

# RAINFALL AT

*Bolton*  
*Horsdorm*

Lat. ....

Lon. ....

County of

*5 Lancashire*

Rain Gauge, by

Observer

*R. H. Swindell Esq. C.E.*

*M Swell 3*

Diameter ..						5					
Height ....						1	-				
Altitude ..						1147					
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..						2.60	7.90	2.50	4.90		
February ..						3.50	4.70	2.30	5.70		
March ....						4.60	4.40	4.70	4.20		
April .....						4.70	2.70	3.00	3.10		
May .....						1.20	5.10	5.30	4.20		
June .....						2.50	2.80	10.80	2.60		
July .....						3.60	3.30	4.80	7.50		
August ....						5.80	5.10	7.00	4.80		
September..						4.30	2.60	1.60	6.10		
October....						6.20	8.30	4.20	2.90		
November ..						6.30	4.90	4.70	4.60		
December ..						1.40	4.80	5.40	3.70		
TOTALS ..						46.70	56.60	56.30	54.30		

+ Inspected

RAINFALL at Belmont HordernCounty of GloucesterObserver J. K. Gwiles, Eng. C.E.River Basin Mersey Drivell - 3Wales L.S. Eng. BoltonRain Gauge, by Gravelle

T.P. Ainsworth, Eng. C.E. (1920)

At. O. (125)

M.

Diameter ...			5									
Height .....			1	0								
Altitude ...			1160									
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930.	MEANS.
January ...			5.00	6.50	4.70	3.40	6.50	6.20	11.28	3.41		6.91
February ...			6.00	7.70	1.80	8.70	6.00	3.00	6.31	1.59		4.5
March .....			3.60	2.50	2.40	3.10	2.80	7.30	4.02	2.28		3.75
April .....			3.30	4.20	2.80	3.10	2.20	4.40	1.63	1.54		2.65
May .....			2.40	4.70	7.10	5.60	4.40	2.10	1.49	3.88		2.87
June .....			4.70	2.40	4.40	3.0	3.00	6.50	8.31	2.67		3.94
July .....			6.30	6.30	7.40	3.50	5.20	5.50	4.07	5.59		7.73
August .....			6.20	7.30	8.50	8.50	5.70	7.70	9.00	7.58		9.46
September...			7.10	6.00	6.30	6.40	5.60	8.20	1.83	3.23		4.75
October .....			1.30	7.90	6.70	6.80	4.20	6.30	7.87	9.27		8.13
November...			4.70	7.30	3.60	4.70	9.00	6.60	9.01	10.17		8.17
December...			6.30	7.40	7.40	4.10	3.10	1.70	4.27	8.87		5.78
TOTALS...	60.40	49.90	56.90	70.20	63.10	55.20	57.70	65.50	72.09	60.08		65.49
			M	M	M	M	M	M	M	M		M

IX 28 Inspected by Mr. Colson, see green file  
 Over exposed prior to 1929 from which a standard rainfall was built.

1924/1 corrected from 7.47 to 7.5

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
1922	53° 38' 1"	2° 30' 32"	Sturton Road	4 mi	W.	St. Peter's Belmont	4 mi	E.N.E.

## RAINFALL at Bolton W.W. (Hordern)

County of South LancashireObserver Bolton Corpn W.W.River Basin Mersey-Traill 3.Type of Gauge Snowdon.Annual Average 5.26 in. based on 13 years obs. un-weighted. Period of average 1881/1915 Ref. 7419/27.

Diameter	5.										
Height	1.0.										
Altitude	1160.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	7.29	6.19	3.25	4.08	3.60	5.53	3.96	6.23	6.75	(3.85)	
February	5.58	1.8	4.73	5.0	7.00	3.21	6.38	2.24	5.91	(3.65)	
March	8.4	4.23	3.80	3.45	1.90	3.82	2.40	2.43	2.74	3.77	
April	4.63	4.05	2.58	3.73	4.15	1.44	5.32	9.2	3.68	4.26	
May	2.97	5.52	2.90	4.69	2.00	1.21	2.75	5.70	1.90	1.23	
June	7.98	1.13	3.60	3.11	5.19	5.29	3.03	6.33	5.20	1.32	
July	5.39	5.73	3.75	2.81	2.47	6.83	2.98	6.31	9.84	7.65	
August	6.82	1.59	4.00	7.19	2.54	4.26	3.35	5.20	2.70	3.64	
September	5.11	8.17	1.04	4.91	8.97	6.20	2.48	3.95	1.88	5.97	
October	3.66	10.27	5.34	7.73	11.04	5.96	2.87	11.63	3.04	5.48	
November	10.11	4.41	3.20	3.41	6.02	7.65	2.48	7.44	8.58	8.42	
December	3.85	2.73	9.3	8.57	5.19	6.19	3.60	5.87	4.36	6.46	
TOTALS	64.13 M	54.20	39.12	54.18	60.07	57.64	44.50	64.75	56.58	(55.70) M	

1940 Jan. Feb. not obsd. by observer.

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 Direction from gauge		Parish Church.	Distance Direction from gauge	
1931			Turton	4 m	E	Belmont	3 1/2 m	ENE.



