	Макс	Мин	Время мин	Ампл.									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17															
1	9.6	8.8	8.8	10.0	11.1	11.5	11.2	10.6	9.8	10.0	11.0	9.7	9.1	9.9	10.7	10.0	10.9	11.0	11.4	10.3	10.0	9.3	9.0	9.3	10.1	14.5	12.0	8.0	21.7	4.0	243.0	
2	9.2	9.3	9.3	10.0	9.7	9.6	9.3	9.1	9.0	9.2	9.7	9.3	9.4	9.3	9.9	8.9	9.3	9.4	9.3	9.3	9.2	9.2	9.1	9.1	10.0	15.2	10.9	8.8	8.2	2.1	240.1	
3	9.0	9.1	9.4	10.1	11.0	11.4	10.5	9.3	8.1	8.3	8.8	8.8	8.9	9.2	9.2	9.1	9.2	9.3	9.3	9.3	9.4	9.4	9.4	9.4	9.4	5.2	11.8	7.9	8.8	3.9	178.0	
4	9.1	9.1	9.1	10.9	10.7	9.6	8.3	7.7	8.3	9.2	9.2	9.1	9.3	9.5	9.6	9.5	9.5	9.5	9.5	9.4	9.3	9.0	8.9	8.8	8.8	9.2	5.1	11.1	7.5	8.1	3.6	184.6
5	8.7	8.8	9.1	9.9	11.5	11.0	9.8	8.2	6.9	7.3	8.7	10.0	9.6	9.3	9.1	9.1	9.2	9.4	9.3	9.3	9.2	9.1	8.9	8.8	9.2	4.6	11.8	6.7	8.9	5.1	220.2	
6	9.0	9.1	9.6	10.1	11.1	11.0	9.6	7.7	7.2	7.8	8.8	9.4	9.6	9.6	9.4	9.5	9.3	9.3	9.3	9.3	9.1	9.0	9.1	9.0	9.2	6.0	11.6	7.0	8.0	4.6	221.6	
7	8.9	8.9	9.1	9.5	10.1	9.8	8.8	8.8	10.5	6.9	7.4	8.7	7.7	7.0	8.0	8.9	9.5	10.0	12.2	12.9	12.1	10.9	10.1	10.1	9.8	18.9	14.5	6.4	14.0	8.1	235.8	
8	9.6	9.1	9.0	10.4	9.0	10.0	8.4	7.1	7.6	7.9	9.0	9.3	9.1	9.1	9.6	9.9	9.4	9.6	10.1	10.2	10.2	11.1	10.1	11	9.4	23.8	12.0	6.5	7.2	5.5	225.8	
9	10.6	10.2	10.4	9.9	10.5	10.4	10.2	9.5	8.7	8.1	20.1	9.3	9.5	9.6	9.6	9.8	9.9	9.9	10.0	10.0	8.6	10.2	10.5	10.0	10.2	4.1	11.0	8.0	9.5	3.0	245.5	
10	9.8	9.8	10.0	10.4	10.6	9.6	9.6	14.4	11.9	21.1	8.0	9.0	9.4	10.0	10.0	9.3	9.6	10.0	9.9	10.1	10.2	10.0	9.7	9.6	10.5	4.2	10.8	5.6	8.2	5.2	252.0	
11	9.7	9.8	9.9	10.6	11.2	10.4	9.3	7.9	6.9	6.6	6.9	7.9	8.3	8.5	9.6	9.3	9.5	9.7	10.3	10.4	9.4	9.4	9.5	9.6	9.2	4.5	11.6	6.5	9.3	5.1	220.6	
12	9.3	8.5	8.7	9.5	11.1	10.7	8.9	7.0	12.6	7.0	8.5	8.5	8.0	7.5	10.3	9.4	10.2	11.4	10.8	10.2	10.0	10.0	9.9	9.9	9.2	14.6	12.1	5.8	8.3	6.3	227.9	
13	9.6	9.6	9.7	10.1	10.4	10.1	9.3	8.7	7.7	7.8	8.9	9.7	9.8	9.3	9.3	9.5	9.6	9.6	9.5	9.3	9.2	9.1	8.8	9.2	9.3	4.7	10.5	7.4	8.9	3.1	223.8	
14	8.4	9.1	9.1	9.7	10.6	10.5	9.8	8.8	7.3	7.2	7.1	8.0	8.5	8.7	9.0	9.3	9.6	9.7	10.1	11.6	11.1	10.1	11.9	11.9	9.5	22.3	12.5	5.1	9.5	7.4	208.9	
15	10.7	10.9	11.2	11.4	10.1	9.7	8.2	7.4	8.4	8.2	7.5	7.7	7.7	8.1	8.5	8.9	9.6	9.8	13.5	13.0	11.6	9.8	10.0	9.3	9.6	18.8	14.1	6.0	9.1	8.1	231.2	
16	9.0	9.0	9.0	10.1	11.0	10.3	10.3	8.7	6.7	6.6	6.7	7.2	7.0	9.9	7.7	9.6	9.9	9.9	9.8	9.6	9.6	9.6	9.6	8.6	9.0	13.6	12.3	5.8	10.1	6.5	215.4	
17	8.9	10.7	10.1	10.1	11.5	10.0	9.7	8.8	7.2	8.3	8.5	9.5	9.4	9.4	8.8	9.8	10.0	11.6	12.2	12.0	9.2	8.2	9.0	9.0	9.7	19.0	14.2	5.9	8.4	8.3	231.9	
18	9.8	10.4	10.2	11.0	12.0	11.5	10.6	8.9	8.1	8.0	7.7	10.7	9.7	8.5	9.4	10.2	12.0	13.2	10.2	11.4	11.2	11.9	12.1	10.7	10.0	16.8	14.7	7.4	8.9	7.3	249.4	
19	10.9	10.9	10.8	11.6	10.7	9.9	8.7	7.7	7.6	6.9	8.7	9.5	9.8	9.6	8.8	9.2	9.6	10.1	10.4	9.7	10.2	9.4	9.1	9.9	9.6	12.9	11.5	2.3	5.7	9.2	229.7	
20	9.2	9.4	9.3	9.0	9.7	9.6	8.8	8.5	9.3	8.0	8.7	8.9	9.1	10.4	10.1	10.1	10.7	10.7	10.6	10.7	10.0	9.6	8.5	9.5	9.5	18.0	11.6	7.2	8.7	4.4	228.4	
21	9.8	10.2	9.3	10.5	10.2	9.3	8.7	7.3	6.3	7.0	8.0	8.8	9.2	9.3	9.4	9.6	9.7	9.8	9.6	9.5	9.2	9.3	9.3	9.2	9.1	4.5	10.7	5.8	8.6	4.9	218.5	
22	9.2	9.4	9.9	10.7	11.5	10.8	9.3	7.3	6.4	6.9	7.5	8.5	9.3	9.4	9.4	9.3	9.3	10.0	9.3	9.5	9.6	9.0	9.1	9.2	9.2	4.6	11.7	6.1	8.5	5.6	219.8	
23	9.5	9.5	9.7	10.0	10.6	10.3	8.8	6.9	0.1	7.7	8.7	8.8	9.5	9.0	8.9	9.5	10.3	9.6	9.2	9.2	9.5	9.3	9.6	9.4	8.9	4.8	10.7	5.1	8.8	5.3	213.6	
24	8.8	8.8	9.0	10.0	11.7	10.7	8.7	6.2	4.8	0	8.3	8.0	8.9	9.6	11.0	12.3	13.3	12.9	13.0	14.1	14.7	12.7	11.9	9.1	10.0	19.8	16.4	4.5	8.5	11.9	239.1	
25	8.2	9.0	8.6	9.9	11.1	10.9	11.5	13.1	11.6	9.4	8.6	9.3	13.5	14.5	12.2	13.4	14.4	16.0	14.4	15.0	12.7	8.4	8.9	8.5	10.1	19.7	17.9	7.6	11.3	10.3	273.6	
26	2.6	3.3	8.9	8.5	11.0	11.6	11.5	10.0	8.3	7.9	8.0	8.8	10.7	10.0	11.6	10.6	9.6	9.6	10.3	10.4	10.4	10.7	9.7	10.1	11.0	14.9	13.6	7.7	10.5	5.9	223.7	
27	10.0	9.8	10.0	10.4	11.6	11.6	11.5	10.0	8.1	9.1	10.6	11.1	14.2	10.3	10.4	12.5	10.9	11.5	11.5	11.0	9.6	9.7	9.7	8.9	10.6	13.5	16.3	7.5	6.7	8.8	233.9	
28	9.9	9.6	8.9	9.9	10.3	10.0	9.6	8.6	7.9	8.4	9.3	9.6	9.3	9.3	9.3	9.6	9.7	10.0	10.2	10.3	9.8	9.3	9.3	9.6	9.5	19.1	10.7	7.7	8.6	3.0	227.7	
29	11.0	9.6	9.6	10.6	11.5	10.7	10.0	8.8	7.6	7.8	8.9	9.5	9.3	9.1	9.1	9.2	9.3	9.5	9.7	9.5	7.6	9.0	9.2	9.2	9.4	4.3	11.7	7.2	8.7	4.5	225.3	
30	9.5	9.1	9.3	9.7	11.0	9.6	9.2	8.4	6.9	7.2	7.7	8.0	7.9	8.3	9.0	9.5	9.7	10.3	9.5	9.6	9.5	9.6	9.6	9.6	9.7	17.0	11.0	6.7	8.2	4.3	217.7	
31	9.6	9.6	11.0	9.2	11.2	10.2	10.4	10.7	6.7	7.2	8.7	9.7	9.7	10.1	9.7	12.0	12.3	10.7	9.5	9.6	9.4	9.1	9.5	9.5	9.8	15.9	13.7	6.5	8.4	7.2	235.3	
Среднее по всем дням	9.3	9.3	9.6	10.1	11.4	10.4	9.7	8.8	8.1	8.0	9.3	9.0	9.3	9.5	9.6	9.5	10.2	10.4	10.5	10.2	9.7	9.7	10.0	9.5	9.6	298.9	12.5	6.6	5.9	231.1		
278.0	270.2	277.8	302.8	335.5	323.4	299.8	272.7	252.9	239.5	279.6	279.9	287.1	295.0	296.4	296.3	316.6	322.4	324.4	316.1	301.0	290.5	298.5	285.6	298.9	386.7	204.2	182.5	7042.0				

Барометр Бодрова Т (Т-ХИ, 1969)

Обработал Григорьева Проверил Сильковская

Условные обозначения:  $\Delta$  — погасла лампа;  $>$  или  $<$  — запись вышла за бумагу;  $\square$  — остановились часы;  $\bar{\Delta}$  иные причины отсутствия записи. Величины, взятые приближенно с магнитограммы — ( ).

Горизонтальная составляющая

Дни	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Сред.	Время Дни	М.ч	Дм	Время Мин	Ампл	Харак- тер.	
1	48	47	48	49	48	45	43	43	50	53	45	44	43	36	38	41	38	43	49	52	53	53	53	46	21.2	55	34	14.3	11		1105	
2	55	55	56	54	53	57	54	52	52	54	53	50	47	51	50	56	58	61	62	63	65	65	66	67	56	23.9	67	45	12.3	23		1356
3	67	68	68	70	68	62	55	57	62	68	71	71	71	69	67	68	69	69	69	Δ	Δ	Δ	Δ	Δ	63	12.5	72	54	6.7	18		1269
4	Δ	Δ	Δ	Δ	73	69	62	62	69	71	68	61	60	66	68	70	71	70	71	71	71	72	72	71	68	4.4	75	56	12.2	19		1368
5	73	74	74	74	68	61	58	65	74	80	86	80	73	69	67	67	68	71	71	70	80	71	71	72	71	10.6	87	57	6.7	20		1717
6	72	72	71	68	61	53	48	52	59	67	72	74	71	69	67	68	68	69	68	67	68	69	69	70	66	11.8	74	47	6.4	27		1592
7	72	74	75	82	81	74	71	75	85	86	79	68	46	51	55	66	66	60	55	43	48	51	52	52	65	9.2	93	39	19.9	54		1567
8	53	53	58	56	50	44	42	45	51	59	61	61	60	57	57	60	63	63	57	71	62	54	63	63	57	19.7	78	40	7.1	38		1363
9	55	52	55	59	62	57	48	48	55	61	61	60	63	63	60	59	61	61	62	62	59	55	57	60	58	19.7	66	46	6.8	20		1305
10	64	65	65	46	56	46	42	46	55	65	66	63	56	55	63	62	62	58	60	62	59	59	60	61	58	9.7	67	41	6.7	26		1396
11	62	63	64	62	54	48	42	41	46	58	66	73	74	61	54	61	60	61	63	63	73	71	68	66	60	20.2	77	38	7.1	39		1454
12	68	68	68	66	55	44	44	52	56	62	58	54	46	39	39	30	37	34	43	50	50	52	53	56	51	9.6	62	28	15.5	34		1224
13	58	59	60	60	57	57	46	45	51	55	55	56	62	68	68	67	66	66	66	65	66	66	67	65	60	12.7	68	43	6.9	25		1445
14	63	Δ	Δ	66	55	36	29	29	38	49	50	61	63	62	66	65	62	62	57	59	57	57	62	47	54	21.9	72	27	6.7	45		1195
15	48	44	38	42	42	43	42	44	50	59	62	60	55	52	59	60	57	58	77	66	43	47	50	50	52	18.9	97	39	20.1	58		1248
16	54	54	55	55	45	33	25	31	30	52	51	57	47	36	42	42	45	50	53	55	55	55	55	55	47	24.0	62	23	6.6	39		1132
17	55	47	54	54	44	28	32	37	41	34	38	47	44	45	49	45	48	58	66	48	50	54	54	54	47	18	81	25	5.3	56		1126
18	33	48	46	47	46	24	25	30	43	51	55	27	49	44	40	47	40	61	45	50	51	54	56	49	44	17.1	83	10	11.7	73		1070
19	49	49	49	53	43	35	39	45	52	48	46	50	51	54	50	53	53	73	73	69	56	63	59	57	53	18.8	83	33	5.6	50		1269
20	59	61	56	52	57	51	48	50	56	61	57	57	54	54	52	52	53	51	46	53	53	54	65	59	54	15.8	70	41	12.9	29		1311
21	56	53	56	54	50	46	40	46	59	64	63	63	63	61	60	60	60	60	60	58	62	59	59	57	57	18.8	76	39	6.3	37		1369
22	58	56	55	53	47	43	44	52	58	59	67	70	68	67	67	65	63	67	66	64	62	66	66	61	60	21.6	71	42	5.7	28		1444
23	60	60	59	59	59	53	47	49	61	70	75	76	76	73	71	66	66	65	73	73	71	75	76	68	66	21.9	84	46	7.0	28		1581
24	80	71	72	70	62	52	50	50	61	73	81	84	77	54	40	22	19	25	31	31	46	33	37	39	52	10.9	85	10	15.7	75		1260
25	44	60	59	57	59	53	48	18	18	33	38	20	7	11	3	29	42	71	25	36	33	44	43	44	37	4.7	62	37	12.8	25		895
26	55	57	54	58	48	41	38	47	56	65	67	48	21	29	35	50	48	51	50	52	49	47	56	50	49	10.7	71	14	12.2	57		1172
27	46	50	50	50	45	32	25	26	26	Δ	Δ	35	29	37	39	36	44	36	39	36	45	46	48	52	36	23.7	57	20	8.1	37		872
28	54	53	50	50	40	32	31	38	49	55	57	57	53	53	53	56	58	55	58	55	54	57	61	56	51	22.5	62	29	6.0	33		1235
29	58	58	59	56	50	44	42	48	56	62	66	65	58	58	60	60	60	59	60	59	60	65	62	63	58	11.2	69	41	6.2	28		1388
30	67	70	67	62	54	46	41	47	56	50	44	61	65	61	58	58	59	61	59	58	57	59	59	60	57	1.0	71	40	6.3	31		1379
31	59	60	59	56	49	45	45	52	57	57	58	58	48	39	36	33	30	39	49	50	47	52	54	55	49	1.8	60	27	16.7	33		1187
Сред.	58	59	59	58	54	47	43	46	53	57	58	58	55	53	54	54	55	57	57	55	55	55	57	56	55		73	36		37		1313
Сумма	1745	1701	1700	1740	1681	1448	1346	1422	1632	1781	1816	1811	1700	1644	1633	1671	1703	1788	1777	1708	1704	1725	1713	1732	1702		2257	1111		1146		40384

Ведомство АН. Каз. ССР

Широта 45°46' Долгота 62°07'

Обсерватория Н-Казалинск

Элемент Склонение D

Месяц февраль Год 1969

D = 6°30'00" + δ<sub>D</sub> = 0.162' / год D<sub>0</sub> = 6°36'00"

