

RAINFALL AT *Botton-l-Moyn, Smithills*

Lat. _____

Lon. _____ County of *LANCASHIRE*

Rain Gauge, by _____

Observer *A. F. Ainsworth**Mersey - Swell 3*

Diameter	8		6				8				
Height	1.5	1.2									
Altitude	557						507				
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	2.04	1.27	3.95	6.33	5.07	2.44	5.84	2.78	2.49	2.25	3.446
February	2.70	7.05	2.58	2.68	3.56	4.02	1.43	1.07	1.71	3.22	2.996
March	2.53	4.60	4.44	1.23	2.20	2.94	2.28	2.52	3.52	2.89	2.915
April	2.65	1.67	5.34	2.15	1.05	2.26	2.21	1.90	2.38	2.37	2.398
May	2.61	4.77	3.24	.48	2.37	2.66	4.52	3.13	.60	3.74	2.812
June	4.02	2.78	7.61	3.25	.53	4.93	2.83	1.25	2.45	.64	3.029
July	5.91	6.54	7.49	3.65	4.68	2.35	4.14	1.49	8.32	4.51	4.908
August	2.72	6.90	4.76	3.65	2.21	2.22	3.14	2.33	4.25	7.87	4.005
September	6.25	1.83	2.48	7.01	4.22	6.38	4.74	5.29	2.23	5.52	4.595
October	2.97	5.31	3.89	6.32	3.41	7.19	5.14	3.10	3.00	3.64	4.397
November	5.61	4.67	8.10	5.31	1.34	4.43	3.64	1.67	6.44	2.37	4.358
December	8.41	6.78	4.43	5.65	5.77	3.17	6.39	3.42	2.93	5.43	5.238
TOTALS	48.42	54.17	58.31	47.71	36.41	44.99	46.30	29.89	40.32	44.45	45.097

1880. St. Paul's

3/4 mile

S.

2850

RAINFALL AT Bolton-le-Moors Smithills Hall

Lat.

Lon.

County of

Lancashire

Rain Gauge, by

Observer

Col R. H. Anisworth Esq.

Alley - Irwell 3

Diameter	8											
Height	12											
Altitude	507 ^T				520 ^T	535 ^T				510		
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	5.75	2.95	4.63	2.12	3.07	3.62	2.23	1.23	3.99	6.16	3.545	
February ....	.71	.51	3.67	5.71	6.37	.94	3.31	4.24	3.99	1.47	3.092	
March	4.31	2.22	1.10	1.19	3.88	4.37	6.58	3.40	2.18	3.05	3.228	
April	1.58	2.31	1.79	.62	1.94	2.38	2.35	3.20	2.15	5.12	2.244	
May	2.62	3.00	3.74	1.83	4.15	.91	.74	2.64	3.74	3.15	2.652	
June	3.89	3.26	4.04	2.39	4.05	2.70	4.14	4.90	3.17	2.16	3.470	
July	3.67	3.62	4.33	3.23	4.76	5.14	2.42	1.84	1.74	2.89	3.264	
August	5.76	9.12	5.22	4.11	6.54	5.14	3.19	5.59	7.07	1.76	5.350	
September...	2.87	3.99	5.15	6.31	.39	2.06	9.79	5.58	1.39	7.47	4.500	
October.....	4.86	5.25	6.30	4.97	4.32	5.17	5.79	2.70	4.57	4.11	4.804	
November...	10.08	4.50	3.58	4.32	3.37	3.65	1.62	5.08	3.53	2.48	4.222	
December....	.65	8.26	3.76	4.92	5.07	5.03	6.81	5.44	5.17	3.65	4.876	
TOTALS	(46.75)	48.99	47.31	41.72	47.91	41.11	48.78	45.84	42.69	43.47	(45.177)	

1890 St Pauls Hallwell 3/4 Miles

1880-

RAINFALL AT *Bolton Smithills Hall*

Lat.

Lon.

County of *Lancashire*

Rain Gauge, by

Observer *Col R.H. Ainsworth**Invert 3*

Diameter ..	8										
Height	10										
Altitude ..	510 T										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	6.86	3.31	4.50	4.34	3.94	2.78	6.75	2.43	4.60	3.11	4.262
February ..	3.05	2.77	2.00	4.88	3.74	3.21	4.60	2.55	4.86	2.28	3.394
March ....	.98	3.96	3.39	5.11	2.53	3.97	3.73	4.39	3.91	3.88	3.585
April	3.29	3.20	2.85	3.02	2.82	4.23	2.64	2.40	2.92	4.21	3.128
May	2.04	1.49	4.11	3.80	2.85	.77	3.97	4.71	3.82	3.20	3.076
June	3.53	2.95	1.36	2.13	1.46	2.55	1.77	9.04	2.61	3.21	3.061
July	2.32	2.04	4.37	4.27	1.72	2.64	1.80	3.68	6.32	7.96	3.712
August	7.45	3.38	3.24	7.75	4.57	4.92	5.49	5.70	3.63	3.34	4.947
September ..	2.71	1.36	2.21	6.42	1.75	3.32	2.22	1.50	4.96	3.30	2.975
October	7.57	4.45	6.87	9.50	3.18	5.10	7.23	3.89	2.39	6.89	5.707
November ..	5.08	5.49	3.09	4.98	4.45	5.03	3.79	4.24	4.21	2.16	4.252
December ..	7.11	5.67	4.36	2.31	3.58	1.07	6.15	4.23	4.07	8.49	4.704
TOTALS ..	51.99	40.07	42.05	58.51	36.59	39.59	50.14	48.76	48.30	52.03	4.803

