**The MAP3S Precipitation
Chemistry Network:
Fifth Periodic Summary Report (1981)**

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THE MAP3S PRECIPITATION CHEMISTRY NETWORK:
FIFTH PERIODIC SUMMARY REPORT (1981)

M. Terry Dana
Jane E. Rothert

February 1983

Prepared for the
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Pacific Northwest Laboratory
Richland, Washington 99352

ABSTRACT

This, the fifth in a series of summary reports, contains complete field and chemical data from the MAP3 Precipitation Chemistry Network for the year 1981. The 1981 data were added to the previous data base, and an update of the previous five year statistical summary completed. Included are basic statistics, time trend analyses, and monthly averages.

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PREFACE

This report contains a listing of precipitation chemistry data collected during the period 1981. It is the fifth of the planned annual summaries of the data collected by the MAP3S Precipitation Chemistry Network (PCN).

The primary objective of the project is to collect the concentration data and distribute them promptly; further analysis of the data and use of the data as an aid in precipitation chemistry research is generally left to the reader, but analyses and interesting applications of the results may appear in summary reports or in the open literature authored by the persons listed below. Other users of the data herein may credit: "The MAP3S Precipitation Chemistry Network."

Cooperating organizations and personnel:

<u>Organization</u>	<u>Persons</u>
Pacific Northwest Laboratory Atmospheric Sciences Department	Elaine Chapman Terry Dana Richard Easter Donald Glover Tom Heimbigner Jane Rothert
Brookhaven National Laboratory Department of Energy and Environment	Gilbert Raynor
Cornell University Department of Ecology and Systematics	Tom Butler Gene Likens
University of Delaware College of Marine Studies	Tom Church Joseph Scudlark
U.S. Geological Survey	LeRoy Schroder
Illinois State Water Survey	Scott Dossett Mark Slater Gary Stensland

Organization

Miami University (Ohio)
Institute of Environmental Sciences

State University of New York at Albany
Atmospheric Sciences Research Center

Oak Ridge National Laboratory
Environmental Sciences Division

Pennsylvania State University
Department of Meteorology

University of Virginia
Department of Environmental Sciences

Persons

Gary Barrett
John Klink
Randy Meyer

Marc DuBois
John Kadlecek

Steven Lindberg
Jan Coe

James Holian
Rosa de Pena

James Galloway
Tom Wood

1.0 DATA FOR 1981

The results of the field data collection and chemical analyses of precipitation samples collected on the MAP3S network during 1981 are listed in the following tables. The first shows data availability. Each row represents a date, which is the date of collection^a of one or more samples. The appearance of an "S" in a column indicates that a sample was collected on that date at the site heading the column.

The second table is the chronological list of field and chemistry data. Each row corresponds to a collection^a date and a site, and each column to a "species." Since there are 23 species this table is broken into three sub-tables, as described in the data tables legend, Appendix A.

The third table lists the hourly precipitation amounts in cm for each site. Each row represents a day of the month listed at the top of the page and each column corresponds to one hour. The precipitation recorded is the amount that fell in the hour previous to the time listed in the column.

Site locations and data periods, and chemical analyses information are listed in Appendix B. A complete description of procedures and quality control may be found in another report.⁽¹⁾ Data for periods previous to 1981 are listed in the first four summaries.^(2,3,4,5)

^aNot necessarily the date of precipitation occurrence.

TABLE 1. Samples Available

		W H I T E F A C E	P E N I T H A C A	S T A T E	V I R G I N I A	I L L I N O I S	B R O N K H A V E	L F E S	C X F O R D	O A K H I N D G
1 JAN 1981		-	-	-	S	S	-	-	-	-
2 JAN 1981		-	-	-	-	-	-	S	-	-
3 JAN 1981		-	S	-	-	-	S	-	S	-
4 JAN 1981		-	S	-	-	-	S	-	-	-
5 JAN 1981		S	-	S	-	-	-	-	-	-
6 JAN 1981		-	-	-	-	S	-	-	S	-
7 JAN 1981		S	-	S	-	-	S	S	S	S
8 JAN 1981		-	S	-	-	S	-	-	-	-
15 JAN 1981		-	-	-	-	-	-	-	-	-
16 JAN 1981		-	-	S	-	-	-	S	S	-
18 JAN 1981		-	S	-	-	-	-	-	-	-
19 JAN 1981		S	-	S	-	-	S	-	-	-
21 JAN 1981		-	-	-	-	-	-	S	-	-
22 JAN 1981		-	-	-	S	-	-	-	-	-
23 JAN 1981		-	-	-	-	-	-	-	-	S
24 JAN 1981		-	S	-	-	-	-	-	-	-
26 JAN 1981		S	-	S	-	-	-	-	-	-
28 JAN 1981		S	-	-	-	-	-	-	-	S
29 JAN 1981		-	-	S	-	-	-	-	-	-
30 JAN 1981		-	-	-	-	-	-	-	-	S
1 FEB 1981		S	-	-	-	-	-	-	-	-
2 FEB 1981		-	-	S	S	-	-	S	S	S
3 FEB 1981		S	S	S	-	S	S	-	-	-
7 FEB 1981		-	-	S	-	-	-	-	-	-
8 FEB 1981		-	-	-	-	-	S	-	-	-
9 FEB 1981		S	S	S	S	-	S	S	-	S
10 FEB 1981		S	-	-	-	-	-	-	-	-
11 FEB 1981		-	-	S	-	-	-	S	-	-
12 FEB 1981		S	-	S	S	-	S	-	S	S
13 FEB 1981		-	S	-	-	S	-	S	-	-
17 FEB 1981		S	-	S	-	S	S	-	S	-
20 FEB 1981		-	-	-	-	S	-	-	-	S
21 FEB 1981		-	-	S	S	-	S	S	S	-
22 FEB 1981		S	S	-	-	-	-	-	-	-
23 FEB 1981		-	-	-	-	S	-	-	-	S
24 FEB 1981		-	S	S	S	S	S	S	-	-
25 FEB 1981		-	-	S	-	-	-	-	-	-
26 FEB 1981		S	S	-	-	-	S	-	-	-
27 FEB 1981		S	-	-	-	S	-	S	S	-
28 FEB 1981		-	-	-	-	-	-	-	S	-
1 MAR 1981		-	-	S	-	-	S	-	-	S
3 MAR 1981		S	-	-	-	S	-	-	-	-
4 MAR 1981		S	S	-	-	S	-	-	-	-
5 MAR 1981		-	-	-	-	S	-	-	-	-
6 MAR 1981		-	-	S	S	-	S	S	-	S
7 MAR 1981		-	-	-	-	-	-	-	S	-
9 MAR 1981		S	-	-	S	-	S	-	-	-
10 MAR 1981		-	-	S	-	-	-	-	-	-

SAMPLES AVAILABLE (CONT.)

		W H I T E F A C E	P E N N S I A N I T H A C	V I R G I N I A	I L L I N O I S	R O C K H A V E	L F W F S	O X F O R D	O A K R I D G E
11 MAR 1981		-	S	S	-	-	-	-	-
12 MAR 1981		S	-	-	-	S	-	-	-
16 MAR 1981		-	-	S	-	-	-	S	S
17 MAR 1981		S	-	-	S	-	S	-	-
18 MAR 1981		S	S	S	-	S	-	-	-
19 MAR 1981		-	-	-	S	S	-	-	-
21 MAR 1981		-	-	S	-	-	-	-	-
23 MAR 1981		S	S	-	S	-	-	-	S
25 MAR 1981		S	-	-	-	-	-	-	-
26 MAR 1981		-	S	-	-	S	-	-	-
27 MAR 1981		-	S	S	-	S	-	S	-
30 MAR 1981		S	-	-	-	S	-	S	S
31 MAR 1981		-	S	S	S	-	S	-	-
1 APR 1981		S	-	-	-	-	-	-	S
2 APR 1981		S	S	S	S	-	S	-	-
3 APR 1981		S	-	-	-	S	-	-	-
4 APR 1981	3	-	-	-	-	-	-	S	-
5 APR 1981		S	-	-	-	-	-	S	-
6 APR 1981		-	S	S	S	-	S	-	S
7 APR 1981		S	-	-	-	S	-	-	-
9 APR 1981		-	S	-	-	S	-	-	-
10 APR 1981		S	-	S	-	-	-	S	S
11 APR 1981		-	-	-	-	-	-	S	-
12 APR 1981		-	S	-	-	-	-	S	-
13 APR 1981		S	S	S	-	S	-	S	-
14 APR 1981		-	S	S	S	-	S	-	-
15 APR 1981		S	-	-	S	-	S	-	S
17 APR 1981		-	-	S	S	-	-	S	-
18 APR 1981		-	S	-	-	-	-	S	-
19 APR 1981		S	-	-	-	-	-	-	-
20 APR 1981		-	-	-	S	-	S	-	-
21 APR 1981		S	S	-	-	-	-	S	S
22 APR 1981		-	-	-	-	S	-	-	-
23 APR 1981		-	-	-	-	-	-	-	-
24 APR 1981		S	-	-	-	-	S	-	S
25 APR 1981		-	S	-	-	-	-	-	-
26 APR 1981		-	-	-	S	-	-	-	-
27 APR 1981		S	-	S	S	-	-	-	-
29 APR 1981		-	-	-	-	S	-	-	-
30 APR 1981		S	S	S	-	S	-	-	S
1 MAY 1981		-	-	-	-	S	-	-	-
2 MAY 1981		-	-	-	S	-	-	S	-
3 MAY 1981		-	-	S	-	-	-	-	-
4 MAY 1981		-	-	-	-	S	-	-	-
5 MAY 1981		-	-	-	-	S	-	-	-
6 MAY 1981		-	S	-	-	-	-	S	-
7 MAY 1981		S	-	S	S	-	-	-	-
9 MAY 1981		-	-	-	-	S	-	-	-

SAMPLES AVAILABLE (CONT.)

			W H I T F A C F	I T H A C A	P E N S T A T F	V I R G I N I A	I L I N O I S	R O O K H A V E	L F W E S	M Y D O R D	O A K R I D G E
10 MAY 1981			-	-	-	-	S	-	-	-	-
11 MAY 1981			-	-	-	S	S	-	-	-	-
12 MAY 1981			-	-	S	S	S	S	S	S	S
13 MAY 1981			S	S	-	-	-	-	-	-	-
14 MAY 1981			-	-	-	-	S	-	-	S	-
15 MAY 1981			-	-	-	-	S	-	-	S	S
16 MAY 1981			-	-	-	S	-	S	-	-	-
17 MAY 1981			-	-	-	-	-	-	S	-	-
18 MAY 1981			S	S	S	-	S	S	-	S	-
19 MAY 1981			-	-	-	-	S	-	-	S	S
20 MAY 1981			-	-	-	-	-	-	S	-	-
21 MAY 1981			-	-	-	S	-	-	-	-	S
22 MAY 1981			S	-	-	-	-	-	-	-	-
25 MAY 1981			-	-	-	-	-	-	-	S	-
26 MAY 1981			S	S	S	-	S	-	-	S	S
27 MAY 1981			S	-	-	-	-	-	-	S	-
28 MAY 1981			S	-	-	S	-	-	-	S	S
29 MAY 1981			-	-	S	-	-	-	S	-	-
30 MAY 1981			-	-	-	-	-	S	-	S	-
31 MAY 1981			-	-	-	-	-	-	-	S	-
1 JUN 1981			S	S	S	-	S	-	-	S	-
2 JUN 1981			-	-	S	S	S	-	-	-	S
3 JUN 1981			-	-	-	-	S	S	S	-	-
4 JUN 1981			-	S	-	S	-	-	-	-	-
5 JUN 1981			S	-	S	-	S	-	-	-	S
6 JUN 1981			-	S	-	-	-	-	-	S	-
7 JUN 1981			S	-	-	S	-	-	-	-	-
8 JUN 1981			-	-	-	-	S	-	-	-	S
9 JUN 1981			S	S	S	-	-	S	-	-	-
10 JUN 1981			S	-	-	S	S	-	-	S	-
11 JUN 1981			-	S	S	-	-	-	S	-	S
12 JUN 1981			S	-	-	-	-	-	-	-	-
13 JUN 1981			-	-	-	-	-	S	-	-	-
14 JUN 1981			S	S	S	-	-	-	S	S	-
15 JUN 1981			S	S	S	-	S	S	S	-	-
16 JUN 1981			-	-	-	S	S	-	-	-	-
17 JUN 1981			S	S	S	-	-	-	-	-	-
18 JUN 1981			S	-	-	-	-	-	-	-	-
20 JUN 1981			S	-	-	-	-	-	-	-	-
21 JUN 1981			-	-	-	-	-	S	-	-	-
22 JUN 1981			S	S	-	S	S	S	S	S	-
23 JUN 1981			S	S	S	-	-	S	-	-	S
24 JUN 1981			-	-	-	-	S	-	-	-	-
25 JUN 1981			-	-	-	-	S	S	S	-	-
26 JUN 1981			-	S	S	S	-	S	S	-	S
27 JUN 1981			S	-	-	-	-	-	-	S	-
29 JUN 1981			-	-	-	-	S	-	-	-	-
30 JUN 1981			-	-	-	-	S	-	-	-	-

SAMPLES AVAILABLE (CONT.)

		W H I T E F A C E	P E N N S I A T E	V T R G I N I A	I L L I N O I S	R R O C K H A V E N	L E W E S	O X F O R D	O A K R I D G E
1 JUL 1981		-	-	-	-	-	-	S	-
2 JUL 1981		-	-	S	-	-	-	S	S
3 JUL 1981		-	S	-	-	S	-	S	-
4 JUL 1981		-	-	-	S	-	-	-	-
5 JUL 1981		S	-	-	-	S	S	-	-
6 JUL 1981		S	S	S	S	-	-	S	-
7 JUL 1981		-	-	-	-	-	-	-	S
8 JUL 1981		-	-	-	-	S	-	-	-
10 JUL 1981		S	-	-	S	-	-	S	-
11 JUL 1981		-	-	-	S	-	-	-	-
14 JUL 1981		-	-	-	-	S	-	S	-
15 JUL 1981		S	-	-	-	S	-	-	-
16 JUL 1981		-	-	-	-	-	-	S	-
17 JUL 1981		-	-	-	-	-	S	-	S
20 JUL 1981		S	-	-	-	S	-	S	-
21 JUL 1981		S	S	S	S	S	-	S	S
22 JUL 1981		S	S	-	-	S	-	S	-
24 JUL 1981		-	-	-	-	-	-	S	-
26 JUL 1981		-	-	-	S	-	-	-	-
27 JUL 1981		S	S	S	-	S	S	-	S
28 JUL 1981		-	-	-	-	S	-	S	-
29 JUL 1981		-	S	S	S	S	S	-	S
30 JUL 1981		S	-	-	-	-	-	S	-
3 AUG 1981		-	S	-	-	S	-	-	S
4 AUG 1981		S	-	-	S	-	S	-	-
5 AUG 1981		-	S	-	S	-	-	-	-
6 AUG 1981		S	-	-	-	S	-	-	-
7 AUG 1981		-	-	-	-	-	S	-	S
8 AUG 1981		-	S	-	S	-	-	-	-
9 AUG 1981		-	-	-	-	-	S	S	-
10 AUG 1981		S	-	-	-	S	S	-	S
11 AUG 1981		-	S	-	-	-	-	S	-
12 AUG 1981		S	-	-	-	S	-	-	S
13 AUG 1981		-	-	-	S	-	S	-	-
14 AUG 1981		S	S	-	-	-	-	-	-
16 AUG 1981		-	-	-	-	S	S	-	-
17 AUG 1981		S	S	-	-	S	-	-	S
18 AUG 1981		-	-	S	-	-	-	-	-
21 AUG 1981		-	-	-	-	-	-	-	S
24 AUG 1981		-	S	S	-	-	S	-	-
25 AUG 1981		S	-	-	S	S	S	-	-
26 AUG 1981		-	-	-	-	S	-	-	-
27 AUG 1981		-	-	-	-	S	-	-	-
28 AUG 1981		S	-	-	-	S	-	-	-
29 AUG 1981		-	-	-	-	-	-	S	-
30 AUG 1981		-	-	-	-	-	-	S	-
31 AUG 1981		S	-	-	-	S	-	-	-
1 SEP 1981		S	-	S	S	S	-	-	S

SAMPLES AVAILABLE (CONT.)

9

	W H I T F A C E	P F N M T H A C A	S T A T E	V T R G I N I A	T I L I N O T S	R O O K H A V E	L E A F S	O X F O R D	O A K P I D G E
2 SEP 1981	-	-	-	-	-	-	-	S	-
3 SEP 1981	S	-	-	-	-	-	-	S	-
4 SEP 1981	-	S	S	-	S	-	-	-	S
5 SEP 1981	-	-	-	-	-	-	-	-	-
8 SEP 1981	-	S	S	-	S	-	S	S	-
9 SEP 1981	S	S	-	S	-	S	-	-	-
11 SEP 1981	S	-	-	-	-	-	-	-	-
14 SEP 1981	S	-	S	-	-	-	-	-	-
15 SEP 1981	S	-	S	-	-	-	-	S	-
16 SEP 1981	-	-	-	-	-	S	-	-	S
17 SEP 1981	-	-	-	S	-	S	S	S	-
18 SEP 1981	S	-	S	-	S	-	S	S	-
19 SEP 1981	-	-	-	-	-	S	-	-	-
20 SEP 1981	-	-	-	-	-	S	S	-	-
21 SEP 1981	S	S	-	-	-	-	-	-	-
23 SEP 1981	-	-	S	-	-	S	-	-	-
24 SEP 1981	-	S	-	-	-	-	-	-	-
25 SEP 1981	S	-	-	-	-	-	-	-	-
28 SEP 1981	-	S	-	-	S	S	-	-	-
29 SEP 1981	S	-	-	-	S	-	-	-	-
30 SEP 1981	-	-	-	-	-	-	-	S	-
2 OCT 1981	S	-	S	S	-	S	-	-	S
3 OCT 1981	-	-	-	-	-	S	-	-	-
4 OCT 1981	-	-	-	-	-	-	S	-	-
5 OCT 1981	S	S	-	-	S	-	-	-	-
6 OCT 1981	-	-	-	-	S	-	-	S	-
7 OCT 1981	-	-	S	-	-	S	S	-	-
8 OCT 1981	-	S	-	-	-	-	-	-	S
10 OCT 1981	S	-	-	-	-	-	-	S	-
12 OCT 1981	-	-	-	S	-	-	-	-	-
13 OCT 1981	-	-	-	-	-	-	-	-	S
15 OCT 1981	-	-	-	-	S	-	-	S	-
16 OCT 1981	-	S	-	-	-	-	-	-	-
19 OCT 1981	-	-	-	S	S	S	S	S	S
20 OCT 1981	S	S	S	-	-	-	-	-	-
22 OCT 1981	-	-	-	-	S	-	-	-	-
23 OCT 1981	-	-	-	-	-	S	-	S	S
24 OCT 1981	-	-	S	S	-	S	S	-	-
25 OCT 1981	-	S	-	-	-	-	-	-	-
26 OCT 1981	S	-	-	-	-	S	S	S	-
27 OCT 1981	-	-	-	-	S	-	-	S	S
28 OCT 1981	-	S	S	S	-	S	S	S	-
29 OCT 1981	S	-	-	-	-	-	-	-	-
30 OCT 1981	-	-	-	-	-	-	S	-	-
2 NOV 1981	-	-	-	-	S	-	-	-	-
6 NOV 1981	-	-	S	-	-	S	-	S	S
7 NOV 1981	-	-	-	S	-	-	S	-	-
8 NOV 1981	-	S	-	-	-	-	-	-	-

SAMPLES AVAILABLE (CONT.)

		W H I T E F A C E	P E N N S I A C A	V I R G I N I A	I L L I N O I S	R O C K H A V E N	L E S	O Y F O P D	O A K R I D G E
9 NOV 1981		S	-	-	S	-	-	-	-
10 NOV 1981		-	-	-	-	S	-	-	-
12 NOV 1981		S	-	-	-	-	-	S	-
16 NOV 1981		-	-	S	-	S	S	-	-
17 NOV 1981		-	-	-	S	-	-	-	S
18 NOV 1981		-	-	-	-	S	S	-	-
19 NOV 1981		-	S	-	-	-	-	-	-
20 NOV 1981		S	-	-	S	S	-	S	-
21 NOV 1981		-	-	S	-	S	-	-	-
22 NOV 1981		-	-	-	-	-	-	-	-
23 NOV 1981		-	S	-	-	-	-	-	-
24 NOV 1981		S	-	S	S	-	-	S	-
25 NOV 1981		-	-	S	-	-	-	-	S
27 NOV 1981		-	-	S	S	-	-	S	-
28 NOV 1981		-	-	-	-	S	-	-	-
30 NOV 1981		S	S	-	-	-	-	-	S
1 DEC 1981		-	-	-	S	-	-	S	-
2 DEC 1981		-	S	S	S	S	S	-	S
3 DEC 1981		-	-	S	S	-	-	-	-
4 DEC 1981		-	-	-	S	S	S	-	S
5 DEC 1981		-	-	S	S	-	-	S	-
6 DEC 1981		-	S	-	-	-	-	-	-
7 DEC 1981		S	-	-	-	-	S	-	-
8 DEC 1981		-	-	S	-	-	S	-	-
9 DEC 1981		S	-	-	-	S	-	-	-
10 DEC 1981		-	-	S	-	-	-	-	-
11 DEC 1981		-	S	-	-	-	-	-	-
12 DEC 1981		-	-	S	-	-	-	-	-
15 DEC 1981		S	-	S	-	S	-	-	-
16 DEC 1981		-	-	S	S	S	S	-	S
17 DEC 1981		S	S	-	-	-	-	-	-
18 DEC 1981		-	-	S	-	S	-	S	S
21 DEC 1981		S	S	-	-	-	-	S	-
22 DEC 1981		-	-	S	-	-	-	-	-
23 DEC 1981		-	-	S	S	S	S	S	S
24 DEC 1981		S	S	-	-	-	-	-	-
27 DEC 1981		-	-	-	-	-	S	-	-
28 DEC 1981		S	-	S	-	S	-	-	-
29 DEC 1981		-	-	S	S	-	-	-	S
30 DEC 1981		S	S	-	-	-	-	S	-
31 DEC 1981		-	-	-	-	S	-	-	-

TABLE 2. Chemistry Data for 1981

		TIME	LAT	LONG	TEMP	SALT	PH	COND	FEL	FEL	COND
		Z		MO, DA	ML	ML	C				UMHO/CM
1 JAN 1981	VIRGINIA	2130	26	1.09	70.0	60.0	15.	3.91	ISA	ISA	
	ILLINOIS	1630	NAP	ISA	30.0	15.0	25.	4.75	ISA	ISA	
2 JAN 1981	LEWES	1430	NAP	1.13	55.0	80.0	20.	3.74	ISA	ISA	
3 JAN 1981	ITHACA	2000	NAP	1.09	320.0	410.0	23.	4.20	4.32	23.0	
	BROOKHAVEN	1730	3	1.09	230.0	220.0	24.	3.96	3.99	50.0	
	OXFORD	1530	6	ISA	18.0	16.0	ISA	ISA	ISA	ISA	
4 JAN 1981	BROOKHAVEN	1900	4	1.09	72.0	62.0	24.	3.93	ISA	ISA	
5 JAN 1981	WHITEFACE	1430	NAP	1.29	110.0	98.0	20.	4.04	4.22	ISA	
	ITHACA	1300	NAP	ISA	0.0	170.0	ISA	ISA	ISA	ISA	
	PENN STATE	1930	NAP	1.19	280.0	NAP	25.	3.98	4.11	31.0	
6 JAN 1981	ILLINOIS	1730	NAP	ISA	16.0	22.0	25.	4.42	ISA	ISA	
	OXFORD	1700	2	ISA	10.0	16.0	ISA	ISA	ISA	ISA	
7 JAN 1981	WHITEFACE	1900	NAP	1.29	130.0	98.0	19.	4.04	4.12	32.0	
	PENN STATE	1900	NAP	1.19	126.0	NAP	25.	4.27	4.56	17.0	
	BROOKHAVEN	1800	1	2.09	640.0	820.0	25.	4.34	4.45	18.0	
	LEWES	1300	NAP	1.29	220.0	230.0	18.	4.70	4.61	11.0	
	OXFORD	1600	9	2.09	220.0	230.0	14.	4.24	4.23	ISA	
	OAK RIDGE	1900	4	2.03	310.0	114.0	21.	4.45	4.57	16.0	
8 JAN 1981	ITHACA	1700	NAP	2.18	280.0	340.0	24.	4.20	4.25	34.0	
	ILLINOIS	1630	NAP	ISA	25.0	25.0	25.	4.41	ISA	ISA	
15 JAN 1981	ILLINOIS	1700	NAP	ISA	20.0	6.0	25.	4.24	ISA	ISA	
16 JAN 1981	PENN STATE	1900	NAP	2.11	62.0	ISA	25.	3.85	ISA	ISA	
	LEWES	1300	NAP	1.29	290.0	325.0	18.	3.97	3.86	66.0	

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I D	A R R	S A M P	P E N	F I L D	F I L D	L A B	C O N D U C T
		R M V D	O P E N	O A T E	V O L	V O L	P H	P H	P H	UMHG/CM
		Z		MO,DA	ML	ML	C			
16 JAN 1981	OXFORD	1430	23	ISA	14.0	ISA	ISA	ISA	ISA	ISA
18 JAN 1981	ITHACA	1700	NAP	2.18	290.0	330.0	25.	3.77	3.79	94.0
19 JAN 1981	WHITEFACE	1430	NAP	1.29	170.0	150.0	20.	3.78	3.95	52.0
	PENN STATE	1900	NAP	2.11	50.0	85.0	25.	3.62	ISA	ISA
	BROOKHAVEN	1630	1	2.09	98.0	174.0	26.	3.72	3.76	86.0
21 JAN 1981	LEWES	1830	NAP	1.29	120.0	180.0	19.	3.97	3.74	ISA
22 JAN 1981	VIRGINIA	1930	8	2.06	140.0	160.0	24.	3.71	3.74	79.0
23 JAN 1981	OAK RIDGE	1900	11	2.03	370.0	390.0	20.	3.80	3.96	48.0
24 JAN 1981	ITHACA	2100	NAP	2.18	510.0	620.0	25.	4.19	4.21	39.0
26 JAN 1981	WHITEFACE	1830	NAP	2.18	186.0	170.0	17.	4.13	4.36	26.0
	PENN STATE	1900	NAP	ISA	23.0	ISA	25.	3.58	ISA	ISA
28 JAN 1981	WHITEFACE	1400	NAP	2.18	207.0	210.0	18.	4.12	4.41	33.0
	OAK RIDGE	1400	5	2.03	200.0	211.0	22.	3.95	4.02	47.0
29 JAN 1981	PENN STATE	1600	NAP	2.11	65.0	NAP	25.	3.85	ISA	ISA
30 JAN 1981	OAK RIDGE	1000	4	2.24	593.0	500.0	19.	4.24	4.46	20.0
1 FEB 1981	WHITEFACE	2230	NAP	2.18	61.0	50.0	19.	3.92	ISA	ISA
2 FEB 1981	PENN STATE	1900	NAP	2.11	2800.0	NOF	25.	4.40	4.46	17.0
	VIRGINIA	1630	8	2.06	1140.0	1200.0	21.	4.29	4.34	31.0
	LEWES	2030	NAP	2.20	1379.0	1400.0	13.	4.67	4.72	30.0
	OXFORD	2030	12	3.06	1520.0	1300.0	18.	4.02	4.25	25.0
	OAK RIDGE	1600	4	2.24	2497.0	2910.0	11.	4.28	4.41	24.0
3 FEB 1981	WHITEFACE	1430	NAP	2.18	1764.0	1710.0	19.	4.32	4.88	8.4
	ITHACA	1300	NAP	2.18	1770.0	2400.0	24.	4.42	4.45	24.0

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I D	A R R	S A M P	P R E D	F I L D	F I L D	L A R	C O N D I T	
		R M V D	O P E N	O A T E	V O L	V O L	P H	P H	P H	T E M P E R A T U R E	
		Z		MO.DA	ML	ML	C			TEMP/CM	
10	3 FEB 1981	PENN STATE	1600	NAP	ISA	12.0	ISA	25.	4.00	ISA	ISA
		ILLINOIS	1730	NAP	4.13	554.0	530.0	25.	4.22	4.28	29.0
		BROOKHAVEN	1500	2	2.09	790.0	910.0	25.	4.74	4.83	36.0
	7 FEB 1981	PENN STATE	1600	NAP	ISA	16.0	NOF	25.	3.97	ISA	ISA
	8 FEB 1981	BROOKHAVEN	2030	NAP	2.18	833.0	810.0	25.	4.68	4.80	15.0
	9 FEB 1981	WHITEFACE	1500	NAP	2.18	946.0	800.0	19.	4.00	4.30	33.0
		ITHACA	1500	NAP	2.18	590.0	910.0	24.	4.27	4.32	21.0
		PENN STATE	1900	NAP	3.02	454.0	380.0	25.	4.17	4.37	27.0
		VIRGINIA	1530	5	3.02	93.0	65.0	23.	4.18	4.23	29.0
		BROOKHAVEN	1430	NAP	2.18	148.0	150.0	25.	4.01	ISA	ISA
		LEWES	1230	NAP	2.20	1062.0	1100.0	12.	4.75	4.92	6.9
		OAK RIDGE	1500	5	2.24	177.0	160.0	20.	3.87	3.90	64.0
	10 FEB 1981	WHITEFACE	1400	0	ISA	65.0	ISA	ISA	ISA	ISA	ISA
	11 FEB 1981	PENN STATE	1830	NAP	3.02	1400.0	1130.0	25.	4.37	4.52	23.0
		LEWES	1900	NAP	2.20	1435.0	1170.0	21.	4.92	4.95	10.0
	12 FEB 1981	WHITEFACE	1700	NAP	3.11	1467.0	1320.0	19.	4.20	4.53	13.0
		PENN STATE	1630	NAP	3.02	401.0	410.0	25.	4.25	4.32	26.
		VIRGINIA	2000	36	3.02	2000.0	2146.0	22.	4.34	4.42	36.0
		BROOKHAVEN	1700	NAP	2.18	168.0	200.0	25.	4.98	5.29	35.0
		OXFORD	1400	12	3.06	1632.0	NOF	18.	4.17	4.33	2.0
		OAK RIDGE	1400	6	2.24	2509.0	2420.0	8.	4.65	4.81	6.9
13 FEB 1981	ITHACA	2000	NAP	3.17	1180.0	1500.0	24.	4.42	4.41	19.0	
	ILLINOIS	1930	NAP	4.13	304.0	290.0	25.	4.22	4.22	31.0	

		THERMAL AIR SAMPLING PERIOD FIELD FIELD LABORATORY									CONDUCTIVITY
		TIME			AIR			FIELD			
		START	STOP	DEPTH	MO. DATA	ML	ML	PH	TEMP	PH	PH
		Z									UMH /CM
13 FEB 1981	LEWES	1500	NAP	2.20	69.0	100.0	17.	4.32	4.33	34.0	
17 FEB 1981	WHITEFACE	2030	NAP	3.11	59.0	49.0	18.	3.68	ISA	ISA	
	PENN STATE	1630	NAP	ISA	34.0	35.0	25.	4.42	ISA	ISA	
	ILLINOIS	1700	NAP	4.13	40.0	40.0	25.	3.89	ISA	ISA	
	BROOKHAVEN	1530	NAP	ISA	22.0	25.0	25.	3.97	ISA	ISA	
	OXFORD	1630	22A	3.06	749.0	600.0	16.	3.98	4.24	7.0	
20 FEB 1981	ILLINOIS	1730	NAP	ISA	0.5	ISA	ISA	ISA	ISA	ISA	
	OAK RIDGE	1530	2A	3.06	1614.0	1670.0	21.	4.41	4.54	14.0	
21 FEB 1981	PENN STATE	1900	NAP	3.02	2357.0	NAP	25.	4.50	4.46	17.0	
	VIRGINIA	1900	23	3.02	2000.0	2490.0	22.	4.76	4.79	8.7	
	BROOKHAVEN	1700	4	3.04	1797.0	2050.0	25.	5.04	5.06	8.2	
	LEWES	1630	NAP	3.18	934.0	1040.0	16.	4.36	4.47	20.0	
	OXFORD	1600	2A	3.06	564.0	540.0	16.	3.96	4.03	45.0	
22 FEB 1981	WHITEFACE	100	NAP	3.11	851.0	670.0	19.	4.18	4.45	17.0	
	ITHACA	2000	NAP	3.17	1530.0	1594.0	25.	4.36	4.42	20.0	
23 FEB 1981	ILLINOIS	1430	NAP	4.13	518.0	440.0	25.	4.15	4.19	34.0	
	OAK RIDGE	1400	4	3.06	466.0	470.0	20.	4.19	4.27	30.0	
24 FEB 1981	ITHACA	1900	NAP	3.17	1360.0	1380.0	25.	4.48	4.57	17.0	
	PENN STATE	1700	NAP	3.02	2503.0	NAP	25.	4.41	4.38	21.0	
	VIRGINIA	1930	41	3.02	192.0	180.0	22.	3.90	3.94	61.0	
	ILLINOIS	1700	NAP	ISA	19.0	15.0	25.	4.53	ISA	ISA	
	BROOKHAVEN	2000	7	3.04	1275.0	1200.0	25.	4.96	5.02	11.0	
	LEWES	1300	1	3.18	459.0	470.0	22.	5.24	4.91	14.0	

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25 FEB 1981	PENN STATE	1900	NAP	ISA	26.0	ISA	25.	4.08	ISA	ISA
26 FEB 1981	WHITEFACE	1400	NAP	3.11	1854.0	1780.0	19.	4.24	4.58	12.0
	ITHACA	1400	NAP	3.17	230.0	260.0	25.	4.01	4.09	47.0
	BROOKHAVEN	2100	8	3.04	1215.0	770.0	24.	4.66	4.71	12.0
27 FEB 1981	WHITEFACE	2030	NAP	3.11	47.0	50.0	9.	4.54	ISA	ISA
	ILLINOIS	1530	NAP	ISA	7.0	5.0	25.	3.72	ISA	ISA
	LEWES	1300	5	3.18	47.0	65.0	20.	4.42	ISA	ISA
	OXFORD	2100	21	3.06	619.0	570.0	18.	4.22	4.26	32.0
28 FEB 1981	OXFORD	2100	7	ISA	47.0	50.0	17.	4.05	ISA	ISA
1 MAR 1981	PENN STATE	1900	NAP	3.31	166.0	140.0	25.	4.29	4.20	35.0
	BROOKHAVEN	1900	2	3.17	190.0	290.0	25.	4.11	4.16	32.0
	OAK RIDGE	2000	5	3.06	173.0	180.0	22.	4.05	4.20	29.0
3 MAR 1981	WHITEFACE	1430	0	3.11	370.0	340.0	19.	3.96	4.08	38.0
	ILLINOIS	1630	NAP	ISA	16.0	15.0	25.	4.84	ISA	ISA
4 MAR 1981	WHITEFACE	1800	NAP	ISA	3.0	50.0	ISA	ISA	ISA	ISA
	ITHACA	2000	NAP	3.17	370.0	370.0	25.	4.12	4.16	38.0
	ILLINOIS	1500	NAP	4.13	205.0	200.0	25.	4.43	4.44	19.0
5 MAR 1981	ILLINOIS	1600	NAP	4.13	250.0	190.0	25.	4.28	4.37	23.0
6 MAR 1981	PENN STATE	1500	NAP	3.31	542.0	530.0	25.	4.40	4.35	22.0
	VIRGINIA	2130	36	4.03	385.0	370.0	21.	4.18	4.23	31.0
	BROOKHAVEN	1600	1	3.17	470.0	980.0	26.	4.42	4.44	61.0
	LEWES	1230	NAP	3.18	1636.0	1530.0	16.	4.44	4.43	21.0
	OAK RIDGE	1430	6	3.31	1612.0	1560.0	19.	4.14	4.19	27.0

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I D	A R R	S A M P	P R E D	F I E L D	F I E L D	L A R D U C T	
		R M V D	O P E N	D A T E	V O L	V O L	P H	P H	P H	UMHO/CM
		Z		MO,DA	ML	ML	C			
7 MAR 1981	OXFORD	1530	31	4.03	1320.0	1150.0	15.	4.20	4.20	31.0
9 MAR 1981	WHITEFACE	1430	NAP	3.27	391.0	280.0	18.	4.35	4.61	11.0
	VIRGINIA	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
	BROOKHAVEN	230	8	3.17	199.0	850.0	26.	4.17	4.25	42.0
10 MAR 1981	PENN STATE	1930	NAP	ISA	15.0	ISA	25.	3.85	ISA	ISA
11 MAR 1981	ITHACA	2000	NAP	3.24	580.0	620.0	25.	4.22	4.22	0.0
	PENN STATE	2000	NAP	3.31	163.0	140.0	25.	3.99	3.89	7.0
12 MAR 1981	WHITEFACE	2130	NAP	3.27	474.0	460.0	12.	4.16	NAP	NAP
	BROOKHAVEN	230	2	4.02	184.0	140.0	25.	3.75	3.82	7.0
16 MAR 1981	PENN STATE	1530	NAP	3.31	137.0	70.0	25.	4.01	3.96	77.0
	ILLINOIS	2000	NAP	ISA	18.0	18.0	25.	5.18	ISA	ISA
	OXFORD	1300	6	MOE	102.0	200.0	14.	3.98	MOE	MOE
	OAK RIDGE	1600	14	3.31	271.0	260.0	20.	3.90	4.04	5.0
17 MAR 1981	WHITEFACE	1430	NAP	3.27	388.0	390.0	17.	4.09	4.24	36.0
	VIRGINIA	1630	5	ISA	8.0	12.0	20.	4.18	ISA	ISA
	BROOKHAVEN	230	5	4.02	99.0	120.0	25.	MOE	3.87	83.0
	LEWES	1300	2	4.10	522.0	520.0	19.	4.31	4.27	49.0
18 MAR 1981	WHITEFACE	1330	NAP	ISA	31.0	50.0	20.	4.18	ISA	ISA
	ITHACA	1400	NAP	3.24	350.0	360.0	25.	4.54	4.63	24.0
	PENN STATE	1530	NAP	3.31	42.0	70.0	25.	4.49	4.38	ISA
	BROOKHAVEN	200	1	ISA	11.0	45.0	25.	4.30	ISA	ISA
19 MAR 1981	VIRGINIA	1930	4	4.03	45.0	40.0	20.	3.80	ISA	ISA
	ILLINOIS	1600	NAP	ISA	2.0	3.0	25.	6.83	ISA	ISA

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DATE	LOCATION	TIME	TYPE	WIND	WAVE	WAVE	WAVE	WAVE	WAVE	WAVE
21 MAR 1981	PENN STATE	2200	NAP	3.31	182.0	140.0	25.	4.27	4.24	41.0
23 MAR 1981	WHITEFACE	1500	NAP	4.14	300.0	210.0	19.	4.11	4.14	20.0
	ITHACA	1700	NAP	4.16	315.0	165.0	25.	4.09	4.13	37.0
	VIRGINIA	1900	MOE	ISA	23.0	10.0	21.	4.18	ISA	ISA
	OAK RIDGE	1900	20	3.31	1171.0	1200.0	19.	4.08	4.13	36.0
25 MAR 1981	WHITEFACE	2000	NAP	4.14	409.0	160.0	18.	4.12	4.30	28.0
26 MAR 1981	ITHACA	1100	NAP	ISA	10.0	13.0	25.	3.79	3.88	NAP
	ILLINOIS	1630	NAP	4.13	47.0	45.0	25.	4.92	ISA	ISA
27 MAR 1981	ITHACA	2100	NAP	4.16	225.0	230.0	25.	3.93	3.95	60.0
	PENN STATE	1600	NAP	4.17	101.0	85.0	25.	4.55	ISA	ISA
	BROOKHAVEN	1600	1	4.02	156.0	160.0	26.	4.20	4.35	33.0
	OXFORD	2030	6	4.03	589.0	520.0	21.	4.05	4.47	38.0
30 MAR 1981	WHITEFACE	1500	NAP	4.14	304.0	260.0	19.	3.70	3.77	87.0
	ILLINOIS	1700	NAP	4.13	31.0	90.0	25.	4.59	5.14	23.0
	OXFORD	1630	2	4.03	570.0	540.0	20.	3.96	4.10	35.0
	OAK RIDGE	1700	5	4.20	2283.0	2113.0	20.	4.53	4.72	11.0
31 MAR 1981	ITHACA	2100	NAP	4.16	155.0	160.0	25.	4.14	4.19	32.0
	PENN STATE	1800	NAP	4.17	570.0	548.0	25.	4.30	4.46	22.0
	VIRGINIA	1630	8	4.03	700.0	650.0	23.	4.54	4.60	10.0
	BROOKHAVEN	1500	4	4.13	931.0	720.0	27.	4.47	4.61	23.0
	LEWES	1300	2	4.10	742.0	700.0	23.	4.71	4.73	15.0
1 APR 1981	WHITEFACE	1430	NAP	4.14	1008.0	910.0	18.	4.19	4.50	14.0
	OAK RIDGE	1920	3	ISA	20.0	16.0	20.	3.80	ISA	ISA

