

VI.—Latitud del Monumento N° VI actualmente N° 21—Continuación.

Micrómetro.	Hora cronométrica.	Nivel.		Diferencia. Ángulo horario.	Z - Z'.
		oc.	ob.		
R.	<i>h. m. s.</i>			° ' "	"
51.5	6 28 26.8	14.4	59.9	9 22 18.5	743.03
51.0	30 16.0	14.4	59.9	9 49 41	778.86
50.5	31 57.9	14.4	60.0	10 15 14	812.25
50.0	33 46.8	14.3	59.9	10 42 32	847.88
49.5	35 31.8	14.2	59.8	11 8 51	882.17
49.0	37 19.5	14.1	59.9	11 35 51	917.31
48.5	39 7.0	14.1	59.9	12 2 48	952.32
48.0	40 55.4	14.2	60.0	12 29 58	987.56
30.0	48 56.1	11.5	59.0	29 32 56.5	2250.29

Combinación por pares de las observaciones.

Revoluciones combinadas.	Ángulo correspondiente.	Valor de una revolución.	Revoluciones combinadas.	Ángulos.	Valor de una revolución.
60 — 54	430.04	70.007	56.0 — 50.0	419.16	69.890
59.5 — 53.5	419.58	69.990	55.5 — 49.5	417.90	69.650
59.0 — 53.0	430.09	70.015	55.0 — 49.0	417.60	69.600
58.5 — 52.5	419.66	69.943	54.5 — 48.5	418.42	69.737
58.0 — 52.0	419.75	69.958	54.0 — 48.0	419.23	69.872
57.5 — 51.5	430.21	70.035			
57.0 — 51.0	419.35	69.892		R =	69.987 ± 0.031
56.5 — 50.5	418.93	69.822			

Determinaciones de los días 12 y 16.

α Ursa min. *h. m. s.* $\alpha R = 1 18 2.8$ $\delta = 88 43 56.5$

Micrómetro.	Hora cronométrica.	Nivel.		Ángulo.	Z - Z'.	Micrómetro.	Hora cronométrica.	Nivel.		Ángulo.	Z - Z'.
		oc.	ob.					oc.	ob.		
	<i>h. m. s.</i>			° ' "	"		<i>h. m. s.</i>			° ' "	"
50.0	5 20 49.4	20.1	64.3	6 35 35	523.92	43	5 59 16.7	61.1	18.8	7 0 57	9 17.5
49.5	5 22 34.5	20.0	64.3	6 9 14	489.16	44	6 2 46.4	61.1	18.8	7 53 27	10 26.66
49.0	24 16.8	20.0	64.3	5 43 35	455.30	45	6 6 20.5	61.1	18.4	8 47 6	11 37.10
48.5	26 0.6	20.0	64.3	5 17 34	420.93	45.5	6 8 7.4	60.0	18.3	9 13 54	12 12.24
48.0	27 46.3	19.9	64.3	4 51 04	389.92	46	6 9 51.1	61.0	18.3	9 39 54	12 46.29
47.5	29 29.6	19.8	64.3	4 25 10.5	351.64	46.5	6 11 38.8	61.0	18.2	10 6 54	13 21.61
47.0	31 21.0	19.8	64.6	3 57 15	314.67	47.0	6 13 24.5	61.1	18.2	10 33 24	13 56.22
46.5	33 6.8	19.8	64.6	3 30 43.5	279.46	47.5	6 15 9.8	61.1	18.1	10 59 48	14 30.66
46.0	34 51.5	19.8	64.7	3 4 29	244.76	48	6 17 1.4	61.1	18.0	11 27 31.5	15 6.76
45.5	36 38.1	19.5	64.3	2 37 45	209.32	48.5	18 48.3	61.6	18.4	11 54 34.5	15 41.93
45.0	38 22.2	19.3	64.4	2 11 39.5	174.72	49	20 35.4	61.8	18.5	12 21 25.5	16 16.79
44.5	40 5.1	19.3	64.4	1 43 52.0	137.85	49.5	22 20.5	61.8	18.4	12 47 46.5	16 50.93
44.0	41 50.0	19.2	64.3	1 19 34.0	105.60	50	24 7.4	61.8	18.3	13 14 33.0	17 25.57
43.5	43 37.2	19.2	64.3	0 52 42	69.95	50.5	25 58.2	61.9	18.3	13 42 18.0	18 1.40

Determinaciones de los días 12 y 16—Continuación.

