

Correction de minutes

Calcul pour la Latitude $45,4^\circ$ et longitude $-74,03$ UTC-5 pour le 01-01

Correction de minutes pour la latitude

Nous calculerons la proportion réelle de notre latitude entre 45° et 50° . Puisque ces latitudes sont distantes de 5° , et que ma latitude est de $0,4^\circ (45,4^\circ - 40^\circ)$ de 40° vers 45° , la proportion réelle est :

$$0,4^\circ / 5^\circ = 0,08$$

La différence entre le 45° et 50° : $7:58:31 - 7:38:17 = +20 \text{ m } 14\text{s} = 20,23$ ($14/60 = 0.23$)

On additionne si le résultat est positif, on soustrait si le résultat est négatif.

Nous multiplions 0,08 par 20.23:

$$0,08 \times 20,57\text{m} = 1,62 \text{ m} = 1\text{m } 37\text{s} \quad (0.65 * 62 = 37,2)$$

Puis on additionne le résultat de l'heure à 45° pour le 01-01, soit 7:38:17 :

$$7:38:17 + 1\text{m } 37\text{s} = \mathbf{07:39:55 \text{ (correction pour la latitude)}}$$

Correction de minutes pour la longitude

74,03 pour notre exemple, $74^\circ 2'$ ($0.03 \times 60 = 1,8$)

Avec le tableau Conversion of Arc to Time (appelé Conversion d'arc en temps) qui vous permet de rechercher l'heure à partir de cette longitude :

$$74^\circ 2' = 4\text{h } 56 \text{ m}, 2 \text{ minutes} = 8\text{s}$$

Ajoutez 4h 56 m 8s à **07:39:55 (correction pour la latitude)**

$$07:39:55 + 4:56:08 = 12:36:03$$

On a addition ou on soustrait notre UTC (-5 dans notre exemple)

