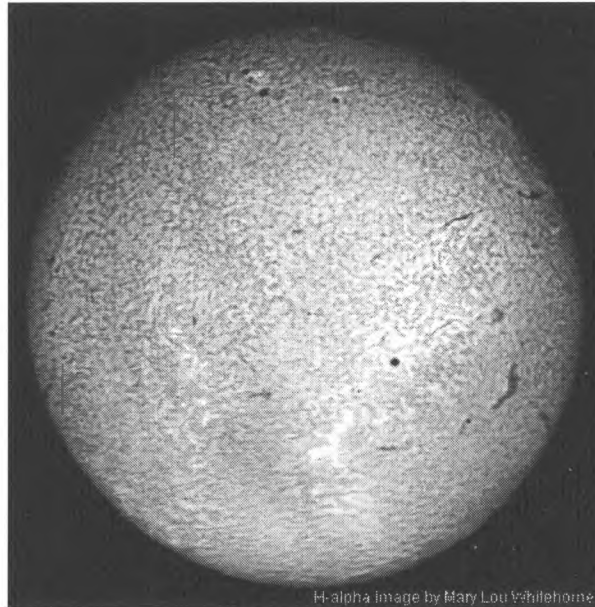


Solar Observations

Volume 3 1983 to 1995



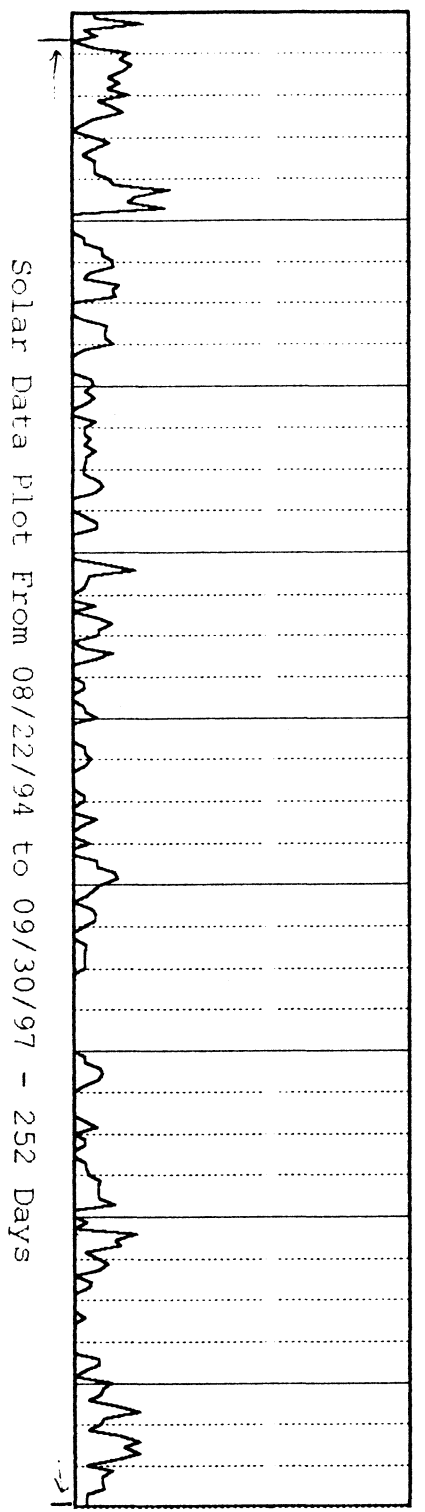
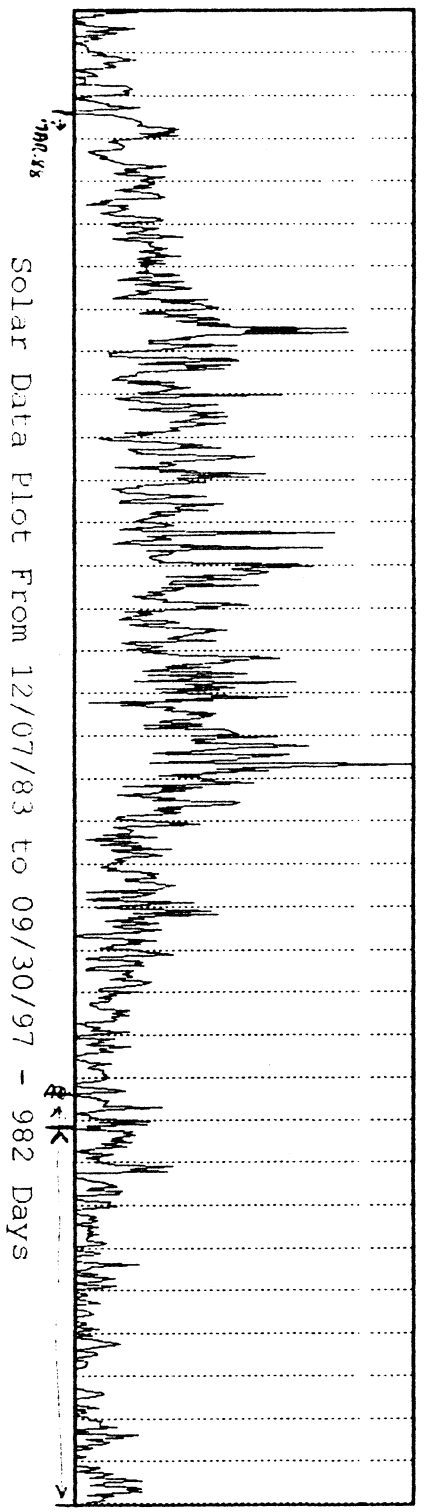
by Bertus (“Bert”) Rhebergen

Published by:

The Hamilton Centre
of the Royal Astronomical Society of Canada



© Copyright 1983-1997 by Bertus Rhebergen



DATA FILE RECORD INFORMATION

	Highest	Lowest
Sun Spots:	09/30/97 0.0	09/30/97 0.0
Solar Flux:	08/18/91 326	08/23/97 0

RELATIVE # OF SUNSPOTS

DEC. 7/83 $10 \times 2 + 12 = 32$ ← THE ESTIMATED NUMBER OF SPOTS IN THE DRAWING.
 DEC. 10/83 $10 \times 4 + 24 = 61$ I WAS NOT MAKING SUNSPOT COUNTS WHEN I MADE THESE DRAWINGS.

MAR. 31/84 $10 \times 1 + 9 = 19$

NOV. 23 $10 \times 2 + 8 = 28$ * ← THIS INDICATES A SUNSPOT COUNT MADE WITH THE DRAWING.

DEC. 23 $10 \times 0 + 0 = 0$ *

DEC. 25 $10 \times 0 + 0 = 0$ *

DEC. 30/84 $10 \times 0 + 0 = 0$ *

JULY 21/85; SKY TEL. JUNE

JAN. 26/85 $10 \times 0 + 0 = 0$ *

FEB. 9 $10 \times 1 + 1 = 11$ *

APR. 19 $10 \times 0 + 0 = 0$ *

APR. 21 $10 \times 1 + 5 = 15$

APR. 27 $10 \times 1 + 14 = 24$

APR. 29/85 $10 \times 4 + 19 = 59$

→ MARCH 21/85; SKY TEL. COUNT?
SMALL CIRCLE ②

- 2
- 7
- 12
- 14
- 17
- 18
- 22
- 26

SMALL CIRCLE ① 30

60, 58

MONTHLY SPOT NUMBERS

() LESS THAN 5 @ MONTH (4 or less)
 — MORE THAN 11 @ MONTH 10 or more

FROM DEC '90; (* COUNTS ONLY)

pg. 2

MAY 23/85 $10 \times 4 + 6 = 46$

JUNE 30 $10 \times 1 + 1 = 11$

JULY 10 $10 \times 2 + 22 = 42$

JULY 11 $10 \times 2 + 20 = 40$

JULY 12/85 $10 \times 2 + 10 = 30$

JAN 2/86 $10 \times 0 + 0 = 0 *$

APR. 27 $10 \times 1 + 8 = 18 *$

JULY 5 $10 \times 2 + 8 = 28$

AUG. 31 $10 \times 1 + 1 = 11 *$

SEPT. 7 $10 \times 1 + 3 = 13$

SEPT. 13 $10 \times 0 + 0 = 0 *$

OCT. 2 $10 \times 1 + 2 = 12$

OCT. 5 $10 \times 1 + 1 = 11 *$

OCT. 7 $10 \times 1 + 4 = 14$

OCT. 11/86 $10 \times 1 + 1 = 11$

↓
CONTINUED ON NEXT PAGE

CONTINUED FROM PRECEDING PAGE
↓

OCT. 18/86 $10 \times 1 + 6 = 16$ ← HERE COMES A STRETCH WHEN I MADE
OCT. 19 $10 \times 1 + 14 = 24$ OBSERVATIONS EVERYDAY FOR AN EXTENDED
STRETCH OF TIME.

OCT. 20 $10 \times 1 + 20 = 30$

OCT. 21 $10 \times 1 + 6 = 16$

OCT. 22 $10 \times 2 + 20 = 40$

OCT. 23 CLOUDY

OCT. 24 $10 \times 3 + 19 = 49$

OCT. 25 CLOUDY

OCT. 26 CLOUDY

OCT. 27 CLOUDY

OCT. 28 $10 \times 5 + 9 = 59$

OCT. 29 CLOUDY

OCT. 30 $10 \times 3 + 5 = 35$

OCT. 31/86 $10 \times 2 + 7 = 27$

↓



NOV. 1/86 $10 \times 3 + 5 = 35$

NOV 2 $10 \times 3 + 11 = 41$

NOV. 3 CLOUDY

NOV. 4 $10 \times 3 + 9 = 39$

NOV. 5 OVERCAST

NOV. 6 CLEAR WITH CLOUDY STREAKS

NOV. 7 CLEAR A.M., FOG P.M.

NOV. 8 RAIN A.M., CLEAR PATCHES LATE P.M.

NOV. 9/86 CLEAR SKIES, STRONG BREEZE.
I ATTEMPTED TO MAKE A DRAWING, BUT MY 2 1/2" TELESCOPE
GOT BLOWN OVER. IT WAS NOT DAMAGED!!!
THIS ENDED MY UNBROKEN STRETCH OF OBSERVATIONS.

page 5

JAN. 25/87 $10 \times 0 + 0 = 0 *$

JAN. 31 $10 \times 0 + 0 = 0 *$

MAR. 5 $10 \times 1 + 8 = 18$

MAR. 7 $10 \times 1 + 8 = 18$

MAR. 8 $10 \times 1 + 13 = 23$

MAR. 10 $10 \times 0 + 0 = 0$

MAR. 15 $10 \times 1 + 1 = 11$

MAR. 16 $10 \times 1 + 1 = 11$

MAR. 17 $10 \times 1 + 1 = 11$

MAR. 18 $10 \times 1 + 1 = 11$

MAR. 19 $10 \times 0 + 0 = 0 *$

MAR. 20 $10 \times 0 + 0 = 0 *$

APR. 8 $10 \times 4 + 10 = 50$

APR. 9 $10 \times 3 + 23 = 53$

APR. 10 $10 \times 3 + 26 = 56$

APR. 11 $10 \times 3 + 12 = 42$ 1:00 P.M.

