

NASA CR 163, 122



3 1176 00161 4743

KSC TR 51-2, Vol II of IV  
August 1980

NASA-CR-163122  
19800019335

## *Nasa Contract Report 163122*

*A Continuation of Base-Line Studies  
for Environmentally Monitoring  
Space Transportation Systems  
at John F. Kennedy Space Center*

# **Chemical Studies: Rainfall Soil Analysis**

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WASHINGTON, D.C. 20540

NF02068

National Aeronautics and  
Space Administration

**John F. Kennedy Space Center**



VOLUME II  
OF THE  
FINAL REPORT  
TO THE  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
JOHN F. KENNEDY SPACE CENTER

A CONTINUATION OF BASE-LINE STUDIES FOR ENVIRONMENTALLY  
MONITORING SPACE TRANSPORTATION SYSTEMS (STS)  
AT JOHN F. KENNEDY SPACE CENTER

CONTRACT NO. NAS 10-8986

VOLUME II OF IV: CHEMICAL STUDIES OF RAINFALL  
AND SOIL ANALYSIS

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AUGUST 21, 1979

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BIOSCIENCE OPERATIONS  
CODE MD-B  
JOHN F. KENNEDY SPACE CENTER  
NASA

*NS1-11627#*

## PREFACE

This document is part of a University of Central Florida contract report, "A Continuation of Base-Line Studies for Environmentally Monitoring Space Transportation Systems at John F. Kennedy Space Center."

The entire report consists of four volumes and an executive summary, all identified as KSC TR 51-2, NASA CR 163122:

Volume I: Terrestrial Community Analysis

Volume II: Chemical Studies of Rainfall and Soil Analysis

Volume III: Part I--Ichthyological Studies, Ichthyological Survey of Lagoonal Waters; Part II--Ichthyological Studies, Sailfin Molly Reproduction Study

Volume IV: Part I--Threatened and Endangered Species of the Kennedy Space Center: Marine Turtle Studies, Part II--Threatened and Endangered Species of the Kennedy Space Center: Threatened and Endangered birds and Other Threatened and Endangered Forms

Executive Summary

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THE CHEMISTRY OF RAINFALL AND SOILS AT  
JOHN F. KENNEDY SPACE CENTER

The general objectives of this contract were as follows:

- (1) to characterize and quantify selected components of the environment,
- (2) to select from among the components studied those which would be appropriate for the detection and assessment of possible perturbations induced by future NASA operations;
- (3) to develop baseline data sufficient to define normal variation (i.e., changes not associated with NASA activities) in those selected environmental components; and
- (4) to determine the kinds and amounts of measurements required to detect and document environmental perturbations that might be caused by future NASA activities.

The results of a study which was designed to monitor, characterize, and evaluate the chemical composition of precipitation (rain) which fell at the Kennedy Space Center, Florida (KSC) during the period July, 1977, to March, 1979, are the subject of the first section of this report. In the second section results obtained from a soil sampling and associated chemical analysis program will be described.

# PRECIPITATION CHEMISTRY

## Introduction

Sampling and chemical analysis of precipitation were used to determine acidity, conductivity, and individual ionic species concentrations. Sample acidity was determined based on dissociated acid concentration (free acidity), strong acid concentration, and titratable acidity. Concentrations of sodium, potassium, calcium, magnesium, ammonium ion, chloride, fluoride, nitrate, orthophosphate, and sulfate were also determined regularly. No attempt was made to evaluate the composition of atmospheric deposition which occurred by means other than rainfall. Throughout this text, the term precipitation means only wet deposition in the form of rainfall, collected by a procedure which excludes dry deposition.

Objectives of this study were:

1. Determine and characterize the acidity of rain which fell on Merritt Island and KSC in a time period prior to the first Space Shuttle launch.
2. Determine concentrations of major contributors to the overall rainfall, including sodium, potassium, calcium, magnesium, ammonium, chloride, fluoride, nitrate, orthophosphate, sulfate, aluminum, and vanadium.

Once established, these prelaunch ambient data can be utilized in assessing long-term and short-term effects of Space Shuttle launches on the composition of precipitation. Such post-launch assessment of long-term effects can be attempted only if a post-launch precipitation monitoring program is operational. Post-launch assessment of significant episodic changes in precipitation composition depends on the ability to sample and chemically analyze a portion of the specific precipitation when it occurs.

No attempt was made to identify specific sources which contribute to the measured composition of rain at KSC. Experimental design emphasized determining existing composition and allowed only restricted conclusions which pertain to relationships among components in the rain to be drawn.

For several years, NASA has been evaluating potential environmental effects associated with launch of the Space Shuttle. One potential problem comes from solid rocket boosters (SRB) on the launch vehicle. The SRB propellant is approximately 70% ammonium perchlorate as oxidant, 16% powdered aluminum as fuel and stabilizer to control burning rate, 14% polybutadiene acrylic nitrile as binder, and minor constituents (NASA, 1978). The SRB exhaust products, by weight percent composition are HCl (21.2%), Al<sub>2</sub>O<sub>3</sub> (30.1%), CO (24.1%), CO<sub>2</sub> (3.4%), H<sub>2</sub> (2.1%), N<sub>2</sub> (8.5%), H<sub>2</sub>O (9.3%), and FeCl<sub>2</sub> (0.6%) (NASA, 1978). A diffusion model has been developed and is briefly summarized by Susko (1979). This model makes it possible to calculate downwind concentrations of exhaust products in the ground cloud. Each launch will generate and release approximately 10<sup>5</sup> kg HCl below 4 km altitude. Precipitation during or immediately after launch may lead to scavenging HCl and result in acid rain.

Predictions (Pellett, 1977) indicate that acid rain of pH less than 1.0 could occur in proximity to the launch site. Acid rain of pH less than 3.0 could occur at extended distances, depending on meteorology and exhaust cloud dynamics which occur during and after launch.

Precipitation collection at sites on or near KSC, latitude 80° 44' W, longitude 28° 38' N, began in July 1977. One site on the campus of UCF (University of Central Florida, latitude 81° 20' W, longitude 28° 33' N), was also utilized. One aspect of site selection was dictated by requirements to provide data from samples collected in proximity to a NASA ambient air quality monitoring network operated by the Booster Exhaust Study Test (BEST). In addition, several sites were selected in proximity to several locations used both as part of a soil chemistry program described in the second part of this volume, and as part of a terrestrial community analysis program (Stout, 1979).

Samples were obtained using collectors open to the atmosphere only during periods of precipitation. Rainfall was collected at 24-hour intervals Monday through Friday; exceptions which increased the intervals did sometimes occur. Samples were generally representative of precipitation which occurred during 24-hour periods ending on Tuesday through Friday, and 72-hour periods ending on Monday.

Several experiments were carried out to evaluate and account for the variability observed in precipitation data. Analytical, sampling, and spatial variability in precipitation data were measured. The quality of chemical analysis data was monitored routinely using the compositional anion/cation ratio, measured conductivity/predictive conductivity ratio, and predictive pH. Predictive conductivity was calculated by summing the ionic concentration and equivalent conductance product for each measured chemical species on a sample by sample basis. Predictive pH can be calculated from the sum of the anion, sum of the cation difference when contribution to the cation sum excludes hydrogen ion. Sample stability, storage conditions, and contamination problems were also studied.

## Background

Acidity of precipitation has increased dramatically in some areas in the past 30 years. Precipitation with a pH less than 5.65 is considered to be acidic. The  $\text{CO}_2 - \text{HCO}_3^-$  equilibrium in precipitation is such that rainwater in equilibrium with the accepted standard atmospheric  $\text{CO}_2$  concentration of 316 ppm will contain concentrations of  $\text{H}_2\text{CO}_3$  and  $\text{HCO}_3^-$  which render it slightly acidic (Reuss, 1975). Precipitation, therefore, is not expected to have a neutral pH of 7.0 but is naturally somewhat acidic. The presence of  $\text{HCO}_3^-$  in precipitation can be extremely important because it acts as a buffer to prevent significant increases in pH (Reuss, 1975) to the extent that basic or alkaline precipitation is rare. The introduction of acidic materials or acid precursors into the atmosphere and the ultimate incorporation into precipitation must occur to an extent which will significantly decrease  $\text{HCO}_3^-$  concentrations (Reuss, 1975) before acid precipitation will occur.

Until the latter 1960's occurrences of acid precipitation in the U.S. were not documented extensively. During the past 10 years, several reports on the collection and chemical analysis of acid precipitation in the northeastern U.S. have appeared (Likens, 1976; Coybill and Likens, 1974; Likens and Bormann, 1974; Likens, Bormann, and Johnson, 1972). Only two nationwide sampling and precipitation chemistry programs have been performed. Each covered relatively short time periods (Junge and Werby, 1958, Junge, 1963, and Lodge, 1968) during the late 1950's and late 1960's. During the past year, the National Atmospheric Deposition Program became operational (Galloway and Cowling, 1978) with sites located mostly in the eastern U.S. and a few scattered sites in the middle and western U.S. Many of the original U.S. studies emphasized determining major chemical species present in the precipitation and assessing the influence that precipitation would have on nutrient cycling in ecosystem studies. As the acidity of precipitation has increased, greater attention has been given to evaluating regional, national, and global sources of pollution which may contribute to creating acid precipitation. More recently, expanded interest and effort has been utilized to study the problem. In the U.S., Federal and state government agencies, private industry, and universities have participated in studies to monitor the composition of precipitation in the U.S. (Galloway and Cowling, 1978; Liljestrang and Morgan, 1978; McColl and Bush, 1978; Valiela, et al., 1978, Jacobson, et al., 1976; Richardson, 1976, Cooper and Lopez, 1976, Miller, 1975).

Several detailed studies have been performed to evaluate methods of analysis, sample collector design, and sample handling (Galloway and Likens, 1978, 1976; Lewis and Grant, 1978; Slanina, et al., 1978, Volchok and Graveson, 1976). Because precipitation samples typically contain chemical species at parts per million and lower concentrations, extreme care must be exercised in collection, sample storage, and analysis. Sample storage options have recently been evaluated (Galloway and Likens, 1978, Peden and Skowron, 1978; Galloway and Likens, 1976). Chemical analysis methods involve a variety of techniques. Choice of the appropriate techniques has varied for individual programs. Several studies to evaluate individual techniques have been performed (Mullik, 1978). Recent developments in analytical instrumentation now make possible the

relatively rapid and routine analysis of precipitation samples for major chemical species and for many species present at trace concentrations.

A recent report (Likens, 1976) presents views and summarizes results of acid precipitation studies in the U.S. and Scandinavia during the past 25 years. As consumption of fossil fuels has increased on a global scale, the acidity of precipitation has been observed to increase. The consequences of this increase have far-reaching implications. The gradual erosion of manmade objects constructed from cement and marble has been occurring at accelerated rates and may be due to increases in concentrations of acidic compounds in the atmosphere and in precipitation. Systematic and detailed studies to evaluate the interactions and influences that acid precipitation may have on soils, rivers, and lakes, and plant and animal life are in their infancy. It is believed that some of these natural systems already are undergoing stress and gradual change due to acid precipitation (Likens, 1976). Several years or decades of study may be required to even partially assess the impact of acid precipitation on the environment.

The effects of acid precipitation on aquatic and terrestrial ecosystems was the subject of a recent literature review (Cornell University, 1976) and an international symposium (Dochinger and Seliga, 1976). Hornbeck, et al. (1977) analyzed the longest continuous set of precipitation data obtained in the U.S. and evaluated seasonal patterns in acidity of precipitation and their implications for forest stream ecosystems. Data for the northeastern U.S. from 1965 to 1973 were utilized. Gorham (1976) presented an overview of acid precipitation and its influence on aquatic ecosystems. The papers include extensive bibliographical information.

Although acid precipitation is increasing in the U.S., several European countries have experienced even greater acid precipitation. Recent reports summarize results and describe the magnitude of efforts which are occurring in Scandinavia, the Netherlands, and England to study this rapidly growing global problem (Granat, 1978; Vermeulen, 1978; Martin and Barker, 1978). Acid rain has been studied in Canada (Summers and Whelpdale, 1976). The southern Ontario region is particularly susceptible to these occurrences (Dillon, et al., 1978). Many of these programs are designed to assess sources for pollutants and transport of pollutants across national boundaries which cause the problem while others continue the attempt to assess the impact of increased pollution on the environment.

#### Assessment of Precipitation Acidity

Recent studies which have emphasized assessing acidity of precipitation samples or acidic components in atmospheric aerosols and particles have varied. Data are typically generated by titration of the sample while monitoring titration progress through measurement of pH when adding hydroxide ions. The hydroxide ion either is generated coulometrically within the sample or added as a dilute standard solution of sodium hydroxide. In most cases, evaluation of the potentiometric titration data is accomplished by linearization of selected portions of the titration curves. The original theory which is used as the basis for this

approach was introduced by Gran (1952). Liberty, et al. (1972) determined the nonvolatile acidity of rain water by a coulometric procedure where the data were treated by the Gran theory. Both strong acidity and nonvolatile weak acidity were determined. Strong acidity is a measure of the total concentration of the free hydrogen ion, present due to totally dissociated acids such as HCl,  $\text{HNO}_3$ , and  $\text{H}_2\text{SO}_4$ . Weak acidity is a measure of the total concentration of undissociated acids which are present. Weak organic acids such as formic acid and acetic acid may be responsible. Galloway, Likens, and Edgerton (1976) identified several weak acids in precipitation which occurred at Ithaca, N.Y., and Hubbard Brook, N.H.

Askne and Brosset (1972) determined the strong acid component in precipitation by titrating samples with 0.001M NaOH and using the Gran plot treatment of data. Krupa, Coscio, and Wood (1976, 1976a) evaluated a coulometric titration procedure for detecting strong and weak acid components in rainwater and presented evidence for multiple hydrogen-ion donor systems in rain. Galloway and Likens (1979) considered the magnitude of error associated with measuring acidity and suggested a generalized procedure for analyzing pH and acidity in acid precipitation samples. Brosset (1978) evaluated water-soluble sulfur compounds in aerosols using a modified Gran plot technique.  $(\text{NH}_4)_2\text{SO}_4$ ,  $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$ , and  $\text{NH}_4\text{HSO}_4$  were identified in the five particle sulfate phases. Jacobson, et al. (1976), concluded that samples collected in Yonkers, New York, in 1974, titrated as though they contained a monoprotic acid with an equivalence point pH near 7.

Seymour, Clayton, and Fernando (1977) used an iterative calculation to segment and linearize potentiometric titration curves. Modified Gran plots were obtained which allow both acid dissociation constants and concentrations to be determined for acidic components in the sample. Applications for the determination of acidic components in atmospheric condensates and rainwater were shown. Seymour, et al. (1978) then used the modified Gran plot technique to evaluate variations in the acid content of rainwater in the course of a single precipitation and concluded that strong acids,  $\text{NH}_4^+$  and dissolved  $\text{CO}_2$  represented the major acid components. These latter developments and refinements of techniques allow a clearer elucidation of specific acidic species in precipitation although their utilization would seem to be limited to research projects rather than routine analysis.

#### Studies in the Southeastern U.S.

Studies to evaluate the composition of precipitation in the southeastern U.S. and Florida have been quite limited. The data of Junge (1963) and Junge and Werby (1958) include results obtained from samples collected near Palm Beach and Tampa, Florida. During the summer of 1973, the Florida Area Cumulus Experiment (FACE) was conducted in south Florida. The program measured the effects of cloud seeding on aerial rainfall. From this program emerged a two-year study (1974 to 1976) of precipitation composition (Wisniewski and Cotton, 1977). Haines (1976) reported acidity measurements from rain collected on the Georgia coast in 1975. More recently, a precipitation collection network of 26 sites

which extends from the Florida panhandle to the Keys has become operational (Brezonik and Edgerton, 1979). Most sites are sampled biweekly by collecting bulk precipitation.

### Meteorology

Two recent publications have appeared which attempt to relate meteorological factors and acid precipitation. Both utilize interpretation of air-mass trajectories (NOAA, 1978) which are associated with precipitation which occurred in Ithaca, N.Y. (Miller, Galloway, and Likens, 1978) and metropolitan New York (Wolff, et al., 1978). Precipitation composition was related to air mass movement and location for several days prior to arrival at the sampling location. Seasonal differences were also noted.

Seasonal variations in precipitation composition have been observed in most studies which continued uninterruptedly for at least one complete year. Acidity is at a maximum during the summer. These maxima also correspond to increased levels for sulfate and nitrate in precipitation. The higher temperatures of summer can increase the rate of oxidation of  $\text{SO}_2$  and nitrogen oxide to sulfuric acid and nitric acid respectively. The more stable summertime air mass results in increased residence time over the continental U.S. for potential acid precursors. These combined effects may account for the elevated acidity, sulfate, and nitrate levels present in precipitation during the summer months.

### Existing KSC Air Quality

In a recent report, Thorpe (1978) summarized composition of the SRB ground cloud, ambient air quality, and monitoring programs in east central Florida and pollutant sources near KSC. Several sources may contribute to the composition of rainfall as measured in this study. Thorpe concludes that there are relatively few significant pollutant sources near KSC and ambient air quality is good. The major local sources of pollutants include two power plants operated by Florida Power and Light (FPL) and Orlando Utilities (OU). These plants are located approximately 22 km southwest of the Shuttle launch pad. Both plants burn natural gas and fuel oil. The FPL plant burns low sulfur fuel (1%) while the OU plant burns number 6 fuel oil with sulfur contents between 1% and 3%. The 1976 emission estimates for the FPL and OU plants were 12,000 tons  $\text{SO}_2$  for each and 13,000 and 36,000 tons  $\text{NO}_2$  respectively (Thorpe, 1978). Other sources of pollution which may be significant include asphalt and cement plants, some agricultural burning, and local automobile traffic. Combustion of fossil fuels in automobile engines can generate  $\text{NO}$  and  $\text{NO}_2$  which can be oxidized to  $\text{HNO}_3$ . Using catalytic converters to reduce auto emissions may be increasing  $\text{H}_2\text{SO}_4$  concentrations near ground level (Holden, 1975).

### Typical Chemical Composition of Precipitation

The major chemical species observed to occur in precipitation are discussed below. Emphasis is placed on general sources of origin (Granat, 1972, Butcher, 1972) and the contribution that each has to the composition of precipitation in Florida.

Free Acidity. The measured acidity of precipitation based on pH is due primarily to the presence of strong acids such as HCl, HNO<sub>3</sub>, and H<sub>2</sub>SO<sub>4</sub>. Sources of these strong acids are described in the following paragraphs when individual anions are considered.

Sodium. The predominant source is seawater. Sodium enters the atmosphere as sea spray. Anthropogenic source emissions may also introduce small amounts. In marine environments, incorporation of sea salt may have a slight neutralizing effect on precipitation. Sea water has a pH of about 8.5. Considerable sea salt exists in precipitation at KSC and at all coastal locations in Florida. Precipitation for all of inland peninsula Florida should be subjected to moderated levels of sea salt.

Potassium, Calcium, Magnesium. For coastal locations in Florida, sea spray provides a significant source for these species. Alternate sources include dust in the atmosphere resulting from soil erosion and anthropogenic emissions. The latter will contribute little compared to the other sources at KSC.

Ammonium. Ammonium ions in precipitation are produced by the reaction of NH<sub>3</sub> with hydrogen ion present in precipitation. The NH<sub>3</sub> can be generated by bacterial action on nitrogen compounds in the soil (Junge, 1963). The NH<sub>4</sub> functions as a weak acid pka = 9.2 in precipitation (Seymour, Clayton, and Fernando, 1977). Several ammonium compounds in the atmosphere have been identified as (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, (NH<sub>4</sub>)HSO<sub>4</sub>, (NH<sub>4</sub>)<sub>3</sub>H(SO<sub>4</sub>)<sub>2</sub> (Brosset, 1978).

Chloride. The predominant source of chloride is seawater. Chloride enters the atmosphere as sea spray. Anthropogenic sources introduce small quantities mainly as HCl. This is not, however, a significant source of chloride at coastal locations in Florida. It has been proposed (Mohnen and Yue, 1977) that HCl in the atmosphere is produced by the reaction of H<sub>2</sub>SO<sub>4</sub> and NaCl. The latter originates in the ocean. This process simply generates HCl in place of H<sub>2</sub>SO<sub>4</sub> and does not change the total amount of strong acid present. Similarly, the amount of Cl<sup>-</sup> is not affected by this process.

Sulfate. There are several potential sources of sulfur-containing compounds in the atmosphere. Anthropogenic emissions (predominantly sulfur dioxide), microbial processes in soils which produce sulfate hydrogen sulfide, and sea spray are all likely to contribute in the KSC area. Sulfur dioxide and hydrogen sulfide are oxidized to sulfate through a variety of postulated mechanisms. Sea spray is the predominant amount of "neutral" sulfate in coastal regions and is a significant source at KSC. The presence of SO<sub>4</sub> in precipitation at concentration levels in excess of those predicted to be present due to sea spray (Granat, 1972) are often associated with the acid rain phenomenon. Significant excess SO<sub>4</sub><sup>2-</sup> is present in certain precipitation events at KSC.

Nitrate. Nitrogen oxides enter the atmosphere from a variety of sources. These include bacterial action and combustion. The internal combustion engine produces nitrogen oxides by oxidizing nitrogen in the



atmosphere. Both NO and NO<sub>2</sub> are oxidized and can result in increased concentrations of nitrate and nitric acid in precipitation.

Fluoride. Fluoride as HF can be present in the atmosphere. Combustion of fluorine-containing fuels and certain industrial waste gases are sources (Israel, 1974). Producing phosphate fertilizers by the reaction of H<sub>2</sub>SO<sub>4</sub> with phosphate rock containing considerable amounts of Ca<sub>5</sub>(PO<sub>4</sub>)<sub>3</sub>(F<sup>-</sup>, Cl<sup>-</sup>, or OH<sup>-</sup>) generates HF. The phosphate industry in west central Florida is a potential regional source for HF in the atmosphere and, therefore, in precipitation.

## Methods and Procedures

### Precipitation Collectors

Samples were collected with Aerochem Model 201 automatic wet/dry precipitation collectors purchased by NASA. The collectors are an improved version of the A.E.C. collector designed by the Health and Safety Laboratory of the Atomic Energy Commission (Volchok and Graveson, 1976; Galloway and Likens, 1976). The collectors were manufactured by Webco Miami, Inc. The collectors were operated using 12V 7 ampere-hr. batteries from June 1977 to November 1977. Higher capacity 12V 30 ampere-hr. batteries were utilized for subsequent collections. The latter batteries gave reliable performance when replaced at two to four-week intervals with recharged batteries. Precipitation samples were collected in polyethylene buckets which have (approximately) a 15-liter capacity. Dimensions are 28.6 cm diameter and 23.4 cm depth; this yields a collection surface of 640 cm<sup>2</sup>.

### Precipitation Collection Sites

Fifteen locations at or near KSC were utilized. One additional collector was located on the UCF campus. The specific location for each collector was established using a variety of criteria. Operational sites were located near some of the reference stands identified for study in the terrestrial community analysis program and some were at sites designated in the NASA/BEST program. In most cases, collectors were located in remote areas so the potential influence of heavy highway traffic could be minimized. Collectors were positioned so that no objects projected above the collector unless they fell below an imaginary 45-degree angle measured above the horizon in all directions. A map showing the location of sites and indicating when collector operation was initiated at each site is shown in Figure 1. A general description of each site follows.

Site 01. The collector was 25 meters west of a large brackish lagoon and was located in a grass covered opening which was mowed periodically. The collector was circled by 15-meter high trees which were typically 20-30 meters removed from the collector. A moderately traveled dirt road is located within 25 meters of the site. The ocean is approximately 0.5 km to the east.

Site 02. The collector was located on the grassy roadside of a moderately traveled paved road. There are trees approximately 20 meters west of the site.

Site 03. The collector was located in a sandy field which had a sparse grass cover 20 meters from the taxiway at the Ti-Co Airport. The site is about four km north northwest of the Florida Power and Light and Orlando Utilities power plants.

Site 05. The collector was in a grassy, cleared area encircled by trees at distances of from 50 to 200 meters. The grass which extends outward as far as 50 yards is mowed periodically. Mosquito Lagoon, a large body of brackish water, is 500 meters east of the site. State Road 3 travels north-south past the site at a distance of 50 meters.

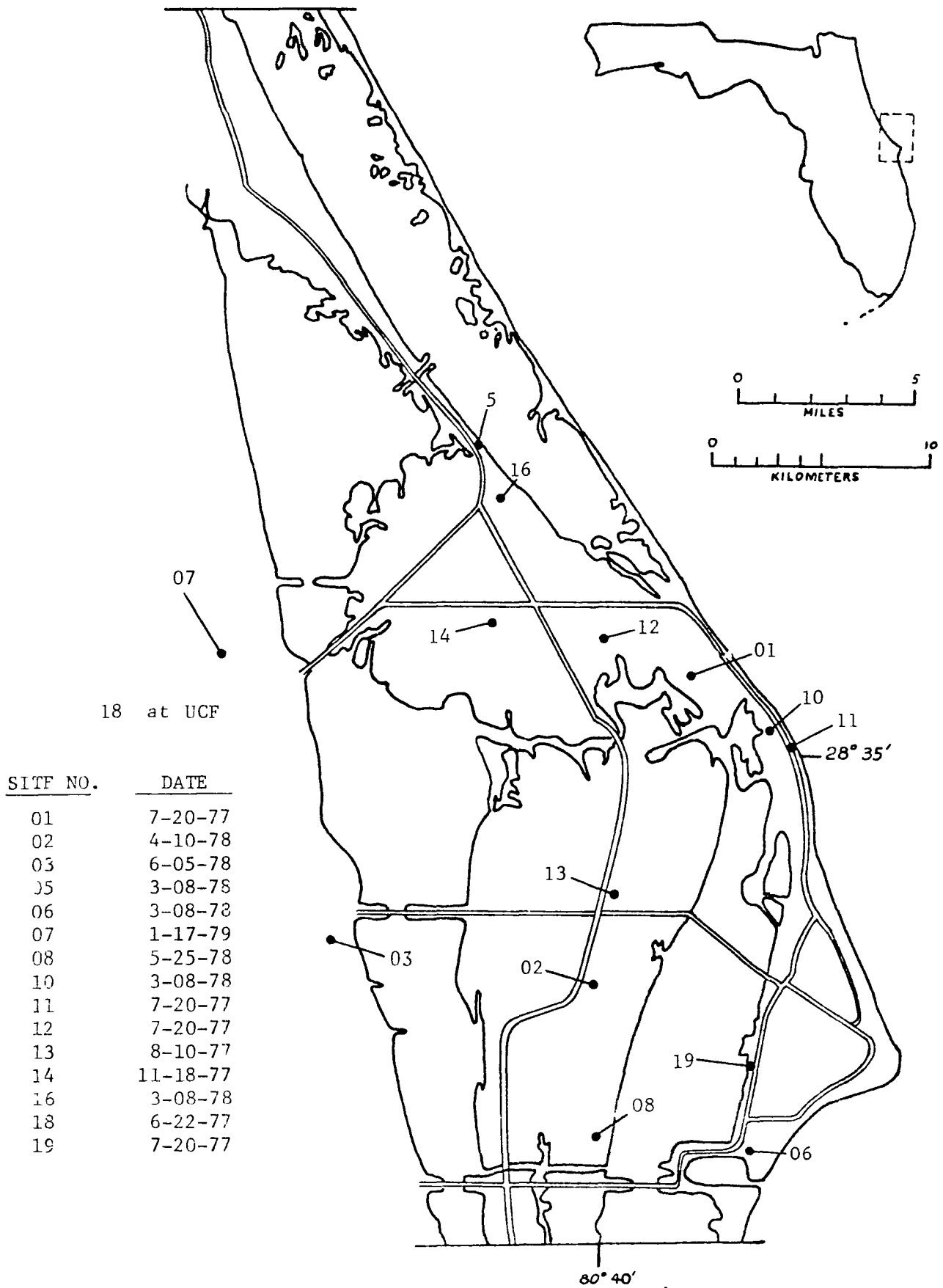


Figure 1. Location of Precipitation Collection Sites

Site 06. The site is near a paved, well-traveled road which provides a major entrance to the center. The collector sat in a grass-covered field that was mowed periodically. Bodies of water approach the site from east and west. Considerable industrial activity is present to the south and east of the site.

Site 07. The collector was located at Dunn Airport, Titusville, in a grassy area that was mowed regularly and was approximately 750 meters from the airstrip. There are a few trees approximately 30-100 meters away. The site is adjacent to the Titusville recreational facility (Tennis/Handball Courts). The collector was located approximately 20 meters from a parachute club drop zone.

Site 08. There is sparse vegetation and some grass that was mowed periodically. Trees partially shield the site from the Banana River, 300 meters east. There is some vehicular traffic on a paved access road to and from a nearby radar installation.

Site 10. The site is encircled by 10-meter trees at a distance from 10 to 30 meters away. The distance to the ocean is approximately one km. The Banana River is about 500 meters west. There is abundant vegetation; the surrounding grass was mowed periodically.

Site 11. The collector sat on a beach dune about 50 meters from the ocean. The dune contours are irregular and extend above the collector to the west. Scattered scrub vegetation is present on the dunes. Access to the site is by a lightly traveled paved road.

Site 12. The site is on a fire break with palmetto plants extending outward on all sides for a distance of 100 meters. The plants were below the horizontal plane of the collector top. Access is by a sparsely traveled dirt road.

Site 13. There is scrub vegetation and uncovered soil but no grass in the cleared area where the collector was located. Tree setback is 25 meters on the east side which partially shelters the site from ocean effects. State Road 3 is 100 meters west and the NASA Causeway is 500 meters south of the site. These paved roads are the major access to the KSC industrial area from the south, west, and north.

Site 14. This site is located in a sandy cleared area at the north end of the Shuttle runway. The average distance between the two-meter high bushes and the collector was three to five meters. The sparse grass near the collector was mowed periodically. Access is by a lightly traveled dirt road.

Site 16. The collector was located in a cleared grass covered area which was mowed periodically. The collector was adjacent to Camera Site UC1. Four-meter trees to the east shelter the site from ocean effects. Access is by a dirt road from State Road 3.

Site 18. This site is located on the campus of UCF. The collector was located in a sandy grass covered area which was mowed periodically. The UCF physical plant complex is located within 50 meters. The collector was located near isolated pine trees which approached the 45° horizon-vegetation top criteria established for site location. Access is by a paved road. University service vehicle traffic was moderate within 100 meters of the collector.

Site 19. The collector was located in a grassy field and encircled by trees at distances that ranged from 50 to 200 meters on all sides. A major body of brackish water is located 200 meters west of the site. Access is by a dirt road.

#### Precipitation Collection

The polyethylene buckets used to collect precipitation samples and all laboratory ware which contacted the precipitation samples was thoroughly cleaned with dilute Alkonox solution and 3M HNO<sub>3</sub>. Each piece was then rinsed with deionized water until the conductivity of the final rinse water was less than 1.0 umho/cm.

Deionized water with a conductivity of less than 1.0 umho/cm was used during all procedures which involve cleaning operations. This water was obtained from a deionizing system which also included a carbon filter. All deionized water utilized for chemical analysis procedures was obtained from a Culligan SR deionizing system which delivered water with a conductivity of less than 0.07 umho/cm.

Collectors were typically checked between 8 a.m. and noon Monday through Friday. Sample pickups were made by UCF personnel on Monday, Wednesday, and Friday from July through September 1977, and intermittently thereafter. Beginning in October 1977, NASA/BEST personnel were responsible for daily pickups. A sample collection log was maintained for each day that precipitation collectors were checked. Several entries were made and included: 1) time of arrival at the site, 2) weather conditions during site visitation, 3) operation of collector, 4) visual inspection of the sample bucket, and amount of precipitation. If precipitation was present, the amount to the nearest 0.1 inch was estimated. Presence of dirt or insects in the sample was noted. A clean bucket was placed in the collector and the cover from the clean bucket placed tightly on the bucket which had been removed from the collector. In February 1979, several sites were equipped with standard Taylor 11-inch rain gauges. These gauges have an outer cylindrical funnel diameter of four inches and an inner measuring cylinder diameter which allows measurement of rainfall amount from a scale which yields a ten-fold increase in readability. These gauges measure rainfall to the nearest 0.01 cm.

#### Sample Identification and Classification

The sample identification was an 11-digit number and was assigned as follows:

Digit corresponding to entries on Precipitation Chemistry Data Sheet (see Figure 2).

1 and 2	Month (01...12)
3 and 4	Day (01...31)
5 and 6	Year (77...79)
7	Not used
8	Represents the frequency of precipitation collector servicing. (0...9) values reflect the number of days that lapse between servicing with 0 indicating daily servicing
9 and 10	Collector Site Number (01...)
11	Sample Type (0...9) This digit is defined as follows and classification was based on a subjective judgment: 0 Clean rainfall precipitation 5 Battery/collector failure left rainfall sample uncovered and somewhat contaminated, analysis performed 6 Rain sample contaminated, analysis performed (less than five insects, etc.) 7 Rain sample contaminated, however, with no visual discoloration of sample; analysis performed 8 Rain sample too contaminated for analysis

To facilitate data reduction, clean samples were those which received a "0." Slightly dirty samples were those classified as "5", "6", or "7."

#### Procedures for Handling and Chemical Analysis of Precipitation Samples

The contents of the sample buckets were transferred into previously cleaned plastic graduated cylinders. Each sample volume was measured to the nearest ml and recorded. A portion of each sample was transferred to a previously cleaned 250 ml polypropylene or polyethylene bottle for storage until chemical analysis on the sample could be accomplished. Conductivity, pH, and titratable acidity were determined on a portion of each sample separate from that saved for additional analysis. Priority was given to the measuring of certain chemical parameters in the event that sample size was insufficient to allow measurements to be made for all chemical species. A flow diagram which summarizes the various chemical analyses performed is presented in Figure 3. Titratable acidity was determined only if sample volume exceeded 120 ml which represented about 0.2 cm of precipitation. If sample volume was less than 50 ml, determination of concentrations of individual ionic species was not attempted except in select samples where acidity was high and dilution of the sample would not jeopardize accuracy.

In general, sample volume and conductivity were measured shortly after samples arrived in the laboratory. Results were recorded directly onto a data sheet (Figure 2). Samples were refrigerated if chemical analysis was not performed within 24 hours. Measurement of pH, pH<sub>NV</sub> (pH after bubbling nitrogen gas through the sample), and titrations were typically performed within eight hours. Conductivity was measured to the nearest 0.1 umho/cm with a Yellow Springs Instrument Model 31 conductivity bridge. An electrode with a 1.00 cm<sup>-1</sup> cell constant was used.

ID	DATE	MET	COL	AMT	VOL	PH	PHTV	TITR ACID	STR ACID	COND	NA	K	CA	MG	NH4	CL	F	NO3	SO4	PO4	AL	V								
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
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Figure 2. Precipitation Chemistry Data Sheet

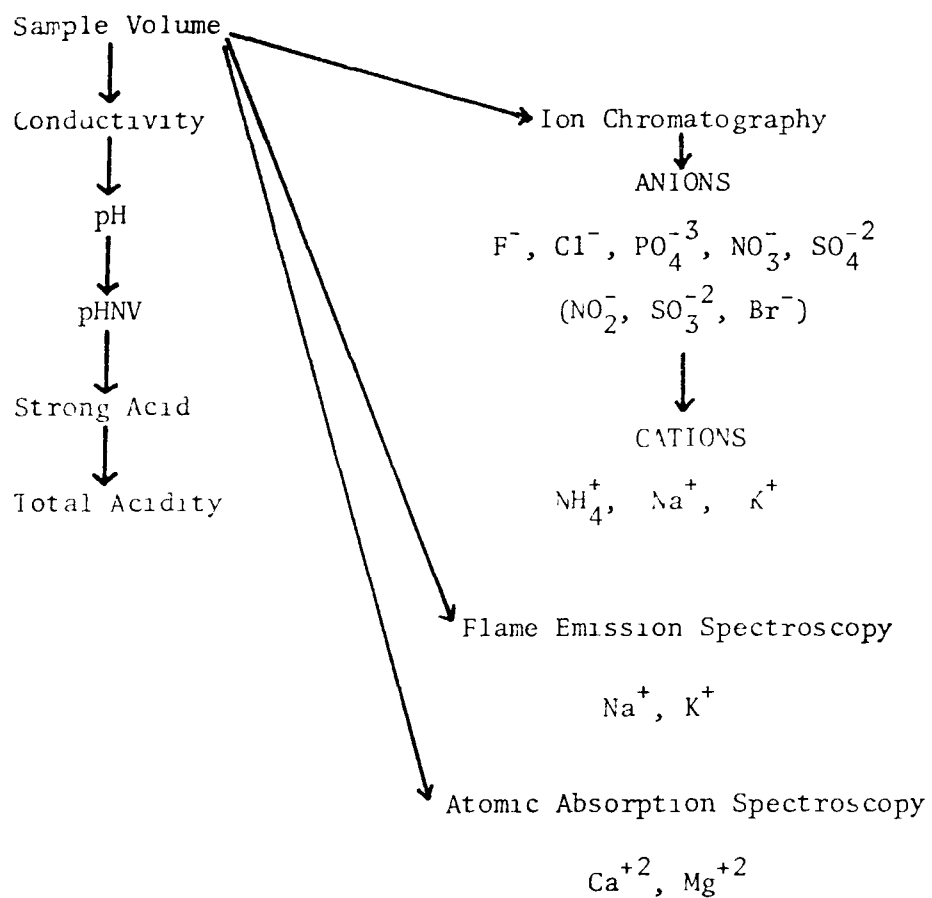


Figure 3. Flow Diagram Showing the Chemical Analysis Sequence for Precipitation Samples



Sample pH was measured at ambient room temperature using a suitable glass and reference electrode pair or suitable combination electrode. Samples were not stirred when the measurement was made. An Orion Model 901 or Corning Model 130 pH meter was used after standardization with buffers of pH 7.00 and 4.01. Nitrogen gas saturated with water vapor was bubbled through the sample for 20 minutes to remove volatile components prior to measuring pHNV. Nitrogen gas was passed over the sample during pHNV measurement. Typically, 15 to 30 minutes was required for the pH reading to stabilize.

If sample pH was less than 4.7 and sufficient sample was available, a potentiometric titration was performed. A 50.00 ml portion of the sample used to determine pHNV was titrated with standardized 0.02 N NaOH under a nitrogen atmosphere. The NaOH was added in volume increments of 5.0 to 50.0 ul. The size of volume increments was selected to allow approximately 10 additions of NaOH to be made before the measured pH increased above 5.0. Sufficient NaOH was then added to increase the pH to above 9.0; 10 additional volumes of NaOH were then added in 20 ul increments. Titration data were treated by the Gran plot technique (Gran, 1952; Rossotti and Rossotti, 1965) to determine the strong acid concentration and total titratable acidity. The strong acid concentration was determined from data collected below pH 5.0, using the following relationship:

$$\psi = (V_0 + v) 10^{-pH}$$

where  $\psi$  is the Gran function,  $V_0$  is sample volume,  $v$  is volume of NaOH added, and pH is the measured pH upon addition of  $v$ . An end point volume ( $V_{ep}$ ) in microliters for NaOH was determined by extrapolation of the  $\psi$  vs.  $v$  plot to  $\psi = 0$ . A linear least squares fit to the data was performed. Results were calculated as follows:

$$\text{Strong acid (microequiv./l)} = \frac{(V_{ep})(N \text{ NaOH})(1000)}{V_0}$$

Total titratable acidity was determined from data collected above pH 9.0 using the following relationship:

$$\psi' = (V_0 + v) 10^{pH}$$

where  $\psi'$  is the Gran function and other terms are as previously described. An end point volume for NaOH was determined using  $\psi'$  in place of  $\psi$  (as previously described) and titratable acidity was calculated as follows:

$$\text{Titratable acidity (microequiv. / l.)} = \frac{(V_{ep})(N \text{ NaOH})(1000)}{V_0}$$

where  $V_{ep}$  is the  $\psi'$  function end point volume. A typical Gran plot is shown in Figure 4. Results were recorded on the Precipitation Chemistry Data Sheet, Figure 2.

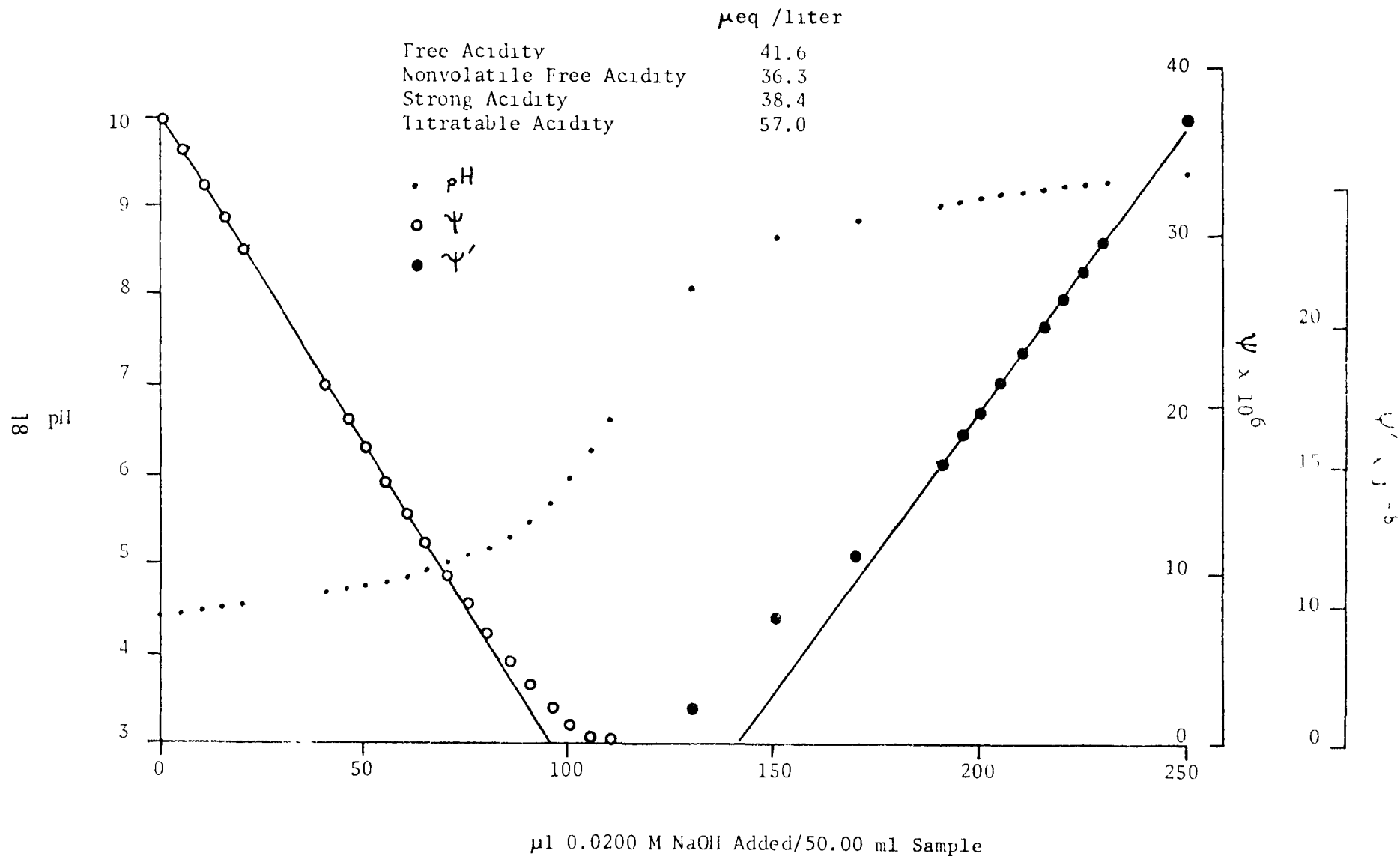


Figure 4. Potentiometric Titration Curve and Gran Plot Functions for a Precipitation Sample Collected February 3, 1978, at UCF Site 18

The concentrations for the major anions  $F^-$ ,  $Cl^-$ ,  $NO_3^-$ ,  $SO_4^{2-}$  and  $PO_4^{3-}$  present in the precipitation samples and for the cations  $Na^+$ ,  $K^+$ , and  $NH_4^+$  were determined by ion chromatography (IC). The ion chromatographic technique was introduced in 1975 and promises to revolutionize chemical analysis at low concentrations for common ionic species such as  $F^-$ ,  $Cl^-$ ,  $NO_3^-$ , and  $SO_4^{2-}$  (Mulik, 1978). The application of IC to the analysis of precipitation samples has been demonstrated (Mulik, 1978) and is of particular advantage for determining  $SO_4^{2-}$  where available methods are not sensitive enough.

A Dionex Model 14 Ion Chromatograph was used in these studies. The Model 14 is capable of dual-column operation, allowing both anions and cations to be determined. The IC was operated according to manufacturer's instructions (Dionex, 1976). Table 1 summarizes conditions used in routine operation of the IC for determining anions and cations.

Standard solutions for calibrating the IC were prepared fresh daily by diluting 1000 ppm stock solutions of each anion or cation. Chromatogram peaks were quantitated by measuring peak height, component identification was based on retention behavior. IC determinations were typically completed within one week of receipt of samples.

The anions are best determined from a single chromatogram obtained using an eluent composed of 0.003 M  $NaHCO_3$  and 0.0024 M  $Na_2CO_3$ . The elution is normally completed in about 18 minutes at a pump pressure of 35 percent. The normal water peak is overcome by preparing each sample and standard to contain exactly the same concentration of  $NaHCO_3$  and  $Na_2CO_3$  as the eluent.

The monovalent cations are best determined on a single chromatogram by employing an eluent of 0.003 M  $HNO_3$  at a pump pressure of 35 percent, the elution is complete in 17.5 minutes.

Prior to injecting the sample, the sample loop was rinsed with approximately two ml of deionized water. A sample volume of approximately one ml was required for anions and a sample volume of approximately two ml was required for cations. Each syringe was previously rinsed with the respective sample or standard.

When increased sensitivity is required, the IC detector attenuation can be changed from 30 to 10 to 3 micromho, etc. A limiting factor is encountered, however, because base-line noise increases. This interference was more noticeable in anion chromatograms.

Initially, fluoride and chloride were separated and quantitated using an eluting solvent that contained 0.003 M  $NaHCO_3$ . A flow rate of about 150 ml/hr. was utilized. A dual pen recorder operated to give relative sensitivity factors of one and two-tenths allowed chromatogram quantitation with sufficient accuracy and precision over the 0.01 and 5.0 ppm concentration range when the 10 micromho IC detector range was used.

Table 1. Ion Chromatograph operational parameters

A. Column Description

<u>Column</u>	<u>Anion</u>		<u>Cation</u>	
	<u>Dimensions</u>	<u>Ser. No.</u>	<u>Dimensions</u>	<u>Ser. No.</u>
Precolumn (1)			6 x 250 mm	3316
Precolumn (2)	3 x 150 mm	2878	6 x 150 mm	2727
Analytical	3 x 500 mm	2868	6 x 250 mm	2402
Suppressor	6 x 250 mm	2372	9 x 250 mm	2523

- (1) Located between eluent pump and injection valve
- (2) Located between injection valve and analytical column

B. Operating Conditions

<u>Anions (1)</u>	<u>Retention Time, Min.</u>	<u>Concentration Range</u> ppm
		<u>30umho Scale</u>
F	2.5	0.01 - 1.50 (2)
Cl	3.7	0.01 - 2.5 (2)
		2.5 - 6.0 (3)
		6.0 - 10.0 (3,4)
NO <sub>2</sub>	4.3	0.02 - 2.0
PO <sub>4</sub>	6.4	0.1 - 25.0 (2)
Br	8.0	0.02 - 2.0
NO <sub>3</sub>	10.0	0.01 - 10.0 (2)
		10.0 - 50.0 (2,4)
SO <sub>4</sub>	14.0	0.01 - 12.0 (2)
<u>Cations (5)</u>		<u>10umho Scale</u>
Na	10.0	0.01 - 2.0 (2)
		2.0 - 4.0 (3)
		4.0 - 10.0 (3,6)
		10.0 - 100 (3,4)
NH <sub>4</sub>	13.2	0.01 - 2.0 (2)
K	15.0	0.01 - 2.0 (2)

- (1) Injection volume 250ul, eluent pump 35% which yields an eluent flow rate of about 150 ml/min. Eluent is .003M NaHCO<sub>3</sub>-.0024M Na<sub>2</sub>CO<sub>3</sub>
- (2) Utilizes either 100mv or 500 mv recorder scale
- (3) Utilizes 1000mv recorder scale
- (4) Appropriate sample dilution required
- (5) Injection volume 1.0 ml, eluent pump 35% which yields an eluent flow of about 150 ml/min; eluent is 0.003M HNO<sub>3</sub>
- (6) 30umho scale

Phosphate, nitrate, and sulfate were separated using an eluting solvent that contained 0.003 M NaHCO<sub>3</sub> - 0.024 M Na<sub>2</sub>CO<sub>3</sub>. Other conditions were identical to those identified for fluoride and chloride. Beginning in November 1978, samples were run exclusively with the 0.003 M NaHCO<sub>3</sub> - 0.024 M Na<sub>2</sub>CO<sub>3</sub> eluent. All samples and standards were spiked with a quantity of 0.3 M NaHCO<sub>3</sub> - 2.4 M Na<sub>2</sub>CO<sub>3</sub> to match the eluent concentration. Phosphate concentrations were consistently below detection limits (approximately 0.1 ppm) of the IC procedure used and do not present a significant contribution to composition.

Base-line noise was found to be minimal for cations. When low concentrations of NH<sub>4</sub><sup>+</sup> were found in the presence of high concentrations of Na<sup>+</sup>, the resolution of NH<sub>4</sub><sup>+</sup> was greatly improved by a 1:5 dilution of the sample. The same observation applies to small concentrations of K<sup>+</sup> in the presence of large concentrations of NH<sub>4</sub><sup>+</sup>.

Concentrations of the major cations Na<sup>+</sup>, K<sup>+</sup>, Ca<sup>+2</sup>, and Mg<sup>+2</sup> present in precipitation samples were determined by flame spectroscopy. This technique has been widely used for determining these species and is characterized by suitable accuracy and precision at expected cation concentration levels.

An Instrumentation Laboratory (IL) Model 751 Flame Spectrophotometer was used. Flame emission was utilized to determine Na<sup>+</sup> and K<sup>+</sup> while atomic absorption was utilized to determine Ca<sup>+2</sup> and Mg<sup>+2</sup> concentrations. This instrument is a dual-channel spectrophotometer which can be used to simultaneously determine two species.

Sodium and potassium were determined after sample and standard pretreatment to introduce 0.1% wt/wt cesium. Occasional dilution was required to decrease sample concentrations to within the concentration range of the calibration curves. The sodium calibration curve was established using five standard solutions which contained from 0.1 ppm to 2.5 ppm sodium. Solutions were prepared fresh daily by diluting a 1000 ppm stock solution. The potassium calibration curve was established using five standard solutions which contain from 0.05 to 0.5 ppm potassium. The IL 751 is microprocessor controlled and reduces data to allow direct concentration read-out based on the entered calibration curve; it operated according to manufacturer's specifications (IL, 1976). A "red" sensitive R955 photomultiplier tube was required to achieve sufficient sensitivity for potassium.

Calcium and magnesium were determined simultaneously by atomic absorption. Samples and standards were treated to contain 0.1% wt/wt lanthanum diluent. Calibration curves for calcium and magnesium covered the range 0.1 to 1.0 ppm and 0.005 to 0.6 ppm, respectively. Flame conditions were optimized for calcium which achieved maximum sensitivity for calcium and still allowed acceptable sensitivity for magnesium. Direct concentration read-out from both channels was made as previously described for sodium and potassium. Standard conditions (IL, 1976, 1977a) were used. Flame spectroscopy determinations were usually completed within ten days of sample receipt.

The concentration of Al and V in precipitation samples is quite low (Galloway, Likens, and Edgerton, 1976). Therefore, it is not possible to utilize conventional flame spectroscopy to determine the concentration for these metals. A flameless atomization source is required to generate enough high atoms to result in a significant absorption signal when atomic absorption is used. An IL 555 controlled temperature furnace (CTF) was the flameless atomization source for the IL 751; it was operated according to manufacturer's directions (IL, 1977b). Several problems were experienced. Difficulty was encountered when temperature program cycles had to be optimized. Extreme difficulty was experienced when sample drying conditions were set. Erratic behavior was observed. During the sample atomization cycle, high temperatures are required for successful atomization of Al and V. At these temperatures, the functional lifetime of temperature sensors and the graphite sample cuvettes was so short that accurate calibration was impossible. Because of these problems, no meaningful results were obtained for Al and V.

#### Evaluation of Sample Collection and Chemical Analysis Procedures

Several experiments were performed to evaluate the compositional integrity of precipitation samples. Factors were evaluated based on chemical analysis of samples obtained or treated in a variety of ways. A description of each study follows.

Collection of precipitation in clean containers is required if the sample composition is to be representative and not influenced by the sampling container. Plastic containers are preferred for collecting precipitation samples to be analyzed for major inorganic ions; glass is preferred for collecting samples if organic species are to be determined (Galloway and Likens, 1976). A series of experiments was performed to evaluate the effects of time on sample bucket cleanliness when the lid on the collector does not open to expose the bucket to the atmosphere. Although during normal operations of the KSC precipitation network, exchange of buckets would normally occur each work day, several occasions arose where selected sites could not be visited for security reasons for several days. It was beneficial to know whether buckets would become contaminated to some extent during these extended time intervals. During February 1978, and again during March 1978, four operational collectors were utilized at Site 14 and outside the chemistry laboratory adjacent to the Apollo Warehouse at KSC. Clean buckets were placed in collectors at staggered intervals so that at the end of a seven-day period, one bucket at each site had resided in a collector for one, two, five, and seven days. An identical set of buckets was maintained in the laboratory. At the end of the study period, all buckets were returned to the laboratory and thoroughly rinsed with 200 ml of deionized water. The rinse water was analyzed to determine contamination levels by measuring conductivity and determining major anions and cations.

The quality of generated chemical analysis data was monitored throughout the study period. While gross errors in procedures could be recognized in such parameters as anion/cation ratio, the general reliability of data obtained was evaluated separately. Precision associated with each procedure for measuring chemical concentrations can be and was

evaluated by repeating procedures with several separate portions of a given sample. The magnitude of errors associated only with measuring chemical composition is referred to as analytical variability. It can be evaluated with as few as two analyses for each species in separate portions of the same sample. This was done on a semi-routine basis. In selected situations, six to ten replicate determinations were performed.

Spike recovery studies can be used to assess the quality and reliability of the methods used to determine chemical composition of samples. A known quantity of each analyte of interest is added to a portion of the sample. This addition increases the concentration of each analyte in the sample. The spiked sample and a portion of the original sample are then analyzed using the accepted procedure. Results obtained for each analyte in the two samples are compared and the difference for each analyte is compared to a value determined from the known quantity of each added analyte. Systematic errors can be detected in the experimental procedures or errors introduced by the presence of other chemical species or physical properties associated with the sample matrix. Steps can then be taken to minimize these errors. Spike recovery studies were performed at periodic intervals.

The compositional stability of precipitation samples is questionable and several investigators have assessed various conditions intended to retard changes (Galloway and Likens, 1978; Peden and Skowron, 1978). We also evaluated different sample storage conditions to determine whether significant differences in stability would be observed. Separate portions of a single sample were analyzed and stored at either room temperature (4°C) or frozen. At periodic intervals, portions of each sample were removed and subjected to chemical analysis again.

A series of experiments was performed to establish the contribution that different sources of variability have on determining the measured composition of precipitation samples. These experiments involved collecting precipitation samples and an analysis to determine the chemical composition of each. Analytical variability, as previously described was evaluated.

Sampling variability, which represents the difference in rainfall composition between samples collected at the same time in adjacent, identical collectors, was evaluated using five or six collectors placed approximately five meters from each other. Data were collected for at least ten rainstorms to evaluate this variable. Collectors were located at Site 14 and were used to perform this study during November and December of 1977, and again during June and July of 1978.

Spatial variability represents the difference in rainfall composition over a widespread area. The evaluation of this parameter was based on rainfall composition data obtained from samples of the entire collector network or from a smaller set of collection sites as was required for comparison purposes.

## Data Management

During the study period, approximately 1500 precipitation samples were collected; most were subjected to chemical analysis. The data obtained as a result of these activities were initially summarized on the Precipitation Chemistry Data Sheet (Figure 2). These data were stored on computer disk as 80-character card images. Data storage, retrieval, and archiving were accomplished using a Harris minicomputer with a 256K CPU memory and a Hewlett-Packard minicomputer. The latter system, which has a 32K CPU memory, tape drive, disk drive, paper tape punch, printer, and plotter, is located at KSC and was used most extensively. Original Fortran IV programming was used in all aspects of data management. Access was by interactive RS232 type terminals.

A "rain" program manipulated the raw data from the card image format. The rain program output included raw data tabulation and associated calculation outputs. Calculation of various parameters was intended to allow evaluation of data quality and to assess various components of precipitation.

Disk files were created by month and by quarter from the rain program output. Other programs assessed results in individual rain program disk files. Figure 5 summarizes prominent features of the system.

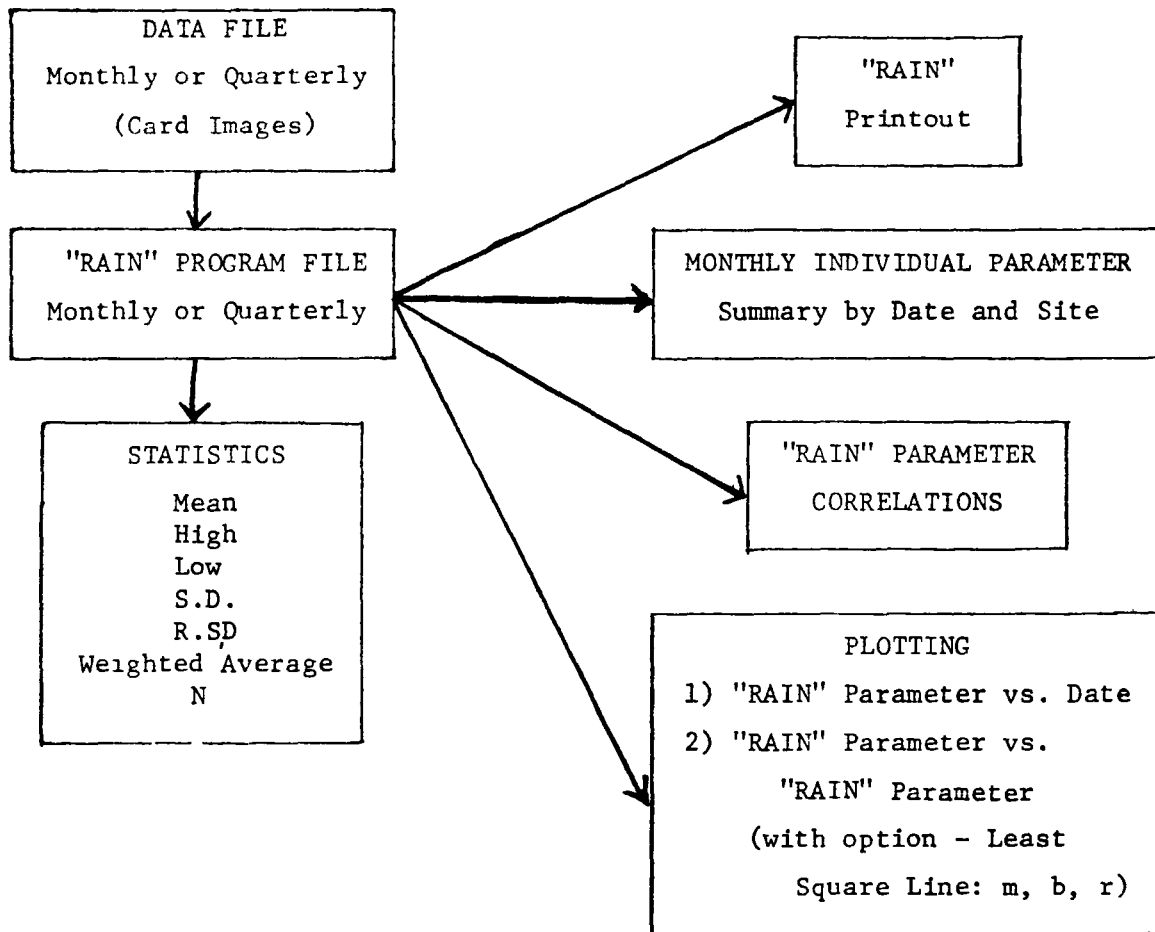
The utilization of computer outputs varied. For example, anion/cation, Cl/Na, Na/Mg, acidity/predicted acidity, etc. were utilized to determine the reliability of the chemical analysis performed on each sample. In addition, Cl/Na, Na/Mg, and calculated sea salt were utilized to assess the contribution of sea salts to precipitation composition and more specifically to document Cl input from the ocean. Types of acidity in precipitation were documented through interpreting pH and titration measurements. A sample rain program printout is shown in Figure 6. A brief description for each parameter in the print-out follows.

### "RAIN" PROGRAM LEGEND

#### RAW DATA

AMT	Depth of precipitation (cm) measured by an independent measuring device, e.g. rain guage located in close proximity to the primary collector
VOL	Volume of precipitation (ml) in the primary collector
pH	Negative logarithm (base 10) of hydrogen ion activity in the precipitation sample. Measurement is made potentiometrically with a glass indicator electrode and suitable reference electrode. Accuracy is limited by the value of buffer solutions used for calibration, typically $\pm 0.01$ pH unit, measurements are made at 25°C
pHNV	The same as pH except volatile weak acids, e.g. carbonic acid ( $H_2CO_3$ ), have been removed from the sample by bubbling nitrogen gas through the sample prior to measurement.





OPTIONS THAT ALLOW SORTING OF DATA BASED  
ON SAMPLE ID ARE PART OF EACH PROGRAM.

Figure 5. Data Management Options

ID	AMT	VOL	PH	PHNY	TITRACID	STRACID	COND	NA	K	CA	MG	NH4	CL	F	NO3	SO4	PO4	AL	Y
07057803016	00	438	4 08	4 13	124 9	78 5	43.2	.75	03	.17	.020	.22	1.21	.080	2 33	2 10	00	000	000
07057803026	00	2148	3 91	3 03	156 0	122 7	61.5	.19	.10	.33	.100	.39	.35	100 1	94	5 03	00	000	000
07057803038	00	115	00	00	0	0	0	00	.00	00	.000	00	.00	000	00	00	00	000	000
07057803068	00	270	00	00	0	0	0	00	00	00	.000	.00	.00	000	00	00	00	000	000
07057803086	00	208	3 66	3 05	275 8	214 3	106 0	04	22	55	134	.55	1 21	070 5	40	9 00	00	000	000
07057803106	00	970	3 96	3 97	145 3	106 5	52 4	77	10	45	070	.19	1 03	040 1	02	3 95	00	000	000
07057803117	00	980	3 97	3 99	134 6	101 2	52 8	64	04	12	074	.19	1 07	040 1	02	4 00	00	000	000
07057803126	00	1240	4 12	4 17	0	0	35 1	23	05	27	035	.17	.38	030 1	40	2 45	00	000	000
07057803136	00	1020	3 02	3 84	203 3	148 8	70 2	31	03	22	.044	.45	.62	070 2	86	5 55	00	000	000

DATA (UEQ/L) AND PATIOS

ID	NA	K	CA	MG	NH4	CL	F	NO3	SO4	PO4	AL	Y
07057803016	32 61	76	8 49	2 30	12 19	34 12	4 21	37 58	43 72	00	.00	00
07057803026	8 26	2 55	16 46	9 22	21 62	9 87	5 26	31 29	104.72	00	.00	00
07057803038	00	00	00	00	00	00	00	00	00	00	.00	00
07057803068	00	00	00	00	00	00	00	00	00	00	.00	00
07057803086	36 52	5 62	27 44	11 02	30 49	34 12	3 68	87 10	187 38	00	.00	00
07057803106	33 47	2 55	22 45	7 40	10 53	29.04	3 15	29 35	82 23	00	.00	00
07057803117	27 82	1 02	5 98	6 08	10 53	30.17	2.10	29 35	83 28	00	.00	00
07057803126	12 17	1 27	13.47	2 87	9 42	10.71	1.57	24 03	51 00	00	.00	00
07057803136	13 47	76	10 97	3 61	24 94	17 48	3.68	46 13	115 55	00	.00	00

26

ID	CHPPT	PVOL	COLEF	SAH	SCA	A/C	CL/NA	NA/MG	SS	NC	COND	PCOND	COND/PCOND
07057803016	653	000	0	119 6	139 5	85	1.04	14.1	37 6	18 7	43 2	41 2	1 046
07057803026	3 205	000	0	151 1	180 1	83	1.19	1 0	10 6	46 4	61 5	58 1	1 057
07057803038	619	000	0	0	0	00	00	0	0	0	0	0	000
07057803068	414	000	0	0	0	00	00	0	0	0	0	0	000
07057803086	310	000	0	312 2	329 8	94	.93	3 3	37 6	73 4	106.0	107 0	930
07057803106	1 447	000	0	143 7	186 0	77	.86	4 5	32 0	44 3	52 4	53 6	976
07057803117	1 462	000	0	144 9	159 6	91	1 08	4 5	33 2	18 1	52 8	51 4	1 025
07057803126	1 850	000	0	87 3	115 0	75	.88	4 2	11 8	27 4	35 1	35.5	987
07057803136	1 522	000	0	182 8	205 1	89	1 29	3 7	17 4	36 3	70.2	70.3	998

ID	PACID	PPH	H	HNV	TITRACID	STPACID	WACOMP	WAFB	XHSA	XHVA	XHYF	AMTH	AMTSA	AMTTA
07057803016	59 2	4 22	83 1	74 1	124 9	78.5	50 7	-4 3	62 8	40.6	-3 4	36 43	34 39	54 70
07057803026	88 9	4 05	123 0	117 4	156 8	122 7	39 3	-5 2	78 2	25 0	-3 3	264 26	263 55	327 67
07057803038	0	00	0	0	0	.0	0	0	.0	.0	.0	00	00	00
07057803068	0	00	0	0	0	0	0	0	0	0	0	00	00	00
07057803086	197 7	3 70	218 7	223 8	275 8	214 3	51 9	9 5	77.7	18 8	3 4	45 50	44 57	57 36
07057803106	64 3	4 19	109.6	107 1	145 3	106 5	38.1	6	73 2	26.2	4	106 35	103 30	140 94
07057803117	91 5	4 03	107 1	102 3	134 6	101.2	32 2	1 1	75 1	23 9	8	105 00	99 17	131 10
07057803126	46 5	4 32	75 8	67 6	0	.0	0	0	0	0	0	94 06	00	00
07057803136	125 6	3 90	151.3	144 5	203 3	148.8	59 7	-4 2	73.1	28 9	-2 0	154 38	151 77	207 36

ID	PACID/H	K-S	CA-S	MG-S	SO4-S	CL-S	NA-S	XPACID	XPPH
07057803016	71	14	7 21	-4 36	36 62	00	3 33	63 27	4 19
07057803026	72	2 38	16 10	6 34	103 7	24	00 94	.03	4 02
07057803038	00	.00	00	00	00	00	00	00	00
07057803068	00	00	00	00	00	00	00	00	00
07057803086	90	5 00	26 17	4 35	180 3	00	7 24	201 2	3 69
07057803106	58	2 02	21 37	1 72	76 20	00	8 55	67 37	4 17
07057803117	65	47 4	86	.18	77 00	00	1 93	90 45	4 02
07057803126	61	1 08	13 07	78 48	78	00	2 38	48 10	4 31
07057803136	83	48 10	39	.54	110 9	1 78	.00	129 1	3 88

Figure 6. "Rain" Program Print-out

"RAIN" PROGRAM LEGEND (Continued)

RAW DATA

- TITRACID Titratable or total acidity in the precipitation sample excluding volatile weak acids which were removed prior to this determination. Determination is accomplished by potentiometric titration of the precipitation sample using standardized 0.02N sodium hydroxide. The potentiometric titration data beyond the equivalence point is treated by the Gran plot method to determine the equivalence point. Units are microequivalents per liter.
- STRACID Contribution due to strong acids, e.g. sulfuric, nitric, and hydrochloric, on the total acidity of the sample. The strong acid contribution is determined by Gran plot treatment of the titratable acidity potentiometric titration data obtained prior to the equivalence point. Units are microequivalents per liter.
- COND. Conductivity of the precipitation sample. The conductivity represents contributions from all ionic species in the sample including dissociated acids. Units are micromhos/cm.
- NA...V Measured concentration of each identified chemical species. Concentration units are micrograms per milliliter or parts per million (ppm).

DATA and RATIOS

- NA...V Data for each identified chemical species expressed as microequivalents per liter (UEQ/L)
- CMPPT Tabulates precipitation depth based on volume collected and 640 cm<sup>2</sup> collection area
- PVOL Volume of precipitation that should have been collected in the wet bucket of the wet/dry collector based on measured AMT
- COLEF Collector efficiency as defined by:

$$\text{COLEF} = (\text{VOL}/\text{PVOL}) 100$$

- SAN Sum of the anion concentrations present in the precipitation sample expressed as UEQ/L
- SCA Sum of the cation concentration present in the precipitation sample expressed as UEQ/L
- A/C Ratio of SAN/SCA
- CL/NA Concentration ratio for these two species; ratio of 1.165 (eq/eq) is expected if sea salt represents the only source of Na and Cl
- NA/MG Concentration ratio for these two species; ratio of 4.4 (eq/eq) is expected if sea salt represents the only source of Na and Mg
- SS Sea salt (SS) contribution to the precipitation composition:
- if CL/Na >1.165, SS = NA (1.293)  
if CL/Na <1.165, SS = CL (1.103)

- NC Neutralizing cation component including contributions of Na, K, Ca, Mg, NH<sub>4</sub>, or nonacidic cations corrected for sea salt
- COND Defined previously
- PCOND Predictive conductivity, this value indicates what the conductivity of precipitation sample should be based on the

determined concentrations of ionic species and the equivalent conductance of each:

$$PCOND = \sum_1 (C_1) (\Lambda_1)$$

where  $C_1$  is the concentration (microequivalents/liter) and  $\Lambda_1$  is the specific conductance (micromhos/cm) of the 1<sup>th</sup> chemical species; contributions from H, Na, K, Ca, Mg,  $NH_4$ , Cl,  $NO_3$ ,  $SO_4$ ,  $PO_4$  are included.

COND/PCOND This ratio should equal one if all chemical species which are present have been determined accurately

PACID Acidity (microequivalents/liter) of the sample predicted based on determination of cations and anions in the precipitation sample exclusive of hydrogen ion:

$$PACID = \sum_1 (A_1) - \sum_J (C_J)$$

where  $A_1$  represents the anion (Cl,  $NO_3$ ,  $SO_4$ ,  $PO_4$ ) concentrations corrected for that of sea salt origin and  $C_J$  represents the cation (Na, K, Ca, Mg,  $NH_4$ ) concentrations corrected for that of sea salt origin

PPH Represents predicted pH based on PACID

H Hydrogen ion concentrations or sample free acidity as calculated from the measured pH of the precipitation sample, units are microequivalents/liter

HNH Hydrogen ion concentration as calculated from the measured pH of the precipitation sample; units are microequivalents/liter

TITRACID Described previously

STRACID Described previously

WACOMP TITRACID minus HNH, an alternate way to express the weak acid component of precipitation after volatile acids have been removed; units are microequivalents/liter

WAFA HNH minus STRACID and yields any dissociated nonvolatile weak acid present in the precipitation sample; units are microequivalents/liter

%HSA Strong acid components' contribution to total acidity, determined by  $STRACID \times (100)/TITRACID$

%HWA Undissociated weak acid contribution to total acidity, determined by  $(TITRACID - HNH) (100)/TITRACID$

%WFA Dissociated nonvolatile weak acid contribution to the total acidity, determined by  $(HNH - STRACID) (100)/TITRACID$

AMTH Amount of free acid deposited, units are microequivalents/640  $cm^2$

AMTSA Amount of strong acid deposited, units are microequivalents/640  $cm^2$

AMTTA Amount of total acid deposited, units are microequivalents/640  $cm^2$

PACID/H Predicted acidity/free acid ratio

K-S...Na-S Represents the identified species concentration in excess of that contributed by sea salt

XPACID Predicted acidity calculated by  $SAN-SCA+H$

XPPH Predicted pH based on XPACID

## Results

### Precipitation Sample Collection

Approximately 1500 precipitation samples were collected from July 1977 to March 1979 as part of a routine sampling schedule. In addition, approximately 200 samples were collected during additional studies. Routine chemical analysis was performed on these samples. The number of collection sites increased gradually during the program. The first site began operation in late June 1977 on the U.C.F. campus. In July 1977, four sites were established at KSC; the number increased as shown in Figure 1.

The justification and rationale used to locate collectors at specific sites as shown in Figure 1 has already been discussed. Within the constraints utilized, it appears that the composition of precipitation at only a few sites was significantly affected by local environment.

### Precipitation Collector Efficiency

The specific design of a rain collector influences the efficiency of sample collection. For comparison purposes, precipitation amount received by the wet/dry collector and Taylor standard rain gauges was evaluated. In general, the efficiency of the wet/dry collector was slightly less than 100 percent compared to the standard rain gauge when small amounts of precipitation were received. The efficiency was close to 100 percent when amounts of precipitation exceeded 1 cm. The sensor which detects precipitation falling on the wet/dry collector consists of a metal grid with approximately one mm spacing. Rain intensity must be great enough to accumulate water across the spacing before the collector is activated and the wet bucket exposed to the rain. Therefore, the initial portion of a rain event may not be collected. When light showers occur, the portion of rain not collected represents a significant fraction of the total amount.

### Evaluation of Factors Which Contribute to the Determined Composition of Samples

The methodology used to investigate several factors which may influence the measured composition of precipitation samples was described in the experimental section. The following describes the contribution which collector operation and sample bucket condition, the chemical analysis program, and natural variations in composition due to meteorological conditions have on the reported concentrations of individual ionic species.

Contamination. A series of experiments was performed to determine whether significant contamination of the sample bucket can occur when the bucket remains in a closed collector for various periods of time. During the first week of February 1978, and again during the first week of March 1978, an experiment (as described in the experimental section) was performed. Chemical analysis of the deionized water rinse from each bucket confirmed that the wet/dry collector will satisfactorily preclude the intrusion of contaminants into the sample bucket. The ionic composition of the deionized water rinse

solution was negligibly low and conductivity was below 1.0 umho/cm. Should circumstances require that a sample bucket not be replaced with a clean one for an extended period, contamination is unlikely unless the collector lid opens to expose the sample bucket. The study periods utilized in this experiment were selected because strong winds typically occur during these months and might be expected to cause contamination problems. Significant rainfall occurred during both study periods and may have helped minimize airborne contaminant levels which could have been introduced into the sample bucket.

Evaluation of the Reliability of Chemical Analysis Procedures. The results obtained in the evaluation of analytical variability are presented in the next section where evaluation of sampling variability and spatial variability are considered.

Typical results obtained in a spike recovery experiment are summarized in Table 2. The recoveries range from 80 to 120 percent. The magnitude of variability for the spike recovery determinations for

Table 2. Typical spike recovery study on precipitation sample

PPM					
	<u>Sample</u>	<u>Spike</u>	<u>Recovery of Spike*</u>	<u>Anal. Var.**</u>	<u>% Recovery</u>
Na	0.48	0.46	0.49+0.01 (.02)	.02	106
K	0.05	0.27	0.23+0.01 (.04)	.04	85
Ca	0.16	0.08	0.10+0.00 (.00)	.03	125
Mg	0.056	0.243	0.243+0.006 (.02)	.02	100
NH <sub>4</sub>	0.13	0.18	0.17		94
Cl	0.73	0.71	0.72		101
NO <sub>3</sub>	0.69	0.85	0.99		116
SO <sub>4</sub>	0.97	2.80	2.56		91

\*Mean + average deviation of triplicate determinations. Relative average deviation is shown in parenthesis.

\*\*Analytical variability from Table 3.

Note: Na and K determined by flame emission, Ca and Mg determined by atomic absorption, and NH<sub>4</sub>, Cl, NO<sub>3</sub>, SO<sub>4</sub> determined by ion chromatography.

cations is comparable to the variability or precision associated with the analytical methods used to determine concentrations for these analyses as summarized in Table 3. These data lend support to the hypothesis that errors introduced in the chemical analysis of samples contribute little to the variability associated with the determined concentrations of various species in rainfall.

We participated in the "MAP3S Precipitation Intercomparison Study" during summer of 1978. The study involved determining the chemical composition of eight precipitation samples. Approximately 35 private, state, university, federal government, and foreign laboratories submitted results. The program was conducted by the U.S. Department of Energy. Our results, which were not submitted in time for inclusion in the interim report (Bogen, et al., 1978), will be included in a final report from DOE. Our results agreed with those reported by several other program participants.

Stability of Ionic Components Present in Precipitation. One source of error in precipitation chemistry is associated with the ionic composition instability of dilute aqueous solutions. All procedures involved in the collection, handling, storage, and chemical analysis of precipitation samples can introduce contaminants or lead to loss of certain ionic components in precipitation samples through decomposition or other chemical processes such as absorption. Maienthal and Becker (1976) conducted an extensive literature review on sampling and storage of environmental water samples. Batley and Gardner (1977) critically reviewed sampling and storage of natural waters for trace metal analysis. These studies present many conflicting views. Studies directed specifically at precipitation samples have been cited (Galloway and Likens, 1976, 1978; Peden and Skowron, 1978).

The contribution of the sampling bucket and collector as a source of contamination has been described. Contamination introduced through sample handling is most difficult to evaluate. It is possible to evaluate the effect that storage conditions have on sample compositional changes. It is likely that the presence of fine particulate matter or other debris that may enter a collected precipitation sample during the actual rain occurrence will contaminate the sample, will act as a surface upon which absorption and accompanying chemical change can occur, or can react with other components in the sample. Unless a precipitation sample can be obtained and all debris removed simultaneously with the occurrence of precipitation, it must be assumed that compositional changes are likely. When sampling locations are remote from the laboratory, it is not possible to collect samples and analyze in realtime. Typically, samples were received in the laboratory within 24 hours of precipitation. Compositional changes which may have occurred during this time period could not be avoided. Once samples reached the laboratory, procedures were employed to minimize further change. Various studies were performed to evaluate the ionic composition stability of samples once they were received in the laboratory. For those species which were part of the routine chemical analysis program, only pH,  $\text{NO}_3^-$  and  $\text{NH}_4^+$  were observed to change concentration by an amount that could not be accounted for by

Table 3. Magnitude of sources of variability in Kennedy Space Center precipitation composition

Precipitation Parameter	Analytical Variability		Sampling Variability		Spatial Variability		
	Nov. 77	July 78	Nov.-Dec. 77	June-July 78	Nov.-Dec. 77	June-July 78	
					5 Sites	5 Sites	12 Sites
cm			0.05	0.02	0.62	0.66	0.75
Conductivity	0.05		0.04	0.03	0.54	0.32	0.42
H	0.002	0.06	0.09	0.06	0.39	0.43	0.46
Na	0.03	0.02	0.06	0.06	0.42	0.53	0.69
K		0.04	0.51	0.30	0.90	0.38	0.86
Ca	0.01	0.04	0.43	0.15	0.94	0.49	0.57
Mg	0.02	0.02	0.06	0.05	0.43	0.52	0.72
NH <sub>4</sub>	0.07	0.56	0.40	0.28	0.32	0.66	0.93
Cl	0.04	0.03	0.07	0.05	0.48	0.55	0.75
NO <sub>3</sub>	0.11	0.04	0.17	0.05	0.63	0.38	0.41
SO <sub>4</sub>	0.03	0.02	0.05	0.05	0.33	0.43	0.49
Excess SO <sub>4</sub>			0.08	0.05	0.43	0.51	0.54
Sum of Anions			0.06	0.03	0.32	0.37	0.52
Free Acid Deposition			0.09	0.06	0.44	0.64	0.70

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Variability is as previously described (Galloway and Likens, 1978). Sampling variability is based on data from five or six collectors located five meters apart at Site 14. The November-December 1977 Spatial Variability Study is based on the same 11 precipitation events that were sampled for the Sampling Variability Study. The June-July 1978 Sampling Variability and Spatial Variability studies are based on data from 10 precipitation events that occurred during late June and early July 1978. Five sites (01, 12, 13, 14, 19) which cover 200 km<sup>2</sup> or 12 sites (01, 03, 05, 06, 08, 10, 11, 12, 13, 14, 16, 19) which cover 600 km<sup>2</sup> were utilized. Sampling Variability and Spatial Variability were calculated by summing the standard deviation/mean (relative standard deviation) for each parameter per event then dividing by the number of events. Analytical Variability is the relative standard deviation based on six to ten separate measurements.



analytical error. Stabilization of  $\text{NO}_3^-$  and  $\text{NH}_4^+$  concentrations was accomplished in most cases by storing the samples at  $4^\circ\text{C}$  until chemical analysis was complete. This procedure appears satisfactory for at least 60 days. Long-term stabilization and storage was accomplished by freezing the sample. Stabilization of sample acidity or pH could not generally be accomplished at either  $4^\circ\text{C}$  or by freezing of the samples. Those samples which were quite acidic with pH 4.2-4.3 or below were generally but not always self-stabilizing. Results of several sample stability studies are shown in Figure 7.

Analytical, Sampling, and Spatial Variability. Since the measured concentrations of chemical species present in precipitation may vary due to several factors, factors which can be controlled and minimized were continually evaluated. Three specific factors were documented: analytical variability, sampling variability, and spatial variability. These factors have been defined in the experimental section of this report. Every effort was made to insure that results obtained did indeed reflect the actual composition of precipitation and were influenced only slightly, if at all, by controllable factors. Results obtained for analytical variability, sampling variability, and spatial variability are presented in Table 3. Specific experiments which were designed to evaluate both analytical variability and sampling variability were performed during November-December 1977, and again during June-July 1978. These time periods were selected because meteorological conditions would be at extremes during the two time periods and variability in precipitation composition could, therefore, be significantly different. Because precipitation composition data were available for the entire operational network, spatial variability was determined for comparable time periods to aid in the evaluation of the major sources of variability in measured precipitation composition. The results presented in Table 3 indicate that analytical variability did not change significantly during the two different time periods and probably contributed only a small amount to any variations observed in precipitation composition. Analytical variability was determined for each chemical species by performing each determination six to ten times on fresh portions of the same sample.

Sampling variability was determined from samples collected 5 meters apart at Site 14. Six collectors were used for the November-December 1977 study while five collectors were used for the June-July 1978 study. Samples from 11 precipitation events were analyzed to determine sampling variability in the November-December 1977 study. Samples from ten precipitation events were analyzed to determine sampling variability in the June-July 1978 study. Variation in precipitation composition that results from sampling as determined here also includes analytical variability. However, the magnitude of analytical variability has been shown to be considerably less than that observed for sampling variability. Only minor differences in sampling variability were observed between the two time periods evaluated. The 11 precipitation events which occurred during November-December 1977 were generated by movement of a cold front through central Florida and were generally characterized by strong gusty winds and precipitation which occurred during periods that ranged from about 1 hour to more than 24 hours of continuous

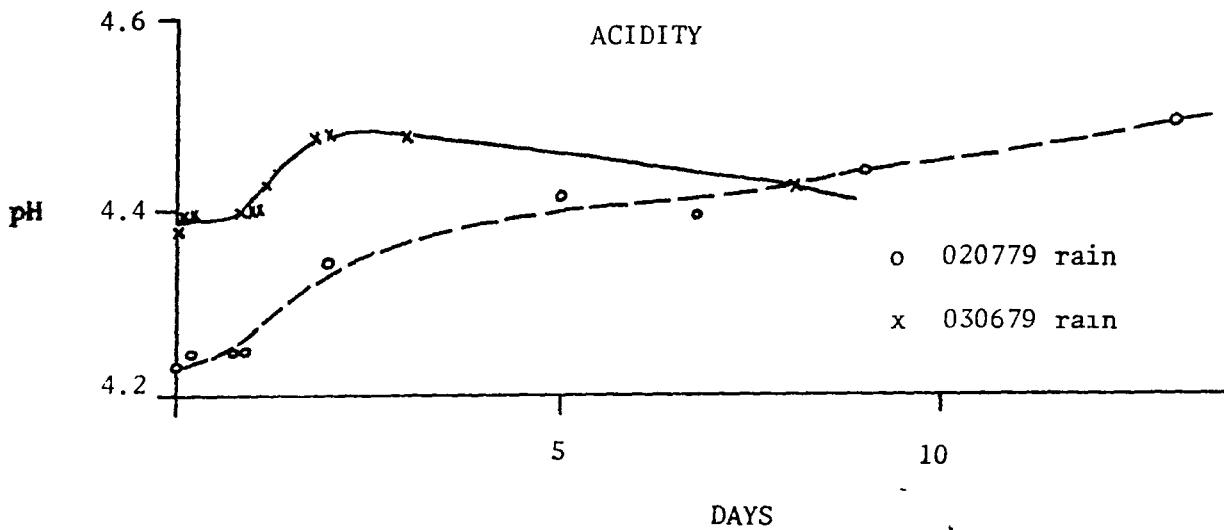
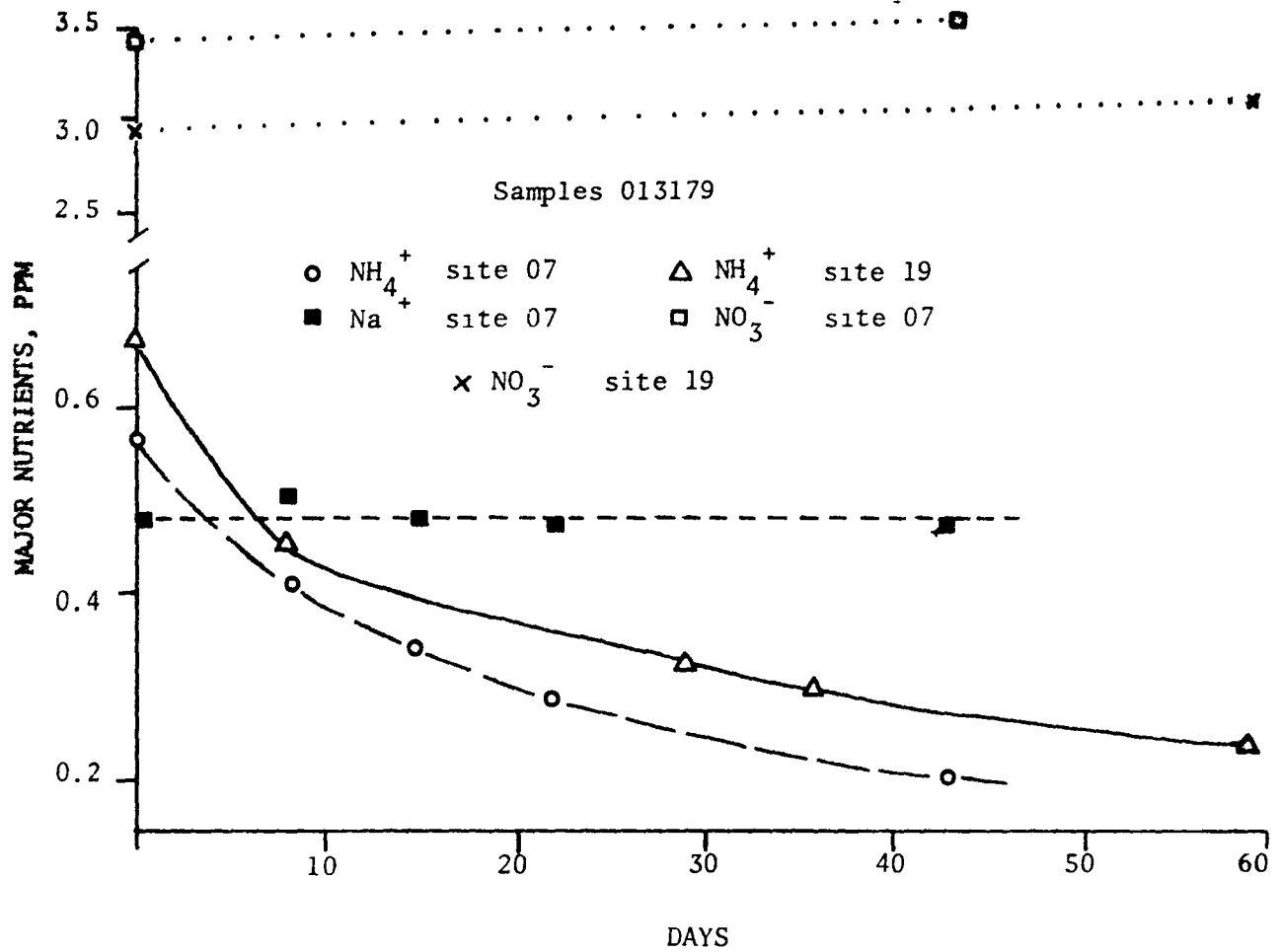


Figure 7. Changes in the chemical composition of precipitation samples with time when stored at room temperature

rain and mist. The ten precipitation events from June-July 1978 were a result of convective-type weather activity. Strong gusty winds usually occur during periods of convectonal storm activity. Precipitation usually occurs over a short time period of two hours or less.

Spatial variability associated with precipitation composition which occurred during the same time periods utilized to evaluate analytical and sampling variability are also presented in Table 3. Spatial variability inherently includes both analytical variability and sampling variability. Results obtained for both the November-December 1977 and June-July 1978 periods show significant variations in precipitation composition. These variations cannot be accounted for by a consideration of analytical and sampling variability. The observed spatial variability in the concentration for each chemical species, as reported in Table 3, is quite typical of what occurs even on an event-by-event basis.

#### Chemical Composition of Precipitation Which Occurred from July 1977 to March 1979

Precipitation chemistry data were collected for several sites on KSC and on the UCF campus for a 21-month period. Ionic composition data were obtained from precipitation samples for the last 17 months while acidity, conductivity, and volume measurements were made during the entire 21-month period. In the following narrative, general observations based on data collected are described. No attempt is made to present all results available on a site and chemical parameter basis. Instead, representative data from selected sites which involve only a few of the more important chemical parameters will be utilized. Trends and variations in volume weighted average concentrations which occurred during the 21-month study for several chemical parameters will be considered. The term "volume weighted average" (VWA) or "weighted average" will be used when concentration data for individual chemical species are to be reported as averages and when precipitation sample sizes were not identical. Larger samples exert a greater influence on weighted average concentration. The weighted average is determined as follows:

$$VWA = \frac{\sum_i C_i V_i}{\sum_i V_i}$$

where  $C_i$  represents the concentration and  $V_i$  represents the volume of the  $i$ th sample. The weighted average for most situations is calculated as described. However, parameters which are logarithmic functions of concentration cannot be treated directly. For example, pH values must be converted to hydrogen ion concentrations, then the weighted average hydrogen ion concentration is calculated and used to calculate weighted average pH.

Monthly weighted average pH, amount of precipitation, major ion concentrations as microequivalents/liter and total deposition amount of free acid measured as microequivalents/square meter are summarized for six individual sites located at KSC, the UCF site, and an average of all KSC sites in Tables 4-12. The values reported in Table 4 include contributions from all KSC sites. The units microequivalents/liter were selected for reporting of results in preference to units of parts per million (ppm) because the former allow direct intercomparison of acidity with other ionic concentrations. Units of ppm are based on weight and thus do not allow direct comparisons to be made. For example, in a dilute solution of sulfuric acid, one microequivalent of acid is present for each microequivalent of sulfate. By comparison, 1 ppm of acid (hydrogen ion) is present for each 48 ppm sulfate.

Results from both "clean" and "slightly dirty" samples are included in the average values reported. Clean samples were those which were colorless and contained no visible contamination such as dirt or insect remains. Slightly dirty samples contained dirt, insect remains, or other foreign matter while the liquid portion of the sample remained colorless. Results obtained as averages for "clean only" samples are reported for comparison purposes in Table 5. The weighted average concentrations based on clean and slightly dirty samples agree with the corresponding averages based on results from clean only samples except during the period December 1978, and January 1979. Clean samples accounted for less than ten percent of all samples collected during this two-month period. No clean samples were collected during February and March 1979. The variations in monthly weighted average pH for all KSC sites based on clean plus slightly dirty and for clean only samples is shown in Figure 8. The variations apparent in the December 1978, to March 1979, data have been explained above.

Tables 6 to 12 summarize the monthly averages considered previously in Tables 4 and 5 for individual KSC sites 01, 11, 12, 13, 14, and 19, and UCF Site 18. In all cases, considerable variation between months is observed for the chemical species measured. Site-to-site variations for individual chemical species is not as great as monthly variations. Figures 9 and 10 show variations observed when weighted average pH based on all KSC sites is compared to the UCF site and when weighted average pH at KSC sites 01, 12, and 14 are compared. The variation in the chemical composition of precipitation has been considered previously. The variation in measured sample pH based on all samples collected at a single site within a specified time period is substantial. Monthly and quarterly pH summaries presented as weighted averages are shown in Figure 11. The distribution and variability of sample pH is shown in Figure 12 and in Appendix Tables 1-21. Because of the variability in the chemical composition of rain monthly weighted averages should be utilized with caution and then only to indicate the relative average composition on a month-to-month basis.

MO/YR	PH	C/PPT	H	NA	K	CA	UEQ/LITER				F	NO3	SO4	XSSO4	SS	UEQ/SQ. M.
							MG	NH4	CL	AMTH						
07/77	4.53	0.0	29.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/77	4.57	0.0	26.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09/77	4.83	0.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/77	4.44	0.0	36.7	4.0	2.4	0.0	16.9	4.1	81.1	0.4	4.8	31.1	22.7	89.2	0.0	0.0
11/77	5.17	0.0	6.8	31.7	0.5	1.0	7.1	1.4	35.6	0.1	3.0	7.8	4.5	38.5	0.0	0.0
12/77	4.64	0.0	23.0	56.3	1.1	3.9	11.7	3.3	52.1	0.0	7.8	25.8	20.5	56.2	0.0	0.0
01/78	4.61	0.0	24.7	53.7	1.1	4.4	13.0	7.7	52.8	0.1	10.1	31.4	26.0	57.8	0.0	0.0
02/78	4.41	0.0	34.1	40.1	0.9	5.4	11.2	8.6	44.5	0.8	9.0	36.1	32.0	44.4	0.0	0.0
03/78	4.51	0.0	30.8	34.3	1.1	10.2	9.6	8.4	39.2	0.8	17.5	30.6	26.8	41.0	0.0	0.0
04/78	4.58	0.0	20.4	68.4	7.5	47.7	17.9	47.1	65.3	3.4	23.4	73.8	67.1	71.6	0.0	0.0
05/78	4.43	0.0	30.4	37.0	2.6	16.3	4.7	34.3	42.2	1.4	21.1	43.8	39.6	45.2	0.0	0.0
06/78	4.52	0.0	30.2	20.0	1.2	0.1	4.6	8.3	21.7	0.2	11.4	27.2	25.0	23.7	0.0	0.0
07/78	4.28	0.0	52.5	21.5	1.0	6.4	5.0	4.0	23.0	1.1	14.9	42.4	40.1	25.0	0.0	0.0
08/78	4.42	0.0	38.4	13.8	0.4	0.0	4.1	2.5	18.4	0.3	10.0	24.7	27.9	14.3	0.0	0.0
09/78	4.42	0.0	38.2	47.2	1.4	0.0	11.4	4.7	53.8	1.2	14.1	31.1	25.7	57.8	0.0	0.0
10/78	4.71	0.0	19.5	64.7	2.0	0.1	13.2	4.1	70.4	0.8	7.2	21.3	14.4	77.2	0.0	0.0
11/78	4.55	0.0	28.3	140.7	3.8	10.7	33.7	0.9	153.0	2.3	11.0	38.0	22.2	108.7	0.0	0.0
12/78	4.90	0.0	11.1	174.0	4.2	10.5	37.8	2.7	188.2	0.9	5.1	24.4	10.1	207.0	0.0	0.0
01/79	4.75	0.0	17.5	50.2	2.1	9.1	11.7	2.7	54.5	0.6	5.2	14.7	14.1	54.7	0.0	0.0
02/79	4.50	0.0	27.5	62.0	2.1	12.8	15.1	11.6	70.0	2.4	14.6	43.4	36.3	76.7	0.0	0.0
03/79	4.60	0.0	25.3	52.0	1.9	11.2	11.9	9.4	54.4	4.2	15.5	32.7	27.1	60.0	0.0	0.0

All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The latter represents the amount of acid deposited (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 4. Volume Weighted Average Chemical Composition by Month for Clean and Slightly Dirty Precipitation Samples Collected at All KSC Sites During 1977-79

MO/YR	PH	CMPPT	UEQ/LITER										UEQ/SQ. M.				
			H	NA	K	CA	MG	NH4	CL	F	NO3	SO4	XSSO4	SS	AMTH		
07/77	4.55	0.0	29.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/77	4.48	0.0	33.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09/77	4.53	0.0	29.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/77	4.39	0.0	40.7	113.2	3.3	9.2	17.8	8.8	96.8	2.9	11.0	34.2	24.3	100.5	0.0	0.0	0.0
11/77	5.17	0.0	8.8	31.7	0.5	1.8	7.1	1.4	35.8	0.1	3.0	7.6	24.5	38.5	0.0	0.0	0.0
12/77	4.52	0.0	23.4	52.1	1.1	4.0	12.1	3.4	54.0	0.5	7.7	26.4	21.0	58.3	0.0	0.0	0.0
01/78	4.80	0.0	13.3	31.4	0.4	6.0	7.4	5.7	31.0	0.1	8.3	19.3	16.0	33.7	0.0	0.0	0.0
02/78	4.41	0.0	39.1	43.0	0.4	3.4	12.0	5.2	48.0	0.5	8.1	30.3	31.9	47.6	0.0	0.0	0.0
03/78	4.51	0.0	33.9	33.3	0.4	8.7	9.3	7.2	38.0	0.8	18.2	28.2	24.5	39.8	0.0	0.0	0.0
04/78	4.50	0.0	21.7	50.4	10.4	34.7	12.8	41.4	44.3	4.4	20.2	54.2	49.5	49.1	0.0	0.0	0.0
05/78	4.44	0.0	38.3	30.6	1.4	13.4	9.1	19.0	40.9	0.7	18.5	40.8	36.5	44.7	0.0	0.0	0.0
06/78	4.59	0.0	23.3	49.9	1.3	8.7	11.3	3.9	54.0	0.2	9.7	28.0	28.5	59.1	0.0	0.0	0.0
07/78	4.38	0.0	41.5	17.3	0.2	3.3	3.8	1.4	18.2	0.3	11.0	31.4	29.6	19.8	0.0	0.0	0.0
08/78	4.40	0.0	39.4	14.4	0.2	4.8	3.8	3.0	17.3	0.4	9.8	31.1	29.5	17.4	0.0	0.0	0.0
09/78	4.54	0.0	28.8	60.3	1.7	4.9	14.3	3.3	68.5	1.6	11.0	28.3	19.5	73.8	0.0	0.0	0.0
10/78	4.72	0.0	18.7	88.3	2.0	5.7	15.6	4.1	72.3	0.6	6.4	21.1	13.7	79.1	0.0	0.0	0.0
11/78	4.55	0.0	27.3	73.0	1.4	8.8	18.8	0.5	71.6	4.3	13.4	19.8	12.4	78.7	0.0	0.0	0.0
12/78	4.05	0.0	69.1	44.0	9.0	29.1	101.3	14.9	474.5	4.4	35.9	120.0	71.2	523.0	0.0	0.0	0.0
01/79	3.97	0.0	106.9	43.7	3.2	55.4	13.3	38.3	43.9	8.3	53.7	121.7	117.2	48.4	0.0	0.0	0.0
02/79	6.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
03/79	6.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The latter represents the amount of acid deposited (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 5. Volume Weighted Average Chemical Composition by Month for Clean Precipitation Samples Collected at All KSC Sites During 1977-79

MU/YR	PH	Cmppt	H	NA	K	CA	UEQ/LITER					F	NO3	SU4	XSSO4	SS	UEQ/SQ. M.	
							Mg	NH4	CL	AMTH	AMTH							
07/77	4.47	4.3	34.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1484.	1484.
08/77	4.50	13.4	31.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4258.	4258.
09/77	4.74	15.4	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2583.	2583.
10/77	4.35	7.4	41.5	54.2	1.5	7.1	12.8	4.4	46.4	4.0	12.2	28.7	23.4	51.7	3076.	3076.	3076.	3076.
11/77	5.04	16.1	8.2	31.8	0.8	1.4	7.2	1.8	36.2	0.2	3.4	8.0	4.3	37.5	1324.	1324.	1324.	1324.
12/77	4.56	7.1	27.3	37.1	0.8	3.4	8.0	3.8	37.5	0.2	7.5	28.0	24.3	40.5	1931.	1931.	1931.	1931.
01/78	4.54	5.4	25.8	38.4	1.3	8.3	10.3	9.5	42.7	0.2	12.1	31.4	27.1	40.7	1523.	1523.	1523.	1523.
02/78	4.44	10.3	38.1	65.2	1.0	4.3	15.1	6.6	58.4	0.5	9.6	37.0	31.0	64.4	3729.	3729.	3729.	3729.
03/78	4.44	8.2	32.1	44.8	1.3	10.3	12.2	8.8	48.8	1.0	17.3	33.2	28.2	52.4	2635.	2635.	2635.	2635.
04/78	4.47	8.5	33.8	85.4	4.7	70.6	22.8	67.7	88.1	5.0	31.8	101.1	92.0	97.1	167.	167.	167.	167.
05/78	4.48	5.9	34.5	44.1	3.1	20.2	13.1	39.0	54.1	1.3	25.5	42.7	36.8	63.0	2040.	2040.	2040.	2040.
06/78	4.44	17.2	35.4	18.8	1.1	8.1	4.4	8.4	19.2	0.0	13.2	30.7	28.8	21.2	6182.	6182.	6182.	6182.
07/78	4.38	22.4	41.8	41.3	1.3	8.2	8.3	3.1	45.3	0.0	12.4	38.4	31.8	49.8	9552.	9552.	9552.	9552.
08/78	4.33	10.1	48.9	15.8	1.2	8.2	8.8	4.0	21.2	0.2	12.2	35.1	33.2	20.4	4757.	4757.	4757.	4757.
09/78	4.37	11.1	42.8	34.8	1.0	10.2	4.8	6.5	44.3	3.4	18.3	37.1	32.8	47.9	4785.	4785.	4785.	4785.
10/78	4.71	8.8	14.3	74.7	2.1	8.7	17.8	2.2	75.8	0.4	8.8	20.3	12.8	82.8	1322.	1322.	1322.	1322.
11/78	4.49	3.7	32.4	178.3	4.3	12.2	40.7	0.9	208.4	2.4	4.8	49.8	28.2	23.1	1145.	1145.	1145.	1145.
12/78	4.87	8.8	13.4	178.8	4.3	10.8	37.3	1.7	191.5	0.8	4.4	28.8	9.3	209.3	1158.	1158.	1158.	1158.
01/79	4.74	20.3	18.3	50.3	1.5	8.8	11.4	2.8	58.8	0.4	5.1	19.3	13.8	81.8	3707.	3707.	3707.	3707.
02/79	4.52	2.3	30.8	73.4	2.8	14.4	18.3	11.5	87.8	1.2	14.1	45.4	36.8	44.2	755.	755.	755.	755.
03/79	4.54	2.7	25.7	58.4	2.0	14.1	12.5	6.4	52.4	8.2	13.4	28.8	23.1	58.3	698.	698.	698.	698.

All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The latter represents the amount of acid deposited (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 6. Volume Weighted Average Chemical Composition by Month for Clean and Slightly Dirty Precipitation Samples Collected at KSC Site 01 During 1977-79

MO/YR	PH	CMPPT	H	NA	K	CA	UEQ/LITER				F	NO3	SU4	XSSU4	SS	UEQ/SQ M.	AMTH
							MG	NH4	CL								
07/77	4.53	3.4	24.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	999.	
08/77	4.54	7.0	20.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2188.	
09/77	4.82	9.4	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1428.	
10/77	4.51	0.6	30.3	20.0	5.0	12.0	25.4	9.1	175.7	2.0	6.4	41.9	23.8	193.0	2032.		
11/77	5.34	15.5	4.0	40.0	1.0	5.0	21.4	1.3	110.1	0.0	2.4	13.2	5.3	120.0	710.		
12/77	4.71	4.4	19.4	130.0	2.0	8.0	31.2	5.4	132.0	2.1	9.7	34.7	21.3	144.0	1814.		
01/78	4.67	5.6	21.4	130.0	2.0	10.0	32.7	7.8	135.0	0.4	11.1	38.1	24.1	149.5	1196.		
02/78	4.46	9.1	34.7	97.0	2.5	7.5	35.0	4.8	138.4	0.0	9.1	46.7	36.0	115.5	3152.		
03/78	4.40	3.3	34.5	85.1	2.5	15.7	22.3	4.2	105.7	1.1	15.8	42.4	32.8	102.8	1129.		
04/78	4.60	0.0	25.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0		
05/78	4.40	5.4	34.3	45.7	3.4	30.8	24.2	34.8	97.7	1.7	27.2	60.6	50.5	107.8	1872.		
06/78	4.55	10.5	27.9	51.0	2.4	8.2	11.4	4.2	57.1	0.2	4.7	31.0	25.1	62.5	4611.		
07/78	4.41	22.0	39.3	27.0	1.2	8.5	0.1	2.4	27.7	1.2	12.4	32.9	30.1	30.4	8635.		
08/78	4.43	16.1	37.1	20.1	0.7	4.4	4.4	2.6	23.4	0.1	9.3	27.5	25.2	24.4	5986.		
09/78	4.50	10.7	31.4	155.5	3.9	11.2	37.3	2.5	170.0	0.5	12.7	39.3	21.7	189.8	3354.		
10/78	4.80	10.3	15.4	190.0	4.4	15.2	45.7	1.5	223.7	0.2	0.9	35.5	13.0	241.0	1637.		
11/78	4.41	1.7	38.9	315.7	9.5	22.8	72.8	1.5	348.0	0.7	15.6	64.8	29.0	384.5	672.		
12/78	5.00	7.5	8.7	582.1	11.8	32.1	120.0	2.5	641.1	3.3	6.1	78.0	12.2	705.2	653.		
01/79	4.82	10.2	15.0	130.1	3.3	41.0	34.5	3.4	154.3	1.1	5.7	29.5	13.0	170.2	2730.		
02/79	4.53	3.3	29.0	194.5	4.0	18.5	40.4	11.8	225.6	2.5	15.5	57.0	33.8	248.4	962.		
03/79	4.60	2.3	25.1	162.5	3.8	17.0	34.0	0.7	190.8	3.5	12.4	42.6	23.0	204.0	589.		

All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The latter represents the amount of acid deposition (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 7. Volume Weighted Average Chemical Composition by Month for Clean and Slightly Dirty Precipitation Samples Collected at KSC Site 11 During 1977-79



MU/YR	PH	CMPPT	UEQ/LITER												SS	UEQ/SQ. M.		
			H	NA	K	CA	MG	NH4	CL	F	NO3	SJ4	XSSO4					
07/77	4.57	3.4	20.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	918.
08/77	4.36	17.7	43.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7743.
09/77	4.83	22.1	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3251.
10/77	4.30	3.0	50.3	63.2	2.4	0.4	13.8	8.3	57.0	1.8	15.7	0.0	0.0	0.0	0.0	60.9	1509.	
11/77	5.17	10.0	6.3	17.7	0.1	1.2	4.0	1.4	18.9	0.1	3.3	0.0	0.0	0.0	0.0	20.8	1089.	
12/77	4.56	7.8	27.7	39.8	1.0	3.3	4.1	2.8	41.1	0.9	9.9	2.8	2.3	24.2	44.2	44.2	2165.	
01/78	4.56	6.4	27.8	37.1	0.0	0.4	8.7	7.8	34.2	0.0	10.5	30.5	27.1	36.8	36.8	36.8	1905.	
02/78	4.42	12.4	38.2	28.1	0.0	4.0	7.1	8.8	29.9	1.3	9.4	33.7	30.7	32.0	32.0	32.0	4730.	
03/78	4.58	7.8	26.3	25.1	0.9	8.0	7.3	8.0	30.0	0.8	11.5	28.2	25.3	30.9	30.9	30.9	2047.	
04/78	4.75	0.4	17.4	51.2	4.4	54.2	14.4	55.1	57.1	3.5	29.2	79.1	73.2	62.6	62.6	62.6	71.	
05/78	4.47	12.9	33.6	18.0	1.4	4.4	4.0	22.8	19.5	0.7	10.4	31.0	29.0	21.4	21.4	21.4	4352.	
06/78	4.40	11.7	40.1	10.3	0.9	0.0	4.3	11.0	18.4	0.1	10.9	33.8	31.9	20.8	20.8	20.8	4708.	
07/78	4.33	24.5	48.3	10.0	0.3	0.8	4.3	3.0	18.0	1.3	14.6	35.8	34.0	20.3	20.3	20.3	11467.	
08/78	4.46	4.0	34.5	0.3	0.0	3.2	2.3	1.3	8.0	1.1	3.5	24.5	23.8	8.0	8.0	8.0	1396.	
09/78	4.58	11.4	26.1	20.0	1.0	4.2	0.0	2.5	33.0	0.2	10.4	19.7	16.5	35.2	35.2	35.2	2980.	
10/78	4.75	13.0	18.0	47.7	1.4	3.3	11.7	2.1	48.0	0.4	5.9	17.9	12.9	53.8	53.8	53.8	2473.	
11/78	4.66	4.7	21.0	32.1	3.1	10.4	29.5	0.4	141.4	0.2	8.0	32.3	17.8	155.8	155.8	155.8	1025.	
12/78	4.42	9.0	12.0	150.0	3.5	8.0	31.0	2.0	158.0	1.6	5.8	20.9	10.5	174.9	174.9	174.9	1075.	
01/79	4.71	20.3	19.4	43.0	2.2	4.0	8.4	2.4	42.4	0.8	0.6	19.1	14.6	47.4	47.4	47.4	3937.	
02/79	4.54	3.3	25.7	53.0	1.5	11.2	12.8	11.4	50.4	2.1	13.2	30.1	30.4	61.7	61.7	61.7	835.	
03/79	4.70	3.3	20.2	81.3	2.3	14.0	10.2	7.5	71.0	4.1	17.0	38.1	30.7	79.0	79.0	79.0	663.	

All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The latter represents the amount of acid deposited (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 8. Volume Weighted Average Chemical Composition by Month for Clean and Slightly Dirty Precipitation Samples Collected at KSC Site 12 During 1977-79

MO/YR	PH	CMPPT	H	NA	K	CA	UEQ/LITER				F	NO3	SO4	XSSO4	SS	UEQ/SQ M.	
							MG	NH4	CL	AMTH						AMTH	
07/77	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/77	5.00	10.7	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09/77	5.02	14.1	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1329.0
10/77	4.25	4.5	56.7	0.0	1.0	5.0	10.0	5.0	53.0	1.5	12.0	29.6	24.1	59.1	256.0	256.0	1481.0
11/77	5.19	18.5	28.0	10.0	0.0	1.1	3.0	1.5	18.1	0.0	3.6	7.3	5.5	19.3	148.1	148.1	2223.0
12/77	4.66	10.1	22.0	30.1	0.0	2.0	8.0	2.7	31.5	0.5	8.5	21.7	16.5	34.1	204.5	204.5	4932.0
01/78	4.66	4.8	21.7	35.3	0.3	7.2	7.4	7.1	30.2	0.0	8.5	25.8	22.8	33.3	104.5	104.5	2599.0
02/78	4.42	12.9	38.1	21.9	0.5	3.8	5.5	6.3	22.2	0.5	8.1	31.1	28.9	23.8	493.2	493.2	2599.0
03/78	4.47	7.7	33.8	30.8	0.9	12.0	10.3	10.2	35.5	0.4	21.8	33.1	29.6	37.3	259.9	259.9	3853.0
04/78	4.74	0.4	18.2	49.8	4.7	59.1	15.8	0.0	59.8	3.8	31.1	88.2	82.3	63.4	76.0	76.0	4157.0
05/78	4.32	8.0	48.2	24.3	2.3	10.3	0.7	39.3	28.7	1.8	23.1	53.7	52.9	24.7	385.3	385.3	10077.0
06/78	4.50	15.0	26.3	13.2	0.7	10.2	3.0	0.2	13.0	0.0	12.5	23.2	21.8	14.3	415.7	415.7	2944.0
07/78	4.32	21.0	48.0	4.0	0.4	0.5	2.3	2.2	4.0	1.3	11.4	39.9	38.9	10.3	100.7	100.7	4141.0
08/78	4.39	10.1	41.1	11.0	1.3	0.9	0.9	4.5	12.2	0.2	11.8	32.3	31.1	13.1	414.1	414.1	2944.0
09/78	4.44	8.0	36.0	26.4	0.9	0.0	7.0	3.8	29.2	0.0	13.7	31.0	28.9	29.4	294.4	294.4	2854.0
10/78	4.63	12.1	23.7	53.2	1.3	5.0	12.3	3.0	56.7	0.2	8.5	23.1	17.3	62.6	285.4	285.4	690.0
11/78	4.56	2.5	27.7	100.3	2.5	8.2	24.6	0.7	104.0	0.4	12.1	24.3	18.1	120.6	69.0	69.0	980.0
12/78	5.00	9.8	10.0	110.3	2.8	7.3	23.2	2.1	108.5	1.3	4.8	20.0	9.8	119.0	98.0	98.0	3421.0
01/79	4.75	14.4	17.6	47.1	2.4	4.2	10.3	2.0	46.4	0.0	0.4	10.0	11.9	51.2	342.1	342.1	1182.0
02/79	4.37	2.7	43.1	60.4	1.7	12.5	14.7	13.5	67.0	2.6	15.4	51.9	45.1	73.0	118.2	118.2	699.0
03/79	4.56	2.5	27.5	44.4	1.4	12.5	10.9	6.8	46.0	3.7	18.1	33.5	28.7	51.2	69.9	69.9	699.0

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All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The latter represents the amount of acid deposited (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 9. Volume Weighted Average Chemical Composition by Month for Clean and Slightly Dirty Precipitation Samples Collected at KSC Site 13 During 1977-79

MU/YR	PH	CMPT	H	NA	K	CA	MG	UEQ/LITER NH4	CL	F	NO3	SO4	XSSO4	SS	UEQ/SQ M. AMTH
07/77	6.00	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
08/77	6.00	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
09/77	6.00	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/77	6.00	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/77	5.21	13.0	26.2	13.0	0.0	0.0	3.4	0.0	17.0	0.0	0.0	0.0	0.0	18.0	807.0
12/77	4.55	7.2	27.4	51.1	0.0	4.2	11.5	0.0	28.0	0.0	2.4	5.5	3.8	59.2	1501.0
01/78	4.55	5.7	26.2	31.3	0.0	7.1	7.5	0.0	55.0	0.0	7.2	30.5	25.3	39.1	2015.0
02/78	4.40	11.6	40.1	24.4	0.0	4.0	0.2	0.0	27.5	0.0	6.5	34.9	32.1	29.0	4531.0
03/78	4.36	5.4	43.7	14.4	0.0	4.0	4.3	5.3	16.5	0.0	3.5	17.3	15.7	16.6	2592.0
04/78	4.64	0.2	22.4	41.3	0.0	4.6	11.1	47.1	42.5	3.7	19.0	53.9	49.8	46.3	554.0
05/78	4.46	7.2	34.5	20.0	1.7	4.6	3.1	29.7	23.0	1.2	18.6	30.1	33.8	24.7	2500.0
06/78	4.34	29.4	40.8	13.4	0.0	4.4	3.2	7.2	14.3	0.0	13.7	30.9	29.5	15.1	9947.0
07/78	4.21	29.5	62.2	12.0	0.0	4.3	2.2	4.9	12.8	0.0	17.8	47.4	46.1	14.1	18340.0
08/78	4.34	7.4	45.9	12.0	0.0	4.1	3.4	2.3	14.8	0.0	13.8	36.4	34.9	15.5	3647.0
09/78	4.08	5.4	83.5	10.4	0.0	4.0	4.4	11.4	23.2	0.0	19.9	54.1	51.9	24.1	4492.0
10/78	4.45	8.6	11.3	67.0	1.3	4.5	1.1	1.0	69.7	0.0	4.6	14.6	7.5	7.9	964.0
11/78	4.70	3.2	14.4	164.4	4.0	4.7	38.0	3.5	164.5	1.8	6.3	34.3	17.6	151.3	641.0
12/78	4.96	8.5	11.0	152.4	3.8	4.1	32.2	3.4	160.5	1.0	5.9	34.3	10.3	176.8	937.0
01/79	4.73	17.1	18.6	37.5	1.0	4.5	6.7	2.2	39.8	0.0	4.7	20.8	15.3	43.4	3197.0
02/79	4.53	3.4	24.7	58.2	1.8	4.3	13.5	0.0	65.9	1.9	14.7	40.7	34.0	72.1	1022.0
03/79	4.68	3.7	20.7	45.4	3.0	4.0	10.2	19.6	50.8	3.9	17.1	32.5	27.4	55.0	767.0

All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The latter represents the amount of acid deposited (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 10. Volume Weighted Average Chemical Composition by Month for Clean and Slightly Dirty Precipitation Samples Collected at KSC Site 14 During 1977-79

MO/YR	PH	CMPPT	H	NA	K	CA	MG	UEQ/LITER			F	NO3	SO4	XSSO4	SS	UEQ/SQ. M.	AMTH
								NH4	CL								
07/77	4.62	1.3	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	311.	
08/77	4.88	14.4	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1894.	
09/77	4.73	12.7	18.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2377.	
10/77	4.78	6.3	16.0	0.0	2.4	5.4	14.2	12.5	4.8	0.0	1.1	4.4	22.2	17.2	53.6	1050.	
11/77	5.17	23.3	6.5	20.0	0.3	1.0	4.0	1.5	22.0	0.0	0.0	2.6	5.9	3.6	24.3	1521.	
12/77	4.76	9.6	17.2	24.0	0.3	2.0	5.7	2.8	26.4	0.3	0.3	5.3	15.8	13.1	28.7	1657.	
01/78	4.61	5.4	24.0	48.1	1.0	9.3	11.4	7.2	47.4	0.1	0.1	9.0	32.0	27.1	52.2	1326.	
02/78	4.34	12.0	45.0	30.4	0.0	8.7	7.4	7.6	30.5	1.0	1.0	11.5	37.7	34.6	32.7	5774.	
03/78	4.53	2.6	29.5	34.5	1.2	13.4	11.0	9.8	44.4	0.9	0.9	15.0	40.7	36.2	49.0	836.	
04/78	4.43	0.4	37.4	135.1	0.4	64.0	24.2	78.1	110.7	5.4	5.4	36.0	117.8	100.6	120.4	165.	
05/78	4.57	10.1	27.1	42.2	2.1	12.0	10.4	27.8	44.4	0.0	0.0	17.0	33.3	28.3	54.1	2731.	
06/78	4.64	20.0	22.7	20.2	1.0	5.7	5.5	7.3	20.1	0.3	0.3	8.8	22.2	19.0	28.5	4550.	
07/78	4.24	21.7	56.4	41.1	1.2	8.0	4.0	2.0	45.3	0.7	0.7	19.1	47.8	43.2	49.7	12330.	
08/78	4.53	5.0	26.1	45.7	1.0	7.2	10.7	1.9	51.2	0.3	0.3	9.7	24.7	19.7	48.3	1452.	
09/78	4.53	11.7	24.5	34.0	1.3	5.1	4.2	3.0	44.2	0.0	0.0	12.9	25.2	20.7	48.1	3440.	
10/78	4.57	14.1	26.4	54.0	1.0	6.0	12.7	3.2	62.2	0.5	0.5	7.3	25.3	19.2	67.1	3793.	
11/78	4.61	2.4	24.5	153.3	4.0	13.0	34.6	0.5	162.4	0.3	0.3	10.8	33.9	17.2	179.1	601.	
12/78	5.00	7.6	10.0	153.3	3.4	7.0	31.7	1.4	144.4	0.1	0.1	3.7	24.0	9.8	154.2	761.	
01/79	4.70	16.1	17.2	44.5	3.5	5.4	11.4	2.8	47.4	0.0	0.0	6.8	18.5	13.6	52.3	2780.	
02/79	4.42	2.4	37.8	31.5	2.6	15.1	18.0	14.4	91.0	3.0	3.0	17.0	51.0	41.7	99.2	1084.	
03/79	4.62	2.3	23.8	40.7	1.9	2.0	10.7	5.1	45.4	5.5	5.5	12.4	26.3	21.6	50.2	552.	

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All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The latter represents the amount of acid deposited (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 11. Volume Weighted Average Chemical Composition by Month for Clean and Slightly Dirty Precipitation Samples Collected at KSC Site 19 During 1977-79

MO/YR	PH	CMPPT	H	NA	K	CA	UEQ/LITER					F	NO3	SO4	XSSO4	SS	UEQ/SQ. M.	
							MG	NH4	CL								AMTH	
07/77	4.50	15.5	50.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7781.	
08/77	4.41	25.0	30.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9639.	
09/77	4.51	21.2	24.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5257.	
10/77	4.40	1.2	39.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	459.	
11/77	4.42	6.3	12.2	10.5	0.5	3.4	5.7	3.2	18.4	0.0	0.0	0.0	11.1	9.3	14.4	766.		
12/77	4.52	3.4	30.0	17.7	0.5	4.5	4.5	1.9	23.7	0.0	0.5	4.1	18.8	16.7	22.2	2527.		
01/78	4.76	5.5	17.5	30.7	0.7	17.1	11.4	7.6	31.6	0.0	10.0	23.4	20.7	34.8	971.			
02/78	4.28	15.9	52.5	1.5	0.4	4.3	2.5	9.7	9.7	0.5	9.4	34.3	38.4	4.4	8354.			
03/78	4.47	6.3	33.6	22.2	1.3	12.2	5.8	11.2	22.9	1.1	13.6	51.9	49.6	25.3	2128.			
04/78	4.68	1.1	21.1	22.0	2.7	26.1	0.4	34.0	21.2	2.1	21.6	41.8	39.6	23.3	226.			
05/78	4.53	7.6	29.7	15.5	5.7	7.2	4.4	51.1	13.8	1.5	16.5	33.3	31.9	15.1	2255.			
06/78	4.48	17.5	33.2	11.2	0.4	6.7	2.6	6.8	11.4	0.1	12.2	24.4	28.7	12.4	5796.			
07/78	4.57	20.9	26.5	0.1	0.8	6.4	1.6	1.5	5.8	0.3	7.6	18.4	18.3	6.3	7232.			
08/78	4.44	4.4	32.1	13.5	1.0	8.6	4.4	3.7	16.5	0.9	13.6	21.3	19.7	17.0	3009.			
09/78	4.35	15.6	44.4	4.7	0.5	2.5	1.4	8.6	5.8	1.1	12.3	31.4	30.8	5.4	6918.			
10/78	4.37	5.8	43.0	61.5	1.5	7.4	13.4	8.3	63.3	0.7	15.1	36.6	30.2	64.6	2510.			
11/78	4.65	0.1	22.4	13.5	1.0	10.5	3.4	4.4	16.4	0.0	30.8	15.6	14.0	17.4	20.			
12/78	4.75	12.5	16.4	30.4	0.4	4.4	7.1	2.7	34.8	0.5	6.6	22.0	18.5	38.5	2078.			
01/79	4.86	18.5	13.8	22.7	0.4	12.6	0.8	4.8	23.8	0.4	6.4	16.3	13.9	25.3	2548.			
02/79	4.35	4.6	44.5	277.8	5.6	23.2	60.1	26.4	347.4	2.5	43.7	143.6	109.6	358.5	2114.			
03/79	4.40	6.3	34.4	14.2	0.8	4.7	3.6	6.0	18.9	5.1	15.3	34.2	32.5	18.3	2502.			

All concentrations are microequivalents/liter except pH, Cmppt, and AMTH. The later represents the amount of acid deposited (microequivalents/square meter). AMTH is calculated from pH and the amount of precipitation which occurred.

Table 12. Volume Weighted Average Chemical Composition by Month for Clean and Slightly Dirty Precipitation Samples Collected at UCF Site 18 During 1977-79



Figure 8. Comparison of Monthly Volume Weighted Average pH for All Clean Plus Slightly Dirty (.....) and Clean Only (\_\_\_\_\_) Precipitation Samples Collected at KSC



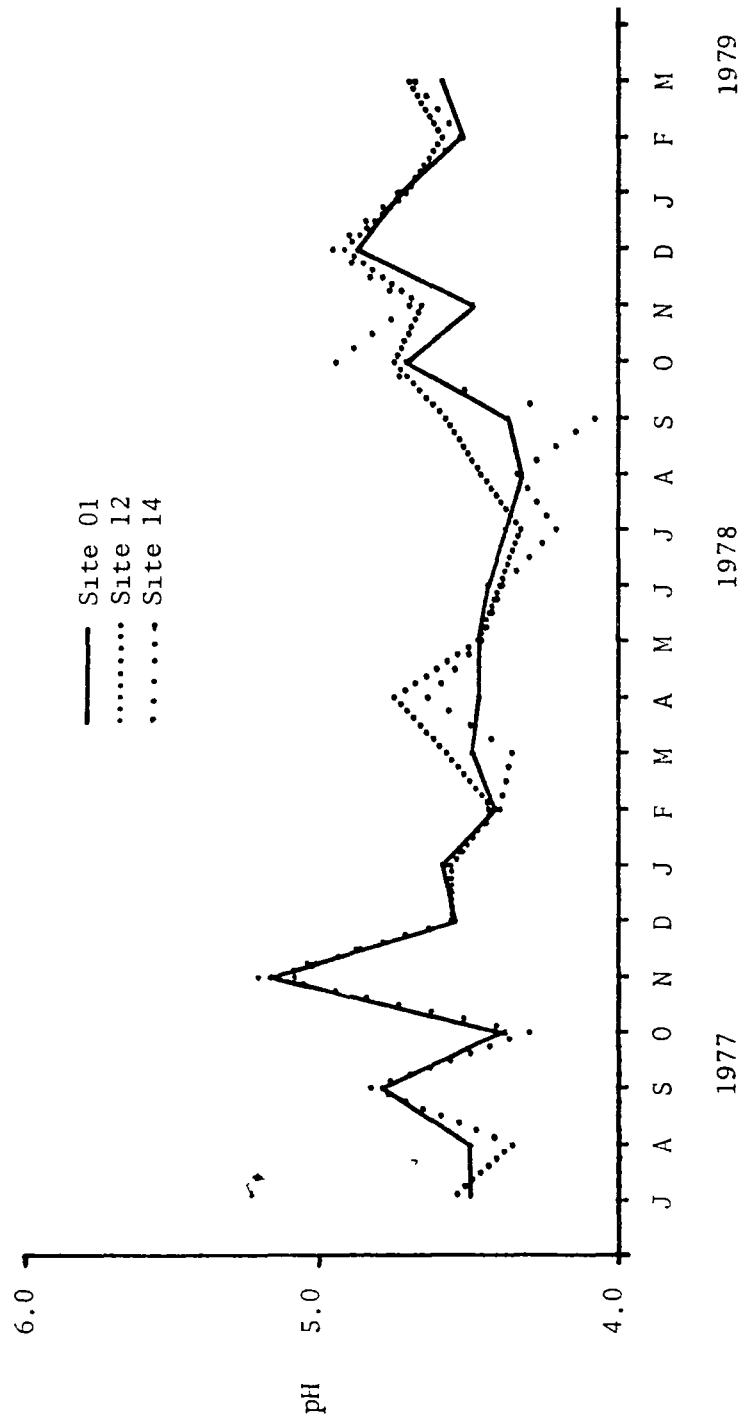


Figure 10. Comparison of Monthly Volume Weighted Average pH for Precipitation Samples Collected at Three Neighboring KSC Sites



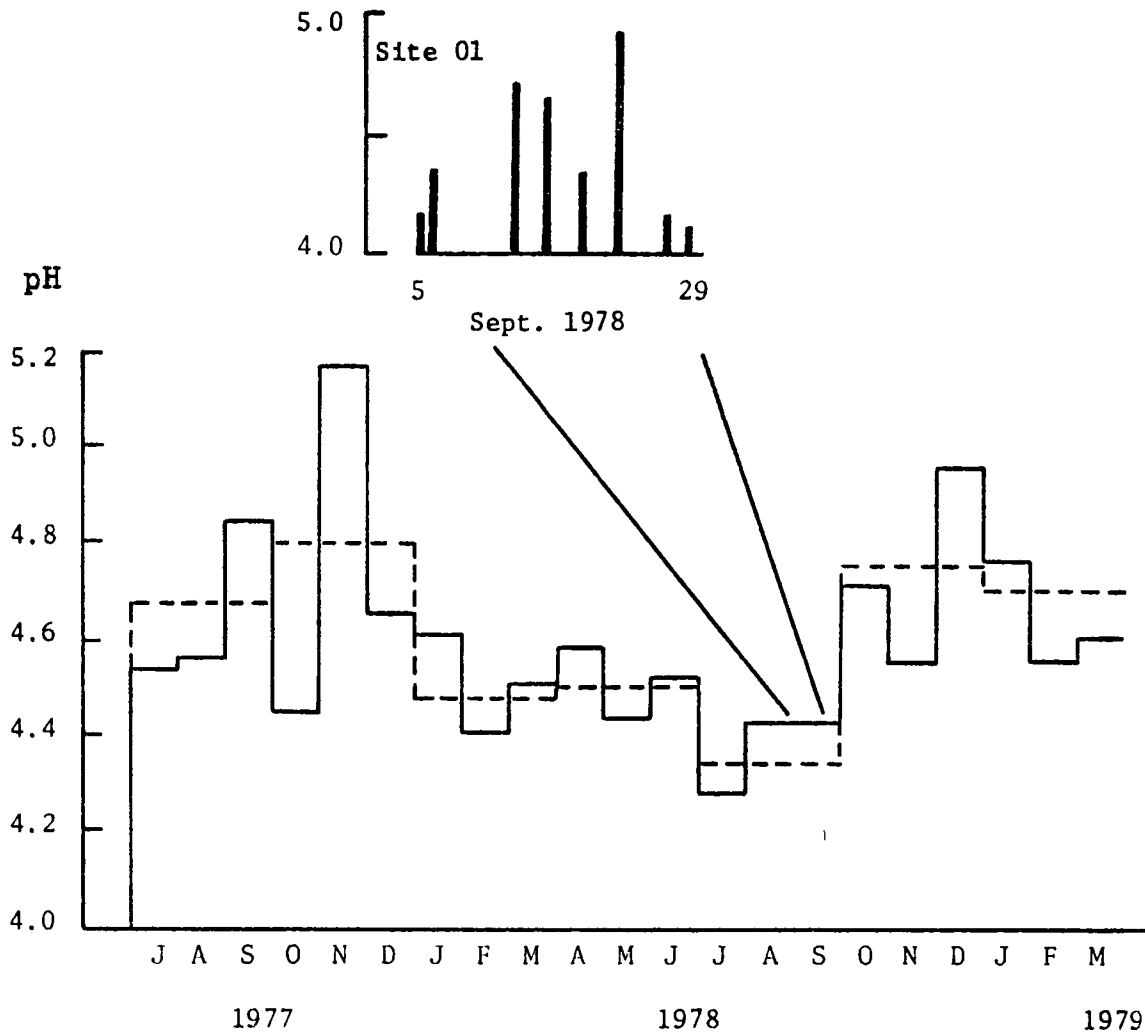
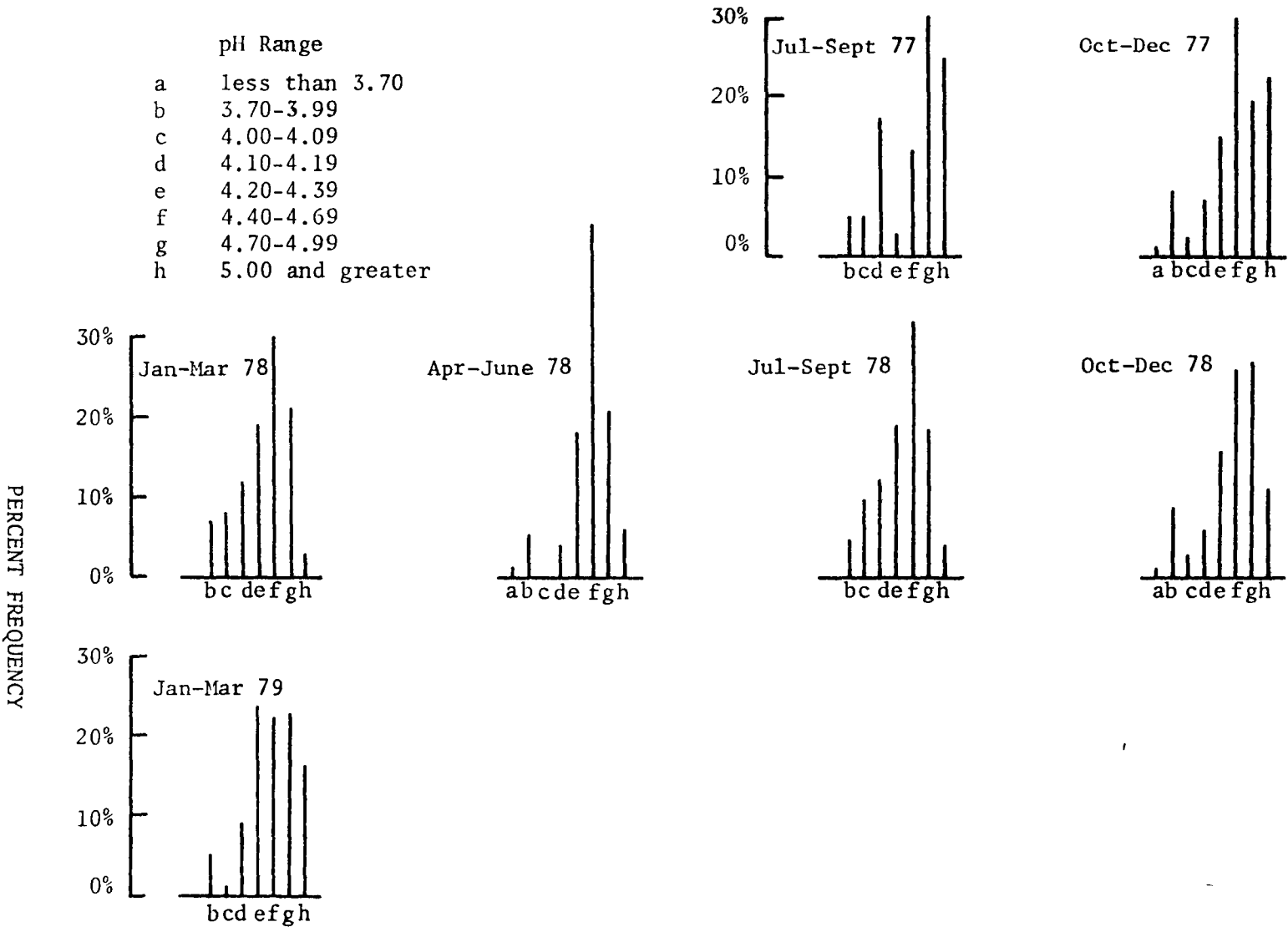


Figure 11. Comparison of Monthly Volume Weighted Average and Quarterly Volume Weighted Average pH Based on All Samples Collected at KSC. Insert Shows pH for Individual Samples Collected at KSC Site 01 During September 1978

\_\_\_\_\_ Monthly Weighted Average pH  
 - - - - - Quarterly Weighted Average pH

Figure 12. Distribution of Individual Sample pH Values for Precipitation Collected at KSC Sites 01, 12, 13, 14, and 19



### Characterization of Precipitation Composition

Results of precipitation chemistry measurements based on monthly averages were presented previously. The trends in precipitation composition from month to month are not clearly defined in most cases; significant correlations do exist, however, among several of the chemical species present. Many of these correlations exist on a sample-by-sample and event-by-event basis as well. The results summarized below will emphasize those correlations which are useful in defining the composition of precipitation.

Acidity. The free acidity of samples was determined by converting the measured pH value to the corresponding hydrogen ion concentration which has units of microequivalents/liter. The pH of dilute aqueous samples which contain strong acids such as  $\text{HNO}_3$ ,  $\text{H}_2\text{SO}_4$ , and/or  $\text{HCl}$  is determined by the total acid concentration present unless acid neutralizing species or partially dissociated weak acids are present. The actual strong acid acidity can be determined by titration and Gran plot treatment of the titration data (Galloway and Likens, 1979). Total titratable acidity can be evaluated from the same titration data and includes the contribution of all acidic species (Galloway and Likens, 1979). Rain samples which gave initial pH readings of less than 4.7 were titrated to determine the total acidity and strong acid acidity. Figures 13 and 14 show the relationships that were observed between HNV (non-volatile free acidity) and strong acid acidity in precipitation samples that were collected at KSC site 01 and for all KSC samples collected from July to September 1978. The relationship which exists between HNV and strong acid acidity for samples collected at KSC site 01 and at all KSC sites indicate that strong acids in the samples account for sample free acidity once volatile acids have been removed and, therefore, are responsible for pH values which have been observed. Similar behavior has been observed during other time periods. Titratable acidity for samples collected during July to September 1978, is compared to sample acidity based on the initial pH measurement in Figure 15.

The free acidity of rainfall at KSC can be totally accounted for by the presence of  $\text{H}_2\text{SO}_4$ , and  $\text{HNO}_3$  when monthly averages are considered. This observation has also been made when only individual samples are considered. The actual concentrations of free acidity,  $\text{NO}_3^-$ , and excess  $\text{SO}_4^{2-}$  (sulfate not of sea salt origin) in individual samples collected at KSC site 01 and UCF site 18 during July 1978, are shown in Figures 16 and 17, respectively. The additive concentrations of  $\text{NO}_3^-$  plus excess  $\text{SO}_4^{2-}$  account for the acidity observed even when sample acidity changed drastically. Concentrations of  $\text{NH}_4^+$  were very low in samples collected during July 1978.

The excess  $\text{SO}_4^{2-}$  concentrations and  $\text{NO}_3^-$  concentrations in rain samples expressed as monthly weighted averages are included in Tables 4 to 12. From Figures 18 and 19, it is apparent that the monthly weighted average acidity in samples corresponds closely to observed weighted average concentrations for both excess  $\text{SO}_4^{2-}$  and  $\text{NO}_3^-$ . Only during April 1978, do these comparisons not hold. The concentrations of  $\text{NH}_4^+$  in precipitation samples from April 1978,

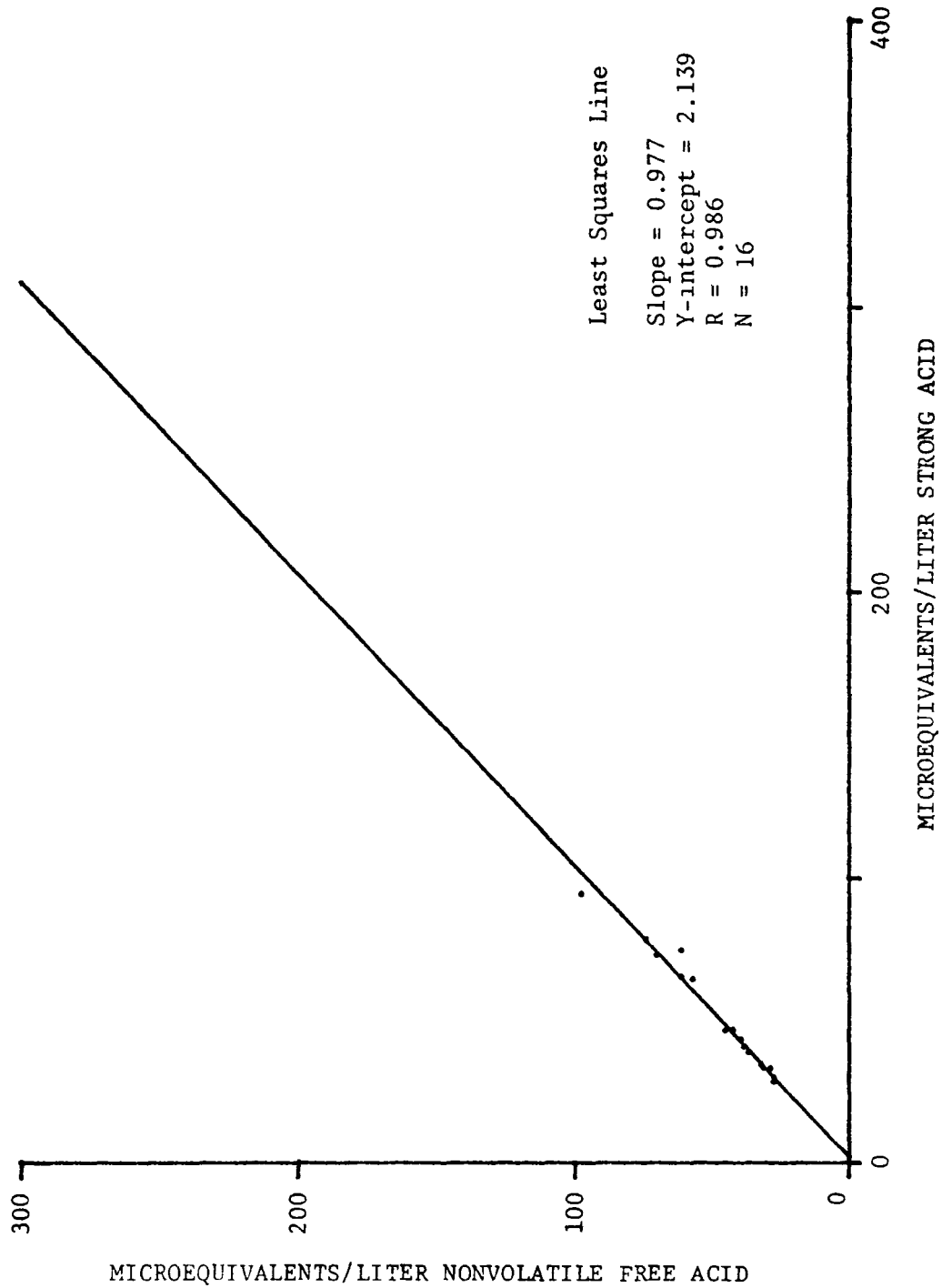


Figure 13. Comparison of Nonvolatile Free Acid and Strong Acid Concentrations in Rainfall Samples Collected During July to September 1978, at KSC Site 01

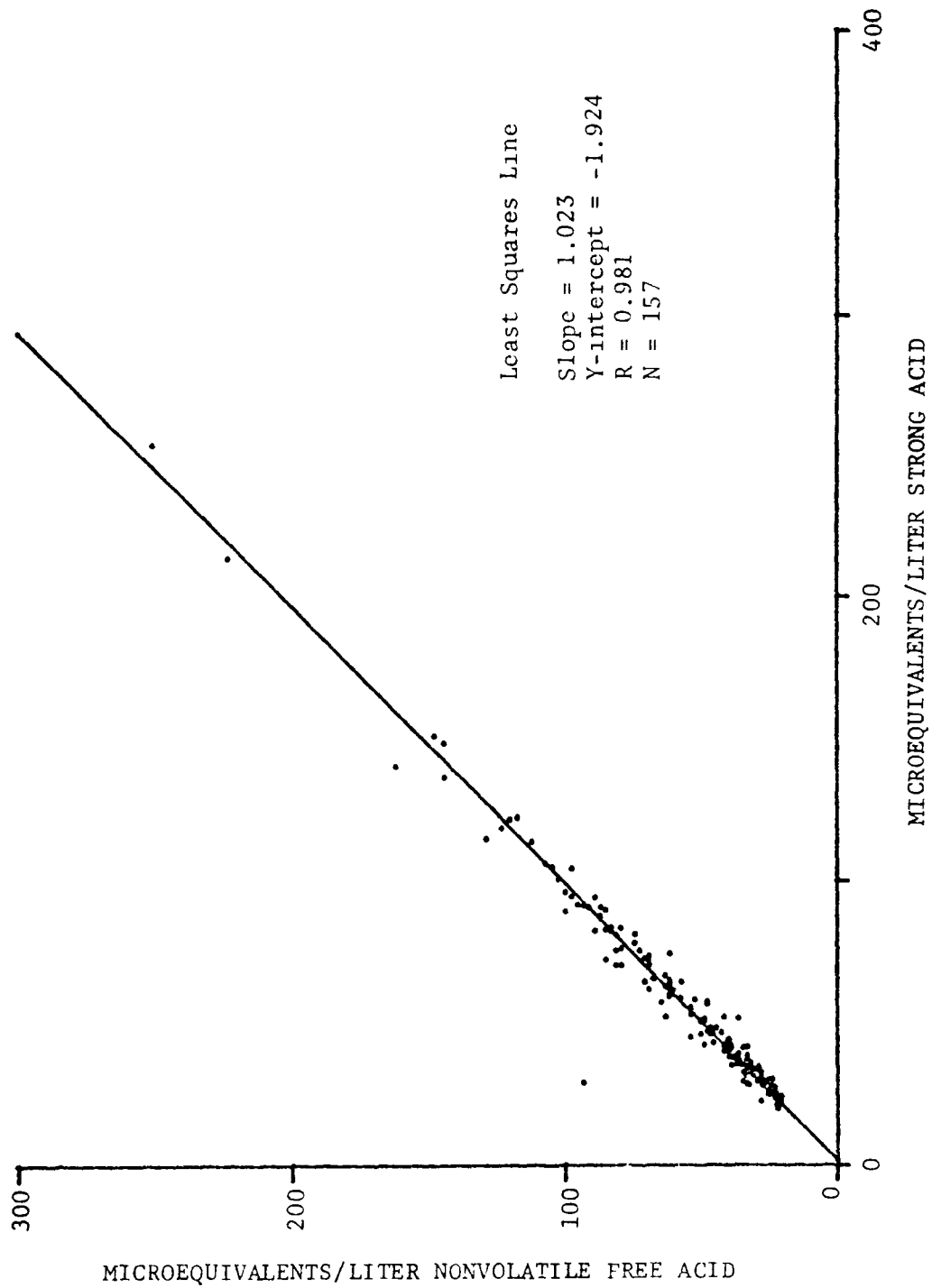


Figure 14. Comparison of Nonvolatile Free Acid and Strong Acid Concentrations in Rainfall Samples Collected During July to September 1978, at All KSC Sites

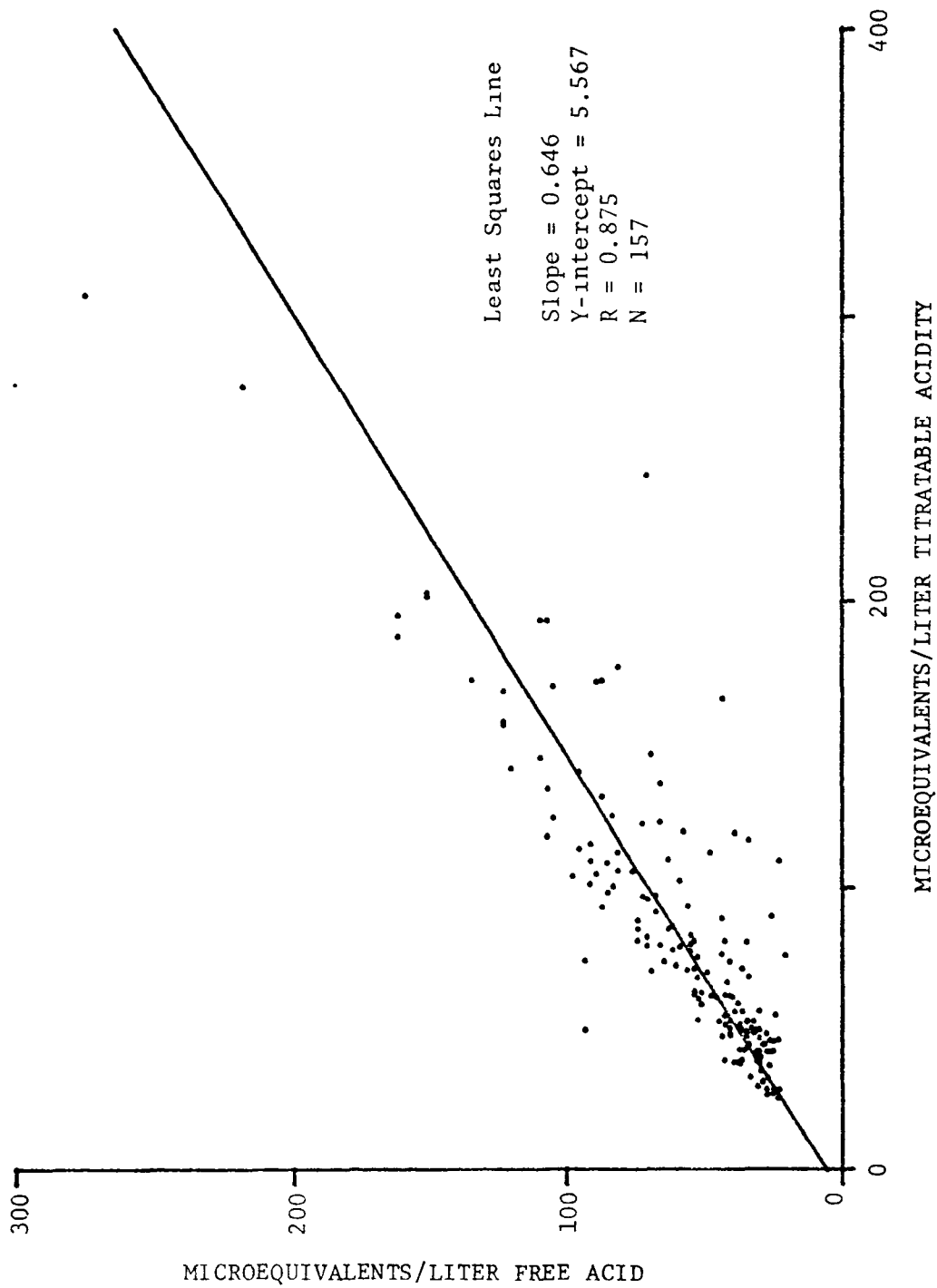


Figure 15. Comparison of Free Acid and Titratable Acidity Concentrations in Rainfall Samples Collected During July to September 1978, at All KSC Sites

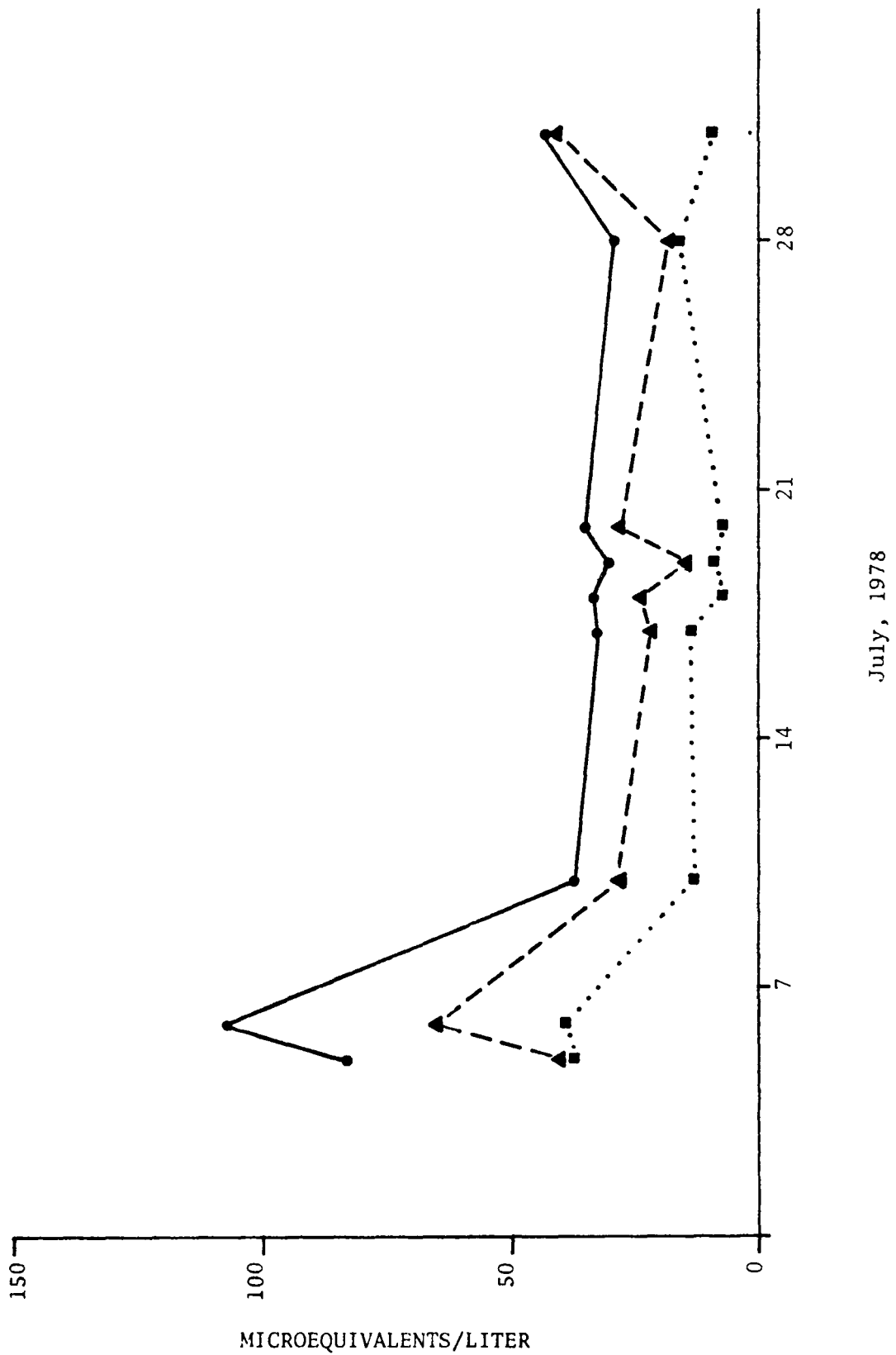


Figure 16. Comparison of Free Acidity (●—●) with Excess Sulfate (▲—▲) and Nitrate (■-■) Concentrations for Precipitation Samples Collected During July 1978 at KSC Site 01

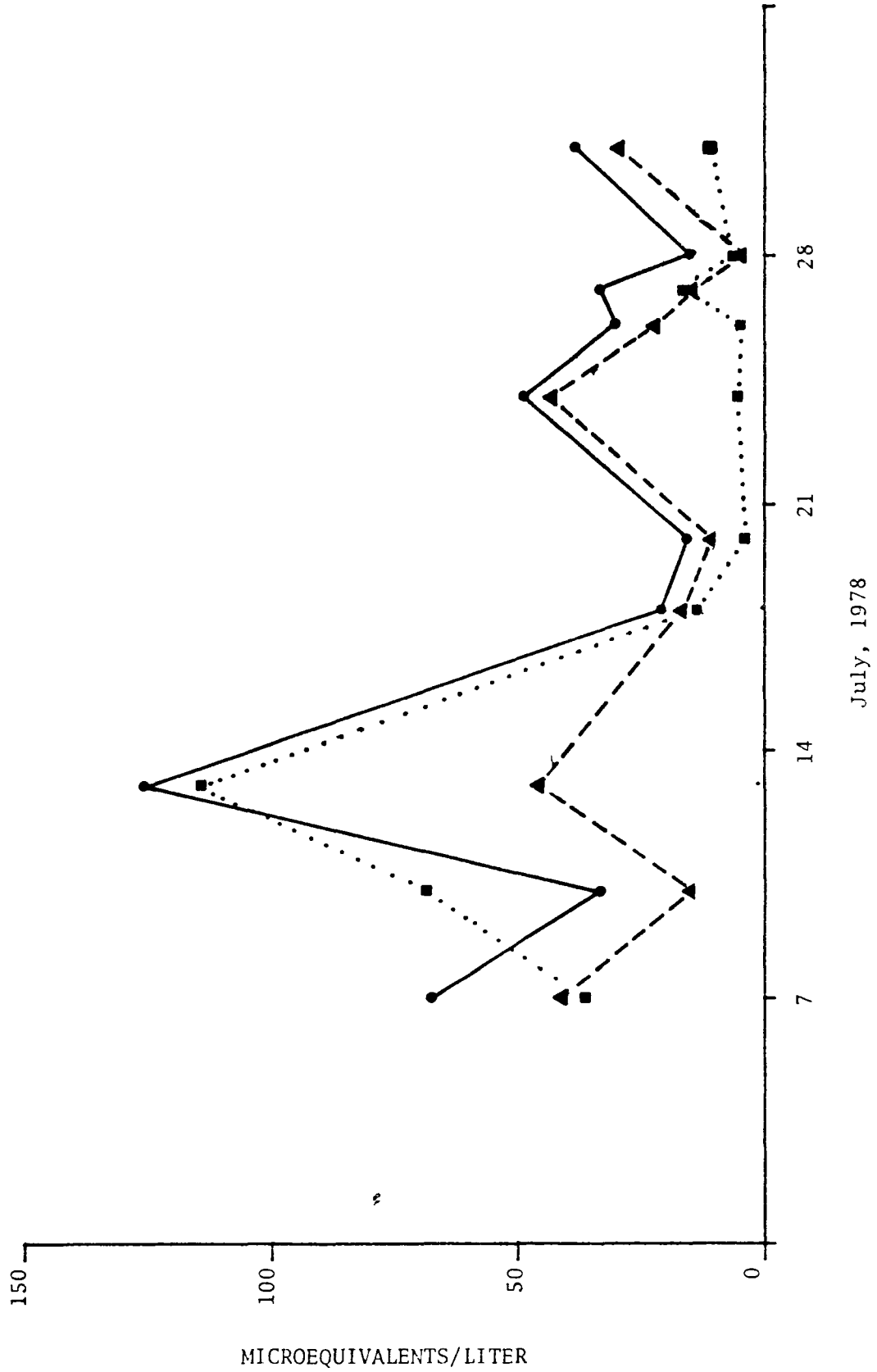


Figure 17. Comparison of Free Acidity (●—●) with Excess Sulfate (▲- -▲) and Nitrate (■- - -■) Concentrations for Precipitation Samples Collected During July 1978 at KSC Site 18



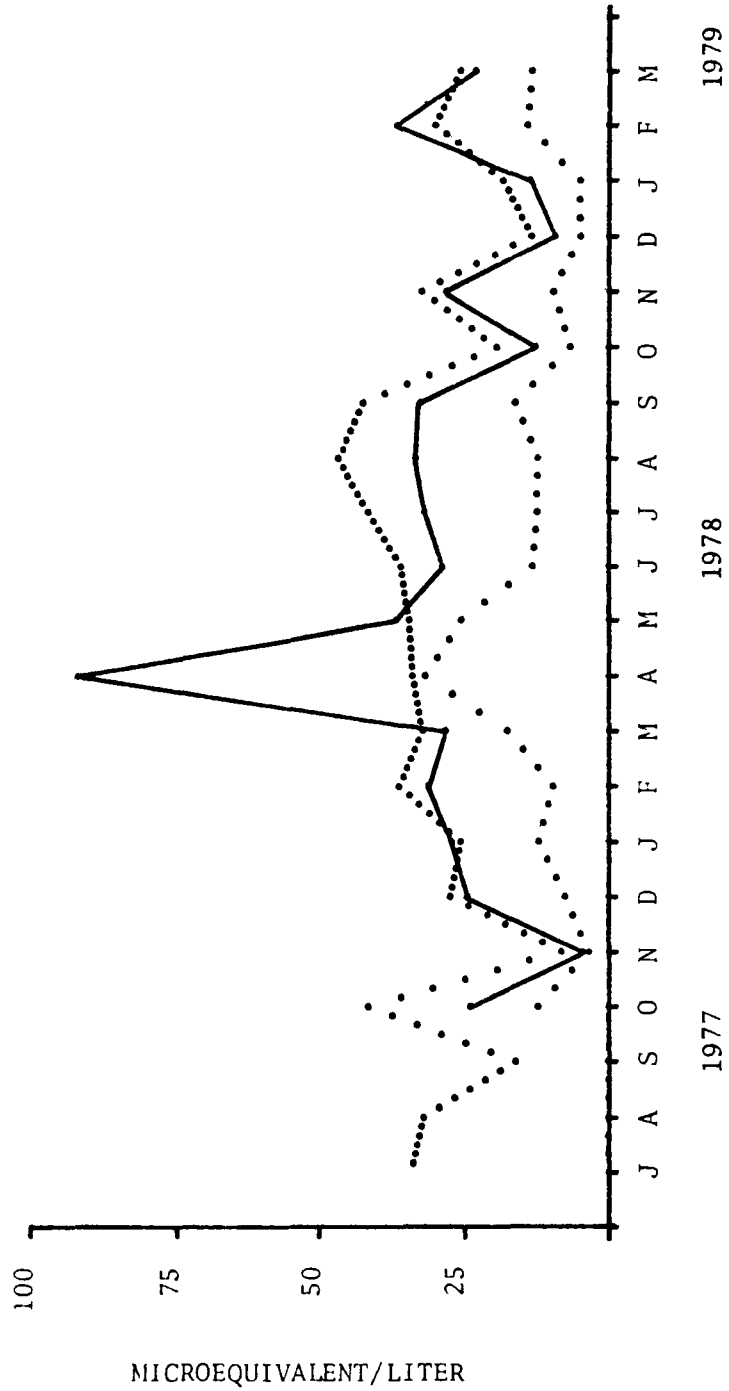


Figure 18. Comparison of Monthly Volume Weighted Average Free Acidity (.....), Nitrate Concentrations (. . . . .), and Excess Sulfate Concentration (\_\_\_\_\_ ) for Precipitation Collected at KSC Site 01

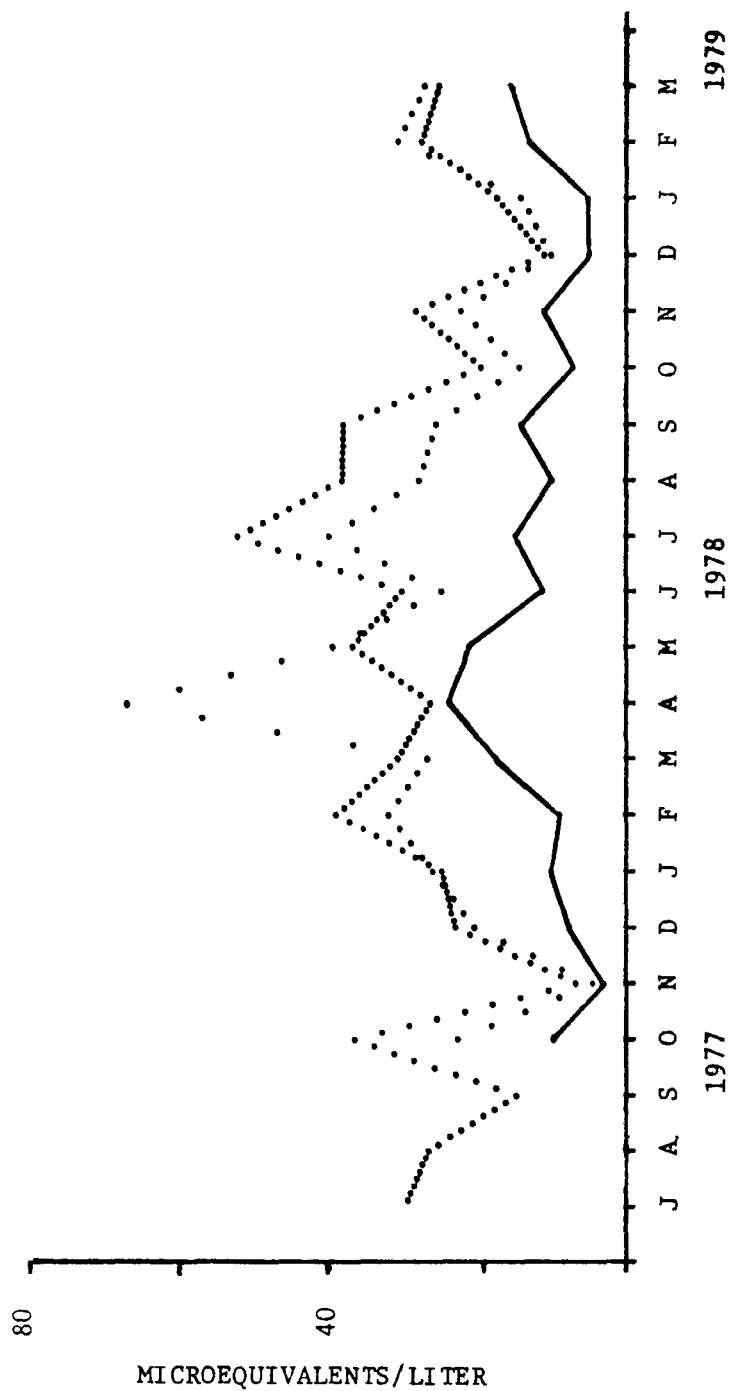


Figure 19. Comparison of Monthly Volume Weighted Average Free Acidity (.....), Nitrate Concentration (\_\_\_\_\_), and Excess Sulfate Concentration (. . . . .) for Precipitation Samples Collected at All KSC Sites

The excess  $\text{SO}_2$  concentrations and  $\text{NO}_3^-$  concentrations in rain samples expressed as monthly weighted averages are included in Tables 4 to 12. From Figures 18 and 19, it is apparent that the monthly weighted average acidity in samples corresponds closely to observed weighted average concentrations for both excess  $\text{SO}_2$  and  $\text{NO}_3^-$ . Only during April 1978, do these comparisons not hold. The concentrations of  $\text{NH}_4^+$  in precipitation samples from April 1978, were typically 2 to 50 times greater than those measured during other months in the study period. No conclusive reasons for this increase can be given. Atmospheric ammonia neutralizes acids in the atmosphere and this may account for the fact that acidity did not increase as in other months in proportion to the excess  $\text{SO}_2$  or  $\text{NO}_3^-$  concentration.

When all samples collected at KSC during July to September 1978, are considered and the dependence of sample acidity on  $\text{NO}_3^-$  or excess  $\text{SO}_2$  concentrations is evaluated, evidence as shown in Figures 20 and 21 indicates that both  $\text{NO}_3^-$  and excess  $\text{SO}_2$  are significant contributors. The correlations of free acidity with  $\text{NO}_3^-$  and excess  $\text{SO}_2$  concentrations from individual samples when evaluated on a month-by-month basis are presented in Table 13.

Figures 22 and 23, respectively, show the dependence of free acidity in samples collected at KSC site 01 on  $\text{NO}_3^-$  and excess  $\text{SO}_2$  when monthly volume weighted average concentrations are considered. The reported correlation coefficients emphasize the existence of a strong dependence and lead to the conclusion that  $\text{H}_2\text{SO}_4$  and  $\text{HNO}_3$  are indeed responsible for the acidic character of precipitation. When the influences of excess  $\text{SO}_2$  and  $\text{NO}_3^-$  are combined with the acid neutralization by ammonia, an even stronger correlation is observed--Figure 24. The relationship between free acidity and  $\text{NO}_3^-$  plus excess  $\text{SO}_2$  minus  $\text{NH}_4^+$  also holds when the average results obtained from samples collected at all KSC sites are considered--Figure 25.

Sample free acidity also appears to be dependent upon the amount of precipitation that occurs. Typical behavior that has been observed is shown in Figure 26. The total amount of acid deposited is also related to the amount of precipitation that occurs as shown in Figure 27 for KSC Site 01. The same general agreement is observed when the amount of free acid deposited and amount of precipitation are compared on a sample-by-sample basis. Typical results for samples collected at KSC from July to September 1978, are shown in Figure 28. A comparison by month between the amount of free acid deposited at KSC Site 01 and UCF Site 18 is shown in Figure 29.

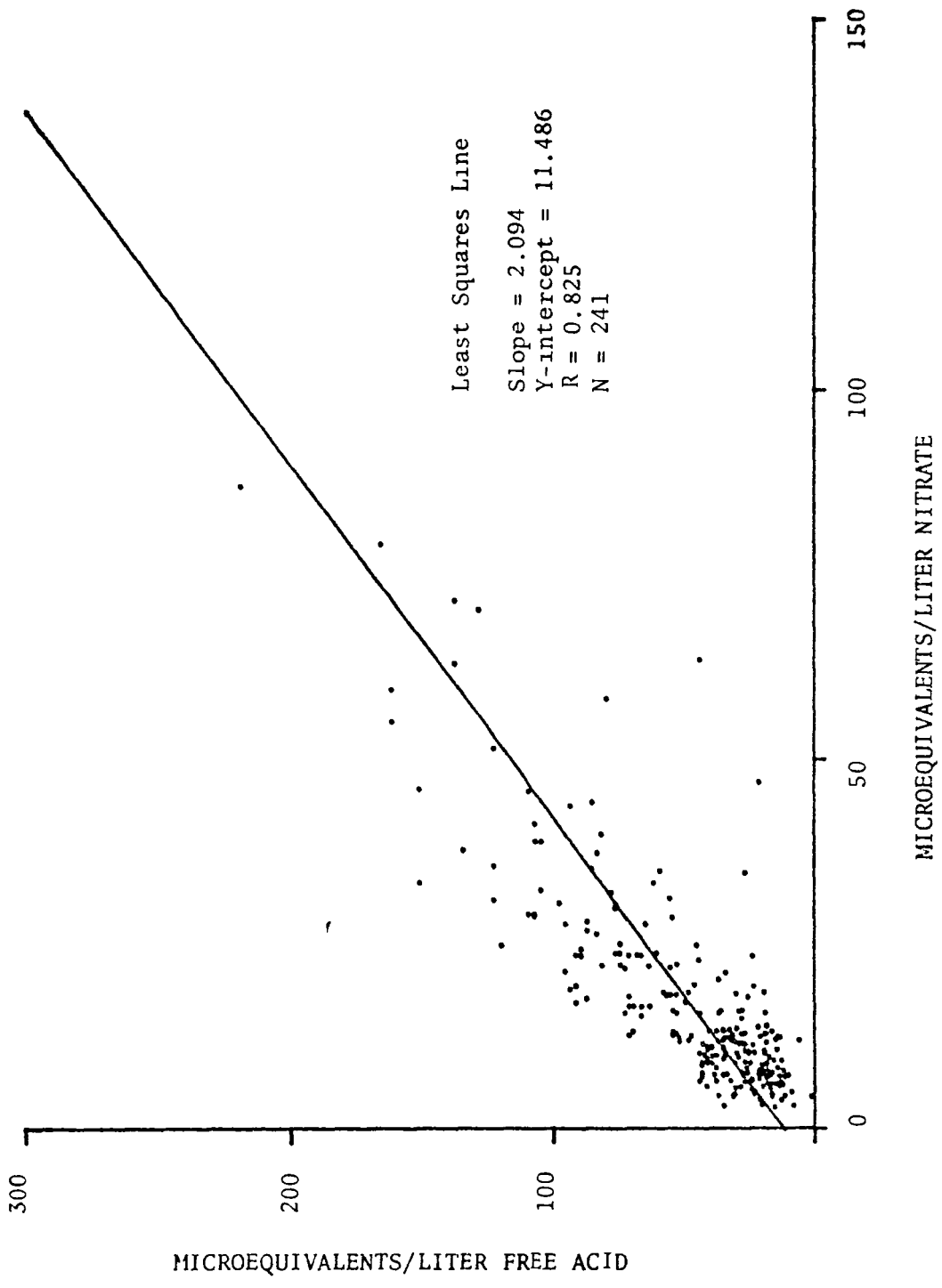


Figure 20. Comparison of Free Acid and Nitrate Concentrations in Rainfall Samples Collected From July to September 1978, at All KSC Sites

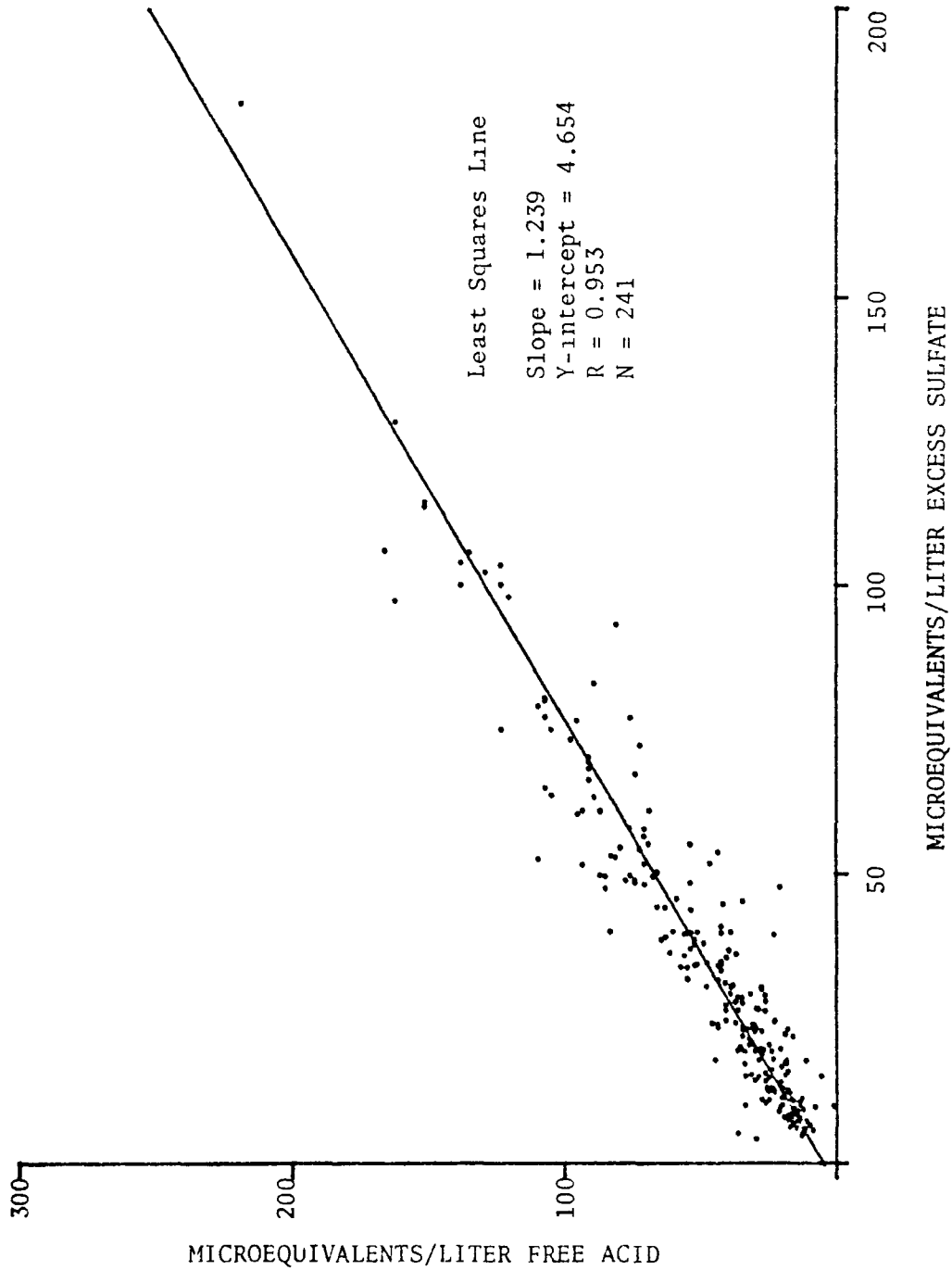


Figure 21. Comparison of Free Acid and Excess Sulfate Concentrations in Rainfall Samples Collected from July to September 1978, at All KSC Sites

Table 13.

