$\Delta = 36,1$ Rh. F.	Juli 1827
28,8	August
21,2	September
20,6	October
24,3	November
31,9	December
22,0	Januar 1828
4,6	Februar
14,2	März
21,1	April
37,2	Mai
26,5	Juni
25,6	Juli
22,1	August
31,7	September
28,6	October
12,1	November
25,4	December.

Aus allen im Jahre 1827 angestellten Beobachtungen ist $\Delta = 28,5$, aus den Beobachtungen der 9 letzten Monate $\Delta = 27,2$, weshalb ich, ehe ein Nivellement die Erhebung des Danziger Barometers ausgemittelt hatte, aus der bekannten Erhebung des Königsberger Barometers von 70,4 Rheinl. Fuß geschlossen hatte, das Danziger Barometer stehe 43 Rh. F. über der Ostsee. Durch Hinzuziehung der drei ersten Monate des J. 1827 erhält man $\Delta = 28,5$ F. aus den Beobachtungen des J. 1828 $\Delta = 22,6$

Aus allen 684 Beobachtungen der J. 1827 u. 1828 folgt

$$\Delta = 25,6 \text{ Rh. F.}$$

aus dem Nivellement $\Delta = 24,2$.

Strehlke.

Osservazioni di Vesta intorno all' opposizione col Sole fatte nell' I. R. Osservatorio di Padova.

1829.	Tempo Medio.	A.R. osservata di Vesta.	Decl. di Vesta.	
	^h ['] ^{''}	^o ['] ^{''}	^o ['] ^{''}	
Aprile 26	13 24 35,4	220 24 43,4	— 3 5 49,8	determ. alla Macch. parallattica
28	12 13 11,0	219 57 8,1	— 2 59 36,6	(al. Quad. Murale, e allo strom. pass.)
29	12 8 17,8	219 42 47,2	— 2 56 39,8	idem.
30	12 3 24,9	219 28 29,6	— 2 53 50,1	idem.
Maggio 1	11 58 31,6	219 14 6,9	— 2 51 7,3	idem.
5	11 38 52,1	218 16 43,5	— 2 41 55,9	idem.

Giovanni Santini.

Schreiben des Herrn *George Innes* aus Aberdeen an den Herausgeber.

Aberdeen 1829. April 18.

Having had early communications of the observations of the Solar Eclipse of the 29th November 1826, which were made in Great Britain and Ireland, I made the necessary calculations, in order to deduce the longitude of each of the places where the observations were made, and communicated the results to the Astronomical Society of London, which the committee of the Society published in their monthly notices, in the Philosophical Magazine and Annals of Philosophy for September 1827. — In addition to the Observations made in this country, I have lately met with some others, made in Germany and Italy; and although most of these have been already calculated by M. *Wurm* and M. *Santini*, and inserted in some of the numbers of the Astronomische Nachrichten, they could not be compared with those I had previously calculated, as it appears that M. *Santini* used *Carlini's* Tables of the Sun, and *Burckhardt's* Tables of the Moon; whereas I used *Delambre's* Solar, and *Damoiseau's* Lunar Tables; and M. *Wurm* does not state what set of tables he has used. Also, the ellipticity, $\frac{1}{359}$, which I have used for reducing the Latitudes

of the places of observation, and also the Moon's parallax, differs from that used by Mr. *Santini*, which is $\frac{1}{330}$. It does not appear what ellipticity M. *Wurm* has used. Although the figure of the earth has not as yet been satisfactorily ascertained, I do not think it can very much affect the present results, where the same ellipticity has been used for each place of observation. Whatever may have been the ellipticity used by M. *Wurm*, his difference of longitude of Bushey Heath and Aberdeen, differs only 0''03 from mine, but the difference of our results for Abo, is considerable. No correction was applied to the semi-diameter of the Sun for Irradiation, nor to that of the Moon for Inflexion as these have not been well ascertained by Astronomers.

Having reason to think the Bushey Heath observations as good as most of the others, as its longitude has been well ascertained, and as both the beginning and end of the eclipse were observed, I have used it as the basis in the reductions. It is in Longitude 10' 42''43, in time, West from Paris.

