

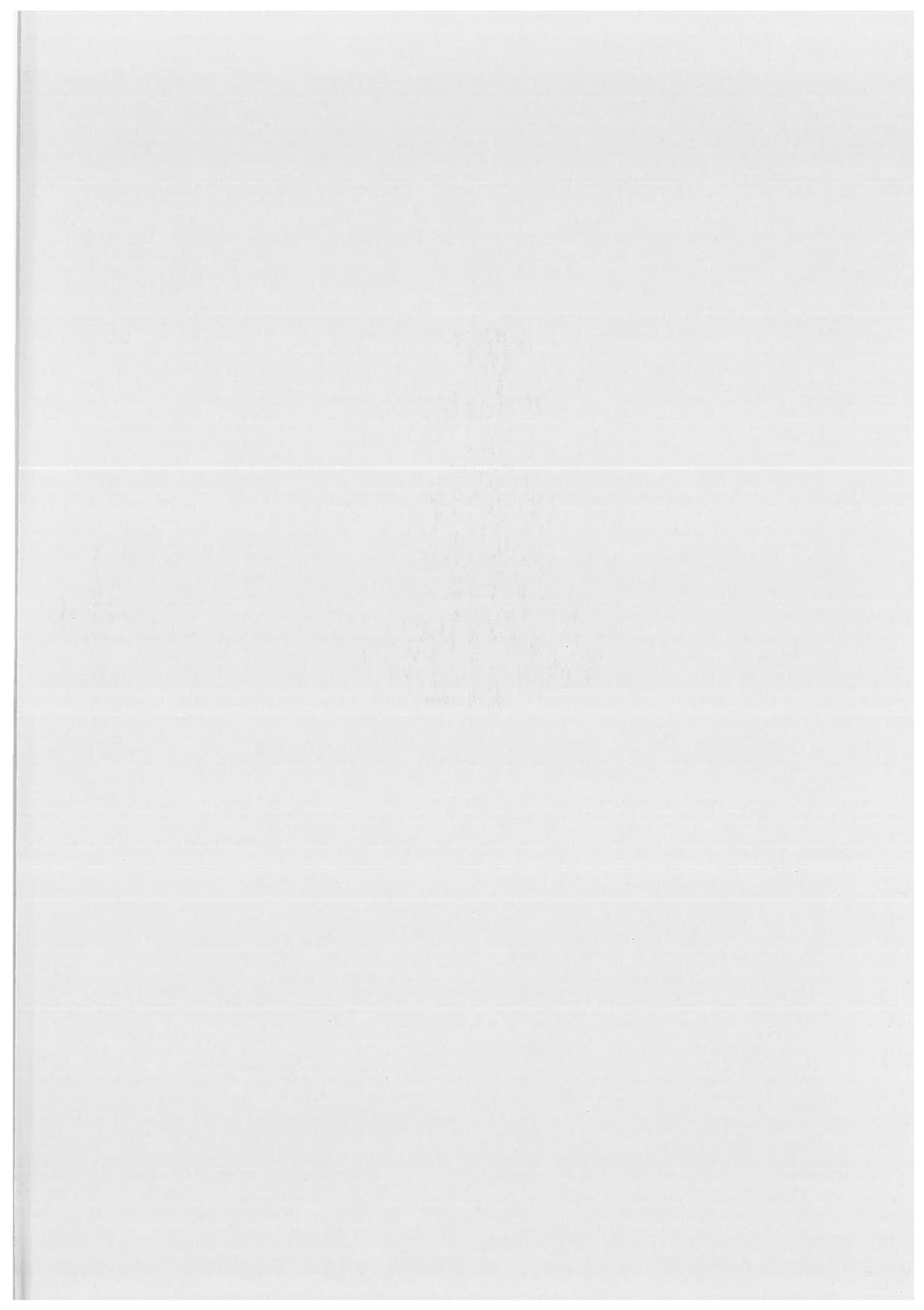
THE AURORAL OBSERVATORY

TROMSØ

NORWAY

MAGNETIC OBSERVATIONS 1967





BHAMMAR LARSSON

Avdelningen för magnetism och elektrodynamik vid institutionen för
fysik vid Kungliga Tekniska Högskolan i Stockholm har föddit en
grundig och tydlig behandling för att minna konsturkningen av vissa
magnetometrar.

THE AURORAL OBSERVATORY AT TROMSØ ($\varphi = 69^{\circ} 39' 8''$ N, $\lambda = 18^{\circ} 56' 9''$ E Gr.)

MAGNETIC OBSERVATIONS 1967

En undersökning om de magnetiska förändringarna under den
magnetiska stormen den 22-23 februari 1967.

Detta är en undersökning om de magnetiska förändringarna under
den 22-23 februari 1967. Den 22 februari var det
magnetiskt stilla med undantag för
minsta delen av natten.

Den 23 februari var det magnetiskt
stilla under morgonen och förmiddagen
men från mitten av förmiddagen och
hela eftermiddagen var det magnetiskt
stilla.

Den 24 februari var det magnetiskt
stilla under morgonen och förmiddagen men
i mitten av förmiddagen och hela efter-

middagen var det magnetiskt
stilla.

GENERAL REMARKS

Our magnetic yearbook has now been subject to some alterations.

The tables of Hourly Mean Values, the Resuming tables and the tables of International Quiet Days and Disturbed Days have been omitted.

The monthly means of estimated quiet hourly values appear in the tables of Quiet Mean Values.

The tables of K-indices have been retained. In addition we have included tables of special geomagnetic events, i. e.:

Sudden Storm Commencements (ssc)

Sudden Impulses (si), Bays (b,bp, bs, bps)

Pulsations (pc, pi, pg)

The following recording sets are in operation:

Normal (Bamberg, 20 mm/h)

D: 4,77 γ/mm = 1,45 min/mm

H: 5,33 γ/mm

Z: 7,15 γ/mm

Insensitive (La Cour, 20 mm/h)

D: 10,5 γ/mm = 3,20 min/mm

H: 23,5 γ/mm

Z: 21,3 γ/mm

Pulsation (Grenet, 6 mm/min).

