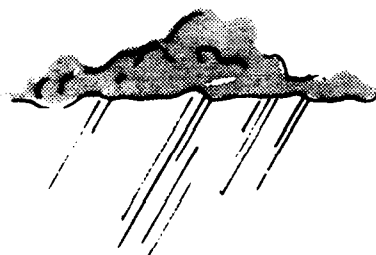


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LARGE SCALE EFFECTS OF CLOUD SEEDING

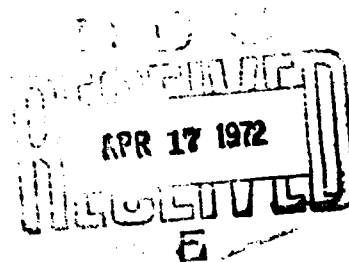
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FINAL REPORT
1970-71 SEASON AND FOUR YEAR SUMMARY



PREPARED FOR: U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
DIVISION OF ATMOSPHERIC WATER RESOURCES MANAGEMENT
BLDG. 67, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

CONTRACT NO. 14-06-D-6841



BY:
KEITH J. BROWN & ROBERT D. ELLIOTT

AEROMETRIC RESEARCH INC.

SANTA BARBARA MUNICIPAL AIRPORT
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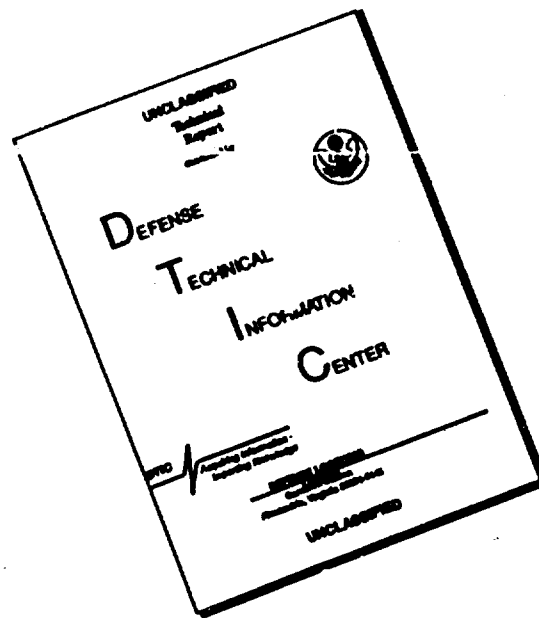
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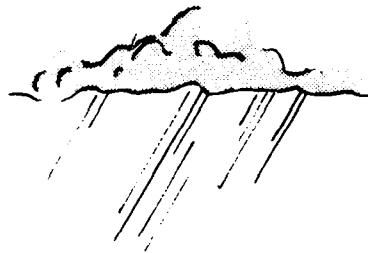
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PREFACE

This report covers research into Large Scale Effects of Weather Modification performed under Contract No. 14-06-D-6841 with the U. S. Department of the Interior, Bureau of Reclamation, Division of Atmospheric Water Resources Management. This study was initiated in April 1966 under a previous contract No. 14-06-D-5963 and work has been in progress since that date.

The field portion of this project has been conducted in cooperation with an ongoing research study in Santa Barbara County, California. This program is operated by North American Weather Consultants (NAWC) under contract with the Naval Weapons Center, China Lake, California.

The authors would like to express their appreciation to the Bureau of Reclamation, Division of Atmospheric Water Resources Management for their continued support of this research effort. Particular thanks are due to Dr. Archie Kahan, Chief of DAWRM and Mr. William Douglas, Project Monitor for their support and helpful suggestions throughout the course of this study.

We are also grateful to the Naval Weapons Center, Earth and Planetary Sciences Division, China Lake, California for their cooperation in this joint program; particularly to Dr. Pierre St. Amand, Director and Dr. S. D. Elliott, Jr., Project Officer for the Santa Barbara Project.

The authors would also like to acknowledge the contributions of many staff members from ARI and NAWC for their invaluable contributions to this research. A special note of thanks to Mr. John Thompson, NAWC Project Director for the Navy's Santa Barbara Project, who also made the band analysis for the entire extended area and contributed greatly to the success of this program.

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LARGE SCALE EFFECTS OF CLOUD SEEDING

BACKGROUND

This report covers the results of the third consecutive year of a field program to investigate the Large Scale Effects of Cloud Seeding. The work during this past year was conducted under Amendatory Agreement No. 1 to Contract No. 14-06-D-6841 between the Bureau of Reclamation, Department of the Interior, and Aerometric Research Inc. (ARI). An earlier contract (No. 14-06-D-5963) starting in April 1966, and subsequent amendments, enabled ARI to make a "post-hoc" analysis of the effects of cloud seeding in extended areas downwind from six long term operational and research seeding projects in the western United States. The results of these earlier studies have been covered in previous reports (ARI 1967, 1969).

The number of scientists investigating, or at least looking for, large scale seeding effects is growing each year. In addition to the earlier investigators (North American Weather Consultants, 1956; Braham, 1965; Brier, 1966; Adderly, 1968), more recent studies were summarized at a seminar held in Santa Barbara, California on February 15-17, 1971. The transactions of this seminar (Elliott, et al, 1971) summarized the work of a number of these people.

Almost all of the data on large scale seeding effects are statistical in nature. The physical mechanisms controlling these effects can only be inferred by indirect means. To date, no field project has been conducted to measure adequately the necessary atmospheric parameters which might lead to an understanding of this phenomenon.

The ramifications of these effects are very important. The potential for enhancing water supplies over major watersheds by minimal seeding effort appears possible. Suggestions of synoptic scale storm modification are beginning to appear. The negative aspects must also be considered. The current concern with the environmental impact of weather modification will be spread over a larger area and targeting problems with small areas becomes more difficult.

PROJECT DESIGN

The field study of large scale effects of cloud seeding was operated in conjunction with a randomized seeding project in Santa Barbara County which was sponsored by the Naval Weapons Center, China Lake, California. The Navy project was operated by ARI's affiliate company, North American Weather Consultants (NAWC). This cooperative effort benefited both projects economically and scientifically by eliminating duplication of effort. The project areas for both programs are shown in Figure 1.

The Santa Barbara project began in November, 1967 and the Bureau of Reclamation Large Scale Effects field project started in November, 1968. However, since most of the raingages used in the large scale analysis were operated by various government agencies, it was possible to obtain records for the 1967-68 season and extend the statistical analysis back to include all four seasons.

The design of the Navy project has been reported on in some detail (Elliott and Thompson 1968, 1969, 1970, 1971) and will only be summarized in this report. The observation and seeding unit is a convective band. The basic characteristics of convection bands had been determined during three years of intensive three-dimensional storm sampling in this area in the early 1960's (Elliott and Hovind, 1964). Convection bands not only produce most of the storm precipitation in west coast storms, but also contain the strong updrafts and supercooled water conducive to cloud seeding effectiveness. Bands typically lasted about one to one and one half hours at a given station and are spaced about three to four hours apart. An average of three seedable convection bands were identified in each storm.

During the months of November through April, the convective bands were tracked into the test area by means of an upwind telemetered raingage network and a 3cm radar set located at the seeding site on a 3500 foot mountain ridge. When the leading edge of the convective band reached the seeding site, the project meteorologist issued a "GO" command from the control center at the Santa Barbara Airport. The technician at the seeding site then referred to a set of preselected random decisions and either seeded the band or did nothing on the basis of that decision.

The seeded bands were treated by igniting one LW-83 pyrotechnic device every 15 minutes during the time the band was over the seeding site. The LW-83 unit burns for three minutes and produces 400 grams of silver iodide smoke.

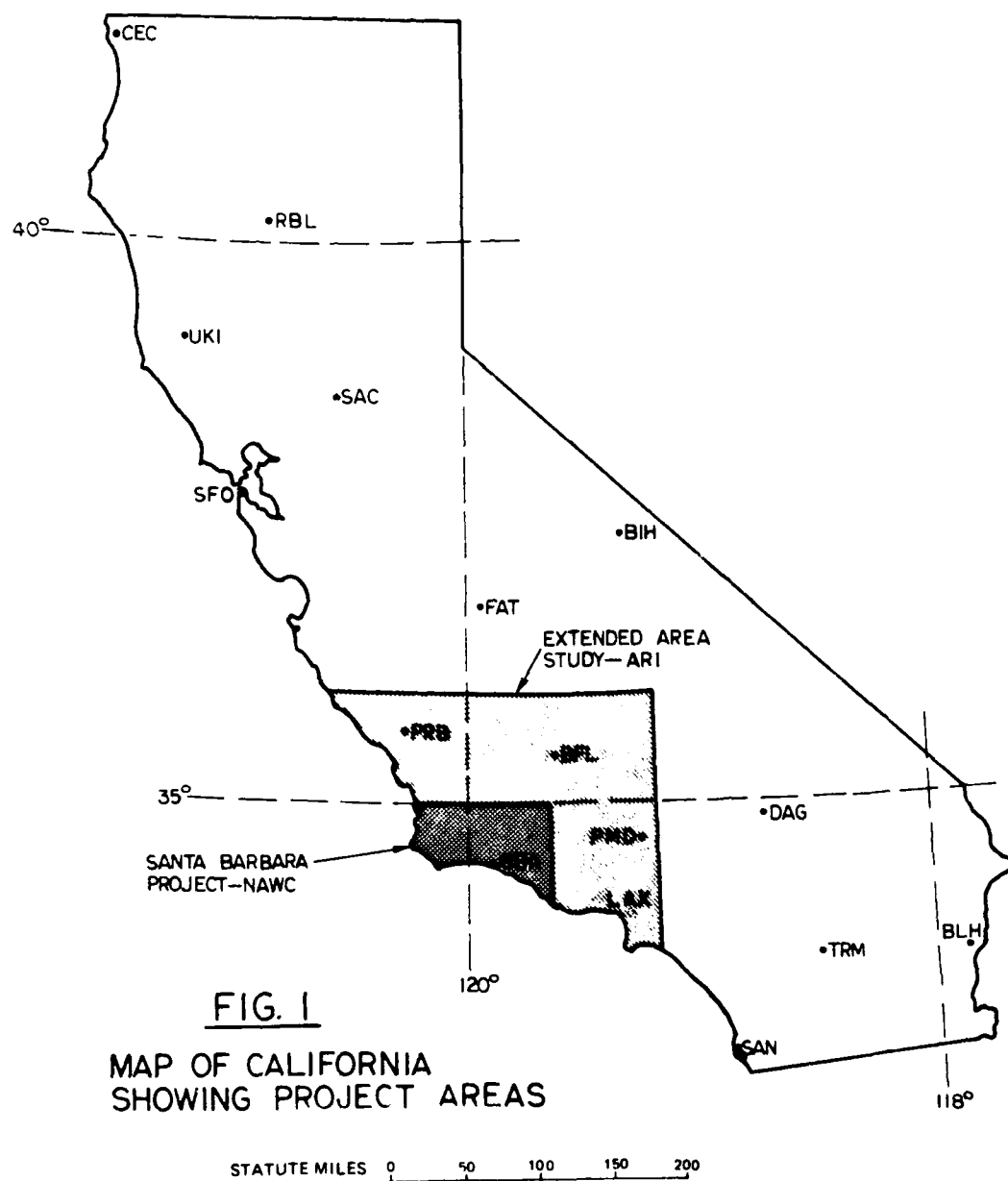


FIG. 1
MAP OF CALIFORNIA
SHOWING PROJECT AREAS

A dense network of recording raingages was available for determining the precipitation patterns produced by the convective bands as they moved through the area. A total of 168 recording gages were used within an area of about 20,000 square miles. Of this total, 45 were installed and operated by ARI and NAWC for the combined project and the remainder were operated by various government agencies. Figure 2 shows the equipment network for the combined projects. Copies of all raingage charts during storm periods were obtained from the respective agencies. Gage locations are shown in Appendix A.

The bands were tracked through the network on the basis of the raingage records. A meteorologist skilled in band analysis and not informed of the randomized seeding decision determined the arrival and departure time of the band at each station and the amount of rain which fell during that interval. When these values were determined for all bands, the seeding decision was revealed and seed/no seed ratios of band precipitation and band duration were computed for each station.

Measurements of the air-mass characteristics were made with a GMD-1 Rawinsonde Receiver at the Santa Barbara Airport and when possible with a RD-65 Rawinsonde unit at Vandenberg Air Force Base. An attempt was made to release one rawinsonde balloon into each band as it passed over the Santa Barbara Airport.

Precipitation samples were collected at eleven sites for analysis of silver content. Precipitation collectors were installed at the sites shown in Figure 2 and a local resident instructed to expose a clean plastic liner when directed by the project meteorologist. The samples were then placed in a freezer and later shipped in dry ice to the Bureau of Reclamation Laboratory in Denver for silver analysis.

The original design of the Navy Project for the 1970-71 season called for a change in seeding mode from the mountain top, point source pyrotechnic seeding used in the three previous seasons to an aerial line source using an acetone-silver iodide-ammonium iodide solution. Arrangements were made with Vandenberg AFB (VBG) to utilize their ARSR surveillance radar and traffic controllers and to fly in the controlled air space just off the coast of VBG. The former primary seeding site on the mountain ridge was to be retained as a backup in case aerial seeding could not be performed. A number of unanticipated problems

occurred which limited the aerial operations to seven rather marginal bands while the bulk of the seeding was conducted in the same manner as the previous three years.

WORK PERFORMED

The 1970-71 field program began November 1, 1970 and continued through April 1971. There were several good seeding opportunities during November and December, but the remainder of the season was relatively dry with only minor seeding opportunities. The storms after mid-December were characterized by cold air masses and generally light precipitation.

A total of 29 bands were declared operational during the 1970-71 season. Twenty-two of these were treated by the ground seeding mode - 13 seeded and nine not seeded; and seven by the aerial seeding mode - three seeded and four not seeded.

After four years of pyrotechnic seeding from a single ground location, a total of 107 bands have been identified and declared operational. Fifty-six of these bands were seeded and 51 not seeded.

MODEL COMPUTATIONS

Rawinsondes were taken just prior to the entrance of the bands into the test area. In order to make quantitative use of this abundant air mass and wind data for elucidating the observed patterns of seeding effect, use was made of the Area of Effect model (Elliott, 1969). This model has been specifically developed for predicting the area of effect due to the seeding of winter storms over an orographic barrier under both stable and unstable air mass conditions. As applied here, only the unstable case is used. The model considers the barrier configuration, the inflowing air mass structure as given by a sounding, and the location, strength, and type of the artificial nuclei source.

The model is steady state and Lagrangian in character. It predicts the movement and dispersion of the nucleant, its entrainment into convection, and the production of ice particles by nucleation, their growth by diffusion and accretion as they ascend in convection, and their drift during fallout from tilted convection columns.

The area of effect model employs a parameterized form of convection; however, a dynamic convection model using the same ice phase nucleation and growth

mechanism is used in a supplementary fashion to predict seeding-produced rise in the top of convection and the updraft which is generated.

The combined models show that in the winter storm convection prevalent in this area, the possibility of overseeding, i.e., a seeding-produced reduction in precipitation through an oversupply of artificial nuclei, is possible in very cold systems. The dynamically-produced rise in cloud top may increase the chance of overseeding with many small ice crystals being ejected from the top of convection.

Figure 3 is an example of the predicted area of effect for a hypothetical case. The quadrilateral enclosed by the solid lines and marked primary area of effect represents the envelope of possible fallout trajectory endpoints (ground interception). The dashed line represents the limits of the ground plume.

Diffusion within the ground plume is assumed to follow the type of plume which observations and laboratory modeling indicate occurs in the rugged terrain around Climax, Colorado (Orgill, 1971). The plume expands vertically and horizontally quite rapidly in the first 5 km, and at a lesser rate thereafter. First entrainment into convection is assumed to occur at 500 sec plume travel distance out from the source. The farthest-out entrainment is assumed to occur at a distance which smoke particles from the first flare could have reached at the time the trailing edge of the band passed by the source.

In some instances the ground plume top rose sufficiently high for seeding to occur within it. This is shown by the hatched area within the plume boundaries in this hypothetical case.

The closest-in fallout from convection (usually the largest and earliest nucleated particles) is calculated to reach the ground at point 1 from the first possible convection tower and at point 2 from the last possible tower. Computations for more towers show that the straight line drawn between 1 and 2 is a fair approximation of the calculated upwind limit of the effect. The farthest-out fallout from convection (usually the particles falling from near convection top) intersect the ground at position 3 (first tower) and position 4 (last tower). This area is designated the primary area.

Radar data indicate that convection in these systems and the precipitation patterns associated with it move about 30° to the right of the mean wind direction between the base and top of convection and at about half its speed. This

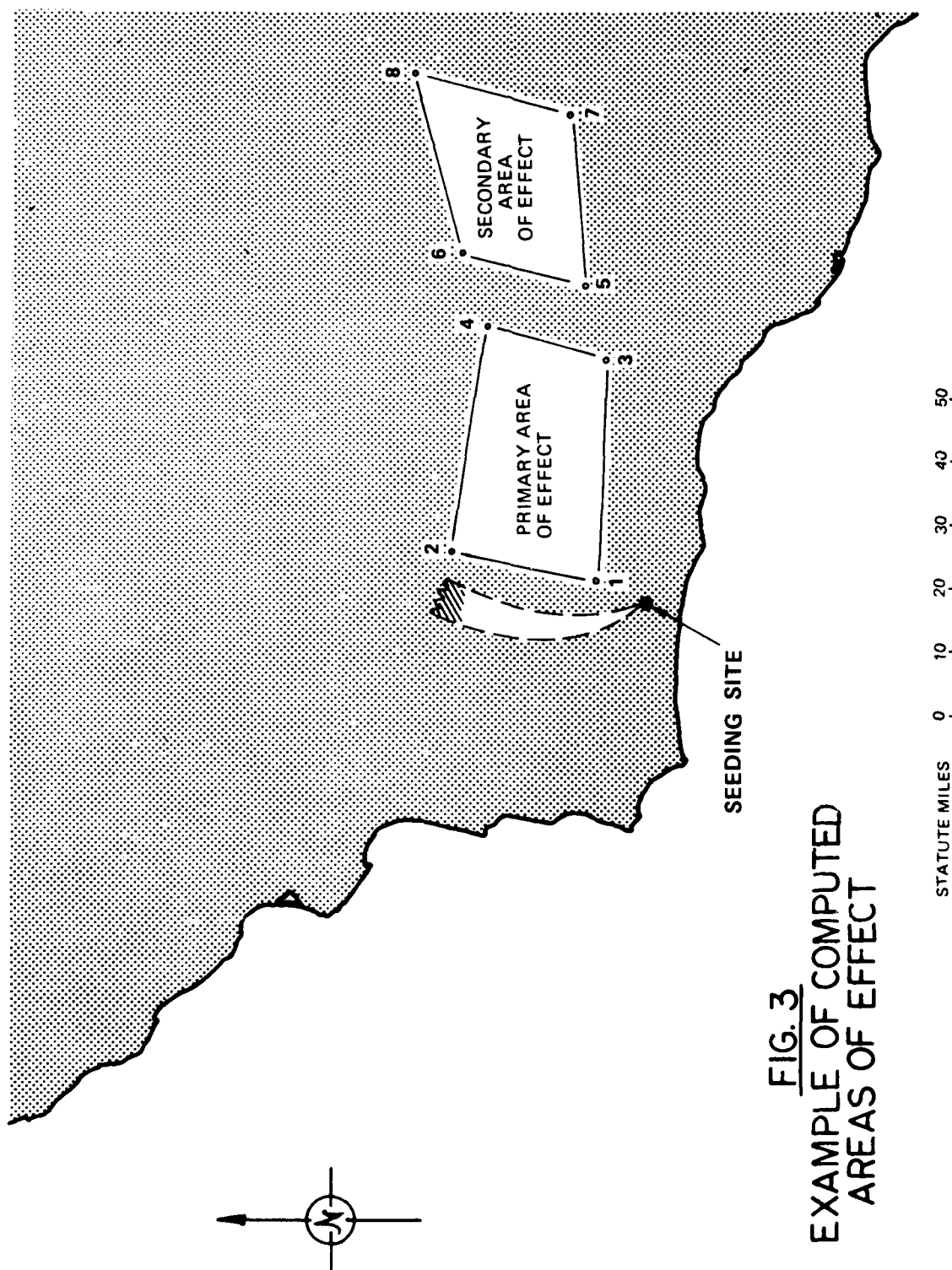


FIG. 3
EXAMPLE OF COMPUTED
AREAS OF EFFECT

behavior conforms to the motion of thunderstorms as discussed by Newton (1959, 1963). In general, it appears that in winter systems observed in western United States, only the shallow small cells move in the direction of the air within which they are embedded. The larger ones move well to the right. The 30° turning is incorporated into the area of effect model predictions.

There remains, however, the possibility that some effect may occur far downwind because the excess of small ice crystals ejected from convection top form an ice anvil which moves rapidly downwind in the environmental wind flow. Seeding-produced cloud top rises would enhance the production of such anvils. As has been shown by Braham and Spyers-Duran (1967), ice crystals have been observed to survive falls of 20,000 feet through relatively dry air from cirrus. The particles they observed were of sufficient concentration to seed cumulus clouds into which they fell, and this appeared to have happened in cases which they observed. It is conceivable that artificially enhanced anvil action produced in the after part of the band, could move forward relative to the band and seed clouds in the forward part, or even in advance of the band. As a check on this possibility, the free fall ballistic trajectories of the most frequent ice particle masses and concentrations calculated to be ejected from convection tops were computed, assuming also their continued growth by accretion in falling through lower cloud forms. The ground interceptions computed in this way are shown for the first and last towers by the positions 5, 6, 7, and 8 linked by the dotted lines in Figure 3. It is seen that this secondary area lies downwind of the primary area of direct effect outlined by points 1, 2, 3, and 4.

Computations along the lines discussed above were made for each seeded band, using as inputs the band soundings and seeding data. The results were composited by drawing an envelope around the individual band areas of effect for all seeded cases. The primary and secondary areas of the various cases overlap, and figures 8, 9, 10 and 16 show separately by dashed line the downwind extension of the envelope produced solely by the secondary effect. The model as employed does not distinguish between the case of a seeding-produced increase in precipitation and the case of a reduction in precipitation. It merely indicates the area where any effect, positive or negative, can be expected.

RESULTS

Precipitation Analysis

Ratios of mean seeded band precipitation to mean not-seeded band precipitation were computed for 168 gages lying over the land area upwind as well as downwind of the seeding source. The band precipitation data at each station were also ranked and the single tail Wilcoxon (Mann-Whitney) U test applied to determine if the seeded sample showed significantly higher ranking than the not-seeded sample. Figures 4, 5, 6 and 7 show the precipitation ratios for each of the four years (1967-68, 1968-69, 1969-70 and 1970-71) that the Santa Barbara field study has been conducted. Each year shows high seed/no seed ratios centered 60 to 90 miles downwind from the seeding source.

While the patterns of the individual years are interesting, the statistical significance of any one year's data is not particularly high. However, when all four years are combined producing a sample of 107 cases, the pattern becomes quite clear and the significance level is very high. This four year ratio map is shown in Figure 8. The direct seeding effect in the primary area shows up as a region extending from the seeding site about 30 miles downwind with precipitation increases of 50% or more during the seeded bands. The large scale effects of seeding are indicated by a very large area with ratios of from 1.50 to over 4.00 extending from north of Bakersfield to the Los Angeles area.

Of the 168 precipitation stations used in this analysis, 60 showed statistically significant differences in the ranks of seeded band precipitation compared to unseeded bands at the 10% level of confidence. Twenty-eight of these stations were significant at the 5% level and four at the 1% level. The statistical test used for this calculation was the non-parametric Wilcoxon (Mann-Whitney) test.

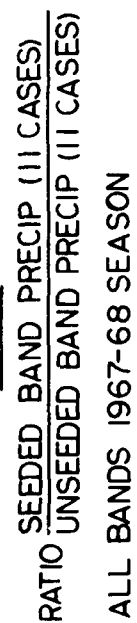
In order to test the likelihood of such a large number of stations achieving significance at those levels, a Binomial Test was applied. This test statistic is given by the following formula:

$$\frac{X - PN}{\sqrt{P(1-P)} \sqrt{N}} \quad (1)$$

where X = number of stations significant at given probability level (P)

P = probability level

N = number of stations in sample



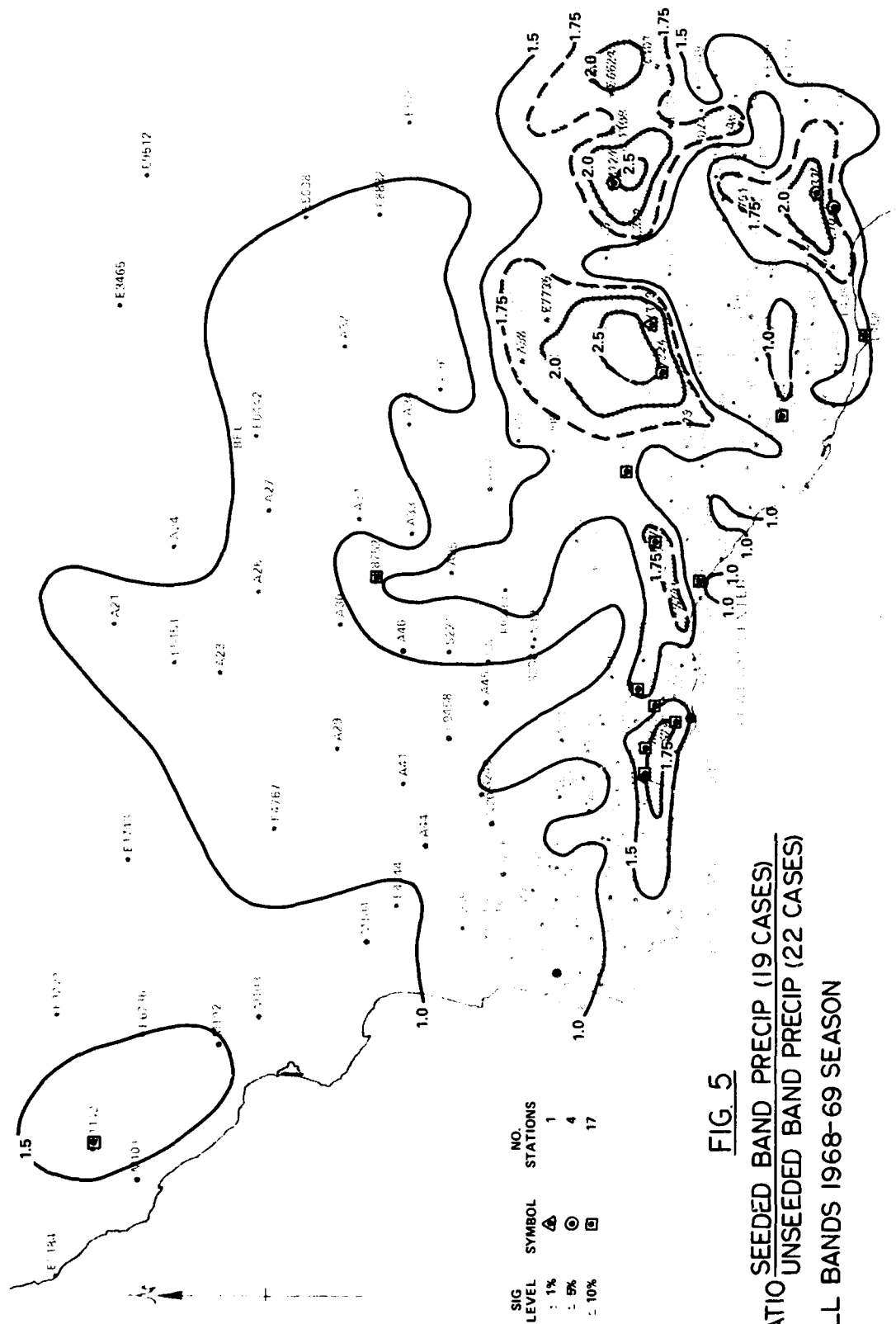


FIG 5
 RATIO SEEDED BAND PRECIP (119 CASES)
 UNSEEDED BAND PRECIP (22 CASES)
 ALL BANDS 1968-69 SEASON

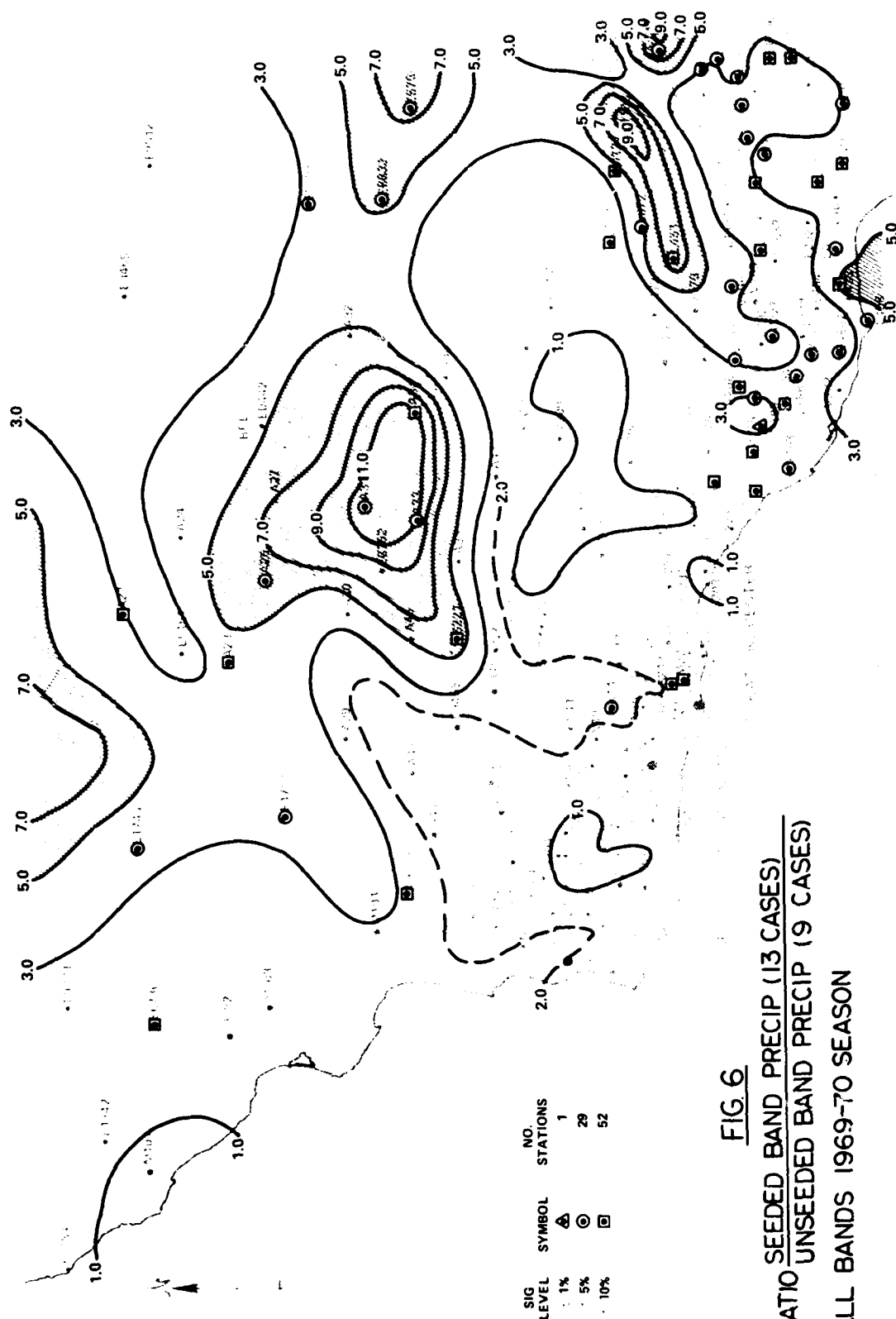


FIG. 6
RATIO SEEDED BAND PRECIP (13 CASES)
UNSEEDED BAND PRECIP (9 CASES)
ALL BANDS 1969-70 SEASON

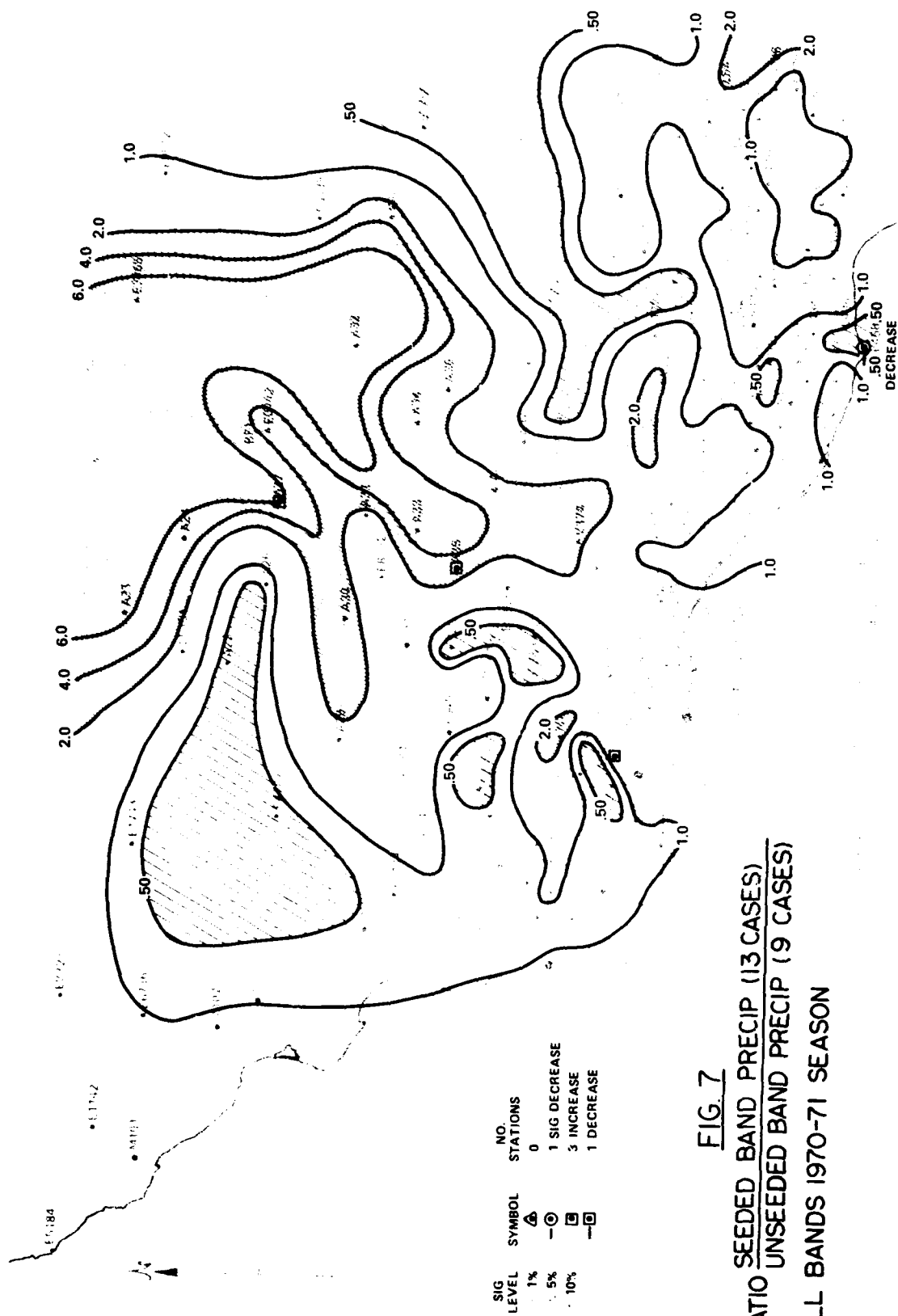
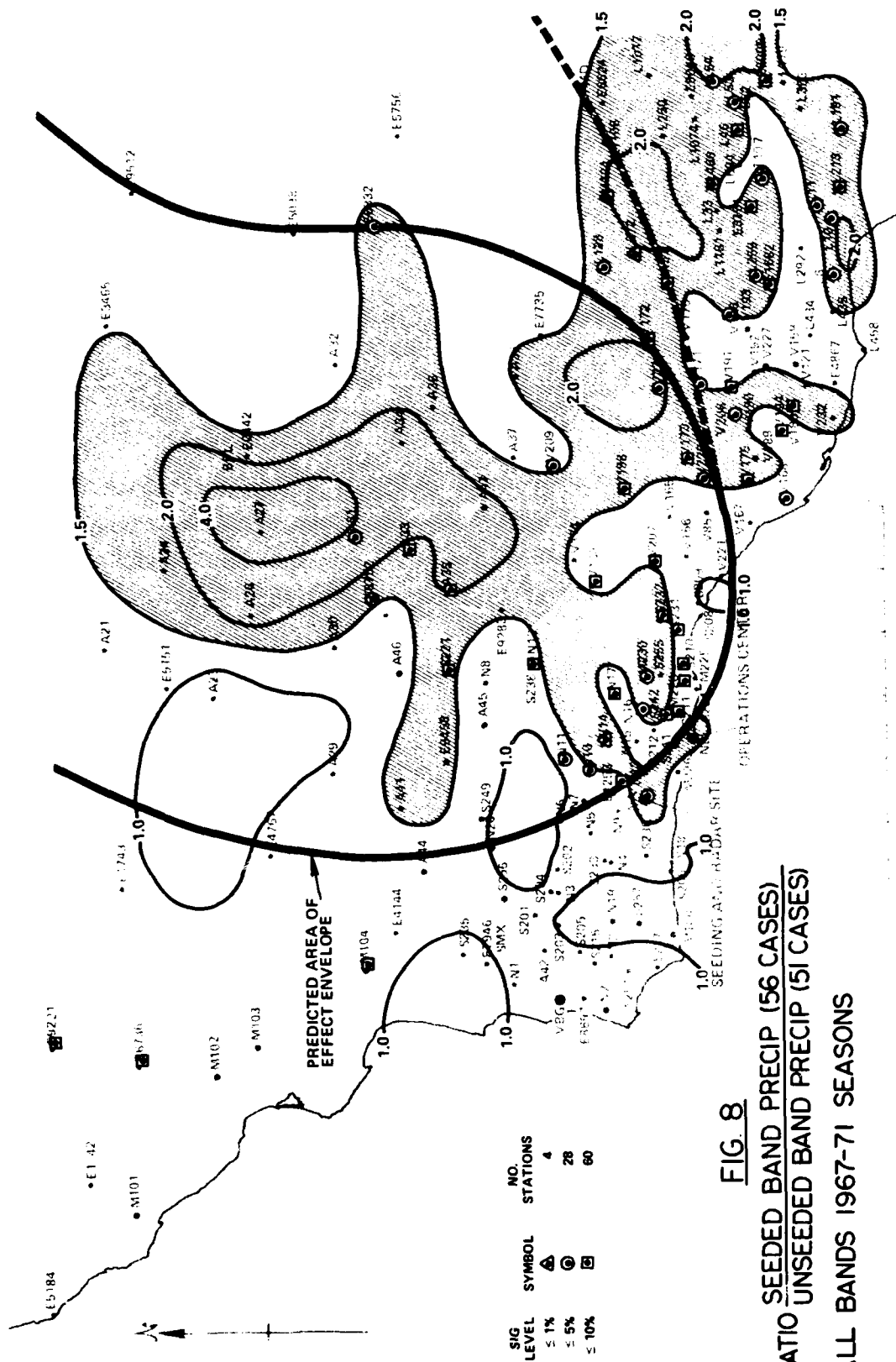


FIG. 7
 RATIO SEEDED BAND PRECIP (13 CASES)
 UNSEEDER BAND PRECIP (9 CASES)
 ALL BANDS 1970-71 SEASON



Equation (1) then reduces to the following equations for 10%, 5%, and 1% levels of probability:

$$10\% \text{ level} \quad \frac{X - .10N}{.949 \sqrt{N}}$$

$$5\% \text{ level} \quad \frac{X - .05N}{.218 \sqrt{N}}$$

$$1\% \text{ level} \quad \frac{X - .01N}{.099 \sqrt{N}}$$

If we divide the stations shown in Figure 8 into three zones: The area within the predicted area of effect envelope (including the cirrus fallout extension); the area to the left of the envelope; the area to the right of the envelope, the following test statistics are derived.

Table 1 - Binomial Test Statistics

Prob. Level	Area of Effect		Left of Area		Right of Area	
	N = 73		N = 45		N = 50	
10%	X = 31	2.9	X = 6	0.2	X = 23	2.7
5%	X = 15	6.1	X = 1	-0.9	X = 12	6.1
1%	X = 4	3.9	X = 0	-0.7	X = 0	-0.7

The probability of detecting so many stations significant at the given levels by chance is calculated to be between .002 and .00001 within the predicted area of effect envelope, while the upwind area to the left of the predicted fallout area has only the expected number or less number stations significant at the various levels. The area to the right or south of the area of effect envelope has a highly significant number of stations in the 10% and 5% categories. For example, the probability of observing twelve or more stations significant at the 5% level within this area containing 50 observing stations is less than .00001.

The four year sample of band precipitation was stratified by various meteorological parameters in order to test the effect of each parameter on seeding effectiveness and location. One of the major stratifications has been on the

basis of 500 mb temperatures which are used as an estimate of cloud top temperature since no direct measurements of cloud top height have been available. The dependence of seeding effectiveness on cloud top temperature has been well documented by Grant (1967) and others.

Three different temperature divisions were tested with the warm-cold split occurring at -18° , -20° and -22°C . There was very little difference between the seed/no seed ratios of the bands when the temperature division was made at -18°C . When the division occurred at -20°C however, a significant difference begins to be apparent with the bands with 500 mb temperatures equal to or warmer than -20°C (Figure 9) showing a large area of high seed/no seed ratios in both the primary seeding area and in the area 60-90 miles downwind. In the warm category 70 stations show significance at the 10% level and 38 at the 5% level. The bands with 500 mb temperatures colder than -20°C (Figure 10) show much smaller areas of high seed/no seed ratios and an area with ratios of less than 0.67 (50% less rain from seeded bands) appears about 60 miles north of the seeding site. Contrasted with the warmer category, only one station is significant at the 5% level and nine at the 10% level or less.

When the temperature division is made at -22°C , the contrast becomes even more evident. The seed/no seed precipitation ratios from the bands with 500 mb temperatures of -22°C or warmer (Figure 11) are greater than 1.50 over a very large area and extremely high ratios (over 20:1 at stations A27 and A31) are observed in the San Joaquin Valley. The ranking of the precipitation distributions was significantly different at 92 stations at the 10% level, 64 stations at the 5% level and 17 stations at the 1% level. The bands with 500 mb temperature colder than -22°C (Figure 12) show a rather large area with ratios under 0.67 in the same region where high ratios occurred in the warm category. Most of the higher ratios (over 1.5) occur over the Sierra Mountains more than 120 miles from the seeding site. The Wilcoxon (Mann-Whitney) test showed only one station with a precipitation distribution which was significantly different for seeded and unseeded bands and that station(A44) showed a decrease in precipitation from seeded bands significant at the 1% level. The sample size for that particular station was quite small, however, (six seed, six no seed), so the results may be questionable.

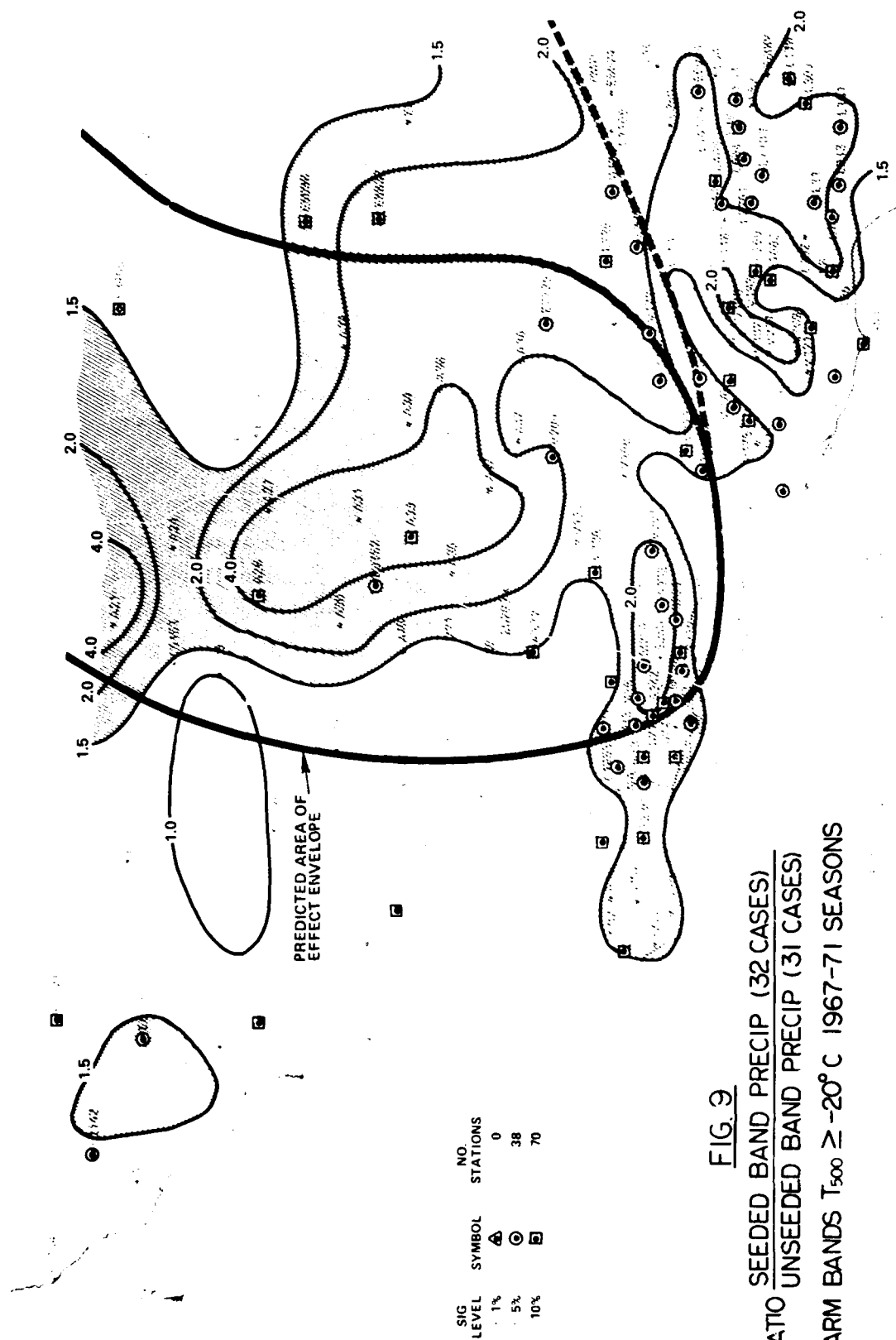


FIG. 9
 RATIO SEEDED BAND PRECIP (32 CASES)
UNSEEDED BAND PRECIP (31 CASES)
 WARM BANDS $T_{500} \geq -20^{\circ}\text{C}$ 1967-71 SEASONS

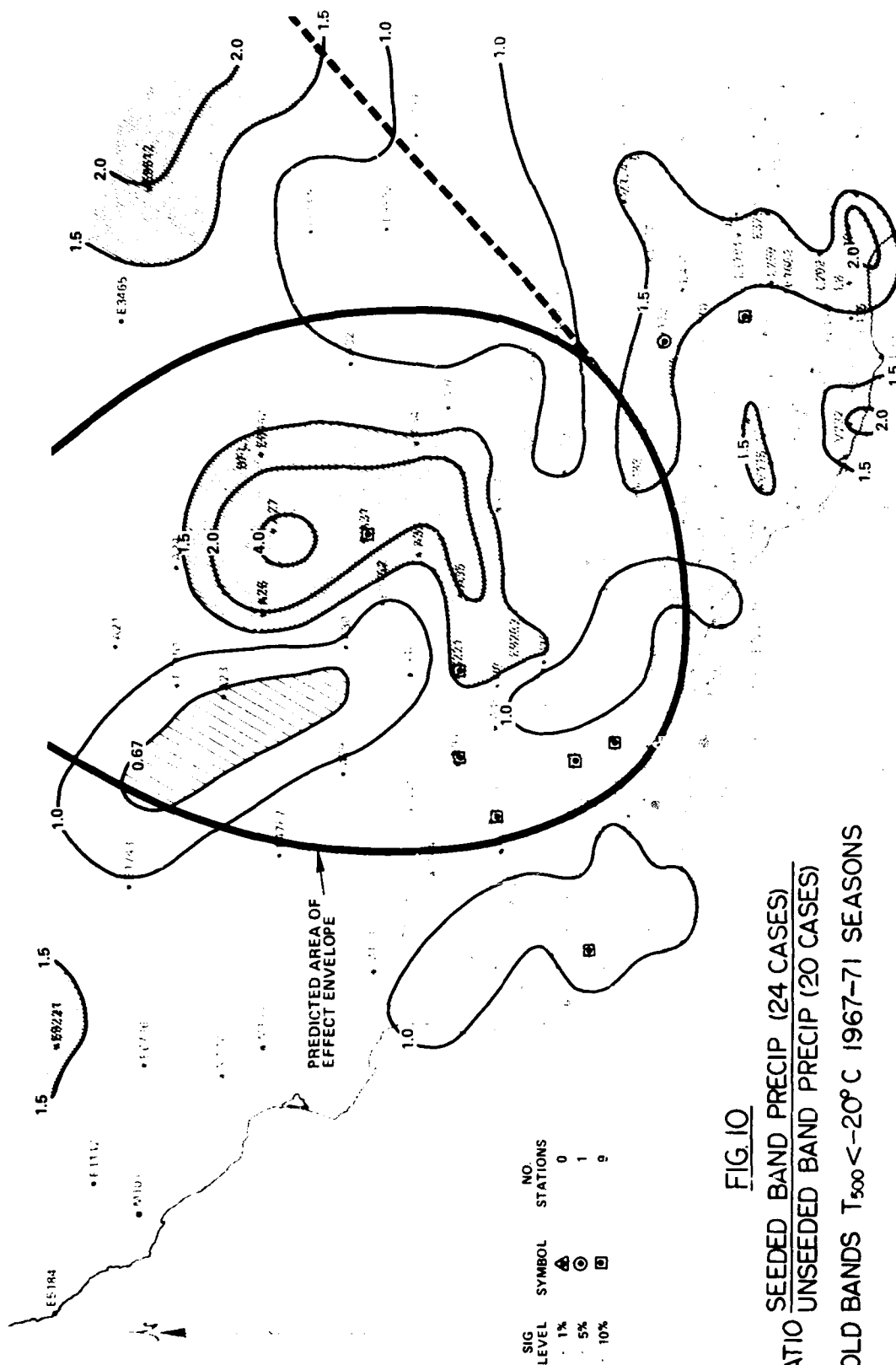
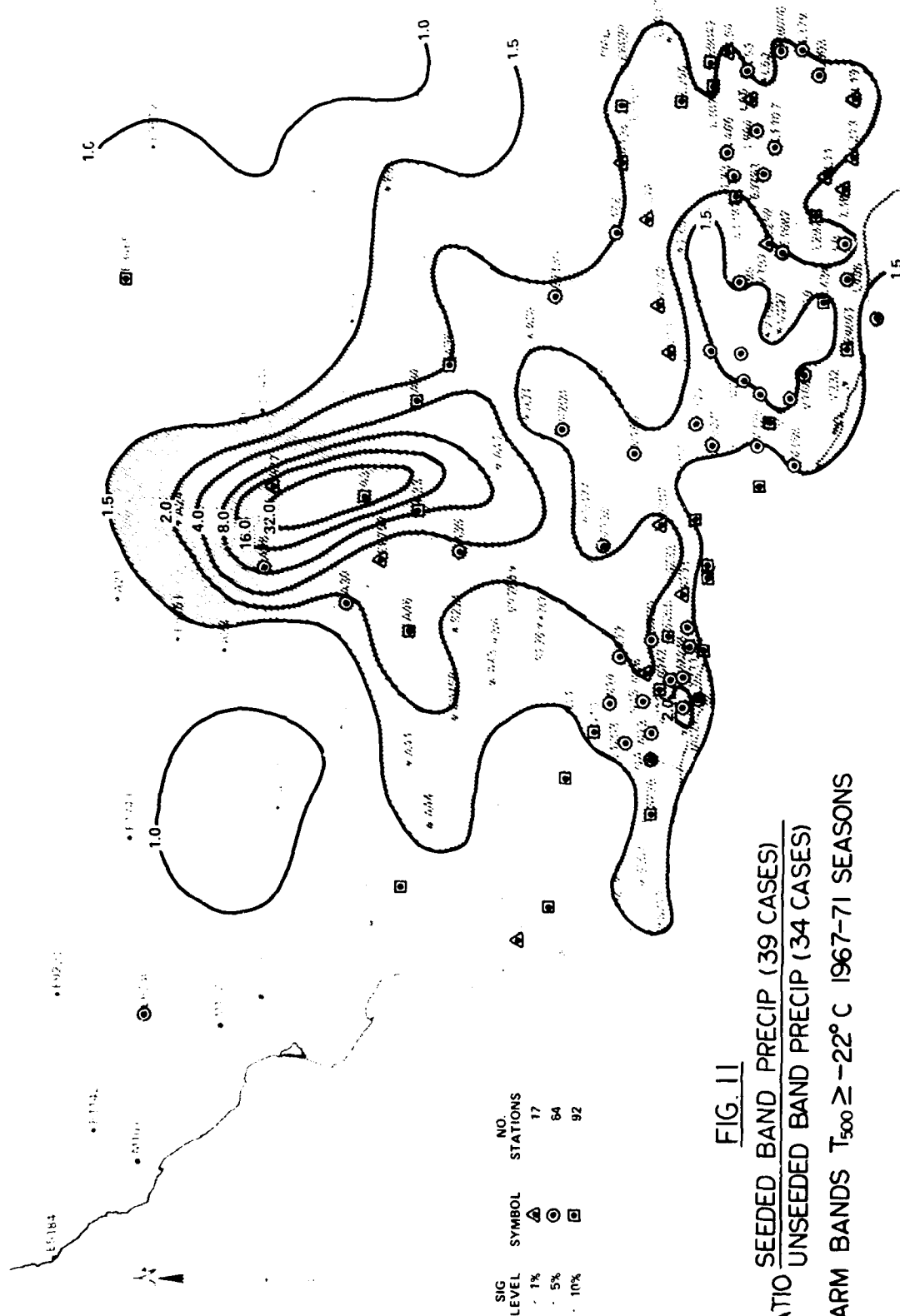


FIG. 10

RATIO SEEDED BAND PRECIP (24 CASES)
UNSEEDED BAND PRECIP (20 CASES)
 COLD BANDS $T_{500} < -20^{\circ}\text{C}$ 1967-71 SEASONS



It would appear that when seeding is done during the coldest storms, the precipitation is decreased due to overseeding. As the system moves further east and new moisture is entrained, the proper mixture of ice crystals and supercooled water is achieved and rainfall is then increased.

