

RAINFALL AT *Cheltenham Hewlett's Res*

Lat.....

Lon.....

County of.....

Gloucester

Rain Gauge, by.....

Observer.....

*N. M. Landsborough &**Seven L-3.*

Diameter.....				8								
Height.....				.6								
Altitude.....				422								
Year.....	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.	
January.....				3.12	2.83	4.60	2.75	5.21	1.64	2.81		
February.....				.70	2.32	1.76	1.74	1.59	1.35	2.94		
March.....				2.94	.79	.87	3.13	1.86	.88	1.17		
April.....				1.94	1.63	3.10	3.14	3.09	3.92	2.59		
May.....				2.52	1.18	2.29	1.08	2.05	5.76	3.20		
June.....				1.78	1.07	2.63	1.54	1.18	2.93	4.04		
July.....				2.43	1.18	5.81	.75	3.51	2.41	4.09		
August.....				2.73	2.20	1.26	2.70	4.54	6.17	6.41		
September.....				1.80	3.75	2.46	3.95	3.19	2.40	3.06		
October.....				2.11	3.61	7.36	2.54	1.98	2.81	1.63		
November.....				1.80	2.80	5.02	3.28	3.93	3.46	1.07		
December.....				.76	1.17	.84	6.30	1.56	1.73	.49		
TOTALS.....				24.63	24.53	38.00	32.90	33.69	35.46	33.50		

RAINFALL AT *Cheltenham, Hawlett's* 2175 80

Lat. _____

Lon. _____

County of _____

Rain Gauge, by _____

 Observer *N. M. Caudabro, Esq.*
Season L - 3.
C.E.

Diameter	8										
Height	6		9								
Altitude	232 L		400								
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	1.11	.64	2.03	3.28	2.76	2.29	3.63	2.32	.63	80	1.949
February	4.65	2.40	2.06	4.97	2.08	3.84	.72	.93	1.20	1.26	2.411
March .....	.75	2.51	1.78	1.49	2.15	1.04	2.28	1.22	3.42	3.76	2.040
April	2.07	.74	4.17	1.07	1.55	2.27	2.36	1.85	2.00	3.62	2.214
May .....	.96	.99	2.30	1.74	1.07	2.42	3.90	1.65	1.68	3.36	2.007
June	3.07	2.54	3.88	4.77	3.71	1.64	.44	1.75	2.52	1.06	2.588
July	4.93	1.82	3.79	3.92	3.23	.14	3.06	1.19	4.91	2.50	2.949
August .....	.77	4.31	2.76	.88	.82	2.16	1.37	1.98	1.97	2.06	1.908
September	5.60	1.81	3.95	4.12	2.19	3.14	2.87	2.50	1.11	2.21	2.950
October	4.71	2.24	6.00	2.68	1.10	3.15	4.63	2.51	.54	2.84	3.040
November	2.79	3.22	3.93	2.71	1.65	3.93	2.64	3.58	6.16	1.71	3.232
December	2.86	3.23	2.66	1.12	2.67	1.11	3.68	1.80	3.75	1.66	2.454
TOTALS	34.7	26.45	39.91	32.75	24.98	27.13	32.08	23.29	29.89	26.84	29.742

RAINFALL AT Cheltenham Hewlett Reservoir

Lat. _____

Lon. _____

County of Gloucester

Rain Gauge, by _____

Observer J. Hall Esq. C.E.Severn. L - 3.

Diameter	8										
Height	0 9	1. 6									
Altitude	400	417					419				
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	3.19	2.00	1.26	1.98	1.86	2.82	.73	1.91	.66	3.54	1.995
February ....	.80	.67	1.44	2.94	2.07	.13	.40	2.92	1.57	3.26	1.620
March	1.15	1.78	.89	.16	1.32	2.49	2.44	4.48	.65	.64	1.600
April .....	.95	.92	.81	.06	3.12	2.46	.78	1.40	2.43	2.16	1.509
May	1.91	3.93	.71	1.46	2.15	.43	.32	1.29	4.38	1.57	1.815
June	1.97	1.57	1.81	1.12	1.96	.78	1.83	2.67	1.19	1.63	1.653
July	3.63	3.96	2.51	2.77	2.27	2.56	1.16	1.53	1.14	.91	2.214
August	2.93	5.35	2.70	1.90	2.38	2.20	2.55	4.45	2.87	3.22	3.055
September....	1.64	2.04	2.64	1.00	3.08	.76	5.31	2.60	.84	2.22	2.213
October	1.41	6.60	2.30	1.67	3.41	3.27	3.21	1.50	3.88	2.28	2.903
November	2.47	1.95	2.02	2.02	4.23	5.28	1.19	1.57	2.49	2.61	2.583
December ....	.49	3.79	.78	3.03	2.26	1.67	3.53	3.59	2.55	1.99	2.368
TOTALS	22.54	34.56	19.87	20.11	30.11	26.85	23.45	29.91	24.15	26.03	25.558

RAINFALL AT

Cheltenham Newletto Reservoir

Lat.

