

RAINFALL AT Lower LivingstonLat. 53° 36' 30" N.Lon. 2° 33' 26" W.County of Lancashire

Rain Gauge, by

Observer

Liverpool Corporation
(Mr. G. Barry CE)Ribble - Douglas 2

Diameter											
Height											
Altitude							4440				
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January											
February											
March											
April											
May											
June											
July											
August											
September....											
October											
November ...											
December											
TOTALS ...							43.34	24.29	24.22	35.65	

from Bunked Table

RAINFALL AT *Lower Rivington*

Lat. $53^{\circ} 36' 20''$ N.

Lon. $2^{\circ} 33' 26''$ W. County of *Lancashire*

Rain Gauge, by

Observer

Ribble - Douglas 2

Liverpool Corporation

(No. 2, 1894)

Diameter												
Height												
Altitude	<i>440</i>											
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January												
February												
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												
TOTALS . . .	<i>39.24</i>	<i>40.87</i>	<i>39.32</i>	<i>35.40</i>	<i>40.48</i>	<i>34.26</i>	<i>41.08</i>	<i>40.71</i>	<i>34.71</i>	<i>38.11</i>	<i>38.41</i>	<i>38.41</i>

RAINFALL AT Horwich Lower Rivington
 Lat. Lon. County of Lancashire South
 Rain Gauge, by Observer J. Parry Esq. C.E.

Douglas 2

Diameter ..				5				8			
Height				10							
Altitude ..				440							
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..											
February ..	5.29	2.43	3.30	2.78	3.59	1.42	6.17	1.67	3.11	1.90	3.169
March	3.17	1.90	1.78	3.49	4.67	1.68	3.53	1.64	3.46	1.31	2.663
April .....	.75	3.00	2.58	4.10	2.22	3.37	2.95	3.09	3.35	3.04	2.845
May	2.05	2.77	2.55	1.57	2.15	2.69	1.89	1.69	2.23	3.20	2.279
June	1.95	1.02	3.89	3.77	1.86	.91	3.71	4.01	3.78	3.03	2.793
July	2.46	2.15	1.98	2.13	2.54	2.15	2.73	7.94	1.76	3.96	2.980
August	1.94	1.91	4.06	3.69	1.25	2.46	1.79	4.10	4.97	6.13	3.233
September ..	6.09	3.06	2.35	5.75	4.31	4.48	4.06	4.80	4.11	3.63	4.264
October	2.60	1.07	2.36	5.05	1.53	2.44	1.74	1.23	5.14	2.69	2.585
November ..	6.25	3.54	4.52	8.60	3.22	4.68	6.01	2.91	2.36	5.67	4.806
December ..	4.44	4.36	2.20	4.61	2.86	4.11	3.04	3.63	2.89	1.72	3.386
TOTALS ..	5.09	3.93	3.12	2.26	3.39	1.23	5.16	4.43	2.61	6.73	3.795
TOTALS ..	42.08	31.44	34.69	47.80	33.62	31.62	43.08	41.14	39.77	43.04	38.798

Records previous to 1903 not printed in "B.R."
 1900-1902 Monthly totals read XII.08. Entered IX.09.
 1909 Corrected for windy day.

+ Inspected

RAINFALL at Hornich Lower RivingtonCounty of Central LancashireObserver J. Perry Esq. C.E.River Basin Ribble-Douglas 2J.R. Davidson Esq. C.E. 1715

