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Assessing the potential impact of rainfall change on southern African river flows

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2010-08-03
http://hdl.handle.net/10539/8345

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Appendices

Table 1: Monthly and annual rainfall (millimeters) data for the Klerksdorp Hartbees rainfall station in the Vaal River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1917	127.40	186.00	43.60	36.60	4.50	14.50	0.00	0.00	0.00	0.00	114.30	123.10	650.00
1918	97.10	181.70	225.80	0.00	4.40	0.00	42.90	88.40	67.90	44.18	75.10	156.00	983.48
1919	66.50	17.80	61.50	15.80	3.80	0.00	0.00	0.00	8.10	14.70	92.50	55.60	336.30
1920	233.80	141.70	59.50	9.90	16.70	0.00	0.00	1.50	42.10	83.10	32.30	31.50	652.10
1921	67.60	79.00	231.70	24.90	49.50	0.00	0.00	0.00	0.00	9.90	79.80	105.90	648.30
1922	93.80	52.60	52.50	0.00	6.40	19.10	0.00	17.20	0.00	7.90	57.90	66.80	374.20
1923	128.10	249.50	17.10	52.30	16.00	18.00	8.90	2.80	5.60	18.60	50.60	13.00	580.50
1924	54.10	19.00	101.90	15.30	25.40	0.00	0.00	5.60	30.20	32.20	113.60	29.20	426.50
1925	58.80	100.06	213.70	115.10	47.00	12.70	0.00	6.40	2.30	44.18	77.30	45.10	722.64
1926	46.20	81.60	74.50	31.50	14.70	0.00	0.80	0.00	3.10	25.60	57.50	99.90	435.40
1927	59.70	66.10	289.70	32.80	0.00	0.00	44.50	4.10	0.00	50.90	69.73	46.40	663.93
1928	138.90	103.40	89.40	0.00	0.00	0.00	0.00	16.50	20.30	34.00	170.70	57.60	630.80
1929	131.00	62.80	171.00	47.70	34.50	30.00	10.20	6.80	16.08	37.20	148.10	93.00	788.38
1930	151.00	121.10	111.50	17.80	0.00	12.20	0.00	4.60	0.00	28.20	47.30	80.00	573.70
1931	169.10	99.30	72.30	93.50	0.00	0.00	1.30	0.00	0.00	20.30	78.20	56.10	590.10
1932	37.20	146.70	78.90	32.00	0.00	0.00	0.00	0.00	2.30	19.10	88.70	100.50	505.40
1933	27.60	94.30	44.00	16.30	0.00	0.00	0.00	0.00	0.00	6.40	106.90	127.00	422.50
1934	259.90	67.50	47.50	47.20	40.40	7.10	3.30	12.70	31.80	60.70	162.60	86.60	827.30
1935	24.20	50.10	211.50	35.80	0.00	0.00	0.00	0.00	7.10	34.10	50.50	149.60	562.90
1936	89.70	123.00	167.60	11.20	64.20	0.00	0.00	0.00	0.00	42.00	157.20	57.70	712.60
1937	163.30	154.40	17.00	40.30	5.30	0.00	0.00	0.30	4.80	19.50	19.00	131.30	555.20
1938	71.90	102.80	27.90	101.70	11.90	11.60	0.00	16.30	0.00	92.00	5.30	111.30	552.70
1939	172.80	126.90	72.30	30.40	1.30	0.00	11.40	4.30	46.80	102.20	88.40	101.30	758.10
1940	102.36	47.20	133.50	0.00	16.55	6.93	4.18	7.09	16.08	44.18	69.73	90.39	538.20
1941	90.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.40	17.80	0.00	103.00	223.80
1942	109.90	58.40	139.50	35.10	0.00	0.00	0.00	17.30	7.40	52.50	19.30	229.50	668.90
1943	195.60	34.30	86.30	119.40	55.40	0.00	23.40	57.20	26.90	82.30	106.70	168.70	956.20
1944	147.90	278.80	55.70	0.00	2.50	88.70	0.00	0.00	55.80	70.50	106.20	18.30	824.40
1945	121.00	58.00	176.70	20.40	0.00	0.00	0.00	0.00	0.00	11.20	62.80	48.00	498.10
1946	107.90	161.30	151.90	54.60	0.00	0.00	0.00	0.00	4.10	37.80	56.30	37.60	611.50
1947	122.20	93.50	90.20	68.10	6.40	0.00	0.00	0.00	6.60	19.00	31.10	84.00	521.10
1948	102.36	100.06	87.98	46.03	16.55	6.93	4.18	0.00	0.00	22.10	93.50	56.40	536.10
1949	53.70	67.80	52.60	6.40	5.60	7.60	0.00	0.00	0.00	29.20	40.60	121.50	385.00
1950	102.36	101.60	135.10	118.70	140.40	18.80	3.30	2.80	12.70	31.80	49.60	190.80	907.96
1951	43.00	101.80	75.70	56.90	64.90	3.90	11.20	11.20	0.30	58.70	10.50	31.50	469.60
1952	85.70	114.90	44.50	10.20	5.00	4.10	22.80	0.00	0.00	68.40	59.60	76.50	491.70
1953	102.36	86.80	112.50	51.60	10.00	0.00	0.00	0.00	0.00	57.20	71.60	54.00	546.06
1954	90.60	0.00	83.00	59.20	27.20	9.00	0.00	0.00	4.80	12.00	62.30	75.00	423.10
1955	222.20	76.70	63.90	45.70	32.90	1.20	0.00	0.00	0.00	40.60	33.40	59.30	575.90
1956	104.40	211.10	177.10	15.70	62.20	0.00	0.00	0.00	29.00	45.90	27.70	107.80	780.90
1957	144.00	125.40	101.00	19.80	6.40	81.40	38.30	6.70	57.60	60.00	49.80	66.20	756.60
1958	88.70	68.50	54.00	73.10	0.00	0.00	0.00	0.00	53.10	25.00	63.60	163.80	589.80
1959	68.80	89.20	28.30	67.70	30.00	5.50	19.50	0.00	0.00	87.20	24.80	166.00	587.00
1960	98.10	100.50	65.50	94.30	0.00	2.50	1.50	15.00	3.00	41.00	76.90	171.90	670.20
1961	21.70	137.20	90.10	147.20	32.50	20.00	1.20	0.00	0.00	2.50	124.00	33.70	610.10
1962	72.70	171.60	97.40	85.00	0.00	0.00	0.00	7.00	3.20	26.30	98.00	77.70	638.90
1963	99.70	33.50	72.50	106.40	37.50	52.00	0.00	0.00	0.00	38.80	222.50	12.50	675.40
1964	44.50	48.60	60.00	26.00	0.50	6.50	0.00	3.50	2.00	116.20	56.30	142.90	507.00
1965	147.50	23.70	15.50	110.00	0.00	1.50	13.50	0.00	6.00	0.00	72.70	40.00	430.40

1966	101.80	224.00	24.50	21.00	0.00	0.00	0.00	0.00	11.00	44.50	41.60	114.00	582.40
1967	186.00	204.50	80.40	176.60	27.00	0.00	0.00	0.00	5.50	18.00	91.00	56.50	845.50
1968	44.30	18.30	120.80	86.40	29.50	0.00	0.00	23.00	7.00	8.80	68.10	92.00	498.20
1969	102.36	119.30	126.90	50.50	96.00	0.00	0.00	0.00	0.00	81.30	41.10	67.90	685.36
1970	129.20	63.50	46.40	38.50	6.00	0.00	21.10	0.00	27.40	12.00	78.50	81.80	504.40
1971	96.70	79.90	99.70	102.70	4.50	2.50	0.00	0.00	10.50	42.50	56.10	113.00	608.10
1972	115.80	105.00	171.30	9.90	0.00	0.00	0.00	2.20	0.00	25.00	35.50	13.00	477.70
1973	118.00	194.40	46.50	56.60	0.80	0.00	0.00	13.50	94.00	28.50	49.20	155.90	757.40
1974	143.50	136.20	145.00	144.70	0.00	0.00	0.00	0.00	4.20	0.00	103.80	113.30	790.70
1975	172.50	35.00	138.50	86.00	0.00	0.00	0.00	0.00	0.00	28.00	40.00	154.00	654.00
1976	218.60	115.10	157.00	17.50	0.00	5.50	0.00	0.00	28.00	79.50	72.50	18.00	711.70
1977	145.50	104.70	155.30	12.00	0.00	0.00	0.00	3.00	63.00	38.50	92.50	12.00	626.50
1978	0.00	95.00	100.50	110.00	0.00	0.00	0.00	7.00	16.08	55.00	25.00	90.39	498.98
1979	176.60	66.40	11.20	27.00	27.50	0.00	12.50	64.50	24.00	65.70	101.90	83.50	660.80
1980	118.20	67.60	23.00	0.00	12.00	0.00	0.00	11.00	58.80	4.50	172.90	65.50	533.50
1981	189.80	105.00	102.40	14.00	0.00	3.50	0.00	34.60	0.00	44.10	80.10	137.00	710.50
1982	145.20	26.70	50.90	110.30	0.00	0.00	32.50	0.00	6.00	103.50	91.00	40.70	606.80
1983	46.70	45.60	20.50	24.50	44.50	50.80	23.50	2.00	0.00	22.00	43.00	94.20	417.30
1984	28.00	14.50	79.40	2.50	10.00	12.50	3.50	16.50	0.00	91.50	27.00	67.50	352.90
1985	65.80	114.50	78.00	0.00	0.00	4.00	0.00	0.00	0.00	58.50	39.00	26.00	385.80
1986	73.50	132.50	38.50	13.00	0.00	16.50	0.00	14.50	21.50	64.00	74.00	63.50	511.50
1987	102.50	37.00	24.00	24.00	0.00	0.00	2.00	4.00	94.50	32.00	32.50	44.50	397.00
1988	63.50	172.00	177.50	106.50	6.50	6.00	0.00	6.00	29.00	130.50	46.50	53.50	797.50
1989	93.50	265.50	43.00	70.00	28.50	5.50	0.00	0.00	0.00	31.00	155.50	74.50	767.00
1990	34.50	64.50	84.00	77.50	5.50	0.00	6.50	3.00	0.00	25.50	23.00	47.50	371.50
1991	151.50	61.50	70.50	0.00	0.00	29.00	0.00	4.00	33.50	75.00	17.50	122.00	564.50
1992	23.00	33.00	26.00	39.50	0.00	0.00	0.00	15.50	0.00	35.50	102.50	144.50	419.50
1993	47.00	53.50	23.00	33.50	0.00	0.00	0.00	3.00	49.00	219.30	113.00	220.50	761.80
1994	86.00	213.00	46.50	17.50	0.00	0.00	1.80	0.00	0.00	18.00	80.80	59.00	522.60
1995	155.00	98.00	107.00	47.50	34.50	0.00	0.00	0.00	17.20	95.50	88.00	99.30	742.00
1996	97.50	137.00	48.00	52.50	46.50	0.00	3.50	29.00	0.00	34.00	67.80	90.39	606.19
1997	26.00	48.00	66.00	46.03	103.00	0.00	5.40	0.00	104.90	44.10	26.80	90.39	560.62
1998	67.60	102.40	59.00	5.00	0.00	0.00	0.00	1.00	10.00	40.00	54.00	162.00	501.00
1999	72.00	62.00	55.00	20.00	17.50	0.00	0.00	0.00	18.00	34.50	10.00	202.60	491.60
2000	0.00	0.00	87.98	26.00	18.00	0.00	0.00	0.00	0.00	6.50	20.30	90.39	249.17
2001	0.70	18.40	67.20	0.00	0.00	0.00	0.00	0.00	16.08	44.18	69.73	90.39	306.69
2002	81.50	49.00	15.50	30.50	47.50	9.00	0.00	35.50	5.00	71.00	12.50	116.50	473.50
2003	61.50	93.50	67.00	8.00	0.00	0.00	0.00	7.00	0.00	30.50	162.00	81.00	510.50
2004	102.36	177.00	49.50	76.00	8.00	6.00	2.00	6.00	0.00	18.50	31.00	117.00	593.36
2005	213.50	113.50	88.00	56.00	6.00	0.00	0.00	0.00	0.00	31.00	25.50	82.50	616.00
2006	201.00	436.00	188.50	28.00	0.00	11.00	0.00	24.00	0.00	48.00	81.00	101.00	1118.50
2007	32.00	28.50	23.50	41.50	0.00	34.00	0.00	0.00	120.00	115.00	69.00	125.00	588.50
2008	127.00	57.00	127.90	80.00	45.00	0.00	4.18	7.09	16.08	44.18	69.73	90.39	668.56

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 2: Monthly and annual rainfall (millimeters) data for the Bloemhof rainfall station in the Vaal River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1931	121.40	110.90	89.60	76.50	0.00	0.00	0.00	0.00	0.00	75.40	149.20	15.00	638.00
1932	37.60	131.30	75.10	6.60	0.00	9.40	0.00	0.00	27.50	5.90	81.00	112.20	486.60
1933	26.40	32.50	38.60	24.20	0.00	0.00	0.00	0.00	7.60	0.00	125.30	86.10	340.70
1934	145.80	95.50	78.20	58.50	61.70	0.00	24.10	6.40	1.80	83.00	126.50	42.40	723.90
1935	33.70	79.80	74.17	98.30	48.30	5.60	0.80	2.00	5.10	4.30	70.60	87.40	510.07
1936	49.10	94.40	128.00	9.90	20.00	0.00	5.07	0.00	0.00	0.00	105.40	20.30	432.17
1937	89.40	80.40	32.90	16.30	5.10	0.00	0.00	0.00	13.13	3.80	7.90	83.40	332.33
1938	66.50	63.80	51.60	7.60	19.30	5.02	6.30	0.00	13.13	142.70	13.50	35.20	424.65
1939	117.80	114.30	73.40	24.40	6.40	1.80	78.40	25.70	7.60	69.80	75.50	33.10	628.20
1940	70.70	56.40	121.20	41.60	9.10	2.30	0.00	0.00	13.70	20.10	38.90	73.70	447.70
1941	66.80	160.10	3.00	25.00	17.95	0.00	0.00	5.60	8.60	8.70	0.00	39.70	335.45
1942	61.10	85.80	99.80	47.80	10.20	0.00	0.00	74.90	1.80	163.80	29.50	247.70	822.40
1943	77.90	39.60	150.10	115.10	52.40	0.00	13.70	0.50	81.30	15.30	132.40	75.10	753.40
1944	56.30	149.10	58.20	11.20	10.50	57.70	0.00	0.00	13.13	20.80	110.00	5.60	479.40

1945	96.00	57.20	213.00	17.80	5.60	0.00	2.30	0.00	0.00	17.80	17.30	31.30	458.30
1946	161.20	18.30	88.40	16.30	11.90	0.00	0.00	0.00	0.00	25.10	42.50	54.30	418.00
1947	83.84	38.30	37.30	61.50	15.00	3.30	0.00	0.00	26.20	17.00	89.30	217.80	589.54
1948	105.40	82.80	139.50	53.10	5.30	5.02	0.00	0.00	0.00	37.80	46.80	12.90	488.62
1949	41.10	31.50	38.00	22.40	5.60	5.60	4.60	0.00	0.00	11.90	14.70	94.10	269.50
1950	43.40	99.30	65.90		50.10	6.60	3.80	37.10	4.90	5.40	23.70	117.20	457.40
1951	68.20	54.70	108.90	67.90	32.40	0.00	0.00	0.00	0.00	40.10	11.90	13.40	397.50
1952	28.90	96.00	28.20	8.40	0.00	4.30	21.40	0.00	7.90	34.80	59.40	67.80	357.10
1953	37.60	52.20	30.50	70.00	0.00	0.00	0.00	2.00	0.00	38.10	29.00	39.00	298.40
1954	52.50	60.00	88.00	20.40	28.50	5.02	0.00	0.00	3.50	0.00	31.30	60.50	349.72
1955	125.20	211.40	43.00	80.00	13.00	30.20	0.00	0.00	0.00	0.00	96.50	150.30	749.60
1956	83.84	104.40	154.00	6.50	31.80	0.00	0.00	7.02	6.50	33.20	80.50	63.00	570.76
1957	112.00	47.00	74.17	26.20	0.00	44.50	5.07	8.00	67.00	56.50	46.00	62.00	548.44
1958	245.50	68.50	16.50	51.00	11.00	0.00	0.00	0.00	12.00	19.50	27.00	98.50	549.50
1959	61.50	76.16	21.50	25.00	57.50	0.00	16.00	0.00	1.40	32.00	15.70	68.70	375.46
1960	99.70	119.00	81.60	94.00	6.00	4.00	13.00	29.50	0.00	36.00	55.80	74.00	612.60
1961	57.50	35.00	65.00	77.50	25.50	39.10	29.50	0.00	0.00	0.00	137.70	41.50	508.30
1962	77.50	51.00	102.50	92.50	3.00	0.00	0.00	0.00	11.50	15.00	114.80	66.50	534.30
1963	168.00	44.00	62.50	73.00	28.50	11.50	4.00	0.00	0.00	65.00	75.60	19.20	551.30
1964	13.00	18.00	87.00	19.70	8.00	7.50	0.00	4.00	0.00	123.30	30.50	117.50	428.50
1965	83.10	60.50	20.50	24.20	0.00	8.50	15.00	0.00	9.50	6.20	62.00	0.00	289.50
1966	92.00	96.00	9.30	39.50	0.00	0.00	0.00	0.00	3.00	30.50	23.50	76.00	369.80
1967	246.00	208.50	55.00	66.60	53.00	0.00	0.00	0.00	10.00	8.50	56.50	7.50	711.60
1968	22.00	29.50	110.10	58.00	61.50	0.00	0.00	0.00	0.00	9.00	55.97	101.40	447.47
1969	61.50	88.40	59.00	50.50	106.50	0.00	0.00	5.50	0.60	47.00	37.50	30.00	486.50
1970	62.70	74.50	48.00	19.00	36.70	15.10	27.50	1.00	4.80	12.50	27.20	73.10	402.10
1971	74.10	82.90	63.00	38.50	44.50	0.00	1.50	0.00	0.00	65.50	12.00	80.00	462.00
1972	114.50	52.50	233.00	54.50	7.00	0.00	0.00	0.00	0.00	5.00	9.90	14.00	490.40
1973	44.50	155.00	29.00	40.00	0.00	0.00	8.50	0.00	50.50	17.50	45.00	79.10	469.10
1974	151.50	58.00	206.90	91.00	12.00	0.00	0.00	6.80	0.00	13.10	121.30	57.50	718.10
1975	111.00	120.90	84.00	32.50	4.50	0.00	0.00	12.00	13.13	7.50	36.90	101.00	523.43
1976	472.50	136.50	70.00	22.30	36.00	16.00	0.00	0.00	17.40	81.00	41.00	76.00	968.70
1977	105.20	71.40	79.50	43.50	0.00	0.00	0.00	18.00	96.50	55.30	31.50	53.50	554.40
1978	47.50	118.40	83.50	105.90	0.00	0.00	0.00	10.00	21.20	64.00	18.50	29.50	498.50
1979	59.20	85.00	0.00	34.50	17.00	0.00	7.00	65.00	0.00	62.00	61.50	62.50	453.70
1980	62.00	138.00	0.00	26.00	0.00	0.00	0.00	0.00	52.00	0.00	195.50	17.00	490.50
1981	123.80	84.00	149.50	14.00	13.50	13.00	0.00	30.00	15.00	32.00	78.00	116.50	669.30
1982	30.50	0.00	112.00	104.50	0.00	7.00	4.00	0.00	1.50	71.00	39.00	103.50	473.00
1983	34.50	9.00	38.10	0.00	19.00	5.00	17.50	0.00	0.00	60.00	78.00	27.00	288.10
1984	17.00	24.50	45.50	7.50	23.00	0.00	14.60	13.50	4.00	118.50	45.00	19.50	332.60
1985	31.00	98.00	68.50	0.00	0.00	0.00	0.00	0.00	0.00	73.00	32.00	77.00	379.50
1986	173.00	67.00	47.00	18.00	3.00	0.00	0.00	15.50	28.50	82.50	105.00	13.50	553.00
1987	36.00	44.50	42.20	22.00	0.00	0.00	0.00	16.00	112.50	9.00	47.50	64.00	393.70
1988	37.00	204.00	96.50	57.20	16.00	4.50	0.00	0.00	14.00	79.50	51.50	120.00	680.20
1989	129.00	119.50	20.50	39.00	0.00	0.00	0.00	0.00	0.00	2.00	77.50	48.00	435.50
1990	32.50	56.00	34.50	58.50	0.00	6.00	0.00	5.00	20.00	1.00	2.00	29.00	244.50
1991	216.00	47.50	121.00	0.00	0.00	8.00	5.07	0.00	55.00	94.00	16.00	62.00	624.57
1992	0.00	0.00	15.00	0.00	0.00	0.00	0.00	21.00	0.00	4.00	25.00	40.30	105.30
1993	31.00	64.00	22.00	50.40	0.00	0.00	0.00	0.00	15.00	82.00	11.00	183.50	458.90
1994	66.00	57.00	40.00	7.00	2.00	0.20	0.00	0.00	0.00	13.00	35.50	19.20	239.90
1995	66.30	60.20	129.80	3.70	17.00	0.00	0.00	28.10	6.00	12.80	95.00	141.40	560.30
1996	87.60	95.50	9.20	152.50	33.50	0.00	20.60	5.50	2.00	33.80	93.00	114.30	647.50
1997	105.10	36.60	131.10	86.30	35.80	7.00	18.70	11.00	1.00	39.30	7.00	46.00	524.90
1998	64.20	68.60	151.90	11.70	0.00	0.00	0.00	0.20	8.10	99.40	134.70	62.00	600.80
1999	30.00	12.00	74.17	41.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	148.20	306.27
2000	100.00	45.00	97.00	13.20	5.50	2.00	0.00	0.00	10.00	45.00	74.00	205.60	597.30
2001	15.00	80.50	96.50	65.00	50.50	10.50	14.30	5.20	51.00	136.00	44.40	112.50	681.40
2002	88.00	20.00	21.00	25.50	45.20	13.60	0.00	37.50	0.00	16.50	29.00	87.50	383.80
2003	17.50	67.00	76.00	10.00	18.50	4.00	0.00	0.70	10.50	8.00	97.00	33.10	342.30
2004	78.50	67.50	114.00	86.00	0.00	0.50	10.50	0.00	8.50	8.50	35.00	114.40	523.40
2005	110.50	103.90	123.00	48.50	17.10	0.00	0.00	0.00	0.00	10.50	47.50	45.00	506.00
2006	71.50	131.00	94.00	43.00	27.50	0.00	2.50	37.00	0.00	35.90	73.30	80.70	596.40
2007	20.60	23.30	20.00	56.10	0.00	18.00	0.00	0.00	47.50	111.00	45.50	74.40	416.40
2008	136.00	19.50	25.50	12.00	94.50	4.50	0.00	0.00	0.00	0.00	0.00	71.07	363.07

