

Алма-Ата

Январь 1973 года

Склонение $\Delta = 4^{\circ}30.0 +$ табличное значение в минутах

Долгота $76^{\circ}55$ в.д.

Широта $43^{\circ}15$ с.ш.

Дни	Время: миро: вое: УТ																									Средн. суточн.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		2.4	2.1	1.7	2.1	2.9	3.4	3.0	1.9	2.0	1.9	2.9	2.6	3.2	2.6	2.6	2.6	2.9	2.9	2.7	2.5	2.4	2.3	2.2	2.3	2.5
2	Q	2.1	2.1	2.2	3.1	3.6	3.5	3.1	2.5	2.4	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.3	2.1	2.0	2.5
3	Q	2.1	2.1	2.3	3.0	3.4	3.4	3.1	2.2	1.9	2.1	2.2	1.9	2.0	2.0	2.1	2.3	2.2	2.1	2.4	2.4	2.3	1.9	1.7	1.6	2.3
4		1.5	0.8	0.8	3.5	2.4	2.8	2.9	1.5	1.9	3.8	4.1	4.0	3.7	1.7	2.2	2.2	3.2	3.9	4.8	6.5	6.2	5.5	2.5	4.0	3.2
5		3.9	1.9	0.5	3.7	4.5	1.8	1.4	1.3	1.4	1.9	1.9	2.4	2.2	2.0	1.9	2.4	3.9	7.5	7.3	7.3	5.6	3.3	3.9	1.9	3.2
6		1.4	3.4	2.6	2.3	1.9	2.8	1.3	0.6	1.3	2.5	3.1	4.6	3.4	2.6	2.7	2.6	2.8	2.6	3.3	3.6	3.6	3.7	2.2	2.3	2.6
7		2.4	2.5	2.9	4.3	4.0	2.9	1.4	0.3	-0.1	0.4	2.4	3.1	3.6	3.4	2.4	3.4	3.8	5.9	5.1	2.9	2.3	2.3	1.8	3.7	2.8
8		1.8	1.9	2.6	4.2	4.4	3.9	1.9	0.9	1.3	2.1	3.3	3.2	5.5	3.3	2.9	4.9	4.6	2.6	2.4	2.4	2.1	2.1	2.1	1.9	2.9
9		1.4	0.3	1.8	3.2	3.7	3.3	2.6	1.7	1.4	1.9	3.1	2.3	2.5	2.5	3.5	3.4	2.6	2.5	2.4	3.0	2.9	2.9	2.9	1.3	2.9
10	D	0.7	0.9	1.4	2.8	2.3	2.0	2.1	1.5	2.4	4.6	5.5	3.9	3.3	3.3	3.4	3.1	3.3	2.2	3.4	2.4	2.1	1.5	1.0	2.6	
11		0.8	1.1	2.4	3.1	2.3	2.9	1.7	1.3	1.4	2.4	4.1	5.0	6.6	6.9	3.8	4.3	2.3	2.3	1.9	2.4	0.3	1.3	2.7	1.9	2.3
12	D	-0.1	1.0	2.1	3.4	4.8	4.4	1.2	-0.1	1.0	3.5	3.6	3.4	7.8	7.5	3.4	3.4	4.7	3.3	3.6	3.0	2.5	2.1	1.9	0.4	3.0
13		1.4	1.3	2.2	2.9	3.6	3.1	1.1	-0.2	0.1	1.7	3.1	4.3	5.5	4.4	5.8	4.5	3.6	3.4	3.0	1.8	2.0	2.2	2.4	2.2	2.7
14		2.0	1.8	2.4	3.4	3.9	3.3	2.3	1.0	0.7	1.4	2.1	2.9	2.9	3.6	3.6	2.8	2.8	2.4	2.3	1.9	1.9	2.1	2.0	1.9	2.4
15		1.8	1.8	2.3	6.4	7.0	6.9	5.8	4.0	3.5	3.5	4.8	5.0	4.9	4.9	5.0	5.0	5.5	5.6	5.5	4.5	4.3	4.4	2.9	1.5	4.4
16		3.2	3.5	4.1	3.4	4.3	3.9	2.8	1.4	0.4	0.3	1.3	2.0	2.3	2.4	2.6	2.6	2.4	2.4	3.3	3.8	3.2	2.0	1.7	1.7	2.5
17	Q	1.4	1.4	1.9	3.4	3.9	4.1	2.5	0.9	0.6	1.4	2.4	2.4	2.5	2.8	3.4	2.3	2.3	2.6	2.8	2.6	2.1	1.8	1.4	2.3	
18	Q	1.1	1.1	1.4	2.6	3.3	3.3	2.6	2.1	1.9	1.3	1.2	1.4	1.9	2.1	2.1	2.3	2.4	2.3	2.0	1.8	1.7	1.4	1.5	1.9	
19		0.4	-0.4	0.1	1.2	1.6	1.8	1.1	-0.2	0.1	1.1	1.3	1.6	1.6	1.7	1.4	2.9	2.9	3.4	4.2	3.2	3.3	3.9	2.9	3.8	1.9
20	D	5.1	1.3	0.8	0.7	3.1	4.4	3.9	3.3	2.9	2.1	2.3	2.8	4.8	3.9	4.1	4.1	4.6	3.7	3.4	4.6	4.8	0.9	2.6	1.0	3.1
21		1.8	0.4	-0.2	1.3	3.6	3.8	3.1	1.6	1.1	1.6	2.8	3.1	2.9	3.1	3.0	3.0	3.6	4.3	4.6	3.9	2.9	2.7	2.8	2.5	2.7
22	Q	1.9	2.4	3.1	4.9	5.2	4.4	3.1	1.6	0.8	-	-	1.9	2.2	2.3	2.9	3.1	2.8	2.4	2.4	2.3	2.3	1.9	1.9	0.8	2.6
23		1.0	0.9	1.1	2.9	2.8	2.4	2.3	0.5	-0.2	0.4	1.2	2.1	1.0	0.4	1.9	1.9	2.7	2.8	3.4	4.1	4.5	3.9	2.8	2.3	2.0
24		2.4	-	-	3.6	3.6	3.4	1.9	1.3	1.2	1.1	1.7	3.4	2.5	3.7	2.3	3.2	3.3	3.7	4.9	4.7	6.0	5.0	4.4	3.4	3.4
25		1.9	2.0	2.5	2.9	2.9	2.7	2.2	1.1	0.1	-0.1	1.4	3.4	1.6	1.9	5.2	2.6	2.9	2.9	2.9	2.9	2.4	0.9	2.4	2.4	2.2
26		1.6	0.4	1.4	2.6	2.5	3.3	2.9	0.9	1.6	0.8	0.8	1.4	1.4	1.4	2.2	2.4	2.7	3.7	5.3	4.0	2.1	1.9	2.9	2.5	2.2
27	D	2.1	1.1	2.6	3.2	2.6	0.4	0.5	0.9	0.9	0.9	1.1	1.0	2.2	2.8	5.4	6.3	7.8	5.4	2.0	2.1	5.5	4.4	1.4	2.8	2.7
28	D	1.6	0.0	1.6	2.9	4.6	4.5	3.5	2.9	1.4	2.7	2.1	2.8	4.9	4.3	3.3	3.4	3.4	3.9	2.1	2.9	3.7	3.1	1.6	1.8	2.9
29		2.4	0.8	2.4	2.9	3.1	2.5	2.1	0.3	-0.1	0.4	1.0	2.0	2.1	2.4	3.4	3.1	4.1	3.3	2.4	3.4	4.1	3.7	2.9	2.4	2.4
30		1.1	1.9	2.3	2.4	2.4	2.7	2.1	1.6	1.6	2.9	2.5	2.3	2.6	2.4	3.4	3.6	3.5	3.1	2.8	2.6	2.9	3.1	2.9	2.1	2.5
31		1.9	2.9	3.3	3.3	3.1	1.9	0.9	0.4	0.4	1.6	2.1	1.0	1.9	1.9	1.9	2.0	2.1	2.8	3.5	3.3	2.0	3.1	2.9	2.8	2.2
Среднее по всем дням		1.8	1.5	2.0	3.1	3.5	3.2	2.3	1.3	1.2	1.8	2.5	2.8	3.2	3.0	3.1	3.2	3.4	3.4	3.3	3.3	3.1	2.7	2.4	2.1	2.6
по Q		1.7	1.8	2.2	3.4	3.9	3.7	2.9	1.9	1.5	1.8	2.0	2.0	2.2	2.3	2.6	2.5	2.4	2.4	2.4	2.4	2.2	1.9	1.8	1.4	2.3
по D		1.9	0.9	1.7	2.6	3.5	3.1	2.2	1.7	1.7	2.7	2.9	2.8	4.6	4.4	3.9	4.1	4.0	3.9	2.7	3.2	3.8	2.5	1.8	1.4	2.9

Алма-Ата

Февраль 1973 года

Склонение $\delta = 4^{\circ}30.0$ + табличное значение в минутах

Долгота $76^{\circ}55$ в.д.

Широта $43^{\circ}15$ с.ш.

Дни	Время: миро: вое: УТ																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		2.2	2.1	3.0	2.9	3.1	2.4	1.9	0.7	0.8	1.8	1.9	2.6	2.4	1.8	2.7	2.9	6.1	3.1	4.8	2.6	4.6	5.6	5.1	4.0	3.0
2		3.1	2.9	2.8	2.6	2.7	1.9	0.9	0.4	1.6	1.9	2.2	2.0	1.9	2.1	1.4	2.0	2.9	3.2	3.0	3.2	4.0	4.6	6.0	3.4	2.6
3		2.4	1.9	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2
4	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		-	-	-	2.1	2.8	3.0	2.9	2.4	2.4	2.7	2.9	2.3	2.4	2.4	2.8	2.8	2.6	2.4	2.2	2.1	1.9	1.9	1.4	1.4	2.4
6		1.1	0.8	0.9	1.9	2.1	1.3	1.1	0.9	1.3	2.7	3.6	3.3	2.8	3.4	5.8	3.7	1.8	2.3	3.3	3.5	3.4	2.8	2.4	2.1	2.4
7		1.8	1.4	1.1	1.0	1.0	0.3	0.3	0.2	1.0	2.4	3.2	2.5	2.4	2.4	2.4	1.8	2.4	2.4	1.1	2.6	1.8	1.7	1.1	1.1	1.6
8		1.0	1.0	1.7	1.0	1.7	1.1	1.1	0.2	-0.6	0.3	4.0	3.2	2.4	3.2	3.2	3.2	4.0	4.0	3.2	2.4	0.2	0.3	1.7	2.4	1.9
9		2.4	1.8	3.2	2.4	2.4	1.8	1.1	1.7	1.7	2.4	2.4	3.2	4.0	4.0	4.1	4.0	3.2	2.4	2.4	1.7	1.0	1.7	2.4	1.7	2.5
10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Q	-	-	-	4.0	4.0	3.2	1.7	2.4	2.4	2.4	2.5	2.5	2.5	3.3	3.3	2.4	2.4	4.0	2.5	2.4	2.4	1.7	2.4	2.4	2.7
14	Q	1.7	2.4	2.4	1.7	2.4	2.4	-	-	1.7	2.5	3.2	2.4	2.4	1.7	1.7	1.7	1.7	2.4	2.4	1.7	2.4	2.4	1.7	0.2	2.1
15	Q	1.0	1.7	1.7	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.7	1.7	1.7	1.7	1.8	2.5	2.4	1.7	1.7	1.7	1.8	1.7	1.1	1.5
16		1.0	1.0	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0
17		-	-	-	-	-	-	-	-	-	-	2.4	2.4	2.4	2.4	4.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.4	2.4	2.9
18		2.4	1.7	1.0	1.7	2.4	2.4	1.7	1.0	1.0	1.7	3.2	2.4	2.4	2.4	2.4	2.4	4.0	3.2	3.2	4.0	4.0	4.0	2.5	4.0	1.9
19		-	-	-	1.7	2.4	3.2	3.2	2.4	1.7	1.7	2.4	2.4	2.4	2.4	2.4	4.0	3.2	3.2	4.0	4.0	4.0	2.5	4.0	4.0	2.9
20		3.2	3.2	3.2	3.2	3.2	2.4	1.7	0.3	1.0	1.8	2.4	2.4	2.4	2.4	2.5	3.2	3.2	3.2	4.7	6.2	4.7	4.0	3.3	3.2	3.0
21	D	3.2	3.2	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7
22	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	D	-	-	-	-	2.3	2.9	2.1	2.4	2.6	2.8	0.5	0.6	-2.4	-0.9	0.2	-1.2	-7.1	-2.2	1.2	1.7	1.8	-0.4	0.6	0.5	0.4
24	D	0.0	0.5	2.4	1.4	1.5	2.6	3.8	3.0	2.0	3.0	0.8	-1.8	-3.7	-3.1	-0.6	-1.9	-2.1	-1.0	1.2	0.0	-1.2	-1.3	2.0	1.1	0.4
25		0.8	0.8	0.5	0.6	1.5	1.8	1.8	3.0	3.6	2.0	1.5	1.5	1.1	0.6	-0.1	-0.6	-0.9	-1.3	0.6	-0.3	1.5	1.1	2.6	2.4	1.1
26		1.8	2.6	1.8	-0.1	-0.3	2.4	3.0	3.0	3.0	2.1	1.2	1.2	-1.0	1.1	1.7	0.0	-0.1	0.6	2.1	3.0	3.9	2.6	0.2	0.5	1.5
27	D	0.9	0.6	0.6	1.7	2.0	2.4	3.9	4.7	4.4	3.3	0.9	0.3	-1.2	-0.9	0.9	1.1	0.3	0.2	0.3	-0.6	0.3	3.0	1.5	1.4	1.3
28		3.3	2.0	0.8	0.6	0.8	2.0	3.5	3.3	3.6	3.2	3.4	0.6	1.8	1.1	0.9	1.2	2.0	1.7	1.5	1.4	1.5	1.8	1.8	2.7	1.9
Среднее по всем дням		1.8	1.8	1.8	1.8	2.1	2.1	2.0	1.8	1.9	2.1	2.3	1.9	1.4	1.6	2.2	1.9	1.6	1.9	2.4	2.2	2.3	2.2	2.3	2.0	2.0
по Q		1.4	2.0	2.0	2.4	2.4	2.5	1.4	1.7	1.7	2.0	2.4	2.2	2.2	2.2	2.2	2.0	2.2	2.9	2.2	1.9	2.2	2.0	1.9	1.2	2.1
по D		1.4	1.4	1.6	1.0	1.9	2.6	3.3	3.4	3.0	2.7	0.7	-0.3	-2.4	-1.6	0.2	-0.7	-3.0	-1.0	0.9	0.4	0.3	0.4	1.4	1.0	1.2

Алма-Ата
Февраль 1973года

Горизонтальная сос-щая
Долгота 76°55 в.д.

H = 25400 + табличное значение в гаммах
Широта 43°15 с.ш.

Дни	Время: миро: вое: УТ																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		99	104	92	97	80	72	71	78	85	89	84	79	89	82	81	73	74	84	81	78	81	82	80	83	83
2		89	91	88	84	83	84	87	96	100	97	96	95	91	83	76	82	86	94	88	92	91	90	88	85	89
3		92	95	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93
4	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		-	-	-	129	126	108	92	96	94	89	88	88	88	88	83	86	88	91	95	95	98	100	103	103	97
6		103	108	111	114	113	119	119	122	125	111	96	100	83	84	80	79	92	92	92	96	92	90	93	95	100
7		96	95	95	95	95	96	98	115	119	109	98	101	95	94	92	92	90	100	120	90	92	98	106	102	99
8		104	99	98	87	80	72	52	106	126	100	78	84	81	79	87	100	84	75	88	88	91	95	92	90	89
9		86	82	72	72	71	72	72	60	77	82	79	83	82	89	74	98	93	93	90	96	106	91	90	88	83
10		89	90	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89
11	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Q	-	-	-	84	78	72	78	83	96	98	93	98	95	87	92	90	88	90	88	88	90	93	92	91	89
14	Q	93	93	93	107	102	107	113	-	109	106	106	105	102	105	107	106	102	100	98	107	104	97	96	106	103
15	Q	108	104	97	95	97	97	95	95	98	106	102	97	81	76	73	78	79	80	87	91	95	88	88	91	92
16		94	95	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95
17		-	-	-	-	-	-	-	-	-	-	72	70	72	66	58	56	70	70	72	84	79	79	81	81	72
18		81	79	88	92	96	98	97	98	100	91	73	76	-	-	-	-	-	-	-	-	-	-	-	-	85
19		-	-	-	88	92	92	88	88	93	96	93	92	91	93	93	72	78	79	86	95	90	95	94	84	89
20		91	94	93	90	86	92	98	103	100	101	102	100	92	92	92	93	88	79	78	67	66	77	77	66	89
21	D	81	81	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84
22	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	D	-	-	-	-	52	53	46	54	49	44	36	21	43	21	57	41	44	37	41	73	89	66	51	59	49
24	D	42	53	63	61	51	54	59	24	39	61	32	32	53	39	63	64	32	46	66	73	60	61	46	47	51
25		53	54	53	43	49	53	46	47	39	33	26	43	51	59	73	74	70	76	84	71	63	51	62	73	56
26		67	53	49	53	44	43	43	47	62	64	54	51	61	71	67	76	73	63	80	88	103	87	63	64	64
27	D	63	57	44	34	47	42	53	63	61	49	29	26	53	63	56	60	61	90	97	71	63	70	73	67	58
28		51	59	66	67	64	67	53	44	44	72	69	61	71	72	76	82	84	79	73	79	82	74	73	73	69
Среднее по всем дням.		84	84	82	88	79	79	77	79	85	84	76	75	78	76	78	79	78	80	84	85	86	84	31	82	82
по Q		100	99	95	94	92	92	95	91	101	103	102	98	93	89	91	91	90	90	91	95	96	93	92	96	95
по D		62	64	66	48	50	50	53	47	46	51	32	26	50	41	59	55	46	58	68	72	71	66	57	58	81

Алма-Ата
Март 1973 года

Склонение $\Delta = 4^{\circ}30.0$ + табличное значение в минутах
Долгота $76^{\circ}55$ в.д. Широта $43^{\circ}15$ с.ш.

