

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

	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
01-01-24	5:59:43	18:06:57	5:42:27	18:24:12	5:23:50	18:42:49	5:02:13	19:04:27	4:49:27	19:17:12	4:34:42	19:31:57	4:17:04	19:49:35	3:55:04	20:11:36
02-01-24	6:00:11	18:07:25	5:43:00	18:24:36	5:24:28	18:43:08	5:02:55	19:04:41	4:50:13	19:17:23	4:35:32	19:32:04	4:17:59	19:49:37	3:56:06	20:11:30
03-01-24	6:00:39	18:07:53	5:43:32	18:24:59	5:25:05	18:43:26	5:03:39	19:04:53	4:51:01	19:17:31	4:36:24	19:32:08	4:18:57	19:49:35	3:57:10	20:11:21
04-01-24	6:01:06	18:08:20	5:44:05	18:25:21	5:25:43	18:43:43	5:04:23	19:05:03	4:51:49	19:17:37	4:37:17	19:32:09	4:19:56	19:49:31	3:58:18	20:11:09
05-01-24	6:01:34	18:08:47	5:44:38	18:25:43	5:26:22	18:43:59	5:05:09	19:05:12	4:52:39	19:17:42	4:38:12	19:32:09	4:20:57	19:49:24	3:59:27	20:10:54
06-01-24	6:02:01	18:09:13	5:45:10	18:26:04	5:27:00	18:44:14	5:05:55	19:05:19	4:53:29	19:17:45	4:39:08	19:32:06	4:21:59	19:49:15	4:00:39	20:10:35
07-01-24	6:02:27	18:09:39	5:45:43	18:26:24	5:27:40	18:44:27	5:06:42	19:05:25	4:54:21	19:17:45	4:40:05	19:32:01	4:23:04	19:49:02	4:01:53	20:10:13
08-01-24	6:02:53	18:10:05	5:46:15	18:26:43	5:28:19	18:44:39	5:07:29	19:05:28	4:55:14	19:17:44	4:41:04	19:31:54	4:24:10	19:48:47	4:03:10	20:09:48
09-01-24	6:03:18	18:10:30	5:46:47	18:27:01	5:28:59	18:44:50	5:08:18	19:05:31	4:56:07	19:17:41	4:42:04	19:31:44	4:25:18	19:48:30	4:04:29	20:09:20
10-01-24	6:03:43	18:10:55	5:47:19	18:27:18	5:29:38	18:44:59	5:09:07	19:05:31	4:57:02	19:17:36	4:43:05	19:31:33	4:26:28	19:48:10	4:05:49	20:08:48
11-01-24	6:04:08	18:11:18	5:47:51	18:27:35	5:30:18	18:45:08	5:09:56	19:05:30	4:57:57	19:17:29	4:44:08	19:31:19	4:27:39	19:47:47	4:07:12	20:08:14
12-01-24	6:04:32	18:11:42	5:48:23	18:27:50	5:30:58	18:45:15	5:10:46	19:05:27	4:58:53	19:17:20	4:45:11	19:31:02	4:28:51	19:47:22	4:08:37	20:07:37
13-01-24	6:04:55	18:12:05	5:48:54	18:28:05	5:31:38	18:45:21	5:11:37	19:05:22	4:59:50	19:17:09	4:46:15	19:30:44	4:30:05	19:46:54	4:10:03	20:06:56
14-01-24	6:05:17	18:12:27	5:49:25	18:28:19	5:32:19	18:45:25	5:12:28	19:05:16	5:00:48	19:16:56	4:47:21	19:30:23	4:31:20	19:46:24	4:11:31	20:06:13
15-01-24	6:05:39	18:12:48	5:49:56	18:28:31	5:32:59	18:45:29	5:13:20	19:05:08	5:01:46	19:16:41	4:48:27	19:30:00	4:32:37	19:45:51	4:13:01	20:05:27
16-01-24	6:06:01	18:13:09	5:50:26	18:28:43	5:33:39	18:45:30	5:14:11	19:04:58	5:02:45	19:16:25	4:49:34	19:29:35	4:33:54	19:45:15	4:14:32	20:04:37
17-01-24	6:06:21	18:13:29	5:50:56	18:28:54	5:34:19	18:45:31	5:15:04	19:04:47	5:03:45	19:16:06	4:50:42	19:29:08	4:35:13	19:44:37	4:16:05	20:03:46
18-01-24	6:06:41	18:13:48	5:51:26	18:29:04	5:34:59	18:45:30	5:15:56	19:04:34	5:04:44	19:15:45	4:51:51	19:28:39	4:36:33	19:43:57	4:17:39	20:02:51
19-01-24	6:07:01	18:14:07	5:51:55	18:29:13	5:35:39	18:45:28	5:16:49	19:04:19	5:05:45	19:15:23	4:53:01	19:28:07	4:37:53	19:43:15	4:19:14	20:01:54
20-01-24	6:07:19	18:14:25	5:52:24	18:29:20	5:36:19	18:45:25	5:17:42	19:04:03	5:06:46	19:14:59	4:54:11	19:27:34	4:39:15	19:42:30	4:20:51	20:00:54
21-01-24	6:07:37	18:14:42	5:52:52	18:29:27	5:36:59	18:45:20	5:18:35	19:03:45	5:07:47	19:14:33	4:55:21	19:26:58	4:40:37	19:41:42	4:22:29	19:59:51
22-01-24	6:07:54	18:14:59	5:53:20	18:29:33	5:37:39	18:45:14	5:19:28	19:03:25	5:08:48	19:14:05	4:56:32	19:26:21	4:42:00	19:40:53	4:24:07	19:58:46
23-01-24	6:08:10	18:15:15	5:53:48	18:29:37	5:38:18	18:45:07	5:20:21	19:03:04	5:09:50	19:13:35	4:57:44	19:25:41	4:43:24	19:40:01	4:25:47	19:57:38
24-01-24	6:08:26	18:15:30	5:54:15	18:29:41	5:38:57	18:44:59	5:21:15	19:02:41	5:10:52	19:13:04	4:58:56	19:24:59	4:44:49	19:39:07	4:27:28	19:56:28
25-01-24	6:08:41	18:15:44	5:54:41	18:29:44	5:39:36	18:44:49	5:22:08	19:02:16	5:11:54	19:12:30	5:00:09	19:24:16	4:46:14	19:38:11	4:29:09	19:55:16
26-01-24	6:08:55	18:15:57	5:55:07	18:29:45	5:40:14	18:44:38	5:23:01	19:01:50	5:12:56	19:11:55	5:01:21	19:23:30	4:47:39	19:37:12	4:30:51	19:54:01
27-01-24	6:09:08	18:16:10	5:55:32	18:29:46	5:40:52	18:44:25	5:23:55	19:01:23	5:13:59	19:11:19	5:02:34	19:22:43	4:49:05	19:36:12	4:32:34	19:52:44
28-01-24	6:09:20	18:16:21	5:55:56	18:29:45	5:41:30	18:44:12	5:24:48	19:00:54	5:15:01	19:10:40	5:03:48	19:21:54	4:50:32	19:35:10	4:34:17	19:51:24
29-01-24	6:09:32	18:16:32	5:56:20	18:29:44	5:42:08	18:43:57	5:25:41	19:00:23	5:16:04	19:10:00	5:05:01	19:21:03	4:51:59	19:34:05	4:36:01	19:50:03
30-01-24	6:09:43	18:16:42	5:56:44	18:29:41	5:42:45	18:43:40	5:26:34	18:59:51	5:17:06	19:09:19	5:06:15	19:20:10	4:53:26	19:32:59	4:37:46	19:48:39
31-01-24	6:09:53	18:16:52	5:57:07	18:29:38	5:43:21	18:43:23	5:27:27	18:59:17	5:18:09	19:08:35	5:07:29	19:19:15	4:54:53	19:31:51	4:39:31	19:47:13

Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

	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
01-02-24	6:10:02	18:17:00	5:57:29	18:29:33	5:43:58	18:43:04	5:28:20	18:58:42	5:19:11	19:07:50	5:08:43	19:18:19	4:56:21	19:30:41	4:41:16	19:45:46
02-02-24	6:10:10	18:17:08	5:57:50	18:29:27	5:44:33	18:42:44	5:29:12	18:58:05	5:20:14	19:07:04	5:09:57	19:17:21	4:57:49	19:29:29	4:43:01	19:44:16
03-02-24	6:10:17	18:17:15	5:58:11	18:29:21	5:45:09	18:42:23	5:30:05	18:57:27	5:21:16	19:06:16	5:11:10	19:16:21	4:59:17	19:28:15	4:44:47	19:42:45
04-02-24	6:10:24	18:17:21	5:58:32	18:29:13	5:45:44	18:42:01	5:30:57	18:56:48	5:22:18	19:05:26	5:12:24	19:15:20	5:00:45	19:26:59	4:46:33	19:41:11
05-02-24	6:10:30	18:17:26	5:58:51	18:29:04	5:46:18	18:41:37	5:31:48	18:56:07	5:23:20	19:04:35	5:13:38	19:14:17	5:02:13	19:25:42	4:48:19	19:39:36
06-02-24	6:10:35	18:17:30	5:59:10	18:28:55	5:46:52	18:41:13	5:32:40	18:55:25	5:24:22	19:03:43	5:14:52	19:13:13	5:03:41	19:24:23	4:50:06	19:37:59
07-02-24	6:10:39	18:17:34	5:59:28	18:28:44	5:47:26	18:40:47	5:33:31	18:54:42	5:25:23	19:02:49	5:16:06	19:12:07	5:05:10	19:23:03	4:51:52	19:36:21
08-02-24	6:10:42	18:17:36	5:59:46	18:28:33	5:47:59	18:40:20	5:34:22	18:53:57	5:26:25	19:01:54	5:17:19	19:11:00	5:06:38	19:21:41	4:53:38	19:34:40
09-02-24	6:10:45	18:17:38	6:00:03	18:28:20	5:48:31	18:39:52	5:35:12	18:53:11	5:27:26	19:00:57	5:18:33	19:09:51	5:08:06	19:20:18	4:55:25	19:32:58
10-02-24	6:10:47	18:17:40	6:00:19	18:28:07	5:49:03	18:39:23	5:36:02	18:52:24	5:28:27	18:59:59	5:19:46	19:08:40	5:09:34	19:18:53	4:57:11	19:31:15
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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

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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

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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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Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

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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

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Temps moyen de Greenwich (GMT) UTC 0 Latitude Sud

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