OBSERVATIONS FOR *LONGITUDE* AT KASHGHAR.—*(Continued.)*

from Lunar Zenith Distances.

28th December 1873 *(Civil Date,* P.M. *)*

Long. E. = L_1 = − 76° 15″ = 5*h.* 5*m.* in time

Barometer = B = 25·6 Inches.
Thermometer = T = 18° (Fahrenheit.)

4	5	6	7	8	9	10
I·8670	I·8691	I·8725	I·8743	1·8768	I·8786	I·8812
0·0366	0·0412	0 0488	0·0528	0·0586	0·0627	0·0689
T.9904	I·9903	I·9903	I·9903	I·9903	I·9902	I·9902
0·3336	0·3336	0·3336	0·3336	0·3339	0·3339	0·3339
1·1761	1·1761	1·1761	1·1761	1·1761	1·1761	1·1761
1·5367	1·5412	1·5488	1·5528	1·5589	1·5629	1·5691
1·1644	1·1643	1·1641	1·1640	1·1638	1·1637	1·1635
I·6277	I·6231	I·6153	I·6112	I·6049	I·6008	I·5944
1·424	1·420	1·412	1·409	1·403	1·399	1·393
19*s.*	20*s.*	24*s.*	18*s.*	24*s.*	37*s*	26*s.*
4*m.* 41*s.*	4*m.* 40*s.*	4*m.* 36*s.*	4*m.* 42*s.*	4*m.* 36*s.*	4*m.* 23*s.*	4*m.* 34*s.*

Mean resulting longitude from observations on 28th December 1873—5*h.* 4*m.* 36*s.* or 76° 9′ 0″.

Table used to facilitate the computation.

TABLE I for Δ *S*

☾'s Apparent Zenith Distance.	Horizontal semi-diameter.	
	14′ 0″	17′ 0″
°	″	″
0	12·7	18·8
10	12 5	18 6
20	12·0	17·7
30	11·0	16·3
40	9 7	14·4
50	8 2	12·1
60	6·4	9·5
70	4·4	6·5
80	2·3	3·4
90	0·1	0·2

TABLE II for Δ π

Latitude.	Equatorial Parallax.	
	53′	61′
°	″	″
0	0·0	0·0
10	0·3	0·4
20	1·2	1·4
30	2·7	3·1
40	4·4	5·1
50	6·2	7·2
60	8·0	9·2
70	9·4	10·8
80	10·3	11·9
90	10·6	12 2

TABLE III for Δ $\delta = D\,(1-f)$

D			δ	*f*
Latitude.	π			
	53′	61′		
°	″	″	°	
0	0·0	0·0	0	·00
5	1·8	2·1	5	·00
10	3·7	4·2	10	·02
15	5·5	6·3	15	·03
20	7·2	8·3	20	·06
25	8·9	10·3	25	·09
30	10·6	12·1	30	·13
35	12·1	13·9		
40	13·6	15·6		
45	14·9	17·2		
50	16·2	18·6		

Example. ϕ = 30°·5′
π = 56′·7, δ = 7°
From Tables
D = 11″·5
− *f D* = − 1 ·2
Δ δ = 10