

-42.9 (22) Var

151199 16 41.9 +55 47 6.2 A2p -46c

22521

+0058<sup>15</sup> +077<sup>22</sup> N30

+0052 $\pm$ 2.6 +083 $\pm$ 2.3 GO  $\rightarrow$  N30



HR 6226 16.71.9 +55 47 Ap -46.0

6.16 +0.07 +0.11 009

+048 +079 6-C  
+048 +077 N30

+0.0052 +0.0072  
+0.0058 +0.077 N30

+0.0055

From  
V. J. J.

110

+323	-229	+97	+025	+027	-0504	+3544	+3040	+132.4	+3.4
+226	+615	+204	+762	+1353	+0745		+2097	+1230	-350
-580	-755	-128	+68	-1661	-0467		-2128	-23.2	-29.6

0943 - 334 827 562 108+025 - 46 064-36 205  
045 060 016 021 diy 360 - 25.8 + 9 + 24 009

+22 +64 -15

+51 - 29 - 36

+19 +55 -19

011

+41 - 30 - 35

10188

16 42.4 443 44

$\begin{matrix} 5 & -7.1 \\ -0.0066 & " \\ -0.07 & -0.064 \end{matrix}$

Eggs Ann New As An. 5,105

x106

I 131.86 1595.65 0.46 +838 -305 +143 -578 0.97 118 82.77  
 H 121.24 1594.79 0.43 +829 -251 +214 -578 0.965117 61.57  
 H 135.31 1596.07 0.47 +857 -233 +119 -571 0.99 117 50.66

7.80 +0.38 (3) 7.52

8.36 +1.04 +0.92 (2)  $\pi = 0.34$

$\frac{5.45}{1.11}$   
 $\frac{5.75}{2.75}$

12.5(7)

$\frac{7.4}{2.1} = 3.52$   
 $\frac{0.12}{0.78}$   
 $\frac{0.05}{0.05}$

71(24) 0375



ADG 10155 14 42.4 +43 34 -2.16

743  
818  
525  
206  
0330 " -070 -0641+

8.36 +1.045 +925 00

~~8.12~~  
1.87 = 74  
5.11 = 13.1  
5.11 = 13.1  
5.11 = 13.1  
5.11 = 13.1

772  
860

911  
2.10

-227 +932 -280  
+614 +360 +702  
-755 +014 +654

27.700  
-2075 -5.7 +2.0 -3.7  
-3129 -8.7 -5.0 -13.7  
+2505 -5042 +2463 +6.8 -4.6 +2.2

-942-330 691 723 -069-068-7.16 -047-5 -232 ✓

-065-044 023 016 -387-099-5.1 +2+5 0330

-10 +2 -12

$\boxed{-5 -15 +3}$



9634 16 43.1 +28 27 9F5 -46c SOL19)  
22552

ADS 10<sup>14</sup> 119 9.20 +0.495 +0.135 2 20"

H  
S

-0014 ± 3.6 +024 ± 2.6

5.641 1893.3 52.70 1886.5



151051.000\*

16.000\*

43.300\*

-41.000\*

-24.000\*

-15 ~~0.000\*~~

+10 ~~0.0005\*~~

7.7 8.400\*

478.630

28.200

-0.005

-0.955

-29.155

0.017

-0.295

0.001

0.015

0.043

8.598

16

150864  
~~14937~~  
-67  
60  
687  
1516  
144 III

-6.1

1880

1881

1882

1883

1884

1885

1886

1887

1888

1889

1890

1891

1892

1893

1894

1895

1896

1897

1898

*df*

151051.000\*

16.000\*

43.300\*

-41.000\*

-24.000\*

-0.018\*

0.010\*

7.700\*

895 346.737

28.200

0.010

-0.955

-23

-23.549

-0.018

-0.295

-15

-14.412

0.096

0.043

139

34.326

$\Delta T_{2A}$  165  
 $+0043 \pm 1.4$   
 $+0037$   
 $-037 \pm 1.5$   
 $-042$   
 $16 \quad 43.4 \quad -6.8 \quad 56 \quad 1.9 \quad 125 \quad -3.6 \quad a$   
 $22558$   
 $9640$

$21.046 \quad 1990.5 \quad -6.8 \quad 5-6 \quad 20.01 \quad 1890.8 \quad 33.84$   
 $-\frac{2.13}{20,833}$   
 $+2.19$   
 $17.82$

$21.039$   
 $-\frac{41}{20998}$   
 $58.2$

$19.51 \quad 1940.50$   
 $-\frac{31}{19,822}$   
 $20.28$   
 $20.56$   
 $20.46$   
 $-2.46$