APR. 11/87 $10 \times 3 + 16 = 46$ 3:00 P.M.



page 6

APR. 13/87	$10 \times 4 + 13 = 53$
APR. 14	$10 \times 4 + 12 = 52$
APR. 18	$10 \times 2 + 4 = 24$
APR. 19	$10 \times 1 + 2 = 12$
APR. 20	$10 \times 0 + 0 = 0 *$
APR. 22	$10 \times 1 + 1 = 11$
APR. 26	$10 \times 2 + 2 = 22$
MAY 9	$10 \times 2 + 5 = 25$
JUNE 23	$10 \times 2 + 13 = 33$
JUNE 24	$10 \times 2 + 12 = 32$
JUNE 25	$10 \times 5 + 13 = 63$
JUNE 26	$10 \times 3 + 6 = 36$
JULY 2	$10 \times 0 + 0 = 0 *$
JULY 5	$10 \times 0 + 0 = 0 *$
JULY 11/87	$10 \times 0 + 0 = 0 *$

NO MORE DRAWINGS MADE TILL MARCH, 1988

page 7

MARCH 17/88	10x3+6	36	7x35 BINOCULARS
MAR. 20	10x3+15	45	
MAR 21	10x4+14	54	
MAR 22	10x4+19	59	
MAR 26	10x4+23	63	
MAR 28	10x4+24	64	
MAR 29	10x4+18	58	
MAR 31/88	10x4+24	64	

page 8

APRIL 1/88 $10 \times 4 + 20$ 60

APR. 9 $10 \times 7 + 24$ 94

APR. 10 $10 \times 7 + 31$ 101

APR. 11 $10 \times 7 + 17$ 87

APR. 12 $10 \times 8 + 16$ 96

APR. 13 $10 \times 5 + 12$ 62

APR. 17 $10 \times 8 + 21$ 101

APR. 20 $10 \times 5 + 16$ 66

APR. 21 $10 \times 5 + 13$ 63

APR. 22 ~~$10 \times 2 + 6$~~ ~~26~~ $10 \times 4 + 6$ 46

APR. 30/88 $10 \times 2 + 12$ 32

IT IS BECOMING RATHER DIFFICULT TO DETERMINE, FROM THE DRAWINGS, WHICH ARE THE SEPARATE GROUPS

← A GROUP OF SPOTS ARE MOVING AROUND THE LIMB, CREATING A FORE-SHORTENING EFFECT.

page 9

MAY 1/88	$10 \times 3 + 12 =$	42	
MAY 3	$10 \times 3 + 13$	43	
MAY 4	$10 \times 3 + 14$	49	
MAY 6	$10 \times 4 + 8$	48	
MAY 8	$10 \times 4 + 6$	46	
MAY 11	$10 \times 2 + 6$	26	
MAY 14	$10 \times 1 + 4$	14	
MAY 23	$10 \times 1 + 9$	19	A LARGE SPOT GROUP CAME INTO VIEW
MAY 26	$10 \times 1 + 13$	23	
MAY 27	$10 \times 1 + 22$	32	
{ MAY 28	{ $10 \times 1 + 14$	{ 24	← $4\frac{1}{2}$ " REFRACTOR 36X THE GROUP IS NOW ON THE SUN'S MERIDIAN. ← 5" REFRACTOR 75X
{ MAY 28	{ $10 \times 1 + 37$	{ 47	
MAY 29	$10 \times 2 + 17$	37	
MAY 30	$10 \times 2 + 17$	37	
MAY 31/88	$10 \times 2 + 23 =$	43	

pg. 10

JUNE 2/88 $10 \times 3 + 19 = 49$

JUNE 5 ~~$10 \times 6 + 19$~~ ~~99~~ ~~$10 \times 6 + 19$~~ ~~99~~ $(10 \times 5 + 39) = 89$

JUNE 6 $10 \times 5 + 23 = 73$

JUNE 11 $10 \times 3 + 19 = 49$

JUNE 18 $10 \times 4 + 9 = 49$

JUNE 19 $10 \times 4 + 23 = 63$

JUNE 23 $10 \times 3 + 8 = 38$

JUNE 27 $10 \times 4 + 14 = 54$

A LARGE GROUP COMES INTO VIEW.
SAME ONE AS MAY 23?

JUNE 28/88 $10 \times 6 + 28 = 88$

JULY	1/88	$10 \times 3 + 43 =$	73	THE GROUP IS CROSSING THE MERIDIAN
JULY	2	$10 \times 3 + 34$	64	
JULY	3	$10 \times 3 + 37$	67	
JULY	4	$10 \times 5 + 28$	78	AS FAR AS I CAN TELL, THE THREE GROUPS HAVE DEVELOPED INTO FIVE GROUPS.
JULY	5	$10 \times 5 + 27$	77	
JULY	6	$10 \times 4 + 17$	57	
JULY	7	$10 \times 6 + 15$	75	← MOST OF THESE DRAWINGS WERE MADE AT WORK, DURING LUNCH HOUR. WHEN THIS DRAWING WAS MADE, IT WAS 97°F ACCORDING TO A FELLOW-WORKER WHO LISTENED TO THE RADIO NEWS BROADCAST
JULY	11	$10 \times 3 + 21$	51	
JULY	13	$10 \times 3 + 9$	39	
JULY	17	$10 \times 3 + 27$	57	ANOTHER BIG GROUP IS CROSSING THE MERIDIAN.
JULY	31/88	$10 \times 5 + 32 =$	82	

page 12

$$\text{AUG. 1/88} \quad 10 \times 5 + 30 = 80$$

$$\text{AUG. 8} \quad 10 \times 6 + 28 = 88$$

$$\text{AUG. 13} \quad 10 \times 5 + 31 = 81$$

$$\text{AUG. 16} \quad 10 \times 3 + 13 = 43$$

$$\text{AUG. 18} \quad 10 \times 2 + 5 = 25$$

$$\text{AUG. 19} \quad 10 \times 3 + 4 = 34$$

$$\text{AUG. 21/88} \quad 10 \times 1 + 2 = 12$$

WHEW! THE TEMPERATURE IS FINALLY GOING
DOWN TO 69°F

SEPT. 5/88 $10 \times 4 + 12 = 52$

SEPT. 6 $10 \times 3 + 14 = 44$

SEPT. 7 $10 \times 4 + 13 = 53$

SEPT. 8 $10 \times 4 + 7 = 47$

SEPT. 9 $10 \times 3 + 10 = 40$

SEPT. 10 $10 \times 2 + 5 = 25$

SEPT. 12 $10 \times 3 + 6 = 36$

SEPT. 15 $10 \times 3 + 11 = 41$

SEPT. 24 ~~$10 \times 8 + 22 = 102$~~

$10 \times 5 + 28 = 78$

SEPT. 25 $10 \times 5 + 36 = 86$

SEPT. 26 $10 \times 6 + 25 = 85$

SEPT. 27 $10 \times 4 + 13 = 53$

SEP. 28/88 $10 \times 3 + 4 = 34$

$$\text{OCT. 20/88} \quad 10 \times 2 + 21 = 41$$

$$\text{OCT. 23} \quad 10 \times 1 + 41 = 51$$

$$\text{OCT. 30} \quad 10 \times 6 + 22 = 82$$

$$\text{OCT. 31} \quad 10 \times 5 + 17 = 67$$

$$\text{NOV. 3/88} \quad 10 \times 5 + 16 = 66$$

$$\text{NOV. 7} \quad 10 \times 4 + 10 = 50$$

$$\text{NOV. 15} \quad 10 \times 5 + 25 = 75$$

$$\text{NOV. 18} \quad 10 \times 7 + 35 = 105$$

$$\text{NOV. 23} \quad 10 \times 5 + 16 = 66$$

$$\text{NOV. 24} \quad 10 \times 3 + 7 = 37$$

$$\text{NOV. 25} \quad 10 \times 4 + 11 = 51$$

$$\text{DEC. 1/88} \quad 10 \times 6 + 17 = 77$$

$$\text{DEC. 6} \quad 10 \times 6 + 11 = 71$$

$$\text{DEC. 16} \quad 10 \times 4 + 32 = 72$$

$$\text{DEC. 17} \quad 10 \times 4 + 32 = 72$$

$$\text{DEC. 23} \quad 10 \times 7 + 20 = 90$$

$$\text{DEC. 30} \quad 10 \times 5 + 32 = 82$$

} SAME COUNT ON DIFFERENT DAYS

$$\text{JAN } 1/89 \quad 10 \times 4 + 22 = 62$$

$$\text{JAN } 11 \quad 10 \times 6 + 23 = 83$$

$$\text{JAN. } 21 \quad 10 \times 6 + 19 = 79$$

$$\text{JAN. } 22 \quad 10 \times 8 + 23 = 103$$

$$\text{JAN. } 23 \quad 10 \times 4 + 33 = 73$$

$$\text{JAN. } 27 \quad 10 \times 3 + 30 = 60$$

$$\text{JAN. } 28 \quad 10 \times 5 + 36 = 86$$

$$\text{FEB. } 11/89 \quad 10 \times 4 + 21 = 61$$

$$\text{FEB. } 18 \quad 10 \times 5 + 38 = 88$$

MAR. 8/89 $10 \times 4 + 24 = 64$

MAR. 9 $10 \times 4 + 27 = 67$

MAR. 10 $10 \times 4 + 28 = 68$

MAR. 12 $10 \times 3 + 40 = 70$

MAR. 14 $10 \times 4 + 31 = 71$

MAR. 16 $10 \times 4 + 19 = 59$

MAR. 21 $10 \times 6 + 32 = 92$

MAR. 23 $10 \times 7 + 32 = 102$

MAR. 25 $10 \times 4 + 27 = ~~67~~ 67$

MAR. 26/89 $10 \times 4 + 16 = 56$

5

page 17

26

$$\text{APR. 1/89} \quad 10 \times 3 + 12 = 42$$

$$\text{APR. 8} \quad 10 \times 7 + 36 = 106 \quad * \text{ COUNT MADE WITH DRAWING}$$

