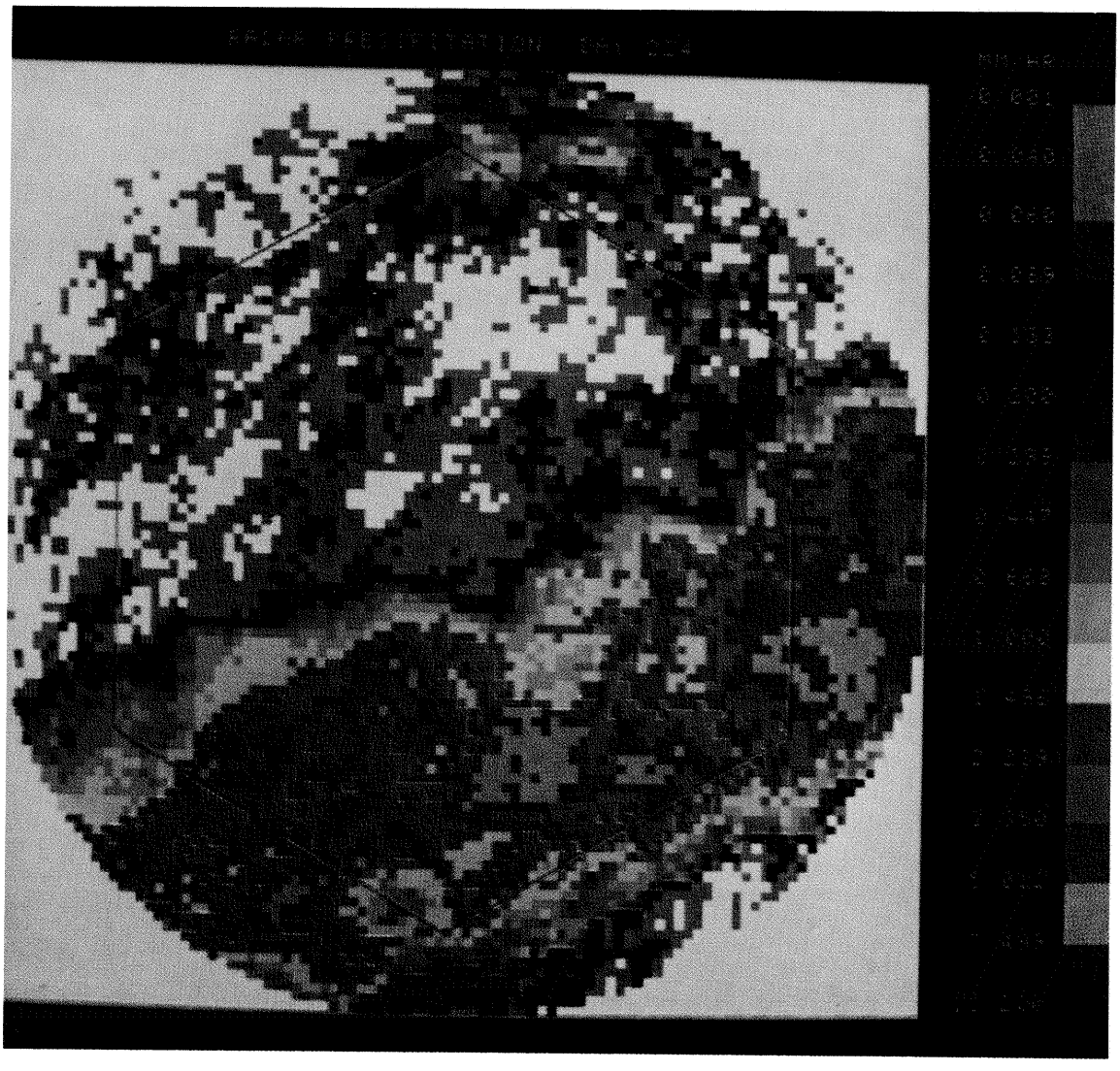
NOAA Special Report

GATE Radar Rainfall Atlas

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data and Information Service

March 1979



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Michael D. Hudlow and Vernon L. Patterson

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Juanita M. Kreps, Secretary

National Oceanic and Atmospheric Administration
Richard A. Frank, Administrator

Environmental Data and Information Service
Thomas S. Austin, Director

COVER: A color display of the mean rainfall rate (mm hr^{-1}) map for August 12, 1974 (Julian Day 224), corresponding to the black and white graphics display shown on page 104. The map was constructed from 4-km resolution data and the GATE B-scale hexagon is illustrated. The 16 color thresholds, as given by the color bar, are identical to the thresholds specified by the set of 16 alphanumeric characters used in the black and white display. The daily precipitation pattern for August 12 was strongly influenced by a confluence zone stretching across the southern portion of the B-scale array, which resulted in precipitation accumulations exceeding 180 mm at several points. Examination of satellite photographs for this day (not shown here) show that this dramatic case of the intertropical convergence zone extends several hundred kilometers beyond the range of the radar coverage.

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GATE RADAR RAINFALL ATLAS

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ABSTRACT. As a part of the GARP Atlantic Tropical Experiment (GATE), quantitative precipitation observations were made during the summer of 1974 for an experimental array centered at 8°30' N. latitude and 23°30' W. longitude using four C-band digital radars complemented by shipboard rain gages. High resolution rainfall data sets covering a circular area (master array) extending approximately 204 km from the center of the experimental array were derived and were archived at the two GATE World Data Centers. The rainfall products were derived for this special report by using the hourly precipitation accumulations for 4-km square data bins as input. These products consist of rainfall rate statistics; daily isohyetal maps; Phase isohyetal maps (each GATE Phase ≈ 20 days); and tabulated rainfall values for various durations, ranging from hourly to daily, and for 15 geometric subareas within the master array.

1. INTRODUCTION

1.1 Purpose and Scope of Atlas

Validation and analysis of the GATE data sets fall under the auspices of five major subprograms that divide GATE according to major disciplines (Kuettner et al., 1974). The radar analyses are an integral part of the Convection Subprogram (Betts, 1974; Betts and Rodenhuis, 1975; Hudlow, 1975). The GATE operations were divided into three observational periods: Phase I, June 28-July 16; Phase II, July 28-August 15; and Phase III, August 30-September 19. Using the C-band radar data, refined quantitative precipitation estimates have been derived for all three Phases at the Center for Experiment Design and Data Analysis (CEDDA)[1] as a major task within the Convection Subprogram. Details of the technical characteristics of the four C-band radars are given by Hudlow et al. (1979), who also discuss the techniques employed for intercomparing the radar systems and for comparing the radar measurements with those from shipboard rain gages.

An important aspect of scale interaction studies, which is central to meeting the GATE objectives, involves various types of atmospheric budget analyses. A significant component of the water and energy budget analyses is accurate rainfall estimates. The primary purpose of the atlas is to fulfill

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[1]Now the Center for Environmental Assessment Services (CEAS).

this basic requirement for accurate rainfall estimates for the space and time scales likely to be used in the budget studies. These rainfall data may also be useful for other applications requiring similar resolution. However, the scope of the atlas is not intended to cover all demands for rainfall data. Higher resolution rainfall data sets are available from the GATE archives (sec. 1.2).

A pictorial GATE radar atlas was previously prepared by Arkell and Hudlow (1977). Their atlas provides maximum geographic coverage, since it contains mosaics using all C- and X-band radar photographs, at 3-hourly intervals for 24 days of GATE, but use of the rain-rate information from their atlas would be limited to semiquantitative studies.

1.2 Other Related Data Sets

High resolution rainfall data are available on both magnetic tapes and microfilm from the GATE World Archives for those applications requiring finer spatial and/or temporal rainfall information than provided by the atlas products. These, together with written documentation, may be ordered from the GATE Data Catalogue (World Data Center A, 1978). Table 1 summarizes the available data sets.

Figure 1 is a sample graphics display of the instantaneous reflectivities, or the corresponding rainfall rates using $R = 0.013Z^{0.8}$, from the Oceanographer radar for 1730 GMT September 2. The rainfall-rate, reflectivity relationship quoted here gives R in mm hr^{-1} for Z in mm^6 m^{-3}. However, Z is expressed in dBZ's in the header key of figure 1, where

$$dBZ = 10 \log_{10} Z \ .$$

The data shown in figure 1 are an exact reproduction of a sample map from data set No. 3.36.02.103 (see table 1), except the corrections for atmospheric attenuation and a systematic bias have been added (Austin, 1977; Hudlow et al., 1979).

Figure 2 is a sample graphics display of the hourly rainfall data that were used to derive the atlas products. This particular map from data set No. 4.36.02.105 (see table 1) gives rainfall accumulations within the master array for the hour ending at 1800 GMT September 2. The sample of instantaneous data from the Oceanographer radar (fig. 1) was collected at the midpoint of this hour (i.e. 1730 GMT) when the Oceanographer was stationed near the southeast corner of the B-scale "hexagon," shown as a dashed line in figure 2. As indicated by the header information in figure 2, data from the other three C-band radars also were merged in the derivation of this hourly rainfall map. The merging procedures are briefly described under section 2.

Using the hourly rainfall data for the 4-km square data bins (data set No. 4.36.02.104; see table 1), coarser resolution estimates were derived for the latitude-longitude network shown in figure 3 (data set No. 4.36.02.106). This latitude-longitude network provides a compromise between spatial resolution and data compactness. For example, it gives adequate resolution to approximate various geometric areas described by the flight patterns of GATE aircraft; yet, it is sufficiently compact to obtain rainfall estimates for the particular geometric areas by manually combining the values from the individual squares. Rainfall estimates for the primary geometric areas, formed by the various B- and C-scale ship stations (Kuettner et al., 1974), are given in this atlas.

Table 1.--Summary of C-band radar rainfall data available from World Data Center - A

Catalogue (Data Set) Numbers	RESOLUTION		COMMENTS
	Temporal	Spatial	
NOAA Radars			
3.36.02.103 3.36.02.104	15 min	4 km x 4 km	Instantaneous reflectivity data in Cartesian coordinates for individual C-band radars, which, with the exception of the Quadra data, do not include refinements for the systematic biases and attenuation corrections developed by Hudlow et al. (1979) and applied by Patterson et al. (1979).
Gilliss Radar			
3.36.02.106	15 min	4 km x 4 km	
Quadra Radar			
3.36.13.102	15 min	4 km x 4 km	
4.36.02.104* 4.36.02.105	60 min	4 km x 4 km	Hourly rainfall accumulations for all data bins within the master array, obtained by merging the refined rainfall estimates from two or more of the individual C-band radars.
4.36.02.106	60 min	0.25° latitude x 0.25° longitude	Derived from data set No. 4.36.02.104.

* The input data used for deriving the atlas products

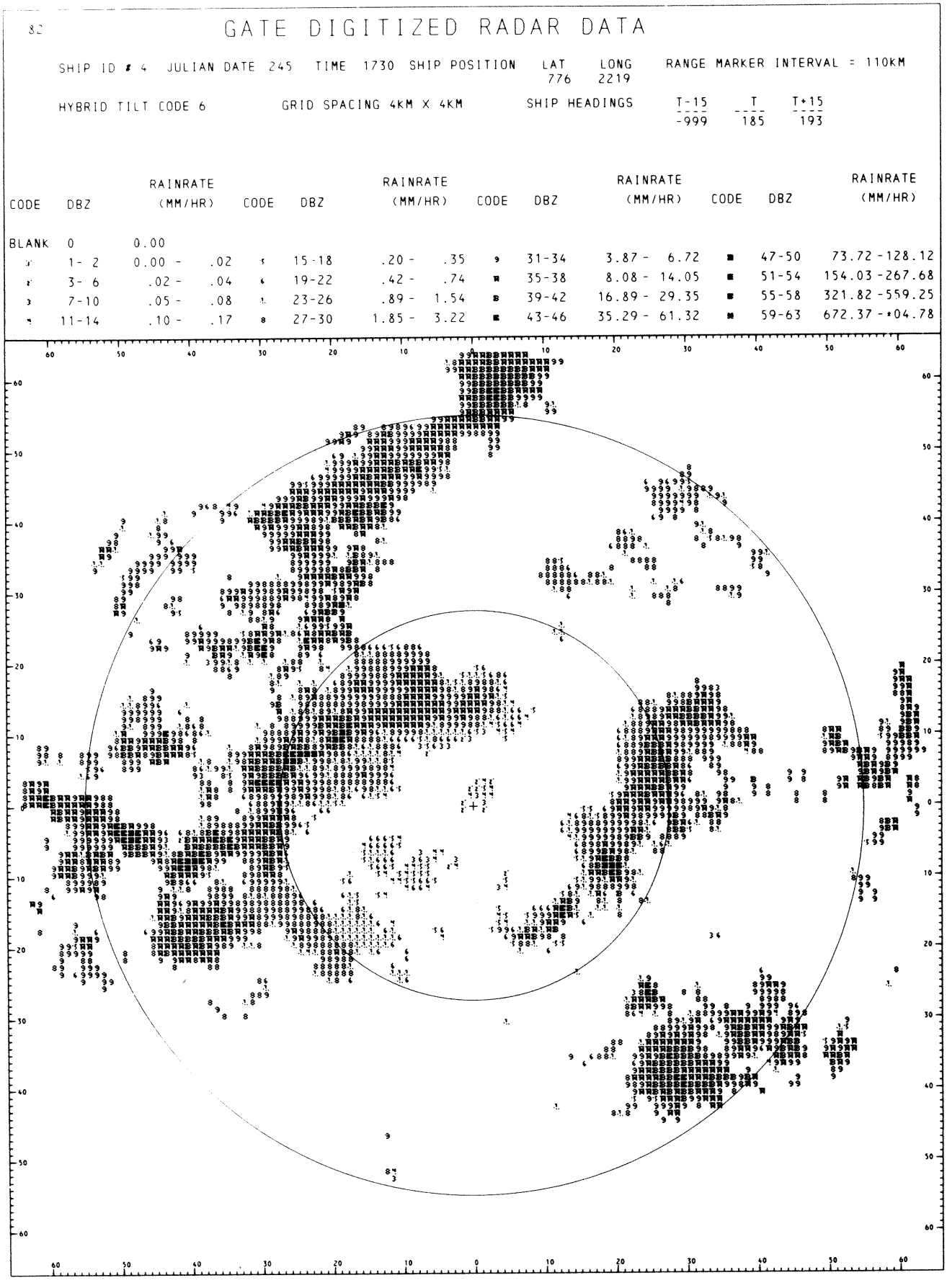

Figure 1.--Sample of instantaneous rainfall-rate map from the Oceanographer radar for 1730 GMT September 2.

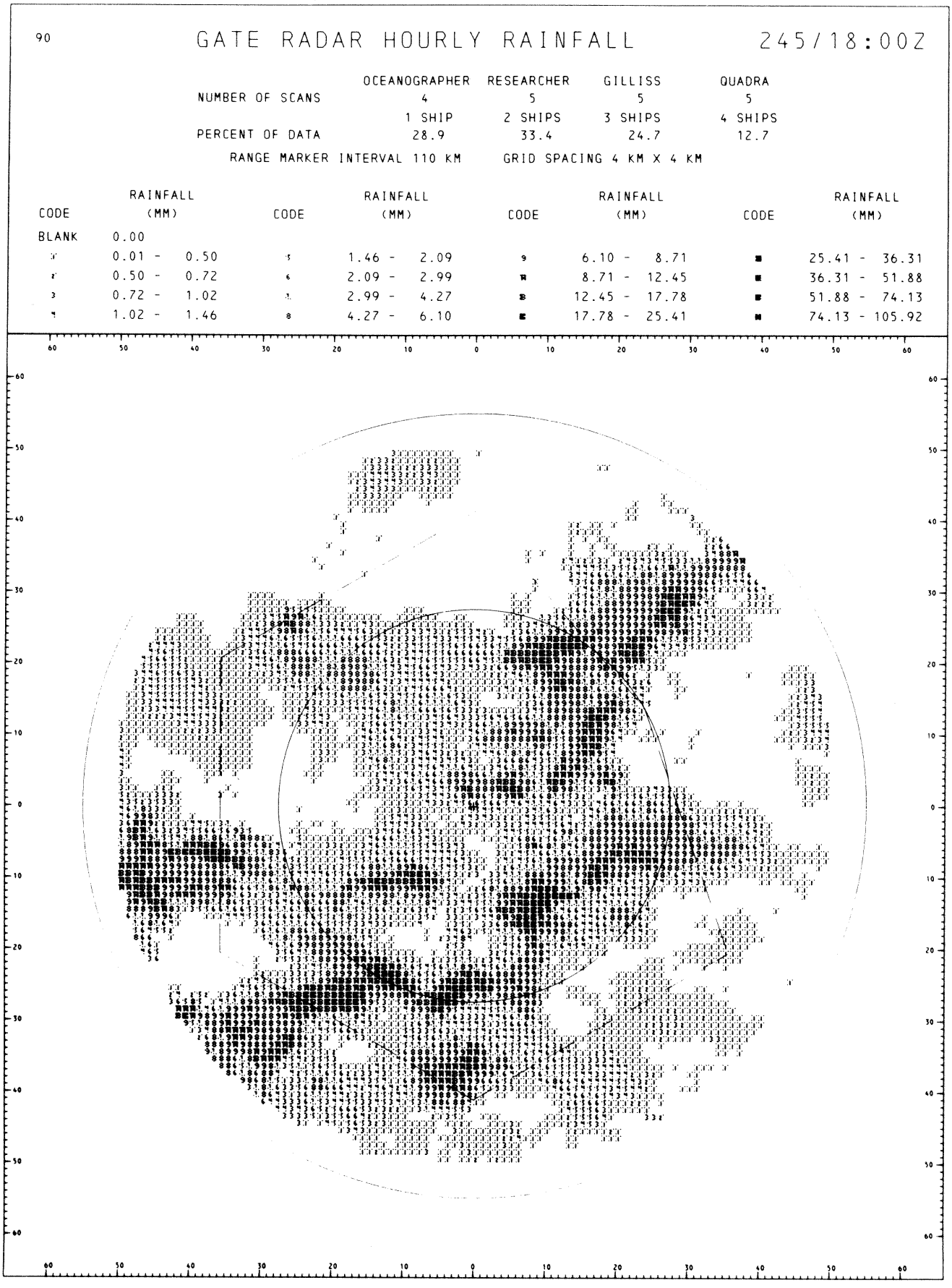

Figure 2.--Map of rainfall accumulations, derived from data collected with the C-band radars, for the hour ending at 1800 GMT September 2. B-scale "hexagon" is illustrated by the dashed lines.

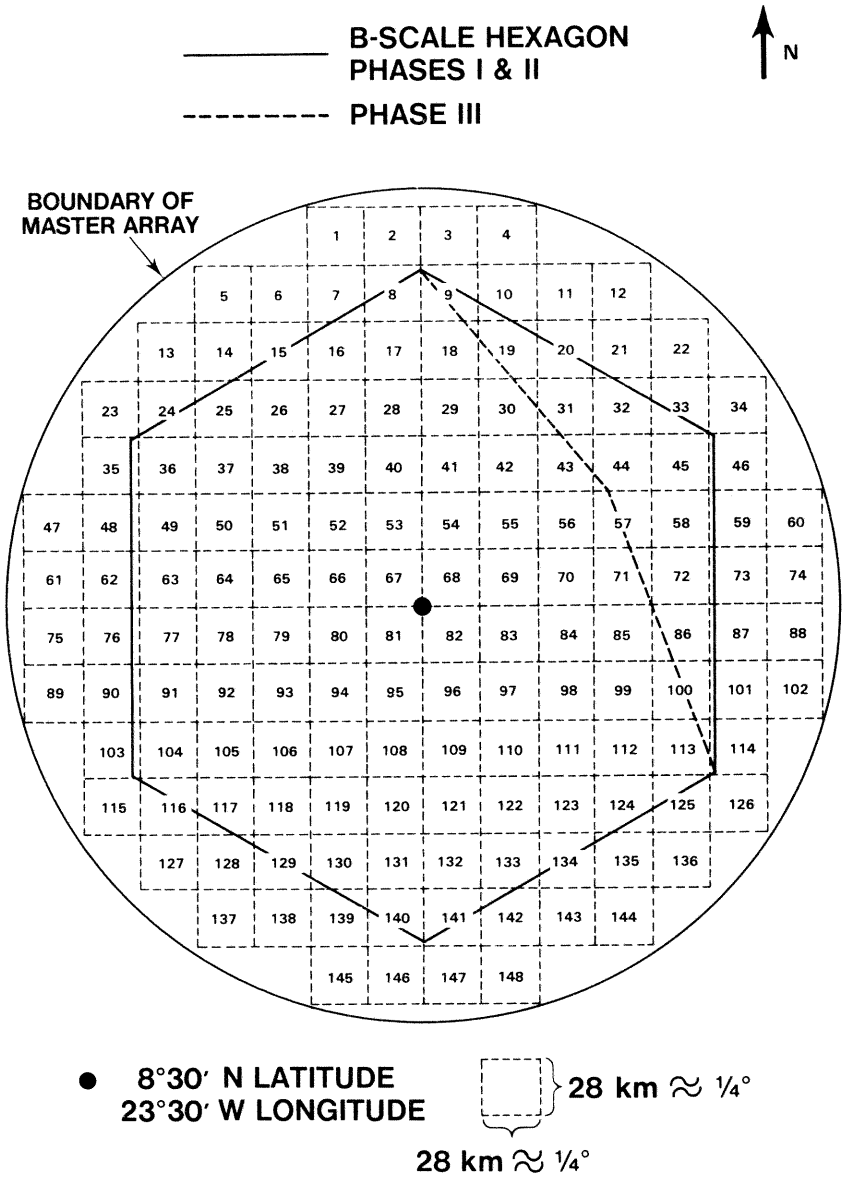

Figure 3.--Schematic of latitude-longitude network within master array, which is centered on hexagonal B-scale ship array.

2. INPUT DATA USED TO DERIVE RAINFALL PRODUCTS

The input data used in the derivation of the atlas products are those contained in data set No. 4.36.02.104 (table 1). A sample graphics display of these data is shown in figure 2.

The input rainfall values were obtained by merging the refined rainfall estimates, within the master array, from two or more of the individual radars. The precipitation processing and merging procedures for Phases I and II were considerably different from Phase III. For Phases I and II, only data from the Oceanographer and Researcher radars were used in the derivation of the hourly maps (fig. 4); for Phase III, data from all four C-band radars were merged when available (fig. 5).

The decision to use only NOAA radar data for Phases I and II was based largely on considerations of data availability and on the fact that the Oceanographer radar covered the complete master array during the first two Phases, when the Oceanographer was stationed near the center of the array. Because the Oceanographer radar data alone were fundamental to the accuracy of the Phase I and II estimates, major efforts were undertaken to refine these data by applying atmospheric, wet radome, and intervening rainfall attenuation corrections. For Phase III, only atmospheric attenuation corrections were applied to the radar data from the four C-band radars. Rainfall attenuation corrections were not considered as significant for Phase III, because data were merged from more radars, each of which viewed the precipitation lying in the interior of the array from different directions (fig. 5). Intervening rainfall attenuation was normally not significant at C-band frequencies for GATE convection, except for very small localized areas (Patterson et al., 1979).

The method used for merging the data from the multiple radars also was different for Phase III; namely, the nonzero rainfall amounts, for the common data bins falling inside the master array from the various radars, were averaged. For Phases I and II, all nonzero rainfall rates from the Oceanographer radar were taken alone as the best estimates. Nonzero estimates from the Researcher radar were substituted only for common data bins within the master array where the Oceanographer values were zero. During Phases I and II, this merging technique recovered data that were sometimes missed by the Oceanographer radar because of an obstruction of the radar beam by the ship's superstructure in a sector, about 20° wide, forward of the ship. The Oceanographer's obstructed sector was normally located in areas covered by the Researcher radar.

The scope here has been confined to a brief description of the rainfall processing system, which prepared the input data used in the derivation of the atlas products. A more complete description of the processing is given by Patterson et al. (1979).

3. RAINFALL STATISTICS

The rainfall statistics presented in this section have been included to provide background information on the rain-rate regime observed during GATE. They should help in the interpretation of the GATE rainfall data relative to rainfall regimes in other parts of the world. These statistics, which should be of particular interest to hydrometeorologists and communication engineers, are only examples of the types of rainfall statistics that may be derived

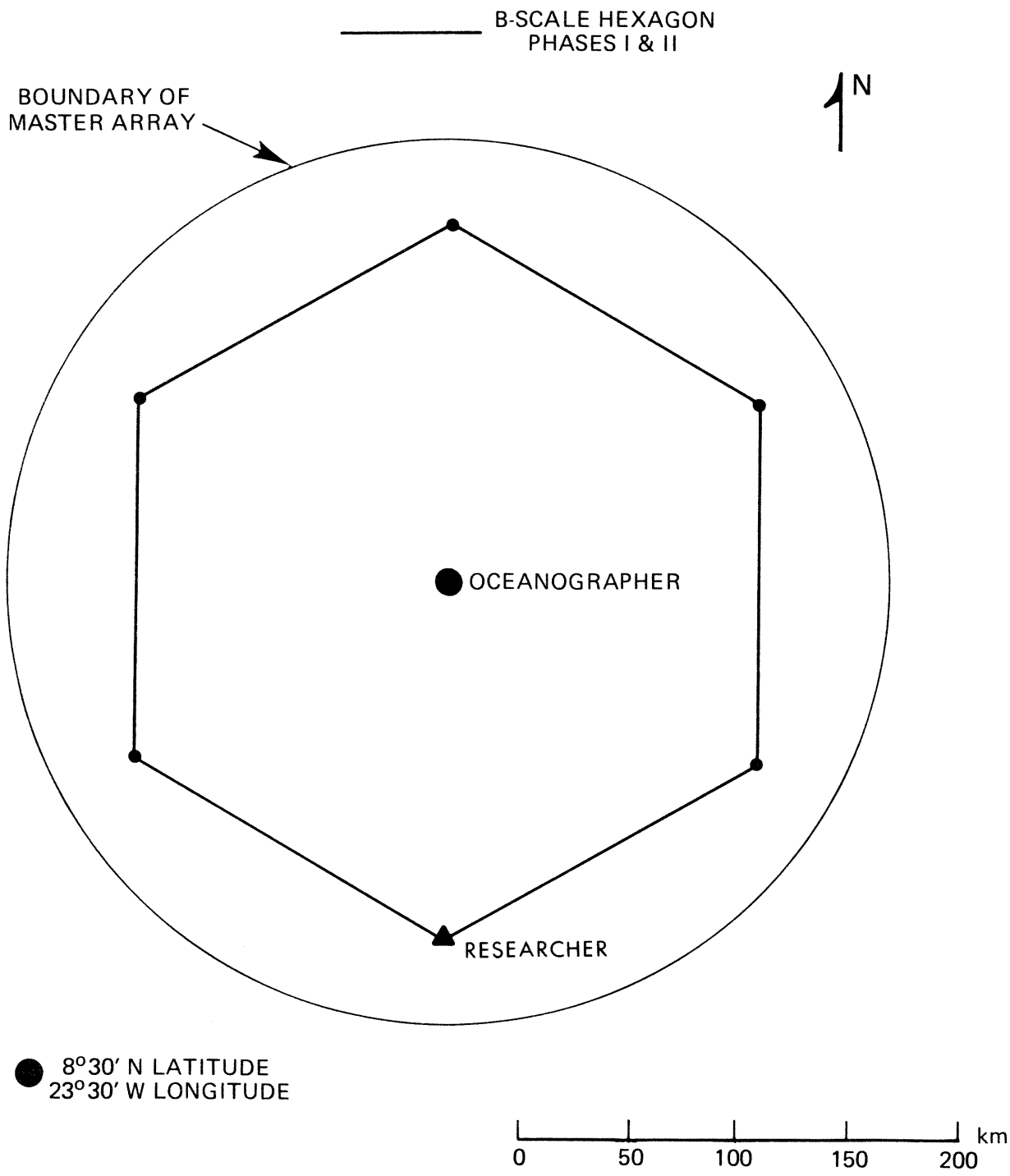

Figure 4.--Schematic illustrating the B-scale and master arrays and location of C-band radars used in rainfall derivations for Phases I and II of GATE.

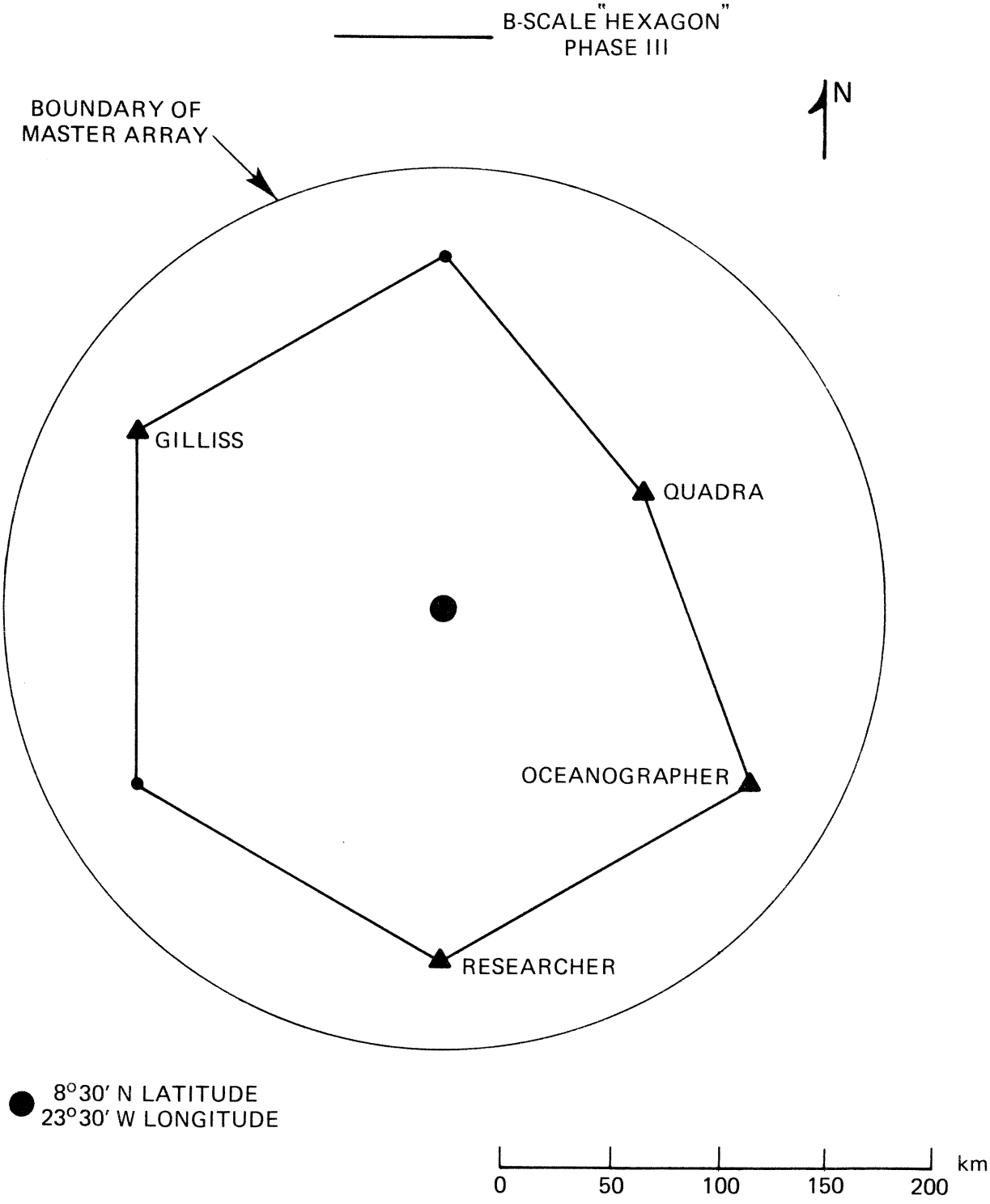

Figure 5.--Schematic illustrating B-scale and master arrays and the location of C-band radars used in rainfall derivations for Phase III of GATE.

from the variety of rainfall data sets now available from the GATE archives (sec. 1.2). Furthermore, analogous statistics for other time scales and larger space scales can be derived directly from the rainfall data contained in this atlas.

3.1 Rainfall-Rate Frequency Distributions for Selected Durations

Cumulative frequency distributions of rainfall rate are presented in figure 6 for selected durations and areas. The radar data and the analysis regions used to composite the statistics for these frequency distributions are summarized in table 2. The cumulative curves give the percent of the rates that are less than a given ordinate value and that exceed a specified threshold. The thresholds for the curves labeled as instantaneous 16 km^2, hourly 16 km^2, daily 16 km^2, and hourly 784 km^2 are 1.2 mm hr^{-1}, 0.5 mm hr^{-1}, 0.02 mm hr^{-1}, and 0.01 mm hr^{-1}, respectively.

The instantaneous frequency distribution emphasizes that the intense convective rainfall cores observed in GATE were confined to a very small fraction of the total rain area. The distribution of rates becomes more uniform for the larger spatial and/or temporal averaging scales. The distributions for the hourly 784-km^2 and the daily 16-km^2 scales are very similar, indicating that some degree of ergodicity is reached for these combinations of space and time scales.

3.2 Maximum Point Rainfall for Various Durations

Figure 7 presents plots of maximum point rainfall accumulations for the range of durations sampled during GATE. For the radar curve, 4-km x 4-km data bins are treated as "point" values. The data used for the radar analysis were the merged rainfall estimates from the C-band radars (sec. 2). The analysis region, used in the determination of the maximum rainfall accumulations from radar, was the total master array. Because the absolute maxima occurred outside the subareas of the master array used in the derivation of the frequency distributions shown in figure 6, the maximum values given on the 4-km curves in figure 6 are somewhat lower than the corresponding values on the radar curve in figure 7.

All shipboard rain-gage data contained in the reports by Seguin and Sabol (1976) and Seguin and Crayton (1977) were examined, and the absolute maxima of all gage values for the various durations were selected for the gage plot shown in figure 7. For all durations of Phase length (≃ 20 days) and less, a rain gage aboard the Oceanographer caught the largest gage amounts. The largest cumulative gage value for all three GATE Phases combined (≃ 60 days) was collected by a rain gage aboard the Researcher.

The Julian days that the maxima occurred, for durations up to daily, appear beside the plotted points on both the radar and shipboard gage curves. A cross-reference between Julian day and the month and day can be made by referring to the headers accompanying the tabulated rainfall data for each day.

A World Record Curve from Chow (1964) is also included in figure 7 for comparison with the GATE radar and rain-gage curves. The values for the GATE curves are based on specific beginning and ending times; for example, the

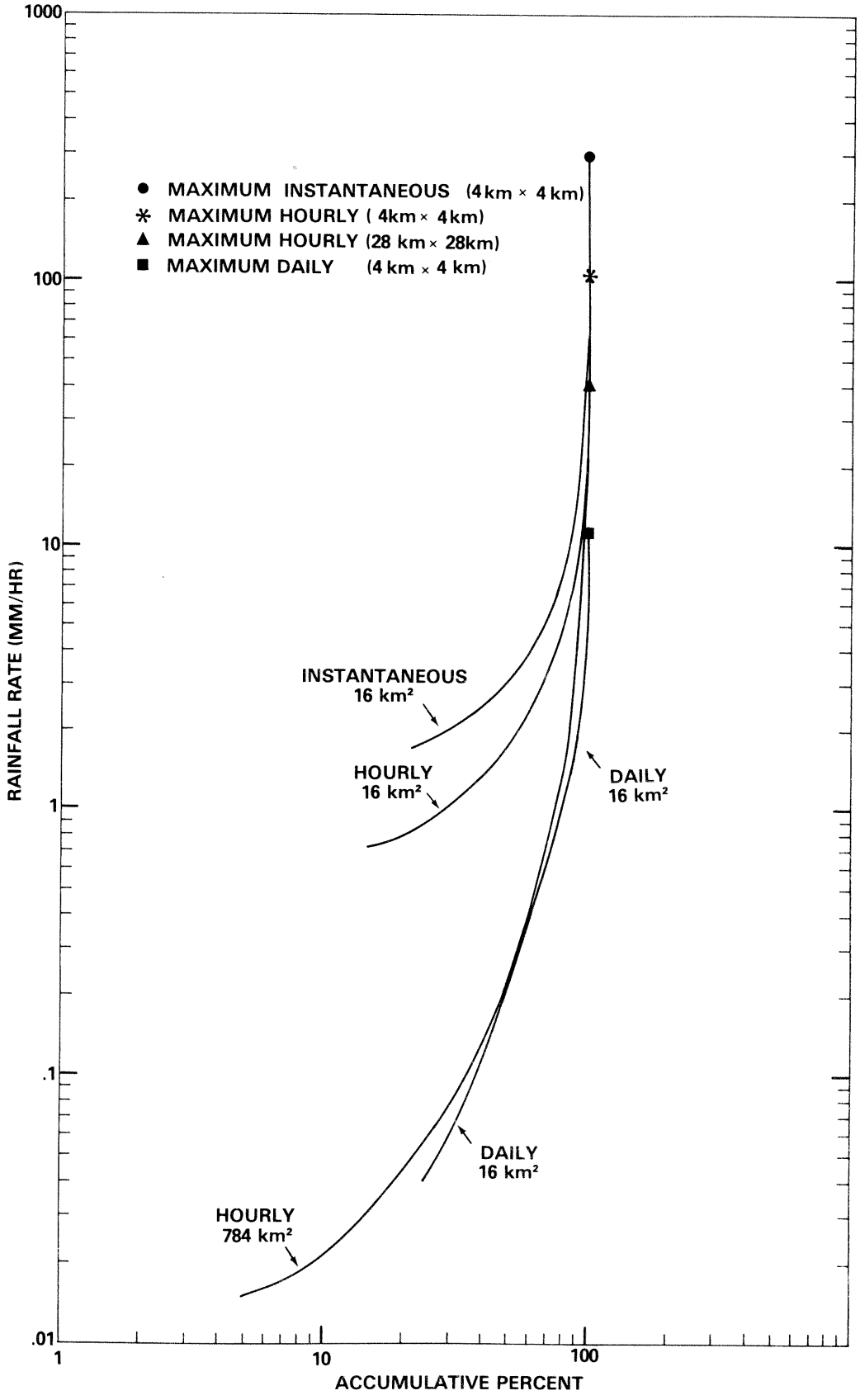

Figure 6.--Cumulative frequency distributions of average rainfall rates for selected spatial and temporal averaging scales (areas and durations), derived from GATE radar measurements specified in table 2. Maximum rainfall rate for each distribution is indicated with special symbol.

Table 2.--Radar data sets, analysis periods, and analysis regions used in the derivation of the rain-rate frequency distributions given in figure 6

Averaging Scales		Data Set No. (see table 1)	Analysis Period	Analysis Region
Time	Space			
Instantaneous	4 km x 4 km	3.36.02.103 3.36.02.106 With bias and atmospheric attenuation corrections added	First 9½ days of Phase III data from Oceanographer radar and all Phase III data from Gilliss radar	Two 8000-km^2 boxes for Oceanographer data and one 8000-km^2 box for Gilliss data, located within optimum ranges of the respective radar.
Hourly	4 km x 4 km	4.36.02.104	Phases I, II, III	160-km x 160-km box centered within master array
Hourly	28 km x 28 km ≃ ¼° x ¼°	4.36.02.106	Phases I, II, III	160-km x 160-km box centered within master array
Daily	4 km x 4 km	4.36.02.104	Phases I, II, III	160-km x 160-km box centered within master array

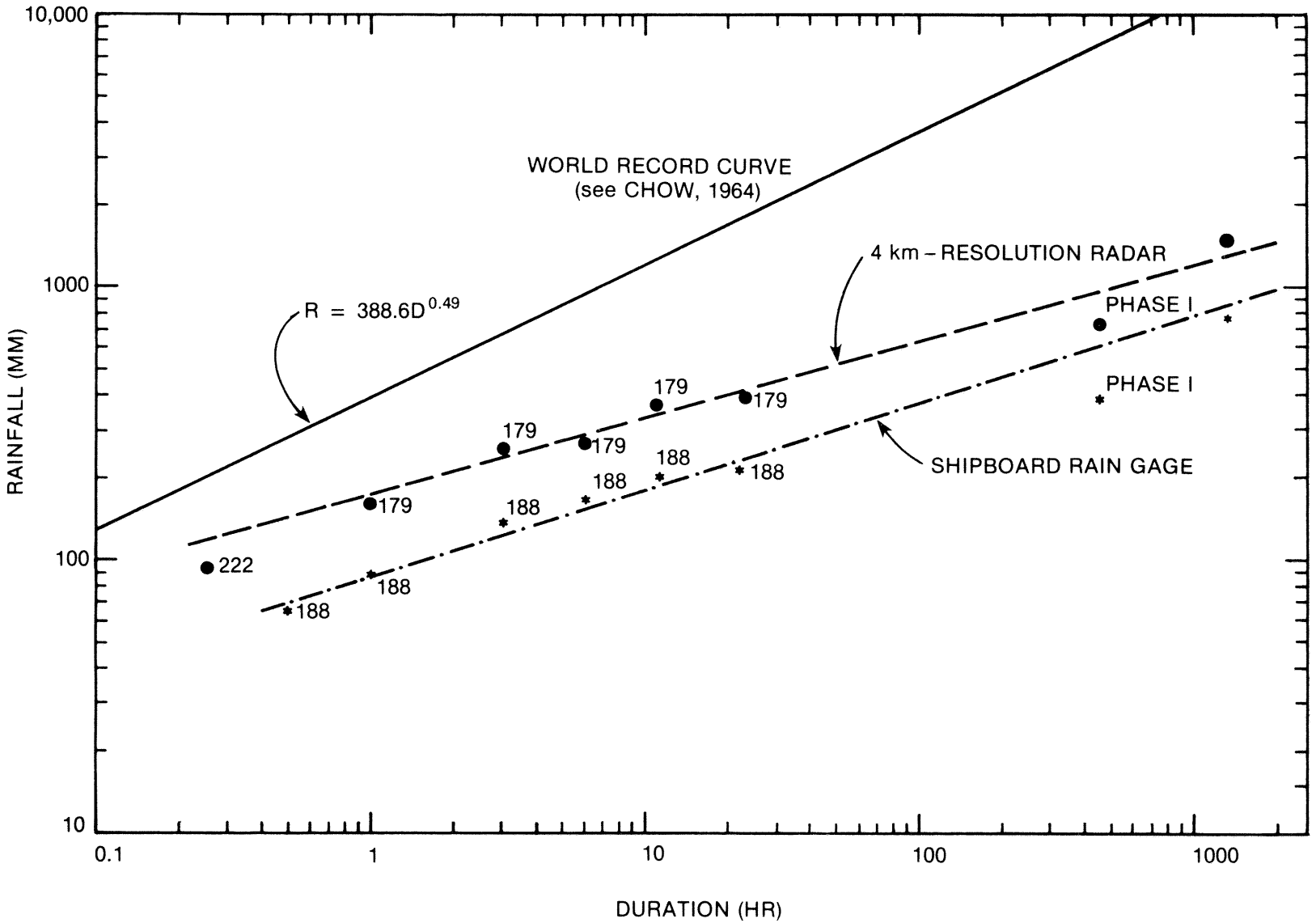

Figure 7.--Plots of maximum point rainfall accumulations observed during GATE for specific end times and various durations and an analogous curve for variable end times based on world record events.

daily accumulations used in the analyses were for 24-hr periods ending at midnight GMT, and the 12-hr accumulations were for periods ending at 1200 GMT and 2400 GMT, and so forth, for the other durations. The World Record Curve is based on the absolute maximum accumulations that have been recorded anywhere in the world for given durations, irrespective of the beginning and corresponding ending times. All values for the World Record Curve are from land stations where terrain features, such as orographic lifting, are often important.

Some interesting observations can be made by comparing the curves in figure 7. First, the GATE radar maxima are consistently higher than those recorded by the shipboard rain gages, although the two curves become closer as the duration increases. This difference is not because of a calibration problem with either sensor but primarily results from incomplete spatial sampling by the widely spaced rain-gage observations. The radar and gage maxima converge for longer durations as the mean rainfall fields become more uniform, increasing the probability that a gage will record a value closer to the absolute maximum. However, the rainfall distribution for the three Phases combined was still sufficiently skewed that no gage caught the absolute maximum.

It is also interesting to note that the radar curve and the World Record Curve approach each other for the shorter durations. This is physically consistent with the fact that some of the GATE systems produced quite intense rainfall for relatively short durations, but the convective and transitory nature of the GATE storms precluded extremely large accumulations at a point for the longer durations.

4. DESCRIPTION OF RAINFALL ESTIMATES

4.1 Missing Data and Derivation of Mean Rates

Except for the 69 consecutive hours that were missed during Phase II when the Oceanographer was off station for a medical evacuation, gaps in the rainfall record are confined to infrequent periods of only a few hours in duration. The hours for which rainfall estimates are missing on a given day appear in the header of the isohyetal map for that day. Also, blank lines in the hourly section of the rainfall tables indicate missing rainfall rates for those hours.

The estimates of mean rainfall rate for the 3-, 6-, 12-, and 24-hr periods were obtained by first summing the nonmissing hourly rates and then dividing the totals by the number of hours within the period that data were available. Mean rates were not calculated when more than one-third of the hourly values within the period were missing. This method of calculation gives "exact" mean rates for the portion of the period covered by existing hours. How representative these mean rates are for the total period depends on the length of the data gap(s) and on whether the mean patterns during the missing hour(s) differed significantly from those observed during the existing hours. The specific hours missing from a period can be identified as previously described.

4.2 Time Series and Array Means for Three GATE Phases

With the exception of the Phase mean rates for the A/B-scale hexagon,[2] which were obtained by extrapolating the B-scale radar estimates using infrared satellite data, the rainfall rates given in this section were derived from the data given in the rainfall tables. The Phase mean values, combined with the B-scale time series, provide a summary of the average precipitation production rates and their temporal distribution.

Figure 8 gives time series of 6-hr mean rainfall rates over the B-scale array for the three Phases of GATE. As can be inferred from figure 8, synoptic scale events, occurring at an average frequency of about once each 3.5 days, affected the precipitation production in the B-scale. Reed et al. (1977) and Hudlow (1977) have shown, for Phase III data, that the precipitating convection was significantly enhanced in the vicinity of the troughs of African waves, which were identified on 700-mb wind charts.

The Phase mean rainfall-rate estimates for the B- and A/B-scale arrays are given in table 3. The A/B-scale estimates, which are included because of their importance in A/B-scale budget analyses, were obtained by extrapolating the B-scale radar estimates using satellite data as follows:

$$(\overline{\text{Rain}})_{AB} = \left[(\overline{\text{High Cloud}})_{AB} \Big/ (\overline{\text{High Cloud}})_{B}\right] \times (\overline{\text{Radar Rain}})_{B} ,$$

where the bars indicate Phase mean values over the arrays as indicated by the subscripts. The high cloud was determined from infrared satellite data collected from the Synchronous Meteorological Satellite-1 (SMS-1). High cloud was defined as the average percent area covered by cloud image exceeding an altitude of 7.8 km (25 k ft), which corresponds to a brightness temperature threshold of approximately -20°C for the GATE area. This threshold closely corresponds to the one that Stout et al. (1977) found to give the best correlations between infrared image area and observed rainfall as measured by radar.

The validity of using the radar/satellite extrapolation technique can be evaluated by examining the correspondence between the relative variations of the radar and the satellite B-scale values for the three Phases. Comparison of the B-array columns in table 3 shows that the relative variations from Phase to Phase closely agree. While this method of extrapolating appears to work well for Phase averages, its validity would probably diminish for much shorter periods. However, using considerably more sophisticated procedures, 6-hourly rainfall estimates covering an A-scale array, which includes the A/B scale, have been derived from SMS-1 data by Griffith et al. (1979). These satellite rainfall estimates are available on magnetic tape from the GATE World Data Center A (1978; see data set No. 5.89.02.102 in the GATE Data Catalogue).

It should be noted that the estimates of mean rainfall rate for Phase II (table 3) are based on only the 16 days with existing radar data. However, the satellite mean high-cloud values also were computed including the 3 days missed by the radar, and these values were virtually identical to the ones given in

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[2]The A/B-scale hexagon is centered on, and symmetric with, the B-scale hexagon, but it covers an area 5 times larger (Kuettner et al., 1974). Accordingly, it is 2.7 times larger than the master array (fig. 4).

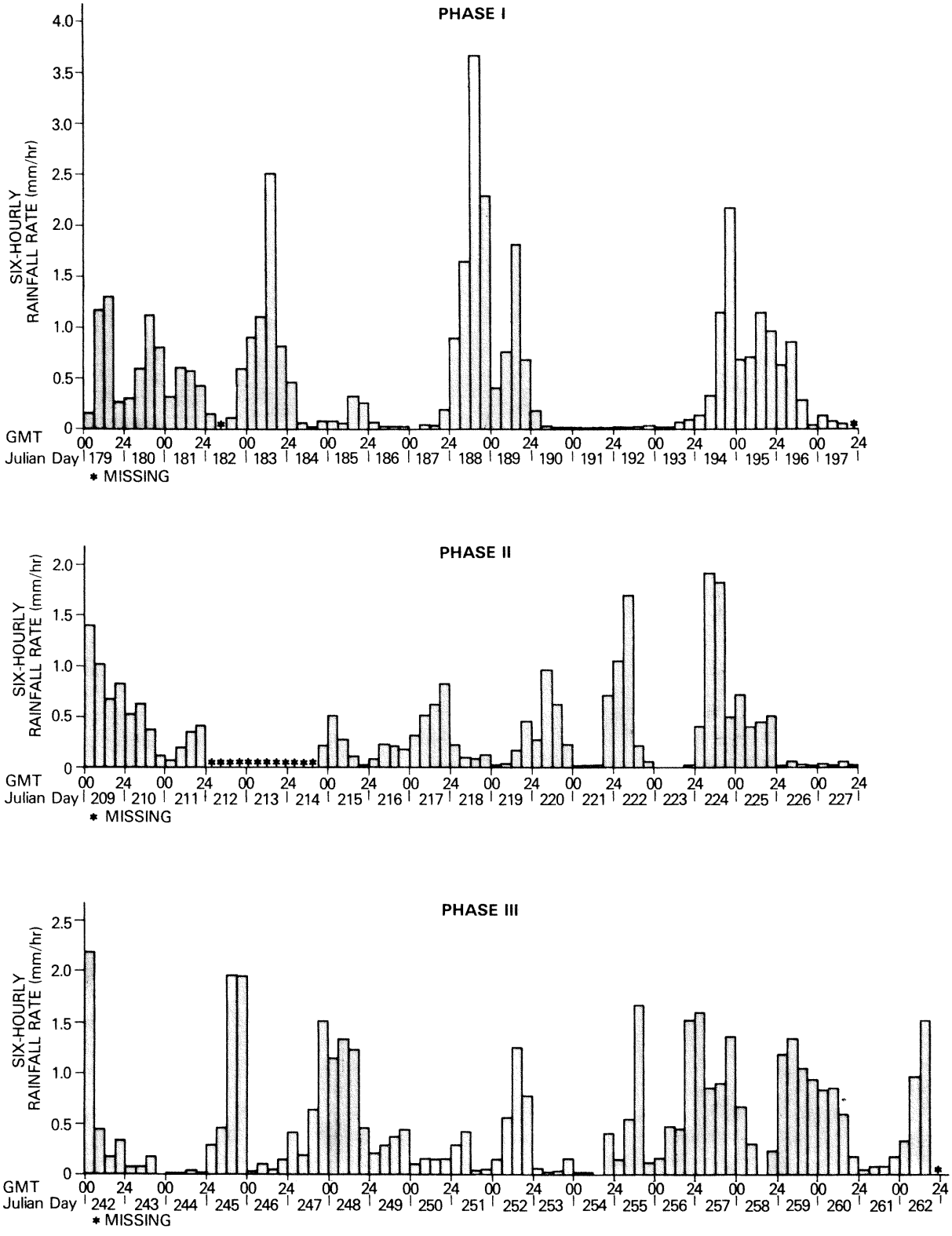


Figure 8.--Time series of 6-hourly average rainfall rate over B-scale hexagon, derived from C-band radar measurements.

Table 3.--Estimates of the Phase mean rainfall rates (mm day^{-1}) and percent satellite high-cloud coverages over the B- and A/B-scale arrays

	B-Array		A/B-Array	
Phase	Radar rain rate	Satellite percent high-cloud cover	Satellite percent high-cloud cover	Extrapolated radar rain rate via satellite ratio
I	11.9	21	19	10.8
II	9.2	15	14	8.6
III	12.7	25	22	11.2
Average all Phases	11.3 mm/day	20.3%	18.3%	10.2 mm/day

table 3 without the 3 days. This supports the conclusion that the B-array mean radar estimate for Phase II was not seriously degraded because of the three days of missing data.

Finally, we emphasize that although the A/B-scale rain estimates may be subject to greater uncertainty than those for the B-scale, they are almost certainly superior to estimates determined from only the shipboard rain gages. It is probable that the widely spaced rain-gage observations will underestimate the true array means, because of the skewed distribution of the Phase rainfall patterns.

4.3 Format of Rainfall Products

The rainfall products are arranged chronologically with the mean isohyetal map for each Phase preceding the series of daily maps and tables for the Phase. All rainfall values are expressed as average rainfall rates (mm hr^{-1}), over the area and period to which they pertain, and all times are Greenwich mean time (GMT). Accumulations can be obtained for a particular period by multiplying the rates times the number of hours in the period.

The number of digits carried past the decimal point should not be taken as an indication of the absolute accuracy of the rain-rate estimates. More decimal places were retained than in some cases are warranted by the accuracy of the measurements, so that the difference between zero and very small rain amounts can be distinguished. This becomes increasingly important as the period and/or area over which the rainfall estimates are being averaged increase. For example, a moderately intense, but brief and isolated, shower may result in a very small mean rainfall rate when averaged over the total B-array for a 24-hr period.

4.3.1 Phase Isohyetal Maps

The contours on each Phase map were manually drawn from an array of Phase mean rainfall-rate values. The elements of the array were obtained by spatially averaging the 4-km resolution data over 16-km x 16-km squares.

Also plotted on the Phase isohyetal charts are the mean rainfall rates calculated from the shipboard rain-gage catches for ship stations in the B-scale array. The letter following the rain-rate value denotes the approximate location of the gage aboard the ship. Data were available from two or more gages for some ships. For these cases, the (maximum) deviation between the value for the plotted gage and the other gage(s) is shown in parenthesis. The triangles mark the navigated gage positions, which are averages calculated by weighting the mean hourly ship positions by the hourly rainfall amounts. In most cases the difference between the rain weighted position and the straight average position is small, and the gage-to-radar correspondence is not affected significantly. There are some notable exceptions; for example, the Oceanographer for Phase I.

4.3.2 Daily Isohyetal Maps

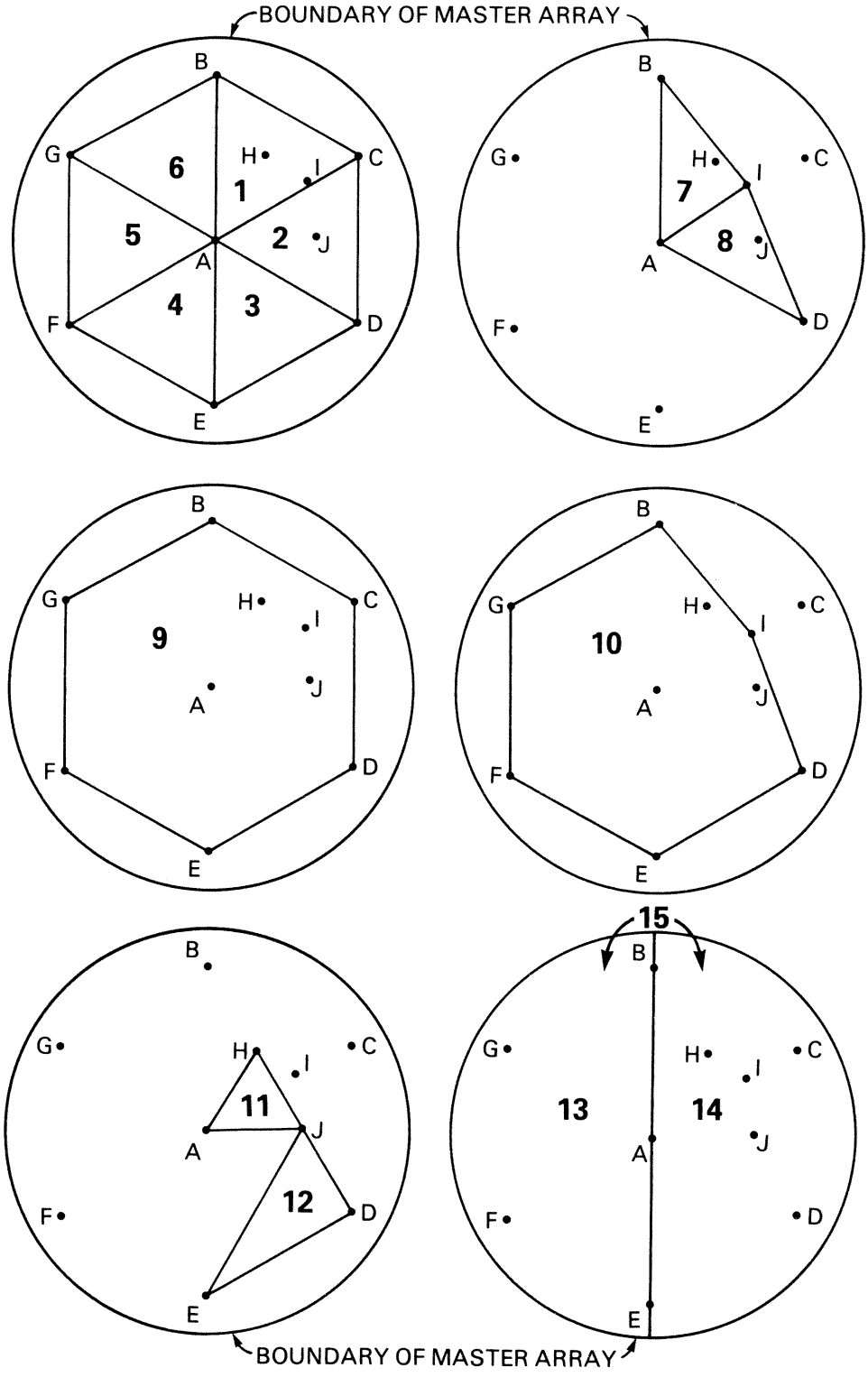
The daily isohyetal displays consist of graphics images, composed of 4-km x 4-km data bins, generated from a set of 16 alphanumeric characters, which provides an intensity resolution of 1.75 decibels. Four gray shades indicating successively higher rainfall rates are illustrated by increasing the number of dots (pixels) used to form the characters.

The key relating the alphanumeric characters to the daily-mean rain rates is given in the header. Hours for which data are missing (see sec. 4.1) are also listed in the header. Finally, the number of scans (maps) of instantaneous data that were used from each radar to derive the hourly data, which in turn were used to derive the daily map, are given in the map header. The maximum possible number of scans that can appear in the header for a given radar and day is 120, which indicates that all of the instantaneous scans, collected at 15-min intervals, were available. The trapezoidal integration algorithm used all of the "on-the-hour" scans twice, and they were likewise included twice in the header count.

4.3.3 Tabulated Mean Rainfall Rates for Various Durations and Geometric Areas

Fifteen area numbers appear across the top of each rainfall table, and the ending hours for the various periods appear down the left side of the table. The 15 area numbers correspond to the 15 geometric areas shown in figure 9. The assigned ship positions shown in table 4 were assumed in determining the boundaries for all computations.

The values contained in the tables give the radar estimates of the average rainfall rates over the various geometric areas and over the 1-, 3-, 6-, 12-, and 24-hr periods within each day. For example, the average rainfall rates (mm hr^{-1}) over the B-scale hexagon (area No. 9) on Julian day 179 (June 28) for the first time period in each duration category, i.e., over hours 00-01, 00-03, 00-06, 00-12, and 00-24, are 0.27, 0.21, 0.15, 0.67, and 0.75, respectively.



• SHIP POSITIONS

Figure 9.--Key giving geometric areas corresponding to the area numbers appearing above the columns of the daily rainfall tabulations. Letters designate ship positions.

Table 4.--Assigned ship positions used in determining the boundaries of the geometric areas shown in figure 9

Ship position	Latitude (N)	Longitude (W)
A	8°30'	23°30'
B	10°00'	23°30'
C	9°15'	22°12'
D	7°45'	22°12'
E	7°00'	23°30'
F	7°45'	24°48'
G	9°15'	24°48'
H	9°15'	23°05'
I	9°00'	22°40'
J	8°30'	22°38'

4.4 Expected Accuracies of Rainfall Estimates

4.4.1 Background

Because of the large spatial and temporal gradients, it is always difficult to establish the absolute accuracy of convective rainfall measurements, even over land areas. At sea it becomes more difficult, since adequate independent "ground truth" measurements are usually not available, especially for the smaller space and shorter time scales. Most radar hydrologists accept that comparisons made against a dense rain-gage network, within optimum range of a land-based radar, often provide the best information for assessing the accuracy of, and for calibrating, radar rainfall estimates. However, it would not have been logistically feasible, if possible, at all, to erect and maintain a dense network of buoys, instrumented with rain gages, in the GATE B-scale area.

Since it was clear early in the planning of the GATE radar program that a dense network of gages would not be available, and that the success of the water and energy budget studies would critically depend on the accuracy of the quantitative radar estimates, a multi-faceted approach for calibrating and intercomparing the data from the four C-band radar systems was undertaken (Hudlow et al., 1979). The electronic calibrations were established before the GATE field Phases and were routinely checked throughout the summer of 1974. A major subtask of the post analyses was the evaluation of the radar calibrations through a variety of intercomparison analyses, which included comparisons of radar measurements from two or more radars in regions of overlapping coverage, and comparisons of the rainfall estimates from the individual radars with rain-gage measurements collected aboard the B-scale ships (figs. 4 and 5). Based on these intercomparisons, systematic biases were estimated, and adjustments for them were made as a part of the derivation of the final rainfall estimates (Patterson et al., 1979).

In arriving at the magnitudes of the systematic biases, considerable weight was given to the comparisons between the Phase rainfall totals from the

individual radars and those from selected gages. Comparisons between radar estimates and gage catches also were made for shorter time periods; however, because the inherent noise in relating the point measurements from the single in situ sensors to the much larger volume measurements from the remote sensors increases with decreasing integration time, no attempt was made to dynamically adjust the radar fields for limited areas or times using gage calibrations. In fact, only time and space invariant bias adjustments, defined here as systematic bias adjustments, were applied to the data sets from the individual radars. In addition, attenuation corrections were applied as described in section 2.

Although it is difficult to relate rain estimates from radar to point estimates from isolated gages, some information can be gained about the accuracy of the radar estimates from such comparisons if the large spatial variabilities and the impreciseness with which the radar precipitation fields can be positioned are considered. Some of the factors that potentially limited the precision with which the shipboard rain gages could be absolutely positioned in the radar fields follow:

1. Uncertainties in the ships' estimated positions were sometimes 1-2 km.
2. Small, time-variant antennae azimuth errors may have occasionally become significant.
3. Data resolution prevented navigation of individual radar fields to an accuracy better than 2 km.
4. The navigation accuracy could further deteriorate for parts of the master array subsequent to the merging of fields from two or more radars (sec. 2).
5. Areas that were obstructed by the ships' superstructures in the individual NOAA radar scans sometimes were filled by data from the same radar, 15-min removed (Richards and Hudlow, 1977), or from another radar as part of the merging process.
6. Wind between beam level and the surface could cause the precipitation to drift laterally and reach the surface a significant distance from the point of radar observation.

None of the above six factors would have a significant impact on the accuracy of the rainfall estimates, except on those applications requiring extremely accurate absolute location of the radar data and/or gage data; for example, "point"[3] estimates are needed in order to make comparisons between radar observations and the individual gage catches.

4.4.2 Radar-Gage Comparative Analyses

Figures 10, 11, and 12 illustrate the scatter that is observed when comparing the refined radar rainfall estimates to individual gage catches for Phase, daily, and hourly periods, respectively. The plotted numbers give the frequency of radar-gage pairs falling within the classes delineated by the vertical and horizontal lines. The class intervals are normally 2 dBR, except 3 to 5 dBR classes are used below -5 dBR for the daily plot because of poor resolution in the rain-gage data at light rain rates. The rainfall rates, R, are averages over the various periods expressed in mm hr^{-1} and in dBR, where $dBR = 10 \log_{10} R$.

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[3]"Point" radar estimates in the context of this report refer to the values for the elemental 4-km x 4-km data bins.

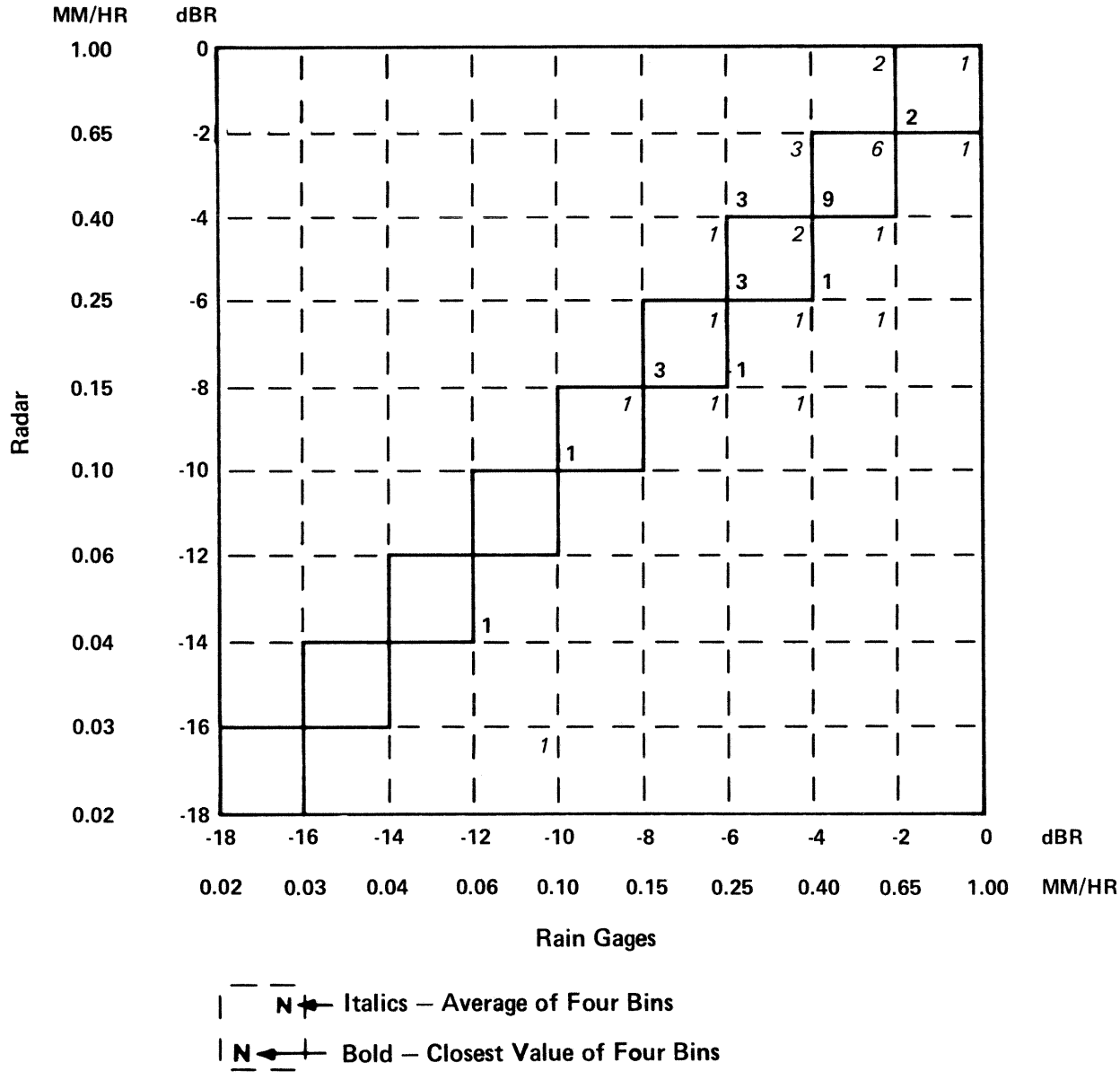

Figure 10.--Scatter diagram of Phase mean radar-rainfall estimates versus those from rain-gage measurements at all B-scale ship stations. The two groups of numbers give frequencies with which estimates fall within indicated classes for two methods of determining the radar values as described in the text.

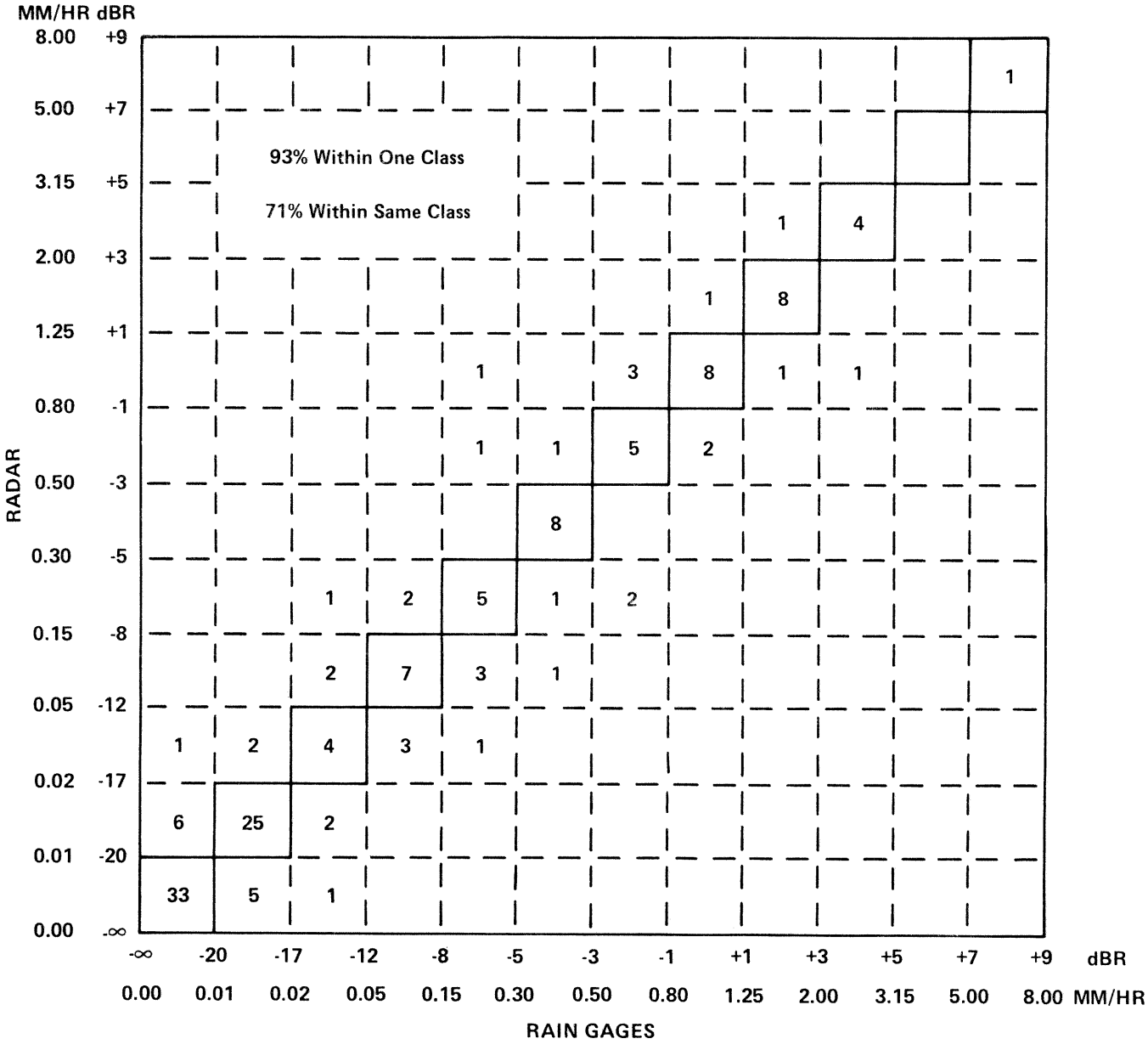

Figure 11.--Scatter diagram of daily mean radar-rainfall rate estimates versus those from rain-gage measurements for all days with data at stations maintained by the Gilliss, Oceanographer, and Meteor. Numbers give frequencies with which estimates fall within indicated classes, when each radar estimate is taken as the value from the set of nine, which minimizes the scatter. (See text.)

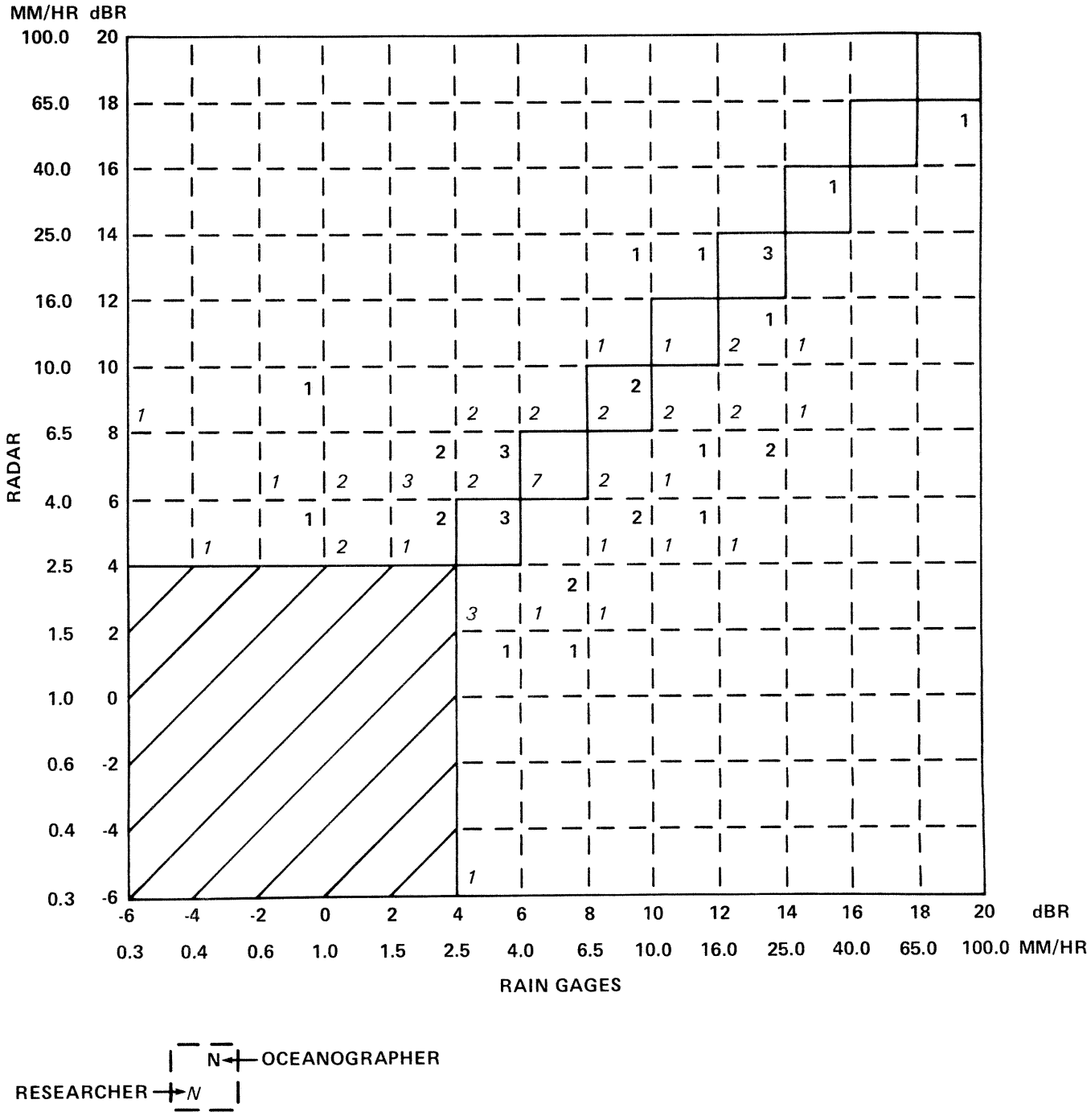

Figure 12.--Scatter diagram of hourly radar-rainfall rate estimates versus those from collocated rain-gage measurements for all hourly values exceeding 2.5 mm hr^{-1} at the Oceanographer and the Researcher. Numbers give frequencies with which estimates fall within indicated classes. Radar estimates are at the respective radar origins as interpolated using an objective analysis model.

The gage values used for the Phase scatter diagram are those plotted on the Phase isohyetal maps. Data were available from two or more gages for some ships. For these cases, the maximum of the gage values was usually selected for comparison with the radar estimates, except that only the rain-gage data published by Seguin and Sabol (1976) were used for the daily comparisons. The data from the supplemental gages, which were subsequently published by Seguin and Crayton (1977), were incorporated for the Phase and hourly comparisons. Rain-gage data from gages aboard the Gilliss, Oceanographer, and Meteor[4] were used, for all days that radar and gage data were available, for the daily comparisons. Only collocated gage and radar data were used for the hourly comparisons. This was accomplished by using the objective analysis model described by Patterson et al. (1979) to obtain interpolated radar estimates at the radar origin, which could then be compared to the rain-gage data aboard the same ship.

The hourly collocated comparisons were made using the refined rainfall estimates from the Oceanographer and Researcher radars, individually, before the fields were navigated and merged. This approach virtually eliminated the positional errors, which may be significant for the daily and Phase comparisons of the remote radar and gage observations. However, the interpolation errors accompanying the hourly radar estimates can be large, since the closest observed data used in the objective analysis were 4 km from the radar origin. Hudlow et al. (1978) show that the mean correlation radius (distance at which the autocorrelation coefficient first diminishes to e^{-1}) is only approximately 4 km for GATE instantaneous rain-rate fields.

Comparison of figures 10, 11, and 12 shows that a significant increase in variability is encountered between the radar and gage observations as the averaging period decreases. No systematic biases are apparent from these plots, however, throughout the dynamic range of the rainfall rates for the three time scales.

An appreciation for the large spatial gradients that exist in the isohyetal patterns, even for averaging periods as long as a Phase, can be obtained by comparing the scatter of the two groups of numbers plotted in figure 10 (italics and bold). The radar estimates for the group exhibiting the most scatter were obtained by averaging the values in a set of four 4-km x 4-km data bins consisting of the one containing the Phase-mean ship (gage) position plus the three nearest neighboring bins. The second group was obtained by taking, for each "point" comparison, the value from the set of four in closest agreement with the gage, which reduces the scatter to the extent that one-third of the radar estimates fall one class closer to the gage values (fig. 10). Considering the large spatial variability and the six factors enumerated above that affect the precision with which the rain gages can be positioned relative to the radar fields, it seems likely that the positional error can be as large as 4 km. Therefore, the second group of numbers can be considered as being most appropriate for the Phase radar-gage comparisons.

Comparison of figures 11 and 13 emphasizes the substantial spatial variability and uncertainty encountered in relating the daily radar and gage estimates. Each radar estimate for the scatter diagram shown in figure 11

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[4]The Meteor maintained station D during Phases I and II and switched with the Oceanographer during Phase III (station A, see table 4 and figs. 4 and 5).

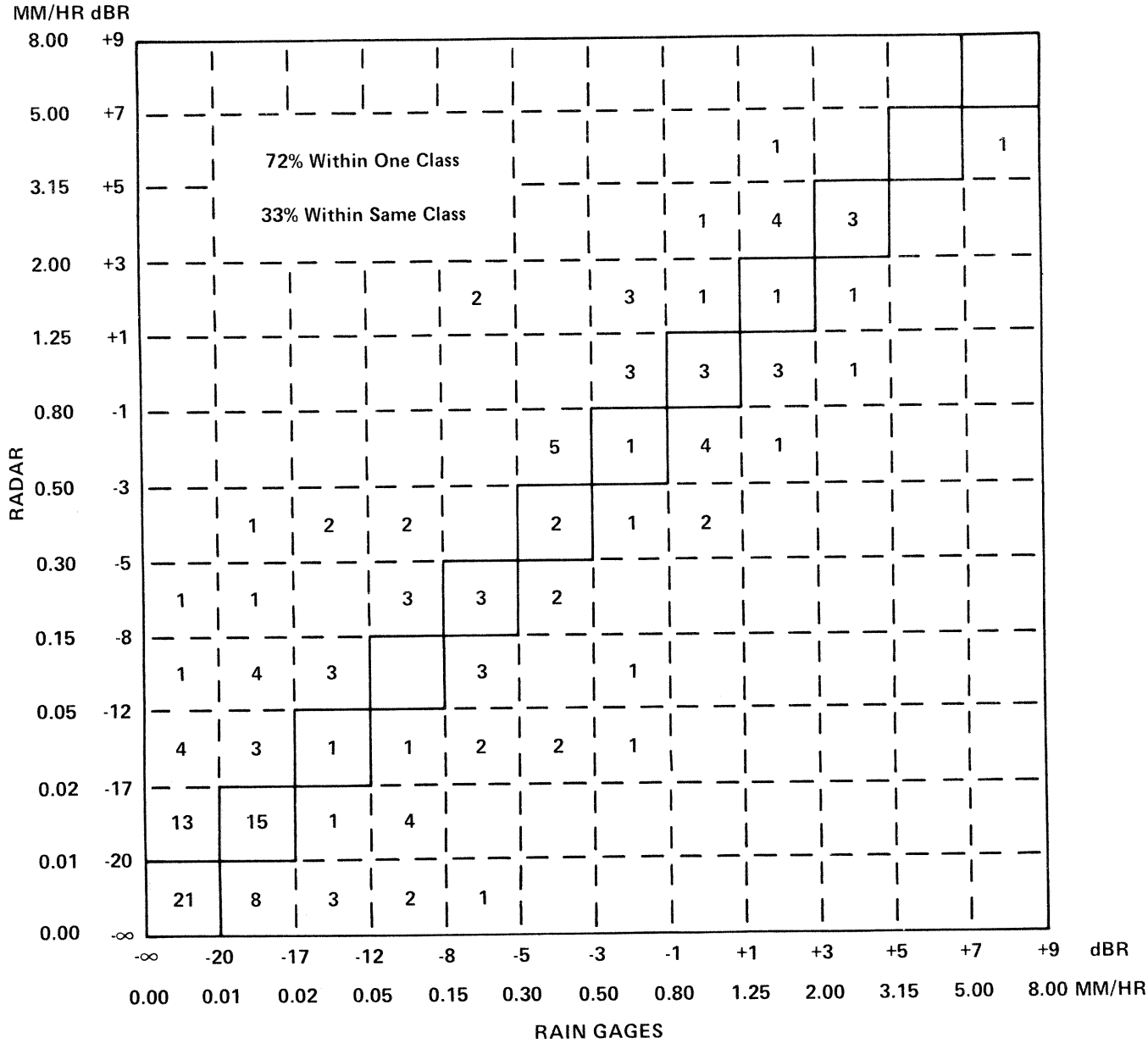

Figure 13.--Same as figure 11 except each radar estimate was taken as the value from the data bin containing the daily-mean ship (gage) position.

was taken as the value in closest agreement with the rain gage from the set of nine 4-km x 4-km data bins, which consist of a central bin containing the daily-mean ship (gage) position plus the eight surrounding bins. Each radar estimate for figure 13 was taken from the central bin, however. The increased scatter exhibited in figure 13, over that in figure 11, is summarized by the significant reduction in the number of radar estimates falling within the same class, and within one class, of the gage values (see annotations on figs. 11 and 13).

Figure 14 further illustrates the large gradients in the daily radar isohyetal maps that exist over distances less than 5.7 km ($\sqrt{4^2 + 4^2}$). The pairs of radar values for this scatter plot were obtained by taking, from the set of nine bins described above, the maximum and minimum values from the eight surrounding bins versus the central bin.

Because of the even larger spatial gradients existing in the daily isohyetal maps compared to the Phase maps, it seems likely that the errors resulting from positioning uncertainties of the rain gages relative to the radar fields would be somewhat greater for the daily scale. Consequently, daily comparisons were made by selecting the radar estimate in closest agreement with the rain gage from the set of nine bins (as opposed to the set of four used for the Phase comparisons).

Potential errors in the shipboard rain-gage data also should be considered when using gage data to assess the absolute accuracy of the daily radar estimates. Significant variability often is observed between measurements from different gages aboard the same ship. For example, the mean absolute percent difference in daily collections between the stern 1 gage and the bow gage on the Gilliss was 18 percent (Seguin and Crayton, 1977). Furthermore, the difference between the stern 1 and the stern 2 gages was 12 percent. As mentioned earlier, the maximum gage catch was normally used for comparison with the radar estimates, since most potential sources of gage error produce deficient gage catches (sec. 4.4.3). The observed variability among the various gage records does further support the appropriateness of matching the radar and gage pairs as described above for the radar-gage comparisons.

4.4.3 Summary of Expected Accuracies

Because the rain-gage observations can be in error and since significant variability (error) is encountered in relating the point measurements from the gages to the much larger volume measurements from the radar, it is difficult to assess the absolute errors in the radar estimates from comparisons with the sparse shipboard rain-gage catches. However, it is useful to summarize the observed differences between the radar and gage estimates, and if one assumes to a first approximation that the gage measurements represent "ground truth" at the point of observation and that the data positional uncertainties are largely eliminated by using the nearest radar value from the data bin sets as described in section 4.4.2, then these observed differences can be interpreted as estimates of the expected error for the radar "point" measurements.

An evaluation of any overall residual systematic biases in the final radar estimates can be obtained by computing the following statistic for each Phase:

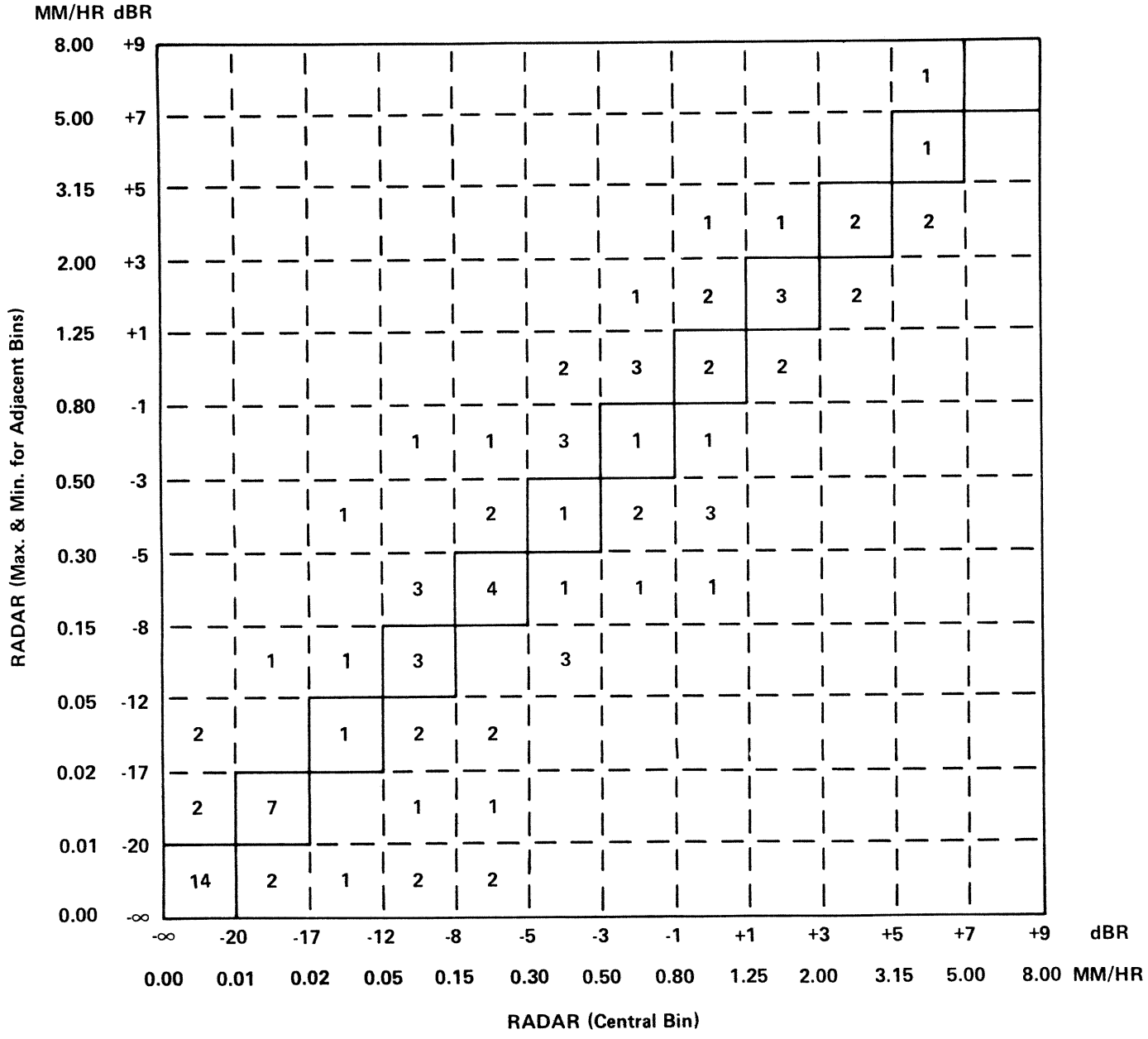

Figure 14.--Scatter diagram of maximum and minimum radar values versus value of the central bin, all from sets of nine data-bins as described in the text. Numbers give frequencies with which radar estimates fall within indicated classes using the same radar data-bin sets as described for figures 11 and 13, except only the first 16 days of Phase I are plotted here.

$$\frac{[\Sigma(\text{Gage})_i - \Sigma(\text{Radar})_i] \times 100}{\Sigma(\text{Gage})_i}$$

where the sum is for all B-scale ship stations (i), and the radar estimates are those corresponding to the second group of numbers in figure 10 (the bold numbers, see sec. 4.4.2). The results from this computation are given in table 5.

