

RAINFALL at Bolton W.W., Bramberry Moss No. 1
 County of Lancashire Observer J. K. Swales, Esq. B.E.
 River Basin Mersey - Towl. 3.

Rain Gauge, by _____

Diameter ...							5			5	
Height							10			1	
Altitude ...							975			984	
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEANS.
January ...							7.80	5.48	13.50	2.24	6.74
February ...							6.35	2.45	5.60	1.58	.56
March							3.32	6.34	3.84	2.10	3.35
April.....							2.35	3.93	1.54	1.56	3.10
May							3.80	1.56	1.27	3.85	2.80
June							4.05	5.54	8.13	2.20	2.79
July							4.63	4.52	2.95	4.28	7.06
August							4.35	7.63	8.98	6.76	9.29
September...							5.50	7.48	1.18	2.40	4.51
October.....							4.15	5.34	7.15	9.68	8.14
November...							8.65	6.35	8.85	11.15	8.36
December...							2.43	1.65	3.92	9.75	5.84
TOTALS...				73.52	63.87	55.33	57.38	58.27	66.91	57.57	62.52

1X/28. Inspected by Mr. Colen see green file.

1929. Overexposed.

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

Date.	Lat. N.	Long.W.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge
1926	53° 40'	2° 26'					

RAINFALL at Bolton W.W. Cranbury Moss No. 2.

County of Lancashire.

Observer per J. K. Davies, Esq., F.R.S.

River Basin Mersey Irwell 3.

J. R. Penworth C.E. (1930)

Rain Gauge, by.....

Diameter											5'
Height											1' 0"
Altitude											982'
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
January											256 7.30
February											1.68 .62
March											2.18 3.50
April											1.57 3.31
May											4.05 2.85
June											2.26 3.03
July											4.37 7.04
August											6.94 9.26
September											2.57 4.51
October											9.80 8.16
November											10.94 8.38
December											10.30 5.85
TOTALS											59.22 63.81

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	Parish Church.	Distance from gauge	Direction

RAINFALL at Bolton W.W. (Cranberry Moss) - 2.

County of South Lancashire

Observer Bolton Corp. W.W.

River Basin. Mersey-Trwest-3

Type of Gauge 5 in. dia.

Annual Average 53.7 in. based on 10 years obs. un-weighted. Period of average 1881-1945 Ref. \$ I.W.S.
(1939) 53.7 10 741918/27.

Diameter	5.										
Height	1.0.										
Altitude	982.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Mosses Total
January	8.80	6.72	3.96	5.03	3.30	5.61	4.68	6.94	(5.93)	(3.75)	54.22
February	6.82	1.9	4.35	.53	8.19	3.28	7.36	2.70	(6.05)	(3.30)	42.71
March	7.3	4.32	3.60	3.56	2.02	2.43	2.12	2.32	2.60	3.81	29.51
April	4.13	4.69	2.55	3.36	4.68	1.36	5.52	4.95	(3.48)	3.09	33.75
May	3.05	5.68	2.64	5.02	1.35	1.10	2.23	(5.00)	1.72	1.69	28.48
June	6.82	1.20	3.01	8.09	4.78	5.80	2.07	(5.90)	(4.64)	1.17	38.53
July	5.60	5.41	4.08	2.65	2.38	6.42	2.59	(6.75)	(10.04)	6.16	52.08
August	6.85	1.81	3.78	6.31	2.29	3.69	3.24	3.02	3.23	2.85	36.57
September	5.29	8.53	1.04	5.13	9.00	5.90	2.13	(3.40)	1.63	6.20	48.25
October	3.49	10.10	5.89	8.11	11.62	7.02	2.71	(12.00)	2.63	5.86	69.48
November	10.29	4.71	2.89	2.93	6.36	8.47	2.22	8.35	9.40	10.04	65.66
December	3.49	3.03	82	8.61	4.98	6.44	3.28	5.76	(3.40)	6.67	46.48
TOTALS	63.86	56.44	38.61	54.27	60.90	59.52	40.75	62.09	(54.75)	(53.59)	545.78

1938 Values for May, June, July, Sept & Oct estimated by Bolton Corp. W.W. as gauge tampered with.

1940 Jan. & Feb. estd. by R.A.W.M.

An old gauge to be used as a check has been set up at Cranberry moss - Ref. 107.40
(3rd no. 2887/1)

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	Parish Church.	Distance from gauge	Direction
			Entwistle	1/2 m	S.E.	Lancaster Tipton	2 1/4 m	N.W.