Copies of the registrations are available, preferably on 35 mm film.

TROMSØ. DECLINATION, D=0 DEG, E + TABULAR QUANTITIES EXPRESSED IN TENTH OF MINUTES.
QUIET MEAN VALUES.

JANUARY 1967	54 52 51 55 56 54 53 51 51 45 32 24 23 26 31 36 33 33 34 40 39 50 48 53 42
FEBRUARY 1967	38 41 43 46 47 50 50 47 41 37 51 8 3 3 8 15 18 17 19 24 41 43 36 34 31
MARCH 1967	41 48 54 58 62 67 74 75 65 46 22 -2 -11 -5 0 14 20 21 19 22 26 30 33 35 39
APRIL 1967	45 56 64 80 86 94 96 88 66 38 7 -25 -33 -25 -9 2 7 1 -1 -5 -0 8 16 29 28
MAY 1967	62 91 95 108 118 115 95 91 59 15 -19 -51 -56 -43 -27 -15 -10 -13 -17 -7 1 24 33 52 24
JUNE 1967	92 108 113 123 123 122 122 108 98 54 12 -27 -42 -48 -41 -24 -15 -12 -4 1 11 31 58 68 34
JULY 1967	82 88 99 104 109 107 101 88 42 24 2 -32 -48 -39 -22 -7 11 6 2 9 22 30 40 52 20
AUGUST 1967	49 69 84 102 115 127 127 106 70 30 -13 -28 -28 -11 4 6 21 22 0 -2 0 6 23 37 40
SEPTEMBER 1967	51 62 71 74 79 82 79 65 57 45 17 4 -11 -2 -3 18 21 21 31 22 28 38 47 50 43
OCTOBER 1967	38 42 44 47 53 54 60 61 45 27 14 -3 -11 -9 -1 6 4 5 16 19 32 38 32 37 30
NOVEMBER 1967	44 46 41 44 43 41 39 43 35 25 12 1 2 34 5 1 -1 15 12 24 29 37 30 30 26
DECEMBER 1967	41 28 37 26 32 35 32 30 20 17 9 8 6 15 18 16 21 29 31 37 38 38 40 25
MEAN 1967	51 57 60 66 69 72 72 68 54 34 14 -10 -16 -9 -2 7 11 11 11 15 23 32 38 45 32

All days

40

TROMSØ. HORIZONTAL INTENSITY. H=11200+TABULAR QUANTITIES EXPRESSED IN GAMMA.
QUIET MEAN VALUES.

JANUARY 1967	69 69 69 71 72 71 71 70 68 65 64 65 67 69 70 72 73 73 73 74 73 72 71 70 69
FEBRUARY 1967	69 70 70 71 71 71 71 68 67 62 60 61 64 68 69 72 72 73 73 71 70 70 69 68 69
MARCH 1967	77 76 75 77 77 76 74 68 62 54 51 52 57 62 68 73 75 79 79 80 80 80 80 79 79 72
APRIL 1967	83 84 82 81 79 76 68 58 50 45 45 50 60 69 77 81 91 96 95 91 83 79 82 83 71
MAY 1967	85 92 94 92 86 79 62 53 48 54 47 52 58 63 76 88 92 97 107 105 99 91 89 87 75
JUNE 1967	74 78 79 81 77 73 65 56 47 45 49 57 60 69 87 90 92 87 91 92 86 76 75 79 71
JULY 1967	81 82 84 81 78 72 66 60 54 52 54 63 72 80 88 91 93 99 100 94 82 78 76 74 77
AUGUST 1967	80 81 83 81 76 73 66 58 50 48 55 63 71 85 93 93 92 90 90 93 84 85 87 75
SEPTEMBER 1967	77 79 76 77 76 76 71 63 56 51 48 52 60 68 74 80 81 86 93 90 81 73 73 75 70
OCTOBER 1967	73 73 75 75 76 76 71 64 58 56 55 59 66 69 72 75 79 82 86 89 89 81 77 78 71
NOVEMBER 1967	72 76 76 79 80 80 80 77 72 67 69 73 78 80 83 86 85 85 86 85 80 79 78 77
DECEMBER 1967	78 75 73 76 79 81 80 78 75 75 77 79 81 81 80 80 75 73 72 74 68 67 70 77
MEAN 1967	75 76 76 77 76 75 72 66 61 58 58 61 67 72 76 79 82 84 86 85 81 76 75 76 72

A.D.

65

TROMSØ. VERTICAL INTENSITY. Z=51100+TABULAR QUANTITIES EXPRESSED IN GAMMA.
QUIET MEAN VALUES.

JANUARY 1967	43 45 43 45 45 45 45 46 47 50 50 50 50 51 51 51 49 50 46 46 45 47 46 44 47
FEBRILARY 1967	45 47 48 47 46 46 46 47 48 50 51 52 52 55 53 52 51 53 54 54 48 46 45 49
MARCH 1967	45 46 46 44 46 46 46 46 45 49 48 47 47 48 48 53 52 50 47 47 46 44 42 42 47
APRIL 1967	43 45 46 45 48 49 50 51 51 53 50 48 49 54 53 54 55 54 52 50 46 44 41 45 50
MAY 1967	57 59 59 57 57 56 53 52 52 54 58 62 64 64 72 67 61 61 58 54 48 49 57 56
JUNE 1967	59 61 61 58 60 61 63 62 61 62 61 62 66 67 68 65 69 66 63 67 66 64 67 62
JULY 1967	57 58 58 59 59 62 62 60 59 60 61 59 62 68 69 71 68 65 64 63 61 63 67 62
AUGUST 1967	63 63 63 62 59 57 54 55 59 61 62 61 61 60 61 60 71 66 62 59 57 55 53 60
SEPTEMBRE 1967	62 62 62 62 62 64 64 64 67 65 62 63 66 68 71 71 69 68 62 58 56 57 59 64
OCTOBER 1967	64 67 70 68 69 70 72 73 73 75 75 73 74 74 73 73 71 72 73 73 70 70 69 68 71
NOVEMBER 1967	72 75 72 72 72 73 73 75 76 78 77 75 76 76 75 76 76 78 76 75 75 72 71 75
DECEMBER 1967	75 70 73 75 74 77 79 78 77 82 85 86 85 82 84 83 83 81 84 83 81 77 74 70 80
MEAN 1967	55 56 57 56 57 58 58 59 59 62 61 61 61 62 63 63 63 62 61 59 59 57 56 56 59