The estimated systematic biases (table 5) for the three Phases are probably not significantly different from zero when one considers the uncertainties that may accompany the estimates from both sensors. Although the estimated magnitudes of the biases are small, the change in sign of the bias for Phase III may be real, and could be explained by remembering that the data from the individual radars were merged differently during Phase III (sec. 2). Specifically, if systematic underestimates exist in the radar fields during Phases I and II, they probably are most significant over the northernmost part of the array since the estimates over this area were derived using the data coverage of only the Oceanographer radar (fig. 4). This was normally not a serious limitation because of (1) the Oceanographer's central position in the array, (2) the superior range performance characteristics of the Oceanographer radar (Hudlow et al., 1979), and (3) the generally smaller amounts of rain occurring in the northern part of the array.

It should be emphasized that the rain-gage records could contain systematic biases, which are not reflected in the percent differences given in table 5. In fact, most potential errors in shipboard rain-gage measurements tend to result in deficit catches (WMO, 1962). Laevastu et al. (1969) and Reed and Elliot (1977) suggest that the approximate magnitude of these deficits would be less than 10 percent for suitable shipboard installations. For those GATE ships that were equipped with two or more gages, the maximum gage value was normally selected for comparison with the radar estimate. This tended to minimize the effect of gage underestimates, resulting from bad gage exposure, in the assessment of systematic biases in the radar estimates (table 5). The difference between minimum and maximum gage values was frequently considerable. For example, the maximum deviation between gages was observed on the Gilliss, where there was consistently about a 20 percent greater Phase catch in one of the stern gages than in the bow gage (see gage values and deviations plotted on the Phase isohyetal maps). The stern gages on the GATE ships generally collected more rain than the mast or bow gages. This was probably due to the sheltering effect provided by the stern exposure. The standard operating procedure for the GATE ships was a drift and slow recovery mode, with the bow maintained into the wind when possible.

Assuming no systematic biases exist in the gage records, an estimate of the expected errors in the radar "point" rainfall estmates, for daily and Phase periods, is given by the mean absolute percent difference between the gage and radar values, i.e.,

$$\Sigma\Sigma \left| \frac{(\text{Gage}_{ij} - \text{Radar}_{ij})}{\text{Gage}_{ij}} \right| \times 100/N$$

Table 5.--Residual systematic bias evaluation between shipboard gages and final radar "point" measurements

Observation period	Percent differences plus: radar < gage minus: radar > gage
Phase I	+5%
Phase II	+6%
Phase III	-4%
All GATE	+2%

where the sums are for all B-scale stations (i) used in the analysis and for all Phases (j), or days (j), during GATE; N is the total number of gage-radar pairs. The first two lines in table 6 give this error statistic for the Phase and daily periods.

Because of the very large variability (scatter) observed in relating the hourly gage and radar values (fig. 12), it is not feasible to use these comparisons directly to assess the expected error for hourly "point" radar estimates. However, as mentioned in section 4.4.2 the scatter plot does show that no significant systematic biases exist between the radar and gage values throughout the dynamic range of the hourly rain rates.

The error estimate for the 1- to 3-hr time scale (third line, table 6) was subjectively determined by assuming that, although errors from such sources as variability in the Z-R relationship (sec. 1.2) are locally correlated for large enough space and time scales, the errors can be treated as random. Therefore, by averaging over more area, an equivalent accuracy to that for the "point" daily estimates can be achieved for the shorter (1- to 3-hr) time scale. Hudlow and Arkell (1978) experimentally show, using observed GATE reflectivity distributions, that changes in the exponent of the Z-R relationship, within realistic bounds, would not seriously affect the accuracy of the rainfall estimates for the space and time scales being considered for the atmospheric budget studies ($\geq$3 hr, $\geq$4000 km^2). They also arrive at the same conclusion for another potential source of error: inadequate temporal sampling. Hudlow and Arkell show that these two sources of error decrease steadily, or until they reach an asymptote, as the averaging area and/or time increases. While other potential sources of error exist, it is reasonable to assume that they too would behave in a similar manner; therefore, the error estimate for the 1- to 3-hr and 500- to 5000-km^2 scales should be realistic (table 6).

Analogous arguments can be made with regard to error estimates for other time and space scales. For example, if the correlation of errors in the Phase "point" estimates weakens with short spatial separations, then averaging in space would rapidly reduce the 14 percent expected "point" error. In fact, if the gage Phase totals, used as standards, contain no systematic biases, then the error in the Phase-mean radar estimates should approach zero as the estimates are averaged

Table 6. -- Summary of mean absolute percent differences between radar and shipboard rain-gage measurements

Time scale	Space scale	Mean absolute percent difference (error)	Comments
Phase	16 km^2	14%	Each radar estimate was taken as the value in closest agreement with the rain gage, from the set of four, 4-km x 4-km data bins consisting of the one containing the Phase mean ship position plus the three nearest neighboring bins.
Daily	16 km^2	23%	Each radar estimate was taken as the value in closest agreement with the rain gage, from the set of nine, 4-km x 4-km data bins consisting of the one containing the daily mean ship position plus the eight surrounding bins.
1-3 hours	5×10^2 - 5×10^3 km^2	23%	Based on expected range of space scales over which the 4-km radar estimates must be averaged to obtain an accuracy equivalent to the daily estimates for time scales of 1-3 hours.

over areas approaching the size of the total B-scale array. As described above, however, there could be systematic deficits in the gage collections, averaging as much as 10 percent.

In conclusion, it is encouraging to note that both Lord (1978) and Thompson et al. (1979) have found excellent agreement between the radar rainfall estimates and those based on B-scale moisture budget analyses. Lord has further demonstrated that the rainfall rates estimated from the Arakawa-Schubert convective parameterization model are also in excellent agreement with the radar estimates. These findings are extremely significant, since they reveal that the quality of the principal GATE data sets should be adequate to achieve the central objectives of the experiment.

ACKNOWLEDGMENTS

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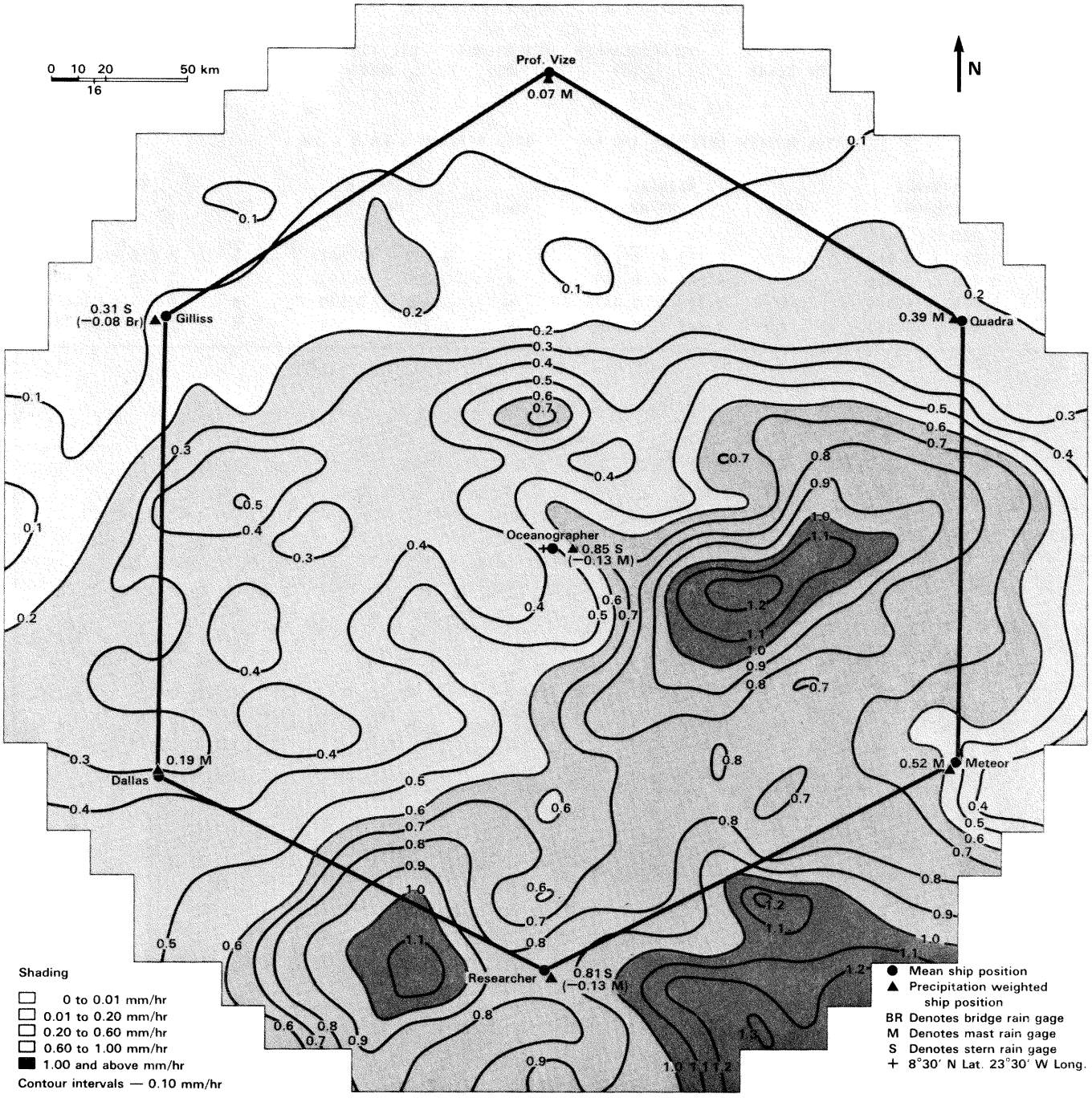
GATE RADAR RAINFALL MAPS AND TABLES

FOR THE

THREE PHASES OF GATE

(For an explanation of data format, see section 4.3.)

PHASE I ISOHYETAL MAP (June 28 - July 16)



1

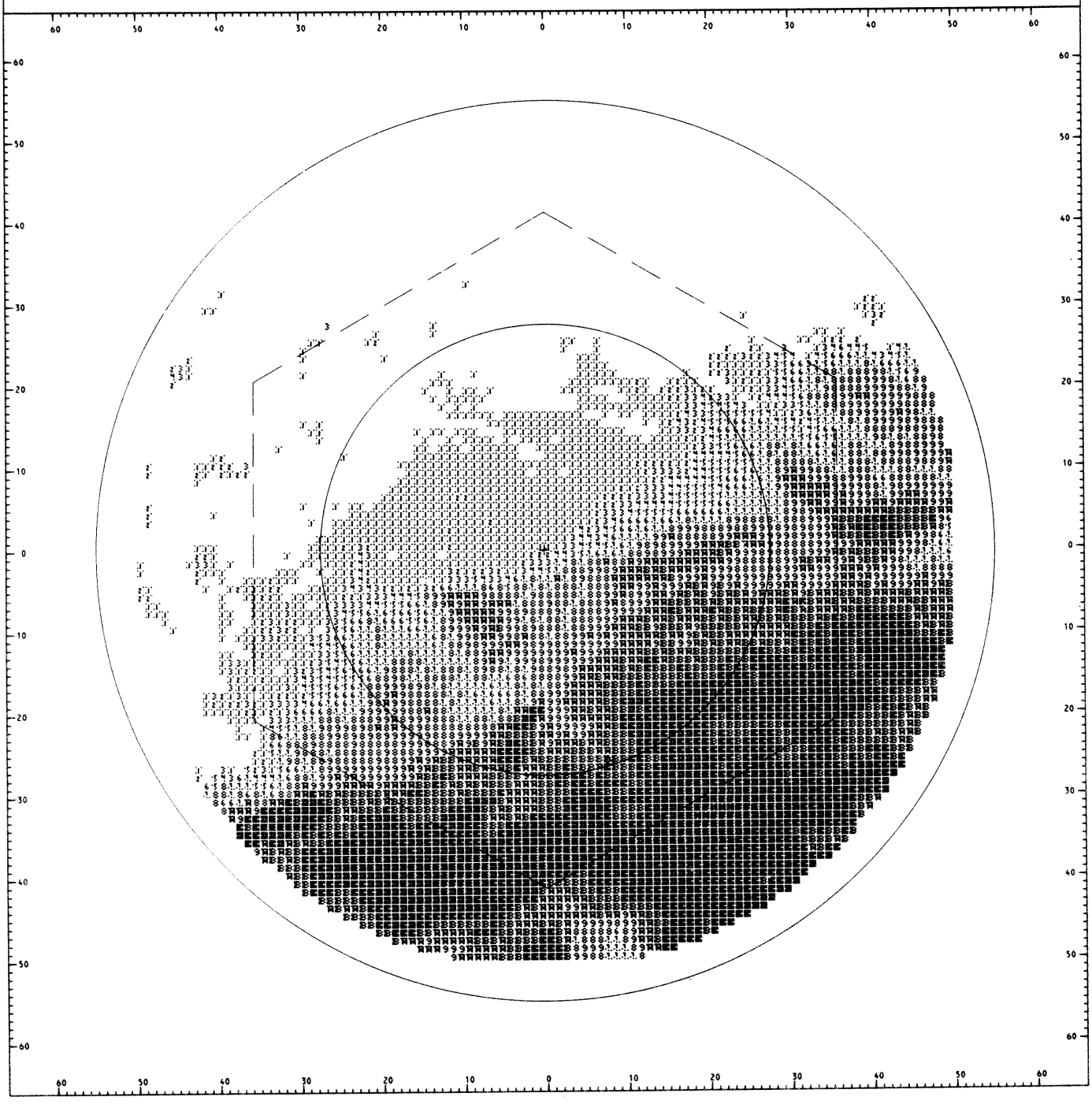
GATE RADAR DAILY RAINFALL RATE 179

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	109	061	000	000

MISSING HOURS: 19

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	A	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	B	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	D	1.496 - 2.239	E	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	F	2.239 - 3.350	G	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JUNE 28, 1974 (JULIAN DAY 179)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0	0.0	0.9216	0.7153	0.0003	0.0	0.0	0.0	0.2715	0.3085	0.0	0.5610	0.5240	0.4694	0.4967
2	0.0	0.0	0.6982	0.6712	0.0092	0.0	0.0	0.0	0.2287	0.2598	0.0	0.7025	0.5440	0.5214	0.5326
3	0.0	0.0008	0.4623	0.3459	0.0020	0.0	0.0	0.0004	0.1345	0.1527	0.0	0.4686	0.6056	0.5260	0.5657
4	0.0	0.0061	0.2189	0.0900	0.0030	0.0008	0.0	0.0071	0.0529	0.0598	0.0	0.2932	0.3296	0.6192	0.4744
5	0.0	0.0002	0.3919	0.1404	0.0062	0.0033	0.0	0.0004	0.0899	0.1021	0.0002	0.5569	0.0892	0.5888	0.3390
6	0.0004	0.0	0.3121	0.5715	0.0016	0.0024	0.0004	0.0003	0.1473	0.1673	0.0	0.3910	0.2071	0.5148	0.3610
7	0.0	0.0019	0.0792	0.6344	0.0002	0.0009	0.0001	0.0026	0.1188	0.1350	0.0009	0.0989	0.2819	0.8435	0.5626
8	0.0001	0.0134	0.1691	0.3552	0.0032	0.0013	0.0001	0.0062	0.0900	0.1004	0.0	0.2122	0.3229	1.8132	1.0679
9	0.0	0.4052	1.3015	0.2773	0.0055	0.0017	0.0	0.3351	0.3313	0.3402	0.0037	2.0552	0.4258	3.0066	1.7161
10	0.0	2.0210	5.6016	0.7747	0.0024	0.0005	0.0001	1.5300	1.3980	1.3905	0.0	8.8313	0.6272	3.1505	1.8888
11	0.0009	3.0093	8.3761	1.3541	0.0054	0.0002	0.0	2.9787	2.1212	2.2015	0.0524	13.1350	1.0020	3.4737	2.2377
12	0.0011	4.9063	11.9673	1.7022	0.0005	0.0	0.0011	5.8044	3.0928	3.2912	0.5334	16.5378	1.1270	4.4576	2.7921
13	0.0128	5.6454	9.8726	2.3946	0.0	0.0	0.0175	6.7456	2.9864	3.1448	1.0317	7.8256	1.3778	3.6096	2.4935
14	0.0046	2.5730	4.2589	4.4378	0.0002	0.0	0.0057	3.2283	1.8759	2.0370	1.3606	2.3749	1.4869	1.6384	1.5625
15	0.0080	0.9357	2.0341	3.7533	0.0003	0.0001	0.0064	0.8303	1.1187	1.1936	0.5968	1.5905	1.2292	0.8582	1.0435
16	0.0366	0.3863	0.5830	3.8982	0.0949	0.0055	0.0300	0.1294	0.8311	0.8830	0.0903	0.3765	1.3831	0.3713	0.8771
17	0.1970	0.6549	0.1500	2.1295	0.5011	0.0195	0.0399	0.0699	0.6085	0.5424	0.0622	0.1077	1.1084	0.5744	0.8412
18	0.3452	0.7556	0.0480	0.9603	0.3138	0.0253	0.1868	0.1169	0.4087	0.2916	0.2529	0.0299	0.6511	0.7409	0.6959
19															
20	0.0397	0.3486	0.8662	0.1045	0.0215	0.0105	0.0594	0.4134	0.2316	0.2471	0.0233	1.2326	0.0393	0.4669	0.2531
21	0.0063	0.4383	1.3082	0.2810	0.0631	0.0071	0.0076	0.6492	0.3502	0.3938	0.0048	1.9815	0.1030	0.4827	0.2928
22	0.0003	0.3177	1.3544	0.4042	0.0862	0.0022	0.0003	0.4706	0.3601	0.4063	0.0015	1.8526	0.1466	0.4473	0.2969
23	0.0	0.0835	1.0523	0.1689	0.1101	0.0025	0.0001	0.1256	0.2355	0.2671	0.0030	0.8456	0.1288	0.3017	0.2152
24	0.0030	0.0659	0.7780	0.1000	0.0180	0.0037	0.0044	0.1003	0.1609	0.1825	0.0788	0.6469	0.0858	0.2397	0.1627
3	0.0	0.0003	0.6940	0.5774	0.0038	0.0	0.0	0.0001	0.2116	0.2403	0.0	0.5774	0.5578	0.5056	0.5317
6	0.0001	0.0021	0.3076	0.2673	0.0036	0.0022	0.0001	0.0026	0.0967	0.1098	0.0001	0.4137	0.2086	0.5743	0.3914
9	0.0	0.1402	0.5166	0.4223	0.0030	0.0013	0.0001	0.1146	0.1800	0.1918	0.0016	0.7887	0.3435	1.8877	1.1155
12	0.0007	3.3122	8.6483	1.2770	0.0028	0.0002	0.0004	3.4377	2.2040	2.2944	0.1953	12.8347	0.9187	3.6939	2.3061
15	0.0085	3.0514	5.3888	3.5285	0.0002	0.0	0.0099	3.6014	1.9935	2.1251	0.9964	3.9303	1.3646	2.0352	1.6997
18	0.1929	0.5989	0.2603	2.3293	0.3033	0.0168	0.0856	0.1054	0.6161	0.5723	0.1351	0.1714	1.0476	0.5622	0.8047
21	0.0230	0.3935	1.0872	0.1927	0.0423	0.0088	0.0335	0.5313	0.2909	0.3204	0.0140	1.6071	0.0711	0.4748	0.2730
24	0.0011	0.1557	1.0616	0.2244	0.0715	0.0028	0.0016	0.2322	0.2521	0.2853	0.0277	1.1150	0.1204	0.3296	0.2250
6	0.0001	0.0012	0.5008	0.4224	0.0037	0.0011	0.0001	0.0014	0.1541	0.1750	0.0	0.4955	0.3832	0.5399	0.4616
12	0.0004	1.7262	4.5826	0.8496	0.0029	0.0008	0.0002	1.7762	1.1920	1.2432	0.0984	6.8119	0.6311	2.7907	1.7107
18	0.1007	1.8251	2.8245	2.9289	0.1517	0.0084	0.0477	1.8534	1.3048	1.3487	0.5658	2.0508	1.2061	1.2986	1.2521
24	0.0099	0.2508	1.0718	0.2117	0.0598	0.0052	0.0144	0.3518	0.2676	0.2993	0.0223	1.3118	0.1007	0.3877	0.2442
12	0.0002	0.8637	2.5417	0.6360	0.0033	0.0009	0.0002	0.8888	0.6731	0.7091	0.0492	3.6537	0.5072	1.6653	1.0861
24	0.0594	1.1095	2.0278	1.6938	0.1099	0.0070	0.0326	1.1708	0.8334	0.8718	0.3187	1.7149	0.7037	0.8847	0.7939
24	0.0285	0.9812	2.2959	1.1419	0.0543	0.0038	0.0157	1.0237	0.7498	0.7869	0.1781	2.7265	0.6011	1.2919	0.9463

2

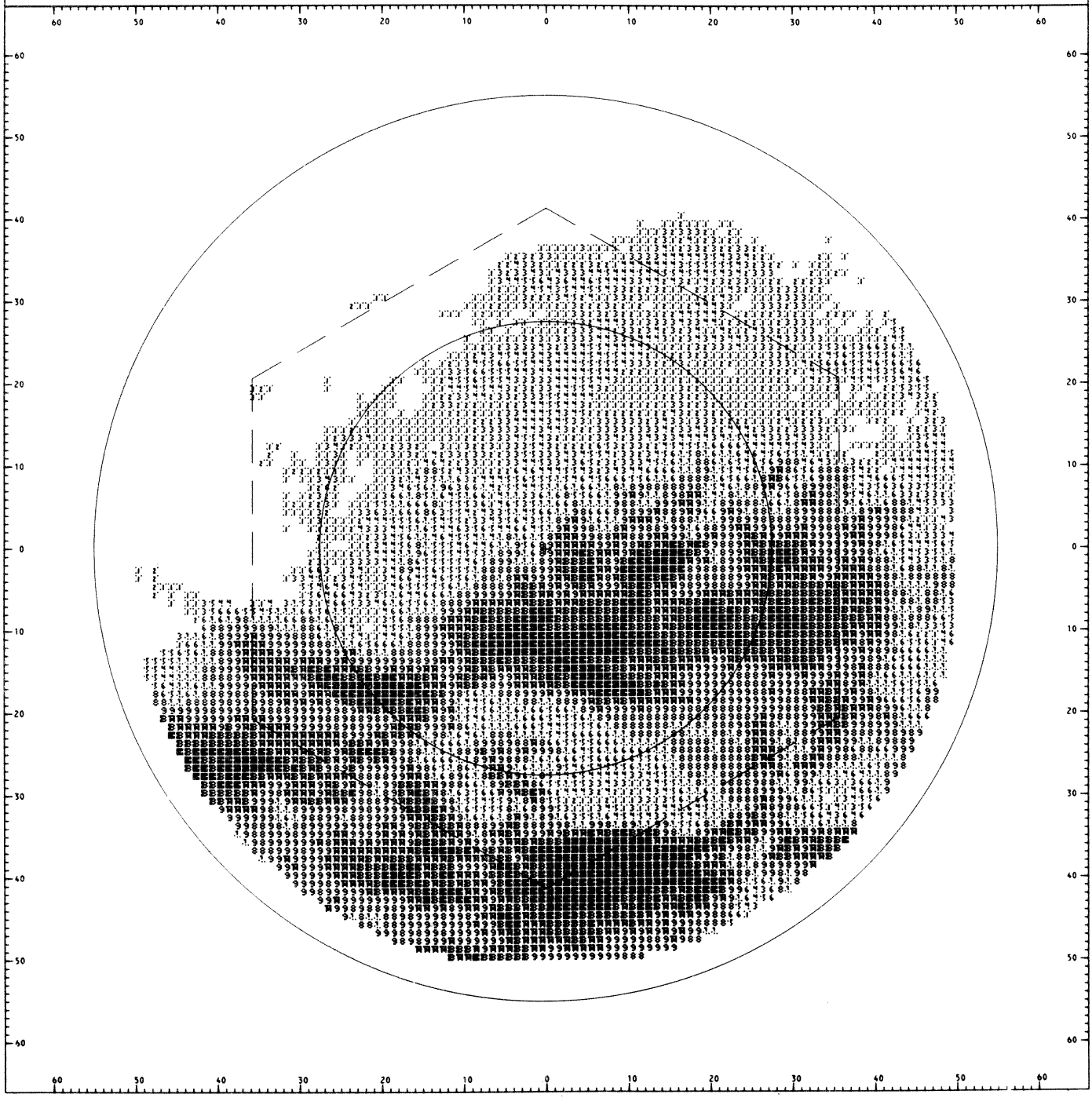
GATE RADAR DAILY RAINFALL RATE 180

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	106	089	000	000

MISSING HOURS: 13 14

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	▼	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	▲	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JUNE 29, 1974 (JULIAN DAY 180)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0103	0.0214	0.7808	0.0535	0.0070	0.0040	0.0156	0.0338	0.1455	0.1653	0.0684	0.7098	0.0473	0.1968	0.1220
2	0.0026	0.0043	0.8294	0.1504	0.0065	0.0004	0.0039	0.0067	0.1648	0.1872	0.0105	0.6570	0.1190	0.2037	0.1614
3	0.0013	0.0037	1.2647	0.5714	0.0525	0.0062	0.0019	0.0058	0.3152	0.3581	0.0060	0.7604	0.3509	0.2608	0.3059
4	0.0025	0.0464	1.7558	0.4430	0.0556	0.0156	0.0039	0.0631	0.3848	0.4361	0.0433	0.8812	0.4144	0.3467	0.3805
5	0.0005	0.0406	1.3092	0.7365	0.0375	0.0032	0.0008	0.0610	0.3530	0.4008	0.0551	0.1890	0.5692	0.2507	0.4100
6	0.0058	0.0181	0.8148	1.9318	0.0385	0.0011	0.0090	0.0280	0.4662	0.5296	0.0129	0.0962	1.0165	0.1547	0.5856
7	0.0069	0.0399	0.4751	2.3914	0.0541	0.0018	0.0106	0.0619	0.4927	0.5597	0.0096	0.0896	0.9324	0.0978	0.5151
8	0.0002	0.0624	0.3658	2.4935	0.2272	0.0007	0.0003	0.0658	0.5231	0.5904	0.0060	0.0683	0.9596	0.0847	0.5221
9	0.0015	0.1911	0.3971	2.1461	0.1425	0.0004	0.0022	0.2226	0.4782	0.5342	0.0063	0.2119	0.8169	0.1151	0.4660
10	0.0004	0.4628	0.8340	1.8377	0.5640	0.0013	0.0006	0.6546	0.6162	0.6922	0.0008	0.5828	0.6592	0.2418	0.4505
11	0.0	0.5080	0.6555	1.9656	1.0954	0.0	0.0	0.7129	0.7045	0.7912	0.0	0.3505	0.7373	0.2165	0.4769
12	0.0	0.7255	0.4196	2.4312	0.6616	0.0	0.0	0.8833	0.7063	0.7726	0.0	0.5439	0.7651	0.2444	0.5047
13															
14															
15	0.0	2.0589	1.0036	0.1739	0.2241	0.0	0.0	2.2268	0.5795	0.5393	0.2213	0.8381	0.0965	0.8307	0.4636
16	0.0	3.8030	1.3375	0.6331	0.0238	0.0	0.0	3.8271	0.9708	0.8478	0.4321	1.4086	0.1699	1.3292	0.7494
17	0.0103	6.8133	1.4825	0.8261	0.0027	0.0	0.0154	7.0708	1.5315	1.3090	0.9710	3.1791	0.1782	1.8859	1.0320
18	0.0552	5.2633	1.8414	0.8697	0.0226	0.0002	0.0373	6.5690	1.3482	1.3294	2.3219	3.7898	0.2040	1.5577	0.8807
19	0.5636	3.3609	2.6302	0.7323	0.0243	0.0009	0.6793	4.7638	1.2207	1.3072	4.5897	2.3767	0.1991	1.5644	0.8816
20	0.7103	0.9659	2.7717	0.9387	0.0480	0.0678	0.9773	1.4887	0.9150	1.0221	2.1691	2.2852	0.3113	1.1962	0.7537
21	0.2784	0.3719	2.8372	1.7778	0.4339	0.2779	0.3614	0.5410	0.9932	1.1150	0.4455	2.2849	0.5248	1.3233	0.9240
22	0.2498	0.0760	1.4754	2.0641	0.7301	0.1898	0.3052	0.1030	0.7956	0.8916	0.1107	1.3187	0.7330	1.4317	1.0823
23	0.2607	0.0687	1.1099	1.1482	0.4217	0.1272	0.2519	0.0873	0.5213	0.5711	0.0109	1.2034	0.6488	1.2093	0.9290
24	0.2433	0.0667	0.6974	0.7383	0.2761	0.4301	0.2823	0.0753	0.4074	0.4475	0.0009	0.7968	0.7894	1.3644	1.0769
3	0.0047	0.0098	0.9583	0.2584	0.0220	0.0035	0.0071	0.0154	0.2085	0.2369	0.0283	0.7091	0.1724	0.2204	0.1964
6	0.0029	0.0350	1.2932	1.0371	0.0439	0.0066	0.0045	0.0507	0.4013	0.4555	0.0371	0.3888	0.6667	0.2507	0.4587
9	0.0029	0.0978	0.4127	2.3436	0.1413	0.0010	0.0044	0.1168	0.4980	0.5614	0.0073	0.1232	0.9029	0.0992	0.5011
12	0.0001	0.5654	0.6364	2.0781	0.7737	0.0004	0.0002	0.7503	0.6757	0.7520	0.0003	0.4924	0.7205	0.2342	0.4774
15															
18	0.0218	5.2933	1.5538	0.7763	0.0164	0.0001	0.0176	5.8223	1.2834	1.1620	1.2417	2.7925	0.1840	1.5908	0.8872
21	0.5174	1.5662	2.7463	1.1496	0.1688	0.1155	0.6727	2.2645	1.0431	1.1482	2.4014	2.3156	0.3450	1.3613	0.8531
24	0.2513	0.0705	1.0942	1.3168	0.4760	0.2490	0.2798	0.0885	0.5748	0.6367	0.0408	1.1063	0.7237	1.3351	1.0294
6	0.0038	0.0224	1.1258	0.6477	0.0329	0.0051	0.0058	0.0331	0.3049	0.3462	0.0327	0.5489	0.4195	0.2356	0.3275
12	0.0015	0.3316	0.5245	2.2109	0.4575	0.0007	0.0023	0.4335	0.5868	0.6567	0.0038	0.3078	0.8117	0.1667	0.4892
18	0.0164	4.4847	1.4162	0.6257	0.0683	0.0001	0.0132	4.9234	1.1073	1.0065	0.9866	2.3039	0.1621	1.4007	0.7812
24	0.3844	0.8183	1.9202	1.2332	0.3224	0.1823	0.4763	1.1765	0.8089	0.8924	1.2211	1.7109	0.5344	1.3482	0.9412
12	0.0027	0.1770	0.8251	1.4293	0.2452	0.0029	0.0041	0.2333	0.4459	0.5014	0.0182	0.4284	0.6156	0.2011	0.4084
24	0.2372	2.2848	1.7186	0.9902	0.2207	0.1094	0.2910	2.6752	0.9284	0.9380	1.1273	1.9481	0.3855	1.3693	0.8771
24	0.1093	1.1351	1.2313	1.2297	0.2341	0.0513	0.1345	1.3432	0.6652	0.6999	0.5224	1.1191	0.5110	0.7322	0.6214

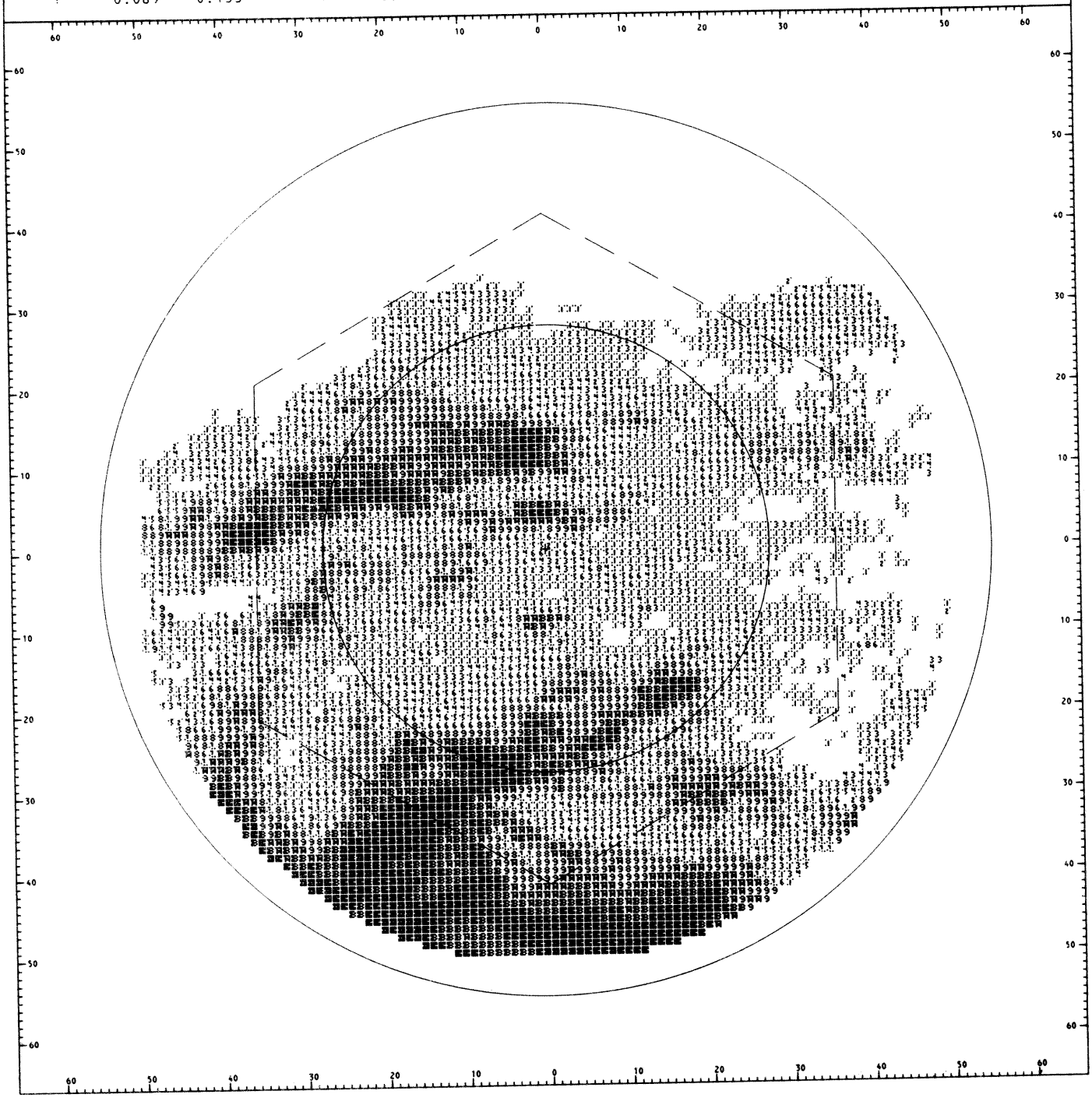
GATE RADAR DAILY RAINFALL RATE 181

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	107	090	000	000

MISSING HOURS: 13 14

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JUNE 30, 1974 (JULIAN DAY 181)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.2097	0.1388	0.2439	0.2254	0.1569	0.5504	0.1549	0.1732	0.2536	0.2621	0.0097	0.3709	0.6111	0.8393	0.7252
2	0.0583	0.0216	0.0774	0.0593	0.1171	0.1459	0.0123	0.0265	0.0799	0.0804	0.0014	0.0791	0.5157	0.2714	0.3936
3	0.0002	0.0209	0.0989	0.2644	0.0981	0.0055	0.0002	0.0323	0.0812	0.0922	0.0003	0.0903	0.4721	0.0674	0.2697
4	0.0046	0.0186	0.3965	0.9288	0.0274	0.0019	0.0043	0.0277	0.2286	0.2592	0.0029	0.2322	0.7456	0.1089	0.4273
5	0.0254	0.0131	0.8723	1.3555	0.1383	0.0036	0.0336	0.0168	0.3997	0.4529	0.0413	0.6179	0.8883	0.1697	0.5290
6	0.0268	0.0274	1.4407	2.5549	0.3214	0.0394	0.0377	0.0231	0.7323	0.8290	0.0583	0.9845	1.2893	0.2772	0.7833
7	0.0834	0.0550	1.4238	2.9300	0.5704	0.0360	0.1298	0.0729	0.8471	0.9607	0.2138	0.5938	1.3247	0.3097	0.8171
8	0.1978	0.3163	1.6250	3.4260	0.5709	0.1197	0.2873	0.2103	1.0396	1.1438	0.6608	0.4787	1.3510	0.4318	0.8913
9	0.1954	0.2414	0.6582	2.2004	0.9814	0.2060	0.3020	0.1668	0.7465	0.8219	0.5768	0.1984	0.9211	0.2576	0.5893
10	0.1941	0.0795	0.1216	1.5190	0.7314	0.2529	0.3005	0.0624	0.4827	0.5404	0.2032	0.0482	0.6517	0.1810	0.4163
11	0.1864	0.1048	0.1447	0.6482	0.1996	0.1616	0.2827	0.1047	0.2404	0.2649	0.4318	0.1435	0.3408	0.3147	0.3278
12	0.0692	0.1300	0.2845	0.7098	0.0819	0.2001	0.0961	0.0476	0.2452	0.2581	0.1024	0.2046	0.3552	0.3781	0.3666
13															
14															
15	0.0552	0.0617	0.5895	0.1128	2.1366	0.4400	0.0805	0.1015	0.5686	0.6459	0.2003	0.7186	0.8548	0.4499	0.6523
16	0.0471	0.0729	0.5229	0.0700	2.4089	0.4302	0.0675	0.0853	0.5952	0.6720	0.2457	0.6737	1.1021	0.4770	0.7894
17	0.0430	0.0663	0.4719	0.1335	1.6588	0.4168	0.0479	0.0571	0.4670	0.5226	0.1215	0.6531	0.9064	0.5725	0.7393
18	0.1870	0.0518	0.6586	0.3035	1.9359	0.4415	0.2846	0.0702	0.5983	0.6774	0.3013	0.6467	0.8964	0.5218	0.7090
19	0.3420	0.1618	0.7751	0.4790	0.8689	1.3825	0.5144	0.0490	0.6674	0.7308	0.1346	0.4394	0.8022	0.4304	0.6162
20	0.5882	0.2716	0.3081	0.3260	0.5389	2.1291	0.8555	0.0664	0.6922	0.7347	0.4282	0.0912	0.7280	0.3024	0.5152
21	0.4614	0.1226	0.1472	0.0978	0.6197	2.2747	0.6331	0.1530	0.6193	0.6882	0.3356	0.0584	0.5746	0.1607	0.3677
22	0.1676	0.0884	0.0371	0.0170	0.2558	0.9430	0.2555	0.1323	0.2511	0.2838	0.1211	0.0181	0.2354	0.0804	0.1579
23	0.0584	0.0329	0.0920	0.1199	0.0990	0.2986	0.0718	0.0456	0.1165	0.1293	0.0196	0.0664	0.1038	0.0601	0.0820
24	0.0960	0.1432	0.0819	0.1470	0.1935	0.1063	0.1435	0.2040	0.1282	0.1426	0.2989	0.0796	0.1163	0.0893	0.1028
3	0.0894	0.0604	0.1401	0.1830	0.1240	0.2339	0.0558	0.0773	0.1382	0.1449	0.0038	0.1801	0.5330	0.3927	0.4628
6	0.0189	0.0197	0.9032	1.6130	0.1624	0.0149	0.0252	0.0225	0.4536	0.5137	0.0341	0.6115	0.9744	0.1853	0.5798
9	0.1588	0.2042	1.2357	2.8521	0.7076	0.1206	0.2397	0.1500	0.8777	0.9755	0.4838	0.4237	1.1989	0.3330	0.7658
12	0.1499	0.1048	0.1836	0.9590	0.3376	0.2049	0.2265	0.0715	0.3228	0.3545	0.2458	0.1321	0.4492	0.2913	0.3702
15															
18	0.0924	0.0637	0.5511	0.1690	2.0012	0.4295	0.1333	0.0709	0.5535	0.6240	0.2228	0.6578	0.9683	0.5238	0.7459
21	0.4639	0.1853	0.4102	0.3009	0.6758	1.9287	0.6676	0.0894	0.6596	0.7179	0.2995	0.1963	0.7016	0.2978	0.4997
24	0.1073	0.0882	0.0704	0.0946	0.1828	0.4493	0.1569	0.1273	0.1653	0.1852	0.1465	0.0547	0.1519	0.0766	0.1142
6	0.0542	0.0401	0.5216	0.8980	0.1432	0.1244	0.0405	0.0499	0.2959	0.3293	0.0190	0.3958	0.7537	0.2890	0.5213
12	0.1544	0.1545	0.7096	1.9055	0.5226	0.1627	0.2331	0.1108	0.6002	0.6650	0.3648	0.2779	0.8241	0.3121	0.5680
18	0.0831	0.0632	0.5607	0.1549	2.0350	0.4321	0.1201	0.0785	0.5572	0.6294	0.2172	0.6730	0.9399	0.5053	0.7225
24	0.2856	0.1368	0.2403	0.1978	0.4293	1.1890	0.4123	0.1084	0.4124	0.4515	0.2230	0.1255	0.4267	0.1872	0.3069
12	0.1043	0.0973	0.6156	1.4018	0.3329	0.1436	0.1368	0.0804	0.4480	0.4971	0.1919	0.3369	0.7889	0.3006	0.5447
24	0.2046	0.1073	0.3685	0.1806	1.0715	0.8863	0.2954	0.0964	0.4703	0.5227	0.2207	0.3445	0.6320	0.3144	0.4732
24	0.1499	0.1018	0.5032	0.8467	0.6686	0.4812	0.2089	0.0877	0.4582	0.5087	0.2050	0.3403	0.7175	0.3069	0.5122

4

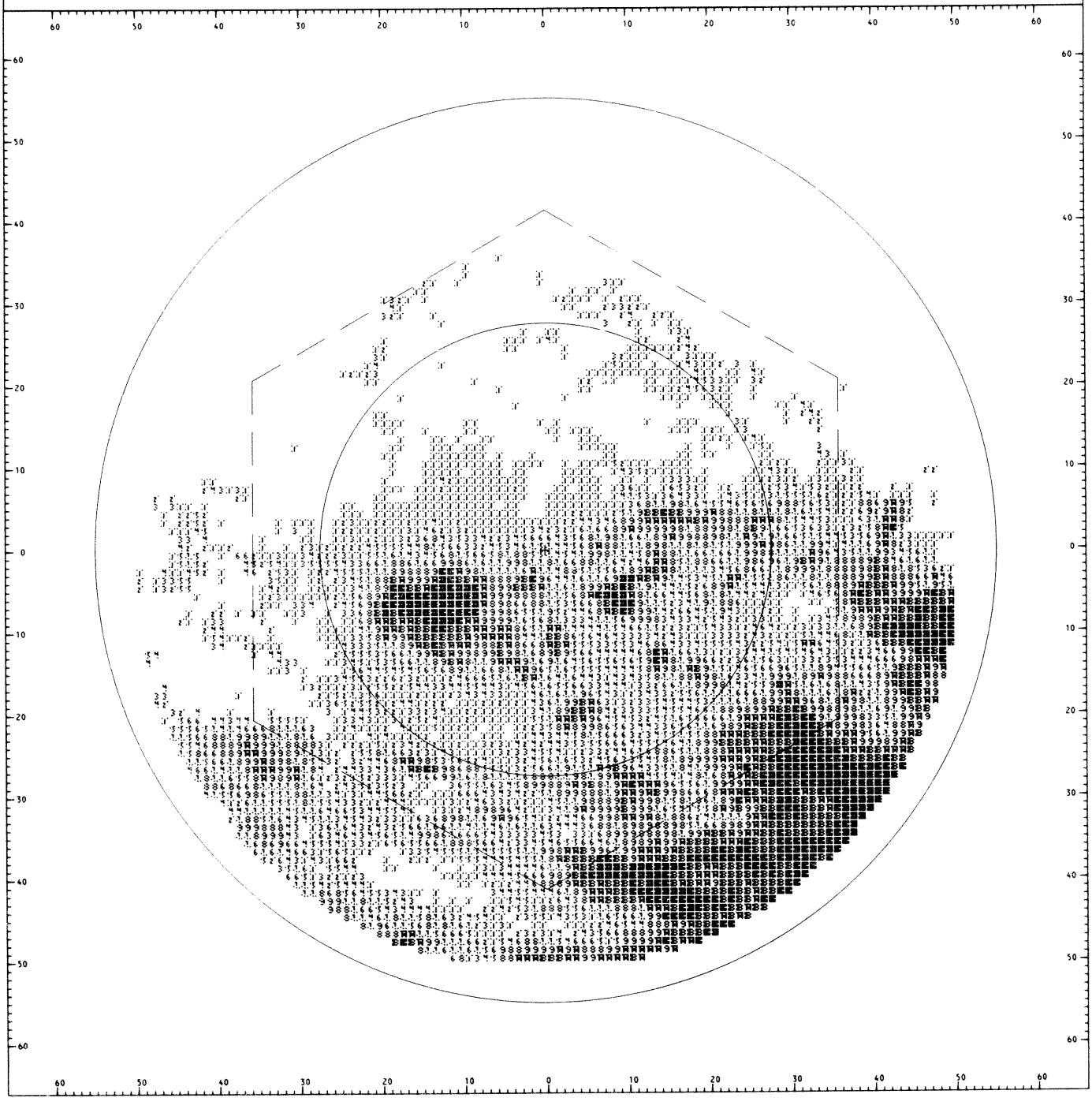
GATE RADAR DAILY RAINFALL RATE 182

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	088	023	000	000

MISSING HOURS: 07 08 09 10 11 12

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 1, 1974 (JULIAN DAY 182)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0678	0.3834	0.0719	0.1237	0.5452	0.0189	0.0838	0.5547	0.2031	0.2231	0.4728	0.1147	0.1649	0.1130	0.1390
2	0.0186	0.5286	0.1022	0.1095	0.2732	0.0141	0.0191	0.7791	0.1755	0.1931	0.8473	0.1969	0.1276	0.1460	0.1368
3	0.0104	0.5935	0.1067	0.0765	0.1117	0.0069	0.0126	0.7940	0.1520	0.1566	0.9482	0.1091	0.0879	0.1732	0.1305
4	0.0090	0.3843	0.0953	0.1170	0.0593	0.0019	0.0111	0.3917	0.1117	0.1013	0.5979	0.1073	0.0845	0.1587	0.1216
5	0.0482	0.5178	0.0483	0.0480	0.0253	0.0	0.0234	0.5841	0.1154	0.0978	1.0706	0.0567	0.0781	0.1855	0.1318
6	0.0398	0.2371	0.1646	0.0065	0.0049	0.0136	0.0186	0.2775	0.0780	0.0722	0.3253	0.1459	0.0618	0.1922	0.1270
7															
8															
9															
10															
11															
12															
13	0.0014	0.0972	0.4496	0.0752	0.0480	0.0001	0.0022	0.0679	0.1117	0.1167	0.0092	0.5539	0.0249	0.3686	0.1967
14	0.0033	0.0637	0.6211	0.0678	0.0469	0.0001	0.0048	0.0332	0.1334	0.1434	0.0086	0.8376	0.0234	0.5247	0.2740
15	0.0014	0.0354	0.3486	0.1354	0.0165	0.0001	0.0012	0.0321	0.0893	0.0985	0.0	0.4799	0.0401	0.6532	0.3467
16	0.0005	0.0171	0.1970	0.2025	0.0140	0.0017	0.0008	0.0026	0.0719	0.0787	0.0001	0.2027	0.0620	0.7616	0.4118
17	0.0029	0.0352	0.4315	0.1445	0.0401	0.0011	0.0046	0.0036	0.1089	0.1174	0.0086	0.5083	0.0790	0.7443	0.4116
18	0.0050	0.0358	0.3590	0.1074	0.0945	0.0023	0.0078	0.0183	0.1005	0.1096	0.0342	0.4292	0.0871	0.8079	0.4475
19	0.0044	0.0937	0.3481	0.0533	0.1852	0.0060	0.0062	0.0701	0.1152	0.1215	0.0429	0.4005	0.0753	0.6923	0.3838
20	0.0081	0.3703	0.8880	0.3268	0.6322	0.0039	0.0115	0.2974	0.3722	0.3885	0.1575	1.2122	0.2105	0.8433	0.5269
21	0.0086	0.5047	0.8713	0.6888	0.9221	0.0044	0.0131	0.5334	0.5010	0.5384	0.2550	1.1494	0.3607	0.7857	0.5731
22	0.0023	0.7410	1.0422	1.0441	0.9870	0.0016	0.0035	1.0008	0.6375	0.7059	0.2359	1.3716	0.4492	0.7644	0.6068
23	0.0002	0.6118	1.9403	1.4389	0.8526	0.0021	0.0003	0.9145	0.8073	0.9129	0.0318	1.3545	0.4703	0.8790	0.6745
24	0.0023	0.6853	2.9319	2.0773	0.6093	0.0089	0.0033	1.0244	1.0504	1.1886	0.0211	2.4163	0.5822	1.3253	0.9537
3	0.0323	0.5018	0.0936	0.1032	0.3101	0.0133	0.0385	0.7092	0.1768	0.1909	0.7561	0.1402	0.1268	0.1441	0.1354
6	0.0323	0.3797	0.1027	0.0572	0.0298	0.0052	0.0177	0.4178	0.1017	0.0905	0.6646	0.1033	0.0748	0.1788	0.1268
9															
12															
15	0.0020	0.0654	0.4731	0.0928	0.0371	0.0001	0.0028	0.0444	0.1115	0.1195	0.0059	0.6238	0.0294	0.5155	0.2725
18	0.0028	0.0294	0.3292	0.1514	0.0495	0.0017	0.0044	0.0082	0.0937	0.1019	0.0143	0.3801	0.0760	0.7713	0.4236
21	0.0070	0.3229	0.7024	0.3563	0.5798	0.0048	0.0102	0.3003	0.3295	0.3495	0.1518	0.9207	0.2155	0.7737	0.4946
24	0.0016	0.6794	1.9714	1.5201	0.8163	0.0042	0.0024	0.9799	0.8317	0.9358	0.0963	1.7141	0.5006	0.9896	0.7449
6	0.0323	0.4408	0.0982	0.0802	0.1699	0.0092	0.0281	0.5635	0.1392	0.1407	0.7104	0.1217	0.1008	0.1614	0.1311
12															
18	0.0024	0.0474	0.4011	0.1221	0.0433	0.0009	0.0036	0.0263	0.1026	0.1107	0.0101	0.5019	0.0527	0.6434	0.3480
24	0.0043	0.5011	1.3369	0.9381	0.6981	0.0045	0.0063	0.6401	0.5806	0.6426	0.1240	1.3174	0.3580	0.8817	0.6197
12															
24	0.0034	0.2743	0.8690	0.5301	0.3707	0.0027	0.0049	0.3332	0.3416	0.3766	0.0671	0.9096	0.2054	0.7625	0.4839
24	0.0130	0.3298	0.6121	0.3802	0.3038	0.0049	0.0127	0.4100	0.2741	0.2980	0.2815	0.6470	0.1705	0.5621	0.3663

5

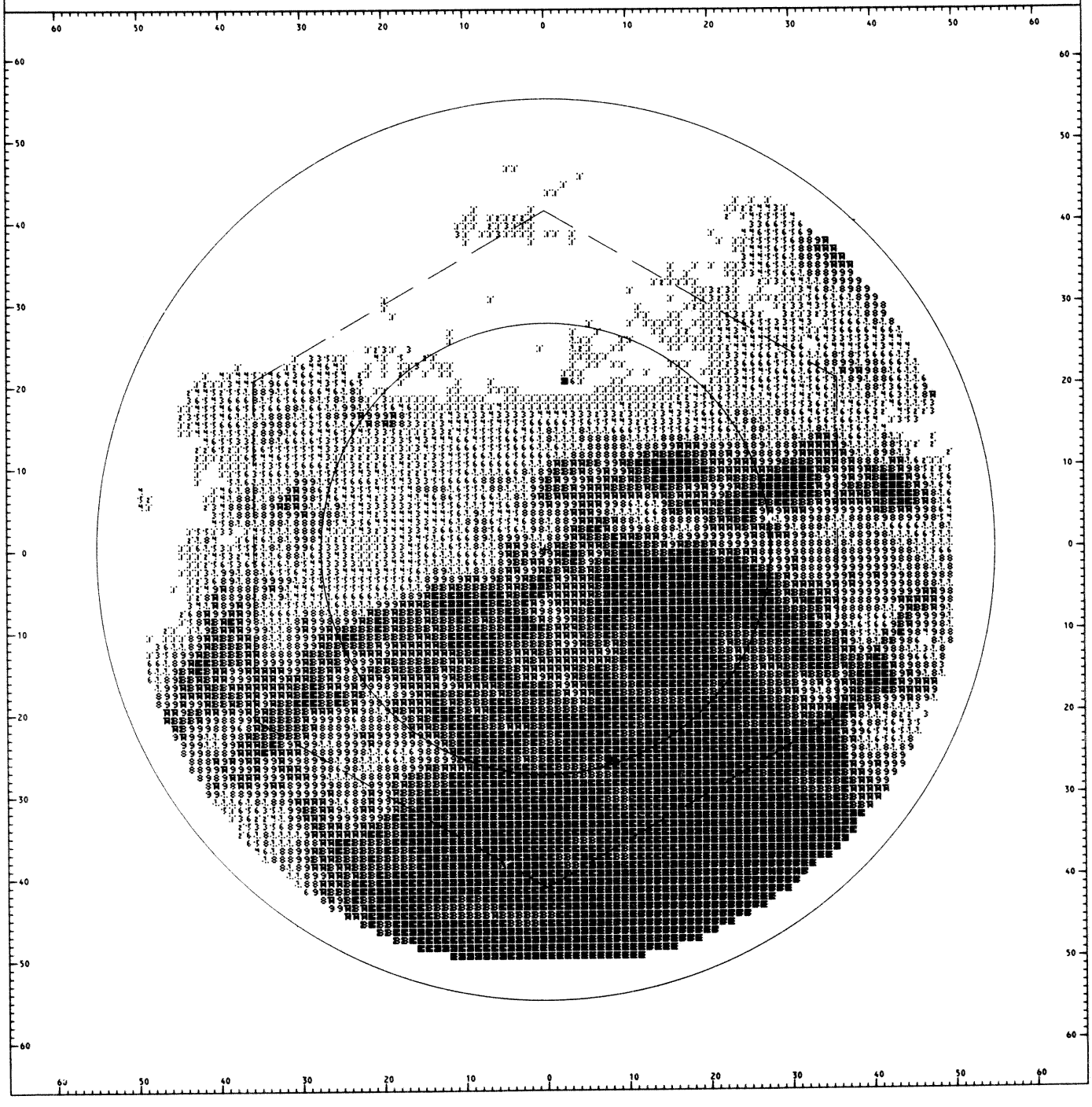
GATE RADAR DAILY RAINFALL RATE 183

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	097	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 2, 1974 (JULIAN DAY 183)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0018	0.2128	2.5135	2.8043	0.4753	0.0059	0.0027	0.3115	0.9989	1.1325	0.0081	1.7940	0.7287	1.3350	1.0317
2	0.0007	0.1340	2.8183	2.8601	0.6538	0.0026	0.0005	0.1495	1.0748	1.2137	0.0383	2.2225	0.7588	1.2668	1.0126
3	0.0012	0.6869	2.4708	2.5620	0.7420	0.0055	0.0019	0.6490	1.0762	1.1713	0.1475	2.0660	0.7269	1.5686	1.1476
4	0.0088	1.9473	2.1542	1.5941	0.3500	0.0027	0.0138	1.0863	1.0102	0.9092	0.1899	2.0451	0.6419	2.1790	1.4103
5	0.0293	2.0440	0.8127	0.7148	0.0386	0.0025	0.0369	1.4474	0.6091	0.4785	0.2100	0.8371	0.6063	1.6281	1.1171
6	0.0406	1.9700	0.5084	0.1621	0.0117	0.0173	0.0253	2.1566	0.4543	0.4008	0.2258	0.7890	0.4302	1.4644	0.9472
7	0.2593	1.7006	1.1613	0.1980	0.0416	0.0448	0.0379	1.9886	0.5691	0.5223	0.1461	0.7758	0.2944	1.3088	0.8015
8	0.1770	1.7796	1.3227	0.5865	0.0939	0.0634	0.0359	1.9146	0.6718	0.6300	0.2139	0.6474	0.2985	1.1673	0.7328
9	0.0319	2.3354	1.8605	0.5850	0.2665	0.0858	0.0182	3.0963	0.8630	0.9119	0.5754	2.0086	0.3591	1.4223	0.8906
10	0.0488	2.4360	3.2574	0.3356	0.1083	0.1036	0.0714	3.2455	1.0492	1.1258	0.5863	4.3733	0.4350	1.6033	1.0190
11	0.1396	3.4857	3.7409	0.8270	0.0952	0.0400	0.2100	4.9140	1.3898	1.5174	1.4592	5.5264	0.5139	1.8972	1.2053
12	0.5119	4.9895	4.9009	1.5775	0.2026	0.0513	0.7847	7.1896	2.0412	2.2494	2.5664	7.9941	0.8423	2.5036	1.6727
13	0.2093	5.3972	6.2140	1.6822	0.4980	0.1069	0.3139	7.0025	2.3537	2.5038	0.9660	9.3333	0.7616	2.7886	1.7749
14	0.0356	5.6991	7.4466	3.3479	1.8262	0.0408	0.0544	6.2146	3.0690	3.1630	0.6466	8.4381	1.5272	2.9245	2.2257
15	0.0301	5.6386	6.8189	5.2271	2.2213	0.0039	0.0280	6.9155	3.3257	3.5505	1.4222	7.2718	1.8081	2.8331	2.3205
16	0.1803	4.0262	4.7329	5.7189	1.9804	0.0154	0.2383	4.8666	2.7762	2.9789	2.9139	3.1897	1.8615	2.2681	2.0646
17	1.3517	2.5465	3.4058	4.2363	1.0181	0.0809	1.7166	2.8690	2.1045	2.2095	6.3634	1.5463	1.4561	2.2535	1.8546
18	2.3520	1.1926	1.6626	2.2006	0.5294	0.2659	3.1587	1.7594	1.3644	1.4758	6.2609	1.1085	0.8693	1.7486	1.3087
19	1.6019	0.2936	1.4146	1.8817	0.4083	0.5676	2.2794	0.5700	1.0246	1.1504	3.0767	1.2764	0.9509	1.9371	1.4439
20	0.6321	0.0689	1.6128	2.3062	0.3216	0.6802	0.9821	0.1143	0.9333	1.0602	0.9938	1.6290	1.2288	2.2048	1.7167
21	0.0797	0.0133	1.1555	1.7271	0.2717	0.4253	0.1248	0.0207	0.6098	0.6927	0.0326	1.2123	1.1628	2.1584	1.6605
22	0.0003	0.0040	1.9070	1.9370	0.2993	0.1284	0.0004	0.0062	0.7099	0.8065	0.0004	1.9053	0.8679	2.2218	1.5447
23	0.0	0.0011	2.0128	2.5437	0.3675	0.0160	0.0	0.0018	0.8204	0.9320	0.0	1.9024	0.9544	1.2743	1.1142
24	0.0004	0.0032	1.5599	2.1809	0.3480	0.0077	0.0007	0.0035	0.6808	0.7733	0.0	1.6897	0.9020	0.8292	0.8655
3	0.0013	0.3446	2.6009	2.7421	0.6237	0.0047	0.0017	0.3700	1.0500	1.1725	0.0646	2.0275	0.7381	1.3901	1.0639
6	0.0263	1.9871	1.1584	0.8237	0.1335	0.0075	0.0253	1.5634	0.6912	0.5962	0.2085	1.2237	0.5594	1.7572	1.1582
9	0.1560	1.9385	1.4482	0.4565	0.1340	0.0646	0.0307	2.3332	0.7013	0.6880	0.3118	1.1439	0.3173	1.2994	0.8031
12	0.2334	3.6370	3.9664	0.9133	0.1354	0.0650	0.3554	5.1164	1.4933	1.6308	1.5373	5.9646	0.5970	2.0012	1.2988
15	0.0917	5.5783	6.8265	3.4190	1.5152	0.0505	0.1321	6.7109	2.9161	3.0724	1.0116	8.3479	1.3656	2.8486	2.1069
18	1.2946	2.5884	3.2671	4.0520	1.1759	0.1207	1.7045	3.1650	2.0815	2.2212	5.1794	1.9482	1.3956	2.0900	1.7424
21	0.7712	0.1253	1.3943	1.9716	0.3339	0.5577	1.1288	0.2350	0.8559	0.9678	1.3677	1.3726	1.1142	2.1001	1.6070
24	0.0002	0.0028	1.8266	2.2205	0.3382	0.0507	0.0003	0.0038	0.7370	0.8372	0.0001	1.8325	0.9081	1.4418	1.1748
6	0.0138	1.1658	1.8796	1.7829	0.3786	0.0061	0.0135	0.9667	0.8706	0.8844	0.1366	1.6256	0.6488	1.5736	1.1110
12	0.1947	2.7878	2.7073	0.6849	0.1347	0.0648	0.1930	3.7248	1.0972	1.1594	0.9245	3.5542	0.4572	1.6502	1.0534
18	0.6932	4.0834	5.0470	3.7355	1.3455	0.0856	0.9183	4.9379	2.4988	2.6468	3.0954	5.1480	1.3805	2.4692	1.9246
24	0.3857	0.0640	1.6104	2.0961	0.3360	0.3042	0.5646	0.1194	0.7964	0.9025	0.6839	1.6025	1.0111	1.7709	1.3909
12	0.1042	1.9768	2.2934	1.2339	0.2566	0.0354	0.1033	2.3457	0.9840	1.0220	0.5306	2.5899	0.5530	1.6120	1.0822
24	0.5394	2.0737	3.3287	2.9158	0.8408	0.1949	0.7414	2.5286	1.6475	1.7746	1.8897	3.3752	1.1958	2.1201	1.6576
24	0.3218	2.0252	2.8111	2.0748	0.5487	0.1152	0.4224	2.4372	1.3157	1.3982	1.2101	2.9826	0.8745	1.8660	1.3699

6

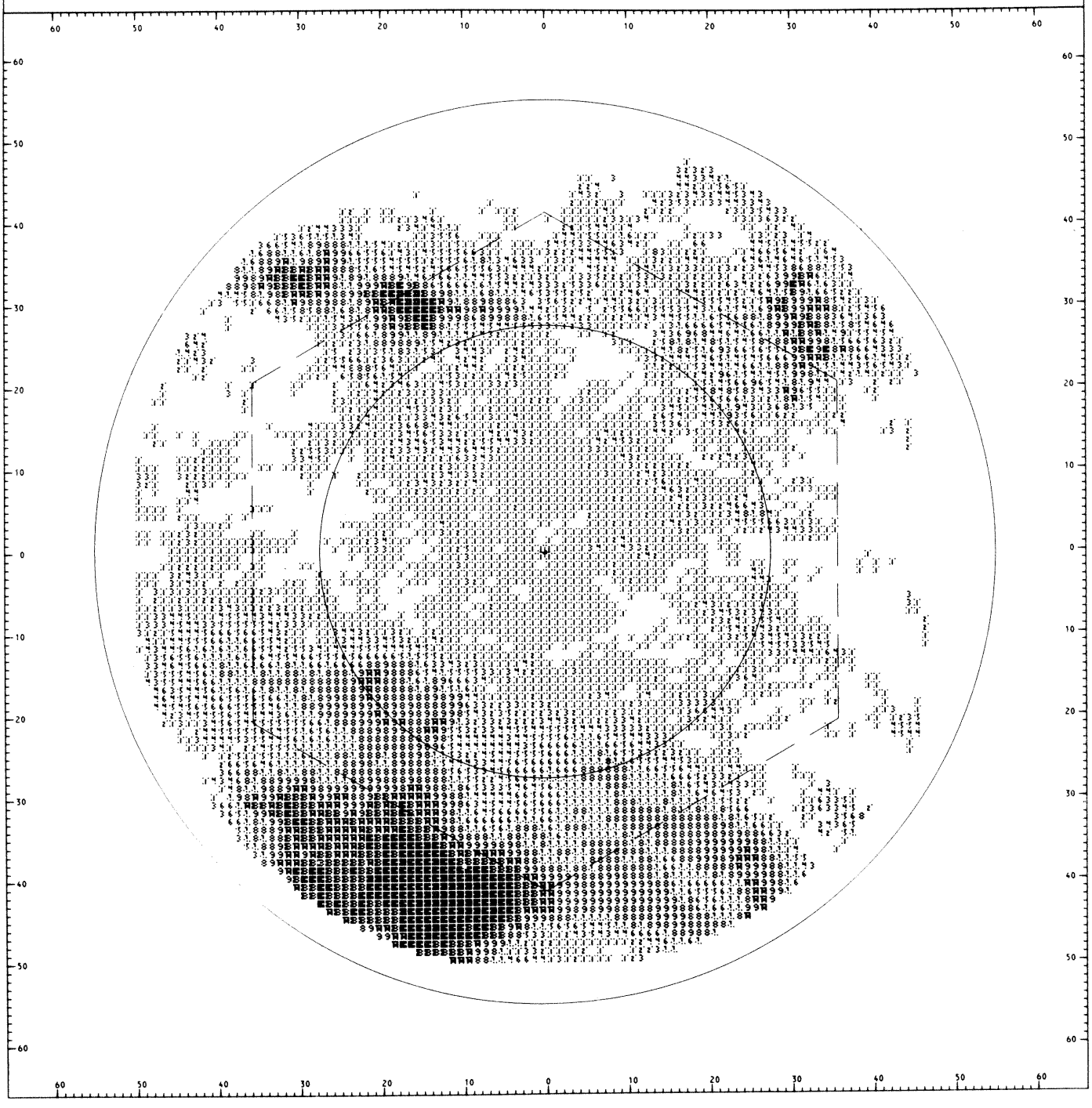
GATE RADAR DAILY RAINFALL RATE 184

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	107	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 3, 1974 (JULIAN DAY 184)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0232	0.0093	0.9481	2.3181	0.1434	0.0387	0.0117	0.0136	0.5776	0.6532	0.0	0.7611	1.0272	0.5783	0.8026
2	0.0813	0.0028	0.5768	1.7831	0.0578	0.7442	0.0524	0.0036	0.5385	0.6026	0.0	0.4856	1.2066	0.3684	0.7874
3	0.0660	0.0004	0.4891	1.5357	0.2835	1.6572	0.0395	0.0	0.6694	0.7527	0.0	0.5185	1.5380	0.3133	0.9256
4	0.0355	0.0002	0.4381	0.9100	0.4129	1.0223	0.0464	0.0004	0.4685	0.5312	0.0013	0.4094	1.9391	0.2365	1.0877
5	0.0385	0.0141	0.2696	0.8534	0.1148	0.3058	0.0593	0.0149	0.2650	0.3001	0.0187	0.2520	1.4659	0.1450	0.8054
6	0.0435	0.0899	0.1668	0.7804	0.0340	0.1953	0.0587	0.0730	0.2175	0.2378	0.0473	0.1361	1.2337	0.1065	0.6701
7	0.0360	0.0611	0.1111	0.3197	0.0149	0.1621	0.0488	0.0549	0.1171	0.1272	0.0601	0.0495	0.7047	0.0576	0.3811
8	0.0602	0.0313	0.0425	0.1516	0.0026	0.1187	0.0683	0.0262	0.0676	0.0709	0.0893	0.0253	0.2890	0.0290	0.1590
9	0.0209	0.0061	0.0095	0.0470	0.0067	0.1136	0.0247	0.0013	0.0338	0.0364	0.0068	0.0068	0.1004	0.0075	0.0540
10	0.0057	0.0003	0.0003	0.0088	0.0	0.1665	0.0057	0.0	0.0301	0.0338	0.0	0.0002	0.0369	0.0015	0.0192
11	0.0	0.0	0.0050	0.0001	0.0002	0.0931	0.0	0.0	0.0163	0.0186	0.0	0.0045	0.0260	0.0013	0.0137
12	0.0013	0.0022	0.0025	0.0113	0.0010	0.0084	0.0015	0.0016	0.0044	0.0047	0.0004	0.0037	0.0051	0.0024	0.0037
13	0.0025	0.0286	0.0341	0.0157	0.0013	0.0033	0.0027	0.0403	0.0142	0.0155	0.0115	0.0418	0.0047	0.0165	0.0106
14	0.0141	0.0504	0.0547	0.0309	0.0003	0.0214	0.0213	0.0712	0.0286	0.0316	0.0816	0.0362	0.0122	0.0320	0.0221
15	0.0103	0.1093	0.0284	0.0839	0.0040	0.0121	0.0117	0.1448	0.0414	0.0435	0.1090	0.0864	0.0307	0.0438	0.0373
16	0.0129	0.1204	0.0302	0.0408	0.0081	0.0056	0.0156	0.1782	0.0365	0.0398	0.1459	0.1150	0.0153	0.0398	0.0275
17	0.0011	0.0389	0.0980	0.0033	0.0162	0.0068	0.0016	0.0506	0.0274	0.0299	0.0345	0.1406	0.0052	0.0298	0.0175
18	0.0002	0.0050	0.0215	0.0096	0.0090	0.0012	0.0003	0.0079	0.0078	0.0088	0.0066	0.0186	0.0039	0.0067	0.0053
19	0.0	0.0006	0.0105	0.0186	0.0011	0.0001	0.0	0.0009	0.0051	0.0058	0.0012	0.0010	0.0074	0.0081	0.0077
20	0.0043	0.0022	0.0080	0.0069	0.0069	0.0392	0.0065	0.0013	0.0112	0.0125	0.0035	0.0003	0.0136	0.0094	0.0115
21	0.0257	0.0159	0.0	0.0027	0.0015	0.0846	0.0379	0.0233	0.0217	0.0242	0.0629	0.0052	0.0196	0.0228	0.0212
22	0.015[illegible]	0.0183	0.0001	0.0029	0.0239	0.0574	0.0080	0.0277	0.0197	0.0203	0.0194	0.0152	0.0193	0.1468	0.0830
23	0.3167	0.0210	0.0056	0.0006	0.0067	0.0588	0.0011	0.0204	0.0680	0.0162	0.0080	0.0202	0.0143	0.4727	0.2435
24	1.5252	0.0552	0.0115	0.0129	0.0257	0.0608	0.2620	0.0062	0.2807	0.0533	0.0421	0.0135	0.0182	0.4271	0.2227
3	0.0568	0.0042	0.6713	1.8790	0.1616	0.8134	0.0345	0.0057	0.5951	0.6695	0.0	0.5884	1.2572	0.4200	0.8385
6	0.0392	0.0347	0.2915	0.8479	0.1872	0.5078	0.0548	0.0294	0.3170	0.3563	0.0224	0.2658	1.5462	0.1627	0.8544
9	0.0390	0.0328	0.0544	0.1728	0.0080	0.1315	0.0473	0.0274	0.0728	0.0782	0.0521	0.0272	0.3647	0.0314	0.1980
12	0.0023	0.0008	0.0026	0.0067	0.0004	0.0893	0.0024	0.0005	0.0170	0.0190	0.0001	0.0028	0.0227	0.0017	0.0122
15	0.0090	0.0628	0.0391	0.0435	0.0019	0.0123	0.0119	0.0854	0.0281	0.0302	0.0674	0.0548	0.0159	0.0308	0.0233
18	0.0048	0.0548	0.0499	0.0179	0.0111	0.0045	0.0058	0.0789	0.0239	0.0262	0.0623	0.0914	0.0081	0.0254	0.0168
21	0.0100	0.0062	0.0062	0.0094	0.0032	0.0413	0.0148	0.0085	0.0127	0.0141	0.0225	0.0022	0.0135	0.0134	0.0135
24	0.6192	0.0315	0.0057	0.0055	0.0188	0.0590	0.0904	0.0181	0.1228	0.0299	0.0231	0.0163	0.0173	0.3489	0.1831
6	0.0480	0.0194	0.4814	1.3634	0.1744	0.6606	0.0447	0.0176	0.4561	0.5129	0.0112	0.4271	1.4017	0.2913	0.8464
12	0.0207	0.0168	0.0285	0.0897	0.0042	0.1104	0.0248	0.0140	0.0449	0.0486	0.0261	0.0150	0.1937	0.0165	0.1051
18	0.0069	0.0588	0.0445	0.0307	0.0065	0.0084	0.0089	0.0822	0.0260	0.0282	0.0648	0.0731	0.0120	0.0281	0.0201
24	0.3146	0.0189	0.0060	0.0074	0.0110	0.0501	0.0526	0.0133	0.0677	0.0220	0.0228	0.0092	0.0154	0.1811	0.0982
12	0.0343	0.0181	0.2550	0.7266	0.0893	0.3855	0.0347	0.0158	0.2504	0.2807	0.0187	0.2211	0.7977	0.1539	0.4758
24	0.1607	0.0388	0.0252	0.0191	0.0087	0.0293	0.0307	0.0477	0.0469	0.0251	0.0438	0.0412	0.0137	0.1046	0.0591
24	0.0975	0.0285	0.1401	0.3728	0.0490	0.2074	0.0327	0.0318	0.1486	0.1529	0.0312	0.1311	0.4057	0.1293	0.2674

7

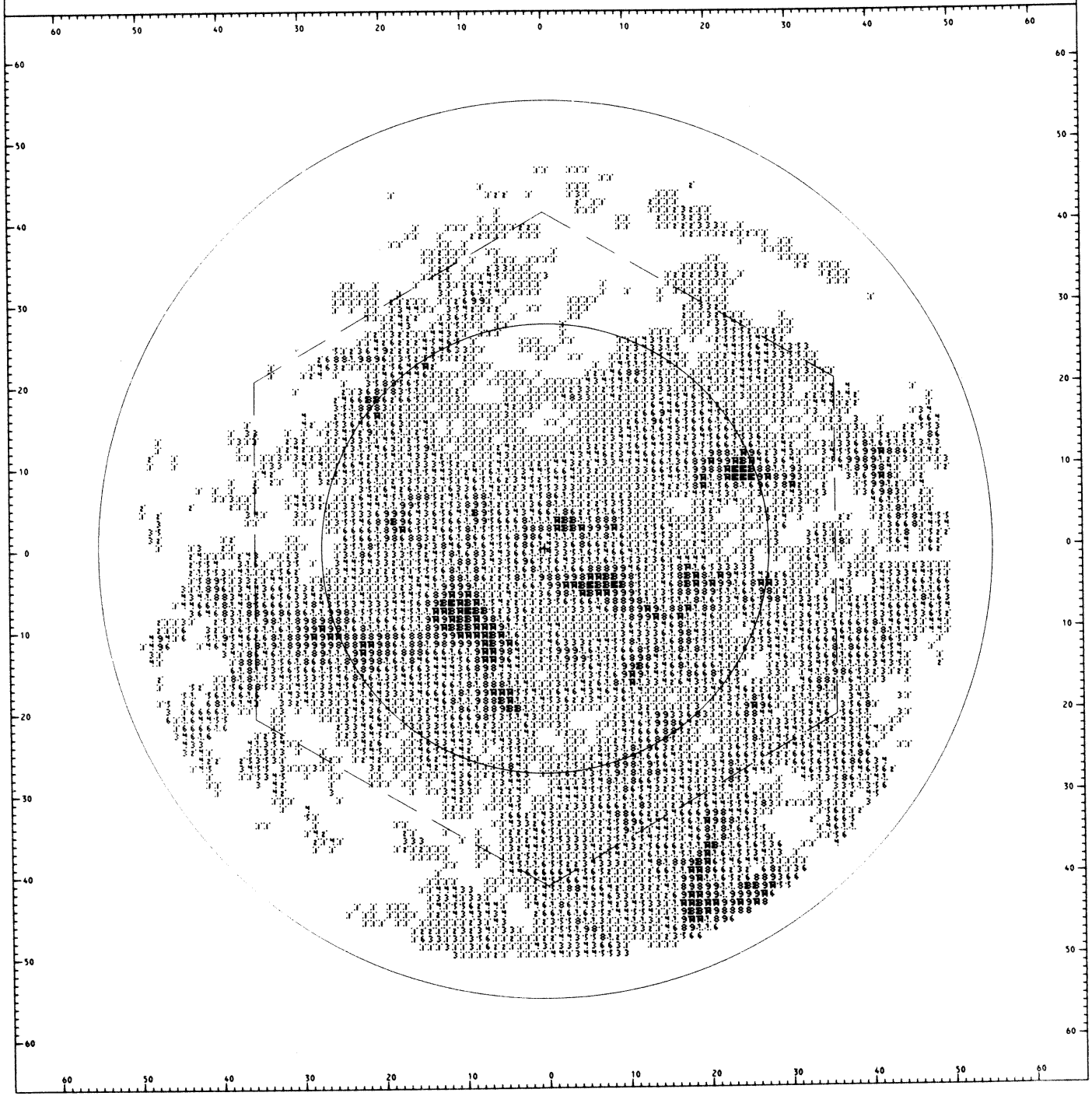
GATE RADAR DAILY RAINFALL RATE 185

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	111	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	4	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	5	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	6	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 4, 1974 (JULIAN DAY 185)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.7485	0.0329	0.0894	0.0445	0.0498	0.0081	0.7491	0.0182	0.1616	0.1286	0.4156	0.0953	0.0197	0.1696	0.0947
2	0.0969	0.0013	0.4170	0.0566	0.1242	0.0062	0.1366	0.0021	0.1167	0.1308	0.0811	0.5576	0.0349	0.0975	0.0662
3	0.0035	0.0	0.5413	0.2045	0.1552	0.0002	0.0054	0.0	0.1504	0.1709	0.0008	0.7264	0.0710	0.1039	0.0874
4	0.0	0.0	0.0901	0.0406	0.0428	0.0	0.0	0.0	0.0289	0.0328	0.0	0.0861	0.0187	0.0194	0.0190
5	0.0	0.0	0.0007	0.0001	0.0	0.0	0.0	0.0	0.0001	0.0002	0.0	0.0	0.0	0.0001	0.0001
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0118	0.0	0.0	0.0	0.0	0.0041	0.0018	0.0	0.0026	0.0010	0.0	0.0	0.0007	0.0073	0.0040
9	0.0238	0.0328	0.0	0.0	0.0	0.0183	0.0112	0.0018	0.0125	0.0050	0.0136	0.0010	0.0033	0.0163	0.0098
10	0.0565	0.1298	0.0214	0.0002	0.0	0.0386	0.0749	0.1466	0.0412	0.0384	0.1033	0.0357	0.0071	0.0541	0.0306
11	0.1541	0.2045	0.0454	0.0403	0.0186	0.1159	0.2392	0.3014	0.0965	0.1075	0.2635	0.0645	0.0320	0.1700	0.1010
12	0.1011	0.1824	0.1373	0.1326	0.1935	0.3097	0.1459	0.2943	0.1761	0.2000	0.3937	0.0620	0.1169	0.1874	0.1521
13	0.0028	0.0918	0.0591	0.1060	0.4805	0.0591	0.0042	0.1106	0.1340	0.1483	0.0143	0.0429	0.1199	0.1646	0.1423
14	0.0276	0.7546	0.0370	0.1450	0.2120	0.0087	0.0312	0.7649	0.1989	0.1745	0.1196	0.2530	0.0700	0.2962	0.1831
15	0.1855	1.1430	0.1659	0.1187	0.1394	0.0655	0.2693	1.3969	0.3046	0.2972	1.0630	0.1424	0.0608	0.3454	0.2031
16	0.1856	0.5085	0.6315	0.0915	0.3597	0.1423	0.2868	0.6482	0.3204	0.3462	0.9396	0.3923	0.1106	0.3365	0.2236
17	0.0208	0.3661	0.7739	0.2408	0.8631	0.2739	0.0318	0.3336	0.4240	0.4528	0.1319	0.6162	0.2580	0.3103	0.2842
18	0.0034	0.4409	0.4783	0.4898	0.9964	0.2243	0.0024	0.4317	0.4402	0.4687	0.0013	0.3585	0.3234	0.2961	0.3098
19	0.0371	0.3362	0.3724	0.4993	0.4095	0.0680	0.0484	0.3365	0.2875	0.3026	0.0392	0.3136	0.2051	0.2394	0.2222
20	0.0517	0.5354	0.3683	0.5697	0.2458	0.1411	0.0355	0.7307	0.3190	0.3447	0.0604	0.3253	0.2194	0.2662	0.2428
21	0.1659	0.3401	0.5162	0.8055	0.2082	0.2412	0.1918	0.5380	0.3790	0.4237	0.2395	0.3246	0.3181	0.2937	0.3059
22	0.0531	0.0758	0.2821	0.6893	0.2119	0.1166	0.0739	0.1199	0.2377	0.2692	0.1328	0.0748	0.2390	0.1173	0.1781
23	0.0307	0.0165	0.1003	0.5746	0.1412	0.1321	0.0462	0.0211	0.1655	0.1872	0.0462	0.0267	0.2038	0.0530	0.1284
24	0.0465	0.0206	0.0242	0.5233	0.2806	0.1075	0.0604	0.0313	0.1670	0.1882	0.0665	0.0131	0.2026	0.0338	0.1182
3	0.2830	0.0114	0.3492	0.1019	0.1097	0.0048	0.2971	0.0068	0.1429	0.1434	0.1658	0.4598	0.0419	0.1237	0.0828
6	0.0	0.0	0.0303	0.0136	0.0143	0.0	0.0	0.0	0.0097	0.0110	0.0	0.0287	0.0062	0.0065	0.0064
9	0.0119	0.0109	0.0	0.0	0.0	0.0075	0.0043	0.0006	0.0050	0.0020	0.0045	0.0003	0.0014	0.0079	0.0046
12	0.1039	0.1722	0.0680	0.0577	0.0707	0.1547	0.1534	0.2474	0.1046	0.1153	0.2535	0.0541	0.0520	0.1371	0.0946
15	0.0720	0.6632	0.0873	0.1233	0.2773	0.0444	0.1016	0.7575	0.2125	0.2067	0.3989	0.1461	0.0836	0.2687	0.1761
18	0.0699	0.4385	0.6279	0.2740	0.7397	0.2135	0.1070	0.4712	0.3949	0.4225	0.3576	0.4557	0.2307	0.3143	0.2725
21	0.0849	0.4039	0.4189	0.6248	0.2879	0.1501	0.0919	0.5351	0.3285	0.3570	0.1130	0.3212	0.2475	0.2664	0.2570
24	0.0434	0.0376	0.1355	0.5957	0.2112	0.1187	0.0601	0.0574	0.1900	0.2148	0.0818	0.0382	0.2151	0.0680	0.1416
6	0.1415	0.0057	0.1898	0.0577	0.0620	0.0024	0.1485	0.0034	0.0763	0.0772	0.0829	0.2442	0.0240	0.0651	0.0446
12	0.0579	0.0916	0.0340	0.0288	0.0353	0.0811	0.0788	0.1240	0.0548	0.0587	0.1290	0.0272	0.0267	0.0725	0.0496
18	0.0709	0.5508	0.3576	0.1986	0.5085	0.1290	0.1043	0.6143	0.3037	0.3146	0.3783	0.3009	0.1571	0.2915	0.2243
24	0.0642	0.2208	0.2773	0.6102	0.2495	0.1344	0.0760	0.2963	0.2593	0.2859	0.0974	0.1797	0.2313	0.1672	0.1992
12	0.0997	0.0486	0.1119	0.0433	0.0487	0.0418	0.1137	0.0637	0.0656	0.0679	0.1060	0.1357	0.0254	0.0688	0.0471
24	0.0676	0.3858	0.3174	0.4044	0.3790	0.1317	0.0901	0.4553	0.2814	0.3002	0.2379	0.2403	0.1942	0.2293	0.2118
24	0.0836	0.2172	0.2147	0.2239	0.2138	0.0867	0.1019	0.2595	0.1735	0.1841	0.1719	0.1880	0.1098	0.1490	0.1294