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 3: Monthly and annual rainfall (millimeters) data for the Villiers rainfall station in the Vaal River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1905	113.04	21.60	85.00	59.20	12.30	0.00	9.03	15.30	5.60	79.81	100.22	66.40	567.50
1906	92.80	90.90	55.10	2.50	0.00	0.00	9.03	0.00	9.40	97.10	101.00	80.70	538.53
1907	237.80	157.00	14.50	92.70	23.10	0.00	0.00	0.00	70.60	73.40	155.70	95.20	920.00
1908	27.20	53.00	112.30	16.50	0.00	8.70	9.40	11.40	39.60	63.90	125.10	32.40	499.50
1909	153.70	84.83	38.00	38.34	21.25	6.70	9.03	10.52	25.34	79.81	100.22	95.42	663.17
1910	113.04	84.83	74.75	38.34	21.25	6.70	9.03	10.52	27.60	183.00	100.22	39.40	708.69
1911	4.10	48.90	74.75	80.10	75.20	0.00	4.10	0.00	10.40	109.30	121.50	46.70	575.05
1912	113.04	84.83	74.75	38.34	21.25	6.70	9.03	10.52	25.34	14.50	32.70	194.50	625.51
1913	60.50	58.30	78.70	39.70	21.25	6.70	7.40	22.80	25.34	130.10	59.90	89.40	600.10
1914	113.04	84.83	74.75	38.34	21.25	6.70	9.03	10.52	25.34	79.81	100.22	95.42	659.26
1915	356.40	114.20	21.30	0.00	8.90	0.00	22.30	0.00	0.00	174.00	224.40	123.50	1045.00
1916	64.80	28.20	61.50	38.30	8.90	0.00	0.00	0.00	0.00	64.10	88.00	102.90	456.70
1917	170.80	82.10	60.20	51.20	75.00	12.90	17.50	42.70	35.10	48.40	402.50	139.40	1137.80
1918	70.00	120.20	117.60	0.00	0.00	0.00	0.00	127.80	30.50	132.10	80.50	230.00	908.70
1919	84.30	65.10	35.70	38.34	2.50	0.00	0.00	0.00	8.10	9.20	118.60	166.40	528.24
1920	91.70	53.70	53.20	0.00	22.10	0.00	27.70	5.60	31.50	189.10	87.30	104.80	666.70
1921	103.20	77.10	196.50	10.70	11.40	0.00	0.00	0.00	26.00	79.10	154.70	116.10	774.80
1922	74.50	74.50	64.00	0.00	21.60	11.00	0.00	52.40	15.30	168.20	193.30	80.60	755.40
1923	147.70	73.40	84.10	41.90	5.80	6.70	21.80	2.30	11.10	32.00	130.00	143.30	700.10
1924	116.70	82.80	169.60	4.60	24.60	2.30	0.00	5.30	62.60	68.70	168.30	100.70	806.20
1925	120.10	84.83	278.30	72.70	77.00	11.40	0.00	0.00	33.00	39.20	62.50	34.20	813.23
1926	185.20	83.90	47.00	7.20	37.40	32.80	10.40	0.00	32.30	61.50	91.00	101.20	689.90
1927	103.30	268.40	239.00	5.80	21.25	6.70	9.03	10.52	25.34	102.60	23.60	84.80	900.35
1928	150.40	46.70	53.00	37.40	40.70	0.00	0.00	0.00	53.10	106.20	117.80	70.80	676.10
1929	128.30	137.10	148.90	96.30	90.70	0.00	131.50	51.80	135.20	113.60	99.20	84.50	1217.10
1930	90.90	78.80	52.80	0.00	0.00	14.70	26.70	0.00	0.00	0.00	45.80	74.60	384.30
1931	202.70	115.50	53.50	161.10	0.00	0.00	29.20	0.00	0.00	10.40	101.60	26.90	700.90
1932	33.50	165.00	74.75	18.50	21.30	2.50	0.00	0.00	34.80	71.10	81.30	42.40	545.15
1933	0.00	84.83	168.40	54.10	21.25	6.70	9.03	0.00	33.30	20.80	291.00	39.90	729.32
1934	295.30	47.70	99.00	56.90	119.20	18.50	29.00	18.60	0.00	138.50	256.20	62.90	1141.80
1935	24.10	59.80	181.70	44.40	0.00	0.00	0.00	0.00	0.00	65.00	16.50	64.10	455.60
1936	177.80	71.80	154.60	51.10	185.40	0.00	0.00	0.00	44.40	91.00	232.10	111.10	1119.30
1937	190.30	129.90	40.20	0.00	0.00	0.00	0.00	0.00	0.00	91.90	15.20	150.90	618.40
1938	79.50	49.50	30.50	123.20	0.00	0.00	6.40	15.20	41.40	155.60	21.10	162.60	685.00
1939	165.40	190.30	36.80	14.50	36.90	0.00	56.30	55.10	0.00	45.80	246.80	75.20	923.10
1940	140.50	58.40	47.00	57.10	47.00	0.00	0.00	16.50	123.40	20.60	132.00	97.50	740.00
1941	68.50	22.00	69.10	92.00	0.00	0.00	0.00	0.00	44.50	113.20	0.00	32.00	441.30
1942	144.70	70.70	102.80	68.90	10.20	30.50	0.00	10.52	0.00	103.60	48.30	222.80	813.02
1943	31.00	105.80	95.50	38.34	82.10	75.70	105.90	3.80	2.50	200.90	98.80	147.80	988.14
1944	75.40	239.10	132.00	0.00	8.90	53.50	0.00	0.00	27.20	159.90	39.40	31.00	766.40
1945	72.60	213.40	266.90	38.10	33.00	0.00	0.00	0.00	0.00	11.80	61.50	23.60	720.90
1946	129.40	127.30	102.50	15.70	0.00	0.00	0.00	0.00	0.00	77.40	103.70	147.90	703.90
1947	150.30	166.30	104.90	81.50	0.00	7.40	6.60	2.80	9.60	64.00	118.10	120.70	832.20
1948	171.50	61.40	143.30	71.40	20.10	0.00	1.80	0.00	39.90	60.40	117.40	38.90	726.10
1949	239.60	69.80	75.90	32.80	1.80	8.10	1.00	0.00	29.70	160.10	237.70	169.70	1026.20
1950	46.90	43.80	46.50	52.90	65.80	2.50	7.90	13.80	3.20	73.20	38.50	118.30	513.30
1951	32.00	139.00	73.50	48.50	47.00	4.80	14.30	16.30	19.60	146.10	16.90	74.70	632.70
1952	104.40	40.80	13.30	58.10	3.10	4.10	75.20	0.30	0.60	55.60	133.70	79.40	568.60
1953	113.04	218.70	75.70	56.70	3.80	0.40	0.00	0.10	0.20	35.50	101.30	5.50	610.94
1954	68.40	71.00	41.20	34.00	7.70	6.00	0.00	0.00	26.00	90.50	143.00	110.50	598.30
1955	97.00	110.50	57.50	78.50	29.00	1.00	1.00	1.50	0.00	126.00	124.50	142.50	769.00
1956	26.00	182.30	79.00	0.00	67.00	0.00	0.00	0.00	15.50	102.50	55.50	121.50	649.30
1957	125.00	60.50	145.00	10.00	0.00	28.50	59.00	10.52	156.50	69.50	75.60	88.00	828.12
1958	162.00	34.00	73.50	67.00	8.00	0.00	0.00	0.00	72.00	38.50	83.70	122.70	661.40
1959	157.00	44.50	7.00	81.00	65.00	2.50	3.50	0.00	12.60	74.00	127.20	89.50	663.80

1960	97.50	105.50	84.50	58.60	0.00	0.00	0.00	29.80	17.00	55.70	109.60	189.50	747.70
1961	78.10	20.00	25.50	124.50	20.50	14.00	0.00	0.00	12.50	67.90	79.90	69.80	512.70
1962	36.50	97.50	40.50	32.50	0.00	0.00	0.00	10.00	25.34	57.40	172.00	24.80	496.54
1963	236.00	69.90	43.50	63.50	23.00	58.00	39.50	0.00	0.00	30.00	93.50	27.90	684.80
1964	135.00	38.50	80.10	78.50	2.80	9.00	0.00	22.20	9.00	198.00	89.00	209.60	871.70
1965	73.00	60.50	21.50	45.00	0.00	9.50	16.00	0.00	0.00	30.00	73.50	30.50	359.50
1966	78.00	68.50	0.00	0.00	11.50	8.50	0.00	5.00	24.20	71.50	85.50	93.30	446.00
1967	184.20	221.60	120.20	93.70	8.50	13.00	0.00	12.50	19.50	75.50	71.70	121.50	941.90
1968	46.50	29.00	92.00	24.00	30.00	0.00	0.00	16.90	25.34	46.00	48.80	87.60	446.14
1969	25.00	125.00	47.90	29.50	53.20	0.00	0.00	2.50	32.50	77.80	79.60	108.50	581.50
1970	91.90	48.30	87.40	23.20	21.40	15.50	39.50	1.60	20.50	82.50	163.50	61.20	656.50
1971	69.50	59.00	68.50	125.00	9.00	10.00	0.00	0.00	24.50	46.50	126.80	127.00	665.80
1972	198.50	15.00	101.00	4.00	6.00	9.40	0.00	14.50	1.50	34.00	80.50	50.50	514.90
1973	72.00	112.00	58.50	30.80	1.50	0.00	0.00	48.00	70.00	37.50	127.00	173.00	730.30
1974	132.50	78.00	32.60	54.00	18.50	14.00	0.00	2.00	26.50	56.00	116.50	132.00	662.60
1975	184.00	124.00	29.50	129.00	3.00	3.00	0.00	0.00	71.00	31.50	180.50	105.00	860.50
1976	173.50	71.00	138.00	24.50	52.50	0.00	0.00	0.00	34.00	125.50	60.00	82.00	761.00
1977	172.70	25.50	63.00	39.70	0.00	0.00	0.00	0.00	62.50	60.20	59.50	316.50	799.60
1978	165.00	84.83	33.30	41.00	0.00	3.50	0.00	9.50	31.50	98.50	53.50	35.50	556.13
1979	123.00	54.50	66.50	14.00	11.30	1.60	20.00	65.00	52.00	90.50	105.70	28.00	632.10
1980	177.50	181.50	11.00	33.40	4.50	0.00	0.00	12.50	29.00	18.20	155.50	79.50	702.60
1981	116.00	70.70	29.00	29.50	0.00	14.00	0.00	39.50	58.50	13.50	66.50	68.00	505.20
1982	116.00	30.00	28.00	16.00	0.00	0.00	17.00	0.00	12.50	119.50	40.00	48.00	427.00
1983	77.00	11.50	69.50	13.00	8.00	27.00	7.00	25.50	0.00	96.00	137.50	103.50	575.50
1984	81.30	0.00	98.00	9.00	0.00	4.00	9.50	35.60	12.00	108.50	106.50	97.50	561.90
1985	139.50	31.00	44.50	0.00	19.00	0.00	0.70	3.50	5.00	88.00	51.00	82.00	464.20
1986	78.00	134.00	64.50	28.00	0.00	13.00	0.00	31.50	9.00	88.00	56.30	101.00	603.30
1987	49.50	106.00	40.00	23.50	6.00	0.00	0.00	14.50	139.50	161.00	96.00	175.00	811.00
1988	157.00	44.00	100.00	42.00	0.00	12.00	5.00	0.00	37.00	150.00	121.00	11.00	679.00
1989	168.50	183.00	50.00	23.00	26.00	25.00	0.00	8.00	7.00	21.00	125.00	124.50	761.00
1990	92.00	54.00	116.00	89.00	0.00	1.00	0.00	0.00	12.00	11.00	25.00	46.00	446.00
1991	110.00	102.00	27.00	0.00	0.00	7.50	0.00	10.52	0.00	81.00	37.00	132.00	507.02
1992	80.00	84.00	4.00	4.00	0.00	0.00	0.00	24.00	0.00	74.00	180.00	53.00	503.00
1993	98.00	30.00	34.00	30.00	0.00	0.00	0.00	5.00	6.00	215.50	77.00	99.50	595.00
1994	99.50	52.00	34.00	10.00	0.00	0.00	0.00	0.00	5.00	71.50	49.00	64.50	385.50
1995	112.00	138.00	81.00	33.50	21.25	6.70	0.00	15.00	3.00	59.50	81.00	317.00	867.96
1996	95.00	113.00	43.00	43.00	28.00	0.00	9.50	0.00	0.00	119.00	47.50	74.00	572.00
1997	52.00	0.00	117.00	12.00	90.00	0.00	0.00	6.00	0.00	22.00	102.00	36.00	437.00
1998	67.00	12.00	25.00	0.00	0.00	0.00	0.00	0.00	30.00	24.00	73.00	36.00	267.00
1999	0.80	0.00	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.80
2000	60.00	110.50	104.00	28.00	52.00	5.00	0.00	0.00	45.00	115.00	73.00	115.00	707.50
2001	14.00	61.00	48.00	12.00	40.00	6.00	0.00	8.00	58.00	87.50	53.50	143.00	531.00
2002	133.50	67.00	27.00	11.00	21.25	6.70	9.03	10.52	25.34	79.81	100.22	95.42	586.80
2003	113.04	84.83	1.50	0.00	0.00	0.00	0.00	0.00	0.00	50.00	84.00	37.00	370.37
2004	0.00	82.00	79.00	0.00	0.00	0.00	0.00	0.00	0.00	78.50	69.00	131.00	439.50
2005	227.00	86.00	32.00	31.00	31.00	0.00	0.00	0.00	25.00	34.00	33.60	56.00	555.60
2006	233.00	43.00	91.70	0.00	0.00	0.00	0.00	29.00	6.00	10.00	3.00	20.00	435.70

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 4: Monthly and annual river flow (cubic meters per second) data for the Vaal River at Schoolplaats station.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1940	84.53	172.80	97.73	55.71	32.50	18.23	14.39	14.76	4.03	21.34	91.54	108.20	59.65
1941	286.18	458.34	63.86	170.41	41.55	6.24	12.25	21.09	22.51	40.31	11.99	47.27	98.50
1942	107.15	69.37	113.10	24.38	9.83	22.76	23.12	34.29	5.89	16.06	20.72	305.33	62.67
1943	201.75	40.00	96.99	76.84	420.32	80.89	323.34	41.90	200.60	132.15	796.30	586.62	249.81
1944	408.94	1654.78	233.37	59.51	19.29	68.41	39.55	32.29	43.72	94.75	203.33	69.38	243.94
1945	74.82	42.58	221.20	34.90	12.74	13.21	10.18	26.36	40.09	26.74	29.64	11.27	45.31
1946	57.82	77.95	127.60	109.17	30.84	35.45	27.34	38.83	29.18	47.40	4.50	35.22	51.77
1947	35.41	56.74	34.59	106.03	54.85	18.29	11.94	7.62	15.14	12.85	13.35	63.83	35.89
1948	46.78	52.83	204.51	182.83	43.68	18.14	17.95	11.80	5.90	27.12	16.74	7.91	53.02
1949	38.35	60.65	34.98	12.11	4.99	2.25	5.07	2.61	3.05	5.71	54.51	157.47	31.81
1950	159.45	63.14	281.48	165.64	172.93	26.84	16.87	7.54	8.24	5.75	7.72	18.20	77.82
1951	62.15	7.88	12.06	13.65	11.14	4.33	6.96	3.40	4.34	34.47	12.06	8.44	15.07
1952	25.52	54.46	57.17	16.18	6.40	9.57	9.15	3.30	4.99	11.83	115.69	150.83	38.76
1953	12.37	154.32	278.02	130.29	16.05	14.75	13.63	12.84	40.07	25.57	25.07	24.75	62.31
1954	15.71	61.74	55.63	19.79	14.26	11.26	7.75	14.79	19.89	5.89	19.15	57.79	25.30
1955	44.83	752.22	383.53	53.31	48.66	15.84	13.80	13.33	24.03	32.74	29.47	68.14	123.32
1956	31.27	56.00	87.67	85.82	21.45	15.95	10.72	9.98	28.94	24.62	71.99	228.16	56.05
1957	370.07	124.53	78.69	34.34	10.12	23.88	62.91	13.12	281.53	1247.24	266.19	257.13	230.81
1958	224.36	156.56	23.14	83.17	86.73	10.89	9.23	6.52	33.08	16.12	51.65	51.73	62.77
1959	38.87	44.94	14.28	16.61	35.28	17.69	11.85	9.51	6.83	47.14	36.17	39.97	26.60
1960	32.96	48.43	73.76	42.69	36.40	14.73	14.51	18.93	6.45	14.11	18.72	125.15	37.24
1961	71.31	37.49	29.36	93.39	32.31	28.33	15.18	12.84	13.46	30.18	86.25	79.38	44.12
1962	17.35	36.60	47.28	38.23	50.72	18.15	12.84	12.26	19.67	38.21	86.78	38.69	34.73
1963	53.08	29.83	13.06	53.12	17.30	12.83	10.76	8.58	15.13	32.10	82.31	29.72	29.82
1964	22.40	34.44	18.22	24.16	8.98	11.24	8.97	5.53	9.18	116.88	116.91	103.03	40.00
1965	263.87	82.69	7.47	17.13	11.40	14.70	15.23	8.76	15.98	11.40	24.67	11.02	40.36
1966	49.89	242.17	5.83	14.26	6.85	5.09	6.42	5.59	6.11	8.88	5.91	22.57	31.63
1967	93.28	903.54	152.28	276.17	54.38	41.10	8.08	10.94	12.84	16.17	34.89	12.19	134.66
1968	11.88	25.51	24.58	6.98	7.24	6.61	4.98	7.89	9.76	21.78	10.11	10.36	12.31
1969	10.22	9.53	5.61	3.64	3.59	3.03	4.06	5.99	7.68	7.92	7.94	12.63	6.82
1970	11.63	7.33	9.90	8.40	4.95	4.77	3.52	7.48	8.09	8.84	10.53	9.29	7.89
1971	6.43	4.84	8.43	6.00	4.63	4.00	4.46	8.56	9.61	10.13	10.01	9.96	7.26
1972	7.28	8.79	7.01	7.23	9.45	9.45	5.68	7.75	10.11	12.53	12.70	10.81	9.07
1973	11.51	14.78	6.76	5.11	5.44	4.36	3.87	5.33	11.04	8.03	13.92	10.35	8.38
1974	6.31	142.56	18.20	100.16	16.64	2.96	3.02	2.95	4.01	10.40	11.66	192.54	42.62
1975	316.57	1407.56	76.18	76.56	29.36	10.66	6.74	3.72	8.67	11.76	12.45	290.29	187.55
1976	540.19	642.96	474.73	200.81	184.50	22.77	7.08	8.80	14.09	118.78	133.78	65.24	201.15
1977	61.15	573.54	67.39	8.60	6.03	4.81	4.81	6.97	8.53	9.04	9.37	9.41	64.14
1978	330.28	322.05	168.88	228.97	12.04	4.53	4.18	5.91	5.38	9.61	10.17	10.88	92.74
1979	14.23	10.16	7.81	4.31	2.70	1.69	2.25	2.24	5.09	6.79	7.42	10.86	6.29
1980	13.93	13.06	4.36	5.23	4.33	2.80	5.22	3.76	7.27	8.61	9.15	6.97	7.06
1981	9.78	4.24	16.57	15.05	5.40	3.71	4.84	3.98	4.32	8.29	8.61	6.33	7.59

1982	9.82	9.76	9.26	4.82	5.89	4.83	4.00	4.86	11.86	11.35	12.44	8.36	8.10
1983	15.07	13.53	13.32	3.93	3.56	0.62	0.62	2.49	5.62	2.94	2.52	2.76	5.58
1984	6.68	7.67	4.20	2.59	2.61	4.36	4.41	5.65	8.98	5.09	6.09	6.42	5.39
1985	5.68	4.99	1.48	4.28	4.35	1.85	2.83	3.76	4.51	6.70	4.68	5.06	4.18
1986	7.43	7.83	6.64	5.59	3.23	2.90	2.78	2.81	3.36	6.90	4.47	6.67	5.05
1987	10.99	8.15	7.41	5.59	3.96	4.17	4.23	4.27	5.14	5.69	8.38	10.19	6.51
1988	12.57	35.13	750.96	86.10	14.18	5.58	7.36	8.51	8.81	40.30	113.18	49.22	94.33
1989	243.51	731.14	173.14	29.10	8.25	2.88	5.38	6.95	9.29	12.77	13.05	10.21	103.81
1990	11.58	10.77	6.30	6.42	3.97	4.09	4.08	4.18	5.85	8.00	8.14	8.03	6.78
1991	7.77	4.95	15.67	4.93	5.76	4.18	3.87	3.88	4.15	5.08	5.23	5.39	5.90
1992	6.21	8.46	8.46	6.88	5.60	3.64	3.46	3.79	5.15	13.00	11.53	10.97	7.26
1993	12.33	13.38	7.36	7.28	5.59	5.84	4.64	4.92	6.22	8.06	8.21	9.24	7.76
1994	8.78	7.72	7.41	7.16	6.13	5.59	5.29	4.82	6.03	11.22	11.34	8.75	7.52
1995	8.20	8.44	8.74	5.22	4.95	3.96	3.38	4.51	5.82	7.42	7.58	5.57	6.15
1996	223.83	1279.31	815.74	154.57	13.57	8.32	7.72	7.76	9.11	10.98	148.11	127.21	233.85
1997	161.60	29.56	125.16	265.92	240.49	470.32	65.73	15.02	134.73	19.97	10.89	163.95	141.95
1998	327.85	76.19	116.34	46.25	9.70	6.01	5.69	8.73	6.54	7.76	8.30	106.26	60.47
1999	127.77	8.48	11.63	7.31	6.62	4.05	6.58	5.39	5.54	7.35	8.10	10.19	17.42
2000	160.96	626.18	239.77	293.66	231.87	6.31	4.83	5.26	6.99	10.18	169.57	357.95	176.13
2001	38.40	8.80	9.96	7.89	5.84	5.43	5.59	5.79	7.02	7.69	133.28	293.20	44.07
2002	95.63	191.89	61.37	7.89	5.31	4.85	4.89	5.44	8.46	10.02	9.64	9.33	34.56
2003	9.50	11.99	8.40	6.20	5.54	6.00	5.84	5.30	7.11	8.77	9.39	8.76	7.73
2004	7.65	7.42	8.05	5.33	5.43	5.33	5.12	5.05	5.71	7.46	7.50	7.27	6.44
2005	7.64	7.49	6.86	6.13	5.76	5.16	4.73	4.54	5.85	7.93	5.52	6.20	6.15
2006	8.56	23.64	561.26	161.74	6.71	4.47	4.47	7.24	14.29	7.98	7.52	7.32	67.93
2007	8.05	9.12	8.32	6.76	13.91	4.68	4.81	5.03	6.31	7.48	7.96	5.50	7.33
2008	6.75	7.13	6.96	7.68	5.78	5.50	6.17	5.29	6.61	8.08	10.65	68.02	12.05

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 5: Monthly and annual rainfall (millimeters) data for the Lille rainfall station in the Orange River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1932	82.60	72.20	40.50	7.60	3.60	3.30	3.80	0.00	46.60	20.00	32.00	68.20	380.40
1933	77.40	96.47	50.00	31.30	4.60	7.40	1.00	2.80	3.10	5.00	142.00	203.50	624.57
1934	166.80	73.40	95.90	32.00	43.20	1.50	11.00	10.70	0.80	95.20	81.00	93.15	704.65
1935	37.10	68.90	89.74	55.30	63.70	2.50	7.20	50.10	8.40	48.80	46.10	76.00	553.84
1936	115.60	115.10	84.10	23.50	42.30	14.50	8.90	0.50	14.50	89.60	156.70	41.00	706.30
1937	182.80	192.60	79.50	4.10	26.70	5.10		2.00	0.80	60.94	7.90	91.00	653.44
1938	81.70	126.20	89.74	97.60	26.70	46.00	11.50	13.80	8.10	60.94	148.60	105.20	816.08
1939	125.70	144.40	46.10	35.50	35.10	5.40	38.10	20.15	16.60	119.10	76.60	39.30	702.05
1940	27.30	111.90	109.10	74.20	57.00	1.40	0.00	15.70	117.40	60.94	62.50	176.40	813.84
1941	56.70	172.70	47.80	42.40	3.80	3.30	26.50	15.80	26.28	36.70	7.60	26.00	465.58
1942	107.40	125.80	110.90	41.90	7.60	2.30	0.00	35.10	42.00	59.90	111.00	180.20	824.10
1943	97.60	75.20	73.10	138.70	124.40	0.00	2.00	47.00	8.10	72.20	135.50	161.90	935.70
1944	54.30	59.50	108.40	13.00	33.80	37.60	0.30	0.00	62.50	28.70	59.20	26.40	483.70
1945	49.30	37.40	168.50	10.60	37.40	0.30	1.30	0.00	0.00	14.70	37.80	78.30	435.60
1946	135.80	73.30	98.80	36.30	56.60	5.10	2.80	0.00	24.40	81.20	43.20	70.00	627.50
1947	50.30	95.60	16.10	62.30	36.80	8.40	7.30	4.80	84.90	92.10	75.20	140.10	673.90
1948	82.30	87.70	160.20	42.90	34.20	0.30	1.30	0.00	0.00	99.30	30.40	34.30	572.90
1949	48.10	40.10	115.30	7.90	44.20	10.10	2.50	0.00	8.60	60.94	137.10	92.20	567.04

1950	75.40	51.10	198.30	144.00	52.90	17.80	36.30	67.80	40.20	38.30	54.70	98.60	875.40
1951	75.50	89.90	87.60	78.70	14.10	26.70	5.00	8.40	46.40	108.90	6.10	8.10	555.40
1952	52.30	142.00	41.40	64.20	2.50	29.70	56.20	19.50	62.50	30.00	45.90	76.30	622.50
1953	43.40	96.47	32.80	59.66	27.65	0.00	0.00	8.10	31.00	60.94	71.91	93.15	525.09
1954	69.60	96.47	151.40	32.00	27.65	16.50	11.05	0.00	37.10	8.40	30.00	93.15	573.32
1955	97.60	117.90	72.40	69.60	27.65	12.20	11.05	5.60	0.30	99.60	88.60	79.20	681.70
1956	97.60	96.47	135.10	59.66	22.90	6.10	5.10	0.00	26.28	60.94	71.91	138.90	720.96
1957	75.60	96.47	113.30	29.20	27.65	15.20	14.20	20.15	26.28	125.00	82.80	93.15	691.35
1958	97.60	51.30	45.70	59.66	60.50	1.00	0.00	0.00	26.28	47.80	71.91	93.15	554.90
1959	104.60		63.80	98.60	36.80	0.00	59.50	0.00	0.00	23.50	81.50	186.50	654.80
1960	76.00	94.50	124.50	65.00	27.50	20.00	16.00	74.00	28.00	65.00	124.00	113.00	827.50
1961	74.50	23.00	150.50	69.00	58.50	54.50	11.50	12.60	0.00	0.00	114.00	148.00	716.10
1962	76.00	138.50	87.50	54.00	2.50	2.00	0.00	0.20	0.00	8.00	151.50	57.50	577.70
1963	211.50	21.50	141.00	130.50	21.60	31.00	37.50	10.00	1.00	88.00	149.00	79.00	921.60
1964	32.00	58.50	103.00	53.20	21.00	29.00	0.00	6.00	5.60	128.00	12.10	36.50	484.90
1965	39.50	50.50	39.50	105.00	0.10	28.50	19.60	11.00	10.50	15.50	69.10	21.60	410.40
1966	239.50	109.50	25.50	23.00	0.00	18.00	0.00	0.50	0.00	39.00	61.00	60.90	576.90
1967	203.00	39.00	112.50	129.00	71.10	12.50	7.50	24.00	6.00	81.00	43.50	13.50	742.60
1968	41.50	11.50	113.00	90.50	58.00	0.70	13.00	10.00	9.60	15.10	30.50	99.50	492.90
1969	23.00	135.50	87.50	62.50	13.00	0.40	0.00	19.50	14.00	56.00	20.00	29.50	460.90
1970	61.10	20.00	19.00	12.00	10.50	11.50	8.50	32.00	59.00	53.50	70.50	113.00	470.60
1971	106.50	78.50	99.50	121.50	63.50	0.00	14.00	6.60	1.50	34.50	35.50	98.50	660.10
1972	166.00	204.00	136.00	37.00	47.50	16.50	0.00	0.00	0.50	67.30	38.00	13.50	726.30
1973	5.00	82.50	49.50	65.20	17.50	1.50	3.60	54.00	38.20	34.00	71.50	96.00	518.50
1974	161.50	279.00	84.70	37.00	36.00	7.50	0.00	39.00	0.50	46.50	109.00	85.20	885.90
1975	67.50	66.50	105.00	37.50	11.00	44.50	26.50	8.00	67.50	16.50	102.20	238.00	790.70
1976	312.00	179.50	158.50	74.50	24.00	14.50	3.00	1.00	112.50	161.00	18.00	73.50	1132.00
1977	106.00	45.50	94.00	30.00	28.00	5.00	0.00	0.00	87.80	175.50	58.50	164.50	794.80
1978	91.50	68.90	139.40	167.00	0.00	12.00	8.00	17.30	54.30	36.50	35.50	171.30	801.70
1979	46.50	151.50	34.00	48.00	8.00	2.50	57.50	53.80	18.60	112.00	44.00	61.80	638.20
1980	58.70	170.50	25.50	39.00	0.00	0.00	4.40	6.00	56.00	0.00	79.00	73.00	512.10
1981	201.70	101.50	69.50	47.00	54.00	28.50	0.00	98.50	0.00	18.00	77.00	57.00	752.70
1982	61.50	36.00	72.50	166.00	4.50	40.50	30.00	16.50	20.50	97.00	99.50	81.00	725.50
1983	81.00	21.50	75.00	71.50	38.50	38.00	104.00	0.00	27.00	34.50	109.50	114.50	715.00
1984	75.50	3.10	85.10	22.00	47.60	11.00	0.00	64.50	0.00	92.50	71.50	16.00	488.80
1985	101.90	65.20	58.60	33.50	3.50	75.50	0.00	0.00	4.00	132.00	129.50	199.50	803.20
1986	162.50	79.50	48.30	8.00	0.00	15.50	2.50	32.50	30.50	155.80	85.50	23.00	643.60
1987	22.50	102.00	89.50	89.00	0.00	7.00	23.00	88.10	102.50	54.00	114.50	126.50	818.60
1988	36.50	352.50	180.00	125.50	8.00	16.00	12.50	11.50	75.50	135.00	32.50	195.50	1181.00
1989	80.00	189.20	76.50	101.50	11.50	22.00	10.50	0.00	0.00	46.50	79.50	63.50	680.70
1990	91.00	2.80	95.00	95.50	7.00	45.50	16.00	26.50	0.00	0.00	17.00	89.00	485.30
1991	302.00	115.00	133.00	7.00	0.00	33.00	9.00	0.00	26.00	193.00	101.50	89.00	1008.50
1992	6.50	47.50	32.00	0.00	0.00	0.00	0.00	26.00	7.00	26.00	49.00	97.00	291.00
1993	53.00	284.50	83.00	85.50	12.00	4.00	0.00	39.00	2.00	79.00	117.50	102.50	862.00
1994	132.50	174.30	51.50	56.50	0.00	3.50	28.00	7.00	0.00	7.50	18.00	21.50	500.30
1995	79.00	126.00	136.00	6.00	41.00	3.00	0.00	0.00	51.00	46.00	54.00	135.00	677.00
1996	144.00	101.00	40.00	106.00	12.00	4.00	22.50	11.00	22.00	35.00	212.00	77.50	787.00
1997	126.00	35.00	198.50	41.00	54.00	26.00	15.00	33.00	0.00	47.50	36.00	32.00	644.00
1998	124.00	193.00	143.50	30.00	11.00	0.00	8.00	0.00	21.00	57.00	100.00	114.50	802.00
1999	84.00	46.00	71.00	52.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	235.00	488.00
2000	90.00	83.00	91.00	69.00	37.00	12.00	0.00	0.00	75.00	58.00	74.00	109.00	698.00
2001	63.00	109.00	96.00	179.00	32.00	40.00	2.00	40.00	27.00	113.00	222.00	182.00	1105.00
2002	158.00	57.00	37.00	48.00	122.00	33.00	0.00	159.00	40.00	21.00	14.00	139.00	828.00
2003	113.00	63.00	97.00	13.00	24.00	0.00	0.00	16.00	31.00	60.94	35.00	68.00	520.94
2004	94.00	67.00	127.00	52.50	0.00	12.00	0.00	32.00	57.00	60.00	0.00	56.50	558.00
2005	119.00	64.00	99.50	28.00	44.00	0.00	0.00	26.00	2.00	37.00	92.00	10.00	521.50
2006	219.50	164.00	118.00	117.00	45.00	0.00	2.00	91.00	4.00	122.00	101.00	86.00	1069.50
2007	29.00	14.00	51.00	41.00	0.00	13.00	0.00	0.00	58.00	21.70	63.30	141.80	432.80
2008	97.50	0.00	0.00	0.00	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117.00