AD

60

TR0MS0.

K-INDICES FOR THREE-HOUR INTERVAL
RANGE 2000 GAMMA FOR K=9, SCALE VALUES D=4.77 GAMMA H=5.33 GAMMA Z=7.15 GAMMA

JANUARY 1967	FEBRUARY 1967	MARCH 1967	APRIL 1967
1 4 2 1 2 5 6 4 3	1 2 2 1 1 1 1 0 1	1 2 3 1 0 3 2 1 0	1 3 1 2 3 3 3 2 3 4
2 3 2 2 1 2 2 2	2 0 0 0 0 0 2 1	2 0 0 0 0 2 1 3 1 3	2 1 1 1 4 4 3 4 4 4
3 2 1 1 2 4 3 3 0	3 0 0 0 1 0 0 0 3	3 0 1 0 2 3 1 1 4	3 2 1 0 0 1 1 1 1 1
4 0 0 0 0 0 0 2 2	4 0 1 0 1 3 4 2 6	4 1 0 0 2 2 1 0 5	4 1 3 1 1 4 3 4 4 3
5 2 0 0 0 0 0 1 2	5 6 3 2 1 2 4 1 2	5 2 1 1 4 4 3 5	5 3 3 3 5 3 3 3 3 3
6 1 0 1 1 1 1 1 0	6 1 1 0 1 2 2 1 5	6 3 2 0 0 1 2 4 3	6 4 3 2 3 2 3 2 4 2
7 0 0 0 2 2 5 4 5 5	7 2 0 0 0 1 5 6 5	7 0 0 0 0 2 2 0 1 3	7 3 3 2 1 2 2 4 2 2
8 5 7 5 4 4 5 5 4 3	8 6 6 3 4 3 3 4 6	8 0 0 0 0 0 0 0 0 0	8 3 3 1 1 1 1 1 4 4
9 3 4 3 1 2 3 3 3 3	9 4 2 3 1 0 0 2 2	9 1 1 2 3 5 4	9 4 1 0 2 2 0 2 5
10 3 0 0 0 0 2 3 4	10 1 1 0 0 1 0 0 0	10 6 3 2 1 1 1 2 1	10 2 2 0 0 0 2 5 2
11 5 2 2 2 3 4 3 5	11 0 3 3 2 0 0 3 3	11 0 0 0 0 0 1 0 0	11 0 0 1 1 1 1 3 4
12 2 0 0 0 0 0 2 0	12 0 0 0 1 0 0 1 3	12 0 0 0 1 0 0 0 0	12 4 3 2 1 1 0 0 2
13 1 2 0 2 5 2 6 6	13 0 0 0 1 1 4 3 3	13 0 0 0 2 2 2 3 4	13 1 0 1 0 0 0 1 3
14 7 6 6 4 2 1 1 2	14 3 1 0 0 1 1 2 3	14 4 0 0 0 0 2 4 3	14 2 0 1 1 1 1 0 0
15 4 1 1 2 2 4 5	15 2 0 0 0 0 1 2 4	15 2 0 0 0 0 0 0 0	15 1 0 0 0 1 1 2 3
16 4 1 3 3 2 1 3 4	16 5 2 4 5 5 5 6 5	16 0 0 0 0 0 3 2	16 1 2 2 3 2 3 6 4
17 3 1 1 1 0 1 1 3	17 3 3 2 3 4 3 4 5	17 0 0 0 0 0 1 2	17 4 5 1 2 3 2 2 4
18 2 1 0 1 0 1 4 2	18 3 1 2 2 1 0 1 0	18 0 2 1 2 3 3 5 2	18 4 3 1 3 3 3 2 6
19 2 0 0 0 0 0 3 3	19 0 0 0 1 2 1 3 4	19 9 4 3 1 3 7 6 5	19 5 6 3 3 4 3 5 6 4
20 2 3 1 2 4 4 3 2	20 2 1 0 1 0 1 4 2	20 5 3 2 2 2 3 4 5	20 4 4 1 2 2 2 3 4
21 4 3 3 2 3 4 3 2	21 0 0 0 0 2 4 4 3	21 4 3 0 1 2 2 3 5	21 5 3 1 2 3 3 3 4
22 4 0 0 0 0 1 3 2	22 2 1 1 1 2 3 3 3	22 4 2 1 0 1 1 0 0	22 5 5 3 4 3 3 3 4
23 2 1 0 0 0 0 1 3	23 3 1 1 2 4 4 5 3	23 0 0 0 0 1 2 4 4	23 5 1 0 2 3 5 5 5
24 0 0 0 0 0 0 1 1	24 1 1 1 1 0 1 4 2	24 0 0 0 0 0 2 1 0 0	24 6 5 4 4 3 3 5 4 5
25 0 0 0 1 1 2 1 0	25 1 4 3 2 0 4 4 3	25 0 0 0 0 0 1 1 2	25 5 4 1 1 1 0 1 3
26 1 0 0 0 1 0 0 0	26 5 3 3 2 2 3 4 3	26 2 0 0 1 1 2 1 2	26 1 1 1 1 1 1 1 0
27 0 1 0 0 0 0 1 2	27 2 1 1 1 1 3 2 0	27 5 2 1 2 3 4 5 5	27 1 1 1 0 2 1 1 2
28 1 3 2 2 2 1 3 3	28 1 1 1 1 1 1 1 2	28 1 1 1 2 3 2 2 2	28 0 0 1 0 2 1 1 2
29 2 3 1 0 0 0 1 3 0		29 1 1 1 2 3 2 2 2	29 1 1 2 2 2 3 2 2
30 0 0 0 0 0 0 1 1		30 3 4 1 1 3 2 4 5	30 1 1 2 2 2 3 2 2
31 0 0 0 0 0 0 1 1		31 4 1 0 0 0 0 1 2	31 2 1 1 2 1 1 1 0