Дни	Время																	Средн. суточн.	Время max	Max	Min	Время min	Amin										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17																
1	10.3	10.3	10.5	11.1	11.3	11.8	12.1	11.3	9.0	8.4	9.1	9.8	9.6	9.5	9.6	9.8	9.5	9.8	10.4	10.0	9.8	9.6	9.7	9.8	10.1	9.7	14.4	10.6	6.6	3.8	242.1		
2	9.8	10.0	10.4	11.1	11.3	11.6	11.1	9.2	7.8	8.2	9.0	9.7	9.8	10.0	10.0	10.6	7.7	8.9	24.0	32.7	25.0	36.5	35.3	22.6	14.7	18.4	41.1	7.6	8.7	33.5	352.3		
3	20.2	15.8	16.3	15.2	14.1	13.4	12.9	11.6	9.9	8.7	9.8	9.5	10.6	14.0	12.2	10.0	11.0	12.4	19.3	17.7	17.6	14.5	14.9	12.9	13.5	18.5	23.3	8.2	9.0	15.1	324.5		
4	12.2	11.4	11.6	12.5	12.2	12.1	11.3	9.4	7.3	7.3	8.5	9.5	9.8	10.4	9.7	9.9	10.0	10.6	11.2	11.6	11.9	12.5	13.7	14.4	10.9	24.0	15.1	6.6	9.3	8.5	261.0		
5	13.7	12.0	11.1	12.2	12.4	12.9	12.4	11.1	8.8	8.2	9.5	10.0	9.1	8.9	9.4	9.8	10.3	10.8	11.3	11.0	11.1	10.3	9.5	10.5	10.7	5.6	13.0	9.6	9.2	3.4	256.3		
6	10.3	10.0	9.5	8.5	9.5	9.3	10.2	9.1	7.4	7.5	7.0	7.8	8.9	9.5	9.8	10.1	10.3	10.6	10.9	10.6	11.0	11.1	11.3	9.7	9.6	21.9	11.9	6.5	10.2	5.4	230.1		
7	10.7	10.8	10.6	11.5	12.4	12.4	11.4	10.8	9.2	8.1	8.1	9.7	9.0	8.6	9.2	9.6	10.2	10.5	11.8	12.9	12.4	11.6	11.3	10.6	10.5	19.3	13.6	7.5	9.9	6.1	253.4		
8	10.9	11.6	10.8	11.1	11.0	10.9	10.0	8.8	7.3	6.9	7.2	7.9	8.6	9.1	9.1	9.5	9.7	11.6	11.7	10.9	10.8	11.1	10.7	10.8	9.9	17.8	13.8	6.4	8.8	7.4	238.0		
9	11.2	11.3	11.2	11.6	12.3	11.3	9.3	7.4	7.2	7.2	7.9	9.0	9.5	9.5	9.6	9.7	9.8	10.0	10.2	10.3	10.3	10.4	10.5	10.6	9.9	21.7	14.3	8.7	6.5	5.6	237.3		
10	10.8	10.6	10.3	11.6	13.3	13.2	12.1	10.3	7.4	6.2	6.3	7.4	8.5	9.1	9.1	9.5	11.6	10.4	9.9	10.3	11.0	11.2	11.9	13.7	10.2	21.5	19.9	8.5	6.9	11.4	245.7		
11	12.6	11.1	9.7	12.7	13.5	13.6	11.6	10.0	8.4	9.0	11.8	12.0	17.3	12.6	12.4	16.6	20.7	20.3	19.8	20.7	13.7	16.0	16.0	14.0	14.0	17.4	21.1	7.4	8.3	13.7	336.1		
12	13.0	13.3	13.0	13.8	14.5	14.3	12.9	11.3	9.9	9.7	10.3	10.9	11.1	11.0	11.0	11.1	11.1	11.1	11.1	12.1	12.0	11.1	11.2	7.4	11.6	6.1	14.9	5.6	24.4	9.3	278.2		
13	10.7	10.6	11.2	12.8	14.2	14.2	12.7	10.8	9.3	8.5	8.7	9.3	9.8	9.9	11.0	10.6	10.6	10.7	10.6	10.7	10.9	10.3	11.6	11.3	10.9	4.6	14.4	8.1	10.7	6.3	261.0		
14	10.6	10.8	11.4	12.1	14.3	14.4	13.0	11.6	9.6	7.5	7.1	8.8	9.5	9.6	10.0	10.7	10.7	11.0	9.5	10.4	10.2	10.0	8.9	9.6	10.5	6.2	15.0	6.5	23.9	8.5	251.3		
15	10.8	10.5	10.4	11.7	12.9	12.9	11.3	10.4	7.6	0	7.3	8.5	8.6	8.5	9.4	9.3	9.8	12.1	12.9	15.8	14.2	11.5	10.8	10.3	10.3	20.6	16.8	5.7	10.5	11.1	247.5		
16	9.8	9.8	11.2	12.6	14.3	14.5	12.4	10.1	8.8	7.2	7.2	8.2	8.9	9.7	10.0	10.7	11.4	11.1	10.7	10.5	10.2	9.9	9.9	9.7	10.4	6.5	14.7	6.4	10.6	8.3	248.8		
17	9.8	9.8	10.4	11.9	13.3	13.3	11.8	10.3	8.7	7.3	7.2	8.2	9.2	9.6	9.8	10.3	10.6	10.5	10.3	10.2	9.9	9.2	9.4	9.3	10.0	5.8	13.8	7.0	9.9	6.8	240.3		
18	9.0	9.4	10.3	11.8	13.2	13.1	11.6	9.3	7.7	6.4	6.8	7.9	8.7	9.0	9.1	9.3	9.7	10.1	10.1	10.4	10.1	9.8	9.5	9.3	9.7	6.2	13.5	6.7	10.7	6.8	231.6		
19	9.0	9.1	9.7	11.3	12.6	12.9	11.6	10.3	8.5	7.0	7.1	7.4	8.9	9.3	9.3	9.6	10.1	10.8	10.0	9.7	9.8	9.8	9.8	9.5	9.7	6.1	13.6	6.3	11.1	7.3	233.1		
20	9.5	9.4	9.8	11.1	11.6	11.0	10.5	9.2	7.3	5.7	5.2	6.4	8.5	9.7	9.0	9.5	11.2	12.3	10.6	9.6	9.3	9.3	9.3	9.0	9.3	18.3	12.9	5.0	9.5	7.9	224.0		
21	7.4	8.9	10.6	12.6	14.1	14.1	11.1	8.5	6.9	5.3	5.6	6.7	8.0	8.7	9.2	9.5	9.8	9.8	10.6	9.8	9.6	9.5	9.5	9.4	9.4	5.7	14.4	5.1	9.7	9.3	225.2		
22	9.3	9.4	10.1	12.4	15.0	15.3	13.2	10.3	7.6	5.9	7.2	7.1	8.2	8.7	8.7	9.2	10.3	10.1	10.3	9.3	9.4	9.5	9.4	9.0	9.8	4.7	15.8	5.3	9.7	10.5	234.9		
23	8.9	8.8	9.8	11.4	14.5	14.5	11.9	9.0	7.4	6.3	6.8	7.7	9.2	9.1	9.0	8.7	8.5	8.6	9.0	9.3	9.4	9.6	9.2	8.7	9.4	5.9	15.8	6.4	9.7	9.4	225.3		
24	8.9	9.3	10.2	10.9	14.4	14.5	11.3	7.2	4.9	4.9	4.9	6.4	8.3	8.7	8.7	9.0	9.3	11.1	9.9	9.5	9.4	9.4	9.5	9.4	9.2	6.1	15.2	3.7	10.6	11.5	220.0		
25	0.2	9.0	9.8	12.0	14.1	14.5	12.4	9.2	6.6	3.3	7.1	6.8	8.1	8.5	9.0	9.1	9.3	9.4	10.7	9.3	9.5	9.5	9.2	9.5	9.4	6.3	15.0	1.4	10.4	13.6	225.1		
26	9.5	9.7	9.2	10.1	12.7	13.7	12.3	8.0	6.3	3.0	5.9	5.0	7.4	8.2	8.2	9.0	8.9	9.5	11.1	11.1	9.8	9.2	7.8	9.2	9.0	6.6	14.4	2.9	11.7	11.5	214.8		
27	9.7	9.7	9.9	11.3	11.4	12.0	11.1	8.3	6.3	4.7	5.0	6.9	7.7	7.7	11.4	12.6	14.7	17.5	14.5	12.9	12.4	11.9	11.4	11.2	10.5	18.7	20.4	4.0	10.9	16.4	252.2		
28	14.7	11.6	12.0	13.7	15.2	14.4	12.4	8.7	6.4	5.7	6.4	7.7	9.3	9.5	9.8	10.0	10.6	10.4	10.6	10.3	10.3	10.6	9.0	9.7	10.4	5.5	17.3	5.2	10.6	12.1	249.0		
29																																	
30																																	
31																																	
Среднее по всем дням	10.8	10.5	10.8	11.9	13.0	13.1	11.7	9.7	7.8	6.6	7.5	8.3	9.3	9.5	9.7	10.1	10.6	11.1	11.9	12.1	11.5	11.6	11.4	10.8	10.5	16.4	6.4	10.0	251.3				
	302.5	291.0	301.0	332.6	365.6	366.1	327.9	271.5	219.7	184.1	210.0	232.2	260.1	266.6	272.7	283.3	297.1	312.0	333.0	339.6	321.0	324.9	320.2	301.1	293.5	459.4	178.9	280.5	7039.1				



Среднемесячи.  $6^{\circ}42'14''$

Ведомство АН. Каз. ССР

Обсерватория Н. Казалинск

Широта  $45^{\circ}46'$  Долгота  $62^{\circ}47'$

Элемент Склонение  $\tau$

Месяц март Год 1969

$\rho = 6^{\circ}30'00''$

$\sigma_D = 0.162 \text{ мм } \tau = 6^{\circ}34'10''$

Дни	Время																	Средн. суточн.	Время макс	мин	Время мин	Ампл.	Сумма								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17														
1	10.0	9.9	10.6	12.5	13.9	13.2	10.7	7.5	5.2	4.3	4.5	5.8	7.2	7.9	7.2	7.8	9.1	5.8	10.8	9.2	8.2	7.6	7.4	6.3	8.4	7.1	16.0	0	5.8	10.2	202.6
2	6.3	7.5	8.6	10.1	12.2	12.8	10.4	7.1	5.0	5.5	4.7	6.4	9.6	9.5	8.4	8.4	8.3	8.7	8.4	8.0	7.8	7.9	7.7	7.4	8.2	4.9	13.3	3.5	5.5	9.8	196.7
3	8.1	8.7	9.2	10.5	12.2	12.0	10.0	6.5	1.0	3.7	4.9	5.4	7.2	7.7	7.8	8.1	8.3	8.2	8.3	8.1	7.8	7.8	7.7	7.8	7.8	4.8	12.7	3.4	5.5	9.3	187.0
4	7.9	8.2	9.2	11.2	13.8	14.6	12.3	8.4	3.5	3.2	3.0	4.9	6.8	7.6	7.1	7.0	7.4	7.9	7.6	8.4	6.8	6.5	8.6	8.3	7.9	4.9	14.9	3.2	5.3	11.7	190.2
5	7.9	7.5	8.7	10.5	12.2	11.8	9.7	7.2	5.0	4.4	5.2	5.0	6.0	6.2	5.8	5.8	6.2	6.6	7.4	7.6	7.9	8.3	8.5	8.2	7.5	5.3	12.6	3.7	5.8	8.9	179.6
6	7.8	8.3	9.2	10.7	12.8	13.1	11.5	8.0	5.0	3.6	3.8	5.5	6.3	7.0	7.2	9.2	9.2	10.9	8.7	8.4	9.0	9.2	9.2	9.2	8.4	5.0	13.4	2.8	5.6	10.6	202.8
7	8.5	8.3	7.0	8.7	11.2	11.4	10.2	7.6	5.7	5.2	5.0	6.1	6.3	7.5	9.4	8.3	7.9	9.9	10.7	12.0	11.4	10.8	9.4	8.9	8.6	7.3	12.8	4.5	5.7	8.3	207.4
8	7.8	9.3	8.8	10.1	11.7	11.0	9.2	6.4	5.2	4.6	5.0	5.9	8.2	7.4	7.6	7.4	7.6	8.0	9.3	8.7	8.4	8.4	7.6	7.2	8.0	4.7	12.2	3.4	5.5	8.8	190.8
9	8.7	9.3	10.0	11.4	12.3	11.4	9.4	6.5	4.6	1.0	5.0	5.5	5.9	7.2	6.6	8.4	8.5	8.1	11.3	8.5	7.1	7.8	7.6	7.6	7.9	4.7	12.6	3.7	5.6	8.9	189.7
10	8.2	8.1	8.5	10.0	11.0	11.7	10.1	7.8	4.6	4.9	5.1	6.0	6.7	7.1	7.1	7.1	7.2	7.3	7.4	7.6	7.7	7.6	7.5	7.4	7.6	4.9	12.0	3.8	5.4	8.2	183.7
11	7.8	8.0	7.9	9.5	10.9	11.8	10.0	7.2	5.4	4.7	4.8	5.4	5.6	6.4	8.0	8.4	7.8	8.4	9.2	9.7	12.8	13.9	13.0	10.0	8.6	7.7	14.9	4.3	5.7	10.6	206.6
12	10.2	9.1	7.9	11.2	10.9	12.1	11.3	9.2	8.2	6.3	7.1	7.1	7.3	8.4	9.6	10.4	12.9	12.3	11.6	9.2	8.5	8.5	8.5	8.4	9.4	5.0	14.7	5.6	5.6	9.1	226.2
13	8.1	9.1	8.8	10.7	12.5	12.9	11.4	8.7	5.5	1.0	3.9	5.3	7.0	7.6	7.7	8.0	8.7	8.8	8.9	8.5	8.6	7.9	8.5	9.9	8.2	4.9	13.3	3.7	5.6	9.6	198.0
14	9.7	9.7	10.4	12.8	14.4	13.5	10.9	7.8	5.5	4.0	3.8	4.3	5.4	6.5	6.7	7.6	8.0	8.4	9.8	8.8	8.7	8.7	9.0	8.5	8.4	4.8	14.7	3.7	5.8	11.0	202.9
15	9.2	8.6	9.2	12.0	14.0	13.5	10.5	8.2	6.0	3.7	3.9	5.1	5.2	7.1	7.8	9.5	9.9	9.0	11.0	9.6	9.2	10.0	7.9	7.1	8.6	4.8	14.9	3.0	5.7	11.9	207.2
16	8.7	9.2	10.5	13.0	14.0	12.6	9.1	6.9	3.9	1.9	6.1	4.4	4.9	5.3	7.0	6.4	6.4	7.1	7.1	7.4	7.5	7.8	7.8	7.7	7.6	4.7	14.4	0.1	5.6	14.3	182.7
17	5.7	7.1	8.5	10.2	13.8	12.3	11.8	9.3	6.2	4.5	4.6	4.5	7.6	7.1	6.5	7.1	10.3	12.4	11.7	9.7	9.1	8.6	9.2	9.0	8.6	4.9	15.9	2.9	5.6	13.0	206.8
18	8.9	9.3	10.2	12.3	13.4	13.4	12.4	8.6	4.4	3.3	3.8	4.8	6.5	7.2	7.2	7.9	9.1	11.0	9.3	8.1	7.7	8.0	8.0	7.7	8.4	4.8	14.1	3.1	5.6	11.0	202.5
19	8.0	8.2	9.0	11.6	14.4	15.4	13.7	10.4	5.8	3.6	2.6	3.6	5.3	6.6	6.1	6.3	6.6	6.6	6.6	7.0	6.0	8.4	5.1	9.3	7.8	5.0	15.3	3.0	5.8	12.3	186.2
20	10.6	8.8	6.2	11.0	13.6	14.8	13.1	10.4	6.3	3.8	3.3	4.3	6.1	7.1	7.1	7.2	8.7	11.7	11.5	11.0	10.8	10.2	13.2	12.2	9.3	4.9	15.3	3.0	5.8	12.3	223.0
21	11.0	10.2	9.5	10.8	12.0	13.2	12.3	10.2	6.0	3.6	2.7	4.3	5.5	6.4	7.0	6.5	7.1	8.0	8.2	8.7	9.3	8.9	7.6	8.7	8.2	5.0	14.0	2.4	5.8	11.6	197.7
22	8.6	8.4	7.9	10.9	12.8	13.9	12.4	9.5	6.3	4.5	3.3	4.2	6.3	7.1	7.8	8.1	8.5	7.8	8.0	9.2	8.7	8.7	9.4	9.2	8.4	5.0	14.3	2.9	5.8	11.4	201.5
23	8.3	7.9	8.8	11.4	13.3	13.1	10.8	7.1	3.8	2.7	2.0	3.3	4.9	5.7	6.0	6.9	7.7	8.7	10.2	12.7	15.8	18.4	16.8	17.9	9.3	7.6	19.4	1.3	5.7	18.1	224.2
24	18.5	10.4	14.7	13.8	8.1	9.2	10.1	11.5	10.8	11.3	13.6	12.6	12.6	12.0	11.0	10.0	10.2	10.3	10.5	10.9	10.9	10.9	10.8	10.7	11.5	1.0	19.4	7.6	4.8	11.8	275.4
25	10.7	11.2	11.6	13.1	14.7	13.9	11.9	9.8	6.6	5.0	3.4	5.7	7.4	8.2	11.0	9.9	10.3	10.6	10.4	9.9	9.7	8.7	7.4	6.7	9.5	4.8	15.2	2.4	5.8	12.8	227.8
	8.6	8.3	11.0	13.8	15.8	16.4	13.3	8.6	4.8	2.9	3.7	6.3	7.9	8.2	10.8	10.2	9.7	10.7	8.7	8.4	8.3	7.8	6.9	6.7	9.1	4.9	16.8	2.4	5.7	14.4	217.8
	7.4	8.6	9.9	12.3	14.4	13.6	11.0	7.6	4.2	5.8	2.8	4.3	6.5	8.1	8.1	8.2	7.6	7.6	7.6	8.0	7.9	7.9	7.9	7.8	8.4	4.8	15.0	1.6	5.7	13.4	195.1
	7.6	7.5	7.7	9.7	12.5	14.2	12.6	8.6	3.8	2.4	3.2	4.7	6.2	7.1	8.2	8.0	9.0	9.2	7.6	7.1	7.2	7.6	7.6	7.8	7.8	5.0	14.4	1.9	5.6	12.5	187.1
	7.9	7.9	8.7	10.5	13.4	13.5	10.5	6.7	4.5	1.0	4.8	6.2	7.6	8.4	9.1	10.5	10.0	9.6	8.3	7.9	7.5	7.4	6.1	5.9	8.1	4.8	14.1	3.9	5.5	10.2	193.9
	8.3	9.4	10.8	13.9	14.9	13.9	10.3	6.0	3.8	3.6	4.7	6.3	7.1	7.5	7.1	6.9	6.9	8.1	10.7	10.1	7.9	5.4	6.3	8.5	8.3	4.6	15.3	3.0	7.6	12.3	198.4
	9.1	8.8	9.0	11.0	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	3.5	5.0	6.3	6.5	6.4	8.0	9.3	8.7	8.5	7.4	8.0	5.4	4.7	12.3	2.3	5.8	10.0	130.1
	8.8	8.7	9.3	11.3	12.9	13.0	11.1	8.2	5.2	4.0	4.5	5.4	6.7	7.4	7.8	7.8	8.5	8.9	9.2	9.0	8.8	8.8	8.6	8.6	8.4	4.7	14.5	3.1	11.4	202.5	
	274.1	270.8	288.0	351.2	387.1	390.2	332.9	245.3	156.6	120.0	134.3	166.7	208.1	229.4	240.5	247.9	262.4	275.0	287.8	277.7	272.9	274.1	265.6	266.0	258.9	157.3	450.2	96.1	176.3	354.1	6221.6

