

## TRANSIT OBSERVATIONS.

Latitude 49° 55' N., Longitude 6 h. 28 m. 28 s. West.

Date. 1882.	Star.	Declination.	Culmination.	No. of Wires.	Observed Mean time of Transit by Chro. 652.	Mean time of Stars. Passage.	Observed Chronometer Error.	Instrum. Errors corrected for			Remarks.
								Level.		Azimuth.	
Dec. 4.	$\gamma$ Ursæ Maj.	N. 49° 54'	L	5	8, 47, 49.64	8, 47, 38.53	+ sec. 13.11	+ sec. 13.03			The inclination of axis was observed as follows:— 8 p.m. = W. +0.16 sec; 10.15 p.m. = W. + 0.62 sec.; 10.45 p.m. = W. + 0.62 sec. The correction for inequality of pivots is included in the above level errors:— It is W. + .16 sec. for lamp east.
	$\alpha$ Draco.....	N. 64° 56'	L	5	9, 06, 00.64	9, 05, 49.70	10.94	10.67			
	4 Draco.....	N. 78° 15'	L	2	7, 11, 41.60	7, 11, 36.90	4.70	4.22			
	$\beta$ Arietis.....	N. 20° 14'	U	5	8, 53, 11.68	8, 52, 53.63	18.05	18.33		21.09	
	$\eta$ Piscium....	N. 14° 45'	"	5	8, 30, 17.22	8, 29, 59.95	17.27	17.45		20.57	
	$\circ$ Piscium....	N. 8° 34'	"	5	8, 44, 14.74	8, 43, 57.21	17.53	17.73		21.19	
	$\theta$ Ceti.....	N. 8° 47'	"	5	8, 28, 14.98	8, 22, 57.95	17.03	17.14		21.61	
								Mean	-	21.11	
	$\beta$ Ur Min.....	N. 74° 38'	L	4	9, 55, 35.10	9, 55, 28.88	6.22	5.07			
	5 Ur Min.....	N. 76° 13'	L	8	9, 32, 20.64	9, 32, 16.04	4.60	3.45			
	$\alpha$ Persei.....	N. 49° 27'	U	3	10, 20, 47.80	10, 20, 28.30	19.50	20.50		20.6	
	$\alpha$ Ceti.....	N. 3° 38'	"	3	10, 00, 59.46	10, 00, 41.70	17.76	18.16		21.9	
	$\gamma$ Ceti.....	N. 2° 44'	"	5	9, 42, 27.58	9, 41, 49.20	18.38	18.70		22.4	
								Mean	-	21.63	
	$\delta$ Persei.....	N. 47° 25'	"	3	10, 39, 21.46	10, 39, 02.65	18.81	20.3		20.6	
	$\eta$ Tauri.....	N. 23° 24'	"	5	10, 45, 14.88	10, 44, 53.90	17.58	18.5		21.0	
							2nd Set. Mean	-	20.6		

Mean Chro. error; lamp east is + 21.11

" " " west is + 21.63

Chro. 652, fast - 21.37

## COMBINATIONS FOR AZIMUTH.

## LAMP EAST.

$\eta$  Ursæ Majoris and  $\beta$  Arietis = 5.27.  
 $\alpha$  Draconis and  $\eta$  Piscium = 4.4.  
 $\alpha$  Draconis and  $\circ$  Piscium = 4.74.  
4 Draconis and  $\theta$  Ceti = 4.31.  
Mean = 4.68.

## LAMP WEST.

$\beta$  Ursæ Minoris and  $\gamma$  Ceti = 5.75.  
5 Ursæ Minoris and  $\alpha$  Ceti = 5.5.  
Mean = 5.62.

Mean of Lamp W. and Lamp E. = + 5.15.