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 6: Monthly and annual rainfall (millimeters) data for the Middelplaats rainfall station in the Orange River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1911	147.60	64.30	113.70	66.10	27.90	9.80	47.30	11.40	14.70	82.20	93.00	12.00	690.00
1912	64.50	88.86	52.30	69.30	16.20	42.40	22.10	0.00	2.00	12.40	0.80	95.30	466.16
1913	69.80	136.40	110.00	6.60	14.00	9.70	24.10	10.70	56.40	24.10	40.70	0.00	502.50
1914	31.50	40.90	58.40	38.20	29.30	10.20	1.50	32.00	16.00	88.10	94.30	73.60	514.00
1915	129.20	132.00	27.50	35.10	46.80	4.40	9.90	0.00	12.50	71.30	71.20	80.60	620.50
1916	49.70	78.90	102.10	38.80	35.60	0.00	13.20	0.00	10.40	76.20	15.00	64.50	484.40
1917	58.20	88.40	86.40	35.10	9.90	9.50	13.00	44.50	21.40	8.40	20.30	86.40	481.50
1918	114.80	92.90	165.40	6.10	34.40	2.50	17.70	32.00	64.70	65.60	94.50	43.40	734.00
1919	52.90	47.80	86.20	45.90	3.30	2.00	11.70	9.70	5.10	7.40	107.90	22.90	402.80
1920	96.30	186.10	155.50	8.70	25.60	5.10	0.00	13.00	27.70	20.80	26.90	21.40	587.10
1921	84.50	96.30	128.60	72.80	15.30	2.00	0.00	0.00	6.10	56.50	77.20	141.50	680.80
1922	56.90	28.40	13.30	1.00	6.60	38.90	21.10	48.10	8.20	26.70	127.00	29.00	405.20
1923	222.50	147.40	48.90	50.60	38.90	38.00	25.10	2.30	5.10	12.80	84.90	39.60	716.10
1924	139.40	38.20	220.00	37.80	1.50	8.90	2.80	4.10	44.10	39.00	63.30	172.40	771.50
1925	79.30	154.10	304.20	158.20	73.60	6.10	2.50	11.50	8.60	2.00	85.90	53.90	939.90
1926	11.20	80.50	168.70	44.90	13.20	5.60	1.80	0.00	9.20	19.00	58.90	59.90	472.90
1927	24.60	47.00	160.10	11.90	0.00	0.00	11.00	14.20	0.00	68.90	33.80	91.00	462.50
1928	79.90	66.00	98.50	27.10	0.00	143.90	0.00	7.90	25.10	50.30	121.70	103.90	724.30
1929	109.80	44.50	68.90	5.60	30.70	43.90	26.40	23.90	149.80	22.10	45.50	91.50	662.60
1930	86.11	34.50	74.90	56.60	25.10	3.30	2.30	36.10	0.00	36.60	15.70	23.40	394.61
1931	48.80	63.10	89.46	52.73	1.00	2.30	64.00	0.00	0.00	47.35	108.80	83.40	560.93
1932	59.70	114.00	63.00	0.00	6.40	2.50	9.70	0.00	65.50	14.50	44.20	30.50	410.00
1933	45.40	17.90	59.90	38.30	0.80	6.90	0.50	3.50	0.00	0.00	207.00	147.70	527.90
1934	184.80	54.60	113.80	51.80	36.30	1.00	9.80	10.70	0.00	110.00	75.40	69.30	717.50
1935	43.00	58.00	157.80	26.00	61.50	1.00	0.50	55.10	9.40	22.80	82.50	47.00	564.60
1936	67.30	70.20	75.00	19.20	73.70	7.10	11.50	0.00	14.20	60.20	115.40	76.70	590.50
1937	106.70	88.86	65.30	9.40	35.80	0.00	14.20	1.00	0.00	28.60	9.20	89.10	448.16
1938	89.30	152.80	49.00	67.90	20.60	38.10	14.30	13.00	5.80	74.10	77.70	80.30	682.90
1939	152.20	190.10	43.40	29.70	27.20	3.90	36.20	47.90	5.60	71.60	69.58	13.70	691.08
1940	33.00	95.90	135.30	71.20	4.10	41.60	11.20	0.00	84.20	7.10	86.30	142.00	711.90
1941	108.20	94.70	65.30	53.90	7.90	0.00	25.40	12.40	39.30	51.30	16.00	3.80	478.20
1942	106.20	82.00	122.70	71.40	9.60	5.10	0.00	59.20	13.30	83.60	62.90	108.80	724.80
1943	50.80	34.30	51.40	178.40	123.70	1.00	2.30	59.90	6.10	38.10	171.50	158.30	875.80
1944	23.20	67.70	73.10	12.20	45.30	24.40	0.00	0.00	116.90	67.70	9.60	14.40	454.50
1945	45.90	55.50	109.00	72.70	33.80	3.00	2.00	0.00	0.00	18.60	62.60	53.90	457.00
1946	127.10	89.60	64.60	64.80	76.30	5.30	4.00	0.00	0.00	120.10	20.60	36.00	608.40
1947	46.90	86.40	23.90	70.60	41.10	4.60	7.40	6.10	90.50	62.20	44.80	136.80	621.30
1948	100.70	92.80	203.50	74.00	10.10	1.80	1.80	0.50	0.00	44.90	10.70	30.00	570.80
1949	45.30	43.90	82.70	34.80	50.10	13.00	5.60	5.10	8.90	13.50	66.90	93.50	463.30
1950	50.60	88.40	139.10	113.70	90.20	21.80	17.70	44.40	35.30	63.50	46.50	103.20	814.40
1951	97.60	51.80	104.20	43.00	15.80	18.90	0.00	3.00	36.30	83.10	15.10	5.30	474.10
1952	38.20	69.10	19.10	58.40	23.60	24.40	67.30	12.70	55.30	39.60	36.70	77.20	521.60
1953	36.30	153.80	27.90	91.70	18.00	0.00	0.10	11.70	11.90	92.20	100.50	99.60	643.70
1954	39.00	106.00	249.80	40.20	30.90	4.00	6.50	0.00	5.00	2.40	78.50	63.20	625.50
1955	259.70	145.80	92.70	83.50	28.10	24.00	14.50	2.30	0.00	52.50	65.70	106.20	875.00
1956	29.10	61.50	159.60	80.10	27.60	12.20	4.50	0.00	30.20	74.70	87.50	131.30	698.30
1957	82.70	86.00	161.80	11.00	14.90	17.00	6.00	51.90	73.70	92.50	103.00	61.70	762.20
1958	116.10	47.70	32.40	72.60	88.00	0.00	0.00	0.00	16.00	25.80	69.00	118.50	586.10
1959	73.50	77.80	64.50	84.30	33.10	0.00	46.70	0.70	1.80	19.50	33.50	136.40	571.80
1960	82.20	85.20	101.00	34.50	28.90	14.00	18.10	47.10	17.40	74.30	97.90	126.40	727.00
1961	72.50	35.00	107.70	60.10	63.90	45.90	33.70	18.90	2.50	0.00	109.20	85.20	634.60
1962	45.10	226.80	34.60	54.20	7.50	7.10	0.00	0.40	4.40	10.40	151.30	69.20	611.00
1963	203.00	64.60	115.40	49.00	10.20	11.90	27.00	10.70	4.20	55.10	175.30	83.60	810.00
1964	33.20	33.60	80.60	40.00	16.00	26.40	0.00	2.60	0.10	103.90	15.10	62.50	414.00
1965	65.50	23.00	26.30	75.90	11.00	28.40	17.80	2.60	16.20	34.60	66.90	11.30	379.50
1966	169.80	96.90	20.60	18.00	1.10	22.00	0.20	1.20	5.60	20.20	75.40	26.70	457.70
1967	179.00	100.10	103.50	142.50	73.50	15.00	6.70	12.50	4.50	80.70	70.70	28.50	817.20
1968	21.00	36.10	94.40	54.00	33.00	0.50	6.20	0.50	13.70	44.00	33.60	92.60	429.60
1969	40.10	141.30	177.20	42.00	22.20	0.40	6.00	12.00	14.10	81.80	14.50	13.60	565.20
1970	23.60	32.10	13.50	6.50	4.70	35.00	15.50	49.00	62.80	28.10	17.50	119.00	407.30
1971	83.70	105.40	78.90	138.40	36.80	4.50	37.50	8.30	0.00	53.40	41.60	79.50	668.00
1972	186.70	180.00	173.20	54.50	2.00	12.00	0.00	4.50	0.00	83.00	46.50	7.50	749.90
1973	37.00	58.00	25.00	62.20	27.80	2.50	0.00	31.40	33.40	36.30	59.30	104.70	477.60
1974	259.70	291.90	134.70	68.80	66.00	8.50	0.00	70.00	0.00	22.50	153.20	69.50	1144.80
1975	70.50	86.00	61.60	91.20	3.00	40.00	22.50	5.00	88.00	7.00	105.30	114.00	694.10

1976	133.80	209.00	185.00	133.00	44.50	5.00	0.00	0.00	47.50	127.00	101.50	84.50	1070.80
1977	134.00	48.00	151.00	52.00	33.20	16.00	0.00	0.00	62.00	83.50	25.00	108.00	712.70
1978	113.50	99.50	139.60	137.00	0.00	9.00	0.00	20.50	64.00	20.50	22.00	135.60	761.20
1979	33.60	111.50	17.00	0.00	55.90	35.00	38.50	50.20	6.00	87.60	37.00	46.00	518.30
1980	69.00	121.50	38.20	11.00	0.00	0.00	2.50	16.00	48.50	0.00	76.70	47.70	431.10
1981	127.60	103.00	39.50	18.00	44.50	34.00	0.00	110.80	0.00	54.00	57.50	97.50	686.40
1982	33.00	43.50	95.50	99.50	0.00	54.00	58.50	0.00	28.50	60.00	113.50	25.00	611.00
1983	34.00	28.50	61.50	60.50	41.00	27.50	77.50	0.00	34.00	46.50	70.00	65.50	546.50
1984	29.00	12.50	64.50	41.50	51.50	6.50	0.00	66.50	0.00	68.50	183.50	13.50	537.50
1985	103.50	142.00	77.00	12.00	0.00	46.00	0.00	0.00	0.00	104.80	86.50	141.50	713.30
1986	169.00	84.00	95.50	28.50	0.00	25.50	0.00	40.50	25.50	118.50	85.00	20.50	692.50
1987	13.50	120.50	71.00	52.40	0.00	12.50	18.00	24.00	181.00	30.00	92.00	22.00	636.90
1988	72.00	343.50	119.00	118.70	22.50	18.00	8.50	7.00	94.00	70.50	35.00	117.00	1025.70
1989	140.50	154.50	55.00	93.50	27.00	19.00	7.50	0.00	36.00	1.00	69.50	72.00	675.50
1990	53.00	43.00	127.00	97.50	7.00	32.00	13.00	14.00	16.00	5.00	29.50	60.00	497.00
1991	234.50	69.00	127.70	0.00	0.00	30.90	0.00	0.00	47.20	176.30	56.10	121.00	862.70
1992	30.50	55.70	34.20	24.00	0.00	4.00	2.00	29.00	0.00	54.50	57.50	5.50	296.90
1993	41.50	134.00	57.00	68.50	17.00	4.50	0.00	14.00	0.00	96.50	63.50	92.50	589.00
1994	136.40	142.70	46.30	9.80	0.00	0.20	13.90	0.00	0.00	0.00	35.00	9.50	393.80
1995	30.50	26.70	105.60	0.00	36.70	3.20	0.00	0.00	42.10	27.70	65.20	153.20	490.90
1996	93.60	56.90	22.00	36.30	8.70	0.00	16.90	12.20	10.40	4.50	191.00	109.90	562.40
1997	12.10	76.40	146.80	63.00	44.80	23.50	11.50	16.10	0.00	41.80	18.50	45.30	499.80
1998	69.50	65.10	101.00	39.30	18.40	0.00	3.70	4.30	24.50	62.50	67.80	53.60	509.70
1999	119.70	69.40	37.90	37.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	155.10	419.50
2000	0.00	41.80	104.50	42.00	19.60	16.20	0.00	0.00	70.00	23.90	101.50	63.60	483.10
2001	36.10	101.30	67.20	151.00	29.00	25.90	2.10	16.00	37.70	45.40	304.80	64.50	881.00
2002	127.80	59.70	19.60	48.10	63.00	21.70	0.00	144.80	28.10	6.50	34.00	58.70	612.00
2003	96.60	70.00	104.50	0.00	0.00	0.00	0.00	13.30	24.40	12.80	0.00	61.00	382.60
2004	121.30	48.00	0.00	58.00	0.00	18.10	18.40	0.00	41.50	23.10	22.80	35.50	386.70
2005	91.20	48.00	14.20	0.00	0.00	6.00	0.00	0.00	36.80	30.10	39.90	0.00	266.20
2006	219.50	169.80	87.60	112.10	40.40	0.00	0.00	30.40	12.60	42.70	73.10	19.60	807.80
2007	61.30	4.90	51.40	36.90	0.00	21.90	2.40	0.00	27.80	59.60	45.30	77.30	388.80
2008	69.20	75.00	11.80	0.00	37.10	0.00	0.00	0.00	26.03	47.35	69.58	71.13	407.20

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 7: Monthly and annual rainfall (millimeters) data for the Zastron rainfall station in the Orange River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1906	168.60	66.70	59.70	8.90	19.80	15.64	11.69	18.68	49.20	98.80	113.20	118.30	749.20
1907	181.00	107.70	59.40	101.90	68.90	6.60	3.30	0.00	23.20	38.30	114.30	118.90	823.50
1908	85.90	43.30	191.40	48.30	16.30	49.30	19.30	38.20	63.50	35.00	52.50	70.00	713.00
1909	74.50	346.90	73.60	111.50	94.00	0.00	2.00	5.10	37.50	33.10	101.10	94.00	973.30
1910	195.60	143.90	130.80	55.24	7.40	25.90	0.00	0.00	15.20	53.31	74.24	70.80	772.38
1911	104.00	58.80	86.60	119.40	55.20	19.10	62.00	16.50	18.00	103.80	39.10	52.10	734.60
1912	96.05	99.22	96.66	55.24	30.45	45.70	20.30	0.00	2.00	23.80	1.80	90.07	561.29
1913	107.20	107.90	55.10	32.30	0.00	11.90	11.69	7.10	56.80	53.31	74.24	90.07	607.60
1914	96.05	99.22	96.66	55.24	30.45	15.64	11.69	18.68	27.85	53.31	103.00	77.70	685.49
1915	66.90	126.50	17.00	37.90	51.50	8.90	25.30	0.00	13.00	53.31	85.90	90.07	576.28
1916	56.40	86.50	93.70	49.90	58.70	0.00	14.70	0.00	9.70	62.00	21.60	134.90	588.10
1917	77.60	130.60	83.10	33.30	3.60	0.00	14.40	40.40	17.30	2.00	20.70	125.30	548.30
1918	91.20	121.70	142.00	6.90	25.40	0.00	0.00	51.10	70.90	55.90	108.50	74.00	747.60
1919	57.50	43.30	104.70	43.70	2.50	3.00	14.30	15.60	14.80	19.60	93.80	46.40	459.20
1920	130.40	174.70	127.30	20.10	31.50	7.60	0.50	20.90	44.30	18.30	44.40	14.40	634.40
1921	31.30	80.10	120.00	72.50	49.30	15.64	0.00	0.00	27.85	48.00	105.10	210.50	760.29
1922	56.20	22.20	15.50	1.30	10.40	76.40	15.70	39.80	4.60	31.70	74.24	22.10	370.14
1923	216.20	191.10		50.30	31.50	48.00	24.40	6.60	2.50	15.90	83.90	14.80	685.20
1924	132.30	68.70	230.90	45.80	3.60	5.60	2.50	18.20	45.50	61.70	96.80	134.90	846.50
1925	155.90	162.10	278.60	133.10	105.70	5.30	3.60	15.00	12.10	19.80	92.60	66.60	1050.40
1926	17.50	111.40	147.00	25.40	14.10	7.30	2.50	1.30	27.85	10.40	39.70	88.40	492.85
1927	50.00	52.60	270.90	5.50	7.80	0.00	18.30	18.30	0.80	80.10	34.50	109.40	648.20

1928	122.40	65.80	106.10	35.10	0.00	2.10	0.00	13.70	19.80	40.90	101.80	90.20	597.90
1929	64.40	47.50	110.60	9.10	49.30	43.20	37.80	18.68	150.80	23.90	74.24	143.90	773.42
1930	103.20	74.60	53.10	47.00	35.60	3.50	0.50	20.80	0.00	61.90	32.00	50.60	482.80
1931	121.10	140.20	92.00	136.10	0.50	1.50	90.00	1.30	0.00	78.90	72.30	84.60	818.50
1932	46.50	96.90	60.60	0.00	6.60	5.30	4.10	0.00	61.00	11.40	27.20	50.50	370.10
1933	76.50	41.90	56.50	43.50	0.00	11.40	3.60	3.30	0.00	4.30	129.20	175.20	545.40
1934	204.80	72.00	103.10	33.40	28.80	0.00	17.50	7.10	0.00	105.50	125.60	90.90	788.70
1935	38.10	44.00	142.60	45.80	69.00	2.50	3.30	55.10	17.60	29.20	60.10	50.20	557.50
1936	93.80	115.30	134.20	30.80	88.60	20.10	14.20	0.00	14.80	86.70	137.60	86.00	822.10
1937	113.10	173.60	73.40	6.30	23.90	6.10	14.30	2.30	0.00	11.20	21.20	105.10	550.50
1938	87.80	183.40	64.90	71.80	27.00	78.10	15.00	14.40	6.40	103.90	90.00	94.40	837.10
1939	110.30	176.90	31.80	39.10	41.10	5.30	28.90	49.90	5.60	53.31	127.50	53.80	723.51
1940	47.50	104.50	166.70	65.50	54.10	1.30	17.50	0.00	101.70	21.80	74.20	186.30	841.10
1941	183.50	151.10	40.20	66.30	7.60	8.00	24.10	9.40	36.10	90.40	0.00	10.50	627.20
1942	114.00	55.60	146.80	59.40	10.20	0.00	0.00	45.20	32.30	105.80	72.90	198.10	840.30
1943	59.00	47.70	113.80	225.30	203.70	2.30	5.30	59.20	5.60	80.10	184.70	196.30	1183.00
1944	63.90	49.50	95.00	9.20	62.50	39.40	0.00	0.00	70.40	45.50	6.40	0.00	441.80
1945	40.10	35.10	127.50	11.00	38.90	0.00	4.60	0.00	0.00	10.70	52.30	51.60	371.80
1946	103.60	58.10	91.60	84.40	76.20	10.20	3.30	0.00	20.60	94.90	28.40	63.70	635.00
1947	21.30	137.90	45.60	65.20	46.00	9.40	7.60	0.00	88.80	89.70	52.00	152.60	716.10
1948	115.30	87.80	140.90	50.30	31.20	0.00	0.00	0.00	0.00	41.90	11.70	30.00	509.10
1949	58.10	22.30	87.30	21.30	61.80	16.80	11.90	0.00	16.30	30.30	85.70	107.00	518.80
1950	79.90	76.50	183.10	94.20	88.00	30.20	14.70	56.30	26.40	39.90	49.10	194.60	932.90
1951	84.30	86.00	124.20	81.10	14.00	21.80	6.10	8.60	45.50	89.10	11.20	0.00	571.90
1952	53.50	81.20	20.60	66.90	20.40	30.80	77.00	19.80	81.30	41.90	39.60	54.50	587.50
1953	29.70	171.20	31.30	97.80	11.90	0.00	0.00	17.00	21.30	73.10	120.80	71.90	646.00
1954	17.80	71.60	209.80	32.50	40.90	0.00	6.90	0.60	7.40	1.80	72.40	106.40	568.10
1955	96.05	145.30	96.66	55.24	30.70	19.30	7.60	5.10	0.00	67.10	74.24	112.50	709.78
1956	96.05	99.22	122.90	55.24	26.70	15.64	11.69	0.00	29.20	63.20	74.24	90.07	684.14
1957	96.05	99.22	96.66	25.40	16.30	16.50	14.20	66.00	27.85	53.31	116.80	90.07	718.37
1958	96.05	99.22	96.66	55.24	79.00	2.00	0.80	0.00	14.20	39.40	99.30	90.07	671.94
1959	49.20	101.60	98.60	99.90	59.00	1.70	58.60	0.00	3.00	52.40	58.50	164.70	747.20
1960	109.80	140.00	103.80	29.50	39.30	31.00	15.00	54.50	43.50	76.50	140.60	99.50	883.00
1961	77.50	79.30	196.10	99.50	47.00	59.00	22.50	26.50	3.00	0.00	109.50	144.50	864.40
1962	39.00	253.50	98.10	47.00	0.00	4.40	1.40	0.50	3.00	6.50	152.00	76.50	681.90
1963	244.00	51.00	108.40	102.10	20.50	19.00	30.50	18.00	0.40	64.40	182.30	70.30	910.90
1964	38.40	49.00	71.50	29.90	17.50	28.80	0.00	4.50	3.20	132.00	16.00	71.40	462.20
1965	75.90	25.50	33.00	73.50	0.00	37.00	10.00	7.50	20.50	20.50	79.60	14.60	397.60
1966	228.00	98.50	40.50	17.50	2.50	28.50	0.00	0.20	0.00	31.00	76.00	115.40	638.10
1967	259.00	93.00	100.50	156.50	99.00	24.50	3.50	28.50	5.50	107.50	78.00	0.00	955.50
1968	36.00	0.00	95.70	91.10	38.90	6.00	12.00	3.50	18.50	28.00	12.50	101.00	443.20
1969	20.00	99.50	206.80	62.30	23.50	0.00	0.00	20.00	5.90	118.00	8.00	23.00	587.00
1970	89.30	19.00	7.50	2.00	10.00	20.00	19.00	39.50	69.00	38.00	80.50	115.00	508.80
1971	80.60	87.50	67.00	111.00	69.00	0.00	17.50	20.00	0.00	74.00	61.20	65.50	653.30
1972	153.20	191.50	145.50	61.50	11.00	13.50	0.00	0.00	0.00	73.00	26.50	18.50	694.20
1973	7.50	100.50	65.80	75.00	22.70	2.50	8.00	38.00	28.60	34.40	74.00	182.00	639.00
1974	274.60	287.60	137.10	49.20	50.70	9.00	0.00	69.80	1.60	47.80	134.60	56.60	1118.60
1975	87.10	110.30	83.80	60.80	0.50	46.50	25.50	3.00	56.00	15.00	112.50	197.50	798.50
1976	216.80	122.80	207.80	83.00	18.70	33.00	4.00	3.00	63.80	134.00	24.90	158.00	1069.80
1977	88.00	29.50	43.00	38.20	0.00	7.50	0.00	0.00	97.20	112.60	22.30	149.80	588.10
1978	95.40	91.30	121.20	129.00	0.00	6.00	0.00	24.50	32.40	34.20	8.50	147.60	690.10
1979	48.30	104.00	33.90	20.40	16.00	4.30	52.10	80.10	4.00	71.00	36.00	50.00	520.10
1980	35.20	115.60	6.20	0.00	0.00	28.00	3.00	18.20	28.00	0.00	77.50	41.50	353.20
1981	164.70	71.70	54.00	23.00	60.70	21.00	0.00	104.90	0.00	46.00	49.00	97.00	692.00
1982	25.50	70.50	77.00	119.50	0.00	29.00	0.00	21.00	25.50	78.00	108.50	26.50	581.00
1983	63.50	21.00	37.50	69.00	46.00	25.80	70.50	0.00	32.00	51.00	91.00	98.50	605.80
1984	36.00	24.00	51.10	32.50	59.50	2.50	0.00	66.00	1.30	87.80	120.30	25.00	506.00
1985	57.00	127.50	76.90	39.90	2.00	70.00	0.00	0.00	7.50	128.10	68.50	165.10	742.50
1986	181.00	43.20	98.00	11.30	0.00	13.50	1.00	44.00	24.50	178.70	110.60	3.50	709.30
1987	0.00	72.10	68.20	56.30	0.00	9.10	10.00	44.50	135.30	35.90	77.60	52.50	561.50
1988	67.00	370.50	212.60	120.50	13.00	22.30	13.00	0.00	168.20	118.30	40.20	161.70	1307.30

