

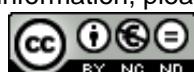


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Examination of Flood Estimation Techniques in the Irish Context



Samiran Das

**Department of Engineering Hydrology
National University of Ireland, Galway**

A thesis submitted for the degree of PhD

Appendix C

Appendix C (Grade A1 stations)

6011 RIVER FANE @ MOYLES MILL							
FANE CATCHMENT	Annual Maximum Floods 1957 to 2004.(no missing years)			A1	A (km^2) =	234.00	N= 48
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1957	12.34	Mean	15.856	L1	15.856	L-Cv 0.113
	1958	21.07	Median	15.390	L2	1.795	L-Skew 0.089
	1959	15.39	Std.Dev.	3.195	L3	0.161	L-Kur 0.074
	1960	14.20	CV	0.202	L4	0.134	
	1961	15.70	HazenS.	0.812			
	1962	13.39					
	1963	18.84					
	1964	19.49					
	1965	18.14					
	1966	18.84					
	1967	13.39					
	1968	15.39					
	1969	13.56					
	1970	10.94					
	1971	13.39					
	1972	10.90					
	1973	13.31					
	1974	14.37					
	1975	11.29					
	1976	19.13					
	1977	11.68					
	1978	26.36					
	1979	16.91					
	1980	17.14					
	1981	17.04					
	1982	17.04					
	1983	19.35					
	1984	11.98					
	1985	12.49					
	1986	14.20					
	1987	15.16					
	1988	15.45					
	1989	12.74					
	1990	14.88					
	1991	19.03					
	1992	12.87					
	1993	14.88					
	1994	16.89					
	1995	19.99					
	1996	15.16					
	1997	15.73					
	1998	14.88					
	1999	17.49					
	2000	19.51					
	2001	19.35					
	2002	19.67					
	2003	11.98					
	2004	18.10					

6011 RIVER FANE @ MOYLES MILL

EV1

AMF(m^3/s)

EV1 y

+ winter peak

LO2

AMF(m^3/s)

Logistic reduced variate

Normal N(0,1) y

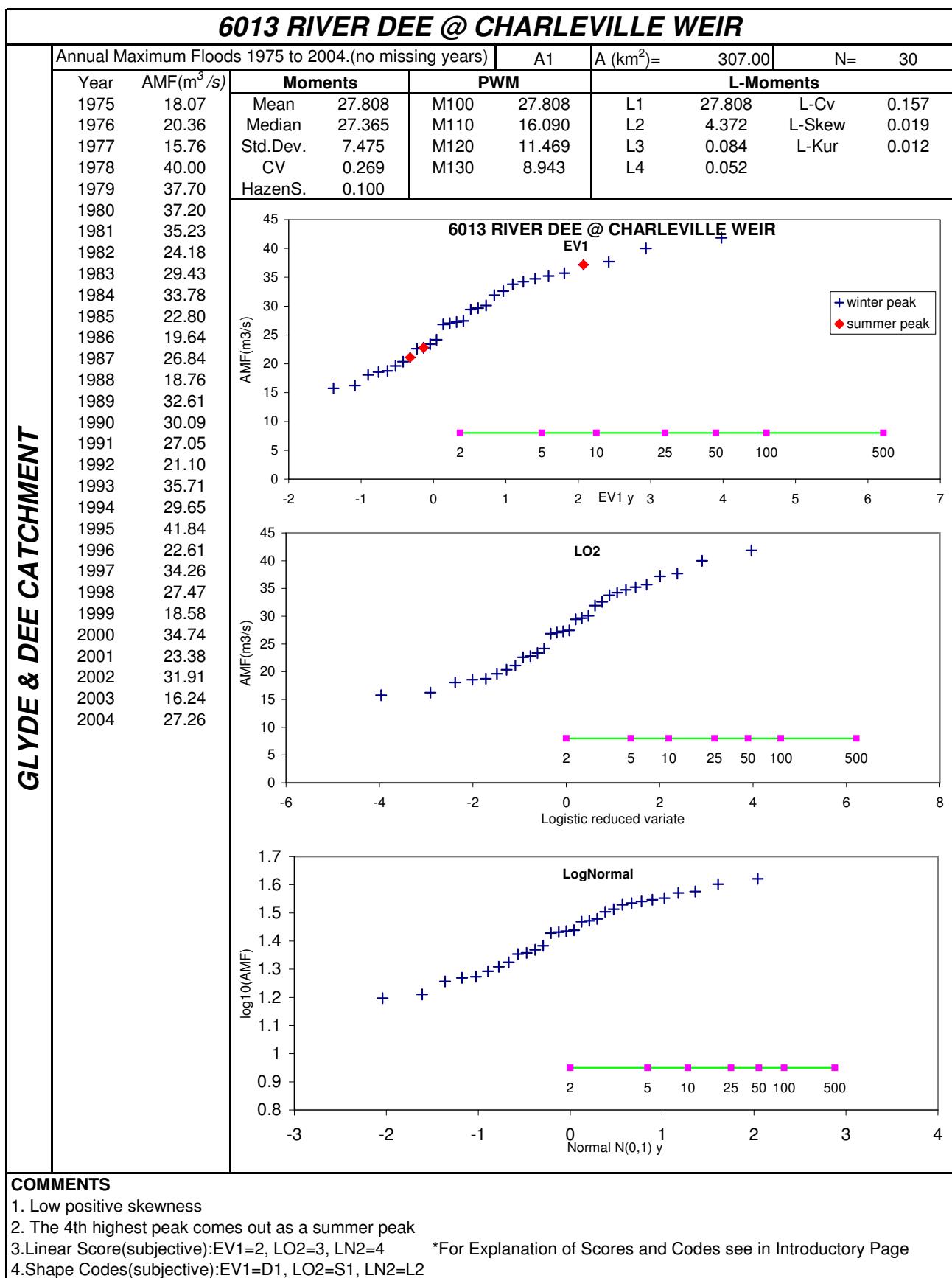
LogNormal

log10(AMF)

Normal N(0,1) y

COMMENTS

- Medium skewness
- No summer peak was observed in the AM series
- Linear Score (subjective) :EV1=4, LO2=2, LN2=3 *For Explanation of Scores and Codes see in Introductory Page
- Shape Codes (subjective) :EV1=L2, LO2=U1, LN2=L2



COMMENTS

1. Low positive skewness
2. The 4th highest peak comes out as a summer peak
3. Linear Score(subjective):EV1=2, LO2=3, LN2=4 *For Explanation of Scores and Codes see in Introductory Page
4. Shape Codes(subjective):EV1=D1, LO2=S1, LN2=L2

GLYDE & DEE CATCHMENT

6014 RIVER GLYDE @ TALLANSTOWN

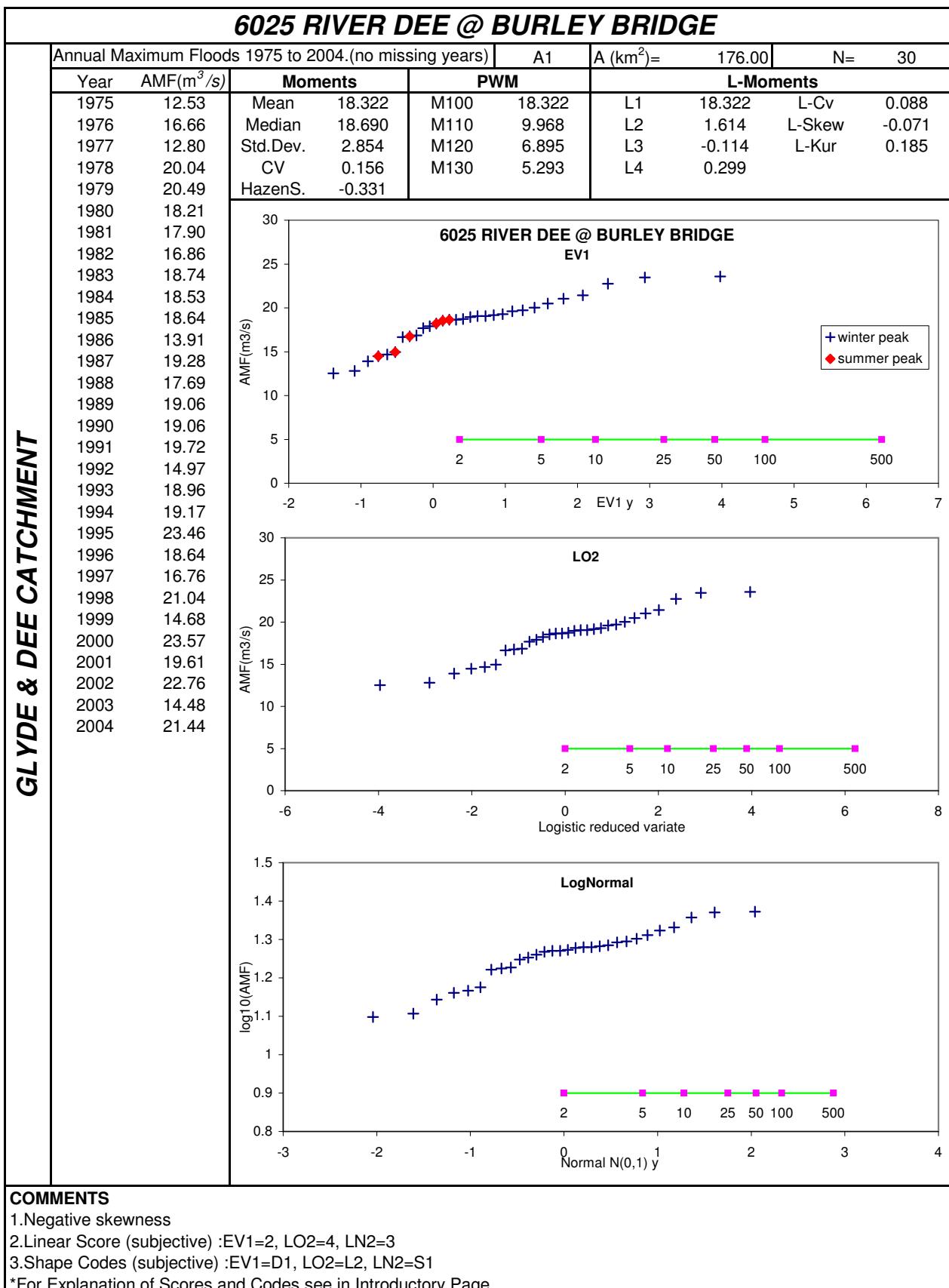
Annual Maximum Floods 1975 to 2004.(no missing years)				A1	A (km^2) =	270.00	N= 30
Year	AMF(m^3/s)	Moments	PWM	L-Moments			
1975	15.49	Mean	22.557	L1	22.557	L-Cv	0.149
1976	19.86	Median	21.460	L2	3.355	L-Skew	0.224
1977	15.30	Std.Dev.	6.045	L3	0.751	L-Kur	0.121
1978	39.40	CV	0.268	L4	0.406		
1979	24.64	HazenS.	1.306				
1980	24.13						
1981	32.39						
1982	23.63						
1983	30.62						
1984	30.62						
1985	17.70						
1986	18.54						
1987	21.23						
1988	16.87						
1989	25.15						
1990	25.15						
1991	17.70						
1992	16.97						
1993	28.63						
1994	22.65						
1995	33.30						
1996	21.84						
1997	19.46						
1998	15.30						
1999	19.86						
2000	23.63						
2001	20.76						
2002	18.12						
2003	16.07						
2004	21.69						

The figure consists of three vertically stacked scatter plots. Each plot shows the relationship between Annual Maximum Flow (AMF) in m^3/s on the y-axis (ranging from 0 to 45) and a reduced variate on the x-axis. The top plot is for EV1 (Linear Score), the middle for LO2 (Logistic Score), and the bottom for LogNormal (Normal Score). Data points are blue '+' symbols representing winter peaks and red diamonds representing summer peaks. A horizontal green line at AMF ≈ 10 represents the mean flow level. The x-axis for EV1 ranges from -2 to 7, for LO2 from -6 to 8, and for LogNormal from -3 to 4.

COMMENTS

1. Linear Score (subjective) :EV1=4, LO2=2, LN2=3
2. Shape Codes (subjective) :EV1=L1, LO2=U1, LN2=L2

*For Explanation of Scores and Codes see in Introductory Page



GLYDE & DEE CATCHMENT

6026 RIVER GLYDE @ ACLINT BRIDGE

Annual Maximum Floods 1959 to 2004.(no missing years)			A1	A (km^2) =	144.00	N=	46			
Year	AMF(m^3/s)		Moments	PWM	L-Moments					
1959	12.30		Mean	13.867	M100	13.867	L1	13.867	L-Cv	0.177
1960	23.89		Median	12.297	M110	8.161	L2	2.456	L-Skew	0.240
1961	10.99		Std.Dev.	4.434	M120	5.949	L3	0.590	L-Kur	0.092
1962	12.30		CV	0.320	M130	4.731	L4	0.227		
1963	15.50		HazenS.	1.051						
1964	24.12									
1965	18.61									
1966	15.50									
1967	22.99									
1968	20.21									
1969	10.19									
1970	10.33									
1971	9.54									
1972	8.57									
1973	14.16									
1974	12.90									
1975	9.12									
1976	10.69									
1977	8.85									
1978	22.33									
1979	12.60									
1980	17.66									
1981	18.61									
1982	10.33									
1983	14.32									
1984	14.99									
1985	11.44									
1986	10.77									
1987	16.92									
1988	7.51									
1989	14.82									
1990	17.66									
1991	12.90									
1992	11.51									
1993	18.81									
1994	11.96									
1995	21.46									
1996	10.55									
1997	12.00									
1998	10.33									
1999	10.40									
2000	10.48									
2001	11.29									
2002	14.65									
2003	8.95									
2004	11.86									

The figure consists of three vertically stacked plots showing the relationship between observed data points (blue plus signs) and fitted distributions (green squares).

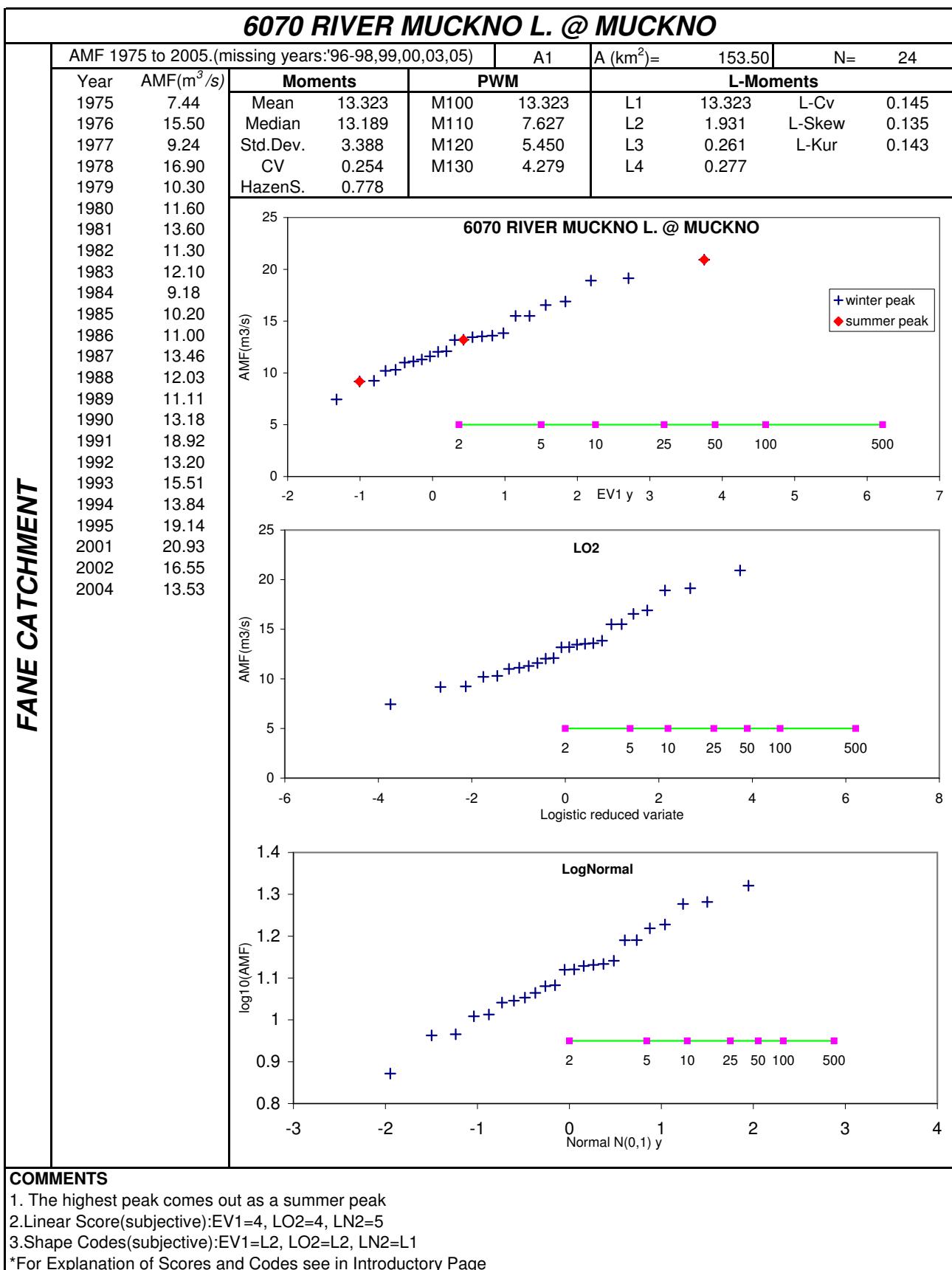
- Top Plot:** Y-axis is AMF (m^3/s) ranging from 0 to 30. X-axis is EV1 y on a logarithmic scale from 0.2 to 500. The plot title is "6026 RIVER GLYDE @ ACLINT BRIDGE EV1". It includes a legend: blue plus signs for "winter peak" and red diamonds for "summer peak".
- Middle Plot:** Y-axis is AMF (m^3/s) ranging from 0 to 30. X-axis is "Logistic reduced variate" ranging from -6 to 8. The plot title is "LO2".
- Bottom Plot:** Y-axis is $\log_{10}(\text{AMF})$ ranging from 0.6 to 1.5. X-axis is "Normal N(0,1) y" ranging from -3 to 4. The plot title is "LogNormal".

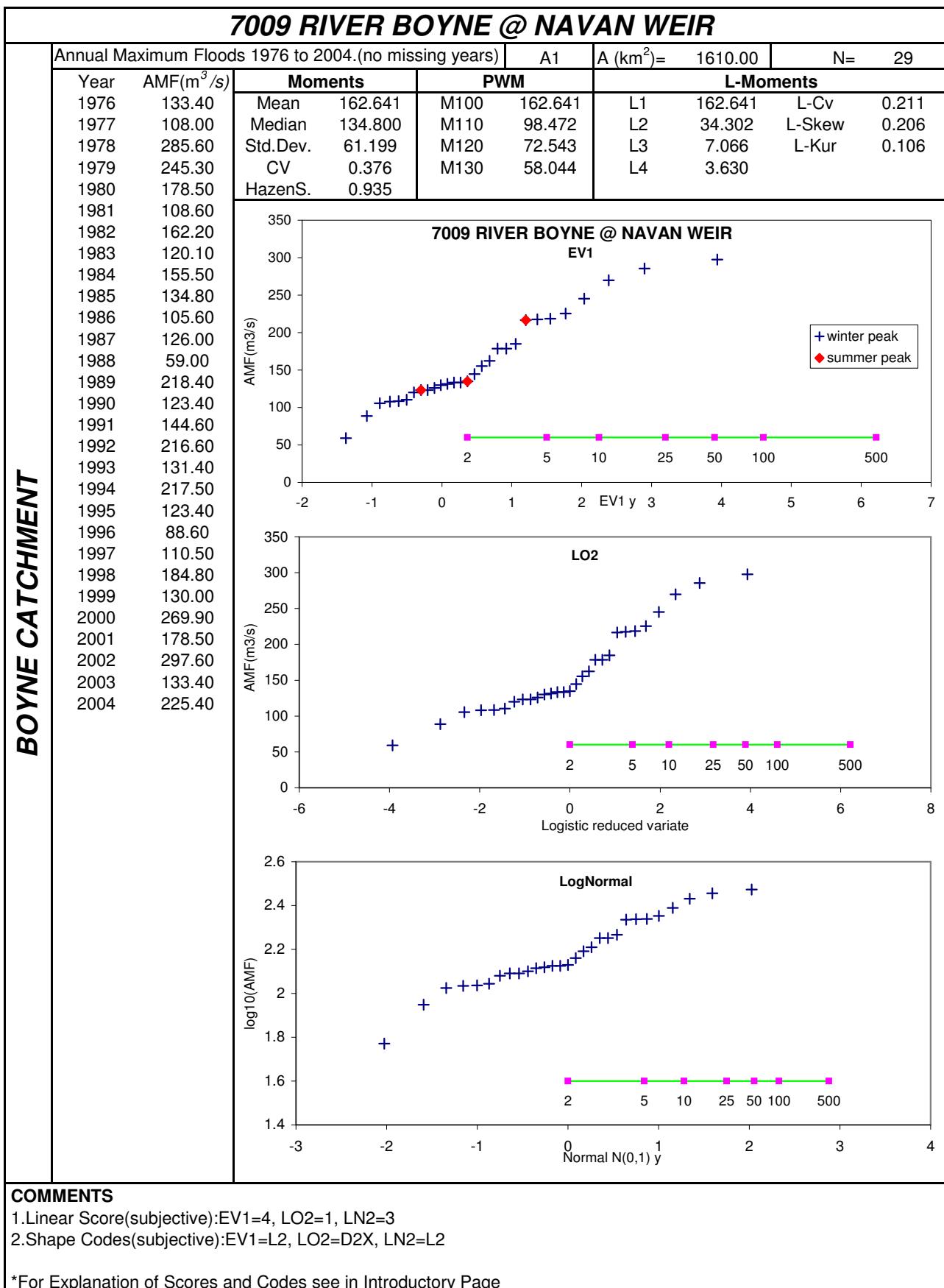
COMMENTS

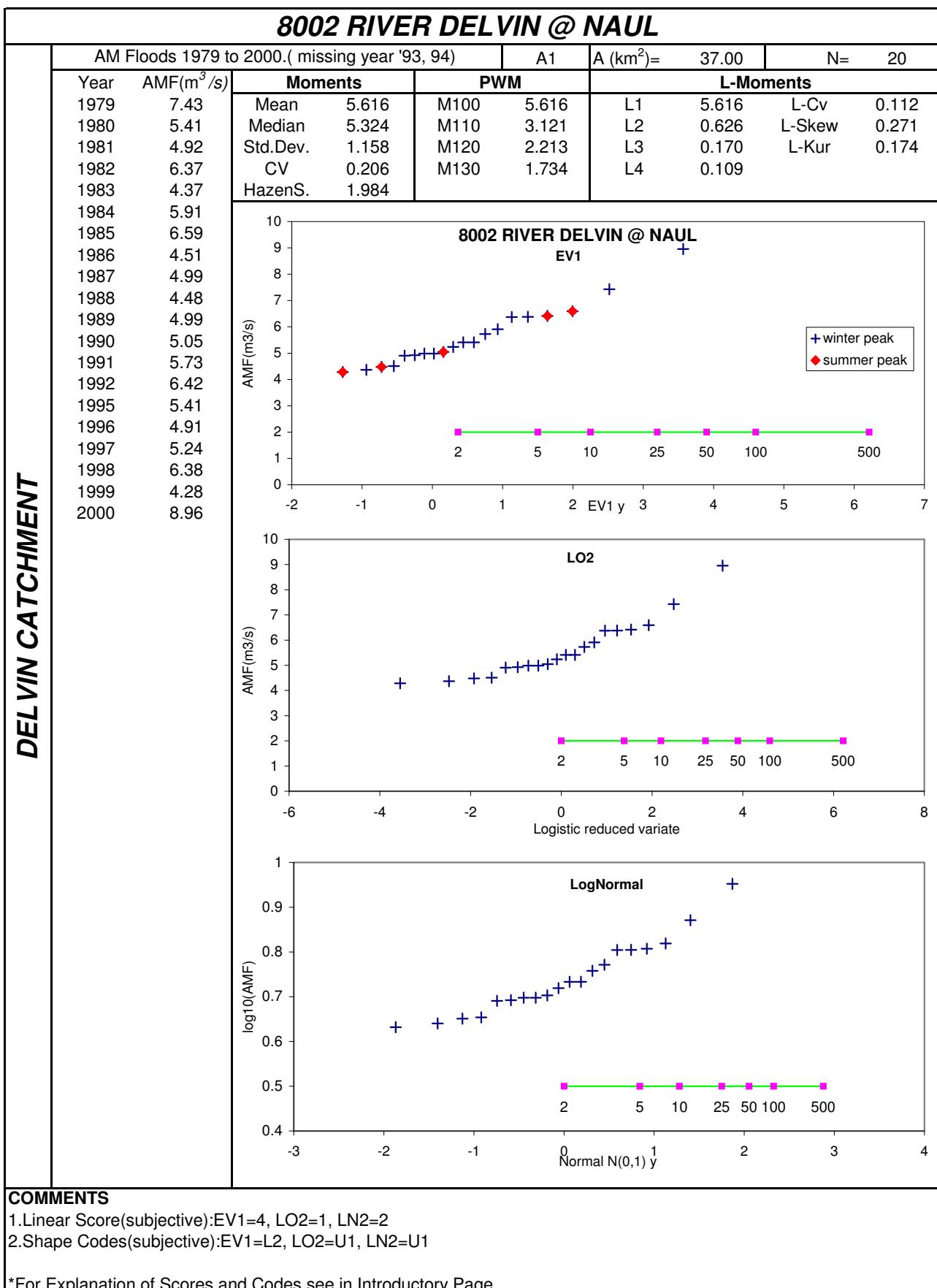
- 1.Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot
 - 2.Linear Score(subjective):EV1=3, LO2=1, LN2=2
 - 3.Shape Codes(subjective):EV1=S1, LO2=S2, LN2=S2

*For Explanation of Scores and Codes see in Introductory Page

For Explanation of Scores and Codes see in Introductory Page



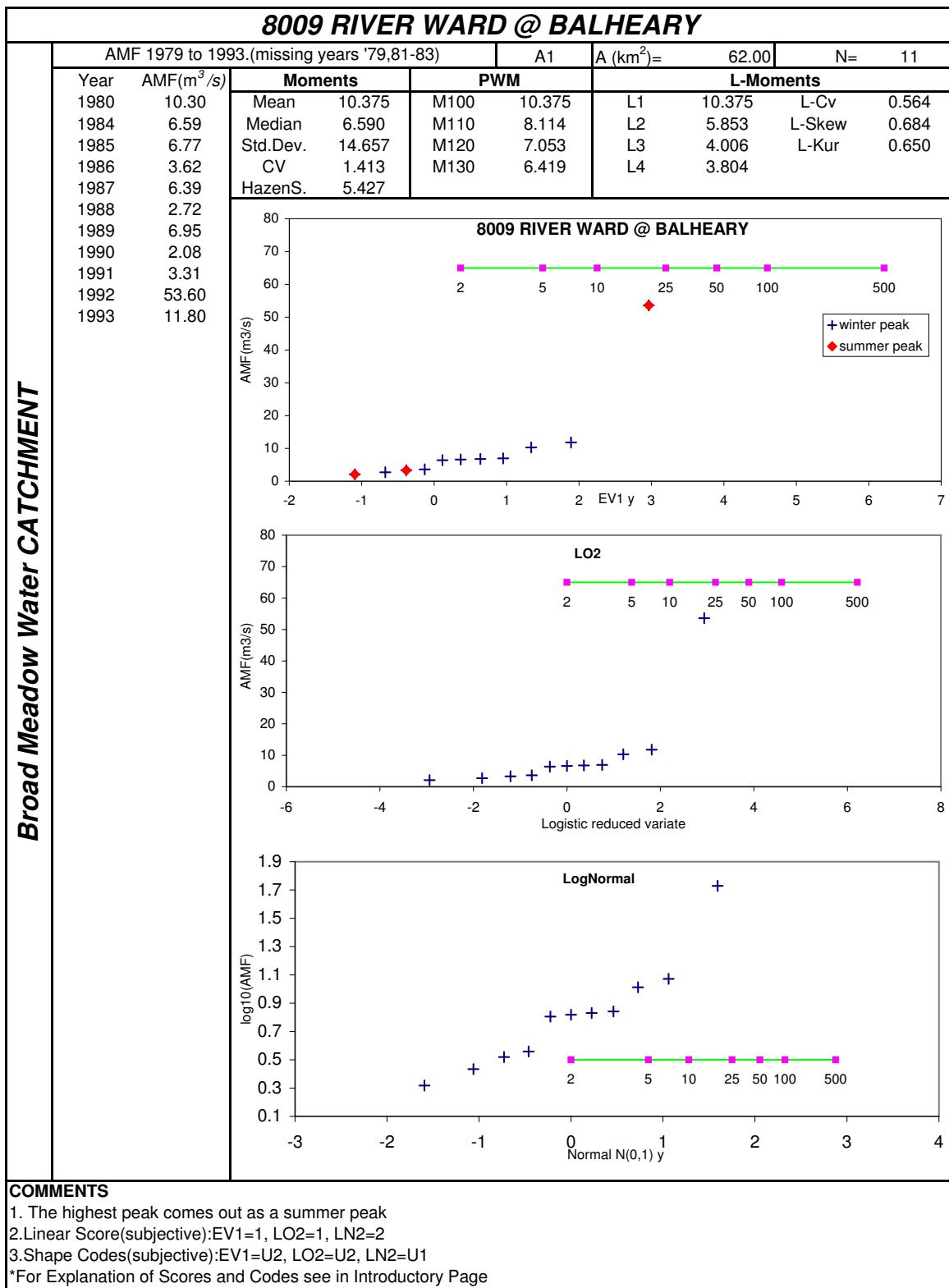


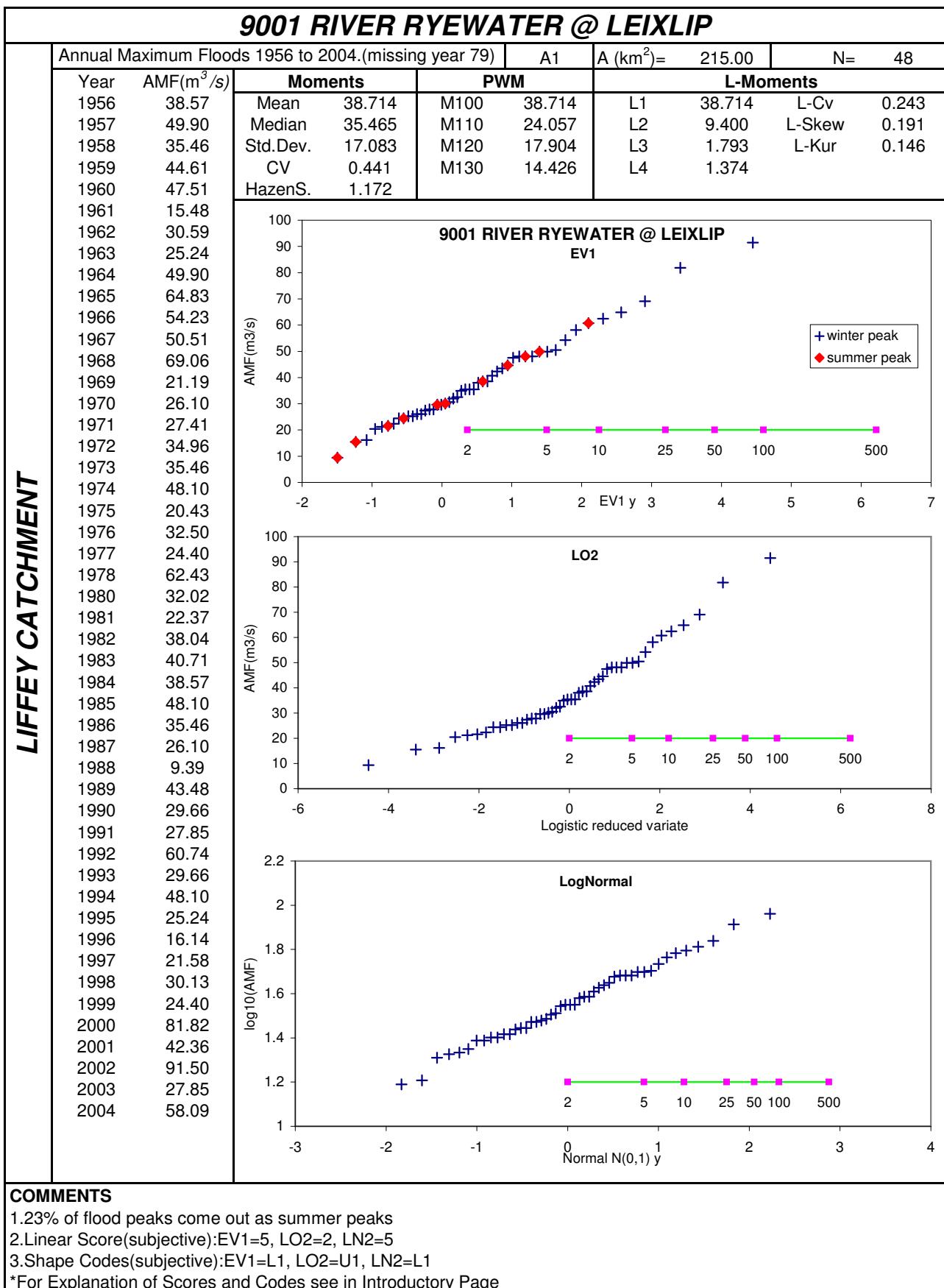


COMMENTS

- Linear Score(subjective):EV1=4, LO2=1, LN2=2
- Shape Codes(subjective):EV1=L2, LO2=U1, LN2=U1

*For Explanation of Scores and Codes see in Introductory Page





9002 RIVER GRIFFEEN @ LUCAN

Annual Maximum Floods '78 to '01. (no missing years)				A1	A (km^2) =	37.00	N=	24		
LIFFEY CATCHMENT	Year	AMF(m^3/s)	Moments	PWM		L-Moments				
	1978	2.86	Mean	7.235	M100	7.235	L1	7.235	L-Cv	0.417
	1979	6.47	Median	5.400	M110	5.127	L2	3.019	L-Skew	0.390
	1980	8.86	Std.Dev.	5.982	M120	4.118	L3	1.179	L-Kur	0.252
	1981	2.21	CV	0.827	M130	3.500	L4	0.762		
	1982	3.64	HazenS.	2.399						
	1983	8.68								
	1984	3.84								
	1985	4.62								
	1986	16.60								
	1987	11.00								
	1988	5.56								
	1989	1.26								
	1990	3.27								
	1991	4.28								
	1992	2.37								
	1993	22.50								
	1994	9.50								
	1995	4.95								
	1996	1.83								
	1997	5.25								
	1998	6.18								
	1999	5.55								
	2000	23.70								
2001	8.66									

9002 RIVER GRIFFEEN @ LUCAN

AMF(m^3/s)

EV1 y

+ winter peak
◆ summer peak

LO2

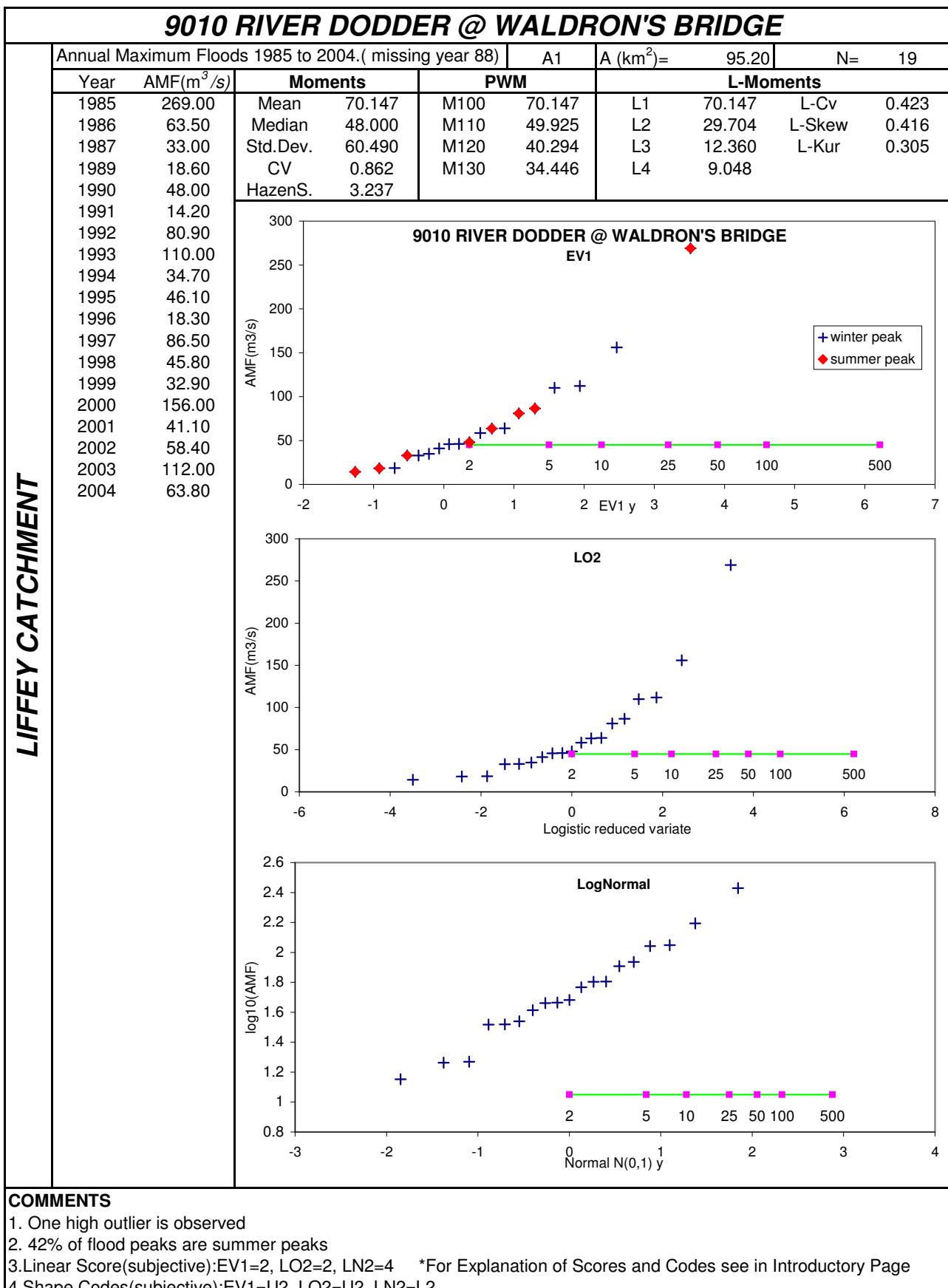
AMF(m^3/s)

Logistic reduced variate

LogNormal

log₁₀(AMF)

Normal N(0,1) y

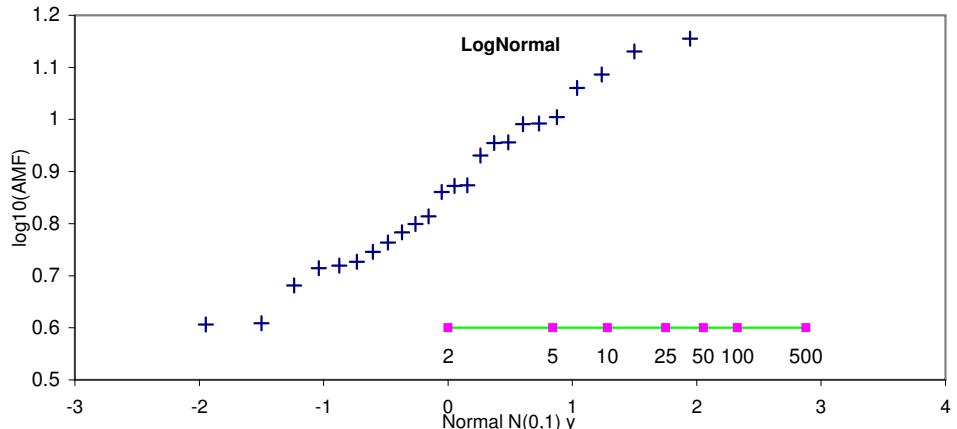
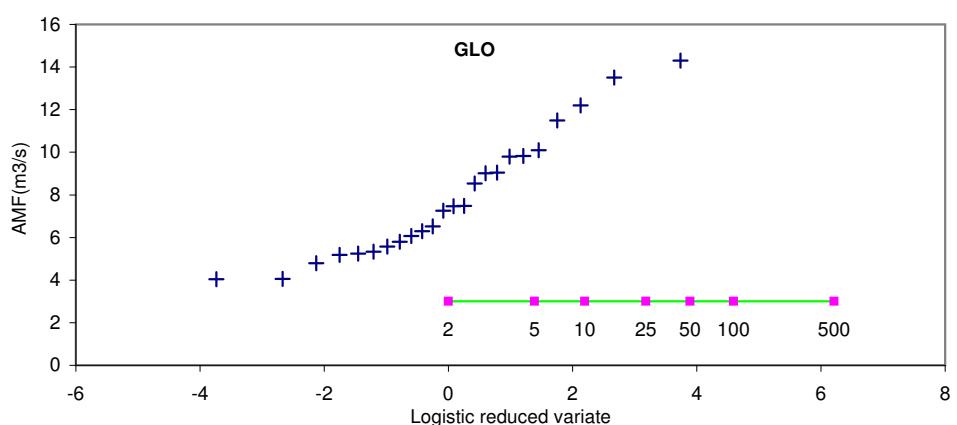
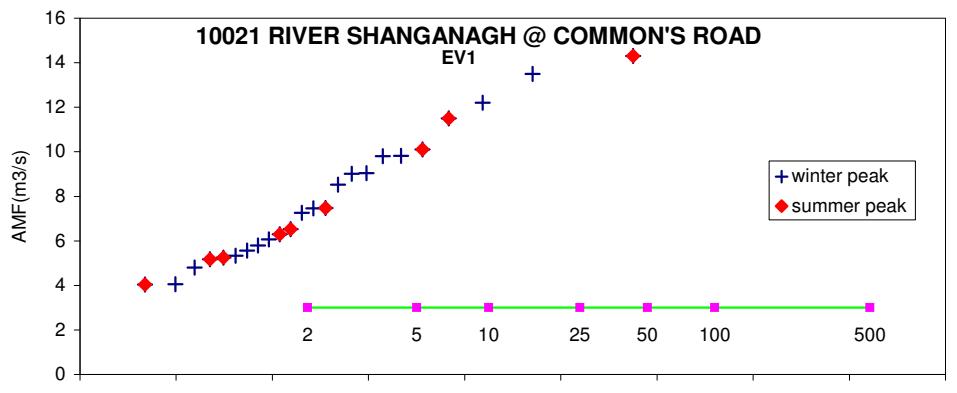


COMMENTS

1. One high outlier is observed
2. 42% of flood peaks are summer peaks
3. Linear Score(subjective):EV1=2, LO2=2, LN2=4 *For Explanation of Scores and Codes see in Introductory Page
4. Shape Codes(subjective):EV1=U2, LO2=U2, LN2=L2

10021 RIVER SHANGANAGH @ COMMON'S ROAD

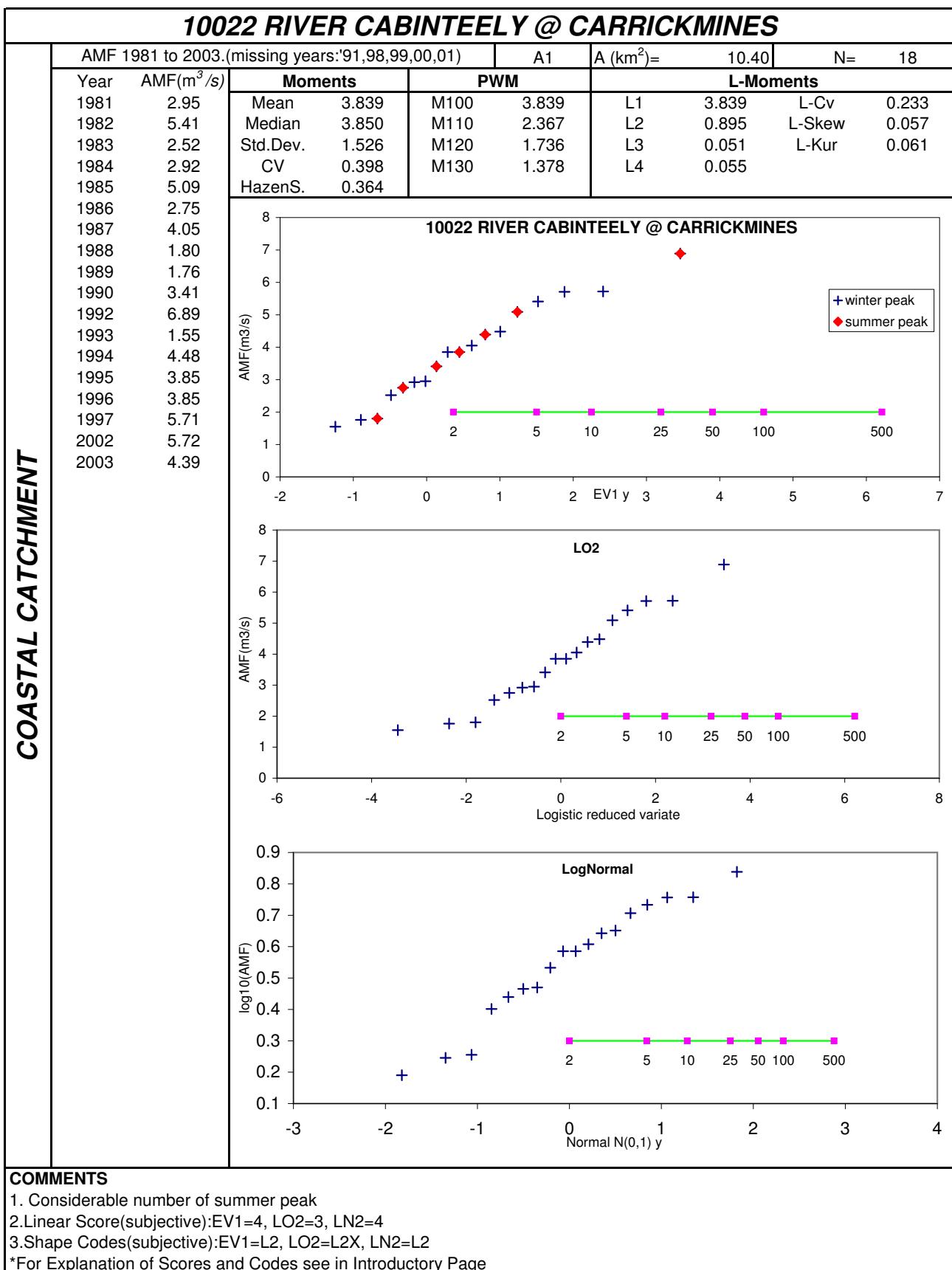
Annual Maximum Floods 1980 to 2004.(missing year 00)				A1	A (km ²)=	30.90	N=	24
Year	AMF(m ³ /s)	Moments	PWM	L-Moments				
1980	5.18	Mean	7.871	M100	7.871	L1	7.871	L-Cv 0.213
1981	5.57	Median	7.360	M110	4.773	L2	1.674	L-Skew 0.186
1982	13.50	Std.Dev.	2.931	M120	3.513	L3	0.311	L-Kur 0.068
1983	5.33	CV	0.372	M130	2.805	L4	0.114	
1984	5.80	HazenS.	0.953					

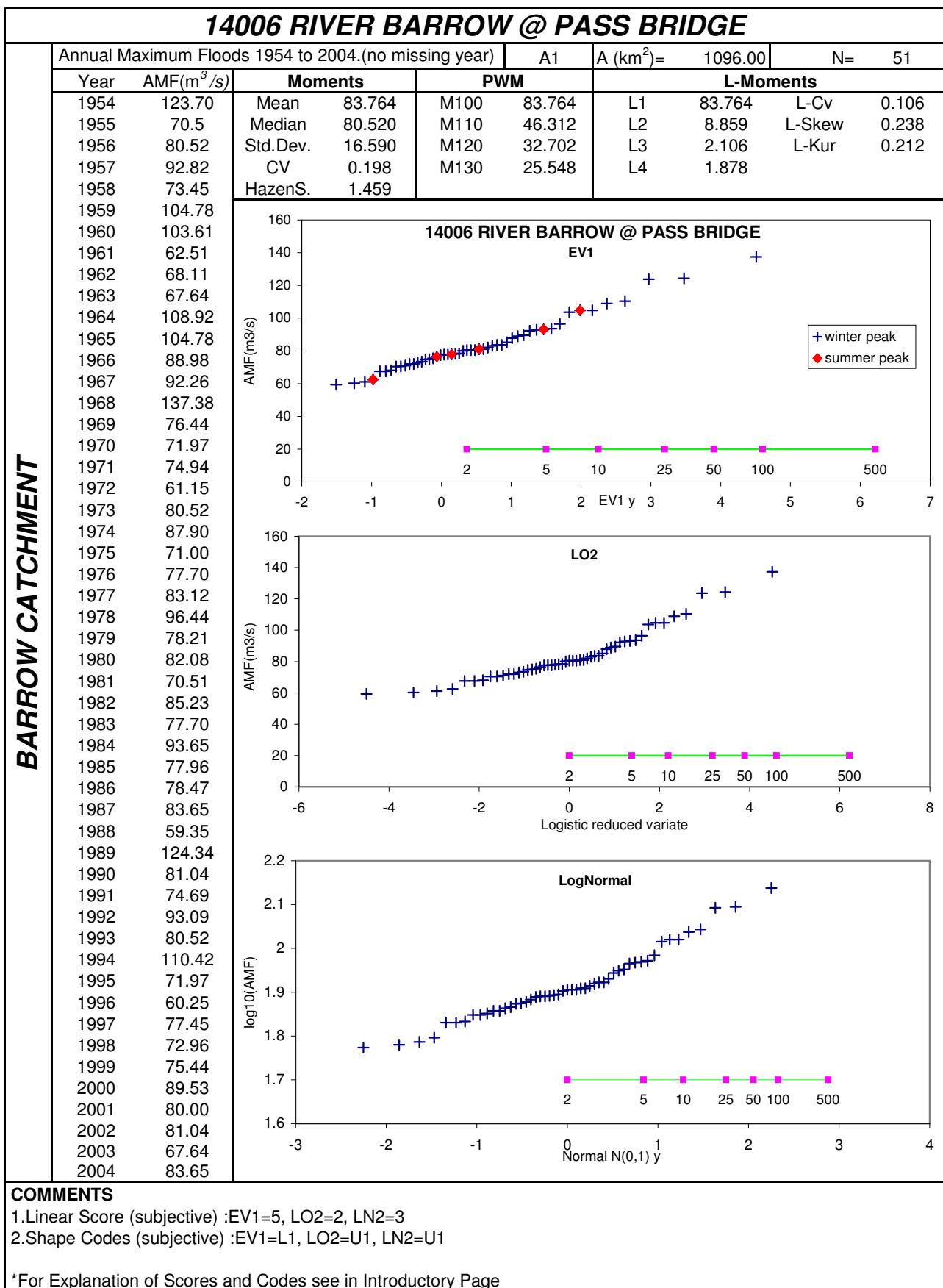


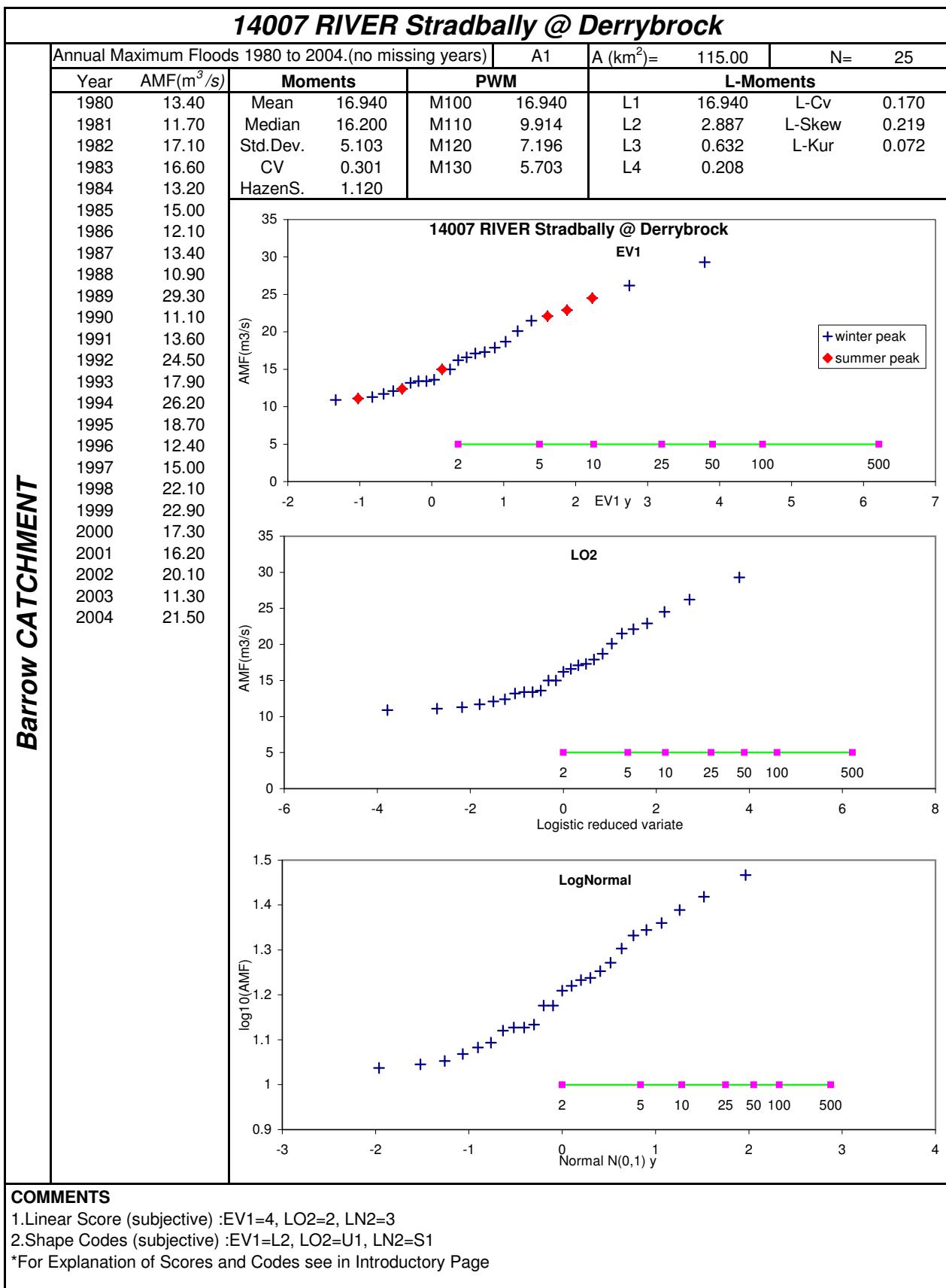
COMMENTS

- 1.The highest peak come out as a summer peak
 - 2.Linear Score (subjective) :EV1=4, LO2=2, LN2=3
 - 3.Shape Codes (subjective) :EV1=L2, LO2=S1, LN2=

*For Explanation of Scores and Codes see in Introductory Page







14011 RIVER Slate @ Rathangan								
Barrow CATCHMENT	Annual Maximum Floods 1979 to 2004.(no missing years)				A1	A (km^2)=	163.00	N= 26
	Year	AMF(m^3/s)	Moments	PWM	L-Moments			
	1979	16.30	Mean	12.070	M100	12.070	L1	12.070 L-Cv 0.143
	1980	13.10	Median	12.300	M110	6.900	L2	1.731 L-Skew 0.020
	1981	9.91	Std.Dev.	3.022	M120	4.894	L3	0.034 L-Kur 0.157
	1982	12.30	CV	0.250	M130	3.819	L4	0.272
	1983	12.80	HazenS.	0.190				
	1984	16.10						
	1985	12.80						
	1986	10.60						
	1987	10.80						
	1988	6.27						
	1989	18.70						
	1990	12.30						
	1991	8.82						
	1992	16.90						
	1993	9.47						
	1994	13.30						
	1995	8.82						
	1996	6.82						
	1997	10.80						
	1998	13.10						
	1999	13.30						
	2000	14.40						
	2001	12.00						
	2002	14.10						
	2003	8.70						
	2004	11.30						

14011 RIVER Slate @ Rathangan
EV1

AMF(m^3/s)

Log-reduced variate

LO2

AMF(m^3/s)

Logistic reduced variate

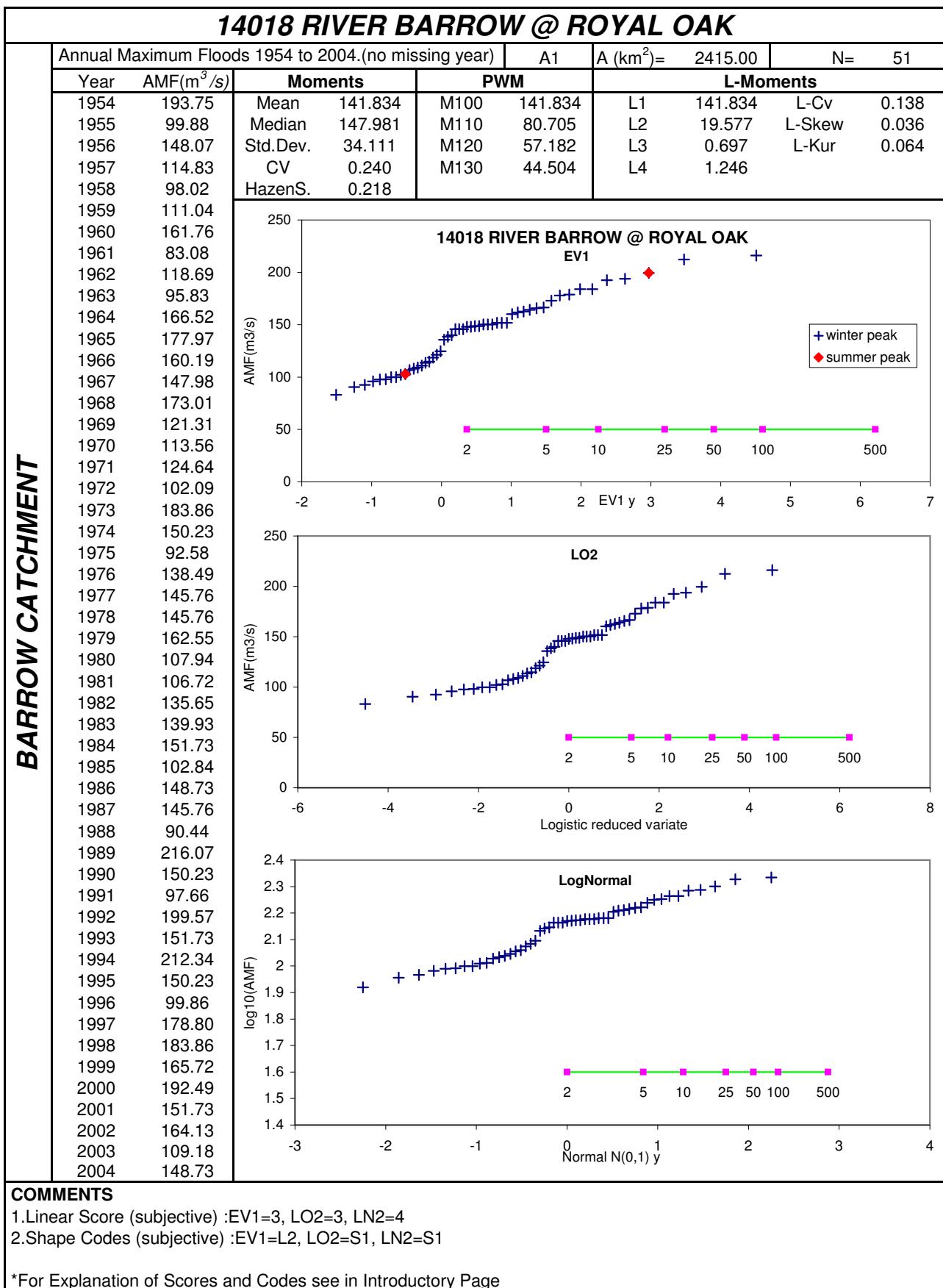
LogNormal

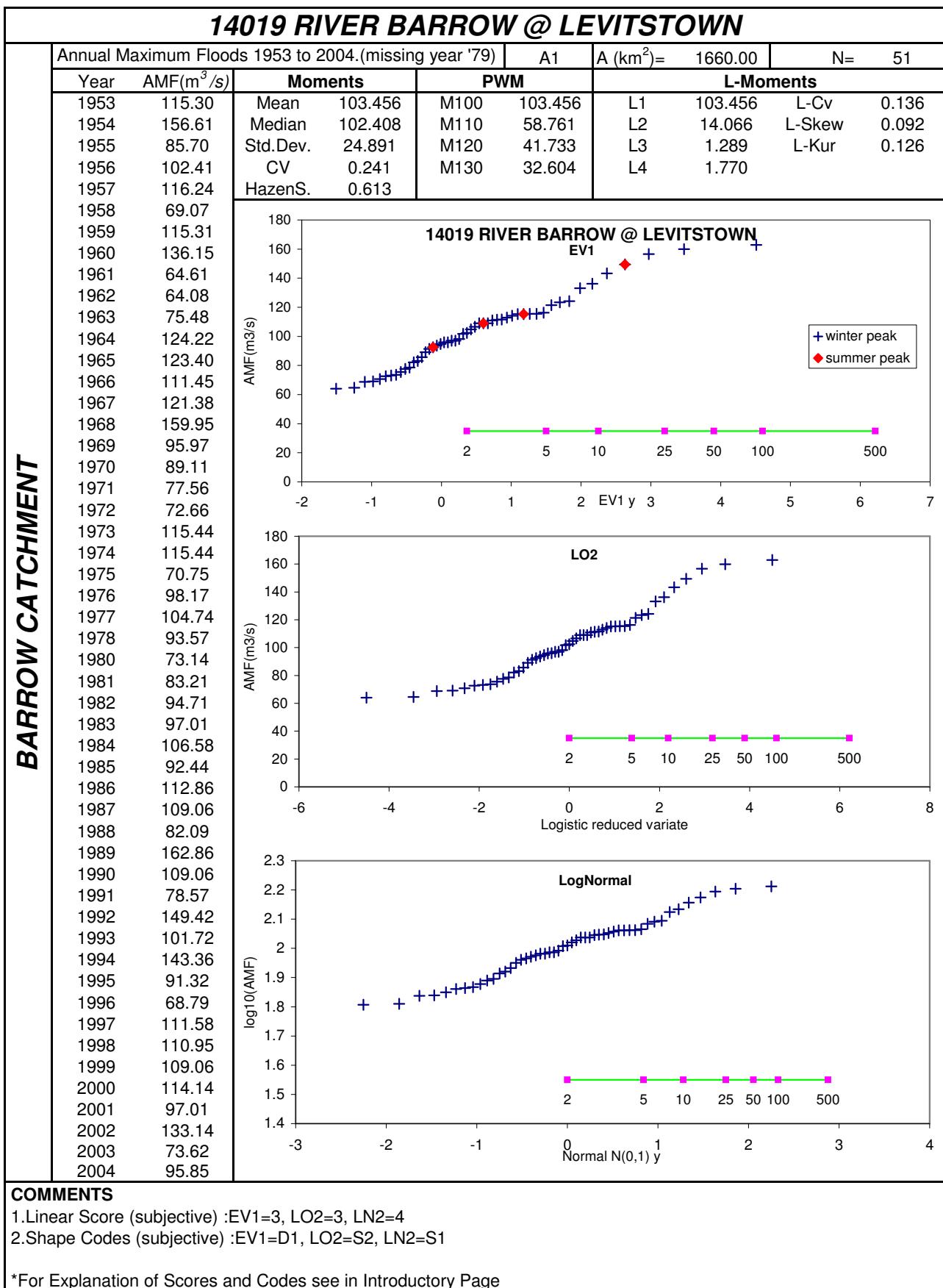
$\log_{10}(\text{AMF})$

Normal $N(0,1)$ y

COMMENTS

- 1.Linear Score (subjective) :EV1=3, LO2=3, LN2=3
 - 2.Shape Codes (subjective) :EV1=L2, LO2=L2, LN2=L2
- *For Explanation of Scores and Codes see in Introductory Page

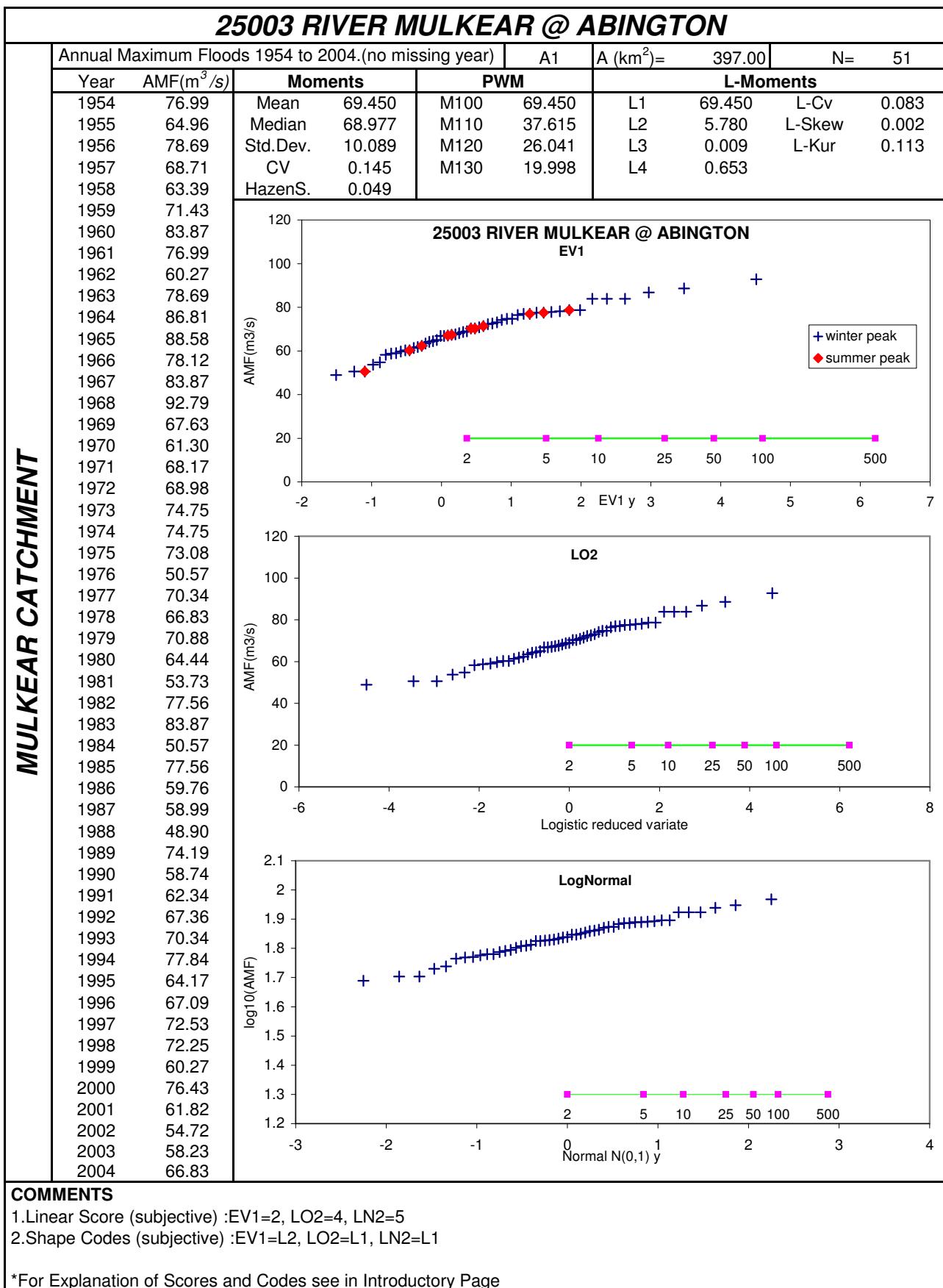




16011 RIVER SUIR @ CLONMEL								
SUIR CATCHMENT	AM Floods 1953 to 2004			A1	A (km^2) =	2173.00	N=	52
	Year	AMF(m^3/s)	Moments	PWM	L-Moments			
	1953	182	Mean	234.519	M100	234.519	L1	234.519
	1954	192	Median	223.000	M110	137.486	L2	40.454
	1955	149	Std.Dev.	70.272	M120	99.000	L3	3.602
	1956	272	CV	0.300	M130	77.841	L4	2.141
	1957	179	HazenS.	0.423				
	1958	152						
	1959	167						
	1960	295						
	1961	122						
	1962	162						
	1963	216						
	1964	211						
	1965	261						
	1966	146						
	1967	124						
	1968	298						
	1969	141						
	1970	138						
	1971	183						
	1972	221						
	1973	267						
	1974	223						
	1975	245						
	1976	171						
	1977	273						
	1978	335						
	1979	255						
	1980	191						
	1981	257						
	1982	254						
	1983	299						
	1984	182						
	1985	287						
	1986	223						
	1987	252						
	1988	309						
	1989	379						
	1990	189						
	1991	249						
	1992	176						
	1993	273						
	1994	352						
	1995	350						
	1996	306						
	1997	336						
	1998	264						
	1999	207						
	2000	389						
	2001	188						
	2002	207						
	2003	146						
	2004	350						

COMMENTS

- 1.Linear Score (subjective) :EV1=3, LO2=2, LN2=3
 - 2.Shape Codes (subjective) :EV1=U1, LO2=S1, LN2=S1
- *For Explanation of Scores and Codes see in Introductory Page



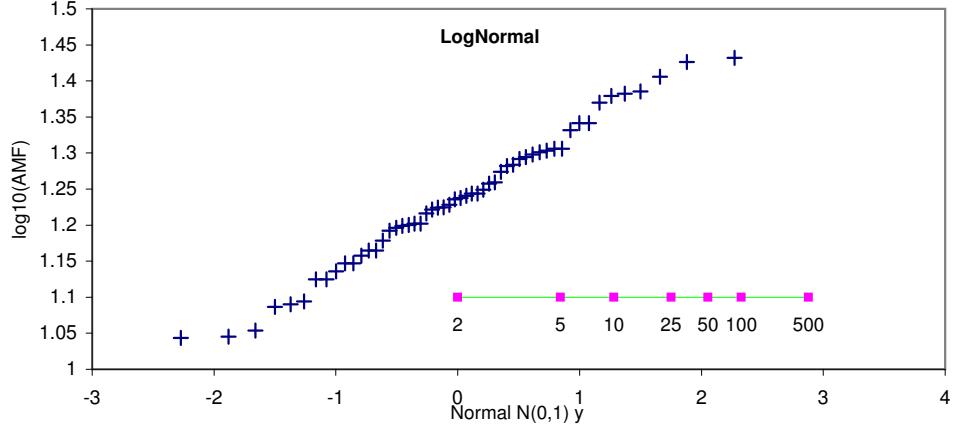
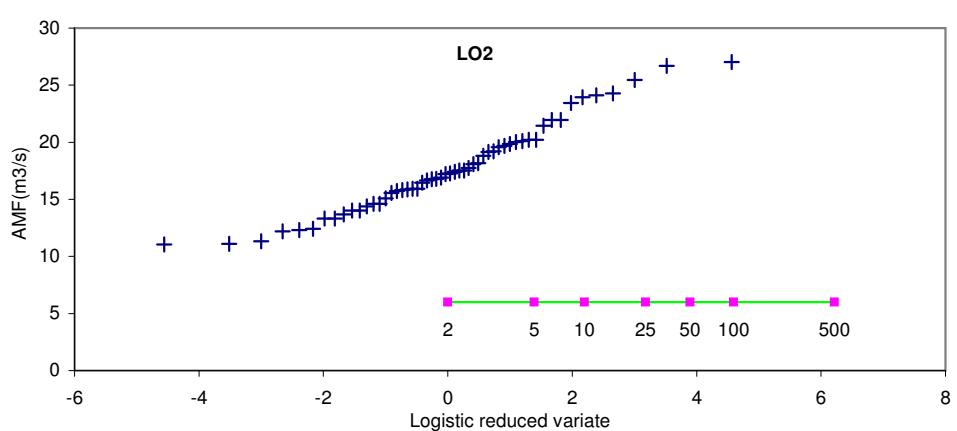
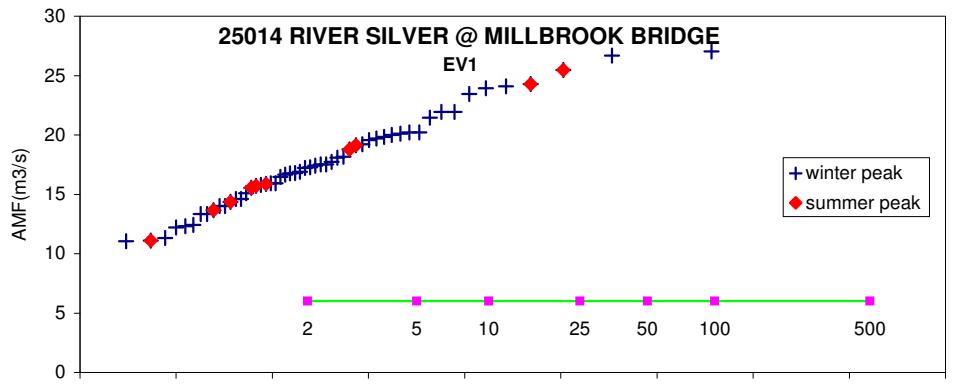
25006 RIVER BROSNA @ FERBANE						
BROSNA CATCHMENT	Annual Maximum Floods 1953 to 2004.(no missing year)			A1	A (km^2) =	1207.00
	Year	AMF(m^3/s)	Moments	PWM	L-Moments	
	1953	96.55	Mean	86.771	L1	86.771
	1954	147.21	Median	81.911	L2	11.862
	1955	78.34	Std.Dev.	21.478	L3	1.660
	1956	103.22	CV	0.248	L4	2.171
	1957	113.50	HazenS.	0.710		
	1958	76.86				
	1959	113.04				
	1960	118.11				
	1961	58.49				
	1962	69.02				
	1963	79.95				
	1964	114.03				
	1965	100.24				
	1966	120.21				
	1967	109.03				
	1968	137.21				
	1969	88.48				
	1970	68.04				
	1971	63.19				
	1972	37.59				
	1973	84.61				
	1974	81.91				
	1975	49.82				
	1976	87.09				
	1977	73.30				
	1978	81.91				
	1979	76.61				
	1980	66.84				
	1981	75.18				
	1982	75.66				
	1983	87.84				
	1984	67.98				
	1985	79.24				
	1986	81.42				
	1987	80.94				
	1988	61.48				
	1989	124.19				
	1990	72.83				
	1991	90.86				
	1992	92.13				
	1993	87.84				
	1994	115.78				
	1995	73.77				
	1996	62.81				
	1997	81.18				
	1998	75.66				
	1999	92.90				
	2000	89.35				
	2001	88.34				
	2002	81.91				
	2003	74.24				
	2004	104.11				

COMMENTS

- 1.Linear Score (subjective) :EV1=4, LO2=3, LN2=4
 2.Shape Codes (subjective) :EV1=L2, LO2=L2, LN2=S1

*For Explanation of Scores and Codes see in Introductory Page

25014 RIVER SILVER @ MILLBROOK BRIDGE							
OFFALY CATCHMENT	Annual Maximum Floods 1951 to 2004.(no missing year)			A1	A (km^2) =	165.00	N= 54
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1951	20.01	Mean	17.665	M100	17.665	L1 17.665 L-Cv 0.128
	1952	11.10	Median	17.247	M110	9.962	L2 2.258 L-Skew 0.103
	1953	16.76	Std.Dev.	3.975	M120	7.056	L3 0.233 L-Kur 0.125
	1954	21.95	CV	0.225	M130	5.505	L4 0.283
	1955	15.72	HazenS.	0.566			
	1956	19.85					
	1957	23.44					
	1958	19.22					
	1959	23.94					
	1960	26.68					
	1961	15.86					
	1962	16.91					
	1963	17.21					
	1964	24.11					
	1965	21.95					
	1966	21.46					
	1967	19.69					
	1968	27.03					
	1969	24.28					
	1970	16.46					
	1971	14.61					
	1972	15.93					
	1973	20.10					
	1974	18.16					
	1975	13.68					
	1976	16.78					
	1977	16.66					
	1978	17.41					
	1979	17.53					
	1980	17.28					
	1981	14.02					
	1982	18.80					
	1983	14.02					
	1984	18.09					
	1985	25.47					
	1986	19.15					
	1987	20.22					
	1988	17.74					
	1989	20.23					
	1990	12.20					
	1991	15.08					
	1992	15.56					
	1993	13.33					
	1994	19.57					
	1995	11.32					
	1996	14.37					
	1997	15.93					
	1998	13.33					
	1999	14.61					
	2000	15.81					
	2001	12.31					
	2002	11.05					
	2003	12.42					
	2004	17.53					
COMMENTS							
1.The 3rd and 4th highest flood come out as summer floods							
2.Linear Score (subjective) :EV1=4, LO2=3, LN2=4 *For Explanation of Scores and Codes see in Introductory Page							
3.Shape Codes (subjective) :EV1=L2, LO2=U1X, LN2=L2							

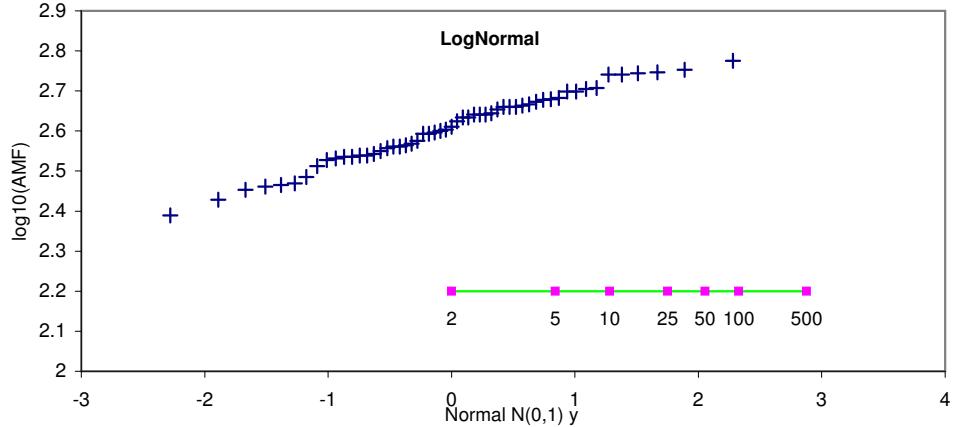
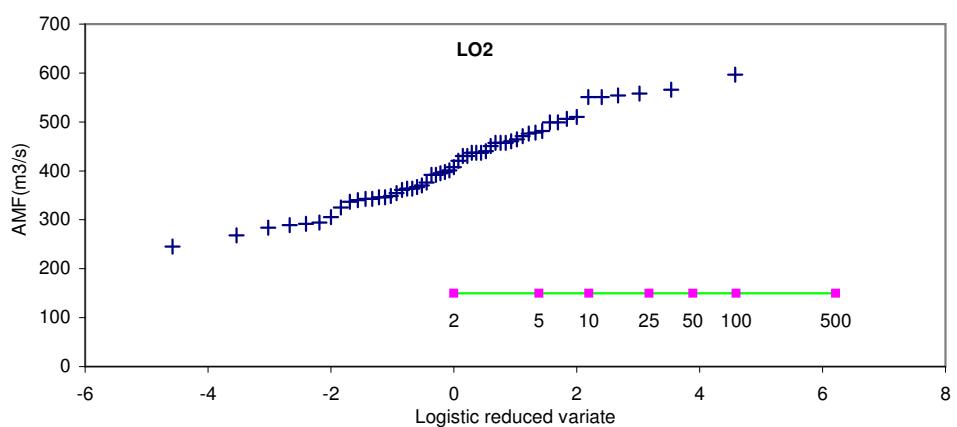
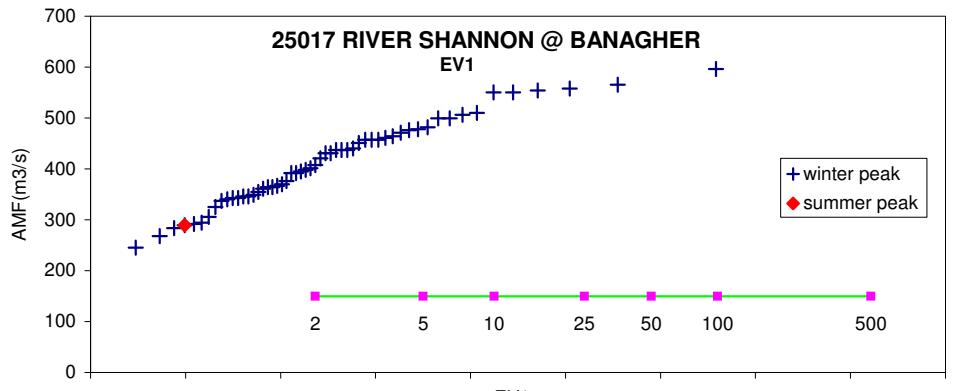