$$\text{APR. 16} \quad 10 \times 6 + 31 = 91$$

$$\text{APR. 18} \quad 10 \times 5 + 8 = 58$$

$$\text{APR. 20} \quad 10 \times 6 + 26 = 86$$

$$\text{APR. 21} \quad 10 \times 8 + 34 = 114$$

$$\text{APR. 22} \quad 10 \times 8 + 31 = 111$$

$$\text{APR. 23} \quad 10 \times 6 + 18 = 58$$

$$\text{APR. 26} \quad 10 \times 4 + 25 = 65$$

$$\text{APR. 27} \quad 10 \times 5 + 25 = 75$$

$$\text{APR. 30/89} \quad 10 \times 4 + 15 = 55$$

MAY 4/89 $10 \times 3 + 18 = 48$

MAY 6 $10 \times 2 + 17 = 37$

MAY 14 $10 \times 9 + 39 = 129$

MAY 15 $10 \times 6 + 24 = 84$

MAY 17 $10 \times 7 + 33 = 103$

MAY 18 $10 \times 9 + 32 = 122$

MAY 21 $10 \times 7 + 58 = 128$

MAY 22 ~~10x7~~ $10 \times 7 + 70 = 140$ * COUNT MADE SAME TIME AS DRAWING

MAY 24 $10 \times 9 + 33 = 123$

MAY 26 $10 \times 8 + 23 = 103$

MAY 28 $10 \times 6 + 13 = 73$

MAY 29/89 $10 \times 5 + 12 = 62$

JUNE 1/89	$10 \times 8 + 29 = 119$	1
JUNE 3	$10 \times 7 + 16 = 86$	2.5
JUNE 4	$10 \times 10 + 24 = 134$	
JUNE 6	$10 \times 8 + 61 = 141$ * COUNT MADE SAME TIME AS DRAWING	
JUNE 7	$10 \times 7 + 28 = 98$	
JUNE 8	10 x 7 + 28 = 98 $10 \times 7 + 40 = 110$	
JUNE 11	$10 \times 6 + 91 = 151$ * COUNT MADE AT TIME OF DRAWING	
JUNE 12	$10 \times 9 + 29 = 119$	
JUNE 17	$10 \times 12 + 45 = 165$	
JUNE 18	$10 \times 14 + 153 = 263$ * COUNT MADE 6/18/89	
JUNE 19	$10 \times 14 + 33 = 173$	
JUNE 23	$10 \times 13 + 35 = 165$	
JUNE 25	$10 \times 15 + 115 = 265$ * COUNTED 6/25/89	
JUNE 28	$10 \times 9 + 38 = 128$	
JUNE 29	$10 \times 9 + 35 = 125$	
JUNE 30/89	$10 \times 8 + 19 = 99$	

page 20

$$\text{JULY } 1/89 \quad 10 \times 9 + 23 = 113$$

$$\text{JULY } 6 \quad 10 \times 5 + 21 = 71$$

$$\text{JULY } 9 \quad 10 \times 6 + 16 = 76$$

$$\text{JULY } 29 \quad 10 \times 6 + 11 = 71$$

$$\text{JULY } 30/89 \quad 10 \times 5 + 23 = 73$$

$$\text{AUG. } 9/89 \quad 10 \times 11 + 48 = 158$$

$$\text{AUG. } 10 \quad 10 \times 9 + 29 = 109$$

$$\text{AUG. } 17 \quad 10 \times 6 + 33 = 93$$

$$\text{AUG. } 19 \quad 10 \times 5 + 26 = 76$$

$$\text{AUG. } 24 \quad 10 \times 5 + 14 = 64$$

$$\text{AUG. } 25 \quad 10 \times 3 + 3 = 33$$

$$\text{AUG. } 27 \quad 10 \times 3 + 5 = 35$$

$$\text{AUG. } 28 \quad 10 \times 3 + 3 = 33$$

$$\text{AUG. } 31/89 \quad 10 \times 5 + 18 = 68$$

STAR * MEANS I COUNTED THE SPOTS WHEN I MADE THE DRAWING. IN OTHER CASES I AM ESTIMATING THE COUNT BY COUNTING SPOTS ON THE DRAWING.

SEPT. 2/89 $10 \times 6 + 92 = 152$ * COUNTED 89/9/2

SEPT. 3 $10 \times 6 + 100 = 160$ * COUNTED 89/9/3

SEPT. 4 $10 \times 3 + 55 = 85$

SEPT. 6 $10 \times 4 + 22 = 62$

SEPT. 8 $10 \times 9 + 62 = 152$

SEPT. 11 $10 \times 7 + 38 = 108$

SEPT. 12 $10 \times 7 + 43 = 113$

SEPT. 15 $10 \times 10 + 46 = 146$

SEPT. 18 $10 \times 5 + 22 = 72$

SEPT. 19 $10 \times 4 + 21 = 61$

SEPT. 20 $10 \times 4 + 19 = 59$

SEPT. 21 $10 \times 4 + 20 = 60$

SEPT. 24 $10 \times 3 + 15 = 45$

SEPT. 25 $10 \times 3 + 11 = 41$

SEPT. 26 $10 \times 3 + 6 = 36$

SEPT. 27 $10 \times 7 + 27 = 97$ *

SEPT. 28 $10 \times 4 + 11 = 51$

SEPT. 30/89 $10 \times 5 + 46 = 96$ *

- OCT. 1/89 $10 \times 7 + 20 = 90$
- OCT. 5 $10 \times 9 + 23 = 113$
- OCT. 7 $10 \times 7 + 18 = 88$
- OCT. 11 $10 \times 7 + 20 = 90$
- OCT. 12 $10 \times 5 + 11 = 61$
- OCT. 13 $10 \times 5 + 18 = 68$
- OCT. 16 ~~$10 \times 11 + 52 = 162$~~ $10 \times 14 + 61 = 201 *$
- OCT. 22 $10 \times 4 + 28 = 68$
- OCT. 23 $10 \times 2 + 19 = 39$
- OCT. 26 $10 \times 4 + 13 = 53$
- OCT. 27 $10 \times 6 + 14 = 74$
- OCT. 28 $10 \times 7 + 17 = 87$
- OCT. 30/89 $10 \times 8 + 59 = 139 *$

25.

NOV. 6/89 $10 \times 8 + 36 = 116$

NOV. 13 $10 \times 6 + 41 = 101$

NOV. 21 $10 \times 4 + 12 = 52$

NOV. 23 $10 \times 7 + 24 = 94$

NOV. 26 $10 \times 7 + 76 = 146$ *

NOV. 29/89 $10 \times 9 + 30 = 120$

DEC. 18/89 $10 \times 9 + 22 = 112$ *

DEC. 28 $10 \times 9 + 59 = 149$ *

25

STAR SYMBOL * MEANS I MADE THE COUNT WHEN I MADE THE DRAWING. IN OTHER CASES I AM ESTIMATING THE COUNT BY COUNTING SPOTS IN THE [DRAWING]

JAN 3/90	$10 \times 9 + 23 = 113$
JAN. 8	$10 \times 7 + 43 = 113 *$
JAN. 13	$10 \times 8 + 11 = 91$
JAN. 15	$10 \times 9 + 57 = 147 *$
JAN. 19	$10 \times 11 + 24 = 134$
JAN. 27	$10 \times 8 + 30 = 110$
JAN. 28	$10 \times 7 + 22 = 92$
JAN. 30/90	$10 \times 7 + 29 = 99$

SKY AND TELESCOPE NUMBERS

132 138

164 157

		(SKY AND TELESCOPE)	
		NUMBERS	
FEB 4/90	$10 \times 7 + 32 = 102 *$	131	119
FEB. 6	$10 \times 4 + 8 = 48$		
FEB. 7	$10 \times 6 + 16 = 76$		
FEB. 8	$10 \times 5 + 13 = 63$		
FEB. 11	$10 \times 4 + 11 = 51$		
FEB. 17	$10 \times 2 + 3 = 23 *$	49	57
FEB. 18	$10 \times 3 + 6 = 36 *$	89	77
FEB. 20	$10 \times 5 + 26 = 76 *$	149	134
FEB. 21	$10 \times 6 + 31 = 91$		
FEB. 26/90	$10 \times 9 + 35 = 125 *$	222	213

SKY AND TELESCOPE
NUMBERS

MAR. 1/90 $10 \times 8 + 22 = 102$

MAR. 2 $10 \times 11 + 32 = 142$

MAR. 5 $10 \times 4 + 11 = 51$

MAR. 6 $10 \times 4 + 17 = 57$

MAR. 7 $10 \times 4 + 24 = 64$

MAR. 8 $10 \times 4 + 19 = 59$

MAR. 21 $10 \times 11 + 28 = 138$

MAR. 24 $10 \times 11 + 64 = 174 *$

MAR. 2 $10 \times 9 + 54 = 144 *$

MAR. 26 $10 \times 10 + 29 = 129$

MAR. 28 $10 \times 7 + 14 = 84$

235 230

219 186

SKY AND TELESCOPE
NUMBERS

APRIL 2/90	$10 \times 7 + 12 = 82$		
APRIL 6	$10 \times 8 + 19 = 99$		
APRIL 8	$10 \times 7 + 18 = 88$		
APRIL 11	$10 \times 3 + 9 = 39$		
APRIL 15	$10 \times 7 + 26 = 96$		
APRIL 16	$10 \times 6 + 59 = 119$	*	189 170
APRIL 18	$10 \times 6 + 22 = 82$		
APRIL 19	$10 \times 10 + 85 = 185$	*	227 213
APRIL 21	$10 \times 7 + 32 = 102$		
APRIL 22	$10 \times 9 + 79 = 169$	*	197 214
APRIL 23	$10 \times 7 + 28 = 98$		
APRIL 24	$10 \times 8 + 29 = 109$		
APRIL 25	$10 \times 9 + 23 = 113$		
APRIL 26	$10 \times 9 + 37 = 127$	*	153 118
APRIL 27	$10 \times 6 + 14 = 74$		
APRIL 28	$10 \times 5 + 10 = 60$		
APRIL 29	$10 \times 5 + 12 = 62$		
APRIL 30/90	$10 \times 3 + 5 = 35$		

(HUBBLE SPACE TELESCOPE LAUNCHED, 8:30 A.M.
E.D.T.,

SKY AND TELESCOPE
NUMBERS

MAY 1/90	$10 \times 4 + 5 = 45$			
MAY 2	$10 \times 4 + 4 = 44$	*	58	59
MAY 3	$10 \times 5 + 5 = 55$	*	61	61
MAY 5	$10 \times 9 + 15 = 105$	*	74	80
MAY 6	$10 \times 10 + 28 = 128$	*	99	106
MAY 8	$10 \times 6 + 15 = 75$			
MAY 14	$10 \times 3 + 34 = 64$			
MAY 15	$10 \times 2 + 25 = 45$			
MAY 17	$10 \times 3 + 13 = 43$			
MAY 22	$10 \times 7 + 75 = 145$	*	178	187
MAY 24	$10 \times 8 + 30 = 110$			
MAY 25	$10 \times 7 + 27 = 97$			
MAY 26	$10 \times 8 + 21 = 101$			
MAY 27	$10 \times 8 + 49 = 129$	*	144	139
MAY 30	$10 \times 6 + 20 = 80$		114	90
MAY 31/90	$10 \times 5 + 22 = 72$			