Micrómetro.	Hora cronométrica.	Nivel.		Ángulo.	Z - Z'.	Micrómetro.	Hora cronométrica.	Nivel.		Ángulo.	Z - Z'.
		oc.	ob.					oc.	ob.		
	<i>h. m. s.</i>			° ' "	"		<i>h. m. s.</i>			° ' "	"
43.0	5 45 22.9	19.1	64.3	0 26 12	34.78	51	6 27 45.7	61.9	18.2	14 9 18.0	18 36.19
42.5	47 7.8	19.1	64.3	0 6	0.13	51.5	29 31.8	62.0	18.2	14 34 54.0	19 9.12
42.0	48 53.0	19.0	64.4	26 28	35.13	52	31 23.5	61.9	18.0	15 3 54.0	19 46.34
41.5	50 39.3	19.0	64.3	53 7	70.50	52.5	33 10.7	62.0	18.1	15 30 46.5	20 20.76
41.0	52 23.2	19.0	64.3	1 19 10	105.07	53	34 58.8	62.0	18.1	15 57 52.5	20 55.40
40.5	54 7.9	18.8	64.1	1 45 24.5	139.89	53.5	36 50.2	62.0	18.0	16 52 55.5	22 5.50
40.0	55 54.7	18.6	64.0	2 12 11	175.41	54	38 38.5	62.0	18.1	17 47 33.0	23 14.74
39.5	57 39.2	18.4	64.0	2 38 27.5	210.26	54.5	40 30.3	62.1	18.0	18 15 43.5	23 50.31
39.0	59 22.5	18.4	64.0	3 4 17	244.49	55	42 16.3	62.1	18.0	18 42 42.0	24 24.27
38.5	6 1 6.3	18.4	64.1	3 30 18	278.97	55.5	44 8.7	62.1	18.0	19 11 39.0	25 0.63
38.0	2 55.6	18.3	64.0	3 57 42	315.26	56	45 56.3	62.1	18.0	19 39 55.5	25 36.03
37.5	4 38.3	18.3	64.1	4 23 27	349.35	56.5	47 51.8	62.1	18.0	20 7 40.5	26 10.67
37.0	6 25.9	18.2	64.0	4 50 25	385.03	57	49 44.6	62.1	17.9	20 35 48.0	26 45.69
36.5	8 10.2	18.2	64.1	5 16 34	419.60	57.5	51 35.3	62.1	17.9	21 4 21.0	27 21.12
36.0	9 56.9	18.2	64.1	5 43 19	454.95	58	53 27.5	62.1	17.8	21 31 51.0	27 55.14
35.5	11 41.9	18.2	64.1	6 9 8	489.03	58.5	55 21.4	62.1	17.7	21 59 42.0	28 29.47
35.0	13 28.3	18.0	64.0	6 38 18	524.88	59	57 11.1	62.1	17.6	22 28 43.5	29 5.15
34.5	15 13.0	18.0	64.1	7 2 18	559.14	59.5	59 2.2	62.0	17.5	22 57 22.5	29 40.24
34.0	16 59.2	18.0	64.1	7 29 11	594.53	60	7 0 58.0	62.1	17.5	23 25 28.5	30 14.53
						60.5	2 52.3	62.1	17.6	23 54 12.0	30 49.47
						61	4 44.4	62.1	17.5	24 22 58.5	31 24.33
						61.5	6 38.9	62.1	17.5	24 51 42.0	31 59.00
						62	8 33.7	62.0	17.4	25 21 39.0	32 35.01
						62.5	10 28.3	62.1	17.4		
						63	12 27.8	62.1	17.4		

R = 69.821" ± 0.081

R = 69.875" ± 0.015

Valor definitivo de una revolución del tornillo micrométrico = 69.898" ± 0.024

Observaciones de los pares de estrellas en los días que se expresan.

ABRIL 11 DE 1892.

Pares.	Tiempo sidéreo de la bisección.	Micrómetro.	Nivel.		δ	$\frac{1}{2}(\delta + \delta')$	Correcciones.				Latitud $31^{\circ} 46'$ +
			oc.	ob.			m.	n.	r. m.	refr.	
	<i>h. m. s.</i>				° ' "	° ' "	"	"	"	"	"
31	10 10 37.4	50.656	17.8	66.3	43 27 19.08						
	10 14 17.3	46.012	13.7	62.2	20 1 8.41	31 44 14.08	2 42.31	2.34	-0.05	0.06	58.74
33	10 26 15.8	52.087	13.4	62.1	76 16 23.11						
	10 32 13.4	46.044	11.4	60.1	-12 49 31.10	31 43 26.01	3 31.20	1.14	0.12	0.08	58.51
34	10 40 33.1	39.531	15.6	64.3	19 27 38.49						
	10 47 50.3	56.907	22.2	71.3	43 45 58.42	31 36 48.46	10 7.29	3.90	0.18	.....	59.83
36	10 59 27.2	44.688	15.4	64.6	7 55 7.26						
	11 6 35.5	53.074	20.9	70.2	55 28 58.81	31 42 7.04	4 53.09	2.58	0.10	.....	58.81

Observaciones de los pares de estrellas en los días que se expresan—Continuación.

