

I have taken no account of the great meteoric showers which I witnessed on 1866 Nov. 13, 1872 Nov. 27 and 1885 Nov. 27 as the thousands of meteors appearing in such very exceptional displays would swell the numbers far beyond ordinary experience. The idea in forming the table was to show the horary number of meteors to be expected on ordinary nights of the year when the conditions are favourable for viewing these phenomena. In or near large towns where artificial illumination affects the sky, the frequency of meteors is not nearly so well marked as in country districts where darker skies enable much smaller objects to be observed.

	Jan.	Feb.	Ma.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18	8	7	7	7	6	8	20	15	13	12	9
2	28	7	6	8	6	5	7	19	14	14	12	9
3	12	7	7	8	6	6	8	19	13	14	13	10
4	9	6	8	7	7	6	9	21	12	14	14	11
5	10	6	7	7	6	7	9	22	12	12	12	12
6	9	6	6	8	5	6	8	24	14	13	13	13
7	8	7	7	6	5	6	8	27	13	12	13	12
8	7	7	7	7	6	6	9	34	12	14	14	14
9	7	7	7	7	6	7	9	48	12	13	14	16
10	7	6	8	8	6	6	10	69	13	14	15	22

Bristol, 1911 June 24.

	Jan.	Feb.	Ma.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	8	6	8	8	6	6	10	48	12	14	16	23
12	8	7	7	7	6	7	11	30	13	15	17	19
13	8	7	8	7	7	6	11	22	14	16	20	16
14	9	7	9	8	6	6	12	20	15	17	21	13
15	8	8	8	7	6	7	12	18	15	21	18	10
16	9	8	9	6	5	7	13	17	15	20	17	10
17	9	8	10	6	5	8	13	16	14	21	16	9
18	9	8	9	7	5	7	14	15	13	21	15	8
19	9	9	8	8	6	6	15	15	14	20	14	9
20	10	9	8	9	6	8	16	16	15	19	15	8
21	9	9	7	10	6	8	17	17	17	18	16	10
22	8	8	7	8	7	6	18	19	16	17	15	10
23	7	8	8	7	7	7	19	19	15	16	16	8
24	6	8	8	6	6	7	20	20	14	16	14	8
25	6	8	8	6	6	7	21	21	13	15	15	9
26	7	7	7	5	6	7	23	20	14	14	14	8
27	7	7	7	6	5	7	25	19	15	15	15	9
28	8	7	8	5	6	6	27	20	13	16	14	9
29	7		8	6	6	6	26	19	14	15	13	10
30	8		9	7	7	7	23	18	15	14	12	9
31	7		8		8		21	16		14		10

W. F. Denning.

### On the orbit of $\Sigma 2525$ . By W. Doberck.

$\Sigma 2525$  was noted single by *Schiaparelli* in 1887, 1888, and 1889 and also by *H. Struve* in 1888, but in 1886 *Schiaparelli* noted the companion in 208.7 at a distance of 0".22, a position approximately agreeing with his previous observations. The following orbit gives for 1886.92  $\theta = 113.7^\circ$ ,  $\varrho = 0".06$ . *Schiaparelli* probably mistook some small speck of light for the companion. The motion is retrograde. The anomalies are taken negative before and positive after the peri-astron passage. The hypothetical parallax is 0".024. Precession has been neglected. Abbrevi-

ations of names are explained in A. N. 4346: Gls means *Glaisher*.

$$\begin{aligned}\Omega &= 9^\circ 0' & P &= 243^y 9 \\ \lambda &= 274.23 & T &= 1887.09 \\ \gamma &= 132.42 & a &= 0".952 \\ e &= 0.9175\end{aligned}$$

$$\varrho \cos \theta = +0".0264 + 0".3770 \sin(E - 4^\circ 23')$$

$$\varrho \sin \theta = -0.5940 + 0.6486 \sin(E + 86.30)$$

$$\pm z = +0.6401 + 0.6981 \sin(E - 88.15)$$

### Ephemeris.

Year	$\theta$	$\varrho$	$z$	Year	$\theta$	$\varrho$	$z$	Year	$\theta$	$\varrho$	$z$
1912.50	306.0	0".686	0".6623	1920.50	300.6	0".788	0".7932	1928.50	296.4	0".876	0".9032
1914.50	304.5	0.713	0.6973	1922.50	299.5	0.810	0.8225	1930.50	295.5	0.895	0.9278
1916.50	303.1	0.739	0.7306	1924.50	298.4	0.833	0.8505	1932.50	294.6	0.912	0.9514
1918.50	301.8	0.764	0.7626	1926.50	297.4	0.855	0.8774	1934.50	293.8	0.930	0.9743

