

Lat. ↓ 48° 52' 0" N Lon. ⇌ 2° 20' 0" E JANV 21 ⇒ DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure hh:mn	Hauteur Degré (°)	Lever hh:mm	Coucher hh:mm	Azimut sud Degré (°)	Angle horizon Degré (°)	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
												Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/01/2021	Vendredi	1	H	12:54	18,14°	08:44	17:04	54,75°	35,10°	08h 19mn 58s	+ 00mn 16s	08:07	17:41	07:26	18:21	06:48	18:59
02/01/2021	Samedi	2	H	12:54	18,23°	08:44	17:05	54,90°	35,15°	08h 21mn 01s	+ 01mn 03s	08:07	17:42	07:26	18:22	06:48	19:00
03/01/2021	Dimanche	3	H	12:55	18,32°	08:44	17:06	55,06°	35,21°	08h 22mn 10s	+ 01mn 09s	08:06	17:43	07:26	18:23	06:48	19:01
04/01/2021	Lundi	4	H	12:55	18,43°	08:44	17:07	55,24°	35,27°	08h 23mn 24s	+ 01mn 14s	08:06	17:44	07:26	18:24	06:48	19:02
05/01/2021	Mardi	5	H	12:56	18,54°	08:44	17:08	55,42°	35,33°	08h 24mn 43s	+ 01mn 19s	08:06	17:45	07:26	18:25	06:48	19:03
06/01/2021	Mercredi	6	H	12:56	18,65°	08:43	17:10	55,62°	35,40°	08h 26mn 07s	+ 01mn 24s	08:06	17:46	07:26	18:26	06:48	19:04
07/01/2021	Jeudi	7	H	12:56	18,78°	08:43	17:11	55,84°	35,47°	08h 27mn 36s	+ 01mn 29s	08:06	17:47	07:26	18:27	06:48	19:05
08/01/2021	Vendredi	8	H	12:57	18,91°	08:43	17:12	56,06°	35,55°	08h 29mn 10s	+ 01mn 34s	08:06	17:48	07:26	18:28	06:48	19:06
09/01/2021	Samedi	9	H	12:57	19,05°	08:42	17:13	56,30°	35,63°	08h 30mn 49s	+ 01mn 39s	08:05	17:49	07:26	18:29	06:48	19:07
10/01/2021	Dimanche	10	H	12:58	19,20°	08:42	17:14	56,54°	35,71°	08h 32mn 32s	+ 01mn 44s	08:05	17:50	07:25	18:30	06:47	19:08
11/01/2021	Lundi	11	H	12:58	19,35°	08:41	17:16	56,80°	35,80°	08h 34mn 20s	+ 01mn 48s	08:04	17:52	07:25	18:31	06:47	19:09
12/01/2021	Mardi	12	H	12:58	19,51°	08:41	17:17	57,07°	35,88°	08h 36mn 13s	+ 01mn 53s	08:04	17:53	07:25	18:32	06:47	19:10
13/01/2021	Mercredi	13	H	12:59	19,68°	08:40	17:18	57,36°	35,98°	08h 38mn 10s	+ 01mn 57s	08:04	17:54	07:24	18:34	06:46	19:11
14/01/2021	Jeudi	14	H	12:59	19,85°	08:40	17:20	57,65°	36,07°	08h 40mn 11s	+ 02mn 01s	08:03	17:55	07:24	18:35	06:46	19:13
15/01/2021	Vendredi	15	H	13:00	20,03°	08:39	17:21	57,95°	36,17°	08h 42mn 17s	+ 02mn 05s	08:02	17:57	07:23	18:36	06:45	19:14
16/01/2021	Samedi	16	H	13:00	20,22°	08:38	17:23	58,27°	36,27°	08h 44mn 26s	+ 02mn 10s	08:02	17:58	07:23	18:37	06:45	19:15
17/01/2021	Dimanche	17	H	13:00	20,42°	08:37	17:24	58,59°	36,37°	08h 46mn 40s	+ 02mn 14s	08:01	17:59	07:22	18:38	06:44	19:16
18/01/2021	Lundi	18	H	13:01	20,62°	08:37	17:26	58,93°	36,47°	08h 48mn 57s	+ 02mn 17s	08:00	18:01	07:21	18:40	06:44	19:17
19/01/2021	Mardi	19	H	13:01	20,83°	08:36	17:27	59,27°	36,57°	08h 51mn 18s	+ 02mn 21s	08:00	18:02	07:21	18:41	06:43	19:19
20/01/2021	Mercredi	20	H	13:01	21,04°	08:35	17:29	59,63°	36,68°	08h 53mn 43s	+ 02mn 25s	07:59	18:04	07:20	18:42	06:43	19:20
21/01/2021	Jeudi	21	H	13:01	21,26°	08:34	17:30	59,99°	36,79°	08h 56mn 11s	+ 02mn 28s	07:58	18:05	07:19	18:44	06:42	19:21
22/01/2021	Vendredi	22	H	13:02	21,49°	08:33	17:32	60,37°	36,90°	08h 58mn 43s	+ 02mn 32s	07:57	18:06	07:18	18:45	06:41	19:22
23/01/2021	Samedi	23	H	13:02	21,72°	08:32	17:33	60,75°	37,00°	09h 01mn 17s	+ 02mn 35s	07:56	18:08	07:18	18:46	06:40	19:24
24/01/2021	Dimanche	24	H	13:02	21,96°	08:31	17:35	61,14°	37,12°	09h 03mn 55s	+ 02mn 38s	07:55	18:09	07:17	18:48	06:39	19:25
25/01/2021	Lundi	25	H	13:02	22,20°	08:30	17:36	61,54°	37,23°	09h 06mn 36s	+ 02mn 41s	07:54	18:11	07:16	18:49	06:39	19:26
26/01/2021	Mardi	26	H	13:03	22,45°	08:29	17:38	61,95°	37,34°	09h 09mn 20s	+ 02mn 44s	07:53	18:12	07:15	18:50	06:38	19:28
27/01/2021	Mercredi	27	H	13:03	22,71°	08:27	17:39	62,37°	37,45°	09h 12mn 07s	+ 02mn 47s	07:52	18:14	07:14	18:52	06:37	19:29
28/01/2021	Jeudi	28	H	13:03	22,97°	08:26	17:41	62,79°	37,56°	09h 14mn 57s	+ 02mn 50s	07:51	18:15	07:13	18:53	06:36	19:30
29/01/2021	Vendredi	29	H	13:03	23,24°	08:25	17:43	63,23°	37,68°	09h 17mn 49s	+ 02mn 52s	07:50	18:17	07:12	18:55	06:35	19:32
30/01/2021	Samedi	30	H	13:03	23,51°	08:24	17:44	63,67°	37,79°	09h 20mn 44s	+ 02mn 55s	07:49	18:18	07:11	18:56	06:34	19:33
31/01/2021	Dimanche	31	H	13:04	23,79°	08:22	17:46	64,11°	37,90°	09h 23mn 41s	+ 02mn 57s	07:48	18:20	07:10	18:58	06:33	19:35

Lat. ↓ 48° 52' 0" N Lon. ⇨ 2° 20' 0" E JANV 21 => DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure hh:mn	Hauteur Degré (°)	Lever hh:mm	Coucher hh:mm	Azimut sud Degré (°)	Angle horizon Degré (°)	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
												Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/02/2021	Lundi	32	H	13:04	24,07°	08:21	17:48	64,57°	38,01°	09h 26mn 40s	+ 02mn 59s	07:46	18:21	07:09	18:59	06:32	19:36
02/02/2021	Mardi	33	H	13:04	24,36°	08:20	17:49	65,03°	38,13°	09h 29mn 42s	+ 03mn 02s	07:45	18:23	07:07	19:00	06:30	19:37
03/02/2021	Mercredi	34	H	13:04	24,65°	08:18	17:51	65,50°	38,24°	09h 32mn 45s	+ 03mn 04s	07:44	18:24	07:06	19:02	06:29	19:39
04/02/2021	Jeudi	35	H	13:04	24,95°	08:17	17:53	65,98°	38,35°	09h 35mn 51s	+ 03mn 06s	07:42	18:26	07:05	19:03	06:28	19:40
05/02/2021	Vendredi	36	H	13:04	25,25°	08:15	17:54	66,46°	38,46°	09h 38mn 59s	+ 03mn 08s	07:41	18:27	07:04	19:05	06:27	19:42
06/02/2021	Samedi	37	H	13:04	25,56°	08:14	17:56	66,95°	38,57°	09h 42mn 08s	+ 03mn 10s	07:40	18:29	07:02	19:06	06:25	19:43
07/02/2021	Dimanche	38	H	13:04	25,87°	08:12	17:57	67,44°	38,67°	09h 45mn 20s	+ 03mn 11s	07:38	18:30	07:01	19:08	06:24	19:44
08/02/2021	Lundi	39	H	13:04	26,18°	08:11	17:59	67,94°	38,78°	09h 48mn 33s	+ 03mn 13s	07:37	18:32	06:59	19:09	06:23	19:46
09/02/2021	Mardi	40	H	13:04	26,50°	08:09	18:01	68,45°	38,88°	09h 51mn 47s	+ 03mn 15s	07:35	18:34	06:58	19:11	06:21	19:47
10/02/2021	Mercredi	41	H	13:04	26,83°	08:07	18:02	68,96°	38,99°	09h 55mn 04s	+ 03mn 16s	07:34	18:35	06:57	19:12	06:20	19:49
11/02/2021	Jeudi	42	H	13:04	27,15°	08:06	18:04	69,47°	39,09°	09h 58mn 21s	+ 03mn 18s	07:32	18:37	06:55	19:14	06:19	19:50
12/02/2021	Vendredi	43	H	13:04	27,48°	08:04	18:06	70,00°	39,19°	10h 01mn 40s	+ 03mn 19s	07:31	18:38	06:54	19:15	06:17	19:52
13/02/2021	Samedi	44	H	13:04	27,82°	08:02	18:07	70,52°	39,29°	10h 05mn 01s	+ 03mn 20s	07:29	18:40	06:52	19:17	06:15	19:53
14/02/2021	Dimanche	45	H	13:04	28,16°	08:01	18:09	71,05°	39,38°	10h 08mn 22s	+ 03mn 22s	07:27	18:41	06:50	19:18	06:14	19:55