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K-INDICES FOR THREE-HOUR INTERVAL
RANGE 2000 GAMMA FOR K=9, SCALE VALUES D=4.77 GAMMA H=5.33 GAMMA Z=7.15 GAMMA

MAY 1967	JUNE 1967	JULY 1967	AUGUST 1967
1 3 3 1 2 2 2 3 4	1 1 1 2 2 2 0 1 1	1 4 3 4 4 6 4 4	1 0 0 0 2 3 2 2 0
2 4 2 2 3 4 5 5 6	2 2 1 2 3 4 4 4 4	2 5 5 2 0 1 1 1 2	2 0 0 0 1 1 0 0 1
3 7 6 5 4 6 6 4	3 3 3 1 2 3 2 2	3 2 1 0 1 1 2 2 4	3 0 0 0 1 2 1 1 0
4 4 4 1 3 4 3 4 4	4 3 0 0 2 5 5 3 5	4 4 1 1 1 1 2 3 5	4 1 2 2 3 3 3 4 3
5 5 3 2 2 2 3 4 5	5 5 2 1 3 4 2 7 5	5 6 6 2 3 5 5 3 4	5 1 1 2 3 3 3 2
6 4 2 1 1 3 2 3 3	6 7 4 1 2 2 2 3 5	6 2 2 0 2 4 3 3 5	6 0 1 2 1 1 1 1 4
7 5 5 4 2 2 1 2 3	7 6 6 3 2 2 2 1 0	7 6 5 2 1 3 3 2 3	7 4 1 1 3 3 3 4 5
8 1 1 1 1 3 3 4 3	8 2 1 2 3 4 3 6 5	8 3 1 1 2 1 1 0 0	8 4 3 2 2 3 4 5 5
9 2 1 1 2 2 2 1 1	9 4 4 3 4 4 1 4 6	9 0 0 1 1 1 1 1 1	9 3 0 0 1 2 3 1 4
10 2 1 1 2 3 4 3 2	10 5 2 2 2 1 2 3 3	10 0 0 0 1 1 1 1 3	10 3 4 2 4 4 4 2 6
11 4 4 2 2 2 1 2 2 5	11 3 2 0 0 2 2 2 4 2	11 5 3 2 3 4 3 3 4	11 4 3 3 3 4 3 5 5
12 5 5 1 2 2 2 3 3 5	12 2 2 1 2 3 2 2 3	12 4 3 2 1 1 1 3 4	12 2 3 1 2 2 4 4 4
13 5 5 2 3 3 3 3 4	13 4 2 1 2 1 2 1 3	13 3 1 0 1 1 0 4 4	13 2 1 0 2 3 3 3 5
14 5 2 1 1 3 5 5 5	14 4 4 2 1 4 3 5 5	14 3 2 1 2 3 2 4 3	14 5 4 3 2 3 2 4 3
15 5 2 1 2 2 2 4 5	15 7 3 2 2 1 2 1 2	15 3 0 0 1 2 3 3 3	15 7 2 1 2 2 2 1 5
16 5 1 1 2 2 2 0 2 4	16 2 2 1 2 2 2 2 3	16 3 0 0 1 1 2 3 4	16 3 1 1 2 3 3 5 5
17 5 4 2 2 2 2 2 4 4	17 2 1 1 3 3 4 3 5	17 2 0 0 1 1 2 3 4	17 4 5 2 5 4 3 3 3
18 4 3 2 2 2 2 2 2 1	18 5 2 1 0 1 1 1 2	18 2 1 1 3 2 3 2 3	18 5 2 3 3 4 3 4 4
19 5 4 3 3 3 3 2 2 1	19 1 0 0 0 1 2 3 1	19 3 0 0 1 2 2 1 2	19 4 1 3 3 3 3 4 3
20 4 2 2 2 3 3 2 3	20 2 1 2 1 1 1 2 0	20 2 0 0 2 2 2 3 2	20 3 3 2 2 3 3 3 3
21 2 2 0 1 1 3 3 4	21 0 0 2 1 2 2 2 3	21 2 0 0 1 2 2 1 2	21 2 2 2 2 3 3 1 3
22 5 1 2 1 1 0 0 0	22 2 1 1 2 3 2 0 0	22 2 1 0 0 2 1 1 2	22 3 0 0 2 2 2 2 1
23 1 1 1 1 0 0 5 5 5	23 1 2 2 0 1 1 3 3	23 0 0 0 1 1 2 2 5 5	23 1 2 0 0 2 1 1 3 2
24 3 1 1 1 3 3 3 4 1	24 1 1 1 0 0 1 1 3	24 4 3 1 2 1 1 4 2	24 4 2 0 3 3 2 3 3 3
25 2 2 2 1 4 7 5 5 4	25 3 2 2 2 2 4 6 4	25 3 1 1 1 3 3 4 3	25 0 2 3 3 3 4 4 5 6
26 8 6 5 5 9 6 4 3 6	26 6 3 2 2 2 2 4 4 4	26 3 1 1 2 2 2 2 0	26 6 1 1 2 2 2 4 4 5
27 5 4 7 3 3 2 2 5 5	27 6 7 3 2 4 1 2 3 3	27 0 0 1 1 1 1 1 3	27 4 3 1 2 2 2 2 1 5
28 3 3 4 4 5 5 6 6 6	28 5 1 1 4 4 3 5 0 5	28 5 1 1 4 2 4 4 4 3	28 2 1 0 2 2 2 3 2 2
29 6 6 5 3 5 3 2 3	29 1 3 3 1 3 3 3 3	29 5 4 5 6 2 2 0 0 0	29 2 1 0 2 2 2 3 2 5
30 3 2 2 2 6 6 6 7	30 5 2 2 2 3 2 4 5	30 1 0 0 0 0 0 0 0	30 5 2 3 2 3 2 3 2 5
31 6 6 5 3 2 3 3 3		31 1 0 0 0 0 0 0 0	31 4 2 1 2 3 3 3 2 5