Lon.

County of

Gloucester

Rain Gauge, by

Observer

J. Hall Esq. C.E.

H. J. White Esq. C.E.

J. J. G. Esq. C.E.

Seven, L-3.

Diameter ..	8"										
Height	1.6										
Altitude ..	419 ft										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	3.45	1.12	.74	2.97	3.02	.82	4.35	.97	1.14	.75	1.933
February ..	5.78	1.35	1.10	1.27	4.01	.97	1.20	1.21	.86	.48	1.823
March	1.14	2.55	1.69	3.59	1.46	3.88	1.11	.61	3.05	3.12	2.2120
April .....	.84	2.96	2.33	2.85	1.14	2.42	.63	2.79	2.19	1.79	1.994
May	2.15	1.31	1.91	4.38	2.59	.32	1.91	2.78	1.50	.93	1.978
June	1.63	2.19	3.20	4.24	1.09	4.00	3.13	2.10	1.04	3.38	2.633
July	1.76	3.17	1.24	4.72	2.51	1.07	1.28	4.56	1.91	2.36	2.458
August	2.98	1.67	2.74	2.87	1.80	4.41	1.01	2.27	3.62	2.10	2.570
September ..	.39	1.55	1.81	2.34	2.34	1.25	.45	.50	1.16	3.38	1.516
October	2.94	1.23	2.45	6.45	.52	1.45	3.94	6.55	1.31	3.77	3.061
November ..	1.77	1.61	2.17	1.88	1.48	3.03	3.63	1.52	1.09	1.04	1.922
December ..	5.25	4.49	1.88	1.32	1.77	.56	1.80	3.80	1.62	3.23	2.572
TOTALS ..	30.08	25.20	23.26	38.88	23.73	24.51	24.44	29.66	20.48	26.33	26.65

1902 Holy Apostles Charlton Kings Ch 5400 ft S W

Wall of Reservoir 3 ft high 36 ft N

1903 Charlton Kings Station 1 1/2 miles S.W.

1905 all Saint Church Cheltenham 1 mile 570 yds N

RAINFALL at Cheltenham Newlett ReservoirCounty of Gloucestershire Observer J. L. Pickering Esq. Ch.River Basin Severn Left Bank Tributaries 3

Rain Gauge, by _____

Diameter ...	8											
Height	1.6											
Altitude ...	419 ft											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	TOTALS
January ...	2.42	1.20	3.55	4.40	.86	3.50	1.22	1.47	2.82	3.78		9.29
February ...	3.63	1.24	2.11	1.05	2.43	4.33	4.35	1.06	1.38	2.38		9.17
March .....	.87	1.98	5.00	3.53	2.95	1.07	3.81	1.71	1.28	3.91		10.71
April	2.68	.77	.11	3.38	1.14	1.53	1.30	1.34	2.73	2.35		7.72
May	1.13	.76	1.79	2.15	1.62	2.69	2.61	3.28	1.52	1.30		8.71
June	2.61	2.05	6.20	1.12	3.48	1.20	2.43	1.80	.89	1.43		6.55
July	2.44	.25	4.60	1.29	3.20	3.91	1.19	2.21	3.40	3.25		10.05
August	4.66	1.62	6.74	1.20	1.38	4.48	3.63	5.26	.86	2.40		12.15
September ..	.86	1.59	.76	2.47	1.03	.88	1.13	1.91	6.02	1.36		10.42
October ...	3.17	2.11	3.12	3.97	2.14	3.07	4.33	3.62	1.29	1.91		11.15
November ..	4.03	2.73	1.58	2.70	3.44	1.71	3.70	.89	2.19	1.41		8.19
December ...	4.78	6.79	3.45	1.02	5.87	4.65	3.36	1.17	2.30	3.42		10.23
TOTALS ...	33.28	23.09	39.01	28.28	29.51	33.02	33.06	25.72	26.68	28.90		114.36

1910 Peak Wall 3 ft high 13860

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
9/10	51.54 N	21° 2' 2.2" W	Charlton Kings	1 3/4 miles	SW	all saints	1 M 570 yds	W

RAINFALL at Cheltenham (Gaulthorpe Reservoir).County of GloucesterObserver J. S. Picketing Esq. C.E.River Basin S - Severn L.Borough Engineer Cheltenham

V-27 { Glaisher Rain Gauge, by N+Z
Glaisher gauge with straight tube
sound & correct. } measure
 correct at .50
 .40, .30, .10, .05.

