

U. S. GEOLOGICAL SURVEY  
ANNUAL PEAK FLOW FREQUENCY ANALYSIS  
Following Bulletin 17-B Guidelines  
Program peakfq  
(Version 4.0, December, 2000)

Station - 05425700 ROBBINS CREEK NEAR COLUMBUS, WI  
2002 MAR 13 09:03:18

I N P U T   D A T A   S U M M A R Y

Number of peaks in record	=	31
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	31
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.386
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	0.0
User supplied high outlier threshold	=	--
User supplied low outlier criterion	=	--
Plotting position parameter	=	0.00

\*\*\*\*\* NOTICE -- Preliminary machine computations. \*\*\*\*\*  
\*\*\*\*\* User responsible for assessment and interpretation. \*\*\*\*\*

WCF134I-NO SYSTEMATIC PEAKS WERE BELOW GAGE BASE.		0.0
WCF198I-LOW OUTLIERS BELOW FLOOD BASE WERE DROPPED.	1	17.3
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.		804.9

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ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	0.0	1.0000	2.1217	0.3433	-1.350
BULL.17B ESTIMATE	17.3	0.9677	2.1398	0.3066	-0.753

ANNUAL FREQUENCY CURVE -- DISCHARGES AT SELECTED EXCEEDANCE PROBABILITIES

ANNUAL EXCEEDANCE PROBABILITY	BULL.17B ESTIMATE	SYSTEMATIC RECORD	'EXPECTED PROBABILITY' ESTIMATE	95-PCT CONFIDENCE LIMITS FOR BULL. 17B ESTIMATES	
				LOWER	UPPER
0.9950	--	6.6	--	--	--
0.9900	--	10.2	--	--	--
0.9500	37.9	28.7	35.0	24.9	51.0
0.9000	53.8	46.0	51.2	38.1	69.4
0.8000	79.3	75.4	77.5	60.4	98.8
0.5000	150.6	157.2	150.6	122.1	187.4
0.2000	252.6	256.1	255.9	201.9	334.5
0.1000	316.0	304.2	323.2	247.9	435.7
0.0400	388.6	346.9	402.8	298.1	558.7
0.0200	436.8	368.9	456.8	330.4	643.9
0.0100	480.2	384.7	506.8	358.9	722.8
0.0050	519.4	396.2	552.4	384.2	795.7
0.0020	565.5	406.7	607.4	413.6	883.4
0.6667	110.1	( 1.50-year flood )			
0.4292	170.7	( 2.33-year flood )			

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I N P U T   D A T A   L I S T I N G

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1960	300.0		1979	95.0	
1961	80.0		1980	265.0	
1962	165.0		1981	165.0	
1963	19.0		1982	188.0	
1964	13.0		1983	88.0	
1965	190.0		1984	220.0	
1966	265.0		1985	335.0	
1967	85.0		1986	312.0	
1968	160.0		1987	70.0	
1969	75.0		1988	71.0	
1970	35.0		1989	125.0	
1971	180.0		1990	263.0	
1972	120.0		1991	167.0	
1973	175.0		1992	137.0	
1974	175.0		1993	344.0	
1975	250.0				