Station No. I.E. 2873RAINFALL at Bollon W.W. (Anderson)

41

County of South LancashireObserver Bollon Gwyn. W.D.River Basin Mersey-Jewell-3Type of Gauge SnowdonAnnual Average 53.6 in. based on 12 years obs. un-weighted. Period of average 1881-1915 Ref. 5File No. 741918/27

Diameter	5"			562	276						
Height	1'0"				1						
Altitude	1160'				41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	1.70	5.54	7.06	7.33	5.41	5.98	4.86	12.03	4.02	5.19	
February	6.89	2.36	4.22	3.09	6.54	7.85	(1.20)	3.37	3.24	6.61	
March	3.86	4.43	1.42	1.29	2.13	1.31	7.97	2.39	2.96	3.11	
April	2.89	2.29	3.71	3.23	2.98	1.89	4.17	2.93	5.45	3.96	
May	3.16	4.94	3.98	4.42	5.15	1.61	3.57	2.38	4.49	2.49	
June	.77	1.11	5.81	4.41	5.67	4.52	3.34	7.18	1.91	3.71	
July	2.84	6.67	4.24	5.79	4.41	5.06	4.47	4.18	3.40	5.64	
August	9.41	6.54	9.31	4.31	3.97	10.18	.27	7.57	3.61	8.97	
September	1.90	4.18	6.24	7.97	3.79	9.07	4.96	4.33	3.18	11.07	
October	6.11	9.23	5.02	6.96	7.62	2.09	1.23	4.62	5.73	4.29	
November	3.62	1.45	5.34	8.73	1.09	9.04	8.09	2.47	7.46	8.02	
December	3.98	5.68	3.97	5.67	4.89	5.61	5.46	5.06	8.09	4.99	
TOTALS	47.03	54.42	60.32	63.20	53.15	64.21	49.59	58.51	53.54	68.05	
		M	M	M	M	M	M	M	N.P.	N	

Jan. est'd. by observer.

1942 40 vol. lost.

11/13/49 Engineer states gauge sound, but will be repaired &amp; long gauge cut.

Dec. 1947. Engineer states outer container perforated. To be replaced.

1947. Feb. cold for snow.

1948. Gauge mania 30.4.48. Tunnel leaking at seam. - gauge run by 15" Tug well.

20004

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			Turton & Edgworth	4 m.	S. E	Belmont	3/4 m.	E. N. E

BRITISH RAINFALL ORGANIZATION

Station No. 2873 vi 36RAINFALL at Bolton W.D. (Horsden)

51

County of L. LancashireObserver BoltonCaptain WatkinsonRiver Basin Mersey-Swivel-3Type of Gauge SnowdonAnnual Average 52.6 in. based on 12 years obs. un-weighted. Period of average 1881-1915 Ref. 5" " 38.28 " " 19 " " within 1921-55.File No. 7419/15/27

Diameter ...	5"			362	276						
Height ...	1' 0"				1						
Altitude ...	1160'				51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	4.19	5.83	2.99	6.51	3.87	7.68	4.40	4.84	3.51	6.21	
February ...	4.68	2.29	2.37	5.31	2.98	1.18	3.52	(9.68)	1.28	4.96	
March ...	6.19	3.20	2.86	3.98	2.61	2.04	4.82	2.60	2.55	1.83	
April ...	(3.10)	4.49	4.37	1.34	(4.60)	3.39	.81	1.27	3.60	3.44	
May ...	3.19	2.89	3.66	3.77	5.81	2.10	2.77	4.98	1.69	2.81	
June ...	2.03	5.71	3.29	6.22	4.92	3.54	2.48	5.06	2.81	1.79	
July ...	4.61	4.39	6.64	11.07	1.33	7.98	8.75	5.24	6.56	10.18	
August ...	6.27	5.44	5.97	8.52	1.91	14.84	8.97	7.20	.68	6.46	
September ...	4.17	6.08	6.11	7.02	6.33	4.94	10.07	6.32	.54	4.15	
October ...	1.14	5.64	2.71	10.61	3.19	3.78	7.72	5.63	5.59	5.68	
November ...	10.61	3.48	7.18	8.91	3.66	2.13	2.40	2.42	6.25	9.05	
December ...	12.38	5.44	2.89	8.81	6.81	5.58	6.07	4.96	9.36	(6.56)	
TOTALS ...	65.56	54.88	50.74	82.07	48.02	59.18	62.78	61.10	44.42	63.12	
	H	M	M	M	M	M	n/p	M	n	n	

1951 Apr. 4th by m 036  
1952 Apr. 25th M.O. 3 at Eng's request.1957 n/p low  
1958 part (not part out w/33)

1959:- n/p low

1960 Oct. Dec. part estimated.

00004

Febr. 1958. Slight leak in outer case. G. replaced. T.W.  
damaged - to be rebuilt.

04004

20004

00014

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference 50(24)664153

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1951			Jordan & Edgworth	4 m. E	Belmont	3/4 m. E.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 1920 A 20.21	✓ -	✓ n.p. 49 -	