ABRIL 11 DE 1892.

Pares.	Tiempo sidéreo de la bisección.	Micrómetro.	Nivel.		δ	$\frac{1}{2}(\delta + \delta')$	Correcciones.				Latitud $31^{\circ} 46'$ +
			oc.	ob.			m.	n.	r. m.	refr.	
	<i>h. m. s.</i>				<i>o' "</i>	<i>o' "</i>	<i>" "</i>	<i>" "</i>	<i>" "</i>	<i>" "</i>	
37	11 15 36.3	60.911	15.2	64.9	6 37 11.00						
	11 23 48.2	40.003	15.0	65.0	57 20 6.95	31 58 38.98	-11 39.38	-0.03	0.24	.....	59.43
39	11 40 3.0	49.409	18.6	68.6	48 22 44.00						
	11 43 29.4	48.807	15.9	65.8	15 10 28.29	31 46 36.15	21.07	1.57	0.01	0.35	58.97
42	12 30 25.2	58.528	15.0	65.7	70 37 3.11						
	12 33 32.0	40.458	16.4	62.1	-7 24 13.59	31 36 24.76	10 31.53	0.63	0.28	0.06	57.23
43	12 40 7.6	45.253	15.1	11.3	46 1 47.20						
	12 46 43.7	51.763	65.8	69.2	17 39 34.11	31 50 40.66	-3 44.03	2.10	0.07	.....	58.67
44	12 53 29.3	54.916	15.0	65.7	17 59 22.88						
	13 1 6.4	41.027	18.5	69.2	45 50 41.08	31 55 1.98	-8 5.42	2.00	0.15	.....	58.41
45	13 9 13.6	50.907	9.9	60.7	67 51 33.41						
	13 17 31.9	47.457	15.7	97.9	-4 21 42.99	31 44 55.21	2 0.58	2 91	0.05	0.32	58.91
46	13 23 47.8	55.086	16.9	67.8	72 57 4.86						
	13 27 11.2	43.552	11.4	62.2	-9 36 40.39	31 40 12.24	6 43.11	3.25	0.20	0.13	58.86
48	13 41 42.7	52.105	14.9	65.8	41 37 40.61						
	13 44 30.7	44.979	9.8	60.8	21 47 50.97	31 42 45.79	4 9.05	2.93	0.07	.....	57.81
49	13 49 51.1	46.697	11.5	62.5	54 15 26.75						
	13 55 50.1	52.247	5.9	57.0	9 24 51.94	31 50 9.57	-3 13.97	3.17	0.06	0.07	58.45
50	14 12 21.5	53.568	12.2	53.5	46 34 52.71						
	14 14 32.2	43 968	14.6	65.9	16 47 54.77	31 41 23.71	5 35.52	-1.37	0.10	.....	57.99
51	14 27 7.1	55.397	18.0	69.1	30 50 31.84						
	14 29 38.3	40.834	23.8	74.9	33 0 17.29	31 55 24.55	-8 28.98	3.31	0.14	.....	58.76

ABRIL 12 DE 1892.

Pares.	Tiempo sidéreo de la bisección.	Micrómetro.	Nivel.		δ	$\frac{1}{2}(\delta + \delta')$	Correcciones.				Latitud $31^{\circ} 46'$ +
			oc.	ob.			m.	n.	r. m.	refr.	
	<i>h. m. s.</i>				<i>o' "</i>	<i>o' "</i>	<i>" "</i>	<i>" "</i>	<i>" "</i>	<i>" "</i>	
28	.....	58.730	16.6	58.5	37 15 42.38						
	.....	40.939	23.0	65.1	26 38 54.19	31 57 18.29	-10 21.78	3.71	0.18	.....	60.04
29	9 30 20.4	52.084	14.7	56.9	31 38 49.82						
	9 35 8.4	44.533	48.3	6.0	31 46 11.76	31 42 30.79	4 23.90	4.45	0.07	.....	59.21
30	9 45 13.6	48.483	56.7	14.3	54 34 19.87						
	9 52 25.1	57.013	53.2	10.7	8 49 43.68	31 42 1.77	4 58.12	-2.02	0.10	.....	58.26
31	10 10 31.1	45.969	60.1	17.5	43 27 19.79						
	10 13 54.0	50.638	60.9	18.0	20 1 8.49	31 44 14.14	2 43.18	0.37	0.05	.....	57.76
32	10 26 42.1	44.286	62.0	18.9	76 16 23.28						
	10 32 12.1	50.410	60.4	17.3	-12 49 31.15	31 43 26.06	3 34.03	0.91	0.12	0.03	59.49

Observaciones de los pares de estrellas en los días que se expresan—Continuación.