8

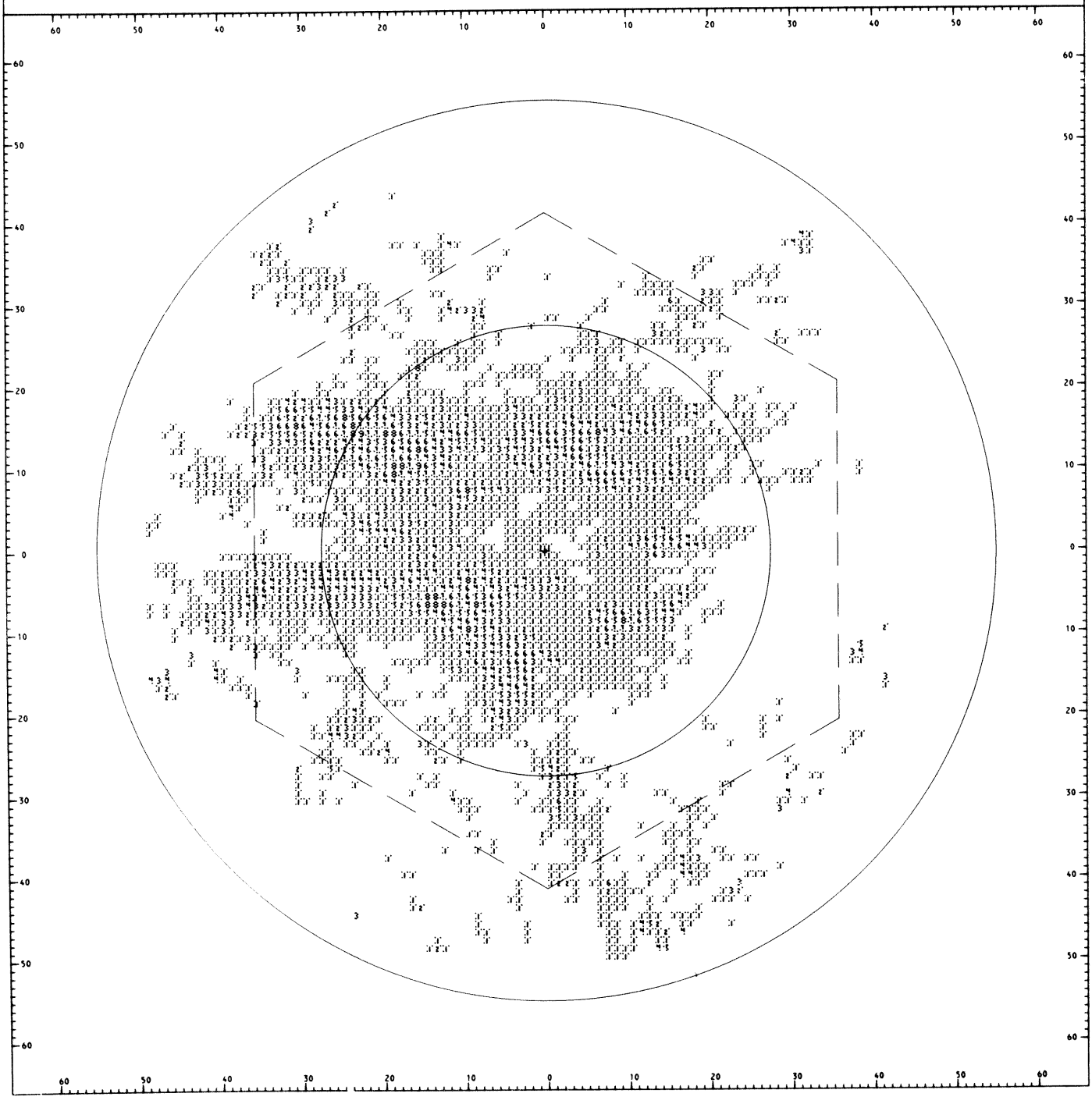
GATE RADAR DAILY RAINFALL RATE 186

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	095	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 5, 1974 (JULIAN DAY 186)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0590	0.0310	0.0208	0.0263	0.2844	0.1238	0.0825	0.0464	0.0912	0.1022	0.1833	0.0083	0.0903	0.0237	0.0570
2	0.1053	0.0315	0.0203	0.0383	0.3017	0.0868	0.1491	0.0530	0.0976	0.1095	0.3286	0.0098	0.0973	0.0301	0.0637
3	0.0641	0.0869	0.0214	0.0491	0.1760	0.0399	0.0947	0.1329	0.0732	0.0822	0.3349	0.0009	0.0574	0.0340	0.0457
4	0.0269	0.0573	0.0267	0.0024	0.1078	0.0342	0.0387	0.0890	0.0427	0.0482	0.1066	0.0	0.0273	0.0207	0.0240
5	0.0229	0.0094	0.1086	0.0018	0.0239	0.0370	0.0334	0.0146	0.0338	0.0382	0.0346	0.0	0.0116	0.0259	0.0188
6	0.0310	0.0131	0.0382	0.0067	0.0117	0.0379	0.0476	0.0205	0.0230	0.0261	0.0589	0.0	0.0111	0.0151	0.0131
7	0.0248	0.0084	0.0155	0.0113	0.0094	0.0296	0.0384	0.0130	0.0165	0.0187	0.0338	0.0	0.0102	0.0089	0.0096
8	0.0181	0.0113	0.0175	0.0159	0.0078	0.0388	0.0283	0.0164	0.0182	0.0205	0.0330	0.0	0.0138	0.0086	0.0112
9	0.0321	0.0116	0.0023	0.0678	0.0094	0.1155	0.0484	0.0151	0.0396	0.0445	0.0982	0.0	0.0397	0.0094	0.0245
10	0.0158	0.0037	0.0015	0.0925	0.0248	0.0571	0.0234	0.0057	0.0325	0.0367	0.0200	0.0007	0.0330	0.0059	0.0195
11	0.0169	0.0173	0.0023	0.0350	0.0170	0.0216	0.0229	0.0268	0.0183	0.0204	0.0750	0.0	0.0150	0.0086	0.0118
12	0.0319	0.0051	0.0007	0.0099	0.0208	0.0408	0.0500	0.0077	0.0182	0.0206	0.0819	0.0	0.0142	0.0071	0.0107
13	0.0403	0.0006	0.0040	0.0024	0.0042	0.0376	0.0565	0.0004	0.0148	0.0159	0.0306	0.0	0.0082	0.0092	0.0087
14	0.0705	0.0012	0.0030	0.0034	0.0052	0.0350	0.0954	0.0018	0.0196	0.0205	0.0580	0.0	0.0081	0.0140	0.0111
15	0.0343	0.0023	0.0002	0.0149	0.0091	0.0481	0.0440	0.0036	0.0181	0.0194	0.0460	0.0	0.0133	0.0070	0.0102
16	0.0421	0.0001	0.0007	0.0333	0.0173	0.0530	0.0493	0.0002	0.0243	0.0256	0.0213	0.0	0.0193	0.0090	0.0141
17	0.0348	0.0003	0.0215	0.0308	0.0127	0.0374	0.0516	0.0005	0.0228	0.0256	0.0013	0.0032	0.0172	0.0120	0.0146
18	0.0399	0.0001	0.0371	0.0575	0.0119	0.0276	0.0614	0.0001	0.0289	0.0327	0.0002	0.0061	0.0190	0.0156	0.0173
19	0.0153	0.0004	0.0148	0.0862	0.0519	0.0325	0.0239	0.0006	0.0335	0.0380	0.0013	0.0011	0.0315	0.0108	0.0212
20	0.0158	0.0003	0.0096	0.0806	0.0933	0.0854	0.0247	0.0005	0.0475	0.0540	0.0015	0.0058	0.0483	0.0104	0.0293
21	0.0170	0.0	0.0003	0.0354	0.1056	0.0792	0.0266	0.0	0.0397	0.0451	0.0001	0.0004	0.0412	0.0061	0.0237
22	0.0046	0.0	0.0001	0.0092	0.0609	0.0306	0.0046	0.0	0.0176	0.0197	0.0	0.0001	0.0193	0.0011	0.0102
23	0.0005	0.0	0.0	0.0005	0.0112	0.0286	0.0008	0.0	0.0068	0.0077	0.0	0.0	0.0080	0.0005	0.0043
24	0.0025	0.0	0.0	0.0	0.0026	0.0112	0.0040	0.0	0.0027	0.0031	0.0	0.0	0.0034	0.0009	0.0022
3	0.0761	0.0498	0.0208	0.0379	0.2540	0.0835	0.1088	0.0774	0.0873	0.0980	0.2823	0.0063	0.0817	0.0293	0.0555
6	0.0269	0.0266	0.0578	0.0036	0.0478	0.0364	0.0399	0.0414	0.0332	0.0375	0.0667	0.0	0.0167	0.0206	0.0186
9	0.0250	0.0104	0.0118	0.0316	0.0089	0.0613	0.0384	0.0148	0.0248	0.0279	0.0550	0.0	0.0212	0.0089	0.0151
12	0.0215	0.0087	0.0015	0.0458	0.0209	0.0398	0.0321	0.0134	0.0230	0.0259	0.0590	0.0002	0.0207	0.0072	0.0140
15	0.0484	0.0014	0.0024	0.0069	0.0062	0.0402	0.0653	0.0019	0.0175	0.0186	0.0449	0.0	0.0099	0.0100	0.0100
18	0.0389	0.0002	0.0198	0.0405	0.0140	0.0393	0.0541	0.0003	0.0254	0.0280	0.0076	0.0031	0.0185	0.0122	0.0154
21	0.0160	0.0002	0.0083	0.0674	0.0836	0.0657	0.0251	0.0004	0.0402	0.0457	0.0010	0.0024	0.0403	0.0091	0.0247
24	0.0026	0.0	0.0	0.0032	0.0249	0.0234	0.0031	0.0	0.0090	0.0102	0.0	0.0	0.0102	0.0008	0.0055
6	0.0515	0.0382	0.0393	0.0208	0.1509	0.0599	0.0743	0.0594	0.0603	0.0677	0.1745	0.0032	0.0492	0.0249	0.0370
12	0.0233	0.0096	0.0066	0.0387	0.0149	0.0506	0.0352	0.0141	0.0239	0.0269	0.0570	0.0001	0.0210	0.0081	0.0145
18	0.0437	0.0008	0.0111	0.0237	0.0101	0.0398	0.0597	0.0011	0.0214	0.0233	0.0262	0.0016	0.0142	0.0111	0.0127
24	0.0093	0.0001	0.0041	0.0353	0.0543	0.0446	0.0141	0.0002	0.0246	0.0279	0.0005	0.0012	0.0253	0.0050	0.0151
12	0.0374	0.0239	0.0230	0.0297	0.0829	0.0552	0.0548	0.0368	0.0421	0.0473	0.1157	0.0016	0.0351	0.0165	0.0258
24	0.0265	0.0004	0.0076	0.0295	0.0322	0.0422	0.0369	0.0006	0.0230	0.0256	0.0134	0.0014	0.0197	0.0080	0.0139
24	0.0319	0.0122	0.0153	0.0296	0.0575	0.0487	0.0458	0.0187	0.0326	0.0365	0.0645	0.0015	0.0274	0.0123	0.0198

9

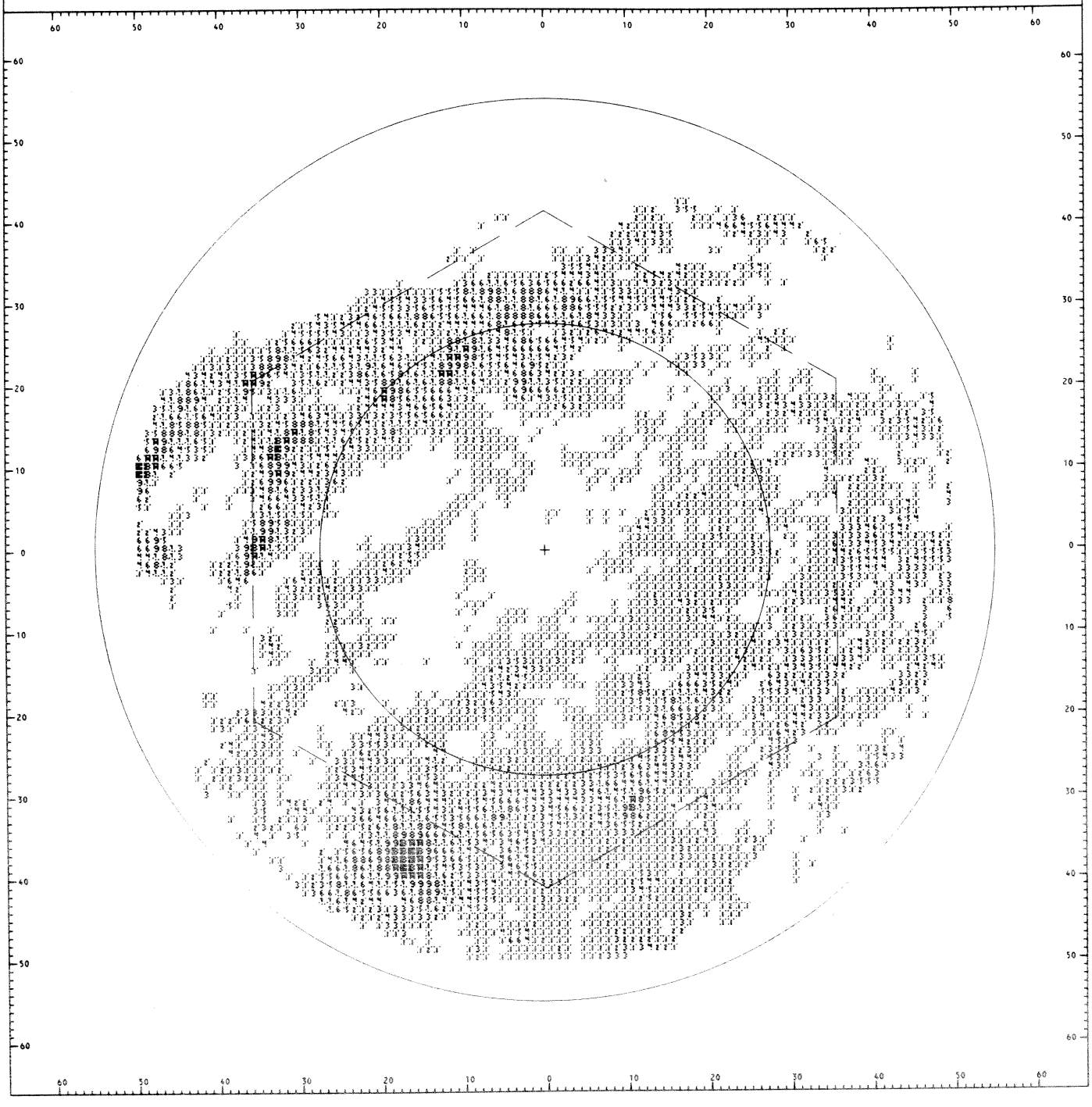
GATE RADAR DAILY RAINFALL RATE 187

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	112	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 6, 1974 (JULIAN DAY 187)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0002	0.0	0.0	0.0028	0.0051	0.0263	0.0003	0.0	0.0057	0.0065	0.0	0.0	0.0078	0.0017	0.0047
2	0.0002	0.0002	0.0	0.0002	0.0033	0.0407	0.0003	0.0003	0.0074	0.0084	0.0	0.0003	0.0093	0.0006	0.0049
3	0.0001	0.0002	0.0001	0.0	0.0050	0.0178	0.0002	0.0002	0.0038	0.0044	0.0	0.0	0.0046	0.0014	0.0030
4	0.0001	0.0049	0.0005	0.0	0.0190	0.0258	0.0002	0.0069	0.0084	0.0095	0.0064	0.0007	0.0087	0.0015	0.0051
5	0.0008	0.0192	0.0027	0.0006	0.0408	0.0296	0.0007	0.0213	0.0157	0.0167	0.0325	0.0030	0.0132	0.0050	0.0091
6	0.0015	0.0102	0.0067	0.0004	0.0195	0.0522	0.0002	0.0080	0.0151	0.0159	0.0113	0.0061	0.0138	0.0052	0.0095
7	0.0092	0.0161	0.0135	0.0023	0.0226	0.0926	0.0144	0.0123	0.0260	0.0280	0.0077	0.0135	0.0226	0.0162	0.0194
8	0.0083	0.0175	0.0151	0.0497	0.0169	0.1442	0.0131	0.0183	0.0418	0.0464	0.0034	0.0247	0.0506	0.0181	0.0344
9	0.0033	0.0546	0.0248	0.0307	0.0208	0.0864	0.0052	0.0635	0.0368	0.0392	0.0133	0.0292	0.0443	0.0226	0.0335
10	0.0	0.0261	0.0638	0.0287	0.0238	0.1200	0.0	0.0315	0.0437	0.0485	0.0095	0.0344	0.0510	0.0307	0.0409
11	0.0	0.0108	0.0432	0.0271	0.0333	0.0820	0.0	0.0137	0.0327	0.0368	0.0026	0.0417	0.0344	0.0237	0.0291
12	0.0004	0.0103	0.0240	0.0239	0.0304	0.1156	0.0006	0.0139	0.0340	0.0384	0.0013	0.0390	0.0586	0.0151	0.0369
13	0.0	0.0059	0.0127	0.0359	0.0343	0.1059	0.0	0.0086	0.0324	0.0367	0.0001	0.0232	0.0563	0.0151	0.0357
14	0.0	0.0132	0.0294	0.0232	0.0071	0.0257	0.0	0.0172	0.0164	0.0182	0.0013	0.0537	0.0191	0.0196	0.0193
15	0.0003	0.0185	0.0611	0.0088	0.0021	0.0354	0.0004	0.0121	0.0210	0.0218	0.0007	0.0946	0.0231	0.0158	0.0194
16	0.0033	0.0233	0.0525	0.0312	0.0135	0.0681	0.0043	0.0143	0.0319	0.0335	0.0027	0.0729	0.0387	0.0166	0.0277
17	0.0220	0.0244	0.0357	0.0629	0.0131	0.1423	0.0234	0.0096	0.0499	0.0519	0.0210	0.0185	0.0885	0.0185	0.0535
18	0.0437	0.0416	0.0150	0.0653	0.0528	0.1534	0.0418	0.0313	0.0619	0.0630	0.0318	0.0049	0.1148	0.0283	0.0715
19	0.0426	0.0324	0.0125	0.0699	0.0330	0.1381	0.0385	0.0354	0.0546	0.0568	0.0213	0.0146	0.1384	0.0329	0.0856
20	0.0905	0.0573	0.0207	0.0266	0.0286	0.1421	0.0757	0.0415	0.0609	0.0554	0.0246	0.0189	0.1134	0.0510	0.0822
21	0.1092	0.0497	0.1100	0.0819	0.0751	0.2787	0.1127	0.0314	0.1171	0.1204	0.0448	0.1153	0.1548	0.0724	0.1136
22	0.1833	0.0704	0.2469	0.1641	0.2105	0.4531	0.1454	0.0546	0.2210	0.2273	0.0135	0.3396	0.2627	0.1244	0.1936
23	0.1899	0.0569	0.4390	0.1629	0.4189	0.5342	0.2384	0.0487	0.3000	0.3288	0.0045	0.6352	0.3578	0.1590	0.2584
24	0.2195	0.0765	0.2424	0.2542	0.7605	0.5146	0.2642	0.0810	0.3450	0.3777	0.0018	0.3387	0.4843	0.1260	0.3051
3	0.0002	0.0001	0.0	0.0010	0.0045	0.0283	0.0003	0.0002	0.0057	0.0064	0.0	0.0001	0.0073	0.0012	0.0042
6	0.0008	0.0114	0.0033	0.0003	0.0264	0.0358	0.0004	0.0121	0.0131	0.0140	0.0167	0.0033	0.0119	0.0039	0.0079
9	0.0069	0.0294	0.0178	0.0276	0.0201	0.1077	0.0109	0.0314	0.0349	0.0379	0.0082	0.0225	0.0392	0.0190	0.0291
12	0.0001	0.0157	0.0437	0.0266	0.0292	0.1059	0.0002	0.0197	0.0368	0.0412	0.0044	0.0383	0.0480	0.0232	0.0356
15	0.0001	0.0125	0.0344	0.0226	0.0145	0.0557	0.0001	0.0126	0.0232	0.0256	0.0007	0.0572	0.0328	0.0168	0.0248
18	0.0230	0.0298	0.0344	0.0531	0.0265	0.1212	0.0232	0.0184	0.0479	0.0495	0.0185	0.0321	0.0807	0.0211	0.0509
21	0.0808	0.0465	0.0477	0.0594	0.0456	0.1863	0.0756	0.0361	0.0775	0.0775	0.0302	0.0496	0.1355	0.0521	0.0938
24	0.1975	0.0679	0.3094	0.1937	0.4633	0.5006	0.2160	0.0615	0.2886	0.3112	0.0066	0.4378	0.3683	0.1365	0.2524
6	0.0005	0.0058	0.0017	0.0007	0.0154	0.0321	0.0003	0.0061	0.0094	0.0102	0.0084	0.0017	0.0096	0.0026	0.0061
12	0.0035	0.0226	0.0307	0.0271	0.0246	0.1068	0.0055	0.0256	0.0358	0.0395	0.0063	0.0304	0.0436	0.0211	0.0323
18	0.0115	0.0211	0.0344	0.0379	0.0205	0.0885	0.0117	0.0155	0.0356	0.0375	0.0096	0.0446	0.0567	0.0190	0.0379
24	0.1392	0.0572	0.1786	0.1266	0.2544	0.3435	0.1458	0.0488	0.1830	0.1944	0.0184	0.2437	0.2519	0.0943	0.1731
12	0.0020	0.0142	0.0162	0.0139	0.0200	0.0694	0.0029	0.0158	0.0226	0.0249	0.0073	0.0160	0.0266	0.0118	0.0192
24	0.0753	0.0392	0.1065	0.0822	0.1374	0.2160	0.0787	0.0321	0.1093	0.1159	0.0140	0.1442	0.1543	0.0566	0.1054
24	0.0387	0.0267	0.0613	0.0480	0.0787	0.1427	0.0408	0.0240	0.0660	0.0704	0.0107	0.0801	0.0904	0.0342	0.0623

10

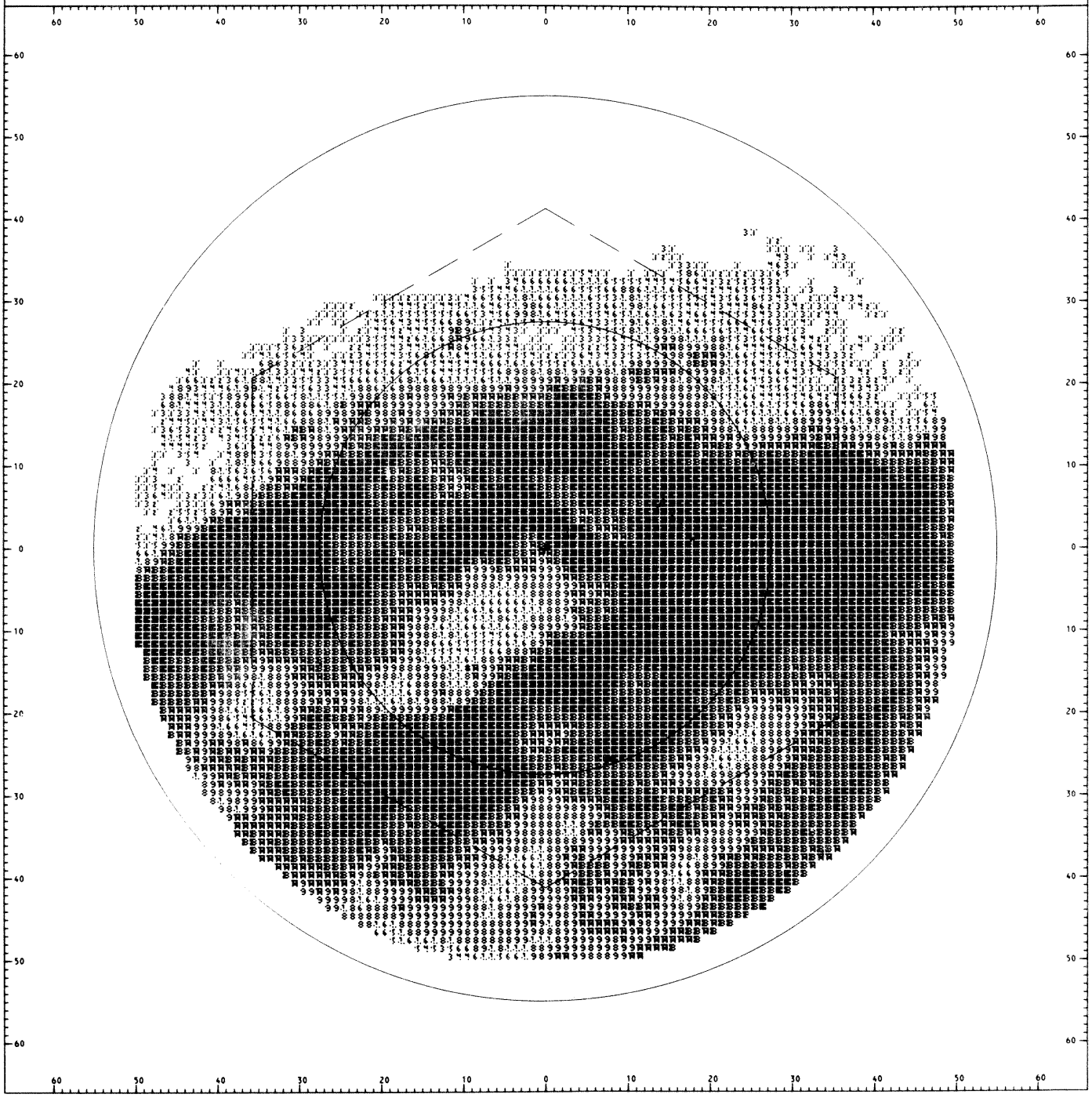
GATE RADAR DAILY RAINFALL RATE 188

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	102	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
	0.001 - 0.040		0.133 - 0.200		0.668 - 1.000		3.350 - 5.012
	0.040 - 0.060		0.200 - 0.299		1.000 - 1.496		5.012 - 7.499
	0.060 - 0.089		0.299 - 0.447		1.496 - 2.239		7.499 - 11.220
	0.089 - 0.133		0.447 - 0.668		2.239 - 3.350		11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 7, 1974 (JULIAN DAY 188)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.4130	0.0307	0.2375	0.1738	1.0528	0.5712	0.4929	0.0225	0.4138	0.4484	0.0195	0.2672	0.4387	0.1470	0.2929
2	0.5647	0.0485	0.4267	0.0716	0.8380	1.1455	0.6605	0.0380	0.5154	0.5540	0.1168	0.6337	0.4151	0.2227	0.3189
3	1.0444	0.0367	0.8841	0.0655	0.9248	2.3786	1.2871	0.0215	0.8870	0.9613	0.1336	1.3293	0.6555	0.4002	0.5278
4	2.0743	0.0384	0.7363	0.0839	1.8038	2.6062	2.8069	0.0198	1.2220	1.3301	0.5629	1.0184	0.8935	0.6351	0.7640
5	2.4179	0.0420	0.6368	0.0894	1.9612	1.0606	3.4730	0.0298	1.0343	1.1329	2.7037	0.9219	0.6699	0.7662	0.7178
6	2.2909	0.6153	0.1270	0.2395	1.9390	1.6273	3.3307	0.8734	1.1402	1.2543	3.7749	0.1736	0.7799	0.7696	0.7745
7	1.4479	1.7083	0.0469	0.2110	2.8702	2.8227	1.7572	1.7179	1.5212	1.5519	2.4524	0.0435	1.1850	0.8649	1.0246
8	1.1749	1.2306	0.0218	0.2517	4.1056	2.3434	1.2007	0.5470	1.5266	1.4895	1.0625	0.0165	1.4194	0.7940	1.1064
9	0.8834	1.0907	0.0616	0.1663	3.8997	1.8170	0.8472	1.1163	1.3253	1.3702	1.7111	0.0589	1.2264	0.6845	0.9552
10	0.3987	1.9081	0.1533	0.3521	2.3215	1.4395	0.5532	2.4072	1.1002	1.1733	3.0445	0.2417	0.9171	0.7387	0.8275
11	0.6574	2.7792	0.3538	0.7792	4.4309	1.2005	1.0067	3.4767	1.7090	1.8360	3.6499	0.5767	1.5350	0.9504	1.2424
12	0.8352	3.5480	0.5027	1.3666	7.4865	1.0292	1.2620	4.4793	2.4758	2.6810	2.0280	0.7832	2.5926	1.1691	1.8807
13	0.9592	3.9885	1.0375	2.9710	4.8903	0.6613	1.4084	4.7388	2.4272	2.5679	1.9599	1.1437	2.2284	1.5269	1.8775
14	0.5700	4.7173	2.0811	4.6537	6.5869	0.8504	0.8029	4.4729	3.2546	3.3361	1.3327	1.2312	3.8557	1.9447	2.9001
15	0.9680	5.4568	3.9326	5.8363	3.1732	0.9778	1.4203	5.2362	3.3947	3.4474	1.8896	1.1724	2.9847	2.7273	2.8559
16	1.9058	6.8591	6.0542	6.2595	0.0674	0.9741	2.9286	7.7496	3.6851	3.8237	3.3709	3.7936	1.9490	3.5700	2.7594
17	2.3447	10.3047	8.0354	6.9926	0.0084	1.1840	3.5920	10.9274	4.8129	4.8350	7.0173	9.0874	2.4734	4.5534	3.5133
18	2.0264	10.8199	6.6661	5.8301	0.0916	0.9108	3.0930	11.5104	4.3955	4.3343	6.1343	7.4855	2.1578	4.3583	3.2579
19	1.3873	9.8184	5.0845	2.7058	0.7532	0.6745	2.0750	11.3434	3.4126	3.3866	4.3329	5.7509	1.1713	3.8556	2.5132
20	1.0588	9.7308	5.7147	1.0333	1.2346	0.2089	1.5479	11.4315	3.1743	3.1419	5.8623	6.7568	0.7133	3.9241	2.3184
21	1.1103	9.4131	2.5746	0.2858	2.1698	0.2273	1.5431	10.4819	2.6451	2.4741	7.9013	3.9042	0.5745	3.5986	2.0863
22	0.8869	7.2661	0.9103	0.2712	1.9429	0.5378	1.1467	8.0192	1.9817	1.8217	6.4875	2.0396	0.5259	3.1035	1.8146
23	0.6932	4.2226	0.9099	0.5047	1.1910	0.4122	0.9543	5.3630	1.3287	1.3477	3.5590	2.0103	0.3952	2.1234	1.2592
24	0.5444	2.4233	0.9213	0.5584	1.0007	0.8165	0.7809	3.3758	1.0472	1.1340	2.2658	1.4432	0.4535	1.4490	0.9511
3	0.6740	0.0386	0.5161	0.1037	0.9385	1.3651	0.8135	0.0274	0.6054	0.6546	0.0899	0.7434	0.5031	0.2566	0.3798
6	2.2611	0.2319	0.5000	0.1376	1.9013	1.7647	3.2035	0.3077	1.1320	1.2389	2.3471	0.7046	0.7811	0.7236	0.7519
9	1.1687	1.3432	0.0434	0.2097	3.6252	2.3277	1.2684	1.1270	1.4575	1.4704	1.7420	0.0396	1.2768	0.7811	1.0286
12	0.6304	2.7451	0.3366	0.8326	4.7464	1.2231	0.9406	3.4544	1.7614	1.8965	2.9075	0.5339	1.6813	0.9528	1.3166
15	0.8324	4.7209	2.3504	4.4871	4.8835	0.8298	1.2105	4.8159	3.0253	3.1169	1.7274	1.1824	3.0228	2.0661	2.5443
18	2.0923	9.3279	6.9185	6.3607	0.0558	1.0230	3.2045	10.0624	4.2977	4.3309	5.5075	6.7889	2.1934	4.1604	3.1767
21	1.1855	9.6540	4.4580	1.3416	1.3858	0.3702	1.7220	11.0855	3.0772	3.0007	6.0322	5.4707	0.8197	3.7927	2.3058
24	0.7081	4.6375	0.9138	0.4447	1.3782	0.5888	0.9606	5.5860	1.4524	1.4343	4.1041	1.8310	0.4582	2.2250	1.3414
6	1.4675	0.1352	0.5081	0.1206	1.4199	1.5649	2.0085	0.1675	0.8689	0.9469	1.2185	0.7240	0.6421	0.4901	0.5659
12	0.8996	2.0441	0.1900	0.5211	4.1858	1.7754	1.1045	2.2907	1.6093	1.6832	2.3247	0.2868	1.4789	0.8669	1.1724
18	1.4623	7.0242	4.6347	5.4240	2.4696	0.9264	2.2075	7.4394	3.6614	3.7238	3.6174	3.9856	2.6080	3.1131	2.8603
24	0.9468	7.1456	2.6859	0.8932	1.3820	0.4795	1.3413	8.3361	2.2646	2.2173	5.0681	3.6508	0.6389	3.0088	1.8235
12	1.1836	1.0897	0.3490	0.3209	2.8028	1.6701	1.5565	1.2291	1.2386	1.3147	1.7716	0.5054	1.0605	0.6785	0.8688
24	1.2046	7.0850	3.6603	3.1586	1.9258	0.7030	1.7744	7.8877	2.9630	2.9705	4.3428	3.8182	1.6234	3.0609	2.3418
24	1.1941	4.0875	2.0046	1.7397	2.3643	1.1865	1.6655	4.5584	2.1008	2.1425	3.0572	2.1618	1.3419	1.8694	1.6053

11

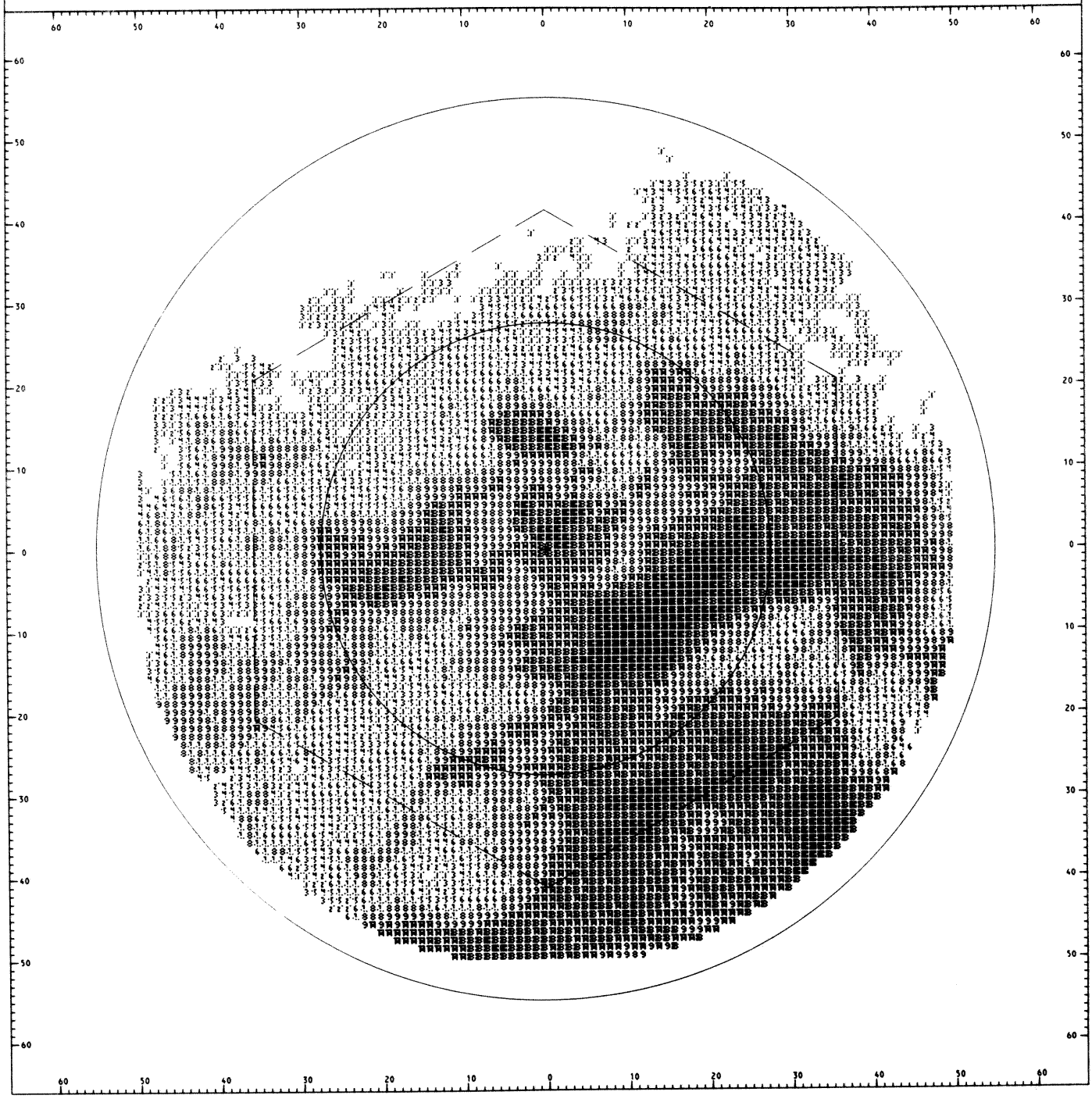
GATE RADAR DAILY RAINFALL RATE 189

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	109	102	000	000

MISSING HOURS: 19

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 8, 1974 (JULIAN DAY 189)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.4970	1.1737	0.9767	0.4428	0.8242	1.0751	0.7211	1.6194	0.8324	0.9140	1.5798	0.6220	0.4392	0.9928	0.7159
2	0.5448	0.2759	0.4630	0.2602	1.1392	0.4731	0.7997	0.4551	0.5269	0.5955	1.5067	0.0077	0.3839	0.3922	0.3881
3	0.4318	0.3947	0.2086	0.0677	0.8018	0.2724	0.6357	0.6019	0.3640	0.4073	1.4334	0.0021	0.2654	0.2654	0.2654
4	0.2829	0.2596	0.0475	0.0371	0.4580	0.1945	0.3309	0.3038	0.2140	0.2174	0.6246	0.0	0.1675	0.1581	0.1628
5	0.2852	0.2762	0.0573	0.0474	0.3071	0.1424	0.3335	0.3419	0.1864	0.1875	0.7480	0.0457	0.0989	0.1402	0.1196
6	0.4100	0.3824	0.2967	0.0856	0.1214	0.1634	0.4530	0.5724	0.2433	0.2511	1.0216	0.1374	0.0835	0.2367	0.1601
7	0.2532	0.5104	0.4449	0.2063	0.1674	0.2219	0.2089	0.5238	0.3008	0.2862	0.3181	0.2707	0.1293	0.2520	0.1906
8	0.2560	0.7771	0.9281	0.2895	0.4306	0.4165	0.2530	0.4038	0.5167	0.4704	0.1371	1.1324	0.2219	0.4341	0.3280
9	0.2404	0.9016	1.8074	0.2662	1.1671	0.4202	0.2511	0.6337	0.8016	0.8013	0.0768	2.6981	0.3830	0.7627	0.5728
10	0.1029	1.0856	2.6258	0.2694	1.3281	0.3502	0.1382	1.0632	0.9615	1.0131	0.2724	3.9605	0.4085	1.0007	0.7045
11	0.4038	0.7715	2.3927	0.2097	1.5945	0.4147	0.6165	0.6410	0.9655	1.0265	0.8422	3.0352	0.5173	0.9734	0.7452
12	0.7824	1.1756	2.2776	0.1465	1.4627	0.3701	1.2097	1.4416	1.0371	1.1293	1.8454	3.0865	0.5897	1.2750	0.9322
13	0.8811	2.2226	1.0440	0.5519	1.3431	0.1290	1.3224	2.4633	1.0322	1.0446	1.8500	1.8133	0.5975	1.4422	1.0196
14	1.0303	3.2832	1.7999	0.7453	1.2420	0.0992	1.4339	3.1946	1.3706	1.3017	1.1904	1.7796	0.4862	2.0277	1.2567
15	1.4323	4.5053	3.6870	1.1996	0.7820	0.1544	1.3949	4.1330	1.9629	1.7762	0.5820	2.3934	0.5120	2.7852	1.6483
16	1.8413	6.6726	3.5098	1.1859	0.6988	0.5064	1.5987	5.5782	2.4081	1.9933	1.0143	2.4107	0.5648	3.0407	1.8024
17	1.5990	4.5999	3.5276	1.2441	0.4779	0.6576	1.6081	4.3581	2.0196	1.8446	2.0628	1.1134	0.5408	2.3022	1.4212
18	0.9915	3.7235	4.3553	1.0976	0.4335	0.6079	1.3645	4.5545	1.8688	1.9500	3.2082	1.6424	0.5872	1.9539	1.2703
19															
20	0.5040	1.4311	3.4118	0.9385	0.4349	0.1985	0.6842	1.9984	1.1519	1.2688	2.1422	2.7521	0.4763	1.1900	0.8330
21	0.4424	0.6287	3.2207	1.4186	0.3478	0.0600	0.3490	0.8832	1.0170	1.1027	0.9125	3.0511	0.5176	1.1545	0.8359
22	0.1564	0.2685	2.2398	0.8653	0.1602	0.0134	0.1226	0.4086	0.6153	0.6833	0.3939	1.5512	0.3971	0.9513	0.6741
23	0.0637	0.0780	1.4458	0.3954	0.0435	0.0114	0.0119	0.1199	0.3383	0.3736	0.1031	0.7399	0.3974	0.7196	0.5585
24	0.0733	0.0345	0.6877	0.4636	0.0439	0.0240	0.0184	0.0384	0.2203	0.2368	0.0642	0.4138	0.4481	0.4440	0.4460
3	0.4912	0.6147	0.5494	0.2569	0.9217	0.6069	0.7188	0.8921	0.5744	0.6389	1.5066	0.2106	0.3628	0.5501	0.4565
6	0.3261	0.3061	0.1338	0.0567	0.2955	0.1668	0.3724	0.4060	0.2145	0.2186	0.7981	0.0611	0.1166	0.1783	0.1475
9	0.2499	0.7297	1.0602	0.2540	0.5883	0.3528	0.2377	0.5204	0.5397	0.5193	0.1773	1.3671	0.2447	0.4829	0.3638
12	0.4297	1.0108	2.4320	0.2085	1.4617	0.3783	0.6548	1.0486	0.9880	1.0563	0.9867	3.3607	0.5052	1.0829	0.7939
15	1.1145	3.3370	2.1770	0.8322	1.1223	0.1275	1.3837	3.2636	1.4550	1.3739	1.2074	1.9954	0.5319	2.0848	1.3080
18	1.4773	4.9988	3.7976	1.1758	0.5367	0.5907	1.5237	4.8303	2.0987	1.9292	2.0951	1.7221	0.5642	2.4321	1.4978
21	0.4732	1.0299	3.3163	1.1785	0.3913	0.1292	0.5166	1.4408	1.0844	1.1857	1.5274	2.9016	0.4970	1.1722	0.8344
24	0.0978	0.1270	1.4578	0.5747	0.0826	0.0163	0.0510	0.1889	0.3913	0.4312	0.1871	0.9016	0.4142	0.7049	0.5596
6	0.4086	0.4604	0.3416	0.1568	0.6086	0.3868	0.5456	0.6490	0.3945	0.4288	1.1523	0.1358	0.2397	0.3642	0.3020
12	0.3398	0.8702	1.7461	0.2313	1.0250	0.3656	0.4462	0.7845	0.7639	0.7878	0.5820	2.3639	0.3749	0.7830	0.5788
18	1.2959	4.1679	2.9873	1.0040	0.8295	0.3591	1.4537	4.0469	1.7767	1.6514	1.6513	1.8587	0.5480	2.2584	1.4028
24	0.2479	0.4882	2.2012	0.8163	0.2061	0.0615	0.2372	0.6897	0.6686	0.7330	0.7232	1.7016	0.4473	0.8919	0.6695
12	0.3742	0.6653	1.0438	0.1940	0.8168	0.3762	0.4959	0.7168	0.5791	0.6083	0.8672	1.2498	0.3073	0.5736	0.4404
24	0.8195	2.4953	2.6299	0.9187	0.5461	0.2238	0.9008	2.5209	1.2730	1.2341	1.2294	1.7873	0.5022	1.6371	1.0693
24	0.5872	1.5405	1.8024	0.5406	0.6873	0.3033	0.6896	1.5796	0.9112	0.9077	1.0404	1.5069	0.4005	1.0824	0.7411

13

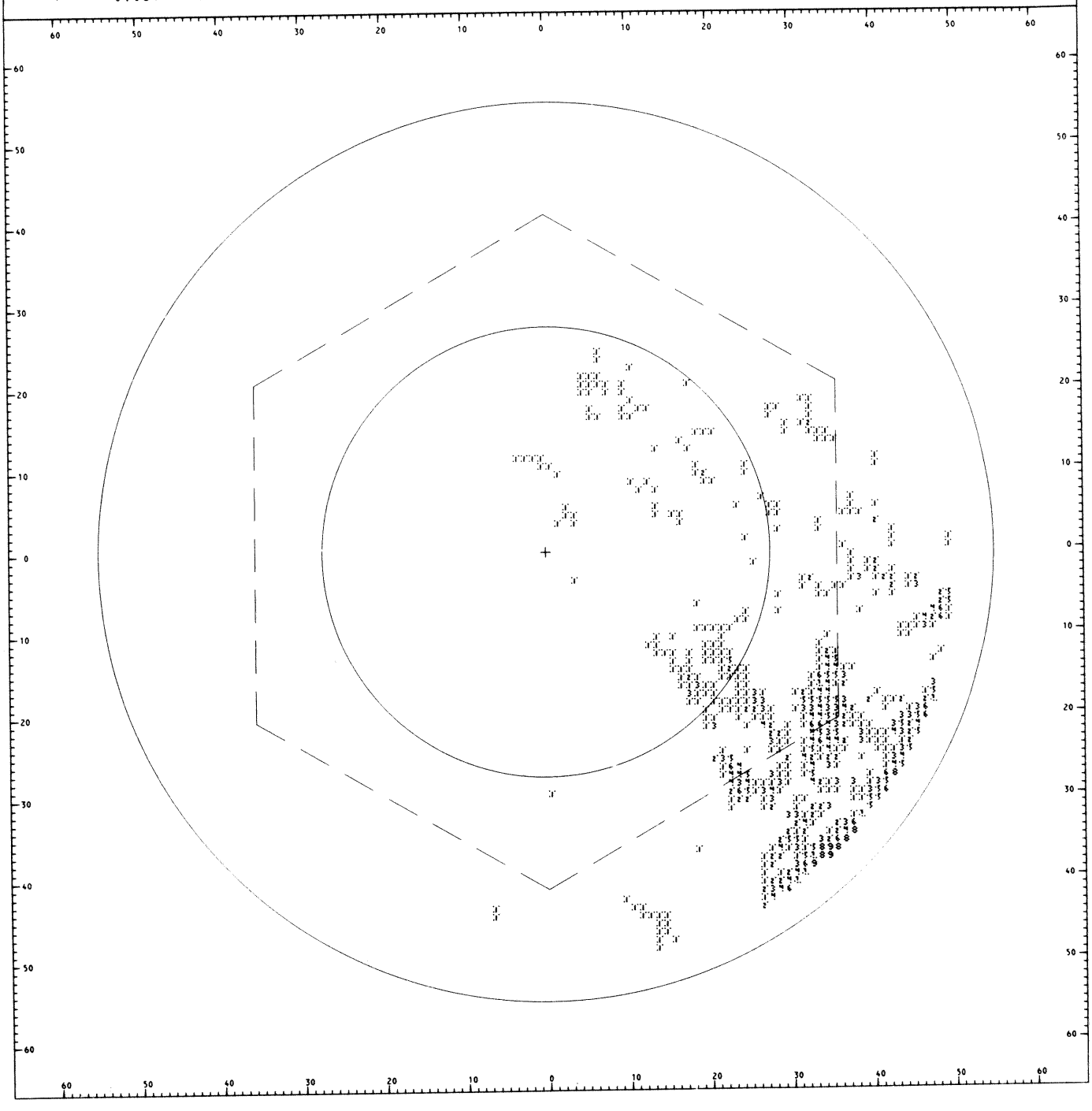
GATE RADAR DAILY RAINFALL RATE 191

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	115	107	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 10, 1974 (JULIAN DAY 191)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0001	0.0384	0.0227	0.0	0.0	0.0	0.0	0.0147	0.0103	0.0061	0.0	0.0332	0.0	0.0141	0.0071
2	0.0006	0.0492	0.0365	0.0	0.0	0.0	0.0	0.0511	0.0144	0.0132	0.0	0.0891	0.0	0.0282	0.0141
3	0.0019	0.0132	0.0382	0.0	0.0	0.0	0.0016	0.0113	0.0089	0.0088	0.0	0.0677	0.0	0.0242	0.0121
4	0.0002	0.0013	0.0141	0.0	0.0	0.0	0.0003	0.0005	0.0026	0.0028	0.0002	0.0212	0.0	0.0052	0.0026
5	0.0001	0.0	0.0212	0.0	0.0	0.0	0.0001	0.0	0.0035	0.0040	0.0002	0.0318	0.0	0.0104	0.0052
6	0.0	0.0001	0.0160	0.0	0.0	0.0	0.0	0.0001	0.0027	0.0030	0.0	0.0240	0.0	0.0186	0.0093
7	0.0002	0.0042	0.0	0.0	0.0	0.0	0.0003	0.0030	0.0007	0.0004	0.0007	0.0	0.0	0.0060	0.0030
8	0.0001	0.0005	0.0	0.0	0.0	0.0002	0.0002	0.0	0.0001	0.0001	0.0003	0.0	0.0	0.0111	0.0056
9	0.0001	0.0001	0.0	0.0	0.0	0.0003	0.0001	0.0001	0.0001	0.0001	0.0003	0.0	0.0001	0.0237	0.0119
10	0.0	0.0003	0.0	0.0	0.0	0.0001	0.0	0.0005	0.0001	0.0001	0.0009	0.0	0.0	0.0370	0.0185
11	0.0001	0.0	0.0	0.0	0.0	0.0	0.0002	0.0001	0.0	0.0	0.0004	0.0	0.0	0.0095	0.0047
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0
13	0.0	0.0	0.0001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0002	0.0001
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0004	0.0002
16	0.0	0.0007	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	0.0	0.0	0.0014	0.0007
17	0.0	0.0044	0.0	0.0	0.0	0.0	0.0	0.0026	0.0008	0.0003	0.0001	0.0013	0.0	0.0008	0.0004
18	0.0001	0.0007	0.0001	0.0	0.0	0.0	0.0002	0.0011	0.0002	0.0002	0.0002	0.0011	0.0	0.0002	0.0001
19	0.0001	0.0	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	0.0	0.0001	0.0	0.0	0.0001	0.0
20	0.0001	0.0	0.0	0.0	0.0	0.0	0.0002	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0
21	0.0001	0.0001	0.0	0.0	0.0	0.0	0.0001	0.0002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0004	0.0	0.0	0.0	0.0	0.0	0.0003	0.0	0.0001	0.0	0.0006	0.0	0.0	0.0001	0.0
24	0.0039	0.0	0.0	0.0	0.0	0.0	0.0061	0.0	0.0006	0.0007	0.0012	0.0	0.0	0.0007	0.0004
3	0.0009	0.0336	0.0325	0.0	0.0	0.0	0.0005	0.0257	0.0112	0.0094	0.0	0.0633	0.0	0.0222	0.0111
6	0.0001	0.0005	0.0171	0.0	0.0	0.0	0.0002	0.0002	0.0029	0.0033	0.0001	0.0257	0.0	0.0114	0.0057
9	0.0001	0.0016	0.0	0.0	0.0	0.0002	0.0002	0.0011	0.0003	0.0002	0.0004	0.0	0.0	0.0136	0.0068
12	0.0	0.0001	0.0	0.0	0.0	0.0	0.0001	0.0002	0.0	0.0	0.0004	0.0	0.0	0.0155	0.0077
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0002	0.0001
18	0.0001	0.0020	0.0	0.0	0.0	0.0	0.0001	0.0012	0.0003	0.0002	0.0001	0.0008	0.0	0.0008	0.0004
21	0.0001	0.0	0.0	0.0	0.0	0.0	0.0001	0.0001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0014	0.0	0.0	0.0	0.0	0.0	0.0021	0.0	0.0002	0.0003	0.0006	0.0	0.0	0.0003	0.0001
6	0.0005	0.0170	0.0248	0.0	0.0	0.0	0.0004	0.0129	0.0071	0.0063	0.0001	0.0445	0.0	0.0168	0.0084
12	0.0001	0.0009	0.0	0.0	0.0	0.0001	0.0001	0.0006	0.0002	0.0001	0.0004	0.0	0.0	0.0146	0.0073
18	0.0	0.0010	0.0	0.0	0.0	0.0	0.0	0.0006	0.0002	0.0001	0.0	0.0004	0.0	0.0005	0.0003
24	0.0008	0.0	0.0	0.0	0.0	0.0	0.0011	0.0	0.0001	0.0001	0.0003	0.0	0.0	0.0002	0.0001
12	0.0003	0.0089	0.0124	0.0	0.0	0.0	0.0002	0.0068	0.0036	0.0032	0.0002	0.0222	0.0	0.0157	0.0078
24	0.0004	0.0005	0.0	0.0	0.0	0.0	0.0006	0.0003	0.0002	0.0001	0.0002	0.0002	0.0	0.0003	0.0002
24	0.0003	0.0047	0.0062	0.0	0.0	0.0	0.0004	0.0035	0.0019	0.0017	0.0002	0.0112	0.0	0.0080	0.0040

14

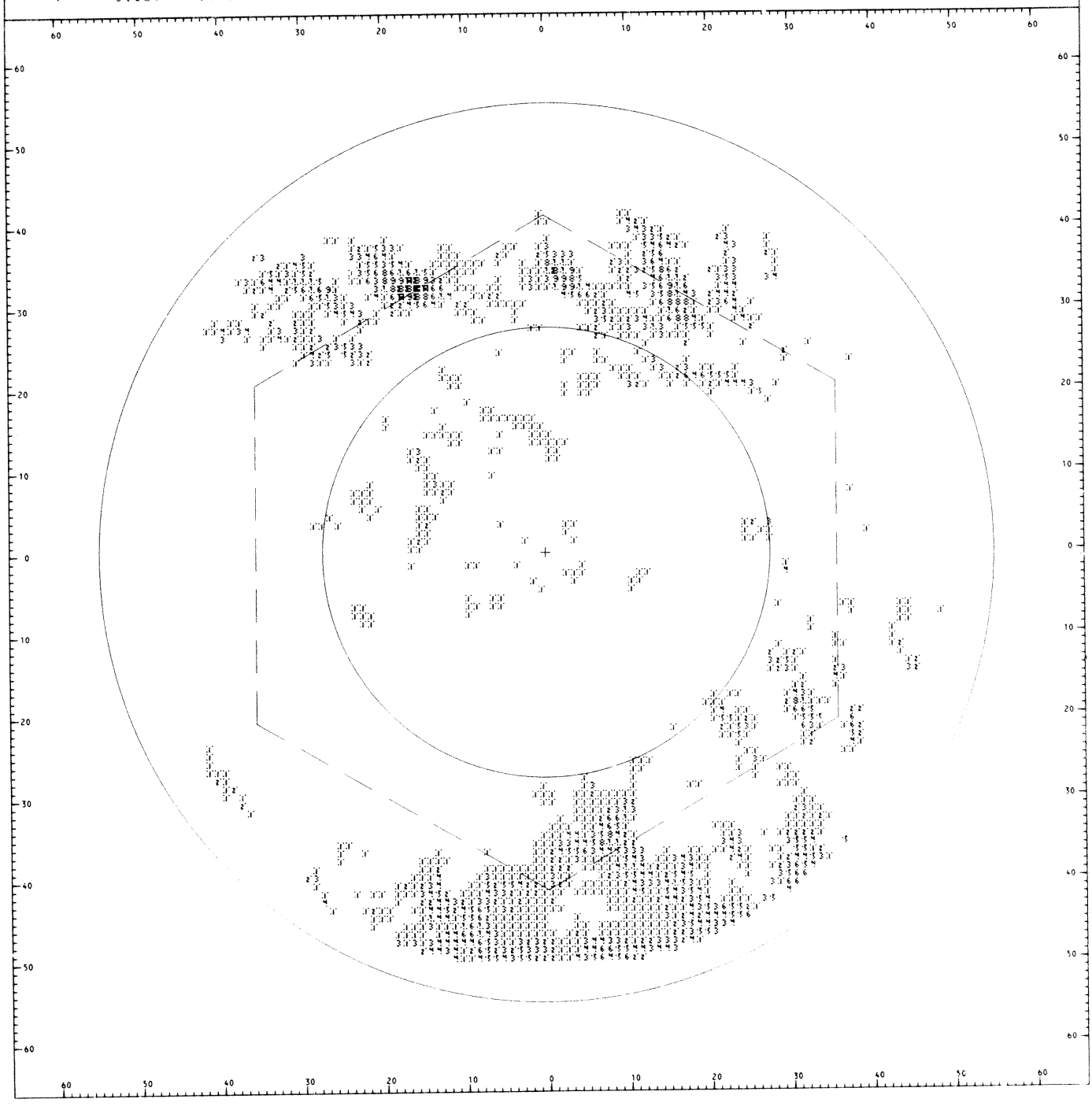
GATE RADAR DAILY RAINFALL RATE 192

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	111	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 11, 1974 (JULIAN DAY 192)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0027	0.0	0.0	0.0	0.0	0.0	0.0042	0.0	0.0004	0.0005	0.0	0.0	0.0	0.0005	0.0002
2	0.0001	0.0	0.0	0.0	0.0	0.0	0.0002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0001	0.0	0.0	0.0001	0.0	0.0	0.0002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0012	0.0	0.0	0.0	0.0	0.0	0.0015	0.0	0.0002	0.0002	0.0	0.0	0.0	0.0009	0.0005
7	0.0006	0.0004	0.0	0.0002	0.0	0.0010	0.0005	0.0007	0.0004	0.0004	0.0	0.0	0.0002	0.0017	0.0009
8	0.0032	0.0	0.0002	0.0	0.0006	0.0001	0.0010	0.0001	0.0007	0.0003	0.0002	0.0004	0.0002	0.0112	0.0057
9	0.0468	0.0	0.0	0.0003	0.0010	0.0015	0.0121	0.0	0.0082	0.0020	0.0043	0.0	0.0010	0.0173	0.0092
10	0.0231	0.0	0.0	0.0006	0.0010	0.0168	0.0120	0.0	0.0069	0.0049	0.0010	0.0	0.0039	0.0130	0.0084
11	0.0042	0.0	0.0005	0.0	0.0048	0.0159	0.0066	0.0	0.0042	0.0048	0.0	0.0007	0.0042	0.0172	0.0107
12	0.0047	0.0	0.0	0.0	0.0062	0.0169	0.0027	0.0	0.0046	0.0047	0.0	0.0	0.0052	0.0088	0.0070
13	0.0002	0.0	0.0	0.0	0.0010	0.0093	0.0003	0.0	0.0018	0.0020	0.0	0.0	0.0044	0.0078	0.0061
14	0.0	0.0	0.0	0.0	0.0	0.0003	0.0	0.0	0.0	0.0001	0.0	0.0	0.0004	0.0200	0.0102
15	0.0005	0.0	0.0	0.0	0.0	0.0080	0.0	0.0	0.0014	0.0015	0.0	0.0	0.0051	0.0091	0.0071
16	0.0536	0.0	0.0	0.0006	0.0009	0.0062	0.0047	0.0	0.0102	0.0020	0.0	0.0	0.0081	0.0150	0.0116
17	0.1515	0.0023	0.0014	0.0	0.0	0.0598	0.0283	0.0	0.0357	0.0149	0.0	0.0021	0.0256	0.0429	0.0343
18	0.0871	0.0085	0.0351	0.0	0.0	0.1001	0.0380	0.0	0.0383	0.0300	0.0	0.0526	0.0828	0.0512	0.0670
19	0.0349	0.0159	0.0808	0.0006	0.0	0.0426	0.0502	0.0156	0.0290	0.0313	0.0	0.1363	0.0829	0.0396	0.0613
20	0.1519	0.0231	0.0277	0.0029	0.0	0.0205	0.2126	0.0339	0.0375	0.0394	0.0	0.0691	0.0457	0.0488	0.0473
21	0.1761	0.0017	0.0540	0.0034	0.0	0.0096	0.2737	0.0026	0.0406	0.0459	0.0001	0.0594	0.0170	0.0550	0.0360
22	0.0059	0.0002	0.1193	0.0010	0.0	0.0020	0.0092	0.0003	0.0213	0.0242	0.0002	0.1491	0.0134	0.0278	0.0206
23	0.0004	0.0017	0.0443	0.0011	0.0	0.0001	0.0001	0.0026	0.0079	0.0089	0.0003	0.0537	0.0057	0.0094	0.0076
24	0.0001	0.0008	0.0090	0.0023	0.0	0.0065	0.0001	0.0012	0.0031	0.0035	0.0001	0.0074	0.0055	0.0041	0.0048
3	0.0010	0.0	0.0	0.0	0.0	0.0	0.0015	0.0	0.0002	0.0002	0.0	0.0	0.0	0.0002	0.0001
6	0.0004	0.0	0.0001	0.0	0.0	0.0	0.0005	0.0	0.0001	0.0001	0.0	0.0	0.0	0.0003	0.0002
9	0.0169	0.0002	0.0001	0.0002	0.0006	0.0009	0.0045	0.0003	0.0031	0.0009	0.0015	0.0001	0.0005	0.0101	0.0053
12	0.0107	0.0	0.0002	0.0002	0.0040	0.0165	0.0071	0.0	0.0052	0.0048	0.0003	0.0002	0.0044	0.0130	0.0087
15	0.0003	0.0	0.0	0.0	0.0004	0.0059	0.0001	0.0	0.0011	0.0012	0.0	0.0	0.0033	0.0123	0.0078
18	0.0974	0.0036	0.0122	0.0002	0.0003	0.0554	0.0237	0.0	0.0280	0.0157	0.0	0.0182	0.0388	0.0364	0.0376
21	0.1210	0.0136	0.0542	0.0023	0.0	0.0242	0.1789	0.0174	0.0357	0.0389	0.0	0.0883	0.0485	0.0478	0.0482
24	0.0021	0.0009	0.0575	0.0015	0.0	0.0029	0.0032	0.0014	0.0108	0.0122	0.0002	0.0701	0.0082	0.0138	0.0110
6	0.0007	0.0	0.0	0.0	0.0	0.0	0.0010	0.0	0.0001	0.0001	0.0	0.0	0.0	0.0002	0.0001
12	0.0138	0.0001	0.0001	0.0002	0.0023	0.0087	0.0058	0.0001	0.0042	0.0029	0.0009	0.0002	0.0024	0.0115	0.0070
18	0.0488	0.0018	0.0061	0.0001	0.0003	0.0306	0.0119	0.0	0.0146	0.0084	0.0	0.0091	0.0211	0.0244	0.0227
24	0.0616	0.0072	0.0558	0.0019	0.0	0.0135	0.0910	0.0094	0.0232	0.0255	0.0001	0.0792	0.0284	0.0308	0.0296
12	0.0072	0.0	0.0001	0.0001	0.0011	0.0044	0.0034	0.0001	0.0022	0.0015	0.0005	0.0001	0.0012	0.0059	0.0036
24	0.0552	0.0045	0.0310	0.0010	0.0002	0.0221	0.0515	0.0047	0.0189	0.0170	0.0001	0.0441	0.0247	0.0276	0.0261
24	0.0312	0.0023	0.0155	0.0005	0.0007	0.0132	0.0274	0.0024	0.0105	0.0092	0.0003	0.0221	0.0130	0.0167	0.0148

15

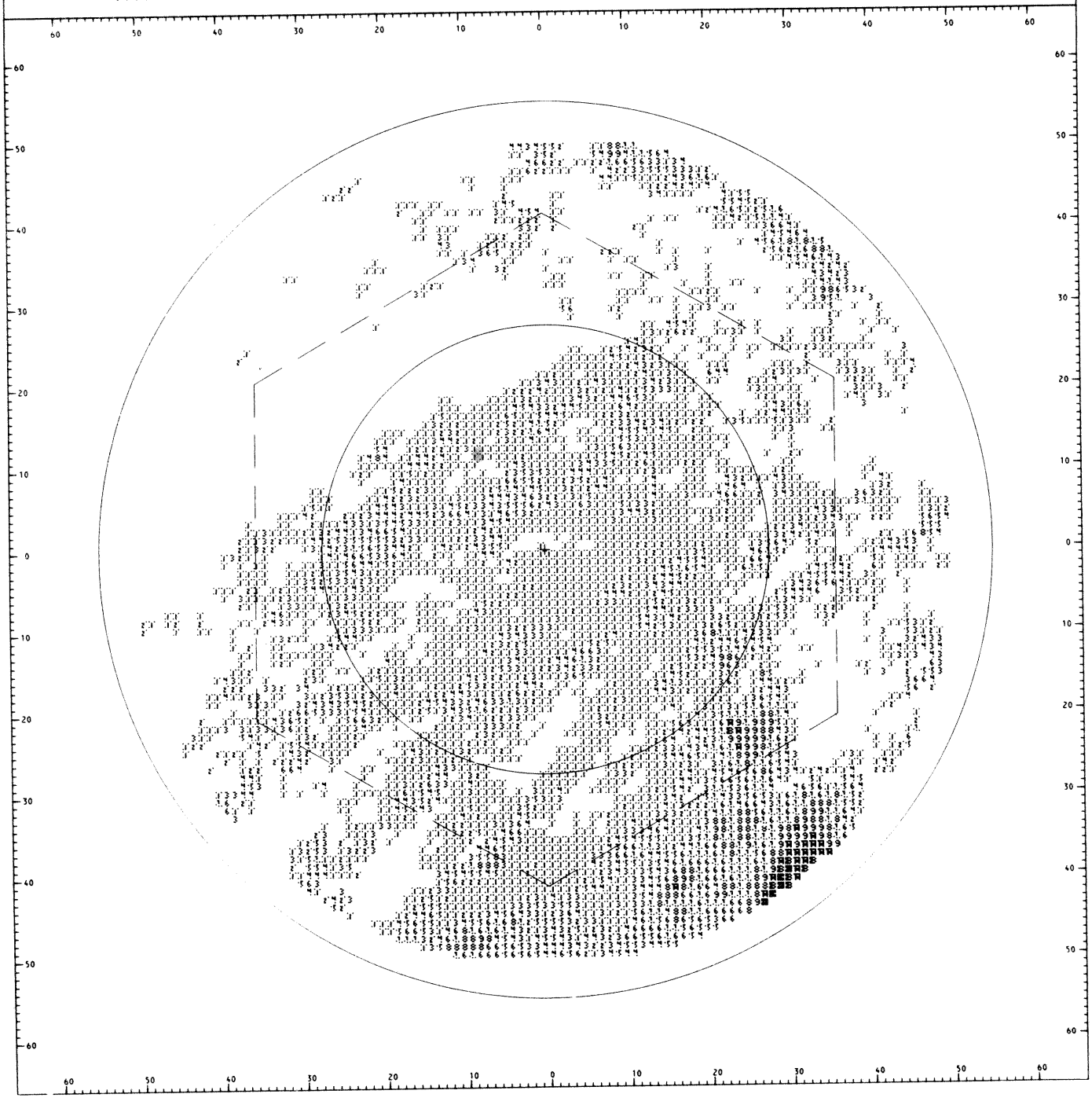
GATE RADAR DAILY RAINFALL RATE 193

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	114	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 12, 1974 (JULIAN DAY 193)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0015	0.0002	0.0018	0.0	0.0	0.0071	0.0008	0.0003	0.0017	0.0018	0.0	0.0025	0.0075	0.0012	0.0043
2	0.0028	0.0033	0.0	0.0016	0.0	0.0057	0.0038	0.0051	0.0022	0.0025	0.0019	0.0	0.0034	0.0013	0.0023
3	0.0059	0.0171	0.0	0.0	0.0	0.0011	0.0034	0.0109	0.0040	0.0020	0.0141	0.0	0.0027	0.0052	0.0039
4	0.0131	0.0256	0.0001	0.0010	0.0	0.0040	0.0067	0.0195	0.0073	0.0042	0.0300	0.0018	0.0022	0.0086	0.0054
5	0.0373	0.0324	0.0147	0.0008	0.0	0.0123	0.0411	0.0395	0.0163	0.0151	0.0707	0.0208	0.0057	0.0216	0.0137
6	0.0257	0.0207	0.0134	0.0	0.0011	0.0064	0.0270	0.0076	0.0112	0.0081	0.0097	0.0070	0.0047	0.0173	0.0110
7	0.0208	0.0164	0.0091	0.0062	0.0053	0.0145	0.0167	0.0035	0.0120	0.0091	0.0080	0.0082	0.0084	0.0122	0.0103
8	0.0352	0.0376	0.0027	0.0101	0.0028	0.0126	0.0028	0.0001	0.0168	0.0057	0.0010	0.0027	0.0083	0.0167	0.0125
9	0.0074	0.0048	0.0013	0.0123	0.0062	0.0	0.0002	0.0	0.0053	0.0038	0.0003	0.0012	0.0074	0.0057	0.0066
10	0.0008	0.0	0.0050	0.0211	0.0010	0.0	0.0	0.0	0.0046	0.0051	0.0	0.0005	0.0124	0.0030	0.0077
11	0.0	0.0002	0.0115	0.0134	0.0	0.0	0.0	0.0003	0.0042	0.0047	0.0	0.0005	0.0097	0.0077	0.0087
12	0.0	0.0006	0.0174	0.0108	0.0015	0.0003	0.0	0.0009	0.0051	0.0058	0.0	0.0035	0.0025	0.0172	0.0099
13	0.0051	0.0109	0.0344	0.0006	0.0111	0.0	0.0	0.0112	0.0103	0.0101	0.0	0.0178	0.0022	0.0609	0.0315
14	0.0038	0.0580	0.0245	0.0004	0.0247	0.0034	0.0	0.0792	0.0193	0.0198	0.0014	0.0072	0.0099	0.1195	0.0647
15	0.0018	0.0682	0.0253	0.0067	0.0675	0.0041	0.0019	0.1060	0.0291	0.0330	0.0349	0.0270	0.0371	0.1830	0.1101
16	0.0079	0.0478	0.1200	0.0446	0.1413	0.0251	0.0117	0.0742	0.0646	0.0733	0.0791	0.1713	0.0533	0.2686	0.1609
17	0.0075	0.1051	0.3840	0.0446	0.0715	0.0201	0.0116	0.1252	0.1054	0.1150	0.0119	0.5704	0.0327	0.4518	0.2422
18	0.0319	0.1272	0.4902	0.0216	0.0463	0.0357	0.0496	0.1450	0.1253	0.1359	0.0731	0.8117	0.0221	0.3160	0.1691
19	0.0140	0.0782	0.2933	0.0756	0.0286	0.0937	0.0219	0.1161	0.0970	0.1095	0.0340	0.5254	0.0595	0.1448	0.1021
20	0.0045	0.0959	0.2045	0.1030	0.0438	0.1104	0.0071	0.0971	0.0936	0.0999	0.0043	0.3244	0.0798	0.0793	0.0796
21	0.0369	0.0917	0.1417	0.1656	0.0439	0.0559	0.0578	0.0621	0.0892	0.0914	0.0103	0.2001	0.0697	0.0613	0.0655
22	0.0960	0.0190	0.0658	0.1496	0.0704	0.0067	0.1504	0.0239	0.0678	0.0763	0.1092	0.0154	0.0617	0.0413	0.0515
23	0.1515	0.0238	0.0173	0.1089	0.0843	0.0121	0.2135	0.0370	0.0663	0.0724	0.2459	0.0012	0.0446	0.0459	0.0453
24	0.1556	0.0306	0.0392	0.1318	0.1380	0.0541	0.2067	0.0481	0.0915	0.0996	0.2038	0.0	0.1184	0.0836	0.1010
3	0.0034	0.0069	0.0006	0.0005	0.0	0.0046	0.0027	0.0054	0.0027	0.0021	0.0053	0.0009	0.0045	0.0025	0.0035
6	0.0254	0.0262	0.0094	0.0006	0.0004	0.0076	0.0250	0.0222	0.0116	0.0091	0.0368	0.0099	0.0042	0.0159	0.0100
9	0.0211	0.0196	0.0044	0.0095	0.0048	0.0090	0.0066	0.0012	0.0114	0.0062	0.0031	0.0040	0.0080	0.0115	0.0098
12	0.0003	0.0003	0.0113	0.0151	0.0008	0.0001	0.0	0.0004	0.0046	0.0052	0.0	0.0015	0.0082	0.0093	0.0088
15	0.0036	0.0457	0.0280	0.0026	0.0345	0.0025	0.0007	0.0655	0.0196	0.0210	0.0121	0.0174	0.0164	0.1211	0.0688
18	0.0158	0.0934	0.3314	0.0369	0.0863	0.0270	0.0243	0.1148	0.0984	0.1081	0.0547	0.5178	0.0361	0.3455	0.1908
21	0.0185	0.0886	0.2132	0.1147	0.0387	0.0866	0.0289	0.0918	0.0932	0.1003	0.0162	0.3500	0.0697	0.0951	0.0824
24	0.1344	0.0245	0.0408	0.1301	0.0976	0.0243	0.1902	0.0363	0.0752	0.0828	0.1863	0.0056	0.0749	0.0569	0.0659
6	0.0144	0.0165	0.0050	0.0006	0.0002	0.0061	0.0138	0.0138	0.0071	0.0056	0.0210	0.0054	0.0043	0.0092	0.0068
12	0.0107	0.0099	0.0078	0.0123	0.0028	0.0046	0.0033	0.0008	0.0080	0.0057	0.0016	0.0028	0.0081	0.0104	0.0093
18	0.0097	0.0695	0.1797	0.0197	0.0604	0.0147	0.0125	0.0901	0.0590	0.0645	0.0334	0.2676	0.0262	0.2333	0.1298
24	0.0764	0.0565	0.1270	0.1224	0.0681	0.0555	0.1096	0.0640	0.0842	0.0915	0.1012	0.1778	0.0723	0.0760	0.0741
12	0.0125	0.0132	0.0064	0.0064	0.0015	0.0053	0.0085	0.0073	0.0076	0.0056	0.0113	0.0041	0.0062	0.0098	0.0080
24	0.0430	0.0630	0.1534	0.0711	0.0643	0.0351	0.0610	0.0771	0.0716	0.0780	0.0673	0.2227	0.0493	0.1546	0.1019
24	0.0278	0.0381	0.0799	0.0388	0.0329	0.0202	0.0348	0.0422	0.0396	0.0418	0.0393	0.1134	0.0277	0.0822	0.0550

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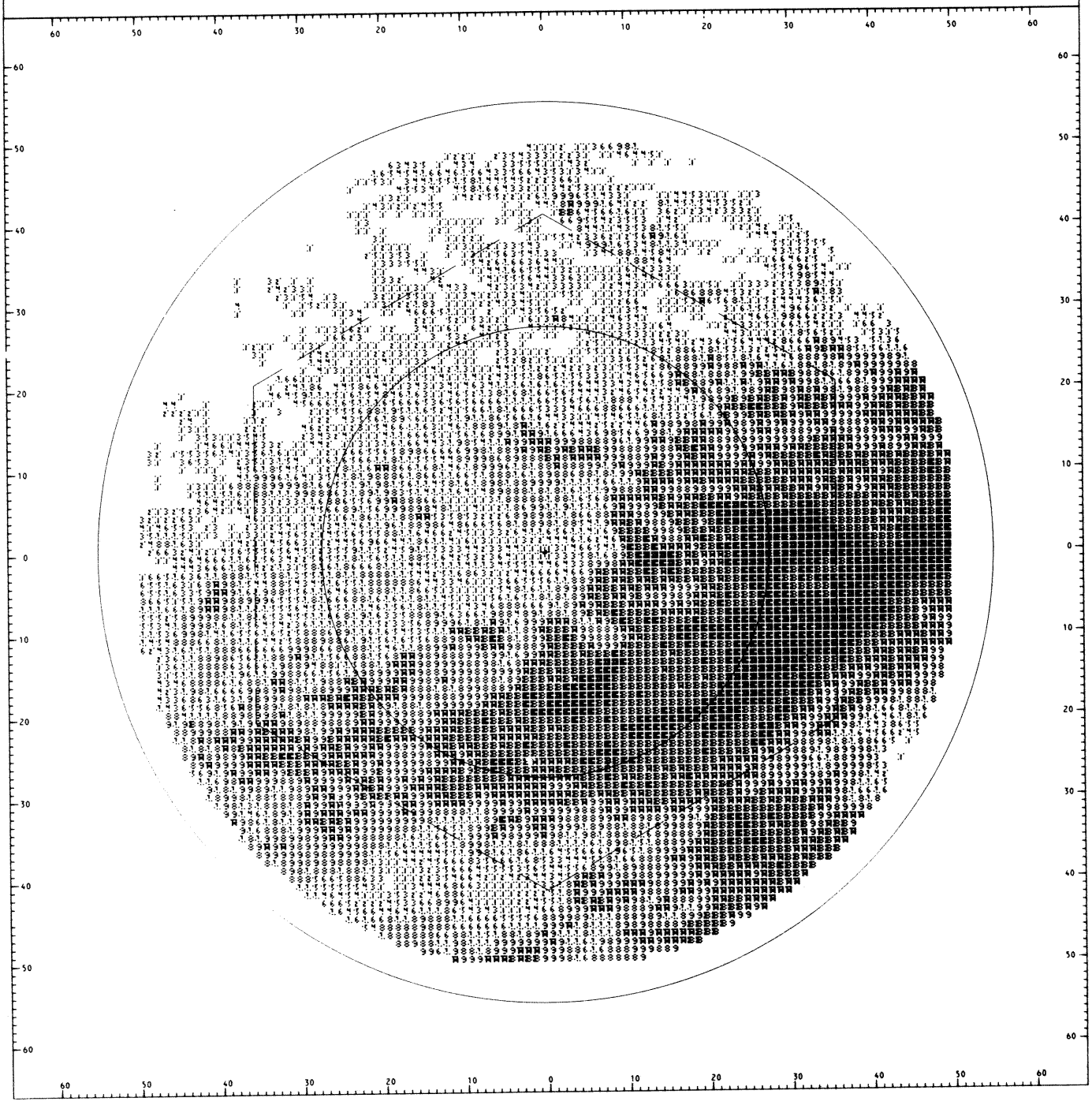
GATE RADAR DAILY RAINFALL RATE 194

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	102	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 13, 1974 (JULIAN DAY 194)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0789	0.0096	0.1143	0.2541	0.1820	0.0607	0.0932	0.0171	0.1165	0.1289	0.0977	0.0563	0.1495	0.1668	0.1581
2	0.0329	0.0425	0.2412	0.2141	0.1880	0.0428	0.0376	0.0713	0.1268	0.1431	0.0838	0.2792	0.1174	0.2299	0.1737
3	0.0123	0.1625	0.3536	0.0972	0.2105	0.0222	0.0179	0.1989	0.1433	0.1560	0.0196	0.4865	0.0866	0.2345	0.1606
4	0.0289	0.1975	0.3305	0.0523	0.2540	0.0020	0.0450	0.1806	0.1446	0.1487	0.0021	0.4367	0.1147	0.2102	0.1625
5	0.0112	0.2038	0.3728	0.0259	0.0992	0.0003	0.0175	0.2271	0.1190	0.1242	0.0085	0.4349	0.1340	0.1814	0.1577
6	0.0068	0.2706	0.2884	0.0356	0.1356	0.0	0.0042	0.2572	0.1232	0.1192	0.0222	0.3213	0.1743	0.2122	0.1932
7	0.0271	0.2919	0.2200	0.0353	0.4147	0.0006	0.0141	0.2832	0.1659	0.1641	0.0559	0.3437	0.2025	0.2776	0.2401
8	0.0272	0.3356	0.2738	0.0884	0.4125	0.0335	0.0353	0.2466	0.1960	0.1881	0.0086	0.5469	0.2693	0.3649	0.3171
9	0.0637	0.4901	0.2469	0.2928	0.6213	0.1032	0.0963	0.3959	0.3042	0.3003	0.1119	0.6539	0.3382	0.4439	0.3911
10	0.0562	0.7063	0.2931	0.5823	0.4767	0.1544	0.0749	0.7679	0.3792	0.3888	0.0564	0.6614	0.3196	0.5973	0.4584
11	0.3009	0.3959	0.6081	0.7029	0.1674	0.2348	0.1735	0.2657	0.4011	0.3769	0.2596	0.6855	0.2660	0.6967	0.4813
12	0.5550	0.6525	0.7732	0.6976	0.0790	0.2033	0.3725	0.5723	0.4928	0.4458	0.3574	1.0056	0.2301	0.7626	0.4963
13	0.7073	1.1622	1.0534	0.9509	0.0594	0.0858	0.6867	0.7037	0.6695	0.5745	0.7706	0.9465	0.2462	0.9124	0.5792
14	1.0677	1.3672	0.9641	0.9343	0.0462	0.0900	0.9415	0.8708	0.7447	0.6041	1.2327	0.5365	0.2502	1.1269	0.6884
15	0.5894	1.9639	1.2486	0.8392	0.0506	0.1120	0.3607	1.7964	0.8016	0.6890	0.9089	0.9510	0.2983	1.4426	0.8703
16	0.3874	3.5962	2.0750	1.4084	0.0903	0.1122	0.2748	2.7178	1.2809	1.0629	1.1420	2.2015	0.4194	2.0370	1.2280
17	0.3080	3.7373	3.0226	1.6346	0.1279	0.1347	0.2948	2.9462	1.4960	1.3259	0.5899	3.9978	0.5074	2.2226	1.3648
18	0.3822	4.7995	3.2305	2.0642	0.1520	0.1187	0.5456	3.8002	1.7941	1.5829	1.0486	5.3163	0.6125	2.5000	1.5560
19	0.3041	6.2532	3.6048	2.3856	0.2746	0.1818	0.2922	6.4136	2.1722	2.0410	2.7747	5.9223	0.7370	2.7674	1.7519
20	0.7084	6.5803	4.2138	2.3661	0.6754	0.2080	0.2110	7.2169	2.4639	2.3228	3.9487	4.4415	0.7249	2.7825	1.7535
21	1.3108	4.5364	5.0849	3.2046	0.4433	0.3726	0.4489	4.6674	2.4915	2.3458	1.6141	3.9482	0.9539	2.3366	1.6450
22	0.8325	4.8678	5.6080	2.7833	0.2432	0.6158	0.8503	4.5579	2.4915	2.4073	1.2632	6.7623	0.8967	2.2770	1.5866
23	1.1242	3.6805	3.6987	1.2637	0.6493	0.8467	1.5505	4.1680	1.8781	1.9186	2.3357	4.8454	0.6842	1.8643	1.2740
24	1.2151	1.8415	2.4538	0.9663	0.9127	1.0939	1.7690	2.6069	1.4132	1.5587	3.2131	1.2833	0.8023	1.4581	1.1299
3	0.0413	0.0715	0.2364	0.1885	0.1935	0.0419	0.0496	0.0958	0.1289	0.1427	0.0670	0.2740	0.1179	0.2104	0.1641
6	0.0156	0.2240	0.3306	0.0379	0.1629	0.0007	0.0222	0.2216	0.1289	0.1307	0.0109	0.3976	0.1410	0.2013	0.1711
9	0.0393	0.3726	0.2469	0.1389	0.4828	0.0458	0.0486	0.3086	0.2220	0.2175	0.0588	0.5148	0.2700	0.3621	0.3160
12	0.3040	0.5849	0.5581	0.6609	0.2410	0.1975	0.2070	0.5353	0.4243	0.4038	0.2245	0.7841	0.2719	0.6855	0.4787
15	0.7881	1.4977	1.0887	0.9081	0.0521	0.0959	0.6630	1.1236	0.7386	0.6225	0.9707	0.8113	0.2649	1.1606	0.7125
18	0.3592	4.0443	2.7760	1.7024	0.1234	0.1219	0.3717	3.1547	1.5236	1.3239	0.9268	3.8385	0.5131	2.2530	1.3827
21	0.7744	5.7900	4.3012	2.6521	0.4645	0.2542	0.3174	6.0993	2.3758	2.2364	2.7792	4.7706	0.8052	2.6287	1.7166
24	1.0572	3.4632	3.9202	1.6711	0.6017	0.8521	1.3899	3.7776	1.9275	1.9614	2.2706	4.2970	0.7944	1.8663	1.3300
6	0.0285	0.1478	0.2835	0.1132	0.1782	0.0213	0.0359	0.1587	0.1289	0.1367	0.0390	0.3358	0.1294	0.2058	0.1676
12	0.1717	0.4787	0.4025	0.3999	0.3619	0.1216	0.1278	0.4219	0.3231	0.3106	0.1416	0.6495	0.2709	0.5238	0.3973
18	0.5737	2.7710	1.9323	1.3053	0.0877	0.1089	0.5174	2.1391	1.1311	0.9732	0.9488	2.3249	0.3890	1.7066	1.0474
24	0.9158	4.6267	4.1107	2.1616	0.5331	0.5531	0.8536	4.9384	2.1515	2.0989	2.5249	4.5338	0.7998	2.2474	1.5232
12	0.1001	0.3132	0.3430	0.2565	0.2701	0.0715	0.0818	0.2903	0.2260	0.2237	0.0903	0.4927	0.2001	0.3648	0.2825
24	0.7447	3.6988	3.0215	1.7334	0.3104	0.3310	0.6855	3.5388	1.6412	1.5360	1.7368	3.4293	0.5944	1.9769	1.2852
24	0.4224	2.0060	1.6822	0.9949	0.2903	0.2012	0.3837	1.9145	0.9338	0.8800	0.9136	1.9610	0.3973	1.1709	0.7837