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1903 Bolton Station 2 miles SE

Hub

RAINFALL at Bolton Smithills HallCounty of South LancashireObserver Col R. H. AinsworthRiver Basin Mersey Inwell 3

Rain Gauge, by _____

Diameter ...	8										
Height	1.2										
Altitude ...	510 T										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	6.40	1.54	4.68	5.55	3.23	6.60	3.84	3.57	4.35	5.24	
February ...	4.80	5.06	1.77	1.66	2.46	4.73	4.84	1.89	5.61	1.13	
March .....	.94	2.34	7.00	5.18	6.49	2.45	1.81	3.40	2.21	7.96	
April	4.15	4.05	1.12	5.63	1.52	2.43	4.76	2.22	1.21	3.37	
May	3.83	1.70	3.09	4.01	3.04	1.84	2.48	2.35	2.71	1.74	
June	3.24	3.60	6.01	3.01	2.15	2.17	4.22	2.46	2.23	2.21	
July	5.58	.24	5.67	1.28	5.75	5.05	2.73	2.64	3.71	2.03	
August	6.50	3.15	8.52	3.06	3.31	5.98	4.12	7.89	4.54	5.05	
September ..	.57	4.10	3.94	2.05	5.19	1.03	4.22	2.67	14.20	2.33	
October ...	3.35	3.15	5.71	2.47	3.10	2.27	8.17	9.54	5.57	3.28	
November ..	7.54	4.62	3.86	5.01	6.33	2.19	3.28	6.57	3.64	4.24	
December ...	4.52	5.36	4.75	3.36	6.82	9.87	3.41	2.62	10.59	8.38	
TOTALS ...	51.42	41.91	56.12	42.27	48.39	46.61	47.86	47.82	60.57	46.96	49.95

+ Inspected

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	53.36.	2.25.	Bolton	3 1/2 m	S	St Peter	2 1/2 m	SW

RAINFALL at Pollon Smithills HallCounty of LancashireObserver Col. R. H. Ainsworth died 23/11/26River Basin Mersey-Truell 3

Tape U. Ainsworth

(1925) Glaisher Rain Gauge, byP. Louthan (Ex-Act. Rainfall)

Diameter ...	8										
Height	1 2										
Altitude ...	510										
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS
January ...	5.14	7.71	4.60	5.92	3.82	3.30	5.15	5.98	11.84	2.77	5.58
February ...	3.89	5.8	5.42	7.26	1.69	7.24	4.65	2.36	5.76	1.49	.51
March	4.04	3.53	3.41	1.93	2.02	2.81	2.48	7.20	2.84	1.83	3.22
April	6.03	2.45	2.63	3.47	2.25	2.47	1.86	3.64	1.28	1.38	2.50
May	7.19	3.14	2.23	4.73	6.68	4.85	4.35	1.76	1.25	3.31	2.70
June	2.67	5.7	3.34	1.51	3.08	.09	2.43	5.85	6.59	1.97	2.86
July	7.53	2.32	4.77	6.07	5.39	2.26	3.15	3.43	3.02	3.47	6.03
August	2.92	6.43	6.26	6.17	8.98	4.30	5.30	6.97	6.03	6.69	8.21
September...	3.64	1.49	5.10	5.91	4.95	5.49	4.74	7.27	.98	2.94	4.45
October	1.71	3.57	.86	6.79	5.59	5.06	3.22	4.79	6.42	8.26	7.73
November...	1.94	4.15	4.73	6.44	2.92	4.57	6.74	4.87	7.54	9.39	7.17
December...	3.84	6.86	6.58	6.50	5.13	3.45	2.75	1.58	3.68	7.18	4.76
TOTALS...	50.54	42.80	49.75	62.70	52.50	45.89	46.82	55.70	57.23	50.68	55.72
	D	D	D	D	D	D	D	D	D	D	D

1921 Stratus.

1925. Evening 7 on 8 ft. high, 10 to 12 ft. N.W.

Position of Station on reduced Ordnance Survey }
Map, 2 miles to 1 inch Series

No. of Map

Reference No.

Date.	Lat. N.	Long. W.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
	53° 36"	2° 28"	Pollon Smithills	23	mi S E	St. Peter's	1 1/2	mi W

RAINFALL at Bolton (Smithills Hall)

County of South LancashireObserver Nigel V. Ainsworth, Esq.River Basin Mersey-Ince-3Type of Gauge GaiaAnnual Average 46.1 in. based on 25 years obs. un-weighted. Period of average 1885/1915 Ref. Bolton

675964/26.