Дни	Время: миро: вое: УТ																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		0.6	1.7	2.6	-0.6	-0.3	0.5	1.8	2.9	4.1	4.4	3.6	3.3	3.7	2.9	2.9	2.4	-2.4	-6.4	-1.2	0.5	2.1	2.0	1.2	1.4	1.4
2		1.4	2.4	0.6	-0.4	0.9	2.1	3.3	4.1	4.5	3.6	2.6	-0.3	0.9	0.9	-1.8	0.0	-1.9	-2.4	-2.4	0.6	-1.8	0.2	2.1	1.5	0.9
3		1.4	1.1	1.4	1.2	1.2	2.0	3.6	4.2	4.5	4.5	2.6	1.5	-0.1	0.9	1.8	2.0	1.5	2.0	2.0	2.0	2.1	2.3	2.4	2.7	2.1
4	Q	3.5	2.0	0.9	-0.3	-0.9	0.6	2.4	3.6	4.2	3.9	2.7	2.0	1.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.6	2.1
5		2.4	2.1	0.9	-0.6	-1.2	0.0	-	-	4.8	4.8	3.9	2.9	2.7	3.0	2.6	2.0	1.2	0.9	0.8	0.8	-0.7	0.2	0.9	0.9	1.5
6		1.5	1.8	1.1	0.0	0.7	0.3	3.2	3.6	3.4	-	-	2.7	2.1	4.8	10.0	7.8	3.4	2.8	2.8	2.7	2.8	2.8	2.7	2.2	2.7
7		1.9	2.2	3.0	4.3	4.9	3.6	2.5	1.9	0.9	0.9	2.5	3.1	2.2	2.2	2.2	3.3	3.3	2.8	2.8	2.4	2.2	2.2	2.2	1.9	2.6
8		1.9	1.9	2.5	3.7	4.3	3.7	2.2	0.4	-0.8	0.8	0.4	1.8	2.2	3.0	3.1	1.6	1.8	1.9	2.2	2.2	1.3	1.8	2.4	1.9	2.0
9		1.8	1.6	2.2	3.1	3.9	3.7	2.7	0.6	0.3	-	0.3	1.0	2.2	2.4	2.4	2.1	1.6	1.6	1.9	2.1	2.2	1.9	2.2	2.0	2.0
10		1.9	1.9	2.5	3.6	4.2	3.1	1.2	-0.8	-0.9	-0.3	0.7	2.1	1.9	1.6	1.6	1.5	1.6	1.9	1.6	1.9	2.2	1.9	1.2	1.9	1.7
11		1.6	1.0	1.9	3.3	4.5	4.2	2.5	0.3	-0.6	-0.3	0.6	1.6	1.6	1.6	3.3	2.8	2.5	2.8	2.2	2.4	2.2	2.1	1.8	1.3	2.0
12		0.4	0.6	1.9	3.6	4.0	2.8	0.9	-0.5	-0.5	0.3	1.8	2.4	2.5	2.2	2.5	2.4	2.2	3.6	4.2	4.3	2.1	3.0	2.8	2.8	2.2
13	Q	2.7	2.8	3.3	4.3	4.6	3.4	1.0	-0.6	-1.2	0.0	1.6	2.7	2.2	1.9	2.2	2.2	1.8	1.9	1.9	2.1	2.2	2.2	2.4	2.2	2.1
14	Q	2.2	2.5	3.7	5.4	5.5	3.7	1.5	-0.5	-1.1	-0.3	1.3	2.5	2.5	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	2.1
15	Q	1.8	2.1	3.4	5.2	5.2	3.9	1.6	-0.8	-1.5	-0.9	0.3	1.9	1.9	1.6	1.6	1.9	1.6	1.6	1.6	1.9	1.8	1.6	1.6	1.5	1.8
16		1.3	1.6	3.0	4.6	4.9	3.1	0.1	-2.4	-3.2	-2.6	-1.4	-0.3	-0.2	0.4	3.1	1.5	1.8	3.1	2.5	3.1	2.8	2.2	2.4	2.1	1.4
17	Q	1.8	1.9	3.0	4.3	5.1	4.3	-2.4	0.6	-0.2	-0.5	0.1	1.3	1.9	1.3	1.6	1.3	1.3	1.9	4.0	3.1	3.0	2.8	1.6	1.6	1.9
18		1.6	1.9	3.4	4.9	5.5	4.0	0.9	-1.7	-2.0	-1.2	0.0	2.4	5.5	2.1	1.3	2.1	1.6	2.5	3.6	4.9	3.7	3.3	3.6	1.5	2.3
19	Q	5.1	4.2	5.1	6.1	5.7	3.4	-0.8	-3.5	-3.6	-3.5	-0.9	2.1	-0.2	3.4	4.2	5.8	5.8	7.9	3.0	6.1	6.0	5.7	0.7	4.2	3.0
20	Q	3.6	4.3	5.1	6.9	4.2	1.9	1.0	1.0	-0.5	3.6	6.7	5.7	5.5	7.9	4.3	6.3	7.3	6.7	2.5	4.9	3.1	2.8	5.5	1.2	4.3
21	Q	4.3	4.8	5.2	5.8	6.3	3.6	3.4	-0.2	-1.1	1.6	1.2	4.9	4.6	6.9	4.3	4.0	9.3	7.2	2.5	5.5	3.9	1.3	2.8	1.5	3.1
22	Q	1.3	3.0	4.0	5.1	6.3	3.7	2.8	1.6	0.3	1.5	1.6	3.4	10.5	4.6	3.7	2.8	2.5	5.4	4.0	1.8	1.3	0.1	2.8	2.5	3.2
23		2.5	1.6	3.4	6.1	5.8	3.0	0.7	-0.8	-2.1	1.5	0.6	3.0	7.0	5.2	2.7	3.6	3.4	3.1	6.6	5.7	1.9	2.1	0.6	3.3	2.9
24		1.0	3.6	4.9	6.1	5.8	4.3	1.8	-0.6	-1.1	-0.5	0.9	3.4	3.3	5.7	5.4	4.6	4.8	4.0	4.0	3.3	2.5	3.3	2.8	1.9	3.1
25	D	3.4	3.4	3.7	0.7	3.0	1.5	0.6	-0.8	-0.8	-0.2	3.0	3.1	2.2	3.0	8.5	6.7	3.4	4.0	2.4	3.4	4.5	1.8	2.1	2.2	2.7
26		1.3	2.2	4.3	5.5	6.1	4.2	2.2	0.7	-0.9	0.1	1.5	2.2	2.4	2.1	1.9	1.9	2.7	4.6	4.3	5.8	1.0	4.3	2.8	3.0	2.8
27		3.4	3.1	3.1	5.1	4.9	3.1	1.8	0.4	-0.8	-0.6	1.9	3.9	4.8	4.6	5.1	3.0	2.8	2.4	3.6	2.2	3.2	2.8	2.4	2.1	2.8
28		3.1	4.0	3.7	1.8	2.1	3.1	3.0	1.1	-0.1	1.2	2.4	3.7	4.1	3.1	2.1	2.2	2.5	3.6	3.9	4.2	3.7	3.3	3.3	2.5	2.8
29		3.0	3.1	3.9	5.7	5.2	3.7	1.8	-0.3	-1.2	-0.3	0.9	1.6	1.8	2.1	1.8	1.9	2.4	2.4	2.8	3.0	2.7	3.1	1.3	3.9	2.3
30		3.3	2.5	4.5	5.4	4.9	3.1	1.0	-1.1	-1.4	-1.5	-0.3	1.0	2.4	3.1	3.0	3.3	2.2	2.2	2.2	2.5	3.1	3.3	1.6	2.2	2.2
31		2.5	2.8	4.6	5.2	3.1	2.7	1.6	-0.2	-0.5	0.3	1.2	1.8	1.9	2.4	3.1	1.8	1.9	1.5	4.8	6.7	5.2	7.0	4.0	3.7	2.9
Среднее по всем дням.		2.2	2.4	3.1	3.7	3.9	2.9	1.7	0.4	0.0	0.7	1.5	2.4	2.8	2.9	3.1	2.8	2.5	2.6	2.6	3.1	2.4	2.5	2.3	2.2	2.4
по Q		2.4	2.3	2.9	3.8	3.9	3.2	0.8	0.5	0.0	0.4	1.2	2.1	2.1	1.8	1.9	1.9	1.7	1.7	2.3	2.2	2.2	2.1	2.0	2.0	2.0
по D		3.5	3.9	4.6	4.9	5.1	2.8	1.4	-0.4	-1.1	0.6	2.3	3.8	4.5	5.2	5.0	5.1	5.7	6.2	2.9	4.3	3.8	2.3	2.8	2.3	3.3

Алма-Ата
Март 1973года

Горизонтальная сос-щая Н = 25400 + табличное значение в гаммах
Долгота 76°55 в.д. Широта 43°15 с.ш.

Дни	Время: миро: вое: УТ																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
I		72	74	66	66	66	63	59	54	53	59	62	70	66	63	72	81	91	81	39	61	76	66	69	69	67
2		61	62	76	67	56	63	53	61	66	43	39	53	63	62	86	55	91	54	43	69	61	56	53	57	60
3		61	63	59	60	61	64	54	51	70	76	76	72	62	76	74	73	81	79	80	77	79	80	80	81	70
4	Q	83	83	81	73	69	59	56	66	81	85	90	87	84	82	80	80	81	84	84	84	86	84	83	83	75
5		86	89	90	86	82	76	70	73	89	99	100	99	97	98	93	82	66	66	76	86	94	86	96	102	87
6		117	122	131	120	99	82	61	69	96	-	-	92	91	70	54	23	62	74	76	76	79	82	85	85	84
7		90	93	95	97	86	81	78	82	91	93	87	82	88	91	88	92	91	88	92	92	94	94	96	97	90
8		98	100	103	101	99	98	99	101	106	109	109	103	97	88	91	97	99	100	105	103	107	104	100	100	101
9		101	101	98	92	95	90	86	87	89	102	100	98	99	94	97	100	101	105	104	100	101	102	97	97	97
10		100	103	103	104	104	101	101	107	108	110	106	96	95	98	100	101	101	100	107	106	105	102	112	109	103
11		107	108	108	107	104	98	94	96	102	107	106	105	103	100	104	104	97	96	106	103	103	101	101	101	103
12		100	100	104	109	111	109	108	94	87	91	93	97	94	93	91	92	92	91	108	97	113	93	94	96	98
13	Q	98	99	98	97	95	91	94	104	111	106	102	95	93	92	92	91	96	98	100	99	104	100	101	101	98
14	Q	103	104	105	102	100	97	100	104	106	106	104	102	98	97	98	101	103	103	105	104	105	105	104	106	103
15	Q	106	109	109	102	101	99	100	105	95	116	111	103	97	97	97	98	100	101	103	105	103	104	104	104	103
16		104	106	104	102	104	105	115	128	136	136	118	98	85	78	90	91	91	85	92	93	98	108	104	100	103
17	Q	102	103	101	102	96	95	92	96	101	105	111	105	98	99	99	99	101	97	96	90	97	100	94	101	99
18		103	109	108	104	100	97	99	106	107	110	109	90	73	67	75	82	91	91	83	82	100	77	91	94	94
19	D	83	82	87	82	72	59	72	82	74	47	11	55	47	8	9	32	30	27	52	58	76	54	89	69	57
20	D	52	48	48	39	39	52	45	64	64	27	38	12	11	11	55	68	76	63	82	82	92	69	78	54	
21	D	66	63	64	35	45	45	10	35	54	53	58	61	50	76	66	78	57	60	81	81	83	74	64	61	59
22	D	69	64	66	61	38	46	45	44	56	64	73	69	73	56	61	82	92	75	79	86	93	95	87	72	69
23		65	73	69	64	61	49	31	55	64	50	51	51	64	55	54	76	67	83	96	64	74	73	80	70	64
24		85	77	79	73	53	39	49	68	73	81	70	73	64	59	67	73	54	71	70	74	80	80	73	73	69
25	D	66	67	55	50	55	55	50	56	64	81	60	75	70	69	81	65	68	73	91	77	73	81	82	73	68
26		72	79	73	58	48	46	51	73	80	85	85	83	82	82	82	83	84	90	85	82	91	79	73	73	76
27		74	71	67	60	64	62	66	82	89	84	64	56	61	68	65	73	76	80	77	91	91	81	78	73	73
28		74	71	74	74	68	64	68	76	83	80	86	68	47	66	84	89	85	92	83	78	80	83	83	94	77
29		86	86	86	71	56	67	80	89	91	90	89	84	78	80	78	77	88	88	92	91	90	89	99	88	84
30		81	87	83	82	78	74	81	88	85	93	96	86	59	57	56	66	76	82	85	85	86	83	85	83	80
31		84	82	80	66	62	64	65	77	84	86	87	87	85	82	83	91	98	122	93	83	99	77	67	66	82
Среднее по всем		85	86	86	81	76	74	72	80	86	83	80	81	77	75	78	80	83	84	86	86	90	87	86	86	82
по Q		98	99	99	95	92	88	88	95	99	104	104	98	94	93	93	94	96	97	98	96	99	99	97	99	96
по D		67	65	64	52	50	51	44	56	62	54	48	54	50	44	54	65	65	60	77	77	81	79	78	70	61

Алма-Ата

Склонение $\Delta = 4^{\circ}30.0$ + табличное значение в минутах

Апрель 1973 года

Долгота $76^{\circ}55$ в.д.

Широта $43^{\circ}15$ с.ш.

Дни	Время: миро: вое: UT																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	D	4.0	4.2	5.5	6.7	5.4	4.0	2.4	0.4	-0.8	-0.5	-0.8	-0.2	0.6	5.2	4.3	5.7	9.6	13.2	12.6	13.5	11.5	11.4	8.4	4.3	5.4
2	D	6.7	7.8	5.7	4.6	4.8	3.7	2.7	1.0	0.7	1.9	5.2	3.4	4.0	4.9	5.8	6.0	5.1	5.8	5.8	1.9	2.8	3.6	3.4	3.7	4.2
3		4.0	4.0	4.2	4.8	5.1	5.1	1.8	0.1	-1.4	0.0	-1.4	1.9	2.5	5.7	4.0	2.7	2.2	4.0	2.8	3.0	3.4	3.1	3.1	3.1	2.9
4		3.4	4.6	5.5	5.5	4.8	3.6	2.4	0.7	-0.8	-0.2	1.3	2.5	2.7	2.5	2.2	1.9	1.9	2.2	2.5	2.5	2.7	2.8	2.8	3.1	3.1
5	Q	3.0	3.1	4.6	6.3	7.0	6.0	4.0	0.9	-0.8	-0.6	0.6	1.6	1.6	1.6	1.9	1.9	2.1	2.2	2.5	2.4	2.5	2.8	2.8	2.8	2.6
6	Q	3.0	3.3	4.5	5.8	5.7	4.6	2.7	0.7	-0.8	-0.9	-0.3	0.7	1.6	1.3	1.3	1.5	1.6	1.6	1.9	2.1	2.2	2.5	2.4	2.4	2.2
7	Q	2.4	3.1	4.5	6.0	6.1	4.9	2.7	0.4	-0.8	-0.8	0.4	1.3	2.1	2.1	1.9	1.6	1.8	1.6	1.6	1.8	1.9	2.2	2.1	2.5	2.2
8		3.0	3.7	5.2	6.4	5.4	2.8	0.7	-1.1	-2.0	-1.4	0.4	0.6	1.0	1.0	1.0	1.8	1.8	1.9	1.8	3.0	2.5	2.1	2.2	2.2	1.9
9		1.9	2.5	4.0	5.7	4.9	2.1	-0.2	-1.7	-2.7	-2.1	-1.4	-0.2	1.3	1.6	1.3	1.3	1.3	1.5	1.6	1.9	2.0	1.9	2.1	2.2	1.4
10	Q	2.5	3.1	4.5	5.5	4.9	2.5	-0.5	-2.0	-2.6	-2.4	-1.4	0.4	1.3	1.3	1.3	1.0	1.3	1.6	1.9	1.9	1.8	1.6	1.6	1.6	1.4
11		1.9	2.5	2.5	4.5	4.6	3.7	0.7	-1.4	-1.4	-1.4	-0.5	1.2	2.2	2.1	3.4	2.9	3.4	3.4	3.4	4.0	3.9	3.4	3.3	3.4	2.3
12	Q	3.9	4.6	5.1	5.1	4.0	1.3	-0.5	-2.1	-2.3	-1.1	-0.2	0.4	0.7	0.9	1.0	1.2	1.3	1.6	1.9	2.2	2.5	2.8	3.1	3.1	1.7
13		2.8	3.4	4.5	4.9	4.0	1.0	-0.8	-1.5	-3.2	-3.2	-3.5	-2.9	2.8	6.7	3.9	1.3	1.9	2.8	3.3	3.1	3.1	3.4	3.7	3.7	1.9
14		4.2	5.1	5.5	4.9	3.0	1.2	3.1	0.9	1.0	2.5	3.1	2.5	2.4	2.2	0.7	1.8	2.5	3.4	3.9	3.7	4.2	4.6	4.5	4.5	3.1
15		4.9	6.4	7.0	7.2	5.2	2.8	0.1	-1.8	-2.3	-2.3	-0.9	0.1	1.3	1.6	1.3	1.6	1.6	1.9	2.2	2.5	2.8	3.0	3.1	3.4	2.2
16	D	3.7	4.9	4.3	5.5	4.5	2.7	0.0	-0.8	-1.8	0.6	1.0	2.5	0.7	5.1	6.4	3.1	3.0	2.8	3.7	7.0	4.9	4.6	4.3	4.2	3.2
17	D	1.9	4.0	5.8	5.1	4.6	3.1	1.9	0.4	2.4	1.8	1.3	5.5	4.8	5.5	5.4	4.0	3.1	2.2	2.4	4.6	3.4	1.0	3.4	4.0	3.4
18		2.4	3.6	5.5	5.7	3.4	2.5	0.6	0.6	-0.2	-0.6	2.4	1.6	4.0	3.0	2.8	3.3	3.7	3.1	4.3	2.2	4.6	3.7	1.6	1.3	2.7
19		3.4	4.9	5.7	4.9	4.8	3.1	1.0	-1.4	-0.8	-1.1	0.6	1.6	1.3	3.1	3.1	1.6	1.7	2.9	2.8	3.7	3.7	3.7	2.5	1.9	2.4
20		2.0	5.0	6.1	4.3	3.4	1.6	0.3	-1.1	-0.8	-1.1	1.6	2.2	1.8	2.5	2.1	4.5	2.8	1.3	3.6	3.7	2.2	4.0	3.0	3.1	2.4
21		4.5	2.2	3.7	4.0	3.4	2.1	0.0	-0.3	-1.1	-1.5	1.0	1.8	4.0	3.9	3.3	2.2	2.5	2.5	4.5	3.7	3.7	2.2	3.6	4.3	2.5
22		3.0	2.8	3.7	4.9	4.9	3.1	0.7	0.1	0.3	0.7	1.0	2.4	3.0	3.7	4.2	5.5	4.2	3.7	3.6	3.1	2.5	2.5	3.1	2.8	2.9
23		2.4	3.7	5.1	4.6	3.7	1.0	-0.9	-2.0	-2.0	-1.4	0.4	2.4	3.7	4.6	4.0	4.9	3.3	2.5	2.4	2.4	2.5	2.4	2.8	3.1	2.3
24		3.6	4.2	5.1	5.2	5.5	4.3	1.9	0.7	-1.1	-0.9	-0.2	0.7	3.1	1.9	1.9	1.9	2.1	2.5	2.5	2.5	2.5	3.3	3.1	3.1	2.5
25		3.9	4.9	6.4	6.6	6.6	2.8	0.1	-1.4	-1.5	-0.6	0.9	1.6	2.4	2.4	2.1	1.9	1.6	1.6	2.8	3.9	3.4	1.6	-0.3	1.9	2.3
26		2.5	3.0	4.3	4.6	3.9	3.3	1.5	-0.6	-1.4	-1.8	-1.2	-0.5	1.2	2.1	2.2	2.5	2.2	2.4	3.6	2.5	4.3	4.9	3.9	3.7	2.2
27		5.5	7.0	6.9	7.6	6.4	5.2	3.1	1.3	0.4	1.0	-0.2	2.2	3.1	3.0	2.1	1.9	1.6	2.4	2.8	2.8	3.0	3.4	3.1	3.7	3.3
28		4.3	5.1	6.1	6.4	4.9	2.2	-0.8	-2.3	-1.8	-2.0	-2.0	-2.3	1.0	2.1	0.7	0.7	0.9	1.2	1.8	1.9	2.2	1.6	1.2	3.3	1.5
29	D	4.0	4.3	6.0	3.9	3.4	2.5	0.7	-0.2	0.4	-0.2	-0.8	0.4	4.2	8.1	3.6	4.9	3.6	2.5	2.5	2.8	-0.2	3.1	3.7	4.3	2.8
30		5.1	6.1	6.4	6.4	5.2	1.2	-1.8	-2.9	-1.7	-0.5	-0.2	0.9	1.5	1.9	2.4	2.2	3.1	3.4	2.2	2.8	2.5	2.8	2.8	3.1	2.3
Среднее по всем дням.		3.4	4.2	5.1	5.5	4.8	3.0	1.0	-0.5	-1.0	-0.7	0.3	1.2	2.3	3.1	2.7	2.7	2.6	2.9	3.2	3.3	3.2	3.2	3.0	3.1	2.6
по Q		3.0	3.4	4.6	5.7	5.5	3.8	1.7	-0.4	-1.5	-1.2	-0.2	0.9	1.5	1.4	1.3	1.4	1.6	1.7	1.9	2.1	2.1	2.4	2.4	2.4	2.0
по D		4.1	5.0	5.5	5.2	4.5	3.2	1.5	0.2	0.2	0.7	1.2	2.3	2.9	5.8	5.1	4.7	4.9	5.3	5.4	6.0	4.5	4.7	4.6	4.1	3.6

Алма-Ата
Апрель 1973 года

Горизонтальная сос-щая Н = 25400 + табличное значение в гаммах
Долгота 76°55 в.д. Широта 43°15 с.ш.

