

Lock Katrina

G. W. W.

Tunnel hill top

Perth.

8 in

+ Ground bin

830 ft

Form, Test - 3.

YEAR - -	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS.
January - -	8.00	14.00	14.50	8.00	7.20	12.60	6.10	11.20	12.90	
February - -	8.50	3.20	7.40	6.50	5.40	11.50	8.20	13.80	9.70	
March - - -	9.50	5.10	5.60	4.80	3.30	5.50	3.20	10.10	2.20	
April - - -	.40	7.50	6.70	3.60	1.90	5.70	10.60	5.10	1.90	
May - - -	.90	7.20	3.20	1.75	4.90	1.90	4.00	5.90	1.20	
June - - -	5.10	7.20	4.90	6.75	1.10	3.70	3.20	2.90	3.00	
July - - -	6.20	8.50	.60	3.80	5.00	4.10	6.70	1.50	4.00	
August - -	14.50	5.00	7.80	4.70	7.30	9.00	4.90	8.60	1.20	
September -	10.10	2.70	9.50	9.20	2.80	8.60	7.40	3.00	11.80	
October - -	8.70	15.10	6.80	5.00	6.80	6.80	9.10	10.20	4.20	
November -	9.40	5.90	7.70	8.70	6.40	7.50	2.60	6.10	9.50	
December -	7.90	15.50	12.80	8.40	9.60	12.90	7.40	15.90	11.80	
TOTALS -	89.20	96.90	87.50	71.20	61.70	89.80	73.40	94.90	73.40	

✓ C C C C C C C C C

RAINFALL AT Lock Katrine Tunnel Hill, Tenn.

Lat..... Lon..... County of... Perth

Rain Gauge, by..... Observer Glasgow Water Works

Form, Tenn - 3.

Diameter .....	.6										
Height .....	.6										
Altitude	830										
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January.....	5.00	6.10	11.00	13.40	8.00	14.60	8.50	14.40	7.10	2.60	9.07
February	9.80	9.40	11.60	1.40	3.50	2.40	6.70	7.80	5.20	4.70	6.25
March	1.30	6.20	5.60	3.10	8.50	3.70	10.50	3.60	4.00	9.00	5.53
April	3.60	4.20	2.80	1.00	4.20	2.40	3.00	5.00	4.20	3.10	3.41
May	7.30	1.80	3.30	4.40	2.70	5.70	1.50	5.00	8.30	3.30	4.33
June.....	1.80	2.60	11.20	4.20	2.80	5.40	7.00	8.70	4.70	6.60	5.50
July	2.90	6.00	7.20	9.00	7.10	2.20	5.00	5.40	1.10	6.80	5.27
August.....	1.20	6.40	10.10	7.30	5.20	5.70	6.40	8.90	6.10	6.50	6.38
September.....	6.60	2.40	9.90	5.20	11.60	7.20	3.60	3.80	9.40	11.50	7.12
October.....	11.30	8.70	8.30	9.60	13.60	10.10	11.80	14.80	9.70	3.50	10.14
November.....	2.90	6.40	13.10	5.50	7.90	8.00	4.60	15.70	2.60	2.10	6.88
December.....	3.70	9.20	13.00	10.10	2.70	10.20	13.20	11.10	3.30	6.90	8.34
TOTALS	57.40	70.00	107.10	74.20	77.80	77.60	81.80	104.20	65.70	66.60	78.24