1989	93.30	124.50	105.50	83.20	22.00	16.00	9.50	0.00	33.50	4.50	113.00	62.00	667.00
1990	80.50	50.50	119.00	96.00	5.00	35.00	4.50	11.00	18.00	1.20	28.50	93.80	543.00
1991	213.10	166.00	138.70	0.00	0.00	35.50	6.00	0.00	79.20	200.70	52.70	134.70	1026.60
1992	42.90	20.80	15.90	13.60	0.00	0.00	5.00	38.30	7.40	55.60	55.50	26.90	281.90
1993	32.90	73.90	73.60	84.70	9.90	3.10	0.00	26.00	0.00	87.50	89.50	58.30	539.40
1994	173.30	106.60	33.70	7.40	2.50	8.00	13.70	1.50	0.00	1.50	24.40	24.90	397.50
1995	68.20	33.90	90.60	3.20	52.20	8.00	2.40	1.10	49.00	48.80	93.70	226.50	677.60
1996	217.00	112.00	45.50	99.70	10.50	3.60	33.50	12.50	10.00	29.20	173.50	111.00	858.00
1997	54.20	43.00	140.50	53.20	42.70	26.20	13.00	27.00	11.60	40.50	56.80	58.70	567.40
1998	121.00	192.50	161.00	29.70	13.00	0.00	5.50	0.00	32.00	60.00	80.30	76.80	771.80
1999	125.00	95.80	12.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	163.60	424.40
2000	92.00	65.10	60.80	54.80	29.00	7.00	2.50	0.00	80.10	12.40	99.00	86.00	588.70
2001	67.00	147.00	59.80	141.20	29.40	2.60	3.60	29.90	34.40	96.40	247.50	124.20	983.00
2002	148.70	70.70	13.50	17.90	100.50	5.50	4.00	108.50	28.00	12.00	62.00	106.60	677.90
2003	43.50	31.00	151.00	2.50	19.00	0.00	0.00	21.80	38.00	22.00	86.00	22.60	437.40
2004	74.10	88.70	124.10	41.90	0.60	0.00	0.00	1.00	6.00	2.00	43.20	100.20	481.80
2005	67.50	52.00	13.50	20.00	13.20	0.00	0.00	1.00	3.00	58.50	66.60	25.80	321.10
2006	221.50	242.90	120.50	108.80	18.00	0.00	0.00	99.00	14.00	61.50	117.50	54.80	1058.50
2007	26.50	26.50	39.80	41.00	0.00	13.00	0.00	0.00	58.00	21.70	63.30	141.80	431.60
2008	97.50	69.40	46.70	18.30	33.20	73.50	2.70	0.00	0.00	17.80	56.20	90.07	505.37

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 8: Monthly and annual river flow data (cubic meters per second) for the Orange River at Aliwal North station.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1914	5.55	6.60	16.47	41.44	4.26	3.41	3.20	5.15	3.87	58.85	96.47	302.47	45.65
1915	303.95	486.24	37.51	6.59	9.48	3.56	4.50	4.68	5.47	37.21	250.72	133.42	106.94
1916	245.96	32.81	130.41	152.07	50.75	6.34	4.03	3.19	3.24	6.24	17.53	129.79	65.20
1917	260.37	263.78	467.17	42.42	16.23	6.21	14.44	107.89	169.94	33.26	265.46	310.47	163.14
1918	310.58	129.52	378.08	99.75	11.19	5.46	4.46	9.86	171.46	138.38	167.01	107.31	127.76
1919	104.38	40.96	58.40	25.79	26.13	3.73	3.44	3.21	41.43	4.34	34.45	10.50	29.73
1920	38.73	449.37	466.20	36.60	8.48	4.50	3.21	3.13	3.92	79.35	16.74	7.90	93.18
1921	55.09	100.80	197.46	235.41	41.37	7.48	3.45	3.14	6.59	28.09	118.18	308.60	92.14
1922	252.38	43.13	8.84	4.15	3.12	5.65	3.58	4.18	6.83	29.41	315.11	73.91	62.52
1923	198.27	388.34	111.96	95.38	190.41	121.95	124.33	70.24	36.29	5.45	17.18	8.40	114.02
1924	22.72	128.13	398.13	52.48	8.71	3.69	3.12	3.13	4.78	58.48	425.16	378.85	123.95
1925	172.93	202.38	1707.94	608.15	316.39	208.25	29.60	13.66	10.64	50.93	125.14	48.88	291.24
1926	8.05	112.23	144.05	100.68	7.65	3.86	3.56	3.12	6.87	28.01	196.45	143.49	63.17
1927	90.11	125.16	350.35	180.06	8.84	4.53	4.13	5.15	3.20	75.98	47.67	150.66	87.15
1928	415.25	137.75	116.70	49.70	4.81	3.28	3.13	3.12	3.12	73.63	92.79	222.75	93.83
1929	100.62	34.87	240.97	32.72	13.07	18.07	96.72	23.03	491.88	295.75	73.85	274.04	141.30
1930	335.50	95.60	134.75	350.97	95.42	53.10	7.29	8.92	9.60	114.24	6.74	5.79	101.49
1931	267.00	237.11	139.90	595.59	39.00	16.91	40.26	35.94	7.97	16.21	244.32	18.90	138.26
1932	166.95	257.88	127.92	42.02	4.00	4.26	3.45	3.12	8.95	4.84	64.03	25.22	59.39
1933	57.75	11.78	77.34	17.15	3.12	3.13	3.13	3.12	3.12	3.12	254.18	508.63	78.80
1934	1054.18	369.59	338.99	164.72	34.72	63.23	16.47	35.24	13.82	93.69	343.05	555.20	256.91
1935	49.08	51.39	230.10	139.88	280.29	41.95	12.49	11.92	65.83	10.32	69.62	9.10	81.00
1936	138.30	83.52	21.67	169.73	38.61	47.03	14.88	4.95	3.30	138.37	763.37	267.32	140.92
1937	433.77	640.08	181.21	182.10	36.95	11.90	7.14	4.92	4.65	4.74	3.49	55.68	130.55
1938	106.71	489.87	88.22	118.82	49.60	30.95	45.59	29.66	127.08	66.41	181.56	180.36	126.24
1939	278.79	704.46	160.56	33.48	77.33	30.60	18.98	41.29	66.05	272.29	342.41	98.72	177.08
1940	31.83	101.50	270.76	138.42	503.14	59.12	15.00	12.67	220.27	185.63	284.00	123.88	162.19
1941	199.86	451.48	152.81	124.62	20.80	7.01	8.57	4.90	5.57	64.97	65.60	4.18	92.53
1942	98.97	150.25	413.17	76.74	26.05	10.00	4.80	22.20	33.87	86.50	180.56	772.81	156.33
1943	200.11	105.76	97.19	245.41	575.22	81.57	29.69	103.59	378.08	458.32	895.98	697.52	322.37

1944	322.58	199.25	250.24	16.32	10.37	43.68	18.20	6.95	161.22	70.50	50.29	18.92	97.38
1945	3.85	135.94	455.99	36.62	17.35	13.40	4.09	3.46	3.00	3.35	2.55	9.19	57.40
1946	199.33	216.24	145.89	199.19	131.86	61.69	15.74	7.43	2.61	184.55	119.49	94.96	114.92
1947	95.08	107.37	45.03	91.09	109.58	21.14	18.99	11.07	104.75	139.41	145.90	313.68	100.26
1948	266.93	307.45	852.77	167.87	81.28	29.84	15.32	8.66	3.61	23.03	15.94	8.71	148.45
1949	11.30	70.43	88.10	19.89	42.46	11.59	3.61	3.06	3.88	8.38	168.71	142.89	47.86
1950	178.68	194.32	611.95	683.99	270.11	67.69	130.41	228.44	333.18	43.44	34.90	336.47	259.46
1951	512.45	154.43	131.53	130.68	56.99	39.29	13.86	10.82	25.09	346.87	121.56	14.04	129.80
1952	60.09	284.24	285.92	42.00	10.91	13.54	58.53	41.53	92.43	51.63	176.50	112.89	102.52
1953	100.76	224.84	84.24	279.34	58.20	22.89	7.85	7.44	38.59	231.83	172.18	235.37	121.96
1954	78.95	235.20	500.43	240.15	59.56	63.63	13.16	7.41	7.68	13.62	27.31	153.19	116.69
1955	204.43	1710.04	401.67	99.00	101.32	31.01	21.28	9.71	5.54	16.58	141.86	513.00	271.29
1956	86.84	371.00	479.06	512.52	112.06	84.16	34.06	19.96	14.56	11.58	344.13	901.42	247.61
1957	328.37	369.44	185.52	131.74	36.99	21.11	44.90	71.52	772.27	748.50	490.59	383.00	298.66
1958	528.57	229.42	107.41	207.78	236.22	145.95	30.92	19.52	16.78	14.97	332.91	148.12	168.21
1959	229.16	318.28	109.09	63.73	886.36	305.78	191.13	97.71	89.43	133.98	280.38	326.01	252.59
1960	99.11	161.93	153.42	255.51	146.34	39.04	30.00	49.50	67.21	117.28	199.67	131.16	120.85
1961	155.74	126.40	149.08	357.50	195.58	202.34	57.40	42.37	22.93	9.05	82.62	312.32	142.78
1962	82.71	401.30	187.98	53.74	50.74	8.20	3.44	2.44	2.22	5.25	89.50	78.69	80.52
1963	416.95	209.95	354.80	451.20	56.69	28.07	67.47	64.06	25.37	17.75	315.70	236.03	187.00
1964	103.29	91.13	76.38	238.96	33.17	19.29	38.03	35.31	25.33	377.94	149.11	61.63	104.13
1965	83.20	55.37	5.34	70.91	22.82	15.53	32.33	36.52	82.09	55.92	73.10	18.20	45.94
1966	475.66	501.10	27.66	14.29	8.75	4.05	1.50	1.59	2.18	2.17	45.32	62.77	95.59
1967	126.42	1007.80	179.52	416.74	159.39	249.15	66.75	37.54	29.68	6.26	144.94	71.18	207.95
1968	24.78	11.91	34.96	57.85	133.05	31.52	36.54	9.22	36.59	19.54	20.53	155.50	47.66
1969	16.23	51.89	306.99	196.31	43.22	31.92	4.01	10.99	2.45	104.83	93.70	52.94	76.29
1970	71.21	100.11	14.50	5.63	3.12	2.97	3.43	9.14	43.43	197.56	101.45	213.69	63.85
1971	189.82	207.09	105.49	250.54	154.08	33.64	19.76	21.11	13.89	16.20	48.18	70.82	94.22
1972	361.03	742.99	584.90	112.41	117.95	50.68	19.27	5.74	3.56	43.98	71.91	28.87	178.61
1973	15.28	108.47	82.23	87.96	10.60	2.96	3.77	71.61	48.51	57.22	46.37	78.28	51.11
1974	584.24	1066.80	528.15	229.81	149.89	91.05	47.03	154.55	79.22	25.98	335.06	217.99	292.48
1975	159.88	479.86	432.82	79.22	42.64	28.71	56.58	18.23	55.05	145.13	271.15	429.09	183.20
1976	750.62	1020.05	1312.40	376.75	344.08	165.82	62.65	35.04	49.52	911.12	540.81	74.58	470.29
1977	98.99	402.16	549.20	90.73	54.52	28.30	21.69	11.47	34.35	206.71	136.20	65.21	141.63
1978	394.61	177.20	111.49	588.32	91.76	33.52	25.20	17.76	108.94	100.40	57.55	472.75	181.63
1979	84.35	115.87	105.74	21.14	22.90	20.98	52.87	199.81	156.08	251.22	86.18	159.11	106.35
1980	109.23	144.54	118.92	32.51	7.65	8.27	6.45	5.52	9.14	60.56	43.32	135.08	56.77
1981	332.66	344.41	215.85	78.73	84.06	168.36	30.71	119.39	163.54	52.14	77.82	179.52	153.93
1982	63.32	88.96	83.80	271.01	98.75	40.60	39.12	20.85	9.29	65.55	422.41	45.30	104.08
1983	15.86	28.30	24.41	31.67	33.63	34.44	42.06	37.38	18.32	40.03	65.89	219.30	49.27
1984	304.25	45.72	53.02	76.36	105.84	22.63	10.89	9.28	56.06	31.42	86.51	65.24	72.27
1985	75.18	391.66	203.87	58.64	14.94	17.15	8.40	2.80	1.74	29.83	324.68	439.73	130.72
1986	182.40	215.09	91.72	39.29	24.87	41.89	14.53	7.08	104.83	216.60	788.22	86.52	151.09
1987	39.38	46.69	51.93	109.58	21.56	9.88	10.69	60.94	632.78	852.68	275.73	153.49	188.78
1988	90.10	824.84	1240.07	311.01	90.94	88.88	68.16	37.88	390.47	181.80	186.39	466.40	331.41
1989	426.65	872.41	243.83	144.19	121.45	203.01	78.90	42.37	28.88	19.96	263.53	218.94	222.01
1990	115.02	98.69	209.54	280.91	137.00	56.21	91.83	55.28	45.51	15.68	13.61	62.79	98.51
1991	282.33	766.44	350.36	59.29	16.29	13.13	10.10	5.90	13.59	519.07	233.71	205.93	206.34
1992	53.14	17.07	20.44	11.97	4.47	3.48	2.91	3.45	11.55	58.57	159.49	24.11	30.89
1993	16.79	154.83	100.54	143.89	43.05	9.15	4.85	7.90	3.07	305.32	215.68	226.90	102.66
1994	502.29	794.83	215.12	98.83	77.27	13.66	8.61	12.65	5.59	1.49	4.76	3.21	144.86
1995	33.32	73.18	151.22	77.74	45.16	11.03	3.97	1.77	7.58	39.67	94.87	532.53	89.34
1996	356.93	438.90	504.95	96.48	25.98	10.60	10.87	52.62	41.71	173.91	488.25	268.80	205.83
1997	325.33	141.57	426.12	417.95	128.40	243.40	88.64	62.93	51.16	36.33	12.38	57.62	165.99
1998	284.34	607.34	649.44	219.99	130.36	26.27	15.21	13.32	11.59	32.25	212.44	246.00	204.05
1999	149.48	168.81	105.07	27.25	15.63	8.45	5.06	3.85	2.30	1.54	9.43	229.53	60.53
2000	513.94	217.85	420.50	214.18	144.71	32.00	16.09	9.44	141.77	123.98	168.30	256.66	188.28
2001	110.25	202.40	136.16	355.53	300.91	37.60	20.17	10.83	354.90	106.03	1148.15	636.97	284.99
2002	524.57	341.15	122.78	59.50	53.30	204.99	48.14	452.54	539.39	55.29	59.51	149.04	217.52
2003	168.74	112.68	236.66	68.31	21.80	11.72	8.00	10.97	7.94	4.96	19.96	36.63	59.03
2004	108.05	187.61	263.07	194.50	22.93	11.18	9.18	13.17	83.05	93.21	54.86	107.46	95.69

2005	186.88	108.12	151.60	114.20	55.04	19.69	11.24	13.25	12.82	28.91	53.24	30.74	65.48
2006	214.42	857.89	506.69	349.74	262.74	71.33	32.14	236.85	112.97	257.03	607.25	198.17	308.94
2007	115.04	76.96	35.09	159.67	92.34	46.65	26.83	35.11	78.20	39.23	29.06	83.89	68.17
2008	41.59	33.84	38.08	25.01	23.65	30.85	17.03	13.08	8.62	5.84	15.51	53.82	25.58

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 9: Monthly and annual rainfall (millimeters) data for the Semonkong rainfall station in Lesotho.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1967	101.01	87.40	87.89	45.48	26.93	63.50	6.30	15.30	12.00	34.70	72.30	45.00	597.81
1968	58.00	30.50	105.50	37.80	64.70	4.00	36.50	0.60	17.00	47.00	34.00	103.50	539.10
1969	25.50	103.20	158.30	83.30	48.40	3.30	2.80	29.80	15.10	133.40	28.00	69.70	700.80
1970	95.20	58.80	34.00	11.20	16.20	17.50	12.80	32.60	82.20	93.70	47.90	141.50	643.60
1971	125.50	113.10	94.60	74.60	60.30	2.90	28.90	9.30	3.50	99.80	81.50	55.80	749.80
1972	165.20	131.10	157.10	22.30	35.40	15.60	4.60	10.60	70.10	18.20	51.20	58.60	740.00
1973	75.80	122.80	66.00	49.20	23.90	2.90	1.50	80.60	27.90	9.10	82.40	125.70	667.80
1974	148.10	160.70	105.20	38.30	39.30	13.00	1.50	79.80	19.60	25.90	115.60	69.20	816.20
1975	117.70	58.20	190.60	106.80	17.60	15.30	22.30	11.30	157.10	131.80	100.40	160.30	1089.40
1976	187.40	260.20	163.30	86.60	33.70	5.30	2.10	1.70	145.20	198.90	48.30	50.50	1183.20
1977	168.60	96.70	179.30	22.20	21.50	9.00	8.50	0.00	43.80	78.80	51.50	98.50	778.40
1978	126.00	57.80	89.90	111.50	0.00	0.00	4.30	28.50	59.00	41.40	27.90	121.00	667.30
1979	21.50	86.70	38.30	17.90	33.40	5.50	64.70	28.80	21.60	68.10	55.00	72.50	514.00
1980	81.30	69.00	68.00	9.70	6.00	0.00	5.50	6.40	60.20	4.70	140.40	67.30	518.50
1981	160.50	94.20	47.10	41.10	21.00	37.00	0.00	100.10	10.50	42.30	72.00	81.70	707.50
1982	163.30	89.40	73.30	103.10	16.80	36.10	40.00	0.00	22.50	123.70	75.00	32.80	776.00
1983	59.70	34.30	63.00	45.00	54.10	17.30	35.90	0.00	22.00	48.10	93.90	93.40	566.70
1984	91.90	26.60	43.60	19.50	76.30	2.00	5.30	59.50	4.00	68.50	92.90	66.00	556.10
1985	84.80	93.10	67.90	38.30	1.30	14.80	0.00	0.00	2.80	139.50	96.00	136.00	674.50
1986	79.90	39.40	64.00	22.10	0.00	34.60	2.40	50.70	22.90	125.20	121.30	46.80	609.30
1987	35.30	91.50	95.00	49.50	2.40	10.60	11.50	43.40	103.40	35.40	54.90	44.90	577.80
1988	51.60	102.80	51.60	48.20	23.00	8.50	13.00	17.60	103.40	35.40	54.90	98.30	608.30
1989	40.30	93.40	42.00	41.10	29.40	34.30	4.70	10.10	43.90	73.50	69.20	66.70	548.60
1990	84.20	32.30	93.00	49.70	3.80	36.70	11.60	20.00	4.80	3.10	13.50	60.10	412.80
1991	103.80	87.50	91.40	2.30	0.00	9.80	0.40	0.00	45.30	121.60	57.90	63.60	583.60
1992	23.40	36.20	25.60	12.60	3.10	0.20	0.90	22.60	6.30	47.30	61.00	15.30	254.50
1995	77.60	32.90	78.00	22.60	13.50	5.30	0.50	4.10	18.40	29.70	45.50	116.30	444.40
1996	77.60	66.70	49.50	37.30	4.70	0.60	17.80	11.50	13.00	51.50	104.60	55.00	489.80
1997	113.70	28.70	130.40	42.90	50.60	19.00	11.20	28.40	10.50	30.80	104.70	67.40	638.30
1998	79.50	116.00	99.50	12.50	41.00	0.30	41.40	15.00	13.60	86.70	144.60	145.40	795.50
1999	125.50	49.70	121.40	21.20	14.80	2.20	6.00	0.60	8.30	64.60	23.10	199.00	636.40
2000	111.40	168.50	72.50	33.70	39.10	16.00	4.20	0.00	70.60	66.20	122.80	126.00	831.00
2001	79.60	86.10	43.50	117.80	27.80	20.50	27.40	78.70	118.90	118.90	185.90	142.30	1047.40
2002	156.90	58.30	35.80	39.90	105.70	14.60	5.50	131.00	52.00	44.40	24.00	113.50	781.60
2003	112.00	55.60	119.20	43.00	4.70	0.00	0.00	36.90	46.50	69.90	59.90	58.60	606.30
2004	124.70	116.50	119.40	45.50	1.60	12.50	5.90	38.70	58.10	48.00	82.80	109.90	763.60
2005	122.80	79.80	67.10	27.20	32.50	32.50	2.10	2.10	20.00	74.10	116.80	31.60	608.60
2006	181.50	205.40	108.00	95.40	28.80	0.00	1.30	68.60	29.40	71.90	174.30	128.80	1093.40

Table 10: Monthly and annual rainfall (millimeters) data for the Thaba Tseka rainfall station in Lesotho.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1965	18.3	41.0	58.5	27.0	0.0	54.0	6.0	43.0	17.9	40.3	42.3	9.0	357.3
1966	193.5	79.4	31.5	11.0	18.0	0.0	0.0	9.5	8.4	24.4	50.5	178.9	605.1
1967	237.5	42.9	70.0	64.0	25.6	10.0	10.0	11.5	10.5	48.4	67.5	17.5	615.4
1968	33.2	11.5	63.5	20.3	7.4	0.0	0.1	0.0	4.5	13.5	17.7	86.6	258.3
1969	120.4	36.0	78.0	34.0	68.0	1.7	0.0	18.9	8.1	85.6	67.0	63.0	580.7
1970	43.5	65.4	34.5	6.0	1.5	5.5	4.5	34.0	63.3	64.8	72.8	84.4	480.2
1976	134.6	94.4	185.5	37.4	25.1	19.2	0.0	1.2	67.8	118.7	62.3	103.8	850.0
1977	149.5	107.3	122.7	24.7	8.0	2.1	0.0	2.1	31.6	104.5	55.9	162.6	771.0
1978	82.6	61.8	63.6	72.8	7.0	7.8	4.6	30.3	83.9	40.8	49.9	178.1	683.2
1979	46.6	130.1	33.4	14.1	29.7	2.0	42.4	58.0	25.2	65.7	58.1	135.6	640.9
1980	122.2	87.3	45.9	28.5	18.2	0.0	1.7	0.4	82.8	30.8	100.7	68.2	586.7
1981	154.5	99.3	41.1	64.2	18.4	19.0	0.0	57.4	14.8	27.4	67.7	64.9	628.7
1982	103.9	80.2	69.0	94.7	0.4	11.3	10.9	0.0	35.3	94.7	39.0	46.0	585.4
1983	117.0	14.0	60.0	24.1	11.6	0.0	16.7	1.1	9.4	53.5	96.8	88.4	492.6
1984	117.7	53.7	74.8	21.2	48.5	1.2	1.0	41.0	4.8	63.7	43.7	25.3	496.6
1985	77.7	174.7	42.9	17.1	0.3	0.0	0.0	0.0	0.0	91.6	76.2	137.0	617.5
1986	50.1	39.4	32.6	39.3	0.0	21.6	0.0	49.3	14.3	146.8	84.4	41.4	519.2
1987	35.2	70.2	51.4	11.0	0.0	8.7	3.0	57.5	164.0	42.7	28.4	53.3	525.4
1988	96.9	133.8	87.8	61.9	28.5	16.9	23.0	11.9	46.3	77.2	98.4	103.0	785.6
1989	74.6	126.7	53.7	32.0	30.4	19.8	5.0	0.0	6.3	62.2	140.9	61.8	613.4
1990	80.6	43.7	130.0	70.7	2.5	11.2	12.9	12.8	0.3	31.0	34.9	84.3	514.9
1991	151.3	79.0	55.7	0.0	0.0	1.9	0.0	0.0	34.2	130.4	24.8	64.5	541.8
1992	57.1	74.8	15.9	12.2	1.6	0.0	0.0	28.1	1.2	48.4	97.8	54.3	391.4
1993	49.3	54.1	83.5	58.4	10.0	1.8	0.0	19.2	9.6	103.4	84.3	113.0	586.5
1994	110.8	147.3	104.4	79.5	0.0	0.0	6.3	3.8	0.0	10.0	24.8	52.0	538.9
1995	178.5	105.4	73.8	28.5	15.8	4.9	0.0	0.0	4.4	98.4	96.9	169.4	776.0
1996	109.7	89.4	63.7	27.9	7.6	0.0	1.3	10.9	2.5	130.6	91.0	96.6	631.2
1997	140.5	30.0	139.7	43.5	35.6	37.0	23.6	31.0	6.8	50.3	100.9	78.3	717.2
1998	140.6	147.8	116.9	8.0	5.3	0.0	17.3	3.3	1.3	75.9	105.2	101.9	723.5
1999	61.6	102.4	64.0	37.9	13.2	4.0	5.0	7.4	4.6	58.3	38.2	97.3	493.9
2000	120.4	125.6	59.9	24.7	24.3	11.2	4.6	0.0	68.8	73.3	68.9	94.9	676.6
2001	232.0	97.3	45.6	53.1	8.1	0.0	5.3	76.1	48.5	73.3	120.7	77.5	837.5
2002	22.5	149.4	51.0	22.6	29.0	10.2	7.9	68.5	46.2	57.1	53.5	99.7	617.6
2003	72.2	75.4	129.5	16.9	10.5	0.0	0.0	24.2	30.4	2.1	103.2	60.1	524.5
2004	92.3	115.9	106.2	14.4	0.5	10.0	12.2	19.1	62.2	52.6	89.8	58.9	634.1
2005	90.9	69.1	81.8	56.8	11.8	0.3	0.0	41.1	24.9	105.7	81.2	13.8	577.4
2006	132.0	135.1	87.6	56.6	10.7	0.0	0.0	50.9	26.4	72.5	191.7	99.8	863.3

