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Title: A Climatology for Prescribed Fire in the Southeastern United States

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E. Wendell Hewson

One hundred twelve different sets of weather conditions are set forth for potential use by persons doing prescribed burning in the southeastern United States. Past weather records from 14 stations across the Southeast were examined for the period 1955 through 1964 to establish the number of days in which each of the 112 sets of weather conditions were met.

The elements making up each set of weather conditions are: wind speed, wind direction, relative humidity, and the duration of time these are maintained within prescribed ranges. Temperature and rainfall are considered separately and indirectly through the use of the National Fire Danger Rating System Buildup Index.

Tables are presented showing the number of days the respective weather conditions were met (in a ten-year period 1955-1964) as well as mean values per month. A table of respective standard deviations accompanies the monthly mean tables.

Utilizing the following criteria:

Relative humidity	- 20 to 49 percent
Wind speed	- four to 15 kts
Wind direction	- persistent within 56 degrees of the starting direction
National Fire Danger Rating System Buildup Index (BUI)	- 11 to 50
Duration in which the above must be simultaneously met	- six hours

the range of acceptable days in the ten-year period of study was from 2.8 percent of all days at Elkins, West Virginia, to 15.1 percent of all days at Macon, Georgia.

Considering a broader range of relative humidity (20 to 69 percent) and wind speed (four to 21 kts), the range of acceptable days is from 17.9 percent of all days at Montgomery, Alabama, to 33.3 percent of all days at Macon, Georgia. The above represent two of the 112 sets of weather conditions examined in this study. They demonstrate the effect of location and differences in weather criteria on the time available for burning.

Isoline analyses of days meeting several of the criteria are presented. These analyses provide a means of estimating time available at locations other than those at stations used in this study. These analyses appear to show that both the Gulf of Mexico and the mountains of the Southeast exert an influence on time available for burning. Proximity to both tends to reduce the amount of time available for burning. Proximity to the Atlantic coastline does not seem to exert a similar influence.

The tables produced by this study will enable persons using prescribed fire to make a more realistic estimate of the number of days suitable for their particular burning operation.

A Climatology for Prescribed Fire in the Southeastern United States

by

Robert Clay Lamb

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Professor of Atmospheric Science

Redacted for privacy

Chairman of Department of Atmospheric Science

Redacted for privacy

Dean of Graduate School

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INTRODUCTION

Fire in the forest is frequently thought to be undesirable. It is associated with a vivid mental picture of blackened wastelands which are the result of a "forest fire." News media report on fires that destroy thousands of acres of natural resources and at times result in the loss of life and property. Less publicized but no less important is the fact that fire in the forest may also be beneficial. In fact, fires have been used to bring about changes in the land cover type since the time of the Indians. More recently, fire in the South and Southeast has become one of the major tools used by the forester for the management of timberlands. This tool has become known as prescribed fire. Prescribed fire (32) is

> ...application of fire to natural fuels under conditions of weather, fuel moisture, soil moisture, etc., that will allow confinement of the fire to a predetermined area and at the same time will produce the intensity of heat and rate of spread required to accomplish certain planned benefits to one or more objectives...

The development and present magnitude of prescribed fire is demonstrated when compared acreage wise to the wildfires (unintentional forest fires requiring suppression action) for the states of the Southern Region shown in Figure 1.

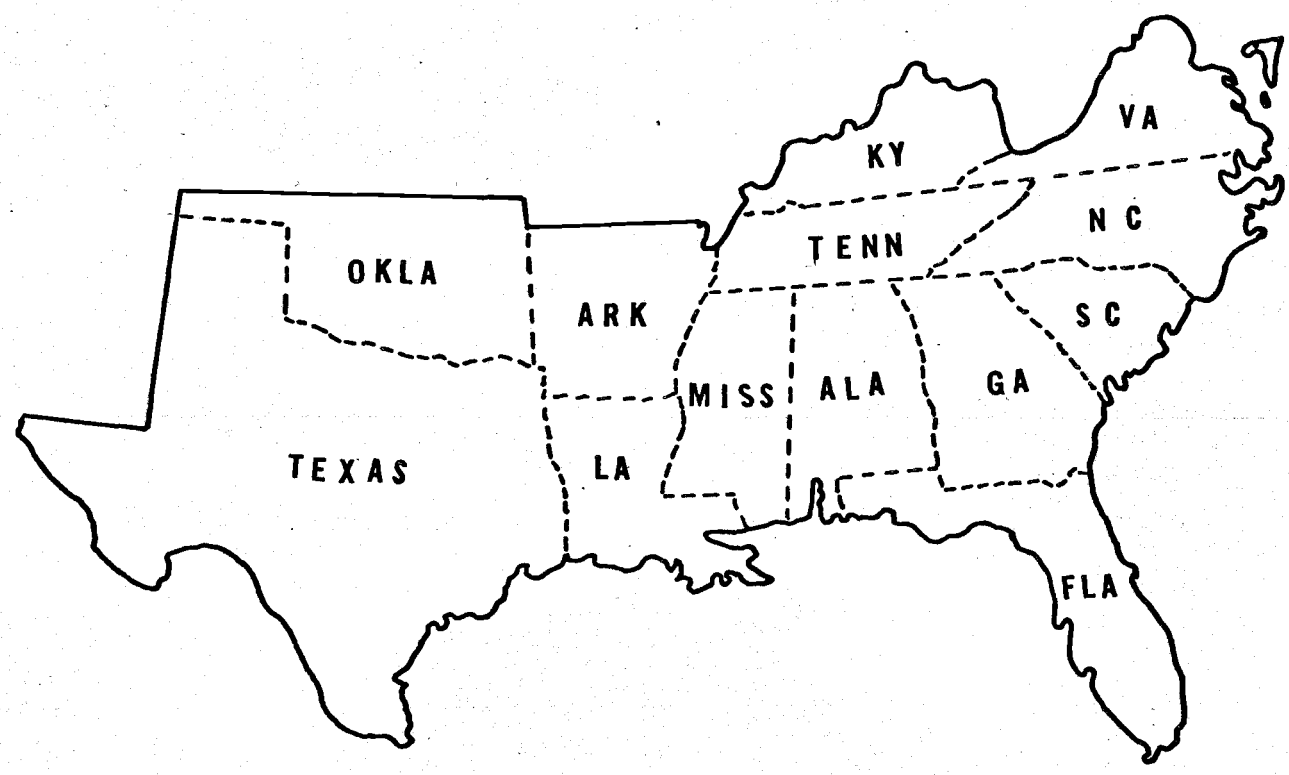


Figure 1.--Southern Region

The average acreage burned by wildfires from 1945 through 1964 was as follows (33):

1945 to 1950 average 16,883,853 acres per year

1950 to 1955 average 10,037,939 acres per year

1955 to 1960 average 3,970,842 acres per year

1960 to 1965 average 2,810,179 acres per year

Figures are not available for corresponding five-year periods for prescribed fire, but the ten-year averages covering the same total time period are (9):

1945 to 1955 average 504,686 acres per year

1955 to 1965 average 1,442,717 acres per year

In 1963, 1.95 million acres were burned by prescribed fire while 4.70 million acres were burned by wildfire. In 1964, 2.24 million acres were burned by prescription fires while 1.54 million acres were burned by uncontrolled forest fires. Two trends appear clear: (1) acreages burned by wildfire have decreased and (2) acreages burned by prescribed fire have increased. It is probable that more area is now burned by prescribed fire than is burned by wildfire. Furthermore, the use of controlled fire is far from its limit. It is estimated that ten million acres should be burned annually in the states shown in Figure 1 (9).

The above data show the position prescribed fire has achieved with respect to wildfire. By way of continued comparison, little meteorological research has been focused on prescribed fire.

Weather features associated with wildfires have been studied for several years. Attention should now be partially focused on prescribed fire.

The various objectives of prescribed burning give further impetus to the need for knowledge of weather factors in relation to prescribed burning operations. Some of these objectives as listed by Davis (11) are:

1. Hazard reduction.--Hazard reduction is simply burning to reduce the available fuel accumulation. The purpose is to prevent or reduce the severity of the unplanned fire that, under more severe weather and fuel conditions, would damage or totally destroy the forest.

2. Seedbed preparation.--Burning for seedbed preparation is essentially the removal of slash and other material by fire in order to produce a suitable seedbed. Natural seed fall or direct-seeding methods may then be used to regenerate the forest.

3. Game improvement.--Burning is used to make habitat more suitable for various wildlife species. Burning in Georgia or Alabama may produce conditions in which quail and turkeys will survive and propagate.

4. Improvement of livestock forage production.--Fire is used on rangelands to increase forage yields and quality (15).

5. Control of undesirable species.--Fire is used to destroy undesirable species to the benefit of more desirable species. Burning has been used to kill understory hardwoods, thereby aiding in the establishment of loblolly pine seedlings (4).

6. Brownspot control.--Brownspot (Scirria acicola) is a fungus needle disease that attacks several species of pine. The most severe problem in the South and Southeast resulting from this fungus occurs in the longleaf pine. Prescribed fire is used to help control the brownspot fungus.

7. Improve forest travel and visibility.--Burning aids travel and visibility for such forest operations as timber marking, logging, and naval stores production.

As research continues, other uses of prescribed fire will be developed. These may include more effective control of certain insects and diseases that attack the forest.

The fire objectives mentioned here require fires of different intensities. These range from hot fires designed to burn down to the mineral soil to cool burns that will not harm specified tree seedlings. The different fire intensities are achieved by burning under a variety of weather conditions and by using different firing techniques.

Thus, the need for weather information for prescribed burning comes about not only from total acreage burned, but also because of the diverse use to which the fire is put.

OBJECTIVE

Knowledge of the time available for burning is currently most useful to persons engaged in the long-range planning of prescribed burning. Should one, for example, consider treating 50,000 or 100,000 acres of timberland with fire in January for the control of undesirable species? Is it necessary to enlarge the burning crew size, or will the present crew be adequate to carry out the job? Can the burning be conducted under what might be considered the optimum conditions in order to successfully complete the task, or must one accept less desirable conditions? Are adequate weather conditions available for new applications of prescribed fire? These are a few of the questions that will be answered by providing information on weather conditions to be expected throughout the year in areas using prescribed fire for the management of timberlands.

The objective of this study is to isolate the time available for conducting prescribed burning in the southeastern United States.

LITERATURE REVIEW

Climatological studies designed to establish time available for prescribed burning have been conducted by Lamb (18, 19), Wasserman and Kanupp (35), and Sando (26). Lamb considered both night burning and day burning in Georgia. Wasserman and Kanupp conducted their study based on data from Columbia, South Carolina, while Sando's study was conducted using three stations in Minnesota. These studies were similar in that they established weather criteria considered acceptable for prescribed fire. Past weather records were then examined to determine the frequency of occurrence of the selected weather conditions. Sando (26) reports the criteria for an acceptable day as:

1. Fine fuel spread index - 15 to 35
2. Wind speed - five to 15 mph
3. Average relative humidity for the period 1000 LST to 1800 LST - less than 70 percent
4. No snow on the ground
5. Less than .01 inch of rain.

Considering the eight months from April through November, Sando found an average of 25 to 40 acceptable days per year, depending on the station used.

Wasserman and Kanupp (35) used the following criteria:

1. No precipitation between 1000 LST and 1600 LST
2. Average relative humidity for the period 1000 LST to 1600 LST less than or equal to 55 percent
3. All hourly values of relative humidity from 1000 LST to 1600 LST greater than or equal to 20 percent
4. All hourly wind speeds from 1000 LST to 1600 LST between five and 18 knots, inclusive
5. 1000 LST surface temperature greater than 32°F
6. No reported hourly wind direction between 1000 LST and 1600 LST varied more than 56 (two compass points on a 16-point compass) degrees from the 1000 LST wind direction.

With the above criteria, an average of 64 days per year were found at Columbia, South Carolina.

In addition to showing the number of days met by these criteria, Wasserman and Kanupp also show the number of days that were excluded or considered not acceptable because of failures of each of the respective criteria. This information lends considerable flexibility to their study results. This study was extended for use as a forecast tool by computing conditional probabilities of occurrence of favorable conditions extending through 1600 LST given specified conditions at 1000 LST.

Lamb (19) established the following limits for night burning in the lower Georgia Piedmont:

1. A potential night burn must start between the hours of 1800 LST and 0600 LST
2. Relative humidities must be in the 20 to 75 percent range for the five-hour period following the start of the potential burn
3. The wind speed must be between five and 20 mph for the six-hour period following the start of a potential burn
4. The hourly observed wind directions must stay within 56 (two compass points on a 16-point compass) degrees of the starting direction for six hours following the start of a potential burn.

Fifteen and 24 percent of the nights met the above criteria at two stations in Georgia.

Lamb (18) considered the major climatic elements that affect the prescribed fire climate to be (1) precipitation, (2) relative humidity, (3) wind speed, (4) wind direction, and (5) the length of time these elements are in a range adequate for burning. He also suggested the National Fire Danger Rating System's Buildup Index (23) be used in lieu of precipitation for a prescribed fire climatology.

Sando (26) and Wasserman and Kanupp (35) both acknowledge temperature as an important variable. Sando used temperature indirectly in his spread index criteria, while Wasserman and Kanupp required temperatures greater than 32°F.

Dixon (12) prepared a guide to aid the forester in planning and executing winter prescribed burning in the coastal plain of the Southeast. He stated,

> Preferred relative humidity for prescribed burning varies from 30 percent to 50 percent. Under special conditions, a wider range of relative humidities--as low as 20 percent and as high as 60 percent--can produce successful burns.

In addition, the preferred ranges for other parameters are:

1. Wind - five to 15 mph at 20-foot-exposed location
2. Temperature - 20 to 50°F
3. Fine fuel moisture - five to 15 percent.

If one used Dixon's temperature criteria for all prescribed burning, there would be few if any summer prescribed fires in the Southeast, which Brender and Cooper (4) say are successful in killing understory hardwoods. In fact, they show the summer fires produce significantly greater kill than the winter burns. Dixon (12) stated, "A calculated risk may be taken during periods of high temperature if the relative humidity, fuel moisture, and wind are high."

Lotti et al. (20) described favorable weather elements when burning for understory control:

1. Temperature - winter - 60°F or above
   summer - 90°F or above
2. Relative humidity - less than 50 percent
3. Wind direction - steady

4. Wind speed - one to seven mph at breast height in stand

5. Fuel moisture - less than ten percent.

They show the weather conditions that were present for 11 winter and 11 summer burns from 1946 through 1957. The maximum air temperature on these fire days ranged from 60°F to 99°F.

Taylor and Wendel (30) suggested the following guide for prescribed burning in eastern North Carolina fuel types:

1. If wind direction is predicted to vary more than $\pm$ 20°, it is usually better to put off burning to another day
2. Wind speed - six to 12 mph in the open
3. Relative humidity - 35 to 50 percent.

Beaufait (2) said "Foresters new to the field require guidelines for prescribed burning. Men who have planned and administered controlled burns in the past are the best sources of such information." On this basis, Beaufait interviewed 62 fire specialists, who had an accumulated prescribed burning experience of more than 700 fire seasons, to solicit responses on the requirements they put on prescribed fire. This study serves to demonstrate the contribution of human judgment toward requirements for prescribed fire. Their responses to (1) the maximum wind speed beyond which they would not burn and (2) the maximum and minimum relative humidities at the start of a burn are as follows:

Maximum speed (mph)	5 or less	10 or less	15 or less
Percent responses	21	65	14

Relative humidity (percent)	10-19	20-29	30-39	40-49	50+
Minimum (percent responses)	27	47	22	3	1
Maximum (percent responses)	--	3	36	36	25

Based on the responses of the 62 fire specialists, Beaufait said "There was no clear expression of the air temperatures most favorable for burning." Regarding the time burning should be initiated, Beaufait reported, "Ignition time should be determined by the job, not by the clock."

Krueger and Pachence (17) conducted a study of wind direction persistence for use in prescribed fire. The study was designed to show the wind directions that were most likely to persist for the six-hour periods following 1000 LST and 1800 LST. Three classes of wind direction change were considered:

1. Wind directions that varied less than 34° from the starting direction (no more than one compass point on a 16-point compass)
2. Wind directions that varied from 34° to 79° from the starting direction (between one and three compass points on a 16-point compass)
3. Winds that varied 79° or more from the starting direction (more than three compass points on a 16-point compass).

In this study, days were not considered when the wind speeds exceeded 20 knots or when the average relative humidity for the six-hour periods following 1000 LST averaged more than 70 percent.

Wind roses were presented for each month at each of five stations in Georgia, Florida, and South Carolina. They show the average number of days that winds persisted from a given direction in the above three classes.

PROBLEM APPROACH

Most investigators in the past have considered a single set of weather criteria adequate for prescribed burning. If one examines the problem carefully, it becomes apparent that a single set or combination of weather elements is not sufficient to provide the information necessary to make the most efficient use of prescribed fire. A single set of weather criteria can be expected to achieve one of the following:

1. Encompass all of prescribed fire with little or no information for specific fire objectives, or
2. Exclude certain prescribed fire objectives in order to be more specific with regard to others.

A more detailed look at some of the factors that determine the desired weather criteria will substantiate the above. At least six factors are involved in determining the weather conditions for a given burn. The schematic diagram in Figure 2 is intended to illustrate the factors that establish the required weather criteria.

Seven objectives that are sought by prescribed fire in the South and Southeast were discussed earlier. The differences in these fire objectives require several different weather prescriptions if the other factors shown are held constant.

Fuel type is ill defined throughout the South and Southeast with respect to fire behavior. Although fire behavior from grasslands

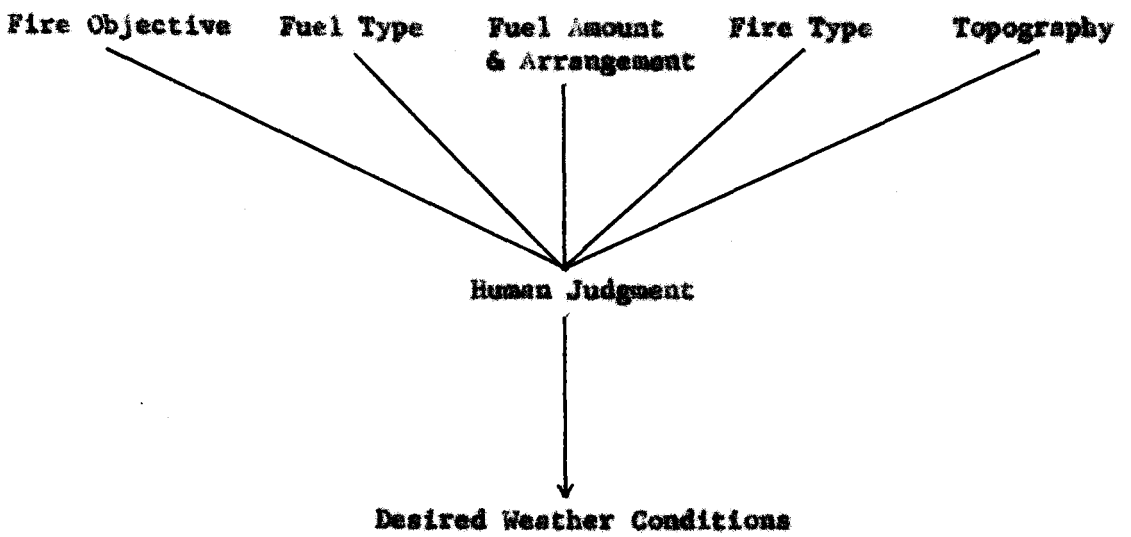


Figure 2.--Schematic diagram of factors that determine weather conditions for prescribed fire.

to timbered areas is expected to be different, documented information for detailed breakdowns is lacking. Studies are now being considered (25) to evaluate fire behavior in different fuel types in the South. The variation in fuel types may require several discrete weather criteria.

Fuel amount and arrangement is more nearly a continuous variable. For example, if the fuel is very heavy and continuous in three dimensions, one might desire weather conditions that would produce as light or cool a burn as possible. On the other hand, for light-to-medium fuels that are partially discontinuous, one might desire drier conditions with a fairly high wind speed.

Basically, there are three fire types. They are the head fire, the backfire, and the flank fire. The head fire moves with the wind, the backfire moves opposite the wind, and the flank fire moves roughly perpendicular to the wind. There are several ways in which these fire types can be employed--for example, a combination of the head and flank fire is used in the chevron burn (24).

Topography in the South and Southeast typically varies from the very flat coastal plain, to the piedmont with low rolling hills, and on to the mountains with fairly high local relief. Topography predominantly changes the requirements on wind speed and direction. The slope and valley winds come into play in the mountains. In addition, slope of the terrain alone is sufficient to carry a fire

through fuel. That is, in the absence of wind, a fire will move upslope as a head fire and downslope as a backfire. Thus, the requirements on the weather conditions in the mountains may be different from those in the coastal plain.

The contributions made through differences in human judgment were illustrated earlier in the discussion of Beaufait's paper (2). Until adequate research has been conducted to establish the correct contribution made by the factors just mentioned, the human-judgment factor will continue to be subject to considerable variation.

The number of variables contributing to the requirements for weather conditions for prescribed burning should make it clear that no single set of weather conditions is adequate for all of prescribed burning. Because of the uncertainty of the contributions to be assigned to the six or more variables, it is not even possible to set absolute limits on meteorological parameters for a specific fire. For these reasons, a somewhat different approach to the problem of determining time available for prescribed fire has been pursued. The approach is twofold:

1. To establish the outside limits on the major weather elements that contribute to the behavior of prescribed fire

2. To establish combinations of weather elements within the above limits such that an appropriate weather prescription can be found for nearly any burning situation. Past weather records are then examined to see how frequently these combinations or sets of weather conditions are met.

WEATHER ELEMENTS GOVERNING PRESCRIBED FIRE

In order to establish the outside limits on weather elements or even select the appropriate weather elements for prescribed fire, it is necessary to consider some fire and weather relationships. Basically, the various prescribed fire objectives are satisfied by burning the area with fire of suitable intensity. The major weather elements that allow us to achieve the different intensities for prescribed burning are moisture and wind.

The moisture may be in the form of water vapor, precipitation, or dew and is important primarily because it governs the moisture content of the fuel to be burned. That is, the fuel must be dry enough to burn yet not so dry that the fire cannot be contained. The wind speed should be sufficient to carry the fire through the fuel and dissipate the heat enough to prevent tree crown damage. The requirement on wind direction is that it remain reasonably steady in order to keep the fire confined to a predetermined area. The prescribed conditions of moisture and wind must exist long enough to complete the burning operation. These conditions delineate the meteorological domain within which all prescribed fires fall. In some areas, because of topography, the wind speed requirements are less because of the relationship between slope and fire spread.

Fuel Moisture

Dead fuel contains two water types. They are called bound water and free water. The free water may be considered equivalent in its properties to any open body of water. That is, it is in equilibrium with the atmosphere with respect to moisture exchange when the relative humidity is 100 percent. The free-water exchange in the fuel then acts in much the same way as if it were contained in an open glass instead of the fuel.

The other water type (bound water) reacts differently to the environment. In the process of becoming bound water, by way of becoming adsorbed by the cellulose fiber in the cell wall, the water undergoes a physical change. The important feature of the physical change with respect to fuel moisture content is that the saturation vapor pressure is reduced. The reduction of the saturation vapor pressure, in turn, means that water in the fuel can remain in equilibrium with the atmosphere at relative humidities of less than 100 percent.

One method of determining fuel moisture is by direct measure. This can be done by ovendrying fuel samples or it can be done by the Fisher titration process (22). Past weather records, however, contain no direct measures of fuel moisture and, therefore, the direct measures of fuel moisture are of no value for climatological study purposes. It is necessary to consider the indirect measures

of fuel moisture. It is here that the importance of the physical states of the water making up the fuel moisture become important. Since the bound water can be at equilibrium with the atmosphere when it is less than 100 percent relative humidity, the relative humidity of the air should be a good indirect measure of the bound water content. The free water, on the other hand, is more closely related to rainfall, dew, and days since rain, although again relative humidity is an important factor as it relates to rates of evaporation of the free water. In periods of low relative humidity with little or no rainfall, the primary water type making up the fuel moisture is bound water. When rainfall is plentiful, free water makes up the major portion of the water in the fuel. Bound water generally cannot account for more than 30 percent moisture content of litter fuels (22). The upper limit of the bound water is called fiber saturation point. The remainder of the fuel moisture, up to 225 percent or more, or whatever the field capacity (total amount of water than can be absorbed by the fuel) of the fuel is, must be contributed as free water.

Bound water - relative humidity.--The relationship between moisture content and relative humidity, up to what is called the fiber-saturation moisture content, is frequently depicted by the equilibrium moisture curves (EMC). An EMC curve is shown in Figure 3 taken from Stamm and Loughborough (29) for Sitka Spruce.

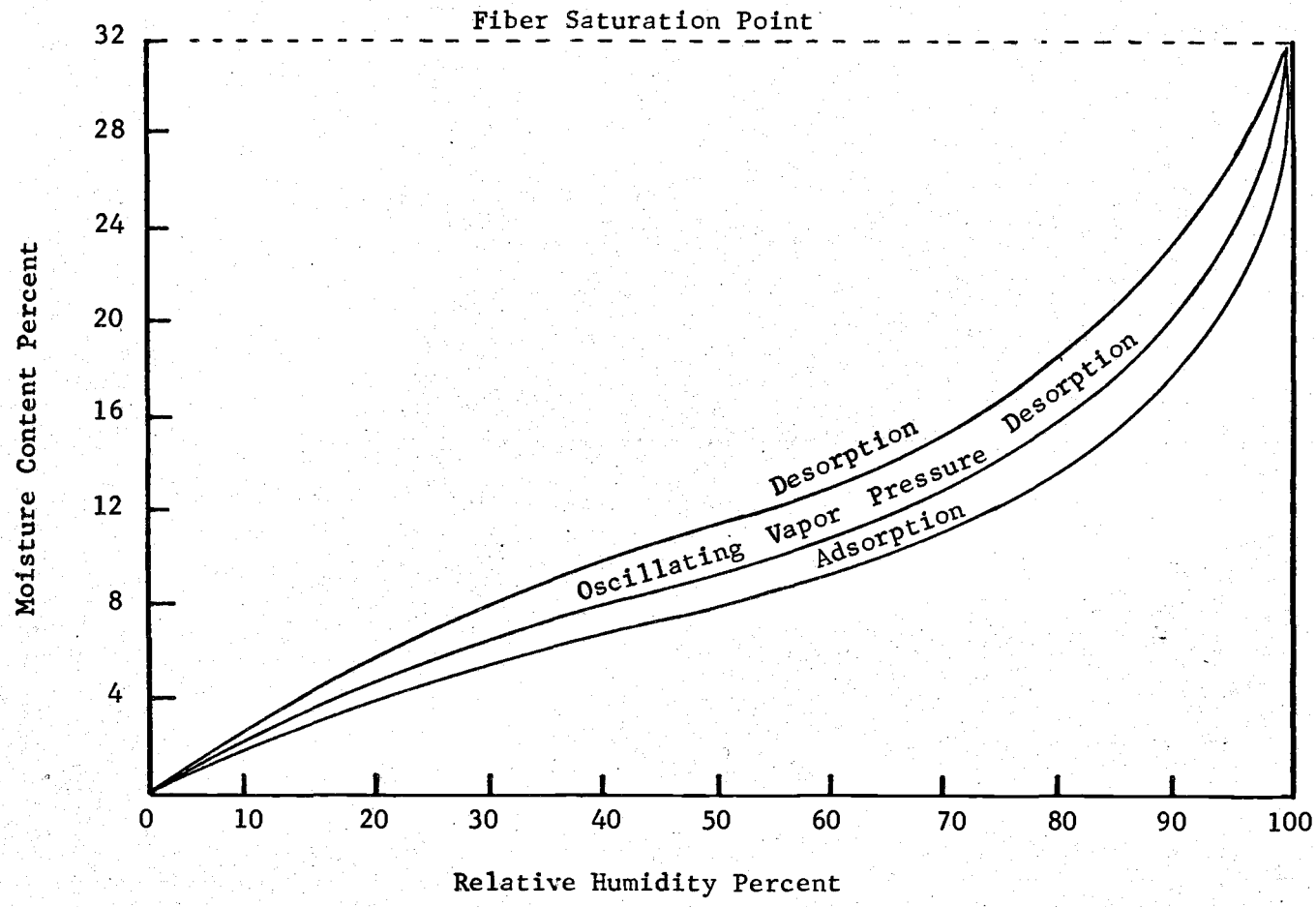


Figure 3.--Moisture content - relative humidity relationship for Sitka Spruce from Stamm and Loughborough (29).

This figure shows the hysteresis loop involved in the drying and wetting of the material. The lower curve is the adsorption or wetting curve. The upper curve is the desorption or drying curve. The curve between the adsorption and desorption curve is called the oscillating vapor pressure desorption curve. Stamm and Loughborough say this curve is the result of fluctuations in relative humidity, or temperature, or a moisture gradient in the material that is moving toward an equilibrium value. The curve to be applied to a given situation to achieve the equilibrium moisture content depends on whether the material was initially above or below the equilibrium moisture content for a given relative humidity and how carefully the drying or wetting is controlled.

Blackmarr (3) used eight to 15 percent fuel moisture content as an acceptable range for prescribed fire in southeastern pine forests. Byram et al. (7) stated that for fairly compact beds of pine needles, the limiting moisture content for combustion is near 20 percent. Gisborne (14) said, for white pine duff, "No ignition or spread occurred when the top layer of duff had over 18 percent moisture content." Gisborne also reported that flammability is extreme when the moisture content is below eight percent. Wright (36) said for mixed red and white pine and mixed jack pine, the degree of flammability is extreme when the moisture content is below ten percent.

It would seem that moisture contents between seven and 20 percent should encompass the majority of prescribed burning. It is recognized that certain fuels may burn adequately outside this range due to special characteristics that might allow them to burn at much higher moisture contents.

With the above-selected range of moisture contents, one can go to EMC curves for representative fuels and determine the equivalent range for relative humidity. However, at this point, one should consider how the natural conditions of temperature and humidity vary throughout the day in order to establish what part of the EMC curve to select. Stamm and Loughborough (29) suggest that the oscillating vapor pressure desorption curve for Sitka Spruce was produced by vapor pressure conditions that were not carefully controlled. Their chamber's temperature oscillated on an average of about 1/4°F about the control value, while the wet-bulb temperature range was about 1/2°F. In addition, their specimens were sufficiently large (3mm thick, weighing from 100 to 125 gms) to permit the setting up of moisture gradients across the sections during the drying process.

If one examines hygrothermograph traces, he finds fluctuations of the magnitude mentioned by Stamm and Loughborough the rule in nature rather than the exception. In addition, natural beds almost always have a moisture gradient which would lead one to the belief

that, under natural conditions, one should use the oscillating vapor pressure desorption curve which lies between the adsorption and the desorption curves.

Using this information, the author took Blackmarr's EMC curves (3) for eight light fuels and loblolly pine sawdust from the South and Southeast and, by an approximating technique, fit an oscillating vapor pressure desorption curve to each. These curves were then combined. Figure 4 shows the upper and lower limits of all the oscillating vapor pressure desorption curves derived from Blackmarr's work. If one now selects the relative humidity range equivalent to the moisture contents of seven and 20 percent, he will find values of ten and 85 percent, respectively. On this basis, as well as discussions with members of the Prescribed Fire Project at the Southern Forest Fire Laboratory (34), a range of ten to 80 percent relative humidity was selected to encompass most of the needs of persons doing prescribed burning.

The relative humidity parameter was chosen because it is included in each hourly weather observation and its hourly variation has a direct bearing on the changes in bound water that make up the moisture content of the small, fast-response fuels. Beyond the bound water is the free water which must first be removed before one even gets down to the moisture content ranges that will allow combustion.

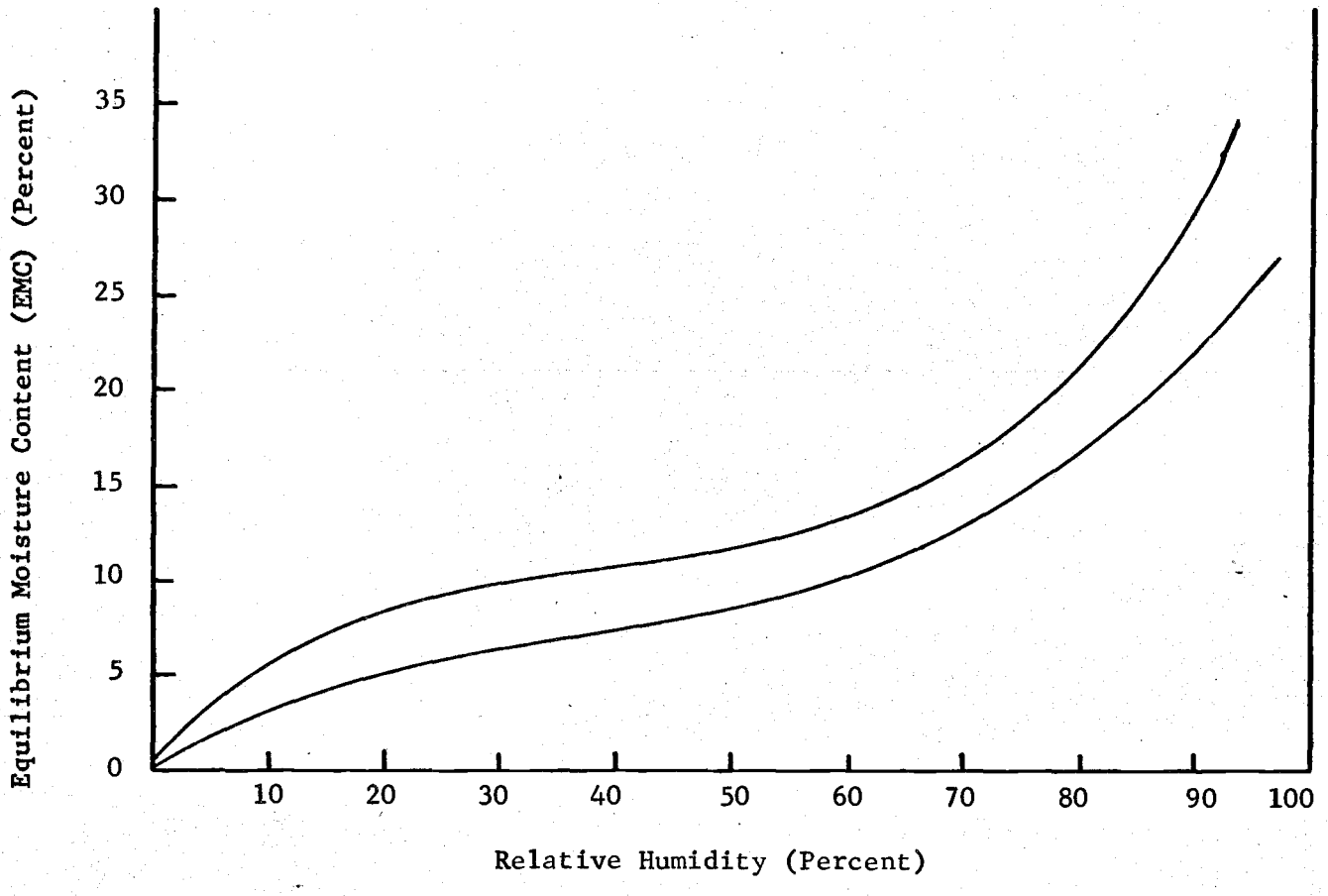


Figure 4.--Oscillating vapor pressure desorption curve range for eight southeastern fuels and loblolly pine sawdust derived from Blackmarr (3).

Free water - buildup index.--There are several factors to consider when examining the amount of water available to fuels as free water. In addition to total rainfall, the rate of rainfall, amount of effective rainfall (throughfall), the field capacity (total amount of water that can be absorbed), duration of rainfall, size, species, and amount of weathering of the material are all important factors affecting the amount of free water in forest fuels. Simard (28) shows some of the problems that presently exist in trying to establish the rates of wetting and drying of fuels above the fiber saturation point. It is sufficient here to say that all factors involved in the wetting and drying process of forest fuels have not been evaluated. Simard (27) says, "If only drying is considered important, time lag constant is probably the best method available today." The timelag refers to the time required for a material to achieve approximately 63 percent ((1-1/e) where e is the base of the natural logarithm) of the change required to achieve its equilibrium moisture content. Equations defining the timelag constant are given by Byram (5). The timelag concept allows one to work with the drying of forest fuels without specifically defining the fuels. That is, all fuels represented by a one-hour timelag constant may be considered. Simard (28) says the use of a wetting timelag is of limited value primarily because the wetting of fuels does not follow a smooth exponential curve.

Notwithstanding some of the problems that exist, the author decided to use the National Fire Danger Rating System's Buildup Index (BUI), (17), as a means of considering wetting and drying of fuels above the fiber saturation point. The BUI is defined as "a number expressing the cumulative effects of drying factors and precipitation in fuels with a ten-day timelag constant." (16). The BUI ranges from zero when fuels represented by the ten-day timelag constant are completely saturated to infinity if no recharge of the fuels ever occurred. A normal range of BUI values in the Southeast is from zero to about 120.

The BUI is computed on a daily basis from the 1300 LST weather observations of temperature and relative humidity and the previous 24-hour accumulation of precipitation. A BUI of 50 is equivalent to saying that the fuels represented by the ten-day timelag constant have undergone ten standard drying days (days with relative humidity of 20 percent and temperature of 80°F). The value of 50 incorporates the constant five times the number of standard drying days. The value of five was used for the convenience of field personnel. That is, they are able to use whole numbers for expression of the BUI rather than fractions.

If more than 0.1 inch of precipitation has not occurred in the 24-hour period ending at 1300 LST, the BUI is adjusted for drying in the following manner (16):

$$\text{(Number of std. drying days)} = \frac{(100-RH\%)\ (VP)\ (actual)}{(100-RH\%)\ (VP)\ (standard)} \qquad (1)$$

"Actual" refers to the conditions of vapor pressure and relative humidity measured on a given day for which the BUI increment is desired. "Standard" refers to a temperature of 80°F and a relative humidity of 20 percent which will produce a vapor pressure of 1.022 inches of hg. Temperature is reflected at this point in both the vapor pressure and the relative humidity. The number of standard drying days is then multiplied by the constant five and the result is added to yesterday's Buildup Index to produce today's Buildup Index. Thus, for the accumulated drying, the BUI makes use of the timelag concept.

If precipitation has occurred in the 24 hours prior to the 1300 LST observation, the BUI is adjusted by using an equation developed by Byram (6).

$$BUI = -50\ \ln\left(1-\left(1-e^{BUIY/50}\right)e^{-1.175(r-0.1)}\right) \qquad (2)$$

where

BUI = Buildup Index following rain

BUIY = Buildup Index computed from the 1300 LST observation on the previous day

r = rainfall in inches

This equation for the BUI recovery resulting from precipitation does not make use of a wetting timelag constant. The rate of wetting is

not considered here, but rather simply that a given amount of precipitation effects a given change in the fuel moisture content according to equation (2). Time is not a variable.

The BUI is not necessarily only a measure of the free water in ten-day timelag fuels. Keetch (16) shows an approximate relationship between the BUI and the moisture content of fuels represented by the BUI. The 30 percent moisture content occurs when the BUI is between 65 and 70. Thus, one would conclude that at BUI values greater than 70, bound water is being removed from or added to these fuels.

For lack of knowledge of limiting values on BUI for prescribed fire, the entire range was examined. That is, the outside limits on BUI were set at zero and the maximum value encountered in the data. This BUI range was then divided into smaller sub-classes.

In effect, fuel moisture content is evaluated in the following way. The relative humidity criteria are used to select days in which the light fuels will allow prescribed burning (ten to 80 percent RH). These days are then divided into BUI classes which should partially reflect the intensity of the burn to be expected. A high buildup, for example, should indicate a more complete burning of fuels, other conditions being equal, than if the BUI were low.

Wind

As indicated earlier, both wind speed and direction are important contributing factors to fire behavior and, as such, must be considered when planning for prescribed fire.

Wind speed.--Many foresters have considered wind speed as the speed at approximately four feet in the timbered stand. Even though the wind for the Spread Index phase of the National Fire Danger Rating System (2) has been standardized at a height of 20 feet in an openly exposed location, people are still interested in the in-stand winds. In fact, in criteria mentioned earlier, Dixon (12) and Lotti et al. (20)both state wind speed criteria for prescribed burning to be one to seven mph within the forest stand. It is quite possible that the best location for measuring winds that affect fire behavior in forests has not been found. Project THEO (31) has decided to acquire wind measurements from instruments located ten feet above the cab of 100-foot fire towers in order to get good exposure. It has not yet been shown that these are preferred locations for wind measurements. At any rate, the wind equipment at the first-order Weather Bureau stations used in this study was at heights varying from 20 to 75 feet above the ground at exposed airport locations. Cooper (8) conducted a study to relate wind speeds from a 20-foot open location to winds at four feet in loblolly-slash pine stands. His data show substantial reductions

in wind speed within the stand, depending on the stand height and basal area. For example, Cooper shows that a 16-mph wind in the open is reduced to a two-mph wind at four feet in a loblolly-slash pine stand that is 20 feet high and has a basal area of 100 sq ft/acre. Although Cooper's study did not consider winds greater than 16 mph at 20 feet, extrapolation of the derived relationships would indicate that a very high wind would be required to achieve a seven-mph wind in the stand just described. In reality, very little prescribed burning has been conducted at high wind speeds. This is not unexpected when one considers how high winds can produce erratic fire behavior. Crosby and Chandler (10) said,

> A surface fire in pine litter spreading at 10 chains per hour with the wind averaging 5 miles per hour would spread 11 feet farther than expected during a minute when the wind was blowing at 9 miles per hour. During that minute, it would burn at twice its average intensity and would be nearly three times as likely to jump a prepared fireline.

This does not mean, however, that certain prescribed fire objectives could not be met under conditions of high winds. Therefore, for this study, no upper limit has been set on wind speed.

A lower limit should be imposed on the wind speed unless one is burning in terrain in which the slope of the ground will be sufficient to carry the fire through the fuel. Even here, the wind helps dissipate the heat produced by the fire which, in turn, helps prevent crown scorch. The lower limit on wind speed has been placed at one knot.

Wind direction.--Earlier, three fire types were described. They were the head fire, the backfire, and the flank fire. In order to use any one of these fire types, one must know from what direction the wind is expected to blow. If one were to burn a stand on a given day with a backfire and if, after the fire was started, the wind shifted to produce a head fire, the results could be disastrous because of the pronounced differences in rates of spread, intensity, and flame heights between the two fire types. The requirement is persistence of wind direction for the duration of the burning operation.

The wind direction contained in the hourly surface observations used in this study were reported to 16 points of the compass. Thus, one might require directions for the duration of the burn period to persist within one, two, three, or more compass points of the starting direction.

The wind direction criteria selected for this study are the same as used previously by Wasserman and Kanupp (35) and Lamb (19). The hourly wind direction shall vary no more than two compass points (56 degrees) from the direction that starts a period meeting preselected criteria of relative humidity and wind speed.

Duration

Although duration is not a weather element, it is discussed here because of its necessary and close association to the weather elements as they affect prescribed fire. In order to successfully carry out prescribed burning, the conditions necessary for meeting the burn's objective must be maintained long enough to complete the burn. The length of time required to complete the burn, in turn, depends upon the number of men available for conducting the burn, the number of acres to be burned, and the type of fire to be used.

Brender and Cooper (4) found rates of spread to vary from about one to one a half chains per hour for downslope backfires to ten chains per hour for upslope strip head fires in Georgia's Piedmont loblolly pine stands. Dixon (12) said a backfire will normally move one to two chains per hour. Beaufait (1) found backfires in ponderosa pine needle fuel beds in the controlled environment of the laboratory to be independent of wind speed (at least up to eight mph) and nearly constant at 0.50 ft/min or approximately one-half chain/hr. Dixon (12) said that 1,000 acres is the largest single unit generally planned for a burn. He also suggested that the burning crew usually consists of about six men.

If a square plot of 640 acres is burned using backfires with spread rates of one chain per hour, 80 miles of fireline would be

required to complete the burn in one hour. If five hours are allowed, 16 miles of fireline are required. Allowing time for ignition, six hours is a reasonable duration for this particular burn. In other cases, using other fire types, the duration could be less than six hours, or more acreage could be planned for the burn. One might also utilize a somewhat smaller crew size. On this basis, six hours has been selected as the duration of time that the preselected weather criteria must persist. The six-hour period may begin with any hour from 0600 LST through 1800 LST.

COMBINATIONS OF WEATHER ELEMENTS EXAMINED IN THIS STUDY

A summary of the selected weather elements and their ranges to be considered in this analysis follows:

1. Relative humidity - ten to 80 percent
2. National Fire Danger Rating System BUI - no limits established--the entire range is examined
3. Wind speed - one knot and up
4. Wind direction - within two compass points of the first wind direction in which all other criteria are met
5. Duration - six hours.

In order to form the different combinations of weather conditions, the relative humidity range of ten to 80 percent was divided into 15 classes as follows:

Relative Humidity Classes in Percent

10 - 39	30 - 69	40 - 79	50 - 69
20 - 69	30 - 59	40 - 69	
20 - 59	30 - 49	40 - 59	
20 - 49	30 - 39	40 - 49	
20 - 39			

The above grouping examines the 50, 40, 30, 20, and 10 percent ranges from 20 through 69 percent, and also the 30 percent range from 10 through 39 percent and the 40 percent range from 40 through 79 percent.

The wind speed range was then divided into the following eight classes:

Wind Speed Classes in Knots

1 - 9	4 - 9	10 - 15	16 - 21
	4 - 15	10 - 21	16 - 99
	4 - 21		

This classification examines the 18-knot, 12-knot, and six-knot ranges from four through 21 knots, in addition to the one through nine and 16 through 99-knot ranges.

These relative humidity and wind speed classes provide the basis for the several combinations of weather criteria that are examined in this study. That is, for each relative humidity class, all wind speed ranges are examined so that all combinations of the two are included. For each of the 112 combinations of relative humidity and wind speed, each day was examined to see if there existed a time period of at least six hours' duration in which the given relative humidity and wind speed criteria were met, while simultaneously the wind direction did not vary more than two compass points from the starting direction.

The days that satisfied the above criteria were then further cross tabulated by months and the following 12 Buildup Index classes:

Buildup Index Classes

0 - 5	21 - 30	61 - 80	> 120
6 - 10	31 - 40	81 - 100	
11 - 15	41 - 50	101 - 120	
16 - 20	51 - 60		

These classes are smallest at the low end of the Buildup Index Range in order to provide more detailed information for prescribed fire. Due to control problems, little planned burning will be conducted on the highest BUI days.

DATA

The data for this study were hourly surface observations and hourly precipitation observations from the following first-order U. S. Weather Bureau Stations. Exceptions are Montgomery, Alabama, and Valdosta, Georgia, in which surface observations came from Maxwell Air Force Base and Moody Air Force Base, respectively.

	Station	Identification	Elevation (ft)
1.	Macon, Georgia	MCN	362
2.	Athens, Georgia	AHN	811
3.	Savannah, Georgia	SVN	48
4.	Valdosta, Georgia	VLD	265
5.	Jacksonville, Florida	JAX	31
6.	Florence, South Carolina	FLO	146
7.	Charleston, South Carolina	CHS	9
8.	Greensboro, North Carolina	GSO	886
9.	Roanoke, Virginia	ROA	1176
10.	Elkins, West Virginia	EKN	2006
11.	Bristol, Tennessee	TRI	1519
12.	Knoxville, Tennessee	TYS	980
13.	Nashville, Tennessee	BNA	605
14.	Montgomery, Alabama	MGM	202

These stations were selected for two reasons. First, they represent stations from the mountains, Piedmont, and Coastal Plains

of the Southeast; and second, they had nearly complete hourly surface and precipitation records for the ten-year period used in this study (January 1955 through December 1964). Athens' records extended from September 1955 through December 1964, and Montgomery's records were for the periods January 1955 through July 1956 and July 1958 through December 1964.

A map of the area with the stations included is shown in Figure 5. Elkins, Bristol, Knoxville, and Roanoke all are within the Appalachian ridge and valley and Blue Ridge Mountain section. Athens, Greensboro, and Macon are considered in the Piedmont, although Macon is very near the fall line. Nashville is west of the Appalachian ridge and valley section in the Cumberland Plateau. Savannah, Jacksonville, Valdosta, Florence, Charleston, and Montgomery are all in the Coastal Plain. Jacksonville, Savannah, and Charleston are representative of areas very near the coast, while Florence, Valdosta, and Montgomery represent more inland portions of the Coastal Plain.

The observations that were subjected to the criteria discussed earlier were from the hour of 0600 LST through 2300 LST. This choice of hours allows any given six-hour period to begin from 0600 LST through 1800 LST.

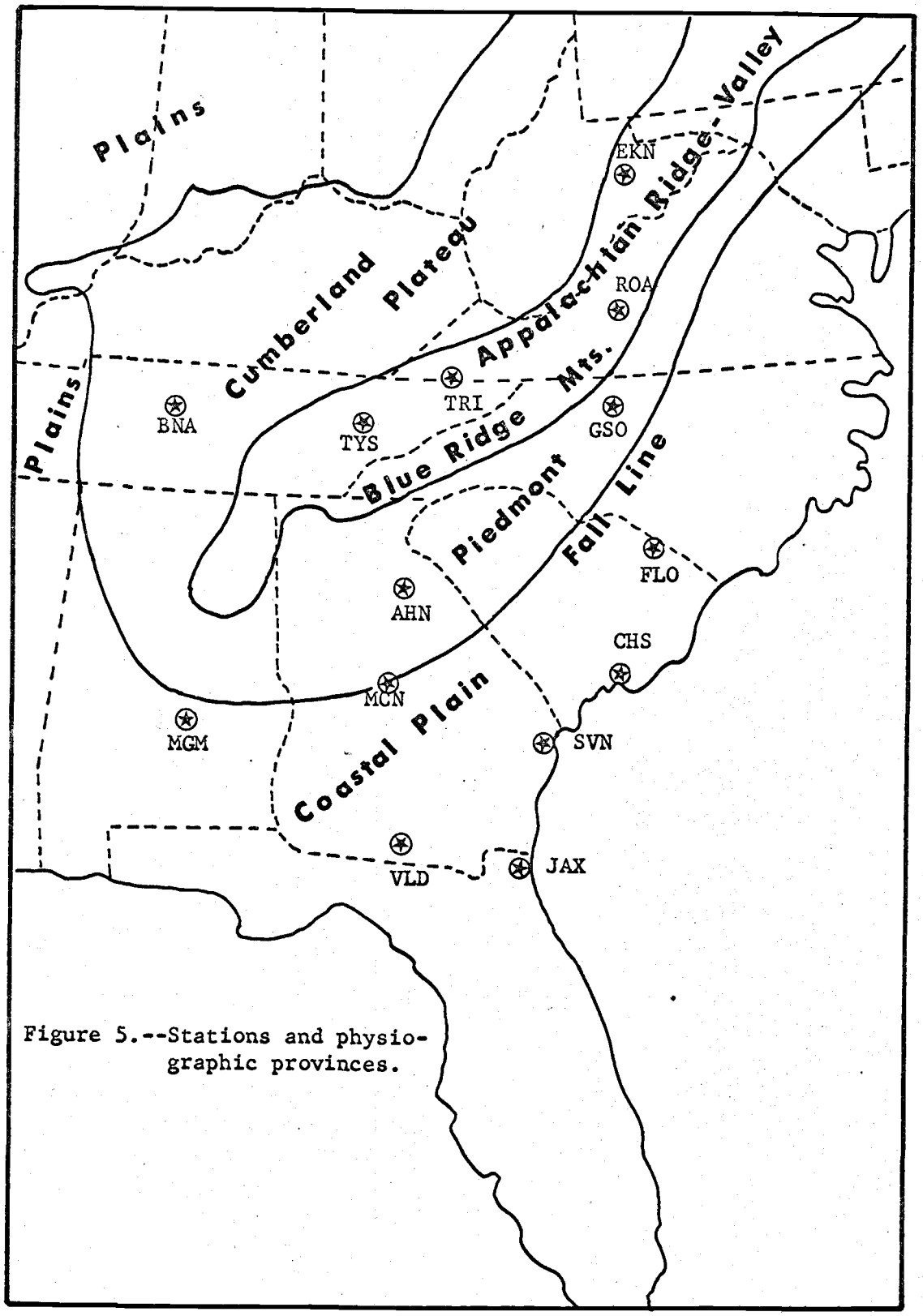


Figure 5.--Stations and physiographic provinces.

METHODS OF ANALYSIS

The method of selecting days that met each of the preselected weather criteria involved searching past weather records with an electronic computer. A series of eight computer programs were required to complete the major portion of the analysis. The schematic diagram in Figure 6 shows the flow of data from the time it came from the National Weather Records Center in Asheville, North Carolina, until the results were produced. Copies of all programs except the BMD08D (13) are listed in Appendix B.

Program I was required to remove the zone punches from the wind speed, dry bulb, wet bulb, and dewpoint temperature fields and replace missing observation values with "999". This program was necessary just to prepare the data for the next program. Program I was written in Autocoder language for the IBM 1401 computer.

Program II functioned to merge the hourly rainfall data tapes with the hourly surface observation data tapes and compute the National Fire Danger Rating System parameters, including the National System's Buildup Index. This program also computed several additional parameters not used in this study.

Program III built working tapes from the merged tapes produced by Program II. Its function was to select only the parameters necessary to continue the analysis. These parameters were year,

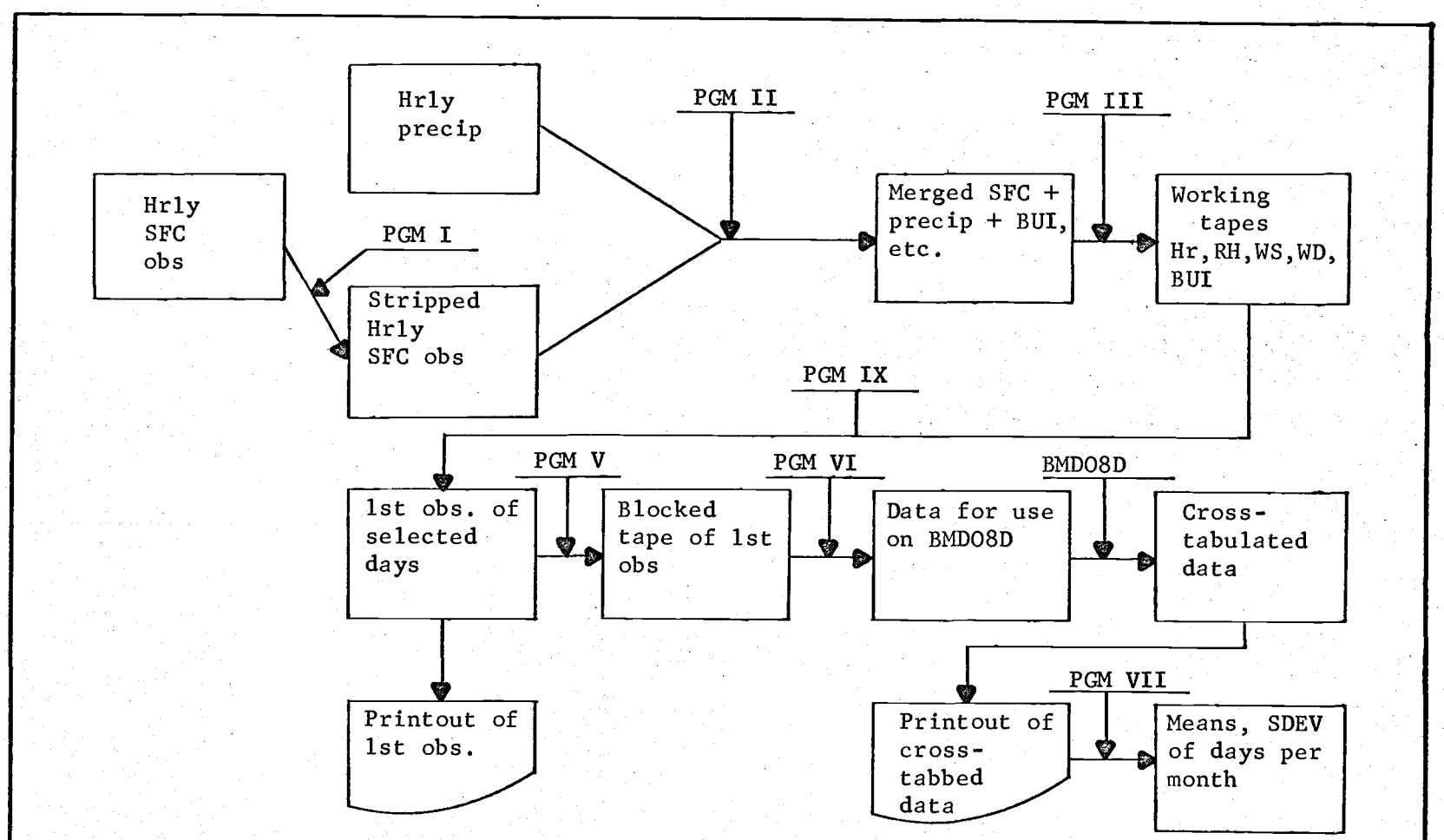


Figure 6.--Schematic diagram of data analysis

month, day, hour, relative humidity, wind speed, wind direction, and National System BUI for the hours 0600 LST through 2300 LST, inclusive, for all days of the ten-year period.

Program IV operated on the results of Program III and was the program that selected the days that met each of the 112 preselected criteria of duration, wind speed, relative humidity, and wind direction. It produced both printed output of the first observation of each day that met the above criteria and, as well, produced a new magnetic tape containing the same information for further analysis.

Program V blocked the data produced by Program IV into a tighter format so that it took less tape storage space. That is, it condensed the information on approximately one and one-fourth tapes so that it fit on one-third of a magnetic tape. This was done by increasing the density with which the data were stored on tape and removing most of the inter-record gaps in the unblocked tape.

Program VI allowed one to select any given number of records from the blocked tape produced by Program V so they could be operated on by the modified version of the BMD08D (13) program. Programs II through VI were all written in Fortran IV language.

The BMD08D (13) program computed two-way frequency tables of data input. This program cross tabulated the BUI with month, and

the years from which the data were selected with month. This program was produced at the Health Sciences Computing Facility at the University of California at Los Angeles. It could not be used in its library form, however. Two modifications were necessary to complete the job required by this study. In its library form, the BMD08D is limited to 1,500 observations per problem. The author modified this program to accept 2,500 cases. In addition, the program was modified so that it would not rewind the input data tape at the end of each problem. The output from this program was two two-way frequency tables for each wind speed - relative humidity group. This program was written in Fortran II language and produced printed output. The BMD08D and Program IV were run on the IBM 7094 computer. All others, except Program I, were run on the IBM 360 Model 65 computer.

Program VII computed the mean, range, upper and lower limits, standard deviation, and coefficient of variation for single variable data sets. This program was run on the results of the two-way frequency table of months and years produced by the BMD08D program. The purpose of Program VII here was to compute the mean number of days for each month for each relative humidity - wind speed group, as well as the standard deviation as a measure of dispersion. Program VII was written in conversational programming system language which is a subset of "Program Language One" (PL/1) developed by IBM.

RESULTS AND CONCLUSIONS

Table 1 portrays the results of the Program IV run on the IBM 7094 computer. This table lists all of the relative humidity and wind speed groups examined in this study in the first column. The 10-39/01-09 refers to the relative humidity class from ten percent through 39 percent, and the wind speed class of one through nine knots. All relative humidity values in tables to follow are in percent and all wind speeds are in knots. The second row, first column, refers to the ten through 39 percent relative humidity again, but this time combined with the wind speed class of four through 21 knots. Columns two through 15 contain the number of days from 1955 through 1964 that had at least six consecutive hours within the relative humidity and wind speed classes that begin each row. In addition, the reported wind direction for each of these six or more hour periods did not vary more than 56 degrees from the starting direction. Each of the columns from two through 15 represent the days from the respective station that heads the column. In other words, there were 125 days at Greensboro, North Carolina (GSO), in the period 1955 through 1964 that met the 10-39/01-09 relative humidity, wind speed, direction, and duration criteria.

Table 1.--Days meeting relative humidity, wind speed, wind direction, and duration criteria (10 years).

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	125	18	63	26	22	56	51	128	41	94	58	55	89	107
04-21	506	297	244	298	193	235	218	506	570	672	347	167	209	241
04-15	419	178	176	185	154	186	167	452	353	559	254	133	170	215
04-09	75	17	43	22	17	38	30	105	24	86	45	34	51	54
10-21	167	134	75	154	56	92	61	127	276	245	125	43	43	59
10-15	77	34	18	46	27	46	24	71	87	126	42	14	14	35
16-99	10	30	14	26	9	7	11	7	54	16	16	4	5	1
16-21	3	6	2	11	2	2	1	2	8	6	2	2	0	1
20-69/01-09	987	244	723	467	241	919	582	883	399	633	761	787	857	685
04-21	2084	1820	1674	1984	1361	1833	1482	2015	1931	2126	1894	1590	1204	1241
04-15	1935	1428	1451	1754	1184	1706	1322	1911	1405	1979	1681	1437	1097	1142
04-09	675	210	503	402	188	629	369	760	223	583	598	458	542	406
10-21	615	752	469	732	386	538	383	474	879	708	591	384	218	251
10-15	365	320	180	375	210	344	192	312	286	461	256	208	99	146
16-99	48	116	92	78	17	31	28	21	215	41	59	24	26	12
16-21	19	32	24	34	4	13	10	10	58	20	24	7	11	7
20-59/01-09	639	133	451	207	138	541	368	560	245	392	443	480	591	487
04-21	1624	1115	1217	1249	895	1331	1032	1504	1562	1718	1400	972	909	915
04-15	1472	826	1021	1040	752	1232	904	1399	1075	1568	1187	879	831	836
04-09	429	115	302	182	102	269	236	466	147	363	336	382	372	280
10-21	498	479	330	468	253	386	271	356	719	571	434	229	150	179
10-15	290	171	123	215	126	239	130	225	221	362	185	107	68	102
16-99	40	85	64	63	12	20	22	14	187	23	46	15	20	5
16-21	16	20	16	26	3	9	9	6	52	15	18	7	6	5

Table 1.--Continued.

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	312	53	205	70	56	228	172	283	129	192	193	219	296	243
04-21	1005	636	688	656	484	720	572	941	1043	1167	843	445	537	524
04-15	895	436	567	483	383	627	482	863	380	1013	678	384	473	476
04-09	190	45	142	61	41	152	110	238	71	179	143	114	182	148
10-21	316	279	177	272	134	236	151	228	490	384	256	95	90	98
10-15	175	90	60	98	56	129	68	138	149	225	105	40	42	55
16-99	23	55	35	41	9	14	14	9	112	16	28	7	7	4
16-21	8	12	9	17	3	7	4	5	24	12	6	3	1	4
20-39/01-09	104	17	55	24	18	55	44	94	29	52	54	51	82	99
04-21	436	277	221	280	182	231	196	407	467	530	321	154	193	218
04-15	366	166	158	176	145	184	150	365	280	433	239	123	161	195
04-09	56	16	36	20	14	36	26	76	20	50	42	32	51	53
10-21	136	129	70	141	55	90	55	101	221	188	111	37	35	47
10-15	70	34	17	44	26	45	23	58	67	98	39	13	14	26
16-99	9	24	12	18	6	6	8	4	38	7	12	4	3	1
16-21	4	4	4	8	2	2	1	2	5	4	3	3	0	1
30-69/01-09	852	217	652	423	223	879	504	742	358	506	694	711	777	598
04-21	1863	1650	1539	1846	1247	1750	1334	1752	1624	1826	1767	1498	1089	1099
04-15	1721	1278	1328	1622	1083	1640	1186	1652	1158	1677	1562	1347	994	1006
04-09	589	186	456	368	176	592	324	643	195	462	546	429	485	347
10-21	507	645	421	634	349	495	335	385	697	546	488	359	184	214
10-15	298	275	157	339	191	325	168	250	213	344	215	199	84	121
16-99	39	89	80	61	11	27	16	16	176	32	44	21	25	11
16-21	14	26	22	26	4	11	7	8	50	15	20	5	11	7

Table 1.--Continued.

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	495	105	375	165	119	496	287	411	204	261	373	411	507	394
04-21	1373	911	1057	1070	783	1249	868	1185	1236	1314	1227	858	778	758
04-15	1222	662	870	884	657	1157	754	1090	819	1179	1033	764	716	686
04-09	339	89	252	148	91	335	188	347	119	240	282	246	140	219
10-21	389	363	281	371	216	341	223	263	541	391	344	184	115	145
10-15	222	125	101	176	108	220	106	159	148	235	145	90	53	80
16-99	32	58	52	46	5	16	11	11	149	15	32	13	17	5
16-21	12	15	14	18	1	7	6	5	44	11	15	5	6	5
30-49/01-09	186	32	133	42	40	178	101	161	87	90	118	153	214	144
04-21	669	408	493	441	363	600	395	582	669	680	582	329	373	333
04-15	577	276	393	320	283	519	326	521	413	578	462	273	345	302
04-09	113	26	98	37	31	110	68	136	46	82	83	87	48	86
10-21	196	160	125	166	98	188	101	129	298	193	155	61	59	60
10-15	107	47	39	59	39	109	43	74	79	102	61	24	27	33
16-99	15	31	22	24	1	9	5	4	74	9	14	5	5	4
16-21	2	7	7	9	1	5	2	3	16	8	3	1	1	4
30-39/01-09	20	2	6	7	6	25	10	24	8	11	13	16	20	24
04-21	119	70	52	90	71	106	55	95	118	111	106	47	67	57
04-15	98	42	32	57	55	84	34	85	70	95	79	37	61	51
04-09	10	2	4	5	6	14	7	22	6	9	11	12	10	12
10-21	34	28	20	46	21	46	17	23	52	31	33	9	9	11
10-15	16	7	3	14	10	27	4	14	16	18	11	3	5	5
16-99	5	4	4	6	0	2	1	0	11	1	2	2	0	1
16-21	2	0	1	1	0	0	0	0	1	0	1	1	0	1

Table 1.--Continued.