17

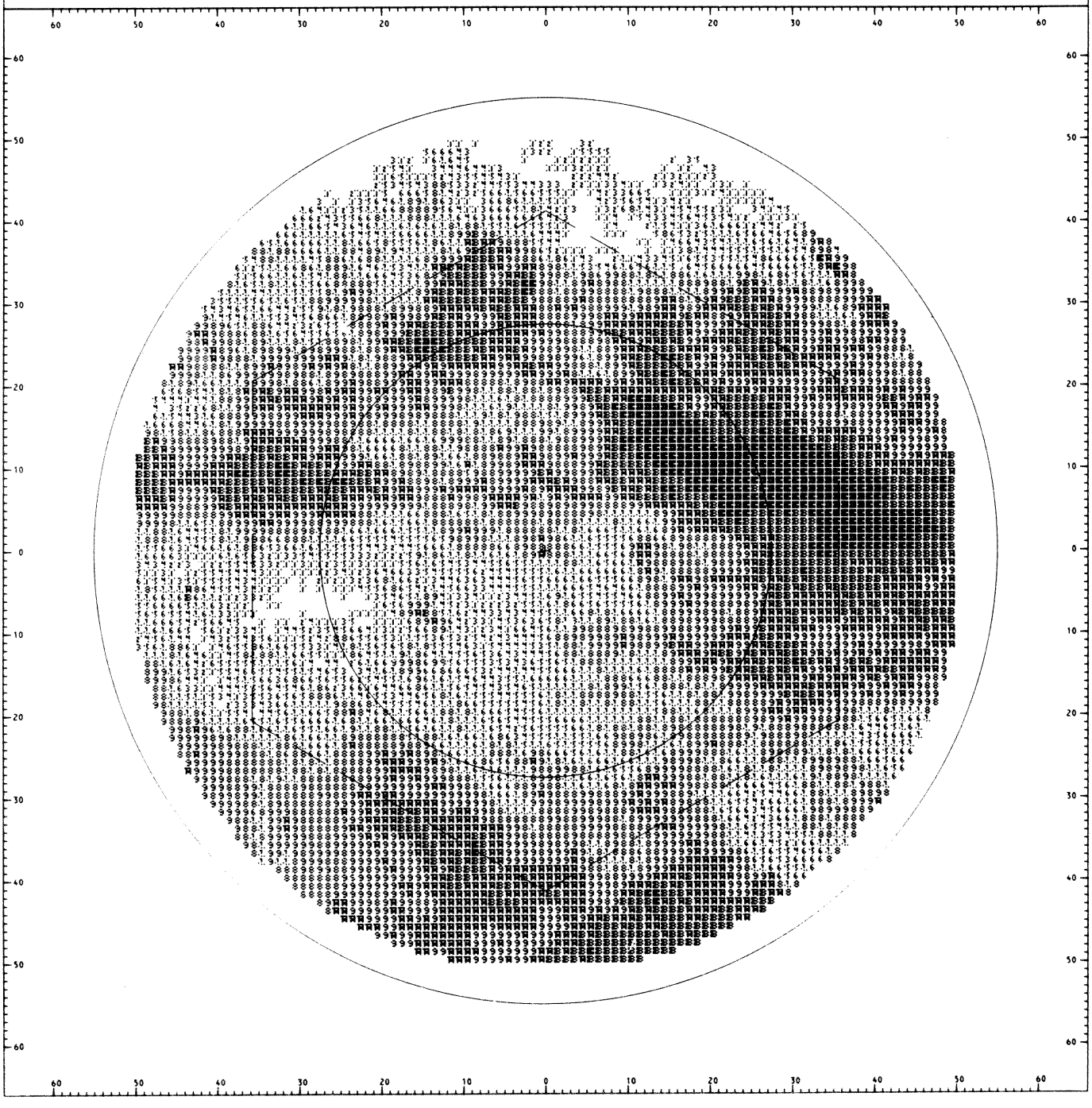
GATE RADAR DAILY RAINFALL RATE 195

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	114	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	▼	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 14, 1974 (JULIAN DAY 195)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	1.2275	1.2368	1.1893	0.2529	0.8284	1.0422	1.7057	1.9087	0.9630	1.0669	2.7323	0.6346	0.6035	1.2520	0.9275
2	0.8742	0.7441	0.5388	0.2572	0.7177	0.8107	1.1680	1.0708	0.6575	0.7124	0.5380	0.7150	0.5556	0.9101	0.7328
3	0.9316	0.1319	0.4368	0.7318	0.6819	0.4176	0.9574	0.1872	0.5545	0.5674	0.3991	0.4417	0.6608	0.6638	0.6622
4	0.8020	0.0822	0.5697	1.3346	0.4623	0.3653	0.5904	0.1282	0.6010	0.6028	0.6536	0.1829	0.7959	0.7405	0.7680
5	0.3973	0.0885	0.4972	1.9856	0.2072	0.3097	0.3595	0.1379	0.5787	0.6259	0.1012	0.2529	0.9006	0.5417	0.7210
6	0.3097	0.4391	0.7912	1.9935	0.1578	0.2183	0.2197	0.4081	0.6498	0.6727	0.0276	0.6882	0.8975	0.5296	0.7134
7	0.5560	0.5431	0.9747	1.2891	0.2533	0.1905	0.5606	0.4594	0.6333	0.6349	0.4069	0.8641	0.8852	0.6068	0.7459
8	0.8682	0.7585	2.1317	0.5002	0.0763	0.2412	0.8084	1.0567	0.7610	0.7834	0.4088	3.4974	0.6239	1.0604	0.8421
9	1.0839	1.3778	1.9443	0.0977	0.0138	0.4327	0.7482	1.6002	0.8244	0.7562	0.5928	3.8235	0.3165	1.2620	0.7892
10	1.0953	1.3771	0.6516	0.0051	0.0023	0.3994	1.0233	1.3991	0.5890	0.4950	1.0667	1.5186	0.2759	1.1434	0.7095
11	1.1980	1.5750	0.2194	0.0267	0.0114	0.5110	1.6439	0.9252	0.5912	0.4566	1.6511	0.5653	0.3845	0.9930	0.6885
12	1.1102	1.8799	0.1096	0.0756	0.2081	1.4240	1.2916	1.2939	0.8024	0.6579	1.4127	0.1919	0.5440	0.9615	0.7524
13	1.1605	2.3982	0.1709	0.1847	0.5182	2.0529	1.2107	1.1992	1.0824	0.8463	1.2117	0.1184	0.6773	1.2815	0.9791
14	1.7468	2.4624	0.2801	0.2533	0.7678	1.2101	2.3119	0.4331	1.1221	0.8067	1.3593	0.0548	0.5885	1.4377	1.0129
15	2.0624	2.0603	0.4603	0.3719	0.8137	0.7668	2.5348	0.5263	1.0905	0.8265	1.3905	0.3568	0.5257	1.5093	1.0173
16	2.1102	1.9265	0.5526	0.4476	0.7512	0.8857	2.6321	1.2583	1.1130	0.9706	2.6532	0.6821	0.6158	1.3964	1.0058
17	1.6335	2.4445	0.5037	0.4226	0.5431	1.6506	1.7896	2.0521	1.2007	1.0576	2.4594	0.5137	0.7313	1.2321	0.9814
18	1.3665	2.5464	0.4614	0.4066	0.3146	2.2097	1.2036	2.0171	1.2182	1.0335	2.0684	0.6600	0.7962	1.0855	0.9405
19	1.2426	2.5252	0.4428	0.2037	0.3548	1.6953	0.9149	2.0831	1.0789	0.8759	1.3641	1.1013	0.6433	1.0287	0.8356
20	1.4793	2.5342	0.4307	0.0771	0.9871	1.2584	1.0061	2.2066	1.1306	0.9146	1.8961	1.1112	0.6705	1.1139	0.8919
21	1.3693	2.5864	0.1559	0.0108	1.6867	0.8926	0.8701	2.5806	1.1216	0.9449	1.9807	0.5012	0.5847	1.0421	0.8131
22	1.4577	1.9446	0.0038	0.0001	1.1855	0.8224	1.2493	1.8074	0.9056	0.7555	1.3810	0.0962	0.4880	0.8359	0.6617
23	1.7983	1.2435	0.0025	0.0	0.6826	0.8520	2.2134	0.7524	0.7641	0.6505	2.6534	0.0812	0.3983	0.6944	0.5463
24	1.7141	1.1441	0.0044	0.0	0.4490	0.8418	1.9816	1.0957	0.6927	0.6187	3.1140	0.0922	0.3068	0.6504	0.4786
3	1.0111	0.7042	0.7216	0.4140	0.7426	0.7568	1.2770	1.0556	0.7250	0.7822	1.2231	0.5971	0.6066	0.9420	0.7740
6	0.5030	0.2033	0.6193	1.7712	0.2758	0.2978	0.3898	0.2247	0.6098	0.6338	0.2608	0.3747	0.8647	0.6039	0.7340
9	0.8360	0.8931	1.6835	0.6290	0.1145	0.2882	0.7057	1.0388	0.7395	0.7248	0.4695	2.7283	0.6085	0.9764	0.7923
12	1.1345	1.6106	0.3269	0.0358	0.0739	0.7781	1.3196	1.2060	0.6608	0.5365	1.3768	0.7585	0.4014	1.0326	0.7166
15	1.6566	2.3069	0.3038	0.2700	0.6999	1.3432	2.0191	0.7195	1.0980	0.8265	1.3205	0.1767	0.5972	1.4093	1.0028
18	1.7034	2.3058	0.5059	0.4256	0.5363	1.5820	1.8751	1.7758	1.1771	1.0205	2.3936	0.6186	0.7144	1.2378	0.9757
21	1.3637	2.5486	0.3431	0.0972	1.0095	1.2821	0.9303	2.2901	1.1102	0.9118	1.7470	0.9045	0.6329	1.0614	0.8467
24	1.6567	1.4440	0.0036	0.0001	0.7723	0.8387	1.8148	1.2185	0.7875	0.6749	2.3828	0.0899	0.3977	0.7269	0.5621
6	0.7570	0.4538	0.6705	1.0926	0.5092	0.5273	0.8334	0.6401	0.6674	0.7080	0.7420	0.4859	0.7356	0.7729	0.7540
12	0.9852	1.2518	1.0052	0.3324	0.0942	0.5331	1.0126	1.1224	0.7002	0.6306	0.9232	1.7434	0.5050	1.0045	0.7544
18	1.6800	2.3063	0.4048	0.3478	0.6180	1.4626	1.9471	1.2476	1.1373	0.9235	1.8570	0.3976	0.6558	1.3234	0.9891
24	1.5102	1.9963	0.1733	0.0486	0.8909	1.0604	1.3726	1.7543	0.9488	0.7933	2.0649	0.4972	0.5153	0.8942	0.7042
12	0.8711	0.8528	0.8378	0.7125	0.3017	0.5302	0.9230	0.8813	0.6838	0.6693	0.8326	1.1146	0.6203	0.8887	0.7542
24	1.5951	2.1513	0.2891	0.1982	0.7545	1.2615	1.6598	1.5009	1.0429	0.8584	1.9610	0.4474	0.5855	1.1086	0.8465
24	1.2331	1.5020	0.5634	0.4553	0.5280	0.8958	1.2914	1.1911	0.8637	0.7638	1.3967	0.7810	0.6029	0.9989	0.8001

18

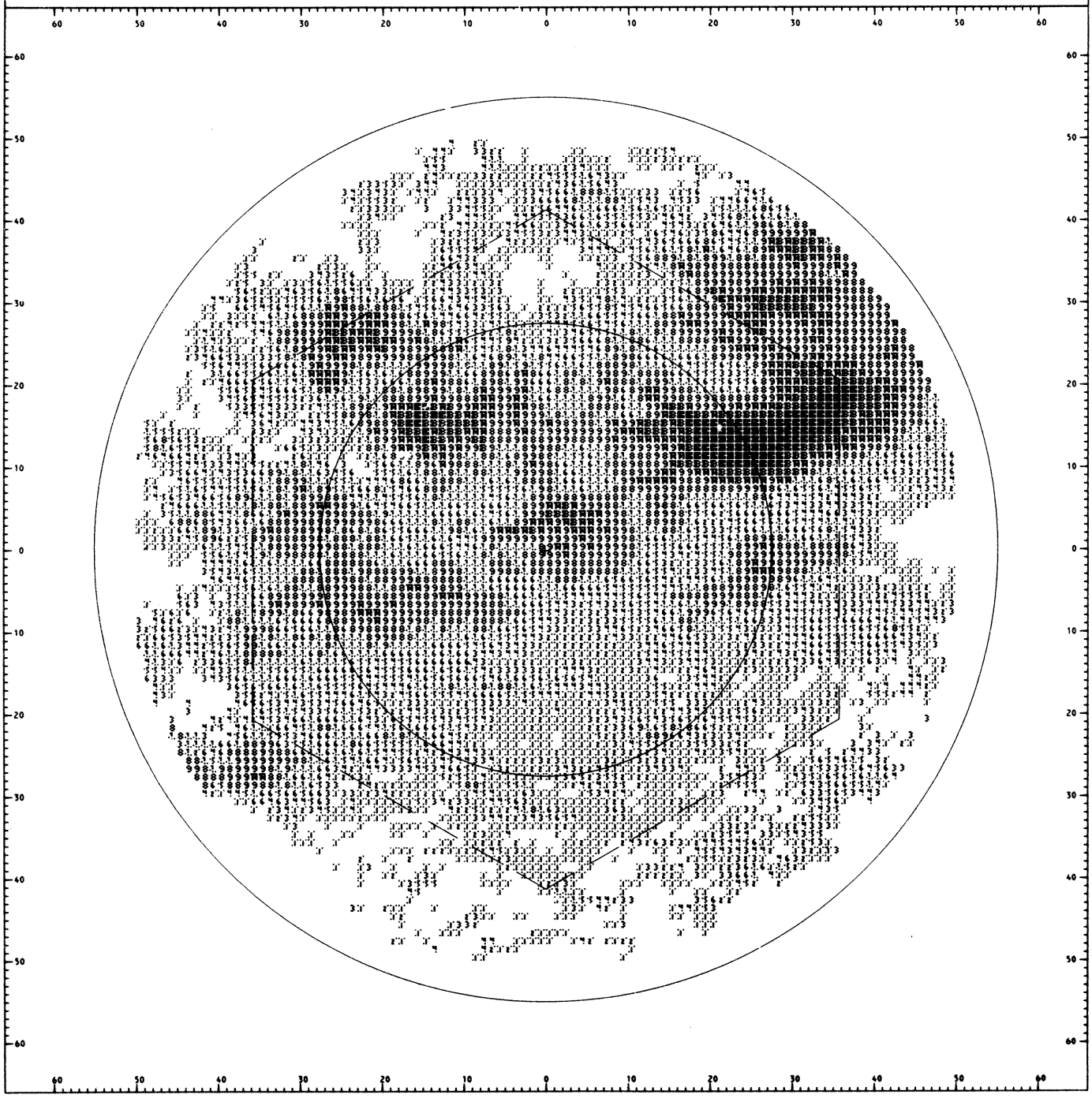
GATE RADAR DAILY RAINFALL RATE 196

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	120	058	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 15, 1974 (JULIAN DAY 196)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	1.3494	1.2773	0.0075	0.0010	0.1853	0.6641	1.7040	1.0871	0.5815	0.5011	2.7692	0.0553	0.1951	0.6066	0.4009
2	0.9574	1.1861	0.0064	0.0045	0.4908	0.3135	1.1008	1.1931	0.4948	0.4344	2.6520	0.0366	0.2066	0.5840	0.3953
3	0.9986	0.7953	0.0500	0.0476	0.5750	0.1353	1.0098	0.8495	0.4349	0.3800	1.4524	0.0051	0.1726	0.5142	0.3434
4	1.4216	1.3316	0.1201	0.1267	0.8192	0.0945	1.3498	0.9153	0.6544	0.4961	0.8393	0.0071	0.2614	0.6965	0.4789
5	1.4012	1.4203	0.1221	0.2056	1.0078	0.0942	1.1833	1.0025	0.7110	0.5381	0.6068	0.0035	0.2889	0.7477	0.5182
6	1.1205	1.7358	0.1239	0.3241	1.4587	0.2821	0.7869	1.4675	0.8446	0.6920	0.5152	0.2564	0.4261	0.7639	0.5949
7	0.7295	1.7535	0.0608	0.4193	1.4868	0.5459	0.6527	1.5336	0.8365	0.7452	0.6265	0.5767	0.4638	0.6355	0.5496
8	0.7970	1.4766	0.0829	0.5915	1.5445	0.2956	0.9425	1.1768	0.8015	0.7365	1.1315	0.2129	0.4979	0.6513	0.5745
9	1.3298	1.1731	0.1062	0.6775	1.0370	0.4912	1.4931	0.7488	0.8039	0.7104	1.6973	0.0670	0.5542	0.7192	0.6365
10	1.4505	1.5718	0.0862	0.6888	0.6169	0.6645	1.6365	0.7849	0.8476	0.6828	1.9634	0.0569	0.6295	0.8858	0.7573
11	1.9075	1.8451	0.1006	0.3402	0.2932	1.1465	1.5638	0.3421	0.9394	0.5853	1.2395	0.1001	0.4966	1.0769	0.7864
12	1.8331	0.7479	0.1459	0.1414	0.1849	1.7357	1.3247	0.0883	0.7965	0.5867	0.6070	0.1069	0.4591	0.8216	0.6399
13	0.6394	0.0306	0.2577	0.0965	0.1414	3.4360	0.4360	0.0205	0.7636	0.7961	0.1023	0.3167	0.7375	0.2646	0.5010
14	0.3019	0.0080	0.1308	0.0214	0.1373	1.7941	0.2463	0.0126	0.3973	0.4241	0.0248	0.1865	0.3622	0.1391	0.2507
15	0.1534	0.0352	0.0387	0.0663	0.0684	1.2359	0.1223	0.0505	0.2653	0.2866	0.0839	0.0534	0.2537	0.0596	0.1566
16	0.0449	0.0184	0.0090	0.0546	0.0164	0.4443	0.0396	0.0275	0.0975	0.1070	0.0162	0.0078	0.0958	0.0459	0.0709
17	0.0039	0.0008	0.0183	0.0178	0.0	0.2061	0.0025	0.0013	0.0410	0.0461	0.0	0.0168	0.0425	0.0471	0.0448
18	0.0208	0.0002	0.0367	0.0350	0.0	0.1086	0.0248	0.0003	0.0334	0.0370	0.0004	0.0180	0.0296	0.0305	0.0300
19	0.0052	0.0002	0.0449	0.0218	0.0020	0.0781	0.0081	0.0003	0.0252	0.0287	0.0009	0.0193	0.0238	0.0241	0.0239
20	0.0071	0.0090	0.0989	0.0268	0.0033	0.0263	0.0052	0.0088	0.0285	0.0310	0.0003	0.0416	0.0139	0.0332	0.0236
21	0.0017	0.0333	0.0956	0.0585	0.0015	0.0214	0.0011	0.0304	0.0352	0.0372	0.0125	0.0713	0.0168	0.0384	0.0276
22	0.0046	0.0229	0.0931	0.0873	0.0	0.0193	0.0045	0.0321	0.0378	0.0421	0.0086	0.0834	0.0260	0.0312	0.0286
23	0.0014	0.0033	0.0556	0.0737	0.0012	0.0173	0.0019	0.0041	0.0253	0.0286	0.0005	0.0524	0.0289	0.0162	0.0226
24	0.0068	0.0084	0.0400	0.0235	0.0004	0.0105	0.0053	0.0145	0.0149	0.0164	0.0013	0.0522	0.0142	0.0270	0.0206
3	1.1018	1.0862	0.0213	0.0177	0.4170	0.3710	1.2715	1.0432	0.5037	0.4385	2.2912	0.0323	0.1914	0.5683	0.3798
6	1.3144	1.4959	0.1220	0.2188	1.0952	0.1569	1.1067	1.1284	0.7366	0.5754	0.6538	0.0890	0.3255	0.7360	0.5307
9	0.9521	1.4677	0.0833	0.5628	1.3561	0.4443	1.0294	1.1530	0.8140	0.7307	1.1518	0.2855	0.5053	0.6687	0.5867
12	1.7303	1.3882	0.1109	0.3901	0.3650	1.1822	1.5083	0.4052	0.8612	0.6182	1.2700	0.0880	0.5284	0.9282	0.7276
15	0.3649	0.0246	0.1424	0.0614	0.1157	2.1553	0.2682	0.0279	0.4753	0.5022	0.0704	0.1855	0.4511	0.1544	0.3028
18	0.0232	0.0065	0.0213	0.0358	0.0055	0.2530	0.0223	0.0097	0.0573	0.0634	0.0055	0.0142	0.0560	0.0412	0.0486
21	0.0047	0.0142	0.0798	0.0357	0.0022	0.0419	0.0048	0.0132	0.0296	0.0323	0.0046	0.0440	0.0182	0.0319	0.0250
24	0.0043	0.0115	0.0629	0.0615	0.0005	0.0157	0.0039	0.0169	0.0260	0.0291	0.0035	0.0627	0.0230	0.0248	0.0239
6	1.2081	1.2910	0.0717	0.1182	0.7561	0.2640	1.1891	1.0858	0.6202	0.5070	1.4725	0.0607	0.2584	0.6521	0.4553
12	1.3412	1.4280	0.0971	0.4764	0.8605	0.8132	1.2689	0.7791	0.8376	0.6744	1.2109	0.1868	0.5168	0.7984	0.6571
18	0.1941	0.0155	0.0819	0.0486	0.0606	1.2041	0.1453	0.0188	0.2663	0.2828	0.0379	0.0999	0.2535	0.0978	0.1756
24	0.0045	0.0129	0.0714	0.0486	0.0014	0.0288	0.0043	0.0150	0.0278	0.0307	0.0040	0.0534	0.0206	0.0284	0.0245
12	1.2747	1.3595	0.0844	0.2974	0.8083	0.5386	1.2290	0.9324	0.7288	0.5907	1.3417	0.1237	0.3876	0.7253	0.5560
24	0.0993	0.0142	0.0766	0.0486	0.0310	0.6165	0.0748	0.0169	0.1470	0.1567	0.0210	0.0766	0.1371	0.0631	0.1000
24	0.6870	0.6868	0.0805	0.1730	0.4197	0.5775	0.6519	0.4747	0.4379	0.3737	0.6813	0.1002	0.2623	0.3941	0.3282

19

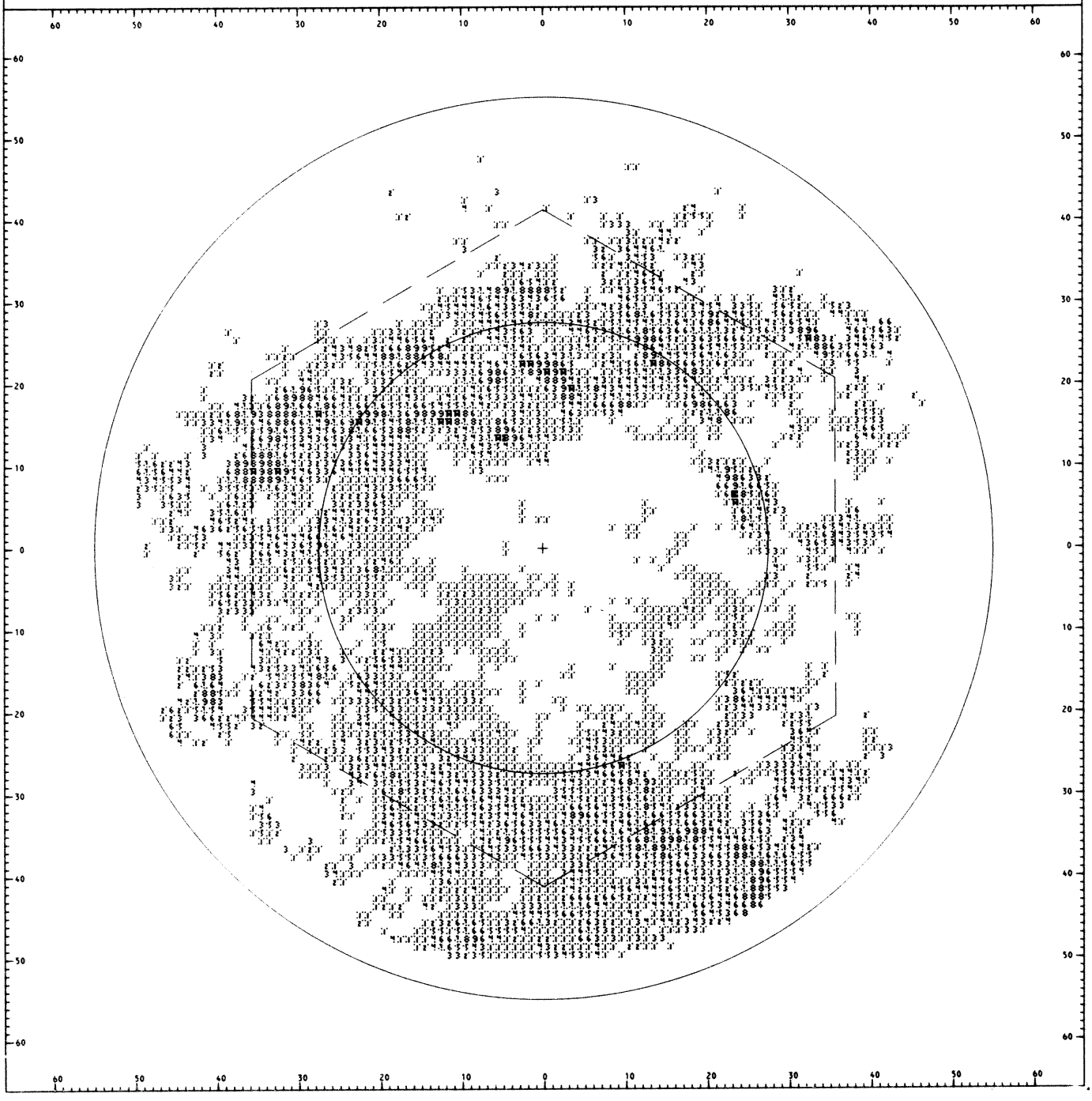
GATE RADAR DAILY RAINFALL RATE 197

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	090	080	000	000

MISSING HOURS: 19 20 21 22 23 24

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

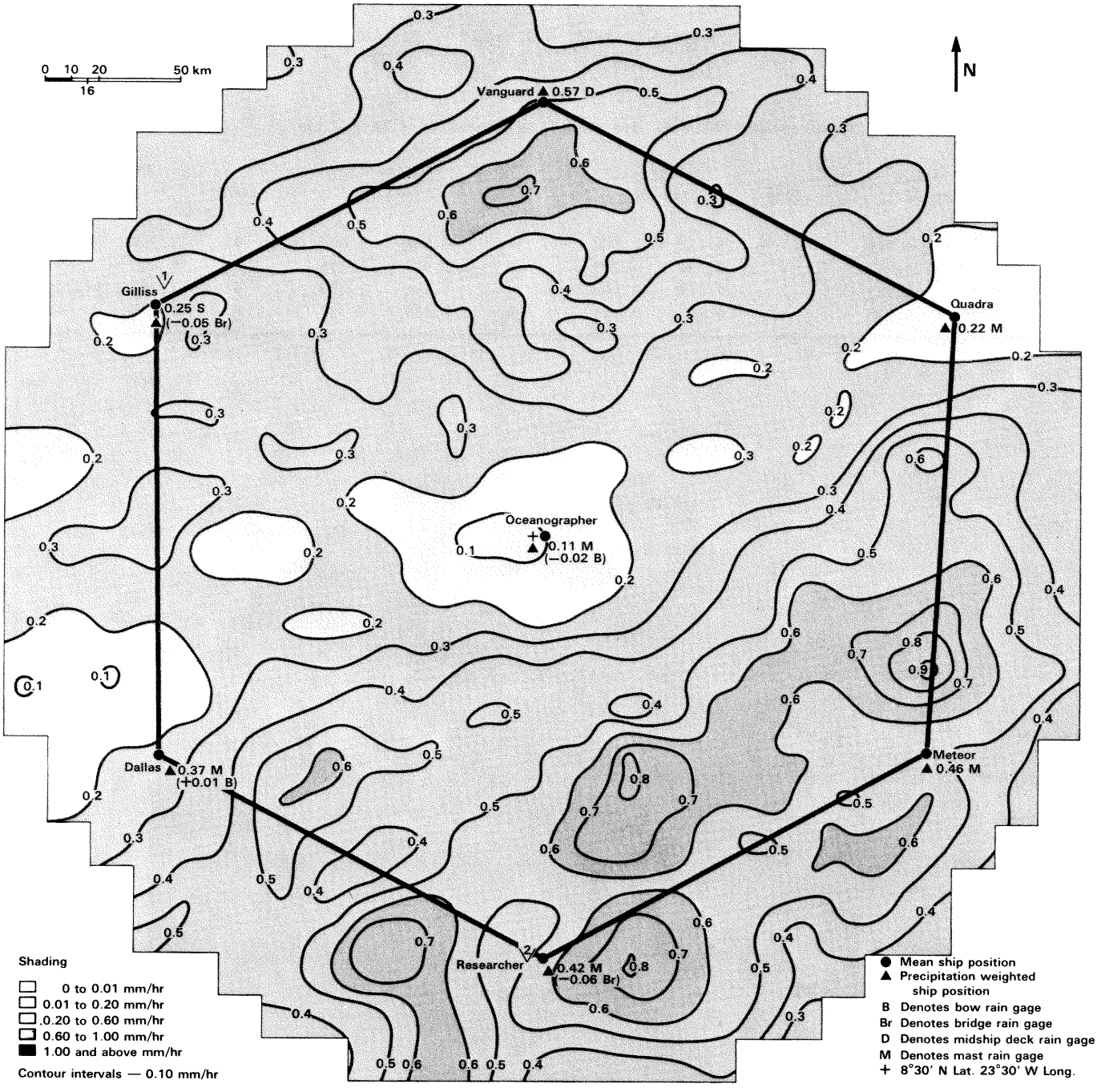
CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 16, 1974 (JULIAN DAY 197)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0456	0.0407	0.0843	0.0274	0.0258	0.0702	0.0237	0.0566	0.0489	0.0490	0.0038	0.0879	0.0387	0.0721	0.0554
2	0.1047	0.0690	0.0875	0.0119	0.0316	0.2021	0.0674	0.0858	0.0843	0.0815	0.0041	0.0941	0.0733	0.0833	0.0783
3	0.1977	0.0425	0.0288	0.0405	0.0611	0.3083	0.1543	0.0465	0.1128	0.1071	0.0	0.0249	0.1059	0.0944	0.1001
4	0.1626	0.1234	0.0299	0.0566	0.0917	0.2367	0.1401	0.1572	0.1167	0.1146	0.0010	0.0303	0.0914	0.1094	0.1004
5	0.1913	0.1007	0.0276	0.0280	0.1106	0.2855	0.2809	0.1174	0.1238	0.1337	0.0043	0.0308	0.0972	0.0786	0.0879
6	0.1899	0.0587	0.1185	0.0514	0.1582	0.4179	0.2303	0.0183	0.1655	0.1709	0.0023	0.1453	0.1332	0.0768	0.1050
7	0.1606	0.0094	0.1005	0.0617	0.2362	0.2681	0.1030	0.0003	0.1393	0.1386	0.0	0.1097	0.1571	0.0636	0.1103
8	0.0532	0.0003	0.0529	0.0725	0.1370	0.1229	0.0392	0.0004	0.0731	0.0777	0.0	0.0620	0.0915	0.0295	0.0605
9	0.0333	0.0025	0.0563	0.0283	0.0303	0.0839	0.0154	0.0028	0.0390	0.0397	0.0002	0.0844	0.0363	0.0243	0.0303
10	0.0858	0.0019	0.0130	0.0320	0.0400	0.0683	0.0540	0.0012	0.0401	0.0356	0.0394	0.0175	0.0292	0.0323	0.0308
11	0.0977	0.0134	0.0335	0.0707	0.0201	0.0562	0.1281	0.0099	0.0485	0.0507	0.0313	0.0544	0.0298	0.0406	0.0352
12	0.1233	0.0148	0.0185	0.0406	0.0501	0.0543	0.1682	0.0176	0.0502	0.0533	0.0016	0.0269	0.0300	0.0344	0.0322
13	0.0509	0.0130	0.0520	0.0388	0.0630	0.0140	0.0268	0.0189	0.0386	0.0374	0.0008	0.0402	0.0279	0.0425	0.0352
14	0.0324	0.0016	0.0441	0.0922	0.0686	0.0060	0.0196	0.0021	0.0408	0.0425	0.0014	0.0215	0.0347	0.0469	0.0408
15	0.0407	0.0008	0.0426	0.1308	0.0894	0.0041	0.0198	0.0009	0.0514	0.0530	0.0006	0.0182	0.0465	0.0591	0.0528
16	0.0282	0.0033	0.0366	0.1173	0.1138	0.0303	0.0349	0.0042	0.0549	0.0612	0.0006	0.0350	0.0518	0.0560	0.0539
17	0.0110	0.0028	0.0492	0.0739	0.1014	0.0153	0.0056	0.0039	0.0423	0.0466	0.0	0.0409	0.0427	0.0400	0.0414
18	0.0193	0.0064	0.0265	0.0528	0.0927	0.0940	0.0042	0.0091	0.0486	0.0520	0.0063	0.0226	0.0469	0.0300	0.0385
19															
20															
21															
22															
23															
24															
3	0.1160	0.0507	0.0669	0.0266	0.0395	0.1936	0.0818	0.0630	0.0820	0.0792	0.0026	0.0690	0.0726	0.0833	0.0779
6	0.1812	0.0943	0.0586	0.0453	0.1202	0.3133	0.2171	0.0976	0.1353	0.1397	0.0025	0.0688	0.1073	0.0883	0.0978
9	0.0824	0.0041	0.0699	0.0542	0.1345	0.1583	0.0525	0.0012	0.0838	0.0854	0.0001	0.0854	0.0949	0.0391	0.0670
12	0.1023	0.0101	0.0216	0.0478	0.0367	0.0596	0.1168	0.0096	0.0462	0.0466	0.0241	0.0329	0.0297	0.0357	0.0327
15	0.0413	0.0051	0.0463	0.0873	0.0737	0.0080	0.0220	0.0073	0.0436	0.0443	0.0009	0.0266	0.0364	0.0495	0.0429
18	0.0195	0.0041	0.0374	0.0813	0.1026	0.0465	0.0149	0.0057	0.0486	0.0533	0.0023	0.0328	0.0471	0.0420	0.0446
21															
24															
6	0.1486	0.0725	0.0628	0.0360	0.0798	0.2534	0.1495	0.0803	0.1087	0.1095	0.0026	0.0689	0.0899	0.0858	0.0878
12	0.0923	0.0071	0.0458	0.0510	0.0856	0.1090	0.0847	0.0054	0.0650	0.0660	0.0121	0.0592	0.0623	0.0374	0.0499
18	0.0304	0.0046	0.0418	0.0843	0.0881	0.0273	0.0185	0.0065	0.0461	0.0488	0.0016	0.0297	0.0418	0.0458	0.0438
24															
12	0.1205	0.0398	0.0543	0.0435	0.0827	0.1812	0.1171	0.0428	0.0868	0.0877	0.0073	0.0640	0.0761	0.0616	0.0688
24															
24	0.0904	0.0281	0.0501	0.0571	0.0845	0.1299	0.0842	0.0307	0.0732	0.0747	0.0054	0.0526	0.0647	0.0563	0.0605

PHASE II ISOHYETAL MAP (July 28 - August 15)
(Excluding GMT July 30 2200—GMT August 2 1900)



20

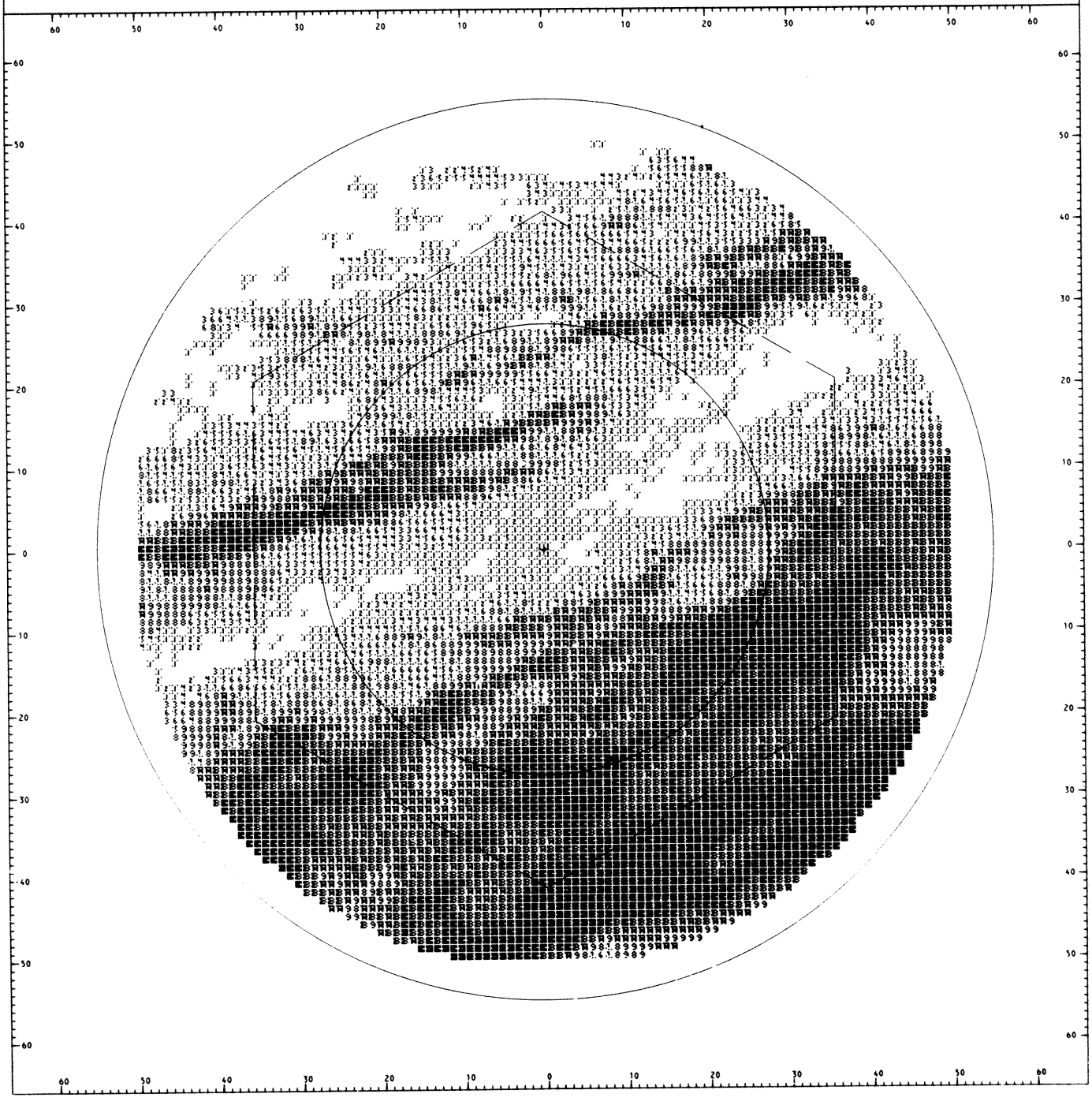
GATE RADAR DAILY RAINFALL RATE 209

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	118	111	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 28, 1974 (JULIAN DAY 209)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0063	3.1582	3.6502	2.0971	0.0170	0.0057	0.0086	3.4069	1.4893	1.5081	0.0158	4.6459	0.6577	1.8393	1.2483
2	0.0033	2.7035	3.5506	2.0038	0.0014	0.0048	0.0039	3.0022	1.3776	1.4182	0.0394	6.5408	0.6252	1.9142	1.2695
3	0.0006	2.1439	3.8248	2.5898	0.0001	0.0062	0.0010	1.9568	1.4256	1.4509	0.1350	5.4942	0.7011	2.3600	1.5304
4	0.0001	2.7030	3.4909	2.9040	0.0	0.0016	0.0002	2.9158	1.5155	1.5645	0.6892	4.3322	0.9579	2.5749	1.7662
5	0.0	2.1845	2.4483	2.9227	0.0	0.0005	0.0	2.2724	1.2583	1.2921	0.4754	2.1070	1.1492	2.0149	1.5819
6	0.0044	2.8586	3.0580	1.8432	0.0	0.0	0.0006	2.0683	1.2945	1.1785	0.0247	3.7888	1.1473	2.2166	1.6817
7	0.0	2.5863	3.6711	2.5056	0.0002	0.0001	0.0	2.1671	1.4596	1.4309	0.0200	5.1253	1.0826	2.4209	1.7516
8	0.0002	2.2100	4.0833	2.3635	0.0013	0.0060	0.0003	2.4628	1.4422	1.5195	0.0197	5.8714	0.9774	2.2877	1.6324
9	0.0020	2.4821	4.3682	1.6563	0.0493	0.0302	0.0018	2.0259	1.4303	1.4001	0.1123	5.3320	0.9227	2.2172	1.5697
10	0.0002	1.7608	2.7615	1.0474	0.1244	0.0162	0.0004	0.9432	0.9517	0.8608	0.0499	3.1341	0.8991	1.8299	1.3643
11	0.0051	0.7451	1.4302	0.7270	0.1037	0.0015	0.0063	0.4755	0.5017	0.4859	0.0	1.3414	0.7398	1.3004	1.0200
12	0.0582	0.5371	0.7039	0.6465	0.0898	0.0128	0.0817	0.4539	0.3412	0.3398	0.0160	0.5923	0.5858	1.2063	0.8960
13	0.0289	0.5280	0.5197	0.9159	0.0793	0.0513	0.0295	0.6313	0.3536	0.3767	0.0090	0.9786	0.5735	1.2327	0.9030
14	0.0786	0.3753	0.8228	1.1038	0.1732	0.1329	0.0655	0.4847	0.4469	0.4888	0.0008	0.8282	0.5458	1.1738	0.8597
15	0.1252	0.1823	1.2066	1.2150	0.1961	0.2340	0.0976	0.1702	0.5249	0.5705	0.0241	0.3759	0.7797	0.7521	0.7658
16	0.1663	0.3481	2.7985	1.1813	0.2309	0.5273	0.2117	0.4939	0.8725	0.9797	0.0134	1.3171	0.7311	1.1092	0.9200
17	0.2326	0.7422	2.7392	0.6794	0.2851	0.3753	0.1688	1.0965	0.8407	0.9248	0.0029	2.7354	0.4010	1.0491	0.7249
18	0.3630	1.0321	3.0041	0.8030	0.7769	0.6196	0.4036	1.2482	1.0987	1.1849	0.0006	4.3714	0.4983	1.2228	0.8604
19	0.6101	0.6554	1.7846	0.7020	1.3604	1.2670	0.6828	0.6917	1.0628	1.1346	0.0004	2.4888	0.7794	0.9529	0.8659
20	0.8418	0.3396	1.2820	0.2589	1.9164	2.1783	0.7926	0.3567	1.1359	1.2062	0.0321	1.6149	1.1164	0.9406	1.0282
21	1.2195	0.0828	0.6747	0.0418	1.6959	1.6996	1.3439	0.1183	0.9023	0.9556	0.0451	0.6653	0.9326	0.9259	0.9289
22	1.7641	0.0429	0.1328	0.0493	1.7216	1.3161	1.8772	0.0624	0.8380	0.8449	0.0052	0.1352	1.1299	0.8519	0.9906
23	0.8711	0.0088	0.1862	0.0155	1.3287	1.0574	0.6790	0.0057	0.5784	0.5736	0.0414	0.2374	0.9176	1.0715	0.9943
24	0.3345	0.0010	0.3490	0.1045	0.6036	0.9196	0.2629	0.0020	0.3850	0.4060	0.0606	0.3618	0.6027	0.7888	0.6956
3	0.0034	2.6685	3.6752	2.2302	0.0062	0.0056	0.0045	2.7886	1.4308	1.4590	0.0634	5.5603	0.6613	2.0376	1.3492
6	0.0015	2.5820	2.9990	2.5566	0.0	0.0007	0.0003	2.4188	1.3561	1.3450	0.3964	3.4093	1.0848	2.2688	1.6766
9	0.0007	2.4261	4.0408	2.1751	0.0169	0.0121	0.0007	2.2186	1.4440	1.4501	0.0507	5.4429	0.9942	2.3086	1.6512
12	0.0212	1.0143	1.6318	0.8069	0.1060	0.0102	0.0294	0.6242	0.5982	0.5622	0.0220	1.6892	0.7416	1.4456	1.0934
15	0.0776	0.3619	0.8496	1.0782	0.1495	0.1394	0.0642	0.4287	0.4418	0.4786	0.0113	0.7276	0.6330	1.0529	0.8428
18	0.2540	0.7075	2.8472	0.8879	0.4309	0.5074	0.2614	0.9462	0.9373	1.0298	0.0056	2.8079	0.5434	1.1270	0.8350
21	0.8904	0.3593	1.2471	0.3342	1.6575	1.7149	0.9397	0.3889	1.0336	1.0988	0.0259	1.5897	0.9429	0.9398	0.9408
24	0.9899	0.0176	0.2227	0.0565	1.2180	1.0977	0.9397	0.0234	0.6004	0.6081	0.0357	0.2448	0.8834	0.9041	0.8933
6	0.0025	2.6252	3.3371	2.3934	0.0031	0.0031	0.0024	2.6037	1.3934	1.4020	0.2299	4.4848	0.8731	2.1532	1.5129
12	0.0110	1.7202	2.8363	1.4910	0.0615	0.0111	0.0151	1.4214	1.0211	1.0062	0.0363	3.5661	0.8679	1.8770	1.3722
18	0.1658	0.5347	1.8484	0.9830	0.2903	0.3234	0.1628	0.6874	0.6895	0.7542	0.0085	1.7677	0.5882	1.0899	0.8389
24	0.9402	0.1884	0.7349	0.1953	1.4377	1.4063	0.9397	0.2061	0.8171	0.8535	0.0308	0.9172	0.9131	0.9219	0.9169
12	0.0067	2.1727	3.0867	1.9422	0.0323	0.0071	0.0087	2.0125	1.2073	1.2041	0.1331	4.0254	0.8705	2.0151	1.4425
24	0.5529	0.3615	1.2916	0.5892	0.8639	0.8649	0.5512	0.4468	0.7533	0.8038	0.0196	1.3425	0.7506	1.0059	0.8779
24	0.2798	1.2671	2.1892	1.2657	0.4481	0.4360	0.2800	1.2297	0.9803	1.0040	0.0764	2.6839	0.8105	1.5105	1.1602

21

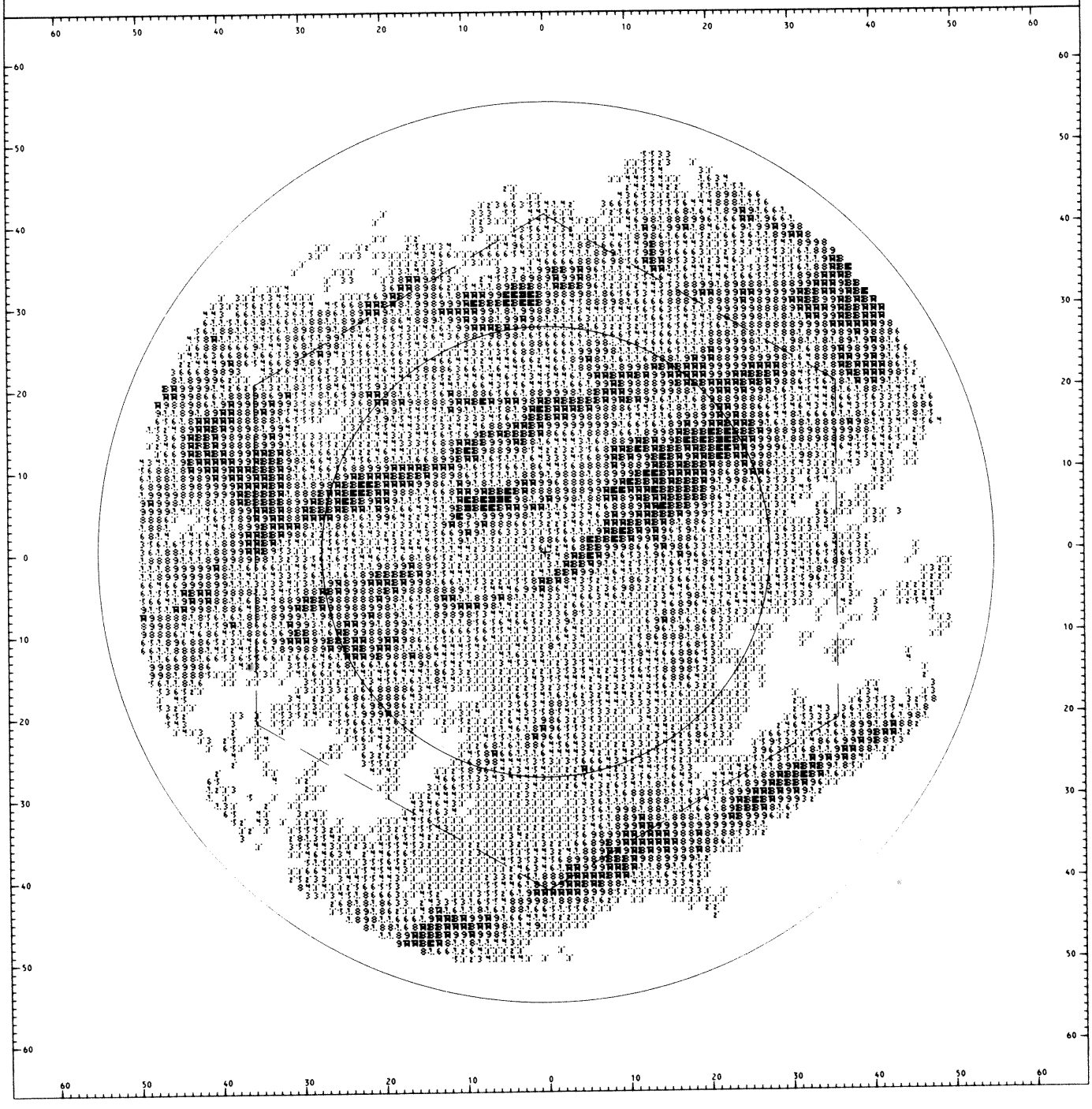
GATE RADAR DAILY RAINFALL RATE 210

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	118	083	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	A	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	B	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	D	1.496 - 2.239	E	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	F	2.239 - 3.350	H	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 29, 1974 (JULIAN DAY 210)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.7679	0.0204	0.3785	0.3439	0.2879	0.6429	1.0261	0.0230	0.4057	0.4385	1.1981	0.3445	0.4450	0.6708	0.5578
2	1.0899	0.0177	0.2982	0.4057	0.2595	0.7765	1.5556	0.0322	0.4729	0.5196	2.0612	0.2815	0.3818	0.6232	0.5025
3	0.8529	0.0166	0.6624	0.2254	0.4480	0.6887	0.9793	0.0319	0.4811	0.5044	0.5815	0.4074	0.3208	0.5875	0.4541
4	0.7333	0.1365	0.4109	0.0528	0.5818	0.9558	0.7077	0.2208	0.4779	0.4910	0.4170	0.2186	0.3549	0.5992	0.4771
5	0.9390	0.2702	0.2777	0.0507	0.5272	1.3667	0.9861	0.4382	0.5710	0.5928	1.0613	0.2562	0.4158	0.5495	0.4826
6	0.9715	0.7757	0.7058	0.0303	0.2495	1.3168	0.9704	0.9743	0.6741	0.6713	1.3902	0.6997	0.3828	0.7013	0.5420
7	1.7810	1.1210	0.6072	0.1026	0.1188	0.7046	2.0846	0.9286	0.7386	0.6544	0.5959	1.0704	0.3221	0.7776	0.5498
8	1.5612	0.5983	0.4098	0.2214	0.3021	0.6485	1.8324	0.4879	0.6227	0.5794	0.4927	0.5490	0.4056	0.5471	0.4764
9	1.7204	0.4866	0.1203	0.2813	1.0526	0.8140	1.4127	0.3500	0.7460	0.6433	0.7948	0.1328	0.5648	0.5001	0.5324
10	1.4469	0.1797	0.0475	0.1935	1.3875	0.4817	1.3599	0.1230	0.6236	0.5802	1.0049	0.0361	0.4589	0.3637	0.4113
11	1.0837	0.3204	0.1536	0.1032	1.5617	0.3256	0.7311	0.4203	0.5931	0.5481	0.5142	0.2008	0.4602	0.3822	0.4212
12	0.5192	0.1556	0.0258	0.0077	1.3589	0.8139	0.4451	0.1266	0.4816	0.4886	0.2852	0.0368	0.5787	0.2423	0.4105
13	0.3983	0.0535	0.0028	0.0186	1.3211	0.7227	0.4471	0.0387	0.4208	0.4513	0.6919	0.0	0.6262	0.2044	0.4153
14	0.7011	0.0625	0.0066	0.0287	1.5090	0.3271	0.9006	0.1269	0.4409	0.4808	0.9736	0.0	0.6806	0.2723	0.4765
15	0.5836	0.1655	0.0027	0.0734	1.0124	0.1607	0.6253	0.2251	0.3343	0.3411	0.4618	0.0	0.4364	0.3119	0.3742
16	0.3704	0.4132	0.0146	0.1984	0.6401	0.3230	0.2751	0.4903	0.3276	0.3169	0.8097	0.0	0.3669	0.2763	0.3216
17	0.1297	1.0268	0.1041	0.2919	0.4394	0.5808	0.0811	1.5170	0.4303	0.4649	2.7683	0.0	0.3166	0.2940	0.3053
18	0.0478	1.3104	0.1624	0.1295	0.0867	0.2721	0.0587	2.0298	0.3366	0.3802	2.9844	0.0007	0.1106	0.2890	0.1998
19	0.1264	0.9471	0.0512	0.1655	0.1367	0.1387	0.1869	1.4769	0.2623	0.2977	2.3436	0.0041	0.1176	0.2076	0.1626
20	0.1308	0.2629	0.0286	0.2007	0.0746	0.0745	0.1977	0.4131	0.1289	0.1462	0.7571	0.0168	0.1287	0.0798	0.1042
21	0.0175	0.0305	0.0123	0.2822	0.2815	0.0250	0.0273	0.0466	0.1084	0.1230	0.1004	0.0020	0.1904	0.0118	0.1011
22	0.0102	0.0070	0.0078	0.1732	0.2829	0.0091	0.0159	0.0094	0.0820	0.0930	0.0029	0.0	0.1266	0.0046	0.0656
23	0.0045	0.0778	0.0081	0.0501	0.0637	0.0001	0.0070	0.0785	0.0343	0.0337	0.0665	0.0006	0.0319	0.0182	0.0250
24	0.0084	0.3383	0.0068	0.0295	0.0190	0.0028	0.0132	0.4364	0.0680	0.0664	0.2572	0.0017	0.0170	0.0674	0.0422
3	0.9036	0.0183	0.4464	0.3250	0.3318	0.7027	1.1870	0.0290	0.4532	0.4875	1.2802	0.3445	0.3825	0.6271	0.5048
6	0.8812	0.3941	0.4648	0.0446	0.4529	1.2131	0.8881	0.5444	0.5743	0.5850	0.9562	0.3915	0.3845	0.6166	0.5006
9	1.6875	0.7353	0.3791	0.2018	0.4911	0.7224	1.7766	0.5888	0.7024	0.6257	0.6278	0.5841	0.4308	0.6083	0.5195
12	1.0166	0.2185	0.0756	0.1015	1.4360	0.5404	0.8454	0.2233	0.5661	0.5389	0.6014	0.0913	0.4992	0.3294	0.4143
15	0.5610	0.0938	0.0041	0.0402	1.2808	0.4035	0.6577	0.1303	0.3987	0.4244	0.7091	0.0	0.5811	0.2629	0.4220
18	0.1826	0.9168	0.0937	0.2066	0.3888	0.3920	0.1383	1.3457	0.3648	0.3873	2.1875	0.0002	0.2647	0.2864	0.2756
21	0.0916	0.4135	0.0307	0.2161	0.1643	0.0794	0.1373	0.6455	0.1665	0.1890	1.0670	0.0076	0.1456	0.0997	0.1226
24	0.0077	0.1411	0.0076	0.0843	0.1219	0.0040	0.0120	0.1748	0.0614	0.0644	0.1089	0.0008	0.0585	0.0301	0.0443
6	0.8924	0.2062	0.4556	0.1848	0.3923	0.9578	1.0375	0.2867	0.5137	0.5362	1.1182	0.3680	0.3835	0.6219	0.5027
12	1.3521	0.4769	0.2274	0.1516	0.9636	0.6314	1.3109	0.4061	0.6342	0.5823	0.6146	0.3377	0.4650	0.4688	0.4669
18	0.3718	0.5053	0.0489	0.1234	0.8348	0.3977	0.3980	0.7380	0.3817	0.4058	1.4483	0.0001	0.4229	0.2746	0.3488
24	0.0496	0.2773	0.0191	0.1502	0.1431	0.0417	0.0747	0.4102	0.1140	0.1267	0.5879	0.0042	0.1020	0.0649	0.0835
12	1.1222	0.3416	0.3415	0.1682	0.6779	0.7946	1.1742	0.3464	0.5740	0.5592	0.8664	0.3528	0.4242	0.5453	0.4848
24	0.2107	0.3913	0.0340	0.1368	0.4889	0.2197	0.2363	0.5741	0.2478	0.2662	1.0181	0.0022	0.2624	0.1698	0.2161
24	0.6665	0.3664	0.1877	0.1525	0.5834	0.5072	0.7053	0.4602	0.4109	0.4127	0.9423	0.1775	0.3433	0.3575	0.3504

22

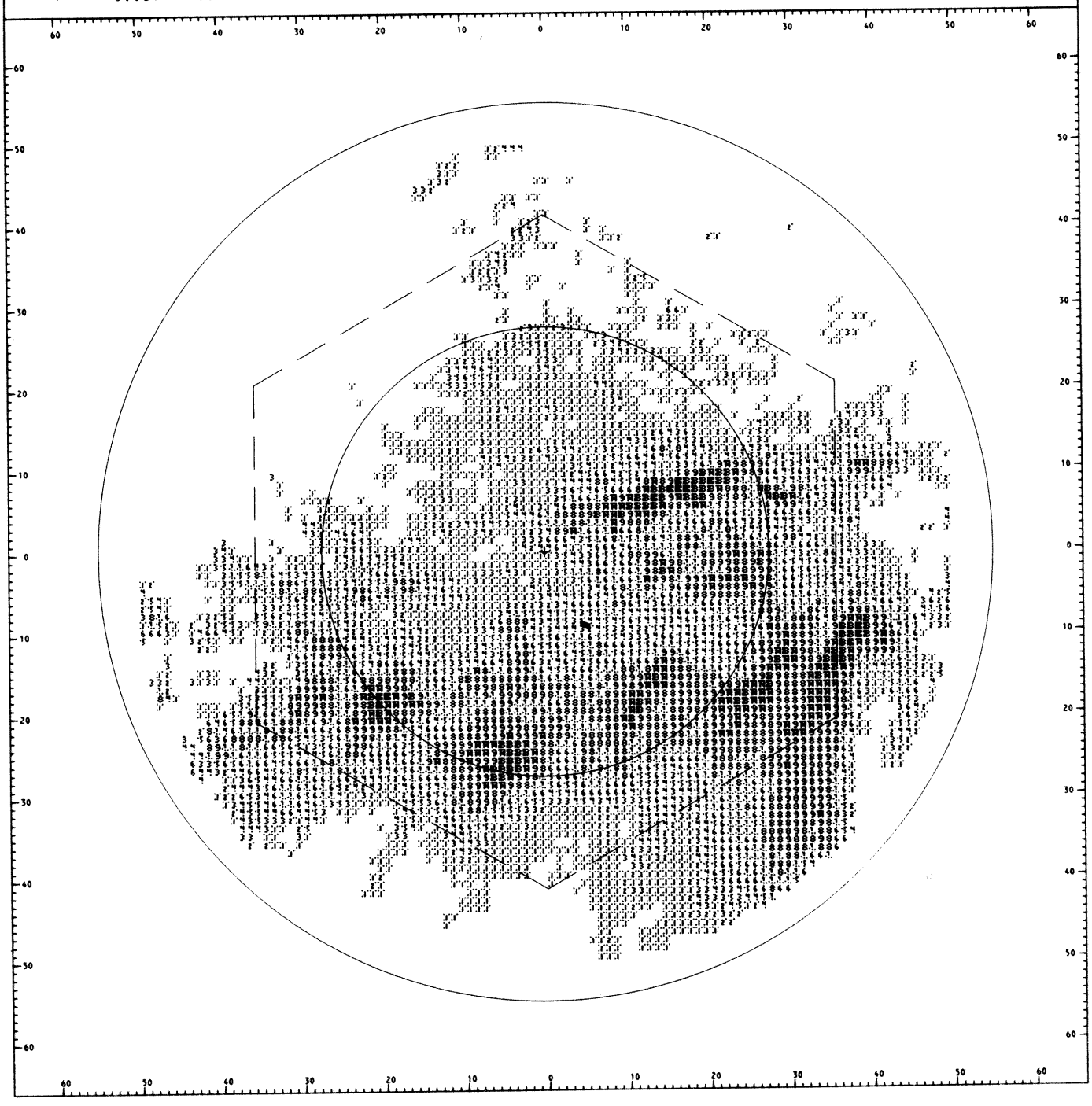
GATE RADAR DAILY RAINFALL RATE 211

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	107	098	000	000

MISSING HOURS: 23 24

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR JULY 30, 1974 (JULIAN DAY 211)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0129	0.5278	0.0315	0.0395	0.0152	0.0258	0.0192	0.7595	0.1096	0.1171	0.2716	0.0064	0.0355	0.1083	0.0719
2	0.0073	0.3453	0.0133	0.0387	0.0378	0.0121	0.0068	0.4791	0.0763	0.0792	0.0659	0.0080	0.0237	0.0680	0.0459
3	0.0035	0.2053	0.0159	0.0130	0.0411	0.0030	0.0016	0.2279	0.0473	0.0422	0.0050	0.0434	0.0148	0.0422	0.0285
4	0.0130	0.1115	0.0198	0.0210	0.1350	0.0062	0.0084	0.0947	0.0514	0.0473	0.0371	0.0459	0.0365	0.0299	0.0332
5	0.0349	0.1318	0.0134	0.0487	0.1716	0.0200	0.0350	0.1453	0.0705	0.0704	0.1886	0.0127	0.0448	0.0411	0.0429
6	0.0420	0.2387	0.0292	0.0838	0.0729	0.0614	0.0643	0.3021	0.0883	0.0918	0.3844	0.0503	0.0408	0.0601	0.0504
7	0.0209	0.2360	0.0787	0.1021	0.0960	0.0461	0.0327	0.3372	0.0970	0.1066	0.0943	0.1138	0.0504	0.0728	0.0616
8	0.0040	0.1565	0.1020	0.1801	0.0904	0.0289	0.0057	0.1843	0.0938	0.0993	0.0341	0.0572	0.0600	0.1238	0.0919
9	0.0037	0.3816	0.1336	0.3573	0.0578	0.0020	0.0028	0.3273	0.1563	0.1446	0.0056	0.1819	0.0766	0.1783	0.1275
10	0.0370	0.4672	0.1581	0.5495	0.0829	0.0062	0.0171	0.3555	0.2171	0.1962	0.0318	0.2862	0.1173	0.1588	0.1381
11	0.0445	0.3591	0.2785	1.2814	0.0842	0.0025	0.0358	0.4034	0.3411	0.3645	0.0492	0.2735	0.2522	0.1490	0.2006
12	0.0264	0.2215	0.8636	0.7747	0.1397	0.0033	0.0323	0.2712	0.3374	0.3733	0.0911	0.5550	0.1764	0.2430	0.2097
13	0.0071	0.3896	1.1370	0.4292	0.0957	0.0050	0.0083	0.5472	0.3434	0.3828	0.1014	1.0734	0.1623	0.3071	0.2347
14	0.0010	0.5888	1.2154	0.8799	0.0596	0.0095	0.0015	0.8053	0.4584	0.5074	0.0690	1.7257	0.2571	0.3558	0.3065
15	0.0067	0.4580	1.3105	0.9103	0.0525	0.0097	0.0101	0.5768	0.4569	0.5026	0.0407	1.9506	0.2033	0.3545	0.2789
16	0.0352	0.4494	0.9276	0.4184	0.0732	0.0148	0.0551	0.4554	0.3194	0.3331	0.1678	1.3616	0.0981	0.3128	0.2054
17	0.0347	0.7403	0.5814	0.2408	0.0830	0.0044	0.0542	0.7225	0.2814	0.2672	0.1831	0.8596	0.0644	0.3590	0.2117
18	0.0417	0.9590	0.6868	0.2742	0.1303	0.0063	0.0650	0.8824	0.3507	0.3238	0.3180	1.0740	0.0867	0.4386	0.2627
19	0.0758	0.8973	0.6970	0.5432	0.1375	0.0207	0.1157	0.9844	0.3959	0.3991	0.5980	1.0062	0.1378	0.4938	0.3158
20	0.1333	0.7562	0.4833	0.7698	0.1030	0.0429	0.1907	0.9998	0.3816	0.4101	1.2533	0.4006	0.1748	0.5031	0.3389
21	0.3321	0.9573	0.2176	0.6563	0.1165	0.0464	0.4908	1.3741	0.3884	0.4241	2.4932	0.2004	0.1617	0.4219	0.2918
22	0.5556	1.3065	0.1233	0.6018	0.1601	0.0472	0.7699	1.9859	0.4671	0.5136	4.4007	0.0973	0.1817	0.4389	0.3105
23															
24															
3	0.0079	0.3595	0.0202	0.0304	0.0314	0.0137	0.0092	0.4888	0.0777	0.0795	0.1142	0.0193	0.0247	0.0728	0.0488
6	0.0300	0.1607	0.0208	0.0512	0.1265	0.0292	0.0359	0.1807	0.0701	0.0698	0.2034	0.0363	0.0407	0.0437	0.0422
9	0.0095	0.2580	0.1048	0.2132	0.0814	0.0257	0.0138	0.2829	0.1157	0.1168	0.0446	0.1176	0.0623	0.1250	0.0937
12	0.0360	0.3493	0.4334	0.8686	0.1022	0.0040	0.0284	0.3434	0.2985	0.3114	0.0573	0.3715	0.1820	0.1836	0.1828
15	0.0049	0.4788	1.2210	0.7398	0.0693	0.0081	0.0066	0.6431	0.4196	0.4643	0.0704	1.5832	0.2076	0.3391	0.2733
18	0.0372	0.7162	0.7319	0.3111	0.0955	0.0085	0.0581	0.6868	0.3171	0.3080	0.2230	1.0984	0.0830	0.3701	0.2266
21	0.1804	0.8703	0.4660	0.6564	0.1190	0.0367	0.2657	1.1194	0.3886	0.4111	1.4482	0.5357	0.1581	0.4729	0.3155
24															
6	0.0189	0.2601	0.0205	0.0408	0.0789	0.0214	0.0225	0.3347	0.0739	0.0747	0.1588	0.0278	0.0327	0.0583	0.0455
12	0.0228	0.3036	0.2691	0.5408	0.0918	0.0148	0.0211	0.3132	0.2071	0.2141	0.0510	0.2446	0.1221	0.1543	0.1382
18	0.0211	0.5975	0.9764	0.5254	0.0824	0.0083	0.0324	0.6649	0.3684	0.3861	0.1467	1.3408	0.1453	0.3546	0.2500
24	0.2742	0.9793	0.3803	0.6428	0.1293	0.0393	0.3918	1.3360	0.4082	0.4367	2.1863	0.4261	0.1645	0.4646	0.3148
12	0.0209	0.2819	0.1448	0.2908	0.0854	0.0181	0.0218	0.3239	0.1405	0.1444	0.1049	0.1362	0.0774	0.1063	0.0918
24	0.1223	0.7502	0.7380	0.5724	0.1012	0.0207	0.1761	0.9333	0.3843	0.4063	0.9625	0.9749	0.1533	0.3987	0.2762
24	0.0670	0.4947	0.4144	0.4188	0.0926	0.0193	0.0920	0.6010	0.2513	0.2634	0.4947	0.5175	0.1121	0.2392	0.1758

DATA MISSED

FROM

2200 GMT JULY 30

THROUGH

1900 GMT AUGUST 2*

WHILE THE OCEANOGRAPHER WAS OFF STATION FOR MEDICAL EVACUATION.

---

*SINCE MORE THAN ONE-THIRD OF THE HOURS WERE MISSED (SEE SECTION 4.1) ON AUGUST 2, THE ISOHYETAL MAP WAS OMITTED, AND ONLY THE TABULATED DATA ARE INCLUDED.

MEAN AREA PRECIPITATION RATE MM/HR AUGUST 2, 1974 (JULIAN DAY 214)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20	0.1395	0.1776	0.0962	0.5032	0.1793	0.3436	0.1947	0.0501	0.2396	0.2415	0.2484	0.0772	0.4237	0.1937	0.3085
21	0.0722	0.3849	0.2116	0.3386	0.2138	0.1036	0.0961	0.1376	0.2212	0.1926	0.2483	0.1928	0.4767	0.2268	0.3517
22	0.0612	0.5488	0.1473	0.2814	0.0847	0.0784	0.0900	0.3114	0.2009	0.1610	0.2490	0.1651	0.5733	0.2510	0.4122
23	0.0386	0.5928	0.0871	0.1794	0.2015	0.0487	0.0379	0.2679	0.1923	0.1355	0.0751	0.1363	0.6680	0.2928	0.4804
24	0.0308	0.5688	0.1759	0.2397	0.3727	0.0058	0.0031	0.4027	0.2334	0.2007	0.0059	0.3693	0.5296	0.3743	0.4520
3															
6															
9															
12															
15															
18															
21	0.1058	0.2812	0.1539	0.4209	0.1966	0.2236	0.1454	0.0939	0.2304	0.2171	0.2484	0.1350	0.4483	0.2102	0.3291
24	0.0435	0.5701	0.1368	0.2335	0.2196	0.0443	0.0437	0.3273	0.2089	0.1657	0.1100	0.2236	0.5903	0.3060	0.4482
6															
12															
18															
24	0.0685	0.4546	0.1436	0.3085	0.2104	0.1160	0.0844	0.2339	0.2174	0.1862	0.1653	0.1881	0.5346	0.2677	0.4009
12															
24															
24															

24

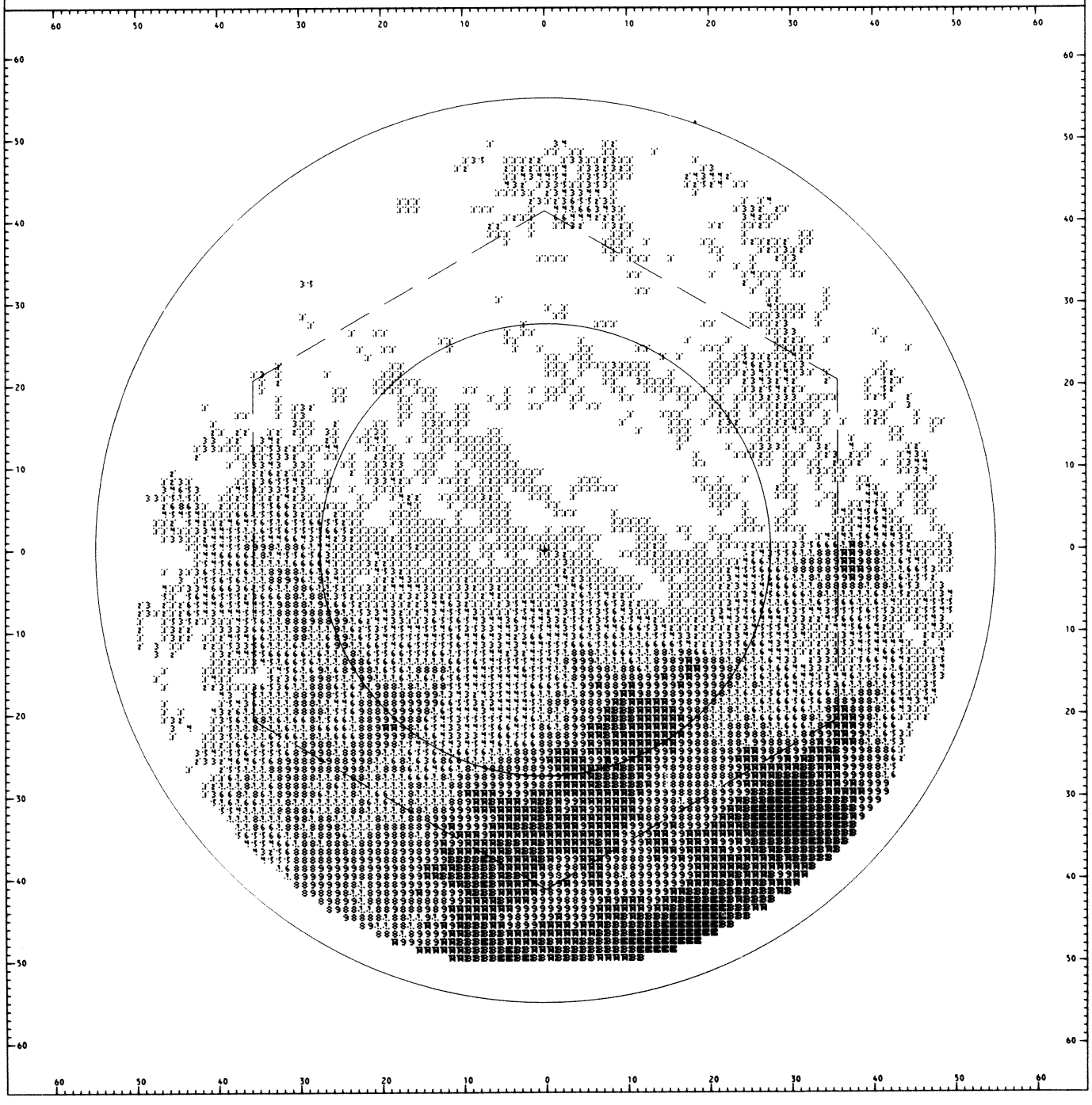
GATE RADAR DAILY RAINFALL RATE 215

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	120	120	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 3, 1974 (JULIAN DAY 215)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0489	0.6616	0.4975	0.6074	0.3361	0.0006	0.0092	0.5705	0.3594	0.3440	0.0020	0.9646	0.4374	0.5098	0.4736
2	0.0489	0.6437	1.4193	0.6932	0.1998	0.0009	0.0191	0.4331	0.5005	0.4921	0.0093	1.6740	0.3531	0.5853	0.4692
3	0.0131	0.3154	1.9687	0.5843	0.0520	0.0	0.0130	0.2157	0.4874	0.5191	0.0092	1.4831	0.2728	0.5567	0.4147
4	0.0021	0.0622	2.0566	0.6984	0.0073	0.0	0.0024	0.0499	0.4690	0.5269	0.0130	0.9182	0.3694	0.5867	0.4780
5	0.0120	0.0230	2.3108	1.1005	0.0701	0.0	0.0029	0.0260	0.5834	0.6597	0.0049	1.3179	0.4129	0.6951	0.5539
6	0.0012	0.0105	2.5731	1.0584	0.3360	0.0003	0.0013	0.0122	0.6608	0.7501	0.0008	2.3920	0.3845	0.7645	0.5744
7	0.0	0.0039	1.4807	0.5772	0.5407	0.0	0.0	0.0043	0.4330	0.4916	0.0	1.6740	0.3636	0.6834	0.5234
8	0.0	0.0092	0.3762	0.2545	0.6343	0.0	0.0	0.0127	0.2129	0.2417	0.0002	0.4925	0.2570	0.8691	0.5630
9	0.0	0.0172	0.1880	0.5232	0.3865	0.0	0.0	0.0240	0.1859	0.2108	0.0	0.1075	0.2007	0.5903	0.3955
10	0.0	0.0042	0.4109	0.6585	0.2328	0.0	0.0	0.0064	0.2172	0.2468	0.0	0.2696	0.1884	0.4834	0.3359
11	0.0	0.0	0.4523	1.1546	0.1228	0.0	0.0	0.0001	0.2872	0.3262	0.0	0.3454	0.2610	0.2577	0.2593
12	0.0	0.0	0.5216	0.9724	0.1315	0.0008	0.0	0.0	0.2700	0.3068	0.0	0.4094	0.2699	0.1876	0.2288
13	0.0	0.0014	0.8364	0.7135	0.0352	0.0024	0.0	0.0022	0.2636	0.2995	0.0	0.8817	0.2566	0.1998	0.2282
14	0.0004	0.0001	0.8955	0.3143	0.0013	0.0	0.0006	0.0001	0.2009	0.2283	0.0	1.0594	0.3215	0.2789	0.3002
15	0.0015	0.0007	0.4984	0.1981	0.0016	0.0039	0.0024	0.0011	0.1168	0.1327	0.0	0.5122	0.2891	0.4295	0.3593
16	0.0044	0.0036	0.1869	0.1441	0.0106	0.0158	0.0042	0.0049	0.0606	0.0685	0.0	0.1384	0.1849	0.4649	0.3249
17	0.0344	0.0034	0.0103	0.0813	0.0440	0.0227	0.0082	0.0016	0.0326	0.0311	0.0003	0.0109	0.1505	0.3352	0.2428
18	0.0053	0.0066	0.0102	0.1077	0.0460	0.0067	0.0014	0.0099	0.0304	0.0337	0.0005	0.0163	0.1044	0.1622	0.1333
19	0.0	0.0171	0.0242	0.0602	0.0111	0.0082	0.0	0.0170	0.0201	0.0217	0.0010	0.0354	0.0509	0.0647	0.0578
20	0.0015	0.0133	0.0411	0.0113	0.0172	0.0171	0.0024	0.0144	0.0169	0.0185	0.0046	0.0491	0.0233	0.0773	0.0503
21	0.0016	0.0149	0.0050	0.0460	0.0186	0.0039	0.0012	0.0167	0.0150	0.0161	0.0020	0.0131	0.0386	0.1078	0.0732
22	0.0027	0.0177	0.0277	0.0694	0.0182	0.0005	0.0002	0.0250	0.0227	0.0250	0.0004	0.0084	0.0488	0.1209	0.0849
23	0.0003	0.0033	0.1002	0.0964	0.0318	0.0032	0.0	0.0041	0.0391	0.0442	0.0	0.0177	0.0676	0.1114	0.0895
24	0.0089	0.0154	0.0908	0.1764	0.0585	0.0108	0.0009	0.0	0.0600	0.0637	0.0	0.0245	0.1063	0.1053	0.1058
3	0.0370	0.5402	1.2951	0.6283	0.1959	0.0005	0.0138	0.4064	0.4491	0.4517	0.0068	1.3739	0.3544	0.5506	0.4525
6	0.0051	0.0319	2.3135	0.9525	0.1378	0.0001	0.0022	0.0294	0.5711	0.6456	0.0063	1.5427	0.3889	0.6821	0.5354
9	0.0	0.0101	0.6816	0.4517	0.5205	0.0	0.0	0.0136	0.2772	0.3147	0.0001	0.7580	0.2737	0.7143	0.4940
12	0.0	0.0014	0.4616	0.9285	0.1624	0.0003	0.0	0.0022	0.2581	0.2932	0.0	0.3415	0.2398	0.3096	0.2747
15	0.0006	0.0007	0.7434	0.4086	0.0127	0.0021	0.0010	0.0011	0.1938	0.2201	0.0	0.8178	0.2891	0.3027	0.2959
18	0.0147	0.0045	0.0692	0.1111	0.0335	0.0150	0.0046	0.0055	0.0412	0.0444	0.0003	0.0552	0.1466	0.3207	0.2337
21	0.0011	0.0151	0.0234	0.0392	0.0157	0.0097	0.0012	0.0161	0.0173	0.0187	0.0026	0.0325	0.0376	0.0833	0.0604
24	0.0040	0.0122	0.0729	0.1141	0.0362	0.0048	0.0004	0.0097	0.0406	0.0443	0.0001	0.0169	0.0743	0.1125	0.0934
6	0.0210	0.2861	1.8043	0.7904	0.1669	0.0003	0.0080	0.2179	0.5101	0.5486	0.0065	1.4583	0.3716	0.6163	0.4940
12	0.0	0.0058	0.5716	0.6901	0.3414	0.0001	0.0	0.0079	0.2677	0.3040	0.0	0.5497	0.2567	0.5119	0.3843
18	0.0077	0.0026	0.4063	0.2598	0.0231	0.0086	0.0028	0.0033	0.1175	0.1323	0.0001	0.4365	0.2178	0.3117	0.2648
24	0.0025	0.0136	0.0482	0.0766	0.0259	0.0073	0.0008	0.0129	0.0290	0.0315	0.0014	0.0247	0.0559	0.0979	0.0769
12	0.0105	0.1459	1.1879	0.7402	0.2541	0.0002	0.0040	0.1129	0.3889	0.4263	0.0033	1.0040	0.3142	0.5641	0.4391
24	0.0051	0.0081	0.2272	0.1682	0.0245	0.0079	0.0018	0.0081	0.0732	0.0819	0.0008	0.2306	0.1369	0.2048	0.1708
24	0.0078	0.0770	0.7076	0.4542	0.1393	0.0041	0.0029	0.0605	0.2310	0.2541	0.0020	0.6173	0.2255	0.3845	0.3050

25

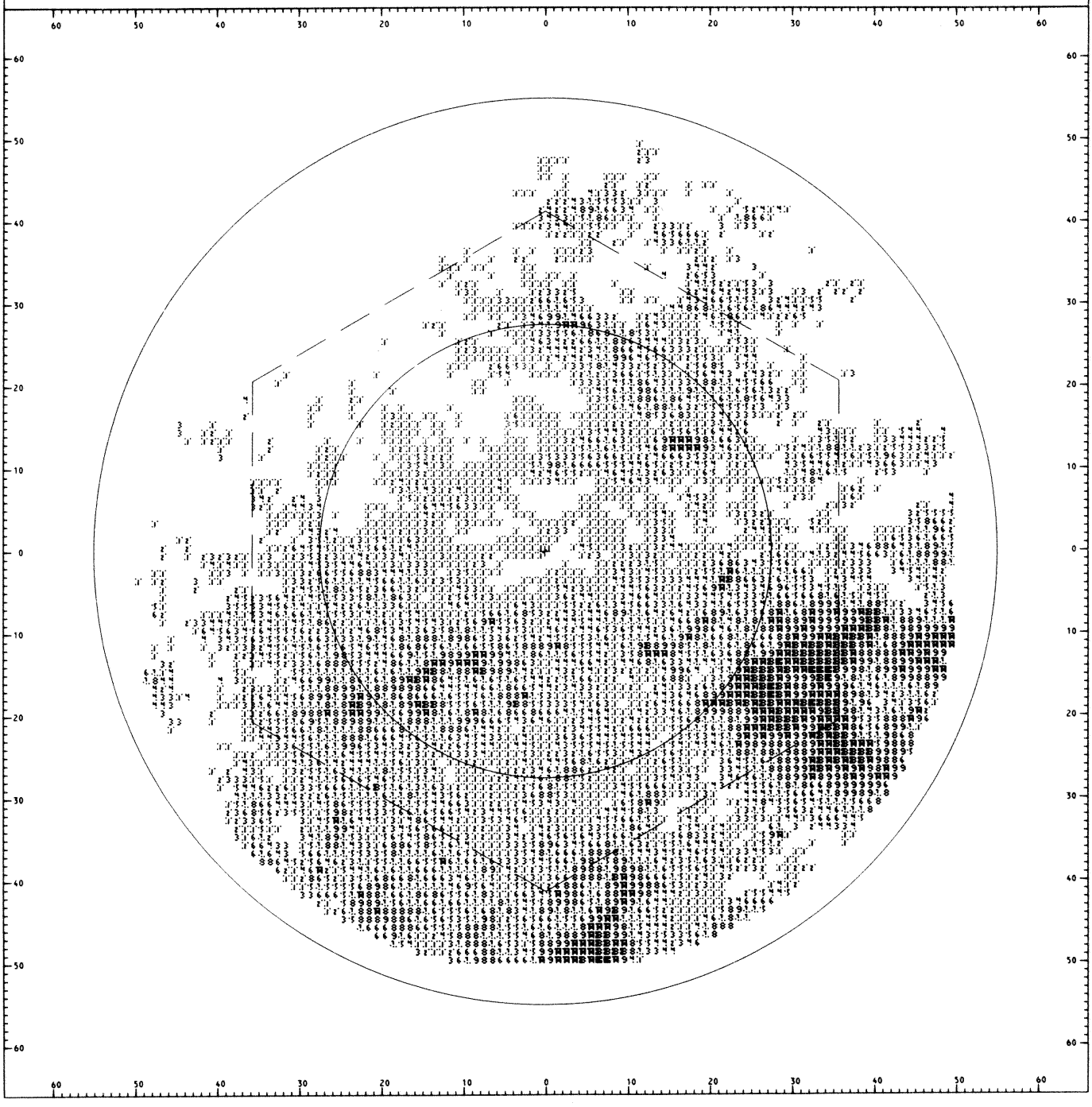
GATE RADAR DAILY RAINFALL RATE 216

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	113	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	A	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	B	1.000 - 1.496	B	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	C	1.496 - 2.239	C	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	D	2.239 - 3.350	D	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 4, 1974 (JULIAN DAY 216)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0129	0.0408	0.0459	0.1885	0.0295	0.0169	0.0100	0.0124	0.0557	0.0557	0.0224	0.0110	0.0634	0.0925	0.0779
2	0.0199	0.0278	0.0403	0.2085	0.0147	0.0337	0.0256	0.0302	0.0573	0.0628	0.0359	0.0395	0.0936	0.1460	0.1198
3	0.0777	0.0642	0.0784	0.2779	0.0431	0.0432	0.1198	0.0642	0.0972	0.1058	0.0423	0.1186	0.1049	0.2369	0.1709
4	0.1090	0.2060	0.0597	0.3317	0.0186	0.0304	0.1599	0.1785	0.1258	0.1243	0.0371	0.1787	0.0973	0.2677	0.1825
5	0.0753	0.3819	0.0798	0.2305	0.0072	0.0081	0.1164	0.2357	0.1308	0.1044	0.0264	0.2056	0.0652	0.3127	0.1889
6	0.0313	0.4170	0.0763	0.1482	0.0140	0.0024	0.0478	0.2621	0.1154	0.0835	0.0024	0.2039	0.0773	0.3519	0.2146
7	0.0121	0.6277	0.1400	0.0356	0.0225	0.0015	0.0190	0.4472	0.1408	0.0951	0.0210	0.4178	0.0591	0.3574	0.2082
8	0.0020	1.1099	0.1710	0.0150	0.0176	0.0001	0.0031	1.0539	0.2210	0.1688	0.0454	0.8457	0.0402	0.4775	0.2589
9	0.0018	0.9352	0.5398	0.0401	0.0437	0.0024	0.0026	1.0428	0.2616	0.2470	0.0217	1.5140	0.0399	0.4286	0.2343
10	0.0027	0.7791	0.9911	0.0308	0.0700	0.0015	0.0027	0.9349	0.3131	0.3218	0.0042	2.2383	0.0505	0.4280	0.2392
11	0.0076	0.4161	0.8951	0.0473	0.0631	0.0015	0.0103	0.5590	0.2385	0.2601	0.0153	1.6688	0.0538	0.3058	0.1798
12	0.1082	0.2673	0.5029	0.1136	0.0825	0.0	0.1137	0.1881	0.1791	0.1688	0.0026	0.7050	0.0644	0.2663	0.1653
13	0.2957	0.2469	0.2322	0.1407	0.0183	0.0024	0.4157	0.2847	0.1559	0.1593	0.0919	0.3596	0.0904	0.2038	0.1471
14	0.1457	0.2699	0.3653	0.2937	0.0341	0.0050	0.2206	0.4132	0.1854	0.2091	0.2503	0.5647	0.1225	0.1851	0.1538
15	0.0546	0.0763	0.6711	0.4386	0.1053	0.0043	0.0423	0.1061	0.2244	0.2482	0.0647	0.6525	0.1823	0.2057	0.1940
16	0.1464	0.1262	0.6105	0.5634	0.1944	0.0001	0.0803	0.0948	0.2729	0.2797	0.1402	0.6678	0.1890	0.2123	0.2007
17	0.1592	0.1591	0.5310	0.5501	0.1049	0.0013	0.1202	0.1695	0.2503	0.2593	0.1808	0.7415	0.1385	0.2247	0.1816
18	0.1205	0.1618	0.3526	0.4320	0.2277	0.0079	0.1626	0.2199	0.2170	0.2395	0.0740	0.5591	0.1358	0.2375	0.1866
19	0.1441	0.0564	0.2586	0.2626	0.1544	0.0054	0.1551	0.0860	0.1467	0.1580	0.0725	0.2213	0.0954	0.2081	0.1518
20	0.1886	0.0500	0.1977	0.2560	0.1574	0.0121	0.2385	0.0811	0.1434	0.1565	0.1942	0.1066	0.1072	0.1239	0.1155
21	0.2551	0.0403	0.1436	0.4169	0.2034	0.0121	0.3346	0.0628	0.1783	0.1947	0.2857	0.0750	0.1365	0.1086	0.1225
22	0.3101	0.0857	0.1441	0.5181	0.0990	0.0294	0.3927	0.1039	0.1972	0.2093	0.0836	0.1403	0.1472	0.1326	0.1399
23	0.3422	0.0367	0.0845	0.5062	0.1182	0.0202	0.3716	0.0525	0.1842	0.1889	0.0798	0.0205	0.1671	0.0993	0.1332
24	0.4637	0.0359	0.0677	0.6548	0.1287	0.0793	0.5332	0.0482	0.2376	0.2457	0.0473	0.0111	0.2051	0.1265	0.1658
3	0.0368	0.0443	0.0549	0.2250	0.0291	0.0313	0.0518	0.0356	0.0700	0.0748	0.0335	0.0564	0.0873	0.1584	0.1229
6	0.0719	0.3350	0.0719	0.2368	0.0133	0.0136	0.1080	0.2254	0.1240	0.1041	0.0220	0.1961	0.0800	0.3108	0.1954
9	0.0053	0.8909	0.2836	0.0303	0.0279	0.0013	0.0082	0.8480	0.2078	0.1703	0.0294	0.9258	0.0464	0.4212	0.2338
12	0.0395	0.4875	0.7964	0.0639	0.0719	0.0010	0.0422	0.5607	0.2435	0.2502	0.0074	1.5373	0.0562	0.3334	0.1948
15	0.1653	0.1977	0.4228	0.2910	0.0525	0.0039	0.2262	0.2680	0.1886	0.2055	0.1356	0.5256	0.1317	0.1982	0.1650
18	0.1420	0.1491	0.4980	0.5152	0.1757	0.0031	0.1210	0.1614	0.2467	0.2595	0.1316	0.6561	0.1544	0.2248	0.1896
21	0.1959	0.0489	0.2000	0.3119	0.1717	0.0099	0.2427	0.0766	0.1561	0.1697	0.1841	0.1343	0.1130	0.1469	0.1299
24	0.3720	0.0528	0.0988	0.5597	0.1153	0.0430	0.4325	0.0682	0.2063	0.2146	0.0702	0.0573	0.1731	0.1194	0.1463
6	0.0543	0.1896	0.0634	0.2309	0.0212	0.0224	0.0799	0.1305	0.0970	0.0894	0.0278	0.1262	0.0836	0.2346	0.1591
12	0.0224	0.6892	0.5400	0.0471	0.0499	0.0012	0.0252	0.7043	0.2257	0.2102	0.0184	1.2315	0.0513	0.3772	0.2143
18	0.1537	0.1734	0.4604	0.4031	0.1141	0.0035	0.1736	0.2147	0.2176	0.2325	0.1336	0.5909	0.1431	0.2115	0.1773
24	0.2840	0.0508	0.1494	0.4358	0.1435	0.0264	0.3376	0.0724	0.1812	0.1922	0.1272	0.0958	0.1431	0.1331	0.1381
12	0.0384	0.4394	0.3017	0.1390	0.0355	0.0118	0.0526	0.4174	0.1613	0.1498	0.0231	0.6789	0.0675	0.3059	0.1867
24	0.2188	0.1121	0.3049	0.4194	0.1288	0.0150	0.2556	0.1436	0.1994	0.2123	0.1304	0.3433	0.1430	0.1723	0.1577
24	0.1286	0.2758	0.3033	0.2792	0.0822	0.0134	0.1541	0.2805	0.1804	0.1811	0.0767	0.5111	0.1052	0.2391	0.1722