Дни	Время: миро: вое: УТ																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	D	68	72	73	71	70	70	72	81	85	81	80	67	51	41	37	28	-14	-45	17	-26	16	17	-28	31	42
2	D	3	-1	6	-6	-2	4	10	24	21	-3	8	21	21	27	35	35	51	42	52	59	57	54	55	55	26
3		58	57	38	45	35	17	44	61	63	57	63	62	63	59	71	67	68	76	84	71	70	70	72	74	60
4		75	73	71	58	52	51	57	65	76	78	79	77	72	73	76	75	79	83	84	82	81	81	82	84	73
5	Q	84	86	88	85	76	70	59	64	79	85	89	89	83	81	79	80	80	81	82	82	81	81	82	82	80
6	Q	82	81	78	71	66	69	75	86	91	93	93	90	88	88	87	88	89	90	90	90	90	90	90	91	85
7	Q	92	91	91	89	83	81	90	97	99	99	93	96	93	89	89	93	93	94	93	94	96	96	94	96	93
8		93	97	100	97	92	95	103	109	110	106	92	90	91	92	93	91	90	93	94	98	95	95	95	95	96
9		92	94	93	85	74	72	80	94	98	99	100	97	95	94	95	97	98	99	99	99	98	97	95	97	93
10	Q	99	103	102	94	84	78	88	96	102	105	103	100	99	98	97	99	99	99	02	100	101	108	109	110	99
11		111	103	108	96	77	61	59	77	73	60	61	54	62	60	57	54	64	73	71	70	72	72	77	78	73
12	Q	79	78	75	67	67	70	82	102	109	109	106	102	99	97	97	97	94	93	97	94	93	91	90	91	91
13		93	93	99	97	106	118	135	136	145	109	61	32	16	7	-12	24	43	47	54	57	62	68	70	74	72
14		72	66	69	88	90	95	61	32	7	11	21	27	26	35	53	54	57	61	60	62	63	57	56	63	54
15		66	58	54	48	45	50	62	71	75	75	73	79	76	77	79	80	82	85	90	91	92	90	87	86	74
16	D	86	88	85	79	71	63	54	39	44	68	43	44	43	47	75	50	70	81	100	76	63	67	66	65	65
17	D	75	71	56	38	26	37	56	71	63	72	71	51	54	82	85	73	71	96	115	84	77	83	83	77	69
18		72	66	62	46	50	61	65	46	80	64	84	84	86	74	73	86	115	90	81	97	87	78	81	85	76
19		82	67	49	59	57	37	51	75	75	84	81	77	75	81	88	82	88	91	107	95	90	90	109	94	78
20		87	72	51	44	61	59	55	70	89	90	84	66	68	80	83	85	87	106	86	82	91	79	81	81	76
21		72	81	79	59	50	51	63	47	54	51	59	51	55	78	63	72	83	82	79	79	80	73	84	77	68
22		77	75	57	60	61	43	32	60	52	64	64	62	61	71	66	92	79	72	76	78	79	81	75	67	
23		75	80	65	46	35	50	68	66	73	81	79	76	68	61	66	76	70	72	75	80	80	81	79	84	70
24		83	81	73	72	64	55	46	58	73	71	76	78	80	80	81	84	86	81	81	82	84	82	79	85	76
25		88	87	80	61	49	49	63	81	94	91	88	86	84	83	85	88	91	85	101	102	83	87	87	87	82
26		96	86	75	72	64	61	76	84	87	92	90	94	84	79	81	80	87	93	99	109	126	90	89	90	87
27		78	66	61	42	48	36	36	67	68	81	71	70	84	80	91	86	86	86	86	86	86	84	84	84	72
28		87	86	85	72	72	75	84	91	98	104	109	118	73	68	87	94	99	99	99	102	99	108	112	99	92
29	D	83	77	61	56	44	41	39	60	61	59	61	70	54	44	63	73	81	93	89	87	103	84	86	86	69
30		86	82	74	60	54	67	68	66	72	82	84	82	81	80	86	88	91	84	83	82	81	80	84	84	78
Среднее по всем дням.		80	77	72	65	61	74	64	73	77	77	76	74	69	70	73	75	79	80	84	82	83	81	80	82	75
по Q		87	88	87	81	75	74	79	89	96	98	97	95	92	91	90	91	92	92	92	93	92	94	93	94	90
по D		63	61	56	48	42	43	46	55	55	55	53	51	45	48	59	52	52	52	52	56	63	61	52	63	54

Алма-Ата

Май 1973 года

Склонение $\delta = 4^{\circ}30.0$ + табличное значение в минутахДолгота $76^{\circ}55$ в.д.Широта $43^{\circ}15$ с.ш.

Дни	Время: миро: вое: UT																									Средн. суточн.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		4.8	5.6	6.6	7.8	6.3	2.7	-0.9	-2.8	-2.7	-2.1	-0.3	1.5	3.3	2.3	1.5	1.5	1.5	1.7	1.5	2.9	2.0	1.8	4.4	3.6	2.3
2		4.2	5.4	6.3	6.9	5.1	2.6	-0.6	-3.0	-4.0	-3.4	-1.6	0.0	0.9	1.2	0.9	1.5	1.8	2.0	1.8	2.1	1.8	1.8	2.0	2.4	1.6
3		3.9	5.4	6.6	6.6	5.3	2.1	-1.2	-2.7	-5.4	-2.7	-0.9	1.1	1.5	2.1	2.4	2.3	2.1	2.7	2.7	2.7	2.4	2.1	2.1	2.7	1.9
4		3.6	4.7	6.3	8.0	7.5	4.1	0.0	-2.2	-2.7	-1.9	-1.2	0.2	1.8	2.4	2.1	2.7	2.6	2.7	2.4	2.4	2.4	2.3	1.8	1.4	2.2
5		3.2	3.9	5.1	7.2	6.3	3.5	0.8	-1.2	-1.9	-2.1	-1.5	0.3	1.8	2.1	1.8	1.8	2.0	2.4	2.9	2.6	2.7	2.4	2.6	2.7	2.1
6		3.6	4.7	5.9	5.7	5.0	3.0	0.3	-2.2	-3.9	-4.3	-3.3	-1.5	-0.4	-0.6	-1.2	-0.9	-0.9	0.0	2.7	3.6	3.3	3.0	2.6	2.4	1.1
7		3.0	3.6	3.5	4.5	4.7	3.5	0.5	-2.1	-2.4	-2.4	-1.6	-1.0	0.3	0.5	0.9	1.2	1.8	1.8	2.4	2.3	2.4	2.6	2.1	2.4	1.4
8		2.4	3.6	4.8	4.8	4.1	2.4	0.0	-1.3	-2.1	-2.1	-1.6	-0.6	-0.3	2.0	0.9	2.0	1.5	2.4	2.9	3.3	3.6	3.0	3.0	2.6	1.7
9		2.7	2.7	3.6	4.4	4.7	3.6	1.5	-0.1	-0.4	-0.3	-0.3	-0.3	0.8	2.4	3.0	1.7	1.5	1.7	1.8	2.0	2.3	2.4	1.5	3.0	1.9
10		3.2	4.1	4.7	4.7	3.9	2.4	1.1	-0.4	-1.5	-1.5	-1.2	-0.3	0.5	1.4	0.9	1.2	0.8	1.5	2.3	2.0	2.3	2.4	2.4	2.9	1.6
11		3.9	4.8	5.4	5.1	3.6	1.1	-0.6	-1.3	-1.3	-0.9	-0.9	-0.7	0.0	0.6	0.3	0.8	0.6	0.9	1.2	1.7	1.7	1.8	2.1	1.5	1.3
12		3.0	3.9	5.0	4.8	3.5	1.2	-0.6	-1.9	-1.9	-1.5	-0.9	0.0	1.2	1.2	0.8	0.6	0.9	1.2	1.8	2.1	2.1	3.2	3.2	3.9	1.5
13		4.4	3.9	3.8	3.9	3.8	2.3	0.0	-1.5	-1.2	-1.2	-1.3	-0.3	0.9	2.0	1.5	1.5	1.2	0.9	0.8	1.4	1.5	4.1	7.2	5.9	1.9
14	D	8.1	5.1	1.2	4.7	3.6	1.6	1.8	1.5	-1.5	-2.4	-1.0	1.5	3.2	3.3	4.1	2.4	0.9	2.6	3.3	3.2	3.3	5.6	5.4	5.0	2.7
15	D	6.0	6.6	6.0	5.6	3.5	2.1	0.6	-0.6	-0.3	-0.3	0.5	1.5	1.7	4.2	3.8	3.6	3.3	3.3	3.6	4.5	3.3	5.1	5.1	4.5	3.2
16	D	3.5	3.3	4.5	3.9	3.6	2.1	0.6	-1.2	-2.4	-1.2	-1.3	-0.6	0.9	1.8	1.5	1.5	1.8	1.8	2.4	2.7	3.0	3.0	2.7	0.8	1.6
17	D	2.6	4.4	5.9	5.0	4.8	3.9	1.1	-0.7	-1.2	-1.2	-0.9	1.8	2.1	3.3	4.1	3.0	1.8	3.2	3.9	3.3	2.7	2.7	3.0	2.9	2.6
18		3.8	5.0	6.0	6.3	5.9	3.0	0.3	-0.9	-1.3	-1.5	-0.9	-0.1	2.1	1.8	2.0	3.2	2.4	2.1	2.4	2.1	2.1	2.6	2.1	2.4	2.2
19		4.1	5.4	7.2	7.2	6.0	2.6	0.0	-1.5	-3.0	-2.4	-1.2	0.0	1.5	2.4	3.9	1.8	2.3	3.0	2.1	2.1	1.8	2.6	2.4	1.4	2.2
20		2.7	5.6	7.2	7.4	6.3	3.3	0.3	-1.8	-1.6	-1.6	-1.5	-0.6	2.9	2.7	0.9	2.4	1.8	2.3	2.9	3.0	2.6	3.0	2.7	1.8	2.3
21	D	4.2	6.3	6.6	4.8	4.4	1.5	0.0	-1.5	-1.2	-3.9	-3.0	-0.9	-0.7	0.0	1.4	1.7	2.4	2.9	3.3	3.9	4.2	4.2	5.3	5.7	2.0
22		3.6	4.4	6.5	4.8	1.8	0.3	-1.6	-2.2	-2.4	-2.5	-2.2	-0.3	0.6	0.9	0.9	1.1	1.5	1.5	2.7	2.6	3.0	3.6	3.9	3.9	1.5
23		4.5	6.0	5.3	4.8	3.5	2.6	2.0	-0.3	-1.3	-0.9	0.0	1.7	1.5	1.8	1.8	1.8	2.0	2.0	2.0	2.1	2.4	2.1	2.0	3.6	2.2
24	Q	5.0	6.0	6.0	4.5	3.3	0.9	-0.9	-1.2	-1.3	-0.7	0.3	0.3	1.5	1.8	1.8	1.8	2.0	1.7	1.7	2.1	2.3	2.1	2.4	3.2	1.9
25	Q	4.7	6.0	6.6	6.5	4.7	2.4	-0.6	-1.8	-2.7	-2.7	-1.9	-0.9	0.6	1.2	0.9	0.6	1.2	2.1	2.3	2.1	2.4	2.7	2.7	3.3	1.8
26		4.5	5.1	4.5	4.4	3.3	0.9	-1.2	-2.1	-2.4	-1.9	-1.0	-0.3	0.5	1.1	1.1	1.1	1.2	1.5	1.7	2.1	2.9	3.0	2.7	3.9	1.5
27		5.4	6.8	6.9	5.0	2.7	-0.9	-2.5	-3.0	-2.7	-2.1	-1.3	-0.3	0.6	0.9	0.6	0.2	0.6	1.1	1.4	3.3	4.1	4.4	3.5	3.9	1.6
28		4.5	4.8	4.1	2.7	0.9	-0.4	-1.8	-1.6	-0.9	-0.4	0.3	1.2	2.1	2.6	2.0	1.5	1.4	1.7	1.8	1.5	1.2	1.5	2.0	2.9	1.5
29	Q	4.5	5.3	4.5	2.6	0.3	-1.2	-1.5	-0.7	-0.1	0.8	2.0	2.4	2.4	1.8	0.9	0.3	0.5	0.9	1.2	1.7	1.7	1.7	1.8	2.7	1.5
30	Q	4.2	4.8	4.5	3.8	2.7	1.2	0.3	0.0	-0.3	-0.1	0.2	0.6	1.4	1.2	0.6	0.5	0.8	0.9	1.2	1.5	1.5	1.7	1.7	2.7	1.6
31	Q	4.2	4.8	4.4	3.8	2.4	0.3	-1.3	-1.8	-1.5	-0.4	0.0	0.9	1.7	1.7	1.4	0.6	0.5	0.8	1.1	1.5	2.0	2.6	3.0	3.3	1.5
Среднее по всем по Q по D дням.		4.1	4.9	5.3	5.2	4.1	2.0	-0.1	-1.4	-2.0	-1.7	-1.0	0.2	1.2	1.7	1.6	1.5	1.5	1.8	2.2	2.4	2.5	2.8	2.9	3.1	1.9
		4.5	5.4	5.2	4.2	2.7	0.7	-0.8	-1.1	-1.2	-0.7	-0.1	0.7	1.5	1.5	1.1	0.8	1.0	1.3	1.5	1.8	2.0	2.2	2.3	3.0	1.7
		4.9	5.1	4.8	4.8	4.0	2.3	0.7	-0.7	-1.9	-1.8	-1.1	0.7	1.4	2.5	3.0	2.4	2.0	2.8	3.3	3.5	3.3	4.1	4.3	3.8	2.4

Алма-Ата

Горизонтальная сос-щая Н = 25400 + табличное значение в гаммах

Май 1973 года

Долгота 76°55 в.д.

Широта 43°15 с.ш.

Дни	Время: миро: вое: УТ																									Средн. суточн.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1		85	85	80	74	62	58	71	81	94	105	101	92	80	78	85	90	90	95	99	93	105	105	80	85	86	
2		86	83	87	62	56	66	76	85	84	85	86	87	88	89	88	89	99	92	98	100	107	114	104	104	86	
3		98	82	74	65	66	73	80	80	86	96	94	95	90	89	95	89	89	89	90	90	85	86	86	87	86	
4		88	88	78	69	57	51	62	80	92	95	98	90	87	89	87	85	89	86	84	83	84	86	89	98	83	
5		98	93	83	66	54	53	62	77	89	93	96	98	94	92	89	90	89	92	98	91	89	90	91	92	86	
6		97	97	94	90	85	85	92	100	113	120	119	114	113	116	121	125	130	130	121	113	119	107	121	111	110	
7		116	115	112	105	97	87	83	94	97	95	92	98	99	98	96	98	101	104	97	95	93	94	96	95	98	
8		98	98	96	95	91	79	79	101	102	96	87	92	93	90	89	89	92	93	102	97	97	92	94	94	93	
9		93	98	98	92	90	86	90	99	93	82	89	95	94	89	87	88	91	93	94	96	95	98	98	94	93	
10		99	98	91	88	85	84	88	97	102	103	102	98	98	91	87	96	99	99	99	101	98	96	96	97	96	
11		93	90	87	77	78	87	96	89	92	96	99	100	100	98	94	95	98	100	99	103	97	97	95	96	94	
12		100	103	100	90	87	88	93	101	101	108	109	103	94	89	95	98	99	99	99	101	99	93	96	94	97	
13		98	94	91	94	93	91	91	87	80	76	88	93	94	89	89	92	96	108	114	121	122	102	90	81	95	
14	D	72	45	54	40	54	53	28	27	25	29	19	27	38	51	33	55	65	80	71	81	92	84	69	63	52	
15	D	65	59	47	43	43	51	73	79	68	62	67	76	75	75	80	71	73	78	77	78	84	85	79	76	69	
16	D	77	77	74	71	62	49	31	38	65	80	87	86	79	75	74	76	80	83	85	85	84	84	87	99	74	
17	D	81	80	62	56	59	44	58	67	65	67	74	80	77	71	80	70	93	81	76	77	80	80	80	79	72	
18		78	78	81	81	63	54	65	66	76	81	73	73	83	73	79	83	81	84	89	86	87	81	84	79	77	
19		79	74	77	71	57	59	61	71	85	74	79	72	80	77	79	85	86	80	83	83	84	83	87	93	77	
20		92	88	73	62	59	54	63	62	77	87	89	89	72	81	87	84	88	93	88	97	99	86	82	88	81	
21	D	90	80	72	68	59	78	59	9	0	13	-	5	14	46	43	39	43	50	55	60	64	60	57	59	58	39
22		70	67	49	46	51	56	50	44	58	56	61	72	77	76	79	78	83	87	87	88	87	85	81	87	70	
23		92	83	76	71	67	69	68	65	74	72	59	68	66	77	82	85	82	78	79	80	80	80	79	80	76	
24	Q	84	80	71	67	64	73	84	89	90	89	89	86	83	82	84	80	84	86	88	88	87	86	89	92	83	
25	Q	94	95	90	84	82	81	83	90	98	98	98	99	96	91	93	99	100	98	93	94	99	103	102	98	94	
26		98	93	89	81	81	87	92	93	96	96	90	89	89	91	92	90	92	96	98	98	98	96	99	97	93	
27		97	98	88	80	81	91	101	107	109	106	102	94	90	89	97	101	104	107	110	115	110	107	93	96	99	
28		102	102	100	93	83	88	99	109	111	109	105	87	87	82	85	91	92	94	95	96	98	96	97	98	96	
29	Q	98	95	89	87	90	98	108	119	123	119	109	103	99	96	94	94	97	98	95	98	98	100	101	100	100	
30	Q	102	100	98	98	97	101	104	107	111	118	119	114	107	102	100	102	102	103	103	104	104	105	105	107	105	
31	Q	107	103	96	89	84	85	94	104	113	111	111	111	104	100	98	96	100	100	99	98	98	98	99	102	100	
Среднее по всем		91	88	82	76	72	73	77	82	86	88	87	87	86	85	86	87	90	93	92	93	94	92	91	91	86	
по Ю Q		97	95	89	85	83	88	95	102	107	107	105	103	98	94	94	94	97	97	96	96	97	98	99	100	96	
по Д D		77	68	62	56	55	55	50	44	45	50	48	57	63	63	61	63	72	75	74	77	80	78	75	75	61	

Алма-Ата

Вертикальная сос-щая $Z = 48000$ + табличное значение в гаммах

Май 1973 года

Долгота $76^{\circ}55$ в.д. Широта $43^{\circ}15$ с.ш.

