

May 01, 2017 12:00:00 PM MDT

Object	Right ascens	Declination	Earth distance	Sun distance
Sun	02h 36m 27s	+15° 17' 31"	0	0
Mercury	01h 32m 36s	+08° 06' 16"	90,904,870	69,333,451
Venus	00h 03m 50s	+01° 39' 46"	66,739,273	108,493,469
Mars	04h 20m 39s	+22° 08' 46"	358,982,013	232,294,221
Ceres	03h 55m 20s	+18° 33' 28"	549,024,185	409,898,166
Jupiter	12h 59m 03s	-04° 37' 39"	678,116,178	816,086,505
Saturn	17h 48m 14s	-22° 02' 29"	1,395,243,580	1,504,339,704
Uranus	01h 35m 12s	+09° 19' 15"	3,125,783,037	2,981,233,970
Neptune	23h 01m 19s	-07° 12' 37"	4,558,769,136	4,480,344,303
Pluto	19h 23m 19s	-21° 10' 57"	4,925,722,685	4,984,596,010
Moon	07h 44m 46s	+17° 43' 51"	371,251	0

(Distances in km)

Object	Rise:	Tran	Set:	Phase	Constl	Magnitud
Sun	06:00	12:57	19:54	0.00%	Ari	unknown
Mercury	05:24	11:53	18:22	11.69%	Psc	2.3
Venus	04:17	10:24	16:33	27.55%	Psc	-4.5
Mars	07:20	14:41	22:03	98.00%	Tau	1.6
Ceres	07:10	14:18	21:27	99.50%	Tau	8.9
Jupiter	17:31	23:18	05:08	99.83%	Vir	-2.4
Saturn	23:22	04:10	08:55	99.87%	Sgr	0.3
Uranus	05:23	11:56	18:29	100.00%	Psc	5.9
Neptune	03:44	09:22	15:00	99.98%	Aqr	7.9
Pluto	00:56	05:44	10:32	99.98%	Sgr	14.2
Moon	10:56	18:15	00:41	35.10%	Gem	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

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