Diameter ...	8												
Height	1.6												
Altitude ...	419												
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS.		
January ...	3.62	2.65	2.83	1.57	3.28	1.75	3.30	2.75	4.18	1.03	5.11	32.07	Totals
February ...	1.05	.25	3.02	6.13	.68	4.64	1.77	3.52	1.95	.45	.37	23.83	
March	3.13	1.50	2.20	1.91	.86	.49	.27	3.07	2.55	.04	1.66	17.68	
April	4.24	1.23	2.83	2.38	2.84	1.85	3.59	1.75	.78	1.13	3.04	25.66	
May	1.36	1.99	.74	1.83	7.02	2.87	3.23	1.23	.87	1.77	1.52	24.43	
June	2.81	.47	.88	.44	2.00	.10	1.85	3.10	2.61	1.48	2.39	18.13	
July	4.53	.38	3.83	1.91	4.26	2.42	2.42	3.35	1.65	1.86	4.07	30.68	
August	1.59	2.64	4.86	2.09	3.32	1.78	1.56	4.15	3.00	1.76	2.59	29.34	
September...	2.33	1.52	2.05	2.35	4.45	3.60	.95	5.03	.91	.22	3.26	26.67	
October.....	2.00	1.38	.85	5.44	4.16	2.69	2.58	1.41	5.46	4.07	1.99	32.03	
November...	.63	2.10	1.54	1.44	2.45	1.64	7.19	2.35	2.92	8.23	3.61	34.10	
December...	2.37	1.49	4.19	3.02	3.19	2.47	.62	3.12	2.58	7.22	3.48	33.75	
TOTALS...	29.66	17.60	29.82	30.51	38.51	26.30	29.33	34.83	29.46	29.26	33.09	328.37	

1920 Reservoir wall, 3 ft. high. 13 yds.

Imperfect g.s. 3.5.27 L. situated in field near reservoir,
 wall 3 ft. high about 13 yds to N, house at considerable distance
 to S.W. ground rises to E & S, but fairly flat to W with
 some shelter in that direction. Exposure fairly good but
 recommend sunbaking gauges 1 ft. The gauge is mounted on an
 iron pipe 4 inches below level of mouth + 1 inch thick.

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

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
1920.	51° 52'	2° 2' W.	Charlton Kings	1/2 m.	S.W.	St. John's Cheltenham	1/2 m. 3/4 m.	W.

RAINFALL at Charlton Kings (Hewletts Res)County of Gloucestershire

Observer

J. A. Picketing Esq. &c.River Basin Severn Left Bank Falls 3G. Claude Harland (1933)

Type of Gauge

Annual Average 27.7 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref 5

6535427

Diameter	8											
Height	1.6											
Altitude	419											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Totals	Means
January	1.40	2.92	2.74	2.45	.82	3.40	3.73	3.02	5.48	2.14	28.13	
February	2.28	2.5	3.85	.48	2.37	2.38	3.62	.78	1.37	2.24	19.62	
March	.21	1.65	2.46	2.68	.42	1.70	3.67	.25	2.11	1.99	17.14	
April	3.33	2.98	0.84	2.59	4.33	1.91	2.78	.17	3.21	1.76	23.90	
May	3.53	5.79	2.82	.99	1.06	.57	2.29	1.68	1.02	1.63	20.88	
June	4.95	1.28	1.89	1.10	2.98	3.69	1.56	1.12	2.45	.41	21.43	
July	3.61	1.65	1.82	2.14	.47	4.85	2.90	3.55	5.20	3.10	29.29	
August	4.47	3.16	0.82	1.87	1.38	.21	.45	3.02	2.37	.20	17.45	
September	2.20	2.76	2.29	1.73	3.70	3.58	1.70	2.72	.97	1.04	22.69	
October	.72	4.16	0.88	1.16	4.32	1.79	3.09	3.11	3.39	3.39	29.01	
November	4.27	1.66	0.88	2.05	5.38	2.45	1.50	3.15	4.34	6.44	32.12	
December	.94	1.15	0.46	5.10	3.76	3.82	2.35	3.55	1.99	1.34	24.46	
TOTALS	31.91	29.41	23.75	24.34	30.99	30.38	29.64	26.12	33.90	25.68	286.12	

1931. Reservoir wall 3' high 13 yards.

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
1931			Charlton Kings	1 3/4 m.	S.W.	All Saints	540 yds	W.
✓ 1934			Charlton Kings	1 3/4 m.	S.W.	All Saints	1 m.	W. ✓

BRITISH RAINFALL ORGANIZATION, EXHIBITION ROAD, LONDON, S.W.7.