$97.32$   
 $48.7$   
 $57.9$

$21.030$   
 $+1.197$

$21.039$   
 $+2.22$   
 $20.61$

$20.46 \quad 1956.82$   
 $-2.74$   
 $20.74$

15/217

16

43.4 + 0.8

40

5.4 gmo

-21.1a

22560

9641

31

+017<sup>28</sup>

N30

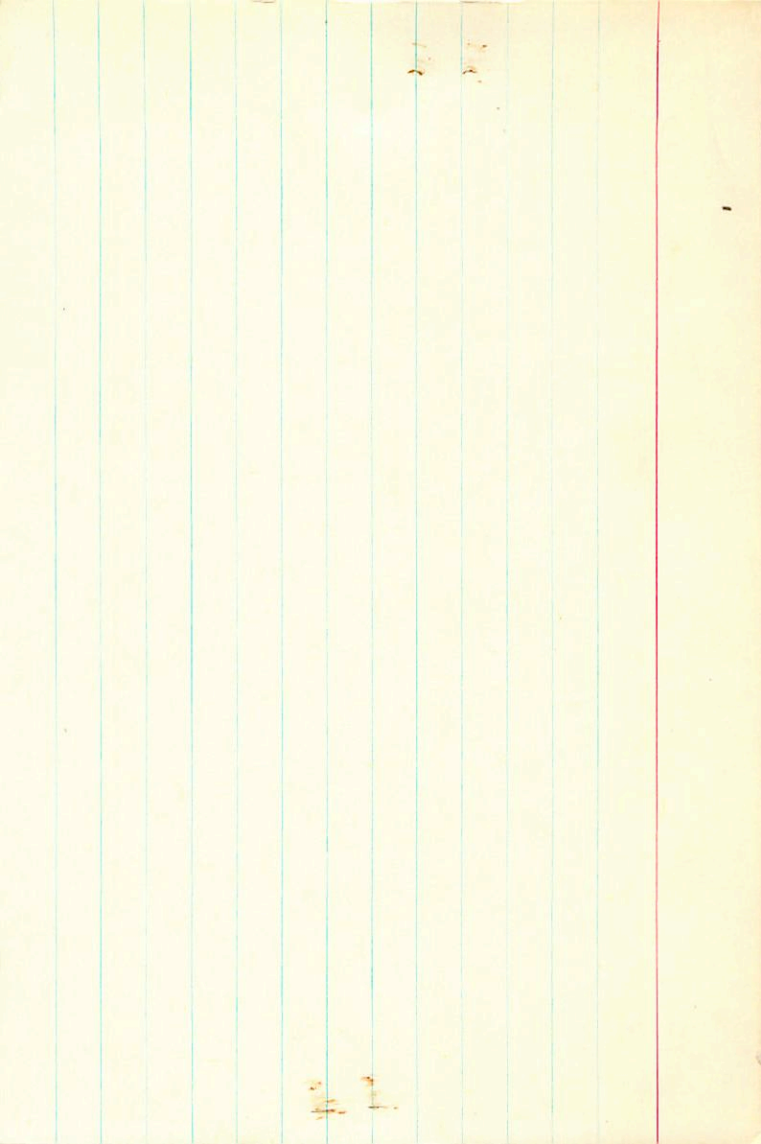
-2080

-0002

-0002±1.9

+016±1.7

6c-9N30





6220

16 43.6 +43 18 556g my

-132

✓ 378

✓ 136(16)

✓ 1000

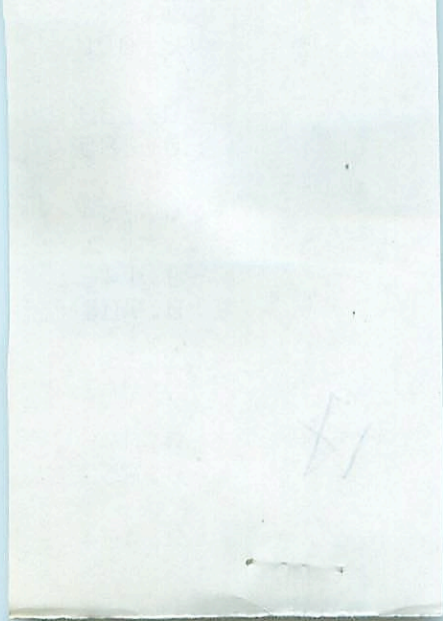
-020 -052-00

-2 +4

-022 -048

11

17



158.489

-13.000

-0.189

-0.285

-26.254

-0.146

0.703

-32.274

17

0.075

0.652

3.404

190ph  
151431

16 44.6 +02 09 6.0 A2m -6.28

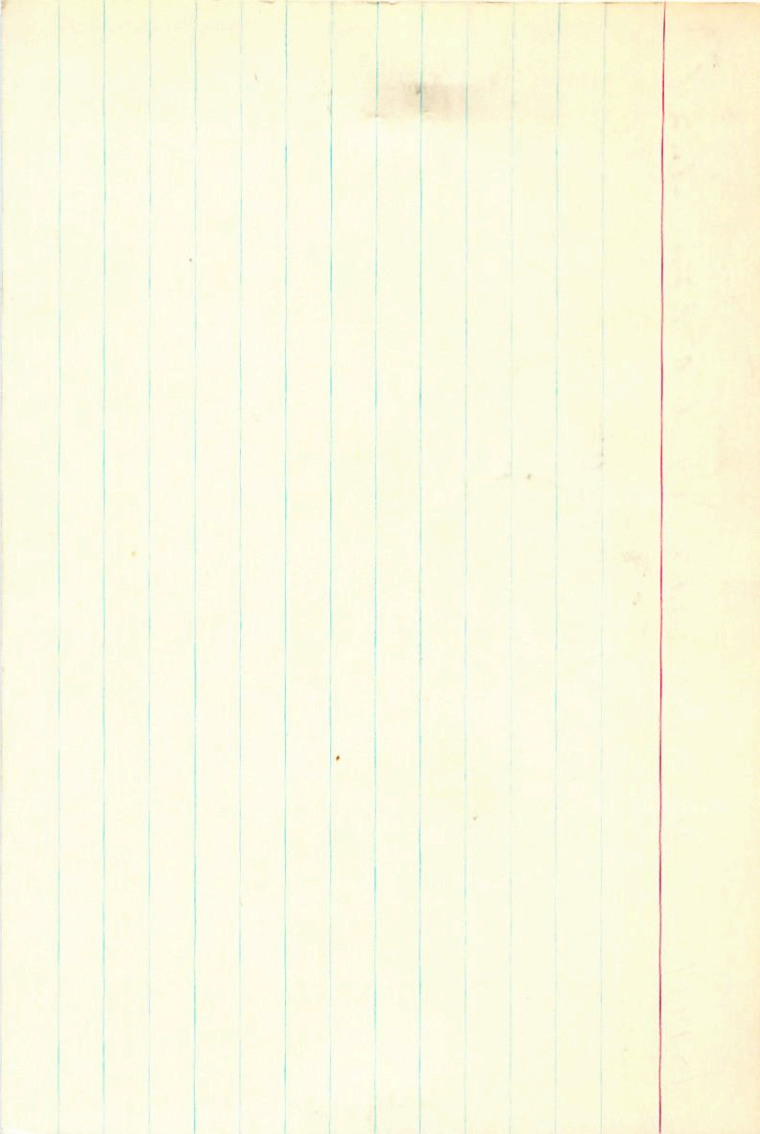
22592

9653

-0009 49 -014<sup>46</sup>N30

AD510207

-0012±2.2 -010±1.8



-0000 ± 3.4 -01113.2 MO II -80.0 COM  
-0000 -029

151415 16 45.2 -24 26 7.5 9 MO -75.0 COM  
22599 -0006 -016 -77.5

9654 11.202 1905.3 -24 26 20.04 1401.7  
027 20.04 20.04 5.9872

0006-016 2.06 + 1.70 + 12.04 (3)  
00045-0115 6.07 + 10.76 (3)  
11.2220 ~~7.9~~ ~~-005-011~~ 5.23  
106-010 7.9 20.14 1938.70768  
↑ 20 219 219 791