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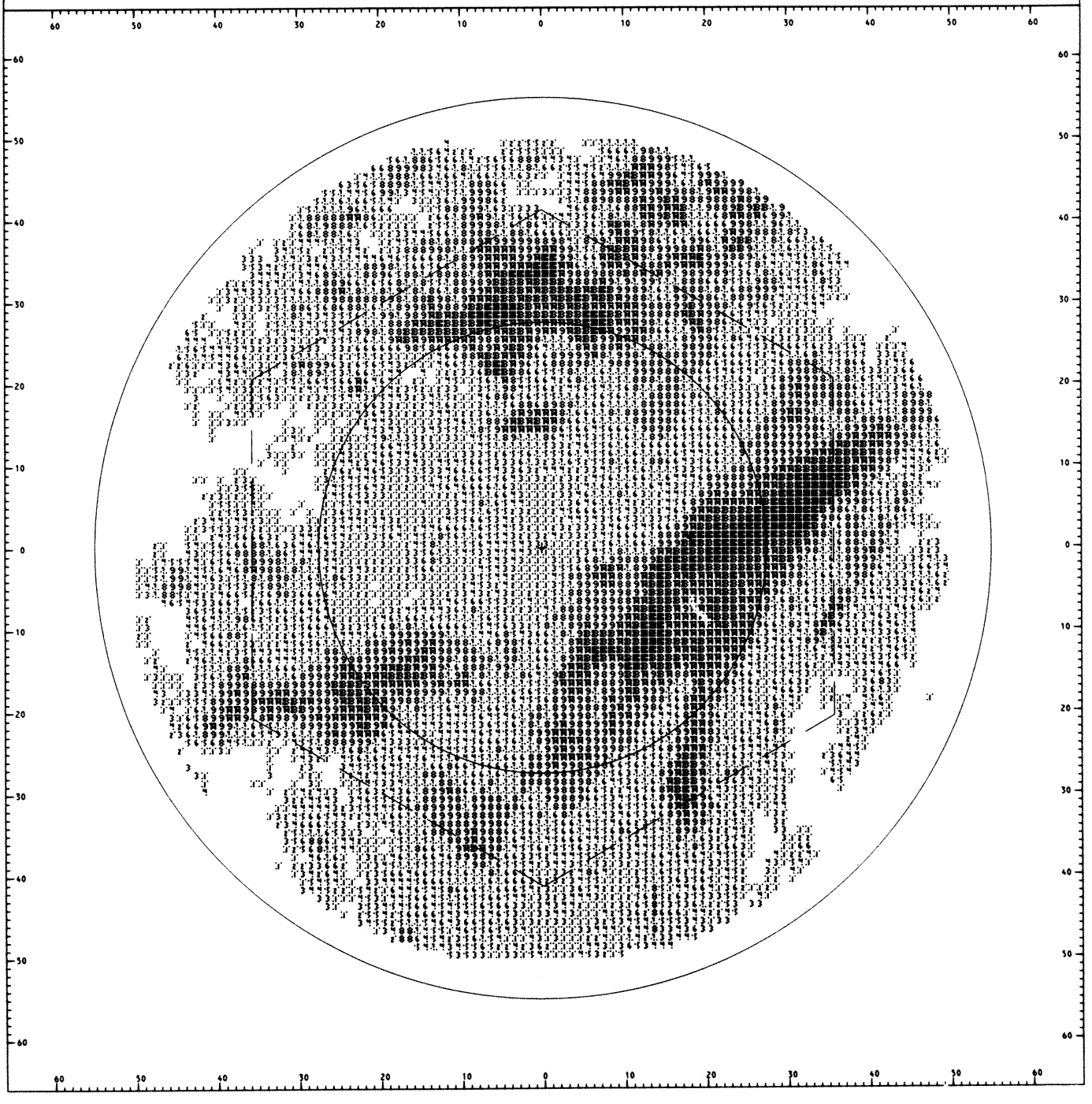
GATE RADAR DAILY RAINFALL RATE 217

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	118	104	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 5, 1974 (JULIAN DAY 217)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.4751	0.0383	0.0633	0.6937	0.1617	0.0992	0.5470	0.0521	0.2544	0.2644	0.0096	0.0074	0.2184	0.1701	0.1943
2	0.4313	0.0536	0.1022	0.8627	0.0763	0.1587	0.3709	0.0757	0.2797	0.2802	0.0307	0.0326	0.2540	0.2174	0.2357
3	0.4700	0.0523	0.1546	0.8359	0.0445	0.4702	0.4531	0.0733	0.3365	0.3472	0.0023	0.0603	0.2782	0.2409	0.2595
4	0.4715	0.0674	0.2325	1.1273	0.0764	0.3537	0.6135	0.0838	0.3865	0.4215	0.0105	0.0715	0.3054	0.2877	0.2965
5	0.5731	0.0741	0.3076	0.8740	0.1332	0.1836	0.7167	0.1042	0.3563	0.3817	0.0156	0.0870	0.2429	0.2934	0.2681
6	0.6460	0.0861	0.2711	0.8232	0.2051	0.1801	0.7094	0.1259	0.3675	0.3801	0.0258	0.1656	0.2843	0.3141	0.2992
7	0.3304	0.2351	0.3823	0.7861	0.2679	0.3519	0.2257	0.3138	0.3915	0.4035	0.0372	0.1611	0.3396	0.3663	0.3529
8	0.1019	0.7026	0.4004	0.7559	0.2507	0.2711	0.1015	0.9864	0.4141	0.4507	0.2253	0.1266	0.3088	0.4361	0.3724
9	0.0680	1.2317	0.3991	0.6623	0.1727	0.3575	0.0659	1.4604	0.4829	0.4883	0.4480	0.1588	0.3342	0.4590	0.3966
10	0.1230	1.6644	0.6556	0.7036	0.2103	0.3665	0.1644	1.2714	0.6221	0.5419	0.7547	0.1154	0.3577	0.5284	0.4431
11	0.2730	1.1026	0.9179	0.7473	0.4172	0.4137	0.3313	0.9875	0.6458	0.6330	0.6858	0.0320	0.3626	0.5299	0.4462
12	0.3329	1.0295	0.7715	0.5860	0.4098	0.4337	0.4621	1.3747	0.5945	0.6409	0.4812	0.1643	0.2920	0.5333	0.4126
13	0.2367	1.2789	0.6241	0.6350	0.2446	0.2232	0.2930	1.6579	0.5415	0.5657	1.4084	0.5415	0.2322	0.5408	0.3865
14	0.5409	1.4611	0.7573	0.2202	0.1444	0.1270	0.7420	1.5282	0.5431	0.5134	1.7239	0.6001	0.1115	0.6220	0.3667
15	0.4994	1.6398	0.8252	0.0624	0.0775	0.3314	0.7072	1.4183	0.5740	0.5044	1.1771	0.4388	0.1207	0.6334	0.3770
16	0.6918	1.6940	0.8069	0.0542	0.0618	0.2654	0.8489	1.0973	0.5971	0.4615	0.7164	0.5438	0.1020	0.7115	0.4067
17	0.9284	2.1459	0.7577	0.1067	0.0747	0.4093	1.0788	0.9413	0.7389	0.5001	0.5140	0.8709	0.1304	0.8765	0.5035
18	0.9732	2.1130	0.7441	0.1044	0.0843	0.6018	1.1230	1.1166	0.7717	0.5621	0.3452	1.6012	0.1993	0.9311	0.5651
19	1.4557	2.3924	1.1508	0.0507	0.1749	0.8664	1.4075	2.0712	1.0163	0.8477	0.1736	2.8446	0.2974	1.0844	0.6907
20	1.3368	2.1438	1.4865	0.0800	0.1383	1.0824	1.0017	1.9769	1.0449	0.8897	0.1771	2.4406	0.3253	1.0514	0.6882
21	1.1907	1.7891	1.8077	0.1335	0.1210	1.3220	1.1326	1.7206	1.0599	0.9863	0.5471	1.3116	0.4280	0.9817	0.7046
22	0.7110	1.2789	1.4980	0.2600	0.0775	1.8471	0.8042	1.3622	0.9440	0.9587	0.7144	0.6250	0.5982	0.7242	0.6609
23	0.2755	0.5403	1.1766	0.2806	0.0925	1.6952	0.2738	0.6836	0.6757	0.7296	0.2296	0.3980	0.6166	0.4171	0.5168
24	0.2394	0.1289	0.3558	0.2561	0.0782	0.5257	0.2046	0.1448	0.2632	0.2717	0.1081	0.0412	0.2882	0.1720	0.2301
3	0.4588	0.0480	0.1067	0.7974	0.0942	0.2427	0.4570	0.0670	0.2902	0.2973	0.0142	0.0334	0.2502	0.2094	0.2298
6	0.5635	0.0759	0.2704	0.9415	0.1382	0.2391	0.6798	0.1046	0.3701	0.3944	0.0173	0.1080	0.2775	0.2984	0.2879
9	0.1668	0.7231	0.3939	0.7347	0.2304	0.3268	0.1310	0.9202	0.4295	0.4475	0.2368	0.1488	0.3275	0.4204	0.3740
12	0.2430	1.2655	0.7816	0.6789	0.3458	0.4046	0.3193	1.2112	0.6208	0.6053	0.6405	0.1039	0.3374	0.5305	0.4340
15	0.4257	1.4599	0.7355	0.3059	0.1555	0.2272	0.5807	1.5348	0.5528	0.5278	1.4365	0.5268	0.1548	0.5987	0.3767
18	0.8644	1.9842	0.7695	0.0884	0.0736	0.4255	1.0169	1.0517	0.7025	0.5078	0.5252	1.0053	0.1439	0.8397	0.4918
21	1.3277	2.1084	1.4816	0.0881	0.1447	1.0903	1.1805	1.9229	1.0403	0.9079	0.2992	2.1989	0.3502	1.0391	0.6944
24	0.4086	0.6494	1.0101	0.2656	0.0827	1.3573	0.4276	0.7302	0.6276	0.6533	0.3507	0.3547	0.5010	0.4378	0.4694
6	0.5111	0.0620	0.1885	0.8694	0.1162	0.2409	0.5684	0.0858	0.3301	0.3458	0.0157	0.0707	0.2638	0.2539	0.2589
12	0.2049	0.9943	0.5877	0.7068	0.2881	0.3657	0.2252	1.0657	0.5251	0.5263	0.4387	0.1264	0.3325	0.4754	0.4039
18	0.6450	1.7221	0.7525	0.1972	0.1145	0.3264	0.7988	1.2932	0.6277	0.5178	0.9808	0.7660	0.1493	0.7192	0.4342
24	0.8681	1.3789	1.2459	0.1768	0.1137	1.2237	0.8040	1.3265	0.8341	0.7806	0.3250	1.2768	0.4256	0.7385	0.5818
12	0.3580	0.5281	0.3881	0.7881	0.2021	0.3033	0.3968	0.5757	0.4276	0.4361	0.2272	0.0985	0.2981	0.3646	0.3314
24	0.7566	1.5504	0.9992	0.1870	0.1141	0.7750	0.8014	1.3099	0.7308	0.6492	0.6529	1.0214	0.2874	0.7288	0.5081
24	0.5573	1.0393	0.6936	0.4875	0.1581	0.5391	0.5991	0.9428	0.5792	0.5426	0.4401	0.5600	0.2928	0.5467	0.4197

27

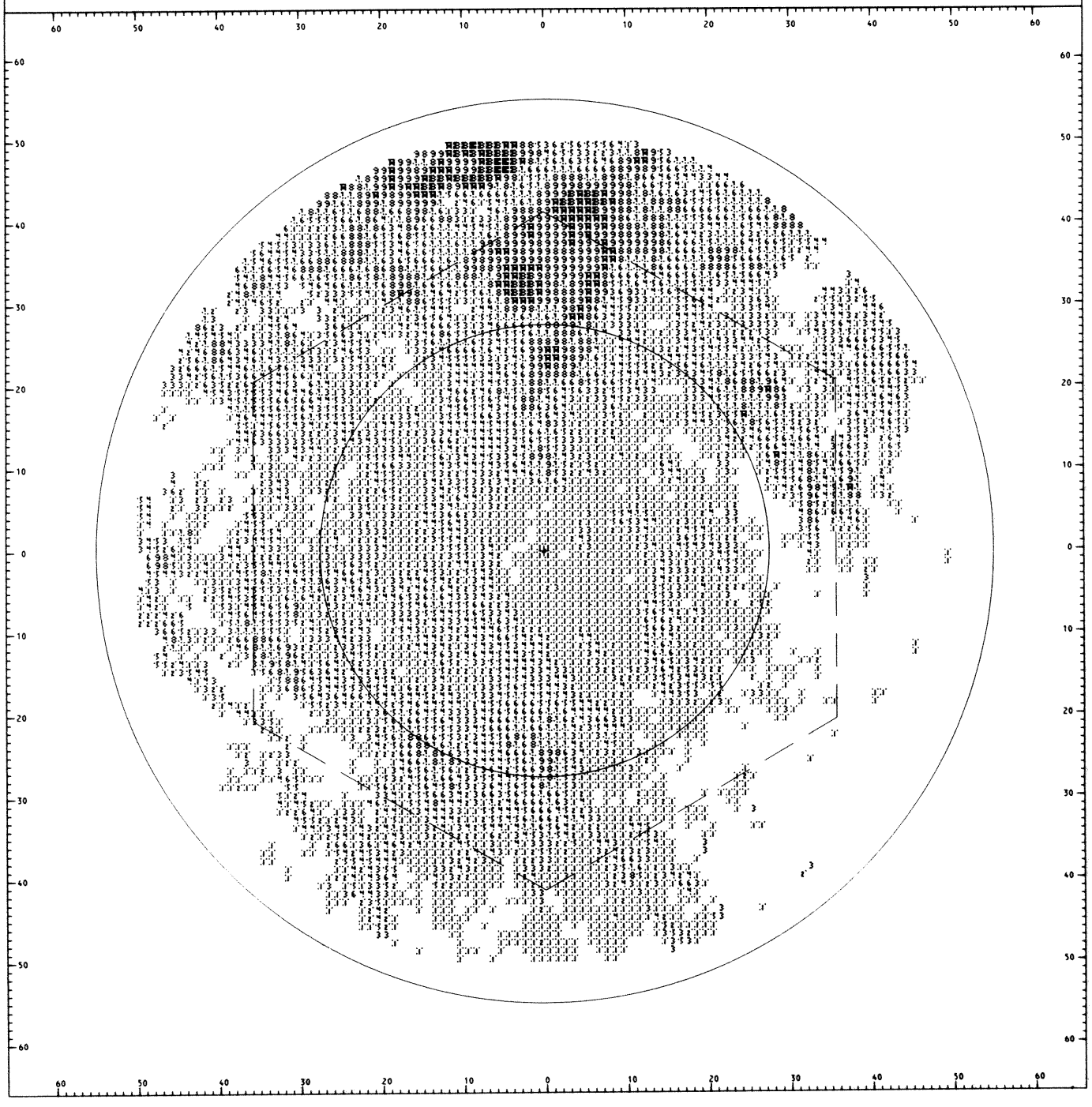
GATE RADAR DAILY RAINFALL RATE 218

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	114	076	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 6, 1974 (JULIAN DAY 218)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.3567	0.1332	0.2259	0.2486	0.0388	0.3026	0.3580	0.0392	0.2170	0.2017	0.0894	0.0083	0.2311	0.2265	0.2288
2	0.2889	0.1354	0.1142	0.1307	0.0289	0.3833	0.2259	0.0049	0.1797	0.1516	0.0316	0.0187	0.1241	0.2389	0.1815
3	0.2457	0.1649	0.2250	0.1286	0.0418	0.5076	0.2580	0.0241	0.2183	0.2042	0.0041	0.1224	0.1484	0.2694	0.2089
4	0.3587	0.0739	0.2297	0.2282	0.0352	0.4987	0.3575	0.0439	0.2365	0.2353	0.0102	0.0858	0.1862	0.2555	0.2209
5	0.2951	0.1057	0.2169	0.3060	0.0395	0.5122	0.2615	0.1487	0.2450	0.2523	0.0368	0.0228	0.2466	0.2230	0.2348
6	0.1288	0.1043	0.0994	0.3257	0.0168	0.5789	0.1382	0.1437	0.2082	0.2267	0.0465	0.0098	0.2807	0.1534	0.2171
7	0.2023	0.0467	0.0140	0.3353	0.0199	0.4829	0.2617	0.0562	0.1828	0.1990	0.0503	0.0	0.2401	0.1342	0.1871
8	0.2026	0.0432	0.0121	0.2895	0.0839	0.2133	0.2363	0.0054	0.1404	0.1421	0.0303	0.0012	0.1858	0.0663	0.1260
9	0.0903	0.0201	0.0112	0.1830	0.1104	0.0498	0.0520	0.0007	0.0774	0.0734	0.0195	0.0015	0.1713	0.0275	0.0994
10	0.0276	0.0257	0.0047	0.1067	0.0658	0.0278	0.0063	0.0102	0.0431	0.0408	0.0005	0.0100	0.2134	0.0183	0.1159
11	0.0904	0.0449	0.0002	0.0530	0.0403	0.0324	0.0037	0.0155	0.0435	0.0262	0.0	0.0146	0.2798	0.0364	0.1581
12	0.1023	0.1683	0.0001	0.0271	0.0197	0.0443	0.0200	0.0240	0.0605	0.0226	0.0187	0.0062	0.2447	0.0571	0.1509
13	0.3589	0.1057	0.0049	0.0827	0.0437	0.2003	0.0482	0.0975	0.1324	0.0805	0.2213	0.0060	0.1297	0.0927	0.1112
14	0.1050	0.0250	0.0066	0.0692	0.1921	0.1283	0.0274	0.0384	0.0878	0.0832	0.0726	0.0067	0.1085	0.0280	0.0682
15	0.0283	0.0094	0.0017	0.0184	0.1985	0.0708	0.0102	0.0147	0.0548	0.0581	0.0145	0.0001	0.0755	0.0199	0.0477
16	0.1194	0.0052	0.0014	0.0054	0.3138	0.0167	0.0556	0.0079	0.0774	0.0721	0.0271	0.0015	0.0891	0.0373	0.0632
17	0.1622	0.0077	0.0017	0.0106	0.2602	0.0013	0.1044	0.0119	0.0742	0.0663	0.0576	0.0024	0.0724	0.0390	0.0557
18	0.2212	0.0064	0.0157	0.0365	0.1062	0.0718	0.2604	0.0099	0.0762	0.0762	0.0184	0.0239	0.0841	0.0730	0.0786
19	0.1870	0.0048	0.0778	0.1013	0.1061	0.2263	0.1814	0.0068	0.1169	0.1193	0.0	0.0670	0.1536	0.0845	0.1191
20	0.3626	0.0036	0.0284	0.0837	0.2350	0.1565	0.4465	0.0020	0.1449	0.1495	0.0057	0.0086	0.1150	0.0908	0.1029
21	0.1682	0.0065	0.0244	0.0450	0.1441	0.1529	0.2007	0.0097	0.0901	0.0948	0.0241	0.0279	0.0990	0.0870	0.0930
22	0.2785	0.0478	0.0118	0.0186	0.0532	0.1555	0.3187	0.0723	0.0940	0.0924	0.1166	0.0258	0.0875	0.1948	0.1411
23	0.6125	0.0463	0.0218	0.0118	0.1101	0.1947	0.8823	0.0723	0.1657	0.1791	0.1464	0.0277	0.0951	0.2183	0.1567
24	0.3909	0.0072	0.0143	0.0218	0.0825	0.3500	0.5689	0.0093	0.1439	0.1581	0.0181	0.0140	0.1099	0.1401	0.1250
3	0.2971	0.1445	0.1883	0.1693	0.0365	0.3978	0.2806	0.0227	0.2050	0.1858	0.0417	0.0498	0.1679	0.2449	0.2064
6	0.2608	0.0946	0.1820	0.2866	0.0305	0.5299	0.2524	0.1121	0.2299	0.2381	0.0312	0.0395	0.2378	0.2106	0.2242
9	0.1650	0.0366	0.0124	0.2693	0.0714	0.2486	0.1834	0.0208	0.1335	0.1382	0.0333	0.0009	0.1991	0.0760	0.1375
12	0.0734	0.0797	0.0016	0.0623	0.0419	0.0348	0.0100	0.0166	0.0490	0.0299	0.0064	0.0102	0.2459	0.0373	0.1416
15	0.1641	0.0467	0.0044	0.0568	0.1448	0.1331	0.0286	0.0502	0.0917	0.0739	0.1028	0.0043	0.1046	0.0468	0.0757
18	0.1676	0.0064	0.0063	0.0175	0.2267	0.0299	0.1401	0.0099	0.0759	0.0715	0.0344	0.0093	0.0819	0.0498	0.0658
21	0.2393	0.0050	0.0435	0.0767	0.1617	0.1786	0.2762	0.0062	0.1173	0.1212	0.0099	0.0345	0.1225	0.0874	0.1050
24	0.4273	0.0337	0.0159	0.0174	0.0819	0.2334	0.5900	0.0513	0.1346	0.1432	0.0937	0.0225	0.0975	0.1844	0.1409
6	0.2790	0.1196	0.1852	0.2280	0.0335	0.4639	0.2665	0.0674	0.2174	0.2119	0.0364	0.0446	0.2028	0.2278	0.2153
12	0.1192	0.0581	0.0070	0.1658	0.0567	0.1417	0.0967	0.0187	0.0912	0.0840	0.0199	0.0056	0.2225	0.0566	0.1395
18	0.1658	0.0266	0.0053	0.0371	0.1858	0.0815	0.0844	0.0300	0.0838	0.0727	0.0686	0.0068	0.0932	0.0483	0.0707
24	0.3333	0.0194	0.0297	0.0471	0.1218	0.2060	0.4331	0.0288	0.1259	0.1322	0.0518	0.0285	0.1100	0.1359	0.1229
12	0.1991	0.0889	0.0961	0.1969	0.0451	0.3028	0.1816	0.0430	0.1543	0.1479	0.0282	0.0251	0.2126	0.1422	0.1774
24	0.2496	0.0230	0.0175	0.0421	0.1538	0.1438	0.2587	0.0294	0.1048	0.1024	0.0602	0.0176	0.1016	0.0921	0.0968
24	0.2243	0.0559	0.0568	0.1195	0.0994	0.2233	0.2202	0.0362	0.1295	0.1252	0.0442	0.0214	0.1571	0.1171	0.1371

28

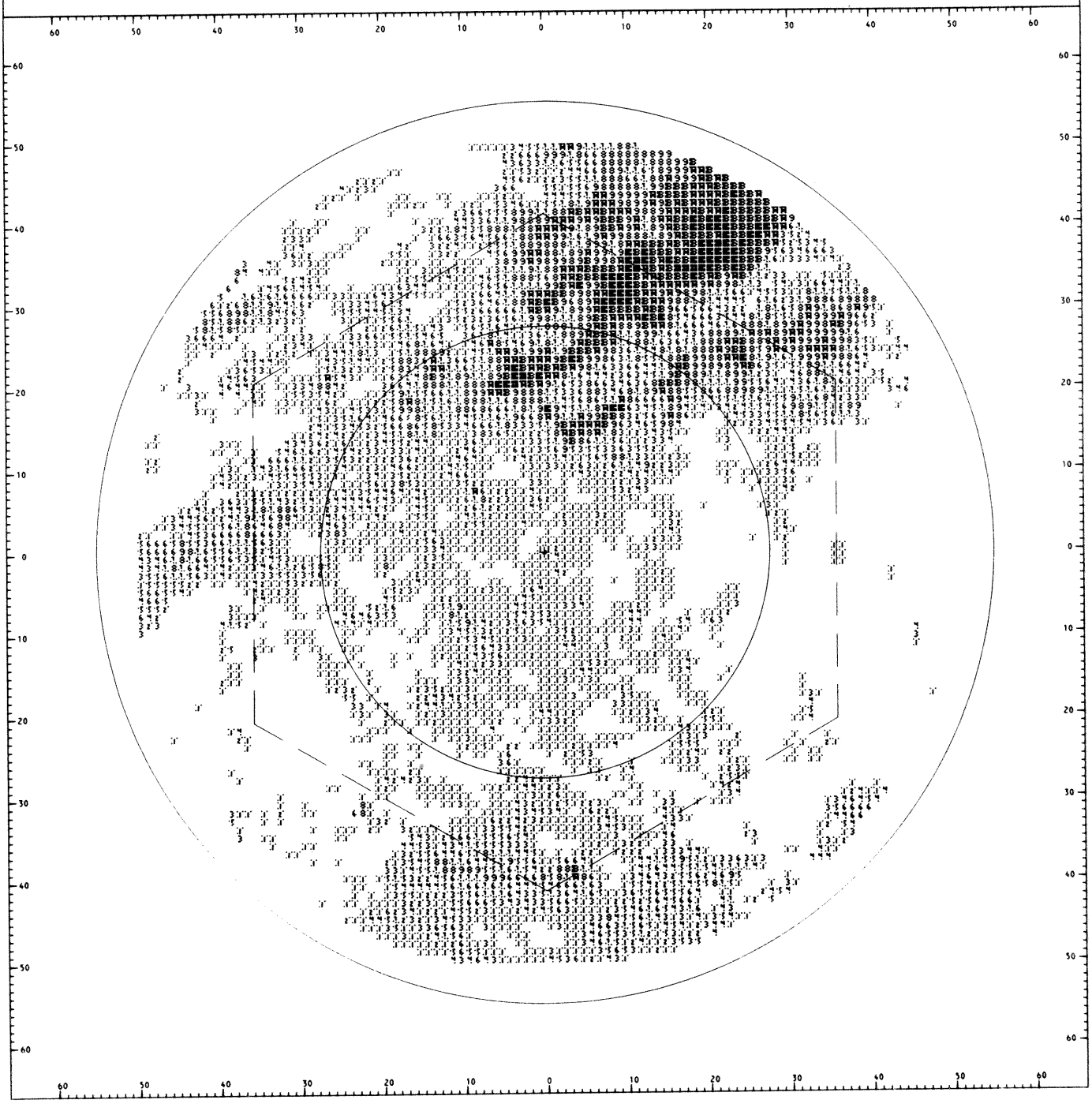
GATE RADAR DAILY RAINFALL RATE 219

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	114	079	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 7, 1974 (JULIAN DAY 219)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0371	0.0002	0.0584	0.0196	0.0371	0.3961	0.0567	0.0004	0.0911	0.1033	0.0007	0.0508	0.1048	0.0356	0.0702
2	0.0	0.0	0.0128	0.0302	0.0182	0.0698	0.0001	0.0	0.0218	0.0247	0.0	0.0088	0.0443	0.0042	0.0242
3	0.0002	0.0	0.0004	0.0126	0.0100	0.0042	0.0003	0.0	0.0046	0.0052	0.0	0.0003	0.0100	0.0005	0.0052
4	0.0019	0.0	0.0	0.0029	0.0074	0.0032	0.0029	0.0	0.0026	0.0029	0.0030	0.0	0.0058	0.0006	0.0032
5	0.0336	0.0008	0.0	0.0	0.0066	0.0252	0.0491	0.0010	0.0110	0.0120	0.0370	0.0	0.0066	0.0063	0.0065
6	0.0577	0.0102	0.0046	0.0028	0.0023	0.0831	0.0570	0.0151	0.0267	0.0262	0.0587	0.0001	0.0163	0.0149	0.0156
7	0.0251	0.0282	0.0165	0.0094	0.0066	0.1133	0.0294	0.0382	0.0331	0.0357	0.0869	0.0023	0.0237	0.0139	0.0188
8	0.0190	0.0166	0.0110	0.0034	0.0031	0.0816	0.0297	0.0179	0.0224	0.0244	0.0224	0.0010	0.0168	0.0117	0.0143
9	0.0163	0.0221	0.0151	0.0192	0.0106	0.1230	0.0154	0.0117	0.0343	0.0350	0.0145	0.0125	0.0306	0.0259	0.0282
10	0.0057	0.0396	0.0363	0.0101	0.0218	0.1213	0.0022	0.0016	0.0391	0.0362	0.0031	0.0383	0.0362	0.0344	0.0353
11	0.0220	0.0194	0.0018	0.0165	0.0458	0.1608	0.0141	0.0	0.0443	0.0442	0.0097	0.0014	0.0550	0.0280	0.0415
12	0.1561	0.0017	0.0023	0.0100	0.0895	0.0891	0.0237	0.0	0.0581	0.0391	0.0007	0.0029	0.0633	0.0536	0.0584
13	0.2030	0.0008	0.0020	0.0302	0.1852	0.0763	0.0837	0.0013	0.0830	0.0661	0.0542	0.0005	0.0789	0.0627	0.0708
14	0.2153	0.0045	0.0006	0.0336	0.1342	0.0424	0.1630	0.0081	0.0718	0.0607	0.0655	0.0	0.1014	0.1208	0.1111
15	0.3780	0.0022	0.0104	0.0808	0.0426	0.0297	0.2269	0.0042	0.0903	0.0587	0.0748	0.0	0.0992	0.2350	0.1671
16	0.6919	0.0047	0.0324	0.1240	0.0482	0.0157	0.5194	0.0039	0.1522	0.1046	0.0816	0.0065	0.0881	0.3527	0.2204
17	1.0963	0.0375	0.0342	0.0522	0.0716	0.0874	0.5941	0.0048	0.2290	0.1185	0.1518	0.0166	0.0836	0.4555	0.2695
18	1.4603	0.1286	0.0023	0.0313	0.1239	0.1428	0.8019	0.0019	0.3139	0.1536	0.1555	0.0019	0.0978	0.5758	0.3368
19	1.6519	0.0880	0.0644	0.0124	0.0473	0.0956	1.1513	0.0	0.3253	0.1800	0.0719	0.0896	0.0787	0.7022	0.3904
20	2.1831	0.0309	0.1133	0.0538	0.0535	0.2498	2.1655	0.0028	0.4454	0.3495	0.0402	0.1031	0.1097	0.8216	0.4657
21	2.0541	0.0049	0.0752	0.1566	0.0925	0.5459	2.0297	0.0032	0.4860	0.4087	0.1209	0.0431	0.1571	0.8203	0.4887
22	1.9745	0.0042	0.0632	0.1759	0.0619	1.1596	2.1799	0.0054	0.5705	0.5382	0.3326	0.0295	0.2656	0.8263	0.5459
23	1.2324	0.0077	0.0447	0.1052	0.1303	1.4443	1.4366	0.0121	0.4920	0.4995	0.0992	0.0719	0.3557	0.6402	0.4979
24	0.6178	0.0336	0.0383	0.0090	0.0979	1.4123	0.7036	0.0501	0.3666	0.3845	0.0120	0.0680	0.3611	0.5492	0.4551
3	0.0124	0.0001	0.0239	0.0208	0.0218	0.1567	0.0190	0.0001	0.0391	0.0444	0.0003	0.0200	0.0530	0.0134	0.0332
6	0.0311	0.0037	0.0015	0.0019	0.0054	0.0371	0.0364	0.0054	0.0134	0.0137	0.0329	0.0	0.0096	0.0073	0.0084
9	0.0201	0.0223	0.0142	0.0107	0.0068	0.1060	0.0248	0.0226	0.0299	0.0317	0.0413	0.0053	0.0237	0.0172	0.0204
12	0.0613	0.0203	0.0135	0.0122	0.0524	0.1237	0.0133	0.0005	0.0472	0.0398	0.0045	0.0142	0.0515	0.0387	0.0451
15	0.2655	0.0025	0.0043	0.0482	0.1207	0.0495	0.1579	0.0046	0.0817	0.0618	0.0648	0.0002	0.0932	0.1395	0.1163
18	1.0828	0.0569	0.0229	0.0692	0.0812	0.0820	0.6385	0.0036	0.2317	0.1255	0.1296	0.0083	0.0898	0.4613	0.2755
21	1.9631	0.0413	0.0843	0.0743	0.0644	0.2971	1.7821	0.0020	0.4189	0.3127	0.0777	0.0786	0.1151	0.7814	0.4482
24	1.2749	0.0151	0.0487	0.0967	0.0967	1.3387	1.4400	0.0225	0.4764	0.4740	0.1479	0.0565	0.3274	0.6719	0.4997
6	0.0217	0.0019	0.0127	0.0113	0.0136	0.0969	0.0277	0.0027	0.0263	0.0291	0.0166	0.0100	0.0313	0.0104	0.0208
12	0.0407	0.0213	0.0138	0.0114	0.0296	0.1148	0.0191	0.0116	0.0385	0.0358	0.0229	0.0097	0.0376	0.0279	0.0328
18	0.6741	0.0297	0.0136	0.0587	0.1009	0.0657	0.3982	0.0041	0.1567	0.0937	0.0972	0.0043	0.0915	0.3004	0.1959
24	1.6189	0.0282	0.0665	0.0855	0.0806	0.8179	1.6111	0.0123	0.4476	0.3934	0.1128	0.0675	0.2213	0.7266	0.4739
12	0.0312	0.0116	0.0133	0.0114	0.0216	0.1059	0.0234	0.0072	0.0324	0.0324	0.0197	0.0099	0.0344	0.0191	0.0268
24	1.1465	0.0290	0.0401	0.0721	0.0907	0.4418	1.0046	0.0082	0.3021	0.2435	0.1050	0.0359	0.1564	0.5135	0.3349
24	0.5888	0.0203	0.0267	0.0417	0.0562	0.2738	0.5140	0.0077	0.1672	0.1379	0.0624	0.0229	0.0954	0.2663	0.1808

29

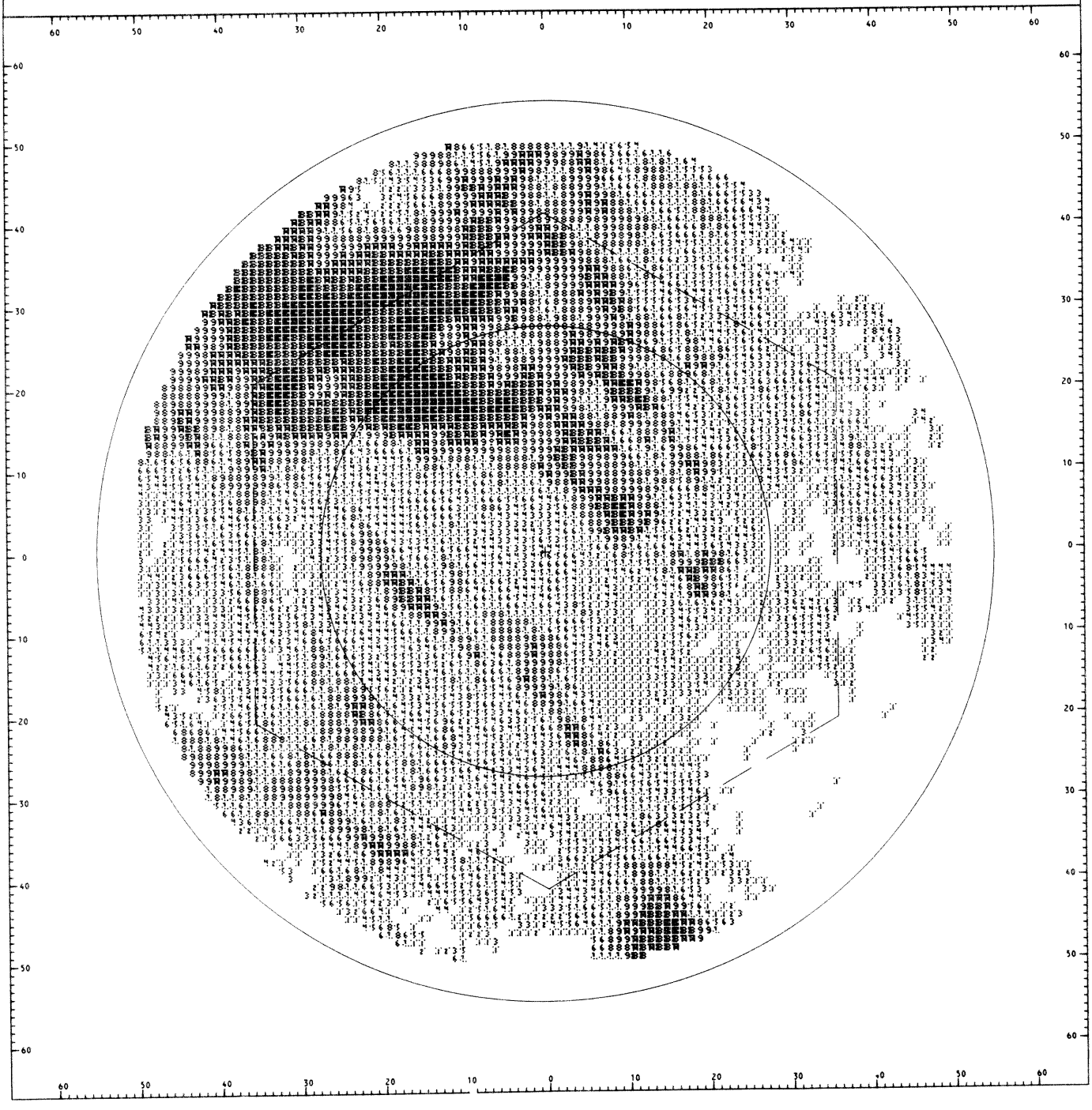
GATE RADAR DAILY RAINFALL RATE 220

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	120	000	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	A	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	B	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	C	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	D	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 8, 1974 (JULIAN DAY 220)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.3345	0.0502	0.0305	0.0299	0.0259	1.1318	0.3322	0.0640	0.2660	0.2774	0.0357	0.0622	0.4061	0.4129	0.4095
2	0.1026	0.2383	0.0542	0.0393	0.0259	0.6059	0.0347	0.2269	0.1775	0.1689	0.0759	0.1298	0.3297	0.3421	0.3359
3	0.2090	0.4277	0.1162	0.0367	0.0096	0.3431	0.1094	0.4856	0.1905	0.1683	0.0443	0.2142	0.2378	0.3078	0.2728
4	0.3320	0.6246	0.1530	0.1047	0.0334	0.1085	0.2867	0.8596	0.2265	0.2158	0.3632	0.1607	0.1981	0.2951	0.2466
5	0.6885	0.8208	0.0925	0.0775	0.0235	0.0989	0.7652	1.2533	0.3009	0.3017	1.2662	0.0538	0.1121	0.4767	0.2944
6	1.1126	0.6625	0.0975	0.0350	0.0179	0.5652	1.2884	1.0677	0.4147	0.4215	2.0155	0.0479	0.1553	0.6024	0.3788
7	1.6345	0.5414	0.0928	0.2385	0.0369	1.4224	1.8378	0.8263	0.6592	0.6603	2.3283	0.0903	0.4321	0.5429	0.4875
8	2.0987	0.3704	0.0777	0.2678	0.0883	2.1925	2.5820	0.5362	0.8461	0.8717	2.8662	0.0593	0.6870	0.5320	0.6093
9	1.9846	0.2843	0.0438	0.2287	0.1509	3.7784	2.7381	0.3825	1.0738	1.1682	1.5246	0.0568	1.0253	0.4580	0.7414
10	1.5873	0.1533	0.0750	0.2177	0.2127	4.4159	2.4288	0.1667	1.1054	1.2400	0.6528	0.0879	1.2321	0.3390	0.7854
11	0.7914	0.0656	0.0484	0.2083	0.3091	4.6865	1.1884	0.0679	1.0139	1.1415	0.2162	0.0416	1.6585	0.1703	0.9143
12	0.2424	0.0532	0.1142	0.3001	0.4522	4.8251	0.2735	0.0757	0.9940	1.1157	0.2095	0.1053	1.8654	0.0918	0.9785
13	0.2096	0.0367	0.1707	0.3377	0.4263	2.3942	0.2045	0.0591	0.5940	0.6602	0.2156	0.2020	1.5024	0.1192	0.8107
14	0.3447	0.0403	0.3495	0.4516	0.3497	1.9524	0.3776	0.0672	0.5795	0.6393	0.4903	0.2376	1.2857	0.2176	0.7515
15	0.4257	0.0440	0.4996	0.6591	0.2734	1.6302	0.6393	0.0388	0.5865	0.6594	0.4023	0.0179	0.8999	0.2550	0.5774
16	0.6900	0.1050	0.4819	0.6596	0.6596	1.6559	1.0245	0.0545	0.7070	0.7831	0.4217	0.0068	0.8241	0.2944	0.5592
17	0.6766	0.1514	0.2668	1.0453	0.9310	1.0361	1.0045	0.0979	0.6838	0.7533	0.2963	0.0050	0.9322	0.2454	0.5887
18	0.5176	0.0971	0.0776	0.6664	0.9954	0.6524	0.5676	0.1458	0.5013	0.5396	0.5057	0.0133	0.6414	0.1593	0.4003
19	0.3612	0.0175	0.0193	0.4312	1.3168	0.3783	0.4291	0.0285	0.4219	0.4630	0.4906	0.0084	0.5881	0.0951	0.3416
20	0.4103	0.0073	0.0055	0.4379	1.2114	0.1812	0.5938	0.0069	0.3767	0.4216	0.1755	0.0017	0.4442	0.0903	0.2673
21	0.2295	0.0066	0.0019	0.1635	0.5390	0.5666	0.3385	0.0029	0.2513	0.2820	0.0162	0.0005	0.3380	0.0572	0.1976
22	0.0611	0.0210	0.0012	0.0271	0.2242	0.5828	0.0910	0.0294	0.1527	0.1726	0.0079	0.0002	0.2215	0.0310	0.1262
23	0.0147	0.0270	0.0037	0.0061	0.2163	0.3161	0.0230	0.0347	0.0974	0.1098	0.0302	0.0	0.1527	0.0090	0.0808
24	0.0090	0.0100	0.0014	0.0176	0.0829	0.0760	0.0140	0.0111	0.0329	0.0368	0.0046	0.0	0.0910	0.0039	0.0474
3	0.2153	0.2387	0.0670	0.0353	0.0205	0.6936	0.1588	0.2588	0.2113	0.2048	0.0520	0.1354	0.3245	0.3542	0.3394
6	0.7110	0.7026	0.1143	0.0724	0.0249	0.2575	0.7801	1.0602	0.3140	0.3130	1.2150	0.0875	0.1552	0.4581	0.3066
9	1.9059	0.3987	0.0714	0.2450	0.0920	2.4644	2.3859	0.5816	0.8598	0.9001	2.2397	0.0688	0.7148	0.5110	0.6125
12	0.8737	0.0907	0.0792	0.2420	0.3246	4.6425	1.2968	0.1034	1.0375	1.1654	0.3595	0.0783	1.5850	0.2003	0.8924
15	0.3266	0.0403	0.3399	0.4828	0.3498	1.9923	0.4072	0.0550	0.5867	0.6529	0.3694	0.1525	1.2290	0.1972	0.7129
18	0.6280	0.1178	0.2754	0.7904	0.8620	1.1148	0.8655	0.0994	0.6307	0.6920	0.4079	0.0084	0.7992	0.2330	0.5161
21	0.3337	0.0105	0.0089	0.3442	1.0224	0.3754	0.4538	0.0128	0.3500	0.3889	0.2274	0.0035	0.4567	0.0809	0.2688
24	0.0283	0.0193	0.0021	0.0169	0.1745	0.3250	0.0427	0.0251	0.0943	0.1064	0.0142	0.0001	0.1551	0.0146	0.0848
6	0.4632	0.4707	0.0907	0.0539	0.0227	0.4756	0.4694	0.6595	0.2626	0.2589	0.6335	0.1114	0.2398	0.4061	0.3230
12	1.3898	0.2447	0.0753	0.2435	0.2083	3.5534	1.8414	0.3425	0.9487	1.0330	1.2996	0.0735	1.1495	0.3556	0.7522
18	0.4773	0.0791	0.3077	0.6366	0.6059	1.5535	0.6363	0.0772	0.6086	0.6724	0.3887	0.0804	1.0143	0.2151	0.6145
24	0.1810	0.0149	0.0055	0.1806	0.5984	0.3502	0.2482	0.0189	0.2221	0.2476	0.1208	0.0018	0.3059	0.0477	0.1768
12	0.9264	0.3577	0.0830	0.1487	0.1155	2.0145	1.1554	0.5010	0.6057	0.6459	0.9666	0.0925	0.6950	0.3809	0.5378
24	0.3292	0.0470	0.1566	0.4086	0.6021	0.9518	0.4423	0.0481	0.4154	0.4600	0.2547	0.0411	0.6601	0.1314	0.3958
24	0.6278	0.2023	0.1198	0.2786	0.3588	1.4831	0.7988	0.2745	0.5105	0.5530	0.6106	0.0668	0.6775	0.2561	0.4668

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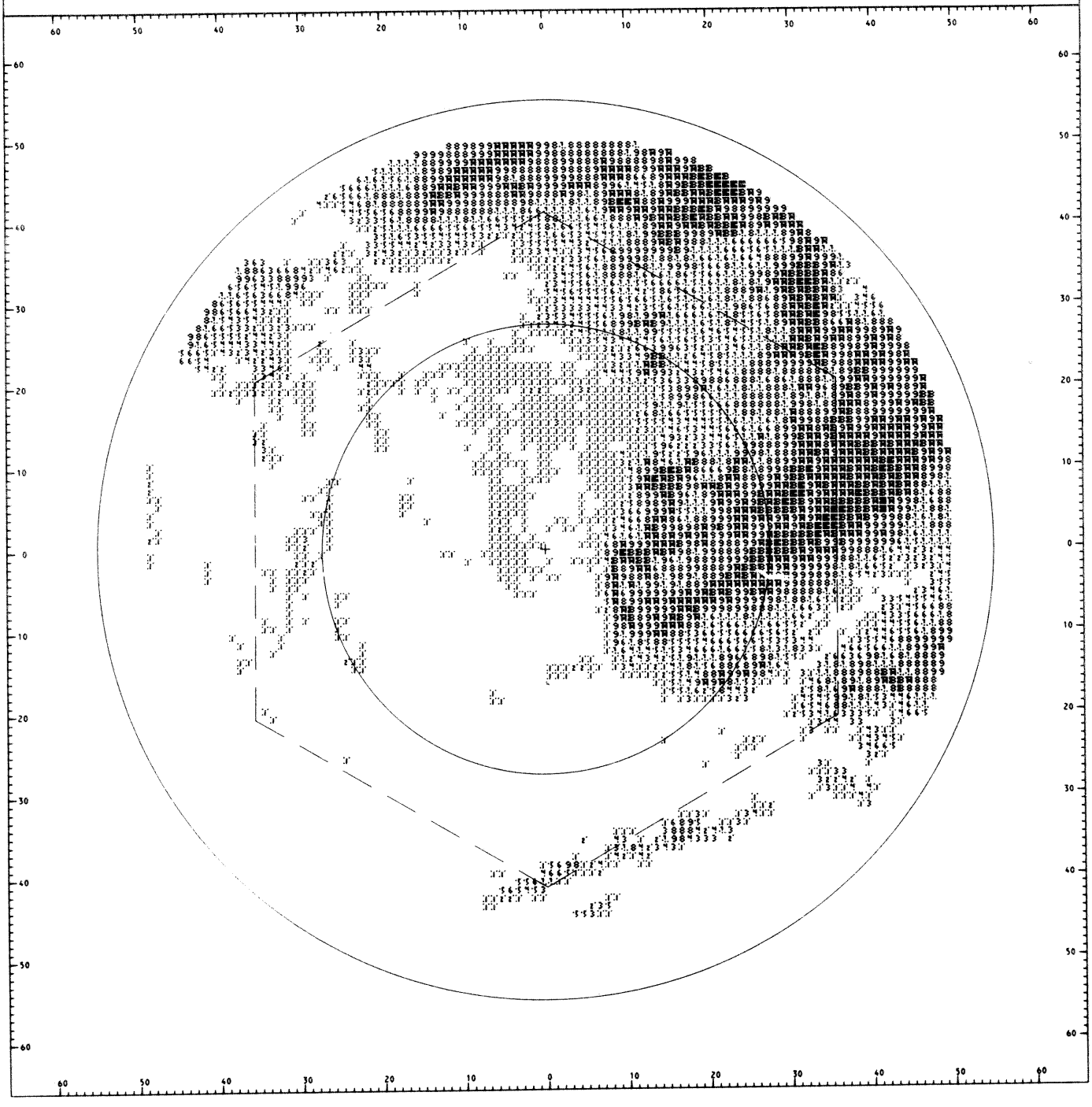
GATE RADAR DAILY RAINFALL RATE 221

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	118	000	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	A	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	B	1.000 - 1.496	B	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	C	1.496 - 2.239	C	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	D	2.239 - 3.350	D	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 9, 1974 (JULIAN DAY 221)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0170	0.0084	0.0	0.0016	0.0098	0.0252	0.0064	0.0149	0.0103	0.0095	0.0192	0.0	0.0695	0.0054	0.0374
2	0.0075	0.0	0.0001	0.0002	0.0016	0.0137	0.0104	0.0	0.0038	0.0042	0.0130	0.0	0.0364	0.0014	0.0189
3	0.0215	0.0	0.0	0.0001	0.0002	0.0032	0.0114	0.0	0.0041	0.0020	0.0032	0.0	0.0037	0.0040	0.0038
4	0.0448	0.0	0.0	0.0003	0.0062	0.0010	0.0287	0.0	0.0087	0.0049	0.0034	0.0	0.0020	0.0089	0.0055
5	0.0504	0.0	0.0	0.0001	0.0196	0.0114	0.0356	0.0	0.0136	0.0102	0.0001	0.0	0.0060	0.0108	0.0034
6	0.1142	0.0	0.0	0.0	0.0116	0.0109	0.0552	0.0	0.0227	0.0109	0.0002	0.0	0.0055	0.0259	0.0157
7	0.3357	0.0	0.0	0.0	0.0006	0.0069	0.2435	0.0	0.0569	0.0307	0.0	0.0	0.0040	0.0850	0.0445
8	0.1138	0.0	0.0	0.0	0.0039	0.0106	0.1464	0.0	0.0213	0.0203	0.0	0.0	0.0032	0.0926	0.0479
9	0.1113	0.0	0.0004	0.0	0.0108	0.0206	0.0789	0.0	0.0237	0.0155	0.0	0.0005	0.0058	0.0796	0.0427
10	0.0410	0.0	0.0	0.0	0.0009	0.0101	0.0528	0.0	0.0086	0.0084	0.0	0.0	0.0021	0.0271	0.0146
11	0.0250	0.0	0.0	0.0	0.0	0.0	0.0306	0.0	0.0042	0.0037	0.0	0.0	0.0030	0.0063	0.0046
12	0.0253	0.0	0.0	0.0	0.0	0.0	0.0204	0.0	0.0042	0.0025	0.0	0.0	0.0049	0.0087	0.0068
13	0.0013	0.0043	0.0	0.0	0.0	0.0	0.0004	0.0	0.0009	0.0001	0.0	0.0	0.0060	0.0293	0.0177
14	0.0092	0.0039	0.0	0.0	0.0	0.0	0.0	0.0	0.0022	0.0	0.0	0.0	0.0450	0.0699	0.0574
15	0.0069	0.0185	0.0	0.0	0.0	0.0019	0.0031	0.0271	0.0046	0.0041	0.0087	0.0	0.0409	0.2603	0.1506
16	0.0034	0.0362	0.0	0.0	0.0	0.0007	0.0017	0.0536	0.0068	0.0070	0.0515	0.0	0.0141	0.3856	0.1999
17	0.0803	0.0232	0.0002	0.0	0.0	0.0092	0.0610	0.0320	0.0188	0.0130	0.0596	0.0002	0.0167	0.5499	0.2833
18	0.2361	0.0714	0.0	0.0002	0.0	0.0071	0.0425	0.0251	0.0524	0.0096	0.0374	0.0	0.0677	0.7047	0.3862
19	0.6678	0.0426	0.0011	0.0002	0.0	0.0128	0.2398	0.0215	0.1203	0.0342	0.0100	0.0061	0.0832	0.8444	0.4638
20	1.0981	0.1996	0.0025	0.0027	0.0	0.0051	0.1285	0.0099	0.2174	0.0186	0.0034	0.0084	0.0516	1.4071	0.7294
21	0.6408	2.0197	0.0077	0.0030	0.0	0.0120	0.1043	0.0506	0.4500	0.0231	0.0191	0.0249	0.1105	1.3216	0.7160
22	0.2745	4.5261	0.0254	0.0	0.0	0.0247	0.2394	1.9861	0.8156	0.2831	0.6975	0.3681	0.2347	1.2224	0.7285
23	0.6860	6.4457	0.1969	0.0041	0.0008	0.0016	0.5746	6.6655	1.2323	0.9294	4.0912	1.5141	0.2242	1.6109	0.9175
24	1.1988	5.3354	1.9924	0.0159	0.0001	0.0004	1.6339	7.6998	1.4298	1.5243	5.5963	2.4196	0.0975	1.7241	0.9108
3	0.0153	0.0028	0.0	0.0006	0.0039	0.0140	0.0094	0.0050	0.0061	0.0053	0.0118	0.0	0.0365	0.0036	0.0200
6	0.0698	0.0	0.0	0.0001	0.0125	0.0078	0.0398	0.0	0.0150	0.0087	0.0012	0.0	0.0045	0.0152	0.0099
9	0.1869	0.0	0.0001	0.0	0.0051	0.0127	0.1562	0.0	0.0340	0.0222	0.0	0.0002	0.0044	0.0857	0.0450
12	0.0304	0.0	0.0	0.0	0.0003	0.0034	0.0346	0.0	0.0057	0.0048	0.0	0.0	0.0033	0.0140	0.0087
15	0.0058	0.0089	0.0	0.0	0.0	0.0006	0.0012	0.0090	0.0026	0.0014	0.0029	0.0	0.0306	0.1198	0.0752
18	0.1066	0.0436	0.0001	0.0001	0.0	0.0057	0.0351	0.0369	0.0260	0.0099	0.0495	0.0001	0.0328	0.5467	0.2898
21	0.8022	0.7539	0.0038	0.0020	0.0	0.0100	0.1575	0.0273	0.2625	0.0253	0.0108	0.0131	0.0818	1.1909	0.6364
24	0.7197	5.4359	0.7382	0.0066	0.0003	0.0089	0.8159	5.4505	1.1592	0.9123	3.4616	1.4339	0.1855	1.5190	0.8522
6	0.0426	0.0014	0.0	0.0004	0.0082	0.0109	0.0246	0.0025	0.0105	0.0070	0.0065	0.0	0.0205	0.0094	0.0150
12	0.1087	0.0	0.0001	0.0	0.0027	0.0080	0.0954	0.0	0.0198	0.0135	0.0	0.0001	0.0038	0.0499	0.0269
18	0.0562	0.0262	0.0	0.0	0.0	0.0032	0.0181	0.0230	0.0143	0.0056	0.0262	0.0	0.0317	0.3333	0.1825
24	0.7610	3.0949	0.3710	0.0043	0.0002	0.0094	0.4867	2.7388	0.7109	0.4688	1.7362	0.7235	0.1336	1.3548	0.7441
12	0.0756	0.0007	0.0	0.0002	0.0054	0.0095	0.0600	0.0012	0.0152	0.0102	0.0033	0.0	0.0122	0.0296	0.0209
24	0.4086	1.5605	0.1855	0.0022	0.0001	0.0063	0.2524	1.3809	0.3626	0.2372	0.8812	0.3618	0.0827	0.8442	0.4634
24	0.2421	0.7806	0.0928	0.0012	0.0028	0.0079	0.1562	0.6911	0.1889	0.1237	0.4422	0.1809	0.0474	0.4369	0.2421

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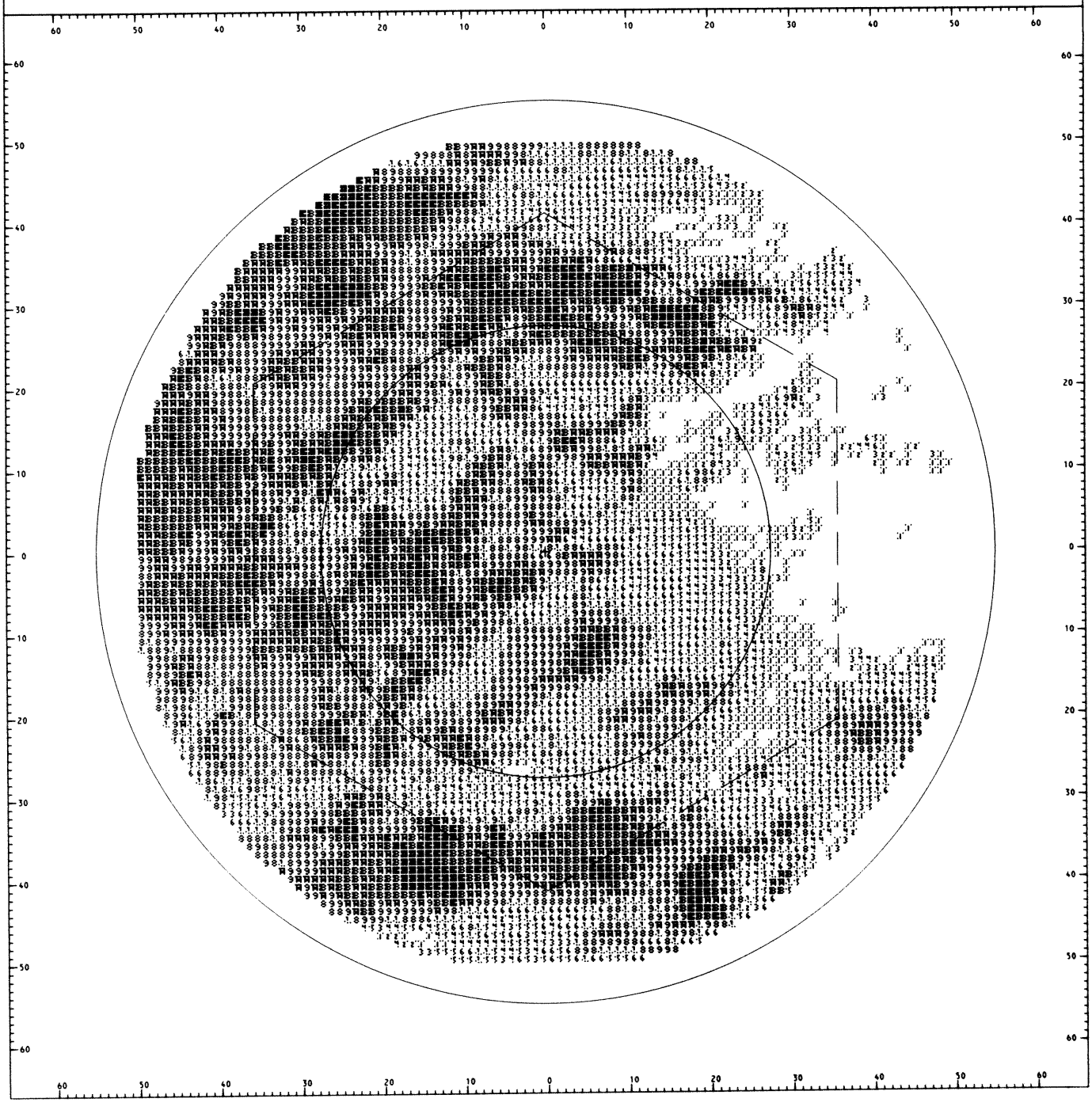
GATE RADAR DAILY RAINFALL RATE 222

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	064	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 10, 1974 (JULIAN DAY 222)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	1.9065	1.5867	3.8999	0.0051	0.0	0.0021	2.9528	2.4664	1.2311	1.3952	4.9458	1.8006	0.0023	1.5253	0.7638
2	1.8445	0.2024	1.8756	0.4914	0.0465	0.2131	2.8458	0.3262	0.7757	0.8775	2.2722	0.4341	0.1708	0.8094	0.4901
3	1.4642	0.1299	1.0928	1.9708	0.2657	1.0636	2.0554	0.1117	0.9938	1.0893	0.1254	0.2779	0.7566	0.5828	0.6695
4	1.6363	0.2004	0.4092	1.3607	0.6421	1.4757	1.0531	0.2726	0.9514	0.8945	0.1955	0.3838	0.8764	0.6470	0.7614
5	2.4934	0.1232	0.7237	0.9072	0.5294	1.7290	1.1317	0.1197	1.0804	0.8851	0.0797	0.6735	0.7863	0.8405	0.8131
6	2.4970	0.0954	0.5698	1.3779	0.6043	2.8727	1.3281	0.0486	1.3310	1.1893	0.0001	0.7507	1.0945	0.9046	0.9992
7	2.3341	0.0009	0.7002	1.9232	1.9611	3.3079	1.6205	0.0003	1.7007	1.6871	0.0	0.6699	1.4910	1.1489	1.3197
8	1.4705	0.0003	0.5489	2.5955	3.7437	3.7521	1.0873	0.0002	2.0175	2.1456	0.0	0.6514	2.2152	1.1486	1.6817
9	0.7596	0.0014	1.0042	2.4420	6.3426	3.6536	1.0606	0.0016	2.3709	2.6778	0.0001	1.2753	3.3590	0.7888	2.0738
10	0.0521	0.0028	1.0129	2.3545	6.2840	3.9089	0.0672	0.0042	2.2732	2.5806	0.0156	0.8268	4.4848	0.4137	2.4491
11	0.0087	0.0129	0.1022	2.3969	4.9605	1.0002	0.0134	0.0133	1.4187	1.6108	0.0049	0.0792	4.2335	0.0376	2.1354
12	0.0115	0.0133	0.0819	0.9747	1.6696	0.0300	0.0170	0.0043	0.4654	0.5265	0.0016	0.1117	3.5351	0.0251	1.7800
13	0.0102	0.0397	0.0953	0.2578	0.2767	0.0656	0.0087	0.0255	0.1244	0.1360	0.0245	0.1416	1.7662	0.0333	0.8997
14	0.0795	0.0464	0.0877	0.2233	0.0035	0.0278	0.0233	0.0718	0.0778	0.0761	0.1110	0.1246	0.2687	0.0449	0.1568
15	0.4619	0.0486	0.2362	0.4258	0.0069	0.0702	0.1846	0.0753	0.2074	0.1708	0.0474	0.3171	0.1782	0.1453	0.1617
16	0.7046	0.0856	0.5333	0.3277	0.0023	0.0493	0.9487	0.1344	0.2826	0.3026	0.1011	0.7069	0.2016	0.2873	0.2444
17	0.9292	0.0039	0.6112	0.3148	0.0	0.0721	1.3733	0.0100	0.3203	0.3544	0.0649	0.6096	0.2531	0.3645	0.3088
18	0.8417	0.0	0.3555	0.1993	0.0	0.2890	1.2946	0.0	0.2795	0.3147	0.0102	0.2800	0.1418	0.2756	0.2087
19	0.4925	0.0244	0.2340	0.0599	0.0	0.5430	0.5114	0.0378	0.2246	0.2238	0.0005	0.1889	0.1229	0.1661	0.1445
20	0.1177	0.0198	0.0447	0.0094	0.0	0.3892	0.1322	0.0307	0.0964	0.1032	0.0	0.0611	0.1062	0.0440	0.0751
21	0.0	0.0021	0.0101	0.0511	0.0007	0.0715	0.0	0.0032	0.0225	0.0255	0.0	0.0058	0.0620	0.0040	0.0330
22	0.0	0.0	0.0140	0.0056	0.0019	0.0	0.0	0.0	0.0036	0.0041	0.0	0.0	0.0740	0.0028	0.0384
23	0.0	0.0	0.0035	0.0033	0.0006	0.0	0.0	0.0	0.0012	0.0014	0.0	0.0	0.0517	0.0008	0.0263
24	0.0	0.0	0.0	0.0002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0304	0.0	0.0152
3	1.7384	0.6396	2.2894	0.8224	0.1041	0.4263	2.6180	0.9681	1.0001	1.1206	2.4478	0.8375	0.3099	0.9725	0.6411
6	2.2089	0.1397	0.5676	1.2152	0.5919	2.0258	1.1710	0.1470	1.1208	0.9896	0.0918	0.6026	0.9191	0.7974	0.8577
9	1.5214	0.0008	0.7511	2.3202	4.0158	3.5712	1.2561	0.0007	2.0295	2.1700	0.0	0.8655	2.3549	1.0287	1.6915
12	0.0241	0.0097	0.3990	1.9087	4.3047	1.6464	0.0325	0.0073	1.3856	1.5725	0.0074	0.3392	4.0841	0.1588	2.1212
15	0.1839	0.0449	0.1397	0.3023	0.0957	0.0545	0.0722	0.0575	0.1365	0.1276	0.0610	0.1944	0.7378	0.0745	0.4062
18	0.8251	0.0298	0.5000	0.2806	0.0008	0.1368	1.2055	0.0481	0.2941	0.3239	0.0588	0.5322	0.1988	0.3091	0.2539
21	0.2034	0.0154	0.0963	0.0401	0.0002	0.3346	0.2145	0.0239	0.1145	0.1175	0.0002	0.0853	0.0970	0.0714	0.0842
24	0.0	0.0	0.0059	0.0030	0.0008	0.0	0.0	0.0	0.0016	0.0018	0.0	0.0	0.0520	0.0012	0.0266
6	1.9736	0.3897	1.4284	1.0188	0.3480	1.2260	1.8944	0.5575	1.0603	1.0551	1.2698	0.7201	0.6145	0.8849	0.7493
12	0.7727	0.0053	0.5750	2.1144	4.1602	2.6087	0.6443	0.0040	1.7074	1.8711	0.0037	0.6024	3.2191	0.5938	1.9061
18	0.5045	0.0374	0.3199	0.2915	0.0482	0.0957	0.6389	0.0528	0.2153	0.2257	0.0599	0.3633	0.4683	0.1918	0.3300
24	0.1017	0.0077	0.0511	0.0216	0.0005	0.1673	0.1073	0.0120	0.0580	0.0597	0.0001	0.0426	0.0745	0.0363	0.0554
12	1.3731	0.1975	1.0017	1.5666	2.2541	1.9173	1.2694	0.2808	1.3836	1.4627	0.6367	0.6612	1.9164	0.7393	1.3273
24	0.3031	0.0225	0.1855	0.1565	0.0244	0.1315	0.3731	0.0324	0.1366	0.1427	0.0300	0.2030	0.2714	0.1140	0.1927
24	0.8381	0.1100	0.5936	0.8615	1.1392	1.0244	0.8212	0.1566	0.7604	0.8030	0.3334	0.4321	1.0942	0.4266	0.7599

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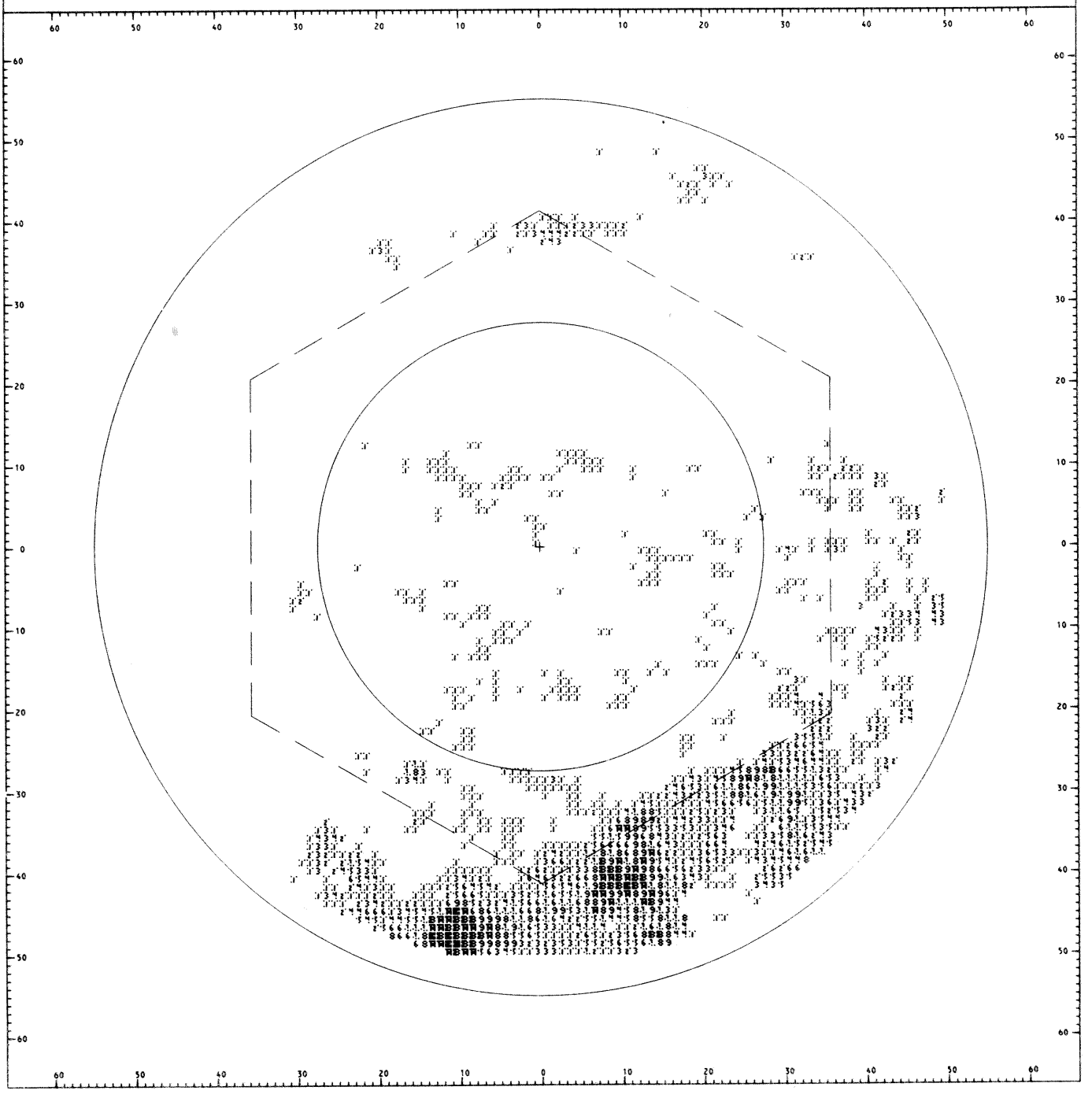
GATE RADAR DAILY RAINFALL RATE 223

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	115	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 11, 1974 (JULIAN DAY 223)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	0.0001	0.0	0.0001	0.0	0.0
2	0.0002	0.0009	0.0	0.0002	0.0	0.0	0.0003	0.0006	0.0002	0.0001	0.0002	0.0	0.0	0.0004	0.0002
3	0.0022	0.0066	0.0030	0.0013	0.0	0.0003	0.0034	0.0102	0.0022	0.0025	0.0028	0.0137	0.0003	0.0026	0.0015
4	0.0006	0.0138	0.0192	0.0011	0.0007	0.0034	0.0010	0.0119	0.0065	0.0062	0.0004	0.0365	0.0010	0.0067	0.0039
5	0.0001	0.0014	0.0014	0.0075	0.0023	0.0018	0.0001	0.0021	0.0024	0.0027	0.0004	0.0	0.0021	0.0008	0.0014
6	0.0	0.0	0.0064	0.0487	0.0026	0.0001	0.0001	0.0	0.0096	0.0139	0.0001	0.0095	0.0094	0.0106	0.0100
7	0.0	0.0	0.0271	0.0090	0.0001	0.0	0.0	0.0	0.0060	0.0068	0.0	0.0404	0.0039	0.0515	0.0277
8	0.0	0.0003	0.0243	0.0018	0.0	0.0	0.0	0.0	0.0044	0.0049	0.0	0.0295	0.0071	0.0387	0.0229
9	0.0	0.0030	0.0023	0.0001	0.0	0.0	0.0	0.0029	0.0009	0.0008	0.0006	0.0030	0.0008	0.0061	0.0034
10	0.0	0.0010	0.0019	0.0	0.0	0.0	0.0	0.0015	0.0005	0.0005	0.0006	0.0036	0.0015	0.0046	0.0031
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0003	0.0001
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	0.0	0.0001	0.0	0.0004	0.0006	0.0005
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0006	0.0004	0.0005
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0024	0.0006	0.0015
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0004	0.0009	0.0006
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0050	0.0025
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0029	0.0091	0.0060
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0071	0.0090	0.0081
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0019	0.0267	0.0143
20	0.0005	0.0006	0.0016	0.0006	0.0	0.0001	0.0	0.0	0.0006	0.0005	0.0	0.0021	0.0639	0.0939	0.0789
21	0.0002	0.0084	0.0037	0.0013	0.0	0.0016	0.0001	0.0003	0.0025	0.0013	0.0005	0.0055	0.0803	0.0897	0.0850
22	0.0133	0.0023	0.0026	0.0089	0.0	0.0070	0.0107	0.0015	0.0057	0.0049	0.0004	0.0016	0.1685	0.1158	0.1422
23	0.0076	0.0063	0.0556	0.0144	0.0002	0.0002	0.0118	0.0051	0.0140	0.0153	0.0	0.0565	0.1461	0.2328	0.1894
24	0.0021	0.0084	0.3504	0.0078	0.0	0.0040	0.0026	0.0088	0.0618	0.0696	0.0	0.5181	0.0673	0.3326	0.1999
3	0.0008	0.0025	0.0010	0.0005	0.0	0.0001	0.0013	0.0036	0.0008	0.0009	0.0010	0.0046	0.0002	0.0010	0.0006
6	0.0002	0.0050	0.0090	0.0191	0.0019	0.0018	0.0004	0.0047	0.0062	0.0066	0.0003	0.0154	0.0042	0.0060	0.0051
9	0.0	0.0011	0.0179	0.0036	0.0	0.0	0.0	0.0010	0.0037	0.0042	0.0002	0.0243	0.0040	0.0321	0.0180
12	0.0	0.0003	0.0006	0.0	0.0	0.0	0.0	0.0005	0.0002	0.0002	0.0002	0.0012	0.0007	0.0018	0.0012
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0011	0.0006	0.0009
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0034	0.0077	0.0055
21	0.0002	0.0030	0.0018	0.0007	0.0	0.0006	0.0	0.0001	0.0010	0.0006	0.0002	0.0025	0.0487	0.0701	0.0594
24	0.0077	0.0057	0.1362	0.0104	0.0001	0.0037	0.0084	0.0051	0.0272	0.0300	0.0002	0.1920	0.1273	0.2271	0.1772
6	0.0005	0.0038	0.0050	0.0098	0.0009	0.0009	0.0008	0.0041	0.0035	0.0038	0.0007	0.0100	0.0022	0.0035	0.0028
12	0.0	0.0007	0.0093	0.0018	0.0	0.0	0.0	0.0007	0.0020	0.0022	0.0002	0.0128	0.0023	0.0170	0.0096
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0022	0.0042	0.0032
24	0.0040	0.0043	0.0690	0.0055	0.0	0.0021	0.0042	0.0026	0.0141	0.0153	0.0002	0.0973	0.0880	0.1486	0.1183
12	0.0003	0.0022	0.0071	0.0058	0.0005	0.0005	0.0004	0.0024	0.0027	0.0030	0.0004	0.0114	0.0022	0.0102	0.0062
24	0.0020	0.0022	0.0345	0.0028	0.0	0.0011	0.0021	0.0013	0.0071	0.0076	0.0001	0.0486	0.0451	0.0764	0.0607
24	0.0011	0.0022	0.0208	0.0043	0.0002	0.0008	0.0013	0.0019	0.0049	0.0053	0.0003	0.0300	0.0237	0.0433	0.0335

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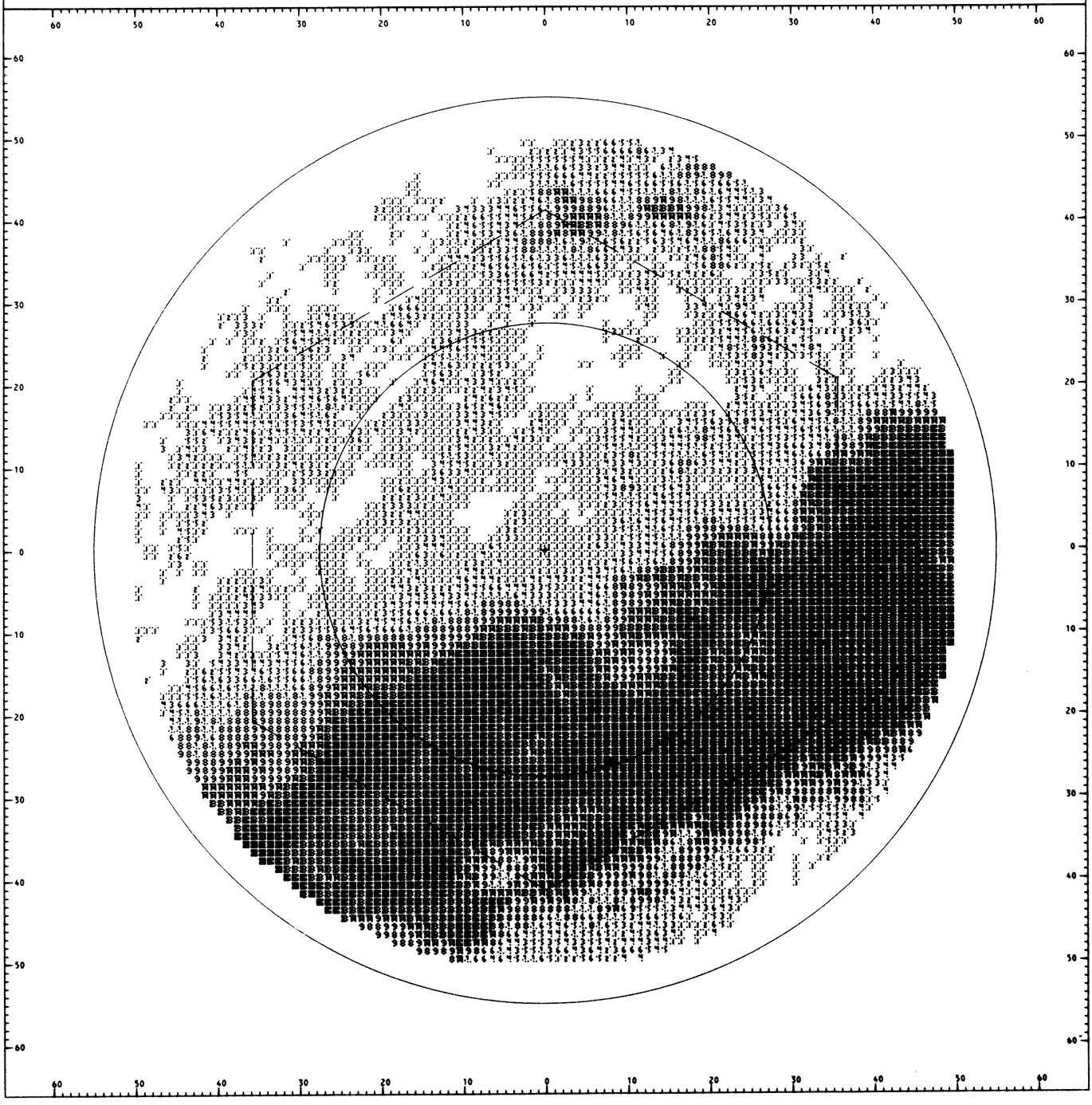
GATE RADAR DAILY RAINFALL RATE 224

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	118	107	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 12, 1974 (JULIAN DAY 224)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0006	0.0163	0.7862	0.0216	0.0016	0.0018	0.0009	0.0253	0.1374	0.1561	0.0001	1.1859	0.0731	0.2898	0.1815
2	0.0002	0.0221	0.4641	0.0540	0.0001	0.0005	0.0002	0.0228	0.0898	0.1006	0.0	0.6406	0.1972	0.1887	0.1930
3	0.0001	0.0267	0.3345	0.1413	0.0	0.0005	0.0002	0.0123	0.0835	0.0913	0.0006	0.3326	0.3840	0.2923	0.3382
4	0.0029	0.0476	0.8236	0.4566	0.0010	0.0007	0.0021	0.0465	0.2211	0.2475	0.0	0.4153	0.6518	0.4849	0.5683
5	0.0007	0.1055	2.5617	1.3883	0.0004	0.0010	0.0005	0.1116	0.6732	0.7583	0.0001	1.2300	0.7953	0.7624	0.7787
6	0.0002	0.0732	4.5213	1.8511	0.0	0.0	0.0001	0.0765	1.0691	1.2100	0.0013	2.9977	0.7042	1.1223	0.9131
7	0.0017	0.2109	6.3938	0.7079	0.0	0.0	0.0	0.1675	1.2135	1.3586	0.0005	6.2841	0.4411	1.4724	0.9566
8	0.0001	0.8510	7.8375	0.8467	0.0	0.0	0.0002	0.4819	1.5834	1.6955	0.0008	9.9739	0.6836	1.8440	1.2636
9	0.0	2.2854	6.8028	1.0463	0.0	0.0	0.0	1.9735	1.6862	1.7220	0.0001	9.7979	0.8490	2.1631	1.5058
10	0.0	4.3869	6.3795	4.0636	0.0030	0.0	0.0	4.8776	2.4705	2.5693	0.0001	9.4926	1.4512	2.3911	1.9210
11	0.0005	3.0516	2.8426	8.2567	0.0016	0.0	0.0003	2.9556	2.3545	2.4558	0.0217	3.3738	2.3206	1.5898	1.9551
12	0.0013	2.3312	1.5534	10.3373	0.0083	0.0	0.0006	1.8440	2.3658	2.4691	0.2226	1.4474	2.6122	1.4248	2.0134
13	0.0066	0.9088	3.1237	8.5300	0.1187	0.0012	0.0035	0.5046	2.1068	2.2810	0.1348	1.3419	2.0383	1.7325	1.8853
14	0.0427	1.3231	3.1008	7.0958	0.8862	0.0005	0.0340	1.1169	2.0698	2.2322	0.5534	1.5584	1.7908	1.6249	1.7077
15	0.1823	2.6526	5.9137	5.3512	0.3083	0.0221	0.0792	2.6939	2.4001	2.5268	0.6758	4.7479	1.3453	2.6987	2.0217
16	0.3085	3.5780	3.8432	3.9367	0.1851	0.0662	0.2170	4.1116	1.9853	2.0463	0.4995	3.7527	1.0488	2.4152	1.7317
17	0.2869	2.9889	3.7056	2.2923	0.1306	0.0367	0.2869	2.7820	1.5730	1.5392	1.0895	2.3364	0.6211	1.9765	1.2985
18	0.1784	2.5979	2.1774	0.7856	0.1095	0.0535	0.2223	2.3887	0.9854	0.9106	0.9737	3.2613	0.2545	1.8856	1.0699
19	0.1281	3.1087	1.5870	0.1532	0.0719	0.2047	0.1383	2.2439	0.8791	0.6735	0.2883	3.6432	0.0993	2.3721	1.2356
20	0.0399	2.9154	1.8228	0.0757	0.0551	0.1239	0.0511	1.9050	0.8420	0.6326	0.0182	3.9286	0.0651	2.3886	1.2268
21	0.0419	2.0551	1.0792	0.0286	0.1008	0.0462	0.0192	1.8300	0.5612	0.4646	0.0221	2.8480	0.0579	1.7445	0.9012
22	0.1023	1.0637	0.3943	0.0766	0.1314	0.0570	0.0568	0.7940	0.3056	0.2293	0.0008	0.8940	0.0587	0.9664	0.5125
23	0.1869	0.2848	0.4642	0.0763	0.0504	0.4224	0.1365	0.1682	0.2471	0.2282	0.0144	0.2568	0.1347	0.3697	0.2522
24	0.2995	0.1814	0.8354	0.0640	0.0599	0.5144	0.2206	0.0603	0.3247	0.3118	0.0031	0.8315	0.1878	0.4879	0.3379
3	0.0003	0.0217	0.5283	0.0723	0.0006	0.0009	0.0004	0.0201	0.1036	0.1160	0.0002	0.7197	0.2181	0.2570	0.2376
6	0.0012	0.0754	2.6355	1.2320	0.0005	0.0006	0.0009	0.0782	0.6545	0.7386	0.0005	1.5476	0.7171	0.7899	0.7533
9	0.0006	1.1158	7.0114	0.8670	0.0	0.0	0.0001	0.8743	1.4944	1.5920	0.0005	8.6854	0.6579	1.8264	1.2420
12	0.0006	3.2565	3.5919	7.5524	0.0043	0.0	0.0003	3.2257	2.3969	2.4980	0.0815	4.7713	2.1279	1.8017	1.9647
15	0.0772	1.6282	4.0461	6.9923	0.4377	0.0079	0.0389	1.4385	2.1922	2.3466	0.4547	2.5494	1.7247	2.0186	1.8715
18	0.2579	3.0549	3.2420	2.3382	0.1417	0.0521	0.2421	3.0941	1.5145	1.4986	0.8543	3.1168	0.6415	2.0923	1.3666
21	0.0700	2.6931	1.4963	0.0858	0.0759	0.1249	0.0695	1.9930	0.7607	0.5902	0.1095	3.4733	0.0741	2.1683	1.1211
24	0.1962	0.5099	0.5646	0.0723	0.0806	0.3313	0.1380	0.3408	0.2925	0.2564	0.0061	0.6608	0.1271	0.6080	0.3675
6	0.0008	0.0486	1.5819	0.6521	0.0005	0.0007	0.0007	0.0492	0.3790	0.4273	0.0004	1.1337	0.4676	0.5234	0.4955
12	0.0006	2.1861	5.3018	4.2099	0.0022	0.0	0.0002	2.0500	1.9456	2.0450	0.0410	6.7284	1.3928	1.8141	1.6033
18	0.1676	2.3415	3.6441	4.6655	0.2897	0.0300	0.1405	2.2663	1.8533	1.9226	0.6545	2.8331	1.1831	2.0554	1.6190
24	0.1331	1.6015	1.0305	0.0791	0.0783	0.2281	0.1037	1.1669	0.5266	0.4233	0.0578	2.0670	0.1006	1.3879	0.7441
12	0.0007	1.1173	3.4418	2.4310	0.0013	0.0004	0.0004	1.0496	1.1623	1.2362	0.0207	3.9310	0.9303	1.1687	1.0493
24	0.1503	1.9715	2.3372	2.3722	0.1840	0.1291	0.1221	1.7166	1.1899	1.1730	0.3561	2.4500	0.6419	1.7216	1.1814
24	0.0755	1.5444	2.8895	2.4016	0.0927	0.0647	0.0613	1.3831	1.1761	1.2046	0.1884	3.1905	0.7861	1.4451	1.1153