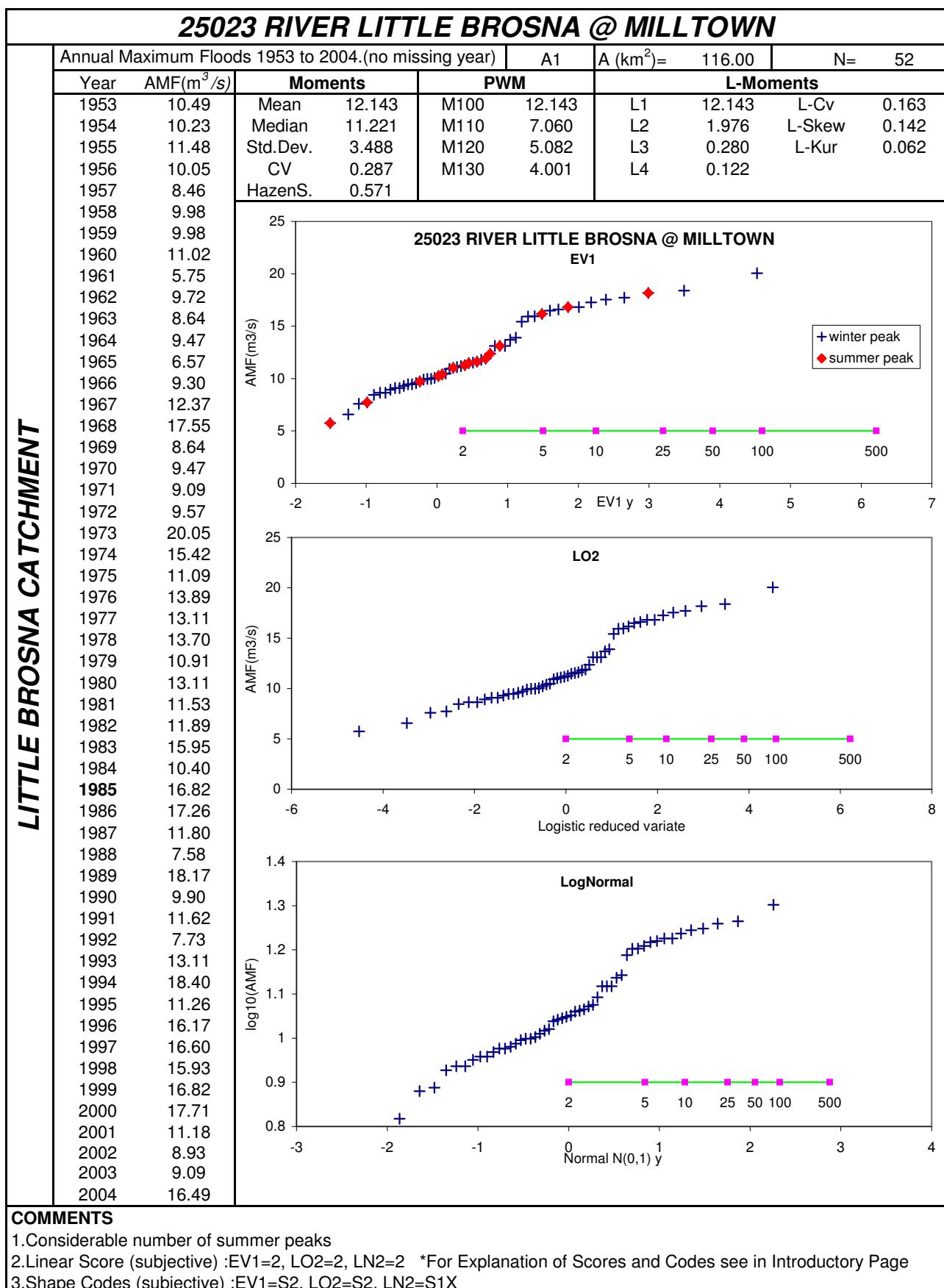
25017 RIVER SHANNON @ BANAGHER							
Annual Maximum Floods 1950 to 2004.(no missing year)				A1	A (km^2)=	N/A	N= 55
Year	AMF(m^3/s)	Moments	PWM	L-Moments			
1950	337.02	Mean	413.250	M100	413.250	L1	413.250 L-Cv 0.117
1951	430.53	Median	407.676	M110	230.827	L2	48.404 L-Skew 0.036
1952	267.95	Std.Dev.	84.092	M120	162.241	L3	1.735 L-Kur 0.081
1953	354.80	CV	0.203	M130	125.724	L4	3.926
1954	596.51	HazenS.	0.180				
1955	283.79						
1956	450.63						
1957	363.86						
1958	342.90						
1959	550.57						
1960	457.43						
1961	366.90						
1962	291.89						
1963	440.52						
1964	506.49						
1965	510.10						
1966	369.96						
1967	464.29						
1968	499.33						
1969	363.86						
1970	391.74						
1971	289.18						
1972	245.04						
1973	391.74						
1974	471.19						
1975	305.64						
1976	437.18						
1977	345.85						
1978	401.26						
1979	457.43						
1980	376.12						
1981	394.90						
1982	407.68						
1983	457.43						
1984	348.82						
1985	360.82						
1986	460.85						
1987	499.33						
1988	325.43						
1989	558.09						
1990	481.65						
1991	345.85						
1992	398.07						
1993	437.18						
1994	550.57						
1995	294.61						
1996	437.18						
1997	420.66						
1998	430.53						
1999	565.67						
2000	478.15						
2001	554.32						
2002	339.95						
2003	342.90						
2004	476.40						

LW. SHANNON CATCHMENT

COMMENTS

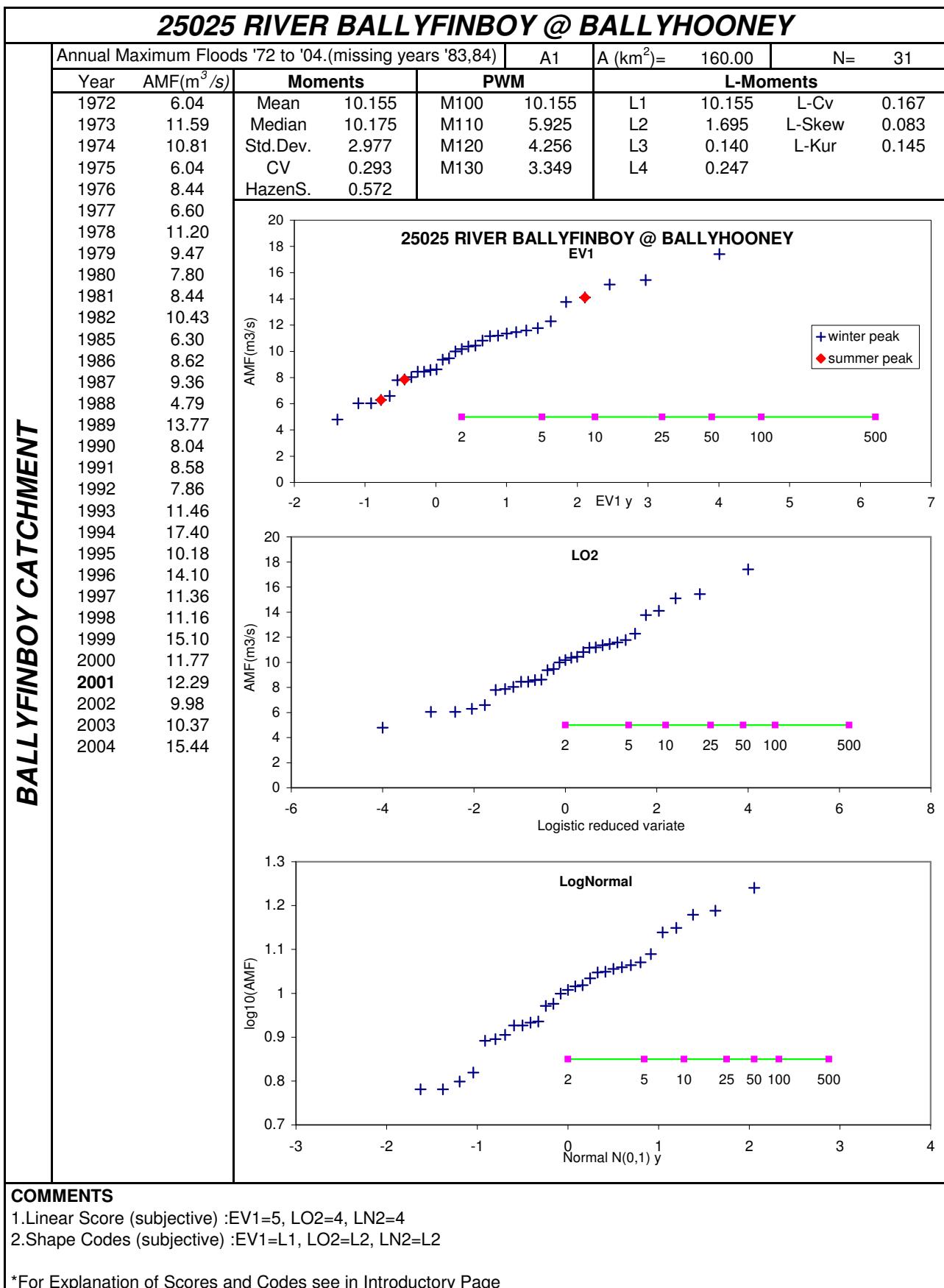
1. Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot
 2. Linear Score (subjective) :EV1=3, LO2=4, LN2=5 *For Explanation of Scores and Codes see in Introductory Page
 3. Shape Codes (subjective) :EV1=D1, LO2=L2, LN2=L1





COMMENTS

1. Considerable number of summer peaks
2. Linear Score (subjective) :EV1=2, LO2=2, LN2=2 *For Explanation of Scores and Codes see in Introductory Page
3. Shape Codes (subjective) :EV1=S2, LO2=S2, LN2=S1X



25027 RIVER OLLATRIM @ GOURDEEN BRIDGE

NENAGH CATCHMENT

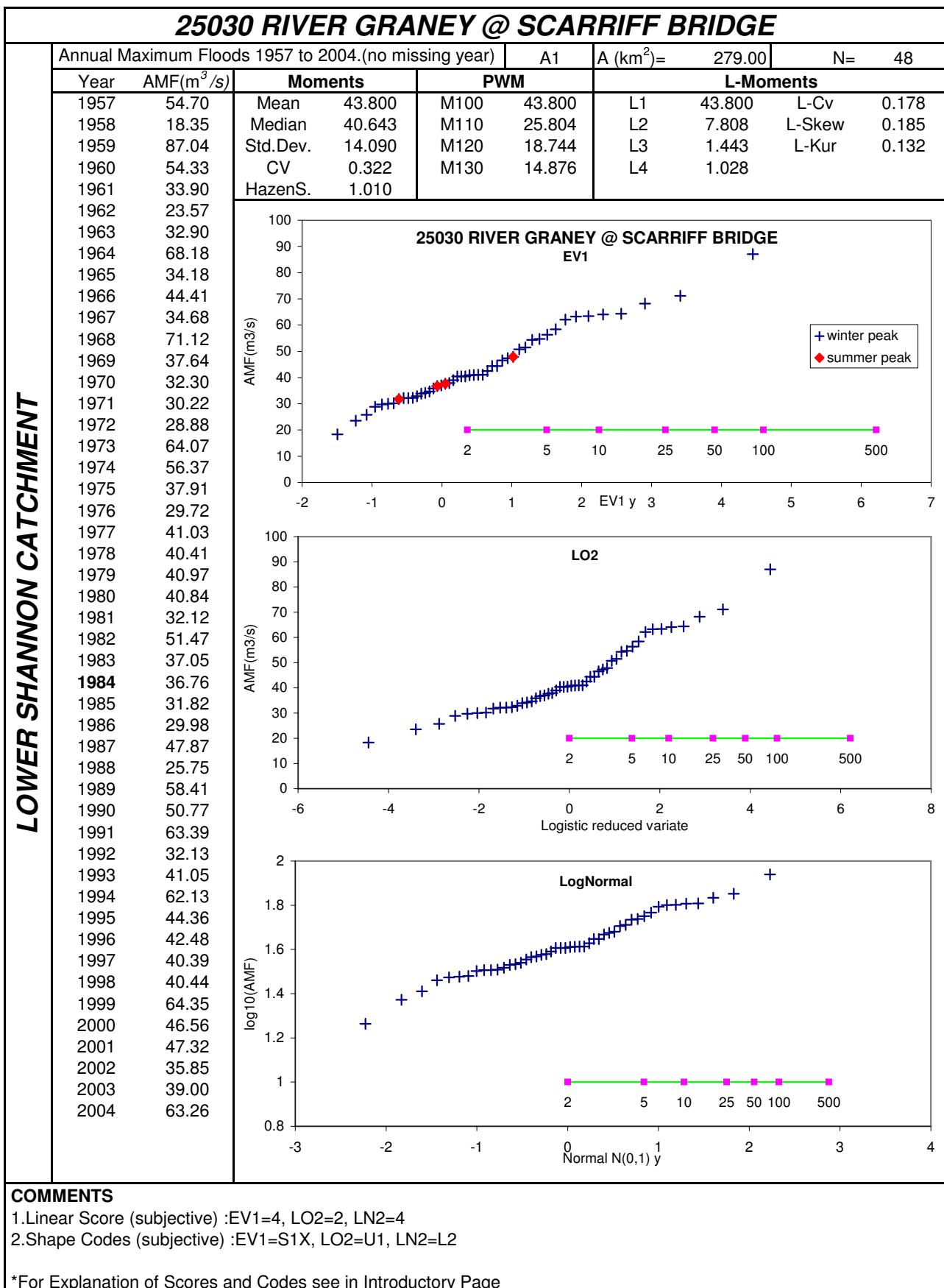
Annual Maximum Floods 1962 to 2004.(no missing years)				A1	A (km^2) =	118.00	N =	43	
Year	AMF(m^3/s)	Moments	PWM	L-Moments					
1962	29.62	Mean	23.323	M100	23.323	L1	23.323	L-Cv	0.158
1963	21.92	Median	22.095	M110	13.506	L2	3.689	L-Skew	0.046
1964	29.06	Std.Dev.	6.513	M120	9.647	L3	0.170	L-Kur	0.126
1965	18.55	CV	0.279	M130	7.556	L4	0.465		
1966	27.40	HazenS.	0.268						
1967	21.67								
1968	40.46								
1969	14.34								
1970	19.49								
1971	18.71								
1972	14.49								
1973	27.05								
1974	21.64								
1975	8.53								
1976	14.27								
1977	21.64								
1978	22.92								
1979	18.85								
1980	23.25								
1981	15.61								
1982	19.89								
1983	30.96								
1984	12.64								
1985	28.42								
1986	22.10								
1987	22.10								
1988	22.35								
1989	35.01								
1990	19.98								
1991	18.46								
1992	18.89								
1993	25.80								
1994	29.60								
1995	25.31								
1996	30.92								
1997	27.55								
1998	30.39								
1999	27.30								
2000	33.62								
2001	23.40								
2002	20.20								
2003	18.67								
2004	29.86								

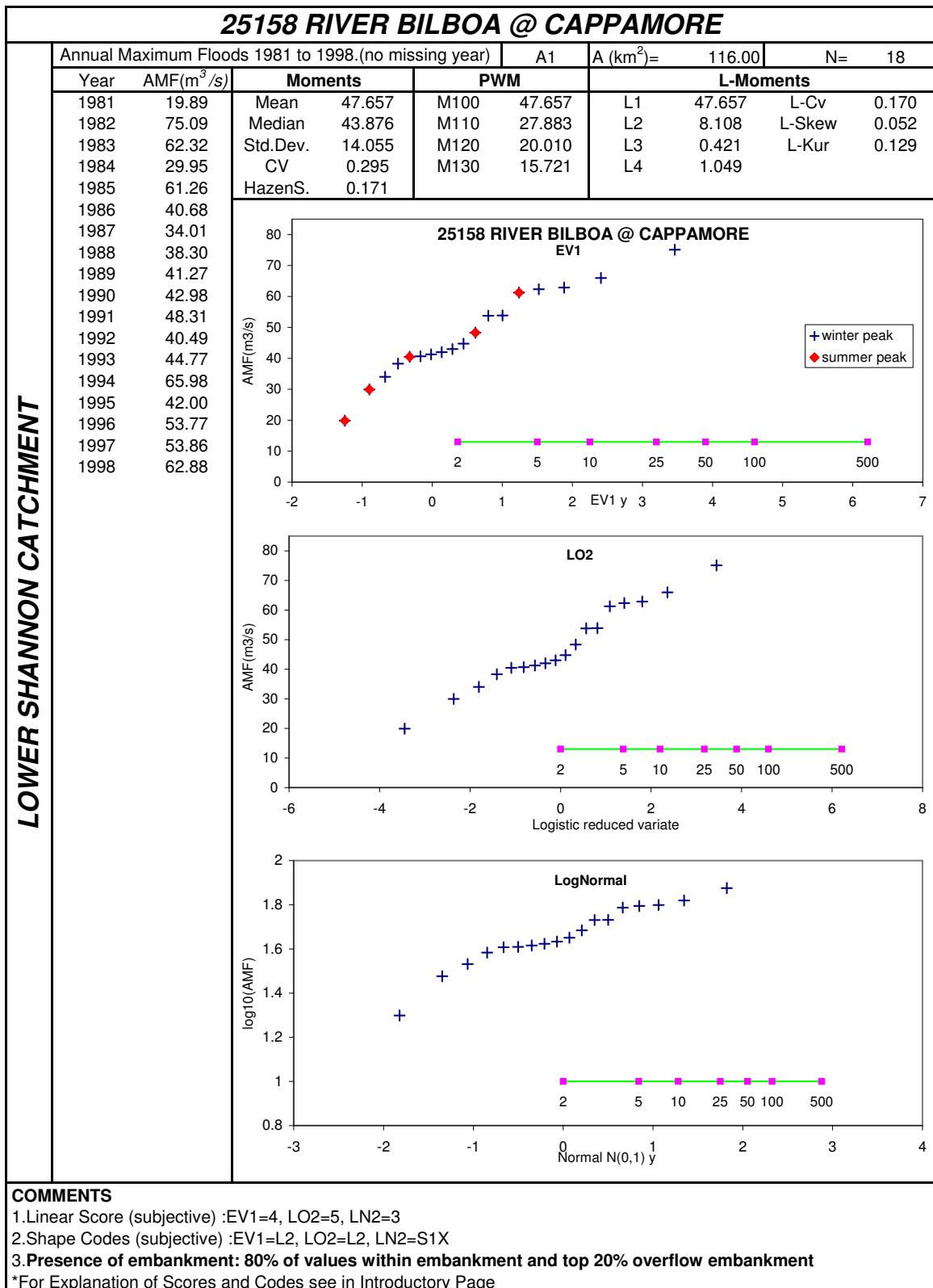
The figure consists of three vertically stacked scatter plots. Each plot has a legend in the upper right corner. The top plot is for 'EV1' and shows data points for winter peak (blue plus signs) and summer peak (red diamonds). The middle plot is for 'LO2' and shows data points for winter peak (blue plus signs). The bottom plot is for 'LogNormal' and shows data points for winter peak (blue plus signs).

COMMENTS

1. Linear Score (subjective) :EV1=4, LO2=5, LN2=3
 2. Shape Codes (subjective) :EV1=L2, LO2=L2, LN2=D1

*For Explanation of Scores and Codes see in Introductory Page



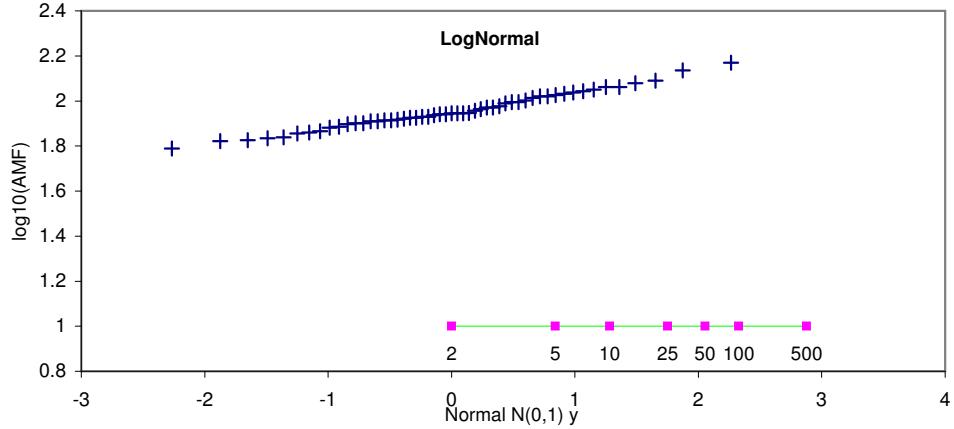
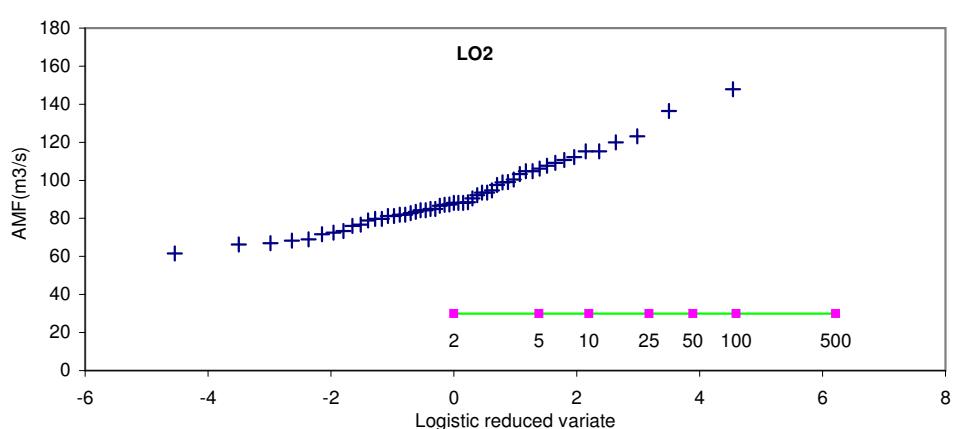
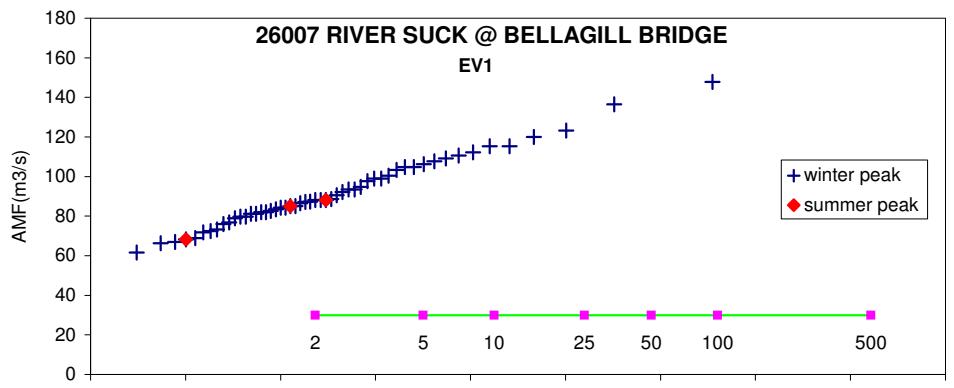


26006 RIVER SUCK @ WILLSBROOK								
SUCK CATCHMENT	Annual Maximum Floods 1952 to 2004.(no missing year)				A1	A (km^2) =	182.00	N= 53
	Year	AMF(m^3/s)	Moments	PWM		L-Moments		
	1952	16.24	Mean	26.566	M100	26.566	L1	26.566 L-Cv 0.152
	1953	30.34	Median	24.227	M110	15.305	L2	4.045 L-Skew 0.397
	1954	70.06	Std.Dev.	9.768	M120	11.146	L3	1.607 L-Kur 0.411
	1955	14.62	CV	0.368	M130	8.947	L4	1.665
	1956	22.43	HazenS.	3.869				
	1957	34.20						
	1958	24.53						
	1959	22.43						
	1960	21.42						
	1961	26.76						
	1962	17.67						
	1963	23.46						
	1964	30.34						
	1965	41.81						
	1966	18.56						
	1967	31.59						
	1968	68.66						
	1969	24.53						
	1970	23.46						
	1971	18.56						
	1972	21.81						
	1973	26.78						
	1974	23.40						
	1975	21.81						
	1976	21.03						
	1977	25.28						
	1978	26.78						
	1979	24.23						
	1980	26.13						
	1981	20.65						
	1982	21.03						
	1983	21.42						
	1984	23.61						
	1985	27.45						
	1986	23.81						
	1987	23.40						
	1988	22.60						
	1989	26.35						
	1990	29.02						
	1991	31.36						
	1992	26.35						
	1993	22.60						
	1994	23.40						
	1995	33.05						
	1996	22.60						
	1997	22.80						
	1998	25.06						
	1999	32.56						
	2000	23.61						
	2001	25.92						
	2002	24.85						
	2003	27.67						
	2004	27.89						

COMMENTS

- 1.Two high outliers are observed
- 2.Linear Score (subjective) :EV1=1, LO2=1, LN2=1 *For Explanation of Scores and Codes see in Introductory Page
- 3.Shape Codes (subjective) :EV1=S2X, LO2=S2X, LN2=S2X

26007 RIVER SUCK @ BELLAGILL BRIDGE							
SUCK CATCHMENT	Annual Maximum Floods 1952 to 2004.(no missing year)			A1	A (km^2) =	1184.00	N= 53
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1952	68.27	Mean	91.749	M100	91.749	L1 91.749 L-Cv 0.107
	1953	76.02	Median	88.152	M110	50.789	L2 9.830 L-Skew 0.164
	1954	136.51	Std.Dev.	17.787	M120	35.767	L3 1.616 L-Kur 0.157
	1955	66.91	CV	0.194	M130	27.842	L4 1.544
	1956	112.19	HazenS.	1.051			
	1957	115.26					
	1958	68.96					
	1959	98.92					
	1960	87.17					
	1961	88.15					
	1962	82.71					
	1963	94.69					
	1964	103.26					
	1965	110.67					
	1966	72.44					
	1967	107.73					
	1968	147.84					
	1969	90.58					
	1970	88.57					
	1971	61.61					
	1972	71.74					
	1973	92.13					
	1974	93.48					
	1975	81.95					
	1976	76.75					
	1977	109.17					
	1978	79.70					
	1979	93.48					
	1980	78.96					
	1981	79.70					
	1982	88.15					
	1983	104.74					
	1984	85.00					
	1985	81.20					
	1986	97.61					
	1987	86.56					
	1988	66.23					
	1989	119.96					
	1990	99.01					
	1991	81.20					
	1992	88.15					
	1993	85.00					
	1994	106.20					
	1995	83.47					
	1996	100.42					
	1997	87.34					
	1998	84.24					
	1999	123.16					
	2000	81.95					
	2001	115.26					
	2002	84.28					
	2003	73.32					
	2004	104.74					
COMMENTS							
1.Linear Score (subjective) :EV1=5, LO2=3, LN2=5							
2.Shape Codes (subjective) :EV1=L1, LO2=U1, LN2=L1							
*For Explanation of Scores and Codes see in Introductory Page							



26008 RIVER RINN @ JOHNSTON'S BRIDGE							
RINN CATCHMENT	Annual Maximum Floods 1955 to 2004.(missing years '74)				A1	A (km^2)=	292.00
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1955	17.29	Mean	23.677	L1	23.677	L-Cv 0.103
	1956	26.55	Median	22.944	L2	2.451	L-Skew 0.193
	1957	20.30	Std.Dev.	4.596	L3	0.473	L-Kur 0.190
	1958	18.50	CV	0.194	L4	0.465	
	1959	17.12	HazenS.	1.492			
	1960	22.94					
	1961	24.12					
	1962	20.86					
	1963	25.94					
	1964	29.52					
	1965	41.02					
	1966	17.12					
	1967	26.97					
	1968	33.55					
	1969	23.73					
	1970	21.79					
	1971	20.12					
	1972	15.62					
	1973	20.49					
	1975	21.04					
	1976	20.86					
	1977	21.23					
	1978	22.37					
	1979	21.98					
	1980	21.04					
	1981	21.04					
	1982	20.36					
	1983	25.73					
	1984	23.73					
	1985	23.53					
	1986	21.61					
	1987	28.66					
	1988	23.73					
	1989	29.74					
	1990	29.74					
	1991	21.23					
	1992	29.52					
	1993	20.67					
	1994	23.73					
	1995	24.92					
	1996	23.14					
	1997	22.94					
	1998	22.17					
	1999	29.74					
	2000	21.23					
	2001	27.60					
	2002	26.55					
	2003	20.67					
	2004	26.14					

EV1

AMF(m^3/s)

EV1 y

Legend: + winter peak, ♦ summer peak

LO2

AMF(m^3/s)

Logistic reduced variate

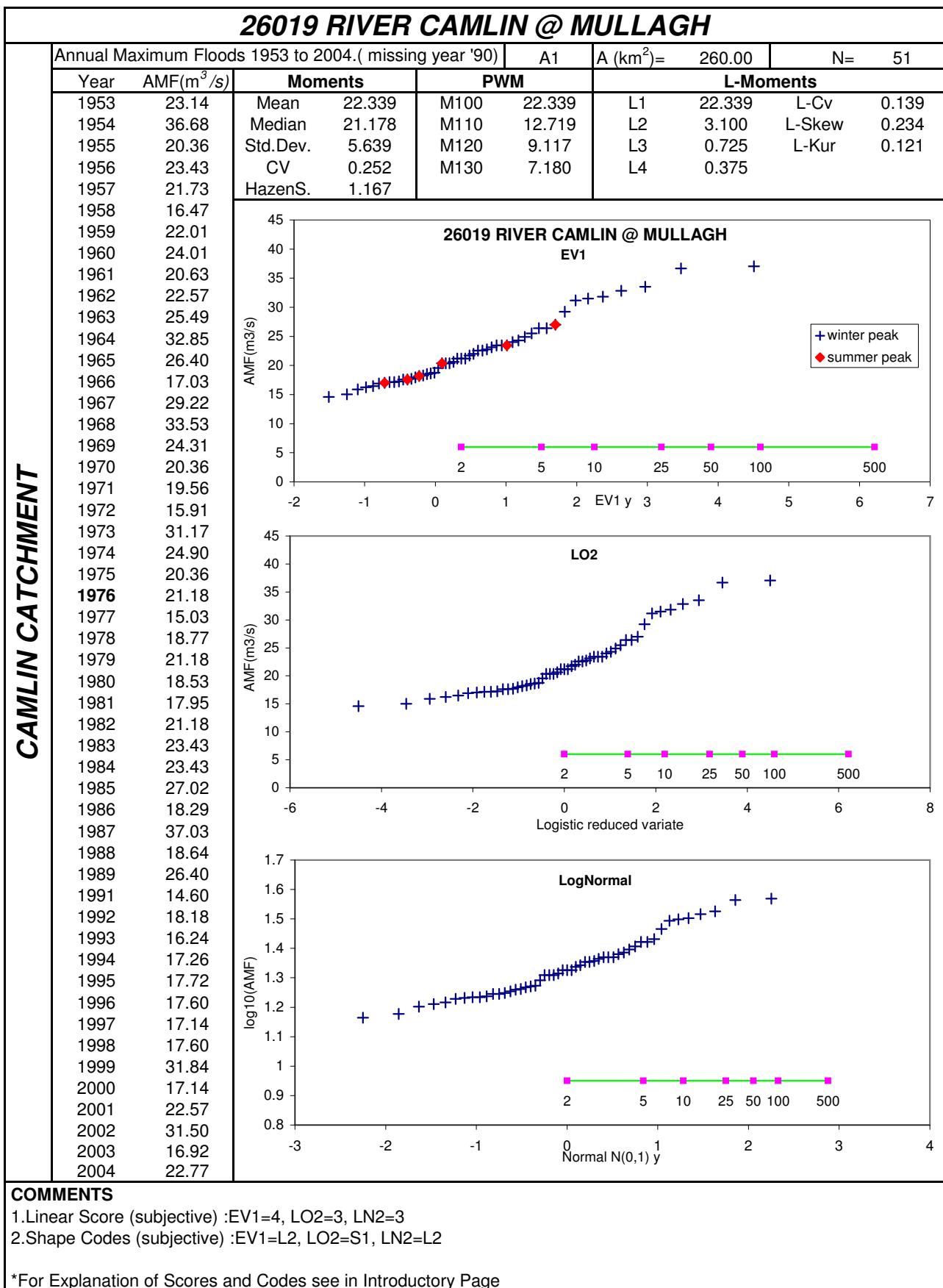
LogNormal

log₁₀(AMF)

Normal N(0,1) y

COMMENTS

1. One low outlier is observed
 2. Linear Score (subjective) :EV1=3, LO2=3, LN2=2
 3. Shape Codes (subjective) :EV1=S2, LO2=S2, LN2=S2
- *For Explanation of Scores and Codes see in Introductory Page



26020 RIVER CAMLIN @ ARGAR BRIDGE								
CATCHMENT	Annual Maximum Floods 1972 to 2004.(no missing year)				A1	A (km^2)=	128.00	N= 32
	Year	AMF(m^3/s)	Moments	PWM	L-Moments			
1973	12.79	Mean	11.207	M100	11.207	L1	11.207	L-Cv 0.108
1974	13.77	Median	11.266	M110	6.207	L2	1.208	L-Skew 0.028
1975	8.51	Std.Dev.	2.080	M120	4.345	L3	0.033	L-Kur 0.075
1976	9.06	CV	0.186	M130	3.358	L4	0.090	
1977	9.31	HazenS.	0.161					
1978	8.67							
1979	10.83							
1980	9.77							
1981	8.27							
1982	9.98							
1983	10.69							
1984	11.12							
1985	11.93							
1986	10.12							
1987	15.59							
1988	10.69							
1989	13.06							
1990	13.92							
1991	11.93							
1992	14.31							
1993	11.49							
1994	13.30							
1995	12.38							
1996	11.78							
1997	11.78							
1998	10.76							
1999	14.55							
2000	8.54							
2001	12.42							
2002	8.54							
2003	7.37							
2004	11.41							

Figure 1: EV1 Probability Plot showing AMF(m^3/s) vs EV1 y. The plot shows a convex upwards pattern with a flattening out at the upper end. Data points are blue '+' symbols, and two specific peaks are marked: a winter peak (blue '+') and a summer peak (red diamond). A green horizontal line is drawn at y=5.0.

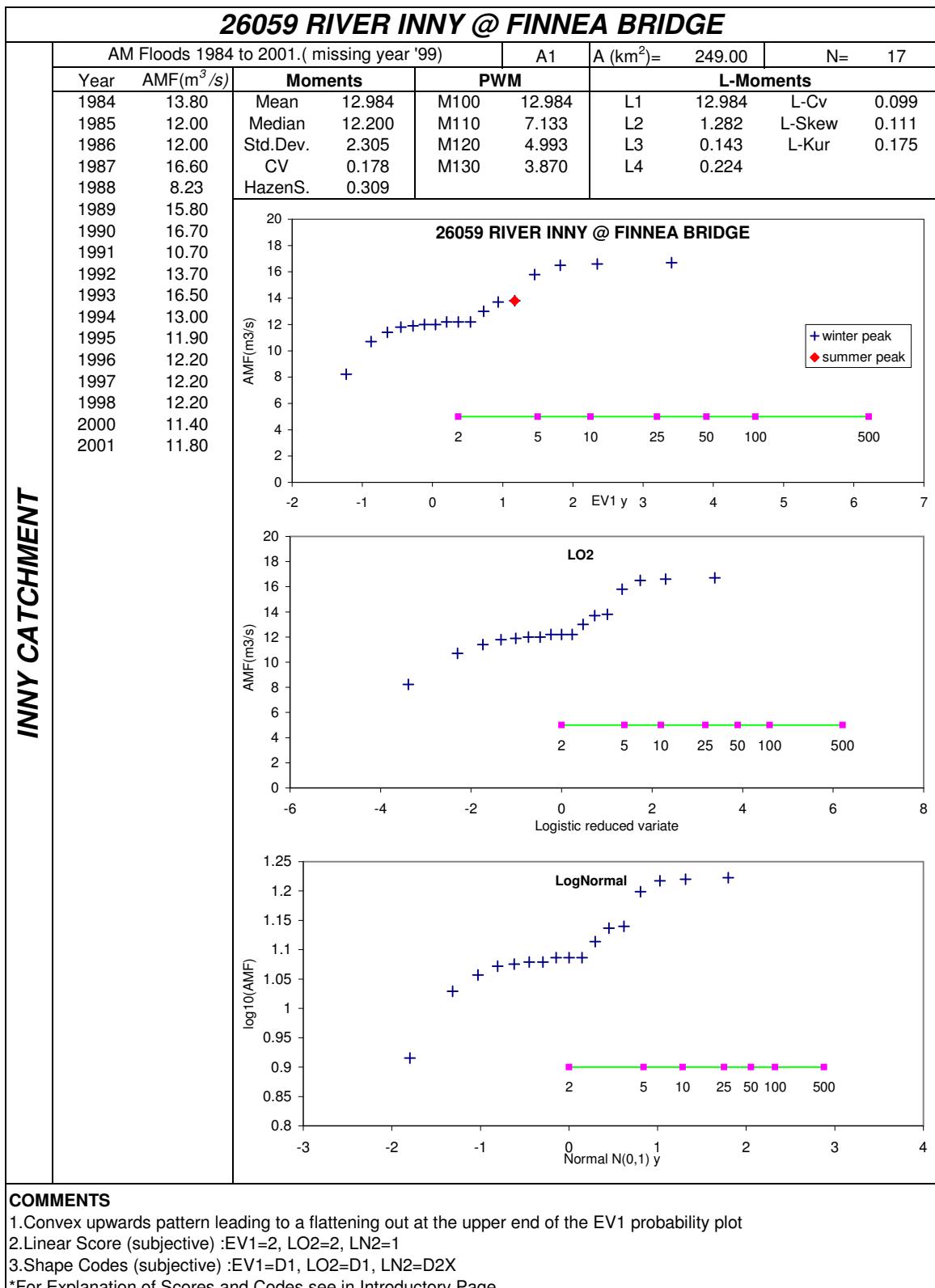
Figure 2: LO2 Probability Plot showing AMF(m^3/s) vs Logistic reduced variate. The plot shows a linear relationship. Data points are blue '+' symbols, and a green horizontal line is drawn at y=5.0.

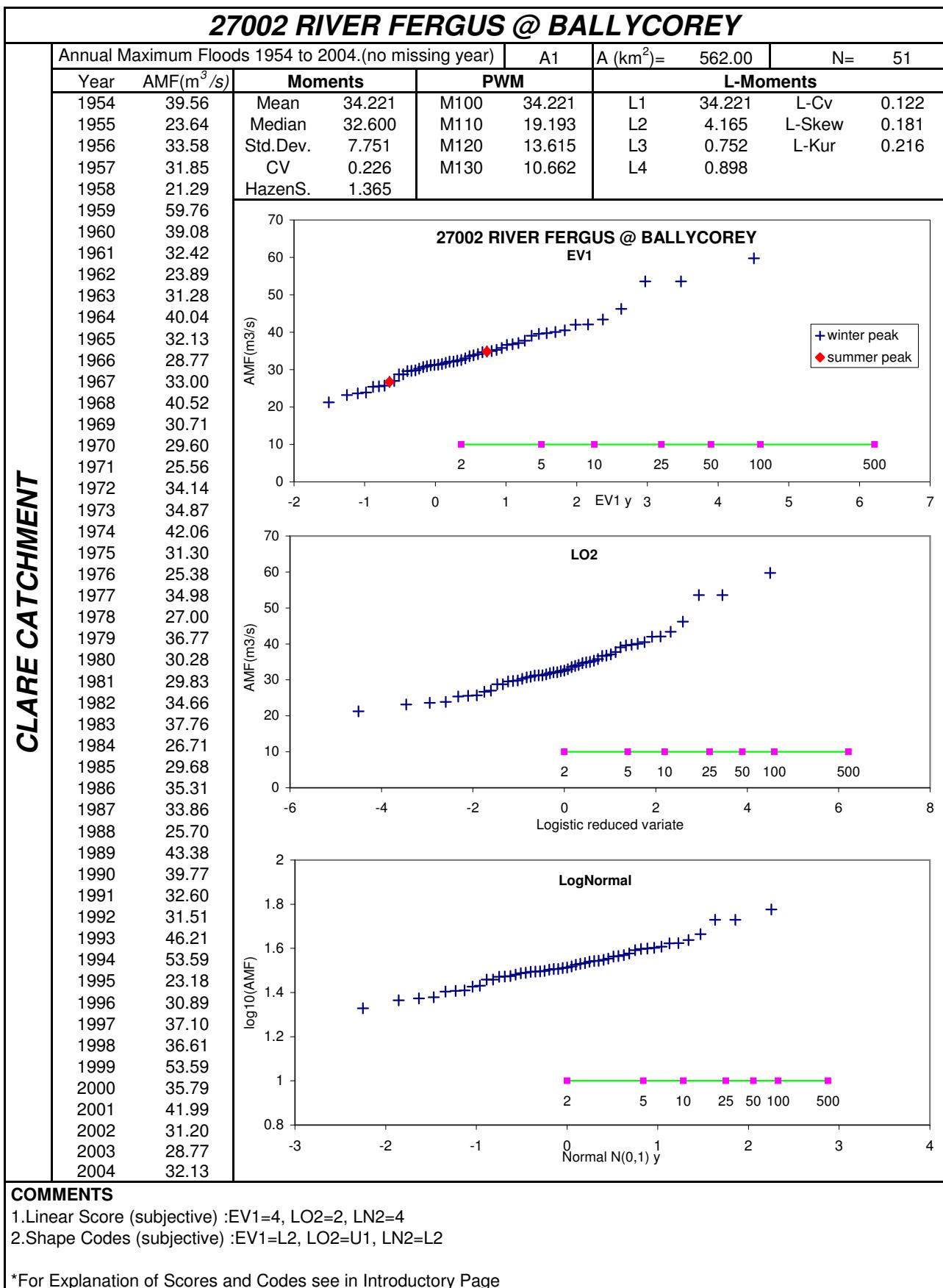
Figure 3: LogNormal Probability Plot showing $\log_{10}(\text{AMF})$ vs Normal $N(0,1)$ y. The plot shows a linear relationship. Data points are blue '+' symbols, and a green horizontal line is drawn at y=0.8.

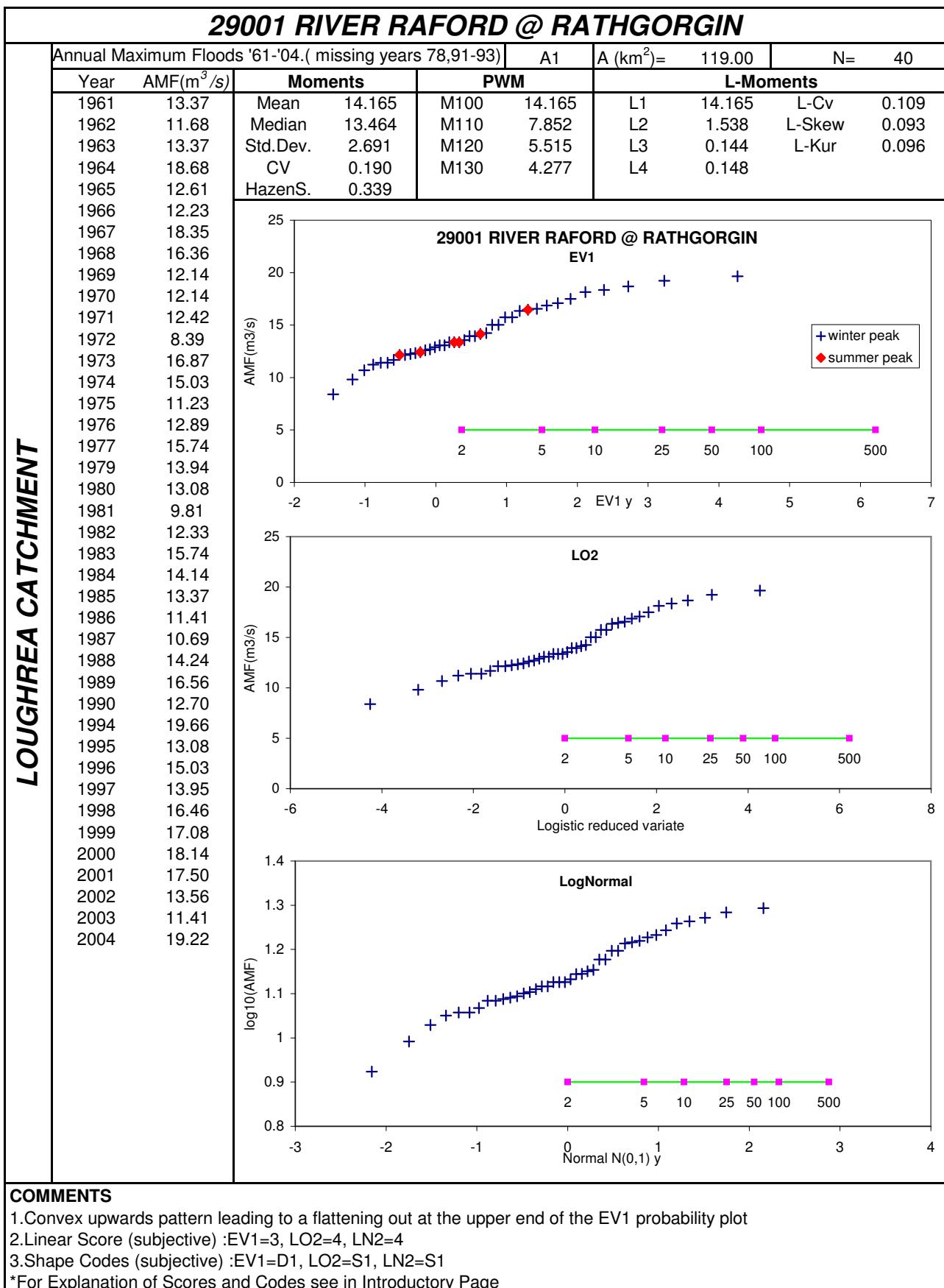
COMMENTS

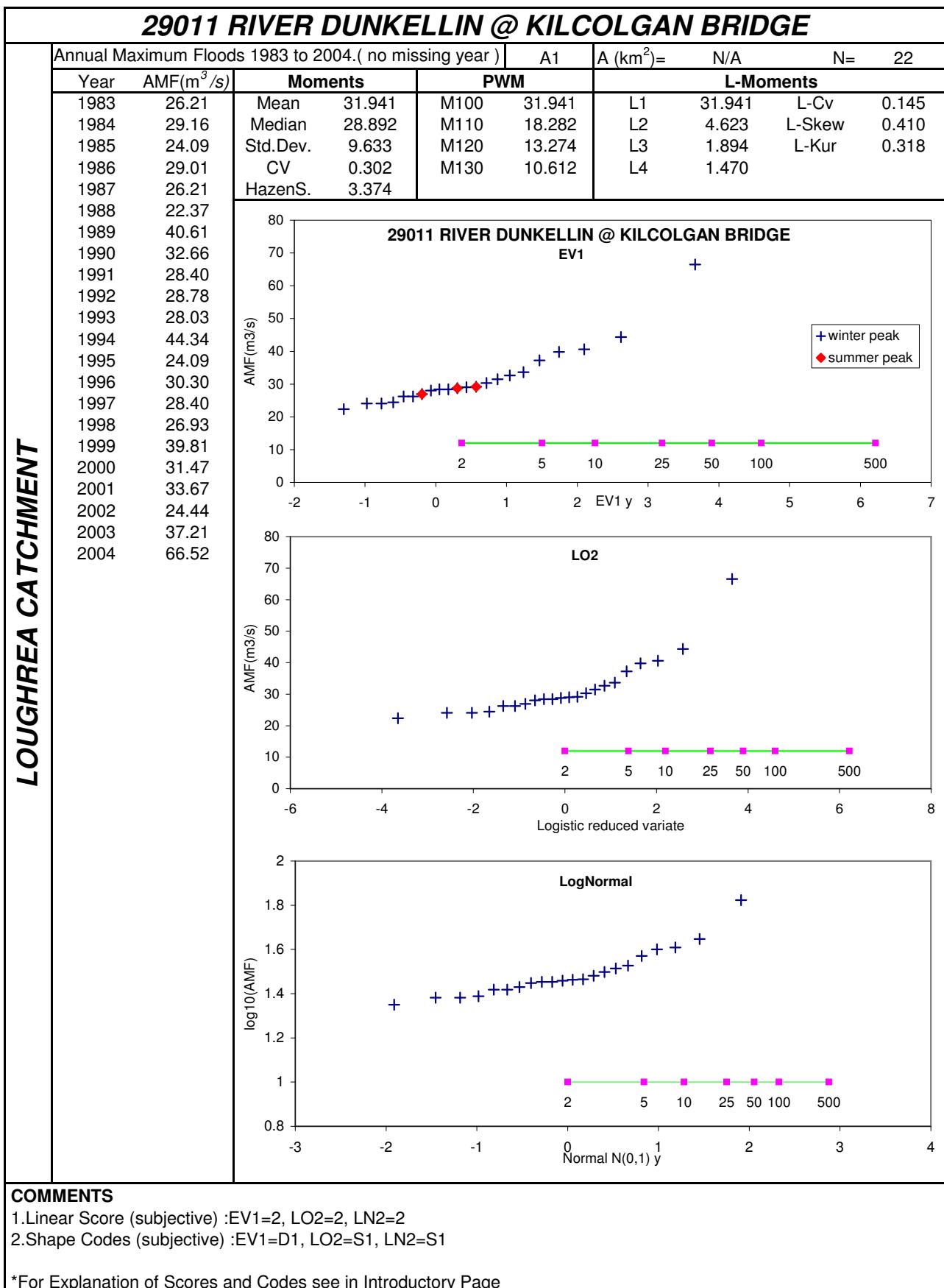
- 1. Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot
- 2. Linear Score (subjective) :EV1=3, LO2=3, LN2=3
- 3. Shape Codes (subjective) :EV1=L2, LO2=S1, LN2=L2

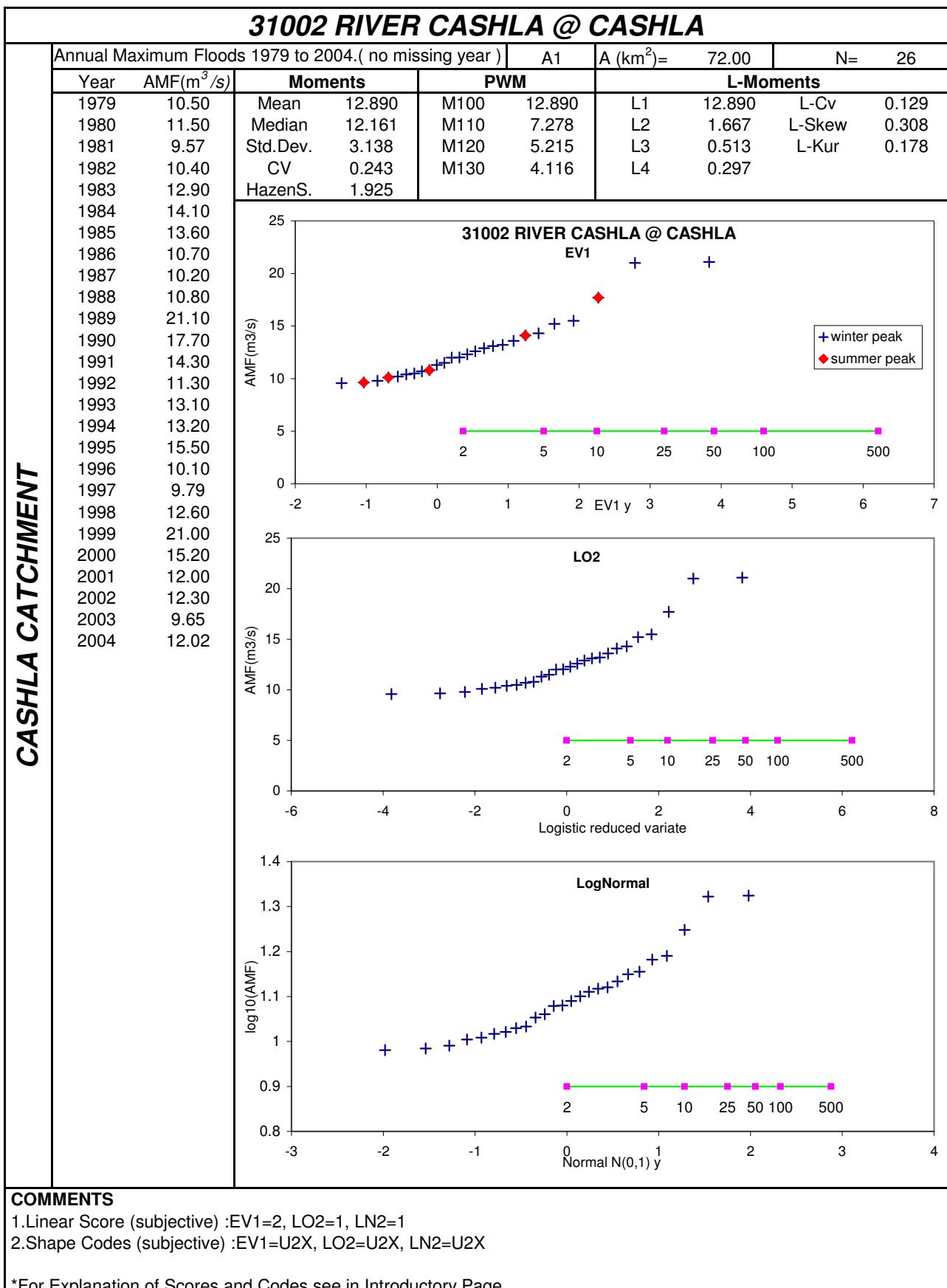
*For Explanation of Scores and Codes see in Introductory Page

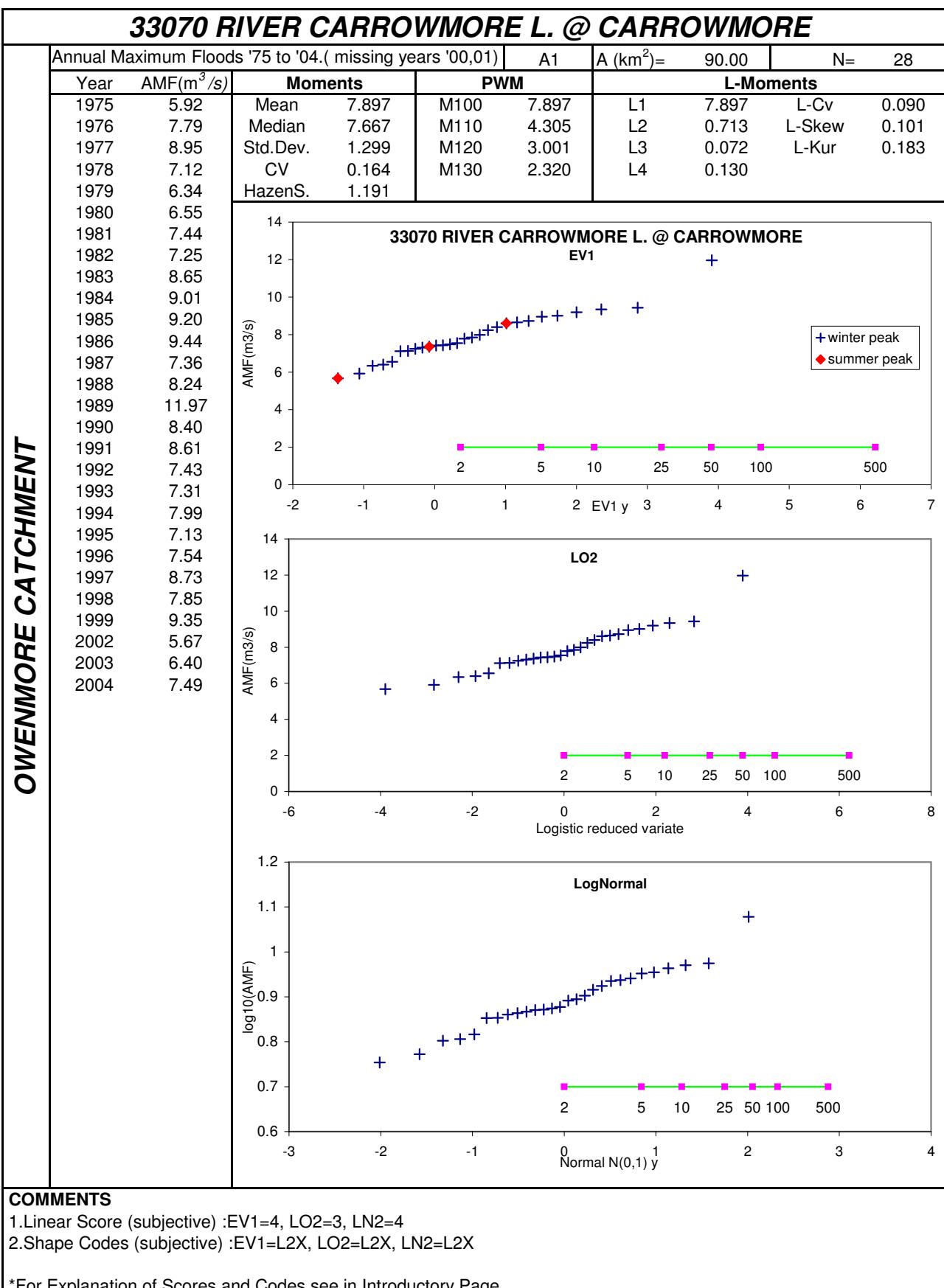


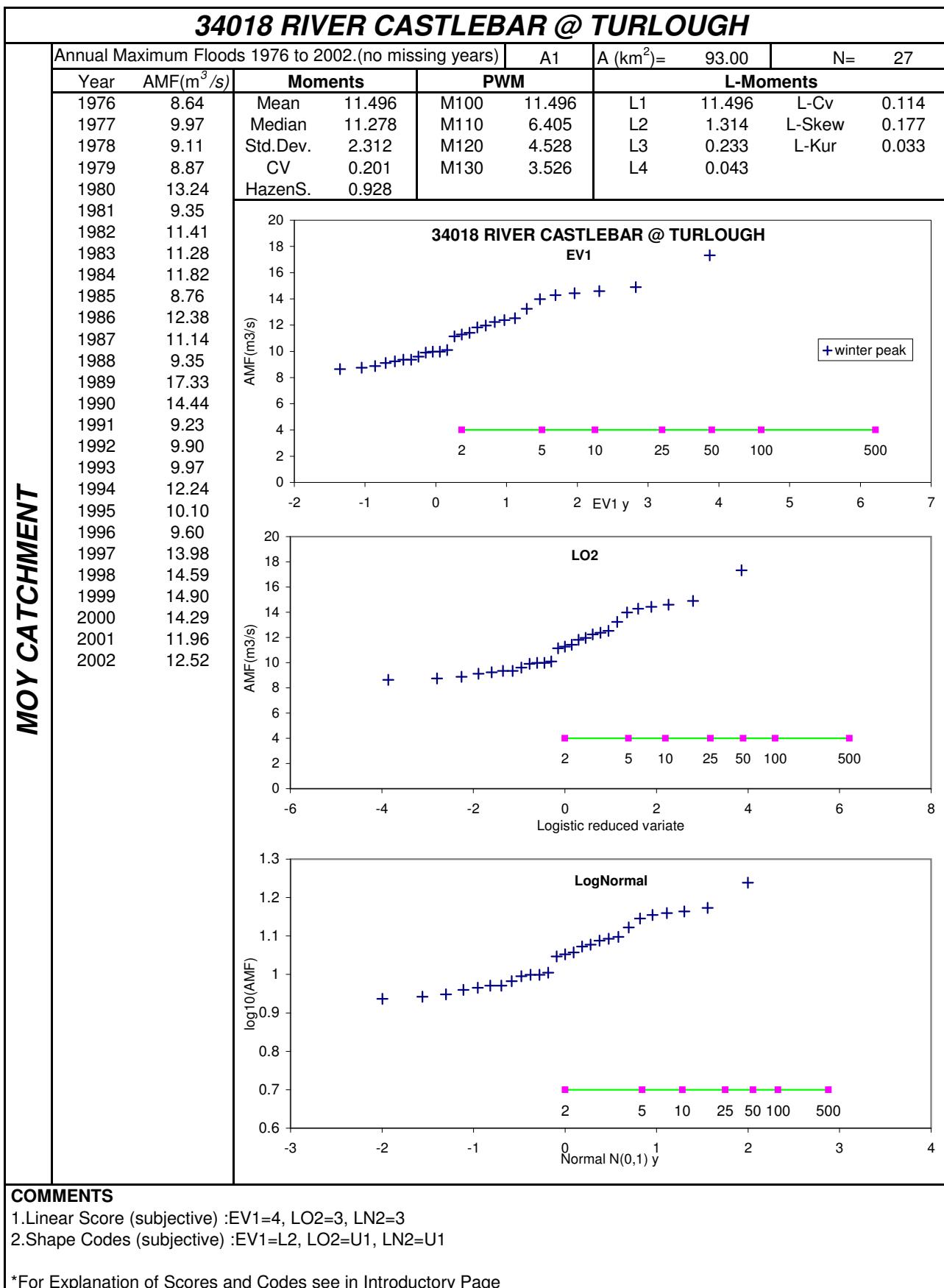


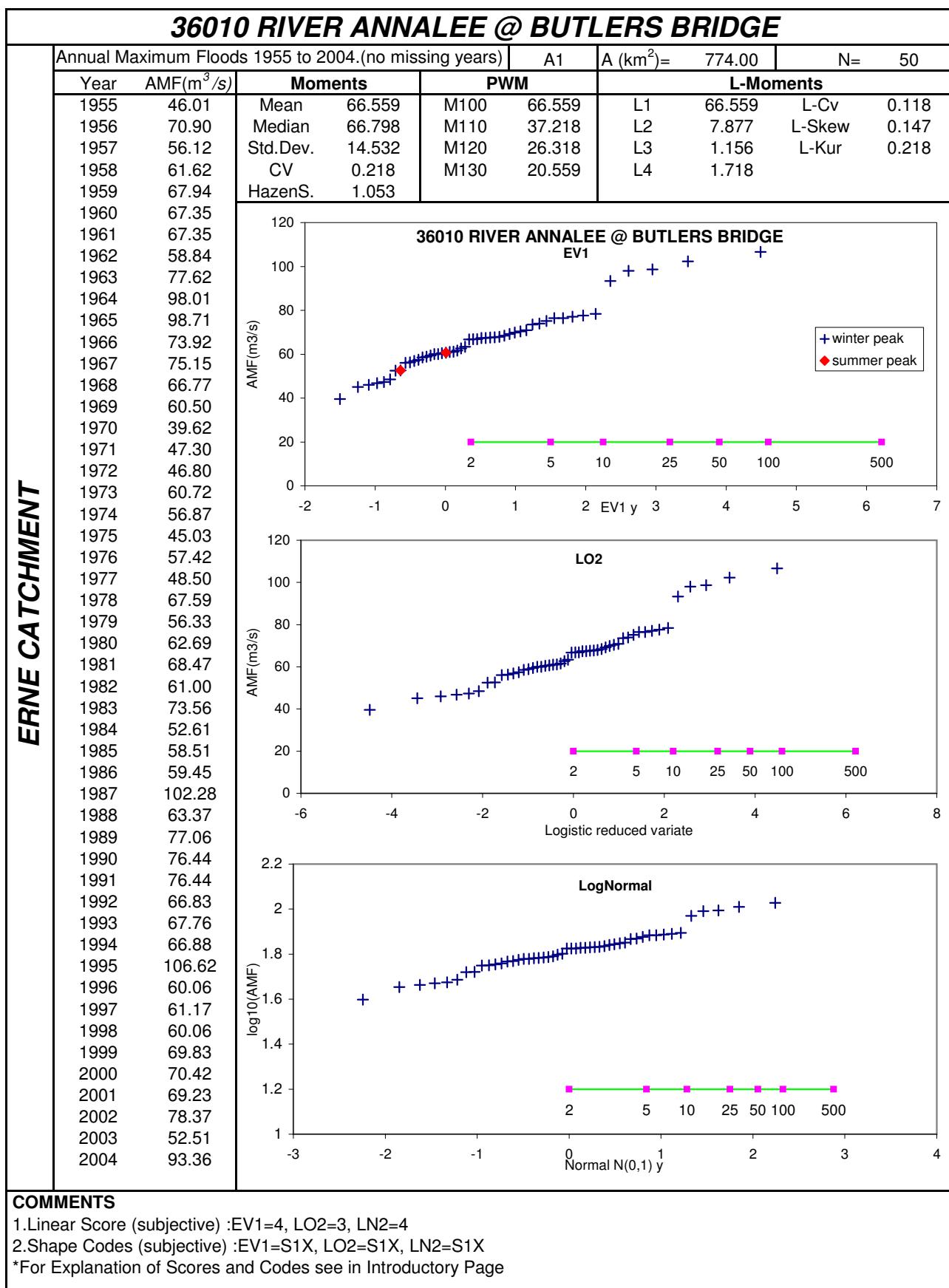


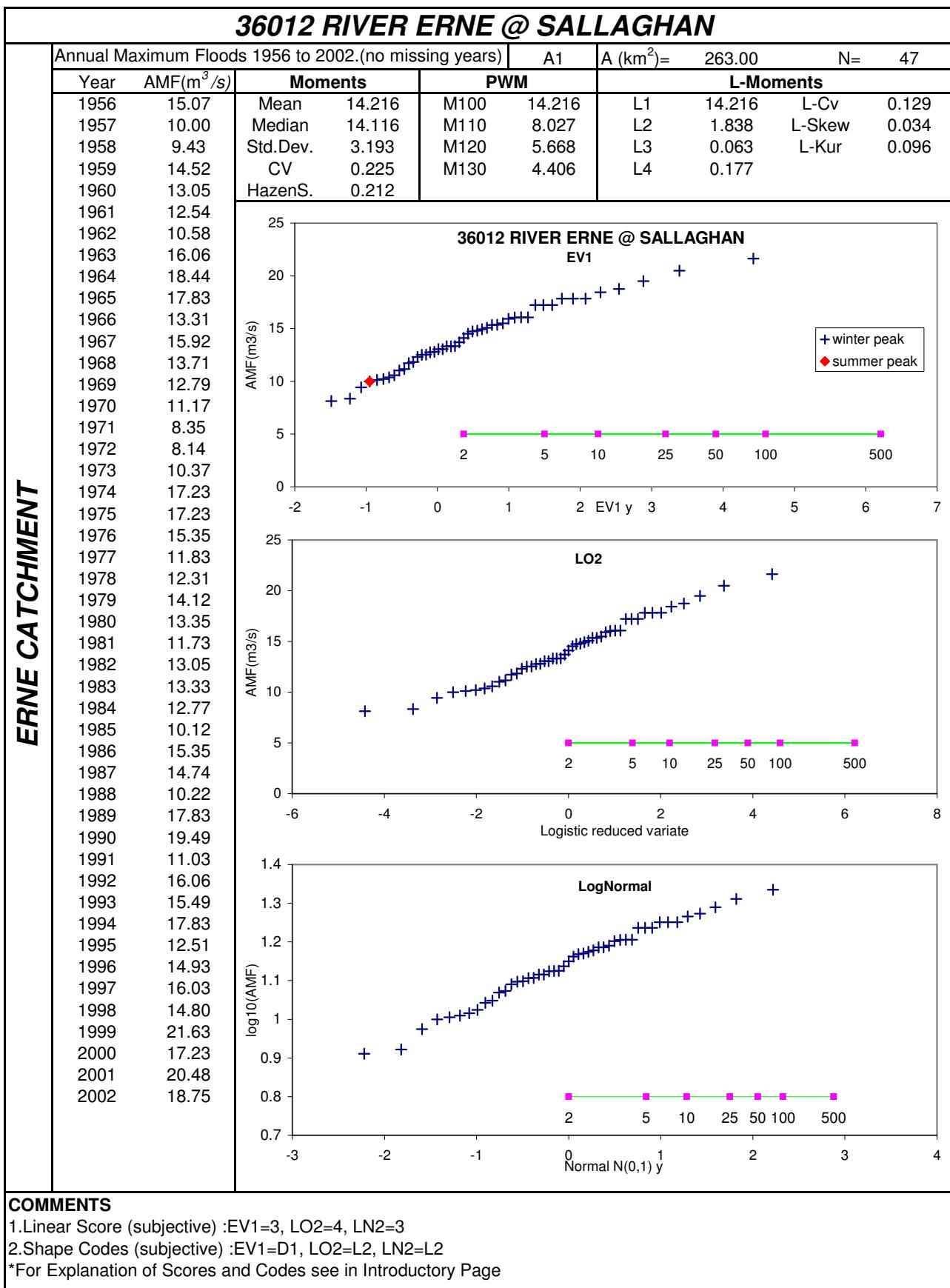


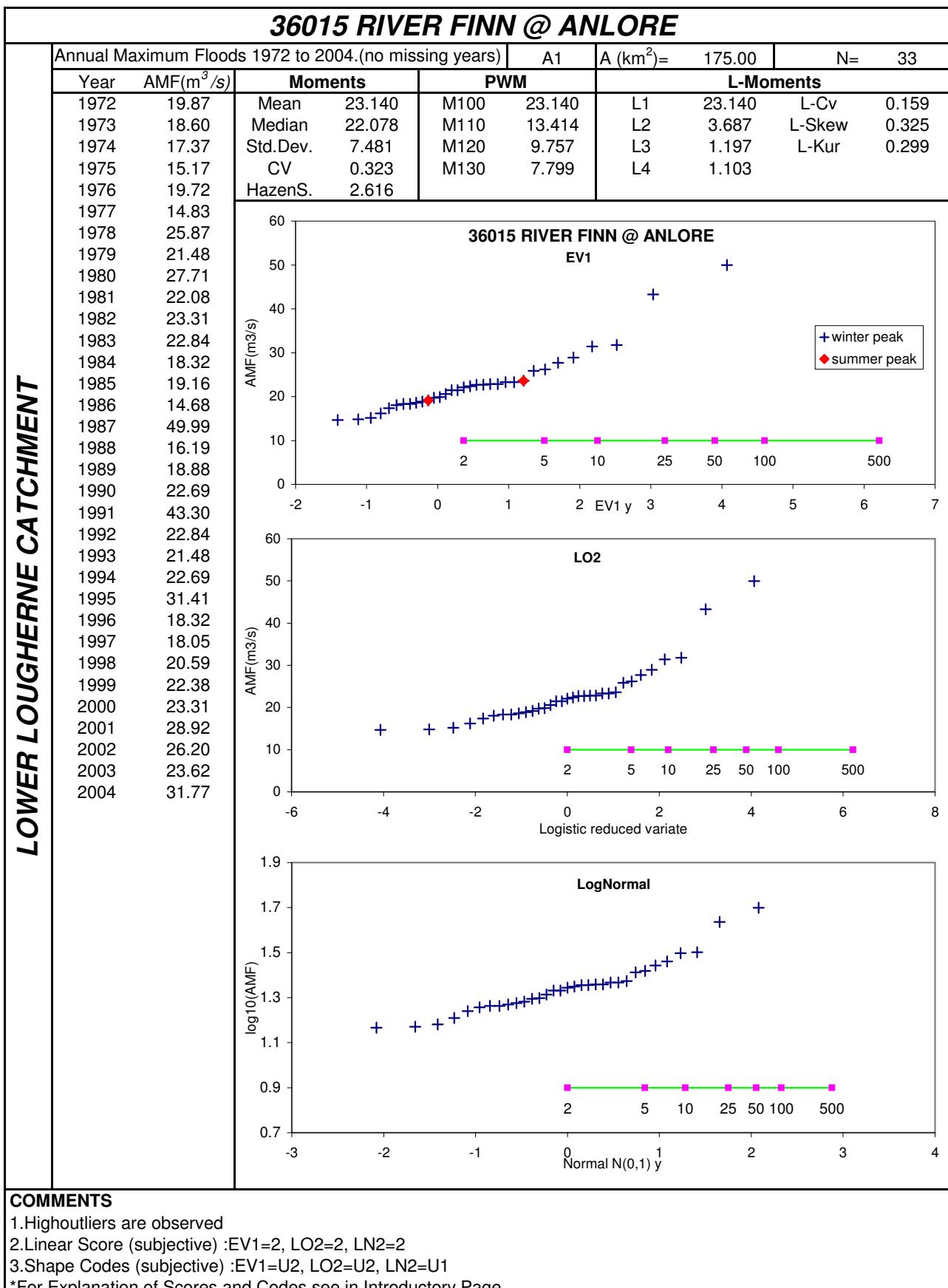












36018 RIVER DRONMORE @ ASHFIELD BRIDGE

Annual Maximum Floods 1955 to 2004.(no missing years)				A1	A (km^2) =	233.00	N =	50	
Year	AMF(m^3/s)	Moments	PWM	L-Moments					
1955	10.23	Mean	15.842	M100	15.842	L1	15.842	L-Cv	0.104
1956	18.33	Median	16.248	M110	8.748	L2	1.653	L-Skew	0.045
1957	13.02	Std.Dev.	2.912	M120	6.120	L3	0.074	L-Kur	0.100
1958	16.25	CV	0.184	M130	4.731	L4	0.165		
1959	16.25	HazenS.	0.433						
1960	16.25								
1961	16.70								
1962	14.06								
1963	16.70								
1964	19.05								
1965	19.17								
1966	14.06								
1967	16.70								
1968	12.62								
1969	16.25								
1970	11.53								
1971	12.52								
1972	12.62								
1973	13.85								
1974	17.63								
1975	10.86								
1976	15.36								
1977	12.22								
1978	17.16								
1979	12.42								
1980	14.70								
1981	15.36								
1982	12.02								
1983	17.39								
1984	13.02								
1985	14.27								
1986	16.70								
1987	19.66								
1988	13.64								
1989	16.70								
1990	18.57								
1991	20.28								
1992	13.85								
1993	19.29								
1994	16.25								
1995	24.43								
1996	14.27								
1997	14.06								
1998	17.16								
1999	18.57								
2000	17.63								
2001	17.16								
2002	20.53								
2003	14.49								
2004	20.28								

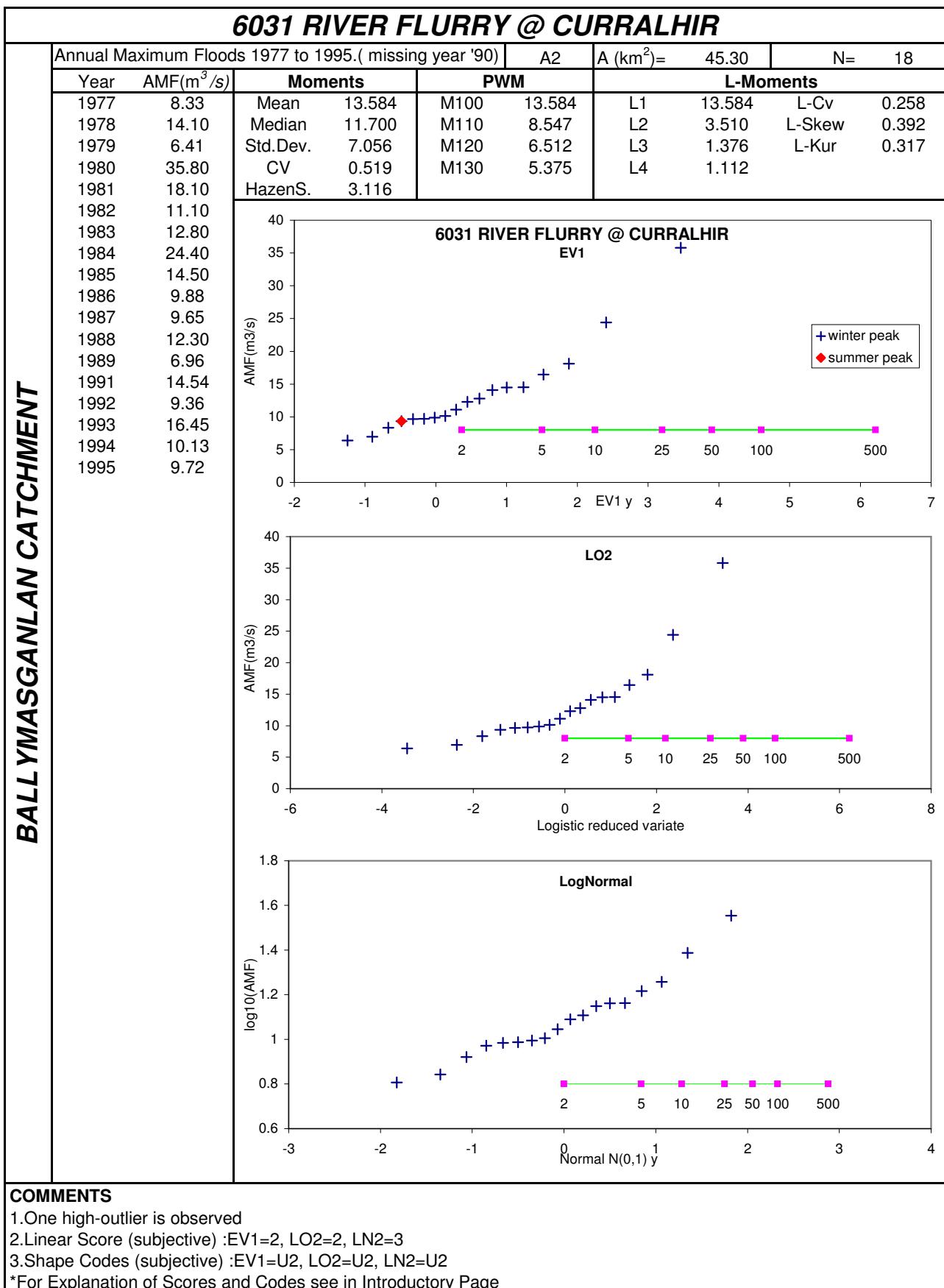
The figure consists of three vertically stacked scatter plots sharing a common x-axis scale from -2 to 7. The top plot is titled '36018 RIVER DRONMORE @ ASHFIELD BRIDGE EV1' and shows AMF (m³/s) on the y-axis (0 to 30). It includes data points for winter peak (blue plus signs) and summer peak (red diamonds), along with a fitted curve and a horizontal green line at y=5. The middle plot is titled 'LO2' and shows AMF (m³/s) on the y-axis (0 to 30). It features a fitted curve and a horizontal green line at y=5. The bottom plot is titled 'LogNormal' and shows log10(AMF) on the y-axis (0.8 to 1.5). It features a fitted curve and a horizontal green line at y=0.9.