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	903	285	700	650	294	1050	592	769	330	520	787	891	777	639
04-21	1723	1898	1597	2143	1383	1872	1330	1672	1340	1568	1769	1702	1058	1121
04-15	1601	1547	1379	1920	1227	1753	1192	1584	960	1459	1562	1564	971	1028
04-09	642	243	489	574	232	707	370	678	177	480	628	511	471	372
10-21	395	730	435	653	398	495	341	347	504	441	447	412	171	206
10-15	238	349	171	355	232	340	182	233	150	290	190	237	88	115
16-99	26	84	78	51	13	31	12	14	125	26	35	23	24	12
16-21	12	23	22	22	4	17	4	6	33	9	17	5	11	6
40-69/01-09	550	140	432	303	179	633	351	433	224	255	436	518	540	404
04-21	1316	1221	1143	1427	994	1390	969	1172	1068	1096	1247	1189	751	778
04-15	1211	946	961	1240	866	1289	862	1098	714	981	1063	1050	682	698
04-09	388	121	306	270	142	439	220	393	124	237	340	302	333	235
10-21	317	467	303	454	274	329	231	240	446	315	314	281	113	141
10-15	181	211	108	245	157	222	120	158	126	197	133	158	53	76
16-99	18	58	53	35	6	18	8	8	116	18	26	14	11	5
16-21	8	14	15	14	2	8	4	4	32	7	14	3	6	3
40-59/01-09	236	51	166	90	81	259	166	169	87	89	157	233	272	226
04-21	717	501	589	609	519	767	503	577	611	559	626	546	402	429
04-15	624	368	457	500	435	713	440	519	285	493	506	483	370	382
04-09	164	44	109	84	59	186	105	148	52	83	118	143	167	124
10-21	196	188	152	185	141	171	119	119	280	163	172	122	42	71
10-15	106	68	52	92	77	116	59	69	66	98	69	64	21	37
16-99	13	28	27	22	4	9	6	5	87	4	15	7	6	1
16-21	6	4	8	7	1	4	3	2	25	3	9	3	3	1

Table 1.--Continued.

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-49/01-09	44	5	12	3	16	30	20	30	15	11	23	40	52	34
04-21	126	81	86	87	117	158	105	103	143	98	118	64	84	72
04-15	104	53	62	66	82	142	86	92	73	85	96	56	74	64
04-09	24	4	8	3	11	21	13	27	5	10	15	18	28	22
10-21	40	34	23	26	30	44	22	18	49	21	28	10	5	9
10-15	22	11	6	11	10	29	9	10	16	11	11	5	3	3
16-99	2	5	4	5	1	4	2	0	20	0	3	0	0	0
16-21	0	1	1	1	1	2	1	0	1	0	0	0	0	0
50-69/01-09	179	54	177	129	80	230	130	152	98	63	129	195	189	133
04-21	520	688	538	722	558	659	455	456	433	339	482	590	285	306
04-15	463	510	427	617	484	585	380	428	284	289	395	513	243	267
04-09	139	44	124	112	66	170	80	137	55	57	96	108	115	76
10-21	113	257	149	219	148	161	129	83	160	99	127	155	46	58
10-15	58	117	47	125	81	103	59	55	41	58	53	85	16	31
16-99	6	29	28	13	3	10	3	4	35	10	15	5	6	3
16-21	0	5	4	6	0	4	0	1	7	2	6	1	4	1

The ten-year period from 1955 through 1964 contained a total of 3,654 days from which the number of days shown in Table 1 met the respective criteria. (The results from AHN and MGM were normalized to a ten-year base in order to provide comparable values.) The number of days meeting the individual criteria varied from zero to 2,126, depending on the station and the weather conditions being examined. This represents an overall range of from zero to 58 percent of the total days. Thus, for some of the criteria there simply is not time available in which to conduct burning, while for other weather conditions time is plentiful.

If, near Macon, Georgia, one requires the 20-49/04-15 set of weather conditions, he would find that in the ten-year period of the study there were 1,013 days that fell within this class. These 1,013 days represent an average of 101.3 days per year or 27.8 percent of the total time. Clearly, this is sufficient time in which to do considerable burning. If this same information were desired for Elkins, West Virginia, one finds 38.3 days per year average for the ten years representing 10.5 percent of the total time. In this case, one must consider planning burns with larger crews or fewer total acres than can be done at Macon. Similar comparisons can be made for any of the remaining criteria, either at one station or among stations.

Further breakdown from Table 1 is desired. Specifically, these data should be stratified by months in order to provide a more usable result. However, at this point, attention was focused on the possibility of grouping stations in order to make the final result more compact. Table 2 presents some statistics derived from Table 1. These statistics were computed in order to examine the possibility of station grouping. Columns one through five present the arithmetic mean (MEAN), the standard deviation (SDEV), the upper limit (UL), the lower limit (LL), and the coefficient of variation (CV) of each row of Table 1. The coefficient of variation in percent is

CV = (Standard Deviation/Arithmetic Mean) (100) (3)

The coefficient of variation is used for purposes of comparing the relative variation within one set of weather criteria with that of any of the others. The range of the coefficient of variation is from 16.8 percent for the 30-69/04-21 group to 166.7 percent for the 40-49/16-99 group. These data show all standard deviations to be greater than 15 percent of their respective means, and all but eight of the 112 sets of criteria have coefficients of variations exceeding 20 percent. Only 21 groups of the 112 exhibit coefficients of variation of less than 30 percent. The large variation in the relative dispersion of the distributions produced by the different sets of weather criteria leads one to be skeptical about the possibility of station grouping.

Table 2.--Statistics computed from table 1.

CRITERIA RH/WS	MEAN	SDEV	UL	LL	CV
10-39/01-09	67	35	128	18	52.7
04-21	336	155	672	167	46.1
04-15	257	128	559	133	50.0
04-09	46	26	105	17	56.1
10-21	118	70	276	43	59.5
10-15	47	31	126	14	66.0
16-99	15	13	54	1	88.9
16-21	3	3	11	0	88.0
20-69/01-09	655	232	987	241	35.4
04-21	1731	299	2126	1204	17.3
04-15	1537	292	1979	1097	19.0
04-09	468	172	760	188	36.8
10-21	527	189	879	218	35.9
10-15	268	97	461	99	36.3
16-99	58	53	215	12	91.4
16-21	19	14	58	4	71.7
20-59/01-09	398	163	639	133	40.9
04-21	1246	274	1718	895	22.0
04-15	1073	253	1568	752	23.6
04-09	277	108	466	102	39.0
10-21	380	154	719	150	40.6
10-15	183	79	362	68	42.9
16-99	44	46	187	5	103.9
16-21	15	12	52	3	81.8
20-49/01-09	189	83	312	53	43.6
04-21	733	221	1167	445	30.2
04-15	581	200	1013	380	34.3
04-09	130	57	238	41	44.0
10-21	229	113	490	90	49.1
10-15	102	53	225	40	52.0
16-99	27	28	112	4	103.6
16-21	8	6	24	1	73.8
20-39/01-09	56	28	104	17	50.9
04-21	294	116	530	154	39.3
04-15	224	95	433	123	42.2
04-09	38	17	76	14	46.0
10-21	101	55	221	35	54.4
10-15	41	24	98	13	58.3
16-99	11	10	38	1	88.4
16-21	3	2	8	0	63.3

Table 2.--Continued.

CRITERIA RH/WS	MEAN	SDEV	UL	LL	CV
30-69/01-09	581	209	879	217	35.8
04-21	1563	262	1863	1089	16.8
04-15	1375	256	1721	994	18.6
04-09	414	150	643	176	36.1
10-21	447	149	697	184	33.4
10-15	234	76	344	84	32.6
16-99	46	43	176	11	93.2
16-21	16	12	50	4	73.2
30-59/01-09	336	134	507	105	40.0
04-21	1048	210	1373	758	20.1
04-15	892	197	1222	657	22.1
04-09	217	87	347	89	40.1
10-21	298	111	541	115	37.4
10-15	141	54	235	53	38.7
16-99	33	36	149	5	110.0
16-21	12	10	44	1	83.3
30-49/01-09	120	55	214	32	46.0
04-21	480	128	680	329	26.7
04-15	399	109	578	273	27.3
04-09	75	32	136	26	43.2
10-21	142	64	298	59	45.0
10-15	60	29	109	24	47.4
16-99	16	18	74	1	115.2
16-21	5	4	16	1	80.0
30-39/01-09	14	8	25	2	54.4
04-21	83	25	119	47	30.0
04-15	63	22	98	32	34.7
04-09	9	5	22	2	52.2
10-21	27	14	52	9	49.8
10-15	11	7	27	3	61.8
16-99	3	3	11	0	100.0
16-21	1	1	2	0	100.0
40-79/01-09	657	227	1050	285	34.5
04-21	1584	296	2143	1058	18.7
04-15	1411	285	1920	960	20.2
04-09	470	165	707	177	35.1
10-21	427	143	730	171	33.4
10-15	226	81	355	88	35.9
16-99	40	32	125	12	82.0
16-21	14	9	33	4	62.9

Table 2.--Continued.

CRITERIA RH/WS	MEAN	SDEV	UL	LL	CV
40-69/01-09	386	144	633	140	37.4
04-21	1126	195	1427	751	17.4
04-15	983	188	1289	682	19.2
04-09	275	98	439	121	35.5
10-21	302	101	467	113	33.6
10-15	153	53	245	53	34.7
16-99	28	29	116	5	103.7
16-21	10	8	32	2	80.0
40-59/01-09	163	71	272	51	43.8
04-21	568	96	767	402	16.9
04-15	470	104	713	285	22.2
04-09	113	43	186	44	38.3
10-21	152	56	280	42	36.8
10-15	71	25	116	21	35.1
16-99	17	21	87	1	127.0
16-21	7	6	25	1	104.1
40-49/01-09	24	14	52	3	60.0
04-21	103	26	158	64	25.3
04-15	81	22	142	53	27.7
04-09	15	8	28	3	55.1
10-21	26	13	49	4	49.2
10-15	11	7	29	3	61.4
16-99	3	5	20	0	166.7
16-21	1	1	2	0	100.0
50-69/01-09	138	50	230	54	36.4
04-21	502	131	722	285	26.2
04-15	420	114	617	243	27.1
04-09	99	36	170	44	36.3
10-21	134	58	257	31	43.4
10-15	66	31	125	16	46.3
16-99	12	10	35	3	85.8
16-21	3	2	7	0	82.1

One can attempt to simply group the stations arbitrarily according to their departure from the mean of all stations. One might consider the following groups:

Group I $= (\bar{X} \pm 1/2$ (Standard Deviation))

Group II $> (\bar{X} + 1/2$ (Standard Deviation))

Group III $< (\bar{X} - 1/2$ (Standard Deviation))

This type of grouping is not consistent. That is, stations fall into different groups, depending upon the criteria being examined. Thus, while one could achieve grouping in this manner, it would not be uniform throughout the range of weather criteria examined here. Because the stations do not consistently fall into a single group, the end result would not appear to be reduced significantly in size which is the reason for grouping.

A logical grouping might also be by physiographic location. This grouping would produce stations grouped by Coastal Plain, Piedmont and Cumberland Plateau, and mountain and ridge and valley. Again the data from stations used in this study do not support a grouping of this type--at least not without additional stratification.

It appears appropriate to discuss briefly some of the reasons why station grouping is not easily achieved and why the coefficients of variation are as large as they are. First of all, the results presented in Table 1 are based on the simultaneous occurrence of several climatic elements. Thus, station-to-station variation in

any one of these is sufficient to produce station-to-station variation in the results presented in Table 1. Furthermore, it is difficult to establish which of the individual climatic elements is actually producing the variation.

It is to be expected that such natural features as proximity to coastlines, latitude, and elevation will affect the results in Table 1. The sea breeze, for example, may have an effect on the frequency of occurrence of time periods meeting any given set of weather criteria at Charleston, South Carolina, Savannah, Georgia, and Jacksonville, Florida. The distance from the Atlantic coastline in these cases should be the prime factor determining the frequency with which the sea breeze makes its influence felt.

There is also a wide variation in latitude (Elkins, West Virginia, to Jacksonville, Florida) as well as elevation (near sea level to over 2,000 feet). As mentioned earlier, the stations represent at least three distinctly different types of terrain (plateau, mountain, and coastal plain).

These considerations, as well as the differences in storm tracks over the entire area, must play a large role in producing the variation observed among the stations.

The lack of suitable station grouping has led the author to present the remaining results separately by station; i.e., the complete results without any station grouping.

Table 3 shows the results of Table 1 stratified by months. The values presented are the arithmetic mean number of days per month that met the respective criteria rather than the ten-year totals. Table 3 contains only 78 of the 112 original sets of criteria as those in which one or more of the 14 stations did not contain at least 100 acceptable days in ten years are omitted.

Table 4 presents the standard deviations associated with the respective means in Table 3. It contains standard deviations only of criteria in which there were at least 200 days in the ten-year period of record that met the respective criteria. The standard deviations of the remaining values are very small as evidenced by Table 4 values that approach 200 acceptable days per ten years. The smaller values were thus not computed and not included here. Table 4 should be used in conjunction with Table 3 as it provides a measure of the dispersion about the mean, experienced in the ten-year record from 1955 through 1964.

Tables 3 and 4 are set up in the same format as Table 1. That is, column one contains the weather criteria that are cross tabulated with the stations. Thus, each entry in column one represents a wind direction range and a duration criteria. With the desired criteria selected, one must then find the appropriate month for which information is required. The average number of days

(text continued on page 146)

Table 3.--Mean number of days/month meeting relative humidity, wind speed, wind direction, and duration criteria.

JANUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	2.3	.4	.3	.5	.1	.2	.2	2.4	.3	.9	1.2	.2	.7	1.1
04-21	4.9	3.4	1.4	2.7	.9	1.1	.8	5.1	4.2	5.0	2.8	1.0	1.9	1.8
04-15	4.3	2.2	1.0	1.5	.8	.9	.7	4.7	2.1	4.2	2.4	.7	1.5	1.7
04-09	1.4	.4	.3	.3	.1	.2	.2	2.1	.2	.8	.8	0	.2	.5
10-21	.8	1.1	.4	1.6	.1	.3	.2	.9	2.4	1.6	.7	.4	.5	.2
10-15	.4	.5	.1	.3	.1	.1	.1	.5	.3	.6	.2	.2	0	.1
20-69/01-09	10.1	4.0	6.5	5.8	2.1	7.0	4.6	8.7	4.0	6.9	7.2	7.0	6.2	5.1
04-21	18.7	17.6	13.5	18.3	10.2	13.2	10.1	16.4	19.0	17.5	16.4	12.6	9.4	10.0
04-15	17.0	13.7	12.1	15.2	9.1	12.2	9.1	14.9	10.9	16.0	14.2	10.7	8.0	9.2
04-09	7.3	3.7	5.2	4.5	1.8	5.2	3.2	7.2	1.7	5.9	5.8	4.2	3.7	3.2
10-21	5.8	8.4	4.6	8.0	2.8	2.9	3.6	4.1	10.9	7.2	6.9	3.6	2.7	2.0
10-15	2.8	3.4	1.8	3.6	1.9	1.6	1.8	2.6	1.9	4.6	3.0	1.5	.8	1.0
16-99	.4	.5	.8	.5	.2	.2	.4	0	4.0	.3	.6	.2	.2	.1
20-59/01-09	6.9	2.3	4.2	2.6	1.1	3.7	3.4	6.6	2.2	5.0	5.1	4.9	4.5	4.0
04-21	14.7	13.0	9.7	13.1	6.5	8.4	6.7	13.6	15.6	14.9	13.1	7.2	6.7	7.0
04-15	12.8	9.3	8.4	10.0	5.7	7.8	5.5	12.2	8.7	13.4	10.4	6.0	5.7	6.6
04-09	5.1	2.1	3.3	1.8	.9	2.7	2.5	5.5	1.3	4.5	4.0	2.9	2.5	2.0
10-21	4.7	6.6	2.9	5.7	1.6	1.5	2.0	2.9	9.1	5.7	5.6	1.4	1.6	1.2
10-15	2.1	2.2	1.2	2.3	1.0	.7	.6	1.8	1.5	3.8	2.1	.3	.3	.6
16-99	.4	.8	.3	.4	0	.1	.2	0	3.3	0	.4	.2	0	.1

Table 3.--Continued.

JANUARY

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
20-49/01-09	3.3	1.2	2.0	1.0	.4	1.6	1.4	3.7	1.0	2.6	2.9	2.3	6.8	1.9
04-21	10.1	7.9	4.2	6.4	3.3	3.6	2.7	8.8	10.4	10.2	7.2	3.0	4.1	3.9
04-15	8.5	5.1	3.8	4.3	3.0	3.3	2.2	7.0	4.2	9.0	5.7	2.3	3.6	3.5
04-09	2.4	1.0	1.7	.7	.4	1.2	1.1	3.2	.6	2.3	2.1	1.0	.9	1.1
10-21	2.9	3.9	1.0	2.6	.6	.7	.5	1.8	5.5	3.1	2.6	.6	.5	.7
10-15	1.1	1.5	.4	.6	.5	.3	.1	1.0	1.1	1.8	.9	.2	.2	.3
16-99	.3	.5	0	.2	0	.1	0	0	1.4	0	.1	.2	0	.1
20-39/01-09	2.0	.4	.3	.5	.1	.2	.2	1.5	.2	.4	1.2	.2	.7	1.0
04-21	4.0	3.2	1.2	2.5	.9	1.1	.8	3.8	3.5	3.8	2.4	1.0	1.6	1.8
04-15	3.5	2.0	.9	1.3	.8	.9	.7	3.6	1.7	2.9	2.2	.7	1.3	1.7
10-21	.6	1.1	.4	1.4	.1	.3	.2	.6	2.0	1.2	.4	.4	.1	.2
30-69/01-09	8.0	3.2	6.1	4.7	2.1	6.9	4.0	6.5	3.5	5.7	6.2	6.2	5.7	4.2
04-21	16.6	15.3	13.1	16.8	9.6	12.8	9.5	13.8	16.8	15.4	15.2	12.0	8.6	9.0
04-15	14.7	11.5	11.7	13.9	8.6	11.8	8.5	12.5	9.1	13.8	13.0	10.2	7.1	8.2
04-09	5.5	2.9	4.9	3.9	1.8	4.9	2.8	5.4	1.2	4.7	5.1	4.0	3.3	2.5
10-21	5.3	7.0	4.7	6.8	2.7	2.8	3.6	3.3	9.5	5.9	6.2	3.1	2.3	1.7
10-15	2.4	2.5	1.7	3.3	1.9	1.6	1.8	2.0	1.5	3.6	2.7	1.2	.7	.9
16-99	.2	.8	.8	.4	.2	.2	.3	0	3.7	.3	.4	.1	.2	.1

Table 3.--Continued.

JANUARY

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
30-59/01-09	4.5	1.5	3.7	1.5	1.1	3.3	2.7	4.6	1.7	3.2	4.2	4.0	3.9	2.9
04-21	12.3	10.6	9.2	10.9	6.0	7.9	6.0	10.8	12.8	11.3	11.8	6.2	5.7	5.6
04-15	10.2	7.2	7.9	8.0	5.3	7.3	4.8	9.6	6.7	9.9	9.2	5.2	4.7	5.2
04-09	3.3	1.3	2.9	1.1	.9	2.3	2.0	3.9	.8	2.9	3.3	2.6	2.1	1.3
10-21	4.1	5.3	2.9	4.5	1.5	1.4	2.0	1.9	7.5	4.4	4.9	1.0	1.2	.9
10-15	1.7	1.4	1.1	2.1	1.0	.7	.6	1.1	1.1	2.7	1.8	.1	.2	.5
16-99	.2	.3	.3	.3	0	.1	.1	0	3.0	0	.3	.1	0	.1
30-49/01-09	1.1	.6	1.7	.4	.4	1.3	.8	1.8	.5	.7	1.8	1.7	1.0	.7
04-21	6.2	4.9	3.8	4.1	2.8	3.1	2.0	5.3	7.4	5.5	5.0	1.9	2.9	2.1
04-15	4.8	3.0	3.4	2.6	2.5	2.9	1.5	4.6	4.1	5.0	3.7	1.5	2.5	1.9
04-09	.7	.5	1.4	.4	.4	.9	.6	1.5	.2	.7	1.3	.8	.5	.4
10-21	2.2	2.4	1.0	1.4	.6	.6	.5	.9	3.8	1.6	1.8	.2	.3	.4
10-15	.9	.8	.4	.5	.5	.3	.1	.4	.7	.8	.6	0	.1	.2
30-39/04-21	.7	.8	.8	.8	.5	.6	.4	1.1	.9	.3	.6	0	.5	.2
40-79/01-09	8.8	3.7	7.3	5.7	2.8	9.7	5.3	6.1	3.4	5.5	5.6	8.4	5.3	4.5
04-21	15.0	15.1	15.7	17.1	12.4	16.0	13.1	11.3	14.2	14.6	15.7	14.3	9.0	8.7
04-15	13.7	12.4	14.3	15.4	10.7	15.0	11.2	10.2	7.2	13.3	13.6	13.3	8.0	7.9
04-09	5.9	3.1	5.5	5.3	2.5	7.0	3.4	5.1	1.1	4.8	4.3	5.3	3.1	2.7
10-21	4.2	5.7	5.1	6.5	4.1	4.5	5.3	3.1	7.1	5.1	6.6	3.9	2.6	1.6
10-15	1.9	1.9	2.3	3.6	2.7	2.7	2.9	1.6	1.0	3.3	3.2	1.5	1.0	.5

Table 3.--Continued.

JANUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-69/01-09	5.1	1.7	5.0	3.2	1.8	5.6	3.1	3.4	2.6	3.1	3.7	4.8	3.7	2.7
04-21	11.5	10.5	11.4	12.3	7.8	10.8	8.3	7.7	12.3	10.3	11.4	10.2	6.9	5.9
04-15	10.1	7.7	9.8	10.2	6.8	9.9	7.3	6.7	5.7	9.0	9.1	8.5	5.6	5.2
04-09	3.4	1.6	3.7	2.8	1.5	3.8	2.0	2.9	.8	2.6	2.9	3.3	2.3	1.7
10-21	3.4	4.6	3.8	4.8	2.5	2.0	3.0	2.2	6.5	3.8	5.1	2.8	2.0	1.2
10-15	1.3	1.5	1.2	2.5	1.8	1.2	1.6	1.2	.8	2.5	2.1	1.0	.5	.4
40-59/01-09	1.7	.6	2.2	.7	.7	1.7	2.0	1.6	1.0	1.7	1.9	2.6	2.1	1.7
04-21	6.4	5.8	6.5	6.1	4.0	4.8	4.8	4.4	7.9	6.0	6.9	4.4	3.2	2.9
04-15	5.0	4.1	5.2	4.6	3.3	4.6	3.7	3.7	2.7	5.2	5.6	3.6	2.5	2.6
04-09	1.3	.6	1.6	.6	.5	1.2	1.4	1.3	.4	1.5	1.4	2.1	1.2	.7
10-21	2.4	2.5	1.7	2.2	1.3	.4	1.4	1.0	4.5	2.3	3.4	.7	.8	.4
10-15	.7	.4	.6	1.1	.9	.2	.4	.4	.5	1.5	1.2	0	.1	.1
40-49/04-21	1.0	.7	.8	.5	1.1	.5	1.0	.8	2.0	.8	.9	.3	.8	0
04-15	.6	.4	.6	.3	.9	.5	.6	.6	1.0	.8	.7	.3	.7	0
50-69/01-09	1.3	.4	2.6	1.4	1.1	2.3	.7	.7	1.4	.5	.8	1.9	.9	.7
04-21	4.7	4.5	6.6	5.5	5.0	6.3	4.2	2.5	5.4	2.8	4.2	5.1	2.7	2.4
04-15	4.0	3.3	5.0	4.4	4.2	5.5	3.5	2.0	2.5	2.3	3.3*	4.4	2.0	2.1
04-09	1.2	.4	1.7	1.2	.8	1.7	.5	.7	.5	.3	1.0*	1.5	.3	.5
10-21	1.0	2.0	2.4	2.0	1.4	1.4	2.1	1.1	3.0	1.2	2.0*	1.5	1.0	.6
10-15	.5	.8	.7	1.1	.9	.8	1.2	.6	.4	.7	1.0*	.9	.2	.3

*Interpolated value.

Table 3.--Continued.

FEBRUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	1.2	.2	.3	.1	.2	.4	.5	1.9	.5	.9	.6	.6	.3	1.0
04-21	4.5	3.4	.7	3.3	1.3	1.6	1.5	6.6	4.9	7.1	4.1	1.8	2.0	2.2
04-15	3.5	2.3	.6	1.9	1.1	1.4	1.1	6.3	2.6	5.7	3.0	1.4	1.8	1.8
04-09	.7	.2	0	.1	.2	.4	.3	1.6	.4	.8	.6	.1	.3	.5
10-21	1.5	1.8	.2	1.9	.3	.3	.3	1.2	2.1	3.3	1.7	.6	.3	.7
10-15	.8	.6	0	.6	.1	.2	.1	.7	.4	1.9	.8	.2	.2	.4
20-69/01-09	6.1	2.3	5.4	3.4	1.3	6.4	3.7	7.1	2.1	4.8	5.4	5.6	6.7	3.9
04-21	16.4	15.0	12.9	17.0	8.1	13.6	12.6	17.5	15.4	18.4	16.1	15.0	11.5	11.3
04-15	14.4	10.8	10.8	13.7	6.6	12.3	10.0	16.1	9.5	16.1	13.4	12.6	10.2	9.6
04-09	4.0	2.0	3.7	2.9	1.1	4.8	2.6	6.4	1.4	4.3	4.8	2.9	4.9	2.2
10-21	7.2	7.1	4.3	8.5	3.1	4.0	4.3	5.4	8.9	9.4	7.1	4.7	2.7	3.4
10-15	3.2	3.0	1.7	3.6	1.6	2.7	2.0	3.2	1.6	5.8	3.3	2.2	1.2	1.7
16-99	1.0	.6	.8	2.1	0	.5	.2	.4	3.4	1.0	.8	.6	.2	.3
20-59/01-09	4.7	1.4	3.4	1.5	.6	3.5	2.7	4.8	1.6	2.9	3.6	3.6	5.1	3.2
04-21	13.7	10.3	9.6	11.2	5.5	9.0	8.2	14.2	13.2	15.0	13.7	9.1	9.4	7.9
04-15	11.4	7.3	8.0	8.8	4.5	8.3	6.8	12.8	7.7	12.8	11.0	7.6	8.5	6.6
04-09	3.0	1.2	2.0	1.5	.4	3.0	1.7	4.4	1.2	2.5	3.1	1.7	3.6	1.8
10-21	6.1	5.0	3.3	5.5	1.9	2.5	2.8	4.1	7.5	7.5	5.7	2.7	1.8	2.2
10-15	2.6	1.7	1.4	2.3	1.2	1.8	1.3	2.4	1.2	4.4	2.6	1.3	.9	1.1
16-99	.7	2.0	.5	1.6	0	.2	.2	.3	3.2	.6	.6	.2	.2	0

Table 3.--Continued.

FEBRUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	2.6	.7	1.5	.6	.5	1.4	1.1	3.4	1.0	1.0	1.8	1.6	2.4	2.0
04-21	8.9	7.1	5.8	6.4	2.8	4.6	4.5	10.6	9.1	10.6	9.8	5.3	5.8	4.9
04-15	7.5	5.1	4.6	4.3	2.2	4.1	3.2	9.9	3.2	8.5	7.1	4.3	5.2	4.2
04-09	1.5	.5	1.0	.6	.4	1.1	.7	3.0	.8	1.0	1.6	.6	1.9	1.2
10-21	3.8	3.4	1.8	3.2	.7	1.4	1.4	2.6	4.4	5.0	3.6	1.2	1.0	1.1
10-15	1.8	1.1	.4	1.0	.2	1.0	.5	1.6	.9	3.2	1.4	.2	.8	.5
16-99	.2	1.2	.2	.8	0	.2	.1	0	1.7	.5	.3	0	0	0
20-39/01-09	1.1	.2	.3	.1	.2	.4	.5	1.3	.3	.6	.6	.4	.3	.7
04-21	4.2	3.2	.7	3.2	1.2	1.6	1.4	5.6	4.3	5.4	3.6	1.5	2.0	1.8
04-15	3.2	2.1	.6	1.8	1.1	1.4	1.1	5.3	2.1	4.2	2.7	1.1	1.8	1.5
10-21	1.4	1.8	.2	1.7	.2	.3	.3	1.2	1.9	2.6	1.3	.5	.3	.4
30-69/01-09	5.2	1.9	4.6	2.9	1.1	6.3	3.2	5.2	1.6	3.4	4.7	4.6	5.9	3.0
04-21	14.5	13.0	12.2	15.7	6.9	12.9	10.9	13.9	12.4	15.3	14.3	14.2	10.2	9.6
04-15	12.7	9.0	10.1	12.3	5.5	11.7	8.8	12.6	7.4	13.1	12.0	11.8	9.2	7.9
04-09	3.4	1.8	3.5	2.5	.9	4.3	2.3	4.8	1.0	3.0	4.1	2.6	4.3	1.6
10-21	6.3	5.9	4.1	7.7	3.0	3.8	3.9	4.4	7.3	7.2	6.0	4.5	2.1	3.2
10-15	2.7	2.5	1.7	3.2	1.6	2.7	1.9	2.5	1.4	4.4	2.8	2.0	.9	1.6
16-99	.8	1.8	.8	1.8	0	.4	0	.4	2.9	.6	.6	.5	.2	.3

Table 3.--Continued.

FEBRUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	3.7	.9	2.6	1.2	.4	3.3	2.2	3.1	1.1	1.5	3.0	2.8	4.3	2.3
04-21	11.7	7.6	8.7	9.8	4.2	8.3	6.3	10.0	10.1	11.0	12.0	8.2	7.9	6.0
04-15	9.6	5.0	7.1	7.4	3.4	7.7	5.5	8.7	5.6	9.1	9.7	6.7	7.2	4.8
04-09	2.3	.8	1.8	1.2	.2	2.5	1.4	2.9	.8	1.4	2.6	1.5	3.0	1.1
10-21	5.0	3.5	3.1	4.8	1.8	2.3	2.4	3.0	5.8	4.9	4.3	2.4	1.0	1.9
10-15	2.0	1.1	1.4	1.8	1.2	1.8	1.2	1.6	1.0	2.8	2.0	1.1	.5	1.0
16-99	.5	1.7	.5	1.3	0	.1	0	.3	2.7	.2	.3	.2	.2	0
30-49/01-09	1.5	.4	.9	.3	.3	1.1	.6	1.7	.5	.2	1.0	1.2	1.6	1.1
04-21	6.0	3.9	4.5	4.3	1.6	3.6	2.7	5.6	5.8	5.3	6.7	4.1	4.0	2.8
04-15	4.8	2.6	3.4	2.7	1.1	3.2	1.9	5.0	3.4	4.1	4.8	3.2	3.7	2.3
04-09	.9	.3	.8	.3	.2	.6	.4	1.5	.4	.2	.9	.6	1.2	.5
10-21	2.7	1.7	1.6	2.1	.6	1.3	1.0	1.3	2.8	2.1	2.0	.9	.3	.8
10-15	1.2	.4	.4	.6	.2	1.0	.4	.7	.7	1.2	.8	.1	.3	.5
30-39/04-21	1.2	.5	.2	1.0	.1	.7	.1	1.1	1.0	.6	1.3	.5	.8	.3
40-79/01-09	3.6	1.6	4.7	2.9	1.5	7.2	3.5	3.0	1.5	2.7	4.0	4.7	4.7	2.6
04-21	12.3	12.7	12.8	15.6	9.6	14.7	11.2	10.7	10.0	12.2	13.9	13.1	10.7	10.0
04-15	10.4	9.6	10.4	11.9	8.1	13.3	9.3	9.4	5.7	10.7	10.7	11.3	8.9	8.4
04-09	2.5	1.5	3.5	2.5	1.4	5.4	2.3	2.6	.8	2.4	3.3	2.5	3.2	1.4
10-21	4.6	6.2	4.0	8.0	3.8	4.8	4.7	4.0	5.6	5.8	5.6	4.5	2.0	3.2
10-15	1.9	2.7	1.6	2.5	1.9	3.1	2.6	2.3	.8	3.5	1.9	2.1	1.0	1.4

Table 3.--Continued.

FEBRUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA MM/WS														
40-69/01-09	2.2	1.2	3.2	1.4	1.0	4.9	2.2	1.9	1.1	1.8	2.6	2.7	3.2	1.6
04-21	8.7	8.3	9.0	11.4	6.3	10.5	8.4	8.2	8.2	8.6	9.8	9.6	6.5	7.3
04-15	7.1	5.7	7.2	7.8	4.9	9.4	6.8	.70	4.2	6.9	7.4	7.7	5.1	5.8
04-09	1.3	1.1	2.3	1.3	.8	3.3	1.6	1.7	.6	1.7	2.2	1.3	2.3	.9
10-21	3.9	3.7	2.4	6.1	2.8	2.6	3.1	2.9	5.0	4.1	3.8	3.3	1.5	2.3
10-15	1.3	1.6	1.1	2.0	1.4	1.7	1.5	1.4	.6	2.2	1.6	1.5	.5	1.0
40-59/01-09	.8	.4	.8	.5	.3	1.9	1.3	.8	.5	.7	.9	1.2	1.6	1.0
04-21	4.6	3.3	4.7	4.2	3.5	5.0	4.0	4.3	4.9	4.6	5.6	3.8	3.5	3.2
04-15	2.9	2.2	3.8	2.9	2.8	4.6	3.7	3.2	1.8	3.4	3.8	2.9	2.6	2.3
04-09	.6	.4	.4	.5	.1	1.4	.8	.8	.3	.6	.8	.5	1.0	.5
10-21	2.5	1.4	1.3	2.1	1.6	1.1	1.6	1.6	3.2	2.1	2.1	1.4	.5	1.0
10-15	.7	.4	.9	.6	1.0	.8	.9	.6	.1	.9	.8	.7	.1	.4
40-49/04-21	.7	.7	.8	.4	.7	.8	.8	1.1	1.0	.9	1.1	.4	.8	.6
04-15	.3	.6	.5	.2	.4	.6	.5	.8	.1	.7	.8	.1	.7	.5
50-69/01-09	.9	.2	1.5	.6	.5	2.4	.7	.7	1.3	.7	.3	.8	1.6	.5
04-21	3.3	3.4	4.7	4.9	3.8	6.0	5.1	3.2	4.2	3.3	2.7	5.0	2.6	3.5
04-15	2.5	2.0	3.7	3.6	2.9	5.4	3.7	2.9	2.2	2.8	2.2*	3.8	2.0	2.5
04-09	.4	.2	1.2	.6	.5	1.6	.6	.6	.1	.6	.7*	.5	1.1	.2
10-21	1.1	1.7	1.3	2.2	1.4	1.4	2.0	1.1	2.1	1.8	1.6*	1.8	.9	1.0
10-15	.5	.8	.5	.9	.5	.9	.8	.7	.2	1.1	1.7	.6	.2	.2

*Interpolated value.

Table 3.--Continued.

MARCH

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	1.6	.1	.6	0	.4	.7	.9	2.2	.9	1.2	.3	.8	1.5	1.8
04-21	9.0	6.7	5.4	5.6	3.8	4.5	3.9	10.2	9.3	9.8	5.6	3.4	3.6	4.0
04-15	6.7	3.8	3.1	2.9	3.0	3.4	2.5	8.9	5.5	7.0	3.2	2.3	2.7	3.2
04-09	1.2	.1	.5	0	.3	.7	.7	1.7	.3	1.0	.2	.5	.5	.5
10-21	4.5	3.3	2.3	3.7	1.3	2.3	1.1	2.7	4.5	5.2	3.0	1.0	.8	1.8
10-15	1.9	.7	.5	.9	.6	1.0	.2	1.5	1.0	2.0	.6	.1	.1	1.0
20-69/01-09	6.5	.6	4.9	2.1	.9	7.0	3.3	6.4	1.6	2.9	4.6	8.0	5.6	4.8
04-21	20.7	18.4	17.2	19.2	12.7	17.5	15.3	18.5	16.7	18.5	17.9	19.7	12.6	15.3
04-15	17.2	12.4	13.3	14.6	9.1	15.9	11.6	16.9	10.0	15.0	13.0	16.5	10.2	12.8
04-09	4.4	.6	3.8	1.7	.5	5.0	2.0	5.4	.9	2.8	3.8	5.0	2.5	2.9
10-21	9.7	10.2	7.1	10.5	5.6	7.8	6.8	6.2	9.5	9.7	93.	6.6	4.6	5.6
10-15	4.9	3.0	2.0	4.9	2.0	4.4	3.0	3.7	2.0	3.9	2.8	2.1	2.1	2.7
16-99	1.5	.7	2.4	2.5	.5	1.0	.8	.6	4.7	1.2	1.8	.5	1.2	.3
20-59/01-09	5.1	.5	3.0	.9	.8	4.5	2.6	4.7	1.1	2.2	3.3	5.3	3.3	4.0
04-21	17.8	1.40	13.3	14.5	9.4	13.7	12.1	15.1	14.6	15.9	14.3	14.2	10.0	12.8
04-15	14.4	8.9	9.8	10.3	6.8	12.5	9.0	13.7	8.2	12.4	11.0	10.9	7.9	10.5
04-09	3.6	.5	2.0	.7	.5	3.1	1.8	3.7	.6	2.2	2.8	3.2	1.5	2.4
10-21	8.6	7.5	5.6	7.7	4.0	5.8	4.8	5.0	8.3	8.2	7.3	4.5	2.7	4.5
10-15	4.4	2.3	1.7	3.1	1.4	3.2	2.0	3.0	1.3	3.4	2.0	1.0	1.1	2.0
16-99	1.3	2.2	1.7	2.1	.3	.8	.6	.4	4.2	.7	1.4	.3	1.0	.2

Table 3.--Continued.

MARCH

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	3.4	.3	1.7	.1	.4	1.9	1.8	2.6	.8	1.0	1.4	2.8	2.2	2.6
04-21	13.0	10.0	9.5	9.4	6.3	9.0	7.9	12.1	10.9	11.8	10.6	8.8	7.0	7.6
04-15	10.1	5.9	7.1	5.6	4.4	7.4	6.1	10.8	4.1	8.1	7.9	6.2	5.5	5.9
04-09	2.5	.3	1.1	0	.3	1.6	1.3	2.2	.3	.9	1.0	1.6	1.1	1.4
10-21	6.5	5.0	3.6	5.7	2.4	3.9	2.8	3.9	5.6	6.3	5.4	2.8	1.9	2.8
10-15	3.0	1.5	1.2	1.8	.8	2.0	1.2	2.5	.8	2.1	1.3	.6	.9	1.2
16-99	1.0	1.6	1.0	1.6	.2	.6	.3	.4	2.9	.5	1.2	.1	.5	.2
20-39/01-09	1.2	.1	.4	0	.2	.7	.8	1.5	.5	.5	.3	.6	1.2	1.5
04-21	7.2	6.2	4.8	5.3	3.4	4.3	3.7	7.8	6.3	6.4	5.6	3.1	3.3	3.4
04-15	5.4	3.4	2.6	2.9	2.6	3.2	2.3	6.9	3.4	4.2	3.2	2.0	2.6	2.6
10-21	3.8	3.2	2.2	3.4	1.3	2.2	1.1	2.0	3.0	3.4	2.9	.9	.7	1.5
30-69/01-09	4.4	.4	4.2	1.7	.6	6.3	2.3	3.5	1.2	1.4	3.7	5.4	4.1	3.6
04-21	15.4	13.2	14.7	16.1	10.6	16.0	12.7	12.7	11.9	13.2	15.9	17.2	10.2	12.4
04-15	12.4	8.1	11.5	11.8	7.5	14.5	9.3	11.0	6.7	10.5	11.4	14.0	8.5	10.1
04-09	3.1	.4	3.2	1.5	.4	4.3	1.3	2.9	.7	1.3	3.2	4.1	1.6	2.0
10-21	6.4	7.1	5.8	8.5	4.8	6.3	6.2	4.4	6.7	7.0	7.1	5.7	4.0	4.7
10-15	3.1	1.8	1.5	4.1	1.5	3.6	2.9	2.4	1.4	2.7	2.2	1.9	1.8	2.1
16-99	1.3	1.8	2.1	1.8	.4	.8	.7	.3	3.5	.9	1.4	.5	1.2	.3

Table 3.--Continued.

MARCH

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	3.2	.3	2.2	.6	.4	3.8	1.5	1.8	.6	.7	2.4	3.7	2.1	2.7
04-21	11.8	8.6	10.4	11.0	7.3	12.2	9.2	8.7	9.5	9.8	11.8	11.6	7.3	9.9
04-15	9.1	4.9	7.5	7.5	5.2	11.1	6.4	7.3	4.8	7.2	8.8	8.8	5.7	7.8
04-09	2.2	.3	1.4	.6	.4	2.4	1.0	1.3	.3	.6	2.1	2.5	.7	1.5
10-21	5.1	4.6	4.3	5.4	3.2	4.3	4.2	3.3	5.4	5.2	5.0	3.7	2.1	3.7
10-15	2.5	1.1	1.2	2.3	.9	2.4	1.9	1.7	.7	2.0	1.4	.9	.8	1.5
16-99	1.2	1.4	1.4	1.4	.1	.6	.5	.1	3.1	.5	1.1	.3	.9	.2
30-49/01-09	1.7	.1	.7	0	.2	.9	.6	.7	.4	.2	.7	1.7	.7	1.1
04-21	6.2	4.5	5.2	4.9	4.2	6.6	4.6	5.4	5.1	5.4	6.2	6.1	4.3	4.1
04-15	4.3	2.2	3.8	2.4	2.8	5.2	3.4	4.2	3.0	3.0	4.4	4.1	3.1	3.0
04-09	1.3	.1	.6	0	.2	.7	.3	.7	.1	.1	.4	1.2	.3	.6
10-21	2.8	2.1	1.9	3.1	1.6	2.5	2.0	2.0	2.4	3.0	2.9	2.0	1.3	1.9
10-15	1.1	.3	.7	.9	.3	1.3	1.1	1.1	.2	.8	.8	.5	.5	.7
30-39/04-21	1.1	.9	.7	1.5	1.0	1.2	.8	1.2	.8	.4	1.6	.8	1.2	.9

Table 3.--Continued.

MARCH

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	2.4	.6	4.2	2.5	1.0	6.6	2.6	2.3	.6	1.1	2.2	6.2	3.7	2.8
04-21	12.2	11.9	14.6	13.8	10.3	15.9	12.7	10.0	9.0	10.3	12.3	15.3	9.7	9.9
04-15	9.9	7.6	11.6	10.2	7.1	13.8	9.5	8.8	4.7	8.0	7.7	12.5	7.8	8.0
04-09	1.8	.4	3.3	2.1	.5	4.5	1.5	1.9	.3	1.0	2.0	3.6	2.1	1.4
10-21	4.8	5.5	6.0	7.0	5.6	6.1	6.6	3.4	5.4	4.7	5.9	5.0	3.7	3.6
10-15	2.6	1.5	1.5	3.3	1.8	3.8	3.0	2.1	1.5	1.7	2.0	2.3	1.8	1.8
40-69/01-09	1.7	.2	2.6	.9	.5	3.9	1.2	1.3	.5	.5	1.3	3.8	2.2	1.4
04-21	9.7	6.9	10.5	9.5	7.0	11.0	8.2	6.5	7.2	7.4	8.8	11.1	6.2	7.8
04-15	7.7	4.2	7.9	7.0	4.8	9.9	5.8	5.4	2.9	5.3	5.0	8.6	5.2	5.9
04-09	1.1	.2	2.3	.8	.3	2.7	.5	1.1	.2	.4	1.2	2.4	1.1	.8
10-21	4.1	3.7	3.6	5.2	3.3	3.9	4.4	2.3	4.7	3.7	4.0	3.7	2.5	2.6
10-15	2.1	1.0	.7	2.6	1.0	2.2	1.9	1.4	1.0	1.2	1.3	1.5	1.3	1.1
40-59/01-09	.9	.2	.8	.4	.3	1.6	.7	.4	.2	.2	.4	1.7	.3	1.0
04-21	6.0	3.1	5.1	5.1	3.6	5.7	4.4	2.9	5.0	3.4	4.0	5.5	2.9	4.8
04-15	4.5	1.9	3.1	3.3	2.7	5.2	3.0	2.2	1.5	2.3	2.7	4.1	2.4	3.7
04-09	.6	.2	.5	.4	3.	.9	.5	.2	.2	.2	.4	1.0	.2	.5
10-21	2.8	1.4	2.2	2.5	1.5	1.9	2.2	1.3	3.4	1.7	1.9	1.7	.7	1.4
10-15	1.5	.5	.4	1.1	.6	1.1	1.0	.7	.3	.6	.7	.5	.3	.5

Table 3.--Continued.

MARCH

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-49/04-21	.9	1.1	.7	1.0	.8	.7	.8	.9	1.0	.5	1.4	1.0	.2	.9
04-15	.8	.7	.3	.7	.4	.6	.6	.7	.3	.3	1.1	.6	.1	.6
50-69/01-09	.4	0	1.2	.4	.1	1.6	.3	.2	1.2	.1	.6	.6	.9	.1
04-21	3.4	3.6	5.2	5.0	4.0	5.6	4.3	2.5	2.7	2.1	3.6	3.7	2.9	2.4
04-15	2.7	1.8	3.6	3.7	2.6	4.7	2.7	2.2	1.0	1.0	3.3*	2.7	2.2	1.6
04-09	.3	0	1.1	.4	0	1.2	0	.2	0	0	1.0*	.4	.5	.1
10-21	1.4	2.4	1.7	2.8	1.8	2.0	2.5	.5	1.8	1.5	1.6	1.5	1.0	1.0
10-15	.4	.6	.3	1.6	.4	1.3	.8	.3	.7	.4	.5	.7	.5	.4

*Interpolated value.

Table 3.--Continued.

APRIL

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	1.8	0	1.4	.2	.5	.8	.6	1.2	.3	.5	.7	1.4	1.4	1.3
04-21	10.2	4.4	6.5	5.3	5.3	5.4	6.2	7.9	10.8	11.8	6.9	4.9	4.3	4.2
04-15	8.0	1.9	4.7	3.1	4.3	4.3	4.2	6.5	5.8	9.3	4.6	4.0	3.3	3.5
04-09	.9	0	1.2	.2	.3	.6	.4	.7	.2	.5	.6	1.0	1.1	.6
10-21	4.1	2.5	1.9	3.3	1.4	2.5	2.2	3.0	6.4	5.4	3.3	1.5	1.0	1.3
10-15	1.7	.2	.6	.9	.7	1.4	.7	1.5	2.0	2.7	1.3	.4	.1	.6
20-69/01-09	7.4	.2	3.8	1.6	1.4	7.0	4.0	5.3	.4	3.4	6.2	6.8	7.5	5.6
04-21	20.3	20.5	18.8	20.8	15.5	19.6	16.5	21.3	18.1	21.5	19.7	19.8	14.3	13.3
04-15	17.3	14.8	14.2	17.3	12.0	17.3	13.2	19.2	10.4	19.4	16.6	17.0	12.3	12.1
04-09	5.1	.1	2.8	1.5	1.1	4.7	2.6	4.5	.3	3.1	5.7	4.6	5.5	3.7
10-21	8.0	11.1	7.8	9.6	7.2	10.5	5.9	8.3	11.8	10.2	7.8	6.6	3.4	2.7
10-15	4.2	3.7	3.0	4.3	3.3	6.5	2.5	5.0	3.5	6.8	3.1	3.7	.9	1.7
16-99	.8	.4	2.7	.5	.5	.7	1.3	.5	3.0	.8	1.4	.5	.5	.3
20-59/01-09	5.6	.1	3.3	1.0	1.1	4.9	3.3	3.6	.4	2.0	3.9	4.9	5.4	4.0
04-21	17.5	15.4	15.2	14.7	13.1	15.8	13.9	18.1	15.8	19.7	16.3	14.9	11.4	11.0
04-15	14.7	9.9	11.6	11.3	10.0	14.0	11.2	16.1	8.4	17.4	12.8	13.3	9.9	9.8
04-09	3.8	.1	2.2	.9	.7	3.5	2.1	2.7	.3	1.9	3.2	3.4	4.1	2.3
10-21	7.0	8.2	6.3	7.1	6.0	8.1	5.1	7.1	10.8	9.5	6.4	4.7	2.7	2.4
10-15	3.8	2.1	2.3	2.7	2.6	5.2	2.3	4.0	3.2	6.5	2.6	2.6	.7	1.4
16-99	.8	1.2	2.3	.5	.5	.5	1.1	.3	2.4	.4	1.2	.4	.3	.1

Table 3.--Continued.

APRIL

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	3.4	0	2.1	.5	.8	2.7	2.3	2.2	.2	1.1	2.1	3.1	3.5	2.7
04-21	13.7	8.5	11.0	9.5	10.2	11.9	10.1	13.2	13.1	14.8	12.0	8.6	8.2	7.6
04-15	11.9	4.9	8.4	6.2	7.5	9.8	7.8	11.5	4.6	12.5	9.3	7.8	6.5	6.7
04-09	2.3	0	1.6	.5	.5	1.6	1.6	1.6	.1	1.1	1.9	1.9	2.7	1.7
10-21	5.3	4.8	4.4	4.9	3.7	6.4	3.5	5.2	8.8	7.0	4.7	2.5	2.0	1.4
10-15	3.0	.7	1.4	1.5	1.3	3.5	1.4	3.0	2.4	4.3	2.1	1.5	.2	.6
16-99	.4	1.0	1.4	.4	.5	.3	1.0	.3	2.0	.1	.9	.3	.1	0
20-39/01-09	1.5	0	1.3	.2	.4	.8	.6	.8	.1	.3	.7	1.4	1.4	1.2
04-21	8.4	4.1	5.8	5.0	5.0	5.4	5.2	6.0	8.3	9.0	6.7	4.4	4.1	3.8
04-15	6.9	1.8	4.2	2.9	3.9	4.3	3.5	5.0	3.9	7.0	4.4	3.5	3.2	3.2
10-21	3.1	2.4	1.7	3.1	1.4	2.5	1.8	2.3	4.7	3.6	2.9	1.2	1.0	1.1
30-69/01-09	4.5	.2	2.2	1.4	1.2	6.4	2.8	3.6	.2	2.1	5.0	5.2	5.6	4.6
04-21	15.4	17.8	14.6	19.0	12.5	18.4	13.3	16.3	12.3	15.6	16.2	17.3	11.6	11.4
04-15	12.9	12.7	10.4	15.6	9.5	16.3	10.3	14.4	6.4	13.0	13.1	14.5	10.1	10.5
04-09	3.5	.1	1.7	1.3	1.0	4.3	2.0	3.0	.2	1.8	4.6	3.5	4.1	3.1
10-21	5.8	8.9	6.6	8.0	5.8	9.4	4.6	6.2	7.4	6.8	6.0	5.6	2.5	1.9
10-15	2.9	3.3	2.4	3.8	2.6	6.0	1.9	3.7	1.6	3.9	1.8	3.1	.8	1.2
16-99	.7	1.7	2.0	.4	.1	.6	.5	.4	2.0	.8	.9	.4	.3	.2

Table 3.--Continued.

APRIL

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	2.8	.1	1.8	.8	.9	4.3	2.0	2.0	.2	1.1	2.7	3.4	3.6	3.0
04-21	12.5	12.1	10.6	12.1	10.2	14.2	10.2	12.2	9.9	11.6	11.4	11.6	8.7	8.9
04-15	9.9	7.7	7.4	9.1	7.6	12.7	8.0	10.4	4.3	9.6	8.6	10.2	7.7	8.0
04-09	2.2	.1	1.2	.7	.6	3.1	1.4	1.4	.2	1.0	2.3	2.3	2.6	1.8
10-21	4.9	5.8	5.1	5.1	4.6	7.0	3.8	5.0	6.2	5.6	4.3	3.6	1.9	1.7
10-15	2.5	1.7	1.8	2.0	2.0	4.7	1.7	2.7	1.3	3.5	1.2	2.0	.5	1.0
16-99	.7	.5	1.5	.4	.1	.4	.4	.2	1.4	.4	.7	.3	.2	.1
30-49/01-09	.9	0	.7	.3	.6	2.1	1.0	1.0	.1	.6	1.0	1.9	2.0	1.5
04-21	6.9	5.5	6.1	6.1	7.0	9.5	6.4	6.9	6.1	6.0	6.0	5.4	5.2	5.0
04-15	5.7	3.4	4.0	3.7	5.1	7.9	4.7	5.9	2.2	4.8	4.6	4.9	4.1	4.6
04-09	.7	0	.6	.3	.4	1.3	.9	.7	.1	.6	.9	1.1	1.5	1.1
10-21	2.7	2.5	3.2	3.0	2.3	4.9	2.1	2.8	3.7	3.0	2.1	1.4	.9	.7
10-15	1.6	.5	.8	.9	.8	2.9	.8	1.8	.6	1.7	.7	.9	.1	.3
30-39/04-21	1.5	1.0	1.2	1.8	1.9	2.8	2.2	1.0	1.3	1.8	1.4	1.3	1.1	1.1

Table 3.--Continued.

APRIL

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	3.3	.6	1.9	2.2	.8	4.7	2.7	2.0	.1	.9	3.8	4.9	5.3	3.5
04-21	11.0	14.9	12.0	18.4	11.4	16.3	9.9	11.6	8.3	9.9	12.7	15.3	10.0	9.7
04-15	9.3	10.9	7.6	15.7	8.5	14.8	8.1	9.8	5.2	8.3	10.1	12.9	9.2	8.6
04-09	2.7	.3	1.2	2.0	.7	3.3	1.7	2.0	0	.8	3.1	3.2	3.6	2.5
10-21	3.3	8.3	5.0	7.4	6.1	7.4	3.2	5.0	3.6	4.9	5.0	5.0	1.6	2.4
10-15	1.6	3.8	1.4	4.3	2.8	4.7	1.3	3.0	.6	2.9	1.3	2.5	.8	1.4
40-69/01-09	1.6	.1	.8	.6	.8	3.8	1.4	1.3	0	.5	2.1	2.7	3.0	2.5
04-21	8.3	11.2	8.9	12.7	8.6	12.7	6.8	8.8	6.5	6.7	8.4	11.1	6.4	6.7
04-15	6.8	8.0	5.5	10.2	6.2	11.1	5.6	7.5	3.9	5.2	6.4	8.9	5.5	5.8
04-09	1.3	0	.7	.6	.7	2.9	.8	1.3	0	.4	1.7	1.9	2.0	1.8
10-21	2.7	6.1	4.0	5.3	4.1	5.4	2.0	3.5	3.2	3.2	3.6	4.1	1.1	1.2
10-15	1.1	2.5	1.3	2.7	1.7	3.0	.8	2.2	.5	1.7	1.1	2.1	.3	.7
40-59/01-09	4.	0	.4	.3	.5	1.8	1.0	.3	0	.1	.7	1.3	1.2	1.2
04-21	4.1	6.2	4.1	5.8	5.7	7.4	3.7	4.1	3.5	3.1	5.0	5.9	3.0	4.1
04-15	2.9	4.0	2.1	4.1	4.2	6.8	3.0	3.4	1.6	2.4	3.0	4.9	2.6	3.5
04-09	.4	0	.2	.3	.3	1.7	.5	.3	0	.1	.3	1.0	.8	.8
10-21	1.6	3.2	2.0	2.3	2.8	2.8	1.3	1.9	2.2	1.8	2.1	2.2	.2	.9
10-15	.6	1.0	.6	1.0	1.2	1.8	.5	1.2	0	1.1	.4	1.1	0	.6

Table 3.--Continued.

APRIL

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-49/04-21	.9	.9	1.0	1.0	2.1	2.1	1.0	.8	.9	.2	1.1	1.0	.8	1.0
04-15	.7	.4	.7	.5	13.	1.7	.8	.7	.5	0	1.0	1.0	.7	.8
50-69/01-09	.4	0	.2	.2	.2	.6	.7	.1	0	.2	.4	.6	.9	.9
04-21	3.1	4.2	3.4	6.3	3.0	5.1	3.1	1.6	2.4	1.8	2.7	4.3	1.8	2.0
04-15	2.4	2.5	1.5	4.8	1.9	3.5	2.3	1.1	1.5	1.2	1.9*	3.0	1.5	1.9
04-09	.3	0	.1	.2	.2	.3	.5	.1	0	.1	.6*	.5	.5	.8
10-21	.8	2.4	1.5	2.3	1.6	2.4	1.0	.6	.9	.6	1.4*	1.8	.2	.1
10-15	.1	.8	.2	1.2	.6	.9	.4	.2	.3	.2	.5*	.6	0	.1

*Interpolated value.

Table 3.--Continued.

MAY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	1.0	0	.7	.2	.5	1.0	.7	.9	.3	.6	.6	1.1	.9	1.5
04-21	5.0	1.8	2.7	2.3	4.7	1.9	3.5	3.9	7.9	8.0	3.3	2.1	1.4	3.2
04-15	4.6	1.3	2.1	1.8	3.6	1.8	3.0	3.6	5.1	7.2	2.8	2.0	1.0	3.2
04-09	.7	0	.3	.2	.4	.6	.4	.7	.2	.9	.5	.9	.7	1.1
10-21	1.2	1.1	.8	1.2	1.8	.6	.5	.7	3.6	2.0	.8	.2	.2	0
10-15	.8	.6	.2	.6	.9	.5	.3	.4	1.3	1.3	.2	.5	0	0
20-69/01-09	8.9	2.1	5.2	3.8	2.5	8.3	5.0	8.6	2.2	5.4	8.0	7.9	8.9	8.5
04-21	19.8	18.0	17.6	18.8	17.4	18.6	16.9	19.8	17.5	20.7	20.2	15.8	10.8	12.4
04-15	19.5	13.9	15.6	17.9	15.1	17.5	16.2	19.4	12.9	20.1	18.0	14.6	10.2	12.2
04-09	6.1	1.6	3.4	3.7	2.0	5.9	3.0	7.3	1.1	5.2	6.1	5.2	5.7	5.8
10-21	5.1	8.0	4.7	5.5	5.8	5.2	3.6	3.9	7.2	6.2	3.7	3.3	1.1	1.4
10-15	4.0	8.9	2.2	3.8	3.4	4.2	1.9	2.7	2.9	5.1	1.9	2.1	.8	1.0
16-99	.1	.6	.4	.1	0	0	.1	0	.9	0	.1	0	0	0
20-59/01-09	5.5	1.1	3.3	1.7	1.9	4.9	3.2	5.3	1.4	4.0	4.2	5.9	7.0	6.5
04-21	16.1	10.8	13.8	11.1	13.7	14.6	13.4	15.4	15.0	18.2	15.7	11.4	9.7	10.6
04-15	15.4	8.3	11.9	10.7	11.3	13.9	12.9	14.8	10.5	17.6	13.1	10.5	9.1	10.2
04-09	3.1	.9	2.3	1.7	1.5	3.6	1.9	4.5	.8	3.9	3.2	4.3	4.7	4.6
10-21	4.3	4.2	3.1	3.3	4.6	4.1	2.5	2.8	6.1	4.7	2.9	2.3	.8	1.1
10-15	3.5	2.0	1.5	2.1	2.5	2.2	1.4	1.9	2.3	3.5	1.6	1.4	.5	.8
16-99	0	.1	.3	.1	0	0	.1	0	1.7	0	0	0	0	0

Table 3.--Continued.

MAY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	3.3	.3	2.3	.8	.7	2.9	1.9	3.4	.9	2.3	2.0	3.7	4.6	3.6
04-21	10.6	5.7	8.9	6.3	10.1	8.8	8.7	9.9	11.2	14.5	8.7	6.1	5.4	6.6
04-15	10.1	3.7	7.8	5.6	7.7	8.2	7.9	9.4	4.2	13.7	7.9	5.9	4.8	6.5
04-09	1.6	.2	1.5	.8	.6	2.1	.9	3.0	.4	2.2	1.4	2.5	2.5	2.5
10-21	2.9	2.7	1.9	2.3	3.5	2.1	1.5	1.5	4.8	3.1	1.8	.6	.2	.4
10-15	2.3	1.2	.7	1.2	1.6	1.6	.8	1.2	1.8	2.2	1.1	.4	0	.2
16-99	0	.1	.3	.1	0	0	0	0	.6	0	0	0	0	0
20-39/01-09	.7	0	.7	.2	.5	1.0	.7	.9	.2	.9	.6	1.1	.9	1.5
04-21	4.7	1.7	2.7	2.3	4.7	1.9	3.4	3.5	6.2	7.7	3.3	2.1	1.4	3.0
04-15	4.3	1.3	2.1	1.8	3.6	1.8	2.9	3.2	4.0	6.9	2.8	2.0	1.0	3.0
10-21	1.1	1.0	.7	1.2	1.8	.6	.5	.5	2.8	2.0	.8	.2	.2	0
30-69/01-09	7.9	2.1	4.5	3.5	2.0	7.7	4.1	7.4	1.9	3.3	7.3	6.9	8.1	7.2
04-21	18.0	17.1	16.4	17.8	15.0	17.8	14.6	17.9	13.1	16.1	18.1	14.6	10.0	10.4
04-15	17.2	13.0	14.4	16.8	12.7	16.7	13.9	17.4	9.5	15.4	17.0	13.4	9.7	10.2
04-09	5.3	1.6	3.0	3.4	1.6	5.3	2.3	6.4	.9	3.1	5.6	4.6	5.2	4.8
10-21	4.5	7.4	3.9	5.0	5.0	5.1	2.9	3.3	5.3	4.6	3.1	3.2	3.7	1.4
10-15	3.2	3.6	1.8	3.4	3.0	4.1	1.4	2.1	2.1	3.8	1.6	2.0	.8	1.0
16-99	.1	.2	.4	0	0	0	.1	0	.7	0	.1	0	0	0

Table 3.--Continued.

MAY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	4.3	1.1	2.6	1.4	1.4	4.4	2.4	4.3	1.2	1.8	3.6	5.1	5.9	5.1
04-21	13.8	9.6	12.4	9.8	11.5	13.7	11.0	13.1	10.6	13.0	13.6	10.2	8.6	8.3
04-15	12.6	7.2	10.4	9.4	9.3	13.0	10.5	12.6	7.1	12.3	11.8	9.3	8.2	7.9
04-09	2.4	.9	1.9	1.4	1.1	3.0	1.3	3.8	.7	1.7	2.7	3.7	3.8	3.5
10-21	3.7	3.5	2.3	2.7	3.8	4.0	1.7	2.3	4.1	3.1	2.3	2.2	.7	1.0
10-15	2.7	1.7	1.1	1.7	2.1	3.1	.9	1.4	1.4	2.2	1.2	1.3	.5	.7
16-99	0	.1	.2	0	0	0	.1	0	.5	0	0	0	0	0
30-49/01-09	2.2	.3	1.3	.6	.3	2.3	1.3	2.5	.6	.7	1.3	2.9	3.6	2.1
04-21	7.6	4.2	6.8	4.9	7.4	7.6	5.7	7.2	5.9	8.7	6.8	4.5	4.1	4.0
04-15	6.9	2.7	5.7	4.4	5.5	7.0	5.0	6.8	3.2	8.1	6.1	4.3	3.7	4.0
04-09	1.0	.2	1.1	.6	.3	1.5	.6	2.1	.2	.6	.9	1.9	1.6	1.4
10-21	2.0	2.0	1.1	1.7	2.7	2.0	.8	1.0	2.8	1.6	1.2	.5	.1	.3
10-15	1.4	.9	.3	.7	1.2	1.5	.4	.7	1.0	1.1	.8	.3	0	.2
30-39/04-21	1.8	.4	.4	.9	2.0	1.1	.8	1.0	1.1	2.0	1.4	.8	.3	.8
40-79/01-09	7.3	3.2	4.4	4.1	2.1	8.8	3.7	5.7	2.2	3.1	7.9	6.3	7.8	5.4
04-21	15.4	20.0	13.5	20.0	12.9	17.4	12.0	14.1	10.2	11.5	15.4	15.8	8.6	9.1
04-15	14.8	15.7	11.9	18.5	11.4	16.7	11.1	13.9	7.2	10.7	14.6	14.9	8.3	9.0
04-09	5.4	2.0	2.0	3.7	1.6	6.9	2.4	5.1	1.4	2.7	6.6	4.0	5.0	4.0
10-21	3.2	9.6	3.8	5.3	3.6	4.5	2.7	2.5	3.4	3.2	2.6	4.2	.8	1.3
10-15	2.2	4.9	1.8	3.4	2.7	3.9	1.6	1.9	.7	2.9	1.2	2.7	.7	1.0

Table 3.--Continued.

MAY

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
40-69/01-09	4.6	1.3	2.5	2.3	1.5	4.7	2.4	3.8	1.3	.9	3.8	3.5	5.3	3.9
04-21	11.7	13.7	11.0	13.1	9.5	14.1	10.3	10.9	7.6	7.7	11.8	10.8	6.1	6.7
04-15	11.3	10.0	9.2	12.2	8.4	13.1	9.4	10.5	4.8	7.2	10.7	9.6	6.0	6.5
04-09	3.5	1.1	1.4	2.2	1.1	3.7	1.4	3.5	.7	.8	3.1	2.6	3.4	2.7
10-21	2.8	6.2	3.0	3.0	2.9	3.9	2.2	1.8	2.8	2.6	1.9	2.8	.7	1.0
10-15	2.1	2.8	1.4	2.1	2.1	3.1	1.2	1.1	.6	2.3	.7	1.7	.5	.9
40-59/01-09	2.1	.6	.5	.6	1.0	1.8	.8	1.5	.6	.1	.9	2.1	3.0	2.5
04-21	7.0	5.8	5.8	4.7	6.0	8.8	6.5	5.6	4.5	3.8	6.0	6.3	4.4	4.7
04-15	6.3	4.1	4.4	4.5	5.0	8.3	5.9	5.3	2.0	3.5	5.0	5.4	4.3	4.5
04-09	1.3	.6	1.6	.6	.7	1.4	.6	1.3	.5	.1	.7	1.8	2.3	2.0
10-21	2.0	2.2	1.4	.9	1.7	2.8	1.1	.8	1.6	1.3	1.0	1.8	.2	.6
10-15	1.5	.9	.7	.6	1.2	2.1	.7	.4	.3	.9	.3	1.0	.2	.6
40-49/04-21	2.0	1.4	.8	.8	1.9	2.9	1.8	1.1	1.2	.9	1.7	.8	1.1	.4
04-15	1.8	.6	.4	.6	1.3	2.8	1.4	1.1	.6	.7	1.4	.8	1.0	1.0
50-69/01-09	1.8	.5	1.2	.6	.3	1.5	.6	.8	.5	.1	.8	.9	1.6	.7
04-21	3.9	7.5	4.7	6.7	4.0	6.0	3.0	3.5	2.7	1.7	4.6	4.3	1.5	1.4
04-15	3.7	5.4	3.8	6.2	3.7	5.3	2.6	3.4	1.9	1.7	3.2*	3.5	1.4	1.3
04-09	1.5	.4	.8	.6	.2	1.2	.4	.7	.3	.1	1.0*	.6	1.0	.5
10-21	.6	3.7	1.4	1.9	1.1	1.5	1.2	.8	.5	.8	.8*	1.0	.1	.1
10-15	.4	2.1	.3	1.5	.8	1.2	.6	.5	.2	.6	.3*	.5	0	.1

*Interpolated value.

Table 3.--Continued.