Table 11: Monthly and annual rainfall (millimeters) data for the New Hanover rainfall station in the Mgeni River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1940	39.10	27.10	28.60	17.20	52.80	23.40	0.00	2.00	20.30	32.40	42.20	131.10	416.20
1941	130.14	118.98	112.16	62.05	26.30	14.40	15.85	1.80	38.80	65.60	67.20	44.70	697.97
1942	109.00	132.90	146.50	39.40	32.10	10.40	26.10	30.70	41.40	170.90	130.50	287.80	1157.70
1943	128.90	132.70	74.60	232.40	108.60	29.00	103.20	151.70	13.00	196.10	115.80	115.40	1401.40
1944	64.80	89.40	91.10	11.10	1.50	21.80	0.00	8.10	128.80	58.90	95.80	39.90	611.20
1945	95.70	100.10	169.90	26.40	28.70	0.00	0.00	8.70	5.10	25.30	8.10	41.40	509.40
1946	147.30	76.70	90.60	91.60	0.00	11.40	4.80	0.00	13.00	93.30	146.40	159.80	834.90
1947	244.30	118.70	86.10	65.60	9.90	65.60	20.30	0.00	66.60	82.60	243.20	93.20	1096.10
1948	133.40	114.30	262.50	91.50	12.90	1.00	0.00	3.80	12.30	55.30	66.00	67.10	820.10
1949	140.20	63.00	100.80	55.60	17.30	1.80	27.70	1.50	36.30	32.70	99.70	145.60	722.20
1950	85.70	112.20	212.30	51.40	12.40	2.60	15.50	76.70	8.20	38.70	44.40	144.10	804.20
1951	270.20	78.00	69.30	63.10	2.10	18.00	0.00	156.10	39.90	114.00	15.40	155.00	981.10
1952	146.30	115.80	97.30	48.30	47.50	2.50	19.20	27.50	30.50	60.00	105.00	105.30	805.20
1953	111.00	161.20	50.00	50.50	17.50	5.00	0.20	81.30	34.10	44.90	67.00	110.30	733.00
1954	116.00	90.80	52.50	72.80	64.80	10.30	32.80	5.40	75.90	100.00	124.60	59.40	805.30
1955	206.00	153.10	81.80	62.40	29.20	25.00	0.00	0.50	17.30	61.00	93.30	149.50	879.10
1956	27.00	219.00	113.00	38.90	18.10	8.10	2.00	20.30	61.00	48.70	165.60	249.80	971.50
1957	146.20	90.00	61.80	49.20	0.00	0.00	29.30	30.80	195.20	204.70	135.60	100.50	1043.30
1958	205.50	170.50	55.50	145.00	3.50	0.00	0.40	0.00	44.30	43.50	118.60	311.00	1097.80
1959	0.00	183.00	57.50	56.00	208.40	0.00	5.90	15.70	49.00	86.50	95.30	168.60	925.90
1960	44.40	70.70	87.30	142.70	1.50	0.20	9.80	10.90	48.70	56.20	130.00	216.10	818.50
1961	99.60	140.00	110.00	104.00	5.00	14.50	5.50	12.60	61.60	50.20	145.40	79.70	828.10
1962	161.50	164.90	83.20	45.30	8.00	0.00	0.00	59.10	8.50	71.00	248.00	182.00	1031.50
1963	103.00	106.50	163.20	103.00	2.50	17.20	81.90	0.00	0.00	151.40	120.30	29.50	878.50
1964	206.50	61.00	64.00	47.90	11.00	23.00	8.00	13.20	66.80	61.00	99.00	143.00	804.40
1965	36.50	78.50	7.40	17.00	17.00	133.00	11.00	59.70	48.50	48.00	133.00	100.70	690.30
1966	145.50	114.20	26.00	45.30	53.00	0.00	1.50	45.00	22.00	80.50	105.50	128.50	767.00
1967	138.00	178.90	245.20	167.50	16.50	11.50	18.30	0.50	6.50	67.80	163.50	95.00	1109.20
1968	191.50	71.00	153.80	49.00	26.30	0.00	0.00	58.00	30.00	65.20	93.10	135.60	873.50
1969	159.00	92.50	215.30	52.10	44.50	0.50	30.00	6.50	68.50	131.30	68.50	167.00	1035.70
1970	80.50	96.50	0.00	25.30	24.20	12.00	0.50	47.00	160.00	130.50	85.00	144.50	806.00
1971	98.50	81.00	110.00	131.00	101.00	0.00	23.50	70.00	40.50	77.00	34.00	134.00	900.50
1972	77.00	179.50	59.00	89.50	52.00	21.00	12.50	6.50	0.50	24.50	187.50	47.50	757.00
1973	202.00	246.50	95.50	138.60	8.50	0.00	2.50	107.10	100.00	42.00	75.00	84.00	1101.70
1974	314.60	165.50	69.00	67.50	54.00	20.00	1.50	9.00	1.00	17.30	117.80	160.20	997.40
1975	130.50	137.00	44.50	109.30	2.50	0.00	1.90	3.30	131.40	26.50	139.00	196.90	922.80
1976	231.00	203.60	273.20	74.40	35.00	0.00	0.00	24.20	60.00	155.90	86.00	86.20	1229.50
1977	204.10	111.00	160.00	29.50	5.20	3.20	0.00	21.60	41.30	90.80	77.10	71.50	815.30
1978	199.00	41.00	173.60	104.70	0.00	0.00	0.00	26.80	103.70	80.99	97.00	132.78	959.57
1979	110.80	143.00	110.00	42.00	57.50	0.00	28.00	25.50	17.50	42.50	31.50	46.00	654.30
1980	91.50	56.50	62.50	42.50	37.00	0.00	0.00	6.00	79.20	35.50	197.80	88.00	696.50
1981	163.40	60.70	101.00	19.00	72.80	9.50	13.30	81.50	33.80	32.90	195.80	43.30	827.00
1982	101.00	94.40	220.50	44.30	12.50	7.30	7.10	4.00	44.40	119.60	79.30	144.90	879.30
1983	34.90	38.30	80.10	29.30	26.50	2.50	28.30	26.60	31.60	94.40	187.20	124.30	704.00
1984	147.90	69.40	115.10	135.20	2.00	18.20	17.90	32.10	15.00	145.10	96.00	163.50	957.40
1985	183.00	216.00	34.00	0.00	0.00	0.00	10.50	2.00	42.50	153.10	65.70	170.00	876.80
1986	127.90	103.30	126.30	18.50	0.00	18.00	0.20	4.70	15.50	106.80	64.00	199.00	784.20
1987	174.80	158.00	222.00	61.50	18.50	37.70	21.50	74.20	396.40	57.60	118.00	64.10	1404.30
1988	128.30	135.00	189.00	34.50	37.60	55.40	32.50	6.50	29.30	63.40	152.00	204.00	1067.50
1989	65.60	225.70	34.00	47.80	6.50	0.00	14.50	0.00	2.20	67.90	127.50	89.80	681.50
1990	3.00	100.50	94.50	63.00	51.00	0.00	0.00	65.80	11.50	71.50	43.00	179.00	682.80
1991	268.50	110.70	152.00	3.50	38.00	9.50	9.50	15.00	79.90	126.50	110.00	118.50	1041.60
1992	104.80	113.40	50.90	55.50	0.00	0.00	8.70	6.00	21.00	67.70	104.50	19.20	551.70
1993	83.00	133.30	99.00	24.00	7.50	0.00	0.40	28.00	58.50	109.50	87.00	190.50	820.70
1994	160.60	152.50	149.50	33.00	20.50	10.70	34.00	44.50	4.00	44.00	19.50	107.40	780.20

1995	47.50	69.50	213.00	26.50	38.00	19.00	0.00	0.00	23.50	90.80	130.00	289.50	947.30
1996	111.00	168.00	155.00	32.00	0.00	19.00	144.80	5.50	0.00	182.00	53.60	139.00	1009.90
1997	177.00	147.90	304.80	71.50	18.00	94.00	33.00	52.00	35.00	124.00	135.00	61.50	1253.70
1998	117.00	160.50	95.00	14.00	22.50	0.00	0.00	31.50	22.00	58.50	136.00	145.00	802.00
1999	100.50	135.40	166.20	18.50	29.00	6.50	0.00	32.50	26.00	100.00	91.30	317.50	1023.40
2000	96.50	87.10	142.30	50.00	83.20	0.00	0.00	0.00	87.50	81.50	123.00	204.50	955.60
2001	51.50	134.60	76.50	186.50	8.00	5.50	0.00	0.00	97.20	92.00	173.50	108.00	933.30
2002	208.50	74.50	6.50	54.50	12.00	23.00	139.00	85.00	24.00	49.00	59.00	165.00	900.00
2003	103.00	95.00	56.50	102.00	25.00	9.00	0.00	16.50	40.00	12.40	115.00	82.50	656.90
2004	137.00	218.50	26.00	0.00	0.00	17.00	38.50	17.50	68.50	44.00	116.50	109.00	792.50
2005	130.14	148.00	134.00	20.50	8.50	14.00	0.00	31.50	21.50	52.00	116.50	188.00	864.64
2006	175.50	89.50	131.00	49.00	21.00	0.00	0.00	65.00	48.00	81.00	155.50	149.50	965.00
2007	69.00	0.00	120.50	39.00	0.00	87.50	0.00	12.50	37.50	159.00	138.50	104.50	768.00
2008	137.00	83.00	117.00	90.00	0.00	24.00	0.00	0.00	65.00	80.99	108.92	132.78	838.69

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 12: Monthly and annual rainfall (millimeters) data for the Mistley rainfall station in the Mgeni River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1940	152.20	142.80	131.90	42.30	202.40	65.60	0.00	2.30	114.00	49.60	179.00	202.60	1284.70
1941	86.60	116.80	47.10	110.80	0.00	4.60	7.30	11.20	50.30	71.10	103.90	33.40	643.10
1942	134.80	149.40	196.70	49.00	21.20	21.40	22.70	49.60	53.70	97.90	168.90	257.30	1222.60
1943	150.40	117.60	119.40	270.50	48.70	24.70	104.20	145.40	23.00	244.00	163.30	119.70	1530.90
1944	82.00	167.70	81.60	25.60	2.60	34.20	3.00	18.10	103.60	70.00	95.20	62.60	746.20
1945	94.20	70.20	217.10	20.60	18.60	1.00	1.80	6.30	8.40	47.50	40.30	80.70	606.70
1946	133.30	101.60	91.20	31.00	17.00	13.75	15.69	0.00	43.20	137.70	193.00	116.10	893.54
1947	164.10	127.40	161.40	63.90	11.30	61.90	16.10	7.60	55.90	85.10	213.90	158.50	1127.10
1948	158.30	58.30	171.80	50.20	10.70	6.60	2.30	12.20	19.80	99.70	88.30	109.40	787.60
1949	112.20	162.50	126.90	58.60	18.20	7.40	16.80	30.67	33.00	86.80	155.00	232.50	1040.57
1950	118.80	106.00	166.20	97.50	11.90	13.76	11.40	55.30	20.70	48.00	50.90	196.30	896.76
1951	124.30	46.20	79.50	13.00	2.30	11.70	0.00	152.30	67.60	106.20	45.70	170.20	819.00
1952	161.80	93.30	108.60	29.20	41.50	5.90	26.50	7.80	8.50	57.80	145.40	112.60	798.90
1953	131.50	154.50	33.00	34.50	36.90	9.30	15.69	73.30	43.40	59.60	115.60	127.00	834.29
1954	161.70	180.90	102.02	84.80	90.60	8.80	12.50	8.10	93.00	176.80	163.30	50.10	1132.62
1955	257.80	89.70	53.60	61.00	21.33	10.00	15.69	0.00	55.96	87.05	111.51	62.70	826.34
1956	21.50	193.80	0.00	26.00	16.00	13.10	2.00	21.50	46.00	80.00	153.90	304.90	878.70
1957	146.60	86.60	119.00	54.00	4.20	7.00	21.40	36.00	177.40	189.60	82.60	135.00	1059.40
1958	181.00	139.40	79.20	47.84	21.33	13.76	15.69	30.67	46.30	37.20	138.10	196.70	947.19
1960	90.00	141.60	80.50	82.60	2.20	0.50	3.00	13.10	54.20	106.70	158.40	199.00	931.80
1961	232.30	96.20	92.90	119.20	4.80	18.50	3.70	10.00	88.50	55.40	105.30	126.00	952.80
1962	149.20	80.90	99.50	39.70	3.50	1.00	5.00	64.50	67.00	97.10	155.70	145.00	908.10
1963	131.40	62.20	139.00	32.40	4.50	5.80	84.00	0.00	6.50	76.40	124.10	46.40	712.70
1964	231.50	43.50	82.50	45.50	9.00	28.00	9.10	30.67	47.30	102.10	82.50	123.40	835.07
1965	69.20	111.70	34.20	47.84	9.90	66.00	18.20	62.50	57.00	66.30	121.00	104.60	768.44
1966	127.90	101.00	29.60	54.20	22.20	0.00	0.00	31.00	21.50	72.50	86.50	70.60	617.00
1967	153.10	54.50	175.50	52.50	17.00	2.50	14.00	3.00	13.50	65.80	136.30	83.00	770.70
1968	65.50	51.90	132.20	48.00	3.00	0.00	0.00	50.00	47.00	47.10	82.00	110.90	637.60
1969	136.50	158.00	206.30	48.00	33.00	0.00	9.00	19.20	36.00	71.60	37.50	88.70	843.80
1970	40.00	53.00	37.00	30.50	30.50	6.20	1.20	30.80	63.10	56.50	66.00	71.20	486.00
1971	75.60	67.50	69.50	44.00	40.50	4.00	40.00	78.00	14.50	89.00	41.00	118.00	681.60
1972	74.50	94.00	87.50	32.00	55.00	13.00	7.50	5.50	7.00	60.70	121.50	55.80	614.00
1973	106.50	152.90	91.20	46.00	1.00	3.00	8.00	74.50	91.50	55.50	88.00	86.00	804.10
1974	238.00	131.00	64.50	60.00	6.90	25.50	9.60	8.00	5.00	30.90	107.00	102.50	788.90
1975	224.20	211.00	56.50	61.00	3.50	2.00	0.00	0.00	184.60	31.70	160.30	210.00	1144.80
1976	229.50	184.30	236.00	73.50	32.50	0.00	0.00	11.50	47.60	148.90	88.80	75.00	1127.60

1977	173.10	68.70	179.50	27.60	13.00	9.00	0.00	34.50	50.50	112.20	153.90	101.00	923.00
1978	196.00	78.00	104.50	41.00	4.10	15.50	8.00	50.50	81.30	128.50	97.90	94.30	899.60
1979	103.30	109.30	89.00	25.00	25.00	0.40	30.50	40.40	35.30	97.80	66.50	80.50	703.00
1980	137.50	57.50	35.00	78.50	37.00	0.00	0.00	31.00	114.00	62.50	129.50	86.50	769.00
1981	126.00	104.50	41.00	30.00	49.50	19.00	5.00	54.00	62.00	29.00	139.00	46.00	705.00
1982	130.50	123.50	151.00	26.00	15.00	12.00	5.00	3.00	37.00	174.00	75.00	92.50	844.50
1983	67.00	42.00	101.00	71.00	22.00	0.00	49.00	18.00	17.00	114.00	161.00	114.00	776.00
1984	214.00	104.00	107.00	100.50	0.00	15.00	34.00	38.00	15.50	104.00	64.50	114.50	911.00
1985	165.00	204.50	75.50	0.00	0.00	1.00	2.50	0.00	26.00	154.50	81.00	132.50	842.50
1986	81.50	69.00	100.00	4.00	0.00	28.00	15.69	2.90	3.50	20.20	76.70	199.00	600.49
1987	180.00	108.00	159.00	33.00	10.00	30.00	5.00	88.00	571.50	86.50	97.50	18.70	1387.20
1988	155.50	201.00	19.00	27.80	10.00	22.00	23.00	26.00	22.00	45.00	182.00	0.00	733.30
1989	130.10	112.25	33.00	47.84	21.33	13.76	15.69	30.67	55.96	87.05	111.51	122.25	781.41
1990	130.10	112.25	102.02	47.84	21.33	13.76	15.69	62.50	12.50	76.50	120.00	197.00	911.50
1991	112.00	106.00	110.00	9.00	33.00	9.00	5.00	16.00	56.50	115.50	110.00	149.00	831.00
1992	82.00	110.00	91.00	57.00	0.00	0.00	2.50	21.00	28.00	55.00	64.00	73.00	583.50
1993	53.50	98.50	113.00	20.00	11.50	0.00	0.00	26.00	53.00	160.00	48.50	160.50	744.50
1994	138.00	49.50	116.00	29.00	1.00	9.00	27.50	52.50	12.00	96.00	26.00	95.50	652.00
1995	63.70	41.50	192.00	51.50	15.00	48.00	6.00	17.00	16.00	84.50	137.30	213.50	886.00
1996	53.50	215.00	151.00	14.00	31.50	4.00	112.00	13.30	9.00	118.00	82.00	158.50	961.80
1997	141.50	94.50	7.00	26.00	16.00	96.00	20.00	20.00	54.00	71.50	151.50	85.50	783.50
1998	81.00	180.50	114.00	23.50	47.00	0.00	6.50	19.00	20.50	11.50	111.00	116.00	730.50
1999	57.40	52.50	49.00	13.50	16.00	2.00	2.50	36.50	65.50	78.00	0.00	0.00	372.90
2000	121.10	102.00	158.00	59.00	74.00	5.00	0.00	0.00	71.50	71.00	104.00	204.00	969.60
2001	35.00	57.00	40.50	0.00	10.00	0.00	0.00	5.00	110.00	109.00	117.00	120.00	603.50
2002	105.00	117.00	101.50	49.00	5.50	18.50	127.00	110.40	33.00	33.00	59.50	132.20	891.60
2003	42.00	20.00	65.00	44.50	20.00	16.50	0.00	12.00	38.00	9.00	91.00	42.00	400.00
2004	154.50	339.00	43.00	7.00	0.00	5.00	26.00	17.50	32.50	47.00	154.00	329.00	1154.50
2005	167.50	114.50	113.00	4.50	10.00	11.50	0.00	31.00	15.00	73.00	109.00	26.00	675.00
2006	214.00	194.00	70.50	88.50	46.00	0.00	0.00	45.00	56.50	89.00	135.50	104.00	1043.00
2007	28.50	35.00	164.00	35.40	10.00	0.00	0.00	0.00	46.50	253.50	245.30	239.00	1057.20
2008	259.00	112.25	142.00	74.50	0.00	21.00	0.00	3.10	68.00	87.05	111.51	122.25	1057.20

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 13: Monthly and annual river flow (cubic meters per second) data for the Mgeni River at Table mountain station.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1951	57.85	17.88	12.16	10.02	4.17	3.05	2.45	6.25	7.54	8.61	6.47	10.73	12.26
1952	19.91	49.38	18.88	8.41	4.77	3.40	2.72	2.32	1.73	1.36	8.98	16.05	11.49
1953	20.19	35.41	12.40	10.54	4.48	2.88	2.27	3.52	3.73	3.94	3.54	12.03	9.58
1954	23.44	33.97	16.05	10.22	7.09	4.90	3.47	2.46	2.76	14.84	17.37	12.37	12.41
1955	18.26	74.53	42.53	12.59	9.00	5.56	4.31	3.20	2.41	4.50	4.89	17.20	16.58
1956	6.22	13.40	25.77	15.06	6.96	4.75	3.42	2.53	3.09	2.55	20.38	72.19	14.69
1957	16.29	21.97	29.65	14.50	9.49	5.78	5.10	4.30	23.36	41.13	29.28	18.30	18.26
1958	33.37	48.11	17.73	18.58	11.20	6.27	4.48	3.22	3.42	2.28	8.77	19.20	14.72
1959	32.01	35.48	19.36	8.20	42.35	13.27	7.80	5.08	4.68	5.18	8.26	13.42	16.26
1960	9.66	13.71	9.16	12.52	9.77	4.39	3.50	2.50	2.32	8.22	16.24	14.30	8.86
1961	16.29	24.23	20.12	12.40	7.23	5.38	5.36	4.83	8.65	8.22	8.02	11.27	11.00
1962	16.29	24.23	20.12	12.40	7.23	5.38	5.36	4.83	8.65	8.22	16.24	14.30	11.94
1963	13.54	13.12	45.45	21.60	6.85	4.47	12.09	4.26	2.52	3.38	5.98	4.34	11.47
1964	30.10	22.11	6.60	8.01	4.30	2.70	2.35	1.93	4.09	4.23	8.09	7.26	8.48
1965	8.84	8.94	3.04	2.85	3.56	6.59	3.36	2.85	5.74	3.67	7.24	8.88	5.46
1966	13.38	20.09	5.07	3.53	5.24	4.65	4.25	4.13	4.39	4.57	7.60	7.81	7.06
1967	9.06	80.06	34.16	42.79	11.29	5.61	4.16	5.33	5.25	5.26	9.08	8.94	18.42
1968	14.12	9.97	14.32	12.66	3.82	5.68	4.44	4.13	3.79	4.78	4.10	7.79	7.47

1969	5.10	3.99	18.36	10.02	4.90	3.08	3.11	4.51	5.26	7.25	4.99	19.48	7.51
1970	17.78	41.79	7.58	3.61	4.28	5.21	4.44	4.84	5.80	18.86	5.32	7.30	10.57
1971	13.51	9.14	9.90	11.61	11.74	4.29	3.79	6.43	4.14	4.90	5.51	16.06	8.42
1972	22.16	14.81	44.06	11.49	6.21	3.80	4.86	4.75	5.09	5.76	7.02	4.06	11.17
1973	8.23	34.78	12.91	35.73	8.06	3.48	5.05	5.72	5.17	6.13	5.01	5.64	11.33
1974	82.97	110.44	54.27	36.56	13.89	8.66	5.00	7.32	5.83	6.01	6.01	10.31	28.94
1975	8.78	49.91	22.69	14.37	5.57	4.79	5.70	4.61	5.42	4.15	5.02	8.69	11.64
1976	33.67	84.92	79.17	34.92	13.31	6.47	5.59	4.87	4.61	10.95	7.32	5.81	24.30
1977	7.26	9.28	11.74	9.41	5.72	5.56	6.26	4.70	4.74	4.63	5.43	6.37	6.76
1978	16.93	17.64	23.04	18.73	8.02	7.74	5.45	5.11	5.08	8.32	8.90	23.30	12.35
1979	27.20	18.66	29.34	9.98	5.72	4.91	4.88	4.95	4.95	5.04	7.94	6.96	10.88
1980	6.12	5.67	5.53	5.70	5.19	5.36	5.57	5.63	5.63	5.29	7.73	8.67	6.01
1981	5.83	4.69	5.43	6.32	5.53	5.42	6.22	5.42	5.35	5.86	6.90	5.32	5.69
1982	5.61	6.48	7.09	5.68	5.81	6.69	6.03	5.35	5.83	6.03	5.56	6.49	6.05
1983	5.46	6.02	4.79	3.87	2.57	1.63	1.97	1.90	1.50	1.07	1.93	2.87	2.97
1984	4.20	10.75	4.77	9.67	2.08	1.06	3.46	3.16	2.43	3.81	4.76	5.10	4.60
1985	8.56	14.14	15.79	7.00	4.37	2.61	2.61	2.39	3.41	3.37	4.89	5.69	6.24
1986	18.98	14.78	9.03	3.69	3.98	3.77	4.57	3.54	4.62	5.28	3.86	5.08	6.76
1987	6.47	7.58	44.07	17.65	4.98	4.26	5.75	5.63	192.84	102.63	45.08	33.35	39.19
1988	23.61	34.82	99.25	18.43	6.96	8.18	5.44	5.09	3.90	4.39	6.24	22.50	19.90
1989	43.74	47.19	25.51	8.47	7.81	6.42	6.96	6.87	5.72	5.73	7.56	11.70	15.31
1990	8.57	10.34	24.52	18.81	7.17	6.14	7.08	6.56	6.55	7.91	7.21	10.58	10.12
1991	16.60	59.56	25.53	11.22	5.66	6.53	6.27	6.07	6.71	8.20	10.35	9.02	14.31
1992	8.79	7.01	6.91	6.45	6.60	6.48	5.78	6.55	6.60	6.14	6.26	6.11	6.64
1993	6.08	6.42	6.50	5.42	5.14	4.53	4.50	4.36	4.76	4.37	4.31	5.36	5.15
1994	5.66	4.18	6.21	5.67	3.50	4.52	5.49	5.74	5.84	8.22	8.02	11.27	6.19
1995	16.29	24.23	20.12	12.40	7.23	5.38	5.36	4.83	8.65	2.31	3.73	13.66	10.35
1996	8.45	44.55	54.15	14.94	7.12	5.87	14.54	9.11	6.49	6.88	6.49	8.02	15.55
1997	28.78	16.50	23.97	22.36	8.16	7.38	6.38	5.83	8.15	7.53	7.68	7.00	12.48
1998	23.63	35.76	30.15	13.57	6.60	6.18	6.02	5.71	4.55	4.76	5.75	5.99	12.39
1999	5.94	8.62	6.73	5.86	5.78	5.80	5.84	5.40	5.99	4.99	5.73	7.79	6.21
2000	9.15	13.69	12.76	17.87	10.81	6.76	7.70	6.67	7.10	6.06	7.88	10.69	9.76
2001	7.91	16.87	8.93	11.83	7.12	6.30	7.03	4.06	6.83	7.04	7.58	11.73	8.60
2002	19.69	22.63	10.15	5.70	7.92	7.32	10.40	7.00	6.46	6.41	6.19	7.30	9.76
2003	6.83	6.38	6.83	6.78	6.41	6.28	6.33	5.22	4.25	4.40	4.71	4.80	5.77
2004	5.35	7.57	7.03	6.57	4.17	5.51	5.29	4.57	3.94	3.99	3.89	4.72	5.22
2005	16.29	6.21	7.99	6.71	6.70	7.09	5.45	7.04	5.44	6.64	5.90	6.69	7.35
2006	7.71	9.03	8.36	13.48	7.94	4.65	6.85	5.86	5.13	6.38	6.57	8.16	7.51
2007	5.62	8.15	6.71	7.22	6.49	5.69	5.41	4.08	4.16	5.78	7.86	8.54	6.31
2008	6.64	3.47	6.71	6.53	3.51	5.38	5.36	4.83	8.65	8.22	8.02	11.27	6.55