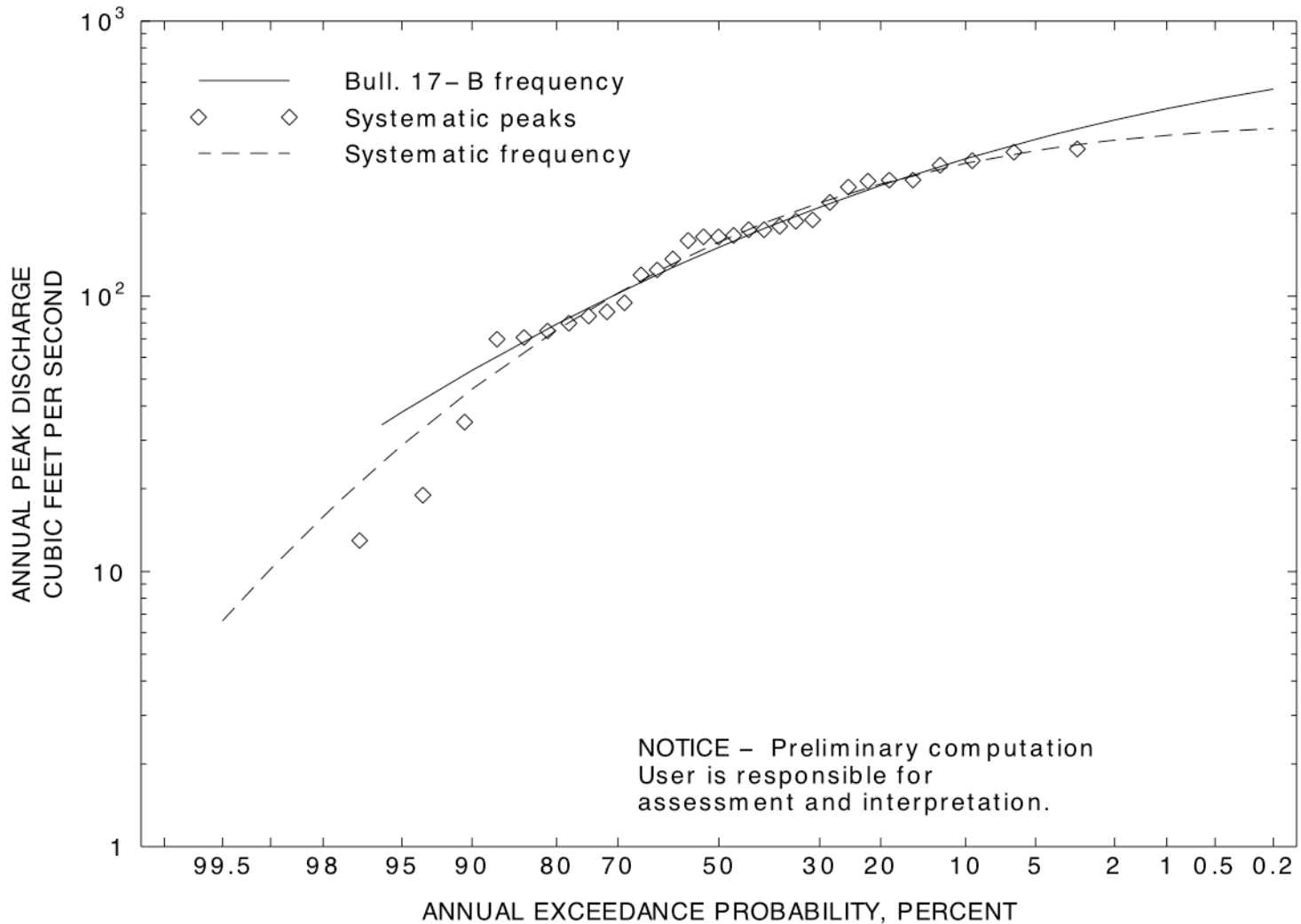
Explanation of peak discharge qualification codes

PEAKFQ CODE	WATSTORE CODE	DEFINITION
D	3	Dam failure, non-recurrent flow anomaly
G	8	Discharge greater than stated value
X	3+8	Both of the above
L	4	Discharge less than stated value
K	6 OR C	Known effect of regulation or urbanization
H	7	Historic peak

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EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1993	344.0	0.0312	0.0312
1985	335.0	0.0625	0.0625
1986	312.0	0.0938	0.0938
1960	300.0	0.1250	0.1250
1966	265.0	0.1562	0.1562
1980	265.0	0.1875	0.1875
1990	263.0	0.2188	0.2188
1975	250.0	0.2500	0.2500
1984	220.0	0.2812	0.2812
1965	190.0	0.3125	0.3125
1982	188.0	0.3438	0.3438
1971	180.0	0.3750	0.3750
1973	175.0	0.4062	0.4062
1974	175.0	0.4375	0.4375
1991	167.0	0.4688	0.4688
1962	165.0	0.5000	0.5000
1981	165.0	0.5312	0.5312
1968	160.0	0.5625	0.5625
1992	137.0	0.5938	0.5938
1989	125.0	0.6250	0.6250
1972	120.0	0.6562	0.6562
1979	95.0	0.6875	0.6875
1983	88.0	0.7188	0.7188
1967	85.0	0.7500	0.7500
1961	80.0	0.7812	0.7812
1969	75.0	0.8125	0.8125
1988	71.0	0.8438	0.8438
1987	70.0	0.8750	0.8750
1970	35.0	0.9062	0.9062
1963	19.0	0.9375	0.9375
1964	13.0	0.9688	0.9688



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