JUNE

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	.4	0	.4	.1	0	.3	.4	0	.2	.1	.4	.5	.7	.4
04-21	1.4	.6	.9	1.0	.2	.7	1.1	1.7	3.0	4.8	1.9	.9	.2	1.2
04-15	1.3	.2	.8	.6	.2	.6	1.0	1.4	2.4	4.3	1.9	.8	.2	.9
04-09	.1	0	.3	.1	0	.2	.3	0	.2	.6	.4	.3	.2	.3
10-21	.4	.3	.1	.2	0	.1	.2	.5	1.2	1.1	.1	.1	0	.3
10-15	.3	0	0	.1	0	0	.1	.3	1.5	.6	0	0	0	.1
20-69/01-09	9.0	.9	7.1	3.1	2.7	7.5	6.6	6.2	3.2	5.1	5.3	5.1	7.8	5.3
04-21	16.3	13.5	14.0	15.7	13.2	14.3	13.2	16.3	14.2	17.3	15.7	11.7	8.9	7.8
04-15	16.1	10.6	12.1	14.5	12.2	13.8	12.7	15.8	12.6	16.8	14.6	11.3	8.3	7.2
04-09	6.1	.8	5.2	2.6	2.1	4.2	4.9	5.5	1.8	4.5	4.1	3.1	4.8	2.6
10-21	3.1	5.1	2.9	3.4	2.2	2.9	1.4	2.8	4.8	4.7	2.4	2.5	.7	.8
10-15	2.0	3.3	1.2	2.0	1.2	2.4	1.2	2.2	2.7	3.8	1.7	1.6	.3	.3
16-99	0	0	.6	.1	0	0	0	0	.2	.1	0	.1	0	0
20-59/01-09	6.2	.3	4.9	1.7	1.5	4.1	4.3	3.1	2.3	3.0	2.1	3.2	5.9	3.6
04-21	12.5	5.7	10.1	8.5	8.4	10.6	9.3	11.2	11.6	14.0	11.1	7.0	6.3	5.4
04-15	12.1	4.1	8.6	7.8	7.8	10.0	9.0	10.7	9.7	13.3	10.1	6.6	6.1	4.8
04-09	4.0	.2	3.5	1.5	1.3	2.2	2.9	2.4	1.3	2.5	1.8	2.2	3.5	1.8
10-21	2.4	2.3	2.1	1.9	.9	1.9	1.1	1.9	3.7	4.0	1.8	1.3	.3	.5
10-15	1.6	.7	.8	1.3	.3	1.3	.9	1.5	2.1	3.2	1.2	.6	.2	.6
16-99	0	.3	.6	.1	0	0	0	0	.2	.1	0	.1	0	0

Table 3.--Continued.

JUNE

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	3.1	.1	2.3	.6	.4	1.8	1.7	1.1	1.5	1.5	1.2	1.1	3.5	.9
04-21	6.6	1.7	5.2	3.9	2.8	4.0	5.1	5.7	7.4	9.3	7.1	2.1	4.2	3.2
04-15	6.2	1.2	4.6	3.3	2.5	3.7	4.7	5.2	2.1	8.8	6.2	1.8	4.2	2.9
04-09	1.6	.1	1.7	.4	.3	.8	1.3	.7	1.0	1.4	1.1	.7	2.0	.8
10-21	1.3	.6	.9	1.0	.1	.7	.5	1.4	2.6	2.4	.9	.2	.1	.3
10-15	.8	.2	.4	.5	0	.4	.3	1.1	1.0	1.9	.6	0	.1	.1
16-99	0	.2	.2	0	0	0	0	0	.2	.1	0	0	0	0
20-39/01-09	.4	0	.4	.1	0	.3	.3	0	.2	.5	.4	.4	.8	.4
04-21	1.4	.6	.9	1.0	.2	.7	1.0	1.7	2.9	4.6	1.9	.8	.2	1.2
04-15	1.3	.2	.8	.6	.2	.6	.9	1.4	2.3	4.1	1.9	.7	.2	.9
10-21	.4	.3	.1	.2	0	.1	.2	.5	1.2	1.1	0	.1	0	.3
30-69/01-09	8.7	.9	6.8	3.1	2.7	7.4	6.2	6.1	3.0	4.7	5.2	5.1	7.4	5.2
04-21	16.0	13.4	13.7	15.5	13.1	14.3	12.3	15.8	13.2	16.2	15.4	11.6	8.6	7.5
04-15	15.7	10.5	11.8	14.4	12.1	13.8	11.8	15.4	11.6	15.6	14.3	11.2	8.0	7.0
04-09	6.0	.8	5.0	2.6	2.1	4.2	4.5	5.4	1.7	4.2	4.0	3.1	4.6	2.5
10-21	3.1	5.8	2.9	3.4	2.2	2.8	1.3	2.7	4.2	4.1	2.3	2.4	.7	.6
10-15	2.0	3.3	1.2	2.0	1.2	2.4	1.2	2.2	2.4	3.4	1.6	1.6	.3	.2
16-99	0	.3	.6	.1	0	0	0	0	.2	0	0	.1	0	0
30-59/01-09	5.9	.3	4.4	1.7	1.5	4.0	3.8	3.1	2.1	2.7	2.1	3.2	5.5	3.5
04-21	12.1	5.5	9.6	8.3	8.3	10.6	8.2	10.6	10.5	12.5	10.8	6.8	5.9	5.1
04-15	11.6	4.0	8.1	7.7	7.7	10.0	7.9	10.2	8.7	11.8	9.8	6.4	5.7	4.6
04-09	3.9	.2	3.3	1.5	1.3	2.2	2.5	2.4	1.2	2.3	1.8	2.2	3.2	1.7
10-21	2.4	2.1	2.1	1.9	.9	1.8	1.0	1.8	3.0	3.3	1.7	1.2	.3	.3
10-15	1.6	.7	.8	1.3	.3	1.3	.9	1.5	1.8	2.7	1.1	.6	.2	0
16-99	0	.2	.6	.1	0	0	0	0	.2	0	0	.1	0	0

Table 3.--Continued.

JUNE

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-49/01-09	2.7	.1	1.9	.6	.4	1.8	12.	1.1	1.3	.8	1.1	1.1	3.3	.8
04-21	5.9	1.4	4.7	3.6	2.7	3.9	4.2	5.2	5.8	7.0	6.6	1.9	3.7	2.7
04-15	5.4	1.1	4.1	3.2	2.4	3.6	3.8	4.8	4.5	6.6	5.7	1.7	3.7	2.5
04-09	1.5	.1	1.5	.4	.3	.8	1.0	.7	.9	.7	1.0	.7	1.8	.7
10-21	1.3	.4	.9	.9	.1	.5	.4	1.3	1.9	1.6	.8	.1	.1	.1
10-15	.8	.2	.4	.5	0	.4	.3	1.1	.7	1.4	.4	0	.1	0
30-39/04-21	.8	.3	.3	.7	.1	.5	.2	1.2	1.4	2.2	1.3	.6	.1	.7
40-79/01-09	9.7	1.6	7.2	5.4	3.2	9.2	6.1	7.1	2.6	3.4	6.3	6.1	7.9	6.1
04-21	15.5	18.7	14.7	20.7	13.7	16.8	11.5	18.2	11.7	13.5	14.2	13.5	8.2	9.1
04-15	15.2	15.9	13.0	18.8	12.8	16.3	10.8	17.9	10.2	13.2	13.3	12.8	7.8	8.3
04-09	6.4	1.2	5.4	4.9	2.5	5.5	4.4	6.7	1.3	3.4	4.1	3.3	4.5	2.7
10-21	2.3	8.1	3.5	4.0	2.7	3.6	1.4	2.1	3.0	2.8	2.2	2.8	.6	.5
10-15	1.5	4.6	1.5	1.8	1.6	3.0	1.1	1.7	1.6	2.3	1.0	1.8	.3	.3
40-69/01-09	6.3	.8	4.3	2.4	2.4	5.0	4.1	5.2	1.5	1.9	3.4	3.9	4.8	4.3
04-21	12.0	12.3	10.5	13.6	11.6	12.6	8.8	12.9	8.2	9.2	11.0	9.7	6.3	5.4
04-15	11.5	9.7	8.7	12.2	10.6	12.2	8.5	12.7	7.0	8.7	10.0	9.3	5.7	5.0
04-09	4.1	.7	3.2	2.1	1.8	3.1	3.0	4.7	.9	1.9	2.2	2.3	3.2	2.1
10-21	2.0	5.1	2.7	2.6	2.2	2.4	.9	1.4	2.7	2.1	1.6	2.2	.5	.2
10-15	1.2	3.1	1.0	1.4	1.2	2.2	.9	1.2	1.5	1.6	.8	1.5	.2	.1

Table 3.--Continued.

JUNE

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-59/01-09	3.7	.2	2.0	.6	1.2	2.1	2.5	2.4	.4	.5	.8	1.7	2.9	2.3
04-21	7.2	4.2	6.5	5.2	6.6	8.5	5.0	6.6	4.6	4.8	5.2	4.8	3.3	2.5
04-15	6.8	3.2	5.2	4.5	6.0	8.2	4.9	6.5	3.0	4.5	4.6	4.4	3.2	2.2
04-09	2.4	.1	1.6	.6	1.0	1.5	1.4	1.9	.2	.5	.7	1.2	1.6	.9
10-21	1.1	1.5	1.7	1.0	.9	1.3	.6	.5	1.3	1.3	.6	1.1	.2	.1
10-15	.7	.5	.5	.7	.3	1.0	.6	.5	.9	1.0	.2	.6	.1	0
40-49/04-21	1.6	.6	1.3	.7	1.3	1.7	1.5	1.5	1.0	.8	1.1	.4	1.2	.5
04-15	1.4	.6	1.2	.7	1.0	1.7	1.4	1.5	.7	.7	.9	.3	1.2	.4
50-69/01-09	1.4	.5	1.7	.8	.9	1.6	1.5	2.0	.5	.7	1.0	1.6	1.1	1.6
04-21	4.2	8.1	4.4	7.2	5.9	5.9	3.1	5.5	3.4	2.9	2.8	5.5	2.0	2.1
04-15	4.0	6.4	3.5	6.4	5.4	5.6	2.8	5.4	2.7	2.6	2.2*	5.1	1.8	1.9
04-09	1.1	.4	1.0	.8	.8	1.3	1.0	2.0	.3	.7	.7*	.8	1.0	.5
10-21	.8	3.2	.7	1.3	1.3	1.0	.3	.8	.9	.4	.6*	2.0	.1	.1
10-15	.4	2.1	.2	.5	.8	.9	.3	.7	.3	.4	.3*	1.4	0	.1

*Interpolated value.

Table 3.--Continued.

JULY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	.2	0	.2	0	0	.5	.2	.1	0	.1	0	.1	.1	.2
04-21	.4	0	.4	.1	0	1.0	.3	.1	1.9	.7	.7	.1	.1	.2
04-15	.2	0	.4	.1	0	1.0	.3	.1	1.4	.7	.7	.1	.1	.2
04-09	.1	0	.1	0	0	.2	.3	.1	0	.1	0	.1	.1	.2
10-21	.2	0	0	0	0	.3	0	0	.7	.1	0	0	0	0
10-15	0	0	0	0	0	.3	0	0	.4	.1	0	0	0	0
20-69/01-09	8.0	.8	5.8	2.5	3.4	7.7	6.2	6.1	3.6	3.6	4.0	5.3	5.2	5.3
04-21	14.8	9.9	13.6	13.4	10.0	13.8	11.1	14.0	15.3	14.6	12.3	8.5	6.0	5.9
04-15	14.7	7.8	12.5	12.9	9.7	13.6	11.1	13.7	12.5	13.9	10.1	8.4	5.8	5.8
04-09	5.8	.5	4.4	2.4	2.4	4.5	4.3	5.5	2.2	3.5	3.2	2.7	3.0	2.8
10-21	1.9	3.3	2.4	2.4	1.1	1.8	.5	2.0	4.3	2.7	1.0	.7	.3	.4
10-15	1.7	1.5	.9	2.0	.7	1.5	.5	1.8	1.8	2.2	.6	.7	.2	.2
16-99	0	0	0	0	0	0	0	0	.2	0	0	0	0	0
20-59/01-09	4.1	.3	3.2	.7	1.8	4.5	3.3	2.5	2.0	1.5	1.6	2.2	3.2	3.1
04-21	9.9	3.6	7.4	5.6	5.5	9.4	6.6	6.9	10.2	9.3	6.6	3.5	3.0	3.4
04-15	9.8	2.9	6.6	5.5	5.4	9.4	6.5	6.5	7.9	9.1	6.2	3.5	3.0	3.4
04-09	3.5	.3	2.3	.7	1.3	2.9	2.3	2.3	1.3	1.3	1.2	1.1	1.9	1.8
10-21	1.2	1.1	1.0	1.1	.4	1.3	.3	1.6	3.2	1.6	.6	.4	.1	.3
10-15	1.0	.5	.3	1.0	.3	1.1	.3	1.3	1.1	1.5	.2	.4	.1	.2
16-99	0	0	0	0	0	0	0	0	.1	0	0	0	0	0

Table 3.--Continued.

JULY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20/49/01-09	1.6	0	.5	0	.5	1.4	1.3	.7	.8	.9	.3	.7	.9	.7
04-21	3.2	.3	2.7	1.4	1.0	4.0	2.4	2.3	5.8	4.6	2.2	.6	.8	.8
04-15	3.2	.3	2.6	1.4	1.0	4.0	2.4	2.3	2.3	4.5	1.9	.6	.8	.8
04-09	1.1	0	.3	0	.4	.8	1.0	.7	.4	.9	.2	.4	.7	.5
10-21	.5	.1	.2	.3	.1	.9	.1	.2	1.7	.6	0	.1	0	0
10-15	.4	.1	.2	.3	.1	.8	.1	.2	.7	.6	0	.1	0	0
16-99	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-39/01-09	.2	0	.1	0	0	.5	.1	.1	0	.1	0	.1	.1	.2
04-21	.4	0	.4	.1	0	1.0	.3	.1	1.9	.7	.7	.1	.1	.2
04-15	.2	0	.4	.1	0	1.0	.3	.1	1.4	.7	.7	.1	.1	.2
10-21	.2	0	0	0	0	.3	0	0	.7	.1	0	0	0	0
30-69/01-09	7.8	.8	5.5	2.5	3.4	7.6	6.1	6.1	3.4	3.6	4.0	5.3	5.0	5.3
04-21	14.7	9.9	13.3	13.4	10.0	13.8	10.9	14.0	14.3	14.6	12.3	8.5	6.0	5.9
04-15	14.6	7.8	12.1	12.9	9.7	13.6	10.9	13.7	11.5	13.9	11.6	8.4	5.8	5.8
04-09	5.7	.5	4.1	2.4	2.4	4.4	4.2	5.7	2.0	3.5	3.2	2.7	2.9	2.8
10-21	1.9	3.3	2.4	2.4	1.1	1.8	.5	2.0	4.0	2.7	1.0	.7	.3	.4
10-15	1.7	1.5	.9	2.0	.7	1.5	.5	1.8	1.6	2.2	.6	.7	.2	.2
16-99	0	0	0	0	0	0	0	0	.2	0	0	0	0	0

Table 3.--Continued.

JULY

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
30-59/01-09	3.9	.3	2.9	.7	1.8	4.4	3.2	2.5	1.8	1.5	1.6	2.2	3.0	3.1
04-21	9.8	3.6	6.9	5.6	5.5	9.4	6.3	6.9	9.1	9.3	6.6	3.4	2.9	3.4
04-15	9.7	2.9	6.1	5.5	5.4	9.4	6.2	6.5	6.8	9.1	6.2	3.4	2.9	3.4
04-09	3.4	.3	2.0	.7	1.3	2.8	2.2	2.3	1.1	1.3	1.2	1.1	1.8	1.8
10-21	1.1	1.1	1.0	1.1	.4	1.3	.3	1.6	2.9	1.6	.6	.4	.1	.3
10-15	1.0	.5	.2	1.0	.3	1.1	.3	1.3	.9	1.5	.2	.4	.1	.2
16-99	0	0	0	0	0	0	0	0	.1	0	0	0	0	0
30-49/01-09	1.4	0	.4	0	.5	1.2	1.2	.7	.7	.9	.3	.7	.8	.7
04-21	3.0	.3	2.3	1.4	1.0	3.8	2.1	2.3	4.8	4.4	2.1	.6	.7	.8
04-15	3.0	.3	2.2	1.4	1.0	3.8	2.1	2.3	3.5	4.3	1.8	.6	.7	.8
04-09	1.0	0	.2	0	.4	.6	.9	.7	.3	.9	.2	.4	.6	.5
10-21	.4	.1	.2	.3	.1	.9	.1	.2	1.4	.6	0	.1	0	0
10-15	.4	.1	.2	.3	.1	.8	.1	.2	.5	.6	0	.1	0	0
30-39/04-21	.3	0	.1	.1	0	.8	0	.1	1.0	.6	.6	.1	0	.2
40-79/01-09	10.4	2.1	6.5	5.2	3.5	10.2	7.0	9.3	3.3	4.2	7.8	8.0	6.2	8.3
04-21	17.6	17.9	15.1	19.2	11.5	15.2	11.7	19.5	12.6	15.1	15.4	10.6	7.8	8.5
04-15	17.4	15.1	13.8	19.0	11.2	14.6	11.6	19.2	9.8	14.9	14.8	10.3	7.7	8.4
04-09	8.0	1.8	5.2	5.0	2.3	5.6	4.3	8.6	1.8	4.1	6.4	3.8	3.9	4.6
10-21	2.0	6.4	2.9	2.8	1.2	1.9	.4	2.4	3.6	2.5	1.7	1.2	.8	.5
10-15	1.8	3.4	1.3	2.5	1.0	1.4	.3	2.2	1.3	2.0	.7	1.1	.7	.3

Table 3.--Continued.

JULY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-69/01-09	6.6	.7	4.5	2.2	2.5	6.1	4.7	5.3	2.2	2.3	3.2	5.0	4.6	5.0
04-21	13.0	9.8	11.1	12.9	9.0	10.9	8.9	12.6	9.9	10.8	10.9	8.1	5.6	5.6
04-15	12.9	7.8	10.0	12.4	8.7	10.6	8.9	12.3	7.4	10.1	10.1	8.0	5.3	5.5
04-09	4.8	.5	3.4	2.1	1.8	3.4	3.0	5.0	1.3	2.3	2.7	2.3	2.6	2.5
10-21	1.6	3.2	2.1	2.2	1.1	1.0	.3	1.9	2.8	2.0	.8	.7	.3	.4
10-15	1.5	1.5	.7	1.8	.7	.8	.3	1.7	1.1	1.5	.6	.7	.2	.2
40-59/01-09	2.6	.2	2.3	.7	.9	2.9	1.9	1.9	.7	.7	.8	1.7	2.4	2.8
04-21	7.0	3.3	4.6	4.9	4.5	5.8	4.6	5.5	4.6	5.1	4.8	3.0	2.3	3.1
04-15	6.9	2.7	4.0	4.8	4.4	5.7	4.5	5.1	1.9	4.9	4.7	3.0	2.3	3.1
04-09	2.3	.2	1.6	.7	.7	1.8	1.1	1.8	.5	.5	.8	.7	1.4	1.5
10-21	.8	1.0	.6	.8	.4	.5	.1	1.5	1.5	.9	.3	.4	.1	.3
10-15	.7	.5	0	.7	.3	1.4	.1	1.2	.4	.8	.2	.4	.1	.2
40-49/04-21	.9	.2	.6	.6	.2	1.3	.6	1.3	1.2	1.0	.6	.4	.2	0
04-15	.9	.2	.6	.6	.2	1.3	.6	1.3	.9	1.0	.6	.4	.2	.5
50-69/01-09	2.1	.3	1.4	1.5	1.3	2.5	1.3	3.0	.7	.9	1.0	2.5	2.2	1.2
04-21	5.1	7.7	5.1	7.8	5.4	5.5	4.3	7.4	3.3	3.3	6.3	4.6	2.2	2.1
04-15	5.0	5.8	4.4	7.4	5.1	5.4	4.3	7.3	2.3	3.1	5.0*	4.6	2.0	2.0
04-09	1.2	.2	1.2	1.4	.9	1.6	.9	2.8	.4	.9	1.5*	1.0	1.2	.5
10-21	.7	2.6	1.3	1.0	.5	.5	.2	.5	.5	.4	.4*	.4	.2	.2
10-15	.5	1.0	.6	.8	.1	.4	.2	.5	.1	.1	.3*	.4	.1	.1

*Interpolated value.

Table 3.--Continued.

AUGUST

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	0	0	.3	0	0	.1	.3	.2	.4	.1	0	0	.1	0
04-21	.5	0	.5	0	0	.3	.3	.3	1.7	1.1	.3	0	0	0
04-15	.5	0	.5	0	0	.2	.3	.3	1.2	1.0	.3	0	0	0
04-09	0	0	.3	0	0	.1	.2	.2	.3	.1	0	0	0	0
10-21	0	0	.1	0	0	0	0	0	.9	.1	.1	0	0	0
10-15	0	0	0	0	0	0	0	0	.5	.1	0	0	0	0
20-69/01-09	7.0	1.0	6.7	4.9	3.1	8.4	6.3	6.3	3.9	4.1	5.9	5.5	6.9	4.5
04-21	14.1	9.6	11.4	12.4	9.6	15.2	9.8	13.1	13.8	14.2	11.8	8.6	6.8	5.9
04-15	14.1	8.2	10.9	11.6	9.4	14.4	9.8	12.9	11.9	14.0	11.7	8.3	6.6	5.7
04-09	5.1	.9	4.5	3.9	2.2	5.8	3.8	5.7	2.0	3.8	4.2	2.5	4.3	2.0
10-21	2.1	2.1	1.6	1.9	.6	2.1	.7	1.4	3.2	1.5	1.0	.7	.1	.5
10-15	2.0	1.0	.8	1.0	.5	1.6	.6	1.0	1.7	1.4	.7	.4	.1	.2
16-99	0	0	0	.1	0	0	0	0	0	0	0	0	0	0
20-59/01-09	4.0	.3	2.6	1.7	1.6	4.1	3.1	3.0	2.2	1.8	3.6	2.9	4.3	3.1
04-21	7.7	2.1	6.5	5.4	4.1	9.9	5.4	6.4	9.6	10.2	7.4	4.0	4.4	3.7
04-15	7.6	1.7	6.0	5.2	4.1	9.6	5.3	6.2	8.0	9.9	7.2	4.0	4.4	3.7
04-09	2.6	.3	1.6	1.5	1.0	2.7	2.0	2.4	1.3	1.8	2.7	.9	2.6	1.4
10-21	1.5	.5	.8	.5	.3	1.5	.3	.4	2.5	1.2	.8	.1	0	0
10-15	1.3	.2	.5	.5	.3	1.2	.2	.2	1.3	.9	.6	.1	0	0
16-99	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 3.--Continued.

AUGUST

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	.8	0	.9	.2	.3	1.4	1.1	.6	.8	.5	1.1	.4	1.4	.9
04-21	2.6	.3	3.0	.5	.6	3.8	2.5	1.3	5.5	5.0	2.7	.2	1.5	.7
04-15	2.6	.2	2.6	.5	.6	3.6	2.4	1.2	1.6	4.7	2.4	.2	1.5	.7
04-09	.5	0	.7	.2	.1	1.0	.8	.5	.6	.5	.9	0	.7	.3
10-21	0	.1	.3	0	0	.4	.1	.1	2.0	.6	.3	0	0	0
10-15	0	0	.1	0	0	.3	0	0	1.0	.5	.2	0	0	0
16-99	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-39/01-09	0	0	.2	0	0	.1	.3	.2	.4	.1	0	0	.1	0
04-21	.5	0	.4	0	0	.3	.3	.3	1.7	1.1	.3	0	0	0
04-15	.5	0	.4	0	0	.2	.3	.3	1.2	1.0	.3	0	0	0
10-21	0	0	.1	0	0	0	0	0	.9	.1	.1	0	0	0
30-69/01-09	7.0	1.0	6.5	4.9	3.1	8.2	6.1	6.3	3.7	3.8	5.9	5.5	6.7	4.5
04-21	14.1	9.6	11.1	12.4	9.6	15.0	9.7	13.1	12.9	13.9	11.8	8.6	6.8	5.9
04-15	14.1	8.2	10.6	11.6	9.4	14.2	9.7	12.9	11.2	13.7	11.7	8.3	6.6	5.7
04-09	5.1	.9	4.3	3.9	2.2	5.7	3.7	5.5	1.8	3.5	4.4	2.5	4.3	2.0
10-21	2.1	2.1	1.6	1.9	.6	2.1	.7	1.4	2.8	1.5	1.0	.7	.1	.5
10-15	2.0	1.0	.8	1.0	.5	1.6	.6	1.0	1.5	1.4	.7	.4	.1	.2
16-99	0	.2	0	.1	0	0	0	0	0	0	0	0	0	0

Table 3.--Continued.

AUGUST

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	4.0	.3	2.4	1.7	1.6	3.8	2.9	3.0	2.0	1.5	3.6	2.9	4.3	3.1
04-21	7.7	2.1	6.2	5.4	4.1	9.6	5.3	6.4	8.7	9.9	7.4	4.0	4.3	3.7
04-15	7.6	1.7	5.6	5.2	4.1	9.3	5.2	6.2	7.3	9.6	7.2	4.0	4.3	3.7
04-09	2.6	.3	1.4	1.5	1.0	2.6	1.9	2.4	1.1	1.5	2.7	.9	2.6	1.4
10-21	1.5	.5	.8	.5	.3	1.5	.3	.4	2.1	1.2	.8	.1	0	0
10-15	1.3	.2	.4	.5	.3	1.2	.2	.2	1.1	.9	.6	.1	0	0
16-99	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-49/01-09	.8	0	.7	.2	.3	1.3	.9	.5	.5	.4	1.1	.4	1.4	.9
04-21	2.5	.3	2.5	.5	.6	3.4	2.4	1.2	4.5	4.6	2.7	.2	1.5	.7
04-15	2.5	.2	2.1	.5	.6	3.2	2.3	1.1	3.6	4.3	2.4	.2	1.5	.7
04-09	.5	0	.5	.2	.1	.9	.7	.4	.4	.4	.7	0	.8	.3
10-21	0	.1	.3	0	0	.4	.1	.1	1.6	.6	.3	0	0	0
10-15	0	0	.1	0	0	.3	0	0	.8	.5	.2	0	0	0
30-39/04-21	.3	0	0	0	0	.1	.2	.2	.9	.9	.3	0	0	0
40-79/01-09	11.3	1.8	7.4	8.4	3.9	10.6	8.1	10.3	4.4	4.9	8.7	9.7	8.6	6.4
04-21	16.9	17.0	12.4	18.6	12.1	16.2	10.3	18.3	13.0	13.2	14.7	13.5	7.7	8.5
04-15	16.6	15.3	11.8	17.6	12.1	16.0	10.2	17.8	11.4	12.9	14.3	13.3	7.4	8.4
04-09	8.6	1.7	5.1	6.9	2.8	7.2	4.8	9.3	2.5	4.5	6.6	4.9	4.8	3.5
10-21	2.6	3.8	2.0	2.7	.9	2.1	.7	2.2	2.2	2.0	1.2	1.0	.1	.9
10-15	2.3	2.2	1.3	1.4	.8	1.7	.7	1.5	.9	2.0	.7	.7	.1	.4

Table 3.--Continued.

AUGUST

STATIONS / CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
40-69/01-09	5.8	1.0	5.1	4.7	2.8	6.8	5.2	5.5	2.4	2.1	4.8	5.1	6.1	3.7
04-21	12.7	9.4	9.2	11.7	9.0	13.3	7.7	12.1	8.9	8.9	9.9	8.4	5.6	5.5
04-15	12.7	7.9	8.8	10.9	8.8	12.6	7.7	12.0	7.4	8.7	9.8	8.1	5.5	5.3
04-09	4.2	.9	3.6	3.8	1.9	4.9	2.9	4.9	1.3	2.0	3.7	2.5	3.6	1.8
10-21	1.9	1.9	1.1	1.8	.6	1.9	.6	1.3	1.8	1.1	.8	.6	.1	.5
10-15	1.9	.8	.5	.9	.5	1.5	.6	1.0	.8	1.1	.4	.3	.1	.2
40-59/01-09	3.3	.3	1.4	1.6	1.4	2.6	2.0	2.4	.9	.8	2.7	2.5	3.0	2.4
04-21	6.0	1.9	3.7	4.6	3.6	8.2	3.6	5.4	4.4	4.9	5.3	3.9	2.9	3.3
04-15	5.9	1.5	3.4	4.4	3.6	7.0	3.6	5.3	2.3	4.8	5.1	3.9	2.9	3.3
04-09	2.0	.3	.8	1.4	.8	1.8	1.2	2.0	.6	.8	2.1	.9	1.6	1.2
10-21	1.3	.4	.2	.4	.3	1.2	.2	.3	1.0	.7	.7	0	0	0
10-15	1.2	.2	.1	.4	.3	1.0	.2	.2	.5	.6	.4	0	0	0
40-49/04-21	.7	.2	.5	.1	.4	1.6	.9	.5	1.3	1.0	1.0	.2	.5	.5
04-15	.7	.2	.4	.2	.4	1.6	.9	.5	.9	1.0	.8	.2	.5	.5
50-69/01-09	2.3	.6	1.8	2.0	1.4	2.3	2.2	2.2	1.4	.3	1.8	2.6	2.4	1.7
04-21	6.2	7.8	4.4	6.2	6.5	5.5	3.4	6.1	2.2	1.7	4.2	5.1	2.1	2.4
04-15	6.2	6.5	4.2	5.4	6.3	4.8	3.4	6.0	1.8	1.7	3.3*	4.8	2.0	2.1
04-09	1.8	.5	1.3	1.3	1.2	2.0	1.5	1.9	.7	.3	1.0*	1.2	1.4	.7
10-21	.8	1.4	.5	1.3	.5	.7	.3	.8	.5	.2	.4*	.6	.1	.4
10-15	.8	.5	.2	.6	.4	.2	.3	.7	.1	.3	.2*	.3	.1	.1

*Interpolated value.

Table 3.--Continued.

SEPTEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	.2	0	.7	0	.2	.6	.2	.1	.1	.1	.2	0	.2	0
04-21	1.2	0	1.8	.3	.5	2.7	1.0	.6	1.8	1.9	.9	0	.9	.2
04-15	1.1	0	1.5	.3	.5	2.0	.8	.6	1.6	1.7	.7	0	.9	.2
04-09	.2	0	.4	0	.2	.4	.2	.1	.1	.1	.2	0	.1	0
10-21	.3	0	.4	0	.1	.9	.4	.3	.6	.4	.3	0	.1	.1
10-15	.1	0	.1	0	.1	.3	.2	.3	.4	.3	.1	0	.1	.1
20-69/01-09	7.8	1.5	7.4	2.8	2.3	8.6	4.6	6.0	5.4	5.3	6.2	4.8	9.5	4.3
04-21	14.0	11.2	12.3	12.8	9.7	13.9	11.7	14.4	13.7	16.8	12.6	10.8	10.8	8.9
04-15	13.8	9.0	11.8	11.9	9.5	13.5	11.0	14.2	12.0	16.1	11.8	10.0	10.4	8.1
04-09	4.5	1.0	4.3	2.6	1.9	6.0	2.6	5.5	3.0	5.0	4.7	3.3	6.2	2.6
10-21	2.8	3.5	1.7	4.6	1.3	3.0	2.0	2.9	3.7	3.5	2.4	2.1	.9	1.7
10-15	2.3	1.7	.9	3.0	1.0	1.6	1.3	2.2	2.0	2.5	1.1	1.6	.8	1.2
16-99	.1	0	0	.2	0	0	0	0	.1	0	0	0	0	.1
20-59/01-09	3.7	.7	4.6	.9	1.4	5.6	2.5	2.9	2.7	2.3	3.0	2.8	6.0	2.5
04-21	9.4	4.0	9.3	5.0	5.1	11.1	7.6	9.0	9.5	11.3	8.1	4.8	7.9	5.6
04-15	9.1	2.7	8.6	4.2	4.8	10.3	7.0	8.6	8.5	10.8	7.3	4.7	7.8	5.1
04-09	2.0	.5	2.6	.9	1.1	4.0	1.7	2.5	1.5	2.0	2.0	2.2	4.1	1.5
10-21	1.6	1.4	1.3	1.6	.6	2.2	1.7	1.8	2.5	2.1	1.3	.5	.8	1.1
10-15	1.1	.4	.6	.7	.3	1.0	1.1	1.2	1.2	1.5	.7	.5	.7	.7
16-99	0	0	0	.2	0	0	0	.1	.1	0	0	0	0	0

Table 3.--Continued.

SEPTEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	1.2	.1	2.4	.1	.5	2.5	1.0	1.0	1.0	1.3	1.1	.5	2.0	1.0
04-21	4.1	.9	5.6	1.5	2.0	6.3	4.3	3.7	4.7	5.9	4.1	.9	3.8	1.9
04-15	3.6	.5	5.0	1.3	1.9	5.8	3.8	3.3	1.7	5.3	3.7	.9	3.7	1.8
04-09	.4	0	1.2	.1	.4	1.6	.8	.9	.5	1.0	.8	.4	1.4	.5
10-21	1.0	.4	.7	.2	.3	1.6	1.1	.9	1.5	1.5	.5	0	.2	.4
10-15	.5	.1	.4	0	.2	.6	.8	.4	.9	1.0	.1	0	.2	.3
16-99	0	0	0	.1	0	0	0	0	0	0	0	0	0	0
20-39/01-09	.2	0	.5	0	.2	.6	.1	.1	.1	.1	.2	0	.2	0
04-21	1.2	0	1.5	.3	.5	2.7	.8	.6	1.6	1.9	.9	0	.9	.2
04-15	1.1	0	1.2	.3	.5	2.0	.7	.6	1.4	1.7	.7	0	.9	.2
10-21	.3	0	.4	0	.1	.9	.3	.3	.6	.4	.3	0	.1	.1
30-69/01-09	7.4	1.5	6.8	2.8	2.2	8.1	3.9	6.0	5.1	4.9	6.0	4.8	9.2	4.3
04-21	13.8	11.2	11.3	12.8	9.4	12.9	10.6	14.3	12.5	16.1	12.2	10.8	10.4	8.8
04-15	13.6	9.0	10.8	11.9	9.2	12.5	10.1	14.0	10.8	15.3	11.4	10.0	10.1	8.0
04-09	4.3	1.0	4.0	2.6	1.8	5.6	2.1	5.7	2.9	4.7	4.5	3.3	6.1	2.6
10-21	2.7	3.5	1.2	4.6	1.2	2.8	1.7	2.8	3.4	3.2	2.3	2.1	1.0	1.6
10-15	2.2	1.7	.7	3.0	.9	1.6	1.0	2.1	1.8	2.2	1.0	1.6	.9	1.1
16-99	.1	0	0	.2	0	0	0	.1	.1	0	0	0	0	.1

Table 3.--Continued.

SEPTEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	3.3	.7	4.1	.9	1.3	5.0	1.7	2.8	2.5	2.0	2.7	2.8	5.6	2.5
04-21	9.2	4.0	7.9	5.0	4.8	10.1	6.4	8.7	8.3	10.3	7.4	4.8	7.4	5.5
04-15	8.9	2.7	7.3	4.2	4.5	9.3	6.0	8.3	7.3	9.9	6.6	4.7	7.2	5.0
04-09	1.8	.5	2.3	.9	1.0	3.6	1.1	2.4	1.4	1.7	1.8	2.2	3.8	1.5
10-21	1.5	1.4	.8	1.6	.5	1.9	1.4	1.7	2.3	1.7	1.2	.5	.8	1.0
10-15	1.0	.4	.4	.7	.2	1.0	.8	1.1	1.0	1.2	.6	.5	.6	.6
16-99	0	0	0	.2	0	0	0	.1	.1	0	0	0	0	0
30-49/01-09	1.0	.1	1.8	.1	.4	1.9	.4	.9	.8	1.1	.8	.5	1.8	1.0
04-21	3.5	.9	4.1	1.5	1.7	5.0	3.0	3.4	3.9	4.9	3.3	.9	3.4	1.8
04-15	3.0	.5	3.8	1.3	1.6	4.5	2.7	3.0	3.1	4.4	3.0	.9	3.3	1.7
04-09	.2	0	.9	.1	.3	1.2	.3	.8	.4	.8	.6	.4	1.2	.5
10-21	.9	.4	.3	.2	.2	1.3	.8	.8	1.2	1.1	.3	0	.2	.3
10-15	.4	.1	.2	0	.1	.6	.5	.3	.7	.7	0	0	.2	.2
30-39/04-21	.9	0	.3	.3	.2	1.0	.1	.5	.5	.6	.4	0	.5	.1
40-79/01-09	9.5	2.6	6.4	5.9	3.6	10.5	5.5	8.7	5.1	7.2	9.3	7.2	9.8	6.0
04-21	14.6	16.8	11.0	18.1	11.3	13.4	9.5	15.9	11.3	16.4	15.9	14.1	10.4	10.5
04-15	14.1	13.8	10.3	16.7	11.1	13.3	9.1	15.7	9.6	16.0	14.9	13.6	10.1	9.6
04-09	6.1	1.9	4.2	5.6	3.1	6.5	2.6	8.4	3.2	6.6	7.0	4.3	6.3	3.2
10-21	2.5	5.8	1.3	6.2	1.3	2.0	.8	2.4	2.9	3.5	2.9	2.5	.9	1.6
10-15	2.1	2.9	.7	4.1	1.0	1.3	.5	1.8	1.4	2.5	1.2	1.9	.7	1.0

Table 3.--Continued.

SEPTEMBER

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
40-69/01-09	5.9	1.5	4.0	2.6	1.7	5.5	3.0	4.5	3.5	3.3	4.7	4.1	7.7	3.5
04-21	10.7	10.6	7.6	11.7	8.4	9.4	7.3	11.1	8.9	12.2	10.3	10.2	8.6	8.0
04-15	10.5	8.6	7.2	10.8	8.1	9.2	7.0	10.9	7.2	11.4	9.5	9.4	8.2	7.2
04-09	3.8	1.0	2.5	2.4	1.5	3.8	1.6	4.5	2.3	3.2	3.4	2.7	5.0	2.2
10-21	1.6	3.3	.8	4.3	1.0	1.7	.8	1.9	2.6	2.3	1.7	2.1	.7	1.4
10-15	1.4	1.7	.5	2.8	.8	1.1	.5	1.5	1.3	1.5	.8	1.6	.5	.9
40-59/01-09	2.1	.7	1.7	.7	1.0	2.9	1.0	1.6	1.3	.7	1.8	2.1	4.3	1.8
04-21	5.1	3.4	4.0	3.8	3.7	5.8	3.6	5.2	4.4	6.1	4.3	4.2	5.6	4.4
04-15	5.0	2.3	3.6	3.1	3.4	5.2	3.5	4.9	2.8	5.8	3.8	4.1	5.5	3.9
04-09	1.3	.5	1.1	.7	.8	2.2	.7	1.5	.8	.6	1.0	1.6	2.9	1.2
10-21	.5	1.2	.4	1.3	.4	1.0	.5	.8	1.1	.8	.7	.5	.5	.8
10-15	.4	.4	.2	.6	.2	.5	.3	.5	.4	.6	.5	.5	.3	.4
40-49/04-21	.5	.2	.8	.5	.8	1.2	.8	.5	.7	1.3	1.0	.4	1.4	.8
04-15	.4	.2	.7	.4	.8	1.1	.8	.3	.6	1.3	1.0	.4	1.1	.7
50-69/01-09	2.5	.5	1.4	1.4	.7	1.3	1.1	1.9	1.7	.5	1.4	2.2	2.9	1.5
04-21	5.3	7.5	2.4	8.0	4.8	3.4	3.1	5.2	4.0	4.6	4.9	7.3	4.2	4.0
04-15	5.2	5.8	2.2	7.2	4.7	3.2	2.9	5.1	3.1	4.0	4.4*	6.5	4.1	3.7
04-09	2.1	.4	.8	1.4	.7	1.0	.5	1.9	1.2	.8	1.3*	1.1	2.3	.9
10-21	.9	2.4	.4	3.0	.5	.7	.2	.8	.9	1.0	.9*	1.9	.2	.8
10-15	.8	1.2	.3	1.9	.4	.5	.1	.7	.4	.8	.4*	2.6	.2	.7

*Interpolated value.

Table 3.--Continued.

OCTOBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	.9	.1	.6	.2	0	.4	.1	.6	.4	.8	.6	.5	.9	1.1
04-21	3.7	1.7	2.3	2.0	.5	1.8	1.9	3.9	3.2	4.6	2.4	1.1	2.5	2.1
04-15	2.9	.9	1.6	1.5	.3	1.5	1.7	3.4	2.0	4.2	1.6	1.0	2.0	2.1
04-09	.5	.1	.4	.1	0	.2	.1	.6	.1	.7	.4	.3	.7	.6
10-21	1.3	.7	.8	.8	.3	.6	.8	1.1	1.4	1.3	.8	.3	.2	.6
10-15	.3	2.2	.2	.3	0	.3	.6	.7	.5	.8	.1	.3	0	.4
20-69/01-09	8.2	3.2	6.5	5.5	1.2	8.6	4.2	7.5	5.1	7.3	8.0	6.6	7.5	7.4
04-21	16.5	16.5	11.5	16.5	9.9	14.5	10.7	15.8	14.4	18.3	15.0	13.1	8.9	11.7
04-15	15.8	14.3	10.4	15.4	8.2	13.8	9.9	15.3	11.6	18.0	14.0	12.2	8.3	11.3
04-09	5.9	2.8	4.6	4.3	.9	5.4	2.4	5.7	3.5	6.6	5.9	3.9	5.2	4.6
10-21	3.7	3.9	2.9	5.4	2.1	4.0	3.3	2.9	5.0	4.5	3.5	3.9	.9	2.3
10-15	2.1	1.9	1.4	3.2	1.1	2.6	1.9	2.0	1.9	3.5	1.8	2.9	.3	1.8
16-99	.1	.1	.1	0	.1	0	0	.1	.6	0	.1	.2	0	0
20-59/01-09	5.5	1.8	4.1	2.2	.6	5.3	2.6	4.7	2.5	5.0	4.5	3.8	4.7	5.5
04-21	13.4	9.8	8.8	11.4	5.9	11.6	7.2	13.0	12.0	14.9	10.8	7.6	6.9	8.8
04-15	12.7	8.3	7.6	9.8	4.7	10.9	6.3	12.5	9.0	14.4	9.1	7.2	6.5	8.5
04-09	4.2	1.6	2.7	1.7	.4	3.2	1.4	3.9	1.3	4.6	3.2	2.1	3.0	3.2
10-21	3.0	2.8	1.7	3.9	1.4	3.2	2.5	2.1	4.3	3.3	2.9	2.1	.9	1.7
10-15	1.6	1.4	.9	2.0	.6	1.9	1.4	1.5	1.5	2.4	1.4	1.7	.3	1.3
16-99	.1	.5	0	0	.1	0	0	0	.5	0	.1	.1	0	0

Table 3.--Continued.

OCTOBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	2.0	.5	1.3	.6	.3	1.9	.9	2.4	1.7	1.8	1.9	1.2	1.9	2.6
04-21	7.5	5.1	4.9	6.2	3.1	6.3	3.4	8.2	7.5	10.3	5.9	2.6	3.8	5.0
04-15	7.2	3.8	4.3	5.1	2.0	5.3	3.0	7.8	2.3	9.8	4.6	2.5	3.4	4.9
04-09	1.2	.5	1.0	.5	.1	1.0	.4	1.9	.8	1.7	1.2	.6	1.1	1.8
10-21	1.9	1.5	.8	1.8	.7	2.0	1.5	1.4	2.6	1.9	1.7	.8	.5	1.1
10-15	1.1	.5	.3	.9	0	.9	.9	.8	.9	1.4	.7	.7	.1	1.0
16-99	.1	.4	0	0	.1	0	0	0	.4	0	0	0	0	0
20-39/01-09	.8	.1	.3	.2	0	.3	0	.6	.2	.4	.6	.5	.5	1.1
04-21	3.2	1.6	1.9	1.8	.5	1.7	1.5	3.2	2.9	3.4	2.1	1.4	2.0	2.0
04-15	2.6	.8	1.3	1.4	.3	1.5	1.3	2.7	1.7	3.1	1.3	1.0	1.8	1.9
10-21	.8	.6	.7	.7	.3	.6	.7	.9	1.3	1.0	.8	.3	.1	.5
30-69/01-09	7.2	3.2	6.0	5.1	1.0	8.1	3.5	6.8	4.8	5.9	7.6	6.1	7.0	6.4
04-21	14.9	15.8	10.4	15.3	9.1	13.7	9.5	14.0	12.4	15.7	14.2	12.7	7.9	9.9
04-15	14.3	13.8	9.3	14.2	7.4	13.2	8.6	13.6	9.7	15.5	13.2	11.8	7.4	9.5
04-09	5.2	2.8	4.3	4.1	.8	5.2	2.2	5.6	2.3	5.3	5.5	3.6	4.6	3.8
10-21	2.9	3.7	2.5	4.8	2.0	3.5	2.5	2.3	4.0	3.4	3.2	3.5	.8	1.7
10-15	1.9	1.8	1.0	2.8	1.1	2.4	1.2	1.7	1.4	2.6	1.7	2.5	.3	1.3
16-99	0	.3	0	0	.1	0	0	0	.5	0	.1	.2	0	0

Table 3.--Continued.

OCTOBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	4.5	1.7	3.4	1.9	.4	4.8	1.9	3.5	2.0	3.4	3.7	3.4	4.2	4.5
04-21	11.4	8.8	7.4	10.0	5.1	10.8	6.0	10.5	9.8	11.2	9.3	7.0	5.9	6.9
04-15	10.8	7.5	6.1	8.6	4.0	10.3	5.0	10.2	7.0	10.8	7.7	6.6	5.5	6.6
04-09	3.5	1.5	2.1	1.5	.3	3.0	1.2	3.1	1.1	3.3	2.5	1.9	2.5	2.4
10-21	2.2	2.4	1.3	3.2	1.3	2.7	1.7	1.4	3.4	2.2	2.6	1.7	.8	1.1
10-15	1.4	1.2	.7	1.6	.6	1.7	.7	1.1	1.1	1.5	1.3	1.3	.3	.8
16-99	0	.3	0	0	.1	0	0	0	.4	0	.1	.1	0	0
30-49/01-09	1.7	.4	.5	.5	.1	1.2	.6	1.6	1.0	.9	1.2	.7	1.4	1.5
04-21	5.4	4.1	3.1	4.7	2.4	5.0	2.1	5.5	4.9	6.4	4.0	1.8	2.5	2.9
04-15	5.4	3.2	2.4	4.0	1.4	4.2	1.7	5.3	3.2	6.0	3.1	1.7	2.3	2.8
04-09	1.1	.4	.5	.4	0	.7	.4	1.3	.5	.9	.6	.4	.6	1.9
10-21	1.1	1.1	.3	1.0	.6	1.5	.7	.5	1.6	1.0	1.3	.4	.3	.5
10-15	.9	.3	.1	.5	0	.7	.2	.3	.5	.6	.6	.3	.1	.5
30-39/04-21	1.3	.9	.5	.7	.2	.7	.3	1.0	.7	.7	.8	.4	.9	.2
40-79/01-09	7.4	4.1	6.1	7.9	1.7	8.9	4.2	8.1	4.6	6.8	8.0	9.1	6.1	8.0
04-21	13.4	16.7	10.2	19.2	9.9	13.1	9.4	13.3	10.0	13.4	13.3	15.9	6.3	10.0
04-15	12.6	15.1	9.6	17.8	8.8	12.6	8.9	13.2	8.2	13.3	12.7	14.4	6.1	9.6
04-09	5.3	3.4	4.4	6.7	1.5	5.6	2.8	6.5	2.2	6.3	6.1	5.1	3.6	4.5
10-21	2.8	4.2	2.1	5.8	2.5	2.7	2.0	2.5	3.2	3.0	2.4	5.5	.8	1.7
10-15	1.7	2.5	1.3	3.4	1.7	2.1	1.2	2.0	1.2	2.5	1.2	3.7	.6	1.2

Table 3.--Continued.

OCTOBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-69/01-09	4.1	1.7	3.5	3.6	.8	5.0	2.1	2.7	3.3	2.4	4.2	4.9	5.0	4.4
04-21	10.1	11.2	6.6	11.9	6.9	10.3	6.7	8.8	8.1	9.1	8.5	10.8	5.0	6.5
04-15	9.5	9.9	5.9	11.2	5.8	10.0	6.0	8.5	6.4	8.9	7.9	10.0	4.8	6.1
04-09	3.1	1.6	2.5	3.0	.7	3.8	1.3	2.5	1.6	2.1	3.0	2.9	3.0	2.3
10-21	2.0	2.6	1.8	3.3	1.6	2.1	1.7	1.8	2.6	2.2	1.6	3.2	.3	1.2
10-15	1.1	1.4	.9	2.2	1.0	1.7	.9	1.3	.9	1.9	.8	2.3	.3	.8
40-59/01-09	1.7	.6	1.4	1.1	.3	1.7	.9	.9	.7	1.1	1.7	2.1	2.0	2.8
04-21	5.8	4.4	3.4	6.2	3.3	5.7	3.0	5.1	4.1	5.3	4.1	5.2	2.6	4.0
04-15	5.2	3.8	2.7	5.2	2.7	5.5	2.6	4.8	2.1	5.0	3.5	4.9	2.5	3.8
04-09	1.4	.5	.8	.9	.3	1.4	.6	.9	.3	1.1	1.1	1.3	1.1	1.2
10-21	1.1	1.4	.8	1.8	.8	1.1	.9	.9	1.7	1.2	1.1	1.4	.2	.4
10-15	.5	.9	.5	1.0	.4	.8	.5	.7	.6	.9	.5	1.1	.2	.2
40-49/04-21	1.1	.6	.5	1.6	.9	1.0	.5	1.0	.8	1.0	.9	.5	.2	.3
04-15	1.1	.5	.4	1.2	.5	.7	.4	.9	.4	1.0	.7	.5	.2	.3
50-69/01-09	1.1	.9	1.1	1.3	.2	1.5	.9	1.0	1.5	.2	1.1	1.6	1.1	1.6
04-21	4.1	5.7	3.1	5.1	3.5	3.4	3.5	3.0	3.8	2.5	3.7	5.8	1.8	3.0
04-15	3.8	4.8	2.6	4.6	3.1	3.2	3.1	2.9	2.7	2.6	3.0*	5.3	1.6	2.8
04-09	1.1	.7	.9	1.1	.2	1.1	.4	8.0	.5	.2	.9*	1.0	.9	1.0
10-21	.7	1.2	1.0	1.5	.9	1.1	.8	.4	.9	.6	.8*	1.8	0	.6
10-15	.4	.7	.3	1.1	.7	1.0	.4	.2	.3	.6	.4*	1.2	0	.5

*Interpolated value.

Table 3.--Continued.

NOVEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	1.5	.4	.5	.4	.3	.6	.7	1.3	.4	1.5	.6	0	1.4	1.3
04-21	5.5	3.0	1.2	2.7	1.5	1.6	1.0	4.5	5.0	6.6	3.4	.4	2.5	2.9
04-15	4.8	2.0	.8	1.7	1.1	.9	.8	4.4	3.7	5.5	2.7	.3	2.1	2.8
04-09	1.2	.3	.3	.4	.2	.2	.1	1.1	.3	1.5	.6	0	.8	.7
10-21	1.4	1.2	.3	1.2	.3	.9	.4	1.0	2.2	2.1	1.0	0	.3	.5
10-15	.6	.2	0	.5	.2	.3	.1	.6	1.0	1.0	.4	0	.2	.4
20-69/01-09	8.7	3.3	6.4	4.9	1.7	8.2	4.8	8.3	4.2	6.5	8.0	8.1	7.9	8.7
04-21	18.1	15.3	12.1	15.6	11.5	15.3	10.4	15.9	18.0	16.8	17.0	12.7	10.8	11.9
04-15	16.6	13.2	10.6	14.2	10.2	13.6	8.9	15.1	13.6	15.3	15.4	12.2	10.1	11.3
04-09	6.2	2.9	4.2	4.2	1.3	5.9	2.7	6.1	2.9	6.2	6.2	4.7	4.6	5.1
10-21	6.2	5.6	3.4	5.7	3.9	5.3	4.0	3.5	8.3	5.2	5.6	1.9	2.1	2.3
10-15	4.1	2.3	1.2	2.7	2.4	2.9	1.6	2.4	3.6	2.8	2.5	1.1	1.0	1.6
16-99	.4	.2	.4	.7	.3	.4	0	.2	1.4	.4	.5	0	.1	0
20-59/01-09	5.7	1.7	4.3	2.8	.7	5.1	3.0	5.7	3.1	4.1	5.2	4.1	5.5	6.1
04-21	14.5	9.9	9.6	11.1	7.6	10.1	6.9	11.9	15.1	13.8	12.1	7.2	7.9	8.7
04-15	13.5	8.5	7.8	9.2	6.2	8.5	5.4	10.9	10.7	12.4	10.4	6.7	7.5	8.2
04-09	3.6	1.4	3.0	2.5	.5	3.3	1.7	4.6	2.1	3.9	3.6	2.4	3.0	3.4
10-21	4.8	3.6	2.6	4.0	2.2	4.2	2.9	2.8	6.7	4.4	3.8	1.0	1.8	1.5
10-15	3.3	1.5	.7	1.4	1.3	2.2	1.0	1.8	2.9	2.1	1.6	.4	.9	1.1
16-99	.3	.4	.2	.5	.2	.3	0	.2	1.1	.3	.3	0	.1	0

Table 3.--Continued.

NOVEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	3.0	.6	2.1	1.0	.5	1.9	1.8	2.6	2.0	2.1	2.1	1.8	3.0	3.4
04-21	10.2	6.6	4.6	5.8	3.8	5.7	3.4	7.9	10.1	8.9	7.2	2.9	5.2	5.6
04-15	9.5	5.3	3.5	4.4	3.3	4.2	2.9	7.4	4.0	7.7	5.8	2.6	4.5	5.3
04-09	1.9	.5	1.6	.9	.3	1.4	.7	2.3	1.2	1.9	1.5	.9	1.6	1.7
10-21	2.9	2.2	1.2	2.2	.6	2.2	1.5	1.6	4.5	2.8	2.0	.4	1.5	.8
10-15	1.9	.7	.2	.6	.5	.5	.6	.8	1.8	1.2	.9	.2	.9	.7
16-99	.2	.1	.2	.3	.1	.1	0	.2	.7	.2	.1	0	0	0
20-39/01-09	1.1	.3	.6	.4	.2	.6	.5	.8	.4	.4	.6	0	1.2	1.3
04-21	4.7	2.8	1.2	2.5	1.3	1.6	.9	3.3	4.1	4.0	2.7	.4	2.0	2.5
04-15	4.1	1.8	.8	1.6	1.0	.9	.7	3.2	3.0	3.1	2.4	.4	1.9	2.4
10-21	1.2	1.2	.3	1.0	.3	.9	.4	.8	1.5	1.5	.7	0	.2	.2
30-69/01-09	7.4	2.6	6.0	4.4	1.4	8.0	3.7	6.8	3.8	5.2	7.0	7.9	6.7	7.5
04-21	16.3	13.9	11.4	14.2	10.9	14.9	9.8	13.6	14.9	14.8	15.7	12.3	9.3	10.3
04-15	14.6	11.8	10.0	13.0	9.7	13.1	8.4	12.8	10.9	13.2	14.2	11.8	8.8	9.7
04-09	5.4	2.3	3.8	3.8	1.2	5.7	2.3	5.8	2.5	4.9	5.6	4.5	4.1	4.5
10-21	5.0	4.7	3.2	4.9	3.7	5.0	3.5	2.4	6.8	4.0	4.8	1.7	1.8	1.9
10-15	3.4	2.1	1.0	2.4	2.3	2.7	1.5	1.6	2.4	2.1	2.1	1.1	.6	1.2
16-99	.3	.8	.4	.5	.2	.4	0	.2	1.2	.4	.3	0	.1	0

Table 3.--Continued.

NOVEMBER

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
30-59/01-09	3.9	1.3	3.7	2.2	.4	4.8	2.0	3.8	2.7	2.8	4.2	3.9	4.4	4.8
04-21	11.8	8.0	8.9	9.2	6.8	9.5	6.3	8.7	11.5	10.7	10.1	6.5	6.4	7.0
04-15	10.6	6.9	7.1	7.7	5.5	7.8	4.8	7.8	7.7	9.3	8.5	6.0	6.0	6.5
04-09	2.7	1.1	2.6	2.0	.4	3.1	1.3	3.3	1.7	2.6	2.9	2.2	2.3	2.8
10-21	3.7	2.7	2.3	3.2	2.0	3.9	2.5	1.5	5.1	3.0	3.0	.3	1.2	1.3
10-15	2.6	1.3	.7	1.1	1.2	2.0	.9	.9	1.7	1.4	1.2	.2	.5	.9
16-99	.2	.4	.2	.3	.1	.3	0	.2	.9	.3	.1	0	.1	0
30-49/01-09	1.2	.2	1.7	.5	.2	1.6	1.0	1.1	1.5	1.2	.7	1.6	1.9	2.1
04-21	6.7	4.2	3.4	3.9	2.8	4.9	2.6	3.9	6.4	4.3	3.5	2.1	3.5	3.3
04-15	5.8	3.4	2.5	2.7	2.4	3.4	2.1	3.6	4.0	3.4	2.7	1.9	2.9	3.0
04-09	.9	.2	1.3	.4	.2	1.1	.4	1.1	.8	1.1	.3	.7	.7	1.1
10-21	1.8	1.2	.9	1.4	.4	1.9	1.1	.6	2.9	1.2	1.1	0	1.0	.4
10-15	1.2	.5	.2	.2	.4	.7	.3	.2	.7	.4	.6	.2	.5	.3
30-39/04-21	1.3	.9	.4	.7	.8	.8	.3	.1	1.0	.7	.1	0	.3	.8
40-79/01-09	6.5	3.5	5.8	7.4	2.5	9.0	3.9	6.8	2.1	6.1	7.4	10.4	6.5	6.6
04-21	13.2	14.5	12.7	17.2	12.2	15.5	10.0	12.1	10.6	13.3	16.5	15.8	8.9	10.2
04-15	12.2	12.0	10.9	15.8	10.8	13.5	8.8	11.2	7.8	11.9	14.5	15.3	8.0	9.8
04-09	5.0	3.1	4.1	6.1	2.0	5.6	2.7	5.5	1.3	5.7	6.3	6.8	3.7	4.4
10-21	3.9	4.9	3.6	4.5	3.9	5.2	3.3	2.8	4.5	3.1	4.1	2.6	1.4	2.1
10-15	2.5	2.1	1.1	2.4	2.6	3.3	1.7	1.8	2.1	1.5	1.8	1.8	.3	1.5

Table 3.--Continued.

NOVEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-69/01-09	4.1	1.7	3.2	2.9	1.1	6.1	1.9	3.5	1.8	3.2	4.7	6.0	4.4	5.0
04-21	10.4	9.2	8.1	11.0	8.7	11.7	7.4	7.7	9.5	9.1	12.2	10.3	6.0	7.3
04-15	9.4	7.6	6.7	9.9	7.7	10.3	6.1	7.0	6.9	7.8	10.3	10.0	5.5	6.8
04-09	3.2	1.5	2.0	2.5	1.0	4.3	1.6	2.8	1.2	3.0	4.0	3.6	2.4	3.2
10-21	2.9	3.2	2.4	3.1	3.0	3.1	2.5	1.6	4.3	2.3	3.3	1.4	.9	1.1
10-15	1.9	1.4	.8	1.5	1.9	2.0	1.1	1.0	2.1	1.2	1.2	1.0	.1	.7
40-59/01-09	1.2	.8	1.2	.8	.2	2.7	.7	1.0	.9	.9	1.7	2.1	3.2	2.4
04-21	5.2	4.1	4.7	5.3	4.2	5.7	3.4	3.5	5.8	4.5	5.5	4.6	2.7	3.8
04-15	4.8	3.4	3.2	4.5	3.2	4.6	2.2	2.8	2.9	3.8	4.4	4.4	2.6	3.4
04-09	.8	.7	.8	.7	.2	1.7	.7	.9	.7	.9	1.3	1.5	.9	1.6
10-21	1.6	1.1	1.5	1.5	1.4	1.9	1.4	.8	2.9	1.3	1.4	.5	.3	.7
10-15	1.3	.5	.5	.5	.8	1.3	.4	.4	1.4	.6	.4	.3	0	.4
40-49/04-21	.9	.6	.4	.7	.6	1.1	.3	.4	1.1	.4	.6	.6		.8
04-15	.6	.6	.2	.6	.4	.9	.1	.4	.5	.4	.4	.6	.1	.7
50-69/01-09	2.0	.6	1.1	1.3	.5	2.0	.9	1.3	1.7	1.0	1.6	2.5	1.4	2.0
04-21	5.0	4.7	3.8	5.2	5.3	5.9	3.2	2.6	5.0	3.5	4.7	4.4	2.4	3.3
04-15	3.9	3.4	3.2	4.6	4.4	5.3	2.6	2.6	3.4	2.8	3.7*	4.2	2.3	3.1
04-09	1.7	.5	.6	1.1	.4	1.5	.6	1.0	.7	.8	1.1*	1.3	.9	1.4
10-21	1.8	1.8	1.1	1.2	2.2	1.5	1.1	.5	2.2	.9	1.7*	.8	.1	.5
10-15	.7	.6	.6	.6	1.2	1.0	.5	.4	.8	.3	.6*	.6	.1	.2

*Interpolated value.

Table 3.--Continued.

DECEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/01-09	1.4	.6	.3	.9	0	0	.3	1.9	.3	1.2	.6	.4	.8	1.0
04-21	4.4	4.7	.6	4.5	.6	.9	.3	5.8	3.3	6.4	2.7	1.1	1.8	2.1
04-15	4.0	3.2	.5	3.1	.5	.6	.3	5.0	1.9	5.7	1.7	.8	1.5	1.9
04-09	.5	.6	.2	.8	0	0	0	1.6	.1	1.7	.3	.2	.3	.4
10-21	1.0	1.4	.2	1.5	0	.4	0	1.3	1.6	2.1	1.1	.2	.7	.4
10-15	.8	.4	.1	.4	0	.2	0	.6	.4	1.2	.4	0	.3	.4
20-69/01-09	11.0	4.5	6.6	6.3	1.5	7.4	4.9	11.8	4.2	8.9	6.8	8.0	6.1	5.1
04-21	18.7	16.5	12.5	17.9	8.3	13.8	9.9	18.5	17.0	20.0	16.1	10.7	10.0	9.7
04-15	17.0	14.1	10.8	16.2	7.3	12.7	8.7	17.6	12.6	19.1	13.9	9.9	8.9	8.1
04-09	7.0	4.1	4.2	5.9	1.5	5.5	2.8	6.7	2.5	8.3	4.9	3.7	3.7	3.1
10-21	5.9	6.2	3.5	6.8	2.9	4.3	2.2	4.0	9.3	6.7	6.4	1.8	2.3	2.0
10-15	3.2	3.3	.9	3.4	1.9	2.4	.9	2.4	3.0	4.1	3.2	.9	1.2	1.2
16-99	.4	.5	1.0	1.0	.1	.3	0	.3	3.0	.3	.6	.3	.2	.1
20-59/01-09	6.9	2.8	4.2	3.0	.7	3.9	2.8	9.1	3.0	6.0	4.0	4.4	4.4	3.1
04-21	15.2	12.9	8.4	13.3	4.7	8.9	5.9	15.6	14.0	16.2	12.2	6.3	7.9	6.6
04-15	13.7	10.7	7.2	11.2	3.9	8.0	5.5	14.9	10.2	14.8	10.3	5.9	7.1	6.2
04-09	4.4	2.4	2.7	2.8	.6	3.1	1.6	7.7	1.7	5.8	2.7	1.8	3.0	1.8
10-21	4.6	4.7	2.3	4.5	1.4	2.3	1.1	3.1	7.2	5.4	4.6	.9	1.6	1.4
10-15	2.7	2.1	.4	2.0	.8	1.1	.5	1.9	2.5	3.3	2.1	.4	1.1	.9
16-99	.4	1.0	.5	.8	.1	.1	0	.1	2.9	.2	.6	.2	.2	.1

Table 3.--Continued.

DECEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-49/01-09	3.5	1.5	1.4	1.5	.3	1.4	.9	4.6	1.2	3.4	1.3	1.7	2.5	2.0
04-21	10.0	9.5	3.4	8.3	2.4	4.0	2.2	10.4	8.6	12.0	7.3	3.4	4.2	4.6
04-15	9.1	7.7	2.4	6.3	2.2	3.3	1.8	9.6	3.5	9.7	5.6	3.3	3.7	4.4
04-09	2.0	1.4	.8	1.4	.3	1.0	.4	3.8	.4	3.3	.8	.8	1.6	1.3
10-21	2.6	3.2	.9	3.0	.7	1.3	.6	2.2	5.0	4.6	2.5	.3	1.1	.8
10-15	1.6	1.4	.3	1.4	.4	.5	.1	1.2	1.6	2.6	1.0	.1	.8	.6
16-99	.1	.4	.2	.9	0	.1	0	0	1.3	.2	.2	.1	.1	.1
20-39/01-09	1.2	.9	.4	.7	0	0	.3	1.6	.3	1.1	.2	.4	7.4	1.0
04-21	3.7	4.3	.6	4.0	.5	.8	.3	4.8	3.0	5.6	2.3	.9	1.8	1.9
04-15	3.5	3.2	.5	2.9	.5	.6	.3	4.2	1.9	4.9	1.5	.8	1.5	1.9
10-21	.7	1.3	.2	1.4	0	.3	0	1.0	1.5	2.3	1.0	.1	.7	.4
30-69/01-09	9.7	3.9	6.0	5.3	1.5	7.1	4.5	9.9	3.6	7.3	7.3	7.1	5.7	4.0
04-21	17.1	14.8	11.7	15.6	8.0	13.7	9.6	15.8	15.7	17.4	15.4	10.0	9.3	8.8
04-15	15.3	12.4	10.1	13.8	7.0	12.6	8.3	14.9	11.0	16.3	13.3	9.2	8.2	8.0
04-09	6.4	3.5	3.8	4.8	1.4	5.3	2.7	8.1	2.3	6.9	4.6	3.4	3.6	2.5
10-21	4.7	5.1	3.2	5.4	2.8	4.1	2.1	3.3	8.3	4.7	5.7	1.7	2.0	1.8
10-15	2.3	2.4	1.0	2.9	1.8	2.3	.9	1.9	2.2	2.3	2.9	.8	1.1	1.1
16-99	.4	1.0	.9	.8	.1	.3	0	.2	2.6	.2	.6	.3	.2	.1

Table 3.--Continued.

DECEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
30-59/01-09	5.5	2.0	3.7	1.9	.7	3.7	2.4	6.6	2.5	4.3	3.4	3.7	3.8	1.9
04-21	13.2	10.6	7.5	9.9	4.5	8.6	5.6	11.9	12.8	12.0	11.2	5.5	7.2	5.5
04-15	11.6	8.5	6.4	8.1	3.7	7.8	5.1	11.2	8.6	10.3	9.5	5.1	6.5	5.1
04-09	3.6	1.6	2.3	1.7	.6	2.9	1.5	5.5	1.5	4.1	2.3	1.5	2.9	1.1
10-21	3.7	3.7	2.1	3.2	1.3	2.0	1.0	2.4	6.3	3.2	3.8	.8	1.4	1.3
10-15	1.9	1.2	.3	1.5	.7	1.0	.5	1.3	1.7	1.2	1.8	.3	1.0	.8
16-99	.4	.9	.5	.6	.1	.1	0	.1	2.5	.1	.6	.2	.2	.1
30-49/01-09	2.4	1.0	1.0	.7	.3	1.1	.5	2.5	1.8	14.	.8	.9	2.1	.9
04-21	7.0	6.6	2.8	4.2	2.1	3.6	1.7	6.3	6.7	6.1	5.6	2.4	3.5	3.1
04-15	6.1	5.0	1.9	3.1	1.9	3.0	1.4	5.5	3.5	4.2	4.2	2.3	3.3	2.9
04-09	1.5	.8	.4	.6	.3	.7	.3	2.1	.3	1.3	.5	.5	1.5	.6
10-21	1.7	2.0	.8	1.5	.6	1.0	.5	1.4	3.7	2.1	1.8	.2	.9	.6
10-15	.8	.6	.1	.8	.3	.4	.1	.6	.8	.4	.7	0	.7	.4
30-39/04-21	.7	1.3	.3	.5	.3	.3	.1	1.0	1.2	.3	.9	.2	.9	.4
40-79/01-09	10.1	4.1	8.1	7.4	2.8	9.8	6.6	7.5	3.1	6.8	8.1	8.1	5.6	3.7
04-21	15.2	13.6	15.0	16.4	11.0	16.7	11.7	12.2	13.1	14.9	16.5	13.0	8.7	7.9
04-15	13.9	11.3	12.7	14.6	10.1	15.4	10.6	11.3	9.0	14.1	14.5	11.8	7.5	6.8
04-09	6.5	3.9	5.0	6.6	2.3	7.6	4.1	6.1	1.8	6.3	6.4	4.3	3.0	2.3
10-21	3.3	4.5	4.2	5.1	4.1	4.7	3.0	2.3	5.9	3.9	4.7	3.0	1.8	1.2
10-15	1.7	2.4	1.3	2.8	2.6	3.3	1.3	1.4	1.9	2.1	2.7	1.6	.9	.7

Table 3.--Continued.

DECEMBER

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
40-69/01-09	7.0	1.9	4.5	3.5	1.0	5.9	3.8	4.9	2.2	3.9	4.7	5.3	4.1	2.4
04-21	12.8	9.0	10.4	10.9	6.6	11.7	8.1	9.9	11.5	10.7	11.6	7.6	6.0	5.1
04-15	11.6	7.5	9.2	9.3	5.8	10.6	7.1	9.3	7.6	9.9	9.8	6.9	5.4	4.7
04-09	4.8	1.9	3.0	3.4	1.1	4.2	2.3	4.4	1.5	3.7	3.6	2.4	2.4	1.5
10-21	2.8	3.1	2.6	3.7	2.3	2.9	1.6	1.4	5.6	2.3	3.4	1.2	.8	1.0
10-15	1.2	1.8	.7	2.0	1.6	1.7	.7	.8	1.4	1.1	1.9	.6	.5	.6
40-59/01-09	3.1	.5	1.9	1.0	.3	2.2	1.8	2.1	1.5	1.6	1.4	2.0	2.4	.7
04-21	7.3	4.6	5.8	5.0	3.2	6.3	3.7	5.1	7.4	4.8	5.5	3.0	3.8	2.1
04-15	6.2	3.6	5.0	4.1	2.2	5.6	3.4	4.7	3.6	4.1	4.6	2.7	3.6	1.9
04-09	2.0	.3	1.3	1.0	.2	1.6	1.0	1.9	.7	1.6	1.1	.7	1.8	.3
10-21	1.9	1.5	1.4	1.7	1.0	1.1	1.6	.5	3.6	1.0	2.0	.5	.3	.5
10-15	.8	.6	.2	.9	.5	.6	.3	.1	.9	.3	1.1	.2	.3	.3
40-49/04-21	1.4	.9	.4	.8	.9	.7	.5	.4	2.1	1.1	.5	.4	.9	.4
04-15	1.1	.3	.2	.6	.6	.7	.5	.4	.8	.7	.4	.4	.9	.4
50-69/01-09	1.7	.9	2.5	1.4	.8	3.8	2.1	1.3	.9	1.2	1.9	2.1	1.6	.8
04-21	3.7	4.1	6.0	4.3	4.6	7.3	5.2	2.5	4.2	4.1	5.4	3.9	2.3	2.0
04-15	2.9	3.3	5.0	3.4	4.1	6.6	4.1	1.9	3.3	3.7	4.3*	3.4	1.5	1.7
04-09	1.2	.7	1.7	1.1	.7	2.5	1.1	1.0	.8	1.0	1.2*	.9	.3	.5
10-21	.7	.9	1.6	1.4	1.6	1.9	1.2	.4	1.8	.6	1.7*	.6	.5	.4
10-15	.3	.5	.5	.7	1.3	1.2	.3	0	.3	.3	1.0*	.1	0	.3

*Interpolated value.

Table 4.--Standard deviation associated with the mean number of days/month meeting relative humidity, wind speed, wind direction, and duration criteria.

JANUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	2.2	2.1	1.6	1.7		1.6	1.3	2.1	2.5	2.0	1.8		2.2	1.9
04-15	2.2							2.1	1.6	2.3	1.5			1.8
10-21									2.1	1.4				
20-69/01-09	2.0	2.8	2.0	1.8	1.5	3.9	1.9	3.0	1.6	2.9	2.1	3.0	3.0	2.7
04-21	3.5	2.1	2.2	3.2	4.4	2.7	2.6	1.5	1.7	3.7	2.5	2.7	5.4	2.6
04-15	3.0	3.6	2.3	2.9	4.2	2.8	2.2	2.3	2.3	4.5	2.1	2.2	4.3	2.5
04-09	1.7	2.7	2.3	2.1		2.9	1.6	2.6	1.3	2.7	1.2	1.9	3.3	2.1
10-21	3.0	3.3	2.4	3.7	2.3	1.9	1.0	2.5	2.3	2.9	2.4	2.2	1.9	1.9
10-15	1.5	1.6		2.2	2.0	1.2		2.0	1.3	2.7	1.1	1.1		
16-99									2.2					
20-59/01-09	2.3		1.7	1.4		2.4	1.6	2.6	1.5	2.1	1.4	2.6	2.5	1.9
04-21	3.8	3.3	2.5	2.7	3.5	3.0	1.8	2.4	2.5	4.4	3.8	3.3	3.9	2.3
04-15	3.5	4.1	2.2	2.9	2.9	2.7	1.6	2.9	2.5	4.6	3.6	2.7	3.7	2.6
04-09	1.6		2.0			1.8	1.5	2.0		2.1	1.4	1.6	2.1	1.1
10-21	2.3	2.8	2.0	2.5	1.4	1.4	1.2	1.8	2.7	3.2	2.2	1.7		
10-15	1.1			1.2		1.3		1.4	1.3	2.6				
20-49/01-09	1.4		1.4			1.6		2.0				1.7	1.4	1.9
04-21	2.9	2.1	2.4	2.0	2.5	2.3	2.1	2.6	3.0	4.0	2.5	2.4	2.3	2.0
04-15	2.9	2.4	2.1	1.6	2.4	2.2	1.7	2.7	2.0	3.8	2.9	2.0	2.3	2.0
04-09						1.2		1.7						
10-21	1.7	1.9		1.1		1.0		1.1	2.2	1.9	.8			
10-15											1.0			

Table 4.--Continued.

JANUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	2.4	1.9	1.6	1.6		1.5		1.8	2.0	1.7	1.3			1.9
04-15	2.1							1.6	1.3	2.0	1.4			
10-21									1.8					
30-69/01-09	1.8	2.4	1.9	1.6	1.4	3.9	1.5	3.2	1.5	2.8	1.9	3.0	2.5	2.2
04-21	2.9	2.8	2.2	3.3	4.2	2.4	2.6	2.1	1.9	3.5	2.5	2.9	4.3	2.6
04-15	2.5	3.4	2.1	2.9	4.0	2.5	2.2	2.6	2.0	4.2	2.2	2.4	3.2	2.5
04-09	1.6		2.2	1.8		2.5	1.4	2.8		2.7	1.5	1.9	3.1	1.7
10-21	2.7	3.5	2.5	3.9	2.4	1.8	1.0	2.3	2.6	2.9	2.4	2.2	1.4	1.9
10-15	1.4	1.8		2.2		1.2		1.8	1.0	2.4	.8		.7	
30-59/01-09	1.7		1.4			2.1	1.3	2.3	1.4	1.7	1.5	2.4	1.9	1.1
04-21	2.7	3.4	2.4	2.2	3.2	2.6	1.5	2.2	2.1	4.2	3.3	3.2	3.1	2.0
04-15	2.5	3.2	1.8	2.5	2.6	2.3	1.3	2.6	1.8	4.5	3.3	2.8	2.7	2.2
04-09	1.4		1.6			1.6		1.8		1.8	1.6	1.4		.8
10-21	2.0	2.9	2.0	2.5	1.4	1.4	1.2	1.6	2.5	3.0	2.0			
10-15	1.2					1.3				2.4				
30-49/01-09													.9	
04-21	1.8	1.6	1.9	2.0	2.2	2.0	1.6	2.2	2.0	3.3	1.9	1.5	1.5	1.0
04-15	1.8	1.6	1.6	1.4	2.0	1.9	1.4	2.3	1.8	2.5	2.4	1.4	1.5	1.1
10-21									1.1					

Table 4.--Continued.

JANUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	2.7	2.0	2.9	2.3	2.1	4.1	1.4	2.7	1.8	2.7	2.2	2.5	2.3	2.6
04-21	2.2	3.7	2.2	3.1	4.1	2.4	3.2	2.4	3.4	3.7	2.5	3.6	4.0	3.6
04-15	1.7	2.8	2.2	3.8	4.4	2.5	2.6	2.6	2.9	4.2	2.1	3.2	3.6	3.6
04-09	1.8	1.8	2.8	2.5	2.2	3.5	.9	2.9		2.6	1.9	2.6	2.9	2.1
10-21	2.6	3.7	1.6	3.7	2.5	2.1	2.3	1.9	2.5	2.1	2.9	2.4		2.2
10-15	1.1	1.5		1.9	2.2	1.5		1.4	.9	1.6		1.4		
40-69/01-09	2.2		1.3	1.6		3.3	1.5	1.9	1.4	1.5	1.5	2.0	2.3	1.3
04-21	3.0	2.9	2.2	4.2	3.6	2.4	2.5	2.7	3.2	2.8	2.5	1.9	4.1	2.1
04-15	2.0	2.5	2.2	3.8	3.7	2.5	2.0	2.6	2.1	3.2	2.3	1.2	3.0	2.3
04-09	1.1		1.7	1.8		2.3	1.1	1.7		1.5	1.6	1.7	2.7	1.1
10-21	3.0	3.1	2.0	3.7	2.3	1.4	.8	1.7	2.7	2.0	2.8	2.1		
10-15		1.0		1.7		.8								
40-59/01-09	1.4					1.3						1.3	1.5	.9
04-21	2.9	3.3	2.0	2.7	1.8	1.9	1.4	1.9	3.6	2.6	3.0	1.6	2.7	1.7
04-15	2.3	2.3	1.1	2.7	1.6	1.8	1.3	1.6	1.8	2.8	1.8	1.5	2.3	2.0
10-21									2.2					
50-69/01-09						2.0	.8							
04-21	1.9	2.5	2.5	2.9	3.4	2.2	2.2	1.2	2.4	1.7	3.6	1.9	2.5	1.1
04-15	1.7	1.7	2.9	2.4	3.5	2.4	2.0	.8	1.0	1.6		1.5		1.0
10-21		1.9		1.6										

Table 4.--Continued.

FEBRUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	2.4	1.8	.6	3.1		1.3	1.1	2.8	2.5	4.3	2.9		1.9	1.2
04-15	2.0							2.8	1.7	3.1	2.3			1.2
10-21									1.5	2.5				
20-69/01-09	3.2	2.0	1.6	1.9	.8	2.3	1.7	2.8	1.6	1.9	2.9	3.4	3.2	1.6
04-21	3.2	4.2	3.0	2.5	4.5	4.0	2.7	3.0	2.9	2.5	4.1	3.7	4.9	4.2
04-15	2.6	4.1	3.3	2.3	3.7	3.9	2.0	3.2	2.2	2.0	3.5	3.4	4.5	3.2
04-09	2.1	2.1	2.0	1.9		1.8	1.4	2.5	1.2	1.1	2.7	2.3	3.5	.9
10-21	3.8	1.9	2.0	2.5	2.7	1.8	1.9	1.6	2.7	2.7	4.0	2.5	2.1	2.4
10-15	2.3	1.7		2.0	1.4	1.3		1.7	1.1	1.6	2.2	1.0		
16-99									2.7					
20-59/01-09	2.7		1.6	1.3		1.8	2.0	2.2	1.6	1.3	3.3	2.7	3.1	1.9
04-21	3.3	2.8	2.9	2.6	3.3	4.1	1.9	3.0	3.0	3.1	4.5	3.2	4.4	3.3
04-15	2.4	2.8	3.2	2.4	2.6	3.9	1.8	2.9	2.7	2.3	4.1	2.6	4.2	2.0
04-09	1.7		1.3			1.6	1.0	2.0		.8	3.1	1.9	3.0	1.0
10-21	3.0	2.1	2.4	2.3	2.2	1.4	1.2	2.1	2.7	2.4	3.4	2.2		
10-15	1.4			1.6		1.2		1.6	1.0	1.7				
20-49/01-09	2.5		.9			.9		2.2				1.6	1.9	1.4
04-21	1.8	1.6	2.0	3.6	2.1	1.8	2.5	2.5	2.7	3.1	4.7	3.5	3.9	2.1
04-15	1.9	2.0	2.2	2.7	1.5	1.8	2.3	2.4	2.3	2.5	3.5	2.6	3.8	1.9
04-09						.9		2.0						
10-21	1.5	2.0		3.5		.8		2.0	1.6	2.6	2.3			
10-15										2.0				

Table 4.--Continued.

FEBRUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	2.1	1.7	.6	3.1		1.3		2.5	2.2	3.1	2.5			1.1
04-15	1.0							2.4	1.4	2.2	2.2			
10-21									1.0					
30-69/01-09	2.7	1.7	1.7	1.6	.8	2.2	1.4	2.3	1.3	2.0	2.7	2.9	2.6	1.5
04-21	3.6	4.3	2.7	2.5	4.3	3.5	2.7	3.2	2.9	2.4	4.2	3.5	4.0	3.8
04-15	2.5	3.8	3.1	2.1	3.4	3.6	1.5	3.0	2.1	2.2	3.6	2.3	3.6	2.7
04-09	1.9		1.9	1.6		1.5	1.3	2.3		1.5	2.5	2.2	2.7	1.0
10-21	4.0	2.0	2.0	1.9	2.5	1.8	1.9	1.7	2.6	2.4	3.5	2.5	1.5	2.3
10-15	2.3	1.8		1.9		1.3		1.3	1.2	1.4	2.0		.8	
30-59/01-09	2.0		1.6			1.7	1.6	1.8	1.0	1.0	3.1	2.2	2.8	2.0
04-21	3.6	2.5	2.5	2.1	2.4	3.4	1.6	2.5	2.9	2.7	4.6	3.2	3.4	3.3
04-15	2.2	2.1	3.0	2.1	2.0	3.3	1.4	2.3	1.8	2.2	3.9	2.8	3.3	1.8
04-09	1.6		1.3			1.4		1.9		.8	2.7	1.7		1.0
10-21	3.2	1.8	2.3	1.7	2.0	1.4	.9	1.7	2.6	2.5	3.0			
10-15	1.3					1.2				1.5				
30-49/01-09													1.6	
04-21	2.1	1.5	1.5	2.5	1.4	1.2	1.4	2.1	2.0	2.6	3.9	2.4	2.7	1.9
04-15	1.6	1.3	1.4	1.9	1.0	1.2	1.2	1.9	1.9	2.0	2.7	1.8	2.9	1.6
10-21									1.2					

Table 4.--Continued.

FEBRUARY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	1.7	1.6	2.1	1.2	1.5	2.6	1.4	2.0	1.2	2.1	1.6	1.8	1.7	1.4
04-21	2.7	3.8	3.4	2.3	4.1	3.6	3.0	3.6	2.1	2.9	2.0	2.8	4.0	2.8
04-15	2.2	4.2	3.5	2.6	3.8	3.7	2.3	3.4	1.8	3.3	2.9	2.3	3.2	2.2
04-09	1.1	1.6	2.1	1.4	1.4	2.3	1.1	2.1		1.6	1.3	1.0	2.0	1.0
10-21	3.0	1.7	1.6	2.2	2.6	1.9	2.3	1.6	2.3	1.9	3.0	1.3		1.8
10-15	1.8	1.6		1.2	1.7	1.9		1.5	.9	1.4		.9		
40-69/01-09	1.7		1.5	.9		2.3	1.0	1.8	1.1	1.9	1.3	2.2	1.1	1.4
04-21	2.6	3.7	2.7	2.8	4.1	3.7	2.9	3.0	2.4	2.7	2.4	2.0	3.0	3.2
04-15	2.1	3.2	2.5	2.5	3.3	3.8	1.7	2.6	1.8	2.8	2.5	1.8	2.2	2.3
04-09	1.0		1.5	.9		1.6	.9	1.7		1.7	1.3	1.1	1.4	1.1
10-21	2.7	1.3	1.3	1.8	2.2	1.5	2.2	1.1	2.0	1.4	2.6	1.3		
10-15		1.1		1.4		1.2								
40-59/01-09	.8					1.8						1.3	1.3	1.5
04-21	2.2	1.7	1.6	1.8	2.2	3.1	1.6	1.7	2.3	2.3	2.3	1.5	1.7	2.7
04-15	1.5	1.4	1.7	1.8	1.9	3.0	1.4	1.5	1.1	2.4	2.1	1.4	1.3	1.9
10-21									2.0					
50-69/01-09						1.4	.5							
04-21	1.3	1.8	2.3	1.7	3.4	3.1	2.4	1.8	1.4	1.5	1.3	1.9	2.6	1.7
04-15	1.2	1.3	2.1	1.6	2.5	3.3	1.4	1.7	1.2	1.7		1.2		1.2
10-21		1.0		1.3										

Table 4.--Continued.

MARCH

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	3.4	2.0	2.8	3.0		3.9	2.1	2.4	3.6	1.8	2.6		1.9	2.1
04-15	2.2							2.6	1.7	1.8	1.9			1.8
10-21									2.7	1.6				
20-69/01-09	2.8	.8	2.4	1.7	.9	1.3	2.4	2.7	1.1	1.4	3.4	2.5	3.5	2.1
04-21	3.4	2.8	2.9	2.6	4.5	3.4	2.5	3.4	2.5	1.5	3.0	3.2	2.6	3.7
04-15	3.2	3.6	3.1	2.4	3.8	3.2	2.8	4.4	1.3	1.6	3.1	3.7	2.6	3.2
04-09	1.8	.8	2.1	1.7		1.3	1.1	2.6	.7	1.3	3.5	2.4	1.4	1.8
10-21	2.2	2.2	2.8	2.2	3.4	3.4	2.0	3.0	2.2	1.8	2.2	.7	2.3	3.3
10-15	1.6	1.7		1.8	1.3	2.3		2.0	1.3	1.6	1.4	1.8		
16-99									1.9					
20-59/01-09	2.2		1.3	1.1		1.6	2.0	2.4	1.2	1.5	2.9	2.5	2.1	2.2
04-21	3.8	2.7	3.1	2.1	4.2	4.1	3.3	3.0	2.1	1.9	3.5	2.9	2.0	2.1
04-15	3.1	3.6	3.1	3.0	3.3	3.8	2.9	4.0	1.2	1.7	3.4	2.8	1.9	2.5
04-09	1.4		1.3			1.6	1.3	2.0		1.5	2.7	1.7	1.1	1.4
10-21	2.1	1.3	2.6	2.0	2.8	3.0	1.9	2.7	1.7	2.1	2.5	1.3		
10-15	1.4			1.9		1.8		2.0	1.0	1.4				
20-49/01-09	2.1		1.1			1.4		1.3				1.2	1.7	1.8
04-21	3.1	3.2	3.1	3.5	3.2	4.5	3.1	3.0	1.2	1.9	3.3	2.8	1.8	2.7
04-15	2.8	3.1	2.3	2.7	2.2	3.4	3.1	3.5	2.7	.9	3.3	2.6	2.5	2.4
04-09						1.2		1.2						
10-21	2.1	2.1		2.5		2.8		1.9	2.1	2.1	2.7			
10-15										.9				

Table 4.--Continued.

MARCH

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	3.0	1.8	2.6	2.8		3.7		3.2	1.8	1.9	2.6			2.0
04-15	1.7							3.0	.8	1.3	1.9			
10-21									2.4					
30-69/01-09	2.1	.7	2.1	1.4	.9	1.5	1.7	2.2	.9	.9	2.8	2.0	2.3	1.7
04-21	2.9	2.6	2.5	3.7	4.1	3.3	1.6	2.8	1.9	2.2	2.6	3.7	3.1	2.8
04-15	2.9	3.1	2.5	2.8	3.4	3.2	1.8	3.3	2.1	2.2	3.1	3.4	2.1	2.1
04-09	1.5		2.4	1.4		1.2	1.0	2.0		.8	3.0	2.2	.7	1.4
10-21	2.2	1.8	2.2	2.6	3.4	2.5	1.5	2.2	1.8	1.9	1.5	.9	2.2	2.7
10-15	2.0	1.0		1.2		1.9		1.3	1.1	1.4	1.4		1.2	
30-59/01-09	1.8		1.2			1.1	1.4	1.3	.9	1.0	2.2	1.8	.9	1.4
04-21	2.8	2.3	2.8	2.7	3.6	3.5	1.7	2.1	2.1	3.0	3.2	2.7	2.6	2.2
04-15	2.9	2.7	2.3	3.1	2.7	3.6	1.5	2.5	1.8	2.2	3.2	2.5	1.6	1.7
04-09	1.2		1.2			1.1		1.2		.9	2.3	1.6		.9
10-21	1.8	1.2	2.1	1.4	2.7	1.6	1.5	1.9	1.0	2.2	1.6			
10-15	1.5					1.4				1.2				
30-49/01-09													.9	
04-21	2.0	2.1	1.9	2.1	2.5	2.8	1.7	1.4	1.3	2.0	1.6	1.6	1.6	2.0
04-15	1.6	1.9	1.2	1.7	1.6	1.9	1.6	1.6	2.0	1.3	1.5	1.5	1.9	1.7
10-21									.9					

Table 4.--Continued.

MARCH

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	1.3	.7	2.3	1.0	.9	2.4	1.7	1.2	.7	1.0	1.8	2.9	2.1	1.7
04-21	2.2	2.3	3.1	3.5	3.5	3.3	2.7	1.3	2.5	2.1	2.5	2.8	4.7	2.3
04-15	2.1	2.3	3.3	2.8	2.8	3.4	2.5	1.7	2.2	2.1	2.5	2.7	3.0	1.8
04-09	1.1	.5	2.7	1.2	.8	1.8	1.2	1.2		1.0	1.7	1.6	1.3	1.4
10-21	1.9	2.3	1.1	3.3	3.3	1.9	2.5	2.3	1.9	1.4	1.7	1.5		1.1
10-15	1.4	1.0		1.1	1.0	1.9		1.0	1.0	1.0		1.1		
40-69/01-09	1.1		2.2	.7		1.2	1.0	1.1	.5	.5	1.3	2.1	1.6	1.3
04-21	1.8	2.0	2.4	4.0	2.6	2.6	1.7	1.4	2.2	2.5	1.9	2.9	3.0	1.9
04-15	2.1	2.1	2.5	2.6	2.1	2.7	2.2	2.3	1.4	2.5	2.1	2.5	2.2	1.6
04-09	1.0		2.2	.6		1.3	.7	1.1		.5	1.2	1.6	.6	1.2
10-21	2.1	2.1	1.4	2.8	2.4	1.2	1.7	1.3	2.0	1.6	1.1	1.4		
10-15		1.0		1.1		1.3								
40-59/01-09	.9					1.3						1.7	.7	1.1
04-21	1.3	2.1	2.3	2.8	2.3	1.7	1.3	1.2	2.0	1.7	1.6	1.9	2.2	1.2
04-15	1.4	1.8	1.7	1.8	2.0	2.2	1.3	1.5	1.2	1.3	1.5	1.8	1.5	1.6
10-21								1.4						
50-69/01-09						1.0	.5							
04-21	1.4	1.7	1.5	3.0	1.7	2.4	2.0	.8	1.7	1.1	1.4	1.3	1.6	1.3
04-15	1.3	1.5	1.8	1.9	1.6	2.5	2.0	1.1	1.0	.8		1.2		1.1
10-21		1.7		2.0										

Table 4.--Continued.

APRIL

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	2.8	2.8	3.4	3.6		2.2	3.3	2.5	3.3	3.6	2.7		1.8	2.6
04-15	2.3							2.1	1.9	3.2	2.2			2.3
10-21									3.4	3.0				
20-69/01-09	4.3	.4	1.4	1.6	1.6	2.1	2.4	1.7	.7	2.7	2.4	2.9	2.4	3.8
04-21	3.2	1.6	3.6	2.9	2.6	2.7	3.2	2.0	2.2	2.6	1.3	2.7	4.4	2.2
04-15	2.9	4.8	4.0	3.5	2.8	3.3	2.6	2.5	2.7	3.1	2.9	2.5	3.4	2.5
04-09	2.7	.3	1.3	1.7		1.7	2.1	2.0	.5	2.3	2.4	1.8	2.5	2.5
10-21	3.3	1.9	2.4	3.1	3.5	3.2	2.4	2.3	3.9	4.2	3.2	3.7	2.3	2.5
10-15	1.5	2.6		1.4	1.7	2.9		2.4	2.2	3.1	1.2	2.5		
16-99									3.0					
20-59/01-09	2.8		1.6	1.3		1.8	1.9	1.0	.7	1.6	1.9	2.8	1.7	3.1
04-21	3.3	2.7	4.1	3.5	2.4	3.4	3.5	2.0	3.0	2.9	2.4	3.9	3.6	2.3
04-15	2.0	4.7	4.4	3.5	2.0	3.4	2.5	2.6	2.4	3.2	2.7	3.6	3.0	2.4
04-09	2.0		1.7			1.2	1.7	1.7		1.4	1.6	1.9	1.9	1.7
10-21	3.0	2.3	1.8	3.4	3.0	3.2	2.1	2.5	4.2	4.2	2.7	2.8		
10-15	1.3			1.5		2.3		2.3	2.1	3.1				
20-49/01-09	1.8		1.7			.9		.9				2.0	1.5	2.2
04-21	2.8	3.3	3.9	4.8	2.3	3.0	3.2	2.8	2.9	3.2	2.1	4.4	2.7	2.3
04-15	2.2	3.4	3.8	4.1	1.9	2.8	2.5	2.4	2.1	2.9	2.4	3.8	2.2	2.5
04-09						1.1		1.1						
10-21	2.2	2.0		3.0		3.0		2.3	3.8	3.8	2.1			
10-15										2.8				

Table 4.--Continued.

APRIL

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	2.0	2.7	2.8	3.2		2.2		1.5	1.8	3.0	2.7			2.2
04-15	1.8							1.6	1.4	2.6	2.4			
10-21									2.4					
30-69/01-09	2.7	.4	1.2	1.5	1.5	2.1	2.8	2.0	.4	2.2	1.6	2.9	2.6	3.7
04-21	3.8	1.8	3.4	2.6	2.5	2.9	3.4	2.8	2.9	3.4	1.9	1.8	4.6	2.3
04-15	4.1	4.6	3.3	3.6	3.1	3.6	3.0	2.5	2.9	3.7	2.3	2.3	3.6	2.4
04-09	2.0		1.0	1.6		1.7	2.2	2.1		1.9	1.6	1.9	2.2	2.5
10-21	2.3	2.2	2.0	2.4	2.7	3.0	2.2	2.5	3.1	3.0	3.4	3.0	2.2	1.6
10-15	.9	2.2		1.1		3.0		1.9	1.1	2.3	1.4		1.0	
30-59/01-09	1.3		1.1			1.6	2.1	1.2	.4	1.2	1.6	2.3	1.9	3.0
04-21	3.0	2.3	3.0	1.9	1.9	3.8	2.6	3.1	2.4	3.8	3.3	2.5	3.6	2.3
04-15	2.6	3.7	2.8	2.6	2.1	3.7	2.5	3.3	2.3	3.9	2.6	2.3	3.5	2.2
04-09	1.4		1.1			1.2		1.4		1.1	1.5	1.6		1.8
10-21	2.0	1.7	1.5	2.0	1.9	3.2	1.9	2.6	3.0	2.6	2.5			
10-15	.7					2.5				2.0				
30-49/01-09													1.4	
04-21	2.1	2.3	2.3	2.7	1.6	3.1	2.2	2.9	1.9	2.7	2.8	2.5	2.4	2.9
04-15	2.1	2.2	2.0	2.4	1.6	2.8	2.2	2.4	1.7	2.4	1.9	2.0	2.1	2.9
10-21									2.0					

Table 4.--Continued.

APRIL

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	3.1	.8	1.3	1.9	1.2	1.6	3.5	1.0	.3	.8	1.8	3.0	2.9	2.5
04-21	2.7	2.6	3.0	3.5	3.1	2.7	3.9	3.4	3.0	2.4	3.3	4.9	4.5	4.0
04-15	3.2	4.4	2.2	3.2	3.7	3.3	3.7	3.6	2.6	2.0	3.0	4.5	4.2	3.4
04-09	2.8	.5	.9	1.7	1.0	1.3	2.3	1.0		.9	1.5	1.9	2.0	2.0
10-21	2.0	2.7	2.3	2.6	2.3	2.2	2.4	1.7	1.9	2.3	2.4	3.1		2.1
10-15	1.1	2.5		1.4	1.4	1.7		1.5	.7	1.5		1.9		
40-69/01-09	1.7		.9	.7		1.5	2.3	.8		.7	1.8	2.2	2.2	2.0
04-21	2.7	2.2	2.9	4.8	2.4	2.7	3.5	2.7	2.4	2.3	3.7	3.9	2.9	2.9
04-15	3.1	3.6	3.0	4.6	2.6	3.0	3.4	2.5	1.6	1.9	3.2	4.0	2.8	2.9
04-09	1.5		.8	.7		1.5	1.5	.8		.7	1.1	1.8	1.9	1.9
10-21	1.7	1.6	2.0	2.6	2.1	2.6	1.7	1.6	1.6	2.4	2.4	2.6		
10-15		1.5		1.6		1.6								
40-59/01-09	.7					1.2						1.6	1.9	1.5
04-21	2.1	2.8	2.3	1.5	2.0	2.8	2.7	1.6	2.0	1.5	3.0	2.4	1.8	2.0
04-15	1.5	2.7	1.8	1.9	1.5	2.6	2.5	1.4	.8	1.1	1.8	2.2	1.9	1.9
10-21									1.7					
50-69/01-09							1.0	1.3						
04-21	1.9	2.2	1.2	4.1	1.4	1.9	1.6	1.1	1.9	1.6	1.3	1.6	1.6	1.3
04-15	1.9	1.6	1.4	3.4	1.3	1.8	1.5	.7	1.2	1.2		1.8		1.4
10-21		1.9		1.7										

Table 4.--Continued.

MAY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	2.5	2.0	1.6	2.0		.8	2.3	2.7	2.4	4.4	3.7		1.2	2.9
04-15	2.3							2.2	2.0	3.8	3.5			2.9
10-21									2.0	2.1				
20-69/01-09	3.4	2.9	2.9	2.7	2.8	2.5	2.6	3.8	2.4	2.4	3.3	3.2	4.8	3.9
04-21	3.2	3.5	3.4	4.7	2.6	4.0	3.1	2.3	2.7	3.1	5.7	3.7	4.0	3.7
04-15	3.2	5.7	3.5	4.6	2.5	4.4	2.7	2.2	2.7	3.2	5.3	3.7	3.9	3.8
04-09	2.4	2.3	2.2	2.6		1.8	1.3	3.6	1.4	2.1	3.1	2.1	3.8	3.3
10-21	2.3	3.5	1.9	2.7	2.6	2.1	2.7	2.5	3.4	2.8	2.7	1.7	1.1	1.1
10-15	2.0	2.1		1.9	1.7	1.5		1.3	1.4	2.3	1.7	1.5		
16-99									.9					
20-59/01-09	2.6		2.1	1.7		2.3	1.7	2.8	1.8	1.9	2.2	3.2	4.4	3.6
04-21	3.7	4.2	4.4	4.3	2.0	5.0	3.8	2.7	3.0	4.2	5.9	4.4	4.1	3.8
04-15	3.8	5.2	4.1	4.2	1.9	4.9	3.5	2.7	3.0	2.9	6.0	4.5	3.9	3.9
04-09	1.3		1.9			2.0	1.1	2.6		1.8	1.8	2.3	3.2	3.1
10-21	2.4	2.8	2.0	2.0	2.8	2.1	2.1	2.2	2.9	2.9	3.0	1.3		
10-15	1.9			1.2		1.2		1.2	1.3	2.1				
20-49/01-09	2.7		1.9			1.6		2.0				2.4	3.1	3.0
04-21	4.2	3.4	4.5	3.4	1.7	3.6	3.2	3.0	3.1	4.9	6.1	3.5	3.0	3.7
04-15	4.1	3.2	4.5	3.0	1.2	3.2	2.6	3.1	2.7	4.6	6.1	3.4	2.6	3.7
04-09						1.1		1.9						
10-21	2.5	2.3		1.9		1.1		1.3	2.4	2.3	2.6			
10-15										1.6				

Table 4.--Continued.

MAY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
STATIONS RH/WS														
20-39/04-21	2.3	1.9	1.6	2.0		.8		2.4	2.0	4.3	3.7			2.7
04-15	2.2							1.9	1.7	3.7	3.5			
10-21									2.0					
30-69/01-09	3.1	2.9	2.5	2.5	2.3	2.2	2.5	3.8	2.1	1.5	3.2	3.3	4.4	3.1
04-21	2.8	3.5	3.6	3.9	2.6	3.8	3.2	1.9	3.1	2.4	4.1	3.3	3.5	3.7
04-15	2.8	5.5	3.8	3.8	2.4	4.2	2.8	1.8	2.6	2.2	4.4	3.4	3.6	3.7
04-09	2.2		1.8	2.3		1.7	1.0	3.5		1.3	3.0	2.2	3.6	2.4
10-21	2.3	3.5	1.5	2.5	2.1	2.1	2.6	2.3	3.1	2.5	2.0	1.8	1.0	1.1
10-15	1.9	1.8		1.6		1.5		1.2	1.7	2.1	1.4		.8	
30-59/01-09	2.3		2.0			2.0	1.4	2.9	1.5	1.0	2.2	3.2	3.8	2.7
04-21	3.5	3.8	4.5	3.7	2.4	4.8	3.2	1.9	2.8	3.2	5.0	4.2	3.7	3.4
04-15	3.6	4.6	3.9	3.4	2.0	4.7	3.0	2.0	2.7	2.9	5.0	4.4	3.7	3.5
04-09	1.3		1.6			1.6		2.6		.8	1.8	2.4		2.0
10-21	2.2	2.5	1.2	1.5	2.2	2.1	1.7	2.1	2.6	2.0	2.3			
10-15	1.8					1.1				1.4				
30-49/01-09													2.5	
04-21	3.1	1.8	3.9	2.7	2.1	3.8	2.5	2.2	2.5	3.1	4.7	3.0	2.6	1.9
04-15	3.0	2.1	3.7	2.4	1.5	3.3	1.9	2.4	1.9	2.8	4.8	3.0	2.3	1.9
10-21									1.9					

Table 4.--Continued

MAY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	2.2	2.6	2.5	2.0	2.4	1.5	2.0	3.0	1.9	1.6	2.6	1.6	4.4	2.1
04-21	3.1	1.9	2.8	2.9	2.6	4.9	3.6	2.3	2.3	2.8	3.1	3.3	4.4	3.1
04-15	2.8	4.4	3.1	2.5	1.7	4.7	3.2	2.2	2.2	2.9	3.3	3.2	4.6	3.2
04-09	2.2	2.4	1.5	2.0	1.9	1.5	1.1	3.2		1.4	1.7	1.6	4.3	2.1
10-21	1.8	4.4	1.8	2.5	2.1	2.2	2.1	1.4	1.5	2.2	1.3	1.3		1.1
10-15	1.6	2.1		1.4	1.6	1.8		1.2	.6	2.1		1.1		
40-69/01-09	2.1		1.7	1.7		1.7	2.1	2.4	1.7	.7	2.0	1.7	3.5	2.4
04-21	2.4	2.9	3.0	2.5	2.5	4.0	3.0	2.3	1.9	2.4	3.7	2.4	2.8	2.8
04-15	2.2	4.6	3.4	2.6	1.9	4.2	2.6	2.0	1.6	2.6	3.6	2.1	2.9	2.8
04-09	2.3		1.0	1.5		1.4	.9	2.3		.7	1.5	1.4	2.8	1.8
10-21	1.5	3.1	1.6	1.5	1.8	2.0	1.7	1.2	1.5	2.1	1.1	1.5		
10-15		1.5		1.1		1.3								
40-59/01-09	1.2					.8						1.6	2.5	1.7
04-21	2.1	2.9	2.1	2.0	2.4	3.2	2.5	2.3	1.8	2.6	1.8	2.2	2.5	2.7
04-15	2.2	3.3	2.1	1.9	2.1	3.0	2.3	2.1	1.5	2.3	1.8	2.4	2.4	2.9
10-21									1.1					
50-69/01-09						.8	1.0							
04-21	1.5	1.9	2.5	1.9	.9	2.8	1.6	1.7	1.2	1.3	2.0	1.9	1.1	1.1
04-15	1.3	2.5	2.1	2.2	1.2	2.6	1.6	1.7	1.0	1.3		1.6		1.1
10-21		1.9		.9										

Table 4.--Continued.

JUNE

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	1.5	1.5	1.1	1.1		.5	2.1	2.0	2.4	3.5	1.7		.4	2.0
04-15	1.9							1.8	1.8	2.9	1.7			1.2
10-21									1.2	1.3				
20-69/01-09	2.3	.7	4.1	2.6	2.3	3.4	3.8	2.4	3.0	3.0	2.4	2.8	3.6	3.5
04-21	3.2	2.9	4.6	4.5	3.3	4.4	5.1	3.2	2.5	3.3	3.3	3.1	7.2	5.2
04-15	3.2	2.2	4.3	4.7	2.8	4.1	5.0	3.1	2.7	3.3	2.7	2.8	6.4	4.6
04-09	2.0	.8	3.1	2.6		2.5	3.2	1.5	1.9	2.2	2.3	1.9	3.8	2.2
10-21	1.6	3.9	2.7	4.1	1.9	1.6	1.4	1.9	2.9	2.3	1.2	2.3	.7	1.8
10-15	1.3	1.7		1.9	1.2	1.4		1.6	2.5	2.1	.8	1.4		
16-99									.4					
20-59/01-09	2.0		2.9	1.6		2.5	3.4	2.0	3.2	2.6	1.8	2.3	1.9	2.4
04-21	3.4	3.2	3.9	4.0	3.0	4.5	4.8	3.9	3.6	3.7	3.8	2.9	5.0	4.5
04-15	3.3	2.7	4.0	3.8	2.6	4.0	4.6	3.7	3.4	3.8	3.5	2.6	4.8	3.5
04-09	1.6		2.6			1.7	2.6	1.4		1.9	1.6	1.3	2.4	1.5
10-21	1.4	3.0	1.9	2.3	1.5	1.5	1.5	2.2	3.4	1.7	1.0	1.3		
10-15	1.2			1.4		1.1		1.6	2.2	1.5				
20-49/01-09	2.1		2.4			1.7		1.5				1.2	1.7	.8
04-21	2.6	1.8	2.5	2.7	1.9	2.4	3.6	2.9	3.6	4.3	4.2	2.2	3.0	3.8
04-15	2.6	1.2	2.7	2.3	1.9	2.1	3.4	2.3	2.2	4.3	3.9	1.7	3.0	2.9
04-09						.8		.8						
10-21	.9	1.2		1.4		.8		1.5	2.2	1.6	.6			
10-15										1.4				

Table 4.--Continued.

JUNE

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	1.5	1.5	1.2	1.1		.5		2.0	2.3	3.2	1.7			2.0
04-15	1.5							1.8	1.7	2.7	1.7			
10-21									1.3					
30-69/01-09	2.2	.7	3.8	2.6	2.3	3.2	3.4	2.4	2.3	2.5	2.3	2.8	3.5	3.5
04-21	3.0	2.7	4.4	4.5	3.3	4.4	4.2	2.9	2.1	3.2	3.3	3.0	6.9	4.5
04-15	3.0	2.4	4.0	4.2	2.8	4.1	4.2	3.1	2.2	3.2	2.7	2.6	6.1	4.2
04-09	2.1		2.9	2.6		2.5	2.8	1.4		1.8	2.3	1.9	3.8	2.2
10-21	1.6	3.9	2.7	4.1	1.9	1.5	1.4	1.7	2.3	3.3	1.3	2.2	.7	1.2
10-15	1.3	1.7		1.9		1.4		1.6	2.5	2.1	.8		.5	
30-59/01-09	1.8		2.5			2.3	2.5	2.0	3.0	2.2	1.8	2.3	1.8	2.3
04-21	3.4	2.9	3.2	3.9	3.0	4.5	3.7	3.6	3.0	3.5	3.7	2.6	4.6	3.7
04-15	3.4	2.8	3.2	3.7	2.6	4.0	3.7	3.5	2.8	3.5	3.4	2.3	4.3	3.0
04-09	1.6		2.3			1.7		1.4		1.7	1.6	1.3		1.5
10-21	1.4	2.4	1.9	2.3	1.5	1.3	1.4	2.0	2.7	1.5	1.1			
10-15	1.2					1.1				1.3				
30-49/01-09													1.5	
04-21	2.4	1.4	2.0	2.5	1.9	2.4	2.4	2.4	2.6	3.6	4.0	1.7	2.5	2.6
04-15	2.4	1.2	2.0	2.3	1.8	2.2	2.3	2.0	2.4	3.5	3.6	1.4	2.5	2.1
10-21									1.4					

Table 4.--Continued.

JUNE

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	2.4	1.2	3.2	4.1	3.3	2.1	2.9	2.7	1.7	2.3	3.1	2.8	3.6	3.3
04-21	3.0	2.7	2.8	3.3	3.6	3.8	2.7	2.9	3.7	3.7	1.9	3.3	5.3	3.6
04-15	3.3	3.9	2.4	4.0	3.2	4.2	2.8	3.1	3.2	3.6	2.5	3.0	4.4	3.1
04-09	2.3	1.0	2.6	4.2	2.6	2.7	2.4	2.3		2.3	2.6	2.0	2.7	1.8
10-21	1.8	3.1	2.5	3.6	1.9	1.8	1.2	1.1	2.0	1.7	2.3	2.0		.7
10-15	1.4	1.7		1.2	1.2	1.6		1.0	1.5	1.3		1.5		
40-69/01-09	1.7		2.5	2.3		2.0	2.7	2.1	1.1	1.5	1.5	2.1	3.1	3.0
04-21	2.4	2.6	3.8	4.1	3.4	3.9	3.0	2.7	2.5	3.4	2.2	2.3	5.7	2.7
04-15	2.3	2.7	3.5	4.0	3.0	3.6	3.1	2.8	2.2	2.9	1.7	2.1	5.0	2.6
04-09	1.8		1.9	2.2		2.0	2.4	1.6		1.5	1.5	1.4	3.0	1.7
10-21	1.5	3.0	2.4	3.3	1.9	1.6	.9	.9	1.8	1.4	1.4	1.9		
10-15		1.6		1.2		1.5								
40-59/01-09	1.0					1.4						1.3	1.8	1.9
04-21	2.5	2.4	2.3	2.4	3.1	3.4	2.5	2.8	2.0	2.3	2.4	1.7	3.0	2.2
04-15	2.5	2.8	2.2	2.0	2.8	3.1	2.5	2.9	1.9	1.9	2.0	1.9	2.8	2.1
10-21									1.7					
50-69/01-09						1.3	1.6							
04-21	1.0	1.7	2.6	4.0	1.6	3.1	2.4	1.9	1.4	1.6	2.0	2.3	1.8	1.3
04-15	1.0	2.0	1.8	4.0	1.7	2.8	2.3	1.7	1.4	1.4		1.9		1.3
10-21		1.9		1.8										

Table 4.--Continued.

JULY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MEM	VLD
CRITERIA RH/WS														
10-39/04-21	.8		.7	.3		1.2	.6	.3	1.6	1.2	.8		.3	.4
04-15	.6							.3	1.2	1.2	.8			.4
10-21									.6	.3				
20-69/01-09	2.5	1.3	2.9	1.8	1.6	2.0	2.0	1.9	3.2	1.6	2.5	2.4	2.0	2.9
04-21	3.5	4.0	4.4	3.8	3.2	3.6	2.5	4.8	3.8	4.5	4.0	3.6	3.0	2.9
04-15	3.6	4.2	4.1	3.8	3.2	3.4	2.5	4.8	4.1	4.7	5.3	.34	2.8	2.9
04-09	2.8	.7	2.4	1.6		2.2	1.7	1.8	2.1	1.5	2.3	1.6	1.4	1.8
10-21	1.5	2.4	2.6	1.9	.9	1.9	.5	2.0	2.5	1.5	1.0	1.0	.7	.7
10-15	1.4	.9		1.5	.8	1.6		1.8	1.2	1.3	.5	1.0		
16-99									.4					
20-59/01-09	2.3		2.4	.9		2.1	1.4	1.5	1.6	1.3	1.4	2.2	1.7	2.0
04-21	3.9	2.2	4.6	2.8	2.0	3.8	2.2	4.0	4.2	4.5	4.0	2.2	2.3	2.2
04-15	3.9	2.6	4.3	2.8	2.0	3.8	2.3	3.8	3.7	4.5	3.9	2.2	2.3	2.2
04-09	2.5		2.1			1.7	1.3	1.6		1.0	1.0	1.5	1.4	1.4
10-21	.8	.9	1.1	1.0	.7	1.7	.5	1.7	2.3	1.1	.7	.7		
10-15	.6			.8		1.2		1.6	.8	1.2				
20-49/01-09	1.0		.5			1.0		.8				.8	1.3	.9
04-21	1.7	.6	2.6	1.4	1.2	2.8	2.2	1.7	2.5	2.9	2.1	.7	1.0	.9
04-15	1.7	.6	2.6	1.4	1.2	2.8	2.2	1.7	2.3	2.8	1.8	.7	1.0	.9
04-09						.8		.8						
10-21	.7	.3		.5		.9		.4	1.4	.7				
10-15										.7				

Table 4.--Continued.

JULY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	.8		.7	.3		1.2		.3	1.6	1.2	.8			.4
04-15	.6							.3	1.2	1.2	.8			
10-21									.6					
30-69/01-09	2.4	1.3	2.7	1.8	1.6	1.9	2.0	1.9	3.2	1.6	2.5	2.4	2.4	2.9
04-21	3.5	4.0	4.5	3.8	3.2	3.6	2.3	4.8	3.6	4.5	4.0	3.6	3.0	2.9
04-15	3.6	4.2	4.2	3.8	3.2	3.4	2.3	4.8	4.2	4.7	3.9	3.4	2.8	2.9
04-09	2.8		2.2	1.6		2.0	1.7	1.8		1.5	2.3	1.6	1.3	1.8
10-21	1.5	2.4	2.6	1.9	.8	1.9	.5	2.0	2.4	1.5	1.1	1.0	.7	.7
10-15	1.4	.9		1.5		1.6		1.8	1.2	1.3	.5		.6	
30-59/01-09	2.3		2.4			2.0	1.2	1.5	1.5	1.3	1.4	2.2	1.8	2.0
04-21	3.9	2.2	4.7	2.8	2.0	3.8	2.1	4.1	4.2	4.5	4.0	2.1	2.1	2.2
04-15	3.9	2.6	4.4	2.8	2.0	3.8	2.0	3.8	3.8	4.5	3.9	2.1	2.1	2.1
04-09	2.5		2.1			1.5		1.6		1.0	1.0	1.5		1.4
10-21	.7	.9	1.1	1.0	.7	1.7	.5	1.7	2.1	1.1	.7			
10-15	.6					1.1				1.1				
30-49/01-09													1.2	
04-21	1.7	.6	2.5	1.4	1.2	2.8	1.8	1.7	2.5	2.7	2.0	.7	.8	.9
04-15	1.7	.6	2.5	1.4	1.2	2.8	1.8	1.7	2.1	2.7	1.8	.7	.8	.9
10-21									1.4					

Table 4.--Continued.

JULY

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	2.9	2.4	2.8	4.0	1.2	2.6	2.3	2.1	3.1	1.7	3.7	2.6	3.0	3.5
04-21	2.9	3.5	3.6	3.4	4.1	4.2	3.3	2.8	3.0	2.8	3.3	4.6	4.7	3.8
04-15	3.1	4.8	3.2	3.6	4.2	3.4	3.2	2.9	3.3	2.8	3.2	4.4	4.5	3.8
04-09	3.7	2.0	2.6	3.9	1.6	1.9	2.3	2.3		1.6	3.3	1.7	1.9	2.7
10-21	1.3	4.4	2.5	2.2	.8	1.5	.7	1.9	2.0	1.4	1.5	1.1		.8
10-15	1.4	1.3		2.3	.8	.9		1.9	1.3	1.3		1.1		
40-69/01-09	2.2		2.1	1.7		2.1	2.6	1.7	2.2	1.4	2.0	2.1	2.3	2.8
04-21	3.5	4.0	3.3	3.9	3.2	3.0	2.6	3.9	2.4	3.1	3.2	3.7	3.0	2.7
04-15	3.7	4.2	2.7	3.9	3.2	2.7	2.6	3.9	2.7	3.0	3.0	3.6	2.8	2.7
04-09	2.5		1.7	1.6		1.9	2.1	1.6		1.4	1.9	1.5	1.3	1.6
10-21	1.4	2.2	2.6	1.7	.8	1.1	.5	1.9	1.9	1.5	.9	1.0		
10-15		.9		1.4		.9								
40-59/01-09	2.0					2.0						1.7	1.3	2.0
04-21	3.7	2.1	3.3	2.3	1.5	2.6	1.9	2.9	2.8	2.5	2.5	2.0	1.8	2.1
04-15	3.6	2.3	2.8	2.3	1.4	2.5	1.9	2.6	.7	2.5	2.5	2.0	1.8	2.1
10-21									1.2					
50-69/01-09						1.1	1.2							
04-21	2.0	3.0	3.2	2.1	2.9	2.8	2.5	3.2	1.6	1.3	2.8	2.5	1.8	1.4
04-15	2.0	2.8	2.0	2.3	2.9	2.6	2.5	3.3	1.6	1.1		2.4		1.3
10-21		2.2		.9										

Table 4.--Continued.

AUGUST

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	.8		1.2			.6	.5	.6	1.7	1.3	.9			
04-15	.8							.6	1.1	1.1	.9			
10-21									1.4	.3				
20-69/01-09	2.6	1.1	2.9	3.1	2.2	2.7	3.8	1.9	2.4	2.3	3.6	1.7	3.7	2.8
04-21	3.1	3.7	3.4	5.2	3.4	3.7	2.8	3.5	4.6	4.4	3.7	3.7	4.6	2.4
04-15	3.1	4.0	3.4	4.9	3.1	3.6	2.8	3.5	4.3	4.6	3.7	3.5	4.4	2.3
04-09	2.0	1.1	2.4	3.0		2.7	2.6	1.9	2.0	2.4	2.7	1.4	2.9	1.5
10-21	1.1	1.8	.9	1.6	.8	2.3	1.0	1.4	2.8	2.4	1.2	1.2	.3	.7
10-15	1.3	1.5		1.0	.7	1.8		1.1	1.4	2.1	.8	.7		
20-59/01-09	2.0		2.0	2.0		2.3	2.0	1.7	1.8	1.2	3.6	1.8	2.7	1.9
04-21	2.1	2.6	4.1	5.3	2.8	3.0	2.5	3.7	4.0	4.4	3.4	3.8	2.7	2.1
04-15	2.2	2.0	3.7	5.0	2.8	3.0	2.5	3.5	3.7	3.9	3.2	3.9	2.7	2.1
04-09	1.6		1.6			2.1	1.3	1.2		1.2	3.1	1.1	1.9	1.1
10-21	.8	.9	.8	.7	.6	2.1	.5	.7	2.2	1.8	.9	.3		
10-15	.9			.7		1.8		.4	1.3	1.1				
20-49/01-09	.9		1.2			1.3		.7				.9	1.2	.7
04-21	2.7	.6	3.1	.7	1.3	2.4	2.6	1.8	3.2	3.4	2.5	.4	1.0	
04-15	2.7	.4	2.6	.7	1.3	2.2	2.6	1.8	2.4	3.0	2.5	.4	1.0	1.1
04-09						1.3		.7						
10-21		.3				1.2		.3	2.3	1.2	.7			
10-15										.9				

Table 4.--Continued.

AUGUST

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	.8		.9			.6		.6	1.7	1.3	.9			
04-15	.8							.6	1.1	1.1	.9			
10-21									1.4					
30-69/01-09	2.6	1.1	2.6	3.1	2.2	2.5	3.7	1.9	2.3	2.1	3.6	1.7	3.2	2.8
04-21	3.1	3.7	2.8	5.2	3.4	3.8	2.9	3.5	4.3	4.3	3.7	3.7	4.6	2.4
04-15	3.1	4.0	2.8	4.9	3.1	3.7	2.9	3.5	4.1	4.5	3.7	3.5	4.6	2.3
04-09	2.0		2.1	3.0		2.7	2.6	1.9		2.2	2.8	1.4	2.9	1.5
10-21	1.1	1.8	.9	1.6	.8	2.2	1.0	1.4	2.3	2.4	1.2	1.2	.3	.7
10-15	1.3	1.5		1.0		1.8		1.1	1.2	2.1	.8		.3	
30-59/01-09	2.0		1.8			2.2	1.8	1.7	1.6	1.1	3.6	1.8	2.5	1.9
04-21	2.1	2.6	3.7	5.3	2.8	2.8	2.5	3.7	3.5	4.1	3.4	3.9	2.7	2.1
04-15	2.1	2.0	3.2	5.0	2.8	2.9	2.4	3.5	3.5	3.6	3.2	3.9	2.7	2.1
04-09	1.6		1.2			2.0		1.2		1.2	3.1	1.1		1.1
10-21	.8	.9	.8	.7	.6	2.1	.5	.7	1.9	1.8	.9			
10-15	.9					1.8				1.0				
30-49/01-09													1.2	
04-21	2.6	.6	2.5	.7	1.3	2.1	2.5	1.6	2.5	2.9	2.5	.4	1.0	1.1
04-15	2.6	.4	2.0	.7	1.3	1.8	2.5	1.5	1.9	2.5	2.5	.4	1.0	1.1
10-21									1.9					

Table 4.--Continued.

AUGUST

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
40-79/01-09	2.7	1.2	3.9	3.2	2.2	3.1	4.6	3.6	2.8	2.3	3.4	2.5	4.0	2.7
04-21	2.0	3.5	3.9	4.3	3.3	4.3	2.2	4.0	3.5	2.6	3.7	3.7	5.0	2.6
04-15	1.9	3.9	4.3	3.8	3.3	4.3	2.3	4.1	3.5	2.7	3.6	3.4	5.0	2.4
04-09	2.7	1.3	2.9	4.0	1.8	3.2	3.0	3.5		2.6	2.2	1.8	3.2	1.6
10-21	2.1	2.5	1.3	2.5	.9	2.0	1.0	1.4	1.8	1.7	.6	1.3		1.0
10-15	1.6	2.1		1.6	.8	1.7		1.1	.8	1.7		.8		
40-69/01-09	1.9		3.0	2.9		2.8	3.5	1.5	1.8	1.7	2.5	1.6	3.2	2.9
04-21	2.8	3.5	2.6	4.5	2.9	3.3	1.7	3.5	3.5	1.6	3.0	3.4	3.7	2.5
04-15	2.8	3.5	2.8	4.3	2.6	3.3	1.7	3.6	3.6	1.8	2.9	3.2	3.7	2.4
04-09	1.9		2.4	2.8		2.9	2.4	1.9		1.8	1.8	1.4	2.3	1.5
10-21	1.1	1.5	.9		.8	1.9	.9	1.2	1.5	1.4	.8	1.0		
10-15		1.0		.9		1.6								
40-59/01-09	1.4					1.9						2.0	2.2	2.0
04-21	1.5	2.3	2.0	4.6	2.1	2.5	1.4	3.0	2.3	1.2	2.5	3.6	2.2	2.3
04-15	1.5	1.8	2.0	4.4	2.1	2.7	1.4	3.1	2.2	1.3	2.4	3.6	2.2	2.3
10-21									1.0					
50-69/01-09						1.2	1.5							
04-21	1.9	1.9	2.0	3.5	2.8	1.8	1.2	3.3	1.6	1.1	2.1	2.0	1.4	1.9
04-15	1.9	2.4	2.0	2.8	2.5	2.0	1.2	3.4	1.7	1.1		1.9		1.4
10-21		1.1		1.0										

Table 4.--Continued.

SEPTEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	1.3		1.4	.5		3.8	1.6	.8	1.2	1.8	1.6		.8	.4
04-15	1.1							.8	1.2	1.7	1.0			.4
10-21									.9	.7				
20-69/01-09	2.4	1.6	2.9	1.5	1.0	3.1	2.7	1.8	1.5	1.6	3.3	3.1	4.0	2.9
04-21	2.9	4.8	3.2	3.6	3.2	4.6	3.7	3.1	3.1	3.5	2.9	4.5	4.2	4.0
04-15	3.1	4.1	3.3	4.3	3.2	4.3	2.8	3.0	3.6	3.4	2.4	4.3	4.2	4.0
04-09	2.1	1.2	2.7	1.1		3.3	1.7	1.8	1.5	1.5	2.9	2.2	3.2	2.2
10-21	1.6	1.8	1.6	2.2	1.3	3.4	1.5	1.8	2.1	1.7	1.9	1.7	1.1	1.0
10-15	1.7	1.1		2.6	.8	1.7		1.5	1.3	1.6	.9	1.7		
16-99									.3					
20-59/01-09	1.9		2.7	.7		3.1	1.8	1.5	1.1	1.5	2.3	2.4	2.2	2.2
04-21	2.6	2.4	3.4	2.5	2.7	5.1	3.1	3.0	3.1	2.8	2.8	4.4	2.7	3.4
04-15	2.6	2.2	3.0	2.2	2.6	3.7	2.6	2.9	2.9	2.6	2.8	4.4	2.7	3.5
04-09	1.5		2.0			2.9	1.4	1.4		1.5	1.4	1.9	1.7	1.6
10-21	1.1	1.1	1.2	1.3	1.0	3.3	1.7	1.5	2.2	1.5	1.1	1.2		
10-15	.9			.6		1.4		1.2	1.1	1.0				
20-49/01-09	1.2		1.8			2.2		.6				.7	.8	1.0
04-21	2.5	1.0	2.7	1.0	1.9	5.2	2.6	2.5	2.6	3.5	2.2	1.2	1.5	1.2
04-15	1.9	.7	2.6	.9	1.7	4.6	2.2	2.1	2.0	3.2	2.0	1.2	1.4	1.2
04-09						1.6		.5						
10-21	1.2	.5		.4		3.0		1.0	1.2	1.3	.9			
10-15										.9				

Table 4.--Continued.

SEPTEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	1.3		1.2	.5		3.8		.8	1.1	1.8	1.5			4.3
04-15	1.4							.8	1.0	1.7	1.0			
10-21									.9					
30-69/01-09	2.2	1.6	2.9	1.5	1.0	3.0	2.3	1.8	1.4	1.8	3.3	3.1	4.2	2.9
04-21	3.0	4.8	3.4	3.6	3.3	4.0	3.0	3.1	2.9	3.2	3.1	4.5	4.4	4.0
04-15	3.2	4.1	3.6	4.3	3.3	3.8	2.6	2.9	3.2	3.0	2.7	4.3	4.4	4.1
04-09	2.0		2.9	1.1		3.3	1.5	1.9		1.6	2.8	2.2	3.2	2.2
10-21	1.4	1.8	1.2	2.2	1.0	3.0	1.6	1.8	1.9	1.6	1.8	1.7	1.1	.9
10-15	1.5	1.1		2.6		1.7		1.4	1.3	1.5	.9		1.1	
30-59/01-09	1.8		2.6			2.8	1.3	1.5	1.1	1.3	2.4	2.4	2.2	2.2
04-21	2.6	2.4	3.5	2.5	2.4	4.4	3.0	2.9	2.5	2.8	2.8	4.4	2.6	3.4
04-15	2.6	2.3	3.0	2.2	2.4	4.1	2.6	2.7	2.3	2.6	3.1	4.4	2.6	3.6
04-09	1.3		2.2			2.7		1.4		1.3	1.5	1.9		1.6
10-21	1.0	1.1	.9	1.3	.8	2.5	1.7	1.4	1.8	1.3	.9			
10-15	.9					1.4				.7				
30-49/01-09													.7	
04-21	2.1	1.0	2.2	1.0	1.4	3.9	2.3	2.5	1.7	2.9	2.0	1.2	1.6	1.2
04-15	1.6	.7	2.2	.9	1.4	3.4	2.1	2.1	1.2	2.6	2.1	1.2	1.5	1.3
10-21	1.4	1.8	1.2	2.2	1.0	3.0	1.6	1.8	1.9	1.6	1.8	1.7	1.1	.9
10-15	1.5	1.1		2.6		1.7		1.4	1.3	1.5	.9		1.1	

Table 4.--Continued.

SEPTEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	3.0	2.3	3.1	1.9	1.4	4.1	3.0	4.0	2.0	3.2	3.8	4.3	3.8	3.6
04-21	2.6	4.1	3.5	2.6	3.1	3.6	2.3	3.6	2.4	2.7	3.8	3.9	4.3	3.7
04-15	2.7	3.9	3.6	3.2	3.2	3.7	2.1	3.5	2.5	2.7	3.3	4.0	4.6	4.1
04-09	2.5	1.9	2.6	1.9	1.4	3.3	1.2	3.9		2.7	3.0	3.0	2.8	2.6
10-21	1.3	2.7	1.0	2.7	1.0	1.4	.6	1.4	1.8	2.2	2.5	1.6		1.1
10-15	1.5	1.5		3.1	.6	1.0		1.1	1.4	1.9		1.7		
40-69/01-09	2.5		1.9	1.1		2.6	2.2	2.2	1.2	1.5	3.3	2.8	3.9	2.5
04-21	2.6	4.4	2.0	3.0	3.8	3.1	1.9	2.8	2.9	3.4	3.0	4.5	4.0	3.3
04-15	2.8	3.8	2.1	3.6	3.8	2.9	1.8	2.7	2.5	3.5	2.8	4.2	4.1	3.5
04-09	2.0		1.9	.8		2.5	1.2	2.2		1.5	2.7	2.2	2.6	1.9
10-21	1.2	1.7	.6	2.1	.9	1.6	.6	1.4	1.7	1.7	1.9	1.7		
10-15		1.5		2.5		1.1								
40-59/01-09	1.6					2.1						2.2	2.0	1.8
04-21	1.8	2.0	1.3	2.0	2.0	2.7	1.7	1.6	2.0	3.0	2.1	4.4	2.2	2.5
04-15	2.0	2.0	1.3	1.7	2.1	2.3	1.6	1.6	1.5	3.1	2.2	4.4	2.4	2.7
10-21									1.0					
50-69/01-09						1.3	.9							
04-21	2.6	3.6	1.7	2.0	2.7	2.8	1.1	2.8	1.3	2.7	1.9	2.4	2.9	2.1
04-15	2.6	2.9	1.8	2.5	2.8	2.6	1.1	2.7	1.1	2.4		2.1		2.0
10-21		2.1		1.6		.								

Table 4.--Continued.

OCTOBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	2.9	1.7	1.9	2.1		1.8	1.5	3.4	1.2	3.7	1.7		1.4	2.2
04-15	2.1							3.1	1.6	3.6	1.2			2.2
10-21									1.2	1.0				
20-69/01-09	2.3	2.4	1.0	2.1	1.1	2.9	1.9	4.1	3.3	4.9	4.3	4.1	3.1	3.2
04-21	3.7	4.4	2.9	5.9	2.3	3.8	4.2	4.6	3.7	4.1	4.7	5.1	4.5	5.3
04-15	3.5	5.5	2.5	5.8	2.4	3.5	4.0	4.8	3.7	4.1	4.7	5.7	4.6	5.5
04-09	1.8	2.2	1.4	2.6		2.0	1.3	3.6	2.3	4.5	3.2	3.0	2.7	2.8
10-21	2.5	2.8	1.8	3.3	1.5	2.3	2.2	2.2	2.8	1.9	2.4	2.9	.9	2.5
10-15	1.6	1.9		2.2	.8	1.9		1.3	1.2	1.8	.8	3.0		
16-99									.8					
20-59/01-09	2.3		1.0	1.0		2.2	1.9	3.0	2.2	3.4	3.5	2.3	3.2	2.8
04-21	4.7	4.3	3.0	5.6	2.2	3.9	3.5	5.1	4.5	4.9	4.4	4.3	3.7	5.2
04-15	4.4	4.6	2.9	5.0	1.7	3.8	3.6	5.0	4.2	5.0	4.8	4.5	3.7	5.4
04-09	2.1		1.0			1.5	1.1	2.8		3.2	2.6	1.8	2.2	2.3
10-21	2.3	2.4	1.0	2.9	.9	2.3	1.9	2.1	2.6	1.1	1.6	1.7		
10-15	1.6			1.6		1.9		1.4	1.2	.9				
20-49/01-09	1.5		1.0			1.5		1.8				1.5	2.2	1.9
04-21	4.0	3.2	3.0	3.5	2.1	3.9	1.9	5.4	3.3	5.7	3.2	2.4	2.0	3.8
04-15	3.8	2.5	2.7	3.0	1.6	2.8	1.9	5.3	1.6	5.6	3.1	2.5	2.1	3.9
04-09						1.2		1.8						
10-21	2.0	1.8		1.8		2.2		1.8	1.9	1.0	1.3			
10-15										.9				

Table 4.--Continued.

OCTOBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	2.7	1.5	1.6	1.8		1.9		2.8	1.2	2.8	1.7			2.1
04-15	2.0							2.2	1.6	2.5	1.2			
10-21									1.1					
30-69/01-09	2.6	2.4	1.3	2.1	1.1	2.4	2.2	3.8	3.5	3.8	4.1	3.6	3.2	3.1
04-21	3.1	3.8	2.6	5.4		3.4	3.5	3.4	3.2	2.9	4.2	4.9	4.3	4.5
04-15	2.7	5.0	2.0	5.4	2.3	3.3	3.4	3.7	3.0	2.9	4.2	5.5	4.3	4.6
04-09	1.8		1.3	2.5		1.9	1.5	3.3		3.4	2.9	2.7	2.7	2.7
10-21	1.9	2.5	1.6	2.5	1.4	2.0	1.6	1.6	2.5	2.3	2.0	2.8	.8	2.0
10-15	1.3	1.7		2.0		1.6		1.1	.8	2.1	.6		.7	
30-59/01-09	2.5		1.1			1.6	1.6	2.5	2.2	2.1	2.8	2.0	2.9	2.5
04-21	3.7	3.4	2.2	4.6	2.1	3.6	3.0	3.7	3.5	3.8	3.3	3.8	3.3	4.1
04-15	3.5	3.5	1.9	4.5	1.6	3.7	3.2	3.7	3.2	3.7	3.7	4.0	3.3	4.3
04-09	1.9		.5			1.4		2.4		2.1	2.0	1.6		2.1
10-21	1.5	1.6	.9	2.1	.8	2.0	1.3	1.5	2.3	1.7	1.4			
10-15	1.4					1.7				1.2				
30-49/01-09													1.7	
04-21	2.7	2.2	1.9	2.1	1.9	2.6	1.6	3.6	1.9	3.6	1.7	1.7	1.4	2.4
04-15	2.7	1.9	1.6	2.2	1.3	1.8	1.7	3.5	2.0	3.6	2.0	1.8	1.6	2.5
10-21									1.3					

Table 4.--Continued.

OCTOBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	1.4	2.6	2.2	3.0	1.6	2.1	1.8	3.0	2.2	2.6	4.2	2.9	2.2	3.0
04-21	2.8	2.0	2.6	3.7	2.3	3.2	3.4	2.5	3.0	3.9	3.3	4.6	3.5	4.3
04-15	2.8	2.7	2.4	3.8	3.2	3.4	3.5	2.7	3.0	3.9	3.1	4.8	3.2	4.3
04-09	1.0	2.2	1.3	3.3	1.5	1.3	1.2	2.2		2.4	3.6	3.3	1.6	2.0
10-21	1.8	2.1	1.1	2.2	1.4	1.8	1.3	.9	2.0	2.6	2.2	3.6		2.0
10-15	.8	1.3		1.4	.9	1.5		.8	1.1	2.6		3.3		
40-69/01-09	1.5		1.4	1.2		1.2	1.8	1.5	2.0	2.2	1.9	3.0	1.3	2.1
04-21	2.9	3.0	2.2	4.6	2.3	2.8	3.1	2.4	2.7	3.0	2.5	4.2	3.3	3.2
04-15	2.3	3.9	2.0	4.7	2.2	2.7	3.0	2.8	2.5	3.0	2.6	4.5	3.0	3.0
04-09	1.5		.9	1.6		1.4	1.2	1.5		2.1	2.0	2.4	1.6	1.6
10-21	1.7	1.6	1.1	1.5	1.3	1.6	1.1	1.0	1.9	2.1	1.7	2.8		
10-15		1.2		1.5		1.2								
40-59/01-09	1.4					1.2						1.6	1.0	1.9
04-21	2.5	3.0	1.4	3.4	1.6	2.6	1.3	2.3	2.3	2.4	1.8	3.7	1.7	2.3
04-15	2.4	2.7	1.1	3.5	1.3	2.5	1.5	2.3	1.5	2.3	1.9	3.8	1.4	2.4
10-21									1.5					
50-69/01-09						.8	1.3							
04-21	2.3	2.1	1.6	1.9	2.1	1.7	2.5	1.8	1.1	2.1	2.1	2.6	1.6	2.0
04-15	2.1	2.3	1.4	1.8	2.0	1.5	2.0	1.9	.9	2.0		2.5		1.8
10-21		.8		.7										

Table 4.--Continued.

NOVEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	2.8	1.0	.9	1.6		1.2	1.0	2.0	2.2	3.3	1.9		1.4	1.9
04-15	2.5							2.0	2.1	3.4	1.4			2.0
10-21									1.3	1.6				
20-69/01-09	3.1	1.8	2.3	1.5	1.3	3.5	2.5	3.1	2.8	3.6	2.7	4.0	3.3	4.1
04-21	2.3	3.3	2.1	1.6	2.7	2.5	2.5	3.4	2.2	3.9	3.3	3.5	4.6	3.7
04-15	2.8	2.8	2.6	1.9	3.1	2.5	2.1	3.4	2.9	3.7	3.4	3.5	3.9	3.7
04-09	1.8	1.9	1.9	1.7		3.4	1.4	2.8	2.3	3.4	2.9	3.0	2.6	2.5
10-21	2.8	1.7	1.6	2.0	1.8	1.9	1.4	1.5	2.2	3.6	2.4	1.1	1.5	1.4
10-15	2.5	1.4		1.4	1.9	1.5		1.0	2.5	1.8	1.4	.8		
16-99									1.0					
20-59/01-09	3.2		2.1	1.3		1.9	2.1	2.7	2.2	3.3	2.0	2.5	1.7	3.3
04-21	1.9	1.3	2.2	3.1	2.7	2.7	2.0	3.3	2.2	3.5	2.5	2.7	4.3	3.2
04-15	2.5	1.5	2.3	2.9	2.3	2.3	2.2	3.4	2.8	2.7	2.9	2.9	3.7	3.4
04-09	1.7		2.0			1.6	1.3	2.6		3.0	2.4	1.6	1.9	2.0
10-21	2.4	1.9	1.6	1.8	2.1	1.7	1.6	1.3	1.9	2.9	1.7	.8		
10-15	2.1			.9		1.3		1.0	1.9	1.3				
20-49/01-09	1.9		1.3			1.1		2.1				1.5	1.2	2.3
04-21	2.6	1.4	1.7	1.8	2.7	2.2	1.6	2.5	2.9	2.4	2.1	1.8	3.4	2.3
04-15	2.5	1.4	1.1	1.2	2.6	1.9	1.5	2.6	2.2	2.1	2.1	1.6	3.0	2.3
04-09						.9		2.0						
10-21	1.8	1.1		1.2		1.8		1.4	2.3	2.3	1.2			
10-15										.9				

Table 4.--Continued.

NOVEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	2.2	.9	.9	1.3		1.2		1.3	2.2	1.9	1.4			1.7
04-15	1.9							1.3	2.1	1.9	1.4			
10-21									1.2					
30-69/01-09	2.6	1.7	2.5	1.8	1.1	3.6	1.8	2.5	2.6	3.0	2.9	4.0	3.4	3.7
04-21	2.2	3.4	2.3	1.7	2.8	2.3	2.4	3.7	2.4	4.0	3.4	3.4	4.3	3.4
04-15	2.4	3.1	2.7	2.4	3.2	2.3	1.9	3.5	2.6	3.6	3.4	3.4	3.6	3.3
04-09	1.8		1.9	1.8		3.3	1.2	2.7		2.9	3.0	2.9	2.7	2.2
10-21	2.6	1.5	1.5	1.8	1.7	1.8	1.5	1.5	1.9	3.0	1.9	1.2	.5	1.4
10-15	2.4	1.3		1.3		1.6		.9	1.7	1.6	1.3		1.0	
30-59/01-09	2.7		2.1			1.9	1.4	2.0	2.0	2.8	2.0	2.5	2.0	2.8
04-21	2.0	1.6	2.2	2.3	2.8	2.5	2.2	2.3	1.6	3.6	2.2	2.2	3.5	2.8
04-15	2.6	1.8	2.3	2.6	2.4	2.4	2.2	2.2	1.8	2.8	2.5	2.5	3.1	2.8
04-09	1.6		2.0			1.5		2.0		2.6	2.2	1.6		1.7
10-21	2.1	1.7	1.6	1.6	2.0	1.7	1.6	1.1	1.6	2.3	1.5			
10-15	2.0					1.3				1.2				
30-49/01-09													1.3	
04-21	2.1	2.0	1.7	1.5	2.3	2.0	1.2	2.1	2.1	1.6	1.2	1.1	2.6	1.1
04-15	1.9	1.8	1.0	1.2	2.2	1.7	1.0	2.0	1.5	.9	1.2	1.2	2.1	.9
10-21									1.6					

Table 4.--Continued.

NOVEMBER

STATIONS CRITERIA RH/WS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
40-79/01-09	2.5	1.7	2.4	2.1	1.7	3.3	1.8	1.8	1.9	2.6	2.7	4.5	2.7	3.4
04-21	2.6	3.4	3.5	2.3	3.4	1.9	1.8	3.6	2.8	3.4	2.7	2.9	4.2	4.2
04-15	2.4	3.7	3.0	2.6	3.5	2.8	1.7	3.0	3.3	3.1	2.9	2.4	3.2	4.3
04-09	2.1	1.6	2.2	1.5	1.2	3.0	1.8	1.7		2.9	2.5	3.2	1.7	2.6
10-21	2.1	2.6	1.8	2.2	1.8	2.2	1.4	2.6	2.2	2.2	2.4	1.7		1.8
10-15	1.6	1.5		1.7	1.9	1.7		1.5	1.7	1.4		1.3		
40-69/01-09	2.0		1.5	1.3		2.7	1.1	1.6	1.8	2.0	1.9	3.6	2.6	2.7
04-21	1.6	3.5	2.7	2.1	2.0	2.0	1.9	2.9	3.1	3.0	3.1	3.8	2.6	3.1
04-15	1.7	3.2	2.7	2.1	2.2	2.5	1.5	2.8	3.3	2.2	3.0	3.8	2.0	3.1
04-09	1.4		1.3	1.4		3.0	1.2	1.2		1.8	2.0	2.9	1.9	1.8
10-21	2.1	1.7	.9	1.5	1.7	1.5	1.6	1.5	1.8	1.8	2.0	1.0		
10-15		1.0		1.4		1.1								
40-59/01-09	1.3					1.9						1.7	1.2	1.6
04-21	2.2	1.2	2.3	1.7	1.5	2.3	.9	1.7	2.6	2.0	1.9	2.6	1.4	2.0
04-15	2.4	1.4	1.5	2.1	1.4	1.8	1.2	1.3	2.3	1.8	2.2	2.7	1.3	2.2
10-21									1.3					
50-69/01-09						2.0	.8							
04-21	1.7	2.3	1.7	2.0	1.6	1.0	1.0	2.1	2.4	2.4	2.1	2.6	1.4	2.7
04-15	1.6	2.3	1.3	2.1	1.9	1.6	.8	2.1	2.2	1.7		2.5		2.7
10-21		1.3		1.2										

Table 4.--Continued.

DECEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
10-39/04-21	2.0	3.2	.9	3.2		.9	.5	3.1	1.1	2.8	1.7		1.6	2.2
04-15	2.1							2.8	1.1	2.4	1.5			2.3
10-21									1.2	1.7				
20-69/01-09	2.8	2.7	3.7	1.9	1.1	3.4	2.4	5.2	1.7	3.6	2.0	2.8	3.9	2.3
04-21	3.5	3.0	2.5	3.0	2.9	3.8	2.2	4.0	3.0	2.9	3.3	2.7	3.6	4.0
04-15	3.5	3.7	3.3	3.3	3.2	3.6	2.1	4.3	2.5	3.3	2.7	2.7	3.5	4.4
04-09	2.1	2.6	2.7	2.3		2.8	1.6	4.0	1.2	3.2	2.1	1.5	1.9	1.6
10-21	2.3	2.8	2.0	2.1	1.7	2.5	1.5	3.0	2.5	2.1	2.3	.9	2.3	1.3
10-15	1.9	1.7		2.2	2.0	1.4		1.7	1.0	2.0	2.1	.7		
16-99									2.2					
20-59/01-09	2.2		3.3	1.6		2.0	1.8	4.6	1.2	3.6	1.6	1.9	2.6	2.4
04-21	3.8	3.7	3.0	4.1	2.4	3.4	2.3	4.5	3.3	2.4	3.7	2.1	3.1	3.9
04-15	3.4	4.2	3.2	3.8	2.2	3.3	2.2	4.4	2.1	2.8	3.1	2.3	3.0	4.0
04-09	1.3		2.3			2.0	1.4	3.3		3.4	1.6	1.0	1.7	1.5
10-21	2.6	2.7	1.9	2.8	1.2	1.9	1.0	2.3	2.9	2.5	2.6	.7		
10-15	1.8			2.4		1.1		1.6	1.4	1.9				
20-49/01-09	2.1		1.4			1.3		3.1				1.6	2.0	1.9
04-21	3.5	3.8	2.1	5.1	1.4	1.7	1.3	4.9	2.0	3.1	2.5	1.5	2.5	2.5
04-15	3.0	3.8	1.9	3.9	1.3	1.4	1.0	4.3	1.9	3.2	2.1	1.4	2.2	2.8
04-09						1.1		2.3						
10-21	1.7	2.1		2.9		1.1		2.2	2.0	2.8	1.9			
10-15									1.5					

Table 4.--Continued.

DECEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
20-39/04-21	2.1	3.3	.9	3.1		.8		3.7	1.0	2.6	1.5			2.1
04-15	1.9							3.2	1.0	2.1	1.0			
10-21									1.2					
30-69/01-09	2.2	2.6	3.6	1.9	1.1	3.1	2.3	4.4	1.7	3.3	1.9	2.3	3.6	2.0
04-21	3.3	3.3	2.9	2.7	3.1	3.8	2.0	3.9	3.3	3.2	3.2	2.6	3.8	4.3
04-15	3.2	3.7	3.4	2.9	3.4	3.6	2.0	4.2	3.2	3.5	2.5	2.6	3.6	4.7
04-09	1.9		2.2	2.2		2.7	1.4	3.4		3.0	2.2	1.4	1.8	1.6
10-21	2.1	2.2	2.1	1.5	1.8	2.5	1.5	1.9	2.7	1.4	1.9	1.0	2.1	1.4
10-15	1.4	1.4		1.6		1.5		1.4	1.3	1.8	2.0		1.2	
30-59/01-09	1.9		2.8			2.0	1.6	3.9	1.2	2.9	1.7	1.3	2.4	1.6
04-21	3.7	2.8	2.7	2.9	2.4	3.5	2.1	4.1	3.5	2.4	3.8	1.7	3.1	3.5
04-15	3.0	3.4	2.7	2.4	2.2	3.3	2.0	4.1	2.8	2.6	2.8	1.9	2.9	3.6
04-09	.9		1.7			1.9		2.8		2.7	1.7	.9		1.0
10-21		2.2	1.7	1.7	1.7	1.3	1.8	.9	2.0	3.1	1.4	2.0		
10-15	1.2					1.2				1.1				
30-49/01-09													1.8	
04-21	2.8	3.0	1.7	2.8	1.6	1.6	.9	3.8	2.5	2.0	2.4	.8	2.0	2.1
04-15	2.2	2.7	1.4	1.9	1.5	1.3	.8	3.6	1.3	1.8	1.9	.8	2.0	2.0
10-21									2.0					

Table 4.--Continued.

DECEMBER

STATIONS	GSO	CHS	TYS	SVN	EKN	BNA	TRI	FLO	ROA	MCN	AHN	JAX	MGM	VLD
CRITERIA RH/WS														
40-79/01-09	1.9	3.5	3.4	2.5	2.2	3.6	3.7	2.9	1.6	3.4	3.1	2.6	2.8	2.5
04-21	2.4	4.0	3.3	2.9	2.7	3.6	1.4	2.6	2.9	3.8	2.2	2.8	2.0	5.5
04-15	2.5	3.8	3.4	3.7	2.7	4.4	2.1	2.7	2.5	4.0	2.5	2.7	2.2	5.6
04-09	1.6	3.1	2.6	2.1	1.6	2.4	2.3	2.1		3.4	2.3	2.6	.7	2.5
10-21	1.6	2.2	2.8	2.0	2.2	1.9	1.4	1.1	2.6	2.0	2.0	1.4		1.3
10-15	1.5	1.3		1.7	2.1	1.2		1.2	1.0	1.5		1.1		
40-69/01-09	2.0		2.5	1.6		3.0	2.1	2.5	2.0	2.4	1.9	2.0	2.5	1.8
04-21	2.6	3.2	3.4	2.5	3.2	3.5	1.8	2.9	3.5	3.9	2.7	2.1	2.1	4.5
04-15	2.4	3.4	3.5	2.8	3.3	3.0	1.5	2.9	2.9	4.0	2.2	1.9	2.1	4.7
04-09	1.4		2.0	1.6		1.7	1.4	1.9		2.3	1.6	1.2	1.1	1.4
10-21	1.5	1.6	2.0	1.4	1.9	2.2	1.5	.9	2.7	1.6	1.9	.9		
10-15		1.5		1.2		1.4								
40-59/01-09	1.2					1.5						1.1	1.4	.6
04-21	2.0	3.1	2.2	1.5	1.8	3.2	1.1	1.7	2.0	2.5	1.9	.6	1.7	2.8
04-15	1.9	2.9	2.0	1.5	1.5	2.9	1.0	1.6	1.7	2.8	1.6	.8	1.5	2.9
10-21									2.2					
50-69/01-09						1.9	1.4							
04-21	1.4	2.4	2.3	3.0	3.0	2.2	1.8	1.7	1.6	1.5	2.5	2.0	1.8	1.6
04-15	1.7	2.1	2.4	2.7	3.3	2.2	1.4	1.6	1.3	1.2		2.1		1.5
10-21		.9		1.1										

per month that were observed during the ten years of this study at each of the 14 stations are then found in the row that begins with the selected criteria.

If any of these stations had more than 200 days in the period from 1955 through 1964, then the respective standard deviations will be found in a like manner in Table 4.

Thus, again considering the 20-49/04-15 group at Macon, one finds a mean of 9.0 days acceptable in January from Table 3. Table 4 shows the standard deviation associated with this mean to be 3.8. The corresponding values at Elkins, West Virginia, are 3.0 for the mean and 2.4 for the standard deviation.

Figures 7 through 13 are isoline analyses of selected criteria from Table 3. These are shown to illustrate patterns of days meeting specific criteria and to help provide the user of the tables with a tool for interpolating table values between stations.

Four charts--January, April, July, and October--are shown for the following weather criteria:

20-69/04-21 (Figure 7A, B, C, D)

20-69/04-09 (Figure 8A, B, C, D)

20-39/04-21 (Figure 9A, B, C, D)

30-49/04-21 (Figure 10A, B, C, D)

30-49/04-09 (Figure 11A, B, C, D)

40-79/04-21 (Figure 12A, B, C, D)

40-79/04-09 (Figure 13A, B, C, D)

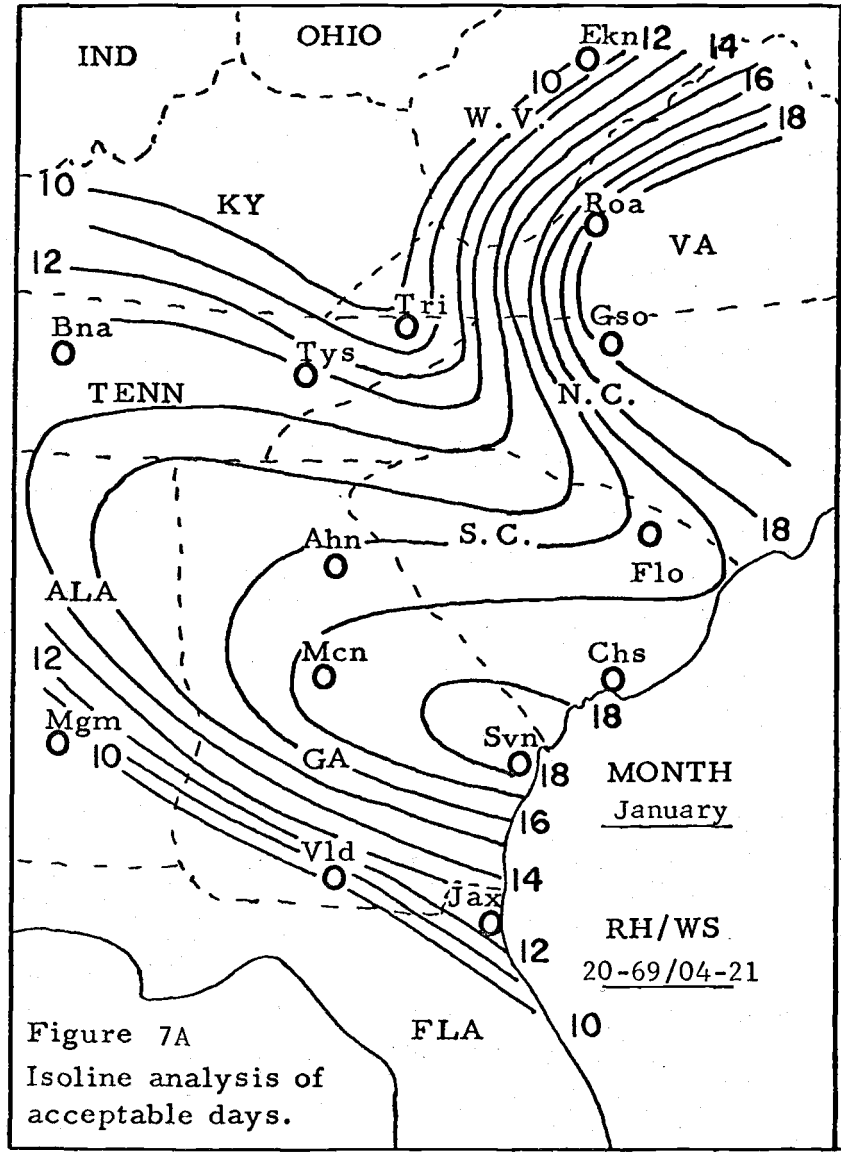
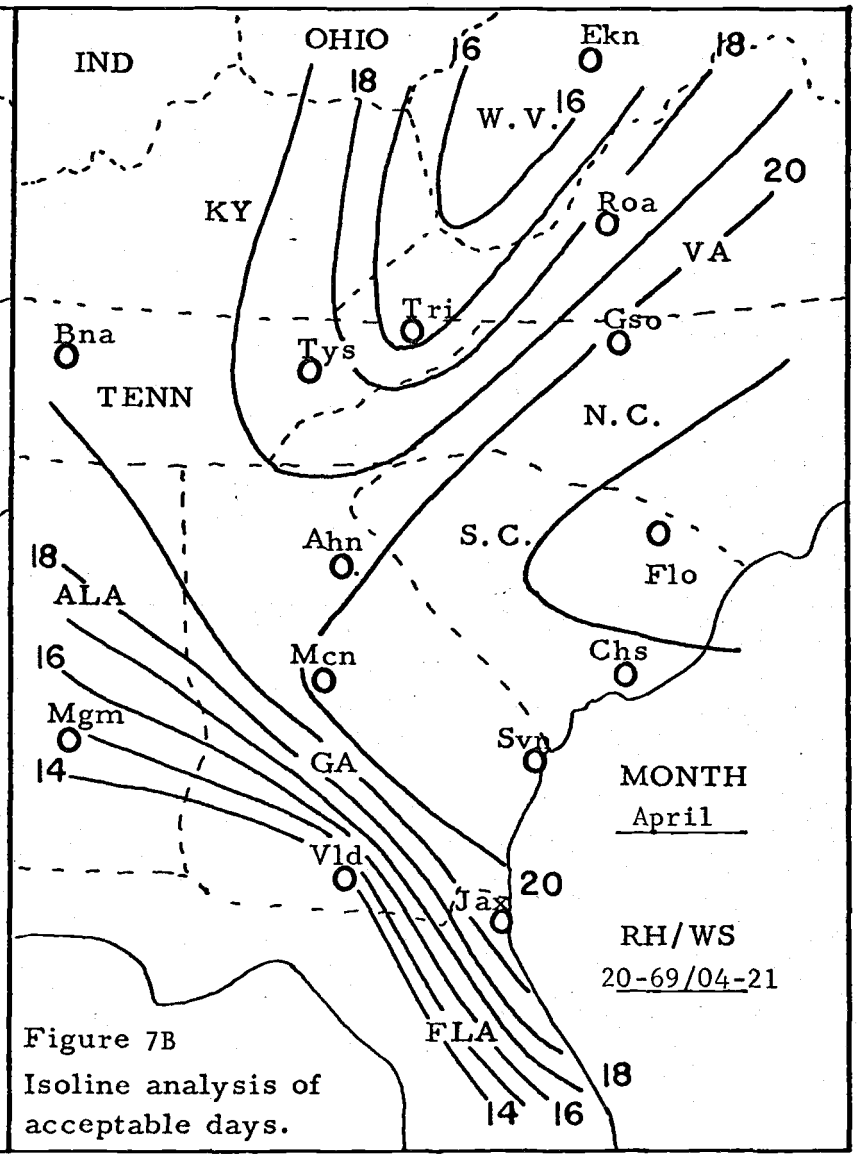


Figure 7A
Isoline analysis of acceptable days.



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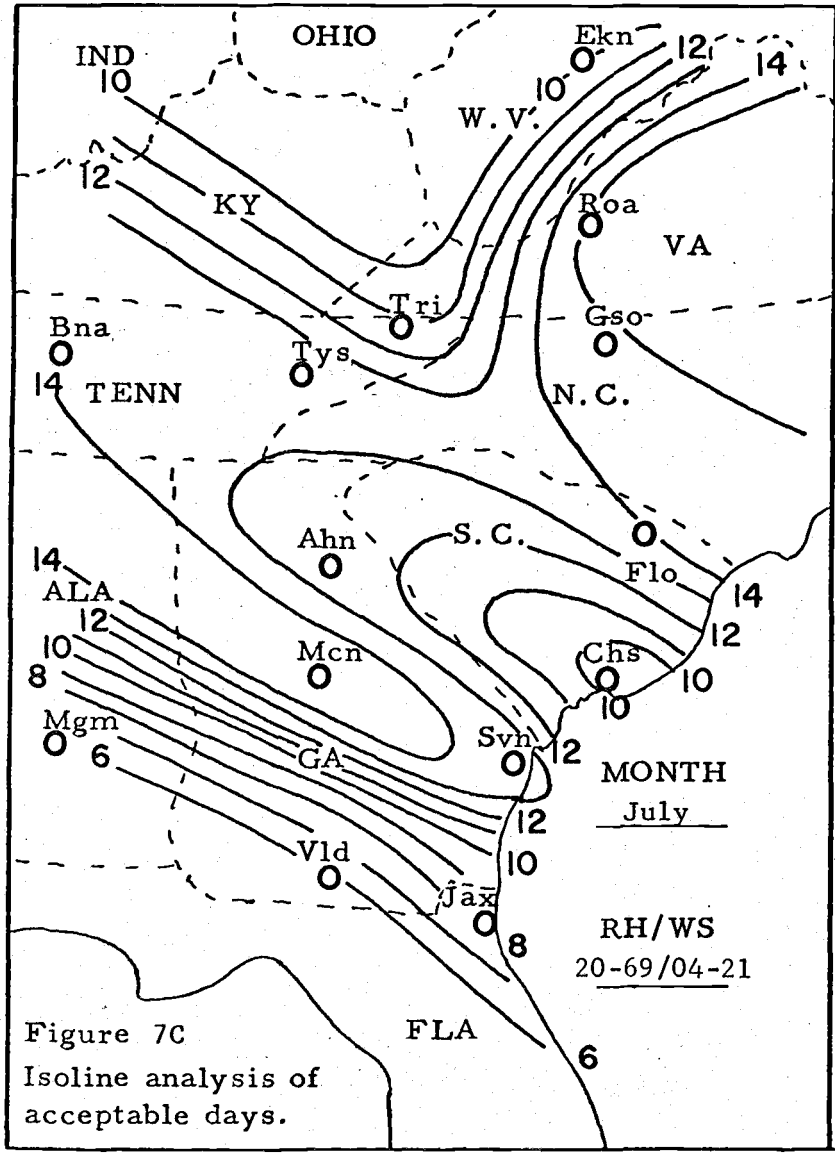

Figure 7C
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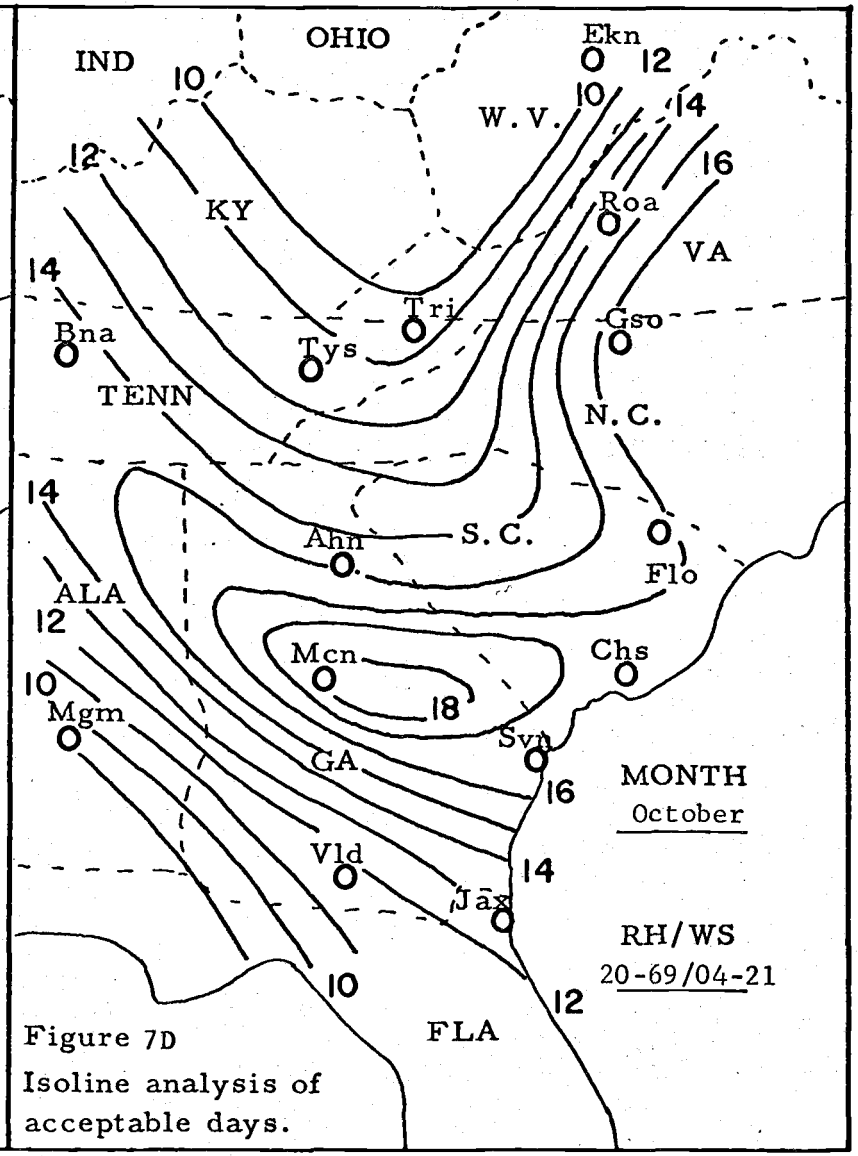
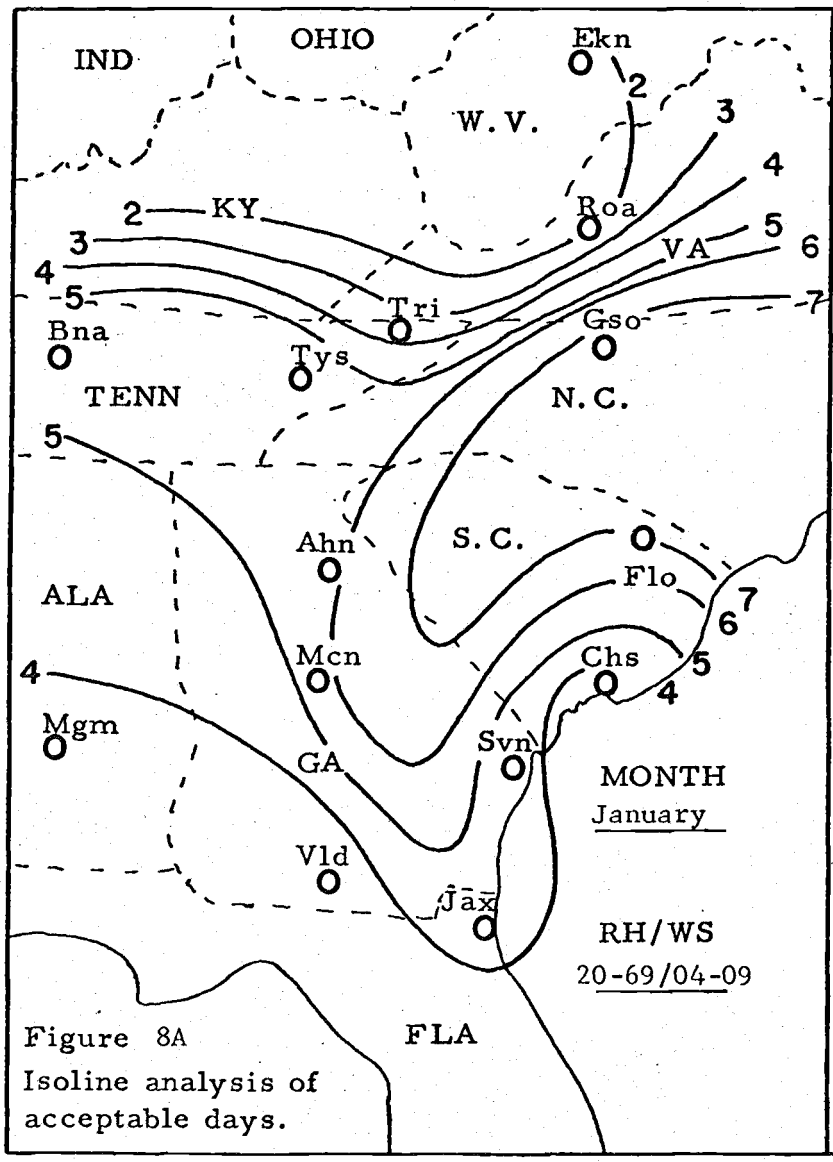


Figure 7D
Isoline analysis of acceptable days.



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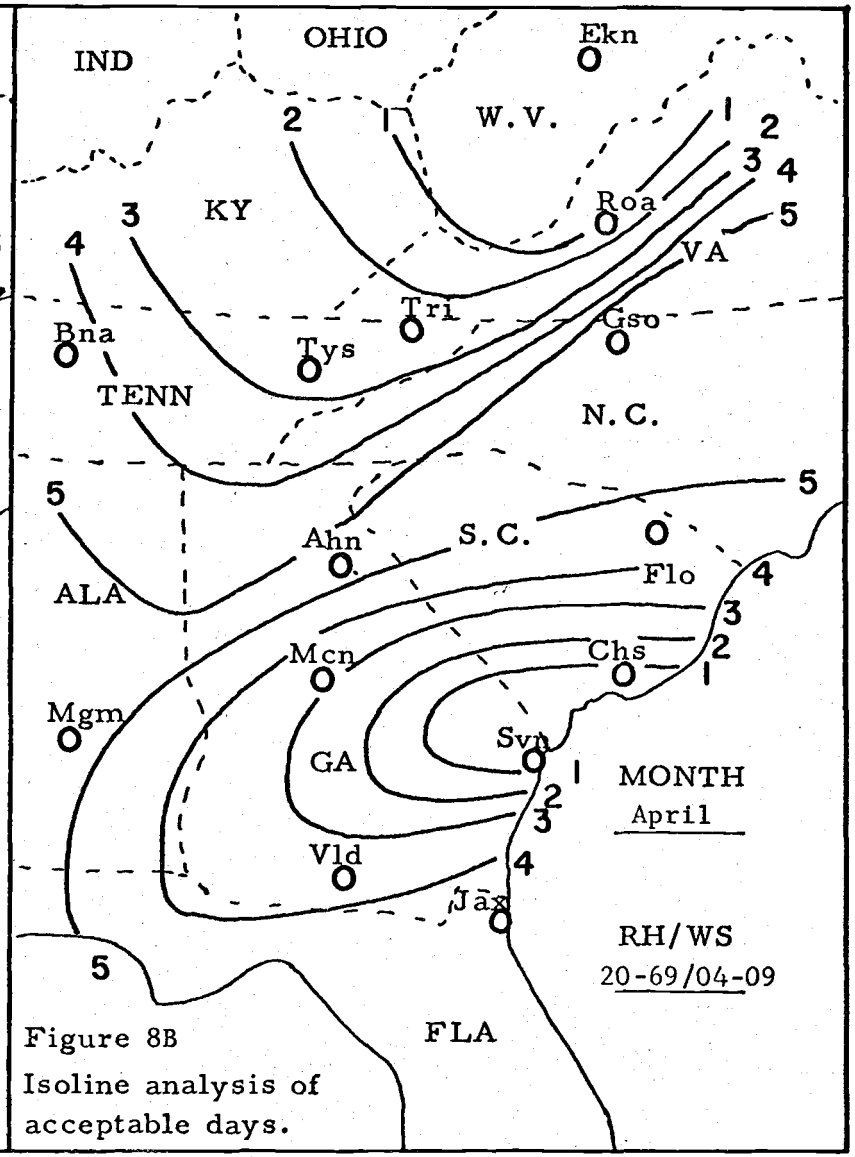

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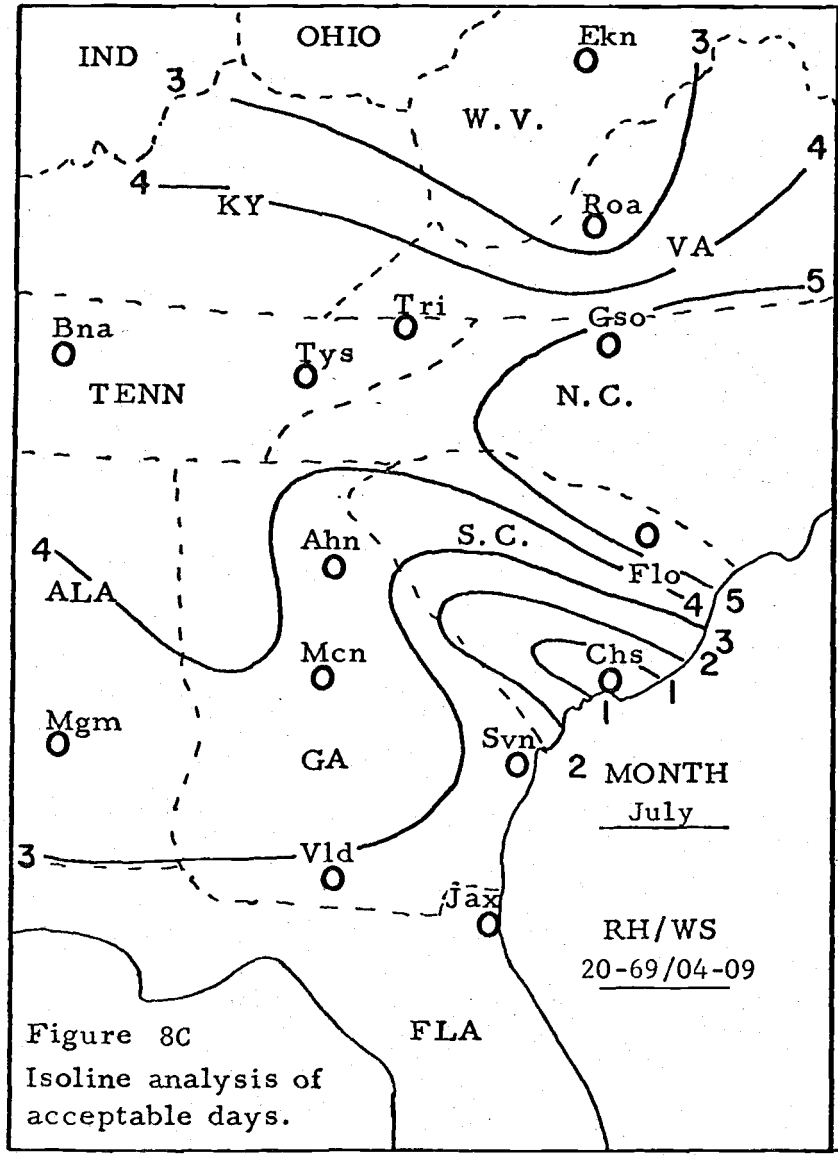

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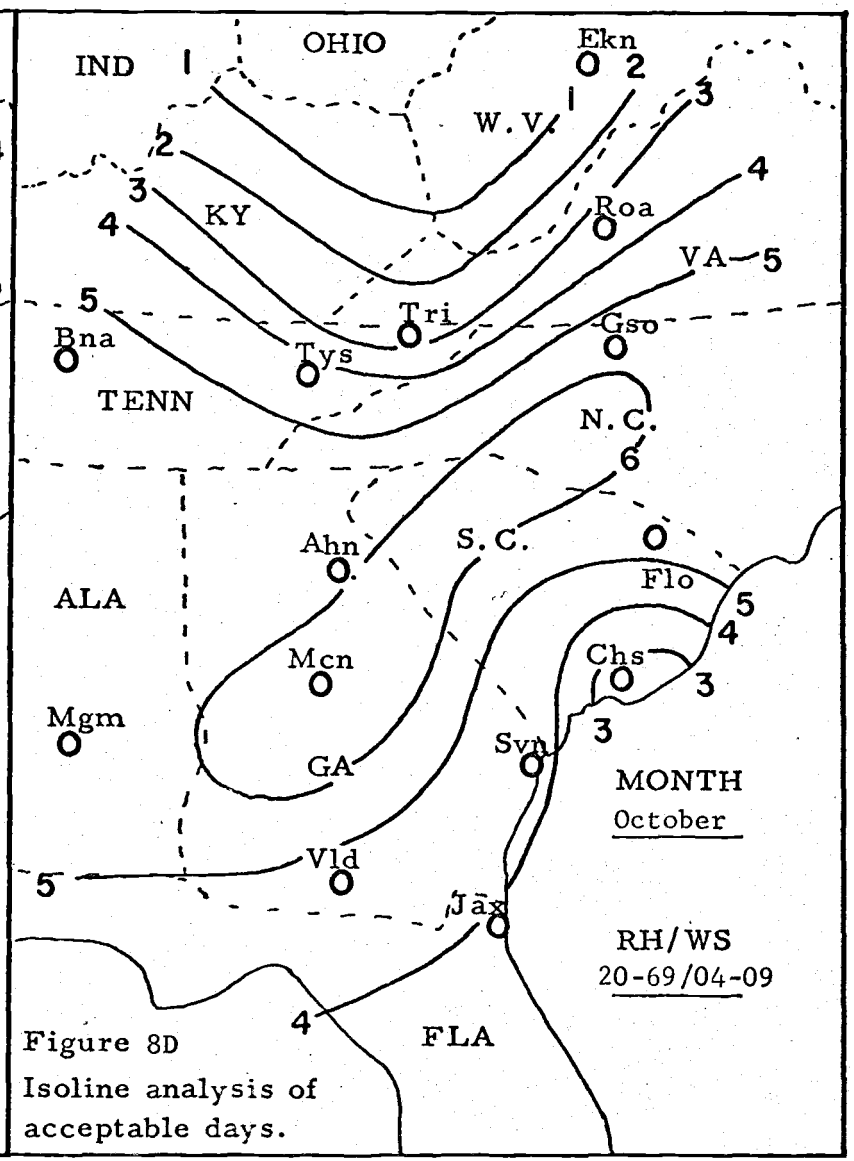

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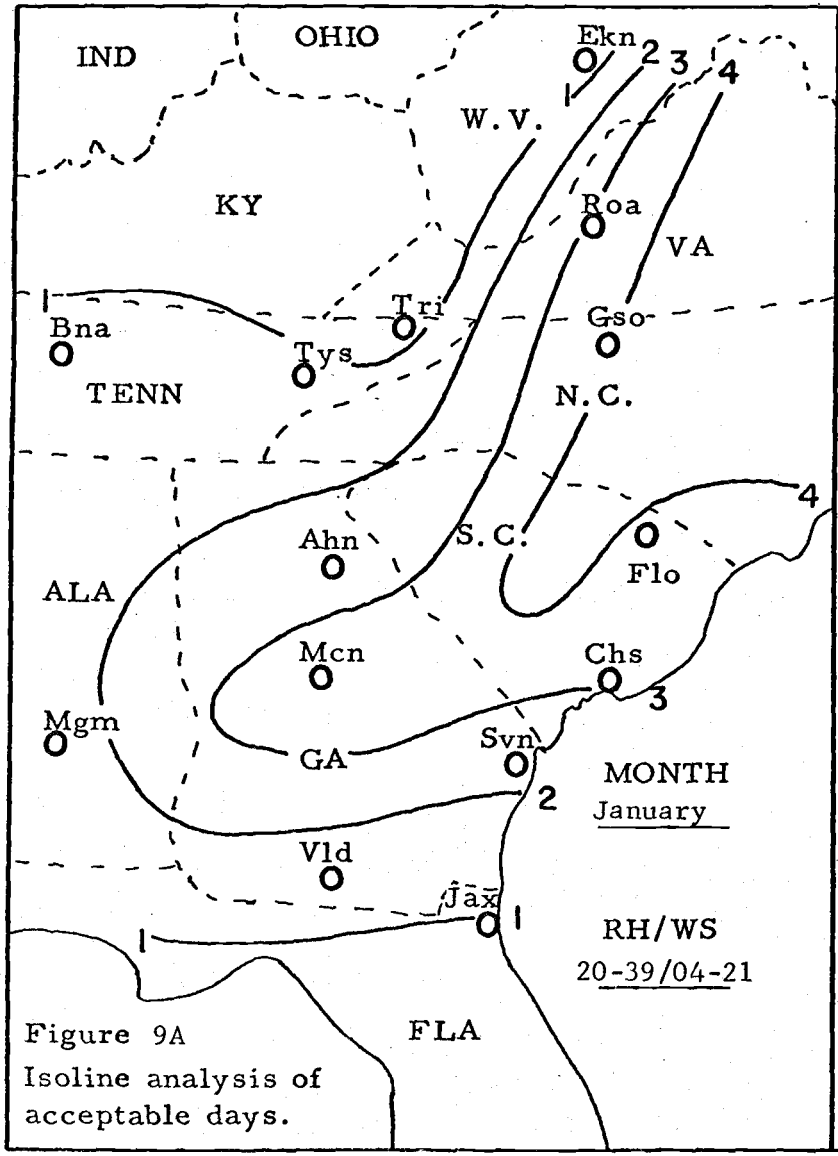

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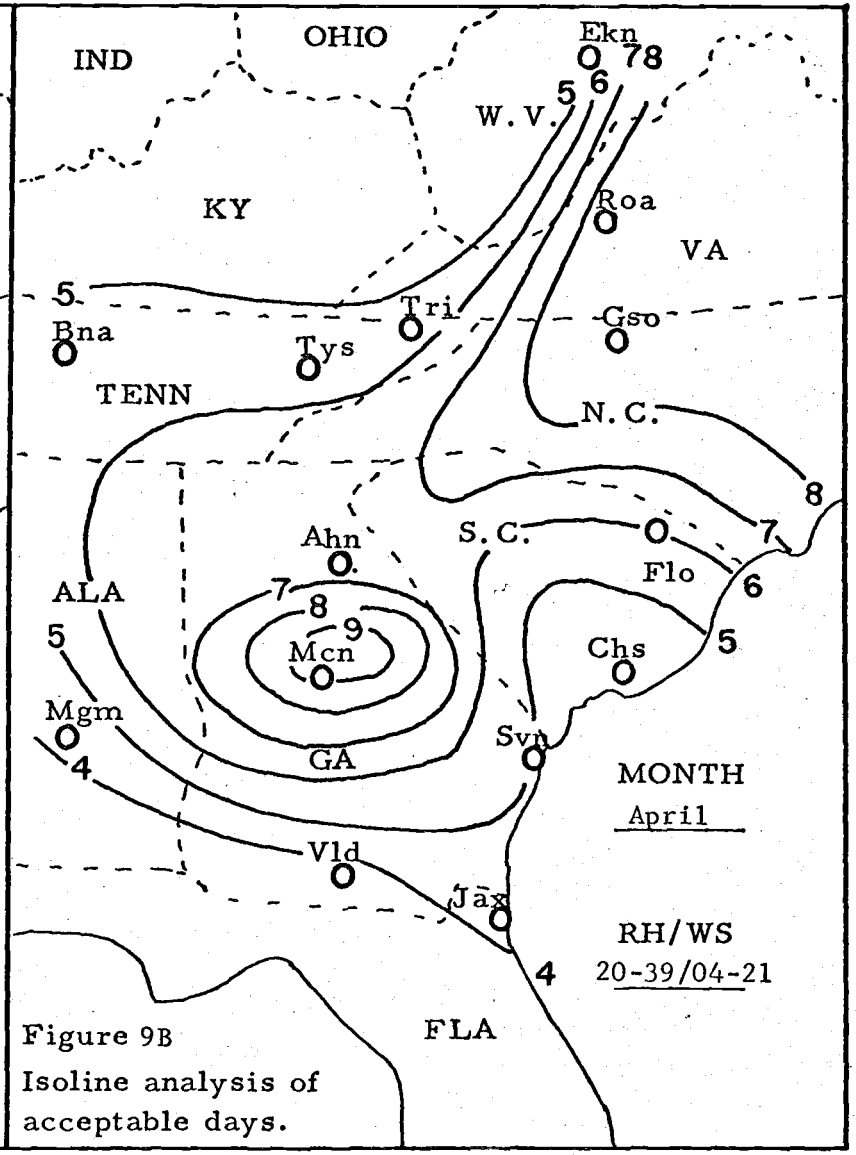

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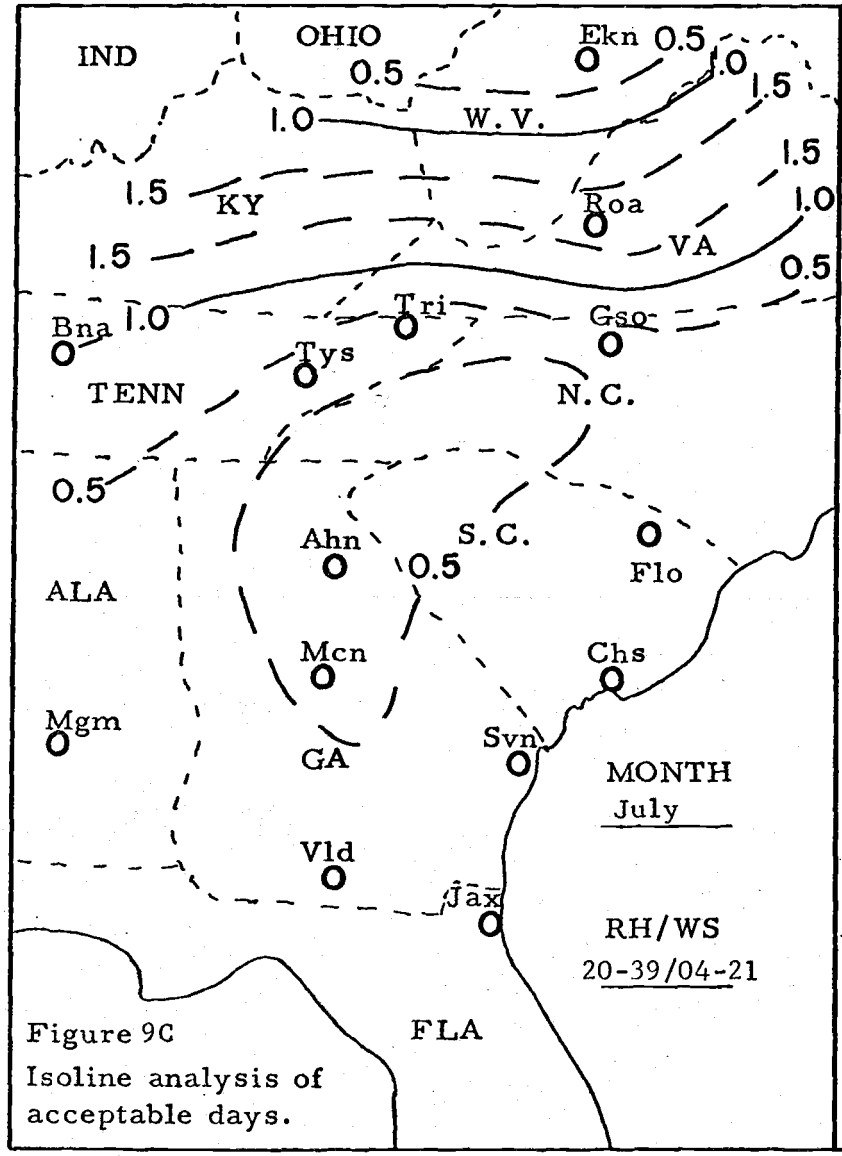

Figure 9C
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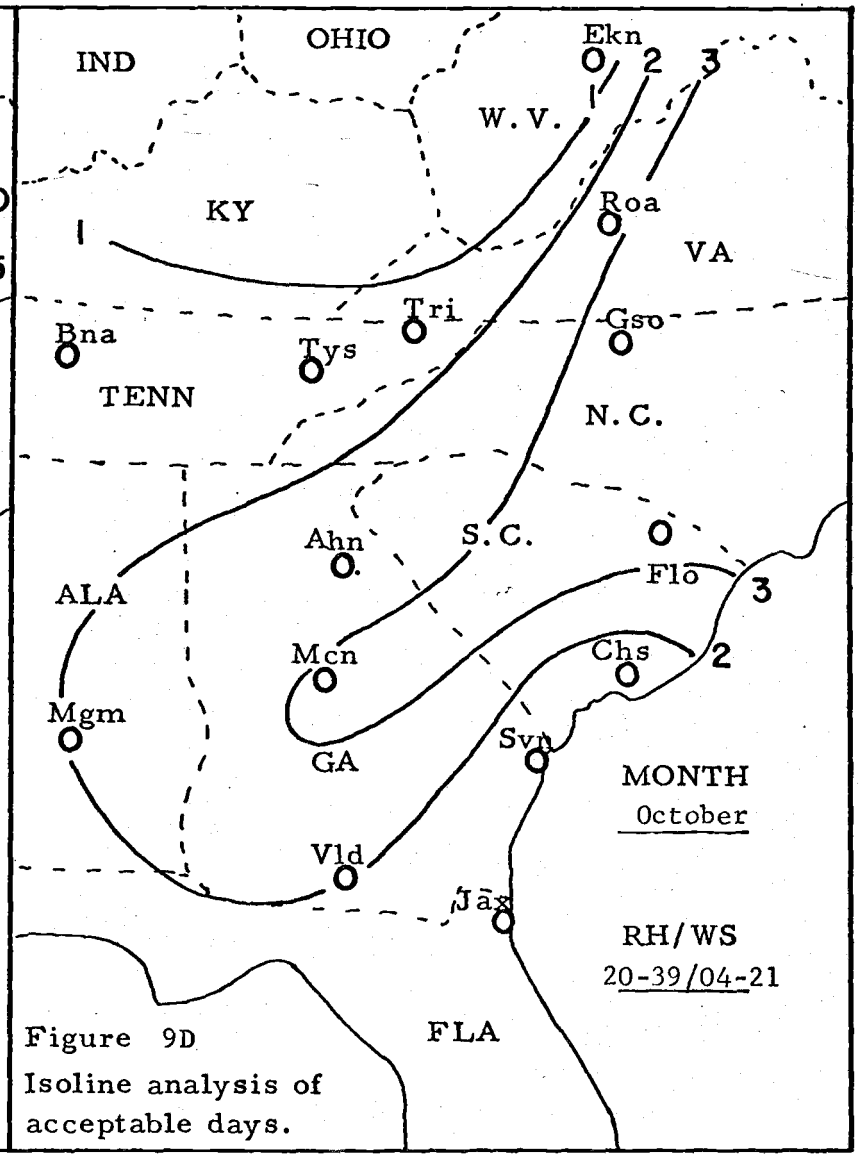

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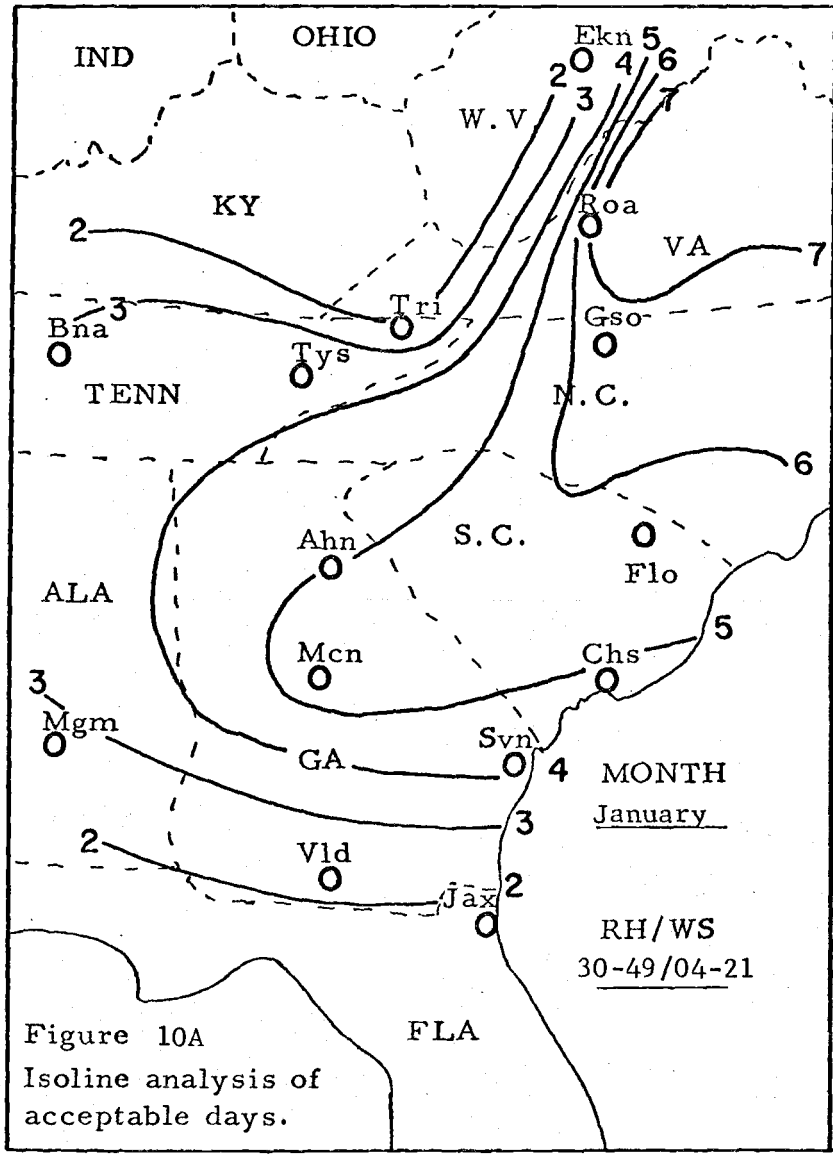

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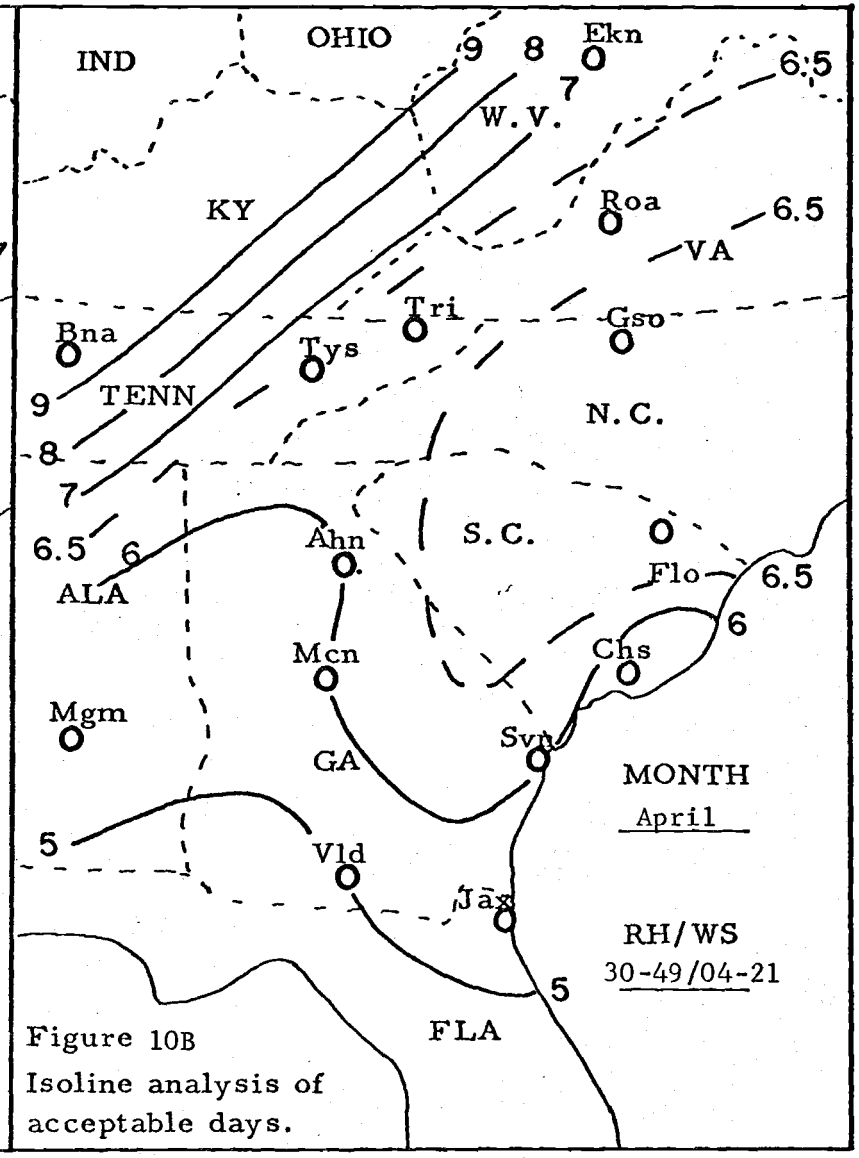

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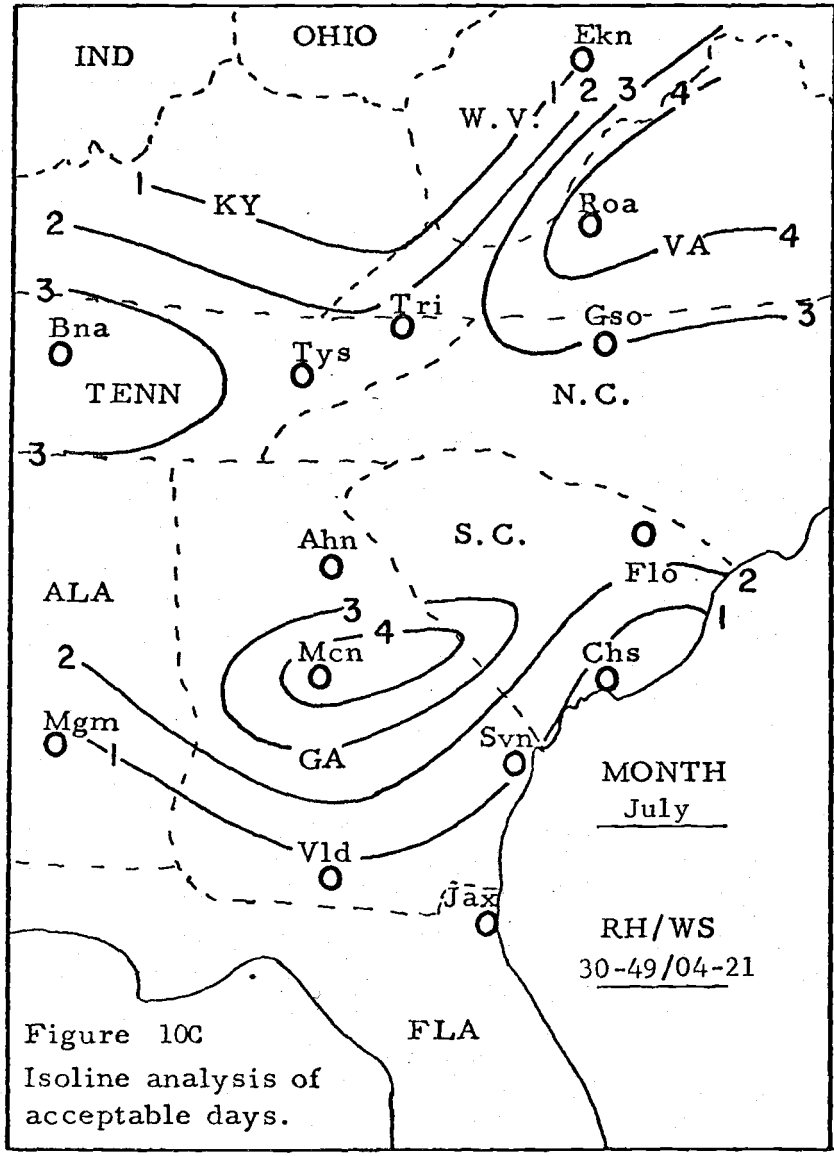

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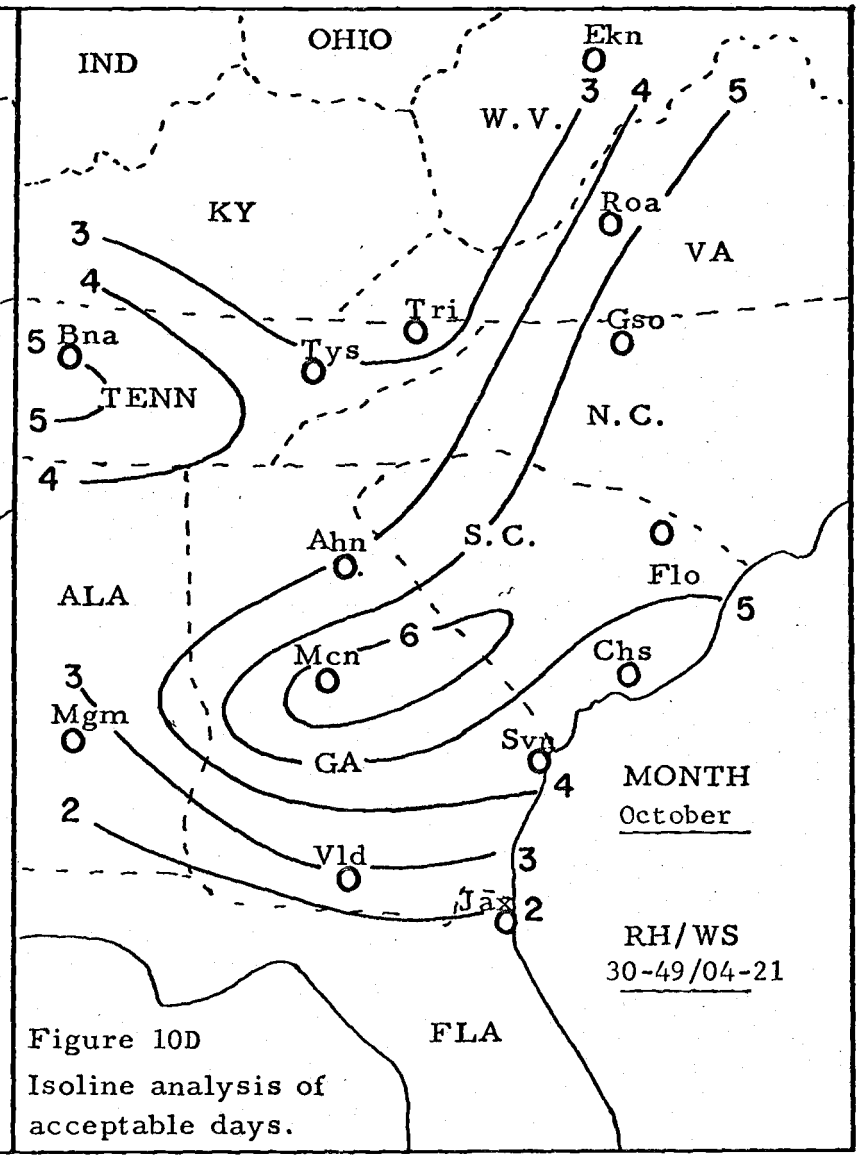

Figure 10D
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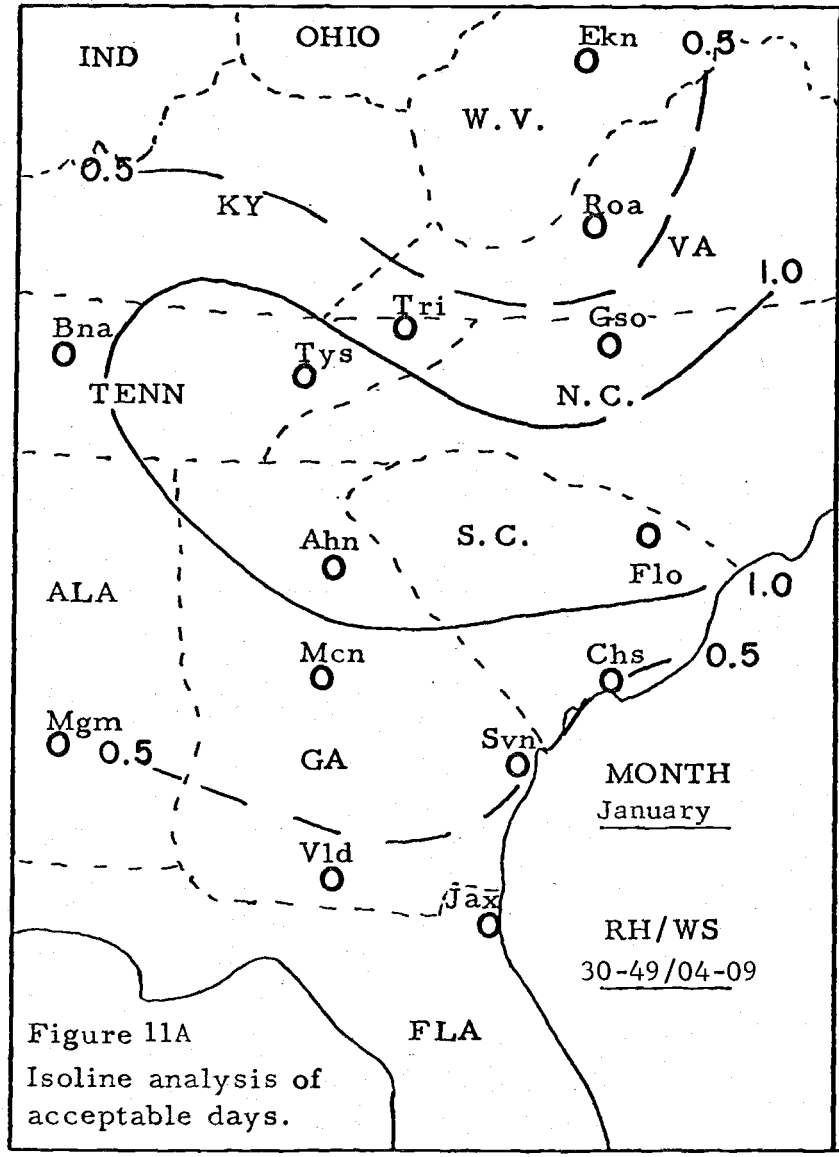

Figure 11A
Isoline analysis of acceptable days.