40.054 227 31.5 193484  
31.188 227 38.05 43.82 3.54  
5.9371 11.1937 21.97 36.8  
545 228 21.58 20.29 (37.1)  
4.65 237 20.29 20.29  
8.25 237 20.29 20.29

8.0 ± 400 P.M.  
+ 74.7  
- 12.9  
- 25.4

18



151415.000\*

16.000\*

45.200\*

-24.000\*

-26.000\*

-0.006\*

-0.010\*

7.900\*

380.189

-77.500

0.002

-0.972

76.075

-0.055

-0.063

-15.909

-0.007

0.225

-20.186

18

16 45.5 -58 57 gmo +9.0a

7 Area  
22606 151249  
1484229 22606  
9666

3.75 +1.61 cure +039 -037 a-c  
+0050 ± 2.6 -037 ± 2.4 +079 -021 n30  
+0040 -030 1903.14040 -030 P  
-58 57 16.75

27.409 1908.5  
-208  
201

+1.74  
15.04

27.374  
-39  
237 965

15.83 1939.10  
-16  
15.99

39.0

9494  
47.5  
44.4

4524  
382  
1181

27.433  
-56  
426

16.65  
-14  
16.79

1955.84

151837

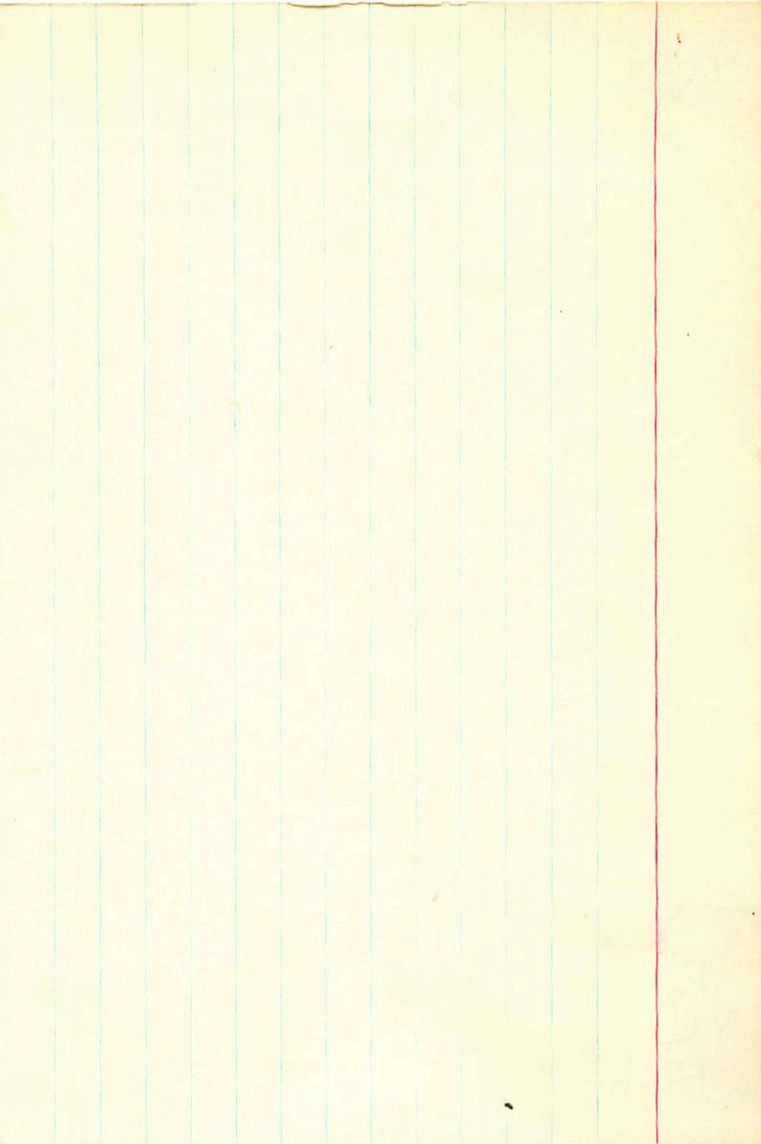
16 45.8 +55 30 7.0 9.15 -2.08

22615

9663.

+0020<sup>15</sup> -002<sup>15</sup> N30

+002433.1 -001E2.9



151627

22616

9664

+0008 ± 63  
+0007

16 45.8 +13

+02225.1  
+03

41 6.3

+3.3 20  
+2.4 5.5  
67 40.68

50.454 1890.8 +13 40 39.79 1884.1 -

-047  
407

50.415  
14  
429

40.4 193.8  
-9  
40.05

46.3

50.432  
14  
444

40.12 1980.4  
-17

444  
138  
4031

3995  
20.02  
7.65

72  
37.1  
52.6

100

151044

16 412

+50 02

-141 A65

6200 48 09

+0135 -106 Country

130-106

203

-106

202

-141

19



12 750  
20 050  
30 050  
40 050  
50 050  
60 050  
70 050  
80 050  
90 050  
100 050

R.A. : 16.750  
DEC. : 50.050  
R.A. : 203.000  
DEC. : -106.000  
ANCE : 2.750  
DULEID : 35  
70.000  
-0.174

6231

121404

16 47.0

67 36

20.5

+0022+13.0 -058+15.0

C<sub>2</sub>(4)