Coefficients of Linear Correlation Between Selected Components Present in Precipitation Collected at KSC

Month/Year	No.	H/NO <sub>3</sub>	H/excess SO <sub>4</sub>	H/F	SS/H	Cl/NA	MG/NA	NH <sub>4</sub> /excess SO <sub>4</sub>	No.	(Microeq./M <sup>2</sup> )/cm
Jul. 77									7	.945
Aug. 77									41	.694
Sep. 77									43	.789
Oct. 77	17	0.979	0.861	0.572	0.118n	0.979	0.805	0.824	25	0.267n
Nov. 77	29	0.953	0.923	0.695	0.270n	0.991	0.992	0.859	34	0.903
Dec. 77	51	0.587	0.954	0.161n	0.014n	0.985	0.997	0.700	64	0.508
Jan. 78	32	0.943	0.947	0.338#	0.069n	0.997	0.995	0.879	33	0.358#
Feb. 78	34	0.765	0.816	0.050n	0.509*	0.990	0.996	0.117n	48	0.938
Mar. 78	45	0.991	0.211	0.102n	0.211n	0.978	0.984	0.862	50	0.348*
Apr. 78	17	0.054n	0.133n	0.015n	-0.366n	0.965	0.966	0.835	20	0.920
May 78	52	0.165n	0.595n	0.085n	-0.065n	0.982	0.970	0.262n	62	0.928
Jun. 78	95	0.933	0.966	0.330	0.361	0.996	0.693	0.599	99	0.862
Jul. 78	109	0.856	0.966	0.228#	-0.179#	0.994	0.968	0.492	113	0.802
Aug. 78	50	0.661	0.928	0.101n	-0.388*	0.991	0.989	0.380*	51	0.941
Sep. 78	81	0.865	0.947	0.398	0.177n	0.994	0.997	0.890	85	0.640
Oct. 78	76	0.616	0.667	0.079n	0.152n	0.994	0.983	0.347*	88	0.544
Nov. 78	63	0.794	0.736	0.230n	0.419	0.993	0.997	0.742	69	0.612
Dec. 78	52	0.826	0.954	0.429*	0.599	1.000	0.999	0.713	56	0.944
Jan. 79	81	0.961	0.964	0.570	0.165n	0.999	0.999	0.934	81	0.910
Feb. 79	46	0.596	0.898	0.748	0.112n	0.998	0.995	0.682	47	0.562
Mar. 79	31	0.200n	0.024n	0.141n	0.190n	0.989	0.989	0.160n	38	0.970
Unweighted										
Average	18	.708	.749	.293	.118	.990	.962	.626	21	.733
Std. Dev.		.324	.328	.203	.272	.009	.080	.269		.227

Correlation coefficients are significant at  $\alpha < 0.001$  except as noted: \*Significant at  $\alpha < 0.01$ . # significant at  $\alpha < 0.05$ . n not significant at  $\alpha > 0.05$ .

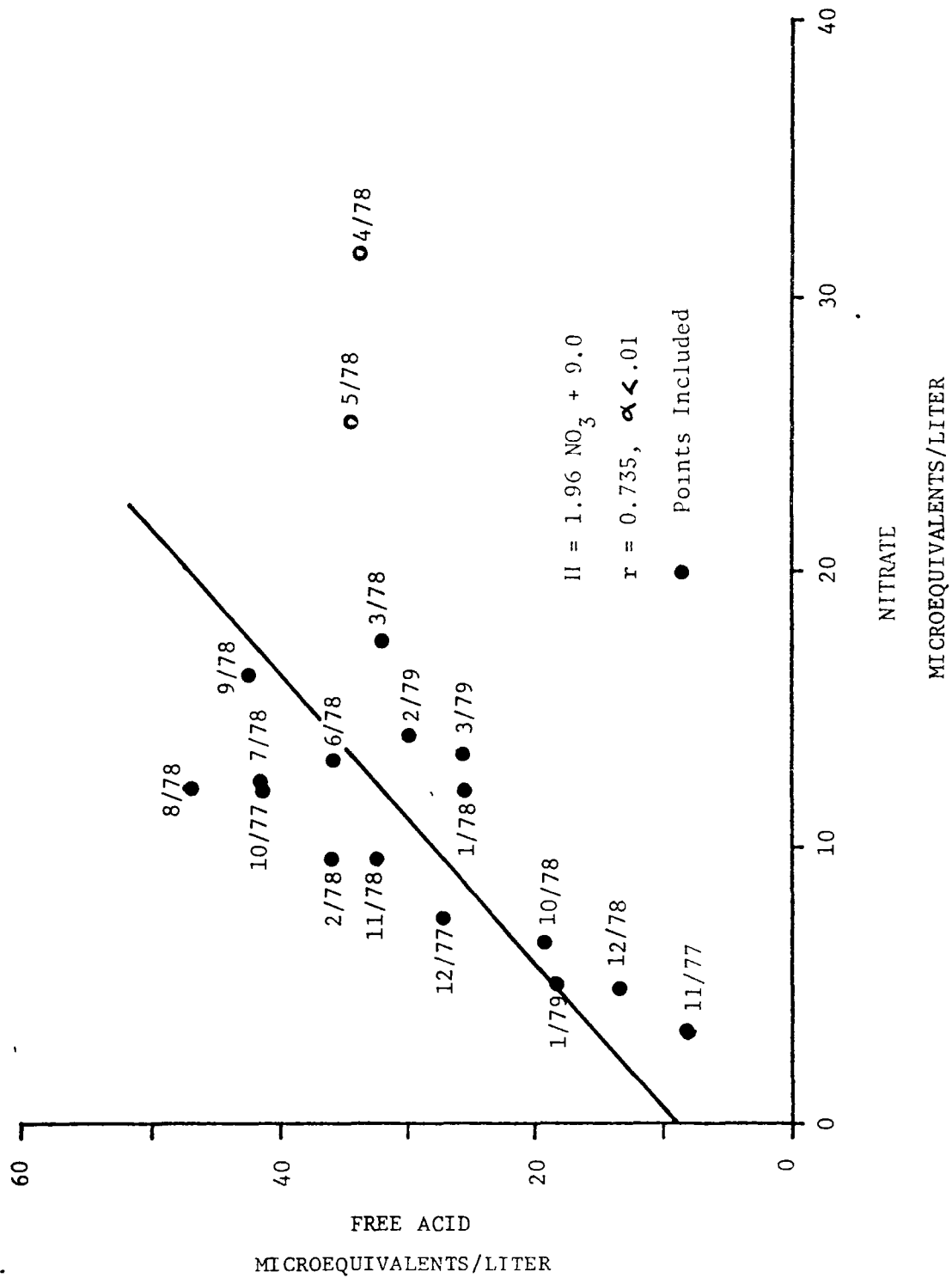


Figure 22. Dependence of Volume Weighted Average Free Acidity on Volume Weighted Average Nitrate Concentration by Month for Precipitation Samples Collected at KSC Site 01

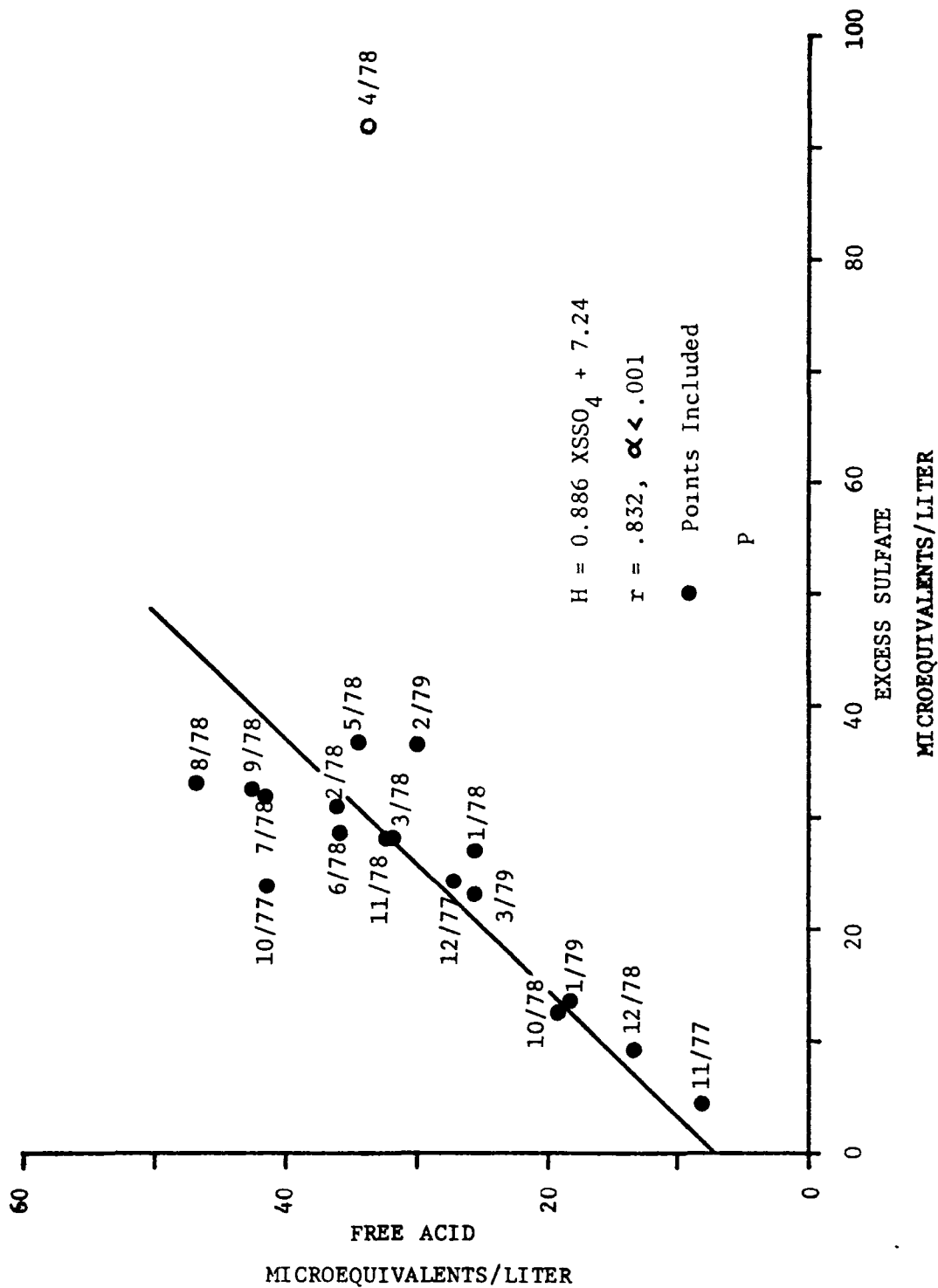


Figure 23. Dependence of Volume Weighted Average Free Acidity on Volume Weighted Average Excess Sulfate Concentration by Month for Precipitation Samples Collected at KSC Site 01



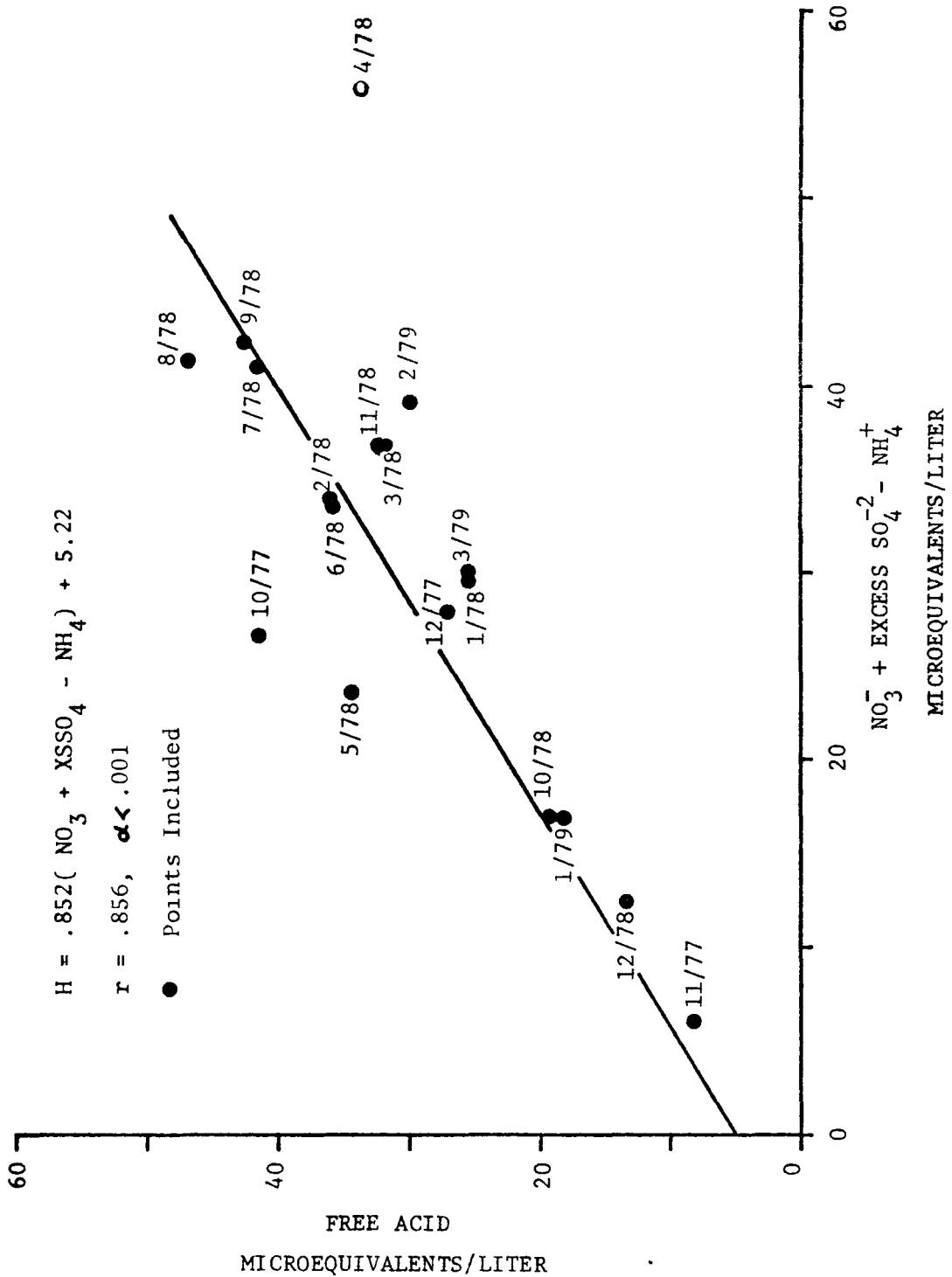


Figure 24. Dependence of Volume Weighted Average Free Acidity on Volume Weighted Average Nitrate, Excess Sulfate, and Ammonium Concentrations by Month for Precipitation Samples Collected at KSC Site 01

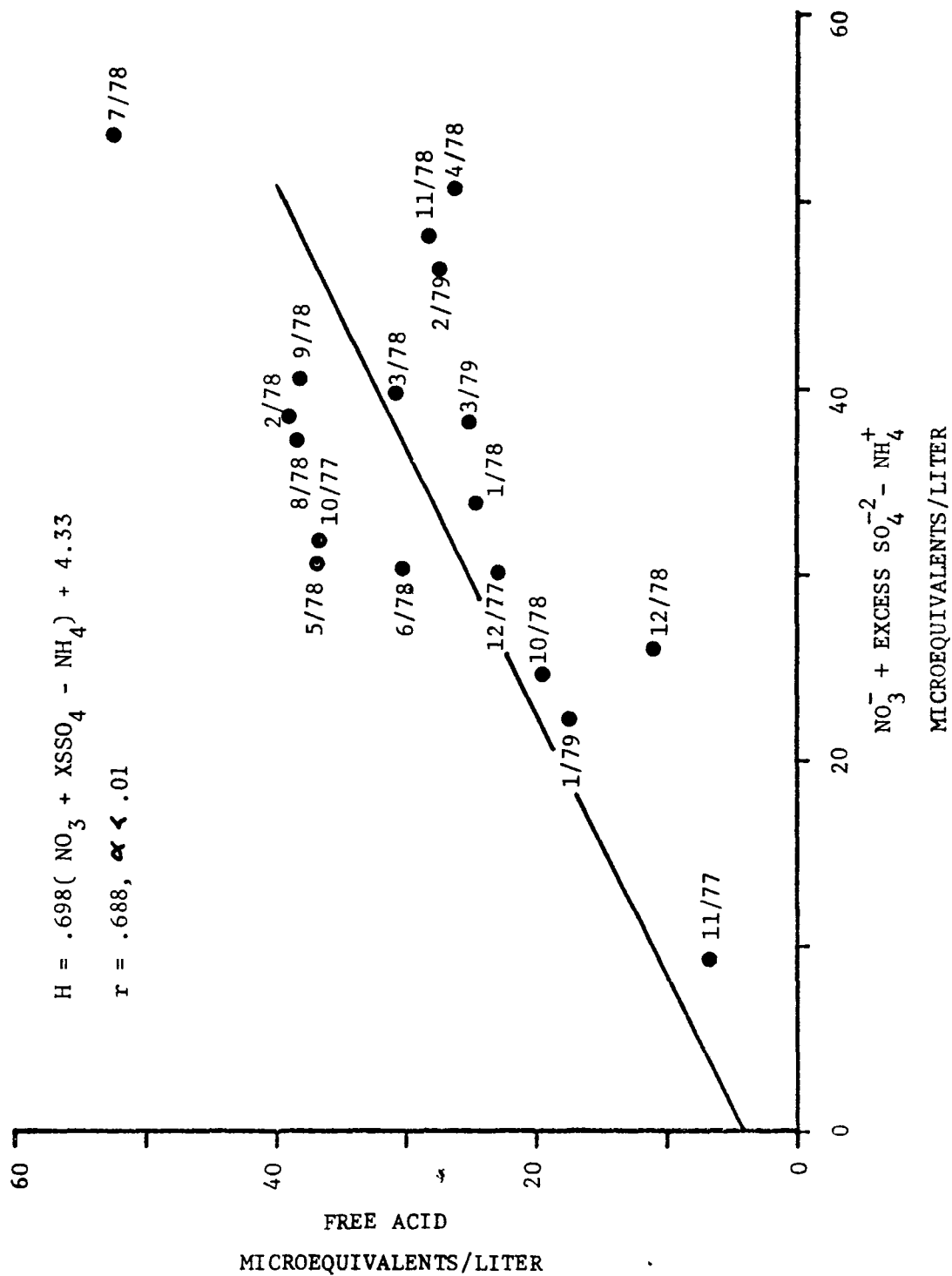


Figure 25. Dependence of Volume Weighted Average Free Acidity on Volume Weighted Average Nitrate, Excess Sulfate, and Ammonium Concentrations by Month for Precipitation Samples Collected at All KSC Sites

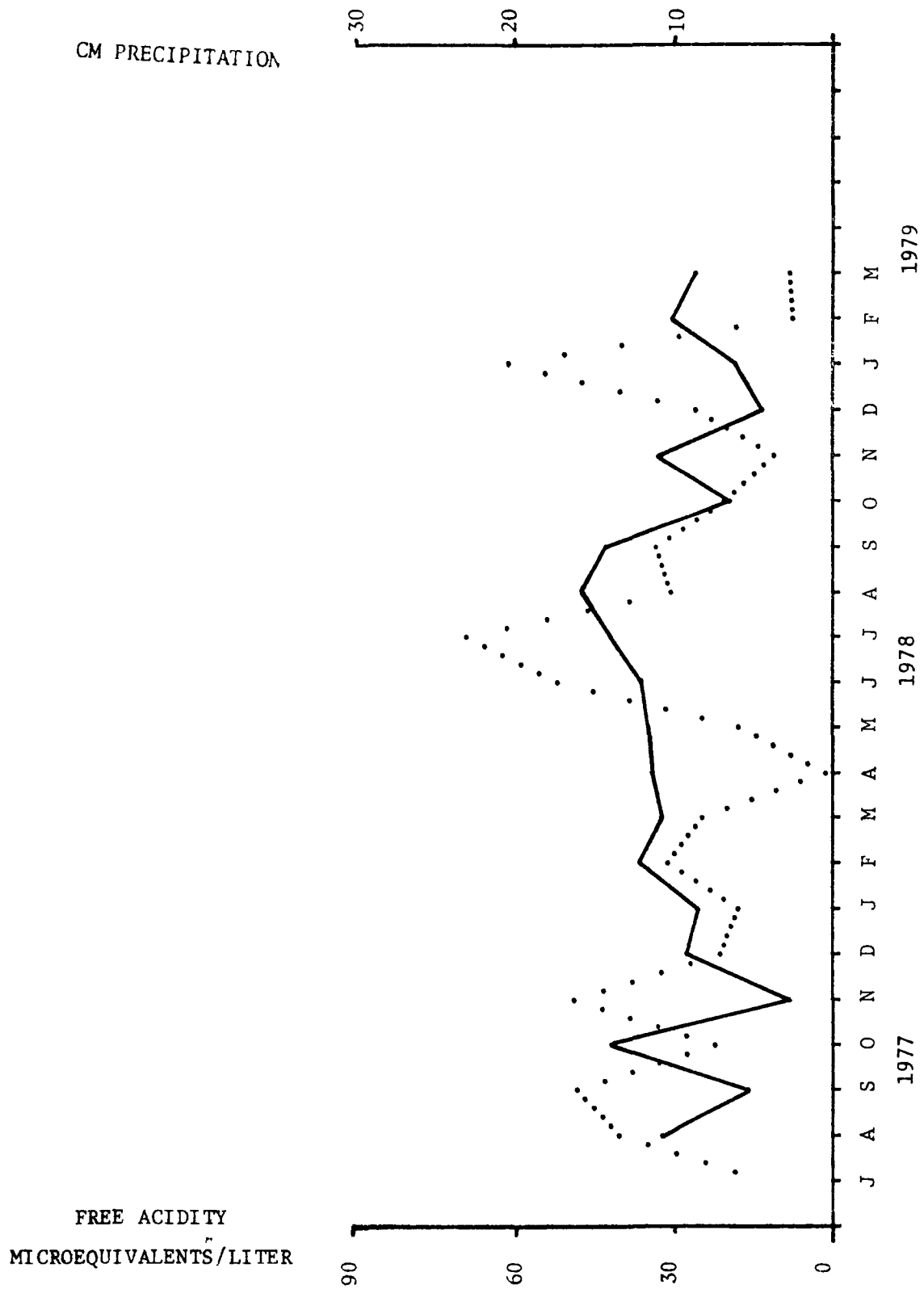


Figure 26. Comparison of Monthly Volume Weighted Average Free Acidity (.....) and Amount of Precipitation (————) for Samples Collected at KCS Site 01

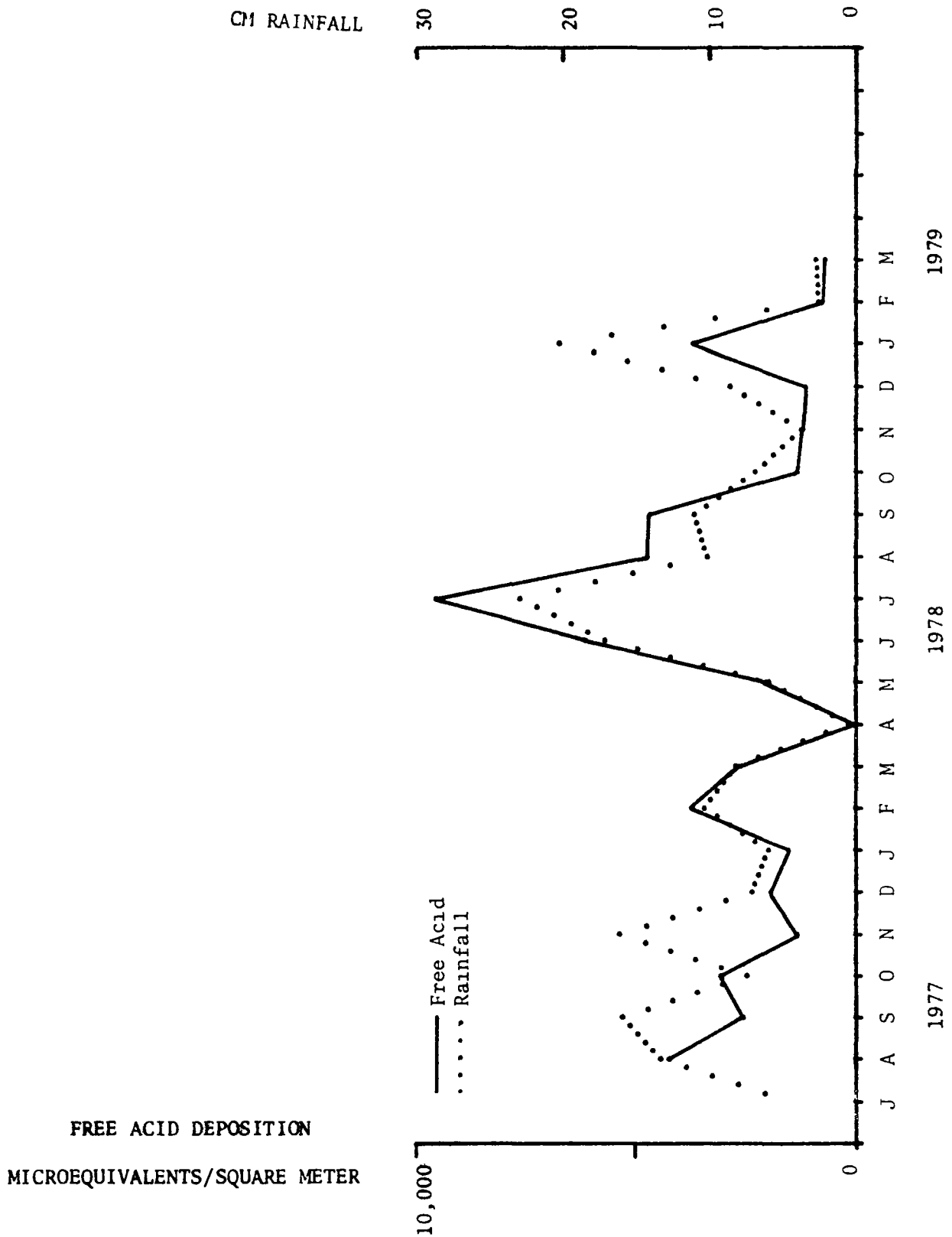


Figure 27. Comparison of the Amounts of Free Acid and Rainfall Received at KSC Site 01

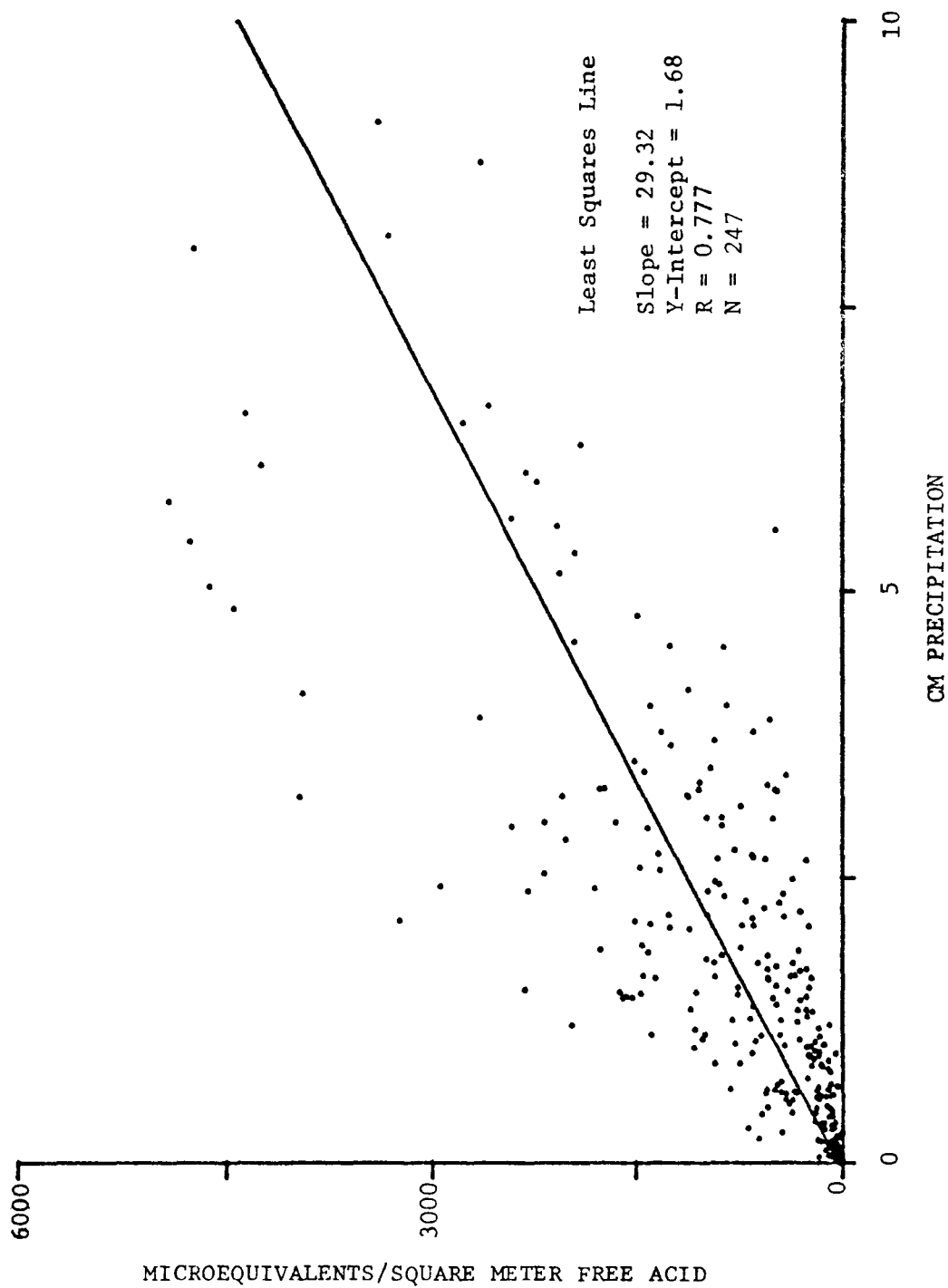


Figure 28. Comparison of the Amounts of Free Acid and Amounts of Rainfall Received from July to September 1978, at All KSC Sites

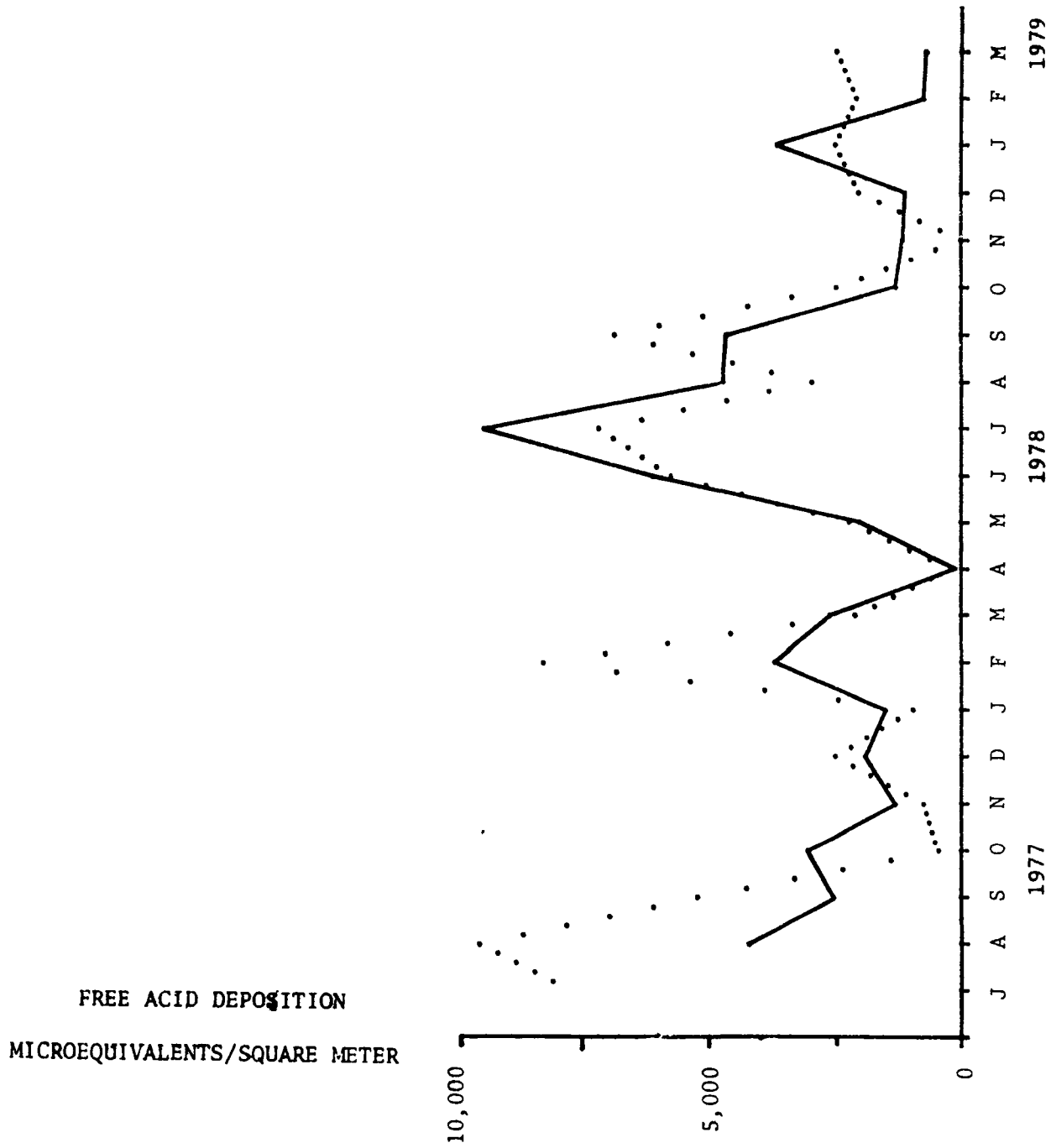


Figure 29. Comparison of Monthly Amounts of Free Acid Deposited by Precipitation at KSC Site 01 (————) and UCF Site 18 (.....)

Sea Salts. "Rainout of pollutants" refers to incorporation of the pollutant into the rain during formation of precipitation in a cloud. "Washout of pollutants" refers to the scavenging action of rain droplets as the travel through a mass of polluted air and dissolve or wash the pollutant from the air. Many pollutants exist as stoichiometric compounds in the atmosphere. The compounds thought to account for increased acidity of rain include  $H_2SO_4$  and  $HNO_3$ . Variations in sample acidity, whether occurring from rainout or washout of pollutants, should come about due to the presence of specific compounds. If  $H_2SO_4$  and  $HNO_3$  are responsible for increased acidity, then the concentrations of  $SO_4^{2-}$  and  $NO_3^-$  in the precipitation samples should be indirect indicators of sample acidity provided other nonacidic sources of  $NO_3^-$  and  $SO_4^{2-}$  do not exist. Sea salt contains considerable  $SO_4^{2-}$  and precipitation collected where the marine influence is strong will contain considerable nonacidic  $SO_4^{2-}$  which arises from this influence. The  $SO_4^{2-}$  which exceeds the sea salt contribution may, therefore, be an indication of acidic  $SO_4^{2-}$ . If  $Na^+$  and  $Cl^-$  concentrations in precipitation are determined, then the concentration of excess  $SO_4^{2-}$  in the sample can be determined (Granat, 1972). The determination of excess sulfate assumes that the concentration ratio of  $SO_4^{2-}:Na^+$  or  $SO_4^{2-}:Cl^-$  in precipitation is the same as that in sea water. It is common to assume that the only source of  $Na^+$  in precipitation is the sea. Therefore, the sea salt origin of  $K^+$ ,  $Ca^{+2}$ ,  $Mg^{+2}$ ,  $Cl^-$ , and  $SO_4^{2-}$  in precipitation can be determined from the measured Na concentration and appropriate element: $Na^+$  ratio. For situations where  $Cl^-$  has no other source except the ocean it can be used to determine the sea salt contribution of each element when used in place of  $Na^+$  in the previous discussion. As will be shown later, it appears that sea salt contributes all of the  $Na^+$  and  $Cl^-$  determined to be present in precipitation at KSC. Therefore, either  $Na^+$  or  $Cl^-$  can be used to determine the sea salt contribution. Because slight variations were observed in the  $Cl^-:Na^+$  ratio from sample to sample, all calculations of total sea salt concentration and excess  $SO_4^{2-}$ , etc. were based on the sea salt ratio of 1.165 which represents microequivalents  $Cl^-$ /microequivalents  $Na^+$ . Chloride was used if the ratio was less than 1.165 which indicates excess  $Na^+$  and vice versa. The presence of sea salt in rain is due primarily to washout. The concentrations of sea salt in precipitation has been included in Tables 4-12.

The ionic species which have their origin in the ocean have been observed to account for a significant portion of the total ionic composition of precipitation samples collected at KSC. Sea salts represent about 75 percent of the total ionic composition in all rain samples collected when pH values are relatively high (low acidity) and as much as 25 percent to 35 percent when sample acidity is high. These observations can be drawn from results presented in Table 4. These same contributions are approximately 90 percent and 40 percent, respectively, at KSC Site 11 [on a beach dune (Table 7)] and are much lower at UCF Site 18 (Table 12). The effect of proximity to the ocean as it influences sea salt concentrations in the rain samples is shown in Figure 30, where monthly volume weighted average sea salt concentrations that were determined for samples collected at KSC sites 01, 11, 12, and 14 are presented. These four sites describe a progressively increasing distance from the ocean. The decrease in sea salt effect is apparent.

The ratios of  $\text{Cl}^-:\text{Na}^+$  and  $\text{Cl}^-:\text{Mg}^{+2}$  have been observed to approximate closely the corresponding ratios as they exist in sea water. These ratios hold when individual samples are considered and variations typically are less than + 10% from the 1.165 ratio for  $\text{Cl}^-:\text{Na}^+$ . Typical behavior is shown in Figures 31 and 32. Agreement between measured  $\text{Cl}^-$  and  $\text{Mg}^{+2}$  with the theoretical ratio of 5.11 is shown in Figure 33. These observations are important for several reasons. Because existing  $\text{Cl}^-$  concentrations can be accounted for by considering sea salt alone, it is apparent that HCl does not contribute to the observed acidity in rain. If no other sources of  $\text{Na}^+$  and/or  $\text{Mg}^{+2}$  exist, then either can be used in determining excess  $\text{SO}_4^{2-}$  concentrations and excess  $\text{Cl}^-$  concentrations should the latter become significant in the future. Terrestrial sources may account for up to 10 percent of the  $\text{Mg}^{+2}$  present in samples.

Correlation Among Species. The coefficients of linear correlation which have been determined for selected pairs of ionic species from samples collected during the 21-month period covered by this study are summarized by month in Table 13. The relationships that exist between selected species from July to September 1978, have already been described and presented graphically in Figures 20, 21, 31, 32, and 33. The results presented in Table 13 show that the pairs, acidity:nitrate, acidity:excess  $\text{SO}_4^{2-}$ ,  $\text{Cl}^-:\text{Na}^+$ ,  $\text{Mg}^{+2}:\text{Na}^+$ ,  $\text{NH}_4^+:\text{SO}_4^{2-}$ , and the amount of free acid:amount of precipitation, are generally highly correlated with few exceptions during individual months and, therefore, support the discussion presented in the previous section. For comparison purposes, the linear correlation behavior between acidity:F and sea salt:acidity are also presented in Table 13. These pairs are not significantly correlated.



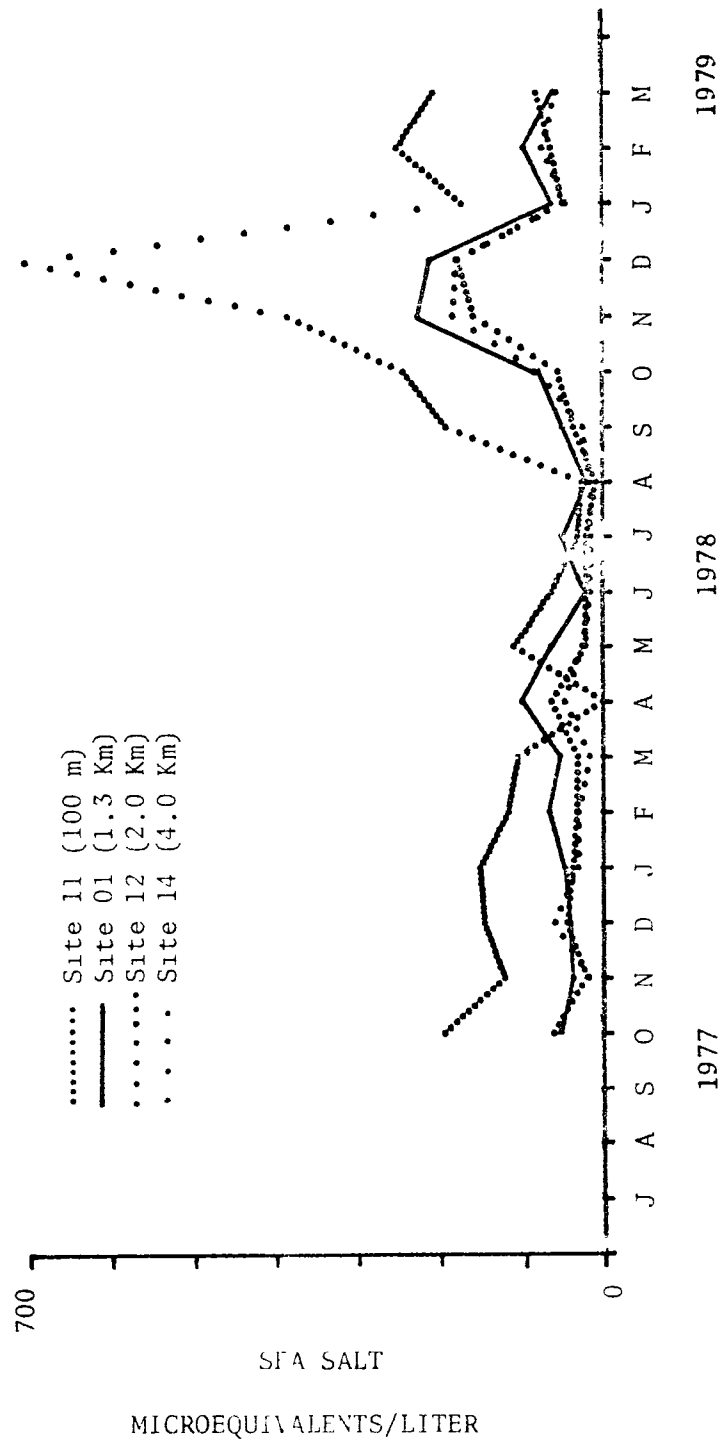


Figure 30. Comparison of Monthly Volume Weighted Average Sea Salt Concentrations in Precipitation Samples Collected at Sites in Close Proximity to the Ocean (distance of each site from the ocean is indicated in parentheses)

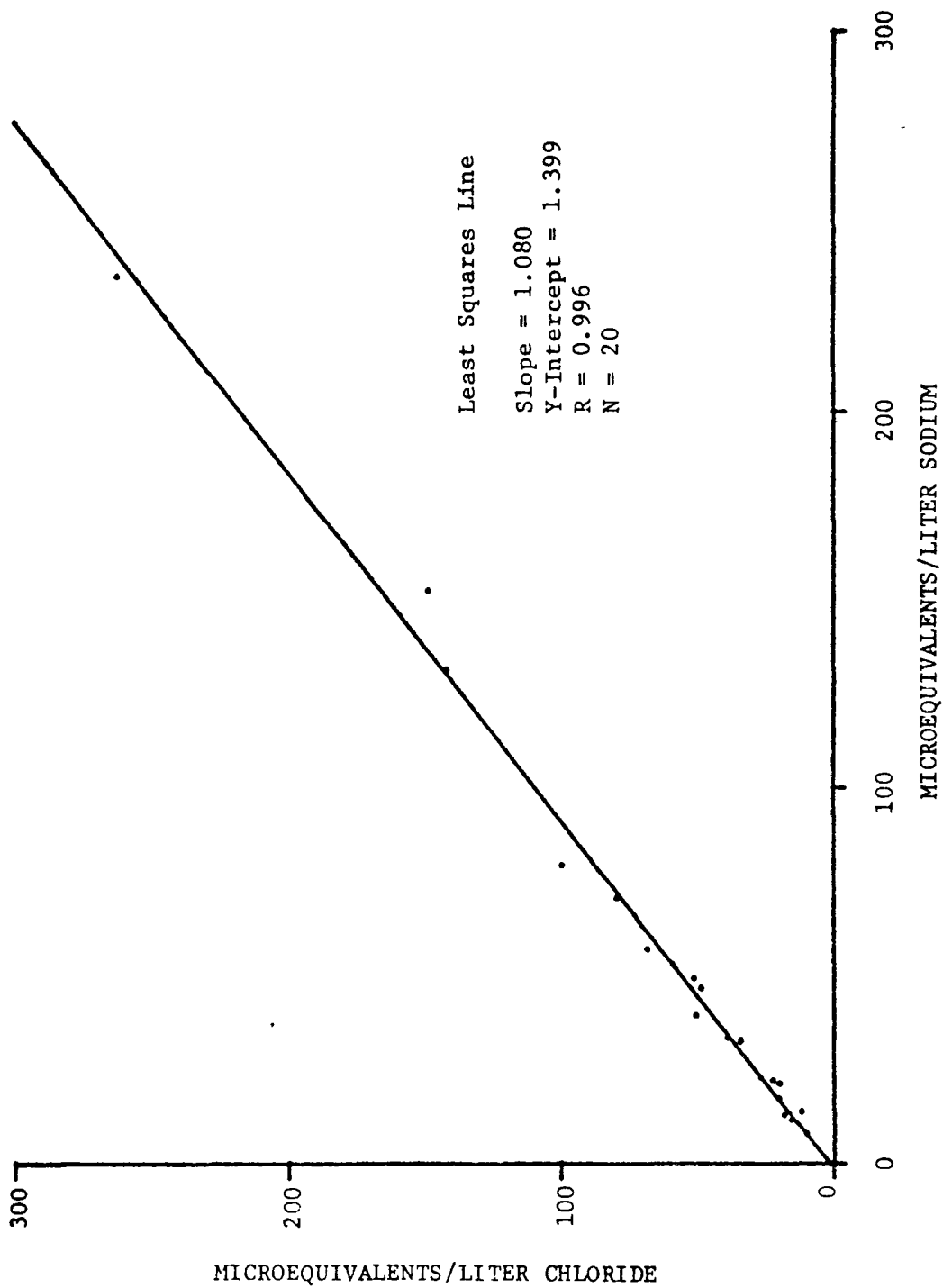


Figure 31. Comparison of Chloride Concentrations and Sodium Concentrations in Rainfall Samples Collected from July to September 1978, at KSC Site 01

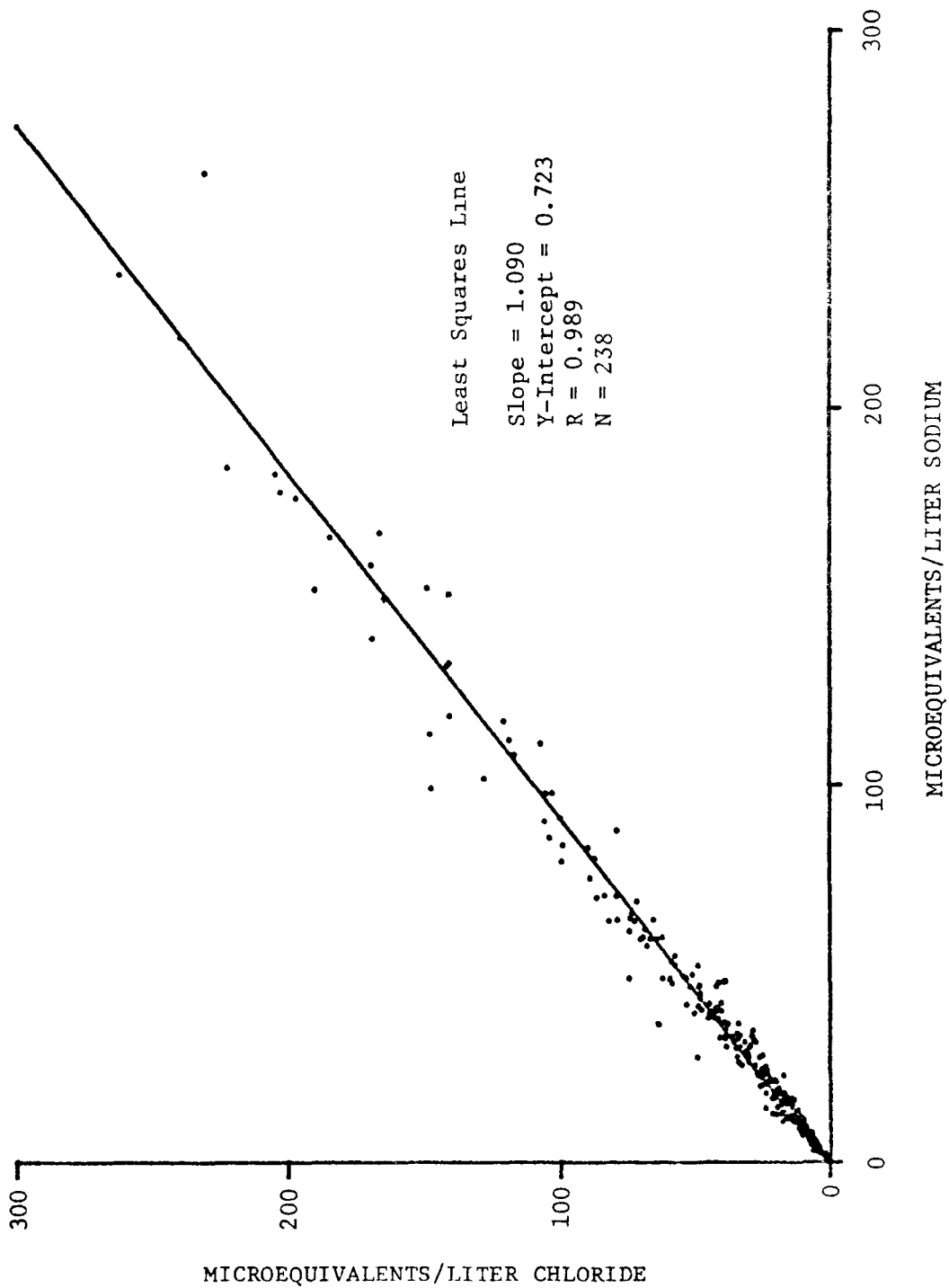


Figure 32. Comparison of Chloride Concentrations and Sodium Concentrations in Rainfall Samples Collected From July to September 1978, at All KSC Sites

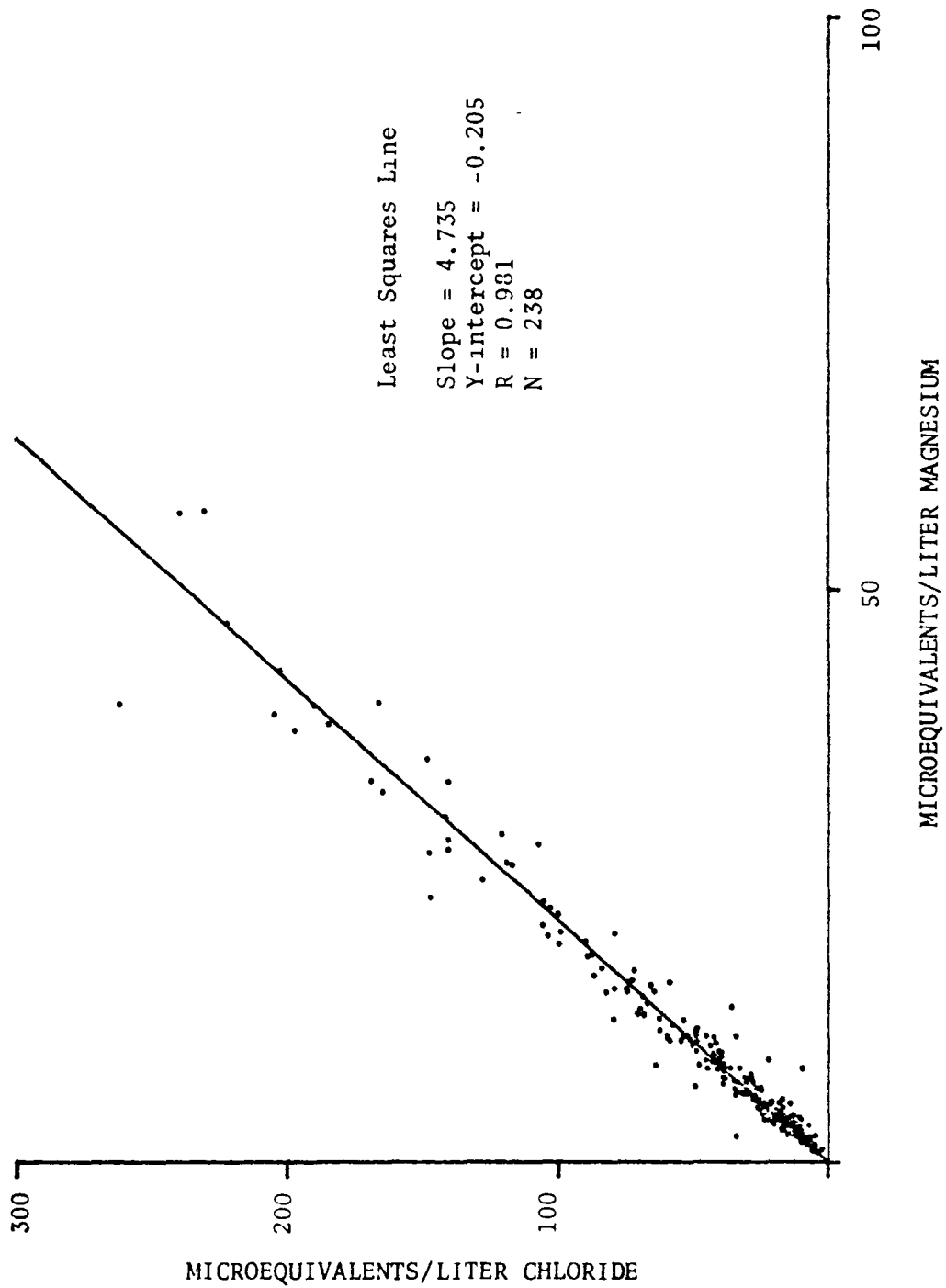


Figure 33. Comparison of Chloride Concentrations and Magnesium Concentrations in Rainfall Samples Collected From July to September 1978, at All KSC Sites

Only during April 1978, May 1978, and March 1979, were significant correlations lacking for acidity: $\text{NO}_3^-$  and acidity:excess  $\text{SO}_4^{2-}$ . Samples collected during these periods tended to contain greater quantities of foreign matter and the frequency of precipitation was much lower. Precipitation only occurred on two days in April 1978, and three days in March 1979. There were six days when precipitation occurred during May 1978. The presence of  $\text{NH}_4^+$  in precipitation in amounts proportional to excess  $\text{SO}_4^{2-}$  was observed during these months of infrequent precipitation. As previously reported (Figures 24 and 25), the  $\text{NH}_4^+$  is probably the neutralization product of the reaction between ammonia and acidity, due to  $\text{HNO}_3$  and  $\text{H}_2\text{SO}_4$ . Excellent correlation was observed between ionic species of sea salt origin. Specifically,  $\text{Cl}^-:\text{Na}^+$  and  $\text{Mg}^{2+}:\text{Na}^+$  correlations (Table 13) and, indirectly,  $\text{Cl}^-:\text{Mg}^{2+}$ , are important because they indicate no significant contribution by other sources of  $\text{Na}^+$ ,  $\text{Mg}^{2+}$ , or  $\text{Cl}^-$  to the ionic composition of collected precipitation. Determination of excess  $\text{Cl}^-$  is feasible based on the measurement of  $\text{Cl}^-$  and either  $\text{Na}^+$  or  $\text{Mg}^{2+}$  concentrations. More extensive monthly weighted average concentrations, range of concentrations, and statistical summaries by month and for individual sites are presented in Appendix Tables 22-203. Evaluation of correlations which may exist among various species concentrations are summarized by month for individual sites in Appendix Tables 204-381.

## DISCUSSION

### Evaluation of Factors Which Contribute to the Composition of Precipitation.

Evaluation of the existing quality of rain which fell during the time period included for this study can be made based on volume weighted average concentrations for chemical species of interest and the time interval desired. Before conclusions can be drawn, several factors that must be evaluated include: 1) Sources of variability in measured rainfall composition 2) Influence of foreign matter which may be present in the sample, e.g. insects and vegetation 3) Site selection and biases introduced 4) Period of time utilized for presentation of results 5) Meteorological conditions. Each of these factors was studied or evaluated to determine the influence that each could have when results of sampling and chemical analysis are reported.

Sources of Variability. The variability associated with measured rainfall composition can be accounted for by a number of factors. Analytical variability refers to the precision associated with the chemical methods of analysis that are utilized to determine individual ion concentrations. The analytical precision depends on the method of analysis utilized. It also depends on the concentration of the chemical species to be measured. When methods which are characterized by relatively poor sensitivity are utilized in attempts to measure small concentrations or when methods of high sensitivity are utilized to measure extremely low concentrations then precision is expected to be poor. When a sample is subjected to chemical analysis, precision may be good or poor for individual components based on selection of method and the actual concentration present for each individual chemical species. Results presented in Table 2 indicate relatively large ranges in precision for some individual species. Under the conditions utilized for routine chemical analysis of precipitation samples, concentrations of 0.01 ppm were typical of the lower concentration limits that were considered significant; no attempt was made to measure concentrations lower than this value. Certain species were typically present in samples at low concentrations. For example, many  $F^-$ ,  $K^+$ ,  $Ca^{+2}$ ,  $Mg^{+2}$ , and  $NH_4^+$  concentrations were determined to be less than 0.1 ppm. Typical concentrations for other species were 2 ppm  $Na^+$ , 3 ppm  $Cl^-$ , 0.5 ppm  $NO_3^-$ , and 1.5 ppm  $SO_4^{+2}$ . For those species which were present at less than 0.1 ppm., an analytical variability of 0.01 (10 percent) was common and acceptable based on methodology used to determine concentration. The analytical variability observed for determining concentrations of other ions present at higher concentrations should be considerably less. These observations were verified; results are presented in Table 3.

Sampling variability is a measure of variability introduced into the measured precipitation composition due to the method of sample collection. This factor was evaluated by placing identical collectors side-by-side--simultaneously collecting precipitation from the same event in each and performing routine chemical analysis on each sample to determine any variability which may be present.

There is no way to physically separate variability due exclusively to sampling from that introduced by analytical variability. A qualitative comparison of the magnitude of analytical variability with that of sampling variability (Table 3) shows that sampling of precipitation does introduce variation into the measured chemical composition which cannot be accounted for by the analytical variability. Only small differences are observed when these comparisons are made between the two different time periods used to study these factors.

Spatial variability refers to the differences observed in measured precipitation composition from samples collected over a specified area. Evaluation of the magnitude of spatial variability is presented in Table 3 for time periods which coincided with those used to evaluate sampling variability. Five sites were utilized for the initial evaluation of spatial variability which occurred during November and December 1977. During June and July 1978, the same 5 sites were again utilized as well as a 12-site network. Variations measured for precipitation composition over the network are only somewhat accounted for by analytical and sampling variability. These observations hold for both time periods. Only minor differences are observed between variability in data from the 5-site and 12-site networks. Several factors account for the relatively large spatial variations observed and probably include local, regional, and long-range origin, meteorology, and transport of various chemical species. The variations in site-by-site and event-by-event precipitation composition are real and complicate assessment of origin and long-term trends associated with precipitation composition.

Analytical, sampling, and spatial variability have been evaluated by others (Galloway and Likens, 1978). The analytical variability for individual chemical species as determined in this study are similar to those reported previously (Galloway and Likens, 1978). The sampling variability associated with collection of bulk precipitation (Galloway and Likens, 1978) is similar to results obtained here for  $H^+$ ,  $K^+$ ,  $Ca^{+2}$ ,  $NO_3^-$ , and  $SO_4^{2-}$ . Sampling variability associated with the determination of  $Na^+$ ,  $Mg^{+2}$ , and  $Cl^-$  in this study were considerably lower than those previously reported, that for  $NH_4^+$  was considerably larger. These differences can be explained when the actual concentrations are considered. KSC precipitation contains much higher concentrations of  $Na^+$ ,  $Mg^{+2}$ , and  $Cl^-$  because of proximity to the ocean. KSC precipitation has generally been characterized by very low  $NH_4^+$  concentrations.

When comparisons are made between the observed spatial variability in precipitation composition at KSC with results of similar studies, several conclusions can be drawn. Galloway and Likens (1978) measured spatial variabilities of less than 15 percent for precipitation amount,  $H^+$ ,  $Ca^{+2}$ ,  $Mg^{+2}$ ,  $NO_3^-$ , and  $SO_4^{2-}$  and up to 90 percent variability for other species. From a three-site network which covered approximately 20 km<sup>2</sup>, sampling and spatial variability were essentially the same. They also reported results from an European study which was based on a 50-site network which

covered an area of 7600 km<sup>2</sup>. Variability for precipitation amount, Na<sup>+</sup>, NH<sub>4</sub><sup>+</sup>, NO<sub>3</sub><sup>-</sup>, and SO<sub>4</sub><sup>2-</sup> were 33 percent, 61 percent, 87 percent, 32 percent, and 29 percent, respectively, and was attributed to the much larger area covered. Greater variability was observed for most individual component concentrations in precipitation collected at KSC.

Analytical, sampling, and spatial variability studies were performed during two different time periods. It was initially believed that seasonal changes in precipitation composition and the different meteorological conditions which result in precipitation during two seasons would significantly alter any variability in composition. This apparently is not the case. Sampling variability was not significantly different when results obtained from samples collected during November-December 1977, are compared with those obtained during June-July, 1978. Similar observations were made for spatial variability. Although the composition of precipitation which occurred during these two time periods was dramatically different, variations due to sampling error and variations observed among individual sites were relatively unchanged. Apparently, complex local and regional meteorology and the processes which result in precipitation are extremely variable and result in significantly different precipitation composition even on a relatively small areal scale.

In addition to reporting sampling and spatial variability for individual chemical parameters or species, Table 2 also includes results for variabilities associated with determination of excess SO<sub>4</sub><sup>2-</sup>, sum of anions, and amount of free acid deposition. These three parameters are calculated by incorporating combinations of previously measured properties. Variability in determination of these parameters, therefore, reflects on any propagation of errors which may occur due to measured chemical composition. Excess SO<sub>4</sub><sup>2-</sup> values were determined from measured concentrations of SO<sub>4</sub><sup>2-</sup> and either Na<sup>+</sup> or Cl<sup>-</sup>. The sum of anions includes the contribution of all measured anions and includes F<sup>-</sup>, Cl<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, and SO<sub>4</sub><sup>2-</sup>. The amount of free acid was determined from measuring the amount of precipitation and the measured sample acidity based on pH. The magnitude of sampling variability expressed in terms of its influence on these three parameters is no greater than that observed for individual parameters. Spatial variability for excess SO<sub>4</sub><sup>2-</sup> and sum of the anions is no greater than the variability associated with the parameters used to calculate each. The spatial variability for amount of free acid deposited is considerably greater than that determined for either amount of precipitation or acidity. This result is expected because of the large observed variations in both parameters from which amount of free acid is determined.

The chemical analysis and sampling programs utilized have proved reliable, relatively efficient for handling a moderate number of samples, and do not contribute significantly to variability of precipitation composition. The results of the analytical variability and sampling variability studies, combined with other studies designed to evaluate quality of data and results, indicate that data used for interpretation of precipitation can be used with confidence.



Sample Contamination. The presence of foreign matter in the form of particulate washout from the atmosphere, wind-blown dust, soil, vegetation, and insect or bird droppings will alter the composition of individual precipitation samples. Samples which were seriously contaminated were discarded. Those which contained small amounts of debris were analyzed. On several occasions, only a few samples collected from a single event were contaminated to some degree. Comparisons were made between individual chemical species concentrations in clean and dirty samples. In most cases where contamination was not severe, differences in concentrations between samples were small. Monthly volume weighted average concentrations for clean and dirty samples and clean only samples are presented in Tables 4 and 5, respectively. During most months, 50-70 percent of all samples collected were clean. However, during December 1978, and January 1979, only 5-10 percent of the samples were clean; during February and March 1979, no totally clean samples were collected. Figure 8 compares monthly volume weighted pH based on clean and dirty samples with clean only samples. During the first three months of this study, clean samples were somewhat more acidic. Clean samples were somewhat less acidic during the middle months of the study. Because so few clean samples were collected from December 1978, to March 1979, comparisons are not justified. When individual comparisons are made for specific chemical species using results presented in Tables 4 and 5, small amounts of foreign matter do not appreciably influence the reported monthly average concentrations in most cases.

Based on these observations, subsequent discussions focus on results obtained from clean and dirty samples because they provide a larger and, hopefully, more representative data base.

The compositional stability of precipitation depends on several factors. As previously described, the presence of foreign matter can contribute to composition in several ways. Changes do occur which influence the concentration of several chemical species present in precipitation. Most notably, pH,  $\text{NH}_4^+$ , and  $\text{NO}_3^-$  values seem susceptible to change with time as shown in Figure 7. Sample treatment and storage conditions can stabilize some of these changes to a certain extent. Refrigeration or freezing of samples is effective for all but pH.

Vegetation and insect contamination has been observed to increase concentrations of  $\text{K}^+$  and  $\text{NH}_4^+$ . It is likely that results presented and discussed here represent a small underestimate of sample acidity because of time dependent decreases in sample acidity which may be due to the presence of foreign matter or to other processes which neutralize a portion of the acidity.

Site Selection. The selection of individual sites can be important because localized sources of pollutants may influence composition of precipitation samples. Although this factor may contribute to some

extent to the observed spatial variability, it appears not to be a serious problem except at a few sites. The presence of sea salt in precipitation is influenced in large measure by proximity to the ocean and to meteorology. These cause "natural" variations and should not be considered a serious problem when site selection is determined. At least two sites utilized in this study have been found to yield results for certain species concentrations which can be considered somewhat different. Site 03, located at Ti-Co Airport, showed significantly elevated excess  $\text{SO}_4^{2-}$  concentrations and significantly lower pH values than other sites when the low altitude winds blow from the southeast during precipitation. Under these conditions, the stack plumes from the FPL and OU power plants will cover this site. Washout of acidic material from the power plant plume may contribute to the increased acidity. At site 06, located near Port Canaveral, elevated  $\text{Ca}^{+2}$  and  $\text{Mg}^{+2}$  concentrations in samples were sometimes observed along with higher pH values. These variations may indicate the influence of nearby cement plants. Other sites including those located near heavily traveled roads do not show extreme variations in the concentration of the major ionic species. The overall site selection plan has been judged to be acceptable to allow precipitation of representative composition to be collected.

Presentation of Results. Extreme variations in sample composition from event-to-event and site-to-site make it difficult to assess long-term behavior or changes which may occur. Therefore, one month has been selected as the minimum data resolution period for use in documenting precipitation composition. Samples collected from individual events are analyzed and these individual results are used to calculate monthly weighted average concentrations. This approach has been used to obtain results presented in Tables 4-12. Selected portions of these results are plotted for easy comparison in Figures 8-10, 18, and 19. The extreme variations that are observed in event sample compositions are smoothed by this approach. However, it is possible to evaluate average seasonal variations in results. Compositional variability between months and seasons and for individual events and sites is discussed in more detail in later sections.

Meteorology. Local and regional meteorology has been observed to influence the composition of precipitation. The influence of proximity to the ocean is very apparent when concentrations of  $\text{Na}^+$ ,  $\text{Mg}^{+2}$ , and  $\text{Cl}^-$  in precipitation are evaluated. Onshore or offshore breezes can dramatically influence the concentration measured for these three species. The anomolous behavior observed for pH and  $\text{SO}_4^{2-}$  concentrations in some samples collected at site 03 can be explained because of the location of site 03 with respect to the power plants and low altitude wind directions. The effect that regional and/or long-range atmospheric transport of pollutants produces cannot easily be analyzed. It is believed that most contributions to the deteriorating quality of precipitation arise from atmospheric transport of pollutants followed by rainout or washout

during the precipitation event. This conclusion is partially supported by results obtained from samples collected at the UCF site and from results obtained from samples collected in Gainesville, Florida during the same time period (Brezonik and Edgerton, 1979). Rainfall is definitely acidic at KSC, Orlando, and Gainesville.

### Chemical Composition of Precipitation

General Composition. The composition of rainfall collected at KSC and on the UCF campus near Orlando, Florida has been presented in Tables 4-12. Tables 6-12 present the results for individual KSC sites and the UCF site. The major differences observed in composition of rainfall at the various sites occurs for  $\text{Na}^+$ ,  $\text{Mg}^{+2}$ , and  $\text{Cl}^-$ . Sea salts are the principal source of these species and site distance from the ocean is very important when sea salt input into rainfall composition is considered. Appendix Tables 22-203 include more detailed statistical summaries of rainfall composition by month combining results from all KSC sites, and treating selected KSC sites and the UCF site individually.

The composition of rainfall determined in this study is similar to that determined for precipitation which occurs in other parts of the U.S. The major differences occur in the acid composition. Likens (1976) has reported the composition of precipitation which occurred during 1963-74 at the Hubbard Brook Experimental Forest, N.H. Liljestr nd and Morgan (1978) reported the composition of precipitation based on 15 events which occurred during 1976-77 at Pasadena, Calif. The present acidity of rainfall at KSC is about one-third that reported at Hubbard Brook and Pasadena. Acidity at Pasadena is due to  $\text{H}_2\text{SO}_4$  and  $\text{HNO}_3$  in a 1:2 ratio. At KSC and in the northeastern U.S., acidity is due to  $\text{H}_2\text{SO}_4$  and  $\text{HNO}_3$  in a 2:1 ratio. The concentrations of  $\text{K}^+$ ,  $\text{Ca}^{+2}$ , and  $\text{NH}_4^+$  are comparable in all areas. Concentrations of  $\text{Na}^+$ ,  $\text{Mg}^{+2}$ , and  $\text{Cl}^-$  are two to ten times greater at KSC than at Hubbard Brook or Pasadena. This is due to proximity of KSC sites to the ocean.

Acidity. The arithmetic means of monthly volume weighted acidity of precipitation samples collected at KSC and UCF during the 21 months yield mean pH values of 4.56 and 4.50, respectively. These values agree closely with pH values of 4.55 reported at Tallahassee, Florida, for 1974-76 and 4.53 at Gainesville, Florida, for 1976 (see Likens, 1976). The weighted mean pH for rainfall collected on an event basis in Gainesville, Florida, during late 1977 and the first 8 months of 1978 was 4.64 while rainfall collected on a weekly basis in west Orlando during the same time period was 4.62 (Brezonik and Edgerton, 1979). Wisniewski and Cotton reported the collection of rain in the Miami, Florida area during the summer of 1973 and measured pH values near 5.9. Using limited data from the southeastern U.S., Likens (1976) concluded that rainfall pH in central Florida was greater than 5.6 in 1966 and greater than 5.0 in 1972-73. These estimates are correct, then the acidity of rainfall in central Florida has increased at least three-fold in the past six years.

The monthly weighted average pH of rain collected at UCF Site 18 compared in Figure 9 with pH determined as a weighted average for all operational KSC sites. The variations from month to month are more severe at UCF Site 18. This may occur because far fewer samples contributed to the reported value. It is apparent that the acidity of rainfall in east central Florida undergoes variations which may be related to seasons of the year. Summertime acidity is as much as 10 times greater than that measured during early winter. For example, July 1978, compared to November 1977, yielded pH values of approximately 4.3 and 5.2 respectively.

Variations in monthly weighted average pH at KSC sites located relatively close together were most severe during spring and fall, 1978. These variations are compared in Figure 10 for Sites 01, 12, and 14. These three sites are located on a line which runs west-northwest from near the ocean (Figure 1). The distance separating Sites 01 and 14 is approximately 10 km. Site 12 is located approximately midway between Sites 01 and 14.

Although the use of monthly or quarterly weighted average pH is convenient when large amounts of data are to be compared for purposes of evaluating the changing composition of precipitation by season, it appears that they should be used with caution. Monthly and quarterly weighted average pH values are compared in Figure 11. The behavior exhibited stresses the smoothing effect that weighted averages have on results that are quite variable. It appears that the only strong seasonal (quarterly) patterns associated with precipitation acidity during the time period covered by this study occurs in the last quarters of 1977 and 1978 where pH was relatively high followed by decreases in subsequent quarters. The monthly weighted average pH for the individual months of October, November, and December which comprise the last quarter show greater variations than any other consecutive three-month period with the possible exception of the September-November 1977, time period. When monthly weighted average pH is considered, there is a pronounced decrease in pH which continues from November 1977, through September 1978. This may be indicative of a yearly cycle. More data are necessary before this tendency can be verified.

The variability in pH for individual samples collected in September 1978, at KSC Site 01 is also presented in Figure 11. These demonstrate the variability associated with acidity of samples which are used to calculate monthly or quarterly weighted averages. Individual pH values obtained from samples collected at individual sites and tabulated by month are presented in Appendix Tables 1-21. These results can be used to evaluate variability as in Figure 11.

The variability that was observed in individual sample pH is summarized in Figure 12. The frequency of occurrence for pH values within a specified range and expressed as a percentage are presented for individual three-month periods. The pH ranges were selected to represent approximately equal ranges of acidity for pH values

greater than 4.0. These results are based on the sites specified because these five sites were operational during most of the 21-month period. Samples with pH greater than 4.7 (acidity of less than 20 microequivalents/l) occur with highest frequency in all time periods and the frequency of occurrence then decreases as pH decreases. Typically, there are 20-50 percent of the samples that have pH less than 4.4.

Characterization of Acidity. In attempts to characterize the acidity of rainfall samples, several measurements that would add insight into acid composition were made on each sample. Measurement of sample pH was used as an indicator of sample free acidity. If volatile acids which contribute to sample acidity are present, it is sometimes possible to effect their removal by bubbling an inert gas such as nitrogen through the sample prior to measuring pH. Carbonic acid is a volatile weak acid which behaves in this manner. When the initial sample acidity is high, any contribution from  $H_2CO_3$  should be minimal because it is a weak acid; it should not undergo significant ionization, therefore. If sample acidity is low, e.g. pH greater than 5.0, then  $H_2CO_3$  may have a more important contribution. Reuss (1975) has discussed the effect that varying  $CO_2$  partial pressures have on pH. When pH is measured after removing  $CO_2$  from the sample, the pH change compared to initial pH measurement will depend on the initial sample pH and the  $CO_2$  partial pressure associated with the original sample. Initial sample pH was always measured with the sample at approximately  $25^\circ C$ . No attempt was made to control  $CO_2$  partial pressure. Sample pH (PHNV) measured after purging with nitrogen gas was made under an inert nitrogen atmosphere and hopefully under conditions where  $CO_2$  removal from the sample was significant. The difference between the two measured pH values was small, typically less than 0.05 units when sample acidity was relatively high; the difference increased significantly in several cases when initial sample pH was greater than 5.0. It is felt that the removal of  $CO_2$  is largely responsible for the differences observed.

Further characterization of sample acidity was carried out on many samples which had initial pH values below 4.7. These samples were titrated as described previously to characterize both the strong acid component and total titratable acidity which include strong acids and weak acids which titrate under the conditions utilized. A typical though somewhat more detailed than usual titration curve obtained for a sample collected in February 1978, is shown in Figure 4. The initial sample pH was 4.38, while the pH after bubbling nitrogen through the sample was 4.44. Typical acid-base titration behavior is observed. It would be extremely difficult, however, to determine an equivalence point from the titration curve because of the gradual "break" which corresponds to the equivalence point. This is characteristic of titrations which involve dilute reagents. Titration data of this type have been treated by Gran theory (Gran, 1952, Rossotti and Rossotti, 1965). The Gran functions that were generated from the titration data are also shown in Figure 4. Comparison of sample acidity based on measurement of pH, PHNV, strong acidity, and total titratable acidity yield values

of 41.6, 36.3, 38.4, and 57.0 microequivalents/liter respectively. The agreement between the first three values indicates that the acidity of this sample which determines initial pH is due primarily to strong acids, and the contribution of volatile acids is quite small. The result for titratable acidity is considerably higher than the other values. This indicates that undissociated acids are present in the sample at a concentration of about one-half that of strong or dissociated acids.

Relationships that have been observed between acidity as determined from measured pH, PHNV, and the Gran functions are displayed in Figures 13, 14, and 15. Although only data for samples collected from July to September 1978 have been included, the results are typical of what was observed during the entire 21 months of the study. The slopes of the least squares correlation lines shown in Figures 13 and 14 are approximately 1.00 and the correlation coefficients approach 1.00 as well. Slopes of 1.00 are expected if the acidity is of common origin. Because data points are approximately equally scattered and the slope is near 1.00, it is believed that experimental error in measuring pH probably accounts for most deviations. An error of 0.01 units in the measurement of pH results in an error of 1.7 percent in acidity determinations. Several sources that may have contributed to an error of this magnitude have been described (Galloway and Likens, 1979). Much greater variability is observed when data obtained as a measure of initial sample acidity are compared to titratable acidity. Results presented in figure 15, which compare measured free acid concentration and titratable acidity, show this greater variability. Variations from a one-to-one correlation are apparent and generally range between 10 and 50 percent. These variations indicate the presence of weak acids in addition to strong acids in the precipitation samples. Several anions which are conjugate bases of weak acids were determined in some of the precipitation samples collected. These include fluoride, orthophosphate, formate, and nitrite. No attempt was made to quantify all these anions in the precipitation samples nor to determine whether they constituted the full complement of weak acids in the samples. Ammonium ion titrates as a weak acid in titrations carried to a pH above 9.0. Rain sample titratable acidity consisted of approximately 65 percent strong acid free acidity and 35 percent weak acids. The latter did not contribute to the initial pH value. Ammonium ion concentrations were not large enough to account for the weak acid component as reported by Liljestr and and Morgan (1978).

Good agreement has been observed between acidity values determined from pH, PHNV, and strong acid determinations for individual precipitation samples. These results indicate that strong acids such as  $H_2SO_4$ ,  $HNO_3$ , and/or  $HCl$  are responsible for the acidic properties which influence the pH of these samples. It is possible to assess the importance of each strong acid if detailed measurements are performed to determine concentrations for  $NO_3^-$ , excess  $SO_4^{2-}$ , and excess  $Cl^-$ . Excess  $Cl^-$  levels are of little consequence (to be discussed later). Concentrations of free acidity,  $NO_3^-$ , and excess  $SO_4^{2-}$  are compared in figures 16 and 17 for samples collected at KSC Site 01 and UCF Site 18 in July 1978. The behavior is similar to

that observed in Figures 18 and 19 when monthly volume weighted averages are utilized. Data for individual samples are considerably more variable than monthly volume weighted averages. Changes in free acidity from sample to sample are followed closely by changes in  $\text{NO}_3^-$  and excess  $\text{SO}_4^{2-}$  concentrations.

When the dependence of free acidity on either  $\text{NO}_3^-$  or excess  $\text{SO}_4^{2-}$  concentrations is evaluated (Figures 20 and 21 respectively), some scatter is shown. In data collected from July to September 1978, free acidity is more closely related to excess  $\text{SO}_4^{2-}$  concentrations than to nitrate, the least square line in each case has a high correlation coefficient significant at  $\alpha < 0.001$  in each case. These correlations are summarized by month for individual KSC sites and the UCF site in Appendix Tables 204-381. Correlations between free acidity and nitrate and excess  $\text{SO}_4^{2-}$  are summarized by month in Table 13. The free acidity: $\text{NO}_3^-$  and free acidity:excess  $\text{SO}_4^{2-}$  ratios are typically 2:1 and 5:4, respectively. There is sufficient  $\text{NO}_3^-$  and excess  $\text{SO}_4^{2-}$  present to account for the entire sample free acidity. The presence of neutralizing cations is obviously important. Their presence indicates that portions of the  $\text{NO}_3^-$  and excess  $\text{SO}_4^{2-}$  were initially present as neutral salts of the neutralizing cations or were formed by partial neutralization of sample acidity. These results lead to the conclusion that present free acidity can be accounted for by the presence of  $\text{HNO}_3$  and  $\text{H}_2\text{SO}_4$  in the samples.

The observed acidity of precipitation is quite variable. This is particularly true when comparisons are made between individual events.

The presentation of results as monthly volume weighted averages tends to smooth the extreme variations to a considerable extent. However, significant differences have still been observed between individual months and particularly between seasons. If the presence of  $\text{NO}_3^-$ , excess  $\text{SO}_4^{2-}$ , and/or  $\text{Cl}^-$  are verified at concentrations which exceed those expected from introduction of sea salts and if the neutralizing cation concentrations are too low to account for the concentrations of excess  $\text{SO}_4^{2-}$ ,  $\text{NO}_3^-$ , and  $\text{Cl}^-$  and the sample is acidic, it is highly probable that sample acidity is due to the presence of at least one of the three strong acids. Neutralizing cations include  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ , and  $\text{NH}_4^+$  which are present in the sample and have origins other than sea salt. They can be considered indicators of basic compounds e.g.  $\text{CaO}$ ,  $\text{NH}_3$ , which have neutralized some of the initial sample acidity. The  $\text{Cl}^-$  concentrations in precipitation samples are due to the presence of sea salt. There is considerable excess  $\text{SO}_4^{2-}$  and  $\text{NO}_3^-$  in samples. If monthly weighted average free acidity variations are compared to the changing concentrations of excess  $\text{SO}_4^{2-}$  and  $\text{NO}_3^-$  as shown in Figures 18 and 19, it appears that the monthly changes in free acidity are followed by similar changes in both excess  $\text{SO}_4^{2-}$  and  $\text{NO}_3^-$  concentrations. The behavior is similar when only samples from a single site (Figure 18) or when samples from all KSC sites (Figure 19) are compared. For the time period studied,  $\text{NO}_3^-$  concentrations were typically less than one-half the free acidity concentrations, excess  $\text{SO}_4^{2-}$  concentrations tended to vary between 70 and 120 percent of the free acidity except

during April 1978, and to a lesser extent, May 1978. During these two months, the neutralizing cation concentrations and, in particular,  $\text{NH}_4^+$  concentrations, were quite large and can account for the deviant behavior observed.

The results presented in Figure 18 for KSC Site 01 are displayed in somewhat different fashion in Figures 22 and 23. Figure 22 shows the dependence of free acidity on the concentration of  $\text{NO}_3^-$  and, assumably,  $\text{HNO}_3$ . When data for April and May 1978 are excluded, the least square line has a slope of 1.96. This indicates that free acidity is only partially accounted for by  $\text{NO}_3^-$ . The correlation coefficient of 0.735 is significant at  $\alpha < 0.01$ . Figure 23 shows the dependence of free acidity on excess  $\text{SO}_4^{2-}$  concentration and, assumably,  $\text{H}_2\text{SO}_4$ . The least square line data fit has a slope of 0.886. This indicates that all free acidity can be accounted for by excess  $\text{SO}_4^{2-}$  were it all present as  $\text{H}_2\text{SO}_4$ . The correlation coefficient of 0.832 is significant at  $\alpha < 0.001$ . The total amounts of  $\text{NO}_3^-$  and excess  $\text{SO}_4^{2-}$  are more than adequate to account for all free acidity observed.

The combined influence of concentrations of  $\text{NO}_3^-$ , excess  $\text{SO}_4^{2-}$ , and  $\text{NH}_4^+$  on free acidity (where  $\text{NH}_4^+$  is considered to be a neutralizing cation) is shown for KSC Site 01 and all KSC sites in figures 24 and 25, respectively. The correlation coefficients are significant at  $\alpha < 0.001$  in both cases. The slopes of the least square lines are greater than 0.8 in each case and indicate that free acidity would generally be overestimated from monthly volume weighted average  $\text{NO}_3^- + \text{excess SO}_4^{2-} - \text{NH}_4^+$  by about 20 percent.

The lack of any significant excess  $\text{Cl}^-$  in KSC rainfall samples and the presence of ample  $\text{NO}_3^-$  and excess  $\text{SO}_4^{2-}$  can be interpreted to mean that present free acidity is due exclusively to the strong acids  $\text{HNO}_3$  and  $\text{H}_2\text{SO}_4$ . The relative concentrations of  $\text{NO}_3^-$  and excess  $\text{SO}_4^{2-}$  indicate that these two acids are present in an approximate 1:2 ratio.

Deposition of Acid. In addition to showing strong dependence on measured  $\text{NO}_3^-$ , excess  $\text{SO}_4^{2-}$  and  $\text{NH}_4^+$  concentrations, free acidity is also influenced by the amount of precipitation that occurs. By either rainout or washout, it would be expected that the initial rain will contain higher concentrations of pollutants. As the precipitation event continues, the pollutant content will decrease because rainout and washout will make the atmosphere cleaner. Therefore, it is expected that the initial portion of a rain sample or the entire volume will contain higher concentrations of pollutants when only small amounts of rain are received. Figure 26 shows the comparison of the free acidity behavior of rain samples with the total monthly amounts of rain received at KSC Site 01. Monthly weighted acidity is generally inversely related to total amount of rain during most months. Exceptions are the summer months in 1978 where high acidity and large amounts of rain occurred.



When assessing the long-term environmental impact of acid rain on soils and other terrestrial ecosystem parameters, the amount of acid deposited is probably more important than acidity associated with individual precipitation events. The total amount of free acid deposited for each month at six KSC sites and UCF Site 18 are presented in tables 6-12. Total free acid deposited related closely to the amounts of rain received. The only exceptions to this behavior occurred in November 1977, when all KSC sites received large amounts of high pH precipitation. Similarly, UCF Site 18 did not show the parallel increase in free acid deposited with the very large amount of rain received in July 1978. The behavior observed between total amount of free acid deposited and the amount of rain is significant because it appears that central Florida ecosystem loading with acid is related directly to the amount of rain received.

Although a small amount of rainfall generally results in a higher concentration of pollutants, the amount of each pollutant deposited is also a function of the amount of rain received. Results that support this observation can be seen in Figure 27 which compares the amount of free acid deposited per month to the amount of rain received. Individual sample behavior in Figure 28 also supports this observation. The deposits of free acid by month at KSC Site 01 and UCF Site 18 are compared in Figure 29.

Reported deposits are probably underestimated because contributions from very contaminated samples were not included. The total acidity deposited due to both strong and weak acids may be as much as 50 percent greater than amounts reported for free acidity.

Chloride, Sea Salt, and Assessment of Acid Rain. The presence of many ionic species in rain is not directly related to acidity. Specific examples include those ions commonly found in sea salt, including  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Cl}^-$ , and  $\text{SO}_4^{2-}$ . Major terrestrial and anthropogenic sources of  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{SO}_4^{2-}$ , and to a lesser degree  $\text{Cl}^-$ , have been documented. When the acidity of precipitation is evaluated, concentrations of the anions  $\text{SO}_4^{2-}$ ,  $\text{Cl}^-$ , and  $\text{NO}_3^-$  become important. For most studies, sea salts in precipitation are of little significance. When the assessment and evaluation of  $\text{Cl}^-$  levels are important, however,  $\text{Cl}^-$  which originates in the oceans must be carefully determined before the presence of excess  $\text{Cl}^-$  can be ascertained. The generation of HCl as an exhaust product from utilization of SRM boosters on Space Shuttle launch vehicles will provide a source of acid and  $\text{Cl}^-$ . To determine increased concentrations of  $\text{Cl}^-$  in precipitation which are not due to sea salts (a greatly variable entity in precipitation) several assumptions and careful measurements must be made. Determination of total sea salt concentrations in rainfall were made by assuming that the contribution of sea salt can be based on the limiting concentration of  $\text{Cl}^-$  or  $\text{Na}^+$  compared to the measured  $\text{Cl}/\text{Na}$  ratio in sea water. This implies that sea water is the only source of the limiting species, either  $\text{Cl}^-$  or  $\text{Na}^+$ . The sea salt contribution to total ionic composition of precipitation then can be assessed. Monthly variations for sea salt concentrations in rain at four KSC sites are shown in

Figure 30. Tabulated summaries are presented in Tables 4-12. The behavior shows considerable variability which can be accounted for when proximity to the ocean is considered. Diverse meteorology accounts for month to month variations at individual sites. Any episodic introduction of HCl into rainfall probably will not increase Cl<sup>-</sup> levels enough to allow precise determination of excess Cl<sup>-</sup> to be made when monthly averages are considered. However, as will be discussed later, it is possible to determine the presence of excess Cl<sup>-</sup> on a sample by sample basis, if the assumption is made that the only Na<sup>+</sup> in the precipitation sample is of sea salt origin.

The direct impact that SRM launches will have on the acidity of rain will be due to the presence of HCl in the exhaust. Should acid rain occur, increased concentrations of acid and Cl<sup>-</sup> will be present. Present Cl<sup>-</sup> concentrations in individual samples, if they originated exclusively from HCl with no other acids present, would yield acidities of 1-1000 and 5-4000 microequivalents/liter at UCF Site 18 and at KSC, respectively. These describe pH ranges of 6.0-3.0 and 5.3-2.4 respectively. Because of the tremendous variability associated with Cl<sup>-</sup> concentrations due solely to sea salt, sample-by-sample determination of Cl<sup>-</sup> due to sea salt must be possible before the acidity of rain in the form of HCl, HNO<sub>3</sub>, or H<sub>2</sub>SO<sub>4</sub> can be accounted for. It appears that sea salts provide nearly 100 percent of the Na<sup>+</sup>, Mg<sup>+2</sup>, and Cl<sup>-</sup> present in rain. This conclusion is supported by ratios and correlation behavior of Cl/Na, Mg/Na, and Cl/Mg presented in Table 13 and figures 31, 32, 33. In addition, Appendix Tables 22-203 and 204-381 include both monthly ratios and linear correlations based on individual samples.

If increased acidity is observed in rain collected after a SRM firing, it should be possible to determine the Cl<sup>-</sup> concentration due to sea salts. Excess Cl<sup>-</sup> can then be attributed to HCl from the SRM exhaust if concentrations of NO<sub>3</sub><sup>-</sup> and excess SO<sub>4</sub><sup>-2</sup> are not elevated enough to account for the increase in acidity.

Although correlation coefficients (Table 13) which relate the dependence of Na<sup>+</sup>, Mg<sup>+2</sup>, and Cl<sup>-</sup> are very high, it is important to consider the ratio of concentrations for individual species. The sea water ratios (eq/eq) of Cl/Na, Mg/Na, and Cl/Mg are 1.165, 0.243, and 5.11, respectively. Actual ratios can be calculated from results presented in tables 4-12 and also are included for a limited set of data in figures 31, 32, and 33. Ratios for Cl/Na and Cl/Mg determined from monthly weighted average concentrations of Na<sup>+</sup>, Mg<sup>+2</sup>, and Cl<sup>-</sup> are generally somewhat lower than those reported for sea water. The majority of values for the Cl/Na ratio are 1.0-1.1, for the Cl/Mg ratio, they are 4.0-4.7. Each indicates the presence of small amounts of Na<sup>+</sup> and Mg<sup>+2</sup> in rain, which may be due to a source other than sea salt. When excess Cl<sup>-</sup> is present, the presence of Cl<sup>-</sup> due to sea salt can only be determined by assuming that the presence of Na<sup>+</sup> and/or Mg<sup>+2</sup> is due exclusively to sea salt as follows:

$$\text{Excess Cl}^- = \text{total [Cl}^-] - 1.165 [\text{Na}^+] \text{ or}$$

$$\text{Excess Cl}^- = \text{total [Cl}^-] - 5.11 [\text{Mg}^{+2}]$$

The error introduced into the determination of excess  $\text{Cl}^-$  may be significant when the excess  $\text{Cl}^-$  concentration is expected to be small. The calculation based on measured  $\text{Na}^+$  concentration may yield a value for sea salt  $\text{Cl}^-$  which is 10-20 percent higher while the calculation based on  $\text{Mg}^{+2}$  concentration may yield a value for sea salt  $\text{Cl}^-$  which is 25 percent higher. These errors are probably only significant when the total  $\text{Cl}^-$  concentration and the  $\text{Cl}^-$  concentration due to sea salt are similar.

Typical precipitation concentrations for  $\text{Na}^+$ ,  $\text{Mg}^{+2}$ , and  $\text{Cl}^-$  are 50, 12, and 55 microequivalents/liter (Table 4). Values of 58.2 and 61.3 are obtained when the values for  $\text{Na}^+$  and  $\text{Mg}^{+2}$  are used to calculate the  $\text{Cl}^-$  concentration due to sea salt. If a precipitation event of pH 3.0 due to HCl (1000 microequivalents  $\text{Cl}^-$ /liter) occurs and also contains sea salt as just described, the excess  $\text{Cl}^-$  based on measured  $\text{Na}^+$  and  $\text{Mg}^{+2}$  is 997 and 994 microequivalents/liter, respectively. Error of less than -1 percent occurs in the determinations. Even when the concentration for sea salts is ten times greater than in the previous example, the error introduced into determination of excess  $\text{Cl}^-$  will be -2.2 percent based on  $\text{Na}^+$  and -6.3 percent based on  $\text{Mg}^{+2}$ . These examples show the utility of using measured  $\text{Na}^+$  or  $\text{Mg}^{+2}$  concentrations in individual samples for determining the presence of excess  $\text{Cl}^-$ . Should increased acidity occur due to the presence of HCl, the acidity can be accounted for based on excess  $\text{Cl}^-$  (if present),  $\text{NO}_3^-$ , and excess  $\text{SO}_4^{2-}$ . There is no evidence to show that existing  $\text{Cl}^-$  concentrations in rain exceed those due to sea salt effects. There may be minor sources for  $\text{Na}^+$  and  $\text{Mg}^{+2}$  in precipitation in addition to sea salts.

Increases in HCl concentrations in individual rainfall samples can be determined with very little error. Increases in HCl concentrations which may occur during extended time periods (weeks to months to years) will be much more difficult to determine. Should increases cause the lowering from existing levels of precipitation pH by several tenths of a unit, then these increases should be measurable if accompanied by HCl concentrations which increase total  $\text{Cl}^-$  concentrations by at least 10-20 percent above levels due to sea salt.

## Summary and Conclusions

The following conclusions can be drawn from nearly two years of activity in the collection and chemical analysis of rainfall:

1. A network for the collection of precipitation samples has been established and demonstrated to be effective and satisfactory.
2. The acidity of precipitation in east central Florida is moderately high; individual rain events can be very acidic. Acidity cannot be associated with operations at KSC.
3. Extensive day-to-day and site-to-site variation in precipitation occurs. Analytical and sampling variability do not contribute significantly to the observed spatial variability in rain composition.
4. Sulfuric and nitric acids account for the observed acidity of precipitation at the present time.
5. Sea salt represents a significant portion of the total ionic composition of precipitation at KSC. Because sea salt contains high concentrations of chloride, the sea salt contribution to precipitation composition must be determined and used to evaluate increased acidity if the presence of hydrochloric acid becomes an issue.
6. Use of monthly volume weighted averages for analysis of general trends associated with changes in precipitation composition can be beneficial. However, to evaluate local perturbations which may influence precipitation composition, event sampling is necessary.
7. Contamination of rain samples occurs; however, it was not a severe problem because the usual sampling period was 24 hours. Sample pickup at less frequent intervals will greatly increase the likelihood of many samples becoming too contaminated for meaningful chemical analysis.
8. The chemistry of rain falling in the vicinity of KSC has been characterized sufficiently to allow detection of changes in the future.

## SOIL CHEMISTRY

### Introduction

This study was designed to evaluate certain chemical parameters associated with representative soils collected at selected sites on Merritt Island and the Kennedy Space Center. The results of this study will be useful when attempts are made to evaluate effects of SRM exhaust on the terrestrial ecosystem. The 10 sites utilized were designated as reference stands in the terrestrial community analysis program (Stout, 1979). Soil samples were analyzed on a routine basis to establish the concentration of certain elements which are essential for plant growth. Samples were assayed for pH,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Na}^{+}$ ,  $\text{K}^{+}$ ,  $\text{NH}_4^{+}$ ,  $\text{Al}^{+3}$ ,  $\text{NO}_3^{-}$ ,  $\text{Cl}^{-}$ ,  $\text{SO}_4^{-2}$ , P, ion exchange capacity, total nitrogen, and organic matter.

Leaching studies were performed on the same representative soil samples. Dilute solutions of HCl were used to leach cations from the soils. Total concentrations of leachable cations and concentrations leached were determined. The extent of acid leaching on the various soils which support the various plant communities was evaluated from the data obtained.

Research directed toward evaluation of pollution on soils and resulting changes in fertility and ability to support and sustain plant life is a relatively recent activity. The changing acidity of precipitation has been evaluated in Europe since the 1950's. Oden (1976) has summarized the results of selected studies and presented evidence to show that movements of air masses across the entire European continent complicate evaluation of the origin of the acidity. Oden also summarized the acid impact on surface waters. In general, pH of freshwaters is characterized by random, seasonal, and yearly variations and time trends. Parallel studies of the acid impact on soils included consideration of ground and surface water runoff and ultimate mixing in lakes. Increased soil acidity will lead to exchange of absorbed cations which will leach from the soil, and base saturation will decrease. Decreases in cation nutrients can lead in the long-term to changes in the plant community supported on the soil.

Norton (1978) has evaluated changes in chemical processes in soils caused by acid precipitation. These include pH insensitive reactions, pH sensitive reactions,  $E_h$  sensitive reactions, and the relative mobility of elements. Increased mobility of  $\text{Al}^{+3}$  and consequential destruction of clay materials may decrease ion exchange capacity. In other situations, ion exchange capacity may increase. The general rate of removal of all cations including trace metals will increase, and this nutrient flux will result in increased nutrient concentrations in aquatic ecosystems below the soil zone.

Frick and Voight (1976) described the nature of acidity and potential effects of acid precipitation on soils in the humid temperate zone. As chemical weathering of soils become more complete and  $\text{Na}^{+}$ ,  $\text{K}^{+}$ ,  $\text{Ca}^{+2}$ , and  $\text{Mg}^{+2}$  are removed, hydrogen and aluminum ions begin to dominate.

Soil acidity then is controlled by hydrolysis of  $Al^{+3}$  and soil pH can be represented by

$$pH = 5.0 + pAlOH - pAl$$

and soils become buffered near pH 5. The relationship between soil pH and ion exchange capacity also was considered but interpretation is complex. They also described the role that the nitrogen cycle and sulfides have in production of acids in the soil. Oden (1976) showed a time sequence which illustrates soil acidification due to biological action, man-made acidity, and excess mineral acids. Mineral acids which contributed less than 20 percent to total acidification in the early 1950's, contributed about 50 percent in the early 1970's.

McFee, Kelly, and Beck (1977) described the effects of acid precipitation on soil pH and base saturation of exchange sites. Noting the resistance of most soil systems to pH change, they conclude that acid precipitation should not cause rapid soil degradation. They point out that it is difficult to evaluate these phenomena in the short-term. They present an example for 100 years of pH 4.0 acid precipitation (100 cm/year) and conclude that percent base saturation within the top 20 cm of a typical midwestern soil with 20 meq/100g ion exchange capacity will decrease by 20 percent. A pH decrease of 0.6 units would occur if no acid neutralizing materials were introduced by other deposition processes.

Overrein (1972) reported the effect of acid precipitation on  $Ca^{+2}$  levels in a Norwegian forest soil and considered the nutritional status of forest soils based on lysimeter studies. The leaching of  $Ca^{+2}$  from different soil types increased rapidly when the acidity of precipitation increased. Soil acidity was dependent on the amount and concentration of acid added, the nutrient element considered, and soil ion exchange capacity. In general, the leaching of  $Ca^{+2}$  was significantly greater at pH 3.0, compared to leaching at pH 4.3 which showed effects similar to those of distilled water. Below pH 3.0, greatly accelerated leaching occurred. All leaching of  $Ca^{+2}$  was characterized by a time delay of several days following acid treatment of soil.

The U.S. Environmental Protection Agency has supported studies to evaluate acid effects on soils. Reuss (1978) performed a simulation study to evaluate nutrient loss from non-calcareous soils due to acid rainfall. A model which predicts the most likely effect of acid precipitation on the leaching of cations was developed.

NASA has supported studies to characterize soil from a Cape Canaveral launch complex, post-launch pad debris particulates, and interaction of soil with aqueous HCl. Pellett, et al. (1979) will report results based on Titan III launches from Launch Complex 40 at KSC on March 11-12, 1975, and August 20, 1977. Soil composition near complex 40 contains considerable  $Ca^{+2}$  and  $Mg^{+2}$ , occurring as carbonates from sea shells. Considerable acid neutralization should be provided in this soil. Soil slurries, which were titrated with HCl, were shown to consume considerable acid on a time-delay basis.

## Methods and Procedures

### Sampling and Sample Preparation

Collection of soil samples was accomplished during mid-July, early September, and early December of 1976 and during mid-March of 1977. Samples were collected from sites identified as reference stands in the Terrestrial Plant Community Analysis Program (Stout, 1979). Each sample consisted of between 30 and 40 cores, 15 cm deep by 2 cm in diameter, obtained with LaMotte, Hankinson-Hester type soil sampling tubes (Welcher, 1962). Samples were collected in random fashion along transects within each sampling area. The layer of ground litter was scraped away before each soil core was taken. The March sampling consisted of four independently collected subsamples, of 20-30 cores, from each site. Each subsample was processed as a separate entity. Samples were collected in zip-lok polyethylene bags for transport to the laboratory.

The soil samples were air-dried in the laboratory by spreading them on aluminum trays. Large clods of air-dried soils were broken up before samples were sieved through a 2.0 mm nylon sieve. Subsamples for all subsequent determinations were obtained by the technique of coning and quartering. Chemical analyses were performed. They are summarized in Figure 34, and are described below.

### Double Acid Extraction Procedure and Analysis

Determination of  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Al}^{+3}$ , and P in the soil samples was accomplished by using a double acid (0.05N HCl in 0.025N  $\text{H}_2\text{SO}_4$ ) extraction reagent, followed by appropriate chemical methods (Soil Testing Lab, 1974). The  $\text{K}^+$  and  $\text{Na}^+$  were determined by flame emission spectroscopy,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ , and  $\text{Al}^{+3}$  by flame atomic absorption spectroscopy, and phosphorus by the Vanado-molybdophosphoric acid colorimetric procedure. These determinations were performed by the Soil Testing Laboratory, University of Florida, Gainesville, under the direction of Dr. H. L. Breland. Air dried and sieved samples were submitted for analysis.

### Organic Matter

Organic matter content of samples was determined by a gravimetric weight loss procedure. Five gram samples were placed in porcelain crucibles and ignited to constant weight at  $900^\circ\text{C}$  by heating initially for two hours, followed by subsequent heating for 30 minutes. Organic matter was determined from the following equation:

$$\text{Organic Matter, \%} = \frac{\text{g loss on ignition}}{\text{g sample}} \times 100$$

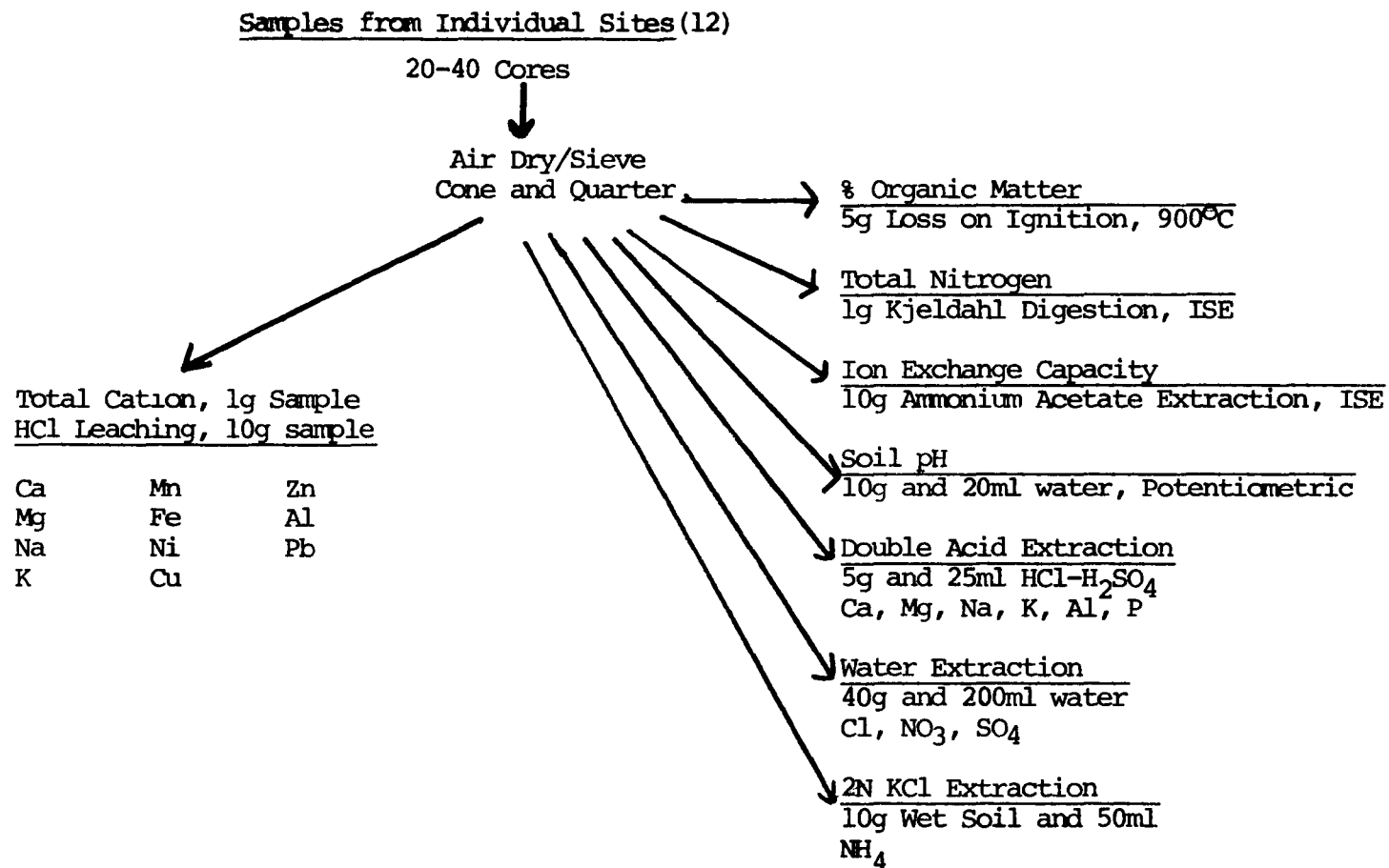


Figure 34. Flow Diagram Showing the Sampling and Analysis Sequence Utilized in the Soil Studies.



## Soil pH, Chloride, Nitrate, Sulfate and Ammonia Determinations

Soil pH was determined by the soil Testing Laboratory, University of Florida. The pH was measured potentiometrically in a slurry prepared to contain a 1:2 ratio of soil:water.

The  $\text{Cl}^-$ ,  $\text{NO}_3^-$ ,  $\text{SO}_4^{2-}$ , and  $\text{NH}_4^+$  concentrations were determined after extraction of the soils with deionized water. Forty grams of air-dried soil was extracted by shaking the soil with 200 ml of deionized water in a 250 ml widemouth polyethylene bottle. Soil and extracting solution was thoroughly mixed, allowed to stand overnight then mixed again before gravity filtering through Whatman #42 filterpaper. Separate portions of the extract were analyzed for each species.

Chloride was determined potentiometrically with a chloride ion-selective electrode prepared as described by Olson et al. (1974) and Czaban and Rechnitz (1973). An Orion double junction reference electrode, model 90-02 was used. The method of standard additions (Eynon, 1970; Beckman, EC-7633; Beckman, EC-8148) was used to overcome possible matrix interference problems. A Beckman Expandomatic pH meter operated in the expanded scale millivolt mode was used. This procedure was used for samples collected during July, September, and December, 1976. The determination of chloride in samples collected in March, 1977 was accomplished through use of the  $\text{Hg}(\text{SCN})_2$  -  $\text{Fe}(\text{III})$  method (Vogel, 1961).

Sulfate was determined turbidimetrically by following standard procedures (Standard Methods, 1975). Soil extract turbidity was compensated for by using a blank which contained all reagents except the  $\text{BaCl}_2$  precipitating reagent. A spectronic 20 colorimeter, equipped with 1.17 cm lightpath cells and set to 420 nm, was used.

Nitrate was determined spectrophotometrically by using a method adapted from the Cd reduction standard procedure (Standard Methods, 1975a). Nitrate was determined by using Hach reagents. The procedure is outlined in a methods manual (Hach 1975).

A nitrate ion-selective electrode, Orion 93-07, was evaluated for use in the determination of soil nitrate concentrations. However, performance was not reliable even though several applications have been published (Smith, 1975; Orion, 1975a; Raveh, 1973; Mack and Sanderson, 1971; Oien and Selmer-Olsen, 1969; Mahendrappa, 1969; Myers and Paul, 1968; Bremner et al., 1968; Standard Methods, 1975).

Determination of  $\text{NH}_4^+$ , reported as  $\text{NH}_3$ , in the soil extract was performed with an Orion 95-10 ammonia electrode. (Orion, 1975a, McKenzie and Young, 1975, Beckett and Wilson, 1974; Banwart et al., 1972).

## Ion Exchange Capacity

Ion exchange capacity of soil samples was determined by the ammonium acetate pH 7.0 procedure (Soil Survey Staff, 1972), except

that the  $\text{NH}_4^+$  present in the NaCl-HCl leachate was determined using an Orion 95-10 ammonia electrode (Orion, 1975a, Busenberg, E., and Clemency, C. V., 1973).

### Total Nitrogen

Semimicro Kjeldahl digestion of samples and measurement of generated ammonium ion with an Orion 95-10 ammonia electrode (Soil Staff Survey, 1972a; Bremner and Tabatabai, 1972; Orion, 1975a) was utilized to determine total nitrogen content of the soil samples.

### Determination of Total Cations in Soils

A 3 g subsample of the air-dried and sieved soil sample from each site was taken for determination of total cations. Each sample was ground, using an agate mortar and pestle, until a fine powder was obtained. Separate one-gram subsamples were taken for subsequent treatment. Twelve elements were determined to be present in the soil samples. Silica was removed, and each sample was dissolved by treatment with hydrofluoric acid, usually in combination with a mineral acid, followed by heating to volatilize  $\text{SiF}_4$  (Dolezal, J. et al. 1968). Dissolution of silica samples in HF prior to extraction and atomic absorption spectrophotometry is commonly used (Sanzolone and Chao, 1976; Fuller and Whitehead, 1974; Fuller, 1973; Fuller, 1972, Ward, 1969). Treatment of soil samples involved ignition of the one gram samples at  $900^\circ\text{C}$  for 2 hours to remove organic matter, followed by treatment with HCl and HF in 20 ml teflon beakers. The procedure followed is described by Pawluk (1967).

Initially, the solutions obtained from the HCl/HF treatment of the soils were subjected to flame atomic absorption analysis for determination of  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Mn}^{+2}$ , and  $\text{Zn}^{+2}$ . The elements  $\text{Al}^{+2}$ ,  $\text{Cu}^{+2}$ ,  $\text{Mo}^{+2}$ ,  $\text{Ni}^{+2}$ ,  $\text{Mn}^{+2}$ , and  $\text{Pb}^{+2}$  were determined by flameless atomization atomic absorption spectroscopy. A Perkin-Elmer 305B atomic absorption spectrophotometer, operated according to manufacturer directions, was used. An air-acetylene flame and a Perkin-Elmer HGA-2100 heated graphite atomization (HGA) sources were used. Flame absorption results were obtained from calibration curves generated from standard solutions and run under identical experimental conditions. Flameless atomic absorption results were obtained by using the method of standard additions. Ultimately, all samples were analyzed by plasma spectroscopy at the Institute of Ecology, University of Georgia. The laboratory was under the direction of Dr. Frank Golly.

### Hydrochloric Acid Leaching of Cations from Soils

Samples of the air-dried and sieved soil samples were used to assess the extent to which various cations could be leached by HCl. Five 10 g subsamples, obtained by coning and quartering, were taken for soil subsamples from each site. These samples were placed in 25 ml-capacity gooch filtering crucibles with fine porosity fritted discs. Leaching was accomplished by adding 20 ml portions of 1.0,  $10^{-1}$ ,  $10^{-2}$ ,  $10^{-3}$ ,  $10^{-4}$  M HCl (pH range 0 to 4) to separate portions

of each sample. The solution was allowed to percolate through the soil using sufficient vacuum to require a minimum of 25 minutes for the leaching. Additional 20 ml portions of acid were added to each soil, until a total of 100 ml had been used and a minimum total leaching time of 2 hours had elapsed. Concentrations of metals in the HCl leachates were determined as described above for total cations.

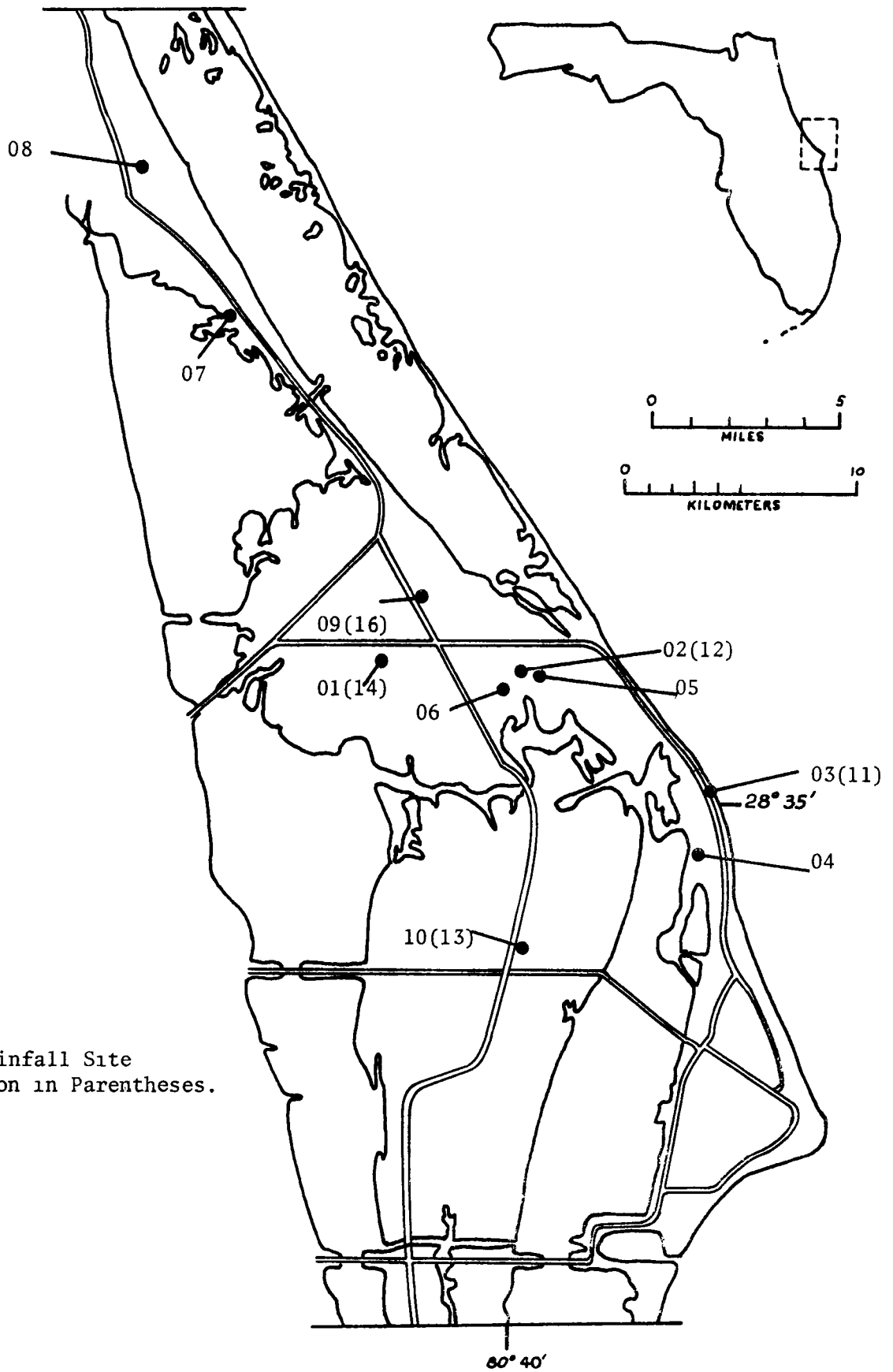
## Results

Ten primary sites were established as part of the Terrestrial Plant Community Analysis Program (Stout, 1979). Figure 35 shows the location of plant communities where soil samples were taken. Site number designation in Figure 35 is that used for the reporting of all subsequent soil results. Nearby sites where collection of precipitation samples was performed are noted. Soil types and descriptions for each of the sites are presented in Table 14.

### Results from the Quarterly Soil Sampling Program

Samples were collected from the ten primary areas identified in Figure 35 in mid-July 1976, early September 1976, early December 1976, and mid-March 1977. Appendix Table 382 summarizes the data from individual sampling sites and sampling periods for the determination of pH,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Al}^{+3}$ ,  $\text{NH}_3$ , P,  $\text{Cl}^-$ ,  $\text{NO}_3^-$ ,  $\text{SO}_4^{-2}$ , organic matter, ion exchange capacity, and total nitrogen. The mean annual concentration of individual soil nutrients, by site, is presented in Figures 36-49. These results are indicative of changes that may be occurring for the various nutrients. However, presentations of mean and standard deviation are not sufficient for establishing trends. No attempt has been made to establish any seasonal trends, because of the limited data available and, in some cases, because of less than adequate analytical methods for determination of very low concentration levels for some of the nutrients. Figures 36-49 also show the mean and standard deviation for individual nutrient concentrations in the soil samples collected during March 1977. These results were obtained from quadruplicate sampling, sample processing, and sample analysis for the 14 nutrients as outlined in Figure 34. The precision associated with the measurement of concentration for each of the nutrients in the different soils represent contributions from collection of sample cores, coning and quartering to obtain subsamples of suitable size for each extraction and/or determination, and the analytical method itself. Comparisons based on the annual and March 1977 sampling have been presented for the 10 primary soils. In a few cases, no information is reported. This occurs when data for certain nutrients is reported as greater than a specified value but no actual concentration is reported. Nutrients involved are  $\text{Ca}^{+2}$  and, occasionally,  $\text{Mg}^{+2}$ , P, and  $\text{NO}_3^-$ .

Site selection resulted in the inclusion of several different soil types. For purposes of sampling, the single beach site was subdivided into three separate sections, based on dune profile and vegetation cover. Designations used are: front dune, middle dune, and back dune, based on proximity to the ocean. Two sites are located on Immokalee Sand and a third, the Pine Flatwoods, is of similar soil type. Three sites are located on Pomello Sand and three are supported on soils referred to as "Swamps" or "Copeland Complex". The latter are complex soils, and complete description of soil type has not been attempted. Sites designated as hammocks are supported on these soils.



Nearby Rainfall Site  
Designation in Parentheses.

Figure 35. Locations of Soil Sampling Sites. Site Descriptions are Included in Table 14.

<u>Site No.</u>	<u>Name</u>	<u>Soil Type<sup>a</sup></u>	<u>Plant Community Description</u>
01	Wisconsin Village	Immokalee sand -- This is a nearly level, poorly drained sandy soil in broad areas in the flatwoods, on low ridges between sloughs, and in low, narrow areas between sand ridges and lakes and ponds. It has a dark-colored, weakly cemented layer below a depth of 30 inches. This layer is dark colored because the sand grains are coated with organic matter. In most years the water table is within a depth of 10 inches for 1 to 2 months. It is between 10 and 40 inches more than half the time, and during short, dry periods it is below 40 inches. The soil is flooded for 2 to 7 days once in 1 to 5 years	The vegetative cover of the grid may best be referred to as Flatwoods without pines. The dominant element in the ground cover is wiregrass <u>Aristida Stricta</u> . Smaller woody plants include St. Johns wort <u>Hypericum reductum</u> , <u>Gaylussacia dumosa</u> , and <u>Vaccinium myrsinites</u> . Taller shrubs (1-2 meters in height) are <u>Quercus myrtifolia</u> , <u>Q. chapmanii</u> , <u>Lyonia lucida</u> , <u>L. fruticosa</u> , <u>Ilex glabra</u> , <u>Befaria racmosa</u> , and <u>Serenoa repens</u> . A smaller oak <u>Quercus minima</u> is also very common.
02	Happy Hammock	Swamp -- consists of nearly level, poorly drained and very poorly drained areas of soils that have a dense cover of wetland hardwoods, cypress trees, vines, and shrubs. Swamp is in poorly defined natural drainage-ways in depressions, and in large bay heads. It is flooded with fresh water most of the time.  The soil pattern in the swamps is intricate and varied. The dense vegetation makes it impractical to map the soils separately. On Merritt Island are the deep sandy Anclote, Pompano, Basinger, Terra Ceia, and Tomoka soils.	Large live oaks <u>Quercus virginiana</u> var. <u>virginiana</u> are scattered throughout the hammock. Other canopy dominants include <u>Sabal palmetto</u> , <u>Quercus laurifolia</u> , red maple <u>Acer rubrum</u> ; and elm <u>Ulmus americana</u> var. <u>floridana</u> . Subcanopy trees include hackberry <u>Celtis laevigata</u> , mulberry <u>Morus rubra</u> and lancewood <u>Nectandra coriacea</u> . Common shrubs are coffee <u>Psychotria nervosa</u> and <u>P. sulzneri</u> , <u>Myrsine guianensis</u> , and <u>Ardisia escallonioides</u> .

Table 14. Soil Sampling Site Numbers and name designation, soil type, and plant community description for sites selected for use in the soil analysis program and Plant Community Analysis Program.

<u>Site No</u>	<u>Name</u>	<u>Soil Type<sup>a</sup></u>	<u>Plant Community Description</u>
04	Dune Scrubb	<p>Pomello sand -- This is a nearly level, moderately well drained sandy soil on broad low ridges and low knolls. The water table is 30 to 40 inches below the surface for 2 to 4 months in most years and between 40 to 60 inches for more than 6 months. During dry periods, it is below 60 inches for short periods.</p> <p>Included with this soil in mapping are a few areas of Myakka and Immokalee soils. Also included are areas of fine sand, small sloping areas, and areas on the Atlantic Coastal Ridge where shell fragments are mixed with the sand beneath the weakly cemented, dark-colored layer is within a depth of 30 inches.</p>	<p>A dense shrub cover 1-2 meters in height covers the area. Essentially no ground level cover is present, but a heavy litter layer has developed beneath the shrubs. Rosemary <u>Ceratiola ericoides</u> forms extensive, almost pure stands. Three oaks, live oak <u>Quercus virginiana</u> var. <u>maritima</u>, chapman oak, and myrtle oak are common. Spanish plum <u>imenia americana</u>, <u>Lyonia ferruginea</u>, and saw palmetto are scattered throughout the grid.</p>
05	39 B Scrubb	Pomello Sand - See Site 04	
06	Happy Creek Scrubb	Pomello Sand - See Site 04	
07	Juniper Hammock	Swamp - See Site 02	

Table 14. Soil Sampling Site Numbers and name designation, soil type, and plant community description for sites selected for use in the soil analysis program and Plant Community Analysis Program. (Continued)

<u>Site No.</u>	<u>Name</u>	<u>Soil Type<sup>a</sup></u>	<u>Plant Community Description</u>
09	Rt. 3 Hammock	<p>Copeland complex -- This complex consists of several nearly level, very poorly drained soils on low flats. In most years the water table is within a depth of 10 inches for more than 6 months. In dry seasons it is between 10 and 30 inches. This soil is flooded for 7 days to a month once in 5 to 20 years. Some areas are underlain by copuina rock instead of limestone.</p> <p>The soils in this complex are so intermixed that it was impractical to map them separately. About 6 percent is Copeland loamy fine sand; 55 percent is a soil that is similar to Copeland loamy fine sand, but has limestone at a depth of about 20 inches and a subsoil of sandy loam; about 8 percent is an area where the black surface layer is underlain by hard limestone, generally within a depth of 10 inches; about 5 percent is a Wabasso soil; 10 percent is a soil similar to the Wabasso soil, but has limestone beneath the loamy layers; and 16 percent is scattered spots of Bradenton shallow variant, Chobee, Felda, Myakka, and St. Johns soils.</p>	
10	Headquarters Pinelands	Immokalee Sand - See Site 01	
03	Beach Grid	<p>Palm Beach sand -- This is a nearly level and gently sloping excessively drained soil on dunelike ridges that roughly parallel the Atlantic Ocean. It consists of mixed sand and shell fragments. Slopes are mostly 2 to 5 percent. The water table is at a depth of more than 10 feet.</p> <p>Included with this soil in mapping are narrow areas that have slopes of 5 to 8 percent and lead to included narrow low sloughs. Also included are areas of soils that contain only a very few shells in the upper 20 to 40 inches and that are brownish yellow to</p>	<p>Three obvious zones of vegetation run parallel with the beach and dune lines. The first zone and most seaward is covered with sea oats <u>Uniola paniculata</u>, <u>Heterotheca hyssopifolia</u>, and <u>Ipomoea stolonifera</u> and <u>I. Pes-caprae</u>. Some 14 other species of plants occur in zone 1. Zone 2 is between the beach and the major dune line. Much of this area is bare sand with clumps of palmetto <u>Serenoa repens</u>, occasional sea grape <u>Coccoloba uvifera</u>, and buckthorn <u>Bumelia tenax</u>. Gopher apple <u>Licania michauxii</u> forms extensive</p>

Table 14. Soil Sampling Site Numbers and name designation, soil type, and plant community description for sites selected for use in the soil analysis program and Plant Community Analysis Program. (Continued)



<u>Site No.</u>	<u>Name</u>	<u>Soil Type<sup>a</sup></u>	<u>Plant Community Description</u>
03 (cont)	Beach Grid (continued)	strong brown, a few areas that have a slightly thicker surface layer, and some areas of coarse sand.	mats in some places Zone 3, behind the main dune line, is covered with a dense shrub layer Palmetto and sea grape are most abundant, while wax myrtle <u>Myrica cerifera</u> , buckthorn and <u>Chiococca alba</u> are common but scattered. Almost no ground cover exists beneath the shrubs, but a heavy litter is present
91	Zone 1 <sup>b</sup>		
92	Zone 2 <sup>b</sup>		
93	Zone 3 <sup>b</sup>		
08	Pine Flatwoods	Not available	

a - According to Soil Survey of Brevard County, Florida, 1974, United States Department of Agriculture, Soil Conservation Service

b - Subdivisions of the Beach Grid

Table 14. Soil Sampling Site Numbers and name designation, soil type, and plant community description for sites selected for use in the soil analysis program and Plant Community Analysis Program. (Continued)

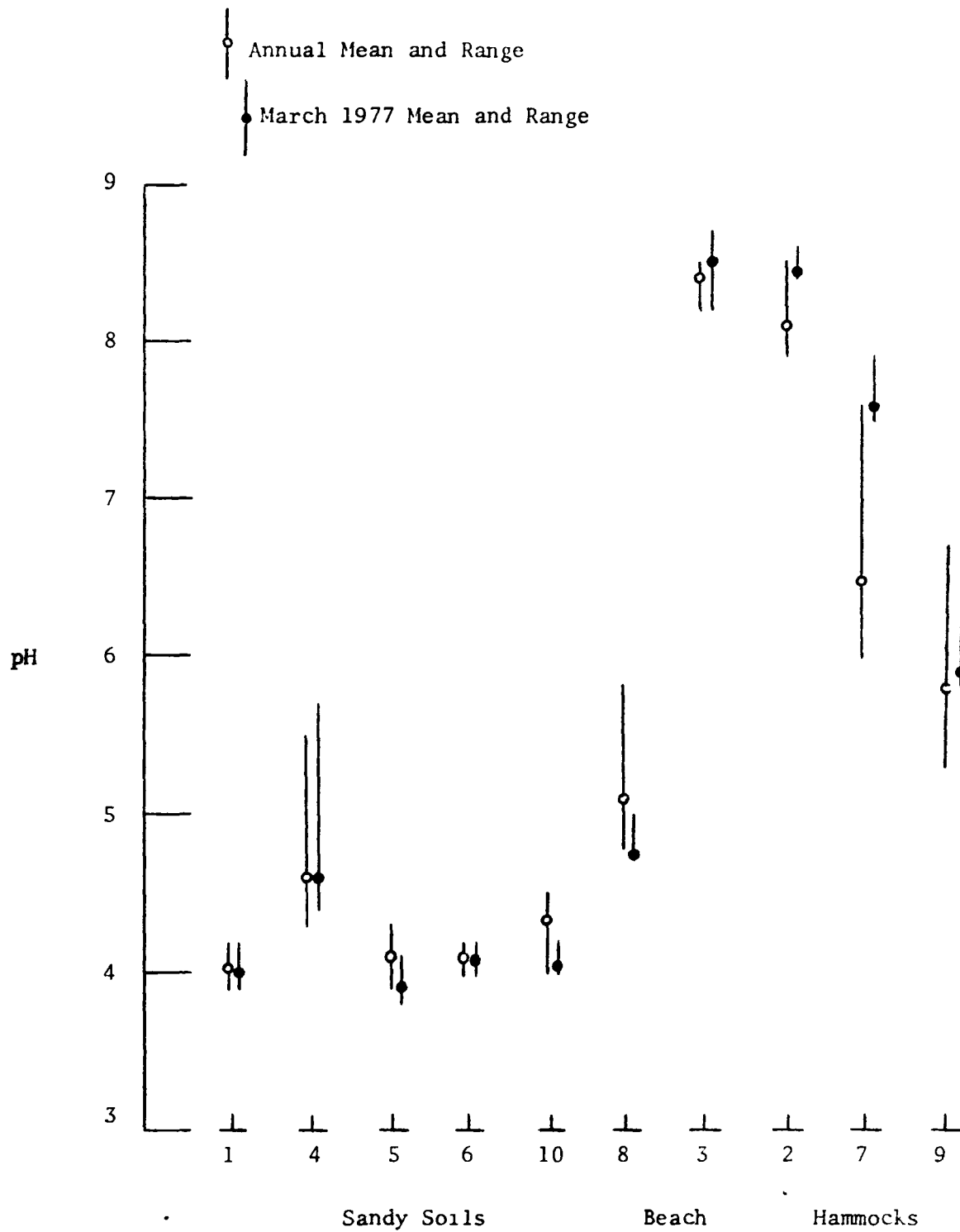


Figure 36. Comparison of Measured pH Values for Merritt Island Soils.

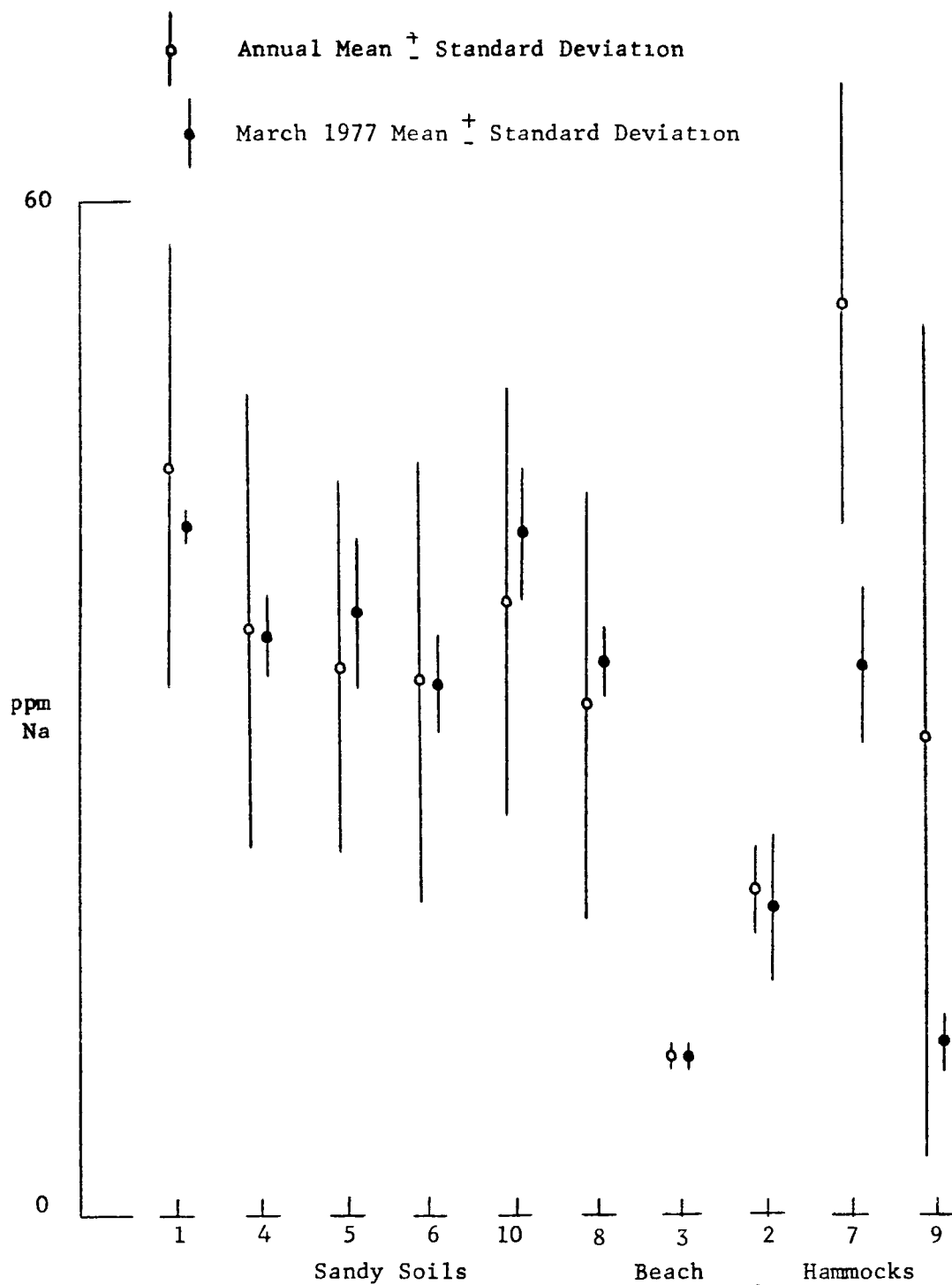


Figure 37. Comparison of Sodium Concentrations in Merritt Island Soils

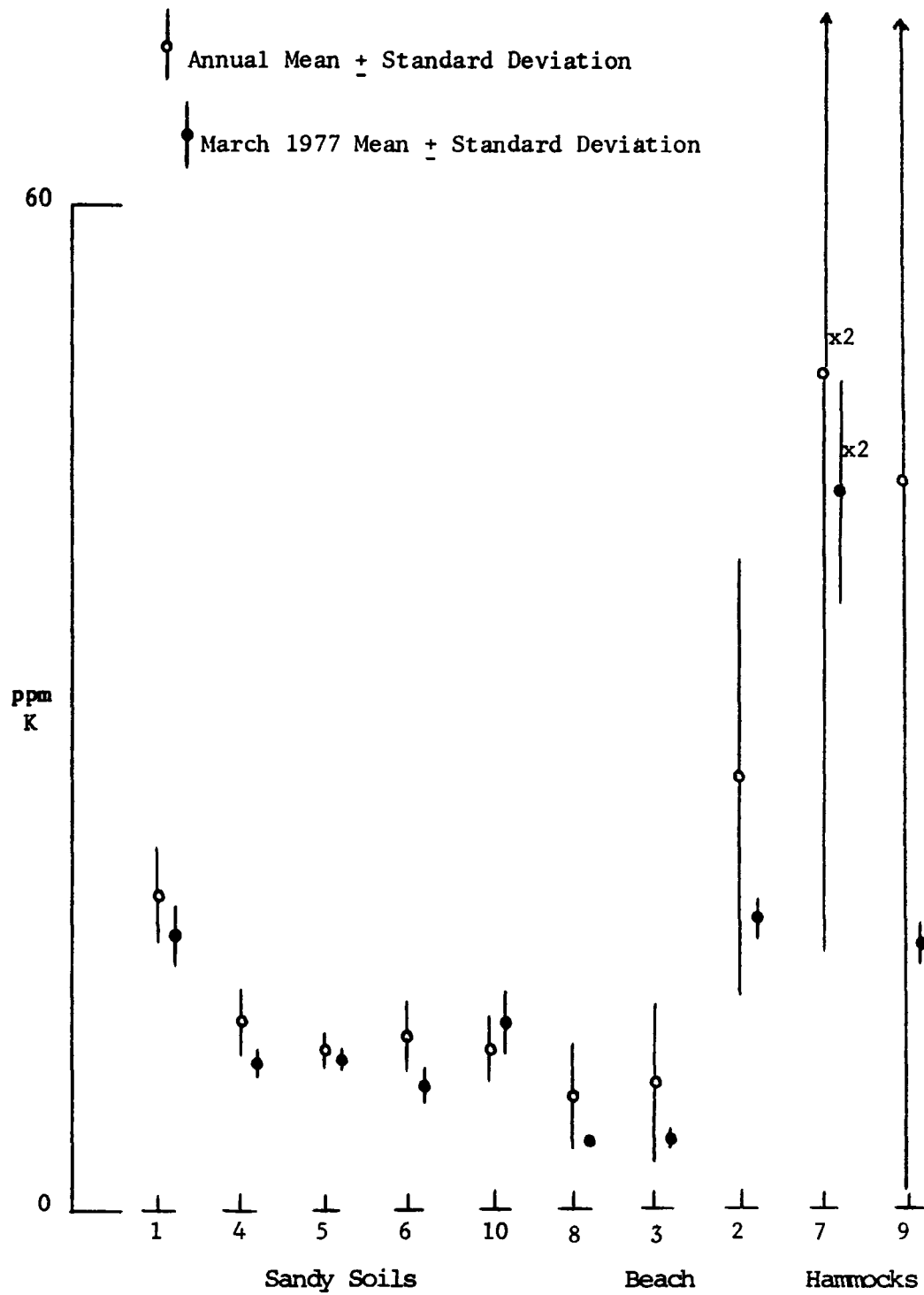


Figure 38. Comparison of Potassium Concentrations in Merritt Island Soils

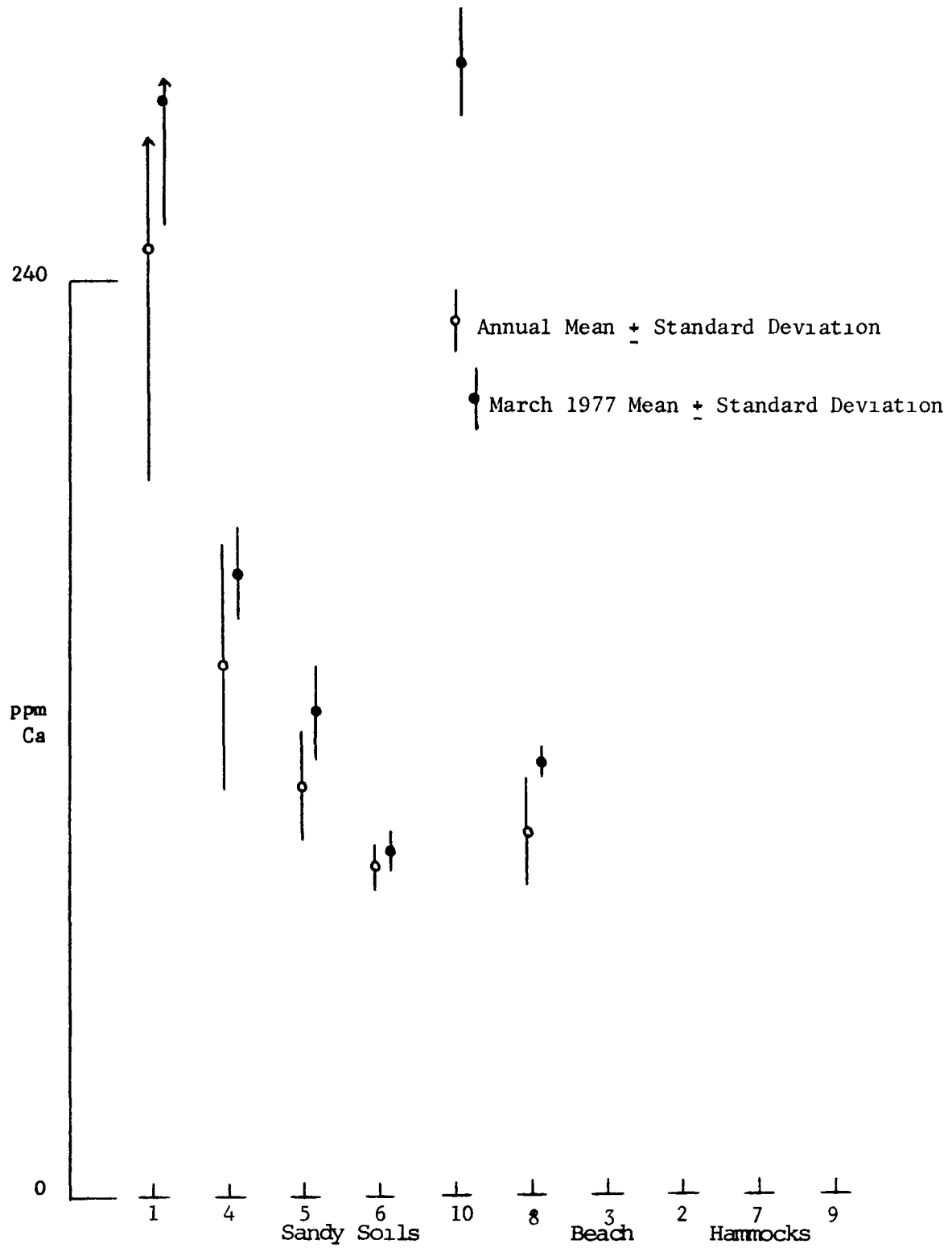


Figure 39. Comparison of Calcium Concentrations in Merritt Island Soils

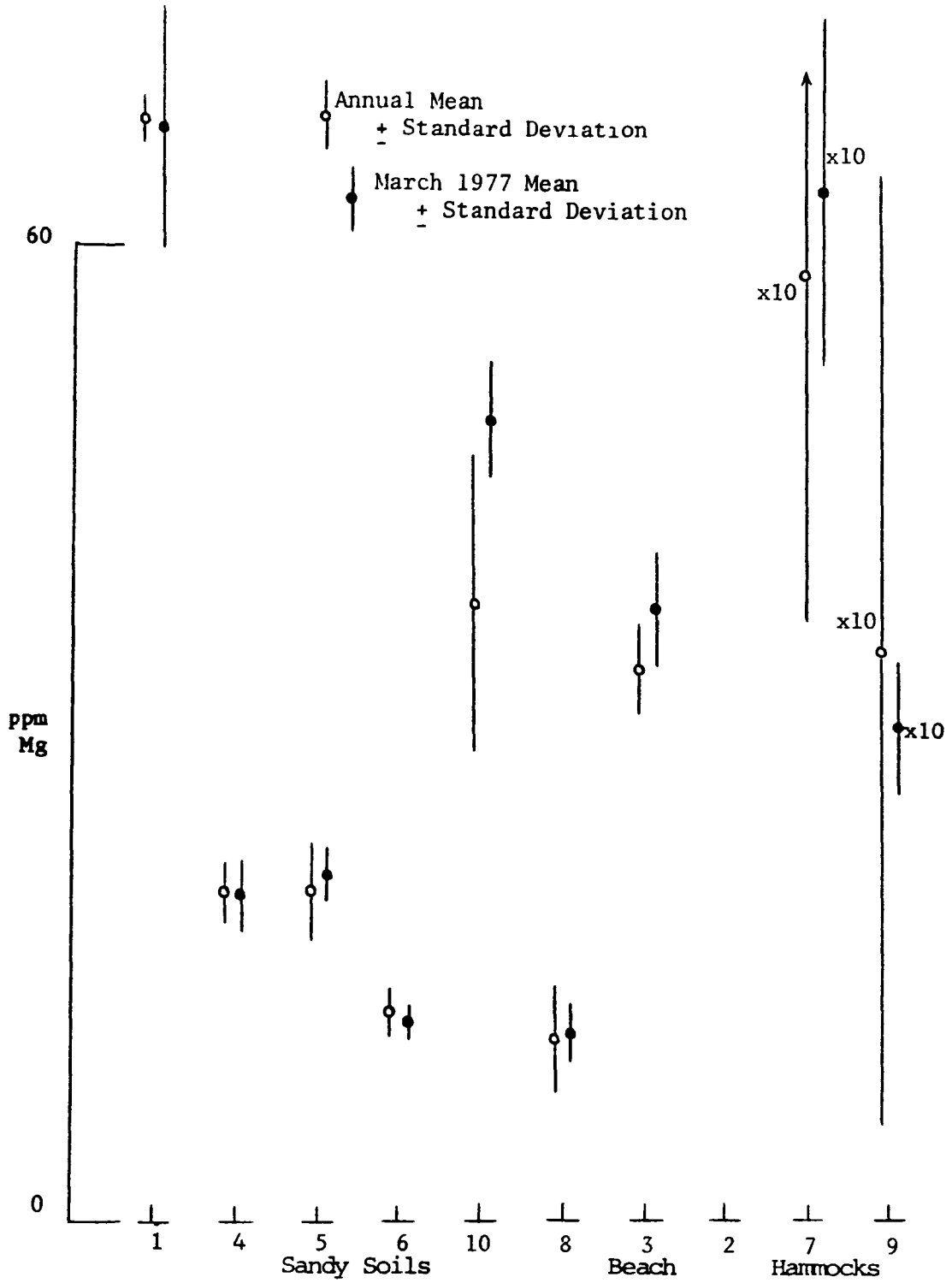


Figure 40. Comparison of Magnesium Concentrations in Merritt Island Soils

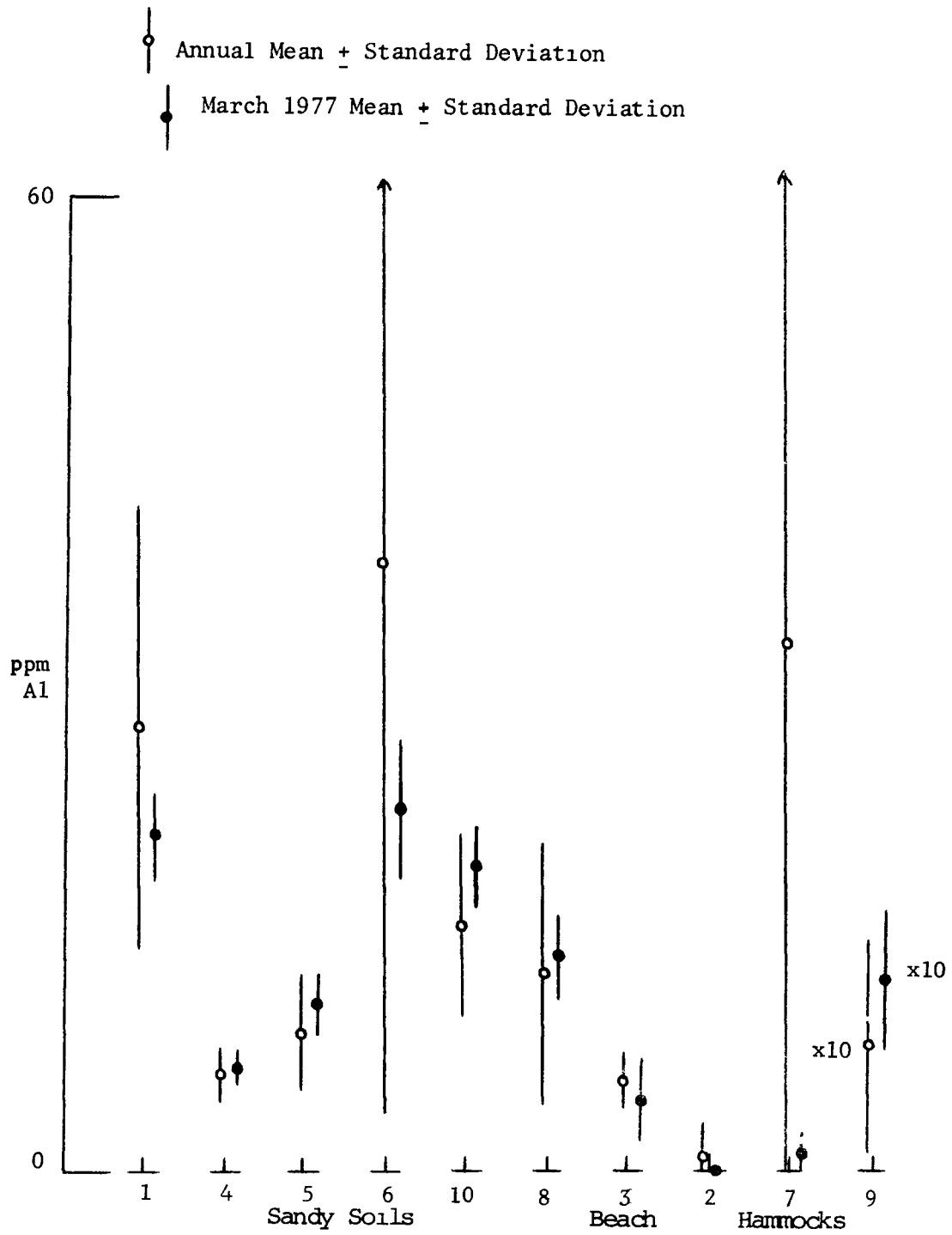


Figure 41. Comparison of Aluminum concentrations in Merritt Island Soils

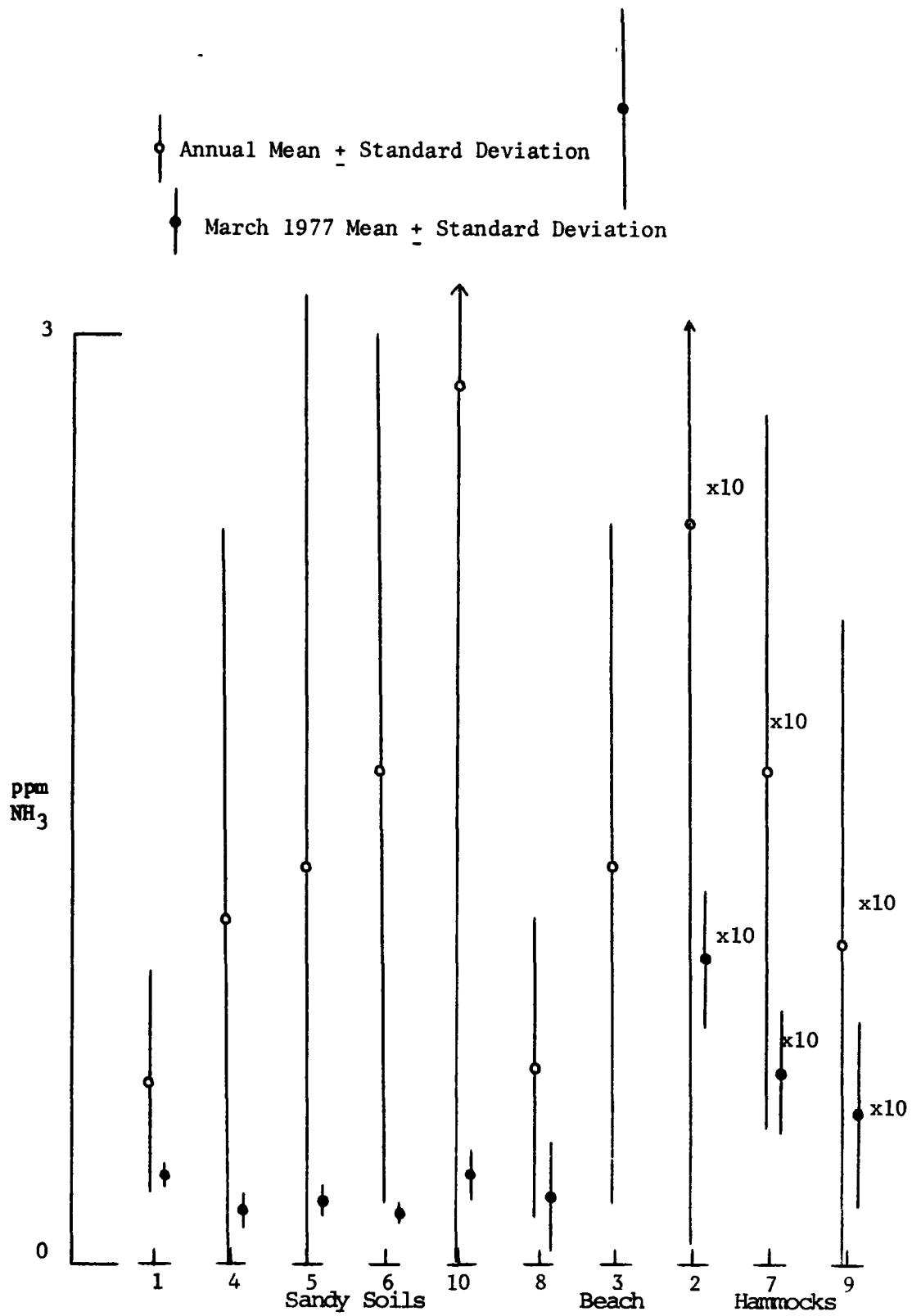


Figure 42. Comparison of Ammonia Concentrations in Merritt Island Soils



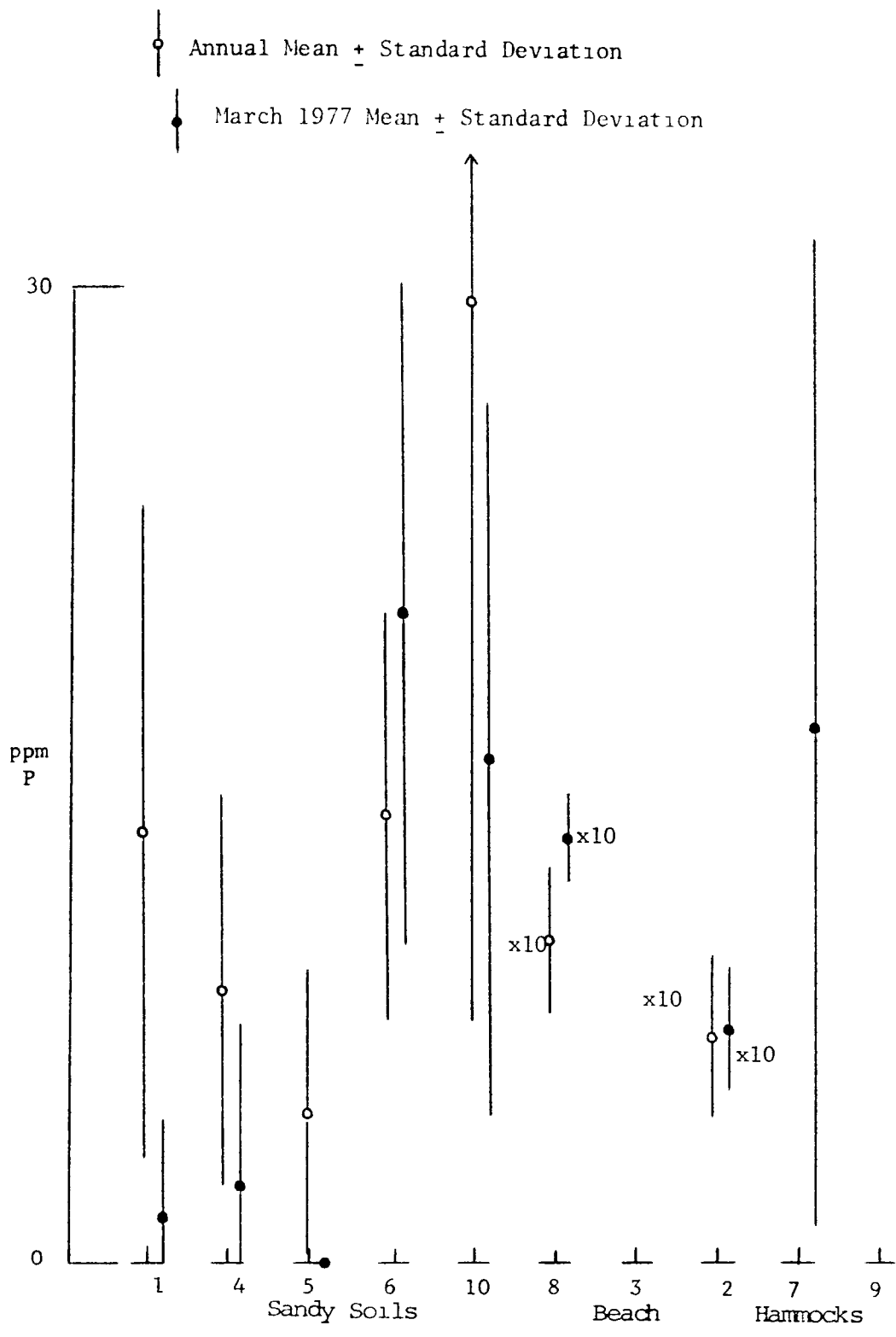


Figure 43. Comparison of Phosphorus concentrations in Merritt Island Soils

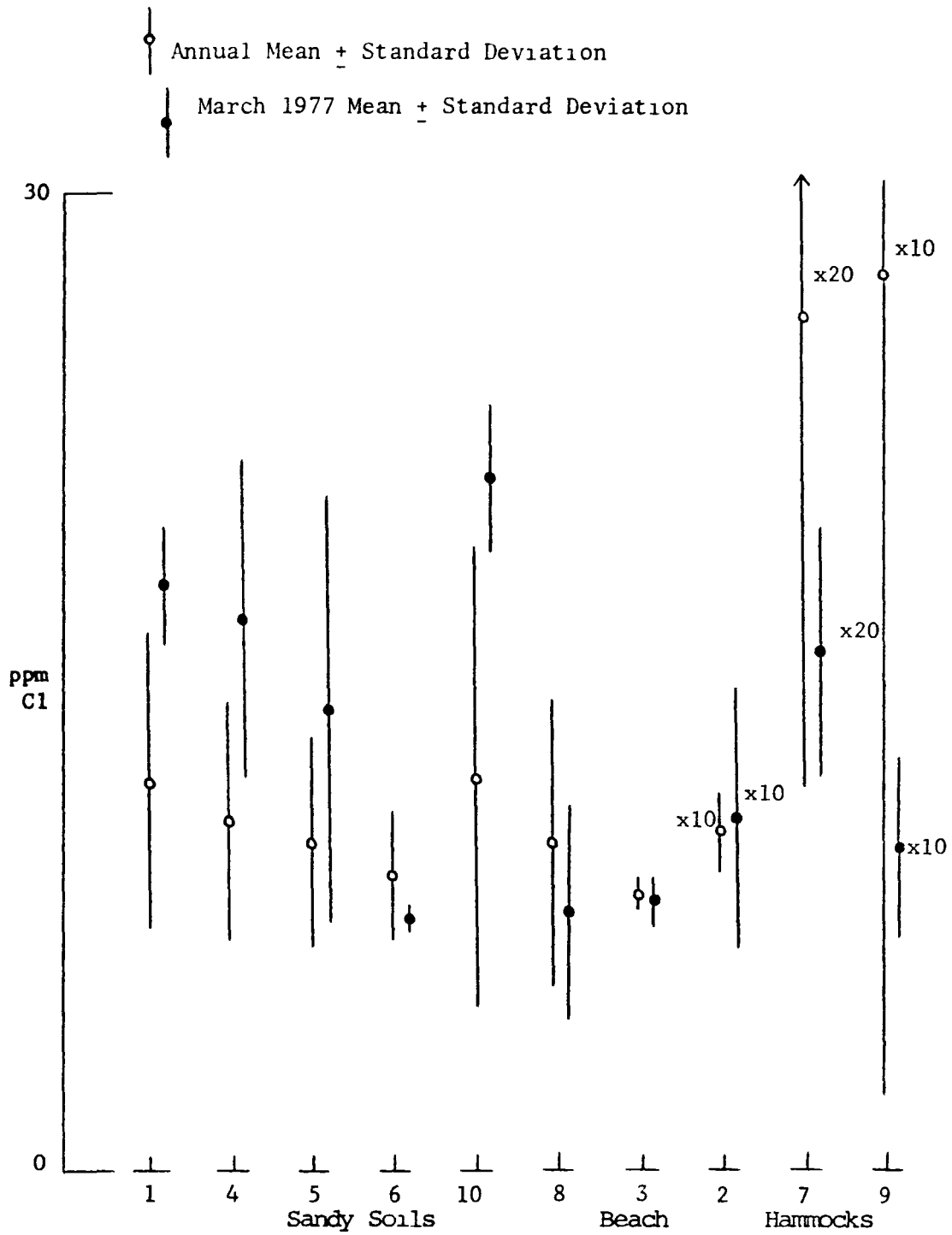


Figure 44. Comparison of Chloride Concentrations in Merritt Island Soils

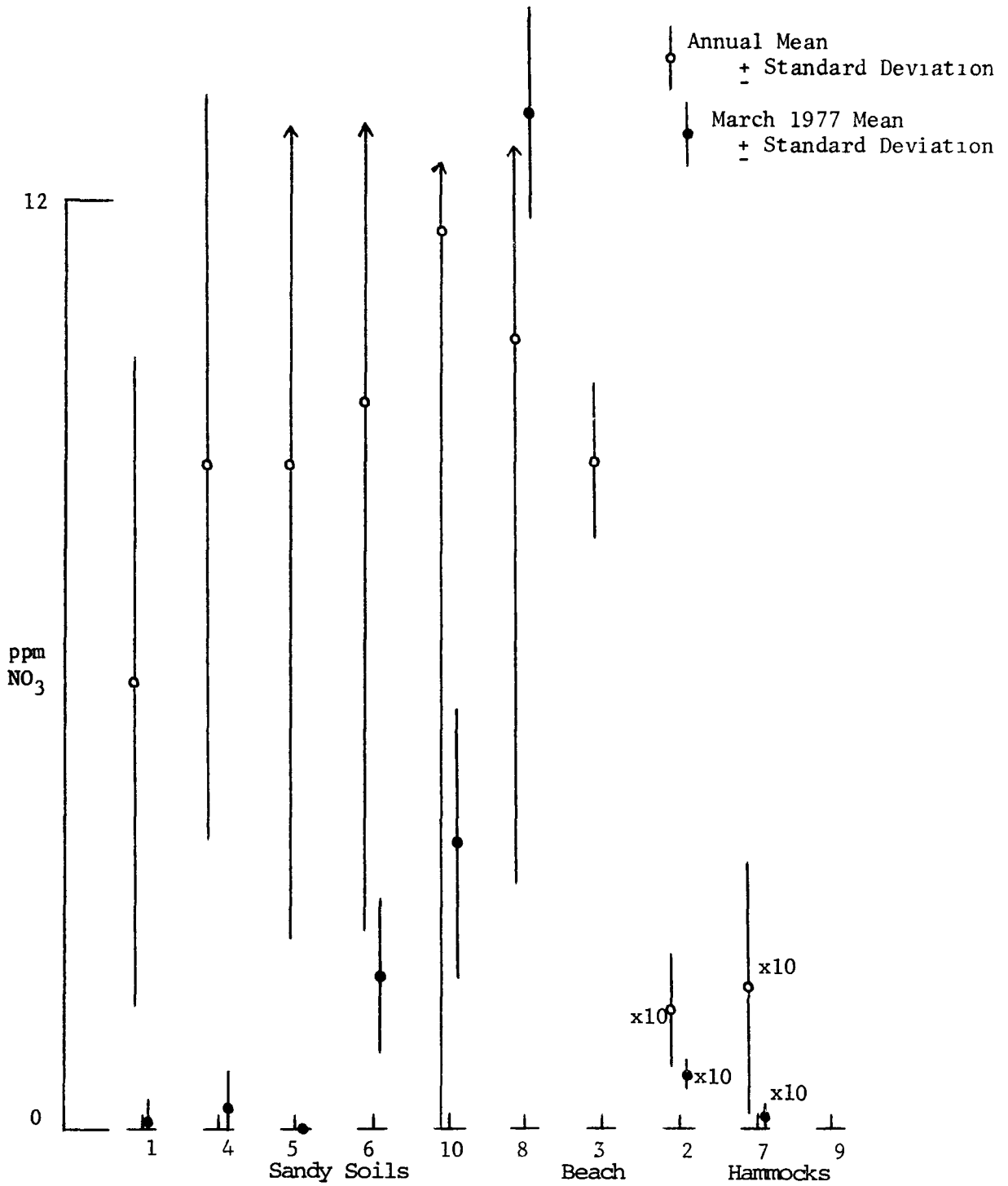


Figure 45. Comparison of Nitrate Concentrations in Merritt Island Soils

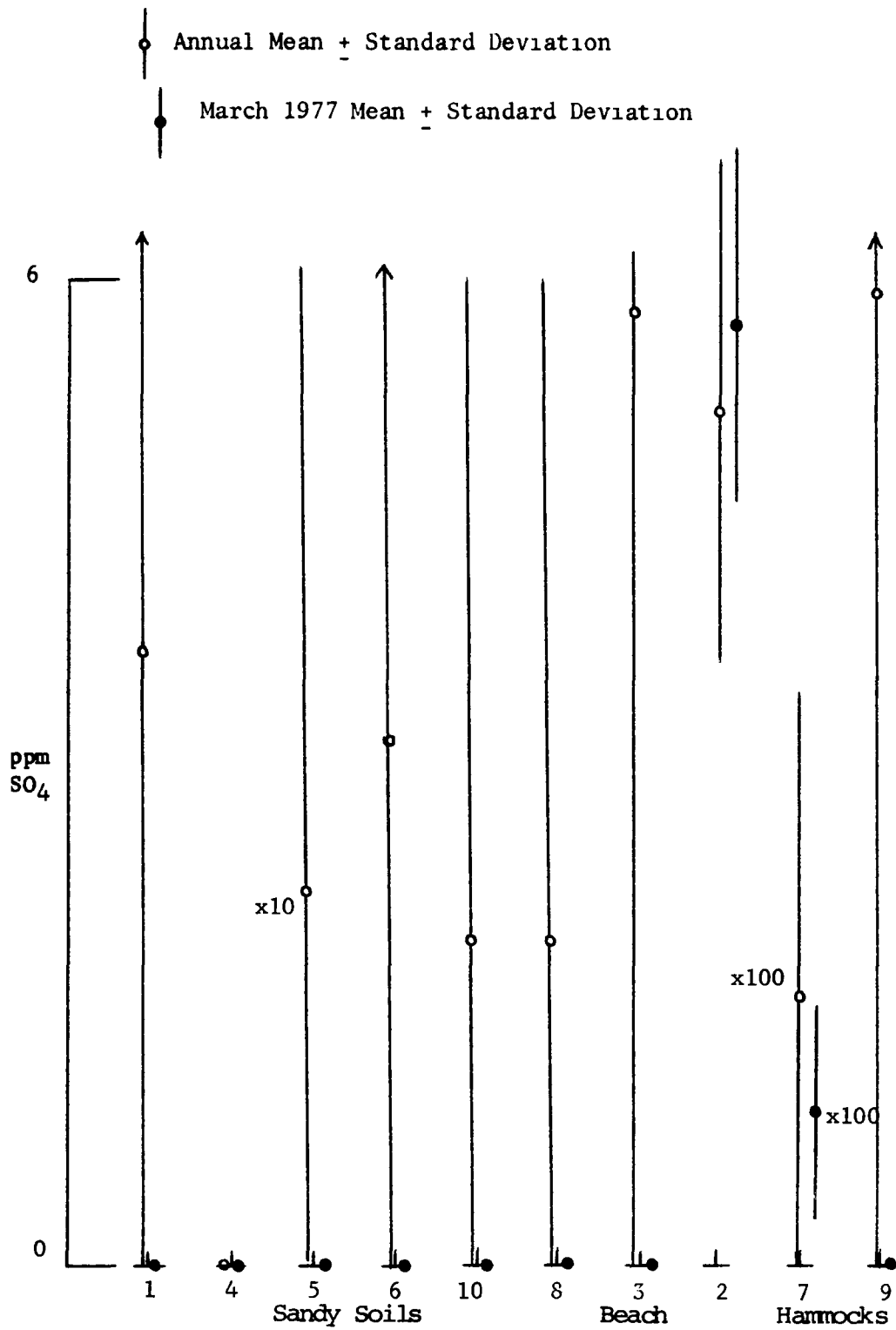


Figure 46. Comparison of Sulfate Concentrations in Merritt Island Soils

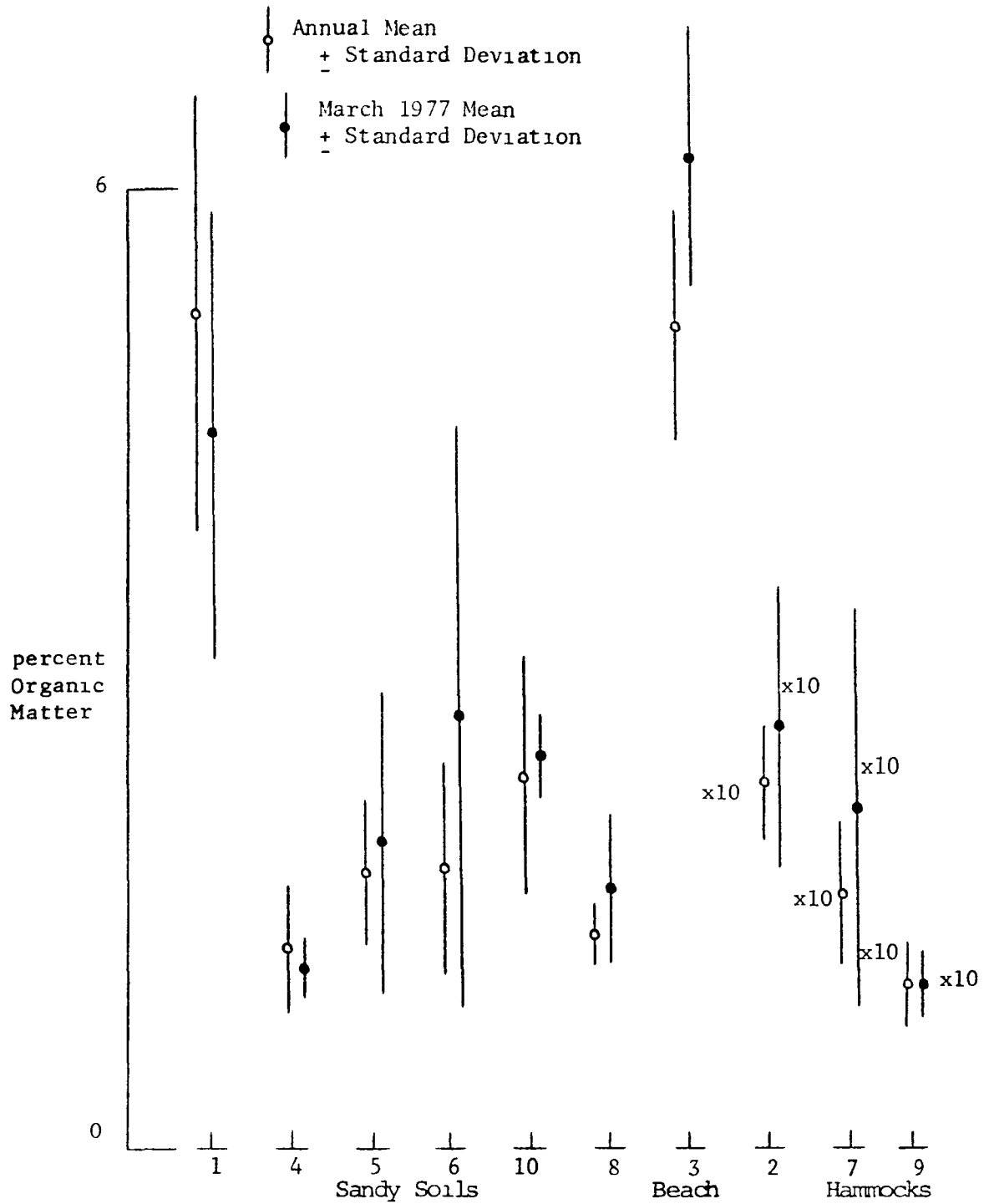


Figure 47. Comparison of Organic Matter Concentrations in Merritt Island Soils

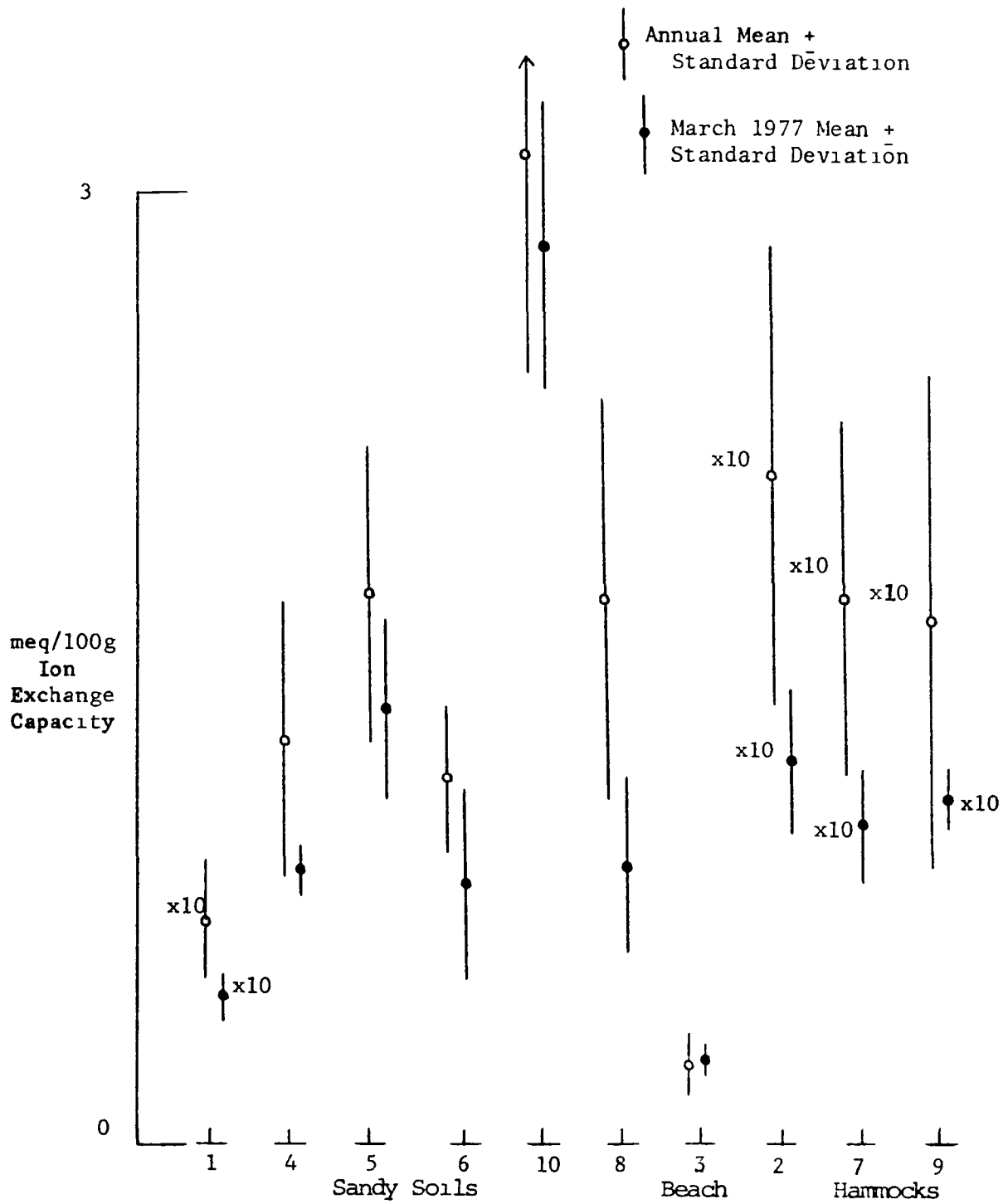


Figure 48. Comparison of Ion Exchange Capacity in Merritt Island Soils

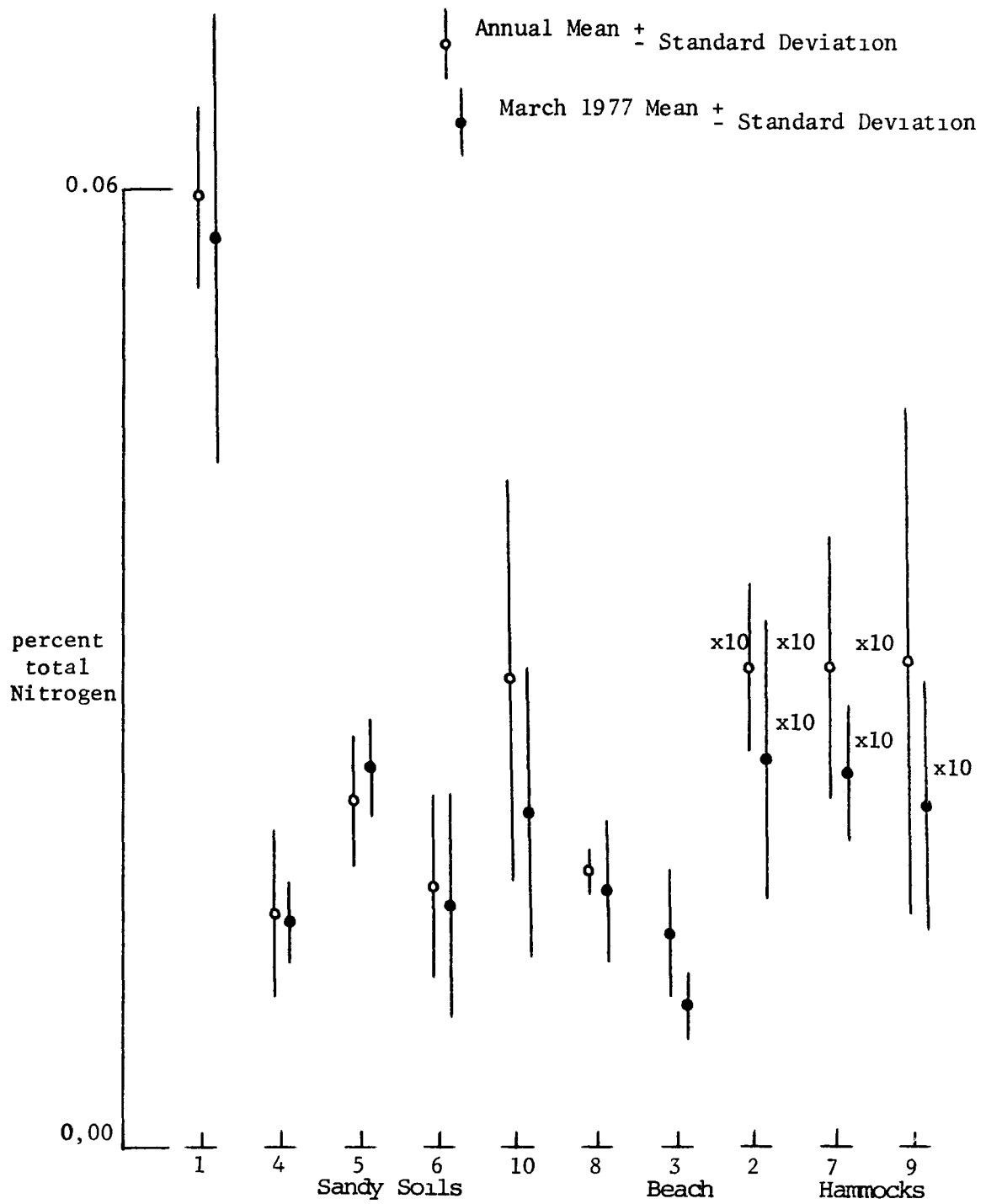


Figure 49. Comparison of Nitrogen Concentrations in Merritt Island Soils

The results presented in Appendix Table 382 and Figures 36-49, which summarize the routine monitoring of nutrients in soils, generally are what would be expected. The soils can be grouped on the basis of concentration levels of several of the nutrients monitored. Some variability of results is observed. However, the following parameters generally are useful for gross differentiation of soils based on chemical differences: pH, ion exchange capacity, total nitrogen, organic matter, calcium, sodium, and chloride. A summary of the concentrations found for these nutrients is presented in Table 15. The most logical grouping of sites is: sandy soils, 6 different sites; beach soils, one site; and hammock soils, 3 sites. The comparison of nutrient results presented in Figures 36-49 are arranged to reflect this grouping. Large amounts of calcium present in the hammock and beach soils and the relatively large ion exchange capacity for the hammocks undoubtedly explain higher pH values associated with these soil types. The hammocks are quite rich with respect to most nutrients monitored, while the sandy soils and beach soil are quite deficient. Figure 50 shows the observed annual mean pH at each site, compared to ion exchange capacity and organic matter content.