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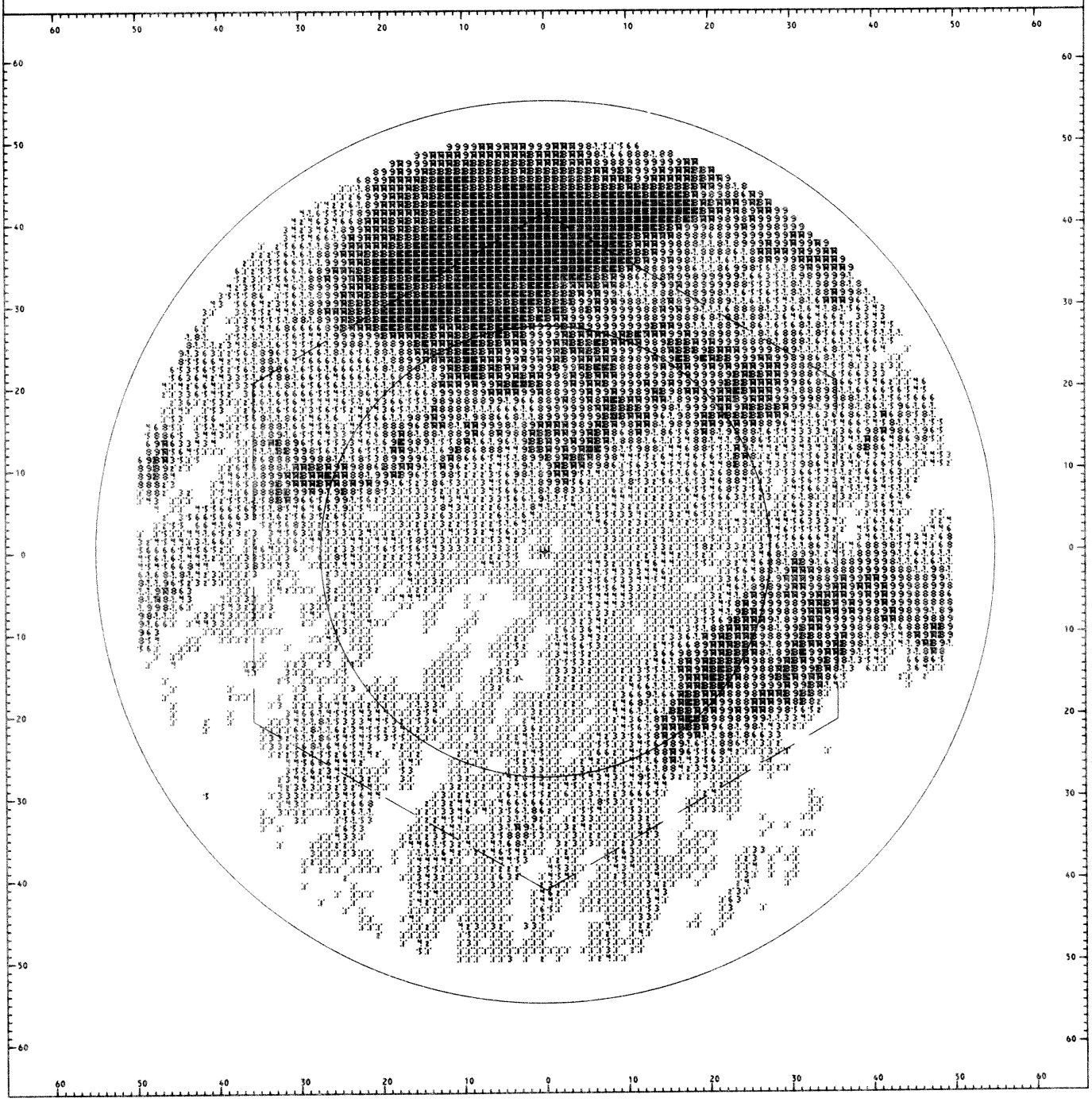
GATE RADAR DAILY RAINFALL RATE 225

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	119	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	A	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	B	1.000 - 1.496	B	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	C	1.496 - 2.239	C	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	D	2.239 - 3.350	D	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 13, 1974 (JULIAN DAY 225)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.4181	0.4078	1.2624	0.1292	0.0403	0.7099	0.4025	0.4233	0.4933	0.5042	0.0002	1.8454	0.3618	0.7410	0.5513
2	0.3782	0.7814	1.3936	0.2750	0.0535	0.6926	0.3413	0.7626	0.5948	0.5902	0.0094	2.4848	0.5737	1.0589	0.8161
3	0.4232	1.2982	1.7757	0.4723	0.0175	0.9417	0.3758	1.4156	0.8206	0.8240	0.1184	3.5293	0.5788	1.1459	0.8622
4	0.8502	2.2513	1.0892	0.2926	0.0038	1.4373	0.9602	2.2355	0.9880	0.9230	0.3917	3.0310	0.5522	1.2160	0.8840
5	1.1527	1.4754	0.7784	0.1780	0.0154	1.3803	1.5366	1.2834	0.8296	0.7862	0.3556	2.0504	0.4404	0.9570	0.6985
6	1.1708	0.5769	0.1561	0.1196	0.0074	1.3251	1.5530	0.4888	0.5580	0.5500	0.0849	0.4585	0.4207	0.4499	0.4353
7	1.4258	0.1773	0.0573	0.0135	0.0150	1.7726	1.6265	0.1685	0.5745	0.5665	0.0900	0.0960	0.4299	0.3569	0.3934
8	1.3712	0.1337	0.0770	0.0112	0.0367	1.6455	1.6615	0.2047	0.5436	0.5587	0.1380	0.1769	0.3926	0.3917	0.3921
9	1.1197	0.1555	0.0418	0.0009	0.0486	1.5042	1.0468	0.1284	0.4766	0.4424	0.3322	0.1131	0.3484	0.4213	0.3849
10	1.2457	0.1322	0.0022	0.0009	0.1433	1.0761	1.3815	0.1312	0.4319	0.4130	0.8419	0.0765	0.2841	0.4591	0.3716
11	0.9432	0.1159	0.0	0.0001	0.0929	0.2307	1.1887	0.1017	0.2298	0.2167	0.5353	0.0031	0.0736	0.3118	0.1927
12	0.7568	0.3025	0.0002	0.0002	0.0512	0.0596	1.0266	0.1350	0.1950	0.1612	0.3867	0.0	0.0301	0.2618	0.1460
13	0.8001	0.2255	0.0001	0.0002	0.0169	0.1991	0.8373	0.2254	0.2065	0.1693	0.2299	0.0	0.0663	0.2699	0.1681
14	1.1301	0.1340	0.0	0.0004	0.0194	0.5062	0.7034	0.0607	0.2973	0.1912	0.0151	0.0003	0.1038	0.3210	0.2124
15	1.2918	0.2112	0.0	0.0004	0.3350	0.9226	0.4615	0.0044	0.4592	0.2940	0.0180	0.0	0.2420	0.4537	0.3478
16	1.0387	0.0694	0.0001	0.0003	0.6230	0.9008	0.3682	0.0	0.4383	0.3332	0.0010	0.0	0.3432	0.7112	0.5272
17	1.2448	0.0036	0.0002	0.0001	0.9214	0.9649	1.1193	0.0014	0.5222	0.4928	0.0011	0.0	0.6820	0.6180	0.6499
18	2.7735	0.0086	0.0	0.0	0.4740	1.6302	1.7710	0.0018	0.8116	0.6110	0.0009	0.0	0.8693	0.8213	0.8451
19	2.8577	0.0695	0.0	0.0001	0.1714	3.4945	2.4999	0.0	1.0939	0.9918	0.0566	0.0	1.1815	0.8375	1.0093
20	1.9641	0.0808	0.0	0.0	0.0196	2.8907	2.1632	0.0255	0.8220	0.8117	0.3729	0.0	1.1983	0.6241	0.9110
21	0.9018	0.2218	0.0	0.0	0.3447	2.4027	1.2478	0.1759	0.6434	0.6903	0.4075	0.0	1.0610	0.3188	0.6898
22	0.3459	0.1097	0.0	0.0	0.4537	0.9093	0.4818	0.1130	0.3030	0.3299	0.3230	0.0	0.5380	0.1148	0.3264
23	0.0213	0.1059	0.0056	0.0	0.3222	0.1312	0.0297	0.1547	0.0983	0.1100	0.1246	0.0	0.2137	0.0287	0.1212
24	0.0001	0.0441	0.0346	0.0002	0.3150	0.0569	0.0001	0.0678	0.0757	0.0859	0.0316	0.0006	0.1825	0.0145	0.0985
3	0.4065	0.8291	1.4772	0.2922	0.0371	0.7814	0.3732	0.8671	0.6362	0.6395	0.0427	2.6198	0.5047	0.9820	0.7430
6	1.0579	1.4345	0.6745	0.1967	0.0089	1.3809	1.3499	1.3359	0.7919	0.7531	0.2774	1.8466	0.4711	0.8744	0.6724
9	1.3055	0.1555	0.0587	0.0085	0.0334	1.6408	1.4449	0.1672	0.5316	0.5225	0.1867	0.1287	0.3903	0.3900	0.3901
12	0.9819	0.1835	0.0008	0.0004	0.0958	0.4554	1.1989	0.1226	0.2856	0.2636	0.5880	0.0265	0.1293	0.3442	0.2367
15	1.0740	0.1902	0.0	0.0003	0.1238	0.5426	0.6674	0.0969	0.3210	0.2182	0.0877	0.0001	0.1373	0.3482	0.2428
18	1.6856	0.0272	0.0001	0.0001	0.6728	1.1653	1.0861	0.0011	0.5907	0.4790	0.0010	0.0	0.6315	0.7168	0.6740
21	1.9078	0.1240	0.0	0.0001	0.1786	2.9293	1.9703	0.0671	0.8531	0.8313	0.2790	0.0	1.1468	0.5935	0.8699
24	0.1224	0.0866	0.0134	0.0001	0.3636	0.3658	0.1705	0.1119	0.1590	0.1753	0.1597	0.0002	0.3114	0.0527	0.1820
6	0.7321	1.1318	1.0759	0.2445	0.0230	1.0811	0.8615	1.1015	0.7140	0.6962	0.1600	2.2332	0.4879	0.9281	0.7076
12	1.1437	0.1695	0.0297	0.0045	0.0646	1.0481	1.3219	0.1449	0.4085	0.3931	0.3874	0.0776	0.2598	0.3671	0.3134
18	1.3798	0.1087	0.0001	0.0002	0.3983	0.8539	0.8767	0.0490	0.4558	0.3486	0.0443	0.0001	0.3844	0.5325	0.4585
24	1.0151	0.1053	0.0067	0.0001	0.2711	1.6475	1.0704	0.0895	0.5060	0.5032	0.2193	0.0001	0.7292	0.3230	0.5259
12	0.9379	0.6507	0.5528	0.1245	0.0438	1.0646	1.0917	0.6232	0.5612	0.5446	0.2737	1.1554	0.3738	0.6476	0.5106
24	1.1974	0.1070	0.0034	0.0001	0.3347	1.2507	0.9735	0.0692	0.4809	0.4259	0.1318	0.0001	0.5568	0.4278	0.4923
24	1.0677	0.3788	0.2781	0.0623	0.1892	1.1576	1.0326	0.3462	0.5211	0.4852	0.2028	0.5777	0.4653	0.5376	0.5015

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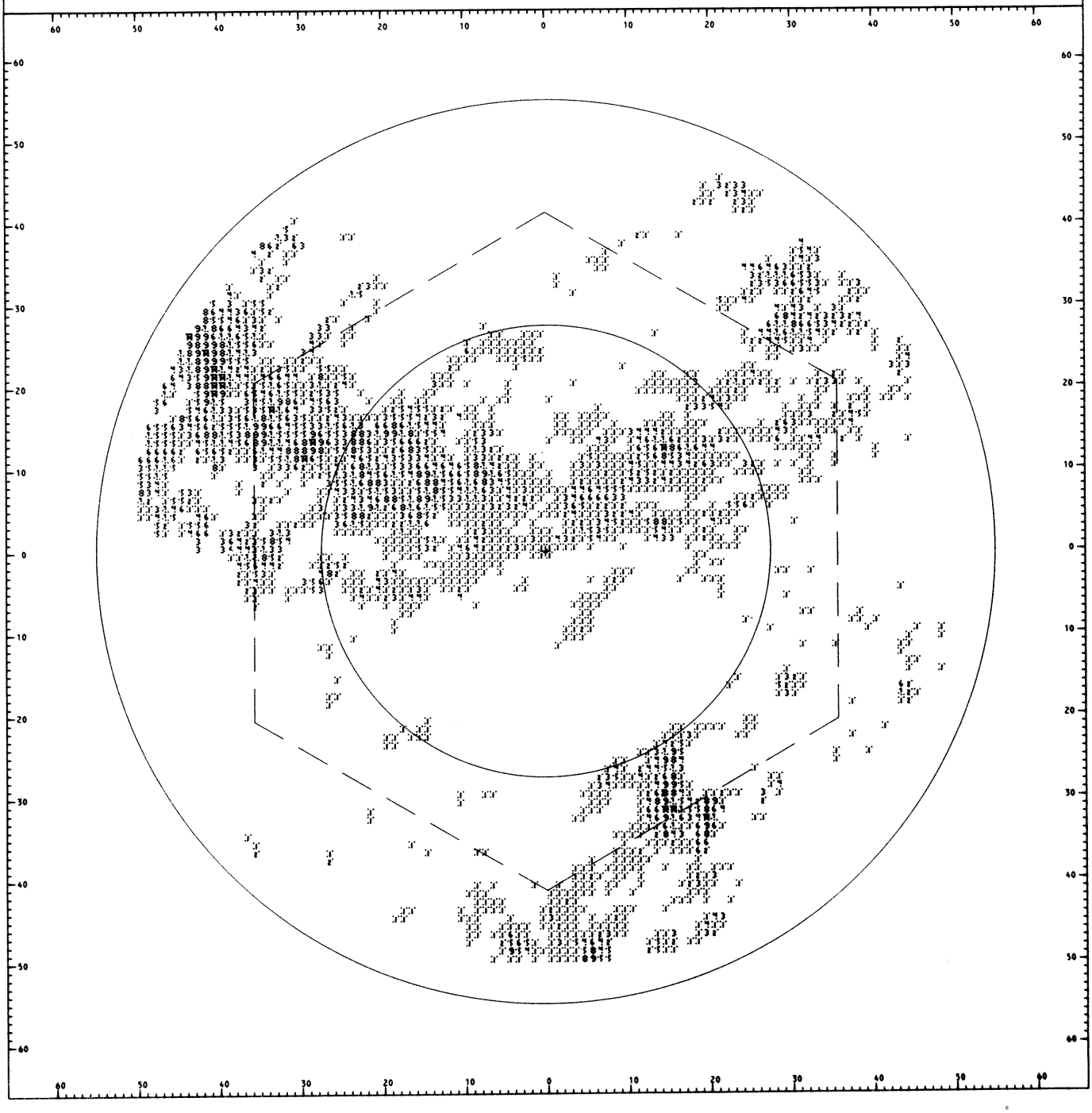
GATE RADAR DAILY RAINFALL RATE 226

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	119	000	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 14, 1974 (JULIAN DAY 226)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0	0.0039	0.0072	0.0	0.1317	0.0009	0.0	0.0051	0.0242	0.0273	0.0030	0.0023	0.0863	0.0020	0.0441
2	0.0	0.0010	0.0019	0.0023	0.0837	0.0	0.0	0.0016	0.0150	0.0170	0.0	0.0004	0.0301	0.0005	0.0153
3	0.0	0.0009	0.0002	0.0006	0.0709	0.0	0.0	0.0004	0.0122	0.0138	0.0	0.0004	0.0188	0.0002	0.0095
4	0.0	0.0260	0.0	0.0	0.0004	0.0	0.0	0.0368	0.0044	0.0046	0.0313	0.0	0.0002	0.0051	0.0027
5	0.0110	0.0815	0.0	0.0	0.0033	0.0004	0.0118	0.1208	0.0162	0.0170	0.2136	0.0	0.0008	0.0171	0.0089
6	0.0480	0.0624	0.0	0.0001	0.1332	0.0051	0.0205	0.0980	0.0418	0.0410	0.2143	0.0	0.0267	0.0204	0.0235
7	0.0772	0.0116	0.0	0.0	0.2116	0.0122	0.0855	0.0126	0.0524	0.0546	0.1595	0.0	0.0552	0.0168	0.0360
8	0.1888	0.0354	0.0	0.0	0.2921	0.0296	0.2886	0.0123	0.0913	0.0977	0.5004	0.0	0.0863	0.0415	0.0639
9	0.1265	0.0176	0.0	0.0001	0.3130	0.0509	0.1897	0.0072	0.0851	0.0932	0.2617	0.0	0.0740	0.0292	0.0516
10	0.0259	0.0185	0.0	0.0	0.3302	0.1040	0.0375	0.0171	0.0802	0.0893	0.0808	0.0	0.0907	0.0211	0.0559
11	0.0002	0.0171	0.0	0.0	0.0919	0.0693	0.0004	0.0197	0.0299	0.0331	0.0170	0.0	0.0332	0.0148	0.0240
12	0.0222	0.0057	0.0	0.0	0.0604	0.2039	0.0279	0.0102	0.0486	0.0546	0.0385	0.0	0.0585	0.0142	0.0363
13	0.0231	0.0012	0.0	0.0	0.0360	0.1697	0.0280	0.0001	0.0382	0.0422	0.0088	0.0	0.0472	0.0230	0.0351
14	0.0021	0.0	0.0	0.0	0.0171	0.2066	0.0033	0.0	0.0375	0.0426	0.0001	0.0	0.0765	0.0191	0.0478
15	0.0034	0.0013	0.0	0.0	0.0224	0.1106	0.0017	0.0014	0.0229	0.0255	0.0	0.0004	0.0985	0.0092	0.0538
16	0.0014	0.0013	0.0	0.0	0.0867	0.0888	0.0	0.0014	0.0298	0.0335	0.0	0.0004	0.1021	0.0144	0.0563
17	0.0016	0.0	0.0	0.0	0.0070	0.0794	0.0002	0.0	0.0146	0.0163	0.0	0.0	0.0623	0.0203	0.0413
18	0.0	0.0	0.0	0.0	0.0107	0.0200	0.0001	0.0	0.0051	0.0058	0.0	0.0	0.0331	0.0134	0.0232
19	0.0034	0.0001	0.0014	0.0002	0.0168	0.0180	0.0	0.0001	0.0067	0.0069	0.0	0.0020	0.0161	0.0153	0.0157
20	0.0003	0.0003	0.0123	0.0001	0.0066	0.0171	0.0001	0.0005	0.0061	0.0069	0.0002	0.0184	0.0081	0.0194	0.0137
21	0.0003	0.0007	0.0575	0.0008	0.0017	0.0096	0.0004	0.0012	0.0117	0.0133	0.0024	0.0859	0.0022	0.0282	0.0152
22	0.0	0.0018	0.1169	0.0	0.0003	0.0003	0.0	0.0028	0.0198	0.0225	0.0033	0.1663	0.0004	0.0260	0.0132
23	0.0005	0.0101	0.2306	0.0002	0.0012	0.0074	0.0005	0.0159	0.0415	0.0471	0.0009	0.3499	0.0086	0.0489	0.0288
24	0.0038	0.0043	0.1723	0.0026	0.0074	0.0149	0.0045	0.0066	0.0341	0.0385	0.0	0.2645	0.0109	0.0362	0.0236
3	0.0	0.0020	0.0031	0.0010	0.0954	0.0003	0.0	0.0024	0.0171	0.0194	0.0010	0.0010	0.0450	0.0009	0.0230
6	0.0197	0.0566	0.0	0.0	0.0457	0.0018	0.0108	0.0852	0.0208	0.0209	0.1530	0.0	0.0092	0.0142	0.0117
9	0.1308	0.0215	0.0	0.0	0.2722	0.0309	0.1879	0.0107	0.0763	0.0818	0.3072	0.0	0.0719	0.0292	0.0505
12	0.0161	0.0138	0.0	0.0	0.1608	0.1257	0.0219	0.0157	0.0529	0.0590	0.0454	0.0	0.0608	0.0167	0.0387
15	0.0095	0.0008	0.0	0.0	0.0251	0.1623	0.0110	0.0005	0.0329	0.0368	0.0030	0.0001	0.0741	0.0171	0.0456
18	0.0010	0.0004	0.0	0.0	0.0348	0.0627	0.0001	0.0005	0.0165	0.0185	0.0	0.0001	0.0658	0.0160	0.0409
21	0.0013	0.0004	0.0237	0.0004	0.0084	0.0149	0.0002	0.0006	0.0082	0.0090	0.0009	0.0354	0.0088	0.0210	0.0149
24	0.0014	0.0054	0.1733	0.0009	0.0030	0.0075	0.0017	0.0084	0.0318	0.0360	0.0014	0.2602	0.0067	0.0370	0.0218
6	0.0098	0.0293	0.0016	0.0005	0.0705	0.0011	0.0054	0.0438	0.0190	0.0201	0.0770	0.0005	0.0271	0.0076	0.0173
12	0.0735	0.0176	0.0	0.0	0.2165	0.0783	0.1049	0.0132	0.0646	0.0704	0.1763	0.0	0.0663	0.0229	0.0446
18	0.0053	0.0006	0.0	0.0	0.0300	0.1125	0.0055	0.0005	0.0247	0.0277	0.0015	0.0001	0.0699	0.0166	0.0432
24	0.0014	0.0029	0.0985	0.0006	0.0057	0.0112	0.0009	0.0045	0.0200	0.0225	0.0011	0.1478	0.0077	0.0290	0.0184
12	0.0417	0.0235	0.0008	0.0003	0.1435	0.0397	0.0552	0.0285	0.0418	0.0453	0.1267	0.0003	0.0467	0.0153	0.0310
24	0.0033	0.0018	0.0492	0.0003	0.0178	0.0619	0.0032	0.0025	0.0223	0.0251	0.0013	0.0740	0.0388	0.0228	0.0308
24	0.0225	0.0126	0.0250	0.0003	0.0807	0.0508	0.0292	0.0155	0.0321	0.0352	0.0640	0.0371	0.0428	0.0190	0.0309

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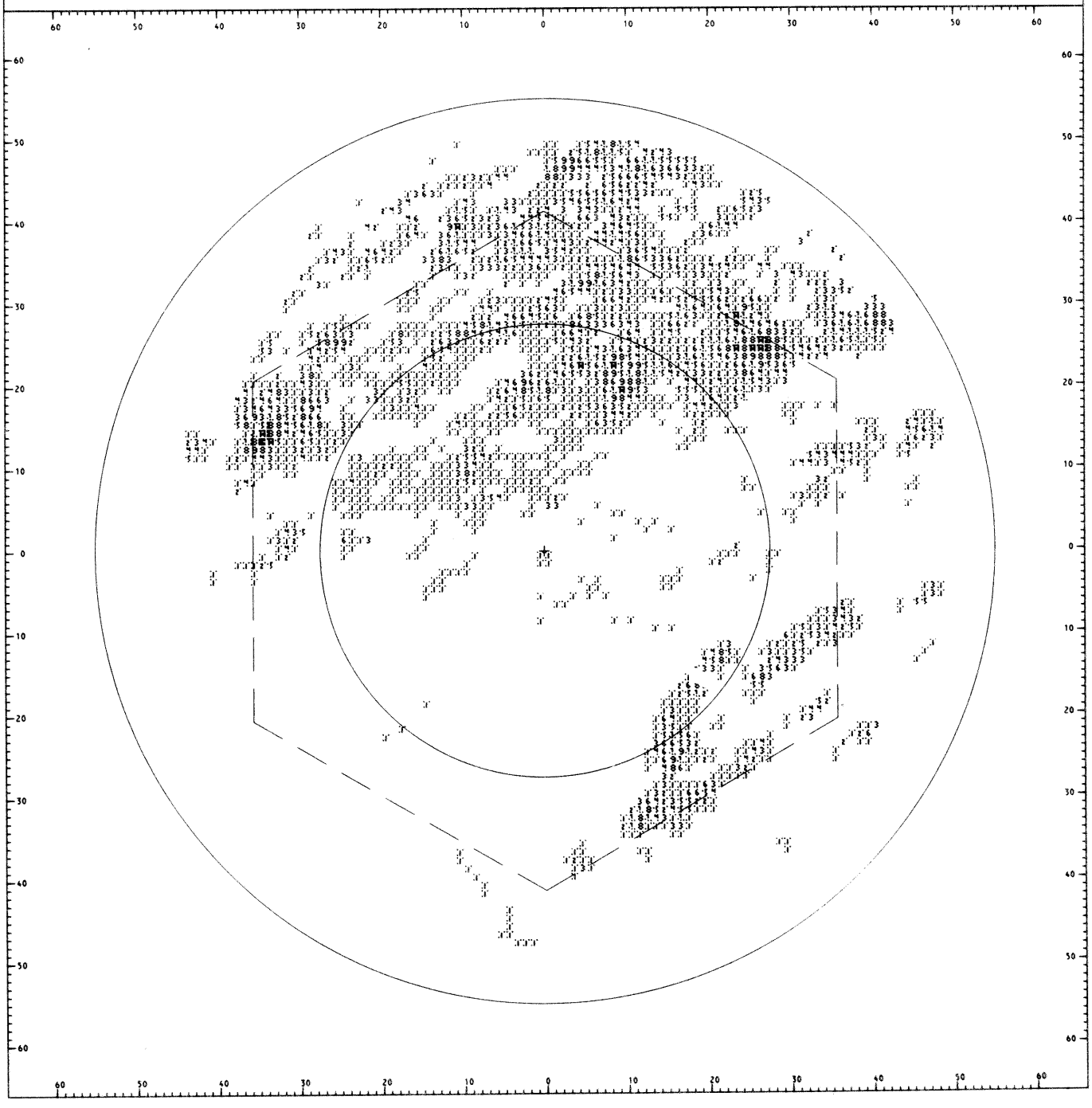
GATE RADAR DAILY RAINFALL RATE 227

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	110	109	000	000

MISSING HOURS: 23 24

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

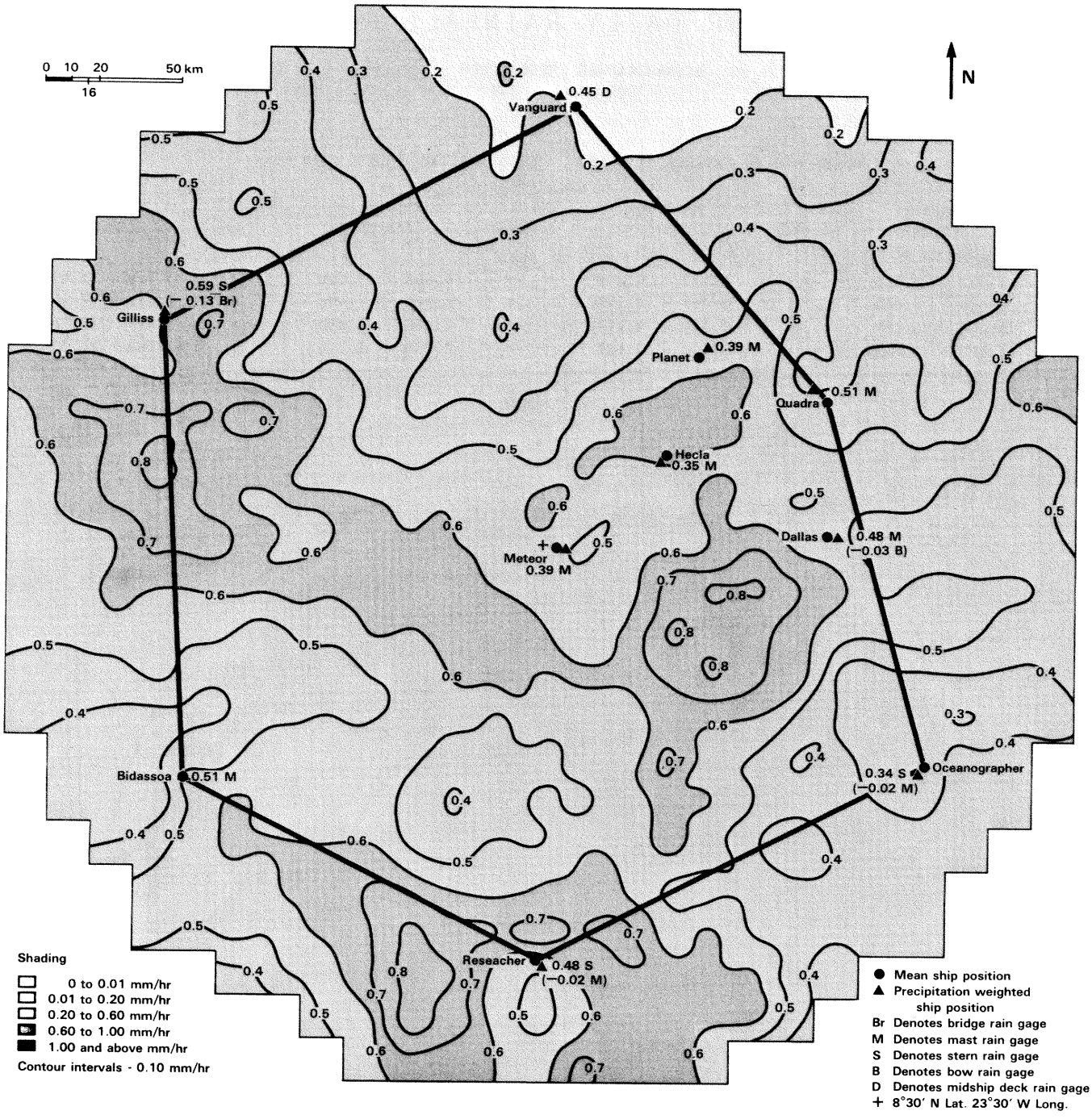
CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 15, 1974 (JULIAN DAY 227)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0084	0.0036	0.1380	0.0004	0.0095	0.0464	0.0104	0.0036	0.0343	0.0383	0.0	0.2103	0.0111	0.0305	0.0208
2	0.0081	0.0340	0.1728	0.0001	0.0176	0.0160	0.0036	0.0506	0.0414	0.0456	0.0	0.2993	0.0069	0.0427	0.0248
3	0.0173	0.0356	0.1417	0.0	0.1454	0.0037	0.0150	0.0318	0.0574	0.0609	0.0004	0.2392	0.0309	0.0395	0.0352
4	0.0160	0.0291	0.1100	0.0	0.0820	0.0061	0.0137	0.0297	0.0406	0.0429	0.0013	0.1846	0.0169	0.0328	0.0249
5	0.0208	0.0242	0.0185	0.0001	0.0070	0.0166	0.0121	0.0126	0.0145	0.0110	0.0001	0.0333	0.0049	0.0183	0.0116
6	0.0548	0.0195	0.0045	0.0	0.0082	0.0173	0.0858	0.0001	0.0174	0.0160	0.0164	0.0060	0.0052	0.0194	0.0123
7	0.1048	0.0007	0.0008	0.0	0.0333	0.0085	0.1407	0.0010	0.0246	0.0252	0.0341	0.0020	0.0090	0.0233	0.0161
8	0.0794	0.0001	0.0025	0.0	0.0040	0.0004	0.1069	0.0002	0.0144	0.0142	0.0047	0.0038	0.0032	0.0173	0.0102
9	0.0947	0.0001	0.0043	0.0	0.0030	0.0030	0.0249	0.0001	0.0174	0.0050	0.0003	0.0065	0.0022	0.0238	0.0130
10	0.0301	0.0	0.0005	0.0	0.0104	0.0239	0.0027	0.0	0.0108	0.0069	0.0	0.0008	0.0069	0.0101	0.0085
11	0.0054	0.0	0.0	0.0	0.0243	0.0306	0.0027	0.0	0.0101	0.0107	0.0	0.0	0.0102	0.0049	0.0075
12	0.0003	0.0	0.0	0.0	0.0424	0.0447	0.0005	0.0	0.0146	0.0166	0.0	0.0	0.0163	0.0010	0.0087
13	0.0110	0.0	0.0	0.0	0.0153	0.0577	0.0131	0.0	0.0140	0.0154	0.0	0.0	0.0134	0.0021	0.0077
14	0.0820	0.0	0.0	0.0	0.1699	0.0685	0.0607	0.0	0.0536	0.0527	0.0006	0.0	0.0453	0.0194	0.0323
15	0.3668	0.0023	0.0	0.0	0.1243	0.3106	0.3694	0.0018	0.1337	0.1269	0.0240	0.0003	0.0876	0.0798	0.0837
16	0.3667	0.0006	0.0	0.0	0.0104	0.1085	0.3061	0.0005	0.0807	0.0593	0.0005	0.0	0.0251	0.0868	0.0560
17	0.4357	0.0003	0.0	0.0	0.0	0.0287	0.2477	0.0	0.0771	0.0352	0.0216	0.0	0.0077	0.1273	0.0675
18	0.2979	0.0015	0.0	0.0001	0.0	0.0133	0.2326	0.0	0.0519	0.0305	0.0070	0.0	0.0180	0.0780	0.0480
19	0.0853	0.0012	0.0	0.0	0.0	0.0049	0.0136	0.0	0.0152	0.0026	0.0022	0.0	0.0322	0.0425	0.0374
20	0.0731	0.0083	0.0001	0.0	0.0	0.0087	0.0557	0.0060	0.0150	0.0091	0.0023	0.0	0.0109	0.0776	0.0443
21	0.0659	0.0056	0.0001	0.0	0.0	0.1275	0.0918	0.0019	0.0330	0.0353	0.0013	0.0	0.0351	0.0679	0.0515
22	0.0383	0.0008	0.0001	0.0	0.0	0.0704	0.0351	0.0	0.0182	0.0175	0.0	0.0	0.0209	0.0422	0.0315
23															
24															
3	0.0113	0.0244	0.1508	0.0002	0.0575	0.0220	0.0097	0.0287	0.0444	0.0483	0.0001	0.2496	0.0163	0.0376	0.0269
6	0.0305	0.0243	0.0443	0.0	0.0324	0.0133	0.0372	0.0141	0.0242	0.0233	0.0059	0.0747	0.0090	0.0235	0.0163
9	0.0930	0.0003	0.0026	0.0	0.0134	0.0040	0.0908	0.0005	0.0188	0.0148	0.0130	0.0041	0.0048	0.0214	0.0131
12	0.0119	0.0	0.0002	0.0	0.0257	0.0331	0.0020	0.0	0.0118	0.0114	0.0	0.0003	0.0111	0.0053	0.0082
15	0.1532	0.0008	0.0	0.0	0.1032	0.1456	0.1477	0.0006	0.0671	0.0650	0.0082	0.0001	0.0488	0.0338	0.0413
18	0.3668	0.0008	0.0	0.0	0.0035	0.0502	0.2621	0.0002	0.0699	0.0417	0.0097	0.0	0.0169	0.0973	0.0571
21	0.0747	0.0050	0.0001	0.0	0.0	0.0470	0.0537	0.0026	0.0211	0.0157	0.0019	0.0	0.0261	0.0627	0.0444
24															
6	0.0209	0.0243	0.0976	0.0001	0.0450	0.0177	0.0234	0.0214	0.0343	0.0358	0.0030	0.1621	0.0127	0.0305	0.0216
12	0.0524	0.0001	0.0014	0.0	0.0196	0.0185	0.0464	0.0002	0.0153	0.0131	0.0065	0.0022	0.0080	0.0134	0.0107
18	0.2600	0.0008	0.0	0.0	0.0533	0.0979	0.2049	0.0004	0.0685	0.0533	0.0089	0.0	0.0328	0.0656	0.0492
24	0.0656	0.0040	0.0001	0.0	0.0	0.0529	0.0490	0.0020	0.0203	0.0161	0.0014	0.0	0.0248	0.0576	0.0412
12	0.0367	0.0122	0.0495	0.0001	0.0323	0.0181	0.0349	0.0108	0.0248	0.0244	0.0048	0.0821	0.0103	0.0220	0.0161
24	0.1823	0.0021	0.0	0.0	0.0320	0.0799	0.1426	0.0010	0.0492	0.0384	0.0059	0.0	0.0296	0.0624	0.0460
24	0.1028	0.0076	0.0270	0.0	0.0321	0.0462	0.0839	0.0064	0.0359	0.0308	0.0053	0.0448	0.0191	0.0403	0.0297

PHASE III ISOHYETAL MAP (August 30 - September 19)



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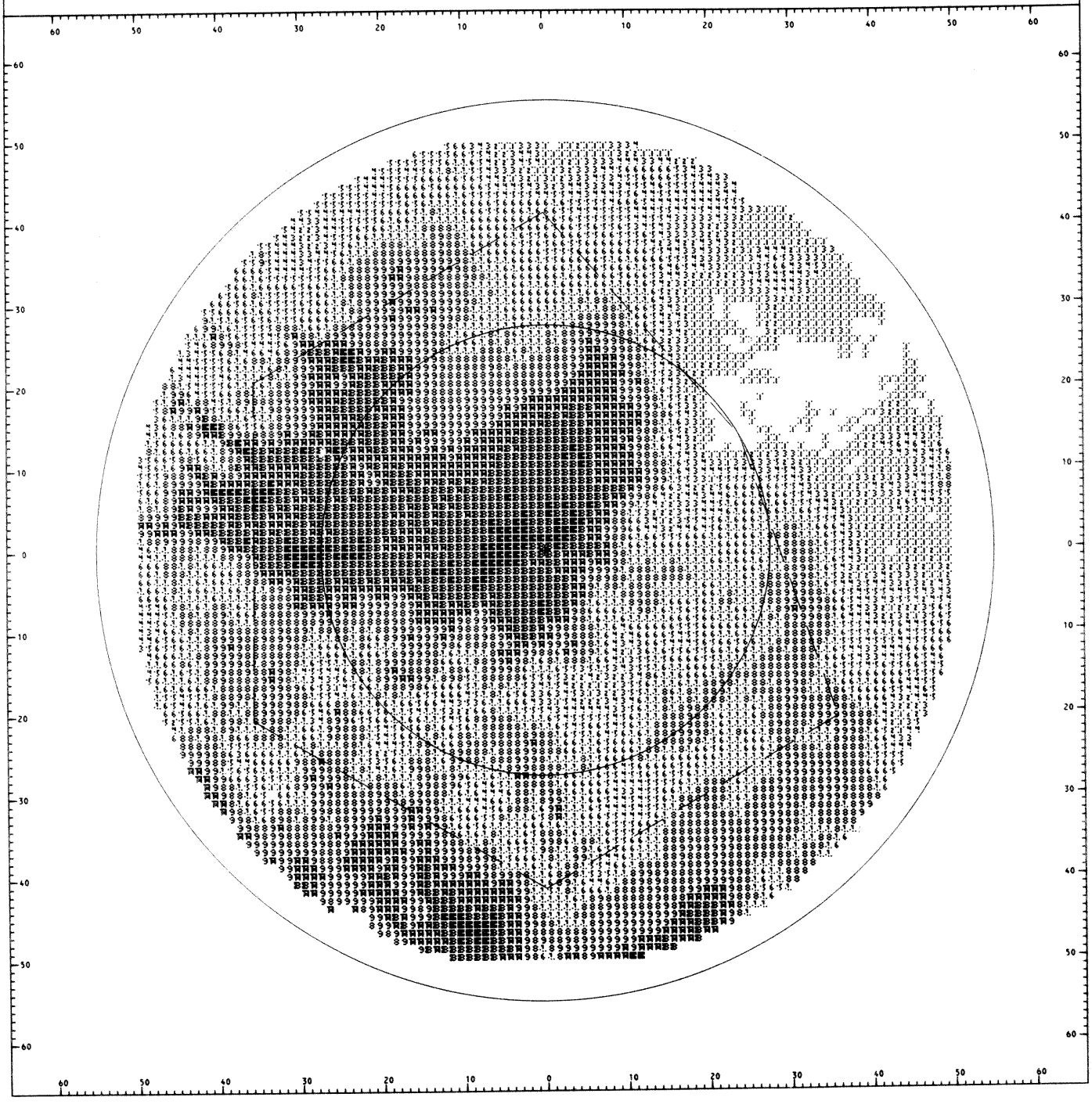
GATE RADAR DAILY RAINFALL RATE 242

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	120	110	115	093

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 30, 1974 (JULIAN DAY 242)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	3.8960	1.0315	1.3610	2.2834	2.4430	4.6555	5.5838	1.4048	2.6063	2.8744	4.9007	1.6938	2.7477	2.0200	2.3836
2	2.6800	0.6906	0.6165	1.5434	3.6664	5.2864	3.9416	0.8453	2.4117	2.6811	2.1628	0.9410	2.6043	1.4558	2.0301
3	2.2677	1.3324	0.7177	1.7520	3.7255	3.2752	3.3511	1.4747	2.1792	2.3786	2.9934	0.8935	2.1254	1.2197	1.6721
4	2.7535	1.4969	0.9030	1.4135	4.1744	2.1556	4.1243	1.7970	2.1520	2.3574	3.7771	0.8206	1.8908	1.2313	1.5606
5	1.0972	0.9120	0.7186	1.5125	3.7324	1.2810	1.7001	0.9498	1.5456	1.6964	1.2687	0.3822	1.6857	0.6405	1.1629
6	0.7924	0.3488	0.4691	0.8810	3.1486	0.4649	1.2335	0.3033	1.0208	1.1295	0.5650	0.1766	1.4895	0.3822	0.9355
7	0.3517	0.1287	0.5305	0.8185	3.3292	0.1462	0.5419	0.0797	0.8883	0.9933	0.4262	0.0832	1.5009	0.2095	0.8550
8	0.0781	0.0724	0.3729	0.7834	2.5265	0.2773	0.1179	0.0771	0.6881	0.7768	0.1721	0.1135	1.0193	0.1135	0.5665
9	0.0512	0.0386	0.5735	1.0349	0.9600	0.1133	0.0759	0.0622	0.4621	0.5247	0.1367	0.4223	0.6341	0.1429	0.3885
10	0.0157	0.0302	0.5705	0.5535	0.1703	0.0534	0.0231	0.0454	0.2316	0.2628	0.0390	0.6336	0.3604	0.1409	0.2507
11	0.0125	0.0265	0.2404	0.2216	0.1069	0.0774	0.0194	0.0353	0.1140	0.1288	0.0250	0.3183	0.2042	0.0671	0.1356
12	0.0001	0.0194	0.0533	0.1224	0.0600	0.0967	0.0001	0.0158	0.0586	0.0648	0.0012	0.0537	0.1098	0.0217	0.0658
13	0.0	0.0652	0.0509	0.4595	0.1960	0.0745	0.0	0.0693	0.1409	0.1562	0.0003	0.0637	0.2217	0.0393	0.1305
14	0.0196	0.1980	0.1293	0.0929	0.1690	0.0651	0.0280	0.2999	0.1126	0.1268	0.1125	0.1606	0.1298	0.0904	0.1101
15	0.2654	0.2091	0.2336	0.0461	0.1761	0.1338	0.3977	0.3326	0.1774	0.2004	0.7695	0.3308	0.1336	0.1568	0.1452
16	0.4061	0.2068	0.4262	0.0028	0.2423	0.1746	0.6004	0.3310	0.2430	0.2731	0.8294	0.5962	0.1289	0.2103	0.1696
17	0.2115	0.3077	0.3844	0.0366	0.1030	0.1978	0.2929	0.4372	0.2068	0.2254	0.5288	0.5109	0.0898	0.1987	0.1442
18	0.0453	0.3483	0.2837	0.0599	0.1213	0.0939	0.0670	0.4359	0.1591	0.1674	0.2378	0.4124	0.0652	0.1570	0.1111
19	0.0164	0.3780	0.1672	0.0478	0.2524	0.1051	0.0239	0.4641	0.1619	0.1686	0.1363	0.1920	0.1096	0.1471	0.1284
20	0.0124	0.3410	0.1387	0.0408	0.3692	0.3244	0.0185	0.2849	0.2051	0.2029	0.1095	0.0927	0.1766	0.1196	0.1481
21	0.0001	0.1701	0.1353	0.0396	0.7079	0.6535	0.0002	0.1996	0.2851	0.3160	0.0754	0.0473	0.3381	0.0794	0.2087
22	0.0006	0.1023	0.1598	0.0129	0.8707	1.3027	0.0	0.1574	0.4085	0.4638	0.0239	0.0370	0.5373	0.0598	0.2986
23	0.0270	0.0582	0.1315	0.0084	0.9381	1.4529	0.0423	0.0899	0.4363	0.4956	0.0043	0.0631	0.5977	0.0463	0.3220
24	0.0780	0.0688	0.0828	0.0182	0.8780	1.2596	0.1219	0.1026	0.3979	0.4515	0.0333	0.1527	0.5707	0.0469	0.3088
3	2.9479	1.0182	0.8984	1.8596	3.2783	4.4057	4.2922	1.2416	2.3989	2.6445	3.3523	1.1761	2.4923	1.5665	2.0293
6	1.5477	0.9192	0.6969	1.2690	3.6851	1.3005	2.3526	1.0167	1.5725	1.7275	1.8702	0.4598	1.6884	0.7518	1.2198
9	0.1603	0.0799	0.4923	0.8789	2.2719	0.1789	0.2453	0.0730	0.6795	0.7649	0.2450	0.2063	1.0515	0.1554	0.6035
12	0.0094	0.0254	0.2881	0.2992	0.1124	0.0758	0.0142	0.0322	0.1347	0.1521	0.0217	0.3352	0.2248	0.0766	0.1507
15	0.0950	0.1574	0.1379	0.1995	0.1804	0.0911	0.1419	0.2339	0.1436	0.1611	0.2941	0.1850	0.1606	0.0955	0.1280
18	0.2210	0.2876	0.3648	0.0331	0.1556	0.1554	0.3201	0.4014	0.2030	0.2219	0.5320	0.5065	0.0947	0.1887	0.1416
21	0.0096	0.2964	0.1470	0.0427	0.4431	0.3610	0.0142	0.3162	0.2174	0.2291	0.1071	0.1107	0.2081	0.1154	0.1617
24	0.0352	0.0764	0.1247	0.0132	0.8956	1.3384	0.0548	0.1166	0.4142	0.4703	0.0205	0.0843	0.5686	0.0510	0.3098
6	2.2478	0.9687	0.7976	1.5643	3.4817	2.8531	3.3224	1.1291	1.9856	2.1858	2.6113	0.8179	2.0902	1.1596	1.6247
12	0.0849	0.0527	0.3902	0.5890	1.1921	0.1274	0.1297	0.0526	0.4071	0.4585	0.1334	0.2708	0.6382	0.1159	0.3771
18	0.1580	0.2225	0.2514	0.1163	0.1680	0.1233	0.2310	0.3176	0.1733	0.1915	0.4130	0.3458	0.1277	0.1421	0.1349
24	0.0224	0.1864	0.1359	0.0279	0.6693	0.8497	0.0345	0.2164	0.3158	0.3497	0.0638	0.0975	0.3883	0.0832	0.2357
12	1.1663	0.5107	0.5939	1.0766	2.3369	1.4902	1.7260	0.5909	1.1962	1.3220	1.3723	0.5444	1.3642	0.6378	1.0006
24	0.0902	0.2044	0.1936	0.0721	0.4186	0.4865	0.1327	0.2670	0.2445	0.2706	0.2384	0.2216	0.2582	0.1126	0.1854
24	0.6283	0.3576	0.3938	0.5744	1.3777	0.9883	0.9294	0.4290	0.7207	0.7966	0.8054	0.3830	0.8116	0.3753	0.5932

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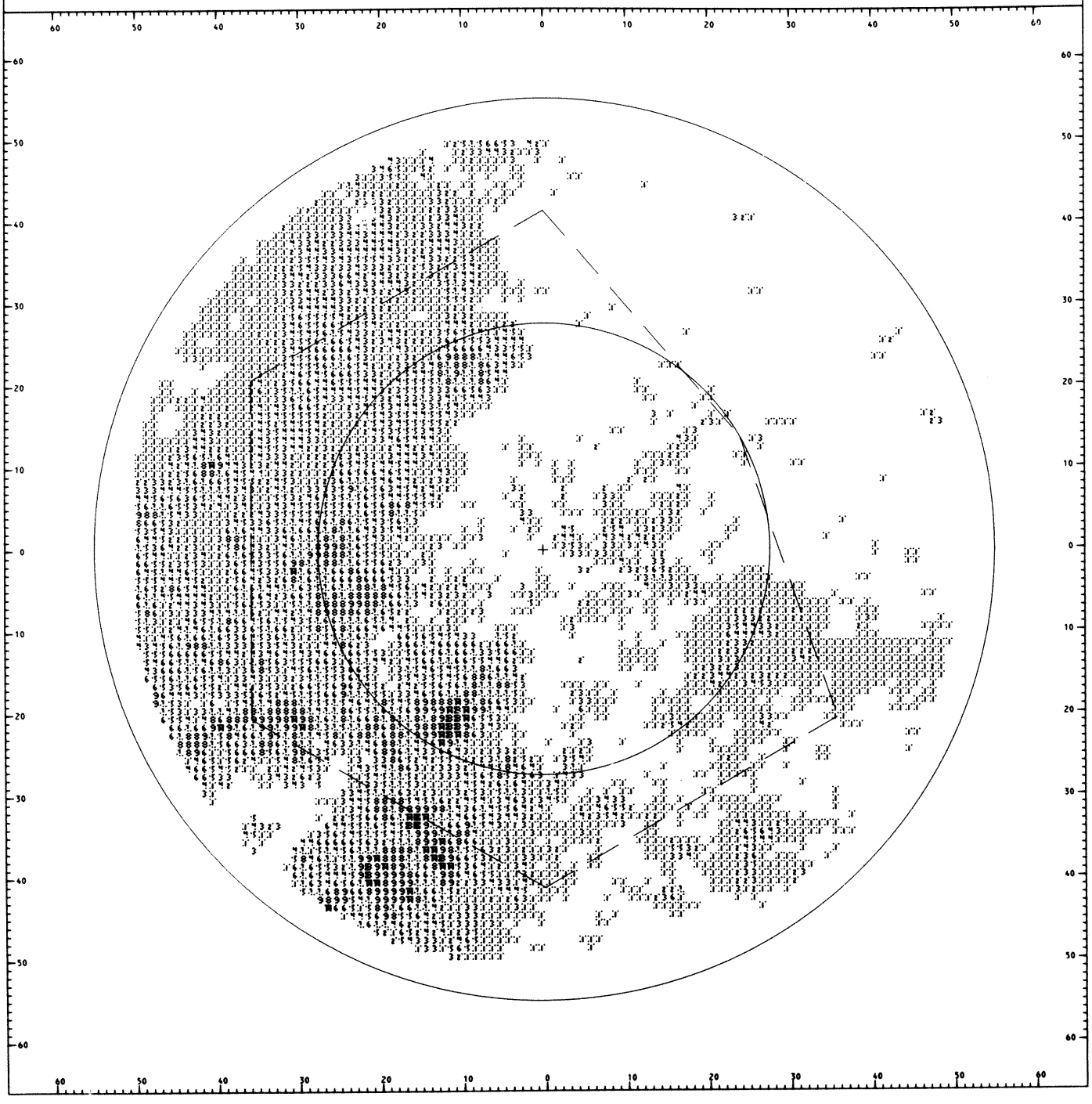
GATE RADAR DAILY RAINFALL RATE 243

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	118	092	000

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR AUGUST 31, 1974 (JULIAN DAY 243)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0050	0.0529	0.0490	0.0184	0.4171	0.6834	0.0079	0.0792	0.2044	0.2319	0.0084	0.1427	0.3539	0.0257	0.1899
2	0.0203	0.0772	0.0278	0.0387	0.1737	0.0896	0.0267	0.1198	0.0715	0.0806	0.1046	0.1145	0.1451	0.0306	0.0879
3	0.0286	0.1037	0.0146	0.0235	0.3176	0.0118	0.0448	0.1522	0.0839	0.0943	0.1811	0.0732	0.1348	0.0304	0.0826
4	0.0075	0.0588	0.0078	0.0055	0.1967	0.0077	0.0090	0.0767	0.0477	0.0521	0.0493	0.0105	0.0864	0.0154	0.0509
5	0.0	0.0169	0.0098	0.0110	0.0383	0.0046	0.0	0.0256	0.0135	0.0153	0.0018	0.0006	0.0270	0.0082	0.0176
6	0.0	0.0108	0.0099	0.0537	0.0017	0.0201	0.0	0.0167	0.0160	0.0181	0.0	0.0015	0.0272	0.0055	0.0163
7	0.0	0.0223	0.0049	0.0612	0.0021	0.0173	0.0	0.0346	0.0179	0.0204	0.0	0.0026	0.0247	0.0088	0.0168
8	0.0	0.0035	0.0017	0.1304	0.0653	0.0256	0.0	0.0055	0.0377	0.0429	0.0	0.0019	0.0630	0.0085	0.0356
9	0.0	0.0001	0.0004	0.1575	0.0338	0.0498	0.0	0.0001	0.0402	0.0456	0.0	0.0006	0.0718	0.0028	0.0373
10	0.0020	0.0111	0.0034	0.3453	0.0263	0.1217	0.0031	0.0171	0.0846	0.0962	0.0205	0.0019	0.1087	0.0047	0.0567
11	0.0154	0.0244	0.0061	0.4707	0.0342	0.1461	0.0186	0.0432	0.1157	0.1315	0.0794	0.0063	0.1599	0.0085	0.0843
12	0.0026	0.0014	0.0005	0.9500	0.2063	0.1013	0.0041	0.0021	0.2098	0.2384	0.0108	0.0008	0.3022	0.0011	0.1519
13	0.0	0.0	0.0005	0.8243	0.2436	0.0535	0.0	0.0	0.1867	0.2121	0.0	0.0007	0.3512	0.0002	0.1759
14	0.0	0.0	0.0003	0.6818	0.3898	0.1901	0.0	0.0	0.2102	0.2388	0.0	0.0004	0.4066	0.0004	0.2038
15	0.0	0.0071	0.0123	0.4501	0.5519	0.2231	0.0	0.0080	0.2078	0.2356	0.0036	0.0162	0.3403	0.0063	0.1735
16	0.0	0.0101	0.0539	0.3342	0.6341	0.1124	0.0	0.0069	0.1914	0.2164	0.0017	0.0685	0.3341	0.0189	0.1766
17	0.0	0.0009	0.0525	0.3907	0.3284	0.0352	0.0	0.0014	0.1348	0.1531	0.0	0.0306	0.2843	0.0115	0.1480
18	0.0007	0.0	0.0598	0.1208	0.2299	0.0050	0.0012	0.0	0.0696	0.0791	0.0017	0.0050	0.1939	0.0113	0.1027
19	0.0003	0.0001	0.0235	0.0312	0.0549	0.0001	0.0005	0.0001	0.0184	0.0209	0.0007	0.0034	0.0710	0.0049	0.0380
20	0.0	0.0024	0.0100	0.0118	0.0088	0.0040	0.0	0.0023	0.0062	0.0068	0.0	0.0083	0.0211	0.0034	0.0122
21	0.0012	0.0018	0.0023	0.0007	0.0002	0.0	0.0018	0.0005	0.0010	0.0009	0.0	0.0015	0.0304	0.0010	0.0157
22	0.0	0.0001	0.0020	0.0	0.0004	0.0	0.0	0.0	0.0004	0.0005	0.0	0.0004	0.0141	0.0004	0.0073
23	0.0	0.0	0.0004	0.0	0.0004	0.0	0.0	0.0	0.0001	0.0001	0.0	0.0005	0.0025	0.0001	0.0013
24	0.0	0.0009	0.0033	0.0	0.0001	0.0	0.0	0.0004	0.0007	0.0007	0.0	0.0031	0.0002	0.0008	0.0005
3	0.0180	0.0779	0.0305	0.0269	0.3028	0.2616	0.0265	0.1171	0.1199	0.1356	0.0981	0.1101	0.2112	0.0289	0.1201
6	0.0025	0.0288	0.0091	0.0234	0.0789	0.0108	0.0030	0.0397	0.0257	0.0285	0.0170	0.0042	0.0469	0.0097	0.0283
9	0.0	0.0086	0.0023	0.1164	0.0337	0.0309	0.0	0.0134	0.0319	0.0363	0.0	0.0017	0.0532	0.0067	0.0300
12	0.0066	0.0123	0.0033	0.5886	0.0889	0.1230	0.0086	0.0208	0.1367	0.1553	0.0369	0.0030	0.1902	0.0048	0.0977
15	0.0	0.0024	0.0044	0.6521	0.3951	0.1556	0.0	0.0027	0.2016	0.2288	0.0012	0.0058	0.3660	0.0023	0.1844
18	0.0002	0.0037	0.0554	0.2819	0.3975	0.0509	0.0004	0.0028	0.1319	0.1495	0.0011	0.0347	0.2707	0.0139	0.1424
21	0.0005	0.0014	0.0119	0.0146	0.0213	0.0014	0.0008	0.0010	0.0085	0.0095	0.0002	0.0044	0.0408	0.0031	0.0220
24	0.0	0.0003	0.0019	0.0	0.0003	0.0	0.0	0.0001	0.0004	0.0004	0.0	0.0013	0.0056	0.0004	0.0030
6	0.0102	0.0534	0.0198	0.0251	0.1908	0.1362	0.0147	0.0784	0.0728	0.0820	0.0575	0.0572	0.1290	0.0193	0.0742
12	0.0033	0.0105	0.0028	0.3525	0.0613	0.0770	0.0043	0.0171	0.0843	0.0958	0.0184	0.0023	0.1217	0.0057	0.0638
18	0.0001	0.0030	0.0299	0.4670	0.3963	0.1032	0.0002	0.0027	0.1667	0.1892	0.0012	0.0202	0.3184	0.0081	0.1634
24	0.0002	0.0009	0.0069	0.0073	0.0108	0.0007	0.0004	0.0005	0.0045	0.0050	0.0001	0.0029	0.0232	0.0018	0.0125
12	0.0068	0.0319	0.0113	0.1888	0.1261	0.1066	0.0095	0.0477	0.0786	0.0889	0.0380	0.0297	0.1253	0.0125	0.0690
24	0.0002	0.0019	0.0184	0.2371	0.2035	0.0520	0.0003	0.0016	0.0856	0.0971	0.0006	0.0115	0.1708	0.0049	0.0880
24	0.0035	0.0169	0.0149	0.2130	0.1648	0.0793	0.0049	0.0247	0.0821	0.0930	0.0193	0.0206	0.1481	0.0088	0.0785

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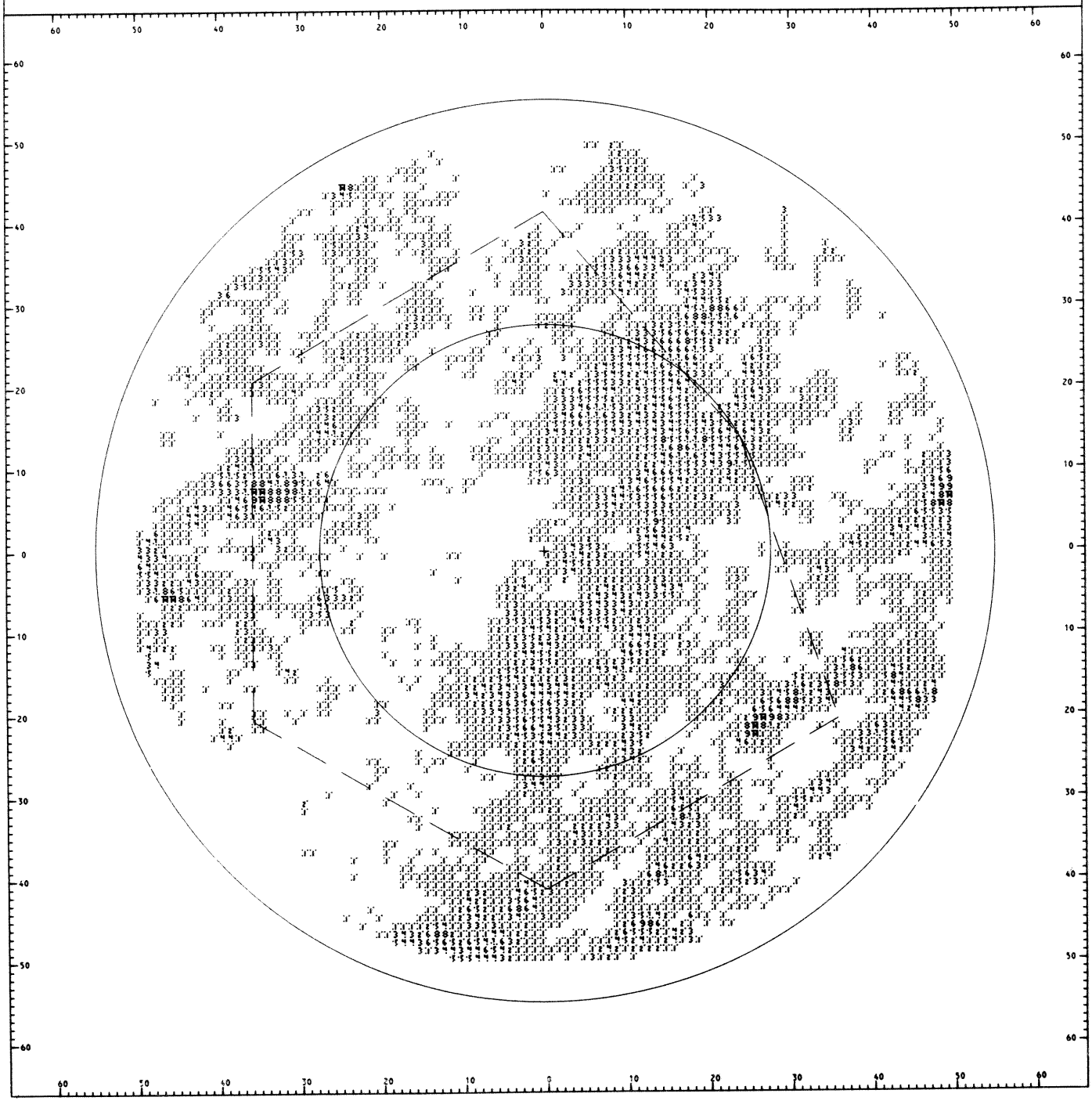
GATE RADAR DAILY RAINFALL RATE 244

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	118	120	085	048

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 1, 1974 (JULIAN DAY 244)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0151	0.0180	0.0046	0.0012	0.0004	0.0008	0.0209	0.0272	0.0067	0.0072	0.0570	0.0019	0.0010	0.0071	0.0041
2	0.0117	0.0168	0.0089	0.0003	0.0002	0.0033	0.0162	0.0257	0.0069	0.0075	0.0477	0.0046	0.0039	0.0091	0.0065
3	0.0238	0.0173	0.0109	0.0012	0.0010	0.0129	0.0237	0.0253	0.0112	0.0109	0.0387	0.0045	0.0129	0.0144	0.0137
4	0.0	0.0022	0.0075	0.0005	0.0017	0.0198	0.0	0.0025	0.0053	0.0059	0.0	0.0079	0.0130	0.0051	0.0090
5	0.0105	0.0238	0.0354	0.0050	0.0813	0.0132	0.0120	0.0358	0.0283	0.0315	0.0327	0.0367	0.0350	0.0186	0.0268
6	0.0302	0.0610	0.0856	0.0048	0.2610	0.0028	0.0372	0.0943	0.0747	0.0836	0.0985	0.0534	0.0782	0.0357	0.0569
7	0.0	0.0199	0.1015	0.0031	0.1605	0.0022	0.0	0.0308	0.0481	0.0546	0.0410	0.0341	0.0844	0.0227	0.0535
8	0.0094	0.0100	0.0205	0.0007	0.0029	0.0023	0.0042	0.0144	0.0076	0.0072	0.0042	0.0129	0.0364	0.0080	0.0222
9	0.0099	0.0222	0.0049	0.0	0.0060	0.0022	0.0017	0.0354	0.0076	0.0070	0.0157	0.0069	0.0144	0.0096	0.0120
10	0.0302	0.0143	0.0123	0.0	0.0166	0.0009	0.0001	0.0222	0.0124	0.0084	0.0034	0.0062	0.0072	0.0196	0.0134
11	0.1113	0.0072	0.0242	0.0002	0.0022	0.0005	0.0203	0.0111	0.0242	0.0089	0.0216	0.0121	0.0017	0.0304	0.0161
12	0.4352	0.0310	0.0297	0.0	0.0007	0.0003	0.1420	0.0521	0.0825	0.0293	0.1718	0.0026	0.0005	0.1058	0.0531
13	0.5156	0.1376	0.0508	0.0	0.0	0.0004	0.5573	0.1437	0.1172	0.0944	0.4212	0.0006	0.0022	0.1414	0.0718
14	0.4684	0.1030	0.1124	0.0286	0.0012	0.0264	0.6667	0.1406	0.1230	0.1293	0.4703	0.0047	0.0137	0.1312	0.0725
15	0.1809	0.0385	0.0853	0.1428	0.0062	0.0283	0.2781	0.0647	0.0800	0.0909	0.1567	0.0013	0.0387	0.0564	0.0475
16	0.0102	0.0355	0.0362	0.1867	0.0297	0.0198	0.0157	0.0552	0.0529	0.0601	0.0330	0.0004	0.0500	0.0172	0.0336
17	0.0	0.0	0.0043	0.0983	0.0049	0.0031	0.0	0.0	0.0184	0.0209	0.0	0.0050	0.0295	0.0016	0.0155
18	0.0	0.0	0.0044	0.0022	0.0015	0.0002	0.0	0.0	0.0014	0.0016	0.0	0.0065	0.0018	0.0009	0.0014
19	0.0	0.0	0.0	0.0001	0.0009	0.0	0.0	0.0	0.0002	0.0002	0.0	0.0	0.0004	0.0018	0.0011
20	0.0	0.0004	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	0.0	0.0001	0.0034	0.0017
21	0.0	0.0025	0.0	0.0002	0.0001	0.0	0.0	0.0	0.0005	0.0001	0.0	0.0	0.0007	0.0187	0.0097
22	0.0	0.0199	0.0076	0.0008	0.0	0.0	0.0	0.0042	0.0047	0.0021	0.0	0.0152	0.0010	0.0453	0.0231
23	0.0117	0.1159	0.1338	0.0002	0.0050	0.0036	0.0048	0.1591	0.0451	0.0471	0.1712	0.2644	0.0022	0.0979	0.0501
24	0.0799	0.0693	0.2893	0.0129	0.0467	0.0488	0.1209	0.0518	0.0910	0.0960	0.0454	0.4712	0.0246	0.1838	0.1041
3	0.0169	0.0174	0.0082	0.0009	0.0005	0.0057	0.0203	0.0260	0.0082	0.0085	0.0478	0.0037	0.0059	0.0102	0.0081
6	0.0136	0.0290	0.0428	0.0034	0.1147	0.0119	0.0164	0.0442	0.0361	0.0403	0.0437	0.0327	0.0421	0.0198	0.0310
9	0.0064	0.0174	0.0423	0.0013	0.0565	0.0022	0.0019	0.0269	0.0211	0.0230	0.0203	0.0180	0.0451	0.0134	0.0293
12	0.1922	0.0175	0.0221	0.0001	0.0065	0.0006	0.0542	0.0285	0.0397	0.0155	0.0656	0.0070	0.0031	0.0520	0.0275
15	0.3883	0.0930	0.0828	0.0571	0.0025	0.0183	0.5007	0.1164	0.1067	0.1048	0.3494	0.0022	0.0182	0.1097	0.0639
18	0.0034	0.0118	0.0150	0.0958	0.0120	0.0077	0.0052	0.0184	0.0242	0.0275	0.0110	0.0040	0.0271	0.0066	0.0169
21	0.0	0.0010	0.0	0.0001	0.0004	0.0	0.0	0.0	0.0002	0.0001	0.0	0.0	0.0004	0.0079	0.0042
24	0.0305	0.0683	0.1436	0.0046	0.0173	0.0175	0.0419	0.0717	0.0469	0.0484	0.0722	0.2503	0.0093	0.1091	0.0591
6	0.0152	0.0232	0.0255	0.0021	0.0576	0.0088	0.0183	0.0351	0.0222	0.0244	0.0457	0.0182	0.0240	0.0150	0.0195
12	0.0993	0.0174	0.0322	0.0007	0.0315	0.0014	0.0281	0.0277	0.0304	0.0193	0.0430	0.0125	0.0241	0.0327	0.0284
18	0.1958	0.0524	0.0489	0.0765	0.0073	0.0130	0.2530	0.0674	0.0655	0.0662	0.1802	0.0031	0.0226	0.0583	0.0404
24	0.0153	0.0347	0.0718	0.0024	0.0088	0.0087	0.0210	0.0359	0.0236	0.0242	0.0361	0.1251	0.0048	0.0585	0.0316
12	0.0573	0.0203	0.0288	0.0014	0.0445	0.0051	0.0232	0.0314	0.0263	0.0218	0.0443	0.0153	0.0241	0.0239	0.0240
24	0.1056	0.0435	0.0603	0.0394	0.0080	0.0109	0.1370	0.0516	0.0445	0.0452	0.1082	0.0641	0.0137	0.0585	0.0361
24	0.0814	0.0319	0.0446	0.0204	0.0263	0.0080	0.0801	0.0415	0.0354	0.0335	0.0763	0.0397	0.0189	0.0412	0.0300

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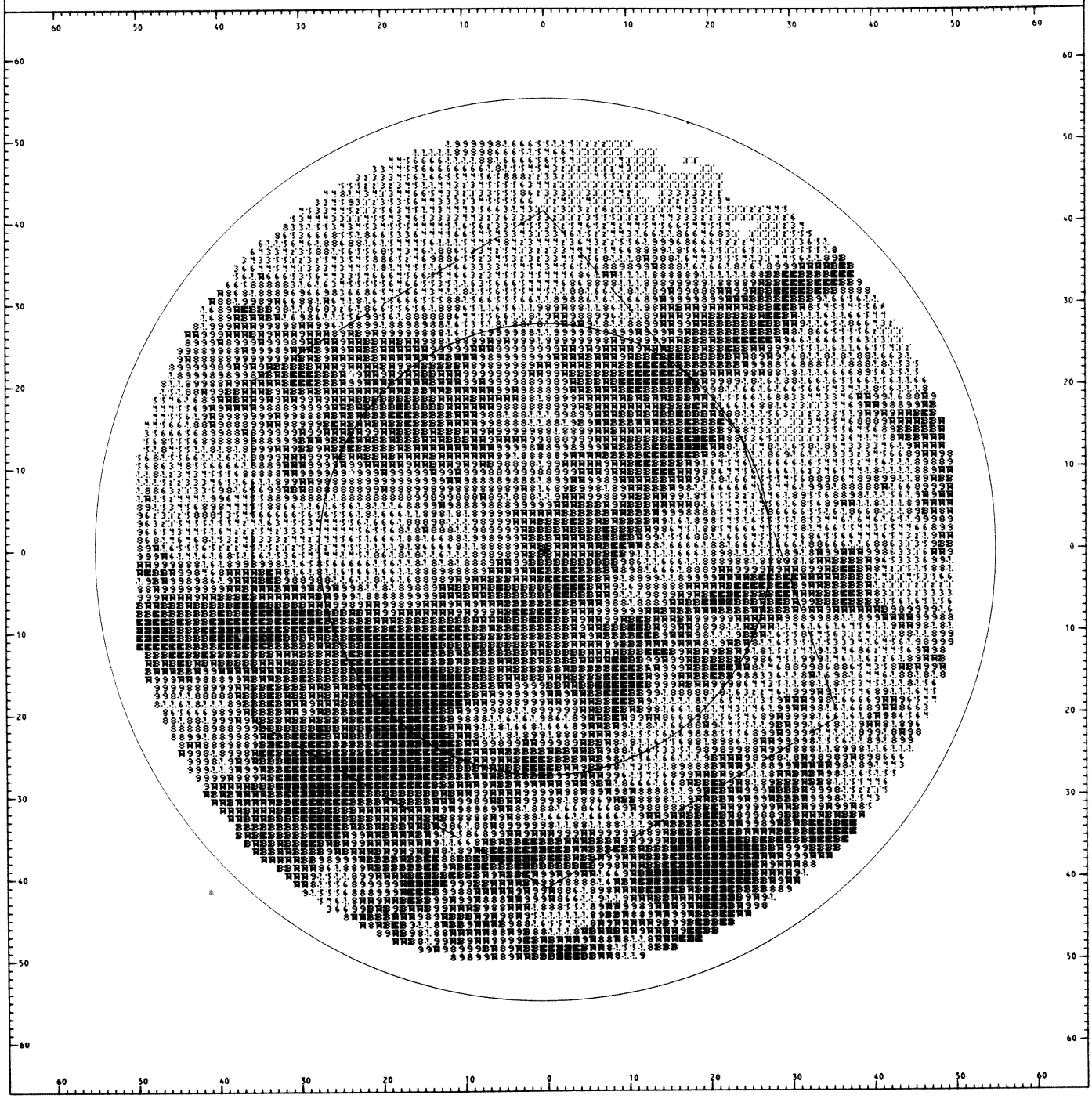
GATE RADAR DAILY RAINFALL RATE 245

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	119	117	115	100

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 2, 1974 (JULIAN DAY 245)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0892	0.0057	0.1947	0.2733	0.2082	0.1162	0.1315	0.0054	0.1477	0.1663	0.0508	0.2585	0.1547	0.2740	0.2143
2	0.0925	0.0101	0.0337	0.4446	0.6167	0.1377	0.1119	0.0168	0.2230	0.2495	0.0748	0.0312	0.3322	0.3590	0.3456
3	0.1605	0.0224	0.0596	0.8025	0.6108	0.1069	0.0754	0.0353	0.2939	0.3128	0.0688	0.0165	0.3960	0.5617	0.4789
4	0.3242	0.0022	0.1172	0.8824	0.4533	0.0506	0.2808	0.0033	0.3046	0.3187	0.0062	0.0089	0.3333	0.4276	0.3804
5	0.1553	0.0145	0.0927	1.4960	0.2231	0.1895	0.2303	0.0219	0.3606	0.4081	0.0045	0.0381	0.4259	0.2007	0.3133
6	0.1550	0.0216	0.0827	1.2734	0.2679	0.1429	0.2333	0.0278	0.3230	0.3651	0.0797	0.0682	0.4610	0.1318	0.2964
7	0.3586	0.0131	0.1028	0.7539	0.3078	0.1384	0.4719	0.0003	0.2785	0.3031	0.3032	0.0119	0.4829	0.1930	0.3382
8	0.6709	0.0139	0.1161	0.4605	0.4613	0.6631	0.9482	0.0265	0.3968	0.4391	0.6524	0.0501	0.7273	0.4275	0.5774
9	1.0610	0.1389	0.0050	0.2004	0.0925	0.7827	0.9749	0.2477	0.3788	0.3516	1.0131	0.0093	0.6438	0.5500	0.5969
10	1.1852	0.2602	0.0264	0.3399	0.1662	0.4784	0.7652	0.3670	0.4084	0.3282	0.9216	0.0373	0.4041	0.5118	0.4579
11	1.2360	0.3675	0.0895	0.5451	0.6151	0.6562	1.6150	0.3420	0.5844	0.5972	0.5324	0.1153	0.4721	0.7444	0.6081
12	1.1735	0.6322	0.4649	0.3669	1.0805	0.8072	1.7433	0.3104	0.7547	0.7633	1.7434	0.6722	0.6469	1.0678	0.8571
13	0.6426	1.0845	1.0865	0.4250	1.0376	1.8582	0.8220	0.9757	1.0225	1.0524	1.5103	1.4562	0.9531	1.4238	1.1880
14	1.0449	1.3072	1.8841	0.8234	1.3833	2.6206	1.0648	1.2685	1.5093	1.5524	0.5129	2.4500	1.3856	1.8663	1.6254
15	1.7874	1.4492	2.7861	1.3712	1.5851	2.1666	1.9923	1.3696	1.8553	1.9025	0.3653	3.9914	1.4459	2.1230	1.7841
16	1.6365	2.5629	2.8861	1.8576	1.2692	1.9880	1.7974	2.8444	2.0321	2.0772	0.3680	3.8043	1.4086	2.0069	1.7073
17	3.3249	2.0266	2.9947	2.9754	1.6774	2.4210	3.2698	2.5118	2.5655	2.6039	2.3626	2.4565	2.1161	2.0841	2.0997
18	3.8860	2.6659	2.9286	4.7769	1.1556	1.5990	4.0950	3.7406	2.8299	2.9269	5.4316	1.5444	2.2473	2.0635	2.1551
19	4.3926	2.2317	3.2057	5.6177	1.3153	1.0018	4.5434	3.4242	2.9540	3.0704	6.0681	0.9486	2.2840	2.0269	2.1551
20	2.5066	1.5045	2.7731	6.4369	1.2662	1.0695	3.0648	2.3705	2.5862	2.8390	4.9170	0.3504	2.3890	1.3106	1.8496
21	0.8441	1.1779	2.3528	7.1359	2.1192	1.4595	1.1865	1.8323	2.5101	2.8359	3.3076	0.4905	2.4587	0.8575	1.6578
22	0.2496	0.3626	1.0990	4.2227	2.3080	1.4823	0.3611	0.5655	1.6188	1.8358	0.9060	0.5363	1.9965	0.3964	1.1962
23	0.0212	0.0682	0.4248	1.4803	1.9831	0.5720	0.0299	0.1066	0.7595	0.8626	0.0760	0.2495	1.4508	0.2217	0.8361
24	0.0060	0.0085	0.0845	0.6525	0.9514	0.0694	0.0009	0.0127	0.2963	0.3355	0.0074	0.0520	0.8294	0.1338	0.4816
3	0.1141	0.0127	0.0960	0.5068	0.4786	0.1203	0.1063	0.0192	0.2215	0.2429	0.0648	0.1021	0.2943	0.3983	0.3463
6	0.2115	0.0128	0.0976	1.2172	0.3148	0.1277	0.2481	0.0177	0.3294	0.3639	0.0301	0.0384	0.4067	0.2533	0.3300
9	0.6968	0.0553	0.0746	0.4716	0.2872	0.5281	0.7983	0.0915	0.3513	0.3646	0.6562	0.0238	0.6180	0.3913	0.5048
12	1.1982	0.4199	0.1936	0.4173	0.6206	0.6473	1.3745	0.3398	0.5825	0.5629	1.0658	0.2749	0.5077	0.7746	0.6410
15	1.1583	1.2803	1.9189	0.8732	1.3353	2.2151	1.2930	1.2046	1.4622	1.5023	0.7962	2.6325	1.2613	1.8043	1.5323
18	2.9491	2.4185	2.9364	3.2033	1.3674	2.0026	3.0541	3.0322	2.4757	2.5359	2.7207	2.6017	1.9238	2.0514	1.9872
21	2.5811	1.6380	2.7772	6.3968	1.5669	1.1769	2.9316	2.5423	2.6834	2.9151	4.7642	0.5965	2.3771	1.3981	1.8873
24	0.0923	0.1464	0.5361	2.1185	1.7475	0.7079	0.1306	0.2283	0.8917	1.0115	0.3298	0.2793	1.4254	0.2506	0.8377
6	0.1628	0.0127	0.0968	0.8620	0.3967	0.1240	0.1772	0.0184	0.2754	0.3034	0.0474	0.0702	0.3505	0.3258	0.3381
12	0.9475	0.2377	0.1341	0.4444	0.4539	0.5877	1.0864	0.2157	0.4669	0.4637	0.8610	0.1493	0.5628	0.5832	0.5729
18	2.0537	1.8494	2.4276	2.0382	1.3513	2.1089	2.1735	2.1184	1.9689	2.0189	1.7584	2.6171	1.5925	1.9277	1.7596
24	1.3367	0.8922	1.6566	4.2578	1.6572	0.9424	1.5311	1.3853	1.7873	1.9630	2.5470	0.4379	1.9012	0.8246	1.3624
12	0.5551	0.1252	0.1154	0.6532	0.4253	0.3558	0.6318	0.1170	0.3711	0.3835	0.4542	0.1098	0.4566	0.4549	0.4558
24	1.6952	1.3708	2.0421	3.1480	1.5043	1.5256	1.8523	1.7518	1.8781	1.9910	2.1527	1.5275	1.7468	1.3761	1.5610
24	1.1251	0.7480	1.0787	1.9006	0.9648	0.9407	1.2420	0.9344	1.1247	1.1874	1.3035	0.8186	1.1019	0.9179	1.0094

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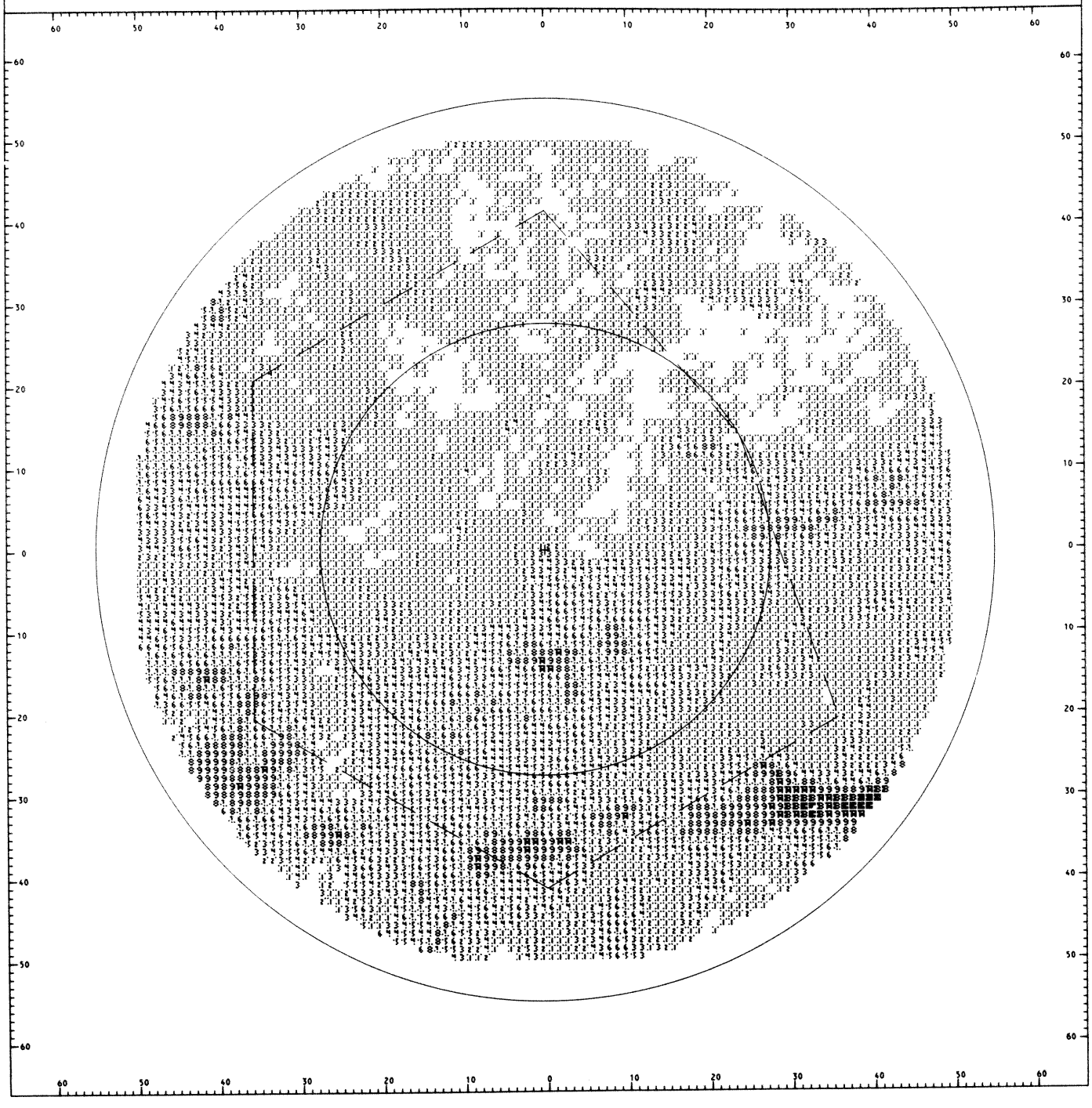
GATE RADAR DAILY RAINFALL RATE 246

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	117	118	104	063

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 3, 1974 (JULIAN DAY 246)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0	0.0086	0.0228	0.1207	0.4603	0.0040	0.0	0.0088	0.1034	0.1169	0.0096	0.0311	0.4315	0.0871	0.2594
2	0.0047	0.0389	0.0453	0.0515	0.1554	0.0003	0.0014	0.0453	0.0496	0.0538	0.0337	0.0514	0.1654	0.0528	0.1091
3	0.0049	0.0346	0.0297	0.0078	0.0044	0.0007	0.0015	0.0514	0.0137	0.0146	0.0516	0.0403	0.0251	0.0331	0.0291
4	0.0	0.0221	0.0213	0.0047	0.0002	0.0044	0.0	0.0242	0.0088	0.0087	0.0002	0.0261	0.0046	0.0123	0.0084
5	0.0055	0.0535	0.0549	0.0044	0.0049	0.0232	0.0080	0.0751	0.0244	0.0267	0.0474	0.0609	0.0112	0.0430	0.0271
6	0.0018	0.0445	0.0197	0.0167	0.0298	0.0128	0.0022	0.0315	0.0210	0.0191	0.0081	0.0171	0.0268	0.0286	0.0277
7	0.0140	0.0586	0.0481	0.0816	0.0548	0.0195	0.0219	0.0384	0.0461	0.0459	0.0167	0.0306	0.0595	0.0302	0.0448
8	0.0131	0.1183	0.1274	0.1051	0.0257	0.0159	0.0155	0.0742	0.0676	0.0627	0.0006	0.0686	0.0953	0.0594	0.0773
9	0.0071	0.1071	0.2024	0.2535	0.0198	0.0294	0.0059	0.0581	0.1030	0.1031	0.0074	0.0413	0.1784	0.0709	0.1246
10	0.0010	0.0785	0.3035	0.4438	0.1074	0.0341	0.0007	0.0751	0.1610	0.1771	0.0125	0.0366	0.2644	0.0862	0.1753
11	0.0031	0.0698	0.1904	0.4556	0.2019	0.0289	0.0032	0.0893	0.1582	0.1771	0.0293	0.0320	0.2546	0.0575	0.1560
12	0.0109	0.0667	0.0646	0.1528	0.2588	0.0181	0.0143	0.0587	0.0956	0.1028	0.0273	0.0578	0.1184	0.0473	0.0828
13	0.0345	0.0523	0.0804	0.1489	0.0798	0.0141	0.0509	0.0710	0.0683	0.0760	0.0259	0.0429	0.0661	0.0542	0.0602
14	0.0261	0.0744	0.1013	0.1505	0.0396	0.0294	0.0368	0.1131	0.0702	0.0789	0.0309	0.0584	0.0608	0.0684	0.0646
15	0.0209	0.0782	0.0888	0.1456	0.0354	0.0417	0.0277	0.1172	0.0684	0.0766	0.0823	0.0282	0.0673	0.0670	0.0671
16	0.0	0.0227	0.0894	0.1386	0.0147	0.0201	0.0	0.0311	0.0474	0.0534	0.0006	0.0395	0.0588	0.0399	0.0493
17	0.0226	0.0699	0.0681	0.1496	0.0042	0.0029	0.0332	0.0817	0.0528	0.0564	0.0021	0.0580	0.0496	0.0570	0.0533
18	0.0297	0.0858	0.0615	0.0892	0.0051	0.0100	0.0176	0.1155	0.0469	0.0476	0.0409	0.0342	0.0589	0.0600	0.0594
19	0.0505	0.1180	0.1095	0.0338	0.0105	0.0032	0.0358	0.1091	0.0543	0.0474	0.0437	0.0132	0.0371	0.0950	0.0660
20	0.0640	0.1555	0.2316	0.0936	0.0169	0.0222	0.0579	0.1273	0.0972	0.0913	0.0309	0.0326	0.0573	0.2898	0.1736
21	0.0037	0.1676	0.2098	0.1816	0.0321	0.0007	0.0051	0.0760	0.0992	0.0900	0.0110	0.0476	0.0834	0.3854	0.2343
22	0.0248	0.2304	0.4815	0.2884	0.0508	0.0003	0.0227	0.1159	0.1792	0.1718	0.0028	0.2757	0.1589	0.3936	0.2761
23	0.0703	0.1436	0.6129	0.5220	0.0438	0.0001	0.0959	0.1494	0.2314	0.2522	0.0669	0.5151	0.2727	0.2877	0.2802
24	0.0086	0.0650	0.5411	0.8534	0.0114	0.0	0.0131	0.0912	0.2456	0.2777	0.0164	0.3650	0.2678	0.1839	0.2259
3	0.0032	0.0274	0.0326	0.0600	0.2067	0.0017	0.0010	0.0351	0.0556	0.0617	0.0316	0.0410	0.2073	0.0577	0.1325
6	0.0024	0.0401	0.0320	0.0086	0.0116	0.0135	0.0034	0.0436	0.0181	0.0182	0.0186	0.0347	0.0142	0.0280	0.0211
9	0.0114	0.0947	0.1260	0.1468	0.0334	0.0216	0.0144	0.0569	0.0722	0.0706	0.0082	0.0468	0.1111	0.0535	0.0823
12	0.0050	0.0717	0.1862	0.3507	0.1893	0.0270	0.0061	0.0744	0.1383	0.1523	0.0230	0.0421	0.2124	0.0637	0.1380
15	0.0272	0.0683	0.0902	0.1483	0.0516	0.0284	0.0385	0.1004	0.0689	0.0772	0.0464	0.0432	0.0647	0.0632	0.0640
18	0.0174	0.0595	0.0730	0.1258	0.0080	0.0110	0.0170	0.0761	0.0490	0.0525	0.0146	0.0439	0.0558	0.0523	0.0540
21	0.0394	0.1470	0.1836	0.1030	0.0198	0.0087	0.0329	0.1041	0.0836	0.0762	0.0285	0.0311	0.0593	0.2569	0.1580
24	0.0346	0.1463	0.5452	0.5546	0.0353	0.0001	0.0439	0.1188	0.2187	0.2339	0.0287	0.3852	0.2331	0.2885	0.2608
6	0.0028	0.0337	0.0323	0.0343	0.1092	0.0076	0.0022	0.0394	0.0368	0.0400	0.0251	0.0378	0.1107	0.0429	0.0768
12	0.0082	0.0832	0.1561	0.2488	0.1114	0.0243	0.0103	0.0657	0.1052	0.1114	0.0156	0.0445	0.1617	0.0586	0.1102
18	0.0223	0.0639	0.0816	0.1371	0.0298	0.0197	0.0277	0.0883	0.0590	0.0648	0.0305	0.0435	0.0602	0.0578	0.0590
24	0.0370	0.1467	0.3644	0.3288	0.0276	0.0044	0.0384	0.1115	0.1511	0.1551	0.0286	0.2082	0.1462	0.2728	0.2094
12	0.0055	0.0584	0.0942	0.1415	0.1103	0.0159	0.0062	0.0525	0.0710	0.0757	0.0204	0.0411	0.1362	0.0508	0.0935
24	0.0296	0.1053	0.2230	0.2329	0.0287	0.0121	0.0331	0.0999	0.1051	0.1099	0.0295	0.1259	0.1032	0.1653	0.1342
24	0.0176	0.0819	0.1586	0.1872	0.0695	0.0140	0.0196	0.0762	0.0880	0.0928	0.0250	0.0835	0.1197	0.1080	0.1139