151849 16 48.4 71 628151

45 - 23 R21E

55 - 23 R21E

-16.5 ± 1.2

22676

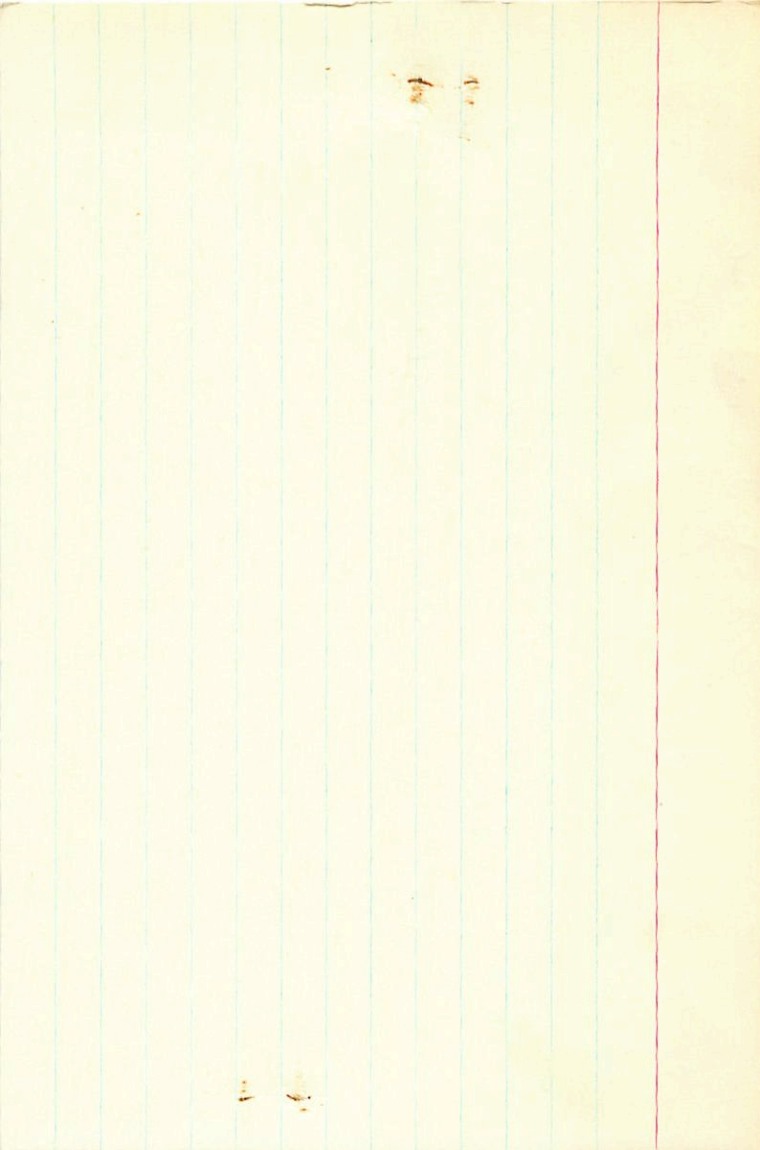
8.44 + 51

26.204 1504.7

64.25 53.49 1504.4

$\frac{401}{201}$

$\frac{492}{50.85}$   
2.64



C<sub>3</sub>(4)