ABRIL 12 DE 1892.

Pares.	Tiempo sidéreo de la bisección.	Micrómetro.	Nivel.		δ	$\frac{1}{2}(\delta + \delta')$	Correcciones.				Latitud $31^{\circ} 46'$ +
			oc.	ob.			m.	n.	r. m.	refr.	
	<i>h. m. s.</i>				<i>o' "</i>	<i>o' "</i>	<i>" "</i>	<i>" "</i>	<i>" "</i>	<i>" "</i>	
34	10 40 37.2	57.271	18.5	61.9	19 27 38.57						
	10 47 43.1	39.828	20.8	64.1	43 45 58.51	31 36 48.54	10 9.62	-1.28	0.18	.....	57.06
35	10 50 9.4	45.946	62.3	18.9	1 18 39.90						
	10 57 9.5	50.089	66.6	23.3	62 20 11.48	31 49 25.69	2 24.79	-2.54	0.05	.....	58.31
36	10 59 27.2	52.171	66.2	18.7	7 55 7.30						
	11 6 31.8	43.690	66.5	23.0	55 28 59.10	31 42 3.20	4 56.40	-2.45	0.10	.....	57.25
37	11 15 35.0	37.891	61.8	.....	6 37 11.03						
	11 23 42.4	57.847	62.2	18.3	57 20 7.16	31 58 39.09	-11 37.44	-0.14	0.24	.....	61.18
39	11 40 22.3	47.573	64.2	20.0	48 22 44.20						
	11 43 33.3	48.072	62.1	17.8	15 10 28.37	31 46 36.28	0 24.43	-1.23	0.01	.....	59.50
40	11 48 13.4	49.537	62.1	17.7	54 17 45.92						
	11 59 32.2	46.414	60.0	15.2	9 19 54.96	31 48 48.94	-1 49.15	-1.37	0.04	0.12	58.32
41	12 22 13.4	45.120	62.6	17.3	41 57 8.64						
	12 24 19.6	51.355	59.9	14.7	21 29 33.86	31 43 21.35	3 37.91	-1.48	0.06	.....	57.74
42	12 30 21.0	35.011	62.2	16.9	70 37 3.38						
	12 33 49.6	53.156	63.4	18.0	-7 24 13.62	31 36 24.88	10 34.08	0.66	0.28	0.01	59.90
43	12 40 2.4	51.330	69.1	23.8	46 1 47.43						
	12 46 51.9	45.011	68.7	23.0	17 39 34.22	31 50 40.82	-3 40.84	-0.34	0.07	.....	59.57
44	12 53 36.9	41.735	60.4	14.8	17 59 29.00						
	13 1 1 0	55.550	60.5	14.7	45 50 41.31	31 55 2.15	-8 2.82	-0.05	0.15	.....	59.23
45	13 9 57.6	45.750	61.0	15.0	67 51 33.49						
	13 17 42.1	49.359	60.4	14.3	-4 21 43.00	31 44 55.34	2 6.13	-0.37	0.05	0.03	61.16
46	13 23 33.3	41.872	62.7	16.4	72 57 5.15						
	13 27 15.1	53.523	63.9	17.6	-9 36 40.43	31 40 12.86	6 47.19	0.68	0.20	0.03	60.44
48	13 41 36.5	44.758	63.0	16.5	41 37 40.83						
	13 44 38.0	51.996	64.0	17.4	21 47 51.11	31 42 45.97	4 12.96	.....	0.07	.....	58.91
49	13 49 53.9	50.696	64.8	18.3	54 15 27.01						
	13 56 15.8	45.259	68.9	22.3	9 24 51.98	31 50 9.50	-3 10.01	2.29	0.06	0.01	61.77
50	14 12 15.3	43.327	62.9	16.0	46 34 52.96						
	14 14 39.6	52.538	61.5	14.7	16 47 54.89	31 41 23.92	5 35.89	-0.70	0.10	.....	59.21
51	14 27 13.2	41.508	61.7	14.7	30 50 32.03						
	14 29 33.5	55.954	62.0	15.0	33 0 17.49	31 55 24.76	-8 24.88	-0.18	0.14	.....	59.66
52	14 35 29.3	53.501	63.6	16.6	22 26 7.08						
	14 39 44.2	42.303	62.1	15.1	40 54 45.44	31 40 26.26	6 31.36	0.86	0.11	0.02	58.59
53	14 45 26.5	42.978	61.6	14.7	46 33 45.12						
	14 52 11.3	52.417	61.5	14.5	16 49 10.08	31 41 27.60	5 29.88	-0.16	0.10	.....	57.42