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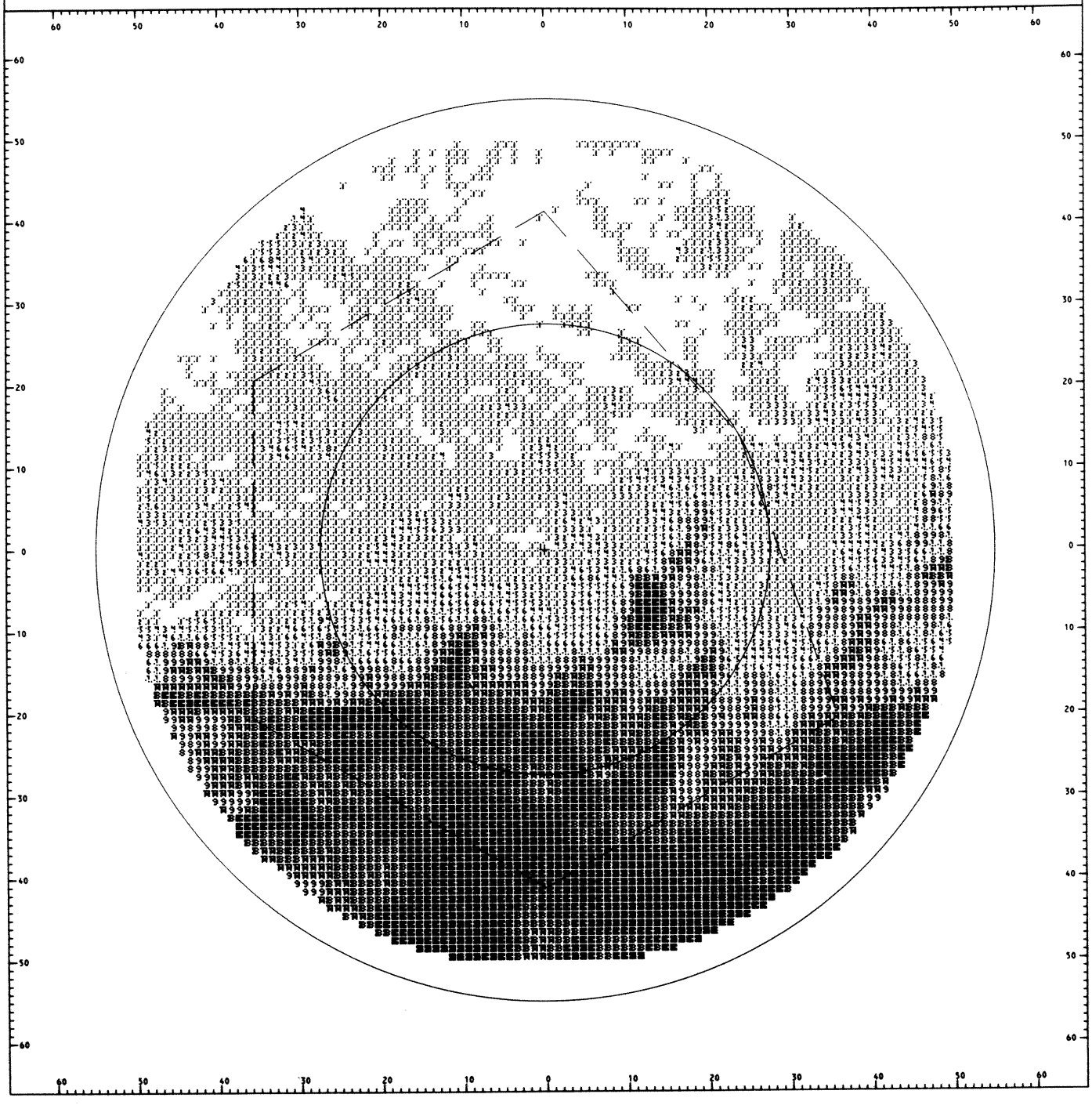
GATE RADAR DAILY RAINFALL RATE 247

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	120	118	086	100

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 4, 1974 (JULIAN DAY 247)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0022	0.0878	0.4992	0.8156	0.0489	0.0008	0.0032	0.1179	0.2416	0.2721	0.0112	0.4557	0.4234	0.3017	0.3625
2	0.0028	0.0418	0.8369	0.5304	0.0564	0.0017	0.0015	0.0280	0.2441	0.2724	0.0033	0.8296	0.6831	0.4327	0.5579
3	0.0056	0.0465	0.9453	0.6091	0.1807	0.0028	0.0076	0.0163	0.2974	0.3309	0.0056	0.5364	1.0141	0.3919	0.7030
4	0.0155	0.0718	1.2543	1.6572	0.1649	0.0175	0.0194	0.0571	0.5282	0.5927	0.0187	1.1507	0.9229	0.3674	0.6450
5	0.0257	0.0549	0.9000	1.8790	0.1924	0.0265	0.0318	0.0595	0.5112	0.5765	0.0366	1.0156	0.6739	0.2690	0.4714
6	0.0032	0.0226	0.6635	1.9622	0.1742	0.0207	0.0024	0.0147	0.4725	0.5340	0.0044	0.4110	0.6887	0.3408	0.5147
7	0.0010	0.0574	0.2925	1.8471	0.0317	0.0047	0.0010	0.0395	0.3708	0.4150	0.0014	0.2433	0.8802	0.4293	0.6547
8	0.0011	0.0450	0.1963	0.6599	0.0557	0.0054	0.0017	0.0539	0.1600	0.1798	0.0092	0.1760	0.5076	0.5945	0.5510
9	0.0001	0.0303	0.6182	0.2350	0.0080	0.0006	0.0002	0.0432	0.1481	0.1677	0.0054	0.4516	0.1844	0.8072	0.4958
10	0.0004	0.0185	0.4300	0.0876	0.0006	0.0003	0.0005	0.0184	0.0892	0.1000	0.0010	0.3122	0.0479	0.6769	0.3624
11	0.0022	0.0519	0.3181	0.1746	0.0181	0.0003	0.0020	0.0626	0.0939	0.1043	0.0222	0.3962	0.0644	0.5160	0.2902
12	0.0121	0.0909	0.4237	0.2894	0.0974	0.0195	0.0188	0.0953	0.1552	0.1707	0.0291	0.2366	0.1779	0.6127	0.3953
13	0.0109	0.1882	0.8939	0.6301	0.0943	0.0484	0.0171	0.0210	0.3101	0.3189	0.0026	0.2891	0.3231	0.9642	0.6435
14	0.0008	0.7703	0.9945	0.5127	0.0214	0.0101	0.0012	0.4271	0.3850	0.3428	0.0058	1.3600	0.2367	0.8513	0.5440
15	0.0160	0.3904	1.8219	0.8162	0.0105	0.0247	0.0246	0.4636	0.5117	0.5638	0.0750	2.7190	0.3211	1.0823	0.7016
16	0.0092	0.2843	2.3987	0.9337	0.0279	0.0283	0.0106	0.3960	0.6114	0.6886	0.0051	3.4438	0.5950	1.4976	1.0462
17	0.0074	0.0648	3.1066	0.7221	0.0949	0.0113	0.0042	0.0824	0.6650	0.7523	0.0132	4.2329	0.5150	1.3391	0.9269
18	0.0129	0.0761	3.9988	1.3897	0.3882	0.0013	0.0023	0.0805	0.9741	1.0999	0.0130	3.7628	0.6110	1.6857	1.1482
19	0.0253	0.1467	3.9581	2.7053	0.0505	0.0099	0.0124	0.1774	1.1441	1.2903	0.0436	1.9550	0.7974	1.6687	1.2330
20	0.0369	0.4026	3.0424	3.5191	0.0306	0.0268	0.0338	0.5946	1.1716	1.3245	0.2015	1.2989	1.0830	1.4189	1.2508
21	0.0698	0.6400	2.3683	5.0179	0.0889	0.0491	0.0938	0.9692	1.3673	1.5485	0.3231	0.9043	1.6294	1.2696	1.4494
22	0.0257	0.6674	2.1453	5.4522	0.1500	0.0064	0.0298	1.0057	1.4028	1.5887	0.2778	0.6579	1.6726	0.9055	1.2890
23	0.0311	0.8771	1.1907	6.8383	0.3627	0.0313	0.0373	1.2416	1.5505	1.7454	0.3878	0.2225	2.3964	0.6839	1.5405
24	0.0324	1.3179	0.5231	5.7721	0.7361	0.0557	0.0453	1.9846	1.4042	1.5873	1.1892	0.0144	2.0970	0.4421	1.2694
3	0.0036	0.0587	0.7605	0.6517	0.0954	0.0018	0.0041	0.0541	0.2610	0.2918	0.0067	0.6072	0.7069	0.3754	0.5411
6	0.0148	0.0498	0.9392	1.8328	0.1771	0.0216	0.0179	0.0438	0.5039	0.5677	0.0199	0.8591	0.7618	0.3257	0.5437
9	0.0007	0.0443	0.3690	0.9140	0.0318	0.0036	0.0010	0.0455	0.2263	0.2542	0.0054	0.2903	0.5241	0.6103	0.5672
12	0.0049	0.0538	0.3906	0.1838	0.0387	0.0067	0.0071	0.0588	0.1127	0.1250	0.0174	0.3150	0.0967	0.6019	0.3493
15	0.0092	0.4496	1.2368	0.6530	0.0421	0.0277	0.0143	0.3039	0.4023	0.4085	0.0278	1.4560	0.2936	0.9659	0.6297
18	0.0098	0.1417	3.1680	1.0152	0.1703	0.0136	0.0057	0.1863	0.7502	0.8469	0.0104	3.8131	0.5737	1.5075	1.0404
21	0.0440	0.3964	3.1229	3.7474	0.0566	0.0286	0.0467	0.5804	1.2276	1.3877	0.1894	1.3861	1.1699	1.4524	1.3110
24	0.0298	0.9541	1.2864	6.0209	0.4162	0.0311	0.0375	1.4106	1.4524	1.6404	0.6183	0.2983	2.0553	0.6775	1.3666
6	0.0092	0.0542	0.8499	1.2422	0.1362	0.0117	0.0110	0.0489	0.3825	0.4298	0.0133	0.7332	0.7343	0.3506	0.5424
12	0.0028	0.0490	0.3798	0.5489	0.0352	0.0051	0.0040	0.0521	0.1695	0.1896	0.0114	0.3026	0.3104	0.6061	0.4582
18	0.0095	0.2957	2.2024	0.8341	0.1062	0.0207	0.0100	0.2451	0.5762	0.6277	0.0191	2.6346	0.4336	1.2367	0.8350
24	0.0369	0.6753	2.2046	4.8842	0.2364	0.0299	0.0421	0.9955	1.3400	1.5141	0.4038	0.8422	1.6126	1.0658	1.3392
12	0.0060	0.0516	0.6148	0.8956	0.0857	0.0084	0.0075	0.0505	0.2760	0.3097	0.0123	0.5179	0.5224	0.4783	0.5003
24	0.0232	0.4854	2.2035	2.8591	0.1713	0.0253	0.0260	0.6203	0.9582	1.0709	0.2115	1.7384	1.0232	1.1520	1.0873
24	0.0146	0.2685	1.4092	1.8773	0.1285	0.0168	0.0168	0.3354	0.6171	0.6903	0.1119	1.1281	0.7728	0.8155	0.7939

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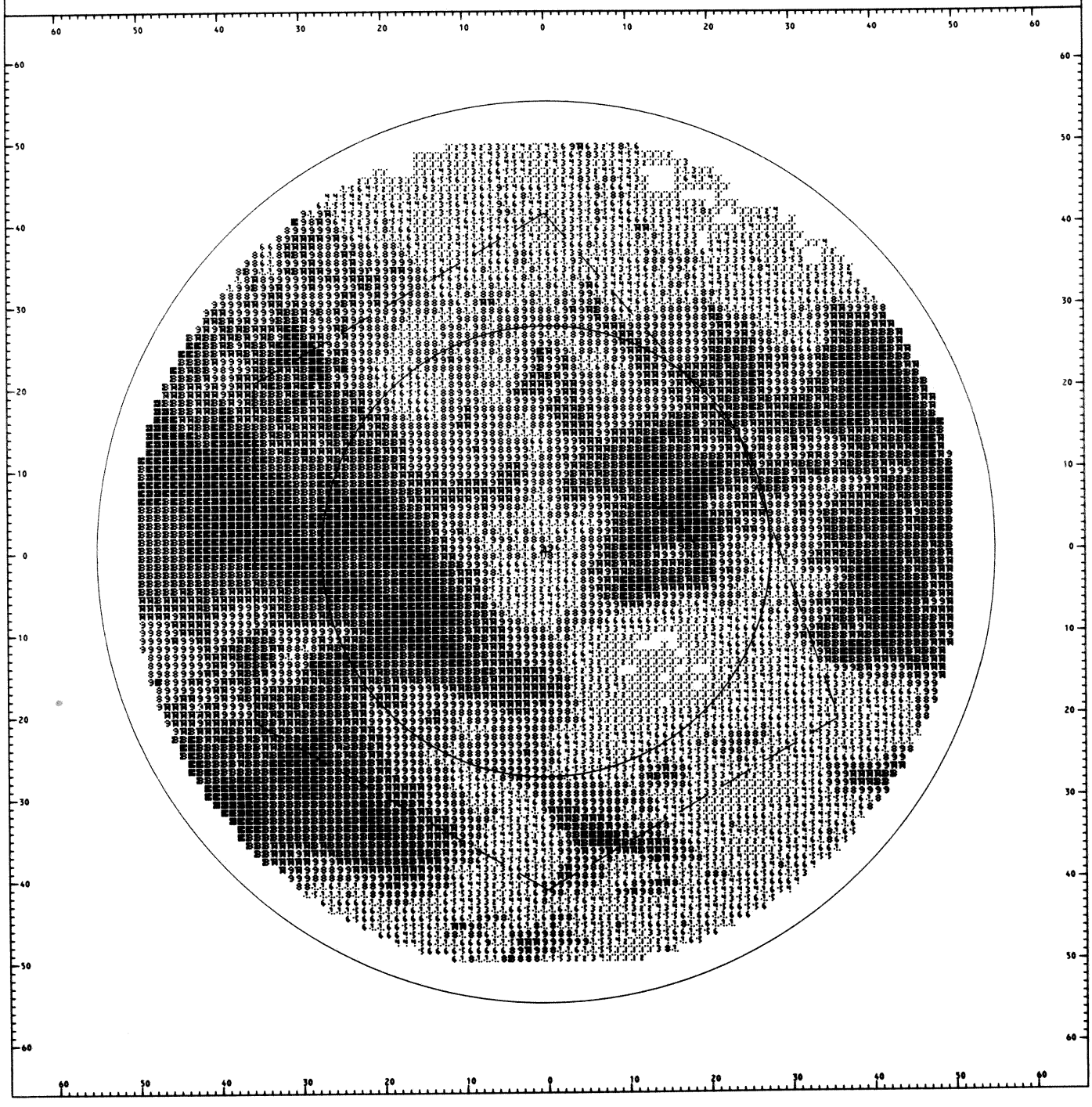
GATE RADAR DAILY RAINFALL RATE 248

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	115	114	101	083

MISSING HOURS: 23

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 5, 1974 (JULIAN DAY 248)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0159	1.2872	0.4530	5.4819	2.4850	0.0203	0.0231	1.9848	1.6250	1.8445	0.8410	0.0003	2.0819	0.3300	1.2062
2	0.0406	1.5830	0.1829	3.1035	1.1997	0.0351	0.0603	2.4463	1.0259	1.1640	1.1644	0.0425	1.6010	0.3383	0.9699
3	0.0551	1.6511	0.3014	1.6886	1.5726	0.0517	0.0792	2.5403	0.8903	1.0081	2.6796	0.1916	1.4987	0.3943	0.9469
4	0.3092	1.6695	0.3711	0.9289	1.7751	0.1597	0.4066	2.3449	0.8731	0.9525	3.0965	0.0960	1.2582	0.5696	0.9137
5	0.7025	1.5316	0.2299	0.6042	2.2842	0.3177	0.8438	2.1461	0.9497	1.0198	2.8306	0.0254	1.3295	0.6792	1.0041
6	1.4637	0.6263	0.1007	0.5602	2.2015	0.5366	1.4683	0.7450	0.9173	0.9150	2.0683	0.0063	1.5820	0.6075	1.0945
7	2.4434	0.3770	0.0860	0.4749	3.2976	1.0138	2.6964	0.3920	1.2846	1.2995	3.0560	0.0254	1.6651	0.6589	1.1617
8	1.8801	0.3694	0.1427	0.7052	2.2999	1.7440	2.2849	0.3418	1.1906	1.2447	2.9103	0.0584	1.4719	0.5729	1.0221
9	1.5546	0.4043	0.3406	0.9092	2.0621	2.4774	2.2201	0.3716	1.2906	1.4089	2.7269	0.3542	1.5737	0.6844	1.1287
10	1.0397	0.9776	0.3849	0.6385	2.6012	1.6964	1.4936	0.7283	1.2254	1.2788	1.8066	0.5144	1.5803	0.8441	1.2118
11	0.9076	1.5076	0.2082	0.6342	2.5450	1.1867	1.3027	1.1545	1.1688	1.1677	2.0959	0.2634	1.2205	1.0202	1.1199
12	0.5488	2.2678	0.1217	0.4939	4.4379	1.4123	0.6859	1.9549	1.5555	1.5537	2.8929	0.1890	1.7162	1.2844	1.5001
13	0.5701	2.3607	0.1208	0.3861	3.5871	1.2124	0.6848	1.9475	1.3803	1.3319	2.5348	0.1793	1.4394	1.2764	1.3576
14	1.3113	2.2148	0.1540	0.5701	3.7992	1.2870	1.4984	1.4639	1.5626	1.4655	2.8389	0.3124	1.5003	1.5889	1.5443
15	1.1998	1.5323	0.3266	1.1248	4.0227	1.3789	0.8163	0.9262	1.6029	1.5144	1.3759	0.5468	1.9135	1.3286	1.6212
16	1.6139	1.4022	0.3089	0.6881	2.0759	0.7685	0.6904	0.9024	1.1455	0.9238	1.4668	0.6631	1.1152	1.1653	1.1399
17	2.1839	1.3130	0.2944	1.0603	2.0702	0.7319	1.5523	0.8198	1.2772	1.0766	0.7037	0.5384	1.3967	1.1972	1.2966
18	2.3406	0.8839	0.2489	1.3310	1.5532	0.7548	1.9458	0.8662	1.1852	1.0776	1.1395	0.3949	1.3697	1.0239	1.1964
19	1.4040	0.8640	0.3795	0.9553	0.7224	0.4467	1.1955	1.1925	0.7953	0.7646	1.1608	0.3966	1.0367	0.8741	0.9549
20	0.6003	0.5043	0.8012	1.0211	0.2548	0.5760	0.6130	0.7300	0.6250	0.6643	0.7663	0.6740	0.8093	0.6505	0.7297
21	0.1551	0.1860	0.9182	0.7180	0.0567	0.3085	0.2081	0.2912	0.3891	0.4382	0.6136	0.9397	0.4873	0.4703	0.4788
22	0.0419	0.0307	1.0950	0.5191	0.0316	0.0411	0.0635	0.0451	0.2919	0.3311	0.1205	1.0070	0.2626	0.3895	0.3261
23															
24	0.0003	0.0050	0.6474	0.0888	0.0118	0.0027	0.0005	0.0070	0.1254	0.1424	0.0088	0.6222	0.0658	0.1698	0.1178
3	0.0372	1.5071	0.3124	3.4246	1.7524	0.0357	0.0542	2.3238	1.1804	1.3388	1.5616	0.0782	1.7271	0.3544	1.0412
6	0.8251	1.2758	0.2339	0.6978	2.0869	0.3380	0.9062	1.7453	0.9133	0.9624	2.6651	0.0426	1.3898	0.6187	1.0038
9	1.9593	0.3836	0.1897	0.6964	2.5532	1.7450	2.4005	0.3685	1.2551	1.3175	2.8977	0.1460	1.5700	0.6387	1.1039
12	0.8320	1.5843	0.2382	0.5888	3.1947	1.4318	1.1608	1.2792	1.3163	1.3332	2.2651	0.3223	1.5055	1.0495	1.2771
15	1.0271	2.0359	0.2005	0.6937	3.8030	1.2927	0.9998	1.4458	1.5151	1.4371	2.2499	0.3462	1.6176	1.4004	1.5089
18	2.0461	1.1997	0.2841	1.0265	1.8998	0.7517	1.3961	0.8628	1.2025	1.0261	1.1033	0.5321	1.2937	1.1286	1.2108
21	0.7198	0.5181	0.6996	0.8981	0.3446	0.4437	0.6722	0.7379	0.6031	0.6223	0.8469	0.6701	0.7778	0.6649	0.7211
24	0.0211	0.0178	0.8712	0.3039	0.0217	0.0219	0.0320	0.0261	0.2087	0.2367	0.0647	0.8146	0.1642	0.2797	0.2219
6	0.4312	1.3914	0.2732	2.0612	1.9197	0.1868	0.4802	2.0345	1.0468	1.1505	2.1134	0.0604	1.5584	0.4865	1.0227
12	1.3957	0.9839	0.2140	0.6426	2.8739	1.5884	1.7806	0.8238	1.2856	1.3253	2.5814	0.2341	1.5376	0.8442	1.1903
18	1.5366	1.6178	0.2423	0.8601	2.8514	1.0222	1.1980	1.1543	1.3586	1.2313	1.6766	0.4392	1.4555	1.2659	1.3605
24	0.4403	0.3180	0.7683	0.6604	0.2155	0.2750	0.4161	0.4532	0.4453	0.4680	0.5340	0.7279	0.5323	0.5108	0.5215
12	0.9134	1.1877	0.2436	1.3519	2.3968	0.8876	1.1304	1.4292	1.1660	1.2378	2.3474	0.1472	1.5479	0.6661	1.1068
24	1.0383	1.0269	0.4814	0.7693	1.6532	0.6826	0.8426	0.8356	0.9438	0.8847	1.1572	0.5704	1.0360	0.9236	0.9791
24	0.9731	1.1108	0.3573	1.0732	2.0411	0.7895	0.9927	1.1453	1.0596	1.0691	1.7782	0.3496	1.3030	0.7896	1.0459

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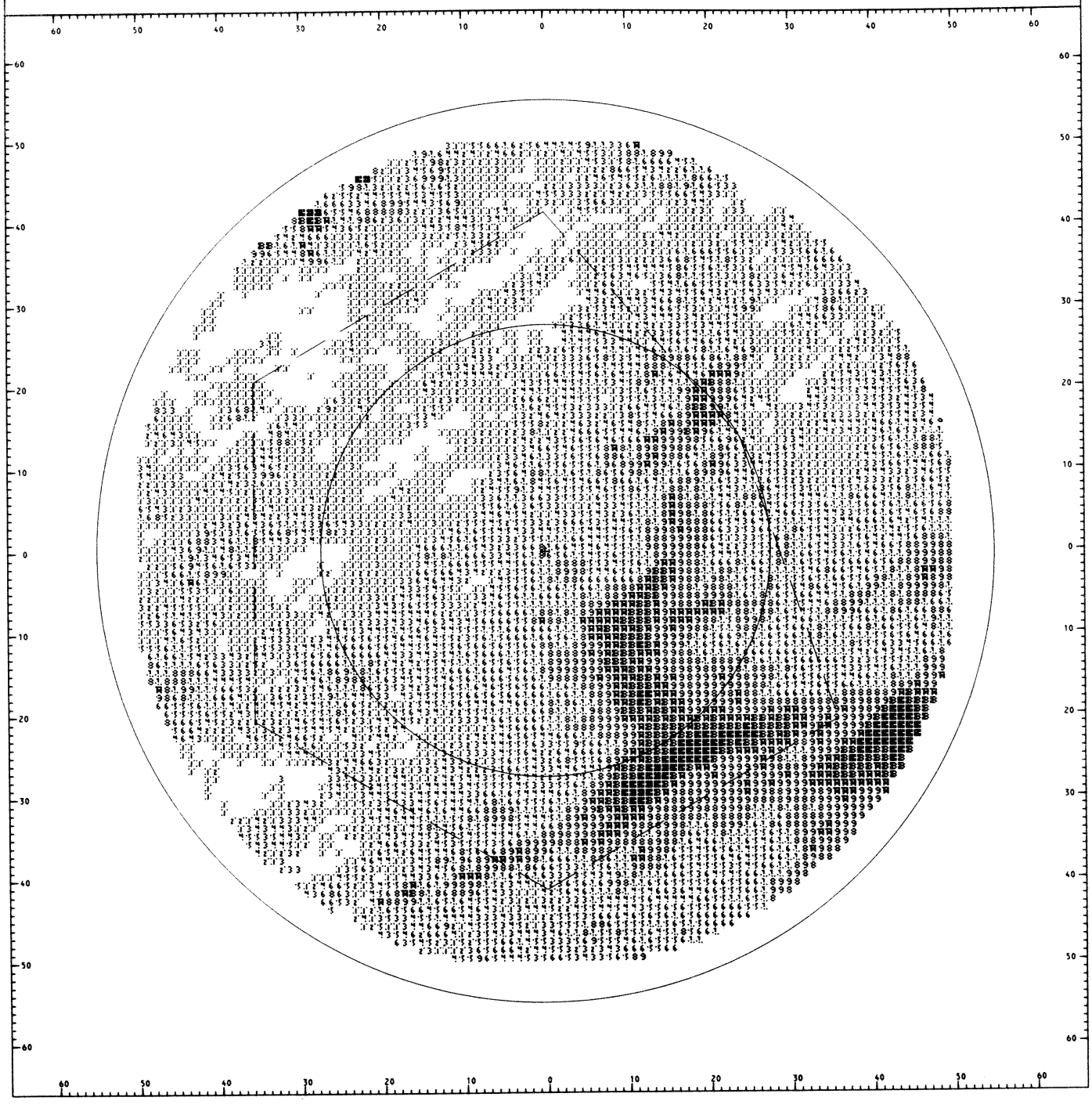
GATE RADAR DAILY RAINFALL RATE 249

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	120	099	118	079

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 6, 1974 (JULIAN DAY 249)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0	0.0048	0.1609	0.0510	0.0209	0.0	0.0	0.0035	0.0395	0.0444	0.0	0.1422	0.0513	0.0578	0.0546
2	0.0006	0.0013	0.0719	0.1833	0.0053	0.0	0.0010	0.0010	0.0435	0.0493	0.0	0.0365	0.1444	0.0273	0.0858
3	0.0	0.0003	0.2702	0.2442	0.0328	0.0	0.0	0.0	0.0909	0.1032	0.0	0.2722	0.1842	0.1048	0.1445
4	0.0	0.0032	0.8662	0.3464	0.0799	0.0	0.0	0.0007	0.2151	0.2438	0.0	1.1849	0.1356	0.2684	0.2019
5	0.0	0.0211	2.2014	0.1308	0.0380	0.0	0.0	0.0099	0.3967	0.4479	0.0	3.1099	0.0481	0.5221	0.2849
6	0.0	0.0804	2.1932	0.0461	0.0044	0.0	0.0	0.0705	0.3856	0.4314	0.0	3.1045	0.0348	0.5957	0.3152
7	0.0	0.1514	2.2470	0.0387	0.0311	0.0	0.0	0.1267	0.4098	0.4522	0.0	3.2595	0.0335	0.7347	0.3841
8	0.0011	0.1382	2.0355	0.0784	0.0081	0.0021	0.0018	0.1259	0.3757	0.4160	0.0011	2.8175	0.0499	0.7110	0.3804
9	0.0255	0.1255	1.1623	0.1157	0.0814	0.0088	0.0320	0.1578	0.2525	0.2813	0.1078	1.5724	0.0487	0.5965	0.3227
10	0.0077	0.2169	0.6502	0.0985	0.0238	0.0123	0.0115	0.2949	0.1680	0.1856	0.1290	0.7261	0.0261	0.4423	0.2343
11	0.0004	0.2857	0.7300	0.0825	0.0011	0.0029	0.0006	0.4100	0.1836	0.2045	0.2087	0.6108	0.0346	0.4379	0.2363
12	0.0002	0.1660	1.1912	0.0173	0.0037	0.0	0.0003	0.2193	0.2290	0.2555	0.0875	0.5880	0.0317	0.4645	0.2479
13	0.0019	0.3694	1.4877	0.1044	0.0277	0.0009	0.0029	0.4782	0.3313	0.3647	0.3925	0.7038	0.0368	0.5109	0.2738
14	0.0156	0.6704	1.6627	0.2336	0.1213	0.0011	0.0143	1.0102	0.4505	0.5070	1.1668	0.5545	0.0849	0.5037	0.2943
15	0.0670	0.7697	1.6539	0.3326	0.1143	0.0067	0.0395	1.2337	0.4905	0.5543	0.8992	0.3302	0.1182	0.5170	0.3176
16	0.0476	0.6976	0.6735	0.2419	0.1303	0.0161	0.0417	1.0582	0.3017	0.3359	0.7339	0.2622	0.1640	0.3273	0.2456
17	0.1077	0.4102	0.5290	0.3636	0.2887	0.0215	0.1210	0.5733	0.2871	0.3126	0.5941	0.3514	0.2786	0.2971	0.2878
18	0.1788	0.1213	0.3475	0.3078	0.2481	0.0551	0.2265	0.1554	0.2096	0.2276	0.4353	0.2743	0.2785	0.2938	0.2862
19	0.5160	0.1604	0.5225	0.3585	0.1509	0.0737	0.7689	0.2301	0.2963	0.3296	1.3243	0.4508	0.2544	0.4031	0.3288
20	1.0900	0.6687	1.1574	0.4994	0.0947	0.3056	1.3525	0.9873	0.6347	0.6722	1.3792	1.4707	0.2674	0.7548	0.5111
21	1.2323	0.8177	1.2694	0.2760	0.0824	0.4207	1.4011	1.2078	0.6819	0.7036	0.4857	2.0002	0.1851	0.7882	0.4867
22	0.7446	0.7696	0.7966	0.1665	0.0830	0.0700	0.7606	0.7967	0.4383	0.4002	0.4525	1.0431	0.1060	0.5329	0.3194
23	0.7088	0.9040	0.4643	0.1479	0.1308	0.0449	0.7371	0.9371	0.4007	0.3530	0.6799	0.4650	0.0985	0.5492	0.3239
24	0.8685	0.9378	0.0830	0.0742	0.1318	0.0416	0.5803	0.8269	0.3570	0.2344	0.4043	0.0975	0.0763	0.5131	0.2947
3	0.0002	0.0021	0.1677	0.1595	0.0197	0.0	0.0003	0.0015	0.0580	0.0656	0.0	0.1503	0.1266	0.0633	0.0950
6	0.0	0.0349	1.7536	0.1744	0.0407	0.0	0.0	0.0270	0.3325	0.3744	0.0	2.4665	0.0728	0.4627	0.2675
9	0.0089	0.1384	1.8149	0.0776	0.0402	0.0036	0.0113	0.1368	0.3460	0.3832	0.0363	2.5498	0.0440	0.6807	0.3625
12	0.0028	0.2229	0.8571	0.0661	0.0095	0.0050	0.0041	0.3081	0.1935	0.2152	0.1417	0.6416	0.0308	0.4487	0.2396
15	0.0282	0.6032	1.6014	0.2235	0.0878	0.0029	0.0189	0.9074	0.4241	0.4753	0.8195	0.5295	0.0800	0.5105	0.2952
18	0.1114	0.4097	0.5166	0.3044	0.2223	0.0309	0.1297	0.5956	0.2661	0.2920	0.5877	0.2960	0.2404	0.3060	0.2732
21	0.9461	0.5489	0.9831	0.3780	0.1093	0.2667	1.1742	0.8084	0.5376	0.5684	1.0631	1.3072	0.2357	0.6487	0.4422
24	0.7740	0.8704	0.4480	0.1295	0.1152	0.0522	0.6926	0.8536	0.3986	0.3292	0.5122	0.5352	0.0936	0.5317	0.3126
6	0.0001	0.0185	0.9606	0.1670	0.0302	0.0	0.0002	0.0143	0.1952	0.2200	0.0	1.3084	0.0997	0.2630	0.1812
12	0.0058	0.1806	1.3360	0.0718	0.0249	0.0043	0.0077	0.2224	0.2697	0.2992	0.0890	1.5957	0.0374	0.5652	0.3012
18	0.0698	0.5064	1.0590	0.2640	0.1550	0.0169	0.0743	0.7515	0.3451	0.3837	0.7036	0.4127	0.1602	0.4083	0.2842
24	0.8600	0.7097	0.7155	0.2538	0.1123	0.1594	0.9334	0.8310	0.4681	0.4488	0.7877	0.9212	0.1646	0.5902	0.3774
12	0.0030	0.0996	1.1483	0.1194	0.0275	0.0022	0.0039	0.1183	0.2325	0.2596	0.0445	1.4520	0.0686	0.4144	0.2413
24	0.4649	0.6080	0.8873	0.2589	0.1337	0.0882	0.5039	0.7912	0.4066	0.4162	0.7456	0.6670	0.1624	0.4992	0.3308
24	0.2339	0.3538	1.0178	0.1891	0.0806	0.0452	0.2539	0.4548	0.3195	0.3379	0.3951	1.0595	0.1155	0.4574	0.2862

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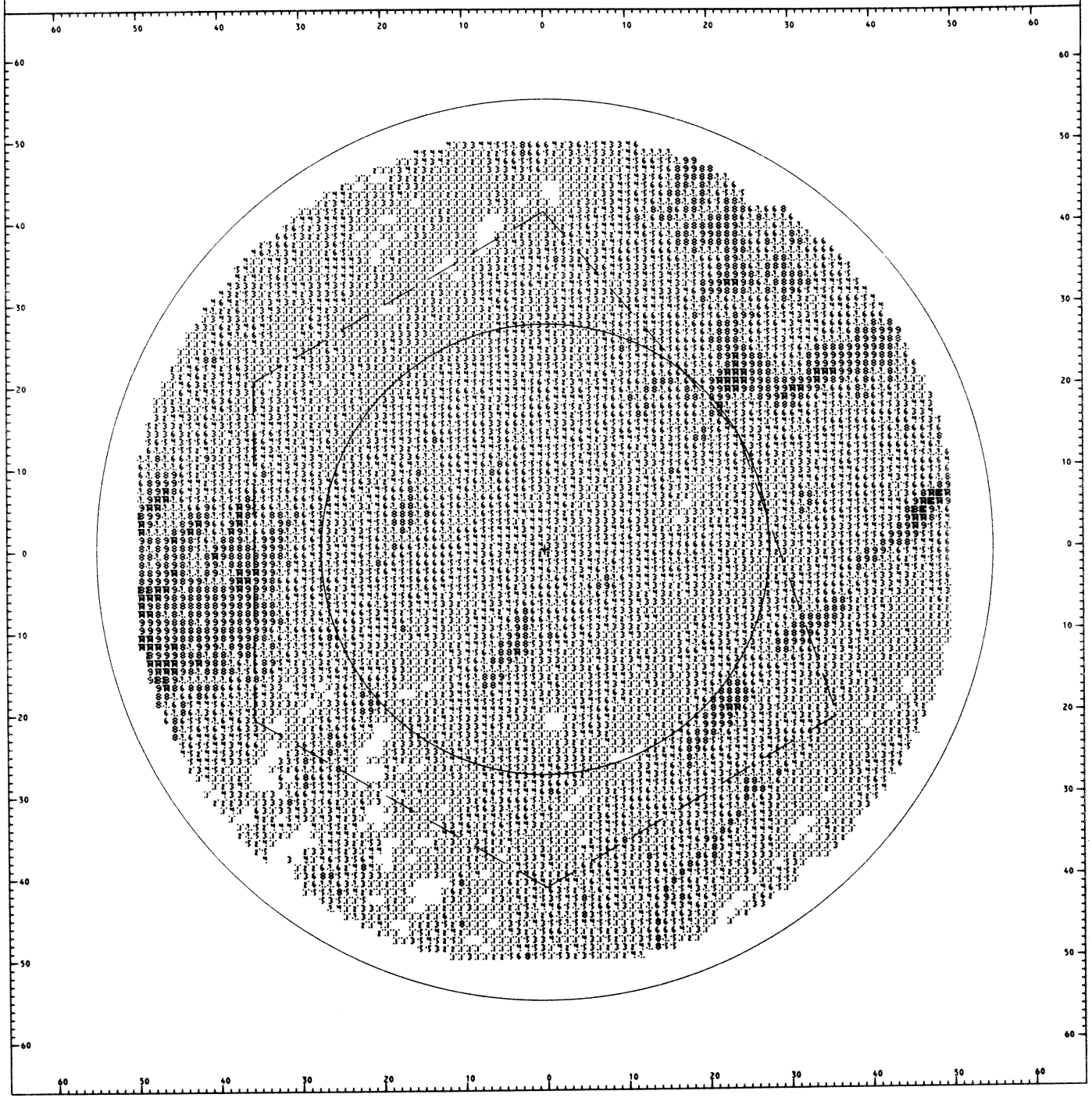
GATE RADAR DAILY RAINFALL RATE 250

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	120	118	113	092

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 7, 1974 (JULIAN DAY 250)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	1.0011	0.8103	0.0824	0.0272	0.2458	0.0685	0.6212	0.5090	0.3733	0.2180	0.5183	0.1042	0.0917	0.4980	0.2949
2	0.9066	0.2457	0.1665	0.0054	0.1887	0.1408	0.2821	0.1525	0.2753	0.1477	0.2188	0.2030	0.1071	0.3998	0.2534
3	0.7364	0.1189	0.0248	0.0004	0.1495	0.1469	0.1575	0.1517	0.1958	0.0986	0.1350	0.0907	0.1292	0.3301	0.2296
4	0.4078	0.1324	0.0056	0.0008	0.0610	0.1363	0.0558	0.1012	0.1238	0.0577	0.0359	0.0396	0.0985	0.3253	0.2119
5	0.1829	0.1136	0.0150	0.0190	0.0390	0.1559	0.0725	0.0662	0.0875	0.0601	0.0211	0.0599	0.1089	0.3425	0.2257
6	0.0549	0.0187	0.0610	0.0505	0.1355	0.0373	0.0293	0.0105	0.0597	0.0588	0.0088	0.0707	0.2744	0.2335	0.2539
7	0.0096	0.0191	0.0939	0.0192	0.1494	0.0261	0.0045	0.0182	0.0530	0.0576	0.0121	0.1231	0.1851	0.1924	0.1888
8	0.0403	0.0877	0.0535	0.0561	0.3481	0.0530	0.0516	0.0991	0.1070	0.1156	0.0788	0.1377	0.2230	0.1555	0.1893
9	0.0774	0.1401	0.0099	0.1819	0.4228	0.1738	0.0890	0.1121	0.1682	0.1742	0.0203	0.0591	0.2622	0.1356	0.1989
10	0.1308	0.0712	0.0649	0.1743	0.3576	0.2907	0.1672	0.0382	0.1817	0.1930	0.0388	0.0435	0.2219	0.1319	0.1769
11	0.2587	0.0620	0.1880	0.1510	0.3205	0.2866	0.3339	0.0488	0.2110	0.2253	0.0703	0.0619	0.1991	0.1623	0.1807
12	0.2291	0.1059	0.3641	0.0505	0.3067	0.2898	0.2479	0.1086	0.2242	0.2345	0.1090	0.1918	0.2160	0.2012	0.2086
13	0.0890	0.0624	0.2813	0.0600	0.3817	0.3898	0.0832	0.0850	0.2107	0.2312	0.0908	0.2312	0.2644	0.1183	0.1913
14	0.0117	0.0164	0.1168	0.0969	0.6018	0.2501	0.0112	0.0227	0.1829	0.2066	0.0040	0.0976	0.3387	0.0414	0.1900
15	0.0072	0.0675	0.0862	0.1583	0.4842	0.0645	0.0038	0.0807	0.1453	0.1612	0.0398	0.0894	0.2400	0.0369	0.1384
16	0.0091	0.0310	0.0740	0.1313	0.2882	0.0122	0.0074	0.0387	0.0913	0.1017	0.0578	0.0891	0.2430	0.0367	0.1399
17	0.1122	0.0822	0.1671	0.2175	0.1237	0.0233	0.1592	0.0366	0.1209	0.1242	0.1432	0.1298	0.2189	0.0913	0.1551
18	0.1444	0.1317	0.2387	0.0866	0.0498	0.0762	0.1888	0.1058	0.1211	0.1209	0.0735	0.3315	0.1063	0.1292	0.1177
19	0.2295	0.1638	0.3263	0.1668	0.0588	0.0149	0.1966	0.1509	0.1598	0.1492	0.2228	0.5209	0.1156	0.1755	0.1455
20	0.3738	0.1933	0.2622	0.6137	0.1229	0.0136	0.3979	0.2270	0.2627	0.2669	0.3179	0.4577	0.1826	0.2168	0.1997
21	0.2776	0.1847	0.3578	0.3688	0.1141	0.0049	0.2571	0.2707	0.2176	0.2239	0.2720	0.4946	0.1149	0.2062	0.1606
22	0.0829	0.1752	0.3374	0.1796	0.0411	0.0135	0.1134	0.2440	0.1381	0.1515	0.1740	0.4493	0.0711	0.1342	0.1026
23	0.0238	0.1581	0.1719	0.1187	0.0956	0.0082	0.0072	0.1682	0.0962	0.0962	0.0702	0.2513	0.0787	0.1552	0.1169
24	0.0447	0.3049	0.0363	0.0430	0.0656	0.0309	0.0340	0.2065	0.0881	0.0629	0.0665	0.0895	0.0671	0.1830	0.1251
3	0.8813	0.3916	0.0913	0.0110	0.1946	0.1188	0.3536	0.2711	0.2814	0.1548	0.2907	0.1326	0.1093	0.4093	0.2593
6	0.2152	0.0882	0.0272	0.0234	0.0785	0.1098	0.0525	0.0593	0.0903	0.0589	0.0219	0.0567	0.1606	0.3004	0.2305
9	0.0424	0.0823	0.0524	0.0857	0.3068	0.0843	0.0484	0.0764	0.1094	0.1158	0.0371	0.1066	0.2234	0.1612	0.1923
12	0.2062	0.0797	0.2057	0.1253	0.3283	0.2891	0.2497	0.0652	0.2056	0.2176	0.0727	0.0950	0.2123	0.1651	0.1887
15	0.0360	0.0487	0.1614	0.1051	0.4892	0.2348	0.0327	0.0628	0.1796	0.1996	0.0449	0.1394	0.2810	0.0655	0.1732
18	0.0886	0.0816	0.1599	0.1451	0.1539	0.0372	0.1185	0.0604	0.1111	0.1156	0.0915	0.1835	0.1894	0.0858	0.1376
21	0.2937	0.1806	0.3154	0.3831	0.0986	0.0111	0.2839	0.2162	0.2133	0.2133	0.2709	0.4911	0.1377	0.1995	0.1686
24	0.0505	0.2127	0.1819	0.1138	0.0674	0.0176	0.0515	0.2062	0.1075	0.1035	0.1035	0.2634	0.0723	0.1576	0.1149
6	0.5482	0.2399	0.0592	0.0172	0.1366	0.1143	0.2030	0.1652	0.1859	0.1068	0.1563	0.0947	0.1349	0.3548	0.2449
12	0.1243	0.0810	0.1290	0.1055	0.3175	0.1867	0.1490	0.0708	0.1575	0.1667	0.0549	0.1028	0.2179	0.1631	0.1905
18	0.0623	0.0652	0.1607	0.1251	0.3216	0.1360	0.0756	0.0616	0.1453	0.1576	0.0682	0.1614	0.2352	0.0757	0.1554
24	0.1721	0.1967	0.2486	0.2484	0.0830	0.0143	0.1677	0.2112	0.1604	0.1584	0.1872	0.3772	0.1050	0.1786	0.1418
12	0.3363	0.1605	0.0941	0.0614	0.2270	0.1505	0.1760	0.1180	0.1717	0.1367	0.1056	0.0988	0.1764	0.2589	0.2176
24	0.1172	0.1309	0.2047	0.1867	0.2023	0.0752	0.1216	0.1364	0.1528	0.1580	0.1277	0.2693	0.1701	0.1272	0.1486
24	0.2267	0.1457	0.1494	0.1241	0.2147	0.1128	0.1488	0.1272	0.1622	0.1473	0.1166	0.1840	0.1732	0.1931	0.1831

46

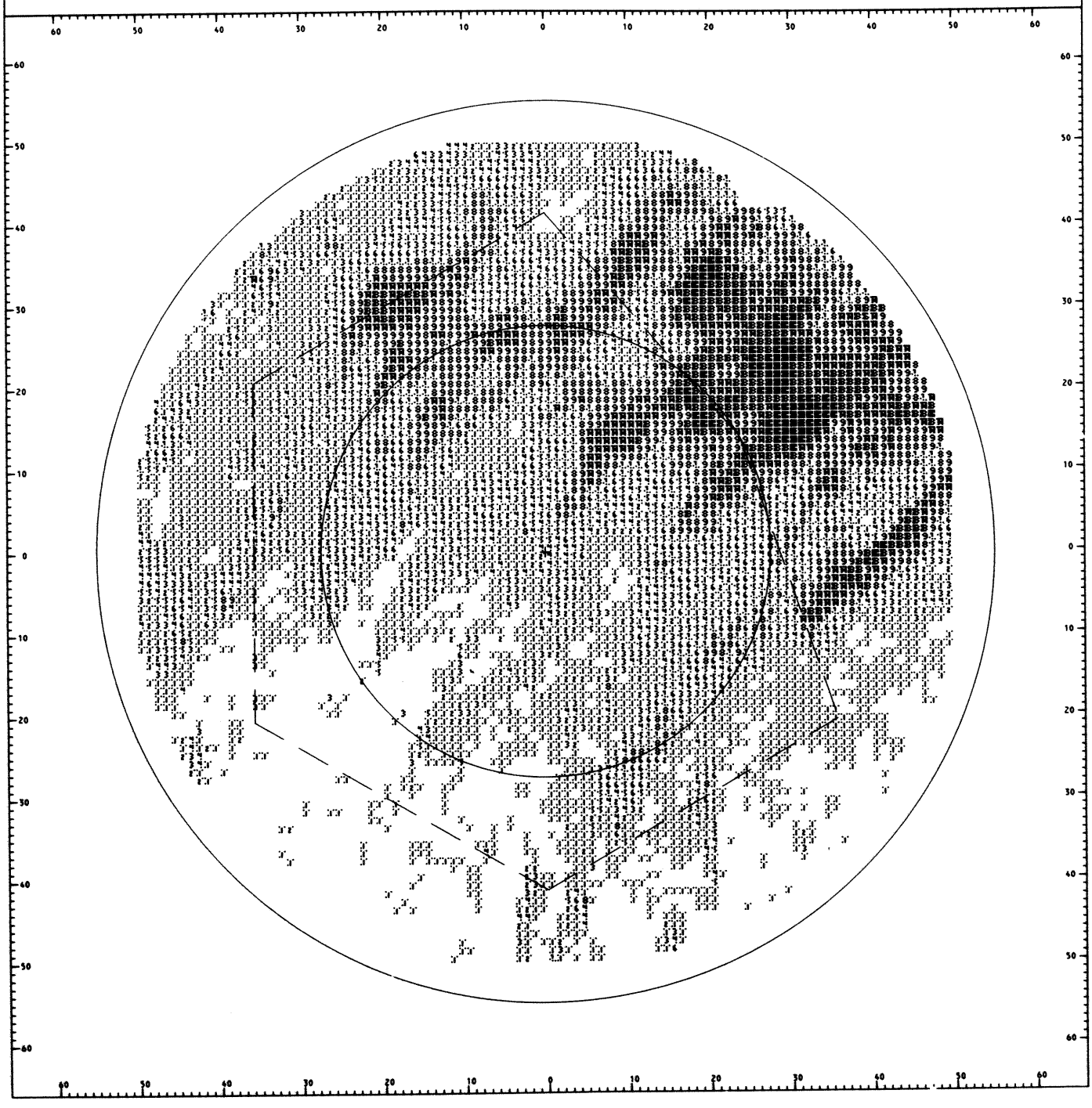
GATE RADAR DAILY RAINFALL RATE 251

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	080	110	102	074

MISSING HOURS: 17 18

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 8, 1974 (JULIAN DAY 251)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.1156	0.8263	0.0094	0.0016	0.0960	0.0063	0.0559	0.3718	0.1773	0.0742	0.3603	0.1206	0.0958	0.4241	0.2599
2	0.2453	1.1352	0.0484	0.0130	0.2720	0.0622	0.2547	0.1809	0.2980	0.1282	0.3171	0.0651	0.0983	0.4590	0.2787
3	0.7409	1.2208	0.2330	0.0213	0.2195	0.1002	0.7117	0.1050	0.4241	0.2073	0.4327	0.2744	0.0828	0.6278	0.3553
4	1.7292	1.2115	0.5198	0.0083	0.1657	0.2795	1.5643	0.1193	0.6525	0.3866	1.2684	0.6846	0.1017	0.8361	0.4689
5	2.0933	0.8833	0.3502	0.0193	0.1215	0.3440	1.8004	0.4561	0.6346	0.4304	1.8525	0.4824	0.0996	0.8038	0.4517
6	2.1629	1.1896	0.1632	0.0301	0.1048	0.4213	1.5759	1.1694	0.6785	0.4695	1.5393	0.4747	0.1136	0.9182	0.5159
7	2.1721	1.2680	0.0327	0.0367	0.1602	0.7540	1.8494	0.9339	0.7372	0.5233	0.9098	0.2907	0.2209	0.8805	0.5506
8	2.1710	1.0036	0.0201	0.0359	0.0751	0.8322	1.7395	0.4857	0.6889	0.4508	0.6997	0.1927	0.2567	0.7679	0.5123
9	1.7732	0.5978	0.0095	0.0002	0.0213	1.5786	1.4870	0.3544	0.6617	0.5258	0.3498	0.0631	0.3833	0.6561	0.5196
10	1.3419	0.1702	0.0020	0.0	0.0012	1.8315	1.2252	0.1782	0.5555	0.5150	0.0850	0.0031	0.4296	0.4590	0.4443
11	0.9087	0.0356	0.0	0.0	0.0078	1.3412	0.6729	0.0398	0.3804	0.3400	0.1765	0.0006	0.3182	0.3496	0.3339
12	0.3940	0.0149	0.0005	0.0	0.0120	1.1058	0.1323	0.0141	0.2533	0.2284	0.0411	0.0003	0.2924	0.2223	0.2573
13	0.2786	0.0267	0.0039	0.0038	0.0146	0.3908	0.1572	0.0387	0.1192	0.1015	0.1040	0.0	0.1377	0.2133	0.1755
14	0.4567	0.0213	0.0232	0.0014	0.0053	0.0337	0.1378	0.0314	0.0899	0.0325	0.0114	0.0035	0.0249	0.2401	0.1325
15	0.3120	0.0122	0.0200	0.0003	0.0089	0.0280	0.0210	0.0193	0.0633	0.0157	0.0059	0.0087	0.0100	0.2563	0.1331
16	0.2484	0.0795	0.0714	0.0074	0.0135	0.0248	0.0037	0.1197	0.0740	0.0373	0.0935	0.0516	0.0118	0.2594	0.1356
17															
18															
19	0.1155	0.0114	0.0089	0.0420	0.0459	0.0179	0.0053	0.0118	0.0402	0.0238	0.0009	0.0178	0.0241	0.2786	0.1513
20	0.0865	0.0383	0.0064	0.0228	0.0478	0.0301	0.0451	0.0206	0.0387	0.0283	0.0402	0.0084	0.0213	0.2353	0.1283
21	0.4901	0.2061	0.0242	0.0010	0.0107	0.0387	0.0987	0.2395	0.1284	0.0555	0.3022	0.0009	0.0117	0.2828	0.1471
22	0.5064	0.1478	0.0421	0.0001	0.0168	0.0183	0.0136	0.1320	0.1217	0.0325	0.1012	0.0127	0.0094	0.2313	0.1203
23	0.6038	0.4494	0.0358	0.0185	0.0193	0.0063	0.1949	0.2322	0.1890	0.0672	0.3966	0.0094	0.0201	0.4328	0.2264
24	0.9449	1.0652	0.0428	0.0317	0.0298	0.0076	0.3904	0.3943	0.3546	0.1167	0.5754	0.0330	0.0471	0.6067	0.3269
3	0.3673	1.0607	0.0969	0.0119	0.1958	0.0562	0.3407	0.2193	0.2998	0.1365	0.3700	0.1533	0.0923	0.5036	0.2979
6	1.9951	1.0948	0.3444	0.0193	0.1307	0.3483	1.6468	0.5816	0.6552	0.4288	1.5534	0.5472	0.1050	0.8527	0.4788
9	2.0387	0.9565	0.0207	0.0242	0.0855	1.0549	1.6919	0.5913	0.6959	0.5000	0.6531	0.1821	0.2869	0.7682	0.5273
12	0.8815	0.0736	0.0008	0.0	0.0070	1.4261	0.6768	0.0774	0.3964	0.3611	0.1009	0.0014	0.3467	0.3438	0.3452
15	0.3491	0.0201	0.0157	0.0019	0.0096	0.1508	0.1053	0.0298	0.0908	0.0499	0.0404	0.0041	0.0575	0.2365	0.1470
18															
21	0.2307	0.0853	0.0132	0.0219	0.0348	0.0289	0.0497	0.0906	0.0691	0.0359	0.1144	0.0090	0.0190	0.2655	0.1421
24	0.6850	0.5541	0.0402	0.0168	0.0220	0.0107	0.1997	0.2528	0.2218	0.0721	0.3577	0.0184	0.0255	0.4239	0.2246
6	1.1812	1.0777	0.2207	0.0156	0.1632	0.2022	0.9938	0.4004	0.4774	0.2827	0.9617	0.3503	0.0986	0.6781	0.3884
12	1.4601	0.5150	0.0108	0.0121	0.0463	1.2405	1.1843	0.3344	0.5461	0.4305	0.3770	0.0918	0.3168	0.5560	0.4363
18	0.3239	0.0349	0.0296	0.0033	0.0106	0.1193	0.0799	0.0523	0.0866	0.0468	0.0537	0.0159	0.0461	0.2423	0.1442
24	0.4578	0.3197	0.0267	0.0194	0.0284	0.0198	0.1247	0.1717	0.1454	0.0540	0.2361	0.0137	0.0223	0.3449	0.1834
12	1.3206	0.7964	0.1157	0.0139	0.1048	0.7214	1.0891	0.3674	0.5118	0.3566	0.6694	0.2210	0.2077	0.6174	0.4124
24	0.4043	0.2058	0.0279	0.0129	0.0213	0.0596	0.1068	0.1239	0.1219	0.0511	0.1631	0.0146	0.0318	0.3034	0.1674
24	0.9041	0.5279	0.0758	0.0134	0.0668	0.4206	0.6426	0.2567	0.3345	0.2177	0.4392	0.1272	0.1277	0.4748	0.3010

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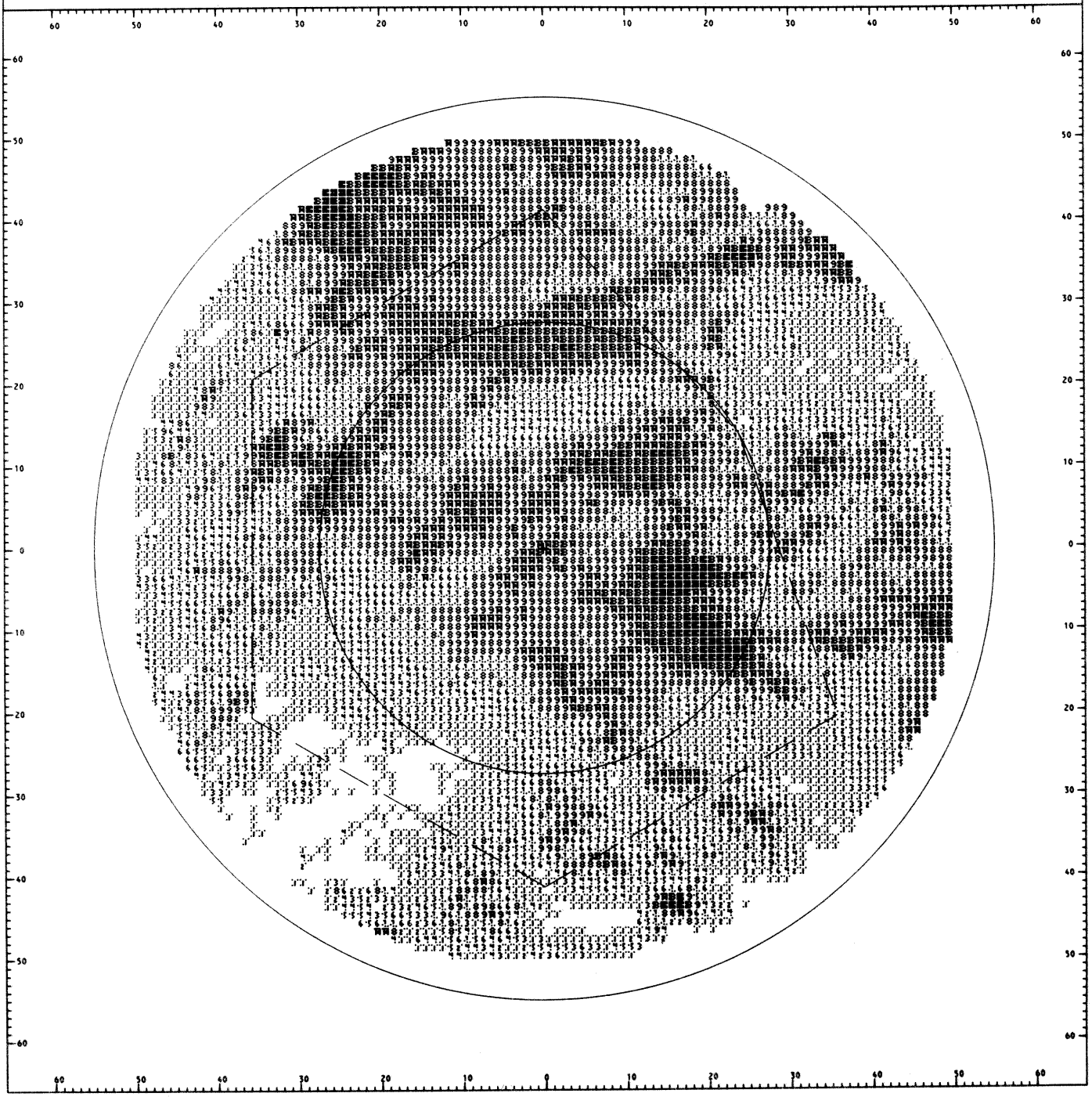
GATE RADAR DAILY RAINFALL RATE 252

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	092	118	120	088

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000		3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299		1.000 - 1.496		5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447		1.496 - 2.239		7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668		2.239 - 3.350		11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 9, 1974 (JULIAN DAY 252)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.7928	0.6040	0.0486	0.0540	0.0116	0.0058	0.2933	0.2160	0.2531	0.0845	0.2918	0.0266	0.0510	0.3719	0.2114
2	0.0068	0.2120	0.1034	0.0315	0.0114	0.0054	0.0100	0.1317	0.0620	0.0460	0.0953	0.0054	0.0525	0.0910	0.0717
3	0.1898	0.2768	0.0516	0.0082	0.1792	0.0242	0.1822	0.1496	0.1222	0.0905	0.0354	0.0025	0.1192	0.1370	0.1281
4	0.0928	0.1773	0.0114	0.0562	0.5542	0.1143	0.0357	0.1040	0.1687	0.1574	0.0259	0.0075	0.1973	0.0964	0.1469
5	0.0235	0.0588	0.0350	0.0048	1.2377	0.3432	0.0058	0.0515	0.2856	0.3158	0.0316	0.0164	0.3284	0.0388	0.1836
6	0.0067	0.0247	0.0123	0.0004	0.8095	0.2992	0.0072	0.0156	0.1932	0.2163	0.0057	0.0087	0.3595	0.0401	0.1999
7	0.0014	0.0168	0.0164	0.0029	0.7157	0.0936	0.0017	0.0190	0.1422	0.1607	0.0048	0.0072	0.2667	0.0700	0.1684
8	0.0101	0.3268	0.0584	0.0003	1.1599	0.3993	0.0113	0.4768	0.3278	0.3682	0.0826	0.0296	0.4293	0.2074	0.3183
9	0.0866	1.5157	0.0781	0.0168	0.8581	0.4024	0.1239	1.8027	0.4964	0.4950	0.8733	0.0322	0.3617	0.4645	0.4131
10	0.4465	2.0733	0.1189	0.0301	0.7429	0.2961	0.6871	2.4601	0.6218	0.6119	1.5952	0.2761	0.2878	0.6090	0.4484
11	1.2238	1.7214	0.4585	0.0743	0.8474	0.3466	1.6321	2.2937	0.7811	0.8068	2.4400	0.5359	0.2854	0.7537	0.5195
12	1.8328	1.4044	0.5318	0.1816	0.7519	0.6139	2.4981	2.0913	0.8870	0.9521	3.5662	0.6304	0.3556	0.7830	0.5692
13	1.7007	1.1883	0.4598	0.3606	0.9242	0.5992	2.3628	1.7917	0.8730	0.9493	3.4899	1.0265	0.4870	0.7519	0.6193
14	1.2621	1.6247	0.7180	0.4809	0.9915	0.6316	1.8413	2.2648	0.9531	1.0352	2.9871	1.6379	0.7394	0.8437	0.7912
15	0.9089	1.2597	1.5531	0.5363	1.3049	0.9238	1.3656	1.6942	1.0819	1.1902	2.3019	1.8683	0.9968	0.9397	0.9679
16	0.7406	1.5078	1.8596	0.4501	1.1723	1.7853	1.0429	2.1089	1.2528	1.3809	1.1963	2.0714	1.0952	1.0442	1.0693
17	1.0221	1.5699	1.8936	0.4562	0.6018	2.2837	1.2635	1.7444	1.3031	1.3548	0.2520	1.8274	1.3147	1.0589	1.1864
18	1.9219	1.5243	1.6561	0.5346	0.3712	2.9211	2.0626	1.8236	1.4849	1.5064	0.5004	1.3859	1.3228	1.2956	1.3088
19	1.7740	0.7724	1.4401	0.5320	0.4598	2.6010	2.0419	1.0195	1.2595	1.3204	0.7730	0.7994	0.9517	1.1490	1.0497
20	2.6153	0.5106	1.2740	0.5652	0.3179	2.5362	3.0601	0.7608	1.2982	1.3465	0.8290	0.5241	0.7876	1.2965	1.0415
21	1.4431	0.7125	1.3413	0.5468	0.1630	0.9179	1.6474	0.9384	0.8520	0.8737	0.6579	0.8266	0.3790	1.1400	0.7592
22	0.4679	0.9408	0.7172	0.6418	0.2453	0.5766	0.5427	0.8120	0.5982	0.5769	0.5912	0.4891	0.3447	0.7098	0.5272
23	0.1776	0.7108	0.2904	0.2604	0.3010	0.3481	0.2500	0.5493	0.3488	0.3247	0.6389	0.3036	0.2345	0.3838	0.3091
24	0.1477	0.6791	0.2873	0.2020	0.2589	0.1642	0.1695	0.4808	0.2907	0.2523	0.5688	0.3172	0.1807	0.4663	0.3235
3	0.3298	0.3643	0.0679	0.0313	0.0674	0.0118	0.1618	0.1657	0.1457	0.0737	0.1408	0.0115	0.0742	0.2004	0.1372
6	0.0410	0.0869	0.0196	0.0205	0.8671	0.2522	0.0162	0.0570	0.2158	0.2298	0.0211	0.0109	0.2951	0.0585	0.1768
9	0.0327	0.6197	0.0510	0.0067	0.9112	0.2984	0.0456	0.7662	0.3221	0.3413	0.3202	0.0230	0.3526	0.2476	0.3001
12	1.1677	1.7330	0.3697	0.0953	0.7807	0.4189	1.6058	2.2817	0.7633	0.7903	2.5338	0.4808	0.3096	0.7152	0.5124
15	1.2906	1.3575	0.9103	0.4593	1.0735	0.7182	1.8566	1.9169	0.9692	1.0581	2.9263	1.5109	0.7411	0.8451	0.7926
18	1.2282	1.5340	1.8031	0.4803	0.7150	2.3300	1.4563	1.8923	1.3468	1.4139	0.6496	1.7615	1.2441	1.1328	1.1880
21	1.9441	0.6652	1.3518	0.5480	0.3136	2.0183	2.2498	0.9062	1.1365	1.1801	0.7533	0.7167	0.7061	1.1950	0.9497
24	0.2644	0.7768	0.4316	0.3681	0.2684	0.3630	0.3207	0.6140	0.4125	0.3846	0.5996	0.3699	0.2533	0.5200	0.3866
6	0.1854	0.2256	0.0437	0.0259	0.4672	0.1320	0.0890	0.1114	0.1808	0.1517	0.0809	0.0112	0.1846	0.1295	0.1571
12	0.6002	1.1764	0.2103	0.0510	0.8460	0.3586	0.8257	1.5239	0.5427	0.5658	1.4270	0.2519	0.3311	0.4818	0.4064
18	1.2593	1.4458	1.3567	0.4698	0.8943	1.5241	1.6564	1.9046	1.1579	1.2359	1.7879	1.6362	0.9929	0.9891	0.9902
24	1.1042	0.7210	0.8917	0.4580	0.2910	1.1906	1.2852	0.7601	0.7747	0.7825	0.6765	0.5433	0.4797	0.8576	0.6682
12	0.3928	0.7010	0.1270	0.0384	0.6566	0.2453	0.4574	0.8176	0.3617	0.3587	0.7540	0.1316	0.2578	0.3054	0.2816
24	1.1818	1.0834	1.1242	0.4639	0.5926	1.3573	1.4708	1.3323	0.9663	1.0094	1.2322	1.0897	0.7362	0.9233	0.8289
24	0.7873	0.8922	0.6256	0.2512	0.6246	0.8013	0.9641	1.0750	0.6641	0.6840	0.9931	0.6106	0.4970	0.6148	0.5554

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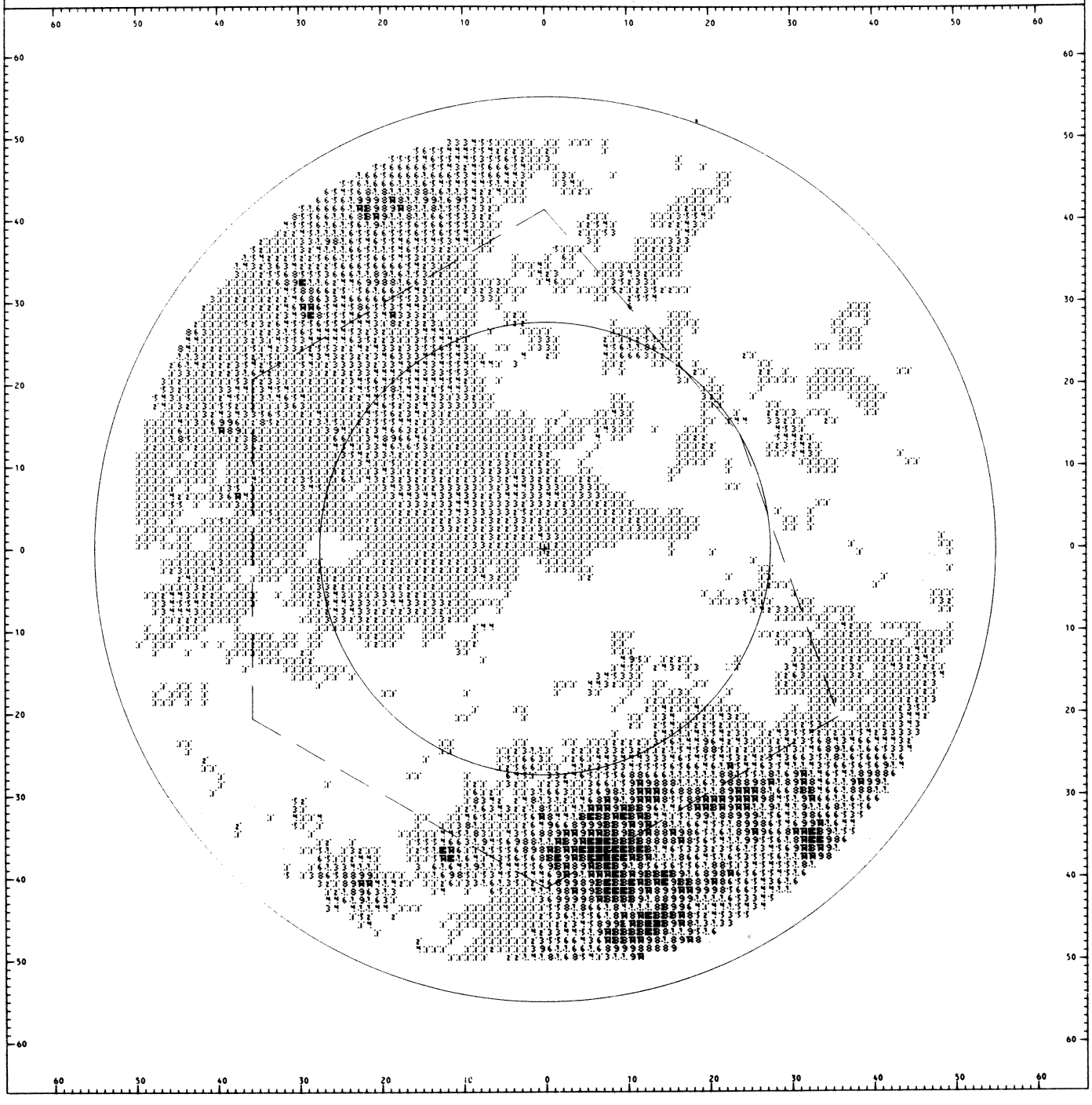
GATE RADAR DAILY RAINFALL RATE 253

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	080	101	101	017

MISSING HOURS: 16 18 19

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 10, 1974 (JULIAN DAY 253)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0688	0.1040	0.2939	0.1654	0.3162	0.1806	0.0863	0.0745	0.1882	0.2006	0.1750	0.3077	0.1866	0.2661	0.2264
2	0.0371	0.0010	0.2219	0.0719	0.0745	0.0753	0.0443	0.0002	0.0801	0.0891	0.0335	0.2150	0.0930	0.0951	0.0940
3	0.0	0.0	0.0611	0.0094	0.0057	0.0365	0.0	0.0	0.0187	0.0212	0.0	0.0396	0.0267	0.0205	0.0236
4	0.0	0.0005	0.0094	0.0089	0.0036	0.0431	0.0	0.0008	0.0109	0.0124	0.0	0.0141	0.0122	0.0321	0.0221
5	0.0	0.0085	0.0144	0.0077	0.0124	0.1021	0.0	0.0129	0.0241	0.0274	0.0	0.0333	0.0239	0.0770	0.0504
6	0.0009	0.0171	0.0239	0.0019	0.0486	0.1843	0.0014	0.0254	0.0461	0.0522	0.0027	0.0514	0.0513	0.0997	0.0755
7	0.0	0.0035	0.1018	0.0034	0.0397	0.1233	0.0	0.0023	0.0452	0.0509	0.0	0.1019	0.0423	0.1078	0.0750
8	0.0	0.0010	0.0655	0.0013	0.0203	0.0452	0.0	0.0011	0.0222	0.0251	0.0	0.0785	0.0329	0.0674	0.0501
9	0.0	0.0	0.0153	0.0021	0.0176	0.0914	0.0	0.0	0.0210	0.0239	0.0	0.0228	0.0527	0.0404	0.0466
10	0.0018	0.0	0.0271	0.0001	0.0037	0.0238	0.0028	0.0	0.0094	0.0107	0.0	0.0407	0.0391	0.1170	0.0780
11	0.0052	0.0	0.0189	0.0	0.0004	0.0007	0.0081	0.0	0.0042	0.0048	0.0024	0.0284	0.0105	0.2259	0.1181
12	0.0530	0.0002	0.0022	0.0031	0.0028	0.0010	0.0304	0.0003	0.0103	0.0054	0.0248	0.0033	0.0227	0.1408	0.0817
13	0.0	0.0	0.0267	0.0	0.0	0.0	0.0	0.0	0.0044	0.0050	0.0	0.0389	0.0228	0.0429	0.0329
14	0.0	0.0008	0.0113	0.0001	0.0272	0.0030	0.0	0.0012	0.0071	0.0081	0.0	0.0162	0.0916	0.1360	0.1138
15	0.0175	0.0	0.0435	0.0740	0.0681	0.0643	0.0207	0.0	0.0445	0.0498	0.0	0.0445	0.2833	0.1037	0.1936
16															
17	0.0594	0.0225	0.0254	0.0078	0.0371	0.1636	0.0431	0.0144	0.0525	0.0511	0.0	0.0420	0.2343	0.1188	0.1766
18															
19															
20	0.0653	0.0020	0.0806	0.0968	0.0021	0.0189	0.1023	0.0004	0.0441	0.0498	0.0	0.0669	0.0446	0.1802	0.1123
21	0.0794	0.0172	0.4868	0.0059	0.0152	0.0248	0.0504	0.0186	0.1044	0.1088	0.0005	0.6849	0.0654	0.2370	0.1512
22	0.0	0.0117	1.4710	0.0100	0.0086	0.0683	0.0	0.0181	0.2604	0.2958	0.0	2.0436	0.0446	0.3891	0.2167
23	0.0	0.0	1.5425	0.0633	0.0230	0.0029	0.0	0.0	0.2707	0.3075	0.0	1.9133	0.0276	0.4555	0.2413
24	0.0	0.0	0.5581	0.1949	0.0025	0.0	0.0	0.0	0.1253	0.1424	0.0	0.4810	0.0455	0.1684	0.1069
3	0.0353	0.0350	0.1923	0.0822	0.1321	0.0974	0.0436	0.0249	0.0957	0.1036	0.0695	0.1874	0.1021	0.1275	0.1148
6	0.0003	0.0087	0.0159	0.0062	0.0216	0.1098	0.0005	0.0130	0.0270	0.0306	0.0009	0.0329	0.0291	0.0696	0.0493
9	0.0	0.0015	0.0609	0.0023	0.0259	0.0867	0.0	0.0011	0.0294	0.0333	0.0	0.0678	0.0426	0.0719	0.0573
12	0.0200	0.0001	0.0161	0.0010	0.0023	0.0085	0.0138	0.0001	0.0080	0.0069	0.0091	0.0241	0.0241	0.1613	0.0926
15	0.0058	0.0003	0.0272	0.0247	0.0318	0.0224	0.0069	0.0004	0.0187	0.0210	0.0	0.0332	0.1325	0.0943	0.1134
18															
21	0.0724	0.0096	0.2837	0.0514	0.0086	0.0219	0.0764	0.0095	0.0743	0.0793	0.0003	0.3759	0.0550	0.2088	0.1318
24	0.0	0.0039	1.1905	0.0894	0.0114	0.0237	0.0	0.0060	0.2188	0.2485	0.0	1.4793	0.0392	0.3378	0.1883
6	0.0178	0.0218	0.1041	0.0442	0.0768	0.1036	0.0220	0.0189	0.0613	0.0671	0.0352	0.1102	0.0656	0.0985	0.0821
12	0.0100	0.0008	0.0385	0.0017	0.0141	0.0476	0.0069	0.0006	0.0187	0.0201	0.0045	0.0459	0.0334	0.1166	0.0749
18	0.0192	0.0058	0.0267	0.0205	0.0331	0.0577	0.0159	0.0039	0.0271	0.0285	0.0	0.0354	0.1580	0.1005	0.1292
24	0.0290	0.0062	0.8278	0.0742	0.0103	0.0230	0.0305	0.0074	0.1610	0.1808	0.0001	1.0380	0.0455	0.2863	0.1657
12	0.0139	0.0113	0.0713	0.0229	0.0455	0.0756	0.0144	0.0098	0.0400	0.0436	0.0199	0.0780	0.0495	0.1076	0.0785
24	0.0246	0.0060	0.4718	0.0503	0.0204	0.0384	0.0241	0.0058	0.1015	0.1131	0.0001	0.5924	0.0955	0.2037	0.1495
24	0.0185	0.0090	0.2429	0.0347	0.0347	0.0597	0.0186	0.0081	0.0664	0.0734	0.0114	0.2985	0.0692	0.1489	0.1090

49

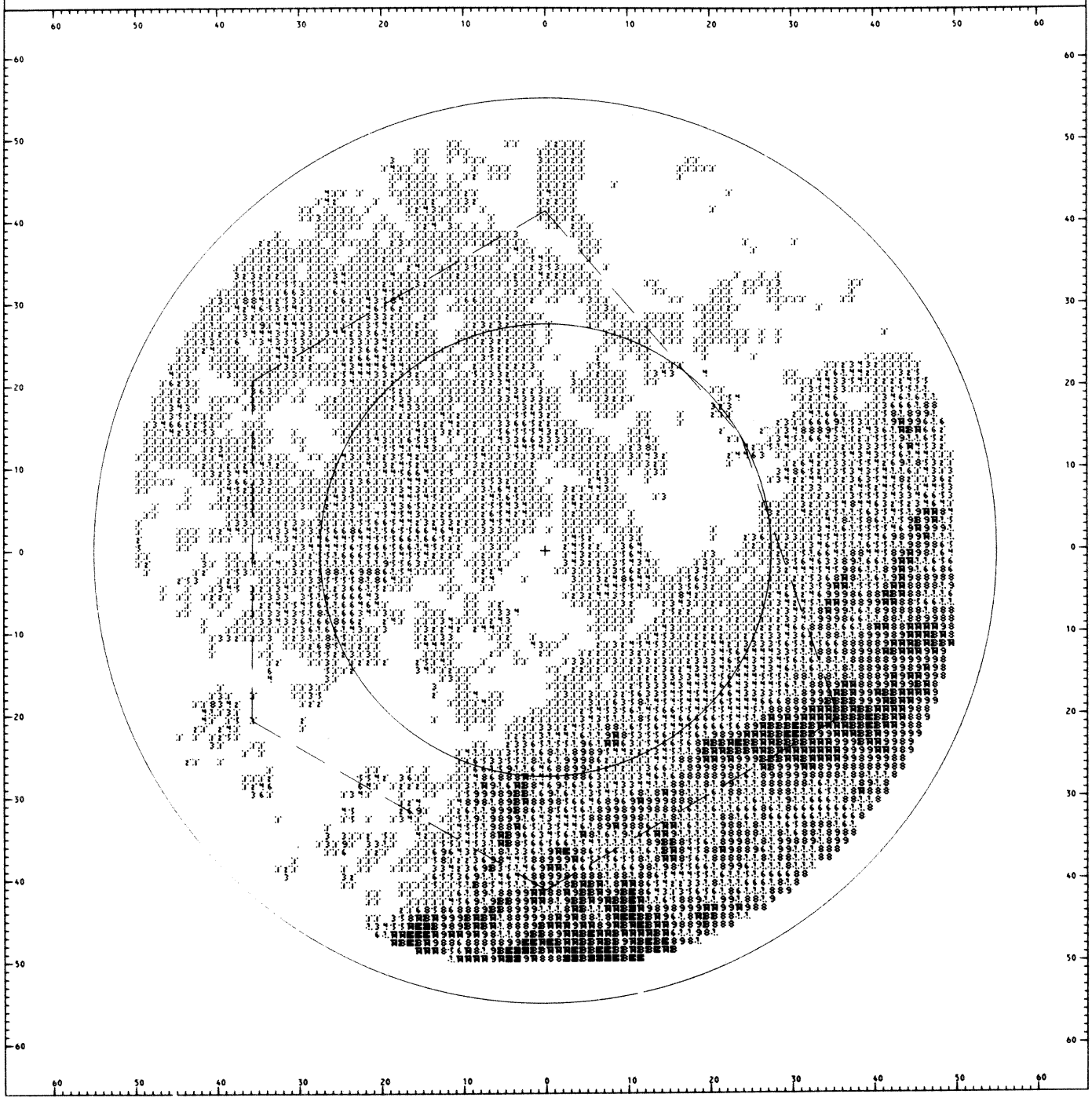
GATE RADAR DAILY RAINFALL RATE 254

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	088	108	074	029

MISSING HOURS: 06 07

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 11, 1974 (JULIAN DAY 254)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0	0.0018	0.0170	0.1692	0.0	0.0	0.0	0.0	0.0312	0.0351	0.0	0.0063	0.0460	0.0072	0.0266
2	0.0028	0.0123	0.0	0.0029	0.0006	0.0	0.0020	0.0023	0.0031	0.0012	0.0	0.0	0.0096	0.0028	0.0062
3	0.0	0.0	0.0010	0.0185	0.0	0.0	0.0	0.0	0.0032	0.0037	0.0	0.0	0.0034	0.0002	0.0018
4	0.0	0.0	0.0012	0.0114	0.0	0.0	0.0	0.0	0.0021	0.0024	0.0	0.0	0.0093	0.0023	0.0058
5	0.0	0.0	0.0003	0.0001	0.0	0.0	0.0	0.0	0.0001	0.0001	0.0	0.0	0.0008	0.0073	0.0041
6															
7															
8	0.0	0.0173	0.0974	0.0002	0.0007	0.0	0.0	0.0162	0.0192	0.0205	0.0	0.1403	0.0007	0.1151	0.0579
9	0.0	0.0017	0.0275	0.0014	0.0045	0.0	0.0	0.0001	0.0058	0.0063	0.0	0.0413	0.0136	0.1654	0.0894
10	0.0	0.0012	0.0053	0.0	0.0	0.0007	0.0	0.0019	0.0012	0.0014	0.0	0.0063	0.0623	0.1984	0.1303
11	0.0	0.0126	0.0073	0.0053	0.0	0.0042	0.0	0.0191	0.0049	0.0055	0.0	0.0183	0.0173	0.1796	0.0984
12	0.0	0.0034	0.0030	0.0147	0.0011	0.0023	0.0	0.0023	0.0041	0.0042	0.0	0.0056	0.0144	0.1233	0.0688
13	0.0	0.0015	0.0014	0.0075	0.0036	0.0021	0.0	0.0011	0.0027	0.0029	0.0	0.0016	0.0155	0.0746	0.0451
14	0.0008	0.0029	0.0010	0.0143	0.0144	0.0026	0.0012	0.0040	0.0060	0.0068	0.0	0.0045	0.0156	0.0874	0.0515
15	0.0005	0.0020	0.0016	0.0092	0.0002	0.0124	0.0	0.0	0.0043	0.0044	0.0	0.0	0.0198	0.0192	0.0195
16	0.0	0.0011	0.0	0.0002	0.0042	0.0397	0.0	0.0	0.0075	0.0083	0.0	0.0	0.0424	0.0448	0.0436
17	0.0077	0.0105	0.0269	0.0331	0.0020	0.0304	0.0	0.0	0.0184	0.0174	0.0	0.0137	0.0377	0.0585	0.0481
18	0.0133	0.0645	0.0536	0.0127	0.0003	0.0313	0.0029	0.0322	0.0293	0.0228	0.0076	0.0413	0.0237	0.1778	0.1007
19	0.0657	0.0670	0.4276	0.0759	0.0065	0.0611	0.0862	0.0585	0.1169	0.1252	0.0559	0.4726	0.0614	0.6182	0.3398
20	0.0185	0.4702	0.7503	0.0682	0.0295	0.1200	0.0208	0.2425	0.2428	0.2148	0.0377	0.9231	0.1436	0.8416	0.4926
21	0.0445	0.9836	1.5832	0.0822	0.2294	0.3022	0.0695	0.7094	0.5378	0.5104	0.1149	2.4070	0.2060	1.0432	0.6245
22	0.0226	0.2933	2.1769	0.6383	0.2799	0.1469	0.0186	0.2718	0.5915	0.6473	0.0284	2.7326	0.2770	1.1331	0.7050
23	0.0435	0.2430	1.6725	0.7539	0.6157	0.1386	0.0555	0.2006	0.5771	0.6324	0.0682	1.8372	0.5485	0.8577	0.7030
24	0.0681	0.3095	0.4956	0.4502	0.5196	0.0914	0.0954	0.0582	0.3228	0.3134	0.1062	0.5317	0.4760	0.3557	0.4158
3	0.0009	0.0047	0.0060	0.0635	0.0002	0.0	0.0007	0.0008	0.0125	0.0133	0.0	0.0021	0.0197	0.0034	0.0115
6	0.0	0.0	0.0007	0.0057	0.0	0.0	0.0	0.0	0.0011	0.0012	0.0	0.0	0.0050	0.0049	0.0049
9	0.0	0.0095	0.0624	0.0008	0.0026	0.0	0.0	0.0082	0.0125	0.0134	0.0	0.0908	0.0072	0.1404	0.0737
12	0.0	0.0057	0.0052	0.0066	0.0004	0.0024	0.0	0.0078	0.0034	0.0037	0.0	0.0101	0.0314	0.1672	0.0992
15	0.0004	0.0022	0.0013	0.0103	0.0061	0.0057	0.0004	0.0017	0.0043	0.0047	0.0	0.0020	0.0170	0.0604	0.0337
18	0.0070	0.0254	0.0268	0.0153	0.0022	0.0338	0.0010	0.0107	0.0184	0.0162	0.0025	0.0183	0.0346	0.0937	0.0641
21	0.0429	0.5069	0.9204	0.0754	0.0884	0.1611	0.0588	0.3368	0.2992	0.2835	0.0695	1.2675	0.1370	0.8343	0.4857
24	0.0447	0.2820	1.4483	0.6141	0.4717	0.1256	0.0565	0.1769	0.4971	0.5310	0.0676	1.7005	0.4338	0.7821	0.6079
6	0.0006	0.0028	0.0039	0.0404	0.0001	0.0	0.0004	0.0005	0.0079	0.0085	0.0	0.0013	0.0138	0.0040	0.0089
12	0.0	0.0072	0.0281	0.0043	0.0013	0.0014	0.0	0.0079	0.0070	0.0076	0.0	0.0423	0.0217	0.1566	0.0891
18	0.0037	0.0138	0.0141	0.0128	0.0041	0.0198	0.0007	0.0062	0.0114	0.0104	0.0013	0.0102	0.0258	0.0771	0.0514
24	0.0438	0.3944	1.1843	0.3448	0.2801	0.1434	0.0577	0.2568	0.3981	0.4072	0.0685	1.4840	0.2854	0.8082	0.5468
12	0.0003	0.0050	0.0160	0.0224	0.0007	0.0007	0.0002	0.0042	0.0075	0.0080	0.0	0.0218	0.0178	0.0804	0.0490
24	0.0238	0.2041	0.5992	0.1788	0.1421	0.0816	0.0292	0.1315	0.2047	0.2088	0.0349	0.7471	0.1556	0.4430	0.2992
24	0.0131	0.1136	0.3341	0.1077	0.0778	0.0448	0.0160	0.0737	0.1151	0.1176	0.0190	0.4174	0.0929	0.2790	0.1858