148451 16 48.6 -87 30 65 III -3.6±0.4

6622679 6.27 56.0 6.57 ± 0.91 1.92  
6.50

-1950 ± 5.6 -144 ± 5.8

34.063 1904.0 41.02 1902.6

-128 -144.66

-5046  
-1960 -127  
-2006  
-42  
+1382

Slip  
Gut

135-125  
-135

148401.000\*

16.000\*

46.000\*

-87.000\*

-30.000\*

-0.120\*

-0.144\*

5.000\*

100.000

-3.600

0.690

-0.520

71.139

-0.578

-0.732

-55.150

0.142

-0.440

15.829

25

6133.000\*

16.000\*

48.600\*

-87.000\*

-30.000\*

-0.135\*

-0.125\*

47

5.000\*

86.8

100.000

-3.600

0.622

-0.520

+54

64.052

-0.572

-0.732

-17

-54.569

20

0.216

-0.440

+21

23.190



+0010 ± 4.9 -137 ± 3.1  
+0010 -129

152113 16 48.7 +09 29 7.0 day -346.6

22683

9685

110610229

44184 18983 +9 29 21.83 1886.2

$\frac{-052}{.132}$

$\frac{44144}{162}$

$\frac{44140}{173}$

44.175

$\frac{170}{+038}$

+8.74

30.57

24.86 11347

$\frac{-14}{2472}$

24.28 1940.4

$\frac{-11}{2417}$

24.32

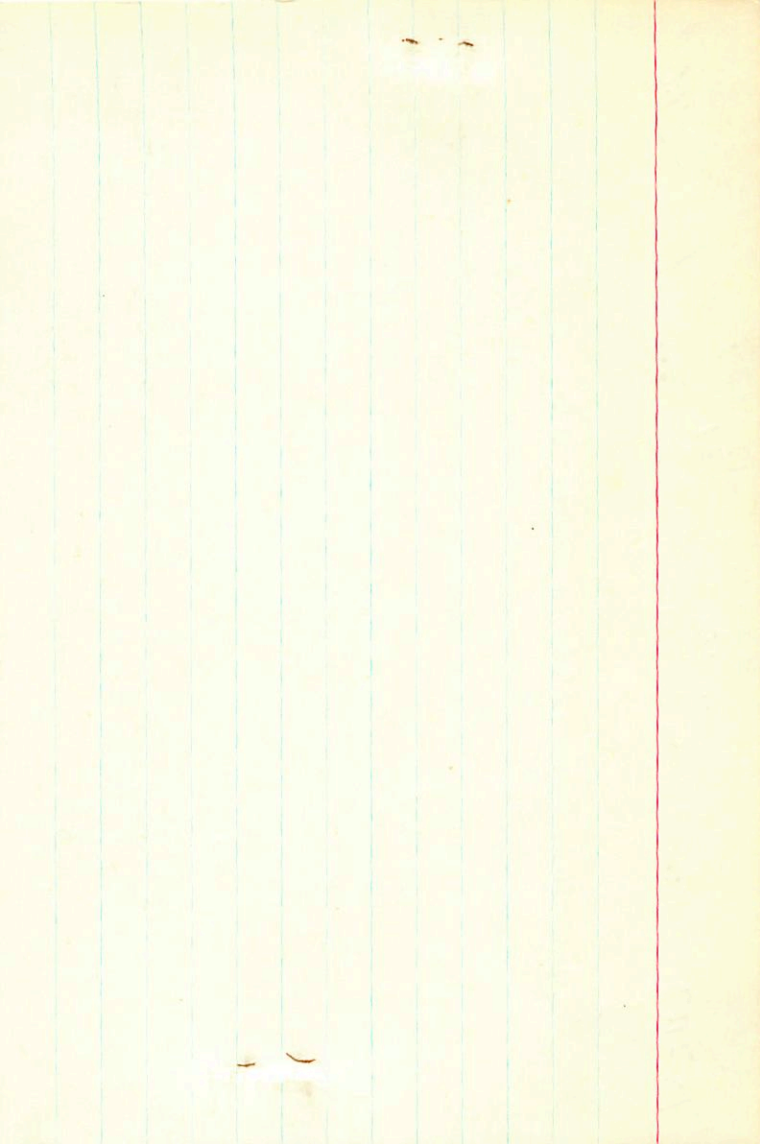
24.40

-6.17

38.9

326  
1936.4  
39.2  
51.0

12-1 11.15



2254) -302 50(35)  
6259 16 489 +32 39 6-13 100H

$$\begin{array}{r} +015 +039 00 \\ -2 \\ \hline +014 \end{array} \quad \begin{array}{r} +5 \\ +004 \\ \hline \end{array} \quad \begin{array}{r} ? \\ ? \\ \hline \end{array}$$