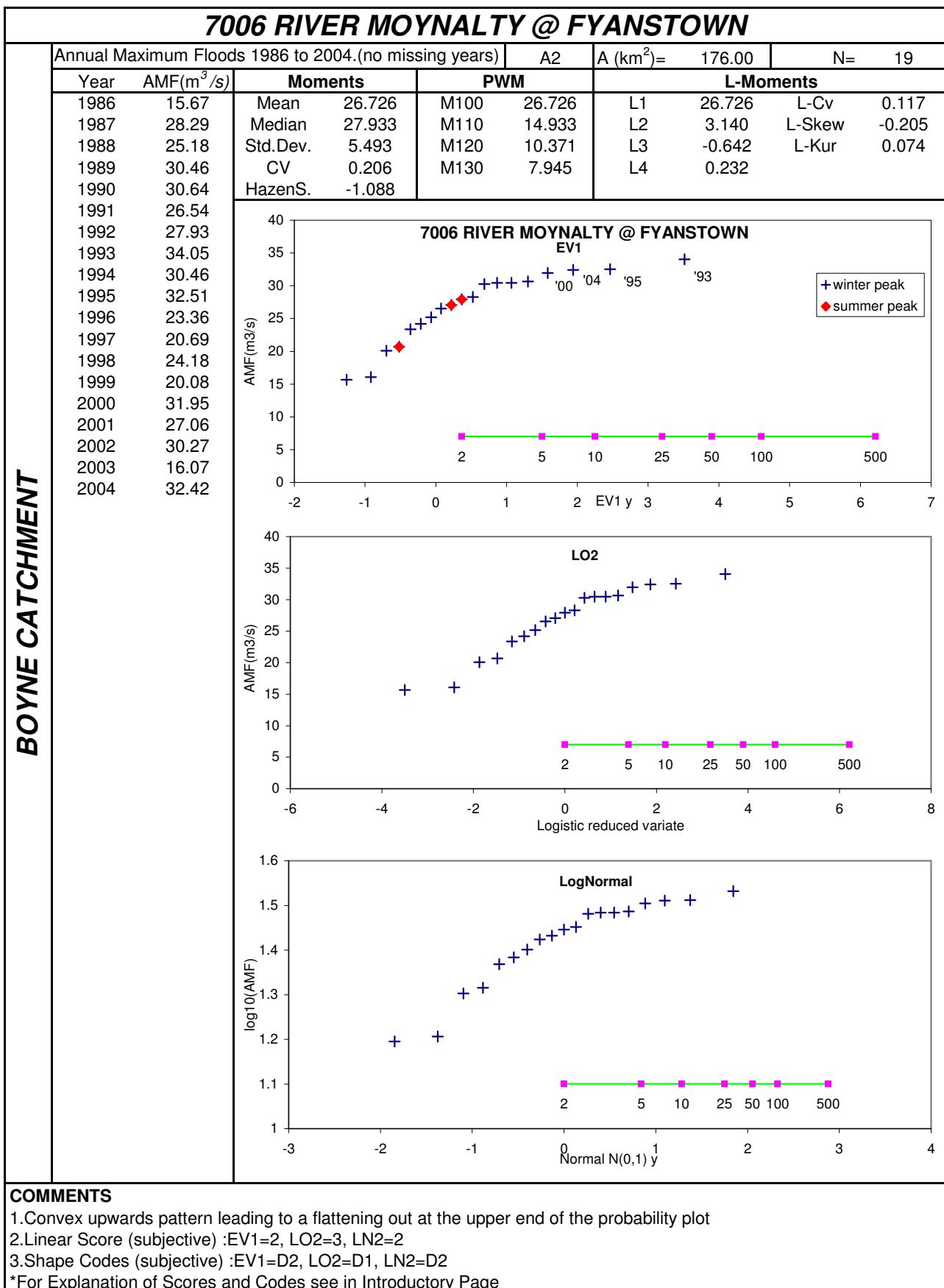
COMMENTS

1. Linear Score (subjective) :EV1=4, LO2=4, LN2=4
 2. Shape Codes (subjective) :EV1=L2, LO2=L2, LN2=L2

*For Explanation of Scores and Codes see in Introductory Page

Appendix C (Grade A2 stations)





BOYNE CATCHMENT

7033 RIVER BLACKWATER @ VIRGINIA HATCHERY

Annual Maximum Floods 1980 to 2004.(no missing years)				A2	A (km^2) =	129.00	N=	25	
Year	AMF(m^3/s)	Moments	PWM	L-Moments					
1980	10.18	Mean	14.934	M100	14.934	L1	14.934	L-Cv	0.129
1981	8.79	Median	14.621	M110	8.431	L2	1.927	L-Skew	0.162
1982	18.71	Std.Dev.	3.622	M120	5.994	L3	0.312	L-Kur	0.272
1983	10.48	CV	0.242	M130	4.705	L4	0.524		
1984	12.60	HazenS.	1.739						
1985	13.83								
1986	15.93								
1987	14.62								
1988	20.56								
1989	14.52								
1990	18.35								
1991	16.61								
1992	16.44								
1993	12.45								
1994	12.75								
1995	16.17								
1996	12.90								
1997	13.83								
1998	12.31								
1999	13.27								
2000	15.67								
2001	14.94								
2002	15.27								
2003	15.60								
2004	26.58								

7033 RIVER BLACKWATER @ VIRGINIA HATCHERY
EV1

AMF(m^3/s)

EV1 y

Legend: + winter peak, ◆ summer peak

LO2

AMF(m^3/s)

Logistic reduced variate

LogNormal

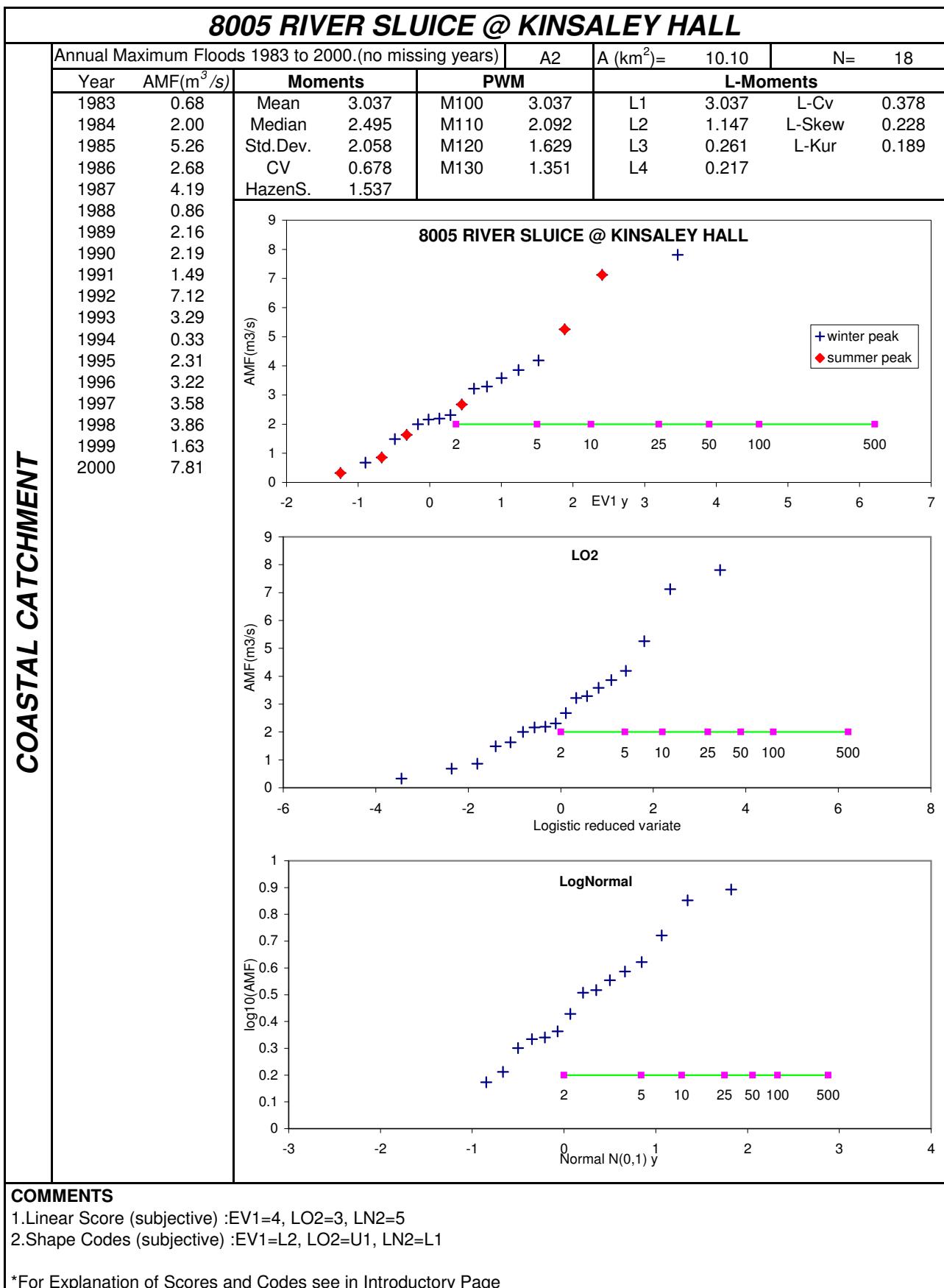
log₁₀(AMF)

Normal N(0,1) y

COMMENTS

1. Linear Score (subjective) :EV1=4, LO2=3, LN2=3
 2. Shape Codes (subjective) :EV1=S1, LO2=U1, LN2=S1

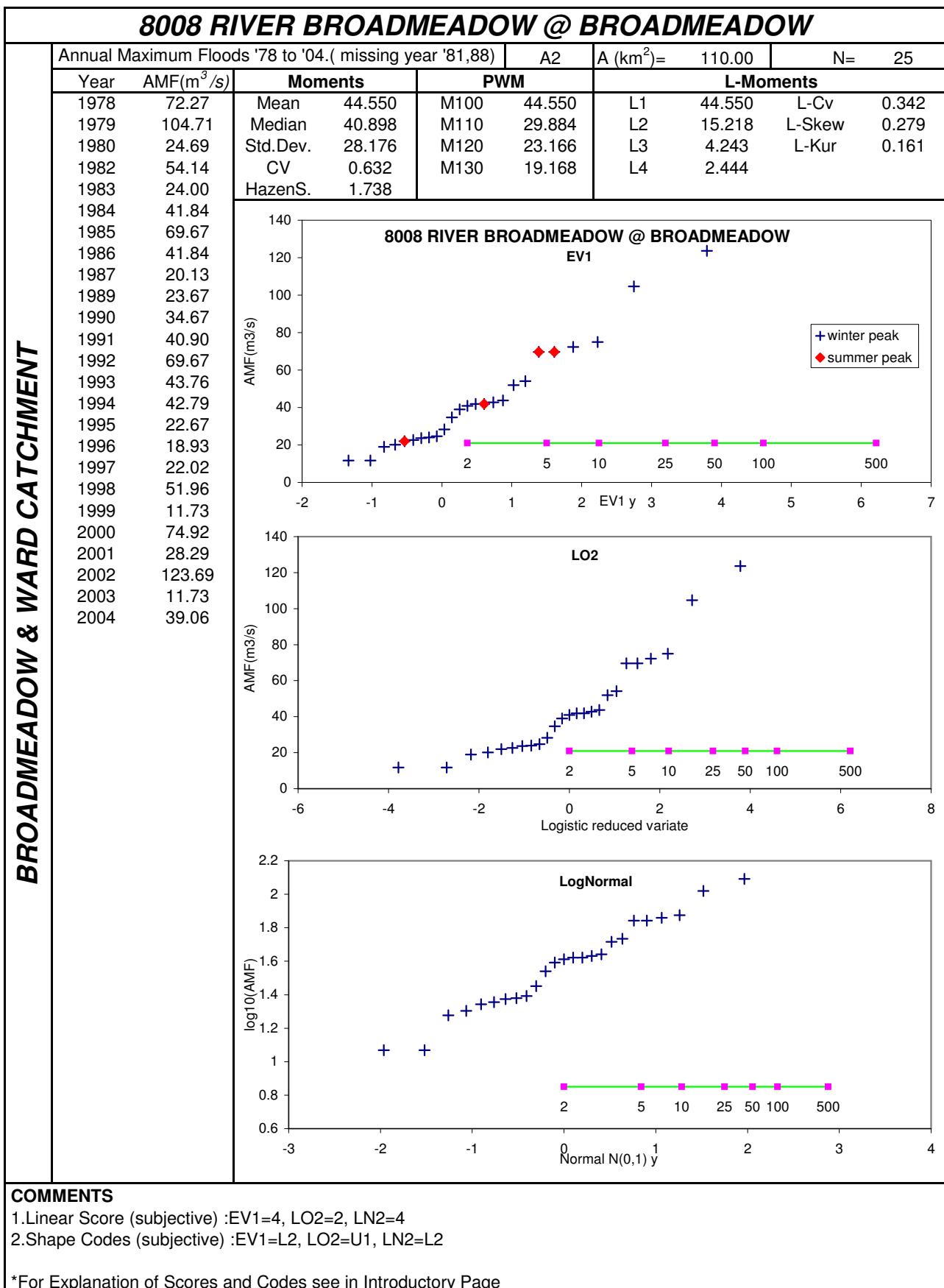
*For Explanation of Scores and Codes see in Introductory Page



COMMENTS

1. Linear Score (subjective) :EV1=4, LO2=3, LN2=5
2. Shape Codes (subjective) :EV1=L2, LO2=U1, LN2=L1

*For Explanation of Scores and Codes see in Introductory Page



12001 RIVER Slaney @ Scarawalsh								
Slaney CATCHMENT	Annual Maximum Floods 1955 to 2004.(no missing years)				A2	A (km^2)=	1036.00	N= 50
	Year	AMF(m^3/s)	Moments	PWM	L-Moments			
	1955	107.00	Mean	169.500	M100	169.500	L1	169.500 L-Cv 0.194
	1956	202.00	Median	157.000	M110	101.195	L2	32.890 L-Skew 0.176
	1957	227.00	Std.Dev.	61.599	M120	73.908	L3	5.776 L-Kur 0.171
	1958	158.00	CV	0.363	M130	58.901	L4	5.636
	1959	146.00	HazenS.	1.595				
	1960	246.00						
	1961	139.00						
	1962	180.00						
	1963	166.00						
	1964	158.00						
	1965	399.00						
	1966	166.00						
	1967	107.00						
	1968	153.00						
	1969	156.00						
	1970	93.20						
	1971	190.00						
	1972	87.90						
	1973	132.00						
	1974	134.00						
	1975	75.00						
	1976	134.00						
	1977	203.00						
	1978	225.00						
	1979	196.00						
	1980	137.00						
	1981	161.00						
	1982	134.00						
	1983	122.00						
	1984	155.00						
	1985	225.00						
	1986	151.00						
	1987	167.00						
	1988	151.00						
	1989	116.00						
	1990	81.90						
	1991	117.00						
	1992	205.00						
	1993	189.00						
	1994	227.00						
	1995	205.00						
	1996	153.00						
	1997	241.00						
	1998	215.00						
	1999	101.00						
	2000	338.00						
	2001	121.00						
	2002	221.00						
	2003	116.00						
	2004	245.00						

COMMENTS

- 1.Linear Score (subjective) :EV1=4, LO2=2, LN2=3
 - 2.Shape Codes (subjective) :EV1=L2, LO2=U1, LN2=L2
- *For Explanation of Scores and Codes see in Introductory Page

14005 RIVER BARROW @ PORTARLINGTON						
BARROW CATCHMENT	Annual Maximum Floods '55 to '04.(missing year '69,77)			A2	A (km^2) =	398.00
	Year	AMF(m^3/s)	Moments	PWM	L-Moments	
	1955	32.58	Mean	40.812	L1	40.812
	1956	48.37	Median	38.266	L-Cv	0.149
	1957	50.88	Std.Dev.	11.827	L2	6.076
	1958	37.42	CV	0.290	L-Skew	0.291
	1959	56.13	HazenS.	2.011	L3	1.767
	1960	57.76			L4	1.352
	1961	32.97				
	1962	40.44				
	1963	40.00				
	1964	59.99				
	1965	48.37				
	1966	52.42				
	1967	52.94				
	1968	80.42				
	1970	34.95				
	1971	44.06				
	1972	32.97				
	1973	45.00				
	1974	38.69				
	1975	32.58				
	1976	32.58				
	1978	37.84				
	1979	35.35				
	1980	37.42				
	1981	30.69				
	1982	39.56				
	1983	38.27				
	1984	38.69				
	1985	45.95				
	1986	40.44				
	1987	38.69				
	1988	37.00				
	1989	80.42				
	1990	39.56				
	1991	27.45				
	1992	28.09				
	1993	35.76				
	1994	52.94				
	1995	28.09				
	1996	26.07				
	1997	34.55				
	1998	29.95				
	1999	36.17				
	2000	38.27				
	2001	32.20				
	2002	29.95				
	2003	28.09				
	2004	40.00				

14005 RIVER BARROW @ PORTARLINGTON

EV1

AMF(m^3/s)

EV1 y

Legend: + winter peak, ◆ summer peak

LO2

AMF(m^3/s)

Logistic reduced variate

LogNormal

log₁₀(AMF)

Normal N(0,1) y

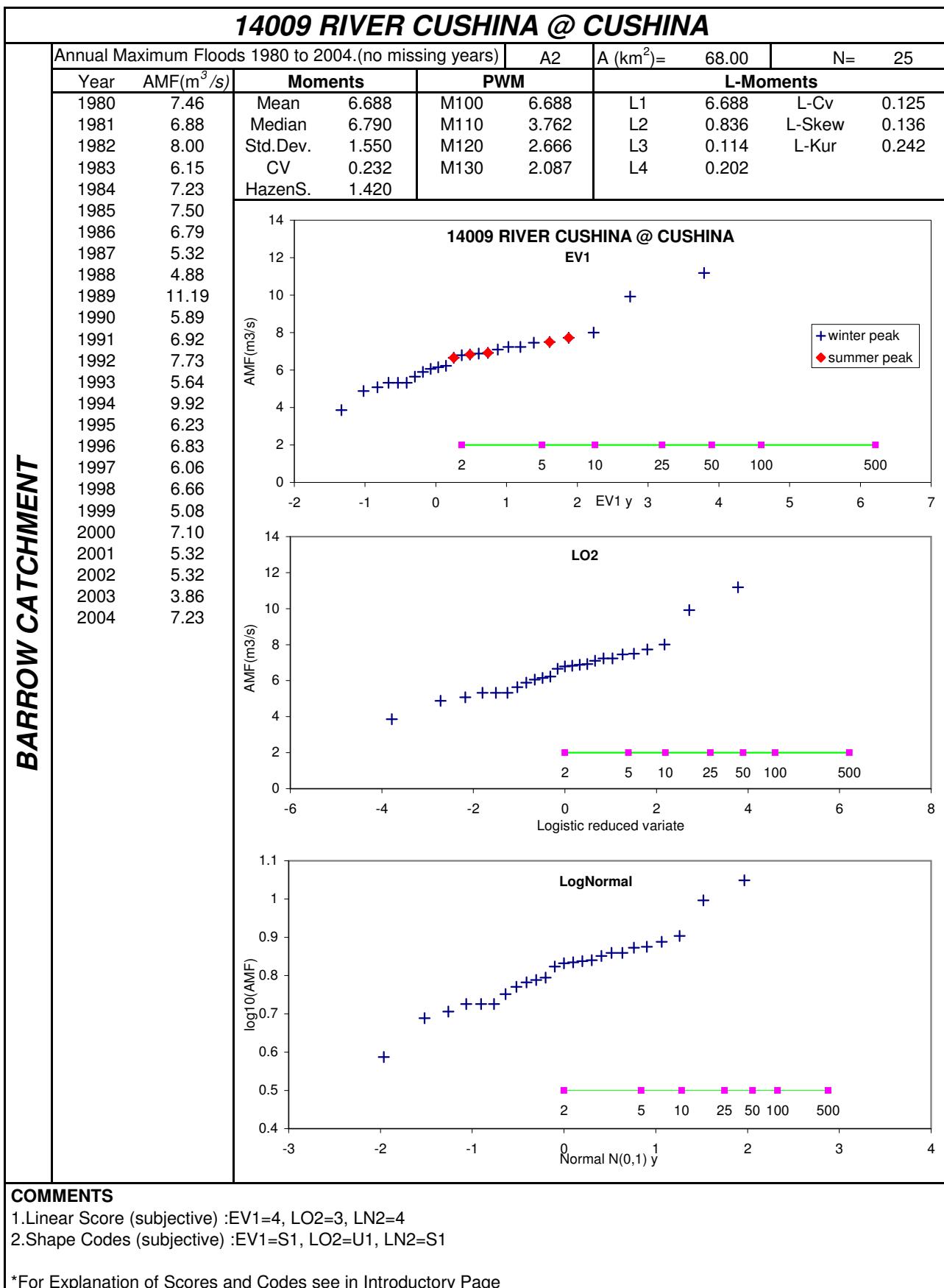
COMMENTS

1.High-outliers are observed

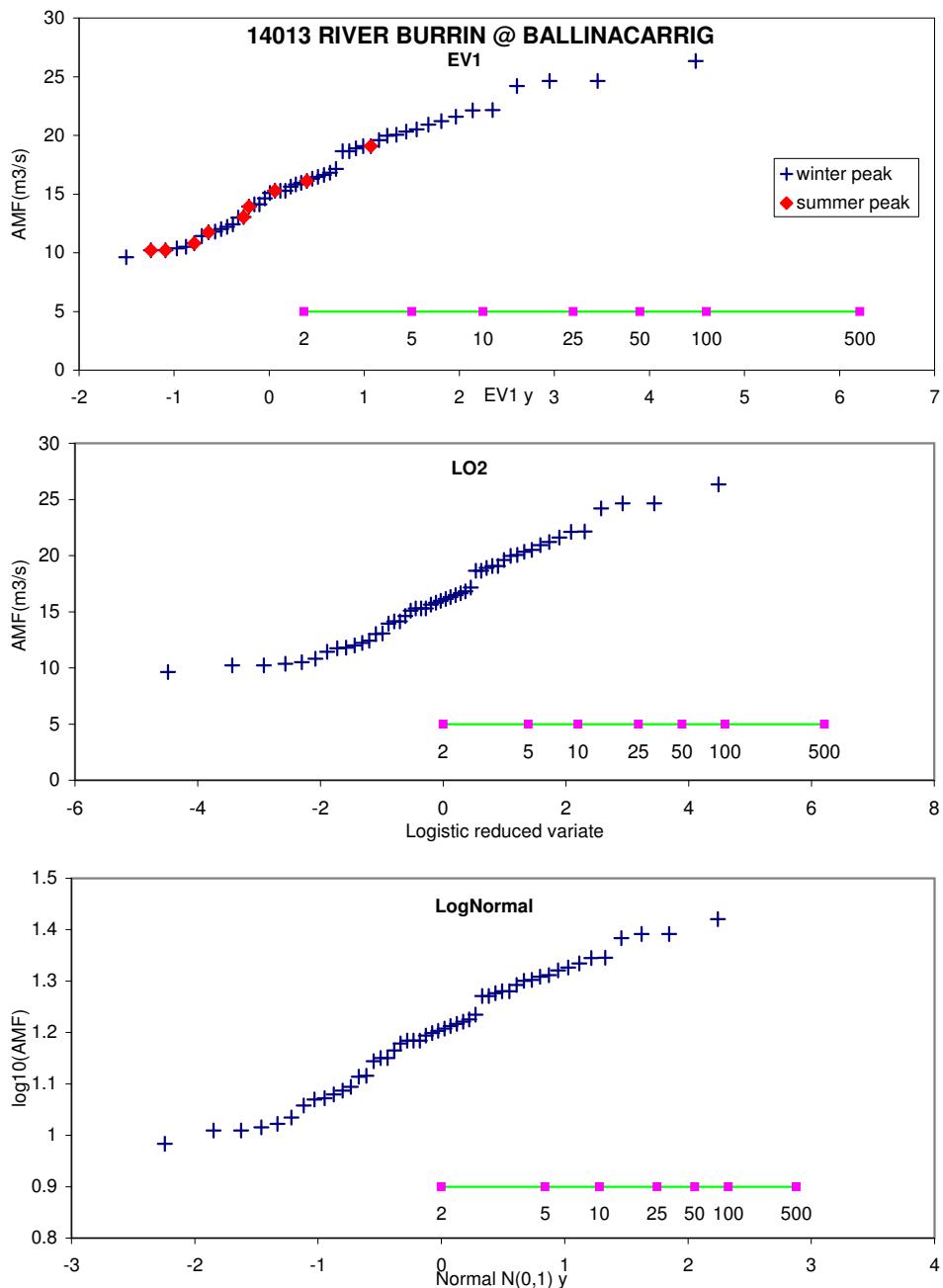
2.Linear Score (subjective) :EV1=3, LO2=2, LN2=2

3.Shape Codes (subjective) :EV1=L2, LO2=U1, LN2=U1

*For Explanation of Scores and Codes see in Introductory Page



14013 RIVER BURRN @ BALLINACARRIG								
BARROW CATCHMENT	Annual Maximum Floods 1955 to 2004. (no missing year)				A2	A (km^2) =	154.00	N= 50
	Year	AMF(m^3/s)	Moments	PWM	L-Moments			
	1955	12.22	Mean	16.537	M100	16.537	L1	16.537 L-Cv 0.151
	1956	20.34	Median	16.048	M110	9.520	L2	2.504 L-Skew 0.071
	1957	16.81	Std.Dev.	4.343	M120	6.794	L3	0.179 L-Kur 0.059
	1958	20.92	CV	0.263	M130	5.313	L4	0.147
	1959	13.94	HazenS.	0.365				
	1960	21.21						
	1961	13.06						
	1962	26.32						
	1963	15.81						
	1964	16.31						
	1965	24.65						
	1966	22.12						
	1967	15.09						
	1968	24.65						
	1969	12.01						
	1970	11.81						
	1971	18.65						
	1972	18.65						
	1973	20.05						
	1974	12.42						
	1975	10.37						
	1976	14.14						
	1977	17.16						
	1978	16.64						
	1979	19.08						
	1980	13.01						
	1981	15.96						
	1982	14.63						
	1983	14.14						
	1984	11.43						
	1985	16.13						
	1986	15.29						
	1987	15.29						
	1988	16.47						
	1989	15.29						
	1990	11.74						
	1991	10.52						
	1992	19.08						
	1993	19.61						
	1994	20.51						
	1995	21.60						
	1996	10.22						
	1997	19.97						
	1998	22.15						
	1999	10.22						
	2000	18.90						
	2001	10.82						
	2002	15.63						
	2003	9.62						
	2004	24.20						



COMMENTS

1. Linear Score (subjective) :EV1=4, LO2=3, LN2=4
2. Shape Codes (subjective) :EV1=S1, LO2=S2, LN2=S1

*For Explanation of Scores and Codes see in Introductory Page

14029 RIVER BARROW @ GRAIGUENAMANAGH							
BARROW CATCHMENT	AMF 1945 to 2004.(missing year '72-77,87,88,92-95)				A2	A (km^2) =	2762.00
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1945	206.21	Mean	162.543	L1	162.543	L-Cv 0.078
	1946	188.58	Median	160.745	L2	12.654	L-Skew 0.058
	1947	200.23	Std.Dev.	21.983	L3	0.739	L-Kur 0.067
	1948	187.46	CV	0.135	L4	0.852	
	1949	147.34	HazenS.	0.184			
	1950	156.94					
	1951	167.48					
	1952	145.49					
	1953	147.96					
	1954	190.15					
	1955	141.70					
	1956	166.94					
	1957	167.59					
	1958	177.71					
	1959	169.32					
	1960	203.21					
	1961	134.03					
	1962	153.16					
	1963	150.97					
	1964	178.37					
	1965	191.16					
	1966	173.22					
	1967	138.05					
	1968	147.96					
	1970	140.79					
	1971	145.69					
	1973	197.84					
	1978	167.81					
	1980	142.83					
	1981	160.21					
	1982	137.75					
	1983	177.27					
	1984	161.60					
	1985	136.54					
	1986	151.18					
	1989	192.40					
	1990	159.26					
	1991	143.13					
	1996	114.45					
	1997	184.67					
	1998	180.24					
	1999	150.24					
	2000	172.57					
	2001	144.05					
	2002	160.74					
	2003	123.09					
	2004	163.94					

COMMENTS

1.Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot

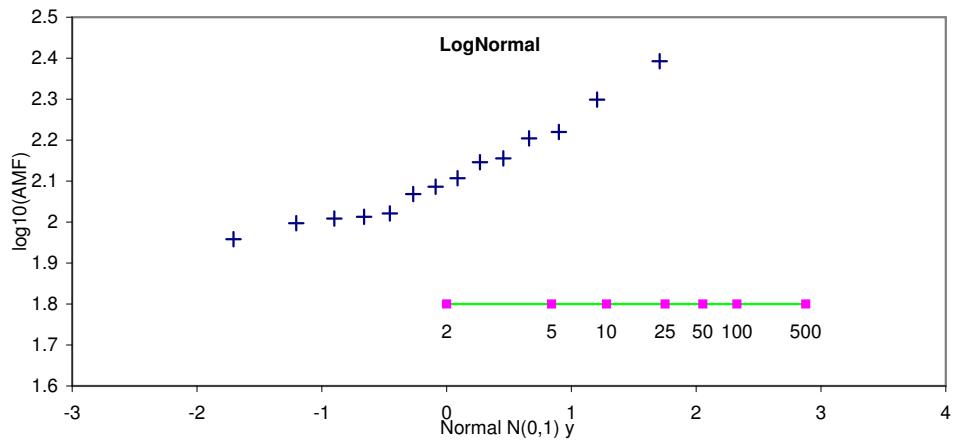
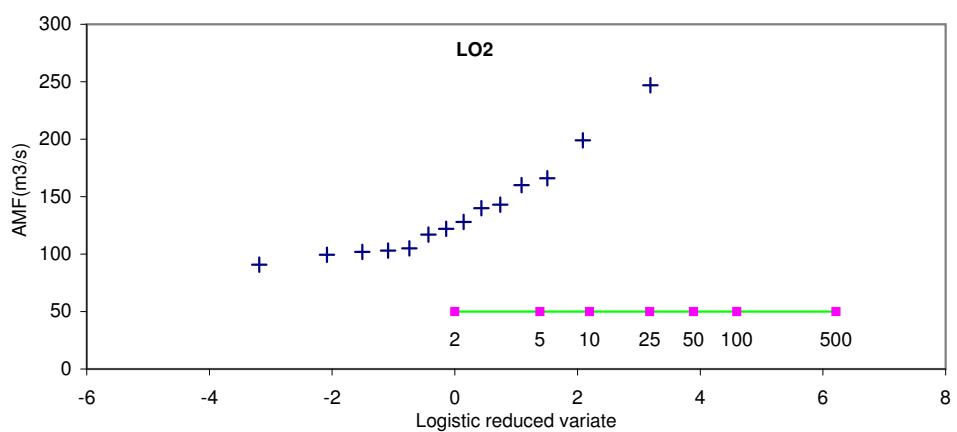
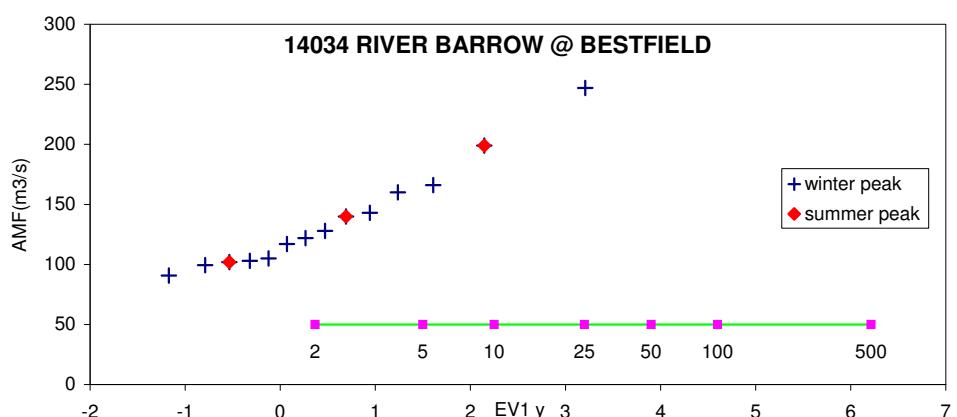
2.Linear Score (subjective) :EV1=3, LO2=4, LN2=5

3.Shape Codes (subjective) :EV1=D1, LO2=S1, LN2=L1

*For Explanation of Scores and Codes see in Introductory Page

14034 RIVER BARROW @ BESTFIELD

AM Floods 1978 to 1994.(missing year '82-83,88)				A2	A (km ²)=	2060.00	N=	14
Year	AMF(m ³ /s)	Moments		PWM		L-Moments		
1978	166.00	Mean	137.300	M100	137.300	L1	137.300	L-Cv 0.175
1979	143.00	Median	125.000	M110	80.645	L2	23.990	L-Skew 0.332
1980	160.00	Std.Dev.	43.868	M120	59.091	L3	7.974	L-Kur 0.173
1981	117.00	CV	0.320	M130	47.322	L4	4.159	
1984	103.00	HazenS.	2.229					



COMMENTS

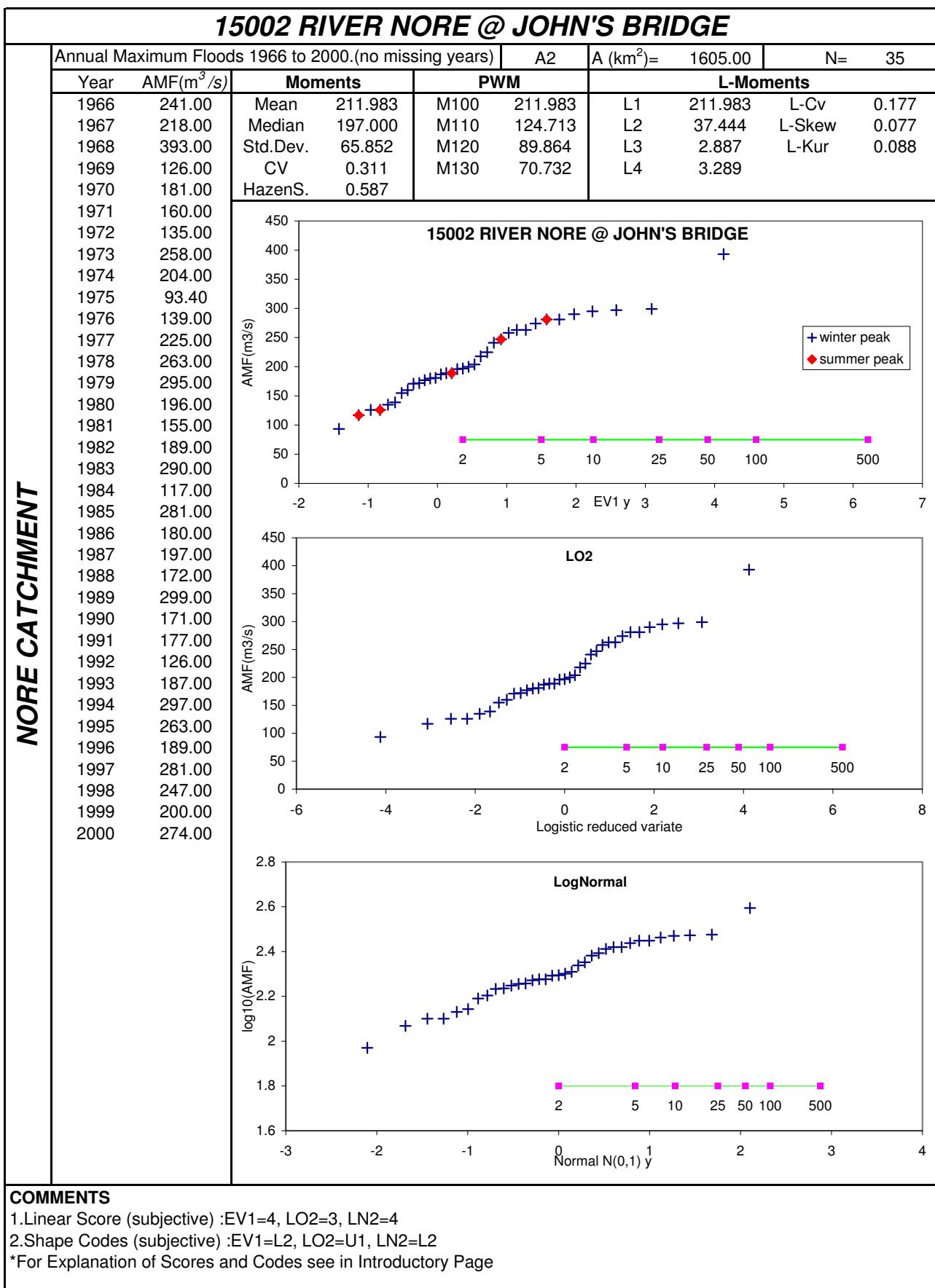
1. Linear Score (subjective) :EV1=4, LO2=2, LN2=2
2. Shape Codes (subjective) :EV1=L2X, LO2=U2X, LN2=U2X

*For Explanation of Scores and Codes see in Introductory Page

15001 RIVER Kings @ Annamult							
NORE CATCHMENT	AM Floods 1954 to 2004.(missing years:61,70-76,01)			A2	A (km^2)=	443.00	N= 42
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
1954	107.00	Mean	89.388	M100	89.388	L1	89.388 L-Cv 0.159
1955	47.00	Median	88.750	M110	51.805	L2	14.222 L-Skew 0.003
1956	73.80	Std.Dev.	24.717	M120	36.915	L3	0.048 L-Kur 0.075
1957	89.20	CV	0.277	M130	28.813	L4	1.070
1958	75.40	HazenS.	0.143				
1959	51.40						
1960	110.00						
1962	52.50						
1963	78.50						
1964	90.90						
1965	97.90						
1966	80.10						
1967	65.00						
1968	151.00						
1969	52.50						
1977	105.00						
1978	110.00						
1979	124.00						
1980	96.10						
1981	97.90						
1982	88.30						
1983	88.30						
1984	62.20						
1985	124.00						
1986	66.40						
1987	84.10						
1988	76.90						
1989	111.00						
1990	63.60						
1991	74.60						
1992	94.30						
1993	69.30						
1994	109.00						
1995	113.00						
1996	73.80						
1997	114.00						
1998	114.00						
1999	83.30						
2000	114.00						
2002	102.00						
2003	44.00						
2004	129.00						

COMMENTS

- 1.Linear Score (subjective) :EV1=2, LO2=2, LN2=3
 - 2.Shape Codes (subjective) :EV1=D2, LO2=S2, LN2=S1
- *For Explanation of Scores and Codes see in Introductory Page



15003 RIVER DINAN @ DINAN BRIDGE							
	AM Floods 1954 to 2004.(missing years '01)			A2	A(km^2)=	298.00	N= 50
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
1954	176.16	Mean	143.575	M100	143.575	L1	143.575 L-Cv 0.111
1955	141.36	Median	150.758	M110	79.736	L2	15.897 L-Skew -0.146
1956	153.43	Std.Dev.	28.196	M120	55.419	L3	-2.325 L-Kur 0.087
1957	164.26	CV	0.196	M130	42.535	L4	1.384
1958	151.14	HazenS.	-0.781				
1959	154.96						
1960	168.98						
1961	127.50						
1962	98.68						
1963	106.65						
1964	110.71						
1965	175.35						
1966	161.92						
1967	153.43						
1968	184.25						
1969	100.65						
1970	126.78						
1971	106.65						
1972	115.52						
1973	165.83						
1974	116.91						
1975	98.02						
1976	107.32						
1977	168.98						
1978	154.96						
1979	164.26						
1980	150.38						
1981	117.60						
1982	161.92						
1983	160.36						
1984	148.86						
1985	187.52						
1986	125.35						
1987	145.85						
1988	133.27						
1989	160.36						
1990	96.72						
1991	150.38						
1992	131.82						
1993	142.85						
1994	157.27						
1995	142.85						
1996	170.97						
1997	185.06						
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1999	151.14						
2000	128.93						
2002	164.26						
2003	61.13						
2004	165.83						

NORE CATCHMENT

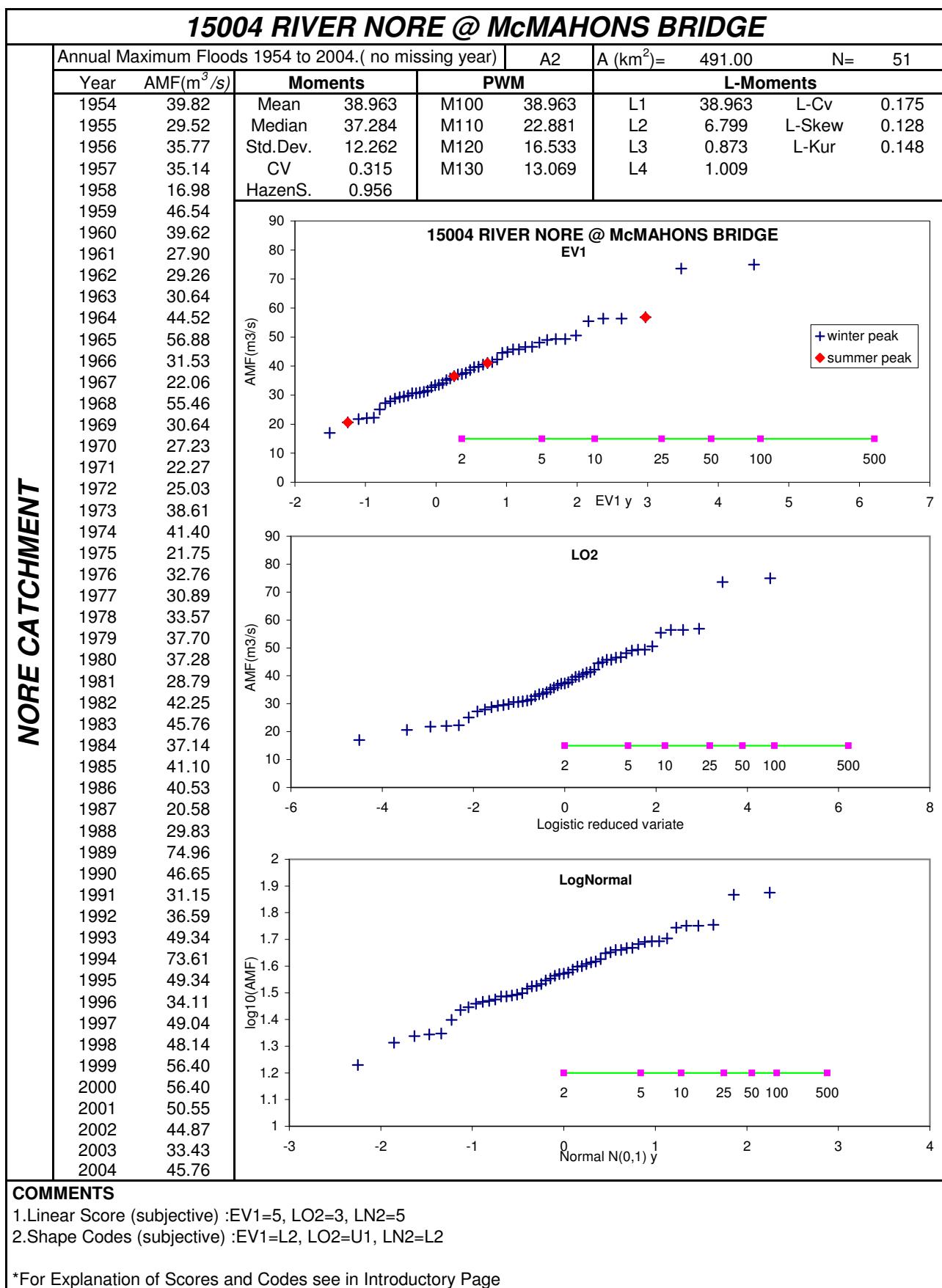
15003 RIVER DINAN @ DINAN BRIDGE

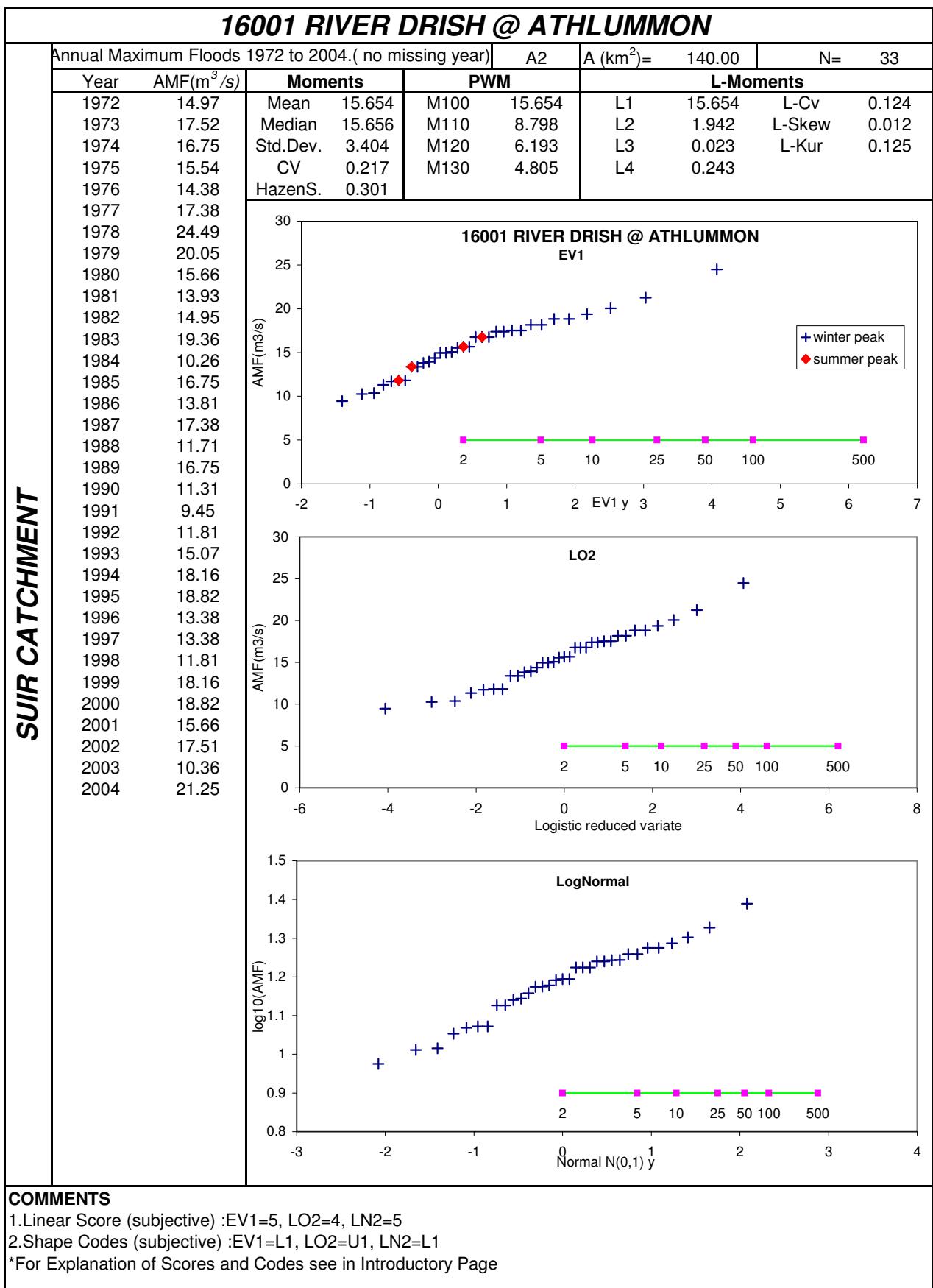
LO2

LogNormal

COMMENTS

1. Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot
 2. Linear Score (subjective) :EV1=2, LO2=3, LN2=2
 3. Shape Codes (subjective) :EV1=D2, LO2=S1, LN2=D2
 *For Explanation of Scores and Codes see in Introductory Page





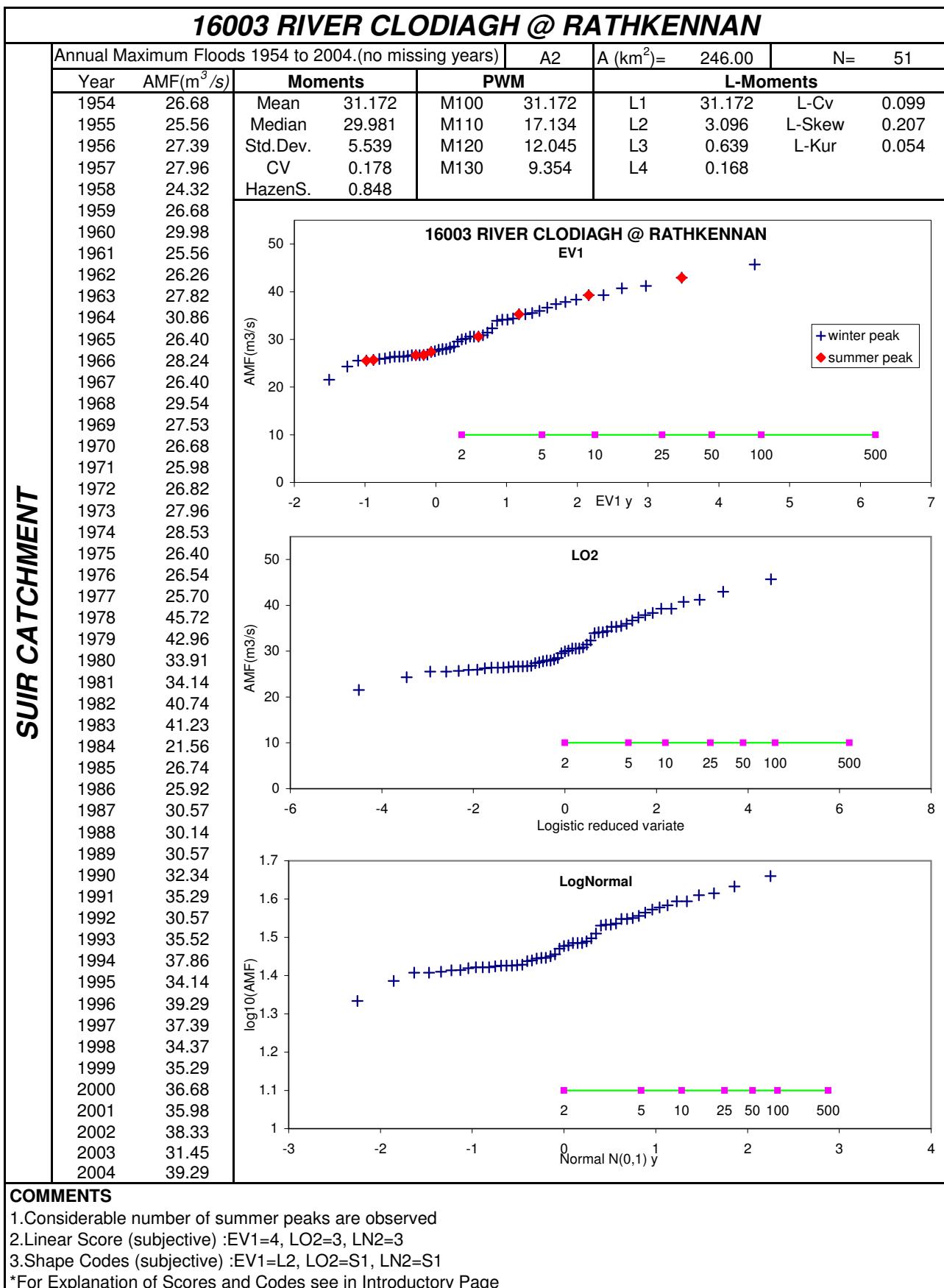
COMMENTS

- 1.Linear Score (subjective) :EV1=5, LO2=4, LN2=5
 - 2.Shape Codes (subjective) :EV1=L1, LO2=U1, LN2=L1
- *For Explanation of Scores and Codes see in Introductory Page

16002 RIVER SUIR @ BEAKSTOWN							
SUIR CATCHMENT	Annual Maximum Floods 1954 to 2004.(no missing years)				A2	A (km^2) =	512.00
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1954	63.23	Mean	55.403	M100	55.403	L1 55.403 L-Cv 0.156
	1955	42.19	Median	52.664	M110	32.027	L2 8.651 L-Skew 0.172
	1956	48.32	Std.Dev.	16.373	M120	23.041	L3 1.490 L-Kur 0.191
	1957	70.88	CV	0.296	M130	18.199	L4 1.650
	1958	50.46	HazenS.	1.793			
	1959	54.92					
	1960	79.03					
	1961	40.25					
	1962	62.00					
	1963	63.23					
	1964	81.86					
	1965	73.54					
	1966	60.78					
	1967	52.66					
	1968	123.88					
	1969	44.51					
	1970	42.06					
	1971	57.07					
	1972	38.55					
	1973	71.32					
	1974	54.69					
	1975	35.25					
	1976	50.09					
	1977	54.69					
	1978	72.71					
	1979	63.31					
	1980	39.70					
	1981	46.81					
	1982	40.87					
	1983	63.31					
	1984	32.14					
	1985	52.36					
	1986	45.74					
	1987	59.52					
	1988	46.81					
	1989	84.42					
	1990	52.36					
	1991	46.81					
	1992	30.18					
	1993	48.98					
	1994	60.77					
	1995	64.61					
	1996	75.54					
	1997	58.29					
	1998	44.51					
	1999	59.52					
	2000	53.52					
	2001	43.65					
	2002	42.63					
	2003	29.81					
	2004	51.22					

COMMENTS

- 1. One high-outlier is observed
 - 2. Linear Score (subjective) :EV1=3, LO2=2, LN2=4
 - 3. Shape Codes (subjective) :EV1=L2X, LO2=U1X, LN2=L2X
- *For Explanation of Scores and Codes see in Introductory Page



16004 RIVER SUIR @ THURLES							
SUIR CATCHMENT	Annual Maximum Floods 1954 to 2002.(missing year 90)			A2	A (km^2) =	236.00	N= 48
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1954	23.48	Mean	22.166	M100	22.166	L1 22.166 L-Cv 0.111
	1955	15.90	Median	21.372	M110	12.311	L2 2.456 L-Skew 0.069
	1956	18.92	Std.Dev.	4.332	M120	8.645	L3 0.170 L-Kur 0.108
	1957	28.91	CV	0.195	M130	6.703	L4 0.265
	1958	22.81	HazenS.	0.530			
	1959	28.17					
	1960	30.14					
	1961	18.51					
	1962	25.55					
	1963	27.21					
	1964	24.74					
	1965	20.61					
	1966	20.66					
	1967	20.48					
	1968	34.89					
	1969	18.40					
	1970	19.03					
	1971	20.08					
	1972	16.00					
	1973	26.61					
	1974	25.44					
	1975	14.10					
	1976	17.59					
	1977	22.92					
	1978	22.92					
	1979	21.48					
	1980	22.47					
	1981	20.29					
	1982	22.92					
	1983	26.85					
	1984	25.79					
	1985	22.70					
	1986	18.92					
	1987	20.51					
	1988	17.39					
	1989	26.38					
	1991	19.44					
	1992	14.47					
	1993	19.44					
	1994	24.51					
	1995	21.26					
	1996	26.38					
	1997	25.55					
	1998	20.94					
	1999	26.61					
	2000	21.15					
	2001	16.88					
	2002	17.59					

16004 RIVER SUIR @ THURLES

EV1

AMF(m^3/s)

EV1 y

+ winter peak
◆ summer peak

LO2

AMF(m^3/s)

Logistic reduced variate

Normal $N(0,1)$ y

LogNormal

$\log_{10}(\text{AMF})$

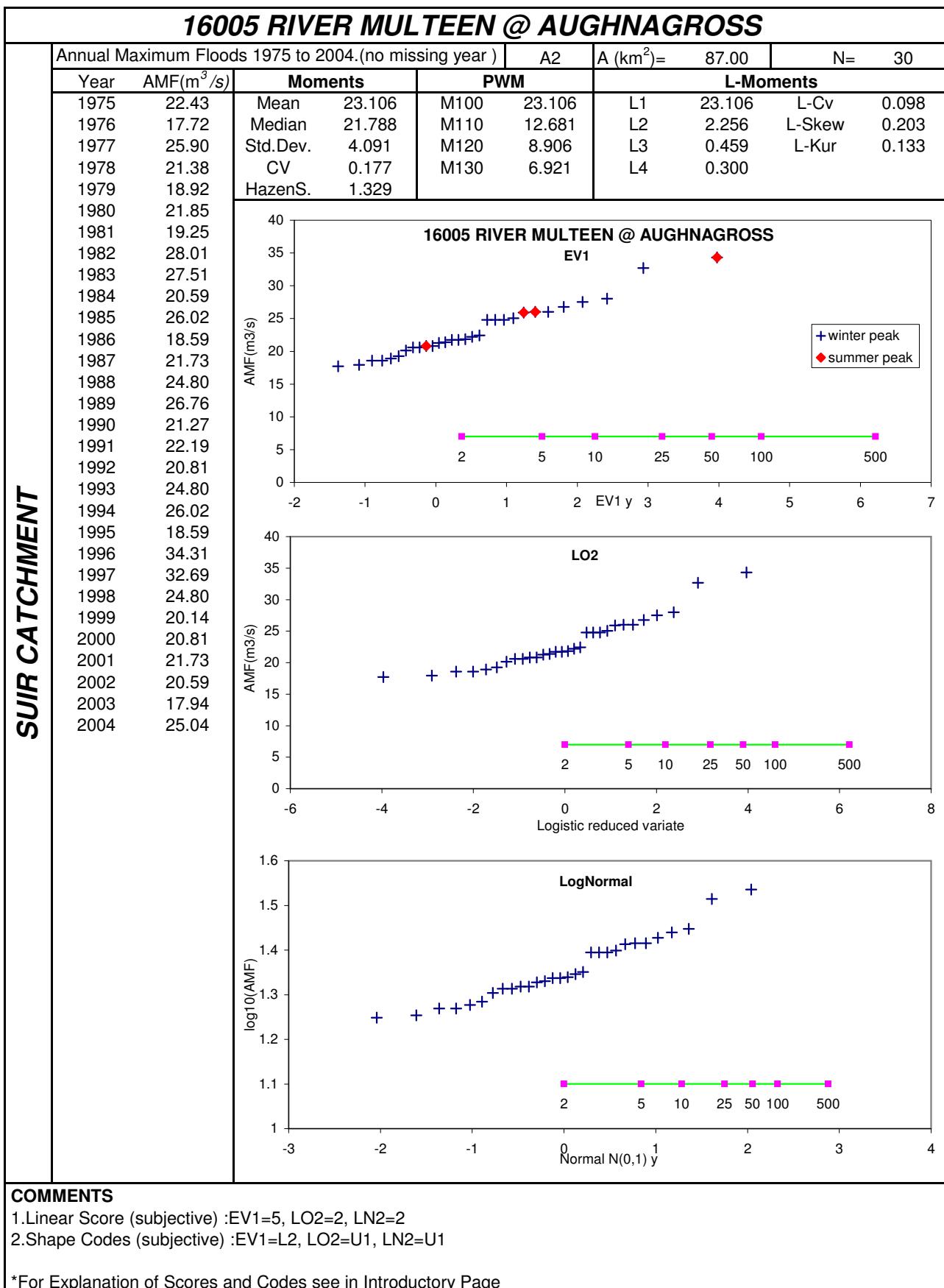
$N(0,1)$ y

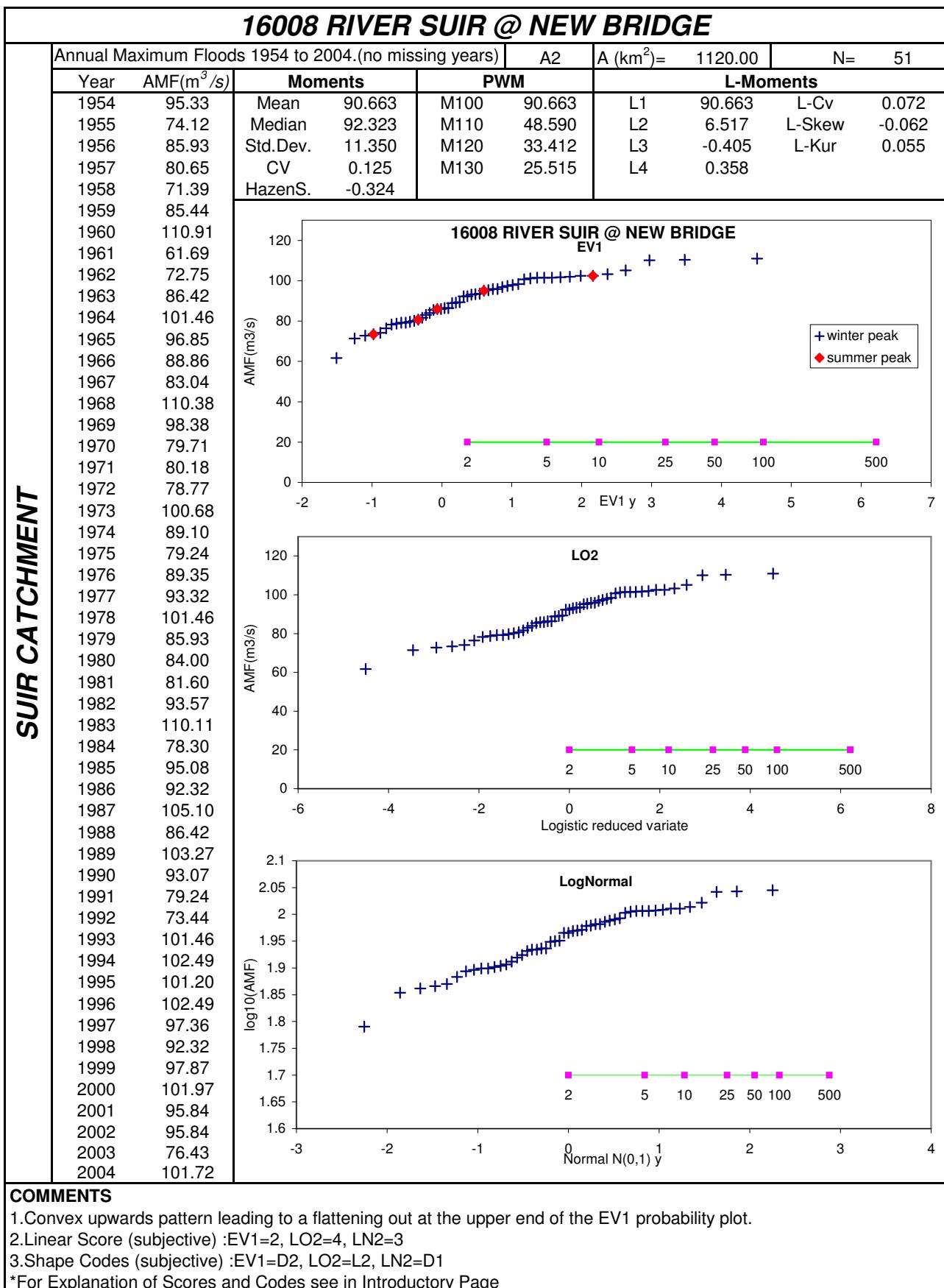
COMMENTS

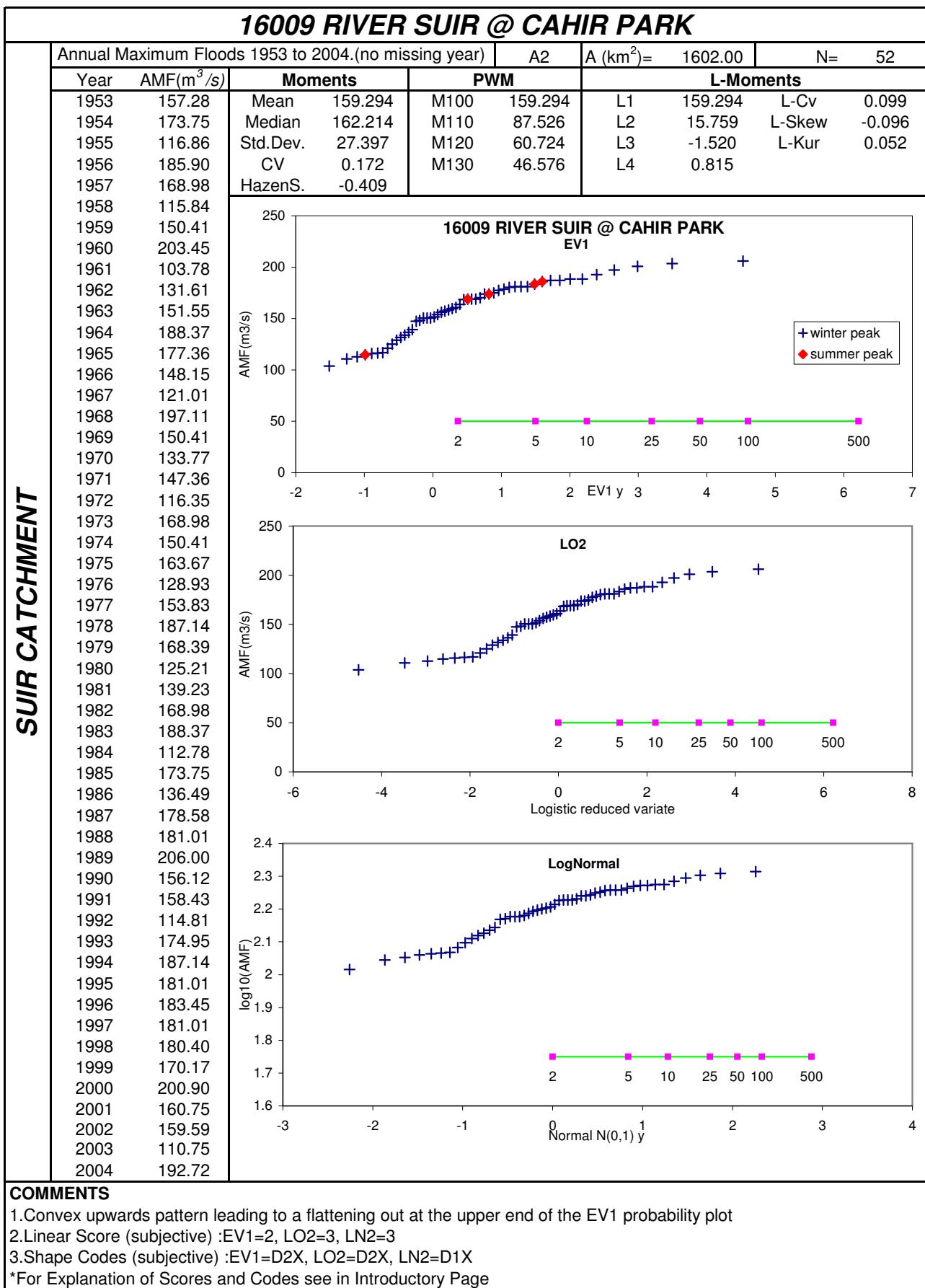
1. Linear Score (subjective) :EV1=5, LO2=4, LN2=5

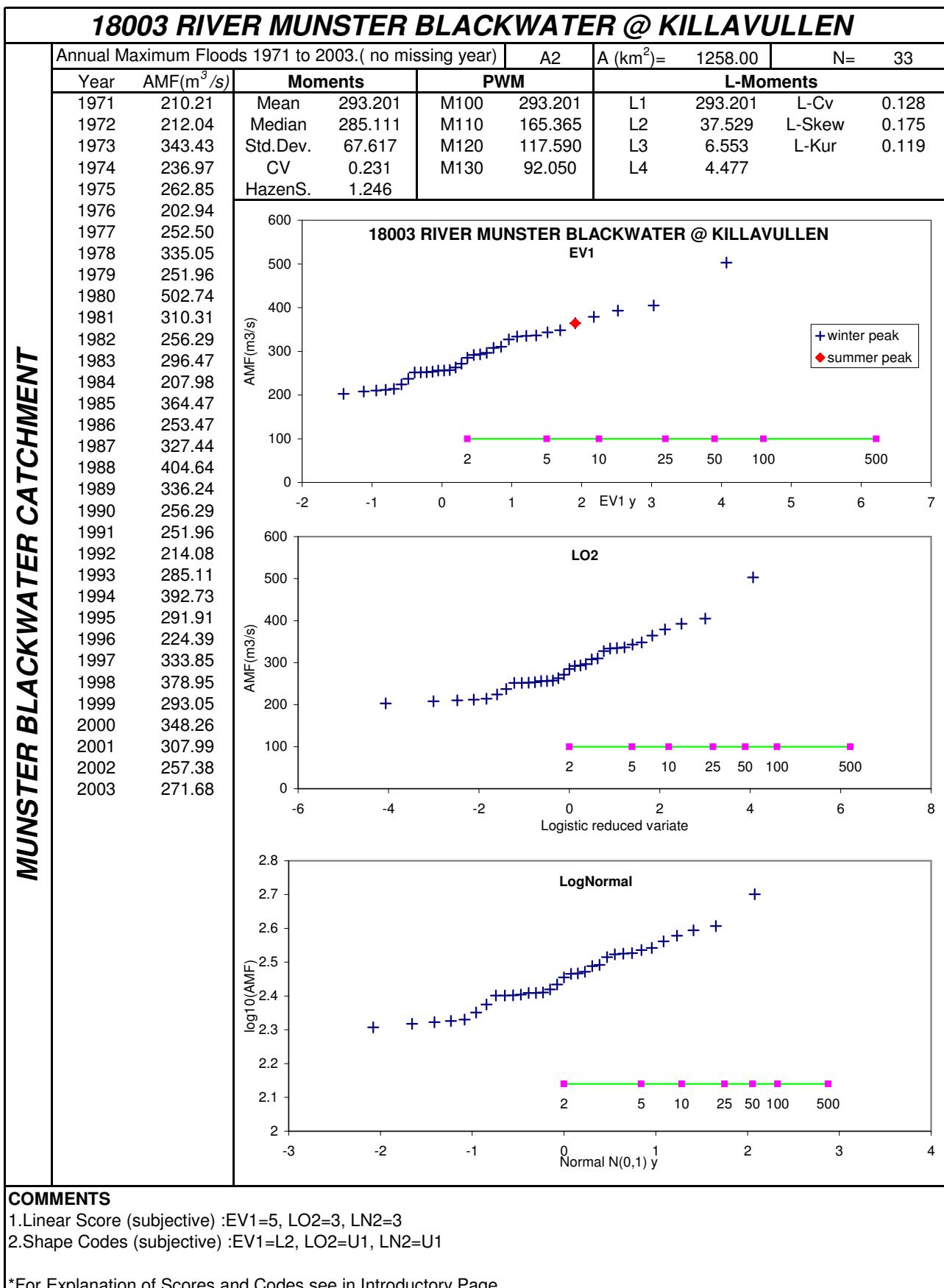
2. Shape Codes (subjective) :EV1=L1, LO2=U1, LN2=L1

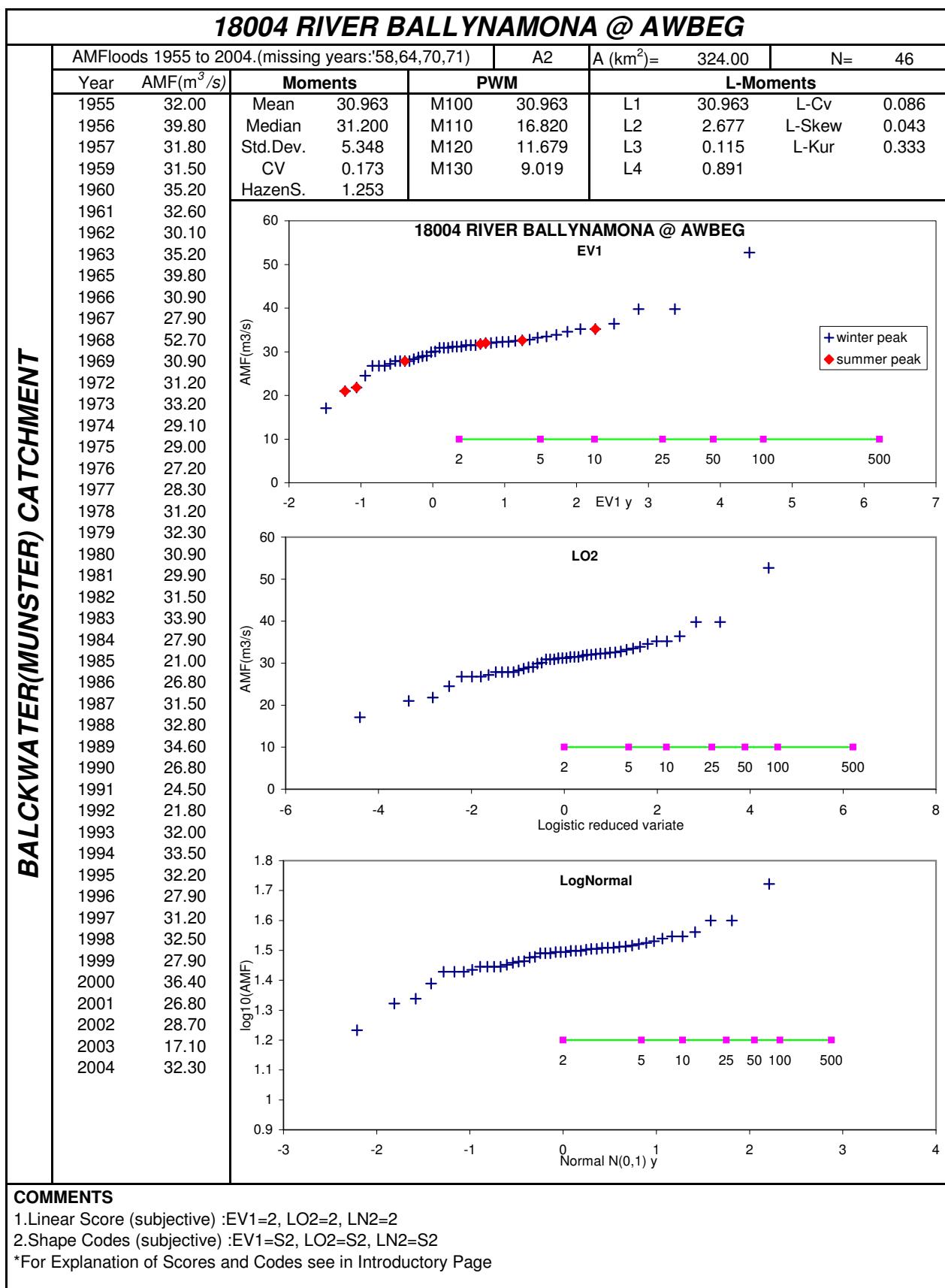
*For Explanation of Scores and Codes see in Introductory Page





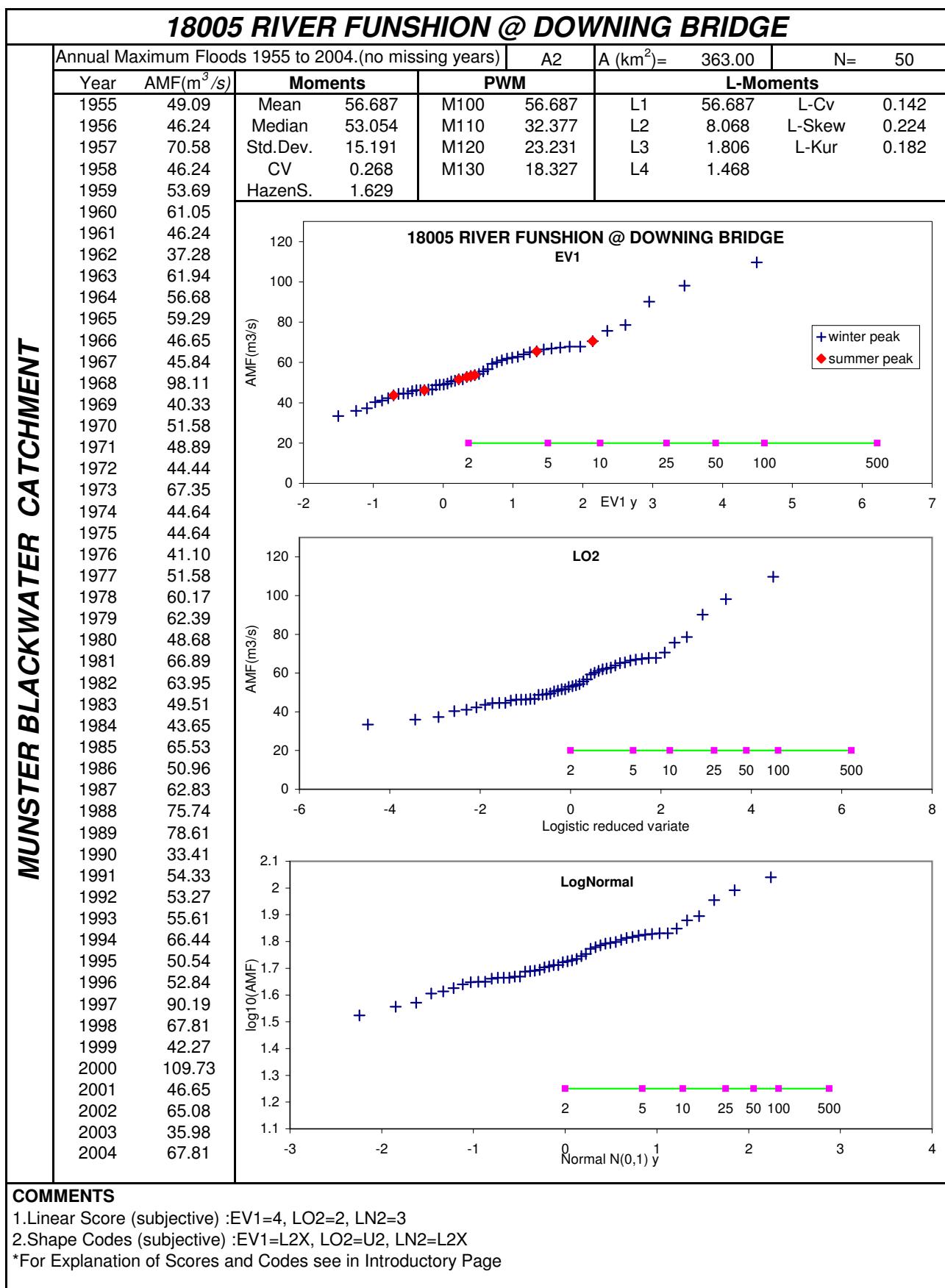


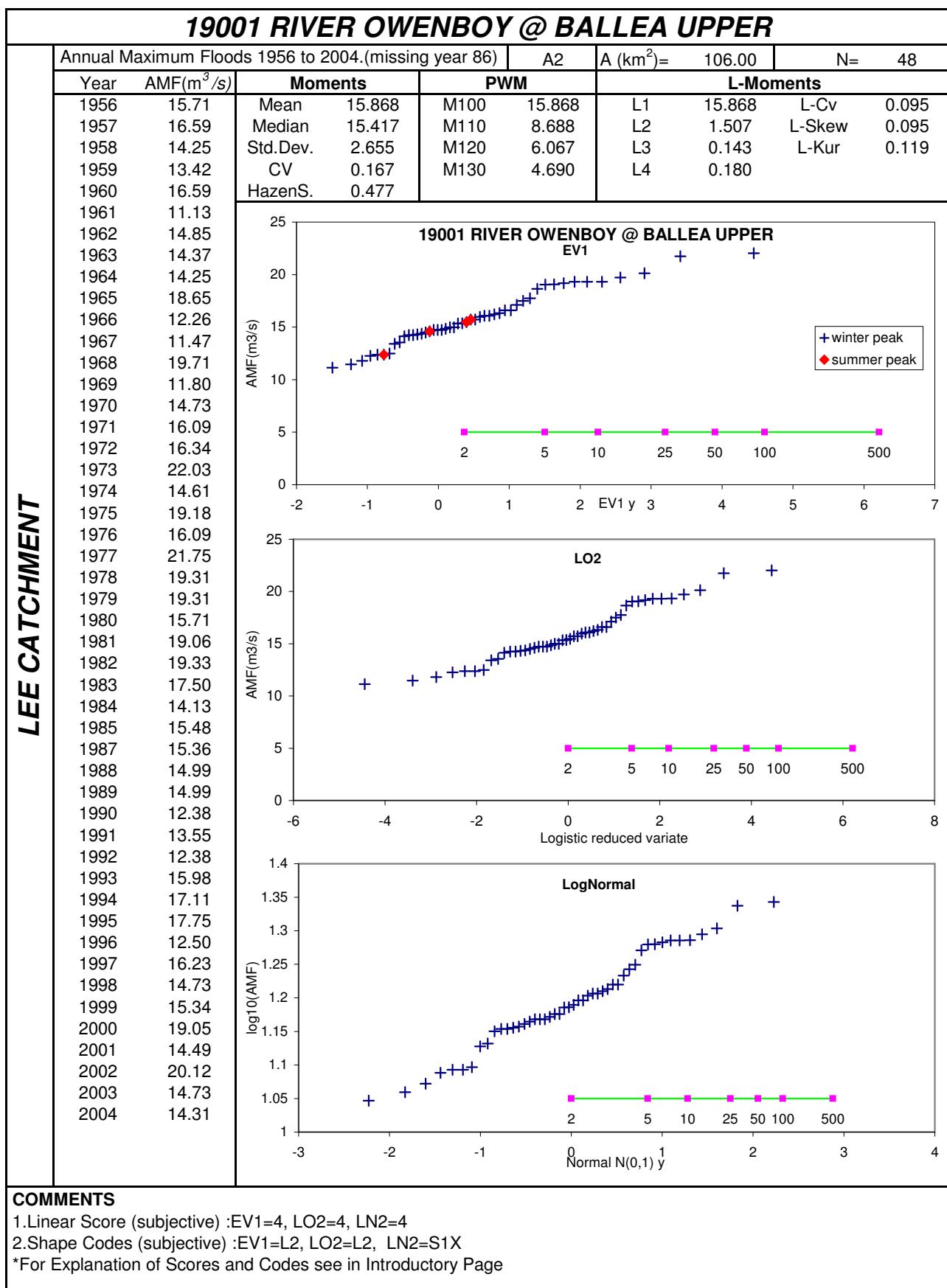


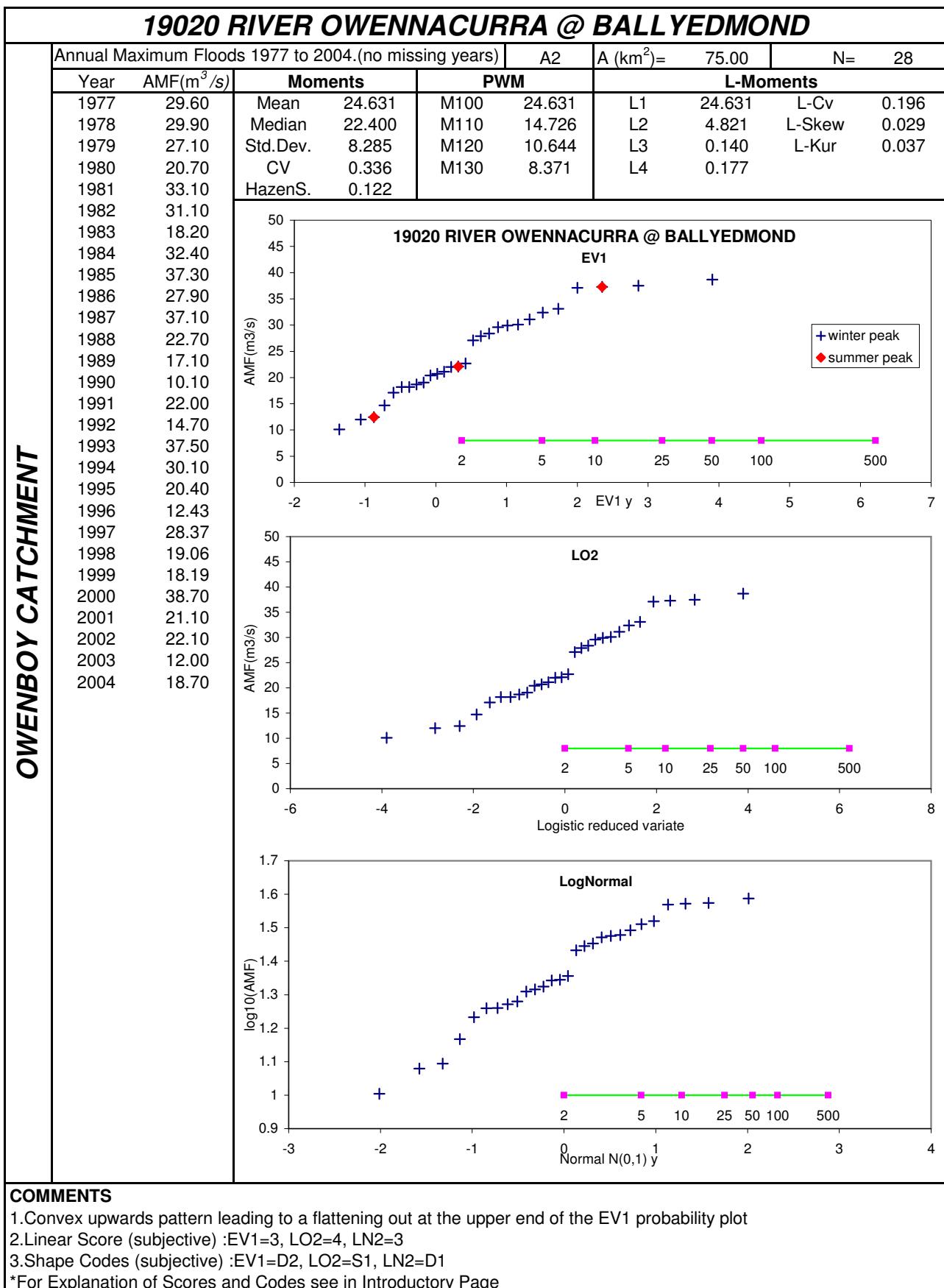


COMMENTS

- 1.Linear Score (subjective) :EV1=2, LO2=2, LN2=2
 - 2.Shape Codes (subjective) :EV1=S2, LO2=S2, LN2=S2
- *For Explanation of Scores and Codes see in Introductory Page