Diameter	8.			5?		5					
Height	1.2.										
Altitude	570.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	8.51	5.40	3.02	4.01	2.71	5.41					
February	6.75	.09	4.39	51	6.72	2.82					
March	.49	3.27	3.32	3.80	1.86	3.13					
April	4.88	4.08	2.21	2.99	3.80	1.19					
May	3.09	5.07	1.96	3.81	1.60	1.09					
June	7.23	.82	3.45	2.27	5.82	4.46					
July	4.95	4.94	2.75	2.71	2.15	5.86					
August	6.65	1.85	3.24	5.85	1.94	3.46					
September	4.33	6.22	1.04	3.80	8.28	6.14					
October	3.30	9.88	5.51	6.89	10.44	5.70					
November	8.60	4.18	3.21	2.64	5.17	7.15					
December	2.80	2.64	.78	7.47	4.52	5.46X					
TOTALS	61.38 D.	48.44 D	34.88 D	46.25 D.	56.01 D	51.87 D	N.R.				

Inspected 26/9/33. G. not standard has small hole in funnel.
 New gauge recommended to be set up on new site.

1937 record destroyed by fire.

1940. Station T. No reply to air. T. Obs. record in 1943

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			Bolton	2m.	S.	St Pauls	1/2 m.	S.

Station No. M 2850RAINFALL at Bolton (Brillville Hall)

41

County of South Lancashire Observer The CorporationRiver Basin Lancaster-Jewell-3

Type of Gauge.....

Annual Average 46.1 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. 13 of N.File No. 675964/26

Diameter	562	400	5"								
Height			1'								
Altitude			41	510'						X	
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January			6.55	6.56	3.71	5.68	3.87	10.72	3.50	4.26	
February			3.52	2.86	6.18	7.27	.96	2.91	2.78	5.55	
March			1.50	.99	1.80	.99	6.76	1.76	2.91	2.64	
April			2.93	3.63	2.68	1.34	3.68	2.36	3.50	4.11	
May			3.61	3.72	4.76	1.42	2.96	2.06	4.54	1.68	
June			4.74	4.23	5.87	4.45	2.79	6.16	10.16	2.27	
July			3.79	4.21	3.41	4.49	3.10	3.02	2.79	4.69	
August			6.96	3.57	3.33	7.74	.23	5.70	4.09	7.94	
September			5.59	6.27	3.23	8.78	3.88	3.48	2.52	8.66	
October			4.37	6.16	6.94	1.28	.90	3.60	4.42	3.55	
November			5.08	8.10	.77	7.19	5.85	2.66	6.54	6.95	
December			3.07	5.17	3.67	4.90	3.98	4.73	7.44	3.86	
TOTALS			51.71	55.47	46.35	55.53	38.96	49.16	46.19	56.16	
			D	D	D	D	D	D	D	D	

1948 Data T/S Michael 3/48

1948 map. 1948

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.
			Bolton	2m.	S.	S. Pauls	1/2 m.	S.

BRITISH RAINFALL ORGANIZATION

Station No. 2850RAINFALL at Boston (Smithville Hall)

51

County of Lancashire Observer The CorporationRiver Basin Mossy - Lowell 3

Type of Gauge

Annual Average 46.4 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. Bd N" " 49.53 " " 15 " " 1943-57 " " 1916-50 " " 5.1File No. 675964/26

Diameter ...	5"			562	400						
Height ...	1' 6"				1						
Altitude ...	510'				51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	5.66	5.09	2.66	4.80	2.78	6.42	3.59	5.34	3.46	6.92	
February ...	3.13	1.88	1.70	3.76	1.54	.81	3.18	8.70	.81	3.34	
March ...	5.29	2.51	2.22	3.73	2.03	1.89	4.15	2.54	1.93	1.41	
April ...	2.47	4.25	3.53	1.15	3.49	3.96	.68	1.68	2.49	2.39	
May ...	2.94	2.57	2.92	2.95	4.64	1.57	1.64	4.89	1.77	2.73	
June ...	1.39	4.40	2.18	4.80	3.70	3.14	2.85	5.30	2.78	1.73	
July ...	3.52	2.87	5.54	8.44	1.22	7.07	6.88	4.60	4.62	8.27	
August ...	4.82	4.89	5.24	6.22	1.17	13.52	7.62	5.83	.54	6.34	
September ...	3.38	4.96	4.44	7.25	4.47	4.44	9.21	5.21	.34	4.10	
October ...	1.16	5.12	2.24	8.86	2.81	3.51	6.73	4.78	5.43	5.46	
November ...	4.96	3.30	5.60	7.33	2.70	2.09	1.96	2.39	5.17	7.86	
December ...	8.74	5.37	2.10	7.94	6.59	4.30	6.04	4.82	8.15	5.39	
TOTALS ...	52.46	47.11	40.37	67.23	37.14	52.72	54.53	50.08	37.49	55.94	
	D	D	D	D	D	D	D	D	D	D	

20084Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference 34 700 118

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

Summary of Earlier Records from 10-year Sheets :

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	✓	✓	31-36	43-50	
	✓	✓	✓	✓	