Another stratification of the precipitation data was made on the basis of 700 mb wind direction. The 700 mb level is considered representative of the area midway between cloud base and cloud top and is generally believed to be important in steering cell movement. The four year data sample was divided into two approximately equal groups with winds from 150 to 234 degrees assigned to the southerly category and winds from 235 to 290 degrees in the westerly group.

The southerly wind group (Figure 13) shows large areas with ratios over 1.5 especially in the San Joaquin Valley which fits well with the median wind direction for this category. Several rather surprising patterns also appear in Figure 13. The area of high ratios and associated low probabilities in the northwest corner of the map is very difficult to explain since the band has almost always passed these stations when seeding is initiated and then therefore presumably couldn't be effected by the seeding. The general high ratios in the southeast portion of the map is rather surprising with a southerly wind component. The concentrated area of high ratios and significance immediately east of the seeding site is also surprising when compared to those bands with a westerly 700 mb wind as shown in Figure 14. It appears that almost all of the close in seeding effect occurs with a southerly wind component but not in a direction which the wind would carry the nucleant. The major area of high ratios in the westerly wind group appears over the Sierras extending south to the San Gabriel Mountains and is not inconsistent with the median flow. An area of apparent precipitation decrease is located along the west side of the San Joaquin Valley with one station (A45) showing a statistically significant decrease at the 5% level.

Since the aerial seeding mode was used on only seven bands (three seeded and four not seeded), the statistical analysis of the precipitation patterns cannot be considered as significant evidence. However, Figure 15 showing the seed/no seed precipitation ratios for these aerial bands is presented for completeness. A possible area of direct seeding effect is located about 20 miles east of the seeding track. Several high ratio areas are also evident 80 to 100 miles east and northeast of the seeding track.

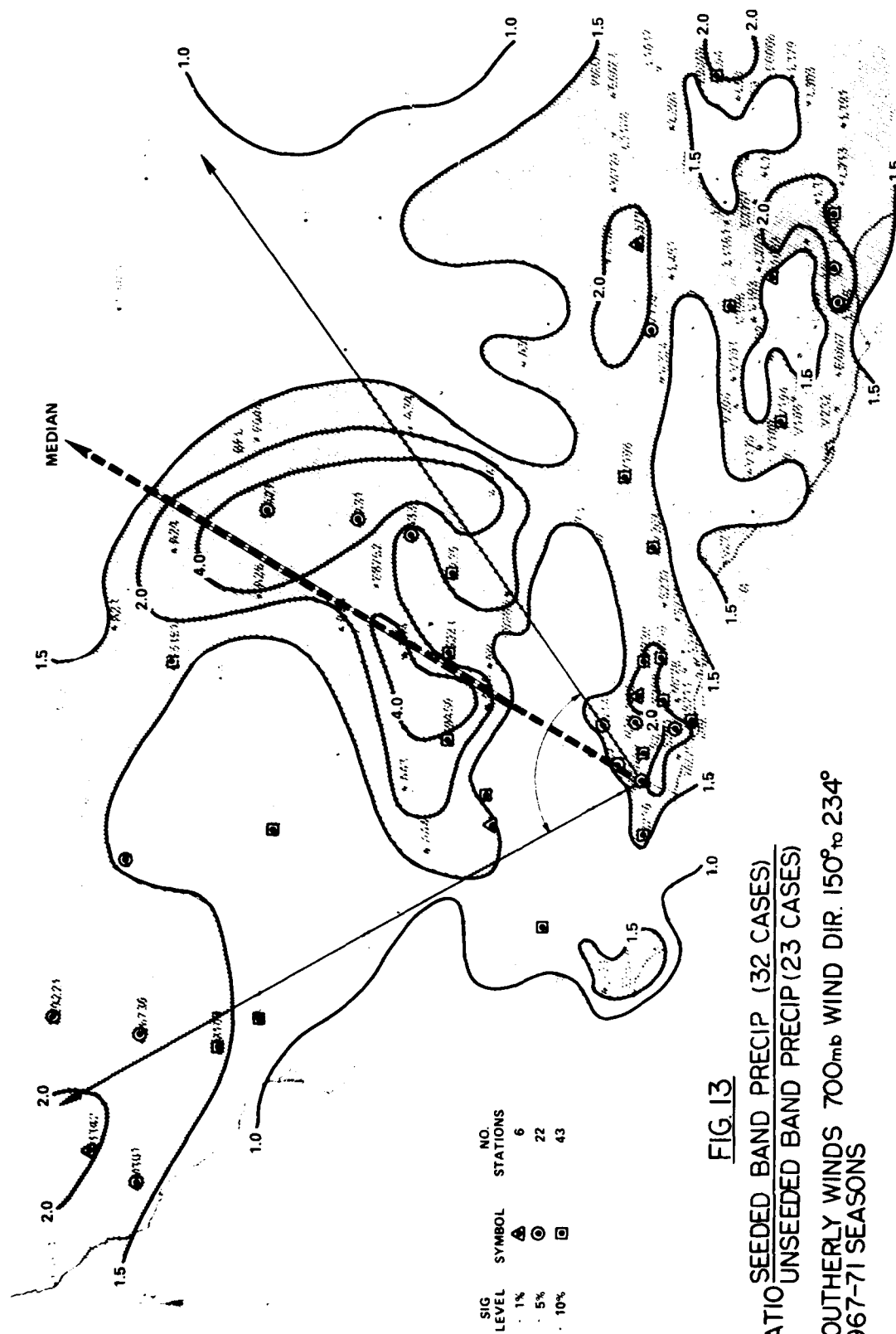


FIG. 13

RATIO SEEDED BAND PRECIP (32 CASES)
UNSEEDED BAND PRECIP (23 CASES)

SOUTHERLY WINDS 700_{mb} WIND DIR. 150° to 234°
1967-71 SEASONS

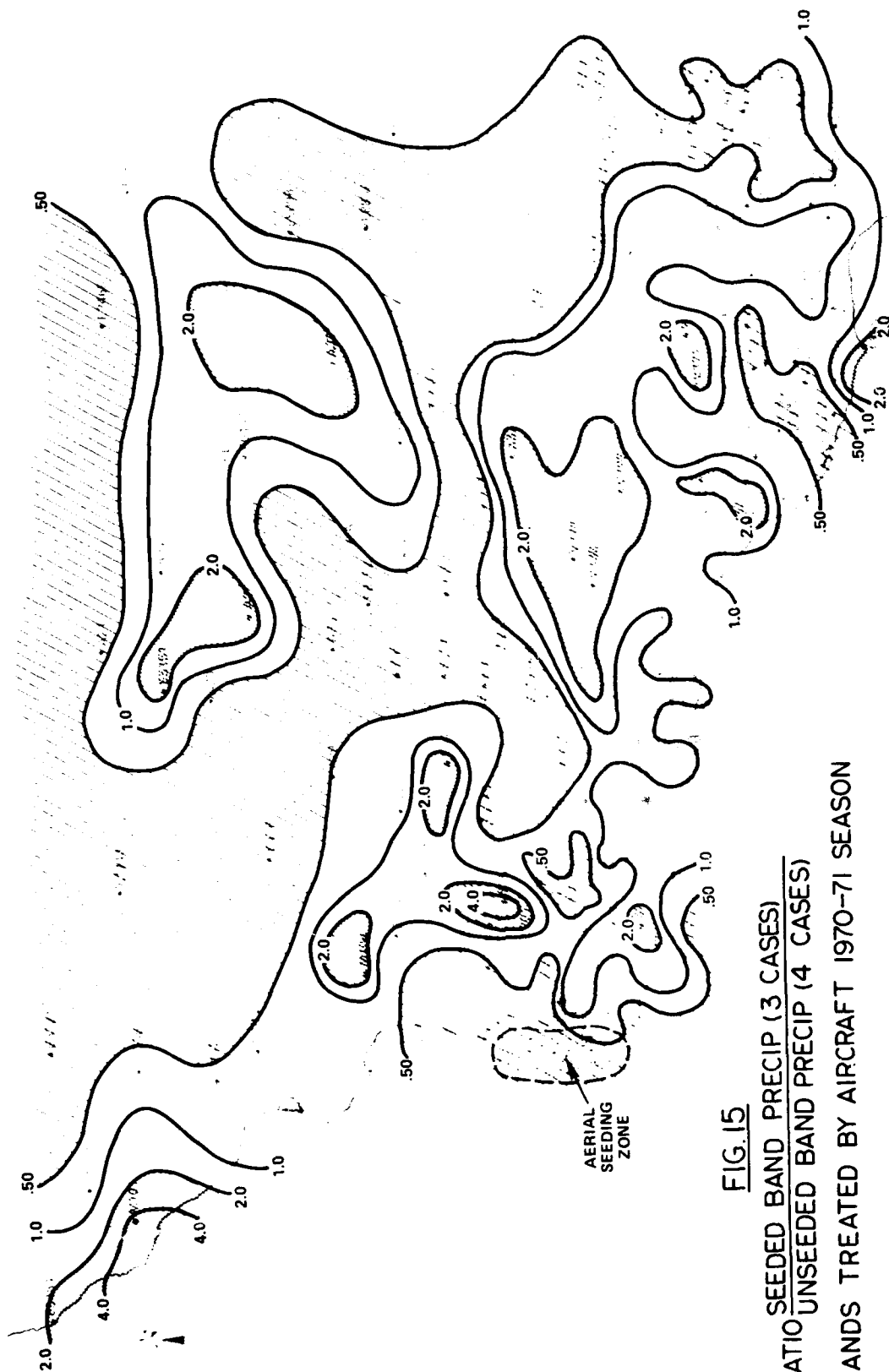


FIG.15
 RATIO $\frac{\text{SEEDED BAND PRECIP (3 CASES)}}{\text{UNSEDED BAND PRECIP (4 CASES)}}$
 BANDS TREATED BY AIRCRAFT 1970-71 SEASON

Band Duration Analysis

The band duration, the elapsed time from the onset of the leading edge of the band at a given point to the passage of the trailing edge at the same point, varies considerably from band to band and from station to station within any band. A statistical analysis was made to determine whether seeding altered the time duration of the band in addition to the precipitation total produced by the band.

Figure 16 depicts the seed/no seed ratio of band duration for all four year's data. Since band duration comes closer to a normal distribution than precipitation data which are notoriously skewed, the ratios in Figure 16 do not show the extreme values found in Figure 8. However, a clear pattern is evident with ratios of over 1.5 in the primary seeding area and large areas of ratios over 1.5 in the extended area. Even more astounding is the large number of stations showing duration distributions which were different and significant at very low probability levels. A total of 98 stations showed distributions significant at the 10% level, 64 at the 5% level and 15 at the 1% level. When we repeat the Binomial Test described in the previous section, the results are quite outstanding, as shown in Table 2.

Table 2. Binomial Test Statistics

Prob. Level	Area of Effect		Left of Area		Right of Area	
	N = 73		N = 45		N = 50	
10%	X = 45	4.65	X = 17	1.96	X = 36	4.62
5%	X = 31	14.68	X = 10	5.30	X = 23	13.30
1%	X = 9	9.78	X = 2	2.33	X = 4	5.00

With test statistics as high as those observed, one can state that the odds against observing so many stations significant at each level is well over a million to one.

CONCENTRATION OF SILVER IN PRECIPITATION

Samples of precipitation were collected during band passage at some stations over the last two seasons. These were sent to the Bureau of Reclamation office for determination of silver content by atomic absorption techniques. During

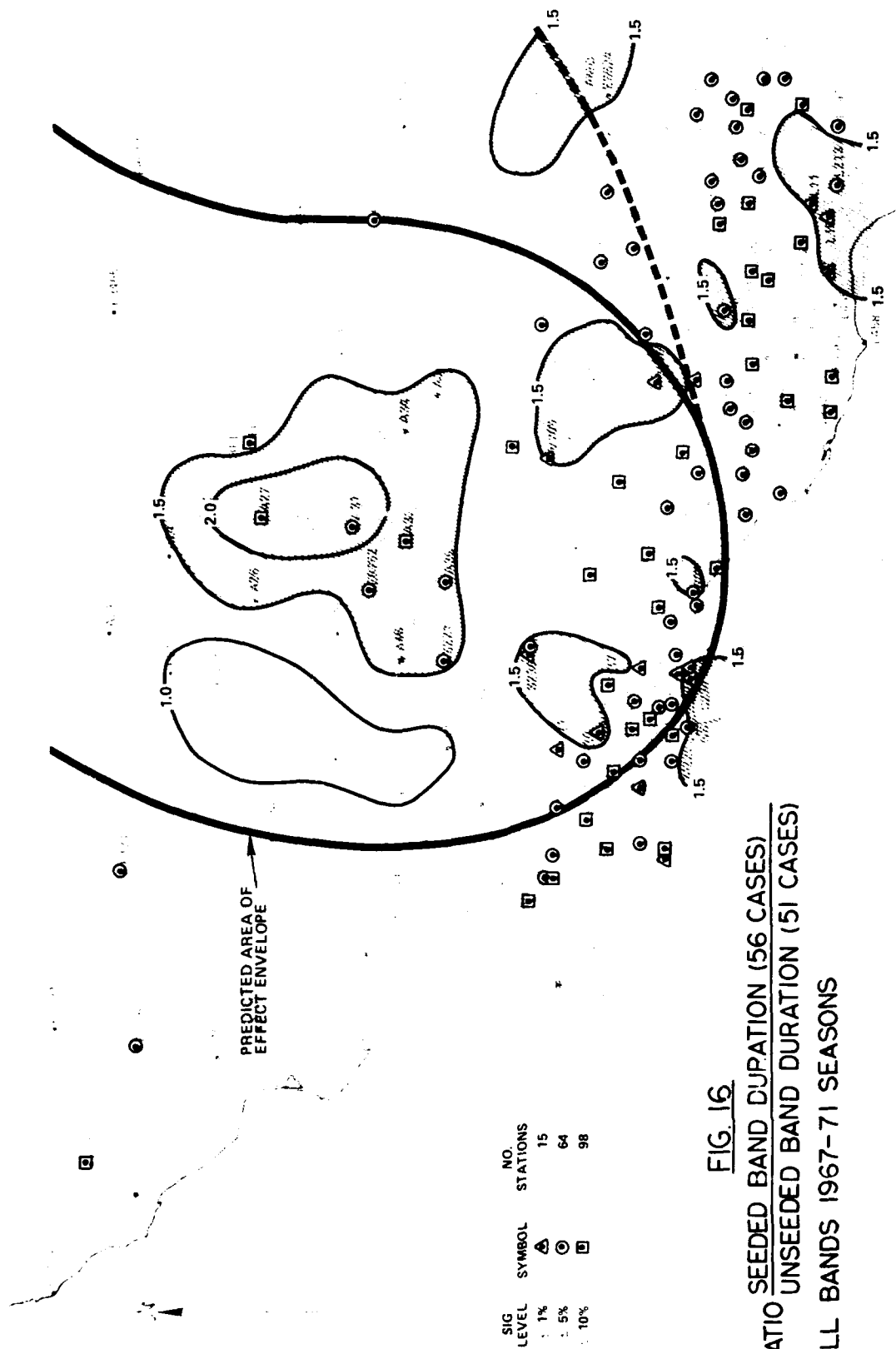


FIG. 16
RATIO SEEDED BAND DURATION (56 CASES)
UNSEEDED BAND DURATION (51 CASES)
ALL BANDS 1967-71 SEASONS

1969-70, collections were made at four stations, making use of sequential samplers which collected rain samples in plastic bottles every 60 minutes. The samples examined were those best covering the time interval of the seeded or not seeded band passage at each station. During 1970-71, observers made the collections manually following alerts by project control. In each season, immediately following collection, the samples were frozen, then shipped to the Bureau of Reclamation office in Denver for analysis.

Table 3 lists the results of these collections. It was not possible to sample every band, and indeed the number is small for making anything more than a minimal type analysis. Figure 17 shows the silver ratios determined, lumping together the different sets of stations used in each of the two seasons sampled. Also shown in Figure 17 are the seed/no seed precipitation ratios for only those bands and stations which were sampled for silver content. Silver ratios above one tend to lie within the envelope of the all band area of effect or immediately upwind thereof. There is a suggestion that low level plume drift to the west before entrainment may be more important than the model would indicate. The area of high precipitation ratio most noticeable in Figures 9 and 11 lies in a similar region. The high silver ratio at Big Eye, right next to the source, may reflect a large degree of washout of oversize particles in that vicinity.

It is perhaps significant that the two stations in the downwind region lying just to the right of the model's envelope have silver ratios of under one. This suggests that the high precipitation ratios observed in this area are not the direct result of artificially altered microphysical processes.

The corresponding precipitation ratios shown in Figure 17 point out the danger of drawing conclusions based on this limited sample. It is apparent that the precipitation ratios bear little resemblance to the patterns shown in earlier figures. The only areas with ratios of over one are in the far upwind, far downwind and south of the seeding site. Little relationship can be found between areas of high silver ratio and high precipitation ratio.

The sample from the aerially seeded bands is too small to provide meaningful results.

EFFECTS OF SEEDING ON OTHER BANDS AND ON BETWEEN-BAND PRECIPITATION

No analysis would be complete without considering the possibility that seeding a given band might affect precipitation in an area much wider than the

TABLE 3-A

CONCENTRATION OF SILVER IN PRECIPITATIONGrams per Mililiter $\times 10^{-10}$

1969-70 Season

Band No.	Date	Seed-S No Seed-NS	Barca Ranch Station A42	Las Cruces 1.5 WNW Station A43	Los Prietos Station N16	NAWC Station NB
1	11/5/69	NS	0.7×10^{-10}	$<0.2 \times 10^{-10}$	$<0.2 \times 10^{-10}$	Msg.
2	11/6/69	S	0.7	1.0	< 0.2	Msg.
3	1/9/70	NS	Msg.	1.6	0.4	Msg.
4	1/9/70	S	Msg.	0.7	1.3	Msg.
5	1/9/70	S	0.8		1.1	Msg.
5	1/9/70	S	0.3	2.5	0.7	Msg.
14	2/28/70	NS			1.5	Msg.
14	2/28/70	NS	0.7	Msg.	0.6	Msg.
14	2/28/70	NS			0.7	Msg.
15	2/28/70	S	0.9	Msg.	0.3	Msg.
16	2/28/70	S	0.7	Msg.	0.5	Msg.
17	3/1/70	NS	0.6	Msg.	Msg.	Msg.
18	3/1/70	S	0.3	Msg.	0.6	Msg.
19	3/1/70	S	0.3	Msg.	0.2	Msg.
22	3/4/70	S	0.9	1.8	0.8	0.9
22	3/4/70	S		0.9		
22	3/4/70	S	1.1	1.7	1.1	1.2
Seed/No seed Ag Ratio:			1.00	1.44	1.12	
Corresponding Seed/No Seed Precip Ratio:			1.16	0.89	0.96	

Rinse Concentrations: 1.0, 0.7, 2.8, 1.7, 1.5, 0.6

TABLE 3-B
CONCENTRATION OF SILVER IN PRECIPITATION
Grams per Milliliter x 10⁻¹⁰
1970-71 Season

Ba id No.	Date	No Seed-NS	NAWC NB	VBG N21	New		Gorman A38	Big Eye NA	Taft E8752	Saugus L372	Bakers- field E442	Buellton N4	Santa Maria E7946
					Cuyama N8	Montalvo V167							
Ground													
4	11/28/70	S	5.2					38.0				0.6	
7	11/29/70	S	0.8		0.7	0.5	0.5	8.3			0.6	5.4	
8	12/2/70	NS	0.4		0.4	1.2		0.8				0.4	
9	12/2/70	S	3.2		3.1			41.0					
11	12/18/70	S	1.8	2.5	0.6	0.5	<0.3	1.7	1.2	0.4		0.9	<0.3
14	12/20/70	NS	0.5		0.9	1.8	<0.3	3.6	1.4	0.6		1.1	
18	2/16/71	S	1.1					290.0				1.0	0.5
20	3/12/71	S	<0.3		0.3	1.2	0.6	8.2	0.5	0.7	0.6	0.5	<0.3
21	4/13/71	S	1.6					15.0					
22	4/14/71	NS	0.5		1.0			12.1	0.5				
Seed/No Seed Ag Ratio: 4.3 - 1.5 0.5 0.8 0.9 - 2.3 -													
Corresponding Seed/No													
Seed Precip Ratio: 1.26 - 0.76 0.90 0.15 1.17 - 0.36 -													
Air													
A1	12/16/70	S	0.4	0.8	2.8			1.4	0.8			<0.3	0.3
A2	12/16/70	S		2.1				1.6				0.3	0.5
A3	12/16/70	NS		0.7									
A6	4/17/71	NS	0.5		0.3			30.0				0.9	0.3
A7	4/17/71	NS					0.6	10.0					
Seed/No Seed Ag Ratio: 0.8 2.1 9.3 - - 0.1 - - 0.3 1.3													
Corresponding Seed/No													
Seed Precip Ratio: 8.00 0.67 ∞ - - 0.71 - - 0.57 0.33													

band itself. The possibility of seeding from artificial cirrus which has moved downwind from the parent band has been mentioned already. There is also the possibility of seeding the area following the band as the low level silver iodide plume drift continues after band passage. Both of these microphysical effects should, on the average, have a positive effect on precipitation.

A mesoscale dynamic effect would be the production of downdrafts far outside of the artificially invigorated segment of the band. In large Great Plains thunderstorms a suppressing effect occurs on convection up to 75 miles from the storm (Schock and Gelhaus, 1971). The average spacing between consecutive convection bands is around 50 miles. These possible microphysical and dynamic effects are summarized in Figure 18.

A statistical analysis to determine the possible interaction between bands was made by computing the ratio of precipitation from bands followed by a seeded band divided by bands followed by an unseeded band without regard as to whether the band in question was seeded or not. These ratios are shown in Figure 19. An interesting pattern is evident with a large portion of eastern Santa Barbara County, Ventura County and Los Angeles County receiving twice as much rainfall when a band is followed by a seeded band as when it is followed by an unseeded band. A total of 37 stations show significantly higher ranks at the 10% level when followed by a seeded band and 22 at the 5% level. The area to the north of this region, however, shows a 50% decrease in rainfall when a band is followed by a seeded band. This area is primarily in the San Joaquin Valley. Nine of these stations have decreased ranks significant at the 10% level.

The area of enhanced precipitation could be due to cirrus seeding as shown in Figure 18, however, it would require an outflow of cirrus well to the right of the cirrus level wind flow. The area of decreased precipitation is more difficult to explain since it is more directly in line with the expected cirrus flow. It may be that in the drier San Joaquin Valley, the subsidence produced by a mesoscale dynamic effect is more pronounced.

Another ratio was calculated comparing bands preceded by a seeded band and those preceded by an unseeded band, again without regard to whether the band used in the analysis was seeded or not. The results of this analysis are shown in Figure 20. In this figure we see an almost complete reversal of the pattern shown in Figure 19. The area of 100% increases in Los Angeles County

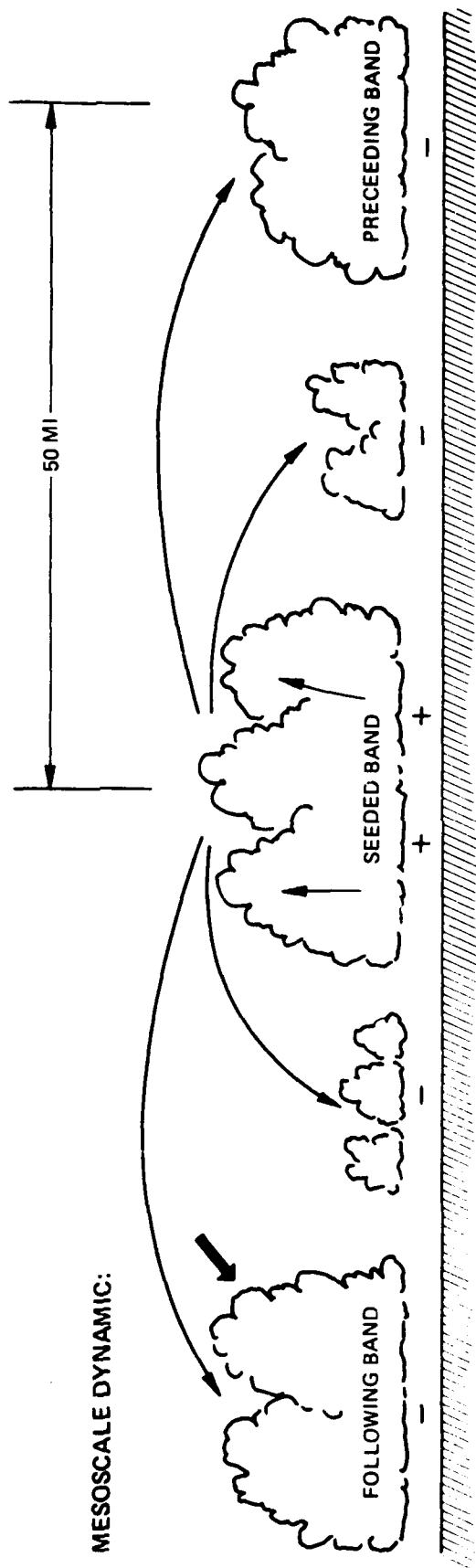
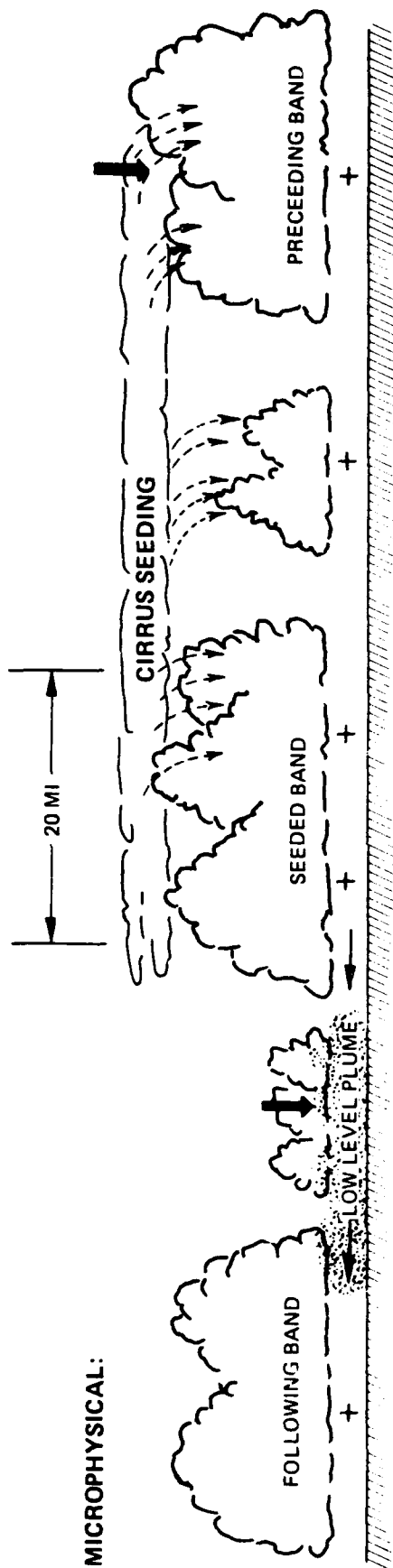


FIG. 18

Possible effects outside of band. The effect on precipitation is denoted by the + or - signs at cloud base. Apparent dominant effect is designated by heavy arrow.

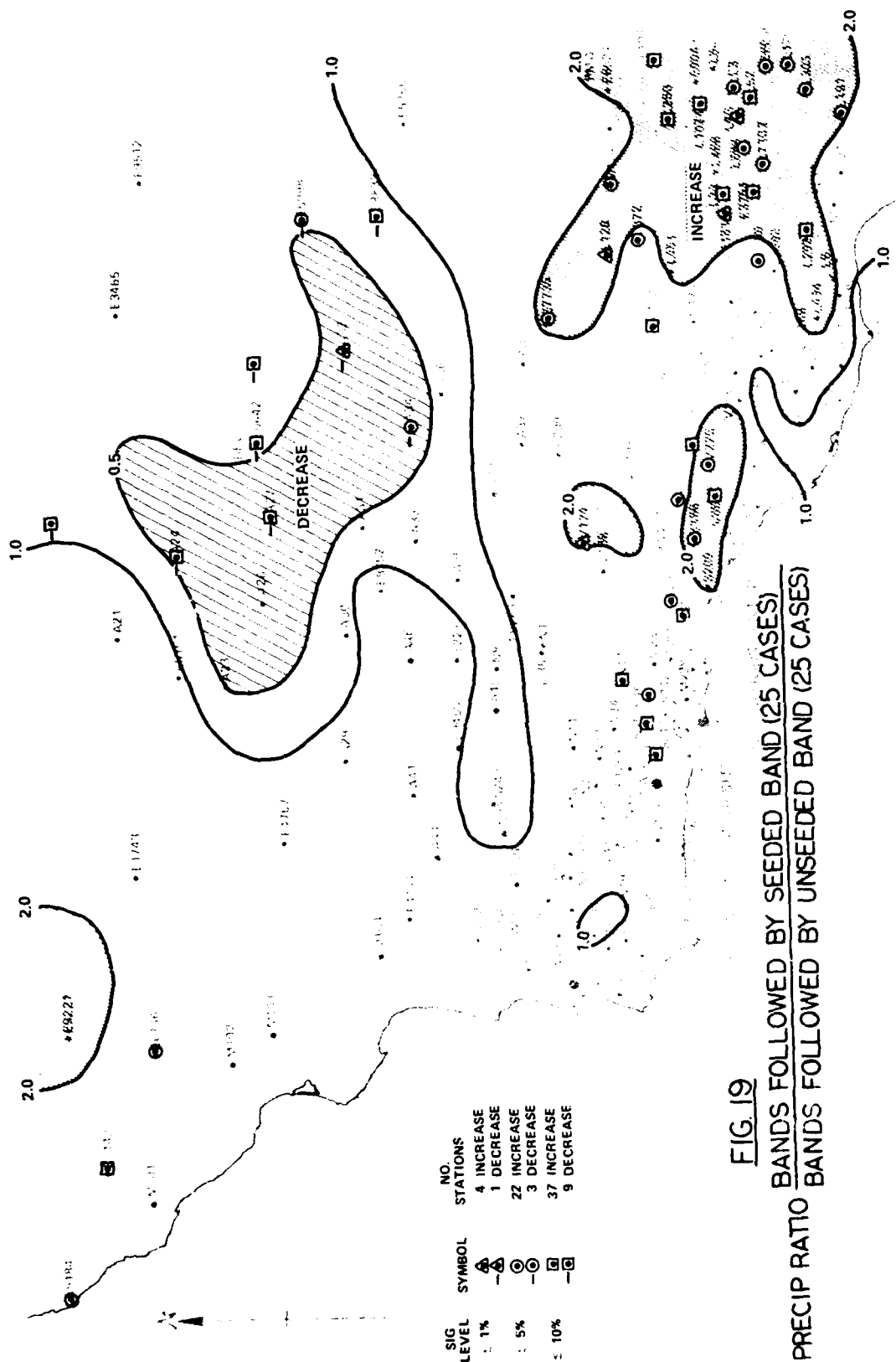


FIG. 19

BANDS FOLLOWED BY SEEDED BAND (25 CASES)
BANDS FOLLOWED BY UNSEDED BAND (25 CASES)

now appears to have 50% less rainfall with a large number of statistically significant stations (43 at the 10% and 29 at the 5% of significance). The area that had decreases in Figure 19 now shows up to 100% increases in Figure 20, although only two stations show statistically significant increases at the 10% level.

The most reasonable explanation of the large area of reduced precipitation is by means of a mesoscale dynamic effect, such as the subsidence indicated in Figure 18. The fact that the decreases appear most prominent in the eastern edge of the base map rather than close in to the seeding source is probably due to the fact that this area represents the average movement of a band in the three hour period that is typically observed between successive bands. To prevent inadvertent bias in the data, the first and last bands of a storm period were omitted from the sample in both Figure 19 and 20. Otherwise, the first band would always be considered as following an unseeded band and the last band would always be counted as preceding an unseeded band.

Between band precipitation is relatively minor and it is difficult therefore to analyze it. Fourteen widely dispersed station records showed little effect with respect to seeding in the preceding or following band, although there was a tendency for higher ranked precipitation in western Santa Barbara County when the preceding band was seeded. This suggests that some low level flow of nucleant may have occurred from the back side of seeded bands into the between band region producing some positive seeding effects there.

Figure 21 is a time versus downwind distance diagram which illustrates diagrammatically the apparent band interactions discussed above. In order for the artificial anvil to spread sufficiently fast to seed the downwind band in Ventura and Los Angeles Counties, the speed of the anvil spread relative to the band must be 40-50 mph. This speed is certainly possible in many cases. However, in order to account for the effect along the southernmost fringe of the downwind area, it becomes necessary to invoke a lateral spreading of the freely drifting ice particles because the higher level winds bearing them, although much more westerly than the mean flow within which the convection itself is embedded, never had an angle sufficiently large to account for drift to this fringe. If such a lateral spread does occur, and observations of anvils indicate such is quite common, then this effect, acting on the forward

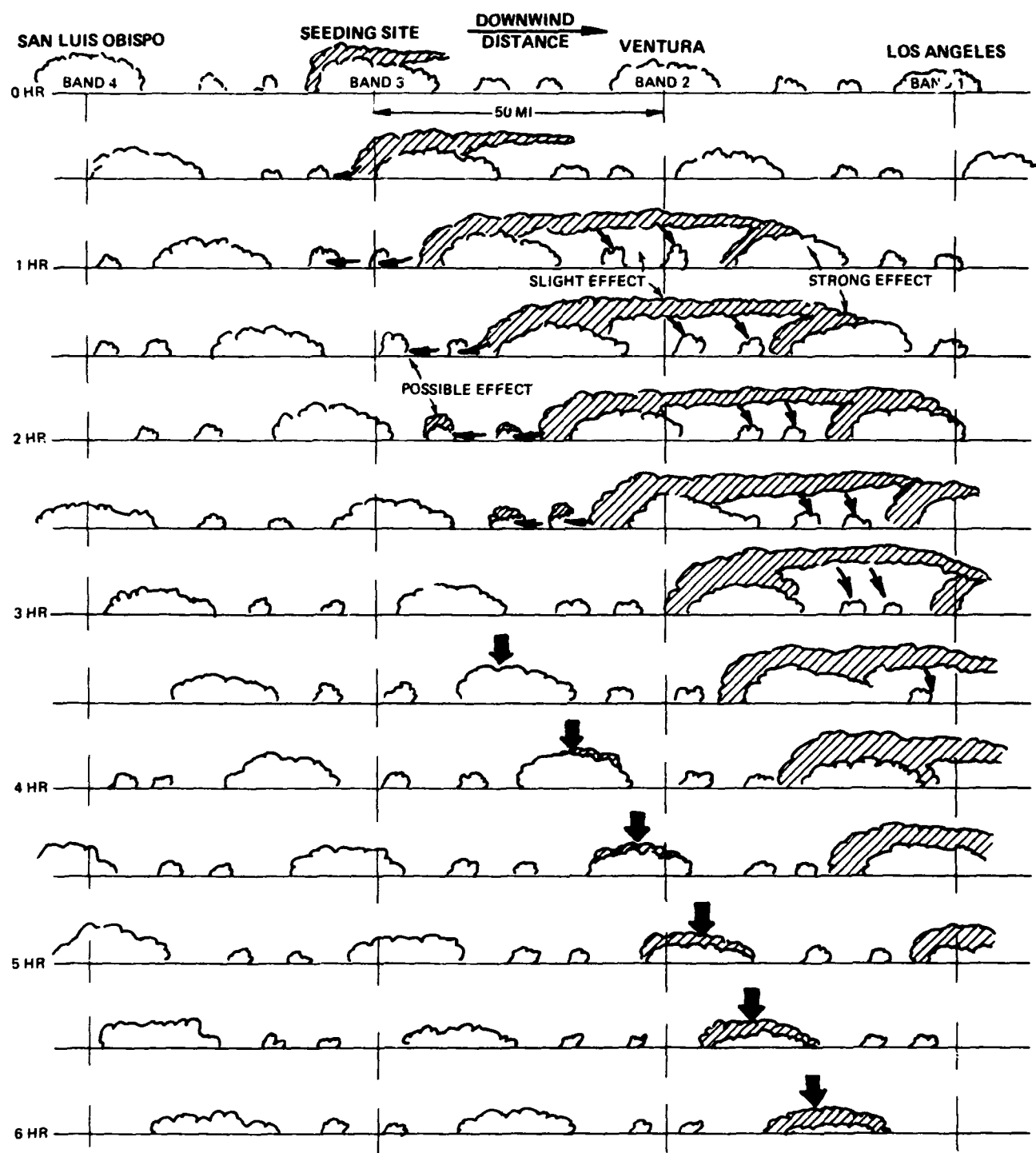


FIG. 21
BAND INTERACTION SUMMARY

portion of a seeded band and issuing from the seeding-enhanced after portion of the band, could account for the main observed downwind effect of band seeding in this southern fringe area.

Seeding Effects on Surface Pressure

The extra heat of condensation produced by the additional precipitation resulting from seeding is sizeable. If we assume this were distributed in the lowest 500 mb of the convection band (essentially below cloud top), then an additional millimeter (.04 inches) of precipitation, a likely figure in a band, would result in a 0.5°C heating effect. If both the added precipitation and added temperature is assumed to be distributed across the band only, then this might be reflected hydrostatically in a 1.8 mb drop in ground level pressure. Compensatory mesoscale redistribution of the air mass would probably preclude the appearance of the full effect at ground level, however, even a fraction of this value would result in an increase in the low level horizontal convergence of air, and of water, into the convection band.

The storm barograms for the Navy station at Pt. Mugu, and for the NWS stations at Sandberg, Santa Barbara, and Bakersfield, were examined and mean band station pressures for all cases, seeded or not seeded, extracted. Since there is a large diurnal pressure variation, the data were stratified into eight time intervals around the local time clock. The results of this analysis are shown in Table 4 which gives the seed-not seeded precipitation ratios and pressure differences for the same bands.

It is apparent that some rather interesting pressure deficits for seeded cases appear in the hours between 0100 and 1300, but at other times, differences are not significant. Curiously, the precipitation ratios are most significant in nearly the same time interval. Since the diurnal changes in pressure and in precipitation run parallel at all four stations, four station averages were calculated and are shown plotted in Figure 22. These curves illustrate the strength of an apparent seeding effect in both pressure and precipitation between the hours of 0100 and 1300 PST. There is little to choose between seeded and not seeded curves from 1300 to 0100 PST. In the not seeded cases the familiar bi-diurnal pressure wave is present and there is a precipitation peak in the evening and early morning hours.

Table 4. Seeded to not seeded station pressure difference, precipitation ratios, and probabilities by time category.

	Time Interval (hours)							
	01-04	04-07	07-10	10-13	13-16	16-19	19-22	22-01
POINT MUGU NAS (NTD)	Precip from gage V168 (Oxnard Airport)							
*Press. Dif- ference (mb)	2.35	-7.49	-3.30	-2.10	0.96	0.50	-1.40	-0.25
**Probability	.286	<u>.009</u>	.184	.258	-.130	-.378	.285	> .10
°Precip Ratio	0.28	1.52	3.91	13.85	1.56	6.19	0.32	3.47
°°Probability	.426	.343	<u>.016</u>	<u>.046</u>	> .10	.292	-.124	<u>.010</u>
SANDBERG (SDB)	Precip from gage E7735 (Sandberg WB)							
*Press. Dif- ference (in)	-.013	-.150	-.089	-.085	.090	-.017	-.036	.050
**Probability	.451	.069	.267	.305	-.120	.387	-.363	> .10
°Precip Ratio	1.20	1.98	2.41	4.06	1.20	0.80	1.89	0.22
°°Probability	-.354	.248	.540	<u>.018</u>	.100	-.250	.418	> .10
SANTA BARBARA AIRPORT (SBA)	Precip from gage NB (NAWC office)							
*Press. Dif- ference (in)	-.023	-.186	-.117	.083	-.077	.094	.052	.014
**Probability	.533	<u>.011</u>	.089	-.092	.111	.177	.184	> .10
°Precip Ratio	1.87	1.77	4.90	2.43	3.20	0.19	0.41	1.62
°°Probability	.500	.527	.144	<u>.015</u>	.177	-.064	-.341	.088
BAKERSFIELD (BFL)	Precip from gage E442 (Bakersfield WB)							
*Press. Dif- ference (in)	-.093	-.104	-.053	-.009	-.025	.029	.045	-.007
**Probability	.141	.141	.314	.571	.500	> .10	> .10	.172
°Precip Ratio	1.24	0.77	1.70	∞	2.00	2.19	0.59	1.95
°°Probability	.426	.500	.473	.214	.402	> .10	> .10	.245

- * Pressure Difference, pressure in seeded bands minus not seeded.
- ** Pressure Probability, positive indicates not seeded pressure greater than seeded.
- ° Precipitation Ratio, seeded to not seeded.
- °° Precipitation Probability, positive indicates seeded precipitation greater than not seeded.
- Probabilities less than .05 are underlined.

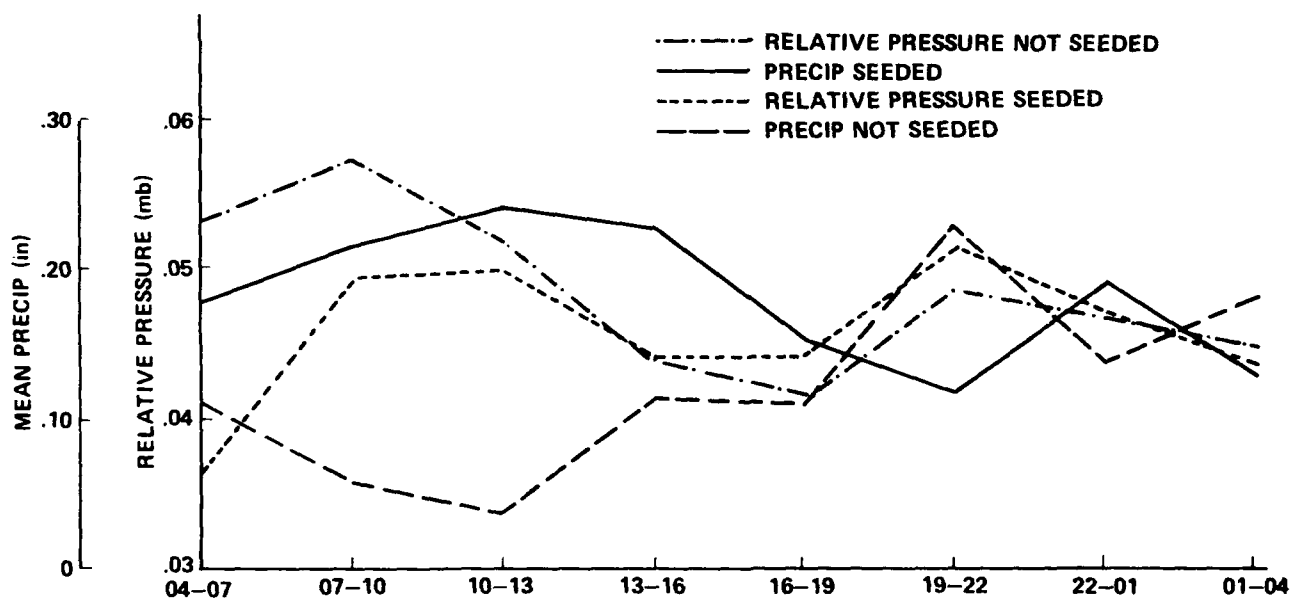
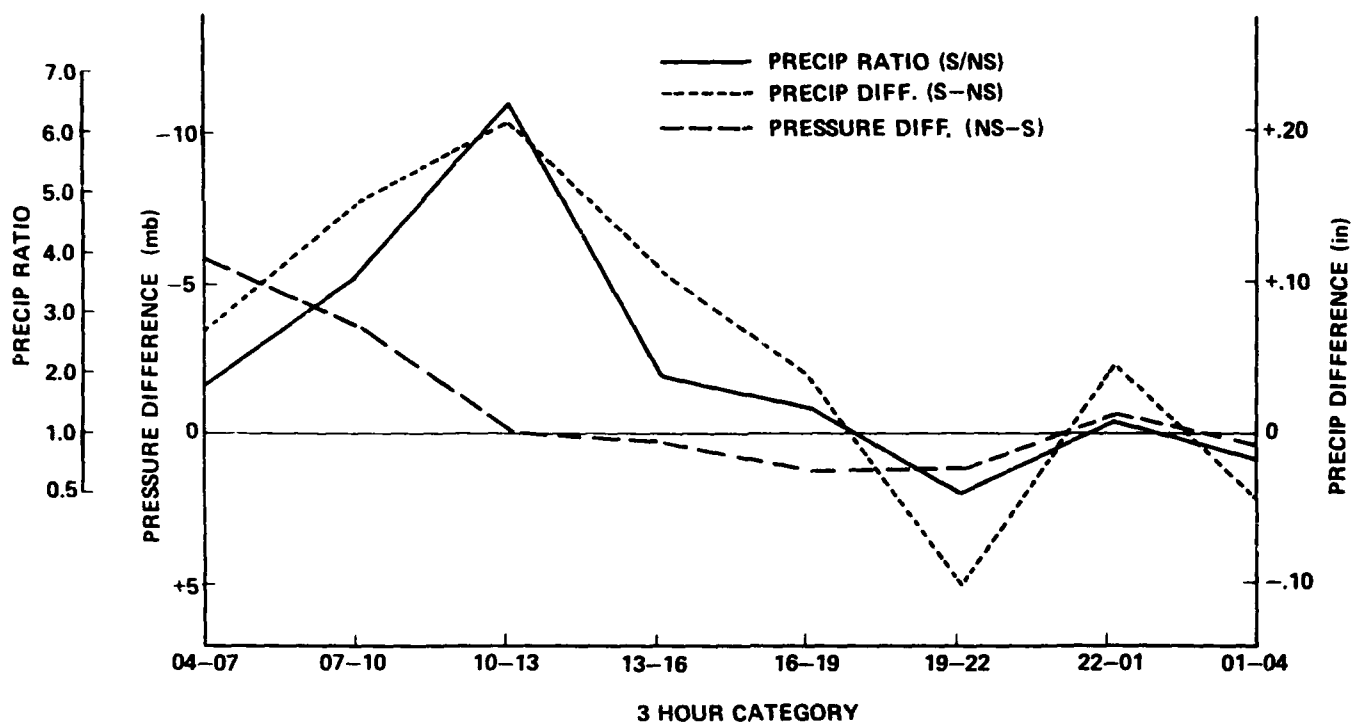


FIG. 22

Diurnal Variations in Seeded and Not Seeded Precipitation and Surface Pressure

This analysis suggests rather strongly that there exists a diurnal variation in the effect of seeding on precipitation over the extended area. The case for a similar diurnal variation in the effect of seeding on station pressure is not so clear cut, but there is a suggestion of its presence.

