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SHORT DURATION PRECIPITATION FREQUENCIES AND EXTREMES FOR
MADISON, WISCONSIN

by

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PRECIPITATION FREQUENCIES FOR MADISON WISCONSIN

Amounts in inches for various intervals

Interval Return Period	5 min	10 min	15 min	30 min	60 min	1 clock-hour*
2 year	.43	.68	.85	1.13	1.42	1.26
5 year	.51	.82	1.04	1.42	1.81	1.60
10 year	.57	.93	1.17	1.62	2.09	1.85
25 year	.65	1.08	1.37	1.91	2.48	2.19
50 year	.72	1.19	1.52	2.14	2.78	2.46
100 year	.79	1.31	1.67	2.36	3.08	2.73

[* clock-hour is for data recorded hourly on the hour, rather than by minute]

Values derived from "Five- to 60-Minute Precipitation Frequency for the Eastern and Central United States", R. H. Frederick, V. A. Myers and E. P. Auciello, 1977. NOAA Technical Memorandum NWS HYDRO-35. (National Weather Service).

Data period for Madison: 1905 to 1972.

Note: Four storms have occurred in the years since 1972 which would alter the probabilities in the above table. In these four storms, the five-minute rainfall amounts were greater than any previously recorded. In two of these, the ten- and fifteen-minute maximum rainfall amounts were greater than any previously recorded. If this more recent data were included in the analysis, the five-, ten- and fifteen-minute precipitation amounts in the table above would be somewhat larger. (July 9, 1973; May 21, 1974; June 17, 1978; June 15, 1981)

MAXIMUM RECORDED PRECIPITATION AMOUNTS FOR MADISON WISCONSIN

Interval	5 min	10 min	15 min	30 min	60 min	120 min
Amount (in.)	.92	1.44	1.55	2.15	3.67	4.91
Date	7-9-1973	7-9-1973	7-9-1973	8-8-1906	8-8-1906	8-8-1906

Data Period: 1905 to June, 1984

Prepared by D. R. Clark, July 16, 1984.