

OLBERS' COMET.—The following ephemeris for Berlin mid-night is in continuation of that given in NATURE, vol. xxxvii. p. 234:—

1888.	R.A.	Decl.	Log r .	Log Δ .	Bright-ness.
	h. m. s.	°			
Jan. 22...	17 18 29	3 49'6 S.	0'2866	0'3932	0'36
24...	17 21 39	4 5'3			
26...	17 24 44	4 20'4	0'2958	0'3948	0'34
28...	17 27 44	4 35'0			
30...	17 30 40	4 49'2	0'3048	0'3961	0'33
Feb. 1...	17 33 31	5 3'0			
3...	17 36 17	5 16'3	0'3137	0'3969	0'31
5...	17 38 59	5 29'2			
7...	17 41 36	5 41'7 S.	0'3224	0'3974	0'30

The brightness on 1887 August 27 is taken as unity.

ASTRONOMICAL PHENOMENA FOR THE WEEK 1888 JANUARY 22-28.

(FOR the reckoning of time the civil day, commencing at Greenwich mean midnight, counting the hours on to 24, is here employed.)

At Greenwich on January 22

Sun rises, 7h. 55m.; souths, 12h. 11m. 46'3s.; sets, 16h. 28m.; right asc. on meridian, 20h. 16'9m.; decl. 19° 44' S. Sidereal Time at Sunset, oh. 34m.

Moon (Full on January 28, 23h.) rises, 11h. 58m.; souths, 19h. 8m.; sets, 2h. 29m.*; right asc. on meridian, 3h. 14'6m.; decl. 12° 39' N.

Planet.	Rises.		Souths.		Sets.		Right asc. and declination on meridian.	
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	
Mercury..	8 16	12 24	16 32	20 29'3	21 11	S.		
Venus....	5 7	9 15	13 23	17 19'6	21 7	S.		
Mars.....	23 47*	5 19	10 51	13 22'8	6 13	S.		
Jupiter...	3 35	7 53	12 11	15 57'2	19 33	S.		
Saturn....	16 26*	0 19	8 12	8 22'5	19 56	N.		
Uranus...	23 29*	5 1	10 33	13 4'6	6 9	S.		
Neptune..	11 56	19 35	3 14*	3 41'8	17 54	N.		

* Indicates that the rising is that of the preceding evening and the setting that of the following morning.

Occultations of Stars by the Moon (visible at Greenwich).

Jan.	Star.	Mag.	Disap.	Reap.		Corresponding angles from vertex to right for inverted image.
				h. m.	h. m.	
23	f Tauri	4	1 19	near approach	51	0
26	χ ³ Orionis	6	0 36	1 20	178	258
26	68 Orionis	6	4 57	near approach	215	—
28	B. A. C. 2683	6	5 10	near approach	209	—

Jan.	h.	Event
22	1	Uranus stationary.
23	14	Saturn in opposition to the Sun.
24	23	Jupiter in conjunction with and 0° 8' south of β ¹ Scorpii.
28	14	Saturn in conjunction with and 1° 10' north of the Moon.

Variable Stars.

Star.	R.A.		Decl.		h. m.
	h. m.	h. m.	h. m.	h. m.	
U Cephei	0 52'4	81 16	N.	Jan. 25,	21 20 m
Algol	3 0'9	40 31	N.	" 23,	20 37 m
S Aurigæ	5 19'7	34 3	N.	" 28,	M
R Canis Majoris	7 14'5	16 12	S.	" 27,	20 36 m
				" 28,	23 52 m
S Cancri	8 37'6	19 26	N.	" 28,	22 28 m
W Virginis	13 20'3	2 48	S.	" 26,	5 0 m
R Camelopardalis.	14 26'1	84 20	N.	" 25,	M
δ Libræ	14 55'0	8 4	S.	" 22,	19 51 m
				" 25,	3 42 m
U Ophiuchi	17 10'9	1 20	N.	" 24,	3 4 m
				and at intervals of	20 8
δ Lyræ	18 46'0	33 14	N.	Jan. 25,	23 0 m
V Cygni	20 37'7	47 45	N.	" 22,	M
S Delphini	20 37'9	16 41	N.	" 24,	M
Y Cygni	20 47'6	34 14	N.	" 22,	20 40 m
				" 25,	20 33 m
δ Cephei	22 25'0	57 51	N.	" 28,	0 0 m

M signifies maximum; m minimum.

