

RAINFALL AT

Cheltenham Landford

Lat. _____

Lon. _____

County of

Gloucester

Rain Gauge, by _____

Observer

J. Hall Esq C.E.

Series L-3.

Diameter			5								
Height			2.0	3.6	2.8						
Altitude			210								
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January ....			.93	1.78	1.55	2.90	.66	1.68	.57	2.95	
February			1.53	2.81	1.85	.10	.32	2.70	1.37	3.05	
March .....			.75	.13	1.19	2.17	2.32	3.72	.55	.51	
April .....			.74	.05	2.83	2.25	.70	1.08	2.30	1.83	
May			1.00	1.33	2.20	.41	.26	1.12	3.94	1.52	
June			1.68	1.03	1.82	.70	1.96	2.35	1.00	1.73	
July			2.24	2.71	2.08	2.61	1.36	1.25	1.04	.77	
August			2.78	1.81	2.02	1.85	2.30	3.41	3.60	2.79	
September....			2.58	.97	3.19	.73	4.75	2.33	.74	1.68	
October			2.04	1.65	3.34	2.85	2.97	1.45	3.39	2.24	
November....			1.83	1.93	4.09	5.20	.94	1.55	2.49	2.49	
December ....			.71	2.91	2.21	1.61	3.35	3.18	2.42	2.08	
TOTALS			18.81	19.11	28.37	23.38	21.89	25.82	23.41	23.64	

RAINFALL AT

Cheltenham Sandford Mead. Pumping Station

Lat.

Lon.

County of

Gloucester

Rain Gauge, by

Observer

J. Hall Esq. C.E.

H. J. White Esq. C.E.

J. T. E. Esq. C.E.

Seven L - 3.

Diameter ..	5											
Height	2 8				2 6							
Altitude ..	210											
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEAN	
January ..	2.78	1.10	.69	2.88	2.82	1.01	4.31	.99	.97	.58	1.813	
February ..	5.60	1.36	.98	1.24	4.25	.69	1.51	1.04	.86	.67	1.820	
March	1.35	2.10	1.63	3.19	1.40	3.66	1.10	.60	2.93	3.01	2.097	
April .....	.60	2.79	2.08	1.81	.97	2.43	.73	3.11	2.01	1.80	1.833	
May	1.97	1.13	2.12	4.71	2.52	.24	1.92	2.55	1.05	.86	1.907	
June	1.42	2.08	2.78	3.83	1.04	4.11	2.97	2.02	1.38	3.23	2.486	
July	1.61	2.19	1.02	3.81	2.59	.66	1.10	4.47	1.79	2.20	2.144	
August	2.78	1.48	3.07	2.83	1.93	4.82	1.01	1.77	2.48	2.03	2.450	
September ..	.33	1.45	1.66	2.31	2.26	1.30	.75	.49	2.40	3.29	1.624	
October	2.23	1.18	2.32	6.73	.39	1.49	4.01	6.30	1.25	3.70	2.960	
November ..	1.65	1.36	2.16	1.55	1.62	3.06	3.20	1.56	.91	.92	1.799	
December ..	5.11	4.57	1.86	1.38	1.80	.56	1.65	3.74	(1.83)	3.22	2.572	
TOTALS ..	27.43	22.79	22.37	36.27	23.59	24.03	24.26	28.64	19.86	25.51	25.475	54.5

1902 St Lukes Church 1000 ft N

Wall 10 ft high 35 ft S

1903 Cheltenham Station 80 ft 1 mile N.W.

Pumping Station 30 ft high 33 ft N

1906 St Lukes Church 550 yards N.W.

1908 50 in. added for Snow in Dec.

RAINFALL at

Cheltenham Sandford Mead

County of Gloucestershire

Observer J. S. Pickering Esq C.E.