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 14: Monthly and annual rainfall (millimeters) data for the Tugela Ferry rainfall station in the Tugela River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1926	189.70	9.90	86.50	0.00	3.80	28.70	0.00	0.00	78.80	121.60	88.02	71.50	678.52
1927	86.20	61.80	135.70	2.50	0.00	0.00	17.00	27.90	0.00	48.20	47.90	82.80	510.00
1928	123.50	33.90	53.60	16.00	2.50	0.00	0.00	4.10	56.90	37.40	25.40	36.20	389.50
1929	26.20	71.70	94.20	28.20	0.00	29.20	24.90	0.00	78.60	29.00	85.50	94.50	562.00
1930	105.60	87.20	43.70	26.20	0.00	0.00	2.50	18.60	31.80	57.70	26.90	98.90	499.10
1931	97.90	61.90	30.50	29.50	0.00	0.00	4.80	0.00	0.00	52.60	16.80	70.10	364.10
1932	41.50	232.40	55.90	8.10	53.60	14.70	0.00	0.00	56.40	3.30	131.10	113.00	710.00
1933	20.80	30.30	24.10	17.60	0.00	0.00	30.20	0.00	0.00	15.20	88.02	195.30	421.52
1934	264.60	72.60	61.50	19.80	31.60	2.00	11.40	44.70	4.60	153.90	80.90	114.40	862.00
1935	39.60	66.10	118.80	49.80	4.60	12.20	0.00	0.00	7.40	0.00	56.60	37.60	392.70
1936	196.00	172.50	56.90	0.00	98.00	0.00	1.30	0.00	9.90	47.60	130.00	22.10	734.30
1937	81.30	71.20	109.90	20.90	0.00	1.50	0.00	0.00	14.50	25.90	59.30	133.70	518.20
1938	55.80	102.50	42.50	53.90	0.00	51.50	51.50	0.00	15.30	65.50	55.10	133.10	626.70

1939	95.20	85.60	16.40	10.50	44.00	0.00	17.20	12.20	39.20	36.90	170.80	103.80	631.80
1940	73.30	40.90	52.10	53.50	102.90	52.80	0.00	0.00	126.00	42.40	75.70	196.80	816.40
1941	57.20	68.60	251.10	124.70	0.00	0.00	6.90	0.00	12.20	18.00	59.70	86.60	685.00
1942	245.70	195.40	203.60	13.00	3.30	18.80	0.00	28.20	35.70	72.30	98.70	249.00	1163.70
1943	156.40	146.90	101.70	237.40	107.40	4.60	116.80	182.90	28.40	222.60	122.80	0.00	1427.90
1944	61.00	87.14	24.40	0.00	0.00	37.10	0.00	0.00	105.50	21.20	108.60	96.90	541.84
1945	97.60	58.90	116.30	46.50	10.60	2.50	0.00	0.00	13.70	4.60	61.80	46.10	458.60
1946	89.80	22.50	37.60	2.50	0.00	0.00	0.00	1.30	28.40	136.30	96.00	73.10	487.50
1947	80.70	103.70	129.20	22.60	2.80	53.90	0.00	0.00	29.50	34.80	184.60	60.40	702.20
1948	73.70	62.80	85.30	32.90	8.70	0.00	0.00	0.00	6.90	66.60	120.70	128.80	586.40
1949	124.30	108.70	53.30	86.90	3.60	4.10	6.90	0.00	4.30	63.50	54.50	208.00	718.10
1950	23.20	76.50	46.00	20.60	4.10	0.30	1.80	12.70	4.30	42.10	55.40	154.40	441.40
1951	75.80	94.50	44.70	24.20	15.78	4.60	0.00	103.30	25.10	56.30	0.00	120.40	548.90
1952	156.00	30.80	83.90	43.40	19.60	0.00	22.60	5.10	0.00	35.00	51.40	140.80	588.60
1953	63.80	87.14	61.80	27.50	14.00	9.00	0.00	43.80	3.00	27.00	129.00	64.30	530.34
1954	114.10	57.50	64.90	41.60	74.10	3.00	0.00	0.00	65.50	105.10	120.80	111.00	757.60
1955	152.80	89.50	80.50	35.70	7.00	0.00	0.00	0.00	8.00	50.00	71.80	135.30	630.60
1956	24.00	120.20	48.00	0.00	15.00	0.00	0.00	5.00	39.50	52.50	154.20	219.50	677.90
1957	248.50	59.50	93.00	65.00	0.00	5.00	55.50	29.50	186.00	109.00	54.00	5.00	910.00
1958	137.50	73.50	53.00	94.50	0.00	0.00	0.00	0.00	11.50	31.50	89.00	134.50	625.00
1959	102.50	240.50	21.50	31.50	74.50	0.00	7.50	0.00	7.00	88.00	72.00	114.00	759.00
1960	130.00	91.50	86.50	60.00	2.00	0.00	0.00	5.00	13.50	95.50	113.00	147.50	744.50
1961	25.50	124.50	33.00	77.50	18.50	4.50	0.00	0.00	34.00	29.50	72.50	26.00	445.50
1962	85.00	36.00	79.50	32.00	4.00	0.00	0.00	38.70	7.50	51.00	27.60	113.80	475.10
1963	87.80	25.30	100.60	20.00	3.50	19.80	51.00	0.00	0.10	138.00	137.20	16.80	600.10
1964	205.50	28.50	57.00	63.10	1.30	22.50	10.80	7.80	49.00	71.60	99.00	86.60	702.70
1965	73.30	67.50	10.80	16.00	5.00	67.00	16.20	34.00	57.60	53.00	183.50	104.70	688.60
1966	185.90	60.50	7.00	54.20	12.30	0.00	0.00	24.20	3.20	25.50	88.02	46.10	418.90
1967	168.60	131.00	120.00	57.50	8.30	0.00	14.50	0.00	4.50	35.50	88.70	92.00	720.60
1968	68.00	39.20	66.20	32.50	0.00	0.00	0.00	25.80	0.00	10.00	68.80	11.00	321.50
1969	64.80	56.50	157.00	32.00	12.00	7.00	6.00	14.50	2.50	85.50	23.00	121.00	581.80
1970	107.90	116.50	0.00	14.00	7.00	0.00	0.00	65.00	49.80	24.10	51.00	69.50	504.80
1971	24.00	88.50	37.00	29.80	130.50	0.00	20.00	31.40	1.40	134.50	113.00	134.00	744.10
1972	0.00	87.14	73.67	36.85	15.78	8.72	13.12	17.74	33.56	66.23	0.00	0.00	352.81
1973	118.80	121.00	36.00	60.50	2.50	0.00	0.00	85.00	0.00	38.00	79.50	61.50	602.80
1974	127.00	33.50	112.00	23.00	1.50	12.00	8.00	3.00	0.00	18.00	143.00	236.00	717.00
1975	144.50	51.50	19.50	64.00	0.00	0.00	0.00	0.00	147.00	20.50	99.00	51.50	597.50
1976	123.00	102.00	174.50	35.00	34.00	0.00	0.00	3.20	18.80	123.80	90.00	135.60	839.90
1977	103.50	99.50	82.50	4.50	11.00	0.00	5.00	7.00	45.50	123.00	133.20	23.50	638.20
1978	223.10	43.70	76.50	85.20	4.50	0.00	0.00	18.00	43.00	147.00	40.50	31.50	713.00
1979	145.00	87.50	35.50	23.00	23.00	0.00	47.50	23.00	45.50	38.00	88.02	73.00	629.02
1980	84.00	31.00	28.80	41.00	8.00	0.00	0.00	0.00	47.00	27.50	82.50	110.00	459.80
1981	181.00	11.50	6.00	25.50	4.50	16.70	0.00	19.00	47.50	11.00	120.00	80.50	523.20
1982	172.00	33.00	36.50	0.00	0.00	11.00	4.50	0.00	44.50	98.00	58.00	76.50	534.00
1983	66.00	0.00	74.00	63.50	12.00	0.00	13.00	15.50	20.00	19.00	100.00	181.50	564.50
1984	165.50	60.00	42.50	88.00	0.00	0.00	21.50	35.00	28.50	182.70	46.50	127.50	797.70
1985	106.50	232.50	49.00	0.00	0.00	0.00	0.00	0.00	0.00	85.00	99.50	114.50	687.00
1986	61.30	31.50	263.00	18.50	0.00	17.50	0.00	0.00	25.00	46.50	91.00	187.00	741.30
1987	105.00	187.50	103.50	0.00	0.00	0.00	0.00	91.00	229.00	24.00	77.50	95.00	912.50
1988	85.00	67.00	91.50	4.50	0.00	29.50	48.00	0.00	29.50	77.50	38.00	162.00	632.50
1989	85.00	97.00	30.50	28.00	0.00	0.40	0.00	10.00	0.00	68.50	145.70	211.50	676.60
1990	82.40	64.80	110.00	90.00	0.00	0.00	0.00	38.00	0.00	50.50	67.00	127.50	630.20
1991	148.00	55.00	0.00	5.00	15.00	6.60	0.00	17.74	60.50	107.00	48.50	150.10	613.44
1992	75.50	218.10	80.50	11.50	0.00	0.00	0.00	13.00	25.00	176.80	455.00	880.00	1935.40
1993	101.00	204.00	85.90	56.70	0.00	0.00	0.00	19.00	27.50	168.30	56.80	121.90	841.10
1994	47.50	22.50	93.00	23.20	0.00	0.00	150.10	47.00	70.00	160.00	31.00	60.40	704.70
1995	188.00	61.50	50.50	12.50	12.00	0.00	0.70	20.00	125.00	112.00	70.00	122.30	774.50
1996	16.30	249.50	95.30	24.00	11.50	0.00	95.50	14.40	7.00	98.90	64.50	55.20	732.10
1997	45.20	99.20	164.50	87.90	41.00	77.00	17.50	23.50	16.10	69.50	133.00	27.20	801.60
1998	147.20	102.20	79.50	22.50	23.00	0.00	4.50	4.50	5.50	38.70	85.00	110.50	623.10
1999	84.50	108.90	59.00	0.00	0.00	2.30	12.00	18.00	0.00	40.80	84.40	162.00	571.90

2000	71.00	67.90	34.50	42.00	98.00	0.00	0.00	9.50	49.00	87.20	68.20	151.30	678.60
2001	76.00	83.00	109.80	94.80	15.50	0.00	13.00	0.00	104.70	52.00	86.50	91.50	726.80
2002	91.50	78.10	110.00	44.30	62.00	14.00	105.00	60.00	26.00	31.70	57.40	76.10	756.10
2003	94.00	112.60	26.50	29.00	8.50	5.00	0.00	9.00	10.50	35.70	53.00	30.00	413.80
2004	106.50	148.00	48.50	0.50	0.00	13.00	32.50	22.40	34.50	34.30	98.80	129.90	668.90
2005	131.10	162.00	105.50	7.50	0.80	4.00	0.00	20.00	10.00	0.00	136.70	23.20	600.80
2006	176.30	99.00	86.00	49.70	0.00	0.00	0.00	43.50	34.00	63.60	83.50	153.50	789.10
2007	68.00	43.00	61.50	11.80	0.00	44.00	0.00	0.00	18.50	162.00	98.20	58.60	565.60
2008	157.50	26.50	42.00	69.00	0.00	5.50	0.00	0.00	0.00	66.23	88.02	111.11	565.85

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 15: Monthly and annual rainfall (millimeters) data for the Swartwater rainfall station in the Tugela River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1932	0.00	224.30	93.90	5.40	55.80	5.30	0.30	0.00	13.80	26.70	57.60	119.70	602.80
1933	82.90	101.90	88.10	18.50	0.00	2.80	36.10	5.10	4.60	39.60	231.50	144.00	755.10
1934	154.20	128.50	112.30	12.30	41.20	0.00	41.20	49.60	6.40	70.70	108.10	149.00	873.50
1935	76.90	60.30	54.60	40.53	9.40	7.90	0.00	0.00	24.10	23.90	50.80	103.60	452.03
1936	160.70	162.90	81.80	6.30	77.20	0.00	0.00	0.00	18.50	56.90	192.40	79.60	836.30
1937	228.70	97.50	109.30	12.20	0.00	0.00	0.00	0.00	30.50	15.40	47.50	251.30	792.40
1938	201.70	183.60	46.90	63.80	0.00	64.80	46.70	10.50	4.10	194.00	41.40	334.50	1192.00
1939	79.50	138.10	64.60	10.20	50.50	0.00	40.50	5.60	51.10	57.70	269.00	110.00	876.80
1940	61.30	100.40	108.70	55.10	170.90	65.50	0.00	0.00	69.10	83.10	85.80	172.50	972.40
1941	133.20	140.20	39.40	136.50	0.00	0.00	10.20	0.00	21.10	39.00	86.10	119.70	725.40
1942	231.90	118.10	57.30	7.60	14.70	10.60	0.00	24.30	33.80	83.40	199.70	168.10	949.50
1943	156.10	68.40	65.80	93.50	94.30	5.10	90.50	128.30	5.80	167.60	111.60	92.50	1079.50
1944	70.70	135.40	30.70	21.10	1.30	79.70	0.00	0.00	105.40	69.90	25.10	124.00	663.30
1945	88.50	46.40	179.70	32.30	8.80	0.00	0.00	0.00	7.10	18.80	15.80	51.50	448.90
1946	136.20	12.40	85.50	2.50	0.00	0.00	1.30	2.80	4.80	116.50	134.20	76.20	572.40
1947	51.90	89.00	70.80	29.20	0.00	49.90	0.00	0.00	38.10	100.10	130.80	95.30	655.10
1948	129.60	94.00	79.00	40.20	15.50	0.00	0.00	0.00	25.70	105.10	77.40	83.00	649.50
1949	190.70	136.30	122.90	0.00	0.00	2.30	4.30	0.00	26.90	85.20	97.40	141.40	807.40
1950	82.40	52.00	106.40	40.30	24.10	1.80	0.00	27.70	10.90	71.10	124.90	185.50	727.10
1951	57.40	101.60	123.50	44.10	33.90	0.00	0.00	70.90	55.70	39.40	46.50	232.70	805.70
1952	190.90	24.90	75.90	45.50	17.80	2.00	43.10	3.00	12.20	46.00	122.00	124.40	707.70
1953	125.65	103.23	77.01	82.80	0.00	2.70	0.00	52.50	18.50	22.50	121.90	76.10	682.89
1954	59.00	164.10	69.60	26.80	52.80	9.50	0.00	0.00	55.00	146.90	177.00	57.50	818.20
1955	201.10	136.80	81.50	29.00	0.00	0.00	0.00	0.00	3.00	75.00	103.60	65.00	695.00
1956	39.10	167.60	92.30	1.00	35.30	0.00	0.00	2.00	30.50	60.50	105.74	201.00	735.04
1957	114.50	73.50	62.00	50.00	0.00	5.80	57.50	42.70	154.50	159.80	41.30	38.00	799.60
1958	143.00	49.50	58.00	122.60	0.00	0.00	0.00	0.00	29.20	80.00	110.50	89.00	681.80
1959	40.00	107.60	36.00	36.50	38.70	0.00	40.90	0.00	23.00	98.10	151.20	116.00	688.00
1960	86.50	103.50	73.50	79.50	0.00	0.00	0.00	0.00	79.20	57.10	145.80	114.80	739.90
1961	22.00	124.50	85.00	77.50	40.70	13.50	0.00	0.00	37.00	56.10	127.80	62.40	646.50
1962	141.00	124.00	84.50	79.30	36.00	0.00	0.00	0.00	23.00	26.90	168.20	154.40	837.30
1963	99.00	12.50	110.50	71.50	26.50	63.60	79.50	0.00	0.00	93.00	250.80	50.60	857.50

1964	183.30	52.50	28.00	63.00	4.00	38.00	2.50	12.50	91.40	300.00	81.50	106.30	963.00
1965	138.30	84.90	9.80	27.80	5.00	68.20	16.20	21.00	40.00	63.50	95.00	48.00	617.70
1966	264.80	77.50	9.30	23.00	52.00	5.00	0.00	23.40	15.00	33.00	72.20	124.00	699.20
1967	137.30	144.50	104.50	63.50	4.00	0.00	6.00	0.00	7.50	71.10	136.00	107.50	781.90
1968	77.00	23.80	70.70	7.00	7.50	0.00	0.00	42.10	3.50	14.10	114.60	203.50	563.80
1969	135.50	99.50	214.70	45.00	38.50	5.00	10.00	1.50	17.70	102.80	37.30	121.50	829.00
1970	187.00	137.50	57.50	40.00	10.00	6.60	11.50	127.50	70.00	90.30	61.00	40.00	838.90
1971	106.00	26.00	58.10	60.20	74.00	0.00	28.70	39.00	7.10	159.00	77.10	185.50	820.70
1972	142.00	161.50	111.00	7.00	47.50	12.00	2.50	3.90	16.00	119.00	154.50	83.00	859.90
1973	118.00	148.00	45.00	80.50	11.00	0.00	0.00	72.00	62.00	12.50	126.00	29.00	704.00
1974	249.00	47.50	44.50	71.00	0.00	40.60	14.50	26.00	5.50	20.80	191.40	182.00	892.80
1975	128.50	117.50	58.00	83.00	13.00	0.00	0.00	0.00	143.50	27.00	119.60	166.50	856.60
1976	121.00	121.90	113.00	45.00	50.00	0.00	0.00	0.00	16.00	177.00	53.50	167.00	864.40
1977	212.00	53.00	122.00	22.00	0.00	0.00	0.00	0.00	105.00	67.00	102.00	81.50	764.50
1978	288.00	80.00	40.00	45.00	9.00	0.00	0.00	26.50	45.50	188.00	73.20	84.40	879.60
1979	85.50	142.00	43.60	14.00	15.00	0.00	48.50	66.70	79.50	16.50	47.40	147.70	706.40
1980	127.50	50.40	52.50	15.00	0.00	0.00	0.00	4.90	104.60	52.90	66.10	211.60	685.50
1981	198.00	50.60	13.50	42.30	2.00	37.00	0.00	31.10	61.00	37.40	123.30	42.50	638.70
1982	92.00	51.20	112.30	8.00	7.00	0.00	7.00	0.00	44.00	146.00	41.30	94.10	602.90
1983	131.50	13.50	65.00	11.00	19.00	0.00	16.00	31.00	2.70	78.50	233.00	173.00	774.20
1984	292.00	103.23	154.00	0.00	0.00	15.00	11.70	66.00	10.00	117.80	53.00	23.00	845.73
1985	107.00	226.00	77.01	40.53	20.96	11.19	11.70	0.00	11.00	80.00	105.74	81.00	772.13
1986	131.00	48.50	111.50	57.50	0.00	0.00	0.00	12.50	8.20	37.20	54.50	246.80	707.70
1987	10.00	130.00	157.00	41.00	20.96	11.19	0.00	38.00	327.00	113.50	100.50	97.00	1046.15
1988	269.30	130.00	73.50	40.53	20.96	11.19	0.00	0.00	34.20	0.00	0.00	0.00	579.68
1989	20.00	197.50	47.00	0.00	0.00	5.00	0.00	3.00	0.00	44.50	347.50	63.50	728.00
1990	56.00	76.00	34.50	110.00	0.00	0.00	11.70	22.00	0.00	70.80	29.50	75.80	486.30
1991	121.00	209.50	50.00	36.00	50.00	17.50	10.00	1.00	8.50	111.00	29.00	153.60	797.10
1992	151.00	89.50	41.00	24.50	0.00	0.00	0.00	0.00	1.50	52.00	77.00	0.00	436.50
1993	55.20	103.23	0.00	21.00	0.00	0.00	0.00	25.00	20.00	224.00	108.00	125.50	681.93
1994	76.00	72.00	94.00	32.50	0.00	0.00	18.00	0.00	34.00	38.00	32.00	96.00	492.50
1995	81.90	44.50	84.50	13.50	28.00	0.00	0.00	0.00	0.00	40.50	157.00	161.00	610.90
1996	202.50	215.00	119.50	17.50	26.00	0.00	1.50	5.50	5.00	45.00	48.50	72.00	758.00
1997	67.50	55.00	75.50	93.00	55.00	107.00	38.00	28.00	38.00	68.50	133.50	66.00	825.00
1998	91.00	68.50	133.00	28.00	25.00	0.00	0.00	0.00	5.00	72.50	106.00	86.00	615.00
1999	183.00	97.50	53.50	10.00	30.00	0.00	0.00	0.00	0.00	28.00	64.50	200.50	667.00
2000	90.00	144.00	104.50	55.00	81.00	10.00	0.00	0.00	58.00	91.00	81.00	146.00	860.50
2001	36.00	112.00	20.00	99.00	0.00	0.00	0.00	0.00	115.00	91.00	105.00	46.00	624.00
2002	126.00	99.00	26.00	43.00	22.00	0.00	88.00	30.00	44.00	49.00	58.00	147.00	732.00
2003	124.00	49.00	39.00	15.00	0.00	39.00	0.00	0.00	35.50	5.50	92.50	51.00	450.50
2004	86.00	129.20	101.00	0.00	0.00	0.00	55.00	10.50	35.00	20.00	75.00	79.00	590.70
2005	111.00	182.50	97.00	6.00	10.00	0.00	0.00	42.00	13.00	50.00	151.50	14.50	677.50
2006	198.00	97.00	69.00	82.00	6.00	0.00	0.00	49.00	70.50	143.50	160.00	203.50	1078.50
2007	51.00	80.00	39.00	58.00	0.00	24.00	0.00	5.00	25.00	121.00	101.50	108.00	612.50
2008	180.00	123.50	129.00	50.00	4.00	5.50	0.00	16.99	37.61	77.33	105.74	114.80	844.47

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 16: Monthly and annual rainfall (millimeters) data for the Moorside rainfall station in the Tugela River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1914	157.13	140.49	70.60	40.50	29.20	0.00	0.00	24.20	5.10	79.50	109.60	286.80	943.12
1915	285.20	176.60	66.30	33.80	9.70	21.10	21.10	6.40	24.40	138.80	126.20	120.20	1029.80
1916	95.40	152.40	85.80	29.70	4.30	0.00	0.00	0.00	25.40	30.70	82.70	138.30	644.70
1917	180.30	185.70	77.70	23.90	16.50	30.80	55.40	79.10	63.70	153.30	228.30	249.80	1344.50
1918	152.40	313.60	140.20	0.00	5.10	0.00	22.90	112.70	33.90	87.90	93.50	174.80	1137.00
1919	106.70	85.70	45.00	39.90	0.00	0.00	1.30	1.80	22.60	27.10	154.10	53.10	537.30
1920	235.20	148.80	163.00	40.85	0.00	0.00	0.00	4.30	80.00	99.70	53.80	63.90	889.55
1921	88.30	118.20	117.60	33.30	12.20	0.00	0.00	0.00	92.00	38.90	300.80	173.60	974.90
1922	104.80	228.30	42.50	2.80	23.30	17.60	2.30	109.70	17.30	108.10	231.30	118.70	1006.70
1923	154.50	306.60	36.80	2.00	0.00	5.60	12.70	5.40	1.00	56.20	43.50	124.10	748.40
1924	228.10	80.00	147.90	22.60	19.60	4.60	2.50	10.00	66.90	71.50	134.00	128.83	787.70
1925	157.13	140.49	333.30	55.50	5.80	2.80	5.10	0.00	40.40	89.10	85.20	72.40	987.22
1926	287.60	72.60	107.60	15.30	7.40	30.30	0.00	0.00	143.60	68.80	101.60	133.60	968.40
1927	95.60	190.90	110.20	15.50	0.00	0.00	24.20	17.30	5.90	146.10	51.00	134.70	791.40
1928	86.80	113.20	100.19	26.10	11.40	0.00	0.00	12.70	45.70	63.00	32.50	208.30	699.89
1929	77.50	87.50	100.19	72.20	12.70	51.00	43.10	8.40	148.80	66.70	201.60	177.60	1047.29
1930	181.60	116.40	40.00	33.10	0.80	0.00	10.70	9.70	39.60	30.30	33.40	112.80	608.40
1931	138.70	237.40	66.50	8.90	0.00	0.00	22.50	0.00	8.10	60.90	56.20	128.83	728.03
1932	157.13	140.49	100.19	40.85	16.42	8.59	10.40	20.05	38.86	33.00	115.90	68.40	750.28
1933	56.20	116.10	62.50	67.60	0.00	0.00	35.90	0.00	0.00	31.20	243.50	189.10	802.10
1934	383.70	57.10	84.80	90.10	50.80	0.00	35.10	64.80	0.00	65.20	48.70	102.50	982.80
1935	31.70	94.80	118.30	24.60	0.00	10.20	0.00	4.10	43.90	27.90	53.80	84.10	493.40
1936	163.60	103.90	163.70	11.90	116.40	0.00	0.00	0.00	10.40	82.30	197.40	104.40	954.00
1937	237.60	81.30	79.10	62.00	0.00	0.00	0.00	0.00	29.20	25.40	55.90	114.80	685.30
1938	85.90	102.40	36.80	111.20	16.42	62.00	62.90	32.20	38.86	90.60	132.80	143.70	915.78
1939	149.40	146.00	93.00	4.10	33.80	0.00	41.90	9.10	34.50	79.20	191.50	204.90	987.40
1940	34.30	120.60	35.30	42.20	88.90	0.00	0.00	3.80	50.00	95.80	88.90	167.10	726.90
1941	208.00	140.49	65.30	90.20	0.00	0.00	5.10	0.00	13.40	49.80	56.70	139.80	768.79
1942	220.40	204.70	160.10	68.00	20.10	2.50	0.00	40.60	37.40	126.20	223.20	196.40	1299.60
1943	222.80	36.90	127.30	122.70	33.00	0.00	83.60	137.10	0.00	132.10	70.40	146.40	1112.30
1944	117.40	218.00	46.30	0.00	2.50	71.40	0.00	0.00	132.80	83.40	58.80	34.70	765.30
1945	65.50	107.30	237.90	42.70	0.00	7.60	0.00	0.00	12.20	15.50	8.10	3.30	500.10
1946	295.20	127.30	221.30	14.20	0.00	0.00	0.00	0.00	0.00	106.30	173.80	78.10	1016.20
1947	88.80	151.40	103.90	41.90	0.00	49.80	0.00	0.00	38.80	64.50	146.60	156.30	842.00
1948	132.00	76.00	113.90	65.10	10.20	0.00	2.30	0.00	26.60	96.10	89.00	60.00	671.20
1949	128.00	122.20	171.20	71.10	6.60	0.00	11.20	0.00	35.80	74.30	164.50	125.40	910.30
1950	111.90	87.10	100.19	69.80	27.30	3.80	3.30	28.40	3.80	70.00	53.40	150.40	709.39
1951	95.70	121.10	61.50	52.10	10.90	9.70	8.90	51.80	38.40	67.70	34.00	109.30	661.10
1952	234.70	105.00	129.40	55.60	3.30	0.00	53.00	8.90	20.80	57.10	109.70	46.30	823.80
1953	204.50	205.00	107.50	74.50	1.00	0.00	0.00	29.50	6.50	27.50	115.00	83.00	854.00
1954	106.80	295.50	126.80	22.00	46.00	15.50	0.00	0.00	75.40	132.50	251.50	134.50	1206.50
1955	250.50	226.00	38.10	22.80	4.50	0.00	0.00	2.00	10.50	57.60	113.00	94.00	819.00
1956	38.00	300.50	159.50	5.50	49.50	0.00	1.20	1.40	31.00	58.50	156.00	246.50	1047.60
1957	194.00	97.50	125.00	63.00	0.00	8.00	76.50	46.50	221.00	105.00	44.50	163.40	1144.40
1958	156.70	144.00	128.10	77.30	1.00	0.00	0.00	0.00	102.20	60.20	112.90	109.60	892.00
1959	95.60	167.80	35.80	25.30	89.30	0.00	2.60	1.30	7.20	112.50	96.70	148.70	782.80
1960	163.90	165.20	71.70	97.90	2.10	0.00	4.30	5.20	22.90	112.50	108.40	202.90	957.00
1961	40.50	51.00	210.40	81.70	24.60	1.90	0.00	0.00	50.20	22.30	169.90	90.60	743.10
1962	240.40	127.30	32.80	71.70	1.20	0.00	0.00	24.30	26.00	24.50	106.40	151.80	806.40
1963	256.00	51.10	85.20	16.20	7.60	38.50	30.20	0.00	0.00	58.00	84.20	72.10	699.10
1964	190.50	25.30	58.90	30.20	0.00	36.80	3.20	11.40	61.40	151.60	108.25	171.00	848.55
1965	157.80	85.20	12.40	48.60	10.30	53.30	5.30	38.60	57.70	49.10	68.80	71.60	658.70
1966	225.60	125.70	27.50	26.20	44.70	0.00	0.00	22.00	22.10	22.10	55.80	152.20	723.90
1967	300.80	147.10	174.50	55.80	8.30	0.00	0.20	0.00	9.50	22.40	52.70	112.70	884.00
1968	54.70	34.70	77.20	24.60	0.00	0.00	0.00	29.10	5.70	28.00	50.70	54.70	359.40