Ведомство АН. Каз. ССР  
 Обсерватория Н. Казалинск

Широта 45°46' Долгота 62°07'

Элемент Горизонтальная составляющая "H"

Месяц март Год 1969

H = 22620 Амл +  $\delta H = 1.03 \Delta m, H_0 = 22637.0 \Delta m$

Дни	Время																	Средн. суточн.	Время макс		Время мин		Ампл									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		19	20	21	22		23	макс	мин	макс	мин				
1	46	41	42	35	22	21	23	21	24	39	46	49	52	57	59	57	46	55	41	46	52	56	58	60	43	240	66	9	68	57	1048	
2	71	57	47	43	41	29	19	16	22	29	39	45	45	47	51	52	52	56	56	55	56	56	58	45	186	59	15	73	44	1098		
3	56	57	57	56	47	41	35	37	43	48	47	56	59	60	59	59	62	59	57	57	57	59	58	59	53	162	64	33	68	31	1285	
4	60	61	62	62	58	48	39	38	43	50	55	59	62	61	62	63	64	64	70	70	77	97	84	68	61	218	110	37	70	73	1477	
5	64	67	70	67	67	63	62	61	71	72	68	64	48	58	65	63	68	70	68	68	68	67	66	67	65	95	76	42	127	34	1570	
6	66	64	67	66	67	58	45	43	47	50	41	44	57	62	63	54	55	64	61	61	57	67	58	56	57	179	96	30	109	66	1377	
7	58	58	68	65	41	47	37	37	41	47	63	65	58	40	31	38	52	61	65	42	49	44	45	44	49	179	87	21	140	66	1196	
8	41	51	54	53	43	36	31	33	38	36	45	46	53	57	55	55	56	57	55	56	58	53	60	66	49	232	73	28	62	45	1188	
9	58	65	58	65	53	38	30	36	35	32	45	55	52	38	39	45	54	56	62	57	64	60	58	61	50	185	71	29	92	42	1216	
10	60	62	64	65	68	70	60	62	52	44	56	59	58	60	60	60	62	64	65	66	66	64	62	62	61	57	71	40	94	31	1471	
11	62	64	66	72	77	73	68	67	57	52	52	34	23	28	31	46	56	56	59	89	97	65	55	52	58	195	113	1	128	112	1401	
12	58	44	29	32	24	2	2	4	2	2	1	23	27	21	24	19	36	36	36	46	43	41	42	43	26	197	60	43	61	17	637	
13	45	39	42	46	47	42	35	27	32	38	43	41	46	50	49	52	47	43	55	53	53	64	62	51	45	219	76	25	77	51	1102	
14	52	56	63	56	44	39	30	28	26	36	42	46	53	55	53	48	47	52	65	61	60	71	59	57	49	211	80	23	82	57	1199	
15	56	61	48	46	36	21	13	12	9	15	25	23	23	0	14	10	16	40	38	47	46	41	48	56	31	12	65	30	87	35	744	
16	49	49	51	48	37	24	19	11	5	10	19	52	48	46	52	59	59	66	66	66	62	61	63	62	45	171	69	1	99	68	1084	
17	74	65	74	68	47	20	18	26	34	33	33	46	21	18	35	44	39	19	19	34	55	62	39	41	40	208	77	7	128	70	964	
18	43	46	47	44	35	31	14	7	15	44	35	41	42	45	46	48	49	53	50	57	57	57	55	58	42	234	63	2	70	61	1019	
19	57	60	61	59	55	52	48	36	31	45	57	41	42	45	46	64	64	68	73	74	97	78	97	60	58	200	113	27	83	86	1410	
20	60	44	57	45	43	27	1	31	18	23	32	46	43	40	41	47	36	25	23	32	35	45	56	41	37	224	61	36	73	25	891	
21	37	36	48	52	44	30	31	15	30	32	37	35	44	48	47	48	54	55	55	56	55	52	65	54	44	221	73	23	75	50	1060	
22	55	55	56	48	53	53	54	42	31	32	38	47	46	38	38	38	41	47	52	47	63	60	60	57	47	201	67	25	94	42	1151	
23	57	56	55	56	48	44	40	37	38	49	70	70	65	70	56	45	66	66	78	34	29	-18	-43	-53	42	185	99	-71	18	170	1015	
24	-10	-57	-76	-50	-101	-99	-97	-67	-63										-12	-10	-9	-8	-5	-3	-43	244	30	-124	55	157	-911	
25	-10	2	12	12	8	8	10	-5	8	-1	26	21	19	4	-3	1	5	22	25	26	25	26	34	37	13	227	51	-9	7.9	60	312	
	28	25	28	25	16	8	14	22	25	32	28	21	28	34	33	33	37	35	40	41	43	44	49	49	30	229	55	28	55	27	738	
	53	49	52	48	38	30	32	33	32	37	41	46	46	44	46	46	48	52	53	58	57	55	56	56	46	122	61	26	58	35	1108	
	56	57	59	61	57	51	49	53	58	49	58	57	58	56	53	53	52	53	55	59	62	62	62	64	56	209	66	45	63	21	1354	
	65	66	68	67	57	51	46	47	46	45	53	56	53	44	50	38	46	53	51	54	57	53	57	63	53	237	69	35	154	34	1286	
	64	45	48	49	29	22	28	39	49	55	60	57	54	52	52	56	60	67	75	54	56	76	77	66	53	213	100	21	53	79	1290	
	59	55	51	56							63	61	56	52	59	84	80	96	74	59	55	59	58	63	63	179	101	46	207	55	1077	
	51	48	49	48	40	32	27	28	29	37	43	46	42	41	41	44	48	51	53	52	55	53	53	50	44		75	17	58		1061	
	1590	1500	1528	1517	1201	980	836	849	899	1045	1255	1408	1319	1276	1301	1373	1491	1582	1652	1624	1714	1665	1652	1570	1368		2322	524	1798	32857		

— погасла лампа; > или < — запись вышла за бумагу; — остановился час; Δ — иные значения. Величины, взятые приближенно с магнитограммы — ( ).

Ведомство АН. Каз. ССР  
 Обсерватория Н. Козаминск

Широта 45°46' Долгота 62°07'

Среднемесячн. 6°46'30"

Элемент Склонение D

Месяц апрель Год 1969

D = 6°30'00" +  $\delta_D = 0.152/\text{км} \cdot D_0 = 6°36'30"$

Дни	Время микровсек																	Средн. суточн.	Время макс	Мин	Время мин	Матр.									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17														
1	10.3	10.4	11.6	14.5	16.0	16.0	13.4	9.3	5.7	8.8	4.1	4.6	6.4	8.6	8.0	9.0	9.9	14.8	12.7	14.0	14.0	13.7	10.9	11.6	10.8	4.6	16.5	3.3	9.8	13.2	2583
2	11.6	11.4	12.3	14.1	15.2	14.5	11.8	7.9	5.5	4.0	4.2	6.6	8.5	9.7	9.0	9.8	11.8	13.9	12.2	10.3	11.4	15.0	14.4	12.4	10.7	21.6	15.9	3.5	10.4	12.4	2575
3	11.1	11.4	13.0	15.0	16.3	15.6	12.7	8.0	4.0	2.0	3.7	0	9.2	10.2	10.1	10.0	11.2	11.4	11.6	9.7	12.1	11.1	10.1	11.4	10.0	5.0	16.9	1.7	9.3	15.2	2409
4	11.1	10.9	11.8	15.5	16.9	17.3	15.1	10.2	6.8	5.7	6.2	8.2	10.3	10.6	9.7	10.0	9.8	9.7	10.2	9.9	10.9	12.1	11.9	11.2	10.9	5.1	17.9	5.3	9.5	12.6	2620
5	10.8	11.1	13.1	15.6	16.9	16.0	12.5	7.3	4.3	3.0	4.7	7.5	9.7	10.3	9.8	10.1	10.3	10.5	10.9	10.1	10.5	10.7	11.1	10.9	10.3	5.1	17.4	2.6	9.6	14.8	2477
6	10.3	10.7	12.3	14.4	15.8	14.5	10.7	10.4	4.3	3.4	4.4	0	8.0	9.0	9.3	9.0	10.1	10.0	10.2	10.9	12.4	10.8	9.2	10.5	9.6	4.7	16.1	3.3	9.8	12.8	2306
7	10.6	9.5	12.3	13.9	15.8	14.5	11.4	9.5	6.3	4.8	5.1	6.1	5.9	7.8	9.6	10.3	9.8	10.6	13.4	10.6	11.5	10.7	10.8	10.9	10.1	5.0	16.6	4.4	9.1	12.2	2417
8	10.5	11.1	12.6	14.7	16.2	16.1	13.4	10.2	7.4	5.9	6.2	7.2	8.3	9.5	9.3	9.3	9.3	9.3	9.5	10.1	10.7	10.3	10.7	11.1	10.4	4.9	16.8	5.4	9.8	11.4	2489
9	11.1	11.5	12.5	14.5	16.4	15.3	12.3	8.0	4.3	3.3	3.1	5.9	7.8	9.4	10.8	12.1	12.0	12.6	13.1	13.3	10.3	11.6	11.0	11.4	10.6	4.7	16.6	2.9	9.7	13.7	2536
10	11.5	11.8	12.3	13.4	14.5	14.1	12.6	10.1	6.4	4.0	3.3	4.7	6.0	7.6	9.3	9.3	10.8	12.7	12.2	11.4	11.3	11.9	11.9	12.1	10.2	4.2	14.8	9.5	10.2	5.3	2452
11	12.0	11.1	12.4	14.5	16.6	15.4	12.6	9.2	4.4	3.3	4.4	5.3	6.9	7.2	7.9	9.2	9.6	9.8	9.8	10.1	10.0	10.1	10.1	10.2	9.7	4.2	17.3	2.9	8.8	14.4	2321
12	10.4	10.8	12.1	14.0	16.0	15.6	12.2	8.1	6.1	5.4	5.8	6.9	7.2	8.0	7.5	7.9	8.5	8.8	9.5	9.7	9.3	8.4	10.0	8.8	9.4	5.1	16.4	5.2	9.8	11.2	2270
13	8.1	10.3	11.6	14.4	16.1	16.3	13.1	7.8	4.7	3.3	3.6	5.3	7.8	9.6	9.4	9.5	10.8	10.1	13.9	14.8	13.5	13.8	13.9	13.4	10.6	5.4	17.4	2.3	10.1	15.1	2551
14	13.4	13.2	12.9	16.3	18.4	18.5	15.0	10.3	9.7	5.4	5.5	9.7	9.3	9.7	9.1	8.8	9.0	9.8	10.2	11.3	11.1	10.6	12.7	12.4	11.3	5.0	19.5	5.0	9.9	14.5	2723
15	10.9	12.1	14.5	16.7	18.2	16.8	13.9	9.7	0	2.8	3.0	5.1	7.6	8.5	8.9	8.6	9.1	9.3	9.8	10.9	9.8	10.6	10.1	10.3	9.9	4.4	19.1	2.3	9.5	16.8	2372
16	10.6	11.6	13.3	15.4	16.9	16.9	14.8	9.7	1.7	2.0	8.3	7.9	8.0	8.3	8.0	7.5	10.3	10.9	10.9	10.9	11.3	10.9	11.5	11.6	10.4	4.5	17.6	0.7	9.7	16.9	2492
17	9.5	11.2	11.8	14.5	16.9	16.8	13.5	9.7	7.0	4.9	5.2	7.9	6.9	9.2	11.0	11.4	11.9	11.8	12.4	12.6	11.8	11.9	10.3	11.6	10.9	5.0	17.3	5.7	9.5	11.6	2617
18	10.6	9.9	11.4	11.5	13.9	13.7	12.1	7.8	5.9	5.2	5.2	6.2	7.4	8.5	8.9	9.2	9.3	9.3	9.8	10.1	10.9	10.8	10.1	11.0	9.5	4.5	14.5	4.2	10.1	10.3	2287
19	11.6	11.8	13.2	15.3	16.1	15.8	13.9	10.8	7.8	6.2	6.0	6.2	7.5	9.2	9.5	8.8	9.2	9.4	9.7	9.9	10.6	9.8	10.6	11.1	10.4	4.6	16.3	5.9	10.1	10.4	2500
20	10.5	10.9	12.9	14.7	15.0	13.5	10.7	7.7	5.0	4.1	4.4	3.6	6.7	6.9	7.2	7.6	8.0	8.5	9.8	10.8	11.3	12.1	13.0	12.1	9.4	4.0	15.5	3.4	9.8	12.1	2270
21	10.3	11.1	12.5	13.9	14.8	14.2	11.9	9.0	5.9	4.1	3.6	4.8	5.9	7.2	7.6	7.7	8.0	8.3	8.5	9.0	9.1	9.4	9.0	8.9	8.9	4.8	15.0	3.0	10.3	12.0	2147
22	9.5	10.9	11.9	12.9	13.4	11.9	9.8	7.4	4.9	4.7	5.5	6.7	7.2	7.9	9.5	8.2	8.5	8.9	8.9	9.3	9.7	9.3	9.5	10.5	9.0	4.1	13.6	4.1	9.0	9.5	2169
23	11.1	11.8	12.2	13.2	13.7	12.3	9.0	6.9	3.6	3.0	4.1	5.5	7.5	7.4	8.9	8.3	8.9	8.5	8.9	9.1	9.2	10.0	9.9	10.1	8.9	4.2	14.3	2.7	9.9	11.6	2131
24	11.0	11.0	9.9	11.9	13.7	14.3	12.2	9.3	5.3	3.8	4.1	5.1	6.5	7.5	8.0	8.5	9.0	8.8	9.3	9.7	7.9	10.0	10.0	9.3	9.0	5.3	14.8	3.2	9.5	11.6	2161
25	14.5	9.3	11.4	13.7	15.5	16.0	14.5	11.3	7.7	5.4	4.9	6.9	6.8	8.1	9.8	10.3	9.3	9.2	9.2	9.5	9.5	9.8	9.3	9.8	10.1	4.7	16.3	4.6	10.7	11.7	2417
26	9.8	10.5	11.3	12.7	13.5	12.7	10.7	8.2	5.5	4.7	5.0	5.7	7.7	8.5	9.2	9.7	9.4	9.6	11.3	10.8	10.1	9.8	9.8	9.8	9.4	4.6	13.7	4.7	9.3	9.0	2260
27	9.9	8.5	9.2	12.1	13.5	13.2	11.8	9.5	6.9	5.5	5.7	5.4	5.9	8.1	9.7	9.3	9.1	9.2	9.8	9.3	9.5	9.6	9.8	9.8	9.2	4.7	13.7	5.1	9.5	8.6	2203
28	10.1	10.9	10.3	12.8	14.5	15.8	12.7	10.5	6.0	6.2	5.1	7.9	7.3	12.7	15.6	12.7	11.3	11.4	11.8	18.3	12.1	12.1	12.2	11.9	11.3	14.1	19.0	3.3	10.4	15.7	2722
29	12.3	13.3	13.5	14.1	14.0	12.2	9.3	5.8	4.1	4.2	4.7	5.7	6.3	5.4	4.9	8.8	9.8	9.9	10.3	11.9	12.9	12.2	12.4	10.8	9.5	4.2	14.5	3.3	8.5	11.2	2288
30	11.4	12.8	13.9	13.7	12.2	12.8	7.9	5.9	4.5	5.4	6.2	7.0	8.5	12.1	13.8	13.1	10.8	10.1	10.0	10.2	10.9	10.0	9.7	10.9	10.1	15.0	17.3	4.1	8.9	13.2	2438
31	10.9	11.1	12.2	14.1	15.4	14.9	12.2	8.8	5.4	4.5	4.8	5.8	7.5	8.7	9.3	9.5	9.8	10.2	10.7	10.9	10.8	11.0	10.9	10.9	10.0	10.7	16.3	3.9	12.4	12.4	2403
Средн. по мес.	3264	3328	3660	4239	4629	4486	3675	2655	1617	1345	1453	1756	2250	2627	2793	2810	2948	3021	3198	3285	3256	3291	3259	3278	3005	488.6	117.6	371.0	72203		

Обработал Средина Проверил Сеньковская

Условные обозначения:  $\Delta$  — погасла лампа;  $>$  или  $<$  — запись вышла за бумагу;  $\square$  — остановились часы;  $\bar{\Delta}$  иные значения. Величины, взятые приближенно с магнитограммы — 1.

