

MEMORANDA FOR OBSERVERS

By P. C. BOSE, ESQ.

FOR THE MONTH OF AUGUST 1920.

Standard time of India is adopted in these notes.

Sidereal time at 8 P. M.

		H.	M.	S.
August	1st	... 16	39	35
	8th	... 17	7	10
	15th	... 17	34	46
	22nd	... 18	2	22
	29th	... 18	29	58

From this table the constellations visible in India during the evenings in August can be ascertained by a reference to a Star Chart, as the above hours of Sidereal time represent the hours of Right ascension on the Central Meridian

Phases of the Moon.

		H.	M.	
August	8th	... 6—20	P. M.	Last Quarter.
,,	14th	... 9—13	A. M.	New Moon.
,,	21st	... 4—21	P. M.	First Quarter.
,,	29th	... 6—32	P. M.	Full Moon.
,,	12th	... 11—3	A. M.	Perigee.
,,	24th	... 10—1	A. M.	Apogee.

Conjunction.

August	2nd	... 1—43	P. M.	with Uranus	5°—42' S.
,,	13th	2—39	A. M.	,, Mercury	3°—23' N.
,,	13th	8—17	P. M.	,, Neptune	5°—14' N.
,,	14th	10—49	P. M.	,, Jupiter	5°—55' N.
,,	15th	9—57	P. M.	,, Venus	6°—24' N.
,,	16th	12—20	P. M.	,, Saturn	6°—23' N.
,,	21st	12—24	P. M.	,, Mars	2°—42' S.
,,	30th	6—11	P. M.	,, Uranus	5°—41' S.

Positions of the planets on the 15th.

R. A.	Decl.	Constellation	Indian Name
(H. M. S.)	(° ' ")	Engl. Name	
Mercury 8 22 51	18 26 0".2	N. Cancer	Karkat
Venus 10 26 3	11 21 44	N. Leo	Sinha.
Mars 14 58 47	18 39 40	s. Virgo	Kanya.
Jupiter 9 59 44	13 8 36	N. Leo.	Sinha.
Saturn 10 56 41	8 39 14	N. "	"
Uranus 22 25 22	10 43 59	s. Taurus.	Meen.
Neptune 8 56 39	17 7 50	N. Cancer.	Karkat.

OBJECTS OF INTEREST.

BY REV. A. C. RIDSDALE, M.A., F.R.A.S., F.R. (MET.)
 SOC., M. LOND. MATH. S., F.P.H.S., A.L.C.M., FOREIGN
 MEMBER OF SOCIETE ASTRONOMIQUE DE FRANCE.

For August 1920.

Nebulæ.

	R. A.	Decl.
	H. M.	
Annular Neb. ...	17 14	-38° 21'
" " ...	17 22	-23° 39'
Trifid Neb. ...	17 55	-23° 2'

Clusters.

	R. A.	Decl.
	H. M.	
Cluster ...	16 52	-44° 29'
" ...	16 54	-29° 56'
" ...	17 31	-3° 10'
Nebulous Cl ...	17 57	-24° 21'

Variables.

	R. A.	Decl.	Range
	H. M.		
α Hercules (irregular)	17 10	+14° 30'	3'1-6'9
\times Sagittarii period 7d. oh			
17 im	17 41	-27° 48'	4'0-6'0
w Sagittarii	17 58	-29° 35'	4'8-5'7
R Scuti (irregular)	18 42	-5° 49'	4'7-9'0

Doubles.

	R. A.		Decl		Distance
	H.	M.			
Antares	16	22	—26	10	3'5"
36 Ophiuchi	17	8	—26°	25'	5'5"
α Hercules	17 9		+14° 32"		4'6"
{ Ruby					
{ Emerald					

METEOR NOTES FOR AUGUST 1920.**Chief Meteor Radiants for August 1920.**

	R. A.		Decl.
Dates	H.	M.	
August 15 to 25	19	25	+60
August—September	23	0	0
July 19 to August 19	Perseid shower.		

By far the most important display at this time of year is that of the Perseids which are visible for about a month. the radiant is a moving one, varying from 1h. 15m. +50' to 3h. 45m. +59° during the period July 19 to August 16. The maximum display is about August 10, 11, when from 50 to 70 meteors may be seen every hour. The radiant on August 11 is at 3h. 0h. +57.
