

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 Sud

	50°		52°		54°		56°		58°		60°		62°		64°	
Date	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher
01-01-25	7:58:29	16:08:53	8:08:04	15:59:18	8:18:50	15:48:32	8:31:05	15:36:17	8:45:16	15:22:06	9:02:03	15:05:19	9:22:36	14:44:46	9:49:05	14:18:17
02-01-25	7:58:22	16:09:55	8:07:54	16:00:23	8:18:36	15:49:42	8:30:46	15:37:32	8:44:50	15:23:27	9:01:30	15:06:48	9:21:50	14:46:28	9:47:59	14:20:19
03-01-25	7:58:13	16:11:00	8:07:41	16:01:32	8:18:18	15:50:55	8:30:23	15:38:50	8:44:21	15:24:52	9:00:51	15:08:22	9:20:58	14:48:15	9:46:47	14:22:26
04-01-25	7:58:00	16:12:07	8:07:24	16:02:43	8:17:57	15:52:10	8:29:56	15:40:12	8:43:46	15:26:21	9:00:07	15:10:00	9:20:01	14:50:06	9:45:27	14:24:40
05-01-25	7:57:44	16:13:17	8:07:04	16:03:57	8:17:32	15:53:29	8:29:25	15:41:36	8:43:08	15:27:53	8:59:18	15:11:43	9:18:58	14:52:03	9:44:02	14:26:59
06-01-25	7:57:25	16:14:28	8:06:41	16:05:13	8:17:03	15:54:50	8:28:50	15:43:04	8:42:24	15:29:29	8:58:25	15:13:29	9:17:50	14:54:04	9:42:30	14:29:24
07-01-25	7:57:03	16:15:42	8:06:14	16:06:31	8:16:31	15:56:14	8:28:11	15:44:35	8:41:37	15:31:08	8:57:26	15:15:19	9:16:36	14:56:09	9:40:52	14:31:54
08-01-25	7:56:38	16:16:58	8:05:44	16:07:52	8:15:55	15:57:41	8:27:28	15:46:08	8:40:45	15:32:51	8:56:23	15:17:13	9:15:17	14:58:19	9:39:08	14:34:28
09-01-25	7:56:10	16:18:16	8:05:11	16:09:15	8:15:16	15:59:10	8:26:41	15:47:45	8:39:50	15:34:36	8:55:16	15:19:10	9:13:53	15:00:33	9:37:19	14:37:07
10-01-25	7:55:39	16:19:35	8:04:34	16:10:40	8:14:33	16:00:41	8:25:51	15:49:24	8:38:50	15:36:24	8:54:04	15:21:11	9:12:24	15:02:50	9:35:24	14:39:50
11-01-25	7:55:05	16:20:57	8:03:55	16:12:07	8:13:47	16:02:15	8:24:57	15:51:05	8:37:46	15:38:15	8:52:47	15:23:14	9:10:51	15:05:11	9:33:25	14:42:37
12-01-25	7:54:28	16:22:20	8:03:12	16:13:36	8:12:57	16:03:51	8:23:59	15:52:49	8:36:39	15:40:09	8:51:27	15:25:21	9:09:13	15:07:35	9:31:21	14:45:27
13-01-25	7:53:48	16:23:45	8:02:26	16:15:07	8:12:04	16:05:29	8:22:58	15:54:35	8:35:27	15:42:06	8:50:03	15:27:30	9:07:31	15:10:02	9:29:12	14:48:21
14-01-25	7:53:05	16:25:12	8:01:37	16:16:40	8:11:08	16:07:09	8:21:53	15:56:24	8:34:12	15:44:05	8:48:34	15:29:43	9:05:44	15:12:32	9:26:59	14:51:17
15-01-25	7:52:20	16:26:40	8:00:45	16:18:14	8:10:09	16:08:50	8:20:45	15:58:14	8:32:53	15:46:06	8:47:02	15:31:57	9:03:54	15:15:05	9:24:42	14:54:17
16-01-25	7:51:31	16:28:09	7:59:50	16:19:50	8:09:07	16:10:34	8:19:34	16:00:06	8:31:31	15:48:09	8:45:26	15:34:14	9:02:00	15:17:41	9:22:22	14:57:19
17-01-25	7:50:40	16:29:40	7:58:53	16:21:27	8:08:01	16:12:19	8:18:20	16:02:01	8:30:06	15:50:14	8:43:46	15:36:34	9:00:02	15:20:19	9:19:57	15:00:23
18-01-25	7:49:47	16:31:12	7:57:52	16:23:06	8:06:53	16:14:05	8:17:02	16:03:57	8:28:37	15:52:22	8:42:03	15:38:55	8:58:00	15:22:59	9:17:29	15:03:29
19-01-25	7:48:50	16:32:45	7:56:49	16:24:46	8:05:42	16:15:54	8:15:41	16:05:54	8:27:05	15:54:31	8:40:17	15:41:18	8:55:55	15:25:41	9:14:58	15:06:38
20-01-25	7:47:51	16:34:20	7:55:43	16:26:28	8:04:28	16:17:43	8:14:18	16:07:53	8:25:30	15:56:41	8:38:27	15:43:44	8:53:46	15:28:24	9:12:23	15:09:47
21-01-25	7:46:50	16:35:55	7:54:34	16:28:10	8:03:11	16:19:34	8:12:51	16:09:54	8:23:51	15:58:54	8:36:35	15:46:10	8:51:35	15:31:10	9:09:46	15:12:59
22-01-25	7:45:46	16:37:31	7:53:23	16:29:54	8:01:51	16:21:26	8:11:21	16:11:56	8:22:10	16:01:07	8:34:39	15:48:38	8:49:20	15:33:57	9:07:06	15:16:11
23-01-25	7:44:39	16:39:09	7:52:09	16:31:39	8:00:29	16:23:19	8:09:49	16:13:59	8:20:26	16:03:22	8:32:40	15:51:08	8:47:03	15:36:45	9:04:23	15:19:25
24-01-25	7:43:31	16:40:47	7:50:53	16:33:24	7:59:04	16:25:13	8:08:14	16:16:03	8:18:39	16:05:38	8:30:38	15:53:39	8:44:42	15:39:35	9:01:37	15:22:40
25-01-25	7:42:19	16:42:26	7:49:34	16:35:11	7:57:36	16:27:09	8:06:37	16:18:08	8:16:49	16:07:56	8:28:34	15:56:11	8:42:19	15:42:26	8:58:49	15:25:56
26-01-25	7:41:06	16:44:05	7:48:13	16:36:58	7:56:07	16:29:05	8:04:57	16:20:15	8:14:57	16:10:14	8:26:27	15:58:44	8:39:54	15:45:17	8:55:59	15:29:12
27-01-25	7:39:50	16:45:45	7:46:50	16:38:46	7:54:34	16:31:01	8:03:14	16:22:22	8:13:02	16:12:33	8:24:18	16:01:18	8:37:26	15:48:10	8:53:07	15:32:29
28-01-25	7:38:32	16:47:26	7:45:24	16:40:35	7:53:00	16:32:59	8:01:29	16:24:30	8:11:05	16:14:53	8:22:06	16:03:53	8:34:55	15:51:03	8:50:12	15:35:46
29-01-25	7:37:12	16:49:07	7:43:56	16:42:24	7:51:23	16:34:57	7:59:42	16:26:38	8:09:06	16:17:14	8:19:51	16:06:28	8:32:23	15:53:57	8:47:16	15:39:04
30-01-25	7:35:50	16:50:49	7:42:26	16:44:14	7:49:43	16:36:56	7:57:52	16:28:47	8:07:04	16:19:36	8:17:35	16:09:05	8:29:48	15:56:51	8:44:18	15:42:22
31-01-25	7:34:26	16:52:31	7:40:54	16:46:04	7:48:02	16:38:55	7:56:00	16:30:57	8:05:00	16:21:58	8:15:16	16:11:41	8:27:11	15:59:46	8:41:18	15:45:40

Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

	50°		52°		54°		56°		58°		60°		62°		64°	
Date	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher	Lever	Coucher
01-02-25	7:33:00	16:54:14	7:39:19	16:47:54	7:46:19	16:40:55	7:54:06	16:33:07	8:02:53	16:24:20	8:12:55	16:14:19	8:24:32	16:02:41	8:38:16	15:48:58
02-02-25	7:31:32	16:55:57	7:37:43	16:49:45	7:44:33	16:42:55	7:52:10	16:35:18	8:00:45	16:26:43	8:10:32	16:16:56	8:21:51	16:05:37	8:35:12	15:52:16
03-02-25	7:30:02	16:57:40	7:36:05	16:51:36	7:42:46	16:44:55	7:50:12	16:37:29	7:58:35	16:29:06	8:08:07	16:19:34	8:19:09	16:08:32	8:32:07	15:55:34
04-02-25	7:28:30	16:59:23	7:34:25	16:53:28	7:40:57	16:46:56	7:48:13	16:39:40	7:56:23	16:31:30	8:05:41	16:22:12	8:16:25	16:11:28	8:29:01	15:58:52
05-02-25	7:26:56	17:01:06	7:32:43	16:55:20	7:39:05	16:48:57	7:46:11	16:41:52	7:54:09	16:33:54	8:03:12	16:24:50	8:13:38	16:14:24	8:25:53	16:02:09
06-02-25	7:25:21	17:02:50	7:30:59	16:57:11	7:37:12	16:50:58	7:44:07	16:44:03	7:51:53	16:36:18	8:00:42	16:27:29	8:10:51	16:17:20	8:22:44	16:05:27
07-02-25	7:23:44	17:04:33	7:29:14	16:59:03	7:35:18	16:53:00	7:42:02	16:46:15	7:49:35	16:38:42	7:58:10	16:30:07	8:08:02	16:20:15	8:19:33	16:08:44
08-02-25	7:22:05	17:06:17	7:27:27	17:00:55	7:33:21	16:55:01	7:39:55	16:48:27	7:47:16	16:41:06	7:55:36	16:32:46	8:05:11	16:23:11	8:16:22	16:12:00
09-02-25	7:20:25	17:08:01	7:25:38	17:02:47	7:31:23	16:57:02	7:37:46	16:50:39	7:44:55	16:43:30	7:53:01	16:35:24	8:02:19	16:26:06	8:13:09	16:15:16
10-02-25	7:18:43	17:09:44	7:23:48	17:04:39	7:29:23	16:59:04	7:35:36	16:52:51	7:42:33	16:45:54	7:50:25	16:38:02	7:59:26	16:29:01	8:09:55	16:18:32
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Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

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Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

	50°		52°		54°		56°		58°		60°		62°		64°	
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Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

	50°		52°		54°		56°		58°		60°		62°		64°	
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 Sud

	50°		52°		54°		56°		58°		60°		62°		64°	
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 Sud

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Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

	50°		52°		54°		56°		58°		60°		62°		64°	
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Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

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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 Sud

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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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