Дни	Время: миро: вое: УТ																									Средн. суточн.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		-4	-3	-4	-6	-17	-25	-29	-26	-15	-7	-7	-7	-8	-11	-11	-11	-12	-11	-11	-12	-12	-19	-20	-15	-13
2		-11	-11	-13	-17	-21	-29	-29	-29	-27	-23	-20	-15	-13	-13	-13	-13	-12	-11	-13	-12	-12	-11	-14	-15	-16
3		-13	-11	-10	-15	-23	-30	-30	-26	-28	-25	-21	-16	-13	-13	-14	-15	-15	-14	-14	-15	-15	-14	-14	-13	-17
4		-13	-6	-8	-11	-21	-29	-29	-23	-17	-13	-11	-11	-10	-11	-13	-12	-13	-13	-13	-13	-13	-12	-12	-12	-14
5		-11	-7	-8	-11	-19	-27	-31	-28	-23	-18	-13	-11	-11	-14	-16	-15	-15	-15	-14	-16	-16	-14	-14	-13	-16
6		-14	-13	-13	-17	-24	-29	-34	-35	-36	-32	-25	-21	-21	-20	-20	-19	-18	-17	-16	-13	-13	-15	-13	-17	-20
7		-16	-15	-14	-18	-22	-29	-27	-23	-22	-18	-18	-15	-14	-14	-15	-15	-15	-15	-17	-16	-15	-16	-16	-15	-18
8		-13	-13	-15	-19	-26	-36	-36	-28	-26	-20	-17	-10	-9	-8	-9	-6	-8	-7	-7	-7	-8	-7	-5	-4	-14
9		-4	-1	0	-5	-11	-17	-21	-22	-19	-15	-10	-7	-6	-6	-5	-7	-6	-7	-7	-7	-7	-7	-7	-7	-9
10		-3	-1	-4	-11	-17	-26	-32	-32	-27	-24	-24	-21	-19	-18	-18	-17	-17	-18	-18	-18	-18	-18	-17	-15	-18
11		-14	-17	-21	-24	-30	-33	-29	-27	-24	-23	-21	-19	-17	-20	-21	-20	-19	-19	-19	-19	-21	-19	-19	-17	-21
12		-14	-15	-14	-19	-23	-25	-22	-23	-20	-15	-15	-17	-16	-18	-18	-17	-17	-17	-17	-17	-18	-18	-16	-14	-18
13		-12	-15	-13	-11	-15	-24	-30	-30	-26	-20	-17	-16	-15	-17	-17	-17	-16	-15	-15	-14	-16	-16	-19	-15	-18
14	D	-15	-20	-16	-19	-14	-19	-25	-22	-19	-14	-9	6	9	5	1	0	-5	-5	-8	-6	-12	-15	-15	-9	-10
15	D	-9	-13	-19	-19	-18	-17	-15	-19	-19	-16	-11	-9	-9	-6	-8	-9	-8	-8	-9	-10	-11	-14	-15	-12	-12
16	D	-13	-15	-16	-22	-31	-37	-33	-25	-20	-16	-10	-9	-9	-9	-10	-10	-11	-12	-12	-12	-12	-13	-13	-18	-16
17	D	-17	-16	-19	-18	-20	-23	-20	-19	-16	-9	-5	-7	0	-4	-7	-9	-11	-13	-13	-11	-11	-13	-13	-11	-13
18		-10	-7	-7	-13	-23	-23	-22	-20	-13	-9	-9	-7	-3	-10	-10	-10	-11	-11	-12	-13	-12	-13	-13	-11	-12
19		-9	-10	-10	-15	-23	-25	-27	-25	-21	-21	-13	-7	-8	-8	-10	-13	-13	-13	-12	-13	-13	-14	-13	-12	-14
20		-11	-11	-15	-18	-24	-32	-30	-26	-17	-16	-16	-11	-10	-11	-15	-16	-15	-15	-16	-14	-19	-20	-17	-15	-17
21	D	-13	-15	-16	-27	-31	-33	-39	-42	-24	0	7	16	9	-2	-5	-5	-5	-5	-5	-5	-7	-7	-7	-8	-11
22		-7	-10	-13	-18	-27	-31	-39	-35	-25	-15	-9	-6	-7	-10	-11	-11	-11	-11	-12	-13	-13	-12	-12	-9	-15
23		-8	-7	-5	-10	-16	-18	-25	-28	-22	-14	-6	-3	-6	-9	-11	-11	-13	-13	-12	-12	-13	-13	-12	-10	-12
24	Q	-9	-11	-12	-19	-24	-27	-25	-24	-23	-22	-16	-10	-9	-11	-14	-15	-14	-15	-15	-16	-16	-16	-14	-11	-16
25	Q	-8	-7	-10	-16	-24	-30	-29	-28	-25	-20	-13	-19	-13	-16	-16	-16	-17	-16	-16	-16	-17	-18	-18	-15	-17
26		-11	-10	-15	-19	-23	-31	-31	-24	-23	-22	-18	-15	-15	-15	-17	-17	-17	-17	-17	-17	-17	-18	-17	-15	-18
27		-14	-15	-24	-30	-29	-27	-27	-22	-22	-26	-21	-15	-14	-15	-16	-18	-18	-17	-15	-15	-17	-17	-16	-13	-19
28		-13	-15	-18	-23	-26	-24	-27	-30	-27	-23	-21	-17	-13	-15	-17	-18	-18	-18	-18	-18	-18	-19	-17	-14	-19
29	Q	-15	-18	-24	-28	-29	-32	-29	-23	-17	-16	-14	-11	-15	-19	-20	-19	-19	-18	-18	-18	-18	-18	-17	-14	-20
30	Q	-13	-13	-15	-20	-24	-26	-26	-24	-26	-29	-22	-17	-20	-24	-24	-23	-22	-21	-21	-21	-21	-20	-19	-15	-21
31	Q	-15	-19	-21	-23	-30	-34	-32	-29	-22	-19	-19	-17	-21	-23	-24	-24	-24	-24	-23	-23	-23	-21	-20	-16	-23
Среднее по всем дням.		-11	-12	-13	-17	-23	-27	-28	-26	-22	-18	-14	-10	-10	-12	-14	-14	-14	-14	-14	-14	-15	-15	-15	-13	-16
по Q		-12	-14	-16	-21	-26	-30	-28	-26	-24	-21	-17	-13	-14	-19	-20	-19	-19	-19	-19	-19	-19	-19	-18	-14	-19
по D		-13	-16	-17	-21	-23	-26	-26	-25	-20	-11	-6	1	0	-3	-6	-7	-8	-9	-9	-9	-11	-12	-13	-12	-12

АЛМА-АТА
Июнь 1973г.

Склонение $D=4^{\circ}20.0$ + табличное значение в минутах
Долгота $76^{\circ}55$ в.д. Широта $43^{\circ}15$ с.ш.

Дни миров. I УТ	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Средн. суточн.	
С 1 по 18 июня данные отсутствуют по причине переоборудования обсерватории.																									
19 D	-	-	-	-	-	-	-	-	-	8.4	8.2	8.5	9.8	11.1	11.1	11.2	11.5	12.3	11.5	10.8	11.9	11.9	13.3	14.0	11.0
20	14.9	15.8	16.4	16.0	12.9	11.0	9.6	8.4	7.3	8.4	8.8	9.6	10.8	13.1	13.2	11.5	11.2	11.1	10.8	11.0	11.7	12.4	12.5	13.1	11.0
21	14.3	15.8	16.2	17.2	16.2	13.9	11.5	9.8	8.2	7.6	8.2	9.0	10.6	11.0	11.4	11.4	11.6	11.4	11.5	11.7	12.2	12.5	12.7	13.1	12.0
22 Q	14.1	15.8	16.6	16.3	14.9	12.9	10.0	8.4	8.0	8.2	8.6	9.3	10.3	10.8	10.8	11.1	11.4	11.5	11.7	11.9	11.9	11.7	12.1	12.7	15.7
23	13.9	15.4	16.6	16.8	15.1	11.5	11.9	5.9	4.5	4.3	5.3	7.3	9.0	10.4	10.8	10.4	10.0	11.5	10.8	11.0	11.5	12.1	12.3	12.9	10.8
24 D	14.5	14.7	16.8	16.2	14.9	14.5	12.3	10.8	8.2	8.4	8.1	9.0	9.2	12.3	15.2	13.1	13.4	13.8	16.1	16.2	14.2	13.7	13.7	15.3	13.1
25	16.6	17.4	17.0	16.2	14.6	12.7	11.2	9.6	9.1	8.4	8.8	9.4	10.0	10.6	10.4	11.5	11.5	11.5	11.4	11.7	11.9	11.9	11.5	12.3	11.9
26 Q	13.5	14.5	14.7	14.9	13.5	11.0	8.7	7.4	7.1	7.8	8.6	10.0	10.6	10.8	10.8	11.0	11.2	11.2	11.7	11.6	11.5	11.8	12.2	12.9	11.2
27 Q	13.9	15.0	15.2	14.2	14.3	11.9	9.6	8.8	8.0	7.7	8.4	9.4	10.4	10.6	10.4	10.4	10.4	10.4	10.6	11.2	11.3	11.5	12.0	12.7	11.2
28	10.6	15.4	15.6	14.1	12.9	11.5	9.4	8.5	7.4	5.9	6.4	7.4	9.5	10.4	10.0	9.4	9.4	9.8	10.4	11.0	11.7	12.1	13.0	13.5	10.6
29 D	15.6	16.6	17.0	15.4	13.1	11.5	11.2	9.9	8.0	7.2	8.3	10.8	10.4	11.3	13.5	12.0	10.9	11.3	11.0	11.0	11.5	11.9	12.0	12.7	11.8
30	14.6	15.8	15.7	14.9	12.7	10.6	9.4	8.6	7.6	6.7	6.3	8.7	12.0	11.1	12.3	10.7	11.1	11.5	11.0	11.0	11.4	11.9	12.0	12.7	11.3
Среднее по всем:	14.2	15.7	16.2	15.6	14.1	12.1	10.4	8.7	7.6	7.4	7.8	9.0	10.2	11.1	11.7	11.1	11.1	11.4	11.5	11.7	11.9	12.9	12.4	13.2	11.6
по Q :	13.8	15.0	15.5	15.1	14.2	11.9	9.4	8.2	7.7	7.9	8.5	9.6	10.4	10.7	10.7	10.8	11.0	11.0	11.3	11.5	11.6	11.7	12.1	12.4	12.6
по D :	15.0	15.5	16.9	15.8	14.1	13.0	11.7	9.9	8.0	7.7	8.2	9.4	9.8	11.6	13.3	12.1	11.9	12.6	12.9	12.7	12.5	12.5	13.0	14.0	12.3

Алма -Ата

Горизонтальная сос-щая Н= 25400 + табличное значение в гаммах

Июнь 1973 года

Долгота 76° 55 в. д. Широта 43° 15 с.ш.

Дни	Время: миро вое																									Средн. суточн.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
С 1 по 18 июня данные отсутствуют по причине переоборудования обсерватории																										
19	Д										81	85	76	63	76	76	83	83	82	83	97	100	95	80	80	83
20		77	79	64	42	39	35	31	44	56	67	65	70	72	74	72	72	75	77	85	81	83	73	75	76	66
21		81	78	70	52	47	44	48	60	69	69	71	81	81	79	79	83	86	82	80	82	82	82	83	85	73
22	Q	86	83	77	75	82	69	72	77	81	86	90	89	88	86	84	88	91	90	90	89	89	92	91	92	85
23		94	93	87	79	84	81	81	86	93	99	98	97	90	92	93	97	105	106	108	110	110	109	115	97	96
24	Д	83	81	64	68	71	79	78	73	56	40	49	64	59	41	42	58	74	63	55	59	65	67	66	71	64
25		73	66	65	61	60	62	67	70	75	73	67	67	69	70	72	78	74	79	81	82	82	81	85	81	73
26	Q	82	80	73	66	64	65	73	81	83	82	79	76	86	85	87	88	87	89	89	90	89	87	88	91	82
27	Q	96	94	87	76	67	66	79	92	98	96	95	93	89	86	89	92	93	97	96	95	93	91	95	108	90
28		112	94	81	76	83	91	97	102	78	83	99	104	96	76	83	86	94	87	100	98	100	103	101	106	93
29	Д	93	83	79	59	60	61	77	23	29	45	40	48	55	51	54	78	75	89	84	89	89	87	91	93	68
30		98	101	96	65	63	74	78	63	59	80	80	73	81	65	76	79	85	88	103	92	92	84	83	86	81
Среднее по всем о Q о D ням		89	85	77	65	65	66	71	70	71	75	77	78	77	73	76	82	85	86	88	89	90	88	88	89	79
		88	86	79	72	74	67	75	83	87	88	88	86	88	86	87	89	90	92	92	91	90	90	91	97	82
		88	83	72	74	66	70	76	48	43	55	58	63	59	56	57	74	77	78	74	82	85	83	79	81	70

Алма-Ата

Склонение $\Delta = 4^{\circ} 20.0$ + табличное значение в минутах

Июль 1973 года

Долгота $76^{\circ} 55$ в.д.

Широта $43^{\circ} 15$ с.ш.

Дни:	Время:	I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Средн. суточн.	
1	D	13.7	15.7	16.1	16.0	14.9	13.1	10.3	8.8	8.3	7.9	7.6	8.5	9.8	10.6	11.5	11.4	10.8	11.7	-	-	-	-	-	-	-	11.5
2		-	-	-	14.4	13.7	11.5	9.6	9.2	8.2	8.3	8.8	9.4	11.0	12.3	11.2	10.3	10.3	10.8	11.4	11.2	11.2	11.2	11.4	12.7	10.9	
3		14.2	15.3	15.2	14.3	12.3	10.8	9.0	7.0	6.9	6.8	7.2	8.6	9.6	10.8	10.6	10.3	10.2	10.6	11.0	11.1	11.4	11.4	11.5	11.7	10.7	
4	Q	13.0	14.1	14.2	14.1	13.1	11.2	8.4	5.9	4.5	4.8	6.5	8.8	10.0	11.2	11.0	10.8	10.6	-	-	-	-	-	-	-	10.1	
5	Q	-	-	-	15.6	14.4	11.7	9.4	7.8	6.6	6.1	6.3	7.8	9.0	10.2	10.2	10.1	10.3	10.6	11.0	11.1	11.2	11.3	11.3	11.9	10.2	
6	Q	13.3	14.2	14.5	14.7	14.1	12.7	9.8	7.4	6.8	6.7	7.0	8.4	10.4	10.7	10.1	10.1	10.4	10.3	10.7	10.8	10.8	10.8	11.2	11.7	10.7	
7	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9		-	-	-	14.3	12.7	10.3	8.4	6.9	5.6	5.9	6.1	6.9	9.4	9.4	9.1	9.4	10.1	11.8	11.9	11.7	11.9	12.3	12.7	13.5	10.0	
10	Q	15.6	16.1	15.7	16.1	13.9	11.0	8.4	8.0	8.2	8.2	8.6	9.8	10.3	9.8	9.6	9.6	10.0	10.3	10.6	11.1	11.1	12.3	11.9	12.4	11.1	
11		13.8	15.0	15.0	14.9	13.5	11.2	9.0	7.2	7.0	7.2	7.6	8.8	9.8	10.2	10.0	10.0	10.0	10.1	10.3	11.2	11.4	11.7	11.5	12.5	10.8	
12		13.8	15.3	15.3	14.3	12.1	10.0	7.6	5.9	4.4	4.3	5.4	7.4	8.8	9.2	9.2	9.0	9.6	10.1	10.8	11.4	12.3	12.7	12.3	12.7	10.2	
13		14.1	15.3	16.0	15.7	14.2	11.7	9.8	8.0	7.1	7.4	7.2	8.4	9.6	10.6	10.1	10.1	10.8	10.3	10.6	10.7	11.7	11.8	12.2	13.0	11.1	
14		14.1	15.3	15.0	13.7	11.9	10.3	8.4	6.9	5.6	5.5	6.0	7.6	9.2	9.8	9.6	9.8	9.8	9.9	10.6	11.4	11.4	11.8	11.8	13.6	10.3	
15	D	15.0	16.0	16.0	15.6	13.0	10.7	8.6	7.0	6.5	6.8	7.9	9.5	10.3	10.8	11.9	11.0	10.0	11.3	11.5	9.9	11.5	13.2	12.7	11.1	11.2	
16	D	14.4	14.9	15.4	14.7	13.5	11.9	10.1	8.3	7.3	7.6	7.6	8.8	11.2	11.9	11.1	10.2	10.1	10.1	10.7	10.6	10.6	11.2	11.7	12.7	11.1	
17	D	14.5	15.6	15.4	14.6	13.2	11.0	9.6	7.5	7.4	7.0	8.0	10.0	10.7	10.8	10.8	10.0	10.0	10.0	10.8	11.3	11.3	11.9	12.1	12.5	11.1	
18	D	13.1	15.3	16.0	15.2	13.9	12.3	10.1	8.1	7.8	7.0	7.0	7.5	8.4	9.8	10.2	10.0	10.3	10.8	11.0	11.3	11.5	11.7	11.8	11.8	10.9	
19		12.6	14.9	15.3	15.1	14.1	12.4	9.8	7.6	5.6	5.1	1.2	4.2	5.6	9.6	8.2	8.8	9.4	9.6	10.2	10.7	11.3	11.2	11.4	12.3	9.9	
20		14.1	14.9	15.4	15.2	14.2	11.9	9.6	7.4	7.2	7.4	8.0	9.6	9.6	10.2	10.1	10.3	10.1	10.2	10.8	11.5	11.9	11.2	12.7	12.7	11.1	
21		13.7	14.3	14.1	13.2	12.3	10.1	7.4	6.3	6.0	6.9	8.8	10.2	10.3	10.1	10.1	10.0	10.3	10.6	10.8	11.0	11.5	11.7	11.5	12.0	10.6	
22		11.8	14.4	15.2	15.4	14.9	13.2	10.6	8.4	7.6	7.4	7.8	8.8	9.8	10.0	9.8	9.9	9.8	10.1	10.6	10.8	11.0	12.3	11.7	11.9	11.0	
23		13.1	13.7	13.4	12.7	12.3	11.3	8.8	6.7	6.3	5.2	6.2	7.5	8.1	9.0	10.3	10.1	10.3	10.8	11.3	11.7	12.3	11.7	11.9	12.7	10.3	
24		13.9	14.6	15.1	15.2	14.6	13.2	11.2	9.2	7.6	7.0	7.2	8.6	10.0	10.9	10.4	10.1	10.0	10.2	10.8	11.3	11.5	11.5	11.8	12.4	11.2	
25		13.3	13.3	13.9	14.3	13.2	11.5	10.0	9.0	8.0	8.1	8.7	6.9	10.3	11.0	10.4	9.9	10.0	10.3	11.3	11.7	11.5	12.2	12.4	13.0	11.0	
26		14.4	15.6	15.8	16.4	14.9	13.5	11.2	8.6	7.8	7.8	9.0	10.2	15.3	10.3	10.6	10.9	11.0	12.7	11.9	12.4	13.4	13.2	13.3	9.5	12.1	
27		11.2	15.1	14.5	14.4	13.2	11.3	10.8	9.6	8.4	9.3	9.4	12.3	12.5	11.5	12.4	10.6	10.3	9.8	11.5	11.7	11.5	12.2	12.3	13.5	11.6	
28		13.9	14.3	14.6	13.8	13.4	12.3	10.0	8.0	7.6	7.8	9.0	10.8	11.5	11.2	9.6	10.0	10.9	11.3	12.7	11.9	11.7	11.6	11.7	12.3	11.3	
29		13.8	14.6	14.3	13.7	11.5	10.0	8.6	8.4	7.6	8.4	10.1	10.0	11.7	12.3	11.3	10.8	10.3	10.7	10.8	11.7	11.2	10.7	11.3	12.5	11.1	
30		13.9	14.9	15.1	14.1	13.2	10.8	9.4	8.8	7.8	8.0	9.5	10.7	10.4	11.9	13.0	11.7	13.0	12.1	12.1	10.6	11.5	12.2	11.9	10.8	11.5	
31		11.5	13.5	15.1	14.3	11.9	11.8	9.4	7.2	5.4	5.9	9.0	10.6	11.7	13.7	14.6	11.9	11.5	10.3	10.6	10.8	11.2	11.2	11.9	12.1	11.1	
Среднее по всем		13.6	14.8	15.1	14.7	13.4	11.5	9.4	7.8	6.9	7.0	7.5	8.9	10.1	10.7	10.3	10.2	10.4	10.6	11.0	11.2	11.5	12.2	11.9	12.3	10.9	
по Q		14.0	14.8	14.8	15.1	13.9	11.7	6.9	7.3	4.5	6.5	7.1	8.7	9.9	10.5	10.2	10.2	10.3	10.4	10.8	11.0	11.0	11.1	11.5	12.0	10.6	
по D		14.1	15.5	15.8	15.2	13.7	11.8	9.7	7.9	7.5	7.3	7.6	8.9	10.1	10.8	8.7	10.5	10.2	10.8	11.0	10.8	11.2	12.1	12.1	12.0	10.7	

Алма-Ата
Июль 1973 г.

Горизонтальная составляющая $H = 25400 +$ табличное значение в гаммах
Долгота $76^{\circ}55$ в.д. Широта $43^{\circ}15$ с.ш.