Table 16 lists the various analytical techniques and associated detection limits utilized for nutrient measurements. The detection limits represent the practical lower concentration limit measurable with each experimental procedure and analytical technique. Values generally correspond to measurements made at twice the background or noise level for each measurement.

Table 17 lists the precision of analytical measurements performed in the UCF laboratories. The degree of precision associated with the analytical measurements performed in the Soil Testing Laboratory, University of Florida, is not available.

Results presented in Figures 42 for  $\text{NH}_3$ , 43 for P, 45 for  $\text{NO}_3^-$ , and 46 for  $\text{SO}_4^{2-}$  show extremely large standard deviations for both the mean annual and quadruplicate March results. Detection limits presented in Table 16 show that when measurements are made at or near these limits, and on a relative basis, more error is likely for these four nutrients. Measurements for the other nutrients are made considerably above the detection limits of the various methods employed, and the deviations that can be attributed, at least in part, to the analytical method have been minimized.

#### Total Cation Concentrations of Soils

The total cation concentration for individual metals in the soil samples based on triplicate determinations are presented in Table 18. In general, these results differ from those obtained initially by atomic absorption spectroscopy by as much as 100 percent. The specific reason for these differences is not known, however, several of the samples submitted to the University of Georgia for plasma spectroscopic determination of metals actually were replicates (same sample; different bottle), spiked samples, and standard solutions



Table 15.  
 Summary Results for Selected Nutrients  
 Based on General Soil Type.

Chemical Parameter	General Soil Type		
	<u>Hammock</u>	<u>Sandy</u>	<u>Beach</u>
pH	5.8-8.5	4.0-5.5	8.0-8.5
Ion Exchange Capacity (milliequivalents/100g)	10-30	1-8	0.1-0.8
Total Nitrogen (percent)	0.2-0.4	0.1-0.6	.01
Organic Matter (percent carbon)	10-30	1-5	6
Calcium (parts per million)	>7000	100-300	>7000
Sodium (parts per million)	100-500	10-30	100
Chloride (parts per million)	100-500	6-20	10

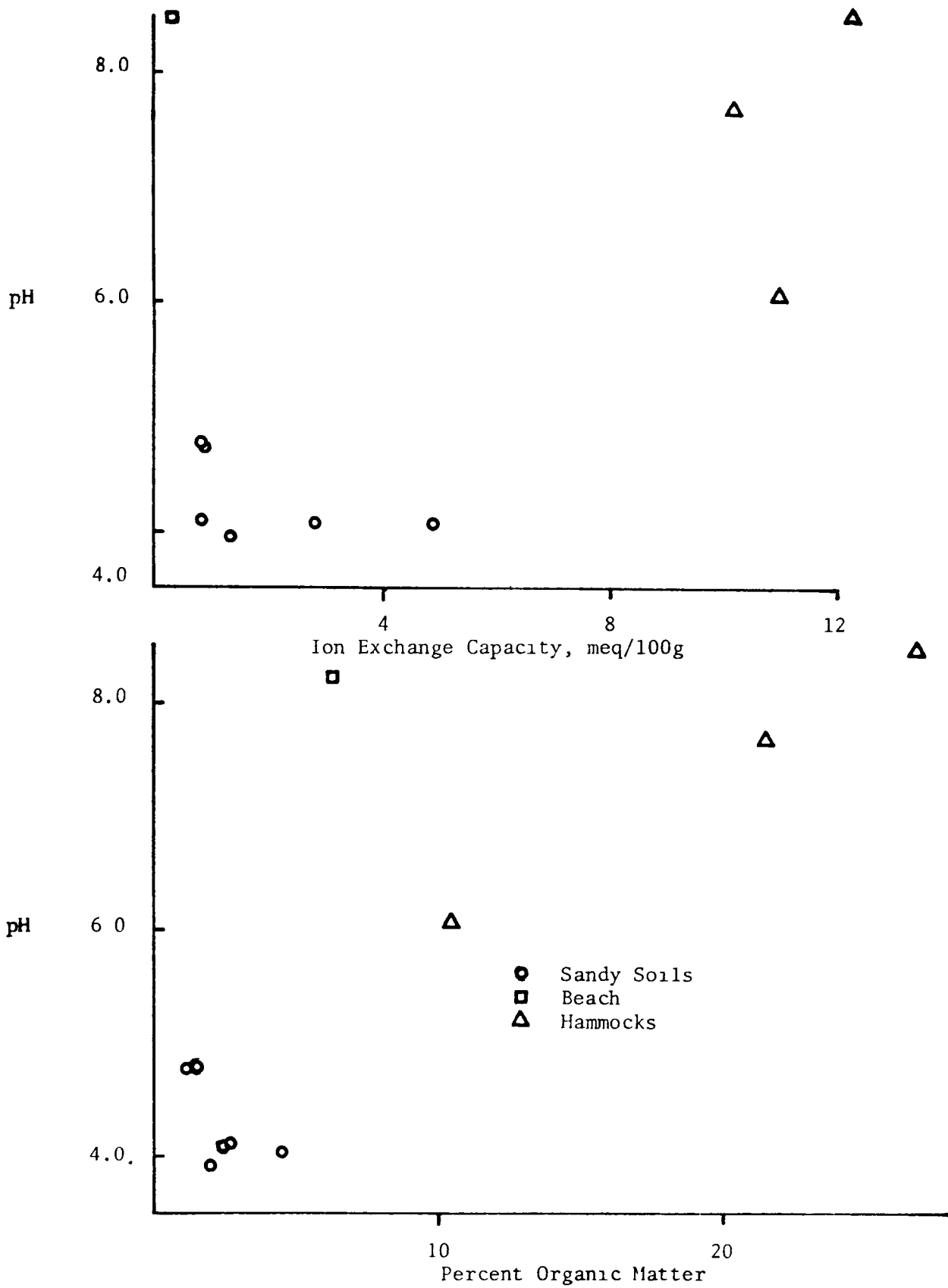


Figure 50. Comparison of Selected Merritt Island Soil Sample pH with Ion Exchange Capacity and Percent Organic Matter.

Table 16.  
 Practical Limits of Detection Imposed by Sample Treatment  
 and Analytical Methods in Nutrient Monitoring Studies.

Chemical Species	Analytical Technique	Detection Limit (ppm unless otherwise noted)
Na	Flame Emission	0.3
K	Flame Emission	0.2
Ca	Atomic Absorption	10.0
Mg	Atomic Absorption	1.0
Al	Atomic Absorption	2.0
P	Spectrophotometry	0.3
NH <sub>4</sub>	Ion Selective Electrodes	0.5
Cl	Spectrophotometry	0.5
SO <sub>4</sub>	Turbidimetry	4.0
NO <sub>3</sub>	Spectrophotometry	2.0
N	Ion Selective Electrode	0.003%
Ion Exchange Capacity	Ion Selective Electrode	0.006meq/100g

Table 17.  
 Precision of Analytical Methods Utilized in Nutrient  
 Monitoring Expressed as Relative Standard Deviation.  
 Precision is Evaluated Based on Repetitive Measure-  
 ments on Standard Solutions.

<u>Methods Utilizing the Ammonia Ion Selective Electrode</u>		
	<u>ppm NH<sub>3</sub></u>	<u>R.S.D., %</u>
Soil Ammonia	0.1-0.5(7 Standards)	9.0
	1.0-4.0(3 Standards)	9.8
Kjeldahl Nitrogen	0.4-1.0(3 Standards)	12.0
	2.0-10.0(8 Standards)	3.4
Ion Exchange Capacity	10.0-50.0(5 Standards)	1.6
	50.0-150.0(3 Standards)	9.7

<u>Methods Utilizing Spectrophotometric Techniques</u>			
<u>ppm Standard</u>	<u>Chloride, R.S.D.,%</u>	<u>Nitrate, R.S.D.,%</u>	<u>Sulfate, R.S.D.,%</u>
1.0	3.7, 6	12.9, 5	76, 8
2.0		9.3, 6	21, 9
3.0	3.0, 6	8.0, 6	18, 5
4.0		7.0, 4	
5.0	2.8, 5	6.1, 7	15, 5
10.0	0.3, 2		18, 5

Note: Precision expressed as 3.7, 6 represents 3.7% R.S.D.  
 based on 6 measurements.

prepared in the UCF laboratory. Results obtained from these "control" samples also showed considerable variation. It should be concluded that results presented here are, at best, semi-quantitative.

Hammock sites 02, 07, and 09 and beach site 03 consistently show higher total metal concentrations. Results presented in Table 18 show how total cation concentrations vary from site to site. Results from sites which have very sandy soil indicate that the total cation composition of these soils is similar. Hammock soils which differ significantly in concentration for individual metals also show significant variation from hammock to hammock.

#### Hydrochloric Acid Leaching of Cations from Soils

Results from the HCl leaching experiments are summarized graphically in Figures 51-59. Appendix Tables 383-474 provide a complete record pertaining to results for total cation and leaching experiments. Figures 51-59 show the leaching behavior of the 9 metals  $\text{Na}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Al}^{+3}$ ,  $\text{Fe}^{+3}$ ,  $\text{Mn}^{+4}$ ,  $\text{Ni}^{+2}$ ,  $\text{Zn}^{+2}$ ,  $\text{Co}^{+2}$ , from KSC soils. The leaching behavior of  $\text{K}^+$ ,  $\text{Cu}^{+2}$ ,  $\text{Cr}^{+2}$ , and  $\text{Pb}^{+2}$  has not been presented. Concentrations of  $\text{K}^+$ ,  $\text{Cr}^{+2}$ , and  $\text{Pb}^{+2}$  in the HCl leachates were generally lower than could be measured routinely with accuracy, and Cu concentration in the HCl leachate was typically 100 percent of the total concentration present. Limits of detection associated with the analytical methods used to determine metals are shown in Table 19. Because of the relatively large deviations in the data, these results should also be interpreted semi-quantitatively.

#### Discussion

Two distinct studies were performed to evaluate soil composition and to assess the effect that HCl will have as a leaching agent for cations from soils. Both studies were performed on soil samples that were collected from reference sites in the Terrestrial Community Analysis Program (Stout, 1979). The soil composition studies initially were intended to continue for the entire three year contract period. Because of funding limitations and a NASA decision to emphasize precipitation chemistry studies, soil studies were terminated after the initial year of the contract. Soil composition results have been reported, but because of the short-term nature of collected data and, in some cases, because of resource and equipment limitations which restrict the usefulness of the results, detailed interpretation cannot be attempted. Results of the leaching experiments should be utilized in a semi-quantitative fashion. The reasons for this previously were explained in the results section.

#### Soil Composition, and Major Nutrients Based on One Year of Quarterly Soil Sampling.

Only limited results are available to use for evaluation of soil composition. Only the stationary pool of nutrients in the surface 15 cm of soil were considered. A more complete soil study should include determination of base-saturation of ion exchange sites and the assay of soil water based on lysimeter sampling, in addition to those determinations which were performed. The availability of more reliable instrumentation and a more frequent sampling program also could provide additional insight into the total nutrient status of Merritt Island soils.

Table 18.  
Total Metal Concentrations in Merritt Island Soils.

Average of Triplicate Determinations and Average Deviation, PPM

<u>Site</u>	<u>Na</u>		<u>K</u>		<u>Ca</u>		<u>Mg</u>		<u>Al</u>		<u>Fe</u>	
01	80.2 ± 5.2		128 ± 10		179 ± 10		81.7 ± 3.9		258 ± 8		236 ± 7	
02	698	37	837	18	50,100	600	123	1	3,100	100	1,210	40
03	652	45	305	54	45,000	3,400	327	19	1,390	360	1,490	360
04	282	47	235	22	302	77	79.7	12.4	1,040	170	1,080	360
05	136	13	293	27	101	3.6	41.9	2.0	497	52	333	53
06	390	36	715	62	295	24	47.4	5.8	1,400	140	530	172
07	1,530	87	143	83	19,400	900	884	26	6,750	160	2,520	30
08	263	11	514	4	226	17	59.0	1.3	1,340	40	717	47
09	647	22	910	40	1,960	60	161	1	2,620	60	813	9
10	50.0	3.0	107	17	121	7	35.6	3.7	171	19	97	8

Table 18.  
Total Metal Concentrations in Merritt Island Soils (Continued).

Average of Triplicate Determinations and Average Deviation, PPM

<u>Site</u>	<u>Mn</u>		<u>Ni</u>		<u>Zn</u>		<u>Co</u>		<u>Cr</u>		<u>Pb</u>		<u>Mo</u>	
01	6.32 ± 0.75		11.0 ± 0.1		3.25 ± 1.0		0.60 ± 0.01		14.2 ± 0.8		90 ± 2		3.3 ± 1.0	
02	59.9	1.5	3.9	2.6	4.9	0.2	10	10	26.1	0.9	99	1	7.6	5.0
03	51.9	21.6	5.8	0.4	3.7	0.3	0.76	0.76	25.5	1.1	100	0	10.7	0
04	79.2	32.6	9.0	1.7	5.8	1.2	16	10	14.8	1.8	81	1	6.3	1.5
05	14.0	3.3	10.5	0.8	2.6	0.6	2.1	1.3	10.7	0.3	84	1	4.5	0.4
06	18.8	8.2	9.8	0.5	2.9	0.6	2.3	1.2	15.7	1.7	98	2	5.8	1.0
07	77.1	4.7	5.2	0.2	13.2	0.5	1.6	1.6	27.1	2.2	89	6	17.5	1.1
08	15.1	3.9	9.8	0.1	2.8	0.6	1.0	0	17.8	5.0	88	3	7.3	0.8
09	23.2	0.8	9.7	0.2	5.4	0.7	1.3	0.1	76	2	76	2	9.8	0.6
10	3.7	0.3	11.4	0.4	2.8	0.9	1.0	0.1	9.9	1.2	81	4	5.0	1.0

Table 19.  
 Detection Limits by Plasma Spectroscopy and Atomic Absorption Spectroscopy  
 for Soil Total Cation Determinations and Hydrochloric Acid Leaching Experi-  
 ments. Concentrations are Reported as Parts per Million and Reflect the  
 Limits for the Various Techniques and Soil Dilution.

Metal	Wavelength, nm.	Total Cations			Leaching*	
		Plasma Spectroscopy	Flame AA	HGA-AA	Flame AA	HGA-AA
Na	589.0	0.37	0.37		0.1	
K	766.5	35.	0.05		0.1	
Ca	422.7	0.20	0.5		1.0	
Mg	285.2	0.03	0.1		1.0	
Al	310.2	0.25				0.05
Cu	324.7	0.05		0.25		0.05
Fe	248.3	0.04	0.5		0.1	
Mn	279.5	0.011	0.1		0.02	
Ni	232.0	0.2		0.25		0.05
Zn	213.9	0.012		0.5		0.1
Co		0.03				
Cr		0.54				
Pb		0.26				

\* Plasma Spectroscopy Detection Limits for Cation Leaching is 5 Times Lower Than That Reported for Total Cations.



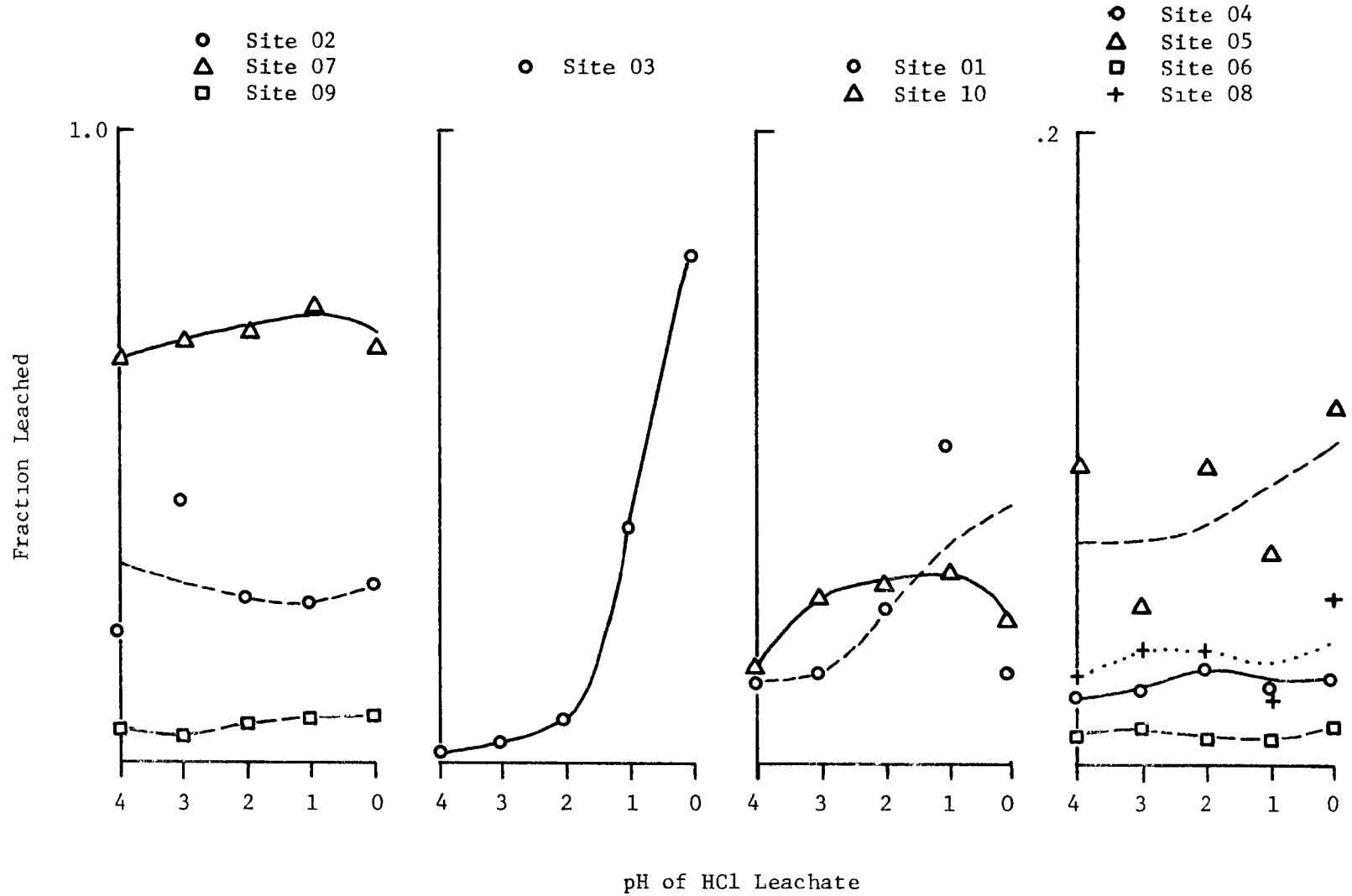


Figure 51. Leaching Characteristics of Sodium from Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.

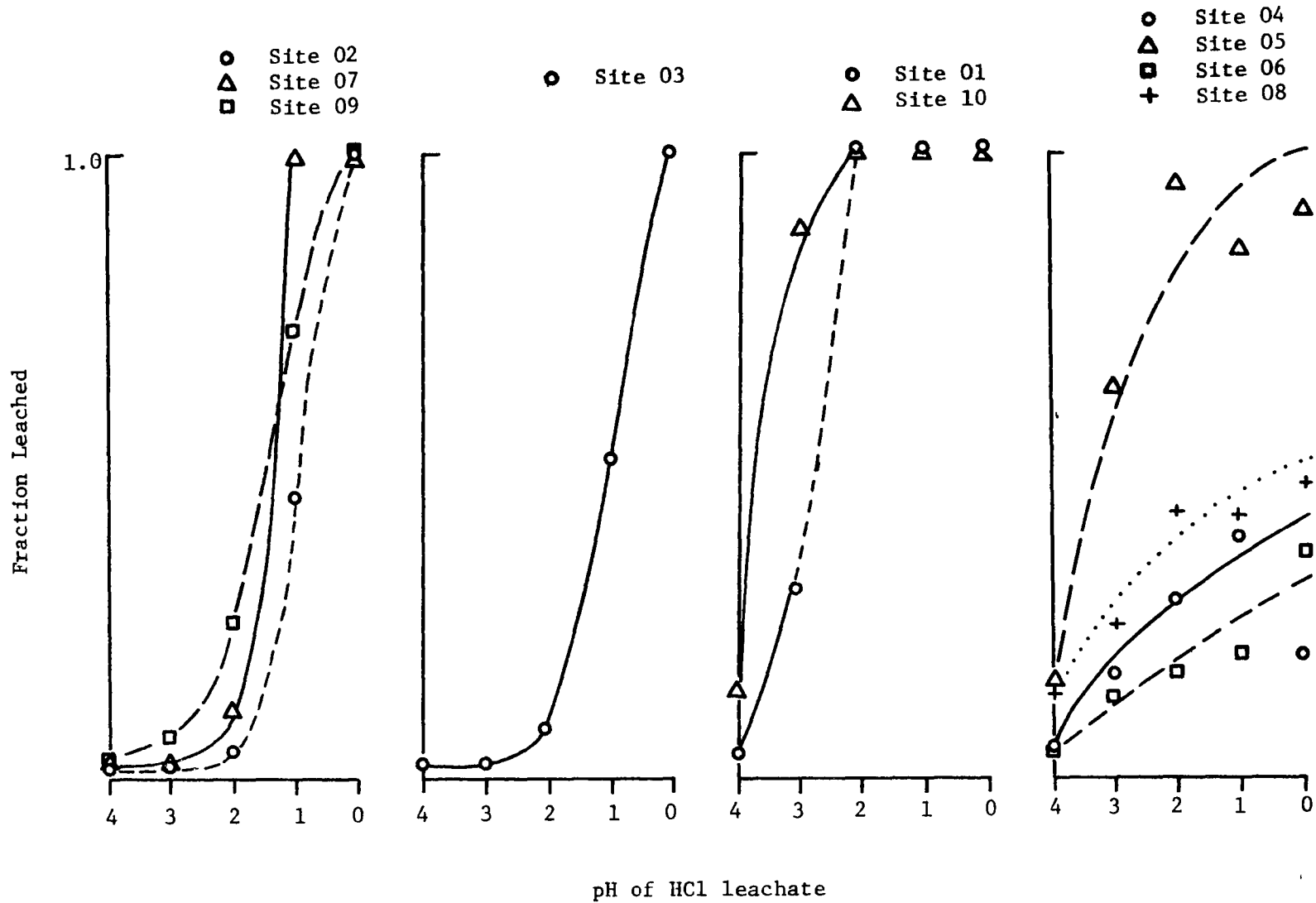


Figure 52. Leaching Characteristics of Calcium from Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.

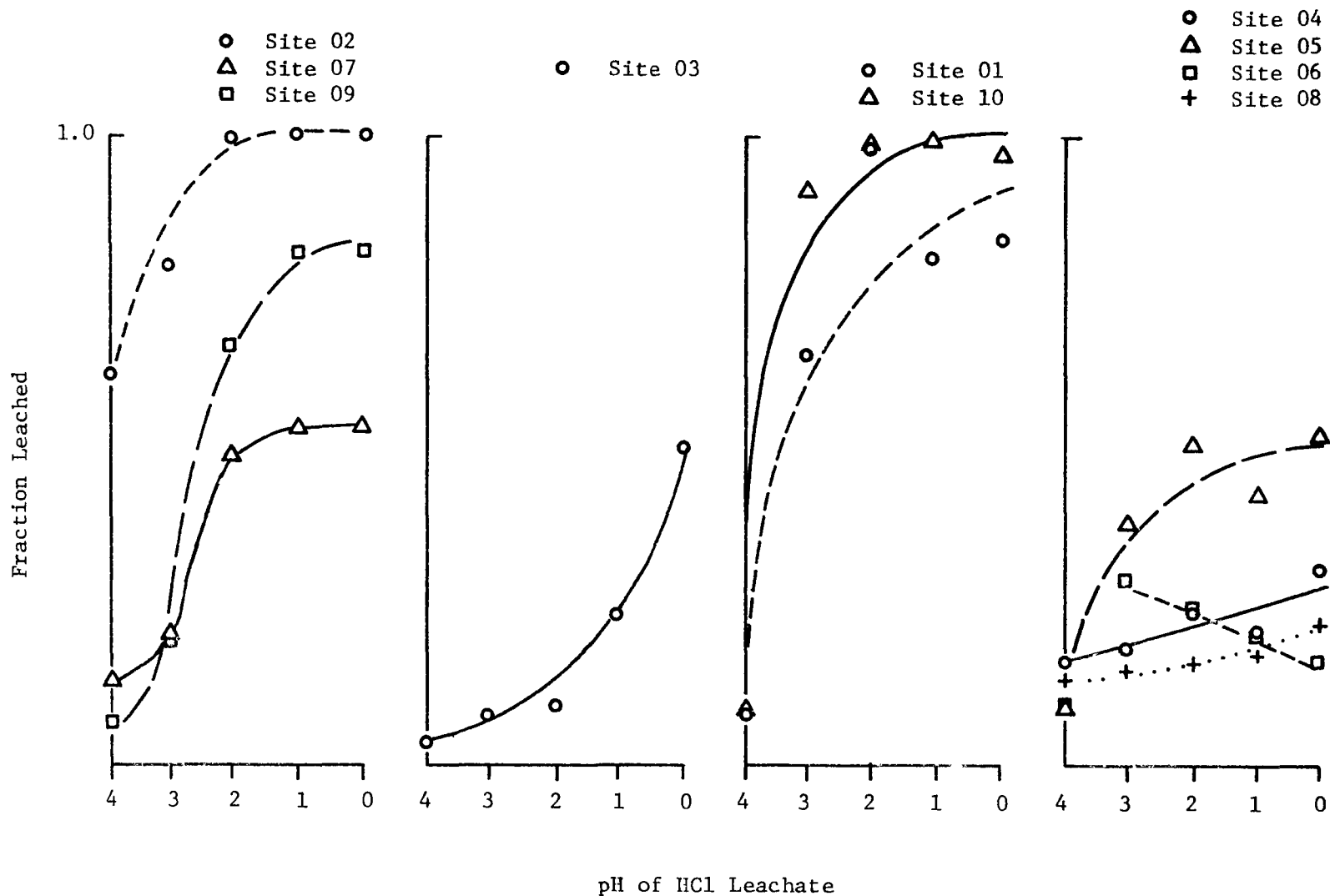


Figure 53. Leaching Characteristics of Magnesium from Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.

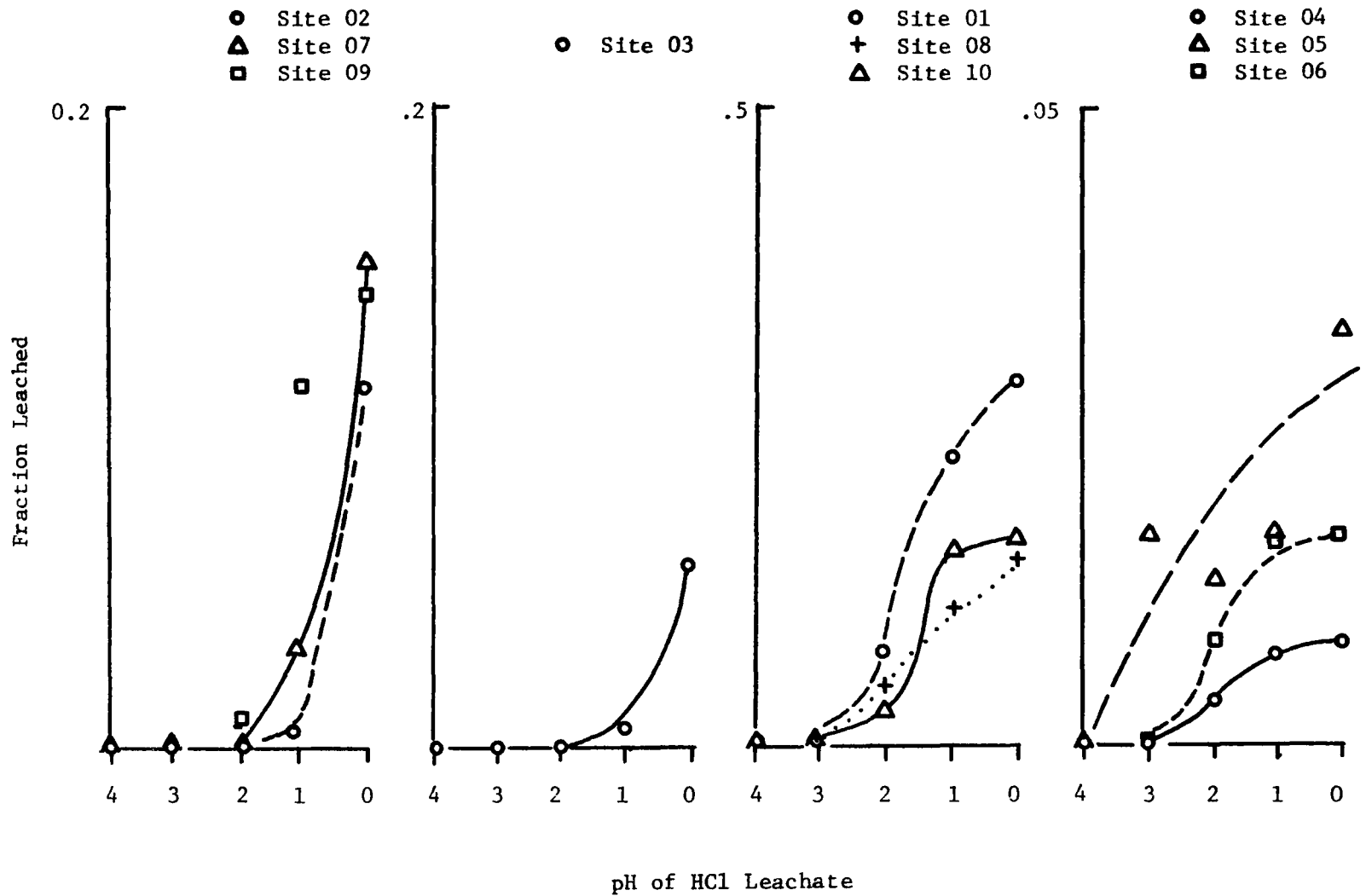


Figure 54. Leaching Characteristics of Aluminum from Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.

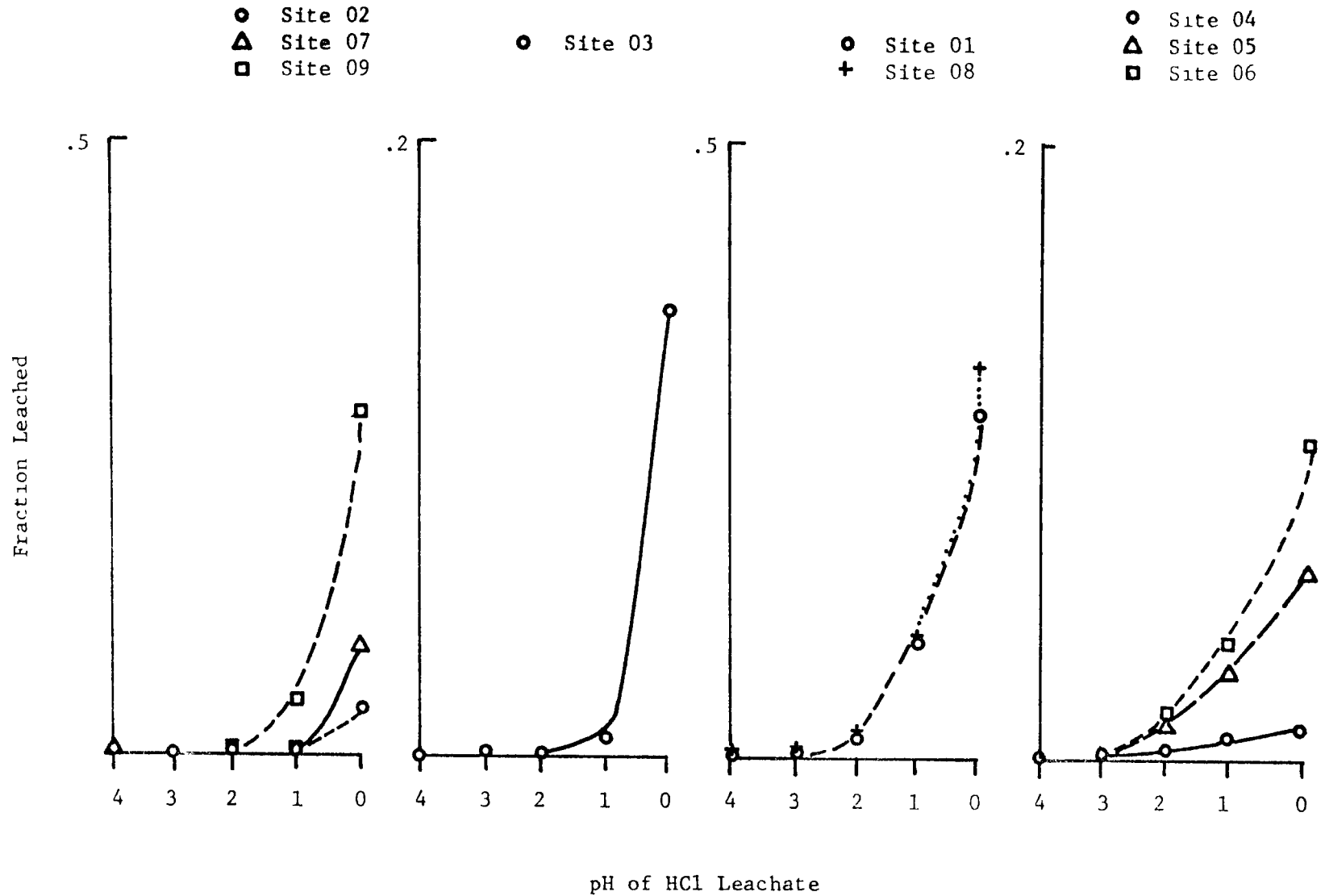


Figure 55. Leaching Characteristics of Iron From Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.

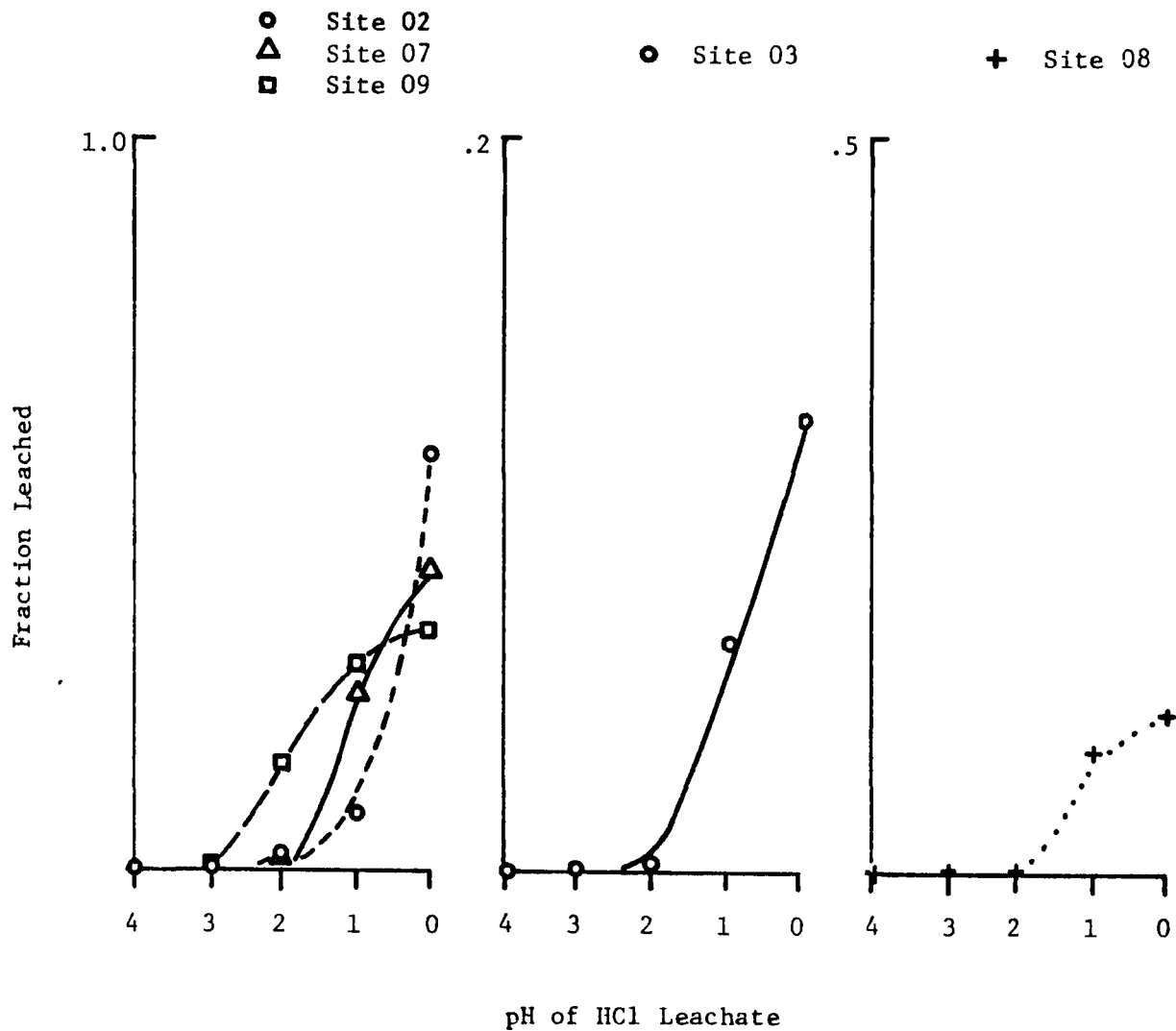


Figure 56. Leaching Characteristics of Manganese from Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.

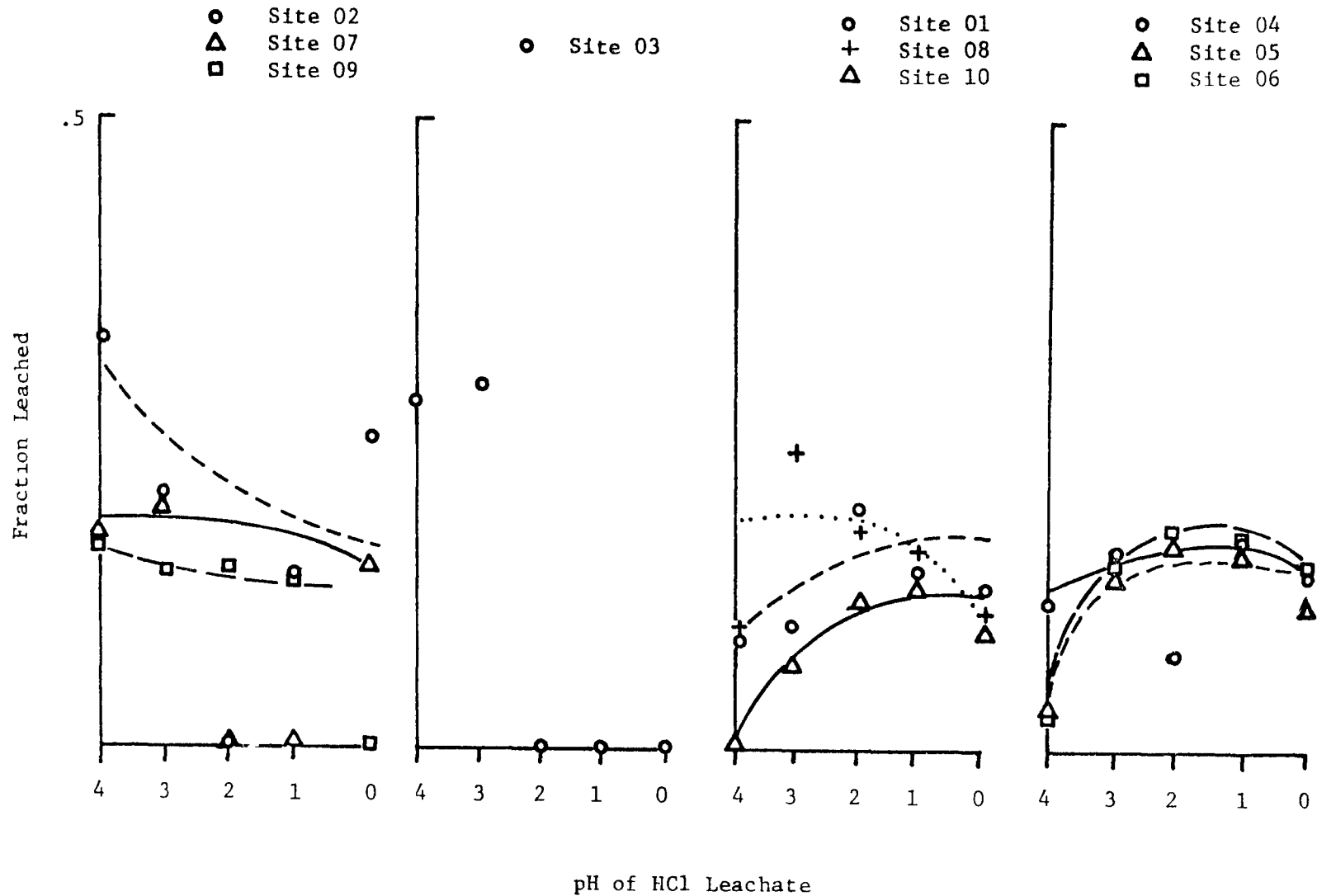


Figure 57. Leaching Characteristics of Nickel from Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.

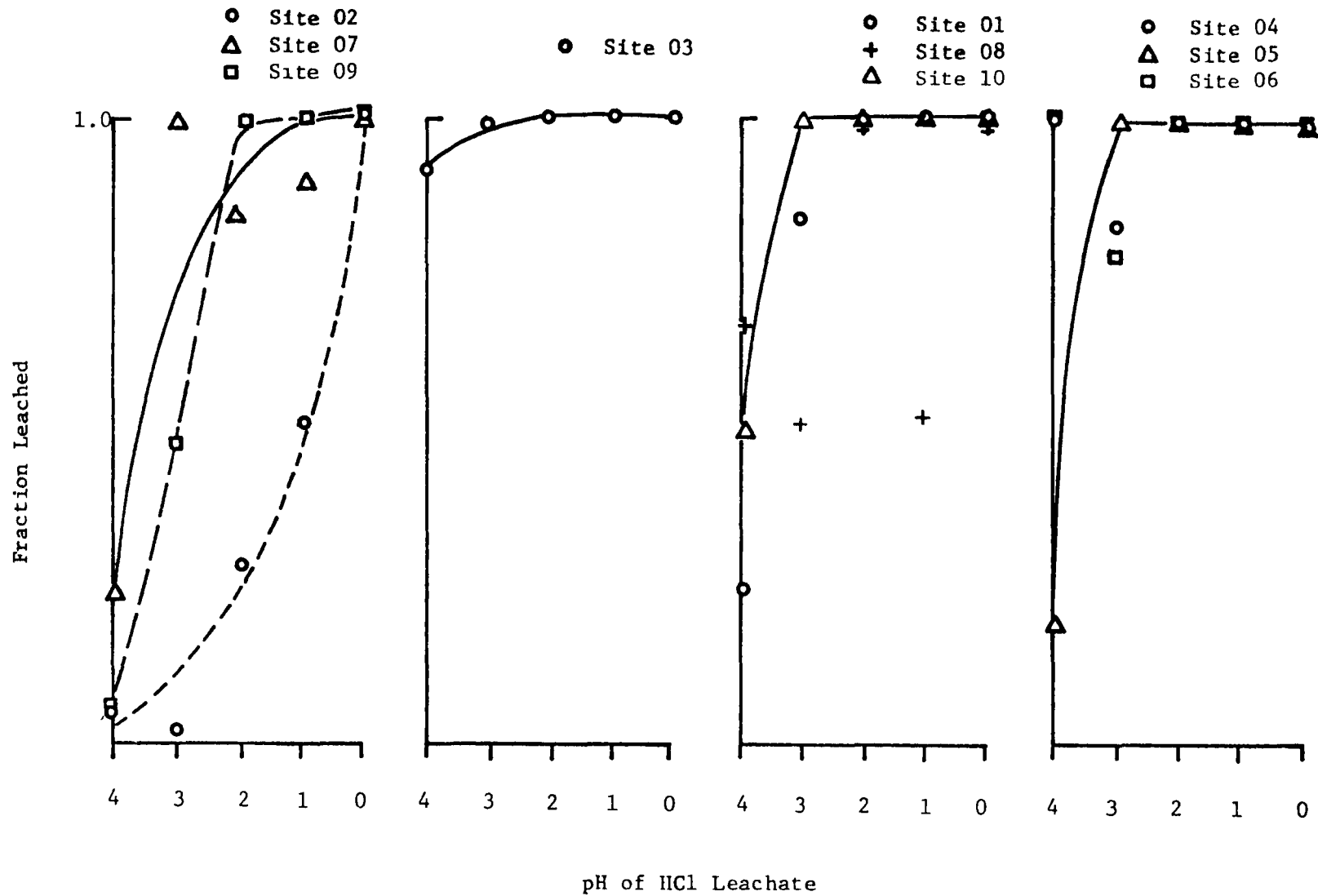


Figure 58. Leaching Characteristics of Zinc from Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.



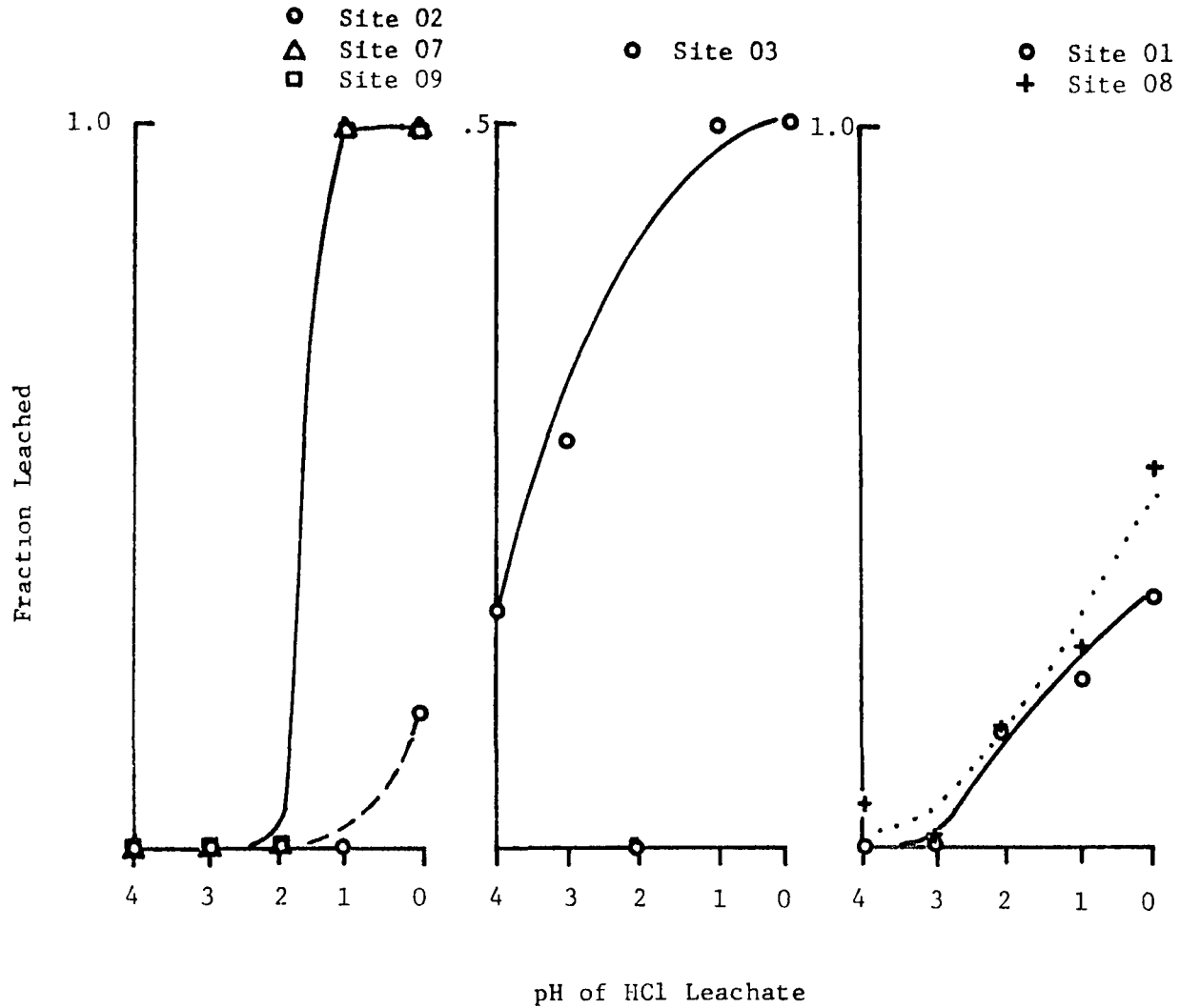


Figure 59. Leaching Characteristics of Cobalt from Merritt Island Soils Due to Percolation of Dilute HCl Solutions Through the Soil. Curves Represent a Visual Fit to the Data. Variability for Each Data Point Based on Triplicate Determinations is Presented in Appendix Tables 383-474.

Soil composition is summarized in Table 15 and Figures 36-49. The summary results shown in Table 15 demonstrate the variability associated with soil composition. When the results shown graphically in Figures 36-49 are evaluated, while simultaneously considering analytical method sensitivity (Table 16) and precision (Table 17), it is difficult to unequivocally locate the major source(s) of error or variation. In general, variation in results is smaller for the quadruplicate March 19/77 sampling of soils. Relative standard deviations are typically 10 percent or less, and reflect contributions due to soil sampling in the field, sample processing in the laboratory, and chemical analysis. Relative standard deviations for the annual mean concentrations based on quarterly values range from 10-100 percent. Concentrations for  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Al}^{+3}$ ,  $\text{Cl}^-$ , ion exchange capacity, organic matter, and nitrogen concentration probably remained relatively constant. Sampling and chemical analysis variability probably accounted for variations observed. The variability in quarterly concentrations for  $\text{NH}_3$  (Figure 42) may be real. Variability in sampling and chemical analysis procedures based on quadruplicate samples collected in March, 1977, is considerably smaller than the variability in quarterly concentrations. Soil handling and treatment after collection of the sample can result in loss of  $\text{NH}_3$ . Air-drying, the procedure used in this study, can result in  $\text{NH}_3$  loss from soils and lead to incorrect results. Similarly, P,  $\text{NO}_3^-$ , and  $\text{SO}_4^{2-}$  concentration variability is extremely large. Concentrations for these species were low and approached the lower practical concentration range for meaningful chemical analysis. This fact, even in the absence of other sources of error, could account for the variability observed. The concentrations reported for P,  $\text{NO}_3^-$ , and  $\text{SO}_4^{2-}$  are not totally reliable for purposes of interpretation.

Soil pH, Figure 36, is related to other properties of individual soils. When sandy soils and hammock soils are considered, pH is related to both ion exchange capacity and organic matter content, Figure 50. Soil pH generally increases as values for these two parameters increase when hammock and sandy soils, but not the beach soil, are considered.

#### Total Cation Concentrations

The total concentrations of several cations which are present in Merritt Island soils are presented in Table 18. Average deviations in reported mean concentrations are presented for each. The reported mean concentrations were used to determine the extent to which leaching of each individual cation was achieved by HCl, as discussed in the next section.

#### Hydrochloric Acid Leaching of Cations from Soils and Evaluation of Leaching by Acid Rain from SRM Exhaust.

The leaching of  $\text{Na}^+$  from the soil samples collected and treated as described in the experimental section (Figure 51) was generally less than 100 percent efficient and showed a strong dependence on HCl concentration only for the soil sample collected from beach site 03. The leaching behavior of  $\text{Na}^+$  closely parallels that of  $\text{Ca}^{+2}$  in the site 03 soil, as will be described later. For hammock soils 10-70 percent of the  $\text{Na}^+$  can be lost regardless of HCl concentration, while less than 20 percent of the  $\text{Na}^+$  is lost from the sandy soil samples studied. Except in the HCl

leachate from samples collected at sites 07 and 09, both hammocks, the concentrations of  $K^+$  were below the reliable analysis sensitivity limit of 35 ppm and, therefore, provided no data to evaluate.

The leaching behavior observed for calcium, Figure 52, and for magnesium, Figure 53, are similar. Leaching of calcium and magnesium is nearly 100 percent efficient at the higher HCl concentrations, and decreases as the HCl concentration decreases. This would indicate that the calcium and magnesium present in the Merritt Island soils exist in an easily exchangeable form in the soils, or they are present as calcareous material that readily dissolves in mineral acids such as HCl. The latter reaction was observed readily during sample preparation. A significant decrease in the fraction of calcium or magnesium leached occurs as the HCl concentration decreases. For soil samples which have relatively large amounts of calcareous matter present (Hammocks and Beach) there was insufficient HCl present when a low HCl concentration leachate was used to result in 100 percent reaction with calcareous material. These soils exhibit very large capacity to neutralize added HCl, and the  $Ca^{+2}$  present in the beach, hammock, and three sandy soils are 100 percent leached as HCl concentration approaches 1.0 M. However, soils 04, 06, and 08, which contain 200-300 ppm total  $Ca^{+2}$ , lose less than 50 percent of the  $Ca^{+2}$  originally present. Soils from sites 04, 06, and 08 consistently show greater resistance to leaching by HCl for all cations investigated. Hammock soil 02 and beach soil 03 contain enough calcareous material, based on total  $Ca^{+2}$  content, to consume all the HCl added until the HCl concentration exceeds 0.25 M. Hammock soil 07 could consume all the 0.1 M HCl (pH 1) added in this experiment. The  $Ca^{+2}$  leaching behavior shown in Figure 52 reflects the acid neutralizing capabilities of these soil samples.

Aluminum is partially leached from all soils at HCl solution pH of 0.0, and decreases to zero as the HCl solution pH increases to 3 or 4 (Figure 54). Aluminum is known to become more readily available and toxic to plants as soil pH decreases. It would, therefore, be expected that the presence of strong acids such as HCl could alter availability of  $Al^{+3}$  significantly and, consequently, alter plant growth.

In addition to  $Na^+$ ,  $K^+$ ,  $Ca^{+2}$ ,  $Mg^{+2}$ , and  $Al^{+3}$ , Fe is the only metal measured in this study consistently having a total concentration in Merritt Island soils greater than 100 ppm. The fraction of Fe leached, Figure 55, is small, and does not occur to any appreciable extent when the HCl concentration decreases below  $10^{-2}$  M (pH 2).

Manganese also is leached by HCl. Results shown in Figure 56 generally indicate less than 50 percent of the total amount of manganese is leached. There is no significant occurrence of leaching below  $10^{-1}$  M HCl (pH 1).

For the metals  $Ni^{+2}$ ,  $Zn^{+2}$ ,  $Co^{+2}$ ,  $Cr^{+2}$ ,  $Pb^{+2}$ , and  $Mo^{+2}$ , leaching behavior becomes more erratic. Leaching characteristics for  $Ni^{+2}$ ,  $Zn^{+2}$ , and  $Co^{+2}$  are shown in Figures 57-59, respectively. The erratic behavior probably results because the actual concentrations of metals in the soils is quite small, and even smaller in leachate samples. Absolute precision

associated with analytical techniques begins to become more important at these low concentrations. In addition, the possibility of sample contamination becomes more likely. On a fractional basis, it appears that the leaching of these metals is similar to that of Fe and Mn at high HCl concentrations, but  $\text{Ni}^{+2}$ ,  $\text{Zn}^{+2}$ , and  $\text{Co}^{+2}$  continue to leach at lower HCl concentrations.

It may be stated that under the experimental conditions utilized in this sequence of experiments, considerable leaching of metals did occur. Experimentally, 10 grams of soil was leached with 100 ml of acid added slowly over a period of two hours. In general, the extent of leaching was small until the pH of leachate decreased to below 3.0 and occurred in very large volume. Even then, the relatively large amounts of calcareous material in some soils should be quite effective in neutralizing the acid, which, in turn, should inhibit the leaching effect.

The results of the leaching experiments can be evaluated to determine the effect that the occurrence of acid introduction into the soils would have on leachability of cations. If an area  $1.0 \text{ m}^2$  is used as the basis for discussion, then 10g of soil, the sample size used in the leaching experiments, will represent a soil depth of 0.000074 cm based on soil density of 1.35 g/cc. The experimental 100 ml HCl treatment of soils would correspond to 0.01 cm of HCl solution, distributed equally over the  $1.0 \text{ m}^2$  area. This corresponds to the addition of 100 meq. HCl. If a more convenient soil depth of 1.0 cm were considered, then scale-up of experimental conditions would correspond to 135 equiv. HCl/ $\text{m}^2$ . Existing deposition of acids due to acid precipitation presently amounts to .03-.05 eq./ $\text{m}^2$ /yr., based on results presented in Tables 6, 7, 9, and 10. The occurrence of acid rain from an SRM firing might, in a severe case, produce 1.0 cm of pH 1.0 precipitation (Pellett, 1977). This corresponds to the deposition of 1.0 equiv./ $\text{m}^2$  of HCl. Therefore, 130-140 cm of pH 1.0 precipitation would be required to correspond to our worst case experimental leaching experiment, or 1-2 cm of pH 1.0 precipitation would correspond to the experimental leaching of 10 g soil with 100 ml of 0.01 M HCl (pH 2).

The yearly background deposition of acid at present is insignificant compared to that which could potentially be introduced from acid precipitation which might occur during or shortly after a SRM firing. Under the conditions described above leaching of  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Al}^{+3}$ , Fe,  $\text{Ni}^{+2}$ ,  $\text{Zn}^{+2}$ , and  $\text{Co}^{+2}$  could occur as previously summarized. Leaching of most cations decreases significantly when the concentration of HCl leachate decreased to 0.01 M. This amount of acid more realistically corresponds to a single worst case acid rain event, and should initially result in only small amounts of leaching of most cations. Many of the soils on Merritt Island contain calcareous material which will consume considerable amounts of acid. The hammock soils have relatively high ion exchange capacity and organic matter content as well. While no attempt has been made to completely characterize these soil properties, it is possible that they may act further to neutralize or buffer the effect of added acid.

## Summary and Conclusions

1. The leaching experiments were designed to evaluate very severe stress to soils due to the addition of HCl. The mobilization and subsequent loss of cations from the soils due to interaction with HCl can occur. Evaluation of leaching under laboratory conditions cannot duplicate in situ soil experiments or actual processes, and probably does not reflect the complex nature by which mobilization of ions in soils can occur.
2. No attempt was made to evaluate the role that soil properties such as organic matter content, or ion exchange capability have in influencing ion mobility. These considerations, when combined with the fact that the analytical data are of a semiquantitative nature in many cases, limit the extension of these results to interpretation of actual interactions between HCl and soils.
3. Based on experimental observations, projected acid rain occurrence, and limitations cited above which have the effect of tempering conclusion, leaching should not be severe in the short-term. Should several rain events with pH 1.0 occur on the same soil, then leaching, which amounts to greater than 30 percent of the original cation concentrations in the top 1.0 cm of soil, can occur.
4. It is not possible to predict whether the effect of several cumulative exposures of lower concentrations of HCl to soils will produce the same effect that a single high concentration treatment produced in this study.
5. It would only be possible to fully measure and understand the effect of acidification on Merritt Island soils following several years of exposure to SRM exhaust, if a long-term program were initiated to continuously study both the stationary and mobilized pool of nutrients and cations present.

## Acknowledgements

Initial evaluation of the precipitation chemistry program and several valuable suggestions by Dr. James Galloway, University of Virginia, were extremely beneficial. Dr. Robert Todd, University of Georgia, made useful suggestions in the area of soil chemistry.

Most chemical analyses were performed by John Hogsett, Leonard Hutto, and Mark Carter. Students who provided assistance in sample collection and chemical analysis include Jim Hood, Chris Kohl, Anthony Mancusi, Karin Moore, and Charles Otis. Sandra Watson assisted in data processing. The reliable and conscientious efforts expended by each were vital to accomplishments achieved. The efficiency and organizational capabilities provided by Rosalie Creamer, who typed this report, is appreciated. Development of all computer software and considerable data processing were accomplished by Farley Place. His never-ending enthusiasm and achievements proved to be indispensable.

Assistance provided by the NASA Booster Exhaust Study Test (BEST) program directed by Mr. Hans Rudolph is acknowledged.

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APPENDIX TABLES

Table 1.

MONTHLY RAINFALL SUMMARY JUL 1977

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
052377	00	00	00	00	00	00	00	.00	00	00	00	00	00	00	00	00	00	4 23	00
062877	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.00	00	00	4 24	00
063077	00	00	00	00	00	00	00	00	00	.00	.00	00	00	.00	00	00	00	6 46	.00
070177	00	00	.00	00	00	00	00	00	00	00	00	.00	00	00	00	00	00	4 47	00
070577	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 23	00
070777	00	00	00	00	00	00	00	00	00	00	00	.00	00	00	00	00	.00	3 96	00
071177	00	00	.00	00	00	00	00	00	00	00	00	00	00	00	.00	00	00	4 25	00
071877	00	00	00	00	00	00	00	.00	00	00	00	00	00	.00	00	00	00	4 48	00
072177	00	00	.00	00	00	00	00	00	00	00	00	.00	00	00	.00	00	00	4 74	00
072277	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.00	00	00	4 15	00
072677	4 57	00	00	00	00	00	00	00	00	00	4 61	4 61	00	.00	00	.00	00	00	4 62
072877	4 12	00	00	00	00	00	00	.00	00	00	4 23	4 15	00	00	00	00	00	4 18	00
072977	00	00	00	00	00	00	00	00	00	.00	00	00	00	00	00	00	00	4 08	00
VOLTOL	2785										2184	2182.						9910	831
HIGH	4 57	00	00	00	00	00	00	00	00	00	4 61	4 61	00	.00	.00	00	00	6 46	4 62
LOW	4 12	00	00	00	00	00	00	00	00	00	4 23	4 15	00	00	00	00	00	3 96	4 62
VWA	4 17	00	00	00	00	00	00	00	00	00	4 53	4 57	00	00	00	00	00	4 30	4 62
RSDH	67 3	00	00	00	00	00	00	00	00	00	58 2	68 6	00	00	00	00	00	54 4	00
RSDPH	7 32	00	00	00	00	00	00	00	00	00	6 08	7 43	.00	00	.00	00	00	14 9	00
AMTH	1484										999	918						7781	311
H	2	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	12	1

VOLTOL ML  
HIGH, LOW, VWA PH  
RSDH % RELATIVE STANDARD DEVIATION  
RSDPH % RELATIVE STANDARD DEVIATION  
AMTH MICRO EQ /SQ METER

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1 Table 2.

MONTHLY RAINFALL SUMMARY AUG 1977

A-3

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
080177	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 05	00
090277	4 18	00	00	00	00	00	00	00	00	00	4 11	4 13	00	00	00	00	00	4 92	4 53
070377	4 96	00	00	00	00	00	00	00	00	00	5 17	4 78	00	00	00	00	00	00	4 89
091077	00	00	00	00	00	00	00	00	00	00	4 37	4 74	00	00	00	00	00	00	00
081277	4 82	00	00	00	00	00	00	00	00	00	4 42	4 88	4 90	00	00	00	00	4 27	4 92
081577	5 06	00	00	00	00	00	00	00	00	00	5 20	5 27	6 92	00	00	00	00	4 81	5 36
071877	00	00	00	00	00	00	00	00	00	00	4 86	00	00	00	00	00	00	4 28	4 63
081977	00	00	00	00	00	00	00	00	00	00	00	4 03	00	00	00	00	00	00	00
082277	4 11	00	00	00	00	00	00	00	00	00	4 10	4 11	4 06	00	00	00	00	00	00
082377	5 77	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
082477	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 33	00
082577	00	00	00	00	00	00	00	00	00	00	4 46	00	4 61	00	00	00	00	5 04	4 91
082977	5 24	00	00	00	00	00	00	00	00	00	5 32	00	5 35	00	00	00	00	4 63	5 42
083177	5 03	00	00	00	00	00	00	00	00	00	5 51	6 80	5 20	00	00	00	00	00	5 19
VOLTOL	8548										4847	10299	6840					16035	9240
HIGH	5 77	00	00	00	00	00	00	00	00	00	5 51	6 80	6 92	00	00	00	00	5 04	5 42
LOW	4 11	00	00	00	00	00	00	00	00	00	4 10	4 03	4 06	00	00	00	00	4 05	4 53
VWA	4 50	00	00	00	00	00	00	00	00	00	4 54	4 32	5 08	00	00	00	00	4 41	4 88
RSDH	123	00	00	00	00	00	00	00	00	00	95 1	101	145	00	00	00	00	71 6	67 9
RSDPH	11 1	00	00	00	00	00	00	00	00	00	11 0	18 7	18 1	00	00	00	00	7 62	6 56
AMTH	4258										2188	7663	893.					9639	1804
N	8	0	0	0	0	0	0	0	0	0	10	8	6	0	0	0	0	8	8

VOLTOL ML  
HIGH, LOW, VWA PH  
RSDH % RELATIVE STANDARD DEVIATION  
RSDPH % RELATIVE STANDARD DEVIATION  
AMTH MICRO EQ /SQ METER



Table 3.

MONTHLY RAINFALL SUMMARY SEP 1977

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
090177	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 97	00
090277	5 56	00	00	00	00	00	00	00	00	00	5 65	5 28	5 36	00	00	00	00	4 95	5 24
090677	4 80	00	00	00	00	00	00	00	00	00	4 93	4 90	5 87	00	00	00	00	4 98	4 95
090877	3 86	00	00	00	00	00	00	00	00	00	3 60	00	4 02	00	00	00	00	00	00
091277	3 93	00	00	00	00	00	00	00	00	00	4 55	4 77	3 87	00	00	00	00	00	4 19
091677	00	00	00	00	00	00	00	00	00	00	00	00	4 19	00	00	00	00	00	00
091977	4 83	00	00	00	00	00	00	00	00	00	4 50	4 71	4 93	00	00	00	00	4 65	4 73
092077	4 72	00	00	00	00	00	00	00	00	00	4 66	4 48	4 10	00	00	00	00	4 34	4 78
092177	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 55
092277	4 04	00	00	00	00	00	00	00	00	00	3 93	4 19	4 10	00	00	00	00	4 69	4 31
092677	00	00	00	00	00	00	00	00	00	00	00	4 67	4 90	00	00	00	00	4 38	4 86
092777	4 12	00	00	00	00	00	00	00	00	00	4 31	3 99	4 42	00	00	00	00	4 28	4 37
VOLTOL	10201										5996	14123	9005					13565	8124
HIGH	5 56	00	00	00	00	00	00	00	00	00	5 65	5 28	5 87	00	00	00	00	4 98	5 24
LOW	3 86	00	00	00	00	00	00	00	00	00	3 60	3 99	3 87	00	00	00	00	4 28	4 19
VVA	4 79	00	00	00	00	00	00	00	00	00	4 82	4 83	5 02	00	00	00	00	4 61	4 73
RSDH	89 0	00	00	00	00	00	00	00	00	00	130	95 3	86 1	00	00	00	00	63 9	71 8
PSDPH	13 2	00	00	00	00	00	00	00	00	00	13 8	8 76	14 4	00	00	00	00	6 33	7 27
AMTH	2563										1428	3251	1329					5257	2377
N	8	0	0	0	0	0	0	0	0	0	8	8	10	0	0	0	0	9	9

VOLTOL ML  
HIGH, LOW, VVA PH  
RSDH % RELATIVE STANDARD DEVIATION  
PSDPH % RELATIVE STANDARD DEVIATION  
AMTH MICRO EQ /SQ METER

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Table 4.

MONTHLY RAINFALL SUMMARY OCT 1977

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
101077	4.89	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.87	4.70	4.76	.00	.00	.00	.00	.00	.00
101177	3.47	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.55	3.80	3.94	.00	.00	.00	.00	.00	3.92
101277	4.32	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.82	3.99	4.19	.00	.00	.00	.00	.00	.00
101377	4.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.18	3.89	4.26	.00	.00	.00	.00	4.28	4.30
102477	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.43
102577	4.52	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.77	.00	4.70	.00	.00	.00	.00	5.20	5.20
102677	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.73	5.08	.00	.00	.00	.00	.00	4.48	.00
103177	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.65	.00
VOLTOL	4748.										4224.	1919.	2888.					747	4045
HIGH	4.89	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.73	5.08	4.76	.00	.00	.00	.00	5.20	5.20
LOW	3.47	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.55	3.80	3.94	.00	.00	.00	.00	4.05	3.92
VVA	4.39	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.51	4.30	4.25	.00	.00	.00	.00	4.40	4.78
RSDH	132	.00	.00	.00	.00	.00	.00	.00	.00	.00	124	79.6	85.5	.00	.00	.00	.00	77.0	91.2
RSDPH	12.4	.00	.00	.00	.00	.00	.00	.00	.00	.00	17.8	13.2	8.79	.00	.00	.00	.00	11.0	12.0
AMTH	3076										2032.	1509.	2560.					459	1050
N	5	0	0	0	0	0	0	0	0	0	6	5	5	0	0	0	0	4	4

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VOLTOL ML  
 HIGH, LOW, VVA PH  
 RSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ /SQ METER

Table 5.

MONTHLY RAINFALL SUMMARY NOV 1977

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
110477	4 44	.00	.00	.00	.00	.00	.00	.00	.00	.00	4 56	4 49	4.63	.00	.00	.00	.00	4 54	4 41
110777	4 47	.00	.00	.00	.00	.00	.00	.00	.00	.00	4 97	4 70	4.64	.00	.00	.00	.00	4 70	4 57
111677	3 89	.00	.00	.00	.00	.00	.00	.00	.00	.00	7 05	3 80	.00	.00	.00	.00	.00	.00	.00
111777	4 38	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4 84	.00	.00	.00	.00	.00	.00
112277	4 31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
112377	5 02	.00	.00	.00	.00	.00	.00	.00	.00	.00	5 16	5 11	4.97	4 87	.00	.00	.00	5 44	4 97
112377	5 31	.00	.00	.00	.00	.00	.00	.00	.00	.00	5 42	5.30	5.31	5 20	.00	.00	.00	4 96	5 25
113077	5 26	.00	.00	.00	.00	.00	.00	.00	.00	.00	5 43	5 41	5.16	5 28	.00	.00	.00	5 03	5 29
VOLTOL	10328.										9903	10230	11840	8336.				4033	14912
HIGH	5 31	.00	.00	.00	.00	.00	.00	.00	.00	.00	7 05	5.41	5 31	5.28	.00	.00	.00	5 44	5 29
LOW	3 88	.00	.00	.00	.00	.00	.00	.00	.00	.00	4 56	3.80	4.63	4 87	.00	.00	.00	4 54	4 41
VVA	5 09	.00	.00	.00	.00	.00	.00	.00	.00	.00	5 34	5.17	5 10	5.21	.00	.00	.00	4 92	5 19
RSDH	106	.00	.00	.00	.00	.00	.00	.00	.00	.00	112	158	56 9	53.7	.00	.00	.00	64 4	85 3
RSDPH	10 9	.00	.00	.00	.00	.00	.00	.00	.00	.00	15.8	12.6	5 60	4.25	.00	.00	.00	7 04	8 00
ANTH	1324										710.	1089.	1481.	907.				766	1521
H	8	0	0	0	0	0	0	0	0	0	6	6	6	3	0	0	0	5	5

VOLTOL ML  
 HIGH, LOW, VVA PH  
 RSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 ANTH MICRO EQ /SQ METER

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Table 6.

MONTHLY RAINFALL SUMMARY DEC 1977

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
120177	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.27	4.33	4.24	.00	.00	.00	.00	5.01
120277	4.41	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.58	.00
120577	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.08	3.97	4.17	.00	.00	.00	3.90	4.16
120677	4.70	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.77	4.66	4.72	5.06	.00	.00	.00	4.68	4.88
120977	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.78	.00
121277	4.93	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.91	4.61	4.87	4.44	.00	.00	.00	.00	4.72
121377	4.53	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.69	4.65	4.53	4.66	.00	.00	.00	.00	.00
121477	5.26	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.36	5.30	4.99	5.26	.00	.00	.00	4.96	5.25
121577	4.16	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.89	6.54	4.79	4.41	.00	.00	.00	.00	5.05
121677	4.56	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.63	4.76	4.60	4.59	.00	.00	.00	4.72	4.47
121977	4.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.96	4.43	4.73	4.38	.00	.00	.00	4.86	4.72
122177	4.25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.27	4.22	4.42	.00	.00	.00	.00	.00
122277	4.08	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.10	4.17	4.18	4.25	.00	.00	.00	4.03	4.00
122877	4.66	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.52	4.59	4.62	4.57	.00	.00	.00	.00	4.56
VOLTOL	4524										5981	5008	6464	4623				5400	7443
HIGH	5.26	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.36	6.54	4.99	5.26	.00	.00	.00	4.96	5.25
LOW	4.08	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.10	4.08	3.97	4.17	.00	.00	.00	3.90	4.00
VWA	4.56	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.71	4.56	4.66	4.55	.00	.00	.00	4.52	4.65
RSDH	67.3	.00	.00	.00	.00	.00	.00	.00	.00	.00	95.2	73.5	79.2	53.7	.00	.00	.00	103	100
RSDPH	7.51	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.26	14.2	6.81	7.23	.00	.00	.00	8.28	8.36
AMTH	1931										1814	2165	2223	2015				2527	2632
H	11	0	0	0	0	0	0	0	0	0	9	12	12	12	0	0	0	8	10

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VOLTOL ML  
 HIGH, LOW, VWA PH  
 RSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ /SQ.METER

Table 7.

MONTHLY RAINFALL SUMMARY JAN 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
010378	3 99	00	00	00	00	00	00	00	00	00	4 00	3 94	4 05	3 95	00	00	00	4 11	4 05
010978	4 83	00	00	00	00	00	00	00	00	00	5 45	4 84	5 09	5 40	00	00	00	5 37	5 04
011378	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 91	00
011678	4 65	00	00	00	00	00	00	00	00	00	4 76	4 57	00	4 62	00	00	00	00	4 88
011878	4 28	00	00	00	00	00	00	00	00	00	4 43	4 31	4 38	00	00	00	00	4 51	4 53
011978	00	00	00	00	00	00	00	00	00	00	00	00	00	4 55	00	00	00	00	00
012078	4 93	00	00	00	00	00	00	00	00	00	4 98	4 96	4 98	4 80	00	00	00	5 00	4 86
012578	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 93	00
012678	4 76	00	00	00	00	00	00	00	00	00	4 87	4 89	00	4 85	00	00	00	00	00
VOLTOL	3809										3578	4394	3080	3660				3547	3450
HIGH	4 93	00	00	00	00	00	00	00	00	00	5 45	4 96	5 09	5 40	00	00	00	5 37	5 04
LOW	3 99	00	00	00	00	00	00	00	00	00	4 00	3 94	4 05	3 95	00	00	00	4 11	4 05
VVA	4 59	00	00	00	00	00	00	00	00	00	4 67	4 56	4 66	4 58	00	00	00	4 76	4 61
RSDH	95 8	00	00	00	00	00	00	00	00	00	119	105	101	120	00	00	00	106	108
PSDPH	7 95	00	00	00	00	00	00	00	00	00	10 4	8 67	10 7	10 1	00	00	00	9 00	8 43
AMTH	1523										1196	1905	1045	1501				971	1326
N	6	0	0	0	0	0	0	0	0	0	6	6	4	6	0	0	0	6	5

VOLTOL ML  
HIGH, LOW, VVA PH  
RSDH % RELATIVE STANDARD DEVIATION  
PSDPH % RELATIVE STANDARD DEVIATION  
AMTH MICRO EQ /SQ METER

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Table 8.

MONTHLY RAINFALL SUMMARY FEB 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
020178	00	00	00	00	00	00	00	00	00	00	00	3 95	4 02	3 99	.00	00	00	00	00
020278	4 17	00	00	00	00	00	00	00	00	00	4 13	4 18	4 15	4 16	00	00	00	4 05	4 14
020378	4 44	00	00	00	00	00	00	00	00	00	4 58	4 45	4 56	4 42	00	00	00	4 38	4 58
020978	4 53	00	00	00	00	00	00	00	00	00	4 57	4 55	4 48	4 49	00	00	00	4 36	4 48
021078	3 98	00	00	00	00	00	00	00	00	00	4 13	00	4 00	4 19	00	00	00	00	3 95
021678	4 35	00	00	00	00	00	00	00	00	00	4 39	4 47	4 07	4 17	00	00	00	00	00
021778	4 53	00	00	00	00	00	00	00	00	00	4 51	4 43	4 48	4 39	00	00	00	4 33	4 37
022078	00	00	00	00	00	00	00	00	00	00	00	4 39	4 39	4 40	.00	00	00	4 21	4 23
022178	4 13	00	00	00	00	00	00	00	00	00	4 20	4 24	4 35	4 29	00	00	00	4 13	4 19
VOLTOL	6600										5807	7928	8284	7398				10192	8063
HIGH	4 53	00	00	00	00	00	00	00	00	00	4 58	4 55	4 56	4 49	00	00	00	4 38	4 58
LOW	3 98	00	00	00	00	00	00	00	00	00	4 13	3 95	4 00	3 99	.00	00	00	4 05	3 95
VVA	4 44	00	00	00	00	00	00	00	00	00	4 46	4 42	4 42	4 40	00	00	00	4 28	4 34
RSDH	51 0	00	00	00	00	00	00	00	00	00	45 4	53 9	49 1	39 4	00	00	00	32 1	49 5
RSDPH	4 98	00	00	00	00	00	00	00	00	00	4 66	4 54	5 11	3 78	00	00	00	3 18	5 02
AMTH	3717										3152	4730	4932	4631				8354	5774
H	7	0	0	0	0	0	0	0	0	0	7	8	9	9	0	0	0	6	7

VOLTOL ML  
 HIGH, LOW, VVA PH  
 RSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ /SQ METER

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Table 9.

MONTHLY RAINFALL SUMMARY MAR 1978

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DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
030178	4 25	00	00	00	00	00	00	00	00	00	3 98	4 23	4 18	00	00	00	00	4 28	4 41
030378	4 06	00	00	00	00	00	00	00	00	00	4 19	4 32	4 00	3 09	00	00	00	4 67	4 17
030678	4 79	00	00	00	00	00	00	00	00	00	00	4 83	4 72	4 75	00	00	00	00	00
030978	4 79	00	00	00	4 77	4 61	00	00	00	4 85	4 70	4 73	4 66	4 72	00	4 83	00	00	4 80
031078	4 61	00	00	00	4 39	4 89	00	00	00	4 89	4 72	4 67	4 79	4 76	00	4 63	00	4 35	4 61
031678	4 22	00	00	00	4 45	00	00	00	00	00	00	4 46	00	00	00	4 51	00	00	00
032278	4 48	00	00	00	4 47	00	00	00	00	4 76	4 50	4 51	4 37	4 59	00	00	00	00	00
032978	4 34	00	00	00	00	00	00	00	00	00	00	4 16	4 41	00	00	00	00	00	00
033078	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 31
VOLTOL	5250				1435	1250				1700	2095	4977	4919	3793		1418		4055	1915
HIGH	4 79	00	00	00	4 77	4 89	00	00	00	4 89	4 72	4 83	4 79	4 76	00	4 83	00	4 67	4 80
LOW	4 06	00	00	00	4 39	4 61	00	00	00	4 76	3 98	4 16	4 00	3 09	00	4 51	00	4 28	4 17
VVA	4 49	00	00	00	4 50	4 70	00	00	00	4 83	4 46	4 58	4 47	4 36	00	4 69	00	4 47	4 53
RSDH	58 4	00	00	00	32 4	44 1	00	00	00	15 7	76 5	53 5	69 7	199	00	35 0	00	41 0	52 0
RSDPH	6 10	00	00	00	3 76	4 17	00	00	00	1 38	7 35	5 41	6 59	16 6	00	3 47	00	4 69	5 57
AMTH	2635				708	386				397	1129	2047	2599	2592		454		2128	936
N	8	0	0	0	4	2	0	0	0	3	5	8	7	5	0	3	0	3	5

VOLTOL ML  
 HIGH, LOW, VVA PH  
 RSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ /SQ METER

Table 10.

MONTHLY RAINFALL SUMMARY APR 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
041478	4 54	4 45	00	00	4 59	4 77	00	00	.00	4 48	00	4.90	4.73	4 64	00	4 64	.00	4 65	4 28
041978	4 41	4 62	00	00	00	5 38	00	00	00	4 58	4 60	4 57	4 76	00	00	4 22	00	4 90	4 79
042078	00	00	00	00	4 78	00	00	00	00	.00	00	00	00	.00	00	00	00	4 70	00
VOLTOL	316	773.			468	220.				192	16	235.	269.	150.		257		634	282
HIGH	4 54	4 62	.00	00	4 78	5.38	.00	.00	.00	4.58	4 60	4 90	4 76	4 64	00	4 64	00	4.90	4 79
LOW	4 41	4 45	00	00	4 59	4 77	00	00	00	4.48	4 60	4 57	4 73	4.64	00	4 22	00	4 65	4 28
VVA	4 47	4 49	00	00	4 63	5 12	00	00	00	4.50	4 60	4 75	4.74	4 64	00	4 57	.00	4 69	4 43
RSDH	21 0	27 3	.00	.00	30 5	85.7	00	00	00	16.2	.00	51 3	4 98	00	.00	63 5	00	27 9	74 6
RSDPH	2 05	2 65	00	00	2 87	8 50	00	.00	00	1.56	.00	4.93	45	00	.00	6 70	00	2 79	7 95
AMTH	167	394.			170	26.				96.	6.	71	76.	54.		108		226	165
H	2	2	0	0	2	2	0	0	0	2	1	2	2	1	0	2	0	3	2

VOLTOL ML  
 HIGH, LOW, VVA PH  
 RSDH % RELATIVE STANDAPD DEVIATION  
 RSDPH % RELATIVE STANDAPD DEVIATION  
 AMTH MICPO EQ /SQ.METER

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Table 11.

MONTHLY RAINFALL SUMMARY MAY 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
050278	4.50	4.33	00	00	00	4.77	00	00	00	4.69	4.88	4.54	4.43	7.00	.00	00	00	00	4.58
050478	.00	4.77	00	.00	4.90	4.84	00	00	00	5.28	00	5.05	6.79	4.89	.00	5.63	00	5.69	4.91
050578	4.46	4.34	.00	00	4.31	4.44	.00	00	00	4.43	4.44	4.49	4.38	4.41	.00	4.31	00	4.51	4.48
050878	4.32	4.29	00	00	4.55	4.55	00	00	00	4.51	4.47	4.29	4.31	4.45	.00	4.58	00	4.41	4.62
050978	.00	5.53	.00	.00	00	.00	.00	00	00	4.81	4.49	00	00	00	.00	00	00	00	00
051078	4.47	4.01	00	00	4.16	00	.00	.00	00	4.37	4.25	4.48	4.10	4.51	.00	4.29	00	.00	00
051878	4.51	4.32	00	00	4.04	4.57	00	.00	00	.00	00	4.46	.00	4.48	.00	4.15	.00	00	4.56
051978	00	00	00	.00	00	.00	00	.00	00	00	00	4.50	.00	.00	.00	00	00	4.23	00
052678	00	00	00	.00	00	.00	00	00	00	00	00	4.22	.00	.00	.00	00	00	00	00
VOLTOL	3783.	4083	.	.	2945.	5551	.	.	.	3643.	3490	8282.	5120	4635.	.	3110.	.	4873.	6450
HIGH	4.51	5.53	.00	00	4.90	4.84	.00	00	00	5.28	4.88	5.05	6.79	7.00	.00	5.63	.00	5.69	4.91
LOW	4.32	4.01	00	00	4.04	4.44	.00	00	.00	4.37	4.25	4.29	4.10	4.41	.00	4.15	.00	4.23	4.48
VWA	4.46	4.31	00	00	4.29	4.56	00	.00	00	4.49	4.46	4.47	4.32	4.46	.00	4.31	00	4.53	4.57
PSDH	19.4	67.8	00	00	62.8	36.2	00	00	.00	55.7	44.5	39.3	59.4	60.6	.00	65.8	.00	77.0	31.1
RSDPH	1.72	11.1	00	00	7.78	3.57	.00	.00	00	7.18	5.10	5.21	21.9	20.5	.00	13.1	00	13.8	3.56
AMTH	2040	3119.	.	.	2376.	2381	.	.	.	1858.	1972.	4352.	3853.	2500.	.	2402	.	2255	2731
N	5	7	0	0	5	5	0	0	0	6	5	7	6	6	0	5	0	4	5

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VOLTOL ML  
 HIGH, LOW, VWA PH  
 PSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ /SQ METER

Table 12.

MONTHLY RAINFALL SUMMARY JUN 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
060178	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.53	.00
060278	3.68	4.06	.00	.00	.00	3.84	.00	3.80	.00	3.68	3.56	3.76	3.76	3.86	.00	3.90	.00	3.52	.00
060578	4.53	4.59	.00	.00	4.45	4.61	.00	4.56	.00	4.58	4.54	4.47	4.62	4.58	.00	4.54	.00	4.60	4.55
060678	4.28	4.17	4.25	.00	.00	4.15	.00	4.11	.00	4.36	4.35	4.26	4.20	4.27	.00	4.41	.00	4.51	4.4
060978	4.30	4.64	4.19	.00	.00	4.21	.00	4.62	.00	4.47	4.50	4.36	4.53	4.18	.00	4.49	.00	4.77	.00
060978	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.55	.00
061278	4.60	4.64	4.74	.00	.00	.00	.00	4.52	.00	4.55	4.56	.00	4.59	4.46	.00	4.66	.00	4.20	4.77
061578	.00	4.14	.00	.00	.00	4.28	.00	4.31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.34
061678	.00	5.11	.00	.00	.00	.00	.00	.00	.00	4.67	4.66	4.53	4.96	4.77	.00	.00	.00	4.02	.00
061978	.00	.00	.00	.00	.00	4.91	.00	4.91	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.70	5.04
062278	4.84	4.93	4.54	.00	4.54	5.46	.00	5.05	.00	4.97	4.86	4.80	5.80	4.72	.00	4.60	.00	.00	4.85
062378	.00	4.68	5.00	.00	4.75	5.19	.00	5.07	.00	4.90	4.90	4.63	4.99	4.39	.00	4.76	.00	4.90	4.90
062678	.00	4.49	.00	.00	.00	4.74	.00	4.85	.00	.00	.00	.00	.00	3.99	.00	.00	.00	4.55	4.75
062878	.00	.00	4.56	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.48	.00	.00	.00	.00	.00	.00
VOLTOL	10987	12077	6820		6038	11446		19777		10746	10590	7506	10132	15619		10668		11179	12920
HIGH	4.84	5.11	5.00	.00	4.75	5.46	.00	5.07	.00	4.97	4.90	4.90	5.80	4.77	.00	4.76	.00	4.90	5.04
LOW	3.68	4.06	4.19	.00	4.45	3.84	.00	3.80	.00	3.68	3.56	3.76	3.76	3.86	.00	3.90	.00	3.62	4.14
VVA	4.44	4.59	4.52	.00	4.54	4.66	.00	4.58	.00	4.54	4.55	4.40	4.58	4.39	.00	4.50	.00	4.48	4.64
RSOH	115	75.1	63.0	.00	32.7	103	.00	113	.00	137	136	102	126	74.1	.00	91.3	.00	111	81.4
RSOPH	9.08	7.31	6.66	.00	5.36	11.5	.00	9.06	.00	8.80	7.32	7.57	12.1	7.19	.00	6.25	.00	9.37	6.57
AMTH	6162	4892	3199		2738	3941		4425		4847	4611	4708	4157	5947		5255		5796	4550
N	6	10	6	1	3	9	0	10	0	8	8	7	9	9	0	7	0	11	8

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VOLTOL    ML.  
 HIGH, LOW, VVA    PH  
 RSOH    % RELATIVE STANDARD DEVIATION  
 RSOPH    % RELATIVE STANDARD DEVIATION  
 AMTH    MICRO EQ / SQ. METER

Table 13.

MONTHLY RAINFALL SUMMARY JUL 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
070578	4 08	3 91	00	00	00	00	00	3 66	00	3 96	3 97	4 12	3 92	4 18	00	4 21	00	00	3 79
070678	3 97	4 15	4 18	00	00	00	00	4 01	00	3 98	3 91	4 25	4 46	4 09	.00	00	00	00	4 12
070778	00	3 82	4 06	00	00	4 09	00	4 04	00	00	00	3 97	00	4 04	.00	00	00	4 17	4 04
071078	4 43	4 07	4 15	00	00	00	00	00	00	00	4 47	4 06	4 23	4 20	00	4 51	00	4 48	4 26
071278	00	00	3 92	00	00	00	00	00	00	00	00	00	00	4 08	00	00	00	00	00
071378	00	3 79	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	3 90	00
071478	00	00	00	00	00	00	00	00	00	00	00	4 54	00	4 50	00	4 36	00	00	00
071778	4 49	4 74	4 53	00	4 50	5 24	00	00	00	4 60	4 73	4 52	4 76	4 36	00	4 55	00	00	4 72
071878	4 48	4 64	4 75	00	4 67	00	00	4 71	00	4 70	4 82	4 58	4 62	4 76	00	4 68	00	4 68	00
071978	4 52	4 29	4 28	00	4 62	00	00	4 27	00	4 39	4 32	4 60	4 38	4 46	00	4 63	00	4 36	4 46
072078	4 46	4 36	00	00	4 59	4 14	00	4 16	00	4 37	4 68	4 39	4 39	4 27	00	4 59	.00	4 90	4 02
072178	00	00	00	00	00	00	.00	.00	00	00	00	00	00	00	.00	00	00	3 97	00
072478	00	00	00	00	00	.00	00	.00	00	00	00	00	00	00	.00	00	00	4 31	00
072678	00	00	00	00	00	00	00	00	00	00	00	00	00	00	.00	00	00	4 52	00
072778	00	4 19	4 28	00	00	00	00	00	00	00	00	00	6 28	4 93	.00	00	00	4 48	00
072878	4 54	4 58	4 56	00	4 46	4 74	00	.00	00	4 89	4 84	4 64	00	4 14	00	00	00	4 92	4 86
073178	4 37	00	4 54	00	4 31	4 53	00	00	00	4 41	4 43	4 40	00	4 37	.00	4 27	.00	4 42	4 44
VOLTOL	14681	17688	13366		8418	7540		10836		11742	14071	15678	16116	18880		10630		17196	12386
HIGH	4 54	4 74	4 75	00	4 67	5 24	00	4 71	00	4 89	4 84	4 64	6 28	4 93	.00	4 68	00	4 92	4 86
LOW	3 97	3 79	3 92	00	4 31	4 09	00	3 66	00	3 96	3 91	3 97	3 92	4 04	00	4 21	00	3 97	3 79
VUA	4 38	4 15	4 21	00	4 49	4 29	00	4 12	00	4 34	4 41	4 33	4 34	4 21	00	4 47	00	4 57	4 21
RSDH	58 4	68 2	57 7	00	32 4	81 0	00	74 5	00	75 5	87 5	58 6	99 7	47 8	00	42 1	00	79 1	72 7
RSDPH	4 67	7 73	6 04	00	2 89	10 4	00	8 36	00	7 37	7 75	5 39	15 8	6 23	00	3 89	00	6 97	8 12
AMTH	9552	19421	13566		4268	6053		12731		8414	8635	11467	11533	18340		5662		7232	12011
H	9	11	10	0	6	5	0	6	0	8	9	11	8	13	0	8	0	12	9

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VOLTOL ML  
HIGH, LOW, VUA PH  
RSDH % RELATIVE STANDARD DEVIATION  
RSDPH % RELATIVE STANDARD DEVIATION  
H MICRO EQ /SQ METER

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Table 14.

MONTHLY RAINFALL SUMMARY AUG 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
080178	4 37	4 51	4 42	00	4 56	4 72	00	4 56	00	4 37	4 43	4 46	4 52	4 44	00	4 57	00	4 51	4 46
090278	4 24	00	00	00	00	00	00	00	00	4 25	4 26	00	4 03	00	00	00	00	00	00
080378	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	3 48	00
090278	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 08	00
080478	00	00	00	00	00	00	00	00	00	00	00	00	00	4 04	00	00	00	00	00
080778	4 83	00	4 15	00	00	4 73	00	00	00	4 93	4 89	00	00	00	00	00	00	4 94	4 81
080878	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 21	5 09
081078	00	00	00	00	4 69	00	00	00	00	00	00	00	00	4 63	00	4 74	00	4 60	00
081178	00	00	00	00	4 77	00	00	00	00	00	00	00	00	00	00	4 79	00	00	00
081478	4 20	00	4 39	00	4 43	00	00	4 49	00	00	4 47	00	00	4 19	00	4 28	00	00	4 45
031578	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 39	00
081678	00	4 32	00	00	00	00	00	00	00	00	00	00	4 28	00	00	00	00	00	00
091778	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	3 56	00
081878	00	3 87	4 11	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
092178	00	00	3 91	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
092278	00	00	00	00	00	00	00	00	00	4 05	00	00	4 39	00	00	00	00	00	00
092378	00	00	00	00	00	4 47	00	00	00	00	00	00	00	00	00	00	00	00	4 79
092578	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 44	00
063178	4 69	00	00	00	4 68	00	00	00	00	00	00	4 56	00	4 63	00	4 95	00	5 24	00
VOLTOL	6493	4720	10757		5340	3290		5057		9284	10315	2588	6444	5087		6648		6006	3561
HIGH	4 83	4 51	4 42	00	4 77	4 73	00	4 56	00	4 93	4 99	4 56	4 52	4 63	00	4 95	00	5 24	5 09
LOW	4 20	3 87	3 91	00	4 43	4 47	00	4 49	00	4 05	4 26	4 46	4 03	4 04	00	4 28	00	3 48	4 45
VWA	4 33	4 38	4 33	00	4 55	4 72	00	4 53	00	4 35	4 43	4 46	4 39	4 34	00	4 57	00	4 49	4 58
PSDH	54 4	78 3	49 2	00	32 5	36 4	00	11 4	00	64 2	49 7	16 2	51 0	61 7	00	65 5	00	127	56 2
PSDPH	6 27	7 76	5 04	00	2 87	3 17	00	1 09	00	8 57	5 93	1 57	4 83	6 03	00	5 46	00	12 4	5 71
AMTH	4757	3074	7887		2329	990		2329		6432	5986	1396	4141	3647		2789		3009	1452
N	5	3	5	0	5	3	0	2	0	4	4	2	4	5	0	5	0	10	5

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VOLTOL ML  
 HIGH, LOW, VWA PH  
 PSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ /SQ METER

Table 15.

MONTHLY RAINFALL SUMMARY SEP 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
090178	00	00	00	00	00	.00	00	00	00	00	00	00	00	00	00	00	00	4 93	00
010578	4 17	4 13	4 05	00	00	4 22	00	.00	.00	00	4 26	4 13	4 15	4 02	.00	3 98	00	4 23	4 28
090678	4 36	4 35	4 03	00	3 96	4 36	00	4 44	00	00	00	00	4 74	00	00	4 07	00	4 09	4 51
090778	00	00	00	00	00	00	00	00	00	3 78	00	.00	00	00	00	00	00	00	00
091178	4 71	4 56	4 29	00	4 58	4 80	00	5 00	00	4 85	4 72	4 70	4 58	4 60	00	4 67	00	4 93	4 69
091478	4 62	00	.00	00	4 74	00	00	00	00	4 95	4 47	00	00	00	00	4 41	00	00	00
091578	00	00	4 06	00	00	3 86	00	3 86	00	4 18	3 89	00	4 13	00	00	00	00	00	4 10
091878	4 34	4 68	4 41	00	4 52	00	00	4 16	00	00	4 64	00	5 87	00	00	4 56	00	00	4 60
091978	00	00	4 61	00	00	4 53	00	4 44	00	00	00	00	4 97	00	00	00	00	00	4 90
032278	4 90	00	00	00	00	00	00	00	00	4 79	4 79	4 75	00	00	00	4 71	00	00	00
032678	00	4 78	00	00	4 78	4 77	00	4 46	00	4 92	4 84	5 06	00	00	00	00	00	00	4 87
092778	4 15	00	4 39	00	00	00	00	00	00	4 37	4 58	4 79	4 72	00	00	.00	00	00	4 41
092878	00	00	00	00	00	00	00	00	00	00	00	00	00	3 97	.00	.00	00	4 40	4 27
092978	4 12	00	00	00	4 33	00	00	00	00	00	4 27	00	00	00	00	4 58	00	00	00
VOLTOL	7077	6367	3745		3775	5385		4940		4629	6838	7311	5148	3465		5261		9963	7465
HIGH	4 90	4 78	4 61	00	4 78	4 80	00	5 00	00	4 95	4 84	5 06	5 97	4 60	00	4 71	00	4 93	4 90
LOW	4 12	4 13	4 03	00	3 96	3 86	00	3 86	00	3 78	3 89	4 13	4 13	3 97	.00	3 98	00	4 09	4 10
VWA	4 37	4 51	4 15	00	4 45	4 51	00	4 52	00	4 72	4 50	4 58	4 44	4 08	00	4 20	00	4 35	4 53
PSDH	55 0	63 8	46 8	00	85 2	90 7	00	83 6	00	120	87 9	96 8	90 1	58 5	00	74 3	00	71 5	60 9
RSDPH	6 57	5 81	5 24	00	6 78	8 06	00	8 61	00	9.86	6 84	7 27	12 3	8 34	00	6 57	00	8 21	6 12
AMTH	4705	3109	4169		2084	2576		2314		1381	3354	2980	2944	4492		5128		6918	3440
H	8	5	7	0	6	6	0	6	0	7	9	5	7	3	0	7	0	5	9

VOLTOL ML  
HIGH, LOW, VWA PH  
PSDH % RELATIVE STANDARD DEVIATION  
RSDPH % RELATIVE STANDARD DEVIATION  
AMTH MICRO EQ /SQ METER

A-1

Table 16.

MONTHLY RAINFALL SUMMARY OCT 1978

A-17

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
100278	4 04	4 31	4 00	00	3 95	4 27	00	4 43	00	4 20	4 08	3.61	3 92	.00	.00	00	.00	3 99	4 33
100378	4 61	00	00	00	4 52	4 32	00	3 96	.00	4 78	4 85	4 60	.00	00	00	4 58	00	00	4 83
100478	4 08	3 98	00	00	00	00	00	4 32	00	4 06	4 14	4 42	.00	00	.00	00	.00	00	4 40
101178	3 92	4 17	4 38	00	4 72	5 04	00	3 86	00	4.32	3 85	00	4 49	00	00	4.76	.00	00	4 12
101278	00	00	00	00	00	00	00	00	00	.00	00	00	.00	00	.00	00	.00	00	00
101378	4.65	00	.00	00	00	00	00	.00	.00	00	4 77	4.49	4.68	.00	.00	00	.00	00	4 75
101678	4 07	4 28	00	00	4 22	4.41	00	4 26	00	4 53	4 06	3 99	00	.00	00	00	00	00	00
100678	00	00	00	.00	00	00	00	00	00	.00	00	00	4.13	00	00	00	00	00	00
101578	.00	00	00	00	00	.00	.00	.00	.00	00	.00	00	.00	4 33	00	.00	.00	4 58	3 93
101978	4 74	4 63	4 64	00	4.84	00	00	00	00	4.33	5 18	4 75	4.66	4 61	00	4.64	00	4 47	4 47
102078	00	4 48	4 16	00	00	00	00	00	00	00	00	.00	00	00	.00	00	.00	4 60	4 57
102378	00	3 86	3 90	00	00	3 46	00	3 62	00	.00	00	00	3.94	3 28	00	00	00	00	3 79
103078	5 12	5 10	5 05	00	5 26	5 14	00	5 14	.00	5 08	5 05	5 11	5 01	5 22	00	5.27	.00	4 98	5 15
VOLTOL	4380.	0554	4635		10031	4993		8367		6037	6583.	8818	7718.	5466.		9547		3731	9033
HIGH	5 12	5 10	5 05	.00	5 26	5.14	.00	5 14	.00	5.08	5.18	5.11	5 01	5.22	.00	5.27	00	4 98	5 15
LOW	3 92	3 86	3 90	.00	3 95	3 46	.00	3.62	.00	4.06	3 85	3.61	3 92	3.28	00	4 58	00	3 99	3 79
VWA	4 71	4 63	4 58	00	4.87	4 52	00	4 62	.00	4 81	4.80	4 75	4 63	4 95	.00	4.95	.00	4 37	4 57
RSDH	75 7	72 6	74 0	00	99 3	155.	.00	87 5	.00	63 8	91 9	126.	82 7	166.	.00	51.0	00	88 6	92 5
RSDPH	9 83	9 00	9 93	.00	10 1	13 7	00	11.7	.00	7.93	11.5	11 2	9 46	18.6	.00	6 53	.00	6 60	9 41
AMTH	1322	3108	1915.		2101	2338		3137		1462.	1637.	2473	2854	964		1661		2510	3793
N	8	8	6	0	6	6	0	7	0	7	8	7	7	4	0	4	0	6	10

VOLTOL ML  
 HIGH, LOW, VWA PH  
 RSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ /SQ METER

Table 17.

MONTHLY RAINFALL SUMMARY NOV 1978

A-10

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
110178	4.72	.00	4.71	.00	4.92	4.74	.00	4.51	.00	4.96	.00	4.87	4.74	4.87	.00	.00	.00	.00	4.74
110378	4.15	4.11	.00	.00	4.05	.00	.00	.00	.00	4.00	4.23	4.62	4.22	.00	.00	.00	.00	.00	4.10
110578	4.54	4.63	4.68	.00	4.55	4.84	.00	4.53	.00	4.59	.00	4.50	4.71	4.25	.00	4.44	.00	.00	4.66
110878	4.82	4.93	4.65	.00	4.87	4.56	.00	4.99	.00	4.87	5.04	4.92	4.83	5.09	.00	4.78	.00	4.65	4.76
111378	4.49	4.48	4.37	.00	4.26	3.74	.00	4.40	.00	4.43	4.47	4.24	4.35	4.23	.00	.00	.00	.00	4.31
111578	4.28	.00	.00	.00	.00	.00	.00	.00	.00	3.89	3.98	4.23	4.14	.00	.00	4.04	.00	.00	4.31
111678	.00	4.37	.00	.00	.00	.00	.00	4.20	.00	.00	.00	.00	4.38	.00	.00	.00	.00	.00	.00
111778	4.72	.00	3.99	.00	.00	.00	.00	.00	.00	4.82	4.84	.00	.00	.00	.00	.00	.00	.00	.00
VOLTOL	2363	926	927		1946	1742		863		1998	1106	3009	1594	2063		792		58	1571
HIGH	4.82	4.93	4.71	.00	4.92	4.84	.00	4.99	.00	4.96	5.04	4.92	4.93	5.09	.00	4.78	.00	4.65	4.76
LOW	4.15	4.11	3.99	.00	4.05	3.74	.00	4.20	.00	3.89	3.98	4.23	4.14	4.23	.00	4.04	.00	4.65	4.10
VVA	4.49	4.59	4.59	.00	4.60	4.57	.00	4.60	.00	4.36	4.41	4.66	4.56	4.70	.00	4.40	.00	4.65	4.61
RSDH	60.4	66.5	84.9	.00	82.5	134	.00	55.3	.00	102	88.3	63.4	57.7	79.3	.00	80.5	.00	.00	62.9
RSDPH	5.44	6.76	6.83	.00	8.34	11.2	.00	6.42	.00	9.39	9.60	6.53	6.13	9.47	.00	8.38	.00	.00	6.16
AMTH	1195	376	370		758	737		339		1355	672	1025	690	641		491		20	601
H	7	5	5	0	5	4	0	5	0	7	5	6	7	4	0	3	0	1	6

VOLTOL ML  
 HIGH, LOW, VVA PH  
 RSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ./SQ METER

Table 18.

MONTHLY RAINFALL SUMMARY DEC 1978

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
120478	4 71	00	.00	00	5 12	00	00	4 52	.00	4.51	4 56	4 83	4.59	4.88	.00	5 26	.00	00	00
120178	00	.00	.00	00	00	00	00	00	.00	.00	.00	00	.00	.00	.00	00	.00	4 58	00
120478	00	00	00	00	00	00	00	.00	.00	.00	.00	.00	.00	.00	.00	00	00	00	4 27
120678	4 72	4.49	4 85	00	4 69	00	00	00	00	4.82	4 83	4 36	4 63	4 40	.00	4 34	00	00	00
120578	00	00	00	00	00	00	00	00	00	.00	00	00	00	00	.00	00	00	4 76	00
121278	3 93	00	.00	00	4 12	4.25	00	00	.00	3 76	3 84	.00	00	.00	00	3 82	00	00	3 86
122278	00	4 74	00	00	3 91	00	00	4 52	.00	.00	00	00	00	00	00	3 71	00	2 93	4 55
122678	4 77	4 84	4 90	00	4 97	00	00	4 94	00	4.82	4 90	4 84	4 82	4 80	.00	4 93	00	5 04	00
122978	4 96	4 88	5.01	.00	5 15	5 11	00	4 95	.00	5 10	5 32	5 01	5 09	5 06	00	5 07	00	5 06	5 10
VOLTOL	5505	3250	5940		6425	4293.		4243.		5864	4792	5752.	6264.	5456		5688		8078	4388
HIGH	4 96	4 88	5 01	00	5 15	5 11	00	4.95	.00	5 10	5.32	5 01	5 09	5.06	00	5 26	00	5 06	5 10
LOW	3 93	4 49	4 85	.00	3 91	4 25	00	4.52	.00	3.76	3.84	4.36	4.59	4.40	.00	3.71	00	2 98	3 86
VWA	4 87	4 85	4.97	00	4 94	5 08	.00	4 93	.00	4 92	5.06	4 92	5 00	4.96	.00	4 97	00	4 78	5 00
PSDH	123	45 0	18 2	.00	118	107	00	52.4	.00	145	143	75 0	44 5	71 8	.00	119	.00	211	100
RSDPH	8 61	3 70	1 66	00	11 4	13 0	.00	5 19	00	11 2	11.7	5 86	4.77	5 83	.00	14 7	.00	20 3	11 7
AMTH	1150.	711.	997.		1159	553.		782.		1102.	653	1075	980.	937.		961.		2078	761
H	5	4	3	0	6	2	0	4	0	5	5	4	4	4	0	6	0	5	4

VOLTOL ML  
HIGH, LOW, VWA PH  
PSDH % RELATIVE STANDARD DEVIATION  
RSDPH % RELATIVE STANDARD DEVIATION  
AMTH MICRO EQ /SQ METER

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Table 19.

MONTHLY RAINFALL SUMMARY JAN 1979

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
010279	4 33	00	4 29	.00	00	00	00	4.42	00	4 26	00	4 30	4 56	4 21	00	4.19	.00	5.71	00
010379	5 00	5 05	5 06	.00	5 09	00	00	5 14	00	5 08	5 16	5 02	5 13	5 07	00	5 26	.00	5 33	00
010879	4 41	4 51	4.59	.00	4 30	4 40	00	4 34	.00	4 41	4 47	4 23	00	4.33	.00	4.21	.00	4 55	4 47
011579	4 85	5 01	4 55	.00	4 93	4 76	.00	5 07	00	4.84	4 91	4 81	4 88	4 84	.00	4.91	.00	00	00
011279	00	00	.00	00	00	00	00	00	00	00	00	00	00	00	.00	00	00	4.94	00
011579	00	00	00	00	00	00	00	00	.00	.00	00	00	.00	00	.00	.00	.00	4.90	4 84
012279	4 74	4 72	4.71	.00	4 56	4 99	4 92	4 77	.00	4 82	4 92	4 75	4 25	5 02	.00	4 90	00	4 91	00
012479	4 66	4 72	4 78	00	4 42	4 89	4 66	4.83	00	4.71	4 75	4 73	4 63	4 48	00	00	00	4 63	4 80
012979	00	00	00	00	00	00	.00	.00	00	00	00	00	00	00	.00	00	.00	4.00	00
013179	3 93	00	3 89	00	3 99	00	3 98	3 98	00	4 01	3 87	3 96	00	3 97	00	4 02	.00	6 17	4 01
VOLTOL	12985	11402	11160		10290	9380	1526	12328		12573	11652	12998	12440	10977		10134		11864	10332
HIGH	5 00	5 05	5 06	00	5 09	4 99	4 92	5 14	.00	5 08	5 16	5 02	5 13	5 07	.00	5 26	00	6.17	4 84
LOW	3 93	4 51	3 89	.00	3 99	4 40	3.98	3 98	00	4 01	3 87	3.96	4 25	3 97	.00	4.02	.00	4 00	4 01
VVA	4 74	4 91	4 57	00	4 77	4 77	4 50	4 89	00	4 76	4 82	4 71	4 75	4 73	.00	4 82	00	4 96	4 76
PSDH	98 0	50 8	104	00	87 1	67 2	110	103	00	89 7	136	90 0	74 0	89 8	00	88 0	00	136	96 8
RSDPH	7 97	4 70	8 23	00	8 95	5 42	10 7	9 04	00	8 19	9 77	8 40	7 10	9 30	00	11 0	.00	13 1	8 48
AMTH	3707	2203	4696		2708	2516	751	2494		3389	2730	3937	3421	3197		2420		2548	2780
N	7	5	7	0	6	4	3	7	0	7	6	7	5	7	0	6	0	9	4

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VOLTOL ML  
HIGH, LOW, VVA PH  
RSDH % RELATIVE STANDARD DEVIATION  
RSDPH % RELATIVE STANDARD DEVIATION  
AMTH MICRO EQ /SQ METER

Table 20.

MONTHLY RAINFALL SUMMARY FEB 1979

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
020679	00	00	4 17	00	4 06	4 34	4 27	4 22	00	4 04	4 02	4 17	4 16	4 24	.00	00	00	4 25	00
020779	00	00	00	00	00	00	00	00	00	00	00	00	.00	00	.00	00	00	4 55	00
020679	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 25
020979	4 12	00	4 54	00	00	4 23	4 45	4 32	00	4 38	4 49	4 30	4 20	4 23	.00	4 64	00	00	4 28
022079	4 63	00	4 04	00	4 73	4 51	00	00	00	4 63	4 79	5 42	4 18	4 26	00	00	00	00	00
021979	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	3 91	00
022079	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	4 43
022679	4 88	4 95	4 97	00	4 74	4 82	4 91	4 76	00	4 93	4 79	5 02	4 78	4 76	00	4 70	00	4 68	4 73
VJLTOL	1608	1400	2592		2756	1595	2464	2102		2144	2080	2080	1756	2200		2290		3053	1938
HIGH	4 88	4 95	4 97	00	4 74	4 82	4 91	4 76	00	4 93	4 79	5 42	4 78	4 76	00	4 70	00	4 68	4 73
LOW	4 12	4 95	4 04	00	4 06	4 23	4 27	4 22	00	4 04	4 02	4 17	4 16	4 23	00	4 64	00	3 91	4 25
VWA	4 52	4 95	4 61	00	4 66	4 48	4 71	4 45	00	4 55	4 53	4 59	4 37	4 53	00	4 69	00	4 35	4 42
RSDH	89 7	00	73 6	00	96 0	50 1	61 3	52 7	00	83 4	94 1	94 8	46 3	42 3	.00	9 75	00	95 0	41 6
RSDPH	8 53	00	9 43	00	8 64	5 75	7 26	6 48	00	8 40	8 04	12 6	6 94	5 92	00	91	00	8 93	4 97
AMTH	755	245	1005		939	822	747	1170		940	962	835	1182	1022		731		2114	1084
H	3	1	4	0	3	4	3	3	0	4	4	4	4	4	0	2	0	4	4

VJLTOL ML  
HIGH, LOW, VWA PH  
RSDH % RELATIVE STANDARD DEVIATION  
RSDPH % RELATIVE STANDARD DEVIATION  
AMTH MICRO EQ /SQ METER

A-21

Table 21.

MONTHLY RAINFALL SUMMARY MAR 1979

DATE	SITE																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
030579	4 18	4 52	4 35	00	00	4 71	4 34	4 70	00	4 86	4 43	6.46	4 16	4 33	.00	00	00	00	4 77
030779	4 60	4 77	4 57	00	4 47	4 60	4 60	4 67	00	4 62	4 62	4 63	4 58	4 62	.00	4 48	00	4 38	4 63
032379	00	00	3 67	.00	00	00	00	00	00	00	00	00	00	00	.00	00	00	.00	00
032779	4 60	5 27	7 01	00	4 75	6 34	4 43	5 07	00	00	00	4 93	5 06	5 44	.00	4 72	00	4 60	4 32
VQLTOL	1732	1309	2163		2190	1412.	3150	1881.		1470	1504	2105	1629	2372.		2910		4067	1486
HIGH	4 60	5 27	7 01	00	4 75	6 34	4 60	5 07	00	4 86	4 62	6 46	5 06	5 44	.00	4 72	00	4 60	4 77
LOW	4 18	4 52	3 67	00	4 47	4 60	4 34	4 67	00	4 62	4 43	4.63	4.16	4 33	.00	4 48	.00	4 38	4 32
VWA	4 59	4 79	4 56	00	4 50	4 62	4 53	4 69	.00	4 64	4 60	4 70	4 56	4.68	00	4 53	00	4 40	4 62
RSDH	61 0	70 9	135	00	44 1	86 0	28 7	42 5	00	38 1	30 5	97 5	89.6	87.0	.00	38.1	00	35 1	55 3
RSDPH	5 44	7 87	29 8	00	4 29	18 7	2 96	4 63	00	3 58	2 97	18 4	9 79	12 0	00	3 69	.00	3 46	5 04
AMTH	696	333	927		1076	527	1457	594		524	589	663.	699	767.		1336		2502	552
H	3	3	4	0	2	3	3	3	0	2	2	3	3	3	0	2	0	2	3

VQLTOL ML  
 HIGH, LOW, VWA PH  
 RSDH % RELATIVE STANDARD DEVIATION  
 RSDPH % RELATIVE STANDARD DEVIATION  
 AMTH MICRO EQ /SQ METER

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Table 22.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 07/77.

	N	VOLWTAV	UEG/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	7	4.53	0.00	4.36	4.62	4.12	0.24	0.22
COND	7	14.22	0.00	21.39	35.20	10.60	11.80	10.93
CMPT	7	0.00	12.47	1.78	3.71	0.17	1.47	1.36
H	7	29.76	0.00	43.65	75.86	23.99	23.81	22.05
HNV	7	27.67	0.00	40.07	72.44	22.39	21.89	20.27
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
X	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	7	0.00	3711.94	530.28	999.23	123.89	317.85	294.33
AMTHNV	7	0.00	3451.34	493.05	932.54	112.99	301.09	278.81
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIO  
 UEG/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEG/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 23.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 08/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	41	4.57	0.00	4.59	6.82	4.03	0.64	0.20
COND	41	18.08	0.00	22.37	100.00	0.00	19.92	6.22
CMPPT	41	0.00	63.79	1.56	7.30	0.03	1.62	0.51
H	41	26.61	0.00	25.54	93.32	0.15	28.62	8.94
HNV	41	21.88	0.00	21.55	81.28	0.13	25.83	8.07
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	41	0.00	16974.66	414.02	5409.25	0.05	953.73	297.89
AMTHNV	41	0.00	13955.01	340.37	4711.26	0.04	816.11	254.91
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 24.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 09/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	43	4.83	0.00	4.32	5.87	3.60	0.52	0.16
CUND	43	24.99	0.00	35.58	211.30	0.00	41.01	12.51
CMPPT	43	0.00	74.14	1.72	12.78	0.00	2.62	0.80
H	43	14.77	0.00	47.43	251.19	1.35	50.22	15.32
HNV	43	12.93	0.00	36.85	199.53	0.00	41.46	12.65
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	43	0.00	10946.69	254.57	1609.06	0.88	317.14	96.73
AMTHNV	43	0.00	9588.20	222.98	1434.08	0.00	294.39	89.79
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 CUND, CMPPT, AND RATIO  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 25.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN  
COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT  
ALL KSC SITES DURING 10/77.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	25	4.44	0.00	4.10	5.73	3.47	0.55	0.23
COND	25	30.60	0.00	56.89	208.00	11.20	54.17	22.54
CMPPT	25	0.00	27.85	1.11	4.67	0.07	1.14	0.48
H	25	36.72	0.00	78.89	338.84	1.86	85.58	35.60
HNV	25	33.81	0.00	75.47	338.84	0.79	84.73	35.25
NA	17	45.54	0.00	95.04	327.40	8.70	87.87	44.33
K	17	2.89	0.00	3.27	11.74	0.51	3.27	1.05
CA	17	7.96	0.00	11.01	28.94	0.99	7.41	3.74
MG	17	16.90	0.00	18.81	46.07	2.55	12.71	6.41
NH4	17	9.15	0.00	12.59	34.93	2.22	9.93	5.01
CL	17	81.12	0.00	83.11	279.18	7.90	77.55	39.12
F	17	2.44	0.00	3.31	12.63	0.00	3.75	1.89
NO3	17	9.77	0.00	16.57	48.87	2.74	14.95	7.54
SO4	17	31.07	0.00	39.93	122.84	15.41	27.35	13.80
PO4	17	1.36	0.00	2.27	7.90	0.00	2.94	1.48
XSSO4	17	22.74	0.00	31.59	101.08	11.69	23.68	11.95
SAN	17	125.76	0.00	145.18	394.27	46.01	100.16	50.53
SCA	17	102.95	0.00	188.35	480.17	74.26	116.64	58.84
A/C	17	0.77	0.00	0.77	1.03	0.56	0.11	0.06
CL/NA	17	0.85	0.00	0.87	1.54	0.65	0.22	0.11
NA/MG	17	5.65	0.00	5.05	10.61	0.50	1.99	1.00
SS	17	89.24	0.00	89.40	307.94	8.71	84.85	42.80
NC	17	43.21	0.00	51.32	126.66	16.13	29.95	15.11
COND/P	17	0.97	0.00	0.95	1.29	0.51	0.22	0.11
AMTH	25	0.00	10227.26	409.09	1197.70	2.12	323.39	134.53
AMTHNV	25	0.00	9414.38	376.58	1117.76	0.91	312.44	129.98
AMTNA	17	0.00	23969.96	1410.00	8722.26	112.03	2103.76	1061.29
AMTK	17	0.00	725.51	42.68	278.85	6.25	66.21	33.40
AMTCA	17	0.00	1997.45	117.50	438.69	16.64	100.74	50.82
AMTMG	17	0.00	4238.97	249.35	821.80	22.17	242.85	122.51
AMTNH4	17	0.00	2295.79	135.05	543.92	22.69	136.42	68.82
AMTCL	17	0.00	20350.67	1197.10	7437.53	73.41	1808.90	912.54
AMTF	17	0.00	611.42	35.97	130.26	0.00	41.66	21.02
AMTNO3	17	0.00	2451.66	144.22	423.19	8.56	104.06	52.50
AMTSU4	17	0.00	7794.34	458.49	1580.77	31.56	362.37	182.81
AMTPO4	17	0.00	342.06	20.12	134.65	0.00	36.00	18.16
AXSSO4	17	0.00	5705.78	335.63	815.45	18.12	211.16	106.53
AMTSS	17	0.00	22388.35	1316.96	8203.60	80.97	1997.31	1007.59
AMTNC	17	0.00	10839.34	637.61	2176.16	60.95	577.84	291.50

N=NUMBER OF SAMPLES  
VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
COND, CMPPT, AND RATIOUS  
UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
MEAN=UNWEIGHTED AVERAGE  
CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
THE MONTH

Table 26.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSL SITES DURING 11/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	34	5.17	0.00	4.63	7.05	3.80	0.57	0.20
COND	34	8.65	0.00	19.06	107.00	0.00	22.58	7.74
CMPT	34	0.00	102.42	3.01	11.44	0.02	3.45	1.18
H	34	6.77	0.00	23.19	158.49	0.09	33.75	11.58
HNV	34	5.10	0.00	17.39	97.72	0.04	21.99	7.54
NA	29	51.67	0.00	78.94	586.11	7.39	118.47	44.00
X	29	0.48	0.00	1.64	9.45	0.00	2.32	0.86
CA	29	1.77	0.00	6.88	43.91	0.00	9.38	3.48
MG	29	7.10	0.00	17.82	147.33	1.73	28.95	10.75
NH4	29	1.44	0.00	3.86	17.74	0.00	4.92	1.83
CL	29	35.64	0.00	95.06	724.74	9.87	156.46	58.11
F	29	0.06	0.00	0.78	6.84	0.00	1.82	0.68
NO3	29	3.01	0.00	9.19	31.76	0.64	9.34	3.47
SU4	29	7.64	0.00	21.59	87.86	2.08	23.93	8.89
PO4	29	0.09	0.00	0.26	7.58	0.00	1.41	0.52
XSSO4	28	4.49	0.00	13.14	49.34	0.56	13.39	5.06
SA	29	46.44	0.00	126.88	819.38	13.50	182.33	67.71
SCA	29	49.10	0.00	124.03	793.71	16.59	164.20	60.98
A/C	29	0.95	0.00	1.02	1.24	0.81	0.10	0.04
CL/NA	29	1.13	0.00	1.20	1.54	0.87	0.17	0.06
NA/MG	29	4.46	0.00	4.43	5.68	3.95	0.39	0.15
SS	29	38.49	0.00	96.26	757.25	9.55	153.46	57.00
NC	26	5.29	0.00	14.44	57.46	0.12	14.86	5.83
CUND/P	29	1.11	0.00	1.02	1.41	0.61	0.19	0.07
AMTH	34	0.00	6930.97	203.85	643.18	0.04	162.41	55.71
AMTHNV	34	0.00	5228.51	153.78	396.56	0.02	116.65	40.01
AMTNA	29	0.00	32316.67	1114.37	5380.65	64.25	1245.10	462.42
AMTK	29	0.00	489.23	16.87	79.78	0.00	20.81	7.73
AMTCA	29	0.00	1809.04	62.38	280.69	0.00	63.66	23.64
AMTMG	29	0.00	7241.37	249.70	1172.20	14.14	275.74	102.41
AMTNH4	29	0.00	1471.65	50.75	190.23	0.00	46.05	17.10
AMTCL	29	0.00	36365.47	1253.98	5957.25	61.23	1424.09	528.89
AMTF	29	0.00	61.30	2.11	19.54	0.00	4.97	1.85
AMTNO3	29	0.00	3069.63	105.85	332.08	31.76	73.56	27.32
AMTSO4	29	0.00	7801.69	269.02	793.76	48.35	177.42	65.89
AMTPO4	29	0.00	94.18	3.25	94.18	0.00	17.49	6.50
AXSSO4	28	0.00	4253.06	151.90	400.09	38.80	110.38	41.72
AMTSS	29	0.00	39274.86	1354.31	6570.85	67.54	1566.72	581.86
AMTNC	26	0.00	4196.08	161.39	513.75	8.34	147.66	57.92

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 27.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSL SITES DURING 12/77.

	N	VOLWTAV	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	66	4.64	0.00	4.51	6.54	0.00	0.90	0.22
COND	66	17.43	0.00	20.38	66.00	0.00	15.80	3.89
CMPPT	66	0.00	51.20	0.78	2.75	0.00	0.65	0.16
H	66	23.05	0.00	31.26	107.15	0.00	23.76	5.85
HNV	66	20.21	0.00	26.04	100.00	0.00	20.72	5.10
NA	51	50.26	0.00	56.22	321.32	4.35	72.32	20.25
K	51	1.09	0.00	1.35	6.64	0.00	1.67	0.47
CA	51	3.87	0.00	5.99	40.42	0.50	7.19	2.01
MG	51	11.69	0.00	13.28	78.15	2.30	16.96	4.75
NH4	51	3.29	0.00	3.92	16.08	0.00	3.85	1.08
CL	51	52.06	0.00	57.54	276.36	7.90	64.11	17.96
F	51	0.63	0.00	0.47	7.89	0.00	1.42	0.40
NO3	51	7.62	0.00	10.80	56.45	1.29	9.75	2.73
SO4	51	25.77	0.00	30.05	77.03	3.54	20.49	5.74
PO4	51	0.64	0.00	0.45	8.84	0.00	1.87	0.52
XSSO4	51	20.53	0.00	24.30	73.23	1.68	18.32	5.13
SAN	51	86.72	0.00	99.32	339.27	23.04	79.99	22.40
SCA	51	93.60	0.00	107.69	437.13	29.23	97.90	27.42
A/C	51	0.93	0.00	0.92	1.24	0.69	0.11	0.03
CL/NA	51	1.04	0.00	1.02	1.82	0.79	0.24	0.07
NA/MG	51	4.30	0.00	4.23	4.01	1.89	0.64	0.18
SS	51	56.21	0.00	61.74	304.82	5.62	70.67	19.79
NC	51	13.99	0.00	19.02	123.74	2.10	27.62	7.74
COND/P	51	0.97	0.00	0.96	1.11	0.30	0.12	0.03
AMTH	66	0.00	11803.72	178.84	714.80	0.00	182.17	44.85
AMTHNV	66	0.00	10345.77	156.75	667.09	0.00	168.17	41.40
AMTNA	51	0.00	24633.29	483.01	3136.30	15.90	669.20	167.41
AMTK	51	0.00	535.05	10.49	70.21	0.00	14.79	4.14
AMTCA	51	0.00	1696.27	37.18	178.39	5.31	35.64	9.98
AMTMG	51	0.00	5727.63	112.31	775.37	8.42	156.27	43.76
AMTNH4	51	0.00	1614.37	31.65	213.44	0.00	37.13	10.40
AMTCL	51	0.00	25517.33	500.34	3567.30	28.87	667.88	187.04
AMTF	51	0.00	307.61	6.03	159.21	0.00	23.73	6.65
AMTNO3	51	0.00	3735.61	73.25	230.66	15.81	47.89	13.41
AMTSO4	51	0.00	12631.52	247.68	663.12	18.46	189.31	53.02
AMTPO4	51	0.00	314.37	6.16	156.17	0.00	26.90	7.53
AXSSO4	51	0.00	10063.73	197.33	629.31	9.03	164.46	46.06
AMTSS	51	0.00	27550.73	540.21	3934.73	20.54	737.99	206.68
AMTNC	51	0.00	6855.88	134.43	1110.76	7.45	181.74	50.90

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 28.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSL SITES DURING 01/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	33	4.61	0.00	4.46	5.45	3.94	0.41	0.14
COND	33	16.29	0.00	28.66	94.30	7.00	21.74	7.57
CMPTT	33	0.00	34.33	1.04	3.81	0.03	1.10	0.38
H	33	24.74	0.00	34.38	114.81	3.55	34.33	11.95
HNV	33	22.31	0.00	30.79	107.15	0.69	33.97	11.83
NA	32	53.70	0.00	89.37	651.33	6.52	119.95	42.41
K	32	1.07	0.00	2.20	17.36	0.00	3.31	1.17
CA	32	9.87	0.00	19.27	77.34	1.00	16.89	5.97
MG	32	12.96	0.00	22.04	166.91	3.04	29.87	10.56
NH4	32	7.68	0.00	12.11	26.06	2.77	7.89	2.79
CL	32	52.81	0.00	88.34	657.06	13.82	119.68	42.31
F	32	0.10	0.00	0.10	1.58	0.00	0.31	0.11
NO3	32	10.11	0.00	15.35	45.33	3.06	13.48	4.77
SO4	32	31.39	0.00	50.44	130.96	9.78	37.93	13.41
PO4	32	1.42	0.00	0.46	110.85	0.00	2.62	0.93
XSSO4	32	26.00	0.00	41.41	110.76	8.04	33.66	11.90
SAN	32	95.82	0.00	154.70	761.13	34.55	148.41	52.47
SCA	32	110.02	0.00	179.57	913.53	39.08	175.34	61.99
A/C	32	0.87	0.00	0.86	1.14	0.72	0.08	0.03
CL/NA	32	0.98	0.00	0.99	5.12	0.78	0.27	0.10
NA/MG	32	4.14	0.00	4.05	25.39	2.14	0.67	0.24
SS	32	57.75	0.00	96.89	724.74	8.43	132.28	46.77
NC	32	27.54	0.00	48.11	185.24	4.52	39.55	13.98
COND/P	32	0.91	0.00	0.92	1.10	0.73	0.08	0.03
AMTH	33	0.00	8494.72	257.42	780.38	7.49	228.76	79.65
AMTHNV	33	0.00	7659.40	232.10	728.30	4.11	221.61	77.15
AMINA	33	0.00	18419.70	575.62	3867.27	62.16	692.82	244.95
AMTK	33	0.00	367.01	11.47	90.87	0.00	18.31	6.47
AMTCA	32	0.00	3385.55	105.80	459.24	12.87	82.56	29.19
AMTMG	32	0.00	4446.32	138.95	991.00	24.01	172.46	60.97
AMTNH4	32	0.00	2635.42	82.36	160.26	12.39	47.44	16.77
AMTCL	32	0.00	18113.59	566.05	3901.29	128.01	689.85	243.90
AMTF	32	0.00	33.47	1.05	16.65	0.00	3.40	1.20
AMTNO3	32	0.00	3468.40	108.39	305.88	15.30	87.56	30.96
AMTSO4	32	0.00	10766.81	336.46	904.37	69.85	231.13	81.72
AMTPO4	32	0.00	487.18	15.22	487.18	0.00	86.12	30.45
AXSSO4	32	0.00	8919.52	278.73	842.48	48.35	210.25	74.33
AMTSS	32	0.00	19808.59	619.02	4303.13	80.31	763.86	270.06
AMTNC	32	0.00	9445.41	295.17	1099.88	58.28	213.06	75.33

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPTT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 29.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN  
COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT  
ALL KSC SITES DURING 02/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	48	4.41	0.00	4.25	4.58	3.95	0.20	0.06
COND	48	22.90	0.00	43.81	192.00	12.00	42.08	12.15
CMPPT	48	0.00	68.89	1.44	5.91	0.01	1.61	0.46
H	48	39.12	0.00	55.85	112.20	26.30	25.82	7.45
HNV	48	33.93	0.00	44.79	89.13	0.00	21.01	6.07
NA	34	40.13	0.00	72.92	919.60	2.17	192.26	65.95
K	34	0.89	0.00	1.51	13.53	0.00	2.49	0.86
CA	34	5.39	0.00	6.77	39.92	0.00	8.18	2.81
MG	34	11.17	0.00	17.42	198.25	1.07	41.89	14.37
NH4	34	6.56	0.00	5.69	17.74	1.66	4.35	1.49
CL	34	44.46	0.00	64.70	641.55	2.26	142.02	48.71
F	34	0.82	0.00	0.67	3.68	0.00	1.15	0.40
NO3	34	9.05	0.00	13.87	68.88	0.00	13.06	4.49
SO4	34	36.11	0.00	45.14	208.20	14.99	36.22	12.42
PO4	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	34	31.97	0.00	38.77	142.19	14.32	22.94	7.87
SAN	34	90.43	0.00	124.38	920.20	26.80	188.33	64.60
SCA	34	103.18	0.00	152.53	1282.11	37.60	254.62	87.33
A/C	34	0.88	0.00	0.82	1.18	0.65	0.10	0.03
CL/NA	34	1.11	0.00	0.89	1.76	0.70	0.27	0.09
NA/MG	34	3.59	0.00	4.19	5.03	1.51	0.80	0.28
SS	34	44.41	0.00	68.37	707.63	2.49	155.79	53.44
NC	34	19.74	0.00	35.94	469.77	1.63	90.03	30.88
COND/P	34	0.93	0.00	0.94	1.12	0.80	0.07	0.02
AMTH	48	0.00	26948.46	561.43	2134.56	8.27	563.81	162.76
AMTHNV	48	0.00	23371.00	486.90	1735.03	0.00	476.87	137.66
AMTNA	34	0.00	26785.06	787.80	4417.02	5.98	1093.41	375.04
AMTK	34	0.00	594.24	17.48	120.27	0.00	20.68	7.09
AMTCA	34	0.00	3599.60	105.87	627.80	0.00	140.28	48.11
AMTMG	34	0.00	7457.86	219.35	1809.73	2.94	356.30	122.21
AMTNH4	34	0.00	4379.25	128.80	507.28	7.62	138.34	47.45
AMTCL	34	0.00	29678.00	872.88	6815.13	6.70	1370.83	470.19
AMTF	34	0.00	546.54	16.07	105.34	0.00	32.13	11.02
AMTNO3	34	0.00	6039.03	177.62	571.91	0.00	124.37	42.66
AMTSO4	34	0.00	24101.19	708.86	2098.95	103.22	582.40	199.76
AMTPO4	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	34	0.00	21340.58	627.66	1634.78	102.53	495.82	170.07
AMTSS	34	0.00	29641.71	871.82	5001.74	7.39	1215.37	416.87
AMTNC	34	0.00	13174.32	387.48	1460.38	17.19	415.90	142.65

N=NUMBER OF SAMPLES  
VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
COND,CMPPT,AND RATIOS  
UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
MEAN=UNWEIGHTED AVERAGE  
CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
THE MONTH

Table 30.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 03/78.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	50	4.51	0.00	4.29	4.89	3.09	0.32	0.09
COND	50	20.57	0.00	34.22	340.00	7.80	47.95	13.56
CMPPT	50	0.00	44.77	0.90	3.89	0.03	0.79	0.22
H	50	30.78	0.00	50.94	812.83	12.88	112.26	31.75
HNV	50	29.21	0.00	51.75	1000.00	9.77	138.70	39.23
NA	45	34.33	0.00	50.52	220.44	4.78	47.87	14.27
K	45	1.15	0.00	1.89	5.62	0.00	1.64	0.49
CA	45	10.17	0.00	17.61	56.89	1.00	16.00	4.77
MG	45	9.58	0.00	14.25	57.34	1.40	13.05	3.89
NH4	45	8.42	0.00	12.68	42.13	0.66	11.54	3.44
CL	45	39.22	0.00	57.68	321.20	5.36	60.84	18.14
F	45	0.78	0.00	0.89	4.74	0.00	1.12	0.33
NO3	45	17.48	0.00	37.58	807.15	6.13	118.70	35.33
SO4	45	30.63	0.00	41.73	139.49	2.70	28.30	8.44
PO4	45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	45	26.82	0.00	36.11	133.69	2.02	25.65	7.65
SAN	45	88.12	0.00	137.89	964.70	2.65	155.58	46.38
SCA	45	94.31	0.00	149.09	947.77	2.71	156.03	46.52
A/C	45	0.93	0.00	0.92	1.53	0.71	0.13	0.04
CL/NA	45	1.14	0.00	1.14	1.65	0.89	0.19	0.06
NA/MG	45	3.58	0.00	3.54	4.66	2.33	0.55	0.16
SS	45	41.00	0.00	60.36	284.81	5.91	59.59	17.77
NC	45	22.66	0.00	36.59	107.13	6.52	30.29	9.03
COND/P	45	0.97	0.00	1.00	1.46	0.82	0.11	0.03
AMTH	50	0.00	13783.55	275.67	1498.66	8.69	257.19	72.74
AMTHNV	50	0.00	13080.43	261.61	1843.75	6.59	288.83	81.69
AMTNA	45	0.00	14616.06	324.80	1633.90	4.72	312.04	93.03
AMTK	45	0.00	491.59	10.92	45.60	0.00	10.05	3.00
AMTCA	45	0.00	4329.07	96.20	303.67	24.17	56.48	17.44
AMTMG	45	0.00	4077.21	90.60	421.35	14.63	82.01	24.45
AMTNH4	45	0.00	3584.63	79.66	282.05	11.95	60.68	18.09
AMTCL	45	0.00	16697.81	371.06	1731.39	56.71	368.65	109.91
AMTF	45	0.00	3327.05	7.38	40.95	0.00	9.61	2.86
AMTNO3	45	0.00	7445.13	165.45	1488.17	39.01	227.99	67.97
AMTSO4	45	0.00	13039.72	289.77	1059.22	77.61	181.29	54.05
AMTPO4	45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	45	0.00	11414.55	253.66	881.06	58.16	161.31	48.09
AMTSS	45	0.00	17453.18	387.85	1909.72	56.48	382.15	113.94
AMTNC	45	0.00	9645.41	214.34	688.15	71.68	118.89	35.45

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 31.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 04/78.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	21	4.58	0.00	4.60	5.38	0.00	1.04	0.47
COND	21	34.47	0.00	42.56	91.50	21.20	18.53	8.41
CMPT	21	0.00	5.06	0.24	0.91	0.03	0.19	0.09
H	21	26.36	0.00	25.02	60.26	0.00	14.00	6.36
HNV	21	19.95	0.00	17.50	51.29	0.00	12.59	5.71
NA	17	68.86	0.00	86.17	247.84	20.44	68.48	34.55
K	17	7.51	0.00	9.78	58.21	2.04	15.01	7.57
CA	17	47.66	0.00	56.50	131.74	17.46	31.39	15.83
MG	17	17.94	0.00	21.72	54.37	6.17	13.40	6.76
NH4	17	47.08	0.00	52.80	82.05	24.39	18.75	9.46
CL	17	65.27	0.00	79.18	172.87	21.43	47.41	23.92
F	17	3.38	0.00	3.94	8.95	0.53	2.29	1.16
NO3	17	23.87	0.00	27.90	39.52	11.61	8.91	4.49
SU4	17	73.75	0.00	82.80	133.25	43.10	31.57	15.92
PO4	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	17	67.07	0.00	74.69	126.14	38.08	29.31	14.78
SAN	17	166.27	0.00	193.88	339.99	78.37	76.84	38.76
SCA	17	215.45	0.00	251.30	516.79	108.20	118.12	59.59
A/C	17	0.77	0.00	0.77	0.90	0.61	0.08	0.04
CL/NA	17	0.95	0.00	0.92	1.25	0.70	0.17	0.08
NA/MG	17	3.84	0.00	3.97	5.54	2.73	0.74	0.37
SS	17	71.64	0.00	86.96	190.67	23.64	52.51	26.49
NC	17	117.40	0.00	140.01	330.04	49.08	79.32	40.02
COND/P	17	1.01	0.00	1.00	1.25	0.80	0.11	0.06
AMTH	21	0.00	1333.38	63.49	321.55	0.00	70.94	32.20
AMTHNV	21	0.00	1008.90	48.04	249.60	0.00	58.82	26.70
AMTNA	17	0.00	3359.04	197.59	564.59	84.79	135.98	68.60
AMTK	17	0.00	366.13	21.54	145.52	4.93	32.71	16.50
AMTCA	17	0.00	2325.62	136.80	329.34	65.49	73.56	37.11
AMTMG	17	0.00	875.16	51.48	135.94	26.03	28.07	14.16
AMTNH4	17	0.00	2296.97	135.12	241.16	60.07	54.86	27.68
AMTCL	17	0.00	3184.17	187.30	413.83	94.12	94.69	47.77
AMTF	17	0.00	165.02	9.71	16.36	1.05	4.14	2.09
AMTNO3	17	0.00	1164.86	68.52	111.10	34.48	19.79	9.98
AMTSO4	17	0.00	3598.33	211.67	390.57	90.57	91.37	46.09
AMTPO4	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	17	0.00	3272.47	192.50	370.58	79.93	88.16	44.48
AMTSS	17	0.00	3495.26	205.60	456.46	103.81	104.96	52.95
AMTNC	17	0.00	5727.67	336.92	825.10	152.03	170.42	85.97

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RAINUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 32.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 05/78.

	N	VOLWTAV	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	62	4.43	0.00	4.46	7.00	4.01	0.52	0.13
COND	62	29.61	0.00	40.19	100.40	15.40	17.07	4.34
CMPPT	62	0.00	79.83	1.29	5.00	0.01	1.24	0.31
H	62	36.93	0.00	34.64	97.72	0.10	20.27	5.15
HNV	62	32.20	0.00	30.38	95.50	0.00	19.53	4.96
NA	52	37.02	0.00	44.88	122.61	9.57	26.42	7.33
K	52	2.59	0.00	3.28	9.70	0.51	2.17	0.60
CA	52	16.29	0.00	25.15	100.80	2.00	23.21	6.44
MG	52	9.68	0.00	12.29	29.86	2.30	7.18	1.99
NH4	52	34.28	0.00	40.10	130.84	7.21	24.33	6.77
CL	52	42.22	0.00	50.69	117.31	10.43	26.95	7.45
NO3	52	21.15	0.00	31.67	89.68	12.26	20.05	5.56
SO4	52	43.78	0.00	55.22	171.56	21.24	27.41	7.60
PO4	52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	52	39.58	0.00	50.15	160.79	19.26	26.57	7.37
SS	52	108.64	0.00	139.75	367.00	48.85	60.13	16.68
SCA	52	136.93	0.00	165.35	390.84	72.74	62.44	17.32
A/C	52	0.79	0.00	0.85	1.10	0.64	0.10	0.03
CL/NA	52	1.14	0.00	1.13	1.69	0.86	0.17	0.05
NA/MG	52	3.83	0.00	3.65	4.84	2.73	0.49	0.14
NC	52	54.21	0.00	54.49	129.40	11.51	30.36	8.42
COND/P	52	54.66	0.00	71.21	184.24	13.73	40.57	11.25
AMTH	62	1.08	0.00	1.09	1.46	0.82	0.15	0.04
AMTHNV	62	0.00	29483.17	475.53	1853.51	0.03	472.74	120.08
AMTNA	62	0.00	25708.04	414.65	1811.31	0.00	422.91	107.42
AMTK	52	0.00	29423.23	565.83	2386.62	39.47	535.32	148.47
AMTCA	52	0.00	2061.30	39.64	175.52	3.31	34.25	9.50
AMTGA	52	0.00	12948.00	249.00	1111.52	36.18	255.23	70.79
AMTMG	52	0.00	7691.01	147.90	613.15	10.88	136.01	37.72
AMTNH4	52	0.00	27249.00	524.02	1555.09	24.32	424.15	117.64
AMTCL	52	0.00	33557.13	645.33	2787.98	66.56	613.98	170.29
AMTF	52	0.00	1098.50	21.12	115.79	0.00	22.29	6.18
AMTNO3	52	0.00	16808.63	323.24	622.63	64.06	173.33	48.07
AMTSO4	52	0.00	34797.31	669.18	1849.40	58.09	453.87	125.88
AMTPO4	52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	52	0.00	31454.05	604.89	1784.11	50.06	423.74	117.52
AMTSS	52	0.00	35933.06	691.02	3083.51	51.00	668.88	185.51
AMTNC	52	0.00	43439.48	835.37	2880.01	119.76	628.91	174.43

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 33.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSL SITES DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	99	4.52	0.00	4.35	5.80	3.56	0.37	0.07
COND	99	18.23	0.00	31.08	510.00	6.20	54.02	10.86
CMPTI	99	0.00	209.73	2.12	9.19	0.04	2.13	0.43
H	99	50.19	0.00	44.81	275.42	1.59	46.54	9.76
HNH	99	26.06	0.00	39.85	239.88	0.50	45.93	9.23
NA	95	20.57	0.00	32.30	326.10	5.22	42.04	8.63
K	95	1.14	0.00	2.30	63.83	0.51	6.70	1.38
CA	95	6.06	0.00	9.95	66.36	1.00	11.71	2.40
MG	95	4.82	0.00	7.14	41.21	1.40	7.20	1.48
NH4	95	8.26	0.00	11.76	287.73	0.00	30.41	6.24
CL	95	21.68	0.00	34.93	339.81	5.08	46.20	9.48
F	95	0.24	0.00	0.59	10.00	0.00	1.61	0.33
NO3	95	11.40	0.00	17.20	102.43	1.45	19.80	4.06
SO4	95	27.16	0.00	37.65	210.91	6.04	39.31	8.07
PO4	95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	95	24.95	0.00	34.11	201.16	4.73	36.97	7.59
SAN	95	60.48	0.00	90.37	625.16	19.10	91.84	18.84
SCA	95	70.99	0.00	104.38	898.87	25.88	111.85	22.95
A/C	95	0.85	0.00	0.87	1.10	0.63	0.10	0.02
CL/NA	95	1.05	0.00	1.08	2.00	0.82	0.15	0.03
NA/MG	95	4.27	0.00	4.52	39.25	1.80	3.64	0.75
SS	95	23.69	0.00	38.07	374.81	5.60	50.66	10.39
NC	95	17.23	0.00	25.41	379.52	2.56	42.33	8.69
COND/P	95	1.04	0.00	1.05	2.34	0.80	0.15	0.03
AMTH	99	0.00	63321.29	639.61	3185.64	13.83	693.48	139.40
AMTHNHV	99	0.00	54663.10	552.15	2973.02	5.76	600.51	120.71
AMTNA	95	0.00	43097.17	453.65	2331.13	21.17	468.51	96.14
AMTK	95	0.00	2489.76	26.21	318.59	1.31	38.00	7.80
AMTCA	95	0.00	12743.76	134.14	795.90	8.19	135.87	27.88
AMTMG	95	0.00	10093.99	106.25	537.52	4.85	110.46	22.67
AMTNH4	95	0.00	17294.35	182.05	1369.54	0.00	274.93	56.42
AMTCL	95	0.00	45410.63	478.01	2606.74	17.34	510.17	104.69
AMTF	95	0.00	511.14	5.38	96.71	0.00	15.80	3.24
AMTNU3	95	0.00	23876.67	251.33	958.93	15.88	258.85	53.12
AMTSO4	95	0.00	56897.64	598.92	2272.96	14.60	615.75	126.35
AMTPO4	95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	95	0.00	52271.32	550.22	2018.60	11.58	583.72	119.76
AMTSS	95	0.00	49633.04	522.45	2875.23	19.13	561.67	115.25
AMTNC	95	0.00	36086.00	379.85	2125.74	27.52	445.47	91.41

N=NUMBER OF SAMPLES  
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 COND,CMPTI, AND RAIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTI IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 34.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 07/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	113	4.28	0.00	4.27	6.28	3.66	0.35	0.07
COND	113	27.79	0.00	30.41	106.00	8.00	17.27	30.25
CMPT	113	0.00	267.86	22.37	12.31	0.02	2.09	0.95
H	113	52.46	0.00	53.19	218.78	0.00	38.55	70.99
HNV	113	49.09	0.00	49.57	223.87	0.00	38.15	77.18
NA	109	21.48	0.00	29.51	235.66	3.48	32.13	66.11
K	109	0.99	0.00	1.45	15.83	0.00	1.99	6.00
CA	109	6.94	0.00	8.68	34.93	0.00	6.27	11.20
MG	109	5.02	0.00	5.76	40.23	0.00	6.88	11.33
NH4	109	4.01	0.00	5.18	54.33	0.00	7.75	14.49
CL	109	23.03	0.00	32.01	262.54	3.67	37.79	74.49
F	109	1.07	0.00	1.10	10.53	0.00	1.65	2.92
NO3	109	14.93	0.00	18.37	87.10	3.06	13.54	25.99
SO4	109	42.43	0.00	42.86	187.38	7.50	29.92	57.73
PO4	109	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	109	40.11	0.00	39.63	183.87	6.60	30.21	59.90
SAN	109	81.46	0.00	94.35	323.64	50.50	57.06	109.93
SCA	109	90.92	0.00	105.53	349.02	30.10	59.31	111.36
A/C	109	0.90	0.00	0.89	1.20	0.00	0.09	0.02
CL/NA	109	1.07	0.00	1.08	1.77	0.02	0.15	0.00
NA/MG	109	4.28	0.00	4.37	14.16	1.00	1.22	2.23
SS	109	24.97	0.00	34.66	289.58	4.04	40.76	77.11
NC	109	13.47	0.00	16.91	75.92	0.88	13.81	22.64
COND/P	109	1.05	0.00	1.04	1.37	0.09	0.06	0.11
AMTH	113	0.00	140516.34	1243.51	5529.06	0.35	1296.49	2433.93
AMTHNV	113	0.00	131485.56	1163.59	5280.21	0.37	1240.28	2333.55
AMTNA	109	0.00	57481.93	527.36	3900.97	0.87	522.17	100.03
AMTK	109	0.00	2640.45	24.22	229.05	0.00	27.54	5.27
AMTCA	109	0.00	18581.77	170.47	1134.44	0.00	167.85	32.16
AMTMG	109	0.00	13429.99	123.21	883.39	13.24	119.73	22.94
AMTNH4	109	0.00	10743.17	98.56	1680.87	0.00	191.40	36.67
AMTCL	109	0.00	61635.48	565.46	4638.46	61.19	602.90	115.49
AMTF	109	0.00	2850.52	26.15	299.33	0.00	45.65	8.74
AMTNO3	109	0.00	39963.75	366.64	1447.26	34.20	285.76	58.74
AMTSO4	109	0.00	113563.82	1041.87	4076.95	71.24	1061.08	203.27
AMTPU4	109	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	109	0.00	107339.19	984.76	4026.38	43.79	1045.15	200.21
AMTSS	109	0.00	66831.05	613.13	5040.05	67.50	653.19	125.13
AMTNC	109	0.00	36045.68	330.69	2348.68	14.07	333.77	63.94

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR THE MONTH



Table 35.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	51	4.42	0.00	4.39	5.09	3.87	0.28	0.08
COND	51	19.72	0.00	25.85	73.50	9.40	13.26	3.71
CMPT	51	0.00	119.62	2.35	11.20	0.02	2.61	0.73
H	51	38.38	0.00	40.80	134.90	8.13	27.81	7.79
HNV	51	35.22	0.00	36.99	128.83	6.61	27.33	7.65
NA	50	15.80	0.00	37.78	182.62	2.17	40.46	11.44
K	50	0.89	0.00	1.97	16.59	0.25	2.61	0.74
CA	50	5.03	0.00	8.42	32.43	0.00	6.09	1.72
MG	50	4.06	0.00	9.13	40.31	0.23	9.25	2.62
NH4	50	2.51	0.00	5.17	29.38	0.00	7.16	2.02
CL	50	18.39	0.00	42.88	205.01	0.26	44.68	12.64
F	50	0.27	0.00	0.28	1.58	0.00	0.45	0.13
NO3	50	10.04	0.00	14.59	47.10	0.23	10.10	2.86
SO4	50	29.70	0.00	35.47	109.10	1.24	21.11	5.97
PO4	50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	50	27.90	0.00	31.20	105.99	0.93	24.61	6.11
SAN	50	58.39	0.00	93.22	278.72	3.97	54.64	15.45
SCA	50	6.67	0.00	103.68	296.70	3.76	57.49	16.26
A/C	50	0.88	0.00	0.90	1.06	0.71	0.08	0.02
CL/NA	50	1.16	0.00	1.13	1.49	0.81	0.14	0.04
NA/MG	50	3.89	0.00	4.14	6.39	1.76	0.95	0.27
SS	50	19.27	0.00	45.92	226.13	2.49	48.70	13.77
NC	50	9.02	0.00	16.56	91.98	0.68	16.94	4.79
COND/P	50	1.02	0.00	1.01	1.63	0.62	0.14	0.04
AMTH	51	0.00	4590.04	90.08	4779.02	4.15	1010.47	282.99
AMTHNV	51	0.00	42129.54	826.07	4460.04	2.56	942.57	263.97
AMTNA	50	0.00	18691.68	377.83	1583.62	2.55	347.64	98.33
AMTK	50	0.00	1064.09	21.28	84.13	1.44	17.86	5.05
AMTCA	50	0.00	6018.18	120.36	391.32	7.30	100.37	28.39
AMTMG	50	0.00	4855.02	97.10	340.98	5.28	79.30	22.43
AMTNH4	50	0.00	2999.96	60.00	303.53	0.00	78.17	22.11
AMTCL	50	0.00	21988.87	439.78	1777.86	28.18	393.72	111.36
AMTF	50	0.00	320.90	6.42	117.92	0.00	18.48	5.23
AMTNO3	50	0.00	12005.54	240.11	823.39	8.52	210.99	59.68
AMTSO4	50	0.00	35514.06	710.28	3848.61	15.23	779.61	220.51
AMTPU4	50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	50	0.00	33371.05	667.42	3734.83	12.33	770.29	217.87
AMTSS	50	0.00	23043.78	460.88	1960.97	31.08	418.04	118.24
AMTNC	50	0.00	10785.15	215.70	860.76	8.39	182.29	51.56

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 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 36.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 09/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95XC.L.
PH	85	4.42	0.00	4.35	5.87	3.78	0.35	0.00
COND	85	24.96	0.00	33.49	158.00	6.60	24.52	5.32
CMPPT	85	0.00	111.58	1.31	5.80	0.00	1.26	0.27
H	85	38.25	0.00	44.49	165.96	0.35	34.47	7.48
HNV	85	34.86	0.00	39.81	154.88	0.34	31.10	6.75
NA	81	47.23	0.00	80.20	648.72	3.04	109.11	24.25
K	81	1.40	0.00	2.37	13.79	0.25	2.76	0.61
CA	81	6.00	0.00	10.20	128.74	0.50	17.22	3.83
MG	81	11.41	0.00	19.14	153.00	1.15	25.90	5.75
NH4	81	4.71	0.00	6.73	37.14	0.00	7.97	1.77
CL	81	53.81	0.00	90.51	748.99	0.92	125.32	27.85
F	81	1.19	0.00	1.04	25.26	0.00	3.51	0.78
NO3	81	14.11	0.00	18.03	79.36	4.03	16.67	3.70
SO4	81	31.08	0.00	39.85	179.68	7.91	32.18	7.15
PO4	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	81	25.70	0.00	30.80	106.35	4.36	26.36	5.86
SAN	81	100.31	0.00	149.84	1009.18	25.27	155.46	34.55
SCA	81	108.98	0.00	162.95	1027.78	26.81	158.66	35.26
A/C	81	0.92	0.00	0.92	1.15	0.39	0.11	0.02
CL/NA	81	1.14	0.00	1.13	2.13	0.75	0.21	0.05
NA/MG	81	4.14	0.00	4.19	5.71	2.47	0.51	0.11
SS	81	57.84	0.00	97.19	826.14	3.93	135.95	30.21
NC	81	12.90	0.00	21.45	153.50	1.28	24.25	5.39
COND/P	81	1.02	0.00	1.01	2.23	0.61	0.20	0.04
AMTH	85	0.00	42675.59	502.07	4115.42	3.79	685.90	148.79
AMTHNV	85	0.00	38898.02	457.62	4021.74	0.95	647.63	140.49
AMTNA	81	0.00	52816.16	649.58	6279.60	23.91	845.82	187.96
AMTK	81	0.00	1559.37	19.25	182.62	1.44	24.83	5.52
AMTCA	81	0.00	6679.98	82.47	448.55	0.87	90.23	20.05
AMTMG	81	0.00	12706.19	156.87	1608.34	4.19	208.57	46.35
AMTNH4	81	0.00	5242.43	64.72	573.39	0.00	98.18	21.82
AMICL	81	0.00	59950.24	740.13	7588.44	19.77	988.51	219.67
AMTF	81	0.00	1327.30	16.39	431.57	0.00	63.68	14.15
AMTNO3	81	0.00	15717.29	194.04	968.82	8.19	223.71	49.71
AMTSO4	81	0.00	34630.38	427.54	2646.77	12.98	484.83	107.74
AMTPO4	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	81	0.00	28632.97	353.49	2604.09	6.48	467.24	103.83
AMTSS	81	0.00	64432.35	795.46	8113.24	21.81	1065.32	236.74
AMTNC	81	0.00	14371.77	177.43	889.82	5.40	190.41	42.31

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 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 37.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSL SITES DURING 10/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	89	4.71	0.00	4.21	5.27	0.00	0.65	0.14
COND	89	19.55	0.00	64.19	1230.00	0.00	135.37	28.70
CMPPT	89	0.00	147.15	1.65	10.94	0.01	2.62	0.56
H	89	19.55	0.00	61.65	524.81	0.00	76.40	16.20
HNV	89	16.85	0.00	54.46	398.11	0.00	64.20	13.61
NA	76	64.71	0.00	184.57	1778.77	3.91	284.02	65.16
K	76	1.96	0.00	6.17	102.63	0.51	13.18	3.02
CA	76	6.11	0.00	16.54	256.99	1.00	31.03	7.12
MG	76	15.24	0.00	42.43	350.02	0.99	64.03	14.69
NH4	76	4.14	0.00	16.28	553.85	0.00	63.73	14.62
CL	76	70.43	0.00	200.38	2005.02	4.51	314.26	72.10
F	76	0.57	0.00	1.67	10.53	0.00	2.16	0.50
NO3	76	7.16	0.00	23.62	161.14	1.94	24.76	5.68
SO4	76	21.54	0.00	62.42	545.48	7.70	77.02	17.67
PO4	76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	76	14.35	0.00	42.02	339.17	4.22	50.91	11.68
SAN	76	99.70	0.00	288.08	2717.96	16.92	402.61	92.37
SCA	76	111.51	0.00	317.10	2590.15	22.31	414.41	95.07
A/C	76	0.89	0.00	0.91	1.10	0.65	0.08	0.02
CL/NA	76	1.09	0.00	1.09	1.40	0.90	0.10	0.02
NA/MG	76	4.25	0.00	4.35	5.72	2.83	0.46	0.11
SS	76	77.17	0.00	218.84	2211.54	4.98	343.58	78.82
NC	76	15.00	0.00	47.14	653.38	2.54	88.28	20.25
COND/P	76	1.00	0.00	0.95	1.52	0.72	0.12	0.03
AMTH	89	0.00	28763.67	323.19	2055.05	0.00	375.07	79.51
AMTHNV	89	0.00	24784.22	278.47	1831.57	0.00	329.58	69.87
AMTNA	76	0.00	94893.70	1248.60	9740.61	19.10	1444.91	331.48
AMTK	76	0.00	2870.29	37.77	362.41	1.56	51.12	11.73
AMTCA	76	0.00	8960.76	117.90	922.53	7.37	147.74	33.89
AMTMG	76	0.00	22351.93	294.10	2214.08	4.76	336.53	77.21
AMTNH4	76	0.00	6072.38	79.90	1955.77	0.00	229.69	52.69
AMTCL	76	0.00	103273.73	1358.86	11684.32	23.15	1654.28	379.52
AMTF	76	0.00	840.01	11.05	297.03	0.00	35.88	8.23
AMTNO3	76	0.00	10501.26	138.17	510.36	12.58	113.82	26.11
AMTSU4	76	0.00	31581.44	415.55	1505.68	26.18	336.22	77.13
AMTPO4	76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	76	0.00	21035.03	276.78	1309.82	18.25	255.25	58.56
AMTSS	76	0.00	113152.06	1488.84	12584.86	24.68	1800.83	413.14
AMTNC	76	0.00	21997.01	289.43	2307.23	7.19	329.61	75.62

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIO  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 38.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	69	4.55	0.00	4.39	5.09	3.74	0.32	0.08
COND	69	33.98	0.00	39.85	140.50	6.20	28.74	6.92
CMPPT	69	0.00	32.65	0.47	2.34	0.04	0.46	0.11
H	69	28.32	0.00	40.30	181.47	8.13	32.49	7.82
HNV	69	26.35	0.00	35.86	134.90	6.76	27.81	6.70
NA	63	146.74	0.00	156.42	864.82	5.22	173.09	43.61
K	63	3.77	0.00	4.28	21.70	0.25	3.99	1.00
CA	63	10.73	0.00	14.16	57.39	2.00	11.95	3.01
MG	63	33.70	0.00	36.39	204.01	1.40	40.83	10.29
NH4	63	0.91	0.00	1.87	21.07	0.00	4.47	1.13
CL	63	153.57	0.00	162.56	897.32	7.05	176.56	44.49
F	63	2.31	0.00	2.25	20.00	0.00	4.04	1.02
NO3	63	11.01	0.00	18.56	195.17	4.19	25.50	6.43
SO4	63	37.97	0.00	45.01	196.54	5.83	40.88	10.30
PO4	63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	63	22.24	0.00	28.32	126.32	4.73	26.02	6.56
SAN	63	204.87	0.00	228.38	1140.14	19.54	218.62	55.99
SCA	63	223.64	0.00	22.11	1265.93	2.10	247.47	62.36
A/C	63	0.92	0.00	0.91	1.09	0.77	0.08	0.02
CL/NA	63	1.05	0.00	1.04	1.45	0.82	0.13	0.03
NA/MG	63	4.35	0.00	4.30	4.77	0.45	0.54	0.14
SS	63	168.72	0.00	178.93	989.75	6.74	194.82	49.09
NC	63	27.12	0.00	34.18	270.64	1.49	46.25	11.65
COND/P	63	0.96	0.00	0.94	1.19	0.69	0.10	0.03
AMTH	69	0.00	9249.98	134.06	609.38	14.89	112.66	27.12
AMTHNV	69	0.00	8603.95	124.69	537.03	14.22	113.40	27.30
AMTNA	63	0.00	46760.57	742.23	4422.73	12.47	964.78	243.10
AMTK	63	0.00	1201.20	19.07	95.74	0.61	20.80	5.24
AMTCA	63	0.00	3419.50	54.28	258.23	8.95	53.42	13.46
AMTMG	63	0.00	10737.82	170.44	989.05	3.24	216.99	54.68
AMTNH4	63	0.00	290.13	4.61	34.30	0.00	8.48	2.14
AMTCL	63	0.00	48937.72	776.79	4289.48	16.26	1002.96	252.72
AMTF	63	0.00	735.75	11.68	230.49	0.00	35.86	9.03
AMTNO3	63	0.00	3509.48	55.71	243.97	11.22	39.95	10.07
AMTSO4	63	0.00	12100.96	192.08	835.03	21.96	195.17	49.18
AMTPU4	63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	63	0.00	7087.31	112.50	525.33	10.50	109.12	27.50
AMTSS	63	0.00	53767.14	853.45	4731.30	16.12	1100.43	277.28
AMTNC	63	0.00	8642.10	137.18	1011.42	10.52	200.18	50.44

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 39.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 12/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	56	4.96	0.00	4.44	5.32	3.71	0.41	0.11
COND	56	30.58	0.00	48.59	565.00	8.00	87.54	23.40
CMPPT	56	0.00	106.81	1.91	7.81	0.02	2.49	0.67
H	56	11.07	0.00	36.00	194.98	4.79	46.17	12.34
HNV	56	9.42	0.00	30.93	162.18	3.31	39.17	10.47
NA	56	174.02	0.00	208.93	3693.63	6.09	540.42	149.89
K	56	4.19	0.00	5.07	68.16	0.51	10.13	2.81
CA	56	10.45	0.00	17.64	194.11	2.50	28.71	7.96
MG	56	37.83	0.00	47.50	821.78	1.56	120.72	33.48
NH4	56	2.68	0.00	10.28	32.16	0.00	9.33	2.59
CL	56	188.16	0.00	222.09	3908.52	7.90	571.83	158.60
F	56	0.87	0.00	2.05	18.42	0.00	3.20	0.89
NO3	56	5.12	0.00	16.81	162.91	3.06	26.29	7.29
SO4	56	29.44	0.00	55.58	579.63	11.24	89.86	24.92
PO4	56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	56	10.14	0.00	32.84	177.44	2.73	39.24	10.88
SAN	56	224.16	0.00	297.12	4657.07	24.50	682.10	189.18
SCA	56	245.14	0.00	321.05	4941.63	29.29	726.90	201.61
A/C	56	0.91	0.00	0.93	1.06	0.79	0.06	0.02
CL/NA	56	1.05	0.00	1.06	1.48	0.82	0.13	0.04
NA/MG	56	4.73	0.00	4.40	5.07	2.58	0.61	0.17
SS	56	206.95	0.00	243.83	4311.10	7.87	631.04	175.02
NC	56	27.22	0.00	45.58	485.99	6.43	73.85	20.48
COND/P	56	0.95	0.00	0.93	1.10	0.57	0.08	0.02
AMTH	56	0.00	11823.42	211.13	652.75	8.81	201.01	53.72
AMTHNV	56	0.00	10060.35	179.65	541.04	6.84	167.25	44.70
AMTNA	56	0.00	190993.70	3672.96	39767.89	26.74	7167.19	1987.82
AMTK	56	0.00	4465.09	85.87	804.19	2.44	154.65	42.89
AMTCA	56	0.00	11148.19	214.39	2077.09	11.73	352.23	97.69
AMTMG	56	0.00	40364.88	776.25	8143.74	10.12	1481.24	410.82
AMTNH4	56	0.00	2858.05	54.96	153.24	0.00	33.84	9.39
AMTCL	56	0.00	200748.04	3860.54	43669.46	27.92	7689.86	2132.78
AMTF	56	0.00	930.03	17.89	236.84	0.00	42.93	11.91
AMTNO3	56	0.00	5461.39	105.03	302.44	13.98	86.52	24.00
AMTSO4	56	0.00	31409.29	604.02	4918.73	21.57	906.91	251.53
AMTPO4	56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	56	0.00	10815.30	207.99	701.15	15.24	165.62	45.94
AMTSS	56	0.00	220788.20	4245.93	48167.42	30.79	8486.71	2353.79
AMTNC	56	0.00	29041.71	558.49	2635.68	33.62	824.21	228.59

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 40.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95XC.L
PH	81	4.76	0.00	4.45	5.26	3.87	0.37	0.08
COND	81	13.86	0.00	37.55	338.00	6.00	53.68	11.93
CMPPT	81	0.00	234.66	2.90	13.83	0.09	4.16	0.92
H	81	17.45	0.00	35.76	134.90	5.50	33.31	7.40
HNV	81	16.07	0.00	32.12	131.83	3.09	31.09	6.91
NA	81	50.18	0.00	151.68	2216.18	12.61	346.68	77.04
K	81	2.07	0.00	3.70	38.29	0.51	5.87	1.30
CA	81	9.09	0.00	21.65	115.77	1.50	26.10	5.80
MG	81	11.69	0.00	34.38	482.04	3.13	76.56	17.01
NH4	81	2.71	0.00	8.43	52.11	0.55	11.16	2.48
CL	81	54.55	0.00	164.83	2497.67	14.66	382.07	84.90
F	81	0.61	0.00	1.94	16.31	0.00	3.45	0.77
NO3	81	5.18	0.00	14.98	70.33	2.26	17.11	3.60
SO4	81	19.69	0.00	51.44	343.95	8.12	59.96	13.32
PO4	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	81	14.13	0.00	34.51	171.44	5.39	38.21	8.49
SAN	81	80.35	0.00	233.51	2884.79	31.43	436.24	96.94
SCA	81	93.19	0.00	255.59	2926.83	37.06	455.63	101.25
A/C	81	0.86	0.00	0.91	1.06	0.64	0.07	0.02
CL/NA	81	1.09	0.00	1.09	1.48	0.80	0.11	0.03
NA/MG	81	4.29	0.00	4.41	22.60	1.52	2.12	0.47
SS	81	59.71	0.00	181.53	2754.93	16.17	421.48	93.66
NC	80	16.08	0.00	38.87	216.49	2.87	44.01	9.84
COND/P	81	0.85	0.00	0.89	1.05	0.69	0.07	0.02
AMTH	81	0.00	4094.10	505.54	3258.75	36.83	603.49	134.11
AMTHNV	81	0.00	37704.68	465.49	3184.58	26.07	576.74	128.16
AMTNA	81	0.00	117747.12	1453.67	19435.76	60.49	2539.15	564.26
AMTK	81	0.00	4849.74	59.87	573.63	5.42	109.42	24.31
AMTCA	81	0.00	21332.18	263.36	6428.91	13.64	746.95	165.99
AMTMG	81	0.00	27427.18	338.61	4921.18	18.56	623.12	138.47
AMTNH4	81	0.00	6356.39	78.47	282.66	2.15	67.12	14.92
AMTCL	81	0.00	128007.36	1580.34	22241.34	54.86	2874.04	638.67
AMTF	81	0.00	1435.79	17.73	187.49	0.00	35.85	7.97
AMTNO3	81	0.00	12147.69	149.97	668.39	15.16	132.43	29.43
AMTSO4	81	0.00	46205.73	570.44	3358.79	95.15	636.08	141.35
AMTPU4	81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	81	0.00	33145.53	409.20	2593.60	31.15	442.46	98.32
AMTSS	81	0.00	140103.76	1729.68	24532.20	60.51	3160.87	702.42
AMTNC	80	0.00	37649.17	470.61	6931.12	46.15	859.29	192.14

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 41.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 02/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	47	4.56	0.00	4.39	5.42	4.02	0.33	0.10
COND	47	22.38	0.00	43.07	180.00	8.40	40.53	11.82
CMPTI	47	0.00	45.17	0.96	3.91	0.06	0.90	0.26
H	47	27.54	0.00	40.30	95.50	3.80	25.68	7.49
HNH	47	24.37	0.00	35.14	87.10	3.31	22.74	6.63
NA	46	62.57	0.00	148.42	987.43	19.57	220.33	64.97
K	46	2.10	0.00	3.97	20.42	0.77	4.66	1.38
CA	46	12.80	0.00	18.24	66.37	6.99	13.46	3.97
MG	46	15.13	0.00	33.60	230.33	5.02	48.88	14.41
NH4	46	11.65	0.00	14.40	29.94	5.54	5.74	1.69
CL	46	70.62	0.00	162.21	1134.49	23.41	245.79	72.48
F	46	2.10	0.00	3.35	10.00	0.53	2.89	0.85
NO3	46	12.95	0.00	16.65	41.13	6.77	7.29	2.15
SO4	46	37.80	0.00	63.77	215.90	11.24	42.51	12.54
PO4	46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSS04	46	50.66	0.00	47.19	117.94	8.90	26.70	7.87
SAN	46	123.74	0.00	246.52	1306.58	42.80	286.85	84.59
SCA	46	151.79	0.00	259.13	1330.07	52.45	289.17	85.27
A/C	46	0.94	0.00	0.95	1.06	0.78	0.08	0.02
CL/NA	46	1.13	0.00	1.09	1.32	0.85	0.11	0.03
NA/MG	46	4.13	0.00	4.42	5.89	3.29	0.41	0.12
SS	46	76.68	0.00	177.81	1251.34	25.28	271.52	80.07
VC	46	27.57	0.00	40.82	113.80	12.35	25.62	7.55
COND/P	46	0.84	0.00	0.91	1.15	0.21	0.15	0.04
AMTH	47	0.00	12439.70	264.67	710.82	6.77	159.58	46.55
AMTHH	47	0.00	11608.09	234.21	514.94	5.90	140.73	41.06
AMTNA	46	0.00	28229.01	613.67	2685.57	169.35	512.11	151.01
AMTK	46	0.00	947.95	20.61	61.19	7.28	13.15	3.88
AMTCA	46	0.00	5772.73	125.49	345.95	23.58	90.09	26.57
AMTMG	46	0.00	6627.27	148.42	647.62	39.52	124.73	36.78
AMTNH4	46	0.00	5254.17	114.22	328.38	10.92	71.91	21.21
AMTCL	46	0.00	31859.63	692.60	3145.62	185.39	603.88	178.08
AMTF	46	0.00	946.43	20.57	72.10	1.88	15.18	4.48
AMTNO3	46	0.00	5841.94	127.00	338.73	24.13	86.47	25.50
AMTSO4	46	0.00	17050.75	370.67	894.61	104.78	173.77	51.24
AMTPO4	46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	46	0.00	13630.15	300.66	741.88	50.61	165.44	48.79
AMTSS	46	0.00	34593.01	752.02	3469.76	204.48	659.15	194.37
AMTINC	46	0.00	12438.13	270.39	702.90	17.92	156.25	46.08

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 CMPTI IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 42

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT ALL KSC SITES DURING 03/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C. L.
PH	38	4.60	0.00	4.51	6.46	3.67	0.51	0.16
COND	38	21.41	0.00	52.97	180.00	10.00	47.90	15.54
CMPPT	38	0.00	42.50	1.12	3.41	0.02	1.20	0.39
H	38	25.27	0.00	30.59	213.80	0.35	34.31	11.13
HNV	38	21.65	0.00	27.25	186.21	0.07	30.17	9.79
NA	31	52.59	0.00	133.58	978.30	14.78	185.73	66.72
K	31	1.86	0.00	4.88	26.04	0.77	5.76	2.07
CA	31	11.22	0.00	40.77	164.67	0.50	49.68	17.85
MG	31	11.92	0.00	33.50	257.23	1.73	48.36	17.37
NH4	31	9.37	0.00	13.79	90.37	0.00	16.30	5.86
CL	31	54.87	0.00	135.78	1079.78	14.66	197.77	71.04
F	31	4.16	0.00	3.82	7.37	1.58	1.61	0.58
NO3	31	15.55	0.00	27.95	89.04	9.03	22.63	8.13
SO4	31	32.68	0.00	67.22	187.38	17.49	50.47	18.13
PO4	31	0.90	0.00	2.12	37.28	0.00	7.96	2.86
XSSO4	31	27.09	0.00	53.30	136.84	15.52	38.07	13.68
SAN	31	108.29	0.00	237.23	1302.96	46.03	247.71	88.98
SCA	31	112.01	0.00	249.51	1429.29	51.20	271.29	97.45
A/C	31	0.97	0.00	0.95	1.36	0.80	0.11	0.04
CL/NA	31	1.04	0.00	1.02	1.24	0.67	0.12	0.04
NA/MG	31	4.41	0.00	3.99	17.37	3.05	2.46	0.88
SS	31	60.02	0.00	149.25	1190.99	16.17	218.14	78.36
NC	31	26.94	0.00	77.27	208.89	2.97	73.70	26.47
COND/P	31	0.96	0.00	0.97	1.13	0.52	0.10	0.04
AMTH	38	0.00	10741.36	282.67	1107.22	0.30	329.22	106.81
AMTHNV	38	0.00	9200.39	242.12	964.35	0.06	281.72	91.40
AMTNA	31	0.00	22190.98	715.84	1921.95	145.79	540.99	194.33
AMTK	31	0.00	785.73	255.35	77.81	3.54	16.54	5.94
AMTCA	31	0.00	4733.22	152.68	296.65	10.45	79.20	28.45
AMTMG	31	0.00	5028.22	162.20	498.38	20.78	120.81	43.40
AMTNH4	31	0.00	3955.83	127.61	585.97	0.00	128.79	46.26
AMTCL	31	0.00	23153.13	746.88	2389.69	157.17	602.40	216.39
AMTF	31	0.00	1753.50	56.56	183.55	2.30	59.68	21.44
AMTNO3	31	0.00	6560.76	211.64	526.85	27.01	156.86	56.35
AMTSO4	31	0.00	13792.25	444.91	1037.29	98.46	262.34	94.24
AMTPO4	31	0.00	378.44	12.21	241.71	0.00	46.55	16.72
AXSSO4	31	0.00	11432.15	368.78	868.46	78.23	227.87	81.85
AMTSS	31	0.00	25326.00	816.97	2483.16	173.36	650.09	233.52
AMTNC	31	0.00	11367.49	366.71	1002.69	62.24	236.48	84.95

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
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 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-43



Table 43.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 07/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	7	4.53	0.00	4.36	4.62	4.12	0.24	0.22
COND	7	14.22	0.00	21.39	35.20	10.60	11.80	10.93
CMPP1	7	0.00	12.47	1.78	3.71	0.17	1.47	1.36
H	7	29.76	0.00	43.65	75.86	23.99	23.81	22.05
HNV	7	27.67	0.00	40.07	72.44	22.39	21.89	20.27
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	7	0.00	3711.94	530.28	999.23	123.89	317.85	294.33
AMTHNV	7	0.00	3451.34	493.05	932.54	112.99	301.09	278.81
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPD4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPP1, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPP1 IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-44

Table 44.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 08/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	33	4.48	0.00	4.53	6.80	4.03	0.59	0.21
COND	33	20.51	0.00	24.61	100.00	0.00	21.43	7.46
CMPPT	33	0.00	48.00	1.45	7.30	0.03	1.64	0.57
H	33	33.08	0.00	29.84	93.32	0.16	30.23	10.52
HNV	33	27.80	0.00	25.61	81.28	0.13	27.18	9.46
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	33	0.00	1588	481.24	5409.25	0.05	1050.35	365.69
AMTHNV	33	0.00	1334	404.37	4711.26	0.04	898.73	312.90
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-45

Table 45.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 09/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	22	4.53	0.00	4.18	5.65	3.60	0.45	0.20
COND	22	28.10	0.00	37.20	123.90	0.00	38.60	17.12
CMPPT	22	0.00	11.96	0.54	3.45	0.00	0.92	0.41
H	22	29.22	0.00	66.56	251.19	2.24	57.63	25.56
HNV	22	24.81	0.00	47.89	199.53	0.00	47.86	21.23
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	22	0.00	349.91	158.77	657.98	0.88	192.43	85.33
AMTHNV	22	0.00	296.43	134.79	611.97	0.00	173.10	76.76
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-46

Table 46.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 10/77.

