

November 01, 2023 12:00:00 PM MDT

Object	Right ascens	Declination	Earth distance	Sun distance
Sun	14h 26m 37.7s	-14° 30' 48"	0	0
Mercury	14h 56m 57.0s	-17° 27' 25"	213,334,456	69,298,579
Venus	11h 34m 52.7s	+03° 25' 47"	113,756,080	107,675,575
Mars	14h 46m 32.0s	-16° 01' 03"	380,643,532	233,102,663
Ceres	15h 12m 34.8s	-14° 13' 51"	550,520,164	405,410,230
Jupiter	02h 34m 57.6s	+13° 41' 28"	595,754,958	744,147,892
Saturn	22h 12m 51.6s	-12° 54' 54"	1,398,431,480	1,459,301,402
Uranus	03h 16m 52.5s	+17° 50' 30"	2,790,426,971	2,935,560,881
Neptune	23h 44m 27.5s	-03° 03' 58"	4,365,498,991	4,473,752,970
Pluto	20h 02m 46.4s	-23° 14' 39"	5,244,755,704	5,218,377,825
Moon	05h 48m 38.4s	+27° 26' 42"	388,831	0

(Distances in km)

Object	Rise:	Tran	Set:	Phase	Constl	Magnitud
Sun	07:28	12:44	17:58	0.00%	Lib	unknown
Mercury	08:11	13:14	18:16	97.81%	Lib	-0.7
Venus	03:37	09:52	16:06	55.07%	Leo	-4.3
Mars	07:56	13:03	18:11	99.92%	Lib	1.5
Ceres	08:17	13:30	18:44	99.50%	Lib	8.7
Jupiter	18:01	00:54	07:42	100.00%	Ari	-2.9
Saturn	15:10	20:28	01:50	99.78%	Aqr	0.7
Uranus	18:27	01:35	08:40	100.00%	Ari	5.6
Neptune	16:08	22:00	03:55	99.99%	Psc	7.8
Pluto	13:39	18:17	22:56	99.98%	Sgr	14.4
Moon	20:43	03:50	11:51	82.73%	Tau	unknown

Meteor Radiant Report

Name	Month/Day	RA	Decl	Hourly Rate
Southern Taurids	11/03	3.4	13.6	7
Pegasids	11/12	22.3	21.0	5
Northern Taurids	11/13	3.9	22.3	7
Leonids	11/17	10.2	22.2	15
Andromedids	11/27	1.7	44.0	100

Equinox/Solstice Report

Vernal equinox: 3/20/23 2:25 PM STD
Summer solstice: 6/21/23 7:58 AM STD
Autumnal equinox: 9/22/23 11:51 PM STD
Winter solstice: 12/21/23 8:28 PM STD

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Date	Moonrise	Moonset	Sunrise	Sunset	Begin Twilight	End Twilight
11/1/23	20:42	11:53	07:29	17:58	05:57	19:30
11/2/23	21:40	12:48	07:30	17:57	05:58	19:29
11/3/23	22:42	13:34	07:31	17:56	05:59	19:28
11/4/23	23:45	14:10	07:32	17:55	06:00	19:27
11/5/23	-----	14:40	07:33	17:54	06:01	19:26
11/6/23	-----	14:05	06:34	16:52	05:02	18:24
11/7/23	00:48	14:27	06:35	16:51	05:03	18:23
11/8/23	01:49	14:48	06:36	16:50	05:04	18:23
11/9/23	02:48	15:08	06:37	16:49	05:05	18:22
11/10/23	03:49	15:29	06:39	16:48	05:06	18:21
11/11/23	04:52	15:51	06:40	16:48	05:07	18:20
11/12/23	05:58	16:17	06:41	16:47	05:08	18:19
11/13/23	07:06	16:49	06:42	16:46	05:09	18:19
11/14/23	08:17	17:29	06:43	16:45	05:10	18:18
11/15/23	09:27	18:18	06:44	16:44	05:11	18:17
11/16/23	10:30	19:19	06:45	16:43	05:12	18:17
11/17/23	11:26	20:28	06:47	16:43	05:13	18:16
11/18/23	12:11	21:43	06:48	16:42	05:14	18:16
11/19/23	12:47	22:58	06:49	16:41	05:15	18:15
11/20/23	13:18	-----	06:50	16:41	05:16	18:15
11/21/23	13:44	00:12	06:51	16:40	05:17	18:14
11/22/23	14:08	01:25	06:52	16:39	05:18	18:14
11/23/23	14:33	02:36	06:53	16:39	05:19	18:13
11/24/23	14:58	03:49	06:54	16:38	05:20	18:13
11/25/23	15:27	05:01	06:55	16:38	05:21	18:13
11/26/23	16:01	06:15	06:57	16:37	05:22	18:13
11/27/23	16:41	07:27	06:58	16:37	05:23	18:12
11/28/23	17:30	08:35	06:59	16:37	05:23	18:12
11/29/23	18:25	09:36	07:00	16:36	05:24	18:12
11/30/23	19:27	10:25	07:01	16:36	05:25	18:12

'-----' means the event does not occur on this date.

*Daylight Saving Time begins for most of US.