23001 RIVER GALEY @ INCH BRIDGE

Annual Maximum Floods 1960 to 2004.(no missing year)				A2	A (km^2) =	196.00	N=	45	
Year	AMF(m^3/s)	Moments	PWM	L-Moments					
1960	105.33	Mean	97.392	M100	97.392	L1	97.392	L-Cv	0.180
1961	77.36	Median	99.054	M110	57.469	L2	17.546	L-Skew	0.128
1962	127.55	Std.Dev.	32.346	M120	41.611	L3	2.245	L-Kur	0.181
1963	60.75	CV	0.332	M130	32.964	L4	3.183		
1964	109.57	HazenS.	1.216						
1965	100.28								
1966	76.46								
1967	119.03								
1968	122.38								
1969	70.89								
1970	56.65								
1971	61.26								
1972	103.27								
1973	210.07								
1974	98.22								
1975	99.05								
1976	38.04								
1977	64.92								
1978	71.19								
1979	76.26								
1980	104.13								
1981	71.91								
1982	90.07								
1983	105.84								
1984	74.07								
1985	120.08								
1986	79.24								
1987	84.57								
1988	111.08								
1989	124.70								
1990	99.89								
1991	135.17								
1992	43.20								
1993	104.98								
1994	164.72								
1995	72.63								
1996	94.10								
1997	127.52								
1998	89.28								
1999	102.42								
2000	122.84								
2001	104.13								
2002	73.35								
2003	74.80								
2004	159.42								

COMMENTS

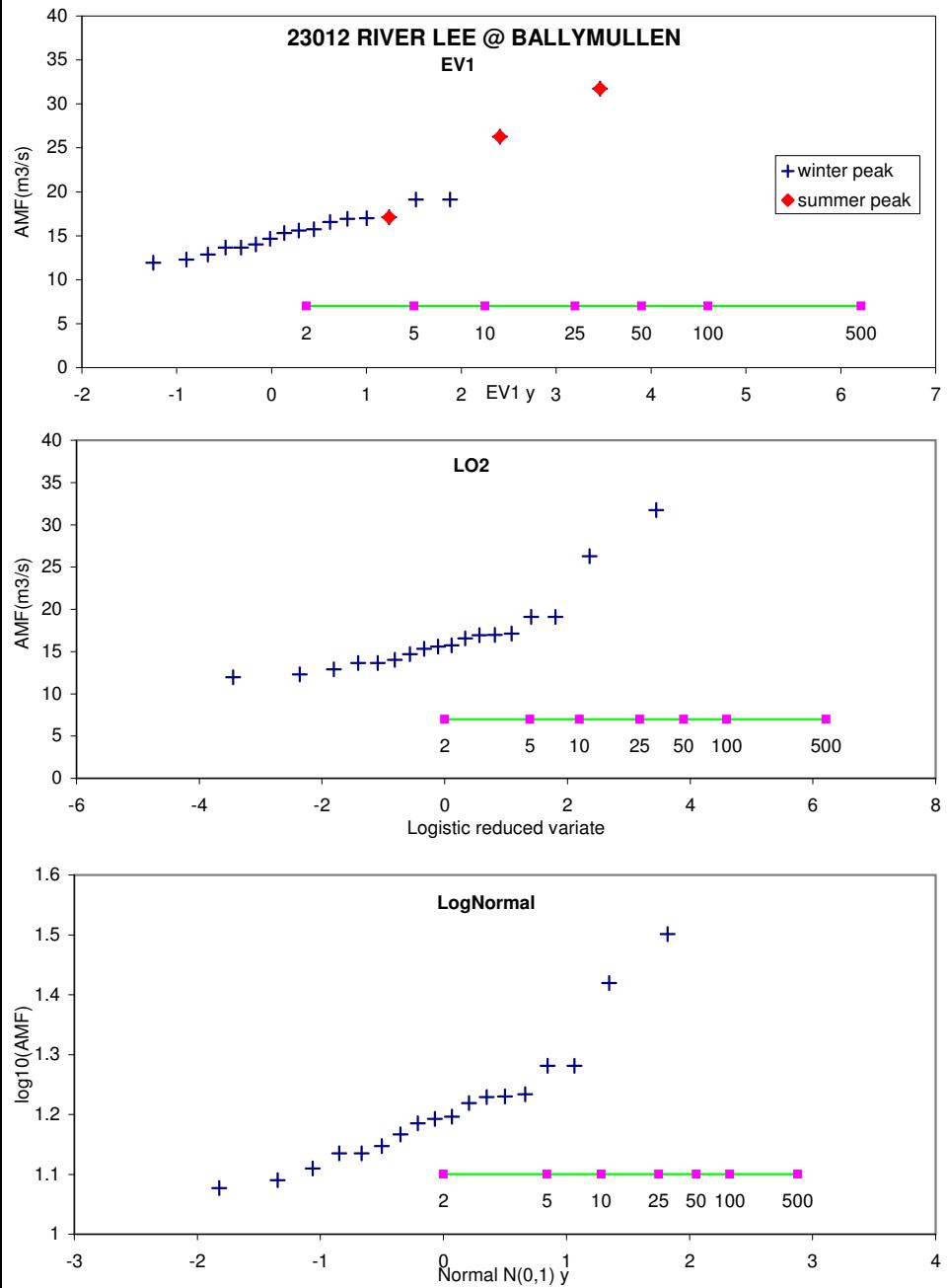
1. Linear Score (subjective) :EV1=4, LO2=2, LN2=3
 2. Shape Codes (subjective) :EV1=L2, LO2=U1, LN2=L2

*For Explanation of Scores and Codes see in Introductory Page

23012 RIVER LEE @ BALLYMULLEN

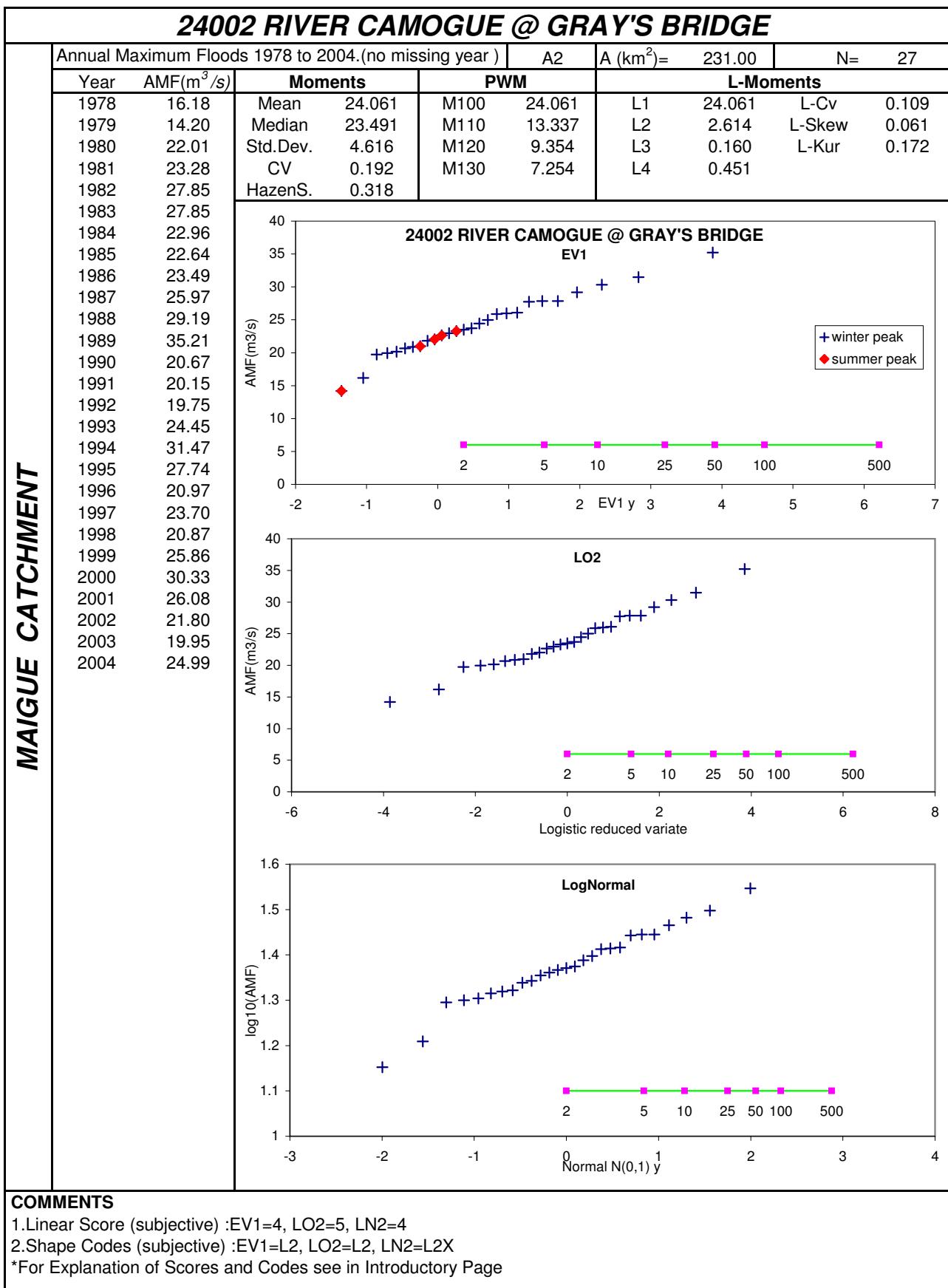
Annual Maximum Floods 1974 to 1991.(no missing year)				A2	A (km^2) =	60.00	N=	18
Year	AMF(m^3/s)	Moments	PWM	L-Moments				
1974	15.72	Mean	16.869	M100	16.869	L1	16.869	L-Cv 0.146
1975	14.03	Median	15.657	M110	9.666	L2	2.464	L-Skew 0.386
1976	13.65	Std.Dev.	4.967	M120	7.014	L3	0.952	L-Kur 0.327
1977	11.95	CV	0.294	M130	5.604	L4	0.805	
1978	12.30	HazenS.	2.984					
1979	15.33							
1980	16.94							
1981	13.65							
1982	14.67							
1983	15.59							
1984	26.27							
1985	31.74							
1986	17.12							
1987	16.98							
1988	19.12							
1989	19.12							
1990	16.57							
1991	12.88							

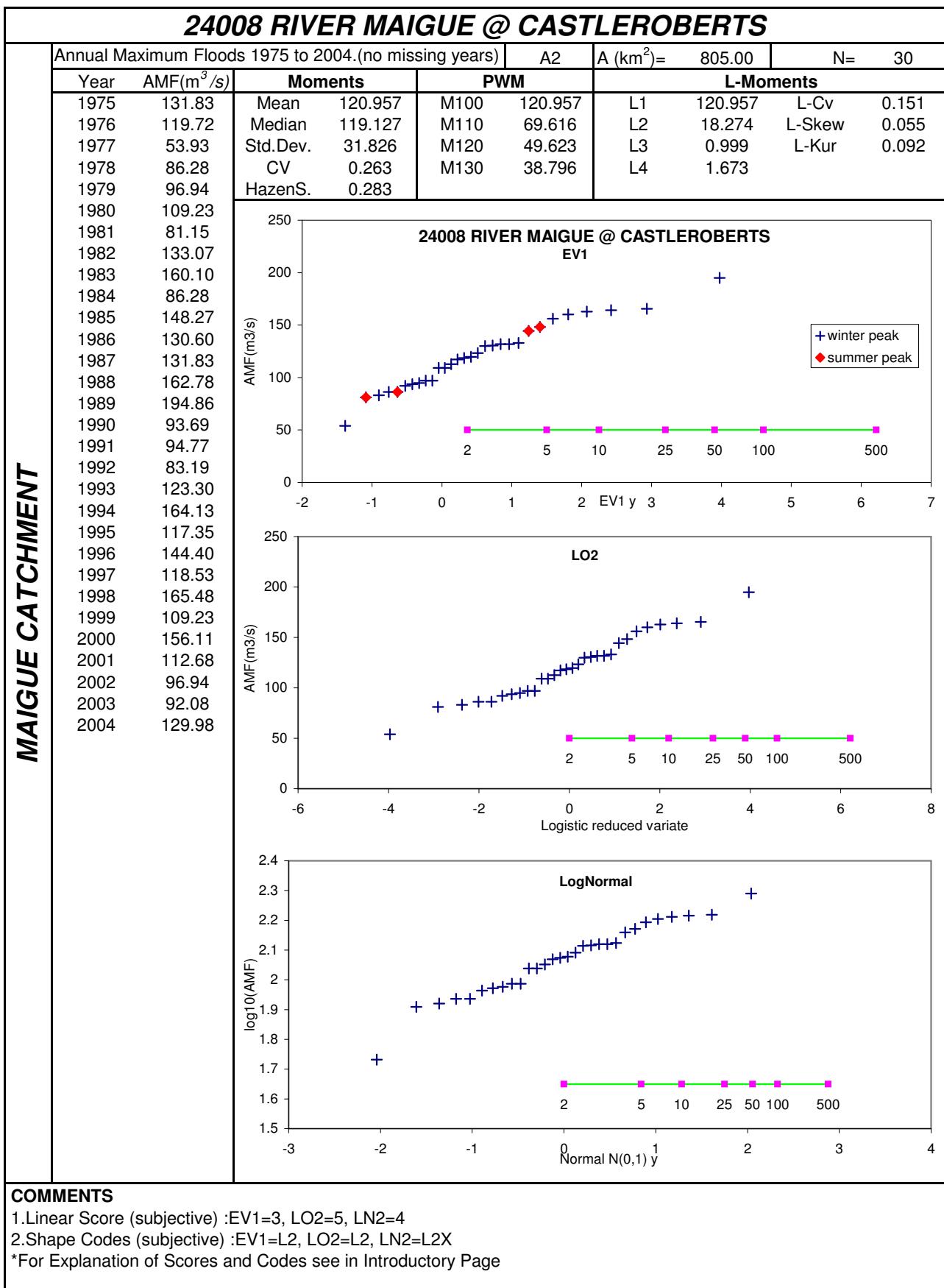
FEALE CATCHMENT

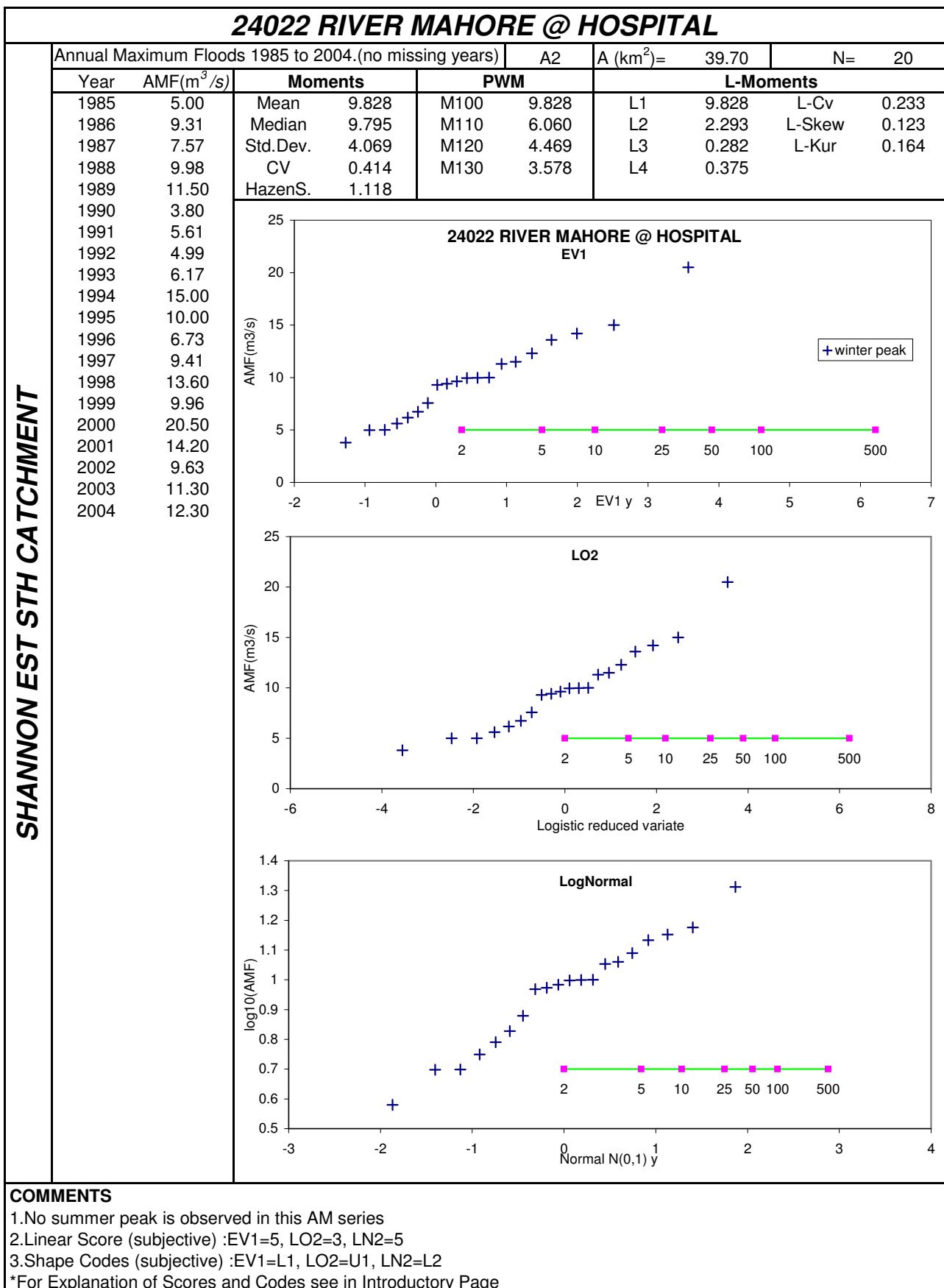


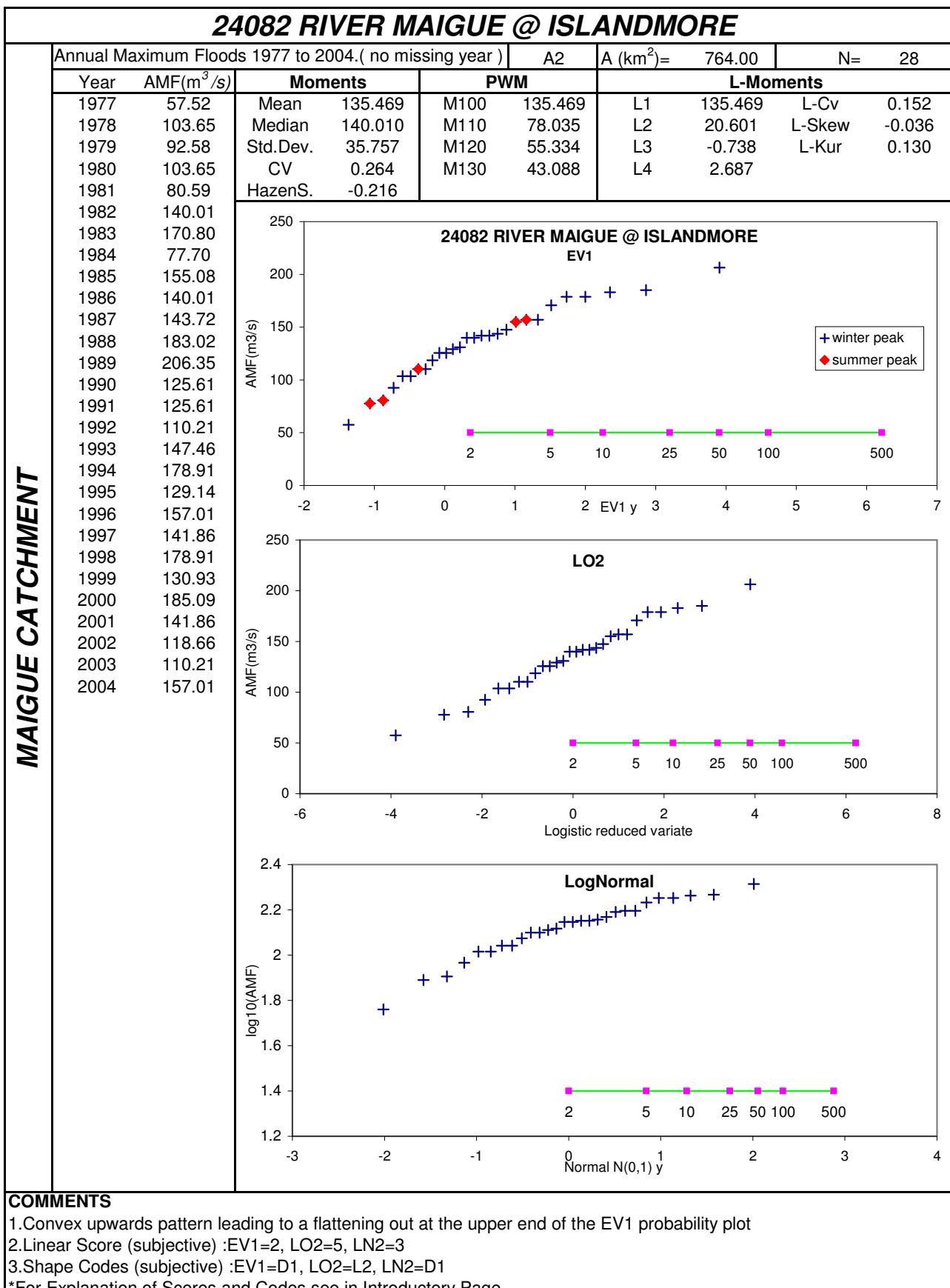
COMMENTS

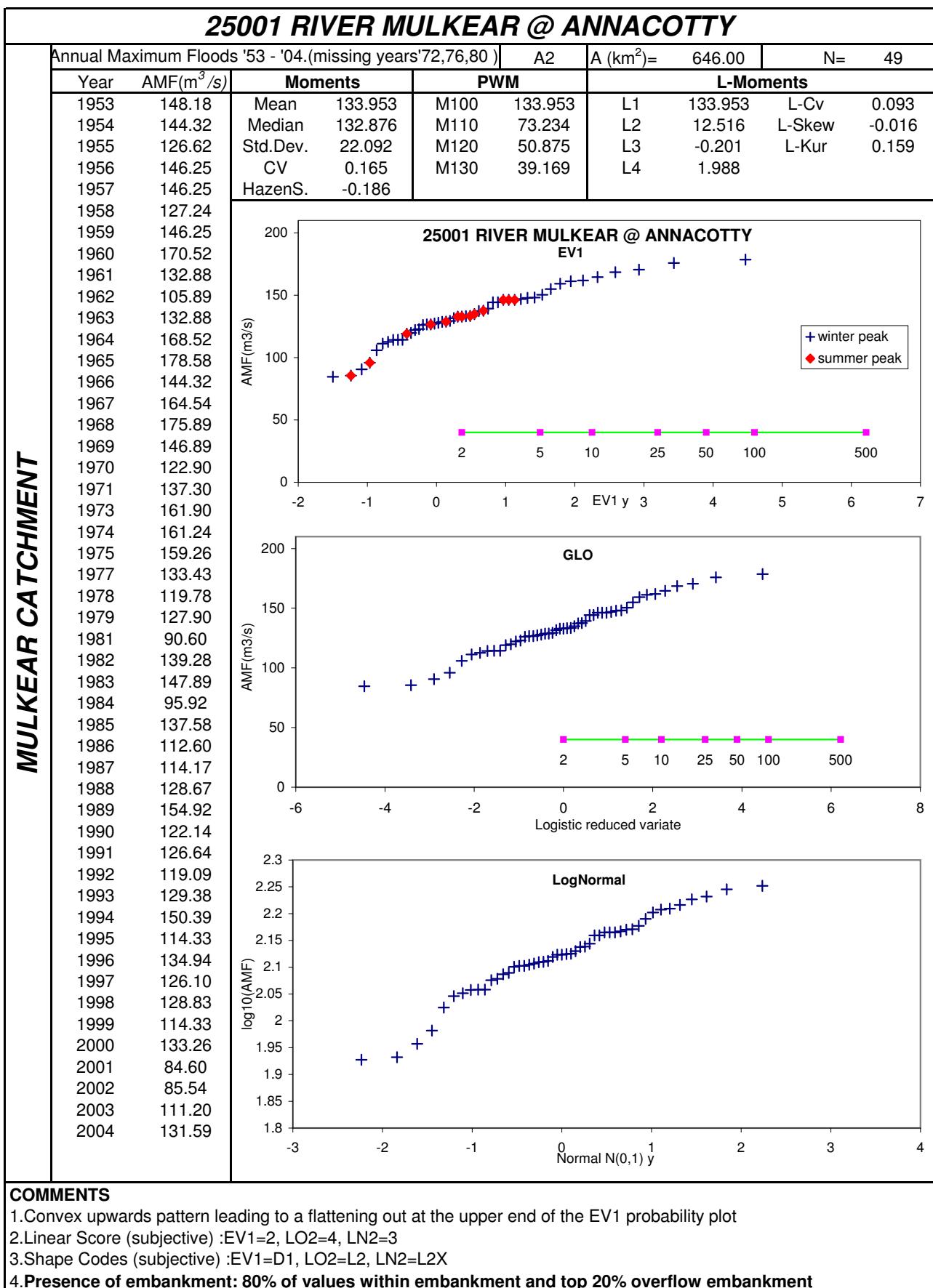
1. High-outlier is observed
2. Two highest peaks come out as summer peaks
3. Linear Score(subjective):EV1=2, LO2=1, LN2=1 *For Explanation of Scores and Codes see in Introductory Page
4. Shape Codes(subjective):EV1=U2, LO2=U2, LN2=U2





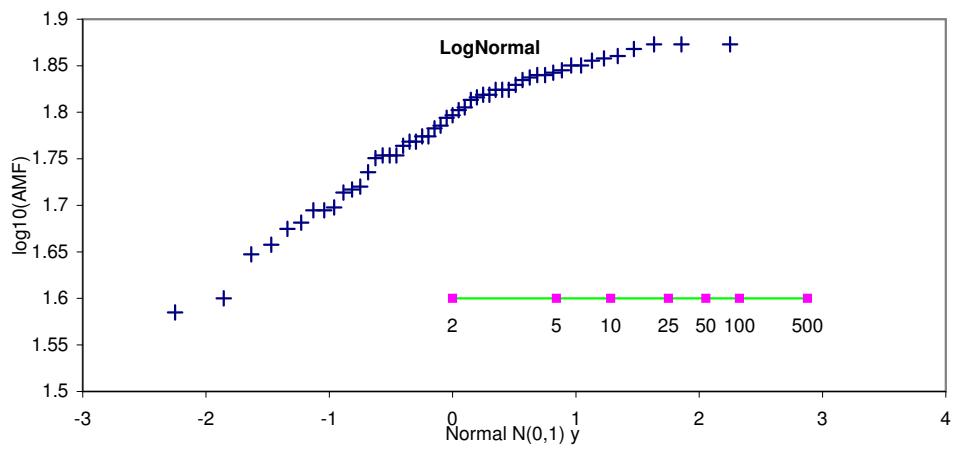
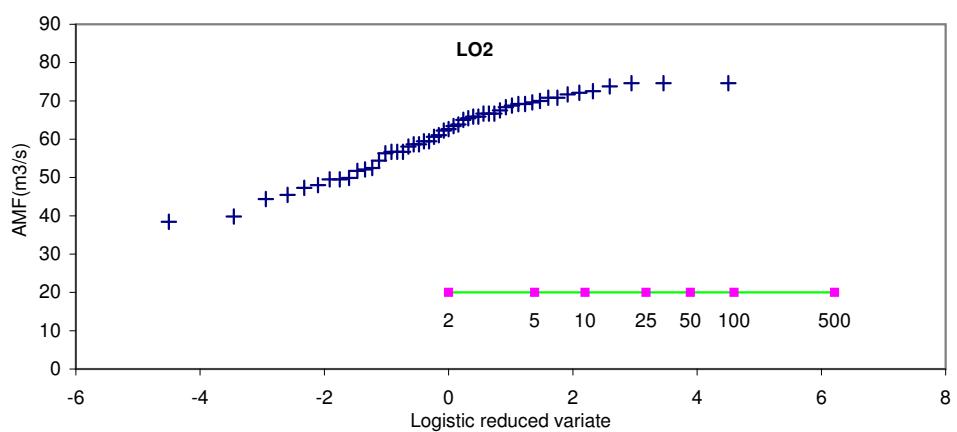
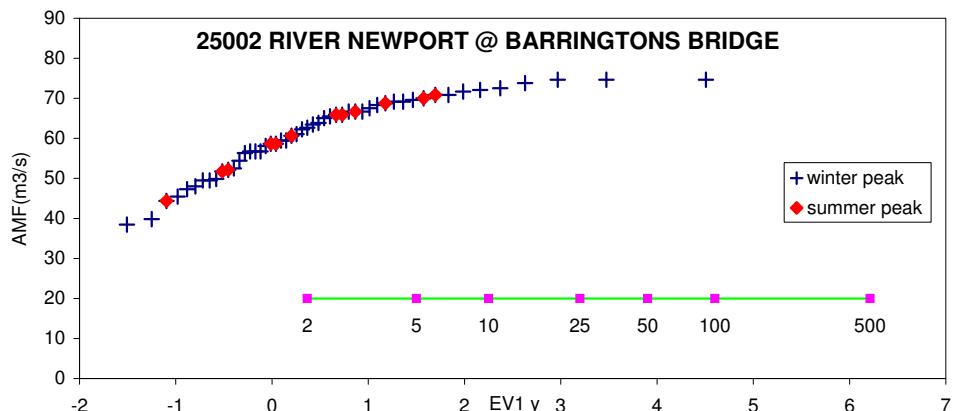






25002 RIVER NEWPORT @ BARRINGTONS BRIDGE							
	Annual Maximum Floods 1953 to 2004.(missing years:71)			A2	A (km ²)=	223.00	N= 51
	Year	AMF(m ³ /s)	Moments	PWM	L-Moments		
	1953	65.07	Mean	61.145	M100	61.145	L1 61.145 L-Cv 0.089
	1954	62.24	Median	62.641	M110	33.291	L2 5.437 L-Skew -0.137
	1955	58.67	Std.Dev.	9.519	M120	22.976	L3 -0.744 L-Kur 0.060
	1956	68.76	CV	0.156	M130	17.563	L4 0.324
	1957	66.70	HazenS.	-0.646			
	1958	54.40					
	1959	70.84					
	1960	74.64					
	1961	52.12					
	1962	48.02					
	1963	65.88					
	1964	74.64					
	1965	73.79					
	1966	63.45					
	1967	74.64					
	1968	72.52					
	1969	69.17					
	1970	63.85					
	1972	72.10					
	1973	70.84					
	1974	71.68					
	1975	69.17					
	1976	52.50					
	1977	58.67					
	1978	56.72					
	1979	69.59					
	1980	61.04					
	1981	39.82					
	1982	68.35					
	1983	67.52					
	1984	44.39					
	1985	66.70					
	1986	47.29					
	1987	49.50					
	1988	59.46					
	1989	62.64					
	1990	56.33					
	1991	60.64					
	1992	51.74					
	1993	56.72					
	1994	65.47					
	1995	49.50					
	1996	65.88					
	1997	66.70					
	1998	70.01					
	1999	56.72					
	2000	59.46					
	2001	45.47					
	2002	38.45					
	2003	49.87					
	2004	58.08					

LOWER SHANNON CATCHMENT



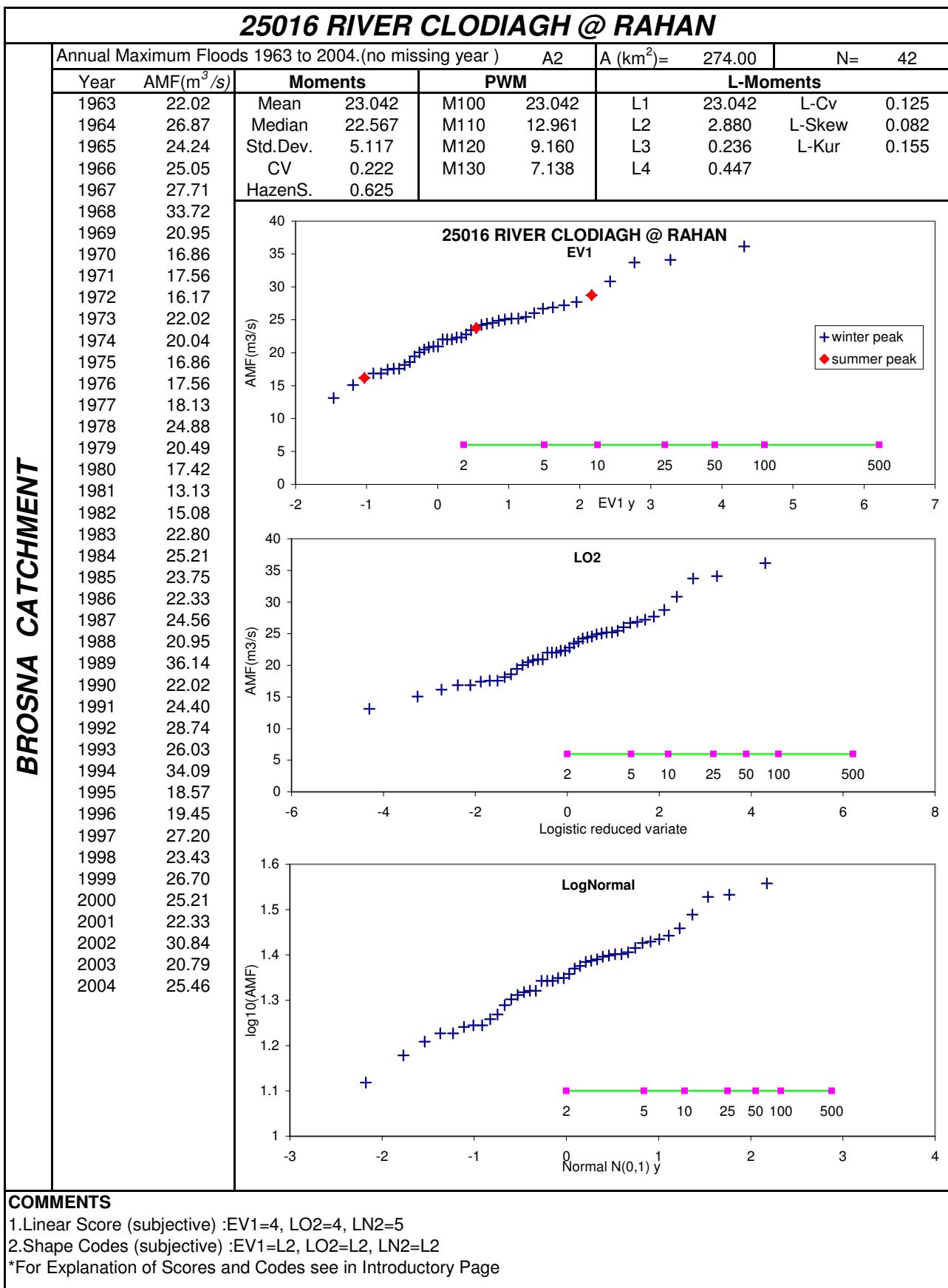
COMMENTS

- 1.Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot
- 2.Linear Score (subjective) :EV1=1, LO2=3, LN2=2
- 3.Shape Codes (subjective) :EV1=D1, LO2=S1, LN2=D2
- 4.Presence of embankment: 80% of values within embankment and top 20% overflow embankment

25005 RIVER DEAD @ SUNVILLE							
MULKEAR CATCHMENT	AMF 1954 to 2004.(missing years '59,63,64,84)			A2	A (km^2)=	190.00	N= 46
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1954	30.44	Mean	28.732	L1	28.732	L-Cv 0.059
	1955	26.62	Median	29.633	L2	1.708	L-Skew -0.192
	1956	31.55	Std.Dev.	3.052	L3	-0.329	L-Kur 0.101
	1957	29.99	CV	0.106	L4	0.172	
	1958	24.66	HazenS.	-0.976			
	1960	32.39					
	1961	23.73					
1962	23.73						
1965	31.72						
1966	28.33						
1967	31.40						
1969	25.49						
1970	20.17						
1971	23.65						
1972	26.36						
1973	33.42						
1974	31.19						
1975	31.05						
1976	22.86						
1977	29.74						
1978	29.89						
1979	29.31						
1980	27.75						
1981	27.61						
1982	32.52						
1983	30.90						
1985	30.32						
1986	23.65						
1987	26.08						
1988	27.47						
1989	29.17						
1990	27.19						
1991	28.03						
1992	29.60						
1993	29.67						
1994	31.93						
1995	28.74						
1996	30.76						
1997	30.68						
1998	30.90						
1999	30.46						
2000	32.67						
2001	28.60						
2002	27.05						
2003	30.25						
2004	32.00						

COMMENTS

- 1.Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot
- 2.Linear Score (subjective) :EV1=1, LO2=3, LN2=3
- 3.Shape Codes (subjective) :EV1=D2X, LO2=D1X, LN2=D1X
- 4.Presence of embankment: 80% of values within embankment and top 20% overflow embankment



25021 RIVER LITTLE BROSNA @ CROGHAN							
LITTLE BROSNA CATCHMENT	Annual Maximum Floods 1961 to 2004.(no missing years)				A2	A (km^2) =	493.00
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1961	24.32	Mean	28.028	M100	28.028	L1 28.028
	1962	35.80	Median	28.578	M110	15.153	L-Cv 0.081
	1963	23.89	Std.Dev.	3.939	M120	10.469	L2 2.279
	1964	29.48	CV	0.141	M130	8.021	L-Skew -0.034
	1965	26.38	HazenS.	-0.134			L-Kur 0.067
	1966	26.77					
	1967	26.19					
	1968	31.06					
	1969	20.92					
	1970	22.37					
	1971	22.96					
	1972	24.06					
	1973	30.09					
	1974	29.48					
	1975	22.06					
	1976	25.09					
	1977	22.33					
	1978	29.08					
	1979	26.81					
	1980	28.58					
	1981	25.65					
	1982	30.60					
	1983	31.22					
	1984	28.38					
	1985	32.69					
	1986	28.58					
	1987	29.79					
	1988	25.28					
	1989	32.27					
	1990	26.23					
	1991	27.00					
	1992	32.90					
	1993	29.28					
	1994	33.11					
	1995	29.18					
	1996	26.04					
	1997	32.48					
	1998	30.40					
	1999	33.33					
	2000	35.27					
	2001	31.22					
	2002	31.22					
	2003	19.89					
	2004	23.51					

AMF(m^3/s)

EV1

Legend: + winter peak, ◆ summer peak

AMF(m^3/s)

LO2

log10(AMF)

LogNormal

Normal N(0,1) y

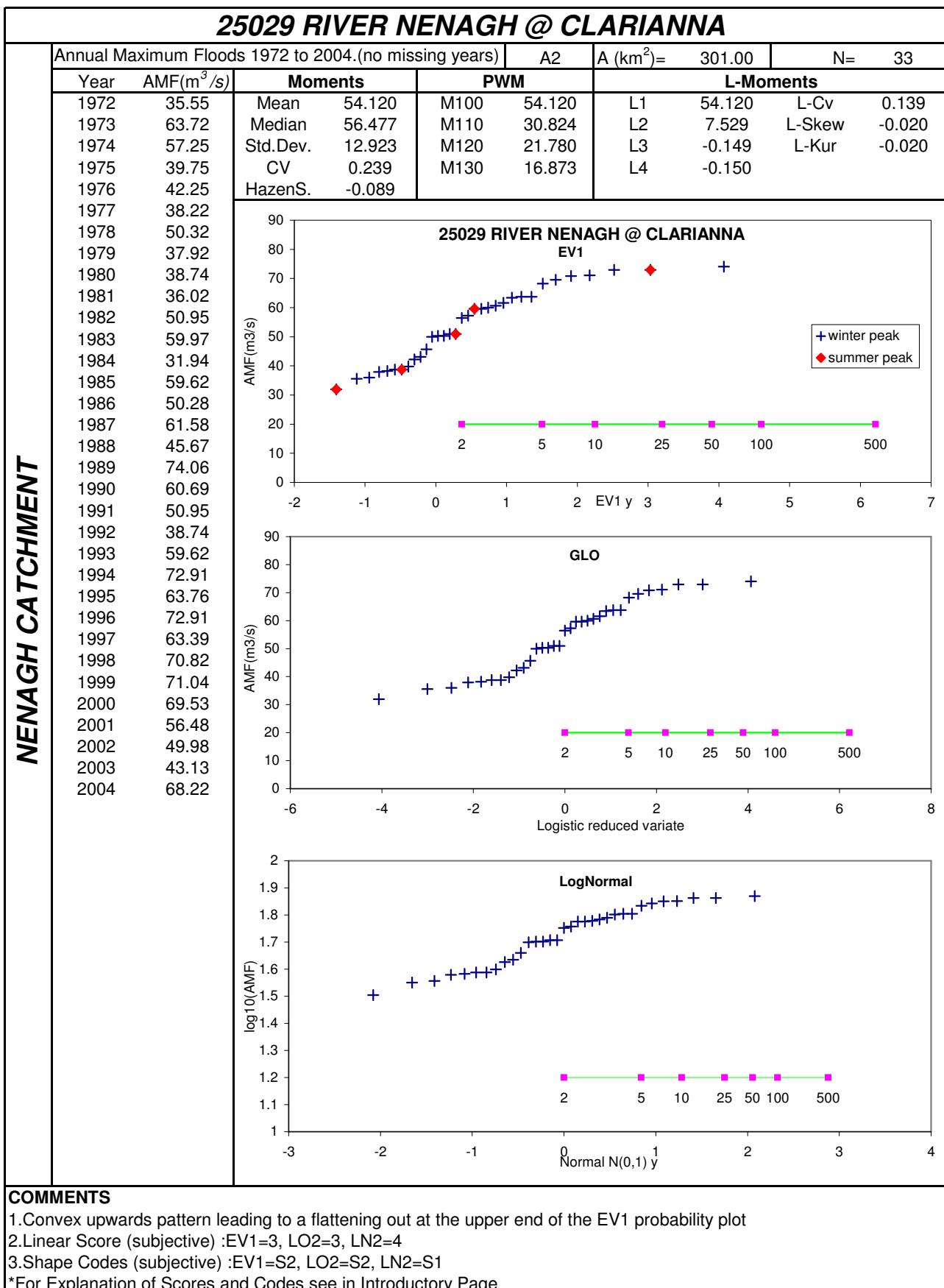
COMMENTS

1. Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot

2. Linear Score (subjective) :EV1=3, LO2=4, LN2=5

3. Shape Codes (subjective) :EV1=D1, LO2=L2, LN2=L2

*For Explanation of Scores and Codes see in Introductory Page



25034 RIVER L. ENNELL TRIB @ ROCHFORT								
Shannon Est Sth CATCHMENT	AM Floods 1977 to 2002.(missing year '98,99)				A2	A (km^2)=	12.00	N= 24
	Year	AMF(m^3/s)	Moments	PWM	L-Moments			
	1977	1.15	Mean 1.503	M100 1.503	L1 1.503	L-Cv 0.166		
	1978	1.47	Median 1.482	M110 0.876	L2 0.250	L-Skew -0.082		
	1979	2.21	Std.Dev. 0.432	M120 0.622	L3 -0.020	L-Kur 0.115		
	1980	1.48	CV 0.287	M130 0.484	L4 0.029			
	1981	1.48	HazenS. -0.482					
	1982	2.07						
	1983	1.79						
1984	2.13							
1985	1.33							
1986	0.92							
1987	1.76							
1988	0.63							
1989	1.92							
1990	1.04							
1991	1.44							
1992	1.88							
1993	1.52							
1994	1.92							
1995	0.98							
1996	0.73							
1997	1.39							
2000	1.67							
2001	1.48							
2002	1.69							

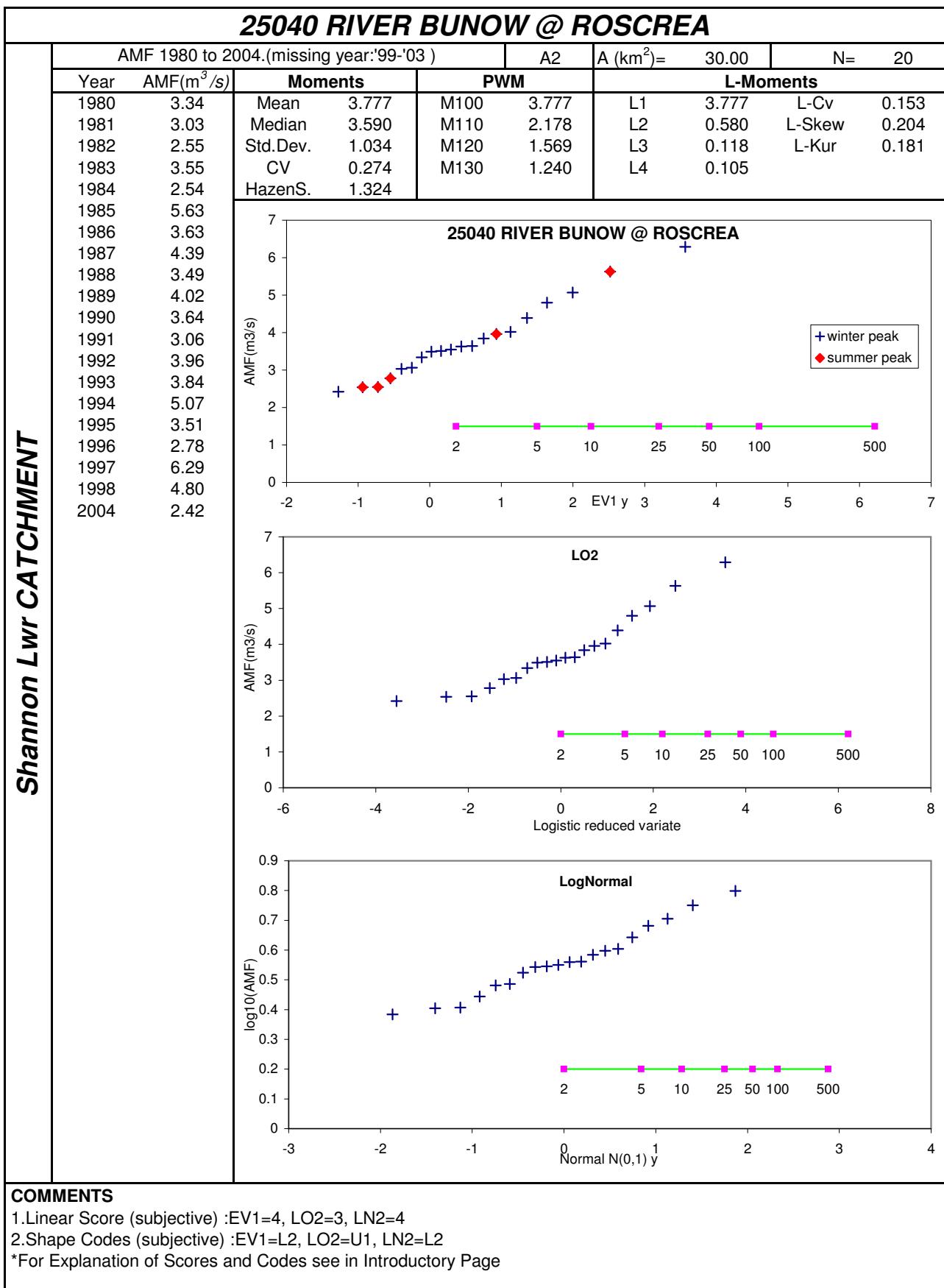
Scatter plot showing AMF (m^3/s) vs EV1 y for River L. Ennell Trib at Rochfort. The x-axis ranges from -2 to 7, and the y-axis ranges from 0 to 3. Blue pluses (+) represent winter peaks, and red diamonds (◆) represent summer peaks. A green line shows a constant value of approximately 1.0 across the x-axis.

Scatter plot showing AMF (m^3/s) vs LO2 for River L. Ennell Trib at Rochfort. The x-axis ranges from -6 to 8, and the y-axis ranges from 0 to 3. Blue pluses (+) represent data points. A green line shows a constant value of approximately 1.0 across the x-axis.

Scatter plot showing $\log_{10}(\text{AMF})$ vs Normal $N(0,1)$ y for River L. Ennell Trib at Rochfort. The x-axis ranges from -3 to 4, and the y-axis ranges from 0 to 0.4. Blue pluses (+) represent data points. A green line shows a constant value of approximately 0.1 across the x-axis.

COMMENTS

1.Linear Score (subjective) :EV1=2, LO2=4, LN2=3
 2.Shape Codes (subjective) :EV1=D2, LO2=L2, LN2=D1
 *For Explanation of Scores and Codes see in Introductory Page



25044 RIVER KILMASTULLA @ COOLE							
	AM Floods '61 to '04.(missing year '75-82,90,91,94)			A2	A (km^2)=	98.90	N= 33
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
1961	18.78	Mean	25.383	M100	25.383	L1	25.383 L-Cv 0.188
1962	13.78	Median	22.700	M110	15.075	L2	4.768 L-Skew 0.248
1963	17.06	Std.Dev.	8.676	M120	11.042	L3	1.185 L-Kur 0.149
1964	45.75	CV	0.342	M130	8.823	L4	0.711
1965	22.50	HazenS.	1.229				
1966	33.03						
1967	25.41						
1968	41.68						
1969	17.59						
1970	21.16						
1971	18.99						
1972	23.99						
1973	24.94						
1974	36.39						
1983	40.50						
1984	21.80						
1985	23.10						
1986	22.70						
1987	21.80						
1988	21.90						
1989	44.10						
1992	14.30						
1993	24.20						
1995	21.40						
1996	32.10						
1997	29.30						
1998	25.24						
1999	26.83						
2000	14.90						
2001	19.60						
2002	18.40						
2003	18.80						
2004	35.59						

SHANNON LWR. CATCHMENT

25044 RIVER KILMASTULLA @ COOLE

AMF(m^3/s)

EV1 y

Legend: + winter peak, ◆ summer peak

LO2

AMF(m^3/s)

Logistic reduced variate

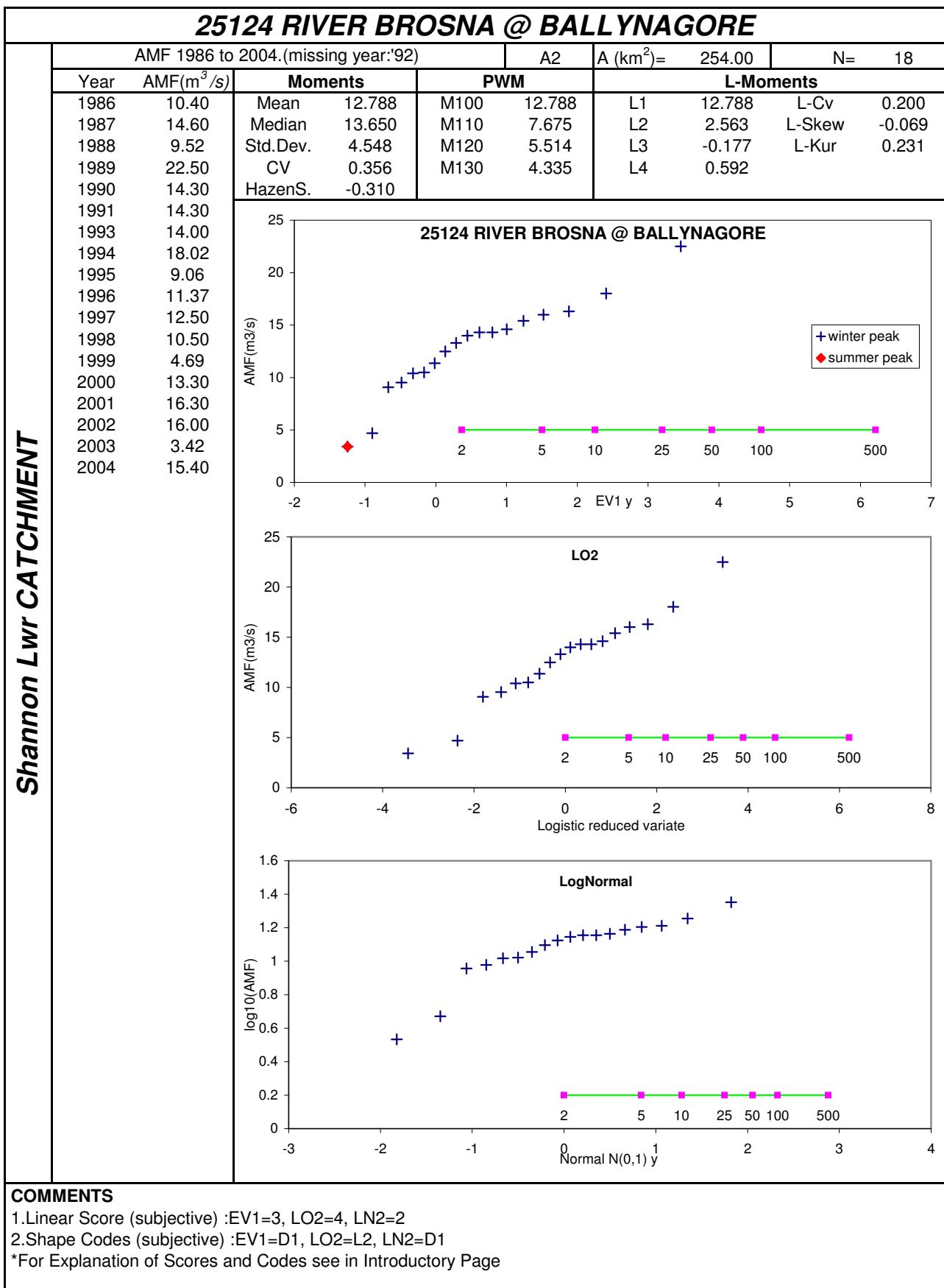
LogNormal

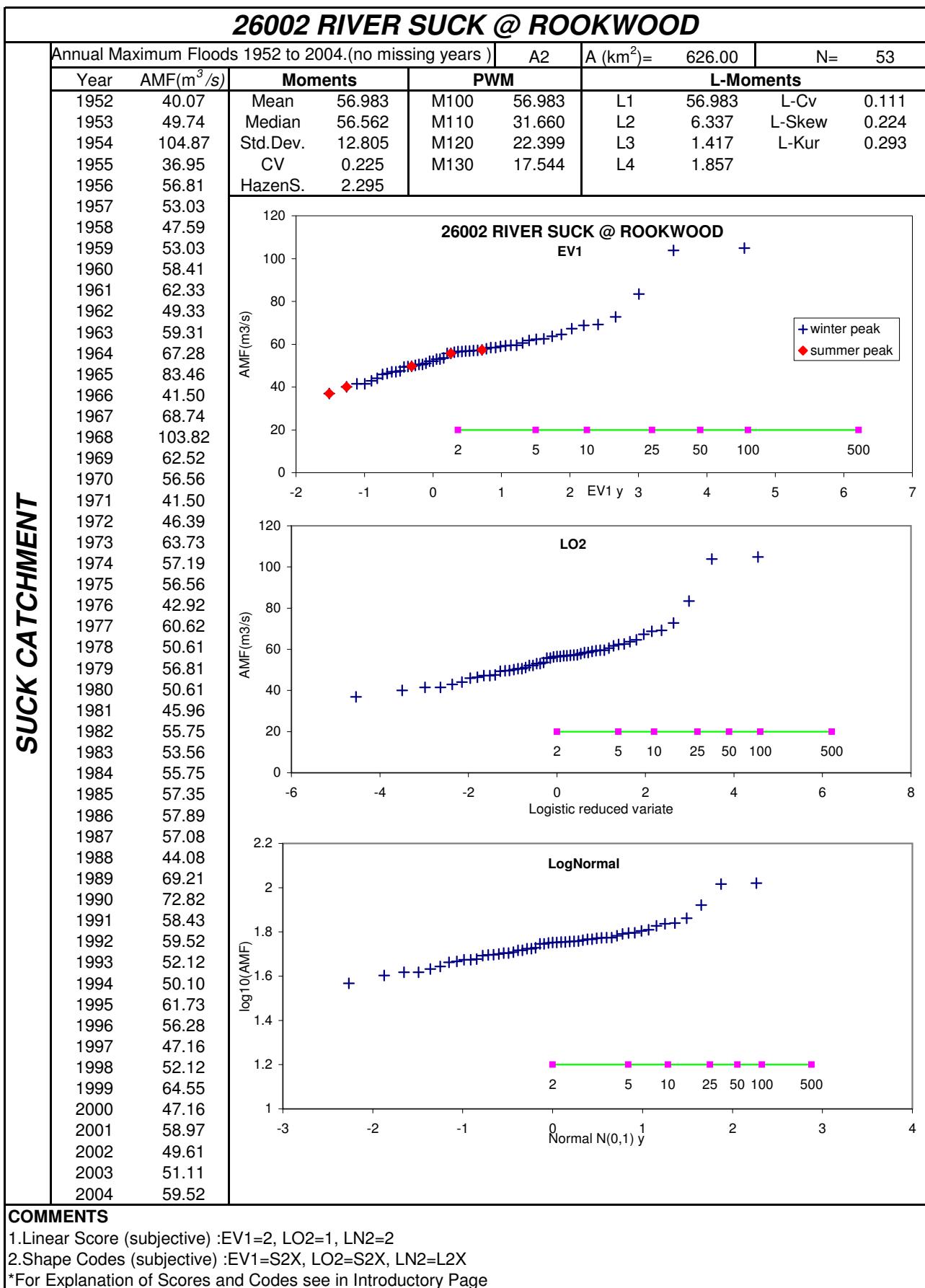
log10(AMF)

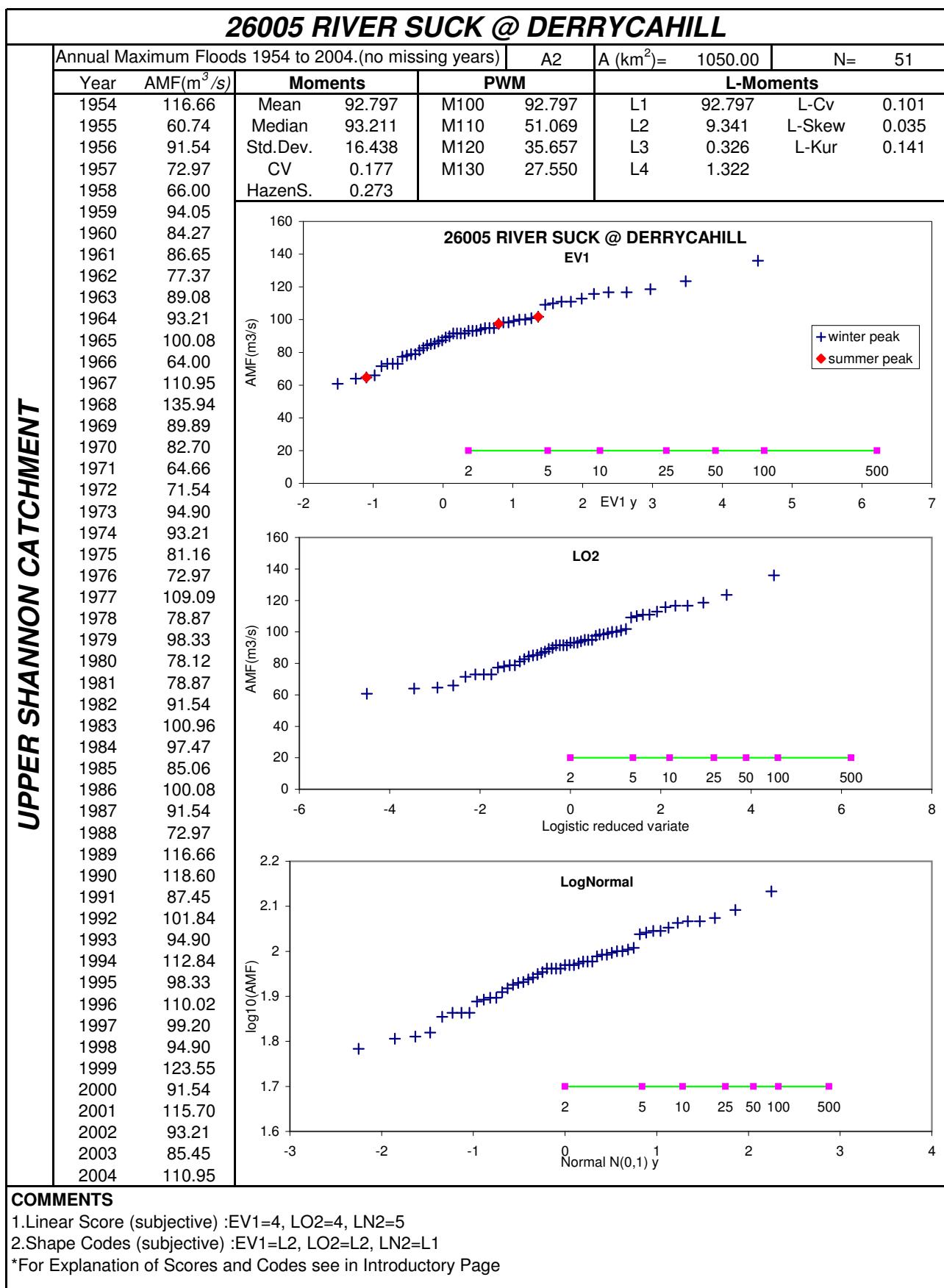
Normal N(0,1) y

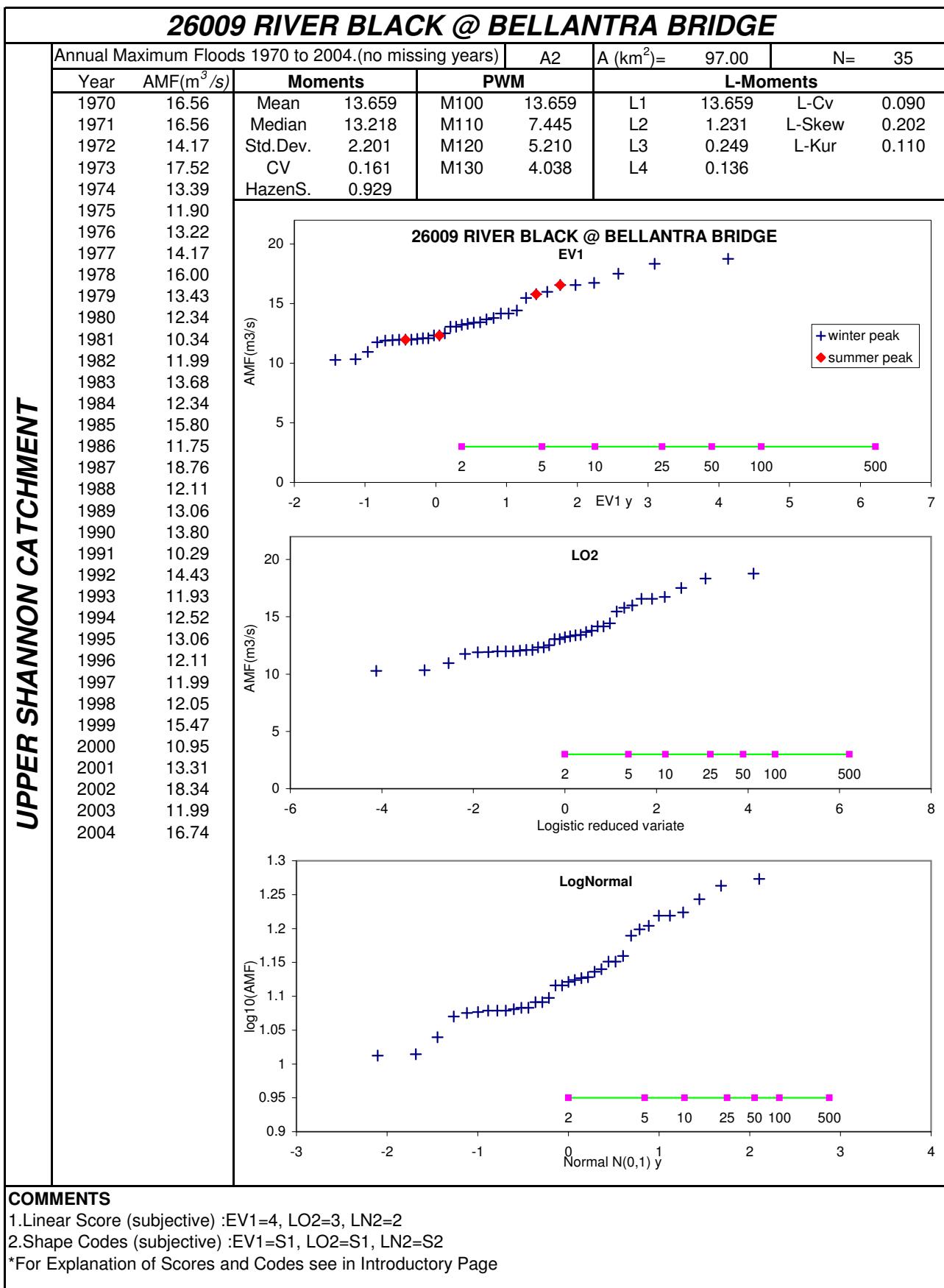
COMMENTS

- 1.Linear Score (subjective) :EV1=3, LO2=3, LN2=3
 - 2.Shape Codes (subjective) :EV1=S1, LO2=S1, LN2=S2
- *For Explanation of Scores and Codes see in Introductory Page









26018 RIVER OWENURE @ BELLAVAHAN							
OWENURE CATCHMENT	Annual Maximum Floods 1956 to 2004.(no missing years)			A2	A (km^2) =	118.00	N= 49
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1956	9.99	Mean	9.192	L1	9.192	L-Cv 0.114
	1957	7.11	Median	8.952	L2	1.047	L-Skew 0.126
	1958	7.43	Std.Dev.	1.860	L3	0.132	L-Kur 0.113
	1959	9.52	CV	0.202	L4	0.118	
	1960	8.07	HazenS.	0.768			
	1961	9.87					
	1962	7.01					
	1963	10.10					
	1964	13.06					
	1965	12.94					
	1966	8.51					
	1967	10.46					
	1968	11.18					
	1969	10.70					
	1970	6.50					
	1971	6.30					
	1972	8.62					
	1973	7.64					
	1974	10.46					
	1975	7.32					
	1976	7.53					
	1977	7.85					
	1978	7.43					
	1979	7.85					
	1980	6.15					
	1981	8.40					
	1982	9.18					
	1983	9.99					
	1984	7.22					
	1985	7.22					
	1986	9.41					
	1987	8.95					
	1988	8.18					
	1989	12.94					
	1990	13.98					
	1991	8.07					
	1992	9.75					
	1993	8.73					
	1994	10.10					
	1995	10.10					
	1996	9.87					
	1997	9.64					
	1998	8.73					
	1999	12.55					
	2000	8.62					
	2001	11.06					
	2002	9.87					
	2003	7.74					
	2004	10.58					

COMMENTS

- 1.Linear Score (subjective) :EV1=4, LO2=3, LN2=4
 - 2.Shape Codes (subjective) :EV1=L2, LO2=S1, LN2=L2
- *For Explanation of Scores and Codes see in Introductory Page

26021 RIVER INNY @ BALLYMAHON

Annual Maximum Floods 1975 to 2004.(no missing years)				A2	A (km^2) =	1071.00	N=	30	
Year	AMF(m^3/s)	Moments	PWM	L-Moments					
1975	42.23	Mean	65.883	M100	65.883	L1	65.883	L-Cv	0.140
1976	59.80	Median	66.345	M110	37.554	L2	9.225	L-Skew	-0.112
1977	66.20	Std.Dev.	16.462	M120	26.401	L3	-1.036	L-Kur	0.187
1978	89.88	CV	0.250	M130	20.449	L4	1.724		
1979	67.38	HazenS.	-0.856						
1980	66.49								
1981	60.95								
1982	81.51								
1983	74.64								
1984	75.88								
1985	51.98								
1986	61.81								
1987	75.26								
1988	43.00								
1989	84.06								
1990	59.23								
1991	53.08								
1992	59.80								
1993	76.49								
1994	88.58								
1995	60.38								
1996	69.77								
1997	69.17								
1998	66.20								
1999	92.51								
2000	73.41								
2001	85.98								
2002	66.20								
2003	25.10								

26021 RIVER INNY @ BALLYMAHON
EV1

AMF(m^3/s)

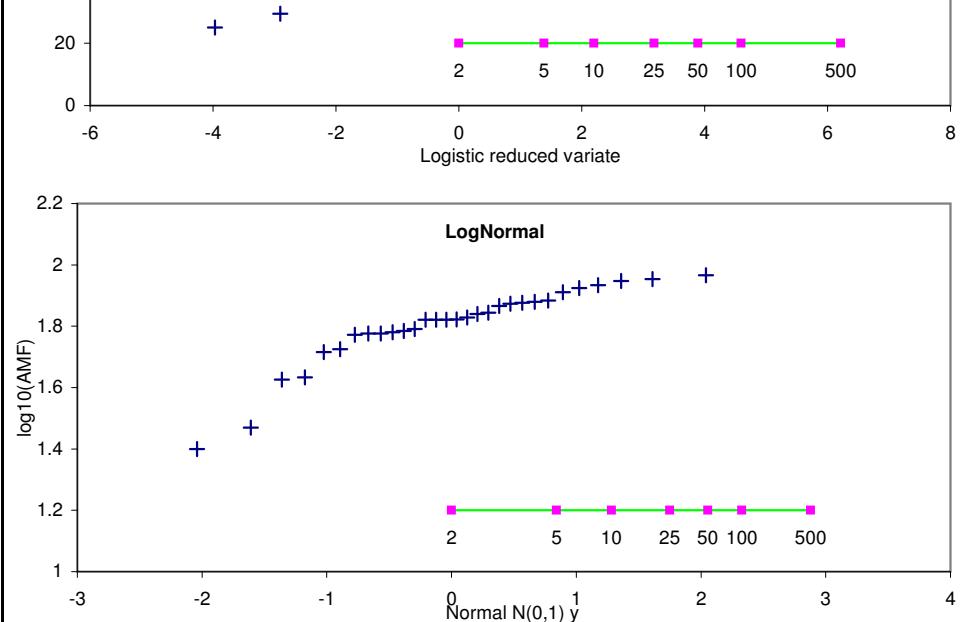
EV1 y

Legend: + winter peak, ♦ summer peak

LO2

AMF(m^3/s)