	N	VOLWTAV	UEG/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	21	4.39	0.00	4.09	5.73	3.47	0.56	0.25
COND	21	34.34	0.00	59.85	208.00	11.20	56.96	25.86
CMPPT	21	0.00	20.09	0.96	2.75	0.07	0.92	0.42
H	21	40.65	0.00	81.65	338.84	1.86	90.28	40.98
HN	21	37.79	0.00	77.99	338.84	0.79	89.18	40.48
NA	15	113.16	0.00	103.57	327.40	11.31	89.95	49.93
X	15	3.30	0.00	3.54	11.74	0.51	3.39	1.88
CA	15	9.23	0.00	11.98	28.94	2.99	7.36	4.08
MG	15	17.83	0.00	19.30	46.07	2.55	13.49	7.49
NH4	15	8.79	0.00	13.08	34.93	2.22	10.46	5.81
CL	15	96.81	0.00	90.84	279.18	9.31	79.28	44.01
F	15	2.89	0.00	3.61	12.63	0.00	3.91	2.17
NO3	15	10.99	0.00	17.52	48.87	3.23	15.52	8.61
SO4	15	34.22	0.00	41.95	122.84	15.41	28.49	15.82
PO4	15	1.81	0.00	2.57	7.90	0.00	3.01	1.67
XSSO4	15	24.28	0.00	32.84	101.08	11.69	24.84	13.79
SAN	15	146.72	0.00	156.49	394.27	46.01	101.48	56.33
SCA	15	185.99	0.00	200.72	480.17	74.26	118.96	66.04
A/C	15	0.79	0.00	0.78	1.03	0.62	0.11	0.06
CL/NA	15	0.86	0.00	0.88	1.64	0.65	0.24	0.13
NA/MG	15	6.35	0.00	5.37	10.61	2.36	1.74	0.97
SS	15	106.47	0.00	97.63	307.94	10.27	86.95	48.27
NC	15	45.85	0.00	53.84	126.66	16.13	31.03	17.23
COND/P	15	0.91	0.00	0.93	1.29	0.51	0.22	0.12
AMTH	21	0.00	8163.08	388.72	1197.70	2.12	324.67	147.36
AMTHNV	21	0.00	7588.11	361.34	1117.76	0.91	307.88	139.75
AMTNA	15	0.00	21335.55	1422.37	8722.26	112.03	2203.93	1233.46
AMTK	15	0.00	622.12	41.47	278.85	6.25	68.73	38.16
AMTCA	15	0.00	1740.85	116.06	438.69	16.64	103.10	57.23
AMTMG	15	0.00	3361.85	224.12	821.80	22.17	239.88	133.17
AMTNH4	15	0.00	1656.59	110.44	351.09	22.69	92.55	55.27
AMICL	15	0.00	18251.10	1216.74	7437.53	73.41	1900.91	1055.25
AMTF	15	0.00	545.80	36.39	130.26	0.00	44.09	24.47
AMTNO3	15	0.00	2071.52	138.10	423.19	8.56	107.18	59.50
AMTSO4	15	0.00	6450.41	430.03	1580.77	31.56	371.29	206.11
AMTPO4	15	0.00	342.06	22.80	134.65	0.00	37.62	20.89
AXSSO4	15	0.00	4577.89	305.19	815.45	18.12	203.46	112.95
AMTSS	15	0.00	20072.51	1338.17	8203.60	80.97	2094.02	1165.22
AMTNC	15	0.00	8644.44	576.30	2176.16	60.95	530.80	294.66

N=NUMBER OF SAMPLES  
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 UEG/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEG/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 47.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 11/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	34	5.17	0.00	4.63	7.05	3.80	0.57	0.20
COND	34	8.65	0.00	19.06	107.00	0.00	22.58	7.74
CMPPT	34	0.00	102.42	3.01	11.44	0.02	3.45	1.18
H	34	6.77	0.00	23.19	158.49	0.09	33.75	11.58
HNV	34	5.10	0.00	17.39	97.72	0.04	21.99	7.54
NA	24	51.67	0.00	78.94	586.11	7.39	118.47	44.00
K	24	0.48	0.00	1.64	9.45	0.00	2.32	0.86
CA	24	1.77	0.00	6.88	43.91	0.00	9.38	3.48
MG	24	7.10	0.00	17.82	147.33	1.73	28.95	10.75
NH4	24	1.44	0.00	3.86	17.74	0.00	4.42	1.83
CL	24	35.64	0.00	95.06	724.74	9.87	156.46	58.11
F	24	0.06	0.00	0.78	6.84	0.00	1.82	0.68
NO3	24	3.01	0.00	9.19	31.78	0.64	9.34	3.47
SO4	24	7.64	0.00	21.59	87.86	2.08	23.43	8.89
PO4	24	0.04	0.00	0.26	7.58	0.00	1.41	0.52
XSSO4	28	4.44	0.00	13.14	49.34	0.56	13.39	5.06
SAN	24	46.44	0.00	126.88	819.38	13.50	182.33	67.71
SCA	24	49.10	0.00	124.03	793.71	16.59	164.20	60.98
A/C	24	0.95	0.00	1.02	1.24	0.81	0.10	0.04
CL/NA	24	1.13	0.00	1.20	1.54	0.87	0.17	0.06
NA/MG	24	4.46	0.00	4.43	5.68	3.95	0.39	0.15
SS	24	58.49	0.00	96.26	757.25	9.55	153.48	57.00
NC	26	5.29	0.00	14.44	57.46	0.12	14.86	5.83
COND/P	24	1.11	0.00	1.02	1.41	0.61	0.19	0.07
AMTH	34	0.00	6930.97	203.85	643.18	0.04	162.41	55.71
AMTHNV	34	0.00	5228.51	153.78	396.58	0.02	116.65	40.01
AMTNA	24	0.00	32316.67	1114.37	5380.65	64.25	1245.10	462.42
AMTK	24	0.00	489.23	16.87	79.78	0.00	20.81	7.73
AMTCA	24	0.00	1804.04	62.38	280.69	0.00	63.66	23.64
AMTMG	24	0.00	7241.37	249.70	1172.20	14.14	275.74	102.41
AMTNH4	24	0.00	1471.65	50.75	190.23	0.00	46.05	17.10
AMTCL	24	0.00	36365.47	1253.98	5957.25	61.23	1424.09	528.89
AMTF	24	0.00	61.30	2.11	19.54	0.00	4.97	1.85
AMTNO3	24	0.00	3069.63	105.85	332.08	31.76	73.56	27.32
AMTSO4	24	0.00	7801.69	269.02	793.76	48.35	177.42	65.89
AMTPO4	24	0.00	94.18	3.25	94.18	0.00	17.49	6.50
AXSSO4	28	0.00	4253.06	151.90	400.09	38.80	110.38	41.72
AMTSS	24	0.00	39274.86	1354.31	6570.85	67.54	1566.72	581.86
AMTNC	26	0.00	4196.08	161.39	513.75	8.34	147.66	57.92

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 48

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 12/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95%CL
PH	62	4.62	0.00	4.49	6.54	0.00	0.92	0.23
COND	62	17.85	0.00	20.87	66.00	0.00	16.18	4.11
CMPPT	62	0.00	46.53	0.75	2.75	0.00	0.65	0.17
H	62	23.94	0.00	32.21	107.15	0.00	24.13	6.13
HNV	62	21.03	0.00	26.81	100.00	0.00	21.08	5.36
NA	48	52.10	0.00	58.49	321.32	4.35	73.98	21.36
K	48	1.09	0.00	1.36	6.64	0.00	1.70	0.49
CA	48	3.96	0.00	6.20	40.42	0.50	7.37	2.13
MG	48	12.12	0.00	13.82	78.15	2.30	17.35	5.01
NH4	48	3.43	0.00	4.11	16.08	0.00	3.89	1.12
CL	48	53.96	0.00	59.77	276.36	7.90	65.48	18.00
F	48	0.55	0.00	0.34	5.79	0.00	0.97	0.28
NO3	48	7.70	0.00	11.04	56.45	1.29	10.00	2.89
SO4	48	26.41	0.00	31.02	77.03	3.54	20.73	5.99
PO4	48	0.68	0.00	0.48	8.84	0.00	1.93	0.56
XSSO4	48	20.98	0.00	25.04	73.23	1.68	18.62	5.38
SAN	48	89.30	0.00	102.65	339.27	23.04	81.33	23.88
SCA	48	96.30	0.00	111.30	437.13	23.23	99.84	28.48
A/C	48	0.93	0.00	0.92	1.24	0.00	0.11	0.03
CL/NA	48	1.04	0.00	1.02	1.82	0.79	0.24	0.07
NA/MG	48	4.30	0.00	4.23	4.81	1.89	0.66	0.19
SS	48	58.28	0.00	64.15	304.82	5.62	72.19	20.84
NC	48	14.41	0.00	19.82	123.74	2.10	28.29	8.17
COND/P	48	0.97	0.00	0.96	1.11	0.30	0.12	0.03
AMTH	62	0.00	11140.68	179.69	714.80	0.00	186.89	47.47
AMTHNV	62	0.00	9784.22	157.81	667.09	0.00	172.55	43.83
AMTNA	48	0.00	24012.07	500.25	3136.30	15.90	685.79	197.97
AMTK	48	0.00	501.62	10.45	70.21	0.00	15.14	4.37
AMTCA	48	0.00	1623.99	38.00	178.39	5.31	36.57	10.56
AMTMG	48	0.00	5585.10	116.36	775.37	8.42	160.18	46.24
AMTNH4	48	0.00	1581.19	32.94	213.44	0.00	37.83	10.92
AMTCL	48	0.00	24672.48	518.18	3567.30	28.87	684.47	197.59
AMTF	48	0.00	252.11	5.25	159.21	0.00	23.34	6.74
AMTNO3	48	0.00	3549.11	73.94	230.66	15.81	49.24	14.22
AMTSO4	48	0.00	12174.29	253.63	663.12	18.46	192.31	55.52
AMTPU4	48	0.00	314.37	6.55	156.17	0.00	27.70	7.99
AXSSO4	48	0.00	9670.59	201.47	629.31	9.03	167.50	48.35
AMTSS	48	0.00	26862.16	559.63	3934.73	20.54	756.42	218.36
AMTNC	48	0.00	6642.02	138.38	1110.76	7.45	186.13	53.73

N=NUMBER OF SAMPLES  
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 COND, CMPPT, AND RATIOUS  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-49

Table 49.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 01/78.

	N	VOLWTAV	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	25	4.80	0.00	4.69	5.40	4.28	0.26	0.11
COND	25	11.80	0.00	19.33	44.20	7.00	10.86	4.44
CMPPT	25	0.00	29.47	1.18	3.81	0.03	1.24	0.52
HNH	25	15.77	0.00	20.58	52.48	3.98	12.76	5.31
HNH	25	13.58	0.00	17.13	48.98	3.47	12.65	5.26
NA	24	31.43	0.00	54.33	216.10	6.52	46.63	19.80
CA	24	0.37	0.00	1.08	4.59	0.00	1.47	0.62
MG	24	6.58	0.00	15.68	44.91	1.00	14.61	6.20
NH4	24	7.42	0.00	13.46	47.88	3.04	11.06	4.69
CL	24	5.69	0.00	9.59	23.28	2.77	6.60	2.80
F	24	31.01	0.00	54.18	202.19	13.82	44.50	18.90
NO3	24	0.07	0.00	0.04	0.53	0.00	0.15	0.06
SO4	24	6.27	0.00	9.43	24.19	3.06	5.38	2.28
PO4	24	19.35	0.00	32.87	63.71	9.78	18.67	7.93
XSSO4	24	1.65	0.00	0.92	14.85	0.00	3.03	1.29
SAN	24	16.21	0.00	27.35	57.56	8.04	15.93	6.76
SCA	24	58.35	0.00	97.14	269.45	34.55	61.50	26.11
A/C	24	67.24	0.00	114.40	333.92	39.08	75.06	31.87
CL/NA	24	0.87	0.00	0.85	1.14	0.72	0.09	0.04
NA/MG	24	0.99	0.00	1.00	2.12	0.78	0.31	0.13
SS	24	4.23	0.00	4.04	5.39	2.14	0.74	0.31
NC	24	33.67	0.00	59.14	223.02	8.43	49.67	21.09
COND/P	24	17.81	0.00	35.00	97.41	4.52	27.98	11.88
AMTH	24	0.92	0.00	0.94	1.10	0.78	0.08	0.03
AMTHV	25	0.00	4646.37	185.85	443.28	7.49	151.79	63.15
AMINA	25	0.00	4001.37	160.05	404.27	5.55	137.23	57.09
AMTK	24	0.00	9252.75	385.53	1306.95	62.16	296.28	125.79
AMTCA	24	0.00	108.39	4.52	36.86	0.00	7.73	3.28
AMTMG	24	0.00	1936.73	80.70	221.04	12.87	49.79	21.14
AMTNH4	24	0.00	2185.12	91.05	299.32	29.01	63.56	26.99
AMTCL	24	0.00	1676.83	69.87	147.95	12.39	42.61	18.09
AMTF	24	0.00	9129.20	360.38	1267.02	128.01	274.42	116.51
AMTNU3	24	0.00	19.98	0.83	16.65	0.00	3.44	1.46
AMTSO4	24	0.00	1846.69	76.95	250.34	15.30	58.86	24.99
AMTPO4	24	0.00	5096.52	237.36	454.54	69.85	127.68	54.21
AXSSO4	24	0.00	487.18	20.30	487.18	0.00	99.44	42.22
AMTSS	24	0.00	4771.83	198.83	404.70	48.35	108.64	46.13
AMTNC	24	0.00	9915.07	413.13	1397.52	80.31	306.46	130.97
		0.00	5244.77	218.53	535.04	58.28	128.18	54.42

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-50

Table 50.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 02/78.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	34	4.41	0.00	4.28	4.58	3.98	0.19	0.00
COND	34	22.86	0.00	36.94	182.00	12.00	37.97	13.03
CMPT	34	0.00	57.34	1.69	5.91	0.01	1.71	0.59
H	34	39.09	0.00	52.99	104.71	26.30	22.86	7.84
HNV	34	34.30	0.00	43.96	83.18	0.00	20.27	6.95
NA	30	43.03	0.00	79.77	919.60	2.17	204.05	74.51
X	30	0.92	0.00	1.62	13.53	0.00	2.64	0.96
CA	30	3.89	0.00	5.82	39.92	0.00	8.08	2.95
MG	30	11.96	0.00	18.93	196.25	1.07	44.46	16.23
NH4	30	5.17	0.00	4.49	13.86	1.66	2.90	1.06
CL	30	48.00	0.00	70.36	641.55	2.26	150.54	54.97
F	30	0.46	0.00	0.37	2.63	0.00	0.84	0.31
NO3	30	8.05	0.00	13.75	68.88	0.00	13.90	5.07
SO4	30	36.29	0.00	46.59	208.20	14.99	38.34	14.00
PO4	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	30	31.87	0.00	39.67	142.19	14.32	24.26	8.86
SAN	30	92.81	0.00	131.06	920.20	26.80	199.82	72.96
SCL	30	104.02	0.00	160.16	1282.11	37.60	270.56	98.79
A/C	30	0.89	0.00	0.82	1.18	0.65	0.10	0.64
CL/NA	30	1.12	0.00	0.88	1.76	0.70	0.28	0.10
NA/MG	30	3.60	0.00	4.22	5.03	1.51	0.84	0.31
SS	30	47.56	0.00	74.22	707.63	2.49	163.25	60.34
NC	30	17.42	0.00	36.40	469.77	1.63	95.96	35.04
COND/P	30	0.93	0.00	0.94	1.12	0.80	0.07	0.03
AMTH	34	0.00	22419.72	659.40	2134.56	12.50	585.81	200.93
AMTHNV	34	0.00	19671.28	578.57	1735.03	0.00	492.72	169.00
AMINA	30	0.00	24628.18	820.94	4417.02	5.98	1155.82	422.05
AMTK	30	0.00	524.20	17.47	120.27	0.00	21.85	7.98
AMTCA	30	0.00	2227.67	74.26	399.63	0.00	97.95	35.77
AMTMG	30	0.00	6847.56	228.25	1809.73	2.94	377.96	138.01
AMTNH4	30	0.00	2960.16	98.67	347.71	7.62	110.87	40.48
AMTCL	30	0.00	27472.49	915.75	6815.13	6.70	1452.93	530.54
AMTF	30	0.00	266.04	8.87	95.39	0.00	25.46	9.30
AMTNO3	30	0.00	4607.44	153.58	353.25	0.00	100.82	36.81
AMTSO4	30	0.00	20772.79	692.43	2098.95	103.22	610.91	223.07
AMTPO4	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	30	0.00	18238.11	607.94	1634.78	102.53	517.66	189.02
AMTSS	30	0.00	27217.72	907.26	5001.74	7.39	1286.89	469.90
AMTNC	30	0.00	9970.05	332.33	1460.38	17.19	388.58	141.89

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 51.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSL SITES DURING 03/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	38	4.51	0.00	4.25	4.89	3.09	0.35	0.11
COND	38	20.09	0.00	36.44	340.00	7.80	54.58	17.71
CMPTT	38	0.00	36.21	0.95	3.89	0.03	0.88	0.29
H	38	30.93	0.00	55.68	812.83	12.88	128.44	41.67
HNV	38	29.82	0.00	57.90	1000.00	10.00	158.82	51.53
NA	34	33.49	0.00	53.81	220.44	4.78	51.84	17.78
K	34	0.91	0.00	1.73	5.62	0.00	1.73	0.59
CA	34	8.70	0.00	16.19	56.89	1.00	15.71	5.39
MG	34	9.32	0.00	14.97	57.34	1.40	14.20	4.87
NH4	34	7.21	0.00	11.27	42.13	1.66	10.79	3.70
CL	34	38.05	0.00	61.19	321.20	5.36	65.58	22.50
F	34	0.84	0.00	0.94	4.74	0.00	1.07	0.37
NO3	34	18.16	0.00	43.53	807.15	6.13	136.34	46.77
SO4	34	28.22	0.00	39.79	139.49	12.70	28.73	9.85
PO4	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	34	24.51	0.00	33.82	133.69	12.02	25.22	8.65
SAN	34	85.29	0.00	145.46	964.70	25.65	175.56	60.22
SCA	34	40.45	0.00	155.72	947.77	28.71	176.10	60.40
A/C	34	0.94	0.00	0.93	1.53	0.77	0.14	0.05
CL/NA	34	1.14	0.00	1.14	1.65	0.89	0.20	0.07
NA/MG	34	3.59	0.00	3.59	4.66	2.37	0.54	0.18
SS	34	39.80	0.00	64.10	284.81	5.91	64.10	21.99
NC	34	19.83	0.00	33.87	101.01	6.52	29.57	10.14
COND/P	34	0.96	0.00	1.00	1.46	0.82	0.12	0.04
AMTH	38	0.00	11205.44	294.88	1498.66	8.69	285.72	92.70
AMTHNV	38	0.00	10601.52	284.25	1843.75	6.59	323.23	104.87
AMTNA	34	0.00	11412.23	335.65	1633.90	43.72	327.85	112.45
AMTK	34	0.00	309.80	9.11	41.33	0.00	9.14	3.13
AMTCA	34	0.00	2965.88	87.23	303.67	24.17	61.86	21.22
AMTMG	34	0.00	3177.57	93.46	421.35	14.63	87.23	29.92
AMTNH4	34	0.00	2457.24	72.27	282.05	11.95	60.96	20.91
AMTCL	34	0.00	12968.10	381.41	1731.39	56.71	378.64	129.87
AMTF	34	0.00	285.19	8.39	40.95	0.00	10.20	3.50
AMTNO3	34	0.00	6199.43	182.34	1488.17	39.01	260.57	89.37
AMTSO4	34	0.00	9617.37	282.86	1059.22	77.61	195.47	67.05
AMTPU4	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	34	0.00	8353.70	245.70	881.06	58.16	171.47	58.81
AMTSS	34	0.00	13565.97	399.00	1909.72	56.48	395.24	135.57
AMTNC	34	0.00	6756.78	198.73	688.15	71.68	129.37	44.37

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 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 52.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSL SITES DURING 04/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	2	4.66	0.00	4.70	4.77	4.64	0.09	0.83
COND	2	24.27	0.00	28.60	36.00	21.20	10.47	94.05
CMPTT	2	0.00	0.45	0.23	0.36	0.09	0.19	1.68
H	2	21.68	0.00	19.95	22.91	16.98	4.19	37.67
HNV	2	19.70	0.00	18.01	20.89	15.14	4.07	36.59
NA	2	50.42	0.00	83.48	140.01	26.96	79.94	718.42
K	2	10.37	0.00	20.68	38.29	3.06	24.91	223.89
CA	2	34.66	0.00	47.65	69.86	25.45	31.40	282.23
MG	2	12.76	0.00	19.37	30.68	8.06	16.00	143.76
NH4	2	41.37	0.00	50.45	65.97	34.93	21.95	197.30
CL	2	44.52	0.00	65.14	100.39	29.89	49.85	448.03
F	2	4.36	0.00	6.05	8.95	3.16	4.09	36.79
NO3	2	20.16	0.00	26.29	36.78	15.81	14.83	133.26
SO4	2	54.20	0.00	69.85	96.61	43.10	37.84	340.04
PO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	2	49.62	0.00	63.15	86.27	40.02	32.71	293.93
SAN	123	23.24	0.00	167.34	242.72	91.95	106.61	958.11
SCA	171	1.26	0.00	241.56	361.80	121.37	170.01	1527.95
A/C	2	0.72	0.00	0.69	0.76	0.67	0.06	0.55
CL/NA	2	0.88	0.00	0.78	1.11	0.72	0.28	2.49
NA/MG	2	3.95	0.00	4.31	4.56	3.34	0.86	7.75
SS	2	49.11	0.00	71.85	110.73	32.97	54.99	494.17
NC	100	0.47	0.00	149.79	234.09	65.49	119.22	1071.43
COND/P	2	0.96	0.00	0.90	1.00	0.80	0.14	1.28
AMTH	2	0.00	98.25	49.12	82.33	15.92	46.96	422.02
AMTHNV	2	0.00	89.27	44.64	75.08	14.19	43.06	386.98
AMTNA	2	0.00	228.13	114.07	131.26	96.88	24.31	218.46
AMTK	2	0.00	46.91	23.46	35.90	11.01	17.60	158.19
AMTCA	2	0.00	156.95	78.48	91.46	65.49	18.36	164.99
AMTMG	2	0.00	57.74	28.87	28.97	28.76	0.15	1.31
AMTNH4	2	0.00	187.37	93.69	125.52	61.85	45.02	404.62
AMTCL	2	0.00	201.54	100.77	107.42	94.12	9.41	84.57
AMTF	2	0.00	19.74	9.87	11.35	8.39	2.09	18.81
AMTNO3	2	0.00	91.29	45.64	56.81	34.48	15.79	141.91
AMTSO4	2	0.00	245.45	122.72	154.88	90.57	45.48	408.72
AMTPO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	2	0.00	224.71	112.35	143.83	80.88	44.51	400.02
AMTSS	2	0.00	222.30	111.15	118.49	103.81	10.38	93.27
AMTNC	2	0.00	454.80	227.40	235.35	219.45	11.24	101.00

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 53.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSL SITES DURING 05/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	23	4.44	0.00	4.43	6.79	4.01	0.63	0.27
COND	23	25.27	0.00	40.18	75.00	15.40	17.76	7.70
CMPPT	23	0.00	22.15	0.96	5.00	0.02	1.32	0.57
H	23	36.31	0.00	36.90	97.72	0.16	27.54	11.94
HNV	23	31.54	0.00	33.80	95.50	0.11	26.45	11.47
NA	18	36.61	0.00	45.73	103.92	12.17	25.28	12.40
K	18	1.43	0.00	2.14	6.38	0.51	1.51	0.74
CA	18	13.90	0.00	27.33	100.80	7.98	27.99	13.72
MG	18	9.06	0.00	12.12	29.78	2.88	6.99	3.43
NH4	18	19.03	0.00	24.39	58.77	13.31	11.68	5.72
CL	18	40.86	0.00	51.26	104.62	10.43	27.42	13.44
F	18	0.68	0.00	0.94	2.11	0.00	0.80	0.39
NO3	18	18.50	0.00	30.17	88.72	12.26	19.19	9.41
SO4	18	40.62	0.00	60.15	171.56	27.90	35.78	17.54
PO4	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSS04	18	36.46	0.00	54.96	160.79	22.01	34.64	16.98
SAN	18	101.03	0.00	144.39	367.00	50.59	71.96	35.26
SCA	18	116.52	0.00	156.84	390.84	74.43	72.91	35.75
A/C	18	0.87	0.00	0.92	1.10	0.67	0.10	0.05
CL/NA	18	1.12	0.00	1.12	1.69	0.86	0.18	0.09
NA/MG	18	4.04	0.00	3.77	4.28	3.35	0.32	0.16
SS	18	44.67	0.00	55.73	115.40	11.51	30.73	15.07
NC	18	35.36	0.00	55.99	184.24	22.66	40.98	20.09
COND/P	18	0.99	0.00	1.03	1.37	0.82	0.16	0.08
AMTH	23	0.00	8040.92	349.61	1733.68	0.03	424.71	184.20
AMTHNV	23	0.00	6985.39	303.71	1285.20	0.02	339.31	147.16
AMTNA	18	0.00	8056.31	447.57	2276.99	39.47	543.13	266.28
AMTK	18	0.00	313.78	17.43	70.37	3.31	17.53	8.59
AMTCA	18	0.00	3058.72	169.93	471.55	36.18	133.88	65.64
AMTMG	18	0.00	1993.95	110.77	547.39	10.88	129.90	63.68
AMTNH4	18	0.00	4188.43	232.69	831.60	24.32	234.26	114.85
AMTCL	18	0.00	8990.67	499.48	2709.32	66.56	641.66	314.58
AMTF	18	0.00	150.00	8.33	40.34	0.00	12.18	5.97
AMTNU3	18	0.00	4072.39	226.24	612.94	64.06	175.75	86.17
AMTSO4	18	0.00	8938.42	496.58	1394.94	58.09	389.32	190.87
AMTPO4	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	18	0.00	8023.31	445.74	1341.26	50.06	350.63	171.90
AMTSS	18	0.00	9829.59	546.09	2941.87	51.00	699.55	342.96
AMTNC	18	0.00	7781.60	432.31	1446.33	119.76	389.13	190.78

N=NUMBER OF SAMPLES  
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 COND, CMPPT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 54.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL NSC SITES DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	22	4.59	0.00	4.34	5.11	3.76	0.40	0.18
COND	22	21.73	0.00	31.85	95.80	8.40	25.28	11.21
CMPPT	22	0.00	14.99	0.68	2.02	0.04	0.54	0.24
H	22	25.53	0.00	46.16	173.78	7.76	52.18	22.14
HNV	22	22.60	0.00	40.65	169.82	7.08	50.35	22.33
NA	20	49.90	0.00	53.85	166.53	15.65	39.30	18.28
K	20	1.53	0.00	2.06	6.64	0.51	1.53	0.71
CA	20	6.68	0.00	12.60	41.92	1.50	12.57	6.33
MG	20	11.53	0.00	13.02	41.21	4.03	9.83	5.77
NH4	20	3.95	0.00	8.21	42.69	0.00	12.26	5.70
CL	20	54.04	0.00	59.22	199.37	14.66	47.50	20.99
F	20	0.20	0.00	0.42	2.11	0.00	0.72	0.33
NO3	20	9.74	0.00	21.40	92.43	1.45	28.49	14.55
SO4	20	25.95	0.00	45.13	158.86	9.37	48.42	22.55
PO4	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	20	20.45	0.00	39.12	151.92	7.25	47.31	22.00
SAN	20	89.93	0.00	126.16	357.57	32.21	98.90	46.00
SCA	20	99.06	0.00	137.22	379.39	37.18	100.51	46.55
A/C	20	0.91	0.00	0.92	1.02	0.63	0.09	0.00
CL/NA	20	1.08	0.00	1.10	1.30	0.88	0.12	0.00
NA/MG	20	4.33	0.00	4.14	5.10	2.99	0.50	0.00
SS	20	59.08	0.00	64.54	215.15	16.17	51.35	23.88
NC	20	14.50	0.00	25.19	88.59	2.36	25.76	11.98
COND/P	20	1.20	0.00	1.12	2.34	0.93	0.29	0.14
AMTH	20	0.00	3825.59	173.89	475.18	13.83	114.89	50.95
AMTHNV	20	0.00	3386.18	153.92	464.36	7.60	110.14	48.88
AMTNA	20	0.00	7418.73	370.94	1535.18	29.35	370.31	172.33
AMTK	20	0.00	227.43	11.37	35.30	1.91	8.32	3.77
AMTCA	20	0.00	993.41	49.67	109.16	17.78	27.96	13.00
AMTMG	20	0.00	1714.04	85.70	379.93	7.56	88.76	41.00
AMTNH4	20	0.00	586.73	29.34	97.02	0.00	25.35	11.79
AMTCL	20	0.00	8034.22	401.71	1837.98	27.50	442.16	205.65
AMTF	20	0.00	29.36	1.47	5.76	0.00	2.23	1.04
AMTNO3	20	0.00	1448.47	72.42	220.53	15.88	54.24	25.04
AMTSO4	20	0.00	3857.44	192.87	398.51	23.03	103.95	48.35
AMTPO4	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	20	0.00	3039.69	151.98	387.95	20.20	87.04	40.48
AMTSS	20	0.00	8783.88	439.19	1983.46	30.33	477.64	222.15
AMTNC	20	0.00	2156.47	107.82	280.20	34.38	62.89	29.25

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 55.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 07/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	44	4.38	0.00	4.41	4.84	3.79	0.23	0.07
COND	44	21.68	0.00	22.07	76.40	8.00	12.45	3.75
CMPPT	44	0.00	106.49	2.42	12.31	0.33	2.49	0.75
H	44	41.53	0.00	38.93	162.18	14.45	26.93	8.12
HNv	44	38.67	0.00	35.64	147.91	10.23	25.46	7.68
NA	44	17.25	0.00	26.22	138.70	3.91	25.32	7.64
K	44	0.75	0.00	1.32	15.83	0.00	2.39	0.72
CA	44	5.49	0.00	6.67	20.46	0.00	5.19	1.57
MG	44	3.82	0.00	5.89	33.48	1.32	5.98	1.80
NH4	44	1.39	0.00	2.63	33.26	0.00	5.08	1.53
CL	44	18.20	0.00	28.57	169.20	5.08	30.42	9.17
F	44	0.75	0.00	0.69	5.79	0.00	1.28	0.39
NO3	44	10.96	0.00	12.72	55.16	3.06	9.06	2.73
SO4	44	31.44	0.00	29.66	99.10	7.50	20.10	6.06
PO4	44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	44	29.59	0.00	26.77	97.59	6.60	19.92	6.01
SAN	44	61.34	0.00	71.65	219.89	23.50	44.60	13.45
SCA	44	70.23	0.00	81.66	212.32	30.10	44.47	13.41
A/C	44	0.87	0.00	0.88	1.04	0.60	0.09	0.03
CL/NA	44	1.06	0.00	1.09	1.59	0.87	0.13	0.04
NA/MG	44	4.52	0.00	4.45	6.29	0.97	0.74	0.22
SS	44	19.82	0.00	31.04	179.20	5.06	32.63	9.84
NC	44	8.89	0.00	11.69	57.81	0.88	9.74	2.94
COND/P	44	1.05	0.00	1.04	1.14	0.89	0.05	0.02
AMTH	44	0.00	44221.11	1005.03	5015.87	80.01	1228.97	370.55
AMTHNV	44	0.00	41179.75	935.90	4738.63	76.41	1157.84	349.10
AMTNA	44	0.00	18369.98	417.50	1334.14	60.87	290.61	87.62
AMTK	44	0.00	801.77	18.22	85.78	0.00	16.10	4.85
AMTCA	44	0.00	5849.32	132.94	1134.44	0.00	190.37	57.40
AMTMG	44	0.00	4064.70	92.38	277.37	13.24	62.48	18.84
AMTNH4	44	0.00	1481.78	33.68	112.27	0.00	28.71	8.66
AMTCL	44	0.00	19383.28	440.53	1511.88	61.19	313.26	94.45
AMTF	44	0.00	793.79	18.04	203.94	0.00	37.28	11.24
AMTNU3	44	0.00	11666.49	265.15	857.24	34.20	247.54	74.64
AMTSO4	44	0.00	33477.56	760.85	3922.10	71.24	959.12	289.18
AMTPO4	44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	44	0.00	31510.80	716.15	3854.21	50.89	947.56	285.70
AMTSS	44	0.00	21105.82	479.68	1667.60	67.50	342.76	103.35
AMTNC	44	0.00	9461.74	215.04	1275.23	14.07	223.85	67.49

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 56.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	27	4.40	0.00	4.34	5.09	0.87	0.31	0.12
COND	27	20.00	0.00	27.06	73.50	9.40	16.63	6.40
CMPPT	27	0.00	71.49	2.65	11.20	0.02	2.80	1.08
H	27	39.88	0.00	45.91	134.90	8.13	32.56	12.33
HVV	27	36.68	0.00	41.55	128.83	6.61	32.15	12.37
NA	26	14.41	0.00	26.71	182.62	3.91	36.12	14.17
K	26	0.81	0.00	1.19	4.08	0.25	0.87	0.34
CA	26	4.80	0.00	7.68	20.46	0.00	5.46	2.14
MG	26	3.82	0.00	6.45	39.32	0.00	7.66	3.00
NH4	26	3.05	0.00	5.42	26.61	0.00	7.02	2.75
CL	26	17.25	0.00	31.01	205.01	5.08	40.60	15.92
F	26	0.44	0.00	0.43	1.58	0.00	0.47	0.18
NO3	26	9.81	0.00	14.44	43.87	0.23	11.42	4.48
SO4	26	31.14	0.00	37.41	109.10	11.24	25.73	10.09
PO4	26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	26	29.47	0.00	34.33	105.99	9.93	26.49	10.39
SAN	26	58.63	0.00	83.29	238.02	3.97	52.75	19.91
SCA	26	66.77	0.00	94.33	252.60	37.76	53.59	21.02
A/C	26	0.88	0.00	0.88	1.03	0.71	0.09	0.03
CL/NA	26	1.20	0.00	1.16	1.49	0.95	0.14	0.05
NA/MG	26	3.77	0.00	4.14	5.22	0.31	0.97	0.38
SS	26	17.91	0.00	33.13	226.13	5.06	44.74	17.55
NC	26	8.98	0.00	14.32	45.83	2.68	10.99	4.41
COND/P	26	1.00	0.00	1.01	1.63	0.62	0.17	0.07
AMTH	27	0.00	28509.69	1055.91	4779.02	4.15	1112.94	428.37
AMTHNV	27	0.00	26216.50	971.06	4460.04	2.56	1036.16	398.82
AMTNA	26	0.00	10295.21	395.97	1583.62	27.55	409.55	160.64
AMTK	26	0.00	5755.25	222.13	76.83	1.44	18.89	7.41
AMTCA	26	0.00	3429.89	131.92	391.32	7.30	101.73	39.90
AMTMG	26	0.00	2731.32	105.05	340.98	5.28	94.47	37.06
AMTNH4	26	0.00	2182.74	83.95	303.53	0.00	99.87	39.17
AMTCL	26	0.00	12324.61	474.02	1777.86	28.18	469.86	184.30
AMTF	26	0.00	312.97	12.04	117.92	0.00	24.50	9.61
AMTNO3	26	0.00	7009.53	269.60	813.18	8.52	217.60	85.35
AMTSO4	26	0.00	22251.92	855.84	3848.61	15.23	884.85	347.07
AMTPO4	26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	26	0.00	21061.96	810.08	3734.83	12.33	873.92	342.78
AMTSS	26	0.00	12794.13	492.27	1960.97	31.08	500.77	196.42
AMTNC	26	0.00	6415.29	246.74	860.76	13.62	200.62	78.69

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 57.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 09/78.

	N	VOLWTAV	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C. L.
PH	54	4.54	0.00	4.37	5.06	3.78	0.33	0.00
COND	54	22.82	0.00	35.44	158.00	6.60	28.85	7.85
CMPPT	54	0.00	57.25	1.06	5.80	0.02	1.21	0.33
H	54	28.78	0.00	42.99	165.96	8.71	37.55	10.22
HNV	54	25.78	0.00	38.27	154.88	7.41	33.55	9.13
NA	50	60.30	0.00	98.13	648.72	3.04	130.98	37.05
K	50	1.67	0.00	2.79	13.79	0.00	3.19	0.90
CA	50	4.95	0.00	8.48	52.39	0.50	9.33	2.64
MG	50	14.49	0.00	23.25	153.00	1.23	31.13	8.81
NH4	50	3.34	0.00	6.31	37.14	0.00	8.48	2.40
CL	50	68.51	0.00	110.40	748.99	5.00	151.09	42.73
F	50	1.04	0.00	1.17	25.26	0.00	4.24	1.20
NO3	50	11.04	0.00	17.34	79.36	4.03	18.11	5.12
SO4	50	26.35	0.00	40.55	179.68	8.12	36.67	10.37
PO4	50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	50	19.48	0.00	29.47	106.35	4.36	28.79	8.14
SAN	50	107.12	0.00	169.85	1009.18	25.27	186.89	52.86
SCA	50	113.48	0.00	181.54	1027.78	28.64	190.50	53.88
A/C	50	0.94	0.00	0.94	1.15	0.75	0.08	0.02
CL/NA	50	1.14	0.00	1.12	1.95	0.83	0.19	0.05
NA/MG	50	4.16	0.00	4.22	5.71	2.47	0.41	0.11
SS	50	73.85	0.00	118.93	826.14	3.93	163.85	46.34
NC	50	10.90	0.00	20.04	83.49	1.28	20.36	5.76
COND/P	50	1.01	0.00	0.99	1.92	0.61	0.17	0.05
AMTH	54	0.00	16474.67	305.09	1593.60	9.55	337.65	91.90
AMTHNV	54	0.00	14756.04	273.26	1453.38	8.51	305.10	83.04
AMTNA	50	0.00	34421.80	688.44	6279.60	23.91	1014.92	287.06
AMTK	50	0.00	955.69	19.11	182.62	1.60	28.86	8.16
AMTCA	50	0.00	2823.67	56.47	390.93	2.96	61.68	17.45
AMTMG	50	0.00	8271.09	165.42	1608.34	4.19	252.81	71.50
AMTNH4	50	0.00	1904.35	38.09	286.87	0.00	51.89	14.68
AMTCL	50	0.00	39109.97	782.20	7588.44	19.77	1193.81	337.66
AMTF	50	0.00	594.93	11.90	431.57	0.00	61.00	17.25
AMTNO3	50	0.00	6301.31	126.03	520.80	11.04	127.32	36.01
AMTSO4	50	0.00	15041.62	300.83	1185.03	12.98	282.83	80.00
AMTPO4	50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	50	0.00	11118.36	222.37	1142.64	6.48	242.50	68.59
AMTSS	50	0.00	42155.79	843.12	8113.24	21.81	1281.91	362.58
AMTNC	50	0.00	6220.81	124.42	794.42	5.40	142.12	40.20

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 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 58.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSL SITES DURING 10/78.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	68	4.72	0.00	4.20	5.27	0.00	0.71	0.17
COND	68	19.51	0.00	72.22	1230.00	0.00	153.82	37.31
CMPPT	68	0.00	114.30	1.68	10.94	0.01	2.66	0.65
H	68	18.92	0.00	62.82	524.81	0.00	84.79	20.56
HNV	68	16.30	0.00	55.33	398.11	0.00	70.66	17.14
NA	56	66.34	0.00	216.23	1778.77	3.91	320.88	85.76
K	56	25.02	0.00	7.09	102.63	0.51	15.14	4.05
CA	56	55.68	0.00	18.13	256.99	1.00	35.90	9.59
MG	56	15.58	0.00	49.66	350.02	0.99	72.39	19.35
NH4	56	4.14	0.00	18.63	553.85	0.00	74.15	19.82
CL	56	72.35	0.00	235.10	2005.02	4.51	355.96	95.14
F	56	0.63	0.00	1.75	10.53	0.00	2.42	0.65
NO3	56	6.43	0.00	22.38	161.14	1.94	26.69	7.13
SO4	56	21.07	0.00	67.64	545.48	7.70	87.11	23.28
PO4	56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	56	13.69	0.00	43.72	339.17	4.22	56.78	15.18
SAN	56	100.48	0.00	326.87	2717.96	16.92	457.87	122.37
SCA	56	112.42	0.00	358.49	2590.15	22.31	469.98	125.61
A/C	56	0.89	0.00	0.91	1.10	0.65	0.09	0.02
CL/NA	56	1.09	0.00	1.09	1.37	0.90	0.10	0.03
NA/MG	56	4.26	0.00	4.35	5.72	3.51	0.42	0.11
SS	56	79.15	0.00	256.60	2211.54	4.98	389.13	104.00
NC	56	14.60	0.00	53.15	653.38	2.54	101.80	27.21
COND/P	56	0.99	0.00	0.96	1.52	0.72	0.12	0.03
AMTH	68	0.00	2162.54	318.02	2055.05	0.00	387.26	93.92
AMTHNV	68	0.00	18633.38	274.02	1831.57	0.00	338.76	82.16
AMTNA	56	0.00	75527.09	1348.70	9740.61	39.38	1522.87	407.00
AMTK	56	0.00	2303.07	41.13	362.41	1.56	55.99	14.96
AMTCA	56	0.00	6463.01	115.41	922.53	7.37	146.11	39.05
AMTMG	56	0.00	17733.71	316.67	2214.08	10.05	352.59	94.23
AMTNH4	56	0.00	4709.27	84.09	1955.77	0.00	261.22	69.81
AMTCL	56	0.00	82362.10	1470.75	11684.32	49.86	1763.89	471.42
AMTF	56	0.00	722.90	12.91	297.03	0.00	41.42	11.07
AMTNO3	56	0.00	7314.49	130.62	413.89	12.58	101.30	27.07
AMTSO4	56	0.00	23988.56	428.37	1505.68	26.18	332.41	88.84
AMTPO4	56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	56	0.00	15590.28	278.40	1309.82	18.25	249.45	66.67
AMTSS	56	0.00	90114.22	1609.18	12584.86	50.88	1915.61	511.97
AMTNL	56	0.00	16621.94	296.82	2307.23	7.19	344.81	92.15

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 59.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	18	4.56	0.00	4.40	4.96	3.74	0.30	0.15
COND	18	22.67	0.00	26.72	86.00	6.20	19.05	9.34
CMPT	18	0.00	6.44	0.36	1.68	0.06	0.37	0.18
H	18	27.26	0.00	39.80	181.97	10.97	38.40	18.83
HNV	18	22.86	0.00	32.36	134.90	9.12	28.39	13.92
NA	17	73.00	0.00	62.15	359.58	5.22	88.45	44.62
K	17	1.85	0.00	1.82	9.70	0.25	2.21	1.12
CA	17	6.85	0.00	8.95	36.93	2.00	7.68	3.87
MG	17	16.75	0.00	14.29	83.33	1.40	20.29	10.23
NH4	17	0.50	0.00	0.49	3.33	0.00	0.90	0.45
CL	17	71.57	0.00	65.19	400.44	7.05	97.17	49.02
F	17	4.47	0.00	22.07	13.68	0.00	3.20	1.61
NO3	17	15.36	0.00	28.15	195.17	4.19	44.51	22.46
SO4	17	19.78	0.00	20.86	53.09	6.25	10.84	5.47
PO4	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	17	12.44	0.00	14.17	29.80	5.52	5.66	2.85
SAN	17	111.19	0.00	116.27	464.22	19.54	108.97	54.97
SCA	17	125.95	0.00	126.61	505.65	22.10	115.26	58.15
A/C	17	0.88	0.00	0.92	1.08	0.79	0.08	0.04
CL/NA	17	0.98	0.00	1.05	1.39	0.82	0.17	0.08
NA/MG	17	4.36	0.00	4.35	4.77	3.73	0.28	0.14
SS	17	78.66	0.00	71.64	441.69	6.74	107.34	54.15
NC	17	20.29	0.00	16.06	49.51	2.21	14.03	7.08
COND/P	17	0.98	0.00	0.98	1.14	0.86	0.06	0.03
AMTH	18	0.00	1755.98	97.55	306.51	23.49	69.95	34.29
AMTHNV	18	0.00	1472.64	81.81	266.95	19.99	58.53	28.70
AMTNA	17	0.00	4658.28	274.02	2116.54	12.47	514.54	259.57
AMTK	17	0.00	118.37	6.96	47.30	0.61	11.34	5.72
AMTCA	17	0.00	437.08	25.71	100.86	9.67	22.58	11.39
AMTMG	17	0.00	1069.11	62.89	486.33	3.24	117.99	59.52
AMTNH4	17	0.00	32.06	1.89	18.68	0.00	4.57	2.31
AMTCL	17	0.00	4567.61	268.68	1852.48	16.26	461.25	232.69
AMTF	17	0.00	285.06	16.77	230.49	0.00	55.23	27.86
AMTNO3	17	0.00	980.06	57.65	243.97	16.51	52.23	26.35
AMTSO4	17	0.00	1261.92	74.23	406.80	21.96	90.63	45.72
AMTPO4	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	17	0.00	793.67	46.69	216.18	19.31	45.76	23.08
AMTSS	17	0.00	5020.03	295.30	2043.28	16.12	509.30	256.93
AMTNC	17	0.00	1294.89	76.17	726.43	10.70	170.89	86.21

N=NUMBER OF SAMPLES  
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 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-60

Table 60.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSC SITES DURING 12/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	12	4.05	0.00	3.98	4.74	3.71	0.37	0.23
COND	12	97.95	0.00	141.67	565.00	11.00	159.13	98.77
CMPPT	12	0.00	1.06	0.09	0.43	0.02	0.11	0.07
H	12	89.08	0.00	103.68	194.98	18.20	61.50	38.17
HNV	12	76.77	0.00	88.18	162.18	13.80	52.10	32.33
NA	9	443.99	0.00	744.47	3693.63	38.26	1180.40	908.91
K	9	9.80	0.00	16.08	68.16	2.30	21.39	16.47
CA	9	29.14	0.00	48.46	194.11	6.49	59.52	45.83
MG	9	101.31	0.00	169.48	821.78	10.20	263.45	202.86
NH4	9	14.93	0.00	20.02	32.16	6.65	8.51	6.55
CL	9	474.46	0.00	785.90	3908.52	45.40	1249.52	966.55
TF	9	4.45	0.00	4.80	7.89	0.00	2.61	2.01
NO3	9	35.94	0.00	53.30	162.91	14.68	47.70	36.73
SO4	9	119.97	0.00	172.27	579.63	27.07	176.27	135.73
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	71.21	0.00	91.43	177.44	22.48	59.94	46.16
SAN	9	635.96	0.00	1017.90	4657.07	92.11	1467.58	1130.03
SCA	9	685.94	0.00	1098.68	4941.63	108.10	1558.34	1199.92
A/C	9	0.93	0.00	0.93	0.99	0.85	0.04	0.03
CL/NA	9	1.07	0.00	1.06	1.19	0.82	0.11	0.08
NA/MG	9	4.38	0.00	4.39	4.63	3.75	0.28	0.21
SS	9	523.05	0.00	866.73	4311.10	49.44	1378.30	1061.29
NC	9	76.13	0.00	131.79	485.99	9.04	150.41	115.82
COND/P	9	0.86	0.00	0.86	0.95	0.57	0.11	0.09
AMTH	1	0.00	950.97	79.25	324.77	10.38	84.81	52.64
AMTHNV	12	0.00	819.52	68.29	289.45	8.41	75.67	46.97
AMTNA	9	0.00	4320.98	480.11	2135.38	40.65	658.83	507.30
AMTK	9	0.00	95.44	10.60	39.41	2.44	11.67	8.98
AMTCA	9	0.00	283.74	31.53	112.22	11.73	31.86	24.53
AMTMG	9	0.00	985.96	109.55	475.09	10.84	146.69	112.95
AMTNH4	9	0.00	145.60	16.18	28.48	6.70	7.25	5.58
AMTCL	9	0.00	4617.49	513.05	2259.61	48.24	698.92	538.17
AMTF	9	0.00	43.35	4.82	18.03	0.00	5.20	4.01
AMTNO3	9	0.00	350.23	38.91	94.18	13.98	26.15	20.14
AMTSO4	9	0.00	1168.84	129.87	335.10	21.57	108.17	83.29
AMTPU4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	9	0.00	694.31	77.15	196.68	15.24	58.43	44.99
AMTSS	9	0.00	5090.37	565.60	2492.35	52.53	770.93	593.62
AMTNC	9	0.00	741.34	82.37	280.96	33.62	79.90	61.52

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 61.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN SAMPLES COLLECTED AT ALL KSL SITES DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	3.97	0.00	3.96	4.01	3.87	0.06	0.07
COND	5	57.79	0.00	60.14	90.50	50.00	17.18	21.36
CMPPT	5	0.00	1.46	0.29	0.38	0.20	0.07	0.08
H	5	106.91	0.00	108.87	134.90	97.72	14.82	18.43
HNV	5	49.24	0.00	101.23	131.83	83.18	18.43	22.91
NA	5	45.71	0.00	56.00	188.27	20.87	73.97	91.96
K	5	3.20	0.00	3.63	8.94	2.04	2.97	3.70
CA	5	55.43	0.00	57.48	90.32	39.42	19.52	24.27
MG	5	13.47	0.00	16.16	51.33	6.25	19.68	24.47
NH4	5	36.28	0.00	37.70	52.11	27.17	9.67	12.03
CL	5	43.92	0.00	54.09	185.27	18.05	73.37	91.22
F	5	8.32	0.00	8.63	16.31	2.63	4.96	6.17
NO3	5	53.73	0.00	54.84	70.33	45.49	9.93	12.35
SO4	5	121.69	0.00	126.59	190.50	44.52	37.17	46.22
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	117.17	0.00	121.02	171.44	91.97	30.06	37.37
SAN	5	227.65	0.00	244.15	455.05	172.96	119.09	148.05
SCA	5	261.00	0.00	279.84	525.86	200.88	138.08	171.67
A/C	5	0.87	0.00	0.87	0.92	0.83	0.03	0.04
CL/NA	5	0.96	0.00	0.97	1.10	0.80	0.12	0.14
NA/MG	5	3.39	0.00	3.47	3.67	2.52	0.50	0.62
SS	5	48.44	0.00	59.66	204.36	19.91	80.93	100.62
NC	5	105.65	0.00	111.31	186.61	70.37	44.16	54.90
COND/P	5	0.91	0.00	0.91	0.92	0.87	0.02	0.03
AMTH	5	0.00	1560.33	312.07	402.49	271.60	53.25	66.21
AMTHNV	5	0.00	1448.38	289.68	393.33	247.70	58.91	73.24
AMTNA	5	0.00	667.17	133.43	382.42	67.12	139.29	173.17
AMTK	5	0.00	46.69	9.34	18.15	6.62	4.45	6.15
AMTCA	5	0.00	809.07	161.81	222.49	117.03	41.98	52.19
AMTMG	5	0.00	196.59	39.32	104.26	18.56	36.53	45.41
AMTNH4	5	0.00	529.49	105.90	119.34	80.65	15.39	19.13
AMTCL	5	0.00	640.99	128.20	376.34	54.86	138.89	172.67
AMTF	5	0.00	121.48	24.30	42.32	8.31	13.22	16.43
AMTNO3	5	0.00	784.16	156.83	213.28	138.87	31.65	39.35
AMTSO4	5	0.00	1776.08	355.22	443.35	280.61	62.89	78.18
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	1710.12	342.02	436.21	273.03	60.37	75.06
AMTSS	5	0.00	707.02	141.40	415.10	60.51	153.20	190.46
AMTNC	5	0.00	1542.00	308.40	380.26	208.92	72.96	90.71

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 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 62.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 07/77.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	2	4.47	0.00	4.29	4.57	4.12	0.32	2.86
COND	2	14.36	0.00	22.45	33.90	11.00	16.19	145.53
CMPPT	2	0.00	4.35	2.18	3.71	0.64	2.17	19.54
H	2	34.10	0.00	51.39	75.86	26.91	34.61	311.03
HNV	2	32.07	0.00	48.78	72.44	25.12	33.46	300.75
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	2	0.00	1484.01	742.00	999.23	484.78	363.77	3269.36
AMTHNV	2	0.00	1395.50	697.75	932.54	462.96	332.04	2984.17
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
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 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 63.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 08/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	8	4.50	0.00	4.62	5.77	4.11	0.54	0.45
COND	8	19.50	0.00	16.52	30.00	0.00	9.18	7.66
CMPPT	8	0.00	13.36	1.67	4.38	0.03	1.50	1.25
H	8	51.88	0.00	24.17	77.63	1.70	29.79	24.85
HNV	8	24.47	0.00	19.24	66.07	0.43	24.56	20.50
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	8	0.00	4257.67	532.21	2890.53	2.63	971.85	810.89
AMTHNV	8	0.00	3267.53	408.44	2192.69	0.67	738.29	616.02
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 64.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 09/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	8	4.79	0.00	4.23	5.56	3.86	0.59	0.49
CUND	8	17.39	0.00	31.60	105.70	0.00	36.81	30.71
CMPPT	8	0.00	15.94	1.99	7.33	0.01	2.73	2.28
H	8	16.08	0.00	59.38	138.04	2.75	52.87	44.11
HNV	8	14.16	0.00	47.22	114.81	0.95	41.51	34.64
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	8	0.00	2562.58	320.32	1161.43	15.10	394.97	329.56
AMTHNV	8	0.00	2256.46	282.06	1109.16	6.74	372.71	310.98
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 CUND,CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 65.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 10/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.38	0.00	3.99	4.89	3.47	0.53	0.66
COND	5	26.37	0.00	54.10	150.00	11.20	55.85	69.43
CMPPT	5	0.00	7.42	1.48	2.75	0.07	1.00	1.24
H	5	41.47	0.00	101.84	338.84	12.88	134.75	167.53
HNV	5	38.81	0.00	99.42	338.84	11.48	135.87	168.92
NA	4	59.17	0.00	74.68	211.31	11.31	92.40	146.92
K	4	1.52	0.00	1.98	5.87	0.51	2.61	4.14
CA	4	7.07	0.00	8.23	11.98	2.99	4.28	6.81
MG	4	12.77	0.00	16.06	44.42	2.55	19.18	30.50
NH4	4	9.40	0.00	10.53	23.28	4.99	8.62	13.71
CL	4	46.88	0.00	60.35	177.10	9.31	78.62	125.00
F	4	4.03	0.00	3.95	7.37	1.58	2.67	4.24
NO3	4	12.16	0.00	13.59	28.07	3.23	10.70	17.01
SO4	4	28.69	0.00	33.94	58.09	15.41	19.99	31.31
PO4	4	0.84	0.00	1.03	4.11	0.00	2.05	3.27
XSSO4	4	23.87	0.00	27.73	39.87	11.69	14.29	22.73
SAN	4	92.61	0.00	112.85	245.84	46.01	91.59	145.63
SCA	4	128.48	0.00	154.08	311.60	74.26	110.28	175.34
A/C	4	0.72	0.00	0.73	0.79	0.62	0.07	0.12
CL/NA	4	0.79	0.00	0.81	0.84	0.70	0.07	0.11
NA/MG	4	4.63	0.00	4.65	4.76	3.95	0.37	0.59
SS	4	51.71	0.00	66.56	195.34	10.27	86.71	137.88
NC	4	38.21	0.00	44.92	86.06	16.13	30.53	48.55
COND/P	4	0.96	0.00	0.99	1.19	0.89	0.14	0.22
AMTH	5	0.00	3076.14	615.23	1197.70	243.54	426.96	530.82
AMTHNV	5	0.00	2878.47	575.69	1117.76	243.54	403.73	501.94
AMTNA	4	0.00	4347.54	1086.88	2367.36	222.56	986.49	1568.52
AMTK	4	0.00	111.62	27.90	65.78	7.70	26.84	42.68
AMTCA	4	0.00	519.20	129.80	180.58	82.33	40.15	63.84
AMTMG	4	0.00	936.09	234.52	497.65	50.20	202.74	322.35
AMTNH4	4	0.00	690.62	172.65	351.09	93.16	120.34	191.35
AMTCL	4	0.00	3444.77	861.19	1984.03	183.21	830.63	1320.70
AMTF	4	0.00	296.03	74.01	130.26	23.58	54.54	86.72
AMTNU3	4	0.00	893.48	223.37	423.19	88.72	161.49	256.77
AMTSO4	4	0.00	2106.10	527.02	650.76	405.80	130.20	207.01
AMTPO4	4	0.00	61.92	15.48	61.92	0.00	30.96	49.23
AXSSO4	4	0.00	1753.63	438.41	598.54	321.54	118.34	188.16
AMTSS	4	0.00	3794.58	949.89	2188.38	202.08	916.18	1456.73
AMTNC	4	0.00	2807.49	701.87	964.15	317.60	274.17	435.93

N=NUMBER OF SAMPLES  
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 COND,CMPPT,AND RAINUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 66.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 11/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	8	5.09	0.00	4.41	5.31	3.88	0.51	0.42
COND	8	8.40	0.00	20.75	51.70	0.00	18.73	15.63
CMPPT	8	0.00	16.14	2.02	6.88	0.02	2.87	2.39
H	8	8.20	0.00	39.08	131.83	4.90	41.25	34.42
HNV	8	6.07	0.00	31.10	97.72	3.39	31.24	26.07
NA	7	51.78	0.00	111.93	281.32	18.26	112.98	104.62
K	7	0.57	0.00	2.74	6.89	0.25	2.89	2.68
CA	7	1.93	0.00	10.62	26.95	0.50	9.82	9.09
MG	7	7.16	0.00	24.02	71.24	4.44	25.34	23.46
NH4	7	1.83	0.00	7.44	17.74	0.55	7.23	6.70
CL	7	36.19	0.00	149.50	432.02	18.61	178.37	165.17
TF	7	0.21	0.00	1.95	6.84	0.00	2.48	2.30
NO3	7	3.44	0.00	16.06	31.78	1.29	13.45	12.45
SO4	7	8.03	0.00	35.81	83.07	2.91	34.11	31.59
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	4.54	0.00	23.10	49.34	0.56	21.25	19.68
SAN	7	47.87	0.00	203.33	538.93	24.92	220.24	203.95
SCA	7	51.34	0.00	182.58	433.71	29.46	169.89	157.32
A/C	7	0.93	0.00	1.11	1.24	0.83	0.18	0.17
LL/NA	7	1.14	0.00	1.34	1.54	0.88	0.26	0.24
NA/MG	7	4.44	0.00	4.66	5.68	3.95	0.61	0.56
SS	7	37.50	0.00	136.83	363.46	20.53	149.29	138.24
NC	7	5.78	0.00	19.92	57.46	2.03	20.00	18.52
COND/P	7	1.09	0.00	0.88	1.20	0.61	0.22	0.20
AMTH	8	0.00	1323.61	165.45	377.81	22.66	125.91	105.06
AMTHNV	8	0.00	980.37	122.55	243.93	16.80	81.20	67.75
AMTNA	7	0.00	5122.62	731.83	1464.73	112.16	467.00	432.45
AMTK	7	0.00	91.65	13.09	17.55	3.11	5.51	5.11
AMTCA	7	0.00	311.31	44.47	85.92	23.31	22.58	20.91
AMTMG	7	0.00	1153.71	164.82	316.70	23.39	109.37	101.28
AMTNH4	7	0.00	295.00	42.14	105.34	12.39	33.59	31.10
AMTCL	7	0.00	5832.89	833.27	1570.39	99.67	503.20	465.97
AMTF	7	0.00	33.82	4.83	13.90	0.00	5.97	5.52
AMTNO3	7	0.00	554.63	79.23	144.62	36.74	40.23	37.25
AMTSO4	7	0.00	1294.28	184.90	273.20	49.48	85.29	78.98
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	7	0.00	731.65	104.52	220.82	38.80	67.30	62.32
AMTSS	7	0.00	6043.28	863.33	1732.14	109.94	557.02	515.80
AMTNC	7	0.00	931.21	133.03	341.16	22.69	119.90	111.03

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 67.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 12/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	12	4.56	0.00	4.48	5.26	0.00	1.35	0.84
COND	12	16.82	0.00	23.20	52.00	0.00	16.29	10.11
CMPPT	12	0.00	7.07	0.59	1.30	0.01	0.52	0.32
H	12	27.29	0.00	32.94	83.18	0.00	25.29	15.70
HNv	12	24.11	0.00	26.81	77.63	0.00	21.98	13.64
NA	8	37.11	0.00	58.81	274.36	9.13	87.81	73.27
K	8	0.80	0.00	1.24	5.62	0.00	1.81	1.51
CA	8	3.40	0.00	5.43	19.46	1.50	6.13	5.11
MG	8	8.62	0.00	13.34	59.31	2.96	18.73	15.63
NH4	8	3.79	0.00	3.88	9.98	0.55	2.93	4.45
CL	8	37.54	0.00	54.18	216.58	13.54	66.66	55.62
F	8	0.27	0.00	0.20	1.58	0.00	0.56	0.47
NO3	8	7.50	0.00	9.40	18.71	1.29	6.08	5.07
SO4	8	28.04	0.00	33.52	76.41	7.50	26.34	21.98
PO4	8	1.50	0.00	1.11	8.84	0.00	3.13	2.61
XSSO4	8	24.27	0.00	28.06	73.23	3.84	22.81	19.03
SAN	8	74.86	0.00	98.40	304.72	43.93	88.76	74.06
SCA	8	80.28	0.00	111.56	392.14	43.23	117.61	98.13
A/C	8	0.93	0.00	0.88	1.10	0.78	0.10	0.09
CL/NA	8	1.01	0.00	0.92	1.48	0.79	0.23	0.20
NA/MG	8	4.30	0.00	4.41	4.68	3.08	0.54	0.45
SS	8	40.49	0.00	58.56	238.88	11.80	74.11	61.84
NC	8	13.24	0.00	24.13	123.74	3.79	40.43	33.73
COND/P	8	0.97	0.00	0.96	1.11	0.74	0.11	0.09
AMTH	12	0.00	1931.64	160.92	714.80	0.00	200.26	124.24
AMTHv	12	0.00	1705.67	142.14	667.09	0.00	187.03	116.08
AMTNA	8	0.00	2557.51	319.69	540.14	32.10	171.43	143.04
AMTK	8	0.00	55.30	6.91	12.37	0.00	4.15	3.47
AMTCA	8	0.00	234.37	29.30	64.32	11.23	16.13	13.46
AMTMG	8	0.00	594.35	74.29	116.76	10.41	36.84	30.74
AMTNH4	8	0.00	261.32	32.67	85.76	7.19	30.93	25.81
AMTCL	8	0.00	2587.12	323.39	521.79	47.59	151.14	126.11
AMTF	8	0.00	18.50	2.31	18.50	0.00	6.54	5.46
AMTNO3	8	0.00	517.10	64.64	160.80	16.73	44.16	36.85
AMTSO4	8	0.00	1932.96	241.62	656.64	66.61	195.46	163.09
AMTPO4	8	0.00	103.65	12.96	103.65	0.00	36.65	30.58
AXSSU4	8	0.00	1672.94	209.12	629.31	49.79	193.26	161.25
AMTSS	8	0.00	2790.28	348.78	575.53	41.47	172.53	143.96
AMTNC	8	0.00	912.57	114.07	243.62	28.40	69.28	57.80

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 68.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 01/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	4.59	0.00	4.43	4.93	3.99	0.36	0.38
COND	6	17.35	0.00	28.25	58.00	7.90	18.26	19.16
CMPPT	6	0.00	5.95	0.99	3.61	0.14	1.29	1.36
H	6	25.59	0.00	36.85	102.33	11.75	35.32	37.06
HNV	6	22.19	0.00	32.03	102.33	17.59	37.68	39.53
NA	6	58.36	0.00	66.09	131.31	20.00	43.90	46.06
K	6	1.35	0.00	2.04	4.59	0.00	1.46	2.05
CA	6	8.51	0.00	16.55	33.93	0.00	11.73	12.31
MG	6	10.55	0.00	18.45	36.44	5.18	12.89	13.52
NH4	6	9.51	0.00	14.78	26.06	3.88	8.39	8.60
CL	6	42.73	0.00	74.54	152.00	22.00	51.77	54.32
F	6	0.16	0.00	0.26	1.58	0.00	0.64	0.68
NO3	6	12.09	0.00	16.40	44.52	6.94	14.39	15.10
SO4	6	31.41	0.00	52.40	122.42	10.41	39.50	41.44
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	27.06	0.00	44.60	110.38	8.15	36.36	38.15
SAN	6	86.39	0.00	143.60	288.65	39.34	94.97	99.64
SCA	6	93.87	0.00	154.77	286.95	44.83	93.30	97.89
A/C	6	0.92	0.00	0.93	1.01	0.79	0.07	0.07
CL/NA	6	1.11	0.00	1.13	1.23	0.94	0.09	0.09
NA/MG	6	3.64	0.00	3.58	4.05	3.15	0.40	0.42
SS	6	46.73	0.00	81.52	167.65	24.26	56.90	59.70
NC	6	21.55	0.00	36.40	54.86	8.85	18.09	18.99
COND/P	6	0.90	0.00	0.94	1.10	0.85	0.09	0.10
AMTH	6	0.00	153.22	253.77	607.58	23.89	225.17	236.25
AMTHNV	6	0.00	132.19	220.03	607.58	11.98	225.46	236.55
AMTNA	6	0.00	283.25	380.54	721.90	115.49	238.29	250.01
AMTK	6	0.00	80.40	13.40	36.86	0.00	14.45	15.16
AMICA	6	0.00	506.31	84.38	133.33	26.51	43.86	46.02
AMTMG	6	0.00	627.86	104.64	187.55	36.71	67.22	70.53
AMTNH4	6	0.00	566.05	94.34	154.71	13.72	52.67	55.27
AMTCL	6	0.00	2543.23	423.87	793.92	142.32	269.52	282.78
AMTF	6	0.00	9.38	1.56	9.38	0.00	3.83	4.02
AMTNO3	6	0.00	719.46	119.91	264.33	15.30	109.51	114.90
AMTSO4	6	0.00	1869.25	311.54	726.88	69.85	235.11	246.67
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	1610.24	268.37	655.37	48.35	214.22	224.76
AMTSS	6	0.00	2781.16	463.53	875.69	149.22	295.48	310.02
AMTNC	6	0.00	1282.70	213.78	325.71	66.83	108.71	114.06

N=NUMBER OF SAMPLES  
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 COND, CMPPT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 69.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 02/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	8	4.44	0.00	4.22	4.53	3.98	0.23	0.19
CUND	8	24.20	0.00	57.02	182.00	16.90	56.86	47.45
CMPPT	8	0.00	10.32	1.29	5.91	0.01	1.99	1.66
H	8	36.11	0.00	60.81	104.71	29.51	30.49	25.44
HNV	8	31.29	0.00	41.46	83.18	0.00	28.38	23.68
NA	6	65.21	0.00	179.14	919.60	6.09	363.50	381.39
K	6	1.02	0.00	3.06	13.53	0.77	5.13	5.38
CA	6	4.32	0.00	11.06	39.92	0.00	15.56	16.32
MG	6	15.06	0.00	39.13	198.25	1.23	78.14	81.98
NH4	6	6.56	0.00	5.73	13.31	2.22	3.98	4.17
CL	6	58.41	0.00	132.59	641.55	5.36	250.27	262.58
F	6	0.54	0.00	0.70	2.63	0.00	1.14	1.19
NO3	6	9.57	0.00	22.21	68.88	4.35	23.78	24.95
SO4	6	37.05	0.00	67.39	208.20	27.90	69.82	73.26
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	31.04	0.00	53.75	142.19	25.84	44.85	47.06
SAN	6	105.57	0.00	222.88	920.20	58.24	342.31	359.15
SCA	6	128.18	0.00	295.08	1282.11	66.42	484.14	507.96
A/C	6	0.82	0.00	0.76	0.90	0.72	0.06	0.07
CL/NA	6	0.90	0.00	0.74	1.17	0.70	0.16	0.17
NA/MG	6	4.33	0.00	4.58	4.93	3.55	0.47	0.49
SS	6	64.42	0.00	146.24	707.63	5.91	270.05	289.63
NC	6	27.74	0.00	91.88	469.77	5.76	185.35	194.46
CUND/P	6	0.93	0.00	0.95	1.09	0.90	0.07	0.07
AMTH	6	0.00	3729.10	466.14	1743.06	11.87	568.99	474.76
AMTHNV	6	0.00	3231.12	403.89	1416.81	0.00	467.25	389.87
AMTNA	6	0.00	6704.85	1117.47	4417.02	18.17	1679.15	1761.76
AMTK	6	0.00	105.19	17.53	45.24	3.05	14.66	15.38
AMTCA	6	0.00	443.95	73.99	253.40	0.00	112.36	107.40
AMTMG	6	0.00	1548.05	258.01	1020.28	3.68	386.14	405.14
AMTNH4	6	0.00	674.53	112.42	327.44	8.77	145.89	153.07
AMTCL	6	0.00	6006.07	1001.01	4063.97	15.99	1531.46	1606.80
AMTF	6	0.00	55.72	9.29	53.45	0.00	21.66	22.72
AMTNO3	6	0.00	984.21	164.03	258.84	37.07	97.14	101.92
AMTSO4	6	0.00	3810.29	635.05	1992.08	161.55	684.08	717.73
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	3192.50	532.08	1573.90	159.90	533.34	559.58
AMTSS	6	0.00	6624.22	1104.04	4482.56	17.64	1689.24	1772.34
AMTNC	6	0.00	2852.35	475.39	1327.42	17.19	502.54	527.26

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 CUND, CMPPT, AND RAINUS  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-70

Table 70.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 03/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%CL
PH	8	4.49	0.00	4.37	4.79	4.06	0.27	0.23
COND	8	21.76	0.00	33.26	67.00	8.60	21.89	18.27
CMPPT	8	0.00	8.20	1.03	3.89	0.06	1.21	1.01
H	8	32.12	0.00	42.42	87.10	16.22	24.77	20.67
HNV	8	29.96	0.00	38.32	81.28	15.85	22.43	18.72
NA	7	44.85	0.00	54.91	141.31	15.22	45.93	42.53
K	7	1.25	0.00	1.86	3.57	0.25	1.42	1.31
CA	7	10.33	0.00	19.46	53.89	2.00	17.95	16.62
MG	7	12.15	0.00	15.70	36.44	4.28	12.21	11.31
NH4	7	8.81	0.00	13.46	41.58	1.66	14.54	13.47
CL	7	48.79	0.00	58.54	149.74	17.20	48.56	44.97
F	7	0.95	0.00	1.20	3.68	0.00	1.45	1.34
NO3	7	17.52	0.00	27.03	66.94	7.74	22.19	20.55
SO4	7	33.17	0.00	44.20	91.61	16.24	31.66	29.32
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	28.24	0.00	38.20	80.30	14.41	28.36	26.26
SAN	7	100.43	0.00	130.97	275.87	44.82	88.49	81.94
SCA	7	109.32	0.00	145.27	311.78	42.40	100.65	93.20
A/C	7	0.92	0.00	0.90	1.06	0.80	0.11	0.10
CL/NA	7	1.09	0.00	1.07	1.28	0.94	0.11	0.10
NA/MG	7	3.69	0.00	3.50	4.13	2.72	0.54	0.50
SS	7	52.95	0.00	64.31	165.17	18.97	53.81	49.83
NC	7	24.45	0.00	41.09	107.13	6.52	35.42	32.80
COND/P	7	0.90	0.00	0.95	1.09	0.82	0.08	0.08
AMTH	8	0.00	2635.49	329.44	1007.05	35.78	327.80	273.51
AMTHNV	8	0.00	2456.26	307.28	939.83	28.42	310.50	259.06
AMTNA	7	0.00	3652.98	521.85	1633.90	109.84	545.63	505.26
AMTK	7	0.00	101.87	14.55	41.33	1.84	13.65	12.64
AMTCA	7	0.00	841.56	120.22	219.25	28.69	64.66	59.87
AMTMG	7	0.00	989.80	141.40	421.35	34.88	137.27	127.12
AMTNH4	7	0.00	717.69	102.53	282.05	11.95	95.69	88.61
AMTCL	7	0.00	3973.49	567.64	1731.39	115.95	581.65	538.61
AMTF	7	0.00	77.33	11.05	40.95	0.00	14.92	13.82
AMTNO3	7	0.00	1427.24	203.89	399.12	55.65	132.03	122.26
AMTSO4	7	0.00	2701.64	385.95	1059.22	136.18	340.59	315.39
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	2294.67	328.52	881.06	123.45	285.43	264.31
AMTSS	7	0.00	4312.71	616.10	1909.72	127.90	638.29	591.07
AMTNC	7	0.00	1991.19	284.46	688.15	83.23	198.55	183.86

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 71.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 04/78.

	N	VOLWTAV	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C. L.
PH	NN	4.47	0.00	4.47	4.54	4.41	0.09	0.83
COND	NNNN	43.26	0.00	43.30	46.80	39.80	4.95	44.49
CMPPT	NNNN	0.00	0.49	0.25	0.25	0.24	0.00	0.04
H	NNNN	33.81	0.00	33.87	38.90	28.84	7.12	63.96
HNV	NNNN	28.99	0.00	29.06	34.67	23.44	7.94	71.38
NA	NNNN	85.93	0.00	86.31	117.83	54.78	44.58	400.66
K	NNNN	4.73	0.00	4.72	5.62	3.83	1.26	11.36
CA	NNNN	70.62	0.00	70.36	91.82	48.90	30.34	272.72
MG	NNNN	22.82	0.00	22.87	27.15	18.59	6.05	54.37
NH4	NNNN	67.70	0.00	67.64	72.63	62.65	7.06	63.42
CL	NNNN	88.07	0.00	88.41	116.18	60.63	39.28	353.05
TF	NNNN	5.00	0.00	5.00	5.26	4.74	0.37	3.34
NO3	NNNN	31.62	0.00	31.61	32.26	30.97	0.91	8.20
SO4	NNNN	101.11	0.00	101.08	103.06	99.10	2.80	25.14
PO4	NNNN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	NNNN	92.04	0.00	91.98	96.80	87.15	6.84	61.47
SAN	NNNN	225.74	0.00	225.10	251.52	200.69	35.95	323.05
SCA	NNNN	85.60	0.00	85.77	99.26	72.27	19.08	171.49
A/C	NNNN	0.79	0.00	0.79	0.84	0.74	0.07	0.65
CL/NA	NNNN	1.02	0.00	1.02	1.11	0.99	0.09	0.77
NA/MG	NNNN	3.77	0.00	3.77	4.34	2.95	0.99	8.86
SS	NNNN	97.14	0.00	97.51	128.15	66.87	43.33	389.41
NC	NNNN	154.65	0.00	154.38	176.56	132.20	31.36	281.88
COND/P	NNNN	0.98	0.00	0.98	0.98	0.97	0.01	0.06
AMTH	NNNN	0.00	166.93	83.47	94.83	72.10	16.07	144.44
AMTHNV	NNNN	0.00	143.12	71.56	84.52	58.61	18.32	164.66
AMTNA	NNNN	0.00	424.17	212.09	287.21	136.96	106.24	954.85
AMTK	NNNN	0.00	23.37	11.69	14.04	9.33	3.33	29.91
AMTCA	NNNN	0.00	348.74	174.37	229.54	119.20	78.02	701.22
AMTMG	NNNN	0.00	112.64	56.32	66.17	46.48	13.92	125.14
AMTNH4	NNNN	0.00	334.27	167.13	181.57	152.70	20.41	183.42
AMTCL	NNNN	0.00	434.77	217.39	283.20	151.57	93.07	836.46
AMTF	NNNN	0.00	24.67	12.34	12.83	11.84	0.70	6.27
AMTNO3	NNNN	0.00	156.14	78.07	80.65	75.49	3.65	32.80
AMTSO4	NNNN	0.00	499.21	249.61	257.65	241.56	11.37	102.21
AMTPO4	NNNN	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	NNNN	0.00	454.47	227.24	242.05	212.42	20.95	188.28
AMTSS	NN	0.00	474.55	239.78	312.37	167.19	102.66	922.63
AMTNC	N	0.00	763.65	381.82	441.40	322.25	84.25	757.20

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A.72

Table 72.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 05/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.46	0.00	4.45	4.51	4.32	0.08	0.10
COND	5	31.59	0.00	34.02	50.10	27.80	9.20	11.43
CMPPT	5	0.00	5.91	1.18	2.43	0.56	0.81	1.00
H	5	34.50	0.00	35.79	47.86	30.90	6.43	8.61
HNV	5	30.90	0.00	31.32	38.90	24.55	5.71	7.10
NA	5	49.11	0.00	49.91	69.57	36.52	13.73	17.07
K	5	3.06	0.00	3.78	6.64	1.79	2.19	2.73
CA	5	20.18	0.00	24.45	57.88	9.48	20.01	24.88
Mg	5	13.10	0.00	13.84	17.60	9.46	2.90	3.61
NH4	5	59.02	0.00	43.80	91.48	13.86	28.77	35.77
CL	5	59.08	0.00	59.78	79.81	45.12	14.74	18.32
F	5	1.32	0.00	1.58	2.63	0.00	0.98	1.22
NO3	5	25.49	0.00	30.07	56.62	16.13	16.16	20.09
SO4	5	42.68	0.00	50.18	72.66	30.19	16.95	21.07
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	36.83	0.00	44.22	68.02	25.81	17.37	21.60
SAN	5	128.58	0.00	141.61	179.70	97.33	30.62	38.07
SCA	5	158.98	0.00	171.57	224.49	129.03	40.81	50.74
A/C	5	0.81	0.00	0.83	0.98	0.75	0.09	0.11
CL/NA	5	1.20	0.00	1.20	1.27	1.15	0.05	0.07
NA/MG	5	3.75	0.00	3.61	4.01	2.83	0.50	0.62
SS	5	62.96	0.00	64.12	88.03	47.19	17.08	21.23
NC	5	61.51	0.00	71.66	115.39	23.68	39.50	49.11
COND/P	5	1.08	0.00	1.07	1.20	1.00	0.09	0.11
AMTH	5	0.00	2039.54	407.91	842.46	197.64	266.28	331.05
AMTHNV	5	0.00	1826.66	365.33	786.23	153.42	255.20	317.27
AMTNA	5	0.00	2902.85	580.57	1087.00	241.86	384.11	477.55
AMTK	5	0.00	181.08	36.22	55.83	13.12	15.28	18.99
AMTCA	5	0.00	1192.82	238.56	428.83	76.95	156.69	194.80
AMTMG	5	0.00	774.50	154.90	275.06	79.14	90.98	113.11
AMTNH4	5	0.00	2306.39	461.28	889.03	101.78	299.30	372.10
AMTCL	5	0.00	3492.42	698.48	1246.97	282.00	456.92	568.07
AMTF	5	0.00	78.18	15.64	38.36	0.00	14.08	17.50
AMTNO3	5	0.00	1507.01	301.40	462.45	118.46	141.50	175.92
AMTSO4	5	0.00	2523.05	504.61	733.50	314.97	189.88	236.07
AMTPU4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	2177.02	435.40	627.10	264.43	152.11	189.11
AMTSS	5	0.00	3721.48	744.30	1375.41	312.48	486.79	605.21
AMTNC	5	0.00	3636.16	727.23	1145.94	173.90	374.47	465.56

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 73.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	4.44	0.00	4.20	4.84	3.68	0.40	0.42
COND	6	20.20	0.00	33.67	106.80	11.80	36.23	38.02
CMPPT	6	0.00	17.17	2.86	7.09	0.12	2.91	3.06
H	6	35.89	0.00	63.44	208.93	14.45	72.78	76.36
HNV	6	31.77	0.00	59.33	204.17	10.72	72.32	75.87
NA	6	18.56	0.00	31.45	81.31	12.17	25.33	26.58
K	6	1.10	0.00	2.30	6.17	0.51	2.89	3.04
CA	6	6.05	0.00	16.22	56.89	2.99	20.55	21.56
MG	6	4.39	0.00	8.32	24.18	0.80	7.99	8.38
NH4	6	8.38	0.00	16.08	54.33	0.88	19.13	20.08
CL	6	19.19	0.00	34.54	95.60	1.13	30.96	32.48
F	6	0.04	0.00	0.70	2.63	0.00	1.14	1.19
NO3	6	13.21	0.00	30.81	102.43	0.23	36.37	38.16
SO4	6	30.73	0.00	56.70	210.91	1.24	76.04	79.78
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	28.75	0.00	53.16	201.16	0.96	73.09	76.69
SAN	6	63.16	0.00	122.75	411.56	0.52	142.34	149.34
SCA	6	74.38	0.00	137.80	433.80	0.77	146.77	154.00
A/C	6	0.85	0.00	0.89	0.95	0.00	0.06	0.06
CL/NA	6	1.03	0.00	1.10	1.18	0.00	0.10	0.10
NA/MG	6	4.23	0.00	3.78	4.76	0.36	0.47	0.49
SS	6	21.16	0.00	38.04	155.05	0.99	33.99	35.66
NC	6	17.32	0.00	36.33	119.83	1.20	41.91	43.97
COND/P	6	1.03	0.00	0.98	1.11	0.09	0.09	0.10
AMTH	6	0.00	616	1027	2615	955	1092	1146
AMTHNV	6	0.00	545	909	2385	555	954	1001
AMTNA	6	0.00	186	531	1573	54	566	593
AMTK	6	0.00	189	311	90	2	33	35
AMTCA	6	0.00	103	173	530	3	187	196
AMTMG	6	0.00	75	125	385	14	137	144
AMTNH4	6	0.00	143	239	707	28	268	281
AMTCL	6	0.00	32	49	170	5	60	63
AMTF	6	0.00	6	1	3	0	1	1
AMTNO3	6	0.00	22	37	91	6	36	38
AMTSO4	6	0.00	27	87	197	5	89	93
AMTPU4	6	0.00	0	0	0	0	0	0
AXSSO4	6	0.00	49	82	184	4	84	88
AMTSS	6	0.00	36	60	187	6	66	70
AMTNC	6	0.00	29	49	141	7	51	54

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 74.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 07/78.

	N	VOLWTA V	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	9	4.38	0.00	4.32	4.54	3.97	0.20	0.16
COND	9	26.51	0.00	31.84	55.40	16.40	14.30	11.01
CMPPT	9	0.00	22.94	2.55	6.80	0.61	2.33	1.79
H	9	41.64	0.00	47.70	107.15	28.84	27.86	21.45
HNV	9	39.21	0.00	44.08	97.72	27.54	24.80	19.09
NA	9	41.34	0.00	61.11	235.66	13.91	68.05	52.40
K	9	1.26	0.00	1.76	5.87	0.51	1.68	1.29
CA	9	6.20	0.00	8.70	23.45	1.50	6.42	4.95
MG	9	8.33	0.00	11.06	40.23	2.30	11.79	9.08
NH4	9	3.09	0.00	5.67	14.97	0.55	5.24	4.03
CL	9	45.27	0.00	66.55	262.54	12.13	76.87	59.19
F	9	0.60	0.00	1.11	4.21	0.00	1.33	1.02
NO3	9	12.40	0.00	17.01	39.20	7.42	12.48	9.61
SO4	9	36.39	0.00	37.89	70.37	16.45	15.77	12.14
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	31.78	0.00	31.06	65.09	14.39	15.65	12.05
SAN	9	94.67	0.00	122.56	323.64	47.08	84.83	65.22
SCA	9	101.86	0.00	136.01	349.02	58.09	90.87	69.97
A/C	9	0.93	0.00	0.90	0.99	0.75	0.07	0.05
CL/NA	9	1.10	0.00	1.19	1.19	0.87	0.10	0.07
NA/MG	9	4.96	0.00	5.53	14.16	4.42	3.06	2.36
SS	9	49.61	0.00	73.28	289.58	13.38	84.78	65.28
NC	9	10.62	0.00	15.00	30.60	4.97	8.21	6.32
COND/P	9	1.07	0.00	1.05	1.14	0.97	0.05	0.03
AMTH	9	0.00	955.69	1061.30	2899.41	193.77	919.23	707.80
AMTHNV	9	0.00	8993.36	999.26	2705.88	166.97	881.52	678.77
AMTNA	9	0.00	9482.15	1053.57	3900.97	223.18	1135.11	874.04
AMTK	9	0.00	288.63	32.07	121.47	5.24	34.89	26.87
AMTCA	9	0.00	1423.26	158.14	576.58	50.29	162.68	125.27
AMTMG	9	0.00	1911.03	212.34	883.39	15.76	262.14	201.84
AMTNH4	9	0.00	709.12	78.79	263.77	24.95	73.96	56.95
AMTCL	9	0.00	10385.17	1153.91	4638.46	233.52	1376.62	1059.99
AMTF	9	0.00	138.47	15.39	35.77	0.00	14.88	11.45
AMTNO3	9	0.00	2844.70	316.08	781.31	82.14	243.58	187.55
AMTSO4	9	0.00	8348.59	927.62	3254.75	180.50	995.87	766.82
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	9	0.00	7289.53	809.95	2787.03	120.64	884.84	681.33
AMTSS	9	0.00	11378.68	1264.30	5040.05	257.57	1494.33	1150.63
AMTNC	9	0.00	2435.50	270.61	706.13	101.96	189.88	146.20

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 75.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN  
COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT  
KSC SITE 01 DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%CL
PH	5	4.33	0.00	4.40	4.83	4.20	0.28	0.35
COND	5	23.63	0.00	34.38	73.50	20.80	22.17	27.56
CMPT	5	0.00	10.14	2.03	5.91	0.02	2.32	2.89
H	5	46.89	0.00	39.70	63.10	14.79	21.60	26.86
HNV	5	44.46	0.00	36.96	61.66	12.59	23.20	28.84
NA	4	15.81	0.00	28.04	79.57	7.83	34.42	54.73
KX	4	1.16	0.00	1.53	2.55	0.77	0.81	1.28
CA	4	6.19	0.00	6.61	10.48	0.99	2.77	4.41
MG	4	4.85	0.00	7.44	19.17	2.88	7.84	12.47
NH4	4	4.03	0.00	4.57	13.31	1.11	5.84	9.28
CL	4	21.19	0.00	36.03	99.83	10.15	42.67	67.85
TF	4	0.24	0.00	0.26	1.05	0.00	0.53	0.84
NO3	4	12.19	0.00	14.07	18.55	8.71	4.45	7.07
SO4	4	35.13	0.00	31.85	40.60	15.82	10.96	17.43
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	33.24	0.00	28.49	39.19	6.28	14.99	23.83
SAN	4	68.75	0.00	82.22	127.91	63.06	30.78	48.94
SCA	4	78.97	0.00	92.73	128.22	68.76	35.18	40.04
A/C	4	0.87	0.00	0.89	1.00	0.74	0.11	0.18
CL/NA	4	1.34	0.00	1.28	1.41	1.26	0.06	0.10
NA/MG	4	3.26	0.00	3.77	4.15	2.72	0.65	1.03
SS	4	20.42	0.00	36.23	102.80	10.11	44.47	70.71
NC	4	11.61	0.00	11.97	20.15	7.86	5.57	8.86
COND/P	4	1.00	0.00	1.00	1.08	0.95	0.06	0.09
AMTH	5	0.00	4756.93	951.39	2519.48	4.15	1029.53	1279.97
AMTHNV	5	0.00	4510.64	902.13	2297.80	2.56	948.24	1178.91
AMTNA	4	0.00	1600.33	400.08	770.41	154.08	292.23	464.64
AMTK	4	0.00	117.20	29.30	60.32	15.96	20.93	33.28
AMTCA	4	0.00	626.24	156.56	383.14	52.39	154.34	245.40
AMTMG	4	0.00	491.01	122.75	262.36	43.19	98.47	156.56
AMTNH4	4	0.00	408.52	102.13	303.53	10.40	136.20	216.56
AMTCL	4	0.00	2145.40	536.35	1082.62	207.27	411.20	653.80
AMTF	4	0.00	24.01	6.00	24.01	0.00	12.01	19.09
AMTNO3	4	0.00	1234.40	308.60	514.45	76.62	197.60	314.18
AMTSO4	4	0.00	3557.03	889.26	2127.35	98.89	874.24	1390.05
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	3365.15	841.29	2034.98	39.27	852.29	1355.14
AMTSS	4	0.00	2067.63	516.91	995.37	199.07	377.56	600.32
AMTNC	4	0.00	1175.68	293.92	546.34	66.42	244.52	388.79

N=NUMBER OF SAMPLES  
VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
COND, CMPT, AND RATIUS  
UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
MEAN=UNWEIGHTED AVERAGE  
CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
THE MONTH

Table 76.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 09/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	8	4.37	0.00	4.35	4.90	4.12	0.29	0.24
COND	8	26.97	0.00	37.05	82.00	8.50	24.98	20.84
CMPPT	8	0.00	11.06	1.38	4.09	0.03	1.49	1.25
H	8	42.55	0.00	44.96	75.86	12.59	24.71	20.62
HNV	8	38.90	0.00	41.13	70.79	11.48	22.07	18.41
NA	7	39.04	0.00	64.29	152.18	17.39	54.47	50.44
K	7	0.98	0.00	2.44	5.62	0.23	2.31	2.14
CA	7	10.19	0.00	24.38	128.74	2.00	46.20	42.78
MG	7	9.60	0.00	15.64	35.37	4.03	12.41	11.50
NH4	7	6.50	0.00	7.52	19.40	0.55	7.90	7.32
CL	7	44.33	0.00	69.45	148.90	20.02	53.63	49.67
F	7	3.38	0.00	1.50	8.95	0.00	3.31	3.06
NO3	7	16.27	0.00	22.24	63.55	4.03	20.85	19.12
SO4	7	37.11	0.00	41.55	92.44	8.12	29.57	27.38
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	32.64	0.00	34.47	77.12	5.36	26.25	24.31
SAN	7	101.11	0.00	134.80	272.40	38.94	87.62	81.14
SCA	7	108.81	0.00	155.55	296.88	44.63	105.62	97.81
A/C	7	0.93	0.00	0.87	1.00	0.70	0.10	0.09
CL/NA	7	1.14	0.00	1.08	1.28	0.98	0.09	0.08
NA/MG	7	4.07	0.00	4.11	4.34	3.36	0.36	0.33
SS	7	47.95	0.00	75.95	164.23	22.08	59.45	55.05
NC	7	18.36	0.00	38.32	153.50	22.50	54.25	50.24
COND/P	7	1.02	0.00	0.99	1.09	0.92	0.06	0.06
AMTH	8	0.00	4705.44	588.18	2762.43	17.70	911.07	760.19
AMTHNV	8	0.00	4301.33	537.67	2519.37	14.39	829.65	692.24
AMTNA	7	0.00	4307.08	615.30	1367.96	165.63	484.05	448.24
AMTK	7	0.00	106.45	15.49	31.29	7.22	9.94	9.21
AMTCA	7	0.00	1125.35	160.76	448.55	14.35	183.72	170.13
AMTMG	7	0.00	1059.36	151.34	342.83	39.02	119.80	110.94
AMTNH4	7	0.00	717.08	102.44	453.05	3.98	160.96	149.05
AMTCL	7	0.00	4890.29	698.61	1590.08	184.18	556.44	515.27
AMTF	7	0.00	372.40	53.20	365.57	0.00	137.75	127.56
AMTNO3	7	0.00	1795.59	256.51	968.82	28.98	323.45	299.22
AMTSO4	7	0.00	4094.42	584.92	2194.79	58.36	747.56	692.25
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	3601.41	514.49	2031.17	36.46	700.09	648.30
AMTSS	7	0.00	5290.75	755.82	1753.86	203.15	601.10	556.62
AMTNC	7	0.00	2026.58	289.51	889.82	17.94	318.33	294.78

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 77.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 10/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	8	4.71	0.00	4.25	5.12	3.92	0.43	0.36
COND	8	21.16	0.00	45.94	115.00	13.20	32.46	27.08
CMPT	8	0.00	0.84	0.86	4.41	0.03	1.47	1.23
H	8	19.33	0.00	56.55	120.23	7.59	42.83	35.74
HNV	8	16.78	0.00	49.52	107.15	5.62	38.63	32.23
NA	7	74.72	0.00	109.69	211.31	31.74	57.63	53.37
K	7	2.14	0.00	3.25	5.62	1.02	1.73	1.60
CA	7	6.69	0.00	9.91	25.95	3.49	7.82	7.24
MG	7	17.83	0.00	25.21	55.94	7.32	15.52	14.58
NH4	7	2.18	0.00	7.84	21.07	3.55	8.91	8.25
CL	7	75.05	0.00	108.81	190.35	33.84	51.31	47.55
F	7	0.38	0.00	1.43	4.21	0.00	1.45	1.34
NO3	7	6.59	0.00	21.59	63.07	3.23	23.01	21.31
SO4	7	20.34	0.00	37.30	92.86	11.66	27.85	25.79
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	12.62	0.00	26.13	82.61	5.96	26.86	24.88
SAN	7	102.36	0.00	169.13	237.26	52.20	75.49	69.90
SCA	7	122.41	0.00	203.35	293.32	70.23	88.10	81.58
A/C	7	0.84	0.00	0.83	0.91	0.74	0.07	0.06
CL/NA	7	1.00	0.00	0.99	1.18	0.90	0.10	0.09
NA/MG	7	4.19	0.00	4.35	5.35	3.78	0.47	0.44
SS	7	82.77	0.00	119.85	209.96	37.33	56.46	52.28
NC	7	20.80	0.00	36.05	65.17	8.36	22.29	20.64
COND/P	7	1.06	0.00	0.97	1.12	0.81	0.12	0.11
AMTH	8	0.00	1322.06	165.26	391.88	36.38	141.11	117.74
AMTHNV	8	0.00	1147.94	143.49	391.88	31.68	129.63	108.16
AMTNA	7	0.00	5089.64	727.09	2682.17	103.88	943.56	873.75
AMTK	7	0.00	145.99	20.86	89.99	4.39	31.09	28.79
AMTCA	7	0.00	455.57	65.08	307.82	12.01	107.71	99.74
AMIMG	7	0.00	1214.80	173.54	627.05	20.47	225.57	208.88
AMTNH4	7	0.00	148.15	21.16	73.85	2.70	24.65	22.82
AMTCL	7	0.00	5111.89	730.27	2795.77	109.41	972.14	900.22
AMTF	7	0.00	25.75	3.68	11.02	0.00	3.90	3.61
AMTNO3	7	0.00	448.51	64.07	142.15	12.58	44.15	40.88
AMTSO4	7	0.00	1385.01	197.86	550.43	38.48	202.23	187.26
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	859.16	122.74	354.98	19.17	132.51	122.71
AMTSS	7	0.00	5637.36	805.34	3083.73	120.68	1072.38	993.04
AMTNC	7	0.00	1416.78	202.40	647.74	19.64	228.94	212.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-78

Table 78.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%CL
PH	7	4.49	0.00	4.47	4.82	4.15	0.25	0.23
COND	7	41.06	0.00	39.29	71.00	8.00	24.01	22.23
CMPT	7	0.00	3.69	0.53	1.68	0.00	0.53	0.49
H	7	32.38	0.00	33.96	70.79	15.14	20.52	19.01
HNV	7	28.32	0.00	31.42	66.07	12.88	19.88	18.41
NA	7	178.48	0.00	169.94	390.88	17.83	140.83	130.41
K	7	4.29	0.00	4.23	8.42	0.77	2.95	2.73
CA	7	12.16	0.00	16.40	35.43	2.99	10.87	10.07
MG	7	40.73	0.00	38.74	90.16	3.78	32.49	30.08
NH4	7	0.87	0.00	1.19	3.88	0.00	1.61	1.49
CL	7	206.36	0.00	190.43	428.08	20.59	158.53	146.81
F	7	2.37	0.00	2.11	8.42	0.00	3.17	2.94
NO3	7	9.57	0.00	12.67	23.23	5.97	6.29	5.83
SO4	7	48.96	0.00	44.76	89.94	8.33	28.26	26.17
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	28.19	0.00	25.31	51.84	6.21	17.64	16.33
SAN	7	267.26	0.00	249.97	504.25	34.88	183.20	169.64
SCA	7	268.90	0.00	264.46	534.36	40.51	188.97	174.99
A/C	7	0.99	0.00	0.95	1.08	0.81	0.09	0.08
CL/NA	7	1.16	0.00	1.12	1.23	0.82	0.13	0.12
NA/MG	7	4.38	0.00	4.39	4.71	4.31	0.16	0.14
SS	7	223.13	0.00	208.64	472.17	22.71	174.92	161.97
NC	7	13.39	0.00	21.87	43.14	1.49	17.41	16.12
COND/P	7	0.93	0.00	0.91	0.99	0.84	0.06	0.05
AMTH	7	0.00	1195.49	170.78	483.98	14.89	164.63	152.45
AMTHNV	7	0.00	1045.73	149.39	375.68	14.22	131.13	121.43
AMTNA	7	0.00	6588.87	941.27	2582.96	47.08	1046.88	969.42
AMTK	7	0.00	158.28	22.61	59.98	1.67	23.01	21.31
AMTCA	7	0.00	449.13	64.16	133.98	14.50	48.28	44.71
AMTMG	7	0.00	1503.53	214.79	585.30	10.12	238.98	221.30
AMTNH4	7	0.00	31.96	4.57	20.62	0.00	7.98	7.39
AMTCL	7	0.00	7617.90	1088.27	3175.38	38.40	1245.41	1153.26
AMTF	7	0.00	87.36	12.48	44.74	0.00	17.54	16.25
AMTNO3	7	0.00	353.51	50.50	119.10	11.22	34.84	32.27
AMTSO4	7	0.00	1807.55	258.22	835.03	25.21	289.86	268.42
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	1040.72	148.67	525.33	10.50	181.85	168.40
AMTSS	7	0.00	8237.28	1176.75	3337.18	42.36	1328.19	1229.92
AMTNC	7	0.00	494.49	70.64	229.16	12.90	76.45	70.79

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPT,AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-79

Table 79.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 12/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.87	0.00	4.43	4.96	3.93	0.40	0.49
COND	5	31.76	0.00	72.12	278.00	11.80	115.54	143.64
CMPT	5	0.00	8.60	1.72	5.95	0.02	2.44	3.03
H	5	13.36	0.00	36.80	117.49	10.97	45.24	56.24
HNV	5	11.05	0.00	31.22	97.72	8.71	37.36	46.45
NA	4	176.78	0.00	88.05	234.36	20.44	98.50	156.61
K	4	4.35	0.00	2.36	5.62	1.02	2.20	3.50
CA	4	10.60	0.00	8.61	11.48	3.99	3.24	5.16
MG	4	37.50	0.00	19.54	48.95	4.03	20.02	31.83
NH4	4	1.69	0.00	4.44	6.65	0.00	3.04	4.83
CL	4	191.49	0.00	98.14	249.85	19.74	103.35	164.33
F	4	0.62	0.00	0.66	1.05	0.53	0.26	0.42
NO3	4	4.93	0.00	6.41	7.90	4.03	1.69	2.69
SO4	4	28.80	0.00	24.62	31.65	20.40	5.03	8.00
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	9.28	0.00	14.78	19.47	5.94	6.15	9.77
SAN	4	226.48	0.00	130.23	286.81	47.93	106.73	169.70
SCA	4	244.00	0.00	139.61	311.36	55.63	116.07	184.55
A/C	4	0.93	0.00	0.93	1.03	0.86	0.07	0.11
CL/NA	4	1.08	0.00	1.11	1.36	0.97	0.17	0.26
NA/MG	4	4.71	0.00	4.51	5.07	3.65	0.65	1.03
SS	4	209.26	0.00	105.56	275.59	21.77	115.05	182.93
NC	4	21.66	0.00	17.42	24.81	13.31	5.19	8.26
COND/P	4	0.92	0.00	0.93	0.98	0.89	0.04	0.06
AMTH	5	0.00	1149.61	229.92	652.75	27.54	253.07	314.63
AMTHNV	5	0.00	951.05	190.21	518.49	22.90	198.27	246.50
AMTNA	4	0.00	15165.76	3791.44	13951.58	70.25	6780.63	10781.20
AMTK	4	0.00	373.14	93.28	334.36	3.51	161.08	256.11
AMTCA	4	0.00	909.04	227.26	683.24	13.72	308.36	490.29
AMTMG	4	0.00	3217.48	804.37	2913.74	13.86	1408.37	2239.30
AMTNH4	4	0.00	144.66	36.17	77.96	0.00	33.12	52.66
AMTCL	4	0.00	16427.56	4106.89	14874.00	67.86	7191.54	11434.55
AMTF	4	0.00	53.37	13.34	31.33	1.81	13.63	21.68
AMTNO3	4	0.00	422.63	105.66	240.06	24.95	94.85	150.81
AMTSO4	4	0.00	2470.49	617.62	1883.95	70.14	851.38	1353.69
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	796.24	199.06	353.41	63.15	125.77	199.97
AMTSS	4	0.00	17952.07	4488.02	16406.02	74.84	7955.91	12649.89
AMTNC	4	0.00	1858.01	464.50	1476.90	49.36	678.03	1078.07

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 80.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%CL
PH	7	4.74	0.00	4.42	5.00	3.93	0.36	0.34
COND	7	13.87	0.00	38.64	130.00	8.00	44.30	41.02
CMPPT	7	0.00	20.29	2.90	13.25	0.20	4.66	4.32
H	7	18.27	0.00	38.20	117.49	10.00	37.42	34.65
HNV	7	16.70	0.00	34.07	107.15	6.46	34.26	31.73
NA	7	50.52	0.00	157.15	791.34	29.57	281.55	260.72
K	7	1.53	0.00	3.54	14.30	1.28	4.80	4.45
CA	7	6.55	0.00	27.30	97.30	2.99	34.40	31.86
MG	7	11.92	0.00	37.11	185.91	6.83	66.01	61.13
NH4	7	2.78	0.00	8.71	34.93	0.55	11.88	11.00
CL	7	55.99	0.00	174.36	880.12	29.33	313.17	290.00
F	7	0.38	0.00	2.26	11.58	0.00	4.23	3.92
NO3	7	5.07	0.00	14.68	50.65	2.90	16.73	15.49
SU4	7	19.35	0.00	50.21	121.80	10.41	48.32	44.74
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	7	13.60	0.00	32.29	118.26	5.93	38.83	35.96
SAN	7	80.82	0.00	241.75	1016.68	56.39	348.07	322.32
SCA	7	91.56	0.00	272.01	1141.16	64.07	390.57	361.67
A/C	7	0.88	0.00	0.89	0.97	0.77	0.06	0.06
CL/NA	7	1.11	0.00	1.11	1.21	0.99	0.07	0.07
NA/MG	7	4.24	0.00	4.23	4.41	3.23	0.41	0.38
SS	7	61.64	0.00	192.06	970.78	32.35	345.55	319.98
NC	7	11.65	0.00	41.75	123.61	4.91	45.95	42.55
COND/P	7	0.83	0.00	0.86	0.94	0.73	0.07	0.07
AMTH	7	0.00	3706.92	529.56	1871.61	95.01	623.53	577.40
AMTHNV	7	0.00	3387.14	483.88	1746.69	79.02	586.88	543.45
AMTNA	7	0.00	10250.27	1464.32	5300.21	85.47	1770.94	1639.91
AMTK	7	0.00	309.81	44.26	169.14	5.42	56.40	52.23
AMTCA	7	0.00	1329.41	189.92	396.70	71.18	110.49	102.32
AMTMG	7	0.00	2418.14	345.45	1264.34	26.44	422.81	391.53
AMTNH4	7	0.00	563.02	80.43	254.03	11.26	82.30	76.21
AMTCL	7	0.00	11360.37	1622.91	5941.04	91.39	1986.90	1839.89
AMTF	7	0.00	77.46	11.07	30.76	0.00	14.02	12.98
AMTNO3	7	0.00	1027.61	146.80	384.70	38.01	117.87	109.15
AMTSU4	7	0.00	3925.59	560.80	1848.29	135.01	590.63	546.93
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	7	0.00	2759.06	394.15	1236.96	52.87	406.47	376.40
AMTSS	7	0.00	12507.57	1786.80	6552.96	100.80	2193.55	2031.26
AMTNC	7	0.00	2363.08	337.58	650.89	74.67	216.29	200.29

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 81.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSL SITE 01 DURING 02/79.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C. L.
PH	3	4.52	0.00	4.43	4.88	4.12	0.39	0.90
COND	3	25.07	0.00	48.73	93.00	14.20	40.29	100.03
CMPTI	3	0.00	2.51	0.84	1.77	0.14	0.81	2.00
H	3	30.04	0.00	37.49	75.86	13.18	33.62	83.40
HN V	3	29.17	0.00	35.59	75.86	12.30	35.01	86.92
NA	3	75.43	0.00	190.44	475.24	40.00	240.77	612.63
K	3	7.77	0.00	6.90	17.36	1.53	8.99	22.33
CA	3	14.90	0.00	19.24	33.93	7.90	13.29	32.99
MG	3	18.53	0.00	44.37	108.75	9.43	55.80	138.53
NH4	3	11.53	0.00	13.80	16.08	9.42	3.84	9.54
CL	3	07.00	0.00	206.99	506.47	46.53	259.58	644.44
F	3	1.22	0.00	1.40	1.58	1.05	0.30	0.75
NO3	3	14.09	0.00	17.21	24.19	13.23	6.07	15.08
SO4	3	45.39	0.00	74.67	109.30	22.28	46.15	114.58
PO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	3	36.62	0.00	53.46	87.05	15.55	30.19	89.80
SA%	3	147.70	0.00	300.60	642.55	104.52	297.20	737.82
SCA	3	153.20	0.00	312.43	674.80	111.10	314.46	780.68
A/C	3	0.96	0.00	0.90	1.02	0.94	0.04	0.11
CL/NA	3	1.15	0.00	1.09	1.21	1.07	0.07	0.10
NA/MG	3	4.07	0.00	4.29	4.37	3.90	0.25	0.61
SS	3	44.25	0.00	227.48	558.64	51.32	286.99	712.48
UC	3	28.91	0.00	47.46	92.72	24.23	39.19	97.30
COND/P	3	0.84	0.00	0.91	1.02	0.79	0.11	0.28
AMTH	3	0.00	754.99	251.66	495.45	32.97	232.26	576.61
AMTHV	3	0.00	733.08	244.30	495.45	26.14	236.35	586.78
AMINA	3	0.00	1893.59	631.20	964.03	261.20	352.85	875.99
AMTK	3	0.00	69.32	23.17	35.10	10.00	12.60	31.27
AMICA	3	0.00	374.31	124.77	274.45	47.72	129.05	321.86
AMTMG	3	0.00	465.36	155.12	247.42	65.01	91.23	226.48
AMTAM4	3	0.00	284.60	96.53	161.99	22.61	70.08	173.97
AMICL	3	0.00	2184.22	728.07	1168.10	303.90	432.32	1073.27
AMIF	3	0.00	30.02	10.21	18.09	2.22	7.94	19.70
AMIND3	3	0.00	354.06	118.02	227.33	34.02	99.11	246.05
AMISU4	3	0.00	1140.36	380.12	603.75	153.71	225.03	558.67
AMTPO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	3	0.00	420.21	306.74	572.48	80.42	248.39	616.65
AMTSS	3	0.00	2360.32	788.77	1245.53	335.20	455.17	1130.02
AMTNC	3	0.00	720.07	242.02	437.47	130.38	164.83	421.62

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPTI IN COND/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 82.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 01 DURING 03/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	3	4.59	0.00	4.41	4.60	4.18	0.24	0.60
COND	2	21.55	0.00	58.33	92.00	19.00	36.83	91.43
CMPPT	2	0.00	2.71	0.90	2.58	0.04	1.45	3.60
H	2	25.74	0.00	38.77	66.07	25.12	23.64	58.69
HNV	2	23.27	0.00	32.75	57.54	17.78	21.63	53.70
NA	2	56.37	0.00	128.92	206.53	51.31	109.76	986.45
K	1	1.98	0.00	8.42	15.32	1.98	1.75	8.61
CA	1	14.06	0.00	86.83	164.67	8.98	110.09	989.40
MG	1	12.46	0.00	33.07	55.11	11.02	31.18	280.20
NH4	1	6.44	0.00	3.33	6.65	0.00	4.70	42.68
CL	5	26.88	0.00	131.69	216.01	47.38	119.24	1071.68
F	1	6.20	0.00	4.47	6.32	2.63	2.61	23.42
NO3	1	13.36	0.00	49.92	89.04	10.81	55.32	497.16
SO4	2	8.56	0.00	91.61	159.06	24.15	95.40	857.36
PO4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	2	23.11	0.00	78.06	136.84	19.28	83.13	747.10
SAN	1	101.01	0.00	278.01	467.37	88.65	267.80	2406.77
SCA	1	116.44	0.00	285.68	466.75	104.62	256.07	2301.37
A/C	1	0.87	0.00	0.97	1.00	0.85	0.11	0.98
CL/NA	1	0.94	0.00	1.02	1.05	0.92	0.09	0.78
NA/MG	1	4.52	0.00	3.90	4.66	3.75	0.64	5.77
SS	5	8.33	0.00	14.52	23.26	5.26	13.53	1182.06
NC	3	2.99	0.00	11.31	20.37	2.24	12.54	1119.31
COND/P	1	0.96	0.00	0.95	0.96	0.93	0.02	0.19
AMTH	6	0.00	69.42	232.14	647.60	21.98	359.80	893.25
AMTHNV	2	0.00	29.55	209.85	590.61	15.56	329.77	818.70
AMTNA	1	0.00	53.46	751.73	1322.74	180.71	807.54	7257.59
AMTK	1	0.00	2.90	26.45	39.49	13.40	18.45	165.80
AMTCA	1	0.00	37.65	187.83	231.57	144.09	61.86	555.94
AMTMG	1	0.00	32.41	166.20	284.18	48.23	166.85	1499.51
AMTNH4	1	0.00	171.52	85.76	171.52	0.00	121.28	1089.99
AMTCL	1	0.00	1410.42	705.21	1221.41	189.01	730.02	6560.91
AMTF	1	0.00	165.13	82.56	162.82	2.30	113.51	1020.11
AMTNU3	1	0.00	356.53	178.26	278.62	77.91	141.93	1275.53
AMTSO4	1	0.00	761.83	380.91	622.65	139.18	341.86	3072.43
AMTPO4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	1	0.00	616.70	308.35	496.97	119.73	266.74	2397.31
AMTSS	1	0.00	1555.70	777.85	1347.22	208.48	805.21	7236.69
AMTNC	2	0.00	880.23	440.12	702.28	177.95	370.76	3332.14

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 83.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 07/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	2	4.53	0.00	4.38	4.61	4.23	0.27	2.41
COND	2	17.43	0.00	24.90	35.20	14.60	14.57	130.91
CMPPT	2	0.00	3.41	1.71	2.94	0.47	1.75	15.73
H	2	29.27	0.00	41.72	58.88	24.55	24.28	218.21
HNV	2	26.20	0.00	36.25	50.12	22.39	19.61	176.24
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	2	0.00	990.62	499.31	722.60	276.02	315.78	2838.05
AMTHNV	2	0.00	893.95	446.98	659.02	234.93	299.88	2695.10
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 84.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 08/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	10	4.54	0.00	4.51	5.51	4.10	0.52	0.37
COND	10	28.97	0.00	40.96	100.00	0.00	29.83	21.32
CMPPT	10	0.00	7.57	0.76	3.22	0.03	1.02	0.73
H	10	28.89	0.00	30.72	79.43	3.09	29.21	20.87
HNV	10	26.17	0.00	26.96	74.13	1.32	27.92	19.95
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	10	0.00	2187.59	218.76	1406.95	0.97	425.35	303.99
AMTHNV	10	0.00	1981.87	198.19	1343.63	0.75	408.46	291.92
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 85.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 09/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV
PH	8	4.82	0.00	4.19	5.65	3.60	0.62
CUND	8	53.71	0.00	62.12	211.30	0.00	73.74
CMPPT	8	0.00	9.37	1.17	4.63	0.00	1.67
H	8	15.25	0.00	64.17	251.19	2.24	83.47
HNV	8	13.57	0.00	48.64	199.53	0.00	72.14
NA	0	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00
N03	0	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00
CUND/P	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	8	0.00	1428.08	178.51	543.39	0.88	214.39
AMTHNV	8	0.00	1270.23	158.78	484.30	0.00	201.06
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 CUND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 86.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 10/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	6	4.51	0.00	4.05	5.73	3.55	0.80	0.84
COND	6	47.47	0.00	103.30	208.00	12.20	81.39	85.39
CMPPT	6	0.00	6.60	1.10	2.66	0.11	1.22	1.28
H	6	30.79	0.00	88.60	281.84	1.86	109.62	115.01
HNV	6	28.15	0.00	84.83	269.15	0.79	106.14	111.36
NA	6	202.04	0.00	174.79	327.40	80.44	133.39	331.17
K	3	5.85	0.00	4.94	10.47	1.79	4.81	11.93
CA	3	12.32	0.00	12.64	16.47	7.48	4.64	11.51
MG	3	25.42	0.00	23.33	30.85	15.96	7.45	18.49
NH4	3	9.08	0.00	11.46	19.96	4.44	7.87	19.53
CL	3	175.67	0.00	148.99	279.18	55.84	116.19	288.45
F	3	2.56	0.00	4.74	12.63	0.53	6.84	16.99
NO3	3	6.91	0.00	10.36	22.90	3.55	10.86	26.97
SO4	3	41.89	0.00	41.36	59.34	24.57	17.41	43.23
PO4	3	2.79	0.00	3.05	5.05	0.00	2.69	6.67
XSSO4	3	23.81	0.00	26.03	34.44	13.05	11.41	28.32
SAN	3	229.81	0.00	208.52	348.17	135.66	120.48	300.35
SCA	3	277.55	0.00	259.34	406.60	173.23	128.14	318.13
A/C	3	0.83	0.00	0.80	0.86	0.68	0.09	0.22
CL/NA	3	0.87	0.00	0.85	0.96	0.69	0.13	0.33
NA/MG	3	7.95	0.00	7.49	10.61	5.02	3.22	8.00
SS	3	193.76	0.00	164.34	307.94	61.59	128.15	318.16
NC	3	60.95	0.00	62.82	81.69	36.26	23.67	58.77
COND/P	3	0.91	0.00	0.92	1.29	0.51	0.39	0.97
AMTH	6	0.00	2031.99	338.66	609.08	2.12	201.23	211.13
AMTHNV	6	0.00	1857.81	309.63	568.42	0.91	184.67	193.76
AMTNA	6	0.00	12486.20	4162.07	8722.26	741.54	4110.61	10205.02
AMTK	3	0.00	361.55	120.52	278.85	16.48	139.36	345.98
AMTCA	3	0.00	761.64	253.88	438.69	128.80	163.35	405.54
AMTMG	3	0.00	1570.59	523.53	821.80	147.12	344.06	854.17
AMTNH4	3	0.00	560.98	186.99	258.83	118.16	70.39	174.74
AMTCL	3	0.00	10656.07	3618.69	7437.53	514.74	3516.33	8729.66
AMTF	3	0.00	158.14	52.71	116.44	13.65	55.66	138.18
AMTNO3	3	0.00	427.02	142.34	211.15	94.54	61.08	151.64
AMTSU4	3	0.00	2588.43	862.81	1580.77	370.43	635.92	1578.75
AMTPU4	3	0.00	172.51	57.50	134.65	0.00	69.44	172.40
AXSSU4	3	0.00	1471.34	490.45	815.45	317.47	281.66	699.25
AMTSS	3	0.00	11974.25	3991.42	8203.60	567.76	3878.51	9628.81
AMTNC	3	0.00	3766.71	1255.57	2176.16	650.17	810.35	2011.79

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIO'S  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 87.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN  
COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT  
KSC SITE 11 DURING 11/77.

	N	VOLNTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	5.34	0.00	5.06	7.05	4.56	0.86	8.90
COND	6	18.81	0.00	41.32	107.00	0.00	42.81	44.92
CMPPT	6	0.00	15.47	2.58	7.34	0.05	3.31	3.48
H	6	4.59	0.00	8.80	27.54	0.09	9.85	10.34
HNV	6	3.35	0.00	7.51	26.91	0.04	9.81	10.29
NA	4	95.99	0.00	221.10	586.11	64.35	245.90	390.96
K	4	1.63	0.00	3.96	9.45	1.02	3.91	6.22
CA	4	4.99	0.00	15.22	43.91	2.00	19.46	30.94
MG	4	21.41	0.00	52.89	147.33	13.90	63.40	100.60
NH4	4	11.30	0.00	22.22	77.21	0.00	33.36	55.34
CL	4	110.10	0.00	263.64	724.74	75.58	309.73	492.46
F	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	4	2.43	0.00	5.20	10.97	1.13	4.58	7.28
SO4	4	13.24	0.00	33.99	87.86	6.25	37.19	59.13
PO4	4	6.82	0.00	11.96	7.58	0.00	7.79	16.03
XSSO4	3	5.38	0.00	11.17	17.59	2.89	7.52	18.68
SAN	4	126.38	0.00	304.12	819.38	85.95	347.41	552.99
SCA	4	129.74	0.00	301.67	793.71	85.54	332.43	528.56
A/C	4	0.97	0.00	1.01	1.03	0.95	0.04	0.06
CL/NA	4	1.15	0.00	1.19	1.24	1.06	0.08	0.12
NA/MG	4	4.48	0.00	4.18	4.68	3.98	0.33	0.52
SS	4	120.04	0.00	279.54	757.25	83.14	320.74	509.98
NC	3	11.37	0.00	21.56	29.54	6.59	12.98	32.28
COND/P	4	1.04	0.00	1.04	1.06	1.01	0.02	0.04
AMTH	6	0.00	709.61	118.27	272.85	0.04	115.65	121.34
AMTHNV	6	0.00	518.53	86.42	193.14	0.02	82.64	86.70
AMTNA	4	0.00	14690.12	3672.53	5380.65	1836.35	1658.75	2637.41
AMTK	4	0.00	249.80	62.45	79.78	44.28	17.56	27.92
AMTCA	4	0.00	763.27	190.82	280.69	130.17	68.16	108.37
AMTMG	4	0.00	3276.11	819.03	1172.20	392.38	348.34	553.86
AMTNH4	4	0.00	199.54	49.89	89.53	0.00	38.82	61.72
AMTCL	4	0.00	16846.73	4212.18	5957.25	1944.15	1883.57	2994.87
AMTF	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	4	0.00	371.90	92.97	136.25	31.76	46.57	74.04
AMTSO4	4	0.00	2026.37	506.59	793.76	362.07	195.47	310.79
AMTPO4	4	0.00	94.18	23.54	94.18	0.00	47.09	74.87
AXSSO4	3	0.00	425.21	141.74	180.76	82.43	52.21	129.61
AMTSS	4	0.00	18370.52	4592.63	6570.85	2144.40	2104.30	3345.84
AMTNC	3	0.00	905.03	301.68	411.78	138.46	144.18	357.94

N=NUMBER OF SAMPLES  
VOLNTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
COND, CMPPT, AND RATIOS  
UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
MEAN=UNWEIGHTED AVERAGE  
CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
THE MONTH

Table 88.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 12/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	10	4.71	0.00	4.68	5.36	0.00	1.54	1.10
COND	10	24.82	0.00	22.69	55.20	0.00	15.58	11.13
CMPPT	10	0.00	9.35	0.93	2.75	0.00	0.82	0.58
H	10	19.40	0.00	21.10	79.43	0.00	22.31	15.95
HNV	10	16.77	0.00	17.89	74.13	0.00	21.10	15.95
NA	8	130.80	0.00	128.59	321.32	13.48	124.17	103.60
K	8	2.85	0.00	2.84	6.64	0.00	2.56	2.13
CA	8	8.02	0.00	8.48	16.47	1.00	5.43	4.53
MG	8	31.24	0.00	31.34	78.15	4.11	30.25	25.24
NH4	8	5.37	0.00	4.37	9.98	0.55	3.55	2.96
CL	8	132.65	0.00	128.06	276.36	16.64	104.86	87.49
F	8	2.10	0.00	0.72	5.79	0.00	2.05	1.71
NO3	8	9.66	0.00	11.07	19.52	4.84	5.20	4.34
SO4	8	34.71	0.00	36.30	75.78	18.32	20.97	17.50
PO4	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	8	21.28	0.00	23.45	70.88	9.35	20.28	16.92
SAN	8	179.12	0.00	176.16	339.27	48.11	113.11	94.38
SCA	8	201.15	0.00	201.45	437.13	51.99	154.14	128.61
A/C	8	0.89	0.00	0.87	1.02	0.77	0.10	0.08
CL/NA	8	1.01	0.00	1.00	1.31	0.86	0.18	0.15
NA/MG	8	4.19	0.00	4.10	4.63	3.28	0.40	0.33
SS	8	144.04	0.00	137.90	304.82	17.41	115.47	96.35
NC	8	34.24	0.00	37.72	120.00	7.94	48.49	40.46
COND/P	8	0.91	0.00	0.89	1.11	0.30	0.25	0.21
AMTH	10	0.00	1813.59	181.36	695.04	0.00	201.89	144.28
AMTHNV	10	0.00	1567.95	156.79	648.65	0.00	191.24	136.67
AMTNA	8	0.00	9935.20	1241.90	3136.30	35.80	1319.93	1101.33
AMTK	8	0.00	216.72	27.09	70.21	0.00	28.20	23.53
AMTCA	8	0.00	608.93	76.12	178.39	5.80	63.88	53.30
AMTMG	8	0.00	2372.77	296.60	775.37	10.93	312.02	260.35
AMTNH4	8	0.00	408.25	51.03	213.44	1.47	71.28	59.48
AMTCL	8	0.00	10076.19	1259.52	3567.30	44.20	1303.91	1087.96
AMTF	8	0.00	159.21	19.90	159.21	0.00	56.29	46.97
AMTNO3	8	0.00	733.90	91.74	230.66	33.85	71.73	59.85
AMTSO4	8	0.00	2636.47	329.56	663.12	53.25	249.03	207.78
AMTPO4	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	8	0.00	1616.51	202.06	620.24	30.06	191.86	160.09
AMTSS	8	0.00	10941.02	1367.63	3934.73	46.26	1446.92	1207.29
AMTNC	8	0.00	2600.85	325.11	1110.76	23.15	401.26	334.81

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 89.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 01/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	4.67	0.00	4.52	5.45	4.00	0.49	0.52
COND	6	28.93	0.00	44.85	94.30	11.00	36.17	37.95
CMPT	6	0.00	5.59	0.93	3.16	0.17	1.11	1.16
H	6	21.40	0.00	30.34	100.00	3.55	35.95	37.72
HNH	6	19.33	0.00	27.08	93.32	0.69	34.39	36.09
NA	6	136.03	0.00	216.39	651.33	26.96	241.65	253.54
K	6	2.58	0.00	4.94	17.36	0.00	6.63	6.96
CA	6	18.75	0.00	30.69	77.34	5.99	27.53	28.69
MG	6	32.66	0.00	51.65	166.91	6.50	61.38	64.40
NH4	6	7.81	0.00	11.64	26.06	3.33	8.97	9.42
CL	6	155.61	0.00	214.88	657.06	31.87	241.71	253.61
F	6	0.36	0.00	0.18	0.53	0.00	0.27	0.28
NO3	6	11.08	0.00	15.57	44.20	5.81	14.47	15.18
SO4	6	38.08	0.00	59.79	130.96	14.37	45.15	47.37
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	24.13	0.00	37.68	99.97	10.25	33.00	34.62
SAN	6	165.13	0.00	290.41	761.13	54.76	280.67	294.48
SCA	6	219.22	0.00	345.64	913.53	62.92	336.05	352.58
A/C	6	0.84	0.00	0.84	0.87	0.81	0.03	0.03
CL/NA	6	1.00	0.00	0.49	1.18	0.94	0.10	0.10
NA/MG	6	4.17	0.00	4.19	4.69	3.90	0.31	0.32
SS	6	149.55	0.00	236.96	724.74	34.83	266.66	279.78
NC	6	48.28	0.00	78.33	185.24	10.71	68.91	72.30
COND/P	6	0.93	0.00	0.92	1.05	0.87	0.07	0.07
AMTH	6	0.00	1196.49	199.41	523.44	21.07	196.67	206.35
AMTHN	6	0.00	1081.22	180.20	488.50	4.11	187.17	196.37
AMTNA	6	0.00	7604.71	1267.45	3867.27	170.59	1408.18	1477.46
AMTK	6	0.00	144.18	24.03	90.87	0.00	35.90	37.66
AMTCA	6	0.00	1048.43	174.74	459.24	37.89	155.35	162.99
AMTMG	6	0.00	1825.54	304.26	991.00	41.12	360.37	378.10
AMTNH4	6	0.00	436.63	72.77	136.39	12.39	47.46	49.79
AMTCL	6	0.00	7581.44	1263.57	3901.29	201.65	1412.45	1481.94
AMTF	6	0.00	19.98	3.33	16.65	0.00	6.66	6.99
AMTNU3	6	0.00	619.54	103.26	231.34	17.19	85.01	89.19
AMTSU4	6	0.00	2129.08	354.85	685.48	98.41	243.87	255.86
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	6	0.00	1349.25	224.87	523.26	62.65	174.51	183.09
AMTSS	6	0.00	8360.31	1393.39	4303.13	220.40	1558.23	1634.90
AMTNC	6	0.00	2699.19	449.86	1099.88	67.79	389.80	408.98

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-90

Table 90.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 02/78.

	N	VOLWTA V	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.46	0.00	4.32	4.58	4.13	0.20	0.19
CUND	7	35.87	0.00	70.06	192.00	16.80	68.93	63.83
CMPPT	7	0.00	9.07	1.30	4.71	0.02	1.62	1.50
H	7	34.74	0.00	48.03	74.13	26.30	21.81	20.20
HNV	7	31.90	0.00	43.57	70.79	23.99	21.52	19.93
NA	5	47.65	0.00	190.36	715.25	5.65	296.08	368.11
X	5	2.54	0.00	3.37	7.40	1.02	2.39	2.97
CA	5	7.54	0.00	8.38	19.96	0.00	7.84	9.74
MG	5	35.62	0.00	47.91	157.94	1.32	63.42	78.84
NH4	5	4.75	0.00	5.32	13.86	1.66	4.98	6.20
CL	5	138.45	0.00	183.58	571.61	4.51	225.97	280.94
F	5	0.04	0.00	0.21	1.05	0.00	0.47	0.59
NO3	5	9.12	0.00	18.36	47.91	5.00	17.96	22.33
SU4	5	46.72	0.00	65.25	149.28	20.82	49.37	61.37
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	35.98	0.00	47.87	90.46	16.15	27.38	34.04
SAN	5	194.32	0.00	267.40	769.85	62.22	290.94	361.71
SCA	5	183.70	0.00	308.25	988.54	78.01	385.77	479.61
A/C	5	1.06	0.00	0.87	1.18	0.78	0.17	0.21
CL/NA	5	1.42	0.00	0.96	1.76	0.80	0.41	0.51
NA/MG	5	2.74	0.00	3.97	4.53	2.14	0.98	1.22
SS	5	115.46	0.00	186.54	630.49	4.98	253.58	315.26
NC	5	32.64	0.00	68.80	283.92	1.63	120.74	150.11
CUND/P	5	1.07	0.00	1.01	1.12	0.91	0.09	0.11
AMTH	7	0.00	3152.35	450.34	1267.96	8.27	419.59	388.55
AMTHNV	7	0.00	2894.31	413.47	1130.07	6.00	376.34	348.50
AMTNA	5	0.00	7203.30	1440.66	3871.32	17.31	1523.11	1893.61
AMTK	5	0.00	187.56	37.51	120.27	8.60	46.78	58.16
AMTCA	5	0.00	555.72	111.14	399.63	0.00	165.81	206.14
AMTMG	5	0.00	2627.23	525.45	1809.73	4.03	734.89	913.66
AMTNH4	5	0.00	350.57	70.11	261.17	8.49	107.27	133.36
AMTCL	5	0.00	10210.28	2042.06	6815.13	13.82	2734.78	3400.03
AMTF	5	0.00	2.76	0.55	2.76	0.00	1.24	1.54
AMTNO3	5	0.00	672.45	134.49	235.56	28.16	84.62	105.20
AMTSO4	5	0.00	3445.10	689.02	2098.95	148.56	802.58	997.81
AMTPU4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	2653.68	530.74	1634.78	147.14	626.95	779.46
AMTSS	5	0.00	8516.12	1703.22	5001.74	15.24	1945.93	2419.29
AMTNC	5	0.00	2408.26	481.65	1460.38	19.90	623.02	774.57

N=NUMBER OF SAMPLES  
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 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 91.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 03/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95XC.L.
PH	5	4.46	0.00	4.32	4.72	3.98	0.32	0.40
COND	5	31.26	0.00	40.70	71.00	11.40	25.44	31.62
CMPT	5	0.00	3.27	0.65	1.12	0.24	0.33	0.41
TH	5	34.49	0.00	47.98	104.71	19.05	36.69	45.61
HNV	5	32.57	0.00	47.87	114.81	15.49	42.00	52.21
NA	5	85.13	0.00	98.79	220.44	19.13	77.58	96.45
K	5	2.50	0.00	3.11	5.62	0.51	2.00	2.48
CA	5	15.71	0.00	21.66	42.41	4.49	15.49	19.83
MG	5	22.26	0.00	26.42	57.34	4.61	19.97	24.33
NH4	5	9.23	0.00	15.30	42.13	1.66	17.15	21.11
CL	5	105.68	0.00	125.77	321.20	19.74	120.82	150.00
F	5	1.13	0.00	1.58	4.74	0.00	1.93	2.00
NO3	5	15.81	0.00	21.45	42.42	0.45	14.57	18.11
SO4	5	42.36	0.00	60.29	139.49	15.62	48.61	60.33
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	32.80	0.00	49.06	133.69	13.58	48.64	60.48
SAN	5	104.98	0.00	209.10	421.27	41.81	145.07	180.36
SCA	5	169.31	0.00	213.26	398.64	50.68	132.42	164.63
A/C	5	0.97	0.00	0.98	1.06	0.82	0.11	0.14
CL/NA	5	1.24	0.00	1.27	1.46	0.90	0.23	0.28
NA/MG	5	3.82	0.00	3.74	4.15	2.95	0.49	0.61
SS	5	102.84	0.00	120.84	284.81	21.77	103.93	129.21
NC	5	31.99	0.00	44.44	97.49	9.85	32.81	40.79
COND/P	5	0.99	0.00	0.98	1.04	0.96	0.03	0.04
AMTH	5	0.00	112.9	225.82	287.52	152.76	50.24	62.46
AMTHNV	5	0.00	1066.39	213.28	280.97	136.15	64.38	80.04
AMTNA	5	0.00	2787.07	57.41	981.66	129.52	377.90	469.55
AMTK	5	0.00	81.77	16.35	28.72	5.70	10.10	12.55
AMTCA	5	0.00	514.20	102.84	175.43	39.02	51.78	64.37
AMTMG	5	0.00	728.71	145.74	255.32	43.83	98.25	122.15
AMTNH4	5	0.00	302.23	60.45	102.04	12.73	39.59	49.22
AMTCL	5	0.00	3459.94	691.99	1430.33	136.59	566.94	704.86
AMTF	5	0.00	37.01	7.40	21.09	0.00	9.11	11.32
AMTNU3	5	0.00	517.71	103.54	137.23	72.08	29.06	36.13
AMTSO4	5	0.00	1386.82	277.36	367.44	174.45	82.49	102.56
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	1073.90	214.78	323.78	151.76	76.39	94.98
AMTSS	5	0.00	3366.74	673.35	1268.31	150.66	500.23	621.92
AMTNC	5	0.00	1047.25	209.45	252.44	110.03	56.87	70.70

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 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 92.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 04/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	1	4.60	0.00	4.60	4.60	4.60	0.00	0.00
COND	1	91.50	0.00	91.50	91.50	91.50	0.00	0.00
CMPTT	1	0.00	0.03	0.03	0.03	0.03	0.00	0.00
H	1	25.12	0.00	25.12	25.12	25.12	0.00	0.00
HNV	1	9.12	0.00	9.12	9.12	9.12	0.00	0.00
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	1	0.00	6.28	6.28	6.28	6.28	0.00	0.00
AMTHNV	1	0.00	2.28	2.28	2.28	2.28	0.00	0.00
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 93.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 05/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST	DEFV	95%C	L
PH	5	4.46	0.00	4.46	4.88	4.25	0.00	0.00	0.00	0.00
COND	5	41.80	0.00	42.56	56.00	33.10	9.00	0.00	11.00	25.00
CMPPT	5	0.00	0.00	0.45	1.94	0.44	0.00	0.00	0.00	0.77
H	5	34.33	0.00	34.00	56.23	13.18	15.00	0.00	19.00	0.00
MNV	5	30.99	0.00	31.29	54.95	7.24	16.00	0.00	21.00	0.00
NA	5	95.70	0.00	93.74	122.61	70.00	22.00	0.00	27.00	0.00
K	5	33.95	0.00	33.93	66.64	1.79	21.00	0.00	32.00	0.00
CA	5	30.80	0.00	30.84	69.36	12.47	24.00	0.00	30.00	0.00
MG	5	24.20	0.00	24.79	29.86	17.93	5.00	0.00	36.00	0.00
NH4	5	34.83	0.00	35.93	74.84	13.31	24.00	0.00	30.00	0.00
CL	5	97.71	0.00	95.49	117.31	76.00	18.00	0.00	23.00	0.00
F	5	1.73	0.00	1.68	2.63	0.00	0.00	0.00	0.00	0.18
N03	5	27.22	0.00	29.68	42.58	18.33	10.00	0.00	13.00	0.00
S04	5	60.56	0.00	59.25	87.44	38.93	20.00	0.00	25.00	0.00
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSS04	5	50.51	0.00	49.43	78.80	29.33	21.00	0.00	26.00	0.00
SAN	5	187.22	0.00	186.10	220.41	145.24	30.00	0.00	77.00	0.00
SCA	5	223.81	0.00	222.62	282.81	176.29	44.00	0.00	54.00	0.00
A/C	5	0.84	0.00	0.84	0.97	0.00	0.00	0.00	0.00	0.10
CL/NA	5	1.02	0.00	1.02	1.12	0.00	0.00	0.00	0.00	0.10
NA/MG	5	3.95	0.00	3.94	4.27	3.55	0.00	0.00	0.00	0.00
SS	10	7.77	0.00	7.32	12.40	8.40	2.00	0.00	5.00	0.00
NC	5	81.72	0.00	82.91	133.44	31.25	42.00	0.00	52.00	0.00
COND/P	5	1.13	0.00	1.15	1.34	1.00	0.00	0.00	0.00	0.00
AMTH	5	0.00	187.90	374.38	703.46	141.57	282.00	0.00	350.00	0.00
AMTHNV	5	0.00	1689.82	3379.96	6488.29	979.91	281.00	0.00	3499.00	0.00
AMTNA	5	0.00	5218.92	10433.78	21229.91	3066.26	688.00	0.00	8566.00	0.00
AMTK	5	0.00	215.49	433.10	791.14	7.82	27.00	0.00	34.00	0.00
AMTCA	5	0.00	1679.52	3353.90	937.46	81.87	349.00	0.00	434.00	0.00
AMTMG	5	0.00	1319.78	2633.96	516.39	82.77	170.00	0.00	211.00	0.00
AMTNH4	5	0.00	1899.43	3799.89	741.16	58.21	265.00	0.00	329.00	0.00
AMTCL	5	0.00	5328.23	10656.65	2201.89	334.35	709.00	0.00	882.00	0.00
AMTF	5	0.00	94.36	18.87	30.59	2.30	11.00	0.00	14.00	0.00
AMTNO3	5	0.00	1484.31	2968.86	507.96	128.44	153.00	0.00	190.00	0.00
AMTSU4	5	0.00	3302.51	6605.00	1181.86	170.33	412.00	0.00	512.00	0.00
AMTPU4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSS04	5	0.00	2754.23	5508.5	1064.99	135.93	373.00	0.00	464.00	0.00
AMTSS	5	0.00	5877.04	11754.1	2428.69	368.78	782.00	0.00	972.00	0.00
AMTNC	5	0.00	4456.10	8912.22	1803.55	260.93	668.52	0.00	831.00	0.00

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 94.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	8	4.55	0.00	4.24	4.90	3.56	0.42	0.35
COND	8	23.06	0.00	87.60	510.00	9.00	170.93	142.62
CMPPT	8	0.00	16.55	2.07	4.69	0.04	2.08	1.74
H	8	27.87	0.00	57.05	275.42	12.59	88.83	74.12
HNV	8	24.21	0.00	48.20	239.88	7.59	78.01	65.09
NA	6	51.00	0.00	87.25	166.53	20.61	64.30	67.46
X	6	2.90	0.00	3.19	6.89	0.51	2.39	2.51
CA	6	6.17	0.00	7.82	13.47	3.49	3.70	3.89
MG	6	11.86	0.00	20.56	41.21	5.26	15.63	16.40
NH4	6	4.20	0.00	3.79	7.76	2.66	2.23	2.34
CL	6	57.09	0.00	100.30	199.37	21.00	76.43	80.19
F	6	0.20	0.00	0.26	0.53	0.00	0.29	0.30
NO3	6	9.72	0.00	10.00	14.68	3.55	4.66	4.89
SO4	6	30.95	0.00	31.68	41.22	10.41	12.35	12.96
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	25.13	0.00	21.50	38.55	7.28	13.21	13.86
SAN	6	97.96	0.00	142.24	245.55	35.96	80.26	84.21
SCA	6	103.23	0.00	147.50	246.81	46.13	80.13	84.07
A/C	6	0.95	0.00	0.96	1.02	0.78	0.09	0.09
CL/NA	6	1.12	0.00	1.15	1.20	0.97	0.08	0.09
NA/MG	6	4.30	0.00	4.24	4.54	4.04	0.16	0.17
SS	6	62.54	0.00	109.41	215.15	24.26	82.92	86.99
NC	6	13.58	0.00	13.20	22.96	5.79	7.40	7.77
COND/P	6	1.02	0.00	1.03	1.10	0.97	0.05	0.05
AMTH	8	0.00	4610.99	576.57	1927.72	13.83	690.81	576.40
AMTHNV	8	0.00	4005.12	500.64	1603.41	7.60	592.83	494.65
AMTNA	6	0.00	8390.74	1398.46	2331.13	103.04	495.61	520.00
AMTK	6	0.00	477.58	79.60	318.59	23.93	117.18	122.94
AMTCA	6	0.00	1014.86	169.14	392.07	83.58	115.40	121.08
AMTMG	6	0.00	1951.38	325.23	536.08	227.20	117.21	122.98
AMTNH4	6	0.00	690.71	115.12	358.73	17.41	131.15	137.60
AMTCL	6	0.00	9393.35	1565.56	2606.74	1031.06	584.96	613.74
AMTF	6	0.00	333.07	5.51	22.71	0.00	8.80	9.24
AMTNO3	6	0.00	1598.81	266.47	626.23	44.61	239.83	251.63
AMTSO4	6	0.00	5092.34	848.72	1905.30	214.71	775.54	813.69
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	4134.00	689.00	1663.84	62.59	751.71	788.69
AMTSS	6	0.00	10290.55	1715.09	2875.23	1137.26	643.63	675.30
AMTNC	6	0.00	2234.72	372.45	1061.37	60.60	371.26	389.52

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 UEQ/SQ.M=MICKOEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 95.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 07/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	9	4.41	0.00	4.33	4.84	0.91	0.35	0.27
COND	9	22.46	0.00	27.87	61.80	0.00	18.04	13.89
CMPPT	9	0.00	21.99	2.44	6.25	0.00	1.87	1.44
H	9	39.28	0.00	46.46	123.03	1.44	40.66	31.31
HNV	9	37.25	0.00	44.28	120.23	1.44	39.52	30.43
NA	9	27.05	0.00	41.64	138.70	1.44	39.18	30.16
K	9	1.18	0.00	1.53	3.83	0.00	1.11	0.86
CA	9	8.50	0.00	8.98	15.98	0.00	4.70	3.62
MG	9	6.11	0.00	9.55	33.48	0.00	4.54	7.35
NH4	9	2.39	0.00	3.00	10.53	0.00	3.43	2.64
CL	9	27.67	0.00	45.93	169.20	1.44	49.34	37.99
F	9	1.23	0.00	1.23	5.79	0.00	1.11	1.43
NO3	9	12.41	0.00	17.40	51.62	0.00	15.86	11.75
SO4	9	32.93	0.00	37.38	83.28	0.00	26.58	20.47
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	30.10	0.00	32.75	80.17	0.00	27.03	20.81
SAN	9	74.24	0.00	101.95	219.89	2.33	64.55	49.70
SCA	9	84.51	0.00	111.19	212.32	3.00	62.50	48.13
A/C	9	0.88	0.00	0.92	1.04	0.00	0.70	0.08
CL/NA	9	1.02	0.00	1.10	1.22	0.00	1.10	0.08
NA/MG	9	4.42	0.00	4.36	4.87	1.44	0.23	0.18
SS	9	30.38	0.00	49.86	179.20	1.82	52.12	40.13
NC	9	14.85	0.00	14.87	24.78	1.44	6.55	5.04
COND/P	9	1.04	0.00	1.02	1.14	0.00	0.07	0.05
AMTH	9	0.00	8634.74	959.42	2322.10	80.01	747.06	575.24
AMTHNV	9	0.00	8189.05	909.89	2269.24	76.41	716.07	551.37
AMTNA	9	0.00	5946.83	660.76	1222.88	185.88	334.63	257.67
AMTK	9	0.00	259.56	28.84	85.78	4.55	24.52	18.88
AMTCA	9	0.00	1867.72	207.52	670.66	26.66	203.35	156.58
AMTMG	9	0.00	1344.15	149.35	293.05	39.56	78.32	60.31
AMTNH4	9	0.00	526.18	58.46	207.90	9.53	73.39	56.43
AMTCL	9	0.00	6083.38	675.93	1198.50	190.88	320.53	246.81
AMTF	9	0.00	271.17	30.13	178.20	0.00	57.06	43.94
AMTNO3	9	0.00	2728.20	303.13	595.50	54.59	201.68	155.30
AMTSO4	9	0.00	7239.04	804.34	2394.30	147.61	718.78	553.46
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	9	0.00	6616.72	735.19	2270.97	76.15	700.67	539.52
AMTSS	9	0.00	6679.70	742.19	1321.94	210.54	353.19	271.96
AMTNC	9	0.00	3264.73	362.75	867.18	55.99	309.03	237.95

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 96.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.43	0.00	4.46	4.89	4.26	0.27	0.43
COND	4	20.19	0.00	24.70	34.80	17.80	7.67	12.20
CMPPT	4	0.00	16.12	4.03	9.55	0.87	3.88	6.17
HI	4	37.14	0.00	34.72	54.95	12.88	17.25	27.43
HNV	4	33.45	0.00	30.69	47.86	12.02	14.89	23.68
NA	4	20.13	0.00	54.89	182.62	5.22	85.67	136.21
K	4	0.67	0.00	1.47	4.08	0.29	1.77	2.82
CA	4	4.39	0.00	6.36	11.48	2.99	3.63	5.77
MG	4	4.89	0.00	12.26	39.32	2.06	18.11	28.80
NH4	4	22.58	0.00	4.85	14.97	0.55	6.78	10.78
CL	4	23.36	0.00	62.11	205.01	7.33	95.74	152.23
F	4	0.09	0.00	0.26	0.53	0.00	0.30	0.48
VO3	4	9.33	0.00	10.93	18.23	6.45	5.60	8.91
SO4	4	27.51	0.00	27.43	32.69	22.28	4.39	6.98
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	25.19	0.00	21.10	32.06	6.93	12.00	19.08
SAN	4	60.29	0.00	100.73	238.02	43.52	91.89	146.11
SCA	4	69.81	0.00	114.55	252.60	49.10	93.13	148.07
A/C	4	0.86	0.00	0.88	0.94	0.71	0.10	0.16
CL/NA	4	1.16	0.00	1.13	1.41	1.09	0.16	0.25
NA/MG	4	4.12	0.00	4.48	4.66	2.44	1.15	1.82
SS	4	24.92	0.00	67.88	226.13	6.74	106.08	168.67
NC	4	7.75	0.00	11.95	21.08	4.08	7.22	11.48
COND/P	4	1.04	0.00	1.03	1.05	0.99	0.03	0.04
AMTH	4	0.00	5986.24	1496.56	3547.00	111.72	1458.22	2318.56
AMTHNV	4	0.00	5390.85	1347.71	3310.25	104.26	1375.11	2186.42
AMTNA	4	0.00	3244.63	811.16	1583.62	97.83	629.19	1000.42
AMTK	4	0.00	108.46	27.12	39.09	9.57	13.26	21.09
AMTCA	4	0.00	708.15	177.04	285.83	93.56	95.81	152.33
AMTMG	4	0.00	788.40	197.10	340.98	40.10	123.21	195.91
AMTNH4	4	0.00	416.49	104.12	280.66	19.23	119.21	189.54
AMTCL	4	0.00	3764.81	941.20	1777.86	137.47	680.19	1081.50
AMTF	4	0.00	14.43	3.61	9.87	0.00	4.70	7.47
AMTNO3	4	0.00	1504.52	376.13	631.36	55.95	244.07	388.07
AMTSU4	4	0.00	4434.35	1108.59	2742.97	225.69	1119.80	1780.48
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	4060.03	1015.01	2673.29	42.74	1146.09	1822.28
AMTSS	4	0.00	4017.02	1004.25	1960.97	126.40	770.42	1224.97
AMTNC	4	0.00	1249.11	312.28	395.34	117.81	131.50	209.08

N=NUMBER OF SAMPLES  
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 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 97.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 09/78.

	N	VOLWTA	VEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	9	4.50	0.00	4.39	4.84	3.89	0.31	0.24
COND		39.79	0.00	62.38	158.00	11.80	46.31	0.64
CMPT	9	0.00	10.68	1.19	3.41	0.07	1.23	0.95
H	9	31.40	0.00	41.14	128.83	14.45	36.17	0.85
HNV	9	27.50	0.00	36.96	114.81	10.00	32.44	0.98
NA	9	155.46	0.00	282.09	648.72	35.22	225.37	1.23
K	9	3.87	0.00	6.67	13.79	1.02	5.33	0.11
CA	9	11.23	0.00	18.85	52.39	8.49	15.35	0.82
MG	9	37.33	0.00	66.90	153.00	8.06	53.14	0.92
NH4	9	2.51	0.00	5.61	31.05	0.00	9.82	0.56
CL	9	176.04	0.00	321.26	748.99	38.92	261.99	0.73
F	9	0.48	0.00	0.29	1.05	0.00	0.46	0.36
NO3	9	12.66	0.00	17.74	70.33	4.68	20.40	0.71
SO4	9	39.32	0.00	63.13	179.68	14.16	52.87	0.71
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	21.66	0.00	30.74	102.61	0.01	30.82	0.73
SAN	9	228.88	0.00	403.80	1009.18	63.07	226.36	0.30
SCA	9	41.79	0.00	421.25	1027.78	83.79	244.72	0.33
A/C	9	0.95	0.00	0.96	1.04	0.75	0.09	0.07
CL/NA	9	1.13	0.00	1.14	1.28	0.88	0.11	0.08
NA/MG	9	4.16	0.00	4.22	4.64	3.80	0.29	0.23
SS	9	189.85	0.00	347.68	826.14	42.92	283.66	0.22
NC	9	20.55	0.00	32.42	83.49	6.88	28.86	0.23
COND/P	9	1.00	0.00	0.95	1.07	0.61	0.14	0.10
AMTH	9	0.00	335.12	372.68	1717.31	45.21	520.75	0.98
AMTHNV	9	0.00	2937.30	326.37	1530.56	40.29	461.43	0.30
AMTNA	9	0.00	16605.80	1845.09	6279.60	275.15	1806.12	0.71
AMTK	9	0.00	413.34	45.93	182.62	7.98	53.29	0.04
AMTCA	9	0.00	1199.44	133.27	390.93	34.38	119.41	0.94
AMTMG	9	0.00	3987.21	443.02	1608.34	62.98	464.83	0.92
AMTNH4	9	0.00	268.16	29.80	190.57	0.00	60.66	0.71
AMTCL	9	0.00	18803.99	2089.33	7588.44	304.03	2181.67	0.89
AMTF	9	0.00	51.51	5.72	32.89	0.00	11.77	0.07
AMTNO3	9	0.00	1352.44	150.27	690.57	15.80	210.56	0.13
AMTSO4	9	0.00	4200.58	466.73	1385.83	110.61	454.05	0.62
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	9	0.00	2313.79	257.09	1248.90	45.36	383.42	0.24
AMTSS	9	0.00	20279.08	2253.23	8113.24	335.35	2324.82	0.11
AMTNC	9	0.00	2194.88	243.88	794.42	47.79	265.49	0.43

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 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN VEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 98.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 10/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	8	4.80	0.00	4.27	5.18	3.85	0.52	0.43
COND	8	48.01	0.00	285.14	1230.00	19.20	396.28	330.65
CMPPT	8	0.00	10.29	1.29	5.44	0.04	2.15	1.79
H	8	15.91	0.00	53.82	141.25	6.61	49.48	41.29
HNV	8	14.09	0.00	49.73	128.83	6.46	45.67	38.10
NA	7	196.64	0.00	718.79	1778.77	81.31	651.27	603.09
K	7	4.37	0.00	18.20	42.12	2.04	15.89	14.71
CA	7	15.23	0.00	65.30	256.99	3.99	87.48	81.01
MG	7	45.70	0.00	167.38	350.02	18.51	144.58	133.89
NH4	7	1.54	0.00	19.48	89.81	0.00	31.78	29.43
CL	7	223.68	0.00	796.93	2005.02	91.65	716.19	663.20
F	7	0.24	0.00	2.41	6.32	0.00	2.75	2.55
NO3	7	6.89	0.00	48.23	161.14	3.55	56.62	52.43
SO4	7	35.52	0.00	175.93	545.48	16.66	190.68	176.57
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	13.03	0.00	95.76	339.17	6.21	120.85	111.91
SAN	7	266.34	0.00	1023.50	2717.96	112.02	952.06	881.62
SCA	7	279.45	0.00	1049.71	2590.15	121.09	928.74	860.02
A/C	7	0.95	0.00	0.98	1.10	0.80	0.11	0.10
CL/NA	7	1.14	0.00	1.11	1.36	0.91	0.13	0.12
NA/MG	7	4.30	0.00	4.29	5.08	3.51	0.52	0.49
SS	7	241.82	0.00	860.07	2211.54	101.09	790.54	732.05
NC	7	21.67	0.00	129.07	309.79	5.87	134.66	124.69
COND/P	7	1.01	0.00	1.03	1.52	0.75	0.24	0.22
AMTH	8	0.00	1636.55	204.57	560.60	3.72	210.95	176.01
AMTHNV	8	0.00	1449.84	181.23	488.26	3.63	180.78	150.84
AMTNA	7	0.00	20118.64	2874.09	9740.61	163.78	3254.14	3013.38
AMTK	7	0.00	447.08	63.87	180.46	5.08	59.17	54.79
AMTCA	7	0.00	1558.70	222.67	922.53	24.45	312.56	289.43
AMTMG	7	0.00	4676.01	668.00	2214.08	36.78	734.70	680.34
AMTNH4	7	0.00	158.21	22.60	44.01	0.00	15.99	14.81
AMTCL	7	0.00	22885.96	3269.42	11684.32	171.43	3900.34	3611.77
AMTF	7	0.00	24.51	3.50	9.95	0.00	4.40	4.07
AMTNO3	7	0.00	705.08	100.73	192.95	36.80	57.82	53.54
AMTSO4	7	0.00	3635.02	519.29	1505.68	68.22	476.50	441.25
AMTPU4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	1333.62	190.52	337.78	50.58	109.70	101.58
AMTSS	7	0.00	24741.75	3534.54	12584.86	189.09	4210.46	3898.94
AMTNC	7	0.00	2216.88	316.70	929.36	65.63	305.13	282.55

N=NUMBER OF SAMPLES  
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 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 99.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.41	0.00	4.35	5.04	3.98	0.43	0.54
COND	5	57.92	0.00	68.10	140.50	14.00	53.57	66.60
CMPPT	5	0.00	1.73	0.35	0.53	0.16	0.17	0.21
H	5	38.87	0.00	44.21	104.71	9.12	39.05	48.55
HNV	5	32.83	0.00	37.73	91.20	7.76	33.82	42.04
NA	5	316.75	0.00	384.54	864.82	50.87	351.83	437.41
K	5	9.79	0.00	10.93	21.70	5.53	7.42	9.23
CA	5	22.77	0.00	28.64	57.39	5.49	21.97	27.32
MG	5	72.85	0.00	89.15	204.01	11.84	82.27	102.99
NH4	5	1.57	0.00	2.99	13.31	0.00	5.81	7.22
CL	5	348.58	0.00	416.91	897.32	51.32	373.32	464.14
F	5	0.67	0.00	1.26	5.79	0.00	2.54	3.16
NO3	5	15.62	0.00	18.42	40.49	5.97	13.59	16.89
SO4	5	64.82	0.00	78.62	196.54	12.49	77.53	96.39
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	28.95	0.00	35.72	104.21	6.19	41.25	51.99
SAN	5	429.68	0.00	515.21	1140.14	79.65	460.09	572.01
SCA	5	462.60	0.00	560.46	1265.93	89.71	501.19	623.11
A/C	5	0.93	0.00	0.92	0.96	0.85	0.04	0.05
CL/NA	5	1.10	0.00	1.08	1.14	1.01	0.06	0.07
NA/MG	5	4.35	0.00	4.31	4.43	4.24	0.07	0.08
SS	5	384.48	0.00	459.85	989.75	56.61	411.78	511.94
NC	5	39.25	0.00	56.40	171.47	13.10	66.00	82.05
COND/P	5	0.93	0.00	0.91	1.03	0.76	0.11	0.14
AMTH	5	0.00	671.77	134.35	279.70	23.49	105.23	130.83
AMTHNV	5	0.00	567.40	113.48	227.35	19.99	86.49	107.53
AMTNA	5	0.00	5475.39	1095.08	2817.07	190.77	1111.70	1382.13
AMTK	5	0.00	169.19	33.84	64.27	5.74	23.30	28.97
AMTCA	5	0.00	393.70	78.74	170.66	28.07	60.33	75.00
AMTMG	5	0.00	1259.33	251.87	636.51	44.42	252.10	313.42
AMTNH4	5	0.00	27.23	5.45	24.53	0.00	10.73	13.34
AMTCL	5	0.00	6025.46	1205.09	3202.74	192.47	1254.96	1560.23
AMTF	5	0.00	11.53	2.31	10.67	0.00	4.69	5.83
AMTNU3	5	0.00	269.97	53.99	80.45	16.51	28.23	35.10
AMTSO4	5	0.00	1120.40	224.08	542.93	62.46	218.39	271.52
AMTPU4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	500.38	100.08	213.37	19.31	94.39	117.35
AMTSS	5	0.00	6646.08	1329.22	3532.63	212.29	1384.22	1720.93
AMTNC	5	0.00	678.77	135.75	316.14	56.71	107.97	134.23

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-100

Table 100.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 12/78.