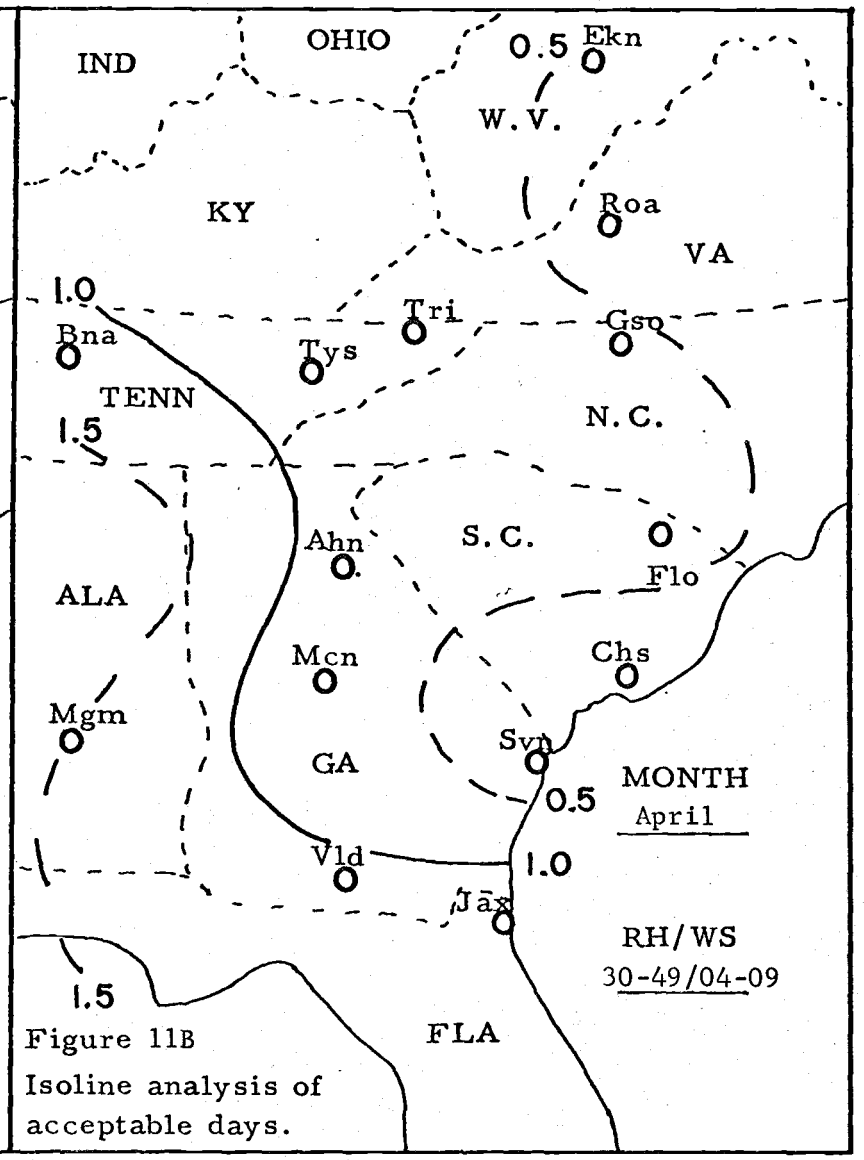

Figure 11B
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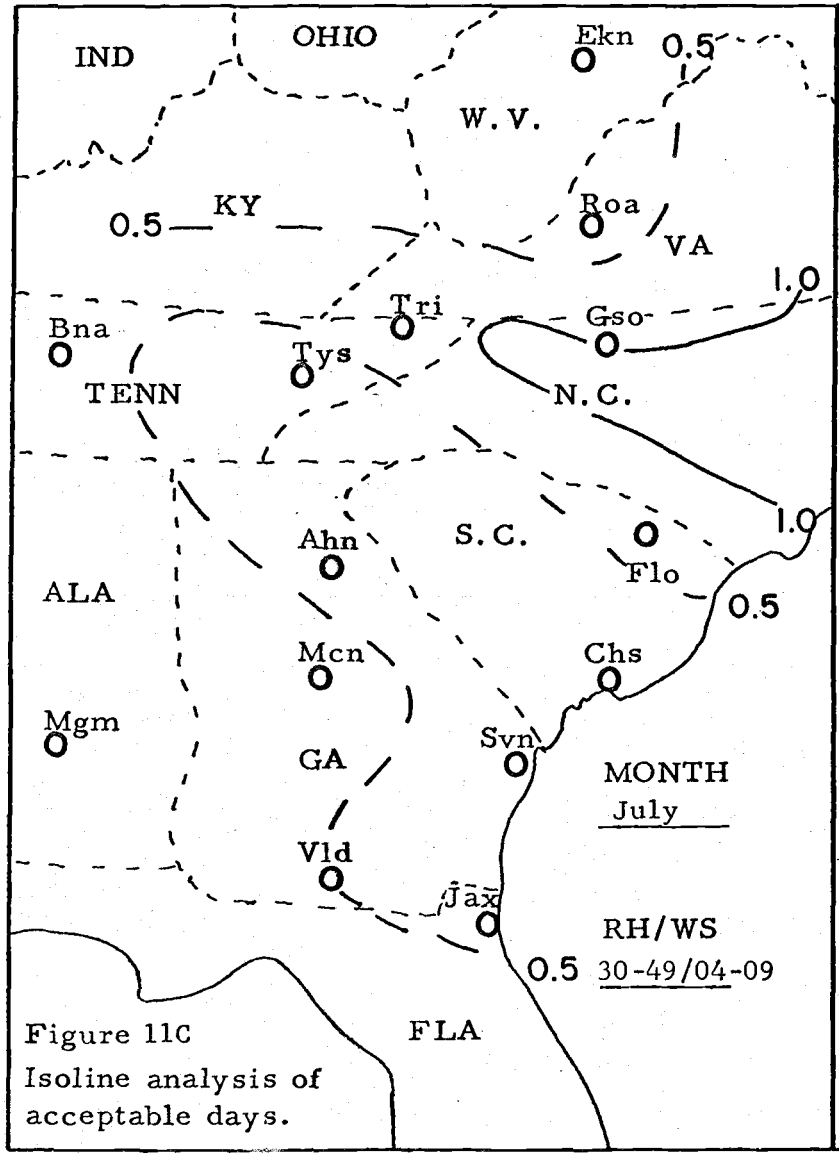

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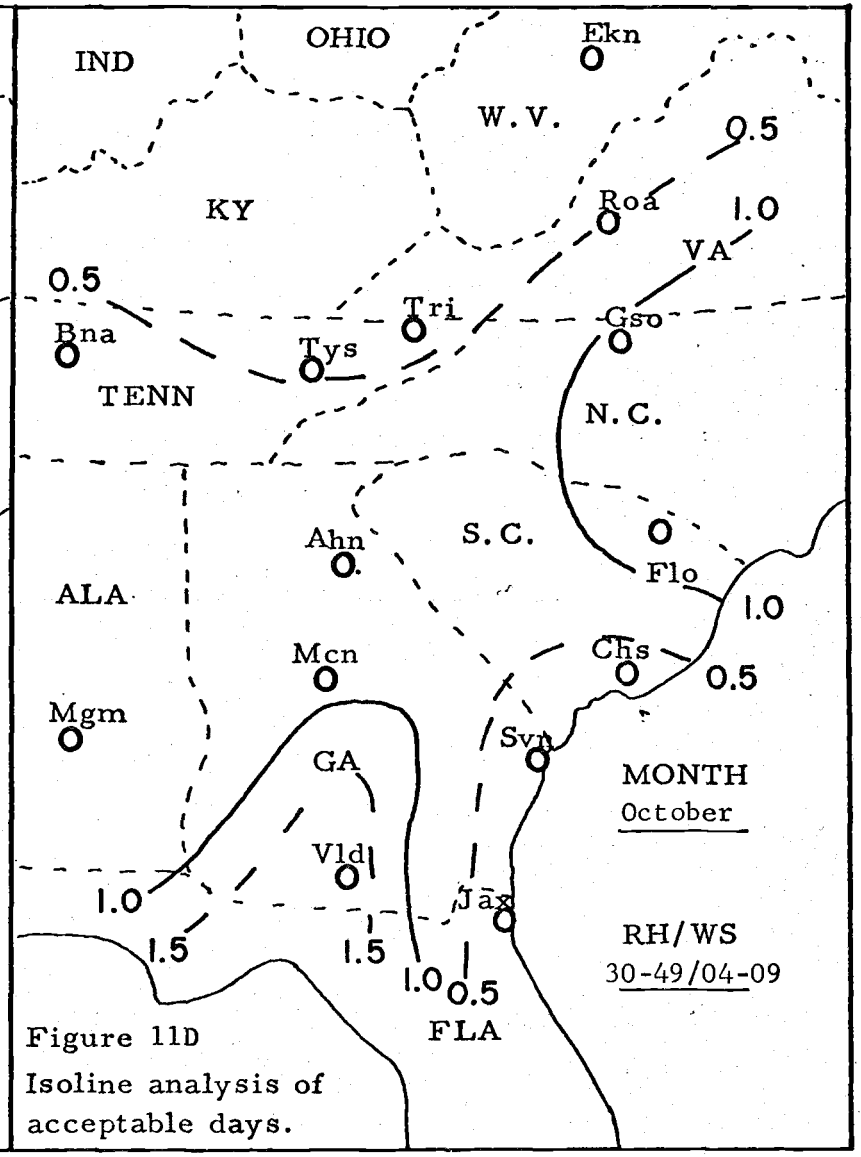

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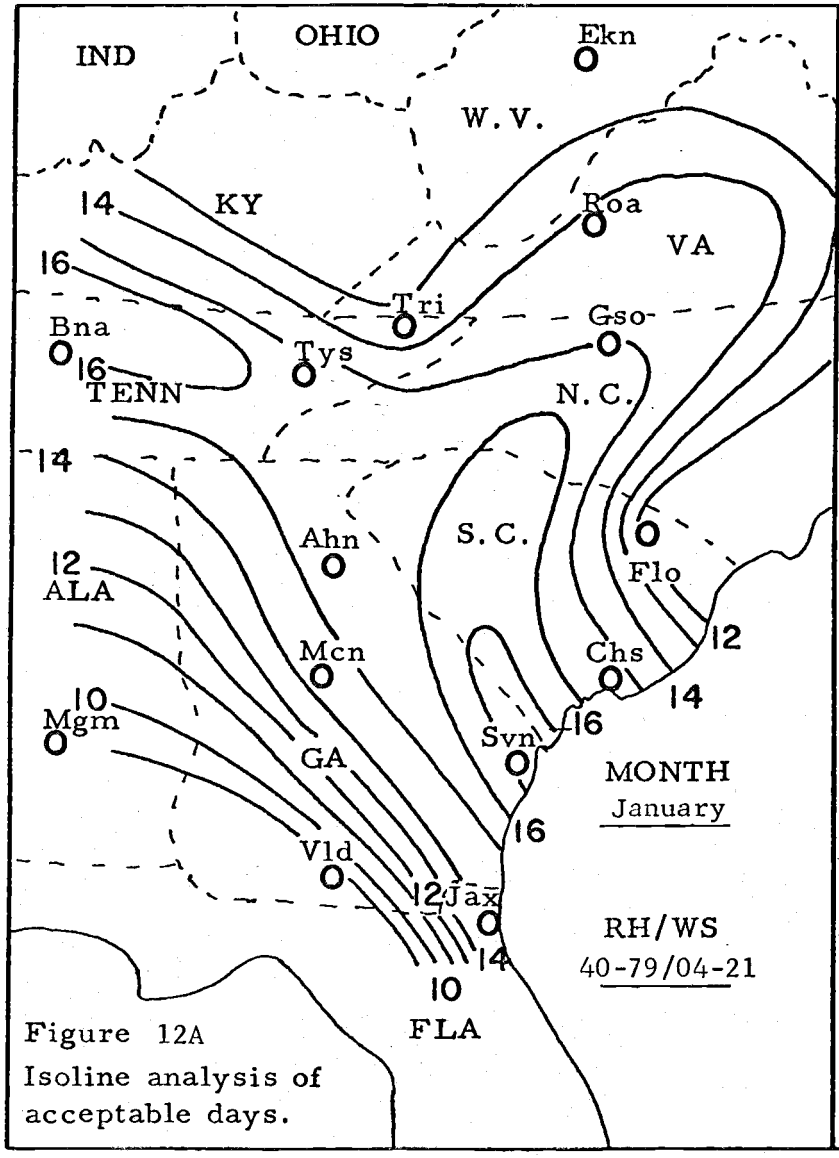

Figure 12A
Isoline analysis of acceptable days.

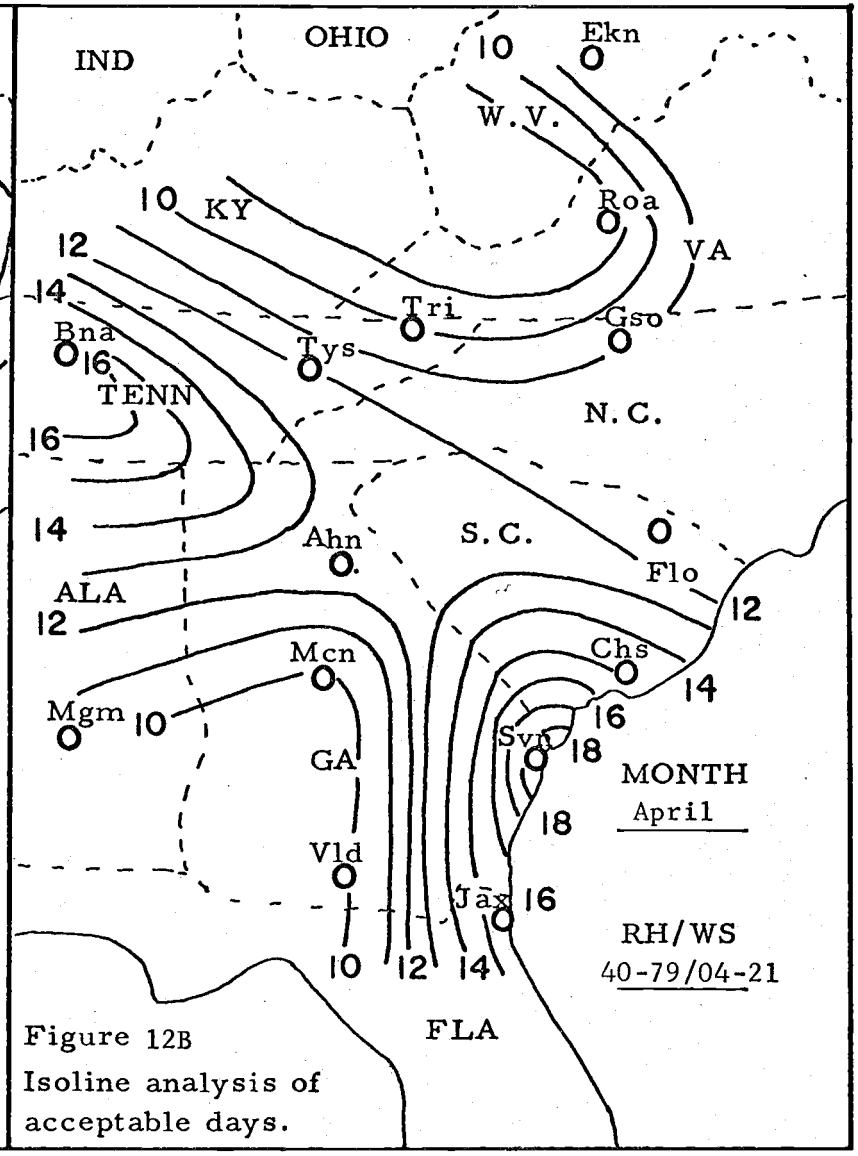

Figure 12B
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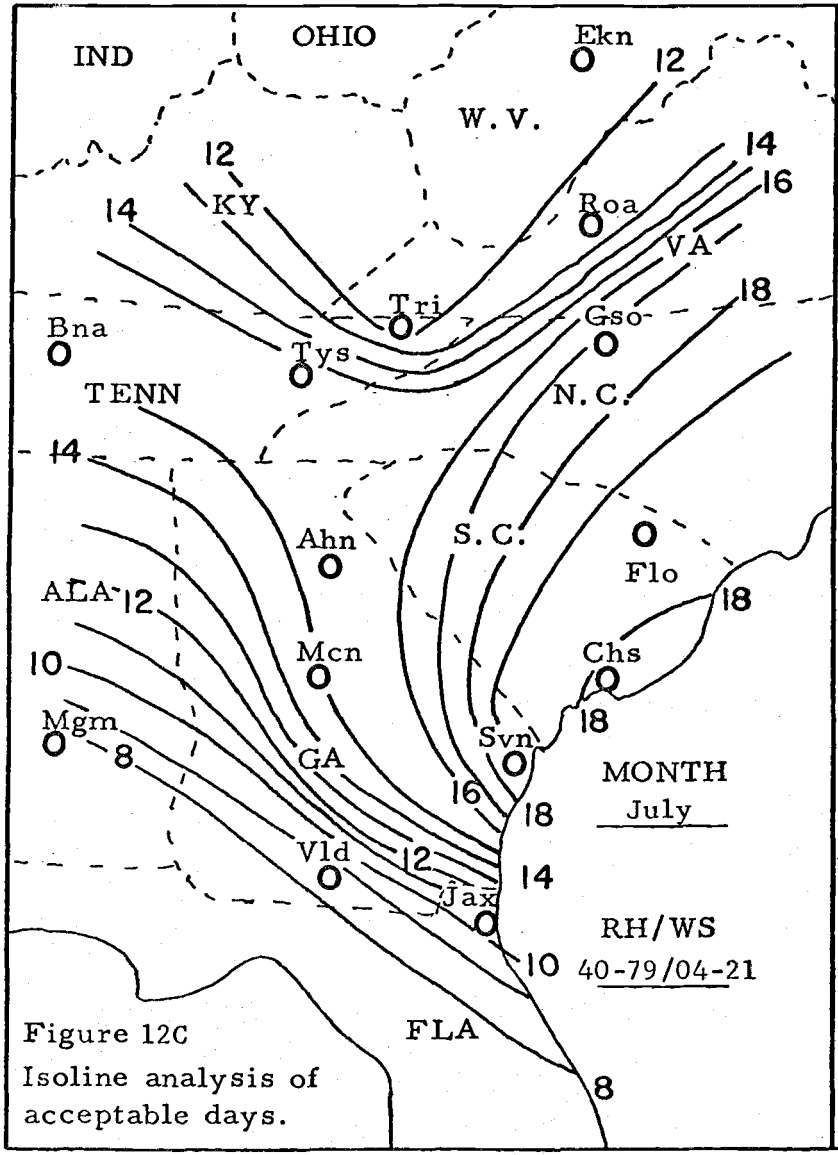

Figure 12C
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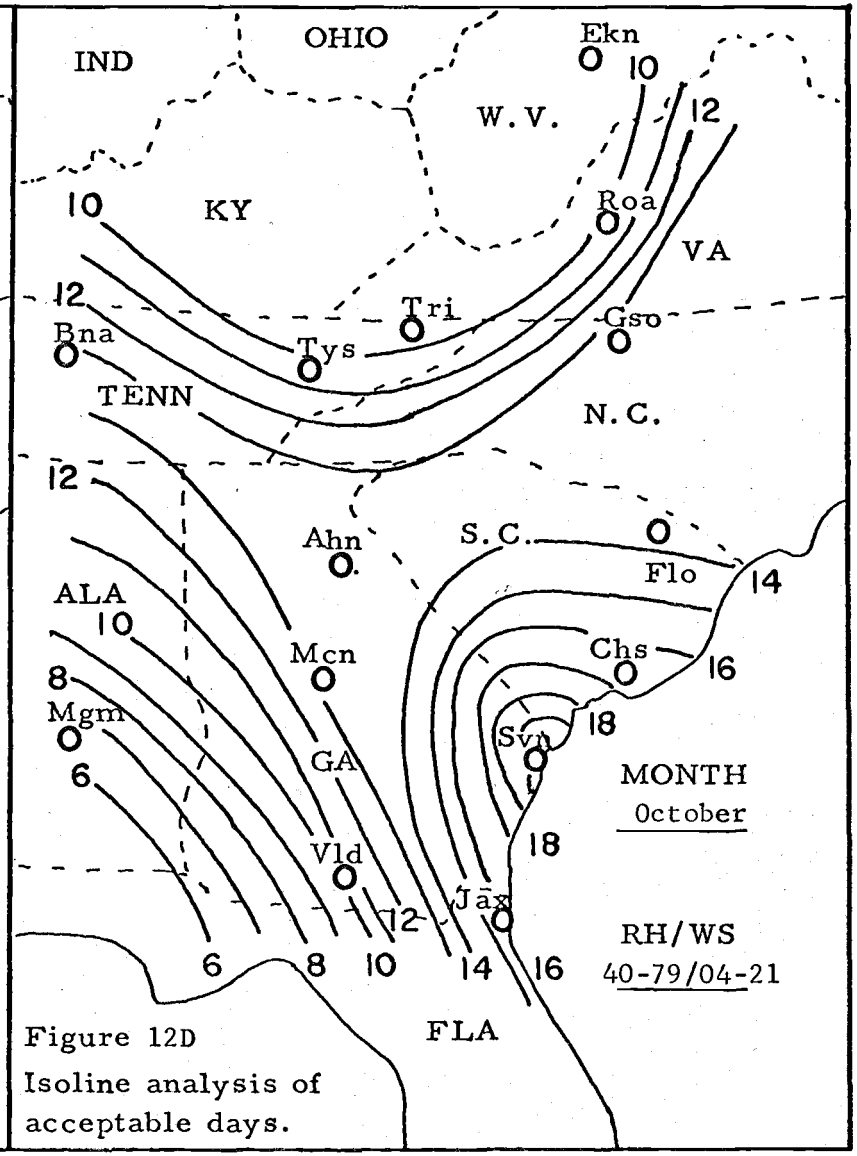

Figure 12D
Isoline analysis of acceptable days.

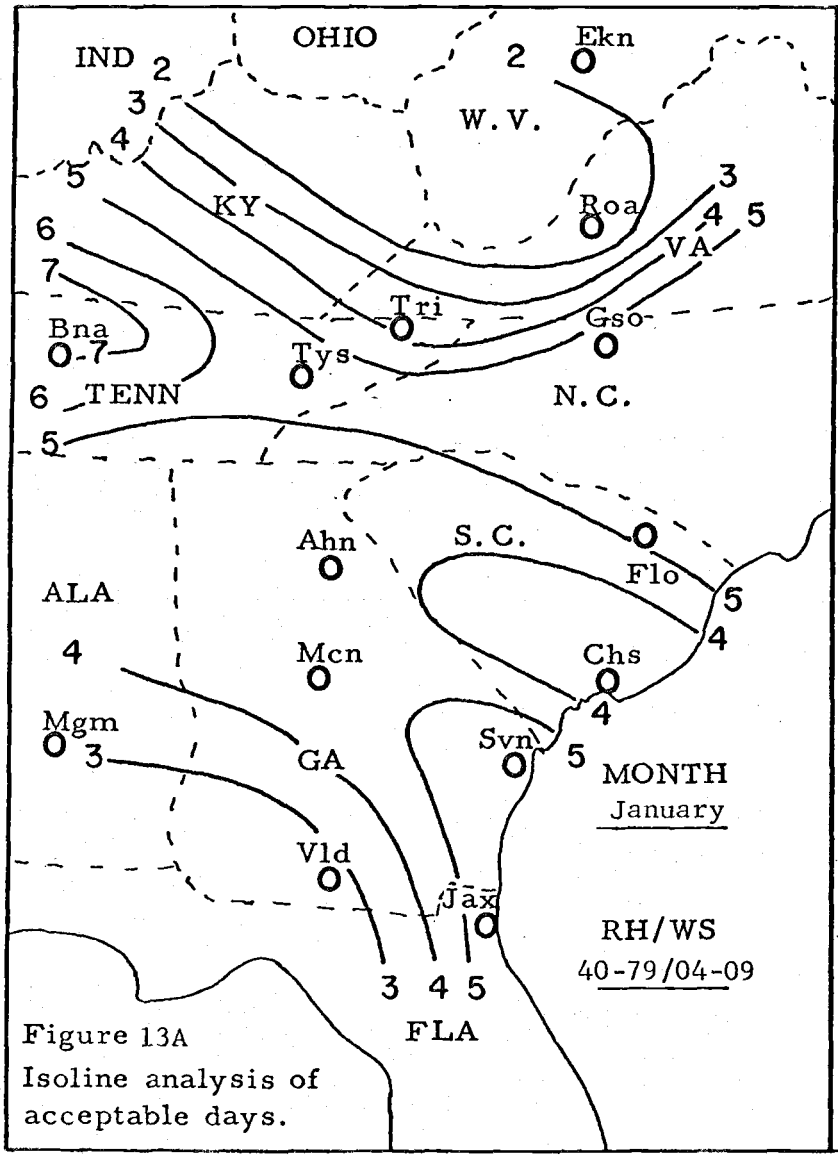

Figure 13A
Isoline analysis of acceptable days.

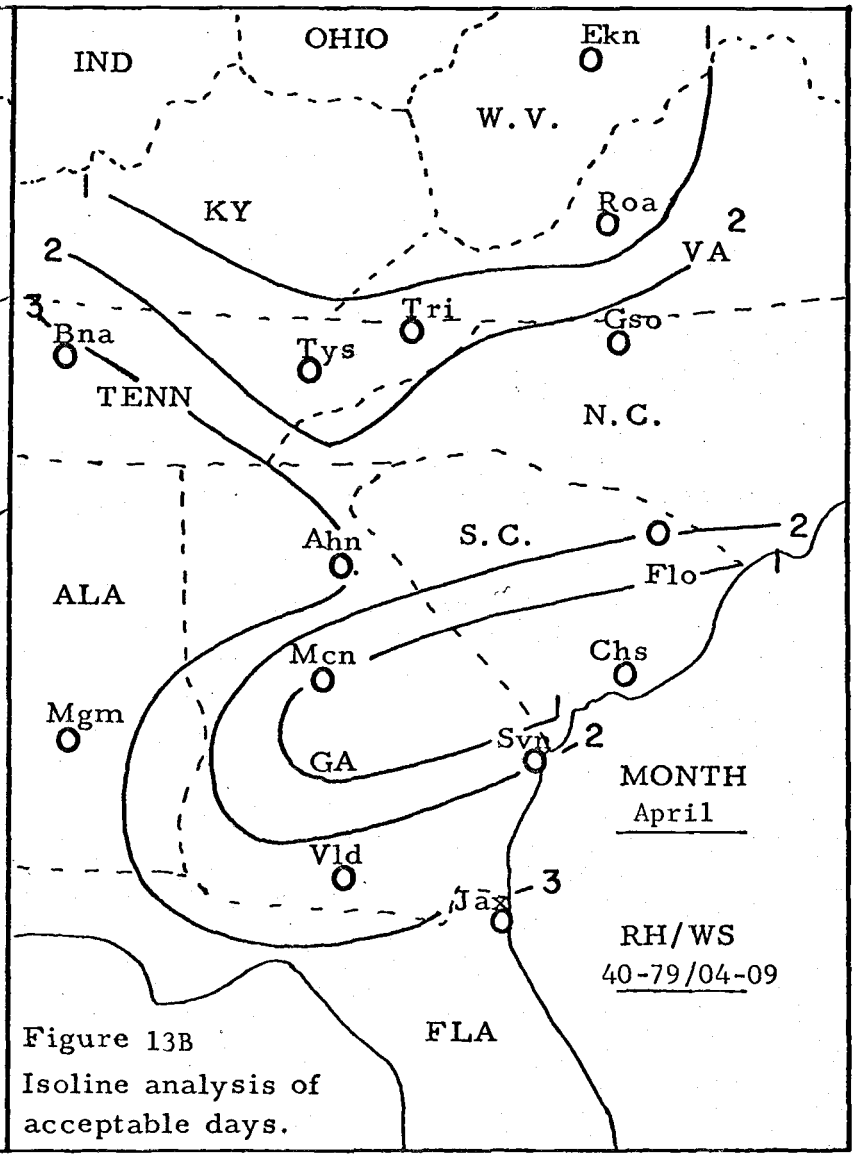

Figure 13B
Isoline analysis of acceptable days.

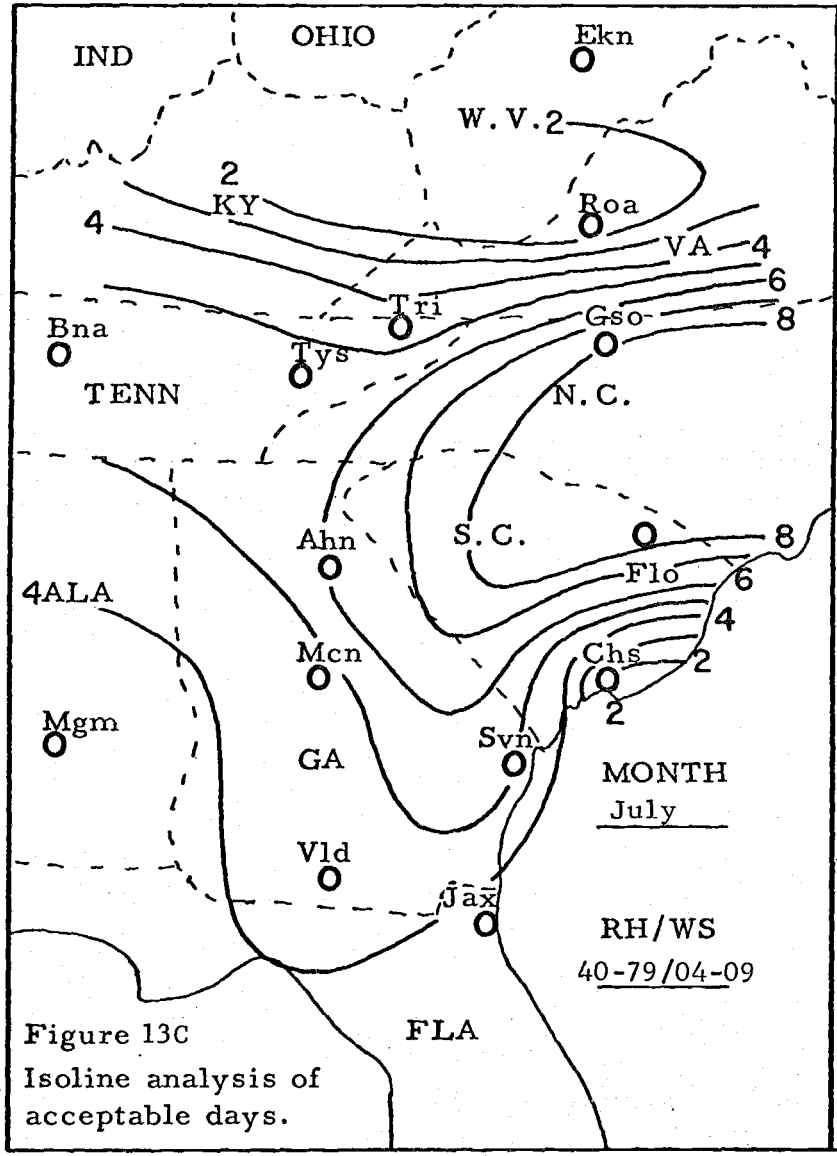

Figure 13C
Isoline analysis of acceptable days.

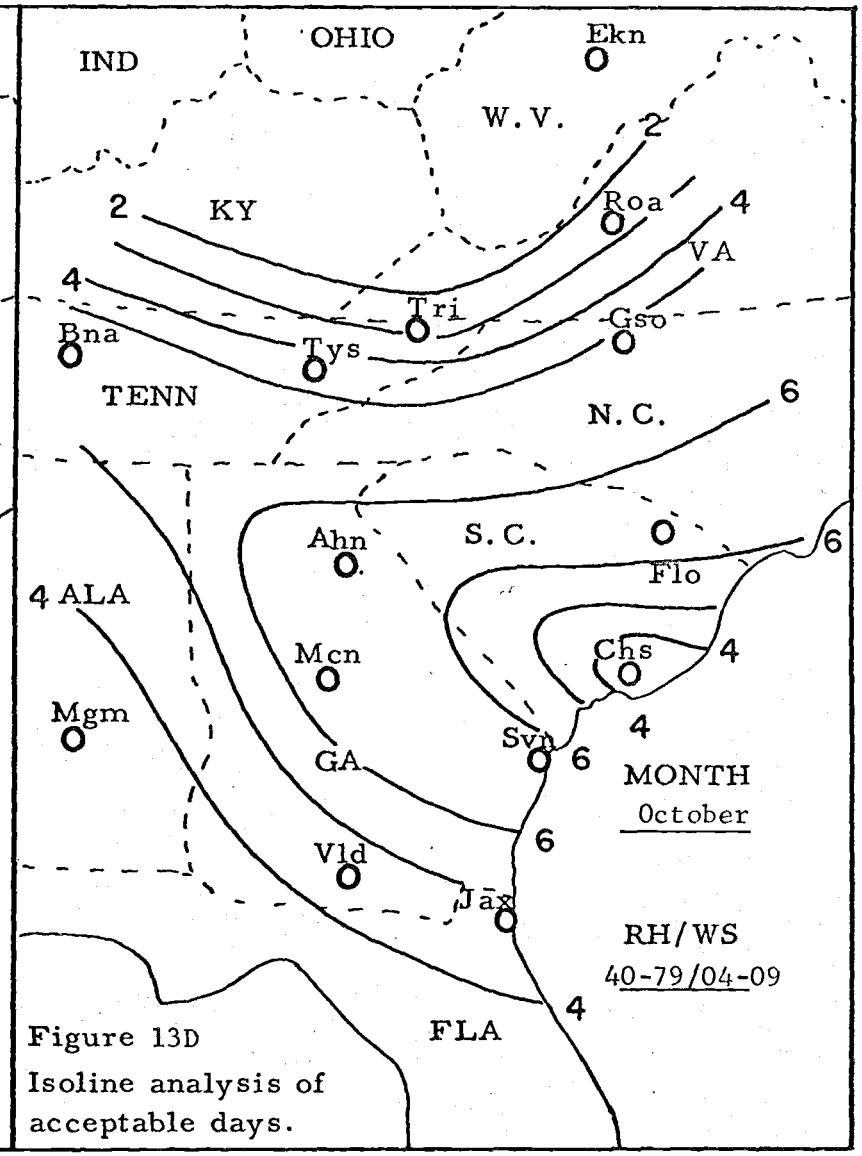

Figure 13D
Isoline analysis of acceptable days.

These charts show overall pattern changes resulting in decreasing the upper limit on relative humidity from 69 percent to 39 percent, decreasing the upper limit on wind speed from 21 knots to nine knots, changing both the upper and lower limit on relative humidity from 20 through 69 percent to 30 through 49 percent, and increasing both the lower and upper limits on relative humidity from 20 through 69 percent to 40 through 79 percent.

These analyses are not easily interpreted in terms of what produces the respective patterns. The mountains do seem to exert an influence that, in most cases, acts to tighten the gradient in the vicinity of the mountains with low values to the northwest.

The Gulf coast appears to act in a similar manner in producing a tight gradient with low values to the southwest, though this does not hold in all cases. These results would be more easily substantiated with stations further west and north than Montgomery and Nashville.

The charts are analyzed for the months of January, April, July, and October in order to help contrast the seasons for the criteria selected. The most striking difference season to season is the number of available days for a given criteria at all stations rather than a difference in the pattern itself. For example, the maps for the 20 through 69 percent groups show an overall minimum in July.

while the charts for the 40 through 79 percent groups show an overall maximum in July. The latter maximum in July is apparently reflective of the summer shower activity in producing generally higher sustained relative humidity than in other seasons of the year.

Examination of the 20-69/16-99 group in Table 3 for these same four months reveals a general maximum in April and a minimum in July. This would appear to be due to the annual wind regime in the Southeast in which maximum yearly wind speeds are experienced in March, April, and May, while minimums are observed in June, July, and August. The maximum wind speeds also coincide with and contribute to some of the most critical conditions for wildfire occurrence.

Table 5 presents a frequency distribution of the National Fire Danger Rating System Buildup Index (BUI) by months for the 20-49/04-15 relative humidity and wind speed ranges at Macon, Georgia. The BUI values are coded as follows as required by the BMD08D computer program:

Table 5.--MCH (BUI vs Months) (1955-1964)

RH/WS	MATBUI													
	12	*	3				9	2						
	11	*	5				13	6	1					
	10	*	5			5	21	15	2	2	9	35	16	8
	9	*			3	8	14	5	2	4	8	6	10	8
	8	*		1	1	7	13	7	6	5	5	7	8	8
	7	*	4	6	4	17	14	11	9	8	8	10	8	9
20-49/04-15	6	*	15	12	20	25	20	17	8	12	8	13	6	13
	5	*	9	10	9	10	12	7	5	6	5	4	5	11
	4	*	17	16	14	16	6	5	3	9	3	8	3	10
	3	*	20	22	23	17	6	4	7			3	2	6
	2	*	12	18	7	20	5	3	2	1	1	5	1	7
	1	*					4	6					1	
			**********											
	MONTH		1		3		5		7		9		11	
				2		4		6		8		10		12
	COLUMN		90		81		137		45		53		77	
	TOTAL			85		125		88		47		98		87

Coded Value of BUI	Actual Range of BUI
1	Greater than 120
2	0-5
3	6-10
4	11-15
5	16-20
6	21-30
7	31-40
8	41-50
9	51-60
10	61-80
11	81-100
12	101-120

The values greater than 120 are coded one because of the transformation required in the computer program. Otherwise, the increasing coded values correspond to increasing values of the buildup index. The BUI classes, as mentioned earlier, are smallest near the low end of the BUI range to provide additional detail for use by persons doing prescribed burning.

Table 5 is interpreted in the following manner: In January there were 90 days in the ten-year period (1955 through 1964) that met the 20-49/04-15 relative humidity and wind speed criteria, while also meeting the wind direction and duration criteria. These 90

days had the buildup index distribution shown in the column above month one of Table 5. That is, 12 days had BUI's in the zero to five range, 20 in the six to ten range, 17 in the 11 to 15 range, etc.

If there were no values in the ten-year period that exceeded a BUI of 120, the coded value of one would not appear in the tables. One can now conclude at Macon that in January 85.6 percent of the 90 days had buildup indexes below 40, while 14.4 percent had BUI's greater than 60. More detailed breakdowns can be made to suit the individual using the information.

Only one table is shown here, but Appendix A contains 60 such tables for Macon and four each for the remaining 13 stations. The 60 tables represent all relative humidity and wind speed criteria in which at least 200 days were found in the ten-year period of study at one or more of the 14 stations.

One might now consider that Macon, in January, had an average of 9.0 days per month that met the 20-49/04-15 criteria (from Table 3 or from column total divided by ten of Table 5). The values making up the January mean had a standard deviation of 3.8 (Table 4). The Buildup Index was generally below 40 (Table 5). Appendix A contains BUI distributions for additional criteria and other stations.

SUMMARY

The objective of this study was to determine the time available for conducting prescribed burning in the southeastern United States. Relative humidity, wind speed, wind direction, and indirectly temperature and precipitation were the weather elements selected for use in the study because of their influence on fuel moisture and ultimately fire intensity. The National Fire Danger Rating System's Buildup Index was used in lieu of direct measures of temperature and precipitation.

Limits were set on the above elements, and the length of time the actual observed conditions must fall within these limits was set forth. The limits imposed produced the following maximum ranges on each of the parameters:

1. Relative humidity - ten to 80 percent
2. Wind speed - greater than one knot
3. Wind direction - within 56 degrees of starting direction
4. Length of time 1, 2, and 3 must be successfully met - six hours
5. Buildup index - entire range examined.

In selecting the relative humidity limits, it was suggested that the oscillating vapor pressure desorption curve be used when estimating the equilibrium moisture content of natural fuel beds from relative humidity.

The relative humidity and wind speed ranges above were divided into 14 and eight smaller ranges, respectively. Combinations of these ranges, each also associated with the wind direction and duration criteria, formed 112 unique sets of weather conditions. The data from each of the 14 weather stations across the southeastern United States were examined for a ten-year period to establish the number of days that successfully met each of the 112 different sets of weather criteria. Tables were prepared and presented these results both for the entire ten years of study, as well as monthly mean values with corresponding standard deviations.

Isoline charts of the frequency of occurrence of the criteria were illustrated. These charts demonstrate a method that can be used to interpolate between data points. The mountains and the Gulf of Mexico appear to influence the number of days meeting a given criterion. The proximity to the mountains and the Gulf both appear to reduce the number of days available for a given set of weather conditions examined in this study. The season-to-season change in the patterns produced by the isoline analysis is not as striking as the total change in the number of available days at all stations.

An example of the National Fire Danger Rating System Buildup Index (BUI) distribution for one relative humidity and wind speed classification is discussed. The remainder of these frequency distributions of BUI by month is included in Appendix A.

Thus, the objective set forth in this study is met by Tables one through five in the text and Appendix A. With these tables and the analysis procedures in Figures 7 through 13, a forester should be able to make considerably more efficient use of the time available for prescribed fire in the southeastern United States.

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APPENDICES

APPENDIX A

Appendix A contains tables of the National Fire Danger Rating System's Buildup Index (BUI) cross tabulated with month for 60 sets (the same criteria as in Table 4 of the text) of weather criteria at Macon, Georgia (MCN), and four sets of weather criteria for each of the 13 stations shown here.

	Station	Identification
1.	Athens, Georgia	AHN
2.	Savannah, Georgia	SVN
3.	Valdosta, Georgia	VLD
4.	Jacksonville, Florida	JAX
5.	Charleston, South Carolina	CHS
6.	Florence, South Carolina	FLO
7.	Greensboro, North Carolina	GSO
8.	Roanoke, Virginia	ROA
9.	Elkins, West Virginia	EKN
10.	Bristol, Tennessee	TRI
11.	Knoxville, Tennessee	TYS
12.	Nashville, Tennessee	BNA
13.	Montgomery, Alabama	MGM

Ten years (1955 through 1964) of weather records from MCN were examined to find the number of days when six consecutive hours (between 0600 LST and 2300 LST) existed in which the wind direction

varied no more than two compass points on a 16-point compass. These days were further stratified according to the following relative humidity and wind speed ranges:

RH(%)/WS(kts)
10-39/04-21
10-39/04-15
10-21
20-69/01-09
04-21
04-15
04-09
10-21
10-15
16-99
20-59/01-09
04-21
04-15
04-09
10-21
10-15
20-49/01-09
04-21
04-15
04-09
10-21
10-15
20-39/04-21
04-15
10-21
30-69/01-09
04-21
04-15
04-09
10-21
10-15

RH(%)/WS(kts)
30-59/01-09
04-21
04-15
04-09
10-21
10-15
30-49/04-21
04-15
10-21
40-79/01-09
04-21
04-15
04-09
10-21
10-15
40-69/01-09
04-21
04-15
04-09
10-21
10-15
40-59/01-09
04-21
04-15
10-21
50-69/01-09
04-21
04-15
10-15

These combinations of weather elements make up the 60 sets of weather criteria each of which is shown with its accompanying BUI distribution by month in the tables for MCN.

The same ten-year period of data was examined at each of the remaining stations[1/] utilizing the following four sets of weather criteria:

RH(%)/WS(kts)
10-39/04-21
20-69/04-21
30-69/04-21
40-79/04-21

Each of the above relative humidity and wind speed ranges is also associated with the wind direction and duration criteria mentioned earlier. These four sets of weather criteria encompass the ranges of 50 of the 60 sets included at Macon. That is, the relative humidity and wind speed ranges of the 50 are equal to or less than the ranges of the four weather criteria for which the distributions are shown.

It is suggested that the Macon BUI tables be used as a guide in estimating the BUI distributions at other stations for weather

---

1/ Exceptions are AHN in which the period 9/55 through 12/64 was examined and MGM in which the periods 1/55 through 7/56 and 7/58 through 12/64 were examined.

criteria other than the four presented. For example, if one is interested in the January BUI distribution for the 20-69/04-15 set of weather criteria at Elkins, West Virginia (EKN), he would proceed in the following way:

1. Examine the BUI distribution for the 20-69/04-21 set of weather criteria at both Macon (MCN) and EKN
2. Reduce the BUI distribution observed at EKN for the 20-69/04-21 by the same percentage as is observed to occur at MCN between the same sets of weather criteria.

The percentages to be multiplied by the values in the January column at EKN for the 20-69/04-21 set of weather criteria to estimate the distribution for the 20-69/04-15 criteria are found as follows:

$$\text{percent} = \frac{\text{No. of days observed at MCN for 20-69/04-15 set}}{\text{No. of days observed at MCN for 20-69/04-21 set}} \quad (100)$$

These percentages must be computed for each BUI class. The percentages for January in this example are:

BUI Classes	BUI Class (coded)[2/]	Percentage
101 - 120	12	100
81 - 100	11	100
61 - 80	10	100
51 - 60	9	100
41 - 50	8	100
31 - 40	7	100
21 - 30	6	78
16 - 20	5	89
11 - 15	4	100
6 - 10	3	90
0 - 5	2	86
> 120	1	100

These percentages multiplied by the January BUI distribution for the 20-69/04-21 set of weather criteria at EKN produce the following distribution for the 20-69/04-15 set of weather criteria:

2/ As found in the table and required by the computer program that produced the tables.

BUI Classes (coded)	Estimated values	Actual values
12	0	0
11	0	0
10	0	0
9	0	0
8	1	1
7	2	2
6	9	12
5	6	7
4	12	9
3	10	11
2	49	49
1	0	0

The estimated distribution is not too far from the actual distribution in this case.

The validity of this procedure for estimating BUI distributions rests primarily in the fact that most of the weather criteria (50 of the 60) are subsets with respect to relative humidity, wind speed, wind direction, and duration of the four shown. Thus, when estimating these distributions, one should select the table which contains as a subset the distribution to be estimated or the distribution closest to the given table when subset selection is not possible. In the example, the 20-69/04-21 table was reduced by percentage values

derived from MCN because the desired distribution (20-69/04-15) was a subset. In several cases tested with this procedure, the values were always ranked correctly within the distribution and were generally quite close to the actual distributions. The actual distributions of all weather criteria for each station are not included here for purposes of brevity.

The tables follow with Macon first and the remaining tables in the order the stations were listed earlier.

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

```
NATBUI
  12 *    2                   7   2               1       3
  11 *    4                   9   2               3   3  16   2
  10 *    3               1  12  13   2   1   1  19   9   5
   9 *            3   3  12   2   3   2   7   7   9   7
   8 *        3   1   7   5   6       2   1   4   5   4
   7 *    4   2   3  15   9   5   1   1   2   3   8   6
   6 *    7   8  27  21   9  10       2   2   5   4  11
   5 *    5  10  11  16   3       1   2   1   1   6   4
   4 *    7  14  22  20   3   1       1   1   1   3   8
   3 *   12  20  22  17   2   2                   2   2   5
   2 *    6  14   9  18   5   1                   1       6
   1 *                    4   4                           1
      ********************************************************
 ( 2)    1       3       5       7       9       11
MCNTH        2       4       6       8       10      12

CCLUMN  50      98      80      7       19      66
 TOTAL      71      118     48      11      46      58
```

10-39/04-15

```
NATBUI
  12 *    2                   7   2               1       3
  11 *    3                   7   2               3   3  12   2
  10 *    3               1  10  10   2   1   1  18   8   5
   9 *            3   3  11   2   3   1   7   8   7   6
   8 *        3   1   6   4   4       2   1   2   5   4
   7 *    4   2   3  14   9   5   1   1   2   3   7   4
   6 *    7   6  19  21   8  10       2   1   5   4   9
   5 *    4   6   8  10   2       1   2               5   4
   4 *    5  13  19  17   3   2       1   1           2   7
   3 *   10  17  13  12   2   1                   2   1   5
   2 *    4  10   4   9   5   1                   1       5
   1 *                    4   4                           1
      ********************************************************
 ( 2)    1       3       5       7       9       11
MCNTH        2       4       6       8       10      12

CCLUMN  42      70      72      7       17      55
 TOTAL      57      93      43      10      42      51
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/10-21

```
NATBUI
  11 *    2                   4                       1   6   2
  10 *    2                   6   3               1   3   4
   9 *                2       1   1   1                   3   2
   8 *                1   2   1   2                   2   1   1
   7 *            1   1   4   2   1       1   1   1   3   2
   6 *            5  12   7   1   2           1   2       4
   5 *    1   7   7   8   1                       1   2   2
   4 *    4   3   8  11   1   1               1   1   1   3
   3 *    3  10  14  10       1                   1   1   2
   2 *    4   7   7  12                           1       1
   1 *                        3
      ********************************************
 ( 2)    1       3       5       7       9       11
MONTH       2       4       6       8       10      12

COLUMN  16      52      20      1       4       21
 TOTAL      33      54      11      1       13      19
```

20-69/01-09

```
NATBUI
  12 *    2                   3   2                   1   7   3
  11 *    1                   4   6   1       4   4   9   3
  10 *    4               1  11   3   1       7  23  11   8
   9 *    1               4   4   1   2   3   6   8   8   6
   8 *        2   1   2   8   5   2   6   5  13   9  10
   7 *    6   2   2   4   3   5   6   2   7   6   8  10
   6 *    9   7   6   6   6  13   3  13  12  11   6  16
   5 *    7   6   2   4   2   4   8   4   2   3   2   8
   4 *   11  13  12   4   1   2   4   9   4   3   1  10
   3 *   17  13   5   4   8   3   5   2   5   1   3   2
   2 *   11   5   1   5   4   5   4   2   1           4
   1 *                        2                   1
      ********************************************
 ( 2)    1       3       5       7       9       11
MONTH       2       4       6       8       10      12

COLUMN  69      29      54      36      53      65
 TOTAL      48      34      51      41      73      80
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

20-69/04-21

```
NATBUI
  12 *    4                  11   3              4      11   4
  11 *    7                  19   9   3     11   9  33   7
  10 *    7              8   30  18   5   3  20  41  29  10
   9 *              4  15   16  11   5   6   8  12  16  11
   8 *    1   2   7  17   20  14  11  13  12  19  17  23
   7 *   10  12  10  30   21  15  23  19  21  26  18  22
   6 *   27  21  38  39   28  34  21  38  34  27  12  34
   5 *   18  27  23  21   20  14  21  24  17  16  12  18
   4 *   31  32  34  25   12   9  21  28  16  14   5  23
   3 *   42  55  48  29   14  15  26   8  15   8  10  14
   2 *   28  35  21  31   12  21  10   3  10  11   3  14
   1 *                     4   9                      2
     ************************************************:
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN 175     185     207     146     168     168
 TOTAL     184     215     172     142     183     180
```

20-69/04-15

```
NATBUI
  12 *    4                  12   3              4      11   4
  11 *    7                  17   9   3      9   9  29   6
  10 *    7              8   31  17   5   3  20  41  25  10
   9 *              3  14   15  12   5   6   8  12  16  11
   8 *    1   2   7  16   19  12  11  13  11  18  16  20
   7 *   11  10   8  26   21  15  21  18  22  27  18  21
   6 *   21  20  32  40   27  32  20  37  30  26  10  33
   5 *   16  18  15  15   18  14  19  24  15  16  11  20
   4 *   31  28  27  20   12  10  20  28  17  13   5  22
   3 *   38  51  41  27   13  14  25   8  15   7   7  14
   2 *   24  32  17  28   12  21  10   3  10  11   3  11
   1 *                     4   8                      2
     ************************************************:
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN 160     150     201     139     161     153
 TOTAL     161     194     167     140     180     172
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

20-69/04-09

NATBUI

12	*	2				3	1				1	7	3
11	*	1				4	6	1		4	4	9	2
10	*	4			1	11	3	1		7	22	10	8
9	*	1			4	4	1	2	2	4	6	8	6
8	*		2	1	2	8	4	2	6	5	12	7	10
7	*	6	2	2	3	3	5	6	1	7	6	8	9
6	*	8	6	6	6	6	11	3	13	11	9	6	14
5	*	6	4	2	4	2	4	8	4	2	3	2	8
4	*	9	13	12	4	1	1	3	9	4	2	1	9
3	*	15	13	4	3	7	2	5	1	5	1	3	2
2	*	7	3	1	4	3	5	4	2	1			4
1	*						2					1	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		59		28		52		35		50		62	
TOTAL			43		31		45		38		66		75

20-69/10-21

NATBUI

12	*					1				2		1	1
11	*	3				8	1			2	2	10	3
10	*	2			1	11	4			2	9	8	
9	*			2	2	4	7	2		1	2	3	3
8	*			5	5	9	3	2	1	4	3	4	5
7	*	3	6	5	12	5	5	2	7	5	4	6	7
6	*	12	7	18	17	6	8	5	3	10	11	3	10
5	*	4	15	15	11	7	5	4		7	3	3	8
4	*	18	15	15	12	4	4	5	3	1	5	4	9
3	*	15	32	23	17	1	2	4	1	1	2	6	9
2	*	15	19	14	25	3	5	3			4	3	5
1	*					3	3					1	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		72		97		62		27		35		52	
TOTAL			94		102		47		15		45		60

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 20-69/10-15

```
NATBUI
  12 *                          1                       2       1   1
  11 *    2                     5   1                       2   5   3
  10 *    2                 1   8   4                   2   8   4
   9 *                  1   2   4   5   2       1   1           3
   8 *                  4   3   7   2   2   1   2   1   3   2
   7 *    3   4   1   9   5   5   2   6   5   4   4   4
   6 *    6   5   6  13   6   5   4   3   6  10   2   4
   5 *    2   6   3   4   4   5   1       5   1   2   7
   4 *   12   8   5   8   4   4   4   3   1   3   2   5
   3 *   10  25  12  11   1   1   4   1   1   1   2   6
   2 *    9  10   7  17   3   4   3           4   2   2
   1 *                    3   2                       1
     **********************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8      10      12

COLUMN  46      39      51      22      25      28
 TOTAL      58      68      38      14      35      37
```

RH(%)/WS(kts) 20-69/16-99

```
NATBUI
   9 *                          1   1
   7 *                                  1
   6 *    1       1   2
   5 *    1   2   5   2       1   1
   4 *        1   1
   3 *        2   3   2       2   1
   2 *    1   5   2   2
     ************************
 ( 2)     1       3       6       12
MONTH         2       4      11

COLUMN   3      12       1       3
 TOTAL      10       8       4
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts): 20-59/01-09

NATBUI

12	*					2	2				1	5	3
11	*	1				4	4			2	3	7	1
10	*	3			1	6	3	1		4	16	8	8
9	*				3	4	1			5	6	3	5
8	*		1		1	5	4	1	3	1	8	7	8
7	*	6		2	4	3	3	2	1	3	5	4	7
6	*	7	6	5	4	3	5	2	3	4	6	3	11
5	*	6	4	2	2	2	1	4	3		2	2	2
4	*	11	7	11	1	1	1		6	2	2		5
3	*	11	7	2	1	8	2	3	1	2	1	2	2
2	*	5	4		3	2	2	2	1				2
1	*						2						
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		50		22		40		15		23		41	
TOTAL			29		20		30		18		50		54

RH(%)/WS(kts): 20-59/04-21

NATBUI

12	*	3				10	2			2		9	4
11	*	7				19	9	1		7	8	28	5
10	*	6			7	26	18	4	3	15	38	26	9
9	*			5	15	14	9	3	6	8	10	14	9
8	*		2	5	11	18	13	9	10	8	14	14	15
7	*	10	10	9	28	20	18	14	13	12	17	13	19
6	*	21	19	33	35	23	22	13	25	23	22	9	28
5	*	17	25	20	21	20	12	17	18	13	16	8	13
4	*	30	26	32	23	8	8	12	20	11	11	6	19
3	*	37	38	38	23	12	9	13	4	9	6	7	13
2	*	18	30	17	34	8	11	7	3	5	7	3	12
1	*					4	8					1	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		149		159		182		93		113		138	
TOTAL			150		197		139		102		149		146

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

20-59/04-15

```
NATBUI
  12 *    3                  11   2                2         9   4
  11 *    6                  17   9   1            7   8  25   4
  10 *    6                7 26  17   4   3  15  38  23   9
   9 *              3  15  14   7   3   6   8  11  13   9
   8 *          2   4  12  16  11   9   8   7  13  13  14
   7 *    9     9   6  22  19  18  14  13  13  16  12  16
   6 *   17    19  27  37  23  21  12  25  19  20   9  25
   5 *   15    16  12  14  18  12  16  18  12  16   7  15
   4 *   31    21  24  20   8   9  12  20  11  10   5  16
   3 *   30    36  36  21  12   8  13   3   9   5   5  11
   2 *   17    25  12  26   8  11   7   3   5   7   2  10
   1 *                      4   7                    1
     ************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN  134     124     176      91     108     124
 TOTAL      128     174     132      99     144     133
```

20-59/04-09

```
NATBUI
  12 *                      2   1                1   5   3
  11 *    1                 4   4            2   3   7   1
  10 *    3              1  6   3   1        3  15   8   8
   9 *                   3  4   1            4   4   3   5
   8 *        1          1  5   3   1   3    1   8   5   8
   7 *    6       2      3  3   3   2   1    3   5   4   7
   6 *    7   5   5      4  3   4   1   3    3   5   3  10
   5 *    5   3   2      2  2   1   4   3        2   2   2
   4 *   10   7  11      1  1                6   2   2   4
   3 *    9   7   2      1  7   1   2   1    2   1   2   2
   2 *    4   2          3  2   2   2   1                2
   1 *                       2
     ************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN   45      22      39      13      20      39
 TOTAL      25      19      25      18      46      52
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 20-59/10-21

```
NATBUI
  12 *                                                 1        1  1
  11 *    3                    7  1                       2  8  2
  10 *    2                 1  9  4                    2  6  8
   9 *                   3  1  3  6  1                 1  1  4  3
   8 *                   4  4  7  3  1  1  1  2  4  1
   7 *    4  5  4 12  4  5  1  6  4  2  4  7
   6 *    9  6 14 14  3  5  4  2  7  9  1  9
   5 *    4 15 13 11  6  4  1     3  2  2  6
   4 *   13 13 14 11  2  4  3  2  1  4  5  8
   3 *   13 21 19 14  1  2  2  1  1  2  4  9
   2 *    9 15 11 27  2  4  3        3  3  3
   1 *                3  2
      ***********************************************:
 ( 2)     1     3     5     7     9     11
MONTH        2     4     6     8     10    12

COLUMN  57    82    47    16    21    44
 TOTAL     75    95    40    12    33    49
```

RH(%)/WS(kts) 20-59/10-15

```
NATBUI
  12 *                                                 1        1  1
  11 *    2                    4  1                       2  4  2
  10 *    2                 1  6  3                    2  5  4
   9 *                   2  1  3  4  1                 1  1  1  3
   8 *                   3  3  5  2  1                    3  1
   7 *    3  4     7  3  5  1  5  4  1  2  3
   6 *    5  5  4 13  3  3  3  2  3  7     4
   5 *    2  5  3  4  3  4  1     2  1  1  6
   4 *   12  7  5  8  2  4  3  2  1  3  2  4
   3 *    7 16 11 10  1  1  2     1  1  1  5
   2 *    5  7  6 18  2  3  3        3  2  1
   1 *                3  2
      ***********************************************:
 ( 2)     1     3     5     7     9     11
MONTH        2     4     6     8     10    12

COLUMN  38    34    35    15    15    21
 TOTAL     44    65    32     9    24    30
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 20-49/01-09

```
NATBUI
  12 *                          1  1                       3  2
  11 *    1                     2  2                 1  1  3  1
  10 *    2              1      2  2                 1  8  4  5
   9 *                   2      1  1                 4     1  4
   8 *       1                  4  2              1  1  2  5  4
   7 *    3        2  3  1  1  2                    2  2  2  3
   6 *    4  3  3  3  3  4  1                       2  4  1  5
   5 *    2  2           1     3  2                          2  1
   4 *    3  1  5        1              2  2  1              3
   3 *    8  2        1  5  1  2                             2
   2 *    3  1        1  2     1                             1
   1 *                      1
      ***************************************************
 ( 2)     1     3     5     7     9     11
MONTH       2     4     6     8     10    12

COLUMN  26    10    23    9     13    21
 TOTAL     10    11    15    5     18    31
```

20-49/04-21

```
NATBUI
  12 *    3                    9  2                 2     5  2
  11 *    6                   15  6  1              4  7 16  3
  10 *    5              5    22 17  2  2           9 36 17  8
   9 *              4   8    14  5  2  5           9  5 12 10
   8 *       1  1   7   15  8  6  6  6           6  9  9  8
   7 *    4  6  5 20  14 11 10  9  8 11           8 13
   6 *   15 13 27 26  22 17  8 12 11 13           7 20
   5 *   12 16 13 15  13  7  5  6  6  5           6 12
   4 *   18 21 22 20   6  4  3  9  3  9           3 14
   3 *   25 27 31 19   6  5  7                    3  2  9
   2 *   14 22 15 28   5  4  2  1  1  5           3  9
   1 *                   4  7                          1
      ***************************************************
 ( 2)     1     3     5     7     9     11
MONTH       2     4     6     8     10    12

COLUMN 102   118   145   46    59    89
 TOTAL    106   148   93    50   103   108
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

20-49/04-15

