

May 01, 2022 12:00:00 PM MDT

Object	Right ascens	Declination	Earth distance	Sun distance
Sun	02h 35m 29.8s	+15° 13' 10"	0	0
Mercury	03h 55m 09.8s	+23° 05' 55"	119,640,657	56,758,799
Venus	23h 58m 05.6s	-01° 40' 05"	150,231,771	108,886,936
Mars	22h 57m 57.3s	-08° 16' 42"	243,088,790	209,358,273
Ceres	05h 34m 23.9s	+26° 08' 38"	489,185,037	393,442,400
Jupiter	23h 54m 51.7s	-01° 43' 32"	846,384,551	743,649,611
Saturn	21h 47m 51.5s	-14° 22' 58"	1,506,700,121	1,480,090,141
Uranus	02h 48m 56.4s	+15° 52' 09"	3,098,401,641	2,947,927,997
Neptune	23h 41m 54.5s	-03° 11' 51"	4,577,601,785	4,475,634,674
Pluto	20h 04m 35.8s	-22° 21' 58"	5,128,085,451	5,163,332,030
Moon	03h 16m 15.5s	+17° 29' 03"	399,053	0

(Distances in km)

Object	Rise:	Tran	Set:	Phase	Constl	Magnitud
Sun	06:01	12:57	19:54	0.00%	Ari	unknown
Mercury	06:51	14:17	21:42	30.92%	Tau	0.7
Venus	04:22	10:20	16:17	67.88%	Psc	-4.1
Mars	03:45	09:20	14:55	89.40%	Aqr	0.9
Ceres	08:18	15:56	23:34	99.50%	Tau	9.0
Jupiter	04:20	10:16	16:13	99.52%	Psc	-2.2
Saturn	02:56	08:10	13:23	99.75%	Cap	0.8
Uranus	06:14	13:10	20:06	100.00%	Ari	5.9
Neptune	04:12	10:04	15:55	99.98%	Psc	7.9
Pluto	01:43	06:26	11:08	99.98%	Sgr	14.4
Moon	06:29	13:40	20:59	0.72%	Ari	unknown

Meteor Radiant Report

Name	Month/Day	RA	Decl	Hourly Rate
Phi Bootids	05/01	16.0	51.0	6
Alpha Scorpiids	05/03	16.0	-22.0	6
Eta Aquarids	05/03	22.4	-1.9	60

Equinox/Solstice Report

Vernal equinox: 3/20/22 8:34 AM STD
Summer solstice: 6/21/22 2:14 AM STD
Autumnal equinox: 9/22/22 6:05 PM STD
Winter solstice: 12/21/22 2:49 PM STD

May 01, 2022 12:00:00 PM MDT

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

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