Дни	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	24	Средн. суточн.
1	07	95	86	79	63	51	35	33	57	71	83	97	100	97	100	100	96	100	105	102	-	-	-	-	-	76
2	07	-	-	-	67	64	63	67	76	79	85	97	95	94	95	95	94	95	95	95	94	96	96	95	95	87
3	07	99	92	80	74	74	80	83	91	96	100	97	96	95	96	92	100	97	97	96	96	96	97	97	100	93
4	07	102	100	94	88	80	77	85	95	97	100	100	103	100	97	97	97	-	-	-	-	-	-	-	-	95
5	07	-	-	-	80	74	77	83	92	97	103	109	108	106	103	99	99	100	105	100	103	105	103	103	106	98
6	07	124	106	99	92	85	83	83	94	80	83	111	111	103	97	97	99	103	103	105	106	108	105	105	106	100
7	07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	07	-	-	-	76	65	73	92	96	103	100	106	100	86	89	94	103	99	103	95	95	96	97	97	100	94
10	07	100	94	94	89	92	97	106	141	115	114	115	109	103	999	100	105	106	106	106	103	105	106	105	105	105
11	07	105	102	95	88	85	83	86	99	100	102	103	97	95	97	103	108	115	117	118	120	115	112	106	106	102
12	07	109	106	97	83	71	65	68	80	96	105	106	108	123	112	112	114	118	121	120	117	115	106	102	105	102
13	07	109	99	115	106	99	86	88	83	92	105	105	106	100	97	100	100	97	108	112	114	108	115	109	112	102
14	07	112	106	95	91	91	95	103	109	117	123	124	120	114	108	112	114	114	120	121	115	112	114	112	115	111
15	07	115	115	117	89	68	65	88	86	74	86	92	92	92	99	112	100	106	105	111	121	121	80	97	100	97
16	07	106	89	74	62	51	60	64	65	65	80	89	92	95	97	97	97	99	100	99	103	100	100	102	103	87
17	07	100	92	88	82	77	76	80	82	86	92	100	105	103	99	100	102	103	106	106	106	106	109	103	103	106
18	07	112	106	89	85	79	77	85	85	88	92	99	103	109	105	103	111	112	108	115	114	112	109	108	106	101
19	07	108	106	97	86	80	77	86	102	109	105	105	118	112	120	121	118	118	117	121	126	127	102	130	127	109
20	07	121	111	99	86	85	85	88	97	94	100	100	105	112	112	112	108	105	105	103	100	100	100	109	108	102
21	07	111	103	99	95	97	96	92	97	106	106	97	89	88	96	103	109	109	109	109	109	106	106	105	108	102
22	07	114	106	105	97	94	92	94	96	96	100	106	108	108	108	109	109	115	117	115	121	118	115	120	124	108
23	07	126	132	132	121	109	103	92	86	92	96	86	89	97	96	95	99	100	103	105	106	103	108	108	106	104
24	07	109	108	103	97	95	95	95	95	95	96	97	95	100	106	106	108	109	111	111	111	109	109	106	108	103
25	07	103	99	97	98	89	103	97	89	95	103	100	95	103	103	103	105	109	109	109	106	105	105	106	112	102
26	07	115	120	121	103	100	97	99	89	100	106	112	80	73	57	71	85	108	92	97	106	100	105	96	100	97
27	07	105	121	86	65	54	60	57	65	70	80	68	67	77	80	77	92	100	103	99	117	103	103	103	102	86
28	07	108	106	99	86	73	71	79	88	94	89	91	91	92	95	99	99	97	95	89	103	102	99	96	95	93
29	07	96	97	97	80	71	82	77	76	95	105	86	85	83	77	95	95	99	95	97	97	103	112	106	102	92
30	07	99	100	91	82	74	76	79	83	96	95	96	103	103	97	108	95	95	105	96	106	103	103	103	106	96
Средн	07	106	103	88	63	76	82	92	73	89	92	71	76	71	77	88	80	83	92	94	95	95	97	96	100	87
Среднее	07																									
по всем:	07	108	104	97	85	79	80	84	88	93	97	99	98	98	97	100	101	104	105	105	107	106	104	105	106	98
по 0	07	109	100	96	87	83	84	89	106	97	101	109	108	103	99	98	90	103	105	104	104	105	105	104	106	100
по D	07	106	98	89	76	65	63	70	75	77	87	95	98	99	100	102	101	104	105	107	111	111	98	103	104	94

Алма-Ата

Вертикальная составляющая $Z = 47900$ + табличное значение в гаммах

Июль 1973 г.

Долгота $76^{\circ}55$ в.д.

Широта $43^{\circ}15$ с.ш.

Дни	Время мирное и т	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Средн.сут.
1	Д	66	82	78	75	74	70	71	74	74	75	77	82	83	81	82	81	82	83	80	-	-	-	-	-	77
2		-	-	-	73	70	64	66	70	67	75	79	82	84	86	78	75	76	76	77	77	77	77	78	80	79
3	Q	84	77	69	68	64	63	64	63	62	62	66	76	78	79	78	78	77	78	77	76	76	76	77	79	73
4	Q	81	79	78	74	70	63	58	58	60	67	74	81	79	77	75	73	-	-	-	-	-	-	-	-	72
5	Q	-	-	-	74	69	62	55	54	60	65	67	71	74	75	72	72	72	71	71	74	71	71	72	74	69
6	Q	77	73	71	69	66	61	54	52	47	54	58	68	72	69	68	68	69	68	68	68	68	69	70	71	66
7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9		-	-	-	64	57	50	45	48	53	61	68	70	72	75	74	74	74	75	73	74	73	72	74	77	67
10	Q	80	77	74	70	64	58	57	49	46	56	62	63	62	65	69	72	72	73	73	73	73	72	73	75	64
11		78	76	76	77	74	62	60	64	68	70	72	75	76	75	74	76	75	74	75	76	75	74	73	76	73
12		79	78	75	74	71	66	60	56	58	64	68	68	71	75	76	76	78	78	78	78	79	77	74	76	75
13		82	80	80	79	76	69	68	60	58	66	70	76	79	82	82	82	82	83	82	81	80	80	77	80	76
14		80	76	76	74	64	62	59	58	57	58	66	71	74	76	76	77	78	78	78	78	77	77	75	78	74
15	Q	80	78	74	66	62	62	63	69	76	74	80	82	83	81	77	78	78	78	80	77	72	74	76	76	74
16		80	76	74	73	68	65	65	66	70	77	73	80	83	80	78	78	78	78	78	78	78	76	77	80	75
17	Q	81	80	76	71	70	64	61	68	74	74	72	77	79	78	77	78	78	79	80	80	78	77	77	81	75
18		82	80	78	75	65	58	58	57	54	60	64	70	75	78	78	78	78	76	75	77	76	75	76	76	72
19		76	75	71	62	54	47	52	54	58	58	61	65	70	76	78	74	74	74	75	74	75	75	72	74	68
20		77	74	72	68	64	59	59	62	63	66	68	73	74	74	72	72	73	74	74	74	74	74	73	75	70
21		76	74	72	69	68	64	62	65	69	75	77	76	76	75	75	74	73	73	73	74	74	73	73	75	72
22		76	74	72	67	60	55	55	58	61	63	66	70	72	72	71	72	73	73	74	74	74	72	73	73	69
23		74	72	66	61	60	57	48	49	57	68	73	78	76	77	77	78	78	78	79	78	78	77	72	75	70
24		77	77	77	78	77	73	69	68	70	71	76	80	82	78	75	74	74	74	74	74	73	72	71	74	74
25		75	73	74	71	69	66	61	65	69	69	71	73	75	74	73	73	73	74	74	73	74	74	74	77	72
26		78	76	75	72	70	60	60	60	69	76	78	86	94	83	81	82	80	78	79	78	75	76	73	74	76
27		69	64	67	66	66	65	65	71	73	78	78	85	84	82	81	81	78	78	76	76	72	73	73	74	74
28		76	74	73	74	73	63	77	63	73	77	78	79	75	71	72	74	75	74	75	76	74	74	74	78	74
29		80	78	74	68	66	68	67	66	64	64	67	76	80	78	74	76	76	75	77	77	77	75	74	76	73
30		79	76	73	72	65	63	60	66	68	68	71	76	76	78	80	78	80	78	76	78	76	76	78	80	74
31		80	78	76	70	71	70	65	60	68	69	73	85	87	88	88	86	86	85	84	83	83	82	81	84	78
Среднее по всем		78	76	74	79	67	63	61	61	63	68	71	73	77	77	76	76	76	76	76	76	75	75	74	77	73
По Q		79	76	74	72	67	61	56	53	53	61	65	71	72	72	71	71	71	71	71	72	71	71	72	73	69
По D		78	79	76	72	68	64	63	66	68	72	72	78	80	80	79	78	78	79	78	78	76	76	77	78	75

Алма-Ата

Склонение $\Delta = 4^{\circ}20.0+$ табличное значение в минутах

Август 1973 года

Долгота $76^{\circ}55$ в.д.Широта $43^{\circ}15$ с.ш.

Дни	Время: миро: вое :																									Средн. суточн.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		12.4	14.6	15.1	14.6	12.4	9.7	7.0	5.6	5.8	6.2	7.5	11.0	11.1	11.4	11.1	10.7	10.3	10.5	10.6	11.0	10.9	10.9	11.5	12.5	11.1
2		14.2	15.3	15.6	15.2	13.6	11.5	8.5	6.9	5.8	5.2	6.3	7.1	8.7	7.5	7.5	5.7	5.7	11.7	11.7	11.6	11.5	11.7	11.6	12.0	10.1
3		13.3	14.8	15.0	13.8	12.6	10.7	8.8	6.7	5.9	6.3	7.7	8.9	9.5	9.5	10.3	10.3	10.2	10.2	10.5	11.0	11.4	11.7	11.1	11.1	10.5
4		12.0	14.2	14.5	14.5	13.6	12.0	9.7	7.7	7.4	7.4	8.1	9.1	10.3	10.7	10.8	10.7	10.5	10.3	10.5	10.9	10.9	10.7	11.3	11.4	10.8
5		13.8	15.2	15.3	14.8	13.3	11.5	9.3	7.5	6.5	6.9	8.5	9.8	11.0	11.1	9.5	9.1	9.4	9.9	10.3	10.6	10.5	11.3	11.3	11.1	10.7
6		12.2	13.6	14.5	13.7	12.6	11.8	9.7	7.5	5.9	6.9	8.3	9.9	12.0	11.6	11.8	12.0	11.5	10.1	10.9	10.6	11.1	11.1	11.5	11.7	10.9
7		13.2	14.4	14.6	14.2	13.0	11.5	9.5	7.1	5.4	5.6	6.5	8.1	10.3	10.7	11.1	10.9	10.1	9.9	9.9	10.7	11.3	11.3	11.7	12.1	10.5
8		13.0	12.9	12.8	12.2	12.2	10.7	8.3	7.1	6.5	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3
9		-	-	-	12.8	10.9	8.5	7.7	6.7	7.0	7.8	8.1	8.9	10.3	10.5	10.7	10.2	10.3	10.5	10.7	10.9	11.0	11.1	11.3	11.8	9.9
10		13.0	14.2	15.0	14.0	12.6	10.5	8.5	7.9	7.9	9.1	9.9	10.7	10.7	9.9	9.5	9.3	9.5	9.9	-	10.9	11.2	11.3	11.2	11.6	10.8
11	2	13.0	14.2	13.8	13.0	11.3	9.3	7.1	6.1	6.3	6.7	7.7	9.0	9.7	10.3	9.6	9.5	9.6	10.0	10.3	10.7	-	-	-	12.0	10.0
12		13.2	14.4	14.1	13.0	11.8	10.7	9.1	7.7	6.7	6.7	7.9	9.1	9.9	9.5	8.9	8.7	8.9	9.5	9.9	10.5	10.7	11.5	12.3	12.5	10.3
13		13.4	14.0	15.0	12.6	10.1	7.7	6.7	6.7	7.1	6.9	7.5	8.1	8.7	9.7	9.0	9.8	10.3	11.1	12.2	11.5	11.8	11.8	11.1	12.6	10.0
14		13.4	14.2	15.0	14.2	12.4	10.3	9.0	7.5	6.5	6.7	7.8	9.5	11.5	10.7	10.1	10.5	10.7	10.1	10.3	10.9	11.8	11.7	11.6	12.4	10.8
15	2	13.4	14.6	13.2	11.1	8.7	8.2	7.7	8.1	8.3	8.9	9.3	9.8	10.0	9.6	9.7	10.2	10.3	10.3	10.7	10.7	11.1	11.6	11.8	12.1	10.4
16	2	13.8	15.0	15.3	14.8	12.8	10.1	7.7	6.6	6.5	6.9	7.9	9.1	11.0	10.7	9.7	9.7	9.9	10.1	10.3	10.7	11.1	11.4	11.9	12.4	10.6
17	2 2	14.1	15.5	15.7	14.8	13.2	11.1	8.9	7.0	6.3	6.9	8.3	9.9	10.5	9.9	9.5	8.9	10.1	9.9	10.3	10.7	11.3	11.5	11.7	12.0	10.7
18	2 2	13.0	14.0	14.6	14.4	12.6	9.7	6.9	5.2	5.0	5.7	6.9	8.5	9.4	10.7	9.9	9.8	10.1	10.3	10.5	10.3	10.9	11.1	11.3	11.6	10.1
19		12.2	12.6	12.6	12.9	11.6	9.7	8.1	6.5	5.7	5.9	7.5	9.3	11.0	10.3	10.1	10.2	9.8	10.3	10.7	10.2	10.9	10.9	11.5	11.5	10.1
20		12.4	13.2	13.8	14.0	13.4	12.0	9.7	8.1	6.7	5.4	5.7	6.7	6.9	9.1	9.5	9.9	10.1	11.1	12.0	11.8	11.8	11.6	11.5	11.8	10.3
21		13.0	14.5	15.0	14.7	13.4	11.8	10.1	7.9	6.7	6.7	7.4	9.8	10.2	9.7	10.1	10.2	10.7	10.7	11.0	10.9	10.9	11.1	11.1	11.4	10.8
22		12.2	13.3	14.4	14.3	13.4	11.8	9.0	6.6	5.8	5.7	6.9	7.8	8.4	8.5	10.5	10.6	10.9	10.9	12.8	12.4	12.0	11.6	9.5	10.9	10.5
23	2 2 2	12.2	12.6	13.6	14.0	12.4	10.7	9.7	8.3	7.9	7.5	7.7	8.7	9.4	9.7	10.8	13.4	12.5	12.6	11.5	11.8	13.4	12.7	12.4	11.1	11.1
24	2 2 2	11.5	11.3	12.0	12.9	11.8	10.6	8.1	6.7	8.1	11.5	11.6	12.4	16.9	14.6	14.9	12.0	13.6	11.5	11.6	11.7	11.5	10.9	9.7	12.2	11.6
25	2 2 2	13.6	15.0	14.6	14.6	13.4	11.8	9.5	7.7	6.9	8.3	7.5	13.6	12.9	12.8	10.5	11.5	11.6	10.9	11.5	11.5	11.0	12.0	12.5	12.0	11.5
26	2 2	12.0	12.5	14.1	15.1	14.2	12.2	10.1	8.1	7.8	8.3	9.7	10.3	10.5	11.0	11.8	13.3	12.8	13.0	11.7	11.6	10.9	11.4	11.8	11.3	11.5
27	2 2	12.4	13.3	12.8	13.2	12.4	10.3	7.9	7.1	6.7	7.5	8.7	11.3	12.1	13.0	13.2	14.4	11.5	10.6	10.9	10.9	11.4	11.6	12.0	11.8	11.1
28		12.6	14.2	15.0	14.2	11.7	9.1	6.9	6.5	7.3	8.2	10.0	11.0	11.1	11.7	16.1	14.0	13.2	10.9	12.3	11.5	11.5	10.5	8.9	9.8	11.2
29		10.9	13.2	16.1	15.9	13.8	11.3	10.5	8.5	8.1	9.8	10.3	9.7	10.7	11.3	10.3	10.6	10.7	10.6	11.4	11.3	11.4	11.5	11.6	10.5	11.3
30		11.6	14.1	15.5	15.7	14.2	11.8	9.3	7.1	6.3	7.9	9.1	12.1	13.2	11.6	10.7	10.5	10.7	10.9	10.9	9.9	10.7	11.5	11.8	11.8	11.2
31		12.0	13.2	14.4	14.0	13.0	11.1	9.5	7.9	7.3	7.2	8.7	11.0	12.2	12.6	11.5	11.0	10.9	11.1	11.1	11.4	11.3	11.5	11.5	11.8	11.1
Среднее		12.8	14.0	13.9	14.0	12.5	10.6	8.7	7.4	6.7	7.2	8.2	9.7	10.7	10.7	10.6	10.6	10.5	10.6	11.0	11.4	11.3	11.4	11.4	12.1	10.7
по всем		13.5	14.7	14.5	13.6	11.7	9.7	7.7	6.6	6.5	7.0	8.0	9.3	10.1	10.2	9.7	9.6	10.0	8.1	10.4	10.6	11.1	11.4	11.7	12.0	10.6
по 2		12.3	12.9	13.4	14.0	12.8	11.1	9.1	7.6	7.5	8.6	9.0	11.3	12.4	12.2	12.2	12.9	12.4	11.7	11.4	11.5	11.6	11.7	11.6	11.7	11.4

Алма-Ата

Горизонтальная сос-щая N= 25400+ табличное значение в гаммах

Август 1973 года

Долгота 76°55в.д.

Широта 43°15с.ш.

Дни	Время: миро: вое : UT	Среднее																								Суточн.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		99	92	90	73	57	56	71	79	79	83	83	76	82	83	88	95	95	93	96	97	107	105	104	105	87
2		104	98	92	72	78	78	82	69	83	103	95	96	115	131	116	114	112	106	97	92	96	93	96	98	96
3		98	94	89	76	72	75	87	96	103	111	106	102	106	108	104	99	99	104	107	105	102	102	108	104	98
4		101	97	94	80	75	73	82	89	100	102	99	101	100	101	99	102	108	111	110	105	105	99	112	111	98
5		108	96	88	84	83	90	102	110	119	121	114	107	103	105	112	117	118	116	110	107	111	113	109	110	106
6		111	108	98	77	79	75	71	80	90	95	97	92	92	87	88	84	90	99	96	99	97	98	98	98	92
7		99	96	94	70	67	72	78	87	102	104	103	104	101	101	94	87	99	101	105	107	103	101	101	102	95
8		105	102	94	83	76	71	66	68	75	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	82
9		-	-	-	87	84	87	91	96	97	96	95	88	82	84	90	93	96	98	102	102	101	101	100	102	94
10		103	99	95	90	83	76	82	91	103	113	116	111	105	101	103	106	106	107	-	108	109	105	108	108	101
11	Q	108	104	99	92	88	92	102	114	119	122	121	115	113	109	107	108	111	108	109	113	-	-	-	106	108
12		106	105	105	99	87	87	93	104	115	122	119	114	113	114	116	121	126	122	123	125	127	118	102	105	111
13		108	111	-	101	103	107	102	109	122	127	121	120	115	102	100	103	100	99	97	106	106	105	108	101	103
14		97	99	96	84	83	86	86	89	98	109	110	101	106	103	102	102	107	108	108	107	104	102	104	102	100
15	Q	102	95	84	82	82	86	89	93	101	108	113	108	106	104	101	104	102	102	104	107	108	104	101	102	99
16	Q	97	93	84	76	75	79	84	96	108	113	112	108	102	96	100	105	107	104	108	107	105	106	102	104	99
17	Q	103	102	96	87	80	79	85	100	114	119	119	115	114	111	111	111	110	110	110	109	108	109	111	110	105
18	Q	111	108	101	92	85	84	91	98	107	111	112	107	102	100	108	111	112	111	109	109	110	111	111	109	104
19		107	105	103	94	91	92	95	90	96	112	115	113	106	104	99	103	99	105	108	108	108	113	111	111	104
20		111	109	106	98	90	84	90	97	107	125	124	102	100	101	100	103	104	102	103	102	102	103	105	105	103
21		106	106	104	96	82	76	81	91	105	116	117	111	111	103	102	105	105	105	106	102	103	99	99	101	101
22		105	105	101	92	85	83	89	103	111	121	126	127	120	116	102	113	67	101	99	97	101	101	109	112	103
23	D	106	93	89	79	74	65	58	64	73	96	106	101	102	102	99	95	76	84	107	106	93	98	102	104	91
24	D	100	88	66	61	44	52	73	82	62	41	46	44	49	34	52	64	79	79	73	76	79	82	79	80	66
25	D	84	74	55	42	29	38	52	71	65	58	73	67	70	78	84	85	93	95	90	96	94	86	84	85	73
26	D	82	74	81	71	51	40	60	73	80	76	71	67	78	81	83	94	91	78	87	99	95	90	88	85	78
27	D	87	80	59	49	41	49	56	55	54	73	81	73	80	75	86	83	93	99	93	90	93	93	91	90	76
28		91	83	70	47	24	23	41	55	67	79	82	90	92	85	83	74	76	96	79	82	83	82	86	87	73
29		93	92	79	66	61	27	28	31	47	60	81	83	84	79	85	88	92	99	100	110	91	88	90	95	78
30		96	90	79	62	50	38	51	64	66	82	87	79	82	82	80	84	85	89	92	103	97	93	95	93	80
31		90	86	80	68	59	64	65	83	91	99	95	82	76	90	86	86	87	94	97	93	92	91	94	92	81
Среднее по всем		101	96	89	78	72	70	77	85	92	99	101	97	97	96	96	98	98	101	101	102	101	100	100	101	93
по Q		104	100	95	86	82	84	90	100	110	115	93	111	107	104	105	108	108	107	108	109	108	108	106	100	102
по D		92	82	70	60	48	49	60	69	68	69	75	70	76	74	97	84	86	87	90	93	91	90	89	89	77

Алма-Ата
Август 1973 года

Вертикальная сос-щая $Z = 47900$ + табличное значение в гаммах
Долгота $76^{\circ}55$ в.д. Широта $43^{\circ}15$ с.ш.