SKY AND TELESCOPE
NUMBERS

JULY 1/90	$10 \times 10 + 30 = 130$		
JULY 2	$10 \times 15 + 101 = 251$	*	237 253
JULY 6	$10 \times 7 + 30 = 100$		
JULY 9	$10 \times 6 + 9 = 69$		
JULY 12	$10 \times 6 + 27 = 87$		
JULY 13	$10 \times 6 + 34 = 94$	*	111 114
JULY 17	$10 \times 5 + 8 = 58$	*	82 87
JULY 18	$10 \times 4 + 6 = 46$		
JULY 19	$10 \times 3 + 7 = 37$		
JULY 21	$10 \times 9 + 51 = 141$	*	128 123
JULY 24	$10 \times 8 + 22 = 102$		
JULY 26	$10 \times 17 + 70 = 240$		187 186
JULY 29	$10 \times 6 + 8 = 68$		
JULY 31/90	$10 \times 8 + 17 = 97$		

AUG. 1/90	$10 \times 7 + 23 = 93$		
AUG. 2	$10 \times 7 + 19 = 89$		
AUG. 3	$10 \times 6 + 12 = 72$		
AUG. 6	$10 \times 5 + 21 = 71$		
AUG. 8	$10 \times 6 + 17 = 77$		
AUG. 9	$10 \times 6 + 26 = 86$		
AUG. 10	$10 \times 6 + 21 = 81$		
AUG. 14	$10 \times 13 + 86 = 216$	*	194 215
AUG. 15	$10 \times 11 + 49 = 159$		
AUG. 16	$10 \times 16 + 70 = 230$	*	223 232
AUG. 17	$10 \times 13 + 32 = 152$		STARFEST 1990
AUG. 18	$10 \times 13 + 36 = 156$		
AUG. 23	$10 \times 9 + 98 = 188$	*	257 281
AUG. 25	$10 \times 8 + 106 = 186$	*	233 263
AUG. 26	$10 \times 4 + 121 = 161$	*	208 214
AUG. 27	$10 \times 5 + 38 = 88$		
AUG. 29	$10 \times 10 + 26 = 126$		
AUG. 30/90	$10 \times 10 + 61 = 161$	*	176 196

SKY AND TELESCOPE
NUMBERS

SEPT. 1/90	$10 \times 6 + 35 = 95$	*	133	136
SEPT. 2	$10 \times 7 + 22 = 92$			
SEPT. 3	$10 \times 7 + 21 = 91$			
SEPT. 16	$10 \times 14 + 38 = 178$	*	164	156
SEPT. 17	$10 \times 7 + 14 = 84$			
SEPT. 18	$10 \times 8 + 25 = 105$			
SEPT. 21	$10 \times 8 + 17 = 97$	*	142	139
SEPT. 26	$10 \times 5 + 21 = 71$		103	93
SEPT. 27	$10 \times 7 + 18 = 88$			
SEPT. 28	$10 \times 7 + 14 = 84$			
SEPT. 30/90	$10 \times 4 + 15 = 55$			

SKY AND TELESCOPE
NUMBERS

OCT. 2/90	$10 \times 5 + 17 = 67$		
OCT. 3	$10 \times 7 + 14 = 84$		
OCT. 5	$10 \times 6 + 25 = 85$		
OCT. 6	$10 \times 11 + 36 = 146$	*	139 124
OCT. 14	$10 \times 10 + 68 = 168$	*	213 202
OCT. 15	$10 \times 7 + 47 = 117$		
OCT. 17	$10 \times 8 + 58 = 138$	*	197 182
OCT. 20	$10 \times 7 + 29 = 99$		
OCT. 26	$10 \times 3 + 18 = 48$		
OCT. 29	$10 \times 6 + 14 = 74$		
OCT. 30	$10 \times 6 + 16 = 76$		
OCT. 31/90	$10 \times 5 + 9 = 59$		

SKY AND TELESCOPE
NUMBERS

NOV. 1/90	$10 \times 4 + 12 = 52$			
NOV. 12	$10 \times 3 + 13 = 43$			
NOV. 14	$10 \times 5 + 37 = 87$	*	145	106
NOV. 15	$10 \times 6 + 41 = 101$	*	116	107
NOV. 18	$10 \times 4 + 37 = 77$	*	116	97
NOV. 19	$10 \times 4 + 13 = 53$			
NOV. 26	$10 \times 6 + 17 = 77$			
NOV. 30/90	$10 \times 9 + 19 = 99$	*	143	153

SKY AND TELESCOPE
NUMBERS

DEC. 2/90	$10 \times 11 + 38 = 148$	*	174	160
DEC. 7	$10 \times 7 + 57 = 127$	*	231	182
DEC. 9	$10 \times 9 + 40 = 130$	*	210	176
DEC. 12	$10 \times 8 + 31 = 111$	*	150	138
DEC. 14	$10 \times 7 + 40 = 110$	*	112	98
DEC. 20	$10 \times 6 + 31 = 91$	*	124	124
DEC. 24	$10 \times 7 + 20 = 90$	*	100	45
DEC. 26	$10 \times 10 + 37 = 137$	*	118	91
DEC. 27/90	$10 \times 5 + 10 = 60$			

SKY AND TELESCOPE
NUMBERS

JAN. 1/91	$10 \times 4 + 5 = 45$			
JAN. 2	$10 \times 5 + 13 = 63$			
JAN. 4	$10 \times 7 + 15 = 85$			
JAN. 7	$10 \times 5 + 19 = 69$	*	123	105
JAN. 8	$10 \times 4 + 11 = 51$			
JAN. 10	$10 \times 6 + 30 = 90$	*	103	97
JAN. 19	$10 \times 5 + 14 = 64$			
JAN. 22	$10 \times 6 + 26 = 86$	*	99	106
JAN. 25	$10 \times 9 + 15 = 105$			
JAN. 27	$10 \times 10 + 72 = 172$	*	213	230
JAN. 28/91	$10 \times 12 + 78 = 198$	*	238	237

SKY AND TELESCOPE
NUMBERS

FEB. 2/91	$10 \times 11 + 31 = 141$		
FEB. 3.	$10 \times 11 + 45 = 155$	*	176 180
FEB. 4	$10 \times 11 + 31 = 141$	*	150 140
FEB. 5	$10 \times 9 + 21 = 111$		
FEB. 8	$10 \times 8 + 8 = 88$		
FEB. 9	$10 \times 9 + 42 = 132$	*	140 134
FEB. 10	$10 \times 8 + 18 = 98$		
FEB. 11	$10 \times 5 + 15 = 65$		
FEB. 16	$10 \times 9 + 31 = 121$	*	169 159
FEB. 21	$10 \times 10 + 67 = 167$	*	232 223
FEB. 22	$10 \times 5 + 20 = 70$		
FEB. 23	$10 \times 6 + 95 = 155$	*	208 200
FEB. 24/91	$10 \times 8 + 34 = 114$		

SKY AND TELESCOPE
NUMBERS

MAR. 5/91	$10 \times 5 + 7 = 57$	*	99	74
MAR. 10	$10 \times 6 + 55 = 115$	*	167	159
MAR. 11	$10 \times 6 + 48 = 108$	*	156	167
MAR. 12	$10 \times 6 + 52 = 112$	*	164	163
MAR. 13	$10 \times 8 + 37 = 117$			
MAR. 16	$10 \times 11 + 104 = 214$	*	211	188
MAR. 20	$10 \times 7 + 36 = 106$			
MAR. 21	$10 \times 8 + 47 = 127$	*	178	167
MAR. 23	$10 \times 8 + 76 = 156$	*	192	179
MAR. 28	$10 \times 6 + 18 = 78$			
MAR. 30	$10 \times 10 + 41 = 141$	*	144	141
MAR. 31/91	$10 \times 5 + 35 = 85$	*	122	115

SKY AND TELESCOPE
NUMBERS

APRIL 3/91	$10 \times 5 + 47 = 97$	*	119	118
APRIL 7	$10 \times 10 + 48 = 148$	*	159	174
APRIL 11	$10 \times 10 + 32 = 132$			
APRIL 12	$10 \times 14 + 66 = 206$	*	197	227
APRIL 16	$10 \times 7 + 18 = 88$			
APRIL 18	$10 \times 6 + 74 = 134$	*	176	171
APRIL 23	$10 \times 1 + 4 = 14$	*	58	72
APRIL 25	$10 \times 6 + 17 = 77$	*	46	39
APRIL 26	$10 \times 3 + 14 = 44$	*	70	77
APRIL 27	$10 \times 7 + 35 = 95$	*	82	82
APRIL 29/91	$10 \times 7 + 27 = 97$	*	119	132

page 40

SKY AND TELESCOPE
NUMBERS

MAY 3/91	$10 \times 6 + 26 = 86$	*	85	99
MAY 8	$10 \times 7 + 32 = 102$	*	132	125
MAY 10	$10 \times 8 + 57 = 137$	*	129	134
MAY 11	$10 \times 7 + 39 = 109$	*	135	145
MAY 12	$10 \times 9 + 44 = 134$	*	124	133
MAY 14	$10 \times 9 + 34 = 124$	*	110	134
MAY 15	$10 \times 10 + 21 = 121$	*	102	119
MAY 16	$10 \times 7 + 16 = 86$			
MAY 18	$10 \times 6 + 22 = 82$	*	121	125
MAY 19	$10 \times 9 + 34 = 124$	*	122	116
MAY 20	$10 \times 5 + 16 = 66$	*	111	121
MAY 23	$10 \times 9 + 34 = 124$	*	119	120
MAY 27	$10 \times 5 + 17 = 67$			
MAY 28	$10 \times 10 + 45 = 145$	*	149	158
MAY 31/91	$10 \times 11 + 42 = 152$	*	136	150

FROM page 41 ON, A STAR * INDICATES I DID NOT MAKE A
SUNSPOT COUNT ON THAT DAY.