1969	97.60	90.50	203.10	77.40	60.70	0.00	10.00	0.00	21.50	130.60	23.00	106.10	820.50
1970	173.00	140.49	28.30	17.50	14.70	13.30	9.20	68.50	51.00	96.00	80.50	34.10	726.59
1971	430.20	67.50	78.90	56.90	68.80	0.00	39.70	21.50	4.50	89.90	75.50	166.10	1099.50
1972	128.50	169.50	164.60	6.00	19.00	4.50	0.00	26.70	0.00	81.00	119.20	104.80	823.80
1973	84.40	111.10	25.90	166.50	0.00	0.00	0.00	81.50	90.30	45.20	143.50	123.60	872.00
1974	201.70	119.30	141.40	71.70	0.00	14.00	5.50	9.00	0.00	34.70	152.70	99.90	849.90
1975	213.10	193.50	98.20	35.20	0.00	0.00	0.00	2.20	121.30	33.00	153.90	259.50	1109.90
1976	193.10	156.00	187.20	93.20	49.60	0.00	0.00	0.00	20.00	129.70	116.30	126.90	1072.00
1977	208.00	68.00	109.20	88.10	0.00	0.00	0.00	0.00	85.50	112.60	43.10	135.20	849.70
1978	244.80	125.90	134.70	0.00	0.00	0.00	0.00	28.50	76.50	138.50	84.80	200.90	1034.60
1979	98.80	166.30	56.50	13.50	84.00	0.00	36.00	91.10	56.10	40.10	57.30	114.10	813.80
1980	162.50	129.70	67.00	26.50	22.70	0.00	0.00	2.00	85.70	60.50	115.00	107.20	778.80
1981	178.90	266.50	9.50	24.50	0.00	18.30	0.00	33.30	61.80	44.30	118.30	137.10	892.50
1982	124.00	24.20	92.50	0.00	6.50	0.00	8.00	0.00	23.50	120.40	57.30	40.00	496.40
1983	100.70	38.10	38.10	24.00	13.00	4.50	6.60	12.80	2.50	123.60	126.40	234.60	724.90
1984	213.50	40.80	117.50	38.50	0.00	0.00	7.50	85.50	28.00	73.50	43.20	81.50	729.50
1985	219.80	245.30	32.10	0.00	0.00	5.00	1.50	0.00	16.20	135.60	131.10	175.50	962.10
1986	153.80	66.10	93.90	36.90	0.00	10.50	0.00	16.90	9.20	77.90	75.80	137.80	678.80
1987	121.70	249.60	141.60	21.10	0.00	8.50	0.00	86.00	243.20	49.80	88.10	144.60	1154.20
1988	60.20	359.50	95.50	0.00	0.00	31.50	25.00	0.00	28.50	73.40	94.00	87.00	854.60
1989	184.20	276.70	52.50	33.30	16.80	11.70	0.00	3.50	0.00	61.30	215.30	85.40	940.70
1990	41.00	115.60	115.20	47.80	5.00	0.30	0.00	26.80	0.00	43.00	10.40	149.60	554.70
1991	107.40	159.40	70.90	0.00	0.00	28.10	0.10	20.05	25.20	177.00	56.50	139.40	784.05
1992	59.50	114.90	20.80	12.90	0.00	0.00	0.00	17.00	1.00	18.30	85.30	43.30	373.00
1993	125.30	152.00	89.30	12.30	1.50	0.00	0.00	0.00	29.70	184.30	97.40	110.60	802.40
1994	168.90	222.00	126.60	36.80	0.00	0.00	6.80	34.70	8.30	54.20	18.10	67.40	743.80
1995	112.40	84.60	102.10	41.00	12.00	6.30	1.40	22.00	32.60	25.00	126.20	236.10	801.70
1996	367.60	272.10	118.90	15.90	24.10	0.00	71.50	13.80	19.40	140.30	77.70	149.90	1271.20
1997	181.50	76.10	209.30	52.40	60.80	69.90	21.70	15.60	46.30	115.10	172.50	71.00	1092.20
1998	174.40	170.80	98.40	28.80	6.60	0.00	4.00	4.10	18.90	61.80	170.10	141.10	879.00
1999	64.40	107.00	53.90	28.40	3.50	4.30	0.00	0.00	0.00	51.10	126.70	284.90	724.20
2000	181.30	162.80	55.20	66.60	134.60	0.00	0.00	13.90	45.20	92.00	87.30	131.90	970.80
2001	30.00	118.60	153.50	21.80	5.40	4.30	0.00	4.20	118.40	109.80	222.20	102.90	891.10
2002	74.40	41.10	49.50	19.80	34.40	8.80	32.50	50.60	27.90	65.00	41.30	191.70	637.00
2003	53.70	168.10	51.80	88.90	14.00	3.40	0.00	5.00	3.00	7.50	95.10	67.20	557.70
2004	80.20	199.80	102.70	29.20	2.50	9.60	0.00	6.50	25.00	25.70	172.30	178.20	831.70
2005	185.10	134.30	82.20	20.70	6.30	0.00	0.00	50.30	11.90	115.40	194.80	43.50	844.50
2006	346.70	135.70	199.60	48.20	0.00	0.00	0.00	35.00	10.00	63.40	111.10	144.00	1093.70
2007	114.70	72.60	75.00	21.40	0.00	11.20	0.00	2.40	50.70	156.30	65.10	70.10	639.50
2008	157.40	130.70	140.60	69.50	8.50	4.50	0.00	0.00	13.60	76.50	108.25	128.83	639.50

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 17: Monthly and annual river flow data (cubic meters per second) for the Tugela River at Tugela Ferry river flow station.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1927	83.48	103.04	127.96	90.12	13.13	6.90	4.27	5.17	2.65	25.14	25.05	65.16	46.01
1928	167.79	78.05	81.42	24.25	8.01	4.17	2.49	1.63	1.13	17.35	3.66	32.04	35.17
1929	106.58	79.57	173.03	37.22	12.53	15.39	20.72	8.56	59.26	92.34	62.63	165.87	69.47
1930	235.00	77.42	179.73	76.00	39.99	21.24	17.24	22.94	29.16	43.73	78.93	124.84	78.85
1931	136.18	127.83	153.41	76.00	39.99	21.24	17.24	22.94	29.16	43.73	78.93	124.84	72.62
1932	95.04	201.90	156.40	33.16	43.59	13.11	11.85	10.61	12.11	10.53	78.93	84.44	62.64
1933	68.66	68.03	73.13	21.33	11.57	11.18	11.57	10.52	9.69	9.42	145.64	219.31	55.00
1934	403.44	229.69	156.80	100.63	26.40	16.72	18.68	48.82	15.53	28.44	134.43	370.76	129.20
1935	83.72	170.01	126.80	97.71	52.45	16.52	12.34	11.80	11.50	11.36	32.34	23.26	54.15
1936	92.38	207.51	88.19	86.56	64.60	14.91	11.32	10.76	10.55	27.07	212.69	68.63	74.60

1937	241.28	302.42	89.15	24.22	15.20	12.58	12.18	11.95	13.09	11.95	23.37	129.33	73.89
1938	113.28	108.72	56.44	129.43	33.95	25.84	14.62	12.37	13.76	81.03	58.12	142.45	65.83
1939	107.21	440.13	89.79	37.82	57.37	25.44	13.62	12.78	12.01	47.50	139.65	156.00	94.94
1940	142.68	112.58	98.47	131.09	102.49	21.05	13.20	12.37	47.49	54.43	102.65	282.55	93.42
1941	151.54	337.01	217.99	99.71	23.36	13.20	12.57	11.95	11.38	11.11	13.33	34.68	78.15
1942	65.19	137.23	306.53	120.00	46.12	28.11	15.72	14.71	14.41	83.73	181.79	325.11	111.55
1943	318.70	126.03	156.67	332.64	522.58	21.24	17.24	458.91	313.46	434.63	528.64	124.84	279.63
1944	164.04	202.25	153.41	76.00	39.99	21.24	17.24	22.94	29.16	43.73	18.85	15.00	66.99
1945	40.00	91.69	185.30	18.49	15.00	15.00	15.00	15.00	15.00	15.00	16.70	17.80	38.33
1946	56.36	160.19	69.93	49.28	15.00	15.00	15.00	15.00	11.10	36.40	97.24	44.66	48.76
1947	53.95	165.57	128.18	94.78	22.12	21.83	14.18	13.11	18.01	44.26	102.64	210.41	74.09
1948	263.47	159.22	336.81	85.24	41.26	19.78	15.53	13.56	12.70	7.89	18.61	47.45	85.13
1949	69.24	133.82	186.22	45.45	49.61	10.68	7.26	3.48	4.67	12.92	77.03	106.92	58.94
1950	98.78	69.16	371.94	114.54	31.58	26.71	18.28	5.97	23.87	15.74	34.49	112.40	76.95
1951	156.15	170.54	157.52	29.69	12.58	7.49	3.51	14.60	47.96	87.78	28.63	98.76	67.93
1952	222.42	266.80	172.68	45.31	13.91	5.02	8.38	4.33	5.07	8.03	119.75	124.50	83.02
1953	172.41	382.53	150.86	121.18	23.88	12.44	8.15	14.74	5.18	9.32	41.22	112.72	87.89
1954	110.44	308.35	182.63	46.61	38.00	10.47	4.17	1.58	31.76	106.62	245.53	224.69	109.24
1955	303.40	568.57	242.11	30.28	22.71	15.05	5.94	1.42	1.42	4.35	3.52	105.17	108.66
1956	19.30	211.80	228.24	84.28	24.78	7.64	2.06	1.34	1.79	2.27	128.33	429.44	95.11
1957	302.73	217.84	229.21	74.14	26.45	17.47	34.96	25.35	305.85	264.96	84.96	111.81	141.31
1958	326.34	246.81	101.78	102.54	26.85	18.65	13.72	10.85	17.69	10.88	87.29	69.44	86.07
1959	139.84	202.34	71.44	17.98	96.14	27.47	19.25	12.77	8.32	40.88	114.16	116.95	72.29
1960	120.20	192.94	253.53	124.88	73.39	31.44	19.95	21.37	18.34	40.76	87.18	279.07	105.25
1961	181.53	90.84	197.19	154.44	41.81	28.55	19.17	16.34	12.23	12.56	77.04	144.58	81.36
1962	310.42	276.26	109.66	64.87	39.12	21.45	18.04	16.47	14.47	10.89	54.40	190.13	93.85
1963	381.98	238.94	251.83	71.48	31.81	24.42	64.80	16.68	16.51	39.60	247.00	141.43	127.21
1964	227.09	125.16	150.35	69.10	29.15	27.00	23.34	15.61	53.79	126.66	265.92	229.49	111.89
1965	232.44	173.74	44.15	60.64	24.24	42.44	30.99	33.10	105.14	46.72	142.56	154.25	90.87
1966	372.04	368.04	79.38	60.08	57.77	41.95	35.81	31.90	43.92	46.70	171.25	374.12	140.25
1967	415.65	644.07	274.78	302.00	77.43	46.24	35.05	26.38	17.56	14.14	74.04	124.07	170.95
1968	95.82	98.86	153.41	76.00	39.99	21.24	17.24	22.94	29.16	43.73	78.93	124.84	66.85
1969	164.04	202.25	153.41	76.00	39.99	21.24	46.16	38.78	40.33	64.09	21.83	124.84	82.75
1970	164.04	293.11	102.83	59.26	45.55	36.09	29.95	57.02	65.38	166.63	122.63	71.20	101.14
1971	281.68	384.22	184.18	176.31	87.13	52.12	56.86	65.69	59.10	92.22	123.87	292.40	154.65
1972	336.20	324.94	521.96	175.04	98.50	64.23	45.28	35.77	32.52	58.22	97.12	106.42	158.02
1973	145.54	276.53	240.48	255.35	121.68	105.31	89.01	153.28	113.36	212.30	280.19	281.83	189.57
1974	765.30	583.56	417.32	264.82	113.49	101.53	66.33	53.59	42.73	45.69	127.88	288.99	239.27
1975	339.83	744.69	428.09	137.44	89.57	67.76	45.73	38.88	125.14	88.03	175.37	391.22	222.65
1976	568.50	531.85	587.58	297.62	120.25	100.09	17.24	38.41	35.88	136.72	164.05	109.90	225.67
1977	198.36	343.26	196.46	174.68	50.08	44.97	36.74	42.26	45.93	55.66	78.93	124.84	116.01
1978	164.04	202.25	153.41	76.00	39.99	21.24	17.24	22.94	29.16	43.73	22.56	185.99	81.55
1979	57.11	177.86	114.93	15.81	13.12	7.76	8.30	19.90	20.11	14.20	15.84	45.94	42.57
1980	77.64	121.84	128.12	29.65	13.92	12.54	9.70	10.68	12.97	15.24	24.51	106.33	46.93
1981	143.89	448.41	123.32	16.47	10.68	9.56	7.35	7.37	16.51	6.03	25.25	33.91	70.73
1982	90.58	23.61	42.40	34.45	16.62	12.69	12.41	12.49	14.27	23.42	26.32	17.18	27.20
1983	32.33	24.61	15.79	16.75	10.36	9.20	8.44	9.72	5.51	21.45	53.21	143.79	29.26
1984	129.79	75.57	83.45	82.50	18.44	13.18	9.98	7.36	16.55	28.38	17.38	30.30	42.74
1985	120.48	282.52	88.88	21.52	15.30	13.53	12.96	11.24	11.08	17.50	63.63	137.12	66.31
1986	164.72	190.27	65.05	30.46	20.86	15.36	11.76	9.93	10.18	17.12	35.54	105.79	56.42
1987	104.88	141.32	210.76	36.55	17.58	15.75	15.08	25.26	54.44	43.73	78.93	124.84	72.43
1988	164.04	202.25	153.41	76.00	39.99	9.98	13.82	9.41	8.38	12.39	11.73	76.28	64.81
1989	168.08	327.17	69.06	12.51	10.20	9.54	8.17	7.25	6.24	7.72	32.49	75.20	61.14
1990	20.28	16.26	33.99	17.48	9.54	8.75	8.48	8.45	8.19	8.66	9.40	30.36	14.99
1991	67.51	128.62	44.11	11.60	8.53	8.72	7.80	6.94	6.94	30.66	16.06	41.97	31.62
1992	27.63	33.27	28.37	10.70	7.91	7.91	7.42	6.94	10.30	7.22	9.49	18.38	14.63
1993	16.25	53.83	56.64	21.06	12.08	11.47	12.08	11.60	11.09	46.67	37.17	53.97	28.66
1994	133.41	204.02	62.08	24.80	12.23	10.39	9.65	10.21	4.43	4.88	5.10	12.32	41.13
1995	24.25	14.99	25.88	18.03	7.06	3.97	3.64	3.37	4.11	9.11	44.09	213.66	31.01
1996	224.69	202.25	64.52	25.08	10.01	3.73	13.50	6.56	2.90	16.67	16.84	32.19	51.58
1997	123.56	34.12	241.15	83.48	22.12	35.26	20.66	10.92	13.43	10.34	25.36	46.79	55.60

1998	73.87	74.89	102.86	26.42	6.71	4.50	4.03	2.96	1.85	3.65	31.04	44.47	31.44
1999	47.95	120.92	53.49	12.17	3.83	2.19	1.85	2.05	1.42	2.96	5.87	84.06	28.23
2000	222.38	151.00	146.34	55.49	44.33	8.91	3.76	3.46	7.16	11.47	22.22	73.49	62.50
2001	27.05	65.66	49.12	77.58	13.97	7.00	4.71	2.54	25.74	24.68	115.49	68.82	40.20
2002	49.24	91.91	35.48	6.43	2.63	5.10	7.03	9.71	15.29	3.35	6.35	52.45	23.75
2003	32.47	15.24	18.52	9.61	5.57	3.57	3.23	3.10	2.91	2.61	13.04	5.15	9.59
2004	25.80	99.16	83.30	43.01	5.23	3.88	3.91	3.96	4.03	4.31	20.76	51.69	29.09
2005	137.27	133.49	234.33	37.80	10.28	6.28	4.97	5.46	4.03	8.73	40.32	8.01	52.58
2006	158.71	318.72	230.45	60.17	25.46	9.38	5.58	7.20	5.74	16.44	34.60	90.84	80.27
2007	45.83	48.68	19.88	12.77	10.51	10.33	11.41	10.20	9.25	32.86	23.06	124.84	29.97

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 18: Monthly and annual rainfall (millimeters) data for the Touwsrivier rainfall station in the Breede River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1918	10.27	0.00	29.80	23.41	32.30	51.80	35.80	0.80	18.40	0.00	0.00	0.00	179.17
1919	0.00	0.00	7.60	0.50	3.80	26.20	33.70	12.50	4.60	0.80	9.70	0.00	99.40
1920	0.00	8.90	2.00	0.00	32.30	67.90	53.10	31.50	24.40	9.40	0.00	22.30	251.80
1921	4.30	49.50	5.10	7.70	1.50	123.00	36.30	39.70	4.60	1.50	8.40	18.80	300.40
1922	70.20	4.60	9.60	25.40	6.40	51.60	6.90	39.30	1.50	9.40	3.60	3.80	232.30
1923	4.30	13.00	0.00	18.20	42.60	2.10	3.80	84.40	13.41	14.30	11.87	11.66	219.64
1924	10.27	10.88	18.40	23.41	26.04	84.40	83.50	51.80	34.00	10.10	60.70	0.00	413.50
1925	0.00	0.00	0.00	0.00	23.30	349.20	43.70	24.90	11.70	0.00	4.60	11.66	469.06
1926	0.00	0.00	0.00	3.80	112.70	11.20	43.70	11.10	1.00	34.30	7.40	0.00	225.20
1927	0.00	6.40	8.40	121.40	4.60	6.40	9.70	83.60	54.20	0.00	8.70	10.70	314.10
1928	3.00	0.00	38.30	4.10	0.00	59.00	12.90	3.10	15.20	0.00	29.50	9.40	174.50
1929	0.00	0.00	40.10	20.00	18.70	20.90	52.60	42.20	3.10	0.00	4.50	5.60	207.70
1930	21.90	24.90	13.50	7.60	0.00	4.60	11.60	17.80	13.41	15.70	0.00	11.66	142.67
1931	15.70	0.00	5.00	55.40	11.10	2.50	15.20	38.20	13.41	38.80	9.40	3.00	207.71
1932	0.00	15.50	0.00	23.41	48.20	36.00	31.50	23.80	63.10	0.00	11.87	11.66	265.05
1933	15.50	7.10	50.00	10.20	16.80	37.40	38.60	27.20	0.00	0.00	27.40	23.60	253.80
1934	8.10	21.10	4.60	3.00	21.30	8.60	14.00	9.90	12.20	41.90	61.40	0.00	206.10
1935	0.00	0.00	17.30	38.70	32.30	27.40	14.80	23.80	13.41	0.00	11.87	0.00	179.58
1936	9.40	0.00	0.00	23.41	26.04	0.00	30.07	23.80	13.41	5.30	29.20	108.30	268.93
1937	21.60	6.90	24.90	8.40	7.20	33.70	32.40	2.00	5.80	10.50	8.40	79.20	241.00
1938	6.60	8.10	21.60	20.20	20.90	15.70	13.50	10.40	6.80	13.40	12.50	0.00	149.70
1939	0.00	53.90	18.50	11.70	33.80	26.20	5.30	33.80	2.50	2.00	0.00	0.00	187.70
1940	12.70	24.90	10.60	37.80	9.40	25.40	9.40	7.40	15.70	6.10	52.60	0.00	212.00
1941	29.00	0.00	0.00	34.00	66.20	47.90	25.80	34.30	21.40	57.10	3.80	9.40	328.90
1942	0.00	0.00	0.30	0.00	28.70	68.80	3.60	11.90	0.00	0.00	0.00	11.66	124.96
1943	30.40	0.00	22.20	23.41	13.50	20.60	25.70	23.20	38.30	14.30	11.87	11.66	235.14
1944	4.80	0.00	29.20	11.50	20.50	36.00	5.10	31.20	50.60	17.20	21.90	5.10	233.10
1945	0.00	0.00	6.80	6.40	69.10	64.50	41.10	29.00	0.00	34.80	0.00	0.00	251.70
1946	0.00	9.10	5.10	0.00	2.00	8.90	5.80	3.50	43.90	5.30	0.00	1.80	85.40
1947	0.00	1.00	5.80	22.70	9.40	44.40	23.90	2.80	2.40	2.30	2.50	11.66	128.86
1948	8.10	2.00	37.20	2.80	23.40	13.20	16.00	1.60	12.50	46.80	0.00	2.00	165.60
1949	0.00	4.80	2.80	26.40	3.30	23.30	17.90	18.20	10.20	31.80	33.00	0.00	171.70
1950	0.00	2.30	8.90	24.10	15.80	10.20	45.80	0.00	22.30	1.00	30.00	8.20	168.60
1951	32.50	31.00	0.00	5.60	6.30	72.70	24.10	17.20	1.50	18.50	19.90	0.00	229.30
1952	0.00	19.70	0.50	26.60	18.30	38.40	33.40	39.10	9.10	3.80	27.90	7.10	223.90
1953	0.00	10.00	0.00	69.00	34.70	3.70	17.50	20.70	8.50	7.60	7.70	12.40	191.80
1954	0.00	1.20	13.60	30.10	94.90	25.50	36.50	47.00	3.70	2.00	9.40	2.10	266.00
1955	6.10	54.60	6.20	23.30	18.80	31.90	27.70	57.10	0.20	7.30	7.90	27.50	268.60
1956	4.00	18.80	45.50	0.00	23.30	43.20	35.80	21.20	1.90	7.10	0.50	33.80	235.10
1957	2.60	31.80	29.40	23.20	72.50	41.40	43.00	44.40	17.80	14.80	0.00	17.00	337.90
1958	0.00	9.50	17.00	27.00	44.50	5.70	6.90	22.50	6.60	8.50	9.10	0.20	157.50
1959	0.30	22.20	6.40	28.80	70.50	5.30	13.60	22.40	4.60	4.80	0.00	3.00	181.90
1960	0.10	12.40	0.50	9.90	18.10	34.60	9.70	1.90	10.10	0.10	20.30	24.60	142.30