50

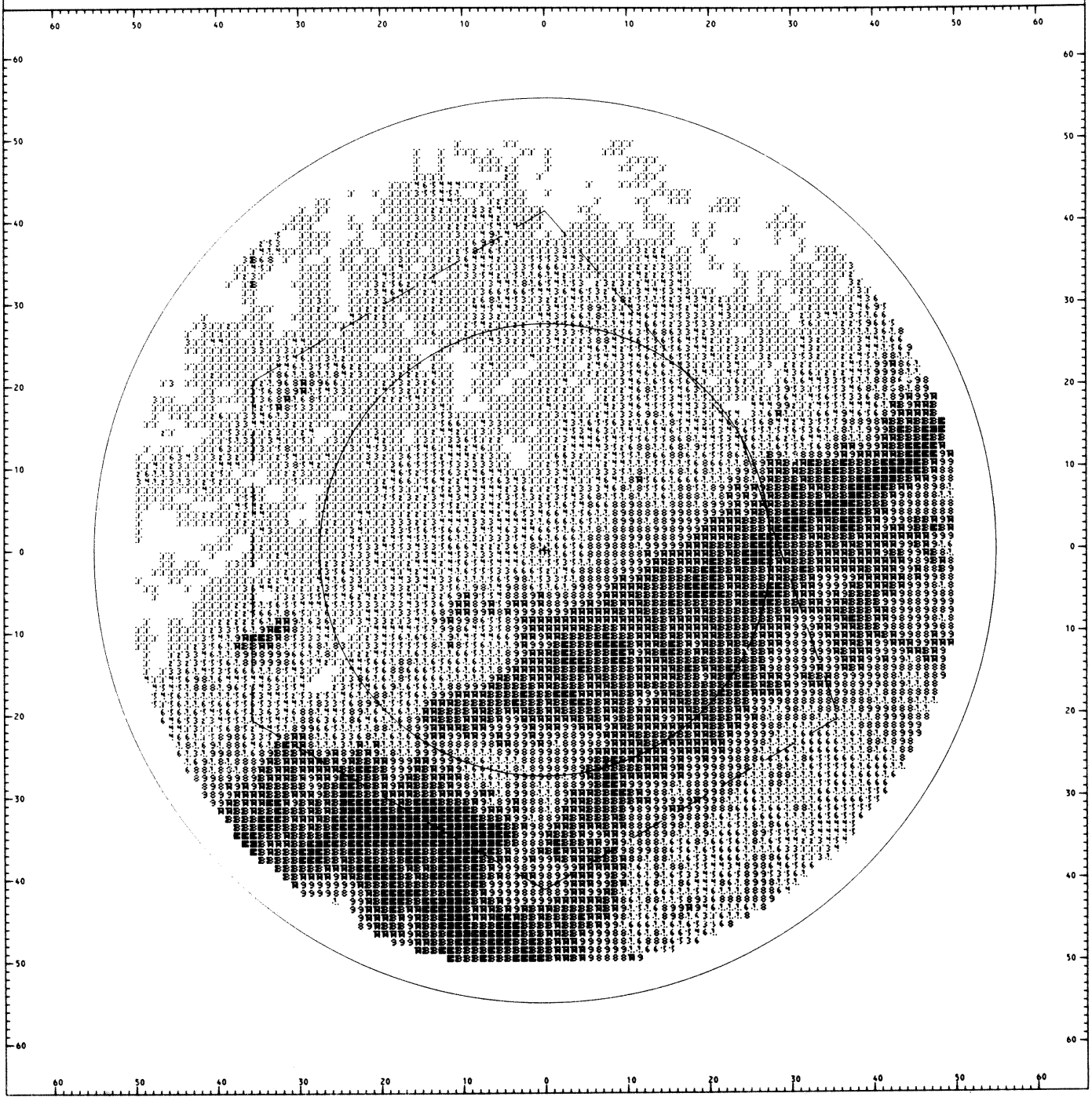
GATE RADAR DAILY RAINFALL RATE 255

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	088	079	097	064

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000		3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299		1.000 - 1.496		5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447		1.496 - 2.239		7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668		2.239 - 3.350		11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 12, 1974 (JULIAN DAY 255)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0019	0.0699	0.0161	0.0129	0.1068	0.0465	0.0	0.0132	0.0426	0.0363	0.0054	0.0195	0.0571	0.1304	0.0938
2	0.0025	0.0483	0.0193	0.3064	0.1829	0.0066	0.0035	0.0637	0.0944	0.1058	0.0454	0.0235	0.2517	0.1196	0.1856
3	0.0007	0.0641	0.0329	0.3106	0.1676	0.0034	0.0011	0.0877	0.0966	0.1084	0.0743	0.0	0.2357	0.0514	0.1436
4	0.0052	0.0464	0.0767	0.5626	0.0970	0.0017	0.0038	0.0357	0.1313	0.1442	0.0087	0.0005	0.1867	0.0300	0.1084
5	0.0296	0.2070	0.1376	0.2955	0.7206	0.0037	0.0348	0.2440	0.2335	0.2543	0.0937	0.0001	0.2483	0.0767	0.1624
6	0.0368	0.1112	0.0085	0.4741	0.7060	0.0005	0.0528	0.1358	0.2238	0.2491	0.0937	0.0004	0.2960	0.0343	0.1652
7	0.0103	0.1214	0.0104	0.1418	0.0675	0.0	0.0139	0.0322	0.0587	0.0472	0.0218	0.0022	0.0719	0.0524	0.0621
8	0.0013	0.3295	0.0103	0.1940	0.0019	0.0	0.0020	0.1422	0.0899	0.0566	0.0123	0.0151	0.0703	0.2240	0.1471
9	0.0184	0.9583	0.8172	1.4871	0.0209	0.0001	0.0022	0.7522	0.5500	0.5312	0.0351	0.1888	0.4736	0.5920	0.5328
10	0.0758	2.1845	1.2723	1.4591	0.0056	0.0036	0.0136	1.8855	0.8348	0.7505	0.1117	1.0208	0.4905	1.0811	0.7857
11	0.6013	2.4301	1.6819	0.9456	0.0060	0.0512	0.2847	2.0012	0.9540	0.7868	0.0504	1.3409	0.3279	1.4929	0.9103
12	1.0983	4.5875	2.0893	0.8444	0.0229	0.2212	1.2480	2.9672	1.4810	1.1147	0.4581	1.0861	0.4691	2.2586	1.3637
13	0.7521	4.4394	1.5362	1.2194	0.0030	0.2009	1.1411	4.1678	1.3624	1.2086	3.0004	1.1158	0.6813	1.7469	1.2139
14	0.5919	4.5228	3.8904	2.4603	0.0214	0.0976	0.8915	5.5867	1.9320	2.0147	3.8329	4.3042	1.0343	2.0504	1.5421
15	0.1851	2.9828	5.1197	3.1600	0.0962	0.1244	0.2693	3.3355	1.9423	2.0451	1.8271	5.2892	0.9955	2.1429	1.5690
16	0.0146	3.2070	4.3337	3.2894	0.2159	0.3870	0.0190	3.8986	1.9066	2.0330	1.1051	5.4835	1.2616	2.1151	1.6881
17	0.0054	1.6953	4.0194	2.4761	0.2729	0.3836	0.0074	2.2388	1.4728	1.6250	0.0811	5.1025	1.6067	1.5724	1.5894
18	0.0001	0.3017	3.0109	1.6859	0.1741	0.1364	0.0	0.3448	0.8817	0.9864	0.0009	3.0614	1.2110	0.8338	1.0222
19	0.0	0.1670	1.2576	0.3039	0.1934	0.1175	0.0	0.1771	0.3391	0.3751	0.0001	1.1388	0.9100	0.3803	0.6451
20	0.0	0.1219	0.4889	0.1789	0.0924	0.0705	0.0	0.1668	0.1585	0.1773	0.0003	0.6593	0.5007	0.1604	0.3306
21	0.0028	0.0098	0.2433	0.1359	0.0220	0.0119	0.0	0.0141	0.0707	0.0796	0.0001	0.2047	0.4469	0.0690	0.2579
22	0.0	0.0031	0.0012	0.0816	0.0068	0.0019	0.0	0.0048	0.0157	0.0179	0.0	0.0018	0.2120	0.0143	0.1132
23	0.0	0.0	0.0	0.0034	0.0074	0.0016	0.0	0.0	0.0021	0.0024	0.0	0.0	0.0292	0.0014	0.0153
24	0.0	0.0	0.0	0.0004	0.0052	0.0015	0.0	0.0	0.0012	0.0013	0.0	0.0	0.0086	0.0013	0.0050
3	0.0017	0.0608	0.0228	0.2100	0.1524	0.0189	0.0015	0.0549	0.0779	0.0835	0.0417	0.0143	0.1816	0.1005	0.1410
6	0.0239	0.1215	0.0743	0.4440	0.5079	0.0020	0.0305	0.1385	0.1962	0.2159	0.0654	0.0003	0.2438	0.0470	0.1454
9	0.0100	0.4697	0.2793	0.6076	0.0301	0.0	0.0060	0.3089	0.2329	0.2117	0.0231	0.0687	0.2054	0.2899	0.2476
12	0.5918	3.0673	1.6812	1.0830	0.0115	0.0920	0.5154	2.2846	1.0899	0.8840	0.2067	1.1493	0.4292	1.6107	1.0197
15	0.5097	3.9817	3.5154	2.2799	0.0402	0.1410	0.7673	4.3633	1.7455	1.7560	2.8868	3.5697	0.9037	1.9799	1.4416
18	0.0067	1.7347	3.7880	2.4838	0.2210	0.3023	0.0088	2.1607	1.4204	1.5482	0.3957	4.5491	1.3597	1.5071	1.4332
21	0.0009	0.0996	0.6632	0.2062	0.1026	0.0666	0.0	0.1193	0.1894	0.2107	0.0002	0.6676	0.6192	0.2032	0.4112
24	0.0	0.0010	0.0004	0.0285	0.0065	0.0017	0.0	0.0016	0.0063	0.0072	0.0	0.0006	0.0832	0.0057	0.0445
6	0.0128	0.0911	0.0485	0.3270	0.3302	0.0104	0.0160	0.0967	0.1370	0.1497	0.0535	0.0073	0.2125	0.0738	0.1431
12	0.3009	1.7685	0.9802	0.8453	0.0208	0.0460	0.2607	1.2967	0.6614	0.5478	0.1149	0.6090	0.3175	0.9520	0.6344
18	0.2582	2.8582	3.6517	2.3818	0.1306	0.2217	0.3881	3.2620	1.5829	1.6520	1.6412	4.0594	1.1317	1.7434	1.4373
24	0.0005	0.0503	0.3318	0.1173	0.0545	0.0342	0.0	0.0605	0.0979	0.1089	0.0001	0.3341	0.3512	0.1046	0.2280
12	0.1568	0.9298	0.5143	0.5862	0.1755	0.0282	0.1384	0.6967	0.3992	0.3487	0.0842	0.3082	0.2650	0.5129	0.3889
24	0.1293	1.4542	1.9917	1.2496	0.0926	0.1279	0.1940	1.6612	0.8405	0.8806	0.8207	2.1967	0.7415	0.9258	0.8332
24	0.1431	1.1920	1.2530	0.9178	0.1340	0.0781	0.1662	1.1789	0.6198	0.6147	0.4524	1.2524	0.5035	0.7199	0.6115

51

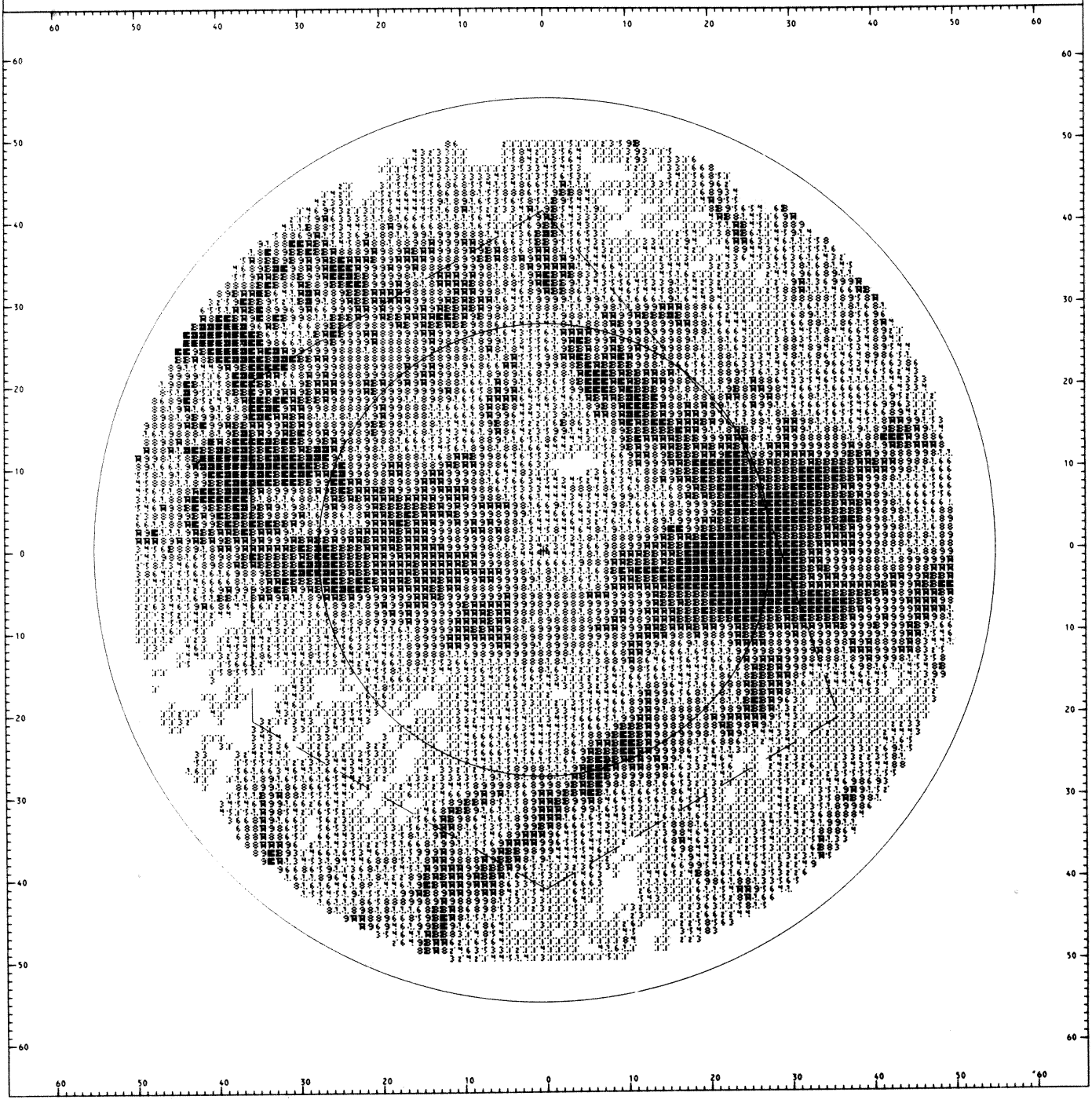
GATE RADAR DAILY RAINFALL RATE 256

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	068	099	094	073

MISSING HOURS: 12 13 14 20

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 13, 1974 (JULIAN DAY 256)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0006	0.0083	0.0004	0.0	0.0313	0.0060	0.0	0.0110	0.0078	0.0085	0.0	0.0022	0.0164	0.0054	0.0109
2	0.0061	0.0372	0.0044	0.0072	0.0762	0.0073	0.0	0.0358	0.0232	0.0225	0.0	0.0163	0.0255	0.0201	0.0228
3	0.0515	0.5996	0.0477	0.0243	0.2988	0.0736	0.0348	0.8792	0.1839	0.1972	0.1045	0.2169	0.1034	0.1727	0.1380
4	0.0733	0.6204	0.0145	0.0093	0.4087	0.1154	0.0352	0.7782	0.2085	0.2046	0.0177	0.1882	0.1131	0.1947	0.1539
5	0.0951	0.6110	0.0038	0.0181	0.3988	0.1618	0.0221	0.8434	0.2162	0.2175	0.0494	0.3779	0.1502	0.1692	0.1597
6	0.1361	1.3472	0.0132	0.0507	0.4046	0.1233	0.0753	1.7271	0.3484	0.3346	0.5688	0.6704	0.1889	0.3044	0.2466
7	0.1965	1.1382	0.0413	0.0329	0.5784	0.2219	0.0640	1.4918	0.3706	0.3581	1.1284	0.3741	0.2385	0.3405	0.2894
8	0.0319	0.5442	0.0662	0.0496	0.9094	0.3031	0.0186	0.7672	0.3194	0.3496	0.5669	0.2518	0.3263	0.1336	0.2299
9	0.2500	1.6702	0.0598	0.0256	1.1390	0.3622	0.2432	2.3613	0.5885	0.6225	1.2377	0.3679	0.4132	0.4560	0.4346
10	0.3283	1.7784	0.0289	0.0041	0.8260	0.4892	0.3387	2.1213	0.5794	0.5586	0.9302	0.3386	0.4445	0.5268	0.4856
11	0.6237	1.4036	0.0496	0.0013	0.9068	0.8745	0.4764	1.2562	0.6457	0.5599	0.8508	0.3581	0.8130	0.5677	0.6901
12															
13															
14															
15	1.4069	2.7267	0.2581	0.1514	1.5542	0.6372	1.5660	3.3232	1.1271	1.0923	1.9290	0.6627	1.0299	0.8841	0.9566
16	1.8372	3.3346	0.3058	0.1830	2.8310	1.2037	1.9998	3.0366	1.6226	1.4746	1.8183	0.5972	1.3920	1.1196	1.2555
17	2.0603	3.3254	0.6228	0.3898	1.9359	1.1691	2.6690	2.6269	1.5885	1.4257	2.0274	0.9633	1.4322	1.2780	1.3547
18	3.0409	3.2405	0.4769	0.8534	2.2398	1.5727	4.4954	2.4847	1.9074	1.8216	3.5280	0.9718	1.6684	1.5061	1.5869
19	2.1488	2.4974	0.8342	0.9860	2.1711	1.5970	3.1842	2.2933	1.7082	1.7241	2.1831	1.5288	1.6432	1.4160	1.5293
20															
21	1.0331	2.8685	1.1616	1.0218	1.0166	0.8333	1.2092	3.3611	1.3251	1.3223	0.4464	2.3666	0.8975	1.3613	1.1291
22	0.5520	2.7056	1.9808	1.0425	1.2422	1.5003	0.5714	3.1926	1.5057	1.5517	0.3684	2.2779	1.0418	1.3504	1.1957
23	0.2352	2.2806	2.3783	0.9645	1.6951	1.5764	0.1213	2.2660	1.5235	1.5446	0.3767	1.8682	1.1775	1.1548	1.1657
24	0.1132	2.2732	2.6423	1.0718	1.9279	1.1621	0.0728	2.2951	1.5342	1.5788	0.9943	1.7139	1.3567	1.1328	1.2444
3	0.0194	0.2150	0.0175	0.0105	0.1355	0.0290	0.0116	0.3087	0.0717	0.0761	0.0348	0.0785	0.0484	0.0661	0.0573
6	0.1015	0.8595	0.0105	0.0260	0.4040	0.1335	0.0442	1.1162	0.2577	0.2522	0.2120	0.4122	0.1507	0.2229	0.1868
9	0.1594	1.1175	0.0558	0.0361	0.8756	0.2958	0.1086	1.5401	0.4262	0.4434	0.9776	0.3313	0.3260	0.3104	0.3182
12	0.4760	1.5910	0.0392	0.0027	0.8664	0.6818	0.4076	1.6888	0.6126	0.5593	0.8905	0.3483	0.6287	0.5472	0.5878
15															
18	2.3128	3.3002	0.4685	0.4754	2.3356	1.3152	3.0547	2.7161	1.7060	1.5738	2.4579	0.8441	1.4974	1.3011	1.3988
21	1.5909	2.6829	0.9979	1.0039	1.5938	1.2152	2.1967	2.8272	1.5165	1.5230	1.3148	1.9477	1.2702	1.3885	1.3288
24	0.3001	2.4198	2.3338	1.0262	1.6217	1.4129	0.2552	2.5846	1.5210	1.5582	0.5798	1.9533	1.1920	1.2126	1.2018
6	0.0605	0.5373	0.0140	0.0183	0.2697	0.0812	0.0279	0.7124	0.1647	0.1641	0.1234	0.2453	0.0996	0.1446	0.1221
12	0.2861	1.3069	0.0492	0.0227	0.8719	0.4502	0.2282	1.5996	0.5007	0.4897	0.9428	0.3381	0.4471	0.4055	0.4263
18	2.0863	3.1568	0.4159	0.3944	2.1402	1.1456	2.6825	2.8678	1.5611	1.4532	2.3256	0.7987	1.3803	1.1967	1.2881
24	0.8164	2.5251	1.7994	1.0173	1.6105	1.3338	1.0317	2.6816	1.5191	1.5440	0.8738	1.9510	1.2233	1.2829	1.2525
12	0.1630	0.8871	0.0300	0.0203	0.5434	0.2489	0.1189	1.1157	0.3174	0.3121	0.4958	0.2875	0.2575	0.2633	0.2604
24	1.3808	2.8058	1.1845	0.7404	1.8459	1.2502	1.7654	2.7644	1.5377	1.5036	1.5190	1.4389	1.2928	1.2444	1.2682
24	0.7110	1.7505	0.5495	0.3444	1.1295	0.6995	0.8598	1.8576	0.8669	0.8486	0.9563	0.8056	0.7236	0.7061	0.7141

52

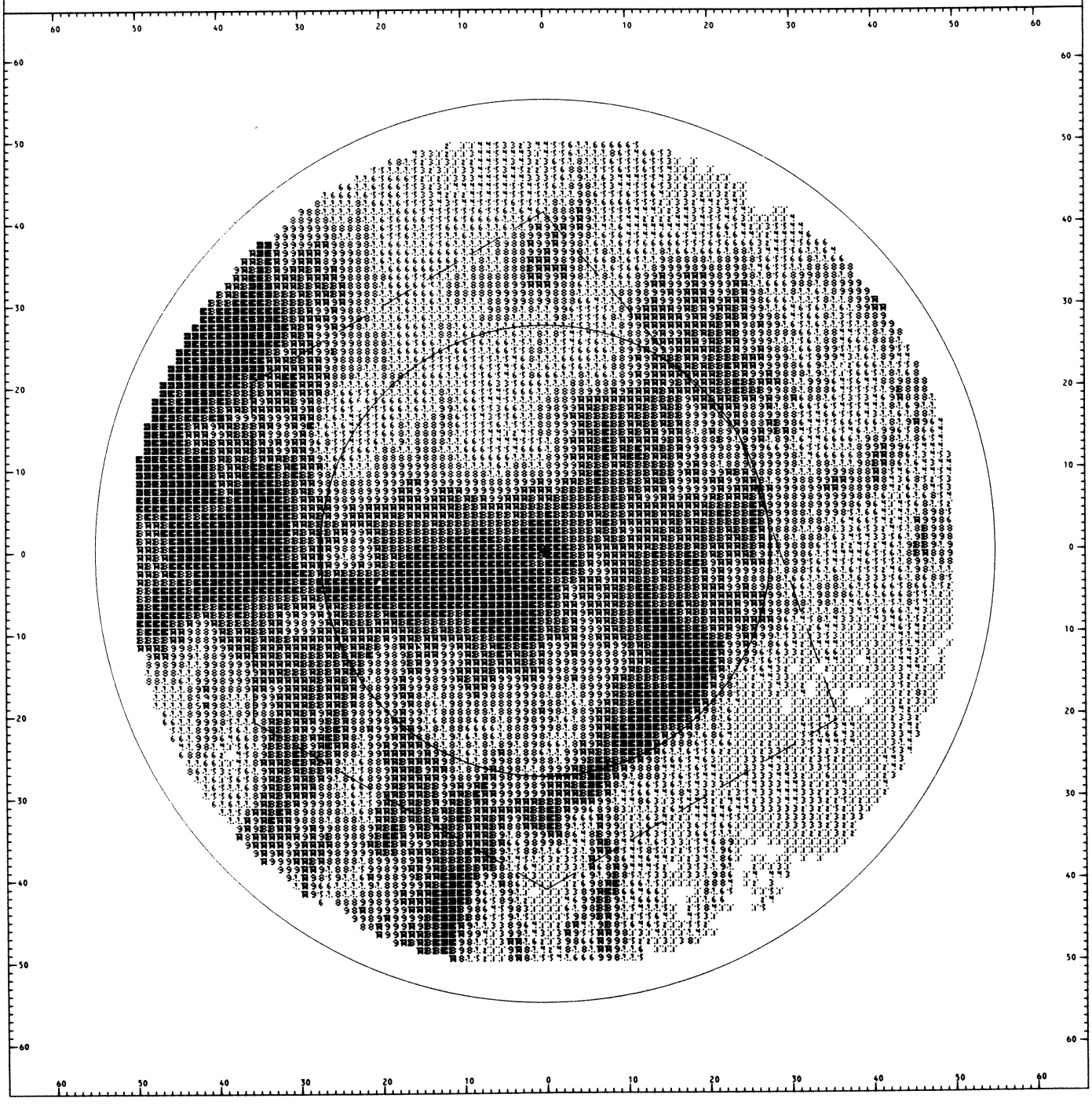
GATE RADAR DAILY RAINFALL RATE 257

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	052	090	100	073

MISSING HOURS: 03 05 09 14

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 14, 1974 (JULIAN DAY 257)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0183	2.0232	4.1376	1.3119	2.0794	0.5352	0.0267	1.8163	1.6858	1.7521	0.6376	2.8879	1.5525	1.2824	1.4172
2	0.0850	1.1674	4.1637	1.4988	2.6056	0.1351	0.1206	1.5940	1.6104	1.8013	0.4088	3.9579	1.5741	1.1250	1.3494
3															
4	0.5769	1.9576	2.1225	1.2955	2.5817	0.2953	0.7675	2.8637	1.4751	1.6383	2.1315	2.2320	1.3182	0.9423	1.1299
5															
6	0.5532	1.3625	1.1100	1.4624	1.6879	0.4697	0.6536	1.9922	1.1095	1.2200	1.5327	0.6773	1.4544	0.5871	1.0204
7	0.5023	1.2734	0.7556	2.9143	1.3592	0.5768	0.5295	1.7366	1.2305	1.3376	1.8678	0.4012	1.8041	0.5596	1.1816
8	0.3526	0.7272	0.3220	3.7906	0.9925	0.4365	0.3314	0.7051	1.1023	1.1736	0.7797	0.2345	1.9316	0.4405	1.1859
9															
10	0.1479	0.4351	0.1632	1.5745	1.6856	0.0940	0.2083	0.2462	0.6852	0.7228	0.5478	0.1381	1.2691	0.3796	0.8242
11	0.3168	0.3935	0.3067	0.7795	1.2456	0.2876	0.4220	0.4042	0.5562	0.5976	0.9633	0.3693	0.8403	0.4490	0.6445
12	0.6803	0.2587	0.1601	0.2393	0.7324	0.4639	0.9905	0.3811	0.4228	0.4688	1.7854	0.0842	0.5455	0.3626	0.4541
13	1.4262	0.6845	0.0812	0.0427	0.3695	0.4856	1.5054	1.0377	0.5150	0.4945	2.8335	0.0737	0.5411	0.5178	0.5294
14															
15	1.7996	0.8703	0.6122	0.2876	0.2316	0.8100	1.9153	1.3203	0.7675	0.7595	3.4208	0.6201	0.7585	0.7250	0.7413
16	2.0977	0.6153	1.0047	0.6616	0.7711	0.6913	2.1578	0.9421	0.9721	0.9673	2.4031	1.0480	0.7906	0.7821	0.7860
17	1.2877	0.7273	1.5406	1.2271	0.8524	0.5987	1.2970	0.7672	1.0376	1.0478	1.0439	0.8385	0.8269	0.7486	0.7874
18	0.9417	0.7974	1.6800	1.1520	1.5915	0.6512	1.0135	0.8197	1.1357	1.1833	0.6079	0.8118	1.2311	0.7174	0.9739
19	0.5117	0.9847	1.2020	1.8166	2.2962	0.5052	0.5252	1.0939	1.2212	1.3007	0.9956	0.7297	1.3513	0.6036	0.9775
20	1.5544	1.2959	0.9646	1.3345	2.3636	0.8618	1.3739	1.3493	1.3975	1.3787	1.1180	0.2217	1.6494	0.8042	1.2265
21	2.0460	1.3648	0.6205	1.0870	2.3812	0.7460	1.7301	1.8874	1.3763	1.3580	1.6019	0.1411	1.8378	0.8240	1.3305
22	2.6785	1.3986	0.8356	1.0818	2.8708	0.8257	2.1210	2.1528	1.6173	1.5859	2.9461	0.0853	1.7573	1.0124	1.3845
23	2.2726	0.9221	0.6761	0.8094	3.1441	0.6497	2.2542	1.4157	1.4150	1.4488	2.7820	0.0296	1.5017	0.8220	1.1616
24	1.0051	0.1173	0.3192	0.3572	3.4748	0.8077	1.2396	0.1668	1.0172	1.1135	0.5298	0.0050	1.4768	0.3326	0.9046
3	0.0516	1.5953	4.1506	1.4053	2.3425	0.3351	0.0736	1.7051	1.6480	1.7766	0.5232	3.4229	1.5631	1.2037	1.3832
6	0.5651	1.6601	1.6163	1.3789	2.1348	0.3825	0.7106	2.4280	1.2922	1.4290	1.8321	1.4546	1.3864	0.7647	1.0751
9	0.4274	1.0003	0.5387	3.3524	1.1758	0.5066	0.4304	1.2208	1.1664	1.2556	1.3237	0.3179	1.8678	0.5000	1.1837
12	0.3817	0.3624	0.2100	0.8644	1.2212	0.2818	0.5403	0.3438	0.5547	0.5964	1.0988	0.1972	0.8850	0.3971	0.6408
15	1.6129	0.7774	0.3467	0.1651	0.3006	0.6478	1.7103	1.1790	0.6412	0.6270	3.1271	0.3469	0.6498	0.6214	0.6351
18	1.4424	0.7133	1.4084	1.0135	1.0717	0.6471	1.4895	0.8430	1.0483	1.0661	1.3516	0.8994	0.9496	0.7493	0.8489
21	1.3707	1.2151	0.9290	1.4126	2.3470	0.7043	1.2097	1.4435	1.3315	1.3456	1.2385	0.3642	1.6127	0.7447	1.1786
24	1.9853	0.8127	0.6103	0.7494	3.1632	0.7610	1.8716	1.2451	1.3496	1.3825	2.0860	0.0400	1.5784	0.7223	1.1501
6	0.3084	1.6277	2.8834	1.3921	2.2387	0.3588	0.3921	2.0665	1.4700	1.6027	1.1776	2.4387	1.4752	0.9843	1.2293
12	0.4000	0.6176	0.3415	1.8596	1.2030	0.3718	0.4963	0.6946	0.7994	0.8601	1.1888	0.2455	1.2781	0.4382	0.8578
18	1.5106	0.7389	0.9837	0.6741	0.7632	0.6473	1.5778	0.9774	0.8856	0.8905	2.0618	0.6784	0.8297	0.6981	0.7632
24	1.6780	1.0139	0.7696	1.0810	2.7551	0.7326	1.5406	1.3443	1.3404	1.3639	1.6622	0.2021	1.5954	0.7340	1.1646
12	0.3593	1.0665	1.4712	1.6518	1.6633	0.3660	0.4500	1.3043	1.0975	1.1902	1.1838	1.2202	1.3653	0.6810	1.0224
24	1.6019	0.8889	0.8669	0.8960	1.8497	0.6939	1.5575	1.1775	1.1334	1.1485	1.8438	0.4186	1.2471	0.7182	0.9822
24	1.0427	0.9688	1.1388	1.2361	1.7658	0.5463	1.0591	1.2346	1.1172	1.1673	1.5468	0.7793	1.3008	0.7018	1.0007

53

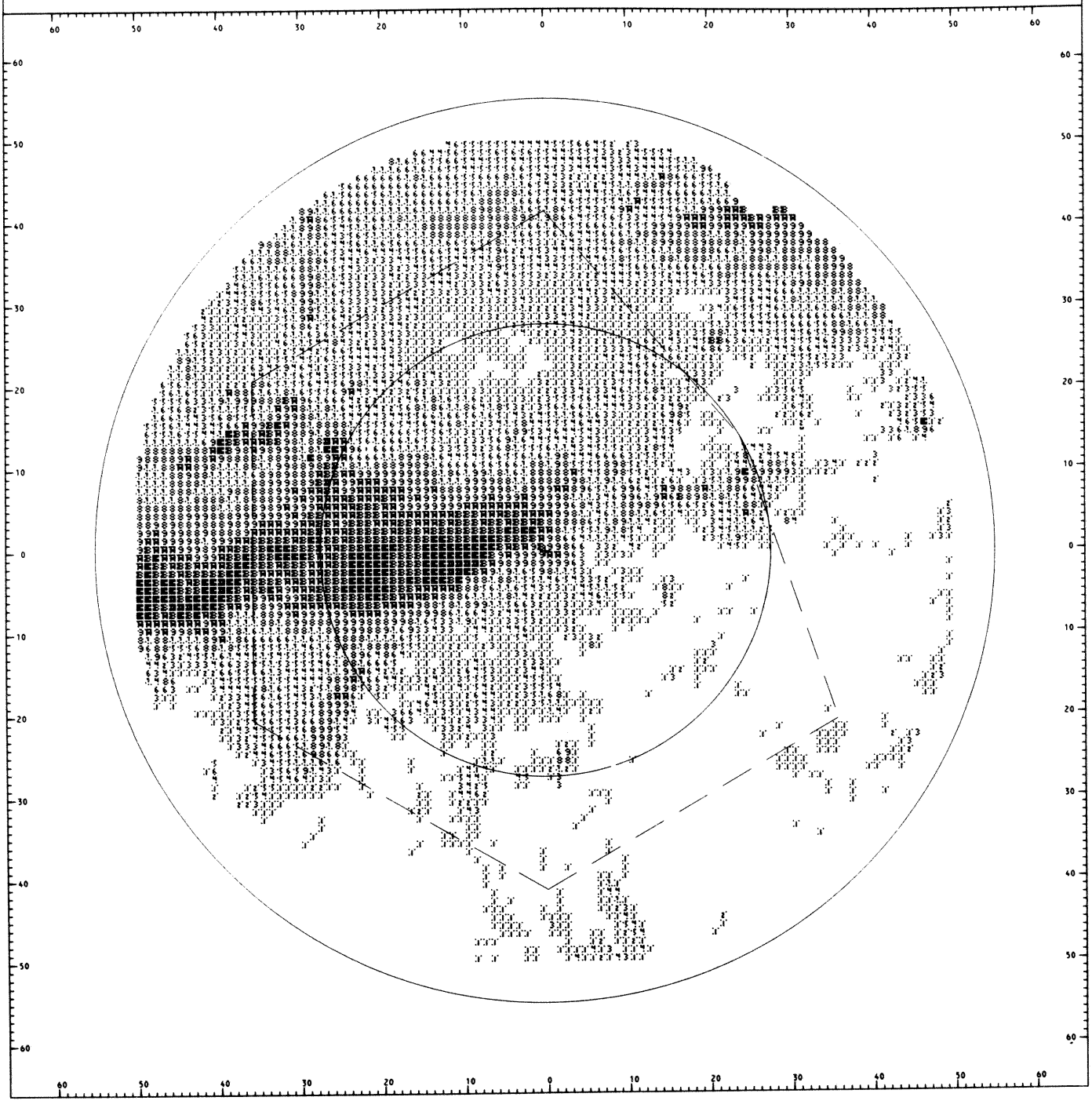
GATE RADAR DAILY RAINFALL RATE 258

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	064	095	081	041

MISSING HOURS: 10 11 14 15 19

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	■	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	■	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	■	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 15, 1974 (JULIAN DAY 258)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.4493	0.0389	0.0832	0.5699	4.2296	1.0977	0.6080	0.0239	1.0831	1.2144	0.0719	0.0001	1.6689	0.1351	0.9019
2	0.0900	0.0916	0.0594	0.4442	3.5416	0.7772	0.1185	0.0974	0.8388	0.9447	0.0677	0.0	1.3538	0.0546	0.7042
3	0.1245	0.0306	0.0348	0.2457	2.5294	0.4671	0.1937	0.0418	0.5755	0.6529	0.2368	0.0	1.0217	0.0400	0.5308
4	0.2721	0.0357	0.0344	0.0974	1.7437	0.2291	0.4237	0.0542	0.4045	0.4590	0.3239	0.0	0.6993	0.0703	0.3848
5	0.1142	0.0176	0.0239	0.0796	1.4301	0.2031	0.1766	0.0292	0.3134	0.3560	0.0971	0.0	0.5956	0.0310	0.3133
6	0.0074	0.0067	0.0124	0.0708	1.6261	0.0681	0.0107	0.0113	0.3011	0.3421	0.0222	0.0	0.5270	0.0051	0.2664
7	0.0025	0.0027	0.0	0.0701	2.5783	0.1011	0.0040	0.0041	0.4632	0.5262	0.0081	0.0	0.6339	0.0047	0.3197
8	0.0929	0.0	0.0	0.0692	1.9732	0.0791	0.0095	0.0	0.3721	0.4064	0.0	0.0	0.5131	0.0443	0.2790
9	0.2917	0.0043	0.0	0.0643	0.8712	0.0043	0.1197	0.0063	0.2071	0.1947	0.0402	0.0	0.2609	0.0606	0.1607
10															
11															
12	0.2865	0.0192	0.0523	0.0430	0.0095	0.0017	0.4413	0.0297	0.0684	0.0768	0.1702	0.0056	0.0121	0.0687	0.0404
13	0.0384	0.0016	0.0186	0.0501	0.0723	0.0027	0.0586	0.0024	0.0306	0.0346	0.0097	0.0007	0.0234	0.0107	0.0171
14															
15															
16	0.0	0.0	0.0	0.0169	0.0560	0.0	0.0	0.0	0.0122	0.0139	0.0	0.0	0.0212	0.0	0.0106
17	0.0	0.0	0.0	0.0006	0.0191	0.0027	0.0	0.0	0.0038	0.0043	0.0	0.0	0.0057	0.0	0.0028
18	0.0066	0.0052	0.0	0.0013	0.0244	0.0001	0.0104	0.0081	0.0063	0.0072	0.0339	0.0	0.0089	0.0022	0.0055
19															
20	0.0028	0.0028	0.0488	0.0054	0.0405	0.0149	0.0044	0.0042	0.0192	0.0218	0.0	0.0031	0.0186	0.0100	0.0143
21	0.1044	0.1060	0.0466	0.0315	0.0424	0.0546	0.1549	0.1176	0.0643	0.0662	0.2591	0.0001	0.0283	0.0748	0.0515
22	0.0763	0.2299	0.0007	0.0744	0.1658	0.3665	0.1196	0.2120	0.1525	0.1554	0.3892	0.0003	0.1209	0.2764	0.1986
23	0.3314	0.4581	0.0021	0.0488	0.5195	0.6385	0.4028	0.5223	0.3338	0.3420	1.0768	0.0009	0.2657	0.5742	0.4200
24	0.4178	0.6920	0.0050	0.0768	1.6005	0.5060	0.5222	0.9783	0.5526	0.6002	1.7258	0.0097	0.5658	0.5364	0.5511
3	0.2213	0.0537	0.0591	0.4199	3.4336	0.7807	0.3067	0.0544	0.8325	0.9374	0.1254	0.0	1.3479	0.0765	0.7122
6	0.1312	0.0200	0.0236	0.0826	1.6000	0.1668	0.2036	0.0316	0.3397	0.3857	0.1477	0.0	0.6073	0.0355	0.3218
9	0.1290	0.0023	0.0	0.0679	1.8076	0.0615	0.0444	0.0035	0.3475	0.3758	0.0161	0.0	0.4693	0.0366	0.2532
12															
15															
18	0.0022	0.0017	0.0	0.0063	0.0332	0.0009	0.0035	0.0027	0.0074	0.0084	0.0113	0.0	0.0119	0.0007	0.0063
21	0.0536	0.0544	0.0477	0.0185	0.0415	0.0347	0.0796	0.0609	0.0418	0.0440	0.1295	0.0016	0.0235	0.0406	0.0320
24	0.2752	0.4600	0.0026	0.0667	0.7619	0.5036	0.3482	0.5709	0.3463	0.3659	1.0640	0.0037	0.3175	0.4614	0.3893
6	0.1762	0.0369	0.0413	0.2513	2.5167	0.4737	0.2552	0.0430	0.5861	0.6616	0.1366	0.0	0.9778	0.0562	0.5176
12	0.1684	0.0065	0.0131	0.0617	1.3580	0.0465	0.1436	0.0100	0.2777	0.3010	0.0546	0.0014	0.3550	0.0447	0.2000
18	0.0113	0.0017	0.0046	0.0172	0.0430	0.0014	0.0173	0.0026	0.0132	0.0150	0.0109	0.0002	0.0148	0.0032	0.0090
24	0.1866	0.2978	0.0206	0.0474	0.4737	0.3161	0.2408	0.3669	0.2245	0.2371	0.6902	0.0028	0.1998	0.2859	0.2428
12	0.1731	0.0247	0.0300	0.1754	2.0533	0.3029	0.2106	0.0298	0.4627	0.5173	0.1038	0.0006	0.7286	0.0516	0.3906
24	0.1087	0.1662	0.0135	0.0340	0.2823	0.1762	0.1414	0.2050	0.1306	0.1384	0.3883	0.0017	0.1176	0.1574	0.1375
24	0.1426	0.0917	0.0222	0.1084	1.2143	0.2429	0.1778	0.1128	0.3054	0.3378	0.2386	0.0011	0.4392	0.1017	0.2707

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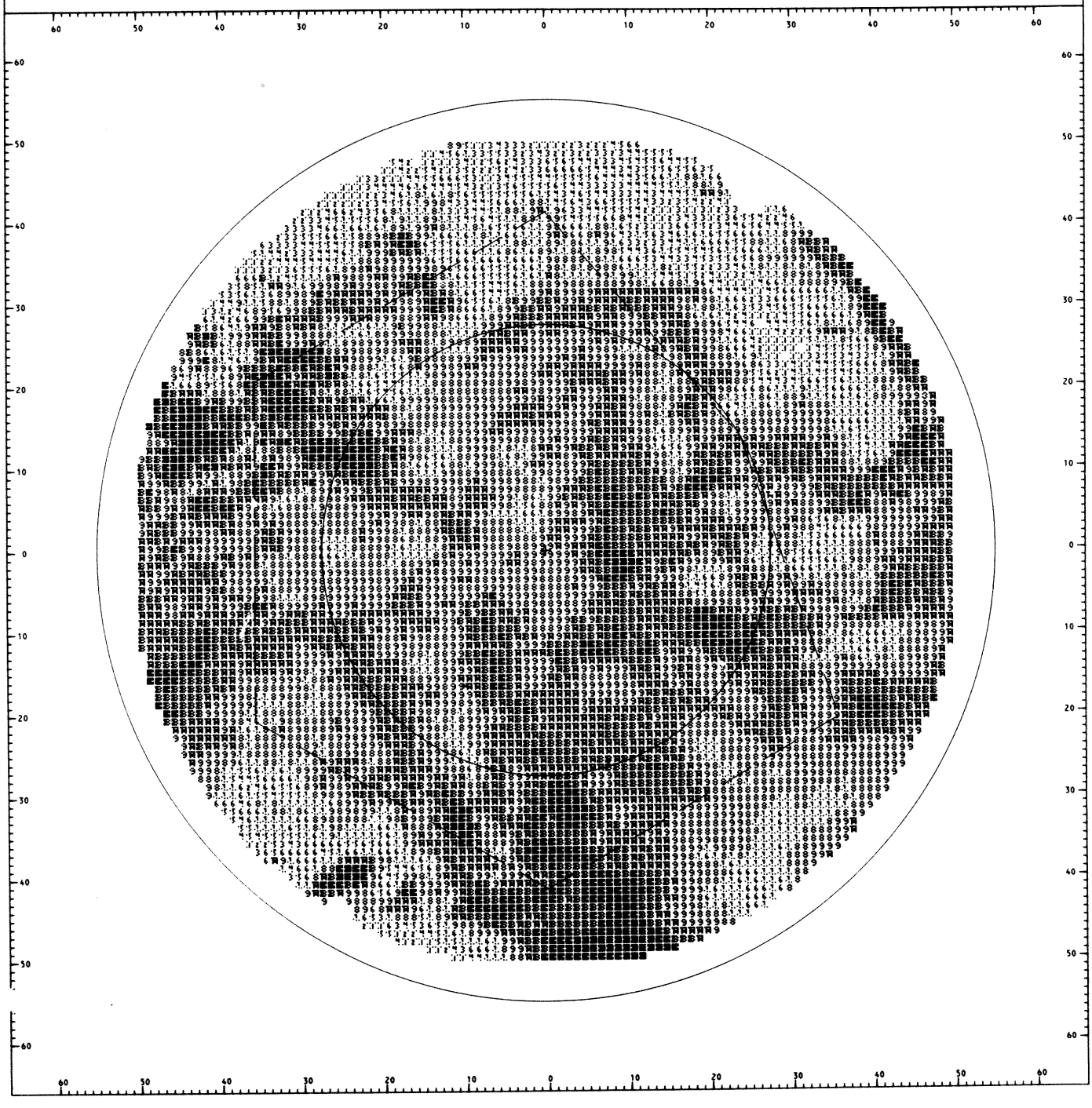
GATE RADAR DAILY RAINFALL RATE 259

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	068	074	110	083

MISSING HOURS: 05 22

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	■	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	■	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	■	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	■	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 16, 1974 (JULIAN DAY 259)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.2087	1.1887	0.0729	0.6920	1.9071	0.1883	0.2630	1.5044	0.7137	0.7614	1.4686	0.2458	0.8244	0.4199	0.6224
2	0.2272	1.9260	0.3320	1.5536	2.7389	0.3007	0.3491	2.5720	1.1853	1.2946	0.3333	0.7261	1.2545	0.7346	0.9548
3	0.1119	1.6261	0.6514	0.9342	2.1308	0.4247	0.1332	1.1281	0.9842	0.9413	0.2269	0.5350	1.2683	0.8122	1.0400
4	0.1713	2.0745	1.0094	1.7065	2.6954	0.1394	0.2566	1.4389	1.3046	1.2615	0.4733	1.0344	1.4780	1.0306	1.2540
5															
6	0.8527	2.3343	2.2920	2.7031	1.9871	0.1409	1.1451	1.5968	1.7202	1.6820	2.0337	1.9981	1.6595	1.2820	1.4705
7	0.4244	1.3863	2.0172	3.4971	1.3749	0.1453	0.4800	1.2316	1.4735	1.5386	1.7089	1.7602	1.3469	0.9589	1.1527
8	0.3782	1.2720	2.9254	3.9758	1.1395	0.2421	0.5085	1.7925	1.6530	1.8457	2.3313	2.7299	1.5086	1.1102	1.3092
9	0.4273	1.5937	2.7556	3.0425	0.5176	0.1362	0.5238	2.3686	1.4103	1.5720	2.1369	2.1534	1.2586	1.1649	1.2115
10	1.0101	1.5401	2.1898	2.3496	0.1718	0.1405	0.7725	2.1493	1.2317	1.2724	2.3671	1.7690	1.0836	1.2178	1.1504
11	1.6143	0.7584	1.5541	1.0670	0.0804	0.4525	1.4538	1.0923	0.9186	0.9040	1.7467	1.5359	0.6887	1.0863	0.8872
12	2.2604	0.5193	1.2429	0.6623	0.2089	0.9043	2.7580	0.6859	0.9632	0.9855	1.1471	1.3489	0.5791	1.2458	0.9122
13	1.1404	0.4262	1.4046	0.4376	0.5678	0.8624	1.4787	0.5620	0.8049	0.8652	0.8597	1.5580	0.6903	1.0962	0.8930
14	1.8067	1.2001	1.7359	0.2077	0.7195	1.2639	2.4233	1.4237	1.1544	1.2086	3.2156	1.8032	0.7853	1.3483	1.0663
15	1.7870	0.9727	1.5536	0.2062	0.8713	0.9496	2.0095	1.3479	1.0559	1.0848	2.5964	1.2852	0.7095	1.2318	0.9702
16	2.1417	0.8033	1.4783	0.2546	0.9515	1.2767	2.1955	1.1407	1.1494	1.1535	1.8393	1.5634	0.8175	1.3153	1.0658
17	1.7028	0.7034	1.0787	0.1323	1.0154	1.8136	1.8160	1.0408	1.0731	1.1107	1.5145	0.9495	0.6466	1.0464	0.8462
18	1.4431	0.5918	0.7824	0.3700	0.9027	1.5797	1.5372	0.8384	0.9439	0.9756	0.7022	1.0170	0.6654	1.0143	0.8396
19	1.0804	1.2750	0.7285	0.2775	0.8026	1.1064	1.1026	1.8223	0.8792	0.9088	0.9134	1.7313	0.5763	1.1115	0.8437
20	0.6233	1.6798	0.8282	0.4662	1.3488	1.4318	0.6240	2.3358	1.0650	1.1345	0.9132	1.8165	1.1579	1.2413	1.1991
21	0.1381	1.6324	0.7911	0.3852	0.6339	1.1709	0.1597	2.0187	0.7936	0.8316	0.9128	1.3575	0.9578	0.8902	0.9236
22															
23	0.0400	1.0923	1.6054	0.5745	0.4165	1.8047	0.0526	1.1926	0.9214	0.9837	0.4484	0.5857	0.9585	0.9509	0.9544
24	0.0399	0.5223	1.0328	0.4199	1.1252	1.6960	0.0525	0.5107	0.8061	0.8776	0.3658	0.0662	1.0729	0.6279	0.8499
3	0.1826	1.5802	0.3521	1.0599	2.2589	0.3046	0.2484	1.7348	0.9610	0.9991	0.6763	0.5023	1.1157	0.6566	0.8863
6	0.5120	2.2044	1.6507	2.2047	2.3413	0.1402	0.7008	1.5178	1.5122	1.4716	1.2535	1.5162	1.5687	1.1562	1.3621
9	0.4100	1.4173	2.5661	3.5051	1.0107	0.1745	0.5041	1.7976	1.5122	1.6520	2.0590	2.2145	1.3713	1.0780	1.2243
12	1.6282	0.9393	1.6623	1.3596	0.1537	0.4991	1.6614	1.3092	1.0378	1.0540	1.7536	1.5513	0.7838	1.1833	0.9831
15	1.5780	0.8663	1.5647	0.2838	0.7195	1.0253	1.9705	1.1112	1.0050	1.0529	2.2239	1.5488	0.7283	1.2264	0.9768
18	1.7625	0.6995	1.1131	0.2523	0.9565	1.5567	1.8496	1.0066	1.0555	1.0799	1.3520	1.1767	0.7082	1.1253	0.9163
21	0.6139	1.5291	0.7826	0.3763	0.9284	1.2363	0.6288	2.0589	0.9126	0.9583	0.9131	1.6351	0.8978	1.0810	0.9889
24	0.0399	0.8073	1.3191	0.4972	0.7708	1.7503	0.0525	0.8516	0.8637	0.9307	0.4071	0.3260	1.0158	0.7894	0.9021
6	0.3144	1.8299	0.8715	1.5178	2.2918	0.2388	0.4294	1.6480	1.1813	1.1880	0.9072	0.9078	1.2967	0.8583	1.0776
12	1.0191	1.1783	2.1142	2.4323	0.5822	0.3368	1.0827	1.5533	1.2750	1.3529	1.9063	1.8829	1.0775	1.1306	1.1037
18	1.6702	0.7829	1.3389	0.2681	0.8380	1.2910	1.9100	1.0589	1.0302	1.0664	1.7879	1.3627	0.7179	1.1765	0.9467
24	0.3843	1.2403	0.9972	0.4247	0.8653	1.4419	0.3983	1.5760	0.8930	0.9472	0.7107	1.1114	0.9451	0.9643	0.9540
12	0.6987	1.4745	1.5493	2.0166	1.3593	0.2923	0.7858	1.5964	1.2324	1.2779	1.4522	1.4397	1.1771	1.0093	1.0928
24	1.0857	0.9908	1.1835	0.3392	0.8504	1.3596	1.2229	1.2939	0.9679	1.0122	1.2983	1.2485	0.8210	1.0803	0.9499
24	0.8922	1.2326	1.3664	1.1779	1.1048	0.8259	1.0043	1.4451	1.1001	1.1451	1.3752	1.3441	1.0000	1.0459	1.0221

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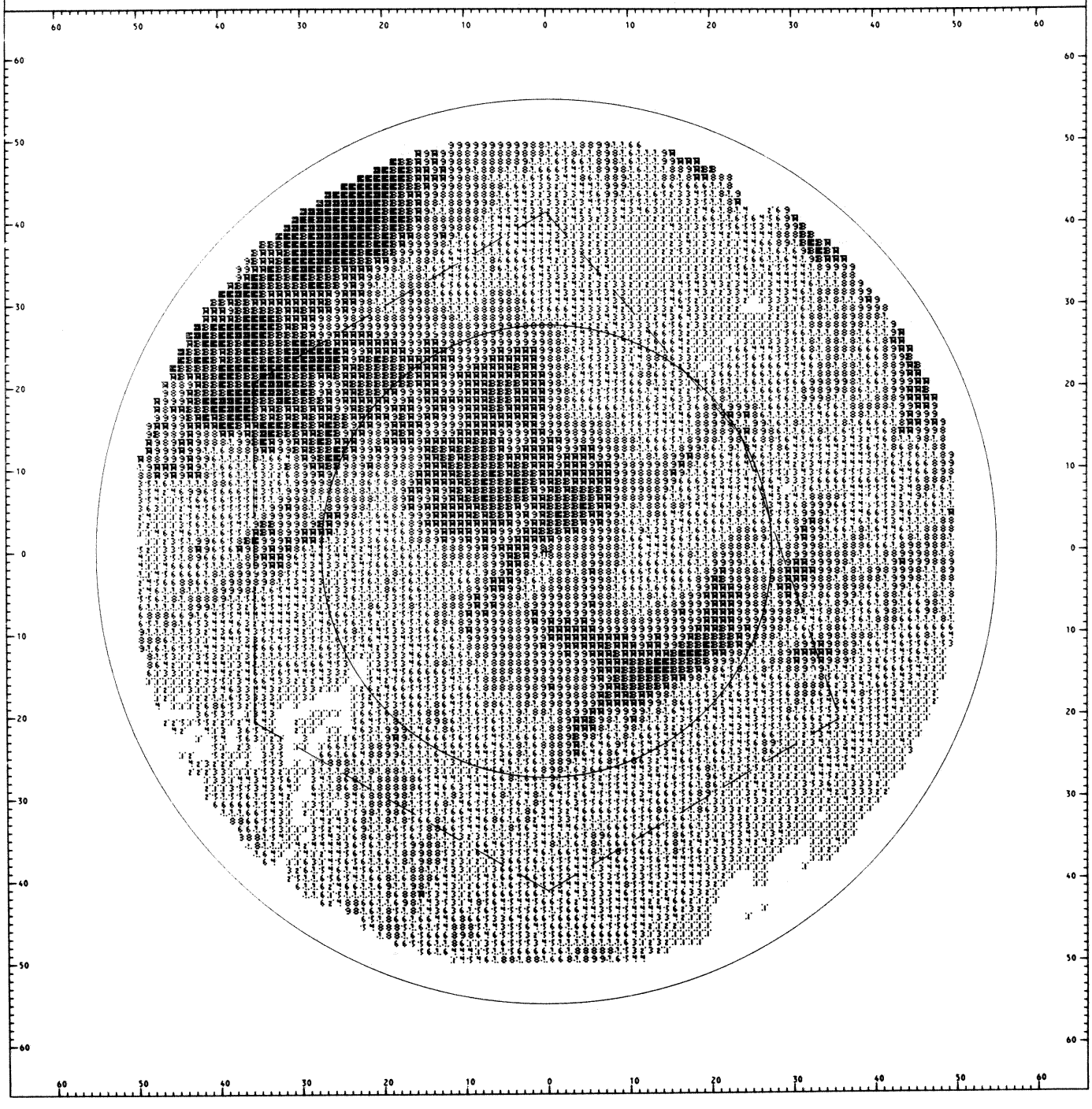
GATE RADAR DAILY RAINFALL RATE 260

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	084	080	112	101

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000		3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299		1.000 - 1.496		5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447		1.496 - 2.239		7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668		2.239 - 3.350		11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 17, 1974 (JULIAN DAY 260)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.1685	0.3642	0.9258	0.6146	1.2647	1.5064	0.2288	0.4682	0.8074	0.9011	0.6392	0.1505	1.2271	0.6163	0.9213
2	0.4664	0.4495	0.6426	0.7128	1.3317	1.4767	0.5747	0.4996	0.8468	0.9189	0.5339	0.2658	1.5381	0.5758	1.0566
3	0.6917	0.6139	0.1493	0.4263	1.1055	1.3141	0.9353	0.3769	0.7175	0.7264	0.9851	0.1521	1.2639	0.4224	0.8429
4	0.8597	0.7020	0.0652	0.1618	1.1668	1.8378	1.2018	0.5875	0.7996	0.8291	1.2729	0.2535	1.2094	0.4789	0.8439
5	0.5727	0.5833	0.0570	0.0678	0.9089	2.3461	0.8193	0.4458	0.7559	0.7928	0.7287	0.1694	1.2200	0.3765	0.7980
6	0.5991	0.5060	0.0567	0.2220	0.7328	2.4092	0.8174	0.4562	0.7536	0.8011	0.7577	0.0431	1.0966	0.3142	0.7052
7	0.4952	0.3324	0.1910	0.5016	1.1118	2.6561	0.7049	0.2683	0.8805	0.9613	0.4844	0.0328	1.3058	0.2421	0.7737
8	0.4749	0.2034	0.5371	0.5062	1.1702	2.8182	0.6944	0.2396	0.9502	1.0642	0.3540	0.1078	1.5677	0.2875	0.9273
9	0.4160	0.0963	0.3417	0.6045	0.7521	2.4043	0.6403	0.1478	0.7674	0.8703	0.2691	0.1789	1.5176	0.2208	0.8690
10	0.7033	0.4093	0.5036	0.6852	0.6814	2.5631	1.0643	0.5231	0.9224	1.0297	1.5353	0.1120	1.2113	0.4142	0.8125
11	0.5220	0.1563	0.6273	0.1338	0.7970	1.4773	0.7846	0.1995	0.6182	0.6930	0.9684	0.0533	0.9108	0.3254	0.6178
12	0.4531	0.2358	0.9834	0.0777	0.6643	1.1109	0.6449	0.3047	0.5868	0.6513	0.6816	0.0765	0.7741	0.3836	0.5787
13	0.5330	0.5949	1.3960	0.2081	0.4952	0.7882	0.6245	0.6056	0.6686	0.6952	0.5392	0.1842	0.5884	0.5828	0.5854
14	0.5489	0.9034	1.4398	0.3191	0.1917	0.3618	0.6883	0.9943	0.6270	0.6416	1.3922	0.5300	0.2971	0.7180	0.5075
15	0.6879	0.8999	1.0655	0.3706	0.1574	0.1134	0.6897	1.0787	0.5490	0.5380	0.8833	0.9455	0.2141	0.6499	0.4320
16	0.7833	1.2607	0.9848	0.4987	0.4655	0.7925	0.5910	1.3758	0.7979	0.7585	0.6495	1.3184	0.4086	0.7229	0.5656
17	0.4023	1.2794	0.5443	0.2395	0.4278	0.4918	0.3233	1.5999	0.5656	0.5583	0.4514	1.2827	0.3105	0.5394	0.4250
18	0.1763	0.7627	0.4755	0.1461	0.2417	0.2403	0.1923	1.0033	0.3412	0.3554	0.4074	0.9372	0.2148	0.3735	0.2942
19	0.0736	0.4169	0.6491	0.2096	0.2604	0.2056	0.0281	0.5410	0.3027	0.3204	0.0873	0.9153	0.1683	0.2722	0.2203
20	0.0524	0.4271	0.6791	0.4565	0.0297	0.0931	0.0326	0.4758	0.2893	0.2997	0.0039	1.0127	0.1283	0.2534	0.1909
21	0.0301	0.3202	0.5941	0.3029	0.0006	0.0371	0.0232	0.2877	0.2139	0.2144	0.0042	0.8010	0.0860	0.2167	0.1514
22	0.0175	0.1660	0.1589	0.2435	0.0121	0.0179	0.0171	0.1468	0.1026	0.1016	0.0064	0.2430	0.0620	0.1125	0.0873
23	0.0053	0.0602	0.0361	0.1006	0.0117	0.0035	0.0075	0.0404	0.0363	0.0345	0.0094	0.0634	0.0270	0.0677	0.0474
24	0.0004	0.0146	0.1671	0.0784	0.0097	0.0031	0.0	0.0125	0.0454	0.0502	0.0	0.2351	0.0245	0.0631	0.0438
3	0.4422	0.4759	0.5726	0.5845	1.2340	1.4324	0.5796	0.4482	0.7905	0.8488	0.7194	0.1895	1.3429	0.5381	0.9400
6	0.6772	0.5971	0.0596	0.1505	0.9362	2.1977	0.9462	0.4965	0.7697	0.8076	0.9198	0.1553	1.1751	0.3899	0.7821
9	0.4620	0.2107	0.3566	0.5374	1.0113	2.6262	0.6799	0.2186	0.8661	0.9653	0.3691	0.1065	1.4634	0.2501	0.8564
12	0.5595	0.2671	0.7048	0.2989	0.7142	1.7171	0.8313	0.3424	0.7091	0.7913	1.0618	0.0806	0.9655	0.3744	0.6694
15	0.5899	0.7994	1.3004	0.2993	0.2814	0.4211	0.6675	0.8929	0.6149	0.6249	0.9382	0.5532	0.3665	0.6502	0.5083
18	0.4539	1.1009	0.6682	0.2947	0.3783	0.5082	0.3689	1.3264	0.5682	0.5574	0.5027	1.1794	0.3114	0.5453	0.4284
21	0.0520	0.3880	0.6407	0.3230	0.0969	0.1119	0.0280	0.4349	0.2686	0.2782	0.0318	0.9096	0.1275	0.2474	0.1875
24	0.0078	0.0803	0.1207	0.1408	0.0112	0.0082	0.0082	0.0665	0.0614	0.0621	0.0053	0.1805	0.0378	0.0813	0.0595
6	0.5597	0.5365	0.3161	0.3676	1.0851	1.8150	0.7629	0.4724	0.7801	0.8282	0.8196	0.1724	1.2588	0.4640	0.8609
12	0.5107	0.2389	0.5307	0.4181	0.8627	2.1716	0.7556	0.2805	0.7876	0.8783	0.7155	0.0935	1.2141	0.3122	0.7626
18	0.5219	0.9502	0.9843	0.2970	0.3299	0.4646	0.5182	1.1096	0.5915	0.5911	0.7205	0.8663	0.3389	0.5977	0.4683
24	0.0299	0.2342	0.3807	0.2319	0.0540	0.0601	0.0181	0.2507	0.1650	0.1701	0.0185	0.5451	0.0827	0.1647	0.1236
12	0.5352	0.3877	0.4234	0.3928	0.9739	1.9933	0.7592	0.3764	0.7838	0.8532	0.7675	0.1330	1.2362	0.3881	0.8115
24	0.2759	0.5922	0.6825	0.2645	0.1920	0.2624	0.2681	0.6802	0.3782	0.3806	0.3695	0.7057	0.2108	0.3818	0.2962
24	0.4056	0.4899	0.5529	0.3287	0.5829	1.1278	0.5137	0.5283	0.5810	0.6169	0.5685	0.4194	0.7244	0.3844	0.5541

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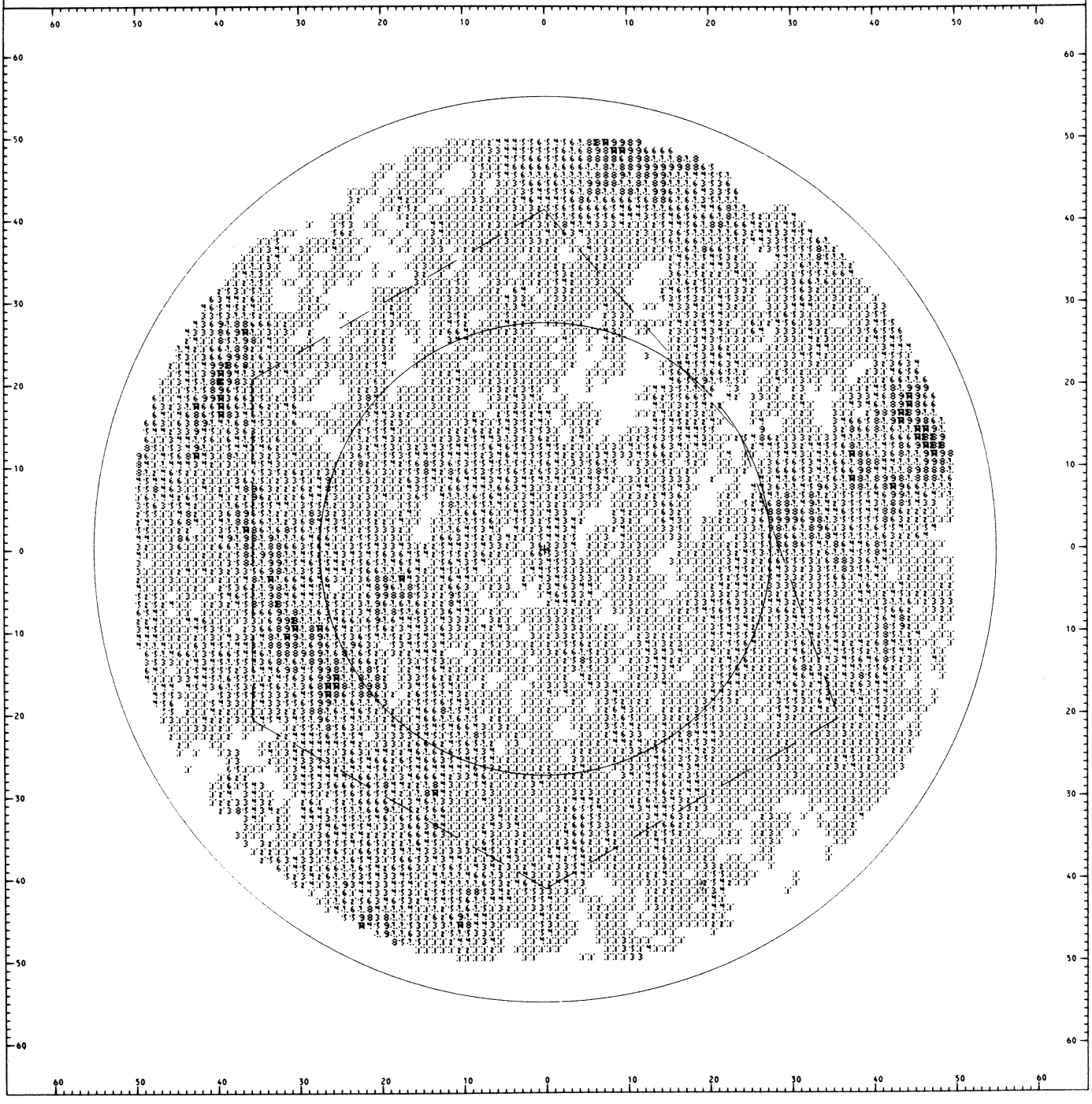
GATE RADAR DAILY RAINFALL RATE 261

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	096	114	090	072

MISSING HOURS:

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
1	0.001 - 0.040	5	0.133 - 0.200	9	0.668 - 1.000	B	3.350 - 5.012
2	0.040 - 0.060	6	0.200 - 0.299	A	1.000 - 1.496	C	5.012 - 7.499
3	0.060 - 0.089	7	0.299 - 0.447	B	1.496 - 2.239	D	7.499 - 11.220
4	0.089 - 0.133	8	0.447 - 0.668	C	2.239 - 3.350	E	11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 18, 1974 (JULIAN DAY 261)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.0007	0.0251	0.1094	0.0827	0.0141	0.0	0.0011	0.0351	0.0386	0.0434	0.0236	0.1278	0.0684	0.0388	0.0536
2	0.0045	0.0220	0.0965	0.0144	0.0154	0.0	0.0042	0.0164	0.0254	0.0264	0.0297	0.1082	0.0597	0.0367	0.0482
3	0.0094	0.1014	0.0746	0.0221	0.0181	0.0048	0.0147	0.0560	0.0385	0.0313	0.0143	0.1145	0.0552	0.0390	0.0471
4	0.0427	0.0475	0.1097	0.0680	0.0106	0.0138	0.0439	0.0467	0.0486	0.0491	0.0226	0.1449	0.0571	0.0496	0.0533
5	0.2380	0.0557	0.0771	0.0471	0.0262	0.0143	0.1446	0.0322	0.0762	0.0525	0.0468	0.1064	0.0591	0.0938	0.0765
6	0.1196	0.0228	0.1261	0.0573	0.0578	0.0067	0.1098	0.0216	0.0649	0.0627	0.1677	0.1851	0.0613	0.0769	0.0691
7	0.0391	0.0376	0.1012	0.0924	0.1329	0.0020	0.0194	0.0492	0.0676	0.0707	0.0250	0.1804	0.0953	0.0530	0.0742
8	0.0143	0.1056	0.0608	0.2096	0.2325	0.0082	0.0122	0.1344	0.1055	0.1150	0.0	0.1491	0.1123	0.0627	0.0875
9	0.0243	0.0583	0.0332	0.1239	0.2862	0.0151	0.0097	0.0628	0.0905	0.0960	0.0	0.0472	0.1114	0.0678	0.0896
10	0.0417	0.0653	0.0274	0.0890	0.2761	0.0431	0.0081	0.0501	0.0908	0.0900	0.0068	0.0163	0.1096	0.0627	0.0862
11	0.0130	0.0461	0.0345	0.0429	0.1541	0.0221	0.0032	0.0155	0.0524	0.0505	0.0051	0.0120	0.0693	0.0445	0.0569
12	0.0095	0.0458	0.0347	0.0556	0.0594	0.0426	0.0109	0.0350	0.0413	0.0420	0.0536	0.0112	0.0436	0.0407	0.0421
13	0.0073	0.0471	0.0299	0.0452	0.0431	0.0501	0.0064	0.0433	0.0371	0.0379	0.0103	0.0314	0.0438	0.0347	0.0392
14	0.0172	0.0645	0.0381	0.0600	0.0237	0.0490	0.0245	0.0459	0.0421	0.0409	0.0214	0.0285	0.0958	0.0446	0.0702
15	0.0223	0.0773	0.0452	0.1223	0.0124	0.0488	0.0329	0.0899	0.0547	0.0582	0.1238	0.0577	0.1061	0.0412	0.0736
16	0.0031	0.0679	0.0128	0.4271	0.0133	0.0469	0.0042	0.0379	0.0949	0.0994	0.0168	0.0291	0.1538	0.0383	0.0961
17	0.0694	0.1098	0.0362	0.3048	0.0994	0.0382	0.0888	0.0668	0.1096	0.1094	0.0486	0.0588	0.1363	0.0887	0.1125
18	0.0579	0.2110	0.0652	0.1247	0.3140	0.0440	0.0664	0.0673	0.1368	0.1204	0.0624	0.0713	0.1290	0.1381	0.1335
19	0.1189	0.3122	0.0659	0.1898	0.2422	0.0570	0.1180	0.1285	0.1649	0.1353	0.0965	0.0919	0.1896	0.1881	0.1888
20	0.1201	0.3583	0.1178	0.2776	0.3864	0.0958	0.1210	0.1211	0.2267	0.1959	0.1052	0.0425	0.2287	0.2729	0.2508
21	0.0856	0.2004	0.0876	0.0435	0.5803	0.1537	0.0498	0.0749	0.1928	0.1798	0.0581	0.0155	0.1840	0.2542	0.2191
22	0.1045	0.1263	0.0377	0.0773	0.6984	0.1863	0.1040	0.0988	0.2061	0.2150	0.2988	0.0106	0.1978	0.2362	0.2170
23	0.0996	0.0511	0.0345	0.0782	0.5389	0.2439	0.1157	0.0324	0.1750	0.1881	0.0756	0.0174	0.2006	0.2729	0.2368
24	0.0244	0.2452	0.0373	0.0166	0.4574	0.1919	0.0179	0.1174	0.1631	0.1504	0.0144	0.0865	0.2463	0.2705	0.2584
3	0.0049	0.0495	0.0935	0.0397	0.0159	0.0016	0.0067	0.0358	0.0342	0.0337	0.0225	0.1168	0.0611	0.0381	0.0496
6	0.1334	0.0420	0.1043	0.0575	0.0315	0.0116	0.0995	0.0335	0.0633	0.0548	0.0790	0.1455	0.0592	0.0734	0.0663
9	0.0259	0.0672	0.0651	0.1419	0.2172	0.0084	0.0138	0.0822	0.0879	0.0939	0.0083	0.1256	0.1063	0.0607	0.0835
12	0.0214	0.0524	0.0322	0.0625	0.1632	0.0359	0.0074	0.0335	0.0615	0.0608	0.0218	0.0132	0.0742	0.0493	0.0617
15	0.0156	0.0629	0.0377	0.0758	0.0264	0.0493	0.0213	0.0597	0.0446	0.0456	0.0518	0.0392	0.0819	0.0401	0.0610
18	0.0435	0.1296	0.0381	0.2856	0.1422	0.0430	0.0532	0.0574	0.1138	0.1097	0.0426	0.0531	0.1397	0.0879	0.1138
21	0.1082	0.2903	0.0904	0.1703	0.4030	0.1022	0.0962	0.1082	0.1948	0.1703	0.0866	0.0500	0.2008	0.2384	0.2196
24	0.0762	0.1409	0.0365	0.0574	0.5649	0.2074	0.0792	0.0828	0.1814	0.1845	0.1296	0.0381	0.2149	0.2599	0.2374
6	0.0691	0.0458	0.0989	0.0486	0.0237	0.0066	0.0531	0.0347	0.0487	0.0442	0.0508	0.1311	0.0602	0.0558	0.0580
12	0.0236	0.0598	0.0486	0.1022	0.1902	0.0222	0.0106	0.0578	0.0747	0.0774	0.0151	0.0694	0.0902	0.0548	0.0725
18	0.0295	0.0962	0.0379	0.1807	0.0843	0.0462	0.0372	0.0585	0.0792	0.0777	0.0472	0.0461	0.1108	0.0640	0.0874
24	0.0922	0.2156	0.0635	0.1138	0.4839	0.1548	0.0877	0.0955	0.1881	0.1774	0.1081	0.0441	0.2078	0.2491	0.2284
12	0.0464	0.0528	0.0738	0.0754	0.1069	0.0144	0.0318	0.0463	0.0617	0.0608	0.0329	0.1003	0.0752	0.0551	0.0651
24	0.0609	0.1559	0.0507	0.1473	0.2841	0.1005	0.0625	0.0770	0.1336	0.1275	0.0776	0.0451	0.1593	0.1565	0.1579
24	0.0536	0.1043	0.0622	0.1113	0.1955	0.0574	0.0471	0.0616	0.0976	0.0941	0.0553	0.0727	0.1172	0.1057	0.1114

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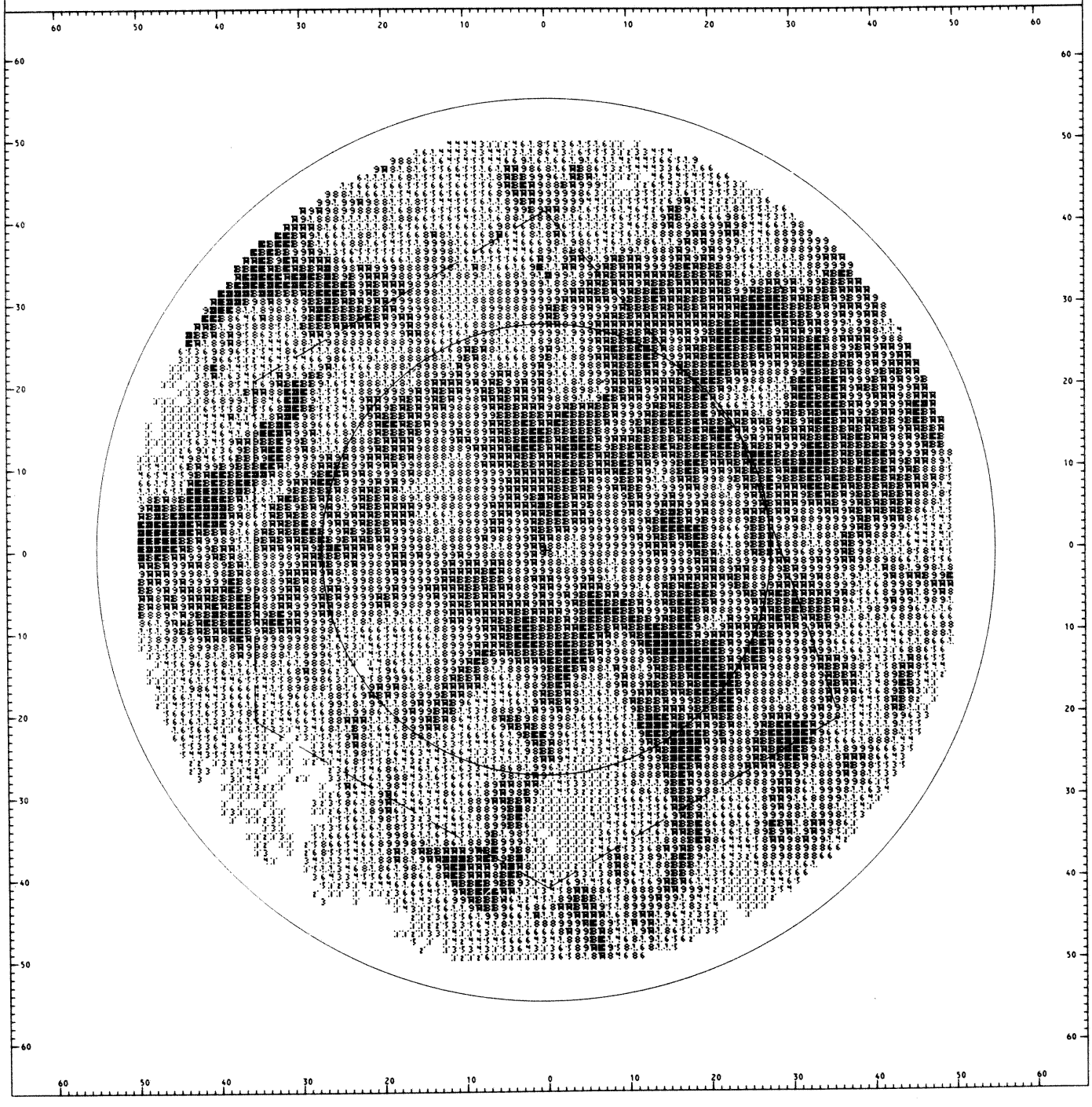
GATE RADAR DAILY RAINFALL RATE 262

	OCEANOGRAPHER	RESEARCHER	GILLISS	QUADRA
NUMBER OF SCANS	048	094	090	086

MISSING HOURS: 20 21 22 23 24

RANGE MARKER INTERVAL 110 KM GRID SPACING 4 KM X 4 KM

CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)	CODE	RAINFALL (MM/HR)
BLANK	0.000						
	0.001 - 0.040		0.133 - 0.200		0.668 - 1.000		3.350 - 5.012
	0.040 - 0.060		0.200 - 0.299		1.000 - 1.496		5.012 - 7.499
	0.060 - 0.089		0.299 - 0.447		1.496 - 2.239		7.499 - 11.220
	0.089 - 0.133		0.447 - 0.668		2.239 - 3.350		11.220 - 16.788



MEAN AREA PRECIPITATION RATE MM/HR SEPTEMBER 19, 1974 (JULIAN DAY 262)

AREA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HRS															
1	0.1392	0.8075	0.0324	0.0314	0.4649	0.1430	0.1322	0.2784	0.2715	0.1781	0.2249	0.1556	0.2941	0.3697	0.3319
2	0.4971	1.0912	0.0394	0.0573	0.7441	0.1708	0.4965	0.4822	0.4357	0.3118	0.4707	0.2616	0.3219	0.4981	0.4100
3	0.6315	0.6564	0.0441	0.0660	0.8260	0.1814	0.5502	0.4112	0.4026	0.3297	0.3875	0.1500	0.3104	0.4715	0.3910
4	1.0314	0.2110	0.0496	0.0215	0.4250	0.4647	0.9785	0.2743	0.3669	0.3337	0.2511	0.0804	0.3941	0.4553	0.4247
5	1.1833	0.1414	0.0425	0.0114	0.1641	0.4748	1.2206	0.2272	0.3353	0.3058	0.1878	0.0809	0.3003	0.3574	0.3289
6	1.9041	0.3485	0.1427	0.0032	0.6821	0.5368	1.8322	0.5481	0.6024	0.5469	0.8422	0.2472	0.3537	0.6781	0.5159
7	2.0154	0.6968	0.2331	0.0162	0.9942	0.3532	1.6286	1.0586	0.7188	0.6300	1.9211	0.4537	0.3639	0.9036	0.6335
8	2.4938	0.3956	0.6088	0.1087	0.5685	0.4949	1.6176	0.5714	0.7769	0.6021	0.8667	1.0300	0.3847	0.8997	0.6420
9	3.0517	0.4105	0.8770	0.1317	0.3750	0.5945	2.5245	0.5195	0.9042	0.7414	1.6041	1.3347	0.3558	1.1431	0.7492
10	3.4183	0.7378	1.1837	0.0686	0.8155	1.3587	3.4955	0.7183	1.2610	1.1567	2.8012	0.9724	0.6904	1.3736	1.0317
11	3.3534	1.2318	1.2085	0.1087	0.8542	2.2473	3.8850	1.1087	1.4979	1.4385	2.8480	0.4250	0.9169	1.4360	1.1762
12	1.8327	2.0068	1.1633	0.3044	0.9422	1.7941	2.2693	1.2609	1.3408	1.2228	2.0202	0.3366	1.0080	1.3525	1.1800
13	1.1822	1.9782	1.2521	0.4295	0.7401	1.8299	1.3932	0.9704	1.2356	1.0902	1.6081	0.5139	1.0877	1.2446	1.1658
14	0.9104	1.8437	1.3712	1.4821	0.7522	1.1228	0.9967	1.0185	1.2470	1.1383	0.9010	0.5119	1.4379	1.1727	1.3049
15	0.6375	2.4987	1.6606	2.4250	0.9108	0.9081	0.8541	1.4268	1.5073	1.3933	1.9352	1.0701	1.5494	1.2175	1.3831
16	0.3621	3.2406	2.3282	2.2224	1.1101	0.9757	0.5322	2.8921	1.7084	1.6736	1.5527	2.7020	1.3029	1.3792	1.3408
17	0.2602	2.3811	2.7676	2.2918	1.9025	0.8536	0.3607	3.0014	1.7443	1.8908	0.8405	4.3069	1.3020	1.2951	1.2982
18	0.2511	1.5512	3.2147	1.5752	2.5065	1.0107	0.2458	2.2920	1.6861	1.8838	1.0834	4.3850	1.2196	1.3296	1.2743
19	0.2109	1.0895	3.2651	1.1850	1.9371	0.4192	0.1729	1.6270	1.3517	1.5089	0.5276	3.6806	1.1232	1.5310	1.3268
20															
21															
22															
23															
24															
3	0.4226	0.8517	0.0386	0.0516	0.6783	0.1651	0.3930	0.3906	0.3699	0.2732	0.3610	0.1891	0.3088	0.4464	0.3776
6	1.3729	0.2336	0.0783	0.0120	0.4237	0.4921	1.3437	0.3499	0.4349	0.3954	0.4270	0.1362	0.3494	0.4969	0.4231
9	2.5203	0.5010	0.5730	0.0856	0.6459	0.4809	1.9236	0.7165	0.7999	0.6578	1.4640	0.9394	0.3681	0.9822	0.6747
12	2.8681	1.3254	1.1851	0.1606	0.8706	1.8000	3.2166	1.0292	1.3663	1.2725	2.5565	0.5780	0.8717	1.3871	1.1291
15	0.9100	2.1069	1.4280	1.4455	0.8010	1.2869	1.0813	1.1385	1.3298	1.2071	1.4814	0.6986	1.3581	1.2114	1.2844
18	0.2911	2.3910	2.7701	2.0298	1.8397	0.9467	0.3796	2.7285	1.7128	1.8160	1.1589	3.7979	1.2747	1.3346	1.3043
21															
24															
6	0.8977	0.5426	0.0584	0.0318	0.5510	0.3286	0.8683	0.3702	0.4024	0.3343	0.3940	0.1626	0.3290	0.4717	0.4003
12	2.6942	0.9132	0.8790	0.1231	0.7582	1.1404	2.5701	0.8728	1.0830	0.9653	2.0102	0.7587	0.6199	1.1845	0.9016
18	0.6006	2.2489	2.0990	1.7376	1.3203	1.1168	0.7304	1.9335	1.5212	1.5115	1.3202	2.2483	1.3163	1.2730	1.2942
24															
12	1.7960	0.7279	0.4687	0.0774	0.6546	0.7345	1.7192	0.6215	0.7429	0.6498	1.2021	0.4607	0.4745	0.8283	0.6506
24															
24	1.3350	1.2272	1.1307	0.6600	0.9323	0.8386	1.3256	1.0887	1.0206	0.9673	1.2039	1.1946	0.7746	1.0058	0.8892

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