SKY AND TELESCOPE
NUMBERS

JUNE 2/91	$10 \times 11 + 43 = 153$	159	175
JUNE 4	$10 \times 11 + 50 = 160$	170	179
JUNE 7	$10 \times 7 + 46 = 116$	154	171
JUNE 9	$10 \times 12 + 77 = 197$	183	251
JUNE 14	$10 \times 9 + 28 = 118$ *		
JUNE 19	$10 \times 8 + 33 = 113$	121	143
JUNE 21	$10 \times 9 + 41 = 131$	118	147
JUNE 24	$10 \times 9 + 27 = 117$	126	135
JUNE 30/91	$10 \times 10 + 81 = 181$	178	175

SKY AND TELESCOPE
NUMBERS

JULY 5/91	$10 \times 17 + 57 = 227$	182	217
JULY 8	$10 \times 13 + 39 = 169$	189	203
JULY 11	$10 \times 7 + 58 = 128$	134	170
JULY 14	$10 \times 9 + 36 = 126$	121	132
JULY 17	$10 \times 6 + 16 = 76 *$		
JULY 20	$10 \times 8 + 20 = 100 *$		
JULY 24	$10 \times 13 + 78 = \underset{208}{208}$	221	205
JULY 30	$10 \times 12 + 63 = 183$	189	197
JULY 31/91	$10 \times 10 + 59 = 159$	164	165

SKY AND TELESCOPE
NUMBERS

AUG. 4/91	$10 \times 10 + 57 = 157$	120	136
AUG. 6	$10 \times 9 + 20 = 110$	119	119
AUG. 9	$10 \times 6 + 12 = 72$	89	89
AUG. 18	$10 \times 23 + 96 = 326$	275	279
AUG. 21	(NO COUNT MADE)	316	300
AUG. 23	$10 \times 19 + 86 = 276$	278	275
AUG. 24	$10 \times 14 + 44 = 188$	249	250
AUG. 26	$10 \times 11 + 27 = 137$	157	177
AUG. 30/91	$10 \times 8 + 98 = 188$	165	166

(BRIAN CARR'S COUNT
278
 $10 \times 17 + 108 = 278$)

SKY AND TELESCOPE
NUMBERS

SEPT. 2/91	$10 \times 9 + 37 = 127$ *		
SEPT. 4	$10 \times 9 + 47 = 137$	134	147
SEPT. 7	$10 \times 4 + 41 = 81$	117	111
SEPT. 8	$10 \times 7 + 50 = 120$	131	135
SEPT. 11	$10 \times 10 + 35 = 125$	109	123
SEPT. 12	$10 \times 9 + 45 = 135$	130	130
SEPT. 29/91	$10 \times 6 + 61 = 121$	136	144

OCT. 3/91	$10 \times 10 + 73 = 173$	159	159
OCT. 6	$10 \times 9 + 39 = 129$	127	129
OCT. 20	$10 \times 3 + 16 = 46$	87	83
OCT. 26/91	$10 \times 5 + 74 = 124$	183	171

SKY AND TELESCOPE
NUMBERS

NOV. 3/91 $10 \times 7 + 14 = 84$ *

NOV. 9 $10 \times 6 + 47 = 107$ 135 132

NOV. 11 $10 \times 6 + 25 = 85$ *

NOV. 17 $10 \times 5 + 20 = 70$ 80 75

NOV. 30/91 $10 \times 3 + 11 = 41$ 82 80

DEC. 19/91 $10 \times 6 + 13 = 73$ 135 134

DEC. 18 $10 \times 8 + 17 = 97$ 132 133

DEC. 22 $10 \times 4 + 35 = 75$ 129 80

DEC. 25 $10 \times 8 + 71 = 151$ 146 143

DEC. 31/91 $10 \times 10 + 60 = 160$ 163 151

SKY AND TELESCOPE
NUMBERS

JANUARY/92

FEB. 8/92 $10 \times 11 + 42 = 152$ 166 179

FEB. 12 $10 \times 8 + 34 = 114$ 146 141

FEB. 29/92 $10 \times 10 + 36 = 136$ 154 176

MAR. 3/92 $10 \times 7 + 10 = 80$ 90 106

MAR. 14 $10 \times 7 + 32 = 102$ 102 130

MAR. 19 $10 \times 6 + 16 = 76$ 70 78

MAR. 28 $10 \times 6 + 42 = 102$ 119 110

MAR. 29/92 $10 \times 6 + 35 = 95$ 102 115

SKY AND TELESCOPE
NUMBERS

APR. 5/92	$10 \times 4 + 18 = 58$	59	57
APR. 6	$10 \times 3 + 12 = 42$	52	60
APR. 9	$10 \times 3 + 10 = 40$	48	58
APR. 12	$10 \times 4 + 9 = 49$	53	66
APR. 14	$10 \times 5 + 19 = 69$	80	79
APR. 20	$10 \times 7 + 29 = 99$	173	173
APR. 28/92	$10 \times 9 + 32 = 122$	101	102
<hr/>			
MAY 4/92	$10 \times 4 + 23 = 63$	82	78
MAY 5	$10 \times 3 + 8 = 38$ *		
MAY 7	$10 \times 3 + 18 = 48$	68	72
MAY 9	$10 \times 4 + 17 = 57$	75	79
MAY 10	$10 \times 4 + 14 = 54$	61	67
MAY 13	$10 \times 4 + 13 = 53$	77	87
MAY 18	$10 \times 2 + 7 = 27$	50	59
MAY 21	$10 \times 5 + 30 = 80$	98	110
MAY 24	$10 \times 2 + 10 = 30$	83	93
MAY 29/92	$10 \times 1 + 1 = 11$	28	33

pg. 48

SKY AND TELESCOPE
NUMBERS

JUNE 8/92 $10 \times 3 + 18 = 48$ 62 60

JUNE 13 $10 \times 5 + 12 = 62$ 85 86

JUNE 28/92 $10 \times 2 + 5 = 25$ 51 45

JULY 4/92 $10 \times 4 + 24 = 64$ 67 64

JULY 5 $10 \times 3 + 24 = 54$ 74 78

JULY 15 $10 \times 7 + 24 = 94$ 134 156

JULY 24 $10 \times 3 + 5 = 35$ 40 43

JULY 27/92 $10 \times 4 + 4 = 44$ 57 56

AUG. 1/92 $10 \times 6 + 8 = 68$ 72 65

AUG. 4 $10 \times 6 + 25 = 85$ 103 103

AUG. 11 $10 \times 4 + 20 = 60$ 70 60

AUG. 14 $10 \times 3 + 19 = 49$ 87 82

AUG. 18 $10 \times 2 + 19 = 39$ 79 71

AUG. 19 $10 \times 3 + 20 = 50$ 74 69

AUG. 20 $10 \times 2 + 19 = 39$ 73 59

AUG. 21 $10 \times 2 + 11 = 31$ 59 44

AUG 22 $10 \times 2 + 12 = 32$ 49 39

AUG. 23/92 $10 \times 2 + 5 = 25$ 35 36

pg. 49

SKY AND TELESCOPE
NUMBERS

SEPT. 4/92	$10 \times 2 + 21 = 41$	53	47
SEPT. 8	$10 \times 2 + 11 = 31$	46	38
SEPT. 10	$10 \times 4 + 18 = 58$	60	54
SEPT. 11	$10 \times 5 + 31 = 81$	60	59
SEPT. 12	$10 \times 5 + 20 = 70$	70	63
SEPT. 13	$10 \times 5 + 27 = 77$	80	77
SEPT. 14	$10 \times 5 + 29 = 79$	75	77
SEPT. 20	$10 \times 4 + 9 = 49$	68	62
SEPT. 22/92	$10 \times 4 + 9 = 49$	64	66
<hr/>			
OCT. 2/92	$10 \times 6 + 16 = 76$	103	98
OCT. 4	$10 \times 5 + 31 = 81$	129	105
OCT. 5	$10 \times 6 + 37 = 97$	136	122
OCT. 6	$10 \times 4 + 48 = 88$	136	119
OCT. 7	$10 \times 4 + 45 = 85$	112	103
OCT. 10	$10 \times 6 + 17 = 77$	85	73
OCT. 12	$10 \times 1 + 2 = 12$	46	41
OCT. 22/92	$10 \times 4 + 38 = 78$	112	104

pg. 50

SKY AND TELESCOPE
NUMBERS

NOV. 7/92	$10 \times 5 + 21 = 71$	92	96
NOV. 8	$10 \times 4 + 23 = 63$	74	74
NOV. 14	$10 \times 5 + 6 = 56$	72	69
NOV. 16/92	$10 \times 1 + 1 = 11$ *		
DEC. 5/92	$10 \times 2 + 4 = 24$	66	51
DEC. 13	$10 \times 8 + 36 = 116$	129	113
DEC. 20	$10 \times 6 + 10 = 70$	106	97
DEC. 24/92	$10 \times 6 + 12 = 72$	83	82

SKY AND TELESCOPE
NUMBERS

JAN. 2/93	$10 \times 3 + 3 = 33$	54	37
FEB. 2/93	$10 \times 2 + 2 = 22$	47	34
FEB. 7	$10 \times 7 + 39 = 109$	124	128
FEB. 8	$10 \times 10 + 32 = 132$	122	134
FEB. 14	$10 \times 4 + 16 = 56$	83	78
FEB. 20	$10 \times 12 + 18 = 138$	84	97
FEB. 28/93	$10 \times 7 + 16 = 86$	96	82
MAR. 9/93	$10 \times 4 + 12 = 52$		
MAR. 12	$10 \times 5 + 16 = 66$		
MAR. 14	$10 \times 2 + 9 = 29$		
MAR. 17	$10 \times 5 + 12 = 62$		
MAR. 18	$10 \times 6 + 21 = 81$		
MAR. 22	$10 \times 4 + 12 = 52$		
MAR. 26	$10 \times 3 + 7 = 37$		
MAR. 30/93	$10 \times 3 + 20 = 50$	60	58

pg. 52

SKY AND TELESCOPE
NUMBERS

APR. 5/93	$10 \times 7 + 14 = 84$	76	75
APR. 6	$10 \times 3 + 27 = 57$	90	89
APR. 7	$10 \times 5 + 12 = 62$	82	79
APR. 11	$10 \times 1 + 1 = 11$	62	55
APR. 13	$10 \times 0 + 0 = 0$	24	19
APR. 18	$10 \times 1 + 6 = 16$	60	49
APR. 22	$10 \times 4 + 18 = 58$	95	93
APR. 23	$10 \times 5 + 24 = 79$	108	96
APR. 26	$10 \times 4 + 12 = 52$	57	50
APR. 27	$10 \times 5 + 13 = 63$	61	62
APR. 30/93	$10 \times 3 + 5 = 35$	34	38

pg. 53

SKY AND TELESCOPE
NUMBERS

MAY 1/93	$10 \times 3 + 6 = 36$	26	33
MAY 2	$10 \times 2 + 4 = 24$	26	30
MAY 6	$10 \times 4 + 25 = 65$	62	71
MAY 7	$10 \times 3 + 31 = 61$	68	74
MAY 9	$10 \times 4 + 38 = 78$	93	87
MAY 10	$10 \times 5 + 45 = 95$	98	120
MAY 12	$10 \times 4 + 19 = 59$	96	111
MAY 16	$10 \times 1 + 2 = 12$	38	37
MAY 22	$10 \times 1 + 1 = 11$	12	20
MAY 29	$10 \times 3 + 30 = 60$	87	88
MAY 30/93	$10 \times 4 + 25 = 65$	91	97