15/02/2021	Lundi	46	H	13:04	28,50°	07:59	18:11	71,59°	39,48°	10h 11mn 45s	+ 03mn 23s	07:26	18:43	06:49	19:20	06:12	19:56
16/02/2021	Mardi	47	H	13:04	28,85°	07:57	18:12	72,13°	39,57°	10h 15mn 09s	+ 03mn 24s	07:24	18:45	06:47	19:21	06:11	19:58
17/02/2021	Mercredi	48	H	13:04	29,19°	07:55	18:14	72,67°	39,66°	10h 18mn 34s	+ 03mn 25s	07:22	18:46	06:46	19:23	06:09	19:59
18/02/2021	Jeudi	49	H	13:04	29,55°	07:54	18:16	73,22°	39,75°	10h 22mn 00s	+ 03mn 26s	07:21	18:48	06:44	19:24	06:07	20:01
19/02/2021	Vendredi	50	H	13:04	29,90°	07:52	18:17	73,77°	39,84°	10h 25mn 26s	+ 03mn 27s	07:19	18:49	06:42	19:26	06:06	20:02
20/02/2021	Samedi	51	H	13:04	30,26°	07:50	18:19	74,33°	39,92°	10h 28mn 54s	+ 03mn 28s	07:17	18:51	06:40	19:27	06:04	20:04
21/02/2021	Dimanche	52	H	13:04	30,62°	07:48	18:20	74,89°	40,00°	10h 32mn 23s	+ 03mn 29s	07:15	18:52	06:39	19:29	06:02	20:05
22/02/2021	Lundi	53	H	13:04	30,98°	07:46	18:22	75,45°	40,08°	10h 35mn 52s	+ 03mn 29s	07:13	18:54	06:37	19:30	06:00	20:07
23/02/2021	Mardi	54	H	13:04	31,35°	07:44	18:24	76,02°	40,16°	10h 39mn 22s	+ 03mn 30s	07:12	18:55	06:35	19:32	05:59	20:08
24/02/2021	Mercredi	55	H	13:03	31,72°	07:42	18:25	76,58°	40,23°	10h 42mn 53s	+ 03mn 31s	07:10	18:57	06:33	19:33	05:57	20:10
25/02/2021	Jeudi	56	H	13:03	32,09°	07:41	18:27	77,16°	40,30°	10h 46mn 25s	+ 03mn 31s	07:08	18:59	06:32	19:35	05:55	20:11
26/02/2021	Vendredi	57	H	13:03	32,46°	07:39	18:29	77,73°	40,37°	10h 49mn 57s	+ 03mn 32s	07:06	19:00	06:30	19:36	05:53	20:13
27/02/2021	Samedi	58	H	13:03	32,84°	07:37	18:30	78,31°	40,43°	10h 53mn 29s	+ 03mn 33s	07:04	19:02	06:28	19:38	05:51	20:15
28/02/2021	Dimanche	59	H	13:03	33,22°	07:35	18:32	78,89°	40,50°	10h 57mn 02s	+ 03mn 33s	07:02	19:03	06:26	19:40	05:49	20:16

Lat. ↓ 48° 52' 0" N Lon. ⇨ 2° 20' 0" E JANV 21 ⇒ DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure	Hauteur	Lever	Coucher	Azimut sud	Angle horizon	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
				hh:mn	Degré (°)	hh:mm	hh:mm	Degré (°)	Degré (°)			Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/03/2021	Lundi	60	H	13:03	33,59°	07:33	18:33	79,47°	40,56°	11h 00mn 36s	+ 03mn 34s	07:00	19:05	06:24	19:41	05:47	20:18
02/03/2021	Mardi	61	H	13:02	33,98°	07:31	18:35	80,05°	40,62°	11h 04mn 10s	+ 03mn 34s	06:58	19:06	06:22	19:43	05:45	20:19
03/03/2021	Mercredi	62	H	13:02	34,36°	07:29	18:37	80,64°	40,67°	11h 07mn 45s	+ 03mn 35s	06:56	19:08	06:20	19:44	05:43	20:21
04/03/2021	Jeudi	63	H	13:02	34,74°	07:27	18:38	81,23°	40,72°	11h 11mn 20s	+ 03mn 35s	06:54	19:09	06:18	19:46	05:41	20:23
05/03/2021	Vendredi	64	H	13:02	35,13°	07:25	18:40	81,82°	40,77°	11h 14mn 55s	+ 03mn 35s	06:53	19:11	06:16	19:47	05:39	20:24
06/03/2021	Samedi	65	H	13:01	35,52°	07:23	18:41	82,41°	40,82°	11h 18mn 30s	+ 03mn 36s	06:51	19:12	06:14	19:49	05:37	20:26
07/03/2021	Dimanche	66	H	13:01	35,90°	07:21	18:43	83,00°	40,86°	11h 22mn 06s	+ 03mn 36s	06:49	19:14	06:12	19:50	05:35	20:27
08/03/2021	Lundi	67	H	13:01	36,29°	07:19	18:44	83,59°	40,90°	11h 25mn 42s	+ 03mn 36s	06:46	19:15	06:10	19:52	05:33	20:29
09/03/2021	Mardi	68	H	13:01	36,69°	07:17	18:46	84,19°	40,93°	11h 29mn 19s	+ 03mn 36s	06:44	19:17	06:08	19:53	05:31	20:31
10/03/2021	Mercredi	69	H	13:00	37,08°	07:15	18:47	84,79°	40,97°	11h 32mn 55s	+ 03mn 37s	06:42	19:19	06:06	19:55	05:29	20:32
11/03/2021	Jeudi	70	H	13:00	37,47°	07:12	18:49	85,38°	41,00°	11h 36mn 32s	+ 03mn 37s	06:40	19:20	06:04	19:57	05:27	20:34
12/03/2021	Vendredi	71	H	13:00	37,86°	07:10	18:51	85,98°	41,03°	11h 40mn 09s	+ 03mn 37s	06:38	19:22	06:02	19:58	05:24	20:36
13/03/2021	Samedi	72	H	13:00	38,26°	07:08	18:52	86,58°	41,05°	11h 43mn 46s	+ 03mn 37s	06:36	19:23	06:00	20:00	05:22	20:37
14/03/2021	Dimanche	73	H	12:59	38,65°	07:06	18:54	87,18°	41,07°	11h 47mn 23s	+ 03mn 37s	06:34	19:25	05:58	20:01	05:20	20:39
15/03/2021	Lundi	74	H	12:59	39,05°	07:04	18:55	87,78°	41,09°	11h 51mn 00s	+ 03mn 37s	06:32	19:26	05:55	20:03	05:18	20:41
16/03/2021	Mardi	75	H	12:59	39,44°	07:02	18:57	88,38°	41,10°	11h 54mn 38s	+ 03mn 37s	06:30	19:28	05:53	20:04	05:15	20:42
17/03/2021	Mercredi	76	H	12:59	39,84°	07:00	18:58	88,98°	41,12°	11h 58mn 15s	+ 03mn 37s	06:28	19:29	05:51	20:06	05:13	20:44
18/03/2021	Jeudi	77	H	12:58	40,23°	06:58	19:00	89,58°	41,13°	12h 01mn 52s	+ 03mn 37s	06:26	19:31	05:49	20:08	05:11	20:46
19/03/2021	Vendredi	78	H	12:58	40,63°	06:56	19:01	90,18°	41,13°	12h 05mn 29s	+ 03mn 37s	06:24	19:32	05:47	20:09	05:09	20:47
20/03/2021	Samedi	79	H	12:58	41,02°	06:54	19:03	90,78°	41,13°	12h 09mn 07s	+ 03mn 37s	06:21	19:34	05:45	20:11	05:06	20:49
21/03/2021	Dimanche	80	H	12:57	41,42°	06:52	19:04	91,39°	41,13°	12h 12mn 44s	+ 03mn 37s	06:19	19:35	05:42	20:13	05:04	20:51
22/03/2021	Lundi	81	H	12:57	41,81°	06:49	19:06	91,99°	41,13°	12h 16mn 21s	+ 03mn 37s	06:17	19:37	05:40	20:14	05:01	20:53
23/03/2021	Mardi	82	H	12:57	42,21°	06:47	19:07	92,59°	41,12°	12h 19mn 58s	+ 03mn 37s	06:15	19:39	05:38	20:16	04:59	20:54
24/03/2021	Mercredi	83	H	12:57	42,60°	06:45	19:09	93,19°	41,11°	12h 23mn 35s	+ 03mn 37s	06:13	19:40	05:36	20:17	04:57	20:56
25/03/2021	Jeudi	84	H	12:56	42,99°	06:43	19:10	93,78°	41,10°	12h 27mn 12s	+ 03mn 37s	06:11	19:42	05:33	20:19	04:54	20:58
26/03/2021	Vendredi	85	H	12:56	43,39°	06:41	19:12	94,38°	41,08°	12h 30mn 49s	+ 03mn 37s	06:09	19:43	05:31	20:21	04:52	21:00
27/03/2021	Samedi	86	H	12:56	43,78°	06:39	19:13	94,98°	41,06°	12h 34mn 25s	+ 03mn 36s	06:06	19:45	05:29	20:22	04:49	21:02
28/03/2021	Dimanche	87	E	13:55	44,17°	07:37	20:15	95,58°	41,04°	12h 38mn 01s	+ 03mn 36s	07:04	20:46	06:27	21:24	05:47	22:04
29/03/2021	Lundi	88	E	13:55	44,56°	07:35	20:16	96,17°	41,02°	12h 41mn 37s	+ 03mn 36s	07:02	20:48	06:24	21:26	05:44	22:05
30/03/2021	Mardi	89	E	13:55	44,95°	07:33	20:18	96,76°	40,99°	12h 45mn 13s	+ 03mn 36s	07:00	20:49	06:22	21:27	05:42	22:07
31/03/2021	Mercredi	90	E	13:54	45,34°	07:30	20:19	97,36°	40,96°	12h 48mn 49s	+ 03mn 36s	06:58	20:51	06:20	21:29	05:40	22:09

Lat. ↓ 48° 52' 0" N Lon. ⇌ 2° 20' 0" E JANV 21 => DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure hh:mn	Hauteur Degré (°)	Lever hh:mm	Coucher hh:mm	Azimut sud Degré (°)	Angle horizon Degré (°)	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
												Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/04/2021	Jeudi	91	E	13:54	45,72°	07:28	20:21	97,95°	40,92°	12h 52mn 24s	+ 03mn 35s	06:56	20:52	06:17	21:31	05:37	22:11
02/04/2021	Vendredi	92	E	13:54	46,11°	07:26	20:22	98,54°	40,88°	12h 55mn 59s	+ 03mn 35s	06:54	20:54	06:15	21:32	05:34	22:13
03/04/2021	Samedi	93	E	13:54	46,49°	07:24	20:24	99,13°	40,84°	12h 59mn 34s	+ 03mn 35s	06:51	20:56	06:13	21:34	05:32	22:15
04/04/2021	Dimanche	94	E	13:53	46,87°	07:22	20:25	99,71°	40,80°	13h 03mn 08s	+ 03mn 34s	06:49	20:57	06:11	21:36	05:29	22:17
05/04/2021	Lundi	95	E	13:53	47,25°	07:20	20:27	100,30°	40,76°	13h 06mn 42s	+ 03mn 34s	06:47	20:59	06:08	21:38	05:27	22:19
06/04/2021	Mardi	96	E	13:53	47,63°	07:18	20:28	100,88°	40,71°	13h 10mn 15s	+ 03mn 33s	06:45	21:00	06:06	21:39	05:24	22:21
07/04/2021	Mercredi	97	E	13:52	48,01°	07:16	20:30	101,46°	40,66°	13h 13mn 48s	+ 03mn 33s	06:43	21:02	06:04	21:41	05:22	22:23
08/04/2021	Jeudi	98	E	13:52	48,38°	07:14	20:31	102,03°	40,60°	13h 17mn 21s	+ 03mn 33s	06:41	21:03	06:01	21:43	05:19	22:25
09/04/2021	Vendredi	99	E	13:52	48,76°	07:12	20:33	102,61°	40,54°	13h 20mn 53s	+ 03mn 32s	06:39	21:05	05:59	21:45	05:16	22:27
10/04/2021	Samedi	100	E	13:52	49,13°	07:10	20:34	103,18°	40,49°	13h 24mn 24s	+ 03mn 31s	06:36	21:07	05:57	21:46	05:14	22:29
11/04/2021	Dimanche	101	E	13:51	49,50°	07:08	20:36	103,75°	40,42°	13h 27mn 55s	+ 03mn 31s	06:34	21:08	05:54	21:48	05:11	22:31
12/04/2021	Lundi	102	E	13:51	49,86°	07:06	20:37	104,32°	40,36°	13h 31mn 25s	+ 03mn 30s	06:32	21:10	05:52	21:50	05:09	22:33
13/04/2021	Mardi	103	E	13:51	50,22°	07:04	20:39	104,88°	40,29°	13h 34mn 55s	+ 03mn 30s	06:30	21:11	05:50	21:52	05:06	22:36
14/04/2021	Mercredi	104	E	13:50	50,59°	07:02	20:40	105,44°	40,22°	13h 38mn 24s	+ 03mn 29s	06:28	21:13	05:48	21:53	05:03	22:38
15/04/2021	Jeudi	105	E	13:50	50,94°	07:00	20:42	106,00°	40,15°	13h 41mn 52s	+ 03mn 28s	06:26	21:15	05:45	21:55	05:01	22:40
16/04/2021	Vendredi	106	E	13:50	51,30°	06:58	20:43	106,56°	40,08°	13h 45mn 20s	+ 03mn 28s	06:24	21:16	05:43	21:57	04:58	22:42
17/04/2021	Samedi	107	E	13:50	51,65°	06:56	20:45	107,11°	40,00°	13h 48mn 47s	+ 03mn 27s	06:22	21:18	05:41	21:59	04:55	22:44
18/04/2021	Dimanche	108	E	13:50	52,00°	06:54	20:46	107,66°	39,92°	13h 52mn 13s	+ 03mn 26s	06:20	21:19	05:38	22:01	04:52	22:47
19/04/2021	Lundi	109	E	13:49	52,35°	06:52	20:48	108,20°	39,84°	13h 55mn 38s	+ 03mn 25s	06:18	21:21	05:36	22:03	04:50	22:49
20/04/2021	Mardi	110	E	13:49	52,69°	06:50	20:49	108,74°	39,76°	13h 59mn 02s	+ 03mn 24s	06:16	21:23	05:34	22:04	04:47	22:51
21/04/2021	Mercredi	111	E	13:49	53,03°	06:48	20:51	109,28°	39,67°	14h 02mn 25s	+ 03mn 23s	06:13	21:24	05:31	22:06	04:44	22:54
22/04/2021	Jeudi	112	E	13:49	53,37°	06:46	20:52	109,81°	39,58°	14h 05mn 47s	+ 03mn 22s	06:11	21:26	05:29	22:08	04:41	22:56
23/04/2021	Vendredi	113	E	13:49	53,71°	06:44	20:54	110,34°	39,49°	14h 09mn 08s	+ 03mn 21s	06:09	21:28	05:27	22:10	04:39	22:58
24/04/2021	Samedi	114	E	13:48	54,04°	06:43	20:55	110,86°	39,40°	14h 12mn 28s	+ 03mn 20s	06:07	21:29	05:25	22:12	04:36	23:01
25/04/2021	Dimanche	115	E	13:48	54,36°	06:41	20:57	111,38°	39,31°	14h 15mn 47s	+ 03mn 19s	06:05	21:31	05:22	22:14	04:33	23:03
26/04/2021	Lundi	116	E	13:48	54,69°	06:39	20:58	111,90°	39,22°	14h 19mn 05s	+ 03mn 18s	06:04	21:32	05:20	22:16	04:30	23:06
27/04/2021	Mardi	117	E	13:48	55,01°	06:37	20:59	112,41°	39,12°	14h 22mn 21s	+ 03mn 16s	06:02	21:34	05:18	22:18	04:28	23:08
28/04/2021	Mercredi	118	E	13:48	55,32°	06:35	21:01	112,91°	39,02°	14h 25mn 36s	+ 03mn 15s	06:00	21:36	05:16	22:20	04:25	23:11
29/04/2021	Jeudi	119	E	13:48	55,64°	06:34	21:02	113,41°	38,92°	14h 28mn 49s	+ 03mn 14s	05:58	21:37	05:13	22:22	04:22	23:13
30/04/2021	Vendredi	120	E	13:47	55,94°	06:32	21:04	113,91°	38,82°	14h 32mn 01s	+ 03mn 12s	05:56	21:39	05:11	22:24	04:19	23:16

Lat. ↓ 48° 52' 0" N Lon. ↗ 2° 20' 0" E JANV 21 => DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure	Hauteur	Lever	Coucher	Azimut sud	Angle horizon	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
				hh:mn	Degré (°)	hh:mm	hh:mm	Degré (°)	Degré (°)			Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/05/2021	Samedi	121	E	13:47	56,25°	06:30	21:05	114,40°	38,72°	14h 35mn 12s	+ 03mn 11s	05:54	21:41	05:09	22:25	04:16	23:18
02/05/2021	Dimanche	122	E	13:47	56,55°	06:28	21:07	114,88°	38,62°	14h 38mn 21s	+ 03mn 09s	05:52	21:42	05:07	22:27	04:13	23:21
03/05/2021	Lundi	123	E	13:47	56,84°	06:27	21:08	115,36°	38,52°	14h 41mn 28s	+ 03mn 07s	05:50	21:44	05:05	22:29	04:11	23:23
04/05/2021	Mardi	124	E	13:47	57,14°	06:25	21:10	115,83°	38,41°	14h 44mn 34s	+ 03mn 06s	05:48	21:45	05:03	22:31	04:08	23:26
05/05/2021	Mercredi	125	E	13:47	57,42°	06:24	21:11	116,30°	38,31°	14h 47mn 38s	+ 03mn 04s	05:47	21:47	05:00	22:33	04:05	23:29
06/05/2021	Jeudi	126	E	13:47	57,70°	06:22	21:13	116,76°	38,20°	14h 50mn 39s	+ 03mn 02s	05:45	21:49	04:58	22:35	04:02	23:32
07/05/2021	Vendredi	127	E	13:47	57,98°	06:20	21:14	117,21°	38,10°	14h 53mn 39s	+ 03mn 00s	05:43	21:50	04:56	22:37	03:59	23:34
08/05/2021	Samedi	128	E	13:47	58,26°	06:19	21:15	117,66°	37,99°	14h 56mn 37s	+ 02mn 58s	05:41	21:52	04:54	22:39	03:56	23:37
09/05/2021	Dimanche	129	E	13:47	58,52°	06:17	21:17	118,10°	37,88°	14h 59mn 33s	+ 02mn 56s	05:40	21:54	04:52	22:41	03:53	23:40
10/05/2021	Lundi	130	E	13:47	58,79°	06:16	21:18	118,53°	37,78°	15h 02mn 27s	+ 02mn 54s	05:38	21:55	04:50	22:43	03:50	23:43
11/05/2021	Mardi	131	E	13:47	59,05°	06:14	21:20	118,96°	37,67°	15h 05mn 18s	+ 02mn 51s	05:36	21:57	04:48	22:45	03:48	23:46
12/05/2021	Mercredi	132	E	13:47	59,30°	06:13	21:21	119,38°	37,56°	15h 08mn 07s	+ 02mn 49s	05:35	21:58	04:46	22:47	03:45	23:48
13/05/2021	Jeudi	133	E	13:46	59,55°	06:12	21:22	119,79°	37,46°	15h 10mn 53s	+ 02mn 46s	05:33	22:00	04:44	22:49	03:42	23:51
14/05/2021	Vendredi	134	E	13:46	59,79°	06:10	21:24	120,20°	37,35°	15h 13mn 37s	+ 02mn 44s	05:32	22:01	04:42	22:51	03:39	23:54
15/05/2021	Samedi	135	E	13:46	60,03°	06:09	21:25	120,60°	37,24°	15h 16mn 18s	+ 02mn 41s	05:30	22:03	04:40	22:53	03:36	23:57
16/05/2021	Dimanche	136	E	13:47	60,26°	06:08	21:26	120,99°	37,14°	15h 18mn 57s	+ 02mn 39s	05:29	22:04	04:38	22:55	03:33	00:00
17/05/2021	Lundi	137	E	13:47	60,49°	06:06	21:28	121,37°	37,03°	15h 21mn 33s	+ 02mn 36s	05:27	22:06	04:37	22:57	03:30	00:03