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K-INDICES FOR THREE-HOUR INTERVAL
RANGE 2000 GAMMA FOR K=9, SCALE VALUES D=4.77 GAMMA H=5.33 GAMMA Z=7.15 GAMMA

SEPTEMBER 1967	OCTOBER 1967	NOVEMBER 1967	DECEMBER 1967
1 5 3 3 3 6 3 5 6	1 5 2 2 2 3 2 3 0	1 0 0 0 0 2 4 3	1 4 3 4 4 5 5
2 6 3 3 5 5 4 4 3	2 0 1 0 1 2 2 5 1	2 4 1 2 3 3 6 4	2 5 3 2 2 2 2 4 5
3 1 1 1 3 2 3 1 4	3 0 1 1 1 2 1 4 3	3 4 2 1 2 5 6 5	3 2 0 1 2 4 3 3 5
4 2 2 2 3 2 3 2 1	4 3 0 0 0 0 0 0 3	4 5 2 2 2 3 1 1 5	4 4 4 1 2 1 2 2 5
5 3 1 1 0 0 1 1 1	5 2 2 1 1 2 3 3 3	5 4 2 2 2 3 1 6 4	5 2 1 0 1 3 5 6
6 2 2 0 1 1 0 0 3	6 2 3 1 1 2 1 0 3	6 2 2 1 1 0 0 2 2	6 2 4 3 2 5 6 5 7
7 1 0 1 0 3 4 3 2	7 3 1 0 1 2 2 2 2 3	7 0 0 0 0 1 1 0 0	7 4 3 3 4 4 4 4
8 1 0 0 2 3 3 6 4	8 0 0 0 2 5 3 5 3 5	8 6 4 1 2 3 4 6 5	8 4 3 4 3 3 4 7 5
9 3 5 2 2 3 3 5 4	9 3 3 0 0 2 3 3 6 6	9 3 2 1 2 3 4 6 4 1	9 4 3 2 0 2 3 3 4 2
10 4 2 1 0 1 0 0 0	10 6 5 3 4 4 6 6 6	10 2 1 0 0 1 1 2 2 2	10 4 2 2 2 2 1 1 2
11 0 0 0 2 1 2 2 1	11 3 2 3 2 2 5 3 3	11 0 0 0 0 0 0 0 0 7	11 4 0 0 0 0 0 0 0 1
12 0 0 0 1 2 2 0 2 2	12 5 5 4 2 1 2 4 5	12 3 3 2 3 2 4 6 4	12 2 2 1 1 0 0 2 3 3
13 1 3 2 4 3 5 5 4	13 7 3 0 2 2 3 4 5	13 4 5 2 3 2 3 4 6	13 0 0 0 2 0 0 0 1 1
14 4 3 3 3 4 3 6 6	14 2 1 2 3 3 3 5 4	14 5 2 3 1 1 5 4 5	14 1 0 0 0 0 0 0 1 1
15 5 3 3 2 1 1 5 4	15 5 2 0 0 0 1 0 3	15 3 3 1 2 2 2 2 3	15 4 2 1 0 0 2 3 4 4
16 4 4 2 2 3 4 2 4	16 4 3 0 0 0 1 3 3	16 3 3 1 2 2 2 2 3	16 2 2 0 1 1 2 4 4 4
17 3 1 1 0 1 3 3 3	17 0 1 2 1 3 1 4 5	17 2 0 0 0 0 0 0 0 2	17 4 1 2 4 3 3 1 4
18 0 0 0 2 3 3 6 4	18 2 1 2 1 2 1 0 1 4	18 2 0 0 0 0 0 0 0 1 0	18 4 3 3 2 4 4 5 3
19 5 2 2 3 2 4 3 5 4	19 2 1 0 0 1 1 2 2 2	19 0 0 0 1 0 0 0 1 0	19 4 4 4 4 5 5 7 6
20 4 4 5 3 4 4 6 6 5	20 3 0 0 0 0 0 1 0 0	20 2 0 0 0 0 0 0 0 1	20 4 6 4 4 5 5 7 3
21 7 7 5 4 4 6 7 6	21 0 0 0 0 0 0 0 0 0	21 0 0 0 0 0 0 0 3 6	21 3 3 2 3 1 5 4 5 3
22 5 4 1 0 2 3 3 0	22 0 0 0 1 0 3 3 2	22 0 0 0 3 3 4 5 3 3	22 3 1 2 3 2 3 4 5 3
23 0 1 0 2 2 1 1 0	23 4 2 1 1 2 3 3 3	23 0 0 0 3 3 4 5 5 5	23 4 3 1 2 3 3 4 5 3
24 0 1 1 2 3 3 5 5	24 0 0 0 2 3 2 2 2 2	24 5 4 4 3 3 4 5 5 5	24 4 1 0 0 2 2 2 3 2
25 4 0 0 1 1 1 3 5 5	25 0 0 0 0 0 0 0 2 1	25 5 7 2 1 2 4 5 4 4	25 3 0 0 0 0 0 0 0 0
26 1 0 0 1 0 0 5 5 4	26 0 0 0 1 0 2 0 2 2	26 5 2 0 0 2 3 2 3 5 4	26 2 1 0 1 3 3 3 4 2
27 4 0 1 0 1 1 2 2 2	27 1 0 1 2 4 3 4 3	27 3 2 0 0 2 3 2 3 6 4	27 4 1 0 1 4 5 1 2
28 3 4 3 4 4 5 5 6 6	28 4 2 2 4 4 4 5 6	28 5 4 5 3 3 3 6 4 5	28 2 1 0 0 0 0 0 4 3
29 6 5 5 4 5 6 5 5 6	29 4 3 2 3 5 5 4 3	29 5 3 2 3 3 3 3 3 4	29 4 1 1 0 1 0 1 1
30 5 6 4 4 4 4 4 4 5	30 4 4 4 1 1 1 0 1	30 2 2 2 2 3 3 3 6 5	30 1 2 1 1 1 2 2 5 4
31 0 0 0 0 0 0 1 1 3	31 0 0 1 3 1 3 3	31 5 5 5 3 3 6 6 8 4	31 5 5 5 3 3 6 6 8 4