Ведомство АН. Каз. ССР

Широта 45°46' Долгота 62°07'

Обсерватория Н-Казалинск

Элемент Горизонтальная составляющая "H"

Месяц апрель Год 1969

H = 22620  $\mu\text{m}$

$E_H = 1.03 \mu\text{m} H = 22636 \mu\text{m}$

Дни	Прямой ход																	Средн. суточн.					Время max	max min	Время min	Ампт.	Сумма				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23									
1	60	64	67	58	46	43	50	55	53	52	61	62	46	45	53	49	56	47	47	64	62	55	56	55	54	203	80	33	180	47	1306
2	53	53	52	52	47	37	33	38	44	53	55	52	48	47	48	53	54	39	36	56	67	43	36	45	47	205	70	29	183	41	1141
3	42	31	32	32	25	14	11	17	33	46	50	51	43	40	42	43	52	49	41	62	48	43	53	46	39	193	74	8	63	66	946
4	48	51	48	40	24	14	8	15	15	20	28	39	39	46	50	52	48	53	56	67	57	53	45	45	40	197	82	6	65	76	961
5	49	50	51	46	30	17	6	14	32	42	52	58	55	51	52	49	53	54	55	57	58	60	52	42	45	195	64	0	68	64	1085
6	55	57	54	49	40	28	29	34	43	59	62	63	61	61	58	56	62	65	61	74	52	55	70	62	54	191	85	25	59	60	1310
7	52	47	55	48	38	17	23	23	38	40	44	44	38	37	35	54	46	40	57	64	41	48	49	53	43	191	83	7	63	76	1031
8	49	55	58	56	48	36	36	38	45	51	52	57	59	54	56	56	58	58	61	60	61	60	64	58	53	220	72	33	59	39	1284
9	59	60	62	61	55	47	42	50	56	45	38	35	32	26	25	26	28	40	48	49	61	55	51	52	46	205	65	22	139	43	1103
10	53	55	59	61	63	55	42	41	47	44	43	45	49	53	47	51	56	55	49	56	54	53	52	51	51	163	59	37	62	22	1234
11	52	58	63	61	52	41	35	29	39	43	46	36	43	53	52	52	55	58	60	60	62	62	61	58	51	193	64	23	75	41	1231
12	59	59	61	62	57	45	39	49	67	74	77	73	70	65	63	63	64	67	64	65	69	80	84	78	65	208	112	37	61	75	1554
13	77	78	78	75	63	39	22	30	61	77	77	69	64	58	48	40	41	51	27	26	41	51	39	37	53	102	64	19	63	45	1269
14	29	30	39	30	24	0	31	29	42	59	60	49	48	46	52	53	53	53	57	61	59	55	50	44	44	186	64	16	53	48	1053
15	48	43	47	43	25	17	19	26	25	46	52	39	35	41	44	47	56	60	63	64	60	60	63	61	45	192	70	15	57	55	1084
16	61	62	61	60	52	39	23	27	44	60	58	52	39	55	56	56	62	67	58	59	67	72	67	57	54	197	76	32	68	44	1314
17	63	70	67	56	46	30	22	32	34	58	60	52	41	24	39	49	41	40	57	41	44	45	54	47	46	97	63	0	60	63	1112
18	51	56	43	34	34	24	18	36	53	63	61	58	51	52	50	51	50	55	55	57	38	54	61	53	47	100	68	13	60	55	1148
19	52	52	55	52	45	39	40	52	66	70	68	63	61	58	52	56	56	57	60	64	58	59	59	54	56	92	71	37	61	34	1348
20	57	59	58	52	41	34	32	46	61	67	67	69	68	63	66	69	72	74	73	75	67	60	46	48	59	197	78	30	65	48	1424
21	58	64	61	59	54	47	49	52	58	64	71	70	69	68	66	66	67	70	73	72	74	74	78	29	63	240	96	30	58	66	1513
22	91	100	102	102	98	99	88	55	77	78	79	71	69	70	65	67	70	69	69	72	70	69	66	65	78	53	103	40	71	63	1861
23	67	68	68	64	54	42	37	47	66	78	78	75	71	59	62	69	71	72	74	73	71	77	73	73	66	101	86	35	61	51	1589
24	73	73	77	82	51	54	54	44	50	67	74	76	77	78	79	74	74	77	76	77	76	75	75	73	70	223	83	42	65	41	1686
25	72	73	73	74	67	56	51	59	71	76	71	67	66	64	58	59	61	66	68	67	67	67	68	65	66	91	79	46	64	33	1586
26	67	70	68	70	66	63	63	63	77	81	76	81	76	65	65	68	64	66	67	73	65	66	64	69	69	93	82	63	72	19	1653
27	71	75	77	72	71	64	57	61	73	78	63	61	68	63	54	58	64	71	83	92	82	88	88	87	72	187	113	52	110	61	1421
28	85	89	90	101	95	65	40	26	5	26	10	9	-5	12	-34	-5	26	30	24	27	27	21	25	28	34	46	103	-45	142	148	817
29	32	32	32	33	32	20	17	35	52	54	58	55	54	52	45	46	42	45	46	58	42	40	45	60	43	20	82	38	65	44	1027
30	44	41	37	29	18	4	12	37	43	40	47	44	44	29	32	40	38	42	52	53	38	44	46	41	37	190	66	-4	59	70	895
31	58	59	60	57	49	38	34	39	49	57	58	56	53	51	49	52	55	56	57	62	58	58	58	55	53		79	24	55		
Средн. по мес.	729	775	795	714	461	1130	1029	1160	1470	1711	1738	1645	1579	1535	1480	1567	1638	1690	1717	1845	1738	1744	1730	1636			2357	719	1638	38286	

Среднемесячи. 64580<sup>1</sup> шт.

Ведомство АН. Каз. ССР  
 Обсерватория Н.Казанск  
 Месяц май Год 1969

Широта 45°46' Долгота 62°07'

Элемент Склонение D  
D = 6°30'00" + δD = 0.162<sup>1</sup>/мм D = 6°36'60"

Дни	Время мильон																	Средн. суточн.	Время max	Max	Min	Время min	Д.м.п.								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17														
1	11.9	12.5	13.4	14.3	15.0	13.0	11.6	9.1	6.5	5.2	5.1	6.1	8.3	9.6	9.7	10.4	10.0	9.9	10.6	10.1	10.1	11.2	11.0	11.3	10.2	4.5	15.1	4.8	9.5	10.3	2459
2	11.8	13.0	14.6	15.6	15.1	13.1	10.3	1.0	4.1	4.1	4.7	5.9	7.5	8.4	8.9	9.4	9.9	10.4	10.1	12.6	11.9	8.4	10.1	10.4	9.6	4.1	15.9	3.4	8.7	12.5	2304
3	11.2	12.1	13.5	14.5	16.2	16.3	12.7	10.3	7.8	5.7	5.5	6.5	6.4	8.5	9.6	10.9	12.2	11.6	11.1	10.9	10.4	9.8	10.7	10.9	10.5	5.2	16.8	4.7	9.9	12.1	2553
4	10.5	12.0	13.0	14.7	15.6	13.9	11.5	8.2	5.2	3.9	4.1	4.2	5.4	6.0	9.2	9.7	9.7	10.1	11.2	10.9	10.5	10.6	10.8	10.6	9.6	4.2	15.7	3.6	9.7	12.1	2315
5	9.6	10.2	12.0	13.8	14.3	13.7	11.7	8.2	5.5	4.2	4.1	4.7	6.9	9.0	9.4	9.0	9.2	9.4	10.0	9.6	10.2	10.5	11.1	9.7	9.4	4.3	14.6	3.7	10.0	10.9	2260
6	10.4	11.7	13.2	14.0	13.5	13.2	11.2	8.5	6.2	4.2	3.3	4.0	7.5	7.9	8.9	9.0	9.3	9.6	10.3	10.4	10.3	10.4	10.4	10.9	9.5	5.0	14.3	3.2	10.6	11.1	2283
7	10.4	11.0	12.8	13.5	14.2	13.4	11.2	8.5	6.7	4.9	4.5	4.7	5.7	7.3	8.2	8.0	8.4	8.7	9.0	9.1	9.5	9.6	9.8	9.8	9.1	4.4	14.4	4.4	10.9	10.0	2189
8	10.1	10.9	11.9	13.0	14.1	13.4	12.7	9.8	0	5.2	4.8	4.9	5.6	6.4	8.9	8.4	8.1	8.5	9.3	9.6	9.6	9.5	9.1	8.9	8.9	4.9	14.3	4.5	10.6	9.8	2132
9	9.6	10.8	12.7	14.2	13.7	13.5	12.8	10.2	1.0	5.1	4.1	4.2	6.2	7.8	8.8	9.1	9.2	9.1	9.3	9.5	10.3	9.3	10.4	11.1	9.2	3.9	14.5	4.8	10.6	9.7	2211
10	10.4	11.8	13.0	13.0	12.3	11.7	10.6	8.3	5.9	4.8	4.9	5.8	6.9	8.3	9.5	9.6	9.1	9.9	10.1	9.9	10.0	10.9	10.1	9.8	9.4	2.8	12.3	4.4	10.3	7.9	2266
11	10.4	11.8	13.1	14.4	14.3	12.3	9.3	5.4	3.3	3.4	5.7	4.9	6.7	8.4	9.1	8.9	9.0	9.0	9.2	9.2	9.6	9.5	9.8	10.3	9.1	3.8	14.8	2.4	9.8	12.4	2175
12	11.6	13.5	15.0	15.6	14.2	12.2	10.3	8.0	5.7	5.4	6.7	1.0	7.2	7.6	7.5	7.7	7.8	8.4	8.3	9.0	10.0	8.5	7.3	8.1	9.0	3.5	15.8	4.4	9.3	11.4	2157
13	10.4	12.0	12.9	14.2	15.3	12.5	11.7	10.1	6.5	5.3	7.9	5.8	7.8	9.3	9.1	11.5	13.5	11.3	11.6	13.0	13.5	13.8	12.7	12.4	11.1	3.6	17.8	4.9	10.0	12.9	2671
14	12.9	12.2	11.9	13.4	14.7	14.3	11.5	7.9	5.4	4.6	4.9	5.4	6.9	8.4	9.8	11.7	11.1	10.1	10.4	8.3	10.8	13.0	17.6	16.6	10.6	22.7	20.7	4.2	9.1	16.5	2538
15	15.3	18.4	17.9	12.5	15.7	16.4	12.8	8.0	6.4	4.2	6.1	6.1	11.3	11.8	14.2	15.5	18.5	16.9	16.2	18.3	16.3	15.8	14.3	16.5	13.5	22.0	22.1	-1.5	10.8	23.6	3254
16	9.3	11.2	12.9	15.7	14.4	15.9	13.4	10.6	9.3	8.8	9.9	8.7	10.9	9.6	10.0	9.8	9.6	10.0	10.4	11.0	10.1	9.6	10.3	11.1	10.9	5.7	16.8	8.0	11.0	8.8	2625
17	12.2	13.5	13.5	14.2	15.1	13.9	11.6	9.2	6.9	4.8	4.7	5.8	7.7	9.5	9.5	9.6	10.0	9.7	10.1	10.5	10.9	11.5	12.1	12.9	10.4	4.6	15.5	4.4	10.4	11.1	2494
18	13.4	11.5	13.0	14.9	15.5	14.7	12.6	9.0	6.2	4.1	4.4	8.0	1.0	8.5	9.3	8.8	8.5	7.5	10.1	11.4	11.0	10.4	10.6	10.4	9.7	3.4	15.6	2.9	10.0	12.7	2339
19	10.8	12.8	14.2	15.6	16.1	15.0	12.3	8.3	6.2	4.4	3.5	4.1	6.0	8.7	10.4	9.8	9.4	9.6	10.2	10.4	10.7	11.2	10.7	10.9	10.0	5.9	16.3	4.0	10.1	12.3	2413
20	10.8	11.3	12.9	14.7	15.8	15.6	12.8	9.5	6.4	4.5	4.1	4.7	5.6	7.8	10.1	10.0	9.6	9.9	10.1	9.9	9.3	9.8	9.7	9.6	9.8	23.3	16.3	4.1	10.5	12.2	2345
21	10.3	11.3	11.8	11.4	11.9	11.7	8.8	6.5	4.8	4.5	4.9	5.7	8.1	10.1	12.7	11.0	9.1	9.0	9.1	9.3	9.5	10.0	10.4	10.4	9.3	14.8	13.2	4.4	8.8	8.8	2223
22	11.9	14.1	16.4	17.2	15.9	14.3	11.9	8.8	6.2	4.9	4.7	4.4	8.9	10.9	10.8	10.1	9.1	9.3	8.8	9.5	9.8	10.4	9.9	10.1	10.3	4.0	16.7	6.1	10.8	10.6	2483
23	10.3	11.7	13.2	13.5	13.7	12.9	11.4	8.8	6.2	5.4	4.8	5.3	6.3	7.8	8.8	8.8	8.8	9.6	9.6	9.8	10.2	10.1	10.1	10.9	9.5	4.8	13.9	3.2	10.9	10.7	2280
24	10.8	12.3	13.7	14.1	15.5	14.2	11.6	7.5	5.7	4.7	3.7	9.0	6.4	9.4	10.0	10.4	8.8	8.9	9.0	9.6	10.9	10.4	9.8	9.7	9.9	4.5	15.8	2.4	10.6	13.4	2370
25	10.0	11.1	12.4	13.0	15.3	15.6	13.9	10.2	5.7	3.2	3.6	4.7	6.4	8.3	9.1	8.8	9.1	9.8	10.4	10.3	10.3	10.1	10.0	10.4	9.6	5.9	15.9	2.6	10.7	13.3	2317
26	10.8	11.6	12.7	15.5	14.7	13.8	11.2	7.6	5.5	4.2	4.9	6.3	7.5	8.5	10.3	8.7	8.5	8.7	9.5	10.1	10.0	9.7	9.8	10.4	9.6	5.9	14.8	3.7	10.2	11.1	2305
27	11.2	12.5	13.7	14.3	14.8	14.8	12.7	9.2	5.8	4.5	4.2	4.2	6.2	9.0	9.6	8.8	8.3	8.9	9.1	9.0	9.3	9.5	9.8	10.4	9.5	6.3	15.0	3.9	11.5	11.1	2298
28	11.2	12.5	13.8	14.2	14.8	14.7	11.6	7.8	4.5	3.4	4.4	5.0	6.5	8.3	9.6	9.1	10.4	10.1	9.3	9.6	10.0	10.6	10.2	10.9	9.7	6.1	15.5	2.9	9.4	12.6	2325
29	11.2	12.8	13.5	14.2	14.3	13.0	10.8	7.2	3.7	2.3	3.1	4.9	7.0	8.7	9.1	9.7	9.3	8.9	9.3	10.1	10.1	10.9	11.0	10.8	9.4	5.3	15.0	2.1	10.7	12.9	2259
30	10.7	12.2	13.4	13.9	14.3	13.0	9.6	6.1	3.6	2.8	3.1	4.4	6.9	8.4	9.4	9.6	11.2	9.6	8.8	9.1	10.2	9.9	11.4	11.2	9.3	4.8	14.5	2.7	10.7	11.8	2228
31	11.6	13.2	13.2	14.8	15.8	13.0	9.0	6.5	5.6	4.8	4.0	4.4	0	8.0	9.4	10.4	9.0	9.1	9.0	9.2	10.1	11.2	12.0	12.2	9.4	5.5	16.3	3.5	11.7	12.8	2255
Средн. по мес. (мм)	11.1	12.2	13.4	14.3	14.7	13.8	11.5	8.2	5.4	4.6	4.8	5.2	6.7	8.6	9.7	9.7	9.8	9.7	10.0	10.3	10.5	10.5	10.7	10.9	9.8	30.52	15.7	3.8	11.9	12.8	2365
Σ	3430	3795	4159	4449	4561	4290	3571	2534	1676	1120	1484	1629	3068	3667	3998	3022	3037	3015	3095	3192	3251	3261	3330	3396	3052	4862	1168	3694	73326		

Условные обозначения: Δ — погасла лампа; > или < — запись вышла за бумагу; □ — остановился час; — линии по линии отсутствия записи. Величины, взятые приближенно с магнитограммы — ( ).

