

KG

11366

v.656

Chronograph Record
A6

From Jan. 25, 1881 to June 15/81

13

St. Baylston,

725

Jan 25, 1881

1881phae.proj.1660R

Jan. 25, 1881

No. 1 = 749

1 0

1 51

Jan. 26, 1881

No. 1 = 750 . 0 54 1 52

Jan. 27, 1881

No. 1 = 751 0 53 1 50

1327 again dropped several
seconds.

Jan, 28, 1881

No. 1 = 752

0 57

1 53

During the night, 1327 again
stopped. Mr. Aston was sent for
and now took down the clock & car-
ried it into Boston.

Jan. 29, 1881

No. 1-753

1

08

2

05

Jan. 31, 1887

No. 1 = 754

\$1 06 2 03

Feb. 2, 1881

No. 1 = 755 0 35 2 05

Received 1327 from Boston.

Feb. 3, 1881

No. 1 = 756 0 56 2 10

Psl. 4

No. 1 = 757

0

43

2

6

Feb. 5 1881

No. 1 = 758

No minute down

Feb. 1, 1881

No. 1 = 759

0 54

2 11

Feb. 10 1881

W.S.R. returns to the
Observatory after an absence
of 2 weeks, during which time
he has been in Washington
for the purpose of comparing certain
standards of length with the
C.S. Standards.

Rel. 10
11

Nov - ~~760~~ 1 21 37 22 35
" 2 - ~~761~~ 2 no minute down

Before this observation of the Sun
The following adjustments were made.

(a) Since Jan 17 no observations for
Collimation have been made. Before making
any adjustments, C was determined
showing results as per Collimation record.

(b) Cleaned the pivots and friction
rollers with kerosene. Oiled pivots

(c) Cleaned east circle.

(d) Set the circle carrying micro-
scopes forward about 18" so that the
circle readings will fall upon diff-
erent divisions from those of previous
years.

167 Adjusted Microscope
 in focus, parallelism of wires
 and in ^{relative} position with respect to the
 5th division, when the telescope points
 to the north horizon.

168 Adjusted Long Collimator
 to the new Collimation.

During the absence of Mr. R.,
 Mr. Brown has observed
 planets and a few time stars,
 reading the ~~declina~~ ^{circles} for
 declination.

Feb. 13, 1881

No. 1 =	~~7~~ 6 2 3	13	23	13	55
" 2 =	7 6 3 4	0	30	3	5
" 3 =	7 6 4 5	~~40 minute down~~			
" 4 =	7 6 5 6	3	13	5	23
" 5 =	7 6 6 7	5	26	5	50
" 5 =	7 6 6 7	12	39	14	36
" 6 =	7 6 7 8	14	38	16	47

Feb. 14, 1881

No. 1 = ~~768~~ 9 21 40 22 12

" 2 = ~~769~~ 10 no minute down

" 3 = ~~770~~ 11 ~~~~~~~~~ 5 53

" 4 = ~~771~~ 12 16 40 18 39

Feb. 15, 1881

No. 1 =	~~772~~	13	21	51	22	6
" 2 =	~~773~~	14	0	26	1	52
" 3 =	~~774~~	15	4	7	5	59

Feb. 16, 1881

No. 1 =	~~775~~ 16	0	40	1	59
" 2 =	~~776~~ 17	12	40	14	35
" 3 =	~~777~~ 18	14	38	16	44
" 4 =	~~778~~ 19	16	47	18	59

Feb. 17, 1881

No. 1 = ~~779~~ 20	21 50	22 35
" 2 = ~~780~~ 21	0 32	2 26
" 3 = ~~781~~ 22	2 29	4 18
" 4 = ~~782~~ 23	4 20	5 56

Feb. 19, 1887

No. 1 = ~~783~~ 24" 2 = ~~784~~ 25" 3 = ~~785~~ 26

" 4 = 27

0 42 2 10

9 125 11 26

4 28 6 3

16 40 17 20

~~40~~ minutes down

Feb. 20, 1881

No. 1 = 28

" 2 = 29

20 44

22 50

No minute down

Feb. 21, 1887

No. 1 = 30

" 2 = 31

" 3 = 32

12 42 14 47

14 50 16 46"

No minute lower

Feb. 22, 1881

No. 1 = 33

21 23

22 51

" 2 = 34

0 48

2 58

" 3 = 35

3 11

5 22

" 4 = 36

5 25

6 04

Feb. 23, 1887

No. 1 = 37

" 2 = 38

" 3 = 39

4 41

12 34

15 38

a break
in here

5 37

18 36

6 16

Sheet No. 3 seems to have been started, a star taken, & then the same sheet left on the chronograph till a later occasion.