	N	VOLWTAV	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C. L.
PH	5	5.06	0.00	4.39	5.32	3.84	0.55	0.68
COND	83	75	0.00	146.40	565.00	15.00	236.30	293.78
CMPT	0	0.00	7.49	1.50	5.63	0.06	2.35	2.92
H	8	7.73	0.00	40.85	144.54	4.79	58.54	72.78
HNV	7	7.84	0.00	36.82	128.83	4.07	52.01	64.66
NA	582	14	0.00	929.60	3693.63	19.13	1569.11	1950.80
K	11	8.2	0.00	17.82	68.16	1.53	28.63	35.59
CA	32	10	0.00	54.49	194.11	3.99	79.01	98.22
MG	120	60	0.00	205.37	821.78	4.77	348.91	433.79
NH4	2	4.7	0.00	10.87	22.18	1.11	9.48	11.78
CL	64	1.11	0.00	993.03	3908.52	23.12	1657.06	2060.14
F	3	3.31	0.00	1.37	4.21	0.00	1.69	2.10
NO3	6	6.09	0.00	39.68	162.91	3.55	69.04	85.84
SO4	77	96	0.00	154.94	579.63	50.81	238.52	296.54
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	12	18	0.00	53.02	177.44	7.56	70.35	87.46
SAN	72	9.65	0.00	1190.70	4657.07	62.65	1964.10	2441.88
SCA	75	7.86	0.00	1259.00	4941.63	65.28	2085.46	2592.76
A/C	0	0.96	0.00	0.95	1.06	0.85	0.07	0.09
CL/NA	1	1.10	0.00	1.07	1.26	0.97	0.12	0.14
NA/MG	4	8.3	0.00	4.53	4.88	4.01	0.36	0.45
SS	70	5.18	0.00	1092.75	4311.10	24.72	1829.38	2274.39
NC	43	9.4	0.00	125.40	485.99	13.02	202.88	252.23
COND/P	0	0.88	0.00	0.91	0.97	0.85	0.05	0.07
AMTH	0	0.00	65	3.35	130.67	269.23	21.96	91.64
AMTHNV	0	0.00	58	6.91	117.38	229.15	20.02	78.21
AMTNA	0	0.00	43	583.23	8716.65	39767.89	89.68	17379.76
AMTK	0	0.00	88	4.89	176.98	804.19	3.79	350.95
AMTCA	0	0.00	24	0.56	480.71	2077.09	18.71	694.24
AMTMG	0	0.00	90	28.75	1805.75	8143.74	22.36	3548.46
AMTNH4	0	0.00	18	4.99	37.00	62.37	11.22	18.27
AMTCL	0	0.00	47	98.58	9599.72	43669.46	108.39	19069.93
AMTF	0	0.00	24	7.90	49.58	236.84	0.00	104.70
AMTNO3	0	0.00	45	5.60	91.12	199.61	23.94	70.59
AMTSO4	0	0.00	58	36.47	1167.29	4918.73	66.44	2100.84
AMTPO4	0	0.00	0	0.00	0.00	0.00	0.00	0.00
AXSSU4	0	0.00	9	12.07	182.41	425.14	50.38	145.52
AMTSS	0	0.00	52	795.69	10559.14	48167.42	115.86	21049.30
AMTNC	0	0.00	32	89.73	657.95	2687.87	61.05	1137.82
								1414.60

N=NUMBER OF SAMPLES  
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 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-101

Table 101.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	6	4.82	0.00	4.44	5.16	3.87	0.46	0.48
COND	6	25.02	0.00	34.47	90.50	7.59	31.73	33.29
CMPPT	6	0.00	18.21	3.03	11.20	0.20	4.08	4.28
H	6	15.00	0.00	36.30	134.90	0.92	49.19	51.61
HNV	6	13.40	0.00	33.82	131.83	5.77	48.56	50.95
NA	6	138.15	0.00	129.28	280.45	34.35	100.10	105.03
K	6	3.34	0.00	4.13	8.94	1.28	3.72	3.93
CA	6	41.55	0.00	38.34	90.32	5.49	37.10	38.93
MG	6	34.49	0.00	32.37	69.02	7.98	25.89	27.17
NH4	6	3.38	0.00	11.37	52.11	0.55	20.06	20.05
CL	6	154.31	0.00	134.75	288.49	38.35	104.37	109.51
F	6	1.10	0.00	4.47	15.79	0.00	6.54	6.86
NO3	6	5.71	0.00	16.88	70.33	3.87	26.33	27.62
SO4	6	29.45	0.00	55.73	190.50	10.41	68.42	71.79
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	13.57	0.00	41.86	171.44	6.38	64.13	67.29
SAN	6	191.19	0.00	212.19	455.05	54.14	172.69	181.19
SCA	6	235.90	0.00	251.78	525.86	58.06	205.99	215.71
A/C	6	0.81	0.00	0.84	0.93	0.00	0.05	0.05
CL/NA	6	1.12	0.00	1.04	1.14	0.00	0.09	0.10
NA/MG	6	4.01	0.00	3.99	4.63	3.67	0.35	0.37
SS	6	170.20	0.00	148.63	318.20	42.30	115.12	120.79
NC	6	50.70	0.00	66.85	186.61	7.91	69.21	72.61
COND/P	6	0.81	0.00	0.86	0.98	0.75	0.08	0.09
AMTH	6	0.00	2730.26	455.04	1378.28	119.99	465.54	488.44
AMTHNV	6	0.00	2439.22	406.54	1228.40	93.14	416.39	436.87
AMTNA	6	0.00	25149.96	4191.66	19435.76	382.42	7512.93	7882.55
AMTK	6	0.00	608.34	101.39	429.02	18.15	161.64	169.59
AMTCA	6	0.00	7563.61	1260.60	6428.91	89.37	2539.12	2664.04
AMTMG	6	0.00	6279.62	1046.60	4921.18	104.26	1908.85	2002.76
AMTNH4	6	0.00	615.57	102.60	248.44	9.61	91.03	95.51
AMTCL	6	0.00	28092.89	4682.15	22241.34	376.34	8644.08	9069.35
AMTF	6	0.00	200.47	33.41	148.02	0.00	57.82	60.67
AMTNO3	6	0.00	1039.60	173.27	451.77	63.03	147.36	154.61
AMTSO4	6	0.00	5361.16	893.53	3358.79	180.55	1216.17	1276.00
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	2470.40	411.73	1070.15	110.59	335.44	351.94
AMTSS	6	0.00	30986.46	5164.41	24532.20	415.10	9534.42	10003.50
AMTNC	6	0.00	9230.64	1538.44	6931.12	137.19	2657.64	2788.39

N=NUMBER OF SAMPLES  
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 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-102

Table 102.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 02/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	4	4.53	0.00	4.40	4.79	4.02	0.36	0.58
COND	4	45.84	0.00	78.25	179.00	22.00	72.01	114.49
CMPPT	4	0.00	3.25	0.81	1.84	0.24	0.72	1.15
H	4	29.60	0.00	40.07	95.50	16.22	37.73	59.98
HNV	4	26.58	0.00	35.75	87.10	14.13	34.66	55.11
NA	4	149.51	0.00	364.91	987.43	37.39	427.63	679.94
K	4	4.61	0.00	7.79	18.64	2.04	7.55	12.01
CA	4	18.81	0.00	34.18	66.37	8.98	28.26	44.93
MG	4	46.87	0.00	84.73	230.33	8.80	99.71	158.54
NH4	4	11.77	0.00	13.72	18.85	8.32	4.86	7.73
CL	4	225.62	0.00	408.62	1134.49	43.43	493.94	785.37
F	4	2.50	0.00	3.95	10.00	1.05	4.09	6.50
NO3	4	15.45	0.00	17.02	25.48	13.55	5.67	9.02
SO4	4	56.96	0.00	88.22	151.57	34.98	55.17	87.72
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
xSS04	4	53.80	0.00	46.20	87.17	17.51	29.62	47.09
SAN	4	301.28	0.00	518.98	1306.58	108.84	542.64	862.80
SCA	4	311.17	0.00	545.40	1330.07	109.20	551.92	877.55
A/C	4	0.97	0.00	0.95	1.02	0.84	0.08	0.13
CL/NA	4	1.13	0.00	1.12	1.17	0.99	0.09	0.14
NA/MG	4	4.26	0.00	4.31	4.47	4.15	0.14	0.22
SS	4	248.86	0.00	450.71	1251.34	47.90	544.82	866.26
NC	4	52.71	0.00	54.62	113.80	13.21	44.49	70.74
COND/P	4	0.93	0.00	0.95	1.03	0.90	0.06	0.09
AMTH	4	0.00	961.87	240.47	373.04	39.03	143.40	228.01
AMTHNV	4	0.00	863.62	215.90	340.22	33.99	133.60	212.42
AMTNA	4	0.00	6480.83	1620.21	2685.57	289.79	1113.11	1769.85
AMTK	4	0.00	149.79	37.45	61.19	15.83	19.80	31.49
AMTCA	4	0.00	611.09	152.77	192.97	92.81	42.52	67.61
AMTMG	4	0.00	1522.62	380.66	647.62	68.21	267.97	426.07
AMTNH4	4	0.00	382.53	95.63	153.33	26.68	56.79	90.29
AMTCL	4	0.00	7329.03	1832.26	3145.62	336.57	1326.56	2109.24
AMTF	4	0.00	81.12	20.28	39.06	6.33	13.71	21.80
AMTNO3	4	0.00	501.97	125.49	261.71	35.71	96.11	152.81
AMTSO4	4	0.00	1650.69	462.67	644.40	364.71	127.53	202.77
AMIPU4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSS04	4	0.00	1098.22	274.55	351.01	83.81	127.69	203.03
AMTSS	4	0.00	8084.06	2021.01	3469.76	371.23	1463.24	2326.56
AMTNC	4	0.00	1062.81	265.70	444.52	150.42	125.79	200.00

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-103

Table 103.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 11 DURING 03/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	2	4.60	0.00	4.51	4.62	4.43	0.13	1.21
COND	2	37.80	0.00	102.50	180.00	25.00	109.60	985.02
CMPTT	2	0.00	2.35	1.17	2.16	0.19	1.39	12.47
H	2	25.07	0.00	30.57	37.15	23.99	9.31	83.67
HNV	2	20.98	0.00	26.16	32.36	19.95	8.77	78.84
NA	16	22.54	0.00	53.72	978.30	89.13	628.74	5650.65
K	2	3.79	0.00	13.91	26.04	1.79	17.15	154.13
CA	2	17.01	0.00	62.62	117.27	7.98	77.27	694.48
MG	2	38.97	0.00	138.28	257.23	19.33	168.22	1511.83
NH4	2	6.69	0.00	9.70	13.31	6.10	5.10	45.81
CL	19	6.82	0.00	59.30	1079.78	110.83	685.15	6157.69
NO3	1	23.51	0.00	5.26	7.37	3.16	2.98	26.75
SO4	4	23.43	0.00	19.03	26.94	11.13	11.18	100.45
PO4	2	23.59	0.00	108.47	187.38	29.56	111.59	1002.92
SSO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	2	33.62	0.00	47.57	76.27	18.88	40.58	368.74
SCA	2	54.07	0.00	729.13	1302.96	155.30	811.52	7293.39
A/C	2	0.98	0.00	788.81	1429.29	148.32	905.78	8140.56
CL/NA	2	1.17	0.00	1.12	1.24	0.91	0.10	0.88
NA/MG	2	4.17	0.00	3.86	4.61	3.80	0.57	5.13
SS	2	3.97	0.00	65.08	1190.99	115.16	760.73	6836.93
NC	2	5.02	0.00	105.16	201.14	9.17	135.74	1219.97
COND/P	2	0.94	0.00	0.95	0.97	0.93	0.03	0.24
AMTH	2	0.00	589.23	294.62	517.25	71.98	314.85	282.65
AMTHNV	2	0.00	492.92	246.46	430.23	63.70	259.88	235.67
AMTNA	2	0.00	3817.41	1908.70	1921.95	1895.46	18.74	168.38
AMTK	2	0.00	88.99	44.49	50.45	38.53	8.43	75.75
AMICA	2	0.00	399.36	199.68	227.20	172.16	38.92	349.82
AMTMG	2	0.00	915.20	457.60	498.38	416.83	57.66	518.25
AMTNH4	2	0.00	157.28	78.64	131.50	25.78	74.75	671.83
AMTCL	2	0.00	4481.76	2240.88	2389.69	2092.07	210.45	1891.35
AMTF	2	0.00	82.37	41.18	68.09	14.28	38.05	341.99
AMTND3	2	0.00	292.17	146.09	239.98	52.19	132.79	1193.42
AMTSU4	2	0.00	1000.53	500.27	637.48	363.05	194.05	1744.02
AMTPU4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	2	0.00	554.81	277.41	407.04	147.77	183.33	1647.63
AMTSS	2	0.00	4790.71	2395.36	2483.16	2307.55	124.17	1116.00
AMTNC	2	0.00	587.52	293.76	389.72	197.80	135.70	1219.60

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 104.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 07/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	2	4.57	0.00	4.32	4.61	4.15	0.33	2.92
COND	2	11.73	0.00	21.60	32.60	10.60	15.56	139.81
CMPPT	2	0.00	3.41	1.70	3.23	0.17	2.16	19.44
H	2	26.92	0.00	47.67	70.79	24.55	32.70	293.91
HNV	2	25.55	0.00	44.00	64.56	23.44	29.08	261.34
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	2	0.00	917.83	458.92	793.94	123.89	473.80	4258.20
AMTHNV	2	0.00	671.20	435.60	758.21	112.99	456.24	4100.39
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RAINUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-105

Table 105

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 08/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	9	4.36	0.00	4.47	6.80	4.03	0.86	0.66
COND	9	20.33	0.00	18.14	41.00	0.00	12.67	9.75
CMPPT	9	0.00	17.73	1.97	7.30	0.03	2.34	1.80
H	9	43.66	0.00	33.72	93.32	0.16	36.79	28.33
HNV	9	38.11	0.00	29.45	81.28	0.13	32.43	24.97
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	9	0.00	7743.18	860.35	5409.25	0.05	1753.85	1350.47
AMTHNV	9	0.00	6758.73	750.97	4711.26	0.04	1529.51	1177.73
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-106

Table 106

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED KSC SITE 12 DURING 09/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.
PH	8	4.83	0.00	4.46	5.28	3.99	0.41	0.
COND	8	22.74	0.00	33.41	109.90	9.40	34.02	28.
CMPPT	8	0.00	22.07	2.76	12.78	0.03	4.39	3.
H	8	14.73	0.00	34.46	102.33	5.25	32.83	27.
HNV	8	13.00	0.00	29.58	91.20	3.63	30.72	25.
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTH	8	0.00	3250.63	406.33	1609.06	5.31	512.87	427.
AMTHNV	8	0.00	2868.30	358.54	1434.08	1.60	460.61	384.
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 107.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 10/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.30	0.00	4.08	5.08	3.80	0.57	0.70
COND	5	25.55	0.00	43.30	75.80	11.80	25.88	32.18
CMPPT	5	0.00	3.00	0.60	1.88	0.10	0.74	0.92
H	5	50.30	0.00	83.58	158.49	8.32	66.56	82.76
HNV	5	47.49	0.00	80.79	154.88	8.13	66.76	83.00
NA	4	63.24	0.00	62.72	73.92	33.91	19.26	30.62
K	4	2.39	0.00	2.87	4.59	2.04	1.17	1.86
CA	4	8.39	0.00	13.60	23.95	7.49	8.60	13.67
MG	4	13.84	0.00	16.95	31.26	7.24	10.16	16.16
NH4	4	8.29	0.00	15.94	31.60	7.22	12.05	19.16
CL	4	57.01	0.00	65.21	121.54	27.64	40.19	63.90
F	4	1.82	0.00	3.99	10.00	2.00	4.62	7.34
NO3	4	15.74	0.00	22.90	41.62	5.32	20.14	32.03
SO4	4	30.80	0.00	40.65	76.20	20.40	26.38	41.94
PO4	4	0.68	0.00	1.85	7.27	0.00	3.63	5.78
XSSO4	4	25.12	0.00	34.85	71.12	11.96	27.87	44.32
SAN	4	106.05	0.00	133.87	184.43	68.58	41.57	66.09
SCA	4	142.80	0.00	176.93	274.43	112.79	70.01	111.31
A/C	4	0.74	0.00	0.76	1.03	0.65	0.17	0.28
CL/NA	4	0.90	0.00	1.04	1.64	0.68	0.43	0.69
NA/MG	4	4.57	0.00	3.70	4.89	2.36	1.23	1.96
SS	4	60.86	0.00	62.29	95.50	30.48	27.19	43.23
NC	4	35.29	0.00	49.79	91.17	24.10	28.88	45.93
COND/P	4	0.74	0.00	0.89	1.12	0.63	0.20	0.32
AMTH	5	0.00	1508.55	301.71	615.58	12.61	229.63	285.49
AMTHNV	5	0.00	1424.18	284.84	587.87	7.77	219.13	272.44
AMTNA	4	0.00	1834.16	458.54	1320.70	112.03	576.30	916.32
AMTK	4	0.00	69.27	17.32	43.08	6.94	17.36	27.60
AMTCA	4	0.00	243.31	60.83	96.06	16.64	32.83	52.20
AMTMG	4	0.00	401.32	100.33	269.92	40.46	113.09	179.82
AMTNH4	4	0.00	240.23	60.06	90.05	22.69	33.20	52.78
AMTCL	4	0.00	1653.17	413.29	1168.54	134.17	503.92	801.24
AMTF	4	0.00	52.88	13.22	27.19	8.00	11.37	18.08
AMTNO3	4	0.00	456.32	114.08	234.82	8.56	92.95	147.79
AMTSO4	4	0.00	893.08	223.27	382.57	31.56	146.90	233.58
AMTPU4	4	0.00	19.75	4.94	19.75	0.00	9.88	15.70
AXSSO4	4	0.00	728.49	182.12	262.32	18.12	113.61	180.63
AMTSS	4	0.00	1765.00	441.25	1288.90	144.74	565.37	898.94
AMTNC	4	0.00	1023.29	255.82	451.88	60.95	159.71	253.94

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 108.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 11/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	5.17	0.00	4.42	5.41	3.80	0.60	0.63
COND	6	7.09	0.00	10.62	19.70	0.00	8.40	0.81
CMPPT	6	0.00	15.98	2.66	6.64	0.00	3.11	0.26
H	6	6.82	0.00	37.91	56.49	3.89	60.07	0.22
HNV	6	5.76	0.00	33.73	83.18	3.31	30.83	0.35
NA	6	17.69	0.00	29.48	48.26	11.74	16.89	0.00
K	6	0.14	0.00	0.51	1.02	0.00	0.51	0.63
CA	6	1.22	0.00	3.49	7.98	0.00	3.16	0.22
MG	6	4.00	0.00	6.50	10.12	2.72	3.60	0.48
NH4	6	1.42	0.00	3.10	8.87	0.00	3.75	0.68
CL	6	18.87	0.00	30.23	50.48	13.54	17.20	0.38
F	6	0.12	0.00	1.26	6.32	0.00	2.82	0.11
NO3	6	3.31	0.00	8.94	23.23	1.29	4.67	0.03
SO4	6	6.61	0.00	12.87	24.36	2.41	9.53	0.44
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	4.67	0.00	9.76	19.75	1.52	8.51	0.50
SAN	6	28.91	0.00	33.30	83.88	17.74	32.05	0.50
SCA	6	31.11	0.00	56.88	92.55	19.77	34.58	0.40
A/C	6	0.93	0.00	0.94	0.99	0.90	0.04	0.00
CL/NA	6	1.07	0.00	1.03	1.17	0.91	0.12	0.00
NA/MG	6	4.43	0.00	3.54	4.85	3.96	0.95	0.00
SS	6	20.61	0.00	33.33	55.61	14.93	18.95	0.66
NC	6	3.67	0.00	9.75	23.14	0.93	11.16	0.00
COND/P	5	1.27	0.00	1.21	1.41	0.98	0.18	0.22
AMTH	6	0.00	108.42	181.57	332.82	29.72	130.01	136.40
AMTHNV	6	0.00	921.33	153.56	283.27	15.60	119.24	125.11
AMTNA	6	0.00	282.21	55.04	83.39	98.20	312.98	389.12
AMTK	6	0.00	23.10	4.62	15.32	0.00	6.31	7.85
AMTCA	6	0.00	194.51	38.90	67.36	0.00	28.64	35.61
AMTMG	6	0.00	637.93	127.59	196.65	20.87	71.77	89.23
AMTNH4	6	0.00	226.98	45.39	133.06	5.02	50.90	63.28
AMTCL	6	0.00	3012.54	602.51	898.87	88.99	340.16	422.90
AMTF	6	0.00	19.54	3.91	19.54	0.00	8.74	10.86
AMTNO3	6	0.00	528.77	105.75	220.17	33.62	70.73	87.93
AMTSO4	6	0.00	1054.92	210.98	365.39	65.06	134.53	167.25
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	745.23	149.05	296.18	53.23	111.81	139.01
AMTSS	6	0.00	3322.26	664.45	991.46	98.15	375.25	466.54
AMTNC	6	0.00	585.48	117.10	347.14	23.62	130.65	162.43

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N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 109.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 12/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	12	4.56	0.00	4.46	6.54	0.00	0.67	0.41
COND	12	18.53	0.00	20.31	66.00	0.00	18.20	11.30
CMPTT	12	0.00	7.82	0.65	1.48	0.01	0.52	0.32
H	12	27.67	0.00	34.38	83.18	0.00	25.27	15.69
HNV	12	24.60	0.00	27.41	64.56	0.00	19.27	11.96
NA	9	39.84	0.00	39.42	94.79	0.00	30.22	23.27
K	9	1.01	0.00	1.00	2.81	0.00	0.08	0.03
CA	9	3.35	0.00	5.32	18.96	0.00	5.57	4.29
MG	9	9.15	0.00	9.27	21.22	0.00	6.71	5.17
NH4	9	2.84	0.00	4.19	14.97	0.00	4.86	3.74
CL	9	4.15	0.00	4.55	96.44	1.00	30.96	23.84
NO3	9	0.87	0.00	1.05	7.89	0.00	2.59	2.00
SO4	9	9.94	0.00	13.12	37.74	0.00	10.45	8.05
PO4	9	28.29	0.00	31.30	63.09	0.00	18.80	14.48
XSSO4	9	0.70	0.00	0.60	5.37	0.00	1.79	1.38
SAN	9	24.16	0.00	27.14	60.32	2.00	18.24	14.04
SCA	9	60.95	0.00	87.58	154.00	3.00	47.41	36.51
A/C	9	63.49	0.00	89.88	161.05	3.00	47.98	36.94
CL/NA	9	0.97	0.00	0.97	1.10	0.00	0.07	0.05
NA/MG	9	1.03	0.00	1.05	1.49	0.00	0.22	0.17
SS	9	4.36	0.00	4.25	4.73	0.00	0.60	0.46
NC	9	44.22	0.00	44.57	106.38	10.00	34.78	26.78
COND/P	9	11.96	0.00	14.71	41.10	0.00	10.52	8.10
AMTH	12	0.99	0.00	0.98	1.06	0.00	0.06	0.05
AMTHNV	12	0.00	216.51	180.38	62.33	0.00	193.15	119.88
AMTNA	12	0.00	192.81	160.40	59.55	0.00	186.00	115.44
AMTK	9	0.00	308.11	343.12	910.84	32.00	317.10	244.17
AMTCA	9	0.00	78.32	8.70	22.08	0.00	9.66	7.44
AMTMG	9	0.00	259.42	28.82	64.40	7.00	17.66	13.60
AMTNH4	9	0.00	709.03	78.78	203.94	11.00	70.14	54.01
AMTCL	9	0.00	219.94	24.44	76.66	0.00	25.08	19.51
AMTF	9	0.00	3189.43	354.38	926.77	43.00	323.35	248.98
AMTNO3	9	0.00	67.50	7.50	55.51	0.00	18.21	14.02
AMTSO4	9	0.00	770.56	85.62	195.30	42.00	50.28	38.72
AMTPO4	9	0.00	2192.55	243.62	581.56	63.00	189.52	145.93
AXSSO4	9	0.00	54.54	6.06	54.54	0.00	18.18	14.00
AMTSS	9	0.00	1873.04	208.12	556.09	40.00	180.67	139.12
AMTNC	9	0.00	3427.24	380.80	1022.22	42.00	360.05	277.24
	9	0.00	927.59	103.07	179.10	36.00	51.42	39.60

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPTT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 110.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 01/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%CL
PH	6	4.56	0.00	4.42	4.96	3.94	0.40	0.42
COND	6	16.74	0.00	24.50	58.00	7.60	18.03	18.91
CMPPT	6	0.00	0.00	1.14	3.81	0.22	1.33	1.40
H	6	27.75	0.00	38.17	114.81	10.97	40.15	42.12
HNV	6	25.45	0.00	34.70	107.15	7.59	38.60	40.50
NA	6	37.11	0.00	59.93	114.79	6.52	44.69	46.89
X	6	0.61	0.00	1.40	3.57	0.00	1.55	1.62
CA	6	8.36	0.00	16.88	34.43	2.50	14.09	14.79
MG	6	8.71	0.00	14.59	26.90	3.04	10.21	10.71
NH4	6	7.76	0.00	11.37	20.51	3.33	7.35	7.71
CL	6	34.17	0.00	54.05	97.01	13.83	34.69	36.39
F	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	6	10.45	0.00	15.38	45.00	4.35	15.13	15.87
SO4	6	30.55	0.00	48.44	110.14	10.41	35.14	36.86
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	27.12	0.00	42.99	100.16	8.41	32.31	33.90
SAN	6	75.17	0.00	117.87	252.15	34.55	79.88	83.81
SCA	6	90.30	0.00	142.34	297.63	42.30	97.36	102.15
A/C	6	0.83	0.00	0.83	0.95	0.72	0.09	0.09
CL/NA	6	0.92	0.00	0.90	2.12	0.79	0.50	0.53
NA/MG	6	4.26	0.00	4.11	4.91	2.14	0.94	0.99
SS	6	36.75	0.00	58.48	107.00	8.43	39.91	41.87
NC	6	25.80	0.00	45.69	90.18	6.96	33.70	35.36
COND/P	6	0.91	0.00	0.89	1.00	0.78	0.08	0.08
AMTH	6	0.00	1904.85	317.48	780.38	28.99	273.62	287.08
AMTHNV	6	0.00	1747.16	291.19	728.30	17.07	260.12	272.91
AMTNA	6	0.00	2547.19	424.53	861.99	62.16	311.69	327.03
AMTK	6	0.00	42.18	7.03	24.29	0.00	9.04	9.48
AMTCA	6	0.00	574.05	95.68	152.62	23.78	50.45	52.94
AMTMG	6	0.00	597.98	99.66	175.63	29.01	61.60	64.63
AMTNH4	6	0.00	532.45	88.74	147.95	23.70	59.36	62.28
AMTCL	6	0.00	2345.91	390.98	741.84	131.70	251.11	263.46
AMTF	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	6	0.00	717.02	119.50	305.88	25.04	107.06	112.33
AMTSO4	6	0.00	2096.97	349.50	748.59	99.78	233.81	245.31
AMTPU4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	1861.67	310.28	680.75	78.89	214.40	224.95
AMTSS	6	0.00	2522.58	420.43	818.24	80.31	291.29	305.62
AMTNC	6	0.00	1771.26	295.21	515.28	66.34	171.68	180.35

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-111

Table 111

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 02/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	8	4.42	0.00	4.29	4.55	3.95	0.20	0.16
CUND	8	20.01	0.00	28.66	58.50	16.20	14.90	12.43
CMPPT	8	0.00	12.39	1.55	3.94	0.03	1.61	1.34
H	8	38.18	0.00	51.41	112.20	28.18	27.69	23.10
HNV	8	32.73	0.00	42.36	89.13	19.50	23.40	19.52
NA	6	28.12	0.00	20.00	59.57	2.17	20.16	21.15
K	6	0.65	0.00	0.60	0.77	0.25	0.21	0.22
CA	6	4.55	0.00	4.41	11.48	0.00	4.00	4.19
MG	6	7.11	0.00	5.22	14.15	1.07	4.59	4.81
NH4	6	6.85	0.00	5.54	14.41	2.77	4.52	4.74
CL	6	29.86	0.00	22.32	59.50	3.67	19.32	20.27
F	6	1.34	0.00	0.88	2.03	0.00	1.36	1.43
NO3	6	9.36	0.00	10.86	20.97	4.68	5.64	5.92
SU4	6	33.71	0.00	35.67	45.18	25.19	8.29	8.70
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	30.72	0.00	33.50	44.92	23.51	8.53	8.95
SAN	6	74.27	0.00	69.73	101.86	50.26	20.99	22.02
SCA	6	85.08	0.00	79.97	109.95	57.77	20.66	21.68
A/C	6	0.87	0.00	0.87	0.93	0.78	0.06	0.06
CL/NA	6	1.06	0.00	1.12	1.69	1.00	0.28	0.29
NA/MG	6	3.96	0.00	3.83	4.21	2.03	0.77	0.80
SS	6	32.03	0.00	23.26	65.63	2.81	21.76	22.83
NC	6	15.27	0.00	12.52	29.24	4.24	9.07	9.52
COND/P	6	0.92	0.00	0.93	0.98	0.83	0.05	0.06
AMTH	8	0.00	4729.89	591.24	1457.66	10.06	541.10	451.49
AMTHNV	8	0.00	4054.69	506.84	1212.43	5.79	460.99	384.64
AMTNA	6	0.00	3456.45	576.08	2345.47	5.98	682.70	926.12
AMTK	6	0.00	80.36	13.39	27.40	0.70	10.70	11.23
AMTCA	6	0.00	559.41	93.23	308.44	0.00	12.87	118.42
AMTMG	6	0.00	873.93	145.66	557.11	2.94	207.47	217.68
AMTNH4	6	0.00	642.08	140.35	387.39	7.62	150.16	157.54
AMTCL	6	0.00	3670.04	611.67	2342.89	10.08	868.38	911.10
AMTF	6	0.00	164.88	27.48	94.16	0.00	43.21	45.34
AMTNO3	6	0.00	1150.00	191.67	355.47	23.95	129.26	135.62
AMTSO4	6	0.00	4142.96	690.49	1483.81	124.24	527.18	553.12
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	3776.08	629.35	1242.73	123.53	452.71	474.98
AMTSS	6	0.00	3936.01	656.00	2584.21	7.72	965.03	1012.51
AMTNC	6	0.00	1876.23	312.71	785.89	20.50	328.85	345.03

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 11?

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 03/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	8	4.58	0.00	4.43	4.83	4.16	0.24	0.20
COND	8	17.46	0.00	25.86	46.50	7.80	15.26	12.73
CMPPT	8	0.00	7.78	0.97	3.27	0.27	0.96	0.80
H	8	26.33	0.00	37.04	69.18	14.79	19.82	16.54
HNv	8	23.89	0.00	32.99	57.54	14.79	17.07	14.25
NA	8	25.12	0.00	38.04	87.39	5.65	29.50	24.62
K	8	0.86	0.00	1.50	3.32	0.00	1.20	0.00
CA	8	8.65	0.00	14.66	22.39	2.39	15.89	13.26
MG	8	7.27	0.00	11.03	22.87	2.39	7.83	6.54
NH4	8	8.01	0.00	13.58	39.36	2.77	12.33	10.28
CL	8	30.61	0.00	46.00	114.21	9.31	37.39	31.20
F	8	0.75	0.00	0.53	2.63	0.00	0.93	0.78
NO3	8	11.53	0.00	16.29	40.81	6.13	11.04	9.21
SO4	8	28.19	0.00	42.06	90.57	16.86	29.51	24.62
PO4	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	8	25.31	0.00	37.66	86.30	16.19	27.20	22.99
SAN	8	71.07	0.00	104.88	209.73	33.35	66.54	52.22
SCA	8	76.23	0.00	115.86	211.86	28.71	73.14	61.03
A/C	8	0.93	0.00	0.91	1.16	0.83	0.12	0.10
CL/NA	8	1.22	0.00	1.21	1.65	0.93	0.24	0.20
NA/MG	8	3.46	0.00	3.45	3.94	2.33	0.64	0.54
SS	8	30.94	0.00	47.27	112.91	7.30	38.28	31.94
NC	8	18.96	0.00	31.55	104.67	6.61	30.86	25.75
COND/P	8	0.98	0.00	1.01	1.10	0.91	0.07	0.06
AMTH	8	0.00	2047.19	255.90	483.02	145.48	116.51	97.21
AMTHNv	8	0.00	1857.76	232.22	483.02	135.77	116.07	96.85
AMTNA	8	0.00	1453.43	244.18	572.31	70.32	175.44	146.38
AMTK	8	0.00	66.98	8.37	22.98	0.00	7.10	5.92
AMTCA	8	0.00	672.48	84.06	162.80	26.82	48.06	40.10
AMTMG	8	0.00	565.23	70.65	145.29	19.09	42.03	32.07
AMTNH4	8	0.00	622.81	77.85	126.73	21.66	34.94	29.15
AMTCL	8	0.00	2380.25	297.53	605.95	81.30	194.74	162.49
AMTF	8	0.00	58.14	7.27	34.37	0.00	13.05	10.89
AMTNO3	8	0.00	696.24	112.03	200.16	39.01	51.58	43.04
AMTSO4	8	0.00	2192.33	274.04	550.72	133.22	131.48	109.70
AMTPO4	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	8	0.00	1968.51	246.06	528.59	124.85	125.69	104.88
AMTSS	8	0.00	2406.52	300.81	666.36	89.67	213.46	178.11
AMTNC	8	0.00	1474.42	184.30	297.38	75.98	80.91	67.51

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N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 113.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 04/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	2	4.75	0.00	4.70	4.90	4.57	0.23	2.10
COND	2	32.91	0.00	33.05	33.60	32.50	0.78	6.99
CMPPT	2	0.00	0.40	0.20	0.25	0.15	0.07	0.65
H	2	17.92	0.00	19.75	26.91	12.59	10.13	91.04
HNV	2	7.90	0.00	8.86	12.59	5.13	5.28	47.41
NA	2	51.21	0.00	57.18	80.44	33.91	32.90	295.66
K	2	4.44	0.00	4.21	5.11	3.32	1.26	11.36
CA	2	54.18	0.00	55.14	58.88	51.40	5.29	47.57
MG	2	14.93	0.00	16.16	20.98	11.35	6.81	61.16
NH4	2	55.10	0.00	52.11	63.76	40.47	16.46	147.98
CL	2	57.10	0.00	62.89	85.45	40.33	31.90	286.74
F	2	3.49	0.00	3.42	3.68	3.16	0.37	3.34
NO3	2	29.17	0.00	30.32	34.84	25.81	6.39	57.40
SO4	2	79.06	0.00	80.26	84.95	75.58	6.62	59.54
PO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	2	73.24	0.00	73.83	76.15	71.51	3.28	29.51
SCAN	2	168.82	0.00	176.89	208.39	145.39	44.54	400.33
SCA	2	197.78	0.00	204.56	231.00	178.12	37.40	336.10
A/C	2	0.85	0.00	0.86	0.90	0.82	0.06	0.55
CL/NA	2	1.12	0.00	1.10	1.19	1.06	0.09	0.81
NA/MG	2	3.43	0.00	3.54	3.83	2.99	0.60	5.38
SS	2	62.57	0.00	69.03	94.25	43.82	35.66	320.48
NC	2	117.29	0.00	115.77	121.71	109.84	6.39	75.43
COND/P	2	1.12	0.00	1.08	1.25	0.90	0.25	2.21
AMTH	2	0.00	71.42	35.71	39.95	31.47	6.00	53.88
AMTHNV	2	0.00	31.51	15.75	18.69	12.82	4.15	37.27
AMTNA	2	0.00	204.19	102.09	119.40	84.79	24.48	219.97
AMTK	2	0.00	17.69	8.85	12.77	4.93	5.54	49.82
AMTCA	2	0.00	215.89	107.95	128.49	87.40	29.05	261.12
AMTMG	2	0.00	59.52	29.76	31.14	28.38	1.95	17.52
AMTNH4	2	0.00	219.46	109.73	159.39	60.07	70.23	631.15
AMTCL	2	0.00	227.65	113.82	126.83	100.82	18.40	165.35
AMTF	2	0.00	13.90	6.95	9.21	4.69	3.20	28.74
AMTNO3	2	0.00	116.24	58.12	64.52	51.72	9.05	81.36
AMTSO4	2	0.00	315.03	157.52	188.94	126.09	44.44	399.41
AMTPO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	2	0.00	291.82	145.91	178.78	113.04	46.48	417.75
AMTSS	2	0.00	249.44	124.72	139.90	109.54	21.46	192.90
AMTNC	2	0.00	467.31	233.66	304.27	163.04	99.86	847.50

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 114.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 05/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.47	0.00	4.50	5.05	4.29	0.24	0.22
COND	7	20.82	0.00	35.37	68.20	15.40	23.03	21.33
CMPPT	7	0.00	12.94	1.85	5.00	0.02	1.81	1.68
H	7	33.63	0.00	31.54	51.29	8.91	12.40	11.48
HNV	7	28.07	0.00	26.47	41.69	7.59	10.29	9.53
NA	6	18.78	0.00	26.16	45.22	12.17	13.32	13.98
K	6	1.34	0.00	2.89	9.70	0.51	3.49	3.66
CA	6	9.40	0.00	19.88	67.86	5.99	24.36	25.56
MG	6	4.62	0.00	7.46	14.31	2.88	5.17	5.42
NH4	6	22.84	0.00	39.36	130.84	10.53	45.81	48.06
CL	6	19.55	0.00	29.70	54.71	10.43	18.03	18.92
F	6	0.68	0.00	1.40	3.16	0.00	1.32	1.38
NO3	6	16.40	0.00	30.43	87.75	12.26	29.73	31.19
SO4	6	30.99	0.00	47.09	90.98	21.24	30.80	32.31
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	28.99	0.00	44.12	85.56	19.26	29.19	30.62
SAN	6	67.62	0.00	108.63	236.07	50.59	76.98	80.76
SCA	6	40.70	0.00	131.07	273.65	72.74	82.03	86.07
A/C	6	0.75	0.00	0.83	0.93	0.67	0.11	0.11
CL/NA	6	1.04	0.00	1.14	1.24	0.86	0.14	0.15
NA/MG	6	4.07	0.00	3.51	4.84	2.73	0.75	0.79
SS	6	21.43	0.00	31.95	58.42	11.51	18.75	19.68
NC	6	35.60	0.00	63.80	163.95	19.97	58.49	61.37
COND/P	6	0.99	0.00	1.07	1.35	0.83	0.17	0.18
AMTH	7	0.00	4352.27	621.75	1733.68	1.81	614.83	569.34
AMTHNV	7	0.00	3632.32	518.90	1285.20	1.54	484.56	488.71
AMTNA	6	0.00	2426.46	404.41	828.52	146.74	267.54	280.71
AMTK	6	0.00	179.92	29.99	65.96	10.69	20.84	21.86
AMTCA	6	0.00	1214.99	202.50	399.20	78.90	113.59	119.17
AMTMG	6	0.00	596.27	99.38	196.60	46.94	58.74	61.63
AMTNH4	6	0.00	2950.60	491.77	1074.32	118.50	381.52	400.29
AMTCL	6	0.00	2525.94	420.99	919.88	181.89	275.18	288.72
AMTF	6	0.00	87.94	14.66	34.00	0.00	15.37	16.13
AMTNO3	6	0.00	2118.63	353.10	612.94	143.96	165.03	173.14
AMTNO4	6	0.00	4003.54	667.26	1394.94	306.83	428.56	449.65
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	3745.46	624.24	1341.26	289.24	410.53	430.73
AMTSS	6	0.00	2768.48	461.41	1014.63	189.60	306.58	321.66
AMTNC	6	0.00	4599.77	766.63	1446.33	375.07	492.48	516.71

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 115.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.40	0.00	4.27	4.80	3.76	0.33	0.31
COND	7	22.51	0.00	30.13	84.90	12.20	25.03	23.18
CMPPT	7	0.00	11.73	1.68	4.91	0.27	1.75	1.62
H	7	40.13	0.00	53.58	173.78	15.85	54.54	50.50
HNV	7	38.25	0.00	51.05	169.82	13.49	53.89	49.90
NA	7	18.33	0.00	27.89	81.74	7.83	25.09	23.24
K	7	0.92	0.00	1.35	3.57	0.51	1.06	0.98
CA	7	6.60	0.00	11.26	38.42	4.49	12.29	11.38
MG	7	4.29	0.00	7.04	18.26	1.65	5.78	5.35
NH4	7	11.01	0.00	9.74	29.94	0.55	10.36	9.59
CL	7	18.94	0.00	29.61	87.14	9.31	26.88	24.89
F	7	0.09	0.00	0.45	2.11	0.00	0.83	0.77
NO3	7	16.92	0.00	23.37	80.65	6.45	26.06	24.13
SO4	7	33.81	0.00	46.34	145.74	16.45	44.81	41.50
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	31.87	0.00	43.30	141.88	14.78	44.41	41.12
SAN	7	69.76	0.00	99.77	266.00	40.84	79.11	73.26
SCA	7	81.29	0.00	110.86	290.38	42.52	85.20	78.89
A/C	7	0.86	0.00	0.90	1.01	0.79	0.08	0.07
CL/NA	7	1.03	0.00	1.06	1.20	0.95	0.10	0.10
NA/MG	7	4.27	0.00	3.96	4.76	2.99	0.62	0.57
SS	7	20.82	0.00	32.58	96.11	10.11	29.70	27.50
NC	7	20.33	0.00	24.70	75.23	8.69	23.06	21.35
COND/P	7	1.04	0.00	1.05	1.19	0.96	0.07	0.07
AMTH	7	0.00	4707.66	672.52	1725.90	134.96	710.22	657.68
AMTHNV	7	0.00	4486.21	640.89	1686.61	114.87	682.51	632.01
AMTNA	7	0.00	2149.93	307.13	959.96	91.55	307.01	284.29
AMTK	7	0.00	107.83	15.40	50.10	4.12	15.80	14.63
AMTCA	7	0.00	774.70	110.67	293.79	21.05	91.53	84.76
AMTMG	7	0.00	503.66	71.95	213.90	24.54	66.13	61.24
AMTNH4	7	0.00	1291.05	184.44	816.01	24.72	296.06	274.15
AMTCL	7	0.00	2221.25	317.32	940.82	93.22	297.35	275.35
AMTF	7	0.00	10.69	1.53	5.76	0.00	2.62	2.43
AMTNO3	7	0.00	1985.03	283.58	775.55	30.24	305.02	282.45
AMTSO4	7	0.00	3965.44	566.49	1440.29	140.06	576.24	533.60
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	3737.85	533.98	1343.48	123.88	555.55	514.45
AMTSS	7	0.00	2442.05	348.86	1037.73	102.82	328.37	304.08
AMTNC	7	0.00	2385.12	340.73	1296.03	68.46	441.70	409.02

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 116

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 07/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	11	4.33	0.00	4.31	4.64	3.97	0.24	0.15
COND	11	24.62	0.00	26.10	49.80	13.20	11.95	7.74
CMPP1	11	0.00	24.50	2.23	5.41	1.06	1.35	0.87
H	11	46.81	0.00	49.11	107.15	22.91	28.78	18.66
HNV	11	44.38	0.00	45.97	104.71	20.89	27.77	18.00
NA	11	18.04	0.00	22.37	86.09	8.70	22.53	14.61
K	11	0.81	0.00	0.93	2.55	0.25	0.65	0.42
CA	11	6.79	0.00	7.30	20.46	1.50	5.45	3.54
MG	11	4.27	0.00	5.11	19.82	1.89	5.12	3.32
NH4	11	3.02	0.00	2.87	9.42	0.55	2.77	1.80
CL	11	18.57	0.00	23.66	104.06	8.18	27.74	17.98
F	11	1.35	0.00	0.96	5.26	0.00	1.52	0.99
NO3	11	14.56	0.00	15.57	29.03	4.84	8.50	5.51
SO4	11	35.85	0.00	37.17	78.28	13.32	20.43	13.24
PO4	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	11	33.96	0.00	34.77	77.27	12.48	20.74	13.44
SAN	11	70.33	0.00	77.37	158.18	32.51	39.40	25.54
SCA	11	79.74	0.00	87.70	155.16	32.51	38.30	24.83
A/C	11	0.88	0.00	0.88	1.02	0.76	0.08	0.05
CL/NA	11	1.03	0.00	1.06	1.21	0.82	0.12	0.08
NA/MG	11	4.23	0.00	4.38	5.35	3.69	0.42	0.27
SS	11	20.32	0.00	25.78	111.23	9.02	29.58	19.17
NC	11	12.61	0.00	12.81	27.41	3.11	7.23	4.68
COND/P	11	1.05	0.00	1.04	1.10	0.97	0.04	0.03
AMTH	11	0.00	11466.53	1042.41	2152.27	243.41	655.24	424.76
AMTHNV	11	0.00	10871.91	988.36	2152.27	221.99	649.10	420.78
AMTNA	11	0.00	4419.20	401.75	914.71	135.94	268.86	174.29
AMTK	11	0.00	198.77	18.07	41.41	4.02	11.04	7.15
AMTCA	11	0.00	1663.34	151.21	377.68	23.58	109.47	70.97
AMTMG	11	0.00	1045.16	95.01	235.70	29.80	68.84	44.63
AMTNH4	11	0.00	739.76	67.25	182.61	5.98	71.75	46.51
AMTCL	11	0.00	4547.49	413.41	1105.62	124.65	317.75	205.98
AMTF	11	0.00	330.89	30.08	203.94	0.00	59.11	38.32
AMTNO3	11	0.00	3567.00	324.27	723.78	102.33	210.00	136.13
AMTSO4	11	0.00	8782.32	798.39	2093.58	208.46	572.43	371.08
AMTPO4	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	11	0.00	8318.48	756.23	1997.89	169.61	563.13	365.05
AMTSS	11	0.00	4978.20	452.56	1181.81	137.49	342.36	221.94
AMTNC	11	0.00	3088.03	280.73	678.59	49.36	205.09	132.95

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 MEAN=UNWEIGHTED AVERAGE  
 CMPP1 IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 117.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	2	4.46	0.00	4.51	4.56	4.46	0.07	0.64
COND	2	16.09	0.00	22.30	28.80	15.80	9.19	82.61
CMPPT	2	0.00	4.04	2.02	3.95	0.09	2.73	24.54
H	2	34.51	0.00	31.11	34.67	27.54	5.04	45.32
HNV	2	31.35	0.00	25.56	31.62	19.50	8.57	77.05
NA	2	6.30	0.00	47.83	91.31	4.35	61.49	552.63
K	2	0.57	0.00	1.91	3.32	0.51	1.99	17.84
CA	2	3.22	0.00	7.98	12.97	2.99	7.06	63.42
MG	2	2.26	0.00	11.80	21.80	1.81	14.13	127.03
NH4	2	1.25	0.00	4.16	7.21	1.11	4.31	38.75
CL	2	8.60	0.00	53.44	100.39	6.49	66.40	596.77
F	2	1.06	0.00	1.32	1.58	1.05	0.37	3.34
NO3	2	3.49	0.00	9.11	15.00	3.23	8.33	74.83
SO4	2	24.52	0.00	32.37	40.60	24.15	11.63	104.53
PO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	2	23.78	0.00	26.95	30.27	23.63	4.69	42.19
SAN	2	37.68	0.00	96.24	157.57	34.92	86.73	779.47
SCA	2	48.12	0.00	104.80	164.15	45.45	83.94	754.36
A/C	2	0.78	0.00	0.92	0.96	0.77	0.14	1.22
CL/NA	2	1.36	0.00	1.12	1.49	1.10	0.28	2.50
NA/MG	2	2.79	0.00	4.05	4.19	2.40	1.26	11.35
SS	2	7.98	0.00	58.17	110.73	5.62	74.33	668.00
NC	2	5.62	0.00	15.51	25.88	5.15	14.65	131.68
COND/P	2	1.02	0.00	1.01	1.02	0.99	0.02	0.18
AMTH	2	0.00	1395.65	697.83	1370.69	24.96	951.58	8552.14
AMTHNV	2	0.00	1267.76	633.88	1250.09	17.67	871.45	7832.01
AMTNA	2	0.00	254.63	127.31	171.88	82.75	63.03	566.45
AMTK	2	0.00	23.19	11.60	20.19	3.01	12.15	109.16
AMTCA	2	0.00	130.11	65.06	118.36	11.76	75.38	677.44
AMTMG	2	0.00	91.29	45.65	71.54	19.75	36.62	329.09
AMTNH4	2	0.00	50.36	25.18	43.83	6.53	26.38	237.04
AMTCL	2	0.00	347.38	173.69	256.40	90.98	116.97	1051.24
AMTF	2	0.00	43.04	21.52	41.61	1.43	28.41	255.34
AMTNO3	2	0.00	141.12	70.56	127.53	13.60	80.56	724.04
AMTSO4	2	0.00	991.52	495.76	954.73	36.79	649.08	5833.47
AMTPO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	2	0.00	461.55	480.77	434.12	27.43	641.12	5762.00
AMTSS	2	0.00	322.42	161.21	222.07	100.35	86.07	773.53
AMTNC	2	0.00	227.17	113.59	203.72	23.45	127.47	1145.65

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 118.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 09/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.58	0.00	4.56	5.06	4.13	0.34	0.42
COND	5	16.80	0.00	18.56	33.10	9.40	8.80	10.94
CMPPT	5	0.00	11.42	2.28	5.80	0.23	2.23	2.77
H	5	26.09	0.00	27.36	74.13	8.71	26.49	32.93
HN	5	23.08	0.00	24.28	64.56	7.41	20.94	28.51
NA	5	28.63	0.00	38.87	66.09	14.78	20.58	25.21
XA	5	1.02	0.00	1.17	2.04	0.51	0.59	0.73
CA	5	4.19	0.00	4.59	8.98	2.00	2.90	3.60
MG	5	6.77	0.00	9.20	15.71	4.19	4.57	5.68
NH4	5	2.52	0.00	2.77	7.76	0.55	2.91	3.61
CL	5	32.97	0.00	44.27	73.88	19.74	22.75	28.28
NO3	5	0.23	0.00	0.21	1.05	0.00	0.47	0.59
SO4	5	10.41	0.00	10.07	25.32	4.84	8.66	10.77
PO4	5	19.75	0.00	21.24	50.38	8.54	16.72	20.79
XSSU4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSAN	5	16.47	0.00	16.79	48.61	35.92	17.89	22.25
SCA	5	63.38	0.00	75.89	97.75	39.08	25.12	31.23
A/C	5	69.21	0.00	83.96	110.62	43.10	27.91	34.70
CL/NA	5	0.92	0.00	0.90	1.00	0.85	0.06	0.07
NA/MG	5	1.15	0.00	1.14	1.34	1.05	0.12	0.15
SS	5	4.23	0.00	4.23	4.45	3.52	0.36	0.45
NC	5	35.21	0.00	47.76	81.49	19.10	25.40	31.57
COND/P	5	7.92	0.00	8.85	17.39	1.28	5.96	7.41
AMTH	5	1.10	0.00	1.05	1.20	0.93	0.10	0.13
AMTHN	5	0.00	298.06	596.01	1876.44	37.00	747.64	929.51
AMTNA	5	0.00	2636.96	5273.99	1634.31	32.97	649.76	807.82
AMTK	5	0.00	116.19	654.04	1386.26	150.77	578.56	719.29
AMTCA	5	0.00	478.33	23.27	74.00	4.66	28.95	35.99
AMTMG	5	0.00	478.67	95.73	227.36	9.51	92.24	114.68
AMTNH4	5	0.00	773.32	154.66	324.26	35.84	130.94	162.79
AMTCL	5	0.00	288.24	57.65	196.46	6.32	81.23	100.99
AMTF	5	0.00	376.21	753.24	1471.25	168.55	646.32	803.54
AMTNO3	5	0.00	26.64	5.33	26.64	0.00	11.92	14.81
AMTSO4	5	0.00	1189.47	237.89	641.02	11.04	255.85	318.09
AMTPO4	5	0.00	2256.23	451.25	1275.35	42.27	501.40	623.37
AXSSU4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	5	0.00	1882.03	376.41	1230.49	24.93	496.29	617.01
AMTNC	5	0.00	4021.59	804.32	1622.78	185.91	703.60	874.76
	5	0.00	905.15	181.03	440.13	25.34	206.33	256.52

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 119.

MONTHLY RAIN-ALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 10/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.75	0.00	4.17	5.11	3.61	0.49	0.46
COND	7	15.37	0.00	37.69	110.00	10.40	33.53	31.05
CMPPT	7	0.00	13.78	1.97	8.20	0.07	3.04	2.82
H	7	17.95	0.00	66.98	245.47	7.76	84.48	78.23
HNV	7	15.66	0.00	63.19	245.47	6.31	84.73	78.46
NA	6	47.70	0.00	84.28	190.88	24.35	71.85	75.38
K	6	1.38	0.00	2.13	3.57	1.02	1.05	1.11
CA	6	3.49	0.00	8.57	17.46	2.00	6.88	7.00
MG	6	11.70	0.00	21.35	54.13	5.51	19.78	20.76
NH4	6	2.14	0.00	11.55	45.46	0.55	17.28	18.13
CL	6	48.84	0.00	83.05	176.25	25.38	64.12	67.28
F	6	0.36	0.00	0.70	1.58	0.00	0.79	0.83
NO3	6	5.93	0.00	24.79	57.58	2.90	24.16	25.34
SO4	6	17.94	0.00	56.98	205.91	10.41	73.72	77.34
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	12.92	0.00	48.48	190.56	6.09	70.16	73.61
SAN	6	73.07	0.00	165.51	407.99	51.12	135.01	141.65
SCA	6	84.29	0.00	200.62	505.79	60.51	169.41	177.75
A/C	6	0.87	0.00	0.83	0.92	0.77	0.06	0.06
CL/NA	6	1.02	0.00	0.99	1.27	0.92	0.12	0.13
NA/MG	6	4.08	0.00	3.95	4.42	3.53	0.34	0.36
SS	6	53.84	0.00	91.13	194.40	27.99	71.17	74.67
NC	6	12.57	0.00	36.74	95.77	6.40	35.79	37.55
COND/P	6	1.03	0.00	0.94	1.07	0.77	0.11	0.12
AMTH	7	0.00	2472.68	353.24	945.88	21.24	327.70	303.45
AMTHNV	7	0.00	2156.58	308.08	805.08	19.37	274.43	254.12
AMTNA	6	0.00	6541.26	1090.21	3210.05	39.38	1219.82	1279.84
AMTK	6	0.00	189.35	31.56	83.77	2.20	33.07	34.70
AMTCA	6	0.00	478.55	79.76	245.60	20.27	86.48	90.74
AMTMG	6	0.00	1604.60	267.43	742.27	10.05	295.29	309.82
AMTNH4	6	0.00	292.84	48.81	125.26	5.24	43.07	45.19
AMTCL	6	0.00	6697.02	1116.17	3446.79	49.86	1286.42	1349.71
AMTF	6	0.00	49.92	8.32	39.64	0.00	15.65	16.42
AMTNO3	6	0.00	812.84	135.47	238.17	77.71	69.06	72.46
AMTSO4	6	0.00	2459.80	409.97	853.94	50.88	316.41	331.98
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	1771.09	295.18	630.78	46.16	226.15	237.28
AMTSS	6	0.00	7382.70	1230.45	3801.81	50.88	1419.60	1489.44
AMTNC	6	0.00	1723.92	287.32	604.57	42.12	237.67	249.37

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-120

Table 120.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LWN	ST.DEV	95XC.L.
PH	6	4.66	0.00	4.48	4.92	4.23	0.30	0.31
COND	6	29.45	0.00	29.87	49.00	6.20	13.74	14.42
CMPPT	6	0.00	4.70	0.78	1.80	0.12	0.69	0.73
H	6	21.80	0.00	32.93	58.88	12.02	20.86	21.89
HNV	6	20.52	0.00	29.27	52.48	9.12	17.64	18.51
NA	6	132.12	0.00	104.28	185.66	6.09	73.33	76.94
K	6	3.12	0.00	2.77	4.59	0.51	1.56	1.64
CA	6	10.42	0.00	12.72	29.94	2.00	10.11	10.60
MG	6	29.55	0.00	23.51	41.38	1.48	16.27	17.07
NH4	6	0.37	0.00	1.11	6.10	0.00	2.45	2.58
CL	6	141.38	0.00	112.75	198.81	8.46	79.80	83.72
F	6	0.24	0.00	1.49	7.89	0.00	3.16	3.32
NO3	6	8.00	0.00	15.16	42.58	4.19	14.89	15.62
SO4	6	32.31	0.00	34.63	59.34	6.25	17.59	18.46
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	17.78	0.00	23.05	41.49	5.52	13.70	14.37
SAN	6	181.93	0.00	164.04	262.60	19.54	90.92	95.39
SCA	6	197.39	0.00	177.32	292.53	22.10	99.92	104.84
A/C	6	0.92	0.00	0.93	0.98	0.88	0.04	0.04
CL/NA	6	1.07	0.00	1.08	1.39	0.98	0.14	0.15
NA/MG	6	4.47	0.00	4.44	4.49	4.00	0.21	0.22
SS	6	155.79	0.00	124.12	219.29	7.87	88.40	92.75
NC	6	19.79	0.00	20.27	42.36	2.21	14.37	15.08
COND/P	6	0.97	0.00	0.96	1.02	0.82	0.08	0.08
AMTH	6	0.00	1024.67	170.78	344.83	58.24	117.96	123.76
AMTHNV	6	0.00	964.71	160.78	336.98	44.18	120.12	126.03
AMTNA	6	0.00	6208.92	1034.82	3336.07	29.48	1290.40	1353.89
AMTK	6	0.00	146.74	24.46	68.81	1.72	27.21	28.55
AMTCA	6	0.00	489.75	81.63	258.23	9.67	94.48	99.13
AMTMG	6	0.00	1388.50	231.42	743.49	7.17	287.32	301.46
AMTNH4	6	0.00	17.58	2.93	9.96	0.00	4.60	4.83
AMTCL	6	0.00	6644.08	1107.35	3572.37	32.21	1375.01	1442.66
AMTF	6	0.00	11.28	1.88	9.87	0.00	3.95	4.15
AMTNU3	6	0.00	376.14	62.69	134.48	23.44	40.37	42.36
AMTSO4	6	0.00	1518.39	253.07	538.72	30.25	236.82	248.47
AMTPU4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	835.40	139.23	369.36	26.72	131.70	138.17
AMTSS	6	0.00	7321.31	1220.22	3940.32	35.53	1517.74	1592.41
AMTNC	6	0.00	930.19	155.03	436.67	10.70	182.73	191.71

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-121

Table 121

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 12/78.

	N	VOLWTAV	UEG/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.92	0.00	4.68	5.01	4.36	0.28	0.44
COND	4	29.75	0.00	22.70	39.00	8.00	16.60	26.39
CMPT	4	0.00	8.99	2.25	6.11	0.21	2.69	4.27
H	4	11.97	0.00	20.67	43.65	9.77	15.49	24.63
HNV	4	10.73	0.00	18.50	38.90	8.71	13.77	21.89
NA	4	150.03	0.00	82.61	213.05	10.00	96.23	153.00
K	4	3.53	0.00	2.17	4.85	0.51	2.00	3.19
CA	4	8.76	0.00	13.60	38.92	2.50	17.30	27.50
MG	4	31.83	0.00	20.52	44.67	2.22	21.55	34.26
NH4	4	2.60	0.00	9.42	28.27	1.11	12.65	20.11
CL	4	158.61	0.00	85.30	225.04	11.84	100.61	159.98
F	4	1.63	0.00	1.84	3.68	0.00	1.52	2.42
NO3	4	5.76	0.00	12.46	33.23	4.52	13.88	22.07
SO4	4	26.86	0.00	35.08	81.20	13.12	31.74	50.47
PU4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	10.54	0.00	26.31	71.68	7.66	30.36	48.27
SAN	4	193.31	0.00	135.06	263.10	31.90	119.91	190.65
SCA	4	208.70	0.00	149.00	283.93	33.81	133.51	212.28
A/C	4	0.93	0.00	0.91	0.97	0.87	0.04	0.07
CL/NA	4	1.06	0.00	1.03	1.18	0.95	0.11	0.18
NA/MG	4	4.71	0.00	4.03	4.77	2.97	0.79	1.26
SS	4	174.91	0.00	94.02	248.22	12.92	111.05	176.56
NC	4	21.83	0.00	34.31	97.86	6.43	43.33	68.89
COND/P	4	1.00	0.00	0.94	1.04	0.82	0.09	0.15
AMTH	4	0.00	1075.47	268.87	597.03	90.03	237.83	378.16
AMTHNV	4	0.00	964.57	241.14	532.10	80.24	212.18	337.37
AMTNA	4	0.00	13484.22	3371.06	13016.15	65.63	6430.38	10224.30
AMTK	4	0.00	316.93	79.23	296.35	5.03	144.76	230.17
AMTCA	4	0.00	787.14	196.79	640.20	16.37	296.76	471.85
AMTMG	4	0.00	2860.73	715.18	2728.89	14.57	1342.65	2134.81
AMTNH4	4	0.00	233.38	58.35	78.22	29.11	21.12	33.58
AMTCL	4	0.00	14255.52	3563.88	13748.29	77.73	6789.94	10796.01
AMTF	4	0.00	146.57	36.64	128.62	0.00	61.47	97.74
AMTNO3	4	0.00	518.13	129.53	275.92	33.87	107.09	170.28
AMTSO4	4	0.00	2414.11	603.53	1882.52	99.74	855.33	1359.98
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	947.74	236.94	467.82	91.87	165.63	263.35
AMTSS	4	0.00	15720.01	3930.00	15164.37	84.79	7489.94	11909.01
AMTNC	4	0.00	1962.40	490.60	1584.95	45.92	732.35	1164.43

N=NUMBER OF SAMPLES  
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 UEG/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEG/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

table 122.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.71	0.00	4.40	5.02	3.96	0.38	0.35
COND	7	12.29	0.00	38.86	140.00	8.00	48.50	44.51
CMPPT	7	0.00	20.31	2.90	13.83	0.30	4.89	4.53
H	7	19.39	0.00	40.01	109.65	9.55	36.03	33.36
HNV	7	17.56	0.00	37.45	104.71	7.24	34.80	32.22
NA	7	43.64	0.00	147.46	812.64	14.35	294.64	272.84
K	7	2.17	0.00	3.61	15.06	0.77	5.09	4.71
CA	7	4.59	0.00	15.68	43.91	2.00	18.49	17.12
MG	7	8.86	0.00	32.60	176.04	3.29	63.61	58.90
NH4	7	2.44	0.00	7.52	32.16	0.55	11.04	10.22
CL	7	42.94	0.00	163.52	921.01	14.66	335.52	310.70
F	7	0.79	0.00	0.68	3.16	0.00	1.17	1.08
NO3	7	6.62	0.00	18.25	46.78	3.39	19.08	17.67
SO4	7	19.06	0.00	51.25	141.37	9.37	55.19	51.10
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	14.64	0.00	34.42	117.44	6.47	38.97	36.09
SAN	7	69.43	0.00	233.87	1084.44	32.69	381.19	352.99
SCA	7	81.08	0.00	246.89	1103.31	43.46	384.36	355.92
A/C	7	0.86	0.00	0.95	0.98	0.75	0.08	0.07
CL/NA	7	0.98	0.00	1.11	1.13	0.88	0.10	0.09
NA/MG	7	4.92	0.00	4.52	5.50	3.08	0.72	0.67
SS	7	47.37	0.00	180.36	1015.88	16.17	370.08	342.70
NC	7	14.33	0.00	26.51	81.71	7.17	26.34	24.39
COND/P	7	0.77	0.00	0.89	0.98	0.69	0.10	0.09
AMTH	7	0.00	3937.42	562.49	2141.72	104.45	713.04	660.29
AMTHNV	7	0.00	3566.96	509.57	1908.81	79.23	633.74	586.85
AMTNA	7	0.00	8863.77	1266.25	4629.60	71.57	1687.78	1562.91
AMTK	7	0.00	440.01	62.86	317.73	7.31	113.05	104.69
AMTCA	7	0.00	931.80	133.11	414.01	38.20	130.04	120.42
AMTMG	7	0.00	1800.04	257.15	841.75	23.25	310.02	287.08
AMTNH4	7	0.00	495.34	70.76	153.33	6.06	59.19	54.81
AMTCL	7	0.00	8722.30	1246.04	4094.51	64.58	1560.06	1444.64
AMTF	7	0.00	160.47	22.92	145.56	0.00	54.23	50.22
AMTNO3	7	0.00	1343.74	191.96	602.23	37.05	200.42	185.59
AMTSO4	7	0.00	3871.06	553.01	1986.52	102.47	643.12	595.54
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	7	0.00	2973.54	424.79	1565.20	70.73	517.28	479.01
AMTSS	7	0.00	9620.70	1374.39	4516.24	71.23	1720.75	1593.43
AMTNC	7	0.00	2910.26	415.75	1840.18	78.48	632.52	585.72

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-123



Table 123.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 02/79.

	N	VOLWIAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.59	0.00	4.48	5.42	4.17	0.59	0.94
COND	4	21.18	0.00	32.75	54.00	12.00	17.73	28.19
CMPTI	4	0.00	3.25	0.81	2.00	0.18	0.81	1.29
H	4	25.69	0.00	32.77	67.61	3.80	31.05	49.38
HNV	4	21.73	0.00	27.77	54.95	3.31	25.88	41.14
NA	4	53.63	0.00	106.85	294.79	33.91	126.10	200.50
K	4	1.54	0.00	2.30	4.08	1.02	1.35	2.15
CA	4	11.23	0.00	13.10	21.46	9.48	5.61	8.91
MG	4	12.80	0.00	22.37	50.76	8.04	23.08	36.70
NH4	4	11.37	0.00	12.34	18.29	6.65	5.48	8.71
CL	4	50.43	0.00	99.76	251.26	40.04	101.67	161.66
F	4	2.15	0.00	3.03	6.84	0.53	2.89	4.60
NO3	4	13.17	0.00	13.67	16.45	12.26	1.94	3.09
SO4	4	36.15	0.00	53.82	87.66	17.90	24.01	38.17
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	4	59.40	0.00	43.62	59.45	13.84	21.52	34.21
SAF	4	108.11	0.00	170.74	334.40	70.90	114.54	182.12
SCA	4	116.20	0.00	189.73	387.55	73.71	138.24	219.81
A/C	4	0.93	0.00	0.90	1.00	0.86	0.06	0.10
CL/NA	4	1.05	0.00	0.93	1.22	0.85	0.17	0.27
NA/MG	4	4.19	0.00	4.76	5.19	3.62	0.68	1.08
SS	4	61.73	0.00	109.45	277.14	43.82	112.59	179.02
WC	4	28.84	0.00	47.51	106.61	20.34	39.86	63.38
COND/P	4	0.96	0.00	0.98	1.15	0.87	0.12	0.20
AMTH	4	0.00	835.00	208.75	386.64	6.77	157.59	250.57
AMTHNV	4	0.00	700.07	176.52	314.27	5.90	129.71	206.24
AMINA	4	0.00	1743.14	435.79	678.29	171.75	216.87	344.82
AMTK	4	0.00	49.96	12.49	20.42	7.28	6.27	9.97
AMICA	4	0.00	365.11	91.28	219.56	38.22	85.98	136.71
AMTMG	4	0.00	416.05	104.01	187.55	43.19	60.77	96.63
AMTNH4	4	0.00	369.51	92.38	177.41	11.85	67.65	107.56
AMTCL	4	0.00	1834.29	458.57	800.88	210.09	248.93	395.80
AMTF	4	0.00	69.95	17.49	39.13	1.88	15.93	25.33
AMTNO3	4	0.00	427.92	106.98	248.40	24.13	98.52	156.64
AMTSO4	4	0.00	1174.76	293.69	378.63	120.53	118.20	187.94
AMTPU4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	4	0.00	988.12	247.03	339.96	74.47	118.02	187.65
AMTSS	4	0.00	2006.36	501.59	876.35	221.90	274.67	436.72
AMTNC	4	0.00	937.41	234.35	400.89	139.58	118.09	187.76

N=NUMBER OF SAMPLES

VOLWIAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH, COND, CMPTI, AND RATIOS

UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER

MEAN=UNWEIGHTED AVERAGE

CMPTI IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR THE MONTH

Table 124.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 12 DURING 03/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	3	4.70	0.00	4.93	6.46	4.63	0.98	2.44
COND	3	23.47	0.00	41.00	55.00	18.00	20.07	49.84
CMPPT	3	0.00	3.29	1.10	2.75	0.15	1.44	3.57
H	3	20.17	0.00	11.85	23.44	0.35	11.55	28.67
HNv	3	16.38	0.00	9.63	19.05	0.07	9.49	23.57
NA	3	81.29	0.00	180.44	328.27	41.31	143.68	356.70
K	3	2.27	0.00	4.60	6.38	1.53	2.67	6.62
CA	3	14.63	0.00	62.37	146.71	4.49	74.71	185.46
MG	3	16.16	0.00	36.30	52.89	9.29	23.59	58.57
NH4	3	7.48	0.00	12.38	17.74	6.10	5.88	14.59
CL	3	71.61	0.00	142.79	219.11	45.68	88.56	219.86
F	3	4.14	0.00	3.68	4.21	2.63	0.91	2.26
NO3	3	17.63	0.00	37.10	68.88	13.23	28.65	71.14
SO4	3	38.08	0.00	89.39	150.53	24.15	63.29	157.12
PO4	3	3.00	0.00	8.42	25.27	0.00	14.59	36.22
XSSO4	3	30.71	0.00	74.69	133.70	19.45	57.22	142.05
SAN	3	134.87	0.00	281.92	386.22	87.65	168.40	418.07
SCL	3	142.00	0.00	307.94	436.62	86.16	192.89	478.86
A/C	3	0.95	0.00	0.92	1.02	0.85	0.08	0.21
CL/NA	3	0.88	0.00	0.79	1.11	0.67	0.22	0.55
NA/MG	3	5.03	0.00	4.97	6.21	3.68	1.30	3.22
SS	3	78.98	0.00	157.49	241.68	50.39	97.66	242.51
NC	3	42.84	0.00	138.60	208.89	12.33	109.59	272.06
COND/P	3	0.99	0.00	0.99	1.00	0.99	0.00	0.01
AMTH	3	0.00	663.46	221.15	644.66	1.35	366.86	910.77
AMTHNV	3	0.00	538.77	179.59	524.00	0.26	298.35	740.70
AMTNA	3	0.00	2673.17	891.06	1282.32	254.94	555.74	1379.68
AMTK	3	0.00	74.54	24.85	42.13	9.47	16.41	40.74
AMTCA	3	0.00	481.61	160.54	217.77	123.50	50.27	124.81
AMTMG	3	0.00	531.59	177.20	255.62	69.36	96.56	239.71
AMTNH4	3	0.00	246.02	82.00	167.71	26.33	75.32	186.99
AMTCL	3	0.00	2355.01	785.00	1256.31	242.78	510.47	1267.30
AMTF	3	0.00	136.14	45.38	115.79	3.91	61.30	152.17
AMTNO3	3	0.00	580.01	193.34	363.73	102.24	147.68	366.64
AMTSO4	3	0.00	1252.76	417.59	664.16	223.44	224.99	558.55
AMTPO4	3	0.00	98.72	32.91	98.72	0.00	57.00	141.50
AXSSO4	3	0.00	1010.43	336.81	534.88	198.46	175.98	436.90
AMTSS	3	0.00	2597.57	865.86	1385.71	267.79	563.05	1397.83
AMTNC	3	0.00	1409.35	469.78	760.12	310.08	251.86	625.26

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-125

Table 125.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 08/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	5.08	0.00	4.65	6.82	4.06	0.94	0.98
COND	6	11.17	0.00	15.83	40.00	8.40	12.03	12.62
CMPPT	6	0.00	10.69	1.78	2.97	0.25	1.30	1.36
H	6	8.35	0.00	22.53	87.10	0.15	32.75	34.36
HNV	6	6.72	0.00	19.39	79.43	0.24	30.22	31.70
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	6	0.00	892.68	148.78	373.74	4.26	130.59	137.01
AMTHNV	6	0.00	718.46	119.74	333.10	6.75	122.66	128.70
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNU3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIO  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 126.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 09/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	10	5.02	0.00	4.28	5.87	3.87	0.66	0.47
COND	10	24.51	0.00	33.67	91.60	2.50	25.81	18.45
CMPPT	10	0.00	14.07	1.41	6.81	0.02	2.20	1.57
H	10	9.45	0.00	52.49	134.90	1.35	45.21	32.31
HNV	10	7.11	0.00	35.04	83.18	0.00	34.24	24.47
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	10	0.00	1328.61	132.86	370.24	21.08	107.94	77.14
AMTHNV	10	0.00	1000.60	100.06	345.53	0.00	112.68	80.53
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-127

Table 127.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 10/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.25	0.00	4.22	4.76	3.84	0.38	0.48
COND	5	32.89	0.00	33.94	65.20	11.20	19.71	24.50
CMPTT	5	0.00	4.51	0.90	1.56	0.31	0.48	0.59
H	5	56.73	0.00	60.28	144.54	17.38	51.51	64.04
HNV	5	54.17	0.00	57.61	138.04	16.22	49.69	61.78
NA	4	62.36	0.00	62.50	141.74	8.70	57.23	91.00
K	4	1.75	0.00	1.91	3.32	0.51	1.15	1.83
CA	4	5.55	0.00	7.11	13.47	2.99	4.76	7.57
MG	4	16.78	0.00	14.66	21.39	7.24	6.08	9.66
NH4	4	5.18	0.00	6.79	14.97	2.22	5.68	9.03
CL	4	53.57	0.00	52.45	121.26	7.90	50.16	79.76
F	4	1.30	0.00	2.24	6.84	5.00	3.11	4.94
NO3	4	12.05	0.00	13.23	23.07	5.97	7.92	12.59
SO4	4	29.61	0.00	28.78	34.14	19.57	6.37	10.12
PO4	4	1.93	0.00	2.53	5.05	0.00	2.92	4.64
XSSO4	4	24.10	0.00	23.39	30.42	13.74	7.40	11.77
SAN	4	48.46	0.00	49.23	169.25	56.31	48.78	77.55
SCA	4	132.14	0.00	132.19	196.61	100.14	44.98	71.52
A/C	4	0.75	0.00	0.75	0.86	0.56	0.13	0.21
CL/NA	4	0.86	0.00	0.84	0.91	0.65	0.12	0.19
NA/MG	4	3.72	0.00	4.26	6.63	0.50	2.64	4.19
SS	4	59.08	0.00	57.85	133.75	8.71	55.33	87.97
NC	4	52.53	0.00	35.13	48.24	22.50	12.38	19.69
COND/P	4	0.99	0.00	0.96	1.24	0.66	0.24	0.38
AMTH	5	0.00	2560.35	512.07	1016.32	137.12	458.12	559.56
AMTHNV	5	0.00	2444.45	488.89	985.87	127.97	447.37	556.20
AMTNA	4	0.00	2375.38	593.84	1632.88	113.18	713.93	1135.15
AMTK	4	0.00	66.55	16.64	38.22	6.25	14.78	23.49
AMTCA	4	0.00	211.48	52.87	91.94	31.50	26.80	42.62
AMTMG	4	0.00	638.98	159.75	269.92	22.17	118.40	188.25
AMTNH4	4	0.00	197.29	49.32	95.29	25.54	31.83	50.62
AMTCL	4	0.00	2040.42	510.11	1396.39	73.41	613.65	975.71
AMTF	4	0.00	49.52	12.38	20.95	0.00	9.01	14.32
AMTNU3	4	0.00	458.92	114.73	252.03	47.09	93.14	148.09
AMTSO4	4	0.00	1128.05	282.01	487.97	92.45	188.85	300.27
AMTPU4	4	0.00	73.68	18.42	58.20	0.00	27.51	43.74
AXSSO4	4	0.00	918.09	229.52	475.27	84.90	179.24	284.99
AMTSS	4	0.00	2250.59	562.63	1540.21	80.97	676.86	1076.20
AMTNC	4	0.00	1239.10	309.78	494.06	147.74	173.01	275.08

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 128.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 11/77.

	N	VOLWTAV	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	5.10	0.00	4.86	5.31	4.63	0.28	0.29
CUND	6	6.64	0.00	11.27	19.30	3.60	5.95	6.24
CMPPT	6	0.00	18.50	3.08	8.21	0.30	3.46	3.63
H	6	8.01	0.00	13.89	23.44	4.90	7.91	8.29
MNV	6	5.68	0.00	10.18	18.20	3.69	5.50	5.77
NA	6	16.03	0.00	30.87	49.13	7.39	20.24	21.23
K	6	0.22	0.00	0.77	1.79	0.00	0.70	0.74
CA	6	1.13	0.00	4.32	7.98	0.00	3.62	3.80
MG	6	3.64	0.00	7.07	12.34	1.73	4.72	4.95
NH4	6	1.55	0.00	2.68	8.87	0.55	3.12	3.28
CL	6	18.08	0.00	34.50	63.45	9.87	23.73	24.90
F	6	0.04	0.00	0.44	2.63	0.00	1.07	1.13
NO3	6	3.58	0.00	7.90	17.42	1.13	6.57	6.90
SU4	6	7.33	0.00	14.30	26.31	2.50	9.34	9.60
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	5.54	0.00	10.88	23.61	1.61	7.64	8.22
SAN	6	29.03	0.00	57.14	89.72	13.50	33.76	35.45
SCA	6	30.58	0.00	59.60	98.44	16.59	34.96	36.68
A/C	6	0.95	0.00	0.96	1.05	0.81	0.09	0.09
CL/NA	6	1.13	0.00	1.12	1.34	0.94	0.17	0.18
NA/MG	6	4.40	0.00	4.36	4.77	3.95	0.28	0.29
SS	6	19.25	0.00	36.65	62.92	9.55	24.85	26.07
NC	6	3.32	0.00	9.06	25.14	0.12	9.58	10.06
COND/P	6	1.12	0.00	1.01	1.34	0.71	0.21	0.22
AMH	6	0.00	1481.05	246.84	466.99	70.69	173.82	182.38
AMTHNV	6	0.00	1050.26	175.04	375.31	54.88	123.78	129.87
AMINA	6	0.00	2966.43	494.40	821.13	64.25	284.47	298.46
AMTK	6	0.00	39.86	6.64	18.25	0.00	7.21	7.56
AMTCA	6	0.00	208.82	34.80	92.74	0.00	35.35	37.09
AMTMG	6	0.00	674.10	112.35	189.12	14.14	62.83	65.92
AMTNH4	6	0.00	286.65	47.78	126.82	8.36	49.85	52.30
AMTCL	6	0.00	3344.50	557.42	903.04	61.23	303.76	318.71
AMTF	6	0.00	7.94	1.32	7.94	0.00	3.24	3.40
AMTNO3	6	0.00	662.60	110.47	238.40	41.37	86.85	91.12
AMTSU4	6	0.00	1356.19	226.03	444.47	48.35	162.43	170.42
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	1024.46	170.74	351.55	42.04	137.45	144.21
AMTSS	6	0.00	3560.99	593.50	996.05	67.54	336.06	352.59
AMTNC	6	0.00	614.86	102.48	359.46	8.34	129.67	136.05

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 CUND, CMPPT, AND RATIUS  
 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-129

Table 129.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 12/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	12	4.66	0.00	4.44	4.99	3.97	0.31	0.19
COND	12	13.92	0.00	15.93	46.70	0.00	13.74	8.53
CMPPT	12	0.00	10.10	0.84	2.14	0.01	0.75	0.47
H	12	22.01	0.00	36.37	107.15	10.23	28.80	17.88
HNV	12	19.84	0.00	31.22	100.00	9.33	26.79	16.63
NA	10	30.11	0.00	42.83	109.57	6.09	37.25	26.62
K	10	0.56	0.00	1.17	4.08	0.00	1.48	1.05
CA	10	2.57	0.00	7.29	40.42	0.50	12.08	8.63
MG	10	6.85	0.00	10.00	27.06	2.88	8.61	6.15
NH4	10	2.70	0.00	4.55	16.08	0.55	5.21	3.72
CL	10	31.51	0.00	45.80	118.16	10.43	38.80	27.58
F	10	0.30	0.00	0.53	2.63	0.00	0.89	0.64
NO3	10	6.88	0.00	13.27	56.45	2.74	16.08	11.49
SO4	10	21.68	0.00	29.42	77.03	11.45	22.59	16.15
PO4	10	1.55	0.00	0.88	8.84	0.00	2.80	2.00
XSSO4	10	18.50	0.00	24.80	64.88	8.46	19.88	14.21
SAN	10	61.91	0.00	89.90	251.65	34.41	70.45	50.35
SCA	10	64.69	0.00	94.09	257.47	36.44	73.77	52.72
A/C	10	0.96	0.00	0.96	1.14	0.85	0.10	0.07
CL/NA	10	1.05	0.00	1.07	1.71	0.89	0.24	0.17
NA/MG	10	4.40	0.00	4.28	4.69	2.11	0.75	0.54
SS	10	34.11	0.00	49.53	130.33	7.87	43.01	30.73
NC	10	8.68	0.00	16.31	66.89	2.17	19.34	13.82
COND/P	10	0.97	0.00	0.96	1.09	0.85	0.08	0.05
AMTH	12	0.00	2223.30	185.27	567.78	2.92	168.23	104.41
AMTHNV	12	0.00	2003.76	166.98	529.89	1.57	156.56	97.17
AMTNA	10	0.00	3035.83	303.58	591.12	24.73	203.79	145.64
AMTK	10	0.00	56.24	5.62	16.70	0.00	5.13	3.67
AMTCA	10	0.00	259.50	25.95	85.77	7.72	22.97	16.42
AMTMG	10	0.00	690.28	69.03	132.17	11.70	43.62	31.17
AMTNH4	10	0.00	272.34	27.23	85.76	3.81	28.12	20.10
AMTCL	10	0.00	3176.93	317.69	627.36	42.39	201.71	144.16
AMTF	10	0.00	30.26	3.03	10.44	0.00	4.19	2.99
AMTNO3	10	0.00	693.32	69.33	163.57	38.14	37.20	26.58
AMTSO4	10	0.00	2186.04	218.60	536.77	68.61	154.40	110.34
AMTPO4	10	0.00	156.17	15.62	156.17	0.00	49.39	35.30
AXSSO4	10	0.00	1863.51	186.55	493.31	57.78	145.53	104.00
AMTSS	10	0.00	3439.28	343.93	691.98	31.95	223.36	159.63
AMTNC	10	0.00	874.92	87.49	162.12	14.90	48.35	34.55

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 130.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN  
COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT  
KSC SITE 13 DURING 01/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LJW	ST.DEV	95%C.L.
PH	4	4.66	0.00	4.43	5.09	4.05	0.49	0.79
COND	4	13.97	0.00	23.42	48.00	7.00	17.95	28.54
CMPPT	4	0.00	4.81	1.20	3.28	0.40	1.39	2.21
H	4	21.71	0.00	37.35	89.13	8.13	37.75	60.03
HNV	4	19.31	0.00	33.75	83.18	5.75	35.85	57.00
NA	4	33.52	0.00	50.76	90.00	20.00	29.13	46.32
K	4	0.34	0.00	0.77	2.55	0.00	1.20	1.90
CA	4	7.20	0.00	14.35	22.45	1.50	9.95	15.82
MG	4	7.45	0.00	12.19	21.96	3.78	7.47	11.88
NH4	4	7.13	0.00	12.47	22.73	3.33	8.64	13.74
CL	4	30.17	0.00	47.60	84.04	16.92	27.74	44.10
F	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	4	8.51	0.00	15.77	35.65	3.06	14.17	22.53
SO4	4	25.85	0.00	47.37	104.10	9.78	40.83	64.92
PO4	4	10.12	0.00	3.71	14.85	0.00	7.42	11.80
XSSO4	4	22.75	0.00	42.45	95.45	8.04	38.03	60.47
SAN	4	74.66	0.00	114.64	223.78	44.62	77.73	123.58
SCA	4	77.35	0.00	127.90	248.33	39.08	87.86	139.69
A/C	4	0.97	0.00	0.90	1.14	0.78	0.15	0.24
CL/NA	4	0.90	0.00	0.94	1.13	0.83	0.14	0.22
NA/MG	4	4.50	0.00	4.16	5.29	3.91	0.63	0.99
SS	4	33.28	0.00	52.72	92.69	18.66	30.59	48.64
NC	4	22.36	0.00	37.82	66.51	9.94	24.33	38.68
CUND/P	4	0.89	0.00	0.90	1.00	0.84	0.07	0.11
AMTH	4	0.00	1044.71	261.18	487.40	47.63	193.75	308.06
AMTHNV	4	0.00	929.06	232.27	454.87	33.72	182.29	289.84
AMTNA	4	0.00	1612.97	403.24	656.28	171.51	214.32	340.77
AMTK	4	0.00	16.47	4.12	13.96	0.00	6.59	10.48
AMTCA	4	0.00	346.49	86.62	131.57	45.73	45.53	72.39
AMTMG	4	0.00	358.56	89.64	124.16	43.92	39.08	62.14
AMTNH4	4	0.00	342.99	85.75	124.31	45.48	37.09	58.97
AMTCL	4	0.00	1452.04	363.01	555.19	194.38	172.36	274.05
AMTF	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	4	0.00	409.49	102.37	194.95	52.93	65.13	103.55
AMTSO4	4	0.00	1244.21	311.05	569.30	164.69	185.36	294.72
AMTPO4	4	0.00	487.18	121.79	487.18	0.00	243.59	387.31
AXSSO4	4	0.00	1094.79	273.70	522.01	139.70	173.82	276.38
AMTSS	4	0.00	1601.60	400.40	612.37	214.40	190.11	302.27
AMTNC	4	0.00	1075.90	268.97	363.75	111.83	111.04	176.56

N=NUMBER OF SAMPLES  
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COND,CMPPT,AND RATIO  
UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
MEAN=UNWEIGHTED AVERAGE  
CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
THE MONTH



Table 131.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 02/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	9	4.42	0.00	4.23	4.56	4.00	0.22	0.17
COND	9	18.68	0.00	41.01	102.00	12.60	34.42	26.50
CMPT	9	0.00	12.94	1.44	5.23	0.02	1.80	1.38
H	9	38.10	0.00	58.95	100.00	27.54	28.95	22.30
HNV	9	33.39	0.00	48.38	77.63	25.12	21.17	16.30
NA	6	21.94	0.00	14.78	37.39	2.61	12.03	12.63
K	6	0.51	0.00	0.68	1.53	0.00	0.55	0.58
CA	6	3.78	0.00	4.91	10.98	0.00	4.00	4.19
MG	6	5.52	0.00	4.02	8.72	1.73	4.63	4.75
NH4	6	6.26	0.00	5.45	13.86	1.66	4.50	4.72
CL	6	22.02	0.00	15.56	34.97	2.26	11.53	12.10
F	6	0.48	0.00	0.53	2.63	0.00	1.05	1.10
NO3	6	8.12	0.00	9.95	17.10	3.55	5.24	5.50
SU4	6	31.14	0.00	31.44	43.10	14.99	9.16	9.61
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	28.92	0.00	29.90	41.48	14.32	9.00	9.44
SAN	6	61.75	0.00	57.47	79.09	26.80	18.98	19.91
SCA	6	75.75	0.00	71.50	98.34	41.16	20.87	21.90
A/C	6	0.82	0.00	0.80	0.87	0.65	0.07	0.08
CL/NA	6	1.00	0.00	1.05	1.40	0.75	0.25	0.26
NA/MG	6	3.97	0.00	3.68	5.03	1.51	1.19	1.25
SS	6	23.82	0.00	16.46	38.57	2.49	12.64	13.26
NC	6	14.19	0.00	13.38	26.67	6.46	7.08	7.43
COND/P	6	0.92	0.00	0.93	1.01	0.83	0.07	0.07
AMTH	9	0.00	4932.26	548.03	1730.68	17.19	628.98	484.32
AMTHNV	9	0.00	4322.60	480.29	1507.36	13.34	557.16	429.02
AMTNA	6	0.00	2821.38	470.23	1954.36	7.75	736.85	773.10
AMTK	6	0.00	64.98	10.83	26.21	0.00	10.36	10.87
AMTCA	6	0.00	486.37	81.06	181.82	0.00	77.34	81.14
AMTMG	6	0.00	710.18	118.36	455.73	5.13	169.63	177.98
AMTNH4	6	0.00	804.70	134.12	347.71	8.23	138.63	145.45
AMTCL	6	0.00	2831.08	471.85	1827.62	6.70	680.92	714.42
AMTF	6	0.00	61.59	10.27	43.58	0.00	17.64	18.72
AMTNO3	6	0.00	1043.77	173.96	353.25	25.86	118.57	124.41
AMTSO4	6	0.00	4004.16	667.36	1643.14	103.22	596.75	626.11
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	3716.73	619.79	1455.07	102.53	534.21	560.49
AMTSS	6	0.00	3062.77	510.46	2015.87	7.39	754.41	791.52
AMTNC	6	0.00	1824.84	304.14	794.09	32.25	292.88	307.29

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 132.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 03/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.47	0.00	4.36	4.79	4.00	0.29	0.27
COND	7	21.75	0.00	30.66	69.00	8.80	22.71	21.03
CMPPT	7	0.00	7.69	1.10	3.27	0.38	0.99	0.92
H	7	53.81	0.00	43.54	100.00	16.22	30.37	28.12
HNV	7	50.46	0.00	39.87	97.72	15.49	30.12	27.69
NA	5	30.81	0.00	59.83	130.01	5.65	62.71	77.97
K	5	0.91	0.00	1.99	4.34	0.00	1.85	1.30
CA	5	12.03	0.00	23.85	45.41	1.00	20.41	25.37
MG	5	10.30	0.00	18.92	42.86	1.89	18.94	23.55
NH4	5	10.19	0.00	14.08	25.50	4.99	9.67	12.02
CL	5	35.47	0.00	64.52	144.67	7.33	65.83	81.84
F	5	0.37	0.00	0.21	0.53	0.00	0.29	0.36
NO3	5	21.80	0.00	34.20	96.78	7.58	36.53	45.22
SO4	5	33.11	0.00	50.38	87.65	12.70	33.66	41.85
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	29.63	0.00	43.82	84.00	12.02	29.95	37.24
SAN	5	40.75	0.00	149.31	314.84	28.58	122.22	151.94
SCA	5	48.69	0.00	167.47	339.40	33.00	136.40	169.58
A/C	5	0.92	0.00	0.89	1.02	0.83	0.07	0.09
CL/NA	5	1.15	0.00	1.08	1.65	0.97	0.26	0.33
NA/MG	5	2.99	0.00	3.16	3.72	2.37	0.51	0.63
SS	5	37.30	0.00	70.42	159.57	7.30	73.41	91.27
NC	5	26.93	0.00	48.26	81.03	7.83	36.84	45.81
COND/P	5	0.94	0.00	1.01	1.20	0.86	0.12	0.15
AMTH	7	0.00	2598.51	371.22	668.75	125.44	224.63	208.01
AMTHNV	7	0.00	2342.35	334.62	653.53	119.79	211.16	195.54
AMTNA	5	0.00	1737.18	347.44	834.52	43.72	317.77	395.06
AMTK	5	0.00	51.58	10.32	20.49	0.00	8.98	11.16
AMTCA	5	0.00	678.17	135.63	303.67	30.88	112.54	139.92
AMTMG	5	0.00	580.50	116.10	286.61	14.63	104.03	129.34
AMTNH4	5	0.00	574.35	114.87	199.15	38.59	72.30	89.88
AMTCL	5	0.00	2000.17	400.03	967.45	56.71	352.21	437.88
AMTF	5	0.00	20.71	4.14	17.19	0.00	7.45	9.26
AMTNO3	5	0.00	1229.31	245.86	647.22	66.12	234.06	291.00
AMTSO4	5	0.00	1866.93	373.39	564.32	98.23	198.42	246.69
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	1670.85	334.17	542.19	92.99	189.79	235.96
AMTSS	5	0.00	2103.41	420.68	1067.10	56.48	398.77	495.77
AMTNC	5	0.00	1518.38	303.68	533.90	73.31	166.16	206.58

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-133

Table 133.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 04/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	2	4.74	0.00	4.74	4.76	4.73	0.02	0.19
COND	2	36.09	0.00	34.50	39.80	29.20	7.50	67.36
CMPT	2	0.00	0.42	0.21	0.27	0.15	0.09	0.80
H	2	18.19	0.00	18.00	18.62	17.38	0.88	7.90
HNV	2	14.38	0.00	13.27	16.98	9.55	5.26	47.23
NA	2	49.76	0.00	54.13	68.70	39.57	20.60	185.13
K	2	4.66	0.00	4.47	5.11	3.83	0.90	8.12
CA	2	59.08	0.00	57.88	61.88	53.89	5.65	50.74
MG	2	15.83	0.00	16.41	18.34	14.48	2.73	24.57
NH4	2	58.60	0.00	55.44	65.97	44.91	14.90	133.89
CL	2	59.60	0.00	63.87	78.11	49.63	20.14	181.00
F	2	3.84	0.00	3.68	4.21	3.16	0.74	6.69
NO3	2	31.12	0.00	32.02	35.00	29.03	4.22	37.93
SO4	2	88.17	0.00	82.24	102.02	62.46	27.97	251.39
PO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	2	82.28	0.00	75.85	97.27	54.42	30.30	272.32
SA	2	182.74	0.00	181.81	184.89	178.73	4.36	39.15
SCA	2	206.12	0.00	206.33	207.05	205.62	1.01	9.07
A/C	2	0.89	0.00	0.86	0.90	0.86	0.03	0.23
CL/NA	2	1.20	0.00	1.18	1.25	1.14	0.08	0.74
NA/MG	2	3.14	0.00	3.30	3.75	2.73	0.72	6.43
SS	2	63.38	0.00	68.64	86.16	51.12	24.78	222.68
NC	2	124.55	0.00	119.70	135.88	103.51	22.89	205.70
COND/P	2	1.13	0.00	1.09	1.23	0.95	0.20	1.80
AMTH	2	0.00	76.44	38.22	50.92	25.52	17.95	161.37
AMTHNV	2	0.00	60.46	30.23	46.44	14.03	22.92	205.97
AMTNA	2	0.00	209.09	104.55	108.19	100.90	5.15	46.32
AMTK	2	0.00	19.59	9.79	13.96	5.63	5.90	52.98
AMTCA	2	0.00	248.35	124.17	169.19	79.15	63.67	572.19
AMTMG	2	0.00	66.53	33.27	39.59	26.94	6.94	80.36
AMTNH4	2	0.00	246.35	123.18	180.40	65.96	80.92	727.27
AMTCL	2	0.00	250.44	125.22	135.71	114.73	14.84	133.34
AMTF	2	0.00	16.15	8.08	11.51	4.64	4.86	43.69
AMTNO3	2	0.00	130.80	65.40	79.39	51.41	19.79	177.82
AMTSO4	2	0.00	370.69	185.35	278.95	91.74	132.38	1189.76
AMTPO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	2	0.00	345.91	172.96	265.98	79.93	131.56	1182.35
AMTSS	2	0.00	266.33	133.16	139.78	126.55	9.36	84.11
AMTNC	2	0.00	523.58	261.79	371.55	152.03	155.22	1395.02

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 134.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 05/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	6	4.32	0.00	4.35	6.79	4.10	1.03	1.08
COND	6	34.62	0.00	42.52	75.00	30.00	16.85	17.68
CMPT	6	0.00	8.00	1.33	2.09	0.02	0.93	0.98
H	6	48.17	0.00	44.61	79.43	0.16	26.52	27.82
HNV	6	42.43	0.00	40.12	75.66	0.11	25.36	26.61
NA	5	24.55	0.00	27.13	41.74	13.04	13.19	16.40
K	5	2.35	0.00	2.25	3.83	0.51	1.23	1.53
CA	5	16.27	0.00	16.57	39.92	4.99	13.98	17.38
MG	5	6.71	0.00	7.50	10.78	2.96	4.01	4.98
NH4	5	39.27	0.00	37.26	70.41	7.21	23.08	28.70
CL	5	28.73	0.00	31.81	52.73	16.07	15.57	19.36
F	5	1.81	0.00	1.68	2.11	1.05	0.58	0.72
NO3	5	23.08	0.00	23.94	28.39	13.39	6.19	7.70
SO4	5	55.66	0.00	60.71	87.03	37.89	19.81	24.63
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	52.90	0.00	57.61	82.70	32.89	19.70	24.49
SAN	5	109.28	0.00	118.14	158.77	84.23	29.02	36.08
SCA	5	137.45	0.00	144.20	174.60	91.40	31.45	39.10
A/C	5	0.80	0.00	0.82	0.92	0.68	0.10	0.13
CL/NA	5	1.17	0.00	1.17	1.45	0.93	0.19	0.23
NA/MG	5	3.66	0.00	3.62	4.55	3.12	0.54	0.68
SS	5	29.65	0.00	33.37	53.93	16.83	16.79	20.87
NC	5	59.50	0.00	57.33	85.89	13.73	28.54	35.48
COND/P	5	1.12	0.00	1.09	1.31	0.96	0.13	0.17
AMTH	6	0.00	385.43	642.24	1176.87	0.03	456.79	479.27
AMTHNV	6	0.00	3393.61	5655.64	10983.22	0.02	406.53	426.53
AMTNA	6	0.00	1958.80	391.76	714.16	95.86	260.18	323.47
AMTK	5	0.00	187.90	37.58	80.18	4.75	30.90	38.41
AMTCA	5	0.00	1296.76	259.75	780.93	46.39	298.88	371.59
AMTMG	5	0.00	535.18	107.04	196.32	27.75	77.64	96.53
AMTNH4	5	0.00	3133.74	626.75	1474.18	78.05	565.14	702.61
AMTCL	5	0.00	2292.35	458.47	902.25	112.36	297.33	369.65
AMTF	5	0.00	144.63	28.93	44.08	2.80	17.20	21.38
AMTNO3	5	0.00	1841.56	368.31	584.26	75.41	204.51	254.25
AMTSO4	5	0.00	4441.35	888.27	1462.18	231.17	466.62	580.13
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	4221.45	844.29	1403.71	219.67	458.95	570.59
AMTSS	5	0.00	2366.27	473.25	922.69	123.85	308.16	383.12
AMTNC	5	0.00	4748.11	949.62	1680.30	128.95	735.67	914.63

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 135

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	9	4.58	0.00	4.38	5.80	3.76	0.56	0.43
COND	9	17.15	0.00	25.71	95.80	7.20	27.20	20.94
CMPPT	9	0.00	15.83	1.76	7.25	0.09	2.15	1.66
H	9	26.26	0.00	41.62	173.78	1.59	52.53	40.45
HNV	9	23.39	0.00	36.35	154.88	0.50	47.70	36.73
NA	9	13.16	0.00	21.16	57.83	8.26	16.19	12.47
K	9	0.70	0.00	1.25	4.34	0.51	1.23	0.94
CA	9	10.17	0.00	14.30	41.92	1.50	13.16	10.13
MG	9	2.96	0.00	5.22	16.53	1.81	4.61	3.55
NH4	9	6.21	0.00	8.50	42.69	0.00	13.22	10.18
CL	9	12.98	0.00	22.87	75.29	7.61	21.20	16.33
F	9	0.01	0.00	0.23	2.11	0.00	0.70	0.54
NO3	9	12.48	0.00	22.30	92.43	2.26	27.87	21.46
SO4	9	23.17	0.00	36.25	158.86	8.95	47.89	36.88
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	21.84	0.00	33.99	151.92	7.24	46.27	35.63
SAN	9	48.64	0.00	81.65	328.68	32.21	94.46	72.73
SCA	9	59.47	0.00	92.06	337.09	41.31	93.82	72.24
A/C	9	0.82	0.00	0.89	0.98	0.63	0.12	0.09
CL/NA	9	0.99	0.00	1.08	1.30	0.88	0.13	0.10
NA/MG	9	4.44	0.00	4.05	5.10	3.50	0.54	0.42
SS	9	14.27	0.00	24.30	74.71	8.40	20.84	16.04
NC	9	18.94	0.00	26.13	88.59	7.15	24.95	19.21
COND/P	9	1.22	0.00	1.21	2.34	0.99	0.43	0.33
AMTH	9	0.00	4157.14	461.90	1739.15	18.20	570.77	439.49
AMTHNV	9	0.00	3702.91	411.43	1480.26	5.76	505.59	389.30
AMTNA	9	0.00	2083.19	231.47	598.94	2.35	179.13	137.93
AMTK	9	0.00	111.05	12.34	37.02	1.91	10.49	8.08
AMTCA	9	0.00	1610.22	178.91	795.90	19.41	250.55	192.92
AMTMG	9	0.00	468.86	52.10	131.20	7.56	37.70	29.03
AMTNH4	9	0.00	982.58	109.16	602.91	0.00	189.05	145.57
AMTCL	9	0.00	2054.30	228.26	552.01	27.50	161.29	124.19
AMTF	9	0.00	1.91	0.21	1.91	0.00	0.64	0.49
AMTNO3	9	0.00	1975.56	219.51	958.93	29.29	291.82	224.70
AMTSO4	9	0.00	3668.02	407.56	1539.64	23.03	493.18	379.75
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	9	0.00	3457.37	384.15	1482.84	20.20	481.50	370.76
AMTSS	9	0.00	2258.34	250.93	608.87	30.33	178.85	137.71
AMTNC	9	0.00	2997.57	333.06	1557.10	35.73	471.65	363.17

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N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIO  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 136.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 07/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.32	0.00	4.32	6.28	3.82	0.78	0.78
COND	7	23.34	0.00	29.71	70.20	11.80	20.72	19.19
CMPPT	7	0.00	20.98	3.00	12.31	0.07	4.25	3.93
H	7	48.03	0.00	47.79	151.36	0.52	49.43	45.99
HNV	7	45.38	0.00	45.42	144.54	0.55	47.51	43.99
NA	6	9.00	0.00	12.83	18.26	5.22	4.51	4.73
K	6	0.42	0.00	0.64	1.28	0.25	0.35	0.37
CA	6	6.50	0.00	11.48	21.96	0.00	8.21	8.61
MG	6	2.27	0.00	3.37	5.35	1.32	1.33	1.39
NH4	6	9.21	0.00	5.17	24.95	0.00	9.77	10.25
CL	6	9.75	0.00	15.37	23.97	5.36	6.85	7.19
F	6	1.34	0.00	1.49	4.21	0.00	1.92	2.02
NO3	6	11.44	0.00	18.79	46.13	5.48	17.39	18.24
SO4	6	39.87	0.00	45.56	115.55	14.16	37.09	38.90
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	38.91	0.00	44.13	113.94	12.44	36.95	38.76
SAN	6	62.40	0.00	81.21	182.85	33.20	56.00	58.75
SCA	6	68.58	0.00	89.16	205.15	44.75	61.63	64.67
A/C	6	0.91	0.00	0.91	0.99	0.74	0.09	0.09
CL/NA	6	1.08	0.00	1.20	1.67	0.93	0.27	0.29
NA/MG	6	3.96	0.00	3.80	4.41	3.41	0.33	0.44
SS	6	10.27	0.00	15.32	23.02	5.91	5.55	6.44
NC	6	10.13	0.00	18.17	36.38	0.88	12.70	13.42
COND/P	6	1.03	0.00	1.01	1.10	0.91	0.06	0.06
AMTH	6	0.00	1007.54	1439.51	5015.87	0.35	1792.92	1660.27
AMTHNV	7	0.00	9520.41	1360.06	4681.08	0.37	1679.70	1555.42
AMTNA	6	0.00	1882.68	313.78	642.42	127.79	222.12	233.05
AMTK	6	0.00	87.98	14.66	31.43	4.55	9.59	10.06
AMTCA	6	0.00	1358.96	226.49	789.04	0.00	285.82	299.89
AMTMG	6	0.00	475.51	79.25	162.05	33.70	51.42	54.48
AMTNH4	6	0.00	461.41	76.90	397.61	0.00	157.53	165.28
AMTCL	6	0.00	2038.42	339.74	659.70	146.73	199.27	209.08
AMTF	6	0.00	279.51	46.59	151.31	0.00	59.23	62.15
AMTNO3	6	0.00	2392.83	398.81	735.23	77.12	292.42	306.81
AMTSO4	6	0.00	8338.62	1389.77	3922.10	126.09	1437.58	1508.31
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	8138.43	1356.40	3854.21	110.77	1418.00	1487.76
AMTSS	6	0.00	2148.20	358.03	727.65	161.84	232.09	243.51
AMTNC	6	0.00	2118.33	353.06	919.54	108.25	329.76	345.99

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 137.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.39	0.00	4.27	4.52	4.03	0.21	0.33
COND	4	21.11	0.00	28.87	49.90	14.60	15.69	24.94
CMPP1	4	0.00	10.07	2.52	6.59	1.13	2.72	4.32
H	4	41.13	0.00	54.19	93.32	30.20	27.63	43.94
HNV	4	38.50	0.00	51.62	93.32	27.54	29.34	46.64
NA	4	11.78	0.00	18.37	47.83	6.09	19.81	31.50
K	4	1.25	0.00	1.21	1.53	0.51	0.48	0.77
CA	4	6.90	0.00	8.61	15.97	3.49	5.50	8.75
MG	4	2.94	0.00	4.46	9.21	1.65	3.54	5.62
NH4	4	4.52	0.00	9.29	26.61	0.55	12.05	19.16
CL	4	12.23	0.00	17.91	39.76	7.33	14.83	23.58
F	4	0.18	0.00	0.39	1.58	0.00	0.79	1.26
NO3	4	11.83	0.00	19.23	43.87	5.64	17.26	27.44
SO4	4	32.35	0.00	41.59	62.46	24.57	15.82	25.16
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	31.13	0.00	39.80	61.01	23.84	15.52	24.67
SAN	4	56.59	0.00	79.12	122.01	37.55	38.96	61.95
SCA	4	68.52	0.00	96.13	154.71	45.25	51.13	81.29
A/C	4	0.83	0.00	0.82	0.90	0.79	0.05	0.08
CL/NA	4	1.04	0.00	0.97	1.41	0.83	0.24	0.38
NA/MG	4	4.00	0.00	4.12	5.19	2.39	1.15	1.83
SS	4	13.12	0.00	19.21	43.86	7.87	16.76	26.53
NC	4	14.28	0.00	22.73	45.83	7.19	17.31	27.53
COND/P	4	1.03	0.00	1.04	1.09	0.98	0.05	0.07
AMTH	4	0.00	4141.40	1035.35	1990.34	477.40	683.26	1086.39
AMTHNV	4	0.00	3876.99	969.25	1815.21	415.80	626.05	995.42
AMTNA	4	0.00	1186.39	296.60	560.48	86.62	223.45	355.28
AMTK	4	0.00	125.44	31.36	84.13	5.98	35.61	56.62
AMTCA	4	0.00	694.93	173.73	361.76	40.93	137.80	219.10
AMTMG	4	0.00	296.42	74.11	108.43	22.17	41.98	66.74
AMTNH4	4	0.00	455.35	113.84	301.87	19.49	129.75	206.30
AMTCL	4	0.00	1231.41	307.85	483.23	122.27	193.28	307.31
AMTF	4	0.00	17.91	4.48	17.91	0.00	8.96	14.24
AMTNO3	4	0.00	1191.10	297.78	497.69	107.74	171.94	273.38
AMTSO4	4	0.00	3257.27	814.32	1619.16	429.41	549.48	873.68
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	4	0.00	3134.38	783.59	1571.06	419.03	538.88	856.83
AMTSS	4	0.00	1320.62	330.15	518.33	111.91	216.38	344.04
AMTNC	4	0.00	1437.92	359.48	519.92	141.25	172.82	274.78

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPP1 IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 138.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT RSC SITE 13 DURING 09/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.44	0.00	4.50	5.87	4.13	0.58	0.54
COND	7	22.76	0.00	25.10	50.50	10.20	15.69	14.53
CMPPT	7	0.00	8.04	1.15	2.48	0.15	0.92	0.85
H	7	36.60	0.00	31.90	74.13	0.35	28.73	26.60
HNV	7	34.79	0.00	29.41	69.18	0.34	27.61	25.57
NA	7	26.36	0.00	49.57	150.44	10.87	52.46	48.57
K	7	0.94	0.00	1.50	3.57	0.25	1.35	1.25
CA	7	8.03	0.00	16.40	76.35	0.00	26.65	24.68
MG	7	7.00	0.00	12.28	33.40	3.21	11.34	10.50
NH4	7	3.78	0.00	4.59	13.86	0.55	5.08	4.70
CL	7	29.22	0.00	51.49	141.00	12.13	48.84	45.22
F	7	0.84	0.00	0.68	3.16	0.00	1.17	1.08
NO3	7	13.71	0.00	12.37	23.71	4.52	7.64	7.08
SO4	7	31.59	0.00	32.78	75.58	11.66	25.48	23.60
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	28.86	0.00	27.84	67.42	10.10	24.29	22.49
SAN	7	75.48	0.00	97.63	188.67	37.57	64.20	59.45
SCA	7	82.70	0.00	116.23	224.71	40.17	71.75	66.44
A/C	7	0.91	0.00	0.84	1.15	0.39	0.23	0.21
CL/NA	7	1.11	0.00	1.04	1.66	0.75	0.34	0.31
NA/MG	7	3.77	0.00	4.04	4.50	2.52	0.75	0.70
SS	7	29.36	0.00	52.99	155.52	13.38	53.55	49.59
NC	7	16.74	0.00	31.35	78.79	6.11	27.50	25.46
COND/P	7	1.06	0.00	1.09	1.23	0.98	0.08	0.07
AMTH	7	0.00	2943.78	420.54	1575.18	3.79	539.18	499.29
AMTHNV	7	0.00	2798.45	399.78	1539.32	0.95	528.76	489.64
AMTNA	7	0.00	2119.88	302.84	525.02	36.69	163.38	151.29
AMTK	7	0.00	75.46	10.78	19.27	1.44	7.32	6.78
AMTCA	7	0.00	646.35	92.34	222.06	15.39	86.10	81.59
AMTMG	7	0.00	562.81	80.40	163.18	14.57	46.61	43.16
AMTNH4	7	0.00	303.78	43.40	148.02	1.56	54.08	50.08
AMTCL	7	0.00	2350.08	335.73	805.68	61.07	237.58	220.00
AMTF	7	0.00	67.21	9.60	40.95	0.00	16.27	15.07
AMTNO3	7	0.00	1102.41	157.49	527.57	12.70	179.33	166.06
AMTSO4	7	0.00	2541.30	363.04	1315.62	32.79	442.39	409.66
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	2321.32	331.62	1287.85	28.39	441.14	408.50
AMTSS	7	0.00	2361.84	337.41	678.33	47.40	201.29	186.40
AMTNC	7	0.00	1346.46	192.35	408.26	73.63	114.84	106.34

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 139.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 10/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.63	0.00	4.25	5.01	3.92	0.42	0.39
COND	7	18.04	0.00	40.71	61.80	9.30	20.22	18.73
CMPPT	7	0.00	12.06	1.72	9.53	0.10	3.46	3.20
H	7	23.67	0.00	56.30	120.23	9.77	46.56	43.11
HNV	7	21.34	0.00	51.43	109.65	8.32	42.68	39.52
NA	7	53.19	0.00	119.26	288.27	16.52	110.81	102.62
K	7	1.25	0.00	3.06	6.38	0.77	2.05	1.90
CA	7	5.61	0.00	11.69	16.97	3.49	4.88	4.52
MG	7	12.25	0.00	27.66	71.32	4.11	25.81	23.90
NH4	7	3.00	0.00	8.79	22.18	0.55	6.52	7.89
CL	7	56.74	0.00	123.76	314.71	20.02	111.13	102.90
F	7	0.19	0.00	1.28	3.68	0.00	1.42	1.32
NO3	7	8.47	0.00	24.38	45.33	3.23	15.29	14.16
SO4	7	23.12	0.00	52.67	103.27	9.99	34.16	31.63
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	17.29	0.00	39.95	93.57	6.22	33.21	30.75
SAN	7	88.52	0.00	202.09	406.08	49.88	125.87	116.56
SCA	7	98.97	0.00	226.76	418.57	55.01	131.50	121.77
A/C	7	0.89	0.00	0.89	0.97	0.82	0.06	0.06
CL/NA	7	1.07	0.00	1.04	1.21	0.91	0.10	0.10
NA/MG	7	4.34	0.00	4.31	4.69	4.02	0.28	0.26
SS	7	62.60	0.00	136.44	347.13	21.35	122.67	113.60
NC	7	12.70	0.00	34.03	74.56	4.80	20.93	19.38
COND/P	7	0.96	0.00	0.93	1.02	0.83	0.07	0.07
AMTH	7	0.00	2853.71	407.67	1076.39	31.35	441.85	409.16
AMTHNV	7	0.00	2572.33	367.48	1004.55	28.59	397.85	368.42
AMTNA	7	0.00	6412.77	916.11	3108.14	19.10	1117.54	1034.86
AMTK	7	0.00	150.83	21.55	73.00	2.36	24.90	23.06
AMTCA	7	0.00	676.98	96.65	332.93	12.09	115.84	107.27
AMTMG	7	0.00	1476.66	210.95	744.84	4.76	263.20	243.73
AMTNH4	7	0.00	361.88	51.70	207.90	3.55	73.67	68.22
AMTCL	7	0.00	6640.88	977.27	3494.16	23.15	1224.76	1134.14
AMTF	7	0.00	22.48	3.21	9.87	0.00	3.82	3.53
AMTNO3	7	0.00	1021.35	145.91	375.02	25.16	139.57	129.24
AMTSO4	7	0.00	2787.37	398.20	968.13	40.44	406.94	376.83
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	2083.77	297.68	877.22	29.94	329.20	304.84
AMTSS	7	0.00	7347.33	1078.19	3854.05	24.68	1350.99	1251.03
AMTNC	7	0.00	1531.39	218.77	477.62	35.90	195.89	181.40

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-14C

Table 140.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95XC.L
PH	7	4.56	0.00	4.41	4.83	4.14	0.27	0.25
COND	7	32.11	0.00	39.74	62.00	7.20	22.71	21.03
CMPPT	7	0.00	2.49	0.36	0.66	0.06	0.21	0.20
H	7	27.69	0.00	38.79	72.44	14.79	22.39	20.74
HNv	7	25.11	0.00	34.29	57.54	13.80	18.79	17.40
NA	5	108.29	0.00	114.61	230.01	7.83	106.24	132.09
K	5	2.46	0.00	2.66	5.11	0.25	2.30	2.86
CA	5	8.20	0.00	9.78	17.96	0.50	6.01	7.48
MG	5	24.58	0.00	25.93	51.41	2.06	23.55	29.28
NH4	5	0.71	0.00	0.55	2.77	0.00	1.24	1.54
CL	5	109.62	0.00	116.92	224.75	10.15	104.57	129.63
F	5	0.44	0.00	0.74	2.11	0.00	0.88	1.09
NO3	5	12.07	0.00	17.78	44.84	5.97	17.08	21.23
SU4	5	29.34	0.00	36.14	88.90	9.16	31.48	39.14
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	18.10	0.00	24.13	65.77	8.22	23.51	29.22
SAN	5	151.48	0.00	171.57	360.60	26.73	139.89	173.92
SCA	5	168.44	0.00	185.01	347.03	27.42	143.92	178.92
A/C	5	0.90	0.00	0.93	1.04	0.79	0.11	0.13
CL/NA	5	1.01	0.00	1.02	1.30	0.94	0.14	0.17
NA/MG	5	4.41	0.00	4.42	4.49	3.81	0.28	0.35
SS	5	120.57	0.00	128.74	247.90	10.11	115.28	143.33
NC	5	23.67	0.00	24.79	63.76	2.52	25.98	32.33
COND/P	5	0.96	0.00	0.96	1.01	0.91	0.04	0.05
AMTH	7	0.00	689.73	98.53	134.18	46.41	27.61	25.57
AMTHNV	7	0.00	625.37	89.34	119.59	36.03	27.54	25.50
AMTNA	5	0.00	2279.13	455.83	1239.89	29.78	490.99	610.43
AMTK	5	0.00	51.85	10.37	26.15	1.09	10.19	12.67
AMTCA	5	0.00	172.57	34.51	69.94	16.37	21.30	26.49
AMTMG	5	0.00	517.31	103.46	277.15	7.22	109.43	136.04
AMTNH4	5	0.00	14.94	2.99	14.94	0.00	6.68	8.31
AMTCL	5	0.00	2307.06	461.41	1164.44	29.58	461.82	574.16
AMTF	5	0.00	9.37	1.87	4.28	0.00	1.86	2.31
AMTNO3	5	0.00	254.15	50.83	91.08	29.37	24.69	30.69
AMTSO4	5	0.00	617.61	123.52	208.75	36.99	74.31	92.38
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	380.91	76.18	133.60	33.95	37.98	47.22
AMTSS	5	0.00	2537.56	507.51	1284.38	32.63	510.92	635.20
AMTNC	5	0.00	498.24	99.65	343.69	16.55	138.52	172.22

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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-141

Table 141.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 12/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	5.00	0.00	4.74	5.09	4.59	0.23	0.36
COND	4	20.80	0.00	19.38	27.00	13.00	6.52	10.37
CMPT	4	0.00	9.79	2.45	7.81	0.10	3.63	5.77
H	4	10.01	0.00	18.10	25.70	8.13	8.05	12.81
H4V	4	8.60	0.00	15.69	22.39	6.76	6.87	10.92
NA	4	110.29	0.00	62.29	130.88	17.39	51.47	81.83
K	4	2.76	0.00	2.17	3.06	1.28	0.90	1.43
CA	4	7.33	0.00	12.97	28.44	6.49	10.48	16.67
MG	4	23.20	0.00	14.85	26.98	4.19	10.41	16.56
NH4	4	2.15	0.00	10.12	26.61	1.11	11.38	18.10
CL	4	108.54	0.00	67.61	126.62	21.71	47.55	75.61
F	4	1.34	0.00	1.58	3.68	0.00	1.55	2.46
NO3	4	4.81	0.00	10.08	20.00	3.87	6.94	11.03
SO4	4	20.84	0.00	30.76	53.30	19.99	15.67	24.92
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	9.75	0.00	23.96	44.64	7.17	16.10	25.00
SAN	4	156.04	0.00	110.34	162.21	61.04	54.67	86.92
SCA	4	155.74	0.00	120.50	176.64	63.37	62.91	100.03
A/C	4	0.87	0.00	0.92	0.96	0.87	0.04	0.07
CL/NA	4	0.98	0.00	1.09	1.31	0.97	0.15	0.24
NA/MG	4	4.75	0.00	4.19	4.85	3.39	0.64	1.02
SS	4	119.00	0.00	73.11	139.66	23.47	53.84	85.61
NC	4	26.73	0.00	29.28	56.53	15.20	19.18	30.49
COND/P	4	0.97	0.00	0.96	0.98	0.93	0.02	0.04
AMTH	4	0.00	980.24	245.06	635.02	23.44	273.71	435.19
AMTHNV	4	0.00	842.23	210.56	528.19	19.50	226.81	360.63
AMTNA	4	0.00	10794.21	2698.55	10224.59	62.50	5020.35	7982.36
AMTK	4	0.00	269.95	67.49	239.34	2.81	114.94	182.76
AMTCA	4	0.00	717.37	179.34	506.80	23.31	227.13	361.14
AMTMG	4	0.00	2271.15	567.79	2107.91	15.08	1028.08	1634.65
AMTNH4	4	0.00	210.34	52.59	86.63	26.61	29.23	46.47
AMTCL	4	0.00	10623.12	2655.78	9892.03	78.03	4829.63	7679.11
AMTF	4	0.00	130.82	32.70	123.35	0.00	60.46	96.13
AMTNO3	4	0.00	471.09	117.77	302.44	20.00	130.56	207.59
AMTSO4	4	0.00	2040.24	510.06	1577.77	53.30	719.86	1144.58
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	954.06	238.51	559.88	44.64	231.33	367.82
AMTSS	4	0.00	11646.85	2911.71	10910.91	80.75	5337.50	8486.62
AMTNC	4	0.00	2616.18	654.04	2254.36	54.61	1070.84	1702.63

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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 142.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LJW	ST.DEV	95% C.L.
PH	5	4.75	0.00	4.59	5.13	4.25	0.33	4.41
COND	5	13.45	0.00	30.40	95.00	8.00	36.86	45.82
CMPT	5	0.00	19.44	33.89	133.31	0.73	5.32	6.61
H	5	17.60	0.00	25.56	56.23	7.41	18.92	23.52
HNV	5	15.89	0.00	22.78	52.48	5.50	18.08	22.48
NA	5	47.13	0.00	134.27	559.15	25.22	237.54	295.32
K	5	2.41	0.00	3.11	9.96	1.02	3.88	4.83
CA	5	4.23	0.00	9.68	30.44	2.50	11.75	14.61
MG	5	10.29	0.00	29.73	122.57	5.51	51.91	64.53
NH4	5	2.01	0.00	3.22	8.87	0.55	3.40	4.23
CL	5	46.38	0.00	142.52	603.20	22.84	257.54	320.19
F	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	5	6.36	0.00	13.45	40.97	2.58	15.73	19.56
SO4	5	16.65	0.00	30.73	88.28	10.20	32.61	40.54
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	11.88	0.00	16.06	26.21	7.21	9.71	12.59
SAN	5	69.44	0.00	186.96	703.85	37.29	289.72	360.20
SCA	5	83.66	0.00	205.57	751.32	44.34	306.13	380.60
A/C	5	0.83	0.00	0.91	0.99	0.73	0.10	0.13
CL/NA	5	0.98	0.00	1.06	1.15	0.86	0.12	0.15
NA/MG	5	4.58	0.00	4.52	4.81	4.14	0.30	0.37
SS	5	51.16	0.00	157.20	665.33	25.20	284.06	353.16
NC	5	14.90	0.00	22.80	58.45	4.89	20.80	25.85
COND/P	5	0.88	0.00	0.93	1.01	0.84	0.07	0.08
AMTH	5	0.00	3420.74	684.15	1754.93	104.25	655.75	815.26
AMTHNV	5	0.00	3088.04	617.61	1637.79	77.28	620.30	771.19
AMTNA	5	0.00	9162.53	1832.51	4106.28	354.63	1830.43	2275.69
AMTK	5	0.00	468.04	93.61	339.87	13.24	139.80	173.81
AMTCA	5	0.00	822.57	164.51	332.15	49.12	113.32	140.89
AMTMG	5	0.00	1999.83	399.97	900.10	85.60	386.75	480.83
AMTNH4	5	0.00	390.33	78.07	238.39	12.21	93.18	115.85
AMTCL	5	0.00	9017.26	1803.45	4429.73	380.35	1836.64	2283.41
AMTF	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	5	0.00	1236.89	247.38	531.33	63.51	194.98	242.41
AMTSO4	5	0.00	3237.22	647.44	1579.85	143.46	562.00	698.71
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	2309.34	461.87	1266.94	101.43	475.03	590.58
AMTSS	5	0.00	9946.04	1989.21	4886.00	419.52	2025.81	2518.60
AMTNC	5	0.00	2697.26	579.45	1656.33	68.78	622.90	774.43

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 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 143.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 02/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.37	0.00	4.27	4.78	4.16	0.30	0.48
CUND	4	21.72	0.00	45.35	122.00	8.40	52.58	83.60
CMPTI	4	0.00	2.74	0.69	1.27	0.11	0.48	0.76
H	4	43.08	0.00	53.74	69.18	16.60	24.88	39.57
HNV	4	59.90	0.00	47.87	61.66	15.85	21.62	34.38
NA	4	60.89	0.00	164.57	526.98	35.22	241.70	384.31
K	4	1.67	0.00	3.45	9.19	0.77	3.87	6.15
CA	4	12.52	0.00	17.59	34.93	9.98	11.85	18.84
MG	4	14.71	0.00	37.96	119.61	9.05	54.44	86.56
NH4	4	13.53	0.00	13.86	23.28	7.21	7.06	11.22
CL	4	67.04	0.00	176.11	559.21	40.04	255.47	406.20
F	4	2.59	0.00	3.03	6.32	0.53	2.45	3.89
NO3	4	15.35	0.00	19.44	30.65	11.29	8.10	12.88
SO4	4	51.93	0.00	77.87	143.03	16.03	52.98	84.23
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	45.13	0.00	59.83	85.49	11.91	34.38	54.66
SAN	4	157.09	0.00	276.81	735.99	67.89	308.85	491.07
SCA	4	146.39	0.00	291.17	766.75	78.82	319.33	507.74
A/C	4	0.94	0.00	0.95	1.04	0.86	0.09	0.14
CL/NA	4	1.10	0.00	1.07	1.24	0.97	0.11	0.18
NA/MG	4	4.14	0.00	4.34	4.47	3.81	0.34	0.54
SS	4	73.02	0.00	193.42	616.80	44.17	282.31	448.88
NC	4	50.28	0.00	44.01	83.88	18.05	28.11	44.69
CUND/P	4	0.75	0.00	0.79	1.05	0.21	0.39	0.62
AMTH	4	0.00	1182.26	295.57	487.02	72.26	189.39	301.14
AMTHNV	4	0.00	1094.91	273.73	475.93	58.74	182.43	290.06
AMINA	4	0.00	1672.51	418.13	576.38	311.42	120.36	191.37
AMTK	4	0.00	45.73	11.43	13.79	9.64	1.92	3.06
AMICA	4	0.00	343.48	85.87	126.31	38.20	43.68	69.45
AMTMG	4	0.00	403.95	100.99	130.82	69.72	27.06	43.03
AMINH4	4	0.00	371.21	92.80	179.73	10.92	68.98	109.68
AMTCL	4	0.00	1841.51	460.38	611.63	302.97	130.93	208.19
AMTF	4	0.00	71.03	17.76	37.70	2.30	16.36	26.02
AMTHU3	4	0.00	421.21	105.30	142.90	33.52	50.25	79.89
AMTSU4	4	0.00	1425.30	356.32	689.42	156.44	241.42	383.86
AMTPU4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	4	0.00	1238.39	309.60	648.78	93.51	250.50	398.30
AMTSS	4	0.00	2005.76	501.44	674.63	334.18	147.55	234.61
AMTNC	4	0.00	831.12	207.78	302.84	91.74	87.42	139.00

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N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPTI IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 144.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 13 DURING 03/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%CL
PH	3	4.56	0.00	4.46	5.06	4.16	0.45	1.12
COND	3	21.00	0.00	52.33	91.00	16.00	37.55	93.23
CMPPT	3	0.00	2.55	0.85	2.31	0.12	1.27	3.15
H	3	27.47	0.00	34.73	69.18	8.71	31.11	77.22
HNV	3	24.32	0.00	29.75	58.88	6.92	26.55	65.91
NA	3	44.45	0.00	170.44	360.88	24.35	172.60	428.49
K	3	1.41	0.00	5.45	12.51	0.77	6.22	15.45
CA	3	12.54	0.00	72.69	153.19	2.99	75.68	187.89
MG	3	10.94	0.00	45.52	89.75	5.43	42.31	105.04
NH4	3	6.79	0.00	14.60	24.95	5.54	9.77	24.55
CL	3	46.56	0.00	179.35	362.09	25.38	170.19	422.51
F	3	3.66	0.00	3.51	4.74	2.11	1.32	3.29
NO3	3	18.06	0.00	50.49	86.78	12.90	36.95	91.74
SO4	3	33.51	0.00	106.67	172.60	21.86	77.12	191.46
PO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	3	28.74	0.00	88.34	135.34	19.25	61.12	151.73
SAN	10	1.83	0.00	340.35	589.07	63.83	263.72	654.72
SCA	10	3.61	0.00	343.42	619.15	65.38	276.89	687.40
A/C	3	0.98	0.00	0.99	1.06	0.95	0.06	0.15
CL/NA	3	1.05	0.00	1.05	1.19	1.00	0.10	0.25
NA/MG	3	4.06	0.00	3.74	4.48	3.05	0.73	1.82
SS	3	51.21	0.00	196.76	399.38	27.99	187.99	466.72
NC	2	4.93	0.00	111.93	174.12	11.09	88.12	218.77
COND/P	3	0.99	0.00	0.97	1.00	0.92	0.04	0.11
AMTH	3	0.00	699.39	233.13	608.25	10.07	326.60	811.30
AMTHNV	3	0.00	619.11	206.37	542.10	8.00	292.35	725.79
AMTNA	3	0.00	1131.77	377.26	563.07	145.79	212.35	527.18
AMTK	3	0.00	35.91	11.97	17.71	3.54	7.46	18.51
AMTCA	3	0.00	318.88	106.29	177.13	69.24	61.37	152.35
AMTMG	3	0.00	278.56	92.85	125.55	47.84	40.29	100.03
AMTNH4	3	0.00	172.63	57.61	128.20	15.38	61.53	152.75
AMTCL	3	0.00	1185.35	395.12	586.91	174.12	207.44	516.24
AMTF	3	0.00	93.14	31.05	85.20	2.47	46.92	116.48
AMTNU3	3	0.00	459.42	153.14	298.41	60.68	127.36	316.18
AMTSU4	3	0.00	852.96	284.32	505.54	145.16	193.69	480.87
AMTPO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	3	0.00	731.42	243.81	445.14	127.68	175.04	434.57
AMTSS	3	0.00	1303.76	434.59	647.36	188.37	231.32	574.27
AMTNC	3	0.00	634.19	211.40	256.40	176.46	40.91	101.57

N=NUMBER OF SAMPLES  
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 COND, CMPPT, AND RATIO  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 145.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 11/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	3	5.21	0.00	5.08	5.28	4.87	0.22	0.54
CUND	3	5.13	0.00	8.83	17.60	3.80	7.62	18.92
CMPPT	3	0.00	13.02	4.34	6.85	0.61	3.29	8.17
H	3	6.19	0.00	8.35	13.49	5.25	4.48	11.13
HNV	3	5.09	0.00	7.12	12.02	3.98	4.30	10.67
NA	3	15.14	0.00	35.22	82.18	10.87	40.68	100.98
K	3	0.19	0.00	0.51	1.28	0.00	0.68	1.68
CA	3	0.78	0.00	2.16	5.49	0.00	2.92	7.26
MG	3	3.43	0.00	7.87	18.26	2.47	9.00	22.35
NH4	3	0.92	0.00	1.29	2.22	0.55	0.85	2.10
CL	3	17.17	0.00	37.98	86.29	13.25	41.85	103.89
F	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	3	0.37	0.00	4.62	10.16	0.64	4.95	12.28
SO4	3	5.48	0.00	9.92	20.82	2.08	9.74	24.17
PO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	3	3.79	0.00	6.08	11.94	0.78	5.60	13.91
SAN	3	0.02	0.00	5.52	117.27	17.11	56.16	139.42
SCA	3	26.66	0.00	55.40	122.91	19.14	58.52	145.28
A/C	3	0.94	0.00	0.95	0.96	0.89	0.04	0.09
CL/NA	3	1.13	0.00	1.08	1.32	1.05	0.16	0.39
NA/MG	3	4.42	0.00	4.48	4.50	4.38	0.06	0.16
SS	3	18.16	0.00	41.28	95.18	14.04	46.68	115.89
NC	3	4.14	0.00	8.74	14.24	3.23	7.79	19.97
COND/P	3	1.01	0.00	0.98	1.04	0.91	0.06	0.16
AMTH	3	0.00	806.74	268.91	432.11	82.62	175.88	436.65
AMTHNV	3	0.00	662.93	220.98	367.78	73.64	147.07	365.12
AMTNA	3	0.00	1971.68	657.23	863.53	503.33	185.73	461.10
AMTK	3	0.00	25.30	8.43	17.48	0.00	8.76	21.74
AMTCA	3	0.00	101.97	33.99	68.35	0.00	34.17	84.84
AMTMG	3	0.00	446.34	148.78	197.17	111.85	43.80	108.74
AMTNH4	3	0.00	120.36	40.12	75.93	13.58	32.19	79.93
AMTCL	3	0.00	2236.45	745.48	907.69	528.54	195.41	485.14
AMTF	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	3	0.00	308.02	102.67	209.88	35.90	93.78	232.81
AMTSO4	3	0.00	713.69	237.96	470.53	115.84	201.49	500.22
AMTPO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	3	0.00	493.59	164.53	377.13	43.33	184.72	458.58
AMTSS	3	0.00	2365.58	788.53	1001.18	582.98	209.19	519.35
AMTNC	3	0.00	308.52	154.26	221.29	87.23	94.79	251.93

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 CUND, CMPPT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 146.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 12/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	12	4.55	0.00	4.45	5.26	4.17	0.33	0.20
COND	12	20.01	0.00	23.59	62.40	0.00	18.09	11.23
CMPPT	12	0.00	7.22	0.60	1.09	0.01	0.45	0.28
H	12	27.89	0.00	35.42	67.61	5.50	19.01	11.80
HNV	12	23.87	0.00	29.32	57.54	4.27	15.96	9.91
NA	9	51.26	0.00	47.54	183.92	4.35	55.15	42.47
X	9	1.36	0.00	1.42	3.83	0.00	1.33	1.02
CA	9	4.15	0.00	5.99	22.95	0.50	7.01	5.40
MG	9	11.52	0.00	11.11	39.40	2.30	11.79	9.08
NH4	9	2.57	0.00	3.63	13.31	0.55	3.97	3.06
CL	9	54.95	0.00	51.57	188.38	7.90	55.65	42.85
F	9	0.03	0.00	0.06	0.53	0.00	0.18	0.14
NO3	9	7.18	0.00	10.45	34.03	1.45	9.78	7.53
SU4	9	30.54	0.00	32.73	55.59	3.54	19.55	15.05
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	25.03	0.00	27.57	48.36	1.68	16.74	12.89
SAN	9	92.69	0.00	94.82	253.94	23.04	73.47	56.57
SCA	9	98.33	0.00	98.69	275.60	29.23	78.34	60.32
A/C	9	0.94	0.00	0.96	1.16	0.00	0.12	0.10
CL/NA	9	1.07	0.00	1.08	1.82	0.00	0.31	0.24
NA/MG	9	4.45	0.00	4.28	4.67	1.89	0.88	0.68
SS	9	59.08	0.00	55.34	207.78	5.62	62.23	47.92
NC	9	11.77	0.00	14.36	43.65	4.35	13.66	10.52
COND/P	9	0.97	0.00	0.97	1.03	0.00	0.05	0.04
AMTH	12	0.00	2014.67	167.89	500.83	7.19	170.57	105.86
AMTHNV	12	0.00	1723.83	143.65	436.21	4.86	151.77	94.20
AMTNA	9	0.00	3645.33	405.04	1954.15	15.90	601.33	463.02
AMTK	9	0.00	96.71	10.75	40.69	0.00	12.66	9.75
AMTCA	9	0.00	295.25	32.81	111.34	5.36	31.75	24.45
AMTMG	9	0.00	618.97	91.00	418.65	8.42	127.57	98.23
AMTNH4	9	0.00	182.71	20.30	54.31	6.04	15.44	11.89
AMTCL	9	0.00	3907.44	434.16	2001.49	28.87	610.56	470.13
AMTF	9	0.00	1.92	0.21	1.92	0.00	0.64	0.49
AMTNU3	9	0.00	510.61	56.73	114.83	15.81	31.74	24.44
AMTSO4	9	0.00	2172.02	241.34	581.79	38.55	201.27	154.97
AMTPU4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	9	0.00	1780.14	197.79	421.82	18.32	161.08	124.03
AMTSS	9	0.00	4201.86	466.87	2207.65	20.54	677.87	521.96
AMTNC	9	0.00	837.13	93.01	334.86	30.13	93.38	71.90

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RAIN  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 147.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 01/78.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	4.58	0.00	4.48	5.40	3.95	0.47	0.50
COND	6	15.05	0.00	23.97	49.00	9.20	16.00	16.79
CMPT	6	0.00	5.72	0.95	2.80	0.03	1.01	1.06
H	6	26.23	0.00	33.05	112.20	3.98	39.67	41.63
HNV	6	23.74	0.00	29.06	107.15	3.47	36.81	40.72
NA	5	31.28	0.00	50.35	91.31	8.70	38.15	47.43
K	5	0.50	0.00	1.23	2.55	0.00	1.28	1.59
CA	5	7.20	0.00	16.27	37.92	1.00	15.49	19.26
MG	5	7.46	0.00	12.70	23.28	3.29	9.41	11.70
NH4	5	6.52	0.00	9.87	22.73	2.77	8.02	9.97
CL	5	28.77	0.00	45.57	80.93	15.79	31.15	38.73
F	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	5	9.12	0.00	14.61	45.33	3.23	17.57	21.84
SU4	5	29.94	0.00	45.30	119.09	14.99	42.88	53.31
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	27.11	0.00	40.73	110.76	13.13	40.24	50.02
SAN	5	67.83	0.00	105.49	245.35	37.23	87.46	108.74
SCA	5	79.17	0.00	124.44	270.64	39.75	99.06	123.16
A/C	5	0.86	0.00	0.85	1.02	0.75	0.11	0.14
CL/NA	5	0.92	0.00	0.91	1.82	0.78	0.43	0.53
NA/MG	5	4.19	0.00	3.96	5.39	2.64	1.00	1.24
SS	5	30.33	0.00	49.03	89.27	11.24	35.91	44.65
NC	5	22.62	0.00	41.38	83.04	4.52	34.28	42.61
COND/P	5	0.93	0.00	0.95	1.08	0.73	0.14	0.18
AMTH	5	0.00	1500.52	250.09	683.73	7.49	277.87	291.54
AMTHNV	5	0.00	1457.88	226.31	652.96	5.55	263.34	276.30
AMTNA	5	0.00	1780.57	356.11	644.52	11.10	234.82	291.93
AMTK	5	0.00	28.32	5.66	15.56	0.00	6.55	8.14
AMTCA	5	0.00	409.55	81.91	157.03	12.87	61.29	76.20
AMTMG	5	0.00	424.45	84.89	131.84	39.28	42.83	53.54
AMTNH4	5	0.00	371.30	74.26	138.51	19.65	49.50	61.54
AMTCL	5	0.00	1637.81	327.56	504.78	128.01	169.12	210.26
AMTF	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	5	0.00	519.36	103.87	276.20	21.50	102.75	127.74
AMTSO4	5	0.00	1704.58	340.92	725.71	78.00	247.95	308.26
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	1543.55	308.71	674.96	64.82	233.15	289.87
AMTSS	5	0.00	1726.80	345.36	556.77	141.19	203.76	253.33
AMTNC	5	0.00	1287.41	257.48	421.52	58.28	152.60	189.72

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 148.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 02/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LDW	ST. DEV	95% C.L.
PH	9	4.40	0.00	4.25	4.49	3.99	0.16	0.12
COND	9	19.95	0.00	33.17	70.00	14.80	19.93	15.34
CMPPT	9	0.00	11.56	1.28	3.81	0.02	1.57	1.21
H	9	40.06	0.00	56.21	102.33	32.36	22.16	17.06
HNV	9	33.77	0.00	43.17	66.07	30.20	14.52	11.18
NA	9	24.41	0.00	20.70	51.31	9.13	17.27	21.47
K	9	0.65	0.00	0.92	1.53	0.51	0.56	0.70
CA	9	4.00	0.00	4.39	10.98	0.00	4.51	5.61
MG	9	6.20	0.00	5.26	12.26	2.63	3.96	4.92
NH4	9	6.64	0.00	5.99	12.75	2.77	4.06	5.02
CL	9	27.45	0.00	23.18	56.40	11.28	18.82	23.99
F	9	0.54	0.00	0.53	2.63	0.00	1.18	1.46
NO3	9	6.50	0.00	9.58	20.00	0.00	7.27	9.03
SU4	9	34.88	0.00	34.48	42.27	27.27	7.30	9.07
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	9	32.10	0.00	32.17	40.60	25.97	6.24	7.76
SAN	9	69.36	0.00	67.77	105.44	43.14	25.49	31.70
SCA	9	81.26	0.00	81.28	104.58	59.02	21.01	26.12
A/C	9	0.85	0.00	0.83	1.01	0.71	0.12	0.15
CL/NA	9	1.12	0.00	1.12	1.36	0.83	0.20	0.24
NA/MG	9	3.94	0.00	3.93	4.63	3.19	0.57	0.71
SS	9	29.80	0.00	24.79	62.21	11.80	21.09	26.21
NC	9	12.11	0.00	12.47	24.54	7.41	6.92	8.60
COND/P	9	0.91	0.00	0.93	0.97	0.80	0.07	0.09
AMTH	9	0.00	4630.89	514.54	1517.78	13.73	56.90	436.51
AMTHNV	9	0.00	3903.38	433.71	1205.62	10.66	475.26	365.95
AMINA	9	0.00	2772.01	554.40	1870.28	101.09	743.83	924.78
AMTK	9	0.00	74.18	14.84	19.47	11.13	3.92	4.87
AMTCA	9	0.00	454.32	90.86	253.87	0.00	97.17	120.81
AMTMG	9	0.00	703.74	140.75	446.80	27.49	174.91	217.45
AMTNH4	9	0.00	754.47	150.89	294.87	23.82	124.16	154.36
AMTCL	9	0.00	3117.09	623.42	2055.96	109.06	813.54	1011.44
AMTF	9	0.00	60.85	12.17	60.85	0.00	27.21	33.83
AMTNO3	9	0.00	737.94	147.59	261.10	0.00	110.14	136.93
AMTSU4	9	0.00	3961.02	792.20	1540.68	234.39	570.38	709.13
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	9	0.00	3645.80	729.16	1329.12	223.17	502.97	625.32
AMTSS	9	0.00	3384.08	676.82	2267.72	120.29	902.60	1122.17
AMTNC	9	0.00	1374.64	274.93	567.41	75.76	206.06	256.18

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RAINUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 149.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 03/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	5	4.36	0.00	3.75	4.76	3.09	0.73	0.90
COND	5	21.23	0.00	77.98	340.00	8.20	146.52	182.16
CMPPT	5	0.00	5.93	1.19	2.42	0.18	0.86	1.07
H	5	43.68	0.00	178.55	812.83	17.38	354.59	440.84
HNV	5	47.83	0.00	214.18	1000.00	16.22	439.29	546.15
NA	5	14.88	0.00	28.78	74.35	4.78	28.84	35.86
K	5	0.40	0.00	0.92	2.30	0.00	1.06	1.32
CA	5	4.52	0.00	7.98	15.47	1.00	6.24	7.76
MG	5	4.30	0.00	7.96	20.65	1.40	7.76	9.64
NH4	5	5.27	0.00	7.87	22.18	3.33	8.06	10.02
CL	5	16.53	0.00	34.35	104.34	5.36	40.65	50.53
F	5	0.57	0.00	0.84	2.11	0.00	0.96	1.19
NO3	5	33.53	0.00	169.14	807.15	6.13	356.67	443.43
SO4	5	17.26	0.00	24.65	51.63	13.32	15.73	19.56
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	15.71	0.00	21.53	42.72	12.44	12.32	15.31
SAN	5	67.88	0.00	228.98	964.70	25.65	411.63	511.76
SCA	5	73.05	0.00	232.07	947.77	30.54	400.80	498.29
A/C	5	0.93	0.00	0.99	1.02	0.76	0.10	0.13
CL/NA	5	1.11	0.00	1.19	1.49	0.89	0.28	0.35
NA/MG	5	3.46	0.00	3.61	4.07	2.72	0.48	0.60
SS	5	16.59	0.00	33.56	96.06	5.91	37.12	46.14
NC	5	12.78	0.00	19.96	38.88	7.10	13.50	16.78
COND/P	5	0.99	0.00	1.00	1.16	0.84	0.12	0.15
AMTH	5	0.00	2591.51	518.30	1498.66	162.26	557.11	692.63
AMTHNV	5	0.00	2838.32	567.66	1843.75	154.96	720.72	896.03
AMTNA	5	0.00	882.19	176.44	333.23	77.35	95.39	118.59
AMTK	5	0.00	23.80	4.76	15.22	0.00	6.23	7.74
AMTCA	5	0.00	267.69	53.54	93.48	24.17	34.68	43.11
AMTMG	5	0.00	254.62	50.92	81.96	22.62	23.30	28.97
AMTNH4	5	0.00	312.50	62.50	134.27	28.33	45.51	56.58
AMTCL	5	0.00	980.04	196.01	295.37	86.65	86.62	107.69
AMTF	5	0.00	33.58	6.72	17.43	0.00	8.17	10.15
AMTNU3	5	0.00	1990.03	398.01	1488.17	83.79	610.92	759.53
AMTSO4	5	0.00	1022.73	204.55	322.71	95.20	83.41	103.70
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	931.19	186.24	301.25	78.76	82.22	102.22
AMTSS	5	0.00	983.40	196.68	325.80	95.57	87.07	108.25
AMTNC	5	0.00	757.40	151.48	226.42	71.68	58.97	73.31

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N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIOS  
 UEQ/SQ.M=MICKROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 150.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SIE 14 DURING 04/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	1	4.64	0.00	4.64	4.64	4.64	0.00	0.00
COND	1	25.00	0.00	25.00	25.00	25.00	0.00	0.00
CMPPT	1	0.00	0.23	0.23	0.23	0.23	0.00	0.00
H	1	22.91	0.00	22.91	22.91	22.91	0.00	0.00
HNV	1	1.95	0.00	1.95	1.95	1.95	0.00	0.00
NA	1	41.31	0.00	41.31	41.31	41.31	0.00	0.00
K	1	4.59	0.00	4.59	4.59	4.59	0.00	0.00
CA	1	29.94	0.00	29.94	29.94	29.94	0.00	0.00
MG	1	11.10	0.00	11.11	11.11	11.11	0.00	0.00
NH4	1	47.12	0.00	47.12	47.12	47.12	0.00	0.00
CL	1	42.02	0.00	42.02	42.02	42.02	0.00	0.00
F	1	3.68	0.00	3.68	3.68	3.68	0.00	0.00
NO3	1	19.03	0.00	19.03	19.03	19.03	0.00	0.00
SO4	1	53.92	0.00	53.92	53.92	53.92	0.00	0.00
PO4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	1	49.60	0.00	49.60	49.60	49.60	0.00	0.00
SAN	1	118.66	0.00	118.66	118.66	118.66	0.00	0.00
SCA	1	156.98	0.00	156.98	156.98	156.98	0.00	0.00
A/C	1	0.76	0.00	0.76	0.76	0.76	0.00	0.00
CL/NA	1	1.02	0.00	1.02	1.02	1.02	0.00	0.00
NA/MG	1	3.72	0.00	3.72	3.72	3.72	0.00	0.00
SS	1	46.35	0.00	46.35	46.35	46.35	0.00	0.00
NC	1	87.72	0.00	87.72	87.72	87.72	0.00	0.00
COND/P	1	0.99	0.00	0.99	0.99	0.99	0.00	0.00
AMTH	1	0.00	53.69	53.69	53.69	53.69	0.00	0.00
AMTHNV	1	0.00	4.57	4.57	4.57	4.57	0.00	0.00
AMTNA	1	0.00	96.81	96.81	96.81	96.81	0.00	0.00
AMTK	1	0.00	10.77	10.77	10.77	10.77	0.00	0.00
AMTCA	1	0.00	70.17	70.17	70.17	70.17	0.00	0.00
AMTMG	1	0.00	26.03	26.03	26.03	26.03	0.00	0.00
AMTNH4	1	0.00	110.45	110.45	110.45	110.45	0.00	0.00
AMTCL	1	0.00	98.48	98.48	98.48	98.48	0.00	0.00
AMTF	1	0.00	8.63	8.63	8.63	8.63	0.00	0.00
AMTNO3	1	0.00	44.61	44.61	44.61	44.61	0.00	0.00
AMTSO4	1	0.00	126.38	126.38	126.38	126.38	0.00	0.00
AMTPO4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	1	0.00	116.25	116.25	116.25	116.25	0.00	0.00
AMTSS	1	0.00	108.62	108.62	108.62	108.62	0.00	0.00
AMTNC	1	0.00	205.61	205.60	205.61	205.61	0.00	0.00

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N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 151.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 05/78.

	N	VOLWTA V	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95XC. L.
PH	6	4.46	0.00	4.60	7.00	4.41	1.02	1.07
COND	6	25.30	0.00	40.93	70.00	20.00	21.49	22.55
CMPPT	6	0.00	7.24	1.21	3.27	0.03	1.38	1.45
H	6	34.52	0.00	25.23	38.90	0.10	15.30	16.05
HNV	6	29.83	0.00	25.66	34.67	0.00	13.17	13.82
NA	4	20.62	0.00	21.52	26.09	18.70	3.19	3.06
K	4	1.68	0.00	2.43	5.62	1.02	2.18	3.47
CA	4	9.64	0.00	11.85	16.97	7.48	3.98	6.33
MG	4	5.07	0.00	5.68	8.14	4.61	1.66	2.64
NH4	4	29.71	0.00	43.13	96.47	17.19	37.30	59.30
CL	4	23.01	0.00	25.38	38.92	16.36	9.71	15.43
F	4	1.16	0.00	1.94	2.63	0.00	1.10	1.74
NO3	4	18.61	0.00	27.94	61.94	15.48	22.70	36.10
SO4	4	36.10	0.00	39.71	51.84	33.31	8.32	13.23
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	33.81	0.00	37.34	48.71	30.81	7.87	12.51
SAN	4	78.88	0.00	94.55	155.33	67.44	40.95	63.11
SCA	4	101.80	0.00	118.21	188.76	85.91	48.44	77.02
A/C	4	0.77	0.00	0.80	0.92	0.68	0.10	0.16
CL/NA	4	1.12	0.00	1.18	1.49	0.87	0.26	0.42
NA/MG	4	4.06	0.00	7.79	4.28	3.20	0.47	0.75
SS	4	24.68	0.00	5.51	33.71	18.04	6.58	10.46
NC	4	42.04	0.00	58.10	119.57	31.67	41.37	65.76
COND/P	4	1.09	0.00	1.13	1.31	1.00	0.14	0.22
AMTH	6	0.00	2499.64	416.61	1272.91	0.10	514.25	539.55
AMTHNV	6	0.00	2160.32	360.05	1134.48	0.00	456.58	479.04
AMTNA	4	0.00	1466.89	366.72	682.85	75.00	283.72	451.11
AMTK	4	0.00	119.27	29.82	66.82	10.21	25.53	40.59
AMTCA	4	0.00	686.13	171.53	267.71	48.78	103.10	163.93
AMTMG	4	0.00	360.93	90.23	169.56	23.41	67.60	107.49
AMTNH4	4	0.00	2113.78	528.44	1197.19	171.86	462.30	735.05
AMTCL	4	0.00	1636.93	409.23	821.17	111.88	334.49	531.84
AMTF	4	0.00	82.34	20.59	40.34	0.00	19.79	31.47
AMTNU3	4	0.00	1324.00	331.00	517.20	154.85	191.05	303.77
AMTSO4	4	0.00	2568.34	642.09	1089.93	149.05	460.15	731.64
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	2405.05	601.26	1008.05	140.05	427.02	678.96
AMTSS	4	0.00	1755.53	438.88	882.25	96.90	367.43	584.21
AMTNC	4	0.00	2491.47	747.87	1479.08	343.78	533.10	847.63

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOUS  
 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 152.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	9	4.39	0.00	4.26	4.77	3.86	0.31	0.24
COND	9	19.08	0.00	28.07	65.80	10.00	18.76	14.45
CMPT	9	0.00	24.40	2.71	9.19	0.57	2.74	2.11
H	9	40.76	0.00	55.32	138.04	16.98	40.98	31.56
HNV	9	37.46	0.00	49.68	120.23	13.18	36.16	27.84
NA	9	13.36	0.00	21.60	48.26	6.96	15.71	12.10
K	9	0.76	0.00	1.05	2.04	0.51	0.55	0.42
CA	9	5.38	0.00	7.21	20.96	2.99	5.66	4.36
MG	9	3.23	0.00	5.32	11.52	1.65	3.67	2.83
NH4	9	7.21	0.00	8.69	33.82	0.55	9.98	7.68
CL	9	14.31	0.00	24.91	53.30	8.46	17.61	13.56
F	9	0.49	0.00	1.23	1.05	0.00	0.38	0.29
NO3	9	13.67	0.00	17.56	49.84	4.03	14.55	11.20
SO4	9	30.89	0.00	43.65	99.94	15.41	27.95	21.52
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	29.49	0.00	41.26	97.64	12.14	27.69	21.32
SAW	9	59.36	0.00	86.36	173.43	29.59	47.65	36.69
SCA	9	70.71	0.00	99.18	219.99	34.22	56.92	43.83
A/C	9	0.84	0.00	0.87	0.97	0.74	0.08	0.06
CL/NA	9	1.07	0.00	1.15	2.00	0.86	0.33	0.26
NA/MG	9	4.14	0.00	4.06	4.63	3.19	0.43	0.33
SS	9	15.08	0.00	25.64	58.79	8.99	19.16	14.75
NC	9	14.87	0.00	18.22	57.24	5.21	15.41	11.87
COND/P	9	0.92	0.00	0.98	1.09	0.80	0.09	0.07
AMTH	9	0.00	9947.14	1105.24	3185.64	161.33	916.18	705.46
AMTHNV	9	0.00	9141.93	1015.77	2973.02	125.23	867.77	668.18
AMTNA	9	0.00	3261.22	362.36	798.94	169.57	205.13	157.95
AMTK	9	0.00	185.83	20.65	46.91	7.66	13.99	10.77
AMTCA	9	0.00	1312.10	145.79	366.76	28.44	111.77	86.07
AMTMG	9	0.00	788.03	87.56	188.94	43.60	46.86	36.08
AMTNH4	9	0.00	1760.63	195.63	509.35	18.09	194.51	149.77
AMTCL	9	0.00	3492.19	388.02	777.26	213.17	169.74	130.70
AMTF	9	0.00	118.38	13.15	96.71	0.00	31.82	24.50
AMTNO3	9	0.00	3336.49	370.72	933.63	38.31	311.31	239.71
AMTSO4	9	0.00	7539.38	837.71	1951.09	164.17	560.41	431.51
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	9	0.00	7196.48	799.61	1871.11	115.37	550.80	424.12
AMTSS	9	0.00	3679.49	408.83	857.32	219.09	201.12	154.86
AMTNC	9	0.00	3628.34	403.15	1053.60	81.02	358.71	276.21

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 153.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 07/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	13	4.21	0.00	4.27	4.93	0.04	0.27	0.16
COND	13	30.42	0.00	30.35	50.20	8.80	12.15	7.24
CMPPT	13	0.00	29.50	2.27	6.88	0.02	2.29	1.37
H	13	62.17	0.00	53.29	91.20	11.75	25.46	15.18
HNV	13	59.09	0.00	49.48	87.10	10.23	25.77	15.36
NA	12	12.13	0.00	18.41	64.78	6.96	15.61	9.99
K	12	0.64	0.00	2.00	15.83	0.00	4.40	2.73
CA	12	4.33	0.00	6.49	17.96	0.00	4.93	3.06
MG	12	2.81	0.00	4.30	15.05	1.11	3.79	2.55
NH4	12	4.90	0.00	6.61	33.26	1.11	8.81	5.47
CL	12	12.83	0.00	19.69	74.45	8.18	18.50	11.48
F	12	0.68	0.00	0.66	3.16	0.00	0.93	0.58
NO3	12	17.78	0.00	18.15	40.00	7.00	9.19	5.51
SO4	12	47.38	0.00	43.34	79.95	7.50	20.70	12.85
PO4	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	12	46.07	0.00	41.34	72.29	6.60	19.93	12.07
SAN	12	78.67	0.00	81.84	176.33	33.50	47.90	23.22
SCA	12	87.01	0.00	94.54	177.24	34.46	38.20	23.71
A/C	12	0.90	0.00	0.87	0.99	0.00	0.12	0.07
CL/NA	12	1.06	0.00	1.07	1.27	0.00	0.13	0.08
NA/MG	12	4.32	0.00	4.28	6.17	3.12	0.92	0.57
SS	12	14.07	0.00	21.46	82.12	8.99	20.24	12.57
NC	12	10.74	0.00	16.34	57.81	3.64	14.78	9.18
COND/P	12	1.04	0.00	1.01	1.08	0.00	0.05	0.03
AMTH	13	0.00	18340.39	1410.80	5529.06	22.57	1762.55	1051.01
AMTHNV	13	0.00	17432.04	1340.93	5280.21	22.29	1700.19	1013.83
AMTNA	12	0.00	3576.79	298.07	568.60	77.45	180.18	111.83
AMTK	12	0.00	187.39	15.62	52.43	0.00	13.42	8.33
AMTCA	12	0.00	1275.66	106.31	274.76	20.27	86.24	53.53
AMTMG	12	0.00	828.03	69.00	149.46	18.51	45.05	27.96
AMTNH4	12	0.00	1443.85	120.32	610.53	18.19	170.96	106.11
AMTCL	12	0.00	3783.41	315.28	679.33	67.42	201.53	125.08
AMTF	12	0.00	200.34	16.69	72.45	0.00	25.25	15.67
AMTNO3	12	0.00	5241.74	436.81	1447.26	34.20	446.06	276.85
AMTSO4	12	0.00	13966.34	1163.86	4076.95	76.12	1372.31	851.73
AMTPU4	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	12	0.00	13580.17	1131.68	4026.38	66.99	1356.45	841.88
AMTSS	12	0.00	4146.76	345.56	734.63	74.36	220.68	136.96
AMTNC	12	0.00	3164.97	263.75	867.06	64.05	244.88	151.99

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N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 154.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.34	0.00	4.32	4.63	4.04	0.26	0.33
COND	5	23.07	0.00	30.76	43.20	17.80	10.59	13.16
CMPT	5	0.00	7.95	1.59	5.59	0.04	2.28	2.83
H	5	45.88	0.00	47.79	91.20	23.44	29.51	36.69
HNV	5	41.12	0.00	42.96	87.10	19.05	27.74	34.49
NA	5	12.03	0.00	44.70	116.96	4.35	46.18	57.41
K	5	0.91	0.00	4.49	16.59	0.51	6.80	8.46
CA	5	5.11	0.00	8.88	19.96	4.49	6.36	7.91
MG	5	3.36	0.00	11.06	28.79	1.56	11.11	13.82
NH4	5	2.27	0.00	8.76	29.38	1.11	11.66	14.50
CL	5	14.83	0.00	51.04	120.98	5.36	48.76	60.62
F	5	0.04	0.00	0.11	0.53	0.00	0.24	0.29
NO3	5	13.94	0.00	18.42	27.90	11.45	7.22	8.97
SO4	5	36.38	0.00	43.72	70.37	25.61	18.17	22.59
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	34.94	0.00	38.68	68.23	17.94	18.72	23.27
SAN	5	65.18	0.00	113.29	196.58	46.65	54.24	67.44
SCA	5	69.56	0.00	125.68	235.13	48.33	68.05	84.60
A/C	5	0.94	0.00	0.90	1.05	0.84	0.09	0.11
CL/NA	5	1.23	0.00	1.14	1.29	1.03	0.10	0.12
NA/MG	5	3.58	0.00	4.04	4.28	2.78	0.65	0.81
SS	5	15.45	0.00	54.21	133.44	5.62	52.89	65.75
NC	5	8.23	0.00	23.67	78.25	6.40	30.68	38.14
COND/P	5	1.04	0.00	1.04	1.11	0.94	0.06	0.08
AMTH	5	0.00	3646.51	729.30	2030.97	9.16	844.85	1050.36
AMTHNV	5	0.00	3268.57	653.71	1768.90	7.44	746.22	927.74
AMTNA	5	0.00	955.87	191.17	331.56	45.69	111.35	138.44
AMTK	5	0.00	72.70	14.54	28.56	6.48	8.61	10.71
AMTCA	5	0.00	406.01	81.20	251.22	7.80	97.53	121.25
AMTMG	5	0.00	267.08	53.42	87.43	11.25	32.73	40.69
AMTNH4	5	0.00	180.74	36.15	62.02	11.48	24.38	30.31
AMTCL	5	0.00	1178.62	235.72	427.16	47.26	145.49	180.88
AMTF	5	0.00	3.04	0.61	3.04	0.00	1.36	1.69
AMTNO3	5	0.00	1107.96	221.59	667.68	9.20	261.81	325.49
AMTSO4	5	0.00	2891.27	578.25	1642.11	20.33	677.33	842.09
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	2777.27	555.45	1612.95	15.47	672.62	836.24
AMTSS	5	0.00	1228.08	245.62	428.38	52.13	146.14	181.69
AMTNC	5	0.00	654.33	130.87	358.21	30.57	134.65	167.40

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 155.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 09/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	3	4.08	0.00	4.12	4.60	3.97	0.35	0.87
COND	3	36.12	0.00	42.93	72.00	17.40	27.47	68.20
CMPT	3	0.00	5.41	1.80	4.31	0.12	2.21	5.49
HI	3	82.96	0.00	75.92	107.15	25.12	44.38	110.18
HN	3	80.20	0.00	67.43	93.32	21.88	39.57	98.25
NA	3	18.93	0.00	89.42	218.70	8.26	113.17	280.96
K	3	0.00	0.00	7.98	7.40	0.51	3.84	9.54
CA	3	4.55	0.00	2.82	15.47	3.49	6.65	16.50
MG	3	4.86	0.00	2.98	56.92	2.30	29.63	73.56
NH4	3	11.39	0.00	12.38	22.18	1.66	10.29	25.54
CL	3	23.23	0.00	100.00	240.26	11.28	122.76	304.76
F	3	0.00	0.00	0.53	1.05	0.00	0.53	1.31
NO3	3	19.93	0.00	24.52	41.45	10.65	15.63	38.81
SO4	3	54.14	0.00	60.93	105.35	16.03	44.66	110.88
PO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	3	51.90	0.00	50.71	80.63	11.08	35.78	88.82
SAN	3	98.16	0.00	186.35	388.09	75.74	174.99	434.43
SCL	3	123.45	0.00	211.50	427.83	82.31	188.52	468.02
A/C	3	0.00	0.00	0.88	0.92	0.75	0.09	0.21
CL/NA	3	1.23	0.00	1.12	1.12	1.10	0.14	0.34
NA/MG	3	3.90	0.00	3.89	4.41	3.59	0.44	0.84
SS	3	24.07	0.00	109.68	265.01	10.67	136.40	338.13
NC	3	16.42	0.00	25.90	55.67	3.82	26.76	66.45
COND/P	3	0.94	0.00	0.92	0.99	0.85	0.07	0.17
AMTH	3	0.00	4491.60	1497.20	4115.42	128.72	2268.22	5631.09
AMTHN	3	0.00	4341.89	1447.30	4021.74	104.79	2230.22	5536.76
AMTNA	3	0.00	1025.74	341.91	406.61	263.13	72.77	180.66
AMTK	3	0.00	40.96	13.65	22.00	8.91	7.25	18.01
AMTCA	3	0.00	246.53	82.18	193.53	18.61	96.76	240.22
AMTMG	3	0.00	263.29	87.76	99.26	68.49	16.80	41.70
AMTNH4	3	0.00	616.44	205.48	573.39	14.37	318.66	791.11
AMTCL	3	0.00	1258.18	419.39	486.10	289.07	112.88	280.22
AMTF	3	0.00	45.99	15.33	45.36	0.00	26.01	64.57
AMTNO3	3	0.00	1079.15	359.72	924.49	49.87	489.87	1216.16
AMTSO4	3	0.00	2931.33	977.11	2646.77	126.75	1446.06	3589.99
AMTPO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	3	0.00	2810.15	936.72	2604.09	97.00	1444.00	3584.88
AMTSS	3	0.00	1304.14	434.71	525.33	318.84	105.54	262.01
AMTNC	3	0.00	888.83	296.28	784.23	37.63	422.83	1049.73

N=NUMBER OF SAMPLES  
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 COND,CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-156

Table 156.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 10/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.95	0.00	3.92	5.22	0.00	2.07	2.58
COND	5	15.24	0.00	16.54	47.00	0.00	20.67	25.70
CMPPT	5	0.00	8.56	1.71	6.66	0.01	2.84	3.53
H	5	11.28	0.00	120.43	524.81	0.00	226.79	281.96
HNV	5	9.37	0.00	93.22	398.11	0.00	171.20	212.85
NA	5	06.96	0.00	100.73	227.84	29.13	110.37	274.01
K	5	1.50	0.00	2.64	4.34	0.77	1.79	4.45
CA	5	5.49	0.00	10.31	14.47	2.99	6.36	15.78
MG	5	15.06	0.00	22.43	48.86	7.07	22.99	57.08
NH4	5	1.02	0.00	4.43	11.64	0.55	6.25	15.51
CL	5	09.70	0.00	105.09	232.37	31.30	110.69	274.80
F	5	0.45	0.00	1.23	2.11	0.00	1.10	2.72
NO3	5	4.65	0.00	15.27	36.45	2.90	18.43	45.76
SO4	5	14.63	0.00	25.54	40.18	7.91	16.34	40.57
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	7.46	0.00	14.73	23.21	4.69	9.36	23.23
SAN	5	09.44	0.00	147.13	281.11	42.12	122.10	303.13
SCA	100	08.83	0.00	166.33	321.16	46.55	140.63	349.12
A/C	5	0.89	0.00	0.88	0.90	0.87	0.02	0.04
CL/NA	5	1.04	0.00	1.04	1.14	1.02	0.06	0.15
NA/MG	5	4.45	0.00	4.49	4.66	3.98	0.36	0.89
SS	5	76.88	0.00	115.92	256.30	34.53	122.09	303.11
NC	5	13.13	0.00	24.63	40.32	5.99	17.35	43.07
COND/P	5	0.97	0.00	0.98	1.04	0.95	0.05	0.12
AMTH	5	0.00	963.84	192.77	401.08	0.00	192.26	239.02
AMTHNV	5	0.00	800.58	160.12	366.90	0.00	161.53	200.82
AMINA	5	0.00	5712.35	1904.12	3648.92	124.35	1762.54	4375.71
AMIK	5	0.00	128.21	42.74	69.51	7.72	31.71	78.72
AMTCA	5	0.00	468.10	156.03	231.76	37.05	104.31	258.97
AMTMG	5	0.00	1284.67	428.22	782.56	31.22	377.49	937.15
AMTNH4	5	0.00	86.68	28.89	36.90	17.76	9.95	24.69
AMTCL	5	0.00	5446.97	1982.32	3721.52	141.92	1791.95	4488.70
AMTF	5	0.00	38.06	12.69	33.72	0.00	18.34	45.53
AMTNO3	5	0.00	396.84	132.28	193.26	100.25	52.83	131.16
AMTPO4	5	0.00	1248.60	416.20	643.55	78.44	298.30	740.55
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	5	0.00	636.66	212.22	312.22	63.84	131.07	325.40
AMTSS	5	0.00	6559.51	2186.50	4104.84	156.53	1976.52	4906.91
AMTNC	3	0.00	1120.49	373.50	645.68	75.83	285.78	709.48

N=NUMBER OF SAMPLES  
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 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FJK  
 THE MONTH

A-157

Table 157.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	4	4.70	0.00	4.47	5.09	4.23	0.44	0.69
COND	4	32.28	0.00	29.75	44.00	8.00	15.33	24.37
CMPPT	4	0.00	3.22	0.81	2.34	0.13	1.03	1.64
H	4	19.91	0.00	34.18	58.88	8.13	27.10	43.09
HNV	4	18.79	0.00	32.31	54.95	6.76	26.25	41.74
NA	4	164.14	0.00	108.16	199.14	13.91	99.36	157.99
K	4	3.98	0.00	3.45	5.87	1.79	1.92	3.05
CA	4	9.71	0.00	10.60	13.97	4.99	4.30	6.84
MG	4	38.01	0.00	27.00	54.87	3.29	25.46	40.48
NH4	4	0.51	0.00	0.83	2.77	0.00	1.32	2.10
CL	4	164.73	0.00	116.54	236.32	15.79	109.89	174.73
F	4	1.83	0.00	3.95	14.74	0.00	7.21	11.46
NO3	4	8.30	0.00	19.72	45.81	4.19	18.49	29.40
SO4	4	34.53	0.00	38.57	75.99	9.99	27.53	43.77
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	17.63	0.00	26.69	52.12	8.37	20.31	32.30
SAN	4	209.39	0.00	178.77	346.40	35.30	134.57	213.97
SCA	4	236.26	0.00	184.22	330.08	32.37	134.81	214.34
A/C	4	0.89	0.00	0.97	1.09	0.84	0.11	0.17
CL/NA	4	1.00	0.00	1.08	1.19	0.97	0.10	0.16
NA/MG	4	4.32	0.00	4.01	4.47	3.63	0.36	0.57
SS	4	181.29	0.00	127.70	257.29	17.42	119.99	190.79
NC	4	35.06	0.00	22.34	43.15	6.82	15.36	24.42
COND/P	4	0.99	0.00	0.98	1.17	0.73	0.18	0.29
AMTH	4	0.00	641.40	160.35	316.16	29.21	131.72	209.43
AMTHNV	4	0.00	605.29	151.32	295.06	24.30	125.46	199.47
AMTNA	4	0.00	5290.65	1322.66	4425.73	40.04	2095.39	3331.67
AMTK	4	0.00	128.33	32.08	95.74	2.32	43.33	68.90
AMTCA	4	0.00	312.84	78.21	222.21	17.93	97.53	155.08
AMTMG	4	0.00	1225.12	306.28	989.05	9.92	465.17	739.63
AMTNH4	4	0.00	16.59	4.15	12.99	0.00	6.14	9.76
AMTCL	4	0.00	5309.57	1327.39	4289.48	40.23	2017.32	3207.54
AMTF	4	0.00	58.93	14.73	57.56	0.00	28.56	45.41
AMTNU3	4	0.00	267.51	66.88	98.29	34.20	27.00	42.93
AMTSU4	4	0.00	1112.78	278.19	731.95	35.91	325.53	517.59
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	4	0.00	568.14	142.04	290.57	30.08	126.50	201.14
AMTSS	4	0.00	5843.30	1460.82	4731.30	44.37	2225.99	3539.33
AMTNC	4	0.00	1130.24	282.56	1011.42	24.50	486.24	773.11

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-58

Table 158.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 12/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.96	0.00	4.71	5.06	4.40	0.28	0.44
COND	4	26.13	0.00	18.87	31.50	9.00	10.73	17.06
CMPPT	4	0.00	8.52	2.13	6.23	0.23	2.76	4.39
H	4	10.99	0.00	19.39	39.81	8.71	13.93	22.15
HNV	4	9.58	0.00	16.74	33.11	7.41	11.40	18.13
NA	4	152.95	0.00	77.07	200.44	13.91	86.21	137.07
K	4	3.56	0.00	2.81	4.85	0.77	2.08	3.31
CA	4	9.11	0.00	13.10	32.43	3.99	13.08	20.80
MG	4	32.23	0.00	18.06	41.87	3.21	18.02	28.65
NH4	4	3.43	0.00	10.67	25.50	1.11	10.41	16.56
CL	4	160.46	0.00	83.19	209.24	15.51	88.86	141.28
F	4	0.95	0.00	4.87	18.42	0.00	9.04	14.37
NO3	4	5.86	0.00	14.40	39.20	4.19	16.60	26.40
SO4	4	26.77	0.00	29.82	55.17	17.70	17.68	28.11
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	10.27	0.00	21.29	46.79	7.20	17.45	27.75
SAN	4	194.51	0.00	132.56	243.32	39.50	101.96	162.12
SCA	4	212.27	0.00	141.09	265.95	43.38	108.22	172.07
A/C	4	0.92	0.00	0.94	0.99	0.90	0.04	0.06
CL/NA	4	1.05	0.00	1.08	1.22	1.04	0.07	0.11
NA/MG	4	4.74	0.00	4.27	4.79	3.26	0.65	1.03
SS	4	176.83	0.00	91.47	230.80	17.11	98.25	156.25
NC	4	24.46	0.00	30.23	67.20	13.09	25.38	40.35
CUND/P	4	0.90	0.00	0.85	0.95	0.64	0.14	0.23
AMTH	4	0.00	436.45	234.24	542.99	90.82	209.68	333.40
AMTHNV	4	0.00	816.86	204.21	462.16	75.54	177.92	282.89
AMTNA	4	0.00	13039.69	3259.92	12496.36	123.92	6157.86	9791.00
AMTK	4	0.00	303.42	75.86	270.58	6.82	129.86	206.47
AMTCA	4	0.00	776.65	194.16	591.08	55.55	265.27	421.77
AMTMG	4	0.00	2748.21	687.05	2610.35	28.57	1282.26	2038.80
AMTNH4	4	0.00	292.32	73.08	90.96	58.18	13.64	21.69
AMICL	4	0.00	13679.75	3419.94	13045.06	138.14	6417.16	10203.28
AMTF	4	0.00	81.00	20.25	42.02	0.00	20.33	32.33
AMTNO3	4	0.00	499.52	124.88	261.46	56.03	92.54	147.14
AMTSO4	4	0.00	2282.10	570.52	1791.24	125.86	814.50	1295.05
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	875.67	218.97	448.90	106.73	155.94	247.94
AMISS	4	0.00	15075.28	3768.82	14388.70	152.36	7080.30	11257.68
AMTNC	4	0.00	2085.01	521.25	1648.80	116.57	751.49	1195.67

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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 159.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.73	0.00	4.40	5.07	3.97	0.42	0.39
COND	7	13.17	0.00	43.39	170.00	7.00	58.51	54.18
CMPPT	7	0.00	17.15	2.45	12.20	0.23	34.33	0.01
H	7	18.64	0.00	40.17	107.15	8.51	35.69	33.05
HNv	7	17.46	0.00	34.59	97.72	6.31	31.79	29.43
NA	7	37.53	0.00	175.53	981.34	18.26	357.46	331.02
K	7	1.00	0.00	3.87	18.38	0.51	6.45	5.97
CA	7	4.51	0.00	19.67	64.87	2.00	25.15	23.29
MG	7	8.70	0.00	40.41	222.93	4.44	80.89	74.90
NH4	7	2.24	0.00	8.87	31.60	2.00	10.78	9.99
CL	7	39.85	0.00	187.17	1043.40	20.30	380.05	351.93
F	7	0.04	0.00	0.23	1.05	0.00	0.41	0.38
NO3	7	4.72	0.00	15.74	48.07	2.58	17.44	16.15
SO4	7	19.39	0.00	54.96	153.86	9.16	55.92	51.78
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	15.29	0.00	35.71	106.49	5.88	34.82	32.24
SAN	7	64.02	0.00	258.36	1229.41	36.00	434.14	402.02
SCA	7	72.61	0.00	288.53	1359.71	41.09	478.97	443.55
A/C	7	0.88	0.00	0.90	0.96	0.80	0.06	0.05
CL/NA	7	1.06	0.00	1.07	1.19	0.91	0.10	0.09
NA/MG	7	4.31	0.00	4.34	4.57	2.27	0.79	0.73
SS	7	43.95	0.00	206.39	1150.87	23.39	419.22	388.21
NC	7	10.03	0.00	41.96	147.18	3.48	53.56	49.60
COND/P	7	0.92	0.00	0.92	1.03	0.83	0.06	0.05
AMTH	7	0.00	3196.99	456.71	1763.89	104.45	591.29	547.54
AMTHNV	7	0.00	2994.68	427.81	1763.89	86.76	600.47	556.04
AMTNA	7	0.00	6440.77	920.11	2334.60	61.92	972.55	900.60
AMTK	7	0.00	170.72	24.39	62.31	6.92	20.54	19.02
AMTCA	7	0.00	774.59	110.66	243.57	41.17	75.13	69.57
AMTMG	7	0.00	1492.80	213.26	542.07	27.33	221.14	204.78
AMTNH4	7	0.00	383.65	54.81	107.15	7.62	37.99	35.18
AMTCL	7	0.00	6838.80	976.97	2477.72	73.62	1035.26	958.67
AMTF	7	0.00	6.36	0.91	3.57	0.00	1.57	1.45
AMTNO3	7	0.00	808.83	115.55	314.94	33.52	96.73	89.58
AMTSO4	7	0.00	3326.23	475.18	1600.63	125.96	508.58	470.95
AMTPU4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	2622.67	374.67	1345.68	80.88	444.35	411.48
AMTSS	7	0.00	7541.99	1077.43	2732.93	80.00	1142.07	1057.57
AMTNC	7	0.00	1720.54	245.79	517.28	47.92	156.21	144.65

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-16c

Table 160.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 02/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.53	0.00	4.33	4.76	4.23	0.26	0.41
COND	4	23.27	0.00	47.13	110.00	16.50	42.97	68.32
CMPTI	4	0.00	3.44	0.86	2.39	0.10	1.04	1.65
H	4	29.72	0.00	47.19	58.88	17.38	19.94	31.71
HNV	4	26.71	0.00	40.32	54.95	16.98	16.32	25.95
NA	4	58.21	0.00	166.64	515.67	35.65	233.39	371.08
K	4	1.81	0.00	4.15	10.98	1.28	4.58	7.29
CA	4	14.33	0.00	18.71	37.43	9.98	12.61	20.06
MG	4	15.50	0.00	39.07	117.88	8.47	52.68	83.76
NH4	4	12.02	0.00	14.55	18.85	9.98	3.63	5.78
CL	4	65.87	0.00	169.15	579.51	41.45	261.30	415.46
F	4	1.90	0.00	3.55	7.37	0.53	2.83	4.50
NO3	4	14.65	0.00	21.45	41.13	12.58	13.44	21.37
SO4	4	40.69	0.00	70.27	131.79	29.15	44.69	71.05
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	4	53.97	0.00	50.91	72.16	24.68	21.22	33.75
SAW	4	123.26	0.00	285.18	758.09	86.17	318.60	506.58
SCA	4	151.60	0.00	290.31	751.32	94.68	309.39	491.93
A/C	4	0.94	0.00	0.98	1.05	0.78	0.12	0.19
CL/NA	4	1.13	0.00	1.14	1.22	1.10	0.05	0.08
NA/MG	4	3.76	0.00	4.26	4.38	3.29	0.49	0.78
SS	4	72.11	0.00	207.64	639.20	45.72	288.71	459.00
NC	4	29.76	0.00	35.48	57.17	26.34	14.52	23.09
COND/P	4	0.93	0.00	0.90	0.97	0.70	0.13	0.21
AMTH	4	0.00	1021.55	255.39	415.44	56.67	148.22	235.66
AMTHNV	4	0.00	918.06	229.52	405.99	47.14	147.97	235.27
AMTNA	4	0.00	2001.67	500.42	945.89	169.35	331.81	527.57
AMIK	4	0.00	62.29	15.57	30.52	8.49	10.08	16.02
AMTCA	4	0.00	492.76	123.19	345.95	38.60	148.78	236.57
AMTMG	4	0.00	532.98	133.24	287.11	40.25	107.83	171.44
AMTNH4	4	0.00	413.13	103.28	238.56	14.86	95.58	151.97
AMTCL	4	0.00	2264.98	566.24	1038.20	196.91	355.01	564.46
AMTF	4	0.00	65.38	16.34	34.54	3.26	13.14	20.90
AMTNO3	4	0.00	503.74	125.93	312.34	42.42	125.76	199.96
AMTSU4	4	0.00	1398.82	349.71	696.82	135.91	245.96	391.07
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	4	0.00	1167.72	291.93	589.99	74.41	218.73	347.78
AMTSS	4	0.00	2479.68	619.92	1145.14	217.19	394.01	626.48
AMTNC	4	0.00	1023.15	255.79	702.90	58.96	300.04	477.07

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPTI, AND RATIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTI IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-161

Table 161.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 14 DURING 03/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	2	4.68	0.00	4.61	5.44	4.33	0.58	1.43
COND	21	56	0.00	46.33	91.00	19.00	39.00	96.83
CMPPT	0	0.00	3.71	1.24	3.02	0.04	1.57	3.90
H	20	69	0.00	24.80	46.77	3.63	21.58	53.58
HNV	19	64	0.00	22.54	41.69	3.02	19.34	48.00
NA	45	39	0.00	62.39	88.70	36.09	37.20	334.34
K	2	96	0.00	6.51	12.00	1.02	7.76	69.77
CA	12	05	0.00	22.21	37.92	6.49	22.23	199.78
MG	10	23	0.00	13.90	19.58	8.23	8.03	72.14
NH4	19	63	0.00	47.40	90.37	4.44	60.76	546.10
CL	50	81	0.00	64.30	85.16	43.43	29.51	265.23
F	3	93	0.00	3.42	4.21	2.63	1.12	10.03
N03	17	13	0.00	18.95	21.77	16.13	3.99	35.87
SU4	32	55	0.00	41.43	55.17	27.69	19.43	174.65
PO4	6	59	0.00	18.64	37.28	0.00	26.36	236.89
XSSO4	27	44	0.00	34.89	46.41	23.36	16.30	146.46
SAN	111	10	0.00	146.99	202.52	91.46	78.53	705.80
SCA	110	66	0.00	166.22	252.20	80.25	121.59	1092.75
A/C	1	00	0.00	0.88	1.14	0.80	0.24	2.14
CL/NA	1	12	0.00	1.03	1.20	0.96	0.17	1.54
NA/MG	4	44	0.00	4.49	4.53	4.39	0.10	0.92
SS	54	99	0.00	70.28	93.94	46.63	33.45	300.66
NC	35	28	0.00	82.13	154.63	9.63	102.53	921.47
COND/P	1	02	0.00	0.99	1.04	0.95	0.06	0.55
AMTH	0	00	766.67	255.56	723.40	19.73	405.17	1005.87
AMTHNV	0	00	728.01	242.67	690.84	17.59	388.13	963.57
AMTNA	0	00	1663.45	831.72	1088.29	575.16	362.84	3260.95
AMTK	0	00	108.60	54.30	77.81	30.80	33.24	298.75
AMTCA	0	00	441.54	220.77	245.91	195.62	35.56	319.59
AMTMG	0	00	375.01	187.51	248.07	126.95	85.64	769.69
AMTNH4	0	00	719.72	359.86	585.97	133.75	319.77	2873.90
AMTCL	0	00	1861.86	930.93	1309.63	552.23	535.56	4813.22
AMTF	0	00	144.03	72.02	126.97	17.06	77.72	698.45
AMTNO3	0	00	627.62	313.81	486.42	141.20	244.11	2193.87
AMTSO4	0	00	1192.81	596.40	835.05	357.76	337.49	3033.13
AMTPO4	0	00	241.71	120.86	241.71	0.00	170.92	1536.09
AXSSO4	0	00	1005.50	502.75	704.56	300.94	285.40	2565.02
AMTSS	0	00	2015.19	1007.59	1406.07	609.12	563.53	5064.66
AMTNC	0	00	1293.14	646.57	1002.69	290.45	503.63	4526.26

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-162

Table 162.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 07/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	12	4.30	0.00	4.27	6.46	3.96	0.66	0.41
COND	12	20.03	0.00	25.74	45.00	9.80	10.45	6.49
CMPT	12	0.00	15.49	1.29	4.77	0.00	1.42	0.88
H	12	50.25	0.00	53.90	109.65	0.35	29.30	18.18
HNV	12	43.35	0.00	49.22	102.33	0.04	28.12	17.45
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	12	0.00	7781.20	648.43	2064.67	0.00	694.44	431.01
AMTHNV	12	0.00	6712.05	559.34	1840.14	0.00	594.16	368.77
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMISS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-163



Table 163.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 08/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	8	4.41	0.00	4.42	5.04	4.05	0.34	0.29
COND	8	22.01	0.00	19.87	37.00	8.30	9.04	7.54
CMPPT	8	0.00	25.05	3.13	8.16	0.31	2.60	2.17
H	8	38.47	0.00	38.16	89.13	9.12	27.31	22.79
HNW	8	31.98	0.00	32.49	77.63	9.12	23.74	19.81
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	8	0.00	9636.80	1204.85	4407.51	28.50	1387.37	1157.60
AMTHNV	8	0.00	8013.38	1001.67	3838.78	28.50	1204.46	1004.98
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-164

Table 164.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 09/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	8	4.61	0.00	4.57	4.98	4.28	0.29	0.25
COND	8	13.73	0.00	16.30	22.40	6.50	6.19	5.17
CMPPT	8	0.00	21.19	2.65	6.49	0.64	2.01	1.68
H	8	24.80	0.00	26.89	52.48	10.47	17.18	14.34
HNV	8	21.09	0.00	21.87	43.65	6.92	14.82	12.37
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	8	0.00	5256.95	657.12	1828.63	68.64	601.72	502.06
AMTHNV	8	0.00	4469.48	558.69	1520.98	44.32	532.24	444.09
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 165.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 10/77.