1

21



$$v(41.3) - 0070 = 4.2 + 064 = 33$$

$$+ 063$$

152262

16 49.0

59 6.3 913 -36.86

22664

9691

59.861 1901.0

41 58

46.29

18973

$$\frac{343}{204}$$

$$0.204$$

$$11.85$$

$$48.1827$$

$$0.0017$$

$$0.04$$

$$0.042$$

$$0.0015$$

$$59.978$$

$$1.98$$

$$1.98$$

$$-3.37$$

$$42.92$$

$$18.5$$

$$37.45$$

$$47.85$$

$$44.94$$

$$17$$

$$47.3$$

$$45.3$$

$$-37$$

$$44.97$$

272

120.030

0.042

0.0015

1.98

565

28.2

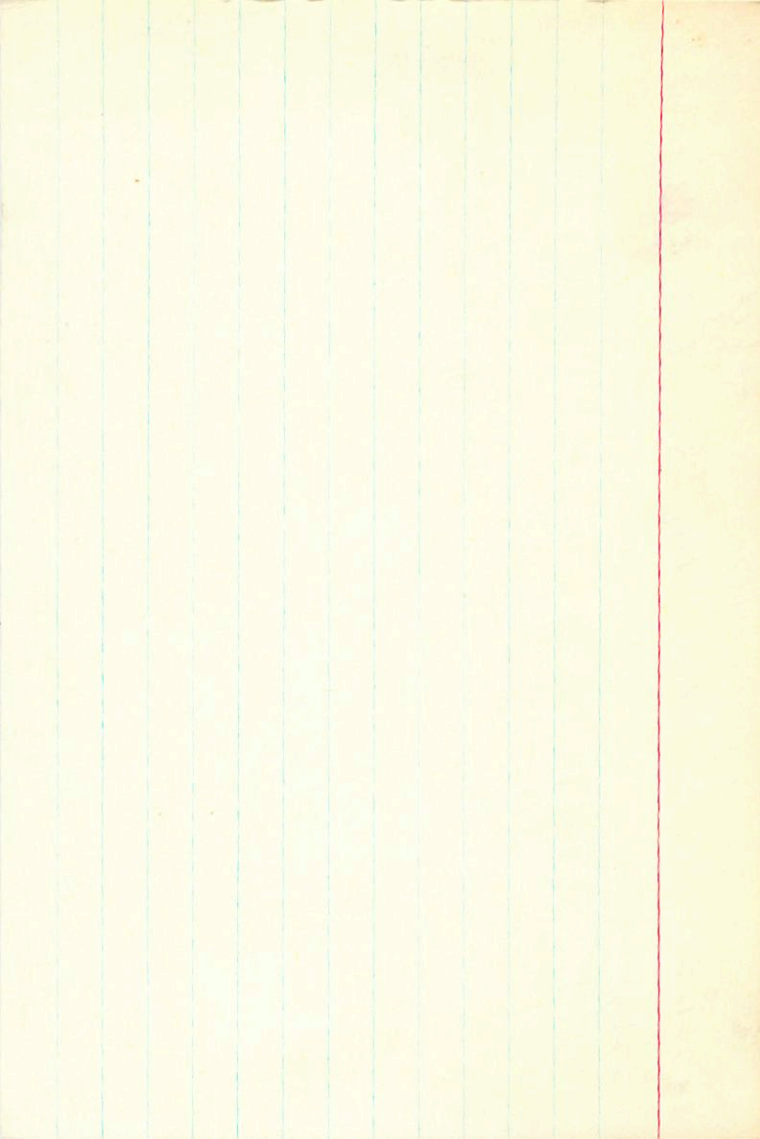
30.9

1926.1

44.05

1.93

1930.4



51 MW

152326 16 49.7 +24 44 512 gnl -15.7a

22706

9697 44 +0007 +001 38 N30

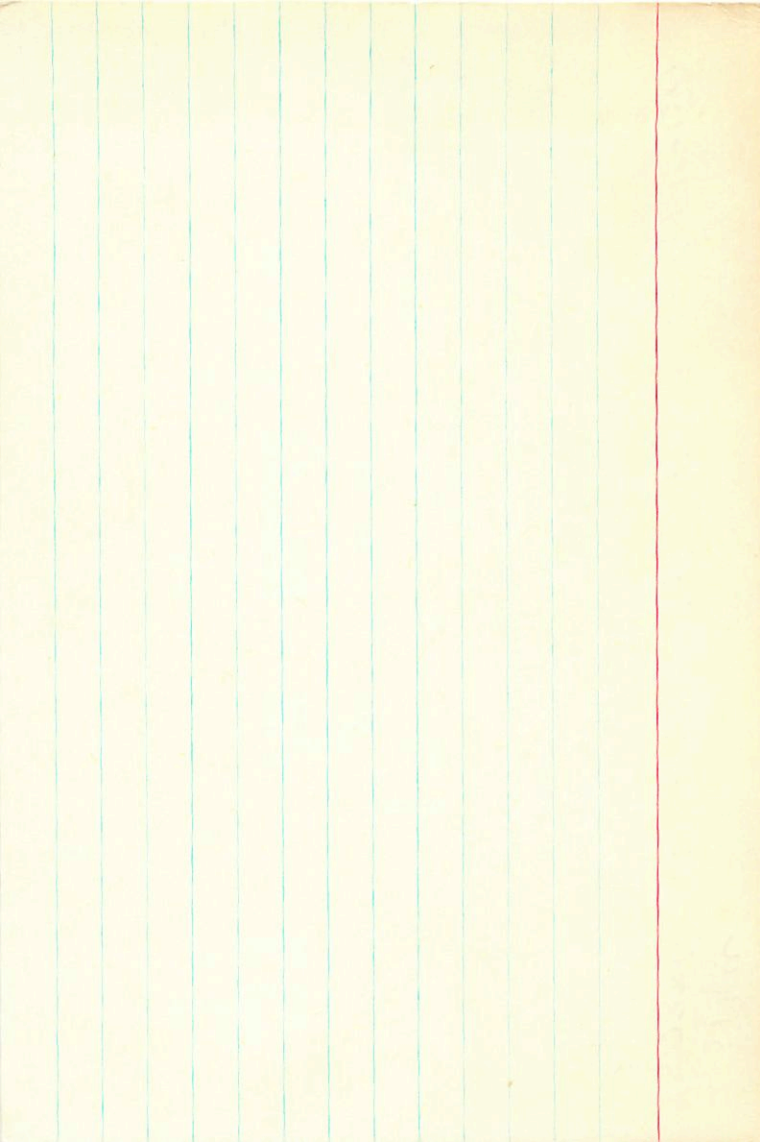
-20.30

+0007 2.6 +009 2.06c → W30

506 +1.23 +1.295 213

504 +1.26 +1.29 214





122100 001251  
497442  
16 454 71 500 600 200

0172-087-746

→ 45  
[ 176 087 ]

✓ 16.8  
→ 45

07E  
07E  
07E

07E

65-930<sup>18</sup>  
out

AUG 10 235

16

49.9 + 28

45

-0014 ± 5.1 + 0.22 ± 3.4  
-0003 + 0.24

-2446

152380

22715  
9649

-0181

-009 + 0.24 14

51.236

1896.5 + 28

44

54.52 1886.6

075  
311

-1.39  
53.13

51.305  
0

599

54.27 1928.4

51.294

306.9

54.01

51.300  
-011

54.80 1938.35

59.16

66.79

+ 1.13

33.4

176.8

-954-301 481 877 -009 +024 -244 012 -12 099  
-009 011 003-004 -024 066 -214 +6 +20 0181

~~440~~ +24-6  
+5-

R-18-14-11

444  
444

$\Sigma 24 \text{ mi}$

153751

16

51.0

+82

07

4.4

9G1

-11.4A

22749

9717

AD510 242 ✓

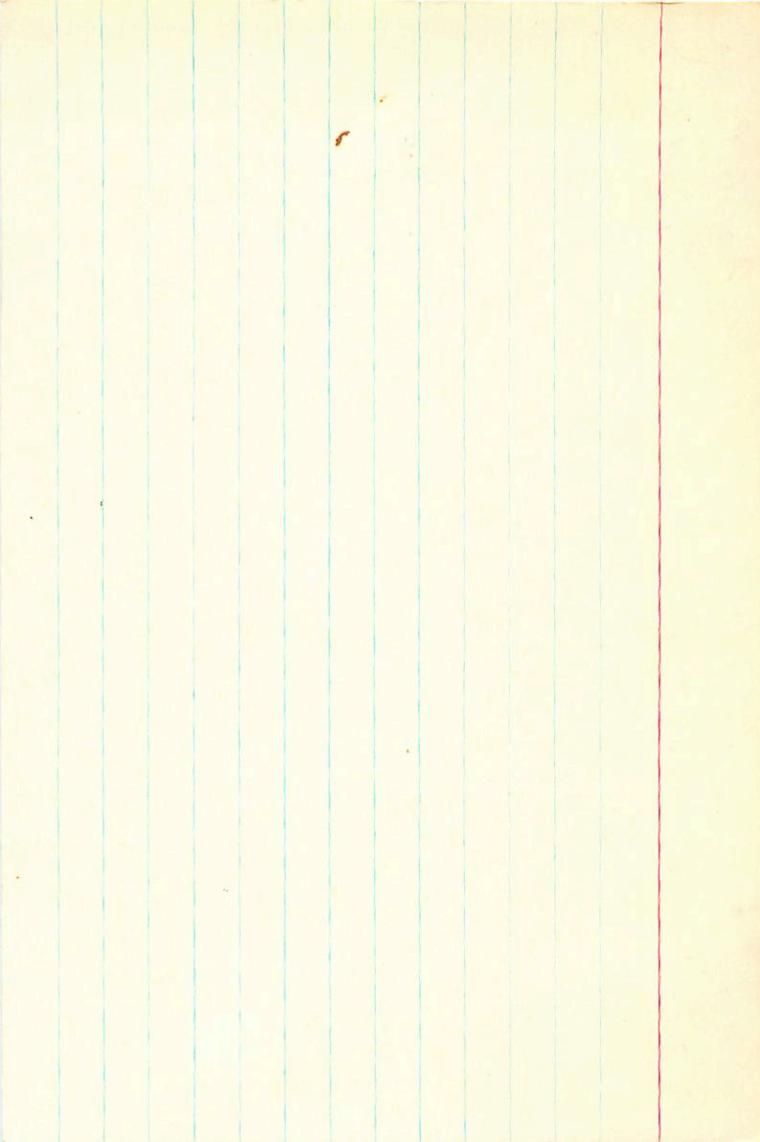
+0062<sup>107</sup>

+004<sup>104</sup> N30

+0066 ± 0.6 +004 ± 0.7 ΔC → 7430

-10.5 Calculated

Sp. B. P = 39d



AIR Sea

16 514 - 36 48.5

0-167

-3611056

1.3 Duba

A.P.