The occurrence of any diurnal effect of seeding not related directly to the daylight-nighttime breakdown is indeed puzzling. A partition of all 108 stations into daylight (0600-1800) and nighttime (1800-0600) showed no difference in precipitation ratio. Somewhat similar diurnal effects of seeding on precipitation have been in New Mexico (Keyes 1971).

CONCLUSIONS AND RECOMMENDATIONS

The data gathered during four years of seeding convective bands with pyrotechnics at a ground based point source in Santa Barbara County has provided rather conclusive statistical evidence that this seeding has altered the precipitation patterns over a very large area. These changes within the seeded bands are generally in the form of increases in precipitation on the order of 50% to 100% in the primary seeding zone extending from the seeding site to about 30 miles downwind, and increases of more than 100% over a large area 70 or more miles downwind from the seeding source. A non-parametric rank test and a binomial test produce a high level of confidence in the indicated results.

It was also found that the seeding effect was highly temperature dependent with a large number of stations showing decreases in precipitation during the colder storms.

One of the more conclusive findings from a statistical viewpoint is the apparent increase in the time duration of a seeded band at a given point. Whether this increased duration is caused by a widening of the band due to dynamic growth or a slowing of band movement has not been completely determined, but the former appears to be the case.

The possibility of interaction between successive bands and also between a band and its surrounding environment was also studied. There appears to be some evidence that when a band is seeded there will also be an increase in the precipitation in a band preceding it by two to four hours. Conversely, it appears that a seeded band may possibly suppress the rainfall in a band that follows it by two to four hours.

A preliminary study of surface pressure values at the time of band passage through the extended area shows some very interesting possibilities. It

appears that a seeded band may produce a lower surface pressure as it moves through the area, especially if band passage occurs during the morning hours of 0100 to 1300 PST. A check of the diurnal change in seeding effects on band precipitation shows the major seeding produced increases in rainfall also occur during this same general time period.

The physical mechanisms which are occurring as a result of convective band seeding can only be inferred on the basis of rainfall statistics since supporting cloud physics measurements are almost nonexistent. It does appear, however, that we are dealing with a complex seeding response in which both micro-physical and dynamic processes are involved. The fact that the ARI Area of Effect Model does a good job of predicting the location of the primary seeding effect and a sizeable portion of the extended area of effect indicates the microphysical process may be the dominant factor in these regions. However, the existence of a highly significant area of enhanced precipitation in the extended area well to the right of the wind flow at any level within the cloud mass suggests that a dynamic change in band structure might be occurring.

The interaction between bands also appears to have both microphysical and dynamic effects operating. The effect on a preceding band seems most likely to be due to cirrus seeding while the effect on a following band would more likely be due to a subsiding motion in the air mass to counterbalance the increased updraft in the seeded band.

The possible changes in surface pressure when a seeded band passes a station probably is due to the release of heat within the cloud from condensation and/or sublimation. A seeding produced cloud top rise is also most likely involved.

All of the findings cited in this report suggest possibilities of major advances in our understanding and utilizing mesoscale or even synoptic scale storm modification. To date, however, we have only been able to use statistical means to detect these effects and infer the causes thereof. What is urgently needed is an intensive cloud physics investigation to enable us to measure the large scale changes that take place under this seeding mode. We recommend strongly that every effort be expended to start such a program as soon as practicable.

The joint Santa Barbara Project and Large Scale Effects Study is planned to continue for at least two or three years, but with a changed operating

procedure. The seeding mode will be changed from point source, ground based seeding to line source, aerial seeding. The seeding device will be changed from pyrotechnics to an acetone-silver iodide-ammonium iodide jet burner developed at China Lake.

The project design will be changed from randomizing on individual bands to randomizing on 48 hour time blocks. With the new system, all convective bands within a predetermined 48 hour period will either be seeded or not seeded based on one decision. This change will do two things. First, it will enable us to treat all the convective bands within a given storm in the same manner and therefore be able to detect frontal scale changes that may occur when all bands in the frontal zone are treated. Secondly, the 48-hour randomization will enable us to test the effect of seeding on one additional parameter - total storm precipitation, including in band and between band effects.

The Santa Barbara Project will have available improved radar coverage with a M-33 and TPS-1D radars which will enable us to detect changes in echo characteristics, cell movement and cloud tops. The addition of a mini-lab on board the seeding aircraft will provide in cloud measurements in the upwind area and immediately after seeding in the primary area.

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APPENDIX A

PRECIPITATION GAGE LOCATIONS AEROMETRIC RESEARCH INC. PRECIP GAGES

Gage No.	Name of Station	Lat.	Long.	Approx. Elev.
A21	Kern National Wildlife Refuge	35°45'	119°35'	250
A23	Belridge	35°30'	119°43'	700
A24	Wasco 2W	35°37'	119°22'	330
A26	Buttonwillow	35°25'	119°30'	265
A27	Bakersfield 10W	35°24'	119°15'	350
A29	Soda Lake	35°15'	119°56'	1900
A30	Derby Acres	35°14'	119°35'	1300
A31	Buena Vista Lake	35°11'	119°17'	350
A32	Arvin	35°13'	118°48'	445
A33	Maricopa 3E	35°04'	119°20'	600
A34	Lakeview 4E	35°04'	119°01'	500
A35	Reyes Station	34°59'	119°27'	2950
A36	Wheeler Ridge	35°00'	118°55'	960
A37	Lake of the Woods 3WSW	34°49'	119°04'	6200
A38	Gorman	34°48'	118°51'	3810
A41	New Cuyama 22 WNW, Rinconada Ranch	35°05'	120°03'	1950
A42	Los Alamos 9.5 WNW, Barca Ranch	34°46'	120°26'	310
A44	Buckhorn Canyon, Adams Ranch	35°01'	120°12'	1000
A45	McPherson Peak	34°53'	119°49'	5747
A46	Taft 16WSW, Traver Ranch	35°06'	119°44'	2700
A47	Mt. Abel	34°51'	119°13'	6000

APPENDIX A (CONT'D)

NORTH AMERICAN WEATHER CONSULTANTS PRECIP GAGES

Gage No.	Name of Station	Lat.	Long.	Approx. Elev.
N A	Santa Ynez Pk, 2WNW, El Capitan Lodge	34°32'	120°01'	3500
N B	Goleta 0.5W, No. Am. Weather Consultants	34°26'	119°50'	10
*N 1	Casmalia	34°50'	120°32'	300
*N 2	Lompoc 2S, San Miguelito Canyon	34°37'	120°28'	320
*N 3	Los Alamos Fire Station	34°45'	120°17'	580
*N 4	Buellton 1 SSW	34°36'	120°12'	340
N 5	Los Olivos	34°39'	120°07'	780
*N 6	Los Olivos 7 NNE, Midland School	34°44'	120°05'	1230
N 7	Los Olivos 4 SE, Bar G.O. Ranch	34°40'	120°02'	450
N 8	New Cuyama 4.5 S, Johnston Ranch	34°53'	119°42'	2900
N 9	Santa Ynez 2 SE, Stepping "C" Ranch	34°05'	120°03'	650
N10	Happy Canyon Rd., Running Springs Ranch	34°39'	119°57'	1110
N11	Cachuma Saddle Guard Station	34°44'	119°55'	3040
N12	Santa Barbara Potrero	34°47'	119°39'	5000
N13	Broadcast Peak, KEYT	34°32'	119°57'	4000
N14	Santa Cruz Creek	34°38'	119°52'	1140
*N15	Cachuma Dam 7.5 ESE, Nash-Boulden Ranch	34°33'	119°52'	925
N16	Los Prietos R.S.	34°33'	119°47'	1029
N17	Little Pine Mtn., Happy Hollow G.S.	34°36'	119°45'	3880
*N18	Gaviota-Getty Oil Co.	34°29'	120°12'	175
N19	Lompoc 6.5E, Casper Ranch	34°37'	120°20'	220
N20	Sisquoc 9.5E, Goodchild Ranch	34°53'	120°08'	860
N21	Surf 4S, Vandenberg AFB	34°39'	120°36'	220

MISCELLANEOUS PRECIP GAGES

M100	Bulito Canyon, Hollister Ranch	34°28'	120°21'	130
M101	San Simeon, Hearst Castle State Mon.	35°41'	121°10'	1450
M102	Atascadero 5SW, Upper Toro Creek	35°28'	120°46'	1400
M103	Santa Margarita Booster Station	35°22'	120°38'	1050
M104	Lopez Lake Dam Site	35°11'	120°29'	540
M124	Bouquet Canyon	34°35'	118°22'	3050
M225	Santa Barbara, Sewage Treatment Plant	34°25'	119°41'	5
M226	Goleta 7W, Dos Pueblos Ranch	34°27'	119°57'	110
M228	Riviera Fire Station	34°27'	119°41'	860
M230	Gibraltar Dam	34°31'	119°41'	1550

APPENDIX A (CONT'D)

ESSA PRECIP GAGES

Gage No.	Name of Station	Lat.	Long.	Approx. Elev.
E0442	Bakersfield WBAP	34°25'	119°03'	475
E1142	Bryson	35°48'	121°05'	925
E1253	Cachuma Dam	34°35'	119°59'	781
E1682	Chatsworth Reservoir	34°14'	118°37'	906
E1743	Cholame Alley Ranch	35°43'	120°15'	1753
E3465	Glenville Fulton Ranger Station	35°44'	118°40'	3500
E3751	Hansen Dam	34°16'	118°24'	1100
E4144	Huasna	35°06'	120°23'	715
E4767	La Panza Ranch	35°23'	120°10'	1550
E4867	Lechuza Pt. Sta. FC352B	34°05'	118°53'	1600
E5098	Loraine	35°18'	118°26'	2720
E5151	Lost Hills	35°37'	119°41'	285
E5184	Lucia Willow Springs	35°53'	121°27'	355
E5756	Mojave	35°06'	118°10'	2735
E6006	Mt. Wilson FC338B	34°14'	118°04'	5709
E6624	Palmdale	35°35'	118°06'	2596
E6736	Paso Robles 5NW	35°41'	120°45'	1040
E7735	Sandberg Weather Bureau	34°45'	118°44'	4517
E7946	Santa Maria WBAP	34°54'	120°27'	236
E8697	Surf 2ENE	34°41'	120°34'	110
E8752	Taft	35°09'	119°28'	1025
E8832	Tehachapi Airport	35°08'	118°26'	3960
E9049	Tujunga Mill Creek FC470	34°23'	118°05'	4645
E9221	Valleton	35°53'	120°42'	957
E9283	Ventucopa Ranger Station	34°51'	119°29'	2749
E9458	Wasioja-Phoenix Ranch	34°59'	119°54'	2370
E9512	Weldon 1WSW	35°40'	118°18'	2680

APPENDIX A (CONT'D)

L. A. COUNTY FLOOD CONTROL PRECIP GAGES

Gage No.	Name of Station	Lat.	Long.	Approx. Elev.
I. 6	Topanga Canyon Patrol Station	34°05'	118°36'	745
L 10	Bel Air Hotel	34°05'	118°27'	585
L 11	Upper Franklin Canyon Reservoir	34°07'	118°25'	867
L 33	Pacoima Dam	34°20'	118°24'	1500
L 46	Big Tujunga Dam	34°18'	118°11'	2315
L 52	Waterman Guard Station	34°16'	118°09'	3300
L 53	Colby's	34°18'	118°07'	3620
L 54	Loomis Range - Alder Creek	34°21'	118°03'	4325
L128	Elizabeth Lake Canyon-Warm Springs	34°36'	118°34'	2075
L179	Bailey Debris Dam	34°10'	118°04'	1180
L191	Los Angeles - Alcazar	34°04'	118°12'	400
L213	Los Angeles - Hancock Park	34°04'	118°21'	175
L250	Acton Camp	34°27'	118°12'	2625
L259	Chatsworth - Twin Lakes	34°17'	118°36'	1275
L292	Encino Reservoir	34°09'	118°31'	1075
L303	Pasadena - Cal Tech	34°08'	118°07'	800
L372	San Francisquito PH No. 2	34°32'	118°31'	1580
L434	Malibu Division Headquarters	34°08'	118°45'	800
L435	Monte Nido	34°05'	118°42'	600
L451	Castaic - Wayside Honor Rancho	34°28'	118°36'	1065
L458	Zuma Canyon Patrol Station	34°01'	118°48'	115
L466	Pacoima Canyon - Dutch Louie Canyon	34°21'	118°21'	3220
L694	Big Tujunga Canyon	34°17'	118°17'	1525
L1017	Little Rock Creek above Dam	34°29'	118°01'	3280
L1074	Little Gleason	34°23'	118°09'	5600
L1107	La Tuna Canyon	34°14'	118°20'	1160
L1108	Leona Valley	34°35'	118°12'	2875
L1181	Schoolhouse Canyon	34°20'	118°27'	1495

APPENDIX A (CONT'D)

VENTURA COUNTY FLOOD CONTROL PRECIP GAGES

Gage No.	Name of Station	Lat.	Long.	Approx. Elev.
V 85	Canada Larga	34°23'	119°14'	1100
V121	Lake Sherwood	34°09'	118°54'	1010
V138	Potrero Seco Guard Station	34°38'	119°26'	4850
V165	Stewart Canyon	34°28'	119°15'	1500
V166	Lake Casitas LN, Selby Ranch	34°25'	119°21'	750
V167	Hall Canyon	34°17'	119°16'	300
V168	Oxnard Airport	34°12'	119°12'	35
V169	Thousand Oaks	34°10'	118°50'	900
V170	Camulos	34°24'	118°45'	720
V171	Fillmore Fish Hatchery	34°24'	118°53'	450
V172	Piru Canyon	34°31'	118°46'	1150
V173	Ferndale Ranch	34°26'	119°05'	1000
V174	Ozena Ranger Station	34°41'	119°21'	3580
V175	Saticoy Forest Service	34°17'	119°09'	150
V188	Newberry Park	34°11'	118°56'	635
V189	Somis WNW	34°17'	119°04'	455
V190	Somis	34°17'	119°00'	550
*V191	Moorpark, 3NNW	34°19'	118°53'	600
V192	Moorpark, 3SE	34°15'	118°51'	550
V193	Simi	34°16'	118°45'	850
V194	Camarillo	34°12'	119°01'	120
V196	Tapo Canyon	34°20'	118°42'	1500
V198	Piedra Blanca	34°34'	119°10'	3460
V206	Balcom Canyon	34°19'	118°58'	600
V207	Matillija	34°30'	119°23'	1640
V209	Lockwood	34°44'	119°06'	5150
V221	Seacliff	34°21'	119°25'	10
V224	Sespi - Shell Oil	34°29'	118°53'	2300
V225	Wheeler Canyon	34°23'	119°09'	700
V227	Conejo Pump Station	34°15'	118°50'	1030
V232	Deals Flats	34°05'	118°58'	1300

APPENDIX A (CONT'D)

SANTA BARBARA COUNTY FLOOD CONTROL PRECIP GAGES

Gage No.	Name of Station	Lat.	Long.	Approx. Elev.
S201	Los Alamos 5NW, Los Flores Ranch	34°47'	120°20'	640
S202	Los Alamos 4.5E, Confaglia Ranch	34°44'	120°14'	720
S203	Las Alamos 5.5W, Luis Ranch	34°44'	120°22'	1000
S204	Los Alamos Fire Station	34°45'	120°17'	565
S205	Lompoc Fire Station	34°41'	120°27'	300
S206	Gaviota Beach Ranger Station	34°28'	120°14'	30
S208	Carpinteria Fire Station	34°24'	119°31'	10
S209	Carpinteria Reservoir	34°24'	119°29'	400
S210	Cold Springs Debris Basin	34°27'	119°39'	550
S211	County Road Dept. Materials Lab.	34°27'	119°47'	400
S212	San Marcos Summit	34°31'	119°49'	2500
S215	Lompoc Airport	34°39'	120°28'	95
S217	Jalama Beach	34°30'	120°29'	20
S221	New Cuyama 1NNE, Cuyama Ranch	34°59'	119°40'	2170
S231	Doulton Tunnel	34°27'	119°34'	1400
S232	Juncal Dam	34°29'	119°30'	2075
S233	Buellton Fire Station	34°37'	120°12'	375
S234	Santa Barbara Cty. Flood Control	34°25'	119°42'	80
S235	Santa Maria Road Yard	34°57'	120°27'	200
S236	Nojoqui Park Ranger Station	34°32'	120°11'	660
S238	Santa Barbara Potrero	34°47'	119°39'	5000
S241	Goleta 2N, Stubchaer Residence	34°27'	119°53'	100
S242	San Marcos Trout Club	34°29'	119°48'	1000
S249	Manzanita Mountain	34°54'	120°04'	3125
S251	Lompoc 2.5S, Miguelito Springs	34°35'	120°30'	1120
S255	La Cumbre Peak 1E, Graham Ranch	34°30'	119°41'	3500
S256	Sisquoc Fire Station	34°52'	120°17'	440
S257	Las Cruces 7WNW, Rancho San Julian	34°32'	120°20'	640

APPENDIX B

1967-68 BAND CHRONOLOGY

Band No.	Date	Passage at Seeding Site		No. of Fusees	700 mb Wind Dir/Speed kts	500 mb Temp °C
		Begin	End(PST)			
1	1/27/68	0930	0945	*	230/33	-26.2
2	1/27/68	1030	1130	*	230/33	-26.8
3	1/27/68	1145	1210	*	230/35	-27.0
4	1/27/68	1315	1430	2	230/35	-28.2
5	1/30/68	2000	2230	4	240/35	-20.7
6	1/31/68	0155	0230	*	260/35	-20.0
7	2/12/68	1900	2000	4	170/15	-23.0
8	2/16/68	1600	1625	2	230/24	-18.3
9	2/16/68	1700	1820	*	230/30	-18.1
10	2/16/68	1910	1930	*	260/25	-16.0
11	2/16/68	2300	0030	*	260/25	-15.0
12	2/17/68	0430	0600	*	270/26	-14.3
13	2/17/68	0715	0800	*	270/25	-16.6
14	2/17/68	1045	1200	5	280/25	-16.2
15	3/7/68	2120	2315	6	240/31	-22.3
16	3/8/68	0230	0300	3	240/32	-24.5
17	3/13/68	0230	0600	9	220/28	-21.0
18	3/16/68	1330	1430	*	250/39	-20.8
19	4/1/68	1200	1400	6	245/30	-23.2
20	4/1/68	1500	1530	2	260/29	-27.1
21	4/1/68	1900	1945	1	270/30	-26.2
22	4/1/68	2215	2315	*	270/32	-26.2

* Not seeded.

APPENDIX B

1968-69 BAND CHRONOLOGY

Band No.	Date	Passage at Seeding Site		No. of Fusees	700 mb Wind Dir/Speed kts	500 mb Temp °C
		Begin	End(PST)			
1	11/14/68	2150	2325	*	285/42	-14.3
2	11/14/68	2350	0040	*	275/57	-15.8
3	11/15/68	0100	0130	3	Westerly	-19.8
4	11/15/68	0350	0430	*	275/44	-19.8
5	12/10/68	1805	1840	2	260/45	-15.5
6	12/10/68	1930	2035	4	240/36	-18.0
7	12/14/68	0555	0700	*	220/54	-15.0
8	12/15/68	2145	2355	10	225/24	-20.3
9	12/24/68	1745	1820	*	240/46	-18.1
10	12/24/68	1915	1950	*	240/39	-16.8
11	1/13/69	1125	1245	4	210/35	-15.0
12	1/13/69	1645	1945	*	215/23	-14.7
13	1/13/69	2030	2215	6	275/20	-16.8
14	1/13/69	2345	0130	*	260/12	-18.5
15	1/18/69	1935	2110	*	230/41	-17.0
16	1/19/69	0440	0640	10	240/39	-16.9
17	1/19/69	0935	1230	11	215/48	-16.7
18	1/19/69	1430	1600	5	222/45	-17.5
19	1/19/69	1630	1710	*	225/45	-17.8
20	1/19/69	1730	1930	*	240/33	-19.0
21	1/20/69	2030	2140	*	200/52	-16.7
22	1/20/69	2330	0150	9	210/62	-14.5
23	1/20/69	0250	0430	5	215/54	-20.2
24	1/24/69	0515	0615	3	245/37	-20.1
25	1/24/69	1040	1140	*	240/37	-18.0
26	1/24/69	1210	1350	7	235/37	-18.1
27	1/24/69	1430	1610	*	235/35	-15.6
28	2/12/69	0035	0200	5	203/13	-20.0
29	2/15/69	0420	0520	*	235/39	-17.7
30	2/15/69	0600	0920	13	220/43	-20.3
31	2/17/69	2215	0100	*	235/15	-24.7
32	2/21/69	1715	2015	*	235/37	-32.0
33	2/23/69	0415	0545	*	240/44	-24.5
34	2/23/69	0600	0950	13	220/44	-23.8
35	2/24/69	1330	1500	*	Southerly	-19.1
36	2/24/69	1525	1600	2	215/55	-14.0
37	2/24/69	1630	1815	*	220/51	-21.3
38	2/24/69	0015	0130	5	230/54	-19.0
39	3/21/69	1105	1210	*	150/21	-19.6
40	4/5/69	1045	1320	12	190/44	-19.9
41	4/5/69	1335	1410	*	195/37	-23.1

* Not seeded.

APPENDIX B

1969-70 BAND CHRONOLOGY

Band No.	Date	Passage at Seeding Site		Fusees	700 mb Wind Dir/Speed kts	500 mb Temp °C
		Begin	End(PST)			
1	11/5/69	2215	2345	*	238/35	-18.3
2	11/6/69	1030	1245	6	229/24	-20.5
3	1/9/70	0700	0755	*	216/33	-20.4
4	1/9/70	0845	0910	2	190/46	-20.5
5	1/9/70	1120	1255	7	190/49	-19.0
6	1/9/70	1635	1735	*	200/42	-19.6
7	1/11/70	1900	1930	*	260/22	-19.6
8	1/15/70 -					
	1/16/70	2330	0130	8	270/29	-19.0
9	1/16/70	0350	0515	*	270/41	-12.8
10	1/16/70	0740	0820	*	260/43	-16.5
11	1/16/70	0925	0950	3	260/43	-16.5
12	2/9/70	1410	1520	4	162/43	-22.2
13	2/13/70	1030	1115	4	265/32	-20.2
14	2/27/70 -					
	2/28/70	2320	0200	*	155/35	-23.0
15	2/28/70	0530	0730	6	175/22	-20.4
16	2/28/70	1030	1145	5	190/35	-20.6
17	3/1/70	0030	0205	*	212/30	-24.6
18	3/1/70	0630	0815	7	155/23	-27.0
19	3/1/70	1220	1345	6	210/22	-26.0
20	3/1/70	1545	1635	*	225/20	-22.8
21	3/1/70	1915	2100	7	250/18	-26.3
22	3/4/70	1300	1700	17	220/52	-25.0

* Not seeded

APPENDIX B

1970-71 BAND CHRONOLOGY

(Ground Seeded)

Band No.	Date	Passage at Seeding Site		No. of Fusees	700 mb Wind Dir/Speed Kts	500 mb Temp °C
		Begin	End(PST)			
1	11/25/70	1550	1715	4	260/30	-12.0
2	11/26/70	0015	0115	*	251/40	-13.0
3	11/26/70	0135	0225	4	265/38	-14.0
4	11/28/70	0600	0730	4	230/42	-20.0
5	11/28/70	1430	1600	*	210/37	-17.0
6	11/29/70	0155	0445	11	193/54	-20.4
7	11/29/70	0605	0810	7	202/56	-20.7
8	12/2/70	0300	0535	*	240/43	-23.0
9	12/2/70	0635	0700	3	256/49	-23.8
10	12/18/70	0940	1100	3	199/08	-27.0
11	12/18/70	1340	1805	9	197/33	-26.7
12	12/18/70	1815	2035	*	210/35	-26.7
13	12/18/70	2045	2200	*	210/35	-26.0
14	12/20/70	2230	0115	*	257/45	-23.5
15	12/21/70	0330	0440	2	264/34	-28.9
16	12/21/70	0530	0610	2	260/25	-28.1
17	12/21/70	0740	0840	*	258/33	-27.4
18	2/16/71	2145	2335	6	188/22	-26.5
19	2/17/71	0105	0215	*	200/13	-26.1
20	3/12/71	1945	2345	11	258/48	-15.4
21	4/13/71	2320	0205	11	223/22	-22.1
22	4/14/71	0225	0335	*	223/22	-22.1

* Not seeded.

1970-71 BAND CHRONOLOGY

(Aerial Seeded)

Band No.	Date	Passage at Seeding Site		Treatment	700 mb Wind Dir/Speed kts	500 mb Temp °C
		Begin	End(PST)			
A1	12/16/70	0410	0505	S	268/43	-16.0
A2	12/16/70	0515	0545	S	268/43	-17.9
A3	12/16/70	0555	0700	NS	268/43	-18.0
A4	1/12/71	1300	1330	NS	268/41	-22.8
A5	1/12/71	1435	1530	S	265/33	-24.0
A6	4/17/71	0230	0300	NS	260/58	-21.5
A7	4/17/71	0510	0600	NS	273/40	-22.4

APPENDIX C

Data Summary: Sample Size (N_1 -Seeded, N_2 -Not Seeded)
S/NS Ratio
Probability (Wilcoxon-Mann Whitney)
($> =$ greater than .10)

Sta. No.	1967-68 (Fig. 4)				1968-69 (Fig. 5)				1969-70 (Fig. 6)				1970-71 (Fig. 7)			
	Ratio		Prob.	N ₁	Ratio		Prob.	N ₁	Ratio		Prob.	N ₁	Ratio		Prob.	N ₁
	N ₂	S/NS			N ₂	S/NS			N ₂	S/NS			N ₂	S/NS		
A21				5	8	.70	>	12	8	3.22	.056	6	6	.70	>	
A23				12	15	.64	>	6	5	4.41	.063	3	2	.46	>	
A24				11	13	1.35	>	4	5	4.06	>	13	9	5.19	>	
A26				4	3	.86	>	12	8	6.30	.032	5	5	.33	>	
A27				3	2	3.20	>	3	3	∞	>	13	9	6.02	.095	
A29				15	16	.73	>	12	8	2.55	>	13	9	1.75	>	
A30				14	17	.96	>	5	5	3.59	>	13	9	3.13	>	
A31				4	5	13.13	>	9	4	∞	.050	12	8	1.73	>	
A32				18	19	.81	>	6	4	5.26	>	4	3	∞	>	
A33				18	18	.76	>	12	8	12.00	.011	11	8	4.96	>	
A34				12	12	1.14	>	12	8	11.08	.069	13	9	2.55	>	
A35				12	12	1.60	>	7	4	4.04	>	9	5	3.11	.092	
A36				15	16	.79	>	9	4	4.69	>	13	9	2.40	>	
A37				17	18	1.55	>	12	8	1.10	>	13	9	1.03	>	
A38				10	8	1.94	>	11	8	1.26	>	8	5	1.67	>	
A41								8	3	1.74	>	13	9	1.47	>	
A42								11	8	1.73	>	13	9	1.27	>	
A44												13	9	1.30	>	
A45												13	9	1.24	>	
A46												13	9	1.42	>	
A47												12	8	2.26	>	
E442	11	11	1.83	19	22	.90	>	13	9	4.92	>	13	9	3.72	>	
E1142	8	10	1.47	17	17	1.61	.060	13	9	1.18	>	13	9	1.15	>	
E1253	10	10	1.85	18	19	1.42	>	12	9	1.45	>	13	9	1.44	.065	
E1682	11	11	4.17	19	22	1.26	>	13	9	2.58	>	13	9	1.05	>	
E1743	11	11	1.64	19	22	1.03	>	13	9	3.72	.020	10	8	.74	>	
E3465	7	2	2.69	17	22	1.25	>	5	6	1.71	>	5	2	16.20	>	
E3751	11	11	2.93	19	22	1.76	>	13	9	3.16	.100	13	9	1.18	>	
E4144	10	11	2.27	19	21	1.05	>	8	6	2.98	.081	13	9	.64	>	
E4767	11	11	1.46	15	16	.82	>	12	8	3.69	.042	0	0	0.00	>	

Sta. No.	1967-68 (Fig. 4)				1968-69 (Fig. 5)				1969-70 (Fig. 6)				1970-71 (Fig. 7)			
	Ratio		Prob.	N ₁	N ₂	Ratio		Prob.	N ₁	N ₂	Ratio		N ₁	N ₂	Ratio	
	S/NS	S/NS				S/NS	S/NS				S/NS	S/NS			S/NS	S/NS
E4867	11	11	>	19	22	1.34	2.68	>	11	8	2.68	.025	12	8	1.03	>
E5098	10	8	>	19	22	1.01	3.21	>	13	9	3.21	.015	13	9	1.72	>
E5151	11	11	>	18	21	.80	1.62	>	12	8	1.62	>	13	9	1.80	>
E5184	11	11	>	19	22	1.34	1.21	>	11	6	1.21	>	7	6	1.28	>
E5756	8	8	>	19	21	1.21	7.83	.050	9	6	7.83	.050	8	6	0.00	>
E6006	8	7	>	14	15	1.56	2.04	.056	12	8	2.04	.056	8	4	2.27	>
E6624	8	3	>	14	17	2.09	1.21	>	13	9	1.21	>	7	6	1.58	>
E6736	9	8	>	19	22	1.37	2.08	.069	12	8	2.08	.069	13	9	1.03	>
E7735	11	11	>	16	20	1.90	1.15	>	12	9	1.15	>	11	8	.77	>
E7946	11	11	>	19	22	.73	1.55	>	13	9	1.55	>	13	9	.73	>
E8697	5	6	>	15	20	.88	1.39	>	10	8	1.39	>	3	2	1.40	>
E8752	11	11	>	19	22	1.47	8.46	.064	11	7	8.46	>	13	9	1.31	>
E8832	7	3	>	19	22	.92	5.32	.015	13	9	5.32	.015	9	5	3.82	>
E9049	9	6	>	18	19	1.34	2.56	.050	13	9	2.56	.050	6	3	1.20	>
E9221	7	5	>	13	18	1.19	2.65	>	9	5	2.65	>	9	8	1.41	>
E9283	5	6	>	14	14	1.62	>	>			>	>	12	9	1.44	>
E9458	6	6	>	4	4	.35	>	>	12	9	1.93	>	10	7	1.03	>
E9512	9	11	>	19	22	1.24	>	>	12	9	1.90	>	10	8	1.11	>
L6	6	10	>	14	16	1.93	>	>	10	8	4.37	.022	8	6	1.05	>
L10	11	11	>	13	18	1.66	.018	>	11	7	3.74	>	9	5	.96	>
L11	11	11	.058	17	20	2.03	.047	>	13	9	3.40	.095	12	8	1.01	>
L33	11	11	.092	18	22	1.86	>	>	13	9	1.38	>	13	9	.92	>
L46	11	11	.096	19	22	1.84	>	>	12	9	2.21	.045	11	8	1.07	>
L52	7	6	>	18	20	1.31	>	>	11	8	2.32	>				
L53	11	11	>	19	22	1.60	>	>	13	9	3.62	.030	13	9	1.87	>
L54	10	8	>	15	15	1.63	>	>	12	8	3.96	.032	10	7	2.28	>
L128	11	11	>	15	16	1.58	>	>	10	7	2.44	.081	11	8	1.26	>
L179	11	11	>	17	22	1.08	>	>	13	9	2.93	.090	12	8	.93	>
L191	11	11	>	18	19	1.67	>	>	13	9	3.27	.048	13	9	.98	>
L213	11	11	>	18	22	1.33	>	>	13	9	3.70	.090	13	9	1.01	>
L250	9	11	>	17	18	1.72	>	>	13	9	2.61	>	9	6	.98	>
L259	11	11	>	19	22	1.56	>	>	13	9	2.92	.100	12	8	1.22	>
L292	11	11	>	18	19	2.01	>	>	11	8	2.86	>	9	7	.62	>

Sta. No.	1967-68 (Fig. 4)				1968-69 (Fig. 5)				1969-70 (Fig. 6)				1970-71 (Fig. 7)			
	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.
L303	10	11	3.81	>	19	22	1.60	>	13	9	2.06	>	13	9	1.05	>
L372	11	11	2.98	.096	19	22	1.85	>	11	8	4.72	.020	13	9	1.24	>
L434	11	11	2.64	>	16	17	1.28	>	12	8	2.08	>	12	9	.80	>
L435	11	11	2.22	>	15	21	1.64	>	12	8	5.03	.088	11	8	1.06	>
L451	11	11	4.47	.071	17	18	1.17	>	7	6	8.33	.051				
L458	11	11	1.21	>	18	20	1.55	.069	12	8	3.40	.029	12	9	.46	-.05
L466	11	11	2.74	.100	18	22	1.53	>	13	9	1.76	>	11	7	1.26	>
L694	8	10	1.89	>	19	22	1.50	>	13	8	2.70	.040	13	9	1.13	>
L1017	11	11	1.71	>	16	19	1.92	>	11	7	8.98	.032	12	8	1.01	>
L1074	10	11	2.30	>	15	18	1.56	>	13	9	1.76	>	8	5	1.93	>
L1107	11	11	2.46	>	19	22	1.33	>	11	9	3.59	.016	10	5	.95	>
L1108	8	6	1.80	>	11	11	1.66	>	7	6	10.50	>	11	9	1.32	>
L1181	11	11	4.68	.043	15	20	1.65	>	12	9	1.66	>	7	4	1.56	>
M100													13	9	.84	>
M101	8	10	1.01	>	19	22	1.19	>	7	5	1.69	>	12	8	1.26	>
M102									12	8	1.65	>	13	9	1.14	>
M103	11	11	1.94	>	19	22	1.06	>	13	9	1.59	>	13	9	1.00	>
M104					16	19	1.11	>	10	7	2.52	>	8	6	.65	>
M124	11	11	2.33	>	17	22	2.42	.036	12	8	3.00	.061	13	9	1.16	>
M225	8	10	1.50	>	18	19	1.22	>	12	9	1.34	>	11	8	1.51	>
M226	11	11	1.43	>	16	20	1.49	>	9	8	1.30	>	13	9	1.65	>
M228	11	11	1.60	>	19	22	1.36	>	13	9	1.36	>	12	9	1.21	>
M230	11	11	1.79	>	19	22	1.72	>	13	9	1.71	>	12	8	1.46	>
NA	9	6	2.30	>	17	19	1.87	.059	9	6	1.60	>	13	9	1.38	>
NB	11	11	1.58	>	18	21	1.40	>	13	9	1.63	>	12	9	1.74	>
N1	6	7	2.14	>	19	22	.83	>	13	9	2.03	>	11	8	.74	>
N2	9	7	1.44	>	17	20	1.22	>	13	9	1.75	>	13	9	.90	>
N3	11	11	1.43	>	19	22	.96	>	13	9	.91	>	13	9	1.16	>
N4	9	11	1.36	>	19	22	1.06	>	13	9	1.62	>	11	9	.73	>
N5	10	11	1.66	>	18	21	.96	>	13	9	1.20	>	12	8	1.22	>
N6	8	10	1.73	>	12	17	.82	>	13	9	1.35	>	11	8	1.48	>
N7	11	11	1.71	>	9	13	.64	>	13	9	1.56	>	5	5	.77	>
N8					14	17	1.40	>	11	9	2.19	>	13	9	1.17	>

Sta. No.	1967-68 (Fig. 4)				1968-69 (Fig. 5)				1969-70 (Fig. 6)				1970-71 (Fig. 7)			
	Ratio		Prob.	N ₁	Ratio		Prob.	N ₁	Ratio		Prob.	N ₁	Ratio		Prob.	N ₁
	N ₂	S/NS			N ₂	S/NS			N ₂	S/NS			N ₂	S/NS		
N9	11	1.83	>	19	22	1.12	>	13	9	1.50	>	2	2	2.49	>	
N10	7	1.47	>	8	11	1.24	>	11	6	1.46	>	0	0	0.00	>	
N11	10	1.82	.088	19	22	1.17	>	9	4	2.04	>	13	9	1.44	>	
N12				18	19	1.44	>	9	4	1.39	>	13	9	1.62	>	
N13	10	2.16	>	19	22	1.62	.099	13	9	1.29	>	13	9	1.10	>	
N14	11	1.49	>	17	20	1.21	>	13	9	2.37	.045	12	8	1.38	>	
N15	9	2.58	>	19	22	1.42	>	13	9	1.58	>	13	9	1.38	>	
N16	8	3.38	>	14	16	1.82	.078	9	5	1.98	>	9	4	1.38	>	
N17	9	1.66	>	16	17	1.02	>	11	6	1.37	>	11	8	.96	>	
N18								13	9	1.19	>	13	9	.90	>	
N19												13	9	.84	>	
N20												6	5	1.17	>	
N21												13	9	.82	>	
S201	11	1.77	>	19	22	.82	>	13	9	1.49	>	13	9	1.27	>	
S202	7	1.35	>	19	22	1.07	>	13	9	.99	>	13	9	1.02	>	
S203				19	22	.95	>	13	9	.95	>	10	7	.96	>	
S204	11	1.31	>	19	22	.98	>	13	9	.87	>	10	7	.90	>	
S205	9	1.30	>	17	21	.91	>	12	7	1.20	>	10	7	.91	>	
S206	11	1.38	>	19	22	1.46	>	12	8	1.37	>	11	7	1.08	>	
S208	9	1.44	>	19	22	1.04	>	11	6	.95	>	12	8	1.09	>	
S209	11	1.86	>	19	22	1.02	>	13	9	.72	>	11	8	1.73	>	
S210	11	1.54	>	19	21	1.70	>	13	9	1.31	>	12	8	.39	>	
S211	11	1.30	>	19	22	1.26	>	13	8	1.72	.100	3	4	.58	>	
S212	3	.46	>	19	22	1.70	.063	12	8	2.00	>	6	6	1.20	>	
S215				13	14	.99	>	12	7	1.92	>	7	6		>	
S217	6	1.31	>	19	22	1.32	>	13	9	1.50	>				>	
S221	11	2.53	>	19	22	.96	>	13	9	10.90	.051				>	
S231	11	1.30	>	16	19	1.75	>	12	8	1.26	>	12	9	1.19	>	
S232	11	1.57	>	18	21	1.73	>	13	9	1.52	>	13	9	1.27	>	
S233	11	1.65	>	19	22	1.02	>	13	9	1.68	>	13	9	.88	>	
S234	11	1.65	>	19	22	1.35	>	11	8	2.09	>	13	9	1.07	>	
S235	11	2.17	>	19	22	.69	>	13	9	1.40	>	13	9	.74	>	
S236	11	2.50	>	19	22	1.61	>	13	8	1.39	>	13	9	.98	>	

Sta. No.	1967-68 (Fig. 4)				1968-69 (Fig. 5)				1969-70 (Fig. 6)				1970-71 (Fig. 7)			
	Ratio		N ₁	N ₂	Prob.	Ratio		N ₁	N ₂	Prob.	Ratio		N ₁	N ₂	Ratio	Prob.
	S/NS	S/NS				S/NS	S/NS				S/NS	S/NS				
S238	10	8	2.89	8	.023	19	22	1.27	13	9	1.39	>	10	7	1.50	>
S241	8	7	1.90	7	>	16	19	1.75	13	9	1.76	.095	5	5	.63	>
S242	6	9	1.22	9	>	19	22	1.49	13	9	1.44	>				
S249						15	16	1.17	13	9	1.28	>	7	6	1.12	>
S251	11	11	1.30	11	>	18	19	1.34	13	9	1.83	>	12	8	1.46	>
S255									9	7	1.53	>	9	6	.76	>
S256									8	3	1.45	>	12	8	.74	>
S257													11	8	1.33	>
V85	11	10	2.41	10	>	12	12	.93	13	9	1.45	.080	13	9	.84	>
V121						15	18	1.46	13	8	2.80	.050	8	4	1.66	>
V138	10	8	2.31	8	.029	19	22	1.25	13	9	1.34	>	13	9	1.39	>
V165	11	11	1.80	11	>	18	19	1.14	13	9	1.01	>	11	9	1.04	>
V166	11	11	2.03	11	>	19	22	1.28	13	8	1.03	>	13	9	.71	>
V167	11	11	1.58	11	>	19	22	1.38	13	9	1.55	.080	12	8	.84	>
V168	10	11	2.03	11	>	19	22	1.41	13	9	1.22	.019	11	8	.92	>
V169	11	11	3.22	11	>								9	7	1.09	>
V170	5	7	2.44	7	>	15	15	1.14	13	9	1.75	>	7	6	.98	>
V171	11	11	3.26	11	>	19	22	1.48	15	9	1.96	>	13	9	1.04	>
V172	11	11	3.71	11	.079	12	16	2.59	13	9	2.02	>	13	9	1.11	>
V173	11	11	2.56	11	>	19	22	1.58	10	6	.77	>	9	5	2.40	>
V174	11	11	1.91	11	>	17	18	1.44	10	6	1.81	.100	11	8	1.13	>
V175	8	10	1.63	10	>	14	17	1.40	13	9	2.82	.025	13	9	.95	>
V188	11	11	2.00	11	>				13	9	3.06	.009	13	9	1.08	>
V189	11	10	1.89	10	>				13	9	3.54	.035	13	9	.75	>
V190	10	8	1.91	8	>	19	22	1.40	13	9	3.40	.016	13	9	.87	>
V191	11	11	3.41	11	>	19	22	1.27	3	3	3.80	>	13	9	1.01	>
V192	11	11	2.09	11	>	16	19	1.04	9	7	2.84	>	6	5	1.03	>
V193						17	20	1.40	12	8	2.47	.088	11	7	.66	>
V194	11	11	1.90	11	>	19	22	1.08	13	9	3.08	.022	13	9	1.11	>
V196	6	9	2.66	9	>	17	20	1.41	13	9	1.43	>	13	9	1.91	>
V198	11	11	1.70	11	>	12	14	1.62	13	9	2.38	.085	11	7	1.19	>
V206	11	11	3.38	11	>	19	22	1.38	13	9	1.31	>	12	9	.88	>
V207	11	11	2.48	11	>	12	15	1.87	11	8	1.31	>				

Sta. No.	1967-68 (Fig. 4)				1968-69 (Fig. 5)				1969-70 (Fig. 6)				1970-71 (Fig. 7)			
	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.
V209	10	7	1.48	>	19	21	1.53	.061	13	9	1.32	>	13	9	1.05	>
V221	11	11	1.70	>	18	22	1.37	>	13	9	1.44	>	13	9	.92	>
V224	9	6	2.13	>	9	15	2.51	.100	10	7	1.72	>	2	1	2.34	>
V225	11	11	3.08	>	19	22	1.55	>	11	7	1.65	>	13	9	1.20	>
V227					15	18	1.59	>	13	9	3.69	.021	7	6	.46	>
V232									6	6	3.73	>	12	8	1.28	>

APPENDIX C

Data Summary: Sample Size (N_1 -Seeded, N_2 -Not Seeded)
S/NS Ratio
Probability (Wilcoxon-Mann Whitney)
($> =$ greater than .10)

Sta. No.	(Fig. 8) 1967-71, All Bands				(Fig. 9) 1967-71, $T_{500} \geq -20^\circ\text{C}$				(Fig. 10) 1967-71, $T_{500} < -20^\circ\text{C}$			
	N_1	N_2	Ratio S/NS Precip.	Prob.	Ratio S/NS Duration	Prob.	N_1	N_2	Ratio S/NS	Prob.	N_1	N_2
A21	23	22	1.34	>	1.18	>	10	8	6.93	>	13	14
A23	20	22	.79	>	.79	>	17	17	1.00	>	4	5
A24	28	27	1.77	>	1.33	>	20	19	1.89	>	8	8
A26	21	16	3.25	>	1.57	>	10	7	4.55	.094	11	9
A27	19	14	7.32	>	2.43	.065	10	6	∞	>	9	8
A29	40	33	1.09	>	.95	>	25	18	1.21	>	15	15
A30	32	31	1.47	>	1.18	>	22	19	2.35	>	10	12
A31	25	17	3.83	.022	5.28	.016	12	7	35.00	>	13	10
A32	28	26	1.23	>	1.41	>	22	18	2.02	>	6	8
A33	41	34	1.27	.076	1.56	.076	27	20	4.07	.072	14	14
A34	35	28	2.21	>	1.54	>	23	17	3.27	>	12	11
A35	28	21	2.49	.059	1.56	.043	19	14	2.75	>	9	7
A36	37	29	1.53	>	1.61	>	22	14	4.06	>	15	15
A37	42	35	1.27	>	1.38	.089	27	21	1.64	>	15	14
A38	29	21	1.56	>	1.15	>	20	14	1.99	>	9	7
A41	21	12	1.54	>	.98	>	7	2	3.83	>	14	10
A42	24	17	1.49	.076	1.22	>	11	7	2.30	>	13	10
A44	13	9	1.30	>	1.20	>	5	2	3.55	>	8	7
A45	13	9	1.24	>	1.30	>	5	2	1.83	>	8	7
A46	13	9	1.42	>	1.62	>	5	2	∞	>	8	7
A47	24	20	2.26	>	1.42	>	5	2	6.31	>	8	9
E442	56	51	1.55	>	1.40	.081	32	31	1.30	>	24	20
E1142	51	45	1.40	>	1.24	.067	30	27	1.46	.050	21	18
E1253	53	47	1.45	.067	1.28	.061	31	27	1.88	.019	22	20
E1682	56	51	1.52	.079	1.30	.054	32	31	1.45	.084	24	20
E1743	53	50	1.19	>	1.30	.043	29	30	1.30	>	24	20
E3465	34	32	1.40	>	1.32	>	24	24	1.44	.097	10	8
E3751	56	51	1.79	.092	1.31	.082	32	31	2.15	.048	24	20
E4144	50	47	1.19	>	1.19	>	30	28	1.30	.051	20	19
E4767	38	35	1.15	>	1.21	>	22	22	1.01	>	16	13
E4867	53	49	1.43	>	1.27	.064	30	30	1.42	.023	23	19

Sta. No.	(Fig. 8) 1967-71, All Bands				(Fig. 9) 1967-71, $T_{500} \geq -20^{\circ}\text{C}$				(Fig. 10) 1967-71, $T_{500} < -20^{\circ}\text{C}$			
	Ratio S/NS		Ratio S/NS		Ratio S/NS		Ratio S/NS		Ratio S/NS		Ratio S/NS	
	N ₁	N ₂	Prob.	Duration	Prob.	N ₁	N ₂	Prob.	N ₁	N ₂	Prob.	Prob.
E5098	55	48	>	1.18	>	32	31	1.79	23	17	.88	>
E5151	54	49	>	1.04	>	30	29	1.44	24	20	.86	>
E5184	48	45	>	1.12	>	26	26	1.25	22	19	1.36	>
E5756	44	41	>	1.10	>	27	27	1.53	17	14	.83	>
E6006	42	34	.074	1.47	.025	27	26	2.12	15	8	1.48	>
E6624	42	35	>	1.63	>	21	20	2.41	21	15	1.21	>
E6736	53	47	.054	1.24	.047	31	30	1.74	22	17	1.03	>
E7735	50	48	>	1.41	.0217	28	29	2.20	22	19	.85	>
E7946	56	51	>	1.14	>	32	31	1.05	24	20	.91	>
E8697	33	36	>	1.11	>	24	26	1.03	9	10	1.05	>
E8752	54	49	.037	1.64	.038	30	29	3.48	24	20	.92	>
E8832	48	39	.046	1.38	.034	30	26	2.22	18	13	.95	>
E9049	46	37	>	1.23	>	28	24	1.65	18	13	1.23	>
E9221	39	37	.067	1.13	>	19	18	1.29	19	19	1.62	>
E9283	31	29	>	1.28	>	19	18	2.05	12	11	1.14	>
E9458	10	7	>	.95	>	16	17	1.04	6	5	2.13	.080
E9512	50	50	>	1.32	>	29	30	1.19	21	20	2.01	
L6	38	40	.042	1.58	.006	22	25	2.16	16	15	1.66	
L10	44	41	.021	1.74	.005	25	28	1.76	19	13	2.05	
L11	53	48	.020	1.64	.003	30	29	2.22	23	19	1.53	
L33	55	51	>	1.42	.016	31	31	2.37	24	20	1.07	
L46	53	50	.053	1.44	.016	30	31	2.43	23	19	1.23	
L52	36	34	>	1.36	.081	22	22	1.64	14	12	1.11	
L53	56	51	.050	1.43	.015	32	31	2.33	24	20	1.39	
L54	47	38	.028	1.38	.048	27	23	3.26	20	15	1.43	
L128	47	41	.045	1.34	.026	23	22	2.19	24	19	1.28	
L179	52	50	>	1.40	.041	30	31	1.30	23	19	1.29	
L191	55	48	.042	1.45	.039	31	29	2.22	24	19	1.37	
L213	55	51	.081	1.54	.015	31	31	1.51	24	20	1.49	
L250	48	44	>	1.25	>	28	26	2.82	20	18	1.14	
L259	55	50	.042	1.31	.053	32	31	1.61	23	19	1.90	
L292	49	45	>	1.27	.093	28	28	2.18	21	17	1.07	
L303	55	51	>	1.38	.062	32	31	2.01	23	20	1.31	
L372	54	50	.010	1.43	.016	30	30	2.09	24	20	1.78	

(Fig. 8) (Fig. 16)
1967-71, All Bands

Sta. No.	Ratio S/NS			Prob.	Ratio S/NS		Prob.	Ratio S/NS			Prob.	Ratio S/NS			Prob.
	N ₁	N ₂	Precip.		Duration	N ₁		N ₂	S/NS	N ₁		N ₂	S/NS		
L434	51	45	1.26	>	1.23	>	.081	27	25	1.51	>	24	20	1.08	>
L435	49	48	1.62	>	1.14	>	>	26	30	1.31	>	23	18	1.73	>
L451	35	35	1.78	.092	1.28	>	>	23	26	1.48	>	12	9	1.80	>
L458	53	48	1.15	>	1.22	>	.079	29	28	1.25	.079	24	20	1.04	>
L466	53	49	1.60	.099	1.37	.042	.059	31	31	1.97	.059	22	18	1.26	>
L694	53	49	1.53	>	1.41	.043	.050	32	30	2.30	.050	21	19	1.16	>
L1017	50	45	1.74	>	1.33	>	>	27	26	2.84	>	23	19	1.25	>
L1074	47	43	1.67	>	1.30	.045	>	28	27	1.88	>	19	16	1.44	>
L1107	51	47	1.59	.042	1.47	.031	.034	30	30	2.22	.034	21	17	1.19	>
L1108	37	32	1.67	>	1.27	>	>	19	18	2.10	>	18	14	1.35	>
L1181	45	44	1.74	>	1.35	.059	>	26	29	1.75	>	19	15	1.59	>
M100	13	9	.84	>	1.05	>	>	5	2	3.18	>	8	7	.62	>
M101	46	45	1.20	>	1.16	>	>	30	30	1.28	>	16	15	1.04	>
M102	25	17	1.35	>	1.30	>	>	11	7	1.41	>	14	10	1.27	>
M103	56	51	1.18	.097	1.17	>	.072	32	31	1.21	.072	24	20	1.15	>
M104	37	35	1.21	>	1.15	>	>	21	19	1.31	>	13	13	1.10	>
M124	53	50	2.01	.008	1.30	.047	.015	30	31	2.30	.015	23	19	1.70	>
M225	49	46	1.36	>	1.46	.005	>	31	28	1.30	>	18	18	1.45	>
M226	49	48	1.45	>	1.33	.019	>	28	29	1.57	>	21	19	1.31	>
M228	55	51	1.36	.076	1.41	.003	.038	31	31	1.67	.038	24	20	1.08	>
M230	55	50	1.66	.049	1.42	.004	.048	32	31	2.11	.048	23	19	1.28	>
NA	48	40	1.65	.049	1.35	.008	.018	25	22	2.11	.018	23	18	1.25	>
NB	54	50	1.55	.068	1.44	.021	.041	30	30	1.73	.041	24	20	1.35	>
N1	49	46	1.17	>	1.26	>	>	31	29	1.14	>	18	17	1.21	>
N2	52	45	1.25	>	1.09	>	>	30	28	1.57	>	22	17	.94	>
N3	56	51	1.05	>	1.19	.069	>	32	31	1.10	>	24	20	.98	>
N4	52	51	1.07	>	1.19	>	>	31	31	1.24	>	21	20	.87	.079
N5	53	49	1.13	>	1.24	.078	>	31	31	1.22	>	22	18	1.00	>
N6	45	38	1.16	>	1.41	.014	>	24	27	1.15	>	20	16	1.10	>
N7	38	38	1.10	>	1.21	>	>	17	20	1.05	>	21	18	1.03	>
N8	38	35	1.33	>	1.32	>	>	25	20	1.44	>	13	15	1.23	>
N9	43	42	1.26	>	1.24	>	>	27	29	1.32	>	16	13	1.12	>
N10	26	23	1.50	.037	1.41	.030	>	15	18	1.48	>	11	5	1.20	>