pg. 54

SKY AND TELESCOPE
NUMBERS

JUNE 4/93	$10 \times 4 + 17 = 57$	83	82
JUNE 6	$10 \times 4 + 26 = 66$	77	83
JUNE 11	$10 \times 2 + 2 = 22$	32	35
JUNE 12	$10 \times 1 + 1 = 11$	22	18
JUNE 13	$10 \times 1 + 1 = 11$	12	10
JUNE 23	$10 \times 4 + 16 = 56$	46	51
JUNE 24	$10 \times 4 + 12 = 52$	51	50
JUNE 27/93	$10 \times 3 + 16 = 46$	70	67

pg. 55

SKY AND TELESCOPE
NUMBERS

JULY 3/93	$10 \times 4 + 15 = 55$; ASAME COUNT BOTH DAYS	70	66
JULY 5	$10 \times 4 + 15 = 55$	68	68
JULY 9	$10 \times 3 + 3 = 33$	40	38
JULY 12	$10 \times 4 + 17 = 57$	40	35
JULY 16	$10 \times 6 + 14 = 74$	64	63
JULY 17	$10 \times 5 + 16 = 66$	62	67
JULY 23	$10 \times 5 + 14 = 64$	64	68
JULY 31/93	$10 \times 4 + 4 = 44$	46	46

pg. 56

SKY AND TELESCOPE
NUMBERS

AUG. 2/93	$10 \times 3 + 3 = 33$	40	40
AUG. 6	$10 \times 2 + 3 = 23$	34	49
AUG. 8	$10 \times 2 + 3 = 23$	40	47
AUG. 9	$10 \times 5 + 11 = 61$	60	59
AUG. 11	$10 \times 2 + 12 = 32$	65	73
AUG. 13	$10 \times 3 + 11 = 41$	63	60
AUG. 17	$10 \times 2 + 3 = 23$	25	29
AUG. 21	$10 \times 3 + 5 = 35$	32	31
AUG. 25	$10 \times 3 + 3 = 33$	56	53
AUG. 30/93	$10 \times 3 + 3 = 33$	41	37

pg. 57

SKY AND TELESCOPE
NUMBERS

SEPT. 5/93	$10 \times 1 + 5 = 15$ ↓ TIME COUNT ↑	23	21
SEPT. 19	$10 \times 1 + 5 = 15$	17	14
SEPT. 23	$10 \times 1 + 11 = 21$	23	16
SEPT. 24	$10 \times 1 + 12 = 22$	25	23
SEPT. 30/93	$10 \times 1 + 15 = 25$	55	40

OCT. 2/93	$10 \times 3 + 23 = 53$	84	95
OCT. 5	$10 \times 2 + 24 = 44$	76	90
OCT. 7	$10 \times 2 + 17 = 37$	50	65
OCT. 11	$10 \times 4 + 12 = 52$	59	65
OCT. 13	$10 \times 3 + 5 = 35$	28	35
OCT. 14	$10 \times 3 + 5 = 35$	26	29
OCT. 23	$10 \times 3 + 11 = 41$	53	61
OCT. 24	$10 \times 3 + 8 = 38$	46	52
OCT. 26	$10 \times 0 + 0 = 0$	43	55
OCT. 30/93	$10 \times 1 + 1 = 11$	23	24

Pg. 58

SKY AND TELESCOPE
NUMBERS

NOV. 2/93	$10 \times 1 + 1 = 11$ <small>ESTIMATE! * SMALL CIRCLE #6</small>		
NOV. 8	$10 \times 2 + 5 = 25$	29	33
NOV. 10	$10 \times 2 + 3 = 23$	27	25
NOV. 12	$10 \times 1 + 6 = 16$	15	15
NOV. 18	$10 \times 1 + 8 = 18$	36	37
NOV. 29/93	$10 \times 3 + 7 = 37$	56	55

DEC. 1/93	$10 \times 3 + 18 = 48$	67	62
DEC. 8	$10 \times 3 + 23 = 53$	60	57
DEC. 11	$10 \times 2 + 4 = 24$	35	35
DEC. 12	$10 \times 1 + 1 = 11$	23	21
DEC. 13	$10 \times 0 + 0 = 0$	19	17
DEC. 14	$10 \times 0 + 0 = 0$	20	23
DEC. 23	$10 \times 2 + 19 = 39$	57	54
DEC. 26	$10 \times 1 + 12 = 22$	70	62
DEC. 28/93	$10 \times 2 + 18 = 38$	76	65

SKY AND TELESCOPE
NUMBERS

JAN. 4/94	$10 \times 2 + 8 = 28$	ESTIMATE! *	(100	103)
JAN. 15	$10 \times 1 + 1 = 11$		36	35
JAN. 16	$10 \times 2 + 2 = 22$		34	29
JAN. 22	$10 \times 4 + 14 = 54$		66	65
JAN. 30/94	$10 \times 2 + 5 = 25$		44	53

FEB. 5/94	$10 \times 2 + 4 = 24$		50	35
FEB. 26	$10 \times 2 + 3 = 23$		38	36
FEB. 27/94	$10 \times 3 + 6 = 36$		46	38

MAR. 19/94	$10 \times 1 + 1 = 11$		10	16
MAR. 20	$10 \times 1 + 1 = 11$		10	8
MAR. 26/94	$10 \times 1 + 1 = 11$		27	24

pg. 60

SKY AND TELESCOPE
NUMBERS

APRIL 1/94	$10 \times 0 + 0 = 0$	16	17
APR. 4	$10 \times 0 + 0 = 0$	0	7
APR. 7	$10 \times 0 + 0 = 0$	0	0
APR. 8	$10 \times 1 + 1 = 11$	7	8
APR. 10	$10 \times 1 + 4 = 14$	10	9
APR. 21	$10 \times 3 + 5 = 35$	37	31
APR. 22/94	$10 \times 3 + 11 = 41$	43	38

SKY AND TELESCOPE
NUMBERS

MAY 2/94	$10 \times 2 + 3 = 23$	37	35	
MAY 8	$10 \times 1 + 4 = 14$	23	21	
MAY 10	$10 \times 1 + 3 = 13$	16	19	ANULAR ECLIPSE OF '94
MAY 12	$10 \times 2 + 7 = 27$	23	27	
MAY 13	$10 \times 2 + 7 = 27$	37	32	
MAY 14	$10 \times 2 + 6 = 26$	34	31	
MAY 18	$10 \times 2 + 10 = 30$	38	33	
MAY 19	$10 \times 2 + 8 = 28$	32	28	
MAY 20	$10 \times 2 + 13 = 33$	28	25	
MAY 21	$10 \times 2 + 9 = 29$	25	25	
MAY 22	$10 \times 2 + 5 = 25$	24	21	
MAY 23	$10 \times 1 + 2 = 12$	19	19	
MAY 27/94	$10 \times 0 + 0 = 0$	0	0	

Pg. 62

SKY AND TELESCOPE
NUMBERS

JUNE 3/94	$10 \times 0 + 0 = 0$	0	0
JUNE 5	$10 \times 0 + 0 = 0$	0	0
JUNE 8	$10 \times 2 + 5 = 25$	37	43
JUNE 12	$10 \times 3 + 6 = 36 *$		
JUNE 14	$10 \times 4 + 9 = 49$	56	58
JUNE 17	$10 \times 3 + 3 = 33$	41	42
JUNE 19	$10 \times 0 + 0 = 0$	25	37
JUNE 21	$10 \times 0 + 0 = 0$	2	14
JUNE 26	$10 \times 1 + 3 = 13$	16	15
JUNE 28/94	$10 \times 2 + 4 = 24$	14	15

SKY AND TELESCOPE
NUMBERS

JULY 1/94	$10 \times 1 + 12 = 22$	34	32
JULY 2	$10 \times 2 + 12 = 32$	41	43
JULY 3	$10 \times 2 + 10 = 30$	34	39
JULY 4	$10 \times 2 + 8 = 28$	33	41
JULY 6	$10 \times 2 + 7 = 27$	31	27
JULY 11	$10 \times 7 + 14 = 84$	65	72
JULY 15	$10 \times 3 + 6 = 36$	35	37
JULY 17	$10 \times 2 + 4 = 24$	46	53
JULY 23	$10 \times 1 + 7 = 17$	13	16
JULY 26	$10 \times 1 + 1 = 11$	13	17
JULY 29	$10 \times 0 + 0 = 0$	6	7
JULY 30/94	$10 \times 0 + 0 = 0$	13	12

311

12, $\overline{311}^{25.9}$

POSTAL: 100511

25.9

SKY AND TELESCOPE
NUMBERS

AUG. 3/94	$10 \times 1 + 4 = 14$	14	13
AUG. 5	$10 \times 1 + 6 = 16$	16	20
AUG. 6	$10 \times 1 + 4 = 14$	16	17
AUG. 14	$10 \times 3 + 19 = 49$	42	44
AUG. 16	$10 \times 6 + 12 = 72$	45	43
AUG. 22/94	$10 \times 2 + 3 = 23$	11	10
<hr/>			
SEPT. 5/94	$10 \times 5 + 19 = 69$	63	65
SEPT. 11	$10 \times 1 + 2 = 12$	15	19
SEPT. 18	$10 \times 2 + 5 = 25$	20	22
SEPT. 20	$10 \times 0 + 0 = 0$	0	10
SEPT. 21/94	$10 \times 0 + 0 = 0$	0	9

SKY AND TELESCOPE
NUMBERS

OCT. 2/94	$10 \times 2 + 2 = 22$	19	16
OCT. 3	$10 \times 2 + 2 = 22$	19	16
OCT. 6	$10 \times 4 + 16 = 56$	54	53
OCT. 8	$10 \times 4 + 7 = 47$	43	44
OCT. 10	$10 \times 5 + 8 = 58$	52	49
OCT. 11	$10 \times 4 + 10 = 50$	48	48
OCT. 12	$10 \times 3 + 5 = 35^*$		
OCT. 14	$10 \times 3 + 17 = 47$	55	60
OCT. 16	$10 \times 2 + 14 = 34$	52	51
OCT. 18	$10 \times 4 + 15 = 55$	49	55
OCT. 23	$10 \times 2 + 5 = 25$	25	25
OCT. 29	$10 \times 3 + 11 = 41$	54	55
OCT. 30/94	$10 \times 3 + 20 = 50$	<u>56</u>	<u>59</u>
	507	526	531
	+ 35*	43.8	44.3
	<u>542</u>		

$$12 \overline{) 507} \quad \begin{array}{r} 42.3 \\ 48 \\ \hline 27 \\ 24 \\ \hline 3 \\ 3 \\ \hline 0 \end{array} \quad \underline{42.3} = \text{AV. MONTHLY \#}$$

$$13 \overline{) 542} \quad \begin{array}{r} 41.7 \\ 52 \\ \hline 22 \\ 26 \\ \hline 6 \end{array} \quad \approx \quad \underline{41.7} = \text{AV. MONTHLY \#}$$