River Basin Severn. Left Bank Tributaries 3

B.A. Rain Gauge, by

Diameter ...	5											
Height	2 6											
Altitude ...	210 T											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEAN.	
January ...	2.61	1.15	3.06	4.14	.96	3.52	1.21	1.40	2.70	3.43		7.74
February ...	3.56	1.12	1.85	.96	2.62	4.43	4.55	1.00	1.28	2.56		9.39
March .....	.71	1.83	4.88	2.95	2.84	1.11	4.11	1.93	1.28	3.75		11.0
April	2.26	.76	.06	3.19	1.12	1.34	1.19	1.60	2.30	2.33		7.32
May	1.06	.67	1.41	2.15	1.58	2.96	2.51	3.07	1.33	1.45		8.36
June	3.27	1.60	5.62	.83	3.59	1.29	2.15	1.97	.83	1.46		6.41
July	2.40	.36	4.93	1.40	3.22	3.66	1.36	2.07	2.96	3.14		9.53
August	4.42	1.48	7.17	1.07	1.42	4.07	3.33	5.23	.84	2.49		11.89
September ..	.89	1.48	.79	2.96	1.09	.89	1.17	1.64	5.40	1.56		9.77
October ...	3.11	2.04	2.86	3.44	2.01	3.04	4.56	3.53	1.45	1.89		11.46
November ..	3.96	2.83	1.48	2.56	3.22	1.88	3.62	.74	2.21	1.36		7.93
December ...	4.76	6.58	2.78	1.06	5.99	4.81	3.03	1.10	2.25	3.35		9.73
TOTALS ...	33.01	21.90	36.79	26.71	29.66	33.00	32.79	25.18	24.86	28.77		111.60
	D	D	D	D	D	D	D	D	D	D		D

1910 Eyrewood Wall 19 ft high 10 yds

†. Inspector J.S.S. September, 1914. Shallow rim g. standing in top of chain pipe before fair.

funnel

glass (flat foot.)

5.05

.05 full

5.05

.40 41

5.05

.50 .50 full elsewhere accurate



Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
910	51.54 N	2.1. W	St James's Sq SWR	1 mile	NW	St Lukes	550 yds	NW

RAINFALL at *Cheltenham (Blackford Road)*.County of *Gloucester*Observer *J. L. Pickering, Esq. C.E.*River Basin *3 - Severn &*Engineer *Cheltenham*Rain Gauge, by *B. S.*measured at *49.33*4-98 }
5-00 }
5-00 } *no gauge at 100 ft. in stream*
*at 100 ft. in stream*measured at *49.33*
21.12.03 } *at 100 ft. in stream* } *1.27*

Diameter ...	5											
Height	2.6											
Altitude ...	210											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 Means.	Totals
January ...	3.35	2.51	3.21	1.55	3.32	1.80	3.14	2.78	3.80	.93	5.02	31.41
February ...	.82	.23	3.06	5.82	.65	4.58	1.68	2.95	1.93	.43	.28	22.43
March	3.13	1.30	1.89	1.92	.94	.43	.25	2.77	2.30	.06	1.61	16.60
April	4.18	1.24	3.08	2.43	2.54	1.84	3.50	1.63	.73	.97	2.72	24.86
May	1.14	1.70	.71	1.66	7.46	2.65	2.97	1.35	.77	1.59	1.99	24.04
June	2.52	.33	.80	.39	2.05	.08	1.68	2.93	2.33	1.43	3.97	18.51
July	4.93	.26	4.02	1.44	4.17	2.43	2.38	2.89	1.63	1.82	3.88	29.85
August	1.06	2.44	4.16	2.26	3.46	1.83	1.66	4.22	2.89	1.42	2.44	27.84
September...	2.51	1.58	2.01	2.45	4.52	3.50	1.03	4.54	.85	.25	3.14	26.38
October	1.75	1.34	.78	5.69	4.11	2.60	2.83	1.31	5.16	4.37	1.94	31.88
November...	2.33	2.09	1.42	1.46	2.86	1.71	6.67	2.22	2.71	8.17	3.41	35.05
December...	1.96	1.19	4.05	2.83	3.11	2.47	.54	3.03	2.38	7.66	3.03	32.25
TOTALS...	29.68	16.26	29.19	29.90	39.19	25.92	28.33	32.62	27.48	29.10	33.43	321.10
	D	D	D	D	D	D	D	D	D	D	D	42.14