(Fig. 9) (Fig. 10)
1967-71, T₅₀₀ ≥ -20°C
1967-71, T₅₀₀ < -20°C

Sta. No.	(Fig. 8) 1967-71, All Bands				(Fig. 9) 1967-71, T ₅₀₀ ≥ -20°C				(Fig. 10) 1967-71, T ₅₀₀ < -20°C			
	Ratio S/NS		Duration		Ratio S/NS		Ratio S/NS		Ratio S/NS		Ratio S/NS	
	N ₁	N ₂	Prob.	Prob.	N ₁	N ₂	N ₁	N ₂	N ₁	N ₂	N ₁	N ₂
N11	40	36	1.36	.045	1.38		.007		23	24	1.31	>
N12	27	23	1.42	>	1.36		.035		20	15	1.49	>
N13	55	48	1.48	>	1.26		.043		32	31	1.91	.064
N14	54	49	1.51	.008	1.52		.0005		30	29	1.61	.027
N15	53	45	1.38	>	1.26		.055		30	26	1.80	.049
N16	44	37	1.87	.011	1.34		.020		24	24	2.51	.024
N17	45	34	1.18	.095	1.18		.093		22	27	1.33	.076
N18	24	17	1.06	>	1.26		.097		11	8	1.41	>
N19	13	9	.90	>	.95		>		5	2	3.56	>
N20	13	9	.84	>	1.05		>		5	2	1.06	>
N21	5	5	1.17	>	.65		>		1	0	0.00	>
S201	56	51	1.03	>	1.29		.055		32	31	1.14	>
S202	52	47	1.11	>	1.25		.031		32	31	1.13	>
S203	45	40	.98	>	1.18		>		30	25	1.07	>
S204	53	49	1.01	>	1.26		.023		30	30	1.06	>
S205	48	41	1.02	>	1.15		>		26	23	1.23	>
S206	53	47	1.29	>	1.39		.007		31	30	1.49	>
S208	51	46	1.08	>	1.36		.038		30	28	1.30	>
S209	43	42	1.00	>	1.52		.014		27	29	1.00	>
S210	54	49	1.46	.066	1.39		.025		30	29	1.67	.067
S211	55	49	1.45	.087	1.32		.040		32	30	1.85	.031
S212	37	39	1.52	>	1.29		.051		26	27	1.85	.068
S215	31	27	1.24	>	1.09		>		20	18	1.42	>
S217	42	43	1.38	>	1.06		>		28	28	1.52	>
S221	42	40	1.52	.064	1.66		.028		27	29	1.26	>
S231	51	47	1.44	.067	1.29		.027		27	27	1.94	.032
S232	55	50	1.55	.087	1.22		.074		31	31	2.14	.050
S233	56	51	1.13	>	1.18		.087		32	31	1.26	.066
S234	54	50	1.40	>	1.60		.005		30	31	1.43	>
S235	56	51	.98	>	1.17		>		32	31	1.04	>
S236	56	50	1.45	>	1.30		.017		32	30	2.01	.081
S238	36	36	1.35	.075	1.52		.003		27	29	1.58	.087
S241	34	33	1.72	>	1.46		.061		21	22	1.82	.093
S242	43	45	1.45	.069	1.32		.036		27	29	1.62	.053

Sta. No.	(Fig. 8) 1967-71, All Bands				(Fig. 9) 1967-71, $T_{.00} \geq -20^{\circ}\text{C}$				(Fig. 10) 1967-71, $T_{500} < -20^{\circ}\text{C}$			
	Ratio S/NS		Ratio S/NS		Ratio S/NS		Ratio S/NS		Ratio S/NS		Ratio S/NS	
	N ₁	N ₂	Precip.	Prob.	Duration	Prob.	N ₁	N ₂	N ₁	N ₂	N ₁	N ₂
S249	28	21	1.27	>	1.29	>	22	21	6	4	1.97	.072
S251	49	45	1.28	>	1.12	>	27	26	22	19	1.07	>
S255	12	8	1.60	>	1.20	>	11	7	7	6	1.07	>
S256	9	6	1.12	>	1.03	>	6	1	5	5	1.10	>
S257	12	8	.74	>	1.02	>	5	2	7	6	.51	>
V85	47	39	1.21	>	1.17	>	23	21	24	18	1.19	>
V121	41	35	1.31	>	1.30	>	26	20	15	15	1.46	>
V138	50	43	1.36	.074	1.24	.055	32	31	18	12	.96	>
V165	55	48	1.22	>	1.32	.029	31	28	24	20	1.14	>
V166	54	50	1.22	>	1.20	>	31	30	23	20	1.24	>
V167	56	51	1.30	>	1.38	.023	32	31	24	20	1.15	>
V168	54	50	1.31	.043	1.47	.029	32	31	22	19	1.23	>
V169	22	19	1.31	>	1.24	>	5	7	17	12	.96	>
V170	29	29	1.25	>	1.35	>	18	19	11	10	1.07	>
V171	50	48	1.49	.015	1.45	.010	28	29	22	19	1.29	>
V172	49	45	1.90	.002	1.39	.017	26	29	23	16	1.52	.043
V173	56	51	1.54	.067	1.24	.078	32	31	24	20	1.24	>
V174	47	40	1.39	>	1.21	>	28	24	19	16	1.15	>
V175	43	41	1.56	.057	1.39	.021	22	23	21	18	1.75	>
V188	37	29	1.57	.089	1.36	.092	14	14	23	15	1.11	>
V189	37	28	1.78	>	1.41	.081	14	14	23	14	1.44	>
V190	55	48	1.38	>	1.47	.016	32	31	23	17	1.18	>
V191	56	51	1.44	.087	1.41	.026	32	31	24	20	1.41	>
V192	43	42	1.15	>	1.45	.053	25	25	18	17	1.21	>
V193	32	32	1.50	>	1.40	.079	21	20	11	12	1.53	>
V194	53	48	1.26	.095	1.25	>	31	30	22	18	1.38	>
V196	32	27	1.78	.012	1.50	.034	14	14	18	13	1.28	.097
V198	49	43	1.61	.062	1.30	.084	25	24	24	19	1.65	>
V206	54	49	1.65	.028	1.38	.038	32	31	22	18	1.70	>
V207	46	43	1.47	.059	1.25	.067	26	28	20	15	.97	>
V209	55	46	1.32	.020	1.51	.005	32	30	23	16	.73	>
V221	55	51	1.32	>	1.25	.067	31	31	24	20	1.27	>
V224	30	29	2.04	.015	1.62	.005	15	17	15	12	1.54	>

Sta. No.	(Fig. 8) 1967-71, All Bands				(Fig. 9) 1967-71, T ₅₀₀ ≥ -20°C				(Fig. 10) 1967-71, T ₅₀₀ < -20°C			
	N ₁	N ₂	Ratio S/NS Precip.	Prob.	Ratio S/NS Duration	Prob.	N ₁	N ₂	Ratio S/NS	N ₁	N ₂	Ratio S/NS
V225	54	49	1.55	.034	1.32	.028	30	29	1.94	24	20	1.23
V227	20	15	1.44	>	1.14	>	9	7	2.92	11	8	1.24
V232	33	32	1.63	>	1.31	.095	24	21	1.42	9	11	2.13
												>

APPENDIX C

Data Summary: Sample Size (N_1 -Seeded, N_2 -Not Seeded)

S/NS Ratio

Probability (Wilcoxon-Mann Whitney)

(> = greater than .10)

(Fig. 11)
1967-71

(Fig. 12)
1967-71

(Fig. 13)
1967-71

Southerly Stratification

Westerly Stratification

$T_{500} \geq -22^\circ\text{C}$

$T_{500} < -22^\circ\text{C}$

Sta. No.	Ratio			Ratio			Ratio			Ratio			Ratio		
	N_1	N_2	Prob.	N_1	N_2	Prob.	N_1	N_2	Prob.	N_1	N_2	Prob.	N_1	N_2	Prob.
A21	13	10	1.27	10	12	1.43	6	9	.31	17	13	1.50	17	13	>
A23	19	18	1.14	2	4	.14	7	12	.38	14	10	1.21	14	10	>
A24	22	20	1.99	6	7	.31	12	15	1.02	16	12	2.70	16	12	>
A26	12	7	8.36	9	9	1.38	8	5	1.41	13	11	4.96	13	11	>
A27	13	7	25.31	6	7	.78	8	5	3.02	11	9	10.91	11	9	.043
A29	29	20	1.11	11	13	1.07	14	15	.60	26	18	1.35	26	18	>
A30	24	21	1.60	8	10	1.27	12	17	.63	20	14	1.99	20	14	>
A31	15	7	53.67	10	10	.87	10	6	.66	15	11	40.70	15	11	.016
A32	23	19	1.34	5	7	1.31	10	13	1.25	18	13	1.10	18	13	>
A33	30	21	1.63	11	13	.45	15	17	.87	26	17	1.42	26	17	.020
A34	27	18	2.83	10	11	1.22	14	13	3.47	23	16	1.70	23	16	>
A35	23	15	3.46	5	6	.65	10	9	1.48	18	12	2.87	18	12	.056
A36	26	16	1.89	11	13	1.06	12	12	1.86	25	17	1.35	25	17	>
A37	31	73	1.57	11	12	.95	16	17	.88	26	18	1.29	26	18	>
A38	24	15	2.12	5	6	.68	11	7	1.40	18	14	1.68	18	14	>
A41	11	3	1.76	10	9	1.03	8	4	.85	13	8	2.24	13	8	>
A42	14	8	1.84	10	9	1.06	9	8	1.13	15	9	1.85	15	9	.092
A44	7	3	2.70	6	6	.46	6	4	1.07	7	5	1.69	7	5	>
A45	7	3	1.80	6	6	.55	6	4	.60	7	5	3.95	7	5	>
A46	7	3	10.82	6	6	.33	6	4	.48	7	5	7.41	7	5	>
A47	6	2	6.44	6	6	.57	6	4	.72	6	4	9.09	6	4	>
E442	39	34	1.34	17	17	2.13	24	28	1.48	32	23	1.59	32	23	>
E1142	37	29	1.34	14	16	1.51	20	24	.78	31	21	2.08	31	21	.009
E1253	37	30	1.68	16	17	1.10	22	24	.82	31	23	1.69	31	23	.036
E1682	39	34	1.58	17	17	1.47	24	28	1.39	32	23	1.43	32	23	.00003
E1743	36	33	1.15	17	17	1.29	22	27	.70	31	23	.032	31	23	>
E3465	27	26	1.38	7	6	1.45	13	19	1.71	21	13	1.18	21	13	>
E3751	39	34	2.28	17	17	1.29	24	28	1.20	32	23	1.98	32	23	>
E4144	36	31	1.26	14	16	1.06	21	26	.96	29	21	1.31	29	21	>
E4767	27	24	.94	11	11	1.78	16	19	.77	22	16	1.26	22	16	.097

Sta. No.	(Fig. 11) 1967-71 $T_{500} \geq -22^{\circ}\text{C}$					(Fig. 12) 1967-71 $T_{500} < -22^{\circ}\text{C}$					(Fig. 14) 1967-71 Westerly Stratification					(Fig. 13) 1967-71 Southerly Stratification				
	Ratio		Prob.			Ratio		Prob.			Ratio		Prob.			Ratio		Prob.		
	N_1	N_2	S/NS	S/NS		N_1	N_2	S/NS	S/NS		N_1	N_2	S/NS	S/NS		N_1	N_2	S/NS	S/NS	
E4867	36	32	1.53	.096		17	17	1.28	1.28		23	28	.84	.84		30	21	1.73	1.73	>
E5098	39	34	1.37	>		16	14	1.23	1.23		24	28	1.56	1.56		31	20	1.20	1.20	>
E5151	37	32	1.34	>		17	17	.79	.79		23	28	.52	.52		31	21	1.82	1.82	.081
E5184	32	29	1.19	>		16	16	1.52	1.52		19	23	.93	.93		29	22	1.70	1.70	>
E5756	32	30	1.02	>		12	11	1.62	1.62		17	23	1.03	1.03		27	18	1.01	1.01	>
E6006	32	27	2.40	.026		10	7	1.08	1.08		19	20	1.58	1.58		23	14	1.81	1.81	>
E6624	27	23	1.84	>		15	12	1.50	1.50		17	19	1.70	1.70	.084	25	16	1.53	1.53	>
E6736	38	33	1.47	.019		15	14	1.22	1.22		24	27	.87	.87		29	20	1.54	1.54	.047
E7735	35	32	2.03	.028		15	16	.74	.74		21	25	.87	.87		29	23	1.25	1.25	>
E7946	39	34	1.02	>		17	17	.92	.92		24	28	.78	.78		32	23	1.07	1.07	>
E8697	28	27	1.11	>		5	9	.78	.78		11	22	.84	.84		22	14	1.00	1.00	>
E8752	37	32	2.71	.009		17	17	.61	.61		24	27	.92	.92		30	22	2.72	2.72	.008
E8832	37	29	1.53	>		11	10	1.84	1.84		21	22	1.75	1.75	.070	27	17	1.43	1.43	>
E9049	34	26	1.58	.082		12	11	1.28	1.28		20	20	1.49	1.49		26	17	1.30	1.30	>
E9221	25	21	1.18	>		13	15	2.16	2.16		19	19	1.05	1.05		19	17	1.80	1.80	.020
E9283	23	19	2.04	>		8	10	1.24	1.24		11	18	.49	.49		20	11	2.51	2.51	>
E9458	21	18	1.84	>		11	8	1.20	1.20		14	16	.86	.86		18	10	3.82	3.82	.082
E9512	34	33	1.13	>		16	17	3.08	3.08		21	28	1.49	1.49		29	22	1.34	1.34	>
L6	27	23	2.45	.016		11	12	1.41	1.41		11	21	.50	.50		27	19	2.46	2.46	.043
L10	32	30	1.89	.006		12	11	2.08	2.08		18	22	1.93	1.93		26	19	1.78	1.78	.072
L11	36	31	2.56	.003		17	17	1.37	1.37		23	26	.88	.88		30	22	2.79	2.79	.042
L33	38	34	2.33	.020		17	17	.96	.96		24	28	1.22	1.22		31	23	1.43	1.43	>
L46	36	33	2.28	.005		17	17	1.21	1.21		22	28	1.21	1.21		31	22	1.66	1.66	>
L52	26	24	1.13	>		10	10	2.05	2.05		15	19	1.38	1.38		21	15	1.16	1.16	>
L53	39	34	1.90	.017		17	17	1.69	1.69		24	28	1.30	1.30		32	23	1.82	1.82	>
L54	34	24	2.68	.010		13	12	1.36	1.36		20	21	1.32	1.32		27	17	2.30	2.30	.090
L128	30	25	1.77	.019		17	17	1.44	1.44		19	21	1.33	1.33		28	21	1.56	1.56	>
L179	36	33	1.54	.035		17	17	1.26	1.26		24	28	1.05	1.05		29	22	1.46	1.46	>
L191	38	32	2.30	.009		17	16	1.29	1.29		24	26	1.45	1.45	.030	31	22	1.74	1.74	>
L213	38	34	1.82	.010		17	17	1.26	1.26		24	28	1.07	1.07		31	23	1.87	1.87	>
L250	34	29	2.25	.090		14	15	1.11	1.11		18	22	.90	.90		30	22	1.73	1.73	>
L259	38	33	2.08	.010		17	17	1.57	1.57		24	28	1.53	1.53		31	22	1.86	1.86	>

Sta. No.	(Fig. 11) 1967-71 $T_{500} \geq -22^{\circ}\text{C}$				(Fig. 12) 1967-71 $T_{500} < -22^{\circ}\text{C}$				(Fig. 14) 1967-71 Westerly Stratification				(Fig. 13) 1967-71 Southerly Stratification					
	Ratio		N_1	N_2	S/NS	Prob.	Ratio		N_1	N_2	S/NS	Prob.	Ratio		N_1	N_2	S/NS	Prob.
	N_1	N_2					N_1	N_2					N_1	N_2				
L292	34	31	1.76	.090	15	14	1.21	>	22	25	.93	>	27	20	1.61	>		
L303	38	34	2.24	.046	17	17	1.18	>	24	28	1.13	>	31	23	1.73	>		
L372	37	33	2.19	.006	17	17	1.77	>	24	28	1.45	.049	30	22	2.08	.004		
L434	34	28	1.33	.055	17	17	1.19	>	20	22	.59	>	31	23	1.47	>		
L435	32	32	1.68	.048	17	16	1.52	>	23	28	.67	>	26	20	2.43	.022		
L451	27	28	1.54	>	8	7	2.17	>	16	22	1.67	>	19	13	1.59	>		
L458	36	31	1.23	.031	17	17	1.06	>	23	26	.65	>	30	22	1.31	>		
L466	38	34	2.05	.030	15	15	1.02	>	24	28	1.57	>	29	21	1.45	>		
L694	39	33	2.16	.031	14	16	1.08	>	21	26	.83	>	32	23	1.71	>		
L1017	34	29	2.28	>	16	16	1.34	>	21	24	1.11	>	29	21	1.94	>		
L1074	34	30	1.93	.062	12	13	1.19	>	19	23	1.58	>	27	20	1.48	>		
L1107	36	32	2.42	.011	15	15	1.05	>	23	22	.97	>	28	20	1.69	>		
L1108	25	21	2.46	.089	12	11	.96	>	15	14	1.10	>	22	18	2.20	>		
L1181	32	31	1.96	.051	13	13	1.42	>	19	25	1.58	.087	26	19	1.60	>		
M100	7	3	1.36	>	6	6	.68	>	6	4	1.00	>	7	5	.80	>		
M101	35	32	1.15	>	11	13	1.28	>	20	26	.92	>	26	19	1.54	.030		
M102	15	8	1.20	>	10	9	1.46	>	10	7	.85	>	15	10	2.40	.100		
M103	39	34	1.14	>	17	17	1.29	>	24	28	.97	>	32	23	1.33	.067		
M104	24	20	1.19	>	10	12	1.25	>	13	19	.88	>	21	13	1.36	>		
M124	37	34	2.01	.004	16	16	2.05	>	21	28	1.78	.034	32	22	1.79	>		
M225	37	31	1.29	>	12	15	1.59	>	18	23	1.09	>	31	23	1.44	>		
M226	34	32	1.57	>	15	16	1.28	>	21	28	1.00	>	28	20	1.65	>		
M228	38	34	1.56	.015	17	17	1.07	>	23	28	.98	>	32	23	1.52	>		
M230	38	33	1.91	.017	17	17	1.38	>	24	28	.89	>	31	22	1.92	.052		
NA	31	25	1.79	.015	17	15	1.39	>	22	22	1.04	>	26	18	2.01	.024		
NB	37	33	1.65	.015	17	17	1.38	>	22	27	1.12	>	32	23	1.67	.074		
N1	35	32	1.20	.0005	14	14	1.11	>	21	27	.96	>	28	19	1.25	>		
N2	36	31	1.43	>	16	14	1.01	>	22	25	.78	>	30	20	1.48	>		
N3	39	34	1.11	>	17	17	.98	>	24	28	.83	>	32	23	1.16	>		
N4	37	34	1.19	>	15	17	.81	>	22	28	.70	>	30	23	1.18	>		
N5	37	33	1.22	>	16	16	.94	>	24	28	.86	>	30	22	1.30	>		

Sta. No.	(Fig. 11) 1967-71 $T_{500} \geq -22^{\circ}\text{C}$				(Fig. 12) 1967-71 $T_{500} < -22^{\circ}\text{C}$				(Fig. 14) 1967-71 Westerly Stratification				(Fig. 13) 1967-71 Southerly Stratification			
	Ratio		Prob.		Ratio		Prob.		Ratio		Prob.		Ratio		Prob.	
	N_1	N_2	S/NS		N_1	N_2	S/NS		N_1	N_2	S/NS		N_1	N_2	S/NS	
N6	30	30	1.22	.095	14	14	1.03	>	20	23	1.12	>	24	21	1.13	>
N7	23	23	1.28	>	15	15	.90	>	16	22	.83	>	22	16	1.29	>
N8	29	22	1.39	>	9	13	1.00	>	13	18	.64	>	25	17	1.67	>
N9	32	31	1.28	>	11	11	1.23	>	18	24	.98	>	25	18	1.22	>
N10	18	18	1.66	.066	8	5	1.11	>	15	16	1.23	>	11	7	1.69	>
N11	29	27	1.26	>	11	9	1.77	>	16	21	1.08	>	24	15	1.33	>
N12	22	16	1.46	>	5	7	1.44	>	8	11	.62	>	19	12	1.44	>
N13	39	34	1.69	.028	16	14	1.06	>	24	28	1.03	>	31	20	1.64	.095
N14	37	32	1.65	.013	17	17	1.28	>	23	27	1.10	>	31	22	1.66	.022
N15	37	29	1.61	.027	16	16	1.11	>	23	24	.76	>	30	21	1.71	.048
N16	30	26	2.70	.003	14	11	1.02	>	21	21	1.08	>	23	16	2.31	.008
N17	33	25	1.31	.041	12	9	.89	>	20	21	1.02	>	25	13	1.15	>
N18	15	9	1.09	>	9	8	1.05	>	8	7	1.10	>	16	10	1.03	>
N19	7	3	1.62	>	6	6	.67	>	6	4	.44	>	7	5	1.40	>
N20	7	3	.99	>	6	6	.46	>	6	4	.54	>	7	5	1.83	.003
N21	1	0	0.00	>	5	5	.79	>	3	2	.78	>	3	3	2.00	>
S201	39	34	1.10	>	17	17	1.05	>	24	28	.91	>	32	23	1.20	>
S202	39	34	1.13	>	13	13	1.08	>	21	27	.83	>	31	20	1.16	>
S203	34	27	1.05	>	11	13	.85	>	17	21	.80	>	28	19	1.04	>
S204	36	32	1.07	>	17	17	.94	>	22	27	.77	>	31	22	1.13	>
S205	32	25	1.13	>	16	16	.83	>	21	22	.82	>	27	19	1.15	>
S206	37	31	1.46	>	16	16	1.04	>	23	25	1.26	>	30	22	1.25	>
S208	35	29	1.19	.057	16	17	1.00	>	20	24	.72	>	31	22	1.22	>
S209	32	31	1.03	.058	11	11	.96	>	18	24	.90	>	25	18	.93	>
S210	37	32	1.47	.032	17	17	1.45	>	22	26	1.04	>	32	23	1.64	>
S211	38	32	1.78	.012	17	17	1.04	>	24	27	.97	>	31	22	1.65	>
S212	28	28	1.66	.064	9	11	1.28	>	13	22	.90	>	24	17	1.49	>
S215	21	18	1.44	>	10	9	.91	>	14	14	.79	>	17	13	1.50	>
S217	32	31	1.52	>	13	13	1.13	>	19	26	.78	>	26	18	1.65	>
S221	32	31	1.45	>	11	11	1.68	>	18	24	.95	>	25	18	1.65	.061
S231	34	30	1.87	.008	17	17	1.05	>	22	27	.88	>	29	20	1.79	>

Sta. No.	(Fig. 11) 1967-71 $T_{500} \geq -22^{\circ}\text{C}$				(Fig. 12) 1967-71 $T_{500} < -22^{\circ}\text{C}$				(Fig. 14) 1967-71 Westerly Stratification				(Fig. 13) 1967-71 Southerly Stratification			
	Ratio		N ₁	N ₂	Prob.	Ratio		N ₁	N ₂	Prob.	Ratio		N ₁	N ₂	S/NS	Prob.
	N ₁	N ₂				S/NS	S/NS				S/NS	S/NS				
S232	38	34	1.74	16	.015	1.29	1.29	17	16	>	.93	.93	24	28	31	22
S233	39	34	1.20	17	>	.98	.98	17	17	>	.87	.87	24	28	32	23
S234	37	34	1.38	17	.056	1.44	1.44	17	16	>	.99	.99	23	28	31	22
S235	39	34	1.04	17	>	.82	.82	17	17	>	.91	.91	24	28	32	23
S236	39	33	1.66	17	.095	1.19	1.19	17	17	>	.93	.93	24	27	32	23
S238	32	31	1.57	10	.081	.88	.88	10	8	>	.96	.96	18	24	24	15
S241	24	23	2.09	10	.039	1.12	1.12	10	10	>	.93	.93	17	22	17	11
S242	31	30	1.54	12	.044	1.35	1.35	12	15	>	.79	.79	16	25	27	20
S249	24	21	1.16	4	>	2.00	2.00	4	4	>	.97	.97	11	13	17	12
S251	33	29	1.40	16	>	1.09	1.09	16	16	>	.99	.99	20	23	29	22
S255	13	17	3.67	8	.063	.91	.91	8	7	>	.70	.70	11	8	11	8
S256	8	1	1.47	9	>	1.05	1.05	9	4	>	.81	.81	9	5	9	5
S257	6	2	2.88	6	>	.57	.57	6	4	>	.48	.48	6	4	6	4
V85	30	23	1.11	17	>	1.39	1.39	17	16	>	.93	.93	18	20	29	19
V121	30	22	1.21	11	>	1.63	1.63	11	13	>	.80	.80	14	17	27	18
V138	39	34	1.63	11	.038	.68	.68	11	9	>	.93	.93	22	26	28	17
V165	38	31	1.27	17	>	1.16	1.16	17	17	>	.91	.91	23	25	32	23
V166	37	33	1.19	17	.062	1.28	1.28	17	17	>	.82	.82	24	27	30	23
V167	39	34	1.37	17	.089	1.26	1.26	17	17	>	.93	.93	24	28	32	23
V168	39	34	1.52	15	.012	1.12	1.12	15	16	>	1.12	1.12	22	27	32	23
V169	10	9	2.94	12	>	.66	.66	12	10	>	.95	.95	11	10	11	9
V170	21	21	1.23	8	>	1.29	1.29	8	8	>	.74	.74	9	16	20	13
V171	34	32	1.54	16	.017	1.45	1.45	16	16	>	1.33	1.33	21	26	29	22
V172	33	31	2.37	16	.002	1.22	1.22	16	14	>	1.41	1.41	22	24	27	21
V173	39	34	1.59	17	.031	1.48	1.48	17	17	>	1.28	1.28	24	28	32	23
V174	35	27	1.59	12	>	1.09	1.09	12	13	>	.78	.78	21	22	26	18
V175	29	26	1.43	14	.041	1.81	1.81	14	15	>	1.12	1.12	16	22	27	19
V188	21	16	2.86	16	.039	.95	.95	16	13	>	1.12	1.12	17	15	20	14
V189	21	15	2.48	16	.051	1.38	1.38	16	13	>	1.44	1.44	17	14	20	14
V190	39	34	1.58	16	.028	1.17	1.17	16	14	>	.99	.99	24	28	31	20
V191	39	34	1.46	17	.037	1.44	1.44	17	17	>	1.02	1.02	24	28	32	23

Sta. No.	(Fig. 11) 1967-71 $T_{500} \geq -22^{\circ}\text{C}$					(Fig. 12) 1967-71 $T_{500} < -22^{\circ}\text{C}$					(Fig. 14) 1967-71 Westerly Stratification					(Fig. 13) 1967-71 Southerly Stratification				
	Ratio		S/NS		Prob.	Ratio		S/NS		Prob.	Ratio		S/NS		Prob.	Ratio		S/NS		Prob.
	N_1	N_2	N_1	N_2		N_1	N_2	N_1	N_2		N_1	N_2	N_1	N_2		N_1	N_2	N_1	N_2	
V192	30	28	1.10		>	13	14	1.28		>	17	22			>	26	20			>
V193	23	22	1.35		>	9	10	1.74		>	11	15			>	21	17			>
V194	37	32	1.39		.011	16	16	1.14		>	24	27			>	29	21			.099
V196	20	15	2.81		.013	12	12	1.33		>	12	13			.071	20	14			.063
V198	32	26	1.82		.023	17	17	1.28		>	21	23			>	28	20			.081
V206	39	34	1.49		.023	15	15	2.01		>	22	26			.090	32	23			>
V207	32	30	2.13		.009	14	13	.84		>	23	24			>	23	19			.075
V209	39	32	1.86		.019	16	14	.60		>	24	27			.081	31	19			>
V221	38	34	1.41		>	17	17	1.24		>	24	28			>	31	23			>
V224	20	19	2.48		.006	10	10	1.46		>	12	15			.063	18	14			>
V225	37	32	1.67		.023	17	17	1.41		>	24	28			.081	30	21			>
V227	12	8	1.54		>	8	7	1.46		>	9	8			>	11	7			>
V232	26	22	1.67		>	7	10	1.77		>	12	18			>	21	14			>

APPENDIX C

Data Summary: Sample Size (N_1 -Seeded, N_2 -Not Seeded)

S/NS Ratio

Probability (Wilcoxon-Mann Whitney)

($> =$ greater than .10)

(Fig. 19)

(Fig. 20)

Sta. No.	Bands Followed by Seeding				Bands Preceded by Seeding			
	N_1	N_2	Ratio S/NS	Prob.	N_1	N_2	Ratio S/NS	Prob.
A20	18	13	1.40	>	10	22	1.52	>
A21	12	5	2.50	>	4	13	.97	>
A22	18	12	.84	-.095	10	21	1.63	>
A23	10	11	.49	>	8	14	1.48	>
A24	10	10	.34	-.10	8	13	1.16	>
A25	13	11	.49	>	8	17	.79	>
A26	9	6	.39	>	5	9	3.06	>
A27	3	2	.04	-.10	2	3	4.80	>
A28	12	8	.77	-.088	4	15	.27	-.075
A29	18	12	1.47	>	8	22	1.31	>
A30	11	12	.81	>	8	17	1.14	>
A31	8	4	.10	>	5	6	2.85	>
A32	14	12	.47	-.005	8	17	.20	-.009
A33	19	14	.85	>	11	22	.67	>
A34	15	11	.34	-.031	8	18	.71	>
A35	13	9	.98	>	8	14	.95	>
A36	17	9	.98	>	6	19	.49	>
A37	19	13	1.76	>	11	21	.59	-.089
A38	14	9	1.65	>	9	14	.92	>
A39	18	12	1.86	>	8	22	.96	>
A40	0	0	0.00	>	0	0	0.00	>
A41	5	1	5.80	>	2	4	3.21	>
A42	8	4	1.01	>	4	7	.96	>
A43	0	0	0.00	>	0	0	0.00	>
A44	0	0	0.00	>	0	0	0.00	>
A45	0	0	0.00	>	0	0	0.00	>
A46	0	0	0.00	>	0	0	0.00	>
A47	0	0	0.00	>	0	0	0.00	>
NA	19	18	1.53	>	15	22	.86	>
NB	24	24	1.44	>	21	27	.70	>
N1	23	22	1.32	>	19	26	.93	>
N2	23	21	1.60	>	20	23	.79	>
N3	25	25	1.35	>	22	28	.89	>
N4	23	25	1.40	>	21	28	1.12	>
N5	25	24	1.33	>	22	27	1.15	>
N6	19	22	1.53	>	16	24	.83	>
N7	19	19	1.16	>	15	23	1.13	>
N8	18	12	.99	>	10	19	1.38	>
N9	25	25	1.75	>	22	28	.83	>
N10	14	16	1.10	>	15	15	.93	>
N11	21	20	1.51	>	18	23	1.16	>
N12	16	11	1.50	>	9	18	1.23	>
N13	24	23	1.50	.072	20	27	.95	>

Sta. No.	(Fig. 19) Bands Followed by Seeding				(Fig. 20) Bands Preceded by Seeding			
	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.
N14	24	23	1.78	>	22	25	1.07	>
N15	24	20	1.07	.076	18	26	.93	>
N16	17	18	1.90	.029	18	17	1.05	>
N17	21	17	2.31	.085	17	21	1.07	>
N18	8	4	1.61	>	4	8	1.41	>
N19	0	0	.91	>	0	0	0.00	>
N20	0	0	0.00	>	0	0	0.00	>
N21	0	0	0.00	>	0	0	0.00	>
S201	25	25	1.16	>	22	28	.94	>
S202	22	22	1.32	>	18	26	.94	>
S203	20	16	1.10	>	13	23	1.15	>
S204	25	25	1.27	>	22	28	.88	>
S205	21	19	.96	>	16	23	.88	>
S206	25	25	1.27	>	22	28	.83	>
S208	23	23	1.77	>	20	26	.82	>
S209	25	25	2.02	>	22	28	.93	>
S210	25	24	1.49	>	22	28	.69	>
S211	25	25	1.37	>	22	28	.81	>
S212	21	21	1.80	>	17	25	.86	>
S215	16	14	1.13	>	13	17	1.05	>
S217	23	22	1.14	>	19	26	.70	>
S221	25	25	1.41	>	22	28	.60	-.074
S225	22	22	1.45	>	18	26	.82	>
S226	22	23	1.26	>	19	26	.64	>
S227	0	0	0.00	>	0	0	0.00	>
S228	25	25	1.34	>	22	28	.73	>
S230	25	25	1.79	>	22	28	.73	>
S231	21	23	1.92	.089	19	26	.60	>
S232	25	24	2.46	.035	22	27	.69	>
S233	25	25	1.51	>	22	28	1.03	>
S234	23	25	1.36	>	22	27	.73	>
S235	25	25	1.45	>	22	28	.59	-.059
S236	25	25	1.74	>	22	28	.76	>
S238	24	23	1.78	>	20	27	1.08	>
S241	14	15	1.25	>	16	13	.52	-.10
S242	22	24	1.35	>	19	27	.89	>
S249	16	15	.98	>	13	18	1.50	.01
S251	24	23	1.37	>	20	27	.94	>
S255	6	3	.73	>	2	7	2.49	>
S256	5	1	.50	>	2	4	3.15	.067
S257	0	0	0.00	>	0	0	0.00	>
L6	17	19	1.45	>	18	19	1.02	>
L10	20	22	1.80	>	20	22	.77	-.031
L11	24	24	1.92	>	22	25	.74	>
L33	25	25	2.41	.074	22	28	.40	-.006
L46	25	25	3.34	.006	22	28	.40	-.015

Sta. No.	(Fig. 19) Bands Followed by Seeding				(Fig. 20) Bands Preceded by Seeding			
	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.
L52	22	19	3.10	.051	17	24	.40	-.013
L53	25	25	3.25	.018	22	28	.38	-.014
L54	22	17	2.01	>	16	22	.46	-.012
L128	21	19	3.13	.002	16	23	.48	-.013
L179	24	25	2.50	.025	21	27	.33	-.009
L191	25	23	2.34	.025	20	27	.44	-.018
L213	25	25	1.84	>	22	28	.86	>
L250	22	23	2.82	.082	19	26	.53	-.025
L259	25	25	1.69	.041	22	28	.59	-.057
L292	23	22	2.33	.052	20	26	.43	-.033
L303	25	25	2.52	.015	22	28	.44	-.022
L372	24	24	1.61	.041	21	26	.61	-.033
L434	23	21	2.43	>	20	24	.64	-.075
L435	21	24	.96	>	21	26	.83	>
L451	20	22	2.01	>	18	23	.68	>
L458	24	25	.94	>	22	27	1.15	>
L466	25	25	1.65	>	22	28	.41	-.006
L694	23	24	2.53	.020	20	27	.40	-.006
L1017	23	22	2.57	.072	18	26	.54	>
L1074	23	22	1.92	.062	19	27	.58	-.019
L1107	24	24	2.74	.047	21	27	.46	-.006
L1108	14	14	1.22	>	11	16	1.29	>
L1181	22	24	2.00	.003	21	27	.45	-.014
M124	23	25	2.43	.048	21	26	.58	>
V85	22	18	2.17	.075	17	23	.87	>
V121	23	22	1.36	>	19	27	.78	-.097
V138	24	23	1.92	>	20	27	1.10	>
V165	24	23	1.85	.048	20	27	.78	>
V166	25	25	1.62	.050	22	28	.90	>
V167	25	25	1.29	>	22	28	.85	>
V168	25	25	1.07	>	21	28	.94	>
V170	11	14	1.84	>	8	16	.75	>
V171	25	25	1.27	>	22	28	.79	>
V172	20	24	1.94	.062	21	23	1.06	>
V173	25	25	1.72	.090	22	28	.77	>
V174	22	21	3.23	.004	19	23	.71	>
V175	19	19	1.43	>	16	23	.90	>
V188	13	13	2.59	>	13	13	.79	>
V189	13	13	1.98	>	13	13	.59	>
V190	24	23	.97	>	20	27	.77	-.097
V191	25	25	1.09	>	22	28	1.01	>
V192	17	20	1.31	>	16	21	.69	>
V194	25	25	1.13	>	22	28	1.17	>
V196	21	23	1.51	>	19	25	.79	>
V198	20	21	1.52	>	16	24	1.69	>
V206	25	25	1.12	>	22	28	.85	>

Sta. No.	(Fig. 19) Bands Followed by Seeding				(Fig. 20) Bands Preceded by Seeding			
	N ₁	N ₂	Ratio S/NS	Prob.	N ₁	N ₂	Ratio S/NS	Prob.
V207	18	23	1.67	>	20	20	1.22	>
V209	24	23	1.84	>	20	27	.79	>
V221	25	25	1.32	>	22	21	.71	-.076
V224	16	13	1.93	>	13	16	.74	>
V225	23	24	1.66	.045	21	26	.84	>
V232	13	12	.52	>	8	18	1.40	>
V233	0	0	0.00	>	0	0	0.00	>
V234	18	13	1.73	>	10	22	.48	-.071
E442	25	25	.92	-.079	22	28	.84	>
E1742	20	21	1.71	.053	18	24	.97	>
E1253	24	22	1.85	>	20	26	.74	>
E1682	25	25	1.69	>	22	28	.53	-.042
E1743	25	25	1.87	>	22	28	.54	-.005
E3465	17	16	.89	>	13	20	.60	>
E3751	25	25	2.13	.052	22	28	.44	-.005
E4144	23	22	1.84	>	20	24	.84	>
E4767	22	22	1.50	>	19	24	1.20	>
E4867	23	25	1.23	>	22	27	1.09	>
E5098	24	23	.57	-.034	20	27	.53	-.038
E5151	24	24	1.04	>	21	27	1.11	>
E5184	24	23	1.36	.029	21	26	.70	-.069
E5756	22	20	1.53	>	17	24	.48	-.033
E6006	18	19	2.76	.046	17	20	.56	-.006
E6624	21	14	2.60	>	13	23	.55	-.023
E6736	24	23	1.89	.038	20	27	.61	-.036
E7735	24	23	2.92	.011	22	24	.48	-.029
E7946	25	25	1.77	>	22	28	.59	>
E8697	19	18	1.01	>	16	23	.95	>
E8752	24	24	1.42	>	21	26	.56	-.055
E8832	23	18	.74	-.089	16	25	.58	-.069
E9049	23	20	1.64	>	18	25	.51	-.017
E9221	19	15	2.10	>	15	18	.94	>
E9283	9	14	1.41	>	8	15	.55	>
E9458	12	12	1.23	>	12	11	1.69	>
E9512	24	25	.78	>	21	28	.66	>
ML00	0	0	0.00	>	0	0	0.00	>

APPENDIX D

LISTING OF BAND PRECIPITATION BY STATION AND YEAR

(-1 or blank space indicates missing data)

PRECIPITATION 1967-68																
A 21	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 23	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 24	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 26	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 27	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 29	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 30	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 31	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 32	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 33	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 34	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 35	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 36	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 37	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 38	1967-68	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
A 41																
A 42																
A 44																
A 45																
A 46																

A 47

E 442	.00	.01	.08	.04	.00	.04	.00	.00	.00	.02	.00	.10	.08	.01	.00	.05
	.18	.10	.44	.01	.15	.05										
E1142	.00	.09	.01	.03	.03	.30	.10	.02	.01	.03	.04	.07	.12	.04	.05	.00
	.93	.35	-1.	-1.	-1.	-1.										
E1253	.01	.14	.15	.10	-1.	-1.	.04	.00	.00	.02	.20	.23	.05	.03	.02	.20
	.78	.23	.82	.01	.03	.07										
E1682	.03	.05	.10	.02	.25	.00	.01	.00	.00	.00	.03	.10	.00	.00	.36	.10
	.25	.00	.43	.00	.08	.05										
E1743	.05	.02	.00	.05	.00	.42	.03	.04	.01	.01	.00	.02	.08	.05	.04	.00
	.52	.14	.47	.13	.00	.06										
E3465	-1.	-1.	-1.	-1.	-1.	-1.	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.25	.03
	.15	.00	.70	.15	.13	.15										
E3751	.00	.01	.21	.02	.30	.00	.00	.00	.00	.00	.00	.05	.04	.00	.25	.06
	.20	.12	.42	.00	.07	.02										
E4144	.13	.24	.05	.03	.02	.12	-1.	.01	.00	.02	.16	.05	.00	.15	.31	.15
	.80	.23	.55	.04	.17	.08										
E4767	.06	.18	.05	.04	.01	.11	.02	.02	.00	.03	.09	.10	.00	.00	.03	.00
	.27	.05	.55	.00	.04	.00										
E4867	.08	.07	.08	.04	.16	.02	.00	.00	.00	.06	.09	.24	.03	.02	.25	.04
	.48	.13	.55	.00	.03	.08										
E5098	-1.	-1.	-1.	-1.	.00	.21	.00	.00	.00	.00	.00	.13	.00	.08	.01	.04
	.06	.30	.25	.08	.15	.14										
E5151	.00	.05	.05	.02	.00	.04	.04	.04	.00	.00	.00	.07	.08	.00	.02	.04
	.15	.00	.30	.00	.00	.05										
E5184	.02	.05	.03	.02	.00	.46	.00	.09	.04	.05	.10	.23	.42	.26	.18	.10
	1.50	.67	.76	.18	.08	.14										
E5756	-1.	-1.	-1.	-1.	.00	.00	.04	.00	.02	.00	.00	.06	.00	.00	-1.	-1.
	.00	.00	.15	.00	.00	.00										
E6006	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.00	.00	.03	.08	.06	.25	.02
	.15	.04	.63	.00	.09	.13										
E6624	-1.	-1.	-1.	-1.	.00	.00	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.07	.02
	.00	.00	.25	.00	.03	.00										
E6736	-1.	-1.	-1.	-1.	.04	.22	-1.	.03	.00	.01	.07	.04	.16	.03	.20	.01
	.58	.13	.70	.00	.04	.11										
E7735	.04	.04	.09	.03	.00	.00	.08	.00	.07	.00	.04	.00	.04	.02	.10	.02
	.13	.00	.37	.00	.00	.00										

E7946	.04	.17	.03	.06	.02	.06	.09	.00	.00	.02	.16	.18	.02	.10	.07	.08
	.89	.21	.51	.00	.01	.08										
E8697	-1.	-1.	.17	.06	-1.	-1.	.02	.00	.00	.02	.16	.34	.17	.05	-1.	-1.
	.60	-1.	-1.	-1.	-1.	-1.										
E8752	.01	.01	.03	.00	.00	.05	.00	.00	.00	.00	.04	.00	.04	.00	.07	.01
	.07	.00	.16	.03	.00	.00										
E8832	-1.	-1.	-1.	-1.	.02	.04	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.06	.13
	.05	.25	.15	.00	.09	.08										
E9049	.04	.14	.18	.06	.11	.02	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.23	.06
	.10	.03	.39	.05	.08	.10										
E9221	.02	.03	.03	.00	.00	.16	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.33	.02
	.50	.22	.70	.07	-1.	-1.										
E9283	-1.	-1.	-1.	-1.	.00	.05	.02	.00	.01	.01	.03	.07	.01	.01	-1.	-1.
	.14	-1.	-1.	-1.	-1.	-1.										
E9458	-1.	-1.	-1.	-1.	-1.	-1.	.05	.00	.00	.05	.05	.04	.00	.04	.50	.40
	.53	.05	-1.	-1.	-1.	-1.										
E9512	.00	.00	.05	.04	.04	.08	.00	.02	.00	.03	.05	.13	.01	.00	-1.	-1.
	.06	.04	.50	.10	.00	.00										
L 6	.00	.25	.10	.02	.13	.02	.00	.00	.00	.00	.03	.15	.00	.00	-1.	-1.
	.26	.00	-1.	-1.	-1.	-1.										
L 10	.00	.11	.18	.08	.18	.01	.00	.00	.00	.00	.00	.00	.00	.00	.83	.00
	.22	.00	.41	.00	.00	.00										
L 11	.00	.16	.16	.04	.17	.00	.02	.00	.00	.00	.00	.09	.01	.00	.46	.02
	.22	.02	.48	.00	.16	.00										
L 33	.04	.06	.19	.04	.27	.02	.01	.00	.00	.00	.00	.06	.02	.02	.24	.30
	.28	.30	.34	.03	.08	.02										
L 46	.00	.09	.30	.05	.15	.00	.01	.00	.00	.00	.00	.02	.00	.00	.32	.04
	.10	.07	.96	.00	.07	.02										
L 52	.02	.07	.23	.09	.10	.00	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	.18	.10	.79	.00	.09	.08										
L 53	.02	.09	.30	.06	.20	.00	.00	.00	.00	.00	.00	.03	.07	.00	.18	.05
	.10	.03	.92	.00	.10	.11										
L 54	-1.	-1.	-1.	-1.	.05	.00	.00	.00	.00	.00	.00	.03	.03	.00	.22	.02
	.06	.02	.47	.02	.11	.12										
L 128	.09	.09	.41	.06	.15	.00	.25	.00	.05	.00	.02	.04	.05	.00	.27	.02
	.32	.10	.57	.11	.04	.00										
L 179	.04	.12	.11	.02	.08	.00	.00	.00	.00	.00	.00	.03	.00	.00	.18	.04
	.10	.02	.58	.00	.18	.02										
L 191	.00	.06	.12	.02	.12	.00	.00	.00	.00	.00	.00	.03	.00	.00	.46	.00
	.18	.08	.38	.00	.15	.02										

L 213															
	.00	.11	.24	.01	.14	.01	.00	.00	.00	.00	.00	.08	.00	.00	.86
	.25	.04	.34	.00	.18	.00									
L 250															
	.03	.03	.14	.02	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	-1.
	.00	.00	.33	.01	.06	.03									-1.
L 259															
	.07	.06	.08	.04	.28	.02	.01	.00	.00	.00	.02	.12	.03	.02	.38
	.29	.04	.34	.00	.00	.02									.44
L 292															
	.00	.18	.06	.00	.07	.03	.00	.00	.01	.00	.00	.15	.00	.00	.28
	.25	.00	.60	.00	.03	.00									.00
L 303															
	.00	.10	.14	.04	.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.28
	-1.	.04	.40	.00	.13	.00									.00
L 372															
	.08	.04	.16	.01	.20	.08	.10	.00	.05	.00	.02	.03	.06	.01	.22
	.30	.00	.55	.05	.06	.00									.05
L 434															
	.03	.08	.08	.02	.10	.00	.01	.00	.00	.00	.05	.20	.00	.00	.12
	.36	.00	.54	.00	.00	.03									.09
L 435															
	.06	.21	.16	.02	.12	.03	.01	.00	.00	.00	.05	.15	.00	.00	.36
	.34	.04	.63	.00	.12	.04									.04
L 451															
	.04	.03	.14	.01	.20	.02	.12	.00	.02	.00	.02	.04	.00	.00	.38
	.25	.05	.43	.02	.09	.00									.11
L 458															
	.06	.07	.10	.02	.08	.02	.00	.00	.00	.02	.07	.17	.00	.00	.15
	.26	.10	.25	.00	.00	.02									.00
L 466															
	.11	.05	.32	.14	.48	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09
	.24	.20	.42	.00	.27	.01									.25
L 694															
	.00	.02	.31	.04	.25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.42
	.06	.18	-1.	-1.	-1.	-1.									.00
L1017															
	.01	.04	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07
	.00	.00	.43	.00	.08	.07									.00
L1074															
	.12	.12	.15	.05	.25	.04	.01	.00	.00	.00	.00	.04	.02	.00	.25
	-1.	.05	.56	.08	.13	.12									.05
L1107															
	.00	.02	.25	.06	.11	.00	.00	.00	.00	.00	.00	.02	.00	.00	.20
	.19	.10	.48	.00	.04	.05									.00
L1108															
	.05	.19	.14	.07	.16	.04	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.18
	.00	.00	.42	.05	.20	.03									.00
L1181															
	.00	.07	.15	.03	.29	.00	.00	.00	.00	.00	.00	.05	.05	.00	.31
	.26	.05	.39	.05	.10	.00									.30
M 100															
M 101	1967-68														
	.00	.22	.00	.06	.06	.42	.10	.03	.02	.04	.11	.28	.43	.25	.15
	.87	.55	-1.	-1.	-1.										
M 102	1967-68														