RAINFALL at Bolton W.W. (Cranberry Moss)-2 check gauge
 County of South Lancashire Observer Bolton Corp.n. W.W.
 River Basin Mersey- Irwell-3
 Type of Gauge Shewdon

Annual Average in. based on years obs. un-weighted. Period of average Ref

Diameter	5									5 "
Height										1'0"
Altitude										990'
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940 Means
January										
February										
March										
April										
May										
June										
July										4.05
August										2.45
September										4.23
October										(5.80)
November										(0.00)
December										6.64
TOTALS										4.15 — in.

Gauge set up July 1940 as check on Sh. no. 2887. Oct & Nov. estimated, gauge leaking;
 new gauge fixed 1/12/40.

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.

BRITISH RAINFALL ORGANIZATION

Station No. T.F. 2887

41

RAINFALL at Bolton (W.W.) (Bramley Town) - 2

County of South Lancashire Observer Bolton Corp. W.W.

River Basin Mersey. Invert - 3

Type of Gauge Standard

Annual Average 53.7 in. based on 10 years obs. un-weighted. Period of average 1881-1915 Ref. I.W.S.

File No. 741918/27

Diameter	5'		562	078							
Height	1' 0"				1						
Altitude	982'				41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means Total
January	1.60	6.33	7.02	7.47	4.79	6.19	4.29	11.72	3.62	4.68	57.71
February	5.56	2.41	3.74	2.66	7.42	7.70	(1.00)	3.68	3.55	5.66	43.44
March	3.86	4.11	1.68	3.95	1.95	1.32	6.73	2.53	2.16	3.52	28.81
April	1.91	2.67	3.07	3.23	2.85	1.57	4.51	2.64	5.11	4.28	31.84
May	3.85	4.30	3.95	4.30	4.41	1.90	3.13	2.28	4.11	2.74	34.61
June	.56	8.7	4.88	4.03	6.19	4.15	3.48	7.71	1.14	2.89	35.92
July	8.42	7.27	3.90	4.95	3.83	4.23	3.78	2.88	2.41	5.78	41.75
August	8.21	7.16	8.35	4.50	3.83	8.91	1.16	6.86	3.14	8.42	59.54
September	1.66	4.20	5.61	8.39	3.62	9.14	4.68	4.01	2.58	10.40	54.23
October	6.00	9.37	4.70	7.30	7.64	1.73	1.36	4.09	5.62	4.21	52.12
November	3.86	1.77	5.08	8.44	.86	9.59	7.52	3.03	8.12	8.37	56.64
December	3.85	6.58	3.58	5.30	4.55	5.30	4.64	5.98	8.38	3.60	51.76
TOTALS	43.36	57.04	55.56	61.46	51.94	61.73	45.34	57.41	49.94	61.65	548.43

Dec 1947. Estimated rainfall during continuous prolonged. To be used in 1947. For part extra for snow

20004

465

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	Parish Church.	Distance from gauge.
1941			Penistone	13/8m	S.E.	Jurton	2 1/2m. S.E.

BRITISH RAINFALL ORGANIZATION

Station No. 2887 | T.F.

41

RAINFALL at Bolton W.W. (Cranberry Moss). check gauge

County of South Lancashire

Observer Bolton Corporation W.W.

River Basin Mersey - Irwell - 3

Type of Gauge Standard

Annual Average in. based on years obs. un-weighted. Period of average

Ref.

File No. 741918/27

Diameter	5'	562	079								
Height	1' 0"			1							
Altitude	990'		41								
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	1.61	6.32	7.19	7.57	4.85	6.23	4.24	11.78	3.57	4.72	
February	5.15	2.12	3.72	2.67	7.49	7.63	(1.00)	3.64	3.52	5.70	
March	3.90	4.10	1.69	.94	2.01	1.80	6.79	3.52	2.13	3.50	
April	1.90	2.73	3.28	3.26	2.84	1.52	4.56	2.58	5.13	4.26	
May	3.57	4.33	3.90	4.26	4.38	1.92	3.11	2.29	4.07	2.70	
June	.58	.80	4.85	4.08	6.24	4.16	3.43	7.63	1.10	2.92	
July	2.71	7.27	3.91	4.93	3.78	4.27	3.75	2.91	2.42	5.86	
August	8.78	7.15	8.47	4.45	3.78	8.86	.18	6.84	3.19	8.53	
September	1.5	4.20	5.53	8.26	3.63	9.05	4.62	4.05	2.52	10.13	
October	5.80	9.15	4.79	7.40	7.58	1.69	1.38	4.02	5.66	4.26	
November	3.90	1.79	5.00	8.41	.87	9.82	7.59	3.04	8.21	8.40	
December	3.80	6.71	3.62	5.28	4.59	5.38	4.55	6.02	8.24	3.65	
TOTALS	43.27	56.67	55.95	61.51	52.04	61.83	45.20	57.32	49.75	64.63	
	m.p.	m.p.	n.p.	m.p.	m.p.	n.p.					