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E		L I D		A R R		S A M P		P R E D		F I E L D		F T E L D		L A H		C O N D U	
		R M V D		O P E N		D A T E		V O L		V O L		P H		P H		P H		T	
		Z				MO,DA		ML		ML		C						UMH/D/CM	
51	2 APR 1981	WHITEFACE	1400	NAP	4.14	1276.0	980.0	17.	4.01	4.30	28.0								
		ITHACA	2000	NAP	4.16	720.0	781.0	25.	4.00	4.07	51.0								
		PENN STATE	1900	NAP	4.17	276.0	324.0	25.	4.24	4.41	30.0								
		VIRGINIA	2130	0	ISA	0.0	19.0	ISA	ISA	ISA	ISA								
		BROOKHAVEN	1530	2	4.13	1603.0	1530.0	26.	4.54	4.61	17.0								
		LEWES	1400	5	4.10	1925.0	1740.0	20.	4.54	4.69	14.0								
	3 APR 1981	WHITEFACE	1400	NAP	ISA	25.0	16.0	20.	4.14	ISA	ISA								
		ILLINOIS	1600	NAP	4.13	63.0	55.0	25.	4.56	5.96	21.0								
	4 APR 1981	OXFORD	1330	3	5.08	65.0	81.0	20.	3.88	ISA	ISA								
	5 APR 1981	WHITEFACE	2400	NAP	4.14	498.0	356.0	17.	3.92	4.16	40.0								
		OXFORD	1300	10	5.08	1300.0	1280.0	19.	4.34	4.70	15.0								
	6 APR 1981	ITHACA	2100	NAP	4.16	150.0	192.0	25.	3.96	4.07	53.0								
		PENN STATE	1930	NAP	4.17	270.0	188.0	25.	4.04	4.08	51.0								
		VIRGINIA	1400	NAP	4.24	239.0	186.0	20.	4.39	4.56	20.0								
		BROOKHAVEN	1530	1	4.13	2197.0	2110.0	26.	4.44	4.49	19.0								
		LEWES	1400	5	4.10	1451.0	1660.0	19.	4.40	4.57	20.0								
		OAK RIDGE	1500	3	4.20	2038.0	1934.0	20.	4.54	4.59	15.0								
	7 APR 1981	WHITEFACE	1400	NAP	ISA	42.0	33.0	18.	4.27	ISA	ISA								
		ILLINOIS	1630	NAP	8.10	247.0	323.0	25.	4.66	MOE	MOE								
	9 APR 1981	ITHACA	2200	NAP	4.16	235.0	243.0	25.	4.16	4.26	32.0								
		ILLINOIS	1700	NAP	8.10	156.0	139.0	25.	4.60	MOE	MOE								
	10 APR 1981	WHITEFACE	1500	NAP	5.12	577.0	520.0	18.	3.97	4.29	26.0								
		PENN STATE	1630	NAP	4.17	144.0	171.0	25.	4.15	4.18	50.0								

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E		L I D		A R R		S A M P		P R E		F I E L		F I E L		L A R		C O N D U C T	
		R M V N	Z	O P E N	D A T E	V O L	V O L	P H	T	P H	P H	P H	P H	P H	P H	P H	P H	P H	P H
					MO,DA	ML	ML												UMHO/CM
16	10 APR 1981	BROOKHAVEN	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE	NDE
		OXFORD	1830	5	5.08	120.0	146.0	20.	3.90	4.11	ISA								
		OAK RIDGE	1500	7	4.20	913.0	862.0	21.	4.40	4.58	15.0								
	11 APR 1981	BROOKHAVEN	2300	2	4.16	182.0	163.0	25.	3.90	4.06	49.0								
		OXFORD	1330	3	5.08	750.0	780.0	20.	3.68	4.16	40.0								
	12 APR 1981	ITHACA	1900	NAP	4.21	610.0	621.0	25.	4.04	4.11	38.0								
		OXFORD	1500	17	5.08	1070.0	1060.0	22.	3.85	4.15	39.0								
	13 APR 1981	WHITEFACE	1830	NAP	5.12	685.0	550.0	17.	3.87	4.10	38.0								
		ITHACA	2300	NAP	ISA	NAP	128.0	NDE	NDE	ISA	ISA								
		PENN STATE	1530	NAP	4.17	1609.0	1433.0	25.	4.09	4.02	49.0								
		ILLINOIS	1630	NAP	8.10	550.0	1460.0	25.	4.31	NDE	NDE								
		LEWES	1700	17	4.27	1780.0	1640.0	19.	3.99	4.07	48.0								
		OXFORD	1500	2	ISA	20.0	16.0	ISA	ISA	ISA	ISA								
	14 APR 1981	ITHACA	2100	NAP	4.21	480.0	516.0	24.	4.14	4.17	30.0								
		PENN STATE	2130	NAP	4.17	1389.0	1245.0	25.	4.09	4.11	41.0								
		VIRGINIA	1600	13	4.24	920.0	832.0	21.	4.08	4.13	36.0								
		ILLINOIS	1700	NAP	8.10	348.0	345.0	25.	4.24	NDE	NDE								
		OXFORD	1700	3	5.08	62.0	65.0	21.	3.81	ISA	ISA								
	15 APR 1981	WHITEFACE	1500	NAP	5.12	160.0	180.0	17.	3.98	4.28	24.0								
		VIRGINIA	1730	4	4.24	268.0	230.0	19.	4.09	4.16	31.0								
		BROOKHAVEN	1530	5	4.29	1660.0	1820.0	25.	4.30	4.37	30.0								
		LEWES	1300	11	4.27	212.0	179.0	20.	3.95	4.08	57.0								
		OAK RIDGE	1430	3	5.04	256.0	228.0	20.	3.98	4.48	45.0								

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E		S P R I N G		P R E C I P I T A T I O N		F E L D P H		C O N C E N T R A T I O N	
		R E C O R D I N G		D A T E		V O L U M E		P H		P H	
		Z		MO,DA		ML		C		UMHO/CM	
17	17 APR 1981	PENN STATE	2200	NAP	5.18	220.0	205.0	25.	3.58	3.65	110.0
		VIRGINIA	2200	1	4.24	158.0	163.0	20.	4.07	4.16	33.0
		ILLINOIS	1700	NAP	8.10	22.0	22.0	25.	3.80	MOE	MOE
		OXFORD	1630	7	5.08	180.0	180.0	22.	3.78	4.00	50.0
	18 APR 1981	ITHACA	1600	NAP	4.29	550.0	520.0	24.	3.76	3.80	66.0
		OXFORD	1430	14	5.08	585.0	620.0	21.	4.13	4.36	31.0
	19 APR 1981	WHITEFACE	30	NAP	5.12	1830.0	1450.0	18.	4.12	4.39	23.0
	20 APR 1981	VIRGINIA	2100	4	4.24	327.0	282.0	21.	4.08	4.17	30.0
		ILLINOIS	1400	NAP	8.10	489.0	462.0	25.	3.84	MOE	MOE
		LEWES	1730	4	4.27	379.0	341.0	22.	4.11	4.24	26.0
		OXFORD	1800	2	5.08	690.0	630.0	19.	4.15	4.35	22.0
	21 APR 1981	WHITEFACE	1430	NAP	5.12	250.0	230.0	18.	4.10	4.56	15.0
		ITHACA	1600	NAP	4.29	50.0	64.0	24.	4.19	4.23	33.0
		OAK RIDGE	1500	20	5.04	2730.0	2600.0	20.	4.29	4.28	29.0
	22 APR 1981	ILLINOIS	1700	NAP	8.10	441.0	404.0	25.	3.97	MOE	MOE
		OXFORD	1500	6	5.08	80.0	65.0	19.	3.70	ISA	ISA
23	23 APR 1981	ILLINOIS	1600	NAP	8.10	106.0	105.0	25.	4.20	MOE	MOE
	24 APR 1981	WHITEFACE	1800	NAP	5.12	570.0	540.0	18.	3.95	4.43	18.0
		BROOKHAVEN	1500	18	4.29	1427.0	NAP	26.	4.17	4.25	28.0
		LEWES	1800	6	5.29	1420.0	1390.0	18.	4.44	4.54	22.0
		OXFORD	1730	17	5.08	2430.0	2500.0	18.	4.01	4.57	14.0
		OAK RIDGE	1400	8	5.04	370.0	340.0	20.	4.23	4.22	29.0
	25 APR 1981	ITHACA	2000	NAP	4.29	1460.0	1470.0	24.	4.11	4.13	32.0

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25 APR 1981	BROOKHAVEN	2400	5	4.29	98.0	358.0	22.	3.87	3.88	65.0
26 APR 1981	VIRGINIA	1700	1	5.27	204.0	186.0	20.	4.41	4.65	22.0
27 APR 1981	WHITEFACE	1530	NAP	5.12	390.0	260.0	17.	3.94	4.16	31.0
	PENN STATE	2200	NAP	5.18	415.0	360.0	25.	3.60	3.68	99.0
	VIRGINIA	2130	1	5.29	23.0	16.0	21.	3.87	ISA	ISA
29 APR 1981	ILLINOIS	1530	NAP	8.10	434.0	425.0	25.	4.55	NQE	NQE
	BROOKHAVEN	1730	1	5.14	250.0	260.0	26.	3.67	3.74	91.0
30 APR 1981	WHITEFACE	1530	NAP	5.12	593.0	570.0	18.	3.88	4.10	37.0
	ITHACA	1800	NAP	5.18	1420.0	1446.0	24.	4.02	4.06	42.0
	PENN STATE	2100	NAP	5.18	1387.0	1180.0	25.	3.69	3.80	84.0
	ILLINOIS	1530	NAP	8.10	80.0	55.0	25.	5.03	NQE	NQE
	OAK RIDGE	1530	1	5.27	340.0	290.0	20.	4.05	4.06	43.0
1 MAY 1981	ILLINOIS	1930	NAP	8.10	35.0	37.0	25.	4.88	NQE	NQE
	LEWES	1500	2	5.29	170.0	220.0	19.	3.84	3.93	60.0
2 MAY 1981	VIRGINIA	2000	3	5.27	940.0	900.0	19.	4.16	4.22	35.0
	BROOKHAVEN	1600	1	5.14	270.0	260.0	25.	4.04	4.10	39.0
	OXFORD	1530	24	6.05	746.0	1070.0	17.	4.00	5.10	5.0
3 MAY 1981	PENN STATE	2030	NAP	5.18	50.0	100.0	25.	3.40	3.57	ISA
4 MAY 1981	ILLINOIS	1830	NAP	ISA	9.0	9.0	25.	3.89	ISA	ISA
	LEWES	1400	17	5.29	1930.0	1950.0	22.	3.91	4.00	54.0
5 MAY 1981	ILLINOIS	1530	NAP	8.10	101.0	99.0	25.	3.87	NQE	NQE
6 MAY 1981	ITHACA	2000	NAP	5.18	160.0	190.0	24.	3.86	3.86	68.0
	ILLINOIS	1630	NAP	6.19	450.0	430.0	25.	4.38	4.54	17.0

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I D	A R R	S A M P	P R E	F I L	F I L	L A B	C O N D U C T
		R M V D	O P F N	O A T E	V O L	V O L	P H	P H	P H	U M H O /C M
		Z		MO.DA	ML	ML	C			
6 MAY 1981	OXFORD	1430	12	6.05	1300.0	1270.0	20.	4.30	4.60	13.0
7 MAY 1981	WHITEFACE	1400	NAP	5.12	400.0	374.0	17.	3.88	4.05	42.0
	PENN STATE	1700	NAP	5.18	240.0	240.0	25.	3.72	3.84	64.0
	VIRGINIA	1900	75	5.27	190.0	200.0	20.	3.74	3.78	74.0
9 MAY 1981	ILLINOIS	MOE	MOE	6.19	MOE	MOE	MOE	MOE	3.98	85.0
10 MAY 1981	ILLINOIS	MOE	MOE	6.19	MOE	MOE	MOE	MOE	4.02	57.0
11 MAY 1981	VIRGINIA	1900	18	5.27	870.0	850.0	20.	4.25	4.28	28.0
	ILLINOIS	1530	NAP	6.19	1180.0	1180.0	25.	4.02	4.53	16.0
	BROOKHAVEN	1700	NAP	5.14	372.0	455.0	25.	4.22	4.30	32.0
12 MAY 1981	PENN STATE	2030	NAP	5.18	2560.0	2575.0	25.	4.40	4.55	18.0
	VIRGINIA	1500	24	5.27	590.0	560.0	20.	4.32	4.41	22.0
	ILLINOIS	1630	NAP	ISA	1.4	3.0	25.	3.32	ISA	ISA
	BROOKHAVEN	1500	8	5.14	780.0	800.0	25.	4.43	4.58	22.0
	LEWES	1530	5	5.29	870.0	910.0	14.	4.65	4.69	18.0
	OXFORD	1300	25	6.05	879.0	890.0	12.	4.03	4.30	27.0
	OAK RIDGE	1410	11	5.27	51.0	49.0	20.	4.34	4.32	30.0
13 MAY 1981	WHITEFACE	1430	NAP	6.09	1592.0	894.0	14.	4.23	4.64	14.0
	ITHACA	1100	NAP	5.18	1240.0	1270.0	24.	4.23	4.26	26.0
14 MAY 1981	ILLINOIS	1600	NAP	6.19	770.0	770.0	25.	3.90	4.12	41.0
	OXFORD	1400	10	6.05	285.0	360.0	16.	3.51	4.70	39.0
15 MAY 1981	ILLINOIS	1500	NAP	6.19	108.0	83.0	25.	3.71	3.88	63.0
	OXFORD	1700	18	6.05	919.0	975.0	15.	3.83	4.24	30.0
	OAK RIDGE	2100	1	5.27	660.0	585.0	20.	4.34	4.30	28.0

MAP35 PRECIPITATION CHEMISTRY DATA (CONT.)

		20									
		T I M E	L T D	A R R	S A M P	P R F	F I L D	F I L D	L A R	C O N T	
		R M V D	O P E N	A T E	V O L	V O L	P H	P H	P H	C T	
		Z		MO,DA	ML	FL	C			HMHO/CM	
20	16 MAY 1981	VIRGINIA	1700	14	5.27	146.0	140.0	21.	4.03	4.09	45.0
		BROOKHAVEN	1600	11	6.09	417.0	390.0	24.	4.42	4.73	20.0
	17 MAY 1981	LEWES	2000	1	5.29	2325.0	2230.0	20.	4.49	4.56	20.0
	18 MAY 1981	WHITEFACE	1400	NAP	6.09	600.0	630.0	14.	4.13	4.41	21.0
		ITHACA	1400	NAP	6.10	1010.0	1110.0	24.	3.93	3.98	52.0
		PENN STATE	1330	NAP	6.15	1052.0	1140.0	25.	4.60	6.50	14.0
		ILLINOIS	1500	NAP	6.19	980.0	960.0	25.	4.11	4.97	6.0
		BROOKHAVEN	0	8	6.09	124.0	134.0	24.	3.46	NAP	NAP
		OXFORD	2100	12	6.05	1891.0	1900.0	14.	4.05	4.43	20.0
	19 MAY 1981	ILLINOIS	1600	NAP	6.19	45.0	40.0	25.	3.49	ISA	ISA
		OXFORD	1900	5	6.05	383.0	422.0	16.	3.71	4.15	35.0
		OAK RIDGE	2000	11	5.27	1460.0	1380.0	18.	4.45	4.53	19.0
	20 MAY 1981	LEWES	1800	6	6.15	1250.0	1380.0	18.	4.02	4.24	31.0
	21 MAY 1981	VIRGINIA	1430	0	6.09	1645.0	1710.0	20.	3.93	4.05	48.0
		OAK RIDGE	1500	10	6.05	294.0	276.0	20.	3.75	3.78	84.0
	22 MAY 1981	WHITEFACE	1430	NAP	6.09	177.0	130.0	19.	4.05	4.59	45.0
	25 MAY 1981	OXFORD	2100	4	ISA	46.0	49.0	24.	3.41	ISA	ISA
	26 MAY 1981	WHITEFACE	1400	NAP	6.09	526.0	550.0	21.	3.64	RPC	RPC
		ITHACA	1600	NAP	6.10	420.0	450.0	25.	3.64	RPC	RPC
		PENN STATE	1530	NAP	6.15	100.0	119.0	25.	3.95	RPC	RPC
ILLINOIS		1600	NAP	6.19	137.0	123.0	25.	3.89	4.11	51.0	
OAK RIDGE		1500	3	6.05	523.0	455.0	20.	3.97	4.16	38.0	
27 MAY 1981	WHITEFACE	1430	NAP	6.09	110.0	98.0	20.	3.85	RPC	RPC	

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I D	A R R	S A M P	P R E D	F I E L D	F I E L D	L A R	C O N D I T
		Z	P E N	D A T E	V O L	V O L	P H	P H	P H	U M H O /C M
27 MAY 1981	OXFORD	1900	16	6.05	1150.0	1140.0	22.	3.76	4.11	39.0
28 MAY 1981	WHITEFACE	1300	NAP	6.09	745.0	680.0	21.	3.87	4.15	39.0
	VIRGINIA	2000	0	ISA	ISA	1110.0	ISA	ISA	ISA	ISA
	OXFORD	1900	12	6.05	330.0	341.0	23.	3.90	4.19	31.0
	OAK RIDGE	1900	15	6.05	889.0	830.0	24.	4.40	4.53	16.0
29 MAY 1981	PENN STATE	1830	NAP	6.15	573.0	631.0	25.	4.67	4.81	17.0
	LEWES	1730	8	6.15	1300.0	620.0	20.	4.48	4.61	22.0
21 30 MAY 1981	BROOKHAVEN	1930	1	6.09	1346.0	1370.0	24.	5.23	5.58	6.0
	OXFORD	2300	12	6.05	676.0	620.0	23.	3.91	4.42	21.0
31 MAY 1981	OXFORD	2330	5	ISA	30.0	49.0	22.	3.58	ISA	ISA
1 JUN 1981	WHITEFACE	1400	NAP	6.09	586.0	570.0	20.	3.86	4.56	17.0
	ITHACA	1900	NAP	6.10	440.0	486.0	25.	3.78	3.80	76.0
	PENN STATE	1530	NAP	6.15	631.0	733.0	25.	3.71	4.49	18.0
	ILLINOIS	1500	NAP	6.19	160.0	140.0	25.	4.17	4.27	34.0
	OXFORD	2100	1	7.08	118.0	114.0	20.	3.54	3.88	65.0
2 JUN 1981	PENN STATE	1730	NAP	6.15	730.0	650.0	25.	4.09	4.78	10.0
	VIRGINIA	1600	0	6.09	1760.0	1766.0	23.	4.00	4.02	49.0
	ILLINOIS	1630	NAP	6.19	130.0	120.0	25.	3.72	3.75	86.0
	OAK RIDGE	1900	12	6.05	2798.0	2503.0	24.	4.13	4.18	35.0
3 JUN 1981	ILLINOIS	1630	NAP	6.19	93.0	89.0	25.	4.29	4.40	ISA
	BROOKHAVEN	2130	1	6.09	43.0	160.0	24.	3.66	4.16	39.0
	LEWES	1630	4	6.15	980.0	990.0	22.	4.16	4.34	28.0
4 JUN 1981	ITHACA	1200	NAP	6.10	1340.0	1414.0	25.	4.37	4.50	16.0

T I M E L I D A R R S A M P P R F T F T F L A C
 R M V D O P E N D A T V O L V O L P H F I O L A R U C
 Z M O . D A M L M L C U M H O / C M

4 JUN 1981	VIRGINIA	1400	0	6.09	780.0	813.0	23.	4.00	4.12	41.0
5 JUN 1981	WHITEFACE	1330	NAP	6.23	240.0	160.0	21.	3.74	4.01	50.0
	PENN STATE	1430	NAP	6.15	1678.0	1740.0	25.	4.29	4.43	19.0
	ILLINOIS	1630	NAP	ISA	19.0	19.0	25.	4.00	ISA	ISA
	OAK RIDGE	1700	8	6.23	1600.0	1460.0	23.	4.40	4.38	22.0
6 JUN 1981	ITHACA	2300	NAP	ISA	ISA	32.0	ISA	ISA	ISA	ISA
	OXFORD	0	9	7.08	270.0	280.0	23.	3.89	4.28	30.0
7 JUN 1981	WHITEFACE	2130	NAP	6.23	1620.0	1460.0	14.	4.26	4.47	21.0
	VIRGINIA	2200	0	7.13	92.0	211.0	21.	6.57	RPC	RPC
8 JUN 1981	ILLINOIS	1500	NAP	6.19	35.0	34.0	25.	3.93	3.93	ISA
	OAK RIDGE	1430	12	6.23	2460.0	2320.0	21.	4.32	4.20	31.0
9 JUN 1981	WHITEFACE	1730	NAP	6.23	700.0	780.0	21.	3.98	4.46	19.0
	ITHACA	1900	NAP	6.29	1340.0	1360.0	25.	4.37	4.45	18.0
	PENN STATE	1700	NAP	6.15	1179.0	1228.0	25.	4.11	4.85	9.0
	BROOKHAVEN	1930	3	6.24	86.0	61.0	23.	4.16	RPC	RPC
	OXFORD	2000	5	ISA	31.0	33.0	24.	4.47	ISA	ISA
10 JUN 1981	WHITEFACE	1330	NAP	ISA	28.0	33.0	20.	4.01	ISA	ISA
	VIRGINIA	1800	5	7.13	304.0	333.0	23.	4.02	4.14	40.0
	ILLINOIS	1430	NAP	ISA	290.0	290.0	25.	4.90	ISA	ISA
	OXFORD	2200	13	7.08	128.0	146.0	23.	3.63	4.18	47.0
11 JUN 1981	ITHACA	1300	NAP	6.29	120.0	130.0	25.	4.16	4.28	32.0
	PENN STATE	1700	NAP	7.08	332.0	341.0	25.	3.88	3.97	68.0
	LEWES	1800	6	6.29	450.0	406.0	25.	4.09	5.19	4.0

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E		L I D		A R R		S A M P		P R E C		F I E L D		F I E L D		L A B		C O N D U C T	
		R M V D		O P E N		D A T E		V O L		V O L		P H		P H		P H			
		Z				MO,DA		ML		ML		C						UMH/CM	
23	11 JUN 1981	OAK RIDGE	1600	3	6.23	770.0	750.0	22.	4.26	4.59	15.0								
	12 JUN 1981	WHITEFACE	1330	NAP	6.23	250.0	230.0	22.	4.10	4.55	20.0								
	13 JUN 1981	BROOKHAVEN	2100	13	6.24	137.0	211.0	22.	3.47	3.55	140.0								
	14 JUN 1981	WHITEFACE	2300	NAP	6.23	120.0	98.0	23.	4.14	4.37	23.0								
		ITHACA	2100	NAP	6.29	1310.0	1300.0	25.	4.11	4.16	36.0								
		PENN STATE	1530	NAP	7.08	1380.0	1410.0	25.	4.01	4.05	40.0								
		LEWES	2100	4	6.29	850.0	890.0	23.	4.07	4.76	10.0								
		OXFORD	2300	13	7.08	1260.0	1140.0	27.	4.21	4.53	18.0								
	15 JUN 1981	WHITEFACE	1500	NAP	6.23	120.0	98.0	23.	4.14	4.68	12.0								
		ITHACA	1900	NAP	6.29	1160.0	1170.0	25.	4.29	4.36	24.0								
		PENN STATE	1900	NAP	7.08	3130.0	3360.0	25.	4.11	4.23	34.0								
		ILLINOIS	1500	NAP	8.03	892.0	820.0	25.	4.28	4.36	25.0								
		BROOKHAVEN	1630	3	6.24	240.0	49.0	22.	3.90	3.49	48.0								
		LEWES	2130	7	6.29	222.0	228.0	23.	3.81	3.92	64.0								
	16 JUN 1981	VIRGINIA	1530	2	ISA	0.0	<13.0	ISA	ISA	ISA	ISA								
		ILLINOIS	1530	NAP	8.03	422.0	430.0	25.	4.60	4.77	12.0								
	17 JUN 1981	WHITEFACE	2000	NAP	7.08	634.0	570.0	23.	4.04	4.42	20.0								
		ITHACA	1800	NAP	6.29	440.0	450.0	24.	4.04	4.11	36.0								
		PENN STATE	1900	NAP	7.08	320.0	340.0	25.	3.89	3.87	66.0								
	18 JUN 1981	WHITEFACE	1230	NAP	ISA	26.0	33.0	22.	4.02	ISA	ISA								
	20 JUN 1981	WHITEFACE	2300	NAP	7.08	485.0	440.0	20.	3.51	3.56	130.0								
	21 JUN 1981	BROOKHAVEN	1800	10	7.01	2210.0	2210.0	23.	4.27	4.78	9.0								
	22 JUN 1981	WHITEFACE	1230	NAP	ISA	ISA	ISA	ISA	ISA	ISA	ISA								

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24	22 JUN 1981	ITHACA	1300	NAP	6.29	2040.0	2050.0	25.	3.71	3.77	82.0
		VIRGINIA	1900	2	7.13	308.0	374.0	23.	4.07	4.13	41.0
		ILLINOIS	1430	NAP	8.03	510.0	490.0	25.	4.18	4.39	24.0
		BROOKHAVEN	1800	2	7.01	140.0	150.0	23.	3.87	3.96	57.0
		LEWES	1500	4	6.29	1430.0	1370.0	24.	3.92	4.16	43.0
		OXFORD	2200	20	7.08	217.0	230.0	23.	3.67	4.14	36.0
	23 JUN 1981	WHITEFACE	1500	NAP	7.08	645.0	780.0	20.	3.86	4.22	30.0
		ITHACA	1300	NAP	ISA	ISA	20.0	ISA	ISA	ISA	ISA
		PENN STATE	1400	NAP	7.08	2650.0	2970.0	25.	3.88	5.18	0.0
		BROOKHAVEN	1300	2	ISA	NAP	36.0	NAP	23.00	3.79	ISA
		OAK RIDGE	1430	8	7.14	114.0	146.0	22.	4.05	4.08	42.0
	24 JUN 1981	ILLINOIS	1430	NAP	8.03	166.0	170.0	25.	4.01	4.12	42.0
	25 JUN 1981	ILLINOIS	1430	NAP	ISA	51.0	50.0	25.	4.20	ISA	ISA
		BROOKHAVEN	1930	2	7.01	890.0	800.0	23.	3.95	4.04	46.0
		LEWES	1600	3	8.06	303.0	310.0	22.	3.63	3.80	75.0
	26 JUN 1981	ITHACA	1900	NAP	8.04	510.0	520.0	24.	4.01	4.13	40.0
		PENN STATE	1700	NAP	7.08	1080.0	970.0	25.	4.18	5.26	3.0
		VIRGINIA	1430	2	ISA	48.0	58.0	23.	3.86	ISA	ISA
		BROOKHAVEN	1430	2	7.01	1520.0	1430.0	23.	3.91	4.93	7.0
		LEWES	1500	2	8.06	587.0	600.0	22.	3.78	3.93	64.0
		OAK RIDGE	1400	3	7.14	1400.0	1200.0	22.	4.03	4.08	44.0
	27 JUN 1981	WHITEFACE	2400	NAP	7.08	870.0	910.0	22.	4.44	4.92	6.0
		OXFORD	1800	9	ISA	23.0	49.0	ISA	ISA	ISA	ISA

MAP38 PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I D	A R R	S A M P	P R E D	F I E L D	F I E L D	L A R	C O N D I T
		Z	MO, DA	ML	ML	C	UHHO/CM			
29 JUN 1981	ILLINOIS	1530	NAP	ISA	1.6	3.1	25.	ISA	ISA	ISA
30 JUN 1981	ILLINOIS	1530	NAP	ISA	17.0	20.0	25.	3.61	ISA	ISA
1 JUL 1981	OXFORD	2030	15	8.11	123.0	150.0	24.	3.31	3.67	100.0
2 JUL 1981	PENN STATE	1900	NAP	8.17	2084.0	2560.0	25.	4.65	4.63	12.0
	BROOKHAVEN	2230	5	7.14	190.0	160.0	26.	4.36	4.50	27.0
	OAK RIDGE	1600	7	7.14	291.0	240.0	22.	4.01	4.13	49.0
3 JUL 1981	ITHACA	300	NAP	8.04	530.0	550.0	24.	4.32	4.42	24.0
	BROOKHAVEN	2400	3	7.14	136.0	150.0	26.	4.79	4.86	17.0
	OXFORD	2400	16	8.11	328.0	340.0	24.	3.63	3.86	66.0
4 JUL 1981	VIRGINIA	2300	916	7.13	6870.0	6940.0	23.	4.43	4.49	17.0
5 JUL 1981	WHITEFACE	2330	NAP	7.22	116.0	80.0	24.	4.18	4.27	28.0
	BROOKHAVEN	1600	14	7.14	924.0	910.0	26.	4.76	4.86	12.0
	LEWES	1800	MOE	8.06	649.0	600.0	20.	4.61	4.97	19.0
6 JUL 1981	WHITEFACE	300	NAP	7.22	NAP	570.0	21.	4.52	4.38	24.0
	ITHACA	1200	NAP	8.04	3390.0	3320.0	24.	4.07	4.15	34.0
	PENN STATE	1900	NAP	8.17	464.0	530.0	25.	4.01	4.13	46.0
	VIRGINIA	2200	421	7.13	1725.0	1830.0	23.	4.00	4.09	41.0
	ILLINOIS	1530	NAP	8.03	1924.0	1830.0	25.	4.20	4.29	27.0
	OXFORD	1930	46	8.11	2157.0	2130.0	23.	3.73	3.95	54.0
7 JUL 1981	OAK RIDGE	1900	19	7.14	1664.0	1480.0	19.	4.35	4.34	26.0
8 JUL 1981	ILLINOIS	1430	NAP	ISA	0.5	ISA	ISA	ISA	ISA	ISA
10 JUL 1981	WHITEFACE	1400	NAP	7.22	NAP	2960.0	23.	4.60	4.84	10.0
	ILLINOIS	1600	NAP	8.03	455.0	440.0	25.	4.67	5.04	9.0

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R M V D . O P E N D A T E V N L . V N L . P H T P H P H

Z M O . D A M L M L C U M H O / C M

DATE	LOCATION	TIME	WIND	WIND DIR	WIND SPC	WIND DIR	WIND SPC	WIND DIR	WIND SPC	WIND DIR	WIND SPC
10 JUL 1981	OXFORD	1730	26	8.11	377.0	360.0	23.	3.83	4.20	41.0	
11 JUL 1981	VIRGINIA	1630	MOE	8.13	314.0	370.0	24.	3.88	3.88	75.0	
14 JUL 1981	ILLINOIS	1630	NAP	ISA	28.0	20.0	25.	4.09	ISA	ISA	
	OXFORD	2100	7	ISA	33.0	35.0	24.	3.59	3.59	ISA	
15 JUL 1981	WHITEFACE	1400	NAP	7.22	2108.0	1930.0	25.	4.43	4.58	16.0	
	ILLINOIS	1530	NAP	8.03	238.0	200.0	25.	3.79	3.90	65.0	
16 JUL 1981	OXFORD	2130	2	8.11	244.0	230.0	23.	3.58	3.98	59.0	
17 JUL 1981	LEWES	1500	2	8.06	95.0	100.0	21.	3.18	ISA	ISA	
	OAK RIDGE	1800	5	8.07	306.0	240.0	22.	3.94	3.98	54.0	
20 JUL 1981	WHITEFACE	230	NAP	8.05	242.0	210.0	24.	3.95	4.08	43.0	
	ILLINOIS	1500	NAP	8.03	1197.0	1140.0	25.	4.03	4.06	44.0	
	OXFORD	2030	37	8.11	1147.0	1120.0	22.	3.59	4.03	47.0	
21 JUL 1981	WHITEFACE	1900	NAP	8.05	581.0	520.0	26.	4.23	4.37	23.0	
	ITHACA	2100	NAP	8.04	2980.0	2960.0	25.	3.88	3.89	62.0	
	PENN STATE	1530	NAP	8.17	4044.0	2350.0	25.	4.21	4.01	47.0	
	VIRGINIA	2100	MOE	8.13	52.0	100.0	26.	4.07	4.26	ISA	
	ILLINOIS	1600	NAP	ISA	1.1	3.1	25.	ISA	ISA	ISA	
	BROOKHAVEN	1400	13	7.29	1412.0	1400.0	26.	3.80	3.91	65.0	
	OAK RIDGE	1400	1	8.07	355.0	290.0	21.	3.93	4.07	48.0	
22 JUL 1981	WHITEFACE	1430	NAP	ISA	22.0	20.0	23.	4.00	ISA	ISA	
	ITHACA	2000	NAP	8.04	90.0	100.0	24.	3.91	3.97	58.0	
	BROOKHAVEN	1400	1	7.29	735.0	630.0	23.	3.70	3.91	65.0	
	OXFORD	1630	3	ISA	25.0	35.0	24.	3.66	ISA	ISA	

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I N E	A R R O W	S A M P L E	P R E C I P I T A T I O N	F I E L D	F T E L D	L A B P H	C O N D U C T
		Z		MO.	DA	ML	ML	C		UMHO/CM
24 JUL 1981	OXFORD	1430	2	8.11	79.0	100.0	24.	3.48	3.88	ISA
26 JUL 1981	VIRGINIA	1900	MOE	8.13	1398.0	1490.0	26.	3.94	3.88	68.0
27 JUL 1981	WHITEFACE	1400	NAP	8.05	523.0	MOE	23.	4.34	4.35	21.0
	ITHACA	1800	NAP	8.04	890.0	870.0	24.	3.80	3.84	65.0
	PENN STATE	1700	NAP	8.17	1310.0	1000.0	25.	4.40	6.73	41.0
	ILLINOIS	1600	NAP	9.14	1899.0	1810.0	25.	4.05	4.17	33.0
	BROOKHAVEN	1400	2	7.29	149.0	150.0	24.	3.60	3.71	110.0
27	LEWES	2200	9	8.06	636.0	600.0	21.	3.92	4.06	48.0
	OAK RIDGE	1700	4	8.07	231.0	210.0	NAP	3.85	4.01	57.0
28 JUL 1981	ILLINOIS	1700	NAP	9.14	329.0	330.0	25.	4.14	4.28	26.0
	OXFORD	30	8	8.11	1037.0	1000.0	24.	3.74	4.20	30.0
29 JUL 1981	ITHACA	2000	NAP	8.04	1460.0	1450.0	24.	4.15	4.19	29.0
	PENN STATE	1500	NAP	8.17	558.0	340.0	25.	4.42	6.37	47.0
	VIRGINIA	1630	MOE	8.13	284.0	250.0	24.	3.94	4.10	48.0
	BROOKHAVEN	1400	5	8.18	948.0	910.0	24.	3.63	3.73	90.0
	LEWES	1430	2	8.13	488.0	500.0	20.	3.83	3.93	59.0
	OAK RIDGE	2030	7	8.07	268.0	210.0	21.	4.20	4.40	22.0
30 JUL 1981	WHITEFACE	1300	NAP	8.05	3109.0	2910.0	23.	4.51	4.59	13.0
	OXFORD	1430	8	8.11	122.0	130.0	21.	3.75	4.15	35.0
3 AUG 1981	ITHACA	2100	NAP	8.21	1395.0	1400.0	24.	3.75	3.79	82.0
	ILLINOIS	1500	NAP	9.14	291.0	280.0	25.	4.21	NAP	NAP
	OAK RIDGE	1530	10	8.07	236.0	180.0	21.	3.89	3.95	55.0
4 AUG 1981	WHITEFACE	1430	NAP	ISA	27.0	20.0	23.	3.46	ISA	ISA

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T J M F	L T D	A R R	S A M P	P R E D	F I E L D	F T F L D	L A K E	C O N D U C T
		R M V D	N P E N	N A T F	V O L	V O L	P H	P H	P H	UMHQ/CM
		Z		MO,DA	ML	ML	C			
4 AUG 1981	VIRGINIA	1530	1	8.13	577.0	500.0	24.	4.10	4.21	30.0
	LEWES	1830	2	8.13	1066.0	980.0	27.	4.04	4.21	35.0
5 AUG 1981	ITHACA	1200	NAP	8.21	5690.0	5900.0	24.	4.09	4.15	35.0
	VIRGINIA	1630	1	ISA	0.0	10.0	ISA	ISA	ISA	ISA
6 AUG 1981	WHITEFACE	1300	NAP	8.25	610.0	520.0	22.	4.04	4.14	37.0
	ILLINOIS	1900	NAP	9.14	828.0	770.0	24.	4.19	NAP	NAP
7 AUG 1981	LEWES	1630	1	8.13	24.0	65.0	29.	4.25	ISA	ISA
	OAK RIDGE	1400	6	8.25	750.0	670.0	22.	4.04	4.06	43.0
8 AUG 1981	ITHACA	1500	NAP	8.21	2000.0	1976.0	24.	4.20	4.26	26.0
	VIRGINIA	2200	22	8.13	3090.0	3090.0	25.	3.79	3.85	66.0
9 AUG 1981	BROOKHAVEN	1700	27	8.18	346.0	390.0	24.	3.90	3.94	60.0
	OXFORD	100	41	9.08	1167.0	1190.0	23.	3.55	3.79	75.0
10 AUG 1981	WHITEFACE	1300	NAP	8.25	1341.0	1270.0	22.	4.18	4.33	24.0
	ILLINOIS	1500	NAP	9.14	1909.0	1840.0	25.	4.16	4.33	26.0
	LEWES	1430	4	8.13	597.0	440.0	23.	4.25	4.40	22.0
	OAK RIDGE	1700	3	8.25	1289.0	1190.0	22.	4.41	RPC	RPC
11 AUG 1981	ITHACA	2100	NAP	8.21	480.0	510.0	24.	3.79	3.82	70.0
	OXFORD	1800	25	9.08	130.0	MOE	25.	3.41	3.64	110.0
12 AUG 1981	WHITEFACE	1430	NAP	8.25	1308.0	1170.0	22.	3.84	3.87	66.0
	BROOKHAVEN	1900	3	ISA	24.0	30.0	23.	3.51	ISA	ISA
	OAK RIDGE	1830	8	8.25	261.0	230.0	21.	3.65	3.71	100.0
13 AUG 1981	VIRGINIA	1700	3	9.15	2645.0	2710.0	25.	3.93	4.06	43.0
	BROOKHAVEN	1400	3	8.18	151.0	180.0	23.	3.99	4.05	44.0