Observaciones de los pares de estrellas en los días que se expresan—Continuación.

ABRIL 12 DE 1892.

Pares.	Tiempo sidéreo de la bisección.	Micrómetro.	Nivel.		δ	$\frac{1}{2}(\delta + \delta')$	Correcciones.				Latitud $31^{\circ} 46'$ +	
			oc.	ob.			m.	n.	r. m.	refr.		
	<i>h. m. s.</i>				" "	" "	" "	" "	" "	" "	" "	
54	14 57 27.2	58.698	61.9	14.8	2 30 44.13							
	14 58 54.3	36.612	62.1	15.0	60 37 30.26	31 34 7.20	12 50.19	-0.14	0.28	.....	57.83	
55	15 10 4.1	47.817	63.8	16.6	42 34 9.42							
	15 13 35.6	49.500	63.8	16.7	20 57 49.76	31 45 59.59	0 58.82	0.03	0.02	0.26	58.59	
56	15 15 42.9	54.691	61.8	14.6	30 0 13.70							
	15 17 24.6	42.042	59.1	12.0	33 18 57.35	31 39 35.52	7 22.07	1.51	0.12	.....	59.23	

ABRIL 13 DE 1892.

Pares.	Tiempo sidéreo de la bisección.	Micrómetro.	Nivel.		δ	$\frac{1}{2}(\delta + \delta')$	Correcciones.				Latitud $31^{\circ} 46'$ +	
			oc.	ob.			m.	n.	r. m.	refr.		
	<i>h. m. s.</i>				" "	" "	" "	" "	" "	" "	" "	
29	9 30 28.9	51.767	60.3	20.4	31 38 49.90							
	9 35 10.3	44.209	55.1	15.1	31 46 11.85	31 42 30.88	4 24.15	-3.22	0.07	.....	58.32	
30	9 44 43.8	42.929	64.2	24.0	54 34 19.99							
	9 52 31.1	51.440	63.6	23.0	8 40 43.73	31 42 1.86	4 57.46	- .46	0.10	.....	58.96	
31	10 10 25.2	45.948	62.1	21.6	43 27 19.92							
	10 13 50.8	50.520	66.3	25.6	20 1 8.56	31 44 14.24	2 39.79	+ 2.38	0.05	.....	56.36	
33	10 26 01.9	44.768	58.4	17.0	76 16 23.45							
	.....	50.743	65.8	24.3	-12 49 31.19	31 43 26.13	3 28.83	+ 4.23	0.12	.....	59.31	
34	10 40 38.8	57.263	61.7	20.0	19 27 38.65							
	10 47 40.0	39.913	53.3	11.6	43 45 58.60	31 36 48.62	10 6.38	+ 4.81	0.18	.....	59.99	
35	10 50 11.9	45.697	62.0	20.3	1 18 39.91							
	10 57 11.6	49.993	56.8	14.9	62 20 11.67	31 49 25.79	2 30.15	+ 3.04	0.05	.....	58.63	
37	11 15 26.9	37.763	60.4	18.4	6 37 11.07							
	11 23 46.5	57.888	53.4	11.3	57 20 7.37	31 58 39.22	-11 43.37	+ 4.08	0.23	.....	59.70	
41	12 22 16.0	45.320	60.9	18.0	41 57 8.83							
	12 24 21.6	51.470	66.5	23.6	21 29 33.98	31 43 21.41	3 34.91	+ 3.19	0.06	.....	59.57	
42	12 30 24.6	39.118	61.1	18.1	70 37 3.65							
	12 33 42.3	57.107	69.4	26.3	-7 24 13.66	31 36 25.00	10 28.72	+ 4.70	0.27	.....	58.69	
44	12 53 38.5	49.931	62.0	18.8	17 59 23.11							
	13 1 2.3	63.846	56.3	12.9	45 50 41.54	31 55 2.32	- 8 6.33	+ 3.22	0.15	.....	59.16	
45	13 9 54.2	45.120	62.2	18.9	67 51 33.98							
	13 17 46.0	48.741	60.2	16.7	-4 21 43.02	31 44 55.48	2 6.55	- 1.23	0.05	.....	60.85	
48	13 41 45.5	44.609	62.1	18.2	41 37 41.06							
	13 44 40.9	51.718	68.2	24.4	21 47 51.24	31 42 46.15	4 8.40	3.57	0.07	.....	58.25	
49	13 49 52.7	50.963	62.1	18.2	54 15 27.28							
	13 56 3.1	45.512	62.1	18.1	9 24 52.06	31 50 9.67	- 3 10.51	- 0.03	0.06	.....	59.07	