18/05/2021	Mardi	138	E	13:47	60,71°	06:05	21:29	121,74°	36,93°	15h 24mn 05s	+ 02mn 33s	05:26	22:07	04:35	22:58	03:27	00:06
19/05/2021	Mercredi	139	E	13:47	60,93°	06:04	21:30	122,10°	36,82°	15h 26mn 35s	+ 02mn 30s	05:24	22:09	04:33	23:00	03:24	00:09
20/05/2021	Jeudi	140	E	13:47	61,14°	06:03	21:32	122,46°	36,72°	15h 29mn 02s	+ 02mn 27s	05:23	22:10	04:31	23:02	03:21	00:13
21/05/2021	Vendredi	141	E	13:47	61,34°	06:02	21:33	122,81°	36,62°	15h 31mn 25s	+ 02mn 23s	05:22	22:12	04:29	23:04	03:18	00:16
22/05/2021	Samedi	142	E	13:47	61,54°	06:00	21:34	123,15°	36,52°	15h 33mn 45s	+ 02mn 20s	05:20	22:13	04:28	23:06	03:15	00:19
23/05/2021	Dimanche	143	E	13:47	61,74°	05:59	21:35	123,48°	36,42°	15h 36mn 02s	+ 02mn 17s	05:19	22:15	04:26	23:08	03:12	00:22
24/05/2021	Lundi	144	E	13:47	61,92°	05:58	21:37	123,80°	36,33°	15h 38mn 15s	+ 02mn 13s	05:18	22:16	04:24	23:09	03:09	00:25
25/05/2021	Mardi	145	E	13:47	62,11°	05:57	21:38	124,11°	36,23°	15h 40mn 25s	+ 02mn 10s	05:17	22:17	04:23	23:11	03:06	00:29
26/05/2021	Mercredi	146	E	13:47	62,28°	05:56	21:39	124,41°	36,14°	15h 42mn 31s	+ 02mn 06s	05:16	22:19	04:21	23:13	03:02	00:32
27/05/2021	Jeudi	147	E	13:47	62,45°	05:56	21:40	124,70°	36,05°	15h 44mn 33s	+ 02mn 02s	05:15	22:20	04:20	23:15	02:59	00:35
28/05/2021	Vendredi	148	E	13:47	62,61°	05:55	21:41	124,98°	35,96°	15h 46mn 32s	+ 01mn 58s	05:14	22:21	04:19	23:16	02:56	00:39
29/05/2021	Samedi	149	E	13:48	62,77°	05:54	21:42	125,25°	35,88°	15h 48mn 26s	+ 01mn 54s	05:13	22:23	04:17	23:18	02:53	00:42
30/05/2021	Dimanche	150	E	13:48	62,92°	05:53	21:43	125,52°	35,79°	15h 50mn 16s	+ 01mn 50s	05:12	22:24	04:16	23:20	02:50	00:46
31/05/2021	Lundi	151	E	13:48	63,07°	05:52	21:44	125,77°	35,71°	15h 52mn 02s	+ 01mn 46s	05:11	22:25	04:15	23:21	02:46	00:49

Lat. ↑ 48° 52' 0" N Lon. ⇨ 2° 20' 0" E JANV 21 => DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure hh:mn	Hauteur Degré (°)	Lever hh:mm	Coucher hh:mm	Azimut sud Degré (°)	Angle horizon Degré (°)	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
												Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/06/2021	Mardi	152	E	13:48	63,20°	05:52	21:45	126,01°	35,64°	15h 53mn 44s	+ 01mn 42s	05:10	22:26	04:13	23:23	02:43	00:53
02/06/2021	Mercredi	153	E	13:48	63,34°	05:51	21:46	126,24°	35,56°	15h 55mn 22s	+ 01mn 38s	05:09	22:27	04:12	23:24	02:40	00:56
03/06/2021	Jeudi	154	E	13:48	63,46°	05:50	21:47	126,46°	35,49°	15h 56mn 55s	+ 01mn 33s	05:08	22:28	04:11	23:25	02:36	01:00
04/06/2021	Vendredi	155	E	13:48	63,58°	05:50	21:48	126,66°	35,42°	15h 58mn 23s	+ 01mn 29s	05:08	22:29	04:10	23:27	02:33	01:04
05/06/2021	Samedi	156	E	13:49	63,69°	05:49	21:49	126,86°	35,35°	15h 59mn 47s	+ 01mn 24s	05:07	22:30	04:09	23:28	02:29	01:08
06/06/2021	Dimanche	157	E	13:49	63,80°	05:49	21:50	127,05°	35,29°	16h 01mn 07s	+ 01mn 19s	05:06	22:31	04:08	23:29	02:26	01:12
07/06/2021	Lundi	158	E	13:49	63,90°	05:48	21:51	127,22°	35,23°	16h 02mn 21s	+ 01mn 15s	05:06	22:32	04:07	23:31	02:22	01:16
08/06/2021	Mardi	159	E	13:49	63,99°	05:48	21:51	127,38°	35,18°	16h 03mn 31s	+ 01mn 10s	05:05	22:33	04:07	23:32	02:17	01:21
09/06/2021	Mercredi	160	E	13:49	64,08°	05:48	21:52	127,53°	35,13°	16h 04mn 36s	+ 01mn 05s	05:05	22:34	04:06	23:33	02:13	01:26
10/06/2021	Jeudi	161	E	13:50	64,16°	05:47	21:53	127,67°	35,08°	16h 05mn 36s	+ 01mn 00s	05:04	22:35	04:05	23:34	02:08	01:32
11/06/2021	Vendredi	162	E	13:50	64,23°	05:47	21:54	127,80°	35,04°	16h 06mn 31s	+ 00mn 55s	05:04	22:36	04:05	23:35	02:01	01:39
12/06/2021	Samedi	163	E	13:50	64,29°	05:47	21:54	127,92°	35,00°	16h 07mn 21s	+ 00mn 50s	05:04	22:36	04:04	23:36	Jour	polaire
13/06/2021	Dimanche	164	E	13:50	64,35°	05:47	21:55	128,02°	34,96°	16h 08mn 06s	+ 00mn 45s	05:04	22:37	04:04	23:37	Jour	polaire
14/06/2021	Lundi	165	E	13:50	64,40°	05:47	21:55	128,11°	34,93°	16h 08mn 45s	+ 00mn 40s	05:03	22:37	04:03	23:38	Jour	polaire
15/06/2021	Mardi	166	E	13:51	64,45°	05:46	21:56	128,19°	34,90°	16h 09mn 20s	+ 00mn 35s	05:03	22:38	04:03	23:38	Jour	polaire
16/06/2021	Mercredi	167	E	13:51	64,49°	05:46	21:56	128,26°	34,88°	16h 09mn 49s	+ 00mn 29s	05:03	22:39	04:03	23:39	Jour	polaire
17/06/2021	Jeudi	168	E	13:51	64,52°	05:46	21:57	128,32°	34,86°	16h 10mn 13s	+ 00mn 24s	05:03	22:39	04:03	23:39	Jour	polaire
18/06/2021	Vendredi	169	E	13:51	64,54°	05:46	21:57	128,36°	34,84°	16h 10mn 32s	+ 00mn 19s	05:03	22:39	04:03	23:40	Jour	polaire
19/06/2021	Samedi	170	E	13:51	64,56°	05:47	21:57	128,39°	34,83°	16h 10mn 46s	+ 00mn 13s	05:03	22:40	04:03	23:40	Jour	polaire
20/06/2021	Dimanche	171	E	13:52	64,57°	05:47	21:58	128,41°	34,82°	16h 10mn 54s	+ 00mn 08s	05:03	22:40	04:03	23:41	Jour	polaire
21/06/2021	Lundi	172	E	13:52	64,57°	05:47	21:58	128,42°	34,82°	16h 10mn 57s	+ 00mn 03s	05:04	22:40	04:03	23:41	Jour	polaire
22/06/2021	Mardi	173	E	13:52	64,57°	05:47	21:58	128,41°	34,82°	16h 10mn 54s	- 00mn 02s	05:04	22:40	04:03	23:41	Jour	polaire
23/06/2021	Mercredi	174	E	13:52	64,56°	05:47	21:58	128,39°	34,83°	16h 10mn 46s	- 00mn 08s	05:04	22:41	04:03	23:41	Jour	polaire
24/06/2021	Jeudi	175	E	13:53	64,54°	05:48	21:58	128,36°	34,84°	16h 10mn 33s	- 00mn 13s	05:04	22:41	04:04	23:41	Jour	polaire
25/06/2021	Vendredi	176	E	13:53	64,52°	05:48	21:58	128,32°	34,86°	16h 10mn 15s	- 00mn 18s	05:05	22:41	04:04	23:41	Jour	polaire
26/06/2021	Samedi	177	E	13:53	64,49°	05:49	21:58	128,27°	34,87°	16h 09mn 52s	- 00mn 24s	05:05	22:41	04:05	23:41	Jour	polaire
27/06/2021	Dimanche	178	E	13:53	64,45°	05:49	21:58	128,20°	34,90°	16h 09mn 23s	- 00mn 29s	05:06	22:41	04:06	23:41	Jour	polaire
28/06/2021	Lundi	179	E	13:53	64,41°	05:49	21:58	128,12°	34,93°	16h 08mn 49s	- 00mn 34s	05:06	22:41	04:06	23:41	Jour	polaire
29/06/2021	Mardi	180	E	13:54	64,36°	05:50	21:58	128,03°	34,96°	16h 08mn 10s	- 00mn 39s	05:07	22:40	04:07	23:40	Jour	polaire
30/06/2021	Mercredi	181	E	13:54	64,30°	05:51	21:58	127,93°	34,99°	16h 07mn 25s	- 00mn 44s	05:08	22:40	04:08	23:40	Jour	polaire

Lat. ↓ 48° 52' 0" N Lon. ⇨ 2° 20' 0" E JANV 21 => DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure	Hauteur	Lever	Coucher	Azimut sud	Angle horizon	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