1871 Average 78.70

RAINFALL AT *Loch Katrine Tunnel Hill Top*

Lat. _____

Lon. _____

County of _____

Perth

Rain Gauge, by _____

Observer *J. M. Gale, Esq., C.E.*Form *Perth - 3.*

Diameter	8										
Height	0.6										
Altitude	830										
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	6.00	1.50	9.30	13.40	11.20	6.10	5.70	6.80	6.00	8.90	7.490
February	10.50	6.60	8.80	11.00	10.40	11.50	4.20	5.10	.60	4.10	7.280
March	4.40	7.40	9.70	4.00	11.60	2.50	5.30	2.50	2.80	3.10	5.330
April	6.10	2.60	3.40	5.40	2.00	4.30	3.10	2.40	3.10	4.70	3.710
May	2.70	4.20	5.70	4.80	7.20	3.80	4.40	4.0	5.50	5.60	4.430
June	3.10	6.80	6.80	3.50	2.40	2.40	1.50	1.40	3.00	2.50	3.340
July	4.70	5.80	10.10	4.70	6.10	2.20	3.80	4.20	7.00	2.20	5.080
August	2.40	4.80	4.90	6.00	5.80	5.60	2.90	4.20	6.00	7.40	5.000
September	4.40	3.80	6.40	5.10	6.30	10.50	6.70	3.30	1.40	1.80	4.970
October .....	.90	6.10	8.20	11.90	8.80	4.50	6.50	1.80	5.40	7.80	6.190
November	9.80	13.30	11.10	8.60	8.60	5.90	5.50	3.00	14.10	3.80	8.370
December	7.40	8.90	10.20	7.20	9.10	5.20	4.20	6.10	7.00	7.70	7.300
TOTALS	62.40	71.80	94.60	83.60	89.50	64.50	53.80	41.20	61.90	59.60	68.490

by overexposed to SW & showing too little 91. VII. 13

RAINFALL AT Loch Katrine Tunnel Hill Top

Lat. _____

Lon. _____

County of Perth

Rain Gauge, by _____

Observer J. M. Gale Esq. C.E.

Form, Serial -3.

Diameter	8										
Height	0 6										
Altitude	830										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	15.50	7.60	8.70	7.70	19.70	2.30	7.70	2.50	8.50	10.30	9.050
February	1.80	3.20	2.20	10.90	24.30	.70	5.60	8.70	8.20	7.20	7.280
March	7.60	5.20	2.20	3.90	9.00	5.90	10.30	12.40	3.60	7.00	6.710
April	3.10	3.60	2.30	2.40	3.10	6.30	4.60	5.70	7.60	7.00	4.570
May	4.30	2.70	6.60	4.20	4.30	1.10	.70	4.00	2.80	3.90	3.460
June	8.30	3.00	6.80	2.40	3.70	2.80	5.30	6.50	3.80	2.90	4.550
July	6.10	3.50	4.70	3.90	5.00	7.00	5.60	4.60	1.90	4.20	4.600
August	4.50	11.00	9.50	7.70	5.50	11.50	4.80	11.50	8.20	2.90	7.710
September....	9.50	7.90	11.00	5.70	.00	3.60	8.40	5.90	8.40	6.30	6.640
October	6.40	13.90	7.40	10.30	5.90	3.80	6.30	6.40	6.80	7.30	7.360
November....	13.90	9.60	9.90	7.40	13.30	13.80	3.80	7.10	10.10	16.40	10.530
December	1.80	13.80	5.00	14.60	10.50	10.10	10.60	11.60	18.70	7.50	10.420
TOTALS	82.80	83.60	76.30	81.10	104.30	68.90	73.70	86.90	88.60	82.90	82.910?

ly overexposed to S.W. & giving too little es. VII. 13

1870

RAINFALL AT Lock Katrina Tunnel Hill Top

Lat. Lon. County of Perth

Rain Gauge, by Observer Jm Gale Esq. Ch.
J Rutherland Esq. Ch.

Forth. Perth - 3.

Diameter ..	8										
Height	0	6									
Altitude ..	830										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	10.60	5.90	8.00	16.00	9.50	7.10	14.00	7.40	8.00	9.10	9.560
February ..	6.50	2.40	2.70	14.80	6.80	6.30	8.90	8.00	5.70	3.40	6.550
March ....	.50	5.00	7.00	20.10	5.20	10.50	5.40	7.20	7.70	1.80	7.040
April	5.00	7.00	4.20	3.30	11.10	4.00	2.70	4.30	3.10	6.60	5.130
May	7.40	2.70	3.60	3.40	4.80	2.90	6.40	7.00	4.20	4.80	4.720
June	6.40	7.00	2.30	3.70	5.10	2.10	1.20	7.20	3.80	2.60	4.140
July	4.40	3.30	3.70	7.70	4.70	3.90	5.70	2.90	4.80	3.30	4.440
August	6.10	4.90	3.30	11.00	7.30	7.30	8.80	8.40	5.60	3.80	6.650
September ..	7.20	8.70	6.30	6.50	8.50	4.40	4.40	3.10	8.50	2.80	6.040
October	9.10	7.90	7.20	17.10	6.80	6.00	10.90	5.20	2.40	12.10	8.470
November ..	7.30	6.70	9.00	6.00	3.90	9.50	8.30	6.70	5.50	3.80	6.670
December ..	17.60	8.50	10.00	9.70	10.50	7.90	6.50	11.30	8.80	8.10	9.890
TOTALS ..	88.10	70.00	67.30	119.30	84.20	71.90	83.20	78.70	68.10	62.20	73.80