Дни	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	24	Средн. суточн.
УТ																										
1.		90	87	87	84	84	83	81	81	87	89	92	97	96	90	89	89	88	88	89	89	89	88	85	87	88
2.		89	86	84	79	76	74	71	65	76	74	74	81	82	85	82	83	84	84	83	82	83	82	82	85	80
3.		86	82	78	76	70	70	72	70	71	70	73	74	76	77	79	81	82	82	81	81	81	78	79	79	77
4.		81	81	79	77	72	70	69	68	67	73	77	78	77	78	77	78	78	77	77	77	76	76	75	77	76
5.		80	78	74	69	66	62	60	55	59	66	70	74	74	72	72	73	73	73	73	74	75	73	73	76	71
6.		78	76	72	68	69	64	52	56	59	65	65	69	77	75	75	76	76	77	76	75	74	74	75	77	71
7.		80	78	74	67	64	61	62	63	68	71	74	77	77	73	74	74	73	73	72	73	71	71	71	73	71
8.		75	73	70	66	65	61	56	60	61	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65
9.		-	-	-	62	61	63	64	64	68	68	67	70	71	70	71	72	74	72	72	71	71	71	70	73	69
10.		76	72	67	61	57	57	57	61	67	72	72	74	72	69	71	73	74	74	74	74	73	72	72	74	69
11.	Q	77	73	69	65	63	61	59	61	62	66	68	69	68	69	70	71	72	72	73	72	-	-	-	73	68
12.		96	74	70	65	60	58	58	60	62	65	67	71	70	67	67	69	69	69	70	70	70	68	68	70	68
13.		73	72	69	65	61	60	57	58	58	61	65	67	66	69	71	71	73	75	74	74	72	72	70	70	68
14.		73	74	73	70	68	66	65	64	61	65	72	74	75	71	71	72	73	72	73	73	72	71	71	72	70
15.	Q	75	73	70	61	68	52	53	60	64	70	72	69	69	68	68	70	71	72	71	71	71	71	71	72	68
16.	Q Q Q	76	74	73	72	68	61	60	60	61	63	68	71	74	72	72	72	72	71	72	72	72	72	71	73	70
17.		78	75	72	65	61	51	50	49	53	59	65	70	69	66	68	69	70	70	71	71	70	70	70	70	66
18.	Q Q Q	74	72	72	68	64	58	49	46	50	60	67	72	73	71	72	72	72	72	72	72	72	71	71	71	67
19.		73	73	74	70	67	65	62	55	52	60	67	71	72	71	71	72	74	75	74	74	74	74	73	74	69
20.		74	75	73	71	66	63	64	67	72	74	76	75	76	74	74	74	74	73	73	72	71	71	70	71	72
21.		74	72	71	69	66	64	63	62	64	66	66	68	70	67	68	68	67	67	67	66	67	66	66	66	70
22.		68	69	68	63	60	55	50	48	52	56	59	61	61	60	62	65	68	70	72	69	71	69	69	65	63
23.	AAA	68	66	68	67	69	67	65	62	61	61	61	63	64	66	68	69	69	71	73	66	68	69	69	71	67
24.		73	73	69	64	61	61	62	62	64	76	82	86	93	84	86	80	80	74	75	76	75	73	72	72	74
25.	AAA	74	73	69	67	64	64	65	64	67	77	77	83	82	78	74	74	73	72	71	72	69	69	70	72	72
26.	AA	75	75	73	69	47	62	64	65	69	74	78	80	80	75	76	75	74	73	76	75	72	72	73	74	73
27.		78	78	75	71	69	66	64	68	72	77	78	80	82	80	81	78	77	77	73	75	75	75	74	75	75
28.		78	77	75	70	68	61	64	70	74	73	72	76	76	74	78	75	79	77	76	77	77	76	76	76	74
29.		79	79	78	72	70	68	64	71	76	82	86	82	80	77	78	79	79	80	78	75	75	76	78	78	77
30.		80	80	80	74	70	69	70	75	79	80	81	83	84	79	79	77	76	76	75	75	72	72	72	73	79
31.		77	78	75	69	60	56	56	59	61	64	68	74	75	74	72	71	71	71	70	69	69	69	69	69	69
Среднее по всем:		78	76	73	69	66	63	62	62	65	69	74	75	75	73	74	74	75	74	74	73	73	73	76	71	71
по: Q		76	73	71	66	65	57	54	55	58	64	68	70	71	69	70	71	71	71	72	71	71	71	72	72	68
по: AA		74	73	71	68	62	64	64	64	67	73	75	78	80	77	74	75	75	73	75	73	72	72	73	72	72

Алма-Ата

Сентябрь 1973 года

Склонение $\Delta=4^{\circ} 20.0+$ табличное значение в минутахДолгота $76^{\circ} 55\text{в.д.}$ Широта $43^{\circ} 15\text{с.ш.}$

Дни	Время: миро вое: I																									Среднее суточн ^е .
		UT	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		13.0	14.4	15.2	15.6	13.5	10.9	8.1	6.0	5.2	5.6	7.0	8.6	9.7	9.4	9.3	9.6	10.4	10.7	11.2	10.8	11.5	11.4	12.0	12.5	10.4
2		13.2	14.5	15.7	14.5	13.0	10.2	7.6	6.0	5.8	6.0	6.8	8.4	10.0	10.6	10.8	10.4	10.4	10.6	10.8	11.2	11.6	11.8	11.8	11.8	10.6
3		13.0	14.8	16.2	15.2	12.0	8.8	6.4	4.8	4.9	6.4	7.8	9.4	10.0	10.0	9.6	9.7	10.2	10.5	11.2	11.8	11.9	12.0	11.4	12.6	10.4
4		12.5	12.8	12.8	14.3	12.8	9.4	7.6	5.0	8.4	5.7	8.2	9.6	11.6	11.0	11.0	11.0	11.4	11.4	11.8	12.4	11.4	12.2	12.0	11.2	10.7
5		11.2	12.1	13.7	12.8	11.2	9.2	8.1	6.4	6.8	8.2	9.8	11.3	11.9	11.4	10.8	11.2	10.9	11.2	12.5	11.2	10.0	11.8	11.6	12.4	10.7
6		12.4	10.8	16.3	16.4	14.2	11.6	8.6	7.2	6.8	7.2	8.4	9.8	11.1	11.2	11.4	12.0	12.0	12.0	11.2	10.9	11.2	11.2	11.2	11.2	11.1
7		11.8	13.2	14.6	15.2	14.3	10.6	8.0	6.6	6.2	7.1	8.2	10.1	11.4	11.4	12.4	10.8	10.6	10.9	11.0	11.0	11.0	11.6	12.0	12.8	11.0
8		12.8	13.8	-	14.9	14.2	12.5	9.8	8.2	7.7	7.2	9.1	10.8	11.0	10.8	10.0	9.8	10.7	11.6	10.5	10.3	10.8	11.1	11.2	11.8	11.0
9	D	12.7	13.0	13.4	14.1	13.6	11.6	9.0	6.8	5.8	6.4	9.2	9.4	10.4	11.0	11.2	10.4	10.2	10.2	11.9	10.0	11.4	14.2	13.2	9.5	10.8
10	D	12.3	15.0	15.8	15.0	12.0	9.0	7.0	6.1	7.0	9.0	8.8	8.2	8.2	11.2	10.4	12.1	11.0	10.6	11.6	10.4	13.2	13.3	13.1	9.3	10.8
11		11.9	13.6	14.2	13.8	12.0	9.8	8.6	8.0	7.8	8.6	9.8	10.8	10.9	10.7	10.8	10.8	11.2	11.4	9.8	11.6	12.2	11.8	11.8	12.2	11.0
12		13.0	13.6	-	13.6	15.8	9.6	8.2	7.4	7.8	8.6	9.1	9.2	9.7	9.2	9.0	10.2	12.2	10.6	11.8	11.2	11.6	11.6	11.7	11.7	10.7
13		12.4	13.2	13.6	12.7	10.4	8.8	11.7	7.2	7.2	8.0	10.1	12.4	11.6	12.6	11.7	11.8	11.3	11.6	11.8	12.0	12.0	11.6	11.6	11.8	11.2
14	Q	12.4	13.6	14.1	13.6	11.2	9.2	7.4	6.4	6.6	7.5	6.0	11.6	11.5	10.6	10.4	10.4	10.4	10.6	10.7	10.8	10.8	11.0	11.2	11.4	10.4
15		12.0	13.0	14.0	14.8	12.4	9.2	7.0	5.4	5.4	6.4	8.1	9.2	9.4	8.6	10.3	10.8	10.8	11.0	11.5	11.6	12.0	11.6	13.2	14.4	10.5
16		14.0	14.2	15.2	15.0	13.0	10.8	8.0	5.4	6.8	7.6	9.4	10.2	11.0	10.2	10.2	11.0	10.8	10.8	10.8	11.1	11.4	11.4	11.3	11.6	10.9
17		11.8	13.0	14.4	14.4	11.8	8.8	6.8	6.8	7.2	9.2	10.0	10.4	10.9	10.5	10.2	10.0	10.1	10.2	10.6	11.0	11.8	11.6	12.2	12.6	10.7
18		13.2	13.9	14.4	13.2	11.2	8.5	6.4	5.6	6.6	7.6	8.6	10.0	11.0	11.0	10.6	10.4	10.6	10.6	10.8	10.4	11.2	11.6	11.6	11.8	10.5
19	Q	11.9	12.8	13.6	14.0	12.6	10.0	7.2	5.4	5.2	6.6	8.8	9.6	9.8	9.8	10.0	10.2	10.2	10.4	10.4	11.0	11.2	11.2	11.6	12.0	10.2
20		11.9	12.6	13.8	13.8	11.8	8.8	6.8	6.4	6.8	7.8	9.2	10.0	10.0	11.2	12.4	10.6	11.2	11.8	12.6	12.8	13.2	11.2	9.0	11.2	10.7
21		11.8	11.0	13.4	14.2	12.0	9.0	7.0	6.6	7.8	10.0	9.6	11.5	10.8	9.8	10.6	10.9	12.2	12.2	11.7	11.2	11.4	11.4	11.6	11.6	10.8
22		11.8	12.8	13.6	13.8	12.8	11.0	9.0	7.8	7.0	7.8	8.2	9.0	9.9	9.6	9.4	10.8	11.2	10.6	10.6	8.2	10.8	11.4	7.2	12.2	10.3
23	D	11.8	11.2	10.8	12.4	12.4	11.2	10.2	9.6	8.2	8.2	12.2	16.6	10.6	14.0	13.3	11.5	11.0	12.8	12.6	11.0	12.6	11.4	11.0	11.2	11.6
24	D	12.0	13.8	14.6	14.0	11.6	9.2	7.6	6.8	8.2	8.2	9.5	10.8	14.2	14.0	13.2	13.8	11.8	11.2	11.1	12.1	11.8	9.8	8.8	10.8	11.2
25	D	12.2	13.4	14.8	15.0	13.6	10.4	7.8	6.4	6.8	8.0	10.0	11.4	11.6	11.8	11.6	10.7	11.0	12.4	11.6	11.6	8.2	13.0	14.2	13.2	11.3
26		13.0	12.8	13.8	12.6	11.2	9.6	8.2	6.8	6.2	7.1	10.6	12.2	13.2	11.0	13.8	9.6	12.4	11.8	11.4	11.4	11.8	12.0	12.0	12.0	11.1
27		12.4	13.5	14.4	14.6	13.6	12.0	10.0	8.6	9.4	11.0	12.6	12.2	12.4	12.2	15.4	12.2	11.2	10.8	11.0	11.0	11.1	11.0	11.3	11.2	11.9
28	Q	12.2	-	-	10.5	11.2	10.5	10.4	10.6	10.8	10.8	10.5	12.4	11.0	11.2	11.6	12.4	13.0	13.2	12.4	10.3	8.0	6.6	6.2	7.4	10.6
29	Q	9.4	10.8	11.2	10.8	10.8	10.8	10.6	10.9	10.7	10.4	10.6	10.8	10.8	10.8	11.0	12.2	13.4	13.1	11.2	8.7	7.3	6.4	6.4	7.4	10.3
30	Q	9.0	10.1	10.2	10.0	10.0	10.2	10.3	10.2	10.4	10.0	10.4	10.9	11.0	11.2	11.6	12.5	-	-	-	-	-	-	-	-	11.2
Среднее	по всем	12.2	13.0	14.0	13.8	12.4	10.0	8.3	7.0	7.3	7.9	9.2	10.6	10.9	10.9	11.1	11.0	11.2	11.3	11.3	11.0	11.2	11.3	11.2	11.5	10.8
	по Q	11.0	11.8	12.3	11.8	11.2	10.1	9.2	8.7	8.7	9.1	9.3	11.1	10.8	10.7	10.9	11.5	11.8	11.8	11.2	10.2	9.3	8.8	8.9	9.6	10.4
	по D	12.2	13.3	13.9	14.1	12.6	10.3	8.3	7.1	7.2	8.0	10.0	11.3	11.0	12.4	11.9	11.7	11.0	11.4	11.8	11.0	11.4	12.3	12.1	10.8	11.1

Алма-Ата
Сентябрь 1973 года

Горизонтальная сос-щая H= 25400 + табличное значение в гаммах
Долгота 76° 55 в.д. Широта 43° 15 с.ш.

Дни	Время: миро вое УТ																									Средн. суточн.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1		92	87	79	84	73	69	78	86	96	108	106	108	110	111	111	115	105	99	100	107	99	98	101	99	97	
2		94	92	86	69	57	55	63	72	79	92	99	102	100	99	99	99	101	102	105	102	102	104	102	99	91	
3		99	102	96	73	64	67	82	101	105	111	113	110	109	105	105	102	102	101	95	89	94	99	110	102	97	
4		105	105	99	81	73	63	51	70	81	87	122	73	67	78	84	83	89	96	87	82	86	84	82	82	84	
5		86	89	79	61	60	57	60	72	78	79	76	70	67	67	76	78	84	86	87	90	108	89	84	87	78	
6		88	79	67	58	55	60	63	67	84	82	81	77	72	67	69	70	67	76	86	89	89	92	92	92	76	
7		91	87	79	61	50	52	64	82	87	95	104	99	95	90	89	88	90	91	93	95	93	90	93	92	85	
8		89	84	-	76	64	61	70	81	93	99	98	92	86	82	90	95	90	82	90	99	102	104	99	98	88	
9	D	99	99	96	84	76	69	74	90	108	101	75	90	97	95	55	71	84	87	76	79	97	88	56	57	85	
10	D	58	52	57	37	31	38	55	79	78	86	93	73	52	67	69	73	79	93	86	79	83	83	81	71	69	
11		81	79	61	50	41	47	56	62	70	76	79	81	83	81	78	79	90	92	87	90	84	87	86	87	75	
12		81	75	-	54	51	54	64	76	86	94	102	104	105	108	109	96	94	90	96	103	102	99	98	93	88	
13		87	82	76	67	67	73	84	90	99	95	79	70	76	90	83	80	96	79	90	90	82	84	89	90	83	
14	Q	90	87	79	66	61	73	83	89	93	95	92	90	91	92	95	96	96	96	96	99	102	102	101	101	90	
15		99	96	95	89	86	86	79	90	98	102	109	102	89	87	89	102	90	92	93	99	98	109	102	88	94	
16		86	89	83	74	55	44	49	79	87	90	90	79	87	93	90	89	89	98	99	96	96	96	99	99	85	
17		98	96	86	70	67	75	79	84	90	89	93	97	97	101	101	102	102	102	102	99	101	98	99	93	92	
18		92	87	83	73	64	64	82	94	99	101	104	95	87	90	90	93	94	96	99	106	102	96	100	98	91	
19	Q	97	98	93	84	79	81	96	111	119	119	113	107	102	102	102	101	101	105	111	107	100	99	99	99	101	
20		99	105	99	86	79	90	104	111	108	107	105	102	95	84	84	93	99	107	90	90	87	93	105	102	97	
21		99	98	102	90	86	79	84	93	84	70	66	55	75	93	90	92	93	87	87	90	90	93	95	96	87	
22		96	95	90	84	85	87	92	96	96	95	99	99	90	89	96	92	102	101	102	116	105	101	113	109	97	
23	D	93	83	81	66	51	52	52	47	78	73	40	22	18	-15	6	35	21	46	87	69	66	67	66	66	52	
24	D	61	58	50	63	38	54	69	69	73	79	79	73	82	70	73	67	76	89	82	78	80	85	81	79	71	
25	D	70	66	57	41	25	32	49	54	70	76	82	75	73	81	84	83	86	90	94	84	108	108	72	90	73	
26		93	84	79	72	64	62	62	70	59	44	3	-2	-18	-9	-7	15	38	52	64	67	72	73	75	75	49	
27		69	70	69	60	61	64	79	89	89	81	61	55	49	50	54	73	63	73	79	82	82	83	82	82	81	
28	Q	82	-	-	84	87	86	89	89	90	87	92	93	93	92	90	87	84	79	73	76	79	86	96	99	87	
29	Q	96	90	84	82	82	84	86	87	90	94	95	96	95	93	93	92	86	73	64	72	89	102	105	104	89	
30	Q	102	96	90	89	91	90	93	101	104	105	105	104	98	93	92	-	-	-	-	-	-	-	-	-	97	
Среднее																											
по всем		89	87	81	71	64	66	73	83	89	90	89	82	81	81	81	84	86	88	90	91	92	93	93	91	84	
по Q		93	93	77	81	80	83	89	95	99	100	99	98	96	94	94	94	92	88	86	89	93	97	100	101	92	
по D		76	72	68	58	36	49	60	68	81	83	74	62	64	60	57	66	69	78	86	79	86	86	77	73	70	

Алма-Ата

Вертикальная сос-щая $Z = 47900+$ табличное значение в гаммах

Сентябрь 1973 года Долгота $76^{\circ} 55$ в.д.

Широта $43^{\circ} 15$ с.ш.

Дни	Время: миро- вое : UT																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1		79	78	77	67	63	63	58	58	64	71	73	73	71	68	70	71	70	72	73	73	72	72	72	71	70
2		74	76	74	72	67	64	64	60	62	68	71	71	73	71	72	73	75	75	75	74	74	73	73	73	71
3		77	78	73	66	56	50	50	49	58	64	66	67	67	66	67	69	70	70	70	70	57	70	68	66	65
4		66	68	69	70	68	64	62	62	62	70	70	73	75	72	72	72	72	72	72	73	73	71	71	72	70
5		76	76	78	74	69	63	63	67	71	73	74	75	76	76	78	77	77	77	77	74	74	70	73	75	73
6		78	77	75	70	64	59	56	59	66	70	75	78	78	78	80	80	80	81	80	78	77	77	76	76	74
7		79	80	79	70	66	67	69	69	72	74	75	74	75	72	74	73	73	73	74	72	72	71	70	70	73
8		71	68	-	65	63	59	56	57	63	65	66	67	67	67	68	69	69	71	72	72	72	71	70	68	67
9	D	67	68	67	63	60	54	52	52	57	61	65	70	70	68	68	75	76	74	75	75	71	67	66	66	66
10	D	70	74	71	62	58	58	64	70	74	78	82	78	77	79	80	83	80	81	81	74	77	77	77	77	74
11		80	77	78	75	74	73	74	71	75	76	78	76	72	71	72	74	75	71	72	70	70	70	69	69	73
12		71	73	70	65	62	60	63	68	72	70	68	65	64	64	65	65	69	70	72	72	70	68	67	67	68
13		67	66	64	58	56	58	58	57	60	65	69	66	67	71	69	69	70	70	71	68	68	69	69	69	66
14	Q	70	70	70	64	59	59	65	65	64	68	69	67	69	69	70	70	70	70	70	70	70	69	68	68	68
15		70	71	72	64	56	57	58	64	67	67	68	69	68	69	73	73	74	76	76	76	74	73	68	66	69
16		72	72	72	65	61	55	57	60	61	66	70	72	73	73	73	74	75	75	74	73	73	73	72	72	69
17		72	73	70	65	65	68	69	73	75	76	77	76	74	73	73	72	72	73	73	73	73	72	71	71	72
18		72	74	71	66	62	58	58	62	65	67	68	70	70	72	74	74	74	74	74	74	72	72	71	71	69
19	Q	72	74	75	72	68	68	66	66	69	71	72	72	70	71	72	73	74	74	74	74	72	72	72	72	71
20		73	75	73	65	52	46	50	54	57	60	65	68	69	71	74	74	74	70	70	71	71	72	72	70	67
21		70	72	71	65	57	51	54	55	60	69	72	70	73	74	73	73	71	72	72	72	72	70	69	68	68
22		69	69	67	63	60	57	55	57	59	62	64	63	62	63	66	66	67	66	66	66	60	61	60	56	63
23	D	57	62	64	60	62	63	64	64	69	67	73	80	93	83	85	84	81	78	78	70	70	71	70	72	72
24	D	71	71	67	62	62	64	62	58	62	69	73	73	74	70	72	72	69	69	68	68	67	64	64	67	67
25	D	66	69	69	62	57	56	57	58	65	72	73	71	69	72	69	70	71	71	70	69	68	63	65	66	66
26		63	65	63	59	58	56	56	59	66	76	85	84	86	90	97	95	90	87	85	82	80	78	76	75	75
27		76	79	78	74	70	62	55	54	59	64	66	70	70	71	71	71	65	66	66	65	64	63	62	62	67
28	Q	65	-	-	60	61	61	61	60	61	60	60	59	58	58	58	61	62	60	57	53	44	43	46	50	57
29	Q	56	56	55	56	57	58	57	57	57	57	56	56	55	54	54	55	57	55	57	53	44	43	45	51	54
30	Q	54	53	52	53	54	54	55	55	54	54	52	52	51	51	53	54	-	-	-	-	-	-	-	-	53
Среднее		70	71	70	65	62	59	60	61	64	68	70	70	71	70	71	72	72	72	72	71	69	68	68	68	68
по всем		63	63	63	61	60	60	61	61	61	62	62	61	61	61	61	63	66	65	65	62	58	57	58	60	61
по D		66	69	68	62	72	70	71	72	77	82	86	87	89	87	88	90	89	88	88	86	83	81	80	80	80

Алма-Ата

Горизонтальная сос-шая Н= 25400+ табличное значение в гаммах

Октябрь 1973 года

Долгота 76°55в.д.