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E		L I D		A R R		S A M P		P R E D		F I E L D		F I E L D		L A R E L I C I T	
		R M V D		O P E N		O A T E		V O L		V O L		P H		P H		P H	
		Z				MO,DA		ML		ML		C				UMHG/CM	
13 AUG 1981	LEWES	1430		7		8.31		2114.0		2160.0		21.		4.11		4.19	34.0
14 AUG 1981	WHITEFACE	1300		NAP		ISA		38.0		35.0		22.		4.12		ISA	ISA
	ITHACA	1200		NAP		8.21		420.0		450.0		24.		3.83		3.92	68.0
16 AUG 1981	BROOKHAVEN	1800		8		9.14		107.0		110.0		20.		3.75		3.60	94.0
	LEWES	1500		4		8.31		4000.0		4440.0		21.		4.06		4.22	31.0
	OXFORD	1830		18		9.08		53.0		NONE		NAP		4.03		ISA	ISA
17 AUG 1981	WHITEFACE	1800		NAP		8.25		2380.0		2240.0		20.		4.06		4.20	33.0
	ITHACA	1500		NAP		8.21		890.0		900.0		24.		3.74		3.78	80.0
	ILLINOIS	1500		NAP		9.14		1907.0		1830.0		25.		4.10		NAP	NAP
	OAK RIDGE	1630		3		8.25		365.0		310.0		NAP		3.82		4.23	31.0
18 AUG 1981	PENN STATE	1430		NAP		9.14		150.0		140.0		25.		4.03		3.32	240.0
21 AUG 1981	OAK RIDGE	1600		10		9.14		1686.0		1510.0		21.		4.09		4.12	37.0
24 AUG 1981	ITHACA	1900		NAP		9.24		790.0		790.0		24.		4.02		4.10	39.0
	PENN STATE	1930		NAP		9.14		315.0		270.0		25.		4.11		3.86	76.0
	LEWES	1400		8		8.31		200.0		260.0		22.		4.79		5.19	17.0
25 AUG 1981	WHITEFACE	1800		NAP		9.21		329.0		290.0		22.		4.00		4.13	36.0
	VIRGINIA	1500		3		ISA		37.0		30.0		24.		5.25		ISA	ISA
	ILLINOIS	1600		NAP		ISA		56.0		50.0		25.		4.05		ISA	ISA
	LEWES	1430		2		8.31		74.0		80.0		24.		3.42		ISA	ISA
26 AUG 1981	ILLINOIS	1500		NAP		ISA		55.0		390.0		25.		3.61		ISA	ISA
27 AUG 1981	ILLINOIS	1500		NAP		9.14		200.0		180.0		25.		3.92		4.00	50.0
28 AUG 1981	WHITEFACE	1500		NAP		ISA		35.0		20.0		22.		4.05		ISA	ISA
	ILLINOIS	1530		NAP		9.14		883.0		840.0		25.		4.09		4.24	30.0

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28 AUG 1981	BROOKHAVEN	1400	3	ISA	30.0	35.0	21.	2.99	ISA	ISA
29 AUG 1981	OXFORD	1300	NAP	9.08	59.0	MOE	24.	3.43	3.79	ISA
30 AUG 1981	OXFORD	2400	NAP	9.08	885.0	960.0	23.	3.88	4.72	25.0
31 AUG 1981	WHITEFACE	1500	NAP	ISA	25.0	20.0	22.	3.42	ISA	ISA
	ILLINOIS	1530	NAP	9.14	483.0	430.0	25.	4.13	4.19	38.0
1 SEP 1981	WHITEFACE	1300	NAP	9.21	65.0	50.0	22.	4.39	ISA	ISA
	PENN STATE	1930	NAP	9.14	1177.0	960.0	25.	4.50	4.22	32.0
	VIRGINIA	1500	14	9.15	326.0	260.0	24.	4.00	4.10	42.0
	ILLINOIS	1600	9	12.15	72.0	33.0	25.	4.39	4.76	19.0
	BROOKHAVEN	2030	9	9.14	3107.0	1140.0	21.	4.70	4.77	14.0
	OAK RIDGE	1500	7	9.14	121.0	100.0	22.	3.98	3.94	65.0
2 SEP 1981	OXFORD	1130	NAP	10.06	359.0	350.0	22.	3.76	4.35	24.0
3 SEP 1981	WHITEFACE	1330	NAP	9.21	78.0	80.0	22.	3.92	ISA	ISA
	OXFORD	1430	NAP	10.06	1018.0	940.0	23.	3.81	4.28	25.0
4 SEP 1981	ITHACA	1200	NAP	9.24	1470.0	1500.0	25.	4.00	4.01	44.0
	PENN STATE	1800	NAP	9.14	2085.0	2510.0	25.	4.17	3.88	65.0
	ILLINOIS	1530	22	ISA	24.0	8.0	25.	3.28	ISA	ISA
	OAK RIDGE	1900	7	9.14	1177.0	1040.0	25.	4.16	4.24	30.0
5 SEP 1981	OAK RIDGE	1900	2	9.14	847.0	750.0	21.	3.76	3.79	18.0
8 SEP 1981	ITHACA	1400	NAP	9.24	1150.0	1290.0	25.	3.99	4.01	48.0
	PENN STATE	2000	NAP	9.14	1621.0	1620.0	25.	4.48	4.39	29.0
	ILLINOIS	1600	41	12.15	175.0	182.0	25.	3.87	3.95	65.0
	LEWES	900	1	10.12	365.0	440.0	15.	4.18	4.28	26.0

		T I M E	L I D	A R R	S A M P	P R E D	F E L D	F I F E L D	L A B	C O N D U C T
		R M V D	D P E N	D A T E	V O L	V O L	P H	P H	P H	
		Z		MO,DA	ML	ML	C			UMHO/CM
8 SEP 1981	OXFORD	1400	NAP	10.06	426.0	360.0	23.	3.60	4.07	43.0
9 SEP 1981	WHITEFACE	1300	NAP	9.21	1230.0	1150.0	20.	4.39	4.54	13.0
	ITHACA	1900	NAP	9.24	1510.0	1500.0	25.	4.11	4.14	35.0
	VIRGINIA	1830	20	9.15	3930.0	3630.0	24.	4.20	4.26	28.0
	BROOKHAVEN	1330	1	9.14	138.0	150.0	22.	4.32	4.49	23.0
11 SEP 1981	WHITEFACE	1430	NAP	9.21	2697.0	2630.0	18.	4.66	4.81	8.1
14 SEP 1981	WHITEFACE	1400	NAP	9.21	462.0	440.0	20.	4.01	4.31	30.0
	PENN STATE	2100	NAP	10.05	92.0	100.0	25.	4.62	4.05	71.0
15 SEP 1981	WHITEFACE	1300	NAP	9.21	137.0	130.0	21.	3.93	4.20	48.0
	PENN STATE	2000	NAP	10.05	980.0	580.0	25.	4.12	3.88	64.0
	OXFORD	1400	NAP	10.06	377.0	330.0	20.	3.66	4.12	38.0
16 SEP 1981	BROOKHAVEN	1730	2	9.24	4594.0	4190.0	20.	4.07	4.14	35.0
	OAK RIDGE	2030	7	10.26	4593.0	4030.0	17.	4.16	4.28	26.0
17 SEP 1981	VIRGINIA	1900	9	10.12	1405.0	1350.0	23.	4.07	4.21	30.0
	BROOKHAVEN	1330	1	9.24	165.0	310.0	20.	4.28	4.42	25.0
	LEWES	1530	8	10.12	1201.0	1690.0	23.	3.96	4.09	44.0
	OXFORD	1500	NAP	10.06	142.0	150.0	18.	3.63	4.13	39.0
18 SEP 1981	WHITEFACE	1230	NAP	10.09	210.0	180.0	20.	3.78	3.97	49.0
	PENN STATE	2000	NAP	10.05	300.0	270.0	25.	4.10	3.79	82.0
	ILLINOIS	1600	12	12.15	114.0	116.0	25.	6.31	6.14	13.0
	LEWES	1800	MOE	10.12	538.0	550.0	23.	4.21	4.36	36.0
19 SEP 1981	BROOKHAVEN	1630	5	9.24	119.0	130.0	19.	4.03	4.12	40.0
20 SEP 1981	BROOKHAVEN	1800	3	ISA	24.0	20.0	19.	3.53	ISA	ISA

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MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	R M V D	L I D O P E N	A R R D A T E	S A M P V O L	P R E V O L	F I L D P H	F I L D P H	L A R P H	C O N D I C T
		Z			MO.DA	ML	ML	C			MMH2O/CM
	20 SEP 1981	LEWES	1730	MOE	10.12	1890.0	MOE	22.	4.31	4.86	13.0
	21 SEP 1981	WHITEFACE	1400	NAP	10.09	189.0	180.0	19.	4.00	4.45	24.0
		ITHACA	1300	NAP	9.24	290.0	320.0	25.	3.88	3.93	58.0
	23 SEP 1981	PENN STATE	2000	NAP	10.05	285.0	270.0	25.	4.21	3.90	75.0
		BROOKHAVEN	1700	3	10.12	542.0	460.0	22.	3.62	3.71	94.0
	24 SEP 1981	ITHACA	1700	NAP	10.21	2095.0	2140.0	25.	3.99	4.04	46.0
	25 SEP 1981	WHITEFACE	1330	NAP	10.09	8286.0	7770.0	18.	4.16	4.66	11.0
32	28 SEP 1981	ITHACA	2000	NAP	10.21	410.0	450.0	25.	3.98	4.01	49.0
		ILLINOIS	1500	3	12.15	1527.0	1568.0	25.	4.34	4.55	24.0
		BROOKHAVEN	1430	2	10.12	1038.0	930.0	19.	4.05	4.15	35.0
	29 SEP 1981	WHITEFACE	1330	NAP	10.09	1072.0	1020.0	19.	4.11	4.54	19.0
		ILLINOIS	1900	4	12.15	617.0	652.0	25.	4.08	4.16	44.0
	30 SEP 1981	OXFORD	1500	NAP	10.06	138.0	150.0	20.	3.81	4.41	27.0
	2 OCT 1981	WHITEFACE	1830	NAP	11.02	247.0	110.0	18.	3.72	4.06	46.0
		PENN STATE	2030	NAP	11.18	442.0	410.0	25.	4.12	3.80	79.0
		VIRGINIA	1830	5	10.12	360.0	340.0	23.	4.06	4.17	35.0
		BROOKHAVEN	1400	12	10.12	639.0	620.0	25.	3.74	3.80	76.0
		OAK RIDGE	1430	2	10.26	605.0	536.0	21.	4.13	4.24	35.0
	3 OCT 1981	BROOKHAVEN	1600	1	10.12	293.0	360.0	26.	3.81	3.87	66.0
		LEWES	1700	2	10.12	465.0	490.0	22.	3.72	4.11	47.0
	4 OCT 1981	LEWES	2230	1	10.12	505.0	550.0	21.	3.70	4.25	43.0
	5 OCT 1981	WHITEFACE	1530	NAP	11.02	550.0	570.0	18.	3.99	4.38	22.0
		ITHACA	1400	NAP	ISA	MOE	1820.0	MOE	MOE	MOE	MOE

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		T I M E	L I D	A R R	S A M P	P R E D	F I L D	F I L D	L A R	C O N D I T
		R M V D	O P E N	D A T E	V O L	V O L	P H	P H	P H	
		Z		MO,DA	ML	ML	C			UMPH/CM
5 OCT 1981	ILLINOIS	1530	1	ISA	21.0	16.0	25.	3.79	ISA	ISA
6 OCT 1981	ILLINOIS	1600	4	12.15	790.0	809.0	25.	4.85	4.88	13.0
	OXFORD	1430	NAP	11.06	627.0	630.0	23.	3.95	4.52	16.0
7 OCT 1981	PENN STATE	2100	NAP	11.18	543.0	500.0	25.	4.24	4.03	48.0
	BROOKHAVEN	1400	4	11.02	188.0	179.0	25.	3.90	4.00	49.0
	LEWES	1400	1	11.04	1394.0	1320.0	18.	4.13	4.30	29.0
8 OCT 1981	ITHACA	2000	NAP	10.21	1310.0	1350.0	25.	4.24	4.50	25.0
	OAK RIDGE	1500	5	10.26	718.0	634.0	21.	4.14	4.22	31.0
10 OCT 1981	WHITEFACE	1600	NAP	11.02	2587.0	2420.0	20.	4.53	4.42	9.3
	OXFORD	1330	NAP	ISA	3.5	0.0	ISA	ISA	ISA	ISA
12 OCT 1981	VIRGINIA	1330	1	11.09	51.0	30.0	24.	3.55	4.18	34.0
13 OCT 1981	OAK RIDGE	1900	3	10.26	62.0	33.0	20.	4.38	4.40	23.0
15 OCT 1981	ILLINOIS	1400	7	12.15	99.0	91.0	25.	3.70	3.77	97.0
	OXFORD	1230	NAP	ISA	2.0	0.0	ISA	ISA	ISA	ISA
16 OCT 1981	ITHACA	2000	NAP	11.06	30.0	NAP	25.	3.95	3.91	ISA
19 OCT 1981	VIRGINIA	1600	2	ISA	203.0	190.0	23.	4.06	ISA	ISA
	ILLINOIS	1500	NAP	12.15	250.0	409.0	25.	4.50	4.50	22.0
	BROOKHAVEN	1400	10	11.02	661.0	700.0	25.	3.97	4.10	50.0
	LEWES	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD	1330	NAP	11.06	202.0	210.0	13.	3.84	4.43	25.0
	OAK RIDGE	1700	5	10.26	1385.0	1252.0	20.	4.08	0.12	36.0
20 OCT 1981	WHITEFACE	1600	NAP	11.02	1604.0	1670.0	19.	4.32	4.75	12.0
	ITHACA	1600	NAP	11.06	540.0	580.0	25.	4.31	4.30	27.0

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I N E	A R R I V E N C E	S A M P L E	P R E D I C T E D	F I E L D	F I E L D	L A B	C O N C E N T R A T I O N
		Z	P E N	D A T E	V O L	V O L	P H	P H	P H	D W H O/ C M
20 OCT 1981	PENN STATE	1400	NAP	11.18	402.0	120.0	25.	4.30	4.11	38.0
22 OCT 1981	ILLINOIS	1730	3	12.15	398.0	421.0	25.	4.47	4.54	17.0
23 OCT 1981	BROOKHAVEN	1500	1	ISA	3.0	65.0	25.	4.83	ISA	ISA
	OXFORD	1330	NAP	11.06	380.0	390.0	15.	3.70	4.30	28.0
	OAK RIDGE	2030	9	11.24	1589.0	1450.0	15.	4.16	4.25	31.0
24 OCT 1981	PENN STATE	1700	NAP	11.18	497.0	256.0	25.	4.25	3.95	55.0
	VIRGINIA	1600	1	11.09	667.0	620.0	20.	4.40	4.52	14.0
	BROOKHAVEN	2330	4	11.02	1320.0	1270.0	25.	4.43	4.53	20.0
	LEWES	1900	4	11.04	523.0	585.0	21.	4.14	4.32	31.0
25 OCT 1981	ITHACA	1700	NAP	11.06	450.0	480.0	25.	3.99	4.97	51.0
26 OCT 1981	WHITEFACE	230	NAP	11.02	950.0	1010.0	18.	4.09	4.16	36.0
	BROOKHAVEN	2000	10	11.02	2241.0	3320.0	25.	4.94	5.15	7.1
	LEWES	1930	21	11.04	1835.0	1900.0	21.	4.91	5.05	18.0
	OXFORD	1400	NAP	11.06	526.0	535.0	17.	3.69	4.31	25.0
27 OCT 1981	ILLINOIS	1530	12	12.15	244.0	239.0	25.	4.09	4.16	37.0
	OXFORD	1330	NAP	11.06	1324.0	1330.0	16.	3.90	4.49	17.0
	OAK RIDGE	1700	9	11.24	2975.0	2715.0	19.	4.35	4.40	19.0
28 OCT 1981	ITHACA	1800	NAP	11.06	5730.0	5690.0	25.	4.65	4.63	10.0
	PENN STATE	1530	NAP	11.18	6204.0	5590.0	25.	5.09	4.64	9.7
	VIRGINIA	1400	3	11.09	6078.0	5690.0	22.	4.65	4.75	7.9
	BROOKHAVEN	1500	9	11.03	1735.0	1720.0	26.	5.23	5.32	3.8
	LEWES	1530	4	11.30	104.0	130.0	21.	4.86	4.91	18.0
	OXFORD	1430	NAP	11.06	778.0	800.0	16.	3.88	4.47	18.0

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		T I M E	L I T D	A R R	S A M P	P R E D	F I L D	F I E L D	L A R	C O N D U C T
		P M V D	O P E N	D A T E	V O L	V O L	P H	P H	P H	U N H O /C M
		Z		MO,DA	ML	ML	C			
29 OCT 1981	WHITEFACE	1500	NAP	12.01	4394.0	4031.0	18.	4.62	5.25	3.4
30 OCT 1981	LEWES	1530	1	11.30	40.0	65.0	20.	3.92	ISA	ISA
2 NOV 1981	ILLINOIS	1700	4	12.15	186.0	198.0	25.	4.91	4.87	16.0
6 NOV 1981	PENN STATE	2100	NAP	11.18	786.0	563.0	25.	4.49	4.26	29.0
	BROOKHAVEN	2100	3	11.17	1063.0	1070.0	25.	4.09	4.21	33.0
	OXFORD	1630	NAP	12.04	117.0	100.0	16.	3.69	4.40	30.0
	OAK RIDGE	1530	9	11.24	235.0	195.0	21.	4.18	4.13	32.0
7 NOV 1981	VIRGINIA	1430	MOE	ISA	MOE	1056.0	MOE	MOE	MOE	MOE
	LEWES	1900	2	11.30	261.0	293.0	14.	4.16	4.39	23.0
8 NOV 1981	ITHACA	1200	NAP	12.07	710.0	890.0	25.	4.26	4.28	30.0
9 NOV 1981	WHITEFACE	1400	NAP	12.01	1111.0	1024.0	18.	4.09	4.54	17.0
	ILLINOIS	1630	9	ISA	36.0	16.0	25.	6.44	ISA	ISA
10 NOV 1981	BROOKHAVEN	1530	6	11.17	218.0	230.0	25.	4.15	4.24	29.0
	OXFORD	1430	NAP	12.04	370.0	370.0	11.	3.54	4.25	40.0
12 NOV 1981	WHITEFACE	1500	NAP	12.01	228.0	228.0	18.	3.85	4.26	38.0
16 NOV 1981	PENN STATE	2000	NAP	ISA	5.0	0.0	ISA	ISA	ISA	ISA
	BROOKHAVEN	1900	13	11.25	815.0	813.0	25.	4.67	4.77	17.0
	LEWES	1800	NAP	11.30	625.0	732.0	17.	4.38	4.03	27.0
17 NOV 1981	VIRGINIA	1830	1	ISA	16.0	6.0	23.	3.60	ISA	ISA
	ILLINOIS	1500	3	ISA	10.0	NAP	25.	4.65	ISA	ISA
	OAK RIDGE	1600	3	11.24	1092.0	990.0	19.	4.03	4.05	45.0
18 NOV 1981	BROOKHAVEN	1900	8	11.25	1153.0	1073.0	26.	4.20	4.35	26.0
	LEWES	1600	NAP	11.30	991.0	1070.0	18.	4.24	4.27	30.0

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I D	A R R	S A M P	P R E D	F I E L D	F I E L D	L A B	C O N D U C T
		R M V D	O P E N	D A T E	V O L	V O L	P H	P H	P H	UMHO/CM
		Z		MO,DA	ML	ML	C			
19 NOV 1981	ITHACA	1300	NAP	12.07	3070.0	3150.0	25.	4.51	4.49	19.0
20 NOV 1981	WHITEFACE	1530	NAP	12.01	1065.0	943.0	18.	4.02	4.65	14.0
	ILLINOIS	1630	10	12.15	212.0	198.0	25.	6.65	6.29	28.0
	BROOKHAVEN	1900	4	11.25	1366.0	1219.0	25.	4.33	4.47	21.0
	OXFORD	1430	NAP	12.04	1829.0	1630.0	12.	3.68	4.40	28.0
21 NOV 1981	BROOKHAVEN	2300	1	12.11	671.0	618.0	25.	4.19	4.31	33.0
22 NOV 1981	PENN STATE	1930	NAP	12.15	411.0	375.0	25.	4.29	4.08	53.0
36 23 NOV 1981	ITHACA	1400	NAP	12.07	1070.0	1090.0	25.	3.99	4.07	50.0
24 NOV 1981	WHITEFACE	1830	NAP	12.31	806.0	797.0	18.	3.99	4.35	26.0
	PENN STATE	2200	NAP	ISA	7.0	0.0	ISA	ISA	ISA	ISA
	ILLINOIS	1430	7	12.15	226.0	231.0	25.	4.16	4.15	48.0
	OXFORD	1430	NAP	12.04	625.0	590.0	11.	3.68	4.29	29.0
25 NOV 1981	VIRGINIA	1400	8	12.14	294.0	640.0	19.	4.47	4.61	16.0
	OAK RIDGE	1530	6	12.22	746.0	618.0	20.	4.09	4.16	46.0
27 NOV 1981	PENN STATE	1700	NAP	12.15	128.0	119.0	25.	4.10	3.95	71.0
	ILLINOIS	1330	2	12.15	103.0	107.0	25.	6.15	5.66	15.0
	OXFORD	1430	NAP	12.04	362.0	300.0	10.	3.55	4.54	22.0
28 NOV 1981	BROOKHAVEN	1600	5	ISA	25.0	49.0	25.	3.77	ISA	ISA
30 NOV 1981	WHITEFACE	1800	NAP	12.31	779.0	585.0	18.	4.06	4.57	21.0
	ITHACA	1500	NAP	12.07	260.0	380.0	25.	4.31	4.38	28.0
	OAK RIDGE	1500	2	12.22	1797.0	1610.0	19.	4.58	4.73	13.0
1 DEC 1981	ILLINOIS	1630	2	12.15	196.0	231.0	25.	4.45	4.44	22.0
	OXFORD	1430	NAP	1.19	2167.0	1540.0	15.	3.60	4.59	12.0

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		T I M E	L I D	A R R	S A M P	P R E D	F I E L D	F I E L D	L A B	C O N D U C T	
		R M V D	O P E N	D A T E	V O L	V O L	P H	P H	P H	U M H O /C M	
		Z		MO,DA	ML	ML	C				
37	2 DEC 1981	ITHACA	1900	NAP	12.31	295.0	290.0	25.	4.67	4.69	13.0
		PENN STATE	1800	NAP	12.15	1351.0	955.0	25.	4.60	4.47	19.0
		VIRGINIA	1430	1	12.14	890.0	845.0	21.	4.10	4.24	34.0
		ILLINOIS	1530	3	ISA	30.0	25.0	25.	4.31	ISA	ISA
		BROOKHAVEN	1900	18	12.11	3276.0	3330.0	26.	4.57	4.71	18.0
		LEWES	2230	14	1.07	1658.0	1640.0	16.	4.45	4.49	24.0
		OAK RIDGE	1400	12	12.22	2195.0	2032.0	19.	4.56	4.61	14.0
	3 DEC 1981	PENN STATE	1900	NAP	12.15	43.0	0.0	25.	3.78	3.54	ISA
		VIRGINIA	2100	1	12.14	203.0	186.0	22.	3.03	3.91	73.0
	4 DEC 1981	ILLINOIS	1600	2	12.15	130.0	117.0	25.	4.46	4.50	23.0
		BROOKHAVEN	2100	2	12.11	57.0	65.0	26.	3.86	ISA	ISA
		LEWES	1530	2	1.07	40.0	49.0	16.	3.55	3.48	ISA
		OAK RIDGE	1830	1	12.22	68.0	49.0	20.	4.18	4.27	47.0
	5 DEC 1981	PENN STATE	1830	NAP	12.15	186.0	136.0	25.	3.80	3.57	133.0
		VIRGINIA	1600	1	12.14	287.0	282.0	21.	4.09	4.24	33.0
		OXFORD	1430	NAP	1.19	92.0	98.0	14.	3.49	4.14	40.0
	6 DEC 1981	ITHACA	1600	NAP	12.31	420.0	440.0	25.	4.11	4.16	48.0
	7 DEC 1981	WHITEFACE	1630	NAP	12.31	135.0	65.0	18.	3.77	4.13	48.0
		LEWES	1530	6	1.07	232.0	360.0	16.	4.26	4.20	40.0
	8 DEC 1981	PENN STATE	1830	NAP	12.15	331.0	188.0	25.	4.40	4.23	33.0
	LEWES	1900	3	1.07	219.0	230.0	18.	3.97	4.07	50.0	
9 DEC 1981	WHITEFACE	1830	NAP	12.31	548.0	358.0	20.	4.22	4.67	13.0	
	BROOKHAVEN	2000	12	12.11	308.0	488.0	26.	4.00	4.04	54.0	

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

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		TIME	LOCATION	ARR.	SAMP.	PERIOD	FT. FL.	FT. EL.	LAB.	COND.
		RM	DP	DATA	VO	VO	PH	PH	PH	CM
		Z		NO.	ML	ML	C			INCH/CM
10 DEC 1981	PENN STATE	1600	NAP	ISA	10.0	0.0	25.	4.09	ISA	ISA
11 DEC 1981	ITHACA	1300	NAP	12.31	1660.0	2060.0	25.	4.52	4.52	19.0
12 DEC 1981	PENN STATE	1600	NAP	ISA	10.0	ISA	25.	4.98	ISA	ISA
15 DEC 1981	WHITEFACE	2000	NAP	12.31	172.0	81.0	18.	3.95	4.54	17.0
	PENN STATE	1900	NAP	1.11	187.0	100.0	25.	4.60	4.49	18.0
	BROOKHAVEN	1600	2	1.06	2250.0	2080.0	26.	4.63	4.72	12.0
16 DEC 1981	PENN STATE	1900	NAP	1.11	107.0	68.0	25.	4.35	4.13	41.0
	VIRGINIA	1430	10	1.11	2742.0	2490.0	23.	4.38	4.45	20.0
	BROOKHAVEN	1600	8	1.06	1807.0	2040.0	26.	4.49	4.56	18.0
	LEWES	1530	19	1.07	3276.0	3460.0	18.	4.72	4.45	21.0
	OAK RIDGE	1700	16	12.22	1252.0	1203.0	12.	4.34	4.00	24.0
17 DEC 1981	WHITEFACE	2100	NAP	12.31	683.0	540.0	18.	4.19	4.54	16.0
	ITHACA	1200	NAP	12.31	450.0	490.0	25.	4.22	4.28	37.0
18 DEC 1981	PENN STATE	1930	NAP	1.11	216.0	140.0	25.	4.40	4.07	50.0
	BROOKHAVEN	1500	11	ISA	58.0	81.0	26.	5.70	ISA	ISA
	OXFORD	1430	NAP	1.19	811.0	796.0	15.	3.72	4.84	6.1
	OAK RIDGE	1900	1	1.12	322.0	260.0	20.	4.05	4.06	51.0
21 DEC 1981	WHITEFACE	2000	NAP	12.31	139.0	16.0	18.	3.89	4.24	32.0
	ITHACA	1600	NAP	1.18	420.0	454.0	25.	4.18	4.25	29.0
	OXFORD	2200	NAP	1.19	509.0	683.0	17.	3.73	5.04	4.0
22 DEC 1981	PENN STATE	1530	NAP	1.11	172.0	90.0	25.	4.45	4.30	30.0
23 DEC 1981	PENN STATE	1830	NAP	1.11	388.0	310.0	25.	4.15	4.02	62.0
	VIRGINIA	1400	13	1.11	329.0	370.0	23.	4.37	4.45	20.0

		T I M E	L I D	A R R	S A M P	P R F	F I E L D	F I E L D	L A R	C O N D U C T
		R M V D	O P E N	D A T E	V O L	V O L	P H	P H	P H	U M I D I T Y
		Z		MO,DA	ML	ML	C			U M I D I T Y
23 DEC 1981	BROOKHAVEN	1900	15	1.06	415.0	439.0	26.	4.07	4.15	51.0
	LEWES	1800	NAP	1.14	51.0	98.0	21.	4.74	ISA	ISA
	OXFORD	1430	NAP	1.19	1474.0	1480.0	11.	3.52	4.21	31.0
	OAK RIDGE	1500	17	1.12	2026.0	1900.0	18.	4.25	4.24	35.0
24 DEC 1981	WHITEFACE	1400	NAP	1.19	1068.0	764.0	18.	4.13	4.51	15.0
	ITHACA	1400	NAP	1.18	1060.0	1050.0	25.	4.40	4.40	19.0
27 DEC 1981	LEWES	1900	NAP	1.14	49.0	65.0	21.	4.69	ISA	ISA
28 DEC 1981	WHITEFACE	2200	NAP	1.19	473.0	309.0	18.	4.24	4.63	13.0
	PENN STATE	1700	NAP	1.11	165.0	120.0	25.	4.15	4.10	53.0
	BROOKHAVEN	1800	13	1.07	280.0	330.0	26.	4.71	4.72	14.0
29 DEC 1981	PENN STATE	1630	NAP	1.11	87.0	30.0	25.	4.05	3.97	89.0
	VIRGINIA	1730	3	MOE	MOE	270.0	MOE	MOE	MOE	MOE
	OAK RIDGE	1530	11	1.12	359.0	325.0	21.	4.11	4.33	32.0
30 DEC 1981	WHITEFACE	1330	NAP	1.19	1130.0	228.0	17.	4.20	4.73	9.1
	IITHACA	1900	NAP	1.18	255.0	260.0	26.	4.20	4.25	32.0
	OXFORD	1930	NAP	1.19	468.0	471.0	11.	3.23	4.98	4.6
31 DEC 1981	BROOKHAVEN	1800	2	1.07	115.0	110.0	26.	3.75	3.68	130.0

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NSC MEANS NO SAMPLE COLLECTED
ISA MEANS INSUFFICIENT SAMPLE FOR ANALYSIS
NAP MEANS NO ANALYSIS PERFORMED
MOE MEANS MALFUNCTION OR OPERATOR ERROR
RPC MEANS REJECTED - PROBABLE CONTAMINATION

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MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O ₂)	(S O ₄)	(N O ₂)	(N O ₃)	(C O ₂)	(P O ₄)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
1 JAN 1981	VIRGINIA	0.5	44.0	0.70	110.0	28.00	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
2 JAN 1981	LEWES	0.7	43.0	ISA	150.0	50.00	<0.20
3 JAN 1981	ITHACA	<0.2	10.0	<0.10	44.0	6.40	<0.20
	BROOKHAVEN	1.2	34.0	0.19	98.0	62.00	<0.20
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
4 JAN 1981	BROOKHAVEN	0.2	18.0	0.50	130.0	62.00	<0.20
5 JAN 1981	WHITEFACE	ISA	7.8	<0.10	56.0	20.00	<0.20
	ITHACA	ISA	ISA	ISA	ISA	ISA	ISA
	PENN STATE	1.1	12.0	0.23	70.0	22.00	0.25
6 JAN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
7 JAN 1981	WHITEFACE	<0.2	8.9	<0.10	72.0	0.30	<0.20
	PENN STATE	0.5	10.0	0.37	70.0	19.00	<0.20
	BROOKHAVEN	1.0	93.0	0.34	14.0	25.00	<0.20
	LEWES	2.8	10.0	0.39	17.0	6.20	<0.20
	OXFORD	0.4	16.0	0.41	53.0	14.00	<0.20
	OAK RIDGE	0.7	14.0	0.28	28.0	6.90	<0.20
8 JAN 1981	ITHACA	<0.2	8.7	0.06	59.0	8.40	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
15 JAN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
16 JAN 1981	PENN STATE	6.0	31.0	ISA	180.0	46.00	<0.20
	LEWES	0.6	47.0	0.38	100.0	71.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 - -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 - -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
16 JAN 1981	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
18 JAN 1981	ITHACA	0.3	24.0	0.09	160.0	26.00	<0.20
19 JAN 1981	WHITEFACE	ISA	9.3	0.21	130.0	9.60	<0.20
	PENN STATE	11.0	100.0	ISA	190.0	31.00	<0.20
	BROOKHAVEN	2.3	78.0	0.24	157.0	94.00	<0.20
21 JAN 1981	LEWES	2.3	20.0	0.17	170.0	24.00	<0.20
22 JAN 1981	VIRGINIA	4.5	30.0	NAP	160.0	12.00	<0.20
41 23 JAN 1981	OAK RIDGE	6.0	57.0	0.27	23.0	11.00	<0.20
24 JAN 1981	ITHACA	0.4	16.0	0.12	51.0	14.00	<0.20
26 JAN 1981	WHITEFACE	1.4	15.0	<0.10	25.0	3.40	<0.20
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
28 JAN 1981	WHITEFACE	1.4	33.0	0.07	44.0	4.80	<0.20
	OAK RIDGE	1.4	43.0	0.54	50.0	16.00	<0.20
29 JAN 1981	PENN STATE	2.9	45.0	ISA	170.0	36.00	<0.20
30 JAN 1981	OAK RIDGE	0.3	15.0	0.17	34.0	12.00	<0.20
1 FEB 1981	WHITEFACE	ISA	6.3	<0.10	91.0	11.00	<0.20
2 FEB 1981	PENN STATE	0.9	18.0	0.16	16.0	14.00	<0.20
	VIRGINIA	<0.2	28.0	0.27	18.0	80.00	<0.20
	LEWES	0.4	22.0	0.06	2.0	198.00	<0.20
	OXFORD	13.0	25.0	<0.10	14.0	3.60	<0.20
	OAK RIDGE	<0.2	31.0	<0.10	14.0	18.00	<0.20
3 FEB 1981	WHITEFACE	<0.2	5.3	<0.10	7.0	0.95	<0.20
	ITHACA	2.1	13.0	0.11	21.0	4.50	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4)	(N O 2)	(N O 3)	(C L)	(P O 4)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
3 FEB 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	3.4	23.0	<0.10	27.0	4.00	<0.20
	BROOKHAVEN	<0.2	24.0	0.09	11.0	320.00	<0.20
7 FEB 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
8 FEB 1981	BROOKHAVEN	<0.2	9.2	0.08	9.8	11.00	<0.20
9 FEB 1981	WHITEFACE	<0.2	12.0	<0.10	55.0	2.70	<0.20
	ITHACA	0.1	8.3	0.11	48.0	5.90	<0.20
	PENN STATE	0.4	15.0	0.27	46.0	30.00	<0.20
	VIRGINIA	2.2	19.0	0.32	34.0	4.00	<0.20
	BROOKHAVEN	3.8	ISA	ISA	ISA	ISA	ISA
	LEWES	<0.2	6.9	<0.10	4.1	4.20	<0.20
	OAK RIDGE	3.5	56.0	<0.10	94.0	12.00	<0.20
10 FEB 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
11 FEB 1981	PENN STATE	<0.2	18.0	0.11	18.0	49.00	<0.20
	LEWES	<0.2	9.4	<0.10	2.0	32.00	<0.20
12 FEB 1981	WHITEFACE	<0.2	12.0	<0.10	11.0	7.20	<0.20
	PENN STATE	6.8	26.0	<0.10	18.0	11.00	<0.20
	VIRGINIA	<0.2	27.0	0.16	14.0	110.00	<0.20
	BROOKHAVEN	<0.2	15.0	<0.10	9.7	197.00	<0.20
	OXFORD	4.3	20.0	<0.10	20.0	3.80	<0.20
	OAK RIDGE	<0.2	7.7	0.08	6.5	3.90	<0.20
13 FEB 1981	ITHACA	1.7	16.0	<0.10	18.0	11.00	<0.20
	ILLINOIS	4.5	22.0	0.12	26.0	8.40	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

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		(S O 2)	(S O 4 -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
13 FEB 1981	LEWES	<0.2	42.0	0.06	33.0	42.00	<0.20
17 FEB 1981	WHITEFACE	0.6	ISA	ISA	ISA	ISA	ISA
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	7.9	23.0	0.09	24.0	21.00	<0.20
20 FEB 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	0.6	13.0	0.12	9.9	9.00	<0.20
21 FEB 1981	PENN STATE	4.0	11.0	0.17	19.0	2.90	<0.20
	VIRGINIA	<0.2	6.1	0.21	6.6	2.70	<0.20
	BROOKHAVEN	<0.2	4.9	<0.10	2.3	26.00	<0.20
	LEWES	0.9	18.0	0.14	18.0	13.00	<0.20
	OXFORD	5.2	52.0	<0.10	52.0	5.50	<0.20
22 FEB 1981	WHITEFACE	<0.2	14.0	<0.10	19.0	14.00	<0.20
	ITHACA	1.1	14.0	0.11	23.0	7.50	<0.20
23 FEB 1981	ILLINOIS	2.4	30.0	0.09	26.0	<0.60	<0.20
	OAK RIDGE	0.6	35.0	0.30	37.0	3.60	<0.20
24 FEB 1981	ITHACA	0.5	12.0	0.08	12.0	19.00	<0.20
	PENN STATE	3.6	19.0	<0.10	14.0	5.00	<0.20
	VIRGINIA	<0.2	54.0	0.50	70.0	23.00	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	<0.2	5.9	0.14	3.7	39.00	<0.20
	LEWES	<0.2	8.4	<0.10	2.3	60.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

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		(S 0 2)	(S 0 4 -)	(N 0 2 -)	(N 0 3 -)	(C L -)	(P 0 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
25 FEB 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
26 FEB 1981	WHITEFACE	<0.2	6.4	<0.10	17.0	<0.60	<0.20
	ITHACA	0.7	51.0	0.19	49.0	7.60	<0.20
	BROOKHAVEN	0.3	8.5	0.32	7.1	11.00	<0.20
27 FEB 1981	WHITEFACE	<0.2	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES	0.3	ISA	ISA	ISA	ISA	ISA
	OXFORD	3.7	42.0	0.36	43.0	5.50	<0.20
28 FEB 1981	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
1 MAR 1981	PENN STATE	5.2	44.0	<0.10	32.0	7.50	<0.20
	BROOKHAVEN	0.9	21.0	0.09	36.0	11.00	<0.20
	OAK RIDGE	<0.2	28.0	<0.10	20.0	9.60	<0.20
3 MAR 1981	WHITEFACE	0.3	33.0	<0.10	52.0	3.00	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
4 MAR 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	ITHACA	1.3	39.0	0.06	35.0	5.30	<0.20
	ILLINOIS	7.1	17.0	<0.10	15.0	1.80	<0.20
5 MAR 1981	ILLINOIS	6.9	18.0	<0.10	25.0	2.40	<0.20
6 MAR 1981	PENN STATE	0.3	14.0	0.12	40.0	5.80	<0.20
	VIRGINIA	1.5	23.0	0.28	41.0	3.70	<0.20
	BROOKHAVEN	<0.2	5.0	0.15	36.0	8.20	<0.20
	LEWES	3.3	16.0	0.12	15.0	37.00	<0.20
	OAK RIDGE	4.9	26.0	0.14	19.0	5.30	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
7 MAR 1981	OXFORD	14.0	23.0	NAP	19.0	4.70	<0.20
9 MAR 1981	WHITEFACE	<0.2	9.8	<0.10	10.0	2.50	<0.20
	VIRGINIA	NAP	NAP	NAP	NAP	NAP	NAP
	BROOKHAVEN	0.2	45.0	0.09	87.0	42.00	<0.20
10 MAR 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
11 MAR 1981	ITHACA	0.3	25.0	0.11	45.0	8.80	<0.20
	PENN STATE	1.7	57.0	0.12	150.0	30.00	<0.20
45 12 MAR 1981	WHITEFACE	NAP	NAP	NAP	NAP	NAP	NAP
	BROOKHAVEN	1.8	22.0	<0.10	140.0	19.00	<0.20
16 MAR 1981	PENN STATE	3.4	81.0	0.09	160.0	22.00	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	MOE	MOE	MOE	MOE	MOE	MOE
	OAK RIDGE	0.4	52.0	0.11	74.0	15.00	<0.20
17 MAR 1981	WHITEFACE	1.5	27.0	<0.10	80.0	5.50	<0.20
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	0.2	43.0	ISA	160.0	63.00	<0.20
	LEWES	5.3	35.0	0.08	39.0	160.00	<0.20
18 MAR 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	ITHACA	0.7	22.0	0.25	53.0	15.00	<0.20
	PENN STATE	ISA	36.0	ISA	80.0	21.00	<0.20
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA
19 MAR 1981	VIRGINIA	0.7	77.0	ISA	160.0	17.00	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O ₂)	(S O ₄)	(N O ₂)	(N O ₃)	(C L)	(P O ₄)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
21 MAR 1981	PENN STATE	1.3	11.0	0.12	50.0	19.00	<0.20
23 MAR 1981	WHITEFACE	<0.2	8.9	<0.10	31.0	6.90	<0.20
	ITHACA	0.8	11.0	0.12	60.0	17.00	<0.20
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	16.0	42.0	0.12	20.0	7.20	<0.20
25 MAR 1981	WHITEFACE	<0.2	30.0	<0.10	22.0	7.10	<0.20
26 MAR 1981	ITHACA	NAP	NAP	NAP	NAP	NAP	NAP
46	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
27 MAR 1981	ITHACA	2.9	44.0	<0.10	49.0	6.50	<0.20
	PENN STATE	6.7	93.0	ISA	140.0	34.00	<0.20
	BROOKHAVEN	0.6	28.0	0.08	51.0	19.00	<0.20
	OXFORD	<0.2	51.0	0.15	62.0	6.80	<0.20
30 MAR 1981	WHITEFACE	<0.2	50.0	0.07	150.0	12.00	<0.20
	ILLINOIS	ISA	42.0	<0.10	37.0	17.00	<0.20
	OXFORD	1.4	36.0	<0.10	26.0	9.50	<0.20
	OAK RIDGE	<0.2	17.0	NAP	7.2	3.80	<0.20
31 MAR 1981	ITHACA	<0.2	27.0	<0.10	25.0	3.10	<0.20
	PENN STATE	<0.2	25.0	0.12	19.0	9.40	<0.20
	VIRGINIA	<0.2	13.0	0.19	10.0	9.80	<0.20
	BROOKHAVEN	<0.2	31.0	<0.10	8.3	40.00	<0.20
	LEWES	<0.2	18.0	<0.10	11.0	27.00	<0.20
1 APR 1981	WHITEFACE	<0.2	11.0	<0.10	9.8	2.30	<0.20
	OAK RIDGE	ISA	ISA	ISA	ISA	ISA	ISA