Meteor-Showers.

	R.A.	Decl.	
Near ϵ Ursæ Majoris	133	48 N.	
" σ Leonis	167	5 N.	Very swift.
" α Coronæ Borealis	236	25 N.	January 28. Very swift.

GEOGRAPHICAL NOTES.

DR. MEYER has been giving an account of his ascent of Kilimanjaro to the Berlin Geographical Society, and from the brief abstract which has appeared his statements are not quite consistent with those made in his letter already referred to. For one thing, Alpinists are doubtful if Dr. Meyer got so close to the summit by a thousand feet as he himself thinks he did; and moreover, from his own statements, his aneroid was quite untrustworthy.

A SPECIAL meeting of the Paris Geographical Society was held on Saturday, to welcome MM. Bonvalot, Capus, and Pepin, who have been journeying in Central Asia. We have already on several occasions referred to this journey, during which the travellers crossed the Pamir, but not for the first time, as they themselves seem to believe. So far it would appear as if the original results of this expedition were of no great value.

THE paper at Monday's meeting of the Royal Geographical Society was by a young engineer, Mr. W. J. Steains, on an exploration of the Rio Dôce and its northern tributaries (Brazil). The Rio Dôce has been in past years a classical region for research in natural history, but for many years it has been neglected. It flows through a region that has scarcely been touched by the influences of civilization, a region which is the home of the Botocudos, one of the most primitive people on the face of the earth. The Rio Dôce lies between parallels 19°-21° S. latitude, and is formed by several small streams springing from the eastern slope of an important range of mountains known by the name of the Serra da Mantiqueira. This range, running in a north-easterly direction, forms a portion of the irregular "coast-range" of Brazil, and forms, so to speak, the "retaining wall" of the series of elevated, undulating tablelands composing the greater portion of Central and Southern Brazil. The total length of the Rio Dôce is a little over 450 miles. That portion of the Rio Dôce basin lying east of the Serra dos Aymôres is a densely wooded lowland, sloping gradually towards the coast from an elevation of about 900 feet. Near the coast this plain resolves itself into a long stretch of low alluvial ground, studded for the most part with small shallow lakes that communicate with each other by means of long, narrow, winding streams, called "vallôes." The largest of these lakes is the Lagôa Juparaná, which communicates with the Dôce some 30 miles above its mouth by means of a narrow, tortuous, deep channel 7 miles long. The lake is 18 miles long, and about 2½ miles broad at its southern extremity. It is very deep, and with the exception of some low alluvial ground at its northern and southern ends, is surrounded by high wooded bluffs, composed for the most part of reddish clay overlying a stratum of coarse red sandstone. At the head of the lake is a river—the S. José, which rises in the Serra dos Aymôres, and flows through an unexplored district, inhabited by wandering hordes of wild Botocudo Indians. Throughout the whole of its course, the S. José flows through dense forest abounding in the much sought-after "Jacaranda," or rosewood tree (*Bignonia cœrulea*, Will.) The Botocudos number about 7000 people, and among some of the more savage tribes cannibalism still prevails. Mr. Steains stayed several weeks among these people, and is therefore able to add something to our knowledge of them. In appearance Mr. Steains states, the Botocudos can scarcely be called prepossessing. The average height is 5 feet 4 inches. Their chests are very broad, and this accounts for the facility with which they can bend their bows, which are exceedingly strong, being made out of the tough springy wood of the Ayri or Brijaubá palm (*Astrocaryum Ayri*, Mart.). The feet and hands of the Botocudos are small rather than delicate, and these are in fair proportion to their legs and arms, which are lean but muscular. Concerning the colour of their skin, these Indians are of all shades, some being of a dark reddish-brown, whilst others, and especially the women, are quite light. With regard to features, the Botocudos struck Mr. Steains, as they have done