M 103	1967-68															
	.07	.05	.00	.06	.15	.52	.12	.00	.03	.14	.13	.12	.00	.25	.26	.06
	1.03	.48	1.00	.00	.15	.05										
M 104	1967-68															
M 124																
	.14	.11	.20	.09	.12	.03	.02	.00	.03	.00	.02	.00	.07	.01	.29	.06
	.19	.07	.65	.04	.09	.00										
M 225	1967-68															
	.12	.12	.09	.04	.15	.05	.05	.00	.00	.05	.23	.35	.09	.02	.60	.02
	.48	.03	-1.	-1.	-1.	-1.										
M 226	1967-68															
	.10	.23	.20	.05	.09	.16	.23	.00	.00	.05	.21	.50	.15	.10	.30	.01
	1.00	.14	.78	.00	.01	.06										
M 228	1967-68															
	.37	.17	.10	.08	.16	.07	.06	.00	.00	.02	.27	.35	.10	.13	.70	.06
	.50	.03	.58	.00	.15	.03										
M 230	1967-68															
	.10	.50	.15	.03	.11	.10	.08	.00	.00	.02	.34	.30	.06	.10	.55	.17
	.67	.05	1.24	.08	.04	.10										
N A	1967-68															
	.05	.27	.15	.05	.18	.10	.10	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.40	.26
	1.05	.30	1.44	.11	.03	.18										
N 8	1967-68															
	.09	.17	.14	.04	.12	.01	.08	.00	.00	.04	.18	.40	.07	.09	.31	.01
	.80	.13	.50	.00	.03	.02										
N 1	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.01	.20	.24	.05	.07	-1.	-1.
	1.14	.31	.47	.00	.01	.11										
N 2	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	.01	.01	.01	.03	.16	.41	.18	.07	.14	.15
	.76	.17	.74	.08	.00	.10										
N 3	1967-68															
	.28	.17	.06	.07	.14	.12	.11	.01	.03	.02	.18	.25	.04	.07	.20	.12
	.87	.34	.50	.01	.18	.11										
N 4	1967-68															
	.01	.30	.14	.01	.08	.03	.11	.00	.00	.02	.14	.39	.12	.08	.07	.10
	1.06	.13	-1.	-1.	.01	.09										
N 5	1967-68															
	.01	.23	.13	.07	.18	.05	-1.	.01	.01	.07	.16	.29	.06	.06	.10	.10
	.88	.23	.44	.02	.12	.07										
N 6	1967-68															
	.02	.40	.11	.10	.18	.12	.13	.01	.01	.03	.22	.22	.03	.22	.34	.15
	.86	.28	-1.	-1.	-1.	-1.										
N 7	1967-68															
	.02	.35	.06	.08	.25	.04	.13	.01	.01	.06	.22	.21	.03	.10	.16	.14
	.77	.28	.31	.05	.32	.08										
N 8	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										
N 9	1967-68															
	.01	.15	.14	.08	.10	.01	.00	.00	.00	.02	.16	.30	.05	.02	.06	.18
	.74	.15	.72	.02	.00	.06										
N 10	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.01	.01	.04	.25	.26	.05	.14	.17	.25
	-1.	-1.	.31	.04	.30	.10										
N 11	1967-68															

	-1.	-1.	-1.	-1.	.33	.12	.19	.01	.02	.01	.30	.32	.10	.25	.41	.45
	.60	.38	.57	.10	.18	.11										
N 12	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										
N 13	1967-68															
	-1.	-1.	-1.	-1.	.22	.12	.08	.00	.00	.04	.21	.48	.11	.14	.50	.28
	1.02	.29	1.22	.19	.08	.13										
N 14	1967-68															
	.02	.31	.19	.09	.21	.06	.07	.03	.02	.02	.27	.29	.04	.12	.10	.34
	.54	.13	.37	.13	.15	.09										
N 15	1967-68															
	.07	.35	.17	.12	.05	.04	.03	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.30	.15
	.89	.09	1.21	.06	.01	.01										
N 16	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.00	.27	.31	.06	.07	.34	.15
	.81	.07	1.40	.09	.04	.04										
N 17	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	.15	.05	.01	.05	.27	.36	.12	.17	.34	.32
	.47	.14	.60	.13	.09	.14										
N 18																
N 19																
N 20																
N 21																
S 201	1967-68															
	.10	.13	.10	.08	.11	.11	.05	.02	.02	.01	.13	.24	.03	.16	.08	.19
	.94	.31	.57	.04	.06	.12										
S 202	1967-68															
	-1.	-1.	-1.	-1.	.17	.13	.12	.00	.04	.03	.18	.25	.06	.10	.20	.10
	.71	.35	-1.	-1.	-1.	-1.										
S 203	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										
S 204	1967-68															
	.29	.27	.08	.08	.16	.15	.13	.03	.04	.03	.20	.26	.06	.06	.21	.10
	.93	.36	.50	.00	.21	.10										
S 205	1967-68															
	.20	.11	.08	.00	.18	.18	.05	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.06	.06
	.69	.25	.44	.01	.24	.07										
S 206	1967-68															
	.04	.22	.02	.00	.30	.25	.23	.00	.00	.04	.15	.41	.15	.09	.10	.05
	.92	-1.	.40	.00	.01	.10										
S 208	1967-68															
	.08	.02	.20	.01	.17	.02	.06	.00	.00	.02	.27	.23	.10	.05	-1.	-1.
	.28	-1.	.50	.00	.16	.01										
S 209	1967-68															
	.04	.06	.27	.01	.18	.02	.05	.00	.00	.00	.30	.22	.10	.03	.35	.05
	.27	.00	.76	.00	.23	.03										
S 210	1967-68															
	.23	.15	.13	.03	.12	.11	.06	.00	.00	.00	.32	.32	.10	.10	.51	.05

	.40	.00	.72	.05	.13	.05										
S 211	1967-68															
	.27	.09	.25	.05	.15	.08	.05	.00	.00	.04	.21	.35	.10	.07	.47	.02
	.64	.15	.50	.00	.07	.02										
S 212	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	.10	.00	.00	.07	.36	.38	.20	.18	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										
S 215	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										
S 217	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.10	.37	.19	.00	.02	-1.	-1.
	.85	.20	.43	.00	.00	.30										
S 221	1967-68															
	.00	.03	.05	.02	.00	.04	.07	.02	.04	.02	.01	.03	.04	.03	.09	.08
	.24	.00	.15	.06	.00	.04										
S 231	1967-68															
	.05	.17	.51	.02	.20	.30	.08	.00	.00	.04	.34	.26	.15	.12	.50	.15
	.37	.05	.83	.06	.12	.02										
S 232	1967-68															
	.11	.30	.64	.03	.22	.20	.08	.00	.00	.01	.30	.20	.06	.05	.40	.11
	.28	.00	1.55	.13	.08	.05										
S 233	1967-68															
	.01	.37	.13	.03	.08	.03	.14	.00	.00	.02	.18	.38	.12	.09	.07	.06
	1.13	.15	.68	.14	.04	.10										
S 234	1967-68															
	.20	.13	.10	.01	.18	.04	.10	.00	.00	.03	.20	.39	.08	.05	.50	.01
	.45	.00	.42	.00	.23	.01										
S 235	1967-68															
	.10	.23	.01	.06	.00	.03	.12	.00	.01	.05	.13	.15	.01	.28	.25	.14
	.80	.15	.42	.00	.03	.10										
S 236	1967-68															
	.02	.35	.05	.05	.15	.06	.28	.00	.00	.04	.13	.40	.14	.09	.13	.21
	1.45	.15	1.05	.10	.01	.07										
S 238	1967-68															
	-1.	-1.	-1.	-1.	.01	.01	.10	.02	.01	.01	.03	.12	.02	.10	.14	.12
	.10	.07	.20	.20	.02	.01										
S 241	1967-68															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.05	.20	.50	.05	.15	.35	.02
	1.00	.12	.54	.00	.05	.05										
S 242	1967-68															
	.14	.25	.15	.05	.12	.12	.07	.00	.00	.05	.25	.33	.12	.12	-1.	-1.
	.79	-1.	-1.	-1.	-1.	-1.										
S 249	1967-68															
S 251	1967-68															
	.25	.27	.22	.12	.30	.08	.08	.00	.02	.03	.19	.45	.22	.04	.17	.27
	.79	.19	.76	.11	.02	.12										
S 255																
S 256																
S 257																
V 85																
	.08	.10	.12	.00	.12	.02	.00	.00	.00	.03	.20	.15	.04	.00	.48	.02

.30	-1.	.75	.05	.27	.01										
V 121															
V 138															
-1.	-1.	-1.	-1.	.09	.03	.10	.01	.02	.01	.20	.12	.01	.04	.21	.20
.24	.02	.20	.05	.07	.01										
V 165															
.10	.08	.11	.00	.16	.15	.03	.00	.03	.02	.24	.11	.02	.02	.23	.12
.22	.00	.62	.07	.08	.00										
V 166															
.05	.07	.23	.05	.18	.05	.01	.00	.00	.01	.35	.20	.04	.03	.30	.04
.41	.01	.72	.12	.23	.02										
V 167															
.04	.05	.11	.00	.18	.02	.00	.00	.00	.04	.20	.23	.04	.00	.20	.06
.35	.00	.42	.00	.02	.05										
V 168															
.02	.01	.09	.00	.20	.01	.00	.00	.00	.02	.07	.35	.06	.00	.17	-1.
.82	.09	.31	.01	.00	.10										
V 169															
.06	.05	.09	.00	.16	.00	.00	.00	.00	.03	.07	.16	.00	.00	.39	.10
.42	.00	.52	.00	.05	.05										
V 170															
-1.	-1.	-1.	-1.	.24	.05	.00	.00	.00	.00	.10	.10	.00	.00	-1.	-1.
.30	.06	-1.	-1.	-1.	-1.										
V 171															
.06	.05	.17	.00	.23	.02	.03	.00	.00	.00	.07	.15	.00	.00	.29	.14
.20	.03	.55	.02	.33	.00										
V 172															
.07	.04	.14	.07	.10	.07	.05	.00	.00	.00	.05	.05	.00	.00	.28	.05
.36	.00	.55	.00	.10	.00										
V 173															
.20	.10	.10	.02	.12	.06	.02	.00	.00	.00	.15	.08	.02	.00	.21	.07
.27	.02	.98	.04	.14	.00										
V 174															
.10	.08	.13	.03	.03	.05	.00	.01	.03	.00	.09	.05	.00	.00	.10	.06
.20	.00	.57	.04	.05	.04										
V 175															
.08	.07	.07	.04	.20	.04	.00	.00	.00	.04	.17	.21	.02	.00	.22	.09
.40	.03	-1.	-1.	-1.	-1.										
V 188															
.03	.02	.14	.00	.24	.02	.00	.00	.00	.03	.11	.20	.04	.00	.17	.20
.35	.00	.30	.00	.10	.09										
V 189															
.05	.05	.10	.04	.22	.05	.00	.00	.00	.04	.18	.12	.02	.00	.19	.01
.37	-1.	.47	.00	.01	.02										
V 190															
-1.	-1.	-1.	-1.	.19	.00	.00	.00	.00	.02	.13	.17	.00	.00	.21	.00
.25	.05	.35	.00	.00	.05										
V 191															
.03	.03	.17	.00	.24	.02	.00	.00	.00	.00	.08	.09	.00	.01	.33	.02
.37	.07	.40	.00	.30	.00										
V 192															
.03	.01	.13	.00	.25	.00	.00	.00	.00	.04	.10	.12	.00	.00	.36	.14
.27	.08	.15	.00	.00	.05										
V 193															

V 194	.00	.03	.12	.00	.27	.02	.00	.00	.00	.03	.13	.24	.05	.00	.25	.09
	.40	.05	.34	.00	.00	.04										
V 196	.08	.05	.15	.06	.30	.00	.04	.00	.00	.00	.00	.13	.01	.03	-1.	-1.
	.32	-1.	-1.	-1.	-1.	-1.										
V 198	.12	.17	.20	.07	.16	.11	.01	.00	.09	.01	.28	.11	.02	.00	.16	.08
	.45	.00	.95	.05	.03	.04										
V 206	.02	.03	.11	.02	.17	.00	.00	.00	.00	.00	.08	.10	.00	.00	.21	.03
	.27	.05	.40	.02	.30	.03										
V 207	.16	.15	.32	.17	.13	.12	.05	.01	.02	.02	.29	.13	.03	.01	.33	.10
	.55	.00	1.67	.07	.08	.04										
V 209	-1.	-1.	-1.	-1.	.00	.04	.00	.02	.09	.02	.08	.08	.03	.04	.12	.08
	.25	-1.	.07	.14	.00	.00										
V 221	.02	.03	.12	.04	.12	.01	.04	.00	.00	.04	.24	.26	.04	.04	.28	.03
	.37	.02	.44	.03	.02	.05										
V 224	.18	.10	.20	.04	.10	.09	.11	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.30	.06
	.35	.00	.75	.01	.10	.00										
V 225	.10	.09	.12	.02	.14	.04	.00	.00	.00	.02	.12	.10	.02	.00	.22	.05
	.25	.00	.80	.08	.32	.00										
V 227																
V 232	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										

PRECIPITATION 1968-69

A 21	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.04	.00	.00	.16	.19
	.00	.18	.00	-1.	.54	.14	.00	.06	.07							
A 23	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.01	.20	.07	.08	.00	.00	
	.01	.40	.11	.14	.06	.05	.02	.00	.01	.05	.09	.04	.00	.00	.47	.08
	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.03							
A 24	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.05	.07	.11	.15	.06	.01	
	.03	.51	.11	.07	.09	.12	.00	.01	.03	.13	.17	.05	.00	.01	.15	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.00	-1.	-1.							
A 26	-1.	-1.	-1.	-1.	.06	.00	.03	.02	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.04							
A 27	-1.	-1.	-1.	-1.	.02	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.00	.22	.05							
A 29	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.02	.06	.13	.05	.12	.04

	.09	.24	.06	.25	.24	.21	.07	.00	.03	.00	.19	.13	.00	.00	.37	.21
	.02	.50	.35	.24	.57	.07	.00	.10	.17							
A 30	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.02	.07	.07	.05	.04	.00
	.04	.27	.02	.19	-1.	-1.	.07	.00	.00	.00	.14	.07	.00	.00	.31	.14
	.00	.38	.04	.05	.50	.12	.00	.18	.11							
A 31	-1.	-1.	-1.	-1.	.00	.00	.01	.17	.00	.00	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.00	.04	.01							
A 32	-1.	-1.	-1.	-1.	.00	.00	.00	.26	.01	.00	.01	.08	.14	.01	.07	.01
	.00	.10	.05	.03	.00	.06	.00	.03	.01	.00	.05	.00	.00	.01	.19	.11
	.00	.15	.00	.02	.34	.08	.07	.14	.30							
A 33	-1.	-1.	-1.	-1.	.00	.00	.00	.29	.00	.00	.00	.07	.13	.04	.01	.00
	.00	.16	.01	.04	.06	.09	.00	.00	.01	.00	.06	.07	.00	.00	.32	.12
	.00	.11	.00	.01	.60	.08	-1.	.11	.05							
A 34	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.06	.10	.02	.04	.00
	.00	.11	.05	.02	.02	.12	.01	.02	.01	.00	.03	.08	.00	.00	.08	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.00	.15	.19							
A 35	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.00	.00	.04	.14	.01	.02	.00
	0.00	.13	0.00	.07	.09	.23	.02	.01	.02	0.00	.12	.09	0.00	0.00	-1.00	-1.00
	-1.	-1.	-1.	-1.	-1.	-1.	.23	.16								
A 36	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.02	.03	.00	.06	.00
	.00	.11	.03	.00	.02	.10	.00	.04	.03	.00	.04	.15	.01	.00	.10	.13
	.00	.17	.00	.00	.47	.13	.00	.14	.22							
A 37	-1.	-1.	-1.	-1.	.01	.01	.00	.03	.01	.01	.00	.10	.16	.01	.10	.05
	.11	.28	.10	.07	.21	.59	.21	.12	.05	.03	.13	.01	.05	.00	.03	.24
	.01	.41	.23	.08	.20	.20	.02	-1.	-1.							
A 38	-1.	-1.	-1.	-1.	.00	.00	-1.	-1.	-1.	-1.	.00	.05	.02	.00	.02	.01
	.04	.31	.04	.05	.17	.37	.24	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.00	.15	.14							
A 41																
A 42																
A 44																
A 45																
A 46																

A 47

E 442																
.10	.02	.11	.04	.02	.04	.02	.05	.00	.00	.02	.07	.14	.05	.16	.00	
.00	.15	.12	.22	.06	.09	.03	.02	.02	.03	.08	.04	.00	.00	.04	.19	
.00	.28	.00	.03	.39	.10	.00	.23	.19								
F1142																
-1.	-1.	-1.	-1.	.32	.34	.22	.47	.26	.07	.29	.25	.16	.06	.75	.60	
.75	.47	.12	.66	.53	1.15	.13	.05	.13	.07	.05	.10	.09	.38	.10	.54	
.22	.89	-1.	-1.	-1.	.10	.00	.39	.10								
E1253																
-1.	-1.	-1.	-1.	.02	.12	.04	.20	.02	.03	.10	.27	.12	.05	.17	.11	
.40	.75	.22	.39	1.05	1.58	.87	.20	.02	.11	.08	.09	.10	.47	.25	.57	
.12	1.37	.87	.35	.95	.10	.10	.87	.53								
E1682																
.07	.04	.02	.07	.01	.11	.00	.11	.00	.00	.02	.38	.39	.05	.33	.05	
.06	.26	.12	.54	.53	.36	.57	.33	.05	.29	.21	.06	.01	.08	.20	.48	
.06	1.15	.20	.05	.35	.08	.05	.18	.09								
E1743																
.05	.03	.16	.05	.03	.05	.10	.02	.03	.02	.12	.28	.13	.14	.10	.01	
.40	.40	.15	.40	.43	.74	.02	.03	.08	.16	.14	.06	.02	.13	.24	.18	
.09	.54	.25	.07	.97	.20	.00	.16	.12								
E3465																
.10	.13	.22	.07	-1.	-1.	.02	.19	.06	.05	.11	.24	.24	.06	.27	.05	
.12	.49	.15	.16	.11	.30	.05	.17	.18	.27	.35	.01	.02	.12	.14	.24	
.20	.55	.39	.15	.54	.06	.00	.46	.20								
E3751																
.05	.05	.03	.05	.00	.26	.00	.23	.00	.00	.02	.33	.28	.09	.24	.01	
.04	.13	.06	.21	.51	.83	.87	.23	.06	.30	.14	.01	.01	.11	.13	.55	
.11	1.24	.21	.08	.47	.26	.04	.30	.13								
E4144																
.15	.10	.12	.05	.25	.42	.05	.20	.10	.05	.08	.22	.22	.07	.35	.09	
.37	.52	.15	.62	.94	.72	.24	.00	.08	.08	.45	.09	.04	.32	.12	.43	
.13	.80	.70	.25	.66	.19	-1.	.48	.25								
E4767																
.03	.02	.08	.02	.02	.05	.02	.07	-1.	-1.	.02	.02	.08	.05	.21	.13	
.29	.42	.12	.55	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.10	.00	.05	.15	.30	
.10	.52	.55	.20	.68	.12	-1.	.12	.14								
E4867																
.08	.06	.04	.12	.08	.21	.00	.10	.00	.00	.09	.67	.48	.04	.34	.10	
.48	1.50	.66	2.58	.22	.56	.80	.28	.12	.33	.17	.04	.04	.38	.11	.74	
.33	2.12	.16	.02	.37	.07	.06	.40	.10								
E5098																
.12	.17	.36	.06	.02	.03	.01	.10	.05	.01	.05	.07	.19	.04	.15	.01	
.03	.09	.10	.12	.02	.05	.01	.16	.06	.05	.21	.01	.00	.02	.13	.04	
.02	.32	.00	.03	.52	.05	.00	.32	.27								
E5151																
.13	.01	.10	.00	.00	.01	.03	.00	.00	.00	.08	.17	.10	.15	-1.	-1.	
.08	.53	.04	.30	.13	.05	.15	.00	.02	.16	.17	.05	.00	.00	.54	.17	
.00	.07	.00	.01	.38	.12	.00	.05	.05								
E5184																
.24	.10	.20	.00	.28	.42	.20	.62	.24	.14	.44	.40	.30	.44	.64	.26	
.28	.70	.10	.38	.43	.43	.04	.08	.20	.10	.18	.10	.18	1.10	.00	.60	
.10	.65	.33	.10	.30	.02	.00	.15	.24								
E5756																
.03	.02	.14	.00	.00	.00	-1.	.00	.00	.00	.00	.10	.08	.07	.05	.00	
.00	.17	.10	.10	.15	.23	.34	.14	.00	.00	.02	.00	.04	.01	.25	.12	
.01	.50	.14	.03	.52	.25	.00	.14	.13								

E6006	-1.	-1.	-1.	-1.	.00	-1.	.00	.25	.00	.00	.00	.58	.58	.24	.15	.10
	.11	.07	.07	.16	1.15	1.46	1.55	.25	.17	.32	.40	.00	.06	.45	.51	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.15	.37	.14							
E6624	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.00	.00	.07	.05	.05	.14	.00
	.00	.04	.09	.05	.04	.20	.42	.01	.01	.03	.01	.00	.00	.00	.15	.08
	.00	.50	.05	.06	.16	.24	.00	-1.	-1.							
E6736	.05	.00	.17	.00	.08	.14	.20	.27	.10	.03	.12	.28	.10	.06	.24	.16
	.24	.43	.15	.40	.44	1.00	.03	.00	.05	.02	.02	.05	.05	.36	.09	.43
	.13	.85	.57	.20	.80	.15	.00	.51	.25							
E7735	.03	.04	.00	.02	.00	.00	.00	.04	.00	.00	.02	.08	.05	.03	.02	.08
	.24	.23	.08	.15	.29	.77	.31	-1.	-1.	-1.	-1.	.05	.01	.09	.15	.19
	.09	.50	.20	.19	.45	-1.	.02	.28	.09							
E7946	.27	.16	.04	.07	.06	.11	.05	.20	.05	.03	.09	.17	.13	.02	.33	.03
	.12	.15	.08	.17	.75	.38	.18	.00	.01	.10	.22	.13	.04	.18	.16	.28
	.10	.54	.56	.23	.70	.06	.04	.28	.52							
E8697	.23	.22	.01	.02	.10	.02	.19	-1.	.13	.02	.09	.21	.25	.08	.10	.01
	.11	.10	.09	.22	-1.	-1.	-1.	-1.	.00	.13	.07	.24	.03	.21	.20	.25
	.05	.44	.23	.14	.53	.05	-1.	.20	.30							
E8752	.06	.02	.10	.00	.00	.00	.00	.11	.00	.00	.02	.04	.22	.02	.00	.23
	.00	.14	.04	.04	.13	.22	.10	.00	.03	.01	.09	.09	.00	.00	.36	.15
	.00	.16	.00	.05	.35	.13	.00	.17	.05							
E8832	.13	.12	.25	.03	.00	.04	.00	.10	.00	.00	.02	.05	.11	.01	.10	.01
	.00	.05	.15	.10	.05	.16	.01	.10	.04	.01	.11	.04	.00	.03	.14	.06
	.00	.10	.08	.03	.42	.10	.00	.14	.05							
E9049	.06	.04	.01	.04	.00	.13	.00	.20	.02	.03	.00	.20	.17	.10	.09	.00
	.03	.09	.06	.14	.22	.50	.60	.20	.06	.47	.23	.00	-1.	-1.	-1.	.51
	.07	.75	.45	.19	.60	.35	-1.	.22	.16							
E9221	.05	.05	.19	.02	.05	.07	.18	.16	.07	.00	-1.	-1.	-1.	-1.	.19	.10
	.70	.20	.05	.55	-1.	-1.	-1.	.00	.07	.06	.05	-1.	.00	.15	.15	.38
	.06	.68	.80	.30	.55	.10	.00	-1.	-1.							
E9283	.20	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.04	.08	.01	-1.	.02
	.09	.08	.09	.10	.24	.42	.10	.05	.02	.00	.05	.04	.00	.00	.27	.08
	.00	.64	-1.	-1.	-1.	.13	.00	.31	.11							
E9458	.28	.35	.05	.09	.02	.06	.05	.14	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.							
E9512	.09	.05	.37	.07	.03	.02	.00	.00	.12	.10	.10	.16	.17	.03	.21	.02
	.02	.22	.13	.20	.09	.19	.09	.06	.12	.40	.34	.04	.05	.12	.02	.07
	.01	.16	.15	.13	.25	.22	.00	.13	.05							
L 6	.08	.06	.02	.08	.00	.14	.00	.05	.00	.00	-1.	-1.	-1.	-1.	.26	.35
	.70	1.00	.54	1.12	.13	.83	1.05	-1.	-1.	-1.	-1.	.05	-1.	.38	.21	.85
	.38	1.99	.16	.02	.02	.15	.10	-1.	-1.							
L 10	.06	.06	.01	.02	-1.	-1.	.00	.09	.00	.00	.04	.53	.21	.18	.14	.20

	.20	.39	.35	.84	.04	.56	.68	.40	.05	.18	.35	-1.	.00	.26	.14	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.04	.24	.09							
L 11	.06	.06	.02	.03	.02	.08	.00	.10	.00	.00	.02	.42	.22	.23	.15	.24
	.35	.38	.14	.80	.10	.75	.80	.18	-1.	-1.	-1.	.00	.29	.15	.60	
	.16	1.74	.14	.01	.02	.22	.08	.22	.13							
L 33	.06	.05	.01	.02	.00	.17	.00	.20	.00	.00	.02	.28	.36	.05	.22	.01
	.02	.14	.06	.24	.36	.91	1.04	.22	.06	.32	.21	-1.	.02	.13	.17	.62
	.15	1.40	.25	.11	.45	.30	.04	.30	.42							
L 46	.06	.12	.00	.02	.00	.15	.00	.20	.00	.00	.00	.36	.25	.20	.12	.14
	.14	.12	.05	.13	1.37	1.83	1.72	.19	.09	.50	.25	.00	.00	.25	.39	.35
	.28	2.20	.90	.72	1.00	.65	.05	.45	.26							
L 52	.05	.11	.00	.05	.00	.18	.00	.24	.02	.03	.00	.37	.33	.17	.15	.13
	.14	.08	.03	.12	1.10	1.25	1.48	.23	.10	.41	.30	.00	.02	.24	.48	.62
	.19	1.97	.85	.49	1.88	.66	-1.	-1.	-1.							
L 53	.07	.10	.02	.09	.00	.15	.00	.20	.00	.04	.00	.27	.27	.08	.13	.15
	.05	.05	.03	.16	.98	1.67	1.78	.23	.08	.32	.27	.00	.00	.11	.38	.64
	.30	2.45	1.17	.80	1.75	.70	.03	.40	.19							
L 54	-1.	-1.	-1.	-1.	.00	.12	.00	.16	.00	.00	-1.	-1.	-1.	-1.	.10	.00
	.03	-1.	-1.	-1.	.14	.88	1.16	.15	.10	.26	.23	.00	.00	.04	.09	.74
	.12	.82	.45	.44	.76	.38	.04	.26	.12							
L 128	-1.	-1.	-1.	-1.	.00	.08	.00	.10	.00	.02	.02	.28	.26	.08	.12	.22
	-1.	-1.	-1.	-1.	.41	1.31	1.18	.10	.11	.14	.10	-1.	.04	.52	.32	.30
	.20	1.64	1.00	.60	1.25	.12	-1.	.30	.23							
L 179	.04	.00	.00	.00	.10	.00	.18	.00	.00	.00	.03	.46	.26	.22	.22	.09
	.10	.12	.00	.14	.50	-1.	-1.	.22	.05	.12	.40	.00	.06	.15	.38	.80
	.34	1.72	.64	.07	.47	.44	.01	.42	.11							
L 191	.06	.06	.02	.02	.00	.10	.00	.14	.00	.00	.02	.33	.21	.07	.24	.03
	.04	-1.	-1.	-1.	.17	.54	.51	.20	.04	.08	.20	.00	.02	.20	-1.	.50
	.14	1.12	.16	.00	.11	.15	.05	.18	.07							
L 213	.07	.06	.02	.00	.00	.12	.00	.16	.00	.00	.03	.45	.18	.20	.23	.02
	.08	.17	.10	.82	.13	.42	.76	.22	.02	.08	.36	-1.	.04	.20	.17	.67
	.06	1.07	.04	.00	.00	.15	.02	.16	.09							
L 250	-1.	-1.	-1.	-1.	.00	.05	.00	.05	.00	.00	.00	.06	.05	.09	.10	.00
	.00	.10	.02	.12	.17	.58	.82	.05	.00	.10	.07	.00	-1.	-1.	.06	.30
	.05	.75	.26	.21	.60	.23	.02	.30	.11							
L 259	.05	.04	.02	.08	.00	.13	.00	.12	.00	.00	.02	.35	.37	.05	.26	.12
	.08	.19	.06	.50	.40	.34	.68	.28	.10	.31	.28	.05	.02	.20	.24	.45
	.14	1.48	.18	.04	.16	.08	.06	.18	.00							
L 292	-1.	.10	.02	.05	.00	.07	.00	.08	.00	.00	.00	.32	.38	.06	.18	.15
	.32	-1.	-1.	-1.	.26	.84	.73	.26	.10	.14	.15	.02	.00	.16	.15	.64
	.15	1.92	.16	.05	.40	.19	.06	.16	.10							
L 303	.07	.05	.00	.05	.00	.06	.00	.16	.00	.00	.00	.46	.28	.16	.16	.04
	.07	.14	.00	.22	.32	.84	.90	.20	.02	.12	.36	.00	.05	.14	.34	.68
	.14	1.52	.29	.03	.12	.30	.08	.30	.08							
L 372	.10	.04	.06	.04	.00	.12	.00	.08	.02	.03	.00	.24	.20	.08	.15	.00

	.07	.26	.12	.28	.22	.44	.92	.18	.04	.17	.10	.06	.00	.11	.24	.52
	.12	1.53	.16	.30	.38	.07	.00	.16	.08							
L 434	-1.	-1.	-1.	-1.	.02	.08	.00	.04	.00	.00	.00	.33	.36	.06	.29	.17
	.28	.51	.27	1.26	.38	.78	.96	-1.	-1.	-1.	-1.	.04	.00	.10	.15	.63
	.18	1.97	.27	.12	1.19	.42	.06	.37	.09							
L 435	.09	.06	.02	.07	.03	.14	.00	.08	.00	.00	-1.	.40	.23	.29	.27	.12
	.38	.84	.40	1.42	-1.	-1.	-1.	.37	.08	.10	.38	-1.	.00	.45	.14	.72
	.23	2.30	.16	.10	.11	.09	.04	.54	.08							
L 451	.05	.06	.02	.05	.00	.15	.00	.05	-1.	-1.	.00	.30	.24	.07	.24	.00
	.03	.05	.11	.31	.20	.49	.63	.21	.02	.17	.14	-1.	.02	.07	.21	.53
	.10	1.05	.23	.12	.43	.10	-1.	-1.	-1.							
L 458	.04	.07	.02	.02	.03	.12	.00	.08	.00	.00	.03	.37	.37	.07	.35	.19
	.17	.92	.22	1.17	.15	.18	.44	.24	.05	.23	.13	.02	-1.	-1.	.00	.44
	.10	1.22	.00	.02	.03	.07	-1.	.20	.05							
L 466	.07	.07	.02	.02	.00	.16	.01	.25	.01	.01	.00	.40	.64	.14	.21	.00
	.05	.18	.05	.28	.60	.85	.70	.15	.09	.36	.30	-1.	.00	.22	.19	.55
	.13	1.15	.41	.24	.64	.38	.07	.28	.25							
L 694	.03	.10	.00	.00	.00	.10	.00	.20	.00	.00	.00	.30	.14	.15	.19	.00
	.02	.07	.05	.07	.43	.98	.95	.18	.06	.35	.13	.00	.00	.07	.30	.77
	.24	1.35	.45	.51	.67	.42	.10	.25	.27							
L1017	.07	.08	.00	.00	-1.	-1.	-1.	-1.	-1.	-1.	.00	.09	.00	.07	.02	.00
	.00	.10	.03	.05	.10	.52	.60	.05	.00	.10	.05	.00	.00	.00	.14	.29
	.02	.73	.25	.25	.38	.35	.00	.19	.15							
L1074	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.10	.05	.00	.35	.45	.15	.15	.08
	.09	.08	.10	.25	.65	1.07	1.60	.25	.05	.48	.27	.00	.03	.15	.31	.50
	.11	.82	.85	.65	.95	.55	.10	.41	.17							
L1107	.02	.10	.03	.00	.00	.12	.00	.15	.00	.00	.00	.40	.11	.05	.15	.00
	.02	.08	.02	.09	.45	.72	.77	.18	.05	.21	.10	.00	.02	.11	.20	.80
	.10	.96	.35	.23	.40	.45	.35	.25	.18							
L1108	-1.	-1.	-1.	-1.	-1.	-1.	.00	.05	-1.	-1.	-1.	-1.	-1.	-1.	.02	.00
	.00	.15	.05	.32	.12	.35	.30	.05	.04	.05	.05	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	.09	.05	.14	.44	.02	.25	.17							
L1181	.04	.07	.01	.05	-1.	-1.	-1.	-1.	.00	.00	.00	.38	.51	.10	.28	.01
	.08	.20	.05	.32	.45	.60	.80	.24	.12	.45	.37	-1.	-1.	.25	.10	.61
	.29	1.57	.29	.10	.42	.16	.07	.43	.35							
M 100																
M 101	1968-69															
	.13	.06	.13	.07	.60	.67	.18	.30	.46	.25	.28	.45	.20	.15	.55	.43
	1.20	.65	.10	1.15	1.07	.70	.02	.02	.40	.30	.33	.55	.15	.70	.08	.50
	.25	.50	.60	.33	.67	.10	.00	.60	.48							
M 102	1968-69															

M	103	1968-69															
			.15	.19	.20	.37	.40	.45	.10	.40	.24	.02	.22	.44	.15	.06	.60
			.95	1.00	.35	1.45	1.45	.45	.27	.00	.09	.45	.45	.07	.10	.85	.17
			.25	.87	1.18	.75	.85	.30	.00	.83	.52						
M	104	1968-69															
			.13	.13	.10	.14	.38	.30	.08	.45	.09	.03	.23	.25	.30	.10	.37
			.35	-1.	-1.	-1.	-1.	-1.	-1.	.00	.20	.20	.55	.03	.03	.47	.16
			.20	.65	.98	.35	.67	.18	.05	.60	.30						
M	124																
			.07	.09	.08	.04	-1.	-1.	.00	.12	.00	.00	.00	.19	.13	.05	.06
			.08	.30	.08	.23	.27	.71	.83	.12	.03	.15	.03	.05	.00	.05	.16
			.08	2.05	.46	.17	.83	.33	.07	.30	.11						
M	225	1968-69															
			-1.	-1.	-1.	-1.	.05	.20	.00	.22	.03	.01	.13	.33	.18	.02	.27
			.17	.34	.36	1.05	.38	.93	.05	.20	.08	.22	.18	.06	.08	.40	.28
			.06	1.48	.00	.00	.78	.05	.13	.65	.50						
"	226	1968-69															
			.13	.17	.08	.07	.00	.18	-1.	.23	.00	.00	.05	.37	.11	.11	-1.
			-1.	-1.	.30	.30	.30	.41	.08	.25	.05	.32	.13	.10	.10	.78	.12
			.23	1.20	.00	.10	.70	.03	.13	.92	.24						
M	228	1968-69															
			.12	.18	.05	.06	.00	.25	.00	.30	.04	.01	.14	.41	.22	.05	.24
			.35	.65	.31	.63	.61	1.13	.23	.26	.13	.27	.23	.05	.13	.50	.33
			.05	1.84	.05	.05	1.20	.07	.10	.75	.58						
M	230	1968-69															
			.25	.16	.14	.10	.00	.23	.00	.20	.01	.02	.06	.50	.20	.05	.22
			.62	1.35	.22	.56	1.09	2.60	.76	.16	.04	.20	.19	.10	.15	.55	.46
			.18	2.56	1.00	.70	1.55	.18	.12	.97	.57						
N	A	1968-69															
			.17	.13	-1.	-1.	.04	.28	.09	.36	.08	.07	.18	.30	.16	.10	.31
			.92	1.00	.32	.87	1.05	1.74	.86	.25	.05	.22	.23	-1.	.21	.76	.30
			.23	1.76	-1.	.30	1.15	.09	.19	1.49	.55						
N	8	1968-69															
			.10	-1.	-1.	.05	.00	.20	.00	.27	.00	.01	.20	.31	.16	.07	.36
			.51	.13	.27	.45	.42	.64	.05	.22	.10	.25	.17	.09	.12	.57	.16
			.05	1.36	.00	.05	.88	.03	.23	.54	.29						
N	1	1968-69															
			.18	.14	.03	.07	.07	.15	.07	.19	.16	.03	.10	.17	.14	.04	.19
			.11	.06	.05	.15	.67	.20	.10	.00	.01	.09	.15	.26	.02	.19	.09
			.03	.30	.13	.08	.44	.06	.09	.35	.35						
N	2	1968-69															
			.18	.15	.10	.05	.07	.13	.16	.09	.14	.01	.26	.27	.22	.17	.29
			.80	.28	.07	.28	.58	.49	.09	.03	.01	-1.	-1.	.22	-1.	-1.	.25
			.16	.97	.27	.20	.49	.06	.22	.76	.53						
N	3	1968-69															
			.21	.22	.08	.13	.05	.12	.06	.26	.07	.01	.04	.26	.13	.11	.25
			.33	.26	.04	.36	.38	.33	.13	.03	.04	.15	.18	.14	.07	.23	.15
			.08	.84	.55	.26	.58	.08	.17	.33	.48						
N	4	1968-69															
			.23	.21	.09	.04	.03	.12	.14	.25	.06	.04	.06	.34	.11	.14	.24
			.64	.78	.36	.42	.94	.49	.38	.21	.01	.12	.15	.08	.06	.36	.14
			.08	.75	.39	.18	.79	.08	.25	.40	.44						
N	5	1968-69															
			.21	.27	.10	.06	.07	.12	.07	.37	.02	.04	.03	.27	.10	.08	.24
			.27	.53	.25	.45	.58	.42	.21	.14	.04	.13	.20	.09	.04	.21	.20
			.05	.47	.37	.17	.57	.06	.08	-1.	-1.						
N	6	1968-69															
			.25	.22	.05	.18	.11	.14	.12	.45	.01	.01	.03	.27	.18	.08	-1.
			-1.	-1.	-1.	-1.	.60	-1.	-1.	.10	.07	.14	.23	-1.	-1.	-1.	-1.
			.09	.84	.87	.29	.67	.05	.08	.35	.43						

N 7	1968-69															
	.18	.17	.07	.02	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.09	.04	.09	.18	.09	.02	.09	.33	.54
	.06	.41	.26	.09	.56	.07	.09	.22	.31							
N 8A	1968-69															
	.06	.24	.10	.05	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.20	.06
	.04	.30	.20	.33	.25	.34	.91	.04	.03	.06	.19	.11	.01	.11	.22	.20
	.01	.75	.36	.18	.53	.12	.01	.51	.24							
N 9A	1968-69															
	.21	.21	.09	.04	.04	.11	.06	.25	.00	.09	.05	.17	.10	.07	.18	.17
	.33	.58	.34	.27	.76	.90	.39	.21	.02	.13	.18	.08	.07	.28	.28	.58
	.12	.99	.67	.19	.86	.06	.14	.55	.35							
N 10	1968-69															
	.22	.19	.08	.05	.04	.11	.07	.26	.01	.09	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.19	.06	.13	.20	-1.	.00	.11	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.13	.31	.34							
N 11	1968-69															
	.19	.24	.07	.40	.02	.50	.12	.51	.03	.16	.10	.27	.10	.01	.33	.37
	.37	1.24	.43	.93	.64	1.28	.71	.30	.10	.16	.31	.08	.01	.10	.25	.58
	.13	.99	1.23	.43	1.10	.07	.10	.59	.35							
N 12A	1968-69															
	-1.	-1.	-1.	-1.	.00	.01	.07	.07	.01	.02	.09	.03	.13	.02	.11	.18
	.15	.37	.16	.31	.53	.82	.82	.05	.03	.02	.12	.11	.03	.07	.26	.36
	.01	.56	.45	.18	.49	.10	.00	.56	.14							
N 13	1968-69															
	.16	.18	.09	.07	.04	.53	.11	.40	.06	.06	.25	.58	.30	.19	.35	.86
	1.51	1.04	.30	1.20	1.12	2.05	.71	.27	.20	.35	.24	.10	.14	.62	.12	.90
	.31	1.82	.66	.24	1.50	.06	.13	1.68	.67							
N 14	1968-69															
	.23	.20	.11	.06	.03	.14	.05	.25	.03	.04	-1.	-1.	-1.	-1.	.28	.25
	.20	.69	.41	.50	.76	.67	.54	.32	.05	.23	.16	.08	.04	.26	.24	.40
	.07	.81	.45	.16	.59	.09	.09	.42	.45							
N 15	1968-69															
	.20	.18	.12	.03	.01	.17	.04	.17	.00	.02	.15	.29	.14	.08	.18	.64
	.85	.66	.23	1.10	1.16	1.45	.73	.13	.01	.15	.08	.04	.14	.67	.26	.82
	.37	1.85	.46	.14	1.45	.10	.15	1.42	.55							
N 16	1968-69															
	.22	.14	.10	.05	.03	.14	.04	.17	.00	.02	.09	.27	.17	.08	.12	.74
	.52	.83	.21	.54	1.23	1.10	.97	.14	.01	.17	.09	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.14	.95	.68							
N 17	1968-69															
	.22	.17	.15	.09	.02	.35	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.17	.35
	.34	.55	.12	.61	.83	.84	.36	.18	.05	.20	.08	.14	.07	.23	.19	.70
	.10	.50	.66	.38	.79	.08	.10	.36	.30							
N 18																
N 19																
N 20																
N 21																

S 201	1968-69															
	.31	.25	.08	.27	.10	.15	.13	.27	.09	.02	.04	.18	.17	.13	.24	.06
	.22	.32	.12	.38	.38	.35	.10	.10	.03	.19	.30	.15	.07	.09	.15	.38
	.11	.72	.30	.19	.52	.05	.20	.22	.51							
S 202	1968-69															
	.22	.15	.08	.11	.08	.10	.21	.30	.05	.04	.05	.25	.10	.07	.26	.17
	.39	.33	.13	.29	.55	.35	.27	.06	.01	.23	.25	.13	.05	.23	.15	.43
	.10	.98	.57	.18	.50	.13	.08	.43	.50							
S 203	1968-69															
	.33	.22	.12	.13	.10	.15	.15	.30	.18	.06	.05	.25	.21	.12	.35	.13
	.38	.35	.10	.34	.49	.47	.19	.06	.03	.21	.25	.15	.06	.15	.17	.42
	.05	.67	.28	.16	.42	.08	.41	.33	.40							
S 204	1968-69															
	.24	.24	.08	.17	.05	.17	.10	.32	.08	.02	.04	.30	.16	.10	.27	.23
	.35	.28	.04	.36	.39	.34	.14	.04	.05	.16	.18	.12	.06	.27	.20	.41
	.10	.88	.54	.29	.55	.08	.17	.32	.52							
S 205	1968-69															
	.35	.16	.16	.05	.15	.13	.22	.06	.25	.05	.05	.29	.22	.14	.27	.10
	.40	.23	.06	.21	-1.	-1.	-1.	.10	.00	.16	.19	.15	.05	.21	.23	.43
	.13	.54	.33	.13	.45	.07	.18	.40	.37							
S 206	1968-69															
	.17	.24	.10	.03	.05	.14	.08	.22	.17	.04	.25	.37	.14	.15	.40	.96
	.62	.33	.11	.02	.45	.34	.06	.27	.02	.21	.10	.12	.14	.65	.20	.50
	.10	.59	.00	.00	.50	.04	.27	.67	.50							
S 208	1968-69															
	.10	.12	.05	.05	.00	.08	.00	.20	.00	.01	.09	.40	.16	.00	.22	.18
	.18	.59	.18	1.43	.48	.79	.12	.30	.10	.21	.12	.05	.10	.36	.46	.67
	.02	1.51	.01	.08	1.10	.02	.03	.40	.40							
S 209	1968-69															
	.10	.14	.05	.07	.00	.10	.00	.26	.00	.02	.08	.45	.18	.00	.21	.07
	.16	.75	.28	1.81	.62	.83	.15	.28	.02	.16	.20	.03	.10	.33	.25	.73
	.03	1.59	.02	.06	.91	.05	.00	.36	.30							
S 210	1968-69															
	-1.	.06	.05	.07	.00	.06	.00	.32	.00	.00	.02	.39	.19	.03	.27	.91
	.41	.84	.42	1.00	.59	1.46	.16	.31	.12	.25	.21	.00	.03	.62	.18	.55
	.05	2.23	.05	.08	1.30	.10	.00	.80	.40							
S 211	1968-69															
	.11	.16	.06	.05	.04	.20	.00	.32	.01	.02	.10	.32	.17	.03	.31	.25
	.37	.28	.31	.74	.45	.75	.05	.20	.05	.25	.19	.10	.11	.40	.14	.71
	.03	1.31	.00	.05	.78	.05	.15	.75	.55							
S 212	1968-69															
	.24	.25	.11	.10	.04	.27	.06	.43	.00	.02	.22	.53	.28	.14	.44	1.27
	1.31	1.23	.57	1.07	2.17	3.20	1.24	.30	.10	.45	.36	.15	.22	.68	.28	.60
	.15	2.35	.22	.45	1.62	.12	.30	1.50	1.20							
S 215	1968-69															
	.30	.11	.11	.05	.07	.05	.15	.05	.18	.03	.11	.25	.19	.09	.17	.11
	.38	.25	.05	.19	.47	.34	.03	.17	.00	.08	.07	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.							
S 217	1968-69															
	.21	.16	.08	.05	.11	.13	.38	.25	.19	.02	.34	.30	.17	.10	.42	.51
	.35	.16	.18	.36	.42	.30	.00	.27	.00	.23	.16	.25	.11	.89	.42	.52
	.17	.67	.02	.23	.35	.04	.25	.89	.5							
S 221	1968-69															
	.13	.08	.11	.00	.00	.00	.00	.15	.00	.00	.04	.16	.10	.02	.02	.02
	.05	.10	.10	.06	.12	.20	.15	.00	.04	.00	.10	.00	.00	.00	.31	.13
	.00	.34	.13	.09	.30	.12	.15	.16	.12							
S 231	1968-69															
	.17	.17	.07	.10	.00	.24	.02	.36	.05	.02	.13	.48	.14	.02	-1.	-1.

	-1.	-1.	-1.	-1.	.57	1.85	.15	.30	.10	.32	.25	.05	.10	.39	.44	.95
	.06	2.14	.13	.23	.90	.11	.00	.90	.48							
S 232	1968-69															
	.19	.18	.10	.09	.04	.20	.00	.20	.04	.05	.06	.49	.25	.00	.17	.47
	1.10	1.72	.70	.98	1.36	3.70	1.10	.25	.07	.21	.15	.03	.15	.48	.35	.73
	.25	3.57	.82	.83	2.95	.15	.05	-1.	-1.							
S 233	1968-69															
	.29	.25	.10	.05	.06	.16	.20	.28	.10	.04	.08	.43	.17	.15	.34	.32
	.65	.71	.35	.30	1.08	.52	.35	.29	.02	.13	.19	.09	.10	.37	.14	.55
	.11	.84	.45	.16	.78	.12	.20	.38	.42							
S 234	1968-69															
	.07	.15	.04	.04	.00	.19	.00	.19	.00	.00	.12	.31	.20	.01	.29	.45
	.20	.40	.28	.87	.50	.89	.03	.19	.12	.15	.16	.04	.08	.45	.17	.60
	.05	1.68	.00	.00	1.02	.04	.12	.70	.35							
S 235	1968-69															
	.38	.14	.06	.14	.10	.20	.05	.20	.04	.03	.03	.27	.21	.19	.29	.05
	.09	.07	.16	.25	.69	.50	.15	.00	.00	.08	.22	.18	.01	.17	.16	.33
	.10	.39	.46	.18	.65	.13	.02	.20	.45							
S 236	1968-69															
	.20	.14	.06	.05	.08	.14	.08	.33	.12	.02	.41	.43	.13	.12	.26	.88
	1.38	.69	.35	.46	.83	.92	.32	.25	.04	.14	.14	.15	.15	1.30	.20	.85
	.34	1.98	.17	.05	1.37	.08	.44	1.20	.77							
S 238	1968-69															
	.13	.15	.09	.05	.00	.02	.10	.08	.01	.02	.07	.03	.15	.02	.11	.17
	.20	.37	.17	.33	.56	.91	.77	.09	.04	.01	.13	.09	.03	.08	.40	.40
	.01	.36	.50	.17	.50	.10	.00	.50	.16							
S 241	1968-69															
	.10	.18	.06	.05	.00	.15	.00	.21	.00	.00	-1.	-1.	-1.	-1.	.40	.41
	.32	.12	.23	.40	.41	.54	.10	.19	.08	.29	.17	.05	.11	.57	.12	.56
	.07	1.07	.00	-1.	-1.	.04	.16	.62	.17							
S 242	1968-69															
	.19	.20	.08	.07	.00	.35	.00	.24	.00	.00	.16	.44	.16	.09	.39	.55
	.80	.80	.53	.80	.80	1.14	.28	.21	.09	.38	.26	.08	.12	.40	.16	.75
	.07	1.94	.02	.20	.92	.05	.15	.90	.75							
S 249	1968-69															
	.22	.28	.18	.15	.13	.23	.13	.50	.02	.08	.04	.26	.09	.04	.27	.06
	.26	.33	.20	.33	.75	.42	.35	.08	.03	.08	.11	.13-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	0.	.43	.14							
S 251	1968-69															
	-1.	-1.	-1.	-1.	.12	.23	.19	.14	.23	.03	.30	.30	.19	.20	.40	.43
	.75	.28	.07	.35	.62	.60	.09	.09	.02	.16	.10	.30	.12	.68	.28	.60
	.20	1.05	.18	.15	.40	.05	.28	1.00	.65							
S 255																

S 256

S 257

V 85

-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.85	.16
.23	.57	.29	1.57	.35	1.05	.79	.34	.20	.30	.31	.01	.00	.27	.09	.45	
.05	1.50	.59	.15	1.12	.11	-1.	-1.	-1.								