	N	VOLNTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	4	4.40	0.00	4.34	5.20	4.05	0.50	0.79
COND	4	17.23	0.00	13.30	25.60	0.00	10.50	16.69
CMPPT	4	0.00	1.17	0.29	0.70	0.01	0.33	0.52
H	4	39.38	0.00	45.26	89.13	6.31	34.84	55.39
HNV	4	7.16	0.00	4.59	13.18	0.00	5.99	9.53
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAH	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	4	0.00	45.46	114.86	232.83	2.86	125.62	199.74
AMTHNV	4	0.00	83.53	20.88	53.76	0.00	25.85	41.10
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLNTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 166.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 11/77.

	N	VOLWTA	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.92	0.00	4.82	5.44	4.54	0.35	0.43
COND	5	8.16	0.00	8.72	11.10	6.60	1.82	2.27
CMPTT	5	0.00	0.30	1.26	2.08	0.70	0.55	0.69
H	5	12.15	0.00	15.11	28.84	3.63	9.73	12.10
HNV	5	10.06	0.00	12.78	22.39	1.82	8.10	10.07
NA	4	15.49	0.00	13.91	20.44	4.35	7.07	11.25
K	4	0.31	0.00	0.26	0.51	0.00	0.21	0.33
CA	4	3.42	0.00	3.12	5.49	0.50	2.49	3.56
MG	4	3.73	0.00	3.33	4.61	1.15	2.60	3.54
NH4	4	3.17	0.00	3.47	8.32	1.11	3.28	5.21
CL	4	18.37	0.00	16.43	23.69	5.08	8.59	13.33
F	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	4	6.57	0.00	7.26	10.32	2.90	3.56	5.66
SU4	4	11.15	0.00	11.92	19.99	4.58	6.37	10.13
PO4	4	1.52	0.00	1.05	4.11	0.00	2.55	3.77
XSSO4	4	9.30	0.00	10.25	18.42	2.14	6.83	10.87
SAN	4	37.62	0.00	36.63	45.22	8.10	8.28	13.16
SCA	4	36.21	0.00	35.76	49.68	23.02	10.93	17.38
A/C	4	1.04	0.00	1.02	1.23	0.86	0.20	0.31
CL/NA	4	1.19	0.00	1.18	1.22	1.16	0.03	0.04
NA/MG	4	4.15	0.00	4.18	4.60	3.78	0.37	0.59
SS	4	19.94	0.00	17.91	26.13	5.62	9.06	14.40
NC	4	6.19	0.00	6.18	12.88	0.61	5.31	8.44
COND/P	4	1.04	0.00	1.03	1.15	0.81	0.15	0.24
AMTH	5	0.00	765.99	153.20	230.08	75.45	62.35	77.52
AMTHNV	5	0.00	634.11	126.82	195.83	37.82	58.43	72.65
AMTNA	4	0.00	866.47	217.12	370.46	37.23	151.68	241.17
AMTK	4	0.00	17.43	4.36	10.61	0.00	4.48	7.13
AMTCA	4	0.00	192.01	48.00	114.07	7.58	49.42	78.58
AMTMG	4	0.00	209.10	52.27	95.73	9.86	37.33	59.36
AMTNH4	4	0.00	177.81	44.45	95.89	16.84	36.79	58.49
AMTCL	4	0.00	1030.07	257.52	451.24	43.46	183.04	291.04
AMTF	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	4	0.00	368.48	92.12	120.67	44.10	34.99	55.64
AMTSO4	4	0.00	625.12	156.28	230.48	69.56	79.35	126.17
AMTPU4	4	0.00	85.34	21.34	85.34	0.00	42.67	67.85
AXSSO4	4	0.00	521.18	130.30	212.44	32.55	78.98	125.57
AMTSS	4	0.00	1117.89	279.47	478.64	48.10	195.12	310.24
AMTNC	4	0.00	346.93	86.73	158.32	9.31	77.60	123.38

N=NUMBER OF SAMPLES  
 VOLWTA=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPTT, AND RATIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 167.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 12/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	8	4.52	0.00	4.39	4.86	3.90	0.38	0.33
COND	8	11.81	0.00	16.96	49.50	7.40	14.02	11.70
CMPPT	8	0.00	0.44	0.00	22.99	0.11	40.71	0.33
H	8	29.95	0.00	40.53	125.89	0.80	43.60	36.38
HNV	8	25.28	0.00	33.53	97.72	0.59	44.07	38.43
NA	7	17.91	0.00	22.77	66.96	0.48	40.90	28.90
K	7	0.52	0.00	0.00	1.53	0.00	0.64	0.00
CA	7	4.46	0.00	5.00	13.97	0.00	4.95	4.58
MG	7	4.48	0.00	6.05	14.97	0.65	4.95	4.59
NH4	7	1.88	0.00	2.46	9.42	0.00	3.20	2.46
CL	7	23.73	0.00	30.33	72.76	0.74	24.23	22.46
F	7	0.47	0.00	0.00	1.58	0.00	0.66	0.00
NO3	7	9.09	0.00	9.99	14.03	0.97	3.49	3.23
SO4	7	16.76	0.00	20.00	37.06	0.41	10.28	9.50
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	16.70	0.00	17.45	34.54	0.34	9.78	9.05
SAN	7	52.05	0.00	59.99	94.87	0.09	30.98	28.68
SCA	7	57.97	0.00	68.11	155.85	0.47	48.71	45.11
A/C	7	0.90	0.00	0.88	1.24	0.60	0.21	0.20
CL/NA	7	1.32	0.00	1.19	2.51	0.90	0.56	0.52
NA/MG	7	3.99	0.00	4.17	4.91	1.11	1.16	1.08
SS	7	22.17	0.00	30.46	80.25	1.49	27.74	25.68
NC	7	7.10	0.00	9.30	32.09	1.18	10.46	9.69
COND/P	7	0.83	0.00	0.83	1.00	0.50	0.16	0.15
AMTH	8	0.00	2527.22	3150.90	1092.20	430.57	337.45	281.57
AMTHNV	8	0.00	2133.32	2666.67	908.45	330.73	280.82	234.31
AMTNA	7	0.00	1491.85	2133.12	483.41	62.10	160.48	148.61
AMTK	7	0.00	43.54	6.22	12.35	0.00	4.99	4.62
AMTCA	7	0.00	371.75	53.11	128.74	0.00	52.38	48.50
AMTMG	7	0.00	373.56	53.37	116.49	19.12	33.06	30.62
AMTNH4	7	0.00	156.88	22.41	67.00	0.00	22.37	20.71
AMTCL	7	0.00	1976.49	2823.36	582.05	102.25	207.01	191.69
AMTF	7	0.00	39.13	5.59	25.46	0.00	10.13	9.39
AMTNO3	7	0.00	757.04	108.15	179.47	19.85	60.26	55.81
AMTSO4	7	0.00	1562.93	223.28	382.72	49.94	122.28	113.23
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	1391.31	198.76	338.17	26.31	109.82	101.70
AMTSS	7	0.00	1846.36	263.77	624.56	80.24	209.96	194.43
AMTNC	7	0.00	591.22	84.46	228.12	24.84	75.23	69.66

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N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RAINUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 168.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 01/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	4.76	0.00	4.59	5.37	4.11	0.43	0.45
COND	6	10.88	0.00	14.57	33.00	6.30	10.44	10.95
CMPPT	6	0.00	5.54	0.92	2.01	0.42	0.66	0.69
H	6	17.52	0.00	25.51	77.63	4.27	27.03	28.36
HNV	6	14.18	0.00	20.56	61.66	2.82	21.98	23.06
NA	6	30.71	0.00	39.78	76.09	20.00	26.42	27.72
K	6	0.70	0.00	1.45	5.62	0.00	2.18	2.29
CA	6	17.15	0.00	19.71	44.41	0.00	18.86	19.79
MG	6	11.87	0.00	12.82	20.73	5.26	7.91	8.29
NH4	6	7.62	0.00	9.24	22.18	2.77	7.24	7.60
CL	6	31.57	0.00	39.76	84.32	17.48	26.71	28.02
F	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	6	10.00	0.00	13.52	38.71	6.13	12.57	13.18
SO4	6	23.94	0.00	31.54	82.66	8.95	26.98	28.31
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	20.69	0.00	27.45	73.98	7.15	24.42	25.62
SAN	6	85.51	0.00	84.83	205.69	34.34	64.58	67.76
SCA	6	85.56	0.00	108.51	246.15	44.80	76.92	80.70
A/C	6	0.77	0.00	0.78	0.89	0.58	0.12	0.12
CL/NA	6	1.03	0.00	1.00	1.13	0.85	0.12	0.12
NA/MG	6	2.59	0.00	3.10	4.45	1.22	1.12	1.18
SS	6	34.82	0.00	43.86	93.00	19.28	29.46	30.91
NC	6	33.22	0.00	39.14	75.53	10.03	28.82	30.24
COND/P	6	0.74	0.00	0.75	0.94	0.62	0.12	0.13
AMTH	6	0.00	971.13	161.86	345.67	62.14	115.66	121.35
AMTHNV	6	0.00	786.08	131.01	274.58	41.09	99.12	104.00
AMTNA	6	0.00	1702.42	283.74	409.99	95.32	119.28	125.15
AMTK	6	0.00	38.69	6.45	25.61	0.00	9.70	10.18
AMTCA	6	0.00	950.49	158.41	443.74	0.00	160.63	168.53
AMTMG	6	0.00	657.79	109.63	302.20	25.09	100.04	104.96
AMTNH4	6	0.00	422.13	70.36	113.15	13.21	41.13	43.15
AMTCL	6	0.00	1749.85	291.64	424.32	83.32	137.13	143.87
AMTF	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	6	0.00	554.53	92.42	172.39	37.67	50.67	53.16
AMTSO4	6	0.00	1326.85	221.14	368.08	42.66	113.87	119.47
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	1146.79	191.13	329.44	34.09	102.22	107.24
AMTSS	6	0.00	1930.09	321.68	468.03	91.90	151.25	158.69
AMTNC	6	0.00	1841.43	306.91	768.75	47.80	251.44	263.81

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 169.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 02/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	4.28	0.00	4.23	4.38	4.05	0.14	0.14
COND	6	19.78	0.00	22.27	40.50	16.10	9.08	9.37
CMPT	6	0.00	15.91	22.65	55.64	0.31	2.26	2.53
H	6	52.51	0.00	52.50	89.13	41.69	19.11	20.05
HNV	6	46.36	0.00	53.32	85.11	36.31	18.68	19.60
NA	6	7.35	0.00	6.09	9.57	1.30	2.06	3.11
K	6	0.00	0.00	0.77	0.77	0.00	1.05	1.10
CA	6	4.32	0.00	4.82	16.47	0.00	6.33	6.64
MG	6	2.50	0.00	2.10	3.29	0.00	0.99	1.04
NH4	6	9.68	0.00	6.93	11.64	0.00	4.28	4.49
CL	6	9.67	0.00	8.51	11.56	0.00	2.94	3.09
F	6	0.00	0.00	0.55	2.11	0.00	0.66	0.90
NO3	6	9.90	0.00	11.69	22.90	2.79	5.60	5.87
SO4	6	39.33	0.00	39.84	61.00	24.36	12.95	13.59
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	58.45	0.00	39.11	60.32	23.58	12.87	13.51
SAN	6	59.39	0.00	60.39	93.78	42.61	12.39	24.33
SCA	6	77.23	0.00	80.21	120.88	54.28	13.28	24.43
A/C	6	0.77	0.00	1.75	1.03	0.00	0.18	0.18
CL/NA	6	1.32	0.00	1.40	2.81	0.00	0.62	0.65
NA/MG	6	2.94	0.00	2.90	3.45	0.00	0.53	0.56
SS	6	9.44	0.00	7.83	12.13	0.00	3.77	3.96
NC	6	15.27	0.00	12.88	24.45	0.00	8.85	9.29
COND/P	6	0.81	0.00	0.84	1.04	0.00	0.19	0.20
AMTH	6	0.00	8354.11	1392.35	2813.21	231.66	1135.88	1191.76
AMTHNV	6	0.00	7375.12	1229.19	2394.43	201.77	973.09	1020.97
AMTNA	6	0.00	1169.43	194.91	490.51	4.08	194.22	203.78
AMTK	6	0.00	139.39	23.23	128.13	0.00	51.43	53.96
AMTCA	6	0.00	686.74	114.46	422.20	0.00	163.19	171.22
AMTMG	6	0.00	397.35	66.22	185.60	1.80	69.96	73.40
AMTNH4	6	0.00	1539.35	256.56	656.70	6.93	278.37	299.06
AMTCL	6	0.00	1539.18	256.53	652.17	11.46	247.91	260.11
AMTF	6	0.00	76.97	12.83	76.97	0.00	31.42	32.97
AMTNO3	6	0.00	1575.52	262.59	600.49	33.27	208.24	218.49
AMTSO4	6	0.00	6256.68	1042.78	2454.45	111.26	927.32	972.94
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	6117.02	1019.50	2395.64	110.77	904.44	948.94
AMTSS	6	0.00	1502.58	250.43	633.74	5.27	249.62	261.90
AMTNC	6	0.00	2429.70	404.95	1121.27	16.17	448.57	470.64

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 170.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN  
COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT  
UCF SITE 18 DURING 03/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LDW	ST. DEV	95% C.L.
PH	33	4.47	0.00	4.40	4.67	4.28	0.21	0.52
COND	33	19.60	0.00	24.03	36.00	13.80	11.20	27.81
CMPT	33	0.00	6.34	2.11	3.28	0.79	1.25	3.11
H	33	33.58	0.00	39.51	52.48	21.38	16.18	40.17
HNV	33	31.30	0.00	36.49	46.77	19.05	15.18	37.69
NA	33	22.17	0.00	25.51	36.96	18.26	10.03	24.90
K	33	1.34	0.00	1.62	2.55	1.02	0.82	2.04
CA	33	12.15	0.00	19.13	41.42	7.98	19.30	47.92
MG	33	5.84	0.00	7.49	12.59	4.61	4.43	11.00
NH4	33	11.24	0.00	16.26	31.60	7.21	13.36	33.16
CL	33	22.90	0.00	26.60	38.35	20.59	10.18	25.26
F	33	1.09	0.00	0.70	2.11	0.00	1.22	3.02
NO3	33	13.58	0.00	18.44	33.07	9.35	12.79	31.75
SO4	33	51.93	0.00	55.80	74.12	34.98	19.69	48.88
PO4	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	33	49.57	0.00	53.06	70.17	32.83	18.87	46.84
SAN	33	89.49	0.00	101.54	145.54	68.75	39.60	98.31
SCA	33	86.31	0.00	109.51	177.60	63.76	60.11	149.24
A/C	33	1.04	0.00	0.93	1.42	0.79	0.35	0.88
CL/NA	33	1.03	0.00	1.04	1.14	0.97	0.09	0.22
NA/MG	33	3.80	0.00	3.41	4.63	2.94	0.86	2.14
SS	33	25.26	0.00	29.34	42.30	25.71	11.23	27.87
NC	33	27.47	0.00	40.66	82.81	19.49	36.51	90.63
COND/P	33	0.89	0.00	0.91	0.97	0.82	0.08	0.21
AMTH	33	0.00	2127.64	709.21	1012.02	414.11	299.03	742.37
AMTHNV	33	0.00	1983.28	661.09	988.98	369.07	311.51	773.35
AMTNA	33	0.00	1404.44	468.15	699.08	291.62	209.11	519.13
AMTK	33	0.00	85.17	28.39	41.89	20.14	11.78	29.25
AMTCA	33	0.00	769.67	256.56	326.81	180.89	73.11	181.50
AMTMG	33	0.00	369.74	123.25	151.15	99.31	26.15	64.92
AMTNH4	33	0.00	711.93	237.31	249.35	226.09	11.65	28.93
AMTCL	33	0.00	1450.89	483.63	675.48	302.62	186.66	463.41
AMTF	33	0.00	64.08	23.03	69.08	0.00	39.88	99.01
AMTNO3	33	0.00	860.24	286.75	306.97	260.91	23.54	58.43
AMTSO4	33	0.00	3290.15	1096.71	1912.84	584.85	714.36	1773.49
AMTPO4	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	33	0.00	3140.85	1046.95	1843.33	553.71	696.21	1728.40
AMTSS	33	0.00	1600.33	533.44	745.05	333.79	205.89	511.15
AMTNC	33	0.00	1740.61	580.20	653.44	441.64	120.06	298.06

N=NUMBER OF SAMPLES  
VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
COND,CMPT,AND RATIOS  
UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
MEAN=UNWEIGHTED AVERAGE  
CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
THE MONTH



Table 171.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 04/78.

	N	VOLWTA V	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH		4.68	0.00	4.74	4.90	4.65	0.13	0.33
COND		18.95	0.00	22.13	33.00	14.40	9.69	24.05
CMPPT		0.00	0.07	0.36	0.74	0.08	0.34	0.85
H		21.10	0.00	18.31	22.39	12.59	5.10	12.67
HN V		19.13	0.00	15.74	20.89	9.33	5.88	14.60
NA		21.95	0.00	46.23	107.40	14.78	52.98	131.52
K		22.72	0.00	3.49	5.62	12.30	1.85	4.59
CA		26.15	0.00	46.24	101.80	14.97	48.24	119.76
MG		36.09	0.00	12.64	28.05	4.36	13.36	33.16
NH4		33.98	0.00	38.62	53.78	28.27	13.41	33.30
CL		21.17	0.00	42.77	97.57	14.95	47.46	117.83
NO3		21.57	0.00	22.28	33.16	1.58	0.80	2.00
SO4		41.76	0.00	52.64	59.84	18.07	23.58	58.54
PO4		0.00	0.00	0.45	0.98	0.27	0.77	76.40
XSSO4		39.59	0.00	1.05	0.00	0.00	0.00	0.00
SAN		86.56	0.00	133.14	251.56	73.22	102.56	254.60
SCA	1	12.78	0.00	16.54	30.33	86.72	124.65	309.46
A/C		0.77	0.00	0.80	0.86	0.00	0.07	0.17
CL/NA		0.96	0.00	0.93	1.01	0.91	0.05	0.13
NA/MG		33.19	0.00	33.66	33.83	2.68	0.65	1.62
SS		23.55	0.00	47.18	107.62	16.48	52.55	129.97
NC	6	8.32	0.00	100.05	189.01	49.01	77.32	191.96
COND/P		0.97	0.00	0.90	1.03	0.81	0.12	0.29
AMTH		0.00	22.52	75.17	165.81	9.83	81.00	201.10
AMTHN V		0.00	234.48	68.16	154.74	7.29	77.01	191.19
AMTNA		0.00	234.70	78.23	109.49	41.31	34.44	85.51
AMTK		0.00	279.04	9.68	18.91	4.39	8.02	19.91
AMTCA		0.00	279.57	93.19	162.61	37.43	63.70	158.15
AMTMG		0.00	73.63	24.54	40.82	10.90	15.13	37.57
AMTNH4		0.00	363.17	121.06	250.47	42.01	112.99	280.50
AMTCL		0.00	226.40	75.47	110.69	39.48	35.61	88.41
AMTF		0.00	220.01	7.34	15.59	2.47	7.19	17.85
AMTNO3		0.00	230.55	76.85	133.80	46.75	49.34	122.50
AMTSO4		0.00	446.43	148.81	282.18	71.08	116.03	288.06
AMTPO4		0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4		0.00	423.14	141.05	270.79	63.24	113.11	280.80
AMTSS		0.00	249.72	83.24	122.10	43.55	39.28	97.52
AMTNC		0.00	730.38	243.46	460.20	122.51	188.12	467.03

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIO S  
 UEQ/SQ. M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ. M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 172.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 16 DURING 05/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.53	0.00	4.51	5.69	4.23	0.66	1.04
COND	4	13.99	0.00	17.70	25.00	11.20	5.91	9.39
CMPT	4	0.00	7.61	1.90	5.68	0.30	2.56	4.07
H	4	29.61	0.00	31.09	58.88	2.04	23.95	38.07
HNV	4	25.02	0.00	27.66	52.48	1.91	21.71	34.51
NA	4	13.33	0.00	17.07	26.09	11.74	6.32	10.06
K	4	5.74	0.00	3.00	7.15	1.02	2.81	4.48
CA	4	7.17	0.00	16.34	37.43	2.50	15.84	25.19
MG	4	4.91	0.00	5.68	8.88	4.28	2.15	3.42
NH4	4	51.13	0.00	35.90	58.77	19.96	16.69	26.54
CL	4	13.75	0.00	17.13	23.41	12.69	4.68	7.43
F	4	1.45	0.00	1.18	1.58	0.53	0.50	0.80
NO3	4	16.48	0.00	25.08	35.65	10.97	10.63	16.90
SO4	4	33.34	0.00	40.34	54.34	27.90	11.76	18.71
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	31.94	0.00	38.62	52.83	26.59	11.61	18.46
SAN	4	65.02	0.00	63.74	105.70	53.14	24.20	38.48
SCA	4	111.90	0.00	109.08	129.53	84.06	18.82	29.92
A/C	4	0.58	0.00	0.77	0.90	0.49	0.19	0.31
CL/NA	4	1.03	0.00	1.00	1.28	0.89	0.18	0.29
NA/MG	4	2.71	0.00	3.01	3.40	2.50	0.40	0.63
SS	4	15.10	0.00	18.49	25.82	14.00	5.15	8.19
NC	4	67.19	0.00	59.49	85.47	27.18	24.98	39.73
COND/P	4	0.66	0.00	0.81	1.00	0.60	0.17	0.27
AMTH	4	0.00	2254.72	563.68	1395.35	7.82	640.63	1018.61
AMTHNV	4	0.00	1905.27	476.32	1134.18	7.29	523.09	831.71
AMTNA	4	0.00	1015.03	253.76	667.32	41.31	284.07	451.67
AMTK	4	0.00	437.32	109.33	406.34	3.03	198.12	315.01
AMTCA	4	0.00	546.13	136.53	243.26	17.78	92.32	146.78
AMTMG	4	0.00	373.90	93.48	266.53	12.70	117.03	186.07
AMTNH4	4	0.00	3893.26	973.31	3340.50	59.25	1583.00	2516.97
AMTCL	4	0.00	1046.99	261.75	721.35	52.74	311.29	494.95
AMTF	4	0.00	110.51	27.63	89.75	1.56	41.69	66.29
AMTNO3	4	0.00	1254.46	313.61	623.49	69.91	265.89	422.76
AMTSO4	4	0.00	2538.82	634.71	1585.87	100.75	684.36	1088.13
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	2431.57	607.89	1511.65	95.80	652.45	1038.20
AMTSS	4	0.00	1150.02	287.51	795.65	53.37	344.44	547.65
AMTNC	4	0.00	5115.62	1278.90	4026.88	80.70	1848.47	2939.06

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RAIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 173.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	11	4.48	0.00	4.19	4.90	3.62	0.41	0.27
COND	11	13.00	0.00	18.44	56.00	0.00	16.74	10.85
CMPPT	11	0.00	17.47	1.59	6.60	0.00	2.11	1.37
H	11	33.18	0.00	64.39	239.88	12.59	71.37	46.26
HNV	11	29.98	0.00	57.82	218.78	11.75	65.05	42.17
NA	10	11.20	0.00	18.91	59.57	3.04	21.60	15.44
K	10	0.90	0.00	1.15	3.32	0.25	0.84	0.60
CA	10	6.66	0.00	10.68	31.94	3.49	8.45	6.04
MG	10	2.85	0.00	5.09	14.15	0.74	4.86	3.48
NH4	10	6.78	0.00	9.98	28.27	2.22	7.83	5.59
CL	10	11.91	0.00	22.19	77.55	2.82	25.99	18.57
F	10	0.09	0.00	0.42	1.58	0.00	0.54	0.39
NO3	10	12.22	0.00	19.95	50.49	7.74	13.67	9.77
SO4	10	29.86	0.00	38.23	117.22	11.45	34.36	24.56
PO4	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	10	28.67	0.00	36.08	115.60	10.41	33.61	24.02
SAN	10	54.08	0.00	80.79	186.56	33.14	57.40	41.02
SCA	10	60.63	0.00	92.65	230.92	40.92	66.23	47.33
A/C	10	0.89	0.00	0.87	1.01	0.73	0.11	0.08
CL/NA	10	1.06	0.00	1.17	1.46	0.81	0.20	0.14
NA/MG	10	3.94	0.00	3.71	4.70	2.25	0.82	0.59
SS	10	12.86	0.00	23.03	76.96	3.11	26.88	19.21
NC	10	15.52	0.00	22.78	65.60	8.26	16.93	12.10
COND/P	10	0.77	0.00	0.82	1.41	0.62	0.22	0.16
AMTH	11	0.00	5796.29	526.94	2040.56	27.30	611.97	396.71
AMTHNV	11	0.00	5237.68	476.15	1948.72	22.71	579.31	375.54
AMTNA	10	0.00	1947.81	194.78	1053.30	11.79	308.76	220.67
AMTK	10	0.00	156.03	15.60	67.43	0.74	20.09	14.36
AMTCA	10	0.00	1157.66	115.77	395.40	11.60	114.73	81.99
AMTMG	10	0.00	494.85	49.48	241.77	3.27	69.21	49.46
AMTNH4	10	0.00	1179.15	117.91	366.08	8.19	131.50	93.98
AMTCL	10	0.00	2070.85	207.09	1120.16	12.57	326.05	233.02
AMTF	10	0.00	16.20	1.62	7.73	0.00	2.43	1.74
AMTNO3	10	0.00	2124.42	212.44	681.65	27.66	205.75	147.04
AMTSO4	10	0.00	5193.25	519.32	2323.36	22.19	697.76	498.67
AMTPO4	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	10	0.00	4984.78	498.48	2304.20	20.89	695.73	497.22
AMTSS	10	0.00	2236.46	223.65	1235.53	13.86	361.21	258.14
AMTNC	10	0.00	2699.05	269.91	902.08	23.21	274.38	196.10

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-174

Table 174.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 07/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	12	4.57	0.00	4.30	4.82	3.87	0.31	0.19
COND	12	12.02	0.00	19.48	59.00	0.00	14.97	9.29
CMPPT	12	0.00	26.87	2.24	10.50	0.06	3.61	2.24
H	12	26.92	0.00	50.61	134.90	15.14	40.06	24.86
HNV	12	23.48	0.00	42.09	104.71	9.77	31.27	19.41
NA	10	6.14	0.00	10.74	30.44	0.87	8.43	6.03
K	10	0.76	0.00	1.35	3.06	0.51	0.83	0.59
CA	10	6.89	0.00	12.08	27.44	4.49	7.74	5.53
MG	10	1.59	0.00	3.10	6.99	0.25	2.13	1.52
NH4	10	1.52	0.00	2.94	9.42	0.55	3.15	2.25
CL	10	5.78	0.00	10.91	30.17	0.55	9.00	6.43
F	10	0.30	0.00	0.74	3.68	0.00	1.20	0.85
NO3	10	7.63	0.00	29.31	114.04	4.03	35.84	25.61
SO4	10	18.94	0.00	25.50	47.68	5.41	15.17	10.84
PO4	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	10	18.35	0.00	24.40	45.65	5.24	14.54	10.39
SAN	10	32.65	0.00	66.46	183.92	13.40	50.18	35.87
SCA	10	43.56	0.00	73.09	174.17	24.27	43.52	31.10
A/C	10	0.75	0.00	0.91	1.18	0.00	0.19	0.14
CL/NA	10	0.94	0.00	1.02	1.25	0.65	0.18	0.13
NA/MG	10	3.86	0.00	3.46	4.35	2.55	0.58	0.41
SS	10	6.35	0.00	11.84	33.28	0.62	9.74	6.96
NC	10	10.55	0.00	18.37	35.49	7.80	9.67	6.91
COND/P	10	0.97	0.00	0.98	1.18	0.92	0.13	0.09
AMTH	12	0.00	7232.02	6022.67	2767.50	30.69	830.38	515.38
AMTHNV	12	0.00	6309.22	5255.77	2582.78	23.28	753.91	467.92
AMTNA	10	0.00	1643.21	1643.32	637.52	11.66	218.03	155.82
AMTK	10	0.00	202.93	202.29	80.42	2.11	24.66	17.62
AMTCA	10	0.00	1841.41	184.14	628.74	14.41	219.18	156.64
AMTMG	10	0.00	426.27	42.63	158.31	3.11	51.75	36.99
AMTNH4	10	0.00	407.49	40.75	131.95	0.78	44.19	31.58
AMTCL	10	0.00	1546.59	154.66	568.54	14.54	202.99	145.07
AMTF	10	0.00	79.81	7.98	62.63	0.00	19.53	13.96
AMTNO3	10	0.00	2039.90	203.99	423.41	72.74	148.41	106.07
AMTSO4	10	0.00	5064.73	506.47	2098.75	22.54	661.48	472.74
AMTPU4	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	10	0.00	4906.31	490.63	2040.25	20.87	645.43	461.27
AMTSS	10	0.00	1699.01	169.90	627.10	15.06	224.04	160.12
AMTNC	10	0.00	2822.30	282.23	865.88	18.13	306.63	219.14

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-175

Table 175.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	10	4.49	0.00	4.04	5.24	3.48	0.54	0.38
COND	10	15.83	0.00	36.96	114.00	8.40	37.22	26.60
CMPTT	10	0.00	9.38	0.94	2.61	0.06	1.03	0.74
H	10	32.07	0.00	90.47	331.13	5.75	115.08	82.24
HNV	10	27.64	0.00	82.78	316.23	0.50	108.93	77.85
NA	9	13.49	0.00	21.40	52.18	3.48	17.28	13.31
K	9	1.04	0.00	1.84	7.15	0.51	2.09	1.61
CA	9	7.98	0.00	11.98	30.44	3.49	8.99	6.92
MG	9	4.40	0.00	7.08	15.05	0.90	5.28	4.07
NH4	9	3.72	0.00	5.98	12.75	0.55	3.86	2.97
CL	9	16.45	0.00	25.04	57.81	0.51	18.65	14.36
F	9	0.85	0.00	0.99	2.63	0.00	0.81	0.62
NO3	9	13.04	0.00	27.31	92.59	5.00	28.30	21.79
SO4	9	21.27	0.00	47.05	198.21	5.83	60.82	46.83
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	19.69	0.00	44.58	195.03	4.64	60.08	46.26
SAN	9	51.61	0.00	100.40	325.97	2.92	93.22	71.78
SCA	9	60.93	0.00	112.01	331.90	2.41	91.29	70.30
A/C	9	0.85	0.00	0.90	0.98	0.65	0.11	0.09
CL/NA	9	1.22	0.00	1.17	1.54	1.08	0.15	0.12
NA/MG	9	3.06	0.00	3.02	4.69	1.34	1.08	0.83
SS	9	16.96	0.00	26.54	63.76	4.49	20.84	16.05
NC	9	13.66	0.00	21.74	39.73	5.20	12.80	9.85
COND/P	9	0.99	0.00	0.95	1.10	0.77	0.13	0.10
AMTH	10	0.00	3008.87	300.89	676.00	57.45	244.39	174.66
AMTHNV	10	0.00	2593.10	259.31	573.02	5.00	213.17	152.35
AMTNA	9	0.00	1258.64	139.85	397.43	6.96	125.98	97.00
AMTK	9	0.00	97.26	10.81	26.47	1.53	8.81	6.78
AMTCA	9	0.00	744.47	82.72	303.91	15.97	89.74	69.10
AMTMG	9	0.00	410.75	45.64	90.34	1.81	32.76	25.22
AMTNH4	9	0.00	340.65	38.52	133.40	9.98	40.01	30.81
AMTCL	9	0.00	1535.33	170.59	508.92	9.02	154.74	119.15
AMTF	9	0.00	79.29	8.81	37.01	0.00	11.53	8.88
AMTNO3	9	0.00	1216.69	135.19	314.03	24.40	89.92	69.24
AMTSO4	9	0.00	1984.31	220.48	528.31	37.22	174.56	134.41
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSS <sup>114</sup>	9	0.00	1837.06	204.12	519.18	31.91	173.07	133.27
AMTSS	9	0.00	1582.91	175.88	513.49	8.99	160.37	123.48
AMTNC	9	0.00	1274.86	141.65	396.64	27.26	121.82	93.80

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPTT, AND RATIOUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTT IN JEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 176.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 09/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.35	0.00	4.38	4.93	4.09	0.37	0.46
COND	5	17.99	0.00	23.18	48.20	6.70	17.49	21.75
CMPPT	5	0.00	15.57	3.11	8.39	0.17	3.18	3.95
H	5	44.44	0.00	41.30	81.28	11.75	29.52	36.70
HNV	5	40.87	0.00	38.94	79.43	8.51	29.15	36.24
NA	5	4.72	0.00	34.78	158.27	2.17	69.05	85.84
K	5	0.47	0.00	2.96	13.02	0.25	5.63	7.00
CA	5	2.27	0.00	4.89	14.97	0.00	5.67	7.05
MG	5	1.37	0.00	8.90	39.81	0.74	17.29	21.49
NH4	5	8.65	0.00	15.74	55.99	1.11	22.94	28.52
CL	5	5.85	0.00	38.13	169.76	2.82	73.61	91.51
F	5	1.13	0.00	0.42	2.11	0.00	0.94	1.17
NO3	5	12.25	0.00	14.39	25.00	5.64	8.55	10.64
SO4	5	31.38	0.00	42.68	104.10	7.70	39.51	49.13
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	30.84	0.00	38.82	86.63	7.39	33.13	41.19
SAN	5	50.61	0.00	95.69	299.24	18.06	116.74	145.13
SCA	5	01.92	0.00	108.58	321.88	21.58	123.71	153.80
A/C	5	0.82	0.00	0.88	0.93	0.80	0.05	0.06
CL/NA	5	1.24	0.00	1.10	1.62	1.07	0.23	0.29
NA/MG	5	3.45	0.00	3.91	3.97	2.94	0.42	0.53
SS	5	5.86	0.00	41.41	187.25	2.81	81.55	101.38
NC	5	11.63	0.00	25.87	94.82	3.42	38.81	48.25
COND/P	5	0.92	0.00	0.94	1.04	0.85	0.09	0.11
AMTH	5	0.00	6917.77	1383.55	4940.76	65.94	2030.21	2524.06
AMTHNV	5	0.00	6362.17	1272.43	4506.03	64.44	1853.55	2304.43
AMTNA	5	0.00	733.84	146.77	262.13	67.63	78.03	97.01
AMTK	5	0.00	73.66	14.73	21.57	8.74	6.24	7.76
AMTCA	5	0.00	353.38	70.68	167.48	24.79	56.30	69.99
AMTMG	5	0.00	212.93	42.59	65.94	20.94	20.31	25.25
AMTNH4	5	0.00	1347.11	269.42	1069.90	37.94	448.01	525.99
AMTCL	5	0.00	909.43	181.89	281.17	99.69	74.48	92.60
AMTF	5	0.00	176.64	35.33	176.64	0.00	79.00	98.21
AMTNU3	5	0.00	1906.46	381.29	1245.13	41.41	491.63	611.23
AMTSO4	5	0.00	4684.71	976.94	3546.26	172.42	1453.98	1807.66
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	4799.95	959.99	3524.39	143.48	1452.08	1805.31
AMTSS	5	0.00	910.89	182.18	310.13	87.38	90.94	113.06
AMTNC	5	0.00	1810.03	362.01	1267.66	117.06	506.56	629.79

N=NUMBER OF SAMPLES  
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 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-177

Table 177.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 10/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	6	4.37	0.00	4.43	4.88	3.99	0.30	0.31
COND	6	23.84	0.00	24.58	39.10	11.20	11.12	11.67
CMPPT	6	0.00	5.83	0.97	2.34	0.08	0.86	0.91
H	6	43.05	0.00	36.95	102.33	13.18	32.74	34.35
HNV	6	39.07	0.00	31.94	95.50	11.75	31.71	33.27
NA	6	61.76	0.00	80.80	207.40	19.57	73.12	76.72
K	6	1.47	0.00	2.30	3.83	0.77	1.28	1.34
CA	6	7.94	0.00	11.56	27.94	2.99	9.77	10.25
MG	6	13.37	0.00	16.63	39.49	3.95	13.71	14.39
NH4	6	8.25	0.00	10.63	31.05	1.11	12.69	13.31
CL	6	63.27	0.00	80.60	188.09	18.89	66.47	69.74
F	6	0.74	0.00	1.40	3.16	0.00	1.23	1.29
NO3	6	15.06	0.00	19.22	48.39	8.23	16.00	16.78
SO4	6	36.65	0.00	34.94	72.66	13.32	21.56	22.62
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	30.17	0.00	26.69	70.72	8.62	22.52	23.63
SAN	6	115.72	0.00	136.17	247.21	67.23	63.89	67.03
SCA	6	135.83	0.00	158.87	309.92	67.93	85.62	89.83
A/C	6	0.85	0.00	0.86	1.00	0.76	0.10	0.10
CL/NA	6	1.02	0.00	1.00	1.20	0.91	0.12	0.12
NA/MG	6	4.62	0.00	4.86	5.73	3.90	0.70	0.74
SS	6	69.58	0.00	68.60	207.47	20.84	73.29	76.90
NC	6	23.21	0.00	33.32	77.33	4.36	29.35	30.80
COND/P	6	0.84	0.00	0.83	0.91	0.78	0.06	0.06
AMTH	6	0.00	2509.60	418.27	1742.80	22.19	655.34	687.58
AMTHNV	6	0.00	2277.60	379.60	1626.47	14.66	616.50	646.83
AMTNA	6	0.00	3600.62	600.10	1344.86	19.08	470.31	493.45
AMTK	6	0.00	85.74	14.29	23.93	3.23	7.49	7.86
AMTCA	6	0.00	463.03	77.17	181.20	16.00	67.24	70.55
AMTMG	6	0.00	779.50	129.92	256.03	3.33	94.18	98.81
AMTNH4	6	0.00	481.03	80.17	368.24	6.83	141.72	148.69
AMTCL	6	0.00	3688.69	614.78	1219.67	17.61	454.20	476.54
AMTF	6	0.00	42.98	7.16	20.18	0.00	7.34	7.70
AMTNO3	6	0.00	878.25	146.38	467.01	40.83	167.16	175.39
AMTSO4	6	0.00	2136.69	356.15	1237.52	20.38	445.73	467.66
AMTPU4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	1758.72	293.12	1204.41	18.57	451.46	473.67
AMTSS	6	0.00	4056.69	676.12	1345.30	19.42	501.35	526.02
AMTNC	6	0.00	1353.23	225.54	581.03	28.92	247.30	259.47

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-18

Table 178.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	1	4.65	0.00	4.65	4.65	4.65	0.00	0.00
COND	1	8.00	0.00	8.00	8.00	8.00	0.00	0.00
CMPPT	1	0.00	0.09	0.09	0.09	0.09	0.00	0.00
H	1	22.39	0.00	22.39	22.39	22.39	0.00	0.00
HNV	1	20.42	0.00	20.42	20.42	20.42	0.00	0.00
NA	1	13.48	0.00	13.48	13.48	13.48	0.00	0.00
K	1	1.02	0.00	1.02	1.02	1.02	0.00	0.00
CA	1	10.48	0.00	10.48	10.48	10.48	0.00	0.00
MG	1	3.95	0.00	3.95	3.95	3.95	0.00	0.00
NH4	1	4.43	0.00	4.44	4.44	4.44	0.00	0.00
CL	1	16.36	0.00	16.36	16.36	16.36	0.00	0.00
F	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	1	30.81	0.00	30.81	30.81	30.81	0.00	0.00
SO4	1	15.61	0.00	15.62	15.62	15.62	0.00	0.00
PO4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	1	14.00	0.00	14.00	14.00	14.00	0.00	0.00
SAN	1	62.78	0.00	62.78	62.78	62.78	0.00	0.00
SCA	1	55.75	0.00	55.75	55.75	55.75	0.00	0.00
A/C	1	1.13	0.00	1.13	1.13	1.13	0.00	0.00
CL/NA	1	1.21	0.00	1.21	1.21	1.21	0.00	0.00
NA/MG	1	3.41	0.00	3.41	3.41	3.41	0.00	0.00
SS	1	17.41	0.00	17.41	17.41	17.41	0.00	0.00
NC	1	15.95	0.00	15.95	15.95	15.95	0.00	0.00
COND/P	1	0.55	0.00	0.55	0.55	0.55	0.00	0.00
AMTH	1	0.00	20.29	20.29	20.29	20.29	0.00	0.00
AMTHNV	1	0.00	18.50	18.50	18.50	18.50	0.00	0.00
AMTNA	1	0.00	12.22	12.22	12.22	12.22	0.00	0.00
AMTK	1	0.00	9.92	9.92	9.92	9.92	0.00	0.00
AMTCA	1	0.00	9.50	9.50	9.50	9.50	0.00	0.00
AMTMG	1	0.00	3.58	3.58	3.58	3.58	0.00	0.00
AMTNH4	1	0.00	4.02	4.02	4.02	4.02	0.00	0.00
AMTCL	1	0.00	14.82	14.82	14.82	14.82	0.00	0.00
AMTF	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	1	0.00	27.92	27.92	27.92	27.92	0.00	0.00
AMTSO4	1	0.00	14.15	14.15	14.15	14.15	0.00	0.00
AMTPO4	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	1	0.00	12.69	12.69	12.69	12.69	0.00	0.00
AMTSS	1	0.00	15.78	15.78	15.78	15.78	0.00	0.00
AMTNC	1	0.00	14.45	14.45	14.45	14.45	0.00	0.00

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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH



Table 179.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 12/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	5	4.78	0.00	3.56	5.06	2.88	0.91	1.13
COND	5	13.00	0.00	88.42	387.00	7.20	166.96	207.57
CMPPT	5	0.00	12.62	2.55	6.38	0.07	3.20	3.98
H	5	16.44	0.00	275.95	1318.26	8.71	582.71	724.46
HNV	5	7.58	0.00	10.59	23.99	0.00	9.14	11.36
NA	5	30.87	0.00	37.74	70.00	7.83	27.27	33.90
K	5	0.91	0.00	1.63	4.08	0.00	1.41	1.75
CA	5	4.87	0.00	10.48	23.95	3.99	8.66	10.76
MG	5	7.05	0.00	6.88	13.00	1.81	5.13	6.38
NH4	5	2.69	0.00	20.18	62.65	0.55	25.09	31.20
CL	5	34.78	0.00	42.36	76.42	8.18	30.05	37.36
F	5	0.30	0.00	1.47	4.74	0.00	1.88	2.33
NO3	5	5.99	0.00	22.78	72.75	3.87	28.53	35.47
SO4	5	2.05	0.00	30.68	145.40	0.53	64.66	79.75
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	18.48	0.00	30.33	144.95	6.86	63.70	79.31
SAN	5	63.14	0.00	376.36	1611.30	28.37	690.90	858.96
SCA	5	62.82	0.00	352.86	1473.90	26.29	627.54	780.19
A/C	5	1.01	0.00	1.07	1.09	0.87	0.10	0.12
CL/NA	5	1.13	0.00	1.12	1.23	1.05	0.07	0.08
NA/MG	5	4.38	0.00	5.49	15.76	3.55	3.29	6.57
SS	5	38.35	0.00	46.57	84.29	9.98	33.22	41.42
NC	5	8.03	0.00	30.34	71.35	4.98	28.20	35.06
COND/P	5	1.11	0.00	0.95	1.13	0.65	0.20	0.24
AMTH	5	0.00	207.90	415.58	885.70	38.01	356.91	443.73
AMTHNV	5	0.00	956.25	191.25	441.04	0.00	215.60	268.04
AMTNA	5	0.00	3896.10	779.22	3221.73	37.09	1378.81	1714.21
AMTK	5	0.00	115.02	23.00	57.76	2.33	27.83	34.60
AMTCA	5	0.00	614.06	122.81	282.25	9.72	134.24	166.90
AMTMG	5	0.00	684.51	177.90	735.15	2.98	314.75	391.32
AMTNH4	5	0.00	339.43	67.89	176.72	31.36	61.09	75.95
AMTCL	5	0.00	4390.51	878.10	3668.64	45.54	1572.49	1955.00
AMTF	5	0.00	38.46	7.69	29.77	0.00	12.41	15.43
AMTNO3	5	0.00	756.67	151.33	411.32	35.88	164.34	204.31
AMTSO4	5	0.00	2786.14	557.23	979.19	72.87	439.74	546.71
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU"	5	0.00	2334.59	466.92	973.91	62.21	417.39	518.92
AMTSS	5	0.00	4840.43	968.04	4046.51	47.93	1734.76	2156.75
AMTNC	5	0.00	1013.68	202.74	519.29	47.94	200.10	248.78

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RAIN  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-100

Table 180.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	9	4.86	0.00	4.65	6.17	4.00	0.65	0.50
COND	9	9.39	0.00	20.09	41.20	4.20	15.09	11.62
CMPPT	9	0.00	18.54	2.06	7.55	0.19	2.32	1.79
H	9	13.75	0.00	22.42	100.00	0.66	30.56	23.53
HNV	9	11.96	0.00	19.43	89.13	0.01	27.34	21.05
NA	9	22.65	0.00	48.02	221.75	8.26	66.92	51.53
K	9	0.87	0.00	1.59	3.57	0.51	1.22	0.94
CA	9	12.65	0.00	44.97	324.35	2.50	105.16	80.97
MG	9	6.84	0.00	17.48	63.26	1.14	22.97	17.68
NH4	9	4.76	0.00	10.66	28.83	0.55	10.83	8.34
CL	9	23.78	0.00	54.30	233.50	7.90	70.67	54.42
F	9	0.90	0.00	2.16	10.00	0.00	3.22	2.48
NO3	9	6.37	0.00	12.28	49.20	0.81	15.59	12.00
SO4	9	16.29	0.00	39.65	114.30	6.25	40.80	31.42
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	13.93	0.00	34.46	109.97	5.10	41.14	31.68
SAN	9	47.43	0.00	108.63	271.38	17.85	95.84	73.80
SCA	9	61.52	0.00	145.12	455.11	21.42	147.27	113.39
A/C	9	0.77	0.00	0.75	1.04	0.53	0.15	0.11
CL/NA	9	1.05	0.00	1.13	2.04	0.90	0.35	0.27
NA/MG	9	3.31	0.00	2.75	4.35	0.57	1.19	0.91
SS	9	25.33	0.00	55.65	257.55	8.71	77.76	59.87
NC	9	22.45	0.00	67.06	407.81	2.14	128.92	99.27
COND/P	9	0.86	0.00	0.89	1.28	0.69	0.17	0.13
AMTH	9	0.00	2548.05	283.12	866.86	3.12	280.52	216.00
AMTHNV	9	0.00	2217.23	246.36	772.59	0.03	249.88	192.41
AMTNA	9	0.00	4198.92	466.55	1106.87	45.59	349.84	269.38
AMTK	9	0.00	161.38	17.93	38.55	4.38	12.46	9.60
AMTCA	9	0.00	2345.48	260.61	1495.05	34.24	470.96	362.64
AMTMG	9	0.00	1268.75	140.97	291.58	12.39	96.97	74.66
AMTNH4	9	0.00	882.84	98.09	239.74	3.98	81.18	62.51
AMTCL	9	0.00	4409.09	489.90	1122.71	59.67	336.75	259.30
AMTF	9	0.00	166.58	18.51	93.71	0.00	30.13	23.20
AMTNO3	9	0.00	1181.34	131.26	280.10	5.32	104.42	80.41
AMTSO4	9	0.00	3019.64	335.52	582.57	118.97	188.35	145.03
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	9	0.00	2581.86	286.87	522.04	32.62	178.91	137.76
AMTSS	9	0.00	4696.58	521.84	1238.35	58.90	384.97	296.43
AMTNC	9	0.00	4160.78	462.31	1879.75	70.56	574.43	442.31

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 181.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 02/79.

	N	VOLWTA V	UEG/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	4	4.35	0.00	4.19	4.68	3.81	0.39	0.61
COND	4	26.61	0.00	42.03	119.00	9.00	51.87	82.48
CMPPT	4	0.00	4.77	1.19	2.82	0.58	1.09	1.73
H	4	44.32	0.00	65.05	154.88	20.89	61.80	98.26
HNV	4	39.46	0.00	58.71	144.54	17.78	58.98	93.78
NA	3	277.77	0.00	281.46	803.08	19.57	451.73	1121.48
K	3	5.56	0.00	5.62	15.06	0.77	8.18	20.31
CA	3	23.17	0.00	24.12	44.91	2.99	20.96	52.04
MG	3	66.12	0.00	67.04	190.35	4.52	106.79	265.12
NH4	3	26.41	0.00	26.24	38.81	16.63	11.38	28.25
LL	3	347.87	0.00	352.59	1009.00	22.00	568.47	1411.28
F	3	2.27	0.00	2.28	6.32	0.00	3.50	8.70
NO3	3	43.73	0.00	44.36	107.75	10.16	54.95	136.43
SO4	3	143.03	0.00	145.18	348.74	33.52	176.56	438.32
PO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	3	109.76	0.00	111.47	252.45	31.26	122.48	304.07
SAI	3	537.23	0.00	544.75	1472.80	66.20	803.84	1995.62
SCA	3	477.21	0.00	484.25	1247.09	79.57	661.05	1641.13
A/C	3	1.13	0.00	1.12	1.18	0.76	0.23	0.56
CL/NA	3	1.25	0.00	1.25	1.26	1.12	0.07	0.17
NA/MG	3	4.20	0.00	4.20	4.32	3.48	0.46	1.15
SS	3	358.50	0.00	363.31	1037.57	24.26	583.93	1449.68
IC	3	40.53	0.00	41.17	54.63	27.13	13.76	34.16
COND/P	3	0.70	0.00	0.71	0.86	0.53	0.16	0.41
AMTH	4	0.00	2113.53	528.36	992.21	205.21	348.28	553.76
AMTHNV	4	0.00	1681.84	470.46	925.99	163.01	334.21	531.39
AMTNA	3	0.00	5413.53	1804.51	5144.70	126.36	2892.70	7181.44
AMTK	3	0.00	106.38	36.13	96.49	4.45	52.30	129.84
AMTCA	3	0.00	451.63	150.54	287.70	21.80	133.15	330.56
AMTMG	3	0.00	1286.71	429.57	1219.43	32.94	684.04	1698.20
AMTNH4	3	0.00	514.83	171.61	248.61	96.67	75.99	188.66
AMTCL	3	0.00	6779.76	2259.92	6463.88	155.72	3640.74	9038.52
AMTF	3	0.00	44.29	14.76	40.46	0.00	22.34	55.45
AMTNO3	3	0.00	852.38	284.13	690.26	73.99	351.79	873.37
AMTSO4	3	0.00	2787.95	929.32	2234.08	244.07	1130.44	2806.43
AMTPO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	3	0.00	2139.47	713.16	1617.23	227.59	783.67	1945.55
AMTSS	3	0.00	6986.87	2328.96	6646.96	163.26	3739.50	9283.71
AMTNC	3	0.00	790.21	263.40	349.99	197.53	78.31	194.42

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N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEG/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEG/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 182.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT UCF SITE 18 DURING 03/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	2	4.40	0.00	4.48	4.60	4.38	0.16	1.40
COND	2	10.58	0.00	12.85	16.00	9.70	4.45	40.04
CMPPT	2	0.00	6.35	3.18	5.46	0.89	3.23	29.06
H	2	39.36	0.00	33.40	41.69	25.12	11.72	105.29
HNV	2	34.08	0.00	28.36	36.31	20.42	11.24	100.99
NA	2	14.17	0.00	12.61	14.78	10.44	3.07	27.63
K	2	0.80	0.00	0.89	1.02	0.77	0.18	1.62
CA	2	4.96	0.00	10.23	17.96	2.50	10.94	98.31
Mg	2	3.55	0.00	3.99	4.61	3.37	0.87	7.84
NH4	2	8.04	0.00	13.03	19.96	6.10	9.80	88.08
CL	2	18.88	0.00	15.93	20.02	11.84	5.78	51.97
F	2	5.12	0.00	3.42	5.79	1.05	3.35	30.10
NO3	2	15.34	0.00	16.61	18.39	14.84	5.51	22.55
SO4	2	34.24	0.00	37.16	41.22	33.10	5.74	51.60
PO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	2	32.55	0.00	35.67	40.01	31.33	6.13	55.12
SAN	2	73.58	0.00	73.13	73.75	72.51	0.88	71.92
SCA	2	70.59	0.00	74.15	79.10	69.20	7.00	62.93
A/C	2	1.04	0.00	0.99	1.07	0.92	0.11	0.95
CL/NA	2	1.33	0.00	1.26	1.35	1.13	0.15	1.39
NA/MG	2	4.00	0.00	3.16	4.38	2.27	1.50	13.46
SS	2	18.25	0.00	16.08	19.10	13.06	4.27	38.36
NC	2	12.97	0.00	24.67	40.92	8.41	22.99	206.58
COND/P	2	0.51	0.00	0.67	0.90	0.45	0.32	2.90
AMTH	2	0.00	2501.51	1250.76	2277.80	223.72	1452.46	13053.71
AMTHNV	2	0.00	2165.72	1082.86	1983.88	181.84	1274.23	11451.96
AMTNA	2	0.00	900.70	450.35	807.76	92.94	505.46	4542.71
AMTK	2	0.00	50.94	25.47	41.85	9.09	23.16	208.15
AMTCA	2	0.00	296.32	148.16	159.99	136.33	16.73	150.38
AMTMG	2	0.00	225.31	112.66	184.28	41.03	101.30	910.40
AMTNH4	2	0.00	510.97	255.49	333.22	177.75	109.93	987.99
AMTCL	2	0.00	1194.50	599.75	1094.01	105.49	699.00	6282.10
AMTF	2	0.00	325.71	162.85	316.33	9.34	217.05	1950.71
AMTNU3	2	0.00	974.61	487.31	810.85	163.77	457.55	4112.16
AMTSO4	2	0.00	2175.96	1087.98	1808.81	367.15	1019.41	9161.77
AMTPO4	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	2	0.00	2068.26	1034.13	1711.96	356.29	958.60	8615.28
AMTSS	2	0.00	1159.98	579.99	1043.63	116.35	655.69	5892.86
AMTNC	2	0.00	824.27	412.14	459.82	364.46	67.43	606.01

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-183

Table 183.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 07/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%CL
PH	1	4.62	0.00	4.62	4.62	4.62	0.00	0.00
COND	1	11.80	0.00	11.80	11.80	11.80	0.00	0.00
CMPPT	1	0.00	1.30	1.30	1.30	1.30	0.00	0.00
H	1	23.99	0.00	23.99	23.99	23.99	0.00	0.00
HNV	1	22.39	0.00	22.39	22.39	22.39	0.00	0.00
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	1	0.00	311.47	311.47	311.47	311.47	0.00	0.00
AMTHNV	1	0.00	290.68	290.68	290.68	290.68	0.00	0.00
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-184

Table 184.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 08/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LDW	ST. DEV	95% C.L.
PH	8	4.88	0.00	4.87	5.42	4.53	0.33	0.27
COND	8	13.40	0.00	14.61	28.20	3.50	9.55	7.96
CMPPT	8	0.00	14.44	1.80	5.34	0.06	1.64	1.37
H	8	13.11	0.00	13.49	29.51	3.80	9.16	7.64
HNV	8	8.51	0.00	9.83	21.88	1.05	8.03	6.70
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	8	0.00	1893.54	236.69	657.42	14.65	264.91	221.03
AMTHNV	8	0.00	1228.42	153.55	414.73	12.27	171.56	143.14
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPU4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMINC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-185

Table 185.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 09/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	9	4.73	0.00	4.56	5.24	4.19	0.34	0.26
COND	9	17.80	0.00	19.58	37.70	10.90	10.24	7.86
CMPPT	9	0.00	12.69	1.41	5.66	0.16	1.74	1.34
H	9	18.73	0.00	27.82	64.56	5.75	19.96	15.37
HNV	9	17.27	0.00	25.60	60.26	3.89	19.33	14.88
NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A/C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CL/NA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NA/MG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COND/P	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTH	9	0.00	2376.79	264.09	655.74	30.26	237.31	182.73
AMTHNV	9	0.00	2192.61	243.62	611.97	28.24	229.75	176.91
AMTNA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTK	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCA	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTMG	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNH4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTCL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTF	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTPO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTSS	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNC	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-18

Table 186.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 10/77.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.78	0.00	4.28	5.20	3.92	0.54	0.85
COND	4	18.71	0.00	36.42	78.00	14.30	28.35	45.08
CMPPT	4	0.00	0.32	1.58	4.67	0.12	2.14	3.40
H	4	16.62	0.00	53.03	120.23	6.31	46.35	76.88
HNV	4	12.81	0.00	47.19	109.65	2.82	45.16	71.81
NA	2	60.34	0.00	145.87	238.27	53.48	130.67	1174.34
K	2	2.40	0.00	6.89	11.74	2.04	6.86	61.66
CA	2	5.40	0.00	16.72	28.94	4.49	17.29	155.39
MG	2	14.22	0.00	29.53	46.07	13.00	23.38	210.15
NH4	2	12.51	0.00	23.28	34.93	11.64	16.46	147.98
CL	2	48.58	0.00	126.90	211.50	42.30	119.64	1075.27
F	2	1.13	0.00	2.11	3.16	1.05	1.49	13.38
NO3	2	4.45	0.00	25.81	48.87	2.74	32.62	293.17
SO4	2	22.20	0.00	70.58	122.84	18.32	73.40	664.20
PO4	2	0.29	0.00	3.95	7.90	0.00	5.58	50.19
XSSO4	2	17.20	0.00	57.52	101.08	13.97	61.59	553.56
SAN	2	76.65	0.00	229.34	394.27	64.42	233.24	2096.20
SCA	10	5.40	0.00	285.57	480.17	90.96	275.21	2473.44
A/C	2	0.73	0.00	0.80	0.82	0.71	0.08	0.72
CL/NA	2	0.81	0.00	0.87	0.89	0.79	0.07	0.62
NA/MG	2	4.24	0.00	4.94	5.17	4.11	0.75	6.72
SS	2	53.58	0.00	139.97	233.28	46.66	131.97	1186.00
NC	2	41.29	0.00	82.33	126.66	38.00	62.70	563.49
COND/P	2	1.20	0.00	1.03	1.21	0.85	0.25	2.28
AMTH	4	0.00	1050.23	262.56	476.78	62.65	172.30	273.95
AMTHNV	4	0.00	809.46	202.36	424.93	55.64	159.20	253.13
AMTNA	2	0.00	2926.68	1463.34	2498.54	428.14	1463.99	13157.36
AMTK	2	0.00	116.52	58.26	95.42	21.10	52.55	472.28
AMTCA	2	0.00	261.82	130.91	209.81	52.01	111.59	1002.88
AMTMG	2	0.00	689.98	344.99	607.21	82.77	370.83	3332.77
AMTNH4	2	0.00	606.68	303.34	543.92	62.76	340.23	3057.76
AMTCL	2	0.00	2356.24	1178.12	1976.20	380.04	1128.66	10143.62
AMTF	2	0.00	54.85	27.42	49.18	5.67	30.76	276.46
AMTNO3	2	0.00	215.93	107.96	128.11	87.82	28.49	256.02
AMTSO4	2	0.00	1076.69	538.34	855.96	220.73	449.18	4036.93
AMTPO4	2	0.00	14.19	7.10	14.19	0.00	10.03	90.18
AXSSO4	2	0.00	834.23	417.11	652.61	181.62	333.04	2993.15
AMTSS	2	0.00	2598.93	1299.47	2179.75	419.18	1244.91	11188.42
AMTNC	2	0.00	2002.74	1001.37	1775.14	227.60	1094.28	9834.64

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIO  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-187



Table 187.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 11/77.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	5.19	0.00	4.76	5.29	4.41	0.40	0.49
COND	5	6.70	0.00	15.28	25.00	4.60	9.74	12.11
CMPT	5	0.00	23.30	4.66	11.44	0.16	5.52	6.86
H	5	6.53	0.00	17.46	38.90	3.13	14.89	18.51
HNV	5	4.70	0.00	14.56	33.11	3.47	13.31	16.55
NA	4	20.48	0.00	45.76	86.96	13.91	35.77	56.87
K	4	0.26	0.00	0.96	2.30	0.00	1.05	1.67
CA	4	0.99	0.00	3.62	8.48	0.00	3.89	6.19
MG	4	4.55	0.00	9.62	16.86	2.88	7.07	11.24
NH4	4	1.48	0.00	3.88	7.20	0.55	5.56	8.64
CL	4	2.00	0.00	4.53	7.86	1.07	3.72	5.61
F	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NO3	4	2.78	0.00	6.81	17.74	1.29	7.47	11.88
SO4	4	5.86	0.00	14.89	33.94	3.12	14.09	22.41
PO4	4	3.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSU4	4	3.60	0.00	10.11	26.13	1.47	11.19	17.79
SAN	4	30.64	0.00	68.23	127.54	20.49	52.87	84.07
SCA	4	34.07	0.00	75.94	153.72	22.48	61.64	98.01
A/C	4	0.90	0.00	0.90	1.01	0.83	0.08	0.12
CL/NA	4	1.07	0.00	1.02	1.17	0.87	0.14	0.22
NA/MG	4	4.50	0.00	4.75	5.16	4.17	0.43	0.69
SS	4	24.25	0.00	51.27	83.67	17.73	37.13	59.03
NC	3	6.42	0.00	16.89	43.13	3.06	22.73	36.43
COND/P	4	1.12	0.00	1.06	1.14	0.96	0.09	0.14
AMTH	5	0.00	1520.55	304.11	643.18	62.00	256.10	518.40
AMTHNV	5	0.00	1095.09	219.02	396.58	52.77	162.21	301.66
AMTNA	4	0.00	4740.41	1185.10	2038.94	611.44	662.49	1053.36
AMTK	4	0.00	59.52	14.88	29.20	0.00	11.95	19.01
AMTCA	4	0.00	229.15	57.29	114.15	0.00	46.63	74.15
AMTMC	4	0.00	1053.18	263.30	489.24	118.57	166.33	264.47
AMTNH4	4	0.00	343.12	85.78	190.23	12.30	75.86	120.62
AMTCL	4	0.00	5090.36	1272.59	2128.75	533.38	723.09	1149.71
AMTF	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMTNO3	4	0.00	643.51	160.88	332.08	59.05	118.45	188.33
AMTSO4	4	0.00	1356.03	339.01	619.13	189.40	193.08	307.00
AMTPU4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSU4	4	0.00	832.91	208.23	400.09	103.80	132.00	209.89
AMTSS	4	0.00	5612.23	1403.06	2348.01	588.31	798.06	1268.91
AMTNC	3	0.00	850.98	283.66	513.75	33.98	240.48	397.03

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 188.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 12/77.

	N	VOLWTA V	UEQ/SQ. M	MEAN	HIGH	LOW	ST. DEV	95% C. L.
PH	8	4.76	0.00	4.64	5.25	4.18	0.35	0.29
COND	8	11.58	0.00	15.19	45.00	7.40	12.43	10.37
CMPPT	8	0.00	9.63	1.20	2.25	0.05	0.80	0.67
H	8	17.20	0.00	22.85	66.07	5.62	19.90	16.60
HNV	8	14.74	0.00	20.35	61.66	4.36	18.57	15.50
NA	7	24.76	0.00	22.42	35.22	7.83	9.00	8.34
K	7	0.33	0.00	0.29	0.77	0.00	0.27	0.25
CA	7	22.49	0.00	22.78	5.99	1.00	1.80	1.66
MG	7	22.66	0.00	22.22	7.57	0.96	1.73	1.60
NH4	7	22.82	0.00	22.61	4.99	0.00	1.53	1.41
CL	7	26.94	0.00	25.86	42.30	11.56	10.79	9.99
F	7	0.32	0.00	0.23	1.58	0.00	0.60	0.55
NO3	7	5.33	0.00	6.04	9.68	1.77	3.07	2.84
SO4	7	15.76	0.00	14.76	27.27	5.20	8.67	8.03
PO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	7	13.11	0.00	12.35	25.50	2.55	9.14	8.47
SAN	7	48.36	0.00	46.91	61.77	34.81	10.03	9.29
SCA	7	53.00	0.00	50.00	60.80	40.52	7.86	7.28
A/C	7	0.91	0.00	0.94	1.24	0.74	0.17	0.15
CL/NA	7	1.09	0.00	1.15	1.69	0.90	0.30	0.28
NA/MG	7	4.37	0.00	4.30	4.81	2.64	0.74	0.68
SS	7	28.72	0.00	26.10	45.50	10.11	10.82	10.02
NC	7	7.34	0.00	7.23	11.96	2.10	3.94	3.65
COND/P	7	1.00	0.00	0.99	1.10	0.90	0.08	0.07
AMTH	8	0.00	1656.61	207.08	648.57	34.07	205.35	171.34
AMTHNV	8	0.00	1419.75	177.47	539.46	31.79	173.75	144.98
AMTNA	7	0.00	2371.30	338.76	792.42	42.56	258.25	239.14
AMTK	7	0.00	31.74	4.53	11.73	0.00	5.11	4.73
AMTCA	7	0.00	238.80	34.11	79.29	5.31	25.55	20.89
AMTMG	7	0.00	542.23	77.46	170.28	16.10	55.74	51.61
AMTNH4	7	0.00	269.81	38.54	95.50	7.87	35.23	32.63
AMTCL	7	0.00	2580.23	368.60	951.75	62.87	291.44	269.88
AMTF	7	0.00	30.22	4.32	30.22	0.00	11.42	10.58
AMTNO3	7	0.00	510.11	72.87	185.24	26.89	53.16	49.23
AMTSO4	7	0.00	1511.47	215.92	522.04	18.46	180.03	166.71
AMTPO4	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	7	0.00	1255.58	179.37	488.12	9.03	167.43	155.04
AMTSS	7	0.00	2751.05	393.01	1023.81	54.98	321.99	298.17
AMTNC	7	0.00	702.82	100.40	211.12	7.45	70.95	65.70

N=NUMBER OF SAMPLES  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 189.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 01/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.61	0.00	4.51	5.04	4.05	0.39	0.49
COND	5	17.57	0.00	24.56	49.40	9.50	16.15	20.08
CMPPT	5	0.00	5.39	1.08	2.84	0.16	1.04	1.30
H	5	24.59	0.00	30.95	89.13	9.12	33.44	41.57
HNV	5	22.70	0.00	28.76	89.13	4.79	34.71	43.15
NA	5	48.06	0.00	70.09	119.14	24.78	36.65	45.57
K	5	1.03	0.00	2.20	3.83	0.00	2.01	2.51
CA	5	9.29	0.00	18.66	44.41	3.99	16.68	20.73
MG	5	11.35	0.00	16.99	27.15	6.09	9.02	11.21
NH4	5	7.16	0.00	12.31	23.28	3.33	9.36	11.64
CL	5	47.36	0.00	69.37	109.13	26.23	33.50	41.65
TF	5	0.08	0.00	0.11	0.53	0.00	0.24	0.29
NO3	5	8.97	0.00	14.23	29.52	4.19	11.60	14.67
SO4	5	31.95	0.00	46.84	115.76	14.16	42.64	53.02
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	27.08	0.00	39.75	107.84	9.51	41.35	51.41
SAN	5	68.35	0.00	130.59	222.79	44.79	74.84	93.05
SCA	10	11.47	0.00	151.20	240.88	51.99	83.26	103.52
A/C	5	0.87	0.00	0.86	0.92	0.79	0.05	0.06
CL/NA	5	0.49	0.00	0.99	1.14	0.92	0.09	0.12
NA/MG	5	4.23	0.00	4.12	4.95	3.61	0.50	0.62
SS	5	2.23	0.00	76.52	120.38	28.93	36.95	45.94
NC	5	24.65	0.00	43.73	72.91	9.26	31.15	38.72
COND/P	5	0.91	0.00	0.91	0.95	0.87	0.03	0.04
AMTH	5	0.00	132	265.11	696.29	46.11	279.37	347.32
AMTHNV	5	0.00	123	244.78	696.29	25.43	282.19	350.83
AMINA	5	0.00	591	518.20	704.78	122.97	236.51	294.04
AMTK	5	0.00	55	11.09	29.92	0.00	13.43	16.69
AMTCA	5	0.00	500	100.14	179.33	43.04	51.67	64.24
AMTMG	5	0.00	611	122.38	173.11	34.06	57.52	71.51
AMTNH4	5	0.00	386	77.20	160.26	35.86	52.23	64.93
AMTCL	5	0.00	553	510.63	745.80	139.68	277.23	282.50
AMTF	5	0.00	4	0.82	4.11	0.00	1.84	2.29
AMTNO3	5	0.00	483	96.70	230.61	37.81	81.67	101.54
AMTSO4	5	0.00	1722	344.54	904.37	92.39	335.49	417.10
AMTPO4	5	0.00	0	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	1460	292.00	842.48	78.02	324.50	403.43
AMTSS	5	0.00	2816	563.23	822.62	154.06	250.63	311.60
AMTNC	5	0.00	1328	265.79	522.18	113.92	168.12	209.02

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHIED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-1(j)

Table 190.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 02/78.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	7	4.34	0.00	4.23	4.58	3.95	0.21	0.20
COND	7	22.39	0.00	37.09	121.00	12.00	37.48	34.71
CMPT	7	0.00	12.60	1.80	3.63	0.02	1.46	1.35
H	7	45.83	0.00	58.60	112.20	26.30	29.00	26.86
HNV	7	39.41	0.00	50.04	79.43	23.99	21.43	19.85
NA	6	30.42	0.00	23.41	62.18	6.09	22.35	23.45
K	6	0.65	0.00	0.64	1.02	0.25	0.35	0.37
CA	6	8.74	0.00	7.32	21.96	0.00	7.79	8.18
MG	6	7.91	0.00	6.05	14.81	1.65	5.29	5.59
NH4	6	7.57	0.00	6.10	17.74	1.66	5.92	6.21
CL	6	30.55	0.00	23.88	58.37	4.51	20.28	21.57
F	6	1.60	0.00	1.05	3.68	0.00	1.66	1.75
NO3	6	11.53	0.00	12.31	21.94	5.32	7.04	7.39
SO4	6	37.65	0.00	38.20	48.51	16.45	11.72	12.30
PO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	6	34.60	0.00	35.84	48.05	15.63	11.95	12.53
SAN	6	81.32	0.00	75.45	103.50	29.67	27.31	28.65
SCA	6	101.04	0.00	93.17	131.76	37.60	33.09	34.72
A/C	6	0.80	0.00	0.81	0.88	0.78	0.04	0.04
CL/NA	6	1.00	0.00	1.02	1.38	0.74	0.25	0.27
NA/MG	6	3.85	0.00	3.87	4.28	2.70	0.57	0.60
SS	6	32.73	0.00	25.36	64.39	4.98	22.71	23.83
NC	6	22.55	0.00	18.15	49.28	2.58	16.61	17.43
COND/P	6	0.89	0.00	0.91	0.99	0.82	0.06	0.07
AMTH	7	0.00	5773.97	824.85	2134.56	17.53	725.63	671.94
AMTHNV	7	0.00	4964.88	709.27	1735.03	12.41	586.53	543.14
AMTNA	6	0.00	3827.07	637.84	2059.59	21.69	798.44	837.72
AMTK	6	0.00	81.97	13.66	29.20	0.91	11.08	11.62
AMTCA	6	0.00	1099.83	183.31	627.80	0.00	248.05	260.25
AMTMG	6	0.00	994.73	165.79	490.47	5.86	191.20	200.61
AMTNH4	6	0.00	952.90	158.82	507.28	11.85	190.24	199.60
AMTCL	6	0.00	3843.43	640.57	1933.64	16.07	733.60	769.69
AMTF	6	0.00	200.73	33.46	105.34	0.00	51.92	54.48
AMTNO3	6	0.00	1450.65	241.78	571.91	38.50	195.64	205.27
AMTSO4	6	0.00	4737.67	789.61	1532.09	172.82	580.42	608.98
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	4353.79	725.63	1484.85	171.16	537.28	563.71
AMTSS	6	0.00	4118.51	686.42	2132.80	17.73	816.16	856.32
AMTNC	6	0.00	2837.99	473.00	1409.23	38.35	544.08	570.85

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 191.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 03/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.53	0.00	4.41	4.80	4.17	0.25	4.31
COND	5	21.53	0.00	30.78	55.50	10.00	18.47	22.96
CMPT	5	0.00	2.84	0.57	1.06	0.07	0.44	0.55
H	5	29.47	0.00	39.18	67.61	15.85	20.39	25.35
HNV	5	28.02	0.00	38.13	61.66	15.14	19.33	24.04
NA	4	39.33	0.00	53.59	131.31	15.65	52.73	83.83
K	4	1.18	0.00	1.79	4.08	0.00	1.74	2.77
CA	4	13.41	0.00	22.45	47.41	3.99	21.52	34.21
MG	4	10.96	0.00	15.67	37.10	3.95	15.01	23.86
NH4	4	9.81	0.00	16.08	29.38	2.22	14.76	23.47
CL	4	44.40	0.00	61.12	151.43	16.36	61.36	97.57
F	4	0.87	0.00	1.18	2.11	0.53	0.79	1.26
NO3	4	15.58	0.00	22.58	40.49	7.26	17.00	27.03
SO4	4	40.73	0.00	49.76	78.41	21.24	24.95	39.67
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	36.16	0.00	43.47	63.32	18.01	20.05	31.88
SAN	4	101.58	0.00	134.65	272.93	60.32	99.19	157.71
SCA	4	103.68	0.00	146.31	302.92	42.66	118.20	187.93
A/C	4	0.98	0.00	0.92	1.53	0.82	0.33	0.53
CL/NA	4	1.13	0.00	1.14	1.15	1.05	0.05	0.08
NA/MG	4	3.59	0.00	3.42	4.08	2.67	0.64	1.01
SS	4	48.97	0.00	67.42	167.03	18.04	67.68	107.62
NC	4	25.72	0.00	42.16	82.02	8.77	38.50	61.22
COND/P	4	0.93	0.00	0.95	1.03	0.83	0.09	0.14
AMTH	5	0.00	636.06	167.21	269.38	33.67	95.80	119.10
AMTHNV	5	0.00	794.96	158.99	245.67	31.42	82.22	102.22
AMTNA	4	0.00	1088.94	272.24	523.19	121.17	179.86	285.98
AMTK	4	0.00	32.74	8.19	16.27	0.00	6.84	10.87
AMTCA	4	0.00	371.33	92.83	145.18	39.92	54.02	85.90
AMTMG	4	0.00	303.39	75.85	147.82	41.95	49.38	78.52
AMTNH4	4	0.00	271.58	67.89	117.07	23.56	41.98	66.75
AMTCL	4	0.00	1229.22	307.30	603.37	139.04	211.21	335.82
AMTF	4	0.00	24.08	6.02	8.39	4.83	1.61	2.56
AMTNO3	4	0.00	431.40	107.85	161.31	72.58	37.89	60.25
AMTSO4	4	0.00	1127.21	281.80	418.09	182.36	107.00	170.13
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	1000.72	250.18	400.21	168.05	106.71	169.67
AMTSS	4	0.00	1355.82	338.96	665.52	153.36	232.96	370.41
AMTNC	4	0.00	712.16	178.04	272.05	93.16	96.88	154.04

N=NUMBER OF SAMPLES  
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 COND, CMPT, AND RADIUS  
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 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 192.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 04/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LDW	ST. DEV	95% C.L.
PH	2	4.43	0.00	4.46	4.79	4.28	0.36	3.24
COND	22	52.45	0.00	52.75	54.50	51.00	2.47	22.24
CMPPPT	22	0.00	0.44	0.22	0.26	0.18	0.05	0.48
H	22	37.43	0.00	34.35	52.48	16.22	25.64	23.00
INV	22	34.45	0.00	31.00	51.29	10.72	28.69	25.70
NA	135	15.15	0.00	151.53	247.84	55.22	136.20	122.07
K	22	6.87	0.00	7.02	7.91	6.13	1.26	1.36
CA	22	64.48	0.00	67.36	84.33	50.40	23.99	21.50
MG	22	29.16	0.00	31.42	44.75	18.10	18.85	16.90
NH4	22	78.14	0.00	77.34	82.05	72.63	6.66	59.90
CL	110	5.67	0.00	119.71	172.87	66.55	75.18	67.63
F	22	5.87	0.00	6.32	8.95	3.68	3.72	3.35
NO3	22	36.61	0.00	36.94	38.87	35.00	2.74	24.60
SO4	117	84.84	0.00	118.05	119.30	116.80	1.77	15.88
PO4	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	106	5.58	0.00	105.85	110.18	101.51	6.13	55.09
SAN	270	9.98	0.00	281.01	339.99	222.04	83.40	74.55
SCA	351	2.23	0.00	369.03	473.67	264.38	148.00	133.10
A/C	22	0.77	0.00	0.76	0.84	0.72	0.09	0.78
CL/NA	22	0.82	0.00	0.79	1.20	0.70	0.36	0.22
NA/MG	22	4.64	0.00	4.82	5.54	3.05	1.76	1.50
SS	120	8.66	0.00	131.01	190.67	71.34	84.38	75.32
NC	192	9.93	0.00	203.67	266.79	140.55	89.26	80.23
COND/P	22	1.01	0.00	1.00	1.05	0.95	0.07	0.63
AMTH	22	0.00	164.95	82.48	135.30	29.65	74.71	67.10
AMTHNV	22	0.00	151.81	75.91	132.22	19.59	79.64	71.50
AMTNA	22	0.00	595.44	297.72	453.08	142.36	219.71	197.57
AMTK	22	0.00	30.27	15.13	15.80	14.47	0.94	8.45
AMTCA	22	0.00	284.10	142.05	154.17	129.94	17.14	15.00
AMTMG	22	0.00	128.46	64.23	81.81	46.66	24.86	23.58
AMTNH4	22	0.00	344.31	172.15	211.54	132.77	55.70	50.57
AMTCL	22	0.00	487.60	243.80	316.02	171.58	102.14	91.93
AMTF	22	0.00	25.85	12.93	16.36	9.50	4.85	4.58
AMTNO3	22	0.00	161.31	80.65	90.24	71.06	13.56	12.86
AMTSO4	22	0.00	519.22	259.61	301.13	218.09	58.71	52.67
AMTPO4	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	22	0.00	469.63	234.82	284.06	185.57	69.64	62.85
AMTSS	22	0.00	532.50	266.25	348.57	183.93	116.42	104.27
AMTNC	22	0.00	850.07	425.04	487.72	362.36	88.64	79.66

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 193.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 05/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	5	4.57	0.00	4.61	4.91	4.48	0.16	0.20
COND	5	25.00	0.00	36.06	72.00	21.00	20.65	25.68
CMPT	5	0.00	10.08	22.02	33.94	0.04	1.62	22.02
H	5	27.09	0.00	24.65	33.11	12.30	7.67	9.54
HNV	5	21.71	0.00	18.94	28.18	9.33	7.29	9.06
NA	4	42.22	0.00	44.02	60.00	14.78	20.83	33.11
K	4	22.12	0.00	22.30	2.81	1.79	0.47	0.74
CA	4	12.03	0.00	17.46	41.92	2.00	17.12	27.22
MG	4	10.42	0.00	11.35	14.39	3.37	5.33	8.47
NH4	4	27.76	0.00	31.46	43.24	16.63	11.03	17.53
CL	4	49.43	0.00	51.04	68.81	17.20	24.35	38.72
F	4	0.84	0.00	1.58	4.74	0.00	2.15	3.42
NO3	4	16.98	0.00	19.11	24.68	14.19	5.22	8.30
SO4	4	33.30	0.00	40.96	77.24	25.61	24.33	38.68
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	28.28	0.00	35.75	72.16	22.01	24.31	38.65
SAN	4	100.55	0.00	112.70	156.01	58.50	40.62	64.58
SCA	4	121.71	0.00	134.34	171.23	80.00	40.10	63.76
A/C	4	0.83	0.00	0.84	0.91	0.73	0.08	0.13
CL/NA	4	1.17	0.00	1.16	1.19	1.13	0.02	0.04
NA/MG	4	4.05	0.00	3.88	4.38	3.16	0.55	0.87
SS	4	54.06	0.00	56.00	75.89	18.97	26.58	42.26
NC	4	40.50	0.00	50.60	90.50	27.41	27.83	44.25
COND/P	4	1.13	0.00	1.13	1.46	0.88	0.24	0.38
AMTH	5	0.00	2730.61	546.12	1084.48	5.00	426.78	530.60
AMTHNV	5	0.00	2188.14	437.63	923.04	3.79	367.90	457.40
AMTNA	4	0.00	4237.78	1059.44	2276.99	448.39	850.72	1352.64
AMTK	4	0.00	213.14	53.29	70.37	26.33	20.83	33.12
AMTCA	4	0.00	1207.08	301.77	471.55	67.49	187.17	297.60
AMTMG	4	0.00	1046.02	261.50	547.39	114.04	198.48	315.58
AMTNH4	4	0.00	2786.93	696.73	1143.49	445.94	309.83	492.63
AMTCL	4	0.00	4961.02	1240.25	2709.32	508.92	1021.93	1624.87
AMTF	4	0.00	84.41	21.10	48.85	0.00	20.31	32.29
AMTNO3	4	0.00	1704.43	426.11	558.90	254.50	137.67	218.89
AMTSO4	4	0.00	3343.02	835.75	1139.50	541.06	246.00	391.15
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	2838.30	709.58	866.49	421.58	198.38	315.43
AMTSS	4	0.00	5423.50	1356.37	2941.87	561.34	1104.93	1756.83
AMTNC	4	0.00	4065.46	1016.36	1252.38	800.52	194.22	308.81

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 194.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 06/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LDW	ST. DEV	95% C.L.
PH	8	4.64	0.00	4.57	5.04	4.14	0.31	0.26
COND	8	15.93	0.00	18.35	47.60	8.60	13.30	11.10
CMPPT	8	0.00	20.03	22.50	6.64	0.47	1.93	1.61
H	8	22.72	0.00	26.85	72.44	9.12	21.85	18.23
HNV	8	19.21	0.00	23.51	69.18	7.08	20.77	17.33
NA	8	25.21	0.00	29.35	65.65	16.52	15.51	12.94
K	8	1.00	0.00	1.08	2.04	0.77	0.43	0.36
CA	8	5.66	0.00	5.05	6.99	2.00	1.63	1.36
MG	8	5.53	0.00	6.50	15.88	3.29	3.99	3.33
NH4	8	7.35	0.00	5.47	14.97	1.11	5.29	4.41
CL	8	26.08	0.00	31.30	80.37	15.79	21.07	17.58
F	8	0.35	0.00	0.59	4.74	0.00	1.67	1.40
NO3	8	8.80	0.00	9.68	25.81	2.42	7.32	6.11
SO4	8	22.23	0.00	24.13	62.04	9.37	18.00	15.02
PO4	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	8	19.58	0.00	20.97	54.17	7.40	16.48	13.75
SAN	8	57.47	0.00	65.70	168.22	35.38	43.80	36.54
SCA	8	67.45	0.00	74.31	168.10	42.28	40.82	34.06
A/C	8	0.85	0.00	0.88	1.00	0.76	0.08	0.07
CL/NA	8	1.03	0.00	1.07	1.22	0.89	0.12	0.10
NA/MG	8	4.56	0.00	4.52	5.07	4.13	0.34	0.28
SS	8	28.52	0.00	33.91	84.83	17.42	21.92	18.29
NC	8	16.22	0.00	13.55	25.52	9.20	5.59	4.67
COND/P	8	1.06	0.00	1.06	1.13	0.99	0.06	0.05
AMTH	8	0.00	4549.98	568.75	1871.58	121.96	560.03	467.28
AMTHNV	8	0.00	3847.23	480.90	1592.97	116.47	474.68	396.07
AMTNA	8	0.00	5049.54	631.19	1645.79	247.84	469.32	391.60
AMTK	8	0.00	199.40	24.92	67.81	9.57	19.71	16.45
AMTCA	8	0.00	1133.57	141.70	463.91	28.07	146.45	122.20
AMTMG	8	0.00	1107.67	138.46	382.38	49.36	110.35	92.07
AMTNH4	8	0.00	1471.31	183.91	994.02	16.11	333.20	278.02
AMTCL	8	0.00	5223.28	652.91	1685.39	236.88	501.33	418.31
AMTF	8	0.00	71.05	8.88	71.05	0.00	25.12	20.96
AMTNO3	8	0.00	1763.09	220.39	771.22	40.22	233.09	194.49
AMTSO4	8	0.00	4453.53	556.69	2129.17	119.00	652.51	544.45
AMTPO4	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	8	0.00	3921.36	490.17	1955.74	90.89	607.64	507.01
AMTSS	8	0.00	5712.68	714.09	1858.99	261.28	550.68	459.48
AMTNC	8	0.00	3248.81	406.10	1694.93	50.78	532.09	443.97

N=NUMBER OF SAMPLES  
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 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-195



Table 195.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 07/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	10	4.24	0.00	4.22	4.86	3.79	0.37	0.27
COND	10	33.53	0.00	35.36	80.00	18.80	19.60	14.01
CMPPT	10	0.00	21.67	2.17	5.28	0.28	1.49	1.07
H	10	56.91	0.00	59.73	162.18	13.80	47.26	33.77
HNV	10	54.10	0.00	56.93	162.18	10.23	48.08	34.36
NA	10	41.14	0.00	44.22	61.74	24.35	12.95	9.26
K	10	1.22	0.00	1.43	2.04	0.51	0.50	0.36
CA	10	8.63	0.00	11.13	18.96	2.99	3.71	2.08
MG	10	9.03	0.00	10.01	14.56	5.10	3.26	2.33
NH4	10	2.61	0.00	5.10	21.07	0.55	6.16	4.40
CL	10	45.30	0.00	47.80	70.50	23.41	17.56	12.55
F	10	0.73	0.00	0.89	3.68	0.00	1.17	0.83
NO3	10	19.11	0.00	23.94	59.52	10.81	14.64	10.46
SO4	10	47.80	0.00	50.41	133.04	17.90	37.13	26.54
PO4	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	10	43.17	0.00	45.52	128.66	10.81	37.86	27.05
SAN	10	112.95	0.00	123.04	238.83	84.40	47.75	34.13
SCA	10	119.53	0.00	131.62	261.46	95.24	52.36	37.42
A/C	10	0.94	0.00	0.93	1.01	0.88	0.05	0.04
CL/NA	10	1.10	0.00	1.08	1.19	0.87	0.12	0.08
NA/MG	10	4.56	0.00	4.42	5.21	3.92	0.37	0.26
SS	10	49.68	0.00	52.45	76.40	25.82	18.98	13.56
NC	10	12.95	0.00	19.44	52.31	7.69	14.12	10.09
COND/P	10	1.06	0.00	1.05	1.13	0.99	0.05	0.03
AMTH	10	0.00	1233.00	1233.04	4816.56	95.27	1441.70	1030.35
AMTHNV	10	0.00	1172.22	1172.24	4816.56	81.09	1443.89	1031.91
AMTNA	10	0.00	8911.92	891.19	1367.45	130.85	515.08	368.12
AMTK	10	0.00	264.79	26.48	41.33	5.03	14.26	10.19
AMTCA	10	0.00	1868.68	186.89	369.26	53.33	110.87	79.24
AMTMG	10	0.00	1956.30	195.63	302.46	30.77	111.78	79.88
AMTNH4	10	0.00	565.85	56.59	133.06	21.83	33.69	24.07
AMTCL	10	0.00	9814.95	981.49	1630.31	119.76	602.21	430.39
AMTF	10	0.00	158.88	15.89	70.98	0.00	21.56	15.41
AMTNO3	10	0.00	4141.45	414.15	1030.76	92.75	286.93	205.06
AMTSO4	10	0.00	10356.76	1035.68	3837.45	114.51	1136.90	812.52
AMTPU4	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	10	0.00	9354.41	935.44	3710.25	86.94	1121.92	801.81
AMTSS	10	0.00	10762.90	1076.29	1766.74	132.10	656.79	469.39
AMTNC	10	0.00	2804.85	280.48	546.19	143.60	130.94	93.58

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 196.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 08/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	5	4.58	0.00	4.66	5.09	4.45	0.27	0.33
COND	5	16.56	0.00	17.48	23.20	11.80	4.53	5.63
CMPPT	5	0.00	5.57	1.11	2.19	0.12	0.77	0.96
H	5	26.10	0.00	22.00	35.48	8.13	12.36	15.36
HNV	5	24.43	0.00	19.84	33.11	6.61	12.49	15.53
NA	5	43.73	0.00	47.91	75.22	36.52	16.09	20.00
K	5	1.64	0.00	1.84	2.81	1.28	0.61	0.76
CA	5	7.18	0.00	10.28	19.96	4.49	5.97	7.43
MG	5	10.69	0.00	11.32	18.01	7.32	4.01	4.98
NH4	5	1.87	0.00	2.33	4.44	0.55	1.59	1.97
CL	5	51.21	0.00	55.05	89.11	38.07	20.52	25.51
F	5	0.33	0.00	0.21	0.53	0.00	0.29	0.36
NO3	5	9.71	0.00	10.29	16.13	3.23	4.85	6.03
SO4	5	24.71	0.00	23.15	33.73	13.95	8.15	10.14
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	19.66	0.00	17.62	28.72	7.22	8.92	11.09
SAN	5	65.96	0.00	88.70	114.71	57.46	21.69	26.97
SCA	5	91.20	0.00	95.68	123.56	68.05	20.13	25.03
A/C	5	0.94	0.00	0.93	1.03	0.84	0.07	0.09
CL/NA	5	1.17	0.00	1.15	1.28	1.04	0.10	0.12
NA/MG	5	4.09	0.00	4.23	4.99	3.79	0.52	0.64
SS	5	54.32	0.00	59.46	97.18	41.99	22.38	27.82
NC	5	10.78	0.00	14.22	25.84	5.97	7.44	9.25
COND/P	5	0.90	0.00	0.98	1.13	0.62	0.20	0.25
AMTH	5	0.00	145.16	290.43	758.49	19.26	313.28	389.49
AMTHNV	5	0.00	1359.44	271.89	724.35	13.32	300.77	373.94
AMTNA	5	0.00	2432.79	486.56	913.08	58.34	302.80	376.45
AMTK	5	0.00	91.26	18.25	33.51	2.42	11.04	13.73
AMTCA	5	0.00	399.24	79.85	106.70	23.70	32.99	41.01
AMTMG	5	0.00	594.73	118.95	241.13	12.60	81.84	101.74
AMTNH4	5	0.00	104.28	20.86	41.84	3.81	16.23	20.18
AMTCL	5	0.00	2849.47	569.89	1172.06	64.97	396.61	493.08
AMTF	5	0.00	18.13	3.63	11.51	0.00	5.26	6.54
AMTNO3	5	0.00	540.49	108.10	211.71	15.71	94.55	117.56
AMTSO4	5	0.00	1374.78	274.96	737.81	32.88	278.91	346.76
AMTPO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	5	0.00	1093.73	218.75	628.33	26.20	247.29	307.44
AMTSS	5	0.00	3022.28	604.46	1179.70	71.66	395.12	491.23
AMTNC	5	0.00	600.02	120.00	202.08	30.68	68.22	84.81

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPPT,AND RADIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 197.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 09/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	9	4.53	0.00	4.44	4.90	4.10	0.28	0.21
COND	9	21.31	0.00	26.81	48.20	12.60	12.10	9.32
CMPPT	9	0.00	11.67	1.30	4.06	0.05	1.56	1.20
H	9	29.49	0.00	36.34	79.43	12.59	22.14	17.05
HNV	9	27.57	0.00	32.86	75.86	11.75	20.67	15.91
NA	8	38.99	0.00	60.11	99.13	30.00	28.91	24.13
K	8	1.29	0.00	1.91	3.83	0.51	1.07	0.89
CA	8	5.09	0.00	7.24	16.96	2.50	5.21	4.34
MG	8	9.23	0.00	14.00	23.20	7.16	6.70	5.59
NH4	8	3.04	0.00	6.79	29.94	0.55	9.81	8.19
CL	8	44.18	0.00	70.54	147.77	34.97	40.44	33.74
F	8	0.62	0.00	0.26	2.11	0.00	0.74	0.62
NO3	8	12.90	0.00	17.62	58.23	7.26	17.11	14.27
SO4	8	25.15	0.00	33.13	66.62	12.28	19.63	16.38
PO4	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	8	20.68	0.00	26.33	54.74	7.99	17.58	14.67
SAN	8	82.91	0.00	122.82	282.40	61.28	73.47	61.30
SCA	8	87.08	0.00	126.07	254.49	66.59	64.66	53.95
A/C	8	0.93	0.00	0.97	1.11	0.82	0.08	0.07
CL/NA	8	1.13	0.00	1.17	1.49	0.94	0.16	0.13
NA/MG	8	4.22	0.00	4.29	4.50	4.02	0.14	0.12
SS	8	48.06	0.00	73.03	128.08	38.76	36.06	30.09
NC	8	9.58	0.00	17.03	46.98	2.49	14.14	11.80
COND/P	8	1.07	0.00	0.99	1.13	0.82	0.11	0.09
AMTH	9	0.00	3440.12	382.24	1804.02	25.53	574.82	442.61
AMTHNV	9	0.00	3215.24	357.25	1722.83	21.73	548.64	422.45
AMTNA	8	0.00	4521.51	565.19	1536.75	49.57	557.18	464.91
AMTK	8	0.00	149.22	18.65	72.60	1.91	24.36	20.33
AMTCA	8	0.00	590.85	73.86	274.45	5.75	93.45	77.97
AMTMG	8	0.00	1070.95	133.87	360.92	11.60	133.03	111.00
AMTNH4	8	0.00	352.94	44.12	209.63	4.16	69.48	57.97
AMTCL	8	0.00	5124.38	640.55	1695.52	73.88	625.02	521.51
AMTF	8	0.00	72.37	9.05	72.37	0.00	25.59	21.35
AMTNO3	8	0.00	1496.58	187.07	770.71	14.01	257.36	214.73
AMTSO4	8	0.00	2917.06	364.63	1467.16	33.31	484.18	403.99
AMTPU4	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	8	0.00	2397.95	299.74	1338.48	23.81	442.92	369.56
AMTSS	8	0.00	5573.96	696.75	1870.16	64.04	685.54	572.00
AMTNC	8	0.00	1111.50	138.94	558.58	22.04	190.73	159.14

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RAINUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

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Table 198.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN  
 COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT  
 KSC SITE 19 DURING 10/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95% C.L.
PH	10	4.57	0.00	4.27	5.15	3.79	0.42	0.30
COND	10	19.61	0.00	40.66	85.00	7.00	28.54	20.40
CMPT	10	0.00	14.11	1.41	3.95	0.04	1.65	1.18
H	10	26.88	0.00	54.26	162.15	7.08	50.17	35.86
HNV	10	22.98	0.00	47.48	147.91	6.03	45.49	32.51
NA	9	54.84	0.00	144.26	454.37	3.91	170.96	131.64
K	9	1.54	0.00	3.57	9.70	0.51	3.67	2.82
CA	9	6.62	0.00	12.25	27.44	1.00	8.82	6.79
MG	9	12.69	0.00	32.21	102.33	0.99	37.71	29.03
NH4	9	3.23	0.00	7.08	22.18	1.11	7.13	5.49
CL	9	62.15	0.00	160.43	510.14	4.51	186.13	143.32
F	9	0.46	0.00	1.93	5.26	0.00	2.06	1.58
NO3	9	7.30	0.00	18.75	43.55	2.42	16.07	12.37
SO4	9	25.49	0.00	55.31	108.68	9.99	39.23	30.21
PO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	9	19.23	0.00	38.95	100.15	9.53	32.27	24.85
SAN	9	45.40	0.00	236.41	623.23	16.92	219.62	169.10
SCA	9	105.77	0.00	255.24	633.83	22.31	225.68	173.78
A/C	9	0.90	0.00	0.93	1.02	0.76	0.09	0.07
CL/NA	9	1.13	0.00	1.11	1.40	0.96	0.14	0.11
NA/MG	9	4.32	0.00	4.48	4.99	2.94	0.56	0.43
SS	9	67.15	0.00	175.50	562.88	24.98	206.01	158.63
NC	9	11.78	0.00	23.87	67.58	2.54	21.00	16.17
COND/P	9	0.98	0.00	0.93	1.05	0.78	0.11	0.08
AMTH	10	0.00	3793.31	379.33	1565.45	17.42	457.61	327.04
AMIHNV	10	0.00	3242.76	324.28	1332.41	16.25	390.21	278.87
AMINA	9	0.00	7716.95	857.44	3145.44	21.20	946.97	729.17
AMTK	9	0.00	217.24	24.14	80.74	1.60	23.27	17.92
AMICA	9	0.00	931.06	103.45	493.15	11.23	149.34	114.99
AMTMG	9	0.00	1786.30	198.48	760.93	7.20	228.63	176.04
AMTNH4	9	0.00	454.93	50.55	204.11	4.76	61.53	47.38
AMTCL	9	0.00	8745.18	971.69	3578.45	29.61	1073.60	826.67
AMTF	9	0.00	64.78	7.20	26.64	0.00	10.06	7.74
AMTNU3	9	0.00	1027.22	114.14	299.69	17.39	67.35	67.26
AMTSO4	9	0.00	3585.76	398.42	1066.13	66.85	326.67	251.54
AMTPO4	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	9	0.00	2705.38	300.60	968.42	25.84	284.48	219.05
AMTSS	9	0.00	9448.46	1049.83	3947.03	27.39	1183.15	911.03
AMTNC	9	0.00	1658.03	184.23	577.06	22.43	180.42	138.92

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-199

Table 199.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 11/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	6	4.61	0.00	4.41	4.76	4.10	0.28	0.29
COND	6	33.91	0.00	38.70	71.00	13.50	19.77	20.74
CMPT	6	0.00	2.45	0.41	1.12	0.06	0.40	0.42
H	6	24.45	0.00	39.14	79.43	17.38	24.61	25.82
HNV	6	21.62	0.00	34.11	69.18	15.85	21.17	22.21
NA	5	153.32	0.00	152.27	333.49	18.26	131.61	163.63
K	5	3.97	0.00	4.19	8.42	1.28	2.76	3.43
CA	5	12.99	0.00	13.17	24.45	3.99	7.65	9.52
MG	5	34.57	0.00	34.47	75.35	4.61	29.51	36.69
NH4	5	0.52	0.00	0.22	1.11	0.00	0.50	0.62
CL	5	162.35	0.00	161.13	343.76	20.30	137.27	170.67
F	5	0.25	0.00	0.63	1.58	0.00	0.69	0.85
NO3	5	10.78	0.00	16.19	31.94	5.48	10.65	13.25
SO4	5	33.89	0.00	40.14	84.32	18.74	26.24	32.62
PO4	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	5	17.18	0.00	23.56	48.95	13.57	14.46	17.98
SAN	5	207.26	0.00	218.10	450.58	64.27	159.33	198.09
SCA	5	229.17	0.00	241.49	521.15	69.63	186.45	231.61
A/C	5	0.90	0.00	0.90	1.00	0.87	0.05	0.07
CL/NA	5	1.06	0.00	1.06	1.15	0.90	0.10	0.12
NA/MG	5	4.44	0.00	4.42	4.46	3.96	0.21	0.26
SS	5	179.07	0.00	177.73	379.16	22.39	151.41	188.25
NC	5	26.31	0.00	26.58	62.55	6.87	23.29	28.95
COND/P	5	0.98	0.00	0.96	1.03	0.84	0.07	0.09
AMTH	6	0.00	60.00	100.09	203.30	31.38	56.58	59.37
AMTHNV	6	0.00	530.92	88.49	181.19	26.71	51.05	53.56
AMTNA	6	0.00	3665.50	733.10	2482.20	33.67	96.71	123.16
AMTK	6	0.00	95.02	19.00	54.19	2.35	20.29	25.23
AMTCA	6	0.00	310.48	62.10	195.12	14.72	74.90	93.12
AMTMG	6	0.00	626.45	165.29	556.91	8.49	223.13	277.41
AMTNH4	6	0.00	12.39	2.48	12.39	0.00	5.54	6.89
AMTCL	6	0.00	3881.13	776.23	2618.04	37.43	1054.08	1310.49
AMTF	6	0.00	6.03	1.21	2.91	0.00	1.26	1.57
AMTNO3	6	0.00	257.85	51.57	81.58	24.13	23.37	29.06
AMTSO4	6	0.00	810.26	162.05	421.00	40.31	149.31	185.63
AMTPO4	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	6	0.00	410.89	82.18	151.61	36.45	44.32	55.10
AMTSS	6	0.00	4280.89	856.18	2887.70	41.29	1162.65	1445.47
AMTNC	5	0.00	628.96	125.79	413.11	17.95	164.25	204.21

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPT, AND RATIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-200

Table 200.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 12/78.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95%CL
PH	4	5.00	0.00	4.24	5.10	3.86	0.52	0.83
COND	4	26.00	0.00	50.55	96.50	25.00	31.53	50.14
CMPPT	4	0.00	7.64	1.91	7.44	0.03	3.69	5.86
H	4	9.96	0.00	56.97	138.04	7.94	57.20	90.95
HNV	4	8.49	0.00	48.39	114.81	6.76	47.79	75.98
NA	153	3.35	0.00	187.40	320.88	89.13	119.82	297.47
K	3	3.38	0.00	5.28	8.42	3.32	2.75	6.84
CA	3	7.77	0.00	16.13	21.96	7.48	7.64	18.96
MG	31	1.74	0.00	40.94	70.74	20.65	26.37	65.46
NH4	3	1.44	0.00	11.09	18.85	1.11	9.08	22.53
CL	144	0.37	0.00	193.26	349.12	87.98	137.72	341.89
F	3	0.06	0.00	1.93	5.26	0.00	2.90	7.20
NO3	3	3.68	0.00	21.51	39.52	3.06	18.23	45.26
SO4	24	6.3	0.00	93.27	179.26	22.28	79.56	197.51
PO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	3	9.77	0.00	73.39	143.34	7.59	67.97	168.73
SAN	173	3.24	0.00	310.43	574.03	168.53	228.51	567.30
SCA	207	5.7	0.00	327.40	578.89	199.84	217.81	540.74
A/C	3	0.83	0.00	0.95	0.99	0.83	0.08	0.21
CL/NA	3	0.94	0.00	1.03	1.09	0.94	0.08	0.19
NA/MG	3	4.83	0.00	4.58	4.84	4.32	0.26	0.66
SS	159	2.24	0.00	213.17	385.07	97.05	151.90	377.11
NC	38	4.4	0.00	47.67	55.78	38.13	8.91	22.13
COND/P	3	0.97	0.00	0.91	0.97	0.84	0.07	0.17
AMTH	4	0.00	761.37	190.34	590.78	8.81	270.68	430.38
AMTHNV	4	0.00	648.84	162.21	502.84	6.84	230.09	365.84
AMTNA	3	0.00	11664.34	3888.11	11318.39	75.21	6435.55	15976.93
AMTK	3	0.00	257.40	85.80	246.84	3.45	139.48	346.27
AMICA	3	0.00	591.22	197.07	556.70	16.00	311.45	773.20
AMTMG	3	0.00	2414.22	804.74	2337.11	17.42	1327.24	3295.01
AMTNH4	3	0.00	109.60	36.53	82.47	11.23	39.85	98.93
AMTCL	3	0.00	10981.52	3660.51	10612.72	74.24	6021.80	14949.75
AMTF	3	0.00	4.88	1.63	24.44	0.00	2.45	6.07
AMTNO3	3	0.00	279.79	93.26	227.94	18.51	116.87	290.13
AMTSO4	3	0.00	1874.18	624.73	1656.88	66.05	894.89	2221.65
AMTPO4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	3	0.00	744.19	248.06	564.83	58.41	276.11	685.47
AMTSS	3	0.00	12112.62	4037.54	11705.83	81.88	6642.04	16489.58
AMTNC	3	0.00	2924.16	974.72	2835.68	41.42	1611.64	4001.06

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND, CMPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-201

Table 201.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN  
COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT  
KSC SITE 19 DURING 01/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	4	4.76	0.00	4.39	4.84	4.01	0.38	0.61
COND	4	13.57	0.00	26.37	50.00	11.50	17.70	28.14
CMPPT	4	0.00	16.14	4.04	12.19	0.32	5.55	8.83
H	4	17.22	0.00	40.48	97.72	14.45	39.18	62.29
HNV	4	16.36	0.00	35.75	83.18	14.13	32.56	51.76
NA	4	49.46	0.00	51.85	93.92	21.74	30.38	48.31
K	4	3.47	0.00	2.55	4.08	1.28	1.16	1.85
CA	4	5.91	0.00	16.59	48.40	4.49	21.28	33.84
MG	4	11.42	0.00	13.04	22.38	8.64	6.31	10.03
NH4	4	2.79	0.00	12.20	37.14	1.11	16.75	26.33
CL	4	47.43	0.00	51.89	97.57	21.15	32.41	51.52
F	4	0.05	0.00	0.66	2.63	0.00	1.32	2.09
NO3	4	6.82	0.00	17.58	45.49	5.48	18.86	29.98
SO4	4	18.51	0.00	45.91	110.14	14.99	44.36	70.53
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	13.63	0.00	40.57	107.96	10.23	45.83	72.87
SAN	4	75.67	0.00	117.10	179.41	67.05	56.98	90.60
SCA	4	40.27	0.00	136.71	215.95	79.72	66.01	104.96
A/C	4	0.84	0.00	0.86	0.91	0.83	0.04	0.06
CL/NA	4	0.96	0.00	1.00	1.04	0.94	0.04	0.07
NA/MG	4	4.33	0.00	3.98	4.39	2.52	0.89	1.42
SS	4	20.32	0.00	57.23	107.62	23.33	35.74	56.83
NC	4	20.74	0.00	39.00	94.89	16.91	37.41	59.47
COND/P	4	0.85	0.00	0.93	1.01	0.81	0.09	0.14
AMTH	4	0.00	2779.52	694.88	1761.63	248.84	716.73	1139.61
AMTHNV	4	0.00	2640.86	660.22	1721.53	226.94	713.05	1133.75
AMTNA	4	0.00	7984.69	1996.17	5988.01	68.62	2703.79	4299.02
AMTK	4	0.00	560.93	140.23	497.83	7.25	238.72	379.56
AMTCA	4	0.00	953.74	238.44	608.16	62.30	249.47	396.65
AMTMG	4	0.00	1844.31	461.08	1363.46	27.26	611.03	971.54
AMTNH4	4	0.00	450.14	112.53	161.12	36.64	53.71	85.39
AMTCL	4	0.00	7657.31	1914.33	5636.48	66.76	2527.23	4018.29
AMTF	4	0.00	8.31	2.08	8.31	0.00	4.15	6.60
AMTNO3	4	0.00	1101.24	275.31	668.39	92.39	265.50	422.15
AMTSO4	4	0.00	2988.57	747.14	1826.95	299.68	725.73	1153.91
AMTPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	2200.64	550.16	1246.96	225.94	469.44	746.41
AMTSS	4	0.00	8446.02	2111.50	6217.03	73.63	2787.53	4432.18
AMTNC	4	0.00	3347.80	836.95	2375.57	181.36	1033.67	1643.53

N=NUMBER OF SAMPLES  
VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
COND, CMPPT, AND RATIOS  
UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
MEAN=UNWEIGHTED AVERAGE  
CMPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
THE MONTH

Table 202.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 02/79.

	N	VOLWTAV	UEQ/SQ.M	MEAN	HIGH	LOW	ST.DEV	95%C.L.
PH	4	4.42	0.00	4.39	4.73	4.25	0.22	0.35
COND	4	52.05	0.00	50.13	111.50	22.00	41.28	65.63
CMPTI	4	0.00	2.87	0.72	1.28	0.14	0.48	0.76
H	4	37.76	0.00	41.12	56.23	18.62	17.12	27.22
HNV	4	35.57	0.00	38.49	53.70	17.38	16.42	26.10
NA	4	81.52	0.00	180.77	560.02	38.70	253.23	402.64
K	4	2.62	0.00	4.40	10.98	2.04	4.39	6.98
CA	4	15.06	0.00	17.96	32.43	7.48	10.83	17.21
MG	4	18.05	0.00	33.71	95.01	8.72	41.08	65.31
NH4	4	14.38	0.00	14.83	21.62	10.53	5.01	7.96
CL	4	91.01	0.00	203.89	631.96	36.94	285.97	454.69
F	4	3.58	0.00	3.95	8.42	0.53	3.29	5.23
NO3	4	17.04	0.00	18.55	24.68	16.13	4.12	6.55
SO4	4	50.98	0.00	71.05	123.46	27.27	40.33	64.13
PO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4	4	41.73	0.00	50.21	70.05	18.92	21.99	34.97
SAN	4	162.97	0.00	297.94	785.04	118.75	325.23	517.11
SCA	4	169.34	0.00	292.79	747.24	129.21	303.11	481.95
A/C	4	0.96	0.00	1.02	1.06	0.89	0.09	0.14
CL/NA	4	1.12	0.00	1.13	1.27	0.95	0.13	0.21
NA/MG	4	4.52	0.00	5.36	5.89	3.91	0.89	1.42
SS	4	99.17	0.00	223.42	697.05	40.75	316.39	503.06
NC	4	32.46	0.00	28.25	34.17	13.03	10.18	16.19
COND/P	4	0.97	0.00	0.98	1.02	0.93	0.04	0.06
AMTH	4	0.00	1084.41	271.10	481.51	51.09	178.43	283.70
AMTHNV	4	0.00	1021.42	255.35	459.83	46.59	171.10	272.06
AMTNA	4	0.00	2343.52	585.88	935.91	306.23	315.92	502.32
AMTK	4	0.00	75.31	18.83	26.17	12.19	6.35	10.10
AMTCA	4	0.00	432.49	108.12	249.34	44.60	94.96	150.98
AMTMG	4	0.00	518.69	129.67	239.25	74.14	77.71	123.56
AMTNH4	4	0.00	412.94	103.24	134.96	16.01	58.20	92.54
AMTCL	4	0.00	2616.34	654.09	1040.58	316.32	355.49	565.22
AMTF	4	0.00	102.76	25.69	72.10	5.07	31.55	50.16
AMTNO3	4	0.00	489.45	122.36	221.13	33.93	78.54	124.87
AMTSO4	4	0.00	1464.28	366.07	490.25	169.76	143.89	228.76
AMTFPO4	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4	4	0.00	1196.53	299.63	457.70	80.35	173.58	275.99
AMTSS	4	0.00	2850.76	712.69	1147.76	348.90	401.06	637.68
AMINC	4	0.00	932.19	233.05	437.87	17.92	174.30	277.13

N=NUMBER OF SAMPLES  
 VOLWTAV=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER EXCEPT FOR PH,  
 COND,CMPTI, AND RAIUS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPTI IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

A-203



Table 203.

MONTHLY RAINFALL SUMMARY INCLUDING STATISTICAL EVALUATION OF VARIABILITY IN COMPOSITION AND DEPOSITION AMOUNT FOR CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED AT KSC SITE 19 DURING 03/79.

	N	VOLWTA V	UEQ/SQ.M	MEAN	HIGH	LOW	ST. DEV	95% C.L.
PH	3	4.62	0.00	4.53	4.77	4.32	0.23	0.57
COND		23.35	0.00	74.33	161.00	17.00	76.35	189.55
CMPPPT		0.00	2.32	0.77	2.09	0.07	1.14	2.84
H		23.77	0.00	29.43	47.86	16.98	16.29	40.44
HNV		19.22	0.00	34.64	44.67	16.60	15.66	38.88
NA		40.67	0.00	120.44	213.05	27.83	130.97	1177.10
K		1.85	0.00	7.02	13.02	1.02	8.48	76.25
CA		2.61	0.00	15.72	30.94	0.50	21.52	193.44
MG		10.66	0.00	38.05	69.84	6.25	44.96	404.10
NH4		5.09	0.00	16.08	28.83	3.33	18.03	162.07
CL		45.90	0.00	126.05	219.11	32.99	131.61	1182.79
F		5.50	0.00	3.68	5.79	1.58	2.98	26.75
NO3		12.38	0.00	19.11	26.94	11.29	11.06	99.43
SU4		26.29	0.00	51.22	80.16	22.28	40.93	367.83
PO4		0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSSO4		21.62	0.00	38.28	57.61	18.94	27.34	245.74
SAN		40.10	0.00	200.32	328.29	72.35	180.97	1626.47
SCA		63.88	0.00	217.51	372.66	62.37	219.41	1971.91
A/C		1.07	0.00	0.92	1.16	0.88	0.20	1.77
CL/NA		1.13	0.00	1.03	1.19	0.83	0.11	1.00
NA/MG		3.81	0.00	3.17	4.45	3.05	0.99	8.90
SS		50.22	0.00	138.82	241.68	35.95	145.47	1307.41
NC		10.67	0.00	58.48	113.99	20.97	78.50	705.54
COND/P		1.07	0.00	0.99	1.08	0.89	0.14	1.21
AMTH		0.00	551.76	183.92	490.82	26.53	265.61	659.91
AMTHNV		0.00	446.23	148.74	347.48	32.11	172.97	429.42
AMTNA		0.00	915.53	457.76	582.63	32.89	176.59	1587.08
AMTK		0.00	41.73	20.86	21.38	20.34	0.73	6.59
AMTCA		0.00	58.79	29.39	48.34	10.45	26.79	240.61
AMTMG		0.00	240.02	120.01	130.90	109.12	15.40	138.37
AMTNH4		0.00	114.69	57.35	69.65	45.05	17.40	156.34
AMTCL		0.00	1033.18	516.59	690.81	342.37	246.39	2214.37
AMTF		0.00	123.68	61.84	121.21	22.47	83.97	754.63
AMTNO3		0.00	278.49	139.25	236.41	42.09	137.40	1234.88
AMTSO4		0.00	591.68	295.84	466.43	125.25	241.26	2168.25
AMTPU4		0.00	0.00	0.00	0.00	0.00	0.00	0.00
AXSSO4		0.00	486.59	243.30	396.58	90.02	216.77	1948.18
AMTSS		0.00	1130.39	565.19	752.76	377.63	265.26	2383.96
AMTNC		0.00	240.36	120.18	178.12	62.24	81.94	736.38

N=NUMBER OF SAMPLES  
 VOLWTA V=VOLUME WEIGHTED AVERAGE. UNITS ARE MICROEQUIVALENTS/LITER, EXCEPT FOR PH,  
 COND, CMPPPT, AND RATIOS  
 UEQ/SQ.M=MICROEQUIVALENTS/SQUARE METER  
 MEAN=UNWEIGHTED AVERAGE  
 CMPPPT IN UEQ/SQ.M COLUMN HAS UNITS OF CM AND REPRESENTS TOTAL AMOUNT OF RAIN FOR  
 THE MONTH

Table 204.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SW.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NU3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.015	2.442	0.993	7
HNv/SA	0.933	2.192	0.998	7
H/TA	0.733	2.684	0.996	7
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.410	1.607	-0.873	7
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNO3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
COND/H	0.475	0.659	0.956	7
COND/NU3	0.000	0.000	0.000	0
COND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	205.821	167.126	0.945	7
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0

Table 205.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.078	-0.628	0.990	19
nNV/SA	0.971	-1.642	0.989	19
H/TA	0.805	-1.065	0.965	19
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	0.072	1.095	0.074	41
LOGNA/LOGCM	0.000	0.000	0.000	0
LUGXSK/LOGCM	0.000	0.000	0.000	0
LUGXCA/LOGCM	0.000	0.000	0.000	0
LUGXMG/LOGCM	0.000	0.000	0.000	0
LUGF/LOGCM	0.000	0.000	0.000	0
LOGNJ3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
CUND/H	0.306	15.802	0.453	38
CUND/NU3	0.000	0.000	0.000	0
CUND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NU3/SO4	0.000	0.000	0.000	0
NU3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	408.538	-221.589	0.694	41
AMTNJ3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0

Table 206.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.081	-2.026	0.994	29
HNH/SA	1.033	-3.370	0.994	28
H/TA	0.790	-3.021	0.968	29
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LUGH/LUGCM	-0.403	1.287	-0.669	43
LUGNA/LUGCM	0.000	0.000	0.000	0
LUGXSK/LUGCM	0.000	0.000	0.000	0
LUGXCA/LUGCM	0.000	0.000	0.000	0
LUGXMG/LUGCM	0.000	0.000	0.000	0
LUGF/LUGCM	0.000	0.000	0.000	0
LUGNO3/LUGCM	0.000	0.000	0.000	0
LXSSO4/LUGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
CUND/H	0.510	14.792	0.615	40
CUND/NO3	0.000	0.000	0.000	0
CUND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	95.643	89.667	0.789	43
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0

Tbale 207.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.634	4.003	0.979	17
H/SO4	1.045	5.891	0.711	17
H/XSSO4	1.462	1.458	0.861	17
H/NO3+XSSO4	1.003	-0.689	0.935	17
H/F	6.132	27.317	0.572	17
H/SA	0.979	2.606	0.997	22
HNV/SA	0.952	0.858	0.996	22
H/TA	0.710	-2.097	0.987	22
XSCA/XSK	1.473	5.335	0.452	17
XSCA/XSMG	0.046	7.848	0.058	17
XSCA/NU3	0.412	1.152	0.730	17
XSCA/XSSO4	0.239	0.430	0.855	17
XSCA/F	1.076	4.420	0.610	17
LUGH/LUGCM	-0.407	1.535	-0.408	25
LUGNA/LOGCM	-0.135	1.803	-0.139	17
LUGXSK/LUGCM	-0.505	0.042	-0.499	17
LUGXCA/LUGCM	-0.587	0.749	-0.659	17
LUGXMG/LUGCM	-0.327	0.492	-0.362	17
LUGF/LUGCM	-0.366	0.321	-0.366	17
LUGNU3/LUGCM	-0.582	1.040	-0.614	17
LXSSO4/LUGCM	-0.301	1.409	-0.475	17
SS/H	-0.250	101.290	-0.118	17
SS/F	-5.860	108.810	-0.259	17
SS/XSSO4	1.191	51.780	0.332	17
SS/NU3	-0.424	96.421	-0.075	17
CUND/H	0.390	26.124	0.616	25
CUND/NU3	0.894	19.116	0.641	17
CUND/XSSO4	0.746	10.358	0.848	17
CL/NA	0.864	1.005	0.979	17
MG/NA	0.116	7.745	0.805	17
NH4/SO4	0.263	2.084	0.724	17
NH4/XSSO4	0.346	1.664	0.824	17
NU3/SO4	0.402	0.515	0.736	17
NU3/XSSO4	0.552	-0.872	0.875	17
F/XSSO4	0.063	1.314	0.398	17
AMTH/CM	75.671	324.787	0.267	25
AMTNU3/CM	9.825	129.715	0.113	17
AMTXSSO4/CM	126.217	149.352	0.715	17

Table 208.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.318	2.774	0.953	29
H/SO4	0.366	6.978	0.678	29
H/XSSO4	0.888	3.658	0.923	29
H/NO3+XSSO4	0.564	2.585	0.964	29
H/F	4.931	11.038	0.695	29
H/SA	0.587	10.641	0.749	13
HNV/SA	0.645	5.137	0.817	13
H/TA	0.713	-2.780	0.880	13
XSCA/XSK	0.111	3.636	0.018	29
XSCA/XSMG	0.202	3.477	0.162	29
XSCA/NU3	0.383	0.127	0.728	29
XSCA/XSSO4	0.262	0.335	0.715	29
XSCA/F	1.347	2.591	0.500	29
LOGH/LOGCM	-0.345	1.064	-0.480	34
LOGNA/LOGCM	-0.546	1.745	-0.694	29
LOGXSK/LOGCM	-0.033	-0.123	-0.053	29
LOGXCA/LOGCM	-0.716	0.526	-0.907	29
LOGXMG/LOGCM	-0.558	-0.050	-0.593	29
LOGF/LOGCM	-0.253	0.164	-0.642	29
LOGNO3/LOGCM	-0.749	0.877	-0.886	29
LXSSU4/LOGCM	-0.772	1.013	-0.854	29
SS/H	3.207	48.523	0.270	29
SS/F	3.241	93.728	0.038	29
SS/XSSU4	5.670	24.598	0.496	29
SS/NU3	4.619	53.817	0.281	29
CUND/H	0.678	10.006	0.398	31
CUND/NU3	0.893	10.498	0.405	29
CUND/XSSU4	0.872	7.677	0.564	29
CL/NA	1.309	-8.231	0.991	29
MG/NA	0.242	-1.319	0.992	29
NH4/SO4	0.124	1.195	0.600	29
NH4/XSSO4	0.315	-0.121	0.859	29
NO3/SO4	0.258	3.615	0.661	29
NO3/XSSO4	0.613	1.446	0.880	29
F/XSSO4	0.060	0.024	0.441	29
AMTH/CM	42.478	75.892	0.903	34
AMTNO3/CM	11.124	66.702	0.524	29
AMTXSSU4/CM	11.032	104.113	0.325	29

Table 209.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.125	14.770	0.587	51
H/SO4	0.783	3.409	0.857	51
H/XSSO4	0.974	3.252	0.954	51
H/NO3+XSSO4	0.650	4.095	0.898	51
H/F	-2.125	27.934	-0.161	51
H/SA	0.913	6.724	0.976	27
HNV/SA	0.892	3.171	0.974	27
H/IA	0.655	5.210	0.903	27
XSCA/XSK	3.442	2.754	0.390	51
XSCA/XSMG	0.284	3.236	0.226	51
XSCA/NO3	0.589	-2.458	0.923	51
XSCA/XSSO4	0.215	-1.318	0.632	51
XSCA/F	-0.262	4.027	-0.060	51
LUGH/LUGCM	-0.180	1.300	-0.294	64
LUGNA/LUGCM	-0.131	1.512	-0.104	51
LOGXSK/LUGCM	-0.243	-0.218	-0.211	51
LOGXCA/LUGCM	-0.995	0.197	-0.636	51
LOGXMG/LUGCM	-0.679	-0.083	-0.376	51
LOGF/LUGCM	0.041	0.036	0.069	51
LUGNO3/LUGCM	-0.720	0.821	-0.705	51
LXSSO4/LUGCM	-0.403	1.204	-0.354	51
SS/H	0.053	60.313	0.014	51
SS/F	-2.034	62.708	-0.041	51
SS/XSSO4	0.654	45.845	0.170	51
SS/NO3	1.693	43.459	0.234	51
CUND/H	0.511	7.224	0.731	54
CUND/NO3	0.719	11.867	0.575	51
CUND/XSSO4	0.482	7.916	0.725	51
CL/NA	0.873	8.443	0.985	51
MG/NA	0.234	0.144	0.997	51
NH4/SO4	0.122	0.245	0.652	51
NH4/XSSO4	0.147	0.352	0.700	51
NO3/SO4	0.317	1.262	0.667	51
NO3/XSSO4	0.352	2.237	0.662	51
F/XSSO4	-0.015	0.828	-0.187	51
AMTH/CM	143.032	70.019	0.508	64
AMTNO3/CM	34.308	40.274	0.420	51
AMTXSSO4/CM	99.592	101.610	0.355	51

Table 210.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NU.
H/NU3	2.438	-2.861	0.943	32
H/SO4	0.793	-5.400	0.862	32
H/XSSO4	0.981	-6.025	0.947	32
H/NU3+XSSO4	0.711	-5.757	0.953	32
H/F	37.833	30.845	0.338	32
H/SA	1.044	9.786	0.688	6
MNV/SA	0.696	36.070	0.502	6
H/TA	0.490	38.062	0.572	6
XSCA/XSK	0.300	15.818	0.055	32
XSCA/XSM6	1.562	8.676	0.753	32
XSCA/NU3	0.320	11.085	0.321	32
XSCA/XSSO4	0.125	10.842	0.311	32
XSCA/F	-1.975	16.194	-0.046	32
LUGH/LUGCM	-0.161	1.318	-0.183	32
LUGNA/LOGCM	-0.605	1.650	-0.577	32
LUGXSK/LOGCM	-0.129	0.006	-0.165	32
LUGXLA/LOGCM	-1.056	0.810	-0.781	32
LUGXMG/LOGCM	-0.766	0.318	-0.608	32
LUGF/LUGCM	-0.040	-0.026	-0.174	32
LUGNU3/LOGCM	-0.453	0.975	-0.516	32
LXSSO4/LOGCM	-0.547	1.343	-0.603	32
SS/H	0.260	87.891	0.069	32
SS/F	-4.899	97.371	-0.012	32
SS/XSSO4	0.728	66.763	0.185	32
SS/NU3	2.413	59.844	0.246	32
CUND/H	0.386	15.379	0.610	32
CUND/NU3	1.202	9.982	0.735	32
CUND/XSSO4	0.463	9.278	0.706	32
CL/NA	0.995	-0.540	0.997	32
MG/NA	0.246	-0.099	0.995	32
NH4/SO4	0.173	3.363	0.834	32
NH4/XSSO4	0.206	3.579	0.879	32
NU3/SO4	0.332	-1.375	0.933	32
NU3/XSSO4	0.385	-0.591	0.961	32
F/XSSO4	0.003	-0.034	0.340	32
AMT/H/CM	74.243	180.180	0.358	32
AMTNU3/CM	26.354	80.137	0.332	32
AMTXSSO4/CM	26.035	248.682	0.147	32



Table 211.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SG.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.153	32.230	0.765	34
H/SU4	0.392	30.508	0.721	34
H/XSSU4	0.701	21.025	0.816	34
H/NU3+XSSU4	0.455	24.250	0.815	34
H/F	-0.851	48.789	-0.050	34
H/SA	0.848	8.460	0.959	34
HVV/SA	0.838	4.255	0.961	34
H/TA	-0.002	46.259	-0.017	34
XSCA/XSK	1.471	3.895	0.241	34
XSCA/XSMG	0.087	3.997	0.227	34
XSCA/NU3	0.191	1.810	0.449	34
XSCA/XSSU4	0.087	1.072	0.361	34
XSCA/F	3.274	2.278	0.680	34
LUGH/LUGCM	-0.151	1.053	-0.647	48
LUGNA/LOGCM	0.071	1.326	0.056	34
LUGXSK/LUGCM	-0.123	-0.267	-0.137	34
LUGXCA/LUGCM	-0.138	0.499	-0.129	34
LUGXMG/LUGCM	0.019	0.064	0.012	34
LUGF/LUGCM	0.095	0.078	0.218	34
LUGNU3/LOGCM	-0.444	1.065	-0.581	34
LXSSU4/LUGCM	-0.242	1.568	-0.555	34
SS/H	4.026	-125.761	0.509	34
SS/F	15.412	58.112	0.114	34
SS/XSSU4	5.855	-158.645	0.862	34
SS/NU3	10.274	-74.154	0.863	34
CUND/H	0.871	-4.851	0.535	48
C(ND)/NU3	2.452	-2.870	0.928	34
CUND/XSSU4	1.415	-23.725	0.939	34
CL/NA	0.731	11.389	0.990	34
MG/NA	0.217	1.595	0.996	34
VH4/SU4	0.021	4.762	0.171	34
VH4/XSSU4	0.022	4.827	0.117	34
NU3/SU4	0.333	-1.168	0.923	34
NU3/XSSU4	0.519	-0.260	0.911	34
F/XSSU4	0.005	0.463	0.104	34
AMTH/CM	329.478	88.584	0.938	48
AMTNU3/CM	40.093	98.910	0.521	34
AMTXSSU4/CM	294.101	50.301	0.958	34

Table 212.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.988	14.995	0.991	45
H/SO4	0.972	11.566	0.232	45
H/XSSO4	0.973	16.996	0.211	45
H/NO3+XSSO4	0.937	-16.946	0.988	45
H/F	10.815	42.524	0.102	45
H/SA	0.878	6.080	0.964	24
HNV/SA	0.927	0.733	0.976	24
H/TA	0.582	3.560	0.916	24
XSCA/XSK	11.710	5.091	0.762	45
XSCA/XSMG	3.592	2.737	0.787	45
XSCA/NO3	0.011	15.172	0.084	45
XSCA/XSSU4	0.407	0.864	0.693	45
XSCA/F	1.409	14.320	0.104	45
LUGH/LOGCM	-0.382	1.423	-0.496	50
LUGNA/LOGCM	-0.859	1.388	-0.630	45
LUGXSK/LOGCM	-0.345	-0.150	-0.258	45
LUGXCA/LOGCM	-1.218	0.800	-0.801	45
LUGXMG/LOGCM	-0.874	0.241	-0.657	45
LOGF/LOGCM	-0.245	0.018	-0.341	45
LUGNU3/LOGCM	-0.873	1.095	-0.694	45
LXSSU4/LOGCM	-0.537	1.397	-0.644	45
SS/H	0.107	54.809	0.211	45
SS/F	8.363	52.929	0.157	45
SS/XSSU4	0.915	27.306	0.394	45
SS/NO3	0.087	57.089	0.173	45
CUND/H	0.414	13.114	0.970	50
CUND/NO3	0.407	18.076	0.966	45
CUND/XSSU4	0.610	11.327	0.313	45
CL/NA	1.244	-5.149	0.978	45
MG/NA	0.268	0.700	0.984	45
NH4/SO4	0.353	-2.041	0.864	45
NH4/XSSU4	0.388	-1.341	0.862	45
NO3/SO4	0.635	11.080	0.151	45
NO3/XSSU4	0.600	15.914	0.130	45
F/XSSU4	0.002	0.808	0.051	45
AMTH/CM	112.827	174.648	0.348	50
AMTNO3/CM	4.672	161.028	0.016	45
AMTXSSU4/CM	115.363	144.533	0.575	45

Table 213.

LINEAR CORRELATION BASED ON  $Y=MX+H$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 04/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.069	22.422	0.054	17
H/SU4	0.024	22.357	0.067	17
H/XSSU4	0.051	20.496	0.133	17
H/ND3+XSS04	0.038	20.492	0.121	17
H/F	0.072	24.052	0.013	17
H/SA	0.692	9.628	0.971	7
HNV/SA	0.837	-0.655	0.984	7
H/TA	0.307	9.749	0.803	7
XSCA/XSK	1.340	42.387	0.642	17
XSCA/XSMG	5.197	20.757	0.886	17
XSCA/NU3	2.067	-4.122	0.606	17
XSCA/XSSU4	0.869	-11.356	0.838	17
XSCA/F	4.401	35.991	0.332	17
LUGH/LUGCM	-0.068	1.314	-0.102	20
LUGNA/LUGCM	-0.911	1.276	-0.634	17
LUGXSK/LUGCM	-0.875	0.088	-0.432	17
LUGXCA/LUGCM	-0.707	1.236	-0.600	17
LUGXMG/LUGCM	-0.748	0.243	-0.537	17
LUGF/LUGCM	-0.518	0.212	-0.384	17
LUGNU3/LUGCM	-0.620	1.047	-0.811	17
LXSSU4/LUGCM	-0.379	1.611	-0.454	17
SS/H	-1.702	128.396	-0.366	17
SS/F	4.986	67.045	0.218	17
SS/XSSU4	0.710	33.957	0.396	17
SS/NU3	2.866	6.972	0.486	17
CUND/H	0.219	36.828	0.151	20
CUND/NU3	0.864	12.429	0.652	17
CUND/XSSU4	0.341	11.086	0.846	17
CL/NA	0.668	21.590	0.965	17
MG/NA	0.189	5.435	0.966	17
NH4/SU4	0.475	13.454	0.800	17
NH4/XSSU4	0.534	12.897	0.835	17
NO3/SU4	0.215	10.123	0.761	17
NO3/XSSU4	0.224	11.139	0.739	17
F/XSSU4	0.039	1.051	0.503	17
AMT H/CM	338.922	-17.994	0.920	20
AMT NU3/CM	63.359	50.337	0.596	17
AMT XSSU4/CM	282.579	111.398	0.596	17

Table 214.

LINEAR CORRELATION BASED ON  $Y=AX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 05/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.149	34.937	0.165	52
H/SU4	0.375	18.923	0.570	52
H/XSSU4	0.404	19.383	0.595	52
H/NU3+XSSU4	0.202	23.113	0.463	52
H/F	-1.473	41.903	-0.085	52
H/SA	0.896	3.116	0.974	43
HNV/SA	0.953	-4.341	0.983	43
H/TA	0.442	6.026	0.814	43
XSCA/XSK	5.043	11.298	0.439	52
XSCA/XSM6	7.616	3.112	0.830	52
XSCA/NU3	0.639	3.066	0.563	52
XSCA/XSSU4	0.543	-3.893	0.633	52
XSCA/F	7.884	11.265	0.360	52
LUGH/LOGCM	0.386	1.491	0.525	62
LUGNA/LOGCM	-0.249	1.572	-0.418	52
LUGXSK/LOGCM	-0.280	0.229	-0.342	52
LUGXCA/LOGCM	-0.575	1.174	-0.629	52
LUGXMG/LOGCM	-0.658	0.197	-0.557	52
LUGF/LOGCM	-0.052	0.174	-0.111	52
LUGNU3/LOGCM	-0.429	1.430	-0.838	52
LXSSU4/LOGCM	-0.244	1.649	-0.553	52
SS/H	-0.110	58.854	-0.065	52
SS/F	4.838	47.097	0.165	52
SS/XSSU4	0.282	40.345	0.247	52
SS/NU3	0.605	35.317	0.400	52
CUND/H	-0.158	45.672	-0.188	62
CUND/NU3	0.446	20.683	0.797	52
CUND/XSSU4	0.279	20.797	0.661	52
CL/NA	1.002	5.716	0.982	52
MG/NA	0.264	0.443	0.970	52
NH4/SU4	0.243	26.701	0.273	52
NH4/XSSU4	0.240	28.067	0.262	52
NU3/SU4	0.429	7.963	0.587	52
NU3/XSSU4	0.425	10.369	0.563	52
F/XSSU4	0.013	0.855	0.343	52
AMTH/CM	354.286	19.346	0.428	62
AMTNU3/CM	123.686	134.193	0.865	52
AMTXSSU4/CM	275.074	184.445	0.787	52

Table 215.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.875	8.653	0.933	95
H/SU4	0.964	4.616	0.952	95
H/XSSU4	1.040	5.427	0.966	95
H/NU3+XSSU4	0.690	5.491	0.969	95
H/F	8.137	36.083	0.330	95
H/SA	0.968	2.500	0.983	46
HNV/SA	0.946	-1.711	0.987	46
H/TA	0.608	5.835	0.872	46
XSCA/XSK	1.078	6.861	0.608	95
XSCA/XSMG	-0.557	8.893	-0.321	95
XSCA/NU3	0.485	0.325	0.892	95
XSCA/XSSU4	0.247	0.237	0.848	95
XSCA/F	0.998	8.077	0.150	95
LOGH/LOGCM	-0.283	1.498	-0.425	99
LOGNA/LOGCM	-0.320	1.375	-0.468	95
LUGXSK/LOGCM	-0.355	-0.141	-0.405	95
LUGXCA/LOGCM	-0.379	0.777	-0.474	95
LUGXMG/LOGCM	-0.395	-0.105	-0.441	95
LUGF/LOGCM	-0.130	0.051	-0.303	95
LUGNU3/LOGCM	-0.342	1.108	-0.490	95
LXSSU4/LOGCM	-0.225	1.389	-0.309	95
SS/H	0.460	19.264	0.361	95
SS/F	4.279	35.532	0.136	95
SS/XSSU4	0.615	17.095	0.449	95
SS/NU3	1.173	17.895	0.458	95
CUND/H	0.888	-8.691	0.797	99
CUND/NU3	1.026	7.493	0.929	95
CUND/XSSU4	0.566	5.818	0.958	95
CL/NA	1.094	-0.413	0.496	95
MG/NA	0.119	3.311	0.693	95
NH4/SU4	0.501	-7.101	0.648	95
NH4/XSSU4	0.493	-5.027	0.599	95
NU3/SU4	0.470	-0.484	0.932	95
NU3/XSSU4	0.500	0.155	0.933	95
F/XSSU4	0.012	0.190	0.271	95
AMTH/CM	281.397	43.470	0.862	99
AMTNU3/CM	106.222	17.095	0.873	95
AMTXSSU4/CM	234.760	32.536	0.855	95

Table 216.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.446	9.021	0.856	109
H/SO4	1.232	1.134	0.953	109
H/XSSO4	1.237	4.920	0.966	109
H/NO3+XSSO4	0.898	1.866	0.973	109
H/F	5.352	48.094	0.228	109
H/SA	1.049	-0.152	0.993	84
HNV/SA	1.046	-3.673	0.994	84
H/TA	0.482	19.077	0.787	84
XSCA/XSK	1.046	6.596	0.334	109
XSCA/XSMG	0.997	6.887	0.306	109
XSCA/NU3	0.219	3.482	0.532	109
XSCA/XSSO4	0.062	5.056	0.336	109
XSCA/F	0.643	6.805	0.190	109
LUGH/LUGCM	0.166	1.581	0.219	113
LUGNA/LUGCM	-0.476	1.438	-0.487	109
LUGXSK/LUGCM	-0.514	-0.200	-0.422	109
LOGXCA/LUGCM	-0.379	0.852	-0.389	109
LOGXMG/LUGCM	-0.392	-0.060	-0.323	109
LOGF/LUGCM	-0.078	0.067	-0.098	109
LUGNO3/LUGCM	-0.281	1.240	-0.353	109
LXSSO4/LUGCM	0.063	1.464	0.093	109
SS/H	-0.188	44.821	-0.179	109
SS/F	-2.943	37.886	-0.119	109
SS/XSSO4	-0.189	42.148	-0.140	109
SS/NU3	0.259	29.906	0.086	109
CJND/H	0.398	4.246	0.888	113
CJND/NU3	1.130	8.920	0.895	109
CJND/XSSO4	0.527	8.801	0.931	109
CL/NA	1.169	-2.477	0.994	109
MG/NA	0.207	0.644	0.968	109
NH4/SO4	0.133	-0.501	0.512	109
NH4/XSSO4	0.126	0.163	0.492	109
NU3/SO4	0.374	2.342	0.827	109
NU3/XSSO4	0.362	4.028	0.808	109
F/XSSO4	0.012	0.619	0.221	109
AMTH/CM	498.004	62.894	0.802	113
AMTNU3/CM	90.410	144.652	0.657	109
AMTXSSO4/CM	404.965	-9.566	0.804	109

Table 217.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.830	14.511	0.661	50
H/SO4	1.145	0.563	0.866	50
H/XSSO4	1.199	3.792	0.928	50
H/NO3+XSSO4	0.838	2.856	0.895	50
H/F	6.242	39.435	0.101	50
H/SA	0.974	4.782	0.895	32
HNV/SA	0.968	1.542	0.887	32
H/TA	0.569	11.312	0.828	32
XSCA/XSK	1.102	5.536	0.455	50
XSCA/XSM6	1.626	5.233	0.505	50
XSCA/NU3	0.389	1.202	0.754	50
XSCA/XSSU4	0.108	3.515	0.447	50
XSCA/F	1.121	6.557	0.098	50
LOGH/LOGCM	0.072	1.522	0.173	51
LOGNA/LOGCM	-0.586	1.372	-0.745	50
LOGXSK/LOGCM	-0.408	-0.131	-0.590	50
LOGXCA/LOGCM	-0.286	-0.760	-0.631	50
LOGXMG/LOGCM	-0.203	-0.072	-0.296	50
LOGF/LOGCM	0.003	-0.040	0.016	50
LOGNU3/LOGCM	-0.216	1.092	-0.493	50
LXSSU4/LOGCM	-0.031	1.403	-0.065	50
SS/H	-0.676	73.773	-0.588	50
SS/F	3.956	44.793	0.037	50
SS/XSSU4	-0.481	60.912	-0.213	50
SS/NU3	0.746	35.041	0.155	50
CUND/H	0.298	13.710	0.624	51
CUND/NU3	0.914	11.561	0.803	50
CUND/XSSU4	0.448	10.931	0.841	50
CL/NA	1.095	1.507	0.991	50
MG/NA	0.226	0.589	0.989	50
NH4/SO4	0.151	-0.185	0.445	50
NH4/XSSO4	0.126	1.244	0.380	50
NU3/SO4	0.377	1.198	0.784	50
NU3/XSSU4	0.345	3.817	0.739	50
F/XSSO4	0.001	0.268	0.025	50
AMTH/CM	364.089	46.140	0.941	51
AMTNU3/CM	67.626	78.356	0.838	50
AMTXSSU4/CM	275.026	9.582	0.934	50

Table 218.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMI=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.827	11.576	0.865	81
H/SO4	0.924	7.494	0.845	81
H/XSSO4	1.264	5.389	0.947	81
H/NO3+XSSO4	0.805	4.987	0.949	81
H/F	3.989	40.161	0.398	81
H/SA	1.078	1.266	0.972	40
MNV/SA	1.015	0.106	0.981	40
H/TA	0.393	21.853	0.672	40
XSCA/XSK	5.171	2.929	0.376	81
XSCA/XSM6	0.882	5.215	0.145	81
XSCA/NO3	0.427	-0.784	0.437	81
XSCA/XSSO4	0.153	2.220	0.247	81
XSCA/F	0.649	6.246	0.140	81
LOGH/LOGCM	-0.161	1.497	-0.273	85
LOGNA/LOGCM	-0.449	1.618	-0.515	81
LOGXSK/LOGCM	-0.311	-0.216	-0.395	81
LOGXCA/LOGCM	-0.288	0.509	-0.342	81
LOGXMG/LOGCM	-0.354	0.011	-0.380	81
LOGF/LOGCM	-0.001	0.044	-0.002	81
LOGNO3/LOGCM	-0.218	1.104	-0.361	81
LXSSO4/LOGCM	-0.198	1.309	-0.273	81
SS/H	0.683	66.910	0.177	81
SS/F	-3.780	101.121	-0.098	81
SS/XSSO4	1.393	54.282	0.270	81
SS/NO3	1.997	61.190	0.245	81
COND/H	0.485	11.930	0.681	85
COND/NO3	0.976	14.866	0.673	81
COND/XSSO4	0.676	11.650	0.737	81
CL/NA	1.142	-1.062	0.994	81
MG/NA	0.237	0.158	0.997	81
NH4/SO4	0.209	-1.599	0.844	81
NH4/XSSO4	0.269	-1.554	0.890	81
NO3/SO4	0.411	1.648	0.793	81
NO3/XSSO4	0.538	1.450	0.851	81
F/XSSO4	0.044	-0.313	0.330	81
AMTH/CM	346.900	46.704	0.640	85
AMTNO3/CM	124.114	23.323	0.701	81
AMTXSSO4/CM	225.299	43.596	0.609	81



Table 219.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.169	23.505	0.616	76
H/SO4	0.507	31.923	0.504	76
H/XSSO4	0.615	27.254	0.667	76
H/NO3+XSSO4	0.434	22.649	0.674	76
H/F	1.715	48.252	0.079	76
H/SA	1.115	1.452	0.967	28
HNV/SA	1.084	-2.004	0.973	28
H/TA	0.707	-1.002	0.926	28
XSCA/XSK	0.058	8.997	0.028	76
XSCA/XSMG	-0.520	11.049	-0.323	76
XSCA/NU3	0.686	-7.049	0.782	76
XSCA/XSSO4	0.508	-3.782	0.721	76
XSCA/F	3.703	2.966	0.368	76
LOGH/LOGCM	-0.411	1.426	-0.698	88
LOGNA/LOGCM	-0.394	1.902	-0.526	76
LOGXSK/LOGCM	-0.426	-0.223	-0.476	76
LOGXCA/LOGCM	-0.385	0.594	-0.525	76
LOGXMG/LOGCM	-0.252	0.196	-0.280	76
LOGF/LOGCM	-0.208	0.157	-0.474	76
LOGNU3/LOGCM	-0.567	1.065	-0.838	76
LXSSO4/LOGCM	-0.470	1.327	-0.721	76
SS/H	1.111	162.069	0.152	76
SS/F	69.414	102.995	0.436	76
SS/XSSO4	4.783	17.880	0.709	76
SS/NU3	9.123	3.390	0.657	76
COND/H	0.205	55.445	0.074	86
COND/NU3	1.481	15.340	0.690	76
COND/XSSO4	0.800	16.760	0.766	76
CL/NA	1.100	-2.689	0.994	76
MG/NA	0.222	1.536	0.483	76
NH4/SO4	0.290	-1.832	0.351	76
NH4/XSSO4	0.435	-1.943	0.347	76
NU3/SO4	0.267	6.942	0.831	76
NO3/XSSO4	0.410	6.328	0.843	76
F/XSSO4	0.009	1.287	0.214	76
AMT/CM	77.644	197.042	0.544	86
AMTNU3/CM	26.240	87.546	0.633	76
AMTXSSO4/CM	48.915	182.347	0.526	76

Table 220.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.044	19.618	0.794	63
H/SO4	0.537	14.816	0.655	63
H/XSSO4	0.950	12.100	0.736	63
H/NO3+XSSO4	0.776	2.594	0.955	63
H/F	1.915	34.645	0.230	63
H/SA	0.995	4.195	0.942	19
HNV/SA	0.949	1.408	0.961	19
H/TA	0.512	8.289	0.812	19
XSCA/XSK	1.415	0.241	0.301	63
XSCA/XSMG	0.411	6.188	0.482	63
XSCA/NU3	0.075	6.714	0.261	63
XSCA/XSSO4	0.157	3.668	0.555	63
XSCA/F	0.266	7.515	0.146	63
LOGH/LUGCM	-0.434	1.274	-0.534	69
LUGNA/LUGCM	0.009	1.890	0.005	63
LUGXSK/LUGCM	-0.373	-0.246	-0.332	63
LOGXCA/LUGCM	-0.750	0.405	-0.699	63
LUGXMG/LUGCM	-0.142	0.184	-0.082	63
LUGF/LUGCM	-0.071	0.173	-0.069	63
LUGNU3/LUGCM	-0.636	0.819	-0.688	63
LXSSO4/LUGCM	-0.302	1.173	-0.320	63
SS/H	2.430	84.167	0.419	63
SS/F	10.323	155.732	0.214	63
SS/XSSO4	5.261	29.928	0.703	63
SS/NU3	0.470	170.201	0.062	63
CUND/H	0.626	14.622	0.708	69
CUND/NU3	0.474	24.120	0.420	63
CUND/XSSO4	0.890	12.721	0.805	63
CL/NA	1.013	4.049	0.993	63
MG/NA	0.235	-0.404	0.997	63
NH4/SO4	0.080	-1.748	0.734	63
NH4/XSSO4	0.127	-1.745	0.742	63
NU3/SO4	0.129	12.742	0.207	63
NU3/XSSO4	0.277	10.713	0.283	63
F/XSSO4	0.053	0.746	0.342	63
AMTH/CM	148.678	63.705	0.612	69
AMTNU3/CM	50.210	40.428	0.357	63
AMTXSSO4/CM	148.595	37.350	0.643	63

Table 221.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METEK.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR.	COEF.	NO.
H/NO3	1.277	10.176	0.826		52
H/SO4	0.366	11.302	0.809		52
H/XSSO4	0.988	-0.816	0.954		52
H/NO3+XSSO4	0.591	2.317	0.927		52
H/F	5.438	20.463	0.429		52
H/SA	1.130	-2.986	0.994		6
HNV/SA	0.999	-2.526	0.991		6
H/TA	0.583	9.482	0.854		6
XSCA/XSK	1.346	7.983	0.171		52
XSCA/XSMG	0.795	5.980	0.792		52
XSCA/NO3	0.322	3.935	0.835		52
XSCA/XSSO4	0.199	2.873	0.764		52
XSCA/F	1.570	6.170	0.496		52
LOGH/LOGCM	-0.441	1.226	-0.827		52
LUGNA/LOGCM	-0.051	1.849	-0.063		52
LUGXSK/LOGCM	-0.268	-0.138	-0.504		52
LOGXCA/LOGCM	-0.481	0.699	-0.782		52
LUGXMG/LOGCM	-0.451	0.083	-0.473		52
LUGF/LOGCM	-0.282	0.111	-0.503		52
LUGNO3/LOGCM	-0.505	0.923	-0.891		52
LXSSO4/LOGCM	-0.528	1.237	-0.906		52
SS/H	9.295	-50.221	0.599		52
SS/F	5.467	232.600	0.028		52
SS/XSSO4	10.680	-106.866	0.664		52
SS/NO3	20.976	-108.765	0.874		52
COND/H	1.309	1.450	0.691		52
CUND/NO3	2.980	-6.472	0.926		52
CUND/XSSO4	1.654	-10.686	0.767		52
CL/NA	1.058	1.047	1.000		52
MG/NA	0.223	0.859	0.999		52
NH4/SO4	0.048	7.597	0.465		52
NH4/XSSO4	0.169	4.715	0.713		52
NO3/SO4	0.282	1.162	0.962		52
NO3/XSSO4	0.598	-2.813	0.892		52
F/XSSO4	0.032	1.000	0.393		52
AMTH/CM	76.199	65.793	0.944		52
AMTNO3/CM	32.433	38.482	0.947		52
AMTXSSO4/CM	58.828	87.286	0.897		52

Table 222.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/79 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.870	7.758	0.961	81
H/SO4	0.401	15.111	0.723	81
H/XSSO4	0.841	0.746	0.964	81
H/NO3+XSSO4	0.597	6.206	0.977	81
H/F	5.501	25.109	0.570	81
H/SA	0.912	9.162	0.991	33
HNV/SA	0.878	5.118	0.987	33
H/TA	0.455	20.409	0.953	32
XSCA/XSK	2.872	13.493	0.221	81
XSCA/XSMG	1.725	11.696	0.467	81
XSCA/NO3	0.907	1.927	0.777	81
XSCA/XSSO4	0.427	0.766	0.818	81
XSCA/F	3.615	8.511	0.625	81
LUGH/LUGCM	-0.431	1.432	-0.662	81
LOGNA/LOGCM	-0.454	1.782	-0.508	81
LOGXSK/LOGCM	-0.118	-0.116	-0.200	81
LUGXCA/LUGCM	-0.650	0.916	-0.676	81
LOGXMG/LUGCM	-0.464	0.163	-0.538	81
LUGF/LUGCM	-0.250	0.226	-0.396	81
LUGNO3/LOGCM	-0.600	1.000	-0.790	81
LXSSO4/LUGCM	-0.512	1.385	-0.722	81
SS/H	2.085	106.976	0.165	81
SS/F	-13.784	208.220	-0.113	81
SS/XSSO4	2.164	106.860	0.196	81
SS/NO3	5.360	101.216	0.218	81
CUND/H	0.731	11.391	0.454	81
CUND/NO3	1.545	14.392	0.493	81
CUND/XSSO4	0.671	14.386	0.478	81
CL/NA	1.101	-2.237	0.999	81
MG/NA	0.221	0.923	0.999	81
NH4/SO4	0.106	2.952	0.572	81
NH4/XSSO4	0.273	-0.987	0.934	81
NO3/SO4	0.210	4.162	0.737	81
NO3/XSSO4	0.418	0.566	0.933	81
F/XSSO4	0.054	0.058	0.602	81
AMTH/CM	132.010	123.111	0.910	81
AMTNO3/CM	24.700	78.415	0.776	81
AMTXSSO4/CM	94.653	136.731	0.884	81

Table 223.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICRUEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICRUEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/79 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.121	5.192	0.596	46
H/SO4	0.385	15.979	0.631	46
H/XSSO4	0.872	-0.643	0.898	46
H/NO3+XSSO4	0.709	-4.770	0.880	46
H/F	6.708	18.017	0.748	46
H/SA	0.789	16.661	0.924	22
HNV/SA	0.774	10.618	0.945	22
H/TA	0.460	20.885	0.740	22
XSCA/XSK	0.381	11.830	0.067	46
XSCA/XSMG	0.505	11.165	0.337	46
XSCA/NO3	0.510	3.727	0.458	46
XSCA/XSSU4	0.111	6.989	0.365	46
XSCA/F	1.466	7.313	0.522	46
LOGH/LOGCM	-0.307	1.435	-0.419	47
LOGNA/LOGCM	-0.848	1.711	-0.780	46
LOGXSK/LOGCM	-0.376	-0.109	-0.438	46
LOGXLA/LOGCM	-0.150	0.991	-0.269	46
LOGXMG/LOGCM	-0.564	0.096	-0.480	46
LOGF/LOGCM	-0.492	0.266	-0.526	46
LOGNO3/LOGCM	-0.294	1.132	-0.746	46
LXSSU4/LOGCM	-0.510	1.491	-0.725	46
SS/H	1.172	130.359	0.112	46
SS/F	-2.763	167.075	-0.029	46
SS/XSSU4	3.402	17.269	0.335	46
SS/NO3	22.906	-203.636	0.015	46
COND/H	0.519	22.156	0.529	47
COND/NO3	4.053	-25.225	0.726	46
COND/XSSU4	0.804	4.303	0.529	46
LL/NA	1.113	-2.949	0.990	46
MG/NA	0.221	0.854	0.495	46
NH4/SO4	0.054	10.956	0.400	46
NH4/XSSO4	0.147	7.487	0.682	46
NO3/SO4	0.137	7.895	0.801	46
NO3/XSSO4	0.189	7.737	0.692	46
F/XSSO4	0.063	0.393	0.579	46
AMTH/CM	100.168	168.413	0.562	47
AMINO3/CM	85.452	43.196	0.885	46
AMTXSSU4/CM	98.766	203.746	0.535	46

Table 224.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/79 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-0.117	26.264	-0.200	31
H/SO4	0.025	21.309	0.095	31
H/XSSO4	0.008	22.538	0.024	31
H/NO3+XSSO4	-0.014	24.098	-0.061	31
H/F	1.163	18.540	0.141	31
H/SA	0.926	4.931	0.794	10
HNv/SA	0.824	4.218	0.775	10
H/TA	0.253	19.479	0.826	10
XSCA/XSK	7.014	18.738	0.470	31
XSCA/XSM6	2.231	19.981	0.508	31
XSCA/NU3	1.971	-19.353	0.960	31
XSCA/XSSO4	1.054	-20.436	0.663	31
XSCA/F	-4.722	53.769	-0.163	31
LOGH/LUGCM	-0.016	1.287	-0.022	38
LOGNA/LOGCM	-0.633	1.782	-0.797	31
LOGXSK/LUGCM	-0.667	0.002	-0.747	31
LOGXCA/LUGCM	-0.982	1.010	-0.871	31
LOGXMG/LUGCM	-1.210	0.190	-0.839	31
LOGF/LUGCM	0.073	0.553	0.216	31
LOGNU3/LUGCM	-0.431	1.279	-0.852	31
LXSSO4/LUGCM	-0.510	1.546	-0.933	31
SS/H	3.125	77.419	0.190	31
SS/F	45.571	-24.822	0.336	31
SS/XSSO4	2.530	14.397	0.442	31
SS/NU3	2.512	79.047	0.261	31
COND/H	0.658	32.832	0.472	38
COND/NU3	0.594	20.388	0.410	31
COND/XSSO4	0.521	9.214	0.605	31
CL/NA	1.054	-4.963	0.989	31
MG/NA	0.258	-0.911	0.989	31
NH4/SO4	0.053	10.206	0.165	31
NH4/XSSO4	0.069	10.132	0.160	31
NO3/SO4	0.349	4.496	0.778	31
NO3/XSSO4	0.531	-0.333	0.893	31
F/XSSO4	-0.010	4.359	-0.239	31
AMTH/CM	265.897	-14.738	0.970	38
AMTNU3/CM	122.295	45.166	0.938	31
AMTXSSO4/CM	168.540	159.358	0.890	31

Table 225.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 07/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSS04	0.000	0.000	0.000	0
H/NO3+XSS04	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.015	2.442	0.998	7
HNV/SA	0.933	2.192	0.998	7
H/TA	0.733	2.684	0.996	7
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSM6	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSS04	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LUGH/LUGCM	-0.410	1.607	-0.873	7
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXM6/LOGCM	0.000	0.000	0.000	0
LUGF/LUGCM	0.000	0.000	0.000	0
LUGNO3/LUGCM	0.000	0.000	0.000	0
LXSS04/LUGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSS04	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
COND/H	0.475	0.659	0.958	7
COND/NO3	0.000	0.000	0.000	0
COND/XSS04	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSS04	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSS04	0.000	0.000	0.000	0
F/XSS04	0.000	0.000	0.000	0
AMTH/CM	203.821	107.126	0.945	7
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSS04/CM	0.000	0.000	0.000	0

Table 226.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 08/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.083	-0.842	0.989	17
HNV/SA	0.963	-1.009	0.988	17
H/TA	0.799	-0.484	0.963	17
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSLA/NJ3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSLA/F	0.000	0.000	0.000	0
LOGH/LOGCM	0.214	1.237	0.249	33
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNO3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
COND/H	0.272	18.246	0.397	30
COND/NJ3	0.000	0.000	0.000	0
COND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	489.280	-230.511	0.764	33
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0



Table 227.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 09/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/(O3+XSSO4)	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.114	-2.900	0.990	13
HNV/SA	1.058	-4.730	0.988	12
H/TA	0.857	-4.118	0.964	13
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSSU4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.263	1.431	-0.459	22
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNO3/LOGCM	0.000	0.000	0.000	0
LXSSU4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
CUND/H	0.381	17.693	0.582	19
CUND/NO3	0.000	0.000	0.000	0
CUND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	143.974	80.519	0.688	22
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSSU4/CM	0.000	0.000	0.000	0

Table 228.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMI=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 10/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.619	3.372	0.985	15
H/SO4	1.031	6.009	0.712	15
H/XSSO4	1.433	2.198	0.863	15
H/NO3+XSSO4	0.991	-0.666	0.939	15
H/F	6.172	26.951	0.585	15
H/SA	0.980	1.869	0.998	19
HNV/SA	0.948	0.168	0.997	19
H/TA	0.703	-2.023	0.989	19
XSCA/XSK	1.351	6.069	0.425	15
XSCA/XSMG	0.148	8.379	0.179	15
XSCA/NO3	0.413	1.439	0.947	15
XSCA/XSSO4	0.236	0.929	0.865	15
XSCA/F	1.010	5.024	0.583	15
LUGH/LUGCM	-0.339	1.540	-0.328	21
LOGNA/LOGCM	-0.057	1.863	-0.063	15
LOGXSK/LOGCM	-0.582	0.036	-0.544	15
LOGXCA/LOGCM	-0.598	0.754	-0.637	15
LOGXMG/LOGCM	-0.517	0.403	-0.593	15
LOGF/LOGCM	-0.328	0.342	-0.309	15
LOGNO3/LOGCM	-0.549	1.037	-0.570	15
LXSSO4/LOGCM	-0.296	1.404	-0.440	15
SS/H	-0.296	112.215	-0.141	15
SS/F	-7.656	125.295	-0.344	15
SS/XSSO4	1.121	60.809	0.320	15
SS/NO3	-0.670	109.368	-0.120	15
COND/H	0.371	29.544	0.588	21
COND/NO3	0.860	20.582	0.620	15
COND/XSSO4	0.731	11.654	0.843	15
CL/NA	0.861	1.652	0.977	15
MG/NA	0.123	6.548	0.821	15
NH4/SO4	0.269	1.801	0.733	15
NH4/XSSO4	0.355	1.413	0.844	15
NO3/SO4	0.394	0.961	0.724	15
NO3/XSSO4	0.543	-0.321	0.869	15
F/XSSO4	0.060	1.643	0.381	15
AMTH/CM	135.549	259.068	0.385	21
AMTNO3/CM	20.623	112.179	0.178	15
AMTXSSO4/CM	147.544	119.730	0.671	15

Table 229.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 11/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.318	2.774	0.953	29
H/SO4	0.306	6.978	0.678	29
H/XSSO4	0.888	3.658	0.923	29
H/NO3+XSSO4	0.564	2.585	0.964	29
H/F	4.931	11.038	0.695	29
H/SA	0.587	10.641	0.749	13
HN/SA	0.645	5.137	0.817	13
H/TA	0.713	-2.780	0.880	13
XSCA/XSK	0.111	3.036	0.018	29
XSCA/XSMG	0.202	3.477	0.162	29
XSCA/NO3	0.383	0.127	0.728	29
XSCA/XSSO4	0.262	0.335	0.713	29
XSCA/F	1.347	2.591	0.500	29
LUGH/LUGCM	-0.345	1.064	-0.480	34
LOGNA/LOGCM	-0.546	1.745	-0.694	29
LUGXSK/LUGCM	-0.033	-0.123	-0.053	29
LUGXCA/LUGCM	-0.716	0.526	-0.907	29
LUGXMG/LUGCM	-0.558	-0.050	-0.593	29
LUGF/LUGCM	-0.253	0.164	-0.642	29
LUGNO3/LUGCM	-0.749	0.877	-0.886	29
LXSSO4/LUGCM	-0.772	1.013	-0.854	29
SS/H	3.207	48.523	0.270	29
SS/F	3.241	93.728	0.038	29
SS/XSSO4	5.670	24.598	0.496	29
SS/NO3	4.619	53.817	0.281	29
CUND/H	0.678	10.006	0.398	31
CUND/NO3	0.893	10.448	0.405	29
CUND/XSSO4	0.872	7.677	0.569	29
CL/NA	1.309	-8.231	0.991	29
AG/NA	0.242	-1.319	0.442	29
NH4/SO4	0.124	1.195	0.600	29
NH4/XSSO4	0.315	-0.121	0.854	29
NO3/SO4	0.258	3.615	0.661	29
NO3/XSSO4	0.613	1.446	0.880	29
F/XSSO4	0.060	0.024	0.441	29
AMT/H/CM	42.478	75.892	0.403	34
AMTNO3/CM	11.124	66.702	0.529	29
AMTXSSO4/CM	11.032	104.113	0.325	29

Table 230.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMI=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 12/77 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.121	14.951	0.584	48
H/SO4	0.798	2.577	0.862	48
H/XSSO4	0.988	2.581	0.959	48
H/NO3+XSSO4	0.657	3.629	0.900	48
H/F	-3.268	28.436	-0.166	48
H/SA	0.915	6.598	0.976	26
HNV/SA	0.897	2.901	0.974	26
H/TA	0.659	4.929	0.902	26
XSCA/XSK	4.345	2.731	0.444	48
XSCA/XSMG	0.277	3.348	0.221	48
XSCA/NO3	0.590	-2.484	0.923	48
XSCA/XSSO4	0.217	-1.394	0.631	48
XSCA/F	-0.439	4.178	-0.067	48
LUGH/LUGCM	-0.166	1.316	-0.274	60
LUGNA/LUGCM	-0.129	1.526	-0.103	48
LUGXSK/LUGCM	-0.228	-0.228	-0.203	48
LUGXCA/LUGCM	-0.998	0.196	-0.634	48
LUGXMG/LUGCM	-0.702	-0.056	-0.411	48
LUGF/LUGCM	0.048	0.020	0.103	48
LUGNO3/LUGCM	-0.721	0.822	-0.703	48
LXSSO4/LUGCM	-0.410	1.211	-0.360	48
SS/H	0.008	63.940	0.002	48
SS/F	1.664	63.587	0.022	48
SS/XSSO4	0.583	49.550	0.150	48
SS/NO3	1.612	46.354	0.223	48
CUND/H	0.511	7.443	0.728	55
CUND/NO3	0.707	12.331	0.570	48
CUND/XSSO4	0.478	8.171	0.718	48
CL/NA	0.672	8.773	0.985	48
MG/NA	0.234	0.152	0.997	48
NH4/SO4	0.120	0.400	0.638	48
NH4/XSSO4	0.144	0.505	0.690	48
NO3/SO4	0.321	1.040	0.665	48
NO3/XSSO4	0.354	2.172	0.660	48
F/XSSO4	-0.009	0.573	-0.175	48
AMTH/CM	152.362	67.539	0.529	60
AMINO3/CM	34.570	40.742	0.419	48
AMTXSSO4/CM	96.809	108.506	0.345	48

Table 231.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 01/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.488	6.231	0.619	24
H/SO4	0.417	6.540	0.602	24
H/XSSO4	0.574	4.552	0.707	24
H/NU3+XSSO4	0.433	4.345	0.699	24
H/F	-13.136	20.834	-0.151	24
H/SA	0.000	0.000	0.000	0
HNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	10.443	12.534	0.652	24
XSCA/XSMG	4.339	0.748	0.893	24
XSCA/NU3	1.570	-1.131	0.638	24
XSCA/XSSO4	0.493	0.191	0.592	24
XSCA/F	-17.676	14.452	-0.198	24
LUGH/LUGCM	-0.159	1.210	-0.327	25
LUGNA/LUGCM	-0.544	1.533	-0.710	24
LUGXSK/LUGCM	-0.087	-0.073	-0.162	24
LUGXLA/LUGCM	-1.021	0.720	-0.823	24
LUGXMG/LUGCM	-0.707	0.185	-0.706	24
LUGF/LUGCM	-0.032	-0.028	-0.189	24
LUGNU3/LUGCM	-0.406	0.854	-0.746	24
LXSSO4/LUGCM	-0.511	1.286	-0.819	24
SS/H	-0.013	59.416	-0.004	24
SS/F	-40.743	60.930	-0.122	24
SS/XSSO4	1.549	16.779	0.497	24
SS/NU3	4.163	19.887	0.451	24
CUND/H	0.394	11.228	0.471	25
CUND/NU3	1.398	5.460	0.730	24
CUND/XSSO4	0.536	3.996	0.827	24
CL/NA	0.936	3.328	0.981	24
MG/NA	0.234	0.725	0.988	24
NH4/SO4	0.294	-0.066	0.831	24
NH4/XSSO4	0.368	-0.477	0.888	24
NU3/SO4	0.253	1.124	0.877	24
NU3/XSSO4	0.303	1.147	0.896	24
F/XSSO4	-0.003	0.121	-0.304	24
AMTH/CM	103.557	63.778	0.845	25
AMTNU3/CM	40.618	27.122	0.857	24
AMTXSSO4/CM	60.504	124.598	0.692	24

Table 232.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM<sup>3</sup>  
 CM<sup>3</sup> PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 02/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.167	33.490	0.786	30
H/SO4	0.386	31.538	0.718	30
H/XSSO4	0.694	21.991	0.817	30
H/NO3+XSSO4	0.452	25.367	0.821	30
H/F	2.781	48.506	0.114	30
H/SA	0.840	9.170	0.959	29
HNV/SA	0.823	5.557	0.902	29
H/TA	-0.005	48.095	-0.038	29
XSCA/XSK	1.567	2.698	-0.331	30
XSCA/XSMG	0.105	2.708	0.355	30
XSCA/NO3	0.177	0.887	0.536	30
XSCA/XSSO4	0.099	-0.629	0.527	30
XSCA/F	2.397	2.432	0.441	30
LUGH/LUGCM	-0.184	1.663	-0.700	34
LUGNA/LOGCM	0.077	1.333	0.059	30
LUGXSK/LUGCM	-0.086	-0.238	-0.098	30
LUGXCA/LUGCM	-0.265	0.422	-0.276	30
LUGXMG/LUGCM	-0.016	0.045	-0.010	30
LUGF/LUGCM	0.029	0.038	0.091	30
LUGNO3/LUGCM	-0.496	1.035	-0.645	30
LXSSO4/LUGCM	-0.250	1.566	-0.562	30
SS/H	4.021	-124.930	0.502	30
SS/F	53.671	54.450	0.274	30
SS/XSSO4	5.870	-158.644	0.862	30
SS/NO3	10.371	-68.368	0.872	30
CUND/H	1.214	-27.374	0.731	34
CUND/NO3	2.477	-1.531	0.939	30
CUND/XSSO4	1.420	-23.814	0.940	30
CL/NA	0.730	12.112	0.990	30
MG/NA	0.217	1.613	0.996	30
NH4/SO4	0.030	3.080	0.400	30
NH4/XSSO4	0.037	3.035	0.307	30
NO3/SO4	0.338	-1.987	0.932	30
NO3/XSSO4	0.527	-7.139	0.719	30
F/XSSO4	0.009	0.019	0.254	30
AMTH/CM	315.886	126.644	0.924	34
AMTNO3/CM	34.585	87.604	0.586	30
AMTXSSO4/CM	291.635	51.585	0.962	30