```
NATBUI
  12 *    3                   9   2               2       5   2
  11 *    5                  13   6   1           4   7  12   3
  10 *    5                5 21  15   2   2       9  35  16   8
   9 *              3   8  14   5   2   4   8   6  10   8
   8 *          1   1   7  13   7   6   5   5   7   8   8
   7 *    4   6   4  17  14  11   9   8   8  10   8   9
   6 *   15  12  20  25  20  17   8  12   8  13   6  15
   5 *    9  10   9  10  12   7   5   6   5   4   5  11
   4 *   17  16  14  16   6   5   3   9   3   8   3  10
   3 *   20  22  23  17   6   4   7               3   2   6
   2 *   12  18   7  20   5   3   2   1   1   5   1   7
   1 *                    4   6                       1
     **********************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN   90      81     137      45      53      77
 TOTAL       85     125      88      47      98      87
```

20-49/04-09

```
NATBUI
  12 *                       1   1                   3   2
  11 *    1                  2   2               1   1   3   1
  10 *    2                1   2   2                   7   4   5
   9 *                    2   1   1               3       1   4
   8 *        1               4   2       1   1   2   3   4
   7 *    3       1   3   1   1   2           2   2   2   3
   6 *    4   3   3   3   3   4   1           1   4   1   5
   5 *    2   2               1       3   2               2   1
   4 *    3   1   5           1               2   2   1       2
   3 *    6   2           1   4           2                   2
   2 *    2   1           1   2           1                   1
   1 *                            1
     **********************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN   23       9      22       9      10      19
 TOTAL       10      11      14       5      17      30
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts): 20-49/10-21

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *									1			1
11 *	2				4					2	7	2
10 *	2			1	8	4			1	6	5	
9 *			1	1	2	1	1		1		4	3
8 *				3	5	2	1		1	2	3	1
7 *	1	2	1	5	3	4	1	4	3	2	2	6
6 *		2	12	9	2	3	1	1	4	2	1	8
5 *	3	10	9	7	2	4			3	1	1	6
4 *	9	11	10	10	2	2	1	1	1	1	2	6
3 *	7	17	19	11		1	1			1	2	6
2 *	7	8	11	23		1				2	1	2
1 *					3	2						
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	31	50	63	70	31	24	6	6	15	19	28	41

RH(%)/WS(kts): 20-49/10-15

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *									1			1
11 *	1				2					2	3	2
10 *	2			1	5	2			1	5	3	
9 *			1	1	2		1		1		1	2
8 *				3	3	2	1				2	1
7 *	1	2		2	3	4	1	3	3	1	1	2
6 *		3	3	5	1	2	1	1	1	2		3
5 *		3	2	2	1	4			2			5
4 *	6	6	3	7	2	2	1	1	1	1	1	3
3 *	4	13	9	8			1			1	1	4
2 *	4	5	3	14		1				2		
1 *					3	2						
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	18	32	21	43	22	19	6	5	10	14	12	23

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 20-39/04-21

```
NATBUI
  12 *    2                   7   2                   1       1
  11 *    1                   9   2                   3   1   8   2
  10 *    2                 1 10  12   2   1   1  14   6   4
   9 *                  1   2 12   2   3   2   7   5   7   6
   8 *            2         5  5   6       2   1   5   4   2
   7 *    4   1   3  12      9   4   1   1   2   1   3   4
   6 *    4   6  15  15      9  10       2   2   3   4  11
   5 *    5   9   7  12      3       1   2   1   1   2   4
   4 *    6  10  16  15      3   1       1   1   1   3   6
   3 *    9  15  17  14      2   2                   2   1   5
   2 *    5  11   5  14      4   1                   1       6
   1 *                        4   4                           1
      ********************************************************
 ( 2)     1       3       5       7       9       11
MCNTH         2       4       6       8       10      12

COLUMN  38      64      77      7       19      40
 TOTAL      54      90      46      11      34      50
```

RH(%)/WS(kts) 20-39/04-15

```
NATBUI
  12 *    2                   7   2                   1       1
  11 *                        7   2                   3   1   5   2
  10 *    2                 1   8   9   2   1   1  13   5   4
   9 *                  1   2 11   2   3   1   7   6   5   5
   8 *            2         4   4   4       2   1   3   4   2
   7 *    4   1   3  11      9   4   1   1   2   1   2   3
   6 *    4   3   9  14      8  10       2   1   3   4   9
   5 *    4   5   5   7      2       1   2       1   2   4
   4 *    3   9  12  14      3   2       1   1       2   5
   3 *    7  12   9  10      2   1                   2       5
   2 *    3  10   3   7      4   1                   1       5
   1 *                        4   4                           1
      ********************************************************
 ( 2)     1       3       5       7       9       11
MCNTH         2       4       6       8       10      12

COLUMN  29      42      69      7       17      31
 TOTAL      42      70      41      10      31      44
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 20-39/10-21

```
NATBUI
  11 *   1                 4                       1   3   2
  10 *   1                 6   3               1   3   3
   9 *                 1   1   1   1                   3   2
   8 *                 1   1   2                   2   1   1
   7 *             1   3   2   1       1   1       2   1
   6 *         2   7   4   1   2               1   2       4
   5 *     1   6   5   6   1                           1   3
   4 *     3   3   5   6   1   1               1       1   2
   3 *     2  11  11   7       1                   1   1   2
   2 *     4   4   4   9                           1       1
   1 *                     3
     **********************************************:
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN   12      34      20      1       4       15
 TOTAL       26      36      11      1       10      18
```

RH(%)/WS(kts) 30-69/01-09

```
NATBUI
  12 *   2                 3   2                   1   6   3
  11 *                     2   6   1       3   1   7   2
  10 *   4             2   8   3   1       7  17   9   6
   9 *   1             2   2   1   2   3   4   7   7   5
   8 *       1   1   2   4   4   2   6   5  11   9   7
   7 *   5   3   1   3   1   3   6   1   7   5   5   9
   6 *   8   5   2   4   5  12   3  12  11  10   4  13
   5 *   7   4   1   1   1   4   8   3   2   3   1   7
   4 *  10  10   5   2       2   4   9   4   3   1  11
   3 *  11   8   3   2   5   3   5   2   5   1   2
   2 *   9   3   1   3   2   5   4   2   1               3
   1 *                     2                   1
     **********************************************:
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN   57      14      33      36      49      52
 TOTAL       34      21      47      38      59      66
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-69/04-21

```
NATBUI
  12 *    2                   6   3           4       9   4
  11 *    5                  14   8   3       9   7  30   6
  10 *    6                8 22  15   5   3  19  31  26   8
   9 *              3  12   7  11   5   6   5  11  14   9
   8 *    1   1   6  16  15  13  11  13  11  15  17  18
   7 *   10  12   6  23  15  11  23  18  21  24  15  21
   6 *   27  18  24  28  25  33  21  36  34  23  10  30
   5 *   14  20  14  16  19  14  21  24  17  15   9  17
   4 *   28  29  23  15  11   9  21  28  16  14   4  21
   3 *   33  44  38  21  13  15  26   8  15   7   9  10
   2 *   28  29  18  17  11  20  10   3  10  10   2  13
   1 *                     3   9                      3
     ************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN 154     132     161     146     161     148
 TOTAL     153     156     161     139     157     157
```

30-69/04-15

```
NATBUI
  12 *    2                   6   3           4       9   4
  11 *    4                  12   8   3       7   7  26   5
  10 *    6                8 23  14   5   3  19  31  22   8
   9 *              2  12   6  11   5   6   5  10  14   8
   8 *    1   1   6  14  15  12  11  13  10  15  16  16
   7 *   11  10   5  19  15  11  21  17  22  25  15  19
   6 *   21  17  19  29  24  31  20  35  29  22   8  29
   5 *   14  13   9  11  16  14  19  24  15  15   8  17
   4 *   26  24  17  10  11   9  20  28  17  14   4  22
   3 *   30  40  32  15  12  14  25   8  15   6   5   9
   2 *   23  26  15  12  11  20  10   3  10  10   2  10
   1 *                     3   8                      3
     ************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN 138     105     154     139     153     132
 TOTAL     131     130     155     137     155     147
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 30-69/04-09

```
NATBUI
  12 *   2                       3   1                       1   6   3
  11 *                           2   6   1       3   1   7   2
  10 *   4               1       8   3   1       7  16   8   6
   9 *   1               2       2   1   2   2   2   6   7   5
   8 *       1   1       2       4   3   2   6   5  10   7   7
   7 *   5   3   1       2       1   3   6       7   5   5   8
   6 *   7   4   2       4       5  11   3  12  11   8   4  11
   5 *   6   3   1       1       1   4   8   3   2   3   1   7
   4 *   7  10   5       2           1   3   9   4   2   1  10
   3 *   8   7   2       2       4   2   5   1   5   1   2
   2 *   7   2   1       2       1   5   4   2   1           3
   1 *                               2                   1
     **********************************************************
 ( 2)      1       3       5       7       9       11
MONTH          2       4       6       8       10      12

COLUMN   47      13      31      35      47      49
 TOTAL       30      18      42      35      53      62
```

30-69/10-21

```
NATBUI
  12 *                           1                   2       1   1
  11 *   3                       7   1               2   1   7   1
  10 *                       1   6   3               1   6   5
   9 *               1   2   2   6   2               1   2   2   2
   8 *               4   5   6   2   2   1   4   2   4   4
   7 *   2   5   4  10   3   4   2   7   3   4   4   6
   6 *  11   6  13  15   5   7   5   3  10   9   3   7
   5 *   2  11   8   8   7   4   4       7   2   2   5
   4 *  15  12  12   5   4   4   5   3   1   4   4   4
   3 *  12  24  18  10   1   2   4   1   1   1   5   7
   2 *  14  14  10  12   3   5   3               3   2   5
   1 *                       1   3                       1
     **********************************************************
 ( 2)      1       3       5       7       9       11
MONTH          2       4       6       8       10      12

COLUMN   59      70      46      27      32      40
 TOTAL       72      68      41      15      34      42
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts): 30-69/10-15

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *					1				2		1	1
11 *	2				4	1				1	3	1
10 *				1	5	3			1	5	2	
9 *				2	2	5	2		1	1		1
8 *			3	3	5	1	2	1	2	1	2	2
7 *	2	3	1	8	3	4	2	6	3	4	3	3
6 *	5	4	5	11	5	5	4	3	6	8	2	1
5 *	2	4	1	2	4	4	1		5	1	2	3
4 *	10	6	3	1	4	4	4	3	1	3	2	3
3 *	9	19	9	4	1	1	4	1	1		1	4
2 *	6	8	5	7	3	4	3			2	2	2
1 *					1	2					1	
COLUMN TOTAL	36	44	27	39	38	34	22	14	22	26	21	21

(2) MONTH

RH(%)/WS(kts): 30-59/01-09

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *					2	2				1	4	3
11 *					1	4			1		4	1
10 *	2			1	3	3	1		4	9	6	5
9 *				2	2	1			3	5	3	4
8 *				1	1	3	1	3	1	5	6	5
7 *	3	1	2	3	1	2	2		3	4	1	5
6 *	6	3		2	2	4	2	2	4	5	2	8
5 *	6	2	1		1	1	4	2		2	1	1
4 *	9	4	4	1		1		6	2	2		6
3 *	3	4			5	2	3	1	2	1	1	
2 *	3	1		1		2	2	1				1
1 *						2						
COLUMN TOTAL	32	15	7	11	18	27	15	15	20	34	28	39

(2) MONTH

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-59/04-21

```
NATBUI
  12 *                                5  2           2        7  4
  11 *    5                          13  8  1        5  5 19  4
  10 *    4                       6  17 15  4  2 13 24 24  6
   9 *                 4 12  5  8  3  6  5  8 14  6
   8 *           1  4 10 13 11  9 10  7  9 12 11
   7 *    7  8  5 19 14 14 14 12 11 14  9 16
   6 *   19 14 18 23 18 19 13 24 23 18  6 19
   5 *   12 18 11 10 19 12 17 18 12 15  3 10
   4 *   26 21 22 10  7  8 12 20 11 10  5 15
   3 *   25 27 23 10 10  9 13  4  9  3  6  8
   2 *   15 21 11 16  6 10  7  3  5  6  2  9
   1 *                3  8
     ***********************************:
 ( 2)     1     3     5     7     9    11
MCNTH        2     4     6     8    10    12

COLUMN 113    98   130    93   103   107
 TOTAL    110   116   124    99   112   108
```

30-59/04-15

```
NATBUI
  12 *                                5  2           2        7  4
  11 *    4                          11  8  1        5  5 16  3
  10 *    4                       6  17 14  4  2 13 24 20  6
   9 *                 2 12  5  6  3  6  5  8 13  5
   8 *           1  3 10 12 10  9  8  6  9 10 10
   7 *    6  7  3 14 13 14 14 12 12 13  8 12
   6 *   15 14 12 24 18 18 12 24 19 16  6 16
   5 *   12 11  7  5 16 12 16 18 12 15  3 10
   4 *   25 16 15  7  7  8 12 20 11 10  4 15
   3 *   19 24 22  9 10  8 13  3  9  2  4  5
   2 *   14 18  8  9  6 10  7  3  5  6  2  7
   1 *                3  7
     ***********************************:
 ( 2)     1     3     5     7     9    11
MCNTH        2     4     6     8    10    12

COLUMN  99    72   123    91    99    93
 TOTAL    91    96   117    96   108    93
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 30-59/04-09

```
NATBUI
  12 *                                 2  1                       1  4  3
  11 *                                 1  4                1      4  1
  10 *    2                 1  3  3  1     3  9  6  5
   9 *                      2  2  1        2  4  3  4
   8 *                      1  1  2  1  3  1  6  4  5
   7 *    3  1  1  2  1  2  2           3  4  1  5
   6 *    6  3     2  2  4  1  2  3  4  2  7
   5 *    5  1  1     1  1  4  2        2  1  1
   4 *    6  4  4  1                    6  2  2     5
   3 *    4  4           4  1  2  1  2  1  1
   2 *    3  1     1        2  2  1                 1
   1 *                      2
      ***************************************
 ( 2)     1     3     5     7     9     11
MONTH        2     4     6     8     10    12

COLUMN  29     6    17    13    17    26
 TOTAL     14    10    23    15    33    37
```

RH(%)/WS(kts) 30-59/10-21

```
NATBUI
  12 *                                                1     1  1
  11 *    3                 6  1                    1  5
  10 *                   1  4  3                 1  3  5
   9 *                2  1  1  5  1              1  1  2  2
   8 *                3  4  4  2  1  1  1  1  4
   7 *    3  4  3  9  2  4  1  6  2  2  2  6
   6 *    8  5  9 13  2  3  4  2  7  7  1  6
   5 *    2 10  5  7  6  3  1     2  2  1  2
   4 *   10  9 11  4  2  4  3  2  1  3  4  3
   3 *   11 12 12  4  1  2  2  1  1  1  3  6
   2 *    7  9  7 13  2  4  3           1  2  3
   1 *                1  2
      ***************************************
 ( 2)     1     3     5     7     9     11
MONTH        2     4     6     8     10    12

COLUMN  44    52    31    16    17    30
 TOTAL     49    56    33    12    22    29
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-59/10-15

```
NATBUI
  12 *                                                    1        1   1
  11 *    2                    3   1                          1   2
  10 *                     1   3   2                      1   2   2
   9 *                 1   1   1   4   1                  1   1       1
   8 *                 2   3   3   1   1                          2
   7 *    2   3            6   1   4   1   5   2   1   1   1   2
   6 *    4   4   2  11   2   2   3   2   3   5           1
   5 *    2   4   1   2   3   3   1       2   1   1   1
   4 *    8   4   3   1   2   4   3   2   1   3   2   2
   3 *    6   9   7   3   1   1   2       1       1   2
   2 *    3   4   4   7   2   3   3               1   2   1
   1 *                    1   2
      **********************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN   27      20      22      15      12      14
 TOTAL       28      35      27      9       15      11
```

30-49/04-21

```
NATBUI
  12 *                        4   2               2       4   2
  11 *    3                  10   3   1           3   4   7   2
  10 *    3                4  12  13   1   1   9  20  10   2
   9 *                2   5   3   3   2   5   4   2   7   5
   8 *                1   5   9   4   6   6   5   4   6   4
   7 *    1   5   2  11   8   8  10   8   7   8   3   5
   6 *   11   6  11  15  16  14   7  11  10   9   3  11
   5 *    6   8   3   4  12   6   5   5   5   4   1   6
   4 *   13  12  11   4   4   3   3   9   3   8   1   8
   3 *   11  13  15   3   4   5   7                       5
   2 *    7   9   9   9   3   3   2   1   1   5   1   5
   1 *                    2   6
      **********************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN   55      54      87      44      49      43
 TOTAL       53      60      70      46      64      55
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-49/04-15

```
NATBUI
  12 *                                4   2                   2           4   2
  11 *    3                           8   3   1               3   4   5   2
  10 *    3                       4  11  10   1   1   9  19   8   2
   9 *                        1   5   3   3   2   4   3   2   5   2
   8 *                        1   5   8   4   6   5   4   3   5   4
   7 *    1   5   1   9   8   8   9   7   7   7   3   3
   6 *   11   5   6  13  15  14   7  11   7   9   2   7
   5 *    5   4   2   2  11   6   5   5   5   3   1   5
   4 *   10  10   5   2   4   4   3   9   3   8   1   6
   3 *   10  10  12   3   4   4   7                       2
   2 *    7   7   2   5   3   2   2   1   1   5           3
   1 *                    2   6
      ************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN  50      30      81      43      44      34
 TOTAL      41      48      66      43      60      38
```

30-49/10-21

```
NATBUI
  12 *                                                    1           1
  11 *    1                   4                       1   3
  10 *                    1   3   3                   3   2
   9 *                    1               1       1       2   2
   8 *                    3   2   1   1       1   1   2
   7 *        1           2   1   3   1   4   1   2       3
   6 *        1   5   7   1   1   1   1   4       1   4
   5 *    1   4   2   2   2   3               2   1       1
   4 *    6   4   6   3   2   1   1   1   1   1   1   3
   3 *    5   9   9   2       1   1                       3
   2 *    3   2   8   9       1                   1   1   2
   1 *                    1   2
      ************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN  16      30      16      6       11      12
 TOTAL      21      30      16      6       10      19
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 40-79/01-09

```
NATBUI
  12 *    1                    1  1                 1  1  4  2
  11 *                         1  1  1              2     14  2
  10 *    3                 1  7                 1  6 11 13  3
   9 *    1                                    2  1  2  4  7  4
   8 *    .    1  1  2  3  3  3  4  3 12  5  8
   7 *    5  2  1  1  1  3  6  3  8  8  9  7
   6 *    9  3     2  5  7  4 12 18 11  4 13
   5 *    6  5  1     4  5  5  9 14  8  1  9
   4 *   11  7  3     3     6 12  6  4  1 10
   3 *   10  8  4  1  2  5 10  5  9  6  2
   2 *    9  1  1  2  4  8  5  2  3  3     3
   1 *                                       1
      ***************************************
 ( 2)     1     3     5     7     9    11
MONTH       2     4     6     8    10    12

COLUMN  55    11    31    42    72    61
 TOTAL     27     9    33    49    68    61
```

RH(%)/WS(kts) 40-79/04-21

```
NATBUI
  12 *    3                    4  1                 3     6  2
  11 *    4                    9  5  3              6  4 28  5
  10 *    3                 5 15  4  2  1 14 24 26  4
   9 *                   2  7  2  9  5  6  7  7 10  8
   8 *    1  2  7 14 16 10  9  6  9 13 12 20
   7 *    9 10  4 17  9 12 22 18 24 23 17 12
   6 *   27 13 15 20 18 24 25 37 32 19 10 28
   5 *   14 19 14  7 15 10 16 20 23 18  6 14
   4 *   28 20 18  4  9 13 19 28 17  9  6 23
   3 *   35 33 27 13  9 19 35 12 21  6  8  8
   2 *   22 25 16 12  9 20 15  4  8 11  2 10
   1 *                    7                    2
      ***************************************
 ( 2)     1     3     5     7     9    11
MONTH       2     4     6     8    10    12

COLUMN 146   103   115   151   164   133
 TOTAL    122    99   134   132   134   134
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

40-79/04-15

```
NATBUI
  12 *    2                    4   1                3       6   2
  11 *    4                    6   5   3            4   4  23   5
  10 *    3                5  15   4   2   1  14  24  25   4
   9 *            1   6   2   7   5   6   7   6  10   7
   8 *    2   2   7  13  16  10   9   6   9  13  11  19
   7 *    9  10   3  16   8  12  21  16  25  24  16  11
   6 *   24  14  13  20  18  23  23  36  29  18   9  26
   5 *   13  14  11   4  13  10  17  20  23  18   5  15
   4 *   25  18  13   3   9  13  20  28  17   9   6  23
   3 *   35  27  21   9   7  19  34  12  21   6   4   5
   2 *   16  22  11   7   9  20  15   4   8  11   2  10
   1 *                        7                    2
     **********************************************
 ( 2)     1       3       5       7       9      11
MONTH         2       4       6       8      10      12

COLUMN  133      80     107     149     160     119
 TOTAL      107      83     131     129     133     127
```

40-79/04-09

```
NATBUI
  12 *    1                    1   1                1   1   4   2
  11 *                         1   1   1            2      13   2
  10 *    3                    7                1   6  11  12   3
   9 *    1                                    2       2   4   5   4
   8 *        1   1   2   3   3   3   4   3  11   5   7
   7 *    5   2   1   1       3   6   3   8   7   9   5
   6 *    8   3       2   5   7   4  11  16   9   4  12
   5 *    5   4   1       4   5   5   9  12   7   1   9
   4 *   10   6   3       2       5  11   6   4   1  10
   3 *    9   8   3   1   1   5  10   4   8   6   2
   2 *    6       1   2   3   8   5   2   2   3       3
   1 *                                              1
     **********************************************
 ( 2)     1       3       5       7       9      11
MONTH         2       4       6       8      10      12

COLUMN   48      10      27      41      66      57
 TOTAL       24       8      33      45      63      57
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 40-79/10-21

```
NATBUI
  12 *                          2                   1       1
  11 *    2                           1              3   1   5   1
  10 *                          3   1              1   5   3
   9 *                1   1     1   3   1          1   2   1   2
   8 *    1           3   3     5   1   1          3   1   1   5
   7 *    2   4   3  10   3     3   4   2   5      6   4   5   2
   6 *    9   6   9  10   3     4   8   8  10     10   3   7
   5 *    5   9   7   7   7     2   3   2   7      3   2   2
   4 *   12   7   4   2   3     4   4   3          1   3   5
   3 *    9  19  14   8   2     2   3   2   3          4   5
   2 *   11  13   6   8   3     5   3              3   2   6
   1 *                          1                      1
     **********************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8      10       12

COLUMN  51      47      32      25      35      31
 TOTAL      58      49      28      20      30      35
```

RH(%)/WS(kts) 40-79/10-15

```
NATBUI
  12 *                          2                   1       1
  11 *    1                           1              1   1   2   1
  10 *                          2   1              1   4   1
   9 *                    1     1   3   1          1   1       1
   8 *    1           2   1     5       1          1   1   1   3
   7 *    2   3   1   7   3     4   2   5      6   4   3
   6 *    4   4   5   7   3     2   6   8      5   9   2   3
   5 *    3   3   2   3   5     2   1   2      6   3   2   2
   4 *   10   4       1   3     4   3   3          1   1   3
   3 *    7  12   5   5   2     2   3   2      3           2
   2 *    5   9   2   4   3     4   3                  1   1   4
   1 *                                                    1
     **********************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8      10       12

COLUMN  33      17      29      20      25      15
 TOTAL      35      29      23      20      25      19
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

40-69/01-09

NATBUI													
12	*	1				1					1	3	1
11	*						1	1		1		5	
10	*	2			1	4		1		4	5	6	2
9	*	1						1		1	4	3	3
8	*		1	1	1		1	1	1	3	5	4	4
7	*	2	2				2	4		5	2	4	4
6	*	5	3			1	3	3	7	11	4	3	8
5	*	4	3			1	4	4	2	2	1		5
4	*	6	4	3			1	2	7	2	1	1	7
3	*	5	5	1	1		2	3	2	3	1	2	
2	*	5			2	2	5	3	2	1			1
1	*											1	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		31		5		9		23		33		32	
TOTAL			18		5		19		21		24		35

40-69/04-21

NATBUI													
12	*	2				2	1			2		5	2
11	*	4				5	3	2		5	3	18	4
10	*	2			4	12	2	3		11	14	14	3
9	*			2	5	1	8	3	2		7	6	6
8	*	1	1	6	9	11	7	4	3	8	8	9	12
7	*	6	6	4	12	6	5	16	14	16	17	12	10
6	*	17	10	11	14	14	19	17	21	28	17	6	19
5	*	9	12	10	5	11	8	13	17	16	10	6	9
4	*	21	14	11	4	5	6	18	22	15	5	4	16
3	*	23	28	17	8	4	11	23	7	12	3	8	8
2	*	18	15	13	6	6	17	9	3	9	7	1	7
1	*						4					2	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		103		74		77		108		122		91	
TOTAL			86		67		91		89		91		96

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 40-69/04-15

```
NATBUI
  12 *    2                       2   1           2       5   2
  11 *    3                       4   3   2       3   3  15   3
  10 *    2                   4  12   2   3      11  13  13   3
   9 *                    1   5   1   7   3   2       6   6   5
   8 *    1   1   6   7  11   6   4   3   7   8   8  11
   7 *    6   5   3   9   6   5  14  13  17  18  11   9
   6 *   14   9   9  14  13  17  16  20  23  16   4  19
   5 *    8   7   5   1   9   8  11  17  15  10   5   9
   4 *   20  11   9   2   5   6  17  22  15   5   4  17
   3 *   21  23  13   6   3  11  22   7  12   3   4   5
   2 *   13  13   7   4   6  17   9   3   9   7   1   6
   1 *                           3                   2
     **********************************************:
 ( 2)    1       3       5       7       9      11
MONTH        2       4       6       8      10      12

COLUMN  90      53      72     101     114      78
 TOTAL      69      52      86      87      89      89
```

RH(%)/WS(kts) 40-69/04-09

```
NATBUI
  12 *    1                       1                   1   3   1
  11 *                                    1   1       1       5
  10 *    2                       4       1       4   5   5   2
   9 *    1                               1           4   2   3
   8 *        1   1   1           1   1   1   3   5   4   4
   7 *    2   2                   2   4       5   2   4   3
   6 *    4   3                   1   3   3   7  11   2   3   7
   5 *    3   2                   1   4   4   2   2   1       5
   4 *    5   4   3               1   2   7   2       1   7
   3 *    4   5       1           2   3   1   3   1   2
   2 *    4           2   1       5   3   2   1               1
   1 *                                                   1
     **********************************************:
 ( 2)    1       3       5       7       9      11
MONTH        2       4       6       8      10      12

COLUMN  26      4       8      23      32      30
 TOTAL      17      4      19      20      21      33
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts): 40-69/10-21

NATBUI		1	2	3	4	5	6	7	8	9	10	11	12
12	*					1				1		1	
11	*	2					1			2	1	4	1
10	*					3	1			1	3	1	
9	*			1	1	1	2	1			2		1
8	*			3	2	5	1	1		2	1	1	3
7	*	2	2	3	7	3	2	1	4	3	3	4	2
6	*	6	4	6	9	3	4	5	3	8	9	2	3
5	*	2	5	7	5	5	2	3		5	1	1	2
4	*	10	6	3	1	2	2	3	3		1	3	2
3	*	8	17	9	4	1		3	1	1		4	4
2	*	8	7	5	3	2	5	3			1	1	3
1	*						1					1	
(2) MONTH		1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL		38	41	37	32	26	21	20	11	23	22	23	21

RH(%)/WS(kts): 40-69/10-15

NATBUI		1	2	3	4	5	6	7	8	9	10	11	12
12	*					1				1		1	
11	*	1					1				1	2	1
10	*					2	1			1	2		
9	*				1	1	2	1			1		
8	*			2		5		1		1	1	1	2
7	*	2	1	1	5	3	2	1	4	3	3	3	
6	*	3	2	3	6	3	2	4	3	4	8	1	1
5	*	1	1	1	1	3	2			4	1	1	1
4	*	9	3			2	2	2	3		1	1	2
3	*	5	11	4	2	1		3	1	1			1
2	*	4	4	1	2	2	4	3			1	1	2
1	*											1	
(2) MONTH		1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL		25	22	12	17	23	16	15	11	15	19	12	10

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 40-59/01-09

```
NATBUI
  12 *                                                 1   1   1
  11 *                                                     2
  10 *   1                             1                 2   1
   9 *                                             1   3   1   2
   8 *                                             1   3       3
   7 *   1                         1   1             1   2   1   2
   6 *   3   1                         2   1   3         1   3
   5 *   3   1               1   1   1   1             1
   4 *   5   2   2                         4                 2
   3 *   3   3                   1   1   1   1   1   1
   2 *   1               1       2   1   1
         ************************************************
 ( 2)      1       3       5       7       9       11
MONTH          2       4       6       8       10      12

COLUMN   17       2       1       7       7       9
 TOTAL        7       1       5       8       11      14
```

40-59/04-21

```
NATBUI
  12 *                           1                       3   2
  11 *   2                       1   2               1   2   9   1
  10 *   1                   1   4       2           4   6  10   1
   9 *               2   3       4   1   2           5   3   2
   8 *           1   3   3   7   6   2   1   4   5   2   5
   7 *   3   4   2   6   5   5   7   4   8   7   6   4
   6 *  10   6   5  10   5   7   9  13  14  11   2  10
   5 *   5   9   5   3   9   5   9  10  11  10   1   4
   4 *  17   6   9   1   2   4   8  12   9   3   3   6
   3 *  16  14   6   2   2   4   8   4   6   1   5   6
   2 *   6   6   2   2   2   8   5   3   4   3   1   2
   1 *                       2
         ************************************************
 ( 2)      1       3       5       7       9       11
MONTH          2       4       6       8       10      12

COLUMN   60      34      38      51      61      45
 TOTAL       46      31      47      49      53      43
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts): 40-59/04-15

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *					1						3	2
11 *	2				1	2			1	2	8	
10 *	1			1	4		2		4	5	9	1
9 *			1	3		3	1	2		5	3	2
8 *		I	2	3	7	5	2	1	4	5	2	5
7 *	3	4		4	4	5	7	4	8	7	4	3
6 *	8	6	4	8	5	6	8	13	11	9	2	9
5 *	4	5	2	1	7	5	8	10	11	10	1	4
4 *	17	4	6	1	2	4	8	12	9	3	2	7
3 *	13	10	7	2	2	4	8	3	6	1	3	2
2 *	4	4	1	1	2	8	5	3	4	3	1	2
1 *						2						
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	52	34	23	24	35	44	49	48	58	50	38	37

RH(%)/WS(kts): 40-59/10-21

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *											1	
11 *						1				1	2	
10 *					1				1	1	1	
9 *			2			1				1		
8 *			2	1	3	1					1	
7 *	2	1	2	4	2	2		3	2		2	1
6 *	5	3	2	8		2	4	2	3	7		2
5 *	2	4	3	3	5	1			1	1		
4 *	7	3	3			2	1	1		1	3	1
3 *	6	7	2	1	1		1	1	1		2	4
2 *	1	3	1	1	1	3	3				1	1
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	23	21	17	18	13	13	9	7	8	12	13	9

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

50-69/01-09

```
NATBUI
  12 *                                                    3  1
  11 *                                 1  1
  10 *                          1                 1      2
   9 *    1
   8 *       1        1                                 1  2  1
   7 *    1  1                             3        2      1  1
   6 *    1  1  1           1        1        1        1     3
   5 *    1                 1        1                       4
   4 *       2              1  1     1                       1
   3 *    1  2        1     1  3     1           2
   2 *                      2  1  1
      ********************************************************
 ( 2)     1        3        5        7        9       11
MONTH           2        4        6        8       10       12

COLUMN   5        1        1        9        5       10
 TOTAL          7        2        7        3        2       11
```

50-69/04-21

```
NATBUI
  12 *                          1                          5  2
  11 *                             2  1        2           3  2
  10 *                       1  4     1        4  2  3     1
   9 *                             3                    1     2
   8 *    1  1  1  4  2  1  2        3  2  7  6
   7 *    3  3  1  5  2     6  3  7  7  3  3
   6 *    5  4  3  1  3  6  1  2  6  7  4  4
   5 *    1  2  5  1  1  2  2  5  5  1  4  7
   4 *    7  4  2  2  2  2  9  4  8  1  2  5
   3 *    4 13  5  4  1  5  7  2  7     4  1
   2 *    7  6  4     1  7  4  1  4  4     4
   1 *                   1
      ********************************************************
 ( 2)     1        3        5        7        9       11
MONTH           2        4        6        8       10       12

COLUMN  28       21       17       33       46       35
 TOTAL      33       18       29       17       25       37
```

Appendix A continued

MCN (BUI vs Months) (1955-1964)

RH(%)/WS(kts): 50-69/04-15

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *					1						4	1
11 *						2	1		1		3	2
10 *				1	4		1		4	2	4	1
9 *						2				1		2
8 *	1	1	1	3	2	1	2		1	2	6	5
7 *	3	2	1	4	2		5	3	7	8	2	3
6 *	4	3	1	1	3	5	1	2	4	7	2	4
5 *	1	1	3		1	2	1	5	4	1	5	7
4 *	6	4		1	2	2	9	4	8	1		4
3 *	4	12	2	2	2	5	7	2	7		2	1
2 *	4	3	2			7	4	1	4	4		3
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	23	26	10	12	17	26	31	17	40	26	28	33

RH(%)/WS(kts): 50-69/10-21

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *					1						1	1
11 *									1		1	1
10 *					1					1		
9 *						1						
8 *				1	2		1			1		1
7 *		1	1	2	1				1	2		
6 *	2	2	3		1	1			4	1	2	
5 *		1	3	1		1	1		3	1	1	1
4 *	6		2				1	1			2	
3 *	1	9	4	2	1			1	1		2	
2 *	3	5	2		1	1	1					1
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	12	18	15	6	8	4	4	2	10	6	9	5

Appendix A continued

AHN (BUI vs Months) (9/1955-1964)

RH(%)/WS(kts) 10-39/04-21

NATBUI												
12 *						1				1		
11 *					3	1				2	1	
10 *	3				3	4	2	2	1	4	4	
9 *	2			1	3	3	2		1	2	2	1
8 *	1			2	9	5	1	1	2	3	8	2
7 *				6	4	1			1	4	8	6
6 *	3	2	3	6	3		1		4	3	3	5
5 *	2	7	5	6	2	1				1	2	3
4 *	5	10	16	10		1				1	2	6
3 *	5	13	16	16	2					1	2	1
2 *	4	5	10	15	1					2		3
1 *											2	
**********												
(2)	1		3		5		7		9		11	
MONTH		2		4		6		8		10		12
COLUMN	25		50		30		6		9		34	
TOTAL		37		62		17		3		24		27

20-69/04-21

NATBUI												
12 *						3		1		1		
11 *	2				6	7		6		8	7	
10 *	7				14	16	4	12	10	22	19	
9 *	2			2	11	18	8	10	10	10	12	8
8 *	4			7	19	26	15	9	12	9	24	7
7 *				23	22	16	10	13	18	19	28	15
6 *	6	9	12	31	32	17	14	17	30	29	20	29
5 *	14	21	10	24	17	8	16	11	17	14	14	19
4 *	31	29	34	19	20	6	15	17	11	15	15	23
3 *	48	44	53	29	15	11	13	6	8	11	15	35
2 *	34	42	52	42	16	12	16	4	10	12	10	25
1 *						1					6	
**********												
(2)	1		3		5		7		9		11	
MONTH		2		4		6		8		10		12
COLUMN	148		161		172		111		126		170	
TOTAL		145		177		141		106		150		161

Appendix A continued

AHN (BUI vs Months) (9/1955-1964)

RH(%)/WS(kts)

30-69/04-21

NATBUI												
12	*					3		1				
11	*	3			6	7		6		6	7	
10	*	5			14	16	4	12	10	21	17	
9	*	3		1	10	17	8	10	9	9	12	8
8	*	2		6	15	26	15	9	11	7	23	7
7	*			21	20	15	10	13	17	18	28	14
6	*	5	8	10	27	32	17	14	17	29	30	18	28
5	*	13	16	12	17	17	8	16	11	17	14	14	17
4	*	28	26	26	17	20	6	15	17	11	15	11	21
3	*	45	39	48	21	15	11	13	6	8	10	13	34
2	*	33	40	47	36	14	12	16	4	10	12	10	25
1	*					1					4	
		**********										
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		137		143		163		111		122		157	
TOTAL			129		146		139		106		142		154

40-79/04-21

NATBUI												
12	*							1		2		
11	*	2			6	6		6	1	4	5	
10	*	4			8	11	6	15	6	11	19	
9	*	2		1	4	13	5	9	10	5	9	9
8	*	1		5	8	22	14	11	16	7	21	8
7	*		1	1	15	17	12	13	14	24	14	22	14
6	*	9	9	9	25	26	21	15	19	33	27	25	28
5	*	16	20	7	17	20	6	17	18	23	17	13	17
4	*	27	20	18	8	16	8	19	21	14	22	17	28
3	*	39	30	35	11	16	11	22	12	12	12	18	33
2	*	41	45	41	32	18	17	28	6	20	12	11	28
1	*						1				4	
		**********										
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		141		111		139		139		159		164	
TOTAL			125		114		128		132		133		165

Appendix A continued

SVN.(BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

```
NATBUI
  12 *                                                   1
  11 *                    1   2                          1   4   5
  10 *   2                1                              3   5   2
   9 *   2                1   3   1   3                  2   2   6
   8 *   4                    1   2   1                  4   3   9
   7 *   2   2   6   4   4                1   1   3   5   8
   6 *   5   2  12   6   6   3                1   4   4   4
   5 *   1   5   9   8   3                    1       2   3
   4 *   4  10   8   7   3   1                        2   1   3
   3 *   5  11  10  12   1   2                            1   2
   2 *   2   3   8  10   3                                    3
         ********************************************************:
 ( 2)    1       3       5       7       10      12
MONTH        2       4       6       9       11

COLUMN  27      56      23       1      20      45
 TOTAL      33      53      10       3      27
```

20-69/04-21

```
NATBUI
  12 *                                                   6   4  10
  11 *                1   7   3                          7  10  14
  10 *  17                8   6   5   1                 13  27   9
   9 *   9   3   3   8  15   8                         9  21  20
   8 *  16   4  10  15  25   8       1   5  16  27  24
   7 *  13   9  19  30  28  18   4  13  18  26  21  37
   6 *  31  21  33  37  29  27  16  20  18  32  18  26
   5 *  23  28  26  27  19  20  20  19  17  11   7  15
   4 *  24  42  29  27  31  20  24  23  18  15   6  11
   3 *  34  37  39  33  15  25  42  24  24  13   4   6
   2 *  16  25  18  22  21  30  28  24  28  16   5   7
   1 *                                            1   6
        ********************************************************:
 ( 2)    1       3       5       7       9       11
MONTH        2       4       6       8      10       12

COLUMN 183     192     188     134     128     156
 TOTAL     170     208     157     124     165     179
```

Appendix A continued

SVN (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-69/04-21

```
NATBUI
  12 *                                                    6  4 10
  11 *          1  7  2                                   5  8 13
  10 *  17      8  6  5  1                               14 25  8
   9 *   7  3  3  8 13  7                                7 21 15
   8 *  14  4  9 15 25  8     1  5 13 27 19
   7 *  13  9 14 30 28 18  4 13 18 25 19 33
   6 *  28 20 24 35 27 27 16 20 18 28 13 24
   5 *  22 26 20 23 17 20 20 19 17 11  5 12
   4 *  23 36 26 25 29 19 24 23 18 14  5 10
   3 *  29 36 33 29 14 25 42 24 24 13  4  6
   2 *  15 22 17 17 20 30 28 24 28 16  5  6
   1 *                                              1  6
      ************************************************
 ( 2)    1     3     5     7     9    11
MONTH      2     4     6     8    10    12

COLUMN 168   161   178   134   128   142
 TOTAL   157   190   155   124   153   156
```

40-79/04-21

```
NATBUI
  12 *                                                    5  3 10
  11 *          1  6  3                                   5  9 11
  10 *  15      6  9  6  3                               15 31 10
   9 *   6  2  2  7 19  9     2                          7 22 17
   8 *  12  5  8 20 27  8     1  8 21 25 24
   7 *  13 12 14 25 30 21  8 20 22 26 29 37
   6 *  32 20 19 37 25 33 16 36 23 32 18 26
   5 *  23 23 19 28 15 25 27 26 23 19  6 13
   4 *  25 34 20 22 27 24 39 34 25 18  6  6
   3 *  28 36 30 24 28 35 47 36 38 25  4  6
   2 *  17 23 14  9 23 49 55 31 42 17  5  4
   1 *                                              2 14
      ************************************************
 ( 2)    1     3     5     7     9    11
MONTH      2     4     6     8    10    12

COLUMN 171   138   200   192   181   172
 TOTAL   156   184   207   186   192   164
```

Appendix A continued

VLD (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

```
NATBUI
  12 *                                  2
  11 *    4   3   6   3   8   1       1   4   3   8
  10 *            1   2   6   3           4   3
   9 *            1   2   2   3           2   6   2
   8 *    2   2   2   4   1               4   4
   7 *    4   1   2   6   2   1           1
   6 *    2   3   3   4   6   3       1   4   9   2
   5 *    2   2   6   2   4               1   1   5
   4 *    3   5   5   5   1   1   1       1   3   2
   3 *        3  11   7                               2
   2 *    1   3   3   7           1
      ***********************************************
 ( 2)     1       3       5       7      10      12
MONTH         2       4       6       9      11

COLUMN  18      40      32       2      21      21
 TOTAL      22      42      12       2      29
```

20-69/04-21

```
NATBUI
  12 *                          2   1
  11 *    8  13  24  14  26  14  10   9  19  21  22  18
  10 *        1   4   5   6  13           2  10  16   5
   9 *    3   6   5   1   6   3       1   3   8  15   3
   8 *   12   6   7  12  11   4       8   4  12  15  14
   7 *    9   6   7  21  13   8   2   1   9  12  12   8
   6 *   12  18  15  22  27   8   6   8  10  19  22  14
   5 *   12  15  14  10   9   2   5  10   7  14   3  15
   4 *   20  13  28  17   7   8  10   5  10  10   9  10
   3 *   15  22  28  17   8  11  15   6  12   8   4   5
   2 *    9  13  21  14   6   6   9  11  13   3   1   5
   1 *                    3       2
      ***********************************************
 ( 2)     1       3       5       7       9      11
MONTH         2       4       6       8      10      12

COLUMN 100     153     124      59      89     119
 TOTAL     113     133      78      59     117      97
```

Appendix A continued

VLD (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-69/04-21

NATBUI

12	*					2	1						
11	*	6	11	19	14	21	14	10	9	19	18	19	16
10	*		1	3	4	2	12			2	7	16	4
9	*	3	6	4	1	5	1		1	3	7	13	3
8	*	11	5	5	10	11	4		8	4	8	14	13
7	*	6	4	5	19	10	8	2	1	9	11	11	8
6	*	11	16	12	18	23	8	6	8	9	16	15	14
5	*	12	14	12	8	6	2	5	10	7	13	3	12
4	*	17	10	23	14	7	8	10	5	10	9	7	9
3	*	15	18	23	14	8	11	15	6	12	7	4	4
2	*	9	11	18	12	6	6	9	11	13	3	1	5
1	*					3		2					
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		90		124		104		59		88		103	
TOTAL			96		114		75		59		99		88

40-79/04-21

NATBUI

12	*					1	2						
11	*	3	11	15	14	15	15	14	14	17	16	21	11
10	*		1	1	2	4	9			4	7	15	6
9	*	2	6	4	1	3			2	4	2	8	1
8	*	7	8	5	10	10	4		10	6	9	12	13
7	*	7	4	5	13	8	7	4	2	9	12	11	9
6	*	15	16	10	22	20	8	9	13	11	15	18	14
5	*	12	15	10	9	6	4	8	12	10	14	3	7
4	*	21	9	20	11	6	11	12	8	12	14	5	8
3	*	13	19	14	8	9	16	23	9	14	4	5	4
2	*	7	11	15	7	7	15	13	15	18	7	4	6
1	*					2		2					
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		87		99		91		85		105		102	
TOTAL			100		97		91		85		100		79

Appendix A continued

JAX (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

```
NATBUI
 12 *        1       2   1                       2
 11 *                1   1   3                   1
 10 *    1           4   4   4               1   1
  9 *    1           1   5   2               4   2
  8 *    4           3   3   3               1   1
  7 *                5   7   2   4               2
  6 *    1   5   4  18   6   1               2   3
  5 *    1   5   5          2       1
  4 *    1   1   6   3                   2       1
  3 *        4   3   2               1   2
  2 *        2   2   3       1
  1 *    1
     ********************************
( 2)     1       3       5       7       11
MONTH        2       4       6      10       12

COLUMN  10      34      21       1       4
 TOTAL      18      49       8      11      11
```

20-69/04-21

```
NATBUI
 12 *    2   3       5   7                           5   6
 11 *    1       8   2  11   2                   6   2  17
 10 *    3   4  15  14  25   1                  12   7   8
  9 *    6   5  13  21  17   2       2   3  12  18   1
  8 *    8   3  22  22  16  14   1   2   4   6  18   2
  7 *   11   7  17  27  18  11   1  10  13   9  18  11
  6 *   11  30  34  51  21  28  12  11  23  17  28  32
  5 *    9  23  18  18  10  11  13  12   9  16  11   8
  4 *   14  17  28  15  14  17  16  17  16  17  11   6
  3 *   31  30  24  12   9  18  16  16  21  20   7   8
  2 *   18  22  18  11  10  13  26  16  19  16   2   3
  1 *   10   6                                       5
     ************************************************
( 2)     1       3       5       7       9       11
MONTH        2       4       6       8      10       12

COLUMN 124     197     158      85     108     127
 TOTAL     150     198     117      86     131     107
```

Appendix A continued

JAX (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 30-69/04-21

NATBUI

12	*	2	3		5	7						5	5
11	*	1		6	2	9	2				6	2	16
10	*	2	4	13	12	23	1				12	7	8
9	*	7	5	13	16	16	2		2	3	10	18	1
8	*	7	3	20	20	12	14	1	2	4	6	18	2
7	*	12	7	12	24	17	10	1	10	13	9	18	10
6	*	10	26	31	42	19	28	13	11	23	17	25	29
5	*	8	22	14	17	10	11	12	12	9	14	11	8
4	*	13	17	24	13	14	17	16	17	16	17	12	5
3	*	31	29	21	13	9	18	16	16	21	20	5	8
2	*	16	20	18	9	10	13	26	16	19	16	2	3
1	*	9	6										5
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		118		172		146		85		108		123	
TOTAL			142		173		116		86		127		100

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NATBUI

12	*	4	4		2	5						5	7
11	*	1		5	2	7	2				5	3	17
10	*	2	4	8	10	22	2				11	9	7
9	*	5	5	11	13	17	4		2	4	7	20	5
8	*	5	2	20	18	12	16	1	5	3	5	29	10
7	*	15	7	9	22	14	11	2	12	15	12	26	15
6	*	10	19	28	36	22	32	17	14	32	25	30	35
5	*	8	21	15	22	12	15	16	21	12	22	14	12
4	*	16	19	21	12	16	17	15	30	24	20	13	5
3	*	38	28	19	7	16	21	22	28	27	29	5	9
2	*	24	16	17	9	15	15	33	23	24	23	4	3
1	*	11	6										5
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		139		153		158		106		141		158	
TOTAL			131		153		135		135		159		130

Appendix A continued

CHS (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

NATBUI											
11	*					1			2		
10	*	1		1	2	3	3	3	5	4	
9	*	1		1		4	3	1	5	3	
8	*	3		4	3	1		5	3	3	
7	*	5	1	4	2	5		4	1	19	
6	*	5	6	10	8	2		1	7	10	
5	*	2	5	8	7	1			6	3	
4	*	6	8	5	6			2	1	2	
3	*	7	9	20	10			1		1	
2	*	4	5	14	6	1				2	
		**********									
(2)		1		3		5		10		12	
MONTH			2		4		6		11		
COLUMN	34		67		18		17		47		
TOTAL		34		44		6		30			

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NATBUI													
11	*			1		9	3				1	14	7
10	*	8		8	4	18	6	1			10	27	14
9	*	8	4	6	9	18	8				7	20	12
8	*	16	8	6	18	20	11			5	21	17	21
7	*	19	8	10	39	20	9	3	2	7	26	18	45
6	*	18	28	27	34	29	11	10	17	16	25	25	29
5	*	19	34	25	21	9	15	7	16	10	14	15	9
4	*	32	18	28	26	18	18	18	23	22	19	7	8
3	*	28	31	38	35	19	21	27	23	33	22	4	12
2	*	28	19	35	19	20	33	33	15	19	20	6	8
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN	176		184		180		99		112		153		
TOTAL		150		205		135		96		165		165	

Appendix A continued

CHS (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-69/04-21

```
NATBUI
 11 *                          1        9  3                          1 13  9
 10 *    6        7  4 14  6  1                                 8 27 12
  9 *    9  4  4  9 16  8                                      6 18 12
  8 *   13  6  5 17 19 11                                5 20 16 19
  7 *   17  8  5 37 20  8  3  2  7 25 15 37
  6 *   15 23 18 26 29 11 10 17 16 23 20 26
  5 *   17 30 19 16  8 15  7 16 10 14 15  8
  4 *   28 15 23 24 18 18 18 23 22 19  5  7
  3 *   25 28 25 27 19 21 27 23 33 22  4 11
  2 *   23 16 25 18 19 33 33 15 19 20  6  7
      ************************************************>
 ( 2)    1     3     5     7     9     11
MONTH      2     4     6     8    10     12

COLUMN 153   132   171    99   112   139
 TOTAL    130   178   134    96   158   148
```

40-79/04-21

```
NATBUI
 12 *                                                      4
 11 *                          11  3                       3 14  7
 10 *    6        6  4 14  6  1                           7 22 15
  9 *    7  4  4 10 15  5                                 7 20 15
  8 *   11  7  4 16 22 11                             7 15 17 19
  7 *   18 12  4 37 23 11  4  3 10 24 19 21
  6 *   17 23 15 23 28 17 17 28 20 28 25 27
  5 *   18 30 17 13 13 24 20 26 20 15  7  6
  4 *   28 11 22 20 23 27 29 34 33 20  4  7
  3 *   22 24 28 17 26 27 46 47 45 23  8 10
  2 *   24 16 19  9 25 56 62 32 33 25  5  9
      ************************************************>
 ( 2)    1     3     5     7     9     11
MONTH      2     4     6     8    10     12

COLUMN 151   119   200   179   168   145
 TOTAL    127   149   187   170   167   136
```

Appendix A continued

FLO (BUI vs Months) (1955-1964)

RH(%) / WS(kts)

10-39/04-21

NATBUI

12	*	3									2	2	1
11	*	3				3					2	2	1
10	*			3	7	7	2		1		9	6	4
9	*	2		3	1	7	1			1	8	7	2
8	*	2	1	4	8	5	2			1	4	5	8
7	*	3	5	12	8	6	2		1		3	9	11
6	*	11	12	16	10	3	4	1		2	3	6	14
5	*	8	9	10	7	3	3			1	1	4	11
4	*	4	17	30	11	4	1		1		3	4	3
3	*	9	15	16	17	1	1						3
2	*	6	7	8	10		1			1	4		
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		51		102		39		1		6		45	
TOTAL			66		79		17		3		39		58

20-69/04-21

NATBUI

12	*	4									5	5	
11	*	6			3	17					6	15	2
10	*			1	20	21	3		4	3	14	23	6
9	*	2	1	5	13	14	10		3	15	15	21	7
8	*	15	5	6	17	19	13	4	4	18	14	16	24
7	*	17	12	20	17	27	25	18	18	20	16	21	42
6	*	29	35	28	38	28	30	33	38	23	23	15	42
5	*	26	25	23	27	29	22	22	24	18	16	14	29
4	*	19	38	48	23	21	13	21	20	13	13	9	15
3	*	29	38	34	31	18	30	28	14	19	18	8	12
2	*	17	21	20	24	4	17	14	6	15	16	7	6
1	*										2	5	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		164		185		198		140		144		159	
TOTAL			175		213		163		131		158		185

Appendix A continued

FLO (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-69/04-21

NATBUI

12	*	2									4	3	
11	*	5			4	15					4	12	1
10	*			1	18	16	3		4	3	10	21	4
9	*	1	1	2	13	15	10		3	14	12	19	6
8	*	13	3	5	14	16	12	4	4	18	12	13	20
7	*	14	9	12	11	19	24	18	18	20	14	20	38
6	*	27	25	15	26	26	28	33	38	23	22	12	38
5	*	20	21	15	21	30	21	22	24	18	16	11	22
4	*	18	33	34	19	20	13	21	20	13	11	5	12
3	*	24	31	28	18	18	30	28	14	19	18	8	11
2	*	14	16	15	19	4	17	14	6	15	15	7	6
1	*										2	5	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		138		127		179		140		143		136	
TOTAL			139		163		158		131		140		158

40-79/04-21

NATBUI

12	*	1									1	3	
11	*	3			2	11					5	11	1
10	*			1	8	11	1		4	6	7	20	4
9	*	1	3	3	9	10	13	2	5	12	9	11	5
8	*	12	3	9	9	9	13	4	3	18	12	15	19
7	*	15	8	12	9	15	31	18	24	17	10	12	26
6	*	24	21	13	28	32	32	37	50	26	15	18	29
5	*	18	15	10	16	23	24	31	31	22	18	11	16
4	*	18	20	24	12	12	13	37	27	17	18	6	8
3	*	14	22	18	10	13	38	38	24	26	19	7	10
2	*	7	15	10	13	5	18	28	15	15	17	4	4
1	*										2	3	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		113		100		141		195		159		121	
TOTAL			107		116		182		183		133		122

Appendix A continued

GSO (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

```
NATBUI
  12 *    2
  11 *    1                    2                        4   2
  10 *                     2   5   1                2   8   7   5
   9 *                     3   7   1            2   1   9   4   3
   8 *                     9   7   2   1        5   5   6   4
   7 *    1        4  11   9   3            2   1   1   8   6
   6 *   11    1  22  16  11   4   3   1    1   3  13   6
   5 *    5    7  22  11   2   2                        5   3
   4 *    8   10  22  15   6                        3   6   7
   3 *   13   19  14  21   1   1                    2   2   6
   2 *    8    8   6  14                        2   2   2   4
      ********************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8      10       12

COLUMN   49      90      50       4      12      55
 TOTAL       45     102      14       5      37      44
```

20-69/04-21

```
NATBUI
  12 *    8                    2
  11 *    7                1  11                    4   8   3   1
  10 *    3                4  17   6   2        10  22  24  11
   9 *                     1  15  15       5  10  16  15   7
   8 *    1               22  17  12   8  13  15  15  15  16
   7 *    7        8  29  28  27  16  25  21  13  33  27
   6 *   24    6  35  40  47  38  43  30  27  32  36  39
   5 *   17   18  52  20  20  19  17  15  14  14  16  17
   4 *   32   31  44  23  17  17  22  18  17  13  16  21
   3 *   46   62  36  31  15  17  25  19  12  17  13  28
   2 *   42   47  32  32   9  12  15  16  10  15  10  20
      ********************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8      10       12

COLUMN  187     207     198     148     140     181
 TOTAL      164     203     163     141     165     187
```

Appendix A continued

GSO (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

```
NATBUI
  12 *    6                    2
  11 *    5              1     9                          4   6   1
  10 *    3              1    13    6    2               9  19  25  10
   9 *                   2    13   15         5  10  11  15   6
   8 *    1             16    15   12    8   13  14  12  12  16
   7 *    7         6   24    24   26   16   25  21  13  29  23
   6 *   20     6  27   31    47   37   43   30  26  31  32  38
   5 *   19    16  37   13    19   18   17   15  15  14  12  13
   4 *   24    26  32   18    14   17   22   18  17  11  16  20
   3 *   42    55  24   22    16   17   24   19  12  17  12  27
   2 *   39    42  28   26     8   12   15   16  10  15   9  18
         **********************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN  166     154     180     147     138     163
 TOTAL      145     154     160     141     149     171
```

20-69/04-21

```
NATBUI
  12 *    6
  11 *    4              1    11                          4   3
  10 *    3              2    11    4    2               7  12  13   9
   9 *                   1     8   11    1    4   8   7  12   5
   8 *    2             11    14   12    6   14  16  15   9  16
   7 *    6         4   27    26   20   23   29  19   9  19  15
   6 *   20     4  22   21    31   34   49   34  31  29  32  37
   5 *   15    12  25    6    18   24   21   14  19  13  13  12
   4 *   24    27  22   14    10   21   23   25  22  11  13  17
   3 *   37    37  18   11    14   16   30   26  14  21  11  21
   2 *   33    43  31   16    11   13   21   23   6  14  10  20
         **********************************************************
 ( 2)     1       3       5       7       9       11
MONTH         2       4       6       8       10      12

COLUMN  150     122     154     176     146     132
 TOTAL      123     110     155     169     134     152
```

Appendix A continued

ROA (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

NATBUI												
12	*				2			1				
11	*				4	2		3			1	4	2
10	*				6	9	6	1	6		4	6	2
9	*			2	9	7	2	3	1		3	5	
8	*		2	3	5	16	7	3	1	4	6		3
7	*	3	4	3	10	15	4	4	2	7	2	9	2
6	*	7	11	17	16	17	6	2	5	4	4	9	8
5	*	7	4	18	12	6	3		1		4	3	4
4	*	7	8	17	20	3	2	2	1		4	7	7
3	*	9	15	22	12	2				3	3	5	2
2	*	9	5	11	8	2					1	2	3
1	*				4								
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		42		93		79		19		18		50	
TOTAL			49		108		30		17		32		33

20-69/04-21

NATBUI												
12	*				2			3				1	
11	*	1			5	3		6	4		2	7	3
10	*	13	1		7	18	12	18	11	10	10	14	2
9	*	6		4	8	20	10	14	14	9	11	8	3
8	*		2	2	9	28	26	22	13	21	16	8	9
7	*	4	5	9	23	26	28	30	26	26	17	35	21
6	*	23	18	26	35	35	27	29	25	26	24	32	31
5	*	24	17	17	18	20	14	11	13	12	14	14	25
4	*	35	21	32	26	11	13	11	13	15	21	23	34
3	*	34	46	36	28	10	6	3	13	10	16	26	22
2	*	50	44	41	15	4	6	6	6	8	13	12	20
1	*				5								
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		190		167		175		153		137		180	
TOTAL			154		181		142		138		144		170

Appendix A continued

ROA (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-69/04-21

NATBUI

12	*				2			2				1	
11	*				2	3		5	4		1	3	1
10	*	12	1		2	11	12	17	7	8	8	10	1
9	*	6		3	4	16	10	11	13	9	7	5	3
8	*			1	8	19	24	21	13	18	11	7	9
7	*	4	3	7	17	19	26	28	25	21	15	29	20
6	*	19	12	15	27	23	21	28	22	25	25	28	29
5	*	24	13	7	12	17	14	11	13	12	13	11	25
4	*	31	19	23	15	10	13	11	13	16	16	19	31
3	*	26	36	30	21	10	6	3	13	8	15	25	19
2	*	46	40	33	11	3	6	6	6	8	13	11	19
1	*				2								
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		168		119		131		143		125		149	
TOTAL			124		123		132		129		124		157

40-79/04-21

NATBUI

12	*				2			2				1	
11	*					2		3	5		1	2	1
10	*	13	1		2	9	8	14	6	7	7	6	1
9	*	6		1		7	10	9	8	9	4		2
8	*			1	3	17	22	13	13	14	5	6	5
7	*	1	1	5	12	14	21	21	20	21	15	23	15
6	*	16	10	12	19	19	14	31	25	20	20	22	24
5	*	16	11	5	9	13	8	12	14	13	8	6	22
4	*	27	13	16	10	8	17	8	17	14	13	10	26
3	*	23	26	18	20	10	8	7	15	6	10	21	17
2	*	40	38	32	6	3	9	6	7	9	17	9	18
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		142		90		102		126		113		106	
TOTAL			100		83		117		130		100		131

Appendix A continued

EKN (BUI vs Months) (1955-1964)

RH(%)/WS(kts): 10-39/04-21

NATBUI	1	2	3	4	5	6	9	10	11	12
9 *		1							1	
8 *					1		2			
7 *				2	7		1	2		
6 *	1	1		5	3	1		1	1	
5 *		1	1	3	3					
4 *	1		2	3						
3 *	1		4	4	1				3	1
2 *	6	10	31	36	32	1	2	2	10	5
COLUMN TOTAL	9	13	38	53	47	2	5	5	15	6

(2) MONTH

RH(%)/WS(kts): 20-69/04-21

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *						3						
11 *					2					3		
10 *					3					1	1	
9 *		1			2				1		3	1
8 *	1	1			6			2	7	2	3	1
7 *	2	1		6	20	2	3	8	4	10	4	2
6 *	12	5	2	17	20	10	20	11	8	14	12	10
5 *	7	4	5	3	9	8	11	10	7	8	8	4
4 *	12	4	7	9	7	10	12	12	6	3	7	
3 *	11	6	13	9	5	10	6	6	7	3	8	10
2 *	57	59	100	111	100	89	48	47	57	55	69	55
COLUMN TOTAL	102	81	127	155	174	132	100	96	97	99	115	83

(2) MONTH

Appendix A continued

EKN (BUI vs Months) (1955-1964)

RH(%)/WS(kts): 30-69/04-21

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *						3						
11 *					2					2		
10 *					3					1		
9 *					2				1		4	1
8 *	1	1			6			2	6	1	2	1
7 *	2	1		4	15	2	3	8	3	10	4	2
6 *	11	4	2	14	18	10	20	11	8	13	12	10
5 *	7	3	3	3	6	8	11	10	7	7	8	4
4 *	11	4	6	6	7	10	12	12	6	3	6	
3 *	10	6	12	6	5	10	6	6	7	3	5	10
2 *	54	50	83	92	86	88	48	47	56	51	68	52
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	96	69	106	125	150	131	100	96	94	91	109	80

RH(%)/WS(kts): 40-79/04-21

NATBUI	1	2	3	4	5	6	7	8	9	10	11	12
12 *						3						
11 *					5					3		
10 *					2					1		
9 *					2				1		2	1
8 *	1	1			7			1	8		2	1
7 *	4	3		3	11	2	2	10	1	6	6	2
6 *	10	5	2	13	16	8	24	14	9	12	18	11
5 *	9	5	3	2	5	8	10	11	9	10	11	4
4 *	11	10	9	7	5	10	12	16	10	4	4	
3 *	10	4	11	11	5	11	6	10	9	3	6	16
2 *	79	68	78	78	71	95	61	59	66	60	73	75
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	124	96	103	114	129	137	115	121	113	99	122	110

Appendix A continued

TRI (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 10-39/04-21

NATBUI												
12 *											1	
11 *				1	2				2			
10 *				4	2	3			4	1		
9 *				3	1	3			1			
8 *				7	7	3			1	4		
7 *				4	9	2	3	1	2	4	3	
6 *	1		4	5	10			2		3	3	1
5 *		2	4	5	2						1	
4 *		4	11	13	1					2	1	
3 *	3	6	13	9							2	1
2 *	4	3	7	11	1					2		1
1 *										2		
**********												
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	8	15	39	62	35	11	3	3	10	19	10	3

20-69/04-21

NATBUI												
12 *											3	
11 *				1	5				3	3		
10 *				6	10	8	5	1	7	6	1	
9 *				10	6	13	8	6	13	6	3	2
8 *				8	22	14	6	8	26	8	16	4
7 *			4	18	27	31	10	18	20	15	15	3
6 *	5	5	9	24	51	29	17	28	17	27	25	23
5 *	11	16	11	22	21	7	14	13	12	8	14	5
4 *	19	23	36	20	12	7	16	9	11	13	9	7
3 *	40	29	52	36	9	18	21	9	5	9	12	21
2 *	26	53	41	20	6	5	14	6	3	8	9	34
1 *										1		
**********												
(2) MONTH	1	2	3	4	5	6	7	8	9	10	11	12
COLUMN TOTAL	101	126	153	165	169	132	111	98	117	107	104	99

Appendix A continued

TRI (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 30-69/04-21

```
NATBUI
  12 *                                                  1  3
  11 *                                 3                   3
  10 *                              3 10   6   5   1   3  6   1
   9 *                              8  4   9   8   6  12  6   3   1
   8 *                              6 17  12   6   8  24  6  15   4
   7 *                           3 16 23  31   8  18  18 12  15   2
   6 *   4   4   5  20  44  28  17  27  17  24  22  22
   5 *   9  13  10  18  20   7  14  13  12   7  13   5
   4 *  19  18  27  16  12   7  16   9  11  12   8   7
   3 *  38  24  44  29   8  18  21   9   5   9  12  21
   2 *  25  50  38  17   5   5  14   6   3   7   9  34
        ********************************************
( 2)     1       3       5       7       9      11
MONTH        2       4       6       8      10      12

COLUMN  95   127   146   109   106    98
 TOTAL     109   133   123    97    95    96
```

40-79/04-21

```
NATBUI
  12 *                                                  1
  11 *                              1   1               2
  10 *                              3   4   4   5       5   7   1
   9 *                              2   2   5   8   4   6   6   4
   8 *                              2   9  11   3   4  16   4  14   3
   7 *                          1   9  19  26   8  11  15  12  20   4
   6 *   5   4   6  15  37  24  18  28  19  28  19  23
   5 *  14  11  11  10  25   9  11  19  12   5  11   5
   4 *  28  16  22  16   8   8  15  13  12   9   9  10
   3 *  50  22  42  27  10  17  28  13   6  12  11  28
   2 *  34  59  45  14   5  11  21  11   4   8  11  44
        ********************************************
( 2)     1       3       5       7       9      11
MONTH        2       4       6       8      10      12

COLUMN 131   127   120   117    95   100
 TOTAL     112    99   115   103    94   117
```

Appendix A continued

TYS (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

NATBUI

12	*										3	
11	*											3
10	*				2	4		2		1	4	
9	*				2	3	4		3	2		
8	*				5	8	2		1	5	5	
7	*			4	7	3		1		4	3	2
6	*			8	6	6	3	1		2	5	3	2
5	*			5	11				1		2	3	1
4	*	3	1	17	8	1					1	2	2
3	*	6	3	12	17	1				1		1	1
2	*	5	3	8	7	1						1	
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		14		54		27		4		18		12	
TOTAL			7		65		9		5		23		6

20-69/04-21

NATBUI

12	*										3	
11	*				2	3		1		4	6	
10	*				5	14	7	7	2	15	12	
9	*				5	20	13	2	6	8	7	
8	*				18	26	12	9	7	19	7	3
7	*			2	18	18	10	20	18	13	15	15	3
6	*	11	1	16	21	27	25	21	22	21	18	19	7
5	*	11	4	18	23	18	21	19	18	18	15	18	12
4	*	26	24	31	29	14	22	18	18	10	16	24	27
3	*	36	41	55	42	20	20	19	16	7	13	30	34
2	*	51	59	50	25	16	10	20	7	5	6	12	42
		**********											
(2)		1		3		5		7		9		11	
MONTH			2		4		6		8		10		12
COLUMN		135		172		176		136		123		121	
TOTAL			129		188		140		114		115		125

Appendix A continued

TYS (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

30-69/04-21