Широта 43°15с.в.

День	Время: миро: вое U																									Средн. суточн.														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24															
4					С	1	по	3	запись	отсутствует															87	85	80	76	77	78	81	81	93	94	75	76	81	82	84	81
5		87	84	84	79	75	78	85	94	99	106	100	90	92	91	93	90	94	97	96	97	90	85	80	88	90	85	80	88	90										
6		89	90	86	84	75	72	70	75	84	84	85	88	87	87	88	87	84	76	78	88	108	95	93	93	86	86	86	86											
7		97	90	93	84	78	74	80	85	91	96	95	93	93	92	90	93	97	97	97	99	99	96	97	99	93	93	93	93											
8		99	99	93	92	94	93	94	102	108	114	110	107	105	108	110	106	109	112	114	111	-	-	-	-	105	105	105	105											
9		-	-	-	99	94	96	94	96	97	100	103	98	103	99	96	96	96	97	102	100	99	98	75	78	97	97	97	97											
10		77	87	93	85	96	98	94	100	108	108	106	100	94	88	87	97	97	102	94	87	96	97	94	97	95	95	95	95											
11		93	99	97	90	87	85	88	93	97	105	103	99	93	88	98	102	100	103	102	100	99	103	104	106	97	97	97	97											
12		105	107	105	100	91	88	87	87	94	102	100	100	104	105	96	84	100	92	99	99	98	101	100	101	98	98	98	98											
13		102	112	99	90	90	79	76	87	90	93	93	98	99	99	96	104	101	108	111	105	98	99	96	96	98	98	98	98											
14		97	100	101	99	99	96	96	99	104	105	101	102	100	93	100	105	101	100	100	100	108	114	96	97	96	101	101	101											
15	Q	98	92	97	99	96	90	84	91	98	100	98	93	100	97	98	100	101	101	104	105	105	105	103	103	98	98	98	98											
16	D	103	105	104	106	102	102	111	127	90	78	87	75	70	85	88	91	96	103	81	66	91	92	81	79	93	93	93	93											
17		78	73	81	78	88	86	73	84	87	79	65	55	61	57	93	94	85	84	87	87	87	89	89	85	81	81	81	81											
18		99	94	91	91	90	79	68	82	84	87	78	63	66	55	72	67	78	73	87	82	87	90	91	90	82	82	82	82											
19		90	88	90	81	84	75	58	75	66	60	65	60	70	72	78	78	76	81	93	88	88	90	84	91	78	78	78	78											
20		96	94	99	92	94	73	78	60	66	72	61	69	78	82	82	111	94	82	79	81	84	90	97	102	83	83	83	83											
21	D	88	83	90	77	84	84	84	97	99	73	70	43	40	66	67	59	60	72	87	109	93	85	81	84	78	78	78	78											
22		86	75	73	85	82	77	72	73	72	66	76	80	78	76	79	97	98	102	90	87	87	87	88	91	83	83	83	83											
23		95	97	94	87	84	80	80	85	95	99	98	96	96	92	94	93	99	98	94	93	92	91	91	96	92	92	92	92											
24		99	102	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	100	100	100											
25	Q	-	-	-	99	100	101	91	85	78	81	87	97	103	105	105	105	105	106	104	105	108	109	-	-	100	100	100	100											
26	Q	-	-	-	94	85	75	78	91	105	109	109	109	106	105	104	103	103	101	101	99	100	101	101	101	99	99	99	99											
27	Q	-	-	-	99	96	94	87	98	108	111	108	108	108	108	107	105	94	88	84	90	91	99	99	101	98	98	98	98											
28	Q	102	104	104	101	97	97	99	108	100	81	87	87	87	87	84	51	51	72	102	102	94	97	99	109	92	92	92	92											
29	D	99	82	96	87	78	72	71	72	51	-27	-8	22	37	6	81	30	69	78	67	64	39	54	60	60	56	56	56	56											
30		55	64	67	51	48	39	40	49	54	54	65	63	57	67	75	90	91	79	75	85	88	97	87	84	68	68	68	68											
31		85	75	68	57	52	52	45	43	51	51	60	64	67	70	70	75	70	75	78	79	80	82	81	82	68	68	68	68											
Среднее																																								
по всем		94	92	92	89	86	82	80	82	88	84	86	83	85	85	90	89	90	91	92	93	92	93	90	92	88	88	88	88											
по D		100	98	101	98	94	90	85	91	97	100	101	102	104	104	104	103	101	99	98	100	101	104	101	102	98	98	98	98											
по Q		97	90	97	90	88	86	89	99	80	41	50	47	49	52	79	60	75	84	78	80	74	77	74	74	75	75	75	75											

Алма-Ата

Вертикальная сос-шая Z = 47900+ табличное значение в гаммах.

Октябрь 1973 года

Долгота 76°55в.д.

Широта 43°15с.ш.

Дни	Время: микро: все : UT	Средн. суточн.																								
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
4																										
5		71	72	73	70	66	62	62	63	66	70	66	68	68	70	70	69	70	70	66	66	70	70	70	70	64
6		72	73	80	74	70	64	60	58	62	66	72	73	72	72	70	70	72	72	72	74	72	70	70	70	70
7		63	66	70	70	66	62	62	62	64	67	67	66	66	66	66	66	66	64	64	64	64	64	64	65	65
8		66	70	72	68	66	62	60	56	52	52	56	62	62	62	62	62	63	64	64	62	-	-	-	-	62
9		-	-	-	60	64	62	62	62	62	63	63	63	64	62	62	62	62	62	62	63	64	66	63	61	62
10		62	63	64	62	62	54	50	51	51	54	60	62	62	63	64	67	65	66	64	64	66	64	62	62	61
11		62	64	62	60	57	54	54	54	56	58	62	62	60	62	64	62	62	62	62	62	62	62	62	61	60
12		60	62	62	61	59	62	60	57	60	61	63	63	62	62	62	64	66	64	65	63	63	62	62	62	62
13		60	64	64	64	62	60	57	60	62	70	71	66	62	63	63	64	66	64	66	62	62	62	62	62	63
14		64	66	66	68	67	63	61	59	61	65	67	67	65	65	65	65	65	66	65	65	63	64	64	64	65
15	Q	64	65	67	68	65	62	59	54	53	58	64	65	65	65	65	65	67	67	67	66	65	65	64	64	
16	D	64	66	65	63	59	54	47	37	44	54	60	62	66	68	68	67	68	67	65	66	67	62	61	64	61
17		65	65	66	64	61	55	52	52	54	60	67	69	70	71	74	68	67	67	66	65	65	66	66	65	64
18		65	64	66	68	66	60	55	56	58	61	67	70	70	72	73	73	74	72	72	71	69	68	67	66	67
19		64	66	68	68	65	58	58	59	64	72	78	76	74	73	73	72	72	71	70	67	67	65	66	66	68
20		67	69	72	72	70	71	67	60	63	60	68	72	73	72	70	72	67	67	68	69	69	68	67	66	68
21	D	64	66	71	71	68	62	59	62	64	65	71	71	78	77	74	74	74	74	73	68	65	64	65	66	69
22		68	68	70	72	69	65	64	66	70	73	75	74	72	73	72	72	70	68	66	67	67	67	67	67	69
23		77	81	81	82	82	77	73	75	80	84	82	80	77	78	78	79	79	79	78	78	78	77	77	77	79
24		77	78	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78
25	Q	-	-	-	79	76	72	70	70	71	74	76	77	77	76	77	77	78	71	77	77	75	75	76	-	75
26	Q	-	-	-	78	75	64	60	62	65	71	74	75	75	75	75	76	77	76	76	76	76	75	75	74	73
27	Q	74	77	78	80	78	71	66	64	65	72	74	74	75	75	75	76	77	78	78	78	78	78	76	75	75
28	Q	75	76	77	71	74	66	61	62	66	70	74	75	75	75	75	79	83	85	82	77	76	76	75	72	74
29	Q	70	71	76	80	76	66	60	58	64	74	87	93	90	88	93	83	85	80	77	68	74	75	72	71	76
30		72	74	75	74	72	66	64	65	70	75	76	79	80	81	81	81	79	79	80	80	78	75	73	72	75
31		72	74	79	82	80	71	67	69	77	82	83	82	80	80	78	78	78	79	78	77	76	74	74	77	77
Среднее по всем дням		67	69	71	70	68	63	60	60	62	67	70	71	71	71	71	71	71	71	70	69	69	69	68	65	68
по Q		69	71	73	76	74	67	64	63	64	69	72	73	73	73	73	74	75	75	75	74	74	73	73	71	72
по D		66	68	71	71	68	61	55	52	57	64	73	75	78	78	78	75	76	74	72	67	69	67	66	67	69

Алма-Ата

Оклонение $\Delta = 4^{\circ}20.0+$ табличное значение в минутах

Ноябрь 1973 года

Долгота $76^{\circ}55$ в.д.

Широта $43^{\circ}15$ с.ш.

Дни	Время: МНО: все																									Средн. суточн.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	Q	13.6	13.7	14.1	15.6	15.2	14.4	11.9	10.6	11.0	12.3	13.4	13.8	14.2	14.8	14.0	14.4	14.0	13.8	13.7	14.0	14.0	13.4	12.8	12.5	13.5
2	Q	14.6	13.2	14.6	16.3	16.4	15.4	14.2	12.4	11.6	11.8	12.6	12.7	13.1	13.6	14.0	14.8	15.1	14.0	14.1	14.2	14.0	14.2	13.7	13.0	13.8
3	Q	13.2	13.2	14.0	15.1	15.4	14.3	12.2	10.6	10.2	11.4	12.2	12.6	12.8	13.2	13.0	13.0	13.2	13.3	13.5	13.3	13.3	12.9	12.9	13.0	13.0
4	Q	13.1	12.8	13.2	13.8	13.5	12.3	11.0	10.3	10.6	11.6	11.9	12.3	12.2	14.0	13.6	12.8	12.7	15.6	15.5	15.8	15.2	13.0	12.6	13.0	13.0
5	Q	13.0	12.6	12.8	13.6	13.5	13.2	11.8	10.7	11.4	12.2	11.8	13.9	13.1	13.0	12.6	12.6	13.0	13.1	13.6	15.0	13.9	12.4	13.2	12.6	12.8
6	Q	12.2	12.5	12.6	13.6	14.0	13.3	12.4	11.2	11.6	11.8	12.2	12.4	12.4	12.6	12.8	12.8	13.1	13.2	13.7	13.8	13.6	14.0	13.6	12.7	12.8
7	Q	12.5	12.6	12.5	12.6	12.2	12.7	12.1	11.3	13.1	12.0	12.4	13.4	12.7	13.4	13.2	13.0	13.6	13.6	12.5	12.5	12.4	13.8	13.3	12.5	12.7
8	Q	12.7	12.7	13.0	13.8	14.0	14.0	12.8	12.2	12.3	13.1	13.7	12.8	12.3	12.6	12.9	13.7	13.3	14.2	13.8	13.7	14.0	13.3	12.8	13.6	13.2
9	Q	13.6	13.0	13.8	14.2	13.7	12.1	11.2	11.7	12.2	13.0	13.2	13.6	15.2	12.6	13.1	13.6	13.2	13.5	13.8	13.4	13.5	13.2	13.0	12.9	13.2
10	Q	12.6	12.8	13.2	13.5	13.2	12.5	11.4	11.4	11.4	12.2	12.6	12.5	12.4	13.0	12.8	13.1	13.1	13.5	13.5	13.5	13.6	13.6	13.5	13.0	12.8
11	Q	12.6	12.6	12.6	13.4	13.6	13.3	12.7	11.8	11.6	12.4	12.5	12.3	12.6	12.9	12.9	13.2	13.2	13.7	13.7	13.5	13.4	13.1	13.7	12.6	12.9
12	Q	12.6	12.6	12.8	-	-	-	-	-	-	-	12.7	12.8	12.8	12.8	13.0	13.2	13.4	13.6	13.5	13.6	13.6	13.8	13.8	13.8	13.2
13	Q	13.0	12.5	12.6	13.8	13.8	13.3	12.3	11.6	11.7	12.6	12.9	12.8	12.6	13.1	13.2	16.1	16.4	15.5	14.8	13.7	13.3	13.0	12.4	12.5	13.3
14	Q	12.2	12.6	12.8	13.2	13.4	12.6	12.0	11.2	11.4	12.2	12.8	12.8	12.6	12.4	12.6	13.3	14.1	14.0	14.9	14.2	12.3	13.3	13.3	13.0	12.9
15	Q	12.6	12.3	12.6	13.9	14.4	14.2	13.5	12.2	11.8	11.9	13.0	13.2	13.1	14.9	14.0	13.7	13.7	13.7	13.9	13.8	14.1	13.7	13.5	13.2	13.4
16	Q	13.0	12.7	13.3	13.7	13.7	13.7	13.2	12.2	11.6	12.0	12.0	13.0	14.8	12.5	12.7	13.4	13.5	13.9	13.6	28.0	32.0	26.0	30.0	14.0	15.8
17	Q	13.0	13.0	10.8	12.6	12.8	12.6	12.5	11.7	11.7	12.0	12.2	12.2	12.2	12.4	16.3	14.7	15.2	15.3	17.4	16.0	15.0	14.2	13.3	12.6	13.8
18	Q	12.2	10.8	10.0	12.7	14.0	13.9	13.7	14.9	14.9	14.6	14.7	13.2	14.4	13.6	13.4	12.9	13.1	13.8	13.8	12.2	12.7	13.1	12.8	12.6	13.3
19	Q	12.7	12.9	13.2	14.2	14.4	13.7	12.9	12.2	12.1	12.3	12.6	12.7	12.7	13.1	13.2	13.5	13.2	13.0	13.2	13.2	12.8	12.7	12.4	12.3	13.0
20	Q	12.4	12.4	13.1	13.4	14.0	13.5	12.6	11.4	11.3	11.6	12.0	12.4	12.6	13.5	12.8	12.8	13.1	13.4	13.2	12.4	12.4	12.4	12.2	11.9	12.6
21	Q	11.6	11.3	11.5	12.3	12.0	11.7	11.0	11.4	11.8	12.0	12.1	12.6	12.1	11.9	12.0	13.1	17.4	17.6	19.2	21.0	19.2	18.4	17.5	15.1	14.0
22	Q	14.6	14.6	14.0	13.5	12.6	12.2	11.7	12.0	12.5	12.8	13.4	13.4	13.4	13.4	13.7	13.2	13.3	13.5	13.6	13.5	13.4	13.3	12.9	12.4	13.2
23	Q	12.2	12.0	11.7	12.4	12.8	13.0	12.9	12.8	12.7	12.4	12.7	12.8	13.2	13.8	14.4	15.0	15.0	15.3	15.4	15.7	14.4	13.5	13.0	12.7	13.4
24	Q	12.5	12.6	12.8	13.2	13.4	13.2	13.0	12.6	12.0	12.4	12.6	12.2	12.3	12.7	17.1	17.6	19.7	17.4	20.0	18.0	16.3	15.4	14.9	15.3	14.5
25	Q	11.5	11.9	12.0	12.9	13.5	13.5	13.7	15.4	15.1	15.7	15.9	16.2	14.9	15.3	18.0	18.3	15.6	15.6	13.3	14.6	11.1	12.2	13.7	13.4	14.3
26	Q	11.8	12.0	11.7	12.1	12.0	13.1	13.4	13.0	13.6	13.0	13.8	15.6	14.7	14.3	14.6	13.1	14.0	13.2	13.4	13.1	13.5	13.3	12.6	12.3	13.2
27	Q	12.4	12.0	12.3	12.9	13.1	12.6	12.2	11.7	11.9	12.6	13.0	13.1	13.2	15.8	16.6	15.0	15.3	14.8	13.0	13.4	12.9	13.1	13.1	13.0	13.3
28	Q	12.4	12.4	12.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.4
29	Q	12.7	12.4	13.2	13.2	13.2	12.6	13.0	13.6	13.8	13.3	13.2	13.6	13.5	13.4	13.4	13.6	13.7	13.3	12.5	13.1	12.9	12.8	12.5	12.4	13.1
30	Q	12.5	12.7	12.7	12.7	12.7	12.1	12.3	12.5	12.8	13.0	13.1	12.9	12.8	12.9	12.6	12.8	13.2	13.8	13.9	14.1	13.0	13.2	12.9	12.5	12.9
Среднее по всем		12.8	12.7	12.7	13.5	13.6	13.2	12.5	12.0	12.1	12.5	12.9	13.1	13.1	13.4	13.7	13.9	14.1	14.2	14.3	14.7	14.3	13.9	13.9	13.0	13.3
по Q		12.6	13.0	11.5	14.8	14.7	13.9	12.8	11.9	11.7	12.3	12.9	13.0	13.1	13.4	13.3	13.7	13.7	13.6	13.7	13.8	13.5	13.4	13.1	12.8	13.3
по D		12.1	11.8	11.8	12.7	13.0	13.0	12.7	13.1	13.3	13.3	13.5	13.5	13.3	13.4	12.3	15.0	11.3	15.6	15.8	15.7	14.3	14.6	14.4	13.8	13.5

22 янв.

Алма-Ата

Горизонтальная сос- шая Н=25400+ табличное значение в гаммах

Ноябрь 1973 года

Долгота 76°55 в.д.

Широта 43°15 с.ш.