Table 233.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 03/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.988	14.740	0.992	34
H/SU4	1.144	12.238	0.242	34
H/XSSU4	1.207	16.934	0.224	34
H/NU3+XSSU4	0.947	-15.480	0.992	34
H/F	13.843	44.686	0.110	34
H/SA	0.908	5.156	0.965	16
HNV/SA	0.966	-0.270	0.982	16
H/TA	0.637	1.556	0.945	16
XSCA/XSK	12.266	5.793	0.795	34
XSCA/XSMG	3.257	2.210	0.793	34
XSCA/NU3	0.009	13.612	0.089	34
XSCA/XSSU4	0.356	1.982	0.621	34
XSCA/F	0.309	13.733	0.023	34
LUGH/LUGCM	-0.384	1.426	-0.485	34
LUGNA/LUGCM	-0.916	1.388	-0.668	34
LUGXSK/LUGCM	-0.279	-0.219	-0.216	34
LUGXCA/LUGCM	-1.187	0.740	-0.805	34
LUGXMG/LUGCM	-0.815	0.241	-0.627	34
LUGF/LUGCM	-0.219	0.018	-0.326	34
LOGNU3/LUGCM	-0.846	1.108	-0.666	34
LXSSU4/LUGCM	-0.501	1.375	-0.651	34
SS/H	0.103	58.135	0.219	34
SS/F	14.704	50.216	0.247	34
SS/XSSU4	1.298	20.201	0.511	34
SS/NU3	0.081	60.558	0.173	34
CUND/H	0.413	13.453	0.972	38
CUND/NU3	0.406	18.082	0.968	34
CUND/XSSU4	0.739	10.740	0.326	34
CL/NA	1.236	-5.321	0.977	34
MG/NA	0.270	0.422	0.987	34
NH4/SO4	0.336	-2.084	0.894	34
NH4/XSSU4	0.372	-1.299	0.869	34
NO3/SO4	0.767	13.008	0.162	34
NO3/XSSU4	0.775	17.321	0.143	34
F/XSSU4	0.001	0.897	0.033	34
AMTH/CM	104.661	195.149	0.322	38
AMTNU3/CM	0.772	181.563	0.003	34
AMTXSSU4/CM	116.927	128.509	0.615	34

Table 234.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 04/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR.	COEF.	NO.
H/NU3	-0.283	27.577	-1.000		2
H/SO4	-0.111	27.683	-1.000		2
H/XSSO4	-0.128	28.038	-1.000		2
H/NU3+XSSO4	-0.088	27.831	-1.000		2
H/F	-1.024	25.142	-1.000		2
H/SA	0.000	0.000	0.000		0
HNH/SA	0.000	0.000	0.000		0
H/TA	0.000	0.000	0.000		0
XSCA/XSK	1.231	21.233	1.000		2
XSCA/XSMG	4.727	13.849	1.000		2
XSCA/NU3	1.993	-7.162	1.000		2
XSCA/XSSO4	0.903	-11.819	1.000		2
XSCA/F	7.217	1.542	1.000		2
LUGH/LUGCM	0.223	1.459	1.000		2
LUGNA/LOGCM	-1.229	0.884	-1.000		2
LUGXSK/LUGCM	-1.994	-0.486	-1.000		2
LUGXLA/LUGCM	-0.746	1.054	-1.000		2
LUGXMG/LUGCM	-1.194	-0.187	-1.000		2
LOGF/LOGCM	-0.777	0.154	-1.000		2
LUGNU3/LOGCM	-0.630	0.919	-1.000		2
LXSSO4/LUGCM	-0.573	1.347	-1.000		2
SS/H	-13.120	333.532	-1.000		2
SS/F	13.433	-9.449	1.000		2
SS/XSSO4	1.681	-34.316	1.000		2
SS/NU3	3.708	-25.647	1.000		2
CUND/H	-2.497	78.405	-1.000		2
CUND/NU3	0.706	10.043	1.000		2
CUND/XSSO4	0.320	8.394	1.000		2
CL/NA	0.624	13.080	1.000		2
MG/NA	0.200	2.666	1.000		2
NH4/SO4	0.580	9.921	1.000		2
NH4/XSSO4	0.671	8.062	1.000		2
NU3/SO4	0.392	-1.082	1.000		2
NU3/XSSO4	0.453	-2.338	1.000		2
F/XSSO4	0.125	-1.851	1.000		2
AMTH/CM	250.592	-7.635	1.000		2
AMTNU3/CM	84.264	26.557	1.000		2
AMTXSSO4/CM	237.528	58.554	1.000		2



Table 235.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 05/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.492	30.266	0.572	18
H/SO4	0.577	10.426	0.813	18
H/XSSO4	0.612	11.508	0.834	18
H/NO3+XSSO4	0.551	15.239	0.706	18
H/F	3.853	41.513	0.121	18
H/SA	0.934	1.569	0.987	15
HNV/SA	0.961	-3.355	0.987	15
H/TA	0.583	2.430	0.952	15
XSCA/XSK	21.056	-0.314	0.920	18
XSCA/XSMG	11.329	-0.180	0.849	18
XSCA/NO3	1.287	-13.378	0.902	18
XSCA/XSSO4	0.421	2.311	0.533	18
XSCA/F	12.224	14.016	0.356	18
LOGH/LOGCM	0.493	1.578	0.582	23
LUGNA/LOGCM	-0.216	1.549	-0.400	18
LUGXSK/LOGCM	-0.458	-0.130	-0.693	18
LUGXCA/LOGCM	-0.541	1.147	-0.773	18
LUGXMG/LOGCM	-0.506	0.127	-0.758	18
LUGF/LOGCM	0.011	0.075	0.033	18
LOGNO3/LOGCM	-0.408	1.343	-0.885	18
LXSSO4/LOGCM	-0.301	1.626	-0.682	18
SS/H	0.076	52.305	0.063	18
SS/F	11.155	45.297	0.290	18
SS/XSSO4	0.321	38.067	0.362	18
SS/NO3	0.774	32.386	0.483	18
CUND/H	-0.033	41.402	-0.051	23
CUND/NO3	0.475	19.061	0.739	18
CUND/XSSO4	0.323	15.604	0.909	18
CL/NA	1.071	2.308	0.987	18
MG/NA	0.273	-0.354	0.987	18
NH4/SO4	0.278	7.654	0.853	18
NH4/XSSO4	0.288	8.584	0.853	18
NO3/SO4	0.427	4.513	0.795	18
NO3/XSSO4	0.433	6.378	0.782	18
F/XSSO4	0.008	0.500	0.344	18
AMTH/CM	314.319	46.916	0.974	23
AMTNO3/CM	121.207	78.055	0.954	18
AMTXSSO4/CM	236.322	156.809	0.933	18

Table 236.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 06/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.856	7.780	0.967	20
H/SO4	1.112	-2.703	0.985	20
H/XSSO4	1.148	2.596	0.993	20
H/NO3+XSSO4	0.729	3.399	0.997	20
H/F	66.698	19.417	0.874	20
H/SA	0.963	3.840	0.999	7
HNV/SA	0.963	-1.514	1.000	7
H/TA	0.696	-2.408	0.926	7
XSCA/XSK	10.151	0.350	0.922	20
XSCA/XSMG	6.002	0.829	0.859	20
XSCA/NO3	0.429	1.237	0.955	20
XSCA/XSSO4	0.254	0.482	0.939	20
XSCA/F	13.640	4.680	0.763	20
LUGH/LUGCM	-0.551	1.282	-0.639	22
LUGNA/LUGCM	-0.106	1.609	-0.136	20
LUGXSK/LUGCM	-0.928	-0.495	-0.688	20
LUGXCA/LUGCM	-1.352	0.318	-0.823	20
LUGXMG/LUGCM	-0.509	-0.038	-0.514	20
LUGF/LUGCM	-0.251	-0.062	-0.584	20
LUGNO3/LUGCM	-1.216	0.706	-0.845	20
LXSSO4/LUGCM	-0.873	1.141	-0.759	20
SS/H	0.142	57.815	0.151	20
SS/F	26.098	53.552	0.364	20
SS/XSSO4	0.202	56.656	0.186	20
SS/NO3	0.189	60.485	0.105	20
CUND/H	0.467	10.295	0.964	22
CUND/NO3	0.864	13.703	0.928	20
CUND/XSSO4	0.544	10.440	0.969	20
CL/NA	1.202	-5.498	0.494	20
MG/NA	0.248	-0.321	0.491	20
VH4/SO4	0.237	-2.472	0.935	20
VH4/XSSO4	0.244	-1.324	0.940	20
VO3/SO4	0.548	-3.352	0.932	20
NO3/XSSO4	0.568	-0.829	0.943	20
F/XSSO4	0.013	-0.096	0.872	20
AMTH/CM	32.463	151.776	0.151	22
AMTNO3/CM	-24.838	90.891	-0.239	20
AMTXSSO4/CM	-3.559	154.630	-0.021	20

Table 237.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 07/78 AT ALL XSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.456	7.689	0.827	44
H/SO4	1.240	2.157	0.926	44
H/XSSO4	1.289	4.421	0.953	44
H/NO3+XSSO4	0.951	1.368	0.967	44
H/F	-2.862	40.920	-0.136	44
H/SA	1.049	-0.197	0.992	30
HNW/SA	0.986	-0.854	0.994	30
H/TA	0.754	-3.410	0.904	30
XSCA/XSK	0.353	5.337	0.176	44
XSCA/XSMG	2.354	4.682	0.337	44
XSCA/NO3	0.262	2.293	0.517	44
XSCA/XSSO4	0.069	3.786	0.298	44
XSCA/F	0.043	5.591	0.012	44
LUGH/LUGCM	0.127	1.493	0.203	44
LUGNA/LOGCM	-0.499	1.394	-0.554	44
LUGXSK/LUGCM	-0.531	-0.308	-0.425	44
LUGXCA/LUGCM	-0.309	0.686	-0.310	44
LUGXMG/LUGCM	-0.110	-0.207	-0.133	44
LUGF/LUGCM	0.131	-0.029	0.201	44
LUGNO3/LUGCM	-0.190	1.068	-0.272	44
LXSSO4/LUGCM	0.155	1.297	0.201	44
SS/H	-0.152	36.953	-0.125	44
SS/F	-3.401	33.395	-0.133	44
SS/XSSO4	-0.023	31.651	-0.014	44
SS/NO3	0.806	20.789	0.224	44
CUND/H	0.430	5.329	0.930	44
CUND/NO3	1.229	6.442	0.894	44
CUND/XSSO4	0.581	6.527	0.929	44
CL/NA	1.196	-2.774	0.945	44
MG/NA	0.234	-0.251	0.492	44
NH4/SO4	0.050	1.152	0.198	44
NH4/XSSO4	0.047	1.376	0.184	44
NO3/SO4	0.350	2.327	0.777	44
NO3/XSSO4	0.342	3.577	0.750	44
F/XSSO4	-0.011	0.940	-0.173	44
AMTH/LM	444.332	-70.340	0.902	44
AMTNO3/CM	70.366	94.848	0.709	44
AMTXSSO4/CM	340.435	-107.761	0.896	44

Table 238.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 08/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.596	9.369	0.904	26
H/SO4	1.217	1.375	0.954	26
H/XSSO4	1.201	5.675	0.970	26
H/NO3+XSSO4	0.881	3.908	0.984	26
H/F	5.996	44.340	0.086	26
H/SA	0.967	7.317	0.874	18
HNV/SA	0.963	3.837	0.862	18
H/TA	0.562	13.524	0.831	18
XSCA/XSK	2.829	4.741	0.241	26
XSCA/XSMG	0.728	6.125	0.122	26
XSCA/NO3	0.343	1.604	0.762	26
XSCA/XSSO4	0.117	2.546	0.602	26
XSCA/F	0.000	6.560	0.000	26
LUGH/LUGCM	0.016	1.559	0.035	27
LOGNA/LOGCM	-0.486	1.281	-0.592	26
LUGXSK/LUGCM	-0.196	-0.274	-0.280	26
LUGXCA/LUGCM	-0.370	-0.776	-0.641	26
LUGXMG/LUGCM	-0.047	-0.047	-0.098	26
LUGF/LUGCM	0.061	-0.086	0.231	26
LUGNU3/LUGCM	-0.259	1.093	-0.439	26
LXSSO4/LUGCM	-0.033	1.424	-0.053	26
SS/H	-0.373	50.628	-0.274	26
SS/F	-0.156	33.193	-0.002	26
SS/XSSO4	-0.439	48.201	-0.260	26
SS/NO3	-0.483	40.102	-0.123	26
CUND/H	0.323	12.235	0.632	27
CUND/NO3	1.091	9.527	0.885	26
CUND/XSSO4	0.456	9.626	0.858	26
CL/NA	1.121	1.061	0.998	26
MG/NA	0.211	0.822	0.995	26
NH4/SO4	0.107	1.395	0.394	26
NH4/XSSO4	0.107	1.732	0.405	26
NO3/SO4	0.375	0.411	0.845	26
NO3/XSSO4	0.362	2.014	0.840	26
F/XSSO4	-0.001	0.446	-0.034	26
AMTH/CM	373.412	67.230	0.939	27
AMTNO3/CM	60.121	104.338	0.774	26
AMTXSSO4/CM	290.414	11.795	0.931	26

Table 239.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 09/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.045	7.108	0.953	50
H/SO4	0.895	6.265	0.845	50
H/XSSO4	1.297	4.347	0.961	50
H/NO3+XSSO4	0.828	3.827	0.979	50
H/F	4.156	37.708	0.454	50
H/SA	1.091	0.782	0.978	50
HNV/SA	1.002	0.912	0.979	50
H/TA	0.422	14.762	0.761	50
XSCA/XSK	2.819	2.119	0.642	50
XSCA/XSMG	0.393	3.602	0.226	50
XSCA/NO3	0.251	0.118	0.850	50
XSCA/XSSO4	0.141	0.310	0.760	50
XSCA/F	0.736	3.608	0.584	50
LUGH/LUGCM	-0.261	1.429	-0.482	50
LUGNA/LOGCM	-0.412	1.669	-0.470	50
LUGXSK/LUGCM	-0.319	-0.233	-0.410	50
LUGXCA/LOGCM	-0.379	0.412	-0.513	50
LUGXMG/LOGCM	-0.340	0.027	-0.364	50
LUGF/LUGCM	-0.103	0.016	-0.176	50
LUGNO3/LOGCM	-0.344	1.023	-0.537	50
LXSSO4/LOGCM	-0.321	1.230	-0.429	50
SS/H	0.913	80.092	0.216	50
SS/F	-3.846	123.428	-0.099	50
SS/XSSO4	1.826	65.122	0.321	50
SS/NO3	2.533	75.007	0.280	50
CUND/H	0.521	13.041	0.678	50
CUND/NO3	1.124	14.447	0.707	50
CUND/XSSO4	0.747	11.922	0.747	50
CL/NA	1.147	-2.170	0.994	50
MG/NA	0.237	-0.009	0.997	50
NH4/SO4	0.200	-1.812	0.866	50
NH4/XSSO4	0.275	-1.809	0.935	50
NO3/SO4	0.412	0.634	0.834	50
NO3/XSSO4	0.575	0.405	0.913	50
F/XSSO4	0.056	-0.483	0.381	50
AMTH/CM	159.111	136.387	0.568	50
AMTNO3/CM	67.935	48.454	0.649	50
AMTXSSO4/CM	97.995	110.471	0.492	50

Table 240.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 10/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.049	25.272	0.570	56
H/SO4	0.281	29.769	0.497	56
H/XSSO4	0.562	24.166	0.650	56
H/NO3+XSSO4	0.386	23.211	0.640	56
H/F	0.427	47.998	0.021	56
H/SA	1.161	-0.131	0.460	21
HNV/SA	1.118	-3.002	0.471	21
H/TA	0.684	1.056	0.907	21
XSCA/XSK	0.054	9.308	0.026	56
XSCA/XSMG	-0.520	11.652	-0.324	56
XSCA/NO3	0.767	-7.692	0.814	56
XSCA/XSSO4	0.330	-4.983	0.747	56
XSCA/F	3.915	2.620	0.377	56
LUGH/LUGCM	-0.401	1.406	-0.686	67
LOGNA/LOGCM	-0.507	1.948	-0.643	56
LUGXSK/LUGCM	-0.396	-0.239	-0.422	56
LUGXCA/LUGCM	-0.429	0.543	-0.547	56
LUGXMG/LUGCM	-0.329	0.206	-0.336	56
LUGF/LUGCM	-0.211	0.167	-0.448	56
LUGNO3/LUGCM	-0.574	1.033	-0.840	56
LXSSO4/LUGCM	-0.504	1.326	-0.743	56
SS/H	1.405	186.123	0.177	56
SS/F	71.153	132.219	0.443	56
SS/XSSO4	5.066	35.127	0.739	56
SS/NO3	10.806	14.794	0.741	56
CUND/H	0.185	65.867	0.062	65
CUND/NO3	1.641	18.057	0.728	56
CUND/XSSO4	0.812	19.267	0.768	56
CL/NA	1.103	-3.343	0.494	56
MG/NA	0.221	1.779	0.482	56
NH4/SO4	0.295	-1.307	0.346	56
NH4/XSSO4	0.454	-1.206	0.347	56
NO3/SO4	0.272	3.488	0.587	56
NO3/XSSO4	0.417	4.141	0.587	56
F/XSSO4	0.008	1.385	0.195	56
AMTH/CM	83.486	180.366	0.575	67
AMINO3/CM	23.750	82.353	0.659	56
AMIXSSO4/CM	49.609	177.546	0.559	56

Table 241.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/80.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 11/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.878	14.206	0.992	17
H/SO4	0.273	33.220	0.075	17
H/XSSO4	3.898	-16.347	0.560	17
H/NO3+XSSO4	0.825	3.975	0.996	17
H/F	-0.419	39.780	-0.034	17
H/SA	0.837	8.103	0.975	4
HNV/SA	1.107	-6.227	0.997	4
H/TA	0.296	20.889	0.826	4
XSCA/XSK	7.215	1.948	0.789	17
XSCA/XSMG	0.359	5.957	0.158	17
XSLA/NO3	0.028	5.755	0.238	17
XSCA/XSSO4	0.358	1.455	0.393	17
XSCA/F	-0.339	7.233	-0.210	17
LUGH/LUGCM	-0.573	1.154	-0.638	18
LUGNA/LOGCM	0.338	1.655	0.190	17
LUGXSK/LOGCM	-0.465	-0.587	-0.390	17
LUGXCA/LOGCM	-0.925	0.182	-0.780	17
LOGXMG/LOGCM	0.359	0.162	0.207	17
LUGF/LOGCM	0.554	0.499	0.492	17
LUGNU3/LOGCM	-1.085	0.613	-0.757	17
LXSSO4/LOGCM	-0.314	0.949	-0.559	17
SS/H	-0.640	96.548	-0.235	17
SS/F	1.044	69.474	0.031	17
SS/XSSO4	-2.473	106.090	-0.130	17
SS/NO3	-0.434	83.865	-0.180	17
CUND/H	0.362	12.322	0.729	18
CUND/NO3	0.335	16.960	0.760	17
CUND/XSSO4	1.435	6.036	0.415	17
CL/NA	1.094	-2.772	0.995	17
MG/NA	0.229	0.050	0.999	17
NH4/SO4	0.031	-0.167	0.381	17
NH4/XSSO4	0.017	0.245	0.109	17
NO3/SO4	0.356	20.721	0.087	17
NO3/XSSO4	3.818	-25.962	0.485	17
F/XSSO4	-0.002	2.109	-0.004	17
AMTH/CM	133.666	49.739	0.704	18
AMTNO3/CM	-6.765	60.188	-0.048	17
AMTXSSO4/CM	116.950	2.816	0.951	17

Table 242.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 12/78 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.812	56.908	0.659	9
H/SO4	0.233	59.965	0.701	9
H/XSSO4	0.913	16.680	0.932	9
H/NO3+XSSO4	0.486	29.884	0.850	9
H/F	1.569	92.638	0.070	9
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	-1.551	21.922	-0.274	9
XSCA/XSMG	0.646	8.896	0.930	9
XSCA/NO3	0.278	4.351	0.940	9
XSCA/XSSU4	0.162	4.305	0.691	9
XSCA/F	-1.792	27.746	-0.332	9
LUGH/LUGCM	-0.215	1.646	-0.186	12
LUGNA/LUGCM	-0.978	1.386	-0.442	9
LUGXSK/LUGCM	-1.032	-0.943	-0.658	9
LUGXCA/LUGCM	-1.472	-0.468	-0.934	9
LUGXMG/LUGCM	-1.646	-0.988	-0.714	9
LUGF/LUGCM	-0.112	0.494	-0.104	9
LUGNO3/LUGCM	-0.750	0.780	-0.619	9
LXSSU4/LUGCM	-0.426	1.384	-0.341	9
SS/H	12.344	-369.711	0.526	9
SS/F	-318.448	2393.718	-0.603	9
SS/XSSU4	16.319	-625.272	0.710	9
SS/NO3	27.592	-603.947	0.955	9
CUND/H	1.372	-0.614	0.530	12
CUND/NO3	3.582	-47.634	0.974	9
CUND/XSSU4	2.283	-55.444	0.780	9
CL/NA	1.059	-2.131	1.000	9
MG/NA	0.223	3.378	1.000	9
NH4/SO4	0.016	17.293	0.328	9
NH4/XSSU4	0.071	13.574	0.497	9
NO3/SO4	0.264	7.825	0.976	9
NO3/XSSO4	0.653	-6.373	0.820	9
F/XSSO4	-0.006	5.345	-0.138	9
AMTH/CM	703.051	10.851	0.905	12
AMTNO3/CM	63.785	32.011	0.295	9
AMTXSSU4/CM	365.835	37.554	0.759	9



Table 243.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM<sup>2</sup>  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 ONLY CLEAN SAMPLES COLLECTED  
 DURING 01/79 AT ALL KSC SITES ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.399	32.124	0.938	5
H/SO4	0.384	60.313	0.962	5
H/XSSO4	0.466	52.538	0.944	5
H/NO3+XSSO4	0.356	46.217	0.952	5
H/F	0.566	103.986	0.190	5
H/SA	0.829	19.858	0.841	5
HNV/SA	1.113	-18.304	0.908	5
H/TA	0.273	58.305	0.530	5
XSCA/XSK	9.414	30.606	0.909	5
XSCA/XSMG	2.973	38.872	0.952	5
XSCA/NU3	1.617	-33.224	0.944	5
XSCA/XSSO4	0.552	-11.340	0.976	5
XSCA/F	0.494	51.203	0.144	5
LUGH/LUGCM	-0.418	1.806	-0.783	5
LOGNA/LOGCM	-3.395	-0.307	-0.851	5
LUGXSK/LUGCM	-1.818	-0.617	-0.886	5
LUGXCA/LUGCM	-0.669	1.365	-0.556	5
LUGXMG/LOGCM	-2.263	-0.622	-0.629	5
LUGF/LUGCM	-0.938	0.358	-0.336	5
LUGNU3/LOGCM	-0.483	1.471	-0.656	5
LXSSO4/LOGCM	-0.708	1.688	-0.731	5
SS/H	5.345	-52.332	0.979	5
SS/F	0.515	55.215	0.032	5
SS/XSSO4	2.500	-242.920	0.929	5
SS/NU3	7.019	-325.269	0.861	5
COND/H	1.151	-65.144	0.993	5
COND/NU3	1.617	-28.530	0.935	5
COND/XSSO4	0.555	-7.070	0.972	5
CL/NA	0.991	-1.424	0.999	5
MG/NA	0.266	1.275	0.999	5
NH4/SO4	0.240	7.262	0.924	5
NH4/XSSO4	0.301	1.280	0.935	5
NO3/SO4	0.251	23.020	0.941	5
NO3/XSSO4	0.313	16.956	0.948	5
F/XSSO4	0.039	3.880	0.238	5
AMTH/CM	714.430	103.595	0.902	5
AMTNU3/CM	354.092	53.508	0.752	5
AMTXSSO4/CM	483.082	201.060	0.538	5

Table 244.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/77 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSS04	0.000	0.000	0.000	0
H/NO3+XSS04	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	0.987	3.726	1.000	2
HNV/SA	0.954	2.697	1.000	2
H/TA	0.676	6.026	1.000	2
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSS04	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.589	1.765	-1.000	2
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGLM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNO3/LOGCM	0.000	0.000	0.000	0
LXSS04/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSS04	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
COND/H	0.468	-1.593	1.000	2
COND/NO3	0.000	0.000	0.000	0
COND/XSS04	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSS04	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSS04	0.000	0.000	0.000	0
F/XSS04	0.000	0.000	0.000	0
AMTH/CM	167.357	377.837	1.000	2
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSS04/CM	0.000	0.000	0.000	0

Table 245.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/77 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.084	0.745	0.985	3
HNV/SA	0.887	0.555	0.998	3
H/TA	1.039	-9.176	1.000	3
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	0.290	1.124	0.396	8
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNO3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
COND/H	0.200	13.624	0.928	7
COND/NO3	0.000	0.000	0.000	0
COND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	499.896	-302.366	0.770	8
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0

Table 246.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/77 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSS04	0.000	0.000	0.000	0
H/NO3+XSS04	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.037	1.549	0.998	6
HNV/SA	1.006	-0.022	0.996	6
H/TA	0.765	1.400	0.997	6
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSSU4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LUGCM	-0.486	1.358	-0.780	8
LOGNA/LOGCM	0.000	0.000	0.000	0
LUGXSK/LUGCM	0.000	0.000	0.000	0
LUGXCA/LUGCM	0.000	0.000	0.000	0
LUGXMG/LUGCM	0.000	0.000	0.000	0
LUGF/LUGCM	0.000	0.000	0.000	0
LUGNO3/LUGCM	0.000	0.000	0.000	0
LXSSU4/LUGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
CUND/H	0.695	2.676	0.850	7
CUND/NO3	0.000	0.000	0.000	0
CUND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSS04	0.000	0.000	0.000	0
NO3/SO4	0.000	1.000	0.000	0
NO3/XSS04	0.000	0.000	0.000	0
F/XSSU4	0.000	0.000	0.000	0
AMTH/CM	121.176	78.895	0.837	8
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSSU4/CM	0.000	0.000	0.000	0

Table 247.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/77 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.647	6.622	0.997	4
H/SO4	0.399	29.038	0.277	4
H/XSSO4	1.182	9.823	0.595	4
H/NO3+XSSO4	1.090	-2.455	0.858	4
H/F	5.294	21.698	0.497	4
H/SA	1.034	-0.326	0.999	4
HNV/SA	0.981	-1.182	0.999	4
H/TA	0.857	-6.689	0.991	4
XSCA/XSK	-0.855	0.735	-0.253	4
XSCA/XSMG	-0.197	6.822	-0.191	4
XSCA/NO3	0.371	0.945	0.991	4
XSCA/XSSU4	0.193	0.642	0.688	4
XSCA/F	0.766	2.958	-0.511	4
LUGH/LUGCM	-0.732	1.713	-0.880	5
LUGNA/LOGCM	-1.682	2.029	-0.522	4
LUGXSK/LUGCM	-1.753	0.106	-0.565	4
LUGXCA/LUGCM	-1.337	1.007	-0.638	4
LUGXMG/LUGCM	-1.471	0.824	-0.528	4
LUGF/LUGCM	0.358	0.430	0.193	4
LUGNO3/LUGCM	-1.252	1.314	-0.525	4
LXSSU4/LUGCM	-1.478	1.745	-0.949	4
SS/H	-1.149	115.509	-0.376	4
SS/F	-13.196	118.651	-0.406	4
SS/XSSU4	3.099	-14.360	0.511	4
SS/NO3	-3.164	109.561	-0.390	4
CUND/H	0.397	13.629	0.959	5
CUND/NO3	0.465	23.800	0.275	4
CUND/XSSU4	1.176	-2.478	0.930	4
CL/NA	0.850	-3.161	1.000	4
MG/NA	0.207	0.566	1.000	4
NH4/SU4	0.184	4.296	0.420	4
NH4/XSSO4	0.416	-0.997	0.689	4
NO3/SU4	0.146	8.647	0.268	4
NO3/XSSO4	0.442	1.339	0.590	4
F/XSSU4	0.041	2.814	0.219	4
AMTH/CM	118.000	440.140	0.275	5
AMTNO3/CM	-60.375	334.263	-0.262	4
AMTXSSU4/CM	-116.779	652.901	-0.692	4

Table 248.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/77 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.284	5.202	0.928	7
H/SO4	0.496	8.067	0.909	7
H/XSSO4	0.824	6.789	0.941	7
H/NO3+XSSO4	0.540	4.698	0.970	7
H/F	4.743	16.557	0.632	7
H/SA	0.813	10.033	0.991	3
HNV/SA	1.135	-6.198	0.999	3
H/TA	0.613	7.069	0.993	3
XSCA/XSK	8.615	1.817	0.863	7
XSCA/XSMG	-0.509	5.952	-0.526	7
XSCA/NO3	0.432	-0.918	0.935	7
XSCA/XSSU4	0.223	0.870	0.762	7
XSCA/F	1.726	2.644	-0.690	7
LUGH/LUGCM	-0.551	1.205	-0.976	8
LUGNA/LOGCM	-0.580	1.788	-0.880	7
LUGXSK/LUGCM	0.034	-0.013	0.278	7
LUGXLA/LUGCM	-0.657	0.529	-0.922	7
LUGXMG/LUGCM	-0.553	-0.039	-0.699	7
LUGF/LUGCM	-0.346	0.237	-0.794	7
LUGNO3/LOGCM	-0.818	0.868	-0.961	7
LXSSO4/LUGCM	-0.943	0.940	-0.918	7
SS/H	6.373	-27.784	0.795	7
SS/F	9.406	118.446	0.156	7
SS/XSSU4	6.208	-6.553	0.884	7
SS/NO3	7.002	24.384	0.631	7
COND/H	0.906	0.326	0.932	7
COND/NO3	1.054	6.785	0.784	7
COND/XSSU4	0.823	4.711	0.966	7
CL/NA	1.567	-25.935	0.993	7
MG/NA	0.218	-0.335	0.970	7
NH4/SO4	0.161	1.682	0.759	7
NH4/XSSO4	0.288	0.801	0.845	7
NO3/SO4	0.311	4.936	0.788	7
NO3/XSSO4	0.540	3.585	0.653	7
F/XSSO4	0.045	0.925	0.382	7
AMTH/CM	40.516	83.726	0.922	8
AMINO3/CM	5.663	66.192	0.418	7
AMTXSSU4/CM	-1.704	108.446	-0.075	7

Table 249.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/77 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	3.130	-0.543	0.603	8
H/SO4	0.725	4.550	0.807	8
H/XSSO4	0.956	2.052	0.920	8
H/NO3+XSSO4	0.760	0.407	0.911	8
H/F	-12.389	51.311	-0.292	8
H/SA	0.810	9.501	0.982	5
HNV/SA	0.778	6.933	0.984	5
H/TA	0.617	5.763	0.947	5
XSCA/XSK	4.741	2.125	0.702	8
XSCA/XSM6	0.559	1.791	0.782	8
XSCA/NO3	0.559	-1.804	0.837	8
XSCA/XSSO4	0.118	0.145	0.662	8
XSCA/F	-1.630	3.770	-0.224	8
LUGH/LOGCM	-0.336	1.304	-0.571	11
LOGNA/LOGCM	-0.612	1.452	-0.430	8
LUGXSK/LOGCM	-0.626	-0.354	-0.515	8
LUGXCA/LOGCM	-1.602	-0.016	-0.752	8
LUGXMG/LOGCM	-1.175	-0.049	-0.712	8
LUGF/LOGCM	0.066	0.034	0.277	8
LUGNO3/LOGCM	-0.825	0.751	-0.647	8
LXSSO4/LOGCM	-0.601	1.231	-0.451	8
SS/H	0.119	55.121	0.038	8
SS/F	-25.278	63.553	-0.190	8
SS/XSSO4	1.296	22.192	0.394	8
SS/NO3	5.826	3.820	0.478	8
C/ND/F	0.371	11.969	0.588	11
C/ND/NO3	1.941	2.073	0.801	8
C/ND/XSSO4	0.495	6.417	0.767	8
CL/NA	0.757	9.645	0.998	8
MG/NA	0.213	0.798	1.000	8
NH4/SO4	0.086	1.013	0.768	8
NH4/XSSO4	0.113	0.710	0.879	8
NO3/SO4	0.209	2.406	0.904	8
NO3/XSSO4	0.240	2.674	0.899	8
F/XSSO4	-0.007	0.396	-0.289	8
AMTH/CM	176.126	62.364	0.443	11
AMTNO3/CM	8.985	56.896	0.084	8
AMTXSSO4/CM	83.124	137.495	0.178	8

Table 250.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.396	-2.441	0.976	6
H/SO4	0.826	-6.433	0.924	6
H/XSSO4	0.924	-4.562	0.952	6
H/NU3+XSSO4	0.675	-4.432	0.964	6
H/F	49.760	23.757	0.908	6
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	3.343	11.461	0.405	6
XSCA/XSMG	2.537	3.576	0.787	6
XSCA/NU3	0.202	10.492	0.293	6
XSCA/XSSU4	0.115	8.663	0.420	6
XSCA/F	3.265	12.940	0.212	6
LUGH/LUGCM	-0.171	1.388	-0.214	6
LOGNA/LOGCM	-0.551	1.599	-0.738	6
LUGXSK/LOGCM	-0.327	-0.002	-0.799	6
LUGXCA/LOGCM	-0.773	0.824	-0.807	6
LUGXMG/LOGCM	-0.603	0.349	-0.734	6
LUGF/LUGCM	0.000	0.033	-0.002	6
LOGNU3/LOGCM	-0.164	1.074	-0.243	6
LXSSO4/LOGCM	-0.487	1.411	-0.564	6
SS/H	0.582	60.086	0.361	6
SS/F	36.666	71.871	0.415	6
SS/XSSU4	0.858	43.090	0.548	6
SS/NU3	1.893	50.478	0.479	6
CUND/H	0.435	12.228	0.841	6
CUND/NU3	1.130	9.722	0.890	6
CUND/XSSU4	0.466	7.365	0.928	6
CL/NA	1.173	-2.972	0.995	6
MG/NA	0.290	-0.718	0.988	6
NH4/SO4	0.180	5.374	0.845	6
NH4/XSSO4	0.202	5.724	0.876	6
NU3/SO4	0.350	-1.914	0.954	6
NU3/XSSO4	0.385	-0.854	0.973	6
F/XSSO4	0.016	-0.439	0.884	6
AMTH/CM	75.161	179.223	0.432	6
AMTNU3/CM	53.777	66.573	0.635	6
AMTXSSU4/CM	22.402	246.155	0.135	6



Table 251.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.089	52.782	0.852	6
H/SO4	0.372	31.880	0.855	6
H/XSSO4	0.614	23.982	0.905	6
H/NU3+XSSO4	0.398	26.713	0.893	6
H/F	0.491	56.620	0.018	6
H/SA	0.934	4.154	0.990	5
HNV/SA	0.953	-0.113	0.990	5
H/TA	0.826	-6.730	0.958	5
XSCA/XSK	4.780	3.004	0.459	6
XSCA/XSMG	0.162	3.982	0.580	6
XSCA/NU3	0.255	0.450	0.745	6
XSCA/XSSO4	0.110	0.183	0.607	6
XSCA/F	4.659	2.848	0.650	6
LUGH/LUGCM	-0.163	1.656	-0.666	6
LUGNA/LOGCM	-0.343	1.611	-0.266	6
LUGXSK/LUGCM	-0.226	-0.131	-0.459	6
LUGXCA/LUGCM	-0.315	0.544	-0.294	6
LUGXMG/LUGCM	-0.376	-0.076	-0.163	6
LUGF/LUGCM	-0.002	0.103	-0.007	6
LUGNU3/LUGCM	-0.573	1.148	-0.820	6
LXSSO4/LUGCM	-0.422	1.615	-0.852	6
SS/H	6.730	-237.116	0.741	6
SS/F	87.778	84.645	0.561	6
SS/XSSO4	5.862	-168.816	0.952	6
SS/NU3	11.034	-98.775	0.951	6
CUND/H	1.466	-32.137	0.786	6
CUND/NU3	2.659	-8.937	0.974	6
CUND/XSSO4	1.425	-26.486	0.984	6
CL/NA	0.688	9.289	1.000	6
MG/NA	0.215	0.623	1.000	6
NH4/SO4	-0.002	5.890	-0.042	6
NH4/XSSO4	-0.008	6.159	-0.090	6
NU3/SO4	0.332	-0.141	0.974	6
NU3/XSSO4	0.514	-5.432	0.970	6
F/XSSO4	0.007	0.319	0.281	6
AMTH/CM	280.033	104.754	0.977	8
AMTNU3/CM	30.021	112.574	0.667	6
AMTXSSO4/CM	244.861	112.351	0.991	6

Table 252.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.670	21.763	0.581	7
H/SO4	0.766	6.003	0.948	7
H/XSSO4	0.815	8.760	0.903	7
H/NU3+XSSO4	0.485	8.272	0.854	7
H/F	-3.421	43.992	-0.194	7
H/SA	0.952	2.818	0.990	5
HNH/SA	0.913	0.774	0.991	5
H/TA	0.463	10.970	0.799	5
XSCA/XSK	17.963	2.930	0.912	7
XSCA/XSMG	3.436	2.496	0.675	7
XSCA/NU3	0.549	2.437	0.694	7
XSCA/XSSU4	0.449	0.127	0.725	7
XSCA/F	6.073	4.981	0.500	7
LUGH/LUGCM	-0.270	1.497	-0.525	8
LUGNA/LOGCM	-0.278	1.582	-0.269	7
LUGXSK/LUGCM	-0.195	-0.032	-0.294	7
LUGXCA/LUGCM	-1.255	0.903	-0.843	7
LUGXMG/LUGCM	-0.728	0.408	-0.592	7
LUGF/LUGCM	-0.365	0.117	-0.551	7
LUGNU3/LOGCM	-0.637	1.249	-0.630	7
LXSSU4/LUGCM	-0.469	1.446	-0.554	7
SS/H	1.849	-9.418	0.880	7
SS/F	-21.594	90.284	-0.581	7
SS/XSSU4	1.151	20.335	0.607	7
SS/NU3	1.191	32.128	0.491	7
CUND/H	0.805	-0.886	0.911	8
CUND/NU3	0.561	13.290	0.672	7
CUND/XSSU4	0.563	6.943	0.863	7
CL/NA	1.055	0.590	0.998	7
MG/NA	0.258	1.523	0.971	7
NH4/SO4	0.416	-4.925	0.906	7
NH4/XSSU4	0.486	-5.106	0.946	7
NU3/SO4	0.422	8.377	0.602	7
NU3/XSSO4	0.458	4.538	0.585	7
F/XSSO4	0.011	0.765	0.224	7
AMTH/CM	151.597	173.974	0.560	8
AMTNU3/CM	47.069	149.122	0.441	7
AMTXSSU4/CM	113.651	196.283	0.493	7

Table 253.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 04/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-7.802	280.543	-1.000	2
H/SO4	-2.544	291.046	-1.000	2
H/XSSO4	-1.041	129.594	-1.000	2
H/NO3+XSSO4	-0.918	147.347	-1.000	2
H/F	19.135	-61.802	1.000	2
H/SA	1.258	-12.930	1.000	2
HNV/SA	1.404	-23.171	1.000	2
H/TA	-3.871	353.243	-1.000	2
XSCA/XSK	16.078	16.994	1.000	2
XSCA/XSMG	19.509	-41.894	1.000	2
XSCA/NO3	34.874	-1035.469	1.000	2
XSCA/XSSO4	4.651	-360.780	1.000	2
XSCA/F	-85.527	494.645	-1.000	2
LUGH/LUGCM	-12.323	-5.959	-1.000	2
LOGNA/LOGCM	-31.525	-17.241	-1.000	2
LUGXSK/LUGCM	39.829	24.634	1.000	2
LUGXCA/LUGCM	28.726	19.247	1.000	2
LUGXMG/LOGCM	17.244	11.211	1.000	2
LUGF/LUGCM	-4.334	-1.934	-1.000	2
LUGNO3/LUGCM	1.680	2.520	1.000	2
LXSSO4/LUGCM	4.332	4.594	1.000	2
SS/H	6.088	-108.704	1.000	2
SS/F	116.494	-484.958	1.000	2
SS/XSSO4	-6.335	680.269	-1.000	2
SS/NO3	-47.501	1599.250	-1.000	2
CUND/H	0.695	19.742	1.000	2
CUND/NO3	-5.426	214.854	-1.000	2
CUND/XSSO4	-0.724	109.872	-1.000	2
CL/NA	0.881	12.355	1.000	2
MG/NA	0.136	11.157	1.000	2
NH4/SO4	2.522	-187.340	1.000	2
NH4/XSSO4	1.032	-27.267	1.000	2
NO3/SO4	0.326	-1.346	1.000	2
NO3/XSSO4	0.133	19.347	1.000	2
F/XSSO4	-0.054	10.002	-1.000	2
AMTH/CM	-3788.167	1019.143	-1.000	2
AMTNO3/CM	860.333	-134.433	1.000	2
AMTXSSO4/CM	4937.833	-992.408	1.000	2

Table 254.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 05/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NO3	0.353	25.164	0.824	5
H/SO4	0.105	30.534	0.256	5
H/XSSO4	0.107	31.058	0.268	5
H/NO3+XSSO4	0.134	25.862	0.589	5
H/F	2.498	31.846	0.355	5
H/SA	1.231	-12.207	0.800	5
HNV/SA	1.133	-12.867	0.894	5
H/TA	0.318	9.391	0.450	5
XSCA/XSK	4.348	10.447	0.500	5
XSCA/XSMG	11.081	-5.574	0.865	5
XSCA/NO3	0.229	15.422	0.183	5
XSCA/XSSO4	0.894	-17.247	0.772	5
XSCA/F	7.315	10.744	0.358	5
LOGH/LUGCM	-0.114	1.548	-0.416	5
LOGNA/LOGCM	-0.014	1.685	-0.034	5
LOGXSK/LOGCM	-0.691	0.281	-0.452	5
LOGXCA/LOGCM	-0.469	1.221	-0.364	5
LOGXMG/LOGCM	-0.648	0.331	-0.664	5
LOGF/LOGCM	-0.371	0.227	-0.654	5
LUGNO3/LOGCM	-0.419	1.433	-0.544	5
LXSSO4/LOGCM	-0.527	1.618	-0.862	5
SS/H	-0.485	81.479	-0.197	5
SS/F	-13.962	86.162	-0.805	5
SS/XSSO4	-0.302	77.488	-0.308	5
SS/NO3	-0.156	68.819	-0.148	5
LUND/H	1.208	-9.218	0.910	5
CUND/NO3	0.558	17.251	0.980	5
CUND/XSSO4	0.278	21.728	0.523	5
CL/NA	1.065	6.605	0.992	5
MG/NA	0.182	4.733	0.862	5
NH4/SO4	0.844	1.451	0.497	5
NH4/XSSO4	0.844	6.482	0.510	5
NO3/SO4	0.629	-1.492	0.660	5
NO3/XSSO4	0.611	3.038	0.657	5
F/XSSO4	0.038	-0.112	0.675	5
AMTH/CM	325.393	23.228	0.986	5
AMTNO3/CM	141.305	134.353	0.805	5
AMTXSSO4/CM	168.418	236.301	0.893	5

Table 255.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.961	3.028	0.980	6
H/SU4	0.949	9.601	0.992	6
H/XSSU4	0.988	10.930	0.992	6
H/NU3+XSSU4	0.668	7.310	0.997	6
H/F	55.989	24.150	0.875	6
H/SA	0.964	3.695	1.000	3
HNV/SA	1.013	-3.729	1.000	3
H/TA	0.404	19.934	0.539	3
XSCA/XSK	7.965	1.619	0.964	6
XSCA/XSMG	9.514	-0.254	0.998	6
XSCA/NU3	0.532	-1.463	0.996	6
XSCA/XSSU4	0.254	1.432	0.955	6
XSCA/F	15.993	3.713	0.436	6
LUGH/LUGCM	-0.295	1.649	-0.569	6
LUGNA/LUGCM	-0.312	1.430	-0.833	6
LUGXSK/LUGCM	-0.367	0.011	-0.631	6
LUGXCA/LUGCM	-0.539	0.969	-0.868	6
LUGXMG/LUGCM	-0.465	0.026	-0.844	6
LUGF/LUGCM	-0.197	0.117	-0.864	6
LUGNU3/LUGCM	-0.442	1.331	-0.831	6
LXSSU4/LUGCM	-0.242	1.505	-0.405	6
SS/H	0.434	10.520	0.929	6
SS/F	25.972	19.813	0.869	6
SS/XSSU4	0.434	14.978	0.933	6
SS/NU3	0.898	10.385	0.461	6
CUND/H	0.497	2.139	0.998	6
CUND/NU3	0.973	3.684	0.977	6
CUND/XSSU4	0.494	7.401	0.997	6
CL/NA	1.221	-3.866	0.999	6
MG/NA	0.315	-1.583	0.999	6
NH4/SU4	0.247	2.060	0.982	6
NH4/XSSU4	0.257	2.430	0.981	6
NU3/SU4	0.461	4.673	0.964	6
NU3/XSSU4	0.478	5.385	0.961	6
F/XSSU4	0.013	0.020	0.825	6
AMTH/CM	337.856	60.404	0.901	6
AMTNU3/CM	120.756	32.414	0.958	6
AMTXSSU4/CM	275.446	34.664	0.952	6

Table 256.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.084	12.263	0.934	9
H/SU4	1.400	-5.342	0.792	9
H/XSSU4	1.617	-2.516	0.908	9
H/NU3+XSSU4	1.044	-2.503	0.985	9
H/F	10.080	36.503	0.480	9
H/SA	1.170	-6.333	0.995	9
HNV/SA	1.043	-4.084	0.997	9
H/TA	0.521	9.883	0.987	9
XSCA/XSK	7.535	2.082	0.793	9
XSCA/XSMG	-0.741	4.805	-0.749	9
XSCA/NU3	0.137	3.907	0.443	9
XSCA/XSSU4	0.030	5.307	0.121	9
XSCA/F	0.376	5.811	0.130	9
LUGH/LUGCM	-0.117	1.657	-0.231	9
LUGNA/LOGCM	-0.509	1.753	-0.571	9
LOGXSK/LUGCM	-0.279	-0.338	-0.276	9
LUGXCA/LUGCM	-0.574	0.823	-0.604	9
LUGXMG/LUGCM	-0.077	-0.013	-0.392	9
LUGF/LUGCM	-0.375	0.178	-0.621	9
LUGNU3/LUGCM	-0.385	1.238	-0.568	9
LXSSU4/LUGCM	0.041	1.439	0.083	9
SS/H	-0.663	104.893	-0.218	9
SS/F	-17.435	92.654	-0.273	9
SS/XSSU4	-1.286	113.241	-0.237	9
SS/NU3	-0.060	74.295	-0.009	9
COND/H	0.355	14.910	0.692	9
COND/NU3	0.905	16.456	0.790	9
COND/XSSU4	0.556	14.590	0.608	9
CL/NA	1.129	-2.445	0.999	9
MG/NA	0.171	0.616	0.986	9
NH4/SU4	0.154	-0.186	0.465	9
NH4/XSSU4	0.032	4.662	0.097	9
NO3/SU4	0.579	-4.913	0.731	9
NO3/XSSU4	0.591	-1.337	0.740	9
F/XSSU4	0.015	0.633	0.181	9
AMTH/CM	373.852	108.433	0.947	9
AMTNU3/CM	87.513	93.027	0.837	9
AMTXSSU4/CM	358.300	-103.280	0.943	9

Table 257.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.903	3.668	0.597	4
H/SO4	1.864	-14.842	0.945	4
H/XSSO4	1.365	5.627	0.947	4
H/NO3+XSSO4	1.274	-9.709	0.996	4
H/F	16.488	40.182	0.402	4
H/SA	0.613	17.523	0.999	3
HNV/SA	0.698	10.689	0.992	3
H/TA	0.461	6.746	0.875	3
XSCA/XSK	-2.483	7.722	-0.692	4
XSCA/XSMG	2.789	2.450	0.650	4
XSCA/NO3	-0.203	8.250	-0.600	4
XSCA/XSSO4	-0.081	7.716	-0.820	4
XSCA/F	-0.311	5.477	-0.110	4
LOGH/LOGCM	0.179	1.557	0.605	5
LOGNA/LOGCM	-0.751	1.441	-0.689	4
LOGXSK/LOGCM	-0.167	-0.013	-0.392	4
LOGXCA/LOGCM	-0.015	0.722	-0.047	4
LOGXMG/LOGCM	0.220	-0.054	0.574	4
LOGF/LOGCM	0.004	0.004	0.158	4
LOGNO3/LOGCM	-0.153	1.170	-0.425	4
LXSSO4/LOGCM	0.662	1.193	0.717	4
SS/H	-1.908	121.166	-0.927	4
SS/F	-33.076	44.941	-0.392	4
SS/XSSO4	-2.914	119.265	-0.982	4
SS/NO3	-3.210	81.414	-0.321	4
COND/H	-0.589	49.810	-0.379	5
COND/NO3	0.906	11.849	0.957	4
COND/XSSO4	0.159	20.068	0.566	4
CL/NA	1.240	1.263	1.000	4
MG/NA	0.228	1.061	0.999	4
NH4/SO4	0.108	1.137	0.203	4
NH4/XSSO4	0.100	1.733	0.256	4
NO3/SO4	0.123	10.155	0.303	4
NO3/XSSO4	0.092	11.451	0.310	4
F/XSSO4	0.009	0.016	0.247	4
AMTH/CM	433.401	72.015	0.979	5
AMTNO3/CM	73.365	122.843	0.873	4
AMTXSSO4/CM	360.404	-70.984	0.994	4

Table 258.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NU3	0.588	28.195	0.502	7
H/SU4	0.757	9.826	0.925	7
H/XSSU4	0.840	12.314	0.912	7
H/N03+XSSU4	0.442	16.210	0.792	7
H/F	3.907	35.397	0.534	7
H/SA	1.201	-11.429	0.998	4
MNV/SA	0.995	-2.524	0.994	4
H/TA	-0.078	66.504	-0.215	4
XSCA/XSK	20.391	-2.476	0.716	7
XSCA/XSM6	8.107	4.095	0.406	7
XSCA/NU3	2.022	-23.150	0.902	7
XSCA/XSSU4	0.631	0.058	0.358	7
XSCA/F	-0.134	22.014	-0.010	7
LUGH/LUGCM	-0.145	1.546	-0.369	8
LUGNA/LUGCM	-0.445	1.664	-0.657	7
LUGXSK/LUGCM	-0.856	-0.072	-0.753	7
LUGXCA/LUGCM	-0.475	0.736	-0.370	7
LUGXMG/LUGCM	-0.676	-0.002	-0.544	7
LUGF/LUGCM	0.381	0.112	0.517	7
LUGNU3/LUGCM	-0.309	1.172	-0.388	7
LXSSU4/LUGCM	-0.080	1.394	-0.103	7
SS/H	1.515	13.428	0.616	7
SS/F	-3.973	81.929	-0.221	7
SS/XSSU4	1.200	34.591	0.530	7
SS/NU3	0.793	54.318	0.276	7
CUND/H	0.901	-3.467	0.891	8
CUND/NU3	0.557	18.242	0.621	7
CUND/XSSU4	0.647	8.326	0.917	7
CL/NA	0.981	6.409	0.996	7
MG/NA	0.227	1.065	0.995	7
NH4/SU4	0.254	-3.041	0.951	7
NH4/XSSU4	0.295	-2.634	0.979	7
NU3/SU4	0.472	2.634	0.675	7
NU3/XSSU4	0.553	3.185	0.703	7
F/XSSU4	0.043	0.009	0.344	7
AMTH/LM	522.245	-133.693	0.857	8
AMTNU3/CM	169.388	-10.466	0.786	7
AMTXSSU4/CM	384.241	-91.132	0.824	7



Table 259.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.345	18.421	0.837	7
H/SU4	1.041	8.624	0.784	7
H/XSSU4	1.084	19.128	0.788	7
H/ND3+XSSU4	0.884	5.289	0.483	7
H/F	8.117	35.862	0.318	7
H/SA	0.900	6.737	1.000	2
HNV/SA	0.949	2.106	1.000	2
H/TA	0.601	6.035	1.000	2
XSLA/XSK	5.330	-0.911	0.896	7
XSCA/XSMG	-0.777	8.956	-0.677	7
XSCA/NU3	0.307	-0.769	0.688	7
XSCA/XSSU4	0.027	5.155	0.091	7
XSCA/F	1.460	3.775	0.266	7
LUGH/LUGLM	-0.526	1.316	-0.829	8
LUGNA/LUGCM	-0.229	1.888	-0.524	7
LUGXSK/LUGLM	-0.403	-0.145	-0.663	7
LUGXCA/LUGLM	-0.304	0.511	-0.442	7
LUGXMG/LUGLM	0.054	0.393	0.065	7
LUGF/LUGLM	-0.289	0.055	-0.752	7
LUGNU3/LUGLM	-0.665	0.838	-0.824	7
LXSSU4/LUGLM	-0.380	1.102	-0.589	7
SS/H	0.199	110.392	0.130	7
SS/F	15.510	97.688	0.398	7
SS/XSSU4	0.196	114.732	0.043	7
SS/NU3	0.403	111.148	0.164	7
CUHD/H	0.655	8.878	0.865	8
CUHD/NU3	0.484	25.624	0.622	7
CUHD/XSSU4	0.564	21.333	0.846	7
LL/NA	0.868	13.646	0.975	7
MG/NA	0.264	-3.750	0.480	7
NH4/SU4	0.223	-0.493	0.699	7
NH4/XSSU4	0.235	1.693	0.710	7
NU3/SU4	0.309	10.060	0.374	7
NU3/XSSU4	0.305	13.622	0.356	7
F/XSSU4	-0.007	1.606	-0.126	7
AM1H/CM	56.656	116.788	0.592	8
AM1NU3/CM	22.591	42.091	0.794	7
AM1XSSU4/CM	42.844	81.049	0.502	7

Table 260.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.549	14.333	0.475	7
H/SU4	0.534	10.059	0.735	7
H/XSSU4	1.074	6.770	0.923	7
H/NU3+XSSU4	1.007	-4.286	-0.972	7
H/F	-0.935	35.929	-0.145	7
H/SA	0.975	8.727	0.807	3
HNV/SA	1.107	-1.095	0.867	3
H/TA	0.100	40.048	0.289	3
XSCA/XSK	6.550	4.168	0.375	7
XSCA/XSMG	0.453	8.536	0.108	7
XSCA/NU3	0.473	3.350	-0.314	7
XSCA/XSSU4	-0.061	10.885	-0.113	7
XSCA/F	-0.362	10.108	-0.121	7
LUGH/LUGCM	0.049	1.491	-0.084	7
LUGNA/LOGCM	0.178	2.116	0.147	7
LUGXSK/LUGCM	-0.254	-0.286	-0.411	7
LUGXCA/LUGCM	-0.947	0.361	-0.871	7
LUGXMG/LUGCM	-0.041	0.210	-0.060	7
LUGF/LUGCM	0.366	0.372	0.366	7
LUGNU3/LUGCM	-0.351	0.900	-0.662	7
LXSSU4/LUGCM	0.230	1.404	0.290	7
SS/H	2.346	128.962	0.275	7
SS/F	29.464	146.612	0.534	7
SS/XSSU4	3.815	112.057	0.385	7
SS/NU3	-4.668	267.792	-0.168	7
CUND/H	0.552	20.542	-0.472	7
CUND/NU3	-0.182	41.593	-0.048	7
CUND/XSSU4	0.779	19.560	0.573	7
CL/NA	1.124	-0.517	0.998	7
AG/NA	0.231	-0.455	1.000	7
NH4/SU4	0.015	0.500	0.269	7
NH4/XSSU4	0.000	1.197	-0.004	7
NU3/SU4	0.005	12.455	0.022	7
NU3/XSSU4	0.068	10.961	0.190	7
F/XSSU4	0.005	1.985	0.026	7
AMTH/CM	269.537	28.661	0.873	7
AMTNU3/CM	58.702	19.549	0.898	7
AMTXSSU4/CM	314.806	-17.319	0.923	7

Table 261.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/78 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.271	2.065	0.979	4
H/S04	-0.692	33.659	-0.886	4
H/XSS04	0.635	7.244	0.993	4
H/NU3+XSS04	0.497	6.097	0.991	4
H/F	0.903	16.031	0.061	4
H/SA	0.000	0.000	0.000	0
HNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	-5.862	8.684	-0.854	4
XSCA/XSMG	2.703	2.765	0.931	4
XSCA/NU3	1.152	-2.345	0.700	4
XSCA/XSS04	0.301	0.591	0.664	4
XSCA/F	4.192	2.285	0.396	4
LOGH/LOGCM	-0.422	1.274	-0.954	5
LUGNA/LOGCM	0.818	1.689	0.979	4
LOGXSK/LOGCM	0.423	-0.390	0.448	4
LUGXCA/LOGCM	-0.216	0.664	-0.428	4
LUGXMG/LOGCM	-0.411	-0.329	-0.348	4
LUGF/LOGCM	0.037	-0.207	0.130	4
LUGNU3/LOGCM	-0.224	0.814	-0.911	4
LXSS04/LOGCM	-0.416	1.166	-0.916	4
SS/H	-28.813	584.582	-0.984	4
SS/F	-95.106	168.119	-0.218	4
SS/XSS04	-18.113	373.279	-0.968	4
SS/NU3	-63.867	515.064	-0.940	4
CUND/H	2.521	-20.635	0.987	5
CUND/NU3	-6.312	61.124	-0.913	4
CUND/XSS04	-1.804	47.312	-0.947	4
CL/NA	1.047	5.990	0.997	4
MG/NA	0.203	1.687	0.998	4
NH4/S04	-0.552	18.014	-0.914	4
NH4/XSS04	0.488	-2.773	0.987	4
NU3/S04	-0.265	12.948	-0.789	4
NU3/XSS04	0.274	2.359	0.995	4
F/XSS04	0.003	0.619	0.061	4
AMTH/CM	103.082	52.581	0.992	5
AMTNU3/CM	36.270	27.867	0.990	4
AMTXSS04/CM	44.401	103.830	0.914	4

Table 262.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/79 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.216	5.674	0.991	7
H/SU4	0.659	5.109	0.851	7
H/XSSU4	0.946	7.642	0.982	7
H/NU3+XSSU4	0.668	6.816	0.988	7
H/F	8.177	19.752	0.924	7
H/SA	0.879	11.307	0.997	3
HNV/SA	0.823	7.682	1.000	3
H/TA	0.601	4.710	1.000	3
XSCA/XSK	-12.898	25.572	-0.524	7
XSCA/XSMG	4.467	7.070	0.894	7
XSCA/NU3	0.988	6.301	0.677	7
XSCA/XSSU4	0.341	9.806	0.542	7
XSCA/F	2.282	15.661	0.395	7
LUGH/LUGCM	-0.416	1.472	-0.706	7
LUGNA/LOGCM	-0.444	1.864	-0.531	7
LUGXSK/LUGCM	-0.219	-0.154	-0.583	7
LUGXCA/LUGCM	-0.936	1.071	-0.945	7
LUGXMG/LUGCM	-0.589	0.246	-0.677	7
LUGF/LUGCM	-0.314	0.269	-0.493	7
LUGNU3/LUGCM	-0.581	1.021	-0.844	7
LXSSU4/LUGCM	-0.432	1.352	-0.643	7
SS/H	0.854	159.435	0.093	7
SS/F	-20.129	237.465	-0.246	7
SS/XSSU4	-0.756	216.488	-0.085	7
SS/NU3	1.821	165.339	0.088	7
CUND/H	0.585	16.313	0.494	7
CUND/NU3	1.287	19.750	0.486	7
CUND/XSSU4	0.378	26.430	0.332	7
CL/NA	1.112	-0.432	1.000	7
MG/NA	0.234	0.270	1.000	7
NH4/SU4	0.169	0.210	0.689	7
NH4/XSSU4	0.300	-0.967	0.980	7
NU3/SU4	0.294	-0.066	0.848	7
NU3/XSSU4	0.423	1.015	0.982	7
F/XSSU4	0.106	-1.179	0.977	7
AMTH/CM	150.904	150.125	0.978	7
AMTNU3/CM	23.602	78.390	0.933	7
AMTXSSU4/CM	83.064	153.384	0.952	7

Table 263.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/79 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	-1.587	64.796	-0.287	3
H/SU4	0.345	11.750	0.473	3
H/XSSU4	0.832	-7.010	0.896	3
H/NU3+XSSU4	0.726	-13.834	0.814	3
H/F	69.329	-59.820	0.626	3
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	0.715	4.300	0.647	3
XSCA/XSMG	0.660	8.922	0.690	3
XSCA/NU3	-0.440	4.032	0.564	3
XSCA/XSSU4	-0.093	16.576	-0.715	3
XSCA/F	-5.493	19.318	-0.355	3
LUGH/LUGCM	-0.140	1.419	-0.198	3
LUGNA/LOGCM	-0.923	1.763	-0.868	3
LUGXSK/LOGCM	-0.967	-0.032	-0.890	3
LUGXLA/LOGCM	-0.090	1.011	-0.238	3
LUGXMG/LOGCM	-0.796	0.164	-0.797	3
LUGF/LOGCM	-0.147	0.100	-0.794	3
LUGNU3/LOGCM	-0.251	1.152	-0.959	3
LXSSU4/LOGCM	-0.448	1.511	-0.627	3
SS/H	-3.381	354.261	-0.396	3
SS/F	442.042	-393.003	0.468	3
SS/XSSU4	0.415	205.279	0.052	3
SS/NU3	46.940	-580.141	0.993	3
CUND/H	-0.069	51.320	-0.058	3
CUND/NU3	6.456	-62.337	0.973	3
CUND/XSSU4	0.436	25.443	0.391	3
CL/NA	1.052	0.665	1.000	3
MG/NA	0.226	1.302	1.000	3
VH4/SU4	0.082	7.750	0.983	3
VH4/XSSU4	0.096	8.713	0.907	3
VU3/SU4	0.093	10.247	0.708	3
NU3/XSSU4	0.028	15.697	0.168	3
F/XSSU4	0.008	0.997	0.907	3
AMFH/CM	65.754	146.583	0.228	3
AMTNU3/CM	123.077	14.923	1.000	3
AMTXSSU4/CM	56.966	259.018	0.185	3

Table 264.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/79 AT KSC SITE 01 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	25.119	0.878	2
H/SO4	0.000	25.119	0.878	2
H/XSSO4	0.000	25.119	0.878	2
H/NO3+XSSO4	0.000	25.119	0.878	2
H/F	0.000	25.119	0.878	2
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	13.940	-2.125	1.000	2
XSCA/XSMG	13.431	-16.438	1.000	2
XSCA/NU3	1.910	-13.423	1.000	2
XSCA/XSSU4	1.271	-17.281	1.000	2
XSCA/F	-40.542	263.280	-1.000	2
LUGH/LUGCM	-0.162	1.430	-0.640	2
LUGNA/LUGCM	-0.411	1.879	-1.000	2
LUGXSK/LUGCM	-0.836	0.170	-1.000	2
LUGXCA/LUGCM	-0.908	1.232	-1.000	2
LUGXMG/LUGCM	-0.587	0.487	-1.000	2
LUGF/LUGCM	0.258	0.694	1.000	2
LUGNU3/LUGCM	-0.622	1.240	-1.000	2
LXSSU4/LUGCM	-0.578	1.523	-1.000	2
SS/H	-0.578	159.786	0.000	2
SS/F	-50.476	371.064	-1.000	2
SS/XSSU4	1.582	21.758	1.000	2
SS/NU3	2.378	26.561	1.000	2
COND/H	1.233	10.523	0.792	2
COND/NU3	0.575	12.784	1.000	2
COND/XSSU4	0.383	11.622	1.000	2
CL/NA	1.086	-8.363	1.000	2
MG/NA	0.284	-3.550	1.000	2
NH4/SO4	-0.049	7.844	-1.000	2
NH4/XSSO4	-0.057	7.744	-1.000	2
NO3/SO4	0.580	-3.197	1.000	2
NO3/XSSO4	0.665	-2.020	1.000	2
F/XSSO4	-0.031	6.920	-1.000	2
AMTH/CM	247.797	8.625	1.000	2
AMINU3/CM	80.575	70.898	1.000	2
AMTXSSU4/CM	151.438	106.558	1.000	2

Table 265.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/77 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSS04	0.000	0.000	0.000	0
H/NO3+XSS04	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.050	2.916	1.000	2
HNV/SA	0.848	4.917	1.000	2
H/TA	0.718	4.146	1.000	2
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSS04	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.476	1.613	-1.000	2
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGLM	0.000	0.000	0.000	0
LOGXCA/LOGLM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNU3/LOGLM	0.000	0.000	0.000	0
LXSS04/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSS04	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
CUND/H	0.600	-0.127	1.000	2
CUND/NU3	0.000	0.000	0.000	0
CUND/XSS04	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSS04	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSS04	0.000	0.000	0.000	0
F/XSS04	0.000	0.000	0.000	0
AMTH/CM	180.438	191.394	1.000	2
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSS04/CM	0.000	0.000	0.000	0

Table 266.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/77 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSS04	0.000	0.000	0.000	0
H/NO3+XSS04	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.141	-4.708	0.995	6
HNV/SA	1.065	-4.144	0.997	6
H/TA	0.916	-6.603	0.989	6
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSM6	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSSU4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	0.031	1.264	0.040	10
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNU3/LOGCM	0.000	0.000	0.000	0
LXSSU4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
CUND/H	0.184	39.298	0.194	9
CUND/NO3	0.000	0.000	0.000	0
CUND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
VH4/SO4	0.000	0.000	0.000	0
VH4/XSS04	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSS04	0.000	0.000	0.000	0
F/XSS04	0.000	0.000	0.000	0
AMTH/CM	188.253	76.176	0.450	10
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSSU4/CM	0.000	0.000	0.000	0



Table 267.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/77 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.000	0.000	0.000	0
H/SU4	0.000	0.000	0.000	0
H/XSS04	0.000	0.000	0.000	0
H/NU3+XSS04	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.051	-2.205	0.998	4
HNV/SA	1.038	-4.386	0.999	4
H/TA	0.679	-0.555	0.997	4
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSU4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LUGH/LUGCM	-0.312	1.257	-0.569	8
LUGNA/LUGCM	0.000	0.000	0.000	0
LUGXSK/LUGCM	0.000	0.000	0.000	0
LUGXCA/LUGCM	0.000	0.000	0.000	0
LUGXMG/LUGCM	0.000	0.000	0.000	0
LUGF/LUGCM	0.000	0.000	0.000	0
LUGNU3/LUGCM	0.000	0.000	0.000	0
LXSSU4/LUGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
CUND/H	0.446	49.141	0.571	6
CUND/NU3	0.000	0.000	0.000	0
CUND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/S04	0.000	0.000	0.000	0
NH4/XSS04	0.000	0.000	0.000	0
NU3/S04	0.000	0.000	0.000	0
NU3/XSSU4	0.000	0.000	0.000	0
F/XSSU4	0.000	0.000	0.000	0
AMTH/CM	105.938	54.444	0.825	8
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSSU4/CM	0.000	0.000	0.000	0

Table 268.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMI=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/77 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR.CUEF.	NO.
H/NO3	2.689	4.271	0.994	3
H/SU4	0.001	32.130	0.001	3
H/XSSU4	1.760	-13.638	0.683	3
H/NO3+XSSU4	1.379	-18.034	0.934	3
H/F	4.296	11.830	1.000	3
H/SA	0.963	2.966	0.999	5
HNV/SA	0.931	2.046	0.998	5
H/TA	0.700	-1.358	0.994	5
XSCA/XSK	-0.252	7.644	-0.158	3
XSCA/XSMG	0.089	7.601	0.319	3
XSCA/NU3	0.376	3.183	0.432	3
XSCA/XSSU4	0.325	-1.389	0.847	3
XSCA/F	0.615	4.169	0.961	3
LUGH/LUGCM	-0.224	1.446	-0.181	6
LUGNA/LUGCM	0.865	1.930	0.720	3
LUGXSK/LUGCM	0.777	-0.098	0.375	3
LUGXCA/LUGCM	-0.921	1.039	-0.871	3
LUGXMG/LUGCM	-1.420	0.654	-0.991	3
LUGF/LUGCM	-2.689	1.002	-0.973	3
LUGNU3/LUGCM	-1.652	1.303	-0.993	3
LXSSU4/LUGCM	-0.504	1.514	-0.575	3
SS/H	-2.835	255.566	-0.650	3
SS/F	-12.477	223.436	-0.666	3
SS/XSSU4	1.246	131.915	0.111	3
SS/NU3	-8.621	253.796	-0.731	3
CUND/H	0.319	75.069	0.429	6
CUND/NU3	-0.197	41.641	-0.077	3
CUND/XSSU4	1.838	-8.236	0.754	3
LL/NA	0.866	-2.361	0.994	3
MG/NA	0.052	14.245	0.932	3
NH4/SU4	-0.184	14.056	-0.407	3
NH4/XSSU4	0.225	5.604	0.326	3
NO3/SU4	-0.069	13.228	-0.110	3
NO3/XSSU4	0.564	-4.435	0.597	3
F/XSSU4	0.400	-5.685	0.667	3
AMTH/CM	71.194	260.351	0.433	6
AMTNU3/CM	-60.874	267.740	-0.983	3
AMTXSSU4/CM	160.396	160.031	0.562	3

Table 269.

LINEAR CORRELATION BASED ON  $Y=MX+b$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/77 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.716	2.561	0.993	4
H/SU4	0.033	5.167	0.371	4
H/XSS04	0.281	4.038	0.748	4
H/NU3+XSS04	0.223	3.336	0.868	4
H/F	0.223	6.287	0.000	4
H/SA	0.338	7.505	1.000	2
HNV/SA	0.402	3.103	1.000	2
H/TA	1.489	-16.089	1.000	2
XSCA/XSK	-3.805	3.394	-0.759	4
XSCA/XSMG	1.253	1.376	0.987	4
XSCA/NU3	0.889	1.187	0.466	4
XSCA/XSS04	0.871	-1.164	0.878	4
XSCA/F	0.871	5.814	0.000	4
LUGH/LUGCM	0.331	0.613	0.345	6
LUGNA/LUGCM	-0.703	2.421	-0.950	4
LUGXSK/LUGCM	-0.024	0.032	-0.305	4
LUGXLA/LUGCM	-1.066	0.856	-0.992	4
LUGXMG/LUGCM	-1.194	0.481	-0.815	4
LUGF/LUGCM	0.000	0.000	-0.815	4
LUGNU3/LUGCM	-0.696	0.801	-0.869	4
LXSS04/LUGCM	-0.953	1.045	-0.941	4
SS/H	23.374	132.573	0.241	4
SS/F	23.374	279.540	0.000	4
SS/XSS04	29.134	46.097	0.801	4
SS/NU3	23.890	155.262	0.341	4
COND/H	2.034	28.147	0.479	5
COND/NU3	3.899	21.444	0.403	4
COND/XSS04	4.213	7.964	0.839	4
LL/NA	1.259	-15.298	0.994	4
MG/NA	0.258	-4.089	1.000	4
NH4/SU4	-0.018	2.823	-0.197	4
NH4/XSS04	0.109	1.347	0.285	4
NU3/SU4	0.058	3.241	0.468	4
NU3/XSS04	0.426	1.785	0.820	4
F/XSS04	0.000	0.000	0.820	4
AMTH/CM	33.597	31.621	0.962	6
AMTNU3/CM	3.486	79.636	0.260	4
AMTXSS04/CM	-17.597	146.652	-0.463	4

Table 270.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/77 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.613	-3.094	0.601	8
H/SU4	0.790	-2.869	0.733	8
H/XSSU4	1.064	0.866	0.955	8
H/NU3+XSSU4	0.899	-5.198	0.945	8
H/F	-2.934	27.951	-0.266	8
H/SA	1.073	1.048	-0.993	4
HNV/SA	1.066	-3.753	0.997	4
H/TA	0.879	-2.611	0.941	4
XSCA/XSK	-0.500	4.110	-0.110	8
XSCA/XSM6	0.075	3.308	0.225	8
XSCA/NU3	0.388	-0.463	0.584	8
XSCA/XSSU4	0.122	0.963	0.717	8
XSCA/F	-0.430	4.137	-0.255	8
LUGH/LUGLM	-0.379	1.206	-0.367	9
LUGNA/LUGCM	0.442	1.953	0.293	8
LUGXSK/LUGCM	-0.815	-0.552	-0.429	8
LUGXCA/LUGCM	-0.571	0.283	-0.284	8
LUGXMG/LUGCM	-0.595	0.241	-0.268	8
LUGF/LUGCM	0.571	0.173	0.702	8
LUGNU3/LUGCM	-0.302	0.957	-0.457	8
LXSSU4/LUGCM	-0.059	1.262	-0.067	8
SS/H	-1.884	186.548	-0.369	8
SS/F	1.023	137.161	0.018	8
SS/XSSU4	-1.139	164.611	-0.200	8
SS/NU3	-3.423	175.787	-0.154	8
CUND/H	0.253	19.283	0.398	9
CUND/NU3	-0.341	30.135	-0.120	8
CUND/XSSU4	0.298	19.377	0.410	8
CL/NA	0.830	21.333	0.983	8
MG/NA	0.243	0.041	0.999	8
NH4/SU4	0.043	2.818	0.252	8
NH4/XSSU4	0.075	2.606	0.424	8
NU3/SU4	0.125	6.528	0.505	8
NU3/XSSU4	0.155	7.439	0.604	8
F/XSSU4	-0.028	1.389	-0.281	8
AMTH/CM	59.307	139.923	0.231	9
AMTNU3/CM	72.249	23.138	0.803	8
AMTXSSU4/CM	79.427	126.648	0.330	8

Table 271.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.379	-6.693	0.957	6
H/SU4	0.542	-2.092	0.681	6
H/XSSU4	1.032	-8.532	0.947	6
H/NU3+XSSU4	0.727	-8.349	0.955	6
H/F	-46.813	38.548	-0.354	6
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	-0.827	23.525	-0.248	6
XSCA/XSM6	1.170	11.385	0.887	6
XSCA/NU3	0.140	20.499	0.106	6
XSCA/XSSU4	0.076	19.802	0.132	6
XSCA/F	-49.966	31.437	-0.710	6
LOGH/LUGCM	-0.202	1.209	-0.166	6
LUGNA/LUGCM	-0.591	1.942	-0.432	6
LUGXSK/LUGCM	0.094	0.066	0.068	6
LUGXCA/LUGCM	-0.669	1.057	-0.634	6
LUGXMG/LUGCM	-0.568	0.442	-0.325	6
LUGF/LUGCM	-0.245	-0.145	-0.690	6
LUGNU3/LUGCM	-0.282	1.017	-0.355	6
LXSSU4/LUGCM	-0.523	1.339	-0.586	6
SS/H	-0.145	241.354	-0.020	6
SS/F	-563.113	335.696	-0.574	6
SS/XSSU4	1.627	175.644	0.201	6
SS/NU3	4.854	161.405	0.263	6
LUND/H	0.357	34.009	0.355	6
CUND/NU3	1.516	21.246	0.607	6
CUND/XSSU4	0.619	21.530	0.565	6
CL/NA	1.000	-1.421	0.999	6
MG/NA	0.253	-3.099	0.996	6
NH4/SU4	0.141	3.184	0.711	6
NH4/XSSU4	0.249	2.258	0.916	6
NU3/SU4	0.275	-0.896	0.859	6
NU3/XSSU4	0.428	-0.579	0.977	6
F/XSSU4	-0.005	0.365	-0.012	6
AMTH/CM	63.463	140.278	0.357	6
AMTNU3/CM	38.278	67.588	0.498	6
AMTXSSU4/CM	48.741	179.456	0.309	6

Table 272.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.996	34.626	0.732	5
H/SU4	0.337	30.914	0.681	5
H/XSSU4	0.713	18.792	0.799	5
H/NU3+XSSU4	0.433	24.252	0.788	5
H/F	25.185	47.611	0.485	5
H/SA	0.731	11.130	0.948	6
HNV/SA	0.685	10.157	0.930	6
H/TA	0.686	0.975	0.949	6
XSCA/XSK	0.909	1.817	0.526	5
XSCA/XSMG	-0.050	2.838	-0.270	5
XSCA/NU3	-0.061	3.213	-0.307	5
XSCA/XSSU4	-0.018	2.970	-0.141	5
XSCA/F	-4.092	2.948	-0.537	5
LUGH/LUGCM	-0.106	1.613	-0.397	7
LUGNA/LOGCM	-0.016	1.830	-0.010	5
LUGXSK/LOGCM	-0.365	-0.127	-0.454	5
LUGXCA/LOGCM	0.364	0.400	0.496	5
LUGXMG/LOGCM	0.265	0.669	0.148	5
LUGF/LOGCM	-0.011	0.004	-0.552	5
LUGNU3/LOGCM	-0.553	1.063	-0.695	5
LXSSU4/LOGCM	-0.311	1.593	-0.579	5
SS/H	5.161	-86.559	0.497	5
SS/F	527.001	75.558	0.979	5
SS/XSSU4	8.060	-194.311	0.870	5
SS/NU3	13.352	-58.548	0.446	5
CUND/H	0.880	27.797	0.278	7
CUND/NU3	2.762	3.780	0.969	5
CUND/XSSU4	1.736	-28.646	0.924	5
CL/NA	0.754	40.063	0.988	5
MG/NA	0.212	7.497	0.991	5
NH4/SU4	0.095	-0.860	0.939	5
NH4/XSSU4	0.157	-2.197	0.863	5
NU3/SU4	0.351	-4.520	0.964	5
NU3/XSSU4	0.604	-10.542	0.920	5
F/XSSU4	0.015	-0.505	0.870	5
AMTH/CM	244.293	133.697	0.941	7
AMTNU3/CM	31.722	87.713	0.695	5
AMTXSSU4/CM	328.957	45.655	0.972	5

Table 273.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.465	-4.903	0.979	5
H/SU4	0.735	3.642	0.973	5
H/XSSU4	0.705	13.370	0.935	5
H/NU3+XSSU4	0.566	8.076	0.960	5
H/F	0.281	34.906	0.437	5
H/SA	0.803	8.737	1.000	5
HNV/SA	0.955	-0.537	0.999	5
H/TA	0.568	4.522	1.000	5
XSCA/XSK	15.245	0.381	0.983	5
XSCA/XSMG	4.083	-3.171	0.724	5
XSCA/NU3	0.969	-3.195	0.964	5
XSCA/XSSU4	0.288	3.439	0.958	5
XSCA/F	1.511	15.205	0.200	5
LUGH/LUGCM	-1.229	1.290	-0.965	5
LUGNA/LOGCM	-0.564	1.734	-0.360	5
LUGXSK/LOGCM	-1.570	-0.487	-0.842	5
LUGXCA/LUGCM	-1.595	0.709	-0.895	5
LUGXMG/LUGCM	-1.178	0.323	-0.727	5
LUGF/LUGCM	-0.492	0.098	-0.454	5
LUGNU3/LUGCM	-1.226	0.947	-0.942	5
LXSSU4/LUGCM	-1.428	1.209	-0.964	5
SS/H	0.530	95.417	0.187	5
SS/F	41.284	55.657	0.768	5
SS/XSSU4	-0.221	131.678	-0.103	5
SS/NU3	2.184	73.998	0.306	5
CUND/H	0.582	12.766	0.840	5
CUND/NU3	1.558	7.284	0.892	5
CUND/XSSU4	0.332	24.394	0.636	5
CL/NA	1.545	-26.809	0.992	5
MG/NA	0.256	1.141	0.994	5
NH4/SU4	0.339	-5.140	0.961	5
NH4/XSSU4	0.328	-0.816	0.932	5
NU3/SU4	0.292	3.824	0.976	5
NU3/XSSU4	0.274	8.021	0.914	5
F/XSSU4	0.005	1.341	0.122	5
AMTH/CM	-87.380	283.020	-0.579	5
AMTNU3/CM	-46.416	133.926	-0.531	5
AMTXSSU4/CM	-160.192	319.641	-0.698	5

Table 274.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT  $CM^2$   
 $CM$  PRECIPITATION AND  $AMT=$ MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 05/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	-0.998	64.015	-0.686	5
H/SU4	-0.203	46.421	-0.271	5
H/XSSU4	-0.197	44.156	-0.271	5
H/NU3+XSSU4	-0.297	57.854	-0.500	5
H/F	-3.919	40.993	-0.200	5
H/SA	0.900	1.982	0.986	4
MNV/SA	0.955	-2.729	0.984	4
H/TA	0.264	20.698	0.647	4
XSCA/XSK	0.190	26.859	0.013	5
XSCA/XMG	5.292	0.167	0.658	5
XSCA/NU3	0.956	-1.111	0.409	5
XSCA/XSSU4	0.611	-2.933	0.523	5
XSCA/F	-3.026	32.372	-0.096	5
LUGH/LUGCM	-0.090	1.492	-0.107	5
LUGNA/LUGCM	0.082	1.964	0.219	5
LUGXSK/LUGCM	0.505	0.221	0.329	5
LOGXCA/LUGCM	-0.105	1.298	-0.076	5
LUGXMG/LUGCM	-0.131	0.616	-0.102	5
LUGF/LUGCM	0.422	0.183	0.429	5
LUGNU3/LUGCM	-0.299	1.442	-0.512	5
LXSSU4/LUGCM	0.154	1.666	0.228	5
SS/H	0.116	101.331	0.086	5
SS/F	16.752	77.110	0.635	5
SS/XSSU4	-0.341	122.160	-0.348	5
SS/NU3	0.354	94.817	0.181	5
CUND/H	0.063	40.397	0.105	5
CUND/NU3	0.448	29.286	0.508	5
CUND/XSSU4	0.012	41.970	0.028	5
CL/NA	0.805	20.028	0.955	5
MG/NA	0.220	3.189	0.943	5
NH4/SU4	0.096	30.226	0.080	5
NH4/XSSU4	0.004	35.752	0.003	5
NU3/SU4	0.145	21.066	0.282	5
NU3/XSSU4	0.129	23.300	0.258	5
F/XSSU4	0.018	0.817	0.472	5
AMTH/CM	335.220	8.654	0.729	5
AMTNU3/CM	184.709	95.345	0.740	5
AMTXSSU4/CM	397.512	117.161	0.654	5



Table 275.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NU3	1.277	12.116	0.504	6
H/SU4	0.700	2.700	0.733	6
H/XSS04	0.812	7.425	0.909	6
H/NU3+XSS04	0.679	3.503	0.908	6
H/F	24.623	18.411	0.601	6
H/SA	1.632	-20.765	1.000	2
HNV/SA	1.119	-7.704	1.000	2
H/TA	1.522	-44.669	1.000	2
XSCA/XSK	0.616	3.274	0.669	6
XSCA/XSMG	-0.004	4.136	-0.002	6
XSCA/NU3	-0.243	1.697	-0.553	6
XSCA/XSSU4	-0.007	4.291	-0.048	6
XSCA/F	-4.710	5.370	-0.662	6
LUGH/LUGCM	-0.292	1.481	-0.574	6
LUGNA/LUGCM	-0.976	2.119	-0.938	6
LUGXSK/LUGCM	-0.025	-0.227	-0.016	6
LUGXCA/LUGCM	-0.023	0.581	-0.042	6
LUGXMG/LUGCM	-0.505	-0.015	-0.330	6
LUGF/LUGCM	0.128	-0.180	0.316	6
LUGNU3/LUGCM	-0.078	0.969	-0.112	6
LXSSU4/LUGCM	0.295	1.157	0.360	6
SS/H	-2.689	176.323	-0.383	6
SS/F	65.951	92.070	0.229	6
SS/XSSU4	-2.502	163.205	-0.399	6
SS/NU3	-0.470	114.113	-0.026	6
CUND/H	1.910	-21.376	0.993	6
CUND/NU3	0.412	22.748	0.175	6
CUND/XSSU4	0.075	25.250	0.091	6
CL/NA	1.187	-3.229	0.998	6
MG/NA	0.243	-0.616	0.998	6
NH4/SU4	0.111	0.268	0.616	6
NH4/XSSU4	0.103	1.579	0.609	6
NU3/SU4	0.169	4.644	0.448	6
NU3/XSSU4	0.153	6.712	0.434	6
F/XSSU4	0.008	0.086	0.377	6
AMTH/CM	273.008	11.656	0.824	6
AMINU3/CM	90.668	17.826	0.747	6
AMTXSSU4/CM	288.672	-102.636	0.759	6

Table 276.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.368	5.247	0.889	9
H/SO4	1.457	-8.017	0.953	9
H/XSSO4	1.463	-1.434	0.972	9
H/NU3+XSSO4	0.999	-3.656	0.990	9
H/F	8.325	36.243	0.381	9
H/SA	1.042	-2.802	0.980	5
HNV/SA	1.029	-4.981	0.986	5
H/TA	0.740	0.111	0.969	5
XSCA/XSK	5.342	3.500	0.858	9
XSCA/XSMG	1.486	6.201	0.261	9
XSCA/NU3	0.036	6.684	0.134	9
XSCA/XSSO4	0.008	7.046	0.052	9
XSCA/F	0.060	7.228	0.028	9
LUGH/LUGCM	-0.059	1.552	-0.064	9
LUGNA/LUGCM	-0.636	1.662	-0.719	9
LUGXSK/LUGCM	-0.217	-0.273	-0.177	9
LUGXCA/LUGCM	-0.066	0.800	-0.077	9
LUGXMG/LUGCM	-0.220	-0.139	-0.202	9
LUGF/LUGCM	0.035	0.041	0.038	9
LUGNU3/LUGCM	-0.504	1.227	-0.483	9
LXSSO4/LUGCM	-0.021	1.394	-0.022	9
SS/H	-0.254	61.652	-0.198	9
SS/F	-3.516	54.173	-0.126	9
SS/XSSO4	-0.351	61.336	-0.182	9
SS/NU3	0.267	45.207	0.078	9
CUND/H	0.416	8.549	0.937	9
CUND/NU3	1.083	9.019	0.916	9
CUND/XSSO4	0.614	7.755	0.920	9
LL/NA	1.257	-6.416	0.998	9
MG/NA	0.243	-0.586	0.999	9
NH4/SO4	0.120	-1.464	0.429	9
NH4/XSSO4	0.117	-0.801	0.414	9
NU3/SO4	0.474	-0.306	0.825	9
NU3/XSSO4	0.450	2.660	0.797	9
F/XSSO4	0.024	0.441	0.349	9
AMTH/CM	290.135	250.649	0.726	9
AMTNU3/CM	49.532	182.133	0.459	9
AMTXSSO4/CM	302.613	-4.060	0.808	9

Table 277.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.482	7.596	0.806	4
H/SS04	2.498	-53.802	0.636	4
H/XSS04	1.373	5.759	0.955	4
H/NU3+XSS04	1.079	0.169	0.999	4
H/F	-3.044	35.519	-0.054	4
H/SA	0.734	12.852	0.968	3
HNV/SA	0.607	12.808	0.905	3
H/TA	0.536	10.340	1.000	3
XSCA/XSK	6.017	1.972	0.961	4
XSCA/XSMG	-0.004	4.069	-0.003	4
XSCA/NU3	0.141	2.532	0.774	4
XSCA/XSS04	0.002	4.031	0.021	4
XSCA/F	0.872	3.839	0.260	4
LUGH/LUGCM	0.335	1.339	0.555	4
LUGNA/LUGCM	-1.095	1.779	-0.679	4
LUGXSK/LUGCM	-0.384	-0.339	-0.635	4
LUGXCA/LUGCM	-0.134	0.658	-0.504	4
LUGXMG/LUGCM	-0.452	-0.168	-0.329	4
LOGF/LUGCM	0.319	-0.281	0.879	4
LOGNU3/LUGCM	-0.653	1.020	-0.107	4
LXSS04/LUGCM	0.590	0.972	0.704	4
SS/H	-5.385	254.825	-0.876	4
SS/F	184.612	19.330	0.529	4
SS/XSS04	-8.285	242.694	-0.937	4
SS/NU3	-10.100	178.253	-0.533	4
COND/H	-0.223	32.432	-0.501	4
COND/NU3	-0.110	25.900	-0.080	4
COND/XSS04	-0.426	33.684	-0.666	4
CL/NA	1.118	0.766	1.000	4
MG/NA	0.211	0.653	1.000	4
VH4/SU4	1.170	-27.256	0.758	4
VH4/XSS04	0.299	-1.459	0.529	4
NU3/SU4	0.542	-3.936	0.425	4
NU3/XSS04	0.276	5.065	0.595	4
F/XSS04	-0.006	0.397	-0.251	4
AMTH/CM	570.899	2.117	0.986	4
AMTNU3/CM	54.843	155.157	0.871	4
AMTXSS04/CM	291.864	-160.985	0.988	4

Table 278.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.730	10.448	0.976	9
H/SO4	0.587	4.065	0.859	9
H/XSSO4	1.138	6.157	0.970	9
H/(NO3+XSSO4)	0.705	6.960	0.985	9
H/F	53.827	25.404	0.691	9
H/SA	1.073	-0.535	0.867	4
HNV/SA	0.909	2.978	0.880	4
H/IA	-0.544	91.241	-0.886	4
XSCA/XSK	-0.198	7.249	-0.037	9
XSCA/XSM6	0.260	5.724	0.209	9
XSCA/NO3	0.324	1.373	0.972	9
XSCA/XSSO4	0.212	0.595	0.963	9
XSCA/F	9.347	4.380	0.639	9
LUGH/LUGCM	-0.316	1.449	-0.566	9
LUGNA/LUGCM	-0.575	2.182	-0.696	9
LUGXSK/LUGCM	0.066	-0.099	0.082	9
LUGXCA/LUGCM	-0.382	0.675	-0.718	9
LUGXMG/LUGCM	-0.422	0.420	-0.414	9
LUGF/LUGCM	-0.084	-0.041	-0.486	9
LUGNO3/LUGCM	-0.325	1.040	-0.519	9
LXSSO4/LUGCM	-0.415	1.242	-0.561	9
SS/H	4.596	158.600	0.586	9
SS/F	75.127	325.714	0.123	9
SS/XSSO4	6.472	148.738	0.703	9
SS/NO3	8.193	202.320	0.589	9
COND/H	0.986	21.827	0.766	9
COND/NO3	1.743	31.457	0.764	9
COND/XSSO4	1.303	22.340	0.862	9
CL/NA	1.169	-8.531	0.992	9
MG/NA	0.238	-0.200	0.995	9
NH4/SO4	0.167	-4.932	0.899	9
NH4/XSSO4	0.303	-3.699	0.950	9
NO3/SO4	0.326	-2.862	0.846	9
NO3/XSSO4	0.626	-1.485	0.945	9
F/XSSO4	0.010	-0.007	0.647	9
AMT H/CM	321.262	-8.729	0.754	9
AMT NO3/CM	132.683	-7.253	0.774	9
AMT XSSO4/CM	224.979	-10.013	0.721	9

Table 279.

LINEAR CORRELATION BASED ON  $Y=MX+H$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.468	37.982	0.538	7
H/SU4	0.126	38.379	0.488	7
H/XSSU4	0.206	40.866	0.504	7
H/NO3+XSSU4	0.146	39.551	0.520	7
H/F	9.842	36.891	0.549	7
H/SA	0.000	0.000	0.000	0
HMV/SA	0.000	0.000	0.000	0
H/IA	0.000	0.000	0.000	0
XSCA/XSK	4.906	16.517	0.272	7
XSCA/XSMG	-1.030	51.769	-0.608	7
XSCA/NU3	1.024	-13.128	0.897	7
XSCA/XSSU4	0.486	-10.262	0.908	7
XSCA/F	15.747	-1.640	0.670	7
LUGH/LUGCM	-0.301	1.344	-0.456	8
LUGNA/LUGCM	-0.479	2.419	-0.691	7
LOGXSK/LUGCM	-0.502	0.212	-0.751	7
LOGXCA/LUGCM	-0.727	0.795	-0.783	7
LUGXMG/LUGCM	-0.458	0.521	-0.407	7
LUGF/LUGCM	-0.310	0.192	-0.677	7
LUGNU3/LUGCM	-0.770	1.033	-0.951	7
LXSSU4/LUGCM	-0.774	1.297	-0.930	7
SS/H	6.971	437.820	0.435	7
SS/F	254.418	247.940	0.385	7
SS/XSSU4	5.984	287.005	0.415	7
SS/NU3	11.500	305.416	0.324	7
COND/H	-2.059	395.937	-0.257	8
COND/NU3	1.249	89.917	0.617	7
COND/XSSU4	0.680	85.005	0.717	7
CL/NA	1.087	15.284	0.989	7
MG/NA	0.215	12.853	0.968	7
NH4/SU4	0.150	-6.921	0.900	7
NH4/XSSU4	0.247	-4.196	0.940	7
NI3/SU4	0.274	-0.028	0.924	7
NI3/XSSU4	0.447	5.406	0.954	7
F/XSSU4	0.018	0.635	0.813	7
AMT H/CM	88.479	90.807	0.901	8
AMT NU3/CM	21.640	69.100	0.844	7
AMT XSSU4/CM	37.264	136.058	0.766	7

Table 280.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.602	-3.724	0.906	5
H/SU4	0.473	7.006	0.940	5
H/XSS04	0.922	11.287	0.974	5
H/NO3+XSS04	0.715	5.518	0.980	5
H/F	12.962	27.840	0.843	5
H/SA	6.579	-180.590	1.000	5
HNV/SA	4.829	-127.920	1.000	5
H/TA	0.420	9.136	1.000	5
XSCA/XSK	0.074	12.824	0.023	5
XSCA/XSMG	0.590	8.579	0.739	5
XSCA/NU3	0.373	6.214	0.538	5
XSCA/XSSU4	0.144	7.935	0.631	5
XSCA/F	2.609	9.797	0.702	5
LUGH/LUGCM	-0.423	1.272	-0.232	5
LUGNA/LUGCM	-1.366	1.645	-0.558	5
LUGXSK/LUGCM	-0.319	0.205	-0.172	5
LUGXCA/LUGCM	-1.380	0.297	-0.870	5
LUGXMG/LUGCM	-2.156	-0.590	-0.828	5
LUGF/LUGCM	-0.413	-0.114	-0.251	5
LUGNU3/LUGCM	-0.601	0.867	-0.452	5
LXSSU4/LUGCM	-0.762	0.930	-0.362	5
SS/H	8.968	63.370	0.850	5
SS/F	118.467	310.227	0.731	5
SS/XSSU4	8.922	141.187	0.894	5
SS/NU3	19.307	104.212	0.637	5
CUND/H	1.219	14.216	0.888	5
CUND/NU3	2.753	17.396	0.698	5
CUND/XSSU4	1.195	25.417	0.920	5
CL/NA	1.059	9.761	0.998	5
MG/NA	0.234	-0.731	1.000	5
NH4/SU4	0.063	-1.998	0.847	5
NH4/XSSU4	0.128	-1.580	0.909	5
NU3/SU4	0.137	7.657	0.781	5
NU3/XSSU4	0.288	8.124	0.875	5
F/XSSU4	0.056	-0.751	0.416	5
AMTH/CM	121.056	92.541	0.192	5
AMTNU3/CM	16.351	48.347	0.097	5
AMTXSSU4/CM	4.221	96.618	0.007	5

Table 281.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/78 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.839	7.551	0.990	5
H/SO4	0.239	3.752	0.976	5
H/XSSU4	0.828	-3.029	0.995	5
H/NO3+XSSU4	0.418	2.112	0.994	5
H/F	-18.828	66.611	-0.543	5
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	-10.439	15.379	-0.916	5
XSCA/XSMG	0.673	9.659	0.960	5
XSCA/NO3	0.254	7.478	0.958	5
XSCA/XSSU4	0.247	4.442	0.950	5
XSCA/F	-4.282	23.404	-0.395	5
LUGH/LUGCM	-0.611	1.118	-0.864	5
LOGNA/LOGCM	-0.215	2.295	-0.191	5
LOGXSK/LOGCM	-0.303	-0.279	-0.681	5
LOGXCA/LOGCM	-0.382	0.941	-0.659	5
LOGXMG/LOGCM	-0.789	0.234	-0.740	5
LUGF/LUGCM	0.191	0.113	0.391	5
LUGNO3/LUGCM	-0.717	0.927	-0.871	5
LXSSU4/LUGCM	-0.616	1.276	-0.942	5
SS/H	29.793	-124.308	0.953	5
SS/F	-314.823	1523.492	-0.291	5
SS/XSSU4	24.703	-216.886	0.950	5
SS/NO3	25.802	68.915	0.974	5
CUND/H	3.895	-12.694	0.965	5
CUND/NO3	3.363	12.952	0.983	5
CUND/XSSU4	3.233	-24.986	0.962	5
CL/NA	1.056	11.373	1.000	5
MG/NA	0.222	-1.307	1.000	5
NH4/SU4	0.019	7.947	0.474	5
NH4/XSSU4	0.082	6.512	0.610	5
NO3/SU4	0.287	-4.725	0.990	5
NO3/XSSU4	0.976	-12.051	0.994	5
F/XSSU4	-0.013	2.046	-0.532	5
AMTH/CM	35.421	77.624	0.908	5
AMTNO3/CM	26.713	51.114	0.889	5
AMTXSSU4/CM	60.467	91.858	0.976	5

Table 282.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/79 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.858	4.929	0.995	6
H/SU4	0.715	-3.530	0.994	6
H/XSSU4	0.765	4.263	0.998	6
H/NU3+XSSU4	0.543	4.411	0.998	6
H/F	3.710	19.704	0.493	6
H/SA	0.986	9.223	1.000	2
HIV/SA	1.025	1.302	1.000	2
H/TA	0.566	17.190	1.000	2
XSCA/XSK	12.999	11.540	0.775	6
XSCA/XSMG	4.992	3.231	0.934	6
XSCA/NU3	0.958	17.138	0.745	6
XSCA/XSSU4	0.404	16.385	0.766	6
XSCA/F	3.309	18.512	0.639	6
LUGH/LOGCM	-0.622	1.442	-0.772	6
LUGNA/LOGCM	-0.134	2.006	-0.197	6
LUGXSK/LOGCM	-0.635	0.154	-0.969	6
LUGXLA/LOGCM	-0.311	1.264	-0.274	6
LUGXMG/LOGCM	-0.426	0.555	-0.374	6
LOGF/LOGCM	-0.689	0.547	-0.732	6
LUGNU3/LOGCM	-0.702	1.071	-0.821	6
LXSSU4/LOGCM	-0.745	1.465	-0.833	6
SS/H	0.879	116.736	0.375	6
SS/F	13.815	86.828	0.784	6
SS/XSSU4	0.590	123.909	0.329	6
SS/NU3	1.277	127.067	0.292	6
CUND/H	0.604	12.553	0.936	6
CUND/NU3	1.083	16.189	0.898	6
CUND/XSSU4	0.453	15.493	0.916	6
CL/NA	1.038	0.568	0.995	6
MG/NA	0.258	-0.966	0.997	6
NH4/SU4	0.283	-4.380	0.964	6
NH4/XSSU4	0.310	-1.593	0.990	6
NU3/SU4	0.377	-4.131	0.980	6
NU3/XSSU4	0.409	-0.244	0.996	6
F/XSSU4	0.047	2.515	0.459	6
AMTH/CM	110.096	120.975	0.964	6
AMTNU3/CM	33.529	71.527	0.928	6
AMTXSSU4/CM	77.002	178.084	0.936	6



Table 283.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/79 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	6.381	-68.507	0.959	4
H/SU4	0.178	24.344	0.261	4
H/XSSU4	1.229	-16.694	0.965	4
H/NU3+XSSU4	1.057	-26.778	0.976	4
H/F	8.978	4.636	0.973	4
H/SA	0.945	8.445	1.000	2
MNV/SA	0.910	3.278	1.000	2
H/IA	0.792	-5.984	1.000	2
XSCA/XJK	1.530	18.409	0.166	4
XSCA/XSM6	3.152	3.548	0.872	4
XSCA/NU3	2.408	-22.025	0.860	4
XSCA/XSSU4	0.467	-2.604	0.870	4
XSCA/F	3.511	5.093	0.904	4
LUGH/LUGCM	-0.259	1.421	-0.273	4
LUGNA/LUGCM	-1.025	2.075	-0.663	4
LUGXSK/LUGCM	-0.797	-0.236	-0.763	4
LUGXCA/LUGCM	-1.225	0.836	-0.921	4
LUGXMG/LUGCM	-1.056	0.184	-0.592	4
LUGF/LUGCM	-0.709	0.287	-0.565	4
LUGNU3/LUGCM	-0.132	1.187	-0.394	4
LXSSU4/LUGCM	-0.471	1.493	-0.626	4
SS/H	-4.035	612.412	-0.279	4
SS/F	-7.398	479.911	-0.056	4
SS/XSSU4	-2.565	564.196	-0.139	4
SS/NU3	-7.784	583.171	-0.081	4
CUND/H	-0.162	84.725	-0.085	4
CUND/NU3	1.373	54.886	0.108	4
CUND/XSSU4	0.142	71.687	0.058	4
CL/NA	1.154	-12.386	0.999	4
AG/NA	0.233	-0.346	1.000	4
NH4/SU4	0.017	12.229	0.192	4
NH4/XSSU4	0.149	6.831	0.908	4
NU3/SU4	0.042	13.288	0.411	4
NU3/XSSU4	0.173	9.014	0.903	4
F/XSSU4	0.132	-2.156	0.957	4
AMT/H/CM	75.974	178.721	0.383	4
AMT/NU3/CM	129.658	20.114	0.976	4
AMT/XSSU4/CM	81.682	208.167	0.463	4

Table 284.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/79 AT KSC SITE 11 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.833	14.718	1.000	2
H/SO4	0.083	21.522	1.000	2
H/XSSO4	0.229	19.658	1.000	2
H/NO3+XSSO4	0.180	18.591	1.000	2
H/F	3.127	14.112	1.000	2
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/FA	0.000	0.000	0.000	1
XSCA/XSK	11.225	5.272	1.000	2
XSCA/XSMG	1.547	5.623	1.000	2
XSCA/NU3	4.610	-47.195	1.000	2
XSLA/XSSU4	1.270	-19.852	1.000	2
XSCA/F	17.310	-50.547	1.000	2
LUGH/LUGCM	-0.182	1.441	-1.000	2
LOGNA/LNGCM	-0.995	2.282	-1.000	2
LOGXSK/LUGCM	-0.770	0.257	-1.000	2
LOGXCA/LUGCM	-1.216	1.020	-1.000	2
LOGXMG/LUGCM	-1.591	0.531	-1.000	2
LOGF/LUGCM	-0.352	0.617	-1.000	2
LOGNU3/LUGCM	-0.367	1.169	-1.000	2
LXSSU4/LUGCM	-0.580	1.469	-1.000	2
SS/H	81.713	-1844.972	1.000	2
SS/F	255.543	-691.842	1.000	2
SS/XSSU4	18.745	-238.683	1.000	2
SS/NU3	68.061	-642.354	1.000	2
COND/H	11.773	-257.405	1.000	2
COND/NU3	9.806	-84.138	1.000	2
COND/XSSU4	2.701	-25.980	1.000	2
CL/NA	1.090	13.694	1.000	2
MG/NA	0.268	-4.517	1.000	2
NH4/SO4	0.046	4.748	1.000	2
NH4/XSSO4	0.126	3.727	1.000	2
NO3/SO4	0.100	8.169	1.000	2
NO3/XSSO4	0.275	5.931	1.000	2
F/XSSO4	0.073	1.773	1.000	2
AMTH/CM	226.943	27.958	1.000	2
AMTNU3/CM	95.715	33.622	1.000	2
AMTXSSU4/CM	132.143	122.139	1.000	2

Table 285.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/77 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NU3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.068	-1.728	1.000	2
HNV/SA	0.950	-0.079	1.000	2
H/TA	0.800	-0.177	1.000	2
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSU4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.363	1.575	-1.000	2
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNU3/LOGCM	0.000	0.000	0.000	0
LXSSU4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
CUND/H	0.476	-1.077	1.000	2
CUND/NU3	0.000	0.000	0.000	0
CUND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NU3/SO4	0.000	0.000	0.000	0
NU3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMH/CM	219.044	85.557	1.000	2
AMINU3/CM	0.000	0.000	0.000	0
AMIXSSU4/CM	0.000	0.000	0.000	0

Table 286.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/77 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.012	2.135	0.986	5
HNV/SA	0.876	2.741	0.985	5
H/TA	0.668	5.506	0.962	5
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LUGH/LUGCM	0.749	1.140	0.609	9
LUGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNU3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
COND/H	0.291	9.375	0.942	8
COND/NU3	0.000	0.000	0.000	0
COND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMT/CM	639.854	-400.302	0.854	9
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0

Table 287.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/77 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.203	-5.201	0.997	6
HNV/SA	1.087	-4.901	0.998	6
H/TA	1.163	-18.158	0.977	6
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSM6	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.198	1.345	-0.428	8
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXLA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNU3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
CUND/H	-0.096	36.718	-0.093	8
CUND/NU3	0.000	0.000	0.000	0
CUND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	109.014	105.642	0.933	8
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0

Table 288.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/77 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.930	-2.254	0.988	4
H/SO4	2.143	-22.270	0.946	4
H/XSSO4	2.073	-7.388	0.967	4
H/NO3+XSSO4	1.259	-7.859	0.994	4
H/F	11.180	28.082	0.864	4
H/SA	0.995	0.843	0.993	5
HNV/SA	0.996	-2.067	0.992	5
H/IA	0.689	-3.776	0.992	5
XSCA/XSK	-0.218	11.896	-0.020	4
XSCA/XSMG	-0.142	12.338	-0.092	4
XSCA/NO3	0.411	2.088	0.915	4
XSCA/XSSO4	0.305	0.858	0.941	4
XSCA/F	1.717	5.848	0.877	4
LOGH/LUGCM	-0.248	1.592	-0.223	5
LUGNA/LUGCM	-0.073	1.753	-0.210	4
LOGXSK/LUGCM	-0.334	0.127	-0.903	4
LOGXCA/LUGCM	-0.855	0.585	-0.713	4
LUGXMG/LUGCM	-0.734	0.377	-0.847	4
LUGF/LUGCM	-0.530	0.109	-0.450	4
LOGNO3/LUGCM	-0.184	1.111	-0.173	4
LXSSO4/LUGCM	-0.115	1.387	-0.145	4
SS/H	-0.361	85.676	-0.792	4
SS/F	-2.485	70.463	-0.422	4
SS/XSSO4	-0.608	83.489	-0.624	4
SS/NO3	-1.106	87.628	-0.820	4
COND/H	0.375	11.962	0.464	5
COND/NO3	1.000	12.271	0.946	4
COND/XSSO4	0.728	9.814	0.953	4
CL/NA	1.379	-21.259	0.661	4
MG/NA	0.359	-5.595	0.681	4
NH4/SO4	0.407	-0.602	0.891	4
NH4/XSSO4	0.373	2.942	0.863	4
NO3/SO4	0.688	-5.068	0.901	4
NO3/XSSO4	0.670	-0.439	0.927	4
F/XSSO4	0.159	-2.264	0.962	4
AMTH/CM	127.946	224.968	0.412	5
AMTNO3/CM	15.831	102.599	0.135	4
AMTXSSO4/CM	92.021	115.384	0.640	4

Table 289.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/77 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.258	2.554	0.998	5
H/SO4	1.105	-0.419	0.863	5
H/XSSO4	1.294	1.160	0.904	5
H/NO3+XSSO4	0.665	1.352	0.973	5
H/F	3.674	9.154	0.851	5
H/SA	1.228	-5.964	1.000	2
HNV/SA	1.054	-4.037	1.000	2
H/TA	0.608	-3.643	1.000	2
XSCA/XSK	6.405	2.613	0.843	5
XSCA/XSMG	4.477	-0.322	0.808	5
XSCA/NU3	0.278	-0.119	0.942	5
XSCA/XSSU4	0.271	-0.275	0.806	5
XSCA/F	0.899	1.233	0.889	5
LUGH/LUGCM	-0.604	1.152	-0.956	5
LUGNA/LOGCM	-0.398	1.499	-0.780	5
LUGXSK/LOGCM	0.215	-0.253	0.407	5
LOGXCA/LUGCM	-0.717	0.443	-0.941	5
LUGXMG/LUGCM	-0.637	-0.249	-0.719	5
LUGF/LUGCM	-0.462	0.277	-0.742	5
LUGNU3/LOGCM	-0.830	0.902	-0.860	5
LXSSU4/LUGCM	-0.656	0.978	-0.797	5
SS/H	0.469	26.855	0.302	5
SS/F	-0.318	33.732	-0.047	5
SS/XSSU4	1.125	22.344	0.505	5
SS/NU3	0.603	27.943	0.308	5
CUND/H	0.506	5.757	0.837	5
CUND/NU3	0.641	7.015	0.841	5
CUND/XSSU4	0.778	5.148	0.898	5
CL/NA	0.984	1.209	0.967	5
MG/NA	0.211	0.270	0.991	5
NH4/SO4	0.363	-1.566	0.922	5
NH4/XSSO4	0.414	-0.936	0.939	5
NO3/SO4	0.894	-2.571	0.881	5
NO3/XSSO4	1.048	-1.294	0.922	5
F/XSSO4	0.181	-0.505	0.546	5
AMTH/CM	32.080	96.109	0.767	5
AMTNU3/CM	1.019	102.501	0.046	5
AMTSSU4/CM	9.617	118.337	0.272	5

Table 290.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/77 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NU3	0.957	18.036	0.518	9
H/SU4	0.997	-0.605	0.971	9
H/XSSU4	1.050	2.087	0.992	9
H/NU3+XSSU4	0.705	2.214	0.927	9
H/F	-2.288	33.006	-0.307	9
H/SA	1.003	2.993	0.987	6
HNV/SA	1.004	-0.124	0.975	6
H/TA	0.585	6.272	0.732	6
XSCA/XSK	-0.742	4.071	-0.120	9
XSCA/XSM6	3.198	-0.578	0.423	9
XSCA/NU3	0.451	-2.095	0.874	9
XSCA/XSSU4	0.185	-1.217	0.628	9
XSCA/F	-0.148	3.973	-0.071	9
LUGH/LUGCM	0.193	1.412	0.232	12
LUGNA/LUGCM	0.002	1.480	0.002	9
LUGXSK/LUGCM	0.320	-0.197	0.286	9
LUGXCA/LUGCM	-1.282	0.112	-0.834	9
LUGXM6/LUGCM	-0.207	0.053	-0.299	9
LUGF/LUGCM	-0.106	0.056	-0.112	9
LUGNU3/LUGCM	-0.630	0.932	-0.701	9
LXSSU4/LUGCM	-0.501	1.239	-0.432	9
SS/H	0.090	41.816	0.050	9
SS/F	-4.272	49.069	-0.318	9
SS/XSSU4	0.168	40.002	0.088	9
SS/NU3	1.451	25.535	0.436	9
CUND/H	0.619	2.164	0.889	10
CUND/NU3	0.644	11.295	0.705	9
CUND/XSSU4	0.435	7.930	0.831	9
CL/NA	1.012	1.614	0.988	9
MG/NA	0.221	0.550	0.496	9
NH4/SU4	0.204	-2.187	0.788	9
NH4/XSSU4	0.212	-1.575	0.797	9
NU3/SU4	0.328	2.863	0.589	9
NU3/XSSU4	0.304	4.872	0.530	9
F/XSSU4	-0.055	2.545	-0.387	9
AMTH/CM	218.987	37.597	0.592	12
AMTNU3/CM	48.458	43.885	0.406	9
AMTXSSU4/CM	150.624	78.396	0.351	9



Table 291.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR.	COEF.	NO.
H/NO3	2.514	-0.495	0.948		6
H/SO4	1.043	-12.379	0.913		6
H/XSSO4	1.160	-11.704	0.934		6
H/NO3+XSSO4	0.806	-8.875	0.945		6
n/F	0.806	38.168	0.000		6
H/SA	0.000	0.000	0.000		1
HNV/SA	0.000	0.000	0.000		1
H/TA	0.000	0.000	0.000		1
XSCA/XSK	7.240	11.723	0.520		6
XSCA/XSMG	3.451	0.329	0.884		6
XSCA/NO3	0.240	11.211	0.280		6
XSCA/XSSO4	0.119	9.794	0.296		6
XSCA/F	0.119	14.905	0.000		6
LUGH/LUGCM	-0.105	1.402	-0.107		6
LOGNA/LOGCM	-0.667	1.538	-0.573		6
LUGXSK/LUGCM	-0.090	-0.078	-0.096		6
LUGXCA/LUGCM	-1.065	0.830	-0.820		6
LUGXMG/LUGCM	-0.899	0.377	-0.895		6
LUGF/LUGCM	0.000	0.000	-0.895		6
LUGNO3/LUGCM	-0.414	0.994	-0.451		6
LXSSO4/LUGCM	-0.592	1.446	-0.652		6
SS/H	0.509	39.037	0.513		6
SS/F	0.509	58.481	0.000		6
SS/XSSO4	0.905	19.576	0.733		6
SS/NO3	1.921	28.942	0.728		6
CUND/H	0.426	8.237	0.949		6
CUND/NO3	1.175	6.428	0.986		6
CUND/XSSO4	0.555	0.645	0.995		6
CL/NA	0.769	7.976	0.991		6
MG/NA	0.228	0.953	0.996		6
NH4/SO4	0.190	2.155	0.909		6
NH4/XSSO4	0.206	2.502	0.906		6
NO3/SO4	0.416	-4.754	0.965		6
NO3/XSSO4	0.452	-4.052	0.965		6
F/XSSO4	0.000	0.000	0.965		6
AMTH/CM	54.433	255.177	0.265		6
AMTNO3/CM	24.704	91.230	0.307		6
AMTXSSO4/CM	15.664	292.351	0.097		6

Table 292.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.886	23.706	0.734	6
H/SO4	1.232	0.230	0.705	6
H/XSSO4	1.399	-2.673	0.823	6
H/NO3+XSSO4	1.092	-4.254	0.917	6
H/F	-2.993	46.819	-0.281	6
H/SA	1.070	0.533	0.993	6
HNV/SA	1.055	-4.677	0.991	6
H/TA	0.995	-15.633	0.954	6
XSCA/XSK	5.576	2.438	0.541	6
XSCA/XSMG	-0.003	3.627	-0.001	6
XSCA/NO3	0.430	-1.046	0.577	6
XSCA/XSSO4	0.162	-1.804	0.329	6
XSCA/F	1.744	2.093	0.564	6
LUGH/LUGCM	-0.111	1.643	-0.451	8
LOGNA/LUGCM	0.792	0.999	0.769	6
LUGXSK/LUGCM	0.482	-0.463	0.841	6
LUGXCA/LUGCM	-0.119	0.478	-0.130	6
LUGXMG/LUGCM	0.374	-0.091	0.625	6
LUGF/LUGCM	0.277	0.097	0.577	6
LUGNO3/LUGCM	-0.139	1.012	-0.288	6
LXSSO4/LUGCM	-0.135	1.535	-0.557	6
SS/H	-0.869	61.667	-0.579	6
SS/F	-3.900	26.676	-0.243	6
SS/XSSO4	-0.598	43.306	-0.235	6
SS/NO3	-1.412	38.592	-0.366	6
CUND/H	0.179	14.461	0.333	8
CUND/NO3	0.691	13.826	0.734	6
CUND/XSSO4	0.521	3.874	0.837	6
CL/NA	0.950	3.322	0.991	6
MG/NA	0.227	0.680	0.998	6
NH4/SO4	-0.118	9.758	-0.217	6
NH4/XSSO4	-0.126	9.764	-0.238	6
NO3/SO4	0.256	1.732	0.376	6
NO3/XSSO4	0.300	0.823	0.453	6
F/XSSO4	-0.062	2.971	-0.392	6
AMTH/CM	522.434	91.947	0.958	8
AMTNO3/CM	58.891	71.030	0.706	6
AMTXSSO4/CM	286.952	41.526	0.985	6

Table 293.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMI=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.053	19.883	0.587	8
H/SO4	0.634	10.377	0.944	8
H/XSSO4	0.666	11.973	0.913	8
H/NO3+XSSO4	0.480	11.162	0.870	8
H/F	-10.864	42.755	-0.511	8
H/SA	0.810	8.993	0.926	8
HNV/SA	0.763	5.346	0.959	8
H/TA	0.567	6.262	0.911	8
XSCA/XSK	15.893	1.580	0.891	8
XSCA/XSMG	5.920	-2.814	0.938	8
XSCA/NU3	1.367	-9.200	0.955	8
XSCA/XSSU4	0.392	-1.678	0.674	8
XSCA/F	-4.231	15.293	-0.250	8
LUGH/LUGCM	-0.608	1.426	-0.830	8
LOGNA/LOGCM	-0.861	1.311	-0.681	8
LUGXSK/LOGCM	-0.087	-0.372	-0.043	8
LUGXCA/LOGCM	-0.851	0.795	-0.646	8
LUGXMG/LOGCM	-0.627	0.205	-0.563	8
LUGF/LOGCM	0.064	0.029	0.112	8
LUGNU3/LOGCM	-0.556	1.063	-0.718	8
LXSSU4/LOGCM	-0.686	1.395	-0.815	8
SS/H	1.636	-13.318	0.847	8
SS/F	-16.477	55.943	-0.402	8
SS/XSSU4	0.861	14.837	0.612	8
SS/NU3	0.762	34.864	0.220	8
CUND/H	0.760	-2.304	0.988	8
CUND/NU3	0.915	10.951	0.662	8
CUND/XSSU4	0.507	6.751	0.905	8
CL/NA	1.253	-1.653	0.988	8
MG/NA	0.255	1.342	0.959	8
NH4/SO4	0.377	-2.263	0.902	8
NH4/XSSO4	0.419	-2.183	0.924	8
NO3/SO4	0.258	5.425	0.690	8
NO3/XSSO4	0.292	5.279	0.720	8
F/XSSO4	-0.013	1.008	-0.373	8
AMTH/CM	101.467	157.261	0.840	8
AMINO3/CM	40.947	72.225	0.765	8
AMIXSSU4/CM	113.528	135.700	0.871	8

Table 294.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 04/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.586	-28.342	1.000	2
H/SO4	1.529	-102.975	1.000	2
H/XSSO4	3.086	-208.055	1.000	2
H/NU3+XSSO4	1.048	-89.354	1.000	2
H/F	-27.236	112.925	-1.000	2
H/SA	0.000	0.000	0.000	0
HNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	-2.200	54.575	-1.000	2
XSCA/XSMG	8.932	17.538	1.000	2
XSCA/NU3	0.639	33.440	1.000	2
XSCA/XSSO4	1.243	-38.943	1.000	2
XSCA/F	-10.970	90.337	-1.000	2
LUGH/LUGCM	-1.449	0.227	-1.000	2
LUGNA/LUGCM	-1.647	0.539	-1.000	2
LOGXSK/LUGCM	1.738	1.688	1.000	2
LUGXCA/LUGCM	-0.209	1.573	-1.000	2
LUGXMG/LUGCM	-0.313	0.371	-1.000	2
LUGF/LUGCM	0.294	0.743	1.000	2
LOGNU3/LUGCM	-0.572	1.067	-1.000	2
LXSSO4/LUGCM	-0.120	1.782	-1.000	2
SS/H	3.520	-0.498	1.000	2
SS/F	-95.875	397.019	-1.000	2
SS/XSSO4	10.862	-732.890	1.000	2
SS/NU3	5.583	-100.266	1.000	2
COND/H	0.077	31.533	1.000	2
COND/NU3	0.122	29.357	1.000	2
COND/XSSO4	0.237	15.558	1.000	2
CL/NA	0.970	7.435	1.000	2
MG/NA	0.207	4.337	1.000	2
NH4/SO4	-2.485	251.589	-1.000	2
NH4/XSSO4	-5.015	422.384	-1.000	2
NU3/SO4	0.964	-47.059	1.000	2
NU3/XSSO4	1.946	-113.315	1.000	2
F/XSSO4	-0.113	11.785	-1.000	2
AMTH/CM	-83.127	52.255	-1.000	2
AMTNU3/CM	125.520	33.140	1.000	2
AMTXSSO4/CM	644.471	17.658	1.000	2

Table 295.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 05/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NU3	0.230	28.329	0.847	6
H/SU4	0.142	28.643	0.542	6
H/XSSU4	0.149	28.726	0.541	6
H/NO3+XSSU4	0.101	27.802	0.716	6
H/F	1.726	32.894	0.282	6
H/SA	0.934	1.706	0.948	6
HNV/SA	0.733	3.216	0.907	6
H/TA	0.190	21.870	0.730	6
XSCA/XSK	1.886	14.334	0.254	6
XSCA/XSM6	10.778	-0.723	0.945	6
XSCA/NU3	0.296	-9.790	0.368	6
XSCA/XSSU4	0.607	-7.996	0.740	6
XSCA/F	14.134	-1.036	0.778	6
LOGH/LUGCM	0.208	1.479	0.729	7
LUGNA/LOGCM	-0.411	1.432	-0.891	6
LUGXSK/LUGCM	-0.856	0.200	-0.732	6
LUGXCA/LUGCM	-0.760	1.173	-0.852	6
LUGXMG/LUGCM	-0.861	0.122	-0.777	6
LUGF/LUGCM	-0.428	0.255	-0.932	6
LUGNU3/LUGCM	-0.644	1.451	-0.924	6
LXSSU4/LUGCM	-0.500	1.647	-0.897	6
SS/H	1.189	-10.052	0.511	6
SS/F	12.312	14.674	0.865	6
SS/XSSU4	0.592	5.815	0.922	6
SS/NU3	0.548	15.264	0.869	6
CUND/H	-0.205	41.851	-0.111	7
CUND/NU3	0.654	9.989	0.991	6
CUND/XSSU4	0.575	4.535	0.855	6
LL/NA	1.351	-5.647	0.998	6
MG/NA	0.377	-2.396	0.971	6
NH4/SU4	1.145	-14.537	0.770	6
NH4/XSSU4	1.200	-13.586	0.765	6
NU3/SU4	0.859	-10.017	0.890	6
NU3/XSSU4	0.904	-9.429	0.887	6
F/XSSU4	0.040	-0.374	0.895	6
AMTH/CM	338.744	-4.489	0.998	7
AMTNU3/CM	86.078	167.735	0.927	6
AMTXSSU4/CM	222.846	144.343	0.964	6

Table 296.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.072	5.161	0.990	7
H/SU4	1.211	-2.547	0.995	7
H/XSS04	1.227	0.456	0.999	7
H/NU3+XSS04	0.775	1.914	0.998	7
H/F	55.326	28.622	0.840	7
H/SA	0.962	2.703	1.000	5
HNV/SA	0.954	0.265	1.000	5
H/TA	0.730	-10.279	0.943	5
XSCA/XSK	12.930	-0.339	0.982	7
XSCA/XSMG	8.883	-1.096	0.913	7
XSCA/NU3	0.460	-0.588	0.978	7
XSCA/XSSU4	0.263	-1.205	0.951	7
XSCA/F	11.458	4.993	0.774	7
LUGH/LUGCM	-0.247	1.601	-0.354	7
LUGNA/LUGCM	-0.427	1.335	-0.629	7
LUGXSK/LUGCM	-0.237	-0.243	-0.316	7
LUGXCA/LUGCM	-0.339	0.803	-0.360	7
LUGXMG/LUGCM	-0.429	0.080	-0.785	7
LUGF/LUGCM	-0.141	0.051	-0.556	7
LUGNU3/LUGCM	-0.245	1.208	-0.310	7
LXSSU4/LUGCM	-0.266	1.512	-0.394	7
SS/H	0.047	30.043	0.087	7
SS/F	20.750	23.223	0.579	7
SS/XSSU4	0.078	29.221	0.116	7
SS/NU3	0.010	32.359	0.008	7
LUND/H	0.454	5.821	0.988	7
LUND/NU3	0.932	8.362	0.970	7
LUND/XSSU4	0.559	5.924	0.992	7
CL/NA	1.069	-0.204	0.998	7
MG/NA	0.224	0.789	0.473	7
NH4/SU4	0.204	0.266	0.885	7
NH4/XSSU4	0.208	0.742	0.891	7
NU3/SU4	0.570	-3.032	0.980	7
NU3/XSSU4	0.580	-1.742	0.988	7
F/XSSU4	0.016	-0.243	0.860	7
AMTH/CM	367.961	56.030	0.905	7
AMTNU3/CM	161.069	13.717	0.922	7
AMTXSSU4/CM	290.588	47.119	0.914	7

Table 297.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/78 AT XSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.956	3.077	0.873	11
H/SU4	1.334	-0.471	0.947	11
H/XSS04	1.350	2.166	0.973	11
H/NO3+XSS04	0.968	0.395	0.963	11
H/F	-3.248	52.223	-0.172	11
H/SA	1.058	-0.597	0.994	10
HNVS/A	1.040	-2.441	0.997	10
H/TA	0.990	-12.311	0.966	10
XSCA/XSK	11.516	0.630	0.793	11
XSCA/XSMG	2.190	3.234	0.235	11
XSCA/NU3	0.176	3.696	-0.316	11
XSCA/XSSU4	-0.001	6.468	-0.004	11
XSCA/F	-0.105	6.534	-0.034	11
LUGH/LUGCM	0.006	1.628	0.006	11
LUGNA/LOGCM	-0.573	1.397	-0.442	11
LUGXSK/LUGCM	0.026	-0.459	0.012	11
LUGXCA/LUGCM	0.035	0.675	0.022	11
LUGXMG/LUGCM	0.336	-0.280	0.281	11
LUGF/LUGCM	0.369	-0.095	0.301	11
LOGNU3/LUGCM	-0.195	1.182	-0.170	11
LXSSU4/LUGCM	0.017	1.467	0.015	11
SS/H	-0.313	41.160	-0.305	11
SS/F	-6.560	32.055	-0.336	11
SS/XSSU4	-0.255	34.636	-0.179	11
SS/NU3	0.530	17.523	0.152	11
CUND/H	0.385	7.209	0.927	11
CUND/NU3	1.373	4.726	0.477	11
CUND/XSSU4	0.551	6.933	0.957	11
CL/NA	1.226	-3.767	0.496	11
MG/NA	0.226	0.051	0.495	11
NH4/SU4	0.057	0.748	0.421	11
NH4/XSS04	0.056	0.921	0.420	11
NU3/SU4	0.390	1.070	0.437	11
NU3/XSSU4	0.370	2.697	0.903	11
F/XSSU4	-0.019	1.613	-0.257	11
AMTH/CM	310.519	350.859	0.639	11
AMTNU3/CM	100.588	100.254	0.645	11
AMTXSSU4/CM	286.126	118.996	0.685	11

Table 298.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR.CDEF.	NO.
H/NU3	-0.606	36.628	-1.000	2
H/S04	-0.434	45.146	-1.000	2
H/XSS04	-1.074	60.059	-1.000	2
H/NU3+XSS04	-0.387	45.076	-1.000	2
H/F	-13.559	48.952	-1.000	2
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	5.981	0.305	1.000	2
XSCA/XSM6	4.748	-1.084	1.000	2
XSCA/NU3	0.546	1.045	1.000	2
XSCA/XSSU4	0.968	-20.060	1.000	2
XSCA/F	12.213	-10.055	1.000	2
LUGH/LUGCM	0.061	1.504	1.000	2
LUGNA/LUGCM	-0.807	1.120	-1.000	2
LUGXSK/LUGCM	-0.337	-0.177	-1.000	2
LUGXCA/LUGCM	-0.316	0.636	-1.000	2
LUGXMG/LUGCM	-0.259	0.068	-1.000	2
LUGF/LUGCM	-0.107	0.087	-1.000	2
LUGNU3/LUGCM	-0.408	0.752	-1.000	2
LXSSU4/LUGCM	-0.066	1.413	-1.000	2
SS/H	-14.738	516.656	-1.000	2
SS/F	199.837	-204.810	1.000	2
SS/XSSU4	15.833	-368.511	1.000	2
SS/NU3	8.927	-23.160	1.000	2
CUND/H	-1.823	79.003	-1.000	2
CUND/NU3	1.104	12.238	1.000	2
CUND/XSSU4	1.958	-30.471	1.000	2
CL/NA	1.080	1.791	1.000	2
MG/NA	0.230	0.811	1.000	2
NH4/S04	0.371	-7.845	1.000	2
NH4/XSS04	0.919	-20.595	1.000	2
NO3/S04	0.716	-14.064	1.000	2
NO3/XSS04	1.774	-38.684	1.000	2
F/XSS04	0.079	-0.819	1.000	2
AMTH/CM	348.455	-6.749	1.000	2
AMTNU3/CM	29.501	10.910	1.000	2
AMTXSSU4/CM	234.771	6.067	1.000	2



Table 299.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	3.029	-3.129	0.991	5
H/SO4	1.566	-5.888	0.988	5
H/XSSO4	1.473	2.630	0.995	5
H/NO3+XSSO4	0.998	0.563	0.997	5
H/F	55.522	15.666	0.987	5
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	0.879	2.638	0.147	5
XSCA/XSMG	0.863	2.335	0.154	5
XSCA/NU3	0.331	-0.353	0.906	5
XSCA/XSSO4	0.170	0.133	0.958	5
XSCA/F	6.363	1.639	0.947	5
LOGH/LOGCM	0.016	1.312	0.026	5
LOGNA/LOGCM	-0.311	1.570	-0.694	5
LOGXSK/LOGCM	0.071	-0.187	0.284	5
LOGXCA/LOGCM	0.159	0.253	0.189	5
LOGXMG/LOGCM	-0.194	0.000	-0.925	5
LUGF/LOGCM	0.005	0.004	0.278	5
LUGNU3/LOGCM	0.181	0.887	0.355	5
LXSSO4/LOGCM	0.044	1.080	0.072	5
SS/H	-0.519	61.946	-0.541	5
SS/F	-34.018	54.921	-0.631	5
SS/XSSO4	-0.774	60.746	-0.545	5
SS/NU3	-1.783	65.705	-0.608	5
CUND/H	0.322	9.761	0.968	5
CUND/NU3	0.955	8.947	0.940	5
CUND/XSSO4	0.471	10.647	0.959	5
CL/NA	1.110	1.128	0.990	5
MG/NA	0.225	0.467	0.996	5
NH4/SO4	0.168	-0.790	0.965	5
NH4/XSSO4	0.157	0.138	0.965	5
NO3/SO4	0.501	-0.579	0.967	5
NO3/XSSO4	0.477	2.063	0.984	5
F/XSSO4	0.026	-0.229	0.994	5
AMTH/CM	103.315	359.958	0.308	5
AMINO3/CM	57.968	105.448	0.505	5
AMTXSSO4/CM	70.952	214.295	0.319	5

Table 300.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR.	COEF.	NO.
H/NU3	3.110	-4.339	0.825		6
H/S04	1.170	6.067	0.948		6
H/XSS04	1.248	12.268	0.962		6
H/NO3+XSS04	1.032	-2.833	0.995		6
H/F	-18.561	85.774	-0.162		6
H/SA	1.122	-4.607	1.000		2
MNV/SA	1.156	-9.254	1.000		2
H/TA	0.935	-7.224	1.000		2
XSCA/XSK	7.401	0.865	0.488		6
XSCA/XSMG	-0.027	5.625	-0.034		6
XSCA/NU3	0.243	-0.531	0.982		6
XSCA/XSSU4	0.051	3.027	0.596		6
XSCA/F	0.855	4.886	0.113		6
LUGH/LUGCM	-0.463	1.464	-0.731		7
LUGNA/LUGCM	-0.183	1.771	-0.346		6
LUGXSK/LUGCM	-0.191	-0.334	-0.355		6
LUGXLA/LUGCM	-0.579	0.451	-0.838		6
LUGXMG/LUGCM	-0.303	0.300	-0.349		6
LUGF/LUGCM	-0.068	0.064	-0.491		6
LUGNU3/LUGCM	-0.715	1.111	-0.993		6
LXSSU4/LUGCM	-0.566	1.369	-0.833		6
SS/H	0.283	70.535	0.362		6
SS/F	-55.764	130.262	-0.621		6
SS/XSSU4	0.509	66.447	0.502		6
SS/NU3	0.497	78.809	0.169		6
CUND/H	0.379	12.313	0.955		7
CUND/NU3	1.095	12.365	0.727		6
CUND/XSSU4	0.505	15.035	0.974		6
CL/NA	0.892	7.907	0.999		6
MG/NA	0.273	-1.648	0.991		6
NH4/S114	0.227	-1.404	0.970		6
NH4/XSS04	0.242	-0.188	0.983		6
NU3/S114	0.208	12.939	0.635		6
NU3/XSS04	0.224	13.923	0.651		6
F/XSS114	-0.004	0.888	-0.341		6
AMTH/CM	76.526	202.604	0.711		7
AMTNU3/CM	20.277	89.130	0.941		6
AMTXSSU4/CM	52.819	174.464	0.748		6

Table 301.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NU3	1.209	14.587	0.863	6
H/S04	0.810	4.859	0.883	6
H/XSS04	1.352	1.752	0.888	6
H/NU3+XSS04	0.801	2.323	0.980	6
H/F	4.609	26.052	0.699	6
H/SA	1.075	-3.649	1.000	2
HNV/SA	1.051	-3.565	1.000	2
H/TA	0.410	5.147	1.000	2
XSCA/XSK	20.708	-6.338	0.993	6
XSCA/XSM6	2.736	4.385	0.260	6
XSCA/NU3	0.356	3.124	0.557	6
XSCA/XSS04	0.574	-4.709	0.826	6
XSCA/F	2.430	4.904	0.808	6
LUGH/LUGCM	-0.459	1.297	-0.766	6
LUGNA/LOGCM	0.357	1.914	-0.299	6
LUGXSK/LUGCM	-0.391	-0.346	-0.635	6
LUGXCA/LUGCM	-0.737	0.422	-0.594	6
LUGXMG/LUGCM	0.149	0.066	0.139	6
LUGF/LUGCM	-0.446	0.018	-0.608	6
LUGNU3/LUGCM	-0.647	0.830	-0.824	6
LXSSU4/LUGCM	-0.343	1.163	-0.486	6
SS/H	-0.076	126.610	-0.018	6
SS/F	8.534	111.397	0.306	6
SS/XSSU4	1.533	88.791	0.238	6
SS/NU3	-2.192	157.360	-0.369	6
CUND/H	0.427	15.800	0.649	6
CUND/NU3	0.313	25.119	0.339	6
CUND/XSSU4	0.757	12.412	0.755	6
CL/NA	1.087	-0.590	0.999	6
MG/NA	0.222	0.375	1.000	6
NH4/SU4	0.095	-2.190	0.683	6
NH4/XSSU4	0.111	-1.452	0.620	6
NU3/SU4	0.245	6.671	0.290	6
NU3/XSSU4	0.646	0.277	0.594	6
F/XSSU4	0.163	-2.259	0.704	6
AMTH/CM	141.965	59.572	0.835	6
AMTNU3/CM	41.021	30.557	0.705	6
AMTXSSU4/CM	129.831	37.533	0.684	6

Table 302.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/78 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR.COEFF.	NO.
H/NO3	1.109	6.851	0.994	4
H/SO4	0.450	4.885	0.922	4
H/XSSO4	0.509	7.270	0.998	4
H/NO3+XSSO4	0.349	7.117	0.997	4
H/F	7.577	6.711	0.743	4
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	44.507	-17.152	0.667	4
XSCA/XSMG	2.317	1.461	0.999	4
XSCA/NU3	1.200	-4.529	0.997	4
XSCA/XSSO4	0.548	-4.001	0.996	4
XSCA/F	8.889	-5.954	0.809	4
LUGH/LUGCM	-0.401	1.262	-0.910	4
LUGNA/LOGCM	0.198	1.568	-0.183	4
LUGXSK/LUGCM	-0.095	-0.236	-0.291	4
LUGXCA/LUGCM	-0.759	0.666	-0.779	4
LUGXMG/LUGCM	-0.973	0.122	-0.776	4
LUGF/LUGCM	-0.192	0.283	-0.513	4
LUGNO3/LUGCM	-0.507	0.961	-0.802	4
LXSSO4/LUGCM	-0.611	1.274	-0.911	4
SS/H	-0.716	108.817	-0.100	4
SS/F	32.640	33.897	0.447	4
SS/XSSO4	-0.126	97.328	-0.034	4
SS/NU3	-0.033	94.427	-0.004	4
CUND/H	0.386	14.718	0.361	4
CUND/NU3	0.534	16.049	0.446	4
CUND/XSSO4	0.230	16.641	0.421	4
CL/NA	1.044	-0.944	0.998	4
MG/NA	0.215	2.769	0.960	4
NH4/SO4	0.372	-3.641	0.934	4
NH4/XSSO4	0.416	-1.534	0.999	4
NU3/SO4	0.416	-2.141	0.952	4
NU3/XSSO4	0.456	0.472	0.996	4
F/XSSO4	0.039	0.810	0.784	4
AMTH/CM	87.721	71.780	0.991	4
AMTNU3/CM	38.757	42.455	0.973	4
AMTXSSO4/CM	60.168	101.754	0.976	4

Table 303.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/79 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NU.
H/NO3	1.761	7.878	0.932	7
H/SU4	0.494	14.682	0.757	7
H/XSSU4	0.877	9.826	0.949	7
H/NO3+XSSU4	0.650	5.796	0.994	7
H/F	25.023	23.080	0.810	7
H/SA	0.881	12.219	0.995	3
HNH/SA	0.851	10.585	0.997	3
H/TA	0.575	12.767	0.987	3
XSCA/XSK	2.659	7.897	0.227	7
XSLA/XSMG	2.054	8.288	0.345	7
XSCA/NU3	0.543	-0.320	0.749	7
XSCA/XSSU4	0.350	-2.471	0.987	7
XSCA/F	10.683	2.354	0.901	7
LUGH/LUGCM	-0.439	1.494	-0.658	7
LUGNA/LUGCM	-0.490	1.719	-0.466	7
LUGXSK/LUGCM	0.068	-0.068	0.139	7
LUGXLA/LUGCM	-0.668	0.759	-0.769	7
LUGXMG/LUGCM	-0.526	0.021	-0.731	7
LUGF/LUGCM	-0.088	0.042	-0.217	7
LUGNU3/LUGCM	-0.619	1.073	-0.704	7
LXSSU4/LUGCM	-0.497	1.388	-0.672	7
SS/H	1.432	123.069	0.139	7
SS/F	-85.240	238.045	-0.268	7
SS/XSSU4	1.181	139.698	0.124	7
SS/NU3	2.080	142.404	0.107	7
CUND/H	0.675	11.868	0.501	7
CUND/NU3	1.101	18.768	0.433	7
CUND/XSSU4	0.599	18.226	0.482	7
LL/NA	1.139	-4.399	1.000	7
MG/NA	0.216	0.770	1.000	7
NH4/SU4	0.125	1.102	0.626	7
NH4/XSSU4	0.275	-1.954	0.972	7
NO3/SU4	0.213	7.351	0.615	7
NO3/XSSU4	0.380	5.172	0.776	7
F/XSSU4	0.026	-0.208	0.859	7
AMTH/CM	142.891	147.881	0.981	7
AMTNU3/CM	35.825	88.014	0.875	7
AMTXSSU4/CM	102.388	127.706	0.969	7

Table 304.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/79 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	9.282	-94.113	0.580	4
H/SO4	0.597	0.629	0.462	4
H/XSSO4	1.129	-16.491	0.783	4
H/NO3+XSSO4	1.102	-30.361	0.798	4
H/F	10.326	1.522	0.963	4
H/SA	0.961	7.357	1.000	2
HNV/SA	0.565	19.518	1.000	2
H/IA	-2.463	262.204	-1.000	2
XSCA/XSK	-2.322	10.549	-0.947	4
XSCA/XSM6	0.577	7.675	0.938	4
XSCA/NO3	-0.202	12.165	-0.204	4
XSCA/XSSO4	-0.037	11.034	-0.419	4
XSCA/F	-0.466	10.814	-0.702	4
LUGH/LUGCM	0.301	1.347	0.218	4
LUGNA/LOGCM	-0.845	1.626	-0.823	4
LUGXSK/LOGCM	-0.503	-0.245	-0.768	4
LOGXLA/LOGCM	-0.088	0.945	-0.446	4
LOGXMG/LOGCM	-0.570	0.180	-0.603	4
LUGF/LUGCM	-0.342	0.201	-0.290	4
LUGNO3/LUGCM	-0.032	1.125	-0.236	4
LXSSO4/LUGCM	-0.487	1.457	-0.700	4
SS/H	-1.988	174.594	-0.548	4
SS/F	-13.951	151.672	-0.359	4
SS/XSSO4	0.029	108.191	0.006	4
SS/NO3	4.478	48.236	0.077	4
CUND/H	-0.017	33.323	-0.031	4
CUND/NO3	4.074	-22.943	0.446	4
CUND/XSSO4	0.412	14.791	0.500	4
LL/NA	0.806	13.607	1.000	4
MG/NA	0.183	2.818	1.000	4
NH4/SO4	0.083	7.884	0.363	4
NH4/XSSO4	0.186	4.238	0.729	4
NO3/SO4	0.037	11.677	0.458	4
NO3/XSSO4	0.043	11.810	0.473	4
F/XSSO4	0.107	-1.646	0.796	4
AMTH/CM	26.022	187.607	0.134	4
AMINO3/CM	120.860	8.781	0.994	4
AMTXSSO4/CM	54.299	202.413	0.373	4

Table 305.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/79 AT KSC SITE 12 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-0.115	16.116	-0.286	3
H/SO4	-0.101	20.879	-0.554	3
H/XSSO4	-0.092	18.726	-0.456	3
H/NO3+XSSO4	-0.054	17.896	-0.401	3
H/F	0.092	11.507	0.007	3
H/SA	0.000	0.000	0.000	0
HNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	52.012	-46.802	0.961	3
XSCA/XSMG	8.530	-14.511	0.852	3
XSCA/NU3	2.547	-37.434	0.994	3
XSCA/XSSU4	1.228	-34.648	0.957	3
XSCA/F	-79.376	349.442	-0.985	3
LOGH/LOGCM	0.513	0.797	0.338	3
LOGNA/LOGCM	-0.570	1.971	-0.800	3
LOGXSK/LOGCM	-0.537	0.075	-0.999	3
LOGXLA/LOGCM	-1.318	0.995	-0.996	3
LOGXMG/LOGCM	-1.329	0.224	-0.972	3
LOGF/LOGCM	0.138	0.593	0.755	3
LOGNU3/LOGCM	-0.542	1.331	-0.977	3
LXSSU4/LOGCM	-0.660	1.580	-1.000	3
SS/H	-8.295	255.755	-0.981	3
SS/F	-21.768	237.677	-0.203	3
SS/XSSU4	1.062	78.180	0.622	3
SS/NU3	1.595	98.312	0.468	3
COND/H	-1.393	57.503	-0.801	3
COND/NU3	0.562	20.152	0.802	3
COND/XSSU4	0.315	17.467	0.898	3
CL/NA	0.596	35.219	0.967	3
MG/NA	0.148	9.559	0.903	3
NH4/SO4	0.093	4.109	0.997	3
NH4/XSSO4	0.101	4.854	0.981	3
NO3/SO4	0.433	-1.596	0.956	3
NO3/XSSO4	0.492	0.326	0.983	3
F/XSSO4	-0.014	4.747	-0.893	3
AMTH/CM	253.801	-57.098	0.994	3
AMTNU3/CM	102.651	80.797	0.999	3
AMTXSSU4/CM	121.235	203.897	0.990	3

Table 306.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/77 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.196	-4.395	1.000	2
HNV/SA	1.154	-8.883	1.000	2
H/TA	1.007	-11.512	1.000	2
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSM6	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LUGCM	-1.325	0.939	-0.709	6
LOGNA/LUGCM	0.000	0.000	0.000	0
LOGXSK/LUGCM	0.000	0.000	0.000	0
LOGXCA/LUGCM	0.000	0.000	0.000	0
LOGXMG/LUGCM	0.000	0.000	0.000	0
LOGF/LUGCM	0.000	0.000	0.000	0
LOGNU3/LUGLM	0.000	0.000	0.000	0
LXSSO4/LUGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
COND/H	0.361	7.699	0.983	6
COND/NU3	0.000	0.000	0.000	0
COND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	14.123	123.622	0.140	6
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0



Table 307.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/77 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.143	-6.412	0.990	5
HNV/SA	1.015	-6.253	0.986	4
H/TA	0.977	-16.948	0.983	5
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSSU4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.706	1.121	-0.906	10
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXLA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNO3/LOGCM	0.000	0.000	0.000	0
LXSSU4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
CUND/H	0.476	8.673	0.834	10
CUND/NO3	0.000	0.000	0.000	0
CUND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	7.971	121.646	0.162	10
AMINO3/CM	0.000	0.000	0.000	0
AMTXSSU4/CM	0.000	0.000	0.000	0

Table 308.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/77 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.620	4.557	0.862	4
H/SU4	1.497	-3.886	0.396	4
H/XSS04	2.984	-30.581	0.917	4
H/NO3+XSS04	1.542	-17.249	0.934	4
H/F	3.933	30.414	0.508	4
H/SA	1.023	0.024	0.997	5
HNV/SA	0.985	-0.404	0.995	5
H/TA	0.921	-22.460	0.964	5
XSCA/XSK	7.993	-2.519	0.844	4
XSCA/XSMG	-0.115	5.661	-0.181	4
XSCA/NO3	0.527	-1.810	0.835	4
XSCA/XSSU4	0.301	-1.885	0.446	4
XSCA/F	1.600	1.574	0.997	4
LOGH/LOGCM	-0.253	1.624	-0.177	5
LOGNA/LOGCM	-0.327	1.584	-0.198	4
LOGXSK/LOGCM	-0.714	-0.141	-0.800	4
LOGXCA/LOGCM	-0.934	0.501	-0.799	4
LOGXMG/LOGCM	0.582	0.509	0.344	4
LOGF/LOGCM	-1.213	0.110	-0.909	4
LOGNU3/LOGCM	-0.384	1.024	-0.432	4
LXSSU4/LOGCM	-0.003	1.350	-0.007	4
SS/H	-1.901	132.391	-0.827	4
SS/F	-6.438	72.255	-0.362	4
SS/XSSU4	-4.001	151.418	-0.535	4
SS/NU3	-4.797	121.304	-0.686	4
CUND/H	0.333	13.887	0.870	5
CUND/NU3	0.507	19.420	0.382	4
CUND/XSSU4	0.941	4.112	0.662	4
CL/NA	0.873	-2.106	0.996	4
MG/NA	0.059	10.963	0.557	4
NH4/SU4	0.099	3.929	0.111	4
NH4/XSS04	0.405	-2.678	0.528	4
NU3/SU4	0.480	-0.599	0.386	4
NU3/XSS04	0.868	-7.064	0.811	4
F/XSSU4	0.215	-2.782	0.511	4
AMTH/CM	446.190	109.339	0.464	5
AMTNU3/CM	137.989	-16.704	0.792	4
AMTXSSU4/CM	311.851	-67.516	0.930	4

Table 309.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/77 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.167	4.669	0.970	6
H/SO4	0.700	3.879	0.827	6
H/XSSO4	0.894	4.164	0.886	6
H/NU3+XSSO4	0.557	3.433	0.969	6
H/F	4.357	11.979	0.592	6
H/SA	1.619	-6.173	0.877	3
MNV/SA	1.193	-5.532	0.985	3
H/TA	0.552	-1.107	0.878	3
XSCA/XSK	6.486	2.036	0.879	6
XSCA/XSMG	4.549	0.406	0.829	6
XSCA/NU3	0.417	-0.209	0.874	6
XSCA/XSSU4	0.308	-0.261	0.769	6
XSCA/F	1.660	2.360	0.569	6
LUGH/LUGCM	-0.412	1.158	-0.860	6
LUGNA/LUGCM	-0.449	1.468	-0.694	6
LUGXSK/LUGCM	0.220	-0.190	0.682	6
LUGXCA/LUGCM	-0.615	0.549	-0.928	6
LUGXMG/LUGCM	-0.774	-0.359	-0.723	6
LUGF/LUGCM	-0.183	0.107	-0.614	6
LUGNU3/LUGCM	-0.643	0.864	-0.824	6
LXSSU4/LUGCM	-0.559	1.016	-0.767	6
SS/H	1.056	21.988	0.336	6
SS/F	-6.502	39.501	-0.281	6
SS/XSSU4	1.781	17.263	0.562	6
SS/NU3	0.706	51.068	0.187	6
LUND/H	0.638	2.401	0.849	6
COND/NU3	0.693	5.788	0.760	6
COND/XSSU4	0.708	3.566	0.933	6
CL/NA	1.136	-0.560	0.968	6
MG/NA	0.231	-0.052	0.989	6
NH4/SO4	0.277	-1.274	0.826	6
NH4/XSSO4	0.358	-1.219	0.899	6
NU3/SO4	0.518	0.505	0.735	6
NU3/XSSO4	0.688	0.415	0.821	6
F/XSSU4	0.026	0.153	0.191	6
AMH/CM	43.218	113.587	0.861	6
AMTNU3/CM	13.700	68.224	0.546	6
AMTXSSU4/CM	19.047	112.015	0.480	6

Table 310.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/77 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.891	16.432	0.743	10
H/SO4	0.809	4.451	0.948	10
H/XSSO4	0.936	5.044	0.965	10
H/NO3+XSSO4	0.505	9.009	0.903	10
H/F	-3.889	30.303	-0.180	10
H/SA	0.947	7.459	0.994	4
HNV/SA	0.929	4.107	0.994	4
H/TA	0.672	6.297	0.995	4
XSLA/XSK	10.040	2.019	0.727	10
XSCA/XSMG	7.673	-3.842	0.810	10
XSCA/NO3	0.682	-3.445	0.993	10
XSCA/XSSO4	0.460	-5.799	0.828	10
XSCA/F	-0.800	6.033	-0.065	10
LUGH/LUGCM	-0.265	1.332	-0.730	12
LUGNA/LOGCM	-0.420	1.424	-0.450	10
LUGXSK/LUGCM	-0.226	-0.073	-0.304	10
LUGXCA/LUGCM	-1.092	0.282	-0.890	10
LUGXMG/LUGCM	-0.595	-0.217	-0.443	10
LUGF/LUGCM	-0.176	-0.018	-0.366	10
LUGNO3/LUGCM	-0.830	0.822	-0.893	10
LXSSO4/LUGCM	-0.436	1.233	-0.621	10
SS/H	1.243	14.399	0.558	10
SS/F	-8.715	54.115	-0.181	10
SS/XSSO4	1.344	16.190	0.622	10
SS/NO3	1.841	25.089	0.688	10
CUND/H	0.571	2.998	0.862	10
CUND/NO3	0.684	10.038	0.862	10
CUND/XSSO4	0.579	4.756	0.902	10
CL/NA	1.030	1.685	0.994	10
MG/NA	0.230	0.164	0.994	10
NH4/SO4	0.204	-1.461	0.886	10
NH4/XSSO4	0.229	-1.127	0.874	10
NO3/SO4	0.610	-4.664	0.857	10
NO3/XSSO4	0.675	-3.467	0.835	10
F/XSSO4	-0.006	0.685	-0.142	10
AMTH/CM	144.499	63.643	0.647	12
AMTNO3/CM	11.619	57.616	0.223	10
AMTXSSO4/CM	107.755	77.891	0.528	10

Table 311.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.600	-3.644	0.976	4
H/SU4	0.902	-5.361	0.975	4
H/XSS04	0.971	-3.856	0.978	4
H/NU3+XSS04	0.707	-3.802	0.977	4
H/F	0.707	37.353	0.000	4
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	4.392	13.020	0.365	4
XSCA/XSM6	3.625	2.230	0.905	4
XSCA/NU3	0.362	6.853	0.558	4
XSCA/XSSU4	0.133	6.901	0.551	4
XSCA/F	0.133	12.563	0.000	4
LOGH/LOGCM	-0.631	1.315	-0.528	4
LDGNA/LOGCM	-0.518	1.598	-0.797	4
LOGXSK/LOGCM	-0.003	0.002	-0.270	4
LOGXCA/LOGCM	-1.431	0.744	-0.917	4
LOGXMG/LOGCM	-0.887	0.212	-0.768	4
LOGF/LOGCM	0.000	0.000	-0.768	4
LOGNU3/LOGCM	-0.890	0.961	-0.825	4
LXSSU4/LOGCM	-0.907	1.387	-0.831	4
SS/H	0.747	24.819	0.922	4
SS/F	0.747	52.722	0.000	4
SS/XSSU4	0.788	19.263	0.980	4
SS/NU3	2.116	19.364	0.980	4
CUND/H	0.467	5.970	0.983	4
CUND/NU3	1.263	3.504	0.997	4
CUND/XSSU4	0.471	3.422	0.999	4
CL/NA	0.930	0.569	0.977	4
MG/NA	0.256	-0.788	0.497	4
NH4/SU4	0.203	2.846	0.960	4
NH4/XSS04	0.218	3.220	0.959	4
NU3/SU4	0.347	-0.661	1.000	4
NU3/XSS04	0.372	-0.041	1.000	4
F/XSSU4	0.000	0.000	1.000	4
AMTH/CM	40.011	213.046	0.287	4
AMTNU3/CM	-0.126	102.523	-0.003	4
AMTXSSU4/CM	-2.819	277.089	-0.023	4

Table 312.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.064	21.132	0.697	6
H/SU4	1.381	-1.763	0.815	6
H/XSSU4	1.453	-1.796	0.843	6
H/NU3+XSSU4	1.006	1.561	0.854	6
H/F	-4.149	43.845	-0.281	6
H/SA	1.102	-0.503	0.992	6
HNV/SA	0.874	2.740	0.988	6
H/TA	-0.019	45.227	-0.349	6
XSCA/XSK	-0.386	4.509	-0.065	6
XSCA/XSMG	0.665	3.616	0.086	6
XSCA/NU3	0.643	-2.043	0.828	6
XSCA/XSSU4	0.261	-3.460	0.577	6
XSCA/F	2.843	2.856	-0.734	6
LUGH/LUGCM	-0.196	1.641	-0.855	9
LUGNA/LOGCM	0.743	0.917	0.855	6
LUGXSK/LUGCM	0.372	-0.342	0.448	6
LUGXCA/LUGCM	-0.414	0.607	-0.421	6
LUGXMG/LUGCM	0.109	-0.022	0.212	6
LUGF/LUGCM	-0.085	0.038	-0.166	6
LUGNU3/LUGCM	-0.223	0.977	-0.374	6
LXSSU4/LUGCM	-0.059	1.465	-0.163	6
SS/H	-0.084	19.943	-0.103	6
SS/F	1.449	15.699	0.121	6
SS/XSSU4	0.098	13.542	0.070	6
SS/NU3	-0.421	20.647	-0.175	6
CUND/H	1.085	-22.432	0.912	9
CUND/NU3	0.681	12.156	0.771	6
CUND/XSSU4	0.475	4.723	0.923	6
CL/NA	0.927	1.846	0.968	6
MG/NA	0.213	0.863	0.978	6
NH4/SU4	0.056	3.703	0.113	6
NH4/XSSU4	0.028	4.627	0.055	6
NU3/SU4	0.374	-1.810	0.653	6
NU3/XSSU4	0.401	-2.030	0.687	6
F/XSSU4	0.001	0.493	0.010	6
AMT/H/CM	340.779	57.952	0.974	9
AMTNU3/CM	35.724	97.399	0.554	6
AMTXSSU4/CM	284.377	10.321	0.978	6

Table 313.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.869	18.390	0.928	5
H/SO4	0.869	5.004	0.836	5
H/XSSO4	0.902	9.285	0.771	5
H/NO3+XSSO4	0.603	1.747	0.991	5
H/F	33.991	41.648	0.280	5
H/SA	1.096	-0.788	0.973	4
MNV/SA	1.089	-3.738	0.965	4
H/TA	0.771	-3.633	0.989	4
XSCA/XSK	12.521	11.085	0.665	5
XSCA/XSM6	2.852	3.100	0.947	5
XSCA/NU3	0.388	8.199	0.782	5
XSCA/XSSU4	0.474	0.700	0.783	5
XSCA/F	-3.450	22.198	-0.055	5
LUGH/LUGCM	-0.485	1.522	-0.495	7
LUGNA/LUGCM	-1.357	1.324	-0.716	5
LOGXSK/LUGCM	-0.177	-0.157	-0.131	5
LUGXCA/LUGCM	-1.909	0.835	-0.900	5
LUGXMG/LUGCM	-1.038	0.455	-0.609	5
LUGF/LUGCM	-0.284	-0.137	-0.664	5
LUGNU3/LUGCM	-0.759	1.276	-0.597	5
LXSSU4/LUGCM	-0.616	1.479	-0.603	5
SS/H	1.537	-4.611	0.733	5
SS/F	41.244	61.741	0.162	5
SS/XSSU4	1.129	20.952	0.461	5
SS/NU3	1.648	14.061	0.820	5
CUND/H	0.706	-0.103	0.945	7
CUND/NU3	0.631	13.409	0.907	5
CUND/XSSU4	0.628	7.478	0.740	5
CL/NA	1.041	2.265	0.991	5
MG/NA	0.297	1.157	0.983	5
NH4/SO4	0.265	0.738	0.922	5
NH4/XSSO4	0.301	0.906	0.931	5
NU3/SO4	0.657	1.113	0.605	5
NU3/XSSO4	0.601	7.883	0.492	5
F/XSSU4	-0.002	0.294	-0.199	5
AMTH/CM	121.254	238.079	0.535	7
AMTNU3/CM	5.984	239.113	0.031	5
AMTXSSU4/CM	93.764	228.423	0.595	5

Table 314.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METEK.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 04/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	-0.208	24.668	-1.000	2
H/SO4	0.031	15.415	1.000	2
H/XSSO4	0.029	15.799	1.000	2
H/NO3+XSSO4	0.034	14.364	1.000	2
H/F	1.182	13.647	1.000	2
H/SA	0.000	0.000	0.000	0
HNW/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	4.939	39.086	1.000	2
XSCA/XSMG	3.840	39.178	1.000	2
XSCA/NU3	-1.538	104.824	-1.000	2
XSCA/XSSO4	0.214	39.318	1.000	2
XSCA/F	8.727	23.418	1.000	2
LOGH/LUGCM	0.112	1.333	1.000	2
LUGNA/LUGCM	-0.891	1.095	-1.000	2
LUGXSK/LUGCM	0.924	1.151	1.000	2
LUGXCA/LUGCM	0.268	1.930	1.000	2
LUGXMG/LUGCM	0.930	1.262	1.000	2
LUGF/LUGCM	0.464	0.886	1.000	2
LUGNU3/LUGCM	-0.302	1.293	-1.000	2
LXSSO4/LUGCM	0.938	2.517	1.000	2
SS/H	-28.190	576.043	-1.000	2
SS/F	-33.308	191.347	-1.000	2
SS/XSSO4	-0.818	130.661	-1.000	2
SS/NU3	5.871	-119.348	1.000	2
CUND/H	8.528	-118.995	1.000	2
CUND/NU3	-1.776	91.368	-1.000	2
CUND/XSSO4	0.247	15.738	1.000	2
CL/NA	0.978	10.947	1.000	2
MG/NA	0.133	9.227	1.000	2
NH4/SO4	0.533	11.641	1.000	2
NH4/XSSO4	0.492	18.150	1.000	2
NU3/SO4	-0.151	44.425	-1.000	2
NU3/XSSO4	-0.139	42.581	-1.000	2
F/XSSO4	0.025	1.822	1.000	2
AMTH/CM	201.524	-4.100	1.000	2
AMTNU3/CM	222.071	18.764	1.000	2
AMTXSSO4/CM	1476.595	-137.128	1.000	2



Table 315.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 05/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-0.067	55.112	-0.025	5
H/SO4	0.460	25.544	0.539	5
H/XSSO4	0.461	26.964	0.536	5
H/NO3+XSSO4	0.341	25.662	0.458	5
H/F	-25.892	97.109	-0.882	5
H/SA	0.947	0.572	0.999	5
HNV/SA	1.000	-7.746	0.991	5
H/TA	0.555	-4.222	0.565	5
XSCA/XSK	-1.081	17.280	-0.097	5
XSCA/XSMG	7.549	3.273	0.971	5
XSCA/NU3	0.744	-2.355	0.333	5
XSCA/XSSO4	0.377	-6.263	0.537	5
XSCA/F	6.804	3.986	0.283	5
LUGH/LUGCM	1.087	1.501	-0.863	5
LOGNA/LOGCM	-0.289	1.416	-0.460	5
LUGXSK/LUGCM	0.120	0.075	0.102	5
LUGXCA/LUGCM	-0.224	1.087	-0.236	5
LUGXMG/LUGCM	-0.362	0.159	-0.330	5
LUGF/LUGCM	0.257	0.174	0.602	5
LUGNU3/LUGCM	-0.126	1.378	-0.357	5
LXSSJ4/LUGCM	-0.241	1.766	-0.594	5
SS/H	0.078	29.188	0.079	5
SS/F	2.141	29.766	0.073	5
SS/XSSO4	0.027	31.811	0.032	5
SS/NU3	0.981	9.880	0.362	5
COND/H	-0.423	61.393	-0.666	5
COND/NU3	0.737	18.371	0.738	5
COND/XSSO4	0.156	27.054	0.496	5
CL/NA	1.128	1.210	0.955	5
MG/NA	0.296	-0.534	0.975	5
NH4/SO4	-0.357	58.959	-0.307	5
NH4/XSSO4	-0.361	58.047	-0.308	5
NU3/SO4	0.123	16.463	0.394	5
NU3/XSSO4	0.116	17.282	0.368	5
F/XSSO4	-0.013	2.449	-0.454	5
AMTH/CM	460.410	28.356	0.941	5
AMTNU3/CM	225.890	7.792	0.835	5
AMTXSSO4/CM	501.939	43.196	0.827	5

Table 316.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.798	1.546	0.954	9
H/SO4	1.086	2.255	0.990	9
H/XSSO4	1.124	3.441	0.990	9
H/NO3+XSSO4	0.715	1.373	0.993	9
H/F	70.629	25.106	0.943	9
H/SA	0.976	1.817	0.998	4
HNV/SA	1.016	-2.389	1.000	4
H/TA	0.774	-3.345	0.982	4
XSCA/XSK	10.846	4.289	0.766	9
XSCA/XSM6	10.493	3.841	0.823	9
XSCA/NO3	0.337	5.968	0.742	9
XSCA/XSSO4	0.182	7.306	0.664	9
XSCA/F	13.853	10.244	0.767	9
LUGH/LUGCM	-0.391	1.346	-0.391	9
LUGNA/LUGCM	-0.352	1.231	-0.703	9
LOGXSK/LOGCM	-0.462	-0.216	-0.783	9
LUGXCA/LUGCM	-0.420	0.903	-0.441	9
LUGXMG/LUGCM	-0.728	-0.331	-0.611	9
LUGF/LUGCM	-0.132	0.034	-0.686	9
LUGNO3/LUGCM	-0.516	1.117	-0.633	9
LXSSO4/LUGCM	-0.283	1.303	-0.376	9
SS/H	0.334	10.398	0.842	9
SS/F	26.942	18.002	0.907	9
SS/XSSO4	0.375	11.560	0.833	9
SS/NO3	0.632	10.216	0.845	9
CUND/H	0.512	4.407	0.989	9
CUND/NO3	0.927	5.035	0.950	9
CUND/XSSO4	0.577	6.114	0.981	9
CL/NA	1.288	-4.371	0.983	9
MG/NA	0.280	-0.711	0.984	9
NH4/SO4	0.268	-1.213	0.971	9
NH4/XSSO4	0.276	-0.893	0.967	9
NO3/SO4	0.543	2.623	0.932	9
NO3/XSSO4	0.560	3.260	0.930	9
F/XSSO4	0.014	-0.259	0.956	9
AMTH/CM	237.680	43.824	0.896	9
AMTNO3/CM	129.673	-8.588	0.956	9
AMTXSSO4/CM	203.089	26.918	0.907	9

Table 317.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.478	9.115	0.877	6
H/SO4	1.308	-3.907	0.988	6
H/XSSO4	1.313	-2.285	0.988	6
H/NU3+XSSO4	0.918	-2.115	0.984	6
H/F	14.350	34.276	0.562	6
H/SA	1.011	0.569	1.000	4
HNV/SA	0.964	1.013	1.000	4
H/TA	0.803	-11.666	0.994	4
XSCA/XSK	14.901	5.206	0.508	6
XSCA/XSM6	17.242	-0.457	0.714	6
XSCA/NU3	0.162	7.916	0.350	6
XSCA/XSSO4	0.046	8.948	0.209	6
XSCA/F	1.920	8.098	0.459	6
LUGH/LUGCM	0.891	1.256	0.784	7
LUGNA/LOGCM	-0.364	1.199	-0.799	6
LUGXSK/LUGCM	-0.368	-0.368	-0.573	6
LUGXLA/LUGCM	-0.792	1.157	-0.693	6
LUGXMG/LUGCM	-0.355	-0.106	-0.690	6
LUGF/LUGCM	-0.043	0.120	-0.046	6
LUGNU3/LOGCM	-0.398	1.253	-0.431	6
LXSSO4/LUGCM	0.134	1.484	0.164	6
SS/H	0.030	13.661	0.246	6
SS/F	0.292	14.888	0.094	6
SS/XSSO4	0.042	13.477	0.260	6
SS/NU3	0.214	11.298	0.626	6
CUND/H	0.318	14.524	0.758	7
CUND/NU3	1.102	6.920	0.876	6
CUND/XSSO4	0.589	1.629	0.995	6
CL/NA	1.272	-0.952	0.837	6
MG/NA	0.285	-0.280	0.968	6
NH4/SO4	0.235	-5.518	0.891	6
NH4/XSSO4	0.236	-5.223	0.891	6
NU3/SO4	0.404	0.375	0.862	6
NU3/XSSO4	0.403	1.005	0.856	6
F/XSSO4	0.035	-0.043	0.668	6
AMTH/CM	389.405	272.291	0.922	7
AMTNU3/CM	38.874	263.249	0.589	6
AMTXSSO4/CM	293.176	334.442	0.916	6

Table 318.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/H13	1.597	23.468	0.997	4
H/S14	1.717	-17.241	0.983	4
H/XSS04	1.757	-15.745	0.987	4
H/NO3+XSS04	0.848	4.104	0.999	4
H/F	33.050	41.140	0.944	4
H/SA	-0.400	68.695	-0.143	4
HNV/SA	-0.441	67.609	-0.149	4
H/TA	-0.060	57.509	-0.028	4
XSCA/XSK	9.330	-0.400	0.716	4
XSCA/XSM6	5.028	2.616	0.962	4
XSCA/NU3	0.302	2.157	0.970	4
XSCA/XSSU4	0.307	-4.252	0.887	4
XSCA/F	6.319	5.465	0.930	4
LUGH/LUGCM	-0.386	1.793	-0.702	4
LUGNA/LOGCM	-0.561	1.246	-0.525	4
LOGXSK/LOGCM	0.264	-0.161	0.395	4
LOGXCA/LOGCM	-0.205	0.880	-0.265	4
LOGXMG/LOGCM	-0.723	-0.002	-0.518	4
LUGF/LUGCM	-0.092	0.073	-0.350	4
LOGNU3/LOGCM	-0.723	1.337	-0.707	4
LXSSU4/LOGCM	-0.355	1.665	-0.801	4
SS/H	0.095	14.077	0.156	4
SS/F	-3.085	20.424	-0.145	4
SS/XSSU4	0.156	12.997	0.144	4
SS/NU3	0.152	16.274	0.157	4
CUND/H	0.561	-1.535	0.989	4
CUND/NU3	0.898	11.599	0.988	4
CUND/XSSU4	0.980	-10.141	0.970	4
CL/NA	0.747	4.189	0.998	4
MG/NA	0.169	1.361	0.946	4
NH4/SU4	0.675	-18.774	0.886	4
NH4/XSS04	0.720	-19.360	0.927	4
NU3/S14	1.057	-24.743	0.969	4
NU3/XSS04	1.082	-23.807	0.972	4
F/XSS04	0.046	-1.450	0.911	4
AMTH/CM	233.827	446.750	0.929	4
AMTNU3/CM	17.852	252.839	0.282	4
AMTXSSU4/CM	193.000	297.766	0.973	4

Table 319.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	3.722	-14.156	0.990	7
H/SU4	1.048	-2.439	0.929	7
H/XSS04	1.147	-0.036	0.970	7
H/NU3+XSS04	0.888	-3.809	0.981	7
H/F	5.579	28.128	0.226	7
H/SA	1.054	-0.686	0.980	3
HNV/SA	1.001	-0.894	0.994	3
H/TA	0.820	-3.527	0.983	3
XSCA/XSK	-12.546	22.410	-0.262	7
XSCA/XSM6	-2.113	20.731	-0.154	7
XSCA/NU3	-1.336	31.139	-0.377	7
XSCA/XSSU4	-0.273	22.203	-0.244	7
XSCA/F	-6.375	18.921	-0.274	7
LUGH/LUGCM	0.529	1.335	0.418	7
LUGNA/LOGCM	-0.627	1.423	-0.641	7
LUGXSK/LUGCM	-0.156	-0.218	-0.226	7
LUGXCA/LUGCM	-0.581	0.682	-0.467	7
LUGXMG/LUGCM	-0.657	0.263	-0.742	7
LUGF/LUGCM	0.130	0.049	0.260	7
LUGNU3/LUGCM	0.165	1.040	0.283	7
LXSSU4/LUGCM	0.039	1.320	0.051	7
SS/H	0.044	51.596	0.023	7
SS/F	-16.071	63.862	-0.350	7
SS/XSSU4	0.311	44.342	0.141	7
SS/NU3	0.255	49.827	0.036	7
CUND/H	0.467	10.214	0.854	7
CUND/NU3	1.759	3.330	0.857	7
CUND/XSSU4	0.594	8.558	0.920	7
CL/NA	0.905	6.610	0.972	7
MG/NA	0.214	1.659	0.991	7
NH4/SU4	0.187	-1.536	0.938	7
NH4/XSS04	0.182	-0.479	0.872	7
NU3/SU4	0.278	3.244	0.928	7
NU3/XSS04	0.304	3.911	0.966	7
F/XSS04	0.003	0.601	0.056	7
AMTH/CM	405.293	-45.199	0.692	7
AMTNU3/CM	153.709	-19.147	0.789	7
AMTXSSU4/CM	303.809	-17.502	0.634	7

Table 320.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.357	-1.175	0.774	7
H/SU4	1.102	-1.745	0.806	7
H/XSSU4	1.319	3.578	0.941	7
H/NI3+XSSU4	0.990	-7.422	0.957	7
H/F	0.199	56.042	0.006	7
H/SA	1.138	2.324	0.959	3
HNV/JA	1.055	1.971	0.966	3
H/IA	0.698	0.360	1.000	3
XSCA/XSK	3.075	4.577	0.422	7
XSCA/XSM6	-0.765	9.757	-0.593	7
XSCA/NU3	0.276	0.357	0.750	7
XSCA/XSSU4	0.065	4.476	0.385	7
XSCA/F	2.168	4.310	0.547	7
LUGH/LUGCM	-0.281	1.512	-0.452	7
LUGNA/LUGCM	-0.150	1.652	-0.223	7
LUGXSK/LUGCM	-0.546	-0.456	-0.746	7
LUGXCA/LUGCM	-0.046	0.673	-0.066	7
LUGXMG/LUGCM	-0.263	0.222	-0.312	7
LUGF/LUGCM	-0.246	0.104	-0.722	7
LUGNU3/LUGCM	-0.448	1.138	-0.754	7
LXSSU4/LUGCM	-0.264	1.371	-0.420	7
SS/H	-0.837	183.539	-0.318	7
SS/F	-9.100	148.072	-0.105	7
SS/XSSU4	-0.323	149.331	-0.087	7
SS/NU3	-0.990	160.563	-0.123	7
CUND/H	0.245	26.911	0.564	7
CUND/NU3	0.734	22.815	0.555	7
CUND/XSSU4	0.449	22.791	0.737	7
LL/NA	0.994	5.255	0.491	7
MG/NA	0.231	0.055	0.494	7
NH4/SU4	0.205	-2.008	0.822	7
NH4/XSSU4	0.238	-0.704	0.926	7
NI3/SU4	0.277	9.810	0.616	7
NI3/XSSU4	0.312	11.901	0.674	7
F/XSSU4	-0.007	1.571	-0.171	7
AMTH/CM	74.276	279.695	0.581	7
AMTNU3/CM	23.180	105.969	0.574	7
AMTXSSU4/CM	44.100	221.647	0.463	7

Table 321.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.150	11.043	0.982	5
H/SU4	0.454	15.077	0.714	5
H/XSSU4	0.712	14.298	0.837	5
H/NU3+XSSU4	0.466	11.962	0.921	5
H/F	21.748	15.458	0.957	5
H/SA	0.963	1.436	0.985	3
HVV/SA	1.021	-4.794	0.972	3
H/TA	0.353	22.885	0.964	3
XSCA/XSK	4.294	3.148	0.473	5
XSCA/XSM6	0.157	4.940	0.155	5
XSCA/NU3	0.191	2.030	0.872	5
XSCA/XSSU4	0.108	2.828	0.676	5
XSCA/F	3.433	2.529	0.925	5
LUGH/LUGCM	-0.722	1.126	-0.913	7
LUGNA/LUGCM	-0.382	1.589	-0.133	5
LUGXSK/LUGCM	-0.732	-0.730	-0.402	5
LUGXLA/LUGCM	-1.260	0.093	-0.834	5
LUGXAG/LUGCM	-0.407	0.020	-0.160	5
LUGF/LUGCM	-0.595	-0.239	-0.666	5
LUGNU3/LUGCM	-1.593	0.417	-0.942	5
LXSSU4/LUGCM	-1.039	0.820	-0.742	5
SS/H	1.509	81.223	0.262	5
SS/F	60.901	83.871	0.465	5
SS/XSSU4	3.130	53.197	0.638	5
SS/NU3	2.003	43.137	0.297	5
LUND/H	0.724	11.664	0.714	7
CUND/NU3	0.809	16.867	0.646	5
LUND/XSSU4	0.785	12.285	0.864	5
LL/NA	0.976	5.000	0.995	5
AG/VA	0.222	0.529	1.000	5
NH4/SU4	0.002	0.489	-0.046	5
NH4/XSSU4	-0.010	0.766	-0.182	5
NU3/SU4	0.418	2.651	0.771	5
NU3/XSSU4	0.652	2.044	0.897	5
F/XSSU4	0.034	-0.081	0.905	5
AMTH/CM	36.407	85.582	0.281	7
AMTNU3/CM	-81.528	85.137	-0.670	5
AMTXSSU4/CM	-48.000	96.381	-0.256	5

Table 322.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/78 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.772	10.319	0.665	4
H/SO4	0.337	7.728	0.656	4
H/XSSO4	0.420	8.032	0.840	4
H/NO3+XSSO4	0.280	8.576	0.794	4
H/F	1.656	15.488	0.319	4
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	46.494	-34.449	0.991	4
XSCA/XSMG	5.321	0.271	0.655	4
XSCA/NO3	1.460	-4.206	0.980	4
XSCA/XSSO4	0.573	-3.228	0.894	4
XSCA/F	4.955	2.686	0.743	4
LOGH/LOGCM	-0.261	1.193	-0.931	4
LOGNA/LOGCM	-0.182	1.685	-0.377	4
LOGXSK/LOGCM	-0.105	-0.032	-0.909	4
LOGXCA/LOGCM	-0.518	0.795	-0.880	4
LOGXMG/LOGCM	0.087	0.138	0.137	4
LOGF/LOGCM	-0.164	0.182	-0.509	4
LOGNO3/LOGCM	-0.345	0.897	-0.963	4
LXSSO4/LOGCM	-0.415	1.252	-0.996	4
SS/H	-4.288	150.731	-0.641	4
SS/F	17.488	45.500	0.503	4
SS/XSSO4	-0.787	91.981	-0.235	4
SS/NO3	-0.414	77.289	-0.053	4
CUND/H	-0.025	19.822	-0.030	4
CUND/NO3	0.535	13.986	0.568	4
CUND/XSSO4	0.176	15.149	0.435	4
CL/NA	0.917	10.490	0.993	4
MG/NA	0.198	2.518	0.978	4
NH4/SO4	0.719	-12.012	0.991	4
NH4/XSSO4	0.680	-6.165	0.961	4
NO3/SO4	0.429	-3.108	0.969	4
NO3/XSSO4	0.414	0.155	0.961	4
F/XSSO4	0.069	-0.067	0.714	4
AMTH/CM	74.530	62.686	0.988	4
AMTNO3/CM	35.451	31.024	0.986	4
AMTXSSO4/CM	62.229	86.240	0.976	4



Table 323.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/79 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.160	9.964	0.964	5
H/SU4	0.107	22.283	0.184	55
H/XSSU4	1.378	3.422	0.562	55
H/NU3+XSSU4	0.934	-2.006	0.981	55
H/F	0.934	25.563	0.000	55
H/SA	1.067	2.796	1.000	55
HNV/SA	1.038	0.455	1.000	55
H/TA	0.000	0.000	0.000	1
XSCA/XSK	-1.986	5.398	-0.824	55
XSCA/XSMG	1.456	1.648	0.900	55
XSCA/NU3	0.101	3.012	0.588	55
XSCA/XSSU4	0.309	-0.595	0.885	55
XSCA/F	0.309	4.365	0.000	55
LUGH/LUGCM	-0.236	1.389	-0.342	55
LOGNA/LOGCM	-0.680	1.935	-0.564	55
LOGXSK/LUGCM	0.384	-0.246	0.659	55
LOGXCA/LUGCM	-0.486	0.731	-0.823	55
LOGXMG/LUGCM	-0.310	0.240	-0.385	55
LUGF/LUGCM	0.000	0.000	-0.385	55
LUGNU3/LUGCM	-0.604	1.130	-0.644	55
LXSSU4/LUGCM	-0.235	1.239	-0.490	55
SS/H	0.943	133.107	0.063	55
SS/F	0.943	157.203	0.000	55
SS/XSSU4	27.162	-279.144	0.738	55
SS/NU3	-1.397	175.998	-0.077	55
CUND/H	0.495	17.734	0.254	55
CUND/NU3	0.258	26.926	0.110	55
CUND/XSSU4	3.970	-33.384	0.831	55
CL/NA	1.084	-3.039	1.000	55
MG/NA	0.219	0.390	1.000	55
NH4/SU4	-0.012	3.593	-0.118	55
NH4/XSSU4	0.161	0.633	0.364	55
NU3/SU4	0.011	13.112	0.023	55
NU3/XSSU4	0.740	1.567	0.363	55
F/XSSU4	0.000	0.000	0.363	55
AMTH/CM	114.945	237.289	0.932	55
AMTNU3/CM	10.491	206.595	0.286	55
AMTXSSU4/CM	87.119	123.183	0.975	55

Table 324.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/79 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.052	13.853	0.668	4
H/SO4	0.354	26.185	0.753	4
H/XSSO4	0.647	15.049	0.893	4
H/NU3+XSSO4	0.537	11.174	0.883	4
H/F	7.444	31.208	0.732	4
H/SA	-4.058	323.214	-1.000	2
HNV/SA	0.935	1.704	-1.000	2
H/IA	-1.127	164.997	-1.000	2
XSCA/XSK	-1.573	11.455	-0.466	4
XSCA/XSMG	0.457	9.365	0.627	4
XSCA/NU3	0.277	5.662	0.701	4
XSCA/XSSO4	0.075	6.544	0.808	4
XSCA/F	-0.323	12.029	-0.246	4
LUGH/LUGCM	-0.379	1.557	-0.583	4
LUGNA/LOGCM	-1.167	1.558	-0.985	4
LUGXSK/LUGCM	-0.910	-0.635	-0.584	4
LUGXCA/LUGCM	-0.170	0.978	-0.612	4
LUGXMG/LUGCM	-0.911	0.108	-0.990	4
LUGF/LUGCM	-0.270	0.255	-0.274	4
LUGNU3/LUGCM	-0.367	1.151	-0.958	4
LXSSO4/LUGCM	-0.557	1.507	-0.635	4
SS/H	3.963	-19.544	0.349	4
SS/F	-27.147	275.577	-0.235	4
SS/XSSO4	4.224	-59.308	0.514	4
SS/NU3	32.433	-436.970	0.930	4
CUND/H	0.880	-1.939	0.417	4
CUND/NU3	6.041	-72.065	0.931	4
CUND/XSSO4	0.731	1.632	0.478	4
CL/NA	1.057	2.197	1.000	4
MG/NA	0.225	0.897	1.000	4
NH4/SO4	0.030	11.548	0.223	4
NH4/XSSO4	0.126	6.345	0.612	4
NU3/SO4	0.147	8.015	0.960	4
NU3/XSSO4	0.180	8.642	0.766	4
F/XSSO4	0.026	1.459	0.368	4
AMTH/CM	124.532	210.136	0.314	4
AMTNU3/CM	95.996	39.448	0.913	4
AMTXSSO4/CM	85.502	250.944	0.163	4

Table 325.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/79 AT KSC SITE 13 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-0.214	45.512	-0.254	3
H/SO4	0.210	12.359	0.520	3
H/XSSO4	0.210	15.495	0.428	3
H/NO3+XSSO4	0.061	26.269	0.181	3
H/F	-23.306	116.504	-0.993	3
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	-4.454	75.866	-0.193	3
XSCA/XSMG	3.783	25.598	0.478	3
XSCA/NU3	1.958	-32.785	0.972	3
XSCA/XSSU4	0.722	2.250	0.593	3
XSCA/F	32.456	-47.831	0.578	3
LOGH/LUGCM	0.025	1.412	0.041	3
LOGNA/LUGCM	-0.725	1.651	-0.921	3
LOGXSK/LUGCM	-0.536	-0.320	-0.562	3
LOGXCA/LUGCM	-1.246	0.764	-0.968	3
LOGXMG/LUGCM	-1.171	0.096	-0.995	3
LUGF/LUGCM	0.051	0.547	0.212	3
LUGNU3/LUGCM	-0.552	1.311	-0.966	3
LXSSU4/LUGCM	-0.618	1.510	-0.995	3
SS/H	4.798	30.128	0.794	3
SS/F	-101.311	552.229	-0.714	3
SS/XSSU4	2.736	-44.895	0.889	3
SS/NU3	1.968	97.395	0.387	3
COND/H	0.878	21.837	0.727	3
COND/NU3	0.487	27.735	0.479	3
COND/XSSU4	0.572	1.768	0.932	3
CL/NA	0.983	11.793	0.497	3
MG/NA	0.243	4.141	0.490	3
NH4/SO4	0.120	1.814	0.947	3
NH4/XSSO4	0.145	1.787	0.908	3
NO3/SO4	0.333	14.999	0.694	3
NO3/XSSO4	0.463	9.585	0.766	3
F/XSSO4	-0.007	4.111	-0.315	3
AMTH/CM	256.181	15.719	0.994	3
AMTNU3/CM	99.196	68.956	0.988	3
AMTXSSU4/CM	137.497	127.118	0.996	3

Table 326.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/77 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.899	4.193	0.992	3
H/SO4	0.457	3.817	0.992	3
H/XSSO4	0.760	3.729	0.950	3
H/NO3+XSSO4	0.416	3.900	0.974	3
H/F	0.416	8.349	0.000	3
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	-3.036	0.251	-0.355	3
XSCA/XSMG	1.861	-0.270	0.988	3
XSCA/NU3	0.279	-0.524	0.994	3
XSCA/XSSO4	0.247	-0.735	0.997	3
XSCA/F	0.247	0.767	0.000	3
LUGH/LUGCM	-0.361	1.048	-0.966	3
LOGNA/LOGCM	-0.834	1.731	-0.990	3
LOGXSK/LOGCM	-1.042	-0.142	-0.566	3
LOGXCA/LOGCM	-0.520	0.257	-0.923	3
LOGXMG/LOGCM	-0.446	0.071	-0.719	3
LUGF/LUGCM	0.000	0.000	-0.719	3
LOGNU3/LOGCM	-0.806	0.802	-0.780	3
LXSSO4/LOGCM	-0.697	0.888	-0.663	3
SS/H	10.345	-45.096	0.994	3
SS/F	10.345	41.281	0.000	3
SS/XSSO4	7.575	-4.742	0.909	3
SS/NU3	9.164	-1.095	0.971	3
CUND/H	1.699	-5.349	0.999	3
CUND/NU3	1.520	1.803	0.987	3
CUND/XSSO4	1.278	1.072	0.939	3
CL/NA	1.028	1.766	0.999	3
MG/NA	0.221	0.075	1.000	3
NH4/SO4	0.087	0.433	0.996	3
NH4/XSSO4	0.150	0.380	0.995	3
NO3/SO4	0.508	-0.419	1.000	3
NO3/XSSO4	0.867	-0.645	0.982	3
F/XSSO4	0.000	0.000	0.982	3
AMTH/CM	52.210	42.232	0.977	3
AMINO3/CM	15.584	35.015	0.547	3
AMTXSSO4/CM	33.464	19.239	0.596	3

Table 327.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/77 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.748	21.183	0.455	9
H/SO4	0.734	4.971	0.892	9
H/XSSO4	0.910	3.890	0.948	9
H/NO3+XSSO4	0.553	7.982	0.836	9
H/F	-4.447	29.254	-0.049	9
H/SA	0.857	8.653	0.970	6
HNV/SA	0.810	4.745	0.960	6
H/TA	0.625	5.851	0.979	6
XSCA/XSK	3.963	2.115	0.432	9
XSCA/XSMG	4.395	-1.638	0.855	9
XSCA/NU3	0.627	-2.433	0.967	9
XSCA/XSSO4	0.223	-2.023	0.588	9
XSCA/F	1.462	4.032	-0.040	9
LUGH/LUGCM	-0.265	1.328	-0.548	12
LUGNA/LOGCM	0.076	1.474	-0.051	9
LUGXSK/LUGCM	-0.465	-0.181	-0.629	9
LUGXCA/LUGCM	-1.276	0.117	-0.806	9
LDGXMG/LUGCM	-0.777	-0.254	-0.429	9
LUGF/LUGCM	0.093	-0.015	-0.315	9
LUGNU3/LUGCM	-1.020	0.677	-0.745	9
LXSSO4/LOGCM	-0.572	1.201	-0.386	9
SS/H	1.050	24.894	0.271	9
SS/F	-106.337	61.551	-0.300	9
SS/XSSO4	1.304	19.369	0.351	9
SS/NU3	1.358	41.142	0.214	9
CUND/H	0.783	-0.416	0.840	11
CUND/NU3	0.662	13.367	0.523	9
CUND/XSSO4	0.588	4.076	0.794	9
CL/NA	1.006	3.747	0.997	9
MG/NA	0.213	1.002	0.995	9
NH4/SO4	0.106	0.162	0.522	9
NH4/XSSO4	0.143	-0.317	0.604	9
NO3/SO4	0.313	0.191	0.626	9
NO3/XSSO4	0.384	-0.139	0.657	9
F/XSSO4	-0.001	0.080	-0.074	9
AMTH/CM	240.234	23.268	0.632	12
AMTNU3/CM	10.012	48.821	0.108	9
AMTXSSO4/CM	167.106	49.918	0.397	9

Table 328.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM<sup>2</sup>  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.392	-0.933	0.949	5
H/SU4	0.973	-10.059	0.942	5
H/XSS04	1.053	-8.872	0.957	5
H/NO3+XSS04	0.733	-6.531	0.956	5
H/F	0.733	34.029	0.000	5
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	19.054	6.668	0.918	5
XSCA/XSMG	4.412	-3.096	0.978	5
XSCA/NU3	0.305	10.151	0.371	5
XSCA/XSSU4	0.133	9.190	0.371	5
XSCA/F	0.133	14.610	0.000	5
LUGH/LUGCM	-0.096	1.272	-0.146	6
LUGNA/LUGCM	-0.683	1.491	-0.714	5
LUGXSK/LUGCM	-0.074	-0.080	-0.150	5
LUGXCA/LUGCM	-1.538	0.596	-0.831	5
LUGXMG/LUGCM	-0.914	0.358	-0.929	5
LUGF/LUGCM	0.000	0.000	-0.929	5
LUGNU3/LUGCM	-0.568	0.896	-0.560	5
LXSSU4/LUGCM	-0.460	1.428	-0.577	5
SS/H	0.460	33.385	0.567	5
SS/F	0.460	49.028	0.000	5
SS/XSSU4	0.690	20.929	0.773	5
SS/NU3	1.589	25.813	0.777	5
CUND/H	0.330	13.057	0.818	6
CUND/NU3	0.925	8.085	0.974	5
CUND/XSSU4	0.408	4.995	0.984	5
CL/NA	0.809	4.814	0.991	5
MG/NA	0.245	0.382	0.992	5
NH4/SU4	0.181	1.655	0.969	5
NH4/XSS04	0.191	2.089	0.958	5
NU3/S04	0.407	-3.843	0.994	5
NU3/XSS04	0.434	-3.080	0.995	5
F/XSSU4	0.000	0.000	0.995	5
AMTH/CM	128.162	127.927	0.467	6
AMTNU3/CM	3.485	99.905	0.034	5
AMTXSSU4/CM	42.749	260.046	0.185	5

Table 329.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.553	29.141	0.782	5
H/SO4	0.837	15.175	0.423	5
H/XSSO4	1.423	-1.754	0.615	5
H/NU3+XSSO4	1.047	0.289	0.831	5
H/F	-1.560	44.843	-0.127	5
H/SA	0.875	7.380	0.990	5
HNV/SA	0.939	-0.594	0.995	5
H/TA	0.745	-1.065	0.968	5
XSCA/XSK	0.607	3.245	0.098	5
XSCA/XSM6	1.641	2.112	0.110	5
XSCA/NU3	0.311	0.575	0.476	5
XSCA/XSSO4	-0.012	3.932	-0.015	5
XSCA/F	3.240	1.850	0.803	5
LUGH/LUGCM	-0.123	1.665	-0.700	5
LUGNA/LUGCM	0.211	1.173	0.256	5
LUGXSK/LUGCM	-0.645	-0.024	-0.607	5
LUGXCA/LUGCM	-0.240	0.491	-0.177	5
LUGXMG/LUGCM	0.142	-0.116	0.304	5
LUGF/LUGCM	0.093	0.060	0.169	5
LUGNU3/LUGCM	-1.030	1.104	-0.711	5
LXSSO4/LUGCM	-0.016	1.505	-0.067	5
SS/H	-0.559	49.398	-0.383	5
SS/F	-3.238	26.495	-0.181	5
SS/XSSO4	1.431	-21.254	0.424	5
SS/NU3	-0.312	27.782	-0.108	5
CUNU/H	0.475	6.459	0.528	5
CUNU/NU3	0.749	14.007	0.877	5
CUNU/XSSO4	0.796	-4.417	0.801	5
CL/NA	1.078	0.876	0.989	5
MG/NA	0.228	0.554	0.992	5
NH4/SO4	-0.128	10.364	-0.229	5
NH4/XSSO4	-0.205	12.584	-0.315	5
NU3/SO4	0.341	-2.184	0.343	5
NU3/XSSO4	0.506	-6.702	0.435	5
F/XSSO4	-0.086	3.298	-0.457	5
AMTH/CM	355.808	57.527	0.983	5
AMTNU3/CM	0.719	145.953	0.010	5
AMTXSSO4/CM	334.160	-29.851	0.977	5

Table 330.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NU3	0.994	10.408	1.000	5
H/SO4	21.659	-355.364	0.961	5
H/XSSO4	27.753	-418.976	0.964	5
H/NO3+XSSO4	0.962	-4.885	1.000	5
H/F	158.974	44.694	0.429	5
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	7.339	4.160	0.787	5
XSCA/XSM6	3.627	-0.521	0.937	5
XSCA/NU3	0.009	5.411	0.580	5
XSCA/XSSO4	0.326	-0.171	0.767	5
XSCA/F	3.175	4.181	0.579	5
LUGH/LUGCM	-1.561	1.530	-0.916	5
LOGNA/LOGCM	-1.028	1.197	-0.887	5
LOGXSK/LOGCM	0.144	-0.142	0.204	5
LOGXCA/LOGCM	-1.064	0.571	-0.811	5
LOGXMG/LOGCM	-0.706	0.146	-0.726	5
LUGF/LUGCM	-0.361	0.028	-0.671	5
LOGNU3/LUGCM	-1.922	1.243	-0.930	5
LXSSO4/LUGCM	-0.494	1.259	-0.991	5
SS/H	0.099	15.914	0.944	5
SS/F	14.599	21.272	0.376	5
SS/XSSO4	2.986	-30.716	0.991	5
SS/NU3	0.098	16.977	0.942	5
CUND/H	0.413	4.211	1.000	5
CUND/NU3	0.411	8.516	1.000	5
CUND/XSSO4	11.519	-170.029	0.966	5
CL/NA	1.376	-5.245	0.976	5
MG/NA	0.268	0.250	0.996	5
NH4/SO4	0.471	-3.729	0.919	5
NH4/XSSO4	0.603	-5.117	0.922	5
NO3/SO4	21.761	-367.300	0.960	5
NO3/XSSO4	27.892	-431.380	0.963	5
F/XSSO4	0.035	0.081	0.455	5
AMTH/CM	-531.214	910.924	-0.510	5
AMTNU3/CM	-433.619	912.018	-0.609	5
AMTXSSO4/CM	94.612	74.084	0.987	5



Table 331.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM<sup>2</sup>  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 05/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR.COEFF.	NO.
H/NU3	0.020	34.041	0.133	4
H/SU4	-0.023	35.518	-0.056	4
H/XSS04	-0.042	36.163	-0.096	4
H/NO3+XSS04	0.008	34.055	0.074	4
H/F	0.281	34.231	0.090	4
H/SA	0.509	17.709	0.899	4
HNV/SA	0.621	8.091	0.934	4
H/TA	0.261	18.842	0.915	4
XSCA/XSK	1.324	8.336	0.710	4
XSCA/XSMG	4.689	5.513	0.973	4
XSCA/NU3	0.142	7.025	0.829	4
XSCA/XSSU4	0.446	-5.646	0.901	4
XSCA/F	1.677	8.785	0.472	4
LUGH/LUGCM	0.662	1.279	0.526	6
LUGNA/LUGCM	-0.087	1.338	-0.679	4
LUGXSK/LUGCM	-0.597	0.200	-0.691	4
LUGXLA/LUGCM	-0.312	1.049	-0.932	4
LUGXMG/LUGCM	-0.651	0.043	-0.967	4
LUGF/LUGCM	-0.285	0.187	-0.702	4
LUGNU3/LUGCM	-0.516	1.411	-0.857	4
LXSSU4/LUGCM	-0.160	1.581	-0.890	4
SS/H	0.928	-6.602	0.483	4
SS/F	5.459	18.327	0.909	4
SS/XSSU4	0.605	2.918	0.724	4
SS/NU3	0.242	18.742	0.836	4
COND/H	-1.223	71.792	-0.871	6
COND/NU3	0.492	14.630	0.484	4
COND/XSSU4	1.335	-21.483	0.926	4
CL/NA	3.025	-39.730	0.993	4
MG/NA	0.512	-5.351	0.981	4
NH4/SU4	4.025	-117.705	0.898	4
NH4/XSS04	4.164	-113.347	0.878	4
NU3/SU4	2.680	-78.499	0.982	4
NU3/XSS04	2.810	-76.980	0.974	4
F/XSSU4	0.112	-2.867	0.805	4
AMTH/CM	367.792	-27.318	0.990	6
AMTNU3/CM	133.164	94.169	0.958	4
AMTXSSU4/CM	308.117	53.277	0.991	4

Table 332.