				hh:mn	Degré (°)	hh:mm	hh:mm	Degré (°)	Degré (°)			Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/07/2021	Jeudi	182	E	13:54	64,23°	05:51	21:58	127,81°	35,03°	16h 06mn 36s	- 00mn 49s	05:08	22:40	04:09	23:39	02:04	01:44
02/07/2021	Vendredi	183	E	13:54	64,16°	05:52	21:58	127,69°	35,07°	16h 05mn 42s	- 00mn 54s	05:09	22:39	04:10	23:39	02:12	01:37
03/07/2021	Samedi	184	E	13:54	64,08°	05:53	21:57	127,55°	35,12°	16h 04mn 42s	- 00mn 59s	05:10	22:39	04:11	23:38	02:17	01:31
04/07/2021	Dimanche	185	E	13:55	64,00°	05:53	21:57	127,40°	35,17°	16h 03mn 38s	- 01mn 04s	05:11	22:39	04:12	23:37	02:22	01:27
05/07/2021	Lundi	186	E	13:55	63,91°	05:54	21:56	127,24°	35,23°	16h 02mn 29s	- 01mn 09s	05:11	22:38	04:13	23:37	02:27	01:23
06/07/2021	Mardi	187	E	13:55	63,81°	05:55	21:56	127,07°	35,29°	16h 01mn 15s	- 01mn 14s	05:12	22:37	04:14	23:36	02:31	01:19
07/07/2021	Mercredi	188	E	13:55	63,71°	05:56	21:56	126,88°	35,35°	15h 59mn 57s	- 01mn 19s	05:13	22:37	04:15	23:35	02:35	01:15
08/07/2021	Jeudi	189	E	13:55	63,59°	05:56	21:55	126,69°	35,41°	15h 58mn 34s	- 01mn 23s	05:14	22:36	04:17	23:34	02:39	01:11
09/07/2021	Vendredi	190	E	13:55	63,48°	05:57	21:54	126,48°	35,48°	15h 57mn 06s	- 01mn 28s	05:15	22:35	04:18	23:33	02:43	01:08
10/07/2021	Samedi	191	E	13:56	63,35°	05:58	21:54	126,27°	35,55°	15h 55mn 34s	- 01mn 32s	05:16	22:35	04:19	23:32	02:47	01:04
11/07/2021	Dimanche	192	E	13:56	63,22°	05:59	21:53	126,04°	35,63°	15h 53mn 57s	- 01mn 36s	05:17	22:34	04:21	23:30	02:50	01:01
12/07/2021	Lundi	193	E	13:56	63,09°	06:00	21:52	125,80°	35,70°	15h 52mn 17s	- 01mn 41s	05:19	22:33	04:22	23:29	02:54	00:58
13/07/2021	Mardi	194	E	13:56	62,94°	06:01	21:52	125,55°	35,78°	15h 50mn 32s	- 01mn 45s	05:20	22:32	04:24	23:28	02:57	00:54
14/07/2021	Mercredi	195	E	13:56	62,79°	06:02	21:51	125,29°	35,86°	15h 48mn 43s	- 01mn 49s	05:21	22:31	04:25	23:27	03:01	00:51
15/07/2021	Jeudi	196	E	13:56	62,64°	06:03	21:50	125,03°	35,95°	15h 46mn 50s	- 01mn 53s	05:22	22:30	04:27	23:25	03:04	00:48
16/07/2021	Vendredi	197	E	13:56	62,48°	06:04	21:49	124,75°	36,04°	15h 44mn 53s	- 01mn 57s	05:23	22:29	04:29	23:24	03:08	00:45
17/07/2021	Samedi	198	E	13:56	62,31°	06:05	21:48	124,46°	36,13°	15h 42mn 52s	- 02mn 01s	05:25	22:28	04:30	23:22	03:11	00:42
18/07/2021	Dimanche	199	E	13:56	62,14°	06:06	21:47	124,16°	36,22°	15h 40mn 47s	- 02mn 05s	05:26	22:27	04:32	23:21	03:14	00:38
19/07/2021	Lundi	200	E	13:56	61,96°	06:08	21:46	123,85°	36,31°	15h 38mn 39s	- 02mn 08s	05:27	22:26	04:34	23:19	03:18	00:35
20/07/2021	Mardi	201	E	13:57	61,77°	06:09	21:45	123,54°	36,41°	15h 36mn 27s	- 02mn 12s	05:29	22:25	04:35	23:18	03:21	00:32
21/07/2021	Mercredi	202	E	13:57	61,58°	06:10	21:44	123,21°	36,50°	15h 34mn 12s	- 02mn 15s	05:30	22:23	04:37	23:16	03:24	00:29
22/07/2021	Jeudi	203	E	13:57	61,38°	06:11	21:43	122,88°	36,60°	15h 31mn 54s	- 02mn 18s	05:31	22:22	04:39	23:14	03:27	00:26
23/07/2021	Vendredi	204	E	13:57	61,18°	06:12	21:42	122,53°	36,70°	15h 29mn 32s	- 02mn 22s	05:33	22:21	04:41	23:13	03:30	00:23
24/07/2021	Samedi	205	E	13:57	60,97°	06:14	21:41	122,18°	36,80°	15h 27mn 07s	- 02mn 25s	05:34	22:19	04:43	23:11	03:33	00:20
25/07/2021	Dimanche	206	E	13:57	60,76°	06:15	21:40	121,82°	36,90°	15h 24mn 39s	- 02mn 28s	05:36	22:18	04:44	23:09	03:36	00:17
26/07/2021	Lundi	207	E	13:57	60,54°	06:16	21:38	121,45°	37,01°	15h 22mn 08s	- 02mn 31s	05:37	22:16	04:46	23:07	03:39	00:14
27/07/2021	Mardi	208	E	13:57	60,32°	06:17	21:37	121,08°	37,11°	15h 19mn 35s	- 02mn 34s	05:38	22:15	04:48	23:05	03:42	00:11
28/07/2021	Mercredi	209	E	13:57	60,09°	06:19	21:36	120,69°	37,22°	15h 16mn 58s	- 02mn 36s	05:40	22:13	04:50	23:03	03:45	00:08
29/07/2021	Jeudi	210	E	13:57	59,85°	06:20	21:34	120,30°	37,32°	15h 14mn 19s	- 02mn 39s	05:41	22:12	04:52	23:01	03:48	00:05
30/07/2021	Vendredi	211	E	13:57	59,61°	06:21	21:33	119,90°	37,43°	15h 11mn 37s	- 02mn 42s	05:43	22:10	04:54	23:00	03:51	00:02
31/07/2021	Samedi	212	E	13:57	59,37°	06:23	21:32	119,50°	37,53°	15h 08mn 53s	- 02mn 44s	05:44	22:09	04:56	22:58	03:54	23:59

Lat. ↓ 48° 52' 0" N Lon. ⇨ 2° 20' 0" E JANV 21 ⇒ DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure hh:mn	Hauteur Degré (°)	Lever hh:mm	Coucher hh:mm	Azimut sud Degré (°)	Angle horizon Degré (°)	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
												Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/08/2021	Dimanche	213	E	13:57	59,12°	06:24	21:30	119,08°	37,64°	15h 06mn 07s	- 02mn 47s	05:46	22:07	04:57	22:56	03:57	23:56
02/08/2021	Lundi	214	E	13:56	58,86°	06:25	21:29	118,66°	37,74°	15h 03mn 18s	- 02mn 49s	05:47	22:05	04:59	22:54	04:00	23:53
03/08/2021	Mardi	215	E	13:56	58,61°	06:27	21:27	118,23°	37,85°	15h 00mn 26s	- 02mn 51s	05:49	22:04	05:01	22:51	04:02	23:50
04/08/2021	Mercredi	216	E	13:56	58,34°	06:28	21:26	117,80°	37,96°	14h 57mn 33s	- 02mn 53s	05:50	22:02	05:03	22:49	04:05	23:48
05/08/2021	Jeudi	217	E	13:56	58,07°	06:29	21:24	117,36°	38,06°	14h 54mn 38s	- 02mn 55s	05:52	22:00	05:05	22:47	04:08	23:45
06/08/2021	Vendredi	218	E	13:56	57,80°	06:31	21:22	116,91°	38,17°	14h 51mn 40s	- 02mn 57s	05:54	21:59	05:07	22:45	04:10	23:42
07/08/2021	Samedi	219	E	13:56	57,52°	06:32	21:21	116,46°	38,27°	14h 48mn 41s	- 02mn 59s	05:55	21:57	05:09	22:43	04:13	23:39
08/08/2021	Dimanche	220	E	13:56	57,24°	06:33	21:19	116,00°	38,38°	14h 45mn 40s	- 03mn 01s	05:57	21:55	05:11	22:41	04:16	23:36
09/08/2021	Lundi	221	E	13:56	56,95°	06:35	21:17	115,53°	38,48°	14h 42mn 37s	- 03mn 03s	05:58	21:53	05:13	22:39	04:18	23:33
10/08/2021	Mardi	222	E	13:56	56,66°	06:36	21:16	115,06°	38,58°	14h 39mn 32s	- 03mn 05s	06:00	21:51	05:14	22:37	04:21	23:30
11/08/2021	Mercredi	223	E	13:55	56,37°	06:38	21:14	114,59°	38,68°	14h 36mn 26s	- 03mn 06s	06:01	21:49	05:16	22:34	04:23	23:27
12/08/2021	Jeudi	224	E	13:55	56,07°	06:39	21:12	114,11°	38,78°	14h 33mn 18s	- 03mn 08s	06:03	21:48	05:18	22:32	04:26	23:25
13/08/2021	Vendredi	225	E	13:55	55,76°	06:40	21:11	113,62°	38,88°	14h 30mn 09s	- 03mn 09s	06:05	21:46	05:20	22:30	04:28	23:22
14/08/2021	Samedi	226	E	13:55	55,46°	06:42	21:09	113,13°	38,98°	14h 26mn 58s	- 03mn 11s	06:06	21:44	05:22	22:28	04:31	23:19
15/08/2021	Dimanche	227	E	13:55	55,15°	06:43	21:07	112,63°	39,08°	14h 23mn 46s	- 03mn 12s	06:08	21:42	05:24	22:26	04:33	23:16