152404

tuos 059 y

10 Duba

(11)

(33)

1702-042-7+6

1025

9364-7557-6986

150-100-100

0406

Area

THIS

2595-945E

27.92

~~23.89~~

~~25.14~~

W

~~532~~

638

167.05

26.76

11.95



R.A.	:	16.850
DEC.	:	-36.800
PM. R.A.	:	-6.000
PM. DEC.	:	-41.000
DISTANCE	:	5.000
MODULUS	:	100
RAD. VEL.	:	
q1 (U)	:	-1.000
q2 (U)	:	-0.195
q3 (U)	:	-0.124
MP	:	-0.973
U	:	28.535
		3.827

q1 (V)	:	0.604
q2 (V)	:	0.766
q3 (V)	:	-0.219
MP	:	-162.684
V	:	-16.050

q1 (W)	:	-0.773
q2 (W)	:	0.630
q3 (W)	:	0.074
MP	:	-104.912
W	:	-10.566

22

2204h  
-0012 ± 2.6  
-035

152534  
16 51.8 -23

22778  
26 7.0 967 -26.58

9730

55.64 1902.9

+1.70  
53.94

26.21 1935.35

20.05

56.74  
1.58

55.16

55.19

54.97 1938.84

55.02

55.12  
1.18

419  
37.1

34.2

36.4

583

292

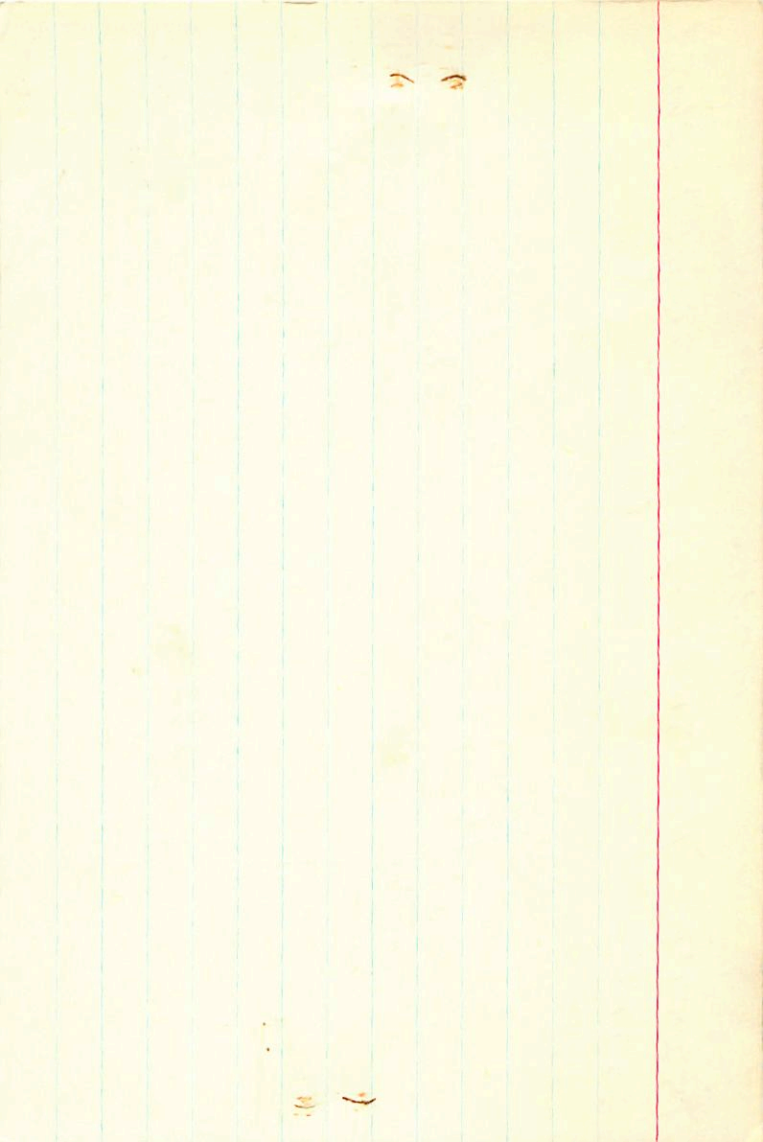
310

292

-02.0

49.285

1.24  
7.73



152812 -0039±160 1099±10.0 40  
-58 +067  
+47 30 6.3 R0 -63.30

22782

9732 53.728 1910.8 447. 29 45.73 15073  
153  
881

-0048 +087  
-3 +087

11.878 1925.7  
44.948  
53.768  
781  
781

0051  
051+087  
17.2

41.50  
10.7 1925.8 561.?  
28.20  
41.74  
42.14 42.88  
20.7

781  
781  
-10  
53.775  
575

42.13 42.01 +1.38  
44.1 1930.3  
-36  
43.7

152812.000\*

16.000\*

51.900\*

47.000\*

30.000\*

-0.051\*

0.087\*

5.000\*

100.000

-63.300

0.441

-0.221

58.029

-0.025

0.742

-49.533

0.183

0.633

23

23

152792	16	52.0	+42	55	260	+7.48
GC22786		6.81	+0.65	+0.08	GOVER	+5.80(6)
W9734						+7.96(4)
Y3848						
+43°2659						
						S = .11

					+114	-331	GC
-39	0	-7	.0435				
-54	-4	-13	.030				

29 ± 8 A(16)

10104 73.1 - 33172.5  
10104 - 334

57.396 1899.8 +42 54 35.35 18986

0522  
56 864

10.010  
17.110

57.113  
133

9.269

+17.01

52.36  
10.9 - 1925.6

28.25  
42.65

43.48

43.33

RSSCO

152476

22786

9735

59.814

1405.0

-45

1

23.18

1903.7

$$\begin{array}{r} -189 \\ \hline 627 \end{array}$$

$$\begin{array}{r} +157 \\ \hline 61 \end{array}$$

10.904

48.670

59.564

1.508

1.500

21.