JANUARY 1967	FEBRUARY 1967	MARCH 1967	APRIL 1967
SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS
3 1057 SSC + - - B	15 2045 SSC - + - B	NONE	1 0806 SSC* - * - * + * Q
13 1204 SSC* + * - * B	25 1057 SSC + - - B		16 1018 SSC + - - B
21 1905 SSC* - * - * B			23 1426 SSC + - - A
JANUARY 1967	FEBRUARY 1967	MARCH 1967	APRIL 1967
BAYS	BAYS	BAYS	BAYS
15 1300 BP + - + C	6 1230 BP + - C	10 1530 B + - - A	7 1103 RP + - - R
16 1733 B + + + A	11 0530 BPS - - - B	13 1130 BP + - - B	7 1250 RPS + - - R
16 1900 BP + + + B			12 2221 RPS - + - R
JANUARY 1967	FEBRUARY 1967	MARCH 1967	APRIL 1967
SUDDEN IMPULSES	SUDDEN IMPULSES	SUDDEN IMPULSES	SUDDEN IMPULSES
7 0800 SI + - - B	11 2015 SI - - - B	2 2124 SI - + - B	4 0304 SI + + - R
12 1948 SI + - - B	19 2256 SI + - - A	2 2212 SI - - - B	9 2045 SI + - - R
	20 2027 SI - + + B	4 2310 SI - - + B	
	25 0515 SI + + + B	14 2015 SI + + - B	
	28 2115 SI - + - B		
MAY 1967	JUNE 1967	JULY 1967	AUGUST 1967
SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS
1 1906 SSC* + * - * - B	8 2001 SSC + - - B	6 2114 SSC - + - B	7 1957 SSC + + - -
30 1427 SSC + - B	26 2027 SSC - + + B	29 1830 SSC - - - A	9 2204 SSC + + - -
MAY 1967	JUNE 1967	JULY 1967	AUGUST 1967
BAYS	BAYS	BAYS	BAYS
6 1115 B + - + A	9 1048 B + A	3 1910 BPS + - + B	10 2127 SSC - - + -
10 1350 B + A			14 2012 SSC + - - -
16 1122 B + A			15 2109 SSC + + - -
MAY 1967	JUNE 1967	JULY 1967	AUGUST 1967
SUDDEN IMPULSES	SUDDEN IMPULSES	SUDDEN IMPULSES	SUDDEN IMPULSES
NONE	3 1727 SI + - - B	5 2019 SI - + - B	18 1928 SI + - - R
	12 2151 SI + - - B	13 1938 SI + + - B	19 1930 SI - + - R
		24 1837 SI + + - B	27 2202 SI - + + R
			28 2300 SI - - - R
SEPTEMBER 1967	OCTOBER 1967	NOVEMBER 1967	DECEMBER 1967
SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS	SUDDEN COMMENCEMENTS
9 2023 SSC* - * - B	18 2111 SSC* - * + * - B	8 1437 SSC + - - B	3 2203 SSC - - + Q
15 1910 SSC* + * - * - B		27 1719 SSC + + - B	17 2218 SSC - + + Q
26 1924 SSC + + - B		30 1929 SSC* - * - * - B	18 0536 SSC* + * + * - R
SEPTEMBER 1967	OCTOBER 1967	NOVEMBER 1967	DECEMBER 1967
BAYS	BAYS	BAYS	BAYS
1 1203 B + + - A	5 1200 B + - B	NONE	11 2400 R - + + A
9 1151 B + - - A	24 2242 BPS - + - A		
SEPTEMBER 1967	OCTOBER 1967	NOVEMBER 1967	DECEMBER 1967
SUDDEN IMPULSES	SUDDEN IMPULSES	SUDDEN IMPULSES	SUDDEN IMPULSES
15 2030 SI - - + B	7 2030 SI - + + B	11 2045 SI + + + B	NONE
	16 2007 SI - - - B	22 1806 SI - - - B	
		29 2110 SI - - - B	