16/08/2021	Lundi	228	E	13:54	54,83°	06:45	21:05	112,13°	39,17°	14h 20mn 33s	- 03mn 13s	06:09	21:40	05:26	22:23	04:36	23:13
17/08/2021	Mardi	229	E	13:54	54,51°	06:46	21:03	111,62°	39,27°	14h 17mn 18s	- 03mn 15s	06:11	21:38	05:28	22:21	04:38	23:10
18/08/2021	Mercredi	230	E	13:54	54,19°	06:48	21:02	111,11°	39,36°	14h 14mn 03s	- 03mn 16s	06:12	21:36	05:29	22:19	04:40	23:08
19/08/2021	Jeudi	231	E	13:54	53,87°	06:49	21:00	110,59°	39,45°	14h 10mn 46s	- 03mn 17s	06:14	21:34	05:31	22:16	04:43	23:05
20/08/2021	Vendredi	232	E	13:54	53,54°	06:50	20:58	110,08°	39,54°	14h 07mn 28s	- 03mn 18s	06:15	21:32	05:33	22:14	04:45	23:02
21/08/2021	Samedi	233	E	13:53	53,21°	06:52	20:56	109,55°	39,63°	14h 04mn 09s	- 03mn 19s	06:17	21:30	05:35	22:12	04:47	22:59
22/08/2021	Dimanche	234	E	13:53	52,87°	06:53	20:54	109,02°	39,71°	14h 00mn 49s	- 03mn 20s	06:19	21:28	05:37	22:10	04:50	22:57
23/08/2021	Lundi	235	E	13:53	52,54°	06:55	20:52	108,49°	39,79°	13h 57mn 28s	- 03mn 21s	06:20	21:26	05:38	22:07	04:52	22:54
24/08/2021	Mardi	236	E	13:53	52,19°	06:56	20:50	107,96°	39,88°	13h 54mn 06s	- 03mn 22s	06:22	21:24	05:40	22:05	04:54	22:51
25/08/2021	Mercredi	237	E	13:52	51,85°	06:57	20:48	107,42°	39,95°	13h 50mn 43s	- 03mn 23s	06:23	21:21	05:42	22:03	04:56	22:48
26/08/2021	Jeudi	238	E	13:52	51,50°	06:59	20:46	106,88°	40,03°	13h 47mn 20s	- 03mn 24s	06:25	21:19	05:44	22:00	04:58	22:46
27/08/2021	Vendredi	239	E	13:52	51,16°	07:00	20:44	106,33°	40,11°	13h 43mn 55s	- 03mn 24s	06:26	21:17	05:45	21:58	05:01	22:43
28/08/2021	Samedi	240	E	13:51	50,80°	07:02	20:42	105,78°	40,18°	13h 40mn 30s	- 03mn 25s	06:28	21:15	05:47	21:56	05:03	22:40
29/08/2021	Dimanche	241	E	13:51	50,45°	07:03	20:40	105,23°	40,25°	13h 37mn 05s	- 03mn 26s	06:29	21:13	05:49	21:53	05:05	22:38
30/08/2021	Lundi	242	E	13:51	50,09°	07:05	20:38	104,68°	40,32°	13h 33mn 38s	- 03mn 26s	06:31	21:11	05:51	21:51	05:07	22:35
31/08/2021	Mardi	243	E	13:51	49,73°	07:06	20:36	104,12°	40,38°	13h 30mn 11s	- 03mn 27s	06:32	21:09	05:52	21:49	05:09	22:32

Lat. ↓ 48° 52' 0" N Lon. ⇨ 2° 20' 0" E JANV 21 ⇒ DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure	Hauteur	Lever	Coucher	Azimut sud	Angle horizon	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
				hh:mn	Degré (°)	hh:mm	hh:mm	Degré (°)	Degré (°)			Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/09/2021	Mercredi	244	E	13:50	49,37°	07:07	20:34	103,56°	40,44°	13h 26mn 44s	- 03mn 28s	06:34	21:07	05:54	21:46	05:11	22:29
02/09/2021	Jeudi	245	E	13:50	49,01°	07:09	20:32	103,00°	40,51°	13h 23mn 15s	- 03mn 28s	06:35	21:04	05:56	21:44	05:13	22:27
03/09/2021	Vendredi	246	E	13:50	48,64°	07:10	20:30	102,43°	40,56°	13h 19mn 47s	- 03mn 29s	06:37	21:02	05:57	21:42	05:15	22:24
04/09/2021	Samedi	247	E	13:49	48,27°	07:12	20:28	101,86°	40,62°	13h 16mn 18s	- 03mn 29s	06:38	21:00	05:59	21:39	05:17	22:22
05/09/2021	Dimanche	248	E	13:49	47,90°	07:13	20:26	101,29°	40,67°	13h 12mn 48s	- 03mn 30s	06:40	20:58	06:01	21:37	05:19	22:19
06/09/2021	Lundi	249	E	13:49	47,53°	07:14	20:24	100,72°	40,72°	13h 09mn 18s	- 03mn 30s	06:41	20:56	06:02	21:35	05:21	22:16
07/09/2021	Mardi	250	E	13:48	47,16°	07:16	20:22	100,15°	40,77°	13h 05mn 48s	- 03mn 30s	06:43	20:54	06:04	21:32	05:23	22:14
08/09/2021	Mercredi	251	E	13:48	46,78°	07:17	20:20	99,57°	40,81°	13h 02mn 17s	- 03mn 31s	06:44	20:51	06:06	21:30	05:25	22:11
09/09/2021	Jeudi	252	E	13:48	46,40°	07:19	20:17	98,99°	40,85°	12h 58mn 45s	- 03mn 31s	06:46	20:49	06:07	21:28	05:26	22:09
10/09/2021	Vendredi	253	E	13:47	46,03°	07:20	20:15	98,41°	40,89°	12h 55mn 14s	- 03mn 32s	06:47	20:47	06:09	21:25	05:28	22:06
11/09/2021	Samedi	254	E	13:47	45,65°	07:21	20:13	97,83°	40,93°	12h 51mn 42s	- 03mn 32s	06:49	20:45	06:11	21:23	05:30	22:04
12/09/2021	Dimanche	255	E	13:46	45,27°	07:23	20:11	97,25°	40,96°	12h 48mn 10s	- 03mn 32s	06:50	20:43	06:12	21:21	05:32	22:01
13/09/2021	Lundi	256	E	13:46	44,88°	07:24	20:09	96,67°	40,99°	12h 44mn 37s	- 03mn 32s	06:52	20:41	06:14	21:18	05:34	21:58
14/09/2021	Mardi	257	E	13:46	44,50°	07:26	20:07	96,08°	41,02°	12h 41mn 05s	- 03mn 33s	06:53	20:38	06:15	21:16	05:36	21:56
15/09/2021	Mercredi	258	E	13:45	44,12°	07:27	20:05	95,49°	41,04°	12h 37mn 32s	- 03mn 33s	06:55	20:36	06:17	21:14	05:37	21:53
16/09/2021	Jeudi	259	E	13:45	43,73°	07:29	20:03	94,91°	41,07°	12h 33mn 59s	- 03mn 33s	06:56	20:34	06:19	21:12	05:39	21:51
17/09/2021	Vendredi	260	E	13:45	43,34°	07:30	20:00	94,32°	41,08°	12h 30mn 26s	- 03mn 33s	06:58	20:32	06:20	21:09	05:41	21:49
18/09/2021	Samedi	261	E	13:44	42,96°	07:31	19:58	93,73°	41,10°	12h 26mn 52s	- 03mn 33s	06:59	20:30	06:22	21:07	05:43	21:46
19/09/2021	Dimanche	262	E	13:44	42,57°	07:33	19:56	93,14°	41,11°	12h 23mn 18s	- 03mn 34s	07:01	20:27	06:23	21:05	05:44	21:44
20/09/2021	Lundi	263	E	13:44	42,18°	07:34	19:54	92,55°	41,12°	12h 19mn 45s	- 03mn 34s	07:02	20:25	06:25	21:02	05:46	21:41
21/09/2021	Mardi	264	E	13:43	41,79°	07:36	19:52	91,96°	41,13°	12h 16mn 11s	- 03mn 34s	07:03	20:23	06:26	21:00	05:48	21:39
22/09/2021	Mercredi	265	E	13:43	41,40°	07:37	19:50	91,37°	41,13°	12h 12mn 37s	- 03mn 34s	07:05	20:21	06:28	20:58	05:49	21:36
23/09/2021	Jeudi	266	E	13:43	41,02°	07:39	19:48	90,77°	41,13°	12h 09mn 03s	- 03mn 34s	07:06	20:19	06:29	20:56	05:51	21:34
24/09/2021	Vendredi	267	E	13:42	40,63°	07:40	19:45	90,18°	41,13°	12h 05mn 29s	- 03mn 34s	07:08	20:17	06:31	20:54	05:53	21:32
25/09/2021	Samedi	268	E	13:42	40,24°	07:41	19:43	89,59°	41,13°	12h 01mn 55s	- 03mn 34s	07:09	20:14	06:32	20:51	05:54	21:29
26/09/2021	Dimanche	269	E	13:42	39,85°	07:43	19:41	89,00°	41,12°	11h 58mn 21s	- 03mn 34s	07:11	20:12	06:34	20:49	05:56	21:27
27/09/2021	Lundi	270	E	13:41	39,46°	07:44	19:39	88,41°	41,11°	11h 54mn 47s	- 03mn 34s	07:12	20:10	06:35	20:47	05:58	21:25
28/09/2021	Mardi	271	E	13:41	39,07°	07:46	19:37	87,81°	41,09°	11h 51mn 13s	- 03mn 34s	07:14	20:08	06:37	20:45	05:59	21:22
29/09/2021	Mercredi	272	E	13:41	38,68°	07:47	19:35	87,22°	41,07°	11h 47mn 39s	- 03mn 34s	07:15	20:06	06:38	20:43	06:01	21:20
30/09/2021	Jeudi	273	E	13:40	38,29°	07:49	19:33	86,63°	41,05°	11h 44mn 05s	- 03mn 34s	07:17	20:04	06:40	20:40	06:03	21:18

Lat. ↓ 48° 52' 0" N Lon. ↗ 2° 20' 0" E JANV 21 => DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure	Hauteur	Lever	Coucher	Azimut sud	Angle horizon	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