Обработал Средина Проверил Сильковская



Ведомство ЯМ. Каз. ССР

Обсерватория Н-Козалинск

Широта 45°46' Долгота 62°07'

Элемент Склонение D

Месяц июнь Год 1969

D = 6°30'00" + 8D 0.163' / мм D 6°36'30"

Дни	Прям. амплит.																	Средн. суточн.				Апрель			Ампл.									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	23	Max	Max	Min	Max	Ампл.								
1	12.9	13.9	15.5	15.4	14.7	12.9	8.9	5.9	4.2	3.6	3.1	4.1	7.1	9.0	9.7	8.8	8.5	8.6	9.8	9.7	10.2	10.3	10.0	9.8	9.4	2.5	15.7	2.9	10.2	12.8	2266			
2	10.6	11.7	14.1	15.2	14.2	12.4	10.1	8.2	5.9	7.0	7.0	6.4	7.7	8.1	8.7	8.5	8.4	8.7	10.2	9.9	10.2	10.6	9.8	9.8	9.7	3.6	15.4	5.4	10.8	10.0	2334			
3	10.3	12.4	13.6	14.1	14.7	12.9	10.4	8.0	5.7	3.7	2.8	3.6	5.5	5.2	8.4	8.9	8.0	9.3	9.8	9.8	9.9	10.5	10.7	10.8	9.1	4.6	15.0	2.6	10.3	12.4	2190			
4	11.1	11.6	13.1	13.8	13.4	13.3	12.0	9.0	6.1	4.1	2.3	1.9	3.1	4.9	7.2	8.0	9.2	8.7	9.1	9.3	10.3	11.1	10.8	10.8	8.9	3.7	14.2	1.8	11.8	12.4	2142			
5	11.6	12.2	13.5	13.6	14.7	14.2	11.1	7.9	4.9	2.8	-0.3	3.3	4.5	6.9	6.7	8.2	8.4	8.4	8.6	9.3	9.8	10.5	10.3	9.9	8.8	4.8	15.2	-3.4	10.2	18.6	2110			
6	10.3	10.6	12.3	13.6	13.9	13.1	10.9	8.0	5.7	4.2	2.8	2.4	3.3	5.4	6.8	7.2	7.6	8.2	8.2	8.4	9.3	9.6	10.9	11.6	8.5	5.2	14.1	2.3	10.8	11.8	2043			
7	11.9	12.4	13.2	15.6	15.5	13.5	9.4	6.0	4.4	3.4	3.3	4.3	1.0	8.6	9.3	8.5	8.3	7.8	8.0	8.6	9.0	9.0	9.4	9.8	8.7	4.1	16.2	2.7	10.0	13.5	2102			
8	11.0	12.2	12.3	12.6	12.4	11.6	9.3	6.5	5.5	5.0	4.1	3.5	3.5	5.0	6.4	6.5	7.7	9.1	9.9	10.0	10.8	10.8	10.8	11.8	8.7	2.1	12.9	3.2	10.7	9.7	2083			
9	13.4	15.8	16.6	16.7	15.0	14.2	11.4	8.3	5.7	4.1	3.4	3.0	4.5	6.1	6.7	7.5	8.9	9.8	10.8	11.1	13.4	14.1	11.5	11.6	10.1	3.4	17.4	2.7	11.3	14.7	2436			
10	12.8	15.1	14.7	15.1	13.8	10.9	7.8	6.2	5.3	4.4	4.3	5.0	6.6	8.3	7.7	7.7	8.0	9.7	10.0	9.5	9.7	9.8	10.0	10.6	9.3	1.9	16.5	4.1	10.4	12.4	2230			
11	12.3	14.0	15.5	15.7	14.0	11.7	8.3	5.9	4.0	3.9	3.6	4.6	6.2	7.4	8.0	8.1	8.0	7.9	8.5	9.4	9.3	9.7	9.6	10.3	9.0	2.9	16.4	3.5	8.4	12.9	2159			
12	11.5	12.6	14.2	14.7	12.9	13.3	8.0	4.9	4.5	3.9	3.4	4.1	6.5	7.7	9.2	10.3	10.7	9.3	9.6	11.1	10.4	10.0	9.7	10.9	9.3	3.5	16.0	3.1	10.9	12.9	2234			
13	13.0	15.4	16.0	16.2	15.5	13.1	10.5	8.1	6.0	3.9	3.0	4.0	5.5	4.0	10.0	10.0	9.3	9.4	9.5	10.6	10.9	12.1	11.8	12.0	10.0	2.3	17.5	2.4	10.8	15.1	2398			
14	13.6	15.2	16.6	17.3	17.0	14.4	11.1	8.0	5.7	5.7	5.2	4.3	7.2	6.9	6.8	9.0	8.0	10.1	10.3	10.1	9.6	9.0	7.8	10.3	10.0	5.6	17.6	4.1	11.4	13.5	2392			
15	11.3	14.1	15.7	15.7	14.7	13.0	11.1	9.2	6.7	4.8	4.6	5.7	8.0	9.3	9.4	8.3	8.2	8.8	9.8	10.3	10.0	10.0	9.7	10.2	9.9	2.7	16.7	4.4	9.7	12.3	2386			
16	11.4	12.4	14.1	15.5	15.4	13.7	9.7	7.2	5.4	4.6	4.1	4.2	5.4	7.3	9.4	10.3	8.5	8.4	8.5	8.7	9.7	9.3	9.6	9.4	9.2	5.0	16.1	3.6	11.1	12.5	2222			
17	10.3	11.1	12.1	11.6	14.4	10.3	9.6	7.5	5.8	4.8	4.9	5.3	5.9	6.6	7.7	8.4	8.4	9.0	9.8	11.2	10.8	10.4	10.4	10.3	8.9	2.4	13.7	4.5	9.7	9.2	2136			
18	11.1	12.9	15.1	16.0	16.3	15.0	12.5	9.2	6.6	4.9	3.9	3.9	5.9	8.0	9.0	9.1	9.7	9.6	9.9	9.6	9.1	9.2	9.0	9.7	9.8	3.8	16.5	3.5	10.8	13.0	2352			
19	10.7	13.1	14.6	14.9	14.3	13.1	11.1	9.1	7.5	6.2	4.5	4.7	6.4	7.6	8.4	9.0	8.3	8.0	8.1	8.5	8.6	9.0	9.0	9.3	9.3	2.5	15.2	4.3	10.7	10.9	2240			
20	10.0	11.9	13.3	13.7	14.6	14.1	10.6	9.3	8.4	7.4	6.0	5.9	7.2	8.5	9.3	9.5	8.7	8.6	9.0	8.7	9.0	9.1	9.3	10.0	9.7	5.4	15.1	5.5	11.0	9.6	2321			
21	10.8	12.4	13.4	13.5	13.7	12.2	10.4	8.4	6.8	5.0	5.7	5.9	6.0	5.8	9.4	8.1	8.3	8.6	8.8	9.0	9.0	9.1	9.6	9.5	9.1	4.5	14.2	4.3	10.1	9.9	2194			
22	10.8	11.8	13.2	13.6	13.6	12.4	10.8	9.0	6.9	5.0	4.1	4.3	5.4	6.8	8.0	8.2	8.2	8.6	8.6	8.8	8.8	8.9	9.0	9.3	8.9	4.7	13.7	4.1	11.4	9.6	2141			
23	9.8	10.8	12.7	13.6	12.9	11.4	9.0	6.4	4.7	3.6	3.6	5.1	6.0	6.5	6.8	7.5	8.8	9.3	9.2	9.7	10.3	11.4	12.4	12.1	8.9	3.3	13.7	3.1	10.6	10.6	2136			
24	12.3	14.1	14.0	13.4	13.3	13.1	10.3	7.6	6.9	7.4	6.6	5.9	6.0	6.8	8.5	9.7	9.2	9.5	9.8	10.2	10.1	10.2	10.3	10.1	9.8	3.2	14.3	5.6	12.4	8.7	2353			
25	11.2	13.7	15.2	15.1	13.9	12.0	9.0	7.2	6.0	5.6	5.2	5.0	5.5	8.0	8.1	7.3	8.4	8.6	9.7	9.8	9.6	9.3	10.9	11.0	9.4	5.7	15.7	4.9	8.9	10.8	2253			
26	12.4	14.3	15.3	15.6	14.4	11.9	9.3	7.7	6.0	5.5	6.2	0	7.9	9.0	9.8	9.4	9.1	8.5	8.5	8.6	9.3	9.0	9.5	10.2	9.5	3.8	16.1	4.9	9.6	11.2	2274			
27	11.1	12.0	14.8	14.9	14.4	12.2	9.0	6.0	5.3	4.6	4.8	5.4	6.6	7.7	8.1	8.7	8.0	7.7	8.1	8.5	9.0	9.8	9.7	10.8	9.0	2.9	15.6	4.4	9.8	11.2	2172			
28	11.6	13.6	13.8	12.8	11.7	10.7	8.7	0.0	9.3	2.0	2.8	3.7	4.9	11.6	7.2	7.5	7.7	8.5	9.0	9.2	9.3	9.4	10.1	10.4	8.6	2.0	14.5	1.8	9.5	12.7	2055			
29	11.5	13.6	14.0	14.6	13.3	12.1	10.0	7.6	7.1	3.9	2.5	3.6	5.0	6.7	7.7	8.0	8.3	8.5	8.6	8.6	9.5	9.9	10.3	9.8	8.9	1.9	14.5	3.3	11.0	11.2	2147			
30	10.4	11.6	12.9	12.9	12.0	10.3	7.8	8.3	10.3	2.7	3.7	4.2	4.8	6.1	7.0	7.9	7.6	7.7	8.6	8.8	9.5	10.1	10.3	10.8	8.6	2.6	13.1	1.9	8.8	11.2	2063			
31																																		
Средне по всем дням	11.4	12.9	14.2	14.6	14.0	12.6	9.9	7.3	6.1	4.6	4.0	4.2	5.6	7.2	8.2	8.5	8.5	8.8	9.2	9.5	9.8	10.0	10.1	10.4	9.2	9.2	15.3	3.4		11.9	2219			
	3430	3885	4251	4370	4216	3790	2981	2206	1833	1377	1212	1273	1691	2158	2451	2541	2541	2629	2763	2850	2944	3012	3027	3129	2770	2770	4588	1015		3573	6656.4			

Условные обозначения:  $\Delta$  — погасла лампа;  $>$  или  $<$  — запись вышла за бумагу;  $\square$  — остановились часы;  $\bar{\Delta}$  иные причины отсутств. записи. Величины, взятые приближенно с магнитограммы — ( ).

Обработал Средина Проверил Семьковская



Среднемесячн. 6°44'63"

Ведомство АН. Каз. ССР.

Широта 45°46' Долгота 62°07'

Обсерватория Н-Козакменек

Элемент Скромение D

Месяц июль Год 1969

D = 6°30'00" / мм

βD = 0.163 / мм D 6°36'03"