JANUARY 1967	JANUARY 1967	FEBRUARY 1967	FEBRUARY 1967
PC1 NONE	PC5 NONE	PC1 NONE	PC5 21 1000 1105 A 154.0
JANUARY 1967	JANUARY 1967	FEBRUARY 1967	FEBRUARY 1967
PC2 16 06-- 09-- R 6.7	PC6 NONE	PC2 NONE	PC6 NONE
JANUARY 1967	JANUARY 1967	FEBRUARY 1967	FEBRUARY 1967
PC3 1 0313 1057 R 25 5-29.5 2 01-- 0718 R 18.0 3 0115 0645 R 31.5 3 0940 1150 R 31.5 4 0800 1145 R 38.5 5 02-- 0500 R 41.0 13 24-- 10-- R 42.0 15 0415 09-- R 29.0 15 1143 1248 R 31.5 17 0150 0630 R 15.5 18 0500 1142 R 25.2 20 03-- 0820 R 15.5 22 02-- 0925 R 26.0 22 1200 1330 R 27.0 23 0111 0200 R 15.5 23 0252 0355 R 24.2 23 0600 0656 R 19.0 23 0856 0955 A 31.0 23 1050 1440 A 30.0 26 0508 0910 R 45.0 27 0716 0750 R 28.0 29 03-- 1140 C 13.5-25.0	PI1 NONE	PC3 1 0038 13-- R 26.0-40.0 3 0320 09-- R 41.5 4 0518 0740 R 32.0 6 0315 0510 R 36.0 7 0533 0935 R 22.0 11 2315 0025 A 29.0 12 0400 1400 R 35.0 12 23-- 0420 R 34.0 13 0500 0920 R 39.0 14 0810 1000 R 31.0 15 0940 1430 R 40.5 21 0644 0810 R 24.0 22 0735 1000 R 31.5 24 0300 1225 R 43.5 27 01-- 11-- R 33.0 27 1135 1220 R 38.0 28 0115 1325 R 39.0	PI1 NONE
JANUARY 1967	JANUARY 1967	FEBRUARY 1967	FEBRUARY 1967
PC4 4 0425 0730 R 48.8 5 2045 2128 R 101.5 19 01-- 1045 R 46.0 26 1035 1150 R 46.2 30 0250 0742 R 47.0 31 0625 10-- R 46.8	PG NONE	PC4 2 0412 1045 R 54.5 9 09-- 1255 R 49.5 10 02-- 1230 A 51.6 18 1225 1425 R 49.5 19 0200 1125 R 49.0 23 0220 0246 R 86.5 23 0323 0410 R 73.0 23 05-- 0645 98.0	PG NONE
MARCH 1967	MARCH 1967	APRIL 1967	APRIL 1967
PC1 1 1350 1510 R 4.7 3 13-- 17-- R 3.3 18 12-- 14-- R 4.3	PC5 NONE	PC1 1 11-- 14-- R 4.6 13 1000 13-- R 4.7 14 11-- 14-- A 3.5	PC5 NONE
MARCH 1967	MARCH 1967	APRIL 1967	APRIL 1967
PC2 2 1620 1810 R 7.2 22 01-- 0615 R 9.5	PC6 NONE	PC2 10 02-- 0445 R 9.5	PC6 NONE
MARCH 1967	MARCH 1967	APRIL 1967	APRIL 1967
PC3 1 0644 1345 R 31.0 4 02-- 0820 R 29.5 5 0905 1405 R 22.0 6 1100 1132 R 38.5 7 0203 0550 R 28.0 7 0554 1100 R 22.5 8 0620 0945 R 23.8 8 1010 1140 R 26.0 9 0643 1038 R 24.6 10 0835 10-- R 31.5 14 04-- 1135 R 25.3 18 0906 1000 R 42.0 19 09-- 1305 R 25.5 21 0400 1030 R 32.4 22 0600 1150 R 36.5 24 0205 1210 R 22.5 25 0400 0950 R 44.0 25 1000 1037 R 41.0 25 1123 1155 R 43.2 26 0640 1026 R 13.0 28 08-- 12-- R 31.5 29 0155 0730 R 28.4	PI1 NONE	PC3 1 0400 0807 R 35.0 3 0830 1131 R 28.5 3 1255 1640 R 36.7 7 1117 1450 R 26.3 9 05-- 0935 R 30.3 11 0300 1010 R 32.5 11 1052 1152 R 40.0 15 0900 1330 R 44.5 20 1013 1313 R 23.7 21 0900 1030 R 27.5 25 1050 1600 R 41.0 26 0249 04-- R 35.3 27 0305 12-- R 44.5 29 0420 1250 R 26.5	PI1 NONE
MARCH 1967	MARCH 1967	APRIL 1967	APRIL 1967
PC4 2 0100 1020 R 54.5 9 0115 0605 R 53.0 16 0625 1017 R 46.8 16 1055 1312 R 70.5 17 2048 2106 R 101.8 26 0905 1303 R 47.5	PG NONE	PC4 13 03-- 07-- R 46.0 13 07-- 1515 C 56.0-108 26 06-- 11-- R 48.0 27 2250 2400 A 114.0 29 0100 0420 A 130.5	PG NONE

MAY 1967

PC1

NONE

MAY 1967

PC2

12 12-- 1715 R 7.5
18 1650 1735 R 9.4

MAY 1967

PC3

4 08-- 11-- R 43.5
5 09-- 1315 R 31.5
6 0255 0620 R 12.5
9 01-- 1205 R 28.5
9 0545 1225 R 10.0
12 08-- 1000 R 24.5
13 08-- 1210 R 23.5
15 04-- 1410 R 36.0
17 0800 1250 R 21.0
20 0806 10-- R 32.0
22 02-- 1202 R 31.0

MAY 1967

PC4

8 0230 0348 R 53.0

MAY 1967

PC5

NONE

MAY 1967

PC6

NONE

MAY 1967

PI1

22 2101 2110 R

MAY 1967

PG

NONE

JUNE 1967

PC1

14 12-- 1330 A 4.8
17 0400 0557 A 3.7
17 0645 08-- A 3.0

JUNE 1967

PC2

29 16-- 1752 R 10.0

JUNE 1967

PC3

2 0700 0925 R 56.0
3 04-- 1200 R 29.5
10 0513 1208 R 32.0
11 0625 1155 R 26.5-34.0
12 0100 1500 R 31.0
16 0500 1510 R 40.5
18 06-- 1525 R 35.3
19 1001 1400 R 31.5
20 0555 0723 R 29.5
22 0203 0915 R 33.0
29 0100 04-- R 20.0