EV1 y

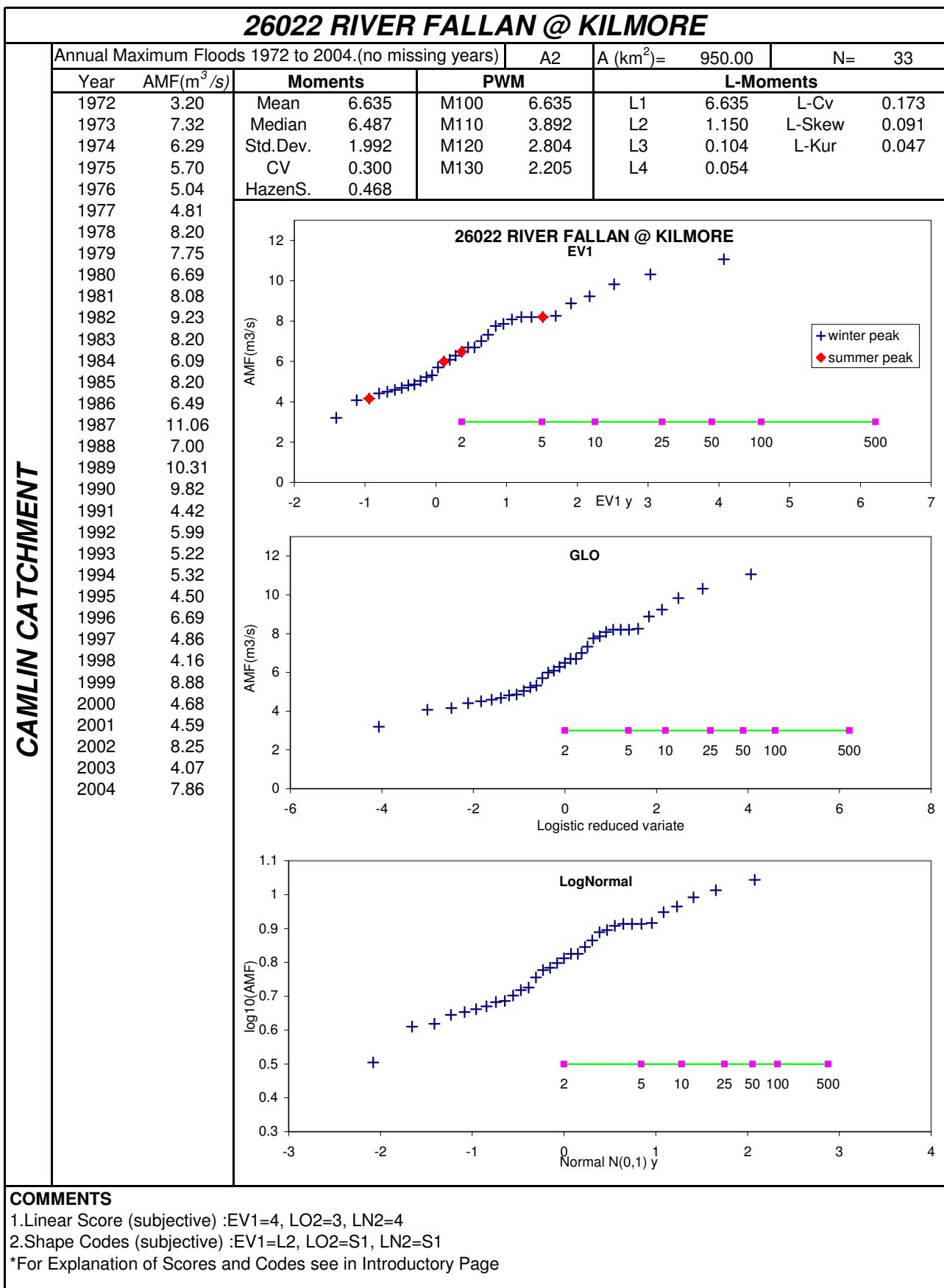


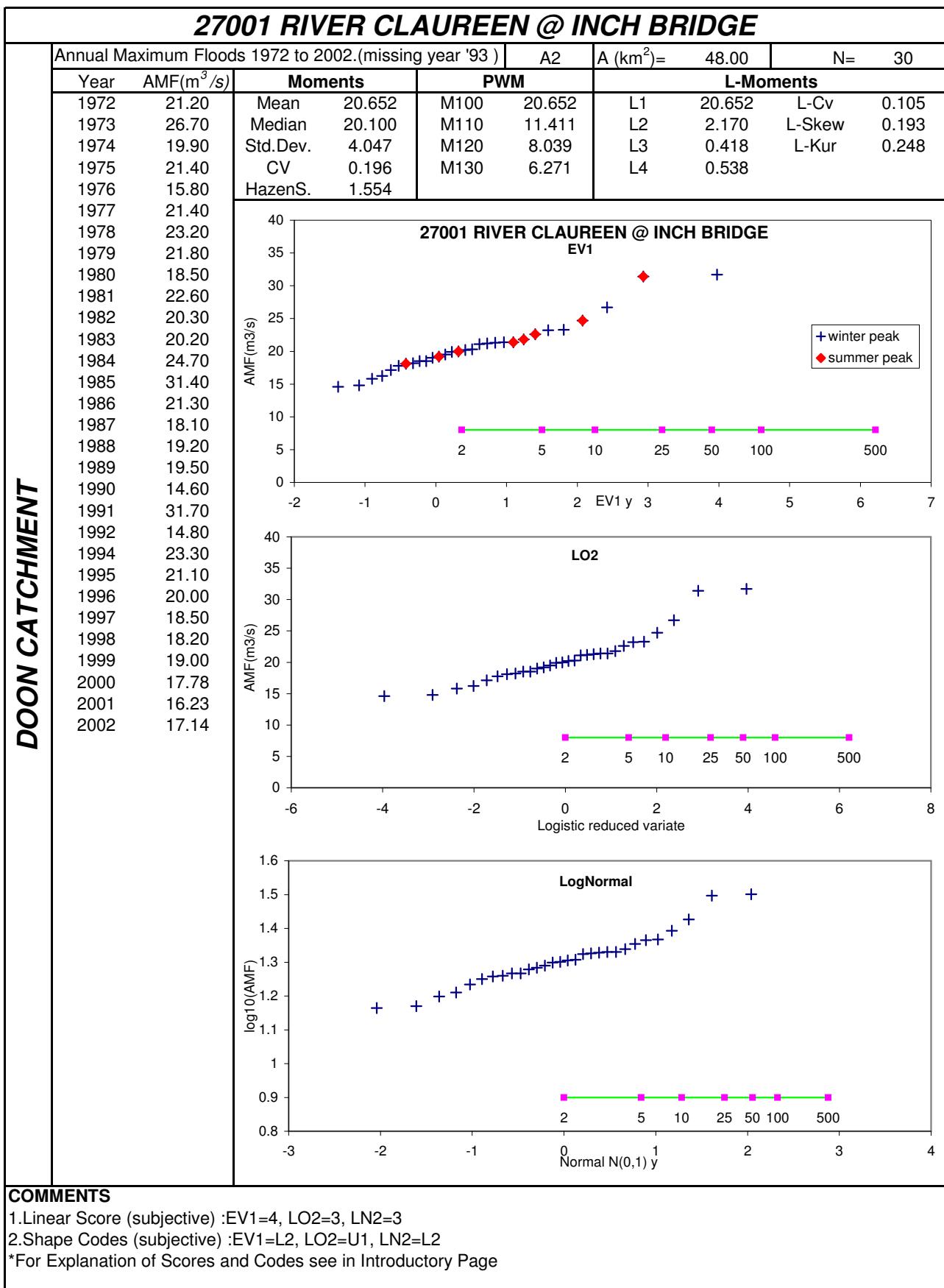
COMMENTS

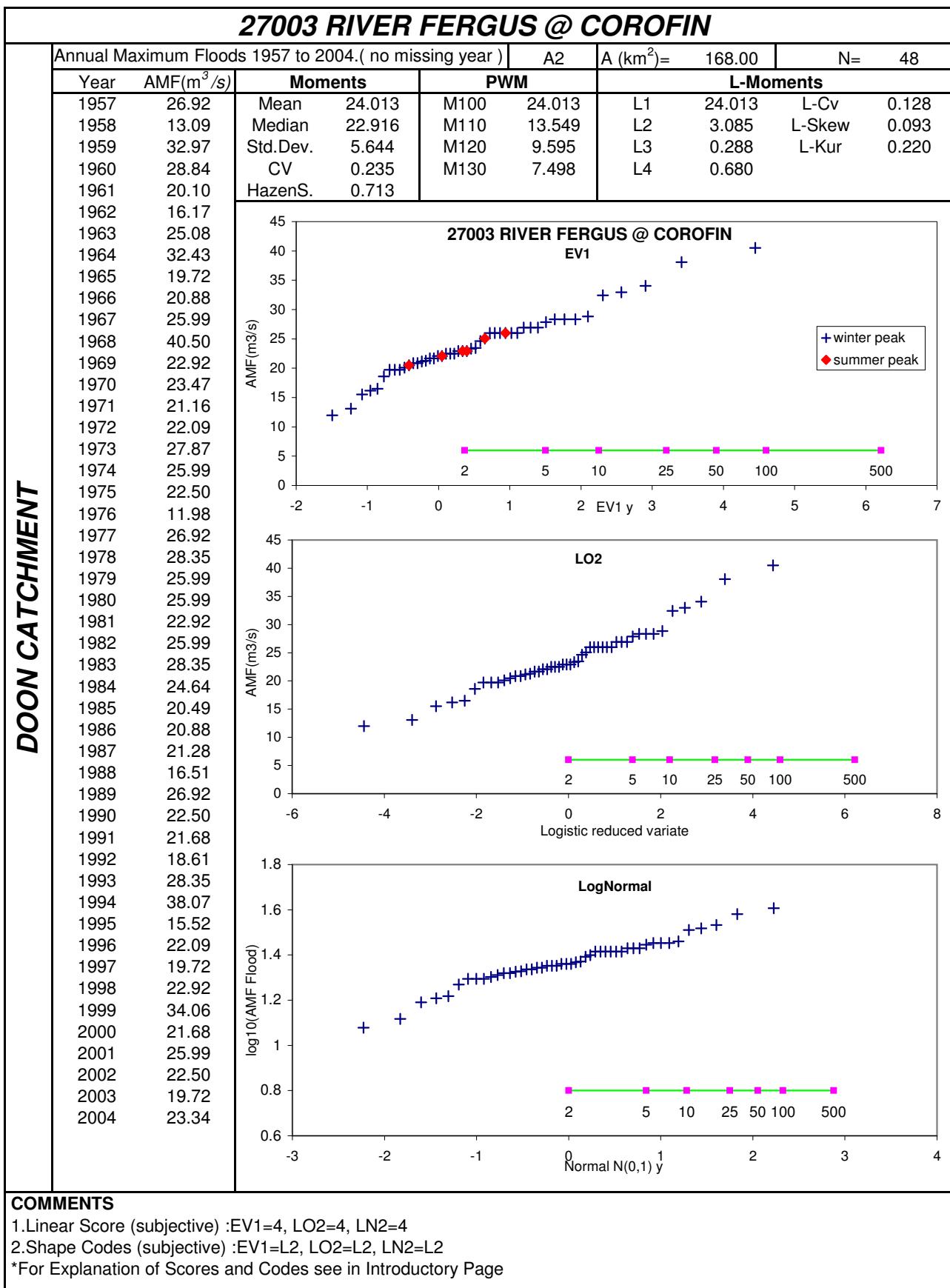
- COMMENTS**

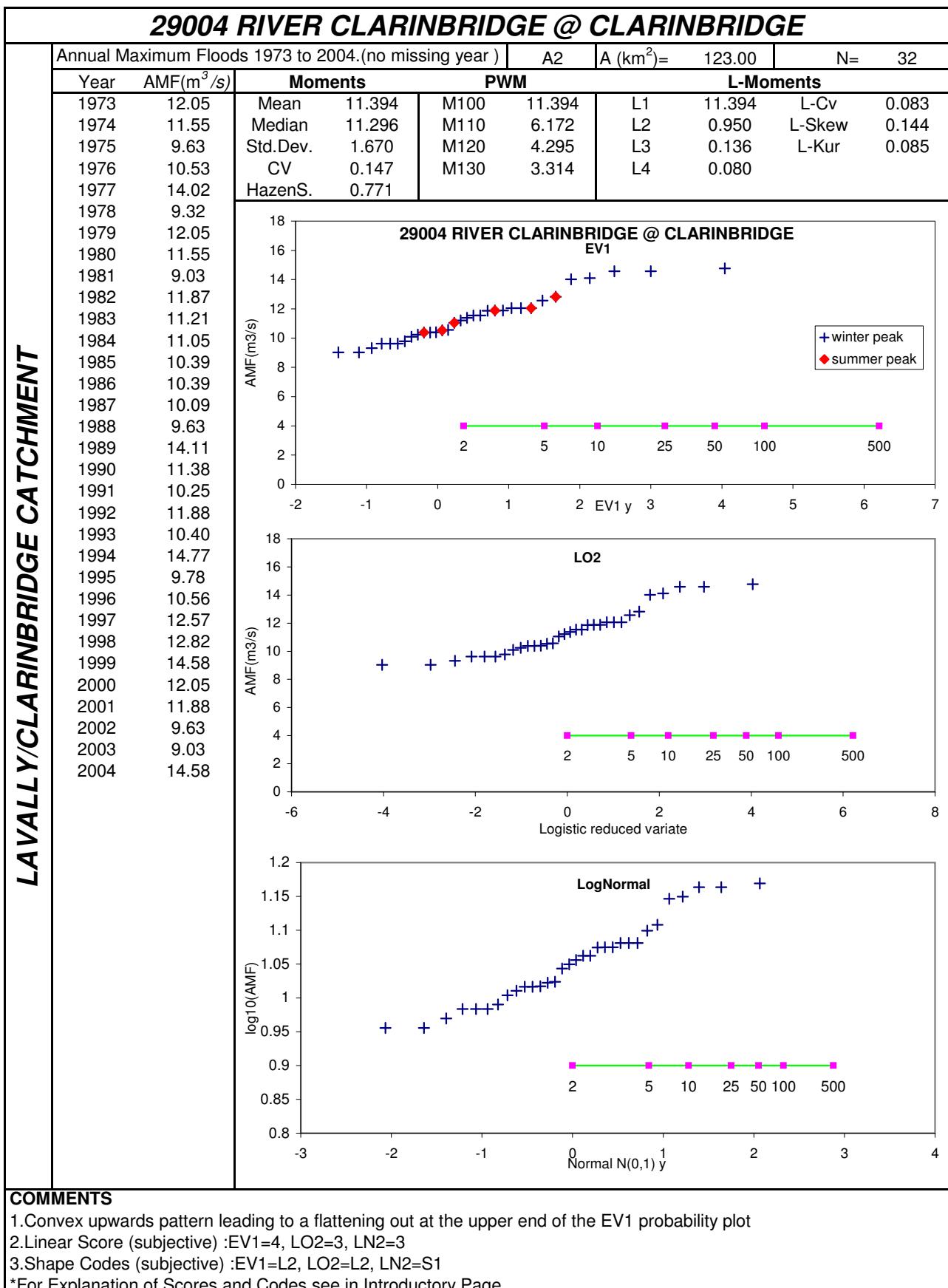
 1. Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot
 2. Linear Score (subjective) :EV1=1, LO2=2, LN2=1
 3. Shape Codes (subjective) :EV1=D2, LO2=D1, LN2=D1

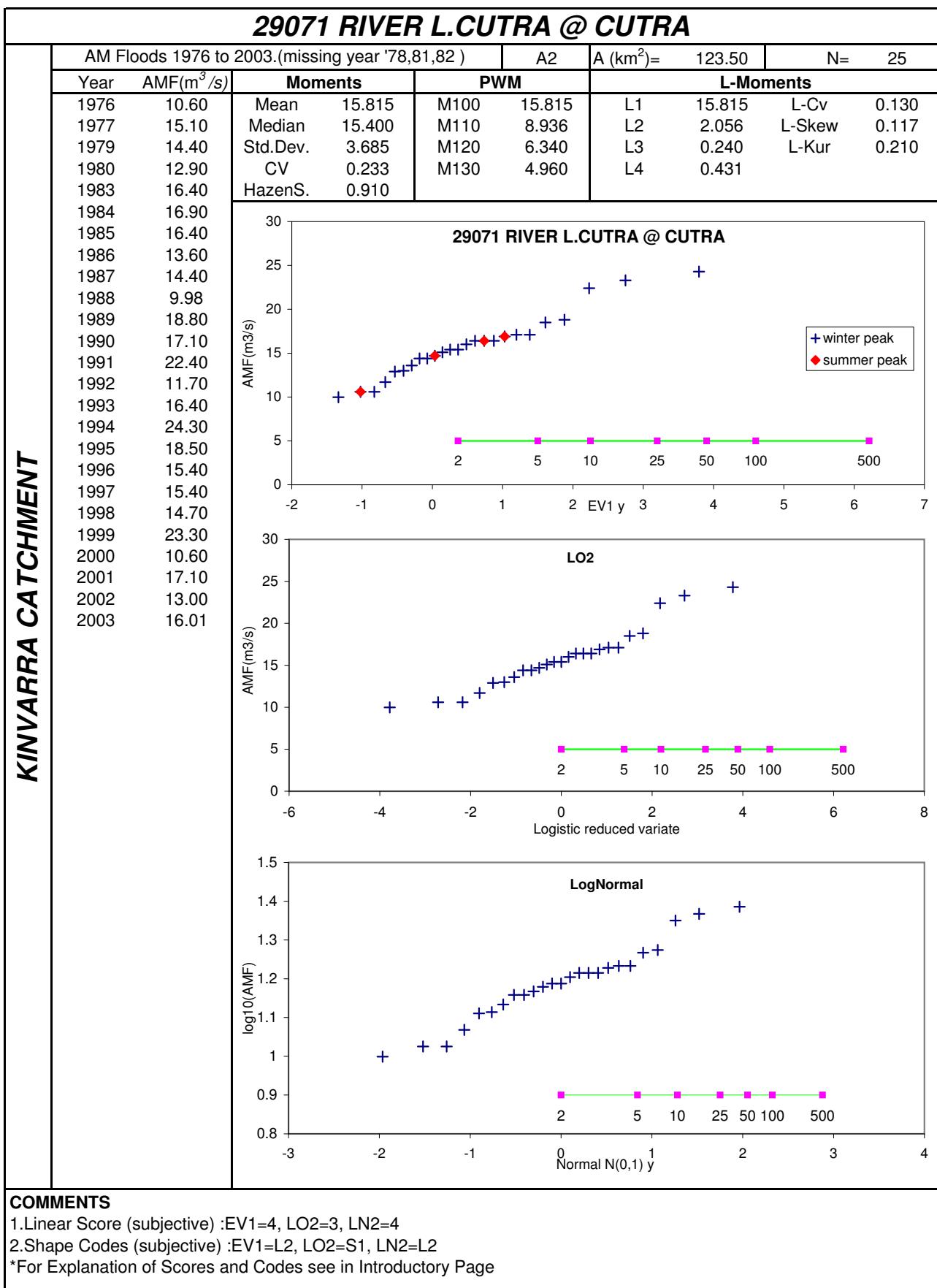
*For Explanation of Scores and Codes see in Introductory Page





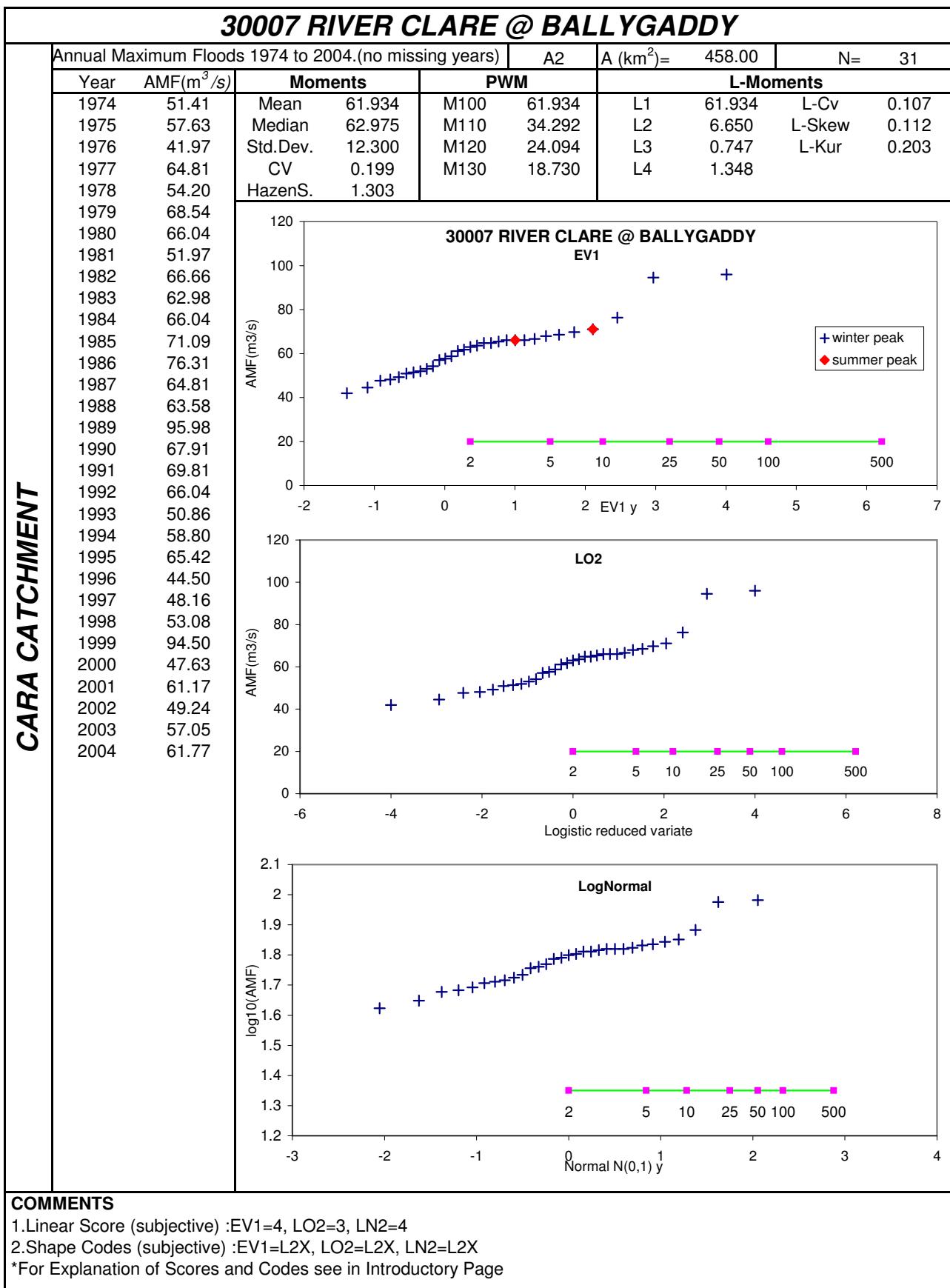




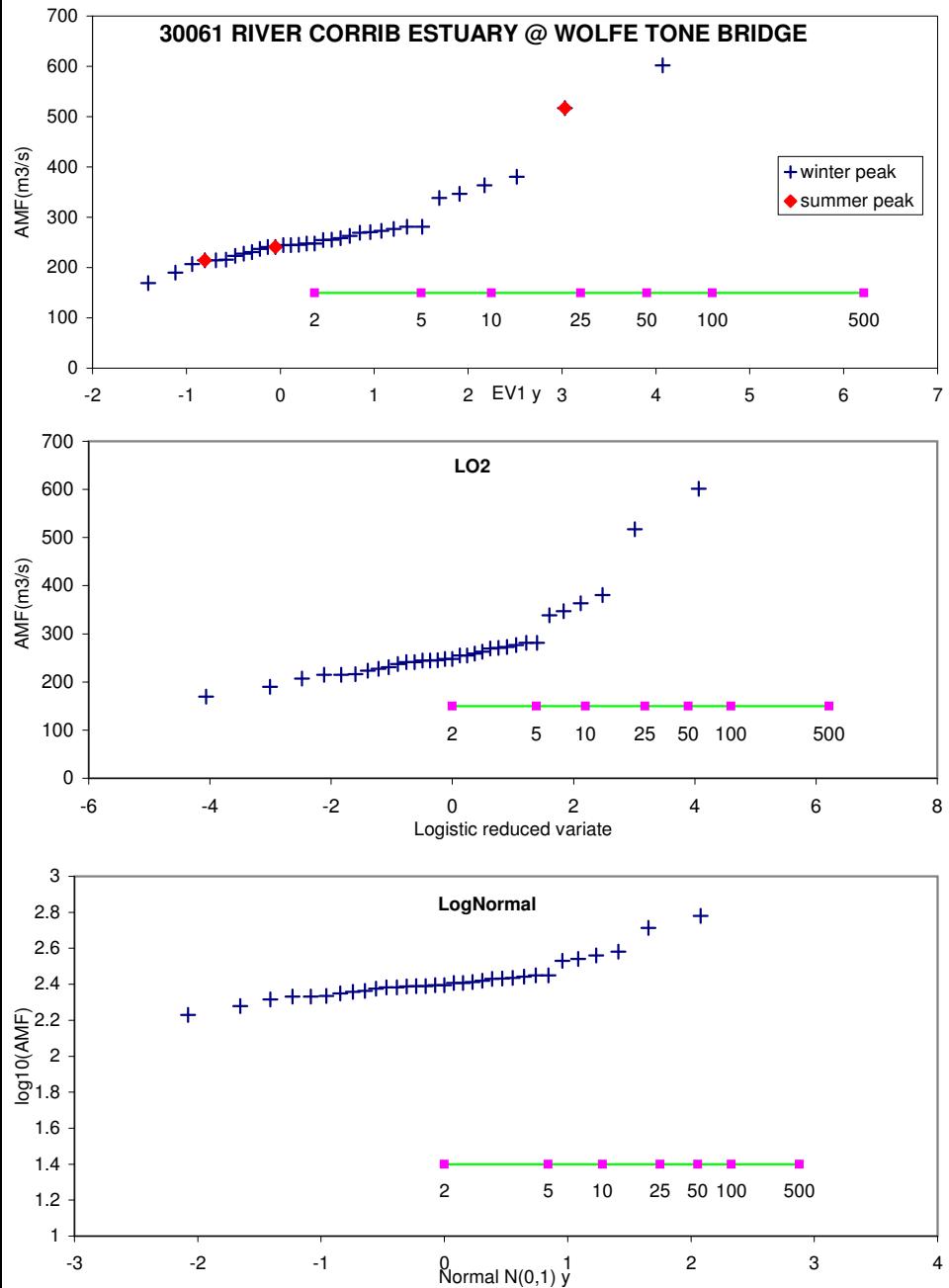


COMMENTS

- 1.Linear Score (subjective) :EV1=4, LO2=3, LN2=4
 - 2.Shape Codes (subjective) :EV1=L2, LO2=S1, LN2=L2
- *For Explanation of Scores and Codes see in Introductory Page

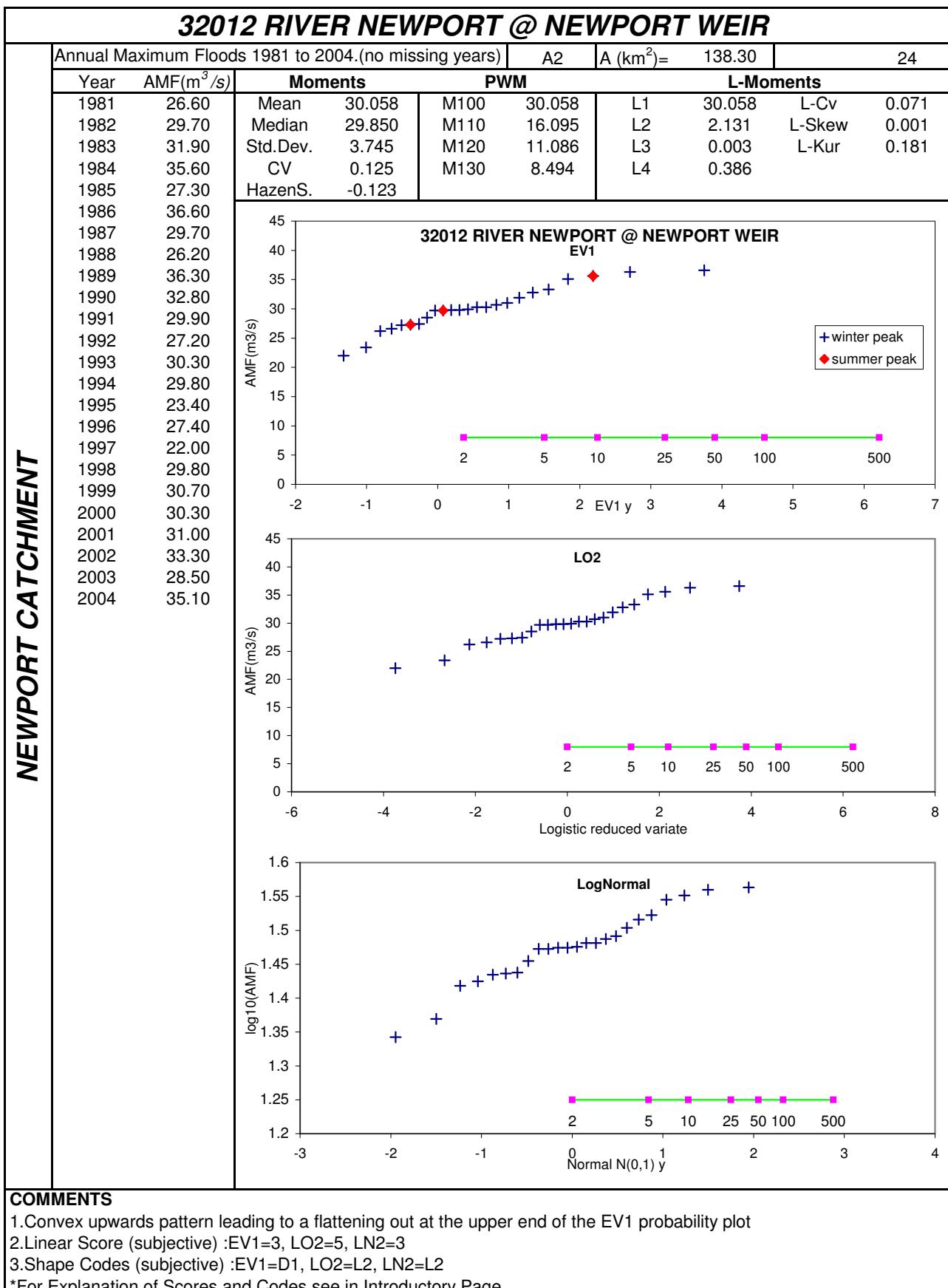


30061 RIVER CORRIB ESTUARY @ WOLFE TONE BRIDGE							
CATCHMENT	AMF 1972 to 2004.(no missing year)			A2	A (km^2) =	3111.00	N= 33
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1972	169.43	Mean	274.974	L1	274.974	L-Cv 0.146
	1973	214.64	Median	247.968	L2	40.273	L-Skew 0.410
	1974	230.98	Std.Dev.	87.229	L3	16.496	L-Kur 0.379
	1975	346.79	CV	0.317	L4	15.247	
	1976	189.82	HazenS.	3.038			
	1977	227.66					
	1978	363.57					
	1979	241.10					
	1980	338.55					
	1981	247.97					
	1982	244.52					
	1983	269.21					
	1984	272.84					
	1985	241.10					
	1986	247.97					
	1987	254.94					
	1988	276.49					
	1989	214.64					
	1990	380.77					
	1991	223.18					
	1992	281.12					
	1993	270.56					
	1994	281.12					
	1995	206.89					
	1996	255.09					
	1997	245.04					
	1998	236.99					
	1999	262.83					
	2000	244.82					
	2001	258.78					
	2002	216.01					
	2003	517.16					
	2004	601.59					



COMMENTS

1. Linear Score (subjective) :EV1=1, LO2=1, LN2=2
 2. Shape Codes (subjective) :EV1=U2, LO2=U2, LN2=U1
- *For Explanation of Scores and Codes see in Introductory Page



34001 RIVER MOY @ RAHANS

MOY CATCHMENT	Annual Maximum Floods 1968 to 2004.(missing years '85)				A2	A (km^2) =	1911.00	N=	36
	Year	AMF(m^3/s)	Moments	PWM	L-Moments				
1968	119.31	Mean	174.763	M100	174.763	L1	174.763	L-Cv	0.104
1969	165.92	Median	174.611	M110	96.506	L2	18.248	L-Skew	0.080
1970	150.64	Std.Dev.	33.409	M120	67.621	L3	1.456	L-Kur	0.211
1971	143.24	CV	0.191	M130	52.459	L4	3.851		
1972	130.33	HazenS.	1.076						
1973	177.00								
1974	163.77								
1975	134.57								
1976	116.62								
1977	155.15								
1978	170.63								
1979	193.38								
1980	208.66								
1981	172.22								
1982	181.85								
1983	195.05								
1984	170.63								
1986	212.12								
1987	178.61								
1988	152.13								
1989	286.56								
1990	224.44								
1991	177.00								
1992	190.05								
1993	178.61								
1994	183.48								
1995	144.70								
1996	129.52								
1997	213.86								
1998	169.06								
1999	219.12								
2000	172.22								
2001	198.41								
2002	183.48								
2003	152.13								
2004	177.00								

EV1

AMF(m^3/s)

EV1 y

Legend: + winter peak, ◆ summer peak

LO2

AMF(m^3/s)

Logistic reduced variate

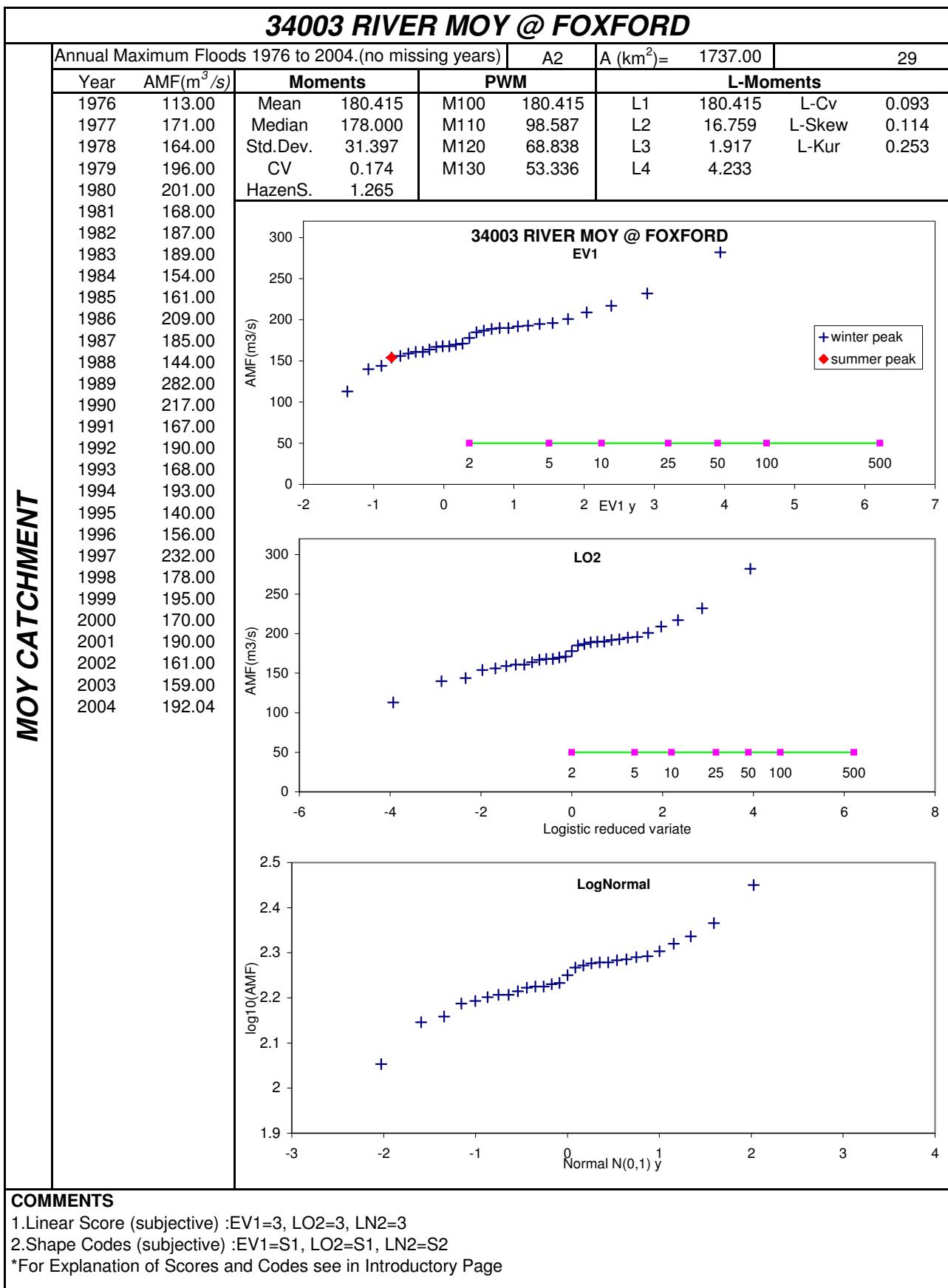
LogNormal

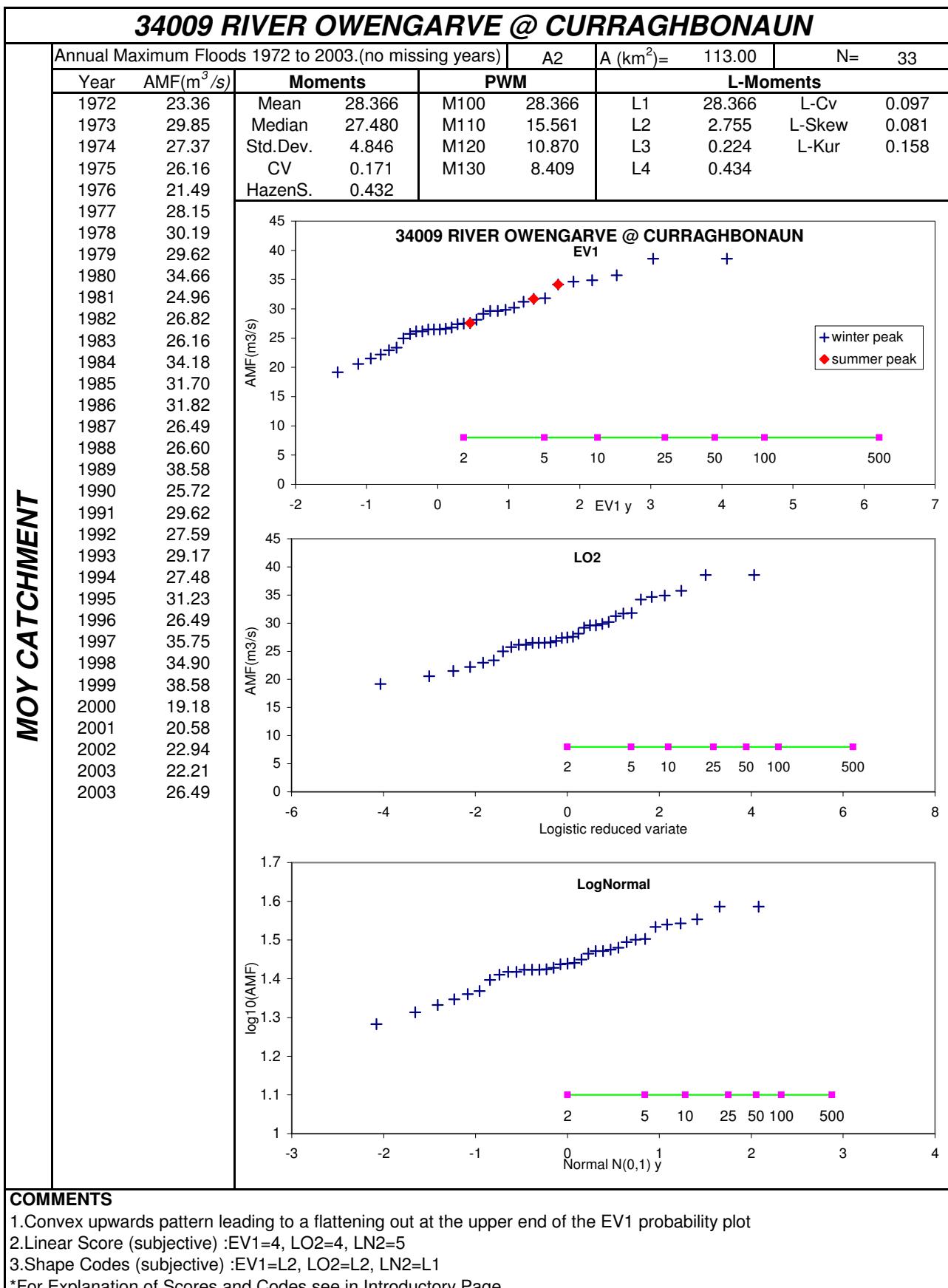
log₁₀(AMF)

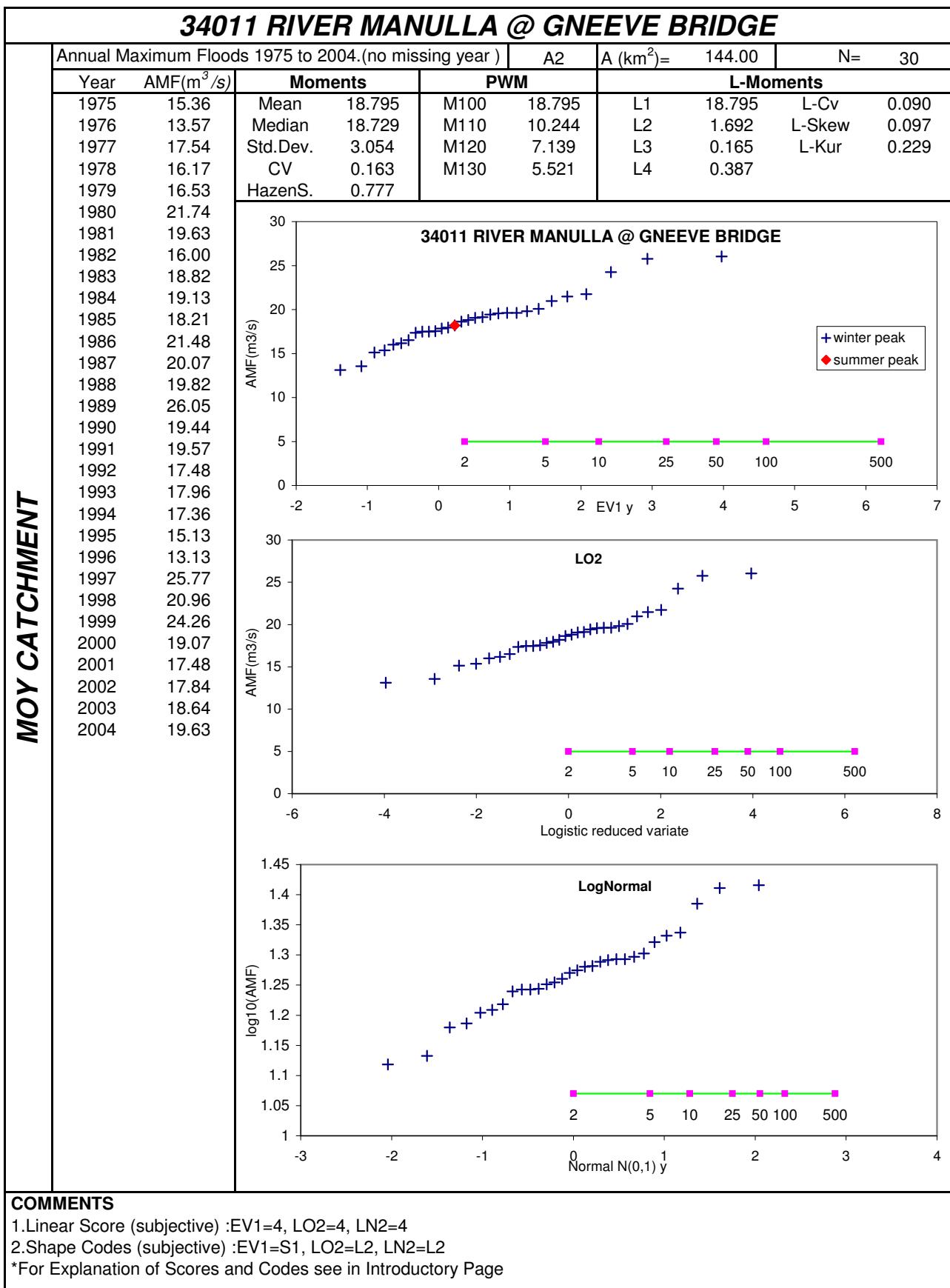
Normal N(0,1) y

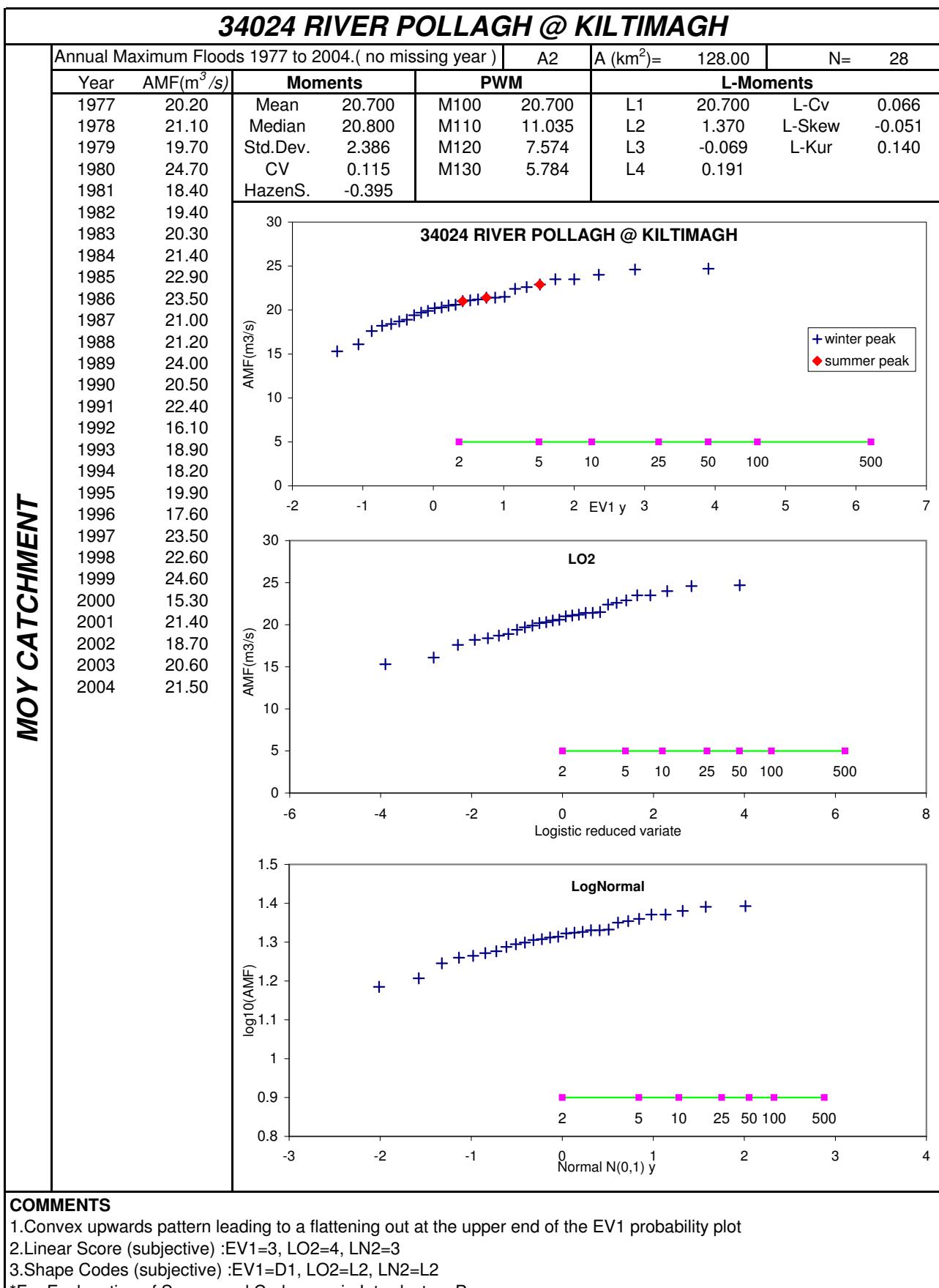
COMMENTS

1. Linear Score (subjective) :EV1=4, LO2=3, LN2=4
 2. Shape Codes (subjective) :EV1=L2X, LO2=L2X, LN2=L2
- *For Explanation of Scores and Codes see in Introductory Page









35001 RIVER OWENMORE @ BALLYNACARROW							
GLENCAR LOUGH CATCHMENT	Annual Maximum Floods 1972 to 2000.(no missing year)			A2	A (km^2) =	299.00	N= 29
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
	1972	27.12	Mean	30.522	L1	30.522	L-Cv 0.119
	1973	33.02	Median	31.159	L2	3.634	L-Skew -0.009
	1974	33.49	Std.Dev.	6.425	L3	-0.034	L-Kur 0.190
	1975	25.39	CV	0.211	L4	0.692	
	1976	23.29	HazenS.	0.097			
	1977	28.44					
	1978	30.70					
	1979	35.40					
	1980	35.40					
	1981	32.08					
	1982	31.16					
	1983	29.79					
	1984	38.34					
	1985	40.85					
	1986	31.62					
	1987	31.16					
	1988	22.47					
	1989	46.04					
	1990	30.24					
	1991	38.83					
	1992	29.34					
	1993	28.44					
	1994	33.96					
	1995	34.44					
	1996	31.62					
	1997	22.06					
	1998	20.46					
	1999	23.29					
	2000	16.66					

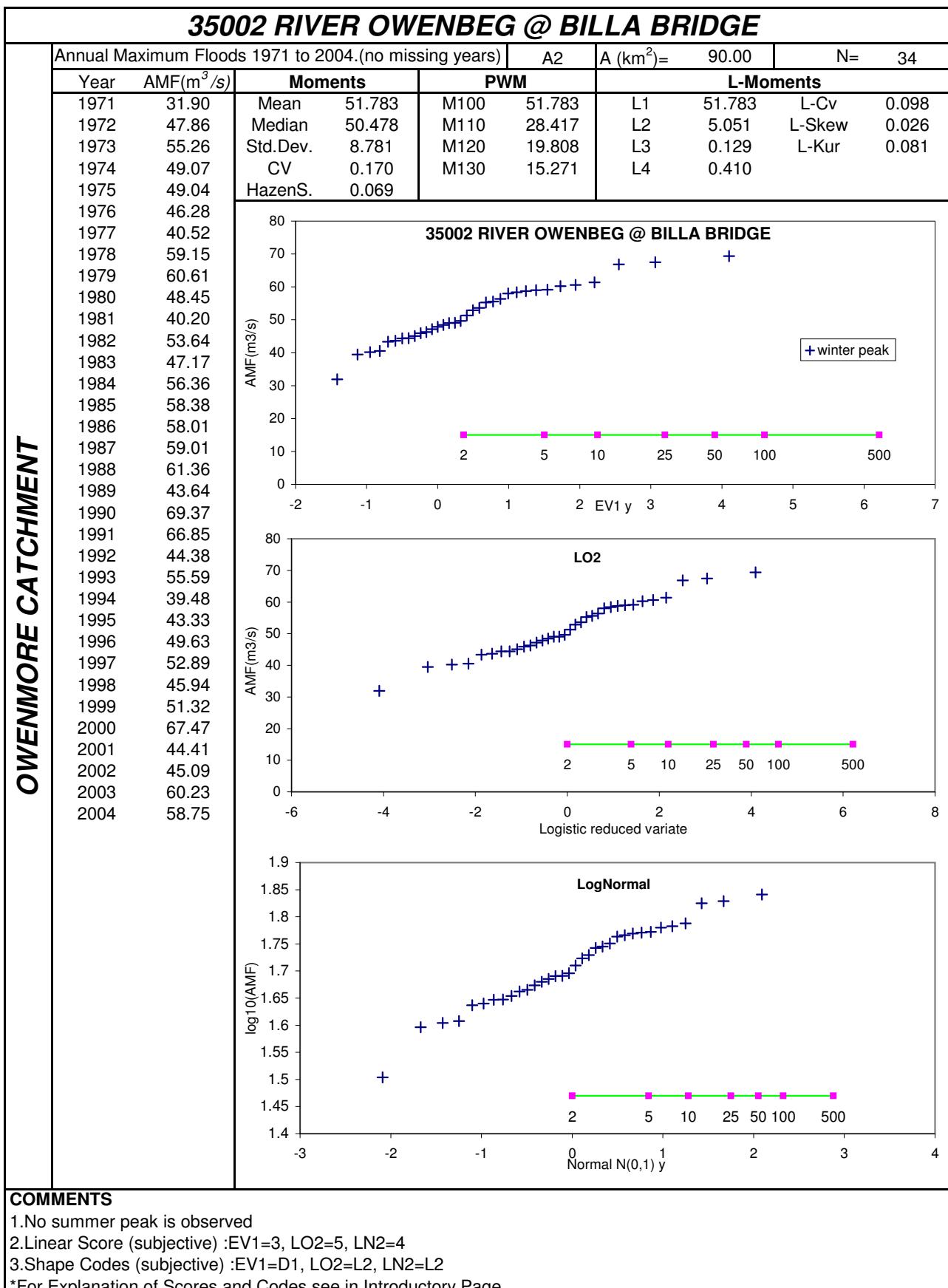
35001 RIVER OWENMORE @ BALLYNACARROW
EV1

LO2

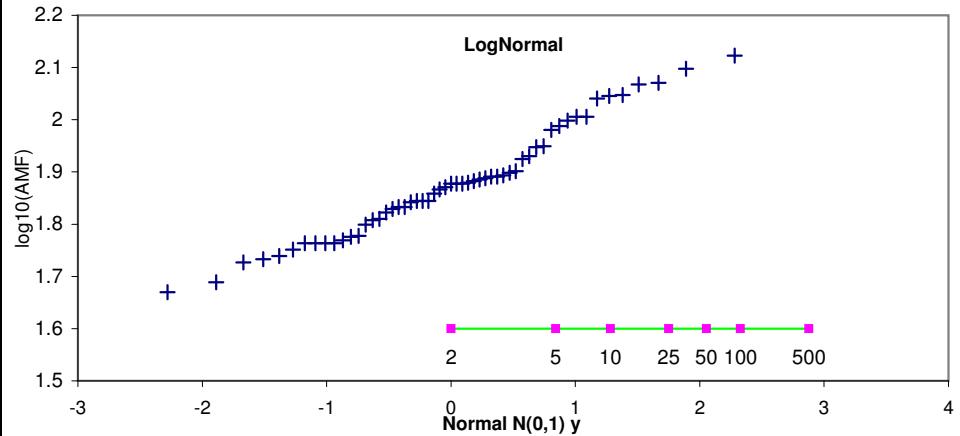
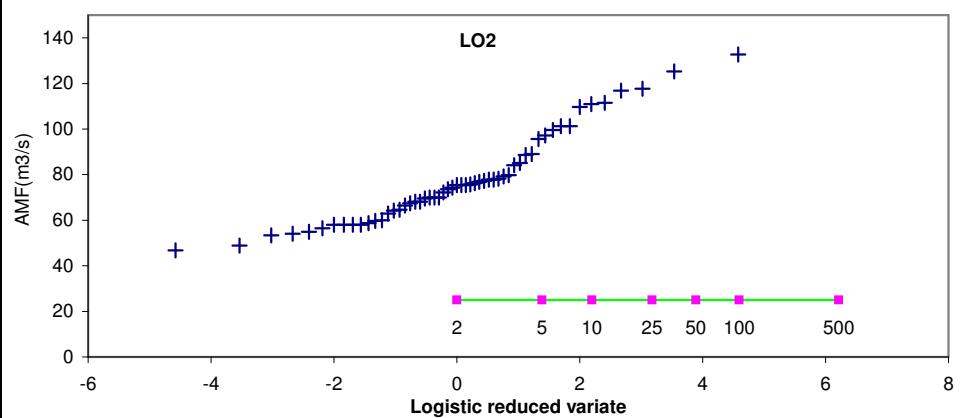
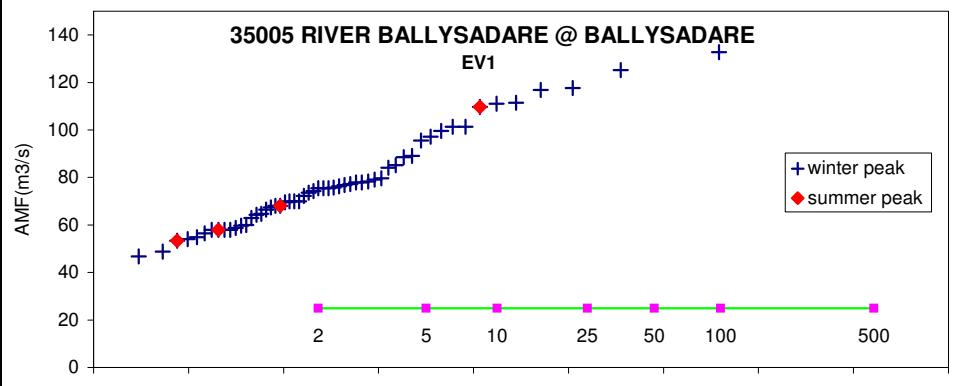
LogNormal

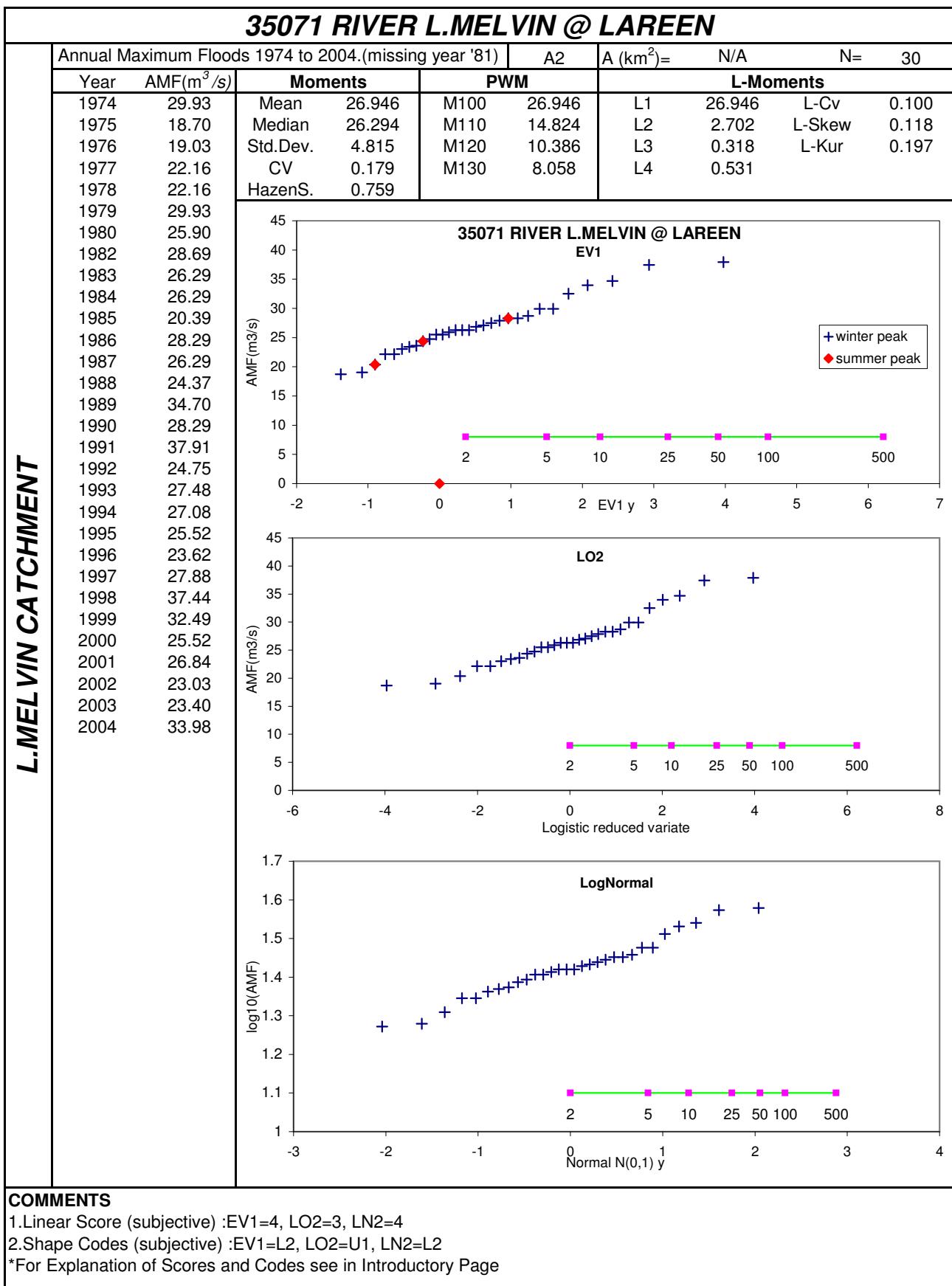
COMMENTS

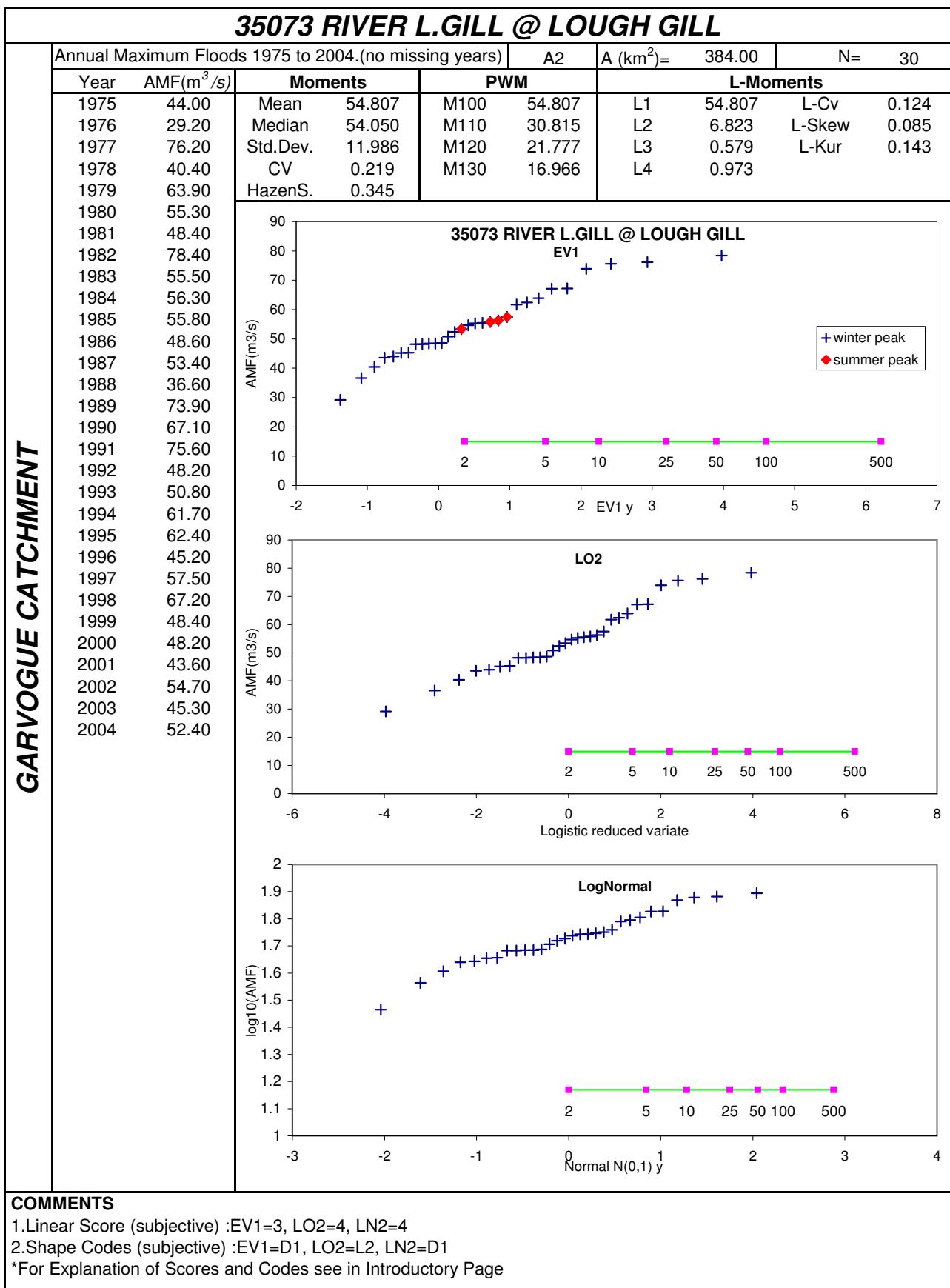
- 1.Linear Score (subjective) :EV1=4, LO2=5, LN2=4
 - 2.Shape Codes (subjective) :EV1=L2, LO2=L2, LN2=L2
- *For Explanation of Scores and Codes see in Introductory Page



35005 RIVER BALLYSADARE @ BALLYSADARE						
MOY CATCHMENT	Annual Maximum Floods '45 - '02.(missing year '62,86,87)			A2	A (km^2) =	642.00
	Year	AMF(m^3/s)	Moments	PWM	L-Moments	
1945	57.98	Mean	77.779	M100	77.779	L1 77.779 L-Cv 0.144
1946	66.43	Median	75.419	M110	44.477	L2 11.174 L-Skew 0.205
1947	69.90	Std.Dev.	20.245	M120	31.895	L3 2.287 L-Kur 0.143
1948	69.90	CV	0.260	M130	25.125	L4 1.595
1949	57.98	HazenS.	1.039			
1950	56.41					
1951	64.62					
1952	54.87					
1953	57.98					
1954	111.03					
1955	53.35					
1956	75.42					
1957	77.27					
1958	57.98					
1959	62.95					
1960	48.83					
1961	79.15					
1963	59.68					
1964	69.90					
1965	73.59					
1966	75.42					
1967	111.49					
1968	125.27					
1969	77.87					
1970	59.93					
1971	75.77					
1972	69.53					
1973	77.87					
1974	89.04					
1975	58.73					
1976	46.78					
1977	64.25					
1978	68.09					
1979	117.72					
1980	85.12					
1981	72.20					
1982	74.25					
1983	76.32					
1984	109.75					
1985	68.09					
1988	54.07					
1989	132.71					
1990	99.65					
1991	97.21					
1992	75.49					
1993	67.44					
1994	88.59					
1995	84.08					
1996	76.88					
1997	101.29					
1998	95.61					
1999	101.29					
2000	79.72					
2001	78.29					
2002	116.82					
COMMENTS						
1.Linear Score (subjective) :EV1=4, LO2=2, LN2=4						
2.Shape Codes (subjective) :EV1=S1, LO2=S1, LN2=L2						
*For Explanation of Scores and Codes see in Introductory Page						







36019 RIVER ERNE @ BELTURBET

Annual Maximum Floods 1958 to 2004.(no missing year)				A2	A (km^2) =	1501.00	N=	47	
Year	AMF(m^3/s)	Moments	PWM	L-Moments					
1958	64.26	Mean	89.597	M100	89.597	L1	89.597	L-Cv	0.104
1959	92.99	Median	89.948	M110	49.462	L2	9.327	L-Skew	-0.029
1960	83.07	Std.Dev.	16.119	M120	34.485	L3	-0.266	L-Kur	0.064
1961	87.95	CV	0.180	M130	26.559	L4	0.596		
1962	71.99	HazenS.	-0.160						
1963	103.56								
1964	119.43								
1965	104.65								
1966	100.32								
1967	100.32								
1968	90.96								
1969	85.00								
1970	67.63								
1971	64.26								
1972	52.47								
1973	73.77								
1974	98.19								
1975	66.78								
1976	88.95								
1977	71.99								
1978	77.41								
1979	81.16								
1980	81.16								
1981	83.07								
1982	80.21								
1983	96.09								
1984	75.58								
1985	86.96								
1986	99.25								
1987	107.96								
1988	65.93								
1989	96.09								
1990	104.65								
1991	75.13								
1992	87.95								
1993	89.95								
1994	98.19								
1995	110.20								
1996	95.05								
1997	102.47								
1998	91.97								
1999	119.43								
2000	106.85								
2001	112.47								
2002	110.20								
2003	74.67								
2004	112.47								

The figure consists of three vertically stacked plots sharing a common x-axis scale from -2 to 7. Each plot shows data points (blue plus signs for winter peak, red diamonds for summer peak) and a horizontal reference line at AMF ≈ 25.

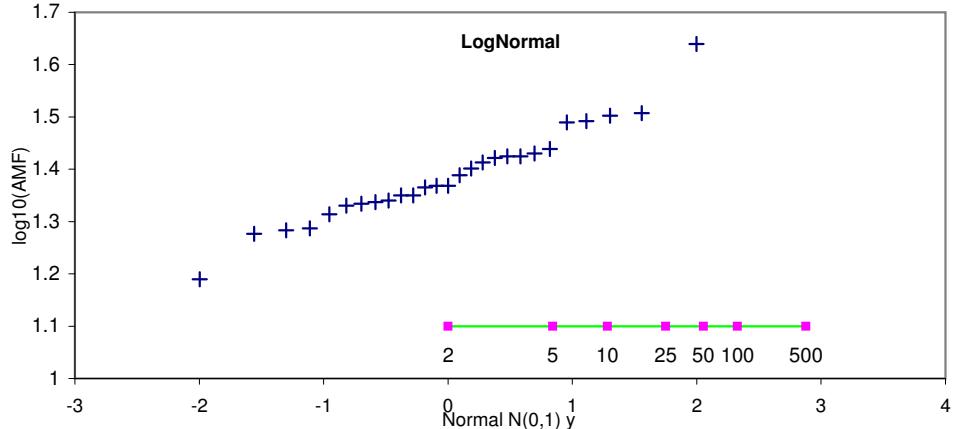
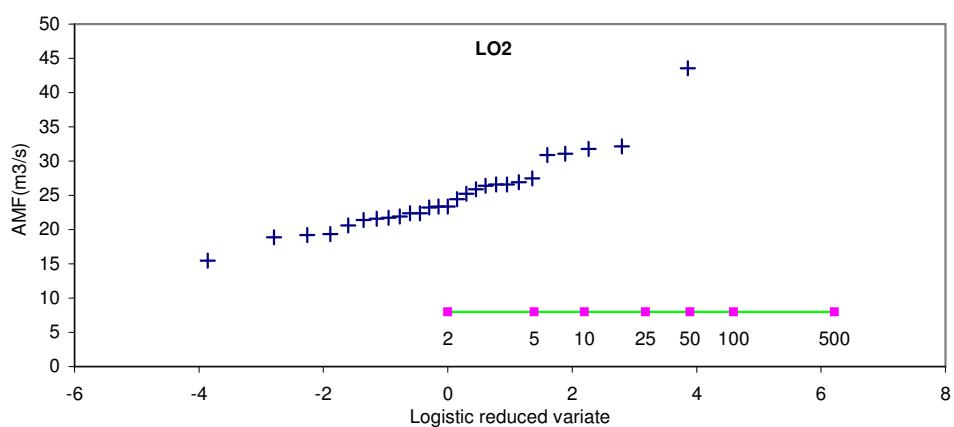
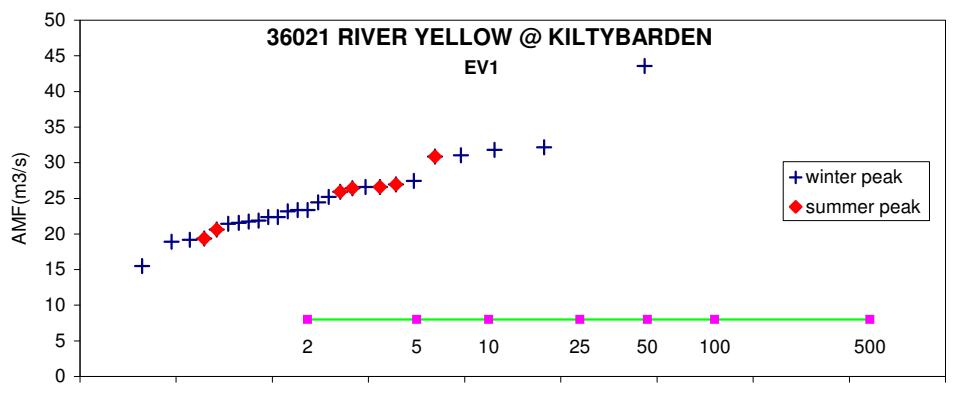
- Top Plot:** Labeled "EV1". The y-axis is AMF (m^3/s) from 0 to 140. The x-axis is EV1 y from -2 to 7. A blue curve fits the data points.
- Middle Plot:** Labeled "LO2". The y-axis is AMF (m^3/s) from 0 to 140. The x-axis is Logistic reduced variate from -6 to 8. A blue curve fits the data points.
- Bottom Plot:** Labeled "LogNormal". The y-axis is $\log_{10}(\text{AMF})$ from 1.5 to 2.2. The x-axis is Normal $N(0,1)$ y from -3 to 4. A blue curve fits the data points.

COMMENTS

- 1.Convex upwards pattern leading to a flattening out at the upper end of the EV1 probability plot
 - 2.Linear Score (subjective) :EV1=2, LO2=3, LN2=3
 - 3.Shape Codes (subjective) :EV1=D1, LO2=S1, LN2=S1

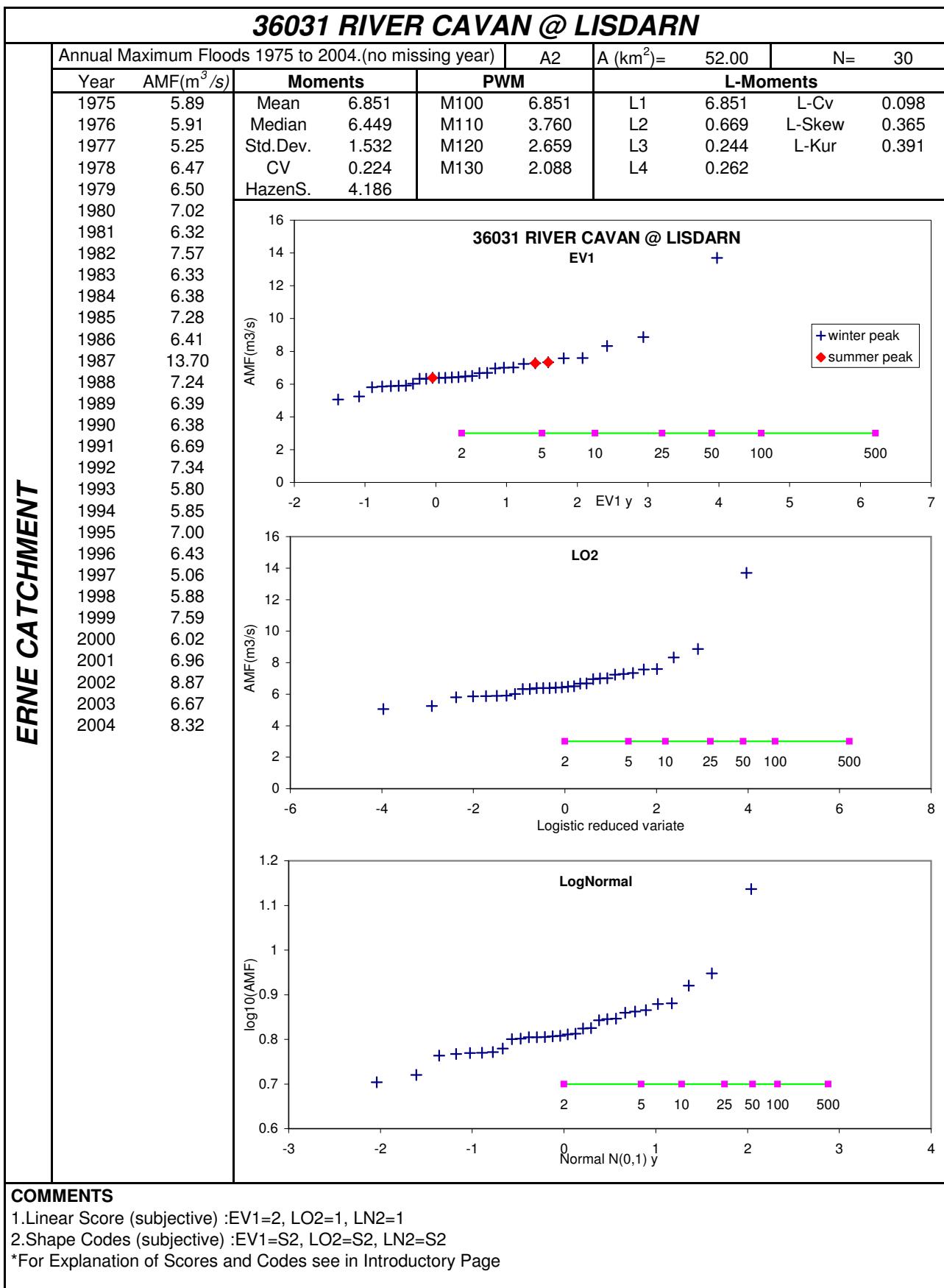
*For Explanation of Scores and Codes see in Introductory Page

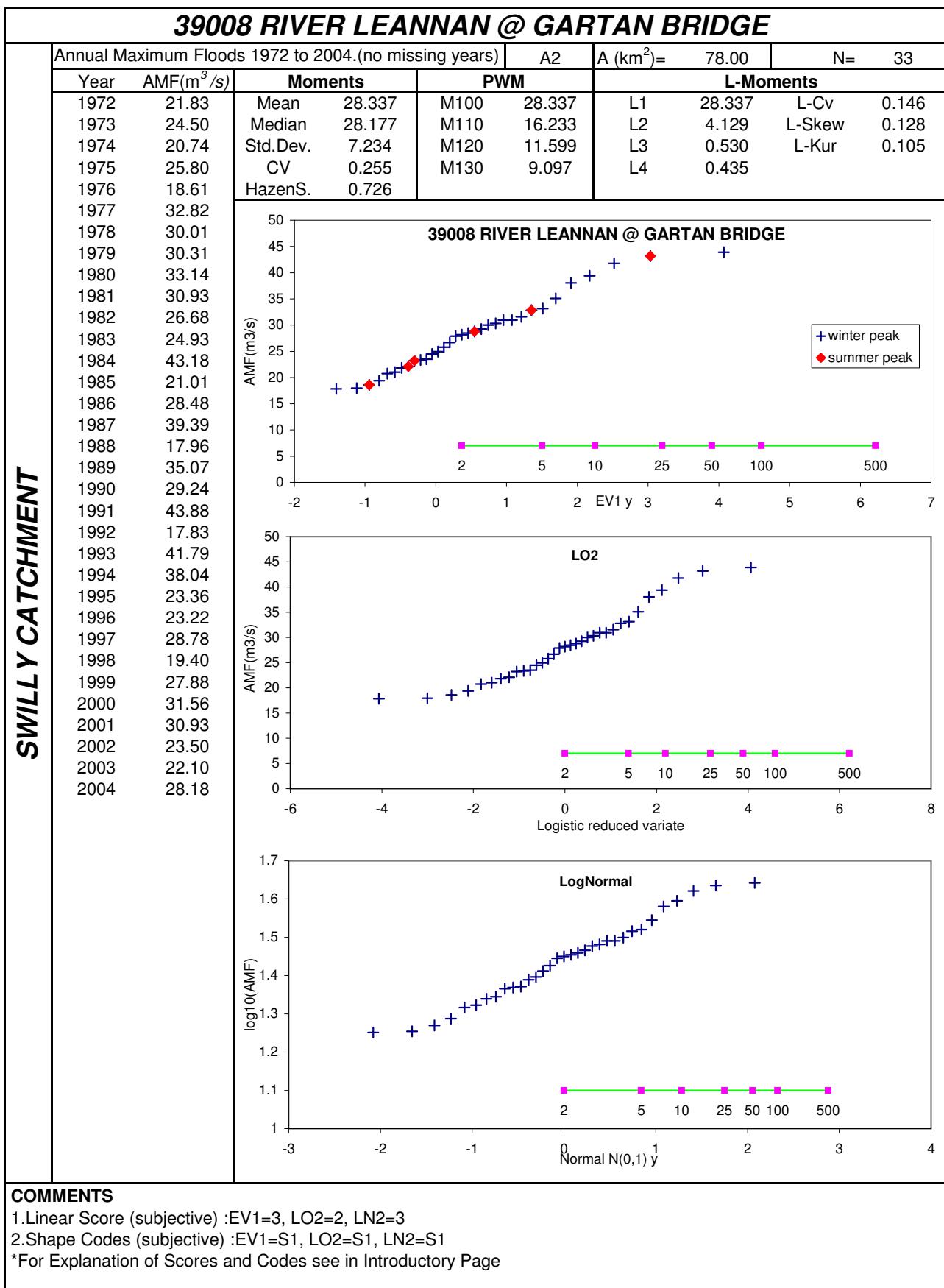
36021 RIVER YELLOW @ KILTYBARDEN								
ERNE CATCHMENT	Annual Maximum Floods 1978 to 2004.(no missing years)				A2	A (km^2) =	23.00	N= 27
	Year	AMF(m^3/s)	Moments	PWM	L-Moments			
	1978	21.73	Mean	24.958	M100	24.958	L1	24.958 L-Cv 0.119
	1979	23.37	Median	23.367	M110	13.964	L2	2.970 L-Skew 0.201
	1980	30.87	Std.Dev.	5.586	M120	9.904	L3	0.597 L-Kur 0.222
	1981	18.90	CV	0.224	M130	7.758	L4	0.659
	1982	25.21	HazenS.	1.848				
	1983	22.38						
	1984	25.90						
	1985	43.57						
	1986	27.46						
	1987	32.16						
	1988	19.36						
	1989	26.94						
	1990	23.37						
	1991	26.42						
	1992	20.61						
	1993	19.20						
	1994	21.89						
	1995	31.05						
	1996	23.20						
	1997	21.41						
	1998	31.79						
	1999	26.59						
	2000	15.49						
	2001	26.59						
	2002	21.57						
	2003	24.45						
	2004	22.38						



COMMENTS

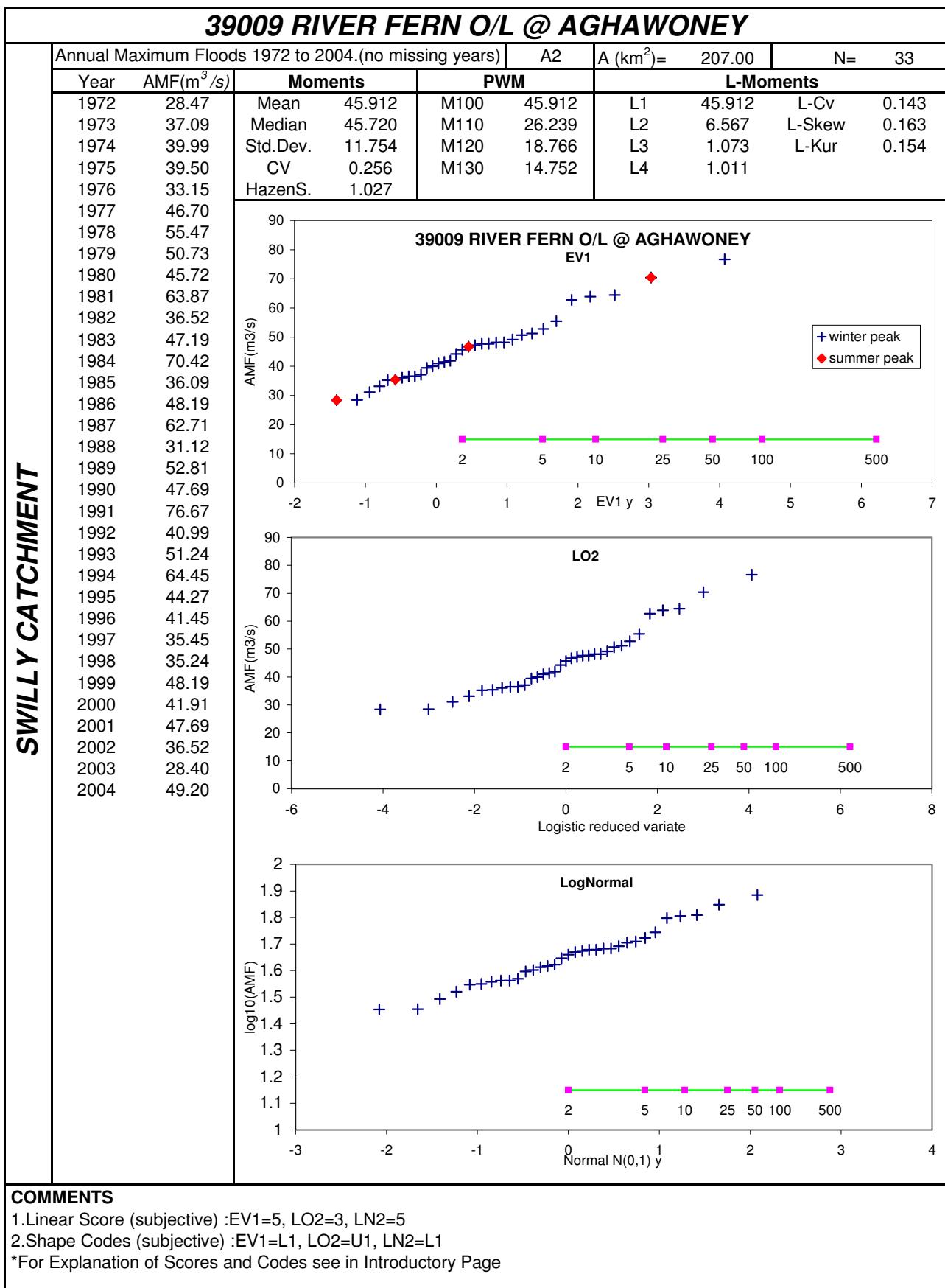
- 1.Linear Score (subjective) :EV1=3, LO2=2, LN2=3
 - 2.Shape Codes (subjective) :EV1=L2, LO2=U2, LN2=S1
- *For Explanation of Scores and Codes see in Introductory Page