SKY AND TELESCOPE
NUMBERS

NOV. 10/94	$10 \times 2 + 2 = 22$	25	24
NOV. 11	$10 \times 1 + 1 = 11$	17	16
NOV. 19	$10 \times 0 + 0 = 0$	14	15
NOV. 26/94	$10 \times 1 + 8 = 18$	22	17
<hr/>			
DEC. 25/94	$10 \times 3 + 7 = 37$	30	36
DEC. 26	$10 \times 2 + 2 = 22$	36	41
DEC. 29/94	$10 \times 0 + 0 = 0$	14	19

NOVEMBER MONTHLY NUMBERS

$$\frac{12.8}{4 \overline{) 51}}$$

(12.8)

DECEMBER MONTHLY NUMBERS

$$\frac{19.7}{3 \overline{) 59}}$$

(19.7)

SKY AND TELESCOPE
NUMBERS

JAN. 8/95	$10 \times 0 + 0 = 0$	8	9
JAN. 28/95	$10 \times 1 + 1 = 11$	30	25
<hr/>			
FEB. 3/95	$10 \times 2 + 3 = 23$	40	38
FEB. 14	$10 \times 2 + 2 = 22$	20	17
FEB. 16	$10 \times 2 + 2 = 22$	27	26
FEB. 18	$10 \times 3 + 5 = 35$	35	31
FEB. 19/95	$10 \times 3 + 12 = 42$	52	46

JANUARY MONTHLY NUMBER

$$2 \overline{) 11} \quad (5.5)$$

FEBRUARY MONTHLY NUMBER

$$5 \overline{) 144} \quad 28.8$$

SKY AND TELESCOPE
NUMBERS

MAR. 1/95	$10 \times 4 + 10 = 50$	52	51
MAR. 2	$10 \times 5 + 12 = 62$	57	51
MAR. 3	$10 \times 4 + 14 = 54$	59	55
MAR. 4	$10 \times 7 + 20 = 90$	74	65
MAR. 9	$10 \times 0 + 0 = 0$	10	0
MAR. 10	$10 \times 0 + 0 = 0$	0	0
MAR. 11	$10 \times 0 + 0 = 0$	8	8
MAR. 12	$10 \times 0 + 0 = 0$	10	12
MAR. 14	$10 \times 1 + 2 = 12$	15	10
MAR. 15	$10 \times 1 + 2 = 12$	14	17
MAR. 18	$10 \times 2 + 9 = 29$	44	35
MAR. 23	$10 \times 2 + 10 = 30$	49	47
MAR. 24	$10 \times 3 + 10 = 40$	44	44
MAR. 25	$10 \times 3 + 11 = 41$	39	42
MAR. 28/95	$10 \times 1 + 7 = 17$	$\frac{20}{495}$	$\frac{19}{456}$
	437	33.0	30.4

MONTHLY NUMBERS
 $437 \div 15 = \underline{29.1}$

SKY AND TELESCOPE
NUMBERS

APR. 1/95	$10 \times 1 + 2 = 12$	18	16
APR. 14	$10 \times 2 + 26 = 46$	38	38
APR. 15	$10 \times 2 + 20 = 40$	39	42
APR. 16	$10 \times 2 + 23 = 43$	47	46
APR. 25/95	$10 \times 0 + 0 = 0$	8	11

141

APRIL MONTHLY NUMBERS

$$141 \div 5 = 28.2$$

SKY AND TELESCOPE
NUMBERS

MAY 3/95	$10 \times 0 + 0 = 0$	0	8
MAY 5	$10 \times 0 + 0 = 0$	9	10
MAY 10	$10 \times 1 + 3 = 13$	10	10
MAY 12	$10 \times 2 + 14 = 34$	23	26
MAY 15	$10 \times 2 + 12 = 32$	34	36
MAY 16	$10 \times 2 + 12 = 32$	42	40
MAY 20	$10 \times 2 + 21 = 41$	24	25
MAY 21	$10 \times 1 + 4 = 14$	15	13
MAY 22	$10 \times 0 + 0 = 0$	9	10
MAY 26	$10 \times 0 + 0 = 0$	0	0
MAY 27	$10 \times 0 + 0 = 0$	0	0
MAY 30/95	$10 \times 0 + 0 = 0$	<u>9</u>	<u>10</u>
	162	180	188
		15.0	15.7

MAY MONTHLY NUMBERS

$$162 \div 12$$

$$\underline{13.5}$$

SKY AND TELESCOPE
NUMBERS

JUNE 4/95	$10 \times 1 + 9 = 19$	18	14
JUNE 5	$10 \times 1 + 11 = 21$	34	30
JUNE 6	$10 \times 1 + 3 = 13$	28	24
JUNE 12	$10 \times 1 + 12 = 22$	20	20
JUNE 13	$10 \times 1 + 5 = 15$	18	17
JUNE 14	$10 \times 0 + 0 = 0$	9	12
JUNE 15	$10 \times 0 + 0 = 0$	0	0
JUNE 18	$10 \times 2 + 3 = 23$	20	9
JUNE 19	$10 \times 1 + 3 = 13$	17	18
JUNE 20	$10 \times 1 + 2 = 12$	15	13
JUNE 21	$10 \times 1 + 8 = 18$	15	15
JUNE 24/95	$10 \times 1 + 2 = \underline{12}$	<u>14</u>	<u>13</u>
	168	208	185
		17.3	15.4

$$\underline{12} \overline{)168}$$

$$\underline{14} = \text{AV. MONTHLY \#}$$

SKY AND TELESCOPE
NUMBERS

JULY 1/95	$10 \times 2 + 3 = 23$	29	30
JULY 2	$10 \times 1 + 3 = 13$	22	25
JULY 3	$10 \times 1 + 3 = 13$	14	14
JULY 12	$10 \times 1 + 1 = 11$	19	16
JULY 13	$10 \times 1 + 2 = 12$	14	9
JULY 14	$10 \times 2 + 6 = 26$	14	13
JULY 15	$10 \times 1 + 10 = 20$ $10 \times 2 + 10 = 30$	18	19
JULY 17	$10 \times 2 + 3 = 23$	15	16
JULY 21	$10 \times 0 + 0 = 0$?	?
JULY 23	$10 \times 0 + 0 = 0$	0	0
JULY 29	$10 \times 0 + 0 = 0$	0	0
JULY 31/95	$10 \times 1 + 3 = \underline{13}$ 164	$\frac{12}{157}$ 13.1	$\frac{10}{152}$ 12.7

$$\begin{array}{r} 13.7 \\ 12 \overline{)164} \end{array}$$

$$\underline{13.7} = \text{AV. MONTHLY \#}$$

SKY AND TELESCOPE
NUMBERS

AUG. 7/95	$10 \times 2 + 4 = 24^*$	17	21
AUG. 9	$10 \times 0 + 0 = 0$	0	0
AUG. 12	$10 \times 0 + 0 = 0$	7	9
AUG. 16	$10 \times 0 + 0 = 0$	35	21
AUG. 18	$10 \times 0 + 0 = 0$	0	10
AUG. 21	$10 \times 0 + 0 = 0$	0	0
AUG. 23	$10 \times 2 + 10 = 30$	17	15
AUG. 25	$10 \times 5 + 11 = 61$	35	30
AUG. 29	$10 \times 1 + 7 = 17$	15	14
AUG. 30/95	$10 \times 1 + 4 = \underline{14}$	13	13

146

$$\frac{146}{10} = 14.6$$

14.6 = AV. MONTHLY #

SKY AND TELESCOPE
NUMBERS

SEPT. 4/95 $10 \times 1 + 1 = 11$

20 16

SEPT. 9 $10 \times 0 + 0 = 0$

0 0

$\frac{5.6}{5.35}$

SEPT. 16 $10 \times 0 + 0 = 0$

7 8

6.5 = AV. MONTHLY #

SEPT. 24 $10 \times 2 + 2 = 22$

30 30

SEPT. 29/95 $10 \times 0 + 0 = 0$
23

9 11

OCT. 17/95 $10 \times 3 + 9 = 39$

38 37

OCT. 18 $10 \times 2 + 6 = 26$

25 28

OCT. 23/95 $10 \times 2 + 5 = 25$
90

23 26

(30.0) = AV. MONTHLY #

NOV. 5/95 $10 \times 0 + 0 = 0$

0 0

(0) = AV. MONTHLY #

DEC. 2/95 $10 \times 1 + 1 = 11$

11 14

DEC. 26/95 $10 \times 1 + 2 = 12$
23

12 21

$\frac{11.5}{2.25}$

(11.5) = AV. MONTHLY #

SKY AND TELESCOPE
NUMBERS

JAN. 5/96	$10 \times 3 + 10 = 40$	40	48
JAN 6	$10 \times 2 + 2 = 22$ *1	(37	47)
JAN 10	$10 \times 0 + 0 = 0$	5	11
JAN. 31/96	$10 \times 2 + 2 = 22$	$\frac{13}{95}$	$\frac{11}{117}$
		19.2	20.6

FEB. 15/96	$10 \times 0 + 0 = 0$	9	7
FEB. 18	$10 \times 0 + 0 = 0$	0	8
FEB 24	$10 \times 1 + 1 = 11$	20	17
FEB 25/96	$10 \times 1 + 2 = 12$	$\frac{16}{45}$	$\frac{13}{45}$
		11.3	11.5

JAN. $\frac{20.7}{3/62}$ (20.7) = AV. MONTHLY #

FEB. $\frac{5.8}{4/23}$ (5.8) AV. MONTHLY #

SKY AND TELESCOPE
NUMBERS

MAR. 7/96	$10 \times 0 + 0 = 0$	0	9
MAR. 10	$10 \times 0 + 0 = 0$	0	0
MAR. 16	$10 \times 1 + 1 = 11$	8	10
MAR. 23	$10 \times 1 + 3 = 13$	15	16
MAR. 27/96	$10 \times 2 + 4 = \frac{24}{48}$	$\frac{20}{43}$	$\frac{21}{56}$
		83	112

APRIL - SMALL CIRCLES page 9

APR. 5/96	$10 \times 0 + 0 = 0$	0	0
APR. 14	$10 \times 0 + 0 = 0$	0	0
APR. 18	$10 \times 0 + 0 = 0$	17	19
APR. 28/96	$10 \times 0 + 0 = 0$	6	9