V 121	1968-69																
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.07	.42	.57	.08	.37	.02	
		.23	.70	.43	1.27	.36	.37	1.05	.35	.03	.22	.29	.00	.01	.14	.10	.52
		.22	2.17	.35	.10	.70	.10	.05	.40	.12							
V 138																	
		.14	.01	.00	.15	.01	.07	.00	.19	.04	.06	.06	.22	.18	.00	.16	.10
		.35	.30	.07	.60	.60	1.30	.67	.15	.04	.16	.17	.02	.01	.07	.20	.40
		.04	.36	.60	.23	.70	.08	.00	.41	.15							
V 165																	
		-1.	-1.	-1.	-1.	.01	.11	.00	.22	.01	.10	.08	.54	.42	.00	.29	.30
		.30	.62	.42	1.72	.46	1.18	.48	.26	.13	.25	.25	.00	.09	.28	.12	.43
		.13	1.55	.75	.25	.55	.06	.00	.48	.35							
V 166																	
		.08	.14	.08	.11	.01	.10	.00	.18	.04	.05	.10	.48	.39	.00	.31	.67
		.37	.88	.60	2.00	.57	1.03	.53	.33	.12	.22	.22	.02	.12	.45	.25	.80
		.08	1.82	.30	.13	.60	.11	.00	.58	.39							
V 167																	
		.07	.11	.04	.07	.00	.05	.00	.10	.03	.05	.05	.27	.25	.00	.29	.06
		.05	.36	.17	.71	.15	.40	.40	.15	.05	.15	.15	.00	.03	.28	.06	.44
		.15	1.06	.03	.09	.37	.16	.08	.42	.13							
V 168																	
		.07	.12	.05	.04	.03	.10	.00	.13	.03	.06	.06	.29	.42	.00	.33	.10
		.04	.45	.16	.95	.05	.15	.18	.22	.03	.14	.15	.00	.05	.39	.05	.37
		.10	1.01	.02	.05	.13	.14	.19	.42	.17							
V 169																	
V 170																	
		-1.	-1.	-1.	-1.	-1.	-1.	.00	.06	-1.	-1.	.00	.51	.37	.10	.29	.00
		.16	.41	.13	.46	.25	.53	.76	.22	.06	.28	.14	.00	.00	.10	-1.	-1.
		.27	1.43	.30	.34	1.17	.13	.00	-1.	-1.							
V 171																	
		.05	.10	.07	.06	.00	.15	.00	.08	.03	.08	.07	.52	.47	.09	.29	.03
		.25	.65	.25	1.00	.26	.68	.67	.35	.05	.20	.18	.02	.00	.12	.10	.50
		.18	1.37	.20	.27	.70	.20	.00	.50	.17							
V 172																	
		.04	.05	.08	.04	-1.	-1.	.00	.07	.04	.04	.02	.39	.35	.08	.28	.20
		.58	.52	.16	.51	.32	.95	.77	.22	.14	.18	.15	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	.00	.53	.06							
V 173																	
		.07	.11	.08	.05	.00	.14	.00	.10	.07	.11	.03	.39	.48	.03	.28	.15
		.40	1.25	.51	.53	.80	1.17	1.65	.29	.17	.18	.22	.00	.01	.28	.02	.50
		.22	1.82	1.10	.55	1.35	.20	.00	.62	.35							
V 174																	
		.07	.19	.03	.02	.00	.02	.00	.18	-1.	-1.	-1.	-1.	-1.	-1.	.12	.15
		.28	.21	.10	.41	.60	.85	.58	.09	.02	.09	.06	.03	.06	.11	.20	.35
		.10	1.25	.31	.20	.64	.21	.00	.34	.15							
V 175																	
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	.05	.08	.07	.37	.35	.00	.30	.16	
		.15	.40	.17	1.16	.10	.29	.39	.19	.06	.09	.16	.00	.03	.25	.07	.43
		.13	1.42	.07	.03	.17	.16	.08	-1.	-1.							
V 188																	
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
V 189																	
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.

V 190																
	.04	.08	.03	.12	.00	.09	.00	.08	.00	.05	.06	.34	.36	.01	.32	.03
	.24	.70	.25	.98	.10	.22	.23	.18	.06	.24	.17	.00	.00	.16	.05	.42
	.17	1.21	.05	.12	.23	.20	.00	.29	.23							
V 191																
	.05	.11	.05	.12	.00	.11	.00	.09	.00	.05	.05	.52	.42	.05	.33	.03
	.21	.77	.20	1.05	.26	.30	.55	.18	.10	.34	.16	.02	.03	.15	.09	.44
	.11	1.26	.17	.08	.45	.18	.00	.15	.22							
V 192																
	-1.	-1.	-1.	-1.	-1.	-1.	.00	.08	.00	.00	.04	.29	.32	.00	.32	.00
	.03	.15	.28	1.05	.26	.34	.40	.20	.03	.26	.19	.00	.00	.14	.10	.47
	.10	1.28	.30	.17	.47	.15	.00	.07	.29							
V 193																
	.03	.04	.07	.08	.00	.07	.00	.12	.00	.00	.00	.24	.15	.00	.20	.00
	.07	.19	.09	.47	.28	.42	.57	.15	.05	.21	.19	.07	-1.	-1.	.20	.49
	.23	1.40	.10	.03	.32	.07	.00	-1.	-1.							
V 194																
	.04	.05	.05	.07	.06	.13	.00	.10	.00	.00	.12	.35	.20	.01	.34	.02
	.02	.20	.05	1.55	.11	.25	.50	.18	.00	.20	.18	.00	.00	.13	.08	.39
	.11	.95	.10	.05	.05	.10	.00	.27	.30							
V 196																
V 198																
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.21	.46	.25	.01	.16	.71
	.83	.85	.46	1.16	-1.	-1.	-1.	.26	.13	.20	.24	.03	.06	.28	.05	.50
	.17	1.76	1.30	.65	-1.	-1.	.00	.89	.28							
V 206																
	.06	.12	.05	.09	.00	.11	.00	.08	.00	.05	.06	.37	.38	.03	.32	.03
	.35	.62	.40	.96	.14	.23	.37	.22	.06	.25	.18	.00	.03	.15	.07	.40
	.16	1.33	.10	.12	.37	.17	.00	.38	.20							
V 207																
	.12	.23	.18	.13	.04	.06	.00	.15	.03	.05	.12	.60	.35	.00	.39	.41
	1.34	1.79	.62	.75	-1.	-1.	-1.	.35	.08	.30	.24	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.	.00	.82	.72							
V 209																
	.07	.03	.05	.10	.00	.05	.00	.07	.02	.01	.06	.05	.15	.00	.07	.11
	.27	.23	.12	.09	.34	.89	.38	.09	.00	.03	.10	.00	.00	.15	.00	.48
	.00	.13	.38	.12	.40	.18	-1.	.33	.12							
V 221																
	.08	.14	.06	.02	.00	.06	.00	.16	.00	.07	.10	.33	.23	.00	.27	.06
	.04	.47	.23	.81	.15	.65	.11	.21	.15	.21	.18	-1.	.02	.24	.26	.50
	.07	1.18	.00	.00	.15	.07	.10	.42	.28							
V 224																
	.06	.10	.07	.05	-1.	-1.	.00	.06	.07	.09	-1.	-1.	-1.	-1.	.32	-1.
	-1.	-1.	-1.	-1.	1.01	1.79	.95	.30	.15	.24	.21	.01	.03	.35	.25	.43
	-1.	-1.	-1.	-1.	-1.	-1.	.05	.65	.12							
V 225																
	.05	.13	.08	.09	.00	.12	.00	.13	.03	.10	.05	.36	.40	.02	.29	.17
	.38	1.30	.47	.97	.57	1.06	1.25	.28	.14	.30	.20	.00	.00	.32	.05	.58
	.14	1.65	.83	.69	1.20	.12	.00	.52	.35							
V 227																
V 232																
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.09	.43	.25	.10	.33	.07

.17	1.30	.32	1.18	.15	.25	.34	.25	.07	.26	.31	.00	.02	.34	.10	.50
.20	1.90	.05	.02	.30	.10	.07	.27	.10							

PRECIPITATION 1969-70

A	21	1969-70													
	-1.	-1.	.00	.00	.00	.00	.00	.02	.01	.01	.50	.01	.08	.00	.26
	.16	.21	.09	.02	.02	.30									
A	23	1969-70													
	-1.	-1.	.00	.00	.02	.00	.07	.08	.00	.00	.01	.22	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	.04									
A	24	1969-70													
	-1.	-1.	.00	.00	.09	.01	.00	.00	.03	.00	.04	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.									
A	26	1969-70													
	-1.	-1.	.00	.00	.13	.00	.00	.13	.03	.00	.03	.26	.01	.05	.21
	.00	.03	.00	.03	.03	.20									
A	27	1969-70													
	-1.	-1.	.00	.00	.16	.00	.00	-1.	-1.	-1.	-1.	.22	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.									
A	29	1969-70													
	-1.	-1.	.00	.00	.12	.08	.02	.00	.00	.09	.05	.35	.01	.01	.34
	.19	.01	.01	.00	.00	.48									
A	30	1969-70													
	-1.	-1.	.00	.00	.27	.04	.09	.00	.02	.02	.04	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	.30									
A	31	1969-70													
	-1.	-1.	.00	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.22	.00	.00	.19
	.00	.03	.00	.00	.03	.09									
A	32	1969-70													
	-1.	-1.	.00	.00	-1.	-1.	.00	.07	.09	.00	.09	.15	.00	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	.40									
A	33	1969-70													
	-1.	-1.	.00	.00	.06	.00	.00	.02	.00	.00	.02	.13	.00	.03	.19
	.00	.04	.00	.00	.02	.05									
A	34	1969-70													
	-1.	-1.	.00	.00	.04	.00	.00	.03	.02	.00	.04	.24	.00	.01	.09
	.00	.00	.00	.02	.20	.19									
A	35	1969-70													
	-1.	-1.	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.48	.00	.12	.29
	.02	.14	.00	.00	.02	-1.									
A	36	1969-70													
	-1.	-1.	.00	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.27	.00	.07	.13
	.02	.00	.01	.00	.31	.21									
A	37	1969-70													
	-1.	-1.	.00	.05	.08	.11	.01	.07	.10	.05	.09	.45	.01	.58	.05
	.10	.20	.00	.00	.09	.33									
A	38	1969-70													
	-1.	-1.	.00	.02	.07	.09	.01	.01	.08	.01	.02	.60	.01	.50	.10
	.11	.29	.00	.00	.09	-1.									
A	41														
												.19	.03	.06	.51
	.32	.02	.02	.01	.13	.74									
A	42														
	.50	.55	.03	.01	.18		.01	.31	.13	.12	.22			.15	.32
	.30	.08	.10	.10	.11	.63									
A	44														

A 45

A 46

A 47

E0442	1969-70															
	.08	.09	.00	.00	.01	.00	.00	.12	.05	.02	.09	.30	.00	.02	.00	.32
	.00	.01	.00	.01	.04	.30										
E1142																
	.23	.02	.08	.17	.16	.24	.02	.07	.30	.36	.36	.00	.17	.25	.32	.10
	.24	.07	.43	.05	.26	.88										
E1253																
	.25	.30	.03	.02	.25	.17	.04	.13	.10	.08	.05	.45	.05	.65	.55	.51
	.11	.18	.01	.03	.32	-1.										
E1682																
	.00	.16	.00	.00	.00	.20	.04	.10	.04	.03	.15	.58	.00	.24	.30	.15
	.04	.45	.00	.21	.37	.72										
E1743																
	.15	.03	.00	.00	.09	.05	.00	.05	.07	.02	.09	.33	.05	.08	.25	.39
	.03	.11	.09	.00	.04	.63										
E3465																
	.00	.28	.00	.05	.06	.13	.00	.69	.50	.35	.32	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										
E3751																
	.00	.11	.00	.05	.00	.21	.02	.07	.04	.05	.20	.74	.00	.17	.28	.03
	.00	.50	.00	.19	.22	.90										
E4144																
	.38	.11	.00	.00	.15	.11	.04	-1.	-1.	-1.	-1.	-1.	.07	.06	.67	.68
	.11	.30	-1.	-1.	-1.	.85										
E4767																
	-1.	-1.	.00	.00	.13	.07	.02	.00	.02	.11	.10	.22	.03	.03	.12	.34
	.05	.12	.10	.00	.02	.48										
E4867																
	.04	.30	-1.	-1.	.21	.17	.03	.13	.07	.04	.15	1.24	-1.	.84	.56	.09
	.00	.24	.00	.00	.12	1.34										
E5098																
	.00	.06	.00	.03	.05	.06	.00	.37	.20	.07	.25	.08	.05	.01	.01	.28
	.01	.05	.03	.03	.20	.30										
E5151																
	.15	.02	.00	.00	-1.	-1.	.05	.00	.00	.00	.00	.33	.01	.15	.00	.08
	.00	.00	.07	.04	.02	.42										
E5184																
	.05	.01	.27	.19	.25	.30	-1.	-1.	-1.	-1.	-1.	.00	.15	.30	.30	.00
	.04	.04	.11	.10	.28	1.02										
F5756																
	.00	-1.	.00	.00	-1.	-1.	.00	-1.	-1.	-1.	-1.	.03	.00	.04	.05	.11
	.00	.08	.00	.00	.04	.16										
E6006																
	.08	.09	.05	.05	.06	.21	.00	.10	.02	.04	.13	.46	.03	-1.	-1.	.48
	.65	.55	.07	.04	.16	1.15										
E6624																
	.00	.03	.00	.00	.00	.02	.00	.00	.00	.00	.00	.06	.00	.07	.07	.02
	.00	.07	.00	.15	.09	.08										

E6736																
	-1.	-1.	.00	.23	.10	.35	.02	.05	.10	.06	.09	.05	.12	.11	.23	.39
	.05	.13	.19	.12	.10	.85										
E7735																
	.09	.01	.00	.09	.08	.20	.03	.02	.05	.02	.03	.50	.00	.53	.32	.20
	.10	.20	.04	.00	.07	-1.										
E7946																
	.43	.23	.02	.01	.12	.21	.04	.26	.15	.10	.14	.01	.06	.08	.66	.36
	.24	.14	.06	.02	.06	.78										
E8697																
	.35	.29	.04	.04	.14	.14	.04	.20	.08	.05	.03	.00	.03	.09	.30	.30
	.03	.09	-1.	-1.	-1.	-1.										
E8752																
	-1.	.07	.00	-1.	-1.	-1.	.01	.00	.02	.00	.06	.30	.00	.04	.00	.30
	.00	.03	.00	.00	.00	.17										
E8832																
	.00	.05	.00	.00	.02	.00	.00	.25	.04	.06	.18	.09	.00	.06	.12	.20
	.00	.05	.00	.00	.17	.10										
E9049																
	.00	.07	.00	.05	.09	.12	.00	.04	.00	.05	.10	.45	.00	.25	.25	.15
	.13	.35	.03	.08	.37	.38										
E9221																
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.06	.10	.10	-1.	.08	.10	.13	.30
	.00	.04	.15	.13	.31	.75										
E9283																
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										
E9458																
	.26	.05	.09	.00	.34	.31	.00	.06	.20	.17	.22	.30	-1.	.05	.22	.73
	.05	.06	.04	.03	.13	.83										
E9512																
	.00	.07	.00	.00	.09	.08	.00	.12	.18	.09	.11	.07	-1.	.00	.00	.24
	.01	.00	.00	.03	.07	.22										
L 6	1969-70															
	.07	.25	.00	.04	.11	.41	.07	.11	.02	.05	.08	1.00	-1.	-1.	-1.	-1.
	.07	.40	.02	.00	.11	1.65										
L 10	1969-70															
	.07	.15	.00	.04	.06	.20	.02	-1.	-1.	-1.	-1.	.54	.00	.19	.28	.00
	.00	.22	.00	.00	.01	1.52										
L 11	1969-70															
	.04	.11	.00	.03	.05	.16	.02	.09	.04	.06	.06	.52	.00	.25	.30	.01
	.00	.08	.02	.00	.10	1.43										
L 33	1969-70															
	.00	.15	.00	.03	.02	.24	.00	.07	.05	.04	.15	.92	.00	.21	.25	.08
	.02	.67	.00	1.30	.35	1.02										
L 46	1969-70															
	.03	.10	.00	.06	.07	.14	.00	.07	.00	.04	.07	.59	-1.	.21	.60	.26
	.91	.49	.08	.17	.55	1.48										
L 52	1969-70															
	-1.	-1.	.00	.06	.03	.20	.01	.08	.02	.04	.10	.52	.00	.32	-1.	.10
	.02	.62	.04	.15	.30	.57										
L 53	1969-70															
	.05	.10	.00	.05	.04	.22	.00	.08	.02	.03	.08	.70	.02	.25	.74	.21
	.04	.58	.05	.13	.47	.75										
L 54	1969-70															
	-1.	-1.	.00	.02	.02	.17	.01	.08	.02	.05	.14	.83	.04	.17	.32	.26
	.04	.33	.03	.03	.42	.42										
L 128	1969-70															
	.00	.03	.00	-1.	.07	.15	.03	-1.	-1.	-1.	-1.	.45	.02	.16	.20	.43
	.17	.34	.07	.30	.22	.99										

L 179	1969-70																
	.00	.13	.00	.03	.00	.25	.00	.07	.04	.02	.12	.24	.00	.20	.51	.57	
	.18	.34	.08	.18	.39	1.20											
L 191	1969-70																
	.00	.06	.00	.03	.00	.06	.00	.08	.02	.02	.08	.26	.00	.23	.24	.20	
	.14	.22	.00	.00	.24	.81											
L 213	1969-70																
	.02	.08	.00	.02	.04	.14	.00	.10	.00	.05	.10	.29	.00	.20	.24	.00	
	.00	.12	.00	.00	.04	1.16											
L 250	1969-70																
	.00	.05	.00	.00	.00	.04	.00	.00	.00	.00	.00	.35	.00	.20	.15	.04	
	.00	.15	.00	.10	.18	.36											
L 259	1969-70																
	.00	.16	.00	.00	.02	.16	.02	.12	.06	.07	.33	.62	.00	.20	.31	.17	
	.04	.44	.00	.22	.32	.76											
L 292	1969-70																
	.05	-1.	.00	.00	.03	.25	.03	.08	.03	.05	.10	.65	.00	-1.	-1.	.06	
	.17	.10	.01	.03	.22	1.15											
L 303	1969-70																
	.00	.08	.00	.02	.02	.27	.00	.08	.04	.01	.11	.16	.00	.40	.31	.25	
	.20	.41	.02	.10	.48	1.09											
L 372	1969-70																
	.00	.06	.00	-1.	-1.	-1.	.04	.04	.00	.03	.09	.56	.00	.13	.17	.14	
	.01	.36	.08	.18	.17	.86											
L 434	1969-70																
	-1.	-1.	.00	.00	.06	.22	.04	.09	.03	.02	.12	.86	.00	.46	.65	.28	
	.26	.38	.02	.08	.28	.73											
L 435	1969-70																
	.06	.15	.00	.00	.12	.16	.07	.08	.04	.03	.08	.80	.00	-1.	-1.	.10	
	.06	.32	.00	.00	.06	1.46											
L 451	1969-70																
	.00	.10	.00	.00	.12	.07	.03	.00	.00	.04	.12	.25	-1.	-1.	-1.	-1.	
	-1.	-1.	-1.	-1.	-1.	.77											
L 458	1969-70																
	-1.	-1.	.00	.03	.17	.15	.05	.09	.02	.02	.11	.79	.00	.35	.36	.25	
	.00	.23	.02	.00	.06	.90											
L 466	1969-70																
	.00	.16	.00	.05	.03	.32	.03	.04	.02	.03	.07	.90	.00	.23	.28	.07	
	.00	.22	.00	.47	.38	.60											
L 694	1969-70																
	-1.	.14	.00	.07	.02	.11	.00	.03	.00	.06	.10	.55	.00	.40	.27	.20	
	.00	.28	.01	.05	.18	.87											
L1017																	
	.00	.07	.00	-1.	-1.	-1.	-1.	.00	.00	.00	.00	.30	.00	.06	.14	.05	
	.01	.16	.03	.02	.22	.30											
L1074																	
	.05	.16	.00	.00	.07	.30	.00	.04	.00	.04	.08	.66	.00	.20	.34	.28	
	.42	.35	.14	.23	.36	.67											
L1107																	
	.04	.11	.00	-1.	-1.	.11	.00	.04	.03	.04	.11	.37	.00	.30	.23	.25	
	.00	.20	.04	.02	.27	.75											
L1108																	
	.00	.03	.00	.00	.00	.04	.00	.00	.00	.00	.00	.10	-1.	-1.	-1.	-1.	
	-1.	-1.	-1.	-1.	-1.	.36											
L1181																	
	.05	.16	.00	-1.	.04	.23	.01	.07	.05	.09	.15	.67	.00	.36	.26	.02	
	.08	.16	.00	.34	.28	.86											
M 100																	

M 101	1969-70	-1.	-1.	.00	.00	.02	.15	.06	.30	.70	.38	.65	.00	.78	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	1.30										
M 102	1969-70	-1.	-1.	.13	.00	.15	.26	.03	.20	.65	.30	.80	.00	.11	.15	.21	.45
		.00	.02	.27	.02	.28	1.33										
M 103	1969-70	.20	.05	.16	.00	.35	.35	.05	.38	.59	.40	1.25	.00	.17	.25	.30	.65
		.12	.19	.55	.17	.14	1.22										
M 104	1969-70	.30	.09	-1.	-1.	-1.	-1.	.05	.13	.25	.25	.55	.00	-1.	.07	.86	.58
		.07	.22	.06	.02	.08	1.07										
M 124	1969-70	.00	.15	.00	.01	.10	.03	.02	.02	.01	.02	.05	.32	.00	.35	.22	.34
		.15	.41	.14	-1.	-1.	.85										
M 225	1969-70	.74	.15	.06	.02	.20	.17	.00	.13	.09	.10	.13	-1.	.10	.68	.09	.65
		.02	.28	.17	.11	.41	1.20										
M 226	1969-70	.34	.33	.10	.07	.39	.26	.04	.19	.14	.15	.25	-1.	-1.	.70	.25	.27
		.15	.11	-1.	-1.	-1.	.88										
M 228	1969-70	.92	.22	.07	.02	.55	.25	.00	.17	.12	.10	.12	.70	.10	.70	.21	.57
		.04	.15	.09	.08	.26	1.36										
M 230	1969-70	.70	.50	.06	.02	.75	.28	.04	.15	.18	.10	.12	.80	.03	1.00	.32	.79
		.10	.57	.02	.02	.30	1.75										
N 4	1969-70	.55	.72	-1.	-1.	-1.	-1.	.04	.14	.10	.04	.07	.22	.08	-1.	-1.	-1.
		.15	.16	.09	.14	.30	.66										
N 8	1969-70	.37	.22	.13	.03	.54	.13	.01	.17	.11	.12	.16	.43	.13	.59	.38	.35
		.25	.13	.06	.01	.20	1.25										
N 1	1969-70	.37	.25	.02	.01	.17	.18	.03	.19	.14	.12	.12	.00	.14	.09	.36	.59
		.10	.13	.06	.00	.15	.91										
N 2	1969-70	.52	.69	.14	.06	.34	.24	.02	.19	.12	.08	.08	.00	.09	.27	1.01	.35
		.17	.13	.24	.18	.17	1.08										
N 3	1969-70	.63	.27	.08	.02	.26	.10	.06	.24	.17	.14	.12	.04	.02	.37	.28	.35
		.43	.08	.19	.10	.08	.77										
N 4	1969-70	.20	.41	.07	.02	.23	.10	.03	.18	.14	.09	.06	.07	.15	.40	.28	.29
		.08	.03	.01	.01	.12	.77										
N 5	1969-70	.23	.38	.05	.01	.22	.13	.04	.25	.13	.18	.11	.12	.03	.49	.22	.41
		.25	.01	.02	.03	.27	.59										
N 6	1969-70	.30	.43	.08	.01	.34	.18	.02	.26	.17	.21	.17	.29	.05	.54	.34	.43
		.22	.07	.04	.09	.20	.91										
N 7	1969-70	.23	.24	.01	.00	.09	.05	.02	.17	.16	.15	.12	.24	.04	.38	.34	.59
		.12	.27	.01	.06	.13	.42										
N 8A	1969-70	.04	.09	.00	.00	.12	.12	.00	.05	.06	.21	.09	.45	.03	.09	.12	.29
		.01	.18	.00	.00	-1.	-1.										
N 9A	1969-70																

	.29	.35	.02	.01	.11	.10	.02	.18	.11	.10	.07	.23	.08	.62	.40	.62
	.14	.07	.00	.05	.22	.80										
J 10	1969-70															
	.15	.35	-1.	-1.	-1.	-1.	-1.	.22	.18	.16	.10	.28	.03	.50	.54	.45
	.07	.23	.02	.03	.20	.50										
N 11	1969-70															
	.31	.30	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.41	.17	.35	.63	.77
	.09	.41	.05	.09	.14	.97										
N 12A	1969-70															
	.10	.04	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.65	.07	.40	.11	.38
	.08	.20	.01	.08	.11	.49										
N 13	1969-70															
	.56	.60	.10	.03	.53	.43	.08	.14	.10	.10	.16	.34	.04	.68	.45	.46
	.14	.31	.11	.08	.17	.89										
N 14	1969-70															
	.16	.53	.01	.00	.19	.13	.00	.41	.18	.19	.08	.49	.07	.52	.42	.83
	.03	.19	.03	.06	.29	.86										
N 15	1969-70															
	.58	.23	.06	.02	.55	.32	.02	.08	.12	.10	.08	.53	.02	.80	.76	.80
	.08	.29	.07	.08	.22	1.29										
N 16	1969-70															
	.37	.36	-1.	-1.	-1.	-1.	.00	-1.	-1.	-1.	-1.	.65	.02	.78	.50	.82
	.20	.64	.04	.05	.32	1.63										
N 17	1969-70															
	.19	.25	-1.	-1.	-1.	-1.	-1.	.32	.16	.15	.14	.37	.09	.40	.36	.58
	.31	.31	.04	.05	.24	.46										
N 18																
	.35	.45	.23	.08	.34	.34	.04	.15	.13	.12	.17	.08	.12	.53	.21	.36
	.00	.01	.09	.11	.24	.89										
N 19																
N 20																
N 21																
S 201	1969-70															
	.50	.38	.05	.02	.27	.15	.03	.47	.15	.17	.25	.02	.03	.20	.42	.55
	.28	.10	.35	.21	.08	.80										
S 202	1969-70															
	.57	.47	.13	.02	.32	.33	.12	.21	.16	.20	.15	.15	.03	.39	.25	.47
	.28	.06	.20	.15	.05	.95										
S 203	1969-70															
	.79	.47	.04	.03	.33	.33	.05	.34	.20	.25	.22	.02	.08	.18	.45	.73
	.50	.15	.34	.50	.08	.66										
S 204	1969-70															
	.83	.62	.12	.03	.28	.27	.07	.28	.21	.10	.15	.04	.00	.42	.32	.38
	.47	.09	.20	.12	.11	.79										
S 205	1969-70															
	.50	.63	.07	.03	.30	.17	.08	.33	-1.	-1.	-1.	.00	.08	.17	.45	.25
	.15	.12	.16	.28	.11	.47										
S 206	1969-70															
	-1.	-1.	.26	.05	.32	.33	.02	.12	.10	.13	.15	.10	.12	.47	.22	.35
	.00	.03	.14	.07	.36	.88										
S 208	1969-70															
	-1.	.34	.03	.00	.25	.27	.00	-1.	-1.	-1.	-1.	.55	.08	.36	.29	.41

1.00	.14	.00	.21	.25	.95										
S 209	1969-70														
.40	.32	.00	.00	.19	.19	.00	.15	.10	.08	.15	.62	.05	.45	.30	.28
2.25	.08	.00	.14	.39	1.20										
S 210	1969-70														
1.04	.20	.07	.01	.42	.28	.00	.20	.13	.10	.15	.59	.05	.71	.25	.72
.04	.27	.12	.10	.32	1.38										
S 211	1969-70														
-1.	.37	.06	.00	.52	.12	.02	.16	.12	.11	.13	.48	.08	.64	.22	.50
.35	.33	.04	.01	.15	1.02										
S 212	1969-70														
-1.	-1.	.10	.03	.86	.42	.05	.09	.20	.13	.14	.46	.07	.90	.87	1.15
.20	.53	.13	.13	.32	1.74										
S 215	1969-70														
-1.	.60	.08	.04	.38	.20	-1.	.43	.12	.12	.04	-1.	.03	.20	.70	.25
.13	.13	.15	.20	.09	.62										
S 217	1969-70														
.87	.50	.35	.15	.66	.32	.02	.11	.10	.12	.09	.01	.16	.37	1.30	.43
.08	.12	.07	.02	.05	1.23										
S 221	1969-70														
.00	.05	.00	.00	.05	.02	.00	.05	.03	.02	.07	.29	.00	.01	.03	.28
0.	.23	0.	0.	.02	.19										
S 231	1969-70														
1.05	.35	-1.	-1.	.32	.23	.00	.17	.15	.09	.17	.50	.00	.62	.40	1.08
.15	.25	.17	.25	.18	1.20										
S 232	1969-70														
.85	.20	.05	.00	.52	.50	.00	.17	.16	.10	.14	.90	.00	.80	1.00	1.45
.29	.37	.10	.28	.34	1.90										
S 233	1969-70														
.25	.42	.09	.04	.30	.08	.05	.21	.14	.09	.06	.07	.16	.48	.45	.40
.15	.04	.05	.03	.23	.87										
S 234	1969-70														
.70	.23	.05	.02	.32	.17	.00	.10	.09	.08	.10	.53	-1.	-1.	-1.	.56
.03	.12	.02	.12	.33	1.23										
S 235	1969-70														
.43	.20	.00	.00	.13	.20	.05	.55	.29	.10	.13	.00	.02	.07	.50	.39
.26	.10	.01	.00	.05	.74										
S 236	1969-70														
-1.	.65	.17	.11	.46	.30	.14	.10	.15	.10	.05	.15	.10	.85	.44	.33
.08	.03	.05	.07	.27	1.47										
S 238	1969-70														
.19	.05	.00	.02	.25	.17	.00	.17	.16	.11	.06	.70	.06	.55	.12	.46
.14	.30	.04	.09	.15	.45					</					

.32 .17 .37 .07 .10 .73
S 257

V 85	1969-70															
	.20	.15	.00	.15	.10	.13	.02	.13	.04	.08	.11	.85	.00	1.23	.43	.33
	.07	.43	.09	.28	.45	1.07										
V 121	1969-70															
	.00	.10	.00	.06	.15	.21	-1.	.11	.04	.00	.16	.93	.00	.60	.42	.19
	.03	.40	.00	.05	.40	1.31										
V 138	1969-70															
	.18	.04	.00	.00	.30	.17	.01	.05	.13	.14	.10	.82	.06	.60	.37	.67
	.19	.13	.07	.12	.19	.18										
V 165	1969-70															
	.25	.10	.03	.02	.20	.35	.01	.08	.07	.10	.18	.71	.00	1.20	.45	.31
	.35	.33	.08	.24	.35	1.00										
V 166	1969-70															
	.44	.24	.05	.05	.23	.34	-1.	.13	.09	.09	.13	.65	.00	.80	.66	.34
	.43	.17	.08	.31	.28	1.29										
V 167	1969-70															
	.20	.21	.05	.05	.19	.10	.03	.18	.05	.08	.25	.75	.00	1.32	.18	.23
	.00	.10	.42	.27	.60	1.55										
V 168	1969-70															
	.02	.15	.03	.07	.45	.19	.02	.19	.05	.04	.25	.75	.07	1.66	.17	.17
	.00	.07	.00	.00	.40	.81										
V 169																
V 170																
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	-1.	-1.	-1.										
V 171	1969-70															
	.00	.08	.00	.05	.25	.23	.05	.05	.05	.08	.15	.53	.00	.35	.29	.20
	.00	.20	.15	.60	.45	1.03										
V 172	1969-70															
	.00	.07	.00	.03	.25	.33	.05	.00	.02	.03	.11	.47	.00	.35	.30	.56
	.03	.21	.08	.25	.11	.81										
V 173	1969-70															
	.04	.07	.00	.07	.12	.23	.02	.07	.04	.08	.18	.55	.00	.68	.43	.62
	.15	.45	.17	.25	.42	1.20										
V 174	1969-70															
	.22	.02	-1.	-1.	-1.	-1.	-1.	.00	.03	.15	.08	.90	.00	.95	.44	.37
	.25	.25	.03	.05	.03	-1.										
V 175	1969-70															
	.07	-1.	-1.	-1.	-1.	-1.	-1.	.16	.05	.07	.18	.91	.00	1.10	.22	.12
	.00	.35	.32	.22	.85	1.45										
V 188	1969-70															
	.00	.09	.01	.00	.02	.04	.00	.11	.04	.05	.17	.82	.03	.71	.41	.35
	.00	.57	.04	.03	.26	.70										
V 189	1969-70															
	.00	.11	.00	.07	.24	.15	.01	.15	.05	.05	.10	.90	.00	.68	.29	.25
	.00	.38	.05	.05	.70	1.13										
V 190	1969-70															
	.00	.09	.00	.00	.22	.11	.05	.13	.03	.05	.17	.66	.00	.50	.30	.08
	.00	.35	.02	.03	.70	1.22										
V 191	1969-70															
	.00	.18	.00	.00	.25	.11	.05	.10	.05	.10	.20	.50	.00	.30	.18	.27
	.00	.23	.17	.05	.26	.90										

V 192	1969-70	.00	.10	.00	.00	.09	.05	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.									
V 193	1969-70	-1.	-1.	.00	.00	.00	.07	.00	-1.	-1.	.02	.22	-1.	-1.	.35	.40
		.00	.18	.00	.25	.82	.75									
V 194	1969-70	-1.	-1.	.01	.05	.25	.13	.02	.17	.04	.07	.05	.82	.03	.52	.19
		.00	.20	.00	.05	.23	1.08									
V 196	1969-70	.00	.06	.00	.02	.06	.04	.04	.10	.09	.10	.15	.39	.00	.31	.31
		.03	.19	.25	.02	.25	.85									
V 198	1969-70	.12	.10	.00	.10	.45	.52	.02	.05	.03	.10	.12	.85	.00	1.04	.67
		.23	.30	.04	.18	.22	.92									
V 206	1969-70	.00	.04	.00	.00	.20	.10	.05	.12	.04	.06	.21	.56	.00	.58	.25
		.25	.38	.10	.07	.57	1.27									
V 207	1969-70	.70	.34	.04	.06	.52	.38	.04	.17	.14	.18	.24	.89	.00	1.22	1.15
		.64	.30	-1.	-1.	-1.	1.63									
V 209	1969-70	.07	.03	.00	.10	.28	.10	.02	.19	.10	.03	.02	.50	.00	.73	.25
		.10	.18	.00	.00	.13	.37									
V 221	1969-70	.26	.13	.05	.06	.10	.18	.02	.12	.09	.08	.18	.75	.06	.59	.18
		.02	.16	.05	.50	.34	1.10									
V 224	1969-70	.03	.08	.00	.11	.37	.46	.04	-1.	-1.	-1.	-1.	-1.	.00	.60	.40
		.22	.31	.30	.20	.38	1.29									
V 225	1969-70	.00	.10	-1.	-1.	-1.	-1.	.05	.09	.02	.07	.13	.76	.00	1.07	.49
		.21	.31	.12	.25	.42	1.25									
V 227	1969-70	.00	.07	.00	.00	.12	.05	.00	.09	.10	.03	.15	.55	.00	.25	.27
		.04	.38	.03	.07	.32	.67									
V 232	1969-70	.15	.24	.01	.00	.16	.17	.02	.08	.07	.02	.09	1.07	-1.	-1.	-1.
		-1.	-1.	-1.	-1.	-1.	-1.									

PRECIPITATION 1970-71

A 21	1970-71	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.00	.00	.05	.04	.01
		.00	.02	.00	-1.	.00	.05									
A 23	1970-71	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
		-1.	.00	.00	.00	.09	.13									
A 24	1970-71	.13	.02	.01	.00	.00	.23	.25	.00	.00	.00	.00	.00	.00	.03	.02
		.01	.03	.00	.08	.00	.04									
A 26	1970-71	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.00	.00	.07	.00
		.02	.02	.00	-1.	-1.	-1.									
A 27	1970-71	.18	.00	.01	.00	.00	.17	.34	.00	.00	.00	.00	.01	.00	.02	.04
		.04	.04	.00	.04	.05	.03									
A 29	1970-71															

	.14	.00	.01	.00	.00	.55	.18	.07	.10	.00	.00	.00	.04	.35	.11	.11
	.02	.01	.02	.24	.14	.13										
A 30	1970-71															
	.29	.02	.00	.00	.00	.45	.19	.02	.00	.00	.00	.04	.02	.14	.04	.00
	.00	.08	.01	.07	.10	.02										
A 31	1970-71															
	.16	.00	.00	.00	.00	.22	.14	.00	.00	.00	.00	.00	.00	.18	.01	.04
	.04	.00	.00	.00	-1.	-1.										
A 32	1970-71															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.00	.00	.00	-1.	-1.	-1.
	-1.	.01	.00	.14	-1.	-1.										
A 33																
	.35	.00	.00	.00	.00	.25	.13	.00	.00	.00	.01	.00	.00	.11	.00	.00
	.00	.01	.00													
A 34	1970-71															
	.38	.01	.00	.00	.00	.08	.23	.00	.00	.00	.00	.02	.00	.03	.00	.01
	.01	.00	.00	.08	.03	.15										
A 35																
	.12	.04	.14	.00	.00	.28	.20	.05	.00							
		.03	.00	.08	.10	.08										
A 36	1970-71															
	.28	.00	.05	.00	.00	.37	.18	.00	.00	.00	.09	.13	.01	.20	.00	.00
	.00	.00	.00	.24	.28	.09										
A 37	1970-71															
	.17	.00	.00	.00	.17	.63	.25	.00	.00	.02	.33	.30	.02	.43	.10	.00
	.01	.01	.00	.09	.02	.16										
A 38	1970-71															
	.17	.00	.00	.00	.27	.63	.27	.00	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	.07	.04	-1.	.01	.12										
A 41	1970-71															
	.18	.12	.06	.00	.00	.64	.40	.14	.09	.00	.00	.04	.07	.51	.24	.13
	.05	.00	.00	.53	.51	.38										
A 42	1970-71															
	.19	.09	.07	.08	.00	.39	.09	.13	.09	.09	.17	.24	.06	.44	.13	.27
	.07	.09	.01	.51	.38	.35										
A 44	1970-71															
	.40	.17	.01	.00	.00	.31	.35	.23	.12	.04	.04	.22	.13	.52	.21	.11
	.10	.03	.01	.79	.60	.22										
A 45	1970-71															
	.14	.20	.15	.00	.01	.51	.16	.21	.09	.00	.11	.06	.01	.24	.06	.04
	.06	.02	.00	.16	.14	.09										
A 46	1970-71															
	.18	.00	.00	.00	.00	.42	.20	.05	.00	.01	.07	.03	.01	.44	.09	.01
	.01	.00	.00	.08	.13	.04										
A 47	1970-71															
	.28	.09	.05	.00	.00	1.03	.32	.06	.00	.00	.15	.11	.00	.34	.11	.03
	.00	.00	.00	.06	-1.	-1.										
E 442	1970-71															
	.15	.00	.02	.00	.00	.04	.30	.00	.00	.00	.00	.00	.00	.06	.01	.14
	.04	.00	.00	.18	.02	.06										
E1142	1970-71															
	.14	.35	.06	.26	.05	.54	.30	.20	.15	.10	.75	.15	.00	.82	.04	.00
	.08	.07	.00	.65	.18	.30										
E1253																
	.23	.14	.25	.20	.08	1.55	.30	.17	.06	.13	.74	.24	.05	1.22	.20	.04
	.06	.41	.14	.27	.37	.18										
E1682	1970-71															
	.12	.01	.01	.00	.25	.82	.78	.10	.00	.12	.98	.64	.06	.72	.01	.02

.06	.18	.02	.33	.20	.49											
E1743	1970-71															
-1.	-1.	-1.	-1.	.12	.19	.11	.38	.07	.06	.25	.23	.02	.50	.06	.00	
.03	.08	.00	.30	.27	.22											
F3465	1970-71															
-1.	-1.	-1.	.01	.00	.40	.35	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	
-1.	.05	.02	.00	-1.	-1.											
E3751	1970-71															
.17	.03	.02	.00	.30	.83	1.70	.30	.00	.10	.90	.37	.10	1.15	.00	.07	
.07	.10	.06	.47	.20	.30											
E4144																
.45	.20	.04	.05	.00	.30	.33	.90	.16	.05	.05	.28	.05	.75	.11	.14	
.10	.00	.00	.65	.28	.54											
E4767	1970-71															
E4867	1970-71															
.04	.05	.06	.05	.44	.94	.64	.25	.00	.20	1.07	1.08	.08	.50	.16	.01	
.05	.02	.24	.97	-1.	-1.											
E5098	1970-71															
.27	.18	.35	.00	.03	.20	.24	.25	.01	.00	.03	.05	.02	.11	.02	.12	
.06	.00	.00	.52	.15	.07											
E5151	1970-71															
.20	.05	.00	.00	.00	.61	.24	.00	.00	.00	.04	.02	.03	.25	.00	.00	
.00	.08	.00	.00	.05	.12											
E5184	1970-71															
-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.28	.30	.09	.04	.83	.04	.08	
.12	.17	.00	.75	.24	.17											
E5756	1970-71															
.00	.00	.00	.00	.13	-1.	-1.	-1.	-1.	.00	.00	.00	.00	-1.	-1.	-1.	
-1.	.00	.00	.00	.00	.03											
E6006	1970-71															
.15	.07	.05	.00	.37	2.05	1.40	.40	.03	-1.	-1.	-1.	-1.	-1.	-1.	-1.	
-1.	.56	.25	.70	-1.	-1.											
E6624	1970-71															
-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.00	.10	.00	.00	.25	.14	.03	
.00	.00	.00	.19	.00	.00											
E6736	1970-71															
.18	.02	.04	.20	.00	.65	.30	.32	.09	.14	.48	.24	.00	.90	.04	.00	
.05	.05	.00	.40	.26	.38											
E7735	1970-71															
.13	.00	.00	-1.	.43	.92	.45	-1.	-1.	.06	.58	1.03	.25	.40	.06	.03	
.02	.07	.02	.04	.04	.11											
E7946																
.35	.23	.14	.05	.00	.12	.11	.04	.01	.03	.13	.21	.03	.98	.12	.18	
.10	.05	.01	.34	.36	.30											
E8697																
.05	.00	.27	.34	.33												
E8752																
.17	.00	.00	.00	.00	.38	.10	.00	.00	.00	.00	.00	.00	.40	.03	.00	
.00	.05	.00	.00	.12	.05											
E8832	1970-71															
.25	.04	.04	.04	.11	.85	.25	.00	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	
-1.	.00	.00	.23	.06	.10											
E9049	1970-71															
.12	.05	.00	.00	.35	.60	.60	.15	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.	
-1.	-1.	-1.	-1.	-1.	-1.											
E9221	1970-71															
-1.	-1.	-1.	.03	.00	.45	.27	.05	.05	-1.	-1.	.18	.00	.35	.05	.00	

	.05	.05	.00	.39	.22	.32										
E9283	.12	.02	.08	.00	.00	.53	.15	.02	.02	.04	.27	.12	.05	.45	.04	.01
	.04	.10	.01		.00	.00										
E9458	.09	.14	.10	.00	.00	.65	.48	.38	.06	.03	.02	.03	.04	.45	.15	.05
	.07															
E9512	1970-71															
	.03	.01	.02	-1.	-1.	-1.	-1.	.05	.00	.00	.00	.00	.00	.05	.04	.00
	.05	.00	.00	.20	.00	.05										
L 6	1970-71															
	-1.	-1.	-1.	.05	.19	1.34	1.55	-1.	-1.	.12	.98	1.13	.08	1.16	.20	.00
	.03	-1.	-1.	-1.	.27	.64										
L 10	1970-71															
	.04	.00	.00	.04	.19	.14	.74	.24	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	.12	.09	.75	.17	.64										
L 11	1970-71															
	.04	.00	.00	.08	.17	1.18	.64	.26	.02	.10	1.02	.56	.06	1.24	.16	.03
	.17	.12	.15	.58	-1.	-1.										
L 33	1970-71															
	.14	.10	.05	.00	.34	.90	1.25	.30	.00	.10	1.12	1.22	.07	.98	.00	.10
	.08	.14	.09	.56	.15	.22										
L 46	1970-71															
	.15	.04	.02	.00	.27	1.53	1.80	.40	.00	.04	.40	.35	.14	1.50	.14	.08
	.05	.29	.28	-1.	-1.	-1.										
L 52	1970-71															
L 53	1970-71															
	.13	.07	.03	.00	.40	1.70	1.60	.33	.00	.06	.40	.05	.00	.85	.08	.13
	.05	.38	.11	.68	.10	.10										
L 54	1970-71															
	.13	.02	.02	.00	.23	1.20	1.10	.08	.00	.05	.39	.18	.00	.40	-1.	-1.
	-1.	-1.	-1.	.34	.06	.10										
L 128	1970-71															
	-1.	-1.	-1.	.00	.44	.90	.85	.25	.00	.08	.34	.18	.13	.82	.25	.05
	.05	.28	.00	.55	.11	.10										
L 179	1970-71															
	.12	.01	.00	.00	.30	.32	1.08	.32	.00	.00	.62	.64	.03	1.08	.34	.08
	.07	.44	.18	.65	-1.	-1.										
L 191	1970-71															
	.09	.05	.22	.00	.14	.45	.66	.24	.06	.03	.75	.51	.03	.72	.13	.11
	.11	.20	.18	.46	.08	.30										
L 213	1970-71															
	.04	.00	.10	.00	.17	.42	.88	.15	.00	.04	.91	.58	.05	.68	.00	.12
	.08	.06	.14	.62	.15	.44										
L 250	1970 71															
	-1.	-1.	-1.	.00	.19	.57	.89	-1.	-1.	.00	.32	.34	.04	.70	.00	.05
	.03	-1.	-1.	.15	.07	.10										
L 259	1970-71															
	.14	.01	.04	.00	.30	.60	1.16	.12	.00	.13	1.04	.82	.06	.68	.00	.18
	.10	.10	.00	.44	-1.	-1.										
L 292	1970-71															
	.07	.00	.00	.03	.27	1.15	-1.	-1.	-1.	.17	1.15	1.13	.10	1.58	.15	.15
	.06	-1.	-1.	-1.	.12	.63										
L 303	1970-71															
	.12	.02	.00	.00	.22	1.06	1.16	.30	.00	.04	.62	.84	.07	1.00	.32	.18
	.10	.42	.32	.62	.06	.16										

L 372	1970-71															
	.16	.02	.26	.00	.38	.36	.68	.13	.00	.04	.98	.46	.15	.64	.19	.02
	.00	.16	.00	.51	.15	.18										
L 434	1970-71															
	.05	.00	.00	.06	.41	1.05	.90	.18	.00	.31	1.08	1.20	.08	1.15	.10	.04
	.07	.16	.06	-1.	.17	.55										
L 435	1970-71															
	.06	.02	.00	.02	.38	1.28	1.06	.17	.00	.21	1.13	1.05	.03	.92	.27	.00
	.06	.06	.18	-1.	-1.	-1.										
L 451	1970-71															
L 458	1970-71															
	.04	.02	.00	.02	.40	.47	.40	.24	.00	.11	1.06	1.11	.05	.72	.11	.03
	.12	.00	.35	-1.	.25	1.05										
L 466	1970-71															
	.14	.10	.07	.00	.44	.92	1.45	.60	.00	-1.	-1.	-1.	-1.	.65	.20	.34
	.06	.12	.09	1.00	.18	.14										
L 694	1970-71															
	.13	.10	.02	.00	.33	1.10	1.30	.25	.02	.08	1.35	.80	.06	1.00	.00	.03
	.05	.15	.09	.40	.08	.17										
L1017	1970-71															
	.06	.00	.00	.00	.15	.27	.62	-1.	-1.	.00	.13	.16	.01	.53	.20	.04
	.05	.09	.02	.13	.05	.13										
L1074	1970-71															
	.12	.10	.03	.00	.34	1.02	1.40	.27	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	.23	.12	.49	.09	.07									
L1107	1970-71															
	.08	.02	.01	.00	-1.	.90	1.47	-1.	-1.	.13	1.53	1.15	.06	1.16	.05	.02
	.04	-1.	-1.	.43	-1.	-1.										
L1108	1970-71															
	-1.	.03	.14	.00	.27	.55	.75	.13	.00	.00	.05	.00	.00	.66	.10	.19
	.01	.00	.00	-1.	.00	.00										
L1181	1970-71															
	.14	.09	.05	.00	.34	.86	1.00	.28	.00	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	.08	.07	-1.	-1.	-1.										
M 100	1970-71															
	.07	.04	.06	.26	.12	.30	.08	.06	.02	.16	.70	1.03	.06	.46	.07	.11
	.05	.16	.13	.58	.20	.33										
M 101	1970-71															
	.36	.27	.00	.20	.10	.68	.32	.05	.05	.09	.45	.10	.07	.77	.10	.03
	.10	.07	.05	.50	-1.	-1.										
M 102	1970-71															
	.52	.43	.05	.11	.00	1.02	.30	.48	.06	.05	.21	.25	.00	.60	.18	.05
	.04	.04	.00	.83	.20	.40										
M 103	1970-71															
	.45	.30	.28	.08	.00	.65	.45	.80	.10	.21	.45	.19	.04	.90	.28	.03
	.10	.09	.00	.67	.42	.55										
M 104	1970-71															
	-1.	-1.	-1.	.00	.00	.17	.30	.36	.13	.11	.15	.18	.10	.65	.16	.15
	.07	-1.	-1.	-1.	-1.	-1.										
M 124	1970-71															
	.15	.21	.20	.00	.35	.47	.72	.13	.02	.06	.33	.07	.07	.77	.10	.02
	.02	.04	.00	.67	.08	.09										
M 225																
	.04	.15	.03	.02	.05	1.10	.45	.21	.02	.20	.65	.40	.12			
	.04	.20	.29	.70	.17	.47										
M 226																
	.03	.18	.10	.07	.02	.60	.24	.05	.01	.17	.65	.10	.08	.65	.05	.05
	.05	.29	.15	.75	.45	.17										

M 228	.20	.31	.06	.04	1.35	.50	.32	.01	.25	.62	.37	.17	1.05	.12	.10	
	.05	.21	.20	.83	.20	.42										
N 230	.08	.08	.12	.15	.15	3.14	.74	.30	.08	.50	1.47	.67	.15	1.84	.21	.10
	.07	.40	.20	.60												
N A	.14	.03	.08	.13	.12	1.25	.33	.70	.06	.13	.59	.21	.09	.76	.10	.06
	.05	.31	.10	.77	.51	.18										
N B	.18	.06	.02	.02	.74	.25	.09	.01	.21	.70	.12	.14	.68	.03	.04	
	.05	.30	.20	.99	.46	.16										
N 1	.57	.17	.06	.14			.04	.00	.02	.20	.21	.13	.82	.18	.14	
	.10	.03	.00	.40	.28	.52										
N 2	.12	.01	.06	.37	.07	.47	.04	.31	.10	.19	.56	.40	.11	.88	.03	.09
	.09	.20	.11	.58	.26	.37										
N 3	.27	.02	.20	.05	.03	.23	.08	.39	.08	.08	.40	.35	.02	.60	.03	.17
	.05	.25	.01	.49	.33	.12										
N 4	.10	.06	.20	.09	.03		.33	.01	.07	.31	.18	.02	.72	.05	.07	
	.08	.18	.13	.28	.23	.24										
N 5	.11	.02	.09	.02	.01	.64	.11	.12	.01	.03	.28	.14	.04	.67	.10	.08
	.05	.15	.01	.32	.	.										
N 6	.27	.11	.24	.01	.02		.38	.16	.03	.14	.08	.08		.09	.13	
	.10	.21	.01	.59	.37	.32										
N 7									.01	.32	.02	.09	.64	.09	.13	
	.07				.35	.35										
N 8A	.11	.10	.14	.00	.00	.54	.38	.13	.03	.00	.06	.19	.01	.50	.03	.09
	.04	.00	.00	.28	.18	.12										
N 9A																
N 10																
N 11																
	.21	.02		.61	.31											
N 12A																
N 13	.10	.07	.16	.11	1.90	.37	.75	.04	.08	.55	.15	.20	.89	.10	.03	
	.02	.28	.11	.94	.42	.10										
N 14	.15	.14	.08	.06	.01	1.21	.61	.23	.09	.23	.49	.22	.04	.69	.26	.10
	.11	.25	.03	.30	.39	.33										
N 15	.12	.03	.07	.06	.02	1.50	.46	.55	.02	.36	.69	.31	.11	1.53	.38	.05
	.07			.48	.48	.22										
N 16																