1941 n.p. check.

20004

1942 m.p. check.

1943 n.p. check.

1944 n.p. check.

1945 n.p. check.

1946 n.p. check. Feb panic estd. for snow

1950 n.p. check.

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	Parish Church.	Distance from gauge	Direction
1941			Entwistle	1 7/8 m.	SE	Tudor	2 7/8 m.	SE

BRITISH RAINFALL ORGANIZATION

Station No. 2887

18/26

51

RAINFALL at Bolton W.W. (Cranberry Moss)County of C. LancashireObserver Bolton Corporation WeatherRiver Basin Mussey IrwellType of Gauge Open BradfordAnnual Average 53.7 in. based on 10 years obs. un-weighted. Period of average 1881-1915 Ref. I.W.S." " 52.9 " 20 " - 1929-57 (Actuals) " " 1916-50 File No. 74498/27

Diameter	5		562	078							
Height	1' 0"	1' 4"			1' 1"	1' 0"					
Altitude	992'				51						
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means Totals
January	5.70	4.52	2.50	5.60	3.00	6.10	4.85	5.54	3.69	2.30	48.80
February	4.09	2.02	1.42	3.56	2.47	1.30	4.15	8.70	1.02	4.04	32.77
March	5.48	3.18	3.03	3.47	2.50	1.95	5.17	2.27	2.60	1.57	31.52
April	3.12	4.38	4.18	1.15	3.88	3.15	.90	2.03	3.92	3.26	29.97
May	2.49	3.08	3.13	3.40	5.01	2.33	2.75	5.67	1.55	2.55	31.96
June	1.59	4.98	2.98	4.21	4.51	3.10	2.68	4.76	3.17	1.75	33.73
July	4.42	3.08	7.62	9.56	1.24	6.65	9.10	4.40	5.40	10.08	60.55
August	5.69	6.28	5.68	7.48	1.71	14.02	8.26	5.37	.51	6.83	61.83
September	4.40	6.08	5.97	6.53	5.28	4.40	10.46	5.23	.46	4.05	52.86
October	1.12	6.09	2.38	10.18	3.39	3.52	8.42	5.81	5.90	5.33	52.14
November	10.02	3.33	7.44	8.96	3.37	2.23	2.70	2.38	6.30	9.00	55.73
December	12.15	5.31	2.50	7.95	6.60	5.46	7.05	5.15	10.87	6.45	69.49
TOTALS	60.27	52.33	48.83	71.05	42.96	54.21	66.49	57.61	45.39	62.21	561.35
	M	M	M	M	M	M	M	M	M	M	

Ins. 7.10.58. G. Sound. Open slightly to west but turf wall probably not necessary.

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference SD710 192

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge
1951			Entwistle	1 3/8 m. S.E.	Stretton	2 5/8 m. N.E.

Summary of Earlier Records from 10-year Sheets :

Record D. or d		1910-19	1920-30	1931-40	1941-50	1951-60
			c. 1929	✓	✓	—

Station No. 288711 T.W.

RAINFALL at Bolton W.W. (Branberry Moss) check gauge.

51

County of Lancashire Observer Bolton Corporation Weather Station
 River Basin Mersey Level - 3
 Type of Gauge Bradford

Annual Average in. based on years obs. un-weighted. Period of average Ref.

File No. 744918/27

Diameter ...	5"	562	079							
Height ...	1' 0"			1						
Altitude ...	990'			51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	Means
January	5.76	4.49	2.55							
February	4.11	2.03	1.46							
March	5.56	3.22	3.02							
April	3.10	4.41	4.24							
May	2.53	3.06	3.20							
June	1.60	4.90	3.00							
July	4.38	3.09	7.61							
August	5.64	6.33	5.71							
September	4.49	6.02	5.85							
October	1.10	6.16	2.42							
November	10.13	3.45	7.68							
December	12.28	5.40	2.62	#						
TOTALS ...	60.68	52.56	49.36	NR.						
	yr. 1951 M	1952 RD								

1951 MP Check

Inv. 7-10-53. Q.S. sound. Site open to SW. To be terminated (at end of 1953)

1953 NP Check.

1954. 1090 received but no record kept during 1954.

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference SD 709191

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge
1951			Bolton	1/8 m.	SE.	Xeston	2 1/8 m. NE.

Summary of Earlier Records from 10-year Sheets :

Record D. or d	1910-19	1920-30	1931-40	1941-50	1951-60
			Camp 1940	✓	-