

Memoranda for Observers.

For the months of August, September, October and November.

Standard Time of India is adopted in these Memoranda.

For the month of August 1911.

Sidereal time at 8 p.m.

			H.	M.	S.
August 1st	16	36 19
„ 8th	17	3 55
„ 15th	17	31 31
„ 22nd	17	59 7
„ 29th	18	26 43

From this table the constellations visible during the evenings of August can be ascertained by a reference to their position as given in the Star Chart.

Phases of the Moon.

		H.	M.
August 2nd	First Quarter	...	4 59 a.m.
„ 10th	Full Moon	...	8 25 a.m.
„ 17th	Last Quarter	...	5 41 p.m.
„ 24th	New Moon	...	9 44 a.m.
„ 31st	First Quarter	...	9 51 p.m.

Meteors.

	R. A.	Dec.	Character.
July—September	... 335°	+73°	Swift, short.
July—August	... 339°	-27	Slow, long
July—August	... 280	+57	Slow, short.
* August 10th to 12th	... 45°	+57	Swift, streaks.
„ 15th	... 290	+53	Swift, bright.
„ 15th to 25th	... 291	+60	Slow, bright.
„ 25th	... 5	+11	Slow, short.
August—October 2nd	... 346	0	Slow.
August—October 2nd	... 74	+42	Swift, streaks.

Planets.

Venus.—Is an evening star. The position of this planet on the 15th August at 8 p.m. will be R. A. 11 h. 44 m. 45 s. Dec. 3°-12'-34" S. The time of its setting on the 15th August will be 7 h. 46 m. p.m.

* This shower is the noted one known as the Perseid Meteor Shower.

Saturn.—The position of the planet on the 15th August at 8 p.m. will be R. A. 3 h. 12 m. 33 s. Dec. 15°-27'-52" N. The time of its rising will be 10 h. 48 m. p.m. on the 15th August.

Mars.—The position of the planet on the 15th August at 8 p.m. will be R. A. 3 h. 9 m. 14 s. Dec. 15°-34'-46" N. The time of its rising will be 10 h. 45 m. p.m. on the 15th August.

Jupiter.—The position of the planet on the 15th August at 8 p.m. will be R. A. 14 h. 21 m. 25 s. Dec. 13°-2'-14" S. The time of its setting will be 10 h. 6 m. p.m. on the 15th August.

For the month of September 1911.

Sidereal time at 8. p.m.

			H	M.	S.
September 1st	...	...	18	38	32
„ 8th	...	...	19	6	8
„ 15th	...	...	19	33	44
„ 22nd	...	...	20	1	20
„ 29th	...	...	20	28	56

From this table the constellations visible during the evenings of September can be ascertained by a reference to their position as given in the Star Chart.

Phases of the Moon.

		H.	M.
September 8th	Full Moon	9	27 p.m.
„ 15th	Last Quarter	11	21 p.m.
„ 22nd	New Moon	8	7 p.m.
„ 30th	First Quarter	4	38 p.m.

Meteors.

	R. A.	Dec.	Character.
July—September	... 335°	+73°	Swift, short.
September 3rd to 8th	353	+39	Very swift.
„ 5th to 15th	62	+36	Swift, streaks.
„ 6th to 17th	106	+52	Swift, streaks.
„ 15th	77	+57	Swift, streaks.
„ 21st	31	+19	Slow, trains.
„ 21st to 27th	87	+43	Swift, streaks.
„ 27th	4	+28	Slow, trains.
August—October 2nd	... 346	0	Slow.
August—October 2nd	... 74	+42	Swift, streaks.

Planets.

Venus.—Begins to be a morning star. It will be very close to the horizon at sunrise on 15th September.

Saturn.—The position of the planet on 15th September at 8 p.m. will be R. A. 3 h. 13 m. 17 s. Dec. $15^{\circ}23'48''$ N. The time of its rising will be 8 h. 46 m. p.m. on the 15th September.

Mars.—The position of the planet on 15th September at 8 p.m. will be R. A. 4 h. 9 m. 57 s. Dec. $19^{\circ}24'25''$ N. The time of its rising will be 9 h. 36 m. p.m. on 15th September.

Jupiter.—The position of the planet on 15th September at 8 p.m. will be R. A. 14 h. 39 m. 17 s. Dec. $14^{\circ}35'10''$ S. The time of its setting will be 8 h. 20 m. p.m. on the 15th September.

For the month of October 1911.

Sidereal time at 8. p m.

			H.	M.	S.
October	1st	...	..	20	36 49
„	8th	...	...	21	4 25
„	15th	...	...	21	32 1
„	22nd	...	...	21	59 37
„	29th	...	...	22	27 12

From this table the constellations visible during the evenings of October can be ascertained by a reference to their position as given in the Star Chart.

Phases of the Moon.

			H.	M.
October	8th	Full Moon ...	...	9 41 a.m.
„	15th	Last Quarter ...	...	5 16 a.m.
„	22nd	New Moon ...	...	9 39 a.m.
„	30th	First Quarter...	...	0 12 p.m.

Meteors.

		R. A.	Dec.	Character.
October	2nd	... 230	+52	Slow, bright.
„	4th	.. 310	+79	Slowish.
„	8th	.. 77	+31	Swift, streaks.
„	8th to 14th	... 45	+78	Small, short.
„	14th	... 133	+68	Rather swift.
„	15th	... 31	+9	Slow.
„	* 18th to 20th	... 92	+15	Swift, streaks.
„	23rd	... 100	+13	Swift, streaks.
„	29th	... 109	+23	Very swift.