1920. Engine room wall 19 ft. high. 10 gals. N.W.

1914. Inspected. "Shallow run of standing water in top of drain pipe."
"Engine room"

Inspected 28.3.27. G. 2 ft. above ground mounted in pipe which gives surface 2 inches below level of mouth of gauge + 2 miles thick all round. G. also somewhat over-sheltered by trees.
Recommended position to edge of covered area (with gauge 1 ft. above ground) but best from these trees & exposure would then be quite good.

Position of Station on reduced Ordnance Survey
Map, 2 miles 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
1920.	51° 52'	2° 1'	Cheltenham. (G.W.R.)	1 m.	N.W.	St. Luke's Cheltenham.	530 ft.	N.W.

RAINFALL at Bhellenham (Sandford Mead)

County of Gloucestershire Observer J. Parkinson Esq. C.E.
River Basin Severn Left Bank 2 miles — 3. G. Gould Masland (1933)
Type of Gauge.....

Annual Average 26.3 in. based on 41 years obs. un-weighted. Period of average 1881-1915 Ref. 3
768354/27.

Diameter	5										
Height	2.6										
Altitude	210										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Totals. Means
January	1.30	2.68	2.42	2.15	73	3.19	3.53	2.65	5.18	2.17	26.00
February	2.07	23	3.91	4.6	2.06	236	3.29	65	1.22	2.12	18.37
March	15	1.51	2.25	2.38	35	1.67	3.73	25	1.84	1.79	15.92
April	3.00	2.68	0.84	2.56	4.30	1.86	2.29	14	2.91	1.64	22.22
May	3.18	5.77	2.09	84	92	71	1.79	1.72	96	1.40	19.40
June	4.55	1.36	2.09	1.06	2.77	3.91	1.17	96	2.16	1.45	20.48
July	3.72	1.59	136	2.24	45	4.95	2.46	3.02	5.11	3.32	28.22
August	4.04	1.88	0.37	1.94	1.30	19	46	3.07	2.47	09	15.81
September	2.33	2.97	2.57	1.75	3.74	3.59	1.47	2.55	.93	1.01	22.91
October	68	4.08	3.72	1.12	4.84	1.51	2.89	3.02	2.97	2.92	27.75
November	4.16	1.62	0.75	1.67	5.36	2.38	1.41	2.91	3.78	5.76	29.80
December	98	1.17	0.44	4.76	3.84	3.61	1.94	3.66	1.74	95	23.09
TOTALS	30.16	27.56	22.81	22.93	30.66	29.93	26.43	24.60	31.27	23.62	269.97

1931. Engine room wall 19' high 10 yards N.W.

Position of Station on reduced Ordnance Survey Map, } No. of Map..... Reference No.....
1 mile to 1 inch Series

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
1931.			G.W.R. Bhellenham	1m	N.	St. Luke's Cham	550 yds.	N.

Station No. 2176

RAINFALL at Cheltenham (Sandford Meads)

41

County of Gloucestershire Observer S. Gould Malsland Esq. C.E.

River Basin Severn: Left Bank Tribs-3 Cheltenham & Glos. Water Board.

