MONTLY NOTICES

OF THE

l'Astronomica Society of India

For the month of July 1920.

Standard Time of India is adopted in these Notes.

MEMORANDA FOR OBSERVERS.

By P. C. Bose Esq.

Siderea time at 8 p.m.

		H.	M.	S.
July	ıst	14	37	21.32
15	8th	15	4	57.22
59	15th	15	32	33.11
,,	sand	16		9.0
,,	29th	16	27	44,89

From this table constellations visible in India during the evenings in July may be ascertained by a reference to a star chart, as the above hours of sidereal time represent the hours of Right Ascension on the meridian.

PHASES OF THE MOON.

July	8th	10-35.1	(A. M.)	Last Quarter
5)	16th	154.5	(A.M.)	New Moon
,,	2 3rd	12-49.9	(A.M.)	First Quarter
**	31st	448.8	(A.M.)	Full Moon
**	14th	5-53	(A.M.)	Perigee
**	27th	7-53	(P.M.)	Apogee

MONTHLY NOTICES.

CONJUNCTIONS.

July	6th	at	9-42	A.M.	with	Uranus	5°-50′	S.
,,	16th		9-37	,,	"	Venus	5° - 59′	N.
,,	17th		5-17	**	3.9	Mercury	10-18	,,
"	17th		8-17	"	,,,	Neptune	5°-15'	,,
1)	18th		2-37	"	1)	Jupiter	6°-6′	,,
3)	19th		9-9	,,	"	Saturn	6° -4 1′	"
				11-34	"	Mars	o° - 48′	

POSITIONS ON THE 15TH.

				Constell	ations
	R, A.	Decl		English	Indian
	(H.M.S.)	(o ')		Names	Names
Mercury	8-46-35	14-22-51	N	Cances	Karkat
Venus	7-52-15	21 - 56-55	"	"	72
Mars	13-57-18	13-20-34	S	Virgo	Tula
Jupiter	9-34-4	15-19-14	N	Leo	Singha
Saturn	10-43-44	9-59-11	19	33	"
Uranus	22-29-16	10-20-40	S	Aquerius	Meen
Neptune	8-52-4	17-36-14	N	Cances	Karkat

OBJECTS OF INTEREST.

By Revd. A. C. Ridsdale, Ma., F.R.A.S., &c. For July, 1920.

Nebulæ

	K. A.	Decl,
	н, М.	(°′)
Nebula	16 10	-22° 41'
Cluster	15 12	+ 2° 33′
"	15 38	-37° 23'
Hercules Cluster	16 37	+36° 42'
Cluster	1 6 41	— 1° 14'

MONTHLY NOTICES

Variables.

	R. H.	A. M.	Decl, (′°)	Range.
R Serpentis	15	46	+15° 26'	5.6 – 13.0

Doubles.

	R,	A.	De 1.	Distance.
	H.	M.	(° ~)	(")
Zeta Bootes	14	35	+14° 15'	I.O"
Epsilon Bootes	14	39	+27° 35'	2. 6"
X_i Bootes $\left\{ \begin{array}{l} \text{Red} \\ \text{Yellow} \end{array} \right\}$	14	45	+19° 36′	5-4"
44 Bootes	14	59	+48° 7'	4.8"
Mu Bootes	15	19	+37° 47′	108.4"
Delta Serpentis	15	2 9	+10° 56′	2.5"
Xi Libræ	15	57	-11° 3'	1.0'

Meteors.

For July, 1920.

		R. A.	Decl.
Dates		H. M.	(°')
July	6 to 22	19 0	-13°
j 1	8 to 31	21 0	+31°
,,	28	22 35	— I I º
"	22 to 27	22 20	+51°
July-August		22 30	-12°
July-September		22 20	+73°

By far the most important display at the time of the year is that of the Preseids which are visible for about a month The radiant is a moving one, varying from 1 hr.—15 mins. R. A. and 59° Decl. during the period from July 19 to August 16. The maxium display is about August 10 and 11, when from 50 to 70 meteors may be seen every hour. The radiant on August 11 is at 3 hr.—0 Min. R.A. and +57° Decl.