Observaciones de los pares de estrellas en los días que se expresan—Continuación.

ABRIL 13 DE 1892.

Pares.	Tiempo sidéreo de la bisección.	Micrómetro.	Nivel.		δ	$\frac{1}{2}(\delta + \delta')$	Correcciones.				Latitud $31^{\circ} 46'$ +	
			oc.	ob.			m.	n.	r. m.	refr.		
	<i>h. m. s.</i>				" "	" "	" "	" "	" "	" "	" "	
51	14 27 15.2	40.308	61.7	17.6	30 50 32.22							
	14 29 37.6	54.777	62.2	18.3	33 0 17.68	31 55 24.95	- 8 25.69	- 0.35	0.14	.....	58.77	
53	14 45 25.1	43.050	61.7	17.8	46 33 45.37							
	14 52 13.2	52.488	62.1	18.3	16 49 10.20	31 41 27.79	5 28.81	0.27	0.10	.....	56.97	
54	14 57 29.0	58.649	61.9	18.1	2 30 44.17							
	14 59 0.1	36.704	58.0	14.3	60 37 30.54	31 34 7.36	12 46.97	2.19	0.28	.....	56.80	
55	15 10 17.0	47.480	61.9	18.2	42 34 9.64							
	15 13 37.7	49.121	62.1	18.7	20 57 49.90	31 45 59.77	0 57.35	0.20	0.01	.....	57.33	
56	10 59 29.6	52.018	65.8	23.9	7 55 7.34							
	11 6 56.4	43.665	59.0	17.2	55 28 59.40	31 42 3.37	4 51.94	3.85	0.11	.....	59.32	
59	11 41 44.8	47.383	64.0	21.8	48 22 44.40							
	11 43 56.4	47.730	69.3	27.0	15 10 28.45	31 46 36.42	0 15.27	3.02	7.57	0.01	58.49	
40	11 48 50.0	49.579	62.2	19.9	54 17 46.14							
	11 59 45.7	46.300	69.1	26.6	9 19 52.02	31 48 48.73	1 54.60	3.86	0.06	0.04	58.83	
43	12 40 35.5	51.242	61.7	18.5	46 1 47.65							
	12 46 53.5	44.783	68.7	24.5	17 39 31.32	31 50 40.99	3 45.74	3.71	0.14	0.07	58.96	
46	13 23 31.8	41.413	61.2	17.5	72 57 5.44							
	13 27 29.9	52.913	68.4	24.7	-9 36 40.48	31 40 12.48	6 41.92	3.83	0.20	0.01	58.43	

Resumen y discusión.

Pares.	φ	Promedios.	Δ	Δ^2	$\Delta\varphi$	$\Delta^2\varphi$	Pares.	φ	Promedios.	Δ	Δ^2	$\Delta\varphi$	$\Delta^2\varphi$
38	60.04	60.04			1.26	1.5876	36	58.81	"	0.35	0.1225		
29	59.21		0.45	0.2025				57.25	58.46	1.21	1.4641		
	58.81	58.76	0.45	0.2025	0.02	0.0004		59.32		0.86	0.7396	0.32	0.1024
30	58.26		0.35	0.1225			37	59.43		0.67	0.4489		
	58.96	58.61	0.35	0.1225	0.17	0.0289		61.18		1.08	1.1664	1.32	1.7424
								59.70	69.10	0.40	0.1600		
31	58.74		1.13	1.2769				58.97		0.02	0.0004		
	57.74		0.13	0.0169			39	59.50		0.51	0.2601	0.21	0.0441
	56.36	57.61	1.25	1.5625	1.17	1.3689		58.49	58.99	0.50	0.2500		
33	58.51		0.59	0.3481				58.32		0.01	0.0001		
	59.49		0.39	0.1521			40	58.33	58.33	0.00	0.0000	0.45	0.2025
	59.31	59.10	0.21	0.0441	0.32	0.1024							
34	59.83		0.87	0.7569			41	57.74		0.91	0.8281		
	57.06		1.90	0.6900	0.18	0.0324		59.57	58.65	0.92	0.8464	0.13	0.0169
	59.99	58.96	1.03	1.0609			42	57.23		1.28	1.6044		
35	58.31		0.16	0.0256				59.90		1.29	1.6641		
	58.63	58.47	0.16	0.0256	0.31	0.0961		58.69	58.61	0.08	0.0064	0.17	0.0289

Resumen y discusión—Continuación.