Obs.	1800 +	$\theta_c$	$\varrho_c$	$\theta_o - \theta_c$	$\varrho_o - \varrho_c$
$\Sigma$	30.43	255.6	1".04	+0.3	+0".29
$\Sigma$	36.14	253.6	0.99	+1.9	+0.31
Da	40.62	251.8	0.96	+3.7	+0.29
$O\Sigma$	.70	"	"	-1.6	+0.17
Gls	41.70	251.4	0.95	-0.7	+0.08
Mä	42.41	251.1	0.94	-0.1	-0.12
Gls	.73	251.0	"	-0.5	-0.12
"	43.61	250.6	0.93	+4.4	0.00

Obs.	1800 +	$\theta_c$	$\varrho_c$	$\theta_o - \theta_c$	$\varrho_o - \varrho_c$
Mä	43.69	250.6	0".93	+3.4	+0".02
Gls	44.60	250.2	0.92	-2.1	0.00
$O\Sigma$	54.63	245.5	0.82	+1.6	+0.18
Se	56.61	244.3	0.79	+2.8	+0.06
A	58.39	243.3	0.77	+15.4	-
A	64.74	238.8	0.68	+2.5	-0.13
En	65.48	238.3	0.67	+15.3	+0.06
A	.58	238.2	"	+2.4	-0.04

Obs.	1800 +	$\theta_c$	$\varrho_c$	$\theta_o - \theta_c$	$\varrho_o - \varrho_c$
Se	65.64	238.2	0.67	+ 1.7	- 0.27
OΣ	.76	238.1	»	+ 1.4	+ 0.03
A	71.54	232.6	0.57	+ 0.5	+ 0.03
OΣ	72.61	231.2	0.54	+ 0.9	+ 0.09
Fer	73.54	230.1	»	+ 11.0	—
WS	.65	229.9	0.53	+ 2.2	- 0.03
A	.71	229.8	0.52	+ 11.2	—
A	74.60	228.6	0.50	+ 1.2	—
Gl	.84	228.2	0.49	+ 6.0	- 0.01
Sp	75.65	227.0	0.47	+ 5.1	- 0.02
WS	.66	»	»	+ 6.6	—
Sp	77.02	224.7	0.45	+ 5.5	- 0.08
A	.82	223.1	0.43	+ 14.9	—
Hl	79.71	218.8	0.37	- 5.6	- 0.04
Do	.79	218.6	0.37	+ 24.4	—
Sp	80.67	216.1	0.35	+ 1.7	- 0.03
Do	.71	215.9	0.34	- 5.9	—
En	83.26	215.4	0.25	+ 12.5	- 0.02
Per	.58	203.5	0.24	+ 3.5	—
Sp	.63	203.2	»	- 3.2	+ 0.11
HΣ	89.78	354.3	0.19	+ 29.8	- 0.04
β	91.46	342.8	0.26	+ 0.6	- 0.08
Ho	.56	342.3	»	- 0.1	+ 0.04
HΣ	.77	341.2	0.27	+ 5.6	- 0.07
β	92.42	338.2	0.29	- 9.9	- 0.02
Com	93.80	333.2	0.33	- 3.6	- 0.02
Sp	94.78	330.2	0.36	- 0.1	- 0.06
Dy	95.65	327.9	0.38	- 0.4	- 0.01
Gla	.67	»	»	- 8.1	- 0.03
L	.68	»	»	- 2.6	- 0.03
Com	»	»	»	- 0.6	0.00
»	96.66	325.6	0.40	+ 0.8	+ 0.01
L	.69	325.5	0.41	+ 1.7	+ 0.10
Sp	.77	325.3	»	+ 0.1	+ 0.03
A	97.60	323.6	0.43	- 1.4	+ 0.05
Com	.64	323.5	»	- 1.9	+ 0.02
L	.69	323.4	»	+ 0.5	- 0.04
Sk	.87	323.1	»	- 30.5	—
L	98.62	321.7	0.45	- 4.4	+ 0.05
Com	.68	321.6	»	- 0.9	+ 0.02
Br	.72	321.5	»	- 1.3	- 0.01
Bry	.74	»	»	- 1.7	- 0.06
Sk	.82	321.4	»	- 6.9	+ 0.05
A	99.62	320.0	0.46	- 0.1	0.00
Bow	»	»	»	- 2.8	- 0.04
L	99.68	319.9	0.47	0.0	- 0.01
Bry	.77	319.8	»	- 5.4	- 0.08

Kowloon, Elgin Rd., Sutton, Surrey, 1911 June 19.