Type of Gauge

Annual Average 26.3 in. based on 41 years obs. un-weighted. Period of average 1881-1915 Ref. S

File No. 768354/27

Diameter	5"				458	896						
Height	2' 4"					1						
Altitude	210					41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	2.17	3.26	4.84	1.72	1.64	2.10	1.82	4.45	1.10	.27		23.37
February	2.04	.49	1.43	.75	1.56	1.71	.99	1.03	1.19	5.99		17.18
March	2.69	1.75	.87	.29	1.04	.73	5.22	1.39	1.21	1.68		16.77
April	1.06	1.23	.89	.88	1.15	1.91	2.66	1.72	1.89	2.08		15.44
May	1.94	3.41	2.52	.58	2.36	3.09	1.03	3.60	1.83	1.88		22.14
June	1.99	.21	1.88	2.31	2.53	2.35	1.61	1.57	.81	2.34		17.60
July	2.75	1.73	.52	2.39	1.66	.97	2.56	.99	.62	3.01		17.20
August	4.07	3.46	1.80	3.27	1.61	5.42	.28	3.28	1.02	4.19		28.40
September	.39	1.62	1.62	2.40	1.48	3.97	1.86	2.59	2.35	3.10		21.28
October	2.34	2.51	2.04	4.02	2.89	.41	.26	2.29	5.98	.84		23.48
November	2.33	1.46	1.28	3.89	.40	4.96	1.44	1.05	3.27	5.76		25.84
December	1.91	3.19	1.14	2.14	4.50	2.37	1.87	4.01	.97	1.53		23.63
TOTALS	25.38	24.32	20.83	24.64	22.82	29.89	21.60	27.97	22.24	32.64		252.33

1941. Engine Room Wall 19' high 10 yds N.W.

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.
1941			G.W.R. Cheltenham	1 m.	N.	St. Luke's.	550 yds	N.

BRITISH RAINFALL ORGANIZATION

Station No. 2176**RAINFALL at Cheltenham (Sandford Mead)**

51

County of GloucesterObserver Cheltenham & Glos. Water BoardRiver Basin Severn - L. Bank Trib. 3Base Water Engineer

Type of Gauge.....

Annual Average 26.3 in. based on 41 years obs. un-weighted.Period of average 1881-1915 Ref. S P27.29 " " 35 " " 1916-1950File No. 268354/27

Diameter ...	5"					458	896				
Height ...	2' 4"					1' 0"	1				
Altitude ...	210'						51				
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means <i>Totals</i>
January ...	3.35	2.24	.87	1.39	2.02	3.52	1.95	1.98	4.73	3.84	25.89
February ...	3.95	.67	1.51	2.35	1.59	.61	2.54	3.30	.14	2.24	18.90
March ...	4.16	2.24	.69	2.21	1.70	.68	1.92	.83	2.53	1.45	18.41
April ...	3.06	2.31	2.42	.28	.85	1.85	.12	.69	3.25	0.99	15.82
May ...	3.18	3.23	2.34	2.15	4.28	.67	1.53	2.65	.81	1.66	22.45
June ...	.49	1.64	1.57	3.13	3.74	1.81	1.17	4.00	1.51	2.30	21.36
July ...	.91	.40	2.59	2.20	.34	2.43	3.46	3.34	2.03	3.44	21.24
August ...	5.24	5.10	3.27	4.48	.57	5.21	3.66	1.52	1.42	3.71	34.48
September ...	2.43	1.17	3.23	2.32	.64	3.32	3.21	3.61	.27	4.27	24.47
October ...	.78	2.89	2.19	2.68	1.38	1.58	1.46	2.53	2.12	5.08	22.69
November ...	6.80	3.16	.84	6.32	3.22	.82	1.92	3.01	3.84	4.33	34.26
December ...	2.54	2.34	.85	2.24	2.53	3.26	2.64	2.92	5.62	2.52	27.46
TOTALS ...	36.84	27.39	22.27	31.85	22.86	25.76	25.58	30.68	28.27	35.83	287.43

1951 *Penguin Room wall 19' high at 10 yds N.W.*1955 *Jan adj. obs. agreed.*1956 *Rain gauge reset at 1' 0".*

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference 50(32)953216

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1957			<i>Cheltenham Western Div</i>	1 m. N	<i>St. Luke's</i>	550 yds N.

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
	✓	✓	✓	✓	
	✓ <i>dist - 11</i>	✓ <i>dist - 27</i>	✓	✓	