Station No. 2175RAINFALL at Cheltenham (Hewlett's Res.)

41

County of GloucestershireObserver G. Gould, Marsland Sq. C.E.River Basin Swenn. Left Bank Trib. - 3Cheltenham & Glos. Water Board

Type of Gauge.....

Annual Average 27.7 in. based on 35 years obs. un-weighted. Period of average 1881 - 1915 Ref. SFile No. 768354/27

Diameter	8"				4.58	331						
Height	1' 6"					1						
Altitude	419'					41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	2.51	3.19	5.42	1.88	1.68	2.32	1.77	5.40	1.32	28		Totals 25.77
February	2.35	.49	1.56	.90	1.81	1.80	.90	1.19	1.27	4.87		17.14
March	2.67	1.94	.98	.38	1.09	.88	4.35	1.68	1.14	1.53		16.64
April	1.24	1.44	.96	1.05	1.17	1.80	2.87	2.10	2.29	2.01		16.93
May	1.73	3.68	2.92	.74	2.07	3.09	1.63	4.03	2.21	1.90		24.00
June	2.30	.13	1.99	2.58	2.58	2.55	1.61	2.19	.81	2.44		17.12
July	2.86	2.06	.57	2.47	1.46	1.27	1.78	.80	.77	2.90		16.94
August	3.88	3.76	2.00	3.21	1.80	5.66	.47	3.49	.92	4.14		27.33
September	.56	1.63	1.97	2.37	1.38	3.83	1.78	2.64	1.81	3.11		21.08
October	2.07	2.66	2.30	4.41	2.86	.44	.54	2.79	5.17	.83		24.07
November	2.55	1.79	1.49	4.45	.39	5.14	1.32	.95	2.95	5.28		26.31
December	1.99	3.49	1.33	2.31	5.53	2.71	1.87	4.39	1.16	1.32		26.10
TOTALS	26.71 D	26.26 D	23.49 D	26.75 D	23.82 D	31.49 D	20.89 D	31.65 D	21.82 D	30.61 D		263.41 D

1941. Reservoir Wall 3' high 13 yds from gauge. N.

232.88

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			Sharneton King.	1 1/2 m.	S.W.	All Saints.	1 1/2 m.	W.

BRITISH RAINFALL ORGANIZATION

Station No. 2175

RAINFALL at Cheltenham (Newlett's Res.)

51

County of Gloucester

Observer Cheltenham & Glos. Water Board.

River Basin Severn-L. Bank Tribs.-3

Rvo. Water Engineer

Type of Gauge.....

Annual Average 27.7 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref S

28.55 " " " " " 1916-1950

1916-1950

File No. 768354/27 P

Diameter ...	8"						458	331			
Height ...	1' 6"					1' 0"		1			
Altitude ...	419'							51			
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means Totals
January ...	2.78	1.92	.78	1.35	1.87	3.62	2.26	2.37	4.13	4.15	25.23
February ...	3.79	.56	1.51	2.34	1.30	.49	2.77	3.22	.15	2.25	18.98
March ...	4.12	2.04	.73	1.93	1.69	.83	2.10	1.04	2.11	1.57	18.16
April ...	3.08	1.99	2.32	.28	.87	1.81	.17	.71	3.35	1.04	15.62
May ...	3.23	3.23	2.25	2.11	4.29	.68	1.40	3.08	.66	1.47	22.40
June ...	.58	2.00	1.78	3.06	3.58	1.87	1.18	3.41	1.09	2.29	21.34
July ...	1.34	.45	2.83	2.49	.29	2.44	3.84	2.79	2.21	3.29	21.97
August ...	5.05	3.92	3.08	4.14	.41	5.00	4.31	2.15	1.18	3.34	32.58
September ...	2.43	1.10	3.84	2.56	.71	3.08	3.30	3.61	.27	4.23	25.13
October ...	.82	3.27	2.30	2.94	1.47	1.64	1.51	2.57	2.26	5.19	23.87
November ...	6.74	3.53	.82	6.69	3.30	.93	2.05	3.02	4.12	4.54	35.74
December ...	2.36	2.46	.98	2.54	2.89	3.21	3.13	3.18	6.01	2.78	29.54
TOTALS ...	36.32	26.47	23.22	32.43	22.67	26.50	28.02	31.65	27.54	36.14	289.96
	D	D	D	P	D	D	D	D	D	D	

1951 a little low but acceptable. Old soaked to test gauge. Recorder's walk 3' high at 13.45 N.

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference So. (32) 974923

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1951			Charlton Kings	1 3/4 mi.	All Saints	1 1/2 mi.

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
	✓ Oct-11, 18	✓ ✓	✓ ✓	✓ ✓	