$$12:36:03 - 5 = \mathbf{07:36:03 = \text{l'heure corrigée}}$$

Conversion of Arc to Time

0° - 59°			60° - 119°			120° - 179°			180° - 239°			240° - 299°			300° - 360°			0' - 59'			0" - 59"	
°	h	m	°	h	m	°	h	m	°	h	m	°	h	m	°	h	m	'	m	s	"	s
0	0	00	60	4	00	120	8	00	180	12	00	240	16	00	300	20	00	0	0	00	0	0.00
1	0	04	61	4	04	121	8	04	181	12	04	241	16	04	301	20	04	1	0	04	1	0.07
2	0	08	62	4	08	122	8	08	182	12	08	242	16	08	302	20	08	2	0	08	2	0.13
3	0	12	63	4	12	123	8	12	183	12	12	243	16	12	303	20	12	3	0	12	3	0.20
4	0	16	64	4	16	124	8	16	184	12	16	244	16	16	304	20	16	4	0	16	4	0.27
5	0	20	65	4	20	125	8	20	185	12	20	245	16	20	305	20	20	5	0	20	5	0.33
6	0	24	66	4	24	126	8	24	186	12	24	246	16	24	306	20	24	6	0	24	6	0.40
7	0	28	67	4	28	127	8	28	187	12	28	247	16	28	307	20	28	7	0	28	7	0.47
8	0	32	68	4	32	128	8	32	188	12	32	248	16	32	308	20	32	8	0	32	8	0.53
9	0	36	69	4	36	129	8	36	189	12	36	249	16	36	309	20	36	9	0	36	9	0.60
10	0	40	70	4	40	130	8	40	190	12	40	250	16	40	310	20	40	10	0	40	10	0.67
11	0	44	71	4	44	131	8	44	191	12	44	251	16	44	311	20	44	11	0	44	11	0.73
12	0	48	72	4	48	132	8	48	192	12	48	252	16	48	312	20	48	12	0	48	12	0.80
13	0	52	73	4	52	133	8	52	193	12	52	253	16	52	313	20	52	13	0	52	13	0.87
14	0	56	74	4	56	134	8	56	194	12	56	254	16	56	314	20	56	14	0	56	14	0.93
15	1	00	75	5	00	135	9	00	195	13	00	255	17	00	315	21	00	15	1	00	15	1.00
16	1	04	76	5	04	136	9	04	196	13	04	256	17	04	316	21	04	16	1	04	16	1.07
17	1	08	77	5	08	137	9	08	197	13	08	257	17	08	317	21	08	17	1	08	17	1.13
18	1	12	78	5	12	138	9	12	198	13	12	258	17	12	318	21	12	18	1	12	18	1.20
19	1	16	79	5	16	139	9	16	199	13	16	259	17	16	319	21	16	19	1	16	19	1.27
20	1	20	80	5	20	140	9	20	200	13	20	260	17	20	320	21	20	20	1	20	20	1.33
21	1	24	81	5	24	141	9	24	201	13	24	261	17	24	321	21	24	21	1	24	21	1.40
22	1	28	82	5	28	142	9	28	202	13	28	262	17	28	322	21	28	22	1	28	22	1.47
23	1	32	83	5	32	143	9	32	203	13	32	263	17	32	323	21	32	23	1	32	23	1.53
24	1	36	84	5	36	144	9	36	204	13	36	264	17	36	324	21	36	24	1	36	24	1.60
25	1	40	85	5	40	145	9	40	205	13	40	265	17	40	325	21	40	25	1	40	25	1.67
26	1	44	86	5	44	146	9	44	206	13	44	266	17	44	326	21	44	26	1	44	26	1.73
27	1	48	87	5	48	147	9	48	207	13	48	267	17	48	327	21	48	27	1	48	27	1.80
28	1	52	88	5	52	148	9	52	208	13	52	268	17	52	328	21	52	28	1	52	28	1.87
29	1	56	89	5	56	149	9	56	209	13	56	269	17	56	329	21	56	29	1	56	29	1.93
30	2	00	90	6	00	150	10	00	210	14	00	270	18	00	330	22	00	30	2	00	30	2.00
31	2	04	91	6	04	151	10	04	211	14	04	271	18	04	331	22	04	31	2	04	31	2.07
32	2	08	92	6	08	152	10	08	212	14	08	272	18	08	332	22	08	32	2	08	32	2.13
33	2	12	93	6	12	153	10	12	213	14	12	273	18	12	333	22	12	33	2	12	33	2.20
34	2	16	94	6	16	154	10	16	214	14	16	274	18	16	334	22	16	34	2	16	34	2.27
35	2	20	95	6	20	155	10	20	215	14	20	275	18	20	335	22	20	35	2	20	35	2.33
36	2	24	96	6	24	156	10	24	216	14	24	276	18	24	336	22	24	36	2	24	36	2.40
37	2	28	97	6	28	157	10	28	217	14	28	277	18	28	337	22	28	37	2	28	37	2.47
38	2	32	98	6	32	158	10	32	218	14	32	278	18	32	338	22	32	38	2	32	38	2.53
39	2	36	99	6	36	159	10	36	219	14	36	279	18	36	339	22	36	39	2	36	39	2.60
40	2	40	100	6	40	160	10	40	220	14	40	280	18	40	340	22	40	40	2	40	40	2.67
41	2	44	101	6	44	161	10	44	221	14	44	281	18	44	341	22	44	41	2	44	41	2.73
42	2	48	102	6	48	162	10	48	222	14	48	282	18	48	342	22	48	42	2	48	42	2.80
43	2	52	103	6	52	163	10	52	223	14	52	283	18	52	343	22	52	43	2	52	43	2.87
44	2	56	104	6	56	164	10	56	224	14	56	284	18	56	344	22	56	44	2	56	44	2.93
45	3	00	105	7	00	165	11	00	225	15	00	285	19	00	345	23	00	45	3	00	45	3.00
46	3	04	106	7	04	166	11	04	226	15	04	286	19	04	346	23	04	46	3	04	46	3.07
47	3	08	107	7	08	167	11	08	227	15	08	287	19	08	347	23	08	47	3	08	47	3.13
48	3	12	108	7	12	168	11	12	228	15	12	288	19	12	348	23	12	48	3	12	48	3.20
49	3	16	109	7	16	169	11	16	229	15	16	289	19	16	349	23	16	49	3	16	49	3.27
50	3	20	110	7	20	170	11	20	230	15	20	290	19	20	350	23	20	50	3	20	50	3.33
51	3	24	111	7	24	171	11	24	231	15	24	291	19	24	351	23	24	51	3	24	51	3.40
52	3	28	112	7	28	172	11	28	232	15	28	292	19	28	352	23	28	52	3	28	52	3.47
53	3	32	113	7	32	173	11	32	233	15	32	293	19	32	353	23	32	53	3	32	53	3.53
54	3	36	114	7	36	174	11	36	234	15	36	294	19	36	354	23	36	54	3	36	54	3.60
55	3	40	115	7	40	175	11	40	235	15	40	295	19	40	355	23	40	55	3	40	55	3.67
56	3	44	116	7	44	176	11	44	236	15	44	296	19	44	356	23	44	56	3	44	56	3.73
57	3	48	117	7	48	177	11	48	237	15	48	297	19	48	357	23	48	57	3	48	57	3.80
58	3	52	118	7	52	178	11	52	238	15	52	298	19	52	358	23	52	58	3	52	58	3.87
59	3	56	119	7	56	179	11	56	239	15	56	299	19	56	359	23	56	59	3	56	59	3.93
60	4	00	120	8	00	180	12	00	240	16	00	300	20	00	360	24	00	60	4	00	60	4.00