Gauge on summit of hill above tunnel at Lock Katrina

G. removed (probably '02) to less exposed position. Previous one exposed from low g. leaky from '02

RAINFALL at Lock Katrine, Tunnel Hill Top.County of Perth Observer J. R. Sutherland Esq. C.E.River Basin Forth, Teith 3Copper Keal Rain Gauge, by _____funnel { $\begin{matrix} 8.14 \\ 8.10 \\ 8.19 \\ 8.10 \end{matrix}$ } but not more than 8.00 at bottom where float rests.

Diameter ...	8										
Height	0 6				1 0						
Altitude ...	830										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	SUM MEANS. 1916-1919
January ...	10.30	6.10	10.50 (10.30)	7.80	6.85	18.80	3.50	7.90	7.40	37.60	
February ...	9.30	16.10	9.80 (7.20)	13.10	12.55	9.85	1.40	15.60	1.20	28.05	
March	4.80	3.30	10.30 (10.00)	9.20	5.25	1.85	3.50	2.80	4.80	12.95	
April	6.50	7.80	4.50 (5.20)	7.80	6.55	6.20	2.10	1.50	4.80	14.60	
May	2.20	6.70	3.00 (6.20)	2.90	1.30	4.80	4.45	4.05	1.80	15.10	
June	2.70	5.40	7.40 (4.40)	1.60	2.30	3.20	4.20	3.40	4.00	14.80	
July	7.00	4.80	4.10 1.00	5.80	4.40	3.70	1.90	3.90	2.20	11.70	
August	10.50	9.00	6.30 1.60	6.65	3.35	5.60	9.30	5.20	5.50	25.50	
September ..	2.10	4.00	4.30 4.10	4.20	2.60	1.70	6.15	8.15	8.30	24.30	
October ...	2.90	7.20	9.90 6.30	3.40	5.85	13.56	12.60	11.80	1.00	39.76	
November ..	3.50	13.70	8.40 11.20	12.35	2.90	10.85	14.30	11.30	7.00	43.45	
December ...	8.00	16.10	24.10 8.40	(13.30)	8.80	9.80	4.00	9.60	13.20	36.60	
TOTALS ...	69.80	100.20	102.60 (75.90)	88.10	62.70	89.81	67.40	85.20	63.00	304.41	

Funnel 37. too big for received.

Renewed VII.13 + g. moved.

1913 Jan. from Combs for Ennis-funnel

Inspected cs. 2. VII.13 g. at head of small glen facing N. & probably slightly overexposed. Was till 10 yrs ago about 60 yds SE of present spot & probably overexposed to SW, being just over head of small funnel glen. A new g. will be put about half way between the two positions in good exposure & both read together for a while.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.

RAINFALL at Lock Hatrine, Tunnel Hill TopCounty of PerthObserver J. R. Sutherland Esq. C.E.River Basin Forth, Perth 31926 9 Henshaw Esq. C.E.Copper Flat Rain Gauge, by _____