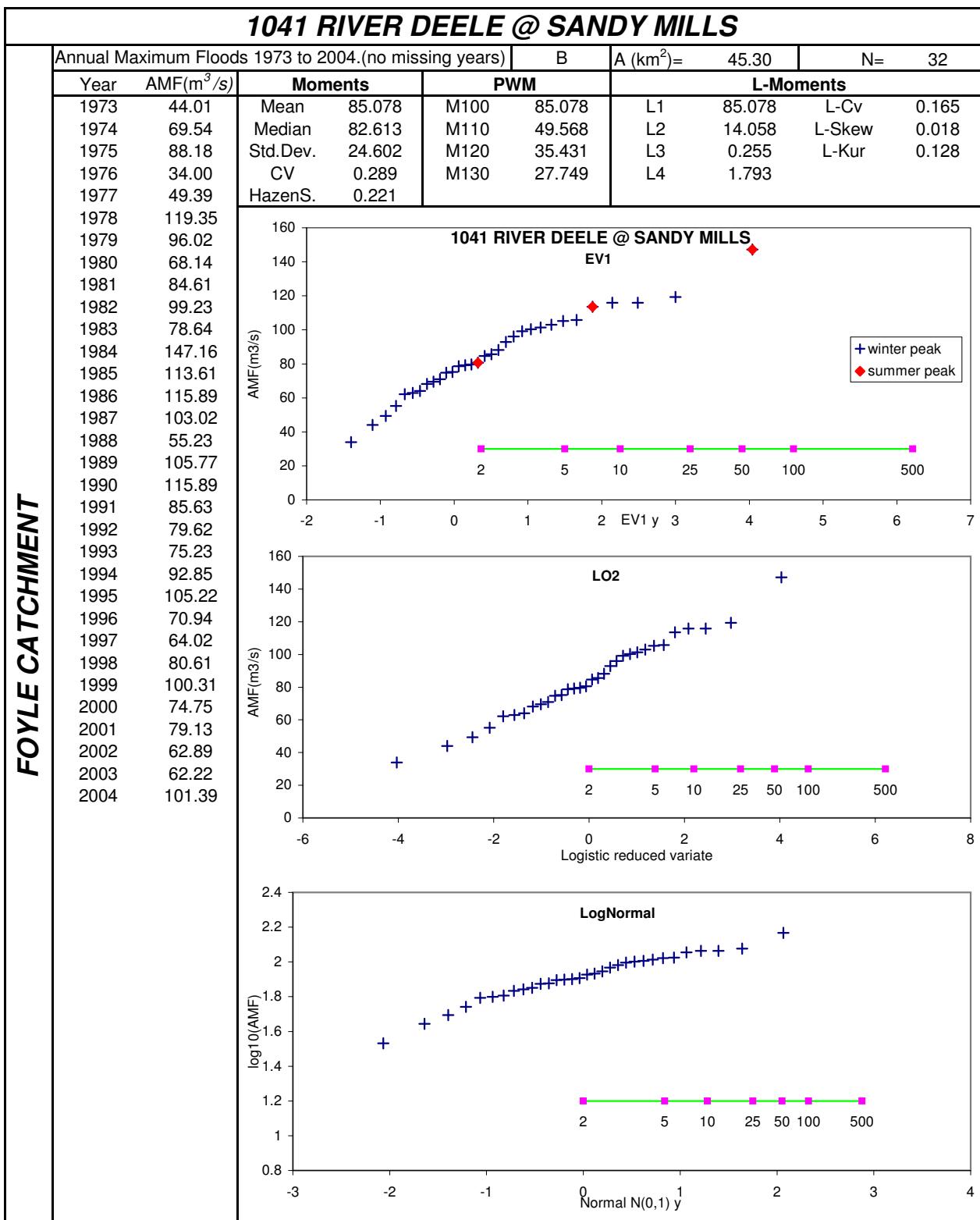


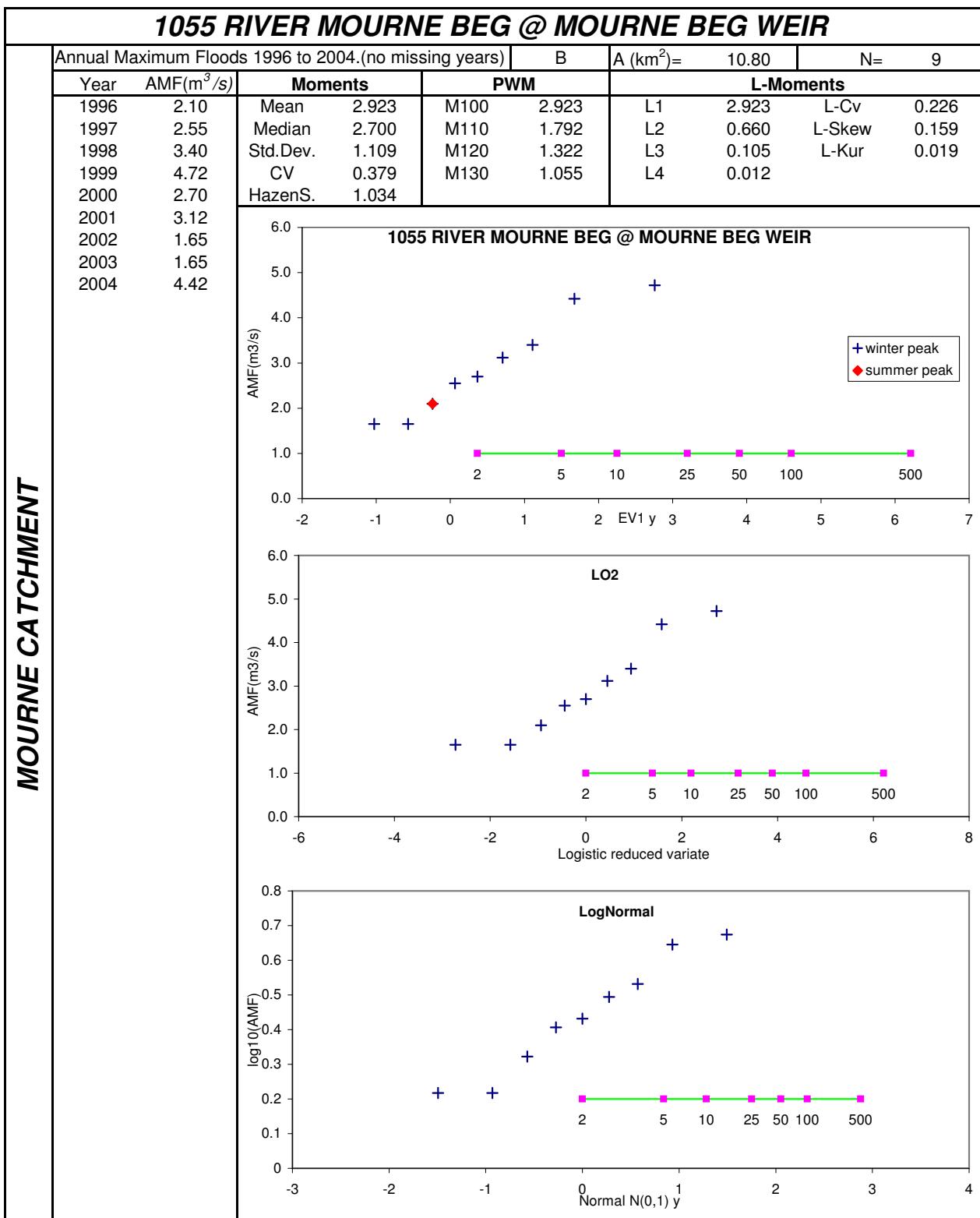
COMMENTS

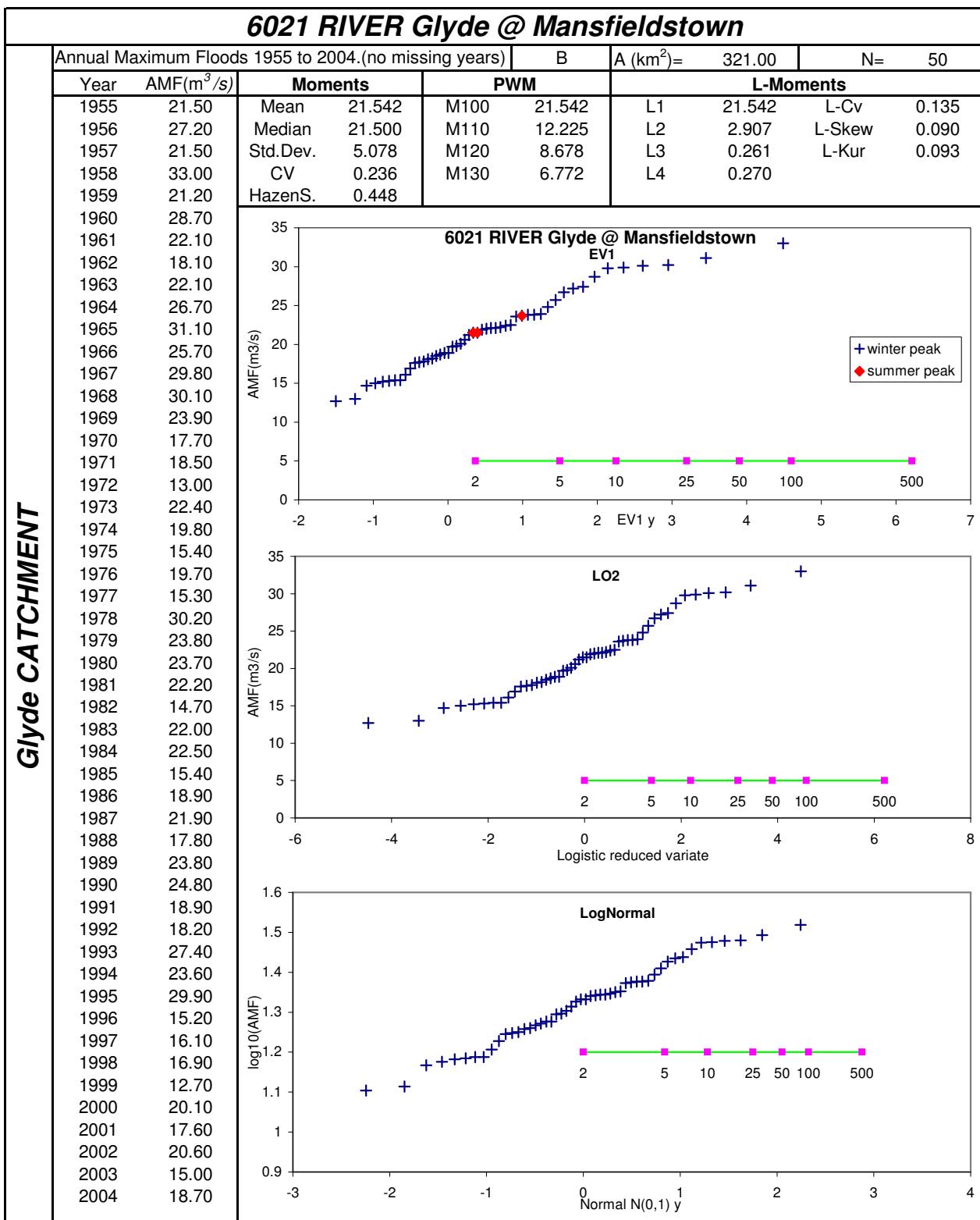
1. Linear Score (subjective) :EV1=3, LO2=2, LN2=3
 2. Shape Codes (subjective) :EV1=S1, LO2=S1, LN2=S1
- *For Explanation of Scores and Codes see in Introductory Page

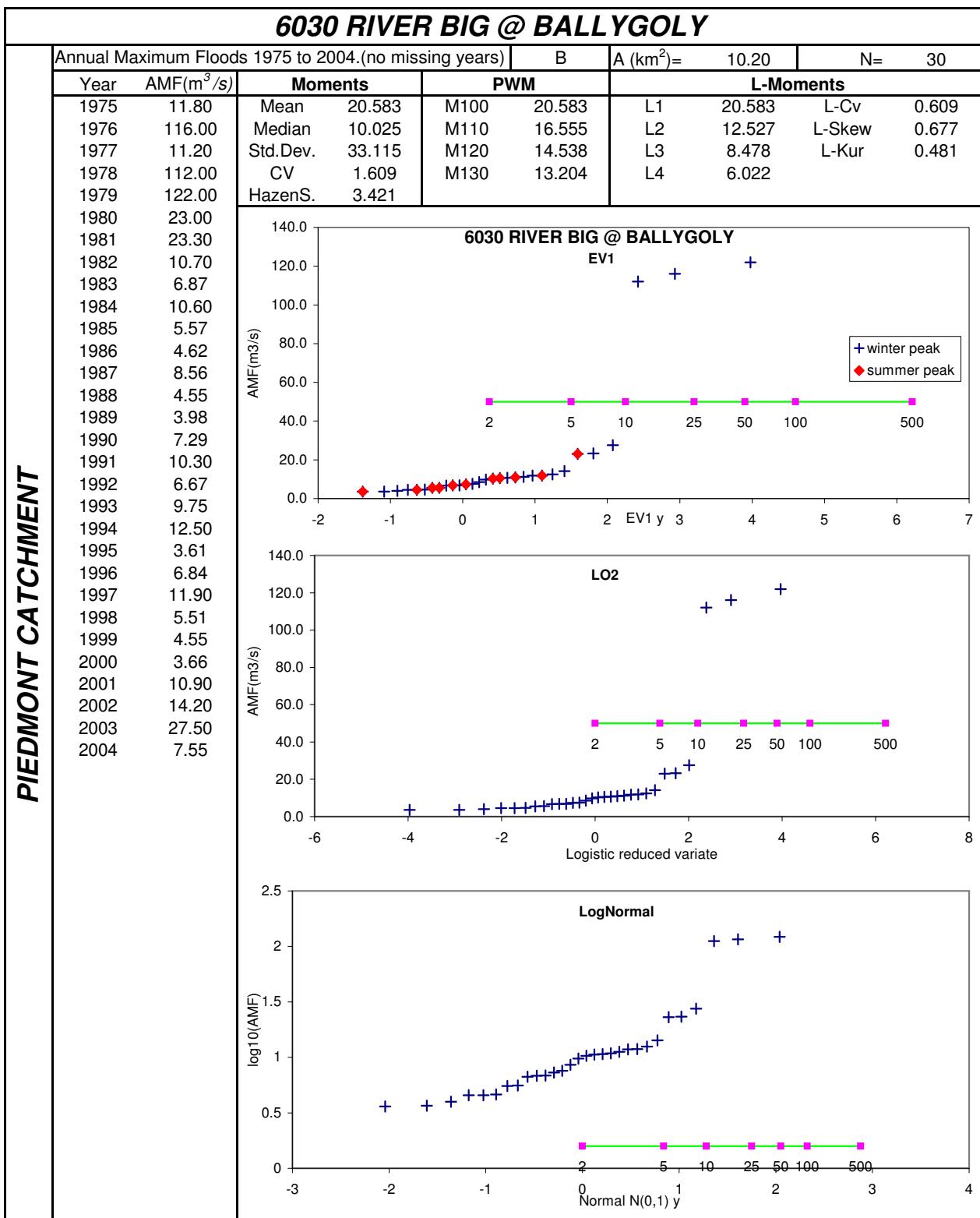


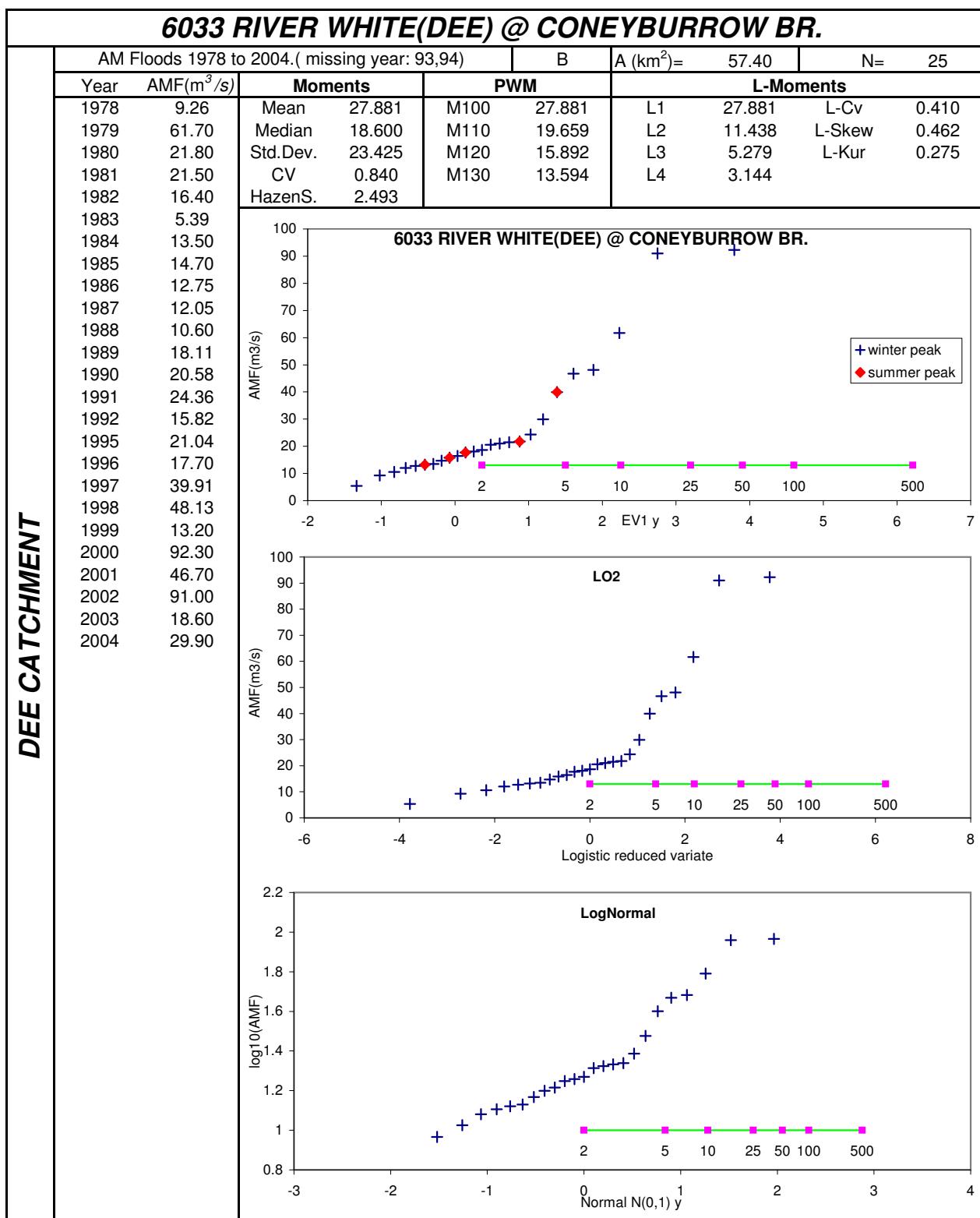
Appendix C (Grade B stations)

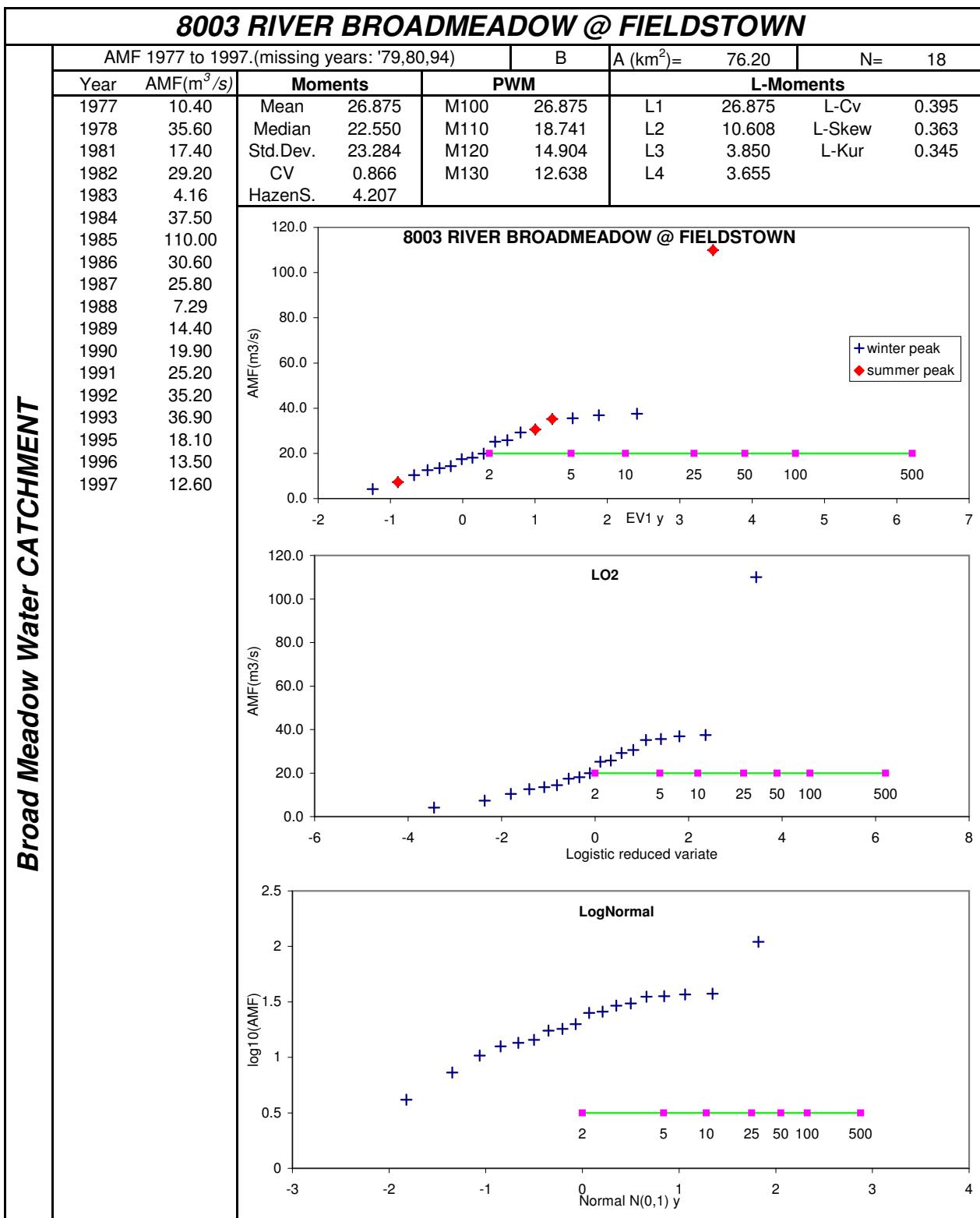


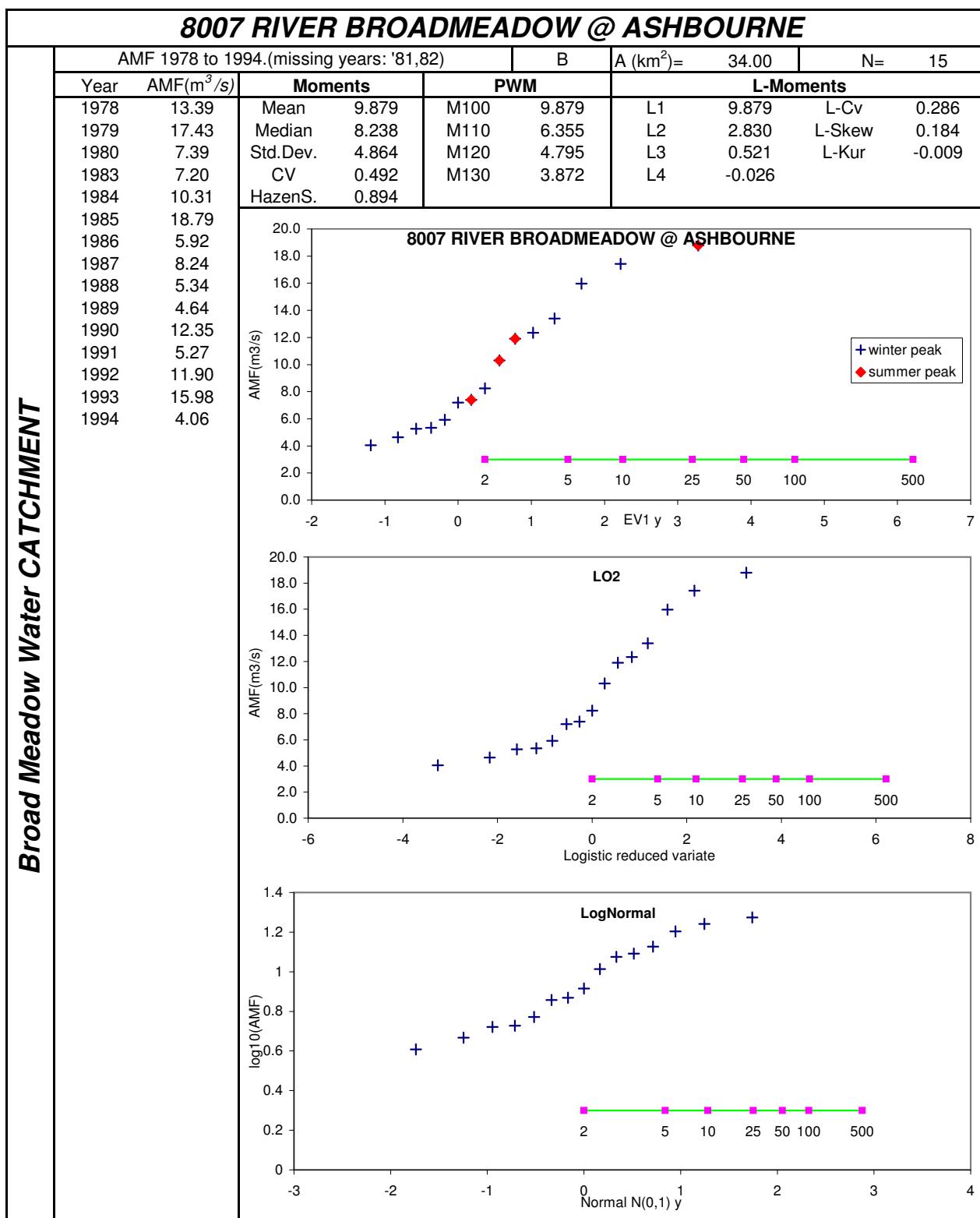


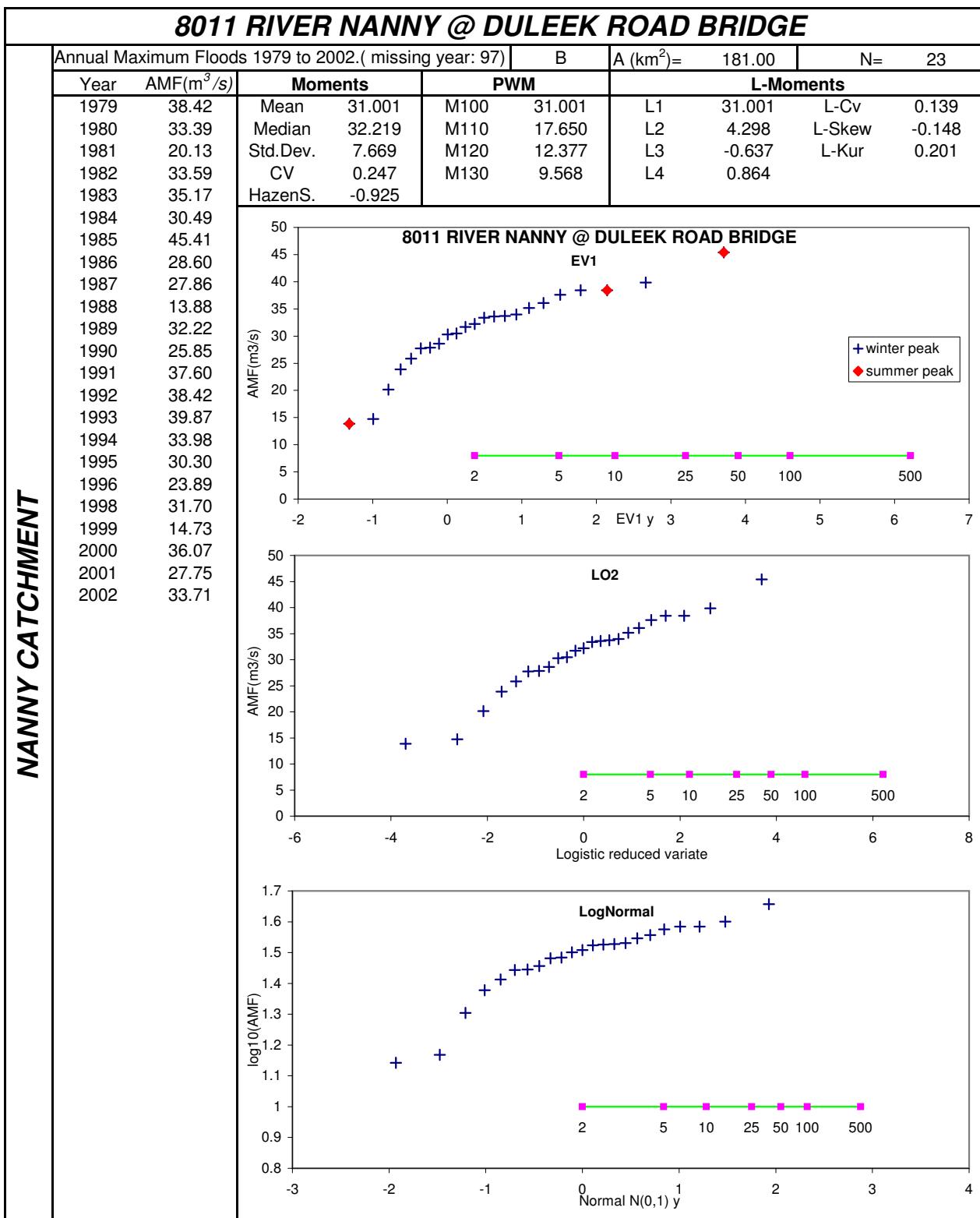


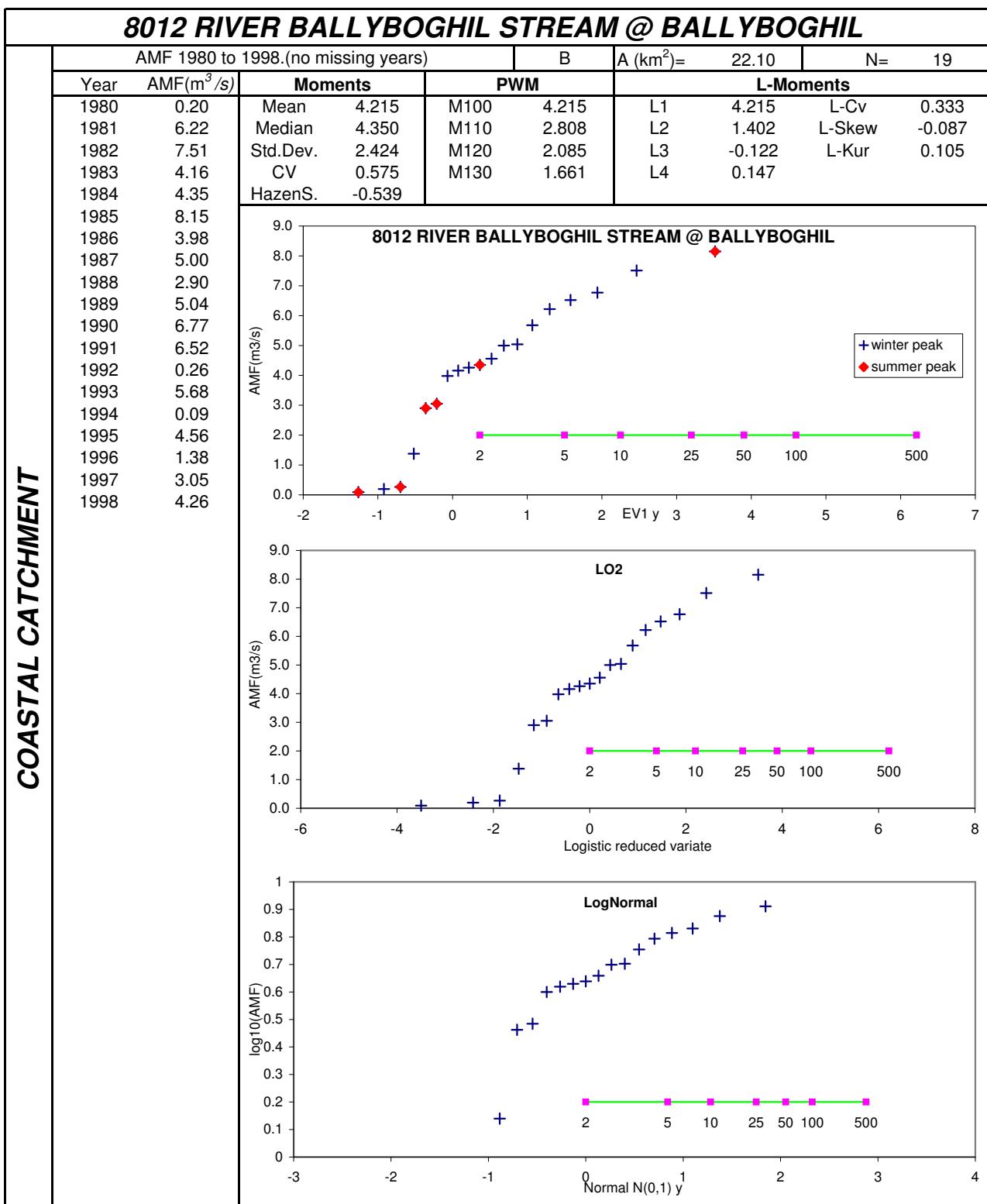


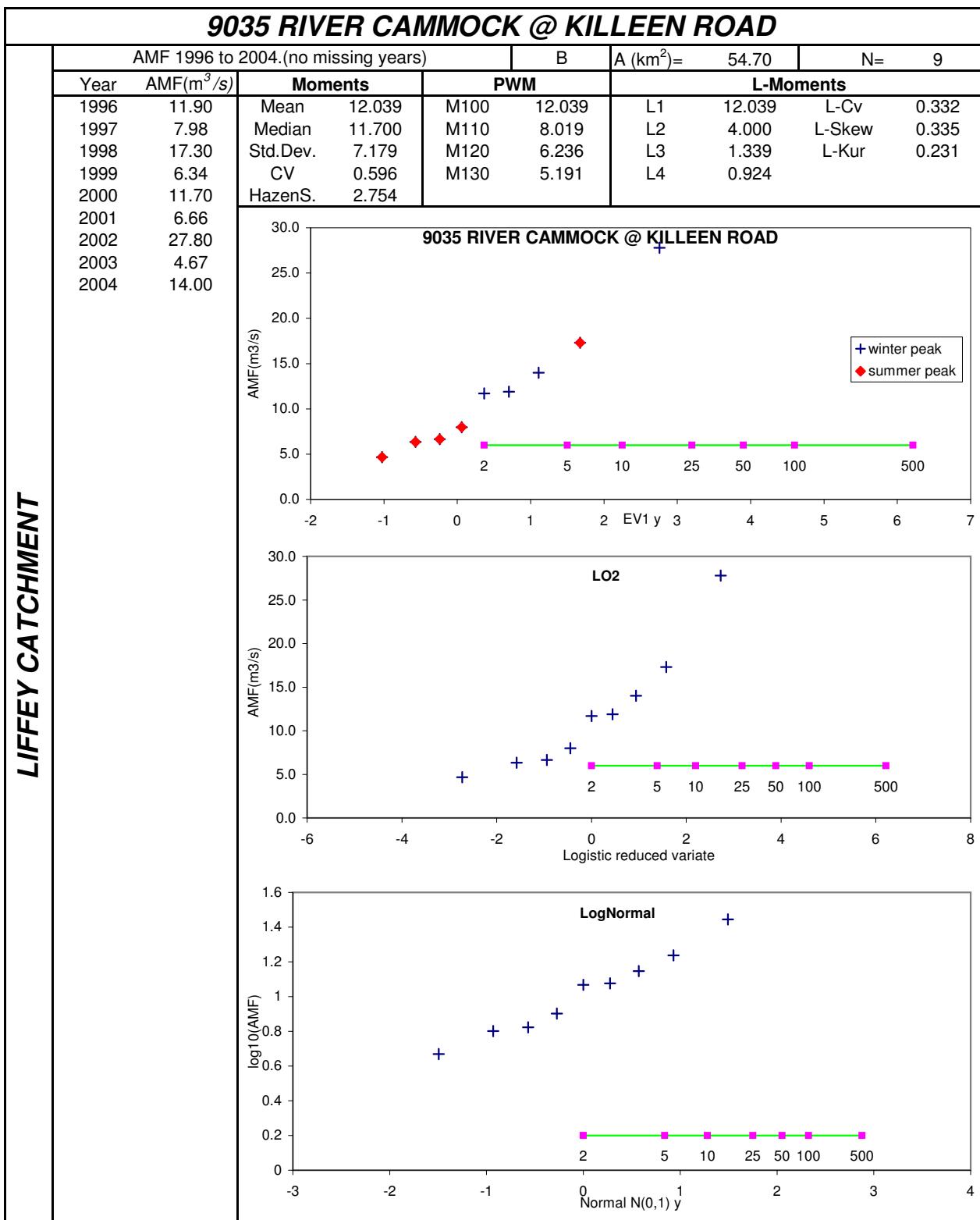












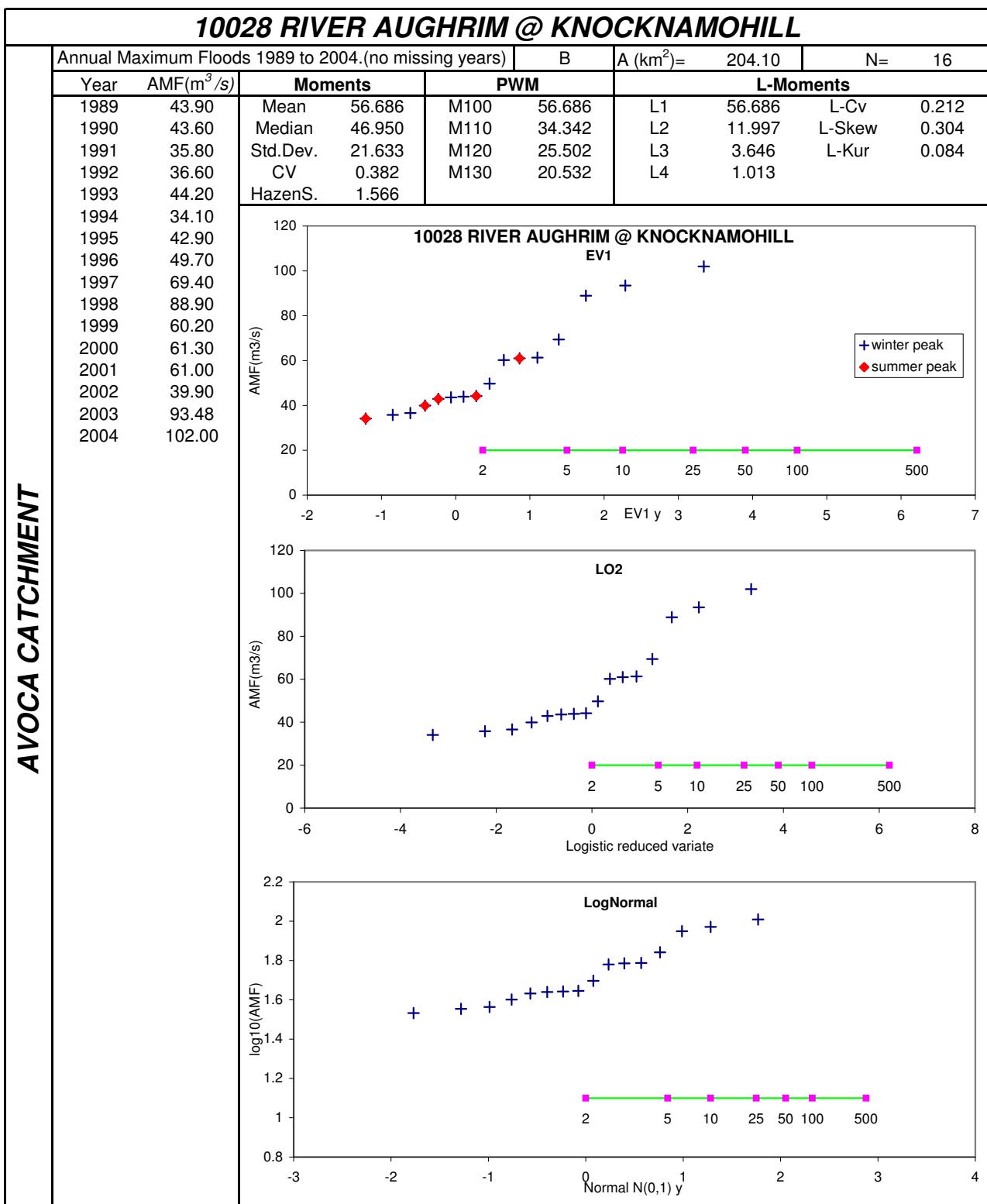
10002 RIVER AVONMORE @ RATHDRUM							
	AM Floods 1952 to 2005.(missing year: 79-81,88,00-02)			B	A (km^2)=	233.00	N= 47
	Year	AMF(m^3/s)	Moments	PWM	L-Moments		
1952	55.29	Mean	88.192	M100	88.192	L1	88.192 L-Cv 0.209
1953	66.08	Median	83.491	M110	53.321	L2	18.450 L-Skew 0.267
1954	90.57	Std.Dev.	38.349	M120	39.444	L3	4.930 L-Kur 0.313
1955	96.92	CV	0.435	M130	31.872	L4	5.771
1956	140.82	HazenS.	2.854				
1957	89.49						
1958	78.80						
1959	84.55						
1960	162.10						
1961	80.18						
1962	88.41						
1963	90.95						
1964	77.93						
1965	266.64						
1966	94.40						
1967	69.22						
1968	99.43						
1969	75.24						
1970	74.46						
1971	88.48						
1972	66.49						
1973	74.03						
1974	65.35						
1975	37.95						
1976	93.14						
1977	116.59						
1978	112.64						
1982	51.13						
1983	51.91						
1984	75.74						
1985	155.32						
1986	23.16						
1987	62.57						
1989	68.11						
1990	86.97						
1991	115.40						
1992	97.54						
1993	56.67						
1994	87.93						
1995	72.65						
1996	57.26						
1997	133.74						
1998	69.88						
1999	60.35						
2003	83.49						
2004	115.11						
2005	83.94						

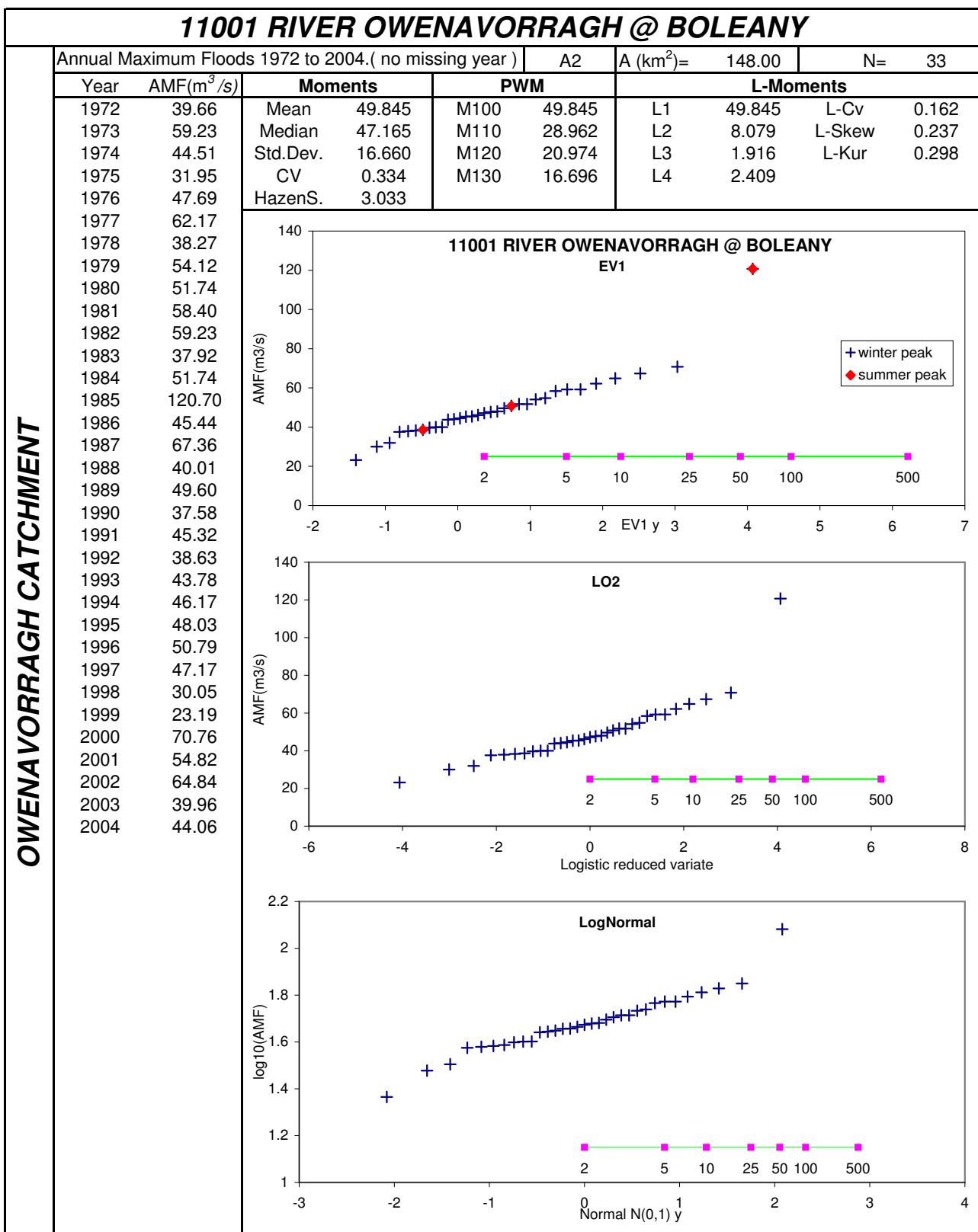
AVOCA CATCHMENT

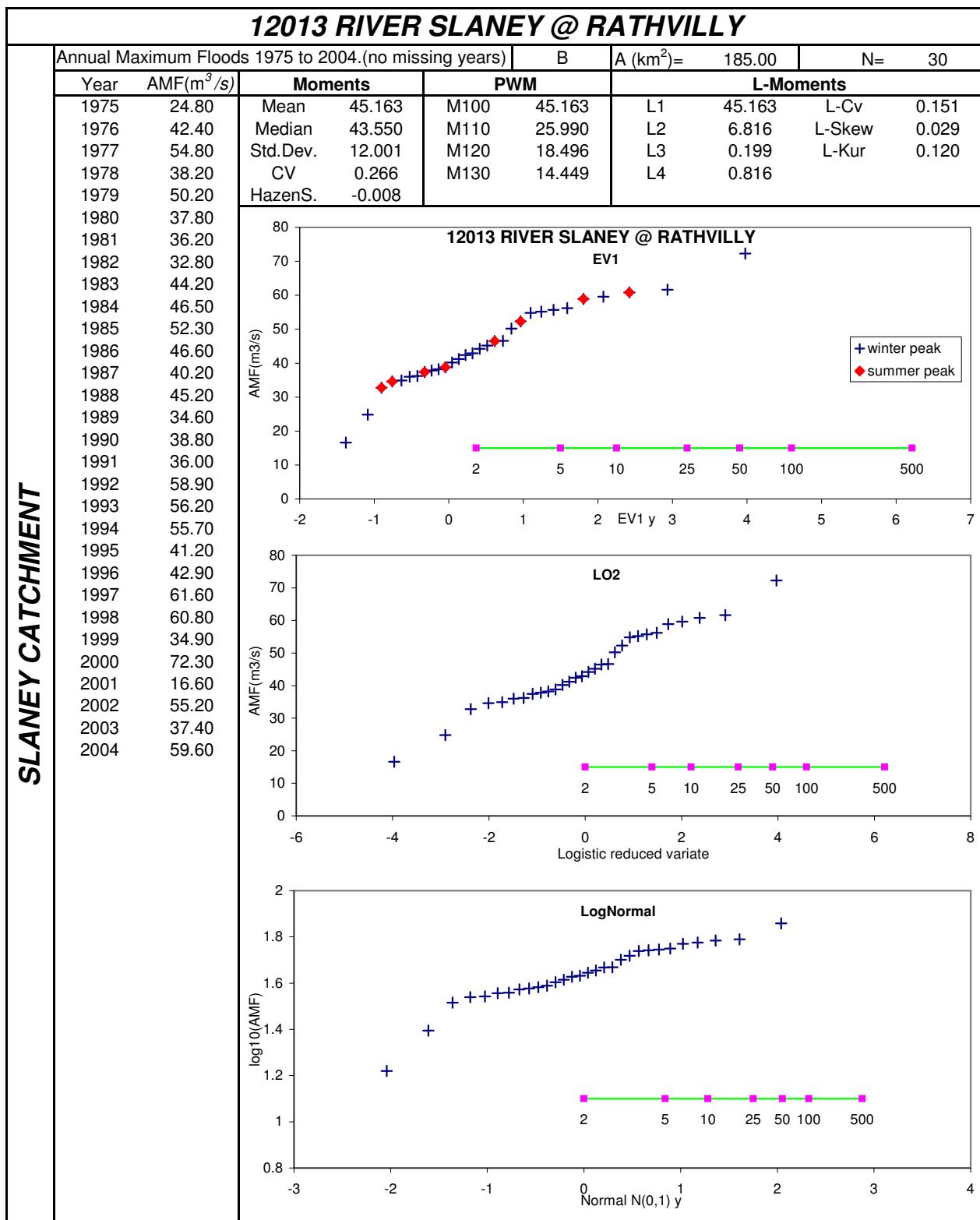
Graph showing AMF (m^3/s) vs EV1 y. The x-axis ranges from -2 to 7, and the y-axis ranges from 0 to 300. Data points are blue '+' symbols for winter peaks and red diamond symbols for summer peaks. A fitted curve is shown, and a green horizontal line is at y ≈ 35.

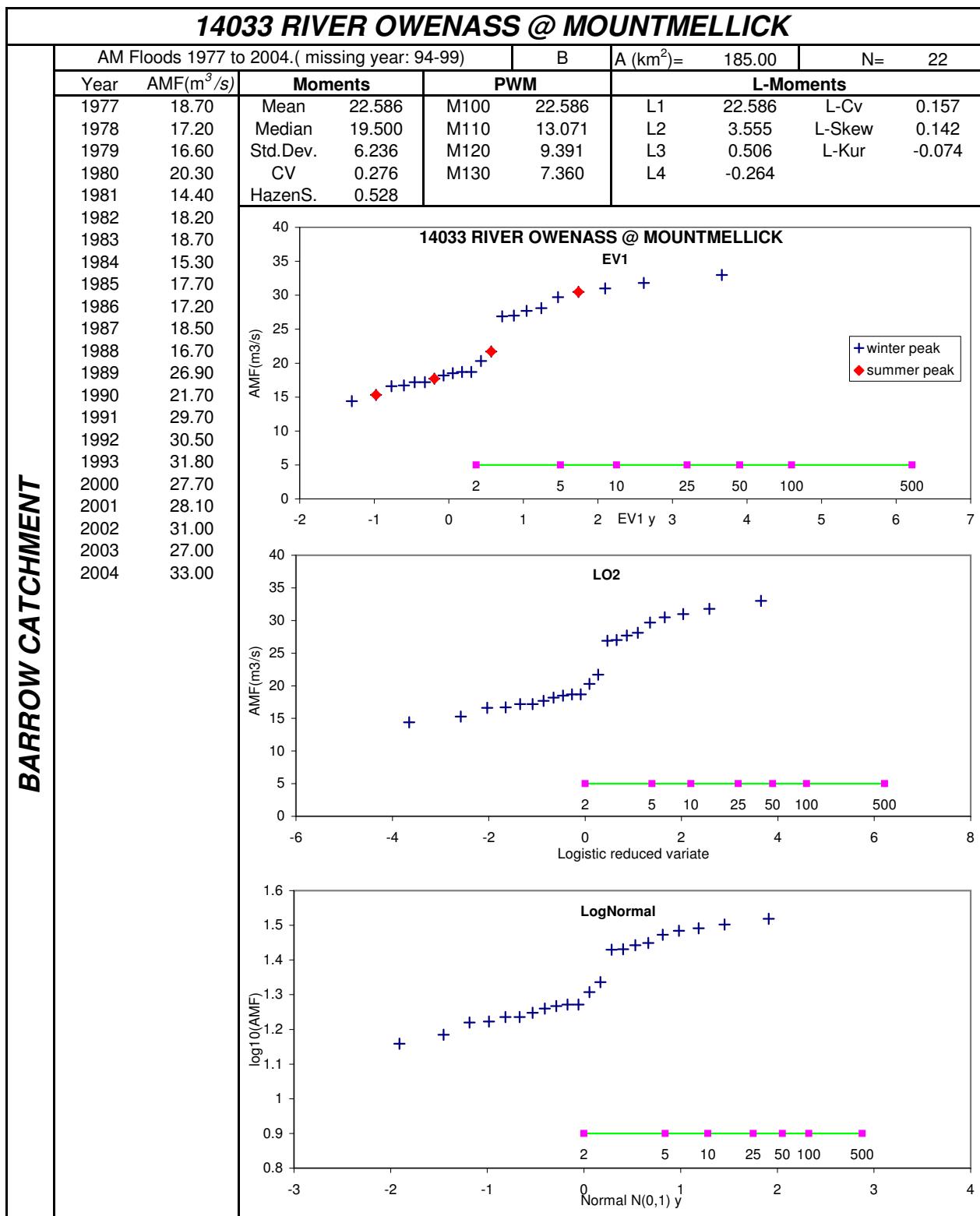
Graph showing AMF (m^3/s) vs Logistic reduced variate. The x-axis ranges from -6 to 8, and the y-axis ranges from 0 to 300. Data points are blue '+' symbols. A fitted curve is shown, and a green horizontal line is at y ≈ 35.

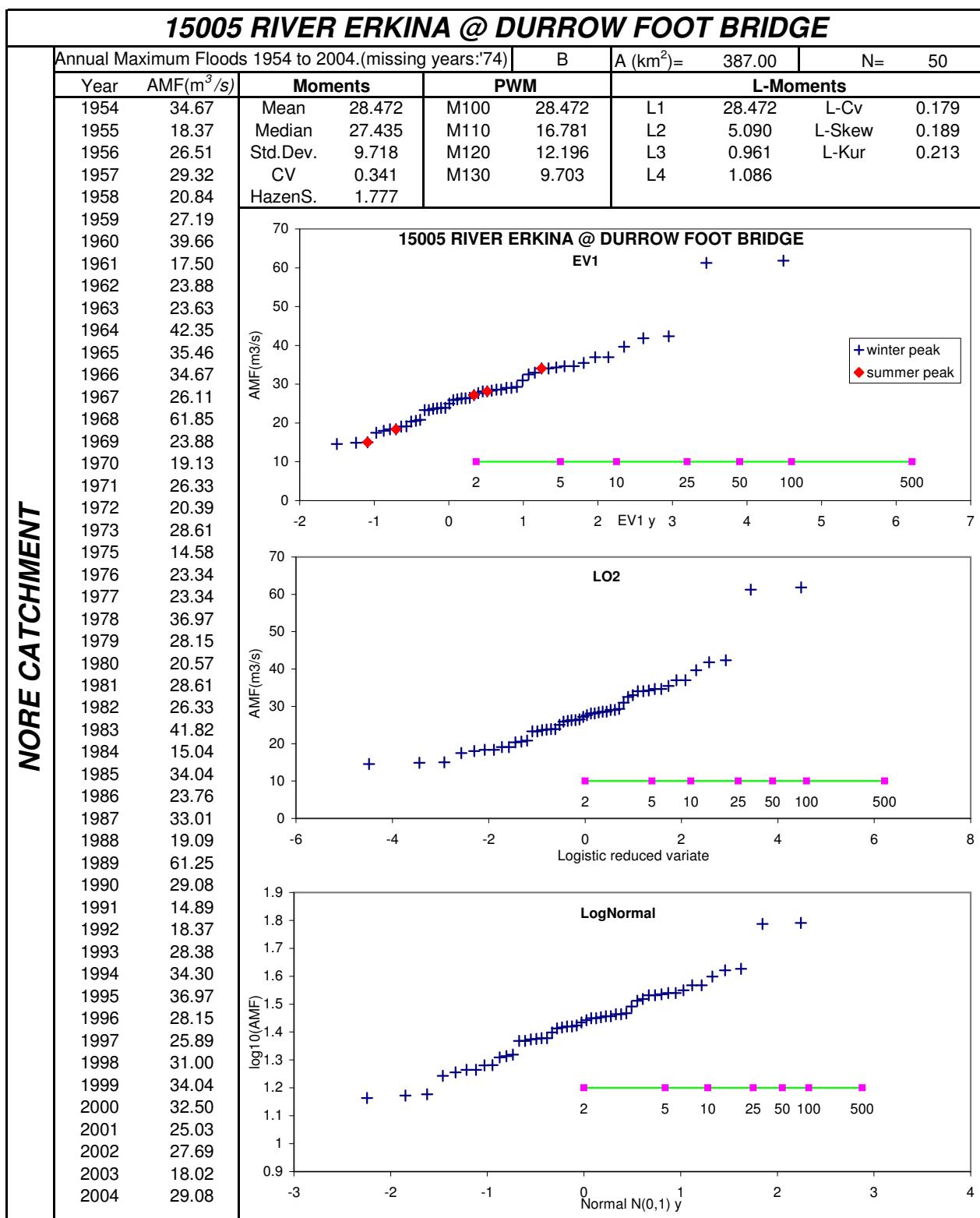
Graph showing $\log_{10}(\text{AMF})$ vs Normal $N(0,1) y$. The x-axis ranges from -3 to 4, and the y-axis ranges from 0.8 to 2.6. Data points are blue '+' symbols. A fitted curve is shown, and a green horizontal line is at y ≈ 1.0.