h= hours of time m= minutes of time s = seconds of time ' = minutes of arc " = seconds of arc

Temps moyen de Greenwich (GMT) UTC 0 Latitude N

	0°		10°		20°		30°		35°		40°		45°		50°	
Date	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher
01-01-25	6:00:04	18:07:18	6:17:08	17:50:14	6:35:16	17:32:06	6:56:00	17:11:22	7:08:05	16:59:17	7:21:56	16:45:26	7:38:18	16:29:04	7:58:29	16:08:53
02-01-25	6:00:32	18:07:46	6:17:32	17:50:46	6:35:35	17:32:43	6:56:13	17:12:05	7:08:14	17:00:03	7:22:01	16:46:17	7:38:19	16:29:59	7:58:22	16:09:55
03-01-25	6:01:00	18:08:13	6:17:54	17:51:19	6:35:52	17:33:21	6:56:25	17:12:48	7:08:22	17:00:51	7:22:04	16:47:09	7:38:16	16:30:57	7:58:13	16:11:00
04-01-25	6:01:27	18:08:40	6:18:17	17:51:51	6:36:09	17:33:59	6:56:34	17:13:33	7:08:28	17:01:40	7:22:05	16:48:02	7:38:11	16:31:56	7:58:00	16:12:07
05-01-25	6:01:54	18:09:07	6:18:38	17:52:23	6:36:24	17:34:37	6:56:42	17:14:18	7:08:32	17:02:29	7:22:04	16:48:57	7:38:04	16:32:57	7:57:44	16:13:17
06-01-25	6:02:20	18:09:33	6:18:58	17:52:55	6:36:38	17:35:16	6:56:49	17:15:04	7:08:34	17:03:20	7:22:00	16:49:53	7:37:54	16:34:00	7:57:25	16:14:28
07-01-25	6:02:47	18:09:59	6:19:18	17:53:27	6:36:51	17:35:54	6:56:54	17:15:51	7:08:34	17:04:12	7:21:55	16:50:50	7:37:41	16:35:04	7:57:03	16:15:42
08-01-25	6:03:12	18:10:24	6:19:37	17:53:59	6:37:03	17:36:33	6:56:57	17:16:39	7:08:32	17:05:04	7:21:47	16:51:49	7:37:26	16:36:10	7:56:38	16:16:58
09-01-25	6:03:37	18:10:48	6:19:55	17:54:31	6:37:13	17:37:13	6:56:59	17:17:27	7:08:28	17:05:58	7:21:37	16:52:49	7:37:08	16:37:18	7:56:10	16:18:16
10-01-25	6:04:02	18:11:13	6:20:12	17:55:02	6:37:22	17:37:52	6:56:59	17:18:16	7:08:22	17:06:52	7:21:25	16:53:50	7:36:47	16:38:27	7:55:39	16:19:35
11-01-25	6:04:26	18:11:36	6:20:28	17:55:33	6:37:30	17:38:31	6:56:57	17:19:05	7:08:15	17:07:47	7:21:10	16:54:52	7:36:24	16:39:37	7:55:05	16:20:57
12-01-25	6:04:49	18:11:59	6:20:44	17:56:04	6:37:37	17:39:11	6:56:54	17:19:54	7:08:05	17:08:43	7:20:53	16:55:55	7:35:59	16:40:49	7:54:28	16:22:20
13-01-25	6:05:12	18:12:21	6:20:58	17:56:35	6:37:42	17:39:51	6:56:48	17:20:45	7:07:54	17:09:39	7:20:35	16:56:58	7:35:31	16:42:02	7:53:48	16:23:45
14-01-25	6:05:34	18:12:43	6:21:12	17:57:05	6:37:47	17:40:30	6:56:42	17:21:35	7:07:41	17:10:36	7:20:14	16:58:03	7:35:00	16:43:16	7:53:05	16:25:12
15-01-25	6:05:55	18:13:04	6:21:24	17:57:35	6:37:50	17:41:10	6:56:33	17:22:26	7:07:26	17:11:34	7:19:51	16:59:09	7:34:28	16:44:32	7:52:20	16:26:40