		hh:mn	Degré (°)	hh:mm	hh:mm	Degré (°)	Degré (°)	Début hh:mn	Fin hh:mn			Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn		
01/10/2021	Vendredi	274	E	13:40	37,90°	07:50	19:31	86,04°	41,03°	11h 40mn 31s	- 03mn 34s	07:18	20:02	06:41	20:38	06:04	21:16
02/10/2021	Samedi	275	E	13:40	37,51°	07:52	19:29	85,45°	41,00°	11h 36mn 57s	- 03mn 34s	07:19	20:00	06:43	20:36	06:06	21:13
03/10/2021	Dimanche	276	E	13:39	37,13°	07:53	19:26	84,86°	40,97°	11h 33mn 24s	- 03mn 34s	07:21	19:58	06:44	20:34	06:07	21:11
04/10/2021	Lundi	277	E	13:39	36,74°	07:55	19:24	84,28°	40,94°	11h 29mn 50s	- 03mn 33s	07:22	19:55	06:46	20:32	06:09	21:09
05/10/2021	Mardi	278	E	13:39	36,36°	07:56	19:22	83,69°	40,90°	11h 26mn 17s	- 03mn 33s	07:24	19:53	06:47	20:30	06:10	21:07
06/10/2021	Mercredi	279	E	13:38	35,97°	07:57	19:20	83,10°	40,87°	11h 22mn 44s	- 03mn 33s	07:25	19:51	06:49	20:28	06:12	21:05
07/10/2021	Jeudi	280	E	13:38	35,59°	07:59	19:18	82,52°	40,82°	11h 19mn 11s	- 03mn 33s	07:27	19:49	06:50	20:26	06:13	21:03
08/10/2021	Vendredi	281	E	13:38	35,21°	08:00	19:16	81,94°	40,78°	11h 15mn 39s	- 03mn 33s	07:28	19:47	06:52	20:24	06:15	21:01
09/10/2021	Samedi	282	E	13:37	34,83°	08:02	19:14	81,35°	40,73°	11h 12mn 07s	- 03mn 32s	07:30	19:45	06:53	20:22	06:17	20:58
10/10/2021	Dimanche	283	E	13:37	34,45°	08:03	19:12	80,77°	40,68°	11h 08mn 35s	- 03mn 32s	07:31	19:43	06:55	20:20	06:18	20:56
11/10/2021	Lundi	284	E	13:37	34,07°	08:05	19:10	80,20°	40,63°	11h 05mn 03s	- 03mn 32s	07:33	19:41	06:56	20:18	06:20	20:54
12/10/2021	Mardi	285	E	13:37	33,69°	08:06	19:08	79,62°	40,57°	11h 01mn 32s	- 03mn 31s	07:34	19:39	06:58	20:16	06:21	20:52
13/10/2021	Mercredi	286	E	13:36	33,32°	08:08	19:06	79,05°	40,51°	10h 58mn 01s	- 03mn 31s	07:36	19:37	06:59	20:14	06:23	20:50
14/10/2021	Jeudi	287	E	13:36	32,95°	08:09	19:04	78,47°	40,45°	10h 54mn 31s	- 03mn 30s	07:37	19:35	07:01	20:12	06:24	20:48
15/10/2021	Vendredi	288	E	13:36	32,58°	08:11	19:02	77,90°	40,39°	10h 51mn 01s	- 03mn 30s	07:38	19:34	07:02	20:10	06:26	20:46
16/10/2021	Samedi	289	E	13:36	32,21°	08:13	19:00	77,34°	40,32°	10h 47mn 32s	- 03mn 29s	07:40	19:32	07:04	20:08	06:27	20:45
17/10/2021	Dimanche	290	E	13:36	31,84°	08:14	18:58	76,77°	40,25°	10h 44mn 03s	- 03mn 29s	07:41	19:30	07:05	20:06	06:28	20:43
18/10/2021	Lundi	291	E	13:35	31,48°	08:16	18:56	76,21°	40,18°	10h 40mn 35s	- 03mn 28s	07:43	19:28	07:06	20:04	06:30	20:41
19/10/2021	Mardi	292	E	13:35	31,11°	08:17	18:54	75,65°	40,11°	10h 37mn 07s	- 03mn 28s	07:44	19:26	07:08	20:02	06:31	20:39
20/10/2021	Mercredi	293	E	13:35	30,75°	08:19	18:52	75,09°	40,03°	10h 33mn 40s	- 03mn 27s	07:46	19:24	07:09	20:01	06:33	20:37
21/10/2021	Jeudi	294	E	13:35	30,40°	08:20	18:50	74,54°	39,95°	10h 30mn 14s	- 03mn 26s	07:47	19:22	07:11	19:59	06:34	20:35
22/10/2021	Vendredi	295	E	13:35	30,04°	08:22	18:49	73,99°	39,87°	10h 26mn 49s	- 03mn 25s	07:49	19:21	07:12	19:57	06:36	20:34
23/10/2021	Samedi	296	E	13:35	29,69°	08:23	18:47	73,45°	39,78°	10h 23mn 24s	- 03mn 25s	07:50	19:19	07:14	19:55	06:37	20:32
24/10/2021	Dimanche	297	E	13:34	29,34°	08:25	18:45	72,90°	39,70°	10h 20mn 00s	- 03mn 24s	07:52	19:17	07:15	19:54	06:39	20:30
25/10/2021	Lundi	298	E	13:34	29,00°	08:26	18:43	72,36°	39,61°	10h 16mn 38s	- 03mn 23s	07:53	19:15	07:17	19:52	06:40	20:28
26/10/2021	Mardi	299	E	13:34	28,65°	08:28	18:41	71,83°	39,52°	10h 13mn 16s	- 03mn 22s	07:55	19:14	07:18	19:50	06:42	20:27
27/10/2021	Mercredi	300	E	13:34	28,31°	08:30	18:40	71,30°	39,43°	10h 09mn 55s	- 03mn 21s	07:56	19:12	07:19	19:49	06:43	20:25
28/10/2021	Jeudi	301	E	13:34	27,98°	08:31	18:38	70,77°	39,33°	10h 06mn 35s	- 03mn 20s	07:58	19:10	07:21	19:47	06:44	20:24
29/10/2021	Vendredi	302	E	13:34	27,65°	08:33	18:36	70,25°	39,24°	10h 03mn 17s	- 03mn 19s	07:59	19:09	07:22	19:45	06:46	20:22
30/10/2021	Samedi	303	E	13:34	27,32°	08:34	18:34	69,73°	39,14°	10h 00mn 00s	- 03mn 17s	08:01	19:07	07:24	19:44	06:47	20:21
31/10/2021	Dimanche	304	H	12:34	26,99°	07:36	17:33	69,22°	39,04°	09h 56mn 44s	- 03mn 16s	07:02	18:05	06:25	18:42	05:49	19:19

Lat. ↑ 48° 52' 0" N Lon. ⇨ 2° 20' 0" E JANV 21 => DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure hh:mn	Hauteur Degré (°)	Lever hh:mm	Coucher hh:mm	Azimut sud Degré (°)	Angle horizon Degré (°)	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
												Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/11/2021	Lundi	305	H	12:34	26,67°	07:38	17:31	68,71°	38,94°	09h 53mn 29s	- 03mn 15s	07:04	18:04	06:27	18:41	05:50	19:18
02/11/2021	Mardi	306	H	12:34	26,35°	07:39	17:29	68,21°	38,83°	09h 50mn 16s	- 03mn 13s	07:05	18:02	06:28	18:39	05:51	19:16
03/11/2021	Mercredi	307	H	12:34	26,04°	07:41	17:28	67,71°	38,73°	09h 47mn 04s	- 03mn 12s	07:07	18:01	06:29	18:38	05:53	19:15
04/11/2021	Jeudi	308	H	12:34	25,73°	07:42	17:26	67,22°	38,62°	09h 43mn 54s	- 03mn 10s	07:08	17:59	06:31	18:37	05:54	19:13
05/11/2021	Vendredi	309	H	12:34	25,42°	07:44	17:25	66,73°	38,52°	09h 40mn 45s	- 03mn 08s	07:10	17:58	06:32	18:35	05:56	19:12
06/11/2021	Samedi	310	H	12:34	25,12°	07:45	17:23	66,25°	38,41°	09h 37mn 39s	- 03mn 07s	07:11	17:56	06:34	18:34	05:57	19:11
07/11/2021	Dimanche	311	H	12:34	24,82°	07:47	17:22	65,78°	38,30°	09h 34mn 34s	- 03mn 05s	07:13	17:55	06:35	18:33	05:58	19:09
08/11/2021	Lundi	312	H	12:34	24,53°	07:49	17:20	65,31°	38,19°	09h 31mn 31s	- 03mn 03s	07:14	17:54	06:37	18:31	06:00	19:08
09/11/2021	Mardi	313	H	12:34	24,24°	07:50	17:19	64,85°	38,08°	09h 28mn 30s	- 03mn 01s	07:16	17:52	06:38	18:30	06:01	19:07
10/11/2021	Mercredi	314	H	12:34	23,96°	07:52	17:17	64,39°	37,97°	09h 25mn 31s	- 02mn 59s	07:17	17:51	06:39	18:29	06:02	19:06
11/11/2021	Jeudi	315	H	12:34	23,68°	07:53	17:16	63,95°	37,86°	09h 22mn 34s	- 02mn 57s	07:19	17:50	06:41	18:28	06:04	19:05
12/11/2021	Vendredi	316	H	12:34	23,41°	07:55	17:15	63,50°	37,75°	09h 19mn 39s	- 02mn 55s	07:20	17:49	06:42	18:27	06:05	19:04
13/11/2021	Samedi	317	H	12:34	23,14°	07:57	17:13	63,07°	37,64°	09h 16mn 47s	- 02mn 52s	07:22	17:47	06:43	18:25	06:06	19:02
14/11/2021	Dimanche	318	H	12:35	22,88°	07:58	17:12	62,64°	37,52°	09h 13mn 58s	- 02mn 50s	07:23	17:46	06:45	18:24	06:08	19:01
15/11/2021	Lundi	319	H	12:35	22,62°	08:00	17:11	62,23°	37,41°	09h 11mn 11s	- 02mn 47s	07:24	17:45	06:46	18:23	06:09	19:00