W

Diameter ...	8			8									
Height	0 6			0 6									
Altitude ...	830			830									
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930. MEAN.	SUMS	
January ...	12.40	15.10	10.45	12.10	7.70	9.30	19.25	13.15	23.00	3.50	13.60	140.55	
February ...	14.80	3.70	8.80	10.60	2.10	6.50	9.50	5.20	11.50	3.00	3.0	76.00	
March	9.95	14.80	3.75	4.60	7.5	3.50	10.30	6.05	10.60	1.70	6.20	71.20	
April	3.45	2.30	4.15	5.90	4.70	7.85	4.05	5.10	4.90	1.60	2.00	46.00	
May	9.80	5.65	7.90	2.85	6.25	10.70	5.10	3.80	1.50	7.00	4.40	64.95	
June	3.30	.80	3.10	2.20	4.00	1.05	4.80	6.70	7.20	6.40	(4.80)	43.85	
July	5.05	6.10	4.80	6.80	6.65	2.30	4.10	5.00	6.10	4.10	2.70	54.70	
August	6.60	8.15	4.10	9.00	6.00	6.60	7.45	6.80	8.70	8.80	7.90	80.15	
September...	4.50	4.40	4.20	11.55	9.80	4.35	5.35	7.70	6.00	3.50	7.20	68.55	
October	5.60	8.00	4.10	12.40	5.90	8.90	2.90	9.70	15.60	12.30	14.10	105.50	
November...	12.30	5.25	6.65	5.35	7.50	1.10	12.70	8.85	11.20	13.20	10.40	94.50	
December...	7.70	15.60	9.80	5.85	16.40	17.00	5.80	2.00	9.80	17.70	9.60	107.25	
TOTALS...	95.45	89.85	71.80	90.20	77.20	(69.15)	97.30	80.05	116.10	82.80	82.70	953.20	

1920. Gauge inspected 1918.

Position of Station on reduced Ordnance Survey } No. of Map _____
Map, 2 miles to 1 inch Series

Reference No. _____

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction

RAINFALL at Loch Katrine (Tunnel Hill Top)County of PerthObserver G. Henshawood, C.E.River Basin 3. North LochJ. Buchanan 11.5.1935

Type of Gauge

Annual Average 19.0 in. based on 46 years obs. un-weighted. Period of average 1881-1915 Ref. 5computed x/37

Diameter	8.											
Height	0.6.											
Altitude	830.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	SUMS	Means
January	8.00	17.80	12.50	17.00	5.30	7.00	15.60	15.60	8.50	(2.00)	104.70	
February	7.20	10	5.30	(2.10)	13.90	4.80	6.70	8.80	12.00	(3.50)	64.40	
March	1.60	3.20	5.50	(4.20)	3.95	6.05	1.60	12.00	6.80	7.10	52.00	
April	3.40	8.50	5.20	6.30	6.10	2.90	3.70	1.40	4.50	4.00	46.00	
May	7.40	3.50	3.40	4.75	.50	2.60	3.00	4.40	1.60	2.50	33.65	
June	8.00	2.90	2.50	2.20	6.50	3.30	4.40	9.60	3.70	1.05	44.15	
July	5.20	5.50	4.70	4.30	2.70	7.80	6.20	4.60	8.60	4.00	53.60	
August	2.30	2.70	6.40	6.85	4.50	4.60	4.60	2.90	3.00	3.10	40.95	
September	2.60	5.00	2.30	12.00	12.30	5.70	6.30	7.20	4.10	6.80	64.30	
October	7.30	9.60	6.10	15.80	18.00	10.80	3.50	16.20	5.50	11.30	104.10	
November	16.70	8.20	4.20	2.85	8.10	5.60	1.20	17.20	13.90	11.40	89.35	
December	11.00	17.60	2.00	16.00	4.80	15.10	3.10	9.10	4.40	11.00	94.10	
TOTALS	80.70	84.60	60.10	94.35	86.65	76.25	59.90	109.00	71.60	(67.75)	790.90	

1940 Jan + Feb adj. for snow.

Position of Station on reduced Ordnance Survey Map,
1 mile to 1 inch Series

No. of Map.....

Reference No.....

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge

Station No.

5515

RAINFALL at Loch Katrine (Tunnel Hill Top.)

41

County of

Pert

Observer

J. Cochrane Esq. C.E.

River Basin

3-Forth-TellTwo A. B. 111 (1942)

Type of Gauge

StandardS. D. Convin Esq. C.E. (1946)Annual Average 79.0 in. based on 46 years obs. ~~un~~-weighted. Period of average 1881-1915 Ref. 8

File No.