1961	4.10	0.00	31.50	58.60	7.90	31.20	34.30	27.00	50.50	14.30	11.87	11.66	282.93
1962	10.27	10.88	18.40	23.41	26.04	36.00	30.00	92.70	8.20	37.50	10.50	0.00	303.90
1963	10.27	11.00	2.20	14.20	17.80	30.30	24.70	67.00	2.50	25.70	14.10	24.80	244.57
1964	2.30	5.10	11.00	4.00	0.80	65.80	8.50	12.80	9.10	0.50	15.40	10.00	145.30
1965	0.00	10.70	79.30	22.70	28.60	5.30	6.70	12.80	7.00	5.60	11.20	11.60	201.50
1966	0.00	0.00	13.90	20.20	7.70	49.00	23.30	23.30	10.00	3.00	0.00	4.50	154.90
1967	0.00	26.00	0.00	55.90	30.80	45.70	11.70	5.30	11.40	7.60	16.00	2.50	212.90
1968	0.00	0.00	10.10	10.00	31.00	30.50	53.00	22.40	2.00	30.70	8.00	0.00	197.70
1969	0.00	3.50	2.00	69.10	0.00	9.00	7.00	17.00	7.00	23.50	0.00	0.00	138.10
1970	0.00	11.30	0.00	0.00	23.60	37.30	42.50	35.20	12.00	20.00	0.00	17.00	198.90
1971	12.30	6.00	30.70	7.50	8.30	30.00	65.50	23.70	0.70	4.80	1.80	18.50	209.80
1972	20.00	0.00	8.00	6.50	19.50	19.00	7.00	0.00	28.00	2.00	0.00	8.50	118.50
1973	0.00	5.00	36.00	3.00	8.00	17.00	104.50	16.50	4.00	7.00	9.50	19.50	230.00
1974	0.00	42.00	0.00	0.00	34.50	54.50	9.00	104.00	0.00	5.00	10.00	0.00	259.00
1975	28.50	3.50	13.00	3.50	65.00	26.50	27.00	22.50	9.00	7.00	0.00	0.00	205.50
1976	25.10	120.00	4.50	86.50	19.50	82.00	32.00	0.00	5.50	10.50	35.00	6.00	426.60
1977	3.00	63.50	29.00	25.00	68.70	31.00	44.50	51.50	0.00	0.00	39.50	7.50	363.20
1978	0.00	0.00	11.00	21.00	0.00	0.00	0.00	39.00	9.00	5.00	23.00	15.50	123.50
1979	0.00	26.00	3.50	0.00	41.00	46.50	11.00	16.70	11.00	10.50	12.00	0.00	178.20
1980	0.00	5.00	5.00	3.50	16.00	17.50	8.00	31.40	51.00	0.00	58.00	2.00	197.40
1981	125.00	0.00	33.00	5.50	5.00	11.00	58.50	30.50	38.00	11.40	0.00	0.00	317.90
1982	8.00	0.00	65.50	83.00	5.50	46.30	17.00	10.00	1.00	26.00	32.30	0.00	294.60
1983	0.00	0.00	11.00	0.00	77.20	45.50	35.50	2.00	24.00	0.00	10.50	0.00	205.70
1984	2.00	0.00	81.00	1.50	79.00	3.00	11.00	12.00	32.50	26.50	0.00	19.20	267.70
1985	69.70	18.50	16.50	3.20	36.50	20.20	63.00	21.00	8.00	42.00	15.50	32.80	346.90
1986	0.00	0.10	3.50	25.10	3.50	49.00	17.80	64.60	16.20	2.10	14.10	0.00	196.00
1987	0.00	3.20	0.00	62.50	40.20	21.20	32.70	15.00	17.50	0.00	0.00	5.00	197.30
1988	0.00	0.00	48.60	51.00	7.00	37.50	1.50	49.20	5.00	0.00	0.00	22.00	221.80
1989	5.80	0.50	20.90	70.30	4.80	45.80	8.50	32.50	18.50	11.60	12.40	1.50	233.10
1990	1.00	24.00	7.80	85.50	36.00	52.00	34.00	5.50	18.00	6.90	3.00	3.50	277.20
1991	37.00	0.00	34.40	11.50	25.00	58.00	61.50	1.00	39.80	66.30	0.40	0.00	334.90
1992	0.00	7.30	12.50	12.50	17.50	87.40	58.40	36.50	13.00	25.50	13.00	0.00	283.60
1993	0.00	7.50	8.50	63.50	25.70	37.50	51.00	3.70	2.00	3.00	0.00	12.00	214.40
1994	8.50	0.00	10.00	17.80	11.00	81.00	32.00	1.00	30.00	42.00	0.00	23.50	256.80
1995	7.00	37.00	18.50	0.00	35.00	14.00	26.50	11.50	0.30	53.00	24.00	77.80	304.60
1996	0.00	0.00	10.27	0.00	14.00	38.00	46.10	28.40	31.10	72.60	53.90	20.30	314.67
1997	0.00	0.00	36.50	9.60	28.40	71.80	30.50	25.30	0.00	0.00	14.00	5.00	221.10
1998	6.00	18.30	32.00	0.00	38.80	6.00	25.00	13.00	16.00	0.00	9.30	77.50	241.90
1999	5.00	18.60	0.00	10.50	15.10	23.80	4.00	39.00	24.40	0.00	35.50	16.70	192.60
2000	27.50	7.00	76.00	0.00	2.50	10.50	36.00	18.00	7.20	0.00	3.00	0.00	187.70
2001	0.00	5.50	0.00	32.00	12.00	5.00	76.50	42.10	12.80	6.00	0.00	0.00	191.90
2002	33.00	0.00	0.00	19.00	38.10	14.40	16.00	21.00	7.00	4.00	1.00	50.00	203.50
2003	0.00	0.00	40.80	14.30	11.90	3.00	1.30	24.00	7.40	19.80	0.00	0.00	122.50
2004	0.00	0.00	2.40	33.30	0.00	30.00	10.00	2.50	2.00	42.30	7.00	11.60	141.10
2005	20.00	0.00	1.20	56.00	31.90	95.10	30.00	22.30	12.00	0.00	17.50	0.00	286.00
2006	0.00	0.00	0.00	7.00	94.80	0.00	49.50	26.50	0.00	18.50	0.00	0.00	196.30
2007	0.00	0.00	0.00	40.00	37.20	116.10	183.20	22.00	18.00	7.00	16.50	11.66	451.66
2008	15.50	14.50	0.00	0.50	35.10	30.50	78.20	57.00	24.90	14.30	11.87	11.66	294.03

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 19: Monthly and annual rainfall (millimeters) data for the Malabar rainfall station in the Breede River catchment.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1944	6.76	8.34	12.68	28.76	53.01	104.50	19.30	96.60	43.90	13.50	12.30	6.60	406.24
1945	0.00	0.00	7.90	36.10	73.80	118.70	98.00	65.70	4.80	26.40	0.00	1.50	432.90
1946	1.00	1.30	1.30	21.30	10.50	9.10	15.00	16.30	81.00	14.30	0.30	3.30	174.70
1947	0.00	0.00	35.90	1.50	61.40	18.80	91.00	15.10	14.30	22.70	2.00	0.00	262.70
1948	0.00	14.50	36.20	47.00	48.30	16.60	74.13	0.00	0.00	2.50	31.80	11.25	282.29
1949	0.00	0.00	2.50	31.80	53.01	21.60	29.20	62.60	11.20	6.40	131.40	14.00	363.71
1950	0.00	0.00	5.10	106.80	0.00	68.67	98.00	0.00	50.80	0.00	40.10	9.90	379.37
1951	16.10	0.00	0.00	6.40	19.10	115.60	78.70	28.00	40.70	26.00	44.50	0.00	375.10
1952	0.00	12.70	3.80	8.40	91.50	25.40	86.40	86.30	14.70	0.00	27.90	17.70	374.80
1953	0.00	38.00	0.00	124.30	61.00	5.00	112.00	53.00	0.00	0.00	46.50	25.00	464.80
1954	0.00	0.00	8.50	3.80	143.50	55.00	165.50	100.00	45.00	19.00	12.50	0.00	552.80
1955	0.00	66.10	0.00	50.50	5.00	36.00	111.00	157.00	70.00	38.10	42.00	3.50	579.20
1956	23.00	0.00	0.00	0.00	54.50	144.50	110.10	42.10	6.30	0.00	0.00	19.00	399.50
1957	0.00	41.00	16.50	5.50	108.50	157.00	78.50	61.10	11.50	27.00	0.00	0.00	506.60
1958	0.00	23.00	7.00	11.00	41.00	155.00	0.00	39.50	15.00	12.00	5.00	0.00	308.50
1959	0.00	17.00	11.00	42.00	82.50	10.50	74.13	33.00	30.28	19.81	18.47	11.25	349.95
1960	6.76	8.34	12.68	28.76	53.01	39.00	0.00	18.00	9.50	2.50	6.00	23.50	208.04
1961	11.50	2.00	8.50	37.70	19.50	50.50	25.50	25.50	71.00	0.00	0.00	0.00	251.70
1962	0.00	0.00	7.50	17.00	25.50	109.00	23.00	77.50	13.00	62.00	21.50	0.00	356.00
1963	25.50	0.00	0.00	0.00	13.40	50.50	53.00	126.50	10.00	19.00	15.00	51.50	364.40
1964	0.00	0.00	0.00	0.00	18.20	68.00	35.50	34.50	32.70	9.50	26.50	0.00	224.90
1965	7.00	7.50	28.50	38.00	40.00	16.00	11.50	13.20	4.50	14.50	7.00	15.00	202.70
1966	0.00	0.00	21.20	11.50	8.00	43.20	70.00	15.50	29.20	6.00	3.20	1.90	209.70
1967	0.00	7.00	0.00	23.50	24.80	122.50	36.50	38.00	15.50	16.50	14.00	0.00	298.30
1968	0.00	0.00	6.00	9.70	43.80	50.00	35.10	34.80	0.00	50.50	8.50	0.00	238.40
1969	0.00	5.40	0.00	23.50	0.00	11.70	10.70	14.40	14.90	28.50	0.00	0.00	109.10
1970	0.00	11.00	0.00	1.20	28.60	112.50	81.00	68.00	40.60	17.50	0.00	5.00	365.40
1971	0.00	0.00	0.00	0.00	25.00	90.50	113.50	80.50	0.00	0.00	0.00	2.00	311.50
1972	0.50	9.00	0.00	40.50	36.50	54.00	32.00	22.60	23.70	17.50	0.00	29.90	266.20
1973	0.00	0.00	9.30	0.00	14.90	9.90	117.50	77.50	35.00	15.00	6.00	18.00	303.10
1974	2.20	32.00	5.00	0.00	53.00	101.50	56.00	200.50	56.80	26.50	20.00	6.80	560.30
1975	12.40	0.60	3.50	31.20	114.20	30.10	39.60	85.50	0.00	49.50	7.10	0.00	373.70
1976	28.00	3.50	28.50	47.50	18.30	135.20	71.80	39.70	6.30	21.70	94.30	74.00	568.80
1977	22.30	7.70	4.60	67.90	183.10	149.00	74.13	52.48	30.28	19.81	18.47	11.25	641.03
1978	0.00	8.34	12.68	28.76	53.01	68.67	74.13	52.48	55.40	6.70	5.40	23.10	388.66
1979	6.00	21.00	1.70	0.00	40.30	137.20	59.70	19.70	35.50	15.00	2.00	0.00	338.10
1980	12.60	10.60	2.70	15.90	60.10	71.20	14.10	58.10	9.20	19.30	92.60	11.50	377.90
1981	49.80	0.00	9.40	11.70	4.70	23.00	108.20	94.20	71.00	23.40	3.40	3.10	401.90
1982	9.30	0.00	62.60	47.20	21.60	31.10	45.10	8.80	7.20	29.30	1.70	6.70	270.60
1983	0.60	28.30	25.70	1.60	154.00	63.20	105.40	16.80	25.50	5.50	3.60	3.40	433.60
1984	0.00	4.30	70.90	25.20	175.00	5.20	47.40	26.70	103.40	87.80	0.00	39.80	585.70
1985	51.40	16.00	66.10	35.30	51.60	95.70	94.10	63.60	39.30	9.50	19.80	34.20	576.60
1986	0.00	3.50	34.10	8.90	30.90	81.50	36.60	88.80	25.10	10.90	10.10	0.00	330.40
1987	11.30	2.50	0.00	51.50	81.60	76.60	51.20	54.90	40.80	0.40	0.00	8.80	379.60
1988	4.30	0.20	67.70	73.10	19.30	79.90	24.70	59.10	37.40	6.90	5.40	13.50	391.50
1989	11.00	11.20	41.40	57.00	25.70	107.80	73.60	124.30	98.20	25.80	22.00	3.00	601.00
1990	9.00	5.30	18.80	63.00	116.80	78.40	118.00	19.70	2.60	9.70	10.80	13.40	465.50
1991	21.20	0.00	4.10	3.30	43.60	133.70	159.50	33.50	85.20	40.30	9.10	0.00	533.50
1992	0.00	14.00	10.80	54.20	50.00	117.80	94.00	46.40	26.00	97.50	32.20	0.00	542.90
1993	0.00	25.00	16.50	167.00	109.80	111.00	547.50	52.00	9.00	0.00	0.00	4.50	1042.30
1994	2.30	0.00	0.00	20.90	28.70	27.70	41.80	9.00	58.90	4.00	0.00	0.00	193.30
1995	5.30	0.00	18.00	0.00	125.60	63.50	68.00	18.60	0.00	64.00	15.00	50.50	428.50
1996	0.00	11.50	17.10	14.50	34.00	125.20	84.60	64.20	75.00	68.20	53.00	11.25	558.55
1997	6.76	8.34	37.20	0.00	29.50	163.20	16.00	49.90	0.00	0.00	21.30	0.00	332.20
1998	23.50	0.00	0.00	0.00	152.70	40.80	32.00	0.00	26.00	0.00	55.10	61.30	391.40
1999	0.00	0.00	0.00	18.50	23.40	26.60	0.00	0.00	70.30	0.00	0.00	6.40	145.20
2000	0.00	0.00	0.00	11.70	12.80	44.50	114.00	27.10	44.00	0.00	33.60	0.00	287.70
2001	0.00	4.30	0.00	26.50	56.30	15.70	138.10	68.50	48.70	33.00	1.20	0.00	392.30
2002	29.20	21.00	0.00	22.50	89.80	37.10	150.00	85.00	26.50	24.00	9.00	11.00	505.10
2003	9.00	0.00	18.00	9.30	3.50	0.00	1.90	117.50	31.90	24.00	0.00	2.50	217.60
2004	9.00	0.00	0.00	50.00	0.00	42.50	43.80	15.00	16.30	42.50	5.00	25.50	249.60
2005	5.00	0.00	5.00	65.10	16.00	67.90	27.50	72.00	15.50	0.00	17.00	0.00	291.00
2006	0.00	0.00	0.00	45.00	118.50	60.50	36.00	34.50	7.00	0.00	31.50	0.00	333.00
2007	0.00	0.00	0.00	38.00	49.00	105.00	123.50	58.00	0.00	15.90	60.00	24.80	474.20
2008	0.00	30.50	0.00	0.50	41.30	56.00	161.00	92.00	45.00	19.81	18.47	11.25	475.83

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.

Table 20: Monthly and annual river flow (cubic meters per second) data for the Bree River at Ceres river flow station.

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1923	0.38	0.19	0.20	1.12	8.94	16.85	7.19	6.23	5.20	2.91	1.97	0.95	4.34
1924	0.32	0.29	0.30	0.30	0.79	5.78	4.78	7.27	6.70	2.99	2.50	0.58	2.72
1925	0.31	0.32	0.25	0.30	0.60	33.87	10.63	3.71	1.88	3.57	2.13	1.09	4.89
1926	0.44	0.50	0.33	0.41	3.29	2.14	6.73	5.45	2.66	4.26	2.34	0.60	2.43
1927	0.35	0.87	0.26	1.01	2.64	2.51	3.46	6.24	5.54	1.28	1.51	0.50	2.18
1928	0.30	0.17	0.86	0.31	0.27	14.27	5.88	3.29	6.38	2.29	1.23	0.43	2.97
1929	0.19	0.13	0.17	1.21	4.13	4.09	14.33	6.26	5.79	1.75	0.69	0.59	3.28
1930	1.96	0.82	0.29	0.77	0.36	1.02	7.89	4.38	16.64	5.54	0.94	0.84	3.45
1931	0.22	0.22	0.11	0.99	9.67	1.66	3.24	15.25	12.91	5.11	0.95	0.52	4.24
1932	0.81	3.61	1.55	0.56	4.60	11.72	16.39	5.98	5.27	2.61	1.34	0.40	4.57
1933	0.33	0.56	0.26	0.23	0.31	6.00	21.05	6.99	4.44	3.16	1.70	0.63	4.47
1934	0.38	0.43	0.64	0.28	1.47	1.78	7.03	5.69	7.67	7.56	3.85	0.58	3.36
1935	0.22	0.38	1.46	0.89	5.26	5.47	7.10	7.39	8.03	1.91	2.51	0.33	3.41
1936	0.85	0.07	0.25	0.12	1.57	1.13	5.33	8.92	9.36	1.15	1.58	1.28	2.64
1937	0.55	0.06	0.86	3.29	6.39	16.03	25.57	5.10	2.15	1.52	0.54	0.23	5.19
1938	2.92	0.27	0.22	0.81	6.78	3.70	2.38	8.54	7.58	3.87	1.12	0.44	3.22
1939	0.07	0.13	0.12	0.93	6.73	1.69	1.57	9.53	4.44	0.82	0.71	0.09	2.24
1940	0.17	0.82	0.36	0.90	2.78	5.37	3.71	4.16	3.90	0.84	2.37	0.32	2.14
1941	1.68	0.12	0.06	3.86	21.23	32.59	10.10	18.05	27.35	4.71	2.24	0.66	10.22
1942	0.26	0.14	0.08	0.18	6.40	40.66	7.22	14.52	3.75	1.69	0.59	0.58	6.34
1943	0.29	0.67	0.81	1.69	0.72	5.79	21.16	28.71	4.90	5.53	2.72	0.38	6.11
1944	0.26	0.03	0.37	1.04	3.75	7.63	9.13	18.64	8.70	4.41	1.66	1.80	7.18
1945	0.22	0.10	0.05	0.32	12.86	33.87	27.71	25.39	2.67	3.14	0.49	0.14	8.91
1946	0.10	0.02	0.14	1.46	3.03	3.70	4.38	10.42	19.20	2.51	1.45	0.08	3.87
1947	0.04	0.04	0.33	0.43	3.03	1.74	18.92	7.50	4.24	2.69	1.45	0.30	3.39
1948	0.05	0.03	1.42	1.95	2.65	7.53	12.47	6.41	14.06	5.92	1.32	0.42	4.52
1949	0.10	0.04	0.02	0.48	1.44	5.58	4.59	9.65	6.46	3.02	9.80	0.42	3.47
1950	0.19	0.06	0.02	4.55	1.12	2.21	14.73	3.08	4.03	6.94	3.04	2.48	3.54
1951	0.82	0.29	0.06	2.70	4.67	13.67	12.73	7.54	5.35	7.06	5.12	1.20	5.10
1952	0.29	1.09	0.72	0.57	6.16	4.19	6.04	21.21	8.37	3.16	1.70	0.63	4.51
1953	0.38	0.21	0.21	8.36	12.96	5.67	23.35	13.44	3.43	1.70	4.10	1.02	6.24
1954	0.41	0.35	0.36	6.75	20.51	10.01	54.42	28.06	12.85	3.63	2.68	2.44	11.87
1955	0.85	2.02	0.86	1.46	1.14	6.02	23.76	40.06	11.05	8.55	2.88	1.97	8.39
1956	0.38	0.35	0.37	1.04	1.78	11.25	8.83	14.03	4.28	1.43	0.59	0.35	3.72
1957	0.27	4.46	0.82	1.15	6.29	34.50	9.13	21.28	5.93	11.67	1.70	0.63	8.15
1958	0.38	0.70	0.64	0.75	3.11	12.07	1.93	4.14	4.22	1.65	1.03	0.36	2.58
1959	0.23	0.21	0.20	0.84	19.34	6.79	2.31	7.41	4.32	4.37	2.80	0.50	4.11
1960	0.14	0.17	0.14	1.31	4.74	11.47	2.25	1.72	1.68	0.58	0.25	0.23	2.06
1961	0.14	0.10	0.11	0.40	1.35	5.99	2.90	5.22	9.95	1.20	0.29	0.11	2.31
1962	0.05	0.07	0.49	1.36	0.65	16.77	9.64	16.68	4.84	14.22	2.67	0.55	5.67
1963	0.18	0.15	0.12	0.20	0.42	1.79	5.92	17.56	3.86	1.28	1.28	0.39	2.76
1964	0.06	0.92	0.22	0.62	1.13	6.20	4.48	7.22	4.95	2.21	2.34	0.21	2.55
1965	0.19	0.26	0.99	1.99	3.90	2.92	2.07	4.45	1.99	1.47	0.44	0.30	1.75
1966	0.07	0.05	0.62	0.89	0.51	1.71	11.22	4.53	2.50	0.91	0.15	0.09	1.94
1967	0.09	0.04	0.05	0.79	1.63	16.93	9.13	9.20	6.17	3.16	1.70	0.63	4.13
1968	0.14	0.12	0.09	0.38	3.75	7.80	8.38	8.22	2.43	9.57	0.99	0.37	3.52
1969	0.31	0.20	0.16	0.78	0.72	1.21	1.35	3.28	4.97	4.76	1.24	0.62	1.63
1970	0.39	0.32	0.34	0.41	1.57	7.76	7.85	10.91	8.36	2.36	1.09	0.70	3.50
1971	0.39	0.32	0.42	0.49	0.71	0.88	7.65	5.79	2.35	0.96	0.47	0.26	1.72
1972	0.19	0.17	0.19	0.24	2.12	2.64	2.45	4.21	2.96	1.08	0.41	0.55	1.43
1973	0.17	0.15	0.46	0.31	0.36	0.48	6.03	5.24	3.55	1.82	0.46	0.31	1.61
1974	0.10	0.07	0.09	0.17	0.59	5.11	2.64	28.31	10.94	3.83	2.16	0.62	4.55
1975	0.30	0.17	0.17	1.33	7.44	3.19	6.07	8.70	2.54	3.61	1.04	0.33	2.91
1976	0.08	0.03	0.09	0.30	0.55	9.70	6.43	3.95	1.80	1.03	8.31	4.20	3.04
1977	2.00	0.65	0.48	1.38	12.11	23.19	26.50	24.70	7.34	3.04	1.65	1.11	8.68

1978	0.24	0.22	0.27	1.01	1.47	0.67	0.40	3.03	4.38	1.78	0.46	0.20	1.18
1979	0.07	0.11	0.19	0.18	1.02	4.97	2.65	3.00	2.61	4.38	0.79	0.17	1.68
1980	0.31	0.11	0.08	0.57	1.80	2.84	1.01	2.71	0.91	0.98	4.83	1.89	1.50
1981	2.62	0.65	0.40	0.48	0.56	0.85	5.48	8.78	5.37	2.26	0.77	0.28	2.37
1982	0.31	0.12	0.17	0.95	1.19	2.08	2.21	2.34	0.43	2.36	0.46	0.53	1.10
1983	0.17	0.43	0.40	0.40	5.53	14.81	17.49	6.17	3.97	1.54	0.41	0.16	4.29
1984	0.04	0.02	0.65	0.69	17.02	1.83	8.12	3.55	15.62	6.59	0.83	0.95	4.66
1985	1.12	0.32	2.97	1.61	2.09	8.60	14.42	13.97	5.68	2.25	0.74	0.42	4.51
1986	0.14	0.09	0.35	1.41	3.03	4.23	6.75	15.81	5.29	1.53	0.58	0.15	3.28
1987	0.17	0.11	0.09	0.36	5.64	7.27	5.10	7.94	3.78	1.97	0.52	0.45	2.78
1988	0.12	0.06	0.15	1.11	1.15	6.17	4.14	3.39	6.14	1.89	0.77	0.23	2.11
1989	0.07	0.09	1.04	1.12	1.54	3.31	5.32	9.27	17.62	4.07	2.39	0.53	3.86
1990	0.20	0.26	0.26	1.75	5.39	6.00	15.55	7.40	1.97	0.88	0.55	0.24	3.37
1991	0.07	0.05	0.08	0.27	1.12	5.95	13.05	10.25	12.22	4.05	1.69	0.39	4.10
1992	0.11	0.16	0.21	1.97	2.43	11.76	9.80	6.87	5.02	5.51	2.59	0.48	3.91
1993	0.14	0.18	0.07	2.97	6.17	6.27	25.00	7.69	2.32	0.97	0.34	0.24	4.36
1994	0.03	0.01	0.01	0.19	0.48	12.23	5.89	2.10	2.60	1.95	0.50	0.09	2.18
1995	0.01	0.00	0.01	0.06	0.80	1.01	7.35	6.58	1.76	4.52	1.15	0.88	2.01
1996	0.15	0.15	0.16	0.46	0.60	8.71	10.70	11.56	14.75	8.30	6.48	2.62	5.39
1997	0.71	0.39	0.46	0.84	0.84	9.29	3.74	5.51	2.40	0.59	1.14	0.84	2.23
1998	0.58	0.14	0.15	0.32	6.80	4.60	4.35	2.21	1.09	0.81	2.54	0.47	2.00
1999	0.10	0.16	0.14	0.29	0.92	1.94	3.46	4.46	6.42	1.89	0.60	0.26	1.72
2000	0.19	0.12	0.28	0.36	1.45	1.42	4.52	1.89	5.29	1.03	0.64	0.37	1.46
2001	0.35	0.15	0.18	0.25	1.35	1.51	10.63	8.49	10.34	2.34	1.39	0.41	3.12
2002	0.75	0.37	0.42	0.47	2.23	3.18	11.14	8.56	3.97	3.73	1.40	0.74	3.08
2003	0.48	0.27	0.40	0.82	0.79	0.50	0.49	3.08	2.04	1.23	0.49	0.26	0.91
2004	0.16	0.17	0.20	0.28	0.28	1.04	1.42	3.68	0.63	0.70	0.24	0.11	0.74
2005	0.09	0.10	0.09	0.28	0.43	3.86	3.81	6.12	2.00	0.97	0.49	0.17	1.54
2006	0.12	0.05	0.11	0.21	3.74	2.79	2.07	5.27	1.84	1.62	2.27	0.32	1.70
2007	0.20	0.12	0.15	0.36	0.74	8.23	13.31	9.63	3.89	2.16	1.78	0.56	3.43
2008	0.28	0.28	0.29	0.29	0.50	2.15	16.00	10.46	23.43	3.16	1.70	0.63	4.93

Yellow highlights: missing values calculated from the average for the specific month across the duration of the data set.