16-01-25	6:06:16	18:13:24	6:21:36	17:58:04	6:37:51	17:41:49	6:56:23	17:23:17	7:07:09	17:12:32	7:19:25	17:00:15	7:33:52	16:45:48	7:51:31	16:28:09
17-01-25	6:06:36	18:13:44	6:21:47	17:58:34	6:37:51	17:42:29	6:56:12	17:24:09	7:06:50	17:13:31	7:18:58	17:01:22	7:33:15	16:47:06	7:50:40	16:29:40
18-01-25	6:06:56	18:14:03	6:21:56	17:59:02	6:37:51	17:43:08	6:55:58	17:25:00	7:06:29	17:14:30	7:18:29	17:02:30	7:32:35	16:48:24	7:49:47	16:31:12
19-01-25	6:07:15	18:14:21	6:22:05	17:59:31	6:37:48	17:43:47	6:55:43	17:25:52	7:06:06	17:15:29	7:17:57	17:03:38	7:31:52	16:49:43	7:48:50	16:32:45
20-01-25	6:07:33	18:14:38	6:22:12	17:59:59	6:37:45	17:44:26	6:55:27	17:26:44	7:05:42	17:16:29	7:17:23	17:04:47	7:31:08	16:51:03	7:47:51	16:34:20
21-01-25	6:07:50	18:14:55	6:22:19	18:00:26	6:37:40	17:45:05	6:55:08	17:27:37	7:05:16	17:17:29	7:16:48	17:05:57	7:30:21	16:52:24	7:46:50	16:35:55
22-01-25	6:08:06	18:15:11	6:22:24	18:00:53	6:37:34	17:45:44	6:54:48	17:28:29	7:04:48	17:18:30	7:16:10	17:07:07	7:29:31	16:53:46	7:45:46	16:37:31
23-01-25	6:08:22	18:15:26	6:22:29	18:01:19	6:37:26	17:46:22	6:54:27	17:29:21	7:04:18	17:19:30	7:15:31	17:08:17	7:28:40	16:55:08	7:44:39	16:39:09
24-01-25	6:08:37	18:15:40	6:22:33	18:01:45	6:37:17	17:47:00	6:54:04	17:30:14	7:03:46	17:20:31	7:14:49	17:09:28	7:27:47	16:56:31	7:43:31	16:40:47
25-01-25	6:08:51	18:15:54	6:22:35	18:02:10	6:37:07	17:47:38	6:53:39	17:31:06	7:03:13	17:21:32	7:14:06	17:10:39	7:26:51	16:57:54	7:42:19	16:42:26
26-01-25	6:09:05	18:16:06	6:22:36	18:02:35	6:36:56	17:48:15	6:53:13	17:31:58	7:02:38	17:22:33	7:13:21	17:11:51	7:25:53	16:59:18	7:41:06	16:44:05
27-01-25	6:09:17	18:16:18	6:22:37	18:02:59	6:36:43	17:48:52	6:52:45	17:32:50	7:02:01	17:23:35	7:12:33	17:13:02	7:24:53	17:00:42	7:39:50	16:45:45
28-01-25	6:09:29	18:16:30	6:22:36	18:03:22	6:36:29	17:49:29	6:52:16	17:33:43	7:01:23	17:24:36	7:11:44	17:14:14	7:23:52	17:02:07	7:38:32	16:47:26
29-01-25	6:09:40	18:16:40	6:22:35	18:03:45	6:36:14	17:50:06	6:51:45	17:34:35	7:00:43	17:25:37	7:10:54	17:15:26	7:22:48	17:03:32	7:37:12	16:49:07
30-01-25	6:09:50	18:16:49	6:22:32	18:04:07	6:35:58	17:50:41	6:51:13	17:35:27	7:00:01	17:26:38	7:10:01	17:16:38	7:21:42	17:04:57	7:35:50	16:50:49
31-01-25	6:09:59	18:16:58	6:22:28	18:04:29	6:35:40	17:51:17	6:50:39	17:36:18	6:59:18	17:27:40	7:09:07	17:17:51	7:20:35	17:06:23	7:34:26	16:52:31