Diameter	8"			892	006							
Height	0'6"				1			1'0"		1'6"		
Altitude	830'				41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	(1.50)	(8.00)	10.56	11.50	3.40	13.30	13.40	12.50	11.20	7.30	92.65	
February	7.50	(2.80)	9.10	4.60	15.20	6.90	(0.52)	10.30	10.90	9.50	77.32	
March	2.90	4.10	(4.50)	1.30	8.00	4.60	5.00	9.80	4.00	7.10	51.30	
April	5.00	4.00	7.90	6.70	5.00	2.90	16.70	5.50	9.00	5.60	67.30	
May	2.10	5.50	5.10	5.80	7.00	2.30	5.11	2.70	3.80	2.50	41.91	
June	2.20	2.00	7.30	6.40	6.90	(7.00)	6.10	6.70	2.20	3.10	49.90	
July	3.80	7.60	(4.20)	3.70	5.40	5.90	5.70	6.90	3.50	9.10	55.80	
August	6.10	9.70	10.20	4.60	1.10	5.50	0.00	10.07	6.80	9.70	63.77	
September	3.00	11.30	7.10	7.30	10.30	11.40	10.80	11.30	3.40	16.90	92.80	
October	8.10	9.30	18.20	9.30	9.00	.90	6.80	12.70	11.60	10.90	96.80	
November	10.70	1.80	5.00	12.10	1.20	12.60	13.70	7.01	10.20	6.30	80.61	
December	6.30	14.80	5.40	9.60	9.20	10.50	2.70	15.70	17.60	3.90	95.70	
TOTALS	59.20	(80.90)	(94.55)	81.90	81.70	83.80	86.53	111.18	94.20	91.70	865.86	

1941 Jan card for snow. 1942 Jan + Feb app r pt est'd.

1943 March & July totals est'd. from maps.

1946 June part estimated by M.O.3.

1947 Feb. ad. for snow 1948 gauge raised to one foot. gauge appears to be unorthodox, but found.

+ 7.150 ft. 5 in. raising question of standard gauge again



Engineer asked to get standard gauge

40004 60004 10404

01004 20004

Position of Station on reduced Ordnance Survey Map,
1 mile to 1 inch Series

No. of Map.....

Reference No.....

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge

BRITISH RAINFALL ORGANIZATION

Station No. 5515

RAINFALL at Loch Katrine (Tunnel Hill Gap)

51

County of Perth

Observer

J.D. Garwin Esq.

River Basin Loch Katrine 3

Type of Gauge. Unattended

Annual Average 79.0 in. based on 46 years obs. un-weighted. Period of average 1881-1915 Ref. S

83-27 - - - 35 - - 1916-1950

1916-1950 Ref. P

File No.

Diameter ...	88"				8"		892	006				
Height ...	1'6"				1'0"			1				
Altitude ...	830'				830'			51				
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	
January ...	9.40	6.30	6.30	8.80	5.80	6.80	13.90	11.80	4.10	6.10		
February ...	5.90	3.50	5.20	(7.80)	4.10	3.50	6.90	4.40	3.70	8.90		
March ...	5.90	8.60	3.60	7.20	2.20	5.30	9.20	2.60	7.50	3.60		
April ...	5.90	4.30	4.90	3.10	5.30	3.10	3.70	3.90	6.50	10.20		
May ...	2.10	2.40	4.80	5.50	5.10	5.20	3.40	5.80	2.00	5.00		
June ...	2.40	5.80	3.41	6.90	4.80	4.70	2.50	4.10	4.20	(3.30)		
July ...	5.10	3.80	7.50	4.00	1.20	6.90	6.20	5.20	7.70	(6.20)		
August ...	8.40	6.70	5.40	7.20	1.50	7.30	7.50	7.30	4.10	5.20		
September ...	6.50	4.60	10.10	11.60	7.10	9.10	5.50	7.00	1.90	4.50		
October ...	2.80	9.70	7.70	11.60	7.40	5.90	9.50	8.40	9.70	7.00		
November ...	13.90	2.90	16.40	16.30	4.60	4.50	3.10	2.70	9.10	11.70		
December ...	14.40	7.90	10.00	13.00	16.20	14.70	12.80	9.90	16.40	9.80		
TOTALS ...	82.70	66.50	85.31	109.00	65.30	77.00	84.20	73.10	76.90	81.50		

8.11.55 Inspected by R. Crang: Satisfactory.

1960 June, July appt. by M.O.E.

01800

20004

Position of Station on Ordnance One-Inch map:

No. of Map.....

National Grid Reference 27/41088

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge.	Direction from gauge.
1951			Aberboyle	14.4	SE	Invernaid	6.2	W.

Summary of Earlier Records from 10-year Sheets:

1916-1950, P - accepted

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	✓ 24-18	✓	✓	✓	