

RAINFALL AT Worcester Water Works

80

Lat. Lon. County of Worcester

Side-tube Rain Gauge, by Observer S. G. Purchase Esq
Serial L-2

Diameter									12		
Height									2.5		
Altitude									54		
Year.....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January ....									.56 .49	.42✓	
February ....									.42 .49	1.07✓	
March									2.11✓ .88	1.88	
April .....									.87 .76	2.42	
May .....									.77 .76	2.36	
June .....									.97 .95	2.52	
July									1.95	.91	
August									4.01	2.12✓	
September....									1.58	2.44✓	
October .....									.61 .48	1.30✓	
November....									.47 .47	2.39	
December									4.58 4.41	2.82	
TOTALS									1.75 1.93	.84	
									19.69	19.10✓	

1888 St Stephens Church 760 yards NE
Engine House 30 ft high 39 ft SE
Dwelling House 28 " " 60 " SW
Fir Tree 30 " " 39 " NNW

1888-9. Corrected for wrong day. Red ink figures are corrected values. (See note at beginning of this book).

RAINFALL AT Worcester Water Works

Lat.

Len.

County of _____

Worcester

Side-tube Rain Gauge, by
Severn. L-2.

Observer S. G. Purchas Esq

[illegible]

RAINFALL AT Worcester Water Works

Lat. _____

Lon. _____

County of Worcester

Rain Gauge, by _____

Observer

S. G. Purchas Esq

Seven, L- 2.

J. Camick Esq C.E.

Diameter	5	5										
Height		8										
Altitude		52										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January		1.30	1.73	1.44	1.53	2.75	.46	1.54	.27	3.38		
February ....		.34	.97	1.98	2.01	.23	.24	2.18	.79	2.47		
March		1.16	.65	.25	.78	1.33	1.68	2.16	.23	.51		
April		1.08	.85	.23	1.37	1.41	.55	1.12	1.02	1.73		
May		3.09	1.47	1.96	2.32	.53	.31	.67	3.59	2.00		
June		2.27	1.76	.88	1.94	2.05	1.51	2.09	1.14	1.10		
July		2.34	1.46	1.76	2.80	2.99	1.29	.27	.83	1.20		
August		3.05	2.90	1.42	2.36	1.40	1.38	3.35	2.03	1.58		
September....		.86	2.00	.95	1.65	.36	2.72	1.59	.55	3.02		
October		5.54	1.62	1.75	2.17	1.91	1.27	1.41	3.11	2.21		
November....		1.91	1.98	1.18	2.67	3.03	.59	1.29	1.78	1.51		
December	<u>.97</u>	3.10	1.06	2.29	1.63	1.22	1.94	1.47	2.29	2.69		
TOTALS		26.04	18.45	16.09	23.23	19.21	18.97	19.14	17.63	23.40		

1892 St Stephens Ch 760 yards N.E.
 Engine house 39ft high 39 ft S.E.
 House 28 - - 60 - S.W.
 Fire Ins 30 - - 39 - N.W.

1896 + 1897 Gauge leaking

RAINFALL AT Worcester Water Works

Lat. Lon. County of Worcester
 66ppp Rain Gauge, by No. 3 No. 1044 Observer J. Cairns Esq. & C.
 Serial, 2-2.

Diameter ..	5										
Height	0 8		9								
Altitude ..	52 N		56								
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	3.50	1.50	1.87	2.05	1.75	1.08	2.99	.87	.53	.91	1.705
February ..	4.26	.84	.99	1.52	3.45	.77	1.46	.64	1.02	.30	1.525
March ....	.92	1.64	1.13	2.89	1.02	2.79	.92	.56	2.81	2.73	1.741
April .....	.70	2.19	1.74	1.69	.85	1.57	1.49	2.34	2.66	1.89	1.712
May	2.14	1.12	2.17	4.16	1.83	.57	2.15	2.35	1.50	.96	1.895
June	2.09	1.35	2.95	2.01	.64	2.02	2.98	2.30	2.24	3.14	2.172
July	1.07	3.30	1.35	2.67	2.60	2.38	1.05	2.17	1.53	2.50	2.062
August	2.99	1.65	2.72	3.13	1.52	5.24	.54	1.84	2.13	1.65	2.341
September..	.44	1.33	1.00	2.33	1.89	.74	.63	.45	3.09	3.36	1.526
October	2.74	1.16	2.43	4.21	.99	1.04	4.34	6.02	1.73	2.58	2.724
November ..	2.05	.65	2.20	1.17	1.33	2.75	2.21	1.96	1.39	.75	1.646
December ..	5.16	3.25	1.49	1.01	1.92	.87	1.72	3.32	1.55	3.56	2.413
TOTALS ..	28.06	19.98	22.04	28.84	19.79	21.82	22.48	24.82	22.51	24.33	23.46

1901 St. Stephen Church 70 yards NE
 Engine House 30 ft high 39 ft. SE
 Dwelling . 28. . 60. . SW
 Fir Tree 30. . 39. . N.W.
 1902 Feby Gauge moved 66 yards E.N.E
 1903 Foregate Street Station 1 mile S.S.E
 1909 Corrected for wrong day

+ Inspected 12.11.06 on low wall between 2 retting tanks. Well clear of all obstacles. S rather distorted. Funnel has been resoldered and pipe is gone.