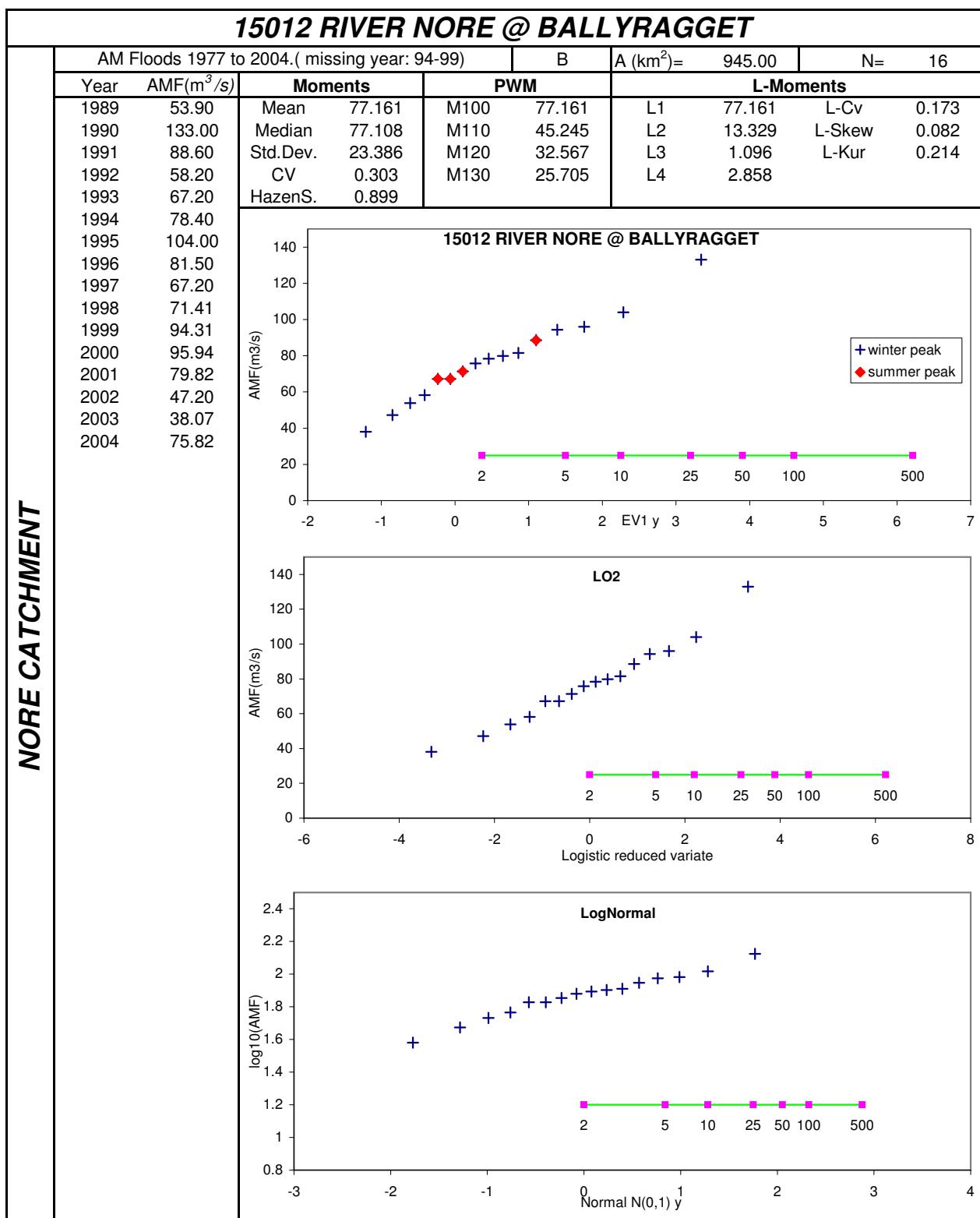


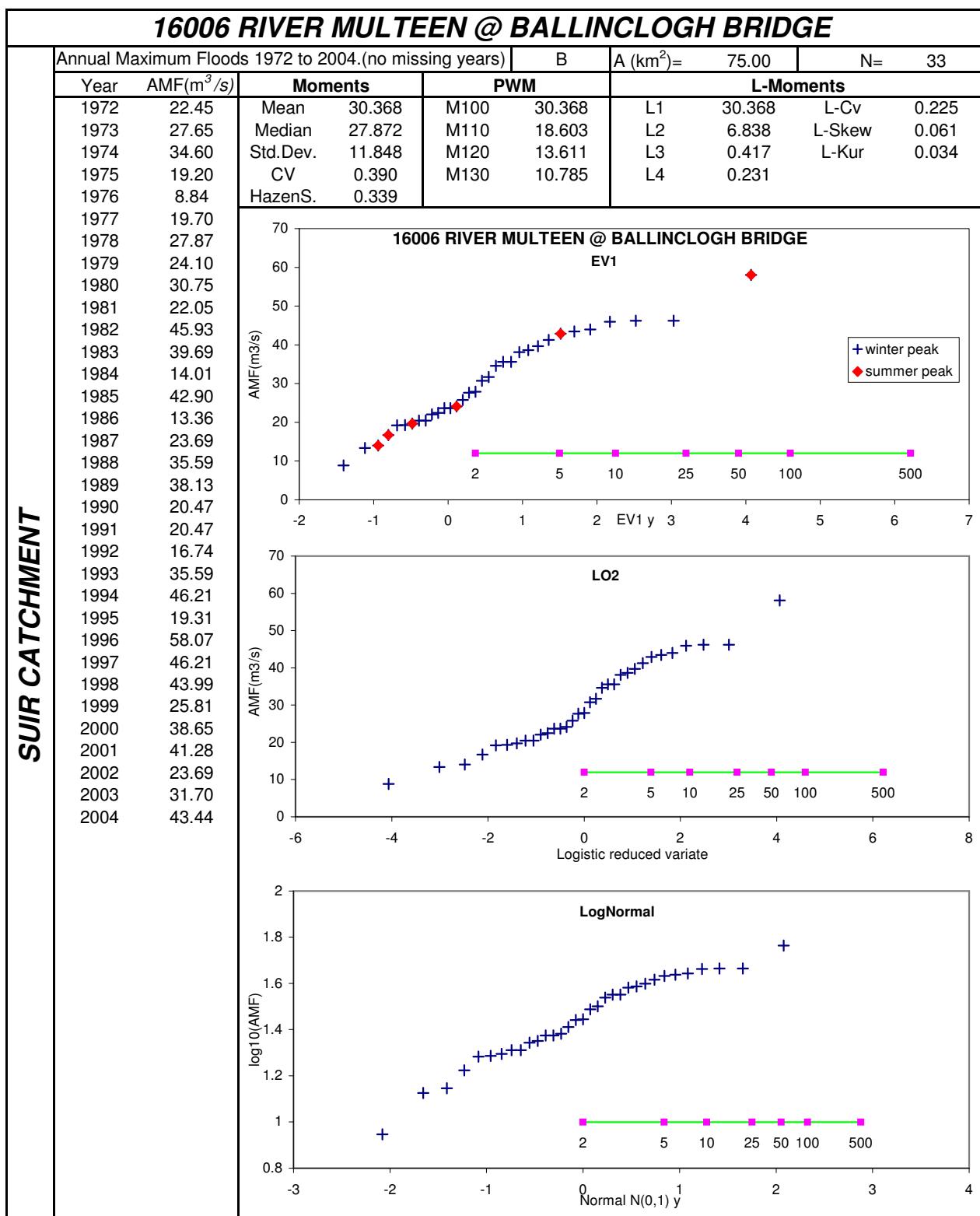


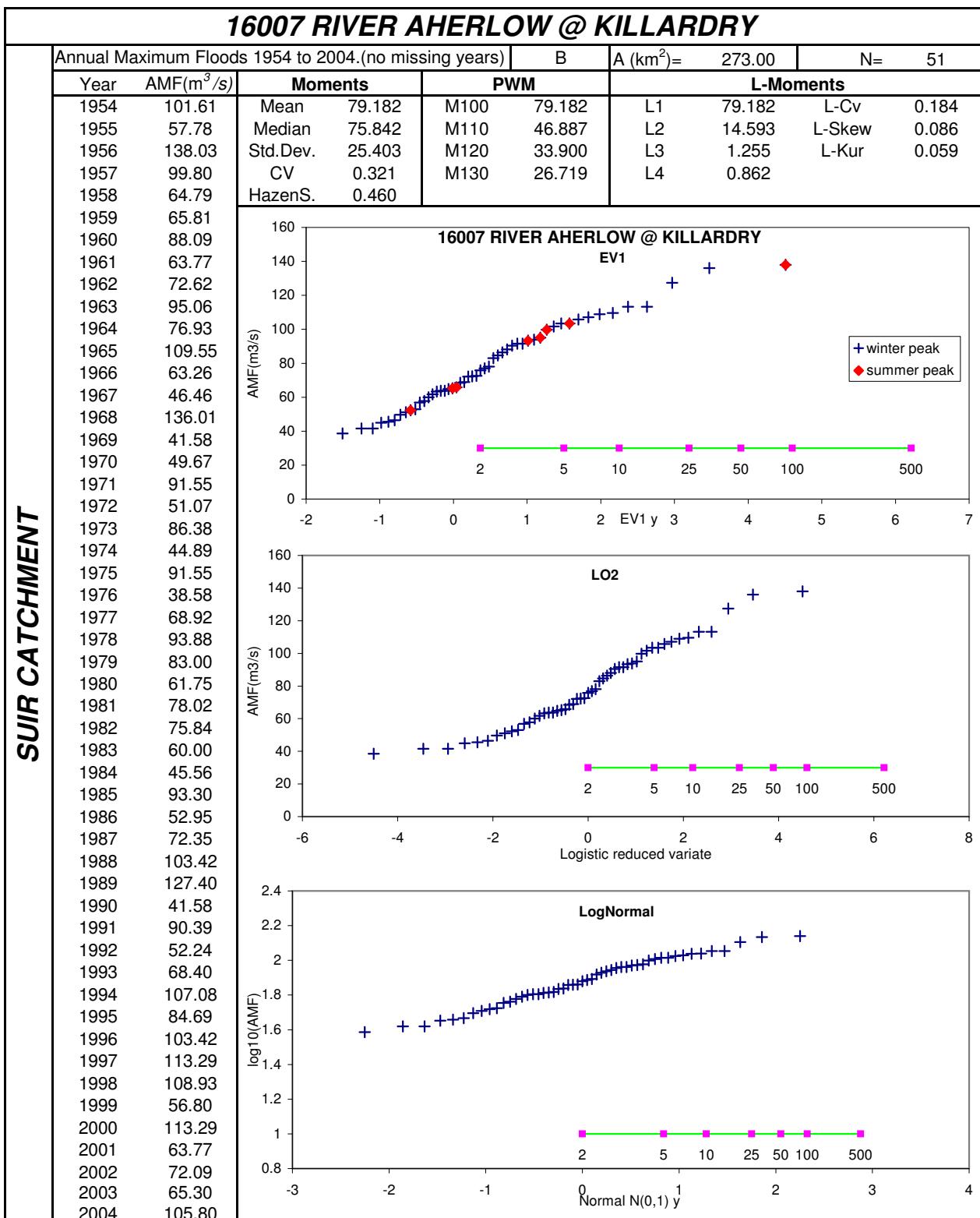


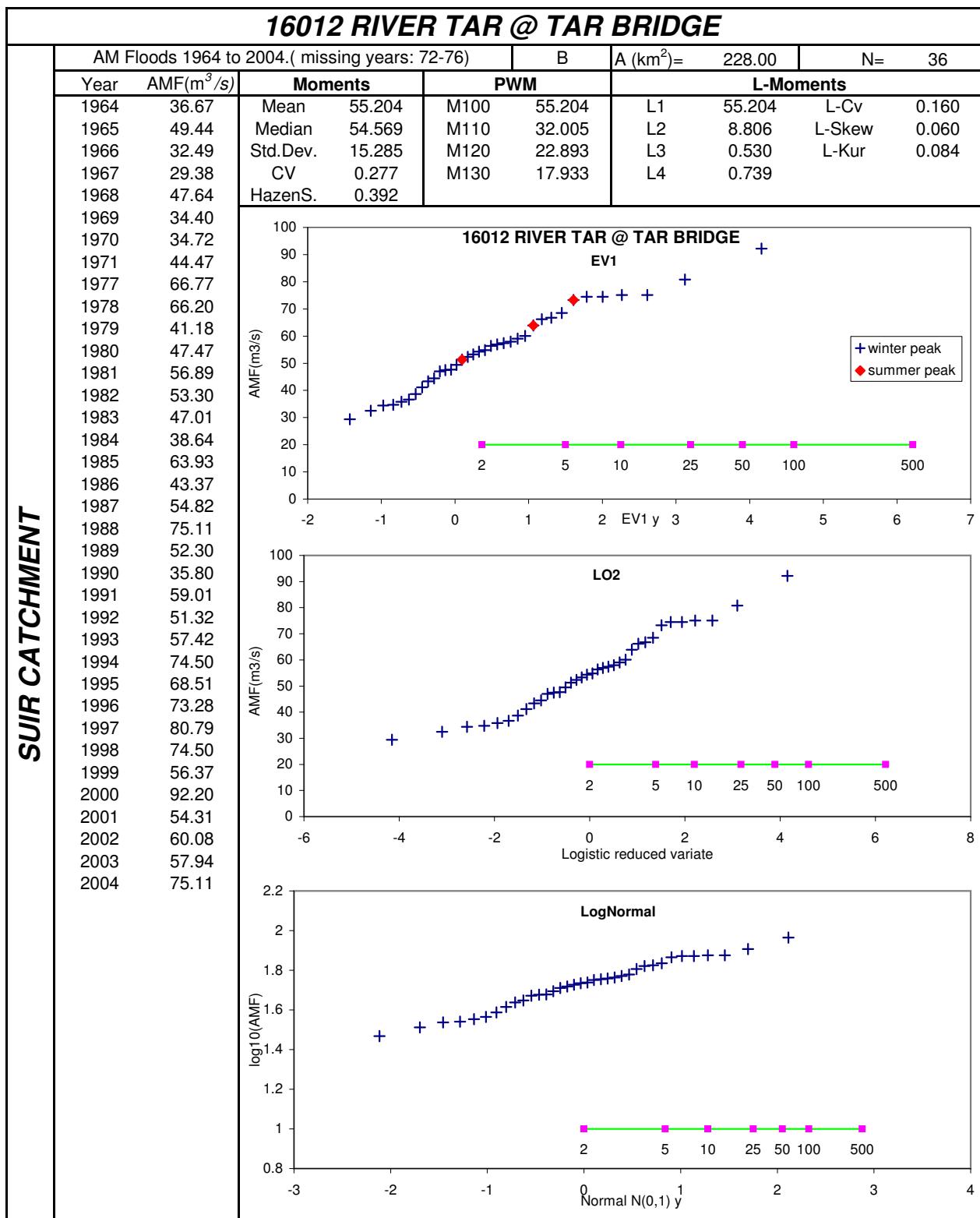


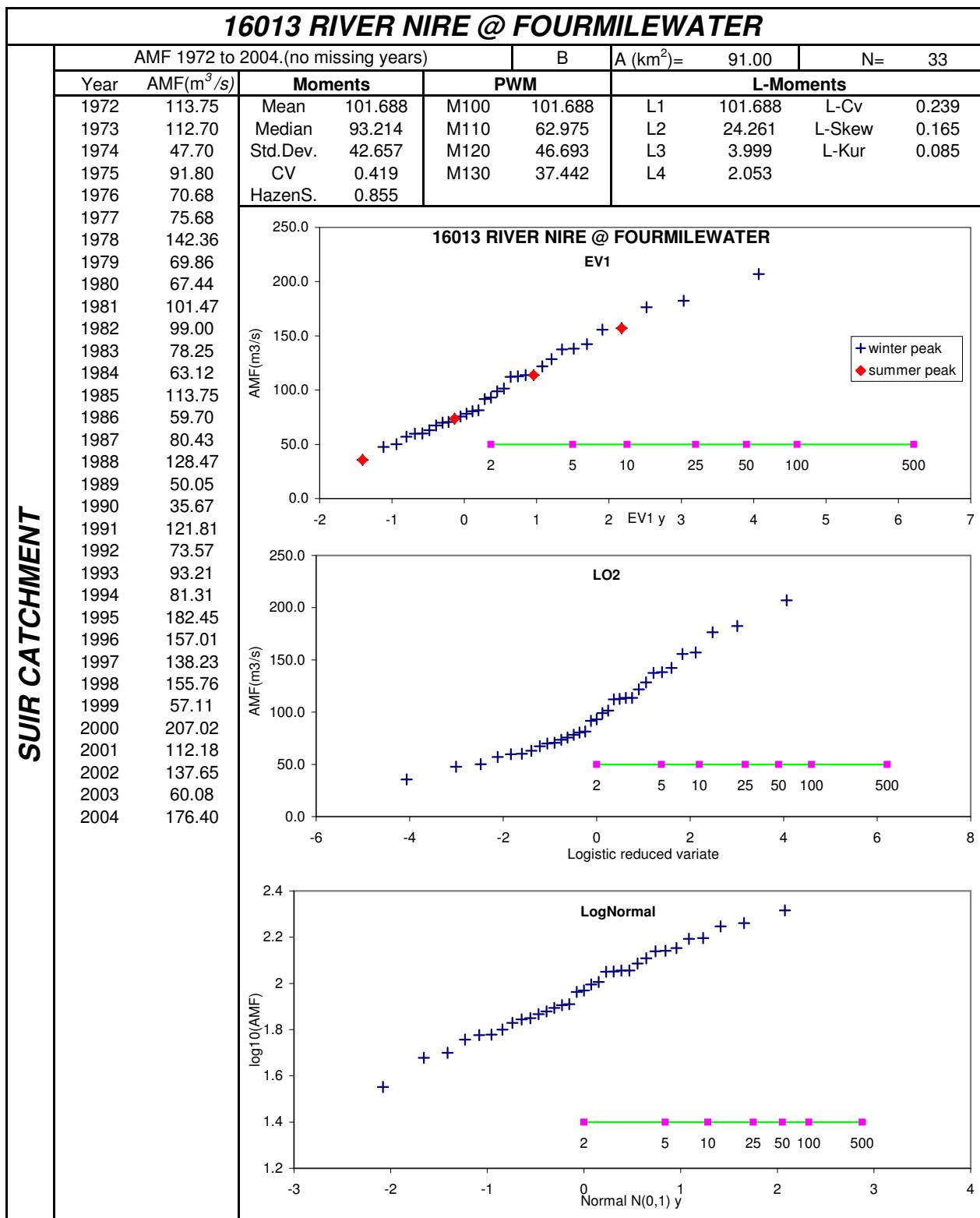


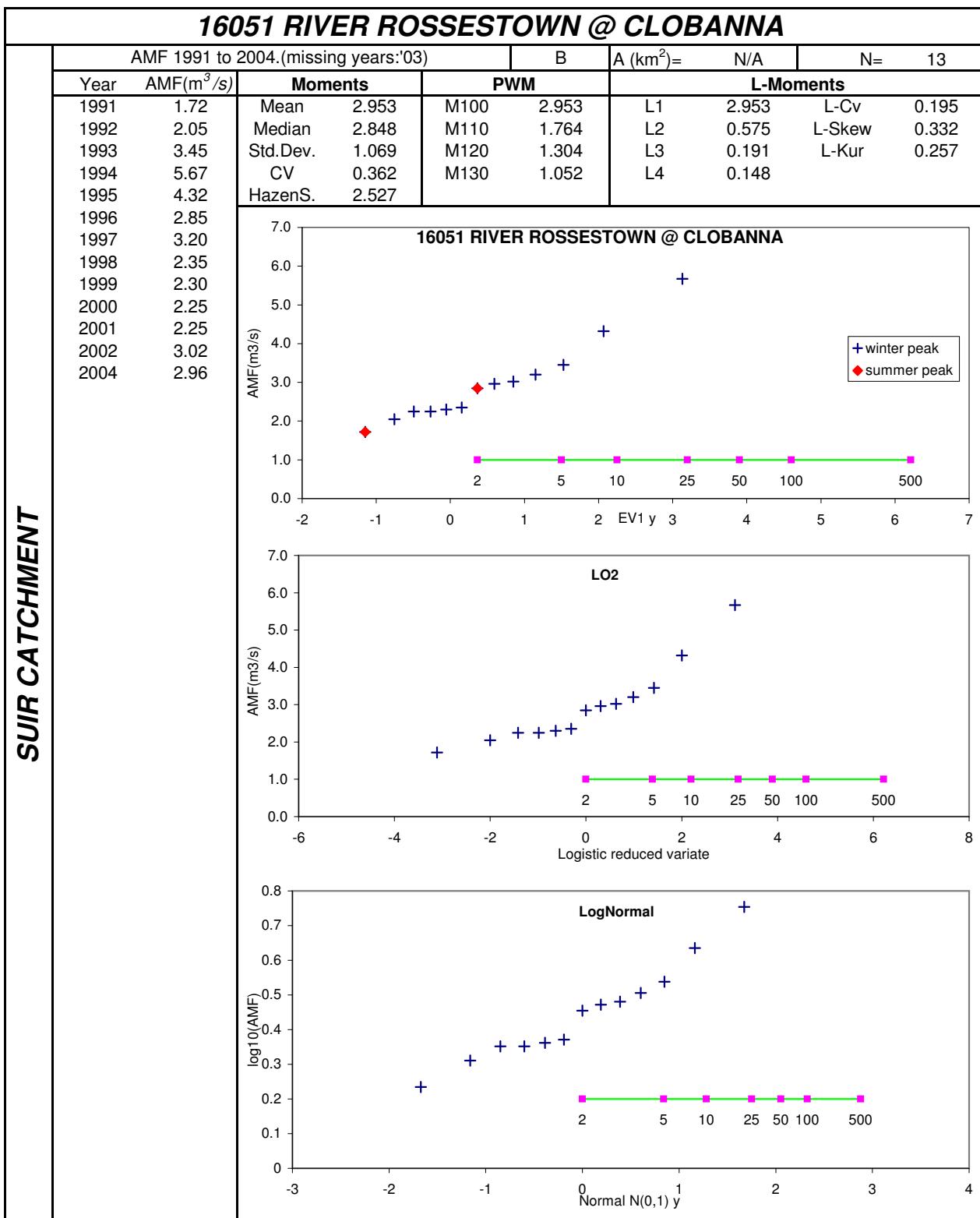


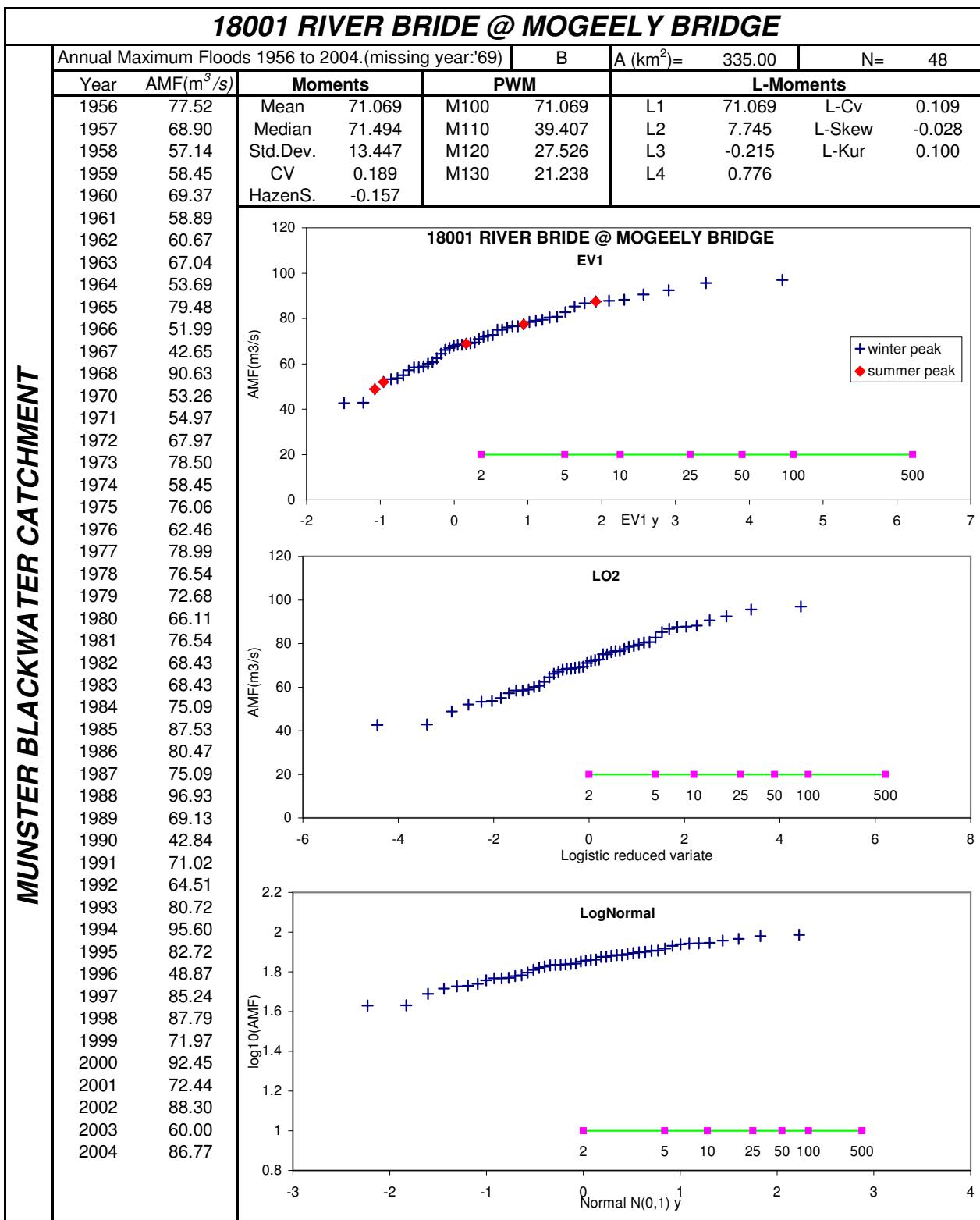


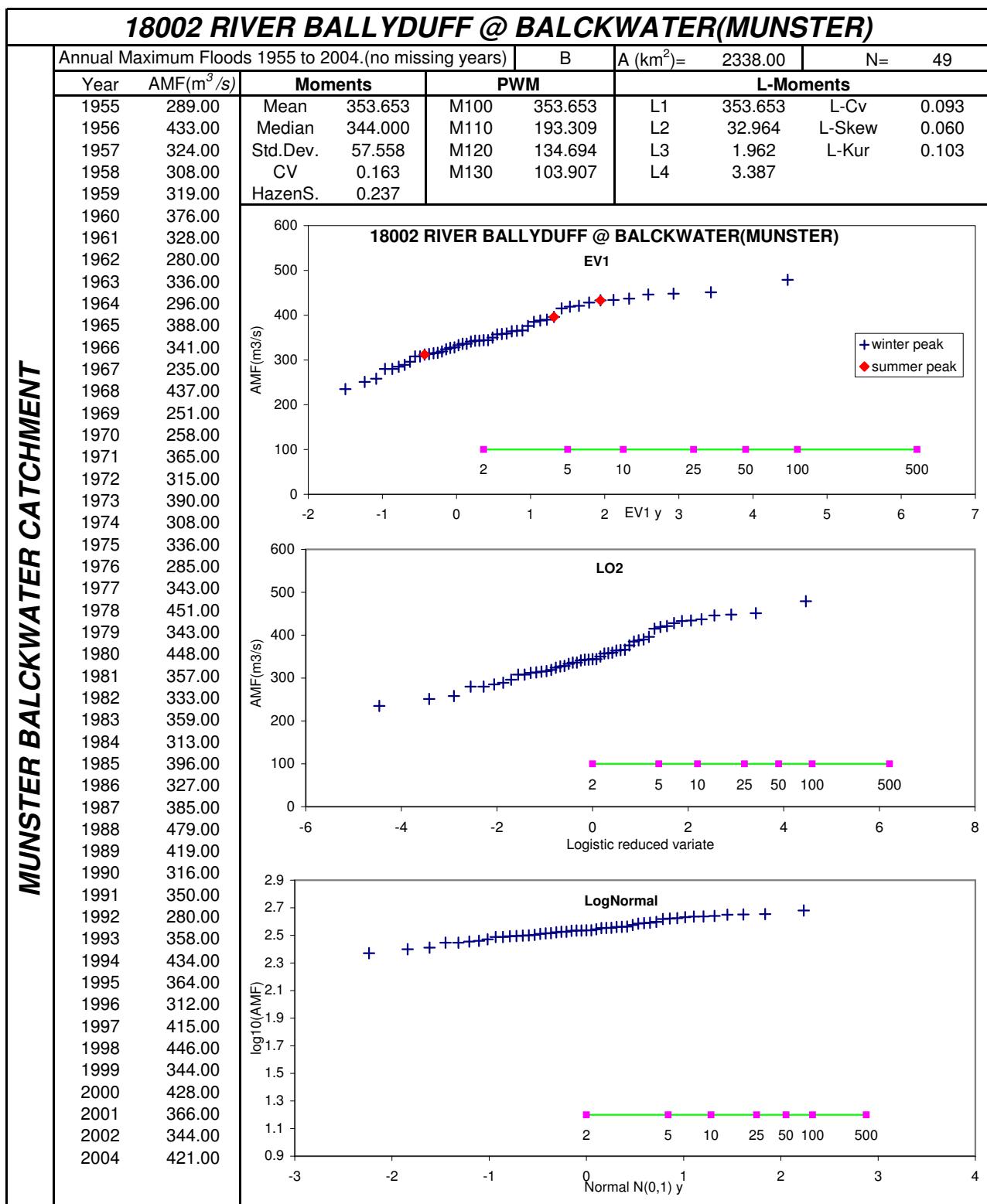


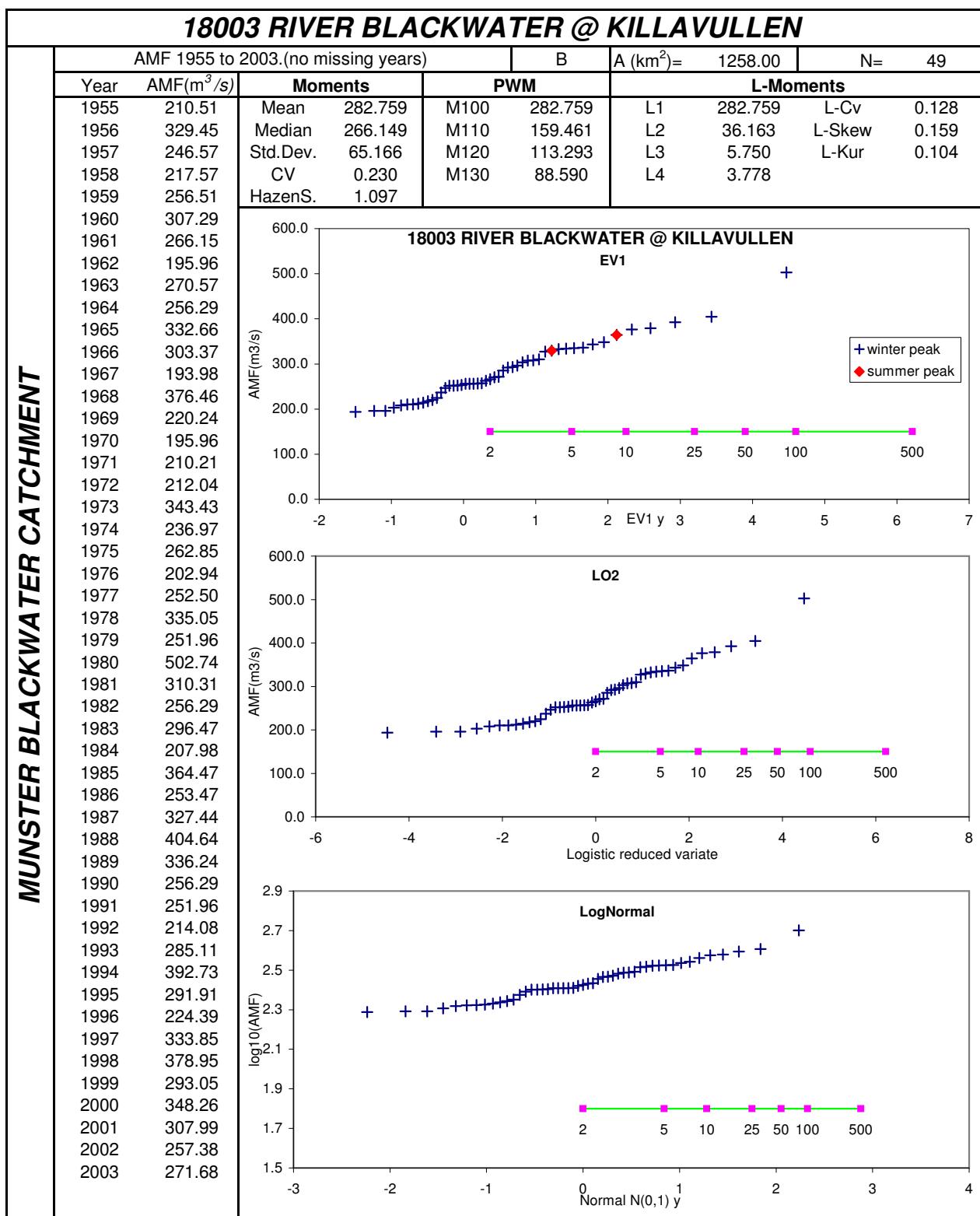


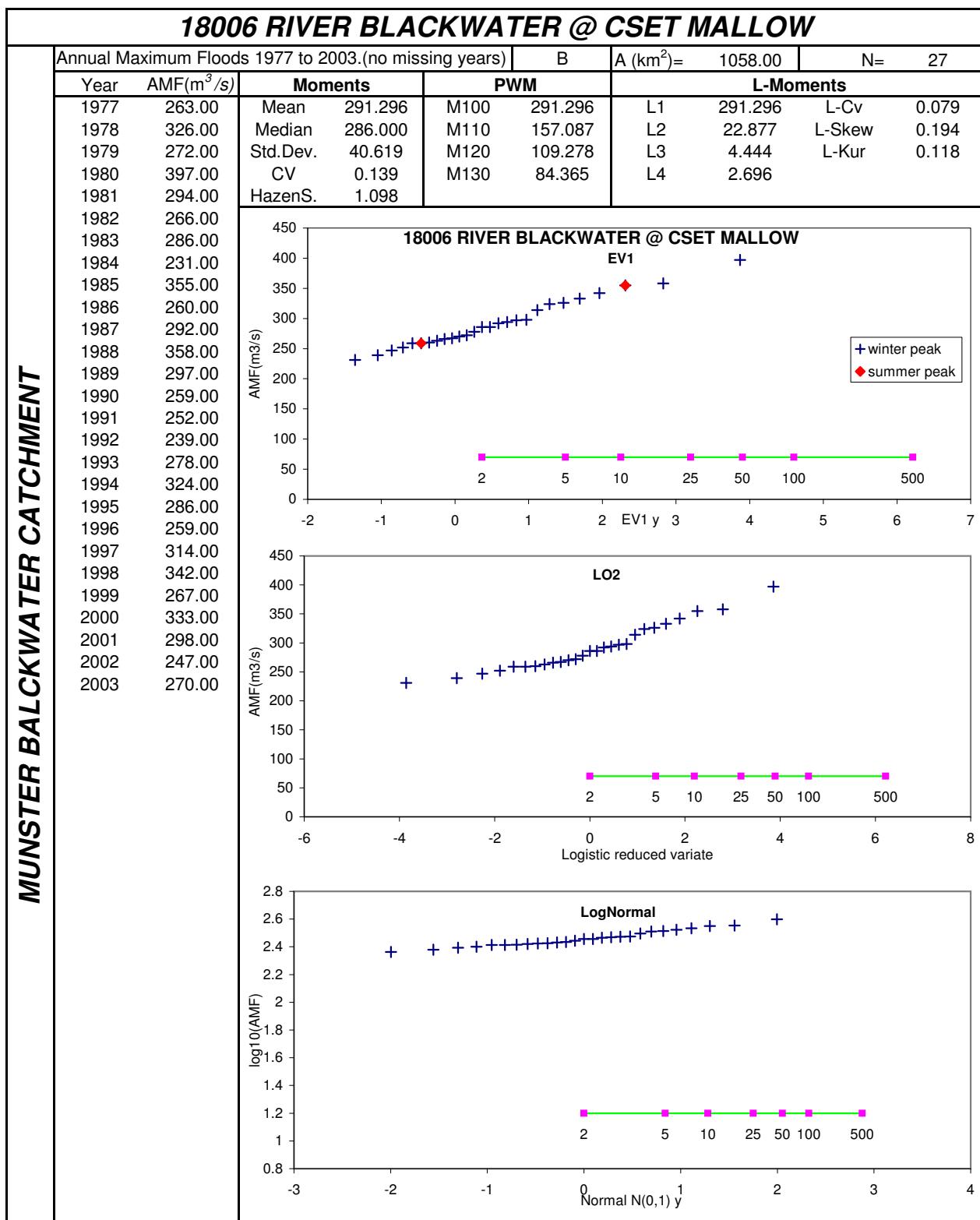


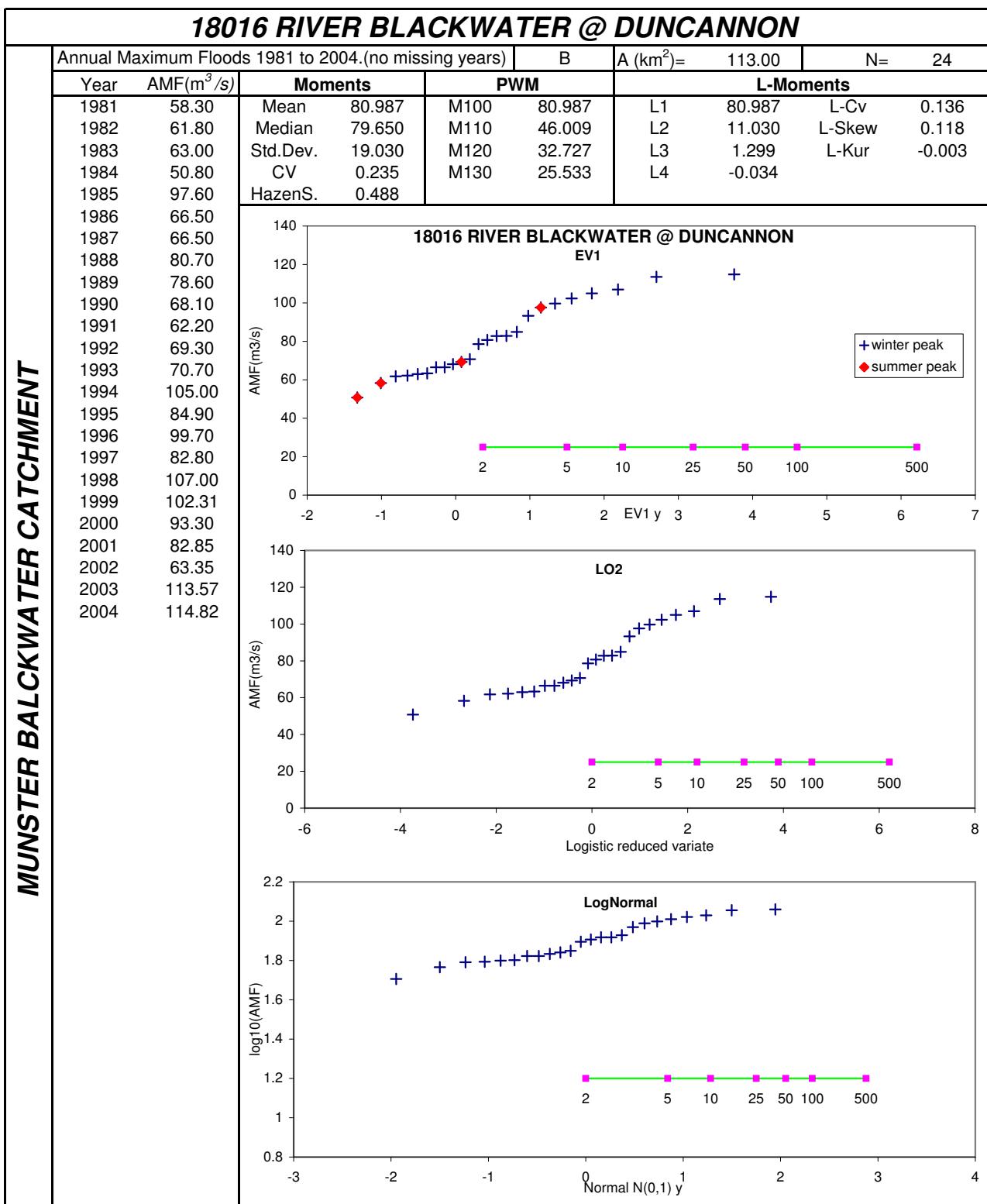


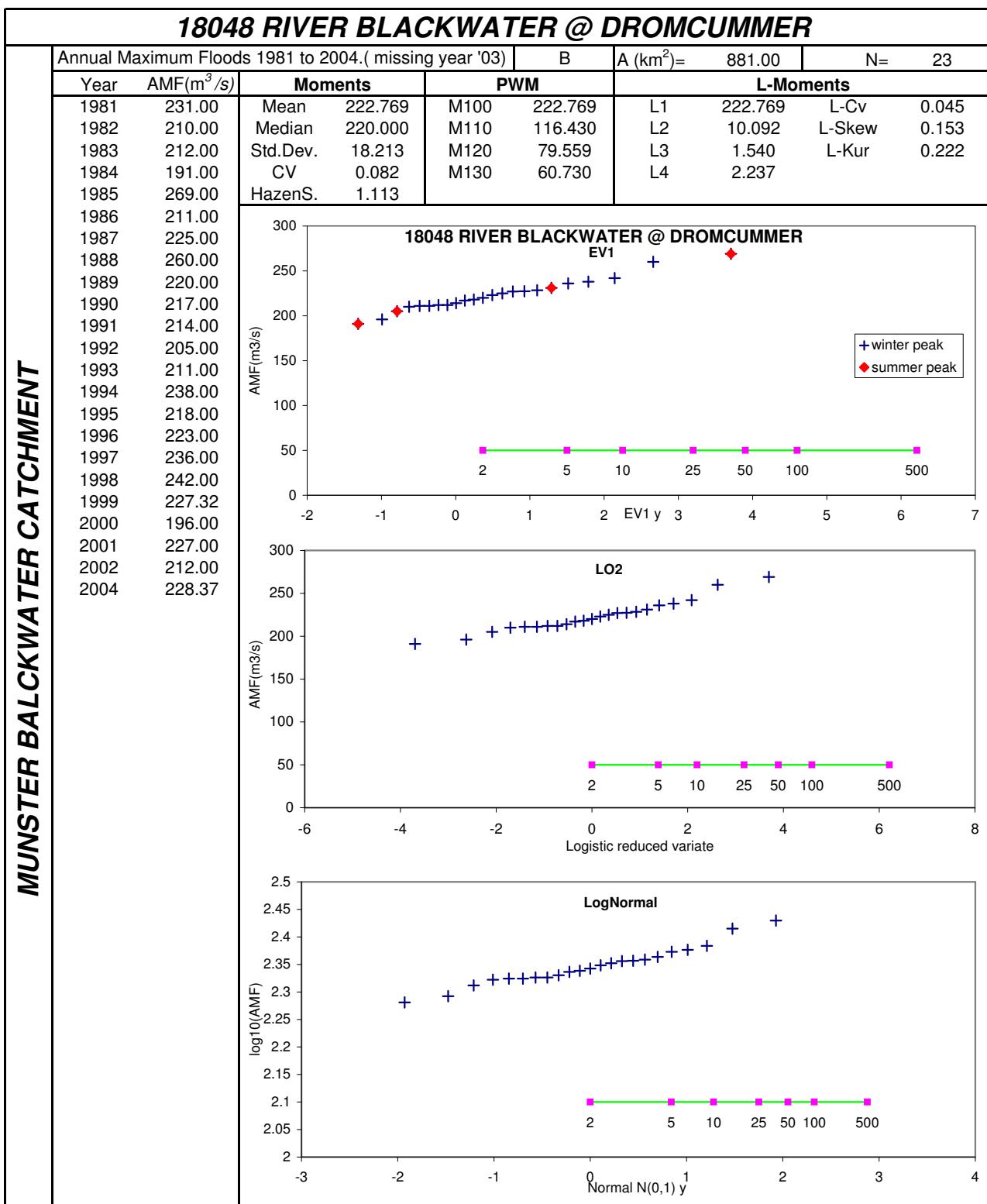


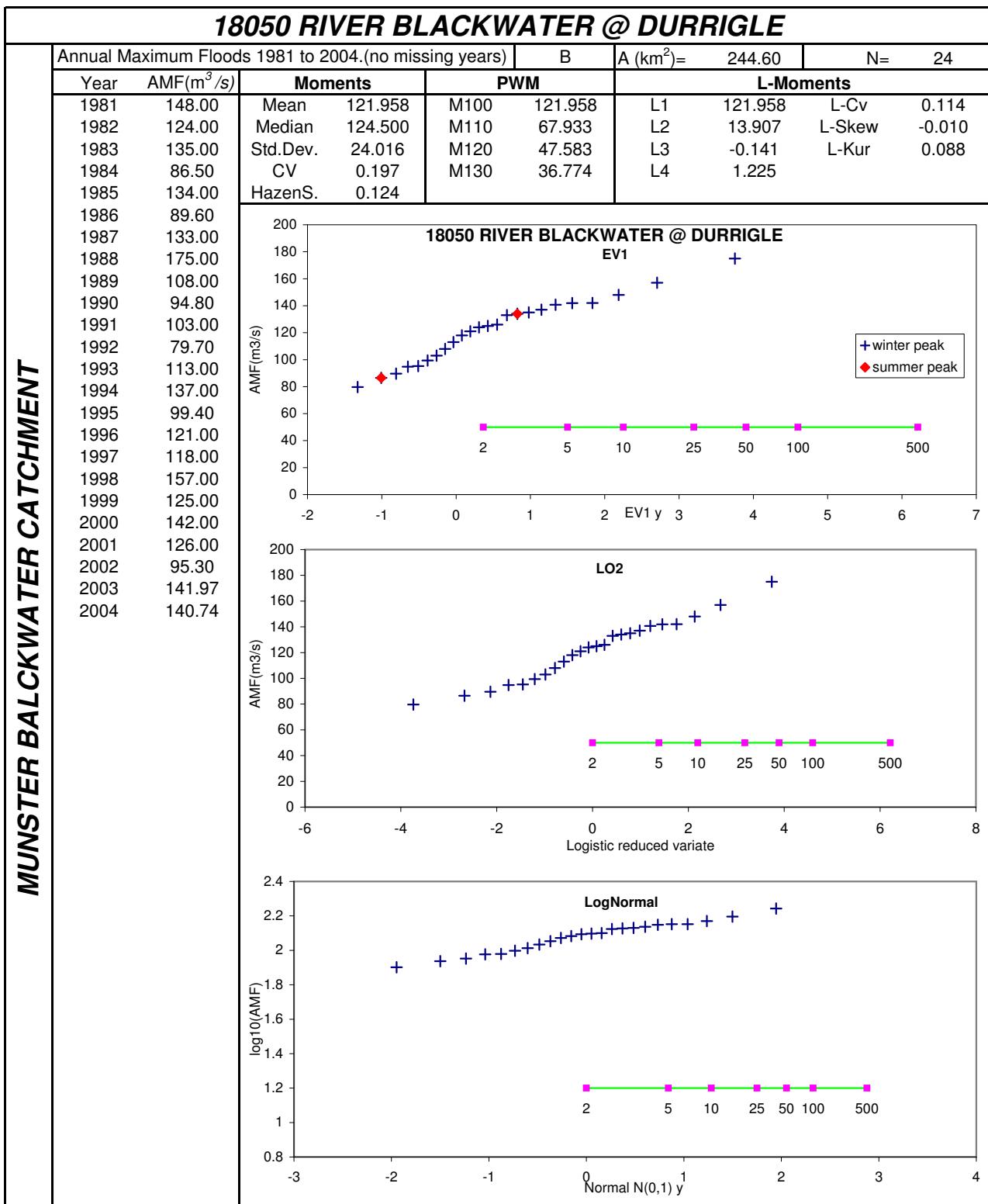


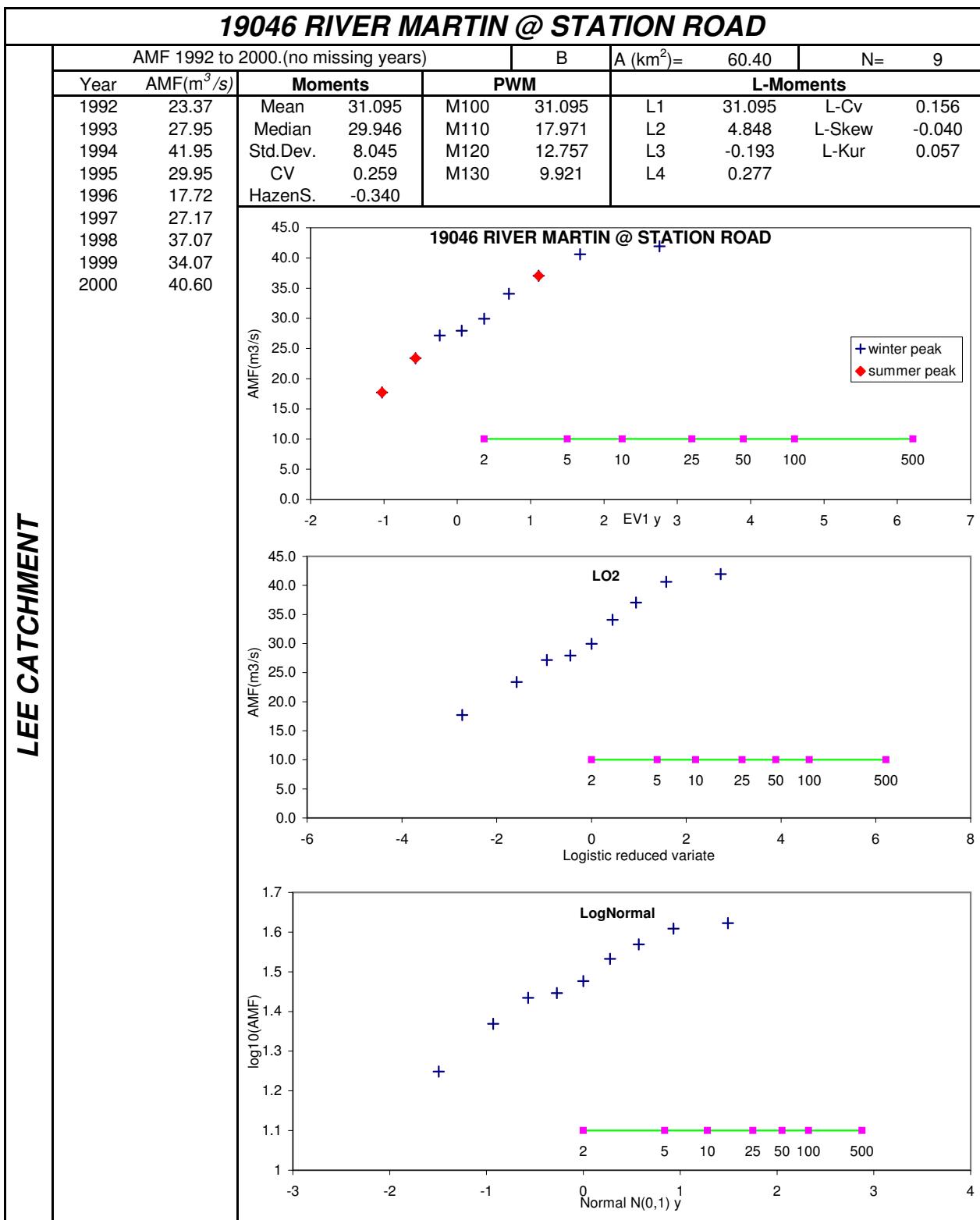


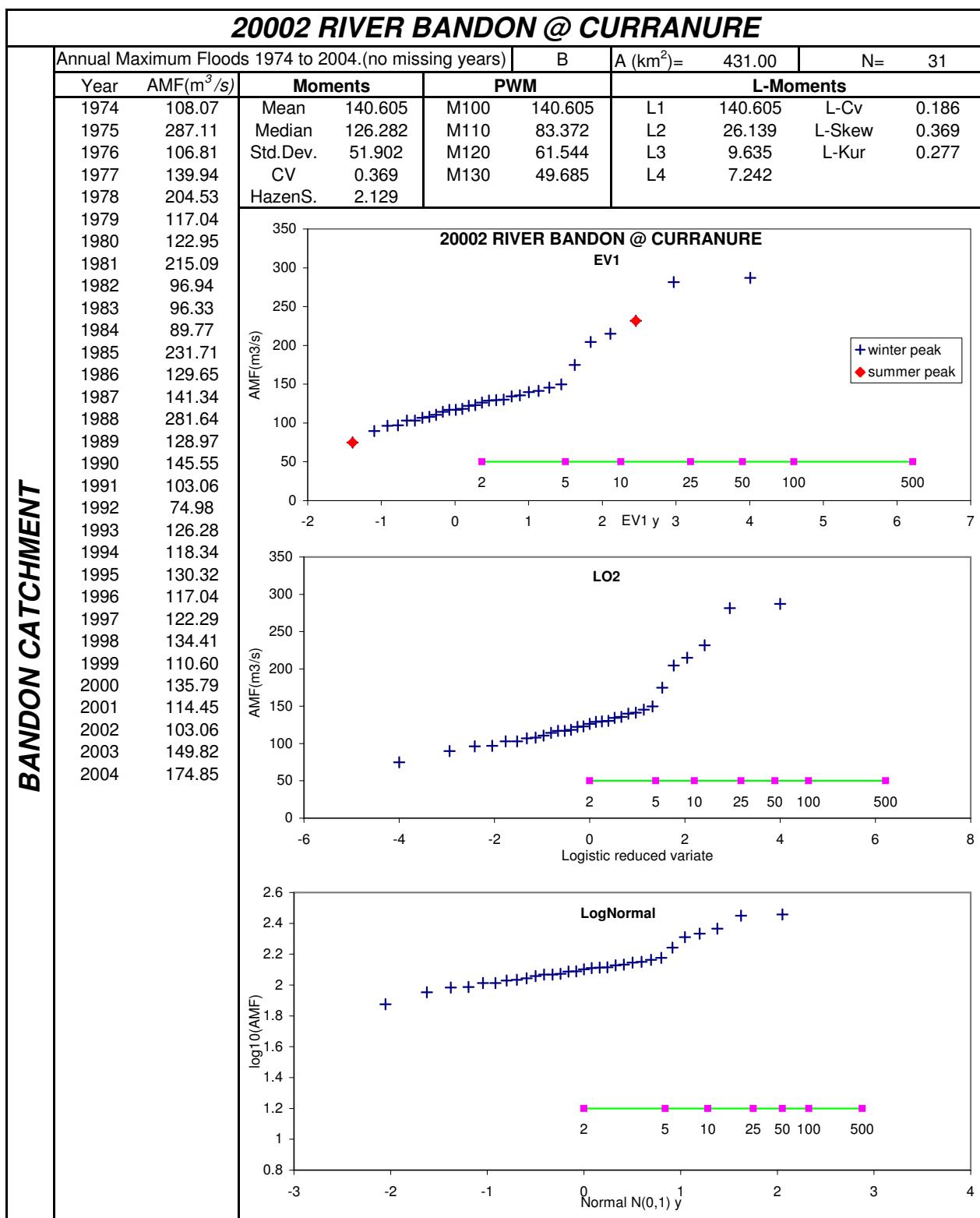


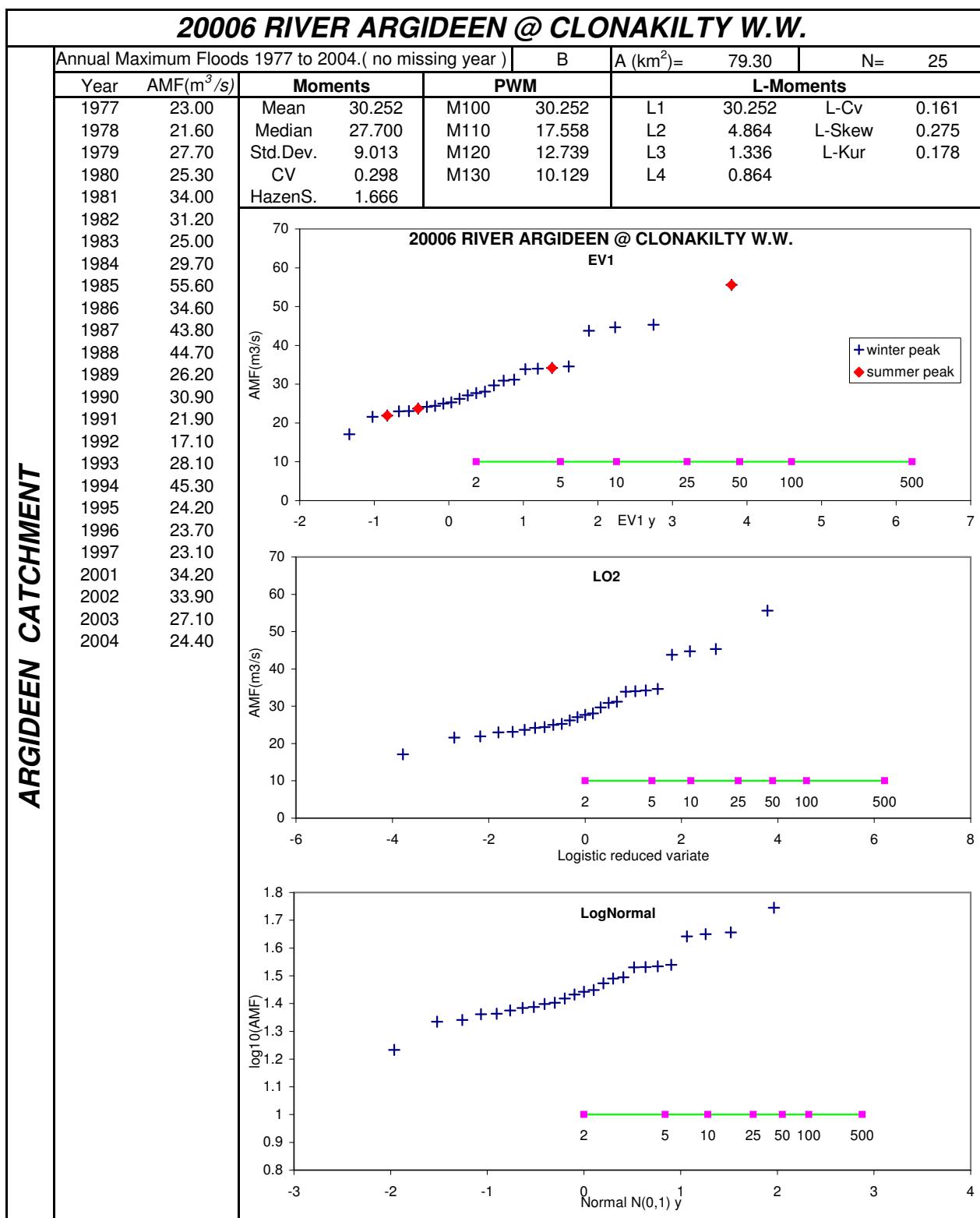


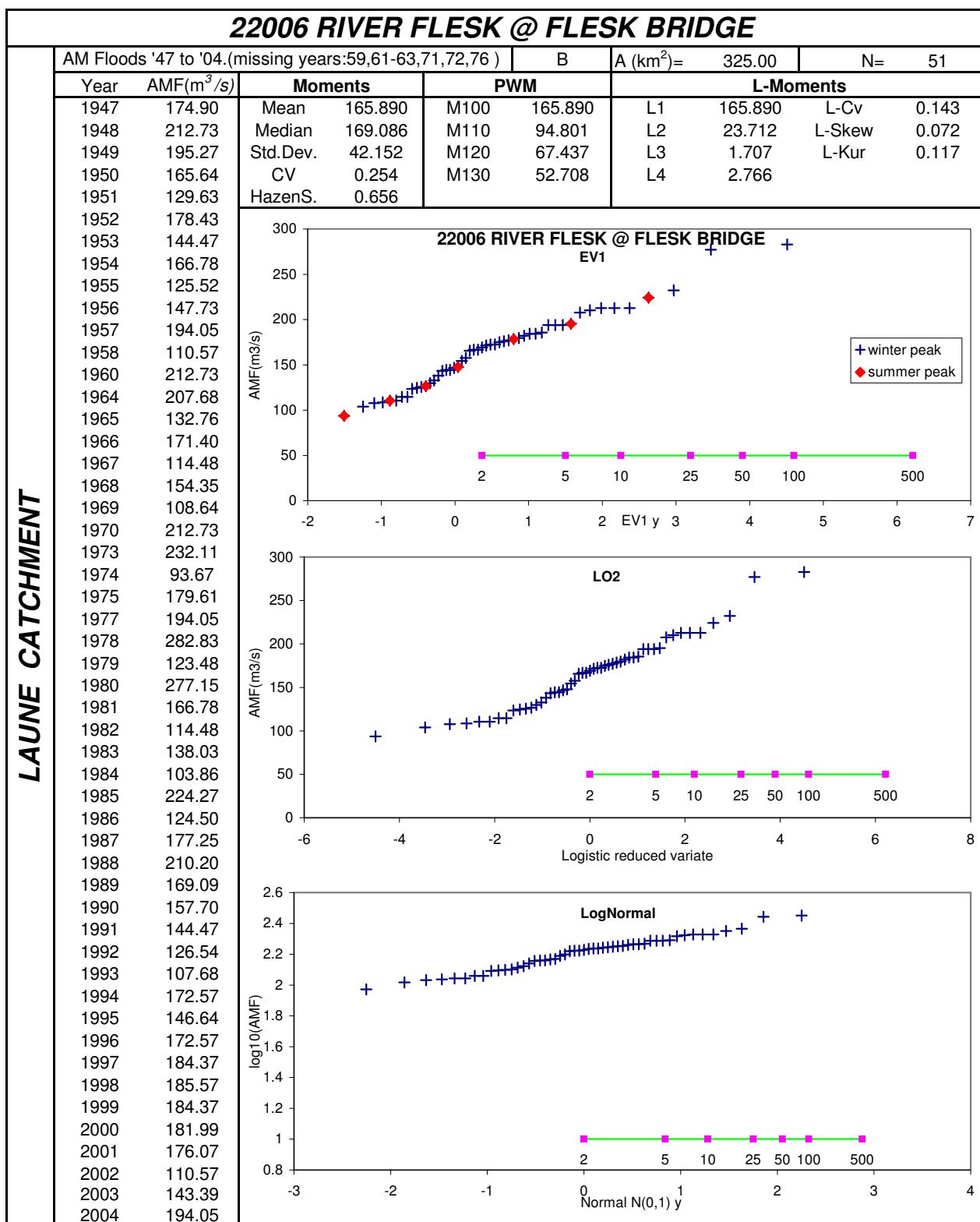


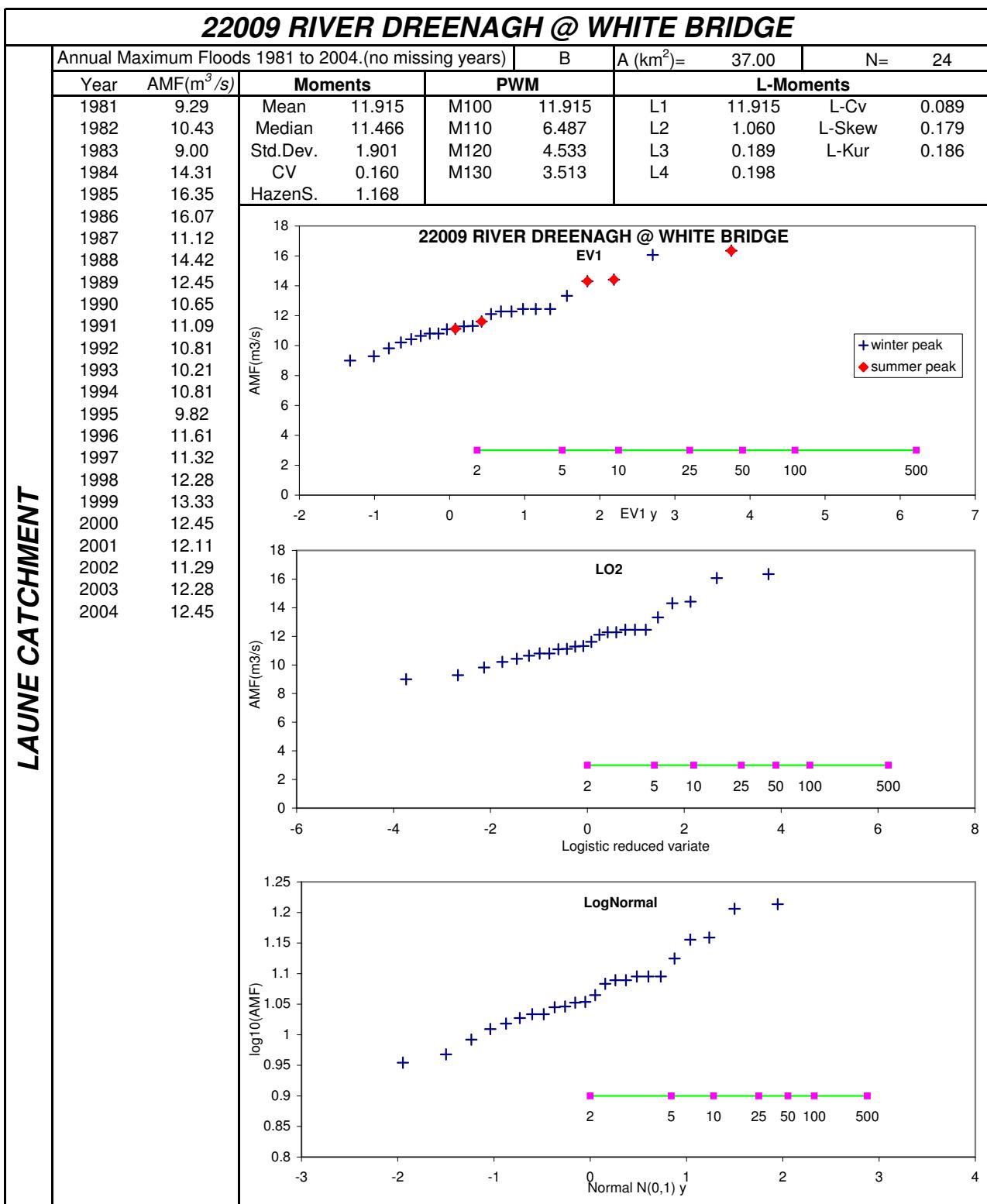


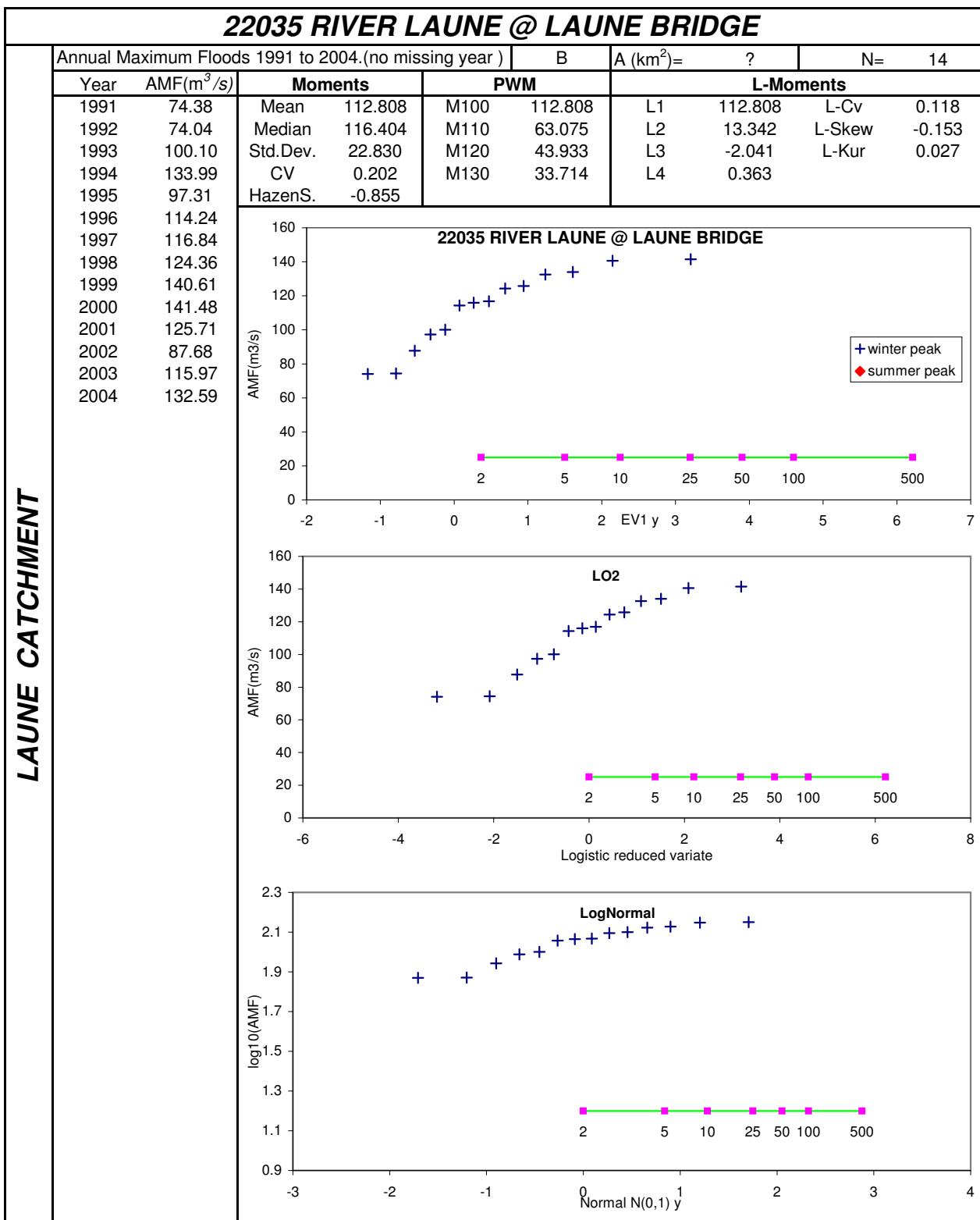


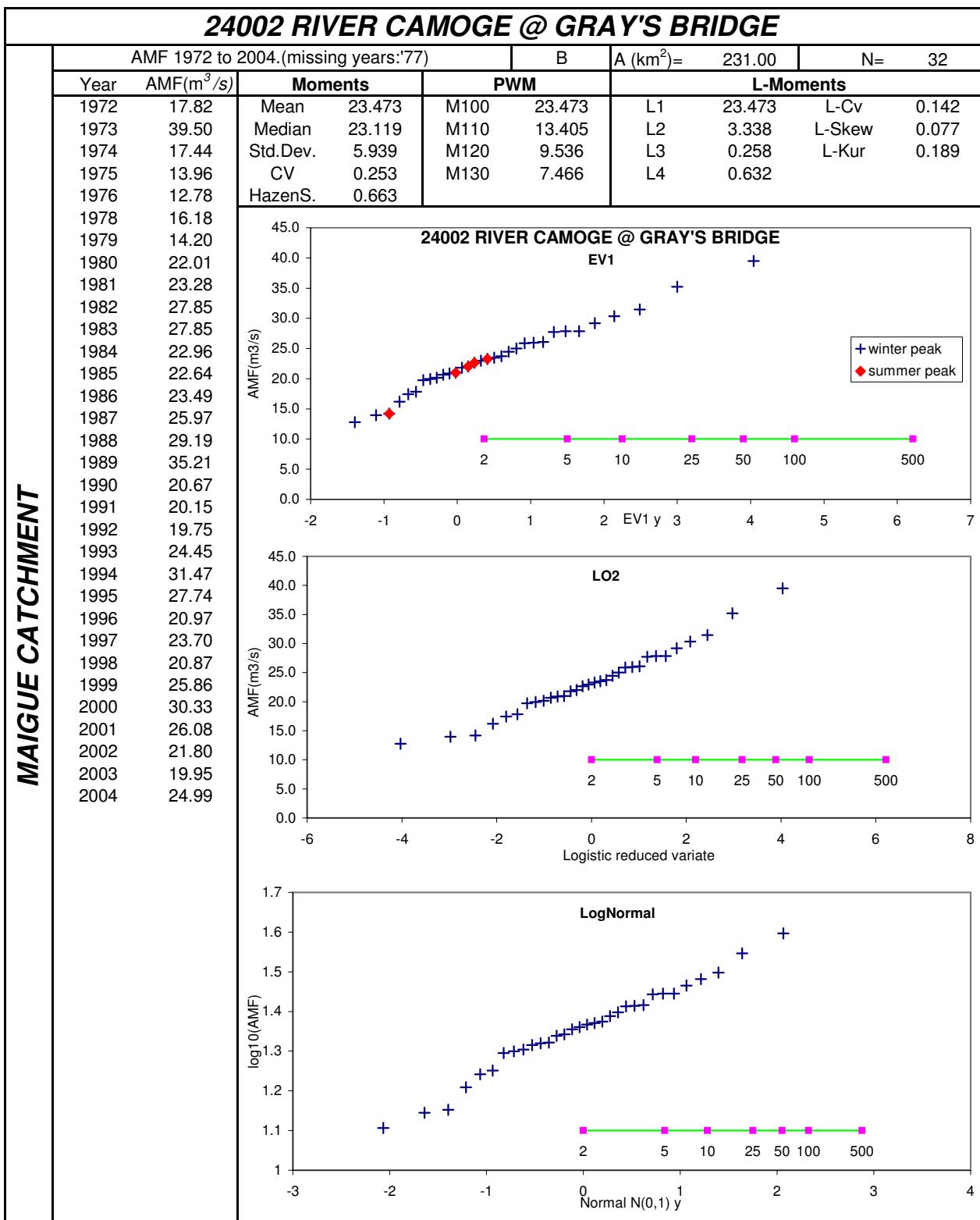


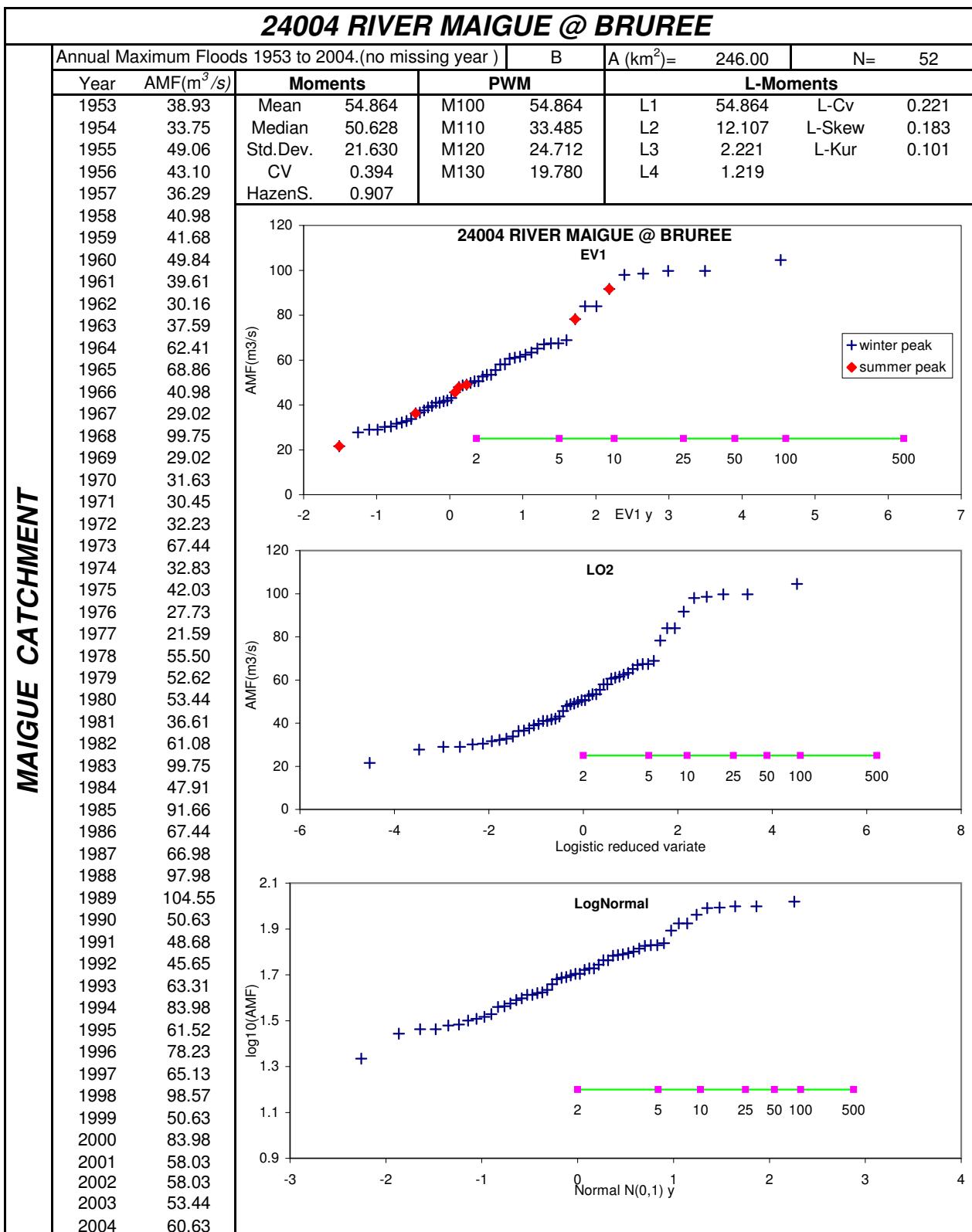


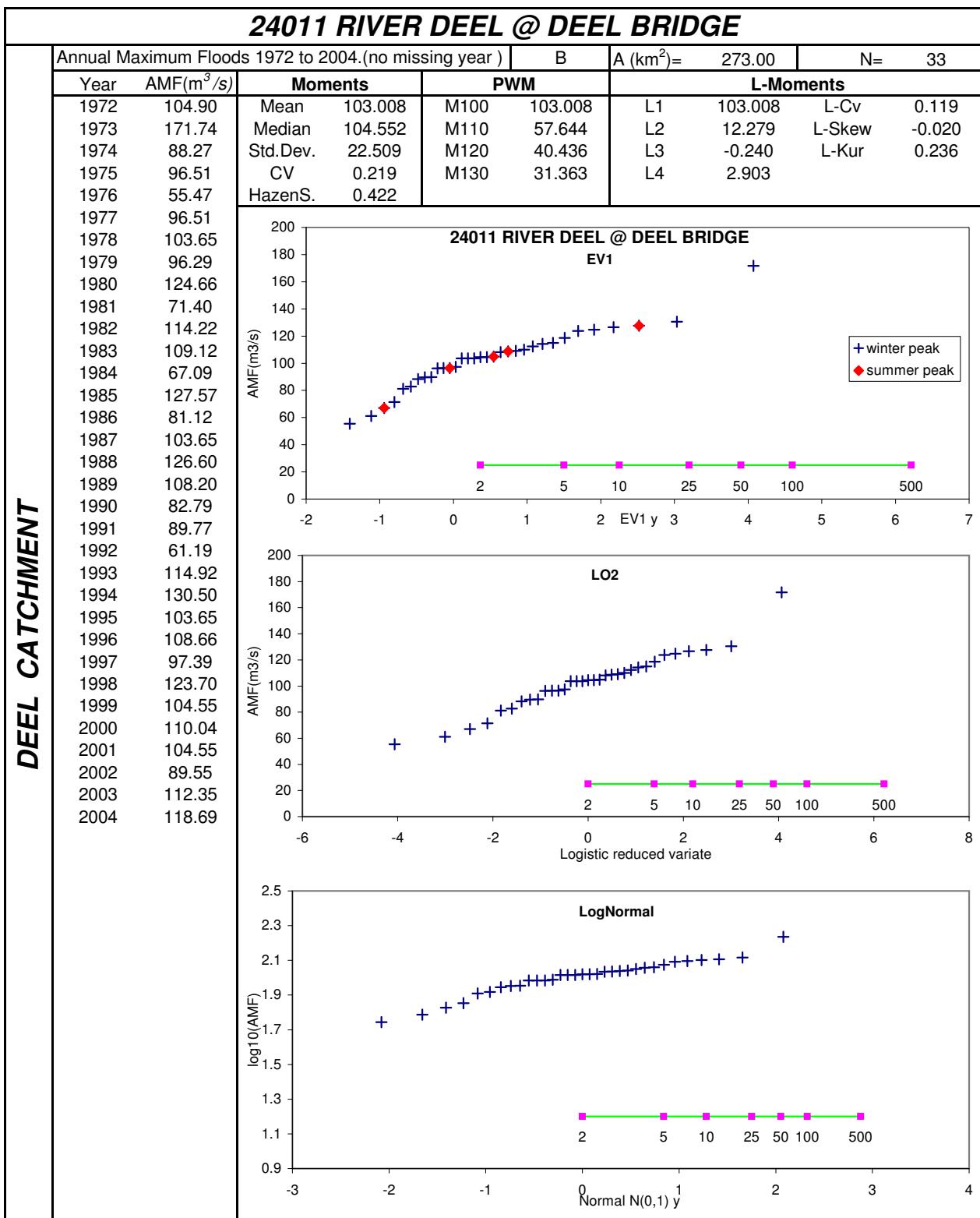


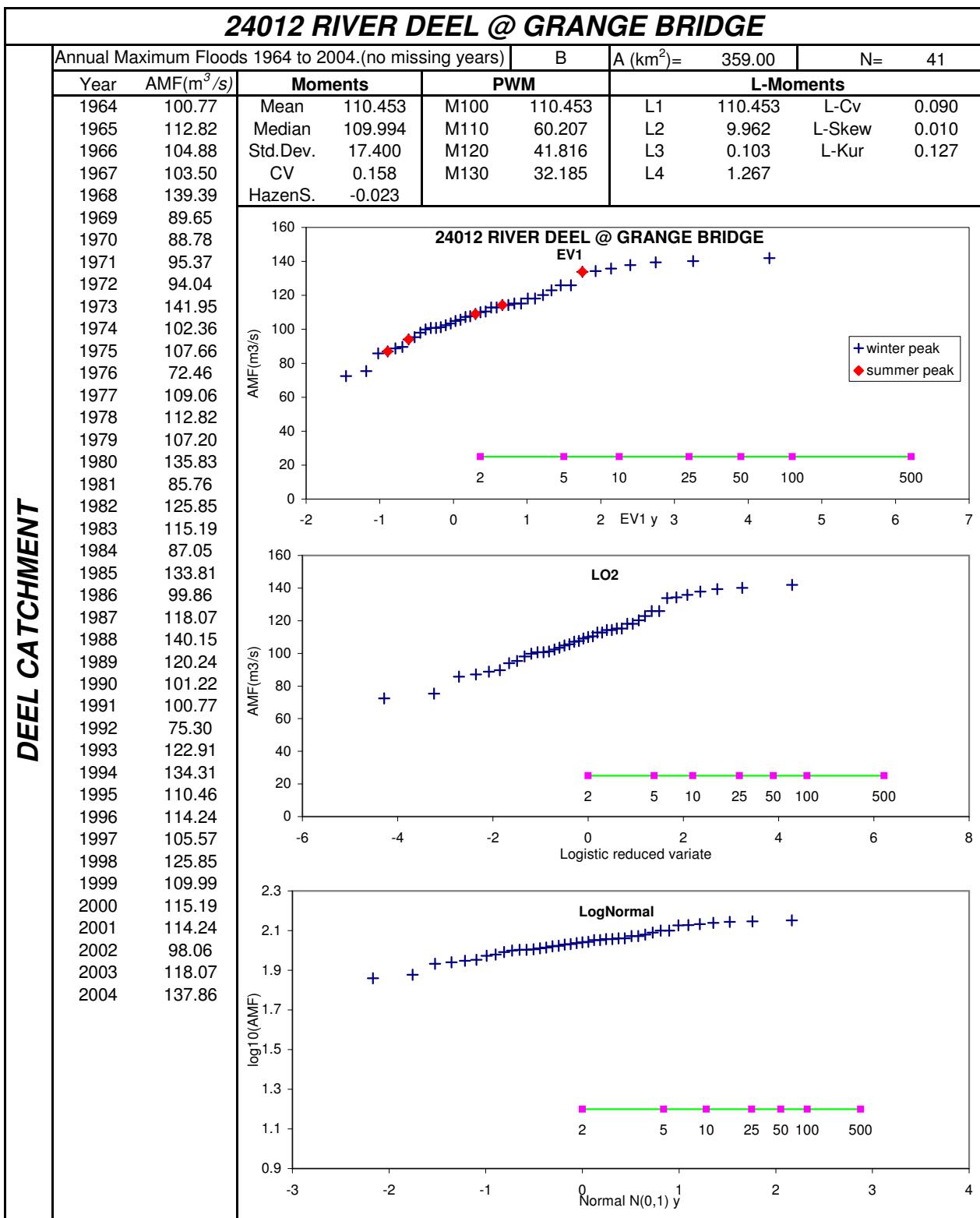


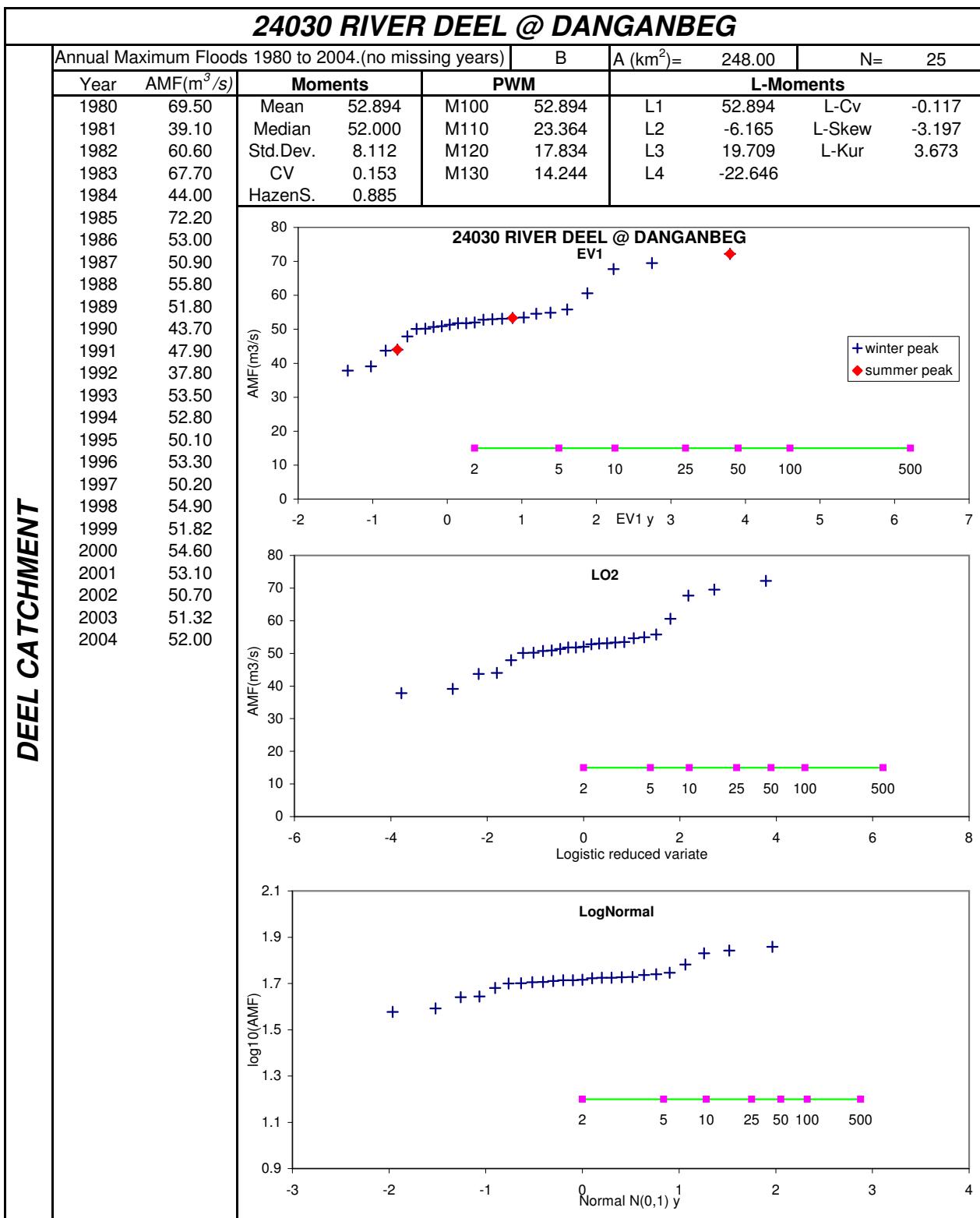


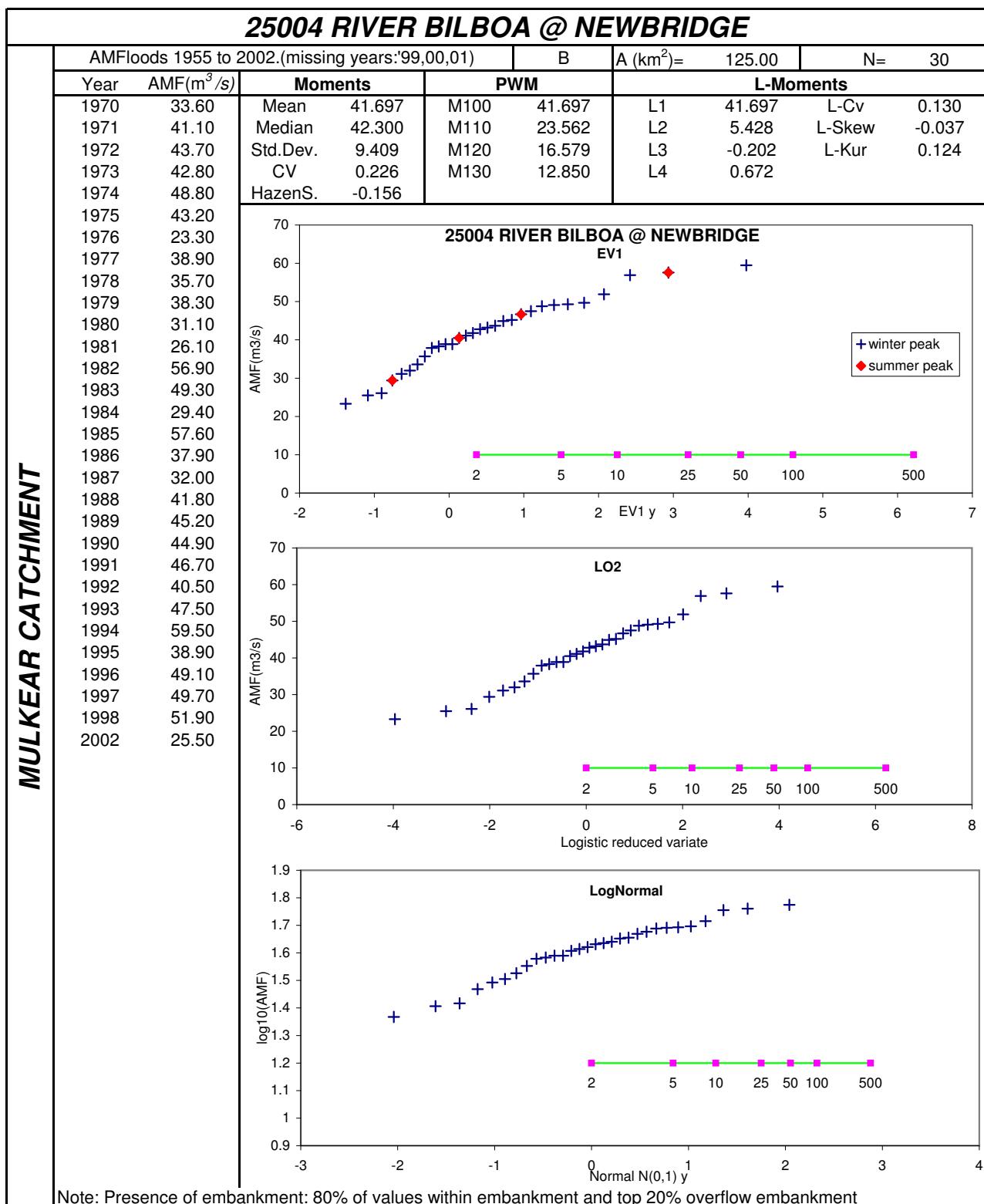


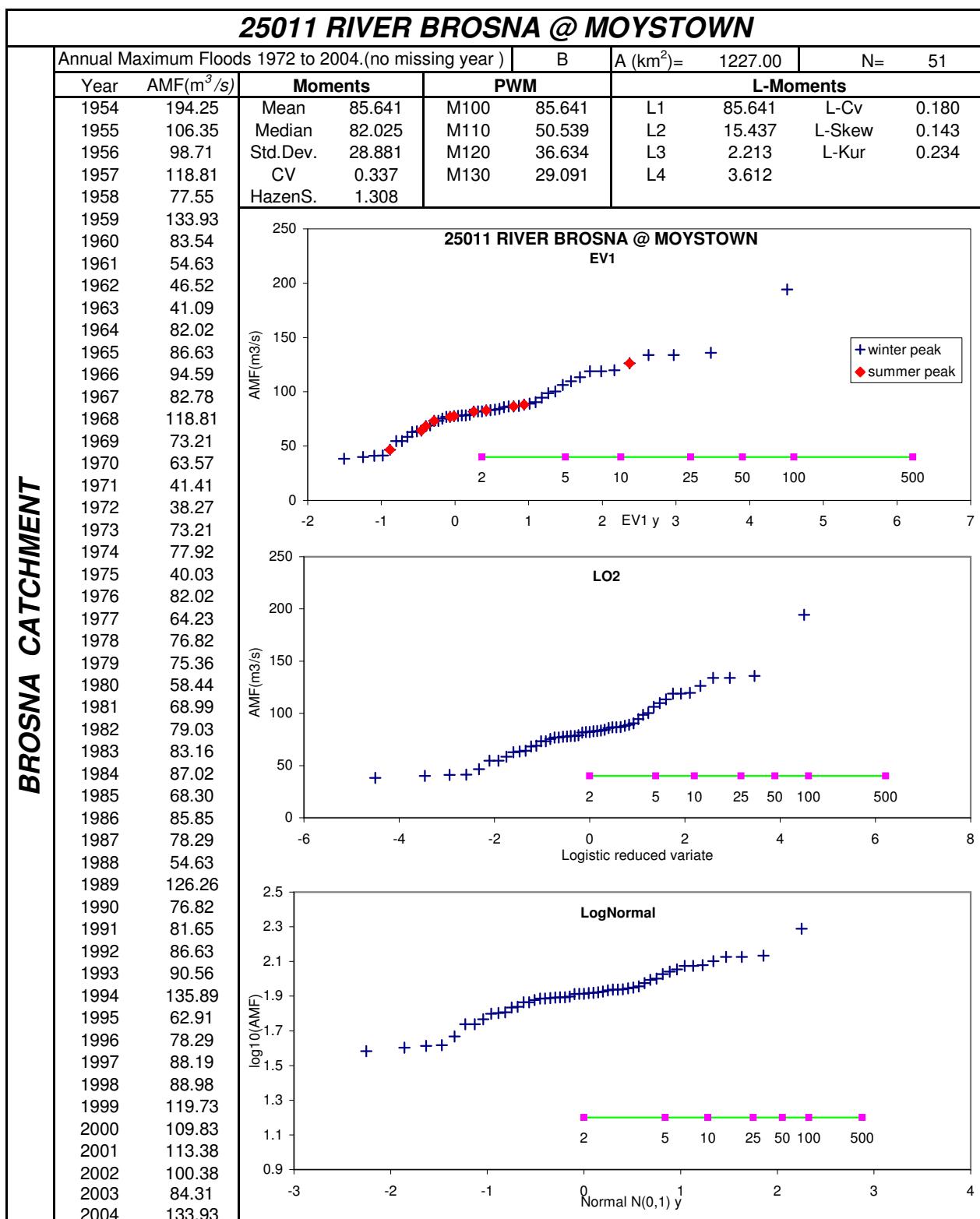