Pares.	φ	Promedios.	Δ	Δ^2	$\Delta \varphi$	$\Delta^2 \varphi$	Pares.	φ	Promedios.	Δ	Δ^2	$\Delta \varphi$	$\Delta^2 \varphi$
43	"	"	0.40	0.1600			50	59.21	"	0.61	0.3721		
	58.67		0.50	0.2500				57.99	58.60	0.61	0.3721	0.18	0.0324
	59.57	59.07	0.11	0.0121	0.29	0.0841	51	59.66		0.60	0.3600		
	58.96							58.76		0.30	0.0900		
44	58.41		0.52	0.2704				58.77	59.06	0.29	0.0841	0.28	0.0784
	59.23		0.30	0.0900			52	58.59	58.59			0.19	0.0361
	59.16	58.93	0.23	0.0529	0.15	0.0225	54	57.83		0.51	0.2601		
45	58.91		1.40	1.9600				56.80	57.32	0.52	0.2704	1.46	2.1316
	61.16		0.85	0.7225			53	57.42		0.22	0.0484		
	60.85	60.31	0.54	0.2916	1.53	2.3409		56.97	57.20	0.23	0.0529	1.58	2.4964
46	58.86		0.38	0.1444			55	58.59		0.63	0.3969		
	60.44		1.20	1.4400				57.33	57.96	0.63	0.3969	0.82	0.6724
	58.43	59.24	0.81	0.6561	0.46	0.2116	56	59.23	59.23			0.45	0.2025
48	57.84		0.49	0.2401				58.78			34.8378		14.7869
	58.91		0.58	0.3364									
	58.25	58.33	0.08	0.0064	0.45	0.2025							
49	58.45		1.29	1.6641									
	61.71		1.97	3.8809									
	59.07	59.74	0.67	0.4489	0.96	0.9216							

$$\left[\frac{1}{n}\right] = 12.162$$

$$E \delta = \pm 0.24'' \quad \varepsilon \delta = \pm 0.34''$$
 Pesos.
 1 observación = 1.00
 2 " = 1.90
 3 " = 3.00

Resultado final.

Pares.	Latitud 31° 47'	Peso.	$p. \varphi$	Δ	Δ^2	$p. \Delta^2$	Pares.	Latitud 31° 47'	Peso.	$p. \varphi$	Δ	Δ^2	$p. \Delta^2$
28	60.04	1	3.04	1.23	1.5129	1.5129	44	58.93	3	5.79	0.12	0.0144	0.0432
29	58.76	2	3.52	0.05	0.0025	0.0050	45	60.31	3	9.93	1.50	2.2500	6.7500
30	58.61	2	3.22	0.20	0.0400	0.0800	46	59.24	3	6.72	0.43	0.1849	0.5547
31	57.61	3	1.83	1.20	1.4400	4.3200	48	58.33	3	3.99	0.48	0.2304	0.6912
33	59.10	3	6.30	0.29	0.0841	0.2523	49	59.74	3	8.22	0.93	0.8649	2.5947
34	58.96	3	5.88	0.15	0.0225	0.0675	50	58.60	2	3.20	0.21	0.0441	0.0882
35	58.47	2	2.94	0.34	0.1156	0.2312	51	59.06	3	6.18	0.25	0.0625	0.1875
36	58.46	3	4.38	0.35	0.1225	0.3675	52	58.59	1	1.59	0.22	0.0484	0.0484
37	60.10	3	9.30	1.29	1.6641	4.9923	53	57.20	2	0.40	1.61	2.5921	5.1842
39	58.99	3	5.97	0.18	0.0324	0.0972	54	57.32	2	0.64	1.49	2.2201	4.4402
40	58.33	2	2.66	0.48	0.2304	0.4608	55	57.96	2	1.92	0.85	0.7225	1.4450
41	58.65	2	3.30	0.16	0.0256	0.0512	56	59.23	1	2.23	0.42	0.1764	0.1764
42	58.61	3	4.83	0.20	0.0400	0.1200							34.9644
43	59.07	3	6.21	0.26	0.0676	0.2028							

Latitud del punto de observación..... 31° 46' 58.81"
 Reducción al centro del Monumento 21..... + .035
 Latitud del monumento..... 31 46 58.845
 $\pm 0.10''$



AGUAJE DEL MOSQUITO.