```
NATBUI
  11 *                          2  3     1     3  5
  10 *                          5 13  7  6  3 14 10
   9 *                          4 20 10  2  3  8  5
   8 *                       14 21 12  9  6 16  7  3
   7 *                    1 13 16 10 19 18 12 15 14  3
   6 *  11  1 12 16 25 25 20 22 19 15 19  7
   5 *  11  4 15 16 17 21 19 18 18 14 17 11
   4 *  24 22 23 23 13 22 18 18 10 14 21 24
   3 *  35 38 49 32 20 20 19 16  7 13 28 30
   2 *  50 57 47 21 16 10 20  7  5  6 12 42
   1 *                                1
     ***********************************
 ( 2)    1     3     5     7     9    11
MONTH      2     4     6     8    10    12

COLUMN 131   147   164   133   113   114
 TOTAL   122   146   137   111   104   117
```

40-79/04-21

```
NATBUI
  11 *                          2     1     1  2
  10 *                          3  7  6  5  2 12 12
   9 *                          4 13  8     4 10  6
   8 *                       11 16 11  6  3 17  8  3
   7 *                       11 12  9 18 20  9  6 13  6
   6 *  13  1 12 14 26 27 20 26 23 17 21  6
   5 *  12  3 12 11 15 21 27 26 14 10 21 12
   4 *  30 24 23 17 12 19 22 14  8 18 25 23
   3 *  41 40 46 27 18 29 28 18  8 15 31 43
   2 *  61 60 53 20 16 17 24 11  7  8 13 60
   1 *                                1
     ***********************************
 ( 2)    1     3     5     7     9    11
MONTH      2     4     6     8    10    12

COLUMN 157   146   135   151   110   127
 TOTAL   128   120   147   124   102   150
```

Appendix A continued

BNA (BUI vs Months) (1955-1964)

RH(%)/WS(kts)

10-39/04-21

```
NATBUI
  12 *                                                  1  1
  11 *                        2                         4  1
  10 *                                                2 10  4
   9 *                        2                    4  1  5  2  3
   8 *                        2  2  1  2              2  2  3
   7 *                        3  4  2  1              3  5        2
   6 *           1  1  4  3  2  1                       1  2  3
   5 *           2  3  9  3  2                          1  1  2
   4 *     2  2  9  9  1     2                 1  1
   3 *     3  6 20 13  3                                    5  2
   2 *     6  5 12 10  3                                    2
   1 *                                          1
     ***************************************************
 ( 2)     1     3     5     7     9     11
MONTH        2     4     6     8     10    12

COLUMN  11    45    19    10    27    16
 TOTAL     16    54     7     3    18     9
```

20-69/04-21

```
NATBUI
  12 *                                                  2  1
  11 *                        7  3     1  2 16 10  2
  10 *                        4  8  1  5 12 24 15  4
   9 *  5                     4  7  4 14 10 16 12 14
   8 *  3                     5 11 11 20 11 16 18 18  1
   7 *  3                    16 31 23 23 20 16 20 11 15
   6 *  3  6  5 31 26 34 27 39 11 29 20 23
   5 * 11 11 10 27 24 14 11 22 11 10 13 17
   4 * 22 17 31 26 38 25 14 16  9  7 26 21
   3 * 35 39 59 46 21 13 14 12  9 16 27 30
   2 * 50 63 70 30 17 18  9  8  7  7 18 31
   1 *                                          2
     ***************************************************
 ( 2)     1     3     5     7     9     11
MONTH        2     4     6     8     10    12

COLUMN 132   175   186   138   139   153
 TOTAL    136   196   143   152   145   138
```

Appendix A continued

BNA (BUI vs Months) (1955-1964)

RH(%)/WS(kts) 30-69/04-21

```
MATBUI
  12 *                                                    2  1
  11 *                        6  3        1  2 13 10  2
  10 *                        4  8  1  6 12 22 13  4
   9 *    5                   4  7  4 13  9 13  9 13
   8 *    3                   5 11 11 20 11 16 17 18  1
   7 *    3                  16 29 23 23 20 15 20 11 15
   6 *    3  6  4 30 22 34 27 39 11 28 19 23
   5 *   11 10 13 27 24 14 11 22 11  9 13 16
   4 *   20 16 25 26 38 25 14 15  9  7 26 21
   3 *   34 36 55 39 21 13 14 12  9 16 25 31
   2 *   49 61 63 27 15 18  9  8  7  7 18 30
   1 *                                    1
     ************************************************
 ( 2)     1     3     5     7     9    11
MONTH        2     4     6     8    10    12

COLUMN 128   160   178   138   129   149
 TOTAL    129   184   143   150   137   137
```

RH(%)/WS(kts) 40-79/04-21

```
MATBUI
  12 *                                                 1
  11 *                        4  2        1  2 12  8  2
  10 *                        4  9  2  7 13 19 16  5
   9 *    7                   1  5  5 14  8  9  8 16
   8 *    4                   5 12 10 18 13 18 17 18  1
   7 *    3                  14 28 21 29 21 14 18 12 17
   6 *    2  8  4 34 27 39 26 40 17 27 20 37
   5 *   16 13 12 24 22 16 14 28 15  8  9 14
   4 *   22 16 19 17 32 32 12 13  9  6 30 22
   3 *   43 37 53 40 21 22 17 16 11 15 25 32
   2 *   63 73 71 20 16 21 14  8  9  8 18 44
     ************************************************
 ( 2)     1     3     5     7     9    11
MONTH        2     4     6     8    10    12

COLUMN 160   159   174   152   134   155
 TOTAL    147   163   168   162   131   167
```

Appendix A continued

MGM (BUI vs Months) (1955-6/1956) (6/1958-1964)

RH(%)/WS(kts)

10-39/04-21

```
NATBUI
 11 *                                          1  3  2
 10 *  1              5                       2  5  2
  9 *  2           1                          2  4  3
  8 *  3           2  2  1                       2
  7 *              5  2     1                 3  2  3
  6 *           6  3  1  1                    2  1  4  4
  5 *        5  5  3                                1  3
  4 *  1  4  6  3                                   3  1  2
  3 *  4  5  8  9  1                                   1  2
  2 *  4  2  4  8                                      1  2
       ********************************************************
 ( 2)     1        3        5        7       10       12
MONTH        2        4        6        9       11
COLUMN  15       29       11        1       20       14
 TOTAL      16       34        2        7       20
```

20-69/04-21

```
NATBUI
 12 *                          1                    3  2  2
 11 *                          8  1                 7  3  8
 10 *  7              2 16  7        4 21 12 16
  9 *  3              4  5  3  1  4  7  2  6
  8 *  5  1  2  7  8  5  3 13  3 13  7
  7 *     1  4 19 10  3  7 14  8 10  9 12
  6 *  2  7 17 18 11  9  6 11  8  4 14 21
  5 *  5 16 13 11  5  9  8  3  8  7  6 13
  4 * 18 20 24 14  6  7  9  3  7  5  4 16
  3 * 16 27 25 19  6 13 13  2  7  5  7 12
  2 * 20 21 17 20 10 14  8     7  5  5  6
  1 *                                3  1
      ********************************************************
 ( 2)     1        3        5        7        9       11
MONTH        2        4        6        8       10       12
COLUMN  76      102       86       55       86       85
 TOTAL      93      114       71       54       71       80
```

Appendix A continued

MGM (BUI vs Months) (1955-6/1956) (6/1958-1964)

RH(%)/WS(kts)

30-69/04-21

```
NATBUI
 12 *                                1                    3  2  2
 11 *                                8  1                 7  1  7
 10 *    6                 2 14  5        4 20  9 14
  9 *    3                 4  5  3  1  4  6  1  6
  8 *    2  1  2  6  6  4  3 13  3 13  6
  7 *       1  4 15  9  3  6 14  8 10  6 11
  6 *    2  6 15 15 10  9  6 11  8  3 13 18
  5 *    5 13  8  9  5  9  8  3  8  7  6 14
  4 *   17 18 17 13  6  7  9  3  6  4  3 15
  3 *   15 23 21 14  6 13 13  2  7  5  6 11
  2 *   19 21 16 14 10 14  8     7  5  4  6
  1 *                                3  1
    ********************************************
( 2):    1     3     5     7     9     11
MONTH       2     4     6     8     10    12

COLUMN  69    83    80    54    83    74
 TOTAL     83    93    68    54    63    75
```

40-79/04-21

```
NATBUI
 12 *                                1                    4  1  3
 11 *                                7  1                 4     6
 10 *    5                 3 11  3        5 22  8  9
  9 *    2                 2  4  5  2  2  5  5  2  5
  8 *    2  2  3  5  5  4  3 13  3 11  8
  7 *       2  6 14  4  4  5 13  8  8  7 10
  6 *    3  6 12 15  9  7 10  9  6  4 14 16
  5 *    6 14 10  8  4 10 11  7  8  6  4 12
  4 *   16 20 16  8  3  6 10  4  6  2  4 14
  3 *   16 25 17 11  7 14 20  5  8  2  5 11
  2 *   23 17 12 12 12 15  9     9  3  4  6
  1 *                                3  1
    ********************************************
( 2):    1     3     5     7     9     11
MONTH       2     4     6     8     10    12

COLUMN  73    78    68    70    83    70
 TOTAL     86    80    66    61    50    69
```

Appendix B

Computer programs for use with

A CLIMATOLOGY FOR PRESCRIBED FIRE IN THE SOUTHEASTERN UNITED STATES

Appendix B

Appendix B contains all of the computer programs used in this study except the BMDO8D that is published elsewhere. The programs contained herein are:

	Program	Computer	Program Language
1.	Program I	IBM 1401	Autocoder
2.	Program II	IBM 360/65	Fortran IV
3.	Program III	IBM 360/65	Fortran IV
4.	Program IV	IBM 7094	Fortran IV
5.	Program V	IBM 360/65	Fortran IV
6.	Program VI	IBM 360/65	Fortran IV
7.	Program VII	IBM 360/65	CPS version of PL/1

The purpose of each of these programs in the overall analysis for this study is contained in the text. The actual programs follow.

Program I

Program for the IBM 1401

```
         JOB   WEATHER DATA ZONE STRIPPER
         CTL   641
         ORG   334
INPUT    DA    1X15
STAT           5,9
         DA    6X80,X1
WIND           15
TEMP1          16,18
TEMP2          19,21
TEMP3          22,24
HUM            26,28
         DCW   -000-
GMWM     DCW   -)-
TOTAL    DCW   -0000001-
ONE      DCW   -0000001-
X1       EQU   89
START    SW    87,87
         RWD   2
         RWD   6
         RTAPE2,INPUT,EOFR2
         CC    K
         MCW   -JOB STARTED FOR STATION-,260
         MCW   STAT,266
         W
         CC    1
         CC    K
         CC    K
         W
         CS    332
         CS
         CC    K
         CC    K
         SBR   X1,0
         B     GO
READ     SBR   X1,0
         RTAPE2,INPUT, EOFR2
         A     ONE,TOTAL
GO       BCE   BLNKW,WIND,
         BCE
         BCE
         MZ    --,WIND
R1       BCE   BLNK1,TEMP1,
         BCE
         BCE
         BWZ   MOVE1,TEMP1,K
         MZ    --,TEMP1
```

```
R2      BCE   BLNK2,TEMP2,
        BCE
        BCE
        BWZ   MOVE2,TEMP2,K
        MZ    --,TEMP2
R3      BCE   BLNK3,TEMP3,
        BCE
        BCE
        BWZ   MOVE3,TEMP3,K
        MZ    --,TEMP3
R4      BCE   AST,HUM,
        BCE
        BCE
SBRX1   SBR   X1,80+X1
        C     X1,-480-
        BU    GO
        MCW   -000-,GMMN-1
        WTAPE6,INPUT,EOFW6
        B     READ
MOVE1   MZ    --,TEMP1
        MCW   ---,TEMP1-2
        B     R2
MOVE2   MZ    --,TEMP2
        MCW   ---,TEMP2-2
        B     R3
MOVE3   MZ    --,TEMP3
        MCW   ---,TEMP3-2
        B     SBRX1
BLNKW   MCW   -999-,WIND
        B     R1
BLNK1   MCW   -999-.TEMP1
        B     R2
BLNK2   MCW   -999-,TEMP2
        B     R3
BLNK3   MCW   -999-,TEMP3
        B     R4
AST     MCW   -999-,HUM
        B     SBRX1
EOFW6   WTM   6
        RWU   6
        MCW   -END OF TAPE ON OUTPUT-,250
        W
        CHAIN10
        CS
        CS
        CC    1
        H     666,666
        B     *-10
```

```
EOFR2   WTM  6
        WTM  6
        WTM  6
        RWU  2
        RWU  6
        MCW  -JOB COMPLETED-,250
        W
        CC   K
        MCW  -RECORDS FOR FILE -,250
        MCW  STAT,267
        MCW  - TOTAL -,274
        MCW  TOTAL,281
        W
        CS
        CS
        CC   1
        H    999,999
        B    *-10
        END  START
```

Program II

Program for the IBM 360/65

```
1.  //     wethr4  job  e3006-1190160,'cliett/lamb',msglevel=1
2.  //     exec forthclg,parm.fort='bcd',region.go=150k
3.  //     fort.sysprint dd sysout=a,space=(trk,(200))
4.  //     fort.syslin dd dsname=&loadset,unit=sysda,disp=(mod,pass),
5.  //                    space=(400,(600,50),rlse)
6.  //     fort.sysin dd *
7.  block data
8.        dimension ffm(10,39),ibr(24,10),istab(16,32)afm(14,14),
9.       1ista(11)
10.       common/blok1/ffm,ibr,afm,istab/blok2/ista
11.        data   ista/  13889,13857,03822,03813,13873,13821,13895,
12.      113874,13723,13897/
13. c
14. c **** ffm table ****
15.       data   ffm/
16.      1         20.,23.,8*25.,16.,18.,8*20.,12.,14.,15.,2*16.,
17.      23*17.,16.,12.,10.,12.,13.,14.,4*15.,13.,10.,9.,11.,
18.      32*12.,3*13.,12.,10.,8.,8.,9.5,2*11.,3*12.,11.,9.,0.0,
19.      47.5,9.,9.5,4*10.,9.5,7.5,0.0,7.,8.5,9.,4*9.5,8.5,
20.      52*0.0,6.5,8.,8.5,4*9.,7.5,2*0.0,6.,7.5,8.,3*8.5,8.,
21.      66.,2*0.0,5.5,6.,2*7.,2*7.5,6.5,6.,2*0.0,5.5,6.,2*7.,2*7.5,
22.      76.5,6.,2*0.0,5.,5.5,4*6.,4.,3*0.0,5.,5.5,4*6.,4.,3*0.0,
23.      84.5,5.,3*5.5,5.,4.,3*0.0,4.5,5.,3*5.5,5.,4.,3*0.0,4.,
24.      94.5,3*5.,3.,4*0.0,4.,4.5,3*5.,3.,4*0.0,2*4.,2*4.5,4.,2.,
25.      a4*0.0,2*4.,2*4.5,4.,2.,4*0.0,3.5,3*4.,3.,5*0.0,3.5,
26.      b3*4.,3.,5*0.0,3*3.5,3.,2.,5*0.0,3*3.5,3.,2.,5*0.0,3*3.,
27.      c2.5,2.,5*0.0,3*3.,2.5,2.,5*0.0,2*3.,2.5,1.5,6*0.0,
28.      d2*3.,2.5,1.5,6*0.0,2*2.5,2.,1.5,6*0.0,2*2.5,2.,1.5,
29.      e6*0.0,2*2.5,1.5,7*0.0,2*2.5,1.5,7*0.0,2*2.,1.,7*0.0,
30.      f2*2.,1.,7*0.0,2.,1.5,1.,7*0.0,2.,1.5,1.,7*0.0,1.5,1.,
31.      g8*0.0,1.5,1.,8*0.0,2*1.,8*0.0/
32. c
33. c ****  bui recovery table ****
34.         data   ibr/
35.      1       0,1,3,6,10,16,21,26,31,35,40,44,50,58,67,76,80,
36.      292,106,126,140,155,185,230,0,1,3,6,10,14,18,22,26,30,
37.      334,37,42,48,54,58,64,69,76,86,95,105,115,135,0,1,3,5,
38.      48,12,15,18,21,23,26,29,32,37,40,43,46,50,54,58,65,70,
39.      575,80,0,1,2,4,6,9,12,14,16,18,20,22,24,26,29,31,33,
40.      635,37,39,42,45,48,50,0,0,2,3,5,7,9,10,12,14,15,16,18,
41.      719,21,23,24,25,27,28,29,30,32,35,0,0,1,2,4,5,6,8,9,
42.      810,11,12,13,14,15,16,17,18,19,20,21,22,23,24,3*0,1,
43.      92,3,3,4,5,5,6,6,7,8,3*9,10,10,11,11,12,12,13,4*0,1,
44.      a3*2,4*3,4*4,4*5,3*6,7,5*0,5*1,6*2,4*3,4*4,15*0,9*1/
```

```
c
c **** afm table ****
      data afm/
     1          11.,11.,2*12.,13.,14.,16.,17.,19.,22.,24.,27.,
     12*31.,10.,2*11.,12.,13.,14.,15.,17.,19.,21.,24.,27.,30.,
     231.,9.5,2*10.,11.,12.,13.,14.,16.,18.,20.,23.,26.,29.,
     331.,8.5,9.,9.5,10.,11.,12.,13.,15.,17.,19.,22.,25.,28.,
     431.,7.5,8.,8.5,9.,10.,11.,12.,14.,16.,18.,21.,24.,27.,
     530.,6.5,7.,7.5,8.,9.,10.,11.,13.,15.,17.,20.,23.,26.,
     629.,5.5,6.,6.5,7.,8.,9.,10.,12.,14.,16.,19.,22.,25.,
     728.,4.5,5.,5.5,6.,7.,8.,9.,11.,13.,15.,18.,21.,24.,27.,
     83.5,4.,4.5,5.,6.,7.,8.,10.,12.,14.,17.,20.,23.,26.,3.,
     93.5,4.,4.5,5.5,6.,7.5,9.5,11.,14.,16.,19.,23.,26.,2.,
     a2.5,3.,4.,4.5,5.5,7.,8.5,10.,13.,16.,18.,22.,25.,2.,
     b2.5,3.,3.5,4.,5.,6.5,8.,10.,13.,15.,18.,22.,25.,1.5,
     c2.,2.5,3.,4.,5.,6.,8.,10.,12.,15.,18.,21.,24.,1.,1.5,
     d2.,3.,3.5,4.5,6.,7.5,9.5,12.,15.,17.,21.,24.1/
c
c **** spread index table ****
      data istab /25,29,33,37,41,45,49,53,57,61,67,76,86,
     13*100,24,28,32,36,40,44,48,52,56,60,65,74,84,97,2*100,
     224,28,32,35,39,43,46,50,54,58,64,72,82,94,2*100,23,27,
     331,34,38,42,45,49,52,56,62,70,80,92,2*100,22,26,30,33,
     436,40,43,47,50,54,60,68,77,89,2*100,21,25,29,32,35,39,
     542,46,49,53,58,66,75,87,2*100,21,24,28,31,34,38,41,45,
     648,51,57,64,73,84,97,100,20,24,27,30,33,37,40,43,47,50,
     755,62,71,82,94,100,19,23,26,29,32,36,39,42,46,48,53,60,
     869,79,91,100,18,22,25,28,31,35,38,41,44,47,51,58,66,77,
     988,100,18,22,25,27,30,34,37,39,42,45,50,56,64,74,85,99,
     a17,21,24,26,29,32,35,38,40,43,48,54,62,72,82,96,17,20,
     b23,25,28,31,34,37,39,42,46,53,60,69,79,93,16,19,22,25,
     c28,30,33,35,38,40,45,51,58,67,76,89,15,19,22,24,26,29,
     d31,34,37,39,43,49,56,65,74,86,15,18,21,23,25,28,30,33,
     e36,38,42,47,54,63,71,83,14,17,20,22,24,27,29,32,34,36,
     f40,46,52,60,68,79,14,17,19,21,23,26,28,30,33,35,38,44,
     g50,58,66,76,13,16,18,20,22,25,27,29,31,33,37,42,48,56,
     h63,73,12,15,17,19,21,23,25,27,29,31,34,39,44,51,58,68,
     i11,13,15,17,19,21,23,25,27,28,31,36,41,47,53,62,10,12,
     j14,16,18,20,21,23,25,26,28,33,37,43,48,56,9,11,12,14,
     k16,18,20,21,22,23,26,30,0,39,44,51,8,10,11,12,14,15,17,
     l18,19,20,22,26,30,34,39,44,6,8,9,10,11,12,13,14,15,16,
     m18,21,24,28,32,36,4,5,6,7,8,9,10,11,12,13,15,17,19,22,
     n25,29,2,3,4,5,6,7,8,8,9,10,11,13,15,17,20,22/
      end
```

```
 2. INTEGER BLNK, AST,CHG,CALC
 3. INTEGER * 4 DAY(5), YER(5), DB(24), WB(24), WS(24)
 4. INTEGER * 4 HR23/'23'/,MBNK/'-'/
 5. INTEGER HUMID(12,24),TTEMP(12,24),TBUI(12),TNBUI(12),RAIN,
   1FI(24),FI10(24),TSIN(12,24)
 6. REAL * 4 A3(24),A10(24),A12(24),TFM10(12),FUEL(12,24),
   1TFM5(12)
 7. REAL * 4 IFOUR, ITWO, IFIVE, LFM10, LFM5
 8. REAL * 8 BULK(100), STAT1(5)
 9. REAL * 8 A2(24),A5(24),A6(24),A7(24),A8(24),A9(24),A11(24)
10. DIMENSION FMT(23,24),FOR(23),SKIP(24),IXX(24),DENOM1(12),
   1          DENOM2(12,24)
11. DIMENSION NUM(12), MINUS(12,24),CONSEC(24),ACCUM(12),
   1AVER1(4,12),AVER2(4,12,24),ISNOW(24),IRH(24),E(24),MC5(24),
   2FM5(24)
12. DIMENSION IWER(24),JSNOW(24),          A4(24),IR1(24),
   1    ISTAT1(5),IYER1(5),MTH1(5),ID1(5),NAIR(5,24),
   2    NRO(24),NDRY(24),NWET(24),IMS(24),FM(24),INDEX(24),
   3    IBU(24),NBUI(24),FM10(24),NROUT(24),
   4    ISTAB(16,32),FFM(10,39),IBR(24,10),AFM(14,14)
13. COMMON/BLOK1/FFM,IBR,AFM,ISTAB
14. DATAIXXX,NUM/000,310,283,310,300,310,300,310,310,300,310,
   1300,310/,ZXZXZ,BLNK,AST/'',' ','****'/
15. DATA XZ,FOR/' ','','','A2,',A8,',A2,',313,',A4,
   1',13,',5A8,',2A1,',A8,',A2,',A3,',12,',13',',12,
   2',11,',13,',12,',13,',4X',''/
16. DATAZX/''/
17. DATA ZX,IFOUR,ITWO,IFIVE,AFOUR,BPAR,FOURX,ATHREE,ATWO,
   1FA4,T12/'','14,',12,',15,',A4,',')',4X',A3,',A2,
   2',(A4,',3A2,'/
18. DIMENSION ISGRAB(16,5)
19. DATA MEOME, ISGRAB/545455,          1,2,3,8 4,4,5,6,7,7,
   K8,10,11,13,14,17,4*1,3*2,3,3,4,5,6,7,8,11,13,9*1,2,3,4,5,6,
   L8,9,11,*1,2,3,4,5,6,16*1/
20. DATA ICHEK/'  '/
21. DO 202 I=1,16
22. DO 202J=1,5
23. 202 ISTAB(I,J+27) = ISGRAB(I,J)
24. CALL ERASE(SKIP(1),SKIP(24))
25. SKIP(24)=0
    C **** INITIALIZE OBJECT TIME FORMAT ****
26. DO 325 J=1,24
27. DO 325 I=1,23
28. 325 FMT(I,J)=FOR(I)
29. FMT(1,1=FA4
30. FMT(2,1)=IFIVE
```

```
31. FMT(3,1)=T12
32. FMT(23,24)=KPAR
33. FMT(22,14)=IFOUR
34. WRITE(6,2005)FMT
35. 2005 FORMAT('',23A4)
36.           ISTAB(1,1)=25
37. ISTAB(13,24)=34
38. ISTAB(1,29)=1
39. WRITE(6,324)
40. 324 FORMAT('BEGIN JOB')
41. DATA DENOM1,DENOM2,FUEL,TPM10,TPM5/250*0.0,250*0.0,112*0.0/
42. DATA PM5/24*0.0/
43. DATA HUMID,TTEMP,TSIN,TBUI,TNBUI,NBUI,IBU,MC5/250*0,250*0,
   1250*0,210*0/
44. 1000 SWIT=0
45. CALL ERASE(TTEMP(1,1),TTEMP(12,24)
46. TTEMP(12,24)=0
47. CALL ERASE(MINUS(1,1),MINUS(12,24)
48. MINUS(12,24)=0
49. CALL ERASE(ACCUM(1),ACCUM(12))
50. ACCUM(12)=0
51. DO 2438 I=1,12
52. DENOM1(I)=0
53. TPM10(I)=0
54. TPM5(I)=0
55. TBUI(I)=0
56. TNBUI(I)=0
57. ACCUM(I)=0
58. DO 2438 J=1,24
59. DENOM2(I,J)=0
60. FUEL(I,J)=0
61. PM5(J)=0
62. HUMID(I,J)=0
63. TTEMP(I,J)=0
64. TSIN(I,J)=0
65. NBUI(J)=0
66. IBUI(J)=0
67. MC5(J)=0
68. MINUS(I,J)=0
69. PI10(J)=0
70. INDEX(J)=0
71. PM(J)=0
72. 2438 PM10(J)=0
73. DO 2439 I=1,4
```

```
 74. DO 2439 J=1,12
 75. AVER1(I,J)=0
 76. DO 2439 K=1,24
 77. 2439 AVER2(I,J,K)=0
 78. CALC=1
 79. NRAII=0
 80. CHG=0
 81. IDATE1=0
 82. NRAI=0
 83. RAIN=0
 84. LAST=0
 85. LAST1=0
 86. LBUI=0
 87. LNBUI=0
 88. LPM10=0
 89. MORE=0
 90. LPM5=0
 91. K=5
     C
     C **** READ SFC.OBS. DATA FROM OC5 ****
 92. 1 READ(2,4,END=2,ERR=3552)
      A                    DECK,ISTAT,IYER,MTH,ID,(IWER(J),A2(J),
                          1A3(J),WS(J),D
      1B(J),WB(J),A4(J),IR1(J),A5(J),A6(J),A7(J),A8(J),A9(J),
      2A10(J),JSNOW
      3(J),A11(J),A12(J),J=1,24)
 93. 4 FORMAT(
      1      A4,I5,3A2,6(A2,A8,A2,I3,2I3,A4,I3,5A8,A1,A1,A8,A2),/
      2            15X,6(A2,A8,A2,I3,2I3,A4,I3,5A8,A1,A1,A8,A2),/
      3            15X,6(A2,A8,A2,I3,2I3,A4,I3,5A8,A1,A1,A8,A2),/
      4            15X,6(A2,A8,A2,I3,2I3,A4,I3,5A8,A1,A1,A8,A2))
 94. CALL ERASE(NROUT(1),NROUT(24))
 95. NROUT(24)=0
 96. CALL ERASE(FI(1),FI(24))
 97. FI(24)=0
 98. IF(IWER(24).EQ.HR23)GO TO 90
100. 697 BACKSPACE 2
101. BACKSPACE 2
102. BACKSPACE 2
103. WRITE(6,725)ISTAT,IYER,MTH,ID
104. 725 FORMAT('OSHORT DAY FOR',2X,I5,1X,3A4)
105. GO TO 1
106. 3552 BACKSPACE 2
107. BACKSPACE 2
108. IVALV=0
109. CALL CRUD(IVALV)
110. IF(IVALV.EQ.1) GO TO 2
```

```
112. GO TO 1
113. 90 IID=ID
114. IMTH=MTH
115. IIYER=IYER
116. CALL STRIP(IID)
117. CALL STRIP(IMTH)
118. CALL STRIP (IIYER)
119. IF(IMTH.EQ.0)GO TO 697
121. IF(IID.GT.31.OR.IMTH.GT.12.OR.IIYER.GT.65.OR.IIYER.LT.55)
    1GO TO 697
123. IDATE=IID+100*IMTH+10000*IIYER
124. IF(ISTAT.EQ.03813.AND.IDATE.GE.611001.AND.IDATE.LE.611031)
    1GO TO 400
126. MCN=0
127. IF(ISTAT.EQ.13857.AND.IDATE.GT.631200)MCN=1
129. GO TO 401
130. 400 MCN=1
131. 401 SWITCH=0
132. IF(ISTAT.NE.13873)GO TO 102
134. 201 IF(IDATE.GT.580500)GO TO 102
136. SWITCH=1.0
137. GO TO 205
    C
    C **** READ RAIN TOTALS FOR ATHENS FROM SYSIN ****
138. 204 READ(5,715)IDATE1,NRAII
139. 715 FORMAT(I6,I3)
140. 205 IF(IDATE-IDATE1)206,152,204
141. 206 NRAI=0
142. GO TO 152
143. 3553 WRITE (6,3554)IDATE1
144. 3554 FORMAT('MORE BAD DATA ON RAIN AFTER',I10)
145. 7 K=0
146. IF(SWIT.EQ.1.0)GO TO 150
    C
    C **** READ RAIN DATA FROM OCO ****
148. READ(1,8,END=960,ERR=3553)
    1(STAT1(I),YER(I),DAY(I),(NAIR(I,J),J=1,24)I=1,5
149. 8 FORMAT(5(A6,A4,A2,1X,12A3,44X,12A3,31X)
150. 149 K=K+1
151. IF(K-6)101,7,7
152. 101 IF(K.EQ.0)K=1
154. JYER=YER(K)
155. JDAY=DAY(K)
```

```
156. CALL STRIP(JYER)
157. CALL STRIP(JDAY)
158. IDATE1=JDAY + 100*JYER
159. 102 IF(IDATE-IDATE1)150,105,149
160. 150 DO 151 I=1,24
161. NRO(I)=MBLNK
162. 151 NROUT(I)=0
163. GO TO 152
164. 105 DO 106 I=1,24
165. NRO(I)=NAIR(K,I)
166. IF(NAIR(K,I).EQ.ICHEK)GO TO 1019
168. NSTRP=NAIR(K,I)
169. CALL STRIP(NSTRP)
170. NROUT(I)=NSTRP
171. GO TO 106
172. 1019 NROUT(I)=0
173. 106 CONTINUE
174. 152 CALL ERASE (CONSEC(1),CONSEC(24))
175. IF(LAST.NE.LAST1)NRAI=0
177. IF(STAT.EQ.13873.AND.IDATE.LT.580500.AND.IDATE.EQ.IDATE1)
    1NRAI=NRAII
179. FLIP=0
180. CONSEC(24)=000
    C
    C **** STRIP ZONES FOR CALCULATIONS ****
181. DO 300 J=1,24
182. NDRY(J)=DB(J)
183. IF(NDRY(J).LT.-200)NDRY(J)=0
185. NWET(J)=WB(J)
186. ISW(J)=WS(J)
187. IRR(J)=IR1(J)
188. ISNOW(J)=JSNOW(J)
    C **** CHANGE WIND SPEED FROM KNOTS TO MPH ****
189. IWS(J)=IWS(J) * 1.1516
190. CALL STRIP(ISNOW(J))
191. IF(NWET(J).EQ.0)NWET(J)=NDRY(J)
193. IF(WS(J).NE.999 .AND.DB(J).NE.999 .AND.IR1(J).NE.999 )
    1GO TO 300
195. FLIP=1
196. CONSEC(J)=1
197. MINUS(IMTH,J)=MINUS(IMTH,J)+1
198. 300 CONTINUE
199. IF(FLIPEQ.)GO TO 153
    C
    C **** ALTER FORMAT IF BLANK ****
```

```
201. DO 301 I=1,24
202. IF(CONSEC(I).NE.1.0)GO TO 301
204. CHG=1
205. I2=I
206. SKIP(I2)=1
207. FI(I2)=BLNK
208. FMT(15,I2)=ATWO
209. INDEX(I2)=BLNK
210. FMT(21,I2)=ATHREE
211. IF(CALC)290,288,290
212. 288MBUI(I2)=BLNK
213. FI10(I2)=BLNK
214. IBUI(I2)=BLNK
215. MC5(I2)=BLNK
216. FMT(16,I2)=ATHREE
217. FMT(17,I2)=ATWO
218. FMT(19,I2)=ATHREE
219. FMT(20,I2)=ATWO
220. 290 CONTINUE
221. 301 CONTINUE
     C **** AVERAGE MISSING HOURS ****
222. 153 IDAT=IID+100*IMTH
223. CALC=1
224. IF(ISTAT.EQ.13873.AND.IDATE.LT.550900) CALC=0
226. CALL FMPLUS(ISTAT,IDAT,ADD)
     C
     C **** IN70-900 COMPUTE RESULTS FOR 24 HOUR OBSERVATIONS,
           C=HOUR ****
227. 70 DO 900 J=1,24
228. IF(MWET(J).EQ.999)MWET(J)=MDRY(J)
230. IXX(J)=0
231. IF(ISNOW(J).NE.2.AND.ISNOW(J).NE.3)GO TO 2000
233. IXX(J)=1
234. LBUI=0
235. LMBUI=0
236. 2000 IF(SWITCH.NE.1.)MRAI=MRAI+MROUT(J)
238. IF(SKIP(J).EQ.1.)GO TO 27
240. IF(MDRY(J).GT.200)WRITE(6,5066)IDATE
242. 5066 FORMAT(' BAD DATA GOT BY ON ',I6)
243. IDIFF=IABS(MDRY(J)-MWET(J))
244. IF(IDIFF.GT.39)IDIFF=39
246. IF(IDIFF)25,25,71
247. 71 MD=11-MDRY(J)/10
248. IF(MDRY(J).LT.10)MD=10
250. IF(MDRY(J).GE.110)MD=1
```

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252. IF(ND)26,250,26
253. 25 FM(J)=31
254. F=31.0
255. GO TO 27
256. 250 ND=1
257. 26 FM(J)=FFM(ND,IDIFF)
258. F=FM(J)
259. 27 IF(CALC.EQ.0)GO TO 255
261. IF(J.EQ.14.AND.SKIP(J).EQ.1.0)RAIN=NRAI
263. IF(J.EQ.14.AND.SKIP(J).EQ.1.0)NRAI=0
265. IF(J.EQ.14.AND.SKIP(J).NE.1.0)GO TO 38
267. 251 IBUI(J)=LBUI
268. NBUI(J)=LNBUI
269. FM10(J)=LFM10
270. FM5(J)=LFM5
271. GO TO 255
     C
     C GET 8-100 BUI CHANGE ONLY AT 1 P.M. OBSERVATION
     C BOX B4, PAGE 2
272. 38 IF(MCN)39,39,2357
273. 39 IF(NRAI)62,66,62
274. 62 IF(NRAI.EQ.BLNK)NRAI=0
276. IBU(14)=IBU(14)-NRAI
277. IF(IBU(14).LT.0)IBU(14)=0
279. LBUI=IBU(14)
280. GO TO 35
     C
     C BOX B5, PAGE 2
281. 66 CALL SUB1(F,MORE)
282. IBU(14)=IBU(14)+MORE
283. LBUI=IBU(14)
284. MORE=0
     C
     C ACCUMULATE NAT. SYS. BUI
285. 35 IF(NRAI-10)43,43,44
286. 43 CALL SUB2(F,MORE)
287. NBUI(14)=NBUI(14)+MORE
288. MORE=0
289. GO TO 45
     C
     C TODAY'S NBUI FROM RECOVERY TABLE
290. 44 CALL SUB3(NRAI, JP,LNBUI,JY)
291. NBUI(14)=IBR(JY,JP)
292. 45 LNBUI=NBUI(14)
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293. IF(LBUI.EQ.BLNK.OR.LNBUI.EQ.BLNK)GO TO 2357
     C
     C BOX E4, PAGE 2, 10 DAY TIME LAG
295. ARG=-.02*NBUI(14)
296. FM10(14)=95.0*EXP(ARG)+5.0
297. ARG=-.04*IBU(14)
298. FM5(14)=95.0*EXP(ARG)+5.0
299. IF(FM10(14).GT.99)FM10(14)=99.0
301. IF(FM5(14).GT.99)FM5(14)=99.0
303. LFM10=FM10(14)
304. LFM5=FM5(14)
305. 254 IF(CALC.NE.1.AND.MCN.EQ.1)GO TO 255
307. DENOM1(IMTH)=DENOM1(IMTH)+1
308. TBUI(IMTH)=TBUI(IMTH)+LBUI
309. TNBUI(IMTH)=TNBUI(IMTH)=LNBUI
310. TFM10(IMTH)=TFM10(IMTH)+LFM10
311. TFM5(IMTH)=TFM5(IMTH)+LFM5
312. 2357 RAIN=NRAI
313. NRAI=0
314. 255 IF(SKIP(J).EQ.1.)GO TO 900
316. FM(J)=FM(J)+ADD
317. F=FM(J)
     C
318. IF(CALC.EQ.0)GO TO 900
     C BOX F5, PAGE 2, ISOLATE SUBSCRIPTS OF AFM TABLE
320. I=LNBUI
321. CALL SUB4(I,JB,F,JF)
322. IF(JF.NE.0.AND.JB.NE.0)GO TO 51
324. WRITE (6,770)JB,JF,LNBUI,F,J,J
325. 770 FORMAT('1JOB TERMINATED BECAUSE OF ZERO SUBSCRIPTS',
    1316,F10.3,2I5)
326. GO TO 999
327. 51 B=AFM(JF,JB)
     C
     C BOX F4, PAGE 2, ISOLATE SUBSCRIPTS FOR SPREAD INDEX TABLE
328. I=IWS(J)
     C
329. CALL SUB5(1,B,IAM)
330. IF(IAM.NE.0.AND.I.NE.0)GO TO 52
332. WRITE (6,770)I,IAM,IWS(J),B,J
333. GO TO 999
334. 52 INDEX(J)=ISTAB(I,IAM)
     C
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335. IF(INDEX(J).EQ.BLNK)GO TO 900
337. IF(IRH(J).LT.200.AND.MDRY(J).LT.200)GO TO 9000
339. WRITE (6,9001)IDATE
340. 9001 FORMAT('ODROPPED AV ON',I10)
341. GO TO 900
342. 9000 DENOM2(IMTH,J)=DENOM2(IMTH,J)+1
343. HUMID(IMTH,J=HUMID(IMTH,J)+IRH(J)
344. TTEMP(IMTH,J)=TTEMP(IMTH,J)+MDRY(J)
345. FUEL(IMTH,J)=FUEL(IMTH,J)+FM(J)
346. TSIN(IMTH,J)=TSIN(IMTH,J)+INDEX(J)
347. 900 CONTINUE
348. DO 901 I=1,24
349. IF(SKIP(I).EQ.1.0)GO TO 897
351. FI(I)=FM(I)+.5
352. 897 IF(CALC.EQ.0)GO TO 918
354. IF(SKIP(I).EQ.1.0)GO TO 901
356. FI10(I)=FM10(I)+.5
357. MC5(I)=FM5(I)+.5
358. GO TO 901
359. 918 ACCUM(IMTH)=ACCUM(IMTH)+1
360. 901 CONTINUE
361. CALL ERASE(SKIP(1),SKIP(24))
362. SKIP(24)=0
363. IF(SWITCH.EQ.0)GO TO 906
365. 904 DO 905 J=1,24
366. 905 HAIR(K,J)=BLNK
367. 906 IF(CALC.EQ.1)GO TO 909
     C
     C **** CASE FIR MACIB'S MISSING RAIN ****
369. 903 RAIN=BLNK
370. FMT(22,14)=AFOUR
371. 907 CHG=1
372. DO 908 I=1,24
373. NBUI(I)=BLNK
374. FI10(I)=BLNK
375. IBU(I)=BLNK
376. MC5(I)=BLNK
377. INDEX(I)=BLNK
378. FMT(21,I)=ATHREE
379. FMT(16,I)=ATWO
380. FMT(16,I)=ATHREE
381. FMT(17,I)=ATWO
382. 908 FMT(19,I)=ATHREE
     C **** WRITE OUTPUT ON OC4 ****
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383. 909 WRITE (4,FMT)DECK,ISTAT,IYER,MTH,ID,(IWER(J),A2(J),A3(J),
    1W8(J),DB(J),WB(J),A4(J),IR1(J),A5(J),A6(J),A7(J),A8(J),
    2A9(J),A10(J),JSNOW(J),A11(J),A12(J),NRO(J),   PI(J),NBUI(J),
    3PI10(J),IXX(J),IBU(J),MC5(J),INDEX(J),J=1,14),RAIN,(IWER(I),
    4A2(I),A3(I),WS(I),DB(I),WB(I),A4(I),IR1(I),A5(I),A6(I),A7(I),
    5A8(I),A9(I),A10(I),JSNOW(I),A11(I),A12(I),NRO(I),PI(I),
    6NBUI(I),PI10(I),IXX(I),IBU(I),MC5(I),INDEX(I),I=15,24)
    C
    C **** RESET FORMAT FOR NORMAL CONDITIONS IF ALTERED ****
384. IF(CHG.EQ.0)GO TO 950
386. WRITE(6,363)IDATE
387. 363 FORMAT('     FORMAT ALTERED ON ',I6)
388. DO 928 J=1,24
389. IF(PI10(J).EQ.BLNK)PI10(J)=0
391. IF(MC5(J).EQ.BLNK)MC5(J)=0
393. IF(IBU(J).EQ.BLNK)IBU(J)=0
395. IF(NBUI(J).EQ.BLNK)NBUI(J)=0
397. IF(INDEX(J).EQ.BLNK)INDEX(J)=0
399. IF(PI(J)    .EQ.BLNK(PI(J)=0
401. DO 928 I=1,23
402. 928 FMT(I,J)=FOT(I)
403. FMT(22,14)=IFOUR
404. FMT(23,24)=RPAR
405. FMT(3.1)=TI2
406. FMT(2,1)=FA4
408. CHG=0
409. 950 LAST=IDATE
410. IAST1=IDATE1
411. GO TO 1
412. 960 SWIT=1
413. DO 961 I=1,24
414. 961 MAIR(K,I)=BLNK
415. GO TO 150
416. 2 END FILE 4
417. 666 IF(SWITCH.NE.1.)GO TO 664
    C **** END OF STATION CALCULATIONS ****
    C FIND AVERAGES
    C
    C
    C **** FIND AVERAGES, PUNCH ****
419. DO 978 I=1,12
420. AVER1(1,I)=
    1          1.0*TNBUI(I)/DENOM1(I)
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421. AVER1(2,I)=
                1.0*TFM10(I)/DENOM1(I)
422. AVER1(4,I)=
                1.0*TFM5(I)/DENOM1(I)
423. 978 AVER1(3,I)=
       1          1.0*TBUI(I)/DENOM1(I)
424. DO 975 I=1,12
425. DO 975 J=1,24
426. AVER2(1,I,J)=TTEMP(I,J)/DENOM2(I,J)
427. AVER2(2,I,J)=HUMID(I,J)/DENOM2(I,J)
428. AVER2(3,I,J)=FUEL(I,J)/DENOM2(I,J)
429. 975 AVER2(4,I,J)=TSIN(I,J)/DENOM2(I,J)
430. WRITE(6,980)ISTAT
431. 980 FORMAT('STATION',I7//)
432. WRITE(6,3012)
433. 3012 FORMAT(12X,'MAT.BUI',11X,'FM10',6X,'8-100 BUI',12X'FM5'
    116X)
434. WRITE(6,3013)
    1             (I,(AVER1(J,I),J=1,4),I=1,12)
435. 3013 FORMAT('0MONTH',I3,F10.3,5X,F10.3,5X,F10.3,16X)
436. DO 2323 J=1,12
437. 2323 WRITE(6,982)J,((M,(AVER2(I,J,M),I=1,4)),M=1,24
438. 982 FORMAT('1MONTH',I3,71X/24X,'TEMP.',4X,'REL.HUM.',4X'FFM',
    14X'SPRD.INDX',20X/24('   HOUR',I3,10X,4F10.3,20X/))
439. WRITE(6,327)
440. 327 FORMAT('1END STATION')
441. WRITE(7,2324)
442. 2324 FORMAT(20X,'PUNCH DECK - TIM FOR WEATHER')
443. WRITE(7,980)ISTAT
444. WRITE(7,3012)
445. WRITE(7,976)(I,(AVER1(J,I),J=1,4),I=1,12)
446. 976 FORMAT('MONTH',I3,F10.3,5X,F10.3,5X,F10.3,5X,F10.3,16X)
447. DO 2322 J=1,12
448. 2322 WRITE(7,981(J,((M,(AVER2(I,J,M),I=1,4)),M=1,24)
449. 981 FORMAT(' MONTH',I3,71X/23X,'TEMP.    REL.HUM.   FFM
    15PRD.INDX.',20X/24('   HOUR',I3,10X,4F10.3,20X/))
450. WRITE(7,2325)
451. WRITE(6,2325)
452. 2325 FORMAT('0END PUNCH OUPUT')
453. GO TO 999
    C
    C **** READ TO BEGINNING OF NEXT FILE TO BEGIN NEW STATION ****
454. 664 READ(1,8,END=665)
455. GO TO 664
```

```
665 SWITCH=1.0
GO TO 666
777 READ(2,778,END=2)
778 FORMAT(1HX)
GO TO 777
999 CONTINUE
WRITE(6,2387)(I,(MINUS(I,J,J=1,24),I=1,12)
2387 FORMAT('1     SUMMARY OF HOURS WITH MISSING DATA'/
   1          ('MONTH',I4,12I10/10X,12I10))
WRITE (6,328)
328 FORMAT('END OF JOB')
STOP
END
```

```
 2. SUBROUTINE PMPLUS(ISTAT,IDAT,ADD)
   C **** DATE OF OBSERVATION, PPM INCREASE ****
 3. DIMENSION ISTA(11)
 4. COMMON/BLOK2/ISTA
 5. ADD=0.0
 6. DO 15 L=1,3
 7. IF(ISTAT.EQ.ISTA(L)GO TO 20
 9. 15 CONTINUE
10. GO TO 87
11. 20 IF(IDAT .GE.401.AND.IDAT .LE.501)ADD=5
13. IF(IDAT .GE.502.AND.IDAT.LE.1116)ADD=10
15. RETURN
16. 87 DO 16 I=4,7
17. IF(ISTAT.EQ.ISTA(I)GO TO 28
19. 16 CONTINUE
20. GO TO 91
21. 28 IF(IDAT.GE.408.AND.IDAT.LE.506)ADD=5
23. IF(IDAT.GE.507.AND.IDAT.LE.1026)ADD=10
25. RETURN
26. 91 DO 17 I=8,11
27. IF(ISTAT.EQ.ISTA(I)GO TO 30
29. 17 CONTINUE
30. IF(IDAT.GE.501.AND.IDAT.LE.520)ADD=5
32. IF(IDAT.GE.521.AND.IDAT.LE.908)ADD=10
34. RETURN
35. 30 IF(IDAT.GE.415.AND.IDAT.LE.430)ADD=5
37. IF(IDAT.GE.501.AND.IDAT.LE.1025)ADD=10
39. RETURN
40. END
```

```
 2. SUBROUTINE SUB1(F,MORE)
    C
    C **** 8-100 BUI ACCUMULATION ****
 3. 66 IF(F.LT.4.0)MORE=10
 5. IF(F.GE.4.0)MORE=8
 7. IF(F.GE.5.0)MORE=6
 9. IF(F.GE.6.0)MORE=5
11. IF(F.GE.7.0)MORE=4
13. IF(F.GE.8.0)MORE=3
15. IF(F.GE.10.)MORE=2
17. IF(F.GE.15.)MORE=1
19. IF(F.GE.20.)MORE=0
21. RETURN
22. END
```

```
 2. SUBROUTINE SUB2(F,MORE)
    C
    C **** NAT.SYS.BUI ACCUMULATION ****
 3. 43 IF(F.LT.3.0)MORE=7
 5. IF(F.GE.3.0)MORE=5
 7. IF(F.GE.4.0)MORE=4
 9. IF(F.GE.5.0)MORE=3
11. IF(F.GE.7.0)MORE=2
13. IR(F.GE.10.)MORE=1
15. IF(F.GE.16.)MORE=0
17. RETURN
18. END
```

```
 2. SUBROUTINE SUB3(NRAI,JP,LNBUI,JY)
    C
    C **** NAT.SYS.BUI FROM RECOVERY TABLE ****
 3. 44 JP=1
 4. IF(NRAI.GE.20) JP=2
 6. IF(NRAI.GT.30) JP=(NRAI+29)/20
 8. IF(NRAI.GT.90) JP=6
10. IF(NRAI.GT.120)JP=7
12. IF(NRAI.GT.180)JP=8
14. IF(NRAI.GT.220)JP=9
16. IF(NRAI.GT.280)JP=10
18. JY=1
19. IF(LNBUI.GE.1) JY=2
21. IF(LNBUI.GE.3) JY=3
23. IF(LNBUI.GE.6) JY=4
25. IF(LNBUI.GE.10)JY=5
27. IF(LNBUI.GE.16)JY=(LNBUI+14)/5
29. IF(LNBUI.GE.51)JY=(LNBUI+79)/10
31. IF(LNBUI.GE.101)JY=18
33. IF(LNBUI.GE.121)JY=19
35. IF(LNBUI.GE.151)JY(LNBUI+849)/50
37. IF(LNBUI.GE.301)JY=23
39. IF(LNBUI.GE.400)JY=24
41. IF(JP.GT.10)JP=10
43. IF(JY.GT.24)JY=24
45. RETURN
46. END
```

```
 2. SUBROUTINE SUB4(I,JB,F,JF)
    C
    C **** ISOLATE SUBSCRIPTS FOR AFM TABLE ****
 3. JB=1
 4. IF(I.GE.1)   JB=2
 6. IF(I.GE.6)   JB=3
 8. IF(I.GE.13)  JB=4
10. IF(I.GE.20)  JB=I/10 + 3
12. IF(I.GE.70)  JB=9
14. IF(I.GE.90)  JB=10
16. IF(I.GE.100) JB=I/50 + 9
18. IF(I.GE.200) JB=13
20. IF(I.GE.400) JB=14
    C
22. IF(F.NE.0)GO TO 347
24. F=1.0
25. WRITE(6,329)
26. 329 FORMAT(' VALUE OF F IS ZERO')
27. 347 CONTINUE
28. IF(F.GE.1) JF=2.0*F - 1.0
30. IF(F.GT.2) JF=F + 1.5
32. IF(F.GT.5) JF=(F+8.9)/2
34. IF(F.GT.11)JF=(F+18.9)/3
36. IF(F.GT.20)JF=13
38. IF(F.GT.25)JF=14
40. IF(JB.GT.14)JB=14
42. IF(JF.GT.14)JF=14
44. RETURN
45. END
```

```
 2. SUBROUTINE SUB5(I,B,LAM)
    C
    C **** ISOLATE SUBSCRIPTS FOR SPREAD INDEX TABLE ****
 3. IF(I.LE.0)I=1
 5. IF(I.EQ.12)I=11
 7. IF(I.GE.13)I=I/5+10
 9. IF(I.GE.30)I=16
11. IF(B.LT.1.0)LAM=1.0
13. IF(B.GE.1.0)LAM=2.0*B -1.0
15. IF(B.GE.10.0)LAM=B+9
17. IF(B.GE.15.0)LAM=(B+33)/2
19. IF(B.GT.30)  LAM=32
21. IF(I.GT.16)I=16
23. IF(LAM.GT.32)LAM=32
25. RETURN
26. END
```

```
 2. SUBROUTINE CRUD(IVALV)
 3. DIMENSION A(495)
 4. IVALV=0
 5. WRITE(6,1)
 6. 1 FORMAT('1     ERROR IN RECORD(S) BELOW')
 7. DO 4 I=1,4
 8. 2 READ(2,3,END=98,ERR=10)A
 9. 3 FORMAT(200A1,200A1,95A1)
10. 4 WRITE(6,5)A
11. 5 FORMAT(' ',15A1/(1X,80A1)
12. GO TO 99
13. 98 IVALV=1
14. WRITE(6,12)
15. 12 FORMAT(' HIT EOF ON LOGICAL 2 WHILE IN CRUD')
16. GO TO 99
17. 10 WRITE(6,11)
18. 11 FORMAT(' NO GO ON READ. CONTINUING.')
19. 99 RETURN
20. END
```

Program III

Program for the IBM 360/65

```
 1.  //STEP1  EXEC FORTHCLG,PARM.FORT='MAP,LIST',TIME=5
 2.  //FORT.SYSIN  DD *
 3.        IMPLICIT INTEGER*4(A-R,T-Z)
 4.        DIMENSION IWD(24)
 5.        DIMENSION HR(24),WD(24),WSP(24),HUM(24),BUI(24)
 6.        NN=0
 7. 20     READ(8,1,ERR=91,END=99),YR,MO,DAY,HR(I),WD(I),WSP(I),
 8.       1HUM(I),BUI(I),I=1,24
 9.        NN=NN+1
10. 1      FORMAT(9X,312,23(A2,8X,A2,A3,10X,A3,57X,A3,15X),A2,8X,
11.       1A2,A3,10X,A3,57X,A3)
12.        DO 10 I=1,24
13.        CALL STRIP(HR(I))
14.        CALL STRIP(WD(I))
15.        CALL STRIP(WSP(I))
16.        CALL STRIP(HUM(I))
17.        CALL STRIP(BUI(I))
18.        IF(WSP(I).EQ.999)WSP(I)=0
19.        IF(HUM(I).EQ.999)HUM(I)=0
20.        IF(BUI(I).EQ.999)BUI(I)=0
21.        CALL CONVT(WD(I),IWD(I))
22. 10     CONTINUE
23.        DO 11 I=7,24
24.        WRITE(9,2)YR,MO,DAY,HR(I),HUM(I),WSP(I),IWD(I),BUI(I)
25. 2      FORMAT(412,213,12,13)
26. 11     CONTINUE
27.        GO TO 20
28. 91     WRITE(6,4)NN
29. 3      FORMAT(T1,'1NOTE:RECORD PLUS 1 HAS BAD DATA',I10)
30.        GO TO 20
31. 99     WRITE(6,4)NN
32. 4      FORMAT(' EOF.ENCOUNTERED.',I10,'.RECORDS.READ.')
33.        STOP
34.        END
35.        SUBROUTINE CONVT(X,Z)
36.        IMPLICIT INTEGER*(A-R,T-Z)
37.        Y=0
38.        IF(X.EQ.11)Y=1
39.        IF(X.EQ.12)Y=2
40.        IF(X.EQ.22)Y=3
41.        IF(X.EQ.32)Y=4
42.        IF(X.EQ.33)Y=5
43.        IF(X.EQ.34)Y=6
44.        IF(X.EQ.44)Y=7
45.        IF(X.EQ.54)Y=8
46.        IF(X.EQ.55)Y=9
```

```
      IF(X.EQ.56)Y=10
      IF(X.EQ.66)Y=11
      IF(X.EQ.76)Y=12
      IF(X.EQ.77)Y=13
      IF(X.EQ.78)Y=14
      IF(X.EQ.88)Y=15
      IF(X.EQ.18)Y=16
      Z=Y
      RETURN
      END
//GO.FT08F001 DD DISP=(OLD,KEEP),UNIT=OC5,LABEL=(01,NL), *
//                DSNAME=IN01,                            *
//                DCB=(RECFM=F,BLKSIZE=2487,DEN=2,TRTCH=ET), *
//                VOLUME=SER=#4502
//GO.FT09F001 DD DISP=(OLD,KEEP),UNIT=OC4,LABEL=(,BLP),  *
1FSNAME=OUT1,                                             *
//                DCB=(RECFM=FB,BLKSIZE=720,DEN=1,TRTCH=ET,  *
//                LRECL=24                                *
//                VOLUME=SER=#0351
//GO.SYSABEND  DD SYSOUT=A
//GO.SYSIN  DD                                            *
```

Program IV

Program for the IBM 7094

```
      INTEGER SWSP,SHUM,SBUI,SDATE,SHR,SWD,DAY,TWD,CNT
 1.   DIMENSION SWSP(20),SHUM(20),SBUI(20),SDATE(20),SHR(20),SWD(20)
 2.   DIMENSION NI(5),NJ(5),NK(5),NL(5)
 3.   DIMENSION DAY(3654),TWD(20)
 4.   DO 109 I=1,3654
 5.   109 DAY(I)=0
 6.   LJK=13
 7.   JFK=1
 8.   REWIND 8
 9.   READ(5,6)NI,NJ,NK,NL
10.   6 FORMAT(20I2)
11.   WRITE(6,77)NI,NJ,NK,NL
12.   77 FORMAT(20I5)
13.   DO 101 II=1,5
14.   DO 100 KI=1,5
15.   KY=0
16.   KX=0
17.   DO 100JI=1,5
18.   DO 100 LI=1,5
19.   CNT=1
20.   NY=0
21.   NX=8
22.   N1=NI(II)
23.   N2=NJ(JI)
24.   N3=NK(KI)
25.   N4=NL(LI)
26.   IF(N1.EQ.10.AND.N2.NE.39)GO TO 100
27.   IF(N1.GE.N2.)GO TO 100
28.   IF(N3.EQ.1.AND.N4.NE.9)GO TO 100
29.   IF(N3.GE.N4)GO TO 100
30.   IF(N2.EQ.79.AND.N1.NE.40)GO TO 100
31.   IF(N4.EQ.99.AND.N3.NE.16)GO TO 100
31.1  49 IF(KY.EQ.0)GO TO 490
31.2   CALL DATA(SDATE,SHR,SHUM,SWSP,SWD,SBUI,NX,KNT,NY)
32.    GO TO 492
32.1  490 IF(EOF88(0))99,491,99
32.2  491 READ(88,1)(SDATE(J),SHR(J),SHUM(J),SWSP(J),TWD(J),SBUI(J),
32.3  1J=1,18)
33.    DO 60 I=1,18
34.    60 SWD(I)=TWD(I)
35.    492 NY=NY+1
36.    IF(NX.NE.8)GO TO 99
37.    1 FORMAT(I6,I2,2I3,I2,I3)
37.1   10 FORMAT( 4(I6,I2,2I3,I2,I3))
```

```
      JFK=1
      500 DO 50 I=JFK,LJK
      IF(SHUM(I).LT.N1.OR.SHUM(I).GT.N2)GO TO 50
      IF(SWSP(I).LT.N3.OR.SWSP(I).GT.N4)GO TO 50
      JJ=I+1
      J=I+5
      L=0
      DO 62 K=JJ,J
      K=K
      IF(SHUM(K).LT.N1.OR.SHUM(K).GT.N2)GO TO 61
      IF(SWSP(K).LT.N3.OR.SWSP(k).GT.N4)GO TO 61
      62 CONTINUE
      Y1=SWD(I)
      DO 51 K=JJ,J
      Y2=SWD(K)
      IF(SWD(K).EQ.0.OR.SWD(I).EQ.0)GO TO 58
      IF(ABS(Y1-Y2).GE.13.5)GO TO 58
      IF(ARS(Y1-Y2).GT.2.)GO TO 50
      58 KL=K
      51 CONTINUE
      KK=I
      WRITE(10,2)CNT,N1,N2,N3,N4,SDATE(KK),SHR(KK),SHUM(KK),
     1SWSP(KK),SWD(KK),SBUI(KK)
      2 FORMAT(I6,4I2,I6,5I3)
      DAY(NY)=SDATE(1)
      IF(SY.NE.0)GO TO 41
      KNT=CNT-1
      DAY(CNT=SDATE(10)
      WRITE(9,10)SDATE(J1),SHR(J1),SHUM(J1),SWSP(J1),SWD(J1),
     1SBUI(J1),J1=1,18)
      40 CONTINUE
      41 CONTINUE
      CNT=CNT+1
      GO TO 49
      CONTINUE
      GO TO 49
      61 JFK=K+1
      IF(JFK.GT.13)GO TO 49
      GO TO 500
      99 WRITE(6,4)CNT
      4 FORMAT(1HO,28H-TOTAL NO. OF SITUATIONS IS-,110)
      WRITE(6,7)N1,N2,N3,N4
      7 FORMAT(1HO,31H-0 PARAMETERS FOR HUMIDITY ARE-,2I10/1X,
     133H-0 PARAMETERS FOR WIND SPEED ARE-,2I10)
```

```
77.     KX=1
78.     KY=1
79.     REWIND 88
80.     REWIND 9
81.     100 CONTINUE
82.     101 CONTINUE
83.     STOP
84.     END
85.     $IBFTC PAT
86.     SUBROUTINE DATA (S1,S2,S3,S4,S5,S6,N,K,K1)
87.     INTEGER S1,S2,S3,S4,S5,S6
88.     DIMENSION S1(20),S2(20),S3(20),S4(20),S5(20),S6(20)
89.     N=8
89.1    K2=K-1
89.2    IF (K2.EQ.K1)GO TO 99
89.3    IF(EOF9(0))99,2,99
89.4    2 READ(9.1)(S1(J),S2(J),S3(J),S4(J),S5(J),S6(J),J=1,18)
89.5    1 FORMAT( 4(I6,I2,2I3,I2,I3))
90.     RETURN
91.     99 N=9
92.     RETURN
93.     END
93.1    $IBMAP UN88
93.2    ENTRY   .UN88
93.3    .UN88.PZE      UNIT88,,4
93.4    UNIT88 FILE      ,CK2,BCK,MOUNT,BLK=120,INOUT,HOLD
93.5    END
93.6    $DATA
94.     10203040507969594939010411016219921150904
```

Program V

Program for the IBM 360/65

```
1.  //IN JOB E3006-1190160,SKEES,MSGLEVEL=1
2.  //STEP EXEC PGM=IEBGENER
3.  //SYSPRINT  DD  SYSOUT=A
4.  //SYSUT1 DD UNIT=OC5,LABEL=(,NL),DISP=(OLD,KEEP),DSNAME=IN,  *
5.  //              DCB=(RECFM=F,BLKSIZE=36,TRTCH=ET,DEN=1,     *
6.  //              VOLUME=(,,,2,SER=(#0354,#9217))
7.  //SYSUT2  DD  UNIT=OC4,LABEL=(,BLP),DSNAME=OUT,              *
8.  //            DISP=(OLD,KEEP),                            *
9.  //            DCB=(RECFM=FB,LRECL=36,TRTCH=ET,            *
10. //            BLKSIZE=1800,DEN=2)                         *
11. //            VOLUME=SER=#0353
12. //SYSIN  DD DUMMY
13. /*
```

Program VI

Program for the IBM 360/65

```
1.  //TAPCOP JOB E3006-1199210,LAMB, MSGLEVEL=1
2.  //LAMB EXEC FORTHCLG
3.  //FORT.SYSIN DD                                                    *
4.        DIMENSION A(36)
5.        M=0
6.        MM=0
7.        READ(5,1) NREC,LREC
8.        IF(NREC.EQ.0)GO TO 30
9.        CALL RECSKP(8,NREC,M)
10. 1     FORMAT(2I5)
11. 30    DO 10 I=1,LREC
12.       READ(8,2)A
13. 2     FORMAT(36A1)
14.       WRITE(9,2)A
15.       MM=MM+1
16. 10    CONTINUE
17.       WRITE(6,4)M,MM
18. 4     FORMAT(I10,'.RECORDS.SKIPPED.',I10,'.RECORDS.READ.')
19.       STOP
20.       END
21.       SUBROUTINE RECSKP(N,NREC,M)
22.       DO 10 I=1,NREC
23.       READ(N,1)
24. 1     FORMAT(36X)
25. 10    CONTINUE
26.       RETURN
27.       END
28. *
29. //GO.FT08F001 DD DISP=(OLD,KEEP),UNIT=0C5,LABEL=(03,NL),           *
29.1 //              DSNAME=IN01,DCB=(RECFM=FB,                       *
29.2 //              LRECL=36,TRTCH=ET,BLKSIZE=1800,DEN=2),           *
30.  //              VOLUME=SER=#0350
31.  //GO.FT09F001 DD DISP=(OLD,KEEP),UNIT=0C4,LABEL=(01,NL),         *
31.1 //              DSNAME=OUT,DEB=(RECFM=F,BLKSIZE=36,DEN=1,        *
31.2 //              TRTCH=ET,LRECL=36),                              *
32.  //              VOLUME=SER=#0533
33.  //GO.SYSIN DD                                                    *
34.  2326110624
```

Program VII

Program for the IBM 360/65

```
 1.                DECLARE a(14)    DEC(6);
 2.5               DECLARE b(14)    DEC(6);
 3.8               a=0;
 4.                n=0;
 5.                LL=1000;
 6.                UL=0;
 7.      leep:     GET LIST(b);
 8.5               a=b;
 9.      loup:     DO i=1 TO 14;
10.                IF a(i) < 0 THEN GO TO pass;
11.                IF a(i) > UL THEN UL=a(i);
12.                IF a(i) < LL THEN LL=a(i);
13.                n=n+1;
14.                END loup;
15.     pass:      ax=0;
16.     loop1:     DO i=1 to n;
17.5               a(i)=b(i);
18.                ax=ax+a(i);
19.                END loop1;
20.                xb=ax/n;
21.                DECLARE sx(4) ;
22.                sx=0;
23.     L:         DO i=1 TO n;
24.     LL:        DO j=1 TO 4;
25.                sx(j)=sx(j)+(a(i)-xb)**j;
26.                END LL;
27.                END L;
28.                ax=ax/n;
29.                sd=sqrt(sx(2));
30.                cv=sd/ax*100;
31.                r=uL-LL;
32.                rb1=sx(3)/sqrt(sx(2)**3);
33.                b2=sx(4)/sx(2)**2;
34.                PUT IMAGE(xb,n,sd,UL,LL,r,cv)(x);
35.                PUT IMAGE(sx(1);sx(2),sx(3),sx(4))(h);
36.                PUT IMAGE(rb1,b2)(h1);
37.     x:         IMAGE;
xb=-----,  n=-----,  sd=---.-,  UL=----,  LL=----,  r=-----,cv=---.--
38.     h:         IMAGE;
sx(1)=-----,  sx(2)=-------,  sx(3)=------------,  sx(4)-----------
39.     h1:        IMAGE;
rb1=-------.----,  b2=-------.----
40.                GO TO leep;
41.                END ;
```