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
2 APR 1981	WHITEFACE	1.7	26.0	<0.10	25.0	2.70	<0.20
	ITHACA	1.4	51.0	0.40	77.0	8.70	<0.20
	PENN STATE	3.7	38.0	0.27	32.0	28.00	<0.20
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	1.1	22.0	0.06	17.0	6.00	<0.20
	LEWES	0.8	10.0	0.09	8.9	9.90	<0.20
3 APR 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	39.0	0.57	23.0	16.00	<0.20
4 APR 1981	OXFORD	<0.2	ISA	ISA	ISA	ISA	ISA
5 APR 1981	WHITEFACE	<0.2	59.0	<0.10	45.0	9.00	<0.20
	OXFORD	<0.2	20.0	NAP	11.0	6.90	<0.20
6 APR 1981	ITHACA	1.1	70.0	<0.10	60.0	12.00	<0.20
	PENN STATE	3.1	65.0	<0.10	56.0	18.00	<0.20
	VIRGINIA	<0.2	34.0	NAP	28.0	15.00	<0.20
	BROOKHAVEN	1.4	16.0	0.12	12.0	13.00	<0.20
	LEWES	<0.2	16.0	<0.10	15.0	15.00	<0.20
	OAK RIDGE	<0.2	17.0	NAP	11.0	8.10	<0.20
7 APR 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
9 APR 1981	ITHACA	1.6	41.0	0.12	30.0	6.70	<0.20
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
10 APR 1981	WHITEFACE	0.7	29.0	NAP	20.0	4.80	<0.20
	PENN STATE	2.8	87.0	0.09	58.0	21.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S 0 2)	(S 0 4 -)	(N 0 2 -)	(N 0 3 -)	(C 0 1 -)	(P 0 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
10 APR 1981	BROOKHAVEN	MOF	NAP	NAP	NAP	NAP	NAP
	OXFORD	5.6	22.0	NAP	21.0	10.00	<0.20
	OAK RIDGE	<0.2	16.0	NAP	10.0	8.90	<0.20
11 APR 1981	BROOKHAVEN	<0.2	54.0	0.21	40.0	27.00	<0.20
	OXFORD	<0.2	46.0	NAP	41.0	21.00	<0.20
12 APR 1981	ITHACA	0.6	46.0	NAP	50.0	5.60	<0.20
	OXFORD	<0.2	52.0	NAP	35.0	13.00	<0.20
48 13 APR 1981	WHITEFACE	1.4	36.0	NAP	41.0	4.80	<0.20
	ITHACA	ISA	ISA	ISA	ISA	ISA	ISA
	PENN STATE	0.5	52.0	<0.10	48.0	8.80	<0.20
	ILLINOIS	MOF	MOF	MOF	MOF	MOF	MOF
	LEWES	NAP	55.0	NAP	41.0	43.00	<0.20
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
14 APR 1981	ITHACA	<0.2	35.0	NAP	22.0	6.50	<0.20
	PENN STATE	<0.2	42.0	0.15	36.0	13.00	<0.20
	VIRGINIA	NAP	47.0	NAP	41.0	12.00	<0.20
	ILLINOIS	MOF	MOF	MOF	MOF	MOF	MOF
	OXFORD	<0.2	ISA	ISA	ISA	ISA	ISA
15 APR 1981	WHITEFACE	<0.2	23.0	NAP	19.0	3.60	<0.20
	VIRGINIA	<0.2	34.0	NAP	23.0	4.90	<0.20
	BROOKHAVEN	<0.2	27.0	NAP	15.0	75.00	<0.20
	LEWES	<0.2	63.0	NAP	45.0	130.00	<0.20
	OAK RIDGE	<0.2	84.0	NAP	60.0	44.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 - 2)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 - 3)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
17 APR 1981	PENN STATE	1.3	110.0	NAP	84.0	21.00	<0.20
	VIRGINIA	NAP	41.0	NAP	28.0	6.80	<0.20
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD	<0.2	55.0	NAP	49.0	14.00	<0.20
18 APR 1981	ITHACA	<0.2	78.0	NAP	62.0	12.00	<0.20
	OXFORD	<0.2	49.0	NAP	46.0	6.60	<0.20
19 APR 1981	WHITEFACE	<0.2	27.0	NAP	20.0	2.50	<0.20
49 20 APR 1981	VIRGINIA	1.3	30.0	NAP	40.0	4.40	<0.20
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
	LEWES	0.3	24.0	NAP	40.0	8.10	<0.20
	OXFORD	2.4	24.0	NAP	22.0	3.70	<0.20
21 APR 1981	WHITEFACE	<0.2	18.0	NAP	8.8	2.10	<0.20
	ITHACA	0.9	38.0	NAP	57.0	5.20	<0.20
	OAK RIDGE	<0.2	20.0	NAP	22.0	14.00	<0.20
22 APR 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD	1.0	ISA	ISA	ISA	ISA	ISA
23 APR 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
24 APR 1981	WHITEFACE	<0.2	14.0	NAP	11.0	2.00	<0.20
	BROOKHAVEN	<0.2	24.0	NAP	23.0	9.00	<0.20
	LEWES	<0.2	26.0	NAP	20.0	18.00	<0.20
	OXFORD	1.5	12.0	NAP	8.7	2.30	<0.20
	OAK RIDGE	<0.2	27.0	NAP	15.0	17.00	<0.20
25 APR 1981	ITHACA	<0.2	29.0	NAP	27.0	3.30	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S)	(S)	(N)	(N)	(C)	(P)
		0	4	0	0	1	4
		2	-	2	3	-	-
		)	)	)	)	)	)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
25 APR 1981	BROOKHAVEN	0.2	44.0	NAP	110.0	11.00	<0.20
26 APR 1981	VIRGINIA	<0.2	39.0	NAP	23.0	4.20	<0.20
27 APR 1981	WHITEFACE	0.2	18.0	NAP	41.0	1.90	<0.20
	PENN STATE	1.5	110.0	NAP	78.0	11.00	<0.20
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
29 APR 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
	BROOKHAVEN	<0.2	100.0	NAP	85.0	22.00	<0.20
30 APR 1981	WHITEFACE	<0.2	43.0	NAP	30.0	2.30	<0.20
	ITHACA	<0.2	37.0	NAP	37.0	3.70	<0.20
	PENN STATE	0.4	95.0	NAP	74.0	8.60	<0.20
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
	OAK RIDGE	1.2	46.0	NAP	26.0	8.00	<0.20
1 MAY 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
	LEWES	<0.2	67.0	NAP	43.0	10.00	<0.20
2 MAY 1981	VIRGINIA	0.4	42.0	NAP	28.0	2.00	<0.20
	BROOKHAVEN	<0.2	31.0	NAP	48.0	10.00	<0.20
	OXFORD	<0.2	5.6	<0.10	6.7	1.60	<0.20
3 MAY 1981	PENN STATE	0.3	99.0	NAP	170.0	19.00	<0.20
4 MAY 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES	<0.2	50.0	NAP	50.0	46.00	<0.20
5 MAY 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE
6 MAY 1981	ITHACA	<0.2	74.0	NAP	49.0	5.40	<0.20
	ILLINOIS	MOE	18.0	0.17	17.0	2.40	<0.20

MAP38 PRECIPITATION CHEMISTRY DATA (CONT.)

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		(S n 2)	(S n 4 -)	(N 0 2 -)	(N 0 3 -)	(C L -)	(P n 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
6 MAY 1981	OXFORD	<0.2	13.0	<0.10	11.0	1.40	<0.20
7 MAY 1981	WHITEFACE	<0.2	45.0	NAP	33.0	3.60	<0.20
	PENN STATE	<0.2	70.0	NAP	73.0	4.30	<0.20
	VIRGINIA	<0.2	68.0	NAP	71.0	4.00	<0.20
9 MAY 1981	ILLINOIS	<0.2	59.0	<0.10	12.0	68.00	1.40
10 MAY 1981	ILLINOIS	<0.2	92.0	<0.10	59.0	7.10	<0.20
11 MAY 1981	VIRGINIA	<0.2	28.0	NAP	23.0	11.00	<0.20
	ILLINOIS	MOE	16.0	<0.10	18.0	2.30	<0.20
	BROOKHAVEN	<0.2	32.0	NAP	13.0	66.00	<0.20
12 MAY 1981	PENN STATE	<0.2	21.0	NAP	18.0	5.70	<0.20
	VIRGINIA	<0.2	24.0	NAP	18.0	5.10	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	<0.2	21.0	NAP	13.0	64.00	<0.20
	LEWES	<0.2	14.0	NAP	13.0	55.00	<0.20
	OXFORD	<0.2	33.0	<0.10	22.0	2.90	<0.20
	OAK RIDGE	<0.2	40.0	NAP	34.0	7.00	<0.20
13 MAY 1981	WHITEFACE	<0.2	15.0	<0.10	11.0	3.90	<0.20
	ITHACA	<0.2	20.0	NAP	22.0	2.50	<0.20
14 MAY 1981	ILLINOIS	MOE	40.0	0.09	42.0	2.70	<0.20
	OXFORD	<0.2	81.0	0.09	61.0	16.00	<0.20
15 MAY 1981	ILLINOIS	MOE	59.0	0.16	75.0	7.90	<0.20
	OXFORD	2.4	33.0	<0.10	22.0	2.80	<0.20
	OAK RIDGE	<0.2	32.0	NAP	27.0	5.30	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O ₂)	(S O ₄)	(N O ₂)	(N O ₃)	(C O ₂)	(P O ₄)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
52	16 MAY 1981 VIRGINIA	<0.2	54.0	NAP	45.0	7.00	<0.20
	BROOKHAVEN	<0.2	22.0	0.09	20.0	57.00	<0.20
	17 MAY 1981 LEWES	<0.2	26.0	NAP	16.0	22.00	<0.20
	18 MAY 1981 WHITEFACE	<0.2	24.0	<0.10	16.0	2.90	<0.20
	ITHACA	0.4	52.0	0.09	47.0	3.90	<0.20
	PENN STATE	<0.2	20.0	0.31	14.0	9.20	<0.20
	ILLINOIS	MOE	6.8	0.16	6.5	1.40	<0.20
	BROOKHAVEN	<0.2	140.0	NAP	180.0	47.00	<0.20
	OXFORD	5.7	19.0	0.06	16.0	2.00	<0.20
	19 MAY 1981 ILLINOIS	MOE	140.0	ISA	77.0	14.00	<0.20
	OXFORD	<0.2	38.0	0.09	17.0	3.80	<0.20
	OAK RIDGE	<0.2	21.0	NAP	24.0	6.70	<0.20
	20 MAY 1981 LEWES	<0.2	49.0	0.22	28.0	24.00	<0.20
	21 MAY 1981 VIRGINIA	<0.2	58.0	0.12	44.0	5.10	<0.20
	OAK RIDGE	<0.2	110.0	0.09	83.0	13.00	<0.20
	22 MAY 1981 WHITEFACE	<0.2	77.0	0.06	36.0	5.50	<0.20
	25 MAY 1981 OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
	26 MAY 1981 WHITEFACE	RPC	RPC	<50.00	RPC	RPC	RPC
	ITHACA	RPC	RPC	RPC	RPC	RPC	RPC
	PENN STATE	RPC	RPC	RPC	RPC	RPC	RPC
	ILLINOIS	MOE	70.0	<0.10	57.0	15.00	<0.20
	OAK RIDGE	<0.2	46.0	0.06	24.0	19.00	<0.20
	27 MAY 1981 WHITEFACE	RPC	RPC	RPC	RPC	RPC	RPC

MAP38 PRECIPITATION CHEMISTRY DATA (CONT.)

		(S 0 2)	(S 0 4 -)	(N 0 2 -)	(N 0 3 -)	(C L -)	(P 0 4 - - -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
27 MAY 1981	OXFORD	<0.2	47.0	0.11	32.0	9.60	<0.20
28 MAY 1981	WHITEFACE	<0.2	44.0	0.08	25.0	3.50	<0.20
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	3.1	29.0	0.12	40.0	21.00	<0.20
	OAK RIDGE	<0.2	16.0	0.08	15.0	3.50	<0.20
29 MAY 1981	PENN STATE	<0.2	28.0	0.24	25.0	13.00	<0.20
	LEWES	<0.2	21.0	0.09	8.1	59.00	<0.20
53 30 MAY 1981	BROOKHAVEN	<0.2	6.5	0.22	3.4	14.00	1.20
	OXFORD	<0.2	28.0	0.12	18.0	2.30	<0.20
31 MAY 1981	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
1 JUN 1981	WHITEFACE	<0.2	24.0	0.06	14.0	3.90	<0.20
	ITHACA	<0.2	93.0	0.12	73.0	8.80	<0.20
	PENN STATE	<0.2	22.0	0.17	14.0	3.50	<0.20
	ILLINOIS	MOE	45.0	<0.10	36.0	5.90	<0.20
	OXFORD	<0.2	76.0	0.29	33.0	10.00	<0.20
2 JUN 1981	PENN STATE	<0.2	11.0	<0.10	11.0	2.20	<0.20
	VIRGINIA	<0.2	56.0	0.08	47.0	4.80	<0.20
	ILLINOIS	MOE	84.0	<0.10	57.0	7.20	<0.20
	OAK RIDGE	<0.2	35.0	0.09	24.0	7.70	<0.20
3 JUN 1981	ILLINOIS	MOE	12.0	<0.10	24.0	4.80	<0.20
	BROOKHAVEN	<0.2	40.0	0.15	34.0	26.00	<0.20
	LEWES	<0.2	30.0	0.22	23.0	21.00	<0.20
4 JUN 1981	ITHACA	<0.2	15.0	0.14	15.0	2.10	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 =	(N O 2)	(N O 3)	(C L =	(P O 4 =
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
4 JUN 1981	VIRGINIA	<0.2	51.0	0.09	40.0	5.90	<0.20
5 JUN 1981	WHITEFACE	<0.2	69.0	<0.10	36.0	3.20	<0.20
	PENN STATE	<0.2	20.0	<0.10	18.0	3.30	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	<0.2	23.0	<0.10	15.0	8.10	<0.20
6 JUN 1981	ITHACA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	<0.2	38.0	0.20	23.0	6.70	<0.20
54 7 JUN 1981	WHITEFACE	<0.2	30.0	<0.10	22.0	2.60	<0.20
	VIRGINIA	4.5	RPC	RPC	RPC	RPC	RPC
8 JUN 1981	ILLINOIS	MOE	71.0	ISA	62.0	14.00	<0.20
	OAK RIDGE	<0.2	33.0	<0.10	16.0	6.40	<0.20
9 JUN 1981	WHITEFACE	0.3	18.0	<0.10	11.0	1.70	<0.20
	ITHACA	2.0	21.0	0.10	11.0	1.00	<0.20
	PENN STATE	<0.2	8.2	<0.10	7.0	1.60	<0.20
	BROOKHAVEN	<0.2	RPC	ISA	RPC	RPC	RPC
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
10 JUN 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	VIRGINIA	<0.2	52.0	<0.10	35.0	5.90	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	<0.2	72.0	0.22	53.0	21.00	<0.20
11 JUN 1981	ITHACA	<0.2	45.0	0.07	37.0	4.00	<0.20
	PENN STATE	0.8	78.0	<0.10	52.0	6.10	<0.20
	LEWES	<0.2	2.9	0.09	2.6	3.60	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
11 JUN 1981	OAK RIDGE	<0.2	17.0	<0.10	17.0	3.70	<0.20
12 JUN 1981	WHITEFACE	<0.2	25.0	<0.10	21.0	2.00	<0.20
13 JUN 1981	BROOKHAVEN	<0.2	130.0	0.16	200.0	46.00	<0.20
14 JUN 1981	WHITEFACE	<0.2	22.0	<0.10	17.0	2.60	<0.20
	ITHACA	1.0	40.0	0.22	31.0	3.30	<0.20
	PENN STATE	0.2	52.0	0.19	32.0	3.00	<0.20
	LEWES	<0.2	13.0	0.08	12.0	11.00	<0.20
	OXFORD	<0.2	21.0	0.38	19.0	9.30	<0.20
15 JUN 1981	WHITEFACE	<0.2	6.7	0.07	20.0	2.80	<0.20
	ITHACA	<0.2	28.0	<0.10	18.0	5.60	<0.20
	PENN STATE	<0.2	39.0	0.10	25.0	9.40	<0.20
	ILLINOIS	<0.2	34.0	0.26	28.0	7.70	<0.20
	BROOKHAVEN	<0.2	45.0	<0.10	41.0	13.00	<0.20
	LEWES	<0.2	77.0	NAP	53.0	14.00	<0.20
16 JUN 1981	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	<0.2	18.0	0.31	13.0	6.90	<0.20
17 JUN 1981	WHITEFACE	<0.2	21.0	0.12	19.0	1.60	<0.20
	ITHACA	<0.2	34.0	<0.10	33.0	4.70	<0.20
	PENN STATE	0.3	70.0	0.34	60.0	16.00	<0.20
18 JUN 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
20 JUN 1981	WHITEFACE	<0.2	190.0	0.08	96.0	5.70	<0.20
21 JUN 1981	BROOKHAVEN	<0.2	9.8	0.08	7.9	4.50	<0.20
22 JUN 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA

MAP35 PRECIPITATION CHEMISTRY DATA (CONT.)

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		(S 0 2)	(S 0 4)	(N 0 2)	(N 0 3)	(C 0 1)	(P 0 4)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
22 JUN 1981	ITHACA	<0.2	95.0	0.14	55.0	4.00	<0.20
	VIRGINIA	<0.2	41.0	0.23	24.0	18.00	<0.20
	ILLINOIS	<0.2	32.0	0.38	26.0	6.10	<0.20
	BROOKHAVEN	<0.2	58.0	0.07	65.0	17.00	<0.20
	LEWES	<0.2	50.0	0.09	42.0	13.00	<0.20
	OXFORD	<0.2	37.0	0.47	31.0	4.50	<0.20
23 JUN 1981	WHITEFACE	<0.2	32.0	0.06	18.0	6.70	<0.20
	ITHACA	ISA	ISA	ISA	ISA	ISA	ISA
	PENN STATE	<0.2	3.7	0.13	4.8	1.60	<0.20
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	<0.2	47.0	0.10	28.0	6.00	<0.20
24 JUN 1981	ILLINOIS	<0.2	58.0	NAP	42.0	9.40	<0.20
25 JUN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	<0.2	48.0	0.05	48.0	21.00	<0.20
	LEWES	<0.2	86.0	0.43	72.0	37.00	<0.20
26 JUN 1981	ITHACA	0.8	50.0	0.13	38.0	3.50	<0.20
	PENN STATE	<0.2	2.2	0.10	2.5	1.20	<0.20
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	<0.2	5.5	0.14	7.0	1.60	<0.20
	LEWES	<0.2	76.0	<0.10	41.0	48.00	<0.20
	OAK RIDGE	<0.2	56.0	0.10	29.0	2.90	<0.20
27 JUN 1981	WHITEFACE	<0.2	5.8	0.21	2.6	1.80	<0.20
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA

MAP38 PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O ₂)	(S O ₄)	(N O ₂)	(N O ₃)	(C L)	(P O ₄)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
29 JUN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
30 JUN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
1 JUL 1981	OXFORD	<0.2	96.0	0.10	100.0	9.50	<0.20
2 JUL 1981	PENN STATE	NAP	13.0	<0.10	9.9	4.40	<0.20
	BROOKHAVEN	<0.2	26.0	0.09	12.0	77.00	<0.20
	OAK RIDGE	<0.2	63.0	0.25	25.0	13.00	<0.20
3 JUL 1981	ITHACA	<0.2	26.0	<0.10	24.0	21.00	<0.20
	BROOKHAVEN	<0.2	18.0	0.23	6.9	71.00	<0.20
	OXFORD	<0.2	63.0	0.20	43.0	6.30	<0.20
4 JUL 1981	VIRGINIA	<0.2	15.0	0.26	13.0	7.60	<0.20
5 JUL 1981	WHITEFACE	<0.2	31.0	0.29	33.0	9.60	<0.20
	BROOKHAVEN	<0.2	11.0	0.15	8.3	37.00	<0.20
	LEWES	<0.2	15.0	<0.10	<0.3	110.00	<0.20
6 JUL 1981	WHITEFACE	<0.2	36.0	0.23	16.0	3.00	<0.20
	ITHACA	<0.2	38.0	0.13	19.0	3.80	<0.20
	PENN STATE	NAP	64.0	<0.10	39.0	15.00	1.50
	VIRGINIA	<0.2	45.0	0.11	28.0	4.40	<0.20
	ILLINOIS	<0.2	31.0	0.32	18.0	3.00	<0.20
	OXFORD	<0.2	56.0	0.10	29.0	3.60	<0.20
7 JUL 1981	OAK RIDGE	<0.2	30.0	0.16	20.0	8.20	<0.20
8 JUL 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
10 JUL 1981	WHITEFACE	<0.2	15.0	0.29	9.1	2.40	<0.20
	ILLINOIS	<0.2	14.0	0.43	19.0	2.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 -)	(N O 2)	(N O 3)	(C l -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
10 JUL 1981	OXFORD	<0.2	51.0	0.35	47.0	5.90	<0.20
11 JUL 1981	VIRGINIA	NAP	130.0	0.13	66.0	5.40	<0.20
14 JUL 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
15 JUL 1981	WHITEFACE	<0.2	21.0	0.25	22.0	5.20	<0.20
	ILLINOIS	<0.2	86.0	0.54	51.0	6.00	<0.20
16 JUL 1981	OXFORD	<0.2	69.0	0.14	49.0	7.20	<0.20
58 17 JUL 1981	LEWES	<0.2	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	<0.2	57.0	<0.10	32.0	6.60	<0.20
20 JUL 1981	WHITEFACE	<0.2	56.0	<0.10	33.0	4.60	<0.20
	ILLINOIS	<0.2	59.0	0.43	41.0	4.80	<0.20
	OXFORD	<0.2	45.0	NAP	27.0	3.30	<0.20
21 JUL 1981	WHITEFACE	<0.2	27.0	<0.10	13.0	2.90	<0.20
	ITHACA	<0.2	80.0	<0.10	35.0	3.50	<0.20
	PENN STATE	NAP	57.0	0.18	28.0	4.00	<0.20
	VIRGINIA	NAP	50.0	ISA	34.0	3.70	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	<0.2	83.0	0.16	56.0	33.00	<0.20
	OAK RIDGE	<0.2	54.0	<0.10	33.0	12.00	<0.20
22 JUL 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	ITHACA	<0.2	83.0	0.22	41.0	5.50	<0.20
	BROOKHAVEN	<0.2	84.0	0.51	74.0	12.00	<0.20
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S) 0 2)	(S) 0 4 -)	(N) 0 2 -)	(N) 0 3 -)	(C) 0 L -)	(P) 0 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
24 JUL 1981	OXFORD	<0.2	81.0	ISA	73.0	8.30	<0.20
26 JUL 1981	VIRGINIA	NAP	91.0	0.47	71.0	13.00	<0.20
27 JUL 1981	WHITEFACE	<0.2	24.0	0.08	10.0	2.40	<0.20
	ITHACA	<0.2	75.0	0.17	45.0	4.80	<0.20
	PENN STATE	<0.2	68.0	0.53	29.0	9.00	10.00
	ILLINOIS	<0.2	37.0	0.34	23.0	3.00	<0.20
	BROOKHAVEN	<0.2	150.0	0.11	91.0	110.00	<0.20
	LEWES	<0.2	46.0	<0.10	30.0	39.00	<0.20
	OAK RIDGE	<0.2	66.0	0.28	41.0	12.00	<0.20
28 JUL 1981	ILLINOIS	<0.2	15.0	0.08	25.0	4.80	<0.20
	OXFORD	<0.2	32.0	0.12	22.0	3.30	<0.20
29 JUL 1981	ITHACA	<0.2	29.0	0.19	25.0	4.10	<0.20
	PENN STATE	<0.2	87.0	0.63	45.0	78.00	13.00
	VIRGINIA	<0.2	73.0	0.40	48.0	4.30	<0.20
	BROOKHAVEN	<0.2	110.0	0.29	69.0	41.00	<0.20
	LEWES	<0.2	44.0	0.23	49.0	29.00	<0.20
	OAK RIDGE	<0.2	21.0	<0.10	27.0	4.90	<0.20
30 JUL 1981	WHITEFACE	<0.2	12.0	0.16	9.7	1.50	<0.20
	OXFORD	<0.2	33.0	0.19	24.0	7.60	<0.20
3 AUG 1981	ITHACA	<0.2	100.0	0.24	48.0	3.90	<0.20
	ILLINOIS	<0.2	NAP	NAP	NAP	NAP	NAP
	OAK RIDGE	<0.2	55.0	0.22	27.0	5.80	<0.20
4 AUG 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
4 AUG 1981	VIRGINIA	<0.2	29.0	0.43	24.0	2.90	<0.20
	LEWES	<0.2	39.0	0.11	18.0	22.00	<0.20
5 AUG 1981	ITHACA	<0.2	43.0	0.08	19.0	1.60	<0.20
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
6 AUG 1981	WHITEFACE	<0.2	45.0	0.09	30.0	3.30	<0.20
	ILLINOIS	<0.2	NAP	NAP	NAP	NAP	NAP
7 AUG 1981	LEWES	<0.2	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	<0.2	53.0	0.22	28.0	5.40	<0.20
8 AUG 1981	ITHACA	1.8	29.0	0.23	19.0	1.50	<0.20
	VIRGINIA	<0.2	74.0	0.39	42.0	3.50	<0.20
9 AUG 1981	BROOKHAVEN	<0.2	54.0	0.24	64.0	22.00	<0.20
	OXFORD	<0.2	81.0	0.15	69.0	7.00	<0.20
10 AUG 1981	WHITEFACE	<0.2	28.0	0.12	15.0	1.80	<0.20
	ILLINOIS	<0.2	35.0	0.17	16.0	5.80	<0.20
	LEWES	<0.2	18.0	0.08	26.0	16.00	<0.20
	OAK RIDGE	RPC	RPC	RPC	RPC	RPC	RPC
11 AUG 1981	ITHACA	<0.2	90.0	0.25	36.0	4.00	<0.20
	OXFORD	<0.2	130.0	0.13	75.0	11.00	<0.20
12 AUG 1981	WHITEFACE	<0.2	89.0	0.06	36.0	3.60	<0.20
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	<0.2	160.0	0.13	72.0	7.90	<0.20
13 AUG 1981	VIRGINIA	<0.2	60.0	0.06	32.0	5.30	<0.20
	BROOKHAVEN	<0.2	54.0	0.46	49.0	17.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4)	(N O 2)	(N O 3)	(C L)	(P O 4)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
13 AUG 1981	LEWES	<0.2	36.0	0.28	22.0	12.00	<0.20
14 AUG 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	ITHACA	<0.2	100.0	0.21	65.0	7.00	<0.20
16 AUG 1981	BROOKHAVEN	<0.2	100.0	0.07	97.0	130.00	<0.20
	LEWES	<0.2	34.0	0.36	19.0	7.80	<0.20
	OXFORD	<0.2	ISA	ISA	ISA	ISA	ISA
17 AUG 1981	WHITEFACE	MOE	36.0	0.20	24.0	2.50	<0.20
	ITHACA	<0.2	97.0	0.23	54.0	4.80	<0.20
	ILLINOIS	<0.2	NAP	NAP	NAP	NAP	NAP
	OAK RIDGE	<0.2	34.0	<0.10	24.0	5.10	<0.20
18 AUG 1981	PENN STATE	<0.2	340.0	0.11	200.0	31.00	<0.20
21 AUG 1981	OAK RIDGE	<0.2	41.0	0.08	18.0	5.00	<0.20
24 AUG 1981	ITHACA	<0.2	49.0	0.27	31.0	4.40	<0.20
	PENN STATE	0.5	99.0	0.17	62.0	7.40	<0.20
	LEWES	<0.2	12.0	0.12	7.0	100.00	<0.20
25 AUG 1981	WHITEFACE	<0.2	47.0	0.07	26.0	2.90	<0.20
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES	<0.2	ISA	ISA	ISA	ISA	ISA
26 AUG 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
27 AUG 1981	ILLINOIS	<0.2	63.0	0.21	31.0	3.20	<0.20
28 AUG 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	<0.2	39.0	0.18	25.0	3.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
28 AUG 1981	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA
29 AUG 1981	OXFORD	ISA	100.0	0.08	71.0	12.00	<0.20
30 AUG 1981	OXFORD	<0.2	42.0	0.14	35.0	24.00	<0.20
31 AUG 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	<0.2	49.0	0.13	34.0	3.50	<0.20
1 SEP 1981	WHITEFACE	<0.2	7.0	<0.10	15.0	3.70	<0.20
	PENN STATE	<0.2	27.0	0.16	36.0	6.20	<0.20
	VIRGINIA	<0.2	45.0	0.40	34.0	25.00	<0.20
	ILLINOIS	ISA	24.0	0.51	33.0	3.60	<0.20
	BROOKHAVEN	<0.2	9.5	<0.10	6.9	44.00	<0.20
	OAK RIDGE	<0.2	76.0	0.15	12.0	41.00	<0.20
2 SEP 1981	OXFORD	NAP	28.0	0.20	17.0	5.70	<0.20
3 SEP 1981	WHITEFACE	<0.2	29.0	0.14	60.0	9.30	<0.20
	OXFORD	NAP	29.0	0.14	14.0	5.30	<0.20
4 SEP 1981	ITHACA	<0.2	45.0	0.21	30.0	5.70	<0.20
	PENN STATE	<0.2	66.0	0.29	56.0	14.00	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	<0.2	32.0	0.26	20.0	5.40	<0.20
5 SEP 1981	OAK RIDGE	<0.2	89.0	0.20	51.0	5.70	<0.20
8 SEP 1981	ITHACA	<0.2	48.0	0.28	46.0	6.50	<0.20
	PENN STATE	<0.2	39.0	0.64	19.0	4.20	<0.20
	ILLINOIS	NAP	78.0	0.16	40.0	4.50	<0.20
	LEWES	NAP	28.0	0.40	16.0	10.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S n 2)	(S n 4 -)	(N n 2)	(N n 3 -)	(C L -)	(P n 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
8 SEP 1981	OXFORD	NAP	51.0	0.29	37.0	14.00	<0.20
9 SEP 1981	WHITEFACE	<0.2	16.0	0.12	8.9	3.00	<0.20
	ITHACA	<0.2	37.0	0.15	15.0	3.90	<0.20
	VIRGINIA	<0.2	27.0	0.34	22.0	12.00	<0.20
	BROOKHAVEN	<0.2	30.0	0.21	14.0	44.00	<0.20
11 SEP 1981	WHITEFACE	<0.2	9.1	0.13	6.0	2.20	<0.20
14 SEP 1981	WHITEFACE	<0.2	38.0	0.43	35.0	4.60	<0.20
15 SEP 1981	PENN STATE	NAP	140.0	0.51	97.0	24.00	<0.20
	WHITEFACE	<0.2	86.0	0.35	72.0	9.60	<0.20
	PENN STATE	NAP	78.0	0.23	55.0	6.60	<0.20
	OXFORD	NAP	49.0	0.08	28.0	4.20	<0.20
16 SEP 1981	BROOKHAVEN	<0.2	42.0	0.10	31.0	13.00	<0.20
	OAK RIDGE	NAP	31.0	0.20	15.0	3.00	<0.20
17 SEP 1981	VIRGINIA	NAP	31.0	0.41	32.0	4.50	<0.20
	BROOKHAVEN	<0.2	33.0	0.32	19.0	45.00	<0.20
	LEWES	NAP	46.0	0.21	36.0	23.00	<0.20
	OXFORD	NAP	45.0	0.13	42.0	4.20	<0.20
18 SEP 1981	WHITEFACE	NAP	41.0	0.13	57.0	3.30	<0.20
	PENN STATE	NAP	95.0	0.42	74.0	7.40	<0.20
	ILLINOIS	ISA	21.0	0.74	20.0	4.20	<0.20
	LEWES	NAP	28.0	<0.10	23.0	120.00	<0.20
19 SEP 1981	BROOKHAVEN	<0.2	39.0	0.21	34.0	27.00	<0.20
20 SEP 1981	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		<div> <div>(S)</div> <div>(S)</div> <div>(N)</div> <div>(N)</div> <div>(C)</div> <div>(P)</div> </div>					
		<div> <div>0 2</div> <div>0 4</div> <div>0 2</div> <div>0 3</div> <div>0 L</div> <div>0 4</div> </div>					
		<div> <div>UMOL/L</div> <div>UMOL/L</div> <div>UMOL/L</div> <div>UMOL/L</div> <div>UMOL/L</div> <div>UMOL/L</div> </div>					
20 SEP 1981	LEWES	NAP	10.0	0.07	4.6	47.00	<0.20
21 SEP 1981	WHITEFACE	MOE	28.0	0.14	37.0	2.60	<0.20
	ITHACA	<0.2	57.0	0.28	76.0	7.10	<0.20
23 SEP 1981	PFNN STATE	NAP	100.0	0.26	78.0	8.00	<0.20
	BROOKHAVEN	NAP	100.0	0.48	110.0	25.00	<0.20
24 SEP 1981	ITHACA	NAP	46.0	0.26	60.0	16.00	<0.20
25 SEP 1981	WHITEFACE	NAP	11.0	0.08	6.3	3.60	<0.20
28 SEP 1981	ITHACA	NAP	64.0	<0.10	34.0	3.80	<0.20
	ILLINOIS	NAP	36.0	0.16	17.0	3.00	<0.20
	BROOKHAVEN	NAP	41.0	0.26	28.0	9.90	<0.20
29 SEP 1981	WHITEFACE	NAP	26.0	<0.10	18.0	2.30	<0.20
	ILLINOIS	ISA	52.0	0.23	28.0	6.10	<0.20
30 SEP 1981	OXFORD	NAP	42.0	0.45	30.0	12.00	<0.20
2 OCT 1981	WHITEFACE	<0.2	44.0	<0.10	44.0	3.60	<0.20
	PENN STATE	0.3	84.0	0.46	80.0	21.00	<0.20
	VIRGINIA	<0.2	51.0	0.30	28.0	4.00	<0.20
	BROOKHAVEN	<0.2	91.0	0.40	74.0	15.00	<0.20
	OAK RIDGE	<0.2	56.0	0.08	29.0	6.20	<0.20
3 OCT 1981	BROOKHAVEN	3.2	50.0	0.52	110.0	16.00	<0.20
	LEWES	<0.2	57.0	0.50	38.0	31.00	<0.20
4 OCT 1981	LEWES	2.6	35.0	0.59	59.0	95.00	<0.20
5 OCT 1981	WHITEFACE	<0.2	17.0	0.12	19.0	1.60	<0.20
	ITHACA	MOE	MOE	MOE	MOE	MOE	MOE

