

Astronomical Almanac for 2020 November

Blackpool, Lancs

Latitude: 53°49'08" N Longitude: 3°02'01" W

Elevation: 10 metres

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
SR: 07:13	SR: 07:15	SR: 07:17	SR: 07:19	SR: 07:21	SR: 07:23	SR: 07:25
SS: 16:38	SS: 16:36	SS: 16:34	SS: 16:32	SS: 16:30	SS: 16:28	SS: 16:26
MR: 17:16	MR: 17:36	MR: 18:02	MR: 18:37	MR: 19:24	MR: 20:23	MR: 21:34
MS: 07:50	MS: 09:01	MS: 10:12	MS: 11:19	MS: 12:20	MS: 13:10	MS: 13:50
Ura Opp						
8	9	10	11	12	13	14
SR: 07:27	SR: 07:28	SR: 07:30	SR: 07:32	SR: 07:34	SR: 07:36	SR: 07:38
SS: 16:25	SS: 16:23	SS: 16:21	SS: 16:20	SS: 16:18	SS: 16:16	SS: 16:15
MR: 22:52	MR: None	MR: 00:16	MR: 01:41	MR: 03:09	MR: 04:39	MR: 06:11
MS: 14:20	MS: 14:44	MS: 15:03	MS: 15:20	MS: 15:36	MS: 15:53	MS: 16:12
LQ: 13:48						
15	16	17	18	19	20	21
SR: 07:40	SR: 07:42	SR: 07:44	SR: 07:45	SR: 07:47	SR: 07:49	SR: 07:51
SS: 16:13	SS: 16:12	SS: 16:10	SS: 16:09	SS: 16:08	SS: 16:06	SS: 16:05
MR: 07:45	MR: 09:17	MR: 10:40	MR: 11:49	MR: 12:41	MR: 13:17	MR: 13:43
MS: 16:36	MS: 17:08	MS: 17:52	MS: 18:50	MS: 19:59	MS: 21:15	MS: 22:31
NM: 05:09						
22	23	24	25	26	27	28
SR: 07:53	SR: 07:54	SR: 07:56	SR: 07:58	SR: 07:59	SR: 08:01	SR: 08:03
SS: 16:04	SS: 16:03	SS: 16:01	SS: 16:00	SS: 15:59	SS: 15:58	SS: 15:57
MR: 14:03	MR: 14:18	MR: 14:31	MR: 14:43	MR: 14:55	MR: 15:08	MR: 15:23
MS: 23:46	MS: None	MS: 00:58	MS: 02:09	MS: 03:18	MS: 04:28	MS: 05:38
FQ: 04:46						
29	30					
SR: 08:04	SR: 08:06					
SS: 15:57	SS: 15:56					
MR: 15:41	MR: 16:05					
MS: 06:50	MS: 08:01					
	FM: 09:32					

Meteor Showers Report for 2020-11-01 to 2020-11-30

Date	Meteor Shower	ZHR	RA	DEC	Illum. Frac.	Longitude
2020-11-03	Taurids	8	3h44m	14°	0.95	221°
2020-11-18	Leonids	10	10h08m	22°	0.11	236°

Planet View Info Report for 2020-11-01 to 2020-11-30

Mercury

Date	Rise	Set	RA	Dec	Elongation	Ill Fr	DIST(AU)
2020-11-01	05:55	16:20	13h40m20s	-9°15'12"	12°27'30"	0.141	0.74785
2020-11-08	05:30	16:02	13h45m10s	-8°30'57"	18°42'02"	0.473	0.92120
2020-11-15	05:46	15:48	14h13m12s	-11°05'18"	18°22'06"	0.730	1.10067
2020-11-22	06:20	15:37	14h51m26s	-14°46'39"	15°22'52"	0.872	1.24315
2020-11-29	06:58	15:28	15h33m53s	-18°23'31"	11°38'39"	0.942	1.34396

Venus

Date	Rise	Set	RA	Dec	Elongation	Ill Fr	DIST(AU)
2020-11-01	03:48	15:49	12h20m04s	-0°25'24"	34°16'59"	0.814	1.27124
2020-11-08	04:10	15:36	12h51m42s	-3°39'58"	32°45'41"	0.833	1.31153
2020-11-15	04:32	15:22	13h23m43s	-6°53'17"	31°12'37"	0.851	1.34999
2020-11-22	04:55	15:10	13h56m16s	-10°00'58"	29°38'09"	0.867	1.38657
2020-11-29	05:18	14:58	14h29m32s	-12°58'33"	28°02'27"	0.882	1.42132

Mars

Date	Rise	Set	RA	Dec	Elongation	Ill Fr	DIST(AU)
2020-11-01	15:59	05:02	1h03m03s	4°49'38"	157°16'49"	0.982	0.46669
2020-11-08	15:27	04:31	0h59m02s	4°55'12"	149°25'00"	0.968	0.49813
2020-11-15	14:56	04:03	0h57m29s	5°13'30"	142°09'13"	0.954	0.53586
2020-11-22	14:27	03:40	0h58m25s	5°44'08"	135°30'29"	0.940	0.57913
2020-11-29	13:59	03:19	1h01m40s	6°25'49"	129°26'31"	0.927	0.62708

Jupiter

Date	Rise	Set	RA	Dec	Elongation	Ill Fr	DIST(AU)
2020-11-01	13:09	20:47	19h31m13s	-22°14'09"	71°59'49"	0.991	5.33665
2020-11-08	12:45	20:25	19h35m38s	-22°04'34"	66°01'09"	0.992	5.43719
2020-11-15	12:21	20:04	19h40m28s	-21°53'31"	60°06'57"	0.993	5.53321
2020-11-22	11:57	19:43	19h45m42s	-21°40'59"	54°17'00"	0.994	5.62365
2020-11-29	11:34	19:23	19h51m15s	-21°26'58"	48°30'59"	0.995	5.70759

Saturn

Date	Rise	Set	RA	Dec	Elongation	Ill Fr	DIST(AU)
2020-11-01	13:24	21:16	19h53m13s	-21°14'06"	77°12'10"	0.998	10.18699
2020-11-08	12:57	20:50	19h54m56s	-21°09'47"	70°35'40"	0.998	10.29848
2020-11-15	12:31	20:26	19h56m56s	-21°04'38"	64°01'38"	0.998	10.40559
2020-11-22	12:05	20:01	19h59m11s	-20°58'38"	57°30'03"	0.998	10.50686
2020-11-29	11:40	19:37	20h01m41s	-20°51'51"	51°00'57"	0.999	10.60098

Uranus

Date	Rise	Set	RA	Dec	Elongation	Ill Fr	DIST(AU)
2020-11-01	16:29	07:17	2h25m46s	13°56'33"	179°24'05"	1.000	18.78963
2020-11-08	16:01	06:48	2h24m38s	13°51'06"	172°18'55"	1.000	18.79885
2020-11-15	15:32	06:19	2h23m32s	13°45'46"	165°00'01"	1.000	18.82312
2020-11-22	15:04	05:50	2h22m30s	13°40'41"	157°40'16"	1.000	18.86215
2020-11-29	14:36	05:21	2h21m31s	13°35'57"	150°20'34"	1.000	18.91525