Places of Observation.	Observations Apparent Time.	Conjunction, Apparent Time.	Correction of Tables in Lat.	Longitude from Bushey Heath.	Longitude from Paris.
	d h m s	d h m s			
Bushey Heath, Beginning . .	28 21 57 37,14	28 23 35 50,66			10° 42' 43" W.
— — — — — End	29 0 9 50,26	— 23 35 47,64			
— — — — — Beg. and End		— 23 35 50,19	— 2,488		
Epping, — — — — — End	29 0 12 25,25	28 23 37 38,08		1° 50' 44" E.	8 51,99 W.
End at { 25 inch. Achromatic	29 0 11 42,75				
Green- { 46 inch. Achromatic	29 0 11 43,64				
wich. { 5 feet Achromatic	29 0 11 44,65				
{ 5 feet Equatorial	29 0 11 47,75	28 23 37 13,21		1 25,57 E.	9 16,86 W.
{ 30 inch. Achromatic	29 0 11 47,75				
{ 7 feet Newtonian.	29 0 11 49,25				
Dublin, — — — — — End	28 23 37 1,39	28 23 11 51,40		23 56,24 W.	34 38,67 W.
Armagh, — — — — — End	28 23 35 42,19	28 23 10 34,23		25 13,41 W.	35 55,84 W.
Aberdeen, — — — — — End	29 0 1 16,42	28 23 28 48,30		6 59,34 W.	17 41,77 W.
Abo, — — — — — Beginning . .	28 23 54 21,84	29 1 6 21,51		90 30,85 E.	79 48,42 E.
— — — — — End	29 2 5 0,41	— 1 6 14,55		90 26,91 E.	79 44,48 E.
— — — — — Beg. and End.		— 1 6 19,07	— 5,168	90 28,88 E.	79 46,45 E.
Padua, — — — — — Beginning . .	28 23 0 54,83	29 0 24 38,35		48 47,69 E.	38 5,26 E.
— — — — — End	29 1 18 32,13	— 0 24 34,69		48 47,05 E.	38 4,62 E.
— — — — — Beg. and End		— 0 24 36,81	— 1,824	48 46,62 E.	38 4,19 E.
Naples, — — — — — Beginning . .	28 23 16 15,87	29 0 34 7,97		58 17,31 E.	47 34,88 E.
— — — — — End	29 1 32 27,90	— 0 34 13,52		58 25,88 E.	47 43,45 E.
— — — — — Beg. and End.		— 0 34 10,27	+ 2,345	58 20,08 E.	47 37,65 E.
Milan, — — — — — Beginning . .	28 22 46 21,83	29 0 13 56,85		38 6,19 E.	27 23,76 E.
Königsberg, — — — — — End	29 1 59 42,16	29 0 58 15,67		82 28,03 E.	71 45,60 E.

There appears to be some error in the Naples observations, as the error of the Tables in Latitude comes out with a contrary sign. The Königsberg observation is taken from Mr. *Bessels* observations for the year 1826, but it seems that there is an error of one minute in printing.

The following are the elements which I have obtained from *Delambre's* Tables of the Sun, and *Damoiseau's* Tables of 1824 for the Moon. In adopting the Tables of *Damoiseau*, I have reduced the results from the decimal, to the sexagesimal division of the circle.

True time of ecliptic conjunction at Paris.	d h m s
Mean time, Nov.	28 23 34 44,89
Equation of mean to apparent time, at conjunction	+ 11 31,76
True time of ecliptic conjunction. Apparent time.	28 23 46 16,65

Longitude of the Sun and Moon at Con-

junction.	246° 46' 19" 84
Apparent obliquity of the Ecliptic. . .	23 27 36,86
Sun's right ascension.	244 55 38,92
— — — — — declination, north.	21 27 34,17
— — — — — hourly motion in Longitude . . .	2 32,19
— — — — — in Right Ascension . . .	2 41,05
— — — — — Semidiameter	16 15,15
— — — — — horizontal parallax	8,93
Hourly decrease of the equation of time	0,875
Moon's Latitude, north increasing . . .	1 12 29,55
— — — — — equatorial horizontal parallax. .	1 1 23,84
— — — — — horizontal semidiameter	16 43,85
— — — — — hourly motion in long., first order	38 8,447
— — — — — sec. order —	0,064
— — — — — hourly motion in latit., first order	+ 3 25,904
— — — — — sec. order —	0,277

George Innes.