Feb. 24, 1881

No. 1 = 40

22 25

22 47

" 2 = 41

0 38

2 42

" 3 = 42

2 44

4 28

Feb. 25, 1881

No. 1 = 43

" 2 = 44

22 28 22 46
 0 41 2 23
~~no minute down~~

Feb. 26, 1881

No. 1 = 45

0 46

2 14

" 2 = 46

5 0

6 20

Mar. 5, 1881

No. 1 = 47

0 46

1 41

Mar. 7, 1881

No. 1 = 48

0

32

2

12

Mar. 8. 1881

No. 1 = 489

0

42

2

24

Mar. 14, 1881

No. 1 = 50

5 51

7 55

" 2 = 51

7 59

8 9

" 3 = 52

16 7

17 38

" 4 = 53

17 42

19 7

" 5 = 54

21 3

21 47

Mar. 15, 1881

No. 1 = 55	23	29	1	30
" 2 = 56	1	32	3	33..
" 3 = 57	3	35	5	40..
" 4 = 58	5	41	7	44
" 5 = 59	7	47	8	9

Mar. 16, 1887

No. 1 = 60

23

35

1

39

" 2 = 61

1

43

3

51

" 3 = 62

3

53

5

54

Mar. 20, 1881

No. 1 = 63

18 35

20 48

" 2 = 64

20 54

23 2

10

10

11

Mar. 21, 1881

No. 1 = 65

No minute.

" 2 = 66

3 26

5 - 36 "

" 3 = 67

5 38

7 43

" 4 = 68

7 47

8 9

" 5 = 69

15 36

17 35

" 6 = 70

20 38

22 5

Mar. 22, 1881

No. 1 = 71	22	6	0	12
" 2 = 72	6	26	8	13
" 3 = 73	~~17~~ 8	~~24~~	19	0

34 = 7 11

Mar. 23, 1881

No. 1 = 74	0	8	2	18
" 2 = 75	5	7	6	07
" 3 = 76	17	20	19	7
" 4 = 77	19	8	21	17
" 5 = 78	21	26	23	22

For the investigation of the apparent errors of the position of certain Fundamental stars, see Flexure Book (Feb. 10, 1881 to —) p. 42 &c.

Mar. 24, 1881

No. 1 = 79

" 2 = 80

" 3 = 81

" 4 = 82

" 5 = 83

" 6 = 84

————

No minute

0 39

17 4 (?)

21 32

1 35

13 45

¹⁹
~~24~~ 53 (?)

21 20

23 53

Mar. 25, 1881

No. 1 = 85	~~No~~ ⁰ 20 ² minutes.	24
" 2 = 86	3 41	5 46
" 3 = 87	5 54	6 41

Mar. 26, 1881

No. 1 = 88

6 31

8 9

" 2 = 89

8 10

9 40

Mar. 27, 1881

No. 1 = 90

0 22 44 1 1/1

Mar. 28, 1881

No. 1 = 91	0	25	1	33
" 2 = 92	3	32	5	16
" 3 = 93	5	17	6	20
" 4 = 94	8	02	9	45
" 5 = 95	13	12	14	02
" 6 = 96	17	50	19	53

Began today to determine the constant of runs by setting, at random, on different 5' parts of the circle.

Mar. 29, 1881

No. 1 = 97

" 2 = 98

0 28

6 23

1 28

8 33

31

Mar. 31, 1881

No. 1 = 99

19

05

20

89

Apr. 1. 1887

$$W. 1 = 100$$

0

37

1

34

$$" 2 = 101$$

4

34

6

46

$$" 3 = 102$$

12

40

13

37

Apr. 2, 1881

No. 1 = 103

0	44
~~4~~	~~34~~

2	57
~~6~~	~~46~~

" 2 = 104

7	29
---	----

9	31
---	----

" 3 = 104.5

9	3.3
---	-----

10	05
----	----

" 4 = 105.6

18	43
----	----

20	45
----	----

Apr. 3, 1881

No. 1 = 10~~6~~7

" 2 = 1078

" 3 = 1089

" 4 = 109¹⁰

" 5 = 1101

" 6 = 1112

0 33

4 33

8 16

17 48

¹⁹~~20~~ 57

21 59

2 ~~4~~ 1

6 48

9 48

19 53

2¹~~2~~ 57

23 22

Apr. 4, 1881

No. 1 = 112	3	0	46	1 54
" 2 = 113	4	4	52	6 56
" 3 = 114	5	6	58	8 58
" 4 = 115	6	9	03	9 45
" 5 = 116	7	17	45	19 52
" 6 = 117	8	19	53	28 22

Apr. 5, 1881

No. 1 = 1189

0 55

1 34

111 - "