VII.

Latitud del extremo Occidental del Paralelo 31° 47'.

Método "Talcott."

Instrumentos:

Anteojo cenital.
Cronómetro N° 750 (tiempo medio).

Personal:

Observador, Felipe Valle.
Ayudante, Valentín Gama.

Valor angular de las revoluciones del micrómetro.

JULIO 8 DE 1892. 8213 B.A.C. $\delta = 86^{\circ} 42' 41.5''$.

Micrómetro.	Hora cronométrica.	Nivel.		Micrómetro.	Hora cronométrica.	Nivel.		Valor de R.
		oc.	ob.			oc.	ob.	
	<i>h. m. s.</i>				<i>h. m. s.</i>			
67	10 3 22.5	35.7	15.0	48	10 29 9.3	35.9	15.0	$R = 69.57'' \pm 0.001$
66	4 44.8	36.3	15.6	47	30 32.0	35.9	15.0	
65	6 7.9	36.3	15.6	46	31 52.5	35.9	15.0	
64	7 28.8	36.0	15.2	45	33 12.2	35.9	15.0	
63	8 51.3	35.7	15.0	44	34 33.5	35.9	14.9	
62	10 13.2	35.8	15.0	43	35 56.0	36.0	14.9	
61	11 31.8	35.8	14.9	42	37 16.6	36.0	14.9	
60	12 52.4	35.8	14.9	41	38 38.8	35.9	14.9	
59	14 8.3	35.8	15.0	40	39 59.2	35.9	14.9	
58	15 37.5	35.8	15.0	39	41 19.4	36.0	15.0	
57	16 55.9	35.9	15.0	38	42 39.8	35.9	14.9	
56	18 21.2	35.9	15.0	37	44 3.3	36.0	15.0	
55	19 42.2	35.8	14.9	36	45 23.2	35.9	14.9	
54	21 0.5	36.0	15.0	35	46 43.0	36.0	14.9	
53	22 23.4	36.0	15.0	34	48 4.7	35.9	14.9	
52	23 44.2	36.0	15.0	33	49 25.3	36.0	14.9	
51	25 7.5	36.0	14.9					
50	26 28.9	35.9	15.0					
49	27 45.6	36.0	15.0					

Observaciones de los pares de estrellas en los días que se expresan.

JULIO 5 DE 1892.

Pares.	Tiempo sidéreo de la bisección.	Micrómetro.	Nivel.		δ	$\frac{1}{2}(\delta + \delta')$	Correcciones.				Latitud 31° 46' +	
			oc.	ob.			m.	n.	re. m.	refr.		
	<i>h. m. s.</i>				<i>° ' "</i>	<i>° ' "</i>	<i>' "</i>	<i>" "</i>				
51	14 27 59.9	42.549	0.1	29.2	30 50 47.51	30 50 47.51						
	14 29 37.2	57.470	31.2	1.6	33 0 33.55	31 55 40.55	- 8 42.04	-0.15	-0.14	-0.09	58.12	
52	14 35 29.95	54.627	8.6	38.6	23 26 20.47							
	14 39 32.8	43.832	41.0	10.9	40 55 3.66	31 40 42.06	+ 6 16.99	-1.18	+0.11	.....	57.99	
53	14 45 28.6	45.559	39.7	9.6	46 34 4.54							
	14 52 7.7	54.578	9.1	39.6	16 49 22.19	31 41 43.36	5 15.55	-0.15	0.09	.....	58.86	
54	14 58 14.8	60.060	6.3	36.8	- 2 30 51.02							
	14 59 20.1	38.448	42.2	11.8	60 37 51.85	31 34 21.43	12 36.85	-2.72	0.28	-0.12	55.72*	
55	15 10 15.0	49.717	42.5	12.2	42 34 29.17							
	15 13 33.1	50.937	11.6	42.0	30 58 3.86	31 46 16.51	0 42.58	-0.37	+0.12	.....	58.83	
56	15 15 45.5	54.998	41.9	11.4	30 0 30.62							
	15 17 28.3	42.802	44.1	13.8	33 19 15.28	31 39 52.95	7 6.50	-1.15	0.12	.....	58.42	

* El resultado del par N° 54 no se tuvo en cuenta al sacar los promedios