MARCH $\frac{9.6}{5 \sqrt{48}}$

9.6 = AV. MONTHLY #

APRIL

(0) = AV. MONTHLY #

SKY AND TELESCOPE
NUMBERS

MAY 6/96	$10 \times 1 + 2 = 12$	15	11
MAY 7	$10 \times 1 + 3 = 13$	13	12
MAY 12	$10 \times 1 + 8 = 18$	18	16
MAY 14	$10 \times 1 + 3 = 13$	16	14
MAY 17	$10 \times 0 + 0 = 0$	9	8
MAY 18	$10 \times 0 + 0 = 0$	6	10
MAY 28	$10 \times 0 + 0 = 0$	0	0
MAY 30/96	$10 \times 0 + 0 = 0$	0	0
	<u>56</u>	<hr/>	

JUNE 10/96	$10 \times 1 + 1 = 11$
JUNE 11	$10 \times 1 + 1 = 11$
JUNE 14	$10 \times 0 + 0 = 0$
JUNE 15	$10 \times 0 + 0 = 0$
JUNE 23	$10 \times 2 + 3 = 23$
JUNE 30/96	$10 \times 1 + 1 = \frac{11}{56}$

MAY	$\frac{7.0}{8.56}$	7.0 = AV. MONTHLY #
JUNE	$\frac{7.3}{6.56}$	9.3 = AV. MONTHLY #

SKY AND TELESCOPE
NUMBERS

JULY 1/96 $10 \times 0 + 0 = 0$

JULY 5 $10 \times 0 + 0 = 0$

JULY 11 $10 \times 1 + 7 = 17$

JULY 19 $10 \times 0 + 0 = 0$

JULY 22 $10 \times 0 + 0 = 0$

JULY 27 $10 \times 2 + 3 = 23$

JULY 28/96 $10 \times 2 + 3 = 23$

$$\frac{9.0}{7/57}$$

9.0 = A.J. MONTH #

AUG. 1/96 $10 \times 3 + 11 = 41$

AUG. 2 $10 \times 3 + 14 = 44$

AUG. 3 $10 \times 1 + 16 = 26$

AUG. 4 $10 \times 1 + 10 = 20$

AUG. 6 $10 \times 1 + 2 = 12$

AUG. 8 $10 \times 0 + 0 = 0$ STAREEST '96

AUG. 9 $10 \times 1 + 8 = 18$ STAREEST '96

AUG. 10 $10 \times 1 + 12 = 22$

AUG. 11 $10 \times 1 + 11 = 21$

AUG. 17 $10 \times 1 + 2 = 12$

AUG. 18 $10 \times 0 + 0 = 0$

AUG. 21 $10 \times 0 + 0 = 0$

AUG. 23 $10 \times 1 + 2 = 12$

AUG. 25 $10 \times 1 + 2 = 12$

AUG. 28 $10 \times 1 + 1 = 11$

AUG. 31/96 $10 \times 1 + 1 = 11$

$$\begin{array}{r} 16 \\ \hline 16 \end{array} = 62$$

$16 \cdot 2 = 10 \times 2 + 4 = 24$

SKY AND TELESCOPE
NUMBERS

SEPT. 2/96 $10 \times 1 + 1 = 11$

SEPT. 18 $10 \times 0 + 0 = 0$

SEPT. 19 $10 \times 0 + 0 = 0$

SEPT. 21 $10 \times 0 + 0 = 0$

SEPT. 29/96 $10 \times 0 + 0 = 0$

$$5 \sqrt{11}^{2.2}$$

2.2 = AV. MONTHLY #

OCT. 5/96 $10 \times 0 + 0 = 0$

OCT. 11 $10 \times 0 + 0 = 0$

OCT. 13 $10 \times 0 + 0 = 0$

OCT. 22 $10 \times 0 + 0 = 0$

OCT. 25 $10 \times 0 + 0 = 0$

OCT. 29/96 $10 \times 0 + 0 = 0$

0 = AV. MONTHLY #

NOV. 2/96 $10 \times 0 + 0 = 0$

NOV. 6 $10 \times 0 + 0 = 0$

NOV. 9 $10 \times 0 + 0 = 0$

NOV. 13 $10 \times 0 + 0 = 0$

NOV. 15 $\left\{ \begin{array}{l} 10 \times 0 + 0 = 0 \\ 10 \times 1 + 1 = 11 \end{array} \right\}$ JORDAN LAKE
+ HWY. 62

NOV. 16 $10 \times 1 + 1 = 11$

NOV. 22 $10 \times 2 + 6 = 26$

NOV. 27/96 $10 \times 1 + 18 = 28$

$\frac{9.5}{2.1}$

9.5, AVERAGE =

DEC. 15 $10 \times 2 + 4 = 24$

DEC. 20/96 $10 \times 1 + 1 = 11$

$\frac{17.5}{2}$

(17.5) = AV. MONTHLY #

JAN. 8/97 10 X 0 + 0 = 0

(0) = AV. MONTHLY #

JAN. 18 10 X 0 + 0 = 0

FEB. 9/97 10 X 0 + 0 = 0

FEB. 24 10 X 0 + 0 = 0

(0) = AV. MONTHLY #

FEB. 28/97 10 X 0 + 0 = 0

MAR. 7/97 $10 \times 1 + 1 = 11$

MAR. 11 $10 \times 2 + 3 = 23$

MAR. 12 $10 \times 0 + 0 = 0$

MAR. 16 $10 \times 1 + 1 = 11$

MAR. 17 $10 \times 1 + 1 = 11$

MAR. 22 $10 \times 0 + 0 = 0$

MAR. 23 $10 \times 0 + 0 = 0$

MAR. 27 $10 \times 1 + = 12$

MAR. 28/97 $10 \times 1 + 3 = 13$

81

13.5
6.81

135, 14. MULTPLY #

page 85

$$\text{MAY } 4/97 \quad 10 \times 0 + 0 = 0$$

$$\text{MAY } 21 \quad 10 \times 4 + 21 = 61$$

$$\text{MAY } 22 \quad 10 \times 3 + 11 = 41$$

$$\text{MAY } 23 \quad 10 \times 4 + 6 = 46$$

$$\text{MAY } 27/97 \quad 10 \times 1 + 1 = 11$$

5.150

21.8 = 10.10.20.21

JUNE 3/97 $10 \times 2 + 4 = 24$

JUNE 4 $10 \times 3 + 3 = 33$

JUNE 6 $10 \times 2 + 4 = 24$

JUNE 13 $10 \times 0 + 0 = 0$

JUNE 14 $10 \times 1 + 7 = 17$

JUNE 15 $10 \times 1 + 5 = 15$

JUNE 22 $10 \times 0 + 0 = 0$

JUNE 27 $10 \times 0 + 0 = 0$

JUNE 30/97 $10 \times 0 + 0 = 0$

$$\frac{12-6}{2.15}$$

12-6 = 6
6 / 2.15 = 2.79

JULY 6/97 $10 \times 0 + 0 = 0$

JULY 7 $10 \times 1 + 1 = 11$

JULY 11 $10 \times 0 + 0 = 0$

JULY 12 $10 \times 0 + 0 = 0$

JULY 16 $10 \times 0 + 0 = 0$

JULY 20 $10 \times 0 + 0 = 0$

JULY 22 $[(10 \times 0) + 1 \text{ SMALL SPOT}] = 5$

JULY 27 $10 \times 0 + 0 = 0$

JULY 31 $10 \times 0 + 0 = 0$

10

10, 10, 10, 10, 10

page 88

AUG. 9/97 $10 \times 2 + 4 = 24$ STARFEST '97

AUG. 15 $10 \times 2 + 4 = 24$

AUG. 18 $10 \times 1 + 1 = 11$

$\frac{23 \cdot 8}{4 \cdot 15}$

AUG. 23 $10 \times 0 + 0 = 0$

AUG. 30/97 $10 \times 2 + 16 = 36$

23.8 = 23.8

SEPT. 3/97	$10 \times 2 + 9 = 29$	
SEPT. 4	$10 \times 2 + 6 = 26$	
SEPT. 5	$10 \times 1 + 4 = 14$	* ESTIMATED AT EYE-PIECE (TRANSPARANCY $\frac{2}{10}$ BE- CAUSE OF THICKENING CIRRUS CLOUD)
SEPT. 6	$10 \times 3 + 15 = 45$	
SEPT. 9	$10 \times 3 + 34 = 64$	
SEPT. 14	$10 \times 3 + 19 = 49$	
SEPT. 15	$10 \times 3 + 34 = 64$	
SEPT. 16	$10 \times 3 + 14 = 44$	
SEPT. 20	$10 \times 1 + 2 = 12$	
SEPT. 21	$10 \times 3 + 8 = 38$	
SEPT. 22	$10 \times 2 + 7 = 27$	
SEPT. 23	$10 \times 2 + 7 = 27$	
SEPT. 24	$10 \times 2 + 9 = 29$	
SEPT. 27	$10 \times 1 + 2 = 12$	$\frac{30.3}{10} \sqrt{515}$
SEPT. 28	$10 \times 1 + 2 = 12$	$\frac{30.5}{10} \sqrt{515} + 1.67$
SEPT. 29	$10 \times 1 + 2 = 12$	
SEPT. 30/97	$10 \times 1 + 1 = 11$	

pg. 90

$$\text{OCT. 1/97} \quad 10 \times 2 + 4 = 24$$

$$\text{OCT. 5} \quad 10 \times 2 + 3 = 23$$

$$\text{OCT. 6} \quad 10 \times 1 + 1 = 11$$

$$\text{OCT. 8} \quad 10 \times 0 + 0 = 0$$

$$\text{OCT. 11} \quad 10 \times 1 + 6 = 16$$

$$\text{OCT. 12} \quad 10 \times 2 + 8 = 28$$

$$\text{OCT. 13} \quad 10 \times 2 + 11 = 31$$

$$\text{OCT. 16} \quad 10 \times 3 + 6 = 36$$

$$\text{OCT. 17} \quad 10 \times 3 + 13 = 43$$

$$\text{OCT. 18} \quad 10 \times 3 + 4 = 34$$

$$\text{OCT. 19} \quad 10 \times 2 + 4 = 24$$

$$\text{OCT. 21} \quad 10 \times 1 + 1 = 11$$

23-0
10-2-0

22-4-5 1000-100-100

$$\text{NOV. 7/97} \quad 10 \times 1 + 1 = 11$$

$$\text{NOV. 11} \quad 10 \times 2 + 5 = 25$$

$$\text{NOV. 24} \quad 10 \times 1 + 3 = 13$$

$$\text{NOV. 29/97} \quad 10 \times 2 + 14 = \underline{34}$$

83

NOVEMBER MONTHLY NUMBERS

$$83 \div 4 = 20.8 \quad (20.8)$$

$$\text{DEC. 1/97} \quad 10 \times 2 + 6 = 26$$

$$\text{DEC. 2} \quad 10 \times 1 + 9 = 19$$