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 =	(N O 2 =	(N O 3 =	(C L =	(P O 4 =
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
5 OCT 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
6 OCT 1981	ILLINOIS	ISA	19.0	0.28	16.0	11.00	<0.20
	OXFORD	<0.2	17.0	0.22	13.0	4.90	<0.20
7 OCT 1981	PENN STATE	0.5	60.0	0.26	42.0	8.00	<0.20
	BROOKHAVEN	<0.2	45.0	0.46	65.0	10.00	<0.20
	LEWES	<0.2	28.0	0.34	19.0	15.00	<0.20
8 OCT 1981	ITHACA	1.6	25.0	0.16	22.0	3.70	<0.20
65	OAK RIDGE	<0.2	37.0	0.34	17.0	6.30	<0.20
10 OCT 1981	WHITEFACE	<0.2	10.0	0.09	5.7	1.60	<0.20
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
12 OCT 1981	VIRGINIA	<0.2	48.0	0.23	25.0	6.30	<0.20
13 OCT 1981	OAK RIDGE	0.4	32.0	0.38	32.0	6.40	<0.20
15 OCT 1981	ILLINOIS	ISA	100.0	0.31	77.0	10.00	<0.20
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA
16 OCT 1981	ITHACA	ISA	78.0	ISA	140.0	12.00	<0.20
19 OCT 1981	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	25.0	0.15	17.0	3.20	<0.20
	BROOKHAVEN	<0.2	54.0	0.23	34.0	130.00	<0.20
	LEWES	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD	2.2	34.0	0.25	22.0	3.80	<0.20
	OAK RIDGE	0.3	42.0	0.34	19.0	3.50	<0.20
20 OCT 1981	WHITEFACE	<0.2	13.0	0.09	9.9	2.80	<0.20
	ITHACA	0.9	26.0	0.30	26.0	3.40	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
20 OCT 1981	PENN STATE	0.8	41.0	0.33	36.0	3.90	<0.20
22 OCT 1981	ILLINOIS	ISA	16.0	0.16	16.0	2.00	<0.20
23 OCT 1981	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	1.6	31.0	0.34	28.0	3.90	<0.20
	OAK RIDGE	1.2	29.0	0.17	27.0	20.00	<0.20
24 OCT 1981	PENN STATE	1.2	46.0	0.13	77.0	9.10	<0.20
	VIRGINIA	0.3	16.0	0.31	12.0	4.00	<0.20
99	BROOKHAVEN	<0.2	16.0	0.15	17.0	42.00	<0.20
	LEWES	<0.2	24.0	0.44	20.0	44.00	<0.20
25 OCT 1981	ITHACA	2.0	43.0	0.32	65.0	5.40	<0.20
26 OCT 1981	WHITEFACE	0.3	26.0	0.31	41.0	3.10	<0.20
	BROOKHAVEN	<0.2	5.4	<0.10	3.2	17.00	<0.20
	LEWES	<0.2	8.2	0.09	3.7	120.00	<0.20
	OXFORD	3.8	24.0	0.30	20.0	2.80	<0.20
27 OCT 1981	ILLINOIS	ISA	19.0	0.34	53.0	2.70	<0.20
	OXFORD	3.3	13.0	0.27	20.0	2.30	<0.20
	OAK RIDGE	1.1	20.0	0.20	7.9	3.10	<0.20
28 OCT 1981	ITHACA	3.1	8.2	0.18	8.7	1.90	<0.20
	PENN STATE	0.1	7.6	0.22	9.7	1.70	<0.20
	VIRGINIA	<0.2	5.6	0.22	8.0	5.90	<0.20
	BROOKHAVEN	<0.2	2.4	<0.10	2.2	8.00	<0.20
	LEWES	<0.2	15.0	0.10	21.0	77.00	<0.20
	OXFORD	7.7	14.0	0.14	15.0	1.10	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 =	(N O 2)	(N O 3)	(C L)	(P O 4 =
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
29 OCT 1981	WHITEFACE	<0.2	2.1	0.10	3.1	<0.60	<0.20
30 OCT 1981	LEWES	0.2	ISA	ISA	ISA	ISA	ISA
2 NOV 1981	ILLINOIS	ISA	28.0	0.49	11.0	3.50	<0.20
6 NOV 1981	PENN STATE	4.5	30.0	0.30	27.0	9.00	<0.20
	BROOKHAVEN	<0.2	41.0	0.09	38.0	16.00	<0.20
	OXFORD	0.4	19.0	0.14	31.0	8.30	<0.20
	OAK RIDGE	<0.2	29.0	0.13	19.0	11.00	<0.20
67 7 NOV 1981	VIRGINIA	MOE	MOE	MOE	MOE	MOE	MOE
	LEWES	<0.2	18.0	0.24	24.0	14.00	<0.20
8 NOV 1981	ITHACA	5.4	25.0	0.10	32.0	4.00	<0.20
9 NOV 1981	WHITEFACE	0.8	12.0	0.12	16.0	2.50	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
10 NOV 1981	BROOKHAVEN	0.6	23.0	0.24	32.0	21.00	<0.20
	OXFORD	0.4	39.0	0.49	66.0	3.90	<0.20
12 NOV 1981	WHITEFACE	1.1	29.0	0.13	73.0	4.60	<0.20
16 NOV 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	<0.2	11.0	0.17	7.6	67.00	<0.20
	LEWES	2.2	21.0	0.30	26.0	66.00	<0.20
17 NOV 1981	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	7.1	46.0	0.54	36.0	7.00	<0.20
18 NOV 1981	BROOKHAVEN	4.6	18.0	0.19	29.0	16.00	<0.20
	LEWES	10.0	23.0	0.17	38.0	27.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4)	(N O 2)	(N O 3)	(C O 2)	(P O 4)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
19 NOV 1981	ITHACA	4.5	18.0	0.12	11.0	1.70	<0.20
20 NOV 1981	WHITEFACE	<0.2	12.0	0.17	9.4	2.50	<0.20
	ILLINOIS	2.6	52.0	1.60	39.0	3.20	<0.20
	BROOKHAVEN	<0.2	22.0	0.27	16.0	15.00	<0.20
	OXFORD	3.1	35.0	0.30	24.0	6.10	<0.20
21 NOV 1981	BROOKHAVEN	1.8	30.0	0.22	36.0	17.00	<0.20
22 NOV 1981	PENN STATE	5.1	45.0	0.26	53.0	23.00	<0.20
23 NOV 1981	ITHACA	1.9	42.0	0.29	75.0	6.80	<0.20
24 NOV 1981	WHITEFACE	<0.2	11.0	0.07	37.0	0.91	<0.20
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	5.8	40.0	0.87	77.0	7.00	<0.20
	OXFORD	7.3	19.0	0.34	36.0	4.00	<0.20
25 NOV 1981	VIRGINIA	1.4	11.0	0.20	18.0	2.30	<0.20
	OAK RIDGE	7.2	35.0	0.59	52.0	8.50	<0.20
27 NOV 1981	PENN STATE	3.3	65.0	0.26	58.0	32.00	<0.20
	ILLINOIS	0.6	28.0	0.70	20.0	17.00	<0.20
	OXFORD	2.9	27.0	0.27	19.0	15.00	<0.20
28 NOV 1981	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA
30 NOV 1981	WHITEFACE	1.3	19.0	0.12	17.0	2.60	<0.20
	ITHACA	2.2	32.0	0.14	21.0	7.50	<0.20
	OAK RIDGE	0.7	13.0	0.40	8.7	7.60	<0.20
1 DEC 1981	ILLINOIS	6.9	21.0	0.34	17.0	2.90	<0.20
	OXFORD	14.0	10.0	0.12	8.8	12.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4 -)	(N O 2 -)	(N O 3 -)	(C L -)	(P O 4 -)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
2 DEC 1981	ITHACA	1.3	12.0	0.08	7.1	2.70	<0.20
	PENN STATE	1.4	16.0	0.13	17.0	2.80	<0.20
	VIRGINIA	<0.2	34.0	0.36	25.0	7.60	<0.20
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	<0.2	15.0	0.14	6.6	42.00	<0.20
	LEWES	1.9	19.0	0.17	13.0	42.00	<0.20
	OAK RIDGE	3.6	14.0	0.12	4.7	3.10	<0.20
69 3 DEC 1981	PENN STATE	4.3	150.0	0.21	200.0	53.00	<0.20
	VIRGINIA	0.3	35.0	0.71	140.0	18.00	<0.20
4 DEC 1981	ILLINOIS	5.8	15.0	0.54	39.0	5.30	<0.20
	BROOKHAVEN	0.6	ISA	ISA	ISA	ISA	ISA
	LEWES	ISA	64.0	0.32	320.0	180.00	<0.20
	OAK RIDGE	0.8	32.0	0.98	120.0	11.00	<0.20
5 DEC 1981	PENN STATE	1.0	76.0	0.27	180.0	25.00	<0.20
	VIRGINIA	8.9	19.0	0.41	45.0	4.60	<0.20
	OXFORD	9.8	30.0	0.08	79.0	7.80	<0.20
6 DEC 1981	ITHACA	0.6	34.0	0.16	50.0	14.00	<0.20
7 DEC 1981	WHITEFACE	1.1	38.0	0.09	61.0	5.00	<0.20
	LEWES	1.9	19.0	0.32	49.0	61.00	<0.20
8 DEC 1981	PENN STATE	8.9	24.0	0.24	43.0	7.10	<0.20
	LEWES	2.7	37.0	0.48	64.0	10.00	<0.20
9 DEC 1981	WHITEFACE	<0.2	9.4	<0.10	15.0	1.40	<0.20
	BROOKHAVEN	14.0	30.0	0.24	75.0	15.00	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O ₂) UMOL/L	(S O ₄) UMOL/L	(N O ₂) UMOL/L	(N O ₃) UMOL/L	(C L) UMOL/L	(P O ₄) UMOL/L
10 DEC 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
11 DEC 1981	ITHACA	0.9	9.9	<0.10	20.0	5.70	<0.20
12 DEC 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA
15 DEC 1981	WHITEFACE	<0.2	9.0	<0.10	24.0	4.00	<0.20
	PENN STATE	0.4	11.0	0.15	26.0	9.00	<0.20
	BROOKHAVEN	6.6	9.9	0.18	9.7	4.10	<0.20
16 DEC 1981	PENN STATE	<0.2	8.2	0.20	72.0	9.40	<0.20
	VIRGINIA	8.9	13.0	0.13	16.0	1.30	<0.20
	BROOKHAVEN	8.7	8.4	0.20	12.0	13.00	<0.20
	LEWES	10.0	17.0	0.26	11.0	20.00	<0.20
	OAK RIDGE	4.9	19.0	0.24	17.0	3.00	<0.20
17 DEC 1981	WHITEFACE	<0.2	8.6	0.07	21.0	<0.60	<0.20
	ITHACA	0.3	24.0	0.09	44.0	16.00	<0.20
18 DEC 1981	PENN STATE	<0.2	14.0	0.23	65.0	17.00	<0.20
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	<0.2	1.7	<0.10	10.0	2.30	<0.20
	OAK RIDGE	8.8	33.0	0.30	38.0	9.80	<0.20
21 DEC 1981	WHITEFACE	<0.2	4.5	0.14	62.0	2.70	<0.20
	ITHACA	<0.2	6.8	0.11	62.0	10.00	<0.20
	OXFORD	<0.2	2.6	<0.10	3.0	2.00	<0.20
22 DEC 1981	PENN STATE	<0.2	8.8	0.25	42.0	6.40	<0.20
23 DEC 1981	PENN STATE	4.5	37.0	0.36	48.0	24.00	<0.20
	VIRGINIA	5.2	7.9	0.25	21.0	3.40	<0.20

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(S O 2)	(S O 4)	(N O 2)	(N O 3)	(C L)	(P O 4)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
23 DEC 1981	BROOKHAVEN	1.4	34.0	0.31	36.0	56.00	<0.20
	LEWES	2.8	ISA	ISA	ISA	ISA	ISA
	OXFORD	8.0	29.0	<0.10	18.0	19.00	<0.20
	OAK RIDGE	7.0	23.0	0.20	13.0	22.00	<0.20
24 DEC 1981	WHITEFACE	1.2	11.0	<0.10	16.0	1.20	<0.20
	ITHACA	7.8	14.0	<0.10	20.0	3.30	<0.20
27 DEC 1981	LEWES	1.4	ISA	ISA	ISA	ISA	ISA
71 28 DEC 1981	WHITEFACE	<0.2	9.8	<0.10	16.0	3.90	<0.20
	PENN STATE	<0.2	39.0	0.20	39.0	17.00	<0.20
	BROOKHAVEN	<0.2	11.0	0.29	8.8	17.00	<0.20
29 DEC 1981	PENN STATE	8.6	45.0	ISA	140.0	40.00	<0.20
	VIRGINIA	MOE	MOE	MOE	MOE	MOE	MOE
	OAK RIDGE	1.7	42.0	0.22	33.0	15.00	<0.20
30 DEC 1981	WHITEFACE	<0.2	3.0	0.10	17.0	<0.60	<0.20
	ITHACA	0.6	22.0	0.10	61.0	8.50	<0.20
	OXFORD	7.0	2.0	<0.10	7.0	2.60	<0.20
31 DEC 1981	BROOKHAVEN	<0.2	120.0	0.61	190.0	120.00	<0.20

MISSING DATA CODES:

NSC MEANS NO SAMPLE COLLECTED
ISA MEANS INSUFFICIENT SAMPLE FOR ANALYSIS
NAP MEANS NO ANALYSIS PERFORMED
MOE MEANS MALFUNCTION OR OPERATOR ERROR
RPC MEANS REJECTED - PROBABLE CONTAMINATION

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H) +	(NH ₄) +	(NA) +	(K) +	(CA) +	(MG) +	(S) U M	(S) U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
1 JAN 1981	VIRGINIA	ISA	43.0	9.80	0.60	11.00	2.00	227.	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
2 JAN 1981	LEWES	ISA	29.0	42.00	20.00	5.10	5.50	286.	ISA
3 JAN 1981	ITHACA	47.9	11.0	1.80	1.30	1.40	<0.40	70.	65.
	BROOKHAVEN	102.3	15.0	54.00	2.60	2.30	5.60	228.	190.
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
4 JAN 1981	BROOKHAVEN	ISA	18.0	43.00	2.20	9.30	5.10	229.	ISA
72 5 JAN 1981	WHITEFACE	60.3	1.8	17.00	0.69	4.10	0.86	92.	90.
	ITHACA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	PENN STATE	77.6	12.0	5.30	3.00	7.50	2.20	117.	117.
6 JAN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
7 JAN 1981	WHITEFACE	75.9	12.0	1.20	0.97	1.60	<0.40	94.	93.
	PENN STATE	27.5	17.0	10.00	2.90	22.00	2.60	109.	107.
	BROOKHAVEN	35.5	6.8	18.00	1.20	1.60	1.50	225.	68.
	LEWES	24.5	4.2	4.30	1.10	0.57	0.58	44.	36.
	OXFORD	14.8	45.0	9.10	6.80	7.90	2.50	99.	96.
	OAK RIDGE	26.9	12.0	2.10	0.61	8.80	1.90	63.	63.
8 JAN 1981	ITHACA	56.2	8.2	2.30	0.74	2.70	0.41	85.	74.
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
15 JAN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
16 JAN 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	288.	ISA
	LEWES	138.0	58.0	61.00	3.50	4.10	6.40	265.	282.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(M G + +)	A N I O N S U F ₆	C A T I O N S U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
16 JAN 1981	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
18 JAN 1981	ITHACA	162.2	15.0	3.40	0.46	2.00	0.62	234.	186.
19 JAN 1981	WHITEFACE	112.2	7.1	1.70	<0.40	0.57	<0.40	158.	122.
	PENN STATE	ISA	114.0	13.00	4.00	ISA	ISA	421.	131.
	BROOKHAVEN	173.8	38.0	84.00	32.00	15.00	13.00	407.	384.
21 JAN 1981	LEWES	182.0	7.8	19.00	3.80	5.30	1.90	234.	227.
22 JAN 1981	VIRGINIA	182.0	20.0	3.70	<0.40	5.60	0.95	232.	219.
73 23 JAN 1981	OAK RIDGE	109.6	2.5	1.50	1.40	2.40	1.10	148.	122.
24 JAN 1981	ITHACA	61.7	18.0	2.40	<0.40	1.60	0.49	97.	86.
26 JAN 1981	WHITEFACE	43.7	5.1	0.80	0.51	0.57	0.45	58.	52.
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
28 JAN 1981	WHITEFACE	38.9	54.0	1.50	<0.40	5.20	1.30	115.	107.
	OAK RIDGE	95.5	23.0	5.70	1.20	7.00	1.40	153.	142.
29 JAN 1981	PENN STATE	ISA	78.0	12.00	5.40	ISA	NAP	296.	95.
30 JAN 1981	OAK RIDGE	34.7	11.0	0.99	1.10	4.00	0.82	76.	57.
1 FEB 1981	WHITEFACE	ISA	<0.6	6.80	2.20	10.00	1.80	115.	33.
2 FEB 1981	PENN STATE	34.7	12.0	6.00	2.30	1.20	0.86	66.	59.
	VIRGINIA	45.7	18.0	70.00	2.60	3.80	7.40	154.	159.
	LEWES	19.1	6.8	164.00	3.70	4.20	17.00	244.	236.
	OXFORD	56.2	8.4	1.00	0.60	1.50	0.49	68.	70.
	OAK RIDGE	38.9	11.0	16.00	3.50	1.90	1.10	94.	75.
3 FEB 1981	WHITEFACE	13.2	0.8	0.62	0.49	1.10	<0.40	19.	17.
	ITHACA	35.5	8.2	0.81	<0.40	1.40	0.74	52.	49.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H)	(N H)	(N A)	(K)	(C A)	(M G)	A T O N S H S H	A T O N S H S H
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
74	3 FEB 1981 PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	52.5	14.0	2.20	<0.40	4.50	0.62	77.	79.
	BROOKHAVEN	14.8	4.2	236.00	4.40	6.00	22.00	379.	315.
	7 FEB 1981 PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	8 FEB 1981 BROOKHAVEN	15.8	2.9	7.90	0.92	2.10	1.90	39.	36.
	9 FEB 1981 WHITEFACE	50.1	21.0	0.74	0.53	0.60	0.62	82.	75.
	ITHACA	47.9	11.0	1.30	<0.40	2.00	0.45	71.	65.
	PENN STATE	42.7	15.0	24.00	9.40	3.00	0.91	106.	99.
	VIRGINIA	58.9	3.7	1.00	<0.40	1.60	<0.40	76.	67.
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES	12.0	1.5	2.40	0.49	<0.50	0.45	22.	17.
	OAK RIDGE	125.9	25.0	3.20	0.94	3.90	1.60	218.	166.
10 FEB 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
11 FEB 1981	PENN STATE	30.2	9.3	42.00	3.00	3.10	4.30	103.	99.
	LEWES	11.2	4.2	26.00	1.00	0.70	3.00	53.	50.
12 FEB 1981	WHITEFACE	29.5	2.2	4.00	0.90	1.30	0.62	42.	40.
	PENN STATE	47.9	7.4	6.60	4.30	2.30	0.45	81.	72.
	VIRGINIA	38.0	11.0	110.00	2.50	3.00	11.00	178.	190.
	BROOKHAVEN	5.1	<0.5	186.00	5.30	9.70	18.00	237.	252.
	OXFORD	46.8	6.9	2.20	0.90	3.70	0.74	64.	66.
	OAK RIDGE	15.5	1.8	1.80	0.66	0.80	0.49	26.	22.
13 FEB 1981	ITHACA	38.9	4.3	3.60	<0.40	2.80	0.74	61.	50.
	ILLINOIS	60.3	6.3	1.20	0.41	5.60	1.20	79.	82.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A +)	(M G +)	A M I O N S H M	C A T I O N S H M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
13 FEB 1981	LEWES	46.8	36.0	42.00	9.30	3.40	4.70	159.	150.
17 FEB 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	57.5	9.2	18.00	1.10	2.20	2.10	91.	94.
20 FEB 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
75	OAK RIDGE	28.8	4.4	5.60	0.40	1.40	0.78	45.	44.
21 FEB 1981	PENN STATE	34.7	2.2	1.10	0.64	0.77	<0.40	44.	40.
	VIRGINIA	16.2	2.0	1.20	<0.40	<0.50	<0.40	22.	19.
	BROOKHAVEN	8.7	1.5	21.00	<0.40	<0.50	2.40	38.	36.
	LEWES	33.9	14.0	8.40	2.20	0.75	0.99	67.	62.
	OXFORD	93.3	41.0	2.40	<0.40	6.30	1.20	162.	152.
22 FEB 1981	WHITEFACE	35.5	6.8	9.00	0.79	1.70	1.30	61.	58.
	ITHACA	38.0	8.0	2.30	<0.40	0.75	<0.40	59.	50.
23 FEB 1981	ILLINOIS	64.6	21.0	0.92	<0.40	3.80	0.45	86.	95.
	OAK RIDGE	53.7	32.0	2.80	<0.40	6.60	0.91	111.	104.
24 FEB 1981	ITHACA	26.9	3.6	16.00	1.20	1.10	1.60	55.	53.
	PENN STATE	41.7	5.5	2.40	0.55	0.95	<0.40	57.	52.
	VIRGINIA	114.8	37.0	18.00	0.57	2.50	2.20	202.	180.
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	9.5	0.9	35.00	0.70	1.00	3.80	55.	56.
	LEWES	12.3	2.5	64.00	1.70	2.20	6.30	79.	98.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(M G +)	(S II M)	(S II M)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
25 FEB 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
26 FEB 1981	WHITEFACE	26.3	1.2	0.91	0.48	1.00	<0.40	30.	31.
	ITHACA	81.3	35.0	0.92	<0.40	11.00	2.60	159.	144.
	BROOKHAVEN	19.5	0.7	7.10	<0.40	0.35	1.20	35.	30.
27 FEB 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	55.0	34.0	2.70	<0.40	13.00	1.80	133.	121.
28 FEB 1981	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
1 MAR 1981	PENN STATE	63.1	24.0	3.80	<1.80	12.00	1.80	128.	118.
	BROOKHAVEN	69.2	13.0	5.70	1.20	6.00	1.60	89.	104.
	OAK RIDGE	63.1	15.0	3.20	1.20	4.30	0.74	86.	93.
3 MAR 1981	WHITEFACE	83.2	22.0	0.81	<0.40	2.50	<0.40	121.	111.
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
4 MAR 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ITHACA	69.2	27.0	3.00	<0.40	8.80	2.30	118.	121.
	ILLINOIS	36.3	13.0	<0.50	<0.40	1.40	<0.40	51.	52.
5 MAR 1981	ILLINOIS	42.7	12.0	0.81	<0.40	1.10	<0.40	63.	58.
6 MAR 1981	PENN STATE	44.7	13.0	1.90	<1.40	6.80	0.58	74.	74.
	VIRGINIA	58.9	24.0	1.50	<1.30	2.00	<0.40	91.	88.
	BROOKHAVEN	36.3	2.7	3.60	0.55	2.70	1.50	54.	52.
	LEWES	37.2	9.8	32.00	1.90	4.70	3.50	84.	97.
	OAK RIDGE	64.6	12.0	2.10	<0.40	1.40	<0.40	76.	81.

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[illegible]

Figure 1 consists of two diagrams, (a) and (b), illustrating the arrangement of atoms in a crystal lattice. Diagram (a) shows a simple cubic lattice with atoms labeled A, B, C, D, E, and F. Diagram (b) shows a more complex lattice structure with atoms labeled A, B, C, D, E, and F.

[illegible]

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(M G + +)	(A M I O N S U M	(C A T I O N S U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
2 APR 1981	WHITEFACE	50.1	23.0	1.10	<0.40	3.50	0.91	80.	83.
	ITHACA	85.1	62.0	2.70	0.47	15.00	4.60	188.	189.
	PENN STATE	38.9	24.0	28.00	10.00	11.00	2.60	136.	128.
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	24.5	9.0	5.20	<0.40	6.30	2.10	67.	56.
	LEWES	20.4	7.3	7.60	0.41	1.80	1.10	39.	42.
3 APR 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	1.1	43.0	16.00	4.70	28.00	7.00	118.	135.
4 APR 1981	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
5 APR 1981	WHITEFACE	69.2	34.0	9.30	0.93	15.00	3.50	172.	150.
	OXFORD	20.0	17.0	5.50	<2.00	6.00	1.40	58.	57.
6 APR 1981	ITHACA	85.1	47.0	66.00	0.40	20.00	4.60	212.	248.
	PENN STATE	83.2	36.0	8.90	5.00	21.00	4.60	204.	184.
	VIRGINIA	27.5	22.0	11.00	2.60	14.00	2.30	111.	96.
	BROOKHAVEN	32.4	5.7	13.00	<0.40	2.00	1.60	57.	58.
	LEWES	26.9	12.0	15.00	1.90	3.50	2.10	62.	67.
	OAK RIDGE	25.7	7.6	6.90	1.30	4.40	1.50	53.	53.
7 APR 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	400.
9 APR 1981	ITHACA	55.0	36.0	4.60	0.70	6.70	3.60	119.	117.
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
10 APR 1981	WHITEFACE	51.3	16.0	2.40	<0.90	3.50	0.78	83.	78.
	PENN STATE	66.1	NAP	NAP	NAP	30.00	8.20	253.	142.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(M G + +)	(S U M + +)	(S U M + +)	
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L	
08	10 APR 1981	BROOKHAVEN	MOF	NAP	NAP	NAP	NAP	MOF	MOE	
		OXFORD	77.6	6.2	9.30	1.70	7.90	2.60	75.	116.
		OAK RIDGE	26.3	9.1	9.60	0.87	2.70	1.30	51.	54.
	11 APR 1981	BROOKHAVEN	87.1	17.0	16.00	2.80	10.00	3.60	175.	150.
		OXFORD	69.2	41.0	18.00	NAP	7.00	2.60	154.	147.
	12 APR 1981	ITHACA	77.6	46.0	4.30	1.20	5.00	1.40	148.	142.
		OXFORD	70.8	46.0	14.00	44.00	6.50	2.20	152.	148.
	13 APR 1981	WHITEFACE	79.4	24.0	2.20	42.60	3.80	0.82	118.	115.
		ITHACA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
		PENN STATE	95.5	33.0	7.80	3.60	7.10	1.80	161.	158.
		ILLINOIS	MOE	MOE	MOE	MOF	MOE	MOF	MOE	MOF
		LEWES	85.1	41.0	43.00	3.80	4.10	5.10	194.	191.
		OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	14 APR 1981	ITHACA	67.6	12.0	4.80	0.41	1.70	0.82	99.	90.
		PENN STATE	77.6	22.0	13.00	40.40	5.00	2.60	133.	128.
		VIRGINIA	74.1	34.0	20.00	5.30	5.50	1.60	147.	148.
		ILLINOIS	MOF	MOE	MOE	MOE	MOF	MOF	MOE	MOE
		OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	15 APR 1981	WHITEFACE	52.5	2.0	1.70	1.60	2.00	0.45	69.	63.
		VIRGINIA	69.2	17.0	3.80	18.00	4.00	0.82	96.	118.
	BROOKHAVEN	42.7	9.6	76.00	4.50	3.90	7.20	144.	155.	
	LEWES	83.2	50.0	120.00	7.40	6.70	13.00	301.	300.	
	OAK RIDGE	33.1	100.0	48.00	8.80	23.00	8.30	272.	254.	

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A +)	(M G +)	A N I O N S U M	C A T I O N S U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
17 APR 1981	PENN STATE	223.9	62.0	15.00	<4.60	15.00	4.20	325.	339.
	VIRGINIA	69.2	26.0	3.40	2.30	2.40	0.82	117.	107.
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD	100.0	37.0	11.00	<3.00	4.60	1.30	173.	160.
18 APR 1981	ITHACA	158.5	36.0	5.10	0.55	4.70	1.40	230.	212.
	OXFORD	43.7	66.0	6.10	<6.00	11.00	2.60	151.	143.
19 APR 1981	WHITEFACE	40.7	17.0	1.10	<1.30	5.20	1.30	77.	72.
81 20 APR 1981	VIRGINIA	67.6	12.0	2.10	1.80	6.30	1.40	104.	99.
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	LEWES	57.5	13.0	3.80	1.50	9.20	2.10	96.	98.
	OXFORD	44.7	8.7	1.40	1.20	4.20	0.82	74.	66.
21 APR 1981	WHITEFACE	27.5	9.4	1.40	<0.40	1.70	0.49	47.	43.
	ITHACA	58.9	41.0	1.40	<0.40	9.80	2.50	138.	126.
	OAK RIDGE	52.5	21.0	11.00	<2.00	3.10	1.60	76.	94.
22 APR 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
23 APR 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
24 APR 1981	WHITEFACE	37.2	3.5	<0.50	<0.40	1.20	<0.40	41.	43.
	BROOKHAVEN	56.2	20.0	7.60	<1.50	2.40	1.20	80.	91.
	LEWES	28.8	37.0	18.00	<2.00	2.40	2.60	90.	94.
	OXFORD	26.9	9.7	2.90	3.50	1.90	<0.40	35.	47.
	OAK RIDGE	60.3	9.7	5.30	1.10	6.70	0.78	86.	91.
25 APR 1981	ITHACA	74.1	13.0	0.63	1.00	3.00	0.53	88.	96.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H ⁺)		(NH ₄ ⁺)		(NO ₃ ⁻)		(K ⁺)		(Ca ²⁺)		(Mg ²⁺)		(S ₀ ²⁻)		(S ₀ ²⁻)	
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
25 APR 1981	BROOKHAVEN	131.8	26.0	4.40	<3.00	9.20	2.50	209.	186.								
26 APR 1981	VIRGINIA	22.4	55.0	4.50	6.20	7.60	1.50	105.	106.								
27 APR 1981	WHITEFACE	69.2	3.7	<0.50	<0.40	1.00	<0.40	79.	75.								
	PENN STATE	208.9	60.0	7.00	<4.50	17.00	3.60	309.	317.								
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA								
29 APR 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE								
	BROOKHAVEN	182.0	66.0	17.00	<4.60	10.00	3.40	307.	292.								
30 APR 1981	WHITEFACE	79.4	22.0	0.60	<0.40	5.70	<0.40	118.	113.								
	ITHACA	87.1	29.0	0.82	<0.40	3.70	0.74	115.	126.								
	PENN STATE	158.5	60.0	3.20	4.90	21.00	5.90	273.	280.								
	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE								
	OAK RIDGE	87.1	25.0	6.50	3.00	4.50	0.66	126.	132.								
1 MAY 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE								
	LEWES	117.5	33.0	4.90	<2.70	7.30	1.70	187.	173.								
2 MAY 1981	VIRGINIA	60.3	42.0	<0.50	<0.40	3.90	0.49	114.	111.								
	BROOKHAVEN	79.4	12.0	8.30	<3.60	6.30	1.60	120.	116.								
	OXFORD	7.9	5.9	<0.50	<0.40	1.40	0.41	20.	17.								
3 MAY 1981	PENN STATE	269.2	62.0	11.00	6.70	23.00	3.70	387.	402.								
4 MAY 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA								
	LEWES	100.0	29.0	35.00	3.50	3.50	4.40	196.	183.								
5 MAY 1981	ILLINOIS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE								
6 MAY 1981	ITHACA	138.0	37.0	1.10	<2.70	8.70	1.90	202.	197.								
	ILLINOIS	28.8	14.0	0.56	<0.40	1.30	0.74	56.	47.								

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(C G + +)	(A M I N + N + C A T I O N S U M + S U M	
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
6 MAY 1981	OXFORD	25.1	4.2	1.10	1.40	<0.50	<0.40	38.	32.
7 MAY 1981	WHITEFACE	89.1	22.0	0.82	<1.80	5.70	1.30	127.	126.
	PENN STATE	144.5	22.0	<0.50	4.90	13.00	1.60	217.	201.
	VIRGINIA	166.0	30.0	<0.50	<0.40	4.40	0.62	211.	206.
9 MAY 1981	ILLINOIS	104.7	1.6	130.00	4.00	58.00	21.00	202.	398.
10 MAY 1981	ILLINOIS	95.5	53.0	2.80	1.10	27.00	5.10	250.	217.
11 MAY 1981	VIRGINIA	52.5	25.0	8.80	<2.00	1.60	1.00	90.	91.
83	ILLINOIS	29.5	8.2	<0.50	<0.40	1.40	<0.40	52.	41.
	BROOKHAVEN	50.1	8.7	64.00	2.50	3.00	6.20	143.	144.
12 MAY 1981	PENN STATE	28.2	29.0	2.90	<1.50	2.10	0.66	66.	66.
	VIRGINIA	38.9	15.0	2.90	1.90	4.90	0.66	71.	70.
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	26.3	17.0	61.00	2.80	3.00	5.90	119.	125.
	LEWES	20.4	6.7	46.00	2.10	2.70	4.70	96.	90.
	OXFORD	50.1	16.0	1.00	1.10	5.50	0.86	91.	81.
	OAK RIDGE	47.9	8.3	4.00	3.10	17.00	3.90	121.	105.
13 MAY 1981	WHITEFACE	22.9	7.2	1.70	0.77	4.20	0.82	45.	43.
	ITHACA	55.0	12.0	0.88	<1.00	1.90	<0.40	65.	72.
14 MAY 1981	ILLINOIS	75.9	31.0	0.90	<0.40	2.40	0.53	125.	114.
	OXFORD	20.0	35.0	24.00	6.40	50.00	18.00	239.	221.
15 MAY 1981	ILLINOIS	131.8	31.0	2.20	<0.40	1.20	0.62	201.	169.
	OXFORD	57.5	9.5	0.78	<0.40	4.90	0.41	91.	78.
	OAK RIDGE	50.1	25.0	1.40	<1.80	8.00	1.50	96.	96.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A +)	(M G +)	A N I O N S U M	C A T I O N S U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UFOL/L	UFOL/L
16 MAY 1981	VIRGINIA	81.3	50.0	5.30	<3.50	8.30	1.40	160.	156.
	BROOKHAVEN	18.6	13.0	47.00	1.60	4.00	5.80	121.	100.
17 MAY 1981	LEWES	27.5	23.0	15.00	<0.40	5.60	2.20	90.	81.
18 MAY 1981	WHITEFACE	38.9	6.1	0.99	0.86	7.60	0.70	67.	63.
	ITHACA	104.7	22.0	<0.50	1.60	3.10	0.70	155.	136.
	PENN STATE	0.3	28.0	16.00	4.90	22.00	8.60	64.	110.
	ILLINOIS	10.7	2.0	0.40	<0.40	1.90	<0.40	22.	17.
	BROOKHAVEN	NAP	38.0	29.00	2.10	33.00	6.20	507.	NAP
	OXFORD	37.2	6.1	0.67	0.67	4.20	0.45	56.	54.
19 MAY 1981	ILLINOIS	ISA	26.0	8.50	1.30	12.00	3.90	371.	68.
	OXFORD	70.8	7.9	0.87	0.49	6.40	1.30	97.	95.
	OAK RIDGE	29.5	21.0	5.60	2.80	5.90	1.30	73.	73.
20 MAY 1981	LEWES	57.5	11.0	17.00	0.77	5.80	2.50	150.	103.
21 MAY 1981	VIRGINIA	89.1	37.0	1.20	<1.70	3.40	0.78	165.	136.
	OAK RIDGE	166.0	12.0	1.70	2.10	2.40	1.10	316.	189.
22 MAY 1981	WHITEFACE	25.7	53.0	1.50	<4.30	38.00	10.00	196.	176.
25 MAY 1981	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
26 MAY 1981	WHITEFACE	RPC	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	ITHACA	RPC	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	PENN STATE	RPC	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	ILLINOIS	77.6	44.0	7.70	0.69	23.00	7.20	212.	190.
	OAK RIDGE	69.2	23.0	15.00	<0.40	2.90	2.20	135.	117.
27 MAY 1981	WHITEFACE	RPC	RPC	RPC	RPC	RPC	RPC	RPC	RPC

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A +)	(M G +)	(S U M)	(S U M)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
27 MAY 1981	OXFORD	77.6	32.0	5.50	0.58	3.20	0.99	136.	124.
28 MAY 1981	WHITEFACE	70.8	30.0	1.30	<1.70	4.40	0.70	117.	112.
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	64.6	8.2	0.75	1.10	5.70	<0.40	119.	86.
	OAK RIDGE	29.5	5.3	1.20	<0.40	1.20	0.41	51.	39.
29 MAY 1981	PENN STATE	15.5	25.0	9.90	3.60	11.00	2.10	94.	80.
	LEWES	24.5	10.0	49.00	1.80	4.00	5.50	109.	104.
30 MAY 1981	BROOKHAVEN	2.6	18.0	11.00	2.10	1.40	1.60	34.	40.
	OXFORD	38.0	14.0	0.64	<0.40	4.10	<0.40	76.	61.
31 MAY 1981	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
1 JUN 1981	WHITEFACE	27.5	24.0	3.60	<1.70	5.70	1.00	66.	69.
	ITHACA	158.5	38.0	2.50	<2.60	13.00	2.10	268.	229.
	PENN STATE	32.4	12.0	1.70	<0.40	2.10	0.66	62.	52.
	ILLINOIS	53.7	30.0	7.20	<0.40	13.00	2.70	132.	122.
	OXFORD	131.8	21.0	2.10	1.50	6.20	1.80	195.	172.
2 JUN 1981	PENN STATE	16.6	9.1	<0.50	<0.40	1.60	0.41	35.	30.
	VIRGINIA	95.5	25.0	0.77	4.00	4.30	1.70	164.	137.
	ILLINOIS	177.8	25.0	4.50	<0.40	8.50	2.90	232.	230.
	OAK RIDGE	66.1	19.0	8.30	2.60	3.90	0.86	102.	105.
3 JUN 1981	ILLINOIS	39.8	NAP	3.40	NAP	2.30	0.58	53.	49.
	BROOKHAVEN	69.2	4.3	17.00	0.83	14.00	2.80	140.	125.
	LEWES	45.7	23.0	17.00	2.00	3.10	2.10	104.	98.
4 JUN 1981	ITHACA	31.6	2.2	1.20	<0.40	1.40	<0.40	47.	38.

		(H +)	(H 4 +)	(N A +)	(K +)	(C A +)	(F G + +)	(O P S U M)	(O P S U M)	
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	HEQ/L	HEQ/L	
98	4 JUN 1981	VIRGINIA	75.9	42.0	1.10	5.10	3.30	1.90	148.	134.
	5 JUN 1981	WHITEFACE	97.7	34.0	2.40	<0.40	11.00	0.91	177.	158.
		PENN STATE	37.2	1.4	0.78	0.62	2.50	0.95	61.	47.
		ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
		OAK RIDGE	41.7	4.9	3.80	0.55	3.10	0.91	69.	59.
	6 JUN 1981	ITHACA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
		OXFORD	52.5	25.0	5.70	2.10	7.00	1.50	106.	102.
	7 JUN 1981	WHITEFACE	33.9	31.0	<0.50	<0.40	5.20	1.40	85.	78.
		VIRGINIA	RPC	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	8 JUN 1981	ILLINOIS	117.5	27.0	15.00	3.90	21.00	4.30	218.	214.
		OAK RIDGE	63.1	5.9	4.40	0.57	1.20	0.70	88.	78.
	9 JUN 1981	WHITEFACE	34.7	12.0	<0.50	<0.40	1.30	<0.40	49.	49.
		ITHACA	35.5	6.8	2.00	1.60	2.50	0.41	54.	52.
		PENN STATE	14.1	5.7	<0.50	<0.40	1.40	<0.40	25.	23.
		BROOKHAVEN	RPC	49.0	39.00	12.00	RPC	RPC	RPC	RPC
		OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	10 JUN 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
		VIRGINIA	72.4	31.0	2.20	<0.40	7.70	1.40	145.	124.
		ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
		OXFORD	66.1	57.0	18.00	10.00	16.00	3.70	218.	190.
11 JUN 1981	ITHACA	52.5	41.0	1.50	<3.50	8.80	2.90	131.	118.	
	PENN STATE	134.9	28.0	3.90	2.20	14.00	1.90	214.	201.	
	LEWES	6.5	4.0	0.63	<0.40	<0.50	<0.40	12.	11.	

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(H 4 +)	(N A +)	(K +)	(C A +)	(M G +)	(S O 4 M +)	(S O 4 M +)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	MEQ/L	MEQ/L
11 JUN 1981	OAK RIDGE	25.7	12.0	3.50	<0.40	4.40	0.95	55.	52.
12 JUN 1981	WHITEFACE	28.2	24.0	NAP	NAP	9.30	2.30	73.	75.
13 JUN 1981	BROOKHAVEN	281.8	89.0	41.00	11.00	19.00	7.70	506.	476.
14 JUN 1981	WHITEFACE	42.7	5.1	0.74	0.57	2.50	0.41	64.	55.
	ITHACA	69.2	23.0	<0.50	<1.30	2.30	0.58	115.	98.
	PENN STATE	89.1	26.0	1.80	1.70	5.20	0.91	139.	131.
	LEWES	17.4	3.7	4.30	<0.40	1.10	0.62	49.	29.
	OXFORD	29.5	15.0	10.00	2.00	4.30	1.70	71.	69.
15 JUN 1981	WHITEFACE	20.9	3.4	2.40	NAP	2.10	0.62	36.	32.
	ITHACA	43.7	19.0	5.80	<1.70	1.60	1.10	80.	74.
	PENN STATE	58.9	23.0	8.80	3.10	4.20	1.50	113.	105.
	ILLINOIS	43.7	23.0	3.50	<2.00	2.20	0.74	104.	76.
	BROOKHAVEN	102.3	7.5	11.00	<0.40	2.50	1.60	144.	129.
	LEWES	120.2	28.0	14.00	0.69	16.00	1.80	221.	199.
16 JUN 1981	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	17.0	8.3	4.00	<0.40	3.90	1.20	56.	39.
17 JUN 1981	WHITEFACE	38.0	3.4	1.10	0.56	1.60	0.66	63.	48.
	ITHACA	77.6	12.0	1.90	1.60	1.80	0.62	106.	98.
	PENN STATE	134.9	29.0	13.00	3.30	17.00	2.90	216.	220.
18 JUN 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
20 JUN 1981	WHITEFACE	275.4	100.0	0.97	<0.40	9.50	2.70	482.	401.
21 JUN 1981	BROOKHAVEN	16.6	5.6	3.30	<0.40	1.00	0.58	32.	29.
22 JUN 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA

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MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(M G + +)	(S U F 6)	(S U M M)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
29 JUN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
30 JUN 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
1 JUL 1981	OXFORD	213.8	34.0	2.10	<0.40	11.00	2.90	302.	278.
2 JUL 1981	PENN STATE	23.4	2.6	19.00	3.40	3.00	0.78	40.	56.
	BROOKHAVEN	31.6	4.7	72.00	3.50	5.50	7.00	141.	137.
	OAK RIDGE	74.1	23.0	0.98	<1.50	11.00	0.82	164.	122.
3 JUL 1981	ITHACA	38.0	8.3	17.00	1.10	8.60	2.50	97.	87.
	BROOKHAVEN	13.8	1.8	67.00	2.30	8.10	6.00	114.	113.
	OXFORD	138.0	29.0	1.10	<0.40	3.70	0.82	176.	177.
4 JUL 1981	VIRGINIA	32.4	5.2	5.60	<0.40	0.65	0.74	51.	46.
5 JUL 1981	WHITEFACE	53.7	6.9	3.30	<1.00	4.80	0.62	105.	75.
	BROOKHAVEN	13.8	3.9	33.00	<1.00	1.20	3.00	67.	59.
	LEWES	10.7	<0.6	100.00	8.40	4.80	8.70	260.	146.
6 JUL 1981	WHITEFACE	41.7	20.0	0.65	<1.00	2.70	<0.40	91.	68.
	ITHACA	70.8	8.5	0.88	<0.40	<0.50	<0.40	99.	80.
	PENN STATE	74.1	52.0	10.00	12.00	10.00	3.90	187.	176.
	VIRGINIA	81.3	21.0	2.90	0.91	2.30	<0.40	123.	111.
	ILLINOIS	51.3	17.0	<0.50	<0.40	<0.50	<0.40	83.	68.
	OXFORD	112.2	32.0	1.20	<0.40	1.50	<0.40	145.	148.
7 JUL 1981	OAK RIDGE	45.7	20.0	2.10	<1.50	4.70	0.58	88.	78.
8 JUL 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
10 JUL 1981	WHITEFACE	14.5	18.0	0.44	<1.00	1.60	<0.40	42.	36.
	ILLINOIS	9.1	20.0	0.59	<1.50	6.20	1.20	49.	45.