Дни	Время: миро: все:																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
I	Q	73	75	75	67	62	58	62	70	78	78	76	72	62	57	60	58	63	68	69	75	70	72	73	73	69
2	Q	78	79	76	75	75	72	64	60	62	69	69	64	60	60	56	60	66	69	66	69	72	72	75	69	
3	Q	81	82	84	84	83	78	76	79	84	84	86	84	79	76	81	81	82	81	82	86	85	89	90	87	83
4		84	86	85	82	86	89	89	89	90	85	87	90	82	55	72	90	90	97	97	72	69	81	85	82	84
5		87	84	84	82	79	79	87	87	78	90	97	81	76	81	85	86	84	86	88	90	93	90	88	83	85
6		84	86	84	79	76	79	81	83	85	87	84	78	79	80	87	86	80	81	84	93	88	83	81	87	83
7	D	89	92	97	91	89	86	84	66	29	59	70	79	78	78	79	75	87	85	105	105	105	73	75	81	82
8		80	80	81	79	76	76	78	72	70	66	82	84	84	84	84	84	81	84	81	84	85	93	93	84	81
9		82	82	82	79	78	82	79	80	86	93	86	66	67	76	84	87	87	84	82	91	87	84	83	87	82
10		83	87	86	82	79	85	84	81	87	90	93	92	98	87	86	82	88	88	90	92	90	89	90	88	88
11		92	94	-	97	96	96	96	98	95	94	93	87	88	88	86	86	87	103	94	91	90	89	89	92	92
12	Q	93	93	96	-	-	-	-	-	-	-	-	90	92	91	86	85	86	88	88	91	89	91	91	87	90
13		86	89	92	96	99	98	95	95	96	99	97	95	90	91	86	89	64	63	71	80	81	84	89	89	88
14		87	90	94	88	87	83	83	84	84	85	85	86	89	92	91	85	86	81	97	87	95	90	89	92	88
15		95	96	97	91	92	89	84	84	86	88	87	88	81	83	83	82	82	87	93	95	90	88	88	89	88
16		90	93	96	69	69	65	65	64	66	67	67	60	56	65	62	59	60	60	70	73	67	72	64	63	68
17		64	61	67	69	77	75	70	68	64	65	65	66	64	63	55	58	50	48	56	56	54	55	56	60	62
18	Q	65	59	67	63	64	66	60	40	39	49	50	51	53	57	57	61	61	58	56	66	64	59	60	58	
19	Q	65	62	66	92	92	92	89	86	86	87	91	92	93	87	85	86	85	86	87	87	88	88	89	91	86
20	Q	93	95	97	93	99	84	82	82	83	86	88	88	83	82	85	85	88	87	87	91	93	91	92	95	89
21	D	93	101	114	117	114	108	101	97	98	104	93	90	99	106	95	86	79	54	30	60	45	47	37	40	84
22		41	39	53	60	67	74	78	76	71	69	71	73	73	67	94	72	74	76	77	74	75	77	77	80	70
23		82	86	93	94	97	102	107	87	93	99	99	95	91	80	69	66	68	72	58	70	73	78	81	84	84
24	Q	85	90	94	97	99	103	102	88	102	90	102	107	104	74	32	18	34	39	75	35	54	72	65	60	76
25	Q	53	60	51	39	53	62	55	50	55	55	58	66	70	64	81	62	53	64	76	64	78	79	75	75	62
26		71	76	72	58	64	64	64	65	60	61	57	60	52	52	61	75	65	67	69	71	69	78	71	76	66
27		76	73	75	69	75	75	75	79	82	84	83	85	83	68	68	63	79	68	79	79	82	78	82	81	77
28		82	80	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81
29		90	91	93	98	98	91	84	85	83	85	75	85	87	88	87	93	92	92	93	93	92	89	92	91	89
30	Q	92	94	96	101	100	102	100	101	97	94	94	95	93	90	84	83	79	74	80	81	89	87	81	94	91
Среднее		81	82	84	82	83	83	81	78	78	81	82	81	80	77	76	75	76	75	79	79	80	80	79	80	80
по всем		81	81	83	86	84	83	82	84	86	86	87	87	84	80	79	79	79	79	81	84	84	85	85	86	83
по дням		77	80	85	81	84	85	80	68	65	71	75	79	81	76	69	60	63	60	68	66	66	62	63	72	72

Алма-Ата

Склонение $\Delta = 4^{\circ}20.0'$ табличное значение в минутах

Декабрь 1973 ГОДА

Долгота $76^{\circ}55'$ В.ДТ

Широта $43^{\circ}15'$ С.Ш.

Дни	Время: Микро: все: от																									Средн. суточн.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	Q	12.6	12.0	12.3	13.2	13.2	12.9	13.0	13.0	13.2	13.3	13.3	13.3	13.0	12.9	12.7	12.7	13.0	13.2	13.2	13.2	13.2	12.9	12.6	12.4	12.9	
2	Q	12.1	12.0	12.2	12.5	12.6	12.0	12.0	12.4	13.0	13.2	13.6	13.2	13.2	13.2	13.0	13.0	13.0	13.0	12.9	12.8	12.8	12.8	12.7	12.2	12.0	12.7
3		12.0	12.0	12.0	12.2	12.0	11.2	10.9	11.3	12.0	12.6	13.2	12.8	12.9	13.0	13.0	13.0	13.0	13.5	14.2	13.7	13.4	13.2	12.4	12.0	12.6	
4	D	12.0	11.7	11.8	12.5	12.3	11.5	11.0	11.8	12.2	13.2	12.1	13.0	13.0	13.0	14.4	14.9	17.0	17.6	19.6	17.2	16.7	14.5	17.3	17.7	14.1	
5		15.7	14.7	14.7	13.8	13.2	12.0	11.0	11.5	12.0	13.2	13.8	13.8	13.8	13.8	13.8	13.8	14.0	15.0	16.5	17.4	16.6	15.6	15.7	13.7	14.1	
6		13.4	13.6	13.8	13.7	13.1	12.2	11.8	12.8	13.3	13.2	13.6	13.6	13.4	13.4	13.4	13.4	13.4	14.0	13.8	13.7	14.0	13.9	14.2	14.0	13.4	
7		13.2	12.3	13.2	17.4	18.0	18.5	18.7	18.7	18.4	18.3	18.2	17.7	17.5	17.8	18.2	18.2	17.9	18.2	18.2	18.2	17.6	18.3	18.3	18.6	17.5	
8		18.4	18.4	18.4	13.6	13.1	12.8	12.3	12.0	12.1	12.5	13.0	13.2	13.2	13.8	12.6	13.1	12.7	12.7	12.5	12.7	12.8	13.0	13.0	12.7	13.5	
9	D	12.5	12.4	12.5	13.0	13.0	11.9	11.7	11.6	12.0	12.7	15.1	15.1	14.6	17.3	16.0	14.7	17.5	15.1	14.3	14.2	13.2	10.0	10.5	11.3	13.4	
10		12.0	12.0	12.5	13.5	13.0	12.4	11.8	11.5	12.2	12.6	13.4	13.5	13.4	13.4	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.6	12.4	12.3	12.7	
11		10.9	11.8	11.7	11.9	12.4	12.4	12.1	12.1	12.8	13.5	13.9	14.0	14.2	13.3	13.4	13.0	13.2	13.0	12.8	13.0	13.0	12.2	11.6	11.5	12.7	
12		11.5	11.5	11.6	11.8	12.3	11.8	11.4	12.0	12.2	12.2	12.4	12.8	12.7	12.7	12.8	12.8	13.3	13.4	13.2	12.9	12.8	12.5	12.4	12.3	12.4	
13		12.3	12.3	12.2	12.3	12.3	11.9	11.7	10.9	11.7	13.0	13.5	13.2	13.0	12.8	12.8	12.8	13.0	13.5	13.4	13.2	13.0	12.7	12.5	12.4	12.6	
14		12.2	12.0	11.9	12.3	12.3	12.0	11.8	11.5	11.7	11.9	12.2	12.2	12.2	11.8	13.3	13.2	12.7	13.4	13.2	13.6	13.1	13.2	13.0	12.0	12.4	
15		12.0	12.0	12.0	12.9	12.9	13.0	13.0	13.4	12.7	12.1	12.8	13.1	13.3	15.3	14.4	13.7	13.2	13.1	13.4	13.1	13.0	12.9	12.8	12.6	13.0	
16	Q	12.1	12.3	12.4	12.3	12.6	12.4	12.7	12.5	12.2	12.8	13.0	13.4	13.2	13.0	13.1	13.4	12.8	12.8	12.8	12.7	12.6	12.4	12.4	12.1	12.7	
17		11.9	12.0	12.0	12.2	13.3	12.2	11.6	11.1	11.2	11.8	12.2	12.9	13.1	13.1	13.0	13.2	13.6	13.8	13.8	13.6	13.8	12.4	13.0	12.7	12.6	
18	Q	12.3	12.3	12.2	12.4	12.4	12.0	11.8	11.6	11.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.1	
19	D	20.0	20.0	19.7	18.6	18.5	18.3	19.0	18.4	16.9	17.0	19.4	18.3	17.4	17.4	17.4	17.4	13.9	15.6	15.2	18.6	19.2	17.2	16.0	18.6	17.8	
20	D	-	-	-	19.4	19.0	19.0	19.8	19.3	18.5	18.5	18.9	18.8	18.6	18.4	18.8	17.2	15.7	15.5	15.6	15.6	16.8	17.1	19.2	20.5	18.1	
21	D	20.2	20.0	20.0	18.8	18.8	19.1	18.5	16.6	17.2	17.3	16.8	16.3	13.9	14.0	13.9	14.7	17.8	17.9	15.2	17.2	17.0	18.6	19.2	18.7	17.4	
22	D	20.3	21.4	19.2	19.0	18.6	18.1	18.4	19.0	18.0	17.6	17.5	15.8	13.3	16.5	17.8	15.8	16.0	17.0	17.5	18.2	18.6	18.2	19.5	20.8	18.0	
23		20.8	19.7	20.2	20.2	19.2	18.6	18.1	18.4	18.2	17.4	17.1	17.2	16.7	17.4	17.2	16.9	17.8	17.0	-	-	-	-	-	-	18.2	
24		-	-	-	13.6	14.2	14.4	13.5	13.0	13.3	13.6	13.8	13.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.6	12.5	12.2	12.0	13.1	
25	Q	11.8	11.8	11.8	12.5	13.6	13.7	13.3	12.7	12.6	12.9	13.2	13.6	13.1	13.1	14.0	13.4	12.9	12.7	12.5	12.3	12.0	12.2	12.0	12.0	12.7	
26		11.7	11.6	11.8	12.0	12.8	13.3	12.8	12.3	12.3	12.5	12.2	12.8	13.2	12.5	12.6	12.7	13.2	13.2	13.3	13.2	12.7	12.5	12.2	11.8	12.6	
27		11.5	11.6	11.6	12.0	12.9	13.4	13.1	12.6	12.4	12.5	12.8	13.1	13.2	13.4	13.0	12.8	12.8	12.9	12.8	12.8	12.5	12.2	12.6	12.1	12.6	
28		11.5	11.5	11.7	11.0	11.5	11.7	11.7	11.7	12.0	12.4	12.4	12.6	12.6	12.7	12.5	12.5	12.6	13.0	14.1	15.0	16.0	15.4	15.1	13.4	12.8	
29		12.1	12.4	12.0	11.6	11.0	11.4	11.4	11.3	12.2	13.2	12.2	12.9	13.4	14.3	12.9	14.0	15.4	14.4	14.4	14.4	14.3	12.6	13.3	13.9	11.5	12.9
30		12.7	12.6	12.2	12.4	12.1	12.7	12.7	11.7	11.7	12.6	13.5	13.5	12.8	12.8	13.2	13.7	13.6	14.4	13.8	14.8	13.5	13.2	12.7	13.0	13.0	
31		12.8	12.8	12.2	12.5	12.0	12.3	12.6	12.7	12.3	12.5	12.6	13.3	14.2	13.2	13.3	15.4	14.0	13.3	13.6	13.2	14.0	12.6	13.8	13.0	13.1	
Среднее по всем дням.		13.6	13.5	13.7	13.8	13.8	13.6	13.4	13.3	13.4	13.7	14.1	14.1	13.8	14.1	14.1	14.0	14.2	14.3	14.2	14.3	14.2	13.8	14.0	13.8	13.9	
по Q		12.2	12.1	12.2	12.6	12.9	12.6	12.6	12.4	12.5	13.1	13.3	13.4	13.1	13.1	13.2	13.1	12.9	12.9	12.8	12.9	12.7	12.6	12.3	12.1	12.7	
по D		17.0	17.1	16.6	16.4	16.2	15.8	15.7	15.5	15.3	15.6	16.1	15.7	14.4	15.6	15.9	15.5	16.4	16.6	16.4	17.1	16.9	15.7	16.5	17.4	16.1	

Алма-Ата

Горизонтальная сос-чая Н= 25400+ табличное значение в гаммах

Декабрь 1973года

Долгота 76°55в.д.

Широта 43°15 с.ш.

Дни	Время: мире: вде:																									Средн. суточн.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	У	88	90	92	93	93	95	95	96	93	89	85	86	86	86	85	86	87	87	86	87	91	88	89	91	89
2		91	94	97	99	99	99	101	106	106	102	95	86	83	83	84	85	88	89	89	91	93	94	94	96	94
3		96	98	102	101	102	104	105	107	105	87	92	92	92	92	92	96	96	89	78	79	78	79	81	84	93
4		83	82	89	99	92	91	90	85	84	69	67	70	60	47	49	61	39	32	20	29	51	79	52	47	65
5		50	41	50	57	54	51	62	63	71	76	72	70	70	71	73	73	70	81	64	51	50	55	61	70	63
6	D	78	69	69	62	66	70	77	77	82	85	80	80	79	69	79	81	82	80	81	82	77	85	79	81	77
7		76	91	87	74	72	70	72	77	79	78	76	75	74	75	80	75	74	74	74	74	70	64	69	65	75
8		71	70	71	85	85	82	82	85	90	93	89	93	88	94	97	97	101	102	102	100	96	94	97	90	90
9		93	95	93	90	94	98	95	90	96	96	71	64	63	61	76	58	97	81	74	76	77	89	90	94	84
10		93	91	83	48	55	55	57	62	64	64	63	63	63	63	64	63	63	64	65	66	68	70	72	70	66
11	D	75	75	74	63	62	58	58	69	65	66	63	56	52	54	56	57	56	66	70	65	66	63	69	76	64
12		72	69	69	103	102	102	102	101	104	101	101	99	97	95	82	93	94	91	90	80	91	91	92	94	92
13		94	94	93	95	96	80	91	99	104	101	101	100	98	97	84	93	92	89	96	85	95	96	96	99	95
14		100	100	102	103	105	104	105	106	106	107	108	108	108	108	108	105	82	84	86	100	96	96	90	92	100
15		93	101	101	96	97	99	98	92	89	86	89	81	67	70	74	83	87	88	86	88	87	87	86	86	86
16	D	90	91	95	96	98	96	96	100	96	98	100	99	101	100	97	95	98	98	94	96	98	97	97	97	97
17		99	101	101	100	91	92	91	94	94	92	95	96	95	94	94	89	86	86	74	80	83	81	90	88	91
18		88	90	92	95	94	95	96	97	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94
19		-	-	-	114	118	114	115	118	110	113	118	116	111	98	101	108	80	87	80	66	66	70	72	82	98
20		83	85	89	89	89	91	91	87	67	67	85	74	59	60	77	69	61	75	60	97	98	81	69	71	78
21	D	72	71	77	84	82	87	81	73	73	68	60	64	60	51	58	49	60	71	59	59	58	62	62	65	67
22		63	75	73	81	77	66	66	64	70	68	68	68	69	67	67	73	60	60	65	69	70	69	69	76	69
23		80	74	73	77	75	74	73	73	76	67	59	59	67	66	73	69	70	72	74	-	-	-	-	-	71
24		-	-	-	86	86	85	85	86	84	83	81	87	90	89	86	86	87	88	89	89	89	88	88	89	87
25		91	90	90	97	98	96	95	91	88	89	89	89	88	88	88	85	90	91	92	92	92	92	92	92	96
26	D	96	97	96	101	104	100	97	97	97	92	95	85	95	95	93	90	91	92	93	93	93	95	94	95	95
27		97	98	101	103	104	101	97	95	96	96	98	88	97	92	94	95	96	97	98	98	97	109	107	93	96
28		91	101	107	104	104	104	107	108	103	101	100	89	101	100	100	102	104	100	98	100	86	84	81	85	98
29		88	89	90	97	99	99	104	104	94	87	79	78	83	85	86	74	82	89	82	86	99	91	90	101	90
30		104	91	89	93	95	98	101	105	105	91	69	64	71	78	79	84	87	84	84	98	89	87	85	83	88
31	82	76	84	91	92	93	85	108	77	87	91	90	85	86	86	73	71	89	84	84	88	94	91	88	86	

Среднее
по всем
по D
по D
дням.

85	86	87	90	90	89	89	91	89	87	85	82	82	82	82	82	81	83	80	81	82	84	83	84	85	85
90	91	93	96	96	96	97	98	96	95	92	90	90	89	89	88	91	91	90	92	94	93	93	95	93	
79	82	84	89	87	87	85	80	78	74	70	68	62	57	65	62	63	64	56	66	71	76	68	71	73	

Алма-Ата
Декабрь 1973 года

Вертикальная
Долгота 76°55 в.д.

сос-щая Z = 47900+ табличное значение в гаммах
Широта 43°15 с.ш.

Дни	Время: миро- вое : UT																									Средн. суточн.
		I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	D G Q	69	71	71	74	72	70	70	70	71	72	71	71	72	72	72	72	72	72	72	72	71	71	71	71	
2		71	72	72	75	75	70	69	70	70	71	70	71	72	72	72	72	72	72	72	72	71	71	70	70	
3		70	70	69	71	71	68	66	65	65	65	66	68	70	70	71	72	71	70	70	71	70	70	71	70	
4		68	68	71	72	70	68	69	70	73	74	74	75	74	76	79	80	79	82	82	85	84	82	71	74	
5		75	74	75	71	70	69	73	77	80	80	77	76	76	76	76	75	76	76	74	75	76	76	76	75	
6	D	72	71	72	72	73	75	76	79	79	78	76	76	76	75	77	77	77	76	75	75	74	75	72	72	
7		72	74	74	72	71	71	72	74	73	72	70	70	70	70	70	71	71	71	71	71	70	70	70	70	
8		70	70	70	72	69	67	66	71	73	73	73	73	71	72	72	72	72	71	71	70	70	70	69	69	
9		69	70	69	68	66	63	65	69	74	73	72	72	75	79	77	76	78	72	72	72	72	72	70	70	
10		59	70	71	72	69	69	71	75	77	75	72	72	72	72	72	72	72	72	72	71	71	70	69	68	
11	D G Q	58	58	69	72	70	67	65	66	69	69	68	68	69	70	70	72	73	72	71	70	69	68	68	68	
12		67	67	66	66	65	64	65	68	70	69	68	68	68	69	69	70	70	70	70	69	69	68	68	67	
13		57	56	55	67	64	60	64	66	65	67	68	69	68	68	67	68	69	69	70	68	68	68	67	67	
14		56	56	56	65	62	62	62	62	64	65	64	63	64	64	66	65	66	69	69	67	66	65	64	64	
15		55	65	65	64	61	61	62	63	62	58	60	60	62	63	64	63	62	62	61	60	59	59	58	59	
16	D G Q	59	59	58	59	59	57	57	59	60	62	62	61	60	59	59	59	59	59	58	58	57	57	56	56	
17		56	56	56	60	59	55	52	54	59	59	60	60	59	59	59	59	60	62	62	62	62	60	62	59	
18		50	60	59	59	59	60	59	59	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59	
19		-	-	-	61	60	57	59	61	57	58	57	59	59	58	61	61	62	63	62	61	62	62	62	61	
20		63	63	65	61	60	59	59	59	61	64	67	67	68	70	72	69	70	71	70	71	65	63	63	66	
21	D G Q	66	66	67	67	64	60	57	61	65	68	70	73	73	73	70	74	74	72	70	70	70	69	69		
22		68	68	67	69	66	64	67	67	69	69	69	70	70	67	69	69	66	67	67	66	65	64	63	63	
23		61	60	60	60	60	60	60	60	62	64	64	66	66	66	66	66	66	66	-	-	-	-	-	63	
24		-	-	-	63	58	55	56	58	62	64	64	65	64	63	62	62	62	62	61	60	60	59	59	58	
25		57	57	57	56	57	55	55	53	51	52	55	58	59	59	60	61	63	61	63	63	63	64	64	64	
26	D G Q	64	64	64	67	68	66	64	66	67	69	70	69	67	66	66	66	66	66	66	65	65	65	65	64	
27		64	65	65	67	66	66	65	64	66	66	67	68	68	68	67	67	67	67	67	66	66	65	63	62	
28		63	65	62	66	65	64	65	65	64	65	67	68	68	67	67	68	68	67	69	67	65	66	66	65	
29		65	65	65	65	64	66	66	66	68	66	67	68	70	69	70	70	72	71	70	71	70	67	67	66	
30		64	62	62	66	67	68	69	70	66	67	70	71	73	72	72	73	72	72	72	70	69	68	69	68	
31		68	67	68	70	70	70	70	67	68	73	72	70	70	71	71	71	73	73	70	70	69	68	67	67	
Среднее по по по дням.		66	66	66	67	65	64	64	66	67	68	68	68	68	69	69	69	69	69	69	68	67	67	66	67	
		63	64	63	65	64	62	62	62	62	64	65	65	66	66	66	66	67	66	66	66	66	65	65	65	
		67	67	68	67	65	63	63	65	68	70	70	71	72	73	73	74	73	73	72	73	71	70	68	69	