JUNE 1967

PC5

NONE

JUNE 1967

PC6

NONE

JUNE 1967

PI1

NONE

JUNE 1967

PG

NONE

13 0300 0350 R 90.5
13 0935 1035 R 109.0
23 0700 09-- R 49.0

JULY 1967

PC1

10 0900 13-- A 4.2
15 0800 15-- R 4.8

JULY 1967

PC5

NONE

AUGUST 1967

PC1

6 1015 1135 A 4.0
16 09-- 11-- B 3.9

AUGUST 1967

PC5

NONE

JULY 1967

PC2

NONE

JULY 1967

PC6

NONE

AUGUST 1967

PC2

NONE

AUGUST 1967

PC6

NONE

JULY 1967

PC3

3 0045 02-- R 13.5
3 03-- 1255 R 39.5
13 0937 1043 R 31.0
16 0945 1245 R 40.0
17 0917 1045 R 36.0
18 0428 0620 R 16.0
19 02-- 1000 R 29.5
20 1042 1410 R 35.2
21 01-- 1008 R 16.5-39.0
25 0535 1152 R 32.8
27 0413 0715 R 39.0

JULY 1967

PI1

9 1953 2005 B

JULY 1967

PG

NONE

AUGUST 1967

PC3

3 04-- 09-- R 38.8
6 0540 10-- R 35.5
7 0400 1140 R 20.0
9 00-- 0945 R 32.0
13 0720 0825 R 33.0
15 0815 0956 R 24.3
22 0500 1223 R 29.8
24 02-- 1230 R 20.3
27 0935 1145 R 23.0
29 0200 0544 R 33.5

AUGUST 1967

PI1

NONE

AUGUST 1967

PI2

21 2314 2325 B
24 1831 1840 B
29 1740 1750 B

JULY 1967

PC4

9 0157 0555 R 50.5
22 1630 2005 R 61.0
23 04-- 1110 R 62.2

JULY 1967

PG

NONE

AUGUST 1967

PC4

NONE

AUGUST 1967

PG

NONE

SEPTEMBER 1967	PC5	OCTOBER 1967	PC5
PC1 7 1020 1205 R 3.1 12 0754 0825 R 2.8	NONE	22 08-- 1025 A 2.9	NONE
SEPTEMBER 1967	PC6	OCTOBER 1967	PC6
PC2 NONE	NONE	PC7	NONE
SEPTEMBER 1967	PI1	OCTOBER 1967	PI1
PC3 5 12-- 1030 R 45.0 8 1430 0610 R 25.8 10 1016 1140 R 25.0 12 0300 0615 R 40.0 17 0305 13-- R 25.0 18 0555 0950 R 25.0 23 0400 12-- R 43.0 24 11-- 1300 R 32.8 25 0407 1540 R 28.0 26 0520 1010 R 31.5	NONE	2 00-- 0800 R 43.8 3 0005 06-- R 44.7 3 06-- 1230 R 25.3 6 0555 0635 R 32.0 8 0410 0915 A 35.0 13 08-- 1005 R 33.2 15 0658 0740 R 28.5 16 09-- 1445 R 26.0 18 0935 1500 R 42.5 19 1040 1302 R 41.7 20 0840 1020 R 30.0 20 2200 1115 A 36.6 23 0930 13-- R 26.0-41.0 24 00-- 12-- R 22.7-40.8 25 0329 1110 R 33.8-42.7 25 0045 13-- R 34.3	3 08-- 1005 R 44.7 1230 R 25.3 0635 R 32.0 0915 A 35.0 1005 R 33.2 0740 R 28.5 1445 R 26.0 1500 R 42.5 1302 R 41.7 1020 R 30.0 1115 A 36.6 26.0-41.0 12-- R 22.7-40.8 33.8-42.7 34.3
SEPTEMBER 1967	PG	OCTOBER 1967	PG
PC4 5 2305 0200 R 58.5 5 0930 1045 R 48.0 5 2305 0201 R 60.5 6 0840 1005 R 46.0 6 2300 04-- R 76.0 27 112-- 0735 R 47.0	NONE	2 0925 1140 R 54.0 4 0625 0755 R 114.7 22 0210 0435 R 46.5	2 0925 1140 R 54.0 12-- R 22.7-40.8 1110 R 33.8-42.7 13-- R 34.3
NOVEMBER 1967	PC5	DECEMBER 1967	PC5
PC1 NONE	NONE	PC1 NONE	NONE
NOVEMBER 1967	PC6	DECEMBER 1967	PC6
PC2 NONE	NONE	PC2 NONE	NONE
NOVEMBER 1967	PI1	DECEMBER 1967	PI1
PC3 6 0145 1500 R 30.4 7 0450 1350 R 19.2 11 02-- 1100 R 26.5 15 0300 0735 R 40.0 17 0555 1040 R 38.0 18 01-- 1235 R 41.0 19 0317 1225 R 29.7 20 0800 1125 R 29.6 21 0403 1002 R 34.0	NONE	3 02-- 11-- R 21.3-39.0 11 03-- 1105 R 33.0 13 0410 0635 R 27.4 14 0950 1115 R 39.7 24 02-- 1300 R 39.0 25 0342 1225 R 37.0	21.3-39.0 33.0 27.4 39.7 39.0 37.0
NOVEMBER 1967	PG	DECEMBER 1967	PG
PC4 NONE	NONE	PC4 NONE	NONE