[illegible]

[illegible]

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N 4 +)	(K +)	(C A +)	(M G +)	(A M I O N I C S U M	(C A T I O N I C S U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEG/L	UEG/L
4 AUG 1981	VIRGINIA	61.7	7.8	2.20	<0.40	1.30	<0.40	85.	74.
	LEWES	61.7	27.0	17.00	4.00	2.00	1.60	118.	117.
5 AUG 1981	ITHACA	70.8	16.0	<0.50	<0.40	1.10	<0.40	107.	89.
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
6 AUG 1981	WHITEFACE	72.4	21.0	<0.50	<0.40	2.50	<0.40	123.	98.
	ILLINOIS	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
7 AUG 1981	LEWES	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	87.1	13.0	1.60	<0.40	7.50	0.66	140.	118.
8 AUG 1981	ITHACA	55.0	6.8	<0.50	<0.40	2.10	<0.40	79.	66.
	VIRGINIA	141.3	20.0	1.00	<0.40	2.30	<0.40	194.	167.
9 AUG 1981	BROOKHAVEN	114.8	13.0	18.00	6.20	3.20	1.90	194.	162.
	OXFORD	162.2	27.0	0.86	<0.40	5.30	1.40	278.	203.
10 AUG 1981	WHITEFACE	46.8	6.1	<0.50	<0.40	2.40	<0.40	73.	58.
	ILLINOIS	46.8	25.0	<0.50	<0.40	3.20	0.86	92.	80.
	LEWES	39.8	6.4	16.00	1.90	2.40	1.20	78.	71.
	OAK RIDGE	RPC	RPC	RPC	RPC	RPC	RPC	RPC	RPC
11 AUG 1981	ITHACA	151.4	19.0	<0.50	<0.40	6.90	0.49	220.	185.
	OXFORD	229.1	38.0	4.00	3.90	13.00	2.90	346.	307.
12 AUG 1981	WHITEFACE	134.9	15.0	<0.50	<0.40	1.10	<0.40	218.	152.
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	195.0	29.0	0.66	<0.40	18.00	1.60	400.	264.
13 AUG 1981	VIRGINIA	87.1	24.0	0.72	<0.40	6.80	0.91	157.	127.
	BROOKHAVEN	89.1	18.0	12.00	3.40	10.00	2.20	174.	147.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A +)	(M G +)	(S U M +)	(S U M +)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	HEQ/L	HEQ/L
13 AUG 1981	LEWES	64.6	9.0	6.20	0.57	1.10	0.99	106.	85.
14 AUG 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ITHACA	120.2	54.0	1.40	<0.40	23.00	4.60	272.	231.
16 AUG 1981	BROOKHAVEN	158.5	52.0	110.00	0.74	16.00	14.00	427.	381.
	LEWES	60.3	12.0	2.60	<0.40	1.10	0.58	95.	78.
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
17 AUG 1981	WHITEFACE	63.1	18.0	<0.50	<0.40	1.40	<0.40	99.	84.
93	ITHACA	166.0	33.0	<0.50	<0.40	6.80	1.00	253.	215.
	ILLINOIS	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
	OAK RIDGE	58.9	7.4	0.69	<0.40	3.10	0.70	97.	75.
18 AUG 1981	PENN STATE	478.6	110.0	5.30	48.00	47.00	11.00	911.	758.
21 AUG 1981	OAK RIDGE	75.9	3.7	<0.50	<0.40	2.40	1.30	105.	87.
24 AUG 1981	ITHACA	79.4	24.0	<0.50	<0.40	2.20	0.66	134.	109.
	PENN STATE	138.0	70.0	9.60	<0.40	13.00	2.80	268.	249.
	LEWES	6.5	1.4	81.00	2.40	4.60	8.70	131.	118.
25 AUG 1981	WHITEFACE	74.1	24.0	<0.50	<0.40	4.30	0.58	123.	108.
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
26 AUG 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
27 AUG 1981	ILLINOIS	100.0	19.0	0.62	<0.40	0.80	<0.40	160.	121.
28 AUG 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	57.5	20.0	0.41	<0.40	1.20	<0.40	106.	80.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

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		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(M G + +)	(S H M + +)	(S U M + +)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
28 AUG 1981	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
29 AUG 1981	OXFORD	162.2	34.0	7.50	3.80	16.00	5.60	283.	251.
30 AUG 1981	OXFORD	19.1	57.0	21.00	18.00	8.20	2.10	143.	136.
31 AUG 1981	WHITEFACE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	64.6	26.0	0.73	<0.40	11.00	1.60	136.	116.
1 SEP 1981	WHITEFACE	ISA	<0.6	0.76	<0.40	1.40	<0.40	33.	4.
	PENN STATE	60.3	16.0	4.90	<0.40	3.70	1.00	96.	91.
	VIRGINIA	79.4	23.0	24.00	<0.40	3.70	2.30	149.	138.
	ILLINOIS	17.4	46.0	2.60	1.60	5.90	1.10	85.	82.
	BROOKHAVEN	17.0	<0.6	36.00	<0.40	1.00	3.90	70.	63.
	OAK RIDGE	114.8	6.3	25.00	<0.40	34.00	12.00	205.	238.
2 SEP 1981	OXFORD	44.7	12.0	5.20	2.80	3.70	0.95	79.	74.
3 SEP 1981	WHITEFACE	ISA	7.8	4.30	<0.40	5.60	0.74	127.	25.
	OXFORD	52.5	8.0	3.50	1.50	2.10	0.45	77.	71.
4 SEP 1981	ITHACA	97.7	9.6	2.60	0.43	<0.50	0.45	126.	111.
	PENN STATE	131.8	38.0	9.80	<0.40	2.20	1.60	202.	187.
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	57.5	6.4	3.20	<0.40	2.60	0.66	90.	74.
5 SEP 1981	OAK RIDGE	162.2	31.0	2.60	<0.40	6.70	1.10	235.	211.
8 SEP 1981	ITHACA	97.7	17.0	3.60	<0.40	5.30	0.95	149.	131.
	PENN STATE	40.7	37.0	1.90	<0.40	2.60	0.58	102.	86.
	ILLINOIS	112.2	51.0	0.51	1.30	2.70	0.49	201.	171.
	LEWES	52.5	2.3	10.00	<0.40	1.40	1.10	82.	70.

The diagram illustrates the experimental design with two parallel sequences of stimuli. The left sequence consists of 'A', 'N', 'I', 'P', and 'M' arranged vertically. The right sequence consists of 'C', 'A', 'I', 'P', and 'M' arranged vertically. A 'S' is located at the bottom center, between the two sequences. Arrows point downwards from 'A' and 'C' to 'N' and 'A' respectively, and from 'N' and 'A' to 'I' and 'I' respectively, indicating the temporal flow of the stimuli.

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MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A +)	(M G +)	(S U M)	(S U M)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
5 OCT 1981	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
6 OCT 1981	ILLINOIS	13.2	23.0	3.70	NAP	5.60	0.95	65.	53.
	OXFORD	30.2	9.7	2.60	0.62	2.20	0.45	52.	48.
7 OCT 1981	PENN STATE	93.3	35.0	7.70	2.00	10.00	2.70	170.	163.
	BROOKHAVEN	100.0	16.0	10.00	NAP	6.30	1.50	165.	142.
	LEWES	50.1	25.0	14.00	1.70	2.00	1.60	90.	98.
8 OCT 1981	ITHACA	50.1	16.0	6.40	5.30	2.50	0.58	76.	84.
	OAK RIDGE	60.3	13.0	4.90	0.94	3.50	0.78	98.	88.
10 OCT 1981	WHITEFACE	15.1	1.1	0.57	6.30	5.80	3.20	27.	41.
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
12 OCT 1981	VIRGINIA	66.1	35.0	4.50	3.40	3.70	1.30	128.	119.
13 OCT 1981	OAK RIDGE	39.8	20.0	20.00	2.10	7.30	0.99	103.	98.
15 OCT 1981	ILLINOIS	169.8	24.0	3.40	1.10	21.00	2.50	287.	245.
	OXFORD	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
16 OCT 1981	ITHACA	123.0	100.0	0.33	3.40	15.00	2.10	308.	261.
19 OCT 1981	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	31.6	23.0	1.30	NAP	2.30	0.53	70.	62.
	BROOKHAVEN	79.4	32.0	93.00	2.50	5.10	10.00	272.	237.
	LEWES	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD	37.2	31.0	7.30	3.30	8.50	1.70	94.	99.
	OAK RIDGE	75.9	22.0	2.00	0.60	1.50	<0.40	107.	103.
20 OCT 1981	WHITEFACE	17.8	0.8	0.89	4.70	5.80	3.20	39.	42.
	ITHACA	50.1	13.0	0.92	1.10	3.50	0.74	82.	74.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H +)	(M A +)	(K +)	(C A +)	(M G +)	(S U M +)	(S U M +)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
20 OCT 1981	PENN STATE	77.6	20.0	3.40	1.30	6.70	1.10	122.	118.
22 OCT 1981	ILLINOIS	28.8	9.9	0.88	<0.40	1.70	<0.40	50.	43.
23 OCT 1981	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	50.1	30.0	3.50	0.41	3.90	0.70	94.	93.
	OAK RIDGE	56.2	15.0	15.00	1.20	2.10	1.60	105.	95.
24 OCT 1981	PENN STATE	112.2	19.0	7.50	1.40	11.00	2.80	178.	168.
	VIRGINIA	30.2	3.2	8.70	1.60	0.50	<0.40	48.	45.
	BROOKHAVEN	29.5	5.5	35.00	0.78	2.00	4.20	91.	83.
	LEWES	47.9	16.0	40.00	2.30	3.10	4.20	112.	121.
25 OCT 1981	ITHACA	107.2	24.0	4.70	1.10	3.10	0.66	157.	144.
26 OCT 1981	WHITEFACE	69.2	17.0	0.80	0.82	4.30	0.78	96.	98.
	BROOKHAVEN	7.1	1.3	14.00	<0.40	<0.50	1.60	31.	26.
	LEWES	8.9	0.9	95.00	2.30	2.50	9.10	140.	130.
	OXFORD	49.0	6.5	1.70	0.51	2.80	0.41	71.	64.
27 OCT 1981	ILLINOIS	69.2	6.9	0.76	<0.40	2.60	0.78	94.	84.
	OXFORD	32.4	10.0	0.70	0.41	0.65	<0.40	49.	45.
	OAK RIDGE	39.8	1.5	0.92	<0.40	0.75	<0.40	51.	44.
28 OCT 1981	ITHACA	23.4	1.3	0.83	<0.40	<0.50	<0.40	27.	26.
	PENN STATE	22.9	2.2	0.90	<0.40	<0.50	<0.40	27.	26.
	VIRGINIA	17.8	2.8	4.00	<0.40	<0.50	<0.40	25.	25.
	BROOKHAVEN	4.2	0.9	5.40	<0.40	<0.50	0.62	15.	12.
	LEWES	12.3	11.0	70.00	3.70	6.40	7.00	128.	124.
	OXFORD	33.9	10.0	1.20	0.51	0.80	<0.40	44.	47.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(M G + +)	(S U M)	(S U M)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
29 OCT 1981	WHITEFACE	5.6	0.5	0.44	<0.40	<0.50	<0.40	7.	7.
30 OCT 1981	LEWES	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
2 NOV 1981	ILLINOIS	13.5	46.0	2.20	NAP	1.60	0.49	71.	66.
6 NOV 1981	PENN STATE	55.0	10.0	3.70	1.20	10.00	0.70	96.	91.
	BROOKHAVEN	61.7	26.0	15.00	1.30	1.20	1.50	136.	109.
	OXFORD	39.8	35.0	11.00	2.80	7.30	1.00	77.	105.
	OAK RIDGE	74.1	4.3	6.10	0.76	0.75	0.74	88.	88.
69 7 NOV 1981	VIRGINIA	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	LEWES	40.7	3.1	9.80	1.00	1.80	1.20	74.	61.
8 NOV 1981	ITHACA	52.5	9.3	2.70	2.10	4.60	1.20	86.	78.
9 NOV 1981	WHITEFACE	28.8	3.4	<0.50	<0.40	<0.50	<0.40	43.	32.
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
10 NOV 1981	BROOKHAVEN	57.5	4.1	23.00	1.40	6.00	2.60	99.	103.
	OXFORD	56.2	52.0	4.90	1.20	8.20	1.90	148.	135.
12 NOV 1981	WHITEFACE	55.0	47.0	7.40	1.10	3.30	1.00	136.	119.
16 NOV 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	17.0	3.7	56.00	1.60	2.00	5.60	97.	93.
	LEWES	37.2	6.4	53.00	1.90	3.10	5.60	134.	116.
17 NOV 1981	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OAK RIDGE	89.1	33.0	4.00	1.00	1.90	0.41	136.	132.
18 NOV 1981	BROOKHAVEN	44.7	12.0	12.00	1.20	1.50	1.10	81.	75.
	LEWES	53.7	12.0	20.00	0.99	2.50	2.30	111.	96.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

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		(H +)	(H 4 +)	(N A +)	(K +)	(C A + +)	(N G + +)	(S U + +)	(S U + +)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
19 NOV 1981	ITHACA	32.4	6.2	1.30	<0.40	<0.50	<0.40	49.	40.
20 NOV 1981	WHITEFACE	22.4	6.3	2.20	<0.40	<0.50	<0.40	36.	31.
	ILLINOIS	0.5	140.0	1.50	NAP	5.40	0.62	148.	154.
	BROOKHAVEN	33.9	16.0	12.00	0.76	1.30	1.20	75.	68.
	OXFORD	39.8	30.0	5.90	1.00	8.20	1.20	100.	96.
21 NOV 1981	BROOKHAVEN	49.0	28.0	15.00	2.00	2.70	1.50	113.	102.
22 NOV 1981	PENN STATE	83.2	18.0	13.00	1.20	13.00	2.00	166.	145.
23 NOV 1981	ITHACA	85.1	23.0	4.00	1.00	7.80	1.10	166.	131.
24 NOV 1981	WHITEFACE	44.7	3.0	2.50	<0.40	<0.50	<0.40	60.	50.
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	70.8	57.0	2.90	NAP	10.00	1.00	165.	153.
	OXFORD	51.3	14.0	2.90	1.00	2.60	<0.40	78.	74.
25 NOV 1981	VIRGINIA	24.5	11.0	4.50	<0.40	0.57	<0.40	43.	41.
	OAK RIDGE	69.2	19.0	4.20	1.40	6.60	0.91	131.	109.
27 NOV 1981	PENN STATE	112.2	26.0	28.00	3.70	11.00	3.00	220.	198.
	ILLINOIS	2.2	19.0	17.00	1.50	23.00	4.00	94.	94.
	OXFORD	28.8	21.0	19.00	1.30	6.50	1.90	88.	87.
28 NOV 1981	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
30 NOV 1981	WHITEFACE	26.9	12.0	3.90	<0.40	1.80	0.41	58.	47.
	ITHACA	41.7	23.0	5.20	1.00	5.40	1.00	93.	84.
	OAK RIDGE	18.6	6.0	7.50	<0.70	0.95	0.70	43.	35.
1 DEC 1981	ILLINOIS	36.3	10.0	1.30	<0.70	4.50	0.58	62.	58.
	OXFORD	25.7	4.0	1.60	<0.40	0.50	<0.40	41.	42.

MAP38 PRECIPITATION CHEMISTRY DATA (CONT.)

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A +)	(M G +)	(S U M)	(S U M)	
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L	
101	2 DEC 1981	ITHACA	20.4	2.5	2.70	<0.40	1.80	<0.40	34.	29.
		PENN STATE	33.9	7.4	1.70	1.00	1.80	<0.40	52.	48.
		VIRGINIA	57.5	20.0	5.90	0.79	1.90	0.58	101.	89.
		ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
		BROOKHAVEN	19.5	8.0	39.00	1.00	1.60	3.50	79.	78.
		LEWES	32.4	11.0	40.00	1.00	2.50	3.40	93.	96.
		OAK RIDGE	24.5	2.1	1.60	<0.70	0.62	<0.40	36.	29.
	3 DEC 1981	PENN STATE	288.4	37.0	5.70	4.80	22.00	5.90	553.	392.
		VIRGINIA	123.0	34.0	11.00	2.90	9.90	1.30	229.	193.
	4 DEC 1981	ILLINOIS	31.6	24.0	1.40	<1.40	6.20	0.70	75.	71.
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA	
	LEWES	331.1	43.0	150.00	8.20	18.00	12.00	628.	592.	
	OAK RIDGE	53.7	36.0	45.00	1.40	21.00	2.30	196.	183.	
5 DEC 1981	PENN STATE	269.2	37.0	11.00	2.40	7.50	0.78	357.	336.	
	VIRGINIA	57.5	13.0	6.60	0.85	1.90	<0.40	88.	82.	
	OXFORD	72.4	29.0	18.00	1.00	11.00	2.90	147.	148.	
6 DEC 1981	ITHACA	69.2	30.0	4.20	0.44	7.50	1.20	132.	121.	
7 DEC 1981	WHITEFACE	74.1	34.0	9.50	<1.40	2.90	0.70	142.	125.	
	LEWES	63.1	6.5	60.00	2.70	3.20	5.00	148.	149.	
8 DEC 1981	PENN STATE	58.9	21.0	3.20	0.82	4.20	0.49	98.	93.	
	LEWES	85.1	36.0	8.20	1.90	5.00	1.20	148.	144.	
9 DEC 1981	WHITEFACE	21.4	6.6	1.80	<0.40	0.62	<0.40	35.	31.	
	BROOKHAVEN	91.2	20.0	14.00	3.70	2.40	1.60	150.	137.	

MAP38 PRECIPITATION CHEMISTRY DATA (CONT.)

102

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(C + +)	(S U M + +)	(S U M + +)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
10 DEC 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
11 DEC 1981	ITHACA	30.2	10.0	1.70	<0.40	0.85	<0.40	46.	44.
12 DEC 1981	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
15 DEC 1981	WHITEFACE	28.8	3.3	4.40	<0.40	0.87	<0.40	46.	38.
	PENN STATE	32.4	2.5	4.10	<0.40	6.30	0.78	57.	53.
	BROOKHAVEN	19.1	2.0	2.80	<0.40	<0.50	<0.40	34.	24.
16 DEC 1981	PENN STATE	74.1	0.7	8.40	<0.40	2.60	0.58	98.	90.
	VIRGINIA	35.5	1.8	0.62	<0.40	<0.50	<0.40	43.	38.
	BROOKHAVEN	27.5	2.7	12.00	<0.40	<0.50	1.10	42.	44.
	LEWES	35.5	1.9	18.00	0.67	0.50	1.60	65.	60.
	OAK RIDGE	39.8	4.5	1.30	<0.40	1.20	<0.40	58.	48.
17 DEC 1981	WHITEFACE	28.8	3.6	1.40	<0.40	<0.50	<0.40	38.	34.
	ITHACA	52.5	20.0	8.50	<0.40	7.40	1.70	108.	99.
18 DEC 1981	PENN STATE	85.1	14.0	6.10	3.10	3.60	1.10	110.	118.
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	14.5	<0.6	0.74	<0.40	<0.50	<0.40	16.	15.
	OAK RIDGE	87.1	20.0	9.30	0.87	2.80	0.82	114.	125.
21 DEC 1981	WHITEFACE	57.5	0.9	1.70	<0.40	0.62	<0.40	74.	61.
	ITHACA	56.2	14.0	3.20	<0.40	2.60	0.58	86.	80.
	OXFORD	9.1	<0.6	1.60	<0.40	<0.50	<0.40	10.	11.
22 DEC 1981	PENN STATE	50.1	4.4	3.80	1.40	4.90	0.82	66.	71.
23 DEC 1981	PENN STATE	95.5	31.0	20.00	3.70	4.90	2.00	146.	164.
	VIRGINIA	35.5	0.9	1.10	<0.40	0.82	<0.40	40.	39.

MAP3S PRECIPITATION CHEMISTRY DATA (CONT.)

103

		(H +)	(N H 4 +)	(N A +)	(K +)	(C A + +)	(M G + +)	(S U M + +)	(S U M + +)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	UEQ/L
23 DEC 1981	BROOKHAVEN	70.8	13.0	52.00	1.80	4.00	4.60	160.	155.
	LEWES	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD	61.7	19.0	13.00	2.70	2.00	1.60	95.	104.
	OAK RIDGE	57.5	8.4	15.00	0.52	2.00	1.00	81.	87.
24 DEC 1981	WHITEFACE	30.9	27.0	1.60	<0.40	0.50	<0.40	39.	61.
	ITHACA	39.8	5.5	0.73	<0.40	0.67	<0.40	51.	47.
27 DEC 1981	LEWES	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
28 DEC 1981	WHITEFACE	23.4	51.0	3.60	<0.40	0.95	0.41	40.	81.
	PENN STATE	79.4	28.0	16.00	8.70	8.60	1.40	134.	152.
	BROOKHAVEN	19.1	3.7	19.00	2.40	3.00	1.50	48.	53.
29 DEC 1981	PENN STATE	107.2	54.0	33.00	24.00	34.00	4.30	270.	295.
	VIRGINIA	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	OAK RIDGE	46.8	5.1	7.80	<2.00	12.00	1.80	132.	87.
30 DEC 1981	WHITEFACE	18.6	41.0	0.41	<0.40	<0.50	<0.40	23.	60.
	ITHACA	56.2	28.0	6.70	0.95	9.70	1.60	114.	114.
	OXFORD	10.5	1.3	0.63	<0.40	1.10	<0.40	14.	15.
31 DEC 1981	BROOKHAVEN	208.9	50.0	130.00	8.80	39.00	15.00	551.	506.

MISSING DATA CODES:

NSC MEANS NO SAMPLE COLLECTED
ISA MEANS INSUFFICIENT SAMPLE FOR ANALYSIS
NAP MEANS NO ANALYSIS PERFORMED
MOE MEANS MALFUNCTION OR OPERATOR ERROR
RPC MEANS REJECTED - PROBABLE CONTAMINATION

TABLE 3. MAP3S Precipitation Chemistry Network Rain Gauge Data

WHITEFACE

JAN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<	-	-	-	-	.15	-
2	-	-	-	-	>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	.03	-	-	-	.03	-	-	.03	.03	.03	-	.03	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.03	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.03	.03	-	-	-	-	-
17	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.03	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-
19	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	.03	-	-	-	-	-
23	-	-	-	-	.03	-	.03	-	-	-	-	-	-	.03	.03	-	-	-	.03	-	-	-	-	-
24	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	.03	.03	.03	.15	.03	.03	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.05	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

FEB 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.08
2	-	-	.05	-	.03	.05	.03	.05	.13	.04	.15	.18	.23	.28	.30	.36	.23	.13	.15	.08	.03	.03	-	-
3	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	.03	-	.03	-	-	-	-	.03	.05	.10	.08	.05	.18	.08	.10
9	.10	.13	.08	.10	.03	.03	-	-	-	-	-	-	-	-	-	.03	.05	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	.03	-	.03	-	-	.03	-	.03	.13	.03	.10	.18	.05	.10	.13	.10	.10	.18	.18	.03	.43
12	.18	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05
17	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	.03	.05	.03	.03	.05	.03	.05	.03	.05	-	.05	.08	.05
21	.08	.13	.03	.03	.03	-	.13	.08	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	.03	.05	.20	.10	.03	.05	.13	.05	-	-	-	.03	-	.03	.15	.13	-	.08	.05
25	.03	.03	.03	-	-	.03	.10	.10	.10	.05	.13	.08	.05	.13	.13	.10	.13	.03	-	-	.03	.10	.05	.03
26	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	.03
27	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	.05	.10	.05	.03	.03	.03	-	-	-	-	.03	-	-	-	-	.03	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

MAR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	.03	-	-	-	.03	.05	.03	-
3	-	.03	.03	-	-	-	-	-	-	-	-	-	-	-	.03	-	.05	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	.03	-	-	-	.03	-	.03
7	-	.05	.05	.03	.05	.03	-	-	-	.03	-	-	.03	.03	-	-	-	.03	-	-	-	.03	-	.03
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	.08	-
10	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03
11	.08	-	.05	.03	.03	-	.03	-	.03	-	.03	-	.05	.03	.03	.08	.03	.03	.05	.03	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	.03	.03	-	-	-	-	-	-	-	-
14	-	-	-	-	.03	-	.03	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	.03	.05	.05	.05	.08	.05	-	.03	.03	-	.03	-	.03	-	.03	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	.03	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	.03	-	-	-	.03	-	-	-	-	-	-	-	.08	.03	-	-	-	-	-	-	-	-	-	-
21	-	-	-	.03	-	-	.03	-	.03	.03	.03	-	.03	.03	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.05	-	.05	.10	.03	-	.08	.05
25	.03	.03	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	.03	.05	.10	-	.05	.05	-	.03	-	-	.03	.03	-	-	-	-	.05	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.20	.20	.25	.20
31	.30	-	-	.03	-	-	-	-	.08	.03	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

APR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.66	.63
2	.03	.03	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	.03	.10	.03	-	-	.08	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.18	.08	.10	.03	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	.10	-	-	.03	-	-
7	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-	-	-	-	.03	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	.58	.13	.05	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	.08	.18	.03	-	.15	.25	.05	-	-	-	.10	.03	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.08	.03	.03	.03	-	-	-
15	-	.08	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.03	.05	.05	-	-	-	-	.05	.18	.10
18	.08	.15	.08	.03	-	-	-	.03	.36	.28	.20	.03	-	.05	-	-	.08	.15	-	.23	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.20	-	-	-	-	-	-	-	-
21	.15	-	-	>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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24	.05	.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.05	-	.05	.08	.08
25	-	-	-	.03	-	.03	.05	.03	.05	.05	-	-	-	-	-	-	-	.05	.03	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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29	-	-	-	-	-	-	-	.05	.10	.05	.03	.03	.03	.10	-	.23	-	-	-	-	-	-	-	-
30	.05	-	.03	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-

107

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

MAY 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																								
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
108	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.20	.08	.03	.10	.05	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	.13	.03	.05	-	.05	.03	.04	-	-	-	.03	
	12	-	-	-	-	-	-	-	-	.03	-	.03	.18	.13	.03	-	-	-	-	.46	-	-	.03	.03	.05	-
	13	-	-	-	-	.08	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	15	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	16	-	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	
	17	-	.08	.28	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.03	.08
	26	.36	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	27	.03	.05	.05	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.76	.03	-	
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

JUN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4		-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	.10	-	-	-	-	-	.03
5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6		-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.81	-	-	-	.20	-	-	-	-
7		-	-	-	-	-	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9		-	-	-	-	-	-	1.27	-	>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	.03	-	-	-
11		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-
12		-	-	.18	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.05	.03	-
13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15		-	-	.03	.05	.05	-	-	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17		-	-	.08	.18	.15	.10	.13	.15	.10	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-
18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-	.41	.15	.03	.03	-	-	-	-	-
21		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.13	.43	.13	.15	.08	.03	-
23		-	-	.13	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24		-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.05	-	-	-	-
26		-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	.20	.25	.51	.18	.13	.13	.03
27		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

JUL 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
110	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.45	-	.15	
	10	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	.03	.10	-	-	-	-	-	-	.15	-	-	-
	14	-	.03	1.02	-	-	-	-	-	-	-	-	-	.08	.03	.03	-	.08	.23	.13	.43	.36	.15	.20	-
	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	-	-	.03	.08	.10	.05	.03	.03	-	-	-	-	-	-
	19	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-
	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.10	.03	-	-	-	.03	-
	21	-	-	-	-	.08	.48	-	-	-	.03	-	-	.05	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03
	27	.13	.23	.18	.13	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.10	.20	.66	-
	29	.66	.61	.74	.36	.20	.13	.08	.05	.05	.03	.03	.03	-	-	-	-	.05	-	.08	.10	.13	.20	.05	-
	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE

ML = MISSING, PRECIPITATION LIKELY

MU = MISSING, PRECIPITATION UNLIKELY

< > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

AUG 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	.03	.03	-	-	-	-	.10	-	-	.46	.03	-	-	.15	.03	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	.08	.05	-	-	.03	-	-	-	-	-	-	-	-	-	-
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8	-	-	-	-	-	-	-	-	-	-	-	-	.08	.28	.08	.48	.38	-	-	-	-	-	-	-
9	-	-	-	-	.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.43	.05	-	-
10	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.45	.28	.10	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.33	.25	.20	.36	.18	.08	.10	.08
16	-	.25	.20	-	.03	-	-	.03	.20	.08	.08	.13	-	-	.03	.03	.03	-	.03	.05	.05	.03	.03	-
17	-	-	.03	-	-	.15	.18	.10	.05	.03	.05	.05	.03	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	.03	-	-	-	-	-	-	.20	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	.18	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP35 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

SEP 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	.03
3	-	-	-	-	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.03	.66
9	.46	.43	-	.10	-	.05	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.28	.43	.74	.97	.91	.43	-	.15
11	-	-	.03	.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.66	.03	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-
15	-	.03	.10	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-
18	-	.03	-	.05	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	.15	.03	-	-	-	-	.05	.03	-	-	.03	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	.03	.13	.10	.20	.25	.25	.41	.46	.46	.36	-	-	-	.10	.03	-	.03	-	-	-
23	-	-	.05	.20	.10	.13	.05	.13	.28	.18	.30	.20	.13	.28	.58	.58	.91	.97	.79	1.17	.69	.50	.10	.10
24	.10	.08	.15	.05	.05	.08	.10	.13	.03	.05	.03	.13	.08	.08	.05	.08	-	.03	.03	-	-	.03	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	.03	.03	.03	.03	-	-	-	.10	.10	-	-	.08	-	-	-	-	-	-	-	-	.25	-	-
28	-	-	-	-	-	-	-	-	-	-	.05	-	.20	-	.03	.18	.13	.23	.08	-	-	.08	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

OCT 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.08	.03	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	.03	.05	.03	.08	.08
3	.03	-	-	-	-	.03	-	.03	.05	.03	.03	-	.03	.10	-	-	-	.03	.05	-	-	-	.03	-
4	.03	-	.03	-	.03	.05	.03	.05	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.13	.25	.08	-	.10	-	.05
7	-	-	-	-	-	-	-	.03	-	.15	.25	.23	.15	.05	.05	.03	.08	.08	.10	.08	.15	.05	.08	.05
8	-	-	-	.03	.10	.18	.10	.05	.03	-	-	.03	-	-	.05	.03	.15	.08	.08	.03	-	-	-	.03
9	.08	.03	.03	-	-	-	-	.03	.05	.03	.13	.08	-	-	.03	.05	.05	.03	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.05	.03	-	.03	-	.25	-	-	.18	.03	.05
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.28	-	-
19	.15	.13	.33	.30	-	-	-	.10	-	.03	-	-	-	.03	-	.03	.03	.03	.03	.03	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.13	.10	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	.03	-	-	.05	.03	-	-	-	.05	-	-	-	-	.03
22	.08	.05	-	.03	-	-	-	.03	-	-	-	-	-	.03	.03	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	.05	.08	.08	.28	.08	.08	-	-	.05	.15	.10	.03
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	.03	.10	.25	.43	.10	.05	.03	-	-	-	-	-	-
27	-	-	-	-	.08	.08	.13	.25	.23	.38	.10	-	.05	.05	.03	.08	.30	.18	-	-	-	-	-	-
28	-	-	-	-	.03	-	.08	.10	.58	.69	1.22	.33	.28	.08	-	-	.05	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

NOV 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	.03	.08	.03	.08	.03	.28	.28	.08	.05	.03	-	.03	.03	.03	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.36	.10	-	-	-	-	-
9	-	-	-	-	-	-	.03	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.08	.10	.08	.05	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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17	-	-	-	-	-	-	.18	.13	.05	.10	-	-	.03	-	-	-	.05	-	-	-	.03	.03	-	-
18	-	-	-	-	-	-	-	.03	-	-	-	.03	-	.03	-	.03	.03	-	.05	.05	.05	.03	.03	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	.03	.15	.13	.10	.05	-	.03	-	-	-	-	-	-	-
21	-	.03	.03	-	.03	.05	.03	.05	-	-	.08	.03	.03	.03	-	.03	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	.03	.20	.15	.20	.13	.08	.05	.03	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	.04	.20	.13	-	.03	-	-	-	-	-	.03	.03	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-	.03	.08
29	.03	.10	.08	-	-	.03	-	-	-	.03	-	-	.03	-	-	-	.03	-	-	-	-	-	-	-
30	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

WHITEFACE

DEC 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	.03	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.05	.05	.03
9	.03	.03	-	.05	.05	.03	.03	.03	-	.03	.05	.03	.03	.03	-	-	.03	-	-	-	-	-	-	.03
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	.03	.03
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	.03	.05	.05	.03	.05	.10	.15	.15	.08	.05	-	-	-	-	-	-	-	-	.05
17	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	.05	.13	-	.03	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	.05	.43	.20	.13	.05	.05	-	-	.03	-	.03	-	-	-	.03
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.15	.13	.08
28	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	.03	.05	.10	.05	.05	.03	.03	-	-	-	-	-	-	-	-	-	.03	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

JAN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (7)																								
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
116	1	-	-	-	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	.25	.13	-	-	-	-	-	-	.13	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	<	-	-	-	-	-	-	-	-	-	-	-	.28	
	5	-	-	-	-	-	-	-	-	-	-	-	>	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	.08	.08	.15	.08	.08	-	-	-	-	-	-	-	.08	-	-	-	-
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	17	<	-	-	-	-	-	-	-	.51	-	-	-	-	-	-	-	>	-	-	-	-	-	-	-	-
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	23	-	-	-	>	-	-	-	-	-	-	-	-	<	-	-	-	.30	-	-	-	-	-	-	>	-
	24	-	-	-	-	-	-	-	-	-	-	-	-	<	-	-	-	.46	-	-	-	-	>	-	-	-
	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.10	-
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	-	-	-	-	-	-	-	-	-	-	.05	.05	.10	.05	.05	-	-	-	-	-	-	-	-	-	-
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP35 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

FEB 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.20	.20	.15	-
2	.05	-	-	-	-	.10	.15	.25	.10	.05	.15	.30	.30	.41	.41	.10	.10	.10	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	.10	.15	.15	.10	.15	.15	.15	.25	.05	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	.10	.05	.05	-	-	-	.15	.05	.10	-	.10	.36	.05	.05	-	-	.05	.05	-	.51	.20	.05	.15	.10
12	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	.08	.08	.05	-	.08	.23	.23	.23	.23	.08	.30	.23	-	-	-	-	.15	.23	.15	.23
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.23	.28	.05	.23	.61	.38
24	.23	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	.13	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	.41	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

MAR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	-	-	-	-	-
3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-
4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	-	-	-	.10	.05	.05
8		-	.05	.10	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.05	-	-	-
9		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	.05	-	-	-	-
10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.20	.10	-	-	-	-	-
14		-	-	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.10	-	-	-	-	-	-	-	-
18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.10	-	-	-	-	-	-	-	-
19		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21		-	-	-	-	-	-	.15	.15	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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25		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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27		.15	.05	-	-	-	.05	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.05	-	-	.10	-	.05
30		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

APR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.30	.91	-	-	-	-
2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		-	-	-	-	-	-	-	-	-	-	.15	-	-	-	-	.15	-	-	-	-	-	-	-	-
6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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9		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.33	.05	-	-	-	-	-
10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11		-	-	-	-	-	-	-	-	-	-	-	-	-	-	.46	.51	-	-	-	-	.20	-	-	-
12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	119	-	-	-	-	-	-	-	-	-	-	-	.13	.25	.38	-	-	-	-	.05	-	-	-	-	-
15		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17		-	-	-	-	-	-	-	.30	.08	-	-	-	-	-	-	-	.38	-	-	-	-	-	-	-
18		-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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23		-	-	-	-	-	-	-	-	-	-	.38	.10	.08	-	-	-	-	-	-	.15	.38	.15	-	-
24		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.23	.38	.30	-	-	-	-
25		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28		-	-	-	-	-	-	-	-	-	-	-	-	-	.25	-	-	-	-	-	-	-	-	.38	.36
29		.30	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	.41	.46	-	-	-	-
30		-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

MAY 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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6		-	-	-	-	-	-	-	-	-	-	-	-	-	.15	.15	-	-	-	-	-	-	-	-	-
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11		-	-	-	-	.46	.30	.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.46
12		.23	.15	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	120	-	-	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10
16		.10	-	-	.41	.41	.05	.05	-	-	-	-	.10	.20	.05	-	-	-	.10	-	-	-	-	-	-
17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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25		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.30	.30	-	-
26		-	-	-	.05	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		-	-	-	-	-	-	-	-	-	-	-	-	-	.20	-	-	-	-	-	-	-	-	-	-
30		-	.15	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	.15	.05	-	-	.05	-
31		-	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

JUN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2		-	-	-	-	-	-	-	-	-	-	.23	-	-	-	-	-	-	-	-	-	-	-	-	-
3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.76	.61	.46	.08
4		-	-	-	-	-	-	-	-	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6		-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9		-	-	.76	.97	-	-	.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.10	-	-
11		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-
13		-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	121	-	-	-	.25	.66	.56	.05	.20	.10	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15		.25	.51	.10	-	-	-	-	-	.36	.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17		.51	.05	-	-	.10	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.52	-	-	-	-	-	-	-	-
21		-	-	-	-	-	-	-	-	-	-	.10	1.47	-	-	-	-	-	-	-	-	-	-	-	-
22		-	-	-	-	-	-	-	-	-	-	-	.10	-	-	-	-	-	-	-	-	-	-	-	-
23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25		-	-	-	-	-	-	-	-	-	-	.61	.15	.05	-	-	-	-	-	-	-	-	-	-	-
26		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

JUL 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
122	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	
	2	-	-	-	-	.08	-	-	-	-	-	-	-	-	-	.05	.08	.61	-	-	-	-	-		
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.41	-	-	-		
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-		
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	3.45	.41	.15	.10	.36	.25	-	-	-		
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
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	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	20	-	-	-	-	-	-	-	-	-	-	-	-	-	2.49	-	-	-	-	-	-	-	-	-	
	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.98	.15	-	.08	-	
	22	-	-	-	-	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.20	.10	.36	.20	.05	-	.56
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	-	-	-	-	-	.01	.61	.25	.25
	29	-	.05	-	-	-	-	-	-	.10	.10	-	-	.05	-	-	-	-	-	.15	-	-	-	-	-
	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

DATA CODES:

T = TRACE
ML = MISSING, PRECIPITATION LIKELY
MU = MISSING, PRECIPITATION UNLIKELY
< > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

AUG 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
123	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.56	1.63	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.74	3.66	-	
	5	-	-	-	-	-	-	2.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	.61	1.02	1.37	-	.08	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.41	.36	.03	-	-	-	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.46	-	.15	-	
	14	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.03	.05	.46	.15	-	.36	-	-	
	16	-	.05	-	.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

SEP 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	.46	.15	.71	.15	-	.15	.15	-	.15	.05	.03	-
3	.10	.10	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	.10	-	-	-	-	-	.15	.10	-	-	-	-	-	-	.05	.05	.05
5	.15	-	.38	.15	-	-	-	-	-	-	.05	.05	-	-	-	-	-	-	-	-	-	.15	-	-
6	-	-	-	-	-	-	-	-	-	-	.05	-	.15	-	-	-	.46	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.20	.46	1.63	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	.20	.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-
22	.10	-	.20	.10	-	.05	-	.05	.36	.30	-	.15	.15	.05	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	.10	.15	.10	-	.05	.20	.25	.05	.10	.15	.10	.05	.15	.05	-	-
24	-	.10	.10	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68	-	-	-
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30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