	.13	.07	.04	.05	.03	3.05	.61	.36	.02	.27	.55	.32	.15	1.66	.25	.06
N 17	.11	.36	.14	.39	.44	.28										
	.09	.20	.11	.02	.02	1.13	.51	.41	.06							
N 18		.20		.41	.23	.26										
		.12	.14	.18	.17	.27	.08			.19	.55	.36	.04	.67	.12	.09
N 19	.02	.16	.26	.79	.28	.53										
	.11	.02	.05	.09	.09	.45	.07	.11	.00	.18	.35	.28	.15	.58	.04	.07
N 20	.13	.25	.07	.28	.20	.22										
	.37	.50	.19	.00	.00	.35	.45	.31	.15	.01	.11	.09	.00	.81	.16	.14
N 21	.13	.04	.00	.41	.37	.43										
										.10	.35	.23	.03	.66	.15	.07
S 201	.02	.07	.00	.58												
	.33	.10	.25	.03	.02	.15	.08	.27	.10	.05	.12	.13	.04	.74	.13	.19
S 202	.08	.10	.01	.38	.32	.50										
	.21	.05	.20	.05	.02	.30	.10	.15	.10	.10	.29	.22	.12	.62	.10	.14
S 203	.06	.26	.04	.55	.32	.20										
	.15	.06	.24	.05	.00	.31	.11	.32	.05	.08	.16	.19	.09	.73	.07	.17
S 204	.08	.18	.01	.74	.37	.36										
				.08	.04	.23	.14	.43	.07	.10	.41	.37	.03	.60	.05	.20
S 205	.03	.28	.02	.53												
		.01	.04	.11	.00	.27	.08	.08	.06	.07	.20	.28	.07	.55	.06	.12
S 206	.05			.32												
	.07	.10	.07	.16	.18	.19	.05			.21	.55	.47	.05	.72	.10	.08
S 208	.01	.15	.17	.80												
	.03	.10	.03	.00	.08	.70	.33	.23	.03	.15	.49	.22	.13	.70	.05	.03
S 209	.05	.35	.22	.60												
S 210																
	.07	.20	.15	.05	.05	1.15	.38	.31	.05	.20	.70	.31	.18	1.00	.10	.07
S 211				.76	.17	.48										
	.06	.20	.38	.04	.03	1.85	.38	.13	.05	.28	.60	.23	.12	.75	.06	.04
S 212	.07	.15	.16	.50												
							.56	.04	.19	.37	.10	.20	1.20			
S 215																
	.07	.08	.02				.13	.02	.11	.26	.28	.08	.50	.06	.10	
S 217																
	.00			.55	.26	.26	.10	.00	.33	1.10	.62	.08	.70	.13	.10	
S 221	1970-71															
S 231																

	.07	.15	.39	.10	.06	1.55	.68	.57	.07	.24	.95	.48	.30	1.56	.20	.10
S 232		.43	.17	.87	.30	.34										
	.07	.20	.53	.26	.15	3.02	1.00	.58	.05	.34	1.05	.50	.42	2.30	.33	.07
	.08	.76	.25	.85	.41	.30										
S 233																
	.10	.04	.13	.13	.07	.56	.10	.29	.00	.15	.31	.18	.02	.75	.05	.05
	.06	.18	.15	.29	.35	.32										
S 234																
	.03	.11	.09	.00	.04	.92	.50	.15	.00	.18	.60	.35	.12	.75	.02	.04
	.05	.22	.22	.75	.19	.51										
S 235																
	.48	.26	.08	.04	.00	.18	.16	.07	.00	.03	.07	.19	.04	.80	.13	.16
	.11	.04	.01	.25	.40	.40										
S 236																
	.04	.04	.10	.40	.27	1.12	.28	.36	.20	.55	.58	.44	.13	1.32	.03	.05
	.03	.60	.38	.58	.27	.43										
S 238																
S 241																
	.09	.20	.40	.02	.02	1.43	.36	.21	.05	.18	.45	.13	.12	.70	.07	.03
	.06															
S 242																
								.35	.06	.22	.47	.17	.12	.92	.20	.06
	.05															
S 249																
S 251																
										.15	.47	.35	.10	.60	.05	.17
	.10	.23	.08	.86	.29	.47										
S 255																
	.09	.21	.45	.22	.18	2.53	.95	.57	.08	.11	1.07	.37	.31	1.45	.15	.10
	.05	.23	.05	1.00												
S 256																
	.35	.15	.08	.00				.14	.05	.04	.08	.22	.00	.51	.12	.14
	.10			.42												
S 257																
	.07	.07	.08	.15	.09	.38	.05	.45	.05	.30	.52	.70	.05	.85	.07	.08
	.02	.25	.15	.65												
V 85																
				.04	.25	1.50	.39	.10	.01	.38	1.15	.55	.35	1.00	.15	.00
	.01	.32	.00	.50	.15	.25										
V 121																
	.02	.00	.02	.00	.40	1.10	.77	.17	.00	.18	1.13	1.20	.09	1.12	.13	.08
	.08	.25	.10	.52	.25	.50										
V 138																
	.02	.02	.10	.08	.31	1.34	.24	.21	.05							
				.21	.8	10										
V 165																
	.02	.03	.40	.00	.20	1.70	.45	.19	.02	.15	.97	.45	.14	1.10	.15	.00
	.02	.30	.00	.60	.12	.30										
V 166																
	.04	.07	.20	.15	.23			.26	.03	.27	.75	.13	.22	1.13	.18	.00
	.05	.66	.02	.58	.20	.29										
V 167																
	.03	.10	.00	.03	.22	.70	.20	.08	.00	.25	.70	.38	.05	1.00	.00	.05

	.03	.02	.00	.56	.12	.75										
V 168	1970-71															
	.02	.00	.00	.10	.43	.56	.20	-1.	-1.	.40	1.05	.82	.05	.48	.01	.10
	.06	.00	.00	.30	.15	.45										
V 169	1970-71															
	-1.	-1.	-1.	.00	.34	1.25	.97	.07	.00	.18	.95	1.18	.07	.93	.05	.05
	.12	.23	.07	.17	.30	.52										
V 170	1970-71															
	-1.	-1.	-1.	.00	.48	.60	.65	.07	.00	.22	1.02	.20	.18	1.05	.09	.05
	.02	.23	.05	-1.	-1.	-1.										
V 171	1970-71															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.27	1.12	.85	.15	1.01	.14	.04
	.03	.35	.05	.53	.27	.30										
V 172	1970-71															
	.07	.00	.10	.04	.52	.83	.33	.08	.00	.15	.45	.00	.25	1.00	.22	.00
	.00	.40	.07	.43	.14	.18										
V 173	1970-71															
	.05	.05	.20	.02	.34	1.27	.68	.20	.03	.12	1.38	.63	.12	1.25	.08	.00
	.05	.23	.02	.66	.20	.40										
V 174																
	.00	.01	.04	.05	.24	1.25	.22	.08	.03							
		.15	.00	.23	.15	.16										
V 175	1970-71															
	-1.	-1.	-1.	.02	.30	.57	.32	.08	.02	.32	1.00	.30	.10	.80	.03	.04
	.10	.05	.00	.55	.24	.35										
V 188	1970-71															
	.03	.02	.04	.00	.31	1.30	.60	.15	.00	.21	.90	.60	.10	.80	.04	.13
	.13	.07	.03	.29	.35	.56										
V 189	1970-71															
	.04	.07	.03	.00	.35	.90	.44	.07	.00	.20	1.10	.55	.08	.70	.07	.05
	.15	.05	.00	.63	.17	.38										
V 190	1970-71															
	.04	.07	.03	.00	.32	.80	.62	.24	.01	.12	1.20	1.25	.07	.88	.14	.06
	.15	.09	.07	.45	.21	.43										
V 191	1970-71															
	.03	.10	.05	.00	.37	.97	.32	.26	.00	.09	.95	.65	.19	.80	.04	.02
	.11	.40	.06	.46	.25	.31										
V 192	1970-71															
	.05	.04	.02	.00	.21	.55	.40	.05	.00	.19	.95	.72	.06	.50	.09	.10
	.10	.25	.05	.35	.20	.42										
V 193	1970-71															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	.23	1.58	.97	.05	.75	.00	-1.
	-1.	.25	.03	.35	.25	.35										
V 194	1970-71															
	.00	.00	.00	.00	.05	.40	.20	.04	.00	.13	.60	.70	.05	.63	.03	.05
	.20	-1.	-1.	.32	-1.	-1.										
V 196	1970-71															
	.15	.06	.07	.00	.18	.80	.66	.10	.00	.17	1.17	1.00	.05	.61	.10	.13
	.11	.20	.05	.65	.26	.55										
V 198																
	.05	.03	.14	.05	.36	2.25	1.20	.18	.01	.15	.60	.11	.05	1.00	.14	.05
	.02	.22	.03	.30	.20	.16										
V 206	1970-71															
	.04	.03	.07	.02	.34	.68	.28	.10	.00	.24	.88	.63	.07	-1.	-1.	-1.
	-1.	.12	.09	.57	.23	.42										
V 207																
	.03	.10	.32	.30	.42	1.40		.23	.02	.36	.40	.35	.39	2.05	.16	.02
	.04	.70	.05	.66	.25	.30										
V 209	1970-71															
	.15	.02	.00	.08	.31	.80	.30	.00	.03	.05	.21	.07	.03	.70	.10	.01

	.01	.03	.00	.10	.09	.15										
V 221	.00	.13	.00	.00	.10	.90	.15	.08	.00	.11	.92	.22	.11	.75	.05	.01
	.05	.12	.10	.48	.18	.65										
V 224	1970-71															
	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.	-1.
	-1.	-1.	-1.	.92	.25	.25										
V 225	1970-71															
	.03	.01	.05	.04	.35	1.45	.45	.17	.00	.26	.97	.25	.12	1.15	.10	.03
	.00	.16	.00	.60	.12	.37										
V 227	1970-71															
	.05	.02	.00	-1.	-1.	-1.	-1.	.10	.00	-1.	-1.	-1.	-1.	.52	.00	.08
	.08	.37	.05	-1.	.20	.55										
V 232	1970-71															
	.01	.08	.02	.04	.42	1.25	.92	.40	.00	.23	1.25	.80	.11	.51	.10	.02
	.08	.09	.10	.85	-1.	-1.										

APPENDIX E

LIST OF BAND DURATION BY STATION AND YEAR
(-1 or blank space indicates missing data)

BAND DURATION 1967-68

A 21

A 23

A 24

A 26

A 27

A 29

A 30

A 31

A 32

A 33

A 34

A 35

A 36

A 37

A 38

A 41

A 42

A 44

A 45

A 46

A 47

E0442 1967-68
000 015 070 040 000 060 000 000 000 060 000 120 060 015 000 030
170 075 120 015 085 050
E1142 1967-68
000 075 015 035 060 120 070 035 015 020 090 110 100 045 030 000
265 130 -1 -1 -1 -1
E1253 1967-68
015 060 055 090 -1 -1 045 000 000 030 090 085 045 045 045
195 060 130 015 030 020
E1682 1967-68
030 015 030 025 130 000 015 000 000 000 090 060 000 000 090 060
150 000 110 000 075 060
E1743 1967-68
035 045 000 030 000 130 045 070 015 015 000 030 030 060 045 000
180 090 150 105 000 060
E3465 1967-68
-1 -1 -1 -1 -1 -1 000 -1 -1 -1 -1 -1 -1 -1 070 030
100 000 195 095 105 105
E3751 1967-68
000 015 055 025 120 000 000 000 000 000 000 060 070 000 100 030
140 120 090 000 045 040
E4144 1967-68
060 070 050 040 060 090 -1 015 000 060 105 100 000 090 090 060
195 090 120 045 075 080
E4767 1967-68
045 090 045 060 015 105 035 040 000 035 040 105 000 000 045 000
150 060 135 000 030 000
E4867 1967-68
040 020 020 020 150 070 000 000 000 090 090 080 020 015 040 030
170 090 100 000 060 025
E5098 1967-68
-1 -1 -1 -1 000 120 000 000 000 000 000 070 000 085 015 045
090 110 150 045 105 120
E5151 1967-68
000 050 055 030 000 030 055 030 000 000 000 075 035 000 045 045
185 000 105 000 000 060
E5184 1967-68

060	075	040	025	000	120	000	070	030	040	070	130	075	070	070	060
200	100	140	070	030	050										
E5756	1967-68														
-1	-1	-1	-1	000	000	060	000	045	000	000	060	000	000	-1	-1
000	000	150	090	000	000										
L6006	1967-68														
-1	-1	-1	-1	-1	-1	-1	000	000	000	000	040	060	060	080	030
140	100	140	000	060	070										
E6624	1967-68														
-1	-1	-1	-1	000	000	000	-1	-1	-1	-1	-1	-1	-1	075	030
000	000	090	000	030	000										
E6736	1967-68														
-1	-1	-1	-1	060	120	-1	030	000	015	090	120	040	090	080	015
225	115	120	000	030	060										
E7735	1967-68														
045	045	060	030	000	000	060	000	045	000	070	000	040	030	070	030
165	000	150	000	000	000										
L7946	1967-68														
060	080	030	025	045	050	070	000	000	045	115	090	045	075	060	075
220	120	105	000	015	060										
E8697	1967-68														
-1	-1	060	025	-1	-1	075	000	000	030	085	090	040	030	-1	-1
155	-1	-1	-1	-1	-1										
E8752	1967-68														
015	015	045	000	000	045	000	000	000	000	090	000	055	000	085	015
225	000	135	010	000	000										
E8832	1967-68														
-1	-1	-1	-1	060	075	-1	-1	-1	-1	-1	-1	-1	-1	045	060
080	135	140	000	085	090										
E9049	1967-68														
040	045	035	045	150	050	000	-1	-1	-1	-1	-1	-1	-1	090	070
060	060	140	050	070	100										
E9221	1967-68														
030	040	075	000	000	105	-1	-1	-1	-1	-1	-1	-1	-1	045	030
215	090	135	030	-1	-1										
E9283	1967-68														
-1	-1	-1	-1	000	045	030	000	015	015	095	030	015	015	-1	-1
120	-1	-1	-1	-1	-1										
E9458															
E9512	1967-68														
000	000	060	045	075	110	000	045	000	050	120	120	015	000	-1	-1
090	075	150	075	000	000										
L 6	1967-68														
000	020	030	030	170	060	000	000	000	000	060	090	000	000	-1	-1
135	000	-1	-1	-1	-1										
L 10	1967-68														
000	020	030	030	150	015	000	000	000	000	000	000	000	000	105	000
130	000	100	000	000	000										
L 11	1967-68														

	000	020	030	040	160	000	025	000	000	000	000	080	015	000	095	030
	125	030	100	000	020	000										
L 33	1967-68															
	030	020	040	050	160	060	015	000	000	000	000	075	050	055	095	050
	145	110	100	080	045	010										
L 46	1967-68															
	000	020	045	040	165	000	015	000	000	000	000	070	000	000	085	055
	120	120	115	000	045	030										
L 52	1967-68															
	020	020	055	050	160	000	000	-1	-1	-1	-1	-1	-1	-1	-1	-1
	135	100	120	000	070	100										
L 53	1967-68															
	030	020	045	040	160	000	000	000	000	000	000	070	070	000	090	060
	120	070	125	000	050	100										
L 54	1967-68															
	-1	-1	-1	-1	150	000	000	000	000	000	000	075	055	000	075	050
	120	070	120	025	070	105										
L 128	1967-68															
	030	025	090	045	120	000	100	000	045	000	055	075	060	000	075	045
	180	070	110	055	050	000										
L 179	1967-68															
	020	030	050	040	160	000	000	000	000	000	000	070	000	000	090	035
	140	050	100	000	070	040										
L 191	1967-68															
	000	025	030	030	170	000	000	000	000	000	000	065	000	000	090	000
	120	055	080	000	055	010										
L 213	1967-68															
	000	020	035	015	165	015	000	000	000	000	000	060	000	000	095	000
	140	060	110	000	060	000										
L 250	1967-68															
	035	020	045	030	120	000	000	000	000	000	000	000	000	000	-1	-1
	000	000	105	015	045	045										
L 259	1967-68															
	040	015	035	040	200	060	015	000	000	000	060	080	060	040	070	050
	160	060	080	000	000	040										
L 292	1967-68															
	000	020	020	000	140	060	000	000	015	000	000	070	000	000	085	000
	140	000	095	000	040	000										
L 303	1967-68															
	000	030	030	040	180	000	000	000	000	000	000	000	000	000	090	000
	-1	090	100	000	040	000										
L 372	1967-68															
	040	015	045	015	155	070	080	000	045	000	030	060	060	015	070	050
	180	000	110	020	030	000										
L 434	1967-68															
	030	030	030	030	160	000	015	000	000	000	090	090	000	000	050	070
	180	000	100	000	000	040										
L 435	1967-68															
	020	030	045	040	170	090	015	000	000	000	090	080	000	000	060	030
	150	050	110	000	050	040										
L 451	1967-68															

	020	020	045	015	155	060	090	000	060	000	060	070	000	000	090	060
	150	120	105	030	035	000										
L 458	1967-68															
	030	020	035	030	150	060	000	000	000	030	090	090	000	000	045	000
	165	105	090	000	000	045										
L 466	1967-68															
	035	020	070	070	185	000	000	000	000	000	000	000	000	000	090	060
	180	120	095	000	090	015										
L 694	1967-68															
	000	020	060	045	175	000	000	000	000	000	000	000	000	000	060	000
	140	165	-1	-1	-1	-1										
L1017	1967-68															
	015	045	060	000	000	000	000	000	000	000	000	000	000	000	095	000
	000	000	120	000	045	040										
L1074	1967-68															
	030	030	040	030	150	070	015	000	000	000	000	100	060	000	075	060
	-1	070	135	070	060	070										
L1107	1967-68															
	000	030	045	050	180	000	000	000	000	000	000	060	000	000	105	000
	150	120	080	000	015	030										
L1108	1967-68															
	020	040	040	045	150	060	-1	-1	-1	-1	-1	-1	-1	-1	075	000
	000	000	135	030	045	055										
L1181	1967-68															
	000	025	030	050	150	000	000	000	000	000	000	060	070	000	080	060
	160	120	090	030	080	000										
M 100																
M 101	1967-68															
	00	55	00	40	75	135	60	35	20	95	75	105	90	75	100	45
	250	125	-1	-1	-1	-1										
M 102	1967-68															
M 103	1967-68															
	45	70	00	80	110	90	45	00	20	80	125	95	00	95	70	45
	240	95	135	00	70	60										
M 104	1967-68															
M 124	1967-68															
	065	045	060	060	095	075	060	000	030	000	120	000	045	015	095	090
	150	060	155	030	045	000										
A 225	1967-68															
	010	020	035	035	135	060	075	000	000	060	085	090	045	030	095	020
	130	070	-1	-1	-1	-1										
M 226	1967-68															
	040	065	040	055	120	050	090	000	000	060	105	135	060	070	120	015
	145	065	120	000	015	040										
M 228	1967-68															

	020	030	025	045	135	060	060	000	000	030	100	090	045	120	110	030
	120	060	120	000	040	060										
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	060	040	060	060	120	060	090	000	000	060	130	090	060	075	215	030
	180	035	150	030	040	060										
"	A	1967-68														
	020	060	025	075	150	035	060	-1	-1	-1	-1	-1	-1	-1	115	030
	210	090	120	030	040	060										
"	8	1967-68														
	025	085	030	040	130	015	035	000	000	030	105	105	060	045	120	015
	240	105	090	000	045	045										
"	1	1967-68														
	-1	-1	-1	-1	-1	-1	-1	000	000	015	105	080	025	080	-1	-1
	270	085	105	000	015	035										
"	2	1967-68														
	-1	-1	-1	-1	-1	-1	015	015	015	020	090	090	040	015	060	075
	180	105	120	040	000	015										
"	3	1967-68														
	105	055	020	030	140	045	100	015	015	035	120	070	040	075	115	060
	180	100	120	015	050	025										
"	4	1967-68														
	015	070	040	015	110	010	050	000	000	020	090	085	045	060	100	080
	240	060	-1	-1	015	030										
"	5	1967-68														
	015	090	050	070	155	030	-1	015	015	055	100	070	065	070	060	045
	180	075	115	050	040	030										
"	6	1967-68														
	010	095	050	075	165	050	080	015	015	020	135	080	020	100	100	060
	180	045	-1	-1	-1	-1										
"	7	1967-68														
	005	070	040	075	175	050	080	015	015	055	110	075	035	065	090	100
	170	105	120	025	045	035										
"	8															
"	9	1967-68														
	015	060	060	055	110	015	000	000	000	010	085	100	035	025	090	030
	230	060	120	015	000	025										
"	10	1967-68														
	-1	-1	-1	-1	-1	-1	-1	015	015	040	110	100	040	090	080	120
	-1	-1	125	015	045	035										
"	11	1967-68														
	-1	-1	-1	-1	170	065	095	015	015	015	110	105	050	120	105	120
	180	140	120	020	055	045										
"	12															
"	13	1967-68														
	-1	-1	-1	-1	180	025	050	000	000	040	120	120	060	090	125	060
	210	120	125	050	010	075										
"	14	1967-68														

	015	100	070	060	175	045	060	020	025	020	100	100	010	075	110	080	
	140	045	130	020	045	035											
N	15	1967-68															
	035	090	050	095	135	020	045	-1	-1	-1	-1	-1	-1	-1	100	080	
	160	055	185	060	015	015											
N	16	1967-68															
	-1	-1	-1	-1	-1	-1	-1	000	000	000	115	095	050	070	105	075	
	145	025	140	020	040	025											
N	17	1967-68															
	-1	-1	-1	-1	-1	-1	070	025	015	045	120	100	045	100	085	065	
	175	105	150	025	025	070											
N	18																
N	19																
N	20																
N	21																
S	201	1967-68															
	075	045	075	045	170	060	090	060	025	015	120	100	045	090	095	060	
	300	105	120	015	045	090											
S	202	1967-68															
	-1	-1	-1	-1	150	060	060	000	030	075	120	065	045	045	125	045	
	240	125	-1	-1	-1	-1											
S	203																
S	204	1967-68															
	095	075	060	040	135	060	120	060	055	060	120	065	060	090	125	120	
	240	120	120	000	030	030											
S	205	1967-68															
	150	030	045	000	120	045	060	-1	-1	-1	-1	-1	-1	-1	060	060	
	210	090	120	015	060	090											
S	206	1967-68															
	030	065	030	000	135	045	075	000	000	060	090	090	045	045	060	030	
	240	-1	120	000	015	030											
S	208	1967-68															
	020	030	045	015	165	045	060	000	000	030	105	075	045	030	-1	-1	
	105	-1	120	000	045	015											
S	209	1967-68															
	020	015	060	015	180	045	030	000	000	000	100	080	045	060	080	030	
	090	000	120	000	045	030											
S	210	1967-68															
	015	015	040	030	130	035	045	000	000	000	120	105	055	065	090	030	
	090	000	105	020	030	060											
S	211	1967-68															

050	020	040	035	130	030	060	000	000	030	105	095	055	030	100	015
150	090	105	000	015	030										
S 212	1967-68														
-1	-1	-1	-1	-1	-1	050	000	000	045	120	105	055	090	-1	-1
-1	-1	-1	-1	-1	-1										
S 215															
S 217	1967-68														
-1	-1	-1	-1	-1	-1	-1	000	000	075	150	150	000	030	-1	-1
195	070	105	000	000	035										
S 221	1967-68														
000	020	030	025	000	040	045	015	020	030	015	040	025	035	090	060
240	000	090	040	000	035										
S 231	1967-68														
030	020	100	030	165	065	040	000	000	030	115	080	065	120	075	040
135	045	135	020	030	030										
S 232	1967-68														
025	035	105	030	120	075	055	000	000	030	120	090	055	090	090	065
120	000	130	045	045	045										
S 233	1967-68														
015	090	055	030	095	015	060	000	000	015	105	090	045	090	105	030
240	030	120	015	060	060										
S 234	1967-68														
015	010	030	015	140	015	130	000	000	030	140	220	050	060	180	015
220	000	190	000	065	015										
S 235	1967-68														
045	075	015	060	000	035	065	000	015	035	120	090	015	040	045	025
225	050	090	030	000	035										
S 236	1967-68														
030	120	040	030	135	030	150	000	000	045	100	075	045	075	075	060
240	120	135	050	015	030										
S 238	1967-68														
-1	-1	-1	-1	015	015	070	020	015	015	060	055	015	125	125	120
080	060	100	060	040	015										
S 241	1967-68														
-1	-1	-1	-1	-1	-1	-1	000	000	075	080	120	045	030	135	040
120	090	110	000	030	030										
S 242	1967-68														
045	075	045	035	120	075	060	000	000	025	105	115	045	055	-1	-1
150	-1	-1	-1	-1	-1										
S 249															
S 251	1967-68														
060	065	045	050	135	075	060	000	030	045	075	095	060	025	065	075
195	105	120	010	025	015										
S 255															
S 256															

S 257

V 85	1967-68															
045	025 045	000	125	020	000	000	000	045	120	080	055	000	090	060		
120	-1 125	060	060	015												
V 121	1967-68															
V 136	1967-68															
-1	-1 -1	-1	120	060	065	015	050	015	135	070	015	070	090	090		
135	060 120	060	080	015												
V 165	1967-68															
030	035 035	000	130	075	055	000	045	045	105	070	045	035	065	030		
135	000 125	060	060	000												
V 166	1967-68															
030	025 025	025	105	035	015	000	000	015	105	075	045	030	050	010		
150	015 125	015	060	060												
V 167	1967-68															
035	015 030	000	120	055	000	000	000	070	115	085	060	000	090	050		
150	000 120	000	060	045												
V 168	1967-68															
025	015 035	000	180	015	000	000	000	060	080	100	045	000	075	-1		
180	075 085	015	000	045												
V 169																
045	025 035	000	110	000	000	000	000	045	085	070	000	000	070	070		
160	000 090	000	065	020												
V 170	1967-68															
-1	-1 -1	-1	155	060	000	000	000	000	065	060	000	000	-1	-1		
150	060 -1	-1	-1	-1												
V 171	1967-68															
045	030 045	000	170	065	050	000	000	000	080	065	000	000	095	045		
150	030 110	030	060	000												
V 172	1967-68															
045	015 045	030	120	075	065	000	000	000	120	075	000	000	075	060		
180	000 120	000	030	000												
V 173	1967-68															
050	020 025	030	120	070	060	000	000	000	120	075	030	000	065	060		
135	060 135	030	080	000												
V 174	1967-68															
035	030 060	035	120	120	000	015	090	000	120	065	000	000	090	060		
180	000 180	040	080	060												
V 175	1967-68															
40	15 10	20	120	75	0	0	0	45	90	90	30	0	75	45		
135	060 -1	-1	-1	-1												
V 188	1967-68															
030	020 020	000	160	060	000	000	000	045	080	090	050	000	075	035		
135	000 080	000	060	020												
V 189	1967-68															

035	020	020	020	180	075	000	000	000	050	080	050	030	000	065	015
150	-1	120	000	015	030										
V 190	1967-68														
-1	-1	-1	-1	165	000	000	000	000	060	080	075	000	000	075	000
180	030	095	000	000	015										
V 191	1967-68														
030	020	045	000	180	075	000	000	000	000	095	090	000	015	070	045
180	045	090	000	095	000										
V 192	1967-68														
035	020	030	000	180	000	000	000	000	090	090	075	000	000	070	060
155	060	065	000	000	020										
V 193															
V 194	1967-68														
000	030	030	000	190	075	000	000	000	090	090	120	060	000	090	060
180	060	120	000	000	060										
V 196	1967-68														
045	020	030	035	135	000	030	000	000	000	000	070	015	045	-1	-1
150	-1	-1	-1	-1	-1										
V 198	1967-68														
045	030	060	040	140	075	015	000	060	015	120	090	045	000	070	060
240	000	120	030	060	060										
V 206	1967-68														
030	020	025	015	180	000	000	000	000	000	090	070	000	000	075	050
150	030	100	020	090	015										
V 207	1967-68														
040	030	045	045	160	075	060	015	060	060	120	075	030	015	075	050
195	000	150	060	060	080										
V 209	1967-68														
-1	-1	-1	-1	000	075	000	030	030	070	105	075	060	050	070	060
100	-1	105	080	000	000										
V 221	1967-68														
025	035	030	025	105	015	065	000	000	075	120	090	060	060	090	045
120	060	100	065	045	060										
V 224	1967-68														
030	020	030	030	165	050	065	-1	-1	-1	-1	-1	-1	-1	090	060
190	000	135	015	040	000										
V 225	1967-68														
050	020	035	055	180	060	000	000	000	045	075	075	035	000	060	045
150	000	125	020	070	000										
V 227															
V 232															

BAND DURATION 1968-69

A	21	1968-69														
		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	075	000	000	220	155
	000	180	000	-1	165	090	000	095	025							
A	23	1968-69														
		-1	-1	-1	-1	-1	-1	-1	000	000	015	140	070	070	000	000
	015	080	040	085	090	070	010	000	015	045	075	060	000	000	200	120
	-1	-1	-1	-1	-1	-1	000	000	015							
A	24	1968-69														
		-1	-1	-1	-1	-1	-1	-1	000	000	065	115	100	090	065	015
	060	080	035	095	040	075	000	015	020	085	085	065	000	015	180	-1
	-1	-1	-1	-1	-1	-1	000	-1	-1							
A	26	1968-69														
		-1	-1	-1	-1	060	000	060	090	-1	-1	-1	-1	-1	-1	-1
	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
	-1	-1	-1	-1	-1	-1	000	000	030							
A	27	1968-69														
		-1	-1	-1	-1	035	000	-1	-1	-1	-1	-1	-1	-1	-1	-1
	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
	-1	-1	-1	-1	-1	-1	000	030	025							
A	29	1968-69														
		-1	-1	-1	-1	-1	-1	-1	-1	-1	050	095	105	050	065	085
	070	050	020	115	090	055	090	000	055	000	070	085	000	000	220	140
	060	220	165	070	175	060	000	090	050							
A	30	1968-69														
		-1	-1	-1	-1	-1	-1	-1	000	000	060	085	100	050	075	000
	075	055	010	110	-1	-1	030	000	000	000	070	070	000	000	220	140
	000	270	060	040	140	100	000	100	030							
A	31	1968-69														
		-1	-1	-1	-1	000	000	015	180	000	000	-1	-1	-1	-1	-1
	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
	-1	-1	-1	-1	-1	-1	000	050	015							
A	32	1968-69														
		-1	-1	-1	-1	000	000	000	145	015	000	015	085	080	015	085
	000	025	020	095	000	035	000	020	015	000	050	000	000	015	125	070
	000	135	000	050	130	080	025	055	050							
A	33	1968-69														
		-1	-1	-1	-1	000	000	000	180	000	000	000	110	110	055	015
	000	060	015	065	050	035	000	000	015	000	040	085	000	000	200	070
	000	225	000	015	160	095	-1	100	050							
A	34	1968-69														
		-1	-1	-1	-1	-1	-1	-1	-1	-1	000	100	090	050	035	000
	000	035	020	030	045	040	015	050	015	000	030	070	000	000	120	-1
	-1	-1	-1	-1	-1	-1	000	060	065							
A	35	1968-69														
		-1	-1	-1	-1	-1	-1	-1	000	000	000	080	110	015	060	000
	000	075	000	055	060	090	110	015	020	000	070	085	000	000	-1	-1
	-1	-1	-1	-1	-1	-1	-1	120	065							
A	36	1968-69														
		-1	-1	-1	-1	-1	-1	-1	-1	-1	000	030	045	000	050	000
	000	035	035	000	020	060	000	060	015	000	085	065	015	000	035	075

	000	230	000	000	145	090	000	080	065								
A 37	1968-69																
	-1	-1	-1	-1	015	015	000	120	015	015	000	105	160	015	090	105	
	155	100	030	080	075	165	075	105	040	030	060	015	065	000	075	220	
	015	275	130	035	130	095	030	-1	-1								
A 38	1968-69																
	-1	-1	-1	-1	000	000	-1	-1	-1	-1	000	105	090	000	035	015	
	070	090	030	060	085	125	110	-1	-1	-1	-1	-1	-1	-1	-1	-1	
	-1	-1	-1	-1	-1	-1	000	055	050								
A 41																	
A 42																	
A 44																	
A 45																	
A 46																	
A 47																	
	-1	-1	-1	-1	-1	-1	000	150	-1	-1	045	120	135	015	-1	105	
	160	070	025	110	-1	-1	-1	060	030	015	075	075	065	000	160	-1	
	090	270	-1	-1	-1	-1	125	060	055								
E0442	1968-69																
	080	030	055	020	030	100	030	190	000	000	090	150	125	105	120	000	
	000	060	020	080	055	080	050	030	030	065	095	075	000	000	090	125	
	000	255	000	060	150	090	000	055	055								
E1142	1968-69																
	-1	-1	-1	-1	070	115	050	180	080	040	150	165	095	045	115	175	
	085	080	040	135	095	125	120	075	080	095	055	115	055	210	135	240	
	080	210	-1	-1	-1	100	000	145	060								
E1253	1968-69																
	-1	-1	-1	-1	045	120	045	120	065	035	080	180	110	055	090	120	
	150	075	045	120	075	145	120	120	050	075	055	105	045	215	195	145	
	060	240	135	045	130	060	040	150	055								
E1682	1968-69																
	040	025	025	045	015	150	000	175	000	000	075	150	180	060	130	105	
	120	085	020	090	130	110	150	110	045	090	095	065	015	130	235	160	
	075	325	150	055	165	075	060	070	030								
E1743	1968-69																
	045	030	045	090	050	055	090	120	060	040	085	120	120	075	055	015	

090	080	045	115	105	120	060	060	045	120	105	085	025	215	235	135
60	205	150	30	170	100	0	120	65							
E3465	1968-69														
120	040	060	030	-1	-1	090	135	075	030	075	150	180	075	090	120
075	075	030	075	095	120	030	060	075	090	100	015	040	300	150	240
105	310	150	040	140	075	000	080	060							
E3751	1968-69														
075	030	020	045	000	140	000	185	000	000	045	200	180	070	135	015
155	070	030	100	125	120	120	095	040	090	085	015	015	225	195	155
090	320	150	075	130	075	020	070	030							
E4144	1968-69														
105	025	035	060	070	030	060	185	055	045	080	140	105	065	090	120
130	070	025	140	110	090	060	000	060	060	105	075	050	235	160	135
090	205	140	050	155	120	-1	150	060							
E4767	1968-69														
060	045	045	045	015	045	075	150	-1	-1	075	135	095	055	075	150
170	070	030	110	-1	-1	-1	-1	-1	-1	-1	100	000	240	090	150
080	135	150	045	160	135	-1	105	060							
E4867	1968-69														
090	030	035	060	040	115	000	155	000	000	075	145	200	105	120	120
125	090	030	100	080	130	170	095	050	105	060	050	040	180	300	175
110	320	130	050	180	080	035	060	040							
E5098	1968-69														
090	060	095	060	060	045	015	165	055	015	045	090	145	075	105	015
060	040	030	110	030	070	015	090	040	080	105	015	000	120	275	090
135	270	000	045	185	050	000	060	090							
E5151	1968-69														
085	015	040	000	000	015	060	000	000	000	090	155	085	110	-1	-1
085	155	025	120	095	065	075	000	075	090	105	060	000	000	240	170
000	060	000	015	165	100	000	105	040							
E5184	1968-69														
120	040	045	000	065	140	095	170	090	060	140	160	105	100	080	165
140	090	030	160	115	180	015	090	070	045	080	090	050	220	000	185
60	185	180	55	175	80	0	115	90							
E5756	1968-69														
040	020	025	000	000	000	-1	000	000	000	000	105	090	050	060	000
000	050	025	075	045	090	150	090	000	000	065	000	060	015	240	165
015	300	150	055	165	095	000	055	030							
E6006	1968-69														
-1	-1	-1	-1	000	-1	000	165	000	000	000	200	160	115	110	105
150	060	030	105	120	140	150	110	070	090	080	000	050	300	220	-1
-1	-1	-1	-1	-1	-1	-1	030	050	030						
E6624	1968-69														
-1	-1	-1	-1	-1	-1	-1	-1	-1	000	000	000	105	120	060	075
000	055	040	060	075	105	120	015	015	050	015	000	000	000	120	045
000	330	055	030	120	080	000	-1	-1							
E6736	1968-69														
060	000	060	000	060	085	075	150	050	040	120	170	105	090	090	165
140	080	030	120	105	155	095	000	040	090	090	090	035	200	230	210
65	210	150	35	160	105	0	150	65							
E7735	1968-69														

050	015	060	060	000	000	000	105	000	000	075	105	130	050	070	110
155	090	040	100	080	140	120	-1	-1	-1	-1	060	015	180	165	165
095	310	145	090	160	-1	045	080	045							
E7946	1968-69														
125	045	030	040	075	080	060	120	050	050	095	160	130	055	080	120
140	050	030	130	115	095	060	000	015	060	070	105	035	220	145	115
100	195	150	045	150	095	075	155	060							
E8697	1968-69														
110	035	015	045	060	030	075	-1	060	040	105	170	135	095	050	015
055	020	015	050	-1	-1	-1	-1	000	060	040	120	045	210	180	090
075	195	135	035	145	060	-1	135	030							
E8752	1968-69														
070	035	050	000	000	000	000	195	000	000	100	095	105	060	000	135
000	070	015	025	065	075	135	000	040	015	065	075	000	000	200	135
000	120	000	040	165	105	000	095	035							
E8832	1968-69														
120	040	075	030	000	075	000	150	000	000	040	060	120	015	065	015
000	035	020	050	030	040	015	090	020	015	080	045	000	190	240	070
000	160	155	035	180	090	000	065	100							
E9049	1968-69														
085	050	015	050	000	110	000	180	040	045	000	140	170	080	120	000
150	050	020	075	130	120	120	110	050	090	100	000	-1	-1	-1	180
095	310	160	060	130	100	-1	060	060							
E9221	1968-69														
080	045	055	045	060	055	105	150	050	000	-1	-1	-1	-1	085	155
160	065	030	150	-1	-1	-1	000	070	100	090	-1	000	210	250	210
65	200	150	65	150	105	0	1	1							
E9283	1968-69														
120	-1	-1	-1	-1	-1	-1	-1	-1	-1	000	075	140	015	-1	120
100	065	025	115	080	195	105	030	030	000	060	070	000	000	160	090
000	245	-1	-1	-1	095	000	075	035							
E9458															
E9512	1968-69														
090	030	095	080	060	075	000	000	065	075	075	115	190	045	080	110
045	070	025	080	045	100	095	095	060	090	105	120	045	210	090	195
015	300	135	065	120	120	000	060	025							
L 6	1968-69														
115	030	015	060	000	120	000	100	000	000	-1	-1	-1	-1	105	130
145	140	030	130	060	075	140	-1	-1	-1	-1	075	-1	225	240	175
070	300	105	020	075	080	060	-1	-1							
L 10	1968-69														
040	030	015	025	-1	-1	000	120	000	000	030	145	145	090	070	150
110	070	030	080	050	100	155	100	055	105	090	-1	000	220	260	-1
-1	-1	-1	-1	-1	-1	-1	070	045	025						
L 11	1968-69														
120	030	010	050	050	130	000	150	000	000	060	130	150	120	080	150
155	085	025	105	060	100	155	110	-1	-1	-1	000	220	220	220	160
095	315	040	015	080	100	020	030	035							

L 33	1968-69														
110	030	015	045	000	130	000	175	000	000	045	120	185	090	090	015
160	065	020	085	115	115	150	090	040	090	105	-1	050	220	205	150
090	330	160	065	150	110	040	055	030							
L 46	1968-69														
080	055	000	030	000	120	000	165	000	000	000	135	135	120	105	140
145	080	025	090	130	135	120	070	050	090	090	000	000	210	200	110
095	310	155	065	110	110	030	070	045							
L 52	1968-69														
055	070	000	035	000	100	000	180	020	020	000	135	200	095	100	110
120	060	025	085	145	130	140	085	045	095	075	000	070	210	200	130
080	330	130	070	135	120	-1	-1	-1							
L 53	1968-69														
080	065	020	035	000	130	000	180	000	060	000	130	140	090	110	130
190	045	030	100	150	125	150	105	045	075	080	000	000	205	210	190
080	305	145	075	125	120	015	050	030							
L 54	1968-69														
-1	-1	-1	-1	000	085	000	180	000	000	-1	-1	-1	-1	100	000
050	-1	-1	-1	145	125	165	090	035	090	085	000	000	180	215	175
085	295	130	080	150	110	045	070	045							
L 128	1968-69														
-1	-1	-1	-1	000	120	000	120	000	060	050	145	185	120	105	150
-1	-1	-1	-1	075	145	145	100	060	085	115	-1	050	205	270	095
070	315	180	085	210	085	-1	050	040							
L 179	1968-69														
040	000	000	000	000	100	000	145	000	000	060	150	150	100	115	120
120	065	000	100	115	-1	-1	110	060	060	090	-1	055	200	170	185
080	280	150	060	110	085	015	060	025							
L 191	1968-69														
120	020	020	040	000	090	000	130	000	000	030	120	150	070	120	030
040	-1	-1	-1	090	090	150	075	025	050	090	000	025	210	-1	190
025	315	125	000	135	060	020	040	020							
L 213	1968-69														
140	025	020	000	000	090	000	120	000	000	060	120	165	140	135	150
160	070	025	115	095	100	145	075	045	080	100	-1	030	215	210	175
075	280	045	000	000	070	010	030	025							
L 250	1968-69														
-1	-1	-1	-1	000	075	000	075	000	000	000	090	115	105	090	000
000	075	030	085	125	110	155	045	000	075	080	000	-1	-1	180	165
070	260	150	055	140	085	015	105	045							
L 259	1968-69														
120	030	010	035	000	150	000	175	000	000	030	140	170	080	110	140
150	095	020	100	125	120	160	090	070	100	090	070	030	190	240	170
090	330	160	065	150	120	060	070	020							
L 292	1968-69														
-1	060	025	040	000	100	000	060	000	000	000	150	150	100	095	130
125	-1	-1	-1	060	080	140	100	050	090	080	040	000	200	240	180
085	310	110	030	120	105	060	050	025							
L 303	1968-69														
140	030	000	025	000	100	000	130	000	000	000	140	150	110	100	070
110	065	040	110	120	090	170	100	060	060	100	000	030	200	170	195

090	300	110	040	100	090	020	050	020									
L 372	1968-69																
110	040	040	040	000	130	000	180	060	040	000	140	170	095	100	000		
150	095	035	120	115	110	135	110	060	090	100	100	000	190	245	165		
070	325	175	080	130	075	000	050	020									
L 434	1968-69																
-1	-1	-1	-1	030	115	000	150	000	000	000	150	160	090	130	130		
135	095	015	110	085	130	140	-1	-1	-1	-1	050	000	320	270	180		
080	315	155	025	180	095	025	065	045									
L 435	1968-69																
135	035	020	075	040	110	000	115	000	000	-1	120	150	140	120	135		
150	095	020	115	-1	-1	-1	040	050	065	105	-1	000	240	250	170		
080	315	105	025	120	070	015	055	035									
L 451	1968-69																
100	035	030	045	000	120	000	120	-1	-1	000	150	110	100	115	000		
030	070	030	120	060	135	150	095	025	080	120	-1	050	135	210	150		
090	375	145	055	155	085	-1	-1	-1									
L 458	1968-69																
075	030	025	030	030	095	000	125	000	000	060	135	165	090	150	135		
130	095	020	110	060	060	180	080	070	075	090	045	-1	-1	000	150		
080	320	000	015	020	035	-1	045	030									
L 466	1968-69																
095	045	030	040	000	075	015	170	015	015	000	150	190	160	120	000		
135	070	030	090	145	165	160	105	045	085	100	-1	000	210	210	205		
090	310	170	070	155	080	045	075	020									
L 694	1968-69																
100	050	000	000	000	075	000	170	000	000	000	150	110	120	120	000		
120	070	080	045	140	140	170	090	045	090	090	000	000	195	210	180		
100	345	150	070	125	075	015	065	030									
L1017	1968-69																
095	060	000	000	-1	-1	-1	-1	-1	-1	000	115	000	120	030	000		
000	055	015	085	045	105	165	030	000	075	080	000	000	000	180	115		
060	300	105	080	105	100	000	090	060									
L1074	1968-69																
-1	-1	-1	-1	-1	-1	-1	-1	050	060	000	140	160	090	110	130		
155	070	035	095	130	130	150	110	040	080	070	000	060	230	220	160		
080	310	145	070	135	100	040	095	040									
L1107	1968-69																
010	050	030	000	000	120	000	155	000	000	000	150	150	120	120	000		
120	085	030	075	150	105	165	095	035	090	070	000	040	225	190	165		
080	330	165	050	130	125	045	050	030									
L1108	1968-69																
-1	-1	-1	-1	-1	-1	000	130	-1	-1	-1	-1	-1	-1	075	000		
000	040	030	120	070	105	120	090	080	060	075	-1	-1	-1	-1	-1		
-1	-1	095	040	120	085	030	080	045									
L1181	1968-69																
080	055	015	040	-1	-1	-1	-1	000	000	000	130	195	060	110	015		
150	080	020	085	135	090	130	090	050	090	105	-1	-1	195	175	190		
090	320	145	020	160	090	020	050	035									
M 100																	

M 101	1968-69															
105	50	45	75	65	155	95	165	90	120	140	155	95	75	105	160	
100	80	35	180	90	70	75	60	135	90	100	135	65	230	105	155	
105	150	175	30	165	105	0	165	90								
M 102	1968-69															
M 103	1968-69															
90	50	35	90	80	75	90	150	70	45	135	165	90	70	105	95	
80	110	35	150	140	120	120	0	50	140	120	50	65	280	195	150	
100	165	160	45	165	120	0	160	95								
M 104	1968-69															
85	50	30	95	90	95	75	180	65	40	125	150	105	80	100	75	
80	1	1	1	1	1	1	0	35	75	105	65	50	240	150	165	
85	150	135	45	165	125	30	140	95								
M 124	1968-69															
090	050	055	065	-1	-1	000	195	000	000	000	180	120	120	090	000	
150	120	025	120	120	140	165	120	060	105	060	055	000	050	255	105	
075	345	180	055	180	090	075	090	045								
M 225	1968-69															
-1	-1	-1	-1	070	100	000	150	075	015	140	195	125	060	100	160	
185	060	025	110	060	170	080	065	035	090	085	100	070	200	190	150	
055	310	000	000	110	050	090	070	055								
M 226	1968-69															
090	050	030	060	000	135	-1	150	000	000	095	195	150	120	-1	-1	
-1	-1	030	075	050	090	045	090	040	105	090	075	050	210	175	120	
075	275	000	035	130	075	055	150	035								
M 228	1968-69															
110	060	035	040	000	110	000	150	010	015	135	190	140	060	100	140	
170	060	025	105	085	150	105	070	035	100	100	100	060	230	185	160	
040	310	030	025	115	070	070	085	050								
M 230	1968-69															
120	050	050	075	000	130	000	180	015	050	120	180	180	060	120	125	
190	120	045	120	090	180	080	075	040	095	090	120	065	240	180	135	
070	330	125	060	130	110	070	120	065								
N A	1968-69															
090	050	-1	-1	040	075	060	135	065	035	080	180	120	105	100	125	
175	090	040	120	070	140	120	060	060	100	100	-1	065	210	195	-1	
090	220	-1	020	195	105	065	165	040								
N B	1968-69															
090	-1	-1	025	000	125	000	105	000	015	080	165	180	115	115	175	
180	070	030	120	075	175	025	070	050	090	090	090	040	210	165	150	
045	280	000	020	150	035	075	085	050								
N 1	1968-69															
095	045	030	055	030	085	060	120	080	030	045	150	090	035	060	120	
150	050	020	125	125	080	075	000	015	045	035	135	030	210	125	125	
045	145	135	040	090	090	070	170	030								
N 2	1968-69															

105	060	020	040	050	075	075	090	070	015	100	180	100	075	105	100
175	075	025	120	115	090	145	050	015	-1	-1	135	-1	-1	200	120
050	200	120	035	145	065	055	180	050							
N 3	1968-69														
105	050	030	075	060	075	055	130	060	015	085	190	105	065	140	120
145	040	030	105	130	150	120	030	025	055	070	110	075	190	195	110
060	215	135	050	130	055	085	145	060							
N 4	1968-69														
115	060	025	060	040	090	060	135	075	045	060	155	130	130	100	150
180	075	035	100	135	125	090	080	015	060	050	075	075	215	195	150
055	195	130	030	105	135	090	140	070							
N 5	1968-69														
110	060	020	035	045	075	090	105	025	055	085	170	120	095	110	145
170	080	030	085	100	180	090	090	010	060	060	090	065	220	195	150
065	210	135	045	120	070	055	-1	-1							
N 6	1968-69														
-1	-1	-1	-1	090	-1	-1	060	035	070	065	-1	-1	-1	-1	165
075	200	120	055	120	075	045	120	060							
115	060	015	050	070	125	090	150	015	015	075	160	120	170	-1	-1
N 7	1968-69														
105	065	015	040	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	-1	090	015	045	050	075	065	210	175	165
075	230	150	050	105	070	075	140	055							
N 8A	1968-69														
120	065	040	030	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	115	120
060	075	035	130	080	165	130	090	030	095	095	105	015	135	145	130
015	250	110	040	095	120	015	155	065							
N 9A	1968-69														
115	045	020	035	045	125	030	145	000	055	060	190	140	145	090	120
175	085	040	110	095	135	120	075	005	065	070	060	035	190	195	145
080	220	145	040	110	035	045	145	055							
N 10	1968-69														
110	060	020	065	040	130	065	195	015	060	-1	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	-1	095	010	080	075	-1	000	185	-1	-1
-1	-1	-1	-1	-1	-1	-1	085	130	055						
N 11	1968-69														
095	065	015	055	020	130	115	210	015	065	120	145	135	015	120	130
170	080	030	140	080	160	130	095	010	085	060	075	015	210	185	185
085	215	140	040	125	080	075	125	060							
N 12A	1968-69														
-1	-1	-1	-1	000	015	060	160	015	055	170	105	175	060	105	135
120	070	030	125	090	190	120	075	030	080	075	075	030	140	195	205
015	260	130	050	110	080	000	140	060							
N 13	1968-69														
095	060	015	055	030	130	050	180	045	025	100	175	175	130	095	135
185	080	035	120	075	145	125	060	055	090	085	090	045	210	200	170
090	250	130	030	110	050	055	145	060							
N 14	1968-69														
115	055	025	045	045	120	045	185	020	010	-1	-1	-1	-1	100	120
135	075	035	125	075	135	135	095	020	085	075	090	030	240	170	130
060	245	120	045	110	065	065	110	045							