LINEAR CURRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMI=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.688	8.101	0.954	9
H/SO4	1.412	-6.300	0.963	9
H/XSSO4	1.436	-3.916	0.970	9
H/NO3+XSSO4	0.968	-1.617	0.981	9
H/F	17.880	51.139	0.167	9
H/SA	1.124	-7.630	0.983	7
HNV/SA	0.962	-3.223	0.981	7
H/TA	0.526	14.109	0.663	7
XSCA/XSK	10.990	-0.550	0.925	9
XSCA/XSM6	7.759	0.280	0.744	9
XSCA/NO3	0.315	0.811	0.819	9
XSCA/XSSO4	0.173	-0.790	0.855	9
XSCA/F	3.055	5.628	0.209	9
LUGH/LUGCM	-0.346	1.735	-0.435	9
LUGNA/LUGCM	-0.636	1.407	-0.820	9
LUGXSK/LUGCM	-0.100	-0.284	-0.116	9
LUGXLA/LUGCM	-0.184	0.729	-0.209	9
LUGXMG/LUGCM	-0.587	-0.102	-0.505	9
LUGF/LUGCM	0.027	-0.067	-0.086	9
LUGNO3/LUGCM	-0.201	1.176	-0.227	9
LXSSJ4/LUGCM	-0.380	1.626	-0.490	9
SS/H	0.017	24.705	0.036	9
SS/F	-22.577	30.917	-0.451	9
SS/XSSJ4	-0.082	22.244	-0.119	9
SS/NO3	-0.186	28.896	-0.141	9
CUND/H	0.448	3.270	0.979	9
CUND/NO3	1.171	7.496	0.908	9
CUND/XSSO4	0.658	0.933	0.970	9
CL/NA	1.063	1.959	0.948	9
MG/NA	0.230	0.351	0.985	9
NH4/SO4	0.272	-3.185	0.762	9
NH4/XSSO4	0.261	-2.913	0.780	9
NO3/SO4	0.473	-3.083	0.909	9
NO3/XSSO4	0.487	-2.529	0.927	9
F/XSSO4	0.001	0.177	0.099	9
AMI/H/CM	288.588	322.685	0.862	9
AMI/NO3/CM	89.869	127.026	0.790	9
AMI/XSSO4/CM	167.542	345.291	0.832	9

Table 333.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.059	14.383	0.817	12
H/SU4	1.002	13.330	0.895	12
H/XSSU4	1.071	12.475	0.921	12
H/NU3+XSSU4	0.831	7.321	0.963	12
H/F	-1.994	58.058	-0.080	12
H/SA	0.961	3.921	0.995	11
HNV/SA	0.972	-0.495	0.992	11
H/TA	0.134	45.408	0.670	11
XSCA/XSK	0.134	5.542	0.131	12
XSCA/XSMG	1.795	4.866	0.314	12
XSCA/NU3	0.228	1.625	0.475	12
XSCA/XSSU4	0.088	2.113	0.399	12
XSCA/F	1.181	4.985	0.249	12
LUGH/LUGCM	0.233	1.651	0.577	13
LUGNA/LUGCM	-0.390	1.253	-0.658	12
LUGXSK/LUGCM	-1.064	-0.062	-0.826	12
LUGXLA/LUGCM	-0.482	0.723	-0.564	12
LUGXMG/LUGCM	-0.974	-0.134	-0.664	12
LUGF/LUGCM	-0.027	-0.028	-0.052	12
LUGNU3/LUGCM	0.014	1.209	0.029	12
LXSSU4/LUGCM	0.086	1.527	0.128	12
SS/H	0.085	16.622	0.098	12
SS/F	-3.824	23.971	-0.175	12
SS/XSSU4	0.379	5.779	0.373	12
SS/NU3	0.092	14.787	0.042	12
CUND/H	0.235	17.836	0.492	13
CUND/NU3	0.949	11.463	0.790	12
CUND/XSSU4	0.536	6.518	0.967	12
CL/NA	1.177	-1.964	0.993	12
MG/NA	0.236	-0.040	0.971	12
NH4/SU4	-0.014	7.206	-0.032	12
NH4/XSSU4	-0.022	7.509	-0.049	12
NU3/SU4	0.281	5.959	0.633	12
NU3/XSSU4	0.302	5.671	0.654	12
F/XSSU4	-0.007	0.961	-0.158	12
AMTH/CM	723.697	-231.492	0.941	13
AMTNU3/CM	179.542	-4.249	0.920	12
AMTXSSU4/CM	566.084	-258.963	0.954	12

Table 334.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.095	27.630	0.268	5
H/SO4	1.150	-2.485	0.708	5
H/XSSO4	1.342	-4.104	0.851	5
H/NO3+XSSO4	1.071	-13.347	0.805	5
H/F	39.861	43.598	0.318	5
H/SA	1.053	-2.029	0.990	4
HNV/SA	0.987	-3.446	0.999	4
H/TA	1.065	-22.054	0.983	4
XSCA/XSK	0.778	4.253	0.947	5
XSCA/XSMG	2.157	3.880	0.905	5
XSCA/NU3	0.459	-1.395	0.667	5
XSCA/XSSO4	0.032	5.803	0.122	5
XSCA/F	1.286	6.920	0.061	5
LUGH/LUGCM	0.145	1.646	0.430	5
LUGNA/LUGCM	-0.654	1.271	-0.927	5
LUGXSK/LUGCM	-0.720	0.012	-0.970	5
LUGXCA/LUGCM	-0.263	0.719	-0.772	5
LUGXMG/LUGCM	-0.418	-0.252	-0.541	5
LUGF/LUGCM	0.002	-0.055	0.013	5
LUGNU3/LUGCM	-0.126	1.210	-0.570	5
LXSSO4/LUGCM	-0.016	1.543	-0.058	5
SS/H	-1.114	107.472	-0.622	5
SS/F	-66.091	61.167	-0.294	5
SS/XSSO4	-0.686	80.739	-0.243	5
SS/NU3	1.423	28.003	0.194	5
COND/H	0.188	21.794	0.523	5
COND/NU3	0.763	16.707	0.520	5
COND/XSSO4	0.468	12.664	0.827	5
CL/NA	1.046	4.278	0.491	5
MG/NA	0.240	0.313	0.999	5
H4/SO4	0.225	-1.099	0.351	5
H4/XSSO4	0.076	5.813	0.122	5
NO3/SO4	0.157	11.551	0.396	5
NO3/XSSO4	0.128	13.462	0.333	5
F/XSSO4	0.000	0.104	0.003	5
AMT/H/CM	346.954	177.708	0.935	5
AMTNU3/CM	113.486	41.172	0.987	5
AMTXSSO4/CM	279.554	111.020	0.947	5

Table 335.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NO3	2.402	17.037	0.846	3
H/SU4	0.922	19.747	0.928	3
H/XSS04	1.226	13.765	0.988	3
H/NO3+XSS04	0.845	12.349	0.962	3
H/F	66.809	40.759	0.793	3
H/SA	0.982	5.585	1.000	3
HNV/SA	0.996	2.048	1.000	3
H/TA	0.632	6.924	1.000	3
XSCA/XSK	1.327	2.560	0.891	3
XSCA/XSMG	0.377	2.773	0.868	3
XSCA/NU3	0.151	0.402	0.984	3
XSCA/XSSU4	0.065	0.796	0.974	3
XSCA/F	2.307	2.899	0.505	3
LOGH/LOGCM	-0.077	1.796	-0.171	3
LOGNA/LOGCM	-0.907	1.536	-0.996	3
LOGXSK/LOGCM	-0.671	-0.342	-0.771	3
LOGXLA/LOGCM	-0.162	0.538	-0.426	3
LOGXMG/LOGCM	-0.937	-0.060	-0.871	3
LOGF/LOGCM	0.201	-0.066	0.937	3
LOGNU3/LOGCM	-0.215	1.304	-0.570	3
LXSSU4/LOGCM	-0.139	1.564	-0.233	3
SS/H	1.466	-1.587	0.478	3
SS/F	-40.685	131.098	-0.157	3
SS/XSSU4	2.311	-7.515	0.607	3
SS/NU3	7.603	-76.728	0.873	3
CUND/H	0.542	1.773	0.876	3
CUND/NU3	1.754	-0.081	0.998	3
CUND/XSSU4	0.722	6.344	0.940	3
CL/NA	1.085	3.209	1.000	3
MG/NA	0.262	-0.429	1.000	3
NH4/SU4	0.230	-1.621	0.998	3
NH4/XSSU4	0.284	-2.015	0.987	3
NO3/SU4	0.344	3.536	0.984	3
NO3/XSSU4	0.401	4.181	0.918	3
F/XSSU4	0.010	0.012	0.689	3
AMTH/CM	1010.681	-326.405	0.986	3
AMTNU3/CM	219.309	-35.988	0.990	3
AMTXSSU4/CM	640.841	-219.574	0.982	3

Table 336.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.030	10.053	0.931	3
H/SO4	0.735	6.998	0.589	3
H/XSSO4	2.138	-5.708	0.981	3
H/NU3+XSSO4	0.749	3.326	0.983	3
H/F	12.725	10.155	0.683	3
H/SA	1.024	5.189	1.000	3
INV/SA	0.822	7.381	1.000	2
H/TA	0.432	10.564	1.000	2
XSCA/XSK	4.413	3.191	0.895	3
XSCA/XSMG	0.035	6.326	0.010	3
XSCA/NU3	0.251	2.553	0.948	3
XSCA/XSSO4	0.506	-1.063	0.969	3
XSCA/F	2.875	2.862	0.644	3
LUGH/LUGCM	-0.638	1.380	-0.992	4
LUGNA/LUGCM	-0.097	1.841	-0.143	3
LOGXSK/LUGCM	-0.743	-0.348	-0.794	3
LOGXCA/LUGCM	-0.571	0.785	-0.979	3
LUGXMG/LUGCM	-0.062	0.215	-0.148	3
LUGF/LUGCM	-0.131	0.194	-0.559	3
LUGNU3/LUGCM	-0.801	1.070	-0.989	3
LXSSO4/LUGCM	-0.490	1.159	-0.932	3
SS/H	0.236	109.840	0.039	3
SS/F	84.305	12.390	0.756	3
SS/XSSO4	3.044	71.090	0.233	3
SS/NU3	-2.180	149.202	-0.329	3
CUND/H	0.483	15.115	0.493	3
CUND/NU3	0.153	25.238	0.141	3
CUND/XSSO4	1.394	7.033	0.653	3
CL/NA	1.003	4.089	1.000	3
MG/NA	0.208	1.451	1.000	3
NH4/SO4	0.077	2.464	0.202	3
NH4/XSSO4	0.542	-3.551	0.812	3
NI3/SO4	0.285	7.997	0.252	3
NU3/XSSO4	1.657	-9.137	0.841	3
F/XSSO4	0.095	-0.173	0.812	3
AMTH/CM	44.485	145.975	0.749	4
AMTNU3/CM	15.467	88.287	0.986	3
AMTXSSO4/CM	30.974	124.119	0.796	3

Table 337.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMI=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.193	10.667	0.814	4
H/SU4	0.741	5.606	0.753	4
H/XSS04	1.221	1.608	0.915	4
H/NU3+XSS04	0.795	-2.732	0.994	4
H/F	2.251	25.301	0.599	4
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	0.456	5.686	0.046	4
XSCA/XSMG	-0.407	8.104	-0.392	4
XSCA/NU3	0.240	1.566	0.990	4
XSCA/XSS04	0.088	3.950	0.399	4
XSCA/F	-0.048	6.488	-0.077	4
LUGH/LUGCM	-0.448	1.237	-0.535	4
LUGNA/LOGCM	0.663	2.029	0.599	4
LUGXSK/LUGCM	-0.213	0.034	-0.664	4
LUGXLA/LUGCM	-0.507	0.552	-0.928	4
LUGXMG/LUGCM	0.578	0.521	0.400	4
LUGF/LUGCM	-0.109	0.261	-0.098	4
LUGNU3/LUGCM	-0.788	0.867	-0.931	4
LXSS04/LUGCM	-0.319	1.207	-0.450	4
SS/H	0.856	98.424	0.193	4
SS/F	11.615	81.850	0.698	4
SS/XSS04	2.895	50.430	0.490	4
SS/NU3	-2.449	175.989	-0.377	4
CUND/H	0.396	18.202	0.701	4
CUND/NU3	0.230	25.223	0.277	4
CUND/XSS04	0.584	14.155	0.774	4
CL/NA	1.092	-1.611	0.988	4
MG/NA	0.253	-0.346	0.987	4
NH4/SU4	-0.004	0.971	-0.076	4
NH4/XSS04	0.010	0.573	0.149	4
NU3/SU4	0.155	13.738	0.231	4
NU3/XSS04	0.474	7.068	0.521	4
F/XSS04	0.309	-4.294	0.870	4
AMH/CM	103.435	76.983	0.810	4
AMINU3/CM	20.143	50.642	0.770	4
AMIXSS04/CM	99.945	61.480	0.815	4

Table 338.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/78 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.833	7.399	0.993	4
H/SU4	0.690	-1.203	0.876	4
H/XSSU4	0.794	2.490	0.994	4
H/NU3+XSSU4	0.409	4.793	0.997	4
H/F	1.505	12.064	0.976	4
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	9.374	-2.177	0.998	4
XSCA/XSMG	4.313	2.029	0.968	4
XSCA/NU3	0.784	-1.278	0.999	4
XSCA/XSSU4	0.737	-5.687	0.988	4
XSCA/F	1.430	3.046	0.992	4
LOGH/LOGCM	-0.443	1.234	-0.937	4
LOGNA/LOGCM	-0.370	1.644	-0.417	4
LUGXSK/LOGCM	-0.518	-0.015	-0.784	4
LUGXCA/LOGCM	-0.831	-0.778	-0.927	4
LUGXMG/LOGCM	-0.494	-0.270	-0.335	4
LUGF/LOGCM	-1.038	0.221	-0.830	4
LUGNU3/LOGCM	-0.646	1.006	-0.895	4
LXSSU4/LOGCM	-0.556	1.252	-0.981	4
SS/H	-1.433	119.255	-0.203	4
SS/F	0.044	91.255	0.004	4
SS/XSSU4	-1.340	120.000	-0.238	4
SS/NU3	-0.540	99.242	-0.091	4
CLND/H	0.101	16.910	0.132	4
CLND/NU3	0.157	16.621	0.242	4
CLND/XSSU4	0.058	17.644	0.094	4
CL/NA	1.030	3.786	1.000	4
MG/NA	0.205	2.234	0.982	4
NH4/SU4	0.480	-3.645	0.815	4
NH4/XSSU4	0.594	-1.982	0.996	4
NU3/SU4	0.871	-11.578	0.927	4
NU3/XSSU4	0.439	-5.603	0.987	4
F/XSSU4	0.502	-5.823	0.970	4
AMTH/CM	75.551	73.218	0.996	4
AMTNU3/CM	32.478	55.662	0.970	4
AMTXSSU4/CM	56.347	98.879	0.999	4



Table 339.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/79 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.998	8.727	0.976	7
H/SU4	0.515	11.848	0.807	7
H/XSS04	1.013	4.014	0.988	7
H/NU3+XSS04	0.684	4.967	0.993	7
H/F	71.893	23.956	0.834	7
H/SA	0.996	2.389	0.993	4
HNV/SA	0.908	-1.506	0.943	4
H/TA	0.653	5.277	0.494	4
XSCA/XSK	8.620	8.725	0.360	7
XSCA/XSM6	1.231	7.978	0.506	7
XSCA/NU3	0.938	-2.072	0.992	7
XSCA/XSSU4	0.452	-3.430	0.953	7
XSCA/F	30.364	5.847	0.762	7
LUGH/LUGCM	-0.493	1.442	-0.656	7
LUGNA/LOGCM	-0.654	1.709	-0.581	7
LUGXSK/LOGCM	-0.475	-0.279	-0.727	7
LUGXCA/LOGCM	-0.889	0.777	-0.862	7
LUGXM6/LOGCM	-0.733	0.110	-0.612	7
LUGF/LOGCM	0.035	-0.037	0.185	7
LUGNU3/LOGCM	-0.740	0.955	-0.830	7
LXSSU4/LOGCM	-0.523	1.378	-0.680	7
SS/H	3.232	76.571	0.275	7
SS/F	-213.005	254.442	-0.210	7
SS/XSSU4	1.704	145.557	0.141	7
SS/NU3	9.066	63.718	0.377	7
CUND/H	0.667	8.550	0.529	7
CUND/NU3	2.062	10.941	0.614	7
CUND/XSSU4	0.687	18.843	0.409	7
CL/NA	1.063	0.546	1.000	7
MG/NA	0.226	0.699	1.000	7
NH4/SU4	0.128	1.830	0.664	7
NH4/XSSU4	0.308	-2.117	0.993	7
NU3/SU4	0.269	0.977	0.861	7
NU3/XSSU4	0.481	-1.425	0.960	7
F/XSSU4	0.011	-0.153	0.890	7
AMTH/CM	132.494	132.083	0.970	7
AMTNU3/CM	19.690	67.304	0.881	7
AMTXSSU4/CM	98.241	133.962	0.957	7

Table 340.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMI=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/79 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.505	36.347	0.341	4
H/SO4	0.244	30.042	0.547	4
H/XSSO4	0.731	9.954	0.778	4
H/NO3+XSSO4	0.389	19.016	0.642	4
H/F	5.080	29.145	0.721	4
H/SA	-0.053	60.944	-1.000	2
HNV/SA	0.447	26.275	-1.000	2
H/TA	-0.016	59.387	-1.000	2
XSCA/XSK	-10.184	19.077	-0.954	4
XSCA/XSMG	1.563	8.114	0.982	4
XSCA/NO3	0.194	7.540	0.786	4
XSCA/XSSO4	0.042	9.566	0.268	4
XSCA/F	-0.478	13.394	-0.408	4
LUGH/LUGCM	-0.372	1.510	-0.803	4
LUGNA/LOGCM	-0.807	1.681	-0.836	4
LUGXSK/LUGCM	0.030	-0.162	0.087	4
LUGXLA/LOGCM	-0.061	1.036	-0.280	4
LUGXMG/LUGCM	-0.064	0.135	-0.067	4
LUGF/LUGCM	-0.584	0.213	-0.675	4
LUGNO3/LUGCM	-0.361	1.164	-0.843	4
LXSSO4/LUGCM	-0.344	1.564	-0.917	4
SS/H	4.259	6.639	0.294	4
SS/F	-1.757	213.885	-0.017	4
SS/XSSO4	9.771	-289.757	0.718	4
SS/NO3	21.276	-248.772	0.991	4
CUND/H	0.807	6.188	0.403	4
CUND/NO3	3.187	-21.244	0.997	4
CUND/XSSO4	1.642	-36.464	0.811	4
CL/NA	1.119	2.604	1.000	4
MG/NA	0.226	1.468	1.000	4
NH4/SO4	0.014	13.575	0.171	4
NH4/XSSO4	0.067	11.163	0.389	4
NO3/SO4	0.292	0.919	0.971	4
NO3/XSSO4	0.499	-3.957	0.788	4
F/XSSO4	0.090	-1.027	0.675	4
AMTH/CM	118.238	153.763	0.326	4
AMTNO3/CM	120.706	22.188	0.994	4
AMTXSSO4/CM	202.593	117.801	0.959	4

Table 341.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/79 AT KSC SITE 14 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-3.606	82.156	-1.000	2
H/SO4	-0.741	44.500	-1.000	2
H/XSSO4	-0.885	44.626	-1.000	2
H/NO3+XSSO4	-0.710	52.010	-1.000	2
H/F	12.892	-30.289	1.000	2
n/SA	0.000	0.000	0.000	1
MNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	2.926	4.172	1.000	1
XSCA/XSMG	10.204	4.870	1.000	2
XSCA/NU3	5.284	-80.304	1.000	2
XSCA/XSSU4	1.294	-25.317	1.000	2
XSCA/F	-18.889	84.444	-1.000	2
LUGH/LUGCM	-0.247	1.114	-0.403	2
LOGNA/LOGCM	-0.585	1.838	-1.000	2
LUGXJK/LUGCM	-2.412	0.565	-1.000	2
LUGXCA/LUGCM	-1.271	1.301	-1.000	2
LUGXMG/LUGCM	-4.144	-0.314	-1.000	2
LOGF/LUGCM	0.306	0.478	1.000	2
LUGNU3/LUGCM	-0.195	1.301	-1.000	2
LXSSU4/LUGCM	-0.446	1.583	-1.000	2
SS/H	-2.324	102.375	-1.000	2
SS/F	-29.962	172.766	-1.000	2
SS/XSSU4	2.053	-1.337	1.000	2
SS/NU3	8.381	-88.557	1.000	2
CUND/H	1.471	9.851	0.814	3
CUND/NU3	1.771	-9.574	1.000	2
CUND/XSSU4	0.434	8.862	1.000	2
CL/NA	0.793	14.800	1.000	2
MG/NA	0.216	0.439	1.000	2
NH4/SO4	3.127	-82.151	1.000	2
NH4/XSSO4	3.729	-82.683	1.000	2
NO3/SO4	0.205	10.442	1.000	2
NO3/XSSO4	0.245	10.407	1.000	2
F/XSSO4	-0.069	5.811	-1.000	2
AMTH/CM	253.201	-57.229	0.982	3
AMTNU3/CM	145.785	46.732	1.000	2
AMTXSSU4/CM	170.448	190.486	1.000	2

Table 342.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/77 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.000	0.000	0.000	0
H/SU4	0.000	0.000	0.000	0
H/XSS04	0.000	0.000	0.000	0
H/NO3+XSS04	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.056	4.686	0.996	9
HNV/SA	0.997	0.191	0.991	9
H/TA	0.867	-0.300	0.986	9
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSM6	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSU4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LUGH/LUGCM	0.760	1.501	0.495	10
LUGNA/LUGCM	0.000	0.000	0.000	0
LUGXSK/LUGCM	0.000	0.000	0.000	0
LUGXCA/LUGCM	0.000	0.000	0.000	0
LUGXM6/LUGCM	0.000	0.000	0.000	0
LUGF/LUGCM	0.000	0.000	0.000	0
LUGNU3/LUGCM	0.000	0.000	0.000	0
LXSSU4/LUGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
CUND/H	0.189	15.533	0.531	12
CUND/NU3	0.000	0.000	0.000	0
CUND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
AG/NA	0.000	0.000	0.000	0
NH4/SU4	0.000	0.000	0.000	0
NH4/XSS04	0.000	0.000	0.000	0
NU3/S04	0.000	0.000	0.000	0
NU3/XSS04	0.000	0.000	0.000	0
F/XSSU4	0.000	0.000	0.000	0
AMTH/CM	402.369	154.972	0.830	10
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSSU4/CM	0.000	0.000	0.000	0

Table 343.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/77 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.202	-6.142	0.959	7
HNV/SA	1.029	-5.015	0.961	7
H/TA	0.881	-6.277	0.896	7
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGLM	0.200	1.406	0.264	8
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXLA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNU3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
COND/H	0.270	9.556	0.817	8
COND/NU3	0.000	0.000	0.000	0
COND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	261.722	385.202	0.491	8
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0

Table 344.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/77 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	0.892	4.260	0.909	6
HNV/SA	0.788	1.878	0.941	6
H/IA	0.751	-3.010	0.972	6
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSU4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LUGH/LUGCM	-0.087	1.371	-0.108	8
LDGNA/LDIGCM	0.000	0.000	0.000	0
LDGASK/LUGCM	0.000	0.000	0.000	0
LUGXCA/LUGCM	0.000	0.000	0.000	0
LUGXMG/LUGCM	0.000	0.000	0.000	0
LUGF/LUGCM	0.000	0.000	0.000	0
LUGNO3/LUGCM	0.000	0.000	0.000	0
LXSSU4/LUGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
COND/H	0.164	11.884	0.456	8
COND/NU3	0.000	0.000	0.000	0
COND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NU3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSU4	0.000	0.000	0.000	0
AMTH/CM	127.537	319.226	0.426	8
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSSU4/CM	0.000	0.000	0.000	0

Table 345.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/77 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NO3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LUGH/LUGCM	-0.017	1.481	-0.029	4
LUGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LUGCM	0.000	0.000	0.000	0
LOGXCA/LUGCM	0.000	0.000	0.000	0
LUGXMG/LUGCM	0.000	0.000	0.000	0
LOGF/LUGCM	0.000	0.000	0.000	0
LOGNO3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LUGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSO4	0.000	0.000	0.000	0
SS/NO3	0.000	0.000	0.000	0
COND/H	0.215	11.151	0.723	3
COND/NO3	0.000	0.000	0.000	0
COND/XSSO4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMTH/CM	363.545	8.800	0.949	4
AMTNO3/CM	0.000	0.000	0.000	0
AMTXSSO4/CM	0.000	0.000	0.000	0

Table 346.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/77 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.345	1.916	0.693	4
H/SO4	0.802	2.115	0.740	4
H/XSSO4	0.761	3.877	0.753	4
H/NO3+XSSO4	0.507	2.801	0.747	4
H/F	0.507	11.680	0.000	4
H/SA	-4.937	112.279	-1.000	2
HNV/SA	-3.003	73.134	-1.000	2
H/TA	-3.174	111.680	-1.000	2
XSCA/XSK	16.976	3.178	0.899	4
XSCA/XSMG	6.832	1.368	0.830	4
XSCA/NU3	0.289	0.419	0.416	4
XSCA/XSSO4	0.231	0.142	0.640	4
XSCA/F	0.231	2.515	0.000	4
LUGH/LUGCM	-1.642	1.196	-0.903	5
LUGNA/LUGCM	-1.583	0.883	-0.855	4
LOGXSK/LUGCM	-2.092	0.039	-0.786	4
LUGXCA/LUGCM	0.846	0.255	0.397	4
LUGXMG/LUGCM	1.848	-0.695	0.757	4
LOGF/LUGCM	0.000	0.000	0.757	4
LUGNU3/LUGCM	-0.980	0.931	-0.625	4
LXSSO4/LUGCM	-1.077	1.033	-0.438	4
SS/H	-0.666	25.684	-0.508	4
SS/F	-0.666	17.908	0.000	4
SS/XSSO4	-0.778	25.890	-0.588	4
SS/NU3	-2.206	33.918	-0.867	4
CUND/H	0.186	5.907	0.493	5
CUND/NU3	0.308	5.891	0.760	4
CUND/XSSO4	0.173	6.346	0.823	4
CL/NA	1.184	-0.042	0.998	4
MG/NA	0.222	0.249	0.981	4
NH4/SO4	0.471	-2.144	0.915	4
NH4/XSSO4	0.420	-0.838	0.875	4
NU3/SO4	0.482	1.519	0.862	4
NU3/XSSO4	0.475	2.392	0.911	4
F/XSSO4	0.000	0.000	0.911	4
AMTH/CM	-71.045	242.730	-0.632	5
AMTNU3/CM	11.967	75.348	0.180	4
AMTXSSO4/CM	12.574	112.674	0.084	4



Table 347.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/77 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	5.579	-22.959	0.676	7
H/SO4	1.354	0.877	0.483	7
H/XSSO4	1.237	6.746	0.420	7
H/NO3+XSSO4	1.089	-0.673	0.494	7
H/F	-10.359	32.233	-0.237	7
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	4.961	2.936	0.538	7
XSCA/XSMG	1.645	3.155	0.287	7
XSCA/NU3	1.186	-6.660	0.862	7
XSCA/XSSO4	0.479	-4.106	0.974	7
XSCA/F	0.260	4.150	0.036	7
LOGH/LOGCM	-0.422	1.389	-0.480	8
LOGNA/LOGCM	-1.244	1.219	-0.716	7
LOGXSK/LOGCM	0.509	-0.189	0.469	7
LOGXLA/LOGCM	0.629	0.352	0.290	7
LOGXMG/LOGCM	-0.040	-0.014	-0.062	7
LOGF/LOGCM	0.090	0.031	0.336	7
LOGNU3/LOGCM	0.064	0.937	0.110	7
LXSSO4/LOGCM	0.099	1.186	0.118	7
SS/H	0.322	21.335	0.335	7
SS/F	-10.207	34.303	-0.243	7
SS/XSSO4	0.192	27.119	0.068	7
SS/NU3	1.811	13.817	0.228	7
CUND/H	0.292	5.135	0.907	8
CUND/NU3	1.142	1.818	0.757	7
CUND/XSSO4	0.315	6.818	0.585	7
CL/NA	1.036	3.998	0.979	7
MG/NA	0.215	0.630	0.994	7
NH4/SO4	0.257	-2.757	0.826	7
NH4/XSSO4	0.274	-2.332	0.839	7
NO3/SO4	0.319	2.718	0.439	7
NO3/XSSO4	0.331	3.411	0.926	7
F/XSSO4	-0.001	0.397	-0.018	7
AMT/H/CM	191.119	114.344	0.400	8
AMTNO3/CM	71.936	22.555	0.765	7
AMTXSSO4/CM	96.121	84.387	0.561	7

Table 348.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.118	-3.124	0.965	6
H/SU4	0.932	-3.895	0.931	6
H/XSSU4	1.042	-3.103	0.942	6
H/NU3+XSSU4	0.709	-3.536	0.963	6
H/F	0.709	25.512	0.000	6
H/SA	0.000	0.000	0.000	0
MNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	5.920	13.946	0.580	6
XSCA/XSMG	1.920	8.541	0.584	6
XSCA/NU3	0.841	6.859	0.587	6
XSCA/XSSU4	0.511	4.196	0.693	6
XSCA/F	0.511	18.227	0.000	6
LUGH/LUGCM	-0.963	1.114	-0.648	6
LUGNA/LOGCM	-0.565	1.456	-0.630	6
LUGXSK/LUGCM	-0.232	0.044	-0.246	6
LUGXCA/LUGCM	0.021	0.905	0.008	6
LUGXMG/LUGCM	0.075	0.488	0.043	6
LUGF/LUGCM	0.000	0.000	0.043	6
LUGNU3/LUGCM	-0.641	0.948	-0.617	6
LXSSU4/LUGCM	-0.516	1.252	-0.419	6
SS/H	0.839	22.450	0.770	6
SS/F	0.839	43.657	0.000	6
SS/XSSU4	1.116	13.210	0.926	6
SS/NU3	1.973	17.183	0.841	6
CUND/H	0.350	5.626	0.907	6
CUND/NU3	0.769	4.170	0.925	6
CUND/XSSU4	0.418	3.092	0.978	6
CL/NA	0.962	0.679	0.972	6
MG/NA	0.211	4.430	0.705	6
NH4/SU4	0.246	1.489	0.916	6
NH4/XSSU4	0.275	1.691	0.927	6
NU3/SU4	0.448	-0.606	0.962	6
NU3/XSSU4	0.498	-0.153	0.968	6
F/XSSU4	0.000	0.000	0.968	6
AMTH/CM	-10.567	171.616	-0.060	6
AMTNU3/CM	19.819	74.115	0.258	6
AMTXSSU4/CM	51.743	143.338	0.334	6

Table 349.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.624	28.824	0.768	6
H/SO4	0.632	26.343	0.564	6
H/XSSO4	0.868	25.555	0.585	6
H/NO3+XSSO4	-0.714	23.209	0.665	6
H/F	-9.037	62.675	-0.406	6
H/SA	0.899	12.851	0.838	6
MNV/SA	0.950	4.055	0.906	6
H/TA	0.681	0.665	0.755	6
XSCA/XSK	-0.596	4.940	-0.101	6
XSCA/XSMG	10.503	-2.956	0.726	6
XSCA/NO3	1.045	-7.663	0.923	6
XSCA/XSSU4	0.406	-11.321	0.825	6
XSCA/F	-2.833	5.554	-0.384	6
LUGH/LUGCM	-0.148	1.790	-0.558	6
LUGNA/LOGCM	0.461	0.611	0.746	6
LUGXSK/LUGCM	0.407	-0.180	0.649	6
LUGXCA/LUGCM	0.005	0.465	0.006	6
LUGXMG/LUGCM	0.234	-0.269	0.431	6
LUGF/LUGCM	0.085	0.035	0.328	6
LUGNO3/LOGCM	-0.148	1.070	-0.454	6
LXSSU4/LUGCM	-0.005	1.574	-0.017	6
SS/H	-0.127	15.357	-0.641	6
SS/F	2.454	6.966	0.559	6
SS/XSSU4	0.058	5.557	0.198	6
SS/NO3	-0.070	8.648	-0.104	6
CUND/H	0.332	2.516	0.699	6
CUND/NO3	1.611	3.426	0.993	6
CUND/XSSU4	0.592	-0.878	0.839	6
CL/NA	0.931	2.841	0.937	6
MG/NA	0.311	0.202	0.931	6
NH4/SO4	0.094	3.200	0.284	6
NH4/XSSO4	0.090	3.407	0.271	6
NO3/SO4	0.355	-2.434	0.821	6
NO3/XSSO4	0.360	-2.386	0.828	6
F/XSSU4	0.011	-0.078	0.164	6
AMTH/CM	486.079	105.513	0.966	6
AMTNO3/CM	88.291	28.482	0.957	6
AMTXSSU4/CM	385.636	-3.010	0.962	6

Table 350.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.996	21.138	0.787	3
H/SO4	0.110	33.395	0.133	3
H/XSSO4	0.086	34.955	0.100	3
H/NO3+XSSO4	0.227	23.299	0.409	3
H/F	-12.919	48.574	-0.970	3
H/SA	1.013	0.161	1.000	3
HNV/SA	0.940	0.001	0.988	3
H/TA	0.743	-5.751	0.993	3
XSCA/XSK	28.989	-14.699	0.979	3
XSCA/XSMG	7.677	0.595	0.992	3
XSCA/NU3	1.465	-8.886	0.990	3
XSCA/XSSO4	0.788	-23.680	0.786	3
XSCA/F	-7.781	23.596	-0.500	3
LUGH/LOGCM	-0.525	1.701	-0.811	3
LUGNA/LOGCM	-0.449	1.501	-0.895	3
LUGXSK/LOGCM	-0.616	0.168	-0.840	3
LUGXCA/LOGCM	-1.295	1.438	-0.968	3
LUGXMG/LOGCM	-1.491	0.563	-0.997	3
LUGF/LOGCM	0.407	0.003	0.701	3
LUGNU3/LOGCM	-0.887	1.428	-1.000	3
LXSSO4/LOGCM	-0.280	1.776	-0.531	3
SS/H	0.489	10.038	0.704	3
SS/F	-4.729	32.659	-0.512	3
SS/XSSO4	0.462	4.814	0.777	3
SS/NU3	0.871	13.282	0.992	3
CUND/H	0.634	-1.007	0.915	3
CUND/NU3	0.849	8.383	0.969	3
CUND/XSSO4	0.292	8.533	0.492	3
CL/NA	1.000	1.081	0.986	3
MG/NA	0.430	-3.488	0.474	3
NH4/SO4	0.502	-11.747	0.740	3
NH4/XSSO4	0.508	-10.674	0.717	3
NO3/SO4	0.465	-7.503	0.716	3
NO3/XSSO4	0.469	-6.452	0.692	3
F/XSSO4	0.009	0.212	0.143	3
AMTH/CM	136.300	421.349	0.571	3
AMTNU3/CM	18.686	247.284	0.995	3
AMTXSSO4/CM	489.347	13.449	0.881	3

Table 351.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM<sup>2</sup>  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 04/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	-0.212	25.230	-0.980	3
H/SU4	-0.160	27.206	-0.968	3
H/XSSU4	-0.190	28.033	-0.967	3
H/NU3+XSSU4	-0.100	26.714	-0.974	3
H/F	-5.328	30.460	-0.840	3
H/SA	0.000	0.000	0.000	0
HNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	46.938	-82.588	0.998	3
XSCA/XSMG	11.239	-3.444	0.996	3
XSCA/NU3	1.956	-19.240	0.993	3
XSCA/XSSU4	1.792	-46.831	0.998	3
XSCA/F	55.895	-82.831	0.967	3
LUGH/LOGCM	0.257	1.408	0.951	3
LUGNA/LOGCM	-0.890	0.927	-0.899	3
LUGXSK/LOGCM	-0.235	0.271	-0.772	3
LUGXCA/LOGCM	-0.688	1.071	-0.764	3
LUGXMG/LOGCM	-0.566	0.143	-0.644	3
LUGF/LOGCM	-0.185	0.227	-0.599	3
LUGNU3/LOGCM	-0.537	1.116	-0.910	3
LXSSU4/LOGCM	-0.357	1.455	-0.862	3
SS/H	-9.987	230.032	-0.973	3
SS/F	61.336	-92.712	0.942	3
SS/XSSU4	2.021	-56.002	1.000	3
SS/NU3	2.219	-25.242	0.999	3
CUND/H	-1.684	52.965	-0.887	3
CUND/NU3	0.395	9.250	0.961	3
CUND/XSSU4	0.365	3.501	0.975	3
CL/NA	0.896	1.349	1.000	3
MG/NA	0.252	1.003	0.998	3
NH4/SU4	0.428	14.411	0.981	3
NH4/XSSU4	0.509	12.655	0.982	3
NU3/SU4	0.765	-9.789	0.999	3
NU3/XSSU4	0.909	-13.775	0.998	3
F/XSSU4	0.030	0.774	0.951	3
AMTH/CM	235.436	-8.720	1.000	3
AMTNU3/CM	139.974	26.974	0.976	3
AMTXSSU4/CM	325.619	25.016	0.990	3

Table 352.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 05/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.668	14.341	0.297	4
H/SO4	0.674	3.899	0.331	4
H/XSS04	0.751	2.102	0.364	4
H/NO3+XSS04	0.367	7.729	0.336	4
H/F	-29.969	66.585	-0.631	4
H/SA	0.995	-2.814	0.960	3
HNV/SA	0.908	-3.505	0.928	3
H/TA	0.301	15.942	0.332	3
XSCA/XSK	-2.424	22.244	-0.441	4
XSCA/XSM6	9.862	-7.979	0.852	4
XSCA/NO3	1.029	-10.087	0.697	4
XSCA/XSS04	0.896	-18.893	0.663	4
XSCA/F	12.072	1.422	0.388	4
LUGH/LUGCM	0.360	1.273	0.321	4
LUGNA/LOGCM	-0.152	1.208	-0.595	4
LUGXSK/LUGCM	0.611	0.283	0.859	4
LUGXCA/LOGCM	-0.576	0.956	-0.602	4
LUGXMG/LOGCM	0.030	0.331	0.073	4
LUGF/LUGCM	0.213	0.040	0.555	4
LUGNO3/LUGCM	-0.271	1.355	-0.701	4
LXSS04/LUGCM	-0.085	1.570	-0.380	4
SS/H	-0.146	23.043	-0.681	4
SS/F	2.311	15.755	0.226	4
SS/XSS04	0.136	13.255	0.306	4
SS/NO3	0.227	12.797	0.469	4
CUND/H	0.193	11.711	0.781	4
CUND/NO3	0.453	6.338	0.815	4
CUND/XSS04	0.398	2.343	0.781	4
CL/NA	0.663	5.810	0.897	4
MG/NA	0.325	0.122	0.956	4
NH4/SO4	-0.688	63.667	-0.485	4
NH4/XSS04	-0.691	62.577	-0.481	4
NO3/SO4	0.862	-9.690	0.954	4
NO3/XSS04	0.868	-8.425	0.947	4
F/XSS04	-0.002	1.260	-0.045	4
AMTH/CM	234.380	117.536	0.935	4
AMTNO3/CM	90.659	141.045	0.872	4
AMTXSS04/CM	248.846	134.214	0.974	4

Table 353.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.519	-3.416	0.791	10
H/SU4	1.238	-0.477	0.977	10
H/XSSU4	1.270	1.014	0.981	10
H/NU3+XSSU4	0.960	-6.940	0.982	10
H/F	-6.470	49.566	-0.081	10
H/SA	0.986	3.843	0.996	5
HNV/SA	0.880	3.290	0.996	5
H/TA	0.805	-2.445	0.992	5
XSCA/XSK	9.497	2.590	0.930	10
XSCA/XSMG	8.914	0.803	0.871	10
XSCA/NU3	0.512	-0.323	0.810	10
XSCA/XSSU4	0.159	4.151	0.620	10
XSCA/F	7.382	6.795	0.464	10
LUGH/LUGCM	-0.314	1.557	-0.490	11
LUGNA/LOGCM	-0.367	1.035	-0.503	10
LOGXSK/LUGCM	-0.090	-0.300	-0.130	10
LUGXCA/LUGCM	-0.243	0.854	-0.436	10
LOGXMG/LUGCM	-0.284	-0.147	-0.464	10
LUGF/LUGCM	0.018	-0.060	0.064	10
LOGNU3/LUGCM	-0.310	1.195	-0.691	10
LXSSU4/LUGCM	-0.107	1.420	-0.192	10
SS/H	0.152	15.911	0.246	10
SS/F	-14.607	29.182	-0.295	10
SS/XSSU4	0.214	15.322	0.267	10
SS/NU3	-0.235	27.712	-0.119	10
CUND/H	0.367	3.090	0.973	10
CUND/NU3	0.893	2.452	0.744	10
CUND/XSSU4	0.471	3.279	0.964	10
CL/NA	1.191	-0.333	0.990	10
MG/NA	0.221	0.967	0.983	10
NH4/SU4	0.173	3.351	0.761	10
NH4/XSSU4	0.181	3.466	0.775	10
NU3/SU4	0.280	9.259	0.703	10
NU3/XSSU4	0.246	9.273	0.728	10
F/XSSU4	-0.002	0.483	-0.107	10
AMTH/CM	267.620	101.979	0.921	11
AMTNU3/CM	89.027	57.633	0.933	10
AMTXSSU4/CM	294.690	-13.959	0.913	10

Table 354.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.761	20.572	0.823	10
H/SO4	1.776	-2.413	0.813	10
H/XSSO4	1.863	-2.590	0.817	10
H/NO3+XSSO4	0.695	5.530	0.931	10
H/F	5.430	38.879	0.196	10
H/SA	1.181	-7.098	0.968	5
HNV/SA	1.087	-7.645	0.984	5
H/TA	0.745	-4.678	0.998	5
XSCA/XSK	6.717	3.898	0.695	10
XSCA/XSMG	5.710	5.430	0.686	10
XSCA/NU3	0.170	6.682	0.795	10
XSCA/XSSO4	0.089	9.494	0.169	10
XSCA/F	-0.231	11.847	-0.036	10
LUGH/LUGCM	-0.261	1.548	-0.669	12
LUGNA/LOGCM	-0.359	0.879	-0.559	10
LUGXSK/LUGCM	-0.351	-0.035	-0.763	10
LUGXCA/LUGCM	-0.318	0.982	-0.755	10
LUGXMG/LUGCM	-0.347	-0.139	-0.628	10
LUGF/LUGCM	0.003	0.081	0.013	10
LUGNU3/LOGCM	-0.663	1.200	-0.901	10
LXSSO4/LUGCM	-0.142	1.305	-0.326	10
SS/H	0.145	5.615	0.494	10
SS/F	-0.292	12.053	-0.036	10
SS/XSSO4	0.455	0.725	0.680	10
SS/NU3	0.084	9.382	0.308	10
CUND/H	0.446	2.115	0.979	11
CUND/NU3	0.360	10.438	0.856	10
CUND/XSSO4	0.806	1.322	0.778	10
CL/NA	1.048	-0.342	0.982	10
MG/NA	0.235	0.576	0.929	10
NH4/SO4	0.015	2.568	0.070	10
NH4/XSSO4	0.017	2.534	0.076	10
NU3/SO4	1.078	1.807	0.457	10
NU3/XSSO4	1.127	1.811	0.457	10
F/XSSO4	0.007	0.573	0.082	10
AMTH/CM	209.941	132.594	0.912	12
AMTNU3/CM	30.651	122.019	0.790	10
AMTXSSO4/CM	147.829	95.276	0.876	10



Table 355.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.729	-10.811	0.933	9
H/SO4	1.293	2.868	0.950	9
H/XSSO4	1.318	4.947	0.957	9
H/NO3+XSSO4	0.967	-5.767	0.990	9
H/F	6.645	57.121	0.065	9
H/SA	1.086	-2.082	1.000	6
HNV/SA	0.995	-2.238	1.000	6
H/TA	0.917	-9.184	0.998	6
XSCA/XSK	-0.338	11.556	-0.069	9
XSCA/XSMG	2.062	6.158	0.579	9
XSCA/NU3	0.000	11.084	0.000	9
XSCA/XSSO4	-0.008	11.456	-0.057	9
XSCA/F	-2.789	8.308	0.253	9
LOGH/LOGCM	-0.709	1.429	-0.762	10
LOGNA/LOGCM	-0.334	1.097	-0.396	9
LOGXSK/LOGCM	-0.525	-0.189	-0.591	9
LOGXCA/LOGCM	-0.403	0.833	-0.597	9
LOGXMG/LOGCM	-0.047	0.139	-0.042	9
LOGF/LOGCM	-0.223	-0.082	-0.426	9
LOGNU3/LOGCM	-0.600	1.125	-0.755	9
LXSSO4/LOGCM	-0.650	1.239	-0.674	9
SS/H	0.042	23.865	0.167	9
SS/F	2.111	24.446	0.082	9
SS/XSSO4	0.129	20.773	0.373	9
SS/NU3	0.019	26.038	0.025	9
COND/H	0.321	7.958	0.991	10
COND/NU3	0.856	5.013	0.845	9
COND/XSSO4	0.444	8.606	0.985	9
CL/NA	1.075	2.036	0.996	9
MG/NA	0.274	1.213	0.898	9
NH4/SO4	0.013	5.343	0.212	9
NH4/XSSO4	0.012	5.424	0.192	9
NU3/SO4	0.375	9.655	0.507	9
NU3/XSSO4	0.384	10.179	0.816	9
F/XSSO4	0.000	9.973	0.035	9
AMTH/CM	141.014	168.559	0.596	10
AMTNU3/CM	50.451	82.893	0.586	9
AMTXSSO4/CM	56.525	145.527	0.341	9

Table 356.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.414	6.564	0.700	5
H/SO4	0.349	26.429	0.466	5
H/XSSO4	0.502	21.821	0.563	5
H/NU3+XSSO4	0.422	18.873	0.593	5
H/F	10.440	36.908	0.333	5
H/SA	0.889	18.530	1.000	5
HNV/SA	1.021	7.348	1.000	5
H/TA	6.788	-637.521	1.000	5
XSCA/XSK	0.677	1.948	0.984	5
XSCA/XSMG	1.020	1.897	0.981	5
XSCA/NU3	0.278	-0.503	0.806	5
XSCA/XSSO4	0.078	0.453	0.880	5
XSCA/F	-0.943	3.887	-0.301	5
LUGH/LUGCM	-0.058	1.517	-0.099	5
LUGNA/LOGCM	-1.144	1.150	-0.958	5
LOGXSK/LUGCM	-1.066	0.054	-0.967	5
LUGXLA/LUGCM	-0.429	0.550	-0.927	5
LUGXMG/LUGCM	-0.909	-0.054	-0.938	5
LUGF/LUGCM	0.139	0.032	0.608	5
LUGNU3/LUGCM	-0.248	1.141	-0.529	5
LXSSO4/LUGCM	-0.391	1.494	-0.501	5
SS/H	-0.084	44.887	-0.030	5
SS/F	-22.925	51.066	-0.265	5
SS/XSSO4	1.980	-35.444	0.804	5
SS/NU3	6.601	-53.553	0.692	5
CUND/H	0.342	9.048	0.577	5
CUND/NU3	2.019	-5.864	0.987	5
CUND/XSSO4	0.526	2.770	0.996	5
CL/NA	1.066	1.046	1.000	5
MG/NA	0.250	0.193	1.000	5
NH4/SO4	0.536	-7.153	0.924	5
NH4/XSSO4	0.607	-7.834	0.877	5
NU3/SO4	0.207	5.570	0.954	5
NU3/XSSO4	0.253	4.575	0.979	5
F/XSSO4	0.002	0.362	0.054	5
AMTH/CM	590.109	-453.810	0.924	5
AMTNU3/CM	146.273	-74.141	0.946	5
AMTXSSO4/CM	417.948	-341.332	0.915	5

Table 357.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.599	25.435	0.293	6
H/SO4	1.373	-11.041	0.904	6
H/XSSO4	1.422	-0.986	0.978	6
H/NO3+XSSO4	0.858	-2.443	0.837	6
H/F	-6.791	46.482	-0.255	6
H/SA	1.321	1.247	1.000	2
HV/SA	1.261	-0.937	1.000	2
H/TA	1.339	-35.766	1.000	2
XSCA/XSK	2.612	6.381	0.388	6
XSCA/XSMG	3.581	5.197	0.408	6
XSCA/NU3	0.312	2.571	0.565	6
XSCA/XSSU4	0.066	6.796	0.169	6
XSCA/F	-1.147	10.177	-0.160	6
LUGH/LUGCM	0.049	1.477	0.084	6
LUGNA/LUGCM	0.006	1.753	0.008	6
LUGXSK/LUGCM	-0.791	-0.369	-0.889	6
LUGXCA/LUGCM	-0.492	0.574	-0.460	6
LUGXMG/LUGCM	-0.021	-0.069	-0.028	6
LUGF/LUGCM	-0.350	0.025	-0.538	6
LUGNU3/LUGCM	-0.345	1.108	-0.564	6
LXSSU4/LUGCM	-0.003	1.323	-0.006	6
SS/H	-0.829	119.238	-0.370	6
SS/F	0.532	87.850	0.669	6
SS/XSSU4	-0.945	113.821	-0.290	6
SS/NU3	-2.590	138.382	-0.565	6
COND/H	0.252	15.260	0.743	6
COND/NU3	0.018	24.238	0.026	6
COND/XSSU4	0.389	14.190	0.789	6
CL/NA	0.902	7.732	0.492	6
MG/NA	0.187	1.536	0.996	6
NH4/SO4	0.216	3.064	0.368	6
NH4/XSSU4	0.296	2.723	0.526	6
NU3/SO4	0.142	14.245	0.192	6
NU3/XSSU4	0.252	12.492	0.355	6
F/XSSU4	-0.018	1.890	-0.334	6
AMT/H/CM	402.605	27.135	0.531	6
AMT/NU3/CM	134.377	15.828	0.695	6
AMT/XSSU4/CM	271.514	29.345	0.520	6

Table 358.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/78 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	20.027	-180.170	0.981	5
H/SU4	0.908	-5.263	1.000	5
H/XSSU4	0.911	-2.171	1.000	5
H/NU3+XSSU4	0.873	-10.347	1.000	5
H/F	302.824	-170.349	0.975	5
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	2.541	6.704	0.332	5
XSCA/XSMG	-0.010	8.891	-0.006	5
XSCA/NU3	0.104	6.528	0.362	5
XSCA/XSSU4	0.002	8.145	0.193	5
XSCA/F	1.338	6.933	0.305	5
LOGH/LUGCM	-0.795	1.410	-0.779	5
LOGNA/LOGCM	-0.194	1.409	-0.406	5
LOGXSK/LUGCM	-0.141	-0.072	-0.435	5
LOGXCA/LUGCM	-0.338	0.754	-0.777	5
LOGXMG/LUGCM	-0.387	-0.261	-0.815	5
LUGF/LUGCM	-0.303	0.040	-0.765	5
LUGNU3/LUGCM	-0.505	1.042	-0.918	5
LXSSU4/LUGCM	-0.830	1.473	-0.813	5
SS/H	0.036	36.634	0.630	5
SS/F	11.750	24.251	0.662	5
SS/XSSU4	0.033	36.562	0.624	5
SS/NU3	0.720	30.172	0.616	5
CUND/H	0.286	4.370	1.000	5
CUND/NU3	5.745	-42.428	0.982	5
CUND/XSSU4	0.261	8.746	1.000	5
CL/NA	1.101	0.809	0.949	5
MG/NA	0.101	3.074	0.536	5
NH4/SU4	0.037	8.668	0.951	5
NH4/XSSU4	0.037	8.794	0.951	5
NU3/SU4	0.044	4.258	0.982	5
NU3/XSSU4	0.044	4.407	0.982	5
F/XSSU4	0.003	0.601	0.975	5
AMTH/CM	32.739	332.934	0.293	5
AMINU3/CM	48.243	29.548	0.939	5
AMTXSSU4/CM	40.307	365.167	0.309	5

Table 359.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM<sup>2</sup>  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/79 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.316	18.542	0.161	9
H/SU4	0.351	8.516	0.468	9
H/XSSU4	0.376	9.453	0.506	9
H/NU3+XSSU4	0.230	11.683	0.419	9
H/F	8.878	3.207	0.435	9
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	74.144	-6.689	0.752	9
XSCA/XSMG	5.880	-1.733	0.998	9
XSCA/NU3	6.083	-31.594	0.902	9
XSCA/XSSU4	1.816	-19.512	0.711	9
XSCA/F	0.702	41.567	0.021	9
LUGH/LUGCM	0.014	1.006	0.011	9
LOGNA/LOGCM	-0.497	1.487	-0.600	9
LOGXSK/LOGCM	-0.444	-0.203	-0.544	9
LOGXCA/LOGCM	-1.015	0.966	-0.689	9
LOGXMG/LOGCM	-0.669	0.305	-0.521	9
LOGF/LOGCM	-0.355	0.291	-0.541	9
LUGNU3/LOGCM	-0.360	0.839	-0.351	9
LXSSU4/LOGCM	-0.685	1.324	-0.716	9
SS/H	-0.607	69.258	-0.239	9
SS/F	-4.830	66.100	-0.200	9
SS/XSSU4	-0.252	64.340	-0.133	9
SS/NU3	-0.532	62.180	-0.107	9
COND/H	0.188	15.882	0.380	9
CUND/NU3	0.671	11.853	0.693	9
CUND/XSSU4	0.291	10.045	0.794	9
CL/NA	1.040	4.350	0.985	9
MG/NA	0.210	7.379	0.613	9
NH4/SU4	0.249	0.788	0.937	9
NH4/XSSU4	0.254	1.891	0.966	9
NU3/SU4	0.344	-1.375	0.901	9
NU3/XSSU4	0.346	0.336	0.913	9
F/XSSU4	0.055	0.278	0.700	9
AMTH/CM	103.045	70.867	0.852	9
AMTNU3/CM	28.045	73.493	0.623	9
AMTXSSU4/CM	25.512	234.325	0.331	9

Table 360.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/79 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.194	26.799	0.986	3
H/SU4	0.372	25.712	0.988	3
H/XSS04	0.539	19.738	0.991	3
H/NU3+XSS04	0.371	21.918	0.990	3
H/F	18.209	38.237	0.959	3
H/SA	0.918	7.790	1.000	3
HNV/SA	0.883	3.081	1.000	3
H/TA	0.734	-5.679	0.999	3
XSCA/XSK	0.285	12.011	0.037	3
XSCA/XSMG	-0.029	11.999	-0.010	3
XSCA/NU3	-0.020	12.817	-0.104	3
XSCA/XSS04	-0.006	12.600	-0.070	3
XSCA/F	-0.686	13.476	-0.223	3
LUGH/LUGCM	-0.789	1.654	-0.658	4
LUGNA/LOGCM	-1.848	1.495	-0.099	3
LUGXSK/LUGCM	2.821	0.292	0.534	3
LUGXCA/LUGCM	-10.626	-1.104	-0.996	3
LUGXMG/LUGCM	-8.740	-1.540	-0.565	3
LUGF/LUGCM	-3.651	-0.516	-0.320	3
LUGNU3/LUGCM	-2.581	0.919	-0.231	3
LXSS04/LUGCM	-2.830	1.333	-0.293	3
SS/H	8.584	-321.390	0.978	3
SS/F	166.109	-15.530	0.997	3
SS/XSS04	4.754	-166.577	0.997	3
SS/NU3	10.616	-107.600	0.999	3
CUND/H	0.835	-12.291	0.995	4
CUND/NU3	1.044	6.721	0.997	3
CUND/XSS04	0.469	0.718	0.999	3
CL/NA	1.258	-1.598	1.000	3
MG/NA	0.236	0.505	1.000	3
NH4/SU4	0.060	17.460	0.938	3
NH4/XSS04	0.086	16.609	0.930	3
NU3/SU4	0.311	-0.830	1.000	3
NU3/XSS04	0.448	-5.627	0.999	3
F/XSS04	0.028	-0.871	0.988	3
AMTH/CM	32.913	489.134	0.103	4
AMTNU3/CM	-596.928	672.131	-0.125	3
AMTXSS04/CM	-1568.194	1732.484	-0.148	3

Table 361.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT  $CM=$   
 $CM$  PRECIPITATION AND  $AMT=$ MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/79 AT UCF SITE 18 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-4.670	110.985	-1.000	2
H/SO4	-2.640	109.232	-1.000	2
H/XSSO4	-1.910	101.532	-1.000	2
H/NO3+XSSO4	-1.350	104.276	-1.000	2
H/F	3.498	21.435	1.000	2
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/IA	0.000	0.000	0.000	1
XSCA/XSK	44.263	-18.154	1.000	2
XSCA/XSMG	6.854	1.819	1.000	2
XSCA/NU3	4.416	-63.685	1.000	2
XSCA/XSSU4	1.806	-54.744	1.000	2
XSCA/F	-3.308	21.006	-1.000	2
LOGH/LOGCM	0.279	1.414	1.000	2
LOGNA/LOGCM	0.192	1.028	1.000	2
LOGXSK/LOGCM	-0.319	-0.110	-1.000	2
LUGXCA/LOGCM	-1.239	1.181	-1.000	2
LUGXMG/LOGCM	-3.379	0.191	-1.000	2
LUGF/LOGCM	0.940	0.070	1.000	2
LUGNU3/LOGCM	-0.118	1.259	-1.000	2
LXSSU4/LOGCM	-0.135	1.595	-1.000	2
SS/H	0.364	3.913	1.000	2
SS/F	1.274	11.722	1.000	2
SS/XSSU4	-0.696	40.902	-1.000	2
SS/NU3	-1.701	44.346	-1.000	2
COND/H	-0.380	25.552	-1.000	2
COND/NU3	1.776	-16.651	1.000	2
COND/XSSU4	0.726	-13.056	1.000	2
CL/NA	1.881	-7.783	1.000	2
MG/NA	-0.284	7.569	-1.000	2
NH4/SO4	1.707	-50.807	1.000	2
NH4/XSSO4	1.598	-43.965	1.000	2
NU3/SO4	0.437	0.375	1.000	2
NO3/XSSO4	0.409	2.024	1.000	2
F/XSSU4	-0.546	22.896	-1.000	2
AMTH/CM	449.177	-176.501	1.000	2
AMTNU3/CM	141.499	37.694	1.000	2
AMTXSSU4/CM	296.451	92.155	1.000	2

Table 362.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/77 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSSO4	0.000	0.000	0.000	0
H/NO3+XSSO4	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.113	-0.025	0.991	3
HNV/SA	0.784	-0.009	0.989	3
H/TA	0.725	-1.283	0.998	3
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSSO4	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.138	1.036	-0.246	8
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXCA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNU3/LOGCM	0.000	0.000	0.000	0
LXSSO4/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSSU4	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
COND/H	0.228	11.542	0.218	8
COND/NU3	0.000	0.000	0.000	0
COND/XSSU4	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSSO4	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSSO4	0.000	0.000	0.000	0
F/XSSO4	0.000	0.000	0.000	0
AMT/H/CM	131.504	-0.639	0.815	8
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSSU4/CM	0.000	0.000	0.000	0



Table 363.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/77 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	0.000	0.000	0.000	0
H/SO4	0.000	0.000	0.000	0
H/XSS04	0.000	0.000	0.000	0
H/NU3+XSS04	0.000	0.000	0.000	0
H/F	0.000	0.000	0.000	0
H/SA	1.030	-0.825	0.988	8
HNV/SA	0.996	-2.044	0.991	8
H/TA	0.775	-3.244	0.946	8
XSCA/XSK	0.000	0.000	0.000	0
XSCA/XSMG	0.000	0.000	0.000	0
XSCA/NU3	0.000	0.000	0.000	0
XSCA/XSS04	0.000	0.000	0.000	0
XSCA/F	0.000	0.000	0.000	0
LOGH/LOGCM	-0.326	1.305	-0.477	9
LOGNA/LOGCM	0.000	0.000	0.000	0
LOGXSK/LOGCM	0.000	0.000	0.000	0
LOGXLA/LOGCM	0.000	0.000	0.000	0
LOGXMG/LOGCM	0.000	0.000	0.000	0
LOGF/LOGCM	0.000	0.000	0.000	0
LOGNU3/LOGCM	0.000	0.000	0.000	0
LXSS04/LOGCM	0.000	0.000	0.000	0
SS/H	0.000	0.000	0.000	0
SS/F	0.000	0.000	0.000	0
SS/XSS04	0.000	0.000	0.000	0
SS/NU3	0.000	0.000	0.000	0
COND/H	0.403	8.362	0.786	9
COND/NU3	0.000	0.000	0.000	0
COND/XSS04	0.000	0.000	0.000	0
CL/NA	0.000	0.000	0.000	0
MG/NA	0.000	0.000	0.000	0
NH4/SO4	0.000	0.000	0.000	0
NH4/XSS04	0.000	0.000	0.000	0
NO3/SO4	0.000	0.000	0.000	0
NO3/XSS04	0.000	0.000	0.000	0
F/XSS04	0.000	0.000	0.000	0
AMTH/CM	82.096	148.287	0.602	9
AMTNU3/CM	0.000	0.000	0.000	0
AMTXSS04/CM	0.000	0.000	0.000	0

Table 364.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/77 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.469	-0.461	1.000	2
H/SO4	1.090	-13.660	1.000	2
H/XSSO4	1.308	-11.958	1.000	2
H/NO3+XSSO4	0.855	-7.978	1.000	2
H/F	54.117	-50.675	1.000	2
H/SA	1.053	1.555	0.996	2
HNV/SA	0.971	0.143	0.996	2
H/TA	0.757	-0.911	0.999	2
XSCA/XSK	2.739	-0.574	1.000	2
XSCA/XSMG	-1813.995	8577.666	-1.000	2
XSCA/NO3	0.393	1.835	1.000	2
XSCA/XSSU4	0.208	0.004	1.000	2
XSCA/F	8.618	-6.161	1.000	2
LUGH/LUGCM	-0.633	1.398	-0.876	2
LOGNA/LOGCM	-0.459	2.035	-1.000	2
LOGXSK/LUGCM	-0.560	0.480	-1.000	2
LOGXLA/LUGCM	-0.607	0.871	-1.000	2
LOGXMG/LUGCM	0.001	0.674	1.000	2
LOGF/LUGCM	-0.337	0.248	-1.000	2
LOGNU3/LUGCM	-0.885	1.030	-1.000	2
LXSSU4/LUGCM	-0.608	1.552	-1.000	2
SS/H	1.638	36.319	1.000	2
SS/F	88.659	-46.701	1.000	2
SS/XSSU4	2.143	16.728	1.000	2
SS/NO3	4.046	35.564	1.000	2
COND/H	0.577	5.817	0.984	2
COND/NO3	1.381	10.514	1.000	2
COND/XSSU4	0.731	4.085	1.000	2
CL/NA	0.916	-6.668	1.000	2
MG/NA	0.179	3.427	1.000	2
NH4/SO4	0.223	7.560	1.000	2
NH4/XSSO4	0.267	7.908	1.000	2
NO3/SO4	0.441	-5.345	1.000	2
NO3/XSSO4	0.530	-4.656	1.000	2
F/XSSO4	0.024	0.715	1.000	2
AMTH/CM	29.581	215.813	0.367	2
AMTNO3/CM	8.969	86.206	1.000	2
AMTXSSU4/CM	104.851	162.746	1.000	2

Table 365.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/77 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.360	2.825	0.997	4
H/SO4	0.709	1.538	0.980	4
H/XSSO4	0.909	2.902	0.998	4
H/NO3+XSSO4	0.546	2.853	0.998	4
H/F	0.546	12.095	0.000	4
H/SA	1.411	-11.735	1.000	2
HNV/SA	1.074	-5.427	1.000	2
H/TA	0.844	-5.931	1.000	2
XSCA/XSK	4.815	1.343	0.948	4
XSCA/XSMG	2.128	0.703	0.819	4
XSCA/NU3	0.362	-0.578	0.977	4
XSCA/XSSU4	0.245	-0.590	0.991	4
XSCA/F	0.245	1.888	0.000	4
LUGH/LUGCM	-0.480	1.212	-0.960	5
LUGNA/LOGCM	-0.623	1.838	-0.988	4
LUGXSK/LUGCM	-0.020	-0.019	0.677	4
LOGXCA/LUGCM	-0.780	0.523	-0.913	4
LOGXMG/LUGCM	-0.259	0.154	-0.785	4
LOGF/LUGCM	0.000	0.000	-0.785	4
LOGNU3/LOGCM	-0.671	0.963	-0.881	4
LXSSU4/LOGCM	-0.789	1.159	-0.921	4
SS/H	2.785	17.581	0.765	4
SS/F	2.785	51.268	0.000	4
SS/XSSU4	2.631	24.661	0.793	4
SS/NU3	3.655	26.361	0.735	4
COND/H	0.599	4.826	0.916	5
COND/NU3	1.191	4.786	0.945	4
COND/XSSU4	0.817	4.642	0.970	4
CL/NA	0.912	4.815	0.967	4
MG/NA	0.196	0.649	0.992	4
NH4/SO4	0.357	-1.429	0.904	4
NH4/XSSO4	0.476	-0.932	0.957	4
NU3/SO4	0.515	-0.855	0.972	4
NO3/XSSO4	0.665	0.089	0.996	4
F/XSSO4	0.000	0.000	0.996	4
AMTH/CM	45.660	91.334	0.984	5
AMTNU3/CM	15.449	71.499	0.740	4
AMTXSSU4/CM	14.910	121.969	0.641	4

Table 366.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/77 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NU3	2.600	0.979	0.775	7
H/S04	1.134	-0.089	0.954	7
H/XSS04	1.093	3.171	0.970	7
H/NU3+XSS04	0.901	0.114	0.992	7
H/F	12.714	13.808	0.737	7
H/SA	-3.032	103.023	-1.000	2
HNV/SA	-1.897	71.431	-1.000	2
H/TA	-15.162	519.068	-1.000	2
XSCA/XSK	-0.579	1.821	-0.064	7
XSCA/XSMG	1.653	0.899	0.725	7
XSCA/NU3	0.186	0.776	0.279	7
XSCA/XSS04	0.054	1.229	0.243	7
XSCA/F	-0.404	1.992	-0.118	7
LUGH/LUGCM	-0.367	1.194	-0.581	8
LUGNA/LUGCM	0.355	1.289	0.494	7
LUGXSK/LUGCM	-0.099	-0.057	-0.178	7
LUGXCA/LUGCM	0.065	0.201	0.057	7
LUGXMG/LUGCM	-0.869	-0.219	-0.293	7
LUGF/LUGCM	0.079	0.023	0.319	7
LUGNU3/LUGCM	-0.474	0.749	-0.534	7
LXSS04/LUGCM	0.436	0.928	0.331	7
SS/H	-0.620	36.429	-0.590	7
SS/F	-5.170	27.264	-0.285	7
SS/XSS04	-0.605	33.574	-0.511	7
SS/NU3	-2.595	41.765	-0.736	7
CUND/H	0.601	1.449	0.963	8
CUND/NU3	0.655	6.972	0.610	7
CUND/XSS04	0.340	6.732	0.942	7
CL/NA	0.975	4.006	0.813	7
MG/NA	0.186	1.055	0.965	7
NH4/S04	0.071	1.566	0.403	7
NH4/XSS04	0.063	1.836	0.377	7
NU3/S04	0.207	2.978	0.584	7
NU3/XSS04	0.213	3.401	0.635	7
F/XSS04	0.041	-0.286	0.634	7
AMTH/CM	168.871	3.777	0.660	8
AMTNU3/CM	36.684	22.673	0.487	7
AMT XSS04/CM	151.592	-28.074	0.639	7

Table 367.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM<sup>2</sup>  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.406	-3.283	0.844	5
H/SO4	0.753	-4.340	0.960	5
H/XSSO4	0.790	-0.433	0.976	5
H/NO3+XSSO4	0.610	-1.979	0.959	5
H/F	138.251	16.405	0.973	5
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	7.530	9.049	0.700	5
XSCA/XSMG	3.536	3.939	0.606	5
XSCA/NU3	1.050	1.130	0.782	5
XSCA/XSSO4	0.198	8.208	0.516	5
XSCA/F	9.522	15.073	0.141	5
LOGH/LOGCM	-0.204	1.299	-0.238	5
LUGNA/LOGCM	-0.431	1.726	-0.739	5
LUGXSK/LUGCM	-0.207	0.147	-0.558	5
LUGXCA/LUGCM	-0.990	0.841	-0.844	5
LOGXMG/LUGCM	-0.775	0.154	-0.512	5
LUGF/LUGCM	-0.011	-0.057	-0.040	5
LOGNU3/LOGCM	-0.605	0.931	-0.706	5
LXSSO4/LOGCM	-0.514	1.342	-0.533	5
SS/H	0.177	71.046	0.160	5
SS/F	19.959	74.418	0.127	5
SS/XSSO4	0.302	64.509	0.338	5
SS/NU3	1.494	55.265	0.477	5
CUND/H	0.439	10.969	0.909	5
CUND/NU3	1.283	6.314	0.937	5
CUND/XSSO4	0.379	9.490	0.971	5
CL/NA	0.894	6.724	0.978	5
MG/NA	0.241	0.126	0.978	5
NH4/SO4	0.179	3.896	0.817	5
NH4/XSSO4	0.178	5.227	0.787	5
NU3/SO4	0.262	1.953	0.946	5
NU3/XSSO4	0.267	3.614	0.935	5
F/XSSO4	0.005	-0.103	0.920	5
AMTH/CM	95.821	161.810	0.358	5
AMTNU3/CM	18.921	76.307	0.242	5
AMTXSSO4/CM	47.350	240.958	0.152	5

Table 368.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METEK.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR.CDEF.	NO.
H/NO3	1.549	30.586	0.593	6
H/SO4	1.280	0.749	0.815	6
H/XSSO4	1.348	1.334	0.875	6
H/NO3+XSSO4	0.912	5.748	0.851	6
H/F	-0.111	49.778	-0.010	6
H/SA	0.894	8.219	0.965	6
HNV/SA	0.930	2.009	0.989	6
H/TA	0.803	-2.727	0.432	6
XSCA/XSK	4.578	5.455	0.201	6
XSCA/XSMG	2.400	2.726	0.431	6
XSCA/NO3	0.661	-1.681	0.606	6
XSCA/XSSO4	0.322	-5.087	0.501	6
XSCA/F	4.153	2.092	0.899	6
LOGH/LOGCM	-0.191	1.708	-0.744	7
LOGNA/LOGCM	0.662	1.074	0.646	6
LOGXSK/LOGCM	-0.164	-0.533	-0.112	6
LOGXCA/LOGCM	-0.173	0.551	-0.103	6
LOGXMG/LOGCM	0.721	-0.158	0.558	6
LOGF/LOGCM	0.378	0.087	0.572	6
LOGNO3/LOGCM	-0.114	1.053	-0.176	6
LXSSO4/LOGCM	-0.118	1.552	-0.255	6
SS/H	-0.521	51.243	-0.422	6
SS/F	1.696	23.574	0.124	6
SS/XSSO4	-0.367	38.521	-0.193	6
SS/NO3	-0.011	25.496	-0.003	6
CUND/H	1.143	-29.864	0.884	7
CUND/NO3	0.705	14.421	0.758	6
CUND/XSSO4	0.469	6.286	0.855	6
CL/NA	0.897	2.871	0.989	6
MG/NA	0.235	0.544	0.993	6
NH4/SO4	0.155	0.172	0.307	6
NH4/XSSO4	0.106	2.286	0.215	6
NO3/SO4	0.374	-1.987	0.623	6
NO3/XSSO4	0.361	-0.618	0.612	6
F/XSSO4	0.040	-0.395	0.290	6
AMTH/CM	449.860	15.233	0.907	7
AMTNO3/CM	94.697	43.197	0.654	6
AMTXSSO4/LM	367.237	-44.463	0.924	6

Table 369.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.211	9.386	0.908	4
H/SO4	0.796	-2.876	0.876	4
H/XSSO4	0.887	-1.815	0.784	4
H/NO3+XSSO4	0.533	1.532	0.856	4
H/F	27.299	4.406	0.951	4
H/SA	0.735	8.041	0.922	3
HNV/SA	0.740	7.421	0.998	3
H/TA	0.473	7.001	0.803	3
XSCA/XSK	22.151	5.229	0.817	4
XSCA/XSMG	4.980	1.646	0.853	4
XSCA/NU3	1.041	-3.336	0.864	4
XSCA/XSSO4	0.809	-14.994	0.791	4
XSCA/F	20.803	-4.456	0.801	4
LUGH/LUGCM	-0.348	1.397	-0.876	5
LOGNA/LOGCM	-0.994	1.368	-0.703	4
LUGXSK/LOGCM	-0.541	-0.154	-0.698	4
LUGXCA/LOGCM	-2.116	0.579	-0.985	4
LUGXMG/LOGCM	-1.954	-0.090	-0.969	4
LUGF/LOGCM	-1.082	-0.249	-0.945	4
LUGNU3/LOGCM	-1.342	0.938	-0.954	4
LXSSO4/LOGCM	-0.697	1.438	-0.787	4
SS/H	2.898	-39.002	0.971	4
SS/F	74.339	-20.598	0.867	4
SS/XSSO4	2.408	-37.262	0.713	4
SS/NU3	3.196	-4.747	0.803	4
CUND/H	0.902	-4.562	0.996	5
CUND/NU3	1.137	2.817	0.943	4
CUND/XSSO4	0.851	-8.474	0.832	4
CL/NA	1.164	-1.243	1.000	4
MG/NA	0.282	0.570	0.990	4
NH4/SO4	0.527	-10.131	0.890	4
NH4/XSSO4	0.647	-12.042	0.879	4
NU3/SO4	0.648	-9.878	0.951	4
NU3/XSSO4	0.789	-11.738	0.931	4
F/XSSO4	0.036	-0.379	0.913	4
AMTH/CM	123.691	97.054	0.570	5
AMTNU3/CM	-63.776	151.967	-0.685	4
AMTXSSO4/CM	139.267	153.843	0.515	4

Table 370.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 04/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-9.368	380.375	-1.000	2
H/SO4	-14.511	1747.366	-1.000	2
H/XSSO4	4.184	-408.458	1.000	2
H/NO3+XSSO4	7.560	-1045.017	1.000	2
H/F	-6.890	77.864	-1.000	2
H/SA	0.000	0.000	0.000	1
HNV/SA	0.000	0.000	0.000	1
H/TA	0.000	0.000	0.000	1
XSCA/XSK	-158.101	831.706	-1.000	2
XSCA/XSMG	5.497	17.670	1.000	2
XSCA/NU3	7.719	-222.185	1.000	2
XSCA/XSSO4	-3.447	427.820	-1.000	2
XSCA/F	5.678	27.086	1.000	2
LUGH/LUGCM	3.419	3.732	1.000	2
LUGNA/LOGCM	-4.371	-0.830	-1.000	2
LUGXSK/LUGCM	0.113	0.762	1.000	2
LUGXCA/LUGCM	-1.409	0.852	-1.000	2
LUGXMG/LUGCM	-1.996	-0.433	-1.000	2
LUGF/LUGCM	-2.583	-0.954	-1.000	2
LUGNO3/LUGCM	-0.305	1.364	-1.000	2
LXSSO4/LOGCM	0.239	2.182	1.000	2
SS/H	-3.291	244.038	-1.000	2
SS/F	22.673	-12.183	1.000	2
SS/XSSO4	-13.766	1588.110	-1.000	2
SS/NU3	30.826	-1007.624	1.000	2
CUND/H	-0.097	56.065	-1.000	2
CUND/NU3	0.904	19.353	1.000	2
CUND/XSSO4	-0.404	95.489	-1.000	2
CL/NA	0.552	36.073	1.000	2
MG/NA	0.138	10.456	1.000	2
NH4/SO4	-3.772	522.563	-1.000	2
NH4/XSSO4	1.087	-37.750	1.000	2
NO3/SO4	1.549	-145.923	1.000	2
NO3/XSSO4	-0.447	84.206	-1.000	2
F/XSSO4	-0.607	70.582	-1.000	2
AMTH/CM	1408.707	-228.144	1.000	2
AMTNU3/CM	255.667	24.278	1.000	2
AMTXSSO4/CM	1313.093	-54.722	1.000	2



Table 371.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 05/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	0.313	21.756	0.421	4
H/SO4	-0.023	28.658	-0.141	4
H/XSSO4	-0.035	29.002	-0.222	4
H/NO3+XSSO4	-0.015	28.581	-0.113	4
H/F	-0.224	28.090	-0.124	4
H/SA	0.341	19.811	0.865	3
HNV/SA	0.719	2.945	1.000	3
H/TA	0.207	16.046	0.717	3
XSCA/XSK	6.722	6.330	0.218	4
XSCA/XSMG	9.339	2.099	0.999	4
XSCA/NU3	2.555	-33.259	0.789	4
XSCA/XSSU4	0.672	-8.430	0.966	4
XSCA/F	7.521	3.699	0.956	4
LUGH/LUGCM	0.180	1.371	0.884	5
LUGNA/LUGCM	-0.329	1.699	-0.313	4
LUGXSK/LUGCM	-0.512	0.274	-0.592	4
LOGXLA/LUGCM	-1.695	1.520	-0.756	4
LUGXMG/LUGCM	-2.760	0.554	-0.665	4
LUGF/LUGCM	-1.255	0.533	-0.841	4
LUGNU3/LUGCM	-0.436	1.418	-0.983	4
LXSSU4/LUGCM	-0.767	1.756	-0.852	4
SS/H	5.424	-94.444	0.791	4
SS/F	-0.431	56.685	-0.035	4
SS/XSSU4	-0.049	57.768	-0.045	4
SS/NU3	1.362	29.968	0.267	4
CUND/H	-2.272	92.075	-0.844	5
CUND/NU3	1.045	7.102	0.986	4
CUND/XSSU4	0.175	20.814	0.770	4
CL/NA	1.168	-0.369	0.999	4
MG/NA	0.243	0.666	0.949	4
NH4/SU4	0.317	18.466	0.700	4
NH4/XSSO4	0.337	19.417	0.743	4
NU3/SU4	0.165	12.371	0.767	4
NU3/XSSO4	0.159	13.433	0.740	4
F/XSSO4	0.087	-1.545	0.989	4
AMTH/CM	259.283	23.459	0.986	5
AMTNU3/CM	98.587	178.703	0.984	4
AMTXSSU4/CM	87.200	490.748	0.604	4

Table 372.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 06/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	2.885	-1.073	0.966	8
H/SU4	1.188	-1.804	0.978	8
H/XSS04	1.298	-0.370	0.979	8
H/NU3+XSS04	0.910	-1.042	0.983	8
H/F	4.550	24.157	0.349	8
H/SA	1.041	-6.439	0.746	3
HNW/SA	1.192	-19.751	0.818	3
H/TA	0.605	9.449	0.948	3
XSCA/XSK	3.031	2.312	0.371	8
XSCA/XSMG	-0.448	4.135	-0.116	8
XSCA/NU3	0.006	3.852	-0.028	8
XSCA/XSSU4	-0.007	4.050	-0.070	8
XSCA/F	-0.243	4.053	-0.258	8
LUGH/LUGCM	-0.315	1.415	-0.363	8
LUGNA/LUGCM	-0.309	1.517	-0.602	8
LUGXSK/LUGCM	-0.062	-0.283	-0.150	8
LUGXCA/LUGCM	0.314	0.461	0.495	8
LUGXMG/LUGCM	-0.099	-0.203	-0.142	8
LUGF/LUGCM	-0.083	0.108	-0.123	8
LUGNU3/LUGCM	-0.206	0.948	-0.234	8
LXSSU4/LUGCM	-0.249	1.287	-0.280	8
SS/H	0.726	14.416	0.724	8
SS/F	-3.979	36.266	-0.304	8
SS/XSSU4	0.957	13.843	0.720	8
SS/NU3	2.451	10.192	0.818	8
CUND/H	0.603	2.152	0.991	8
CUND/NU3	1.781	1.112	0.980	8
CUND/XSSU4	0.794	1.708	0.984	8
CL/NA	1.352	-8.380	0.995	8
MG/NA	0.257	-1.046	0.998	8
VH4/SU4	0.161	1.542	0.548	8
VH4/XSSU4	0.191	1.478	0.594	8
NU3/SU4	0.396	0.130	0.973	8
NU3/XSSU4	0.427	0.720	0.962	8
F/XSSU4	0.029	-0.011	0.283	8
AMTH/CM	256.390	-73.253	0.885	8
AMTNU3/CM	111.367	-58.477	0.924	8
AMTXSSU4/CM	278.831	-208.022	0.887	8

Table 373.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 07/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.853	-8.565	0.884	10
H/SO4	1.264	-3.963	0.993	10
H/XSSO4	1.243	3.150	0.996	10
H/NO3+XSSO4	0.914	-3.728	0.989	10
H/F	28.103	34.593	0.693	10
H/SA	1.132	-5.562	0.992	7
HNV/SA	1.152	-9.670	0.989	7
H/TA	0.996	-24.595	0.990	7
XSCA/XSK	13.424	1.765	0.779	10
XSCA/XSMG	2.919	7.230	0.632	10
XSCA/NO3	0.179	5.071	0.490	10
XSCA/XSSO4	0.027	8.143	0.189	10
XSCA/F	2.255	7.340	0.491	10
LOGH/LUGCM	-0.162	1.676	-0.176	10
LUGNA/LUGCM	-0.084	1.645	-0.253	10
LUGXSK/LUGCM	-0.599	-0.211	-0.741	10
LUGXCA/LUGCM	-0.512	0.994	-0.682	10
LUGXMG/LUGCM	-0.535	0.153	-0.882	10
LUGF/LUGCM	-0.291	0.039	-0.413	10
LUGNO3/LUGCM	-0.369	1.394	-0.649	10
LXSSO4/LUGCM	-0.185	1.559	-0.203	10
SS/H	-0.190	63.812	-0.474	10
SS/F	-1.963	54.206	-0.121	10
SS/XSSO4	-0.217	62.350	-0.434	10
SS/NO3	-0.335	60.461	-0.258	10
CUND/H	0.410	10.852	0.989	10
CUND/NO3	1.209	6.410	0.903	10
CUND/XSSO4	0.513	11.995	0.991	10
CL/NA	1.323	-10.684	0.976	10
MG/NA	0.246	-0.861	0.976	10
NH4/SO4	0.108	-0.352	0.652	10
NH4/XSSO4	0.103	0.392	0.636	10
NO3/SO4	0.348	6.418	0.882	10
NO3/XSSO4	0.339	8.508	0.877	10
F/XSSO4	0.021	-0.075	0.692	10
AMTH/CM	785.596	-469.038	0.813	10
AMTNO3/CM	159.406	68.776	0.829	10
AMTXSSO4/CM	598.664	-361.625	0.796	10

Table 374.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 08/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NU3	1.658	4.935	0.651	5
H/SS04	1.105	-3.593	0.729	5
H/XSS04	1.023	-3.966	0.739	5
H/NU3+XSS04	0.829	-1.147	0.809	5
H/F	-1.891	22.396	-0.044	5
H/SA	-0.149	39.785	-1.000	2
HNV/SA	0.000	33.113	-1.000	2
H/TA	-0.132	41.077	-1.000	2
XSCA/XSK	13.310	-3.171	-0.015	5
XSCA/XSM6	-3.496	11.099	-0.546	5
XSCA/NU3	0.275	5.443	-0.231	5
XSCA/XSSU4	-0.050	9.152	-0.077	5
XSCA/F	-10.886	10.566	-0.543	5
LUGH/LUGCM	0.169	1.298	0.308	5
LUGNA/LUGCM	-0.100	1.653	-0.378	5
LUGXSK/LUGCM	-0.183	-0.102	-0.668	5
LUGXLA/LUGCM	-0.566	0.777	-0.934	5
LUGXMG/LUGCM	0.143	0.094	0.510	5
LUGF/LUGCM	-0.186	-0.132	-0.605	5
LUGNU3/LUGCM	-0.168	0.940	-0.305	5
LXSSU4/LUGCM	-0.002	1.192	-0.003	5
SS/H	-0.557	71.707	-0.307	5
SS/F	-33.485	66.506	-0.431	5
SS/XSSU4	-1.176	80.187	-0.469	5
SS/NU3	-0.215	61.670	-0.047	5
CUND/H	0.154	14.097	0.420	5
CUND/NU3	0.814	9.104	0.872	5
CUND/XSSU4	0.008	17.337	0.016	5
CL/NA	1.256	-5.121	0.984	5
MG/NA	0.240	-0.158	-0.961	5
NH4/SS04	-0.001	2.360	-0.007	5
NH4/XSS04	0.020	1.983	0.110	5
NO3/SS04	0.310	3.112	0.521	5
NO3/XSS04	0.265	5.625	0.487	5
F/XSS04	0.006	0.113	0.171	5
AMTH/CM	359.973	-110.291	0.887	5
AMTNU3/CM	95.988	1.244	0.784	5
AMTXSSU4/CM	293.123	-107.558	0.915	5

Table 375.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 09/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.200	14.865	0.868	8
H/SO4	1.177	-2.964	0.977	8
H/XSS04	1.327	1.062	0.987	8
H/NO3+XSS04	0.705	5.050	0.980	8
H/F	8.939	33.865	0.281	8
H/SA	1.018	0.572	1.000	2
HNV/SA	0.972	0.546	1.000	2
H/TA	0.985	-7.228	1.000	2
XSCA/XSK	4.203	1.778	0.643	8
XSCA/XSMG	-0.178	4.966	-0.032	8
XSCA/NO3	0.241	0.530	0.897	8
XSCA/XSS04	0.153	0.750	0.585	8
XSCA/F	1.007	4.508	0.163	8
LUGH/LUGCM	-0.165	1.429	-0.451	9
LUGNA/LUGCM	-0.256	1.673	-0.890	8
LUGXSK/LUGCM	-0.166	-0.156	-0.444	8
LUGXCA/LUGCM	-0.216	0.477	-0.426	8
LUGXMG/LUGCM	-0.135	-0.021	-0.346	8
LUGF/LUGCM	0.067	0.056	0.428	8
LUGNO3/LUGCM	-0.205	1.083	-0.499	8
LXSS04/LUGCM	-0.216	1.273	-0.495	8
SS/H	0.830	43.147	0.544	8
SS/F	-17.864	77.728	-0.369	8
SS/XSS04	1.132	43.226	0.552	8
SS/NO3	1.161	52.575	0.551	8
COND/H	0.513	8.168	0.939	9
COND/NO3	0.615	14.825	0.848	8
COND/XSS04	0.679	7.774	0.963	8
CL/NA	1.325	-9.118	0.948	8
MG/NA	0.231	0.093	0.999	8
NH4/SO4	0.432	-7.515	0.864	8
NH4/XSS04	0.469	-5.568	0.841	8
NO3/SO4	0.703	-5.680	0.807	8
NO3/XSS04	0.775	-2.791	0.797	8
F/XSS04	0.012	-0.060	0.290	8
AMTH/CM	284.344	13.663	0.770	9
AMTNO3/CM	128.780	0.342	0.795	8
AMTXSS04/CM	196.482	14.846	0.705	8

Table 376.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 10/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	2.988	-0.158	0.907	9
H/SO4	1.039	-1.590	0.770	9
H/XSSO4	1.607	-6.740	0.980	9
H/NO3+XSSO4	1.066	-5.644	0.964	9
H/F	-0.600	57.019	-0.023	9
H/SA	1.327	1.831	0.996	3
HNV/SA	1.230	0.421	0.999	3
H/TA	0.972	-10.028	0.981	3
XSCA/XSK	-0.933	6.961	-0.103	9
XSCA/XSMG	-0.304	6.670	-0.197	9
XSCA/NU3	0.190	2.766	0.652	9
XSCA/XSSU4	0.090	2.803	0.624	9
XSCA/F	0.407	5.539	0.179	9
LUGH/LUGCM	-0.329	1.475	-0.572	10
LOGNA/LOGCM	-0.553	1.718	-0.543	9
LUGXSK/LUGCM	-0.202	-0.277	-0.517	9
LUGXCA/LUGCM	-0.376	0.595	-0.586	9
LUGXMG/LUGCM	-0.419	-0.141	-0.407	9
LUGF/LUGCM	-0.328	0.186	-0.629	9
LUGNU3/LUGCM	-0.574	1.001	-0.841	9
LXSSU4/LUGCM	-0.413	1.385	-0.719	9
SS/H	-0.268	191.614	-0.074	9
SS/F	66.354	47.455	0.662	9
SS/XSSU4	0.657	149.897	0.103	9
SS/NU3	3.515	109.610	0.274	9
CUNO/H	0.276	25.703	0.485	10
CUNO/NU3	1.355	17.094	0.734	9
CUNO/XSSU4	0.569	20.308	0.620	9
CL/NA	1.087	3.627	0.996	9
MG/NA	0.220	0.426	0.999	9
NH4/SO4	0.154	-1.415	0.845	9
NH4/XSSO4	0.218	-1.411	0.987	9
NO3/SO4	0.378	-2.174	0.923	9
NO3/XSSO4	0.477	0.146	0.959	9
F/XSSO4	0.003	1.831	0.040	9
AMTH/CM	161.057	151.999	0.581	10
AMTNO3/CM	36.413	57.205	0.698	9
AMTSSU4/CM	117.163	117.421	0.689	9

Table 377.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT  $CM^2$   
 $CM$  PRECIPITATION AND  $AMT=$ MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 11/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	1.721	4.307	0.680	5
H/SO4	0.782	5.799	0.760	5
H/XSSO4	1.711	-3.138	0.917	5
H/NO3+XSSO4	1.264	-13.094	0.980	5
H/F	29.242	18.704	0.744	5
H/SA	0.000	0.000	0.000	0
HNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	1.869	4.819	0.381	5
XSCA/XSMG	0.879	4.556	0.894	5
XSCA/NO3	0.093	5.657	0.307	5
XSCA/XSSO4	0.155	3.510	0.694	5
XSCA/F	1.512	6.209	0.321	5
LOGH/LOGCM	-0.518	1.219	-0.876	5
LOGNA/LOGCM	-0.028	1.986	-0.021	5
LOGXSK/LOGCM	-0.340	-0.106	-0.587	5
LOGXLA/LOGCM	-0.175	0.737	-0.332	5
LOGXMG/LOGCM	-0.022	0.315	-0.020	5
LOGF/LOGCM	-0.114	-0.064	-0.265	5
LOGNO3/LOGCM	-0.639	0.836	-0.838	5
LXSSO4/LOGCM	-0.477	-1.104	-0.871	5
SS/H	2.654	79.066	0.473	5
SS/F	-13.296	180.129	-0.060	5
SS/XSSO4	7.168	8.857	0.685	5
SS/NO3	-4.332	247.888	-0.305	5
CUND/H	0.597	15.352	0.742	5
CUND/NO3	0.061	36.146	0.030	5
CUND/XSSO4	1.266	7.315	0.844	5
CL/NA	1.041	2.640	0.998	5
MG/NA	0.224	0.323	1.000	5
NH4/SO4	-0.001	0.262	-0.052	5
NH4/XSSO4	-0.013	0.534	-0.386	5
NO3/SO4	0.017	15.521	0.041	5
NO3/XSSO4	0.274	4.727	0.373	5
F/XSSO4	0.023	0.099	0.477	5
AMTH/CM	130.050	46.926	0.920	5
AMTNO3/CM	30.681	36.912	0.533	5
AMTXSSO4/CM	106.686	31.203	0.976	5

Table 378.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 12/78 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NU3	3.555	-9.892	0.982	3
H/SU4	0.829	-10.808	1.000	3
H/XSSU4	0.964	-4.212	0.993	3
H/NU3+XSSU4	0.759	-5.490	0.991	3
H/F	21.983	24.142	0.966	3
H/SA	0.000	0.000	0.000	0
MNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XSK	7.016	-3.413	0.956	3
XSCA/XSMG	-0.837	11.566	-0.071	3
XSCA/NU3	0.192	4.791	0.519	3
XSCA/XSSU4	0.045	5.610	0.454	3
XSCA/F	0.214	8.513	0.092	3
LOGH/LOGCM	-0.361	1.303	-0.739	4
LOGNA/LOGCM	-0.024	2.203	-0.095	3
LOGXSK/LOGCM	-0.255	0.081	-0.991	3
LOGXCA/LOGCM	-0.379	0.665	-0.961	3
LOGXMG/LOGCM	0.041	0.511	0.551	3
LUGF/LUGCM	-0.114	0.099	-0.247	3
LOGNU3/LUGCM	-0.505	0.926	-0.976	3
LXSSU4/LUGCM	-0.574	1.381	-0.971	3
SS/H	1.957	82.879	0.850	3
SS/F	50.203	116.296	0.956	3
SS/XSSU4	1.751	84.669	0.783	3
SS/NU3	6.131	81.321	0.736	3
CUND/H	0.534	20.109	0.969	4
CUND/NU3	1.946	11.317	0.931	3
CUND/XSSU4	0.535	13.869	0.956	3
CL/NA	1.147	-21.649	0.998	3
MG/NA	0.220	-0.228	0.998	3
NH4/SU4	0.106	1.195	0.930	3
NH4/XSSU4	0.129	1.634	0.965	3
NU3/SU4	0.225	0.496	0.983	3
NU3/XSSU4	0.268	1.676	0.997	3
F/XSSU4	0.040	-0.977	0.924	3
AMH/CM	72.488	51.946	0.987	4
AMINU3/CM	27.469	23.619	0.998	3
AMIXSSU4/CM	64.612	84.249	0.994	3



Table 379.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 01/79 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR.CDEF.	NO.
H/NU3	2.073	4.033	0.998	4
H/SU4	0.883	-0.038	0.999	4
H/XSSU4	0.854	5.817	0.999	4
H/NU3+XSSU4	0.605	5.288	0.999	4
H/F	29.011	21.396	0.974	4
H/SA	1.091	-1.474	1.000	2
HNV/SA	0.894	1.952	1.000	2
H/TA	0.664	2.329	1.000	2
XSCA/XSK	2.688	10.332	0.153	4
XSCA/XSMG	14.749	-28.028	0.858	4
XSCA/NU3	1.156	-5.673	0.992	4
XSCA/XSSU4	0.473	-4.551	0.987	4
XSCA/F	16.702	3.671	0.999	4
LUGH/LUGCM	-0.502	1.585	-0.910	4
LOGNA/LOGCM	0.097	1.635	0.260	4
LUGXSK/LUGCM	0.139	0.064	0.264	4
LUGXCA/LUGCM	-0.635	0.980	-0.775	4
LUGXMG/LUGCM	-0.227	0.481	-0.809	4
LUGF/LUGCM	-0.211	0.153	-0.898	4
LUGNU3/LUGCM	-0.536	1.204	-0.903	4
LXSSU4/LUGCM	-0.614	1.554	-0.928	4
SS/H	-0.404	73.570	-0.442	4
SS/F	-17.182	68.534	-0.832	4
SS/XSSU4	-0.367	72.108	-0.470	4
SS/NU3	-0.949	73.909	-0.500	4
CUND/H	0.438	8.645	0.970	4
CUND/NU3	0.894	10.659	0.953	4
CUND/XSSU4	0.372	11.298	0.963	4
CL/NA	1.065	-3.325	0.998	4
MG/NA	0.202	2.574	0.972	4
NH4/SU4	0.368	-4.676	0.973	4
NH4/XSSU4	0.360	-2.416	0.986	4
NU3/SU4	0.423	-1.833	0.995	4
NU3/XSSU4	0.411	0.899	0.999	4
F/XSSU4	0.028	-0.484	0.980	4
AMTH/CM	128.374	176.760	0.994	4
AMTNU3/CM	47.441	83.857	0.992	4
AMTXSSU4/CM	83.421	213.470	0.987	4

Table 380.

LINEAR CORRELATION BASED ON  $Y=MX+B$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 METER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 02/79 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CORR. COEF.	NO.
H/NO3	-1.165	62.726	-0.280	4
H/SO4	0.128	31.994	0.303	4
H/XSSO4	0.652	8.390	0.837	4
H/NO3+XSSO4	0.564	2.339	0.754	4
H/F	4.217	24.478	0.809	4
H/SA	2.887	-98.794	1.000	2
HNV/SA	3.635	-141.476	1.000	2
H/TA	0.111	44.333	1.000	2
XSCA/XSK	-1.361	11.391	-0.310	4
XSCA/XSM6	0.079	10.879	0.275	4
XSCA/NO3	-0.127	12.761	-0.119	4
XSCA/XSSO4	-0.150	17.968	-0.758	4
XSCA/F	-1.213	15.201	-0.913	4
LOGH/LOGCM	-0.131	1.543	-0.252	4
LOGNA/LOGCM	-1.101	1.689	-0.885	4
LOGXSK/LOGCM	-0.073	-0.018	-0.145	4
LOGXCA/LOGCM	0.130	1.024	0.310	4
LOGXMG/LOGCM	0.361	0.216	0.609	4
LOGF/LOGCM	-0.456	0.309	-0.381	4
LOGNO3/LOGCM	-0.187	1.212	-0.892	4
LXSSO4/LOGCM	-0.345	1.564	-0.570	4
SS/H	-3.881	383.022	-0.210	4
SS/F	-11.107	267.261	-0.115	4
SS/XSSO4	3.014	72.077	0.210	4
SS/NO3	76.516	-1195.908	0.997	4
COND/H	-0.060	52.587	-0.025	4
COND/NO3	9.676	-129.362	0.956	4
COND/XSSO4	0.696	15.195	0.371	4
CL/NA	1.129	-0.208	1.000	4
MG/NA	0.162	4.414	0.999	4
NH4/SO4	0.010	14.155	0.077	4
NH4/XSSO4	0.169	6.344	0.742	4
NO3/SO4	0.082	12.746	0.800	4
NO3/XSSO4	0.024	17.340	0.129	4
F/XSSO4	0.072	0.357	0.478	4
AMT H/CM	193.916	131.921	0.521	4
AMT NO3/CM	163.197	5.229	0.995	4
AMT XSSO4/CM	149.149	192.579	0.412	4

Table 381.

LINEAR CORRELATION BASED ON  $Y=MX+H$   
 BETWEEN SELECTED RAIN COMPONENTS. ALL UNITS  
 ARE MICROEQUIVALENTS/LITER EXCEPT CM=  
 CM PRECIPITATION AND AMT=MICROEQUIVALENTS/SQ.  
 MEIER.  
 CLEAN AND SLIGHTLY DIRTY SAMPLES COLLECTED  
 DURING 03/79 AT KSC SITE 19 ARE INCLUDED.

Y/X	SLOPE	Y-INT.	CURR. COEF.	NO.
H/NO3	-0.413	28.104	-1.000	2
H/SO4	-0.112	25.928	-1.000	2
H/XSSO4	-0.167	26.606	-1.000	2
H/NO3+XSSO4	-0.119	27.038	-1.000	2
H/F	1.534	14.559	1.000	2
H/SA	0.000	0.000	0.000	0
HNV/SA	0.000	0.000	0.000	0
H/TA	0.000	0.000	0.000	0
XSCA/XJK	2.729	-1.885	1.000	2
XSCA/XMG	0.867	-0.634	1.000	2
XSCA/NO3	1.500	-17.649	1.000	2
XSCA/XSSU4	0.607	-12.207	1.000	2
XSCA/F	-5.576	31.569	-1.000	2
LUGH/LUGCM	-0.127	1.358	-0.422	2
LUGNA/LUGCM	-0.784	1.696	-1.000	2
LOGXJK/LUGCM	-1.172	0.011	-1.000	2
LOGXCA/LUGCM	-1.203	0.386	-1.000	2
LOGXMG/LUGCM	-1.269	0.407	-1.000	2
LOGF/LUGCM	0.500	0.602	1.000	2
LUGNO3/LUGCM	-0.335	1.160	-1.000	2
LXSSU4/LUGCM	-0.428	1.415	-1.000	2
SS/H	-31.847	782.504	-1.000	2
SS/F	-48.867	318.844	-1.000	2
SS/XSSU4	5.320	-64.818	1.000	2
SS/NO3	13.149	-112.513	1.000	2
COND/H	4.346	-53.568	0.927	3
COND/NO3	1.790	-3.206	1.000	2
COND/XSSU4	0.724	3.285	1.000	2
CL/NA	1.005	5.033	1.000	2
MG/NA	0.343	-3.301	1.000	2
NH4/SO4	0.441	-6.490	1.000	2
NH4/XSSO4	0.060	-9.166	1.000	2
NO3/SO4	0.270	5.269	1.000	2
NO3/XSSO4	0.405	3.627	1.000	2
F/XSSO4	-0.109	7.851	-1.000	2
AMTH/CM	232.063	4.304	0.999	3
AMTNO3/CM	100.266	26.447	1.000	2
AMTXSSU4/CM	158.183	65.339	1.000	2

Table 382.

Concentration of Various Nutrients Present in Soil Samples collected in July, 1976, September, 1976, December, 1976, and March, 1977, from Merritt Island Plant Communities. Concentrations reported are parts per million(ppm) except for percent Organic matter, Ion Exchange Capacity in milliequivalents per 100g, and percent Nitrogen.

DATA TYPE	SITE	EXP NO	DATE	PH	NA	K	CA	MG	AL	NH3	P	CL	NO3	SO4	% ORG	IEC	% N
01	01	01	9/07/76	4.2	18	23.2	156	70.0	48	.50	1.68	7.5	.0	15.0	4.37	8.45	.054
01	01	01	1/09/76	4.1	30	18.0	280	67.0	20	1.06	2.48	10.1	8.2	.0	4.85	6.33	.061
01	01	01	10/12/76	3.9	48	18.0	260	68.4	22	.63	1.00	12.1	9.4	.0	7.26	9.05	.067
01	01	01	18/03/77	4.2	42	18.0	266	64.0	20	.19	.00	18.5	5.1	.0	4.89	5.71	.066
01	01	02	18/03/77	4.1	40	14.0	025H	60.0	14	.20	.00	17.0	.0	.0	3.61	4.26	.043
01	01	03	18/03/77	4.0	42	17.0	298	69.0	22	.23	.00	20.5	5.1	.0	3.21	4.30	.047
01	01	04	18/03/77	3.9	42	18.0	326	77.0	24	.18	.60	16.3	5.7	.0	6.28	5.18	.072
01	02	01	9/07/76	7.9	164	45.2	>1999	636.0	0	63.00	10.10	115.0	16.5	61.0	19.70	20.70	.361
01	02	01	1/09/76	8.5	210	22.0	>1999	>799.9	0	22.30	4.24	87.5	5.1	60.5	20.40	28.00	.324
01	02	01	10/12/76	8.0	218	19.0	>1999	>799.9	4	1.83	6.30	107.0	19.8	29.4	25.50	23.80	.279
01	02	01	18/03/77	8.4	126	17.0	>1999	>799.9	00	9.00	5.70	64.0	21.6	42.0	16.60	11.00	.245
01	02	02	18/03/77	8.3	142	19.0	>1999	>799.9	00	12.80	7.60	89.0	22.2	67.3	35.10	15.00	.325
01	02	03	18/03/77	8.5	230	18.0	>1999	>799.9	00	10.40	5.70	136.0	22.8	60.5	33.00	13.20	.123
01	02	04	18/03/77	8.6	182	16.0	>1999	>799.9	00	7.72	9.60	148.0	19.8	59.2	22.40	9.72	.281
01	04	01	9/07/76	4.6	20	11.2	168	19.6	8	3.00	1.68	10.5	2.5	.0	.96	1.00	.017
01	04	01	1/09/76	4.3	34	11.0	132	23.0	4	.89	.76	10.7	7.0	.0	1.86	1.81	.020
01	04	01	10/12/76	5.5	52	14.0	100	18.8	6	.45	.70	8.7	11.2	.0	1.18	1.50	.008
01	04	01	18/03/77	5.7	33	8.0	150	18.0	6	.16	1.00	21.4	12.4	.0	.88	.81	.011
01	04	02	18/03/77	4.5	33	10.0	176	23.0	8	.18	.00	13.5	17.3	.0	1.28	.81	.014
01	04	03	18/03/77	4.4	38	9.0	160	20.0	6	.26	.00	20.9	13.0	.0	1.16	.97	.017
01	04	04	18/03/77	4.5	35	9.0	170	20.0	6	.14	.00	11.9	11.8	.0	1.23	.89	.015
01	05	01	9/07/76	4.1	18	8.8	96	18.8	12	4.00	.48	7.0	.0	80.5	2.30	3.21	.017
01	05	01	1/09/76	4.0	32	10.0	100	24.0	4	.00	1.04	8.3	10.0	12.0	1.42	2.17	.026
01	05	01	10/12/76	4.3	45	11.0	116	17.2	8	1.00	.30	11.1	14.3	.0	1.32	2.22	.020
01	05	01	18/03/77	3.9	40	10.0	142	23.0	12	.20	.00	10.3	15.7	.0	3.02	1.36	.021
01	05	02	18/03/77	4.0	36	9.0	128	20.0	12	.18	.00	24.0	5.1	.0	1.55	1.78	.023
01	05	03	18/03/77	3.8	38	9.0	126	23.0	8	.17	.00	10.8	9.4	.0	.00	1.34	.024
01	05	04	18/03/77	4.1	30	9.0	114	20.0	10	.28	.00	11.7	10.6	.0	1.29	1.09	.028
01	06	01	16/07/76	4.2	18	11.2	82	12.2	88	3.50	.76	8.0	.0	8.5	1.26	1.34	.018
01	06	01	1/09/76	4.1	28	10.0	94	15.0	16	1.19	.00	8.5	9.4	.0	1.56	1.31	.009
01	06	01	10/12/76	4.1	50	12.0	86	12.4	24	1.58	1.40	12.1	14.9	4.3	1.52	1.22	.023
01	06	01	18/03/77	4.1	28	7.0	88	12.0	18	.14	2.10	7.8	20.4	.0	5.10	.67	.017
01	06	02	18/03/77	4.2	32	7.0	96	12.0	26	.16	1.50	8.1	12.4	.0	1.19	.75	.010
01	06	03	18/03/77	4.0	32	9.0	96	14.0	26	.16	3.40	8.1	10.6	.0	1.47	1.29	.025
01	06	04	18/03/77	4.1	35	7.0	88	12.0	20	.20	1.00	7.3	10.6	.0	3.20	.64	.009
01	07	01	26/07/76	7.6	999	180.0	>1999	756.0	0	30.00	6.80	750.0	9.0	440.0	15.50	18.10	.372
01	07	01	1/09/76	7.5	670	121.0	>1999	668.0	0	22.30	3.80	549.0	2.7	85.7	16.30	23.80	.390
01	07	01	10/12/76	6.0	168	16.0	>1999	276.0	130	7.06	>55.99	83.0	39.3	36.1	10.80	17.60	.249
01	07	01	18/03/77	7.5	268	12.0	>1999	636.0	00	7.16	.60	233.0	34.8	42.5	11.40	10.80	.206
01	07	02	18/03/77	7.9	352	84.0	>1999	620.0	00	7.30	.60	340.0	20.4	130.0	11.50	7.64	.205
01	07	03	18/03/77	7.5	310	84.0	>1999	644.0	02	3.26	3.90	297.0	3.9	168.0	26.50	11.00	.292
01	07	04	18/03/77	7.7	376	104.0	>1999	628.0	02	7.14	1.50	412.0	34.4	42.5	36.70	11.40	.232
01	09	01	26/07/76	5.3	48	20.8	1840	172.0	136	9.80	>55.99	21.5	.0	1.5	6.72	13.40	.195
01	09	01	1/09/76	6.7	430	29.0	>1999	152.0	56	25.10	18.00	495.0	>99.9	84.1	12.60	28.00	.538
01	09	01	10/12/76	6.7	550	108.0	>1999	772.0	4	1.77	16.10	490.0	83.8	151.0	12.40	14.00	.268
01	09	01	18/03/77	6.2	47	16.0	>1999	300.0	114	9.51	>55.99	114.0	>99.9	.0	10.80	11.40	.186
01	09	02	18/03/77	6.4	120	16.0	>1999	340.0	120	2.58	>55.99	83.8	5.7	.0	8.39	9.82	.195
01	09	03	18/03/77	5.7	82	15.0	>1999	252.0	120	4.84	>55.99	70.0	.0	.0	9.50	10.70	.153
01	09	04	18/03/77	5.8	110	18.0	>1999	316.0	124	3.07	>55.99	129.0	>99.9	.0	13.00	12.00	.330
01	10	01	26/07/76	4.4	27	11.2	200	40.4	20	3.80	6.12	6.5	2.5	8.0	3.29	4.14	.048
01	10	01	1/09/76	4.5	32	8.0	1900	27.0	8	1.12	1.36	6.9	8.2	.0	1.66	2.55	.023
01	10	01	10/12/76	4.5	52	8.0	166	34.0	14	6.29	2.80	13.7	32.0	.0	1.94	3.00	.026

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Table 382. Concentration of Various Nutrients Present in Soil Samples collected in July, 1976, September, 1976, December, 1976, and March, 1977, from Merritt Island Plant Communities. Concentrations reported are parts per million (ppm) except for percent Organic matter, Ion Exchange Capacity in milliequivalents per 100g, and percent Nitrogen.

DATA TYPE	SITE	EXP NO	DATE	PH	NA	K	CA	MG	AL	NH3	P	CL	NO3	SO4	% ORG	IEC	% N
01	10	01	18/03/77	4.2	44	11.0	292	45.0	18	.28	1.00	21.9	2.7	.0	2.46	2.26	.026
01	10	02	18/03/77	4.1	35	10.0	312	48.0	20	.20	3.10	20.5	2.7	.0	2.12	3.08	.022
01	10	03	18/03/77	4.0	42	14.0	300	51.0	22	.34	1.50	24.2	5.7	.0	2.71	3.31	.008
01	10	04	18/03/77	4.0	40	10.0	278	53.0	16	.38	.60	18.9	.0	.0	2.62	2.74	.028
01	91	01	9/07/76	8.0	84	20.8	>1999	30.0	8	4.00	>55.99	16.5	1.6	.0	5.70	.50	.016
01	91	01	1/09/76	7.8	96	11.0	>1999	35.0	4	2.98	>55.99	18.5	33.2	.0	5.16	.77	.019
01	91	01	10/12/76	7.2	105	8.0	>1999	30.0	8	2.51	>55.99	12.4	29.5	4.3	5.01	.30	.013
01	91	01	18/03/77	7.5	97	6.0	>1999	35.0	06	.69	34.80	8.5	12.4	.0	4.93	.27	.009
01	92	01	9/07/76	8.5	84	14.0	>1999	31.6	8	.50	42.40	7.5	.0	23.5	4.90	.14	.010
01	92	01	1/09/76	8.5	92	4.0	>1999	33.0	4	2.51	>55.99	8.3	24.6	.0	4.86	.35	.016
01	92	01	10/12/76	8.2	101	6.0	>1999	33.2	6	1.99	46.10	9.9	17.9	.0	4.70	.00	.018
01	92	01	18/03/77	8.2	96	5.0	>1999	40.0	04	.27	46.20	7.7	15.5	.0	7.01	.21	.009
01	92	02	18/03/77	8.5	104	4.0	>1999	40.0	04	.32	43.70	9.4	23.4	.0	6.34	.33	.013
01	92	03	18/03/77	8.6	96	4.0	>1999	38.0	08	.31	>55.99	7.7	22.2	.0	6.43	.26	.011
01	92	04	18/03/77	8.7	84	4.0	>1999	33.0	02	.31	39.20	8.6	16.1	.0	5.13	.30	.009
01	93	01	9/07/76	8.5	72	11.2	>1999	35.6	4	3.00	17.40	6.5	2.5	1.5	6.94	.16	.005
01	93	01	1/09/76	8.6	92	3.0	>1999	40.0	0	1.77	21.90	11.5	11.2	.0	5.85	.79	.008
01	93	01	10/12/76	8.3	103	6.0	>1999	42.0	6	1.88	24.50	19.3	24.0	4.3	5.71	.19	.008
01	93	01	18/03/77	8.7	96	4.0	>1999	40.0	02	.21	45.00	11.6	.0	.0	6.38	.26	.008
01	94	01	26/07/76	5.4	12	11.2	96	15.6	124	.50	8.60	16.5	.0	.0	1.36	2.38	.018
01	94	01	1/09/76	5.8	36	6.0	90	8.0	116	.56	7.88	6.5	16.1	8.0	1.21	1.72	.017
01	94	01	10/12/76	5.1	40	6.0	80	10.0	120	1.33	10.50	9.4	12.4	.0	1.27	1.98	.019
01	94	01	18/03/77	5.0	32	4.0	116	10.0	134	.24	15.10	5.1	10.6	.0	1.01	.64	.014
01	94	02	18/03/77	4.8	32	4.0	116	11.0	138	.22	12.80	12.7	.0	.0	2.05	.68	.012
01	94	03	18/03/77	4.7	32	4.0	116	12.0	132	.25	12.20	7.3	14.9	.0	1.51	1.03	.017
01	94	04	18/03/77	4.6	36	4.0	108	14.0	134	.21	12.20	6.8	11.8	.0	1.94	1.18	.022
01	95	01	10/12/76	4.8	40	8.0	128	19.6	62	.00	3.50	8.6	13.0	.0	1.30	.00	.000

A-384

79 RECORDS PRINTED

Table 383.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES

SITE=01				ELE=NA		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
12.17	2.22	80.17	5.22	1795	1518	1240
40.35	14.25	80.17	5.22	6811	5033	3256
18.83	1.31	80.17	5.22	2513	2349	2186
11.13	1.36	80.17	5.22	1558	1389	1220
11.07	2.69	80.17	5.22	1716	1380	1045

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

A-385

Table 384.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-386

SITE=01				ELE=CA		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
185 70	15 47	178 77	9 71	1 1253	1 0388	9523
199 57	11 84	178 77	9 71	1 1826	1 1164	1 0501
199 77	39 29	178 77	9 71	1 3372	1 1175	8977
51 27	7 09	178 77	9 71	3264	2868	2471
5.83	2 02	178.77	9 71	0439	0326	0213

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 385.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-387

SITE=01				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
68 89	8 94	81 72	3 88	9524	8430	7336
66 63	2 11	81 72	3 88	8412	8154	7896
79 89	14 20	81 72	3 88	1 1515	9777	8039
54 00	1 82	81 72	3.88	6831	6608	6385
6 40	2 88	81 72	3 88	1136	0783	0431

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)



A-388

Table 386.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=01				ELE=AL		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
69 20	8 27	257 77	7 11	3005	2685	2364
58 63	5 24	257 77	7 11	2478	2275	.2071
16 90	1 40	257 77	7.11	.0710	0656	0601
00	00	257 77	7.11	0000	0000	0000
00	00	257 77	7 11	0000	0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 387.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-389

SITE=01				ELE=FE		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
61 60	4.19	235 83	6.74	2790	2612	2434
20.16	61	235 83	6 74	0881	0855	0829
2 64	21	235 83	6 74	0121	0112	0103
00	00	235.83	6.74	0000	0000	0000
00	00	235 83	6 74	0000	0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

A-330

Table 388.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=01				ELE=NI		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1 52	1 02	11 04	12	2300	1380	0460
1 58	33	11.04	12	1721	1427	1132
2 08	38	11.04	12	.2227	1881	1535
1 00	00	11.04	12	.0906	0906	0906
97	97	11 04	12	1757	0879	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 389.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-391

SITE=01				ELE=ZN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
11.69	4.63	3.25	.99	5.0174	3.5932	2.1691
6.12	2.61	3.25	.99	2.6820	1.8801	1.0782
5.10	1.63	3.25	.99	2.0673	1.5666	1.0659
2.75	1.75	3.25	.99	1.3842	.8453	.3064
.80	.27	3.25	.99	.3289	.2459	.1629

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 390.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-392

SITE=02				ELE=NA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
194 73	11 44	697 83	36 89	2955	2791	2627
165.37	17 78	697 83	36 89	2624	2370	2115
180 27	1 02	697 83	36 89	2598	2583	2569
285 23	178 04	697 83	36 89	6639	4087	1536
142 57	5 36	697 83	36 89	2120	2043	1966

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 391.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-393

SITE=02				ELE=CA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
69640.0	2120.00	50108.3	622.22	1.4321	1.3898	1.3475
22876.7	1535.56	50108.3	622.22	.4872	.4565	.4259
2202.33	104.22	50108.3	622.22	.0460	.0440	.0419
397.00	47.73	50108.3	622.22	.0089	.0079	.0070
313.70	8.47	50108.3	622.22	.0064	.0063	.0061

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 392.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-394

SITE=02				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
705 17	33 64	122.88	99	6 0123	5 7385	5 4647
470 10	87 87	122.88	99	4.5406	3 8256	3 1105
346 53	65 76	122.88	99	3 3551	2 8200	2 2849
97 93	10 36	122.88	99	8812	7970	7127
74 80	98	122.88	99	6167	6087	6007

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 393.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-395

SITE=02				ELE=AL		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
351 13	23.84	3105.83	99.56	1207	1131	1054
5 60	00	3105.83	99.56	.0018	0018	0018
00	00	3105.83	99.56	.0000	0000	0000
00	00	3105.83	99.56	0000	.0000	0000
00	00	3105.83	99.56	0000	0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)



Table 394.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-396

SITE=02				ELE=FE		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
45 50	2 88	1213 00	45 00	0399	0375	0351
1 53	86	1213 00	45.00	0020	0013	0006
1 34	1 12	1213.00	45.00	0020	0011	0002
00	00	1213.00	45 00	0000	0000	0000
64	00	1213 00	45 00	0005	0005	0005

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 395.

A-397

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=02				ELE=MN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
34.28	.96	59.90	1.47	.5883	.5723	5564
4.40	1.58	59.90	1.47	.0997	.0734	0471
1.46	1.46	59.90	1.47	.0487	.0244	0000
00	00	59.90	1.47	.0000	.0000	0000
00	00	59.90	1.47	0000	0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

A-398

Table 396

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=02				ELE=NI		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
96	96	3.90	2.60	4902	2451	0000
54	54	3.90	2.60	.2772	1386	0000
00	00	3.90	2.60	0000	0000	0000
76	76	3.90	2.60	3901	1950	0000
1 28	40	3.90	2.60	4311	3285	2258

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

A-399

Table 397.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=02				ELE=ZN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
7.67	2 17	4 92	.19	1 9991	1 5586	1 1180
2 54	00	4 92	.19	5159	5159	5159
1.34	00	4 92	.19	.2722	.2722	.2722
15	10	4.92	19	.0506	0298	0090
28	19	4.92	19	0959	0575	.0192

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

A-400

Table 398.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=02				ELE=C0		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1 91	13	10 22	10 22	1994	1870	1746
00	.00	10 22	10.22	.0000	0000	0000
11	11	10 22	10.22	0225	0113	0000
00	00	10 22	10.22	0000	0000	0000
00	00	10 22	10 22	0000	0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

A-401

Table 399.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=02				ELE=PB		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
6.31	.63	99.63	.48	.0697	.0634	.0571
.00	.00	99.63	.48	.0000	.0000	.0000
.00	.00	99.63	.48	.0000	.0000	.0000
.00	.00	99.63	.48	.0000	.0000	.0000
.00	.00	99.63	.48	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-402

Table 400.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=02				ELE=M0		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
3.82	.96	7.57	5.05	.6310	.5048	.3787
1.99	.00	7.57	5.05	.2628	.2628	.2628
4.52	4.52	7.57	5.05	1.1937	.5968	.0000
.00	.00	7.57	5.05	.0000	.0000	.0000
.00	.00	7.57	5.05	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 401.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-403

SITE=03				ELE=NA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
530.07	20.11	652.17	45.22	.8436	.8128	.7819
232.53	5.69	652.17	45.22	.3653	.3566	.3478
36.30	3.27	652.17	45.22	.0607	.0557	.0507
14.00	3.47	652.17	45.22	.0268	.0215	.0162
5.33	.71	652.17	45.22	.0093	.0082	.0071

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).



A-404

Table 402.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=03				ELE=CA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
59043	3 2815.55	44975	0 3423.33	1.3754	1.3128	1 2502
23373	3 817.78	44975	0 3423.33	.5379	.5197	.5015
3015.67	62.89	44975	0 3423.33	.0685	.0671	.0657
370.43	9.96	44975	0 3423.33	.0085	.0082	.0080
81.47	2.69	44975	0 3423.33	.0019	.0018	.0018

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 403.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-405

SITE=03				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
165.63	9.98	326.95	18.93	.5371	.5066	.4761
80.62	10.15	326.95	18.93	.2776	.2466	.2155
31.58	4.68	326.95	18.93	.1109	.0966	.0823
30.34	5.72	326.95	18.93	.1103	.0928	.0753
8.84	.90	326.95	18.93	.0298	.0270	.0243

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION) .  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-406

Table 404.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=03				ELE=AL		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
77.30	6.47	1390.67	363.56	.0602	.0556	.0509
1.95	1.95	1390.67	363.56	.0028	.0014	.0000
.00	.00	1390.67	363.56	.0000	.0000	.0000
.00	.00	1390.67	363.56	.0000	.0000	.0000
.00	.00	1390.67	363.56	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 405.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=03				ELE=FE		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
217.20	4.20	1492.33	356.44	.1484	.1455	.1427
3.27	1.79	1492.33	356.44	.0034	.0022	.0010
.65	.04	1492.33	356.44	.0005	.0004	.0004
.00	.00	1492.33	356.44	.0000	.0000	.0000
.00	.00	1492.33	356.44	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-407

A-408

Table 406.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=03				ELE=MN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
5.91	41	51.88	21.65	.1218	.1139	.1061
3.19	31	51.88	21.65	.0675	.0616	.0556
.00	.00	51.88	21.65	.0000	.0000	.0000
.00	.00	51.88	21.65	.0000	.0000	.0000
.00	.00	51.88	21.65	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)

FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)

AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 407.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-409

SITE=03				ELE=NI		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
.00	.00	5.81	.44	.0000	.0000	.0000
.00	.00	5.81	.44	.0000	.0000	.0000
.00	.00	5.81	.44	.0000	.0000	.0000
1.02	.68	5.81	.44	.2928	.1757	.0586
1.29	.32	5.81	.44	.2773	.2222	.1670

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-410

Table 408.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=03				ELE=ZN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
9.45	3.72	3.66	.28	3.5913	2.5775	1.5637
5.88	2.52	3.66	.28	2.2916	1.6053	.9189
4.67	4.08	3.66	.28	2.3896	1.2751	.1607
25.13	7.75	3.66	.28	8.9720	6.8577	4.7434
3.41	.32	3.66	.28	1.0156	.9295	.8434

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 409.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=03				ELE=CO		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1.41	1.41	.76	.76	3.7105	1.8553	.0000
2.47	2.47	.76	.76	6.5132	3.2566	.0000
.00	.00	.76	.76	.0000	.0000	.0000
.11	.11	.76	.76	.2763	.1382	.0000
.12	.12	.76	.76	.3158	.1579	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-411



Table 410.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-412

SITE=03				ELE=PB		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
5.25	.88	99.99	.00	.0613	.0525	.0438
.00	.00	99.99	.00	.0000	.0000	.0000
.00	.00	99.99	.00	.0000	.0000	.0000
.00	.00	99.99	.00	.0000	.0000	.0000
.00	.00	99.99	.00	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 411.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-413

SITE=03				ELE=M0		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
2.29	.00	10.66	.00	.2148	.2148	.2148
.00	.00	10.66	.00	.0000	.0000	.0000
.00	.00	10.66	.00	.0000	.0000	.0000
.00	.00	10.66	.00	.0000	.0000	.0000
.00	.00	10.66	.00	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 412.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=04		ELE=NA				
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
7.83	1.51	281.57	47.38	.0332	.0278	.0225
6.40	1.00	281.57	47.38	.0263	.0227	.0192
8.93	3.44	281.57	47.38	.0440	.0317	.0195
6.43	2.98	281.57	47.38	.0334	.0228	.0123
5.77	1.36	281.57	47.38	.0253	.0205	.0157

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 413.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-415

SITE=04				ELE=CA		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
60.93	2.51	302.50	76.93	.2097	.2014	.1931
117.73	30.04	302.50	76.93	.4885	.3892	.2899
86.17	23.16	302.50	76.93	.3614	.2848	.2083
46.27	6.09	302.50	76.93	.1731	.1529	.1328
11.80	3.60	302.50	76.93	.0509	.0390	.0271

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 414.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-416

SITE=04				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
25.22	1.34	79.58	12.39	.3338	.3169	3001
15.44	.02	79.58	12.39	.1944	.1941	.1937
18.78	3.64	79.58	12.39	.2818	.2360	.1902
14.04	.74	79.58	12.39	.1858	.1765	.1671
13.29	5.25	79.58	12.39	.2330	.1670	1011

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 415.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-417

SITE=04				ELE=AL		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
9.17	.56	1040.50	171.33	.0093	.0088	.0083
8.07	.18	1040.50	171.33	.0079	.0078	.0076
3.10	.00	1040.50	171.33	.0030	.0030	.0030
.00	.00	1040.50	171.33	.0000	.0000	.0000
.00	.00	1040.50	171.33	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 416.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-418

SITE=04				ELE=FE		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
9.91	.50	1078.67	364.78	.0096	.0092	.0087
5.79	.96	1078.67	364.78	.0063	.0054	.0045
2.02	.48	1078.67	364.78	.0023	.0019	.0014
.00	.00	1078.67	364.78	.0000	.0000	.0000
.00	.00	1078.67	364.78	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 417.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-419

SITE=04				ELE=NI		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1.27	.27	8.97	1.71	.1717	.1410	.1104
1.53	.40	8.97	1.71	.2152	.1706	.1260
.72	.72	8.97	1.71	.1594	.0797	.0000
1.40	.27	8.97	1.71	.1867	.1564	.1262
1.04	.70	8.97	1.71	.1939	.1163	.0388

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)



Table 418.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-420

SITE=04				ELE=ZN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
20.09	1.45	5.75	1.19	3.7455	3.4939	3.2423
18.35	9.11	5.75	1.19	4.7751	3.1913	1.6075
21.42	1.27	5.75	1.19	3.9461	3.7252	3.5043
4.84	1.44	5.75	1.19	1.0908	.8412	.5915
13.40	9.32	5.75	1.19	3.9527	2.3310	.7094

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 419.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-421

SITE=04				ELE=C0		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
5.48	.22	15.96	9.94	.3572	.3434	.3296
3.75	2.50	15.96	9.94	.3913	.2348	.0783
2.53	1.86	15.96	9.94	.2756	.1588	.0419
.00	.00	15.96	9.94	.0000	.0000	.0000
.00	.00	15.96	9.94	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-422

Table 420.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=04				ELE=CR		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
.00	.00	14.76	1.80	.0000	.0000	.0000
00	00	14.76	1.80	.0000	0000	0000
.00	.00	14.76	1.80	.0000	.0000	.0000
.00	00	14.76	1.80	.0000	.0000	.0000
00	00	14.76	1.80	.0000	.0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 421.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-423

SITE=05				ELE=NA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
15.40	6.67	136.00	12.80	.1623	.1132	.0642
9.00	3.40	136.00	12.80	.0912	.0662	.0412
12.70	4.67	136.00	12.80	.1277	.0934	.0591
6.70	.93	136.00	12.80	.0561	.0493	.0424
12.47	4.78	136.00	12.80	.1268	.0917	.0565

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 422.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-424

SITE=05				ELE=CA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
90.97	15.89	101.07	3.58	1.0573	.9001	.7429
85.30	9.87	101.07	3.58	.9416	.8440	.7464
95.60	26.73	101.07	3.58	1.2104	.9459	.6814
62.97	6.71	101.07	3.58	.6894	.6230	.5566
13.33	6.04	101.07	3.58	.1917	.1319	.0721

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 423.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-425

SITE=05				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
22.26	2.28	41.87	2.05	.5859	.5316	.4772
18.33	2.44	41.87	2.05	.4960	.4377	.3794
21.31	6.61	41.87	2.05	.6667	.5090	.3512
16.05	1.08	41.87	2.05	.4091	.3833	.3575
3.92	.05	41.87	2.05	.0949	.0936	.0923

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-426

Table 424.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=05				ELE=AL		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
22.53	1.31	497.47	52.36	.0479	.0453	.0427
14.77	2.18	497.47	52.36	.0341	.0297	.0253
6.63	1.36	497.47	52.36	.0161	.0133	.0106
8.60	.00	497.47	52.36	.0173	.0173	.0173
.00	.00	497.47	52.36	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 425.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-427

SITE=05				ELE=FE		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
19.37	1.90	333.22	52.89	.0638	.0581	.0524
8.43	1.20	333.22	52.89	.0289	.0253	.0217
2.61	.45	333.22	52.89	.0092	.0078	.0065
.56	.00	333.22	52.89	.0017	.0017	.0017
.00	.00	333.22	52.89	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).



A-428

Table 426.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=05				ELE=NI		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1.21	1.21	10.49	.85	2307	.1153	.0000
1.74	51	10.49	.85	2145	.1654	.1163
1.70	30	10.49	.85	.1908	.1624	.1340
-1.51	.49	10.49	.85	.1907	.1439	.0972
.00	.00	10.49	.85	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 427.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A=429

SITE=05				ELE=ZN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
10.94	1.15	2.60	.57	4.6509	4.2090	3.7671
9.79	2.62	2.60	.57	4.7761	3.7667	2.7573
10.58	4.41	2.60	.57	5.7667	4.0692	2.3718
4.45	.53	2.60	.57	1.9145	1.7103	1.5060
2.11	1.00	2.60	.57	1.1966	.8128	.4291

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-430

Table 428.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=06				ELE=NA		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
4.75	.95	389.50	36.13	.0146	.0122	.0098
3.20	.27	389.50	36.13	.0089	.0082	.0075
3.30	.20	389.50	36.13	.0090	.0085	.0080
4.40	.00	389.50	36.13	.0113	.0113	.0113
3.75	.55	389.50	36.13	.0110	.0096	.0082

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 429.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-431

SITE=06				ELE=CA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
105.43	28.78	295.80	24.40	.4537	.3564	.2591
58.30	.10	295.80	24.40	.1974	.1971	.1968
50.10	6.60	295.80	24.40	.1917	.1694	.1471
41.05	1.55	295.80	24.40	.1440	.1388	.1335
17.77	15.82	295.80	24.40	.1136	.0601	.0066

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 430.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-432

SITE=06				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
7.33	.99	47.41	5.76	1754	.1546	.1338
9.53	.67	47.41	5.76	.2151	.2010	.1870
10.76	1.85	47.41	5.76	.2659	.2269	.1879
14.55	2.38	47.41	5.76	.3570	.3068	.2567
4.02	.17	47.41	5.76	.0885	.0849	.0813

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 431.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-433

SITE=06				ELE=AL		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
26 40	2.73	1399.17	141.22	.0208	.0189	.0169
24.60	.93	1399.17	141.22	.0182	.0176	.0169
13 17	.76	1399.17	141.22	.0100	.0094	.0089
.00	00	1399.17	141.22	.0000	.0000	.0000
00	00	1399.17	141.22	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 452.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-434

SITE=06				ELE=FE		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
54.70	5.89	529.85	172.43	.1144	.1032	.0921
17.83	1.30	529.85	172.43	.0361	.0337	.0312
3.72	.07	529.85	172.43	.0072	.0070	.0069
.69	.15	529.85	172.43	.0016	.0013	.0010
.29	.29	529.85	172.43	.0011	.0005	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 433.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-435

SITE=06				ELE=NI		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1.37	.34	9.83	.52	.1748	.1398	.1047
1.54	.38	9.83	.52	.1946	.1564	.1182
1.76	.34	9.83	.52	.2136	.1788	.1439
1.68	.31	9.83	.52	.2022	.1710	.1398
.00	.00	9.83	.52	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).



A-436

Table 434.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=06				ELE=ZN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
13.30	6.70	2.90	.55	6.9064	4.5926	2.2789
14.10	11.20	2.90	.55	8.7346	4.8688	1.0031
2.91	1.60	2.90	.55	1.5573	1.0058	.4542
2.27	1.87	2.90	.55	1.4281	.7837	.1392
6.39	7.46	2.90	.55	4.7817	2.2071	-.3675

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 435.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-437

SITE=06				ELE=PB		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
.00	.00	98.33	2.22	.0000	.0000	.0000
.00	.00	98.33	2.22	.0000	.0000	.0000
.00	.00	98.33	2.22	.0000	.0000	.0000
.00	.00	98.33	2.22	.0000	.0000	.0000
.00	.00	98.33	2.22	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 436.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-438

SITE=07				ELE=NA		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
970.17	20.04	1533.17	86.78	.6459	.6328	.6197
1111.10	109.20	1533.17	86.78	.7959	.7247	.6535
1044.57	85.62	1533.17	86.78	.7372	.6813	.6255
1030.93	196.04	1533.17	86.78	.8003	.6724	.5446
973.43	96.76	1533.17	86.78	.6980	.6349	.5718

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 437.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-439

SITE=07				ELE=K		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
253.83	43.98	1428.50	82.67	.2085	.1777	1469
208.20	25.87	1428.50	82.67	.1639	.1457	1276
215.10	30.13	1428.50	82.67	.1717	.1506	1295
190.00	9.60	1428.50	82.67	.1397	.1330	1263
181.30	.00	1428.50	82.67	.1269	.1269	1269

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 458.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-440

SITE=07				ELE=CA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
20526.7	624.44	19418.3	922.22	1.0892	1.0571	1.0249
20540.0	.00	19418.3	922.22	1.0578	1.0578	1.0578
2141.50	48.50	19418.3	922.22	.1128	.1103	.1078
415.20	97.80	19418.3	922.22	.0264	.0214	.0163
299.13	22.84	19418.3	922.22	.0166	.0154	.0142

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 439.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=07				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
580.43	25.51	884.50	26.33	.6851	.6562	6274
583.37	74.18	884.50	26.33	.7434	.6595	5757
540.23	32.69	884.50	26.33	.6477	.6108	5738
162.93	18.78	884.50	26.33	.2054	.1842	1630
119.53	9.02	884.50	26.33	.1453	.1351	1249

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

A-441

A-442

Table 440.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

SITE=07				ELE=AL		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1018.97	66.71	6748.33	157.78	1609	.1510	.1411
210.00	.00	6748.33	157.78	0311	.0311	.0311
.00	.00	6748.33	157.78	.0000	.0000	0000
.00	.00	6748.33	157.78	.0000	.0000	.0000
.00	.00	6748.33	157.78	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 441.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-443

SITE=07				ELE=FE		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
207.93	1.36	2522.83	27.56	.0830	.0824	.0819
15.43	.00	2522.83	27.56	.0061	.0061	.0061
1.17	.40	2522.83	27.56	.0006	.0005	.0003
.75	.16	2522.83	27.56	.0004	.0003	.0002
.79	.20	2522.83	27.56	.0004	.0003	.0002

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).



Table 442.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-444

SITE=07				ELE=MN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
30.88	1.42	77.13	4.66	.4187	4003	.3819
19.21	.00	77.13	4.66	.2490	.2490	.2490
.00	.00	77.13	4.66	.0000	.0000	.0000
.00	.00	77.13	4.66	.0000	.0000	.0000
.00	.00	77.13	4.66	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 443.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-445

SITE=07				ELE=NI		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
.75	.75	5.22	.22	2891	1445	.0000
.00	.00	5.22	.22	.0000	.0000	.0000
.00	.00	5.22	.22	.0000	0000	.0000
1.00	.00	5.22	.22	.1914	.1914	.1914
.88	.60	5.22	.22	.2836	1691	0547

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 444.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-446

SITE=07				ELE=ZN		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
22.56	4.85	13.20	.49	2.0768	1.7091	1.3414
11.85	2.20	13.20	.49	1.0644	.8977	.7311
11.42	3.12	13.20	.49	1.1016	.8654	.6292
13.66	13.13	13.20	.49	2.0298	1.0348	.0399
2.99	1.73	13.20	.49	.3574	.2263	.0951

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 445.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES

SITE=07				ELE=C0		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1.58	1.58	1.60	1.60	1.9688	.9844	.0000
3.88	.00	1.60	1.60	2.4250	2.4250	2.4250
.00	.00	1.60	1.60	.0000	.0000	.0000
.00	.00	1.60	1.60	.0000	.0000	.0000
.00	.00	1.60	1.60	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-447

Table 446.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-448

SITE=07				ELE=P8		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
42.30	6.49	88.55	6.13	.5510	4777	.4045
3.31	.00	88.55	6.13	.0374	0374	.0374
.00	.00	88.55	6.13	.0000	.0000	.0000
.00	.00	88.55	6.13	.0000	.0000	.0000
.00	.00	88.55	6.13	.0000	0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 447.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-449

SITE=07				ELE=M0		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
4.05	.71	17.49	1.10	.2725	2318	1911
2.32	.00	17.49	1.10	.1327	.1327	1327
.00	.00	17.49	1.10	.0000	0000	0000
.00	.00	17.49	1.10	.0000	.0000	.0000
.00	.00	17.49	1.10	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 448.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-450

SITE=08				ELE=NA		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
13.83	5.24	262.87	11.11	.0726	.0526	.0327
6.90	.07	262.87	11.11	.0265	.0262	.0260
9.10	3.13	262.87	11.11	.0465	.0346	.0227
10.47	7.09	262.87	11.11	.0668	.0398	.0128
6.57	1.24	262.87	11.11	.0297	.0250	.0202

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 449.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-451

SITE=08				ELE=CA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
162.93	31.76	226.47	16.62	8597	7195	.5792
92.97	14.82	226.47	16.62	4760	.4105	3451
96.77	13.56	226.47	16.62	.4871	.4273	3674
56.57	29.71	226.47	16.62	.3810	.2498	1186
30.67	23.36	226.47	16.62	.2385	.1354	.0323

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)



A-452

Table 450.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

SITE=08				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
13.82	2.38	59.02	1.28	.2745	.2341	.1937
10.81	.38	59.02	1.28	.1896	.1832	.1767
10.21	.54	59.02	1.28	.1822	.1730	.1639
10.30	3.03	59.02	1.28	.2259	.1746	.1233
7.80	3.67	59.02	1.28	.1944	.1322	.0699

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 451.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-453

SITE=08				ELE=AL		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
204.27	11.02	1336.33	44.56	.1611	.1529	.1446
144.70	7.73	1336.33	44.56	.1141	.1083	.1025
71.47	6.11	1336.33	44.56	.0581	.0535	.0489
4.45	35	1336.33	44.56	.0036	.0033	.0031
3.10	3.10	1336.33	44.56	.0046	.0023	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 452.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES

A-454

SITE=08				ELE=FE		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
228.03	4.02	717.17	46.78	.3236	.3180	3124
66.74	1.30	717.17	46.78	.0949	.0931	0912
8.32	.10	717.17	46.78	.0117	.0116	.0115
1.67	.76	717.17	46.78	.0034	.0023	0013
.39	.39	717.17	46.78	.0011	.0005	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 453.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

SITE=08				ELE=MN		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1.64	.09	15.13	3.29	.1141	.1082	.1023
1.31	.03	15.13	3.29	.0888	.0866	.0844
.00	.00	15.13	3.29	.0000	.0000	.0000
.00	.00	15.13	3.29	.0000	.0000	.0000
.00	.00	15.13	3.29	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-455

Table 454.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-456

SITE=08				ELE=NI		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
.91	.60	9.79	.14	.1544	.0926	.0309
1.47	.35	9.79	.14	.1863	.1502	.1141
1.74	.43	9.79	.14	.2221	.1778	.1335
2.24	.26	9.79	.14	.2554	.2284	.2013
.86	.86	9.79	.14	.1747	.0874	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 455.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

SITE=08

ELE=ZN

LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
22.71	12.05	2.88	.64	12.0823	7.8946	3.7068
2.04	.21	2.88	.64	.7833	.7092	.6350
5.80	3.28	2.88	.64	3.1560	2.0174	.8787
1.48	.89	2.88	.64	.8223	.5133	.2043
1.91	.84	2.88	.64	.9556	.6628	.3700

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)

FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)

AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-457

Table 456.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-458

SITE=08				ELE=CO		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
55	.18	1.04	.00	.6966	5256	.3547
.00	.00	1.04	.00	.0000	.0000	.0000
.00	.00	1.04	.00	.0000	.0000	.0000
.00	.00	1.04	.00	.0000	.0000	.0000
.00	.07	1.04	.00	.1346	.0673	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 457.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-459

SITE=08				ELE=CR		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
.00	.00	17.85	4.99	.0000	.0000	.0000
.00	.00	17.85	4.99	.0000	.0000	.0000
.00	.00	17.85	4.99	.0000	.0000	.0000
.00	.00	17.85	4.99	.0000	.0000	.0000
.00	.00	17.85	4.99	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).



A-460

Table 458.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=09				ELE=NA		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
47.35	6.05	647.00	21.67	.0825	.0732	.0638
45.27	2.11	647.00	21.67	.0732	.0700	.0667
39.47	7.98	647.00	21.67	.0733	.0610	.0487
29.73	1.29	647.00	21.67	.0479	.0460	.0440
36.07	4.36	647.00	21.67	.0625	.0557	.0490

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 459.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-461

SITE=09				ELE=K		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
74 90	74 90	910.00	40 67	.1646	.0823	.0000
.00	00	910.00	40.67	.0000	.0000	.0000
.00	00	910.00	40.67	.0000	.0000	.0000
.00	.00	910.00	40.67	.0000	.0000	.0000
.00	00	910.00	40.67	.0000	.0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 460.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-462

SITE=09				ELE=CA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
2338 00	190.00	1965.17	62.56	1.2864	1.1897	1.0930
2217.67	262.22	1965.17	62.56	1.2619	1.1285	.9951
1396 00	105 33	1965.17	62.56	.7640	.7104	.6568
121.57	1 82	1965.17	62.56	.0628	.0619	.0609
39.60	2.07	1965.17	62.56	.0212	.0202	.0191

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 461.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-463

SITE=09				ELE=MG		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
129.45	8.15	160.62	.61	.8567	8060	.7552
130.57	10.78	160.62	.61	.8800	.8129	.7458
106.05	12.46	160.62	.61	.7379	.6603	.5827
30.37	1.08	160.62	.61	.1958	.1891	.1823
8.84	.54	160.62	.61	.0584	.0550	.0517

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0 0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 462.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-464

SITE=09				ELE=AL		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
373.45	1.95	2624.50	58.67	.1430	.1423	.1416
300.03	16.91	2624.50	58.67	.1208	.1143	.1079
16.93	1.64	2624.50	58.67	.0071	.0065	.0058
.00	.00	2624.50	58.67	.0000	.0000	.0000
90	.90	2624.50	58.67	.0007	.0003	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 463.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=09				ELE=FE		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
226.20	15.90	812.83	9.44	.2978	.2783	.2587
31.38	.40	812.83	9.44	.0391	.0386	.0381
2.73	.32	812.83	9.44	.0038	.0034	.0030
.74	.11	812.83	9.44	.0010	.0009	.0008
.57	.04	812.83	9.44	.0007	.0007	.0007

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-465

Table 464.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-466

SITE=09 ELE=MN

LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
7.45	54	23.24	.84	.3438	3205	.2973
6.93	82	23.24	.84	.3334	.2980	.2626
3.32	.36	23.24	.84	.1587	.1430	.1273
.00	.00	23.24	.84	.0000	.0000	.0000
.00	.00	23.24	.84	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION)

Table 465.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=09				ELE=NI		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
.00	.00	9.77	.15	.0000	.0000	.0000
1.34	.26	9.77	.15	.1639	.1375	.1111
1.42	.00	9.77	.15	.1454	.1454	.1454
1.41	.45	9.77	.15	.1909	.1447	.0985
1.52	.34	9.77	.15	.1904	.1551	.1198

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-467



Table 466.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES

A-468

SITE=09				ELE=ZN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
15.98	1.87	5.42	.74	3.2913	2.9465	2.6017
18.27	8.28	5.42	.74	4.8957	3.3694	1.8431
7.62	1.29	5.42	.74	1.6425	1.4044	1.1664
2.58	.91	5.42	.74	.6443	.4763	.3083
.32	.22	5.42	.74	.0994	.0596	.0199

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

A-469

Table 467.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

SITE=09				ELE=CO		
LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
4.49	.24	1.31	.03	3.6107	3.4275	3.2443
2.85	2.85	1.31	.03	4.3511	2.1756	.0000
5.39	.26	1.31	.03	4.3070	4.1120	3.9169
00	00	1.31	.03	.0000	.0000	.0000
00	.00	1.31	.03	0000	.0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 468.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-470

SITE=09				ELE=PB		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1.87	1.87	75.82	2.08	.0492	.0246	.0000
.00	.00	75.82	2.08	.0000	.0000	.0000
.00	.00	75.82	2.08	.0000	.0000	.0000
.00	.00	75.82	2.08	.0000	.0000	.0000
.00	.00	75.82	2.08	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 469.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

A-471

SITE=10				ELE=NA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
11.67	4.29	50.00	3.00	.3191	.2333	1476
14.80	6.33	50.00	3.00	.4227	2960	.1693
14.43	4.38	50.00	3.00	.3762	.2887	.2011
13.67	4.76	50.00	3.00	.3684	.2733	.1782
7.90	.93	50.00	3.00	.1767	.1580	.1393

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 470.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

A-472

SITE=10				ELE=CA		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
221.27	11.29	121.37	6.98	1.9161	1.8231	1.7301
219.10	20.60	121.37	6.98	1.9750	1.8053	1.6355
245.97	11.69	121.37	6.98	2.1230	2.0266	1.9303
106.77	25.89	121.37	6.98	1.0930	.8797	.6664
16.77	8.02	121.37	6.98	2042	.1381	.0720

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 471.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS PRESENT IN MERRITT ISLAND SOIL SAMPLES.

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SITE=10				ELE=MG		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
34.51	.85	35.64	3.68	.9921	.9683	.9445
41.20	4.40	35.64	3.68	1.2795	1.1560	1.0325
53.65	7.27	35.64	3.68	1.7091	1.5052	1.3013
32.87	3.57	35.64	3.68	1.0222	.9221	.8220
4.93	.07	35.64	3.68	.1402	.1382	.1362

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
 FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
 AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

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Table 472.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=10				ELE=AL		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
27.13	1.71	170.90	18.67	1688	1588	.1488
26.57	3.71	170.90	18.67	1772	.1555	.1337
5.30	20	170.90	18.67	.0322	.0310	.0298
.00	00	170.90	18.67	.0000	0000	.0000
.00	00	170.90	18.67	.0000	.0000	0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1 0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

Table 473.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN HERRITT ISLAND SOIL SAMPLES.

SITE=10

. ELE=NI

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LEACHING, PPM		TOTAL CATION, PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
1.34	.39	11.35	.36	.1524	.1176	.0828
1.39	.28	11.35	.36	.1471	.1225	.0978
1.35	.31	11.35	.36	.1460	.1189	.0919
.77	.52	11.35	.36	.1136	.0681	.0227
.00	.00	11.35	.36	.0000	.0000	.0000

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).



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Table 474.

TOTAL CONCENTRATION, CONCENTRATION LEACHED AND FRACTION LEACHED FOR CATIONS  
PRESENT IN MERRITT ISLAND SOIL SAMPLES.

SITE=10				ELE=ZN		
LEACHING,PPM		TOTAL CATION,PPM		FRACTION LEACHED		
MEAN	DEV	MEAN	DEV	HIGH	AVE	LOW
12.56	1.44	2.79	.86	5.0123	4.4952	3.9781
4.46	2.98	2.79	.86	2.6631	1.5979	.5326
5.21	3.47	2.79	.86	3.1086	1.8652	.6217
6.67	.93	2.79	.86	2.7196	2.3878	2.0561
1.40	.76	2.79	.86	.7761	.5024	.2287

LEACHING RESULTS PRESENTED IN ORDER FOR 1.0M HCL TO 0.0001M HCL.

FRACTION AVERAGE REPRESENTS (MEAN LEACHED/MEAN TOTAL CATION)  
FRACTION HIGH REPRESENTS (MEAN LEACHED PLUS DEVIATION/MEAN TOTAL CATION)  
AND FRACTION LOW REPRESENTS (MEAN LEACHED MINUS DEVIATION/MEAN TOTAL CATION).

**STANDARD TITLE PAGE**

1 Report No <b>CR-163122</b>		2 Government Accession No.		3. Recipient's Catalog No.	
4 Title and Subtitle <b>Vol. II of IV: A continuation of Base-Line Studies for Environmentally Monitoring Space Transportation Systems at John F. Kennedy Space Center</b>				5 Report Date	
7 Author(s) <b>B. C. Madsen</b>				8 Performing Organization Report No <b>TR51-2, Vol. II of IV</b>	
9 Performing Organization Name and Address <b>Department of Biological Sciences University of Central Florida P.O. Box 25000, Orlando, Florida 32816</b>				10 Work Unit No.	
				11 Contract or Grant No. <b>NAS 10-8986</b>	
12 Sponsoring Agency Name and Address <b>National Aeronautics and Space Administration Washington, D. C. 20546</b>				13 Type of Report and Period Covered <b>Environmental Base-Line July 1977 - March 1979</b>	
				14 Sponsoring Agency Code <b>MD-B</b>	
15 Abstract <p>The first part of the document reports the results of a study which was designed to monitor, characterize, and evaluate the chemical composition of precipitation (rain) which fell at the Kennedy Space Center, Florida (KSC) during the period July 1977 to March 1979. In the second section, the results which were obtained from a soil sampling and associated chemical analysis are discussed. The purpose of these studies was to determine the environmental perturbations which might be caused by NASA space activities.</p> <p>Note: This document was prepared under the sponsorship of the Biomedical Office, Bioscience Operations, Dr. William M. Knott and Dr. Paul Buchanan.</p>					
16 Key Words <b>Acid rain; rain chemistry; hydrochloric acid; soil chemistry; soil leachates</b>					
17 Bibliographic Control <b>STAR Category 51</b>			18 Distribution <b>Unlimited</b>		
19 Security Classif (of this report) <b>Unclassified</b>		20 Security Classif (of this page) <b>None</b>		21. No of Pages	22 Price

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