61

54.05

1429.81

3030

435

2190

311

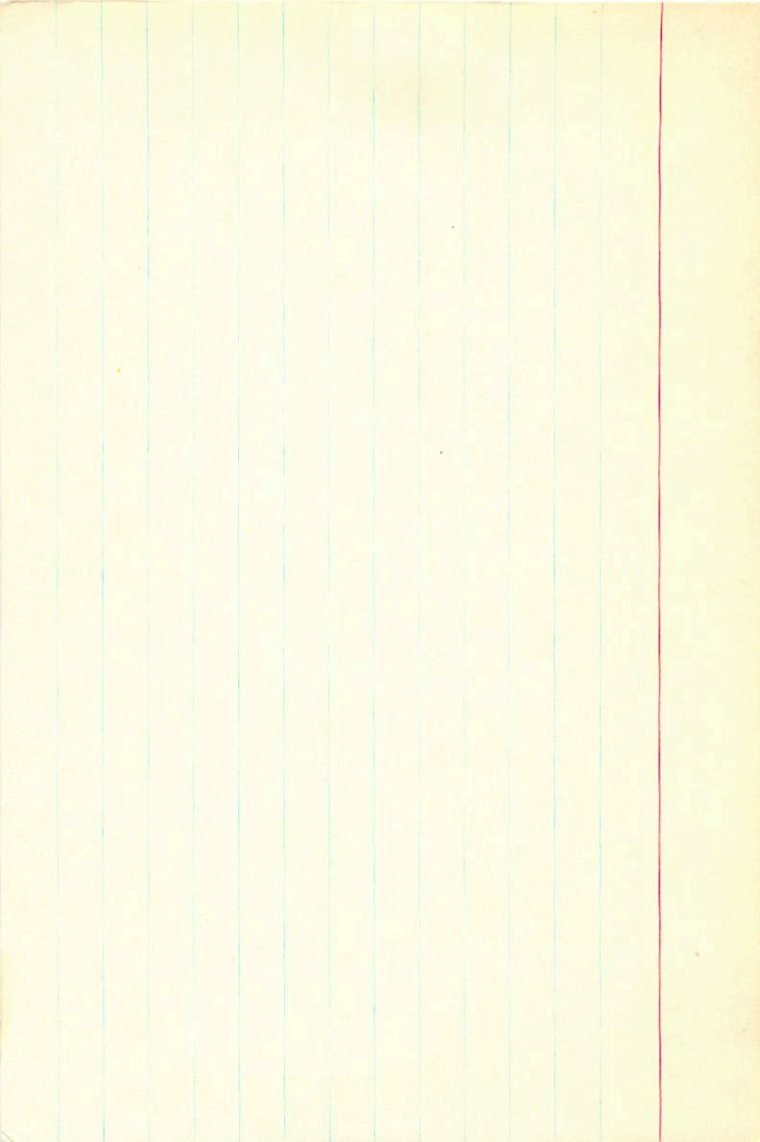
22.24

$$+1042 \pm 15.0 \quad -034 \pm 12.2$$

$$n=319 d$$

602 gms + 746





JTHer

16

52.1

+16

55

A3

+21.82 W(15)

+17°3117

W9736

-62 -20 -30 .004

-79 -27 -46 .003

+010±5 -056±64  
-1  
+9 -58

-0009±5.5  
+0002  
-043  
-030±5.6  
-043  
-127

10 52 8.569 1910.3 +16 55 2.55 1911.5

$$\begin{array}{r} 036 \\ \hline 1605 \\ \hline 3.71 \\ \hline 29 \sqrt{144} \end{array}$$

$$8.593$$

$$\frac{19}{804}$$

$$\frac{612}{1007}$$

$$243$$

$$\begin{array}{r} 2.06 \\ +1 \\ \hline 207 \\ \hline 15 \frac{3}{246} \end{array}$$

13  
12  
10

$$8.612$$

$$\frac{622}{622}$$

$$3.7 \quad 1928.9$$

(23.1)

$$-0004$$

$$\frac{-25}{-25}$$

$$\frac{3.2}{3.2} \quad \frac{5}{5} \quad \frac{10}{10}$$

$$17 \sqrt{290}$$

AS on

254  
678  
+3223

16 523 25 10

270  
769  
744

19  
193257  
180255

6.53

210-1000-050

110-050

130013

40  
22  
424  
h5e

182413

3311

LD 3311

-19

02

A1-A3-A5

1892

57

R.A. : 16.900  
 DEC. : -65.150  
 M. R.A. : -40.000  
 M. DEC. : -56.000  
 DISTANCE : 4.250  
 MODULUS : 71  
 AD. VEL. : -25.400

q1 (U) : -0.184  
 q2 (U) : -0.573  
 q3 (U) : -0.798  
 dU : 166.836  
 U : 32.091

q1 (V) : 0.600  
 q2 (V) : 0.578  
 q3 (V) : -0.553  
 dV : -201.189  
 V : -0.197

q1 (W) : -0.778  
 q2 (W) : 0.581  
 q3 (W) : -0.238  
 dW : -92.173  
 W : -0.477

*M*

152781 16 53.1 -16 44 6.5  $\log_{10} 2 = 2.76$

22815

9752

8.456 1905.2 -16 43 41.67 1502.8

$$\begin{array}{r} -244 \\ \hline 1210 \end{array}$$

46890

26345

8.227

311

313

8.395

354

349

+139

$$\begin{array}{r} -160 \\ \hline 18.27 \end{array}$$

17.28 1928.24

27.15

44.43

1.51

42.915

42.77

28.5

899

67.42

33.7

30.9

1939.18

42.39

+16

42.33

42.55

+0.72