N 15 1968-69
095 060 035 075 015 130 030 120 000 025 090 180 165 090 100 135
165 070 040 130 085 160 090 075 015 065 115 050 045 210 150 195
105 255 115 035 135 080 050 125 050
N 16 1968-69
095 045 025 015 045 065 025 120 000 035 100 180 155 125 110 135
160 065 040 120 080 160 105 090 015 075 110 -1 -1 -1 -1 -1
-1 -1 -1 -1 -1 -1 065 130 060
N 17 1968-69
115 060 030 040 020 130 -1 -1 -1 -1 -1 -1 -1 -1 090 120
170 070 030 160 085 155 125 090 010 090 075 090 055 205 155 230
075 250 130 045 115 085 050 120 060
N 18

N 19

N 20

N 21

S 201 1968-69
125 045 035 095 060 090 070 170 065 020 090 180 115 085 090 140
135 060 030 120 150 175 120 150 045 105 105 120 045 180 180 120
075 195 120 055 140 090 090 135 060
S 202 1968-69
115 045 030 095 090 120 075 180 065 025 060 160 100 075 085 135
165 075 020 120 120 210 105 070 015 075 085 095 045 180 210 120
065 210 145 045 130 160 060 140 060
S 203 1968-69
120 040 020 055 075 090 070 140 070 030 075 180 115 075 105 140
150 055 025 075 120 180 130 040 025 050 075 095 075 180 195 100
075 205 155 045 135 105 110 150 060
S 204 1968-69
105 050 025 070 050 070 055 170 070 020 090 180 100 120 080 130
140 055 020 105 130 185 130 045 020 070 070 070 060 210 195 110
060 230 120 060 120 085 085 145 060
S 205 1968-69
120 060 030 090 060 090 060 120 080 020 090 170 100 070 085 150
190 050 030 130 -1 -1 -1 060 000 040 040 090 065 180 200 090
065 195 150 030 135 090 040 170 065
S 206 1968-69
080 055 020 030 055 075 045 130 090 020 105 200 145 120 105 190
110 055 030 090 065 145 075 060 020 075 075 075 050 210 210 130

	045	225	000	000	150	120	060	150	065								
S	208	1968-69															
	095	055	035	035	000	090	000	135	000	015	120	195	125	000	120	135	
	150	065	030	105	090	150	080	060	050	075	080	045	060	220	195	155	
	040	315	015	055	130	030	030	075	045								
S	209	1968-69															
	090	055	035	025	000	095	000	150	000	030	110	180	120	000	110	135	
	135	060	025	105	090	185	120	060	015	075	060	030	045	210	180	140	
	055	300	060	025	135	030	000	070	030								
S	210	1968-69															
	-1	055	020	045	000	060	000	170	000	000	080	175	140	060	120	165	
	160	070	025	185	080	155	050	060	030	070	075	000	040	210	090	085	
	035	305	070	030	115	060	000	080	045								
S	211	1968-69															
	080	055	030	060	000	130	000	135	015	030	080	170	130	060	120	145	
	190	060	025	120	090	180	045	055	040	070	095	095	060	195	165	135	
	050	275	000	020	125	060	060	080	065								
S	212	1968-69															
	105	065	040	075	060	115	040	180	000	035	090	180	170	090	120	135	
	190	090	035	110	090	180	100	095	050	100	090	090	075	200	180	105	
	075	300	090	050	160	080	080	135	070								
S	215	1968-69															
	120	060	020	035	060	090	060	115	090	010	070	180	120	065	070	120	
	175	040	020	065	135	180	135	040	000	030	030	-1	-1	-1	-1	-1	
	-1	-1	-1	-1	-1	-1	-1	-1	-1								
S	217	1968-69															
	105	045	025	030	070	060	080	130	085	025	090	180	090	095	100	150	
	135	045	020	080	145	180	000	075	000	055	060	135	060	205	210	105	
	065	205	135	045	150	060	070	170	060								
S	221	1968-69															
	120	060	060	000	000	000	000	210	000	000	070	150	120	060	120	150	
	110	080	050	110	075	105	135	000	060	000	090	090	000	000	160	100	
	000	280	110	060	130	090	-1	-1	-1								
S	231	1968-69															
	115	065	025	085	000	110	040	150	070	030	090	165	140	045	-1	-1	
	-1	-1	-1	-1	095	170	080	080	040	105	105	070	085	195	225	180	
	060	320	105	060	120	065	000	090	055								
S	232	1968-69															
	120	060	030	075	045	115	000	165	055	060	085	190	150	000	105	120	
	170	090	040	115	090	170	105	050	040	080	080	030	090	180	180	170	
	065	330	125	035	140	080	060	-1	-1								
S	233	1968-69															
	110	060	040	080	080	120	060	135	090	070	070	180	130	120	120	150	
	175	070	050	080	145	120	085	090	015	060	060	100	070	205	180	150	
	080	220	150	030	110	105	120	120	065								
S	234	1968-69															
	095	055	025	035	000	100	000	140	000	000	100	170	110	015	115	170	
	150	070	020	130	070	190	035	060	050	075	090	075	050	225	130	155	
	040	315	000	000	090	075	050	075	050								
S	235	1968-69															
	120	035	020	050	050	075	050	165	065	020	090	180	090	075	090	105	

	135	020	040	125	105	080	050	000	000	070	090	120	015	195	165	120
	085	190	155	050	155	120	045	120	065							
S 236	1968-69															
	C90	060	030	060	035	090	080	180	105	040	150	180	120	120	105	180
	190	120	030	140	105	110	075	100	035	090	090	120	060	240	075	155
	090	255	150	025	120	110	100	130	075							
S 238	1968-69															
	075	060	060	080	000	090	080	180	015	040	120	120	180	060	090	120
	150	080	045	150	100	160	115	095	040	015	085	090	030	180	180	120
	015	250	150	030	120	080	000	120	060							
S 241	1968-69															
	C90	050	030	060	000	135	000	155	000	000	-1	-1	-1	-1	115	135
	180	070	025	115	075	115	025	065	035	095	085	060	045	210	135	125
	050	330	000	-1	-1	080	035	095	040							
S 242	1968-69															
	110	050	030	070	000	150	000	140	000	000	120	180	150	040	140	125
	185	090	020	115	090	150	095	070	045	085	085	090	050	195	180	160
	055	275	060	040	120	045	060	090	065							
S 249	1968-69															
	100	075	050	090	060	105	090	225	030	060	070	135	060	045	120	100
	175	075	045	150	130	150	075	040	030	030	060	090	-1	-1	-1	-1
	-1	-1	-1	-1	-1	-1	000	180	060							
S 251	1968-69															
	-1	-1	-1	-1	065	075	085	155	070	040	100	180	105	150	110	140
	170	055	030	125	130	090	140	045	015	065	060	135	065	195	200	115
	060	210	120	035	170	070	070	150	065							
S 255																

S 256

S 257

V 85	1968-69															
	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	125	150
	170	085	045	110	060	135	135	070	080	085	095	015	000	190	245	165
	090	315	130	075	165	075	-1	-1	-1							
V 121	1968-69															
	-1	-1	-1	-1	-1	-1	-1	-1	000	000	060	080	190	105	110	060
	165	095	030	100	100	115	185	050	040	100	070	000	015	175	240	100
	100	305	140	015	135	100	015	050	040							
V 138	1968-69															
	050	015	000	120	015	075	000	200	090	105	120	165	155	000	075	120
	180	085	030	140	105	180	135	065	040	075	080	045	020	100	145	110
	060	200	120	075	135	120	120	120	060							
V 165	1968-69															

-1	-1	-1	-1	015	075	000	205	045	075	090	180	165	000	100	125
165	090	030	140	075	155	140	070	070	090	075	000	040	210	180	150
045	315	120	060	130	075	000	060	055							
V 166	1968-69														
060	050	045	075	015	050	000	185	060	110	095	180	155	000	100	110
150	075	050	120	090	150	125	060	085	090	090	060	070	210	180	170
045	325	105	040	150	065	000	060	050							
V 167	1968-69														
085	050	015	045	000	060	000	150	070	080	110	165	170	000	105	105
105	090	040	090	055	115	120	030	040	080	045	000	025	195	075	135
080	305	060	065	150	095	060	070	025							
V 168	1968-69														
085	050	025	045	030	110	000	145	050	065	105	130	205	000	075	075
225	090	030	105	135	085	120	065	060	070	055	000	030	210	090	125
075	310	075	065	150	100	035	065	030							
V 169															

V 170	1968-69														
-1	-1	-1	-1	-1	-1	000	125	-1	-1	000	170	140	115	125	000
165	105	025	100	080	140	135	105	035	075	075	000	000	195	-1	155
105	330	115	085	165	120	000	-1	-1							
V 171	1968-69														
070	050	050	035	000	105	000	125	070	055	090	170	165	070	125	065
165	100	020	120	075	135	145	100	040	070	090	060	000	180	135	180
090	325	135	065	180	090	000	060	050							
V 172	1968-69														
070	045	055	075	-1	-1	000	130	070	055	060	170	150	080	120	110
165	085	030	120	110	130	135	090	060	085	105	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	000	100	060							
V 173	1968-69														
090	050	040	040	000	120	000	125	070	065	105	150	175	045	135	105
150	085	040	120	085	105	150	075	070	080	085	000	015	185	120	180
095	335	155	050	160	075	000	065	065							
V 174	1968-69														
090	060	035	040	000	090	000	190	-1	-1	-1	-1	-1	-1	075	120
180	110	040	100	120	180	140	060	060	075	105	045	030	120	165	165
065	300	120	060	180	090	000	080	060							
V 175	1968-69														
-1	-1	-1	-1	-1	-1	-1	-1	070	070	105	165	160	000	120	120
145	110	020	115	065	090	115	090	060	075	070	000	040	195	135	145
065	335	070	075	120	095	025	-1	-1							
V 188															

V 189

V 190	1968-69														
060	045	025	045	000	120	000	130	000	045	060	160	170	015	090	075
120	090	020	120	055	105	135	065	045	080	050	000	000	200	090	140
060	310	075	065	165	100	000	055	040							
V 191	1968-69														
075	040	055	060	000	110	000	140	000	045	075	165	165	075	110	050
180	090	015	115	085	150	130	080	055	090	100	075	015	180	120	175
075	345	135	070	150	085	000	060	050							
V 192	1968-69														
-1	-1	-1	-1	-1	-1	000	130	000	000	075	130	180	000	095	000
090	105	030	090	120	135	140	075	045	090	075	000	000	190	120	170
090	305	150	075	155	090	000	055	035							
V 193	1968-69														
060	030	075	040	000	105	000	125	000	000	000	135	150	000	080	000
150	090	015	115	135	135	165	060	060	085	070	055	-1	-1	120	165
105	310	120	045	140	105	000	-1	-1							
V 194	1968-69														
030	060	030	090	045	120	000	150	000	000	075	150	180	015	105	060
060	105	020	150	070	095	145	075	000	075	065	000	000	150	135	150
070	330	120	060	075	090	000	075	050							
V 196	1968-69														
V 198	1968-69														
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	100	165	150	015	100	120
165	090	025	105	-1	-1	-1	080	075	080	095	050	040	210	115	165
070	330	110	045	-1	-1	000	080	040							
V 206	1968-69														
080	060	015	035	000	120	000	140	000	045	060	150	165	045	120	060
150	095	020	110	110	140	145	085	045	080	105	000	050	195	135	195
085	320	075	070	190	090	000	075	055							
V 207	1968-69														
090	060	040	040	025	080	000	150	050	095	075	185	155	000	110	115
175	090	030	125	-1	-1	-1	075	020	085	080	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	020	080	065							
V 209	1968-69														
050	050	035	025	000	100	000	150	030	015	070	090	180	000	070	135
135	080	030	100	080	180	135	100	000	040	060	000	000	220	000	240
000	170	120	050	130	080	-1	085	040							
V 221	1968-69														
085	045	015	020	000	085	000	150	000	060	105	165	125	000	090	070
090	080	035	090	060	130	100	065	050	090	095	-1	030	195	195	135
065	315	000	000	135	080	030	065	045							
V 224	1968-69														
085	045	035	060	-1	-1	000	135	060	050	-1	-1	-1	-1	090	-1
-1	-1	-1	-1	090	125	145	090	075	075	075	015	025	190	120	185
-1	-1	-1	-1	-1	-1	030	075	030							
V 225	1968-69														
085	050	020	040	000	120	000	105	050	060	090	150	165	070	120	095
150	095	030	110	090	120	145	075	025	080	085	000	000	195	180	175

065 315 135 070 150 065 000 055 045
 V 227

V 232 1968-69
 -1 -1 -1 -1 -1 -1 -1 -1 000 000 090 135 175 100 110 105
 120 095 015 105 070 105 160 080 065 100 065 000 015 195 120 155
 095 290 120 050 165 100 020 050 030

BAND DURATION 1969-70

A 21 1969-70
 -1 -1 000 000 000 000 000 000 035 015 015 145 015 100 000 065
 050 090 035 060 080 210
 A 23 1969-70
 -1 -1 000 000 050 000 095 090 000 000 015 100 -1 -1 -1 -1
 -1 -1 -1 -1 -1 015
 A 24 1969-70
 -1 -1 000 000 060 015 000 000 045 000 040 -1 -1 -1 -1 -1
 -1 -1 -1 -1 -1 -1
 A 26 1969-70
 -1 -1 000 000 055 000 000 095 055 000 020 100 015 100 015 080
 000 060 000 060 090 080
 A 27 1969-70
 -1 -1 000 000 040 000 000 -1 -1 -1 -1 120 -1 -1 -1 -1
 -1 -1 -1 -1 -1 -1
 A 29 1969-70
 -1 -1 000 000 055 050 090 000 000 045 060 105 015 015 110 095
 100 015 015 000 000 215
 A 30 1969-70
 -1 -1 000 000 065 050 090 000 035 025 040 -1 -1 -1 -1 -1
 -1 -1 -1 -1 -1 140
 A 31 1969-70
 -1 -1 000 000 -1 -1 -1 -1 -1 -1 -1 115 000 000 015 100
 000 040 000 000 135 080
 A 32 1969-70
 -1 -1 000 000 -1 -1 000 100 090 000 090 090 000 -1 -1 -1
 -1 -1 -1 -1 -1 180
 A 33 1969-70
 -1 -1 000 000 050 000 000 075 000 000 015 080 000 090 015 085
 000 040 000 000 030 060
 A 34 1969-70
 -1 -1 000 000 015 000 000 090 040 000 055 100 000 015 000 125
 -1 -1 -1 055 095 150
 A 35 1969-70
 -1 -1 000 -1 -1 -1 -1 -1 -1 -1 080 000 150 085 100
 020 055 000 000 030 -1
 A 36 1969-70
 -1 -1 000 000 -1 -1 -1 -1 -1 -1 -1 100 000 130 030 100

	060	000	015	000	140	180										
A	37	1969-70														
	-1	-1	000	050	130	080	015	095	050	030	060	100	015	190	105	085
	085	095	000	000	140	235										
A	38	1969-70														
	-1	-1	000	035	105	065	015	015	060	015	015	160	015	195	070	105
	100	080	000	000	140	-1										
A	41	1969-70														
	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	090	075	165	115	110
	105	040	050	015	105	245										
A	42	1969-70														
	100	130	060	015	120	-1	015	105	105	060	060	-1	-1	130	105	105
	100	070	060	030	060	225										
A	44															
A	45															
A	46															
A	47															
E0442	1969-70															
	050	135	000	000	015	000	000	080	060	025	045	125	000	210	000	110
	000	015	000	015	150	165										
E1142	1969-70															
	120	060	060	080	120	100	075	090	105	060	070	000	070	180	140	075
	045	040	105	020	090	195										
E1253	1969-70															
	095	125	060	040	110	065	060	110	080	035	050	080	035	170	100	075
	105	120	015	055	105	-1										
E1682	1969-70															
	000	140	000	000	000	105	110	080	070	055	055	100	000	195	120	110
	080	090	000	055	135	245										
E1743	1969-70															
	090	045	000	000	120	075	000	090	070	030	060	105	045	150	115	115
	050	050	075	000	075	245										
E3465	1969-70															
	000	105	000	030	095	105	000	105	085	070	080	-1	-1	-1	-1	-1
	-1	-1	-1	-1	-1	-1										
E3751	1969-70															
	000	130	000	060	000	105	060	095	075	060	070	150	000	175	135	090
	000	045	000	055	140	255										
E4144	1969-70															
	150	115	000	000	110	090	060	-1	-1	-1	-1	-1	060	120	120	170
	055	060	-1	-1	-1	230										
E4767	1969-70															
	-1	-1	000	000	090	070	060	000	055	060	050	065	070	220	125	115

U60	075	060	000	075	240											
E4867	1969-70															
050	150	-1	-1	120	090	070	105	060	050	060	170	-1	130	110	120	
000	060	000	000	040	255											
E5098	1969-70															
000	060	000	030	090	075	000	080	075	045	060	095	045	015	015	145	
015	075	045	050	135	170											
E5151	1969-70															
145	120	000	000	-1	-1	075	000	000	000	000	100	015	105	000	080	
000	000	035	060	090	130											
E5184	1969-70															
100	015	070	090	120	060	-1	-1	-1	-1	-1	000	080	200	120	000	
080	030	080	050	095	195											
E5756	1969-70															
000	-1	000	000	-1	-1	000	-1	-1	-1	-1	075	000	075	080	120	
000	060	000	000	045	330											
E6006	1969-70															
040	105	060	030	095	100	000	070	050	040	060	115	040	-1	-1	130	
070	180	030	055	155	255											
E6624	1969-70															
000	105	000	000	000	105	000	000	000	000	000	100	000	120	090	070	
000	105	000	090	100	140											
E6736	1969-70															
-1	-1	000	085	120	080	060	080	080	045	055	030	050	180	120	105	
105	060	075	060	120	225											
E7735	1969-70															
070	015	000	045	105	110	065	090	060	045	060	125	000	180	095	135	
090	135	070	000	090	-1											
E7946	1969-70															
120	135	030	015	105	080	095	090	125	035	040	015	060	165	120	125	
080	060	080	035	120	240											
E8697	1969-70															
090	115	060	035	105	075	045	080	100	040	030	000	030	150	090	110	
050	065	-1	-1	-1	-1											
E8752	1969-70															
-1	105	000	-1	-1	-1	015	000	060	000	070	115	000	100	000	085	
000	095	000	000	000	080											
E8832	1969-70															
000	075	000	000	075	000	000	100	075	045	060	090	000	180	065	105	
000	060	000	000	135	240											
E9049	1969-70															
000	105	000	055	110	080	000	090	000	055	070	130	000	150	130	110	
100	150	030	060	190	330											
E9221	1969-70															
-1	-1	-1	-1	-1	-1	-1	000	070	065	065	-1	060	165	110	105	
000	060	050	040	060	220											
E9283																
E9458																

E9512	1969-70															
000	060 000	000	080	080	000	090	070	060	060	105	-1	000	000	120		
015	000 000	050	090	185												
L 6	1969-70															
030	150 000	090	085	105	090	095	085	045	075	125	-1	-1	-1	-1		
050	080 035	000	150	280												
L 10	1969-70															
060	150 000	055	080	105	065	-1	-1	-1	-1	090	000	145	090	000		
000	080 000	000	015	260												
L 11	1969-70															
035	150 000	060	075	100	070	095	065	040	060	110	000	180	120	015		
000	090 030	000	150	260												
L 33	1969-70															
000	150 000	050	075	100	000	090	070	050	070	155	000	180	125	090		
040	075 000	060	145	270												
L 46	1969-70															
060	115 000	060	075	100	000	100	000	060	075	120	-1	160	115	100		
070	120 060	045	140	275												
L 52	1969-70															
-1	-1 000	040	060	100	015	100	040	075	070	120	000	120	-1	100		
070	130 050	040	100	210												
L 53	1969-70															
065	085 000	055	070	100	000	100	040	060	060	115	030	110	120	100		
020	140 055	045	150	265												
L 54	1969-70															
-1	-1 000	030	070	090	015	100	080	055	055	125	060	105	115	120		
120	160 065	060	180	275												
L 128	1969-70															
000	120 000	-1	105	080	075	-1	-1	-1	-1	125	070	180	120	135		
045	080 045	090	090	255												
L 179	1969-70															
000	110 000	050	000	100	000	090	090	060	050	125	000	160	130	100		
030	105 030	050	140	265												
L 191	1969-70															
000	105 000	070	000	110	000	090	040	050	080	095	000	180	140	120		
020	070 000	000	155	250												
L 213	1969-70															
050	125 000	050	085	090	000	090	000	060	060	095	000	175	120	000		
000	100 000	000	150	260												
L 250	1969-70															
000	110 000	000	000	060	000	000	000	000	000	115	000	195	135	090		
000	105 000	075	120	250												
L 259	1969-70															
000	140 000	000	080	105	075	095	040	055	080	115	000	180	130	120		
090	070 000	070	130	260												
L 292	1969-70															
040	-1 000	000	080	085	115	090	080	060	070	100	000	-1	-1	090		
050	040 015	070	130	250												
L 303	1969-70															
000	120 000	050	075	100	000	090	090	015	070	125	000	175	110	120		

L	040	090	050	065	170	260										
	372	1969-70														
	000	120	000	-1	-1	-1	045	090	000	050	060	130	000	160	120	130
	015	075	065	055	110	245										
L	434	1969-70														
	-1	-1	000	000	095	080	120	080	065	030	060	130	000	180	160	120
	110	045	030	050	080	235										
L	435	1969-70														
	030	170	000	000	100	090	105	080	090	050	075	140	000	-1	-1	070
	085	080	000	000	060	240										
L	451	1969-70														
	000	105	000	000	120	070	080	000	000	055	080	145	-1	-1	-1	-1
	-1	-1	-1	-1	-1	250										
L	458	1969-70														
	-1	-1	000	070	120	085	105	105	045	045	065	150	000	180	120	100
	000	030	030	000	060	200										
L	466	1969-70														
	000	135	000	060	085	100	070	105	045	040	065	150	000	180	110	120
	000	080	000	065	150	265										
L	694	1969-70														
	-1	135	000	060	090	080	000	090	000	045	065	145	000	185	090	135
	000	125	015	060	125	240										
L1017	1969-70															
	000	050	000	-1	-1	-1	-1	000	000	000	000	110	000	150	100	120
	015	110	045	050	120	255										
L1074	1969-70															
	070	110	000	000	085	100	000	080	000	065	065	115	000	090	120	115
	140	150	070	065	155	275										
L1107	1969-70															
	090	140	000	-1	-1	065	000	090	080	065	050	135	000	170	120	150
	000	130	060	075	140	260										
L1108	1969-70															
	000	090	000	000	000	090	000	000	000	000	000	100	-1	-1	-1	-1
	-1	-1	-1	-1	-1	245										
L1181	1969-70															
	070	160	000	-1	080	090	015	090	050	070	060	100	000	180	120	090
	040	065	000	070	145	240										
M	100															
M	101	1969-70														
	-1	-1	0	0	90											

	60	50	85	15	90	250										
M 124	1969-70															
000	150	000	015	120	065	060	065	015	050	060	185	000	180	120	060	
110	090	095	-1	-1	240											
M 225	1969-70															
115	120	050	030	110	090	000	080	055	050	060	-1	020	180	125	065	
030	030	095	050	190	240											
M 226	1969-70															
100	135	075	090	110	075	060	100	095	035	065	-1	-1	180	055	055	
065	085	-1	-1	-1	235											
M 228	1969-70															
110	125	060	040	120	090	000	090	075	040	055	120	050	185	110	070	
020	030	090	055	105	255											
M 230	1969-70															
120	150	060	060	120	095	060	120	060	050	040	105	045	190	120	130	
095	090	060	050	170	240											
N 4	1969-70															
090	135	-1	-1	-1	-1	025	105	085	040	085	070	035	-1	-1	-1	
095	105	085	050	120	240											
N 8	1969-70															
100	130	075	040	120	085	015	100	075	035	070	080	020	190	105	060	
080	065	085	015	210	235											
N 1	1969-70															
100	120	010	015	090	075	035	090	120	065	035	000	050	165	100	130	
040	050	060	000	115	250											
N 2	1969-70															
090	145	055	070	110	085	030	080	090	060	035	000	040	185	135	115	
025	100	075	045	110	240											
N 3	1969-70															
155	115	045	025	105	085	075	105	110	060	065	075	010	180	130	085	
100	060	095	030	110	240											
N 4	1969-70															
095	105	035	025	080	050	020	090	100	060	015	085	030	180	120	095	
090	035	015	015	095	235											
N 5	1969-70															
075	120	070	015	110	070	040	105	085	060	060	055	030	180	100	075	
120	015	030	020	120	250											
N 6	1969-70															
085	120	060	015	110	070	015	105	085	080	040	060	050	155	120	085	
105	045	050	040	120	250											
N 7	1969-70															
065	095	015	000	105	080	035	085	085	060	060	060	090	175	145	085	
080	055	015	035	095	230											
N 8A	1969-70															
065	140	000	000	060	065	000	105	065	065	050	110	025	185	065	090	
015	095	000	000	-1	-1											
N 9A	1969-70															
075	135	045	015	100	070	055	105	080	045	055	060	035	150	090	080	
080	080	000	065	095	240											
N 10	1969-70															
080	090	-1	-1	-1	-1	-1	100	085	065	065	075	030	185	120	080	

	105	055	050	030	120	230										
N	11	1969-70														
	065	135	-1	-1	-1	-1	-1	-1	-1	-1	-1	080	095	185	130	075
	105	085	075	035	115	235										
N	12A	1969-70														
	C90	100	-1	-1	-1	-1	-1	-1	-1	-1	-1	140	C75	200	095	105
	085	105	015	070	155	240										
J	13	1969-70														
	080	120	075	075	115	075	060	105	075	035	050	065	C20	205	120	C60
	055	085	085	030	135	235										
N	14	1969-70														
	090	120	015	000	135	070	000	090	075	060	C70	100	085	180	130	090
	100	060	080	025	150	245										
N	15	1969-70														
	100	060	055	010	135	075	085	105	070	040	060	075	025	180	125	060
	030	085	035	060	150	230										
N	16	1969-70														
	095	120	-1	-1	-1	-1	000	-1	-1	-1	-1	095	025	185	130	095
	C85	070	080	045	130	260										
N	17	1969-70														
	100	150	-1	-1	-1	-1	-1	120	075	060	C70	100	045	185	120	C85
	080	060	075	050	140	240										
J	18	1969-70														
	085	075	090	080	105	105	050	120	100	060	C80	065	C30	215	075	075
	000	015	095	045	100	235										
N	19															
N	20															
N	21															
S	201	1969-70														
	120	120	055	030	110	075	040	120	100	070	055	060	035	150	075	110
	090	055	045	030	100	240										
S	202	1969-70														
	120	120	060	025	105	075	050	095	095	070	075	105	C45	180	115	125
	100	050	110	045	120	240										
S	203	1969-70														
	110	125	060	030	110	100	030	165	095	060	025	070	040	190	165	100
	095	065	065	040	090	245										
S	204	1969-70														
	135	115	045	030	105	090	020	105	095	050	080	C75	000	210	130	090
	095	080	090	035	110	250										
S	205	1969-70														
	120	125	060	050	120	090	040	105	-1	-1	-1	000	070	180	105	105
	085	060	040	030	080	240										
S	206	1969-70														
	-1	-1	055	060	110	075	035	110	080	030	C60	065	035	180	075	C85

000	075	120	065	090	250											
S 208	1969-70															
-1	135	050	000	125	090	000	-1	-1	-1	-1	105	020	150	100	095	
105	060	000	045	120	240											
S 209	1969-70															
120	150	000	000	120	090	000	115	075	035	090	110	045	180	125	070	
105	045	000	050	145	240											
S 210	1969-70															
120	120	060	015	120	090	000	110	070	035	065	105	035	180	120	090	
075	045	100	070	120	245											
S 211	1969-70															
-1	120	045	000	120	075	060	105	070	050	060	085	035	180	110	065	
110	045	070	015	165	220											
S 212	1969-70															
-1	-1	060	030	135	070	050	165	075	040	055	080	045	195	125	075	
090	060	105	060	170	240											
S 215	1969-70															
-1	120	060	050	090	090	-1	105	085	085	020	-1	030	195	120	105	
090	060	075	025	120	235											
S 217	1969-70															
100	135	065	075	120	065	030	090	070	045	020	015	040	170	135	090	
015	050	-1	-1	-1	-1											
S 221	1969-70															
000	100	000	000	040	045	000	100	060	045	040	080	000	015	120	090	
000	085	000	000	090	220											
S 231	1969-70															
120	150	-1	-1	120	075	000	115	070	040	060	105	000	185	150	070	
045	055	065	065	120	240											
S 232	1969-70															
135	150	060	000	135	060	000	120	075	045	045	115	000	180	155	095	
110	055	055	075	105	245											
S 233	1969-70															
090	095	030	060	110	055	020	105	100	070	025	085	030	190	135	085	
095	030	060	060	120	240											
S 234	1969-70															
110	135	075	030	120	095	000	090	060	030	030	210	-1	-1	-1	065	
020	020	060	055	300	240											
S 235	1969-70															
120	150	000	000	090	050	090	145	120	040	030	000	060	135	115	130	
045	0															

110	105	060	075	155	240														
V 174	1969-70																		
125	075	-1	-1	-1	-1	-1	000	060	060	060	160	000	240	120	120				
115	090	060	060	135	-1														
V 175	1969-70																		
030	-1	-1	-1	-1	-1	-1	090	055	060	075	130	000	210	095	075				
000	120	045	045	135	235														
V 188	1969-70																		
000	135	015	000	120	075	000	100	085	055	060	125	060	185	120	070				
000	065	030	020	100	215														
V 189	1969-70																		
000	120	000	050	125	075	015	105	090	055	060	165	000	180	105	080				
000	120	090	085	115	235														
V 190	1969-70																		
000	150	000	000	110	080	095	060	100	055	075	130	000	175	105	090				
000	090	055	040	140	235														
V 191	1969-70																		
000	120	000	000	135	090	095	090	080	050	075	135	000	120	120	095				
000	060	030	045	185	240														
V 192	1969-70																		
000	125	000	000	110	090	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1				
-1	-1	-1	-1	-1	-1														
V 193	1969-70																		
-1	-1	0	0	0	75	0	-1	-1	35	90	-1	-1	195	130	85				
0	75	0	70	195	250														
V 194	1969-70																		
-1	-1	015	045	120	120	095	120	100	060	075	150	060	195	120	075				
000	060	000	045	060	240														
V 196	1969-70																		
000	085	000	060	120	090	120	090	100	065	055	105	000	180	130	120				
110	075	045	050	160	240														
V 198	1969-70																		
105	090	000	055	125	075	090	070	050	060	045	135	000	195	120	110				
095	055	030	055	090	245														
V 206	1969-70																		
000	060	000	000	130	075	105	090	080	055	075	150	000	185	120	030				
060	075	030	040	155	240														
V 207	1969-70																		
100	120	060	040	125	080	070	150	065	055	045	120	000	205	115	115				
120	070	-1	-1	-1	240														
V 209	1969-70																		
045	115	000	050	110	075	090	085	075	045	060	095	000	190	095	120				
075	075	000	000	090	240														
V 221	1969-70																		
105	125	055	070	115	100	060	075	065	045	050	150	040	185	135	075				
060	040	030	045	120	240														
V 224	1969-70																		
030	120	000	050	135	100	100	-1	-1	-1	-1	-1	000	175	100	105				
095	075	090	050	125	240														
V 225	1969-70																		
000	135	-1	-1	-1	-1	135	085	060	050	075	135	000	210	110	150				

BAND DURATION 1970-71

E-34

	95	0	0	0	65	180	135	0	0	85	225	140	100	115	45	0	
	15	15	0	210	40	110											
A	38	1970-71															
	105	0	0	0	80	175	105	0	0	-1	-1	-1	-1	-1	-1	-1	
	-1	90	110	-1	15	120											
A	41	1970-71															
	90	115	75	00	00	180	130	155	45	00	00	95	70	180	75	65	
	35	00	00	225	175	165											
A	42	1970-71															
	70	65	75	80	00	215	75	140	30	80	160	85	90	155	65	55	
	40	40	30	195	135	150											
A	44	1970-71															
	95	110	25	00	00	190	120	120	40	90	180	100	90	150	65	75	
	50	35	15	230	165	120											
A	45	1970-71															
	90	75	85	00	15	190	105	150	60	00	160	110	40	160	110	45	
	45	60	00	235	150	90											
A	46	1970-71															
	90	00	00	00	00	190	90	140	00	15	180	65	15	100	30	15	
	15	00	00	235	125	80											
A	47	1970-71															
	75	60	60	0	0	190	120	120	0	0	195	100	0	125	75	50	
	0	0	0	260	-1	-1											
E	442	1970-71															
	65	0	75	0	0	180	165	0	0	0	0	0	0	90	20	85	
	30	0	0	240	110	165											
E1142	1970-71																
	90	90	50	105	25	160	105	175	35	80	220	105	0	155	50	0	
	85	130	0	180	135	120											
E1253	1970-71																
	60	45	85	135	45	200	125	155	30	100	260	135	50	165	40	35	
	50	150	120	250	160	120											
E1682	1970-71																
	105	30	45	0	85	150	145	115	0	75	225	175	60	195	15	40	
	45	90	30	190	125	150											
E1743	1970-71																
	-1	-1	-1	-1	90	150	90	150	30	85	190	75	45	110	55	0	
	60	150	0	220	140	125											
E3465	1970-71																
	-1	-1	-1	60	0	190	150	-1	-1	-1	-1	-1	-1	-1	-1	-1	
	-1	90	60	0	-1	-1											
E3751	1970-71																
	95	60	45	0	80	140	170	180	0	75	230	120	45	195	0	35	
	20	135	50	210	140	125											
E4144	1970-71																
	105	75	60	30	00	200	135	180	50	75	180	80	75	165	55	65	
	60	00	00	205	135	125											
E4767	1970-71																
E4867	1970-71																

55	60	70	100	100	140	135	145	0	80	240	150	60	180	40	15
30	60	105	175	-1	-1										
E5098	1970-71														
90	65	50	0	75	180	105	120	45	0	200	120	120	150	75	90
70	0	0	245	140	90										
E5151	1970-71														
90	35	0	0	0	150	105	0	0	0	180	75	75	75	0	0
0	90	0	0	100	45										
E5184	1970-71														
-1	-1	-1	-1	-1	-1	-1	-1	-1	100	210	90	45	175	75	60
80	110	0	185	120	130										
E5756	1970-71														
0	0	0	0	90	-1	-1	-1	-1	0	0	0	0	-1	-1	-1
-1	0	0	0	0	60										
E6006	1970-71														
85	60	50	0	85	170	155	135	25	-1	-1	-1	-1	-1	-1	-1
-1	125	125	210	-1	-1										
E6624	1970-71														
-1	-1	-1	-1	-1	-1	-1	-1	-1	0	190	0	0	120	85	35
0	0	0	240	0	0										
E6736	1970-71														
90	55	50	110	0	135	130	175	45	85	210	105	0	150	60	0
40	90	0	160	155	135										
E7735	1970-71														
85	0	0	-1	75	185	135	-1	-1	75	225	160	150	150	75	80
60	135	60	270	110	145										
E7946															
90	90	100	70	00	195	105	155	45	75	165	95	75	165	60	75
60	80	30	210	90	90										
E8697															
	75	00	210	105	135										
E8752															
75	00	00	00	00	170	120	00	00	00	00	00	00	105	45	00
00	80	00	00	105	75										
E8832	1970-71														
90	85	60	90	100	195	115	0	0	-1	-1	-1	-1	-1	-1	-1
-1	0	0	230	125	85										
E9049	1970-71														
90	75	0	0	130	185	170	200	0	-1	-1	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1										
E9221	1970-71														
-1	-1	-1	60	0	180	115	160	30	-1	-1	105	0	135	45	0
70	120	0	175	120	135										
E9283															
70	60	75	00	00	195	90	145	55	85	220	120	85	200	60	15
40	90	60		00	00										
E9458															
75	90	65	00	00	165	105	155	40	95	225	115	100	135	60	60
60															
E9512	1970-71														

	60	30	30	-1	-1	-1	-1	65	0	0	0	0	0	105	60	0
	60	0	0	150	0	90										
L 6	1970-71															
	-1	-1	-1	90	60	155	160	-1	-1	90	235	180	60	195	45	0
	60	-1	-1	-1	105	150										
L 10	1970-71															
	50	0	0	110	60	150	110	100	0	-1	-1	-1	-1	-1	-1	-1
	-1	80	70	200	120	155										
L 11	1970-71															
	60	0	0	50	50	135	150	120	15	80	225	140	45	180	50	60
	35	80	90	190	-1	-1										
L 33	1970-71															
	105	60	60	0	90	185	145	105	0	90	220	140	45	210	0	60
	30	75	80	180	140	125										
L 46	1970-71															
	90	75	45	0	80	165	170	150	0	100	220	135	120	170	75	55
	50	165	80	-1	-1	-1										
L 52	1970-71															
L 53	1970-71															
	90	70	50	0	80	170	170	175	0	100	215	110	0	185	30	90
	45	165	120	205	140	80										
L 54	1970-71															
	90	70	40	0	85	165	170	175	0	100	210	80	0	180	-1	-1
	-1	-1	-1	220	150	80										
L 128	1970-71															
	-1	-1	-1	0	80	210	135	130	0	90	255	150	170	140	70	70
	30	180	-1	235	120	120										
L 179	1970-71															
	85	60	0	0	80	150	165	130	0	0	220	180	20	180	60	75
	30	120	115	210	-1	-1										
L 191	1970-71															
	85	55	60	0	80	150	150	100	20	60	230	175	90	170	115	45
	20	100	60	185	100	135										
L 213	1970-71															
	60	0	60	0	70	120	150	110	0	75	225	175	50	150	0	65
	30	95	75	205	125	115										
L 250	1970-71															
	-1	-1	-1	0	110	165	195	-1	-1	0	210	175	110	200	0	60
	15	-1	-1	250	120	90										
L 259	1970-71															
	100	50	55	0	85	155	145	120	0	90	230	180	55	210	0	70
	40	90	0	205	-1	-1										
L 292	1970-71															
	85	0	0	100	85	150	-1	-1	-1	65	210	180	50	195	50	60
	35	-1	-1	-1	105	165										
L 303	1970-71															
	90	60	0	0	80	155	165	120	0	80	215	180	50	175	60	90
	35	120	100	210	130	100										
L 372	1970-71															

	80	50	35	0	90	170	135	90	0	75	270	140	180	130	70	30
	0	130	0	215	120	150										
L 434	1970-71															
	50	0	0	100	90	140	165	130	0	85	250	180	55	200	35	55
	45	105	40	-1	80	140										
L 435	1970-71															
	55	45	0	80	100	150	160	130	0	85	250	190	60	225	60	0
	80	50	150	-1	-1	-1										
L 451	1970-71															
L 458	1970-71															
	75	35	0	80	100	125	135	150	0	80	250	170	75	180	60	45
	45	0	145	-1	105	110										
L 466	1970-71															
	80	60	60	0	120	180	145	120	0	-1	-1	-1	-1	220	105	55
	30	155	80	205	140	115										
L 694	1970-71															
	75	60	45	0	110	175	185	105	10	95	235	125	35	175	0	30
	25	120	65	195	135	110										
L1017	1970-71															
	70	0	0	0	90	140	195	-1	-1	0	205	180	40	180	95	45
	25	120	40	225	155	110										
L1074	1970-71															
	80	75	45	0	105	145	155	195	0	-1	-1	-1	-1	-1	-1	-1
	-1	150	120	230	160	100										
L1107	1970-71															
	95	60	30	0	-1	165	150	-1	-1	90	230	145	45	210	30	30
	45	-1	-1	205	-1	-1										
L1108	1970-71															
	-1	60	65	0	110	175	195	105	0	0	45	0	0	180	35	50
	15	0	0	-1	0	0										
L1181	1970-71															
	100	70	75	0	90	190	140	110	0	-1	-1	-1	-1	-1	-1	-1
	-1	135	70	-1	-1	-1										
M 100	1970-71															
	70	55	70	95	75	195	115	195	15	90	240	110	30	195	35	45
	30	70	75	190	100	115										
M 101	1970-71															
	110	100	0	75	55	175	105	110	50	55	205	90	30	160	60	30
	65	120	90	190	-1	-1										
M 102	1970-71															
	110	120	45	120	0	190	120	175	70	75	195	115	0	135	75	45
	45	30	0	200	125	160										
M 103	1970-71															
	110	100	90	90	0	195	130	160	75	85	195	85	55	150	70	30
	45	60	0	210	165	170										
M 104	1970-71															
	-1	-1	-1	0	0	180	110	150	35	75	165	70	45	140	70	40
	60	-1	-1	-1	-1	-1										
M 124	1970-71															

	70	90	85	0	100	135	165	90	45	105	260	150	210	190	60	20
M	225	1970-71														
	80	80	90	60	35	180	90	170	35	115	220	130	100			
M	226	1970-71														
	25	60	85	230	105	70										
	60	45	115	60	55	180	90	135	25	110	235	125	80	180	90	35
M	228															
	20	90	75	205	145	60										
	20	55	75	110	20	180	110	180	40	125	225	125	120	210	95	75
M	230	1970-71														
	80	65	110	135	30	225	120	130	45	90	240	125	105	195	75	45
N	A	1970-71														
	35	115	80	180												
	85	60	50	90	85	170	125	155	30	80	265	140	75	165	70	40
N	B	1970-71														
	60	110	70	240	165	70										
	15	55	75	45	20	185	110	155	15	120	245	125	90	140	105	25
N	1	1970-71														
	100	90	70	85												
	30	60	00	225	125	100										
N	2	1970-71														
	75	75	45	60	90	220	95	200	15	105	210	120	90	165	35	70
	45	60	70	195	90	130										
N	3	1970-71														
	90	55	85	85	20	225	70	170	25	80	210	125	35	215	15	75
N	4	1970-71														
	30	120	35	245	145	75										
	80	65	45	90	30											
V	5	1970-71														
	50	110	70	225	125	90										
	60	50	85	55	15	200	70	155	15	70	195	105	40	200	50	60
N	6	1970-71														
	25	135	30	240												
	90	110	95	15	15											
N	7	1970-71														
	50	110	40	250	125	110										
	35				145	120										
N	8A	1970-71														
	70	60	55	00	00	175	105	140	15	00	170	110	15	135	30	55
N	9A	1970-71														
	20	00	00	250	115	110										
N	10															
N	11	1970-71														

N 12A	120	35		160	100											
	1970-71															
N 13	1970-71															
60	60	35	85	90	185	120	160	25	70	255	115	70	180	65	35	
40	120	65	225	155	60											
N 14	1970-71															
90	60	60	115	15	195	125	165	10	110	220	125	55	175	80	70	
50	125	65	225	160	120											
N 15	1970-71															
60	60	60	45	70	180	120	145	10	105	220	110	60	185	80	35	
40			250	155	130											
N 16	1970-71															
65	65	65	70	60	180	120	135	25	110	230	120	70	180	75	30	
60	100	125	200	160	150											
N 17	1970-71															
70	65	65	60	70	180	125	165	10								
	105		190	160	115											
N 18	1970-71															
50	95	90	90	170	120											
20	95	85	185	130	105				120	225	90	30	170	65	25	
N 19	1970-71															
80	70	65	90	50	190	125	185	00	85	175	100	50	225	35	65	
60	100	85	205	100	130											
N 20	1970-71															
80	90	30	00	00	170	105	160	30	20	175	105	60	195	40	65	
40	45	00	215	150	155											
N 21	1970-71															
60	00	180														
S 201	1970-71															
60	45	65	105	40	215	80	170	20	75	195	90	90	140	60	80	
30	90	15	210	120	120											
S 202	1970-71															
70	60	80	90	45	185	75	180	25	75	195	105	70	165	45	70	
35	120	55	240	135	120											
S 203	1970-71															
90	90	75	110	00	210	90	175	20	75	180	95	110	145	30	75	
25	60	30	210	130	105											
S 204	1970-71															
			75	35	225	80	185	35	90	205	120	45	170	70	75	
30	105	35	230													
S 205	1970-71															
	40	50	150	00	210	100	195	45	85	195	90	110	165	30	65	
50			205													
S 206	1970-71															
80	55	65	75	60	180	125										
15	80	60	185						105	210	115	50	145	60	35	
S 208	1970-71															

80	80	90	00	60	180	110	150	30	120	220	110	100	180	40	80
25	75	55	210												
S 209															
S 210	1970-71														
		50	25	180	100	150	15	100	240	125	105	190	90	70	
35	75	80	230	90	110										
S 211	1970-71														
75	65	65	120	20	180	125	155	15	120	215	105	80	180	75	60
25	55	90	250												
S 212	1970-71														
						160	30	105	220	110	100	165			
S 215	1970-71														
							200	30	100	210	110	95	165	25	65
50	65	55													
S 217	1970-71														
							180	00	110	210	110	85	195	75	60
00		160	90	105											
S 221															
S 231	1970-71														
	65	70	90	60	180	110	135	40	115	235	135	105	180	80	90
30	100	60	205	105	85										
S 232	1970-71														
80	60	75	70	70	185	140	140	50	100	220	130	225	200	90	90
45	100	80	225	105	75										
S 233	1970-71														
80	60	45	90	30	190	95	150	00	95	205	90	90	220	60	75
45	115	75	240	135	135										
S 234	1970-71														
80	50	90	00	20	180	105	150	00	110	235	130	100	200	85	20
55	55	75	215	110	75										
S 235	1970-71														
90	95	125	45	00	180	105	160	00	65	160	90	60	155	60	75
45	40	15	235	140	120										
S 236	1970-71														
65	60	50	90	90	190	115	180	40	110	200	100	55	155	60	30
40	135	105	210	120	110										
S 238															
S 241	1970-71														
65	60	75	60	45	170	180	165	15	120	220	100	100	150	65	30
25															
S 242	1970-71														
						165	20	105	225	105	105	170	75	30	
25															
S 249															

S 251	1970-71									110	200	120	85	165	40	75
	30	75	110	200	105	145										
S 255	1970-71															
	70	50	75	130	95	170	120	140	15	85	240	110	50	195	90	90
	50	95	35	200												
S 256	1970-71															
	110	60	90	00				135	15	85	180	105	00	150	30	65
	70			225												
S 257	1970-71															
	75	75	60	90	60	195	90	195	30	120	210	110	70	215	50	70
	20	80	85	200												
V 85	1970-71															
				60	75	190	120	150	15	110	235	135	125	180	90	00
	15	85	00	180	85	85										
V 121	1970-71															
	75	0	60	0	90	145	125	105	0	75	230	165	80	180	55	45
	35	90	90	200	125	110										
V 138	1970-71															
	30	25	60	60	160	220	120	170	60							
				210	110	105										
V 165	1970-71															
	70	60	65	00	75	210	120	145	15	90	240	120	120	220	90	00
	30	95	00	195	80	120										
V 166	1970-71															
	80	80	75	105	75			150	15	85	215	120	135	210	95	00
	35	105	30	210	90	120										
V 167	1970-71															
	75	70	00	65	75	180	125	120	00	95	225	120	85	165	00	30
	20	75	00	210	75	90										
V 168	1970-71															
	60	0	0	60	75	150	125	-1	-1	100	240	135	50	150	15	20
	20	0	0	165	95	145										
V 169	1970-71															
	-1	-1	-1	0	90	160	135	120	0	75	225	165	55	165	30	40
	30	105	75	170	140	120										
V 170	1970-71															
	-1	-1	-1	0	110	185	140	90	0	105	240	120	105	155	60	50
	45	120	40	-1	-1	-1										
V 171	1970-71															
	-1	-1	-1	-1	-1	-1	-1	-1	-1	120	230	180	80	185	85	30
	30	110	70	240	145	115										
V 172	1970-71															
	40	0	60	45	90	195	100	120	0	95	105	0	140	180	75	0
	0	145	70	210	120	135										
V 173	1970-71															
	55	50	75	60	90	210	160	130	30	70	240	130	130	185	80	0
	45	105	100	190	90	145										
V 174	1970-71															

	00	30	60	50	105	225	120	175	50							
		105	00	210	120	85										
V 175	1970-71															
	-1	-1	-1	85	75	170	125	120	30	95	240	115	135	165	25	30
	45	60	0	195	105	65										
V 188	1970-71															
	60	60	60	0	90	165	120	135	0	105	240	170	85	130	60	60
	45	35	30	195	125	115										
V 189	1970-71															
	60	60	60	0	90	190	180	120	0	75	240	150	95	150	90	35
	45	60	0	190	90	115										
V 190	1970-71															
	55	50	60	0	80	180	190	120	15	110	240	115	95	190	75	45
	35	75	60	180	115	105										
V 191	1970-71															
	40	60	50	0	75	180	160	150	0	110	245	165	90	170	90	20
	30	95	80	210	120	140										
V 192	1970-71															
	45	45	60	0	75	180	130	120	0	105	235	170	60	150	130	50
	25	90	20	205	125	120										
V 193	1970-71															
	-1	-1	-1	-1	-1	-1	-1	-1	-1	90	225	165	80	165	0	-1
	-1	135	30	195	135	125										
V 194	1970-71															
	0	0	0	0	55	175	135	150	0	105	230	150	90	150	45	30
	80	-1	-1	190	-1	-1										
V 196	1970-71															
	105	60	75	0	95	180	170	100	0	85	230	170	65	165	95	55
	35	120	90	240	150	120										
V 198	1970-71															
	65	35	70	85	85	200	180	130	15	95	240	120	90	205	80	45
	30	105	135	195	105	60										
V 206	1970-71															
	35	45	45	20	80	195	150	130	0	120	240	165	70	-1	-1	-1
	-1	85	120	180	110	105										
V 207	1970-71															
	70	60	60	70	90	190		140	25	95	215	130	120	195	75	20
	40	100	65	210	105	105										
V 209	1970-71															
	75	40	0	60	70	165	160	0	30	90	225	120	90	160	60	15
	15	75	0	235	110	75										
V 221	1970-71															
	00	70	00	00	45	180	120	110	00	75	235	125	90	200	65	20
	20	60	65	195	75	90										
V 224	1970-71															
	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
	-1	-1	-1	230	135	135										
V 225	1970-71															
	75	45	60	80	85	165	135	140	0	100	235	135	120	165	60	60
	0	75	0	200	90	155										
V 227	1970-71															

45	30	0	-1	-1	-1	-1	120	0	-1	-1	-1	-1	155	0	50
40	100	30	-1	125	110										
V 232	1970-71														
30	60	60	95	85	165	120	130	0	90	245	155	80	165	45	50