

## Equal Altitude Sights

27 July 2020

### Observations

H <sub>A.H.</sub>		Time			Time		
°	'	h	m	s	h	m	s
90	0	9	58	8	4	4	57
90	30	9	59	34	4	3	35
91	0	10	0	57	4	2	15
91	30	10	2	20	4	0	49
92	0	10	3	42	3	59	26
92	30	10	5	5	3	58	2
93	0	10	6	30	3	56	39
93	30	10	7	54	3	55	16
94	0	10	9	19	3	53	55
94	30	10	10	40	3	52	30
95	0	10	12	4	3	51	2
95	30	10	13	27	3	49	41
		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
		10	5	48	3	57	21

### Reduction

Date	y	m	d	
	2020	7	27	
	h	m	s	
Average, $\bar{t}$	13	1	34.5	
Difference, $\Delta t$	5	51	32.3	
Time Offset	-	4	0	0.0
		°	'	"
latitude, $L$	41	5	24	N
Declination, $\delta$	18	59	15	N
Hourly variation, $\delta'$	-		0	35
			m	s
Equation of Time	-		6	31.9
$\log_{10} \Delta t / (30 \sin \Delta t / 2)$			9.4494	
$\log_{10} \delta'$			1.5401	
$\log_{10} \tan L$			9.9405	
			<hr/>	
			0.9300	8.511
$\log_{10} \Delta t / (30 \tan \Delta t / 2)$			9.3067	
$\log_{10} \delta'$			1.5401	
$\log_{10} \tan \delta$			9.5367	
			<hr/>	
			0.3835	<hr/>
				2.418
				<hr/>
				6.093 s
	h	m	s	
CT at $\bar{t}$	13	1	34.5	
CT at LAN	13	1	40.6	
EqT	-		6	32
CT at LMN	12	55	8.65	
Longitude	73	47	9.77	W