111 = 8 "

Apr. 6, 1881

No. 1 = 1 ~~19~~ 20

" 2 = 12 ~~1~~ 1

0 58 124

5 44 633

Apr. 7, 1887

No. 1 =	12 + 2	0	47	2	05
" 2 =	12 ~~x~~ 3	4	37	6	49
" 3 =	12 ~~x~~ 4	6	50	7	42
" 4 =	12 ~~x~~ 5	17	58	19	54
" 5 =	12 ~~x~~ 6	19	56	22	04
" 6 =	12 ~~x~~ 7	22	32	23	36

Apr. 8, 1881

No. 1 = 12 ~~78~~	0	48	2	08
" 2 = 129	9	08	9	47
~~" 3 = 130~~	~~0~~			

2^h 30^m P.m. M.T.

Took out Tail piece
for the purpose of cleaning
dors plate and for in-
vestigating error of collima-
tion.

Put Tail piece in place again
at 5^h 30^m before completing meas-
urements.

Apr. 9, 1881

No. 1 = 130	0 59	2 11
" 2 = 131	7 21	9 31
" 3 = 132	~~9~~ 33	10 25
" 4 = 133	18 28	20 39

Apr. 10. 1881

No. 1 = 134	18	14	20	23
" 2 = 135	20	25	22	40

3⁴ On. ~~mt~~

Took out time piece to complete investigation of calibration
Screw. In means see p 72

6^h Repair clock for Feb. 10 1882

Apr. 11, 1881

No. 1 = 136	23	31	1	32
" 2 = 137	4	21	6	19
" 3 = 138	6	21	8	30
" 4 = 139	9	7	10	18

Observed that, resting the steeple
vers night upon the glor case
of the Meridian Circle disturbs
the ^{resting} ~~position~~ of the level.

This may be the cause of certain
~~errors~~ apparent anomalous values
which have hitherto been observed.

Apr. 15, 1881

No. 1 = 140 0 52 1, 41

Apr. 16, 1881

No. 1 = 141	9	50	10	28
" 2 = 142	12	41	13	36
" 3 = 143	23	43	1	36
~~" 4 = 144~~	~~1~~	~~37~~	~~2~~	~~31~~
~~" 5 = 145~~	~~4~~	~~27~~	~~6~~	~~37~~
~~" 6 = 146~~				

Apr. 17. 1881

No. 1 = 144	1	37	2	31
" 2 = 145	4	27	6	37
" 3 = 146	6	39	8	14
" 4 = 147	18	39	5 \ 20	46
" 5 = 148	20	48	22	56

Apr. 18, 1881

No. 1 = 149	0	50	2	38
" 2 = 150	7	50	9	44
" 3 = 151	9	46	11	12
" 4 = 152	18	35	20	23
" 5 = 153	20	25	22	38
" 6 = 154	22	37	0	25

At 19^h this morning, found that the $C = 17^{\circ} 65.4$ instead of $18^{\circ} 5.4$ at which it was intended to be set.

As we got the Long Collimator last evening, at 9^h 55^m, it is presumed that the mistake occurred then, & that the value $C = 17^{\circ} 65.4$ should apply for the rest of the evening.

Apr. 19, 1881

No. 1 = 155	0	52	2	2
" 2 = 156	6	20	7	44
" 3 = 157	7	45	9	46
" 4 = 158	9	49	10	22

Apr. 20, 1881

No. 1 = 1589	1	46	2	6
" 2 = 160	9	9	11	12
" 3 = 161	18	40	20	46
" 4 = 162	20	48	22	53

Began a series of observations to determine whether the value of μ derived equatorial and polar stars, will satisfy stars the same for stars between these limits.

The selected list containing stars in groups having near the following declinations:-

$\mu = 100$

+ 7

+ 25

+ 42

+ 58

+ 75

+ 105

For list see working list for 1881

The stars fixed case of Meridian Circle so that it does not touch the axis when the observer levels the level.

Apr. 21, 1881

No. 1 = 163	0	29	2	5
" 2 = 164	5	56	8	4
" 3 = 165	9	1	11	10
" 4 = 166	11	12	12	58
" 5 = 167	12	59	13	35
" 6 = 168	19	40	21	10

Discovered that - whoever applied
the correction $P' - P$ in δ for stars
below pole has made the mistake
of applying them with the wrong
sign. So these stars do not enter
into the determining the figure
This error does not affect the work
thus far.