OCT 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	.05	-	.05	.05	-	-	-	.10	.20	.36	.56	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	.05	.05	.05	-	-	.10	.10	-	-	.05	-	.05	-	-
3	.10	.15	.10	.05	.15	.10	.10	.05	.03	.03	.05	.10	-	.05	-	-	-	-	-	-	.05	-	-	-
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

NOV 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

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DATA CODES:

- T - TRACE
- ML - MISSING, PRECIPITATION LIKELY
- ML - MISSING, PRECIPITATION UNLIKELY
- < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

ITHACA

DEC 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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9	.05	.05	.05	.10	.20	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	.05	-	.10	.10	-	.05	-	.05	.05	-	.05	-	-	-	-	-	.05	-	-	-	-	-	-	-
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

JAN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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DATA CODES:

T - TRACE

ML - MISSING, PRECIPITATION LIKELY

MU - MISSING, PRECIPITATION UNLIKELY

< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

FEB 1981

HOURLY PRECIPITATION AMOUNTS (CM)

	TIME (Z)																							
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19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	T	-	-	>	<	-	1.93	-	-	-	-	>	<	-	-	-	-	-	ML	-	-	-	-	>
21	<	-	-	-	1.04	-	-	-	-	-	>	<	-	-	-	-	-	-	-	-	.08	-	-	-
22	-	-	-	-	-	-	-	-	-	-	>	-	-	-	-	-	-	<	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	3.58	-	-	-	-	-	-	-	-	-	-	-	-	-	>
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	-	.10	-	-	-	-	-

DATA CODES:

T = TRACE
ML = MISSING, PRECIPITATION LIKELY
MU = MISSING, PRECIPITATION UNLIKELY
< > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

MAR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	.08	.08	.05	.10	.10	-	.05	.05	.15	.05	.05	.03	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	.05	-	-	.13	.03	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	.03	.03	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	.08	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05
21	.03	.05	-	.03	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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27	-	-	-	-	-	-	.05	.05	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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30	-	-	-	-	-	-	-	-	-	-	-	.05	.23	.10	.23	.08	-	-	-	.13	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

APR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.41	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	.05	.05	.10	.08	-	-	-	.13	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-	-	-	-	-	.18	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	.61	.08	-	-	-	-	-	.03	-	.23	-	-
12	-	.03	.10	.18	.08	.03	.10	-	-	-	.03	-	-	-	.05	-	-	-	.03	.05	.03	-	.03	.08
13	.18	-	.03	.18	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	.05	.13	.10	.05	.05	.58	.08	.03	-	-	-	-	.79	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	.03	-	.18	-	-	-	.03	-	.05	.03	-	-	-	-	-	-	-
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23	-	-	-	-	-	-	.05	-	.03	-	.03	.05	.10	.18	.05	.05	-	-	.05	-	-	.05	.03	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	<	-	-	-	-	-	-	1.60	-	-	-	-	-	-	-	-	-	-	-	-	<	-
29	-	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

MAY 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.13
2	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	.08	.13	-	-	-	.03	.10	.03	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05
11	.03	-	-	.33	-	-	-	-	.05	.18	.10	-	-	-	1.35	-	-	-	-	-	-	.05	1.40	.10
12	-	-	-	-	-	-	.13	-	.03	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.37	.33	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	.05	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	.08	.23	.33
29	.08	.08	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-
31	.56	-	.43	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

JUN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	.08	.74	.08	-	-	.05	.03	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	.15	.69	.05	.23	-	-	-	-	-	.79	.30
4	.03	-	-	-	-	.03	-	-	-	-	-	.33	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	.03	.08	-	-	.25	.51	.30	.33	.33	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	.43	-	-	-	.03	.05	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1.19	-	.03	.13	.15	-	.13	.23	-	-	-	.08	.03	-	-	-	-	-	-	.63	.03	.91	.03	.13
15	-	-	-	-	-	-	-	-	-	1.02	1.88	.03	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	.05	.20	.03	-	-	-	.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	.05	.13	-	.03	-	-	-	-	-	-	-	-	-	.03	1.35
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.46	1.50	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	.58	.18	-	.13	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	.28	-	-	.18	-	-	-	-	-	.99	-	-	-	-	-
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30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP33 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

JUL 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	.63	.33	.99	.28	.08	-	.05	-	-	-	-	-	-	1.37	.05	-	-	.03	-	-	-	.04	-	.05
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.04	-	-	-	-	-	-	.03	-
4	-	-	-	-	-	-	-	-	-	-	.08	.13	.08	.08	.08	.04	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.23	-	-	-	-	-	-	-
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20	-	-	.03	.03	.20	.05	.05	.13	.30	.23	.15	.05	.15	.25	.13	.13	.13	.13	.56	.13	.43	.13	.08	.05
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DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

AUG 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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31	.13	.51	.38	.10	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

SEP 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	.05	.05	.15	.03	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	.13	.15	.03	.05	.15	.03	.03	.03	-	.10	.41	-	-	-	-	-	-	-
3	.03	-	-	-	-	-	-	-	-	.05	-	.03	-	1.35	.08	.08	.05	-	.05	.13	.08	.08	.08	-
4	.03	-	.03	-	-	-	-	.08	.03	.03	.08	.10	.05	.03	.08	.05	.03	.03	.08	.15	.33	.10	-	-
5	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	.46	.10	.13	.18	.13	-	-	-	-	-	-	.33
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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15	.25	-	-	-	-	-	-	-	-	-	-	.03	.05	.03	-	-	-	-	-	-	-	-	-	-
16	.03	-	-	-	-	.05	.13	.13	.03	.05	-	-	.05	.03	-	-	-	-	-	-	-	-	-	-
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DATA CODES:

T = TRACE
ML = MISSING, PRECIPITATION LIKELY
MU = MISSING, PRECIPITATION UNLIKELY
< > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

OCT 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	.03	-	-	-	-	.28	.08	.03	-	-	-	-	.15	-	-	-	-	.03	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

NOV 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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6	.03	.08	.10	.13	.03	-	-	-	-	-	-	-	-	.03	-	-	-	.03	-	-	.03	.03	.08	.30
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21	-	-	-	-	-	-	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

PENN STATE

DEC 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
139	1	-	-	-	-	-	-	-	-	-	<	-	-	-	-	-	1.42	-	-	-	-	-	-	-	>
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

JAN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

FEB 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

MAR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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5	-	-	.05	.05	.03	.03	.08	.10	.18	.03	-	-	.03	-	-	-	-	-	-	-	-	-	-	-
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DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

APR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

MAY 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1.12	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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7	.10	.08	-	-	-	-	-	T	T	T	T	T	-	-	-	-	-	-	-	-	-	-	-	-
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11	T	.03	.05	.03	.10	-	-	-	-	-	-	.13	-	-	-	-	-	-	.05	-	.61	.38	-	-
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DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

JUN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
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	4	.03	.10	.13	.08	1.35	.13	.03	-	-	.03	.05	-	-	.33	.03	-	.03	-	.03	-	-	-	-		
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP35 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

JUL 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	1.32	.25	-	-	-	.03	-	.41	.15	.53	.25	-	.15	.30	.13	.53
2	.23	-	.08	.36	.05	-	-	-	-	-	-	-	-	-	-	-	.30	.30	-	-	1.07	.05	-	-
3	-	-	.03	-	.38	.33	.33	.30	-	-	.05	-	-	-	-	-	-	-	-	.28	.15	.10	-	.13
4	.25	.28	.99	.33	.46	.18	.08	.23	.08	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	2.11	.05	-	-	-	-	-	.03	.03	.20	.20	.15	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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DATA CODES:

T = TRACE

ML = MISSING, PRECIPITATION LIKELY

MU = MISSING, PRECIPITATION UNLIKELY

< > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

AUG 1941

VIRGINIA

MAP35 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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12	.25	.79	-	-	-	.03	-	-	-	-	.33	.36	-	-	-	-	-	-	.13	-	-	.13	2.16	.25
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29	-	-	-	-	-	-	-	.13	.05	.23	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

SEP 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																								
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
148	1	-	-	-	-	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	.10	1.14	.20	-	-	-	-	-	.03	.10	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	.03	-	-	-	.13	.36	.30	.33	.23	.53	.03	-	.08	.03	-	.03	.05	
	5	.03	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	.08	.20	.03	.03	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.93	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	16	-	.03	.41	.03	-	.10	.13	.15	.23	.36	.10	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-
	17	-	-	-	-	-	-	.25	.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
NL = MISSING, PRECIPITATION LIKELY
MU = MISSING, PRECIPITATION UNLIKELY
< > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

OCT 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (7)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	.18	.15	.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	.36	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	.10	.05	.10	.15	.15	.15	.13	.10	.03	.03	.03	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.08	.08	.08	.10	.08	.10	.08
26	.10	.10	.08	.10	.08	.10	.05	-	.03	-	.03	.08	.08	.08	.18	.15	.15	.18	.10	.05	.03	.08	.10	.08
27	.15	.15	.10	-	-	-	-	.03	.03	.05	.18	.43	.28	.28	.38	.36	.36	.30	.51	.36	-	-	-	-
28	.30	.18	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP35 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA
HOURLY PRECIPITATION AMOUNTS (CM)

VIRGINIA

NOV 1981

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1.42

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DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

VIRGINIA

DEC 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
151	1	-	-	-	-	-	-	-	-	-	.05	-	.05	.15	.23	.18	.13	.05	.08	.05	.03	.05	.05	.05	
	2	.08	-	.03	-	-	-	-	-	-	-	-	-	.05	.15	.23	.18	.13	.05	.08	.05	.03	.05	.05	
	3	-	-	-	-	-	-	-	.05	.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.08	.03	.05	.05	.10	.03	.05	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.08	.10	.10	.13	.10	.18	.23	.10	.08	
	15	.03	.05	.03	-	.03	-	-	-	-	-	.10	.15	.13	.18	.15	.15	.10	.08	.13	.15	.13	.20	.15	
	16	.10	.15	.13	.15	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21	-	-	-	-	-	-	.08	.03	-	-	.05	.03	-	.03	-	-	-	-	-	-	-	-	-	
	22	.03	-	.03	.08	.05	.10	.08	.03	-	-	.05	.03	-	.03	-	-	-	-	-	-	-	-	-	
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	25	-	-	-	-	-	-	-	-	.03	.10	.05	.10	.13	-	-	-	-	-	-	-	-	-	-	
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.13	.20	.20	.28	.30	.20	

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

NO DATA RECEIVED	SITE 50	ILLINOIS	JAN 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	FEB 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	MAR 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	APR 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	MAY 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	JUN 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	JUL 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	AUG 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	SEP 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	OCT 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	NOV 1981
NO DATA RECEIVED	SITE 50	ILLINOIS	DEC 1981

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

JAN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
153	1	-	-	-	-	-	.10	-	-	.20	.05	-	.03	.03	.05	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.03	.03	.03	.03	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	.15	.36	.23	.20	.15	.13	.20	.10	.08	.03	.05	.08	.18	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-	-	-	
	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-	
	16	.03	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.03	.03	.05	.05	.05	.05
	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

153

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

FEB 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
154	1	-	-	.05	.05	-	-	-	-	-	-	-	-	-	.46	.28	.08	.41	.20	.41	.03	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	.13	.15	.15	.33	.43	.25	.15	.05	.03	-	-	-	-	-	.05	.20	.08	
	8	.05	T	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.28	.05	-	
	11	-	.05	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	16	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.05	
	19	.05	-	-	.15	-	.15	.33	.18	.08	.38	.20	.08	.05	.08	.18	.33	.23	.28	.20	.33	.33	-	-	-
	20	-	-	-	-	-	-	-	-	-	-	.03	.15	-	.05	.08	.05	.08	.05	.03	-	-	-	-	-
	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24	-	-	-	.51	.58	-	.20	.15	.18	.05	.05	.05	-	.08	-	-	-	-	-	-	-	-	-	-
	25	.05	.08	.10	.03	.08	.18	.05	.05	.18	.25	.20	.18	.15	.18	.05	.03	.03	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.13	.20	.10
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

MAR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	.13	.18	.08	.25	.15	.15	.08	.05	.05	.05	.10	.10
6	.10	.05	-	-	-	-	-	-	-	-	-	-	.05	.03	.03	-	-	-	-	-	-	-	-	-
7	-	.08	.05	.03	.05	.03	-	-	-	.03	.05	.03	.05	.03	.03	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.25	.05	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.03	.03	.03	.13	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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27	-	-	-	-	-	-	-	-	-	-	-	.03	.20	.03	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.20	.08	.25	.25	.63	-
31	.05	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

155

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

APR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																								
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
156	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	.05	1.09	.76	.25	.03	.15	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.20	.15	.15	.18	
	6	.15	.25	.43	.23	.48	.25	.28	.38	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.03	-	-
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.23	-	-	-	-	-	-	-	
	12	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.51	.63	.13	.86	.03	.03	.61	.03
	15	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-
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	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.03	.03
	24	-	-	1.14	.36	.18	.03	.28	.08	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

MAY 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	.10	.03	.05	.08	.08	.05	.03	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	.05	.03	.03	.03	.10	.15	.03	.03	.23	-	-	-	.05	.05	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	.48	.63	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	.30	.08	.10	.05	-	-	-	-	-	-	-	-	-	-	.03	.10	.03	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	.23	.03	.05	.05	1.30	.30	.03	.05	.03	.08	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	.03	.20	.03	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

JUN 1981

BROOKHAVEN

MAP35 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	.05	.08	.05	.08	.05	.03	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	.08	.05	.03	-	.05	.08	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	.05	-	.05	.76	.53	.25	-	.71	.51	-	.10	.28	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	.10	.05	-	-	-	-	-	.08	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	.63	.30	-	-	-	-	-	-	.05	.46	-	-	-	-	-	.15
26	1.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

JUL 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	.05	"	"	"	"	
2	"	"	"	"	"	"	"	"	"	"	.15	.05	"	"	"	"	"	"	"	"	"	"	"	"	
3	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	.18	"	"	.05	"	"	"	"	
4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	.10	"	.25	.51	.30	.13	"	"	"	"	
5	"	"	"	"	"	"	.13	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
7	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
11	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
12	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
13	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
14	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
15	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
16	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
17	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
18	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
19	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
20	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	.20	.05	1.14	.25	"	"	"	.03	
21	"	"	"	.46	"	"	"	.13	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1.02	
22	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
23	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
24	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
25	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
26	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
27	"	"	"	"	"	"	.18	.05	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
28	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
29	"	"	"	.89	.03	"	"	.25	.13	.03	.10	"	"	"	"	"	"	"	"	"	"	"	"	"	
30	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
31	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

AUG 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	.03	.05	.03	.03	.03	.05	.03	.03	.13	.08	.08	-	-	-	-	-	-
9	-	-	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.08	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	.05	-	-	.08	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.30	-	-	-	-

DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

SEP 1991

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	1.65	.66	-	.10	.63	.38	.05	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	.10	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	.13	.38	.18	.30	.13	.13	.13	.13	.51	.61	.20	.25	.46	.79	-	1.27 .05	1.02 -	.18	.10 .05	-	-	-	-	.05
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	.03	.05	-	.10	.05	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	.33	.05	.20	-	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	1.07	.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP39 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

OCT 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.10	-	-	-	-	-	-	-	-	-
2	-	-	-	.28	.08	.05	.33	.05	-	-	-	-	-	-	-	-	-	-	.51	-	.05	.03	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-	-	-	-
7	-	-	.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.13	.15	.10	-
19	.51	.15	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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23	-	-	-	-	-	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.13	.03	.23	-
24	.23	.15	.38	.38	.28	.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10
26	.13	.15	.08	.13	.20	.25	.38	.66	.63	.30	.20	.13	.05	.15	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	1.02	-	.08	-	.56	.08	-	.03
28	-	-	.13	.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA NOV 1981

HOURLY PRECIPITATION AMOUNTS (CM)

BROOKHAVEN

TIME (7)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	.38	.30	.20	.38	.41	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05
10	.20	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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15	-	-	-	-	-	-	.05	-	-	.03	-	-	-	-	-	-	-	-	.13	.23	.30	.10	.10	-
16	.10	-	-	.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	.13	.51	.18	-	-	.13	-	.13	.10	-	.05	.08	-	-	-	-	-	-	-	-	-	.28	.10
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.19	.63	.13	-	-	-	-	-	.25	.51
21	.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

BROOKHAVEN

DEC 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.25	.23	.25	.18	.18
2	.08	.05	.08	.15	.18	-	.10	.99	.51	.63	.48	.51	.13	-	.13	.13	.15	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	.10	.13	.10	.10	.08
9	-	.03	.03	-	.05	.05	-	-	-	-	.05	-	.05	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.15	.18	.23	.23
15	.33	.28	.36	.36	.30	.46	.66	.10	.05	-	-	-	-	-	-	-	-	.10	.10	.13	.18	.20	.18	.28
16	.53	.05	-	.05	.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08
18	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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22	-	-	-	-	-	-	-	-	-	-	-	.05	.03	.08	.08	.10	-	-	-	-	.05	-	-	-
23	-	-	-	-	-	.08	-	-	-	-	-	.03	.13	.10	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.05	.08	.05	-	-
28	.13	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	.03	.10	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWES

JAN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	.05	"	"
2	"	"	"	"	"	"	"	"	"	"	"	"	"	.05	"	"	"	"	"	"	"	"	"	"
3	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
7	"	"	"	"	.03	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8	"	"	"	"	"	"	"	"	<.33	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
11	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
12	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
13	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
14	"	"	"	"	"	"	"	"	ML	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
15	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
16	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	.51	"	"	"	"	"	"	"
17	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
18	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
19	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
20	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
21	"	"	"	"	"	"	.10	"	"	"	"	"	"	"	.18	"	"	"	"	"	"	"	"	"
22	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
23	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
24	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
25	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
26	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
27	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
28	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
29	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
30	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
31	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWFS

FER 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWES

MAR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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DATA CODES:

T = TRACE
ML = MISSING, PRECIPITATION LIKELY
MU = MISSING, PRECIPITATION UNLIKELY
< > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWES

APR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWES

MAY 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																								
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
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	11	-	.03	-	-	-	-	-	-	-	-	<.15	>	.71	.13	<	.36	>	-	-	<.05	>	-	-	-	
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DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA
HOURLY PRECIPITATION AMOUNTS (CM)

JUN 1991

LEWES

TIME (7)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWES

JUL 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWIS

AUG 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWES

SEP 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

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DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP35 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA
HOURLY PRECIPITATION AMOUNTS (CM)

LEWES

OCT 1981

TIME (Z)

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DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWES

NOV 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
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	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

175

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

LEWES

DEC 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
176	1	-	-	-	-	-	-	-	-	-	-	-	-	-	<.20	>	-	-	<1.3	>	-	-	-	-	
	2	-	-	-	.03	-	-	-	-	-	<	-	1.07	-	>	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-	-	-	-	-	-	-		
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	
	5	-	-	.03	<	.28	>	-	<	.20	-	>	-	-	.03	-	-	-	-	-	-	-	-	-	-
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	<.08	>	-	-	-	-	-	-	-	.28	-	-	-	-	-	-	-	-	-
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.08	.03	<
	15	-	2.31	-	-	-	-	-	-	>	.03	.03	.03	-	-	<	-	1.04	-	-	-	>	.03	<	.71
	16	>	.53	<	.33	>	-	.03	.03	<.03	>	<.10	>	-	-	.08	-	-	-	-	-	-	-	-	-
	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	.08	-	-	-	-	-	-	-	-
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP35 PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

JAN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	.05	.05	.10	.03	.08
7	-	-	.03	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

FEB 1961

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																								
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
178	1	-	-	-	-	-	-	-	-	-	-	.46	.46	.41	.03	.03	.03	-	.05	.15	.08	.08	.15	.05	.05	
	2	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12	ML	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	16	-	-	-	-	-	-	-	-	-	-	-	-	.03	.23	.08	.05	.20	.23	.08	-	-	-	-	-	
	17	-	.03	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	19	-	-	.03	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.23	.18	.08	.05
	20	.03	-	-	.03	-	-	-	-	-	-	.03	-	-	.03	.03	-	-	-	-	-	-	-	-	-	-
	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.43	
	24	.13	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.05	-	.03	-	-
	25	.03	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	.03	.03	-	-	-	-	-	-	-	-	-

178

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

MAR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	.03	.08	.08	.08	.08	.08	.05	.08	.03	.05	.03	.03	.03	-
5	.03	-	.15	.13	.03	.30	.36	.03	-	-	.03	.05	.03	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	.30	.08	.10	.08	.05	.10	.05	.03	-	-	-	-	-	-	-	-	-	-	-	-	.03
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	.13	.05	.05	.10	.36	.03	.10	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

179

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

APR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (7)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
180	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	.66	.13	.15	.23	.08	.05	.13	.10	.36	.05	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.18	-	.03	-	-	-	-	-	
	11	-	.03	.66	.41	.13	-	-	-	-	-	-	-	-	-	-	.18	-	.03	-	.08	-	.84	.23	.08
	12	.38	.03	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	-	-	-	.05	.03	.03	-	-	-	-	-	-	-	-	-	
	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17	-	-	-	-	-	-	.13	.13	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	.25
	18	.10	.03	.08	.33	.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.08	.08	.15	.15
	20	.10	.13	.13	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	-	-	-	.03	.05	.03	-	-	-	-	-	-	-	.30	.15	.18	.13
	23	.03	-	-	.05	.84	.71	.48	.48	.05	-	.13	.10	.25	-	-	-	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	-	-	-	.05	.03	-	-	-	-	-	-	-	-	-	-	-	-
	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29	-	-	.03	-	.36	.33	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-
	30	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	.05	-	.30	-	-	-	.18	.23	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

MAY 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1		.15	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
2		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
3		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
4		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5		"	"	"	"	"	"	"	"	"	"	"	"	"	.03	"	"	"	"	"	"	.03	.36	.46	.13
6		.23	.15	.13	.13	.08	"	.03	"	"	.03	.08	.08	.08	"	"	"	"	"	"	"	"	"	"	"
7		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
9		"	"	"	"	"	"	"	"	"	"	"	"	"	"	.03	"	"	"	"	"	"	"	"	"
10		"	"	"	"	"	"	"	"	"	"	"	"	"	.03	"	.08	.03	.03	"	"	"	"	"	"
11		.08	"	"	"	"	"	"	"	"	"	.03	"	.03	.05	.05	.05	"	.03	.03	.03	"	.51	"	"
12		.10	.05	.03	"	"	"	"	"	"	"	"	"	"	.05	.05	.05	"	"	"	.03	.05	.10	.05	"
13		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
14	181	.03	.03	"	"	"	"	.05	.18	.13	.03	.03	"	.05	.03	.15	.05	.03	.03	.30	.61	.05	"	"	.03
15		"	"	"	"	.08	.05	.05	"	.05	.03	.03	"	"	"	"	"	"	"	"	"	"	"	"	"
16		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
17		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
18		"	"	"	"	"	.03	.03	"	"	"	"	"	.23	.56	.91	.94	.28	"	"	"	"	.03	.08	"
19		.03	"	"	"	"	"	"	"	"	"	"	"	"	.08	.28	.15	.03	"	"	"	"	"	"	"
20		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
21		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
22		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
23		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
24		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
25		.03	"	"	"	"	"	"	"	"	"	"	.05	"	"	"	"	"	"	"	"	"	"	"	"
26		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	.13	.46	.30	.13	"	"	"
27		"	"	"	.13	.13	.10	.15	.25	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
28		"	"	.03	"	.20	.23	.08	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
29		"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
30		"	"	"	"	"	"	.03	"	"	"	"	"	"	"	"	.05	"	.86	.03	"	"	"	"	.03
31		.03	"	"	"	"	"	.03	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

JUN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.13	.05	-	-	-	-	-	-	-
2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-
3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6		-	-	-	.41	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9		-	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
10		-	-	-	-	-	.18	.03	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.18	.13	-	-	-	-
13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.58	-	.99	-	-	-
14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21		-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.10	-	.03	.18	-	-	-	-	-
22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25		-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-	-	-
26		-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

JUL 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	.10	.03	-	-	.03	.05	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	.03	.05	.03	-	-	-	.03	.03	-	-	-	-	-	-	.05	-
3	-	-	-	-	-	-	-	-	-	-	.03	-	.03	.30	-	-	-	-	-	-	.08	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.15	-	.13	.08	.74	.05	-	.03
5	-	-	-	-	-	.05	.05	1.09	.86	.08	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	.20	.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.18	-	.03	.15	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.25	-	.03	.03	.10	.08	-
20	-	-	-	-	-	.23	-	-	-	-	-	.81	.08	.15	-	-	-	-	-	-	-	-	-	-
21	-	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	.03	.03	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	.18	.10	.03	.91	.30	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	.03	.15	.03	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

AUG 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (7)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
184	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.36	.58	.03	
	6	.05	.05	.05	-	-	-	-	-	-	.03	.38	.03	-	-	-	-	-	-	-	-	-	-	-	-
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.28	-	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-
	11	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-
	15	-	-	-	-	-	-	-	-	-	-	-	.03	.08	-	-	-	-	-	-	-	-	-	-	-
	16	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	.05	-	-	.03	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
	29	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	-	-	-	-	-	-	-	-	.03	-	.05	-	.41	.66	.25	.03	.03	.05	-	-	-	-	-	-
	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

SEP 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-
2	.13	.36	-	-	-	-	-	-	-	-	-	-	-	-	.20	.03	-	-	-	-	-	-	.30	.58
3	.23	-	-	.08	.03	-	-	-	-	-	-	-	.03	-	-	.03	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-
8	-	.05	-	.05	.25	.03	-	.05	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.18	.33	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.08	.13	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	.13	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

OCT 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	.10	.15	.28	.20	.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03
15	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	.08
18	.03	.03	.03	.03	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	.03	.10	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.08	.05	.10	.08
23	.08	.05	.05	.08	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	.03	.15	-	.05	.05	.08	.13	.23	.13	-	-	-	-	-	.03	-	-	.03	.03	-	-	-	-	.38
27	.41	-	.36	.38	.18	.05	.03	-	-	.03	.03	.08	.10	-	.03	.05	.10	.33	.41	.13	.15	.03	.03	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

NOV 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	.10	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	.03	-	.03	.10	.05	.03	.13	.15	.05	.03	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.03	.38	.36	.13	.23	.15	.91
20	.13	.13	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.13	.10	.18	.15
24	.05	.18	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	.43	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OXFORD

DEC 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	.15	.23	.18	.51	.46	.08	.08	.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	.10	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	.05	.05	.10	.08	.15	.18	.18	.08	.15	.03	.15	.05	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	.08	.05	.13	.08	.05	.08	.10	.20	.20	.10	-	-	-	-	-
22	-	-	-	.03	.03	-	.03	-	-	.03	-	-	-	-	-	-	-	-	-	.23	.13	.38	.23	.20
23	.20	.20	.20	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	.05	.08	.18	.05	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.13	.10	.13	.03	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.25	.28	.13	.03	-	.03

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

JAN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.18	-	-	-	-	-	-
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12		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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16		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	.03	-	-	-
17		-	-	-	-	-	-	-	-	-	-	-	.58	.43	.69	.05	-	-	-	-	-	-	-	-	-
18		-	-	-	-	-	-	-	-	-	-	-	-	.43	.03	-	-	-	-	-	-	-	-	-	-
19		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.20	.15
20		-	-	-	-	-	-	.25	-	.23	.38	-	-	.05	.25	-	-	.10	.13	-	-	-	-	-	-
21		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23		-	-	-	-	-	-	-	-	-	.10	-	-	-	.03	-	-	-	-	.05	.03	.10	.10	.10	.03
24		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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31		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

FEB 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	.05	.08	.03	.05	-	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	.03	.25	.61	.43	.74	.18	.36	.41	.20	.03	-	-
11	-	-	-	.03	-	.03	-	-	.08	.36	-	-	-	-	-	.03	-	.03	-	.03	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-
17	.03	-	-	-	-	.03	-	-	.03	-	-	.03	.05	.15	.05	.23	.18	.25	.38	.05	-	-	-	-
18	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	.05	-	.13	.10	.05	.05	.08
19	.08	.13	.10	.10	-	-	-	-	-	-	-	-	-	-	-	.03	.08	-	-	-	.03	-	-	-
20	-	.03	-	-	-	-	.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	.05	.03	.38	.10	.10	.05	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

MAR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																						
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	.03	-	.05	.05	.08	.05	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	.05	.23	.18	.28	.25	.28	.10	.05	-	-	-
5	-	-	-	.03	.03	.08	.03	.03	.03	-	.20	.08	-	.08	.25	-	.18	.03	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	.05	.08	.05	.03	-	-	.03	.05	.08	.03	-	-	-	.03	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	.10	.08	-	-	.15	.20	.23	.03	.05	.08	.13	.05	.08	.30	.10	-
23	-	.10	.08	.05	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	.20	.28	.18	.46	.86	.41	.48	.13	-	.03	-	-	.03	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

APR 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	.86	.91	.81	.20	.18	.03	-	-	.03	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	.05	-	.15	.84	.28	-	.03	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-
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30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

MAY 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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11	-	-	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.05
15	.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-
18	-	.03	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	-	.20	-	.23	.08	-	-	-	.89	.10	.38	.20	-	-	-	-	-	-	-	-	-	.05	.08	-
20	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-	-	-	-	-	.03	.05	.08	.10	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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27	-	.18	.20	.08	-	.05	.03	-	.03	-	-	.03	.03	-	-	-	-	.03	.48	-	-	-	-	-
28	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-
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30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.18	-	-	.99	.13	-
31	-	-	-	-	-	-	-	-	.63	.13	.05	-	-	-	-	-	-	-	-	-	-	-	.18	.30

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

JUN 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	.03	-	-	-	1.14	-	-	.05	-	.03	-	-	-	-	-	-	-	-
3	-	-	-	-	.30	.10	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	.15	.10	-	.30	.51	<	-	ML	-	>	.05	<	ML	-	>
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-
6	.08	-	-	-	-	-	-	-	-	-	.25	.03	.79	.51	.48	.30	.10	.05	-	.03	-	-	-	.84
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.33	.13
11	.18	.28	.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.03	-
12	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	.03	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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26	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

JUL 1981

HOURLY PRECIPITATION AMOUNTS (CM)

	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	.05	.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.91	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	.03	.33
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	.38	-
6	-	-	-	.03	.15	.08	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	.20	.03	.05	-	-	-	-	.03	-	-	-	-	-	-	-	-
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16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.36	-	-	.03	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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27	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	.13	.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

AUG 1981

HOURLY PRECIPITATION AMOUNTS (CM)

TIME (Z)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	.08	.05	.10	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.38	.61	-	-	-	.03	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-	-
8	-	.13	.05	.03	.99	.61	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08
12	-	-	-	-	-	-	-	-	-	-	.25	-	.03	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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16	-	-	-	-	-	-	-	-	-	.33	-	-	-	-	-	-	-	-	-	-	-	-	.15	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.13	.15	.03	.05
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	-
21	-	-	-	.03	.23	.76	.43	.28	.13	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	.03	.05	.03	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T - TRACE
 ML - MISSING, PRECIPITATION LIKELY
 MU - MISSING, PRECIPITATION UNLIKELY
 < > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

SEP 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.38	.25	-	-	-	-	-	-	-	
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	-	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	.20	.66	-	-	.08	.05	-	
5	-	-	.46	.69	-	-	-	-	-	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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15	-	-	.13	.33	.08	.46	.84	.56	-	-	-	-	.20	.10	.13	.25	-	-	.03	.69	-	-	.05	2.34	
16	-	.08	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

OCT 1981

HOURLY PRECIPITATION AMOUNTS (CM)

DAY	TIME (Z)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	.18	.33	.10	.13	.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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18	-	-	-	-	-	-	-	.15	.69	.79	.05	.08	.03	.05	.13	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	.08	.03	.03	-	-	.16	.84	.51	.25	-	-	.10	.05	.13	.08	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	.10	.03	-	-	.05	.08	.08	.08	-	-	-	-	-	-
26	.13	.33	.56	.25	.03	.03	.15	.41	.30	-	-	-	-	-	.05	.13	.03	-	-	-	-	-	-	-
27	-	.18	.58	.28	.43	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

NOV 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																								
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
199	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	-	-	-	.03	-	-	-	.03	-	-	-	-	.05	.10	.10	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.08	.05	.20	.36	.41	.10	-	-	.05
	17	.13	.13	.03	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24	-	.08	.05	.13	.51	.13	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-	-	-
	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	.58	.99	.51	.05	.10	.15	.13	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.25	.15	.15	.08	.28	.66	.03	.03

DATA CODES:

T = TRACE
 ML = MISSING, PRECIPITATION LIKELY
 MU = MISSING, PRECIPITATION UNLIKELY
 < > = AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

MAP3S PRECIPITATION CHEMISTRY NETWORK RAIN GAUGE DATA

OAK RIDGE

DEC 1981

HOURLY PRECIPITATION AMOUNTS (CM)

		TIME (Z)																							
	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
200	1	.03	-	-	-	-	-	-	.03	.08	.03	.41	.41	.51	.05	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	4	-	-	-	-	-	.05	-	.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14	-	-	-	-	-	-	-	-	.05	.20	.28	.30	.36	.10	.03	.03	-	-	-	.03	.03	.05	-	.03
	15	-	-	-	-	-	-	-	-	-	.03	-	-	-	-	-	.05	.03	.05	.10	.05	.10	-	-	
	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17	-	-	-	-	-	-	-	-	-	-	-	-	-	.15	.28	-	-	-	-	-	-	-	-	
	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21	-	-	<	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	-	
	22	-	-	>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	-	.05	-	-	
	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	25	-	-	-	-	.03	.03	.05	.10	.03	.08	-	.03	.05	.08	-	-	-	-	-	-	-	-	-	
	26	-	-	-	-	-	-	-	-	-	-	-	-	.05	-	-	-	-	-	-	-	-	-		
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	31	-	-	-	-	-	-	-	-	-	-	.08	.23	.20	.36	.56	.30	.28	.10	.03	-	.03	-	-	

DATA CODES:

T - TRACE
ML - MISSING, PRECIPITATION LIKELY
MU - MISSING, PRECIPITATION UNLIKELY
< > - AMOUNT SPANS A PERIOD GREATER THAN ONE HOUR

2.0 RESULTS OF USGS/MAP3S BLIND AUDIT PROGRAM

A brief summary of the USGS/MAP3S blind audit program is presented on page 129 in the MAP3S Precipitation Chemistry Network: Fourth Periodic Summary Report (1980). During 1981, MAP3S analytical laboratory received thirty-five blind audit samples. The results of twenty-six samples of the audit program are summarized in Figures 1-4. Deleted from the data summary are values which are reported as "less than" by the laboratory or the USGS. Also, results that were determined to be in error because of sample contamination or similar problems are not reported.

Calcium, magnesium, and nitrate results show a bias between the laboratory and USGS reported values. Phosphate values reported by laboratory blind audit samples are often less than 0.02 milligrams per liter; therefore, only seven results are summarized on Figure 2.

Intralaboratory analysis of selected duplicate samples presented in Table 4 indicated the laboratory precision is good. Since the blind samples are not chilled during the entire submission train, nitrate and phosphate values may change.

FIGURE 1. Comparison of MAP3S and USGS Reported Values

FIGURE 2. Comparison of MAP3S and USGS Reported Values

FIGURE 3. Comparison of MAP3S and USGS Reported Values

FIGURE 4. Comparison of MAP3S and USGS Reported Values

TABLE 4. Intralaboratory Comparison of Duplicate Blind Audit Samples by Date Submitted to the Laboratory

Parameter	Calc. MAP3S		USGS Reported
	<u>mg/L</u>		<u>mg/L</u>
	<u>(8/19/80)</u>	<u>(10/06/80)</u>	
Ca	4.41	4.81	5.34
Mg	1.09	1.09	1.35
Na	4.60	5.06	4.40
K	.90	.90	.87
SO ₄	12.50	12.50	11.94
NO ₃	.02	.08	.004
Cl	1.66	1.52	1.75
PO ₄	.10	< .02	.21

Parameter	Calc. MAP3S			USGS Reported
	<u>mg/L</u>			<u>mg/L</u>
	<u>(11/04/80)</u>	<u>(11/09/80)</u>	<u>(09/15/81)</u>	
Ca	1.40	1.44	1.36	1.43
Mg	.19	.19	.16	.21
Na	.48	.46	.48	.48
K	.28	.22	.33	.28
SO ₄	2.50	2.50	2.78	2.62
NO ₃	.20	.15	.24	.07
Co	.35	.31	.32	.27
PO ₄	< .02	< .02	< .02	.07

Parameter	Calc. MAP3S		USGS Reported
	<u>mg/L</u>		<u>mg/L</u>
	<u>(04/13/81)</u>	<u>(12/10/81)</u>	
Ca	0.80	0.84	0.95
Mg	.12	.12	.14
Na	.34	.32	.32
K	.12	.13	.19
SO ₄	1.73	1.54	1.75
NO ₃	.08	.05	.05
Cl	.24	.17	.18
PO ₄	< .02	< .02	.05

3.0 STATISTICAL SUMMARY

The tables in this section contain basic statistics for the year 1981 (precipitation, number of events, deposition-weighted average concentrations) by month and year, and additional statistics for the complete data base (September 1976-December 1981). These data are updates to similar reports in the Fourth Periodic Summary Report⁵ and the published article.⁶ The present calculations have employed different computer programs, however, and the method of editing the data base varies slightly. Users of these summary statistics should note carefully the following description of the editing procedure.

3.1 General Edit

Prior to calculating monthly statistics and general statistics, the data base is subject to an edit program which eliminates samples with missing precipitation data and computes collection efficiency. The following steps are taken in order:

1. All samples with SAMPLE VOLUME less than zero (missing) are set equal to PREDICTED VOLUME. (For 1981, 20 such cases occurred; for the total data base, 83 cases).
2. All samples with SAMPLE VOLUME still less than zero (meaning that both SAMPLE VOLUME and PREDICTED VOLUME were missing) are eliminated from the data base. (For 1981, 7 cases were removed; for the total data base, 26).
3. PREDICTED VOLUMES less than zero (missing) or less than SAMPLE VOLUME are set equal to SAMPLE VOLUME. (For 1981, 402 cases; for total data base, 1398).
4. Collection efficiency = $\text{SAMPLE VOLUME} / \text{PREDICTED VOLUME}$ is calculated. This number is thus between zero and +1 [no negative (missing) volumes, and no greater than unity ratios].

The result of this edit is that the data base contains no completely missing volume cases (an insignificant fraction of the total events) and a collection efficiency between 0 and 1 for all events. Negative (missing or below MDL) concentrations remain in the data base.

3.2 Precipitation and Weighted Average Edit and Calculation

The data base, after the above general edit, is broken down by site and month (or year) and a count ("Total Events") taken. Then, the following calculational and edit steps are taken in order:

1. Precipitation is calculated (sum of volumes/area of collector) using the greater of SAMPLE VOLUME and PREDICTED VOLUME for each event.
2. Samples with collection efficiency less than 0.50, and samples with the appropriate concentration missing (concentration less than -99.) are eliminated.
3. A count of remaining samples is taken ("Averaged Events") and the precipitation for these samples is calculated.
4. Concentrations below the minimum detection limit (MDL) (small negative numbers) are set equal to zero.
5. The deposition-weighted concentration for the chosen period is calculated using the Step 3 (above) precipitation.
6. The ratio of the precipitation included in the average (Step 3) to the total precipitation is calculated (PR).

In Tables 5 to 13 the results are shown for months of 1981 and in Table 14 for the year 1981. Note that "PR" is generally very nearly unity although several events may not be included. This reflects the fact that most missing concentrations are the result of insufficient sample for analysis. Averaged events are only listed once -- this is the number of samples averaged for sulfur (SO_2 + sulfate), the species which has top priority for analysis. Most other species have the same number of averaged events. The ones that have less are indicated by a lower PR than that for sulfur. A "-1" in the average column indicates insufficient data for a meaningful average, either because $\text{PR} < .80$ or averaged events are < 2 . A "-2" indicates that the average is less than the MDL for that species.

An additional edit for DOWN TIME is usually performed, but a scan of the 1981 data shows that there were no significant down periods at any site. (ALL precipitation events are listed in the data base, whether a sample was collected or not -- therefore, DOWN TIME only reflects periods when both the collector and the raingauge were out of service, and an event was missed).