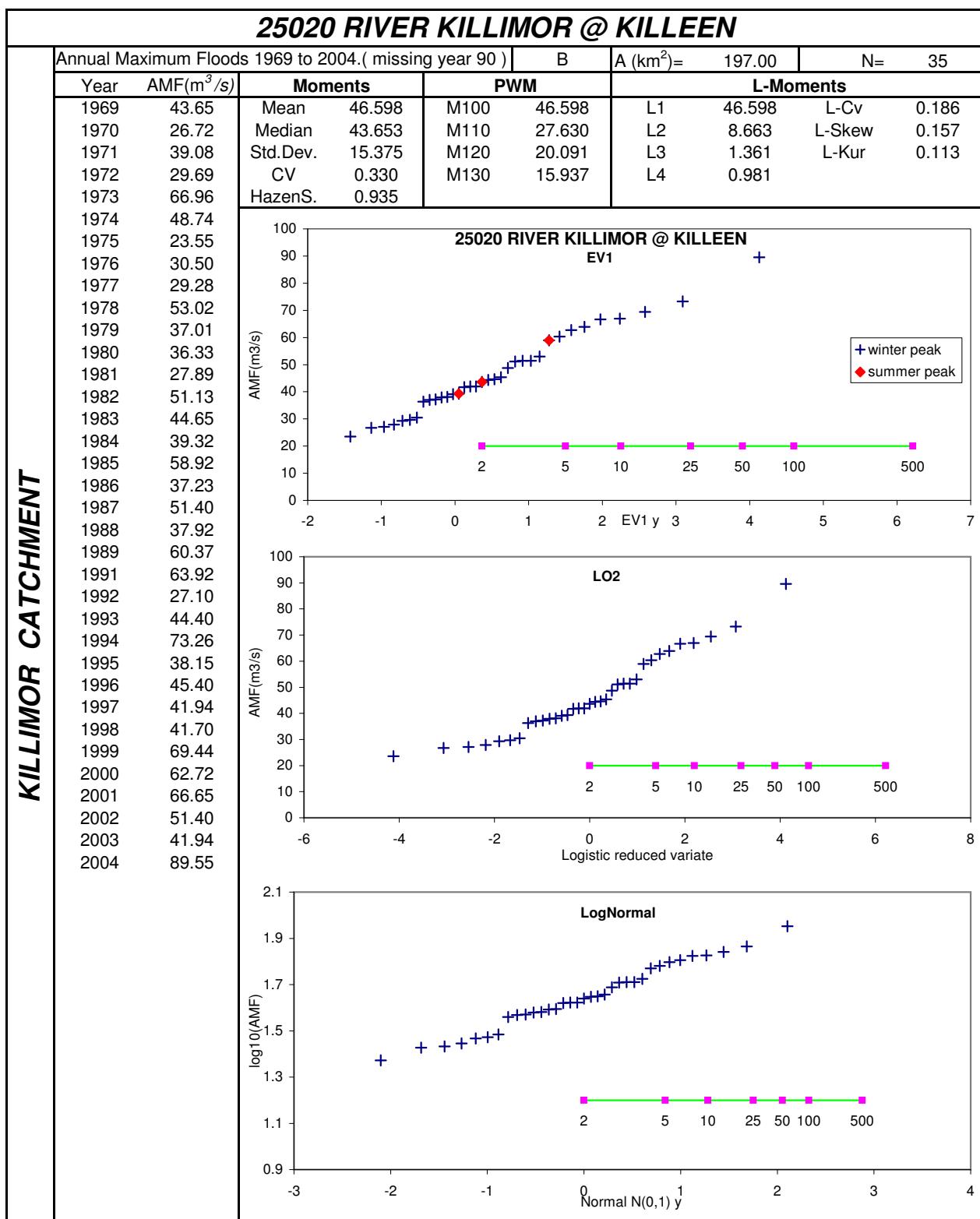


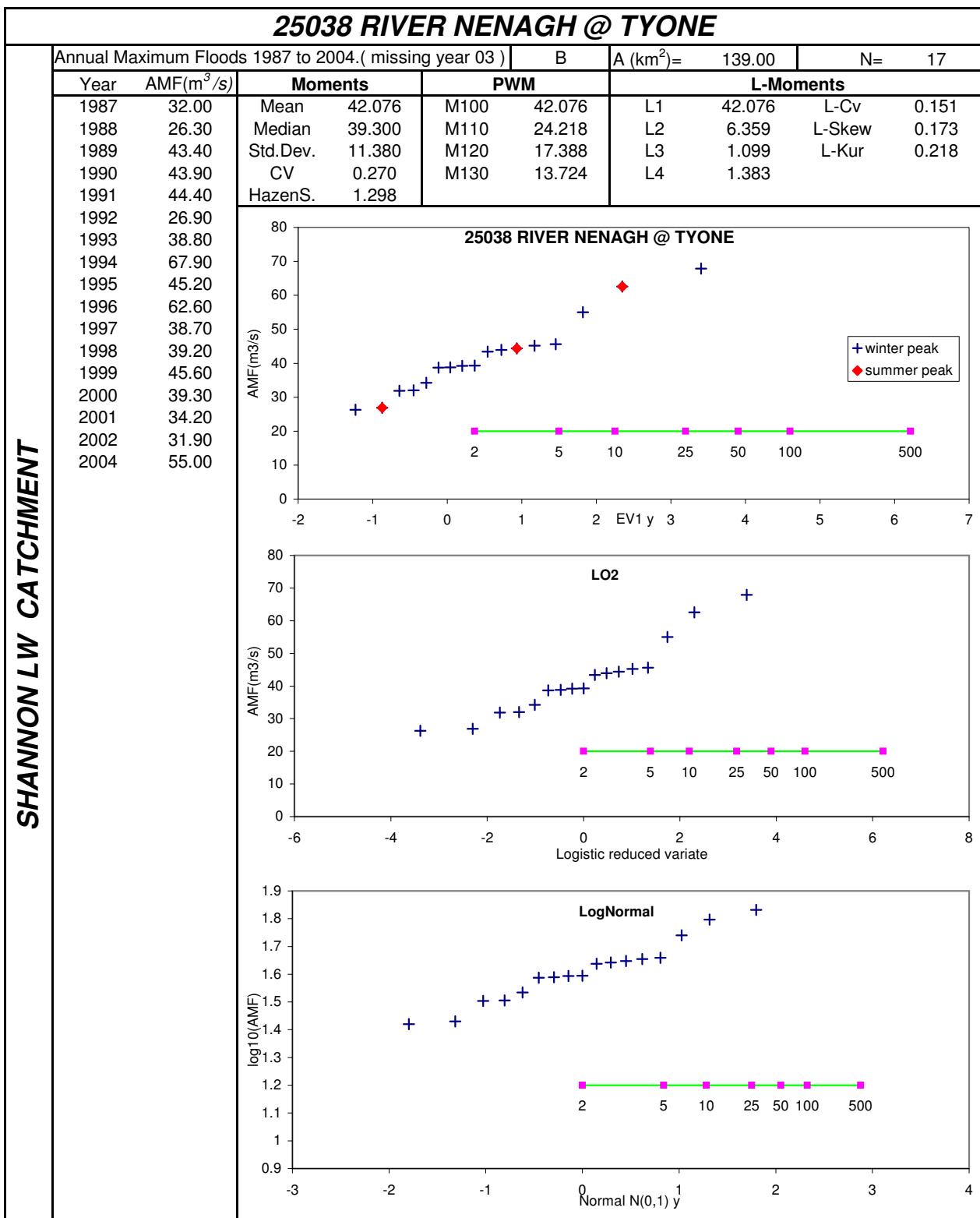


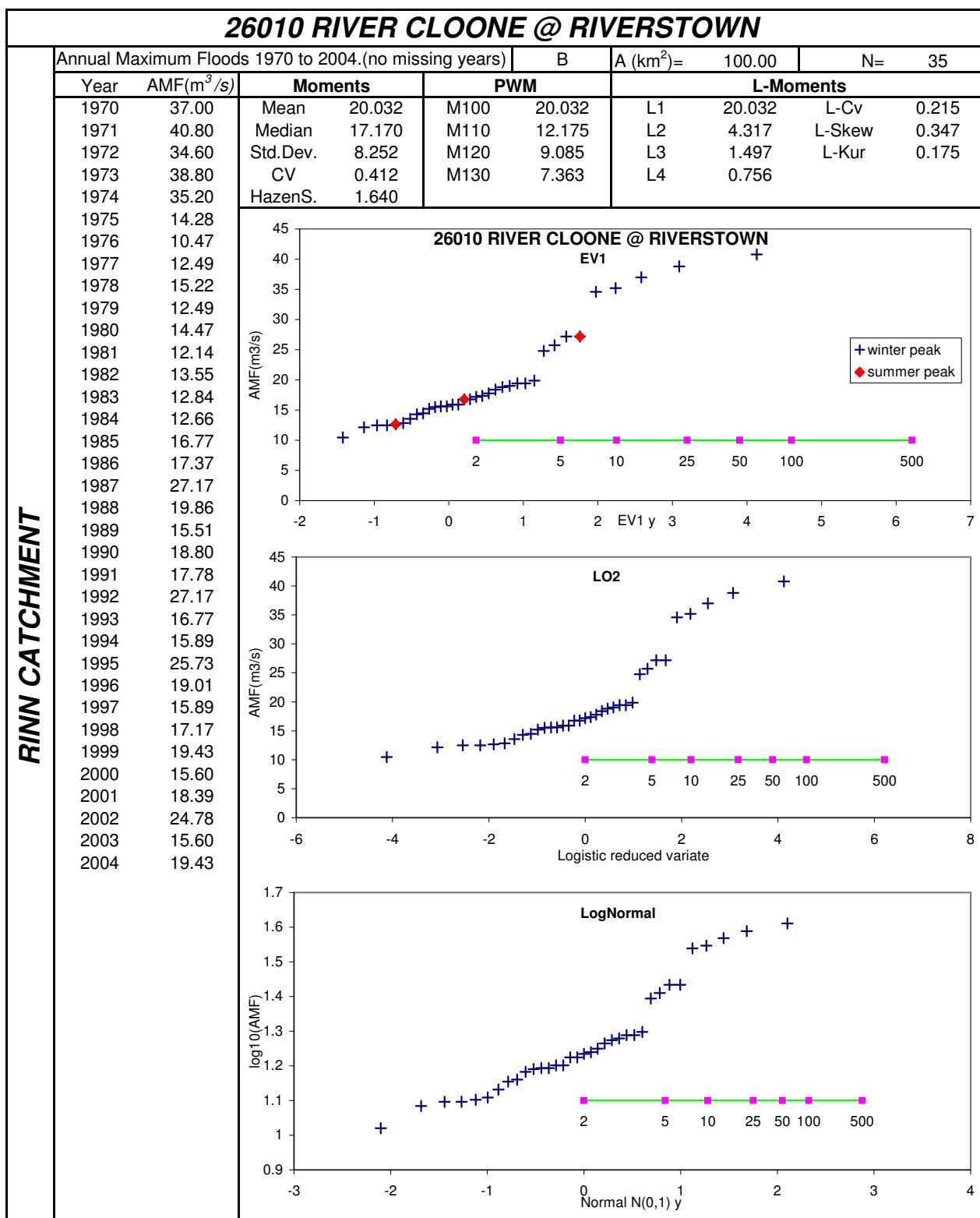


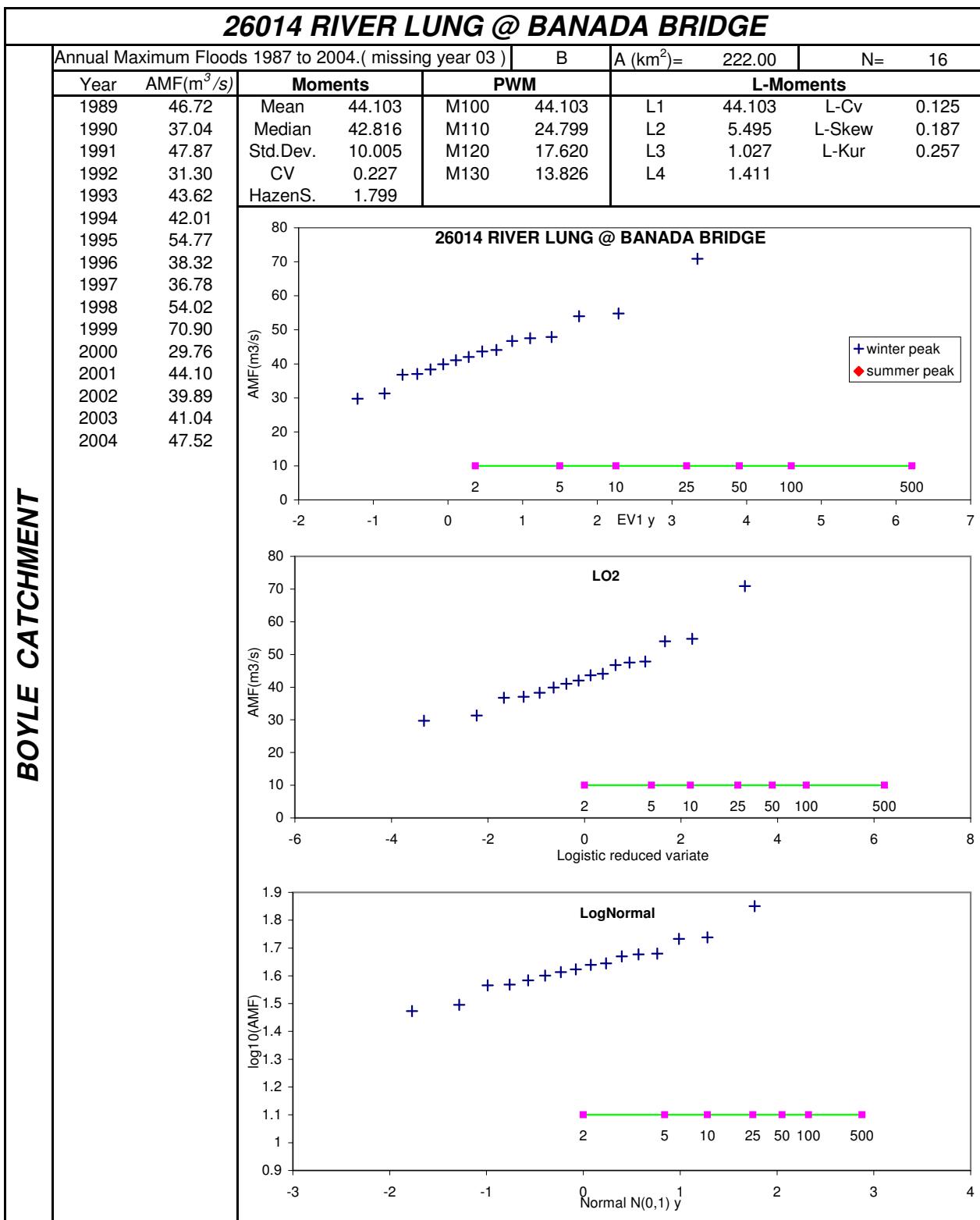


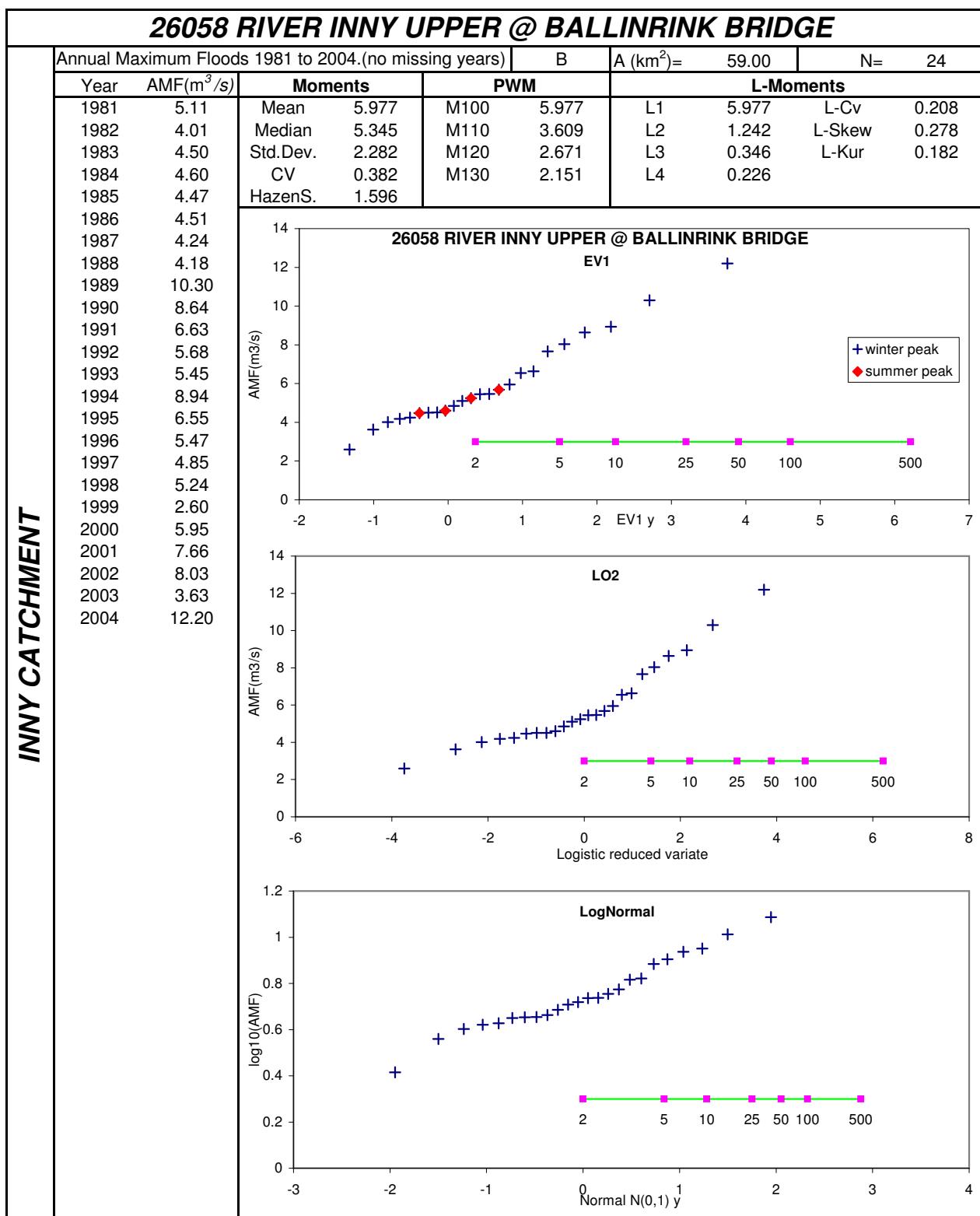


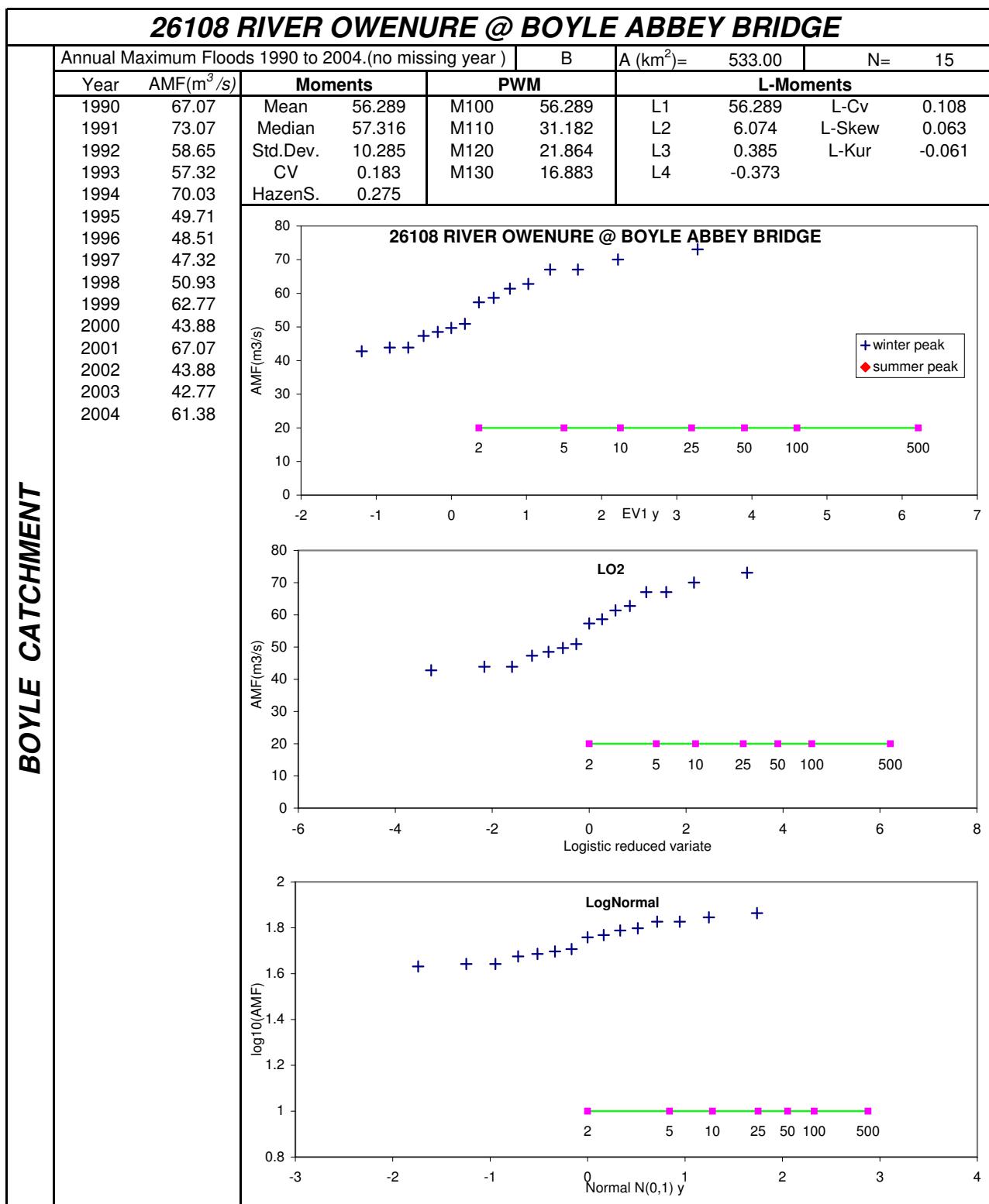


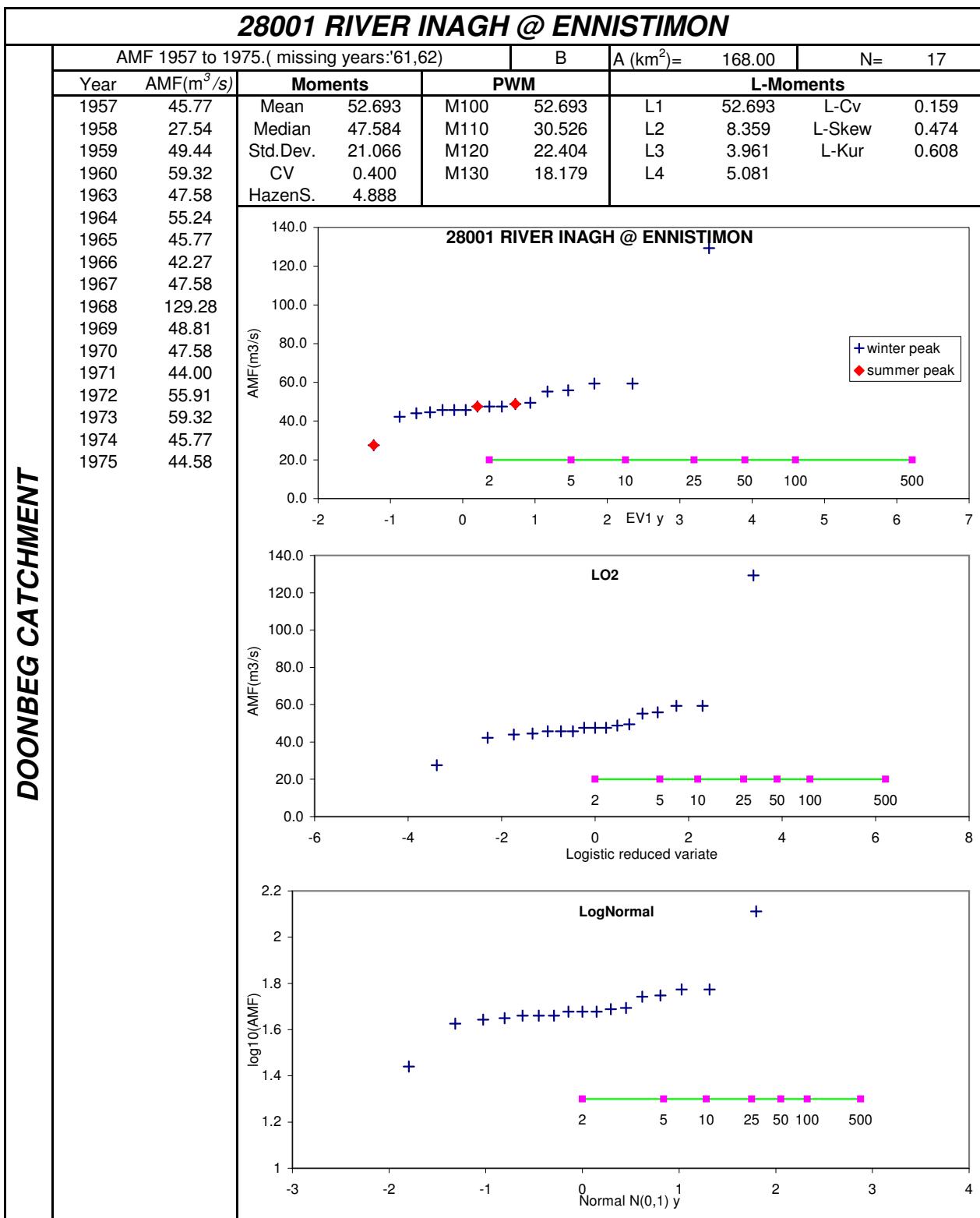


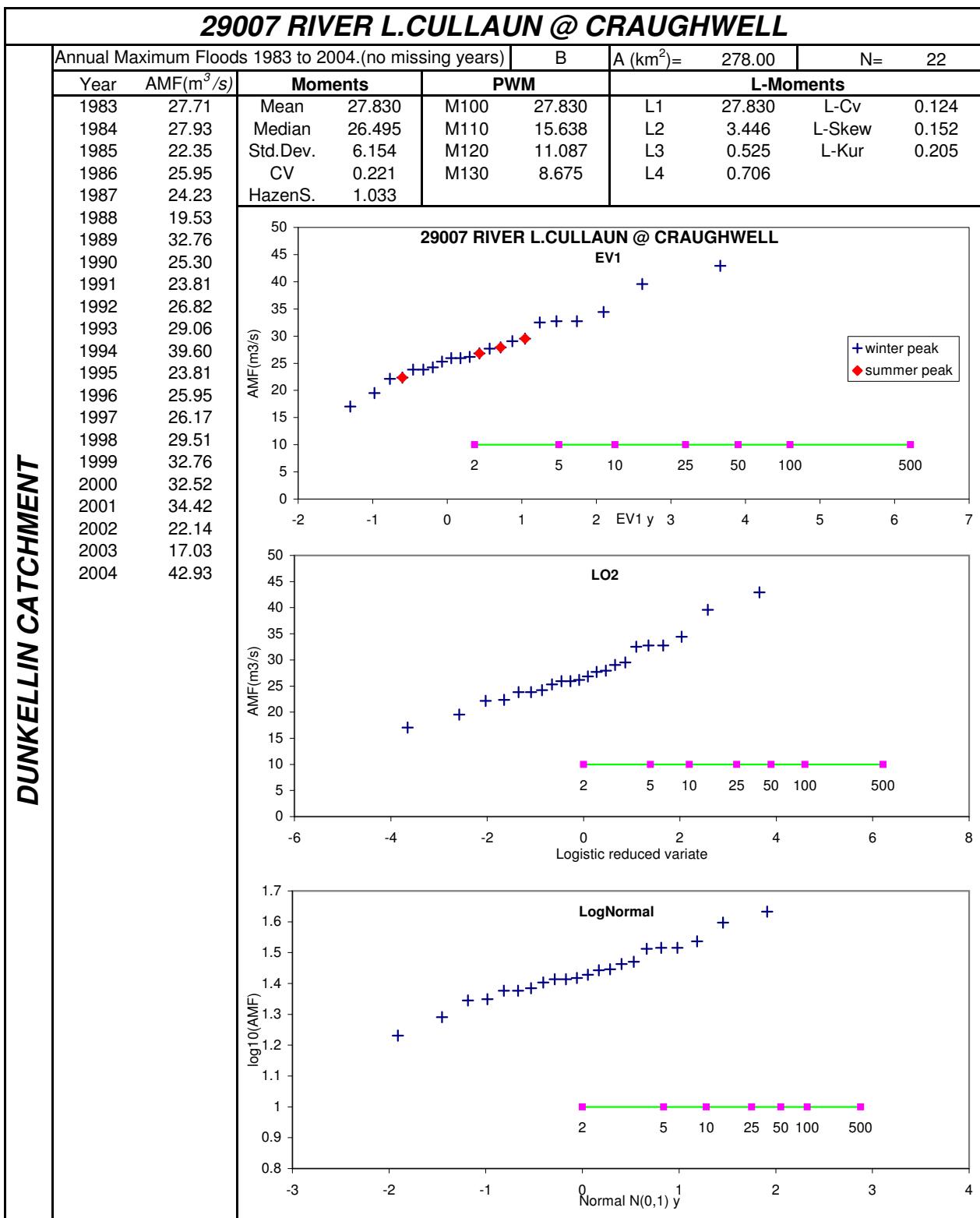


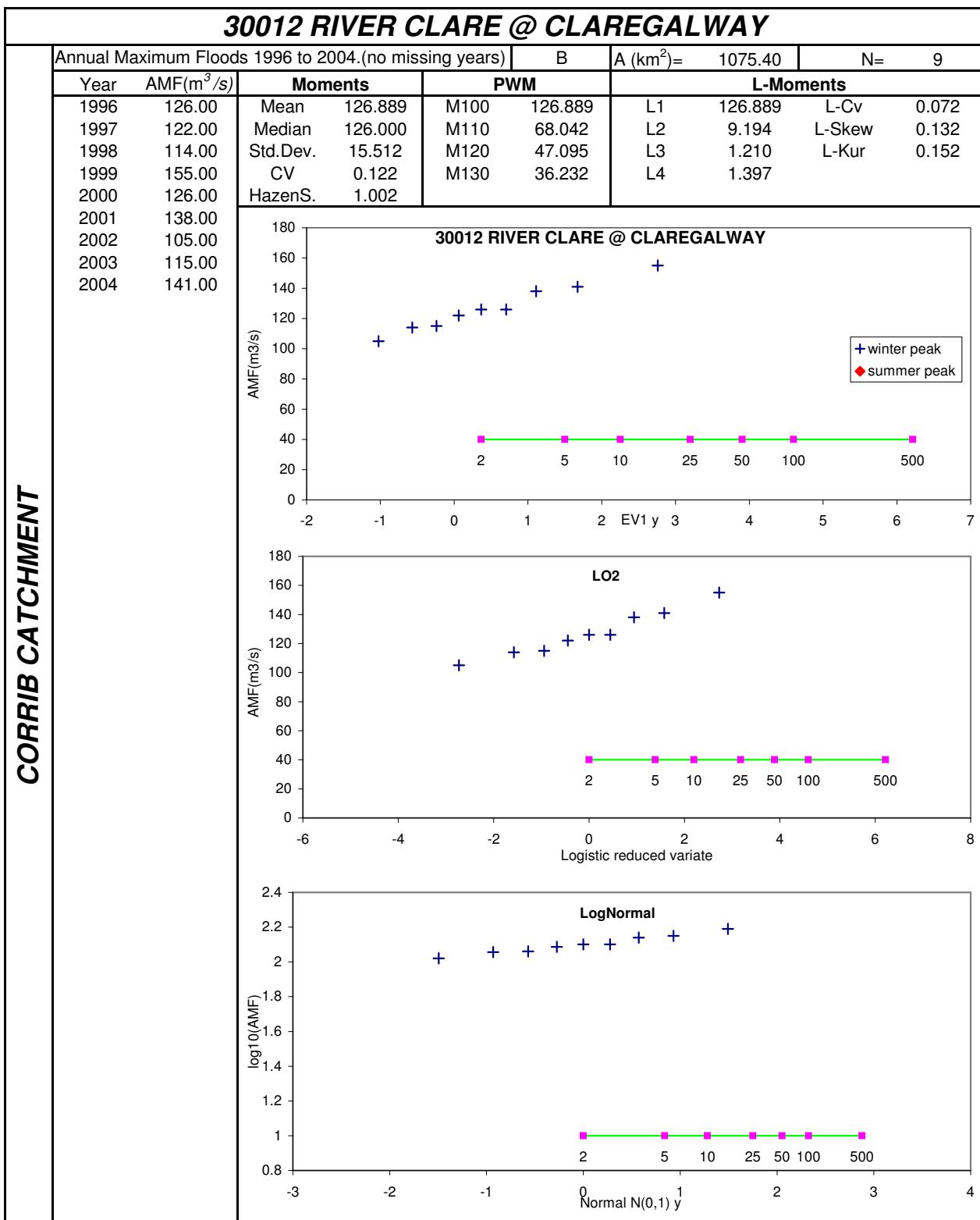


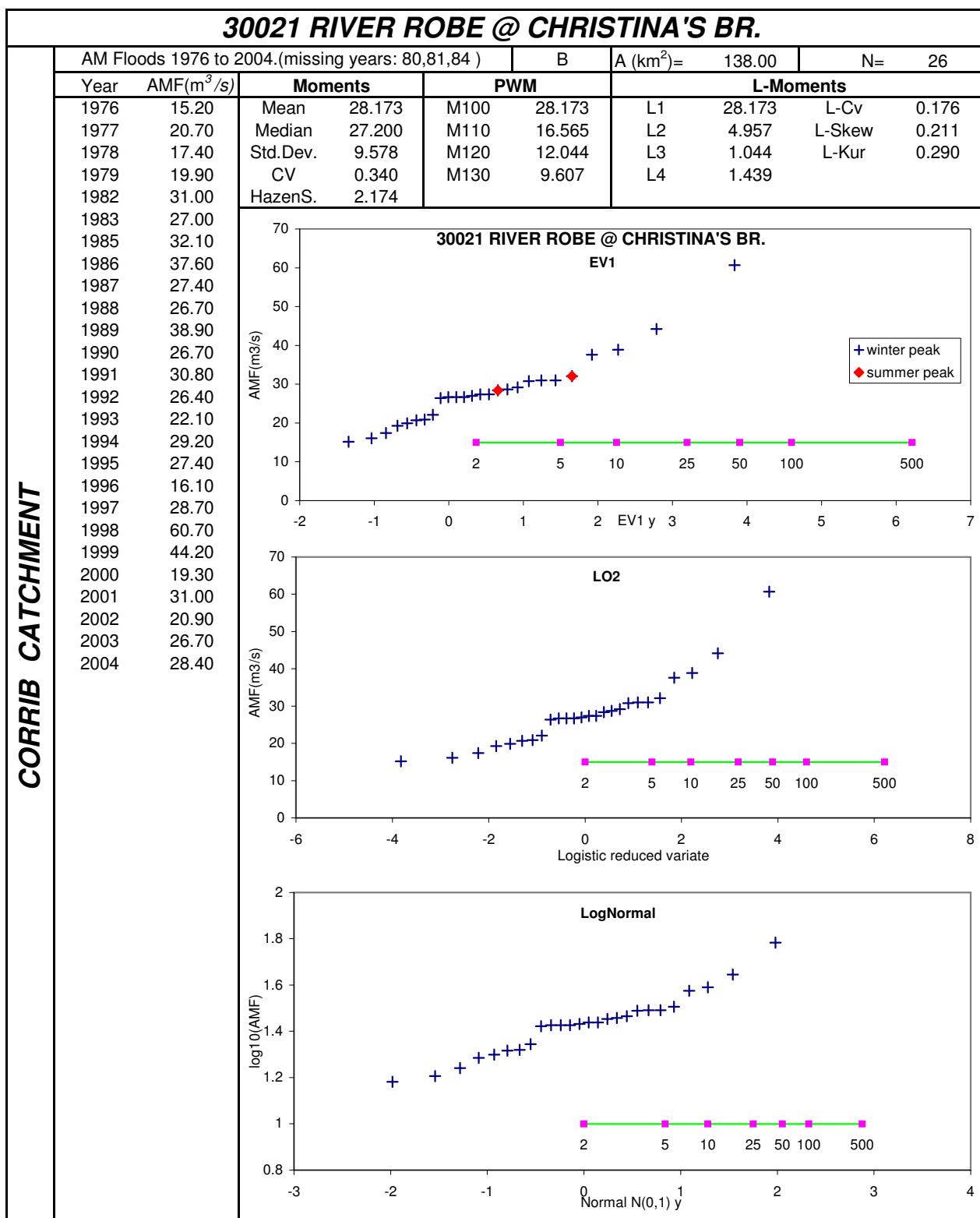


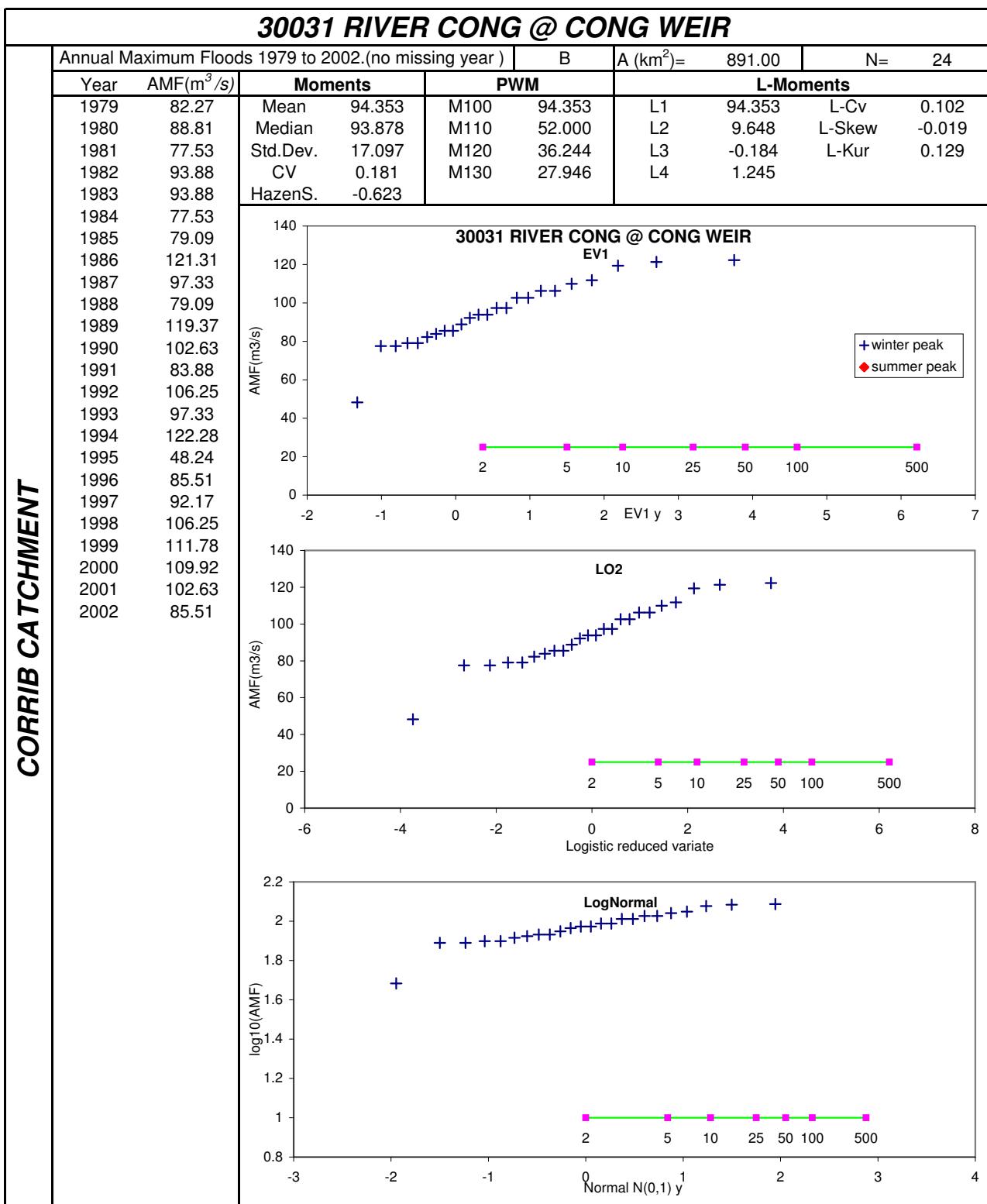


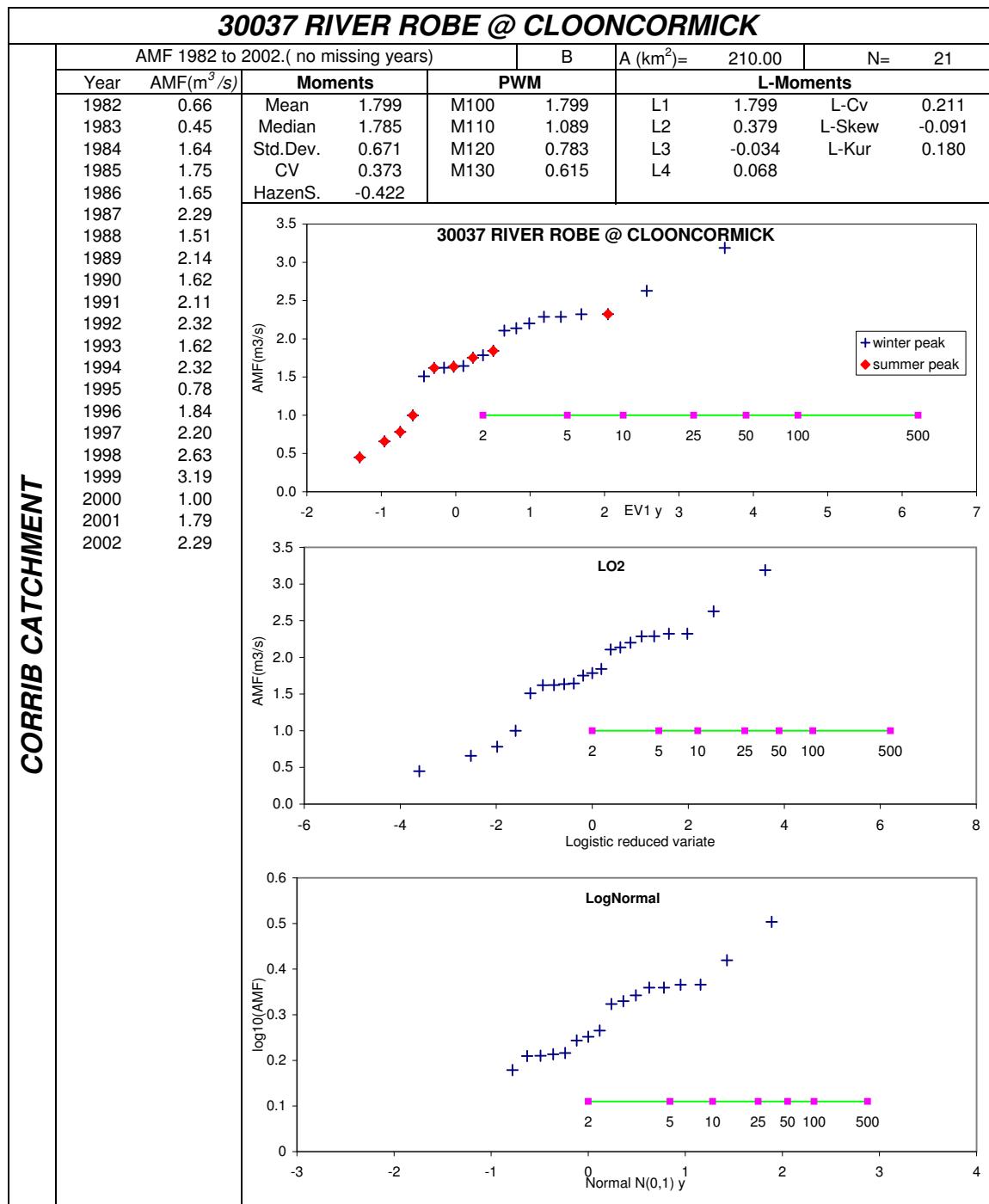


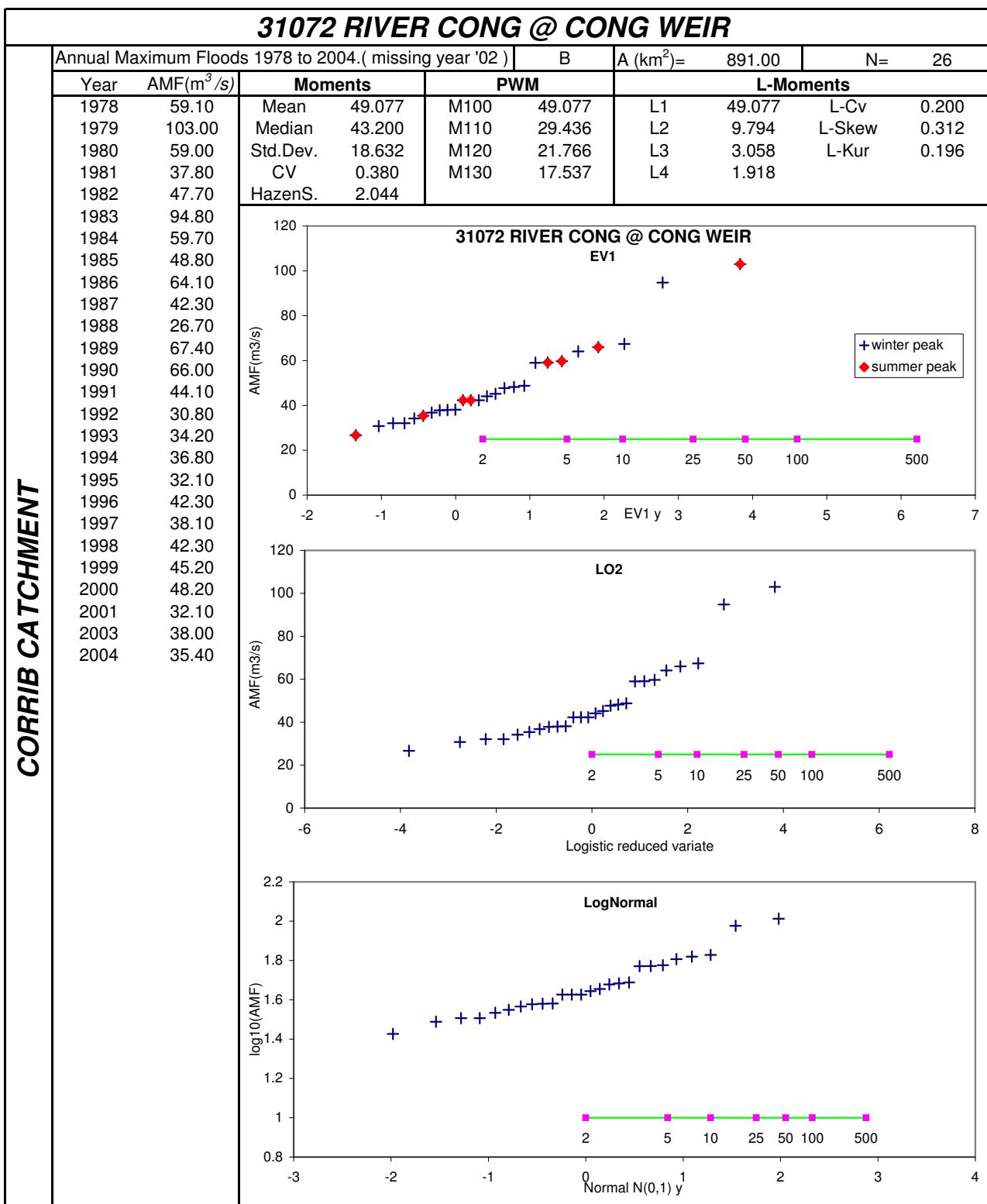


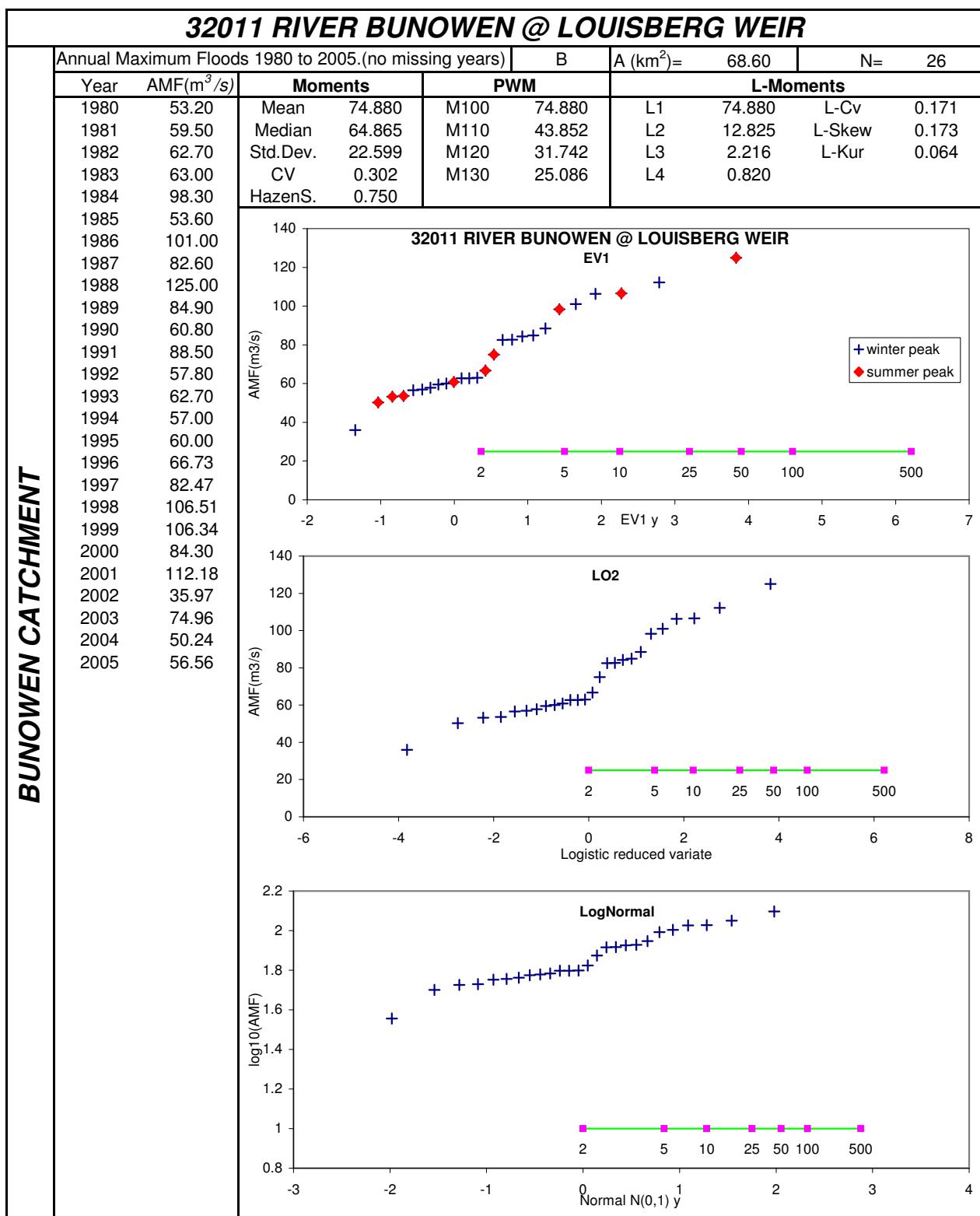


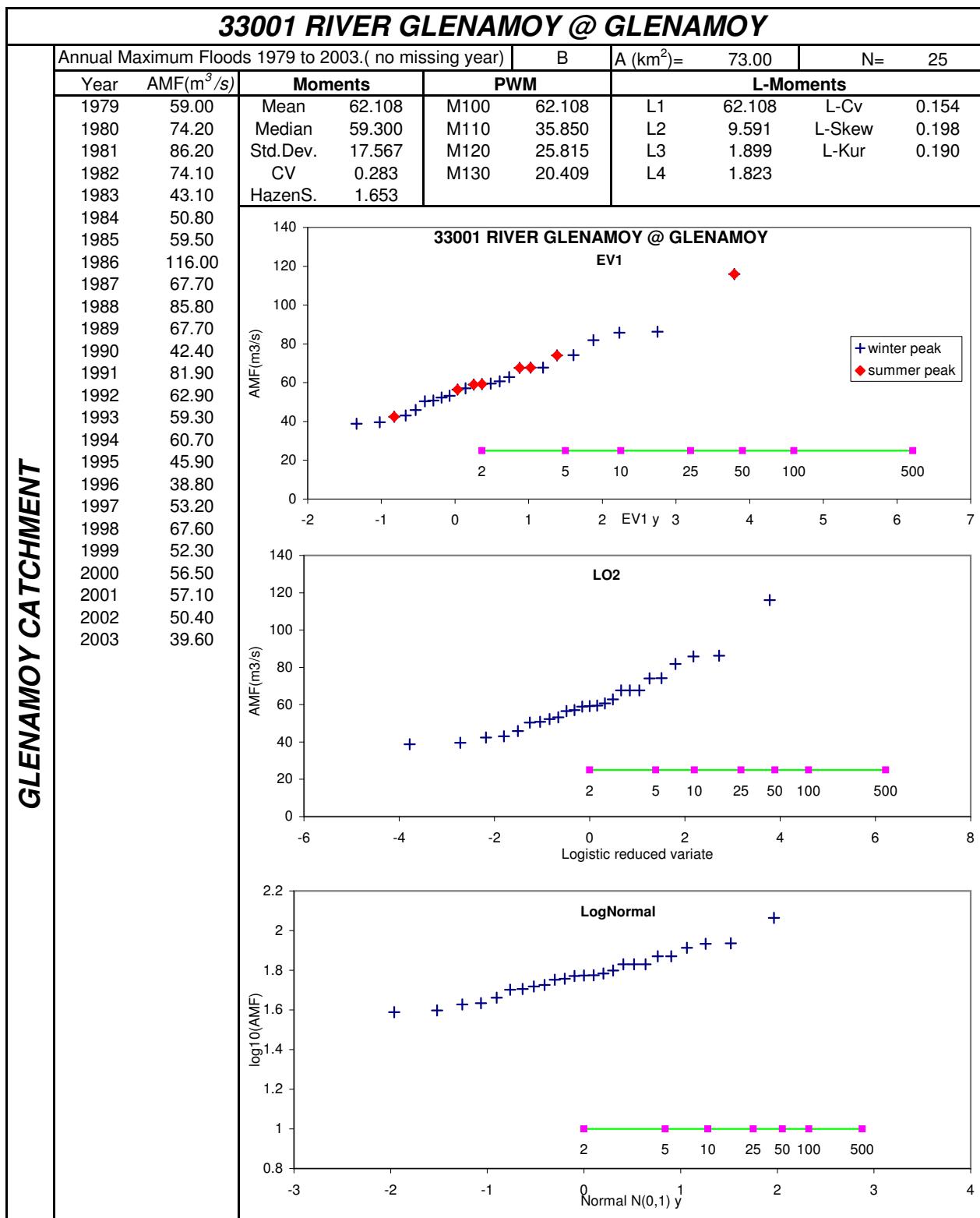


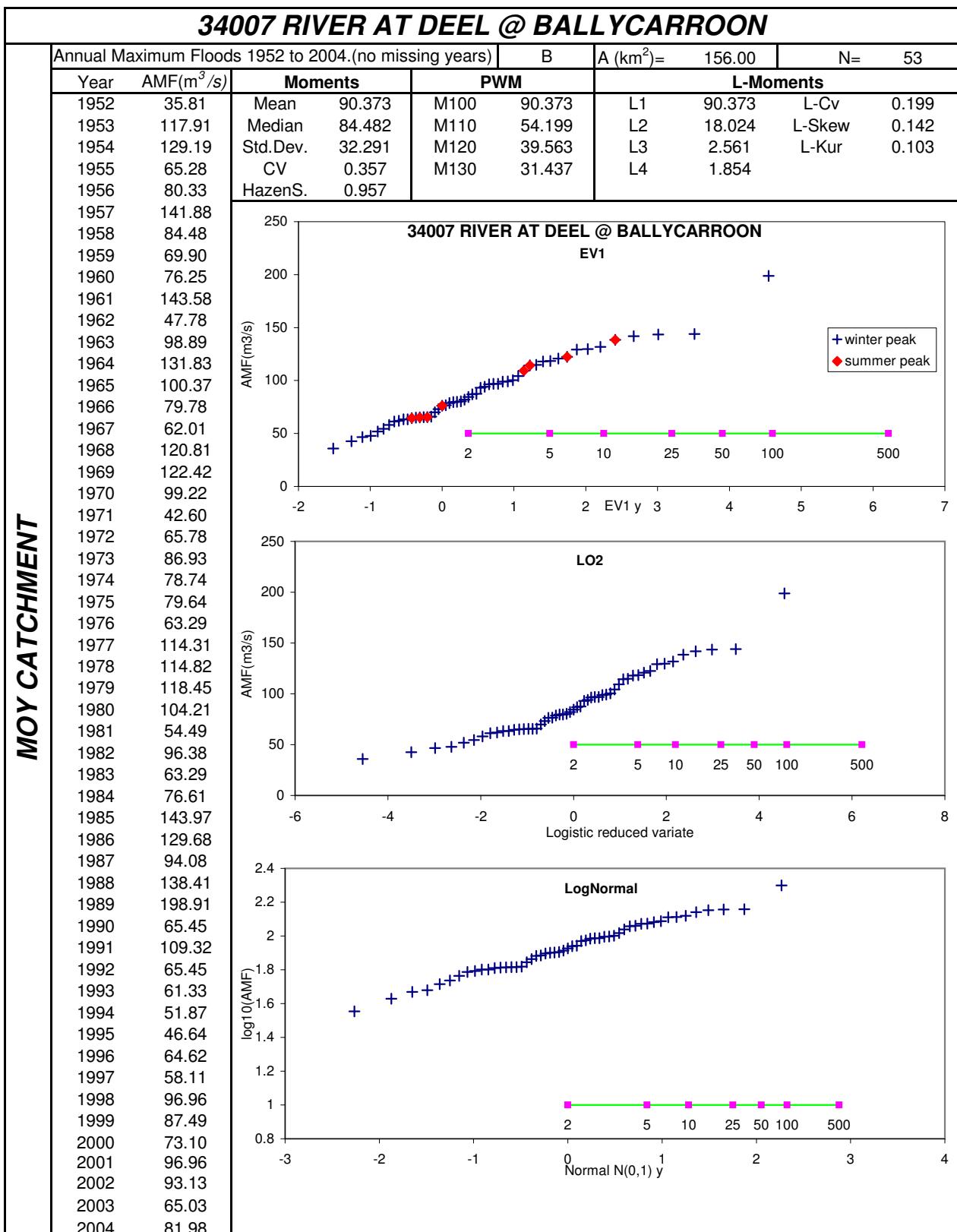


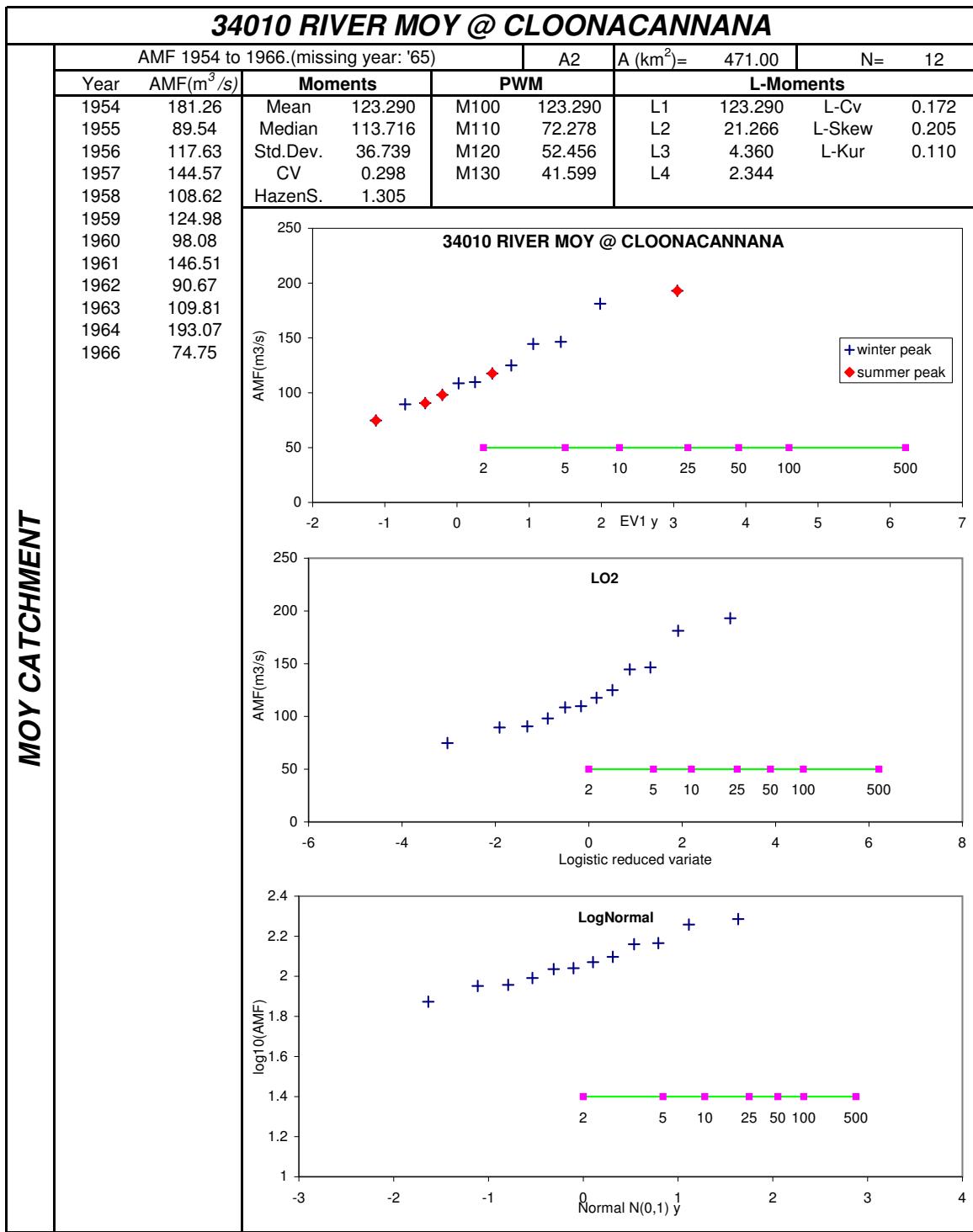


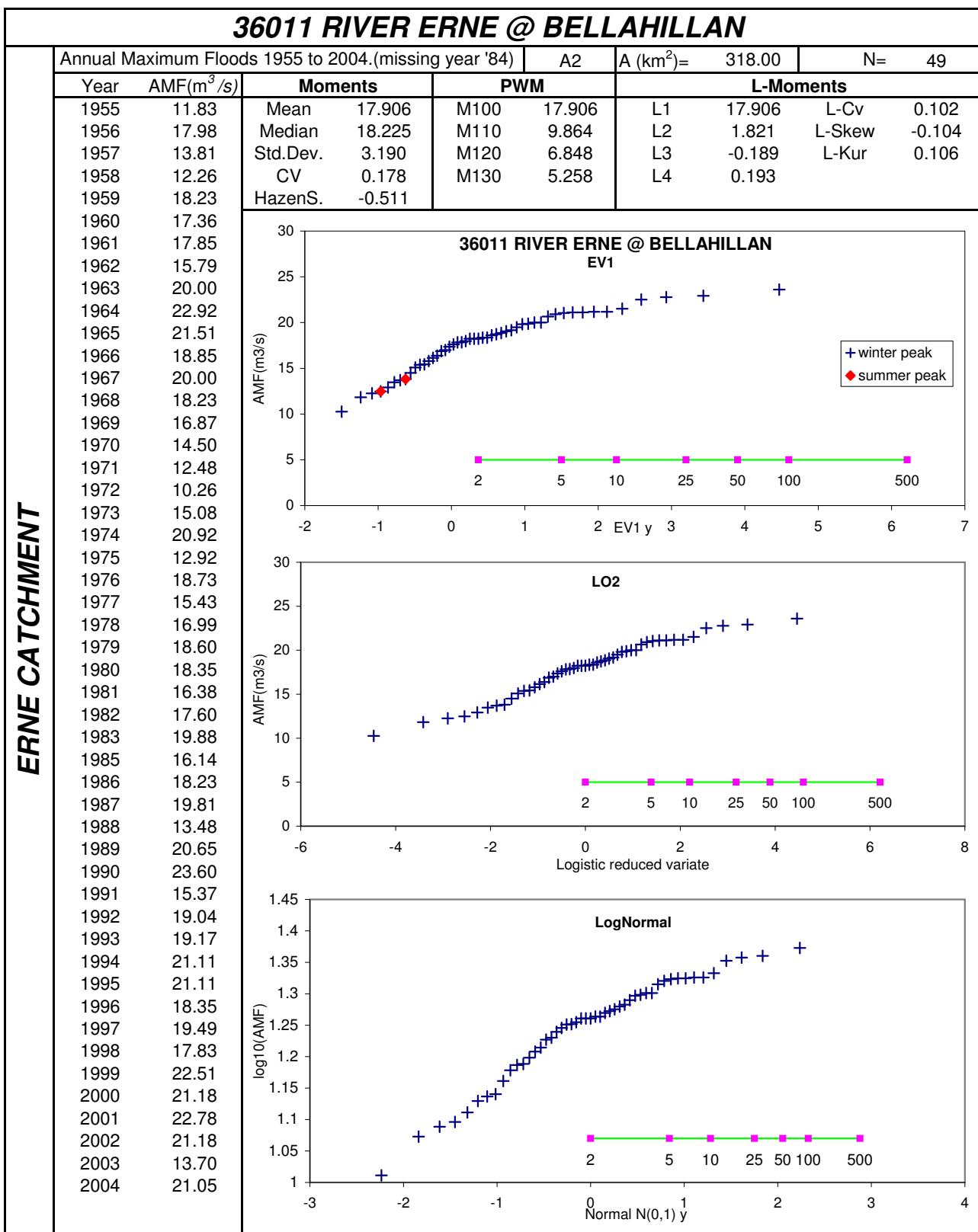


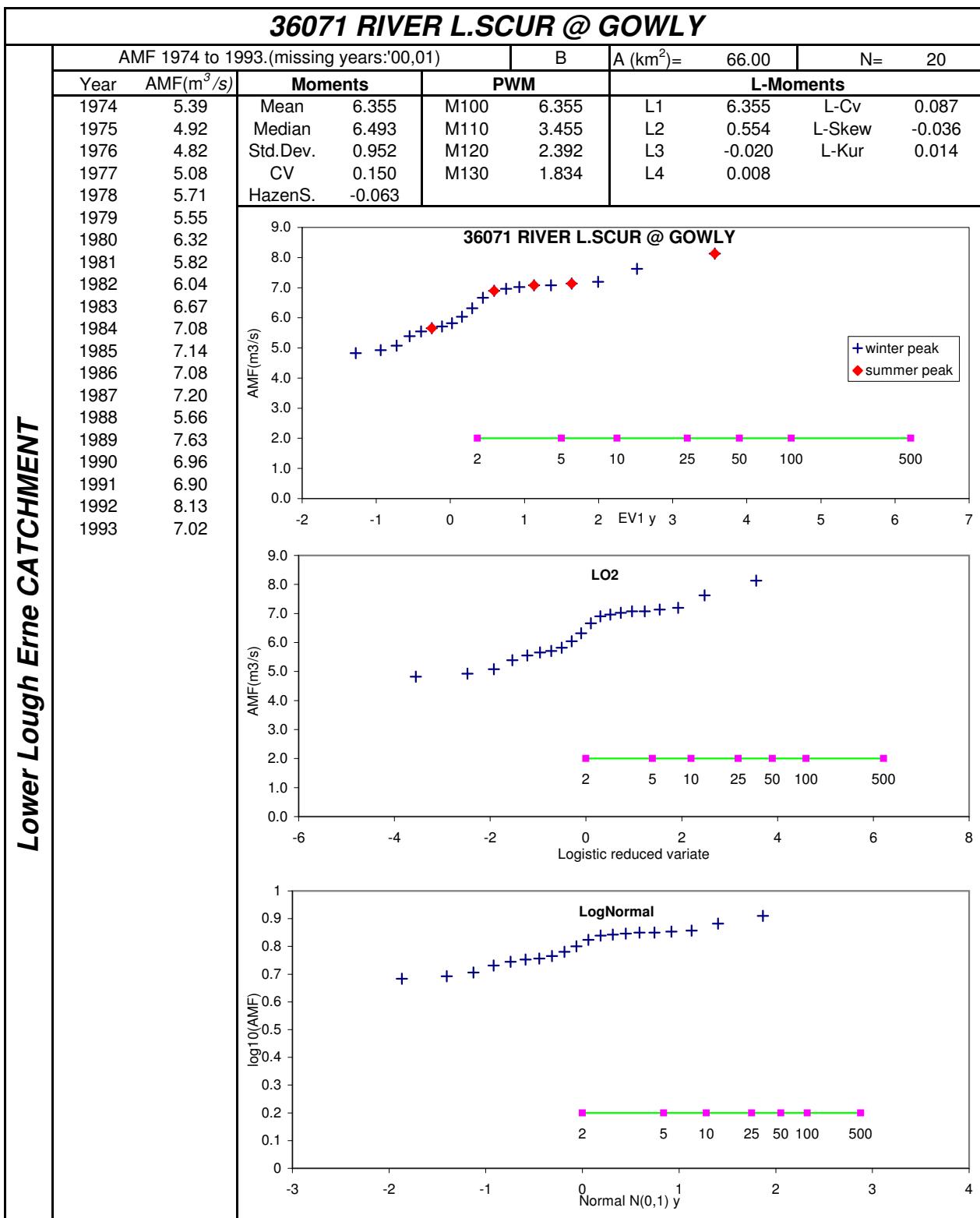


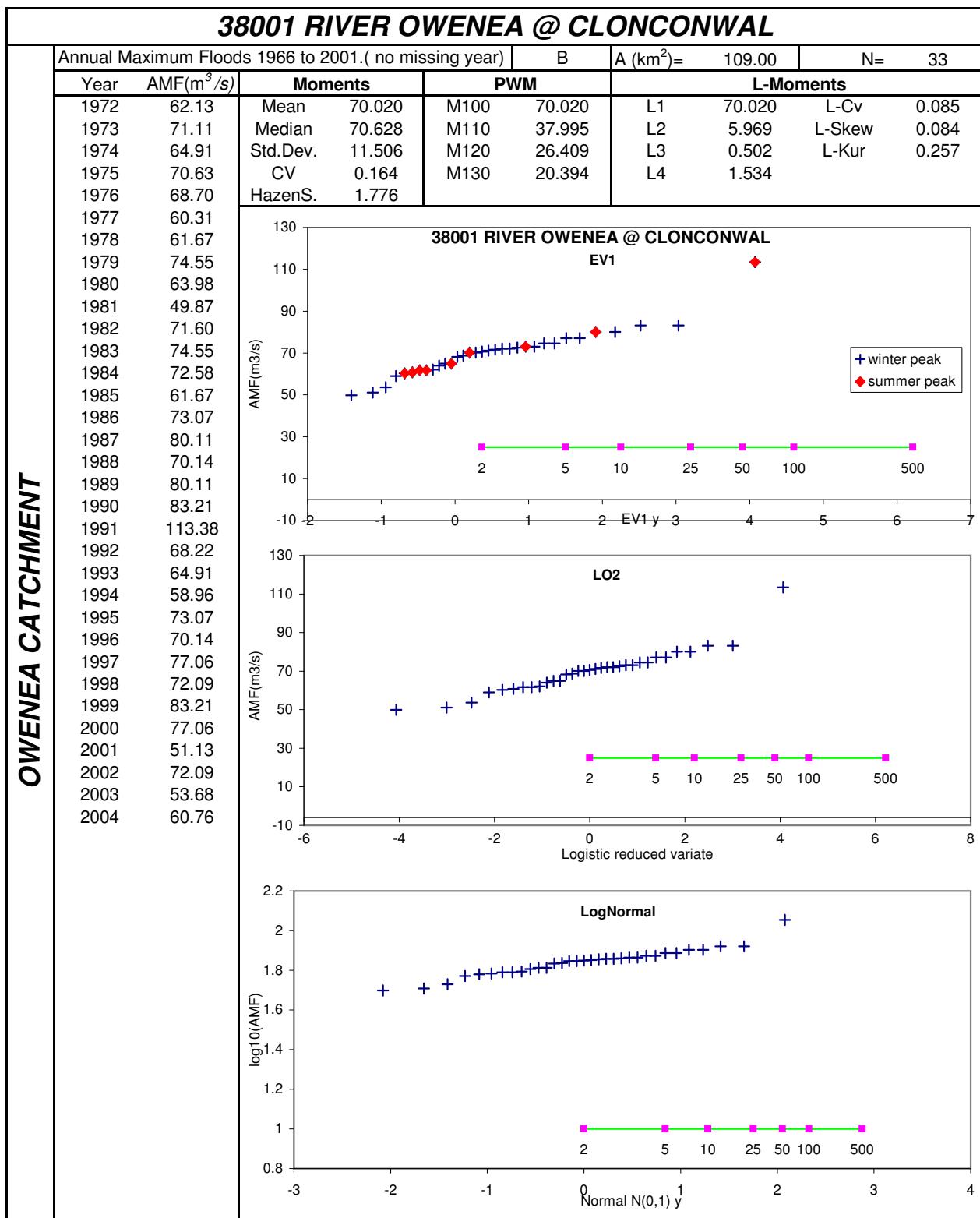


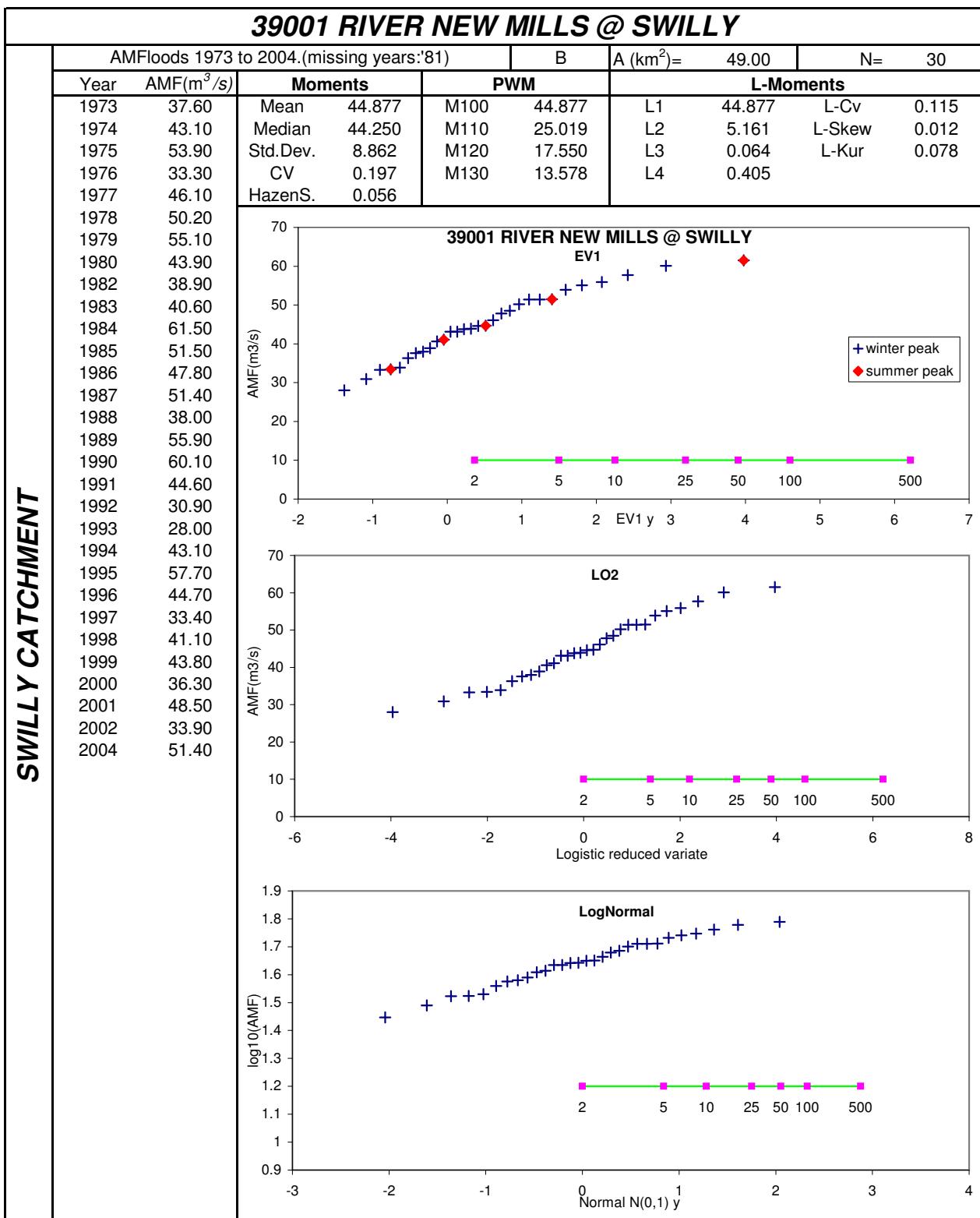




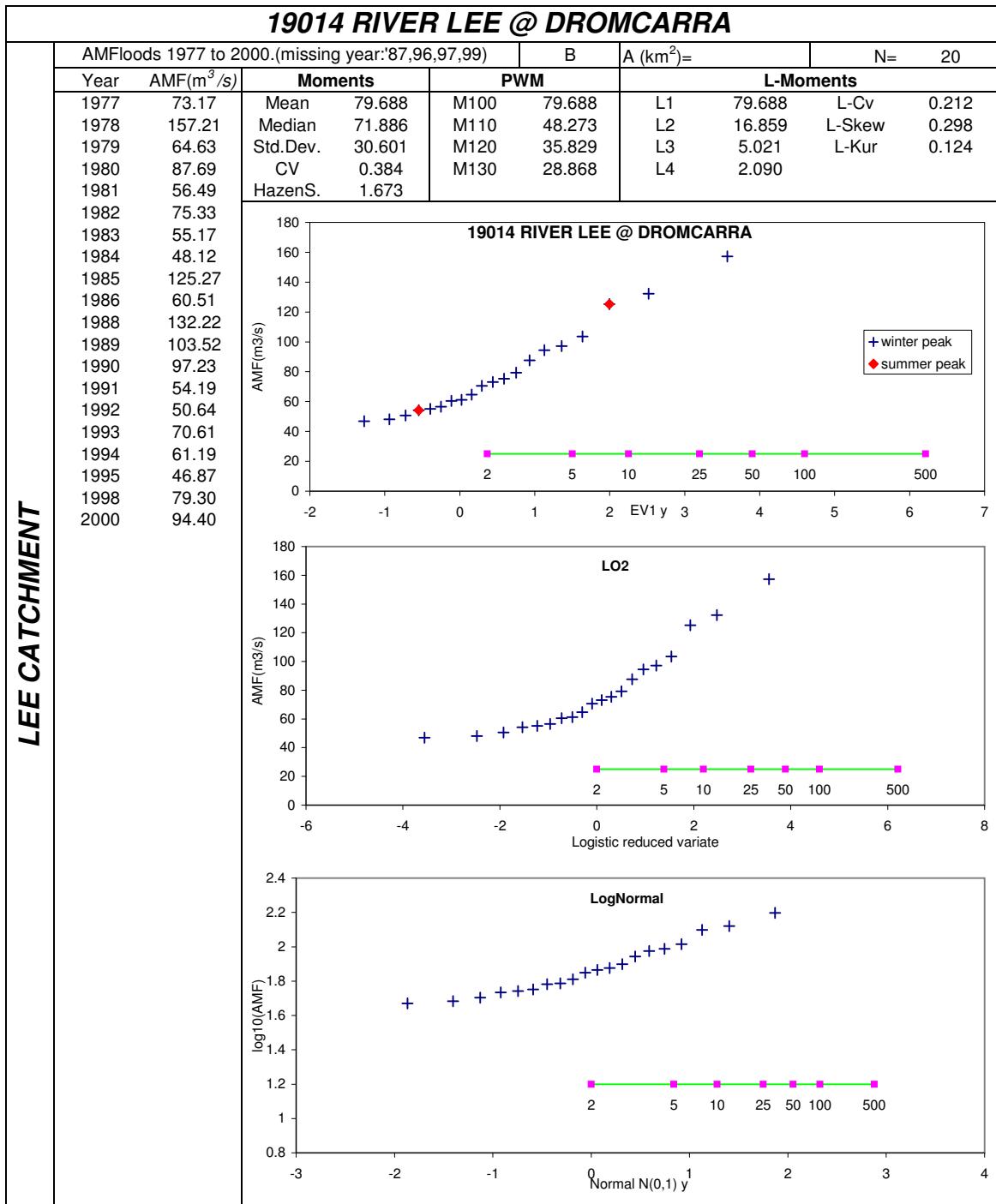


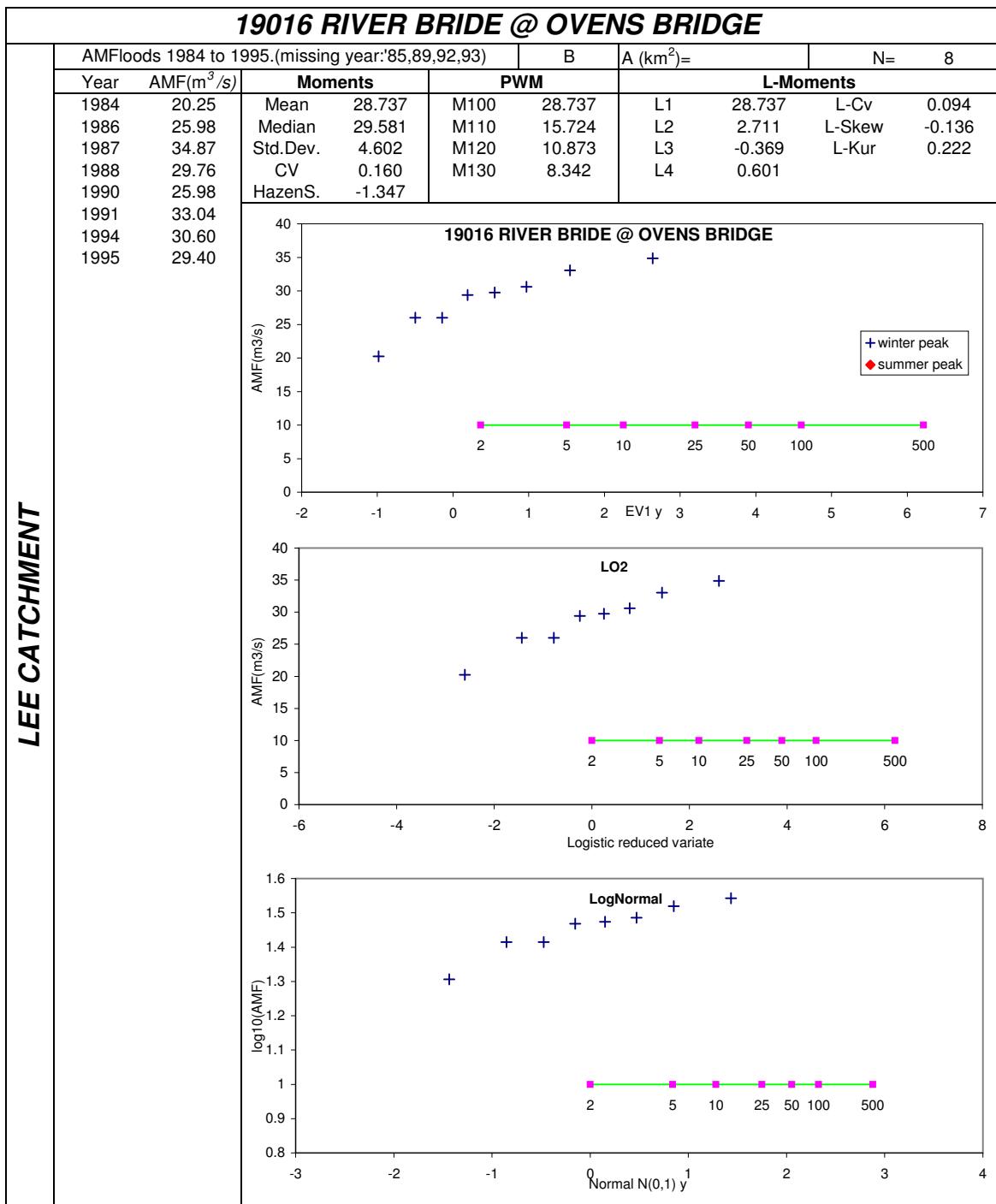


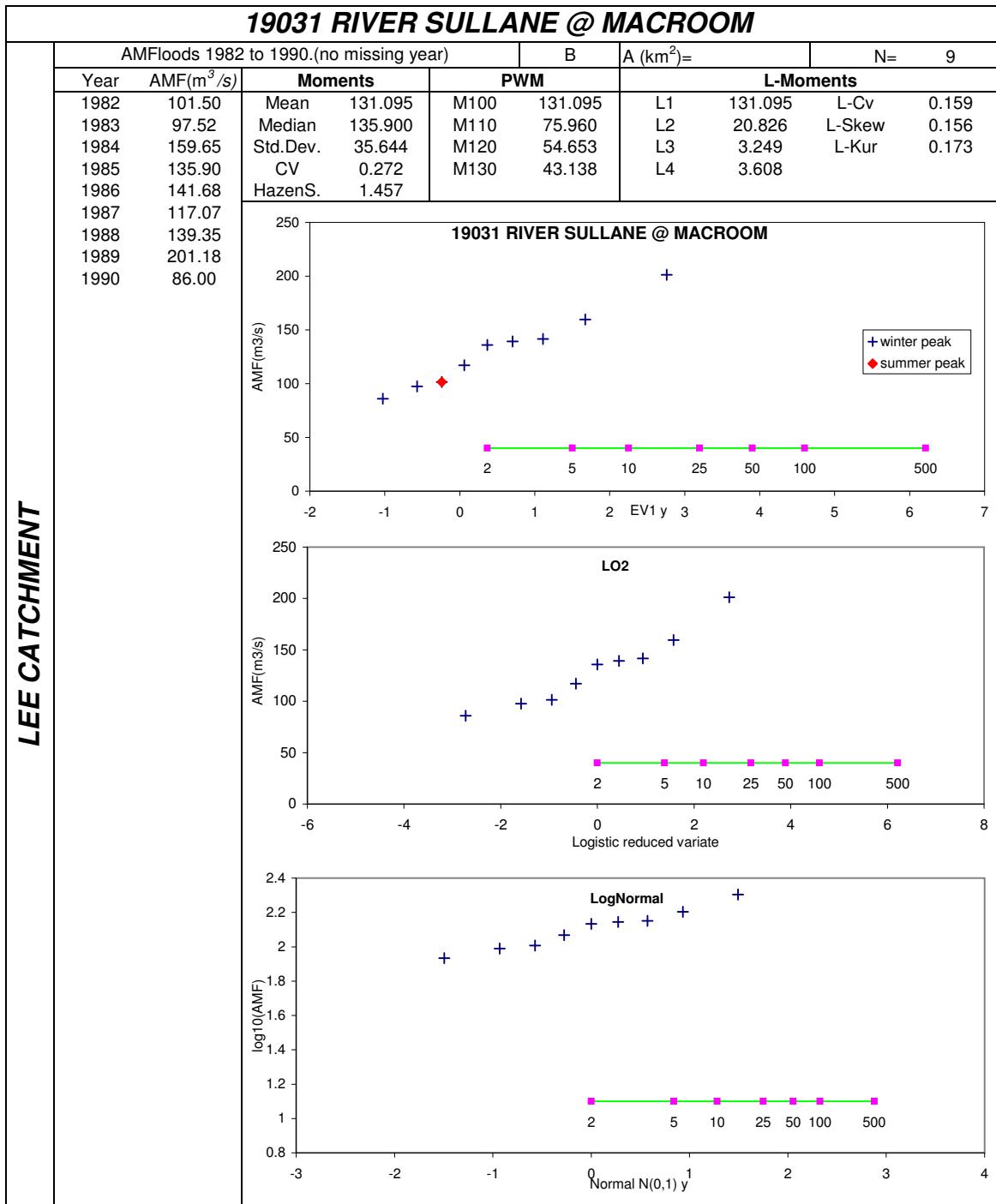




ESB Stations







Appendix C (Drainage stations)