Время мирное																							Средн. суточн.	Время			Время				
	Дни	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22		23	Max	Max	Min	Max	Min	Минп.	
1	12.1	14.0	13.4	14.2	14.2	12.7	10.9	9.2	8.0	5.3	2.8	2.2	3.4	4.1	5.8	7.6	8.4	8.6	9.0	7.1	9.5	11.0	10.7	10.5	8.9	4.0	15.4	1.7	11.5	13.7	214.7
2	11.7	12.5	13.6	14.9	15.2	13.9	10.8	8.2	5.9	4.9	3.3	2.6	4.1	6.8	8.6	9.3	9.2	9.2	9.3	9.5	9.7	9.4	9.8	9.9	9.3	5.0	15.7	2.3	11.4	13.4	222.3
3	10.5	11.8	14.1	16.3	18.0	16.4	11.6	7.7	5.2	2.9	2.6	2.3	3.7	5.5	7.2	7.8	8.0	8.3	8.6	9.2	9.3	9.0	9.4	9.7	9.0	4.6	18.1	1.1	11.0	17.0	215.1
4	10.0	11.6	14.1	16.2	16.8	15.2	11.6	6.7	4.4	3.3	1.7	1.8	3.7	6.7	8.2	8.6	8.3	8.2	8.3	8.7	9.0	9.5	9.3	9.7	8.8	4.5	16.8	1.3	10.8	15.5	211.6
5	10.3	12.3	14.9	16.0	14.6	12.4	9.5	5.7	3.6	2.3	2.4	2.8	4.4	5.9	6.8	7.5	7.5	8.0	8.2	8.7	9.0	9.3	9.7	9.7	8.4	4.5	16.2	2.1	9.3	14.1	201.5
6	10.5	11.8	13.9	15.2	15.2	13.7	11.8	8.5	6.2	3.9	2.6	2.7	4.6	6.3	6.8	7.9	8.0	7.4	7.2	7.8	8.5	9.3	9.8	10.7	8.8	4.1	15.4	2.3	10.6	13.1	210.3
7	11.4	12.9	14.4	14.2	13.7	11.6	9.0	5.9	3.3	2.6	1.4	2.2	3.8	5.8	6.5	6.9	7.4	8.8	8.8	8.9	9.5	10.3	10.8	10.8	8.4	2.6	14.7	1.1	10.5	13.6	200.9
8	12.0	13.3	14.4	15.1	14.5	11.6	9.0	6.1	4.7	3.3	2.8	3.9	5.1	6.1	7.7	8.0	7.5	8.0	8.4	9.2	9.6	10.2	10.3	11.1	8.8	3.8	15.4	2.4	10.2	13.0	211.9
9	11.5	12.3	13.2	13.1	12.9	11.2	9.3	6.2	3.6	1.6	2.3	2.9	3.7	5.7	7.9	8.2	8.0	8.0	8.9	9.4	9.5	10.2	10.3	10.7	8.3	3.7	13.5	1.0	9.8	12.5	200.6
10	11.5	13.4	14.2	14.1	12.5	11.6	7.2	8.2	5.0	3.1	2.9	4.1	5.4	6.7	8.2	9.3	8.4	8.2	8.3	8.6	9.2	9.5	9.8	10.8	8.7	3.1	15.2	2.3	9.8	12.9	210.2
11	11.6	13.3	13.7	14.0	13.6	12.1	10.1	7.9	5.9	4.4	4.4	5.3	6.6	7.7	8.5	8.1	8.2	8.2	8.2	9.3	8.8	9.3	9.3	10.3	9.1	2.4	14.1	4.2	7.8	9.9	218.8
12	11.1	13.2	13.1	13.3	12.1	11.2	10.3	7.7	5.7	4.9	4.1	4.2	5.2	6.5	8.7	8.0	7.3	7.2	7.4	7.9	8.0	8.6	9.8	10.8	8.5	3.5	14.1	3.9	10.2	10.2	206.3
13	11.6	13.6	14.9	14.2	13.1	10.8	8.0	5.6	3.6	3.7	4.1	4.8	6.5	7.7	8.3	7.7	7.9	8.2	8.1	Δ	Δ	Δ	Δ	Δ	8.5	2.5	15.7	2.9	8.9	12.8	162.4
14	Δ	Δ	Δ	Δ	12.6	11.6	9.8	7.7	6.5	7.1	4.1	4.5	5.9	6.4	7.5	8.2	8.3	8.6	9.2	9.3	9.8	9.8	9.4	9.8	8.3	4.2	13.9	3.7	11.0	10.2	166.1
15	10.8	12.4	13.6	13.4	12.6	11.6	10.8	9.4	7.9	6.0	4.6	5.0	5.9	8.4	9.0	7.9	8.1	8.0	8.1	8.5	9.2	8.9	8.5	8.5	9.0	2.4	13.7	4.1	10.7	9.6	217.1
16	10.0	11.6	12.3	Δ	11.8	12.0	9.3	6.9	2.5	2.6	3.3	5.3	6.8	7.6	7.8	8.3	8.7	8.4	8.3	9.0	8.5	8.7	9.3	9.3	8.2	5.2	12.4	1.5	9.1	10.9	188.3
17	9.8	10.5	11.8	13.1	13.4	12.8	11.0	7.5	5.9	4.6	Δ	Δ	7.2	9.3	9.4	8.8	8.8	8.6	8.5	8.6	9.0	9.0	9.3	9.3	9.4	3.8	13.7	4.6	9.6	9.1	206.2
18	10.0	11.3	12.8	13.1	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	8.0	7.9	7.7	8.0	8.5	8.8	9.0	9.0	9.0	9.2	9.4	3.6	13.1	4.9	8.1	8.2	132.3
19	10.1	11.8	13.5	14.5	14.6	13.5	11.6	9.2	Δ	Δ	4.3	5.4	6.7	8.0	8.4	8.2	8.2	8.4	8.5	8.7	9.0	9.0	9.0	9.0	9.5	3.9	14.7	4.2	10.6	10.5	209.6
20	9.4	10.6	12.1	12.8	12.3	11.0	9.1	5.9	3.6	2.7	2.3	2.6	3.1	4.9	5.5	6.3	6.1	7.1	7.1	7.6	8.2	8.3	8.7	9.2	7.3	3.1	12.9	1.8	11.8	11.1	176.5
21	10.3	11.8	13.1	Δ	Δ	Δ	Δ	Δ	5.0	4.1	Δ	4.8	Δ	7.2	7.1	7.1	7.2	7.8	8.9	9.1	9.7	10.3	9.8	8.8	8.3	2.9	13.4	3.6	10.0	9.8	142.1
22	9.8	11.1	11.9	12.6	13.7	12.1	9.6	6.9	5.9	8.0	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	10.2	5.1	14.0	3.8	10.0	10.2	101.6	
23	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	5.0	5.0	5.9	6.4	7.1	7.9	8.2	8.5	8.9	9.4	9.3	9.6	9.8	9.3	7.9	22.6	10.0	4.7	10.5	5.3	110.3
24	9.9	11.3	12.1	12.4	12.1	11.4	9.4	Δ	Δ	6.6	0	6.2	6.7	7.2	8.0	8.0	8.1	8.4	8.5	8.5	8.0	9.2	9.4	9.3	8.7	5.2	12.4	6.1	10.4	6.3	191.6
25	9.8	11.3	12.5	12.1	11.0	9.5	7.2	5.9	5.4	5.8	6.2	6.5	Δ	Δ	6.8	7.1	7.5	7.9	8.3	8.6	8.9	8.7	8.9	9.3	8.4	2.4	12.9	5.4	8.3	7.5	185.2
26	10.0	12.1	13.8	11.6	Δ	Δ	Δ	Δ	Δ	Δ	5.1	4.6	4.2	4.9	5.4	4.1	4.9	6.0	7.0	8.4	9.5	10.1	9.4	8.5	7.7	2.8	14.2	2.0	12.0	12.2	139.6
27	7.5	9.4	9.0	9.4	7.1	8.3	8.9	8.3	5.7	5.4	5.9	7.6	8.8	10.0	Δ	9.4	9.8	9.8	9.8	Δ	Δ	Δ	Δ	8.3	1.9	12.1	4.9	9.5	7.2	150.1	
28	12.6	13.7	14.7	14.6	Δ	Δ	Δ	Δ	Δ	6.2	7.1	7.5	8.2	8.9	9.0	8.6	8.5	8.9	8.8	9.2	9.6	9.7	10.1	10.6	9.8	3.0	15.2	6.3	9.6	8.9	186.5
29	10.8	11.5	12.9	13.6	12.6	10.8	9.2	7.2	6.1	5.4	5.0	5.4	6.4	7.2	7.7	7.7	7.7	8.1	8.5	9.1	9.8	9.8	9.8	10.3	8.8	3.3	13.7	4.9	10.8	8.8	212.6
30	10.7	11.6	13.7	14.2	13.3	11.3	8.5	5.5	4.2	4.1	4.5	4.9	5.9	7.1	6.7	5.8	6.0	8.1	9.3	9.1	10.5	10.8	Δ	Δ	8.4	4.2	13.7	3.9	9.1	9.8	185.8
31	Δ	Δ	Δ	Δ	13.7	12.8	11.3	8.7	5.8	3.8	3.3	3.9	5.0	7.2	8.0	8.2	8.1	8.2	8.5	8.6	8.8	9.3	9.4	9.2	8.1	4.6	13.7	3.1	10.6	10.6	161.8
Среднее из вс. м. дням	10.6	12.1	13.3	12.8	13.3	12.0	9.8	7.3	5.2	4.4	3.6	4.3	5.4	6.9	7.6	7.8	7.9	8.2	8.4	8.7	9.2	9.5	9.6	9.8	8.6		14.2	3.3		10.9	207.7
	297.3	338.0	321.7	358.2	347.2	313.1	254.8	182.7	129.6	118.6	98.1	121.0	146.9	192.2	220.6	234.4	236.0	245.1	253.4	244.8	251.3	265.8	258.8	264.3	269.2		440.0	102.0		338.0	5749.9

Условные обозначения: Δ — п. гасла лампы; > или < — запись вышла за бумагу; □ — остановились часы; Δ — иные причины отсутств. записи. Величины, взятые приближенно с магнитограммы — ( )

Обработал Срегина

Проверил Сильковская

Среднемесячн. 22710 Ж/мм

Элемент Горизонтальная составляющая "H"  
H = 22620

Эн = 1.05 Ж/мм H = 22640 Ж/мм

Месяц июль год 1969

Время мир. дни																		Средн. суточн.					Время тах	Maximum	Minimum	Время мин	Ампл.	Сумма						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23												
	91	90	95	93	83	79	69	41	45	68	57	58	57	72	68	68	70	73	70	79	72	69	69	70	71	4.0	133	28	7.6	105	1706			
2	67	74	69	57	44	32	24	31	44	54	61	64	67	71	71	71	71	73	74	74	73	73	71	74	62	10.0	76	23	6.8	53	1484			
3	80	85	83	74	55	35	28	37	49	52	59	69	77	77	76	76	79	83	84	84	81	78	75	75	69	19.5	86	26	6.2	60	1651			
4	83	91	89	80	69	55	48	51	57	67	70	76	84	79	79	79	81	85	85	84	81	79	80	83	76	12.0	92	47	7.0	45	1815			
5	88	91	84	76	68	56	47	52	57	59	64	71	73	74	80	84	86	86	88	87	89	89	88	90	76	21.4	90	46	6.5	44	1827			
6	89	91	90	83	72	65	56	65	77	81	83	85	86	87	88	85	81	88	94	93	94	93	96	90	84	22.5	100	55	6.4	45	2012			
7	97	101	96	87	72	64	60	59	64	69	72	80	83	87	90	87	93	90	85	82	81	82	78	81	81	16.6	99	56	7.1	43	1940			
8	85	90	87	74	65	54	59	65	71	70	68	66	75	78	77	79	84	83	86	80	77	72	71	72	74	18.8	88	51	5.7	37	1788			
9	76	81	84	78	69	57	50	50	50	55	60	66	68	69	69	73	74	75	72	73	73	68	68	71	68	2.2	85	46	8.1	39	1629			
10	75	75	66	53	48	52	55	57	63	64	63	62	64	75	76	67	71	73	73	74	73	73	71	72	66	14.5	82	48	4.4	34	1595			
11	76	75	75	70	57	54	67	64	63	75	83	84	83	77	75	77	78	78	79	77	87	74	72	73	74	20.6	93	52	5.4	41	1773			
12	79	83	79	65	57	52	43	46	53	66	67	70	77	80	75	76	84	90	95	98	94	80	87	76	74	19.6	106	42	6.5	64	1772			
13	80	82	72	61	41	26	24	36	46	49	64	65	70	77	79	77	75	79	81						62	18.2	87	19	6.2	68	1184			
14					31	42	45	34	35	43	58	68	71	75	70	70	69	72	73	69	72	75	69	70	50	13.8	84	24	4.5	60	1211			
15	75	71	71	68	67	63	58	53	53	63	70	74	76	77	74	73	73	75	79	77	76	77	81	80	71	22.7	85	49	7.6	36	1704			
16	81	81	77	64	57	50	50	65	70	71	66	63	68	66	70	73	74	68	74	84	74	74	73	76	70	19.4	91	46	5.9	45	1669			
17	78	80	78	72	60	51	54	62	65	66			79	77	71	71	73	73	73	72	74	72	73	73	70	24.9	81	48	5.5	33	1547			
18	77	79	80	69											68	67	72	74	75	75	72	73	73	74	73	2.0	81	57	3.2	24	1028			
19	76	80	79	69	58	54	50	55	64	73	79	84	81	83	80	77	76	77	79	80	81	79	78	79	74	11.5	84	47	6.5	37	1771			
20	81	85	81	71	62	59	64	71	73	77	81	81	88	90	91	89	89	89	92	92	92	92	93	92	82	22.7	94	57	5.1	37	1975			
21	92	97	96					89	94		102		90	86	78	77	83	83	76	76	78	76	70	78	84	11.8	105	69	22.7	36	1438			
22	78	85	81	76	64	57	47	47	58	69															66	2.0	86	44	7.6	42	662			
23											71	70	72	76	75	76	81	85	78	75	75	75	75	81	76	17.7	87	68	11.2	19	1065			
24	80	81	80	74		63	56	60		71	77	80	79	77	73	72	74	78	78	80	77	75	76	79	68	19.3	83	53	7.0	30	1640			
25	80	79	74	68	53	43	40	58	75	82	78	72			75	76	76	76	77	79	81	81	77	75	66	9.5	81	39	6.2	42	1575			
26	77	76	71	68						87	87	109	96	80	73	80	85	85	85	81	84	78	93	94	83	12.2	123	51	14.8	72	1504			
27	77	58	31	31	37	31	0	-5	6	32	33	30	30	23		37	42	44	52	75					35	24.6	84	41	7.6	43	664			
28	49	52	47	35	27	30		39	48	52	55	54	52	52	52	53	57	57	60	62	59	60	60	62	49	19.7	64	27	4.5	37	1174			
29	64	66	64	56	48	47	46	50	55	60	63	64	67	69	70	70	71	72	74	74	72	70	69	59	63	19.5	76	45	6.5	31	1520			
30	70	74	71	68	68	68	67	73	78	78	80	79	73	72	78	85	91	77	77	73	74	75			75	16.2	100	65	5.9	35	1649			
31					51	47	41	41	48	54	63	67	68	70	63	67	71	73	78	77	80	75	74	77	64	20.4	84	36	7.4	48	1285			
Среднее по всем дням	78	80	77	68	57	51	46	50	57	65	68	71	73	75	75	73	76	77	78	79	78	76	76	77	70		90	45		45	1681			
Среднее по ст. дням																																		
Среднее по возмущ.																																		
Сумма по всем дням	2201	2253	2150	1840	1483	1386	1248	1357	1556	1814	1832	1991	1977	2096	2179	2206	2273	2314	2346	2286	2196	2137	2060	2076	2156		2790	1405		1385	47257			
Сумма по ст. дням																																		
Сумма по возмущ.																																		

Условные обознач: Δ - погасла лампа > или - запись вышла за бумагу; - - - - - остановились часы; Δ - иные причины отсутствия записи; поправки в даты приближены к магнитограммам (1)

Обработал *Недзюрова* Проверил *Степанов*

Среднемесячн. 6°44'00"

Ведомство АН. Каз. ССР

Широта 45°46' Долгота 62°07'