Obs.	1900 +	$\theta_c$	$\varrho_c$	$\theta_o - \theta_c$	$\varrho_o - \varrho_c$
Bry	00.62	318.5	0.48	+ 3.2	- 0.01
Do	.63	»	»	- 0.1	- 0.04
Bow	01.64	317.0	0.50	- 4.0	+ 0.05
L	.65	»	»	+ 2.8	+ 0.01
Com	.72	316.9	0.51	+ 3.4	+ 0.08
Bow	02.61	315.6	0.53	- 2.4	- 0.10
L	.66	»	»	- 2.3	- 0.08
Com	.76	315.5	»	+ 4.2	+ 0.01
Lh	03.53	314.5	0.55	- 4.7	+ 0.27
Bis	.61	314.4	»	+ 3.1	+ 0.03
Com	.65	314.3	»	+ 4.7	+ 0.11
Bow	.66	»	»	- 5.5	+ 0.06
»	04.61	313.3	0.57	- 1.6	- 0.01
Doo	.69	313.2	»	+ 23.8	+ 0.16
Lh	.80	313.0	»	- 4.3	+ 0.03
A	05.46	312.3	0.58	- 1.4	- 0.04
Lh	.54	312.2	»	+ 1.1	+ 0.06
Bow	.76	312.0	»	+ 0.8	+ 0.08
Lh	06.56	311.2	0.60	- 0.1	+ 0.33
Com	.60	»	»	+ 5.0	- 0.03
Bow	.68	311.1	»	- 0.9	+ 0.06
»	07.56	310.2	0.61	- 5.0	+ 0.06
Do	08.67	309.2	0.63	+ 2.1	+ 0.04
L	.77	309.0	»	+ 1.8	- 0.01
Bow	.84	»	0.64	- 1.4	+ 0.10
Jk	09.54	308.4	»	+ 4.2	- 0.03
Bow	.58	»	»	+ 0.2	+ 0.02
Do	.65	308.3	0.65	+ 0.7	+ 0.14
L	.83	308.1	»	+ 3.7	+ 0.07
Do	10.65	307.4	0.66	+ 4.3	+ 0.16

Observer	Prob. Errors of Angle			Errors of Distance		
	Deg. at $\rho = 0.5$	Arc	$n$	Const.	P. E.	$n$
<i>O. Struve</i>	2.10	0.019	4	+ 0.0117	0.054	4
<i>Glaisher</i>	3.32	0.030	4	- 0.010	0.054	4
<i>Dembowski</i>	7.20	0.065	7	- 0.080	0.073	4
<i>Schiaparelli</i>	1.95	0.018	6	- 0.008	0.048	6
<i>Wilson &amp; Seabr.</i>	10.25	0.092	4	+ 0.010	0.045	2
<i>Doberck</i>	4.86	0.044	6	+ 0.075	0.066	4
<i>Comstock</i>	2.49	0.022	9	+ 0.022	0.028	9
<i>Lewis</i>	2.02	0.018	9	+ 0.007	0.041	9
<i>Bowyer</i>	2.41	0.022	10	+ 0.028	0.043	10
<i>Bryant</i>	3.81	0.034	3	- 0.050	0.028	3
<i>Aitken</i>	1.07	0.010	3	0.000	0.031	3
<i>Lohse</i>	2.73	0.024	4	+ 0.172	0.124	4

W. Doberck.

## Komet 1905 VI (1906 a Brooks).

1906 Jan. 28 10<sup>h</sup> 57<sup>m</sup> 0<sup>s</sup> M. Z. Wien  $\Delta\alpha = -1^m 27^s.44$   $\Delta\delta = -2' 23''.2$   $\alpha$  app. = 16<sup>h</sup> 18<sup>m</sup> 22<sup>s</sup> 79 (9.645<sub>n</sub>) $\delta$  app. = +49° 41' 51.4 (0.862) Red. ad l. app. - 1.43 - 8.8.Vergleichstern (1906.0):  $\alpha = 16^h 19^m 51^s.66$   $\delta = +49^\circ 44' 23''.4$  AG Bo 10498.

Die Beobachtung ist A. N. 170.273 in vorläufiger Reduktion schon veröffentlicht.

Wien, k. k. Sternwarte, 1911 März.

J. Holetschek.