Temps moyen de Greenwich (GMT) UTC 0 Latitude N

	0°		10°		20°		30°		35°		40°		45°		50°	
Date	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher
01-02-25	6:10:08	18:17:06	6:22:24	18:04:50	6:35:21	17:51:52	6:50:04	17:37:10	6:58:33	17:28:41	7:08:11	17:19:03	7:19:25	17:07:48	7:33:00	16:54:14
02-02-25	6:10:15	18:17:13	6:22:18	18:05:10	6:35:01	17:52:27	6:49:27	17:38:01	6:57:46	17:29:42	7:07:13	17:20:15	7:18:14	17:09:14	7:31:32	16:55:57
03-02-25	6:10:22	18:17:19	6:22:11	18:05:30	6:34:40	17:53:01	6:48:49	17:38:52	6:56:59	17:30:43	7:06:14	17:21:28	7:17:01	17:10:40	7:30:02	16:57:40
04-02-25	6:10:28	18:17:24	6:22:03	18:05:49	6:34:18	17:53:35	6:48:10	17:39:43	6:56:09	17:31:44	7:05:13	17:22:40	7:15:46	17:12:06	7:28:30	16:59:23
05-02-25	6:10:34	18:17:29	6:21:55	18:06:08	6:33:54	17:54:08	6:47:29	17:40:34	6:55:18	17:32:44	7:04:10	17:23:52	7:14:30	17:13:33	7:26:56	17:01:06
06-02-25	6:10:38	18:17:33	6:21:45	18:06:26	6:33:29	17:54:41	6:46:47	17:41:24	6:54:26	17:33:45	7:03:06	17:25:04	7:13:12	17:14:59	7:25:21	17:02:50
07-02-25	6:10:41	18:17:36	6:21:34	18:06:43	6:33:03	17:55:14	6:46:03	17:42:14	6:53:32	17:34:45	7:02:01	17:26:17	7:11:52	17:16:25	7:23:44	17:04:33
08-02-25	6:10:44	18:17:38	6:21:23	18:06:59	6:32:36	17:55:46	6:45:19	17:43:03	6:52:37	17:35:45	7:00:54	17:27:28	7:10:31	17:17:51	7:22:05	17:06:17
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10-02-25	6:10:47	18:17:40	6:20:57	18:07:30	6:31:39	17:56:48	6:43:46	17:44:42	6:50:43	17:37:44	6:58:35	17:29:52	7:07:44	17:20:43	7:18:43	17:09:44
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Temps moyen de Greenwich (GMT) UTC 0 Latitude N

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Temps moyen de Greenwich (GMT) UTC 0 Latitude N

	0°		10°		20°		30°		35°		40°		45°		50°	
Date	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher
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Temps moyen de Greenwich (GMT) UTC 0 Latitude N

	0°		10°		20°		30°		35°		40°		45°		50°	
Date	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher
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Temps moyen de Greenwich (GMT) UTC 0 Latitude N

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Date	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher
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Temps moyen de Greenwich (GMT) UTC 0 Latitude N

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Temps moyen de Greenwich (GMT) UTC 0 Latitude N

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Temps moyen de Greenwich (GMT) UTC 0 Latitude N

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Temps moyen de Greenwich (GMT) UTC 0 Latitude N

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Date	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher
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