Обсерватория Н-Казалинск

Элемент Склонение D

Месяц август Год 1969

D 6°30'00" N

ЭД 0.165 N D 6°35'90" N

Время мирное Дни																							Средн. суточн.	Время		Время					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23		max	max	min	min	мин			
1	9.6	11.1	12.1	12.9	13.5	12.9	11.3	9.9	5.7	4.1	3.5	3.1	4.7	6.8	7.7	7.3	7.3	7.1	7.4	7.8	8.3	8.5	8.8	9.1	8.4	5.0	13.8	2.8	11.3	11.0	200.5
2	9.6	10.6	12.1	13.1	13.1	11.5	9.6	7.3	4.5	2.5	1.2	1.7	3.0	4.5	0.1	5.5	0.1	0.1	6.6	7.3	8.7	8.9	9.3	9.6	6.7	4.0	13.4	1.0	10.6	12.4	160.5
3	10.0	11.1	12.3	12.5	12.1	11.6	9.6	7.3	7.8	9.6	10.0	9.7	7.0	0	6.7	6.7	6.7	7.1	8.3	8.6	9.3	Δ	Δ	Δ	8.8	3.2	13.4	10.6	11.2	2.8	184.0
4	Δ	Δ	Δ	Δ	12.9	11.4	10.0	8.1	6.8	5.8	5.6	5.6	0	6.8	7.9	8.4	8.8	8.9	8.3	9.2	9.3	8.2	8.9	9.5	8.0	4.2	13.3	5.4	10.8	7.9	160.4
5	9.8	11.4	12.1	12.2	12.1	11.3	10.6	8.9	6.9	5.8	5.0	4.8	6.4	7.1	7.2	9.7	7.8	8.3	8.4	8.5	8.6	9.0	9.2	9.3	8.8	1.9	12.5	4.4	11.4	8.1	210.1
6	10.0	11.7	11.8	12.1	11.7	10.2	8.0	0	4.1	3.5	4.0	4.5	5.3	6.3	7.8	7.1	6.3	6.7	6.3	6.7	8.4	9.2	9.3	9.3	7.5	3.7	12.9	5.3	11.3	7.6	180.3
7	10.0	10.8	11.6	12.3	12.6	Δ	Δ	7.8	6.5	6.8	5.1	4.6	5.3	6.3	7.7	7.1	6.3	6.3	6.7	8.4	9.2	10.0	9.3	9.2	8.2	3.4	12.9	4.3	11.3	8.6	179.9
8	9.6	11.0	12.8	13.8	13.3	11.9	9.3	Δ	6.5	4.4	3.5	4.8	0.1	6.5	6.9	6.9	7.4	7.3	8.2	8.7	8.6	7.7	9.0	8.1	8.1	3.5	13.9	3.0	10.9	10.9	186.3
9	8.7	9.7	10.6	Δ	9.9	10.5	Δ	6.8	4.8	3.2	3.1	4.9	7.1	8.8	9.1	8.0	8.1	8.7	8.3	8.4	8.5	8.4	8.3	7.0	7.8	5.1	10.7	2.1	10.0	8.6	170.9
10	8.1	10.2	11.2	11.1	10.8	9.5	6.9	4.4	2.3	3.1	7.3	0.1	7.2	8.6	9.2	8.3	7.5	7.5	7.7	7.8	8.3	8.6	8.8	9.1	7.7	3.4	11.4	9.8	8.7	1.6	183.6
11	9.6	11.1	12.6	13.6	13.7	11.6	9.3	6.7	4.7	2.7	4.1	4.6	0.1	7.1	7.3	6.2	6.8	6.8	7.4	7.7	7.4	7.8	8.2	8.1	7.7	4.0	13.9	3.3	9.8	10.6	185.2
12	8.2	8.7	8.8	11.0	10.9	9.3	7.7	5.6	4.0	3.0	2.5	4.8	6.6	8.2	8.9	8.0	8.8	10.4	10.0	8.8	9.0	9.2	9.0	8.9	7.9	3.4	11.9	1.8	10.7	10.1	190.3
13	10.0	12.0	13.0	13.6	13.5	11.6	8.3	5.3	4.5	4.5	4.9	4.5	0.1	7.9	8.4	8.0	7.9	7.7	8.2	8.3	8.7	7.8	8.4	8.9	8.2	4.0	14.6	3.7	10.3	10.9	196.0
14	9.2	10.3	11.8	12.6	12.6	11.1	8.2	5.1	3.0	2.2	2.5	4.1	5.3	8.5	8.7	7.9	8.0	7.5	7.6	7.8	8.3	8.5	8.8	9.0	7.9	4.0	13.2	10.6	9.8	2.6	188.6
15	9.6	11.2	12.2	12.9	12.7	11.0	7.8	5.5	3.5	3.3	4.3	5.5	5.2	7.4	7.3	7.3	7.3	7.4	7.0	7.8	7.8	7.7	8.2	8.3	7.8	4.0	13.1	3.1	9.0	10.0	188.2
16	9.2	10.8	12.1	12.9	13.0	12.2	9.6	6.5	7.5	3.0	3.1	4.0	5.3	7.2	8.0	8.0	8.7	7.9	7.4	7.6	7.8	8.2	8.8	8.9	8.2	3.7	13.2	2.5	10.0	10.7	197.7
17	8.9	9.0	9.3	11.8	11.3	10.8	10.4	8.4	5.8	5.7	4.5	4.8	5.3	6.6	7.3	7.4	7.6	7.7	7.9	8.8	9.2	9.6	9.9	9.9	8.2	3.5	12.1	4.0	10.0	8.1	197.9
18	10.0	11.1	11.1	11.0	10.8	9.2	7.5	5.1	3.2	2.5	3.7	4.6	5.6	6.7	7.8	6.7	6.3	6.3	6.8	7.9	8.6	8.7	8.9	9.0	7.5	2.9	11.4	2.1	9.7	9.3	179.1
19	9.3	9.8	10.8	10.8	11.6	10.7	8.6	11.1	3.8	1.6	1.7	1.7	3.8	4.8	0.1	6.7	9.3	10.7	9.2	11.5	12.3	13.9	11.6	9.5	8.1	5.5	11.8	0.3	9.9	11.5	194.9
20	9.8	11.8	13.4	13.4	13.3	11.8	9.5	6.7	4.2	3.5	3.8	Δ	Δ	Δ	Δ	Δ	3.8	8.1	8.3	8.4	8.8	8.5	8.6	9.0	8.7	2.6	13.8	3.2	9.3	10.6	164.7
21	8.8	9.9	11.1	12.1	12.9	11.5	8.7	0.1	4.1	4.2	4.8	5.8	6.5	7.9	8.2	8.4	8.8	8.6	7.8	8.1	8.8	8.5	8.6	9.0	8.1	4.2	13.0	3.8	8.6	9.2	193.2
22	9.4	10.8	11.6	12.5	12.1	10.1	7.5	4.1	2.0	2.1	2.5	2.8	4.1	5.8	6.2	6.4	6.8	7.8	8.2	7.8	8.0	9.2	8.9	8.9	7.3	3.5	12.8	10.1	8.7	2.7	175.6
23	9.5	10.6	11.6	14.3	14.6	11.1	8.5	6.3	4.8	4.8	4.0	5.1	6.4	7.2	7.8	8.8	8.5	8.3	7.7	7.7	7.5	8.3	8.4	8.9	8.4	4.0	16.2	2.2	9.6	14.0	200.7
24	9.6	10.9	12.5	13.4	12.6	11.0	7.9	5.4	3.1	3.8	3.3	4.4	6.5	6.4	6.2	6.1	6.4	6.8	8.0	8.3	8.3	8.7	9.0	9.4	7.8	3.5	13.6	1.8	10.4	11.8	188.0
25	9.3	10.3	11.1	12.5	12.6	11.3	8.3	5.6	3.0	3.4	4.6	5.9	6.3	7.4	7.4	7.2	7.3	7.4	7.6	7.9	8.1	8.3	8.4	8.8	7.9	5.6	12.6	1.9	8.6	10.7	190.0
26	9.2	11.1	12.7	13.9	13.4	11.6	8.3	5.8	3.1	1.7	3.0	6.2	7.0	6.8	6.3	6.3	6.5	6.8	7.2	7.3	7.8	8.4	10.6	10.6	8.0	3.6	14.3	1.1	10.2	13.2	191.6
27	9.8	11.8	12.5	14.8	11.2	10.5	9.6	6.9	7.8	5.3	6.5	6.9	7.2	8.8	10.1	11.3	10.2	8.8	9.6	9.3	8.7	8.7	8.9	9.4	9.4	3.9	17.1	3.8	8.5	13.3	224.6
28	9.3	10.7	12.8	13.8	13.6	11.3	8.0	5.8	3.6	3.0	3.3	9.8	6.5	7.5	7.9	8.3	8.7	8.6	9.3	9.3	8.4	8.4	8.9	9.3	8.6	3.6	14.0	2.9	10.3	11.1	206.1
29	9.8	11.2	13.4	14.6	Δ	Δ	Δ	Δ	Δ	3.3	4.1	4.9	6.6	7.2	7.0	7.2	6.9	7.4	7.4	8.0	8.3	8.6	8.7	8.8	8.1	3.3	14.9	3.2	9.7	11.7	153.4
30	9.3	11.1	13.7	15.3	14.7	12.1	8.3	5.4	3.1	2.3	3.6	5.4	5.9	7.6	7.6	7.3	6.9	7.3	7.4	8.0	8.3	8.8	8.8	9.0	8.2	6.4	15.3	2.0	9.2	13.3	197.2
31	9.3	10.9	12.9	14.0	13.8	11.9	8.2	6.1	3.1	2.0	2.3	3.9	6.2	6.8	7.0	6.9	8.0	8.5	7.8	7.9	8.4	8.7	8.7	9.3	8.0	3.6	14.2	1.9	9.9	12.3	192.6
Среднее по всем дням	9.4	10.8	11.9	12.5	12.6	11.1	8.8	6.1	4.6	3.8	4.0	4.8	5.1	6.9	7.2	7.5	7.3	7.6	7.9	8.2	8.6	8.8	9.0	9.0	8.1		13.4	3.8		9.6	193.5
Σ	282.5	322.7	357.6	374.8	376.9	322.5	345.5	278.0	137.8	116.7	125.4	143.5	152.0	205.5	215.8	225.1	225.8	234.8	244.0	255.6	265.7	263.0	269.2	271.1	250.0		415.2	118.0		297.2	5812.1

Условные обозначения: Δ — погрешность лампы; > или < — запись вышла за бумагу; — — — — — оставшиеся часы; Δ — иные причины отсутствия записи. Вельчины, взятые приблизительно с магнитограммы ( )

Обработал Срегина

Проверил Семьковская

Среднемесячн. 23°21'9"

Ведомство АН. Каз. ССР  
 Обсерватория Н-Казалинск  
 Месяц август Год 1969

Широта 45°46' Долгота 62°07'

Элемент Горизонтальная составляющая "H"

H = 22620  $\mu\text{m}$

$\delta H$  = 1.05  $\mu\text{m}$  H = 22°63'9"  $\mu\text{m}$

Время мгровое Дни																		Средн. суточн.	Время		Время											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		19	20	21	22		23	max	max	min	min	Ампл.			
1	69	73	72	69	64	56	52	51	51	56	54	51	53	58	60	61	64	68	66	68	68	67	65	66	62	17	74	50	80	24	1482	
2	68	70	71	68	65	66	68	67	68	68	68	71	72	72	75	75	76	87	89	90	87	92	90	89	76	191	96	64	58	32	1812	
3	89	87	75	75	71	68	77	80	73	63	65	71	64	67	64	57	66	70	71	65	60	0	0	0	70	18	90	53	93	37	1478	
4	Δ	Δ	Δ	Δ	44	35	32	29	28	33	27	36	50	54	56	53	56	63	58	53	51	52	54	54	46	172	67	23	103	44	918	
5	58	59	58	54	42	31	37	43	45	47	50	50	50	53	55	58	58	58	57	59	58	56	57	59	52	188	62	28	56	34	1252	
6	59	56	50	48	45	41	44	49	53	59	66	68	71	68	63	62	59	61	62	65	65	64	64	67	59	121	72	38	58	34	1409	
7	66	73	79	74	67	63	62	65	69	86	87	87	78	70	68	75	78	75	76	75	66	57	54	59	71	101	93	54	221	39	1709	
8	61	62	59	56	51	41	43	41	31	37	52	44	47	51	51	57	58	67	69	67	68	68	64	63	54	213	73	32	84	41	1308	
9	65	66	63	61	56	59	Δ	49	41	55	64	66	64	63	51	51	55	59	62	59	58	58	57	65	56	109	68	35	82	33	1347	
10	63	64	59	54	42	41	45	45	52	59	76	71	56	50	44	46	54	60	62	62	60	60	62	63	56	107	79	48	48	31	1350	
11	66	69	66	59	53	46	46	49	53	59	66	71	73	75	72	73	73	76	77	77	78	79	80	83	67	233	86	45	58	41	1619	
12	82	79	70	67	55	45	53	57	46	53	65	43	43	51	50	58	58	56	58	64	63	58	58	57	58	06	84	33	118	51	1389	
13	61	59	55	44	29	24	29	35	31	33	47	54	56	56	57	56	58	61	62	59	59	62	59	70	50	216	66	25	90	41	1216	
14	59	61	57	49	37	33	30	29	36	43	40	44	46	47	51	55	60	64	67	68	66	66	66	68	52	177	72	25	72	47	1242	
15	70	71	68	64	50	45	45	51	63	66	67	69	71	71	69	64	63	70	78	71	70	76	73	69	66	213	86	41	61	45	1574	
16	69	71	71	67	62	54	51	52	56	59	65	67	67	65	64	62	63	68	73	74	72	78	75	69	66	217	83	49	73	34	1574	
17	71	71	72	68	58	49	38	38	46	50	47	61	63	63	62	62	63	63	64	68	61	59	59	61	59	194	72	34	68	38	1416	
18	65	66	59	59	50	48	49	54	64	72	76	85	83	78	58	62	69	74	75	73	73	73	71	72	67	113	86	52	151	34	1608	
19	70	65	58	53	47	37	35	46	59	66	59	69	58	54	58	65	66	70	66	64	59	58	51	52	58	173	76	30	60	46	1385	
20	53	53	49	37	30	31	24	21	24	37	51	50	48	46	50	56	59	57	59	59	61	65	63	63	48	242	69	25	70	44	1146	
21	62	58	54	52	36	36	40	49	55	61	67	69	68	63	58	62	59	53	62	62	63	61	64	64	57	116	71	34	45	37	1378	
22	65	66	65	56	46	40	34	35	53	63	62	61	62	63	69	71	72	70	70	73	73	70	71	70	62	206	79	34	72	45	1480	
23	70	77	77	71	45	41	44	56	66	68	66	55	46	51	51	59	64	68	65	67	72	65	65	65	61	201	78	38	48	40	1474	
24	62	58	55	50	41	34	35	46	49	56	70	69	67	62	67	70	70	72	72	71	74	74	73	70	61	217	78	32	57	46	1467	
25	69	70	67	64	48	37	33	37	44	50	54	58	64	67	67	67	66	67	68	68	67	67	67	67	60	13	73	31	62	42	1433	
26	69	69	65	55	47	40	34	43	57	63	56	49	51	57	61	64	69	72	76	79	81	80	68	54	61	216	86	30	64	56	1459	
27	68	77	54	41	35	33	30	35	21	16	14	20	25	31	31	35	33	41	49	50	49	52	53	50	39	11	82	9	101	73	943	
28	50	49	40	28	10	14	12	24	32	43	45	50	55	51	52	53	56	56	55	58	58	59	58	58	44	132	63	17	64	46	1066	
29	61	60	59	43	Δ	Δ	Δ	Δ	Δ	59	61	64	65	68	65	60	58	61	65	66	65	65	66	65	62	137	69	56	159	13	1176	
30	64	64	56	44	30	19	12	27	46	65	75	73	69	66	59	63	67	67	69	68	68	68	61	68	57	109	77	24	68	53	1368	
31	69	69	64	54	40	28	24	23	35	46	58	56	65	66	64	66	66	62	63	64	63	63	64	64	56	117	69	21	76	48	1336	
Среднее по всем дням	65	66	62	56	46	41	38	44	48	55	59	60	60	60	59	61	62	65	67	67	66	65	64	65	58		77	36	41	1401		
	1973	1992	1867	1684	1396	1235	1158	1326	1447	1691	1820	1852	1850	1857	1822	1818	1935	2016	2065	2066	2036	1972	1932	1944	1813		2379	1110	1269	42814		

Условные обозначения: Δ — п. часа лампа; > или < — запись вышла за бумагу; — — — — — остановились часы; Δ — иные причины отсутств. записи. Величины, взятые приближенно с магнитограммы — ( ).

Обработал Недридова Проверил Сильковская



Среднемесячн. 22703 мм

Ведомство АН. Каз. ССР  
 Обсерватория Н-казалинск  
 Месяц сентябрь Г. 1969

Широта 45°46' Долгота 62°07'

Элемент Горизонтальная составляющая "H"  
 H 22620 мм Вн 1.05 мм/ч 22640 мм

Время Мировое	1																	2					Средн. суточн.	3			4						
	Дни	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23		Мак	Мин	Разн	Мак	Мин					
1	72	75	71	64	47	33	36	37	51	68	79	84	88	85	80	79	79	80	83	84	83	83	81	81	71	127	90	34	60	56	1703		
2	79	78	75	63	45	36	38	50	61	75	86	87	85	79	78	26	28	29	31	32	33	33	34	36	54	119	89	33	61	56	1297		
3	38	48	58	66	70	62	63	72	83	91	93	91	85	86	84	84	85	83	90	92	88	79	79	80	77	184	95	58	60	37	1850		
4	79	76	70	62	50	37	39	50	64	78	87	91	91	89	82	80	81	78	81	80	75	77	75	75	73	122	94	34	56	60	1747		
5	78	78	76	73	59	50	47	53	62	72	78	77	75	62	22	-2	33	48	57	73	55	52	59	55	58	120	81	-11	150	92	1392		
6	66	50	53	33	31	11	13	32	43	45	42	36	54	57	57	58	56	60	64	67	64	71	71	66	50	218	86	-6	60	92	1200		
7	67	63	54	47	72	75	71	41	37	39	58	58	62	57	58	68	78	68	70	60	58	57	64	68	60	160	84	30	63	54	1450		
8	60	58	46	35	7	-5	-3	-5	-4	8	33	45	48	49	42	49	53	55	57	57	58	59	61	60	38	00	63	-11	73	74	923		
9	60	58	59	56	50	45	31	45	58	64	67	69	65	57	50	50	70	58	60	66	67	67	68	69	59	162	75	28	67	47	1409		
10	66	67	71	66	52	50	55	63	70	76	79	80	76	72	65	63	63	66	73	72	73	79	75	76	69	215	86	48	54	38	1648		
11	73	77	71	64	58	46	47	50	47	53	66	72	67	67	69	70	72	72	72	72	69	71	70	70	65	194	83	42	59	41	1570		
12	69	66	63	58	44	32	32	39	55	58	67	69	74	76	74	74	74	77	79	78	77	76	76	76	65	181	84	28	54	56	1563		
13	76	75	70	64	52	46	50	59	65	68	71	70	72	75	77	77	77	77	81	83	86	87	87	87	72	229	89	45	58	44	1732		
14	84	80	73	66	56	55	60	70	77	77	75	76	76	72	71	84	90	88	89	90	95	79	64	54	75	202	116	53	55	63	1801		
15	70	47	49	47	44	19	9	26	42	37	40	36	32	24	28	25	12	15	24	48	53	53	57	56	37	08	67	5	52	62	893		
16	55	55	53	43	42	31	26	26	34	51	55	57	56	62	64	65	66	69	70	71	75	76	75	71	56	209	82	25	73	57	1348		
17	72	72	75	72	58	47	46	57	72	76	78	71	68	76	74	79	81	86	88	77	74	74	76	76	72	183	96	43	62	53	1725		
18	74	71	70	65	49	28	31	46	52	60	71	71	76	76	66	73	80	105	73	66	81	77	68	73	67	176	119	23	57	96	1602		
19	69	69	64	57	42	30	39	48	55	57	64	68	69	67	68	70	73	74	75	76	75	74	77	76	64	223	80	25	53	55	1536		
20	74	71	71	68	48	29	22	28	34	47	66	74	73	66	65	78	64	84	71	73	74	76	76	77	63	173	90	22	63	68	1509		
21	75	74	73	65	50	35	32	46	63	76	73	86	86	83	80	79	76	79	79	79	79	80	77	79	71	129	88	30	63	58	1704		
22	77	78	76	72	53	39	36	47	64	77	78	78	81	78	81	81	81	81	80	80	80	80	81	81	72	100	80	34	61	46	1740		
23	79	79	78	76	61	47	39	56	76	91	103	106	99	84	64	66	67	77	83	74	77	76	64	71	75	111	109	34	60	75	1793		
24	71	74	75	70	53	43	44	46	60	75	80	86	90	77	77	77	77	77	78	76	76	76	75	73	71	115	89	42	52	47	1706		
25	74	74	70	56	37	35	25	39	66	83	91	88	84	79	79	75	67	68	77	80	81	80	77	77	69	103	92	15	69	77	1662		
26	76	76	77	71	58	49	46	47	59	64	71	76	76	77	78	78	80	81	82	83	81	83	83	84	72	228	86	44	71	42	1736		
27	85	85	84	81	70	62	61	72	83	92	92	91	88	84	83	84	84	83	87	88	89	106	110	102	85	215	132	56	26	76	2046		
28	93	96	100	100	88	86	86	77	89	88	95	115	29	29	28	48	52	49	54	49	50	80	60	48	70	112	198	14	123	184	1689		
29	50	55	59	52	45	57	50	46	14	37	19	32	48	57	58	56	37	56	65	68	21	31	66	88	49	237	98	-9	95	107	1167		
30	56	6	35	40	-7	-17	-20	-28	-35	-23	-35	-30	-19	-31	1	2	4	7	23	28	32	25	31	36	3	200	47	-50	120	97	81		
31																																	
Среднее по всем дням	71	68	67	62	49	40	38	44	53	62	67	70	68	66	63	63	65	68	70	71	69	71	71	71	63	1882	92	25	67	1507			
	2117	2031	2019	1852	1484	1193	1151	1335	1597	1860	2022	2110	2057	1921	1903	1896	1910	2030	2096	2127	2079	2117	2117	2121	1882	2768	758	2010	45222				