RAINFALL at Worcester Water WorksCounty of WorcestershireObserver J. G. G. G. G.River Basin Severn Left Bank Tributaries 2Station Sturdon Rain Gauge, by N 43 No 1441

rim slightly distorted
 inner slightly distorted
 inner slightly distorted
 inner slightly distorted

Diameter ...	5											
Height	0 9											
Altitude ...	56 K											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	TOTALS
January ...	2.08	.68	3.62	3.82	.81	2.39	1.23	1.45	2.27	2.91		78.6
February ...	2.58	1.37	1.64	1.01	1.55	2.36	3.40	.96	1.13	2.75		8.24
March .....	.60	1.63	3.29	4.16	2.28	.57	2.96	2.16	1.16	4.06		10.34
April	2.02	.78	.07	3.07	1.09	.97	.90	.81	1.96	1.75		5.62
May	1.06	.45	2.23	2.31	1.37	2.63	2.62	3.08	1.98	.94		8.62
June	2.84	1.23	4.45	.61	2.43	1.07	1.16	1.72	.77	.70		6.35
July	1.94	.45	3.56	.77	3.43	5.84	1.76	2.24	1.85	2.82		8.67
August	5.07	1.40	6.86	1.67	1.38	3.27	2.10	3.69	.94	1.81		8.54
September ..	.68	1.06	.62	1.92	.64	.79	.78	1.72	4.79	1.05		8.34
October ...	2.53	1.41	2.56	3.41	1.42	3.74	3.48	1.69	.87	2.17		8.21
November ..	3.61	2.32	1.43	2.29	2.36	2.22	2.50	.74	1.52	.94		5.70
December ...	4.34	5.28	3.07	1.02	5.35	4.75	2.39	.92	1.73	2.94		7.98
TOTALS ...	29.35	18.06	33.40	26.06	24.11	31.60	25.28	21.18	20.97	24.84		92.7
	D	D	D	D	D	D	D	D	D	D		92.7

1910 Corrected for wind day
 1912 True 80 ft high 57 ft W
 Exposed 30. 92. S.S.

30.3.20. C.B. conifer 35 ft. high 50 ft. ESE. S. has been elsewhere formerly but near about
 50 ft. high 75 ft. W. S. has been elsewhere formerly but near about
 suggested new gauge which will be sufficient.

+ Inspected Exposure good. S. not tested.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
52.12.11	2 13. W		St. Stephens	760 yds	NE	700 ft. St.	19m	SSE
					? to compare			

RAINFALL at Worcester WaterworksCounty of WorcestershireObserver W. Ransom, Esq., C.E.River Basin Savern Left Bank tribs 2Type of Gauge SnodonAnnual Average 23.2 in. based on 26 years obs. ~~un~~-weighted. Period of average 1881-1915 Ref. 3.

575125/28.

Diameter	5					5"						
Height	10					1' 0"						
Altitude	52					52"						
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	Totals.
January	1.41	2.43	1.87	2.28	.78	3.17	2.76	2.99	5.23	3.30		26.22
February	1.89	.17	2.61	.40	1.64	2.32	3.66	.53	0.76	2.12		16.10
March	.18	1.58	1.90	1.75	.50	2.49	2.57	.29	0.99	1.34		13.59
April	2.86	3.55	0.82	1.98	3.96	1.59	1.87	.06	1.78	2.08		20.55
May	3.91	8.28	1.36	.96	.98	.84	2.20	1.43	1.20	2.58		23.74
June	3.45	1.07	1.61	.54	2.52	4.11	.84	1.13	1.82	.76		17.85
July	2.68	2.36	1.08	.85	.35	5.08	2.42	2.98	3.93	2.20		23.93
August	4.21	2.62	0.68	1.65	1.67	.34	1.48	2.68	1.80	.34		17.47
September	1.84	2.91	1.40	1.63	3.25	2.01	2.66	1.28	0.83	1.46		19.27
October	.68	3.10	3.01	1.03	3.01	1.26	2.16	2.35	3.05	3.31		22.96
November	3.25	1.26	0.74	1.77	5.14	1.92	1.30	2.78	3.58	6.19		27.93
December	.72	1.06	0.53	4.25	3.03	2.34	2.03	3.56	1.58	1.30		20.40
TOTALS	27.08	30.39	17.61	19.09	26.83	27.47	25.95	22.06	26.55	26.98		250.01
	D.	D.	D.	D.	D.	D.	D.	D.	D.	D.		416

1931. Concrete walls 2' 1/2" high 18' 22' 17' 4 1/2" N.W. & S. Stevenson screen 6' 4" high 16' 4" East.

1940. Stevenson Screen 5' 6 1/2" high 16' 1" E. & 22' 3 1/2" N.

Filter Walls 2' 3 1/2" " 17' 9" S. & 17' 6 1/2" 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.			Foregate Street	5000'	S.E.	S. Stephens	2200'	N.E.