*This is an important shower.

Planets.

Venus.—Is a morning star. The position of the planet on the 15th October at 8 p.m. will be R. A. 10 h. 58 m. 18 s. Dec. $2^{\circ}30'2''$ N. The time of its rising will be 2 h. 55 m. a.m. on the 16th October.

Saturn.—The position of the planet on the 15th October at 8 p.m. will be R. A. 3 h. 7 m. 50 s. Dec. $14^{\circ}56'54''$ N. The time of its rising will be 6 h. 44 m. p.m. on the 15th October.

Mars.—The position of the planet on the 15th October at 8 p.m. will be R. A. 4 h. 37 m. 46 s. Dec. $21^{\circ}20'48''$ N. The time of its rising will be 8 h. 2 m. p.m. on the 15th October.

Jupiter.—The position of the planet on the 15th October at 8 p.m. will be R. A. 15 h. 2 m. 13 s. Dec. $16^{\circ}21'5''$ S. The time of its setting will be 6 h. 41 m. p.m. on the 15th October.

Eclipse of the Sun.

An Annular Eclipse of the sun partially visible in India will occur on the morning of October 22nd. The line of the central eclipse passes from Turkestan through Thibet and South-East China into the China Sea. It then passes between the Philippine Islands and Borneo and through the southern part of the Island of New Guinea.

The times and extent of the eclipse for several places in India will be found in the paper on the subject in another part of the JOURNAL.

For the month of November 1911.

Sidereal time at 8 p.m.

				H.	M.	S.
<i>November 1st</i>	...	...	...	22	39	2
„ <i>8th</i>	...	..	...	23	6	38
„ <i>15th</i>	...	...	...	23	34	14
„ <i>22nd</i>	...	...	...	0	1	50
„ <i>29th</i>	...	...	...	0	29	26

From this table the constellations visible during the evenings of November can be ascertained by a reference to their position as given in the Star Chart,

Phases of the Moon.

		H.	M.
November 6th	Full Moon ...	... 9	18 p.m.
..	13th Last Quarter ...	... 0	50 p.m.
..	21st New Moon ...	... 2	1½ a.m.
..	29th First Quarters	... 7	1½ a.m.

Meteors.

	R.A.	Dec.	Character.
November 1st	... 43	+22	Slow, bright.
.. 2nd	... 58	+ 9	Slow, bright.
.. 5th to Decr. 4th	162	+58	Swift, streaks.
.. 10th—12th	133	+31	Very swift, streaks
.. 14th—16th	150	+22	Swift, streaks.
.. 16th—28th	154	+41	Swift, streaks.
.. 20th—23rd	63	+23	Slow, bright.
.. 17th—23rd	25	+43	Very slow, trains.
.. 25th to Decr. 12th	189	+73	Rather swift.
.. 30th	190	+58	Swift, streaks.

The showers on the 14th, 16th and 17th—23rd are the celebrated Leonid and Andromedid meteor showers respectively.

Planets.

Venus.—Is a morning star. Its position on the 15th November at 8 p.m. will be R. A. 12h. 22m. 49s. Dec. $1^{\circ}26'16''$ S. The time of its rising will be 2h. 25m. a.m. on 16th November.

Saturn.—The position of this planet on 15th November at 8 p.m. will be R.A. 2h. 58m. 21s. Dec. $14^{\circ}6'40''$ N. The time of its setting will be 5h. 25m. a.m. on 16th November.

Mars.—The position of this planet on 15th November at 8 p.m. will be R. A. 4h. 13m. 18s. Dec. $21^{\circ}55'46''$ N. The time of its rising will be 5h. 35m. p.m. on 15th November.

Jupiter.—On the 16th of November this planet rises immediately after sunrise and sets immediately after sunset.

Eclipse of the Moon.

There will be a Penumbral Eclipse of the moon visible in India on the 6th November, 1911.

			H.	M.
First contact with Penumbra	...	...	7	9
Last ,, ,,	...	...	11	4

Extracts from Publications.

Speaking at the Meeting of the British Astronomical Association in April last, Major Grant said that Mr. Donald L. Springall had recently sent a number of communications with regard to the proposed calendar reform under the name of Mr. John C. Robertson. The proposal was to be discussed at a conference arranged by the Swiss Government at the instigation of the International Congress of Chambers of Commerce.

The proposal was that all four quarters of the year should each contain 91 days; that the week should be recognised as a definite unit of time, and that the months should contain four and five weeks. In the first quarter January was to contain four weeks, February four and March five, and that was continued through each of the quarters of the year. It was proposed that New Year's Day should be taken as a day separate from the calendar and called New Year's Day. The year would always begin on a Sunday and would, of course, end on a Saturday. Every month would begin on a Sunday and the whole calendar was arranged on a uniform principle. The advantages claimed for this calendar were that there would be only one set of monthly dates to memorise, and every fixed holiday would occur on the same day of the week, there would be fixed dates for Christmas and Easter; then all weekly markets would recur on the similar dates of each month, and quarter days would always recur on the same day of the week.

All months were even multiples of the week and began with the beginning and ended with the end of the week, and had therefore no troublesome fractions of a week to be dealt with.