For these stars L.C. $P' - P$ is to be subtracted
from the value of $R_g + R_c$. This is not the case
of

The computation of R for these stars will
be done in red of

Apr. 23, 1881

No. 1 = 169

" 2 = 170

" 3 = 171

" 4 = 172

19 31

21 44

Apr. 24, 1881

No. 1 = 173	0 ^h 48 ^m to 1 ^h 09 ^m + 215 to 240
" 2 = 174	5 13 6 03
" 3 = 175	19 37 21 37

Apr. 25, 1881

40 No. 1 = 176

0 51

2 18

" 2 = 177

" 3 = 178

19 36

21 46

Apr. 27. 1881

No. 1 = 179 21 05 22 2

Apr. 28, 1881

No. 1 = 180

0 47

2 31

" 2 = 181

9 36

11 27

" 3 = 182

12 48

13 39

Apr. 30, 1881

No. 1 = 183

21 12

23

07

" 2 = 184

23 28

1

30

~~Apr.~~ May 1, 1881

No. 1 = 185

1 31

3 06

" 2 = 186

4 20

6 34

May 2. 1881

No. 1 = 187

2

29

2 48

" 2 = 188

21

06

22 05

" 3 = 189

22

46

1 50

May 3. 1881

120. 1 = 190

2 34

2 56

" 2 = 191

9 21

11 26

" 3 = 192

11 30

13 33

" 4 = 193

21 6

22 40

" 5 = 194

23 54

1 52

May 4, 1881

W. 1 = 195	2	46	3	11
" 2 = 196	9	32	~~14~~	31
" 3 = 197	11	32	13	33
" 4 = 198	21	28	22	10
" 5 = 199	23	53	1	37

Cleaned & oiled the pivots and made preparations for investigating the errors of the circle. Adjusted the 15° plate. Cleaned the micrometer.

Added 3 grms. to the pendulum of 1327 at 1^h 30^m

It is thought that the level may have been disturbed some to-day.

May 5, 1881

No. 1 = 200

2 42

2 38

" 2 = 201

9 36

11 33

May 7. 1881

No 1 = 202

" 2 ~ 203

9 56.

11 43.

12 11

13 54

May 8, 1881

No. 1 = 2034.

1 06

1 53

May 9. 1881

W. 1 = 20 45

9 52

11 41

" 2 = 20 46

1 11

1 42

May 10, 1881

No. 1 =	~~206~~ 7	3	04	3.	26
" 2 =	~~207~~ 8	12	38	13	35
" 3 =	~~208~~ 9	23	53	2	3

May 11, 1881

No. 1 =	209	10	2	42	3	21
" 2 =	210	1	22	36	0	38
" 3 =	211	2	0	39	2	0

May 12, 1881

No. 1 = 2173 2 53 B 24.

"

May 13, 1881

No. 1 = 2134	3	15	3	29
" 2 = 215	13	0	13	56
" 3 = 216	0	57	1	39

Stars to be observed which
have large proper motions.

Tarnell 10 149 = Lacaille 9352

61 Cygni

Lac. 21185

Taylor 1840 11 5 25.71 - 24° 59' 12.2"

Lac. 21258

40 Eridani

in Cass.

a Centauri.

May 22, 1881

No. 1 = 217

3 50

4 55

" 2 = 218

23 23

1 35

May 23, 1881

No. 1 = 219	4	3	5	16
" 2 = 220	10	50	12	40
" 3 = 221	12	43	13	33
" 4 = 222	0	0	1	43

Began observations with the
new ~~at~~ level, ^{inverted} ~~made by~~ J. Clark
U.S. Coast Survey and made by
Rauter & Co. Wash. D.C.
See. Pleasure & Book. 1881

May 24, 1881

No. 1 = 223	4	1	4	45
" 2 = 224	11	21	13	31
" 3 = 225	22	31	0	39
" 4 = 226	0	51	2	10

May 25, 1881

No. 1 = 227

4

8

4

21

May 26, 1881

No. 1 = 228

4 8 6 0.

" 2 = 229

11 18 13 24

" 3 = 230

23 29 0 55-

" 4 = 231

0 56 2 13

May 27, 1881

No. 1 = 232

4

10

4

25

May 30, 1881

No. 1 = 233

0

36

1 37

May 31, 1881

No. 1 = 234

0 43 1 41

June 1, 1881

No. 1. = 235

1 17

2^h 01^m

June 4, 1881

No. 1 = 206

12

44

13

25

June 5, 1881

No. 1 = 237

1

10

2

22

June 6, 1881

No. 1 = 238

" 2 = 239

12 34 47 30

1 05 2 04

June 11, 1881

No. 1 = 240 12 42 14 06

June 14, 1881

No. 1 = 241 1 02 2 14

June 15, 1881

No. 1 = 242

5 29

5 45

" 2 = 243

12

2

13 23

" 3 = 244

1

3

2 15

1681phae-pr.01.1668