Station No. 2401

RAINFALL at Worcester Waterworks

41

County of Worcestershire

Observer W. Ransom Esq. C.E.

River Basin Severn Left Bank - 2

The City Engineer (1941)

Type of Gauge Snowden

Annual Average 23.2 in. based on 26 years obs. un-weighted. Period of average 1881-1915 Ref S

File No. 875125/28

Diameter	5"				440	198						
Height	1'0"					1						
Altitude	52'					41				57'		
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	3.24	2.99	5.19	2.11	1.48	2.41	1.93	3.86	1.55	4.7		Totals 25.23
February	2.15	.59	1.13	.74	1.46	1.50	1.30	.92	.99	4.11		14.89
March	2.11	1.95	1.00	.23	.91	.61	5.88	1.13	1.91	1.24		16.97
April	1.27	.83	1.27	1.50	.82	2.68	2.20	1.66	2.10	1.82		16.15
May	2.16	3.64	3.54	.55	2.45	3.11	2.16	3.00	3.22	1.82		25.35
June	2.48	.09	1.54	1.51	3.00	1.77	1.13	1.88	.31	1.90		15.61
July	2.90	1.13	1.00	2.92	2.36	2.22	1.39	.77	1.90	2.23		18.8
August	3.71	2.16	1.15	3.74	2.42	6.39	1.11	4.69	.94	3.48		29.79
September	1.14	1.33	2.38	2.52	1.34	3.49	1.28	2.52	1.87	3.08		20.95
October	2.95	2.39	1.58	2.89	2.87	.77	.39	2.24	4.73	.66		21.47
November	2.97	1.11	1.23	3.63	.22	3.88	1.86	1.16	2.44	3.74		22.24
December	1.23	2.97	1.19	1.88	3.50	2.11	1.86	3.91	1.35	1.59		21.59
TOTALS	28.31	21.18	22.20	24.22	22.83	30.94	22.49	27.74	23.31	25.84		247.05

1941 Stevenson screen 5'6 1/2" high 16'1" E & 22'3 1/2" N. Filler walls 2'3 1/2" high 17'9" S. & 17'6 1/2" W.

1947 .. as above for 1941

1948 } Stevenson screen 5' high 7' E. : again house 60' high 75' S.

1949 }

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			Doregate St.	5000'	S.E.	St. Stephens.	2200'	N.E.

BRITISH RAINFALL ORGANIZATION

Station No. 2401

RAINFALL at Worcester (Waterworks)

51

County of Worcestershire

Observer

The City Engineer

River Basin Evern - Left Bank - 2

Type of Gauge Snowdon (+AOS)

Annual Average 23.2 in. based on 26 years obs. unweighted. Period of average 1881-1915 Ref. S
25.30 " 34 " (within) 1921-56 1916-1950 - 5
File No. 275125/28

Diameter ...	5"				440	198						
Height ...	1' 0"					1						
Altitude ...	57'					51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	1881-1915
January ...	2.20	1.93	.59	1.05	2.70	3.71	1.16	1.95	3.55	5.35	24.19	
February ...	2.58	.59	1.25	1.65	1.49	.31	2.51	4.60	.12	2.18	17.28	
March ...	4.02	1.66	.91	2.07	2.16	.85	1.82	1.53	2.56	1.96	19.54	
April ...	2.41	1.82	1.92	.39	1.09	1.80	.04	.55	2.90	1.27	14.19	
May ...	3.05	2.51	2.08	2.44	4.53	.49	1.67	2.24	1.31	1.26	21.58	
June ...	.89	1.56	1.23	2.94	4.07	1.68	1.33	3.56	.71	1.49	19.46	
July ...	.71	.53	2.20	2.44	.98	2.97	3.04	2.50	1.32	2.51	19.20	
August ...	3.46	4.47	2.65	3.42	.22	4.08	5.81	3.98	2.17	4.36	34.62	
September ...	3.26	1.57	1.83	1.08	1.60	2.93	3.58	4.42	.18	4.07	24.46	
October ...	.64	3.84	1.82	2.33	1.45	1.42	.99	2.25	2.50	6.28	23.52	
November ...	5.95	2.20	1.02	5.58	3.16	1.17	2.16	2.29	4.12	3.86	31.51	
December ...	1.88	1.96	1.06	1.59	2.36	2.87	1.93	3.66	4.81	3.43	25.60	
TOTALS ...	30.99	24.64	18.56	26.98	26.81	24.28	26.09	33.53	26.25	38.02	275.15	
	D	D	D	D	D	D	D	D	D	D	D	

1951 Stevenson screen 5' high at 71 E., Engine House 60' high at 75° S.

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference 503284565

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1951			Foresale St.	1490' S.E.	St Stephens	2100' N.E.

Summary of Earlier Records from 10-year Sheets :

1916-1950, P - Rejected

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	✓	✓	✓	✓	
	✓	✓ but - 27	✓	✓	