TABLE 5. Monthly Rainfall, Events and Deposition-Weighted
Average Concentrations for 1981 Site = Whiteface
(See text and Table 15 for explanation)

Site	Month	Area cm ²	Precip cm	Total Events	Averaged Events
1.	1.	640.	1.30	5.	5.
1.	2.	640.	11.15	9.	6.
1.	3.	640.	4.30	9.	6.
1.	4.	640.	12.40	13.	11.
1.	5.	640.	6.60	7.	5.
1.	6.	640.	10.30	13.	11.
1.	7.	640.	16.00	9.	8.
1.	8.	640.	9.50	9.	5.
1.	9.	640.	22.50	10.	10.
1.	10.	640.	16.40	6.	6.
1.	11.	640.	6.20	5.	5.
1.	12.	640.	6.80	8.	8.

Month	Sulfur		Nitrate		Chloride	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	1.00	17.00	1.00	64.00	1.00	7.50
2.	0.98	9.00	0.98	19.00	0.98	3.90
3.	0.79	-1.00	0.79	-1.00	0.79	-1.00
4.	0.99	27.00	0.99	24.00	0.99	3.20
5.	0.84	29.00	0.84	19.00	0.84	3.70
6.	0.99	37.00	0.99	22.00	0.99	3.10
7.	1.00	19.00	1.00	13.00	1.00	2.90
8.	0.98	47.00	0.98	25.00	0.98	2.70
9.	1.00	15.00	1.00	10.00	1.00	3.50
10.	1.00	9.90	1.00	10.00	1.00	1.30
11.	1.00	14.00	1.00	22.00	1.00	2.30
12.	1.00	8.80	1.00	20.00	1.00	1.30

Month	Hydrogen		Ammonium		Sodium	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	1.00	64.00	1.00	19.00	1.00	3.40
2.	0.97	28.00	0.98	4.70	0.98	2.5
3.	0.79	-1.00	0.79	-1.00	0.79	-1.00
4.	0.99	50.00	0.99	16.00	0.99	1.60
5.	0.84	43.00	0.84	16.00	0.84	1.40
6.	0.99	54.00	0.99	23.00	0.95	0.99
7.	1.00	27.00	1.00	11.00	1.00	-2.00
8.	0.98	77.00	0.98	15.00	0.98	-2.00
9.	0.99	25.00	1.00	6.00	1.00	0.98
10.	1.00	20.00	1.00	3.40	1.00	0.77
11.	1.00	31.00	1.00	8.30	1.00	2.30
12.	1.00	27.00	1.00	25.00	1.00	1.90

TABLE 6. Monthly Rainfall, Events and Deposition-Weighted
Average Concentrations for 1981 Site = Ithaca
(See text and Table 15 for explanation)

Site	Month	Area cm ²	Precip cm	Total Events	Averaged Events
2.	1.	640.	2.9	5.	4.
2.	2.	640.	12.40	5.	6.
2.	3.	640.	3.30	7.	5.
2.	4.	640.	9.40	10.	9.
2.	5.	640.	4.70	4.	3.
2.	6.	640.	13.90	11.	9.
2.	7.	640.	14.60	6.	6.
2.	8.	640.	16.70	7.	7.
2.	9.	640.	11.30	6.	6.
2.	10.	640.	15.60	6.	5.
2.	11.	640.	6.60	4.	4.
2.	12.	640.	7.90	7.	7.

Month	Sulfur		Nitrate		Chloride	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	0.91	15.00	0.91	72.00	0.91	13.00
2.	1.00	19.00	1.00	23.00	1.00	9.10
3.	0.99	27.00	0.99	50.00	0.99	10.00
4.	0.98	43.00	0.98	42.00	0.98	5.90
5.	0.85	38.00	0.85	35.00	0.85	3.30
6.	0.99	47.00	0.99	32.00	0.99	3.60
7.	1.00	53.00	1.00	26.00	1.00	4.90
8.	1.00	56.00	1.00	28.00	1.00	2.60
9.	1.00	46.00	1.00	41.00	1.00	8.50
10.	0.82	15.00	0.82	16.00	0.82	2.50
11.	1.00	25.00	1.00	28.00	1.00	3.50
12.	1.00	15.00	1.00	30.00	1.00	7.30

Month	Hydrogen		Ammonium		Sodium	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	0.91	76.00	0.91	14.00	0.91	2.4
2.	1.00	38.00	1.00	7.80	1.00	4.30
3.	0.99	64.00	0.99	25.00	0.99	3.90
4.	0.98	85.00	0.98	31.00	0.98	4.40
5.	0.85	83.00	0.85	18.00	0.85	0.52
6.	0.99	83.00	0.99	23.00	0.99	1.70
7.	1.00	94.00	1.00	18.00	1.00	1.40
8.	1.00	92.00	1.00	20.00	1.00	-2.00
9.	1.00	91.00	1.00	21.00	1.00	2.30
10.	0.82	55.00	0.82	6.30	0.82	2.00
11.	1.00	47.00	1.00	11.00	1.00	2.30
12.	1.00	41.00	1.00	13.00	1.00	2.80

TABLE 7. Monthly Rainfall, Events and Deposition-Weighted
Average Concentrations for 1981 Site = Penn State
(See text and Table 15 for explanation)

Site	Month	Area cm ²	Precip cm	Total Events	Averaged Events
3.	1.	640.	1.00	6.	5.
3.	2.	640.	15.70	10.	6.
3.	3.	640.	3.00	9.	8.
3.	4.	640.	9.00	8.	8.
3.	5.	640.	7.50	6.	4.
3.	6.	640.	21.80	10.	10.
3.	7.	640.	14.20	5.	5.
3.	8.	640.	0.73	2.	2.
3.	9.	640.	10.90	7.	7.
3.	10.	640.	12.70	5.	5.
3.	11.	640.	2.10	5.	3.
3.	12.	640.	5.10	13.	11.

Month	Sulfur		Nitrate		Chloride	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	0.97	33.00	0.97	120.00	0.97	28.00
2.	0.99	17.00	0.99	18.00	0.99	15.00
3.	0.99	33.00	0.99	59.00	0.99	14.00
4.	1.00	67.00	1.00	55.00	1.00	12.00
5.	0.95	24.00	0.95	21.00	0.95	7.50
6.	1.00	24.00	1.00	17.00	1.00	4.40
7.	1.00	49.00	1.00	25.00	1.00	10.00
8.	1.00	180.00	1.00	110.00	1.00	15.00
9.	1.00	59.00	1.00	46.00	1.00	9.00
10.	1.00	19.00	1.00	21.00	1.00	3.70
11.	0.99	38.00	0.99	38.00	0.99	16.00
12.	0.99	25.00	0.99	47.00	0.99	11.00

Month	Hydrogen		Ammonium		Sodium	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	0.48	~1.00	0.87	40.00	0.87	7.9
2.	0.99	37.00	0.99	7.60	0.99	9.80
3.	0.99	57.00	0.99	35.00	0.99	6.50
4.	1.00	110.00	0.97	40.00	0.97	9.40
5.	0.95	26.00	0.95	28.00	0.95	7.00
6.	1.00	40.00	1.00	12.00	1.00	2.90
7.	1.00	54.00	1.00	60.00	1.00	7.40
8.	1.00	250.00	1.00	83.00	1.00	8.20
9.	1.00	99.00	1.00	34.00	1.00	5.90
10.	1.00	43.00	1.00	9.00	1.00	2.60
11.	0.99	69.00	0.99	14.00	0.99	8.90
12.	0.99	71.00	0.99	16.00	0.99	7.00

TABLE 8. Monthly Rainfall, Events and Deposition-Weighted
Average Concentrations for 1981 Site = Virginia
(See text and Table 15 for explanation)

Site	Month	Area cm ²	Precip cm	Total Events	Averaged Events
4.	1.	496.	9.47	2.	2.
4.	2.	496.	12.50	5.	5.
4.	3.	496.	2.40	5.	3.
4.	4.	640.	3.40	8.	6.
4.	5.	640.	8.70	7.	6.
4.	6.	640.	5.60	6.	4.
4.	7.	640.	17.20	6.	6.
4.	8.	640.	10.00	5.	3.
4.	9.	640.	8.80	3.	3.
4.	10.	640.	11.50	5.	4.
4.	11.	640.	2.70	3.	0.
4.	12.	640.	7.40	6.	5.

Month	Sulfur		Nitrate		Chloride	
	PR	μmol/l	PR	μmol/l	PR	μmol/l
1.	1.00	34.00	1.00	140.00	1.00	17.00
2.	1.00	19.00	1.00	14.00	1.00	56.00
3.	0.97	19.00	0.97	27.00	0.97	8.00
4.	0.98	40.00	0.98	34.00	0.98	9.10
5.	0.80	45.00	0.80	34.00	0.80	5.60
6.	0.92	53.00	0.92	41.00	0.92	6.70
7.	1.00	36.00	1.00	26.00	1.00	7.60
8.	0.99	64.00	0.99	36.00	0.99	4.20
9.	1.00	29.00	1.00	25.00	1.00	11.00
10.	0.97	9.20	0.97	9.50	0.97	5.60
11.	0.00	-1.00	0.00	-1.00	0.00	-1.00
12.	0.94	18.00	0.94	26.00	0.94	3.70

Month	Hydrogen		Ammonium		Sodium	
	PR	μmol/l	PR	μmol/l	PR	μmol/l
1.	0.70	180.00	1.00	27.00	1.00	5.60
2.	1.00	33.00	1.00	9.40	1.00	54.00
3.	0.93	37.00	0.97	17.00	0.97	5.60
4.	0.98	62.00	0.98	29.00	0.98	11.00
5.	0.80	72.00	0.80	32.00	0.80	2.70
6.	0.92	86.00	0.92	31.00	0.92	1.80
7.	1.00	59.00	1.00	17.00	1.00	5.20
8.	0.99	110.00	0.99	21.00	0.99	0.99
9.	1.00	52.00	1.00	16.00	1.00	8.40
10.	0.97	22.00	0.97	4.60	0.97	4.50
11.	0.00	-1.00	0.00	-1.00	0.00	-1.00
12.	0.94	45.00	0.94	7.50	0.94	2.60

TABLE 9. Monthly Rainfall, Events and Deposition-Weighted
Average Concentrations for 1981 Site = Illinois
(See text and Table 15 for explanation)

Site	Month	Area cm ²	Precip cm	Total Events	Averaged Events
5.	1.	325.	0.30	4.	0.
5.	2.	325.	4.40	7.	3.
5.	3.	325.	1.20	7.	3.
5.	4.	325.	12.10	11.	1.
5.	5.	325.	11.70	11.	7.
5.	6.	325.	8.60	13.	8.
5.	7.	325.	16.70	9.	6.
5.	8.	325.	21.40	9.	4.
5.	9.	325.	8.00	6.	5.
5.	10.	325.	6.10	6.	5.
5.	11.	325.	2.40	6.	4.
5.	12.	325.	1.20	3.	2.

Month	Sulfur		Nitrate		Chloride	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	0.0	-1.00	0.0	-1.00	0.0	-1.00
2.	0.95	25.00	0.95	26.00	0.95	3.50
3.	0.79	-1.00	0.87	23.00	0.87	4.60
4.	0.02	-1.00	0.02	-1.00	0.02	-1.00
5.	0.96	24.00	0.96	24.00	0.96	2.90
6.	0.86	36.00	0.86	28.00	0.86	7.20
7.	0.99	38.00	0.99	26.00	0.90	3.50
8.	0.50	-1.00	0.50	-1.00	0.50	-1.00
9.	0.99	42.00	0.99	22.00	0.99	4.00
10.	0.99	24.00	0.99	24.00	0.99	6.40
11.	0.94	39.00	0.94	41.00	0.94	6.40
12.	0.92	19.00	0.92	25.00	0.92	3.80

Month	Hydrogen		Ammonium		Sodium	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	0.0	-1.00	0.0	-1.00	0.0	-1.00
2.	0.95	59.00	0.95	15.00	0.95	1.50
3.	0.79	-1.00	0.87	20.00	0.87	3.00
4.	0.02	-1.00	0.02	-1.00	0.02	-1.00
5.	0.95	59.00	0.96	14.00	0.96	0.82
6.	0.86	49.00	0.83	19.00	0.86	3.70
7.	0.99	63.00	0.99	20.00	0.99	1.10
8.	0.50	-1.00	0.50	-1.00	0.50	-1.00
9.	0.99	43.00	0.99	35.00	0.99	2.60
10.	0.99	35.00	0.99	18.00	0.99	2.20
11.	0.94	26.00	0.94	72.00	0.94	4.30
12.	0.92	35.00	0.92	15.00	0.92	1.30

TABLE 10. Monthly Rainfall, Events and Deposition-Weighted
Average Concentrations for 1981 Site = Brookhaven
(See text and Table 15 for explanation)

Site	Month	Area cm ²	Precip cm	Total Events	Averaged Events
6.	1.	490.	2.60	4.	4.
6.	2.	490.	13.60	8.	6.
6.	3.	640.	5.60	8.	5.
6.	4.	640.	12.30	7.	6.
6.	5.	640.	5.40	6.	6.
6.	6.	640.	8.60	9.	6.
6.	7.	640.	7.60	7.	7.
6.	8.	640.	1.20	5.	3.
6.	9.	640.	15.50	8.	7.
6.	10.	640.	13.00	8.	7.
6.	11.	640.	6.40	7.	6.
6.	12.	640.	10.90	9.	7.

Month	Sulfur		Nitrate		Chloride	
	PR	μmol/l	PR	μmol/l	PR	μmol/l
1.	1.00	76.00	1.00	55.00	1.00	43.00
2.	0.97	9.50	0.97	5.90	0.97	70.00
3.	0.47	-1.00	0.47	-1.00	0.47	-1.00
4.	0.95	25.00	0.95	19.00	0.95	26.00
5.	1.00	22.00	1.00	19.00	1.00	39.00
6.	0.95	23.00	0.95	25.00	0.95	8.90
7.	1.00	72.00	1.00	50.00	1.00	38.00
8.	0.91	61.00	0.91	65.00	0.91	38.00
9.	1.00	34.00	1.00	27.00	1.00	25.00
10.	0.99	20.00	0.99	19.00	0.99	28.00
11.	0.99	24.00	0.99	25.00	0.99	24.00
12.	0.98	15.00	0.98	16.00	0.98	25.00

Month	Hydrogen		Ammonium		Sodium	
	PR	μmol/l	PR	μmol/l	PR	μmol/l
1.	0.94	68.00	1.00	13.00	1.00	35.00
2.	0.97	13.00	0.97	1.70	0.97	55.00
3.	0.47	-1.00	0.47	-1.00	0.47	-1.00
4.	0.95	44.00	0.95	12.00	0.95	26.00
5.	0.96	23.00	1.00	16.00	1.00	34.00
6.	0.96	46.00	0.96	13.00	0.96	9.00
7.	1.00	110.00	1.00	29.00	1.00	31.00
8.	0.91	120.00	0.91	21.00	0.91	31.00
9.	1.00	60.00	1.00	14.00	0.99	22.00
10.	0.99	36.00	0.99	10.00	0.99	20.00
11.	0.99	42.00	0.99	16.00	0.98	23.00
12.	0.98	30.00	0.98	6.40	1.00	34.00

TABLE 11. Monthly Rainfall, Events and Deposition-Weighted
Average Concentrations for 1981 Site = Lewes, DE
(See text and Table 15 for explanation)

Site	Month	Area cm ²	Precip cm	Total Events	Averaged Events
7.	1.	640.	1.50	4.	4.
7.	2.	640.	8.80	7.	6.
7.	3.	640.	4.50	5.	5.
7.	4.	640.	11.50	6.	6.
7.	5.	640.	12.70	6.	6.
7.	6.	640.	7.70	7.	7.
7.	7.	640.	2.90	4.	5.
7.	8.	640.	15.30	7.	5.
7.	9.	640.	7.10	4.	4.
7.	10.	640.	8.00	7.	6.
7.	11.	640.	3.30	5.	3.
7.	12.	640.	9.50	7.	5.

Month	Sulfur		Nitrate		Chloride	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	1.00	50.00	1.00	97.00	1.00	40.00
2.	0.99	14.00	0.99	6.00	0.99	67.00
3.	1.00	20.00	1.00	18.00	1.00	57.00
4.	1.00	28.00	1.00	23.00	1.00	24.00
5.	1.00	35.00	1.00	25.00	1.00	37.00
6.	1.00	42.00	1.00	31.00	1.00	19.00
7.	0.95	34.00	0.95	24.00	0.95	62.00
8.	0.98	34.00	0.98	20.00	0.98	14.00
9.	1.00	27.00	1.00	20.00	1.00	43.00
10.	0.99	23.00	0.99	20.00	0.99	70.00
11.	1.00	22.00	1.00	52.00	1.00	39.00
12.	0.97	19.00	0.97	19.00	0.97	50.00

Month	Hydrogen		Ammonium		Sodium	
	PR	μmol/ℓ	PR	μmol/ℓ	PR	μmol/ℓ
1.	0.90	110.00	1.00	29.00	1.00	34.00
2.	0.99	18.00	0.99	6.60	0.99	56.00
3.	1.00	35.00	1.00	16.00	1.00	52.00
4.	1.00	43.00	1.00	24.00	1.00	23.00
5.	1.00	51.00	1.00	19.00	1.00	29.00
6.	1.00	62.00	1.00	24.00	1.00	15.00
7.	0.95	68.00	0.95	15.00	0.95	56.00
8.	0.98	59.00	0.98	13.00	0.98	8.50
9.	1.00	46.00	1.00	14.00	1.00	38.00
10.	0.99	37.00	0.99	17.00	0.99	58.00
11.	1.00	46.00	1.00	8.80	1.00	30.00
12.	0.97	41.00	0.97	6.50	0.97	27.00

TABLE 14. Annual Rainfall, Events, and
Deposition-Weighted Average Concentrations for 1981

<u>Site</u>	<u>Area</u>	<u>Precip. cm</u>	<u>Total Events</u>	<u>Averaged Events</u>
1	640	124.	103.	86.
2	640	124.	79.	72.
3	640	104.	86.	74.
4	490/640	91.	61.	47.
5	325	97.	92.	48.
6	490/640	108.	86.	70.
7	640	90.	65.	58.
8	640	79.	86.	68.
9	640	104.	65.	63.

<u>Site</u>	<u>Sulfur</u>		<u>Nitrate</u>		<u>Chloride</u>	
	<u>PR</u>	<u>μmol/ℓ</u>	<u>PR</u>	<u>μmol/ℓ</u>	<u>PR</u>	<u>μmol/ℓ</u>
1	.98	21.	.98	18.	.98	2.9
2	.97	37.	.97	31.	.97	5.2
3	.99	35.	.99	30.	.99	9.1
4	.93	32.	.93	26.	.93	14.
5	.74	-1.	.74	-1.	.74	-1.
6	.93	27.	.93	23.	.93	32.
7	.99	28.	.99	22.	.99	38.
8	.98	31.	.98	25.	.98	6.7
9	.98	30.	.98	20.	.98	8.1

<u>Site</u>	<u>Hydrogen</u>		<u>Ammonium</u>		<u>Sodium</u>	
	<u>PR</u>	<u>μmol/ℓ</u>	<u>PR</u>	<u>μmol/ℓ</u>	<u>PR</u>	<u>μmol/ℓ</u>
1	.98	37.	.98	12.	.98	1.2
2	.97	70.	.97	17.	.97	2.1
3	.99	59.	.99	25.	.99	6.1
4	.93	58.	.93	16.	.93	12.
5	.74	-1.	.74	-1.	.74	-1.
6	.93	44.	.93	12.	.93	29.
7	.99	47.	.99	16.	.99	32.
8	.98	54.	.98	19.	.98	4.4
9	.98	53.	.98	13.	.98	5.5

TABLE 15. General Statistics for
September 1976 - December 1981
(See text and Table 15 for explanation)

SPECIES = SULFUR

Site	1.000	2.000	3.000	4.000	5.000
N-Total	395.000	339.000	466.000	310.000	309.000
N-C.E. edit	382.000	314.000	449.000	287.000	261.000
N-MISSING	34.000	16.000	36.000	37.000	86.000
MIN	1.900	0.710	2.100	4.100	1.600
MAX	190.000	240.000	340.000	250.000	280.000
MEAN	28.000	39.000	44.000	40.000	40.000
STD DEV	23.000	32.000	40.000	33.000	30.000
LOG MEAN	21.000	29.000	31.000	30.000	33.000
LOG STD DEV	2.270	2.260	2.400	2.220	1.870
A	27.900	37.400	36.200	40.400	43.700
B	0.113	0.590	2.860	-0.130	-1.070
r	0.008	0.027	0.109	-0.006	-0.043

Site	6.000	7.000	8.000	9.000	ALL
N-Total	278.000	245.000	261.000	65.000	2668.000
N-C.E. edit	250.000	228.000	242.000	65.000	2478.000
N-MISSING	48.000	25.000	57.000	2.000	341.000
MIN	2.400	2.900	1.700	7.700	0.710
MAX	170.000	150.000	150.000	160.000	340.000
MEAN	35.000	32.000	39.000	39.000	37.000
STD DEV	31.000	24.000	22.000	25.000	31.000
LOG MEAN	25.000	25.000	32.000	33.000	38.000
LOG STD DEV	2.320	2.090	1.960	1.780	2.230
A	22.100	36.000	39.100	14.500	35.700
B	3.490	-1.120	-0.090	5.000	0.531
r	0.124	-0.050	-0.004	0.055	0.024

TABLE 15 Continued

SPECIES = NITRATE

Site	1.000	2.000	3.000	4.000	5.000
N-Total	595.000	359.000	466.000	310.000	309.000
N-C.E. edit	482.000	312.000	449.000	287.000	261.000
N-MISSING	33.000	15.000	36.000	37.000	87.000
MIN	0.300	2.500	2.000	3.200	6.500
MAX	190.000	210.000	240.000	530.000	140.000
MEAN	31.000	41.000	52.000	39.000	36.000
STD DEV	28.000	27.000	40.000	44.000	24.000
LOG MEAN	23.000	23.000	38.000	28.000	29.000
LOG STD DEV	2.270	2.000	2.260	2.250	1.860
A	53.600	39.300	51.000	36.000	41.600
B	-0.940	1.070	0.480	0.990	-1.630
r	-0.058	-0.024	0.017	0.032	-0.082

Site	6.000	7.000	8.000	9.000	ALL
N-Total	278.000	245.000	261.000	65.000	2668.000
N-C.E. edit	250.000	228.000	242.000	65.000	2478.000
N-MISSING	48.000	25.000	58.000	2.000	341.000
MIN	1.800	0.300	3.000	4.700	0.300
MAX	260.000	320.000	140.000	120.000	530.000
MEAN	40.000	33.000	35.000	29.000	39.000
STD DEV	45.000	39.000	23.000	22.000	36.000
LOG MEAN	24.000	21.000	29.000	24.000	28.000
LOG STD DEV	2.820	2.760	1.860	1.910	2.310
A	19.600	33.800	42.000	28.600	41.700
B	5.320	-0.100	-1.700	0.100	-0.772
r	0.128	-0.003	-0.071	0.001	-0.031

TABLE 15 Continued

SPECIES = CHLORIDE

Site	1.000	2.000	3.000	4.000	5.000
N-Total	395.000	339.000	466.000	310.000	309.000
N-C.E. edit	382.000	314.000	449.000	287.000	261.000
N-MISSING	35.000	15.000	40.000	46.000	87.000
MIN	0.100	0.100	0.100	0.400	0.100
MAX	63.000	65.000	84.000	210.000	93.000
MEAN	5.200	7.100	11.000	12.000	7.600
STD DEV	6.400	7.600	11.000	21.000	9.900
LOG MEAN	3.300	4.800	6.600	7.300	5.400
LOG STD DEV	2.690	2.570	3.140	2.530	2.620
A	6.610	6.920	7.660	15.600	6.870
B	-0.463	0.057	1.100	-1.090	0.205
r	-0.115	0.011	0.150	-0.072	0.025

Site	6.000	7.000	8.000	9.000	ALL
N-Total	278.000	245.000	261.000	65.000	2668.000
N-C.E. edit	250.000	228.000	242.000	65.000	2478.000
N-MISSING	50.000	25.000	58.000	2.000	358.000
MIN	1.200	1.500	1.100	2.900	0.100
MAX	540.000	650.000	38.000	44.000	650.000
MEAN	40.000	56.000	7.400	9.600	16.000
STD DEV	54.000	85.000	5.900	7.500	36.000
LOG MEAN	25.000	31.000	5.900	7.900	7.330
LOG STD DEV	2.640	2.850	1.920	1.840	3.280
A	39.200	103.000	8.150	19.600	13.700
B	0.320	-13.000	-0.183	-1.990	0.690
r	0.006	-0.165	-0.029	-0.074	0.027

TABLE 15 Continued

SPECIES = HYDROGEN

Site	1.000	2.000	3.000	4.000	5.000
N-Total	395.000	339.000	466.000	310.000	309.000
N-C.E. edit	382.000	318.000	249.000	287.000	261.000
N-MISSING	47.000	51.000	82.000	48.000	72.000
MIN	1.100	2.400	0.190	7.600	0.280
MAX	370.000	400.000	480.000	450.000	380.000
MEAN	60.000	89.000	94.000	85.000	66.000
STD DEV	42.000	58.000	72.000	78.000	56.000
LOG MEAN	48.000	75.000	69.000	65.000	42.000
LOG STD DEV	2.030	1.960	2.600	2.040	3.450
A	63.200	105.000	93.600	95.700	86.100
B	-0.920	-0.940	0.160	-3.550	-5.810
r	-0.033	-0.115	0.003	-0.062	-0.125

Site	6.000	7.000	8.000	9.000	ALL
N-Total	278.000	245.000	261.000	65.000	2668.000
N-C.E. edit	250.000	223.000	242.000	65.000	2478.000
N-MISSING	26.000	20.000	49.000	2.000	377.000
MIN	0.100	5.700	1.600	15.000	0.100
MAX	400.000	420.000	260.000	190.000	850.000
MEAN	79.000	66.000	69.000	66.000	77.000
STD DEV	74.000	63.000	44.000	36.000	63.000
LOG MEAN	48.000	46.000	55.000	57.000	56.000
LOG STD DEV	3.270	2.370	2.150	1.730	2.470
A	106.000	94.100	91.400	25.600	90.800
B	-7.110	-7.620	-5.530	8.000	-4.080
r	-0.105	-0.131	-0.119	0.062	-0.088

TABLE 15 Continued

SPECIES = AMMONIUM

Site	1.000	2.000	3.000	4.000	5.000
N-Total	495.000	439.000	466.000	510.000	309.000
N-C.E. edit	482.000	414.000	449.000	257.000	261.000
N-MISSING	44.000	15.000	57.000	40.000	88.000
MIN	0.410	0.280	0.350	0.510	0.600
MAX	100.000	120.000	250.000	290.000	140.000
MEAN	17.000	22.000	25.000	22.000	29.000
STD DEV	19.000	21.000	28.000	24.000	23.000
LOG MEAN	10.000	14.000	15.000	12.000	21.000
LOG STD DEV	3.220	3.020	3.000	3.270	2.430
A	15.800	16.600	15.100	16.000	32.400
B	0.510	1.670	3.320	1.910	-0.910
r	0.045	0.114	0.170	0.110	-0.048

Site	6.000	7.000	8.000	9.000	ALL
N-Total	278.000	245.000	261.000	65.000	2668.000
N-C.E. edit	250.000	228.000	242.000	65.000	2478.000
N-MISSING	48.000	26.000	58.000	2.000	379.000
MIN	0.500	0.600	0.600	1.500	0.280
MAX	180.000	79.000	200.000	100.000	250.000
MEAN	22.000	18.000	27.000	17.000	22.000
STD DEV	27.000	16.000	24.000	16.000	23.000
LOG MEAN	12.000	11.000	19.000	12.000	13.000
LOG STD DEV	3.240	2.800	2.440	2.480	3.030
A	24.300	15.100	35.800	39.700	18.500
B	-0.640	0.730	-2.250	-4.590	1.080
r	-0.026	0.050	-0.087	-0.082	0.066

TABLE 15 Continued

SPECIES = SODIUM

Site	1.000	2.000	3.000	4.000	5.000
N-Total	395.000	444.000	466.000	310.000	309.000
N-C.E. edit	482.000	514.000	449.000	287.000	261.000
N-MISSING	82.000	35.000	85.000	70.000	87.000
MIN	0.400	0.400	0.400	0.400	0.400
MAX	140.000	137.000	120.000	120.000	140.000
MEAN	2.900	3.500	5.500	7.300	4.500
STD DEV	8.900	9.100	8.900	16.000	11.000
LOG MEAN	1.460	1.700	2.790	3.100	2.400
LOG STD DEV	2.800	2.740	3.320	3.270	2.740
A	1.630	1.960	1.540	4.350	1.410
B	0.365	0.041	1.300	0.908	0.868
r	0.059	0.066	0.208	0.071	0.094

Site	6.000	7.000	8.000	9.000	ALL
N-Total	278.000	245.000	261.000	65.000	2668.000
N-C.E. edit	250.000	228.000	242.000	65.000	2478.000
N-MISSING	48.000	25.000	58.000	2.000	492.000
MIN	0.700	0.850	0.400	0.500	0.400
MAX	450.000	720.000	24.000	48.000	720.000
MEAN	35.000	50.000	4.400	6.400	12.000
STD DEV	49.000	80.000	4.700	8.800	35.000
LOG MEAN	20.000	25.000	2.600	3.700	3.600
LOG STD DEV	3.070	3.270	2.730	2.800	4.290
A	36.200	49.600	1.140	-16.200	10.100
B	-0.230	-13.500	0.789	4.520	0.654
r	-0.005	-0.183	0.158	0.144	0.025

3.3 Summary Statistics Edit and Calculation

The data base following the general edit (Section 3.1) is further edited and calculations performed as follows:

- 1) The site is chosen and a count of total events ("N-total") made.
- 2) Samples with collection efficiency less than 0.50 are eliminated and another count made ("N-C.E. edit").
- 3) Missing concentrations are set to a "missing" code and below MDL concentrations are set to the MDL value.
- 4) The number of missing concentration cases are noted ("N-MISSING").
- 5) Statistics are calculated.

Table 15 lists the results of these general calculations. Most species have few missing values and the difference between MDL and zero is probably insignificant in most cases. The linear time trends are all highly statistically insignificant. Please note that time = 0 is at July 1, 1976, so trend expressions for the newer sites are of less value than those starting earlier.

Table 16 is a brief legend of the items in Tables 5 to 15.

TABLE 16. Legend for Tables 4 to 14

<u>ITEM</u>	<u>EXPLANATION</u>
Site	1 = Whiteface, 2 = Ithaca, 3 = Penn State, 4 = Virginia, 5 = Illinois, 6 = Brookhaven, 7 = Lewes, DE, 8 = Oxford, OH, 9 = Oak Ridge
Area	Area of collector.
Precip.	Total precipitation for period. (Based on maximum of sample and predicted volume).
Total Events	Total number of events in data base for period.
Averaged Events	Number of events included in weighted average for sulfur (other species may include fewer events).
PR	Ratio of precipitation included in average to total precipitation.
N-Total	See Total Events.
N-C.E. edit	Number of events considered for statistical calcula- tions-includes N-MISSING.
N-MISSING	Number of events with missing concentrations-not included in statistical calculations.
MIN	Minimum concentration, $\mu\text{mol}/\ell$ (usually lowest MDL).
MAX	Maximum concentration, $\mu\text{mol}/\ell$.
MEAN	Arithmetic mean concentration, $\mu\text{mol}/\ell$.
STD DEV	Standard Deviation of concentration, $\mu\text{mol}/\ell$.
LOG MEAN	Antilog of mean of logs of concentrations, $\mu\text{mol}/\ell$.
LOG STD DEV	Antilog of standard deviation of logs of concentrations (geometric standard deviation).
A	Intercept of $C=A+Bt$, where t is time in years since July 1, 1976 and C is concentration, $\mu\text{mol}/\ell$.
B	Slope of above regression expression, $\mu\text{mol}/\ell$ year.
r	Correlation coefficient between C and t .

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APPENDIX A

LEGEND FOR DATA TABLES

Data Table 2 contains the 1981 field and precipitation chemistry data. The format for 1981 is slightly different from the four previous summaries^(2,3,4,5) and slightly different interpretations may be placed on certain entries. Of particular importance are the following:

- Sample and Predicted Volumes should be used for comparison and for weighting only. Hourly precipitation data for 1981 is available on Table 3. Properly calculated monthly precipitation amounts and weighted average concentrations may be found in Section 3 of this report.
- Downtime is not reported. All hourly precipitation amounts are reported in Table 3.
- Hourly precipitation amounts are not available for Illinois State Water Survey. Sample Time and Precipitation End data are available on tape from the MAP3S Data Base from Brookhaven National Laboratory.

TABLE 17
LEGEND FOR TABLE 2

Sub- Table	Column	Species	Units
1	1	Time Removed Time of day (on date at left) that sample was collected.	GMT or "Z"
	2	Lid Open Number of times the collector opened during the sample period	(none)
	3	Arrival Date Date sample arrived at the laboratory	Month Day of Month
	4	Sample Volume Volume of sample as measured immediately after collection	ml
	5	Predicted Volume Volume for sample predicted on the basis of precipitation amount measured by the rain gauge. (Area of collector: HASL-640 cm ²).	ml
	6	Field pH T Temperature at which field pH measurement was made	C
	7	Field pH	pH units
	8	Lab pH	pH units
	9	Conductivity ^(a)	μmho/cm
2	1	SO ₂ S ^{IV} or dissolved SO ₂ measured in separate tetrachloromercurate-fixed aliquots	μmoles/l
	2	SO ₄ ⁼ "Total Sulfur" measured as sulfate-this is normally the sum of SO ₂ and SO ₄	μmoles/l
	3	NO ₂ ⁻	μmoles/l

^(a) Measured at 25C.

Sub-Table	Column	Species	Units
3	4	NO_3^-	$\mu\text{moles}/\ell$
	5	Cl^-	$\mu\text{moles}/\ell$
	6	PO_4^{3-}	$\mu\text{moles}/\ell$
	1	$\text{H}^+(\text{a})$ Free hydrogen ion concentration calculated from lab pH $[\text{H}^+ = 10^{(6-\text{pH})}]$	$\mu\text{moles}/\ell$
	2	NH_4^+	$\mu\text{moles}/\ell$
	3	Na^+	$\mu\text{moles}/\ell$
	4	K^+	$\mu\text{moles}/\ell$
	5	Ca^{++}	$\mu\text{moles}/\ell$
	6	Mg^{++}	$\mu\text{moles}/\ell$
	7	Anion Sum The sum of the equivalents for all the anions: $2[\text{SO}_4^{=}] + [\text{NO}_2^-] + [\text{NO}_3^-] + [\text{Cl}^-]$ $+ 3[\text{PO}_4^{3-}] + [\text{unoxidized SO}_2]^b$	$\mu\text{eq}/\ell$
	8	Cation Sum $[\text{H}^+] + [\text{NH}_4^+] + [\text{Na}^+] + [\text{K}^+]$ $+ 2[\text{Ca}^{++}] + 2[\text{Mg}^{++}]$	$\mu\text{eq}/\ell$

(a) Measured at 25C.

(b) Estimated.

Table 18 lists the special symbols found in the data tables. The latter are also found at the foot of the individual tables within Table 2 and Table 3.

TABLE 18
SPECIAL DATA TABLE CODES

<u>Code</u>	<u>Numerical Value^a</u>	<u>Explanation</u>
ISA	-200.	Insufficient sample for analysis
NAP	-300.	No analysis performed
MOE	-400.	Malfunction or operator error
RPC	-500.	Rejected - probable contamination
T		Trace
ML		Missing, precipitation likely
MU		Missing, precipitation unlikely
<...>		Amount spans a period greater than one hour

^aOn data tape.

APPENDIX B

NETWORK BACKGROUND

Figure 5 shows the locations and names of the currently active MAP3S PCN sites. Table 19 lists locations, elevations and start dates.

Table 20 is a list of current analytical techniques and sensitivities. The reader and data user is strongly advised to consult the more detailed descriptions of network operations in the previous publications.¹⁻⁶

TABLE 19
NETWORK SITE DETAILS^(a)

Site No.	Name	Location		Elevation (m, msl)	Date of First Sample Collected
		Longitude	Latitude		
1	WHITEFACE	73°, 51.	44°, 23'	604	October 11, 1976
2	ITHACA	76°, 43'	42°, 23'	503	October 26, 1976
3	PENN STATE	77°, 57'	40°, 47'	396	September 22, 1976
4	VIRGINIA	78°, 32	38°, 2'	171	December 12, 1976
5	ILLINOIS	88°, 22'	40°, 3'	213	November 20, 1977
6	BROOKHAVEN	72°, 53'	40°, 52'	24	February 9, 1978
7	LEWES DE	75°, 0'	38°, 46'	0	March 1, 1978
8	OXFORD OH	84°, 44'	39°, 32'	283	October 1, 1978
9	OAK RIDGE TN	84°, 20'	35°, 55'	-	January 7, 1981

^(a) See Preface for cooperating institutions and personnel.

FIGURE 5. Locations of MAP3S Network Sites

TABLE 20
CHEMICAL SPECIES AND ANALYSIS DETAILS

Species	Method ^(a)	Instrument	Minimum Detection Limit(b) μmoles/ℓ	Estimated Error(c)
H ⁺ (free)	Electrode	Corning	--	±0.05 pH units ^(d)
Conductivity	Bridge	Markson Electro- mark	--	±20%
SO ₃ ⁼	AWC	Technicon Auto Analyzer	0.1	±GO(MDL or 10%)
SO ₄ ⁼	IC	Dionex System 10 (Anion)	0.2	±GO(MDL or 10%)
NO ₂ ⁻	AWC	Technicon Auto Analyzer	0.05	±GO(MDL or 10%)
NO ₃ ⁻	IC	Dionex System 10 (Anion)	0.2	±GO(MDL or 10%)
Cl ⁻	IC	Dionex System 10 (Anion)	2	±GO(MDL or 10%)
PO ₄ ³⁻	IC	Dionex System 10 (Anion)	0.2	±GO(MDL or 10%)
NH ₄ ⁺	IC	Dionex System 10 (Cation)	0.5	±GD(MDL or 10%)
Na ⁺	IC	Dionex System 10 (Cation)	0.4	±GD(MDL or 10%)
K ⁺	IC	Dionex System 10 (Cation)	0.4	±GO(MDL or 10%)
Ca ⁺⁺	AA	Perkin-Elmer 306	0.5	±GO(MDL or 10%)
Mg ⁺⁺	AA	Perkin-Elmer 306	0.4	±GO(MDL or 10%)

(a) AWC = Automated Wet Chemistry; IC = Ion Chromatography; AA = Atomic Absorption Spectrophotometry

(b) Best Obtained--Some analysis sessions result in higher maximum detection limits. These are noted, where relevant, in the Appendix.

(c) MDL - Minimum detection limit; GO = "Greater Of".

(d) At pH = 4.

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Richard G. Semonin
Illinois State Water Survey
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Champaign, IL 61820

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Dr. Sam Stevens
Concord Scientific Corp.
2 Tippet Road
Downsview, Toronto
Ontario, Canada M3H 2V2

Mr. Malcolm Still
Atmospheric Environment Service
4905 Dufferin Street
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Ontario, Canada M3H 5T4

Arthur W. Struempfer
Div. of Science & Mathematics
Chadron State College
Chadron, NB 69337

Mrs. B.L. Taylor
Atmospheric Environment Service
Atlantic Region, Scientific
Services
1496 Bedford Highway
Bedford, S.N.
Canada B4A 1E5

Leo Topol
Rockwell International
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Atmospheric Environment Service
4905 Dufferin Street
Downsview, Toronto
Ontario, Canada M3H 5T4

Dr. Ray Wilhour
U.S. Environmental Protection
Agency
2000 S.W. 35th Street
Corvallis, OR 97330

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Air Resources Center
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S-106 Stockholm
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F.B. Smith
Meteorological Office
Met. 0.14 London Road
Bracknell, Berkshire
RG122SZ, ENGLAND

Dr. Peter Winkler
Deutscher Wetterdienst
Meteorologisches Observatorium
Hamburg
Frahmredder 95
2000 Hamburg 65
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