16/11/2021	Mardi	320	H	12:35	22,37°	08:01	17:10	61,81°	37,30°	09h 08mn 26s	- 02mn 44s	07:26	17:44	06:48	18:22	06:10	19:00
17/11/2021	Mercredi	321	H	12:35	22,12°	08:03	17:08	61,41°	37,19°	09h 05mn 44s	- 02mn 42s	07:27	17:43	06:49	18:21	06:12	18:59
18/11/2021	Jeudi	322	H	12:35	21,88°	08:04	17:07	61,02°	37,08°	09h 03mn 06s	- 02mn 39s	07:29	17:42	06:50	18:20	06:13	18:58
19/11/2021	Vendredi	323	H	12:36	21,65°	08:06	17:06	60,63°	36,97°	09h 00mn 30s	- 02mn 36s	07:30	17:41	06:52	18:20	06:14	18:57
20/11/2021	Samedi	324	H	12:36	21,42°	08:07	17:05	60,25°	36,86°	08h 57mn 57s	- 02mn 33s	07:31	17:40	06:53	18:19	06:15	18:56
21/11/2021	Dimanche	325	H	12:36	21,20°	08:09	17:04	59,89°	36,76°	08h 55mn 28s	- 02mn 29s	07:33	17:39	06:54	18:18	06:17	18:55
22/11/2021	Lundi	326	H	12:36	20,98°	08:10	17:03	59,53°	36,65°	08h 53mn 02s	- 02mn 26s	07:34	17:38	06:55	18:17	06:18	18:55
23/11/2021	Mardi	327	H	12:37	20,77°	08:12	17:02	59,18°	36,54°	08h 50mn 39s	- 02mn 23s	07:36	17:38	06:57	18:16	06:19	18:54
24/11/2021	Mercredi	328	H	12:37	20,56°	08:13	17:01	58,84°	36,44°	08h 48mn 20s	- 02mn 19s	07:37	17:37	06:58	18:16	06:20	18:53
25/11/2021	Jeudi	329	H	12:37	20,37°	08:15	17:01	58,51°	36,34°	08h 46mn 05s	- 02mn 15s	07:38	17:36	06:59	18:15	06:21	18:53
26/11/2021	Vendredi	330	H	12:37	20,17°	08:16	17:00	58,19°	36,24°	08h 43mn 53s	- 02mn 12s	07:40	17:35	07:00	18:14	06:23	18:52
27/11/2021	Samedi	331	H	12:38	19,99°	08:17	16:59	57,88°	36,14°	08h 41mn 45s	- 02mn 08s	07:41	17:35	07:02	18:14	06:24	18:52
28/11/2021	Dimanche	332	H	12:38	19,81°	08:19	16:58	57,58°	36,05°	08h 39mn 42s	- 02mn 04s	07:42	17:34	07:03	18:13	06:25	18:51
29/11/2021	Lundi	333	H	12:38	19,64°	08:20	16:58	57,29°	35,95°	08h 37mn 42s	- 02mn 00s	07:43	17:34	07:04	18:13	06:26	18:51
30/11/2021	Mardi	334	H	12:39	19,47°	08:21	16:57	57,01°	35,86°	08h 35mn 47s	- 01mn 55s	07:45	17:33	07:05	18:13	06:27	18:50

Lat. ↓ 48° 52' 0" N Lon. ⇌ 2° 20' 0" E JANV 21 => DÉC 21		Quantième	H Été / Hiver	Passage méridien		Heure de lever & coucher du soleil				Durée du jour		Crépuscules					
Date	Jour			Heure	Hauteur	Lever	Coucher	Azimut sud	Angle horizon	hh mn ss	Variation mn ss	Civil		Nautique		Astronomique	
				hh:mn	Degré (°)	hh:mm	hh:mm	Degré (°)	Degré (°)			Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn	Début hh:mn	Fin hh:mn
01/12/2021	Mercredi	335	H	12:39	19,31°	08:23	16:57	56,74°	35,78°	08h 33mn 56s	- 01mn 51s	07:46	17:33	07:06	18:12	06:28	18:50
02/12/2021	Jeudi	336	H	12:40	19,16°	08:24	16:56	56,49°	35,69°	08h 32mn 09s	- 01mn 47s	07:47	17:32	07:07	18:12	06:29	18:50
03/12/2021	Vendredi	337	H	12:40	19,02°	08:25	16:56	56,24°	35,61°	08h 30mn 27s	- 01mn 42s	07:48	17:32	07:08	18:11	06:30	18:50
04/12/2021	Samedi	338	H	12:40	18,88°	08:26	16:55	56,01°	35,53°	08h 28mn 50s	- 01mn 37s	07:49	17:31	07:09	18:11	06:31	18:49
05/12/2021	Dimanche	339	H	12:41	18,75°	08:28	16:55	55,79°	35,46°	08h 27mn 17s	- 01mn 33s	07:50	17:31	07:11	18:11	06:32	18:49
06/12/2021	Lundi	340	H	12:41	18,63°	08:29	16:55	55,58°	35,39°	08h 25mn 49s	- 01mn 28s	07:51	17:31	07:12	18:11	06:33	18:49
07/12/2021	Mardi	341	H	12:42	18,51°	08:30	16:54	55,39°	35,32°	08h 24mn 27s	- 01mn 23s	07:52	17:31	07:13	18:11	06:34	18:49
08/12/2021	Mercredi	342	H	12:42	18,41°	08:31	16:54	55,20°	35,26°	08h 23mn 09s	- 01mn 18s	07:53	17:31	07:13	18:11	06:35	18:49
09/12/2021	Jeudi	343	H	12:42	18,30°	08:32	16:54	55,03°	35,20°	08h 21mn 56s	- 01mn 13s	07:54	17:31	07:14	18:11	06:36	18:49
10/12/2021	Vendredi	344	H	12:43	18,21°	08:33	16:54	54,87°	35,14°	08h 20mn 49s	- 01mn 07s	07:55	17:30	07:15	18:11	06:37	18:49
11/12/2021	Samedi	345	H	12:43	18,13°	08:34	16:54	54,72°	35,09°	08h 19mn 47s	- 01mn 02s	07:56	17:30	07:16	18:11	06:38	18:49
12/12/2021	Dimanche	346	H	12:44	18,05°	08:35	16:54	54,59°	35,04°	08h 18mn 50s	- 00mn 57s	07:57	17:31	07:17	18:11	06:39	18:49
13/12/2021	Lundi	347	H	12:44	17,98°	08:36	16:54	54,47°	35,00°	08h 17mn 59s	- 00mn 51s	07:58	17:31	07:18	18:11	06:39	18:49
14/12/2021	Mardi	348	H	12:45	17,92°	08:37	16:54	54,36°	34,96°	08h 17mn 13s	- 00mn 46s	07:59	17:31	07:19	18:11	06:40	18:49
15/12/2021	Mercredi	349	H	12:45	17,86°	08:37	16:54	54,27°	34,93°	08h 16mn 33s	- 00mn 40s	08:00	17:31	07:19	18:11	06:41	18:50
16/12/2021	Jeudi	350	H	12:46	17,81°	08:38	16:54	54,19°	34,90°	08h 15mn 59s	- 00mn 35s	08:00	17:31	07:20	18:11	06:42	18:50
17/12/2021	Vendredi	351	H	12:46	17,77°	08:39	16:54	54,12°	34,87°	08h 15mn 30s	- 00mn 29s	08:01	17:31	07:21	18:12	06:42	18:50
18/12/2021	Samedi	352	H	12:47	17,74°	08:40	16:55	54,06°	34,85°	08h 15mn 06s	- 00mn 23s	08:02	17:32	07:21	18:12	06:43	18:51
19/12/2021	Dimanche	353	H	12:47	17,72°	08:40	16:55	54,02°	34,84°	08h 14mn 49s	- 00mn 18s	08:02	17:32	07:22	18:12	06:44	18:51
20/12/2021	Lundi	354	H	12:48	17,70°	08:41	16:56	54,00°	34,83°	08h 14mn 37s	- 00mn 12s	08:03	17:33	07:23	18:13	06:44	18:51
21/12/2021	Mardi	355	H	12:48	17,69°	08:41	16:56	53,98°	34,82°	08h 14mn 31s	- 00mn 06s	08:03	17:33	07:23	18:13	06:45	18:52
22/12/2021	Mercredi	356	H	12:49	17,69°	08:42	16:56	53,98°	34,82°	08h 14mn 31s	- 00mn 00s	08:04	17:33	07:24	18:14	06:45	18:52
23/12/2021	Jeudi	357	H	12:49	17,70°	08:42	16:57	53,99°	34,83°	08h 14mn 36s	+ 00mn 06s	08:04	17:34	07:24	18:14	06:46	18:53
24/12/2021	Vendredi	358	H	12:50	17,72°	08:43	16:58	54,02°	34,84°	08h 14mn 48s	+ 00mn 11s	08:05	17:35	07:25	18:15	06:46	18:53
25/12/2021	Samedi	359	H	12:50	17,74°	08:43	16:58	54,06°	34,85°	08h 15mn 05s	+ 00mn 17s	08:05	17:35	07:25	18:15	06:46	18:54
26/12/2021	Dimanche	360	H	12:51	17,77°	08:43	16:59	54,11°	34,87°	08h 15mn 27s	+ 00mn 23s	08:06	17:36	07:25	18:16	06:47	18:55
27/12/2021	Lundi	361	H	12:51	17,81°	08:44	17:00	54,18°	34,89°	08h 15mn 56s	+ 00mn 28s	08:06	17:37	07:26	18:17	06:47	18:55
28/12/2021	Mardi	362	H	12:52	17,86°	08:44	17:00	54,26°	34,92°	08h 16mn 30s	+ 00mn 34s	08:06	17:37	07:26	18:18	06:47	18:56
29/12/2021	Mercredi	363	H	12:52	17,91°	08:44	17:01	54,35°	34,96°	08h 17mn 10s	+ 00mn 40s	08:06	17:38	07:26	18:18	06:48	18:57
30/12/2021	Jeudi	364	H	12:53	17,97°	08:44	17:02	54,46°	34,99°	08h 17mn 55s	+ 00mn 45s	08:06	17:39	07:26	18:19	06:48	18:57
31/12/2021	Vendredi	365	H	12:53	18,04°	08:44	17:03	54,58°	35,04°	08h 18mn 46s	+ 00mn 51s	08:06	17:40	07:26	18:20	06:48	18:58