Условные обозначения: Δ - п. галса лампы; > или < - запись выдана за бумагу; - - - - - обозначение часа; Δ - п. галса; --- - причина отсутств. записи. Величины, взятые приблизительно с микрограммы - ( )

Обработал *Неридово*

Проверил *Сильковская*

Ведомство АН. Каз. ССР  
 Обсерватория Н. Казалинск  
 Месяц октябрь Год 1969

Широта 45°46' Долгота 62°07'

Среднемесячн. 6°44'50"

Элемент Склонение D

D 6°30'00"

8D 0.163/км D 6°35'70"

Время Мировое	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17																	18 19 20 21 22 23					Средн. суточн.	Время			Время				
	Дни																							Мак	Мак	Мин	Мин	Ампл.	Сумма		
1	9.4	8.9	9.4	10.5	12.9	12.7	11.8	9.2	6.6	6.1	7.1	8.5	11.5	8.6	8.4	9.5	8.4	10.3	9.9	9.0	9.1	7.1	8.5	9.2	9.3	5.8	13.3	5.8	9.6	7.5	222.6
2	9.0	6.8	9.4	13.0	14.5	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	10.5	Δ	Δ	Δ	Δ	Δ	52.7
3	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
4	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
5	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
6	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
7	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
8	Δ	Δ	Δ	Δ	7.9	8.6	7.1	5.7	3.5	2.4	2.1	5.8	6.6	7.5	8.1	8.3	8.6	9.0	10.1	9.3	8.7	8.7	8.7	9.2	7.3	18.7	10.5	1.8	10.4	8.7	145.9
9	8.9	9.7	9.4	10.7	12.2	12.5	11.4	8.2	5.8	5.9	6.3	6.1	7.1	7.6	8.1	8.5	7.9	7.8	7.8	7.8	7.3	8.8	9.7	8.4	8.5	21.8	12.8	5.8	9.9	7.0	203.9
10	8.4	8.7	8.7	7.1	11.1	9.6	8.3	8.3	9.1	9.2	10.5	8.9	9.2	11.0	10.1	10.5	8.7	8.3	7.2	6.7	6.6	6.1	6.5	6.7	8.6	11.2	11.9	5.5	22.0	6.4	205.5
11	7.8	10.2	10.8	10.8	12.4	11.8	9.1	7.0	6.6	6.1	6.1	6.5	7.4	9.1	7.9	9.2	9.1	8.8	9.1	9.1	9.3	8.2	8.7	9.2	8.8	5.9	12.5	5.6	9.6	6.9	210.3
12	9.1	9.2	8.3	9.9	10.7	11.0	9.7	8.1	6.6	6.7	6.8	7.4	6.9	8.3	10.4	10.6	10.2	9.5	9.7	9.1	10.0	8.7	8.6	8.4	8.9	5.2	11.5	6.4	9.1	5.1	213.9
13	8.3	8.4	8.8	9.9	11.3	11.6	9.7	7.9	6.1	6.4	0	7.0	7.5	7.3	8.0	8.1	8.6	9.4	9.6	9.5	9.6	8.7	8.4	8.3	8.3	5.2	11.8	6.0	9.8	5.8	198.4
14	8.3	8.3	8.7	9.4	10.6	8.9	8.1	8.1	8.3	8.4	8.4	8.9	9.3	9.1	8.5	7.8	7.2	7.1	6.9	6.6	5.9	6.0	5.5	6.4	7.9	4.1	11.4	5.3	9.2	6.1	190.7
15	7.1	9.7	11.6	11.2	11.9	12.3	11.0	8.3	6.5	5.3	5.2	6.5	5.9	6.1	6.6	6.8	7.3	8.1	8.2	7.9	6.9	6.8	7.3	7.4	8.0	4.9	12.5	4.8	10.3	7.7	191.9
16	7.5	7.8	8.4	9.4	10.5	10.9	9.7	7.2	5.5	3.8	3.7	5.4	6.6	6.0	6.6	6.7	7.5	10.0	9.6	9.9	11.0	9.5	8.9	8.7	7.9	20.4	11.5	3.4	10.4	8.1	190.8
17	8.1	8.2	9.2	11.0	12.3	11.9	10.2	7.4	6.6	6.0	6.5	6.8	6.0	5.9	6.4	6.3	6.4	6.9	7.2	7.2	7.7	10.1	10.5	10.7	8.1	4.9	12.4	6.0	9.6	6.4	195.5
18	8.4	8.2	8.8	10.2	8.6	7.1	7.5	8.0	7.7	7.4	7.3	7.3	7.6	7.6	7.4	7.3	7.1	7.1	6.8	6.6	6.1	6.1	4.8	5.2	7.3	3.6	10.6	4.6	22.6	6.0	176.2
19	6.8	8.1	10.5	11.5	9.9	10.0	8.2	6.7	6.1	4.4	5.1	5.5	5.8	6.3	7.1	7.4	7.6	8.8	8.4	9.1	8.0	7.9	8.1	8.0	7.7	3.0	11.7	3.8	9.7	7.9	185.3
20	7.9	7.9	8.7	10.2	10.9	11.0	9.0	6.7	4.5	5.4	6.1	6.6	7.7	8.1	8.3	8.6	8.7	8.9	9.4	10.1	10.7	9.7	10.2	9.9	8.5	5.7	11.4	3.8	8.9	7.6	205.2
21	9.9	9.7	9.7	10.5	11.7	12.2	11.2	8.9	6.6	5.8	6.8	6.3	7.4	7.6	8.0	7.3	9.7	9.7	10.5	10.5	10.2	10.2	10.4	10.3	9.2	5.2	12.4	5.5	9.0	6.9	221.1
22	9.8	9.7	10.1	10.9	11.8	10.1	9.7	9.2	9.4	9.4	9.6	9.7	9.7	10.0	11.5	9.6	9.1	9.2	9.0	8.0	7.0	6.5	6.1	7.6	9.3	4.2	12.5	6.8	22.2	5.7	222.7
23	9.7	12.0	12.8	12.3	13.1	12.6	11.8	8.3	5.9	6.5	5.8	6.6	7.7	8.0	8.4	8.7	8.7	9.2	9.5	9.5	9.6	8.4	9.7	9.4	9.3	5.2	14.1	6.5	9.4	7.6	224.2
24	9.7	9.2	9.3	11.3	12.2	14.0	10.9	8.4	6.5	6.8	6.5	6.7	7.6	8.6	8.5	8.8	9.5	9.4	9.9	10.2	9.9	9.6	10.2	10.2	9.3	5.2	14.8	5.3	9.0	9.5	223.9
25	9.5	9.6	10.2	12.5	14.6	14.6	12.6	10.1	7.8	7.2	7.3	8.2	9.0	9.1	9.1	9.1	8.9	8.7	9.0	9.3	9.6	9.2	10.8	9.8	9.8	5.0	15.2	6.8	9.9	8.4	235.8
26	9.7	9.7	9.7	11.9	11.5	10.1	9.3	9.2	9.2	9.2	9.1	8.9	9.1	9.2	9.0	8.9	8.7	8.7	8.5	8.2	8.3	6.9	6.0	6.9	9.0	3.9	12.7	5.8	9.3	6.9	215.9
27	8.3	11.8	14.1	13.6	12.6	12.3	10.4	7.4	6.5	5.8	5.9	7.3	7.8	8.4	8.3	8.4	8.7	9.3	9.9	9.8	8.9	11.7	11.9	11.0	9.6	2.7	14.5	5.5	9.5	9.0	230.1
28	10.9	10.5	10.9	11.7	12.3	12.3	10.2	8.0	6.1	6.7	6.6	7.8	8.0	7.7	8.1	8.6	10.1	10.1	10.2	11.5	10.8	12.4	11.0	10.2	9.7	5.1	12.9	6.4	9.1	6.5	232.7
29	9.7	9.8	10.1	10.9	12.0	12.0	10.4	7.9	6.5	6.0	6.8	6.8	7.8	8.2	8.4	8.6	8.9	9.2	9.4	9.8	10.6	10.5	10.2	9.9	9.2	5.0	12.4	5.7	9.3	6.7	220.4
30	9.6	9.4	9.7	11.0	12.5	12.8	11.5	9.3	7.2	5.8	6.2	7.3	7.9	8.1	8.4	8.7	9.1	9.4	9.7	9.7	9.6	9.5	9.1	8.9	9.2	5.2	13.0	6.8	9.5	6.2	220.4
31	8.9	8.7	9.6	10.8	12.4	13.3	12.8	10.7	7.9	6.3	6.8	8.4	8.7	9.7	9.9	10.5	10.5	10.8	10.0	9.8	9.7	9.4	8.9	9.1	9.7	5.8	13.6	5.9	9.9	7.7	233.0
Среднее на все дни	8.8	9.2	9.9	10.9	11.7	11.4	10.1	8.2	6.8	6.4	6.3	7.2	7.8	8.1	8.4	8.5	8.6	8.9	9.0	9.0	8.8	8.7	8.7	8.8	8.8	228.9	12.5	5.4	7.1	210.2	225.5
Σ	220.7	230.2	246.9	272.2	304.4	286.2	251.6	204.2	169.1	159.0	158.6	181.2	195.8	203.1	209.5	212.8	215.2	223.1	225.5	224.2	221.1	216.7	218.7	219.0	228.9	313.9	135.6	178.3	5269.0		

Условные обозначения: Δ — п. глаза лампы; > или < — запись вывела за бумагу; — — — — — отклонения в часе; Δ — шире  
 Причины отсутств. записей: Величины, взятые приближенно с магнитограммы ( )

Обработал Средина Проверил Сельковская









Среднемесячн. 22681 =

Ведомство АН. Каз. ССР  
 Обсерватория Н-Казанский  
 Месяц декабрь Год 1969

Широта 45°46' Долгота 62°07'

Элемент Горизонтальная составляющая Н''  
Н = 22630/мм + Вн = 1.05/мм Н<sub>0</sub> = 22648/мм

Время мировое Дни																		Средн. су. очн.	Время			Время										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		19	20	21	22	23	max	max	min	min	Ампл.				
1	-	-	-	-	48	46	44	45	48	45	44	40	40	35	39	37	34	34	42	45	52	49	46	48	43	20.3	54	32	17.0	22	861	
2	49	50	52	54	55	52	49	44	43	46	44	42	38	45	44	45	46	46	46	45	43	44	46	46	46	4.2	57	18	13.8	39	1114	
3	48	49	52	53	53	37	43	40	41	41	43	47	52	54	56	57	47	57	55	54	69	60	46	42	49	20.0	76	39	8.0	37	1196	
4	46	47	49	52	61	68	66	52	50	47	42	42	46	41	29	40	46	55	55	51	53	56	53	52	50	5.7	70	22	14.1	48	1199	
5	54	55	62	69	74	70	63	59	60	54	39	30	60	37	14	35	29	32	28	37	52	40	45	41	47	4.5	78	26	14.2	52	1139	
6	39	44	39	53	49	44	44	42	36	28	32	35	37	33	34	35	41	45	46	44	44	47	41	42	40	21.3	54	25	14.2	29	974	
7	43	48	50	52	50	48	40	34	32	35	35	42	45	46	48	50	48	52	53	50	48	56	51	48	46	21.5	59	31	8.2	28	1104	
8	49	48	49	55	66	66	60	54	55	56	54	51	52	54	54	51	55	58	55	56	68	62	53	58	55	20.8	70	49	16.0	21	1339	
9	59	57	61	71	67	73	67	58	55	57	55	58	51	53	48	45	58	51	51	51	51	49	48	49	55	5.6	77	43	22.7	34	1343	
10	48	49	50	53	58	63	58	59	59	55	56	58	58	56	58	57	56	56	58	60	50	52	51	39	54	5.2	64	32	23.5	32	1317	
11	51	38	39	48	Δ	Δ	Δ	Δ	Δ	Δ	Δ	51	54	51	39	38	45	46	44	45	49	47	46	48	46	12.3	58	34	14.6	24	779	
12	46	46	47	52	58	64	56	51	55	51	50	48	50	50	51	50	51	51	52	53	53	54	52	55	51	5.2	65	47	12.4	18	1243	
13	56	53	55	57	60	59	55	54	55	56	55	55	58	61	58	57	58	57	57	56	53	54	55	53	56	13.4	63	52	20.8	11	1347	
14	54	57	59	61	67	68	65	64	66	62	63	60	62	62	57	50	50	54	53	52	44	57	60	58	58	5.5	65	46	15.7	19	1405	
15	67	57	56	58	63	65	67	61	62	56	51	57	60	62	61	59	52	46	46	58	53	53	47	44	57	6.3	68	37	18.2	31	1361	
16	52	57	48	50	56	49	42	51	49	50	48	47	49	46	30	19	35	41	45	45	43	45	43	43	45	19.9	63	22	16.1	41	1083	
17	47	49	51	54	56	55	51	48	50	48	44	44	50	51	53	51	48	46	45	48	50	48	49	50	49	4.3	57	42	11.4	15	1186	
18	52	52	52	53	56	57	53	49	48	52	54	55	58	61	60	58	58	58	57	57	55	53	50	49	54	13.5	62	47	8.8	15	1307	
19	52	54	58	57	56	55	49	49	49	51	56	62	61	62	61	60	59	56	60	66	61	59	60	60	57	19.0	69	47	6.8	22	1373	
20	60	63	63	64	64	57	57	51	58	64	68	65	65	66	65	63	62	61	58	58	57	56	58	58	61	11.0	69	49	7.2	20	1461	
21	36	57	58	65	65	67	64	62	64	65	61	56	57	59	62	61	59	62	62	61	60	57	57	63	60	9.0	66	55	12.3	11	1440	
22	62	62	65	66	68	65	52	42	45	53	61	60	53	58	56	48	48	56	59	60	58	56	55	53	56	13.7	73	40	7.3	33	1356	
23	55	56	58	66	68	66	55	50	46	35	33	28	32	32	45	40	33	40	47	43	48	35	43	46	46	5.1	70	23	13.8	47	1100	
24	44	50	47	45	47	45	42	37	43	48	48	45													45	9.2	51	35	7.6	16	541	
25											44	41	37	28	39	51	35	39	39	40	42	44	44	44	40	15.0	58	23	13.4	35	567	
26	54	45	47	50	48	48	43	37	39	43	50	47	49	54	56	58	51	46	50	51	53	44	45	49	48	16.6	64	34	6.8	30	1157	
27	54	56	57	53	48	42	43	46	49	44	36	32	49	45	46	46	43	45	44	50	40	48	49	50	46	18.3	56	28	10.7	28	1115	
28	50	51	51	52	50	43	37	41	48	51	52	51	50	47	47	47	46	53	49	47	49	50	52	50	48	17.4	61	37	6.3	24	1164	
29	51	51	51	50	47	43	42	47	30	49	48	46	49	49	49	47	46	52	52	52	53	54	55	55	48	17.3	56	41	6.8	15	1168	
30	56	56	55	51	45	41	36	42	48	54	58	56	55	56	55	57	56	57	60	62	61	61	64	64	54	24.0	65	36	6.5	29	1306	
31	66	68	67	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66							264
Среднее из всех дней	52	52	53	56	57	55	52	49	49	50	49	48	51	50	48	48	48	50	51	52	52	51	50	50	51	51		64	36	28	1222	
	1500	1525	1548	1627	1603	1551	1443	1369	1381	1396	1424	1451	1477	1454	1414	1412	1394	1452	1468	1497	1512	1490	1464	1457	1577		1918	1092	826	35309		

Условные обозначения: Δ — п. гасла лампы; > или < — запись вышла за бумагу; □ — остановился час; ▮ — выше  
 Причины отсутств. записи. Величины, взятые приближенно с магнитограммы — ( ).

Обработал Синьковская Проверил \_\_\_\_\_