Rain Gauge, by _____

Diameter ...	8											
Height	1 0											
Altitude ...	440											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	
January ...	4.43	1.07	3.36	3.76	2.63	5.11	2.83	2.74	2.95	4.91		Totals 16.19 13.43
February ...	3.39	3.62	1.71	1.27	2.35	4.24	3.53	1.32	4.03	1.21		10.09
March .....	.83	1.38	5.97	4.31	4.44	1.71	2.00	2.51	1.76	7.03		13.30
April	2.97	3.23	.58	5.01	1.20	1.90	3.70	2.16	.93	2.51		9.30
May	3.19	1.92	2.30	3.44	2.15	1.45	2.33	2.01	2.56	1.50		8.40
June	3.35	3.39	4.87	2.59	1.64	2.17	3.74	2.39	2.30	2.53		10.96
July	5.57	.21	4.74	1.78	5.87	4.21	2.90	2.31	4.00	1.74		10.95
August	5.14	4.14	8.76	3.27	3.13	4.65	4.56	7.66	4.65	4.32		21.19
September ..	.50	4.09	2.45	2.06	3.99	.91	2.91	2.31	11.68	1.99		13.39
October ...	2.98	2.72	5.16	2.28	2.77	2.30	7.01	7.92	4.72	2.92		12.57
November ...	6.60	3.79	2.19	4.36	5.28	1.77	2.52	4.54	2.99	2.90		12.93
December ...	3.62	7.04	3.44	2.55	6.06	8.51	2.89	2.30	8.93	6.25		20.37
TOTALS ...	42.57	36.60	46.53	36.68	41.54	38.93	40.90	40.17	51.50	39.81		172.38 125
	3	2	7	3	7	2	2	2	2	3		

+ Inspected

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.

RAINFALL at Horwich Lower RivingtonCounty of C. LancashireObserver Col. J. R. Davidson G.E.River Basin Ribble-Douglas 2Water Reg. Liverpool Wm.(1929) Snowdon Rain Gauge, byAs 1931-1915 38.7

Diameter ...	9										5"		
Height	1.0												
Altitude ...	440												
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEANS 1930		
January ...	3.89	5.82	4.63	3.59	3.50	2.55	6.07	4.81	9.58	2.47	5.02	<i>Totals.</i> 51.93	
February ...	3.16	2.2	4.08	6.53	1.15	6.63	3.83	1.99	5.15	1.25	2.3	34.27	
March	4.08	2.79	3.12	2.09	1.83	1.98	1.19	5.66	2.50	1.50	2.85	27.41	
April	5.26	1.58	2.34	3.93	2.03	2.11	1.37	2.25	1.01	1.06	2.67	25.63	
May	6.56	2.58	2.03	3.39	5.03	4.61	4.16	1.27	1.41	2.85	1.34	35.25	
June	2.90	5.8	3.05	1.24	3.02	11	2.18	4.86	6.14	1.62	1.86	27.56	
July	6.94	1.43	4.24	5.13	5.41	2.94	3.71	4.29	2.81	3.71	4.97	46.18	
August	3.97	6.19	5.03	5.54	8.15	4.22	4.22	5.12	5.96	4.81	7.16	60.37	
September...	3.44	1.38	6.54	4.31	4.38	4.75	4.27	6.97	1.02	2.35	2.84	42.25	
October	1.31	3.02	5.4	6.00	5.03	4.72	3.73	4.28	5.51	5.93	5.09	45.46	
November...	1.95	3.12	3.73	5.16	2.62	5.09	6.91	4.73	6.04	6.59	5.88	51.82	
December...	3.00	5.22	5.93	5.65	6.20	2.87	1.75	1.63	3.26	4.66	4.40	64.59	
TOTALS...	46.46	33.93	46.16	52.58	48.41	42.63	43.39	47.86	50.39	38.60	44.31	494.72	
	7	3	10	10	10	10	10	10	10	10	10	10	

18/11/23 Inspected by Mr. Corran per green file

Position of Station on reduced Ordnance Survey } No. of Map

Map, 2 miles to 1 inch Series

Reference No.

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
1920	53° 36' 30"	2° 35' 26"						

RAINFALL at Horwich (Lower Rivington)

County of Central Lancashire

Observer Col. J. R. Davidson, C.E.

River Basin Ribble - Douglas - 2

Lt. Col. F. Hilbert C.E.

Type of Gauge

Annual Average 32.7 in. based on 30 years obs. un-weighted. Period of average 1881-1915 Ref. S

660603/26.

Diameter	5.											
Height	1.0											
Altitude	440.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January	4.34	3.90	2.14	3.14	2.07	4.24	2.82	4.17	5.27	2.71		36.80
February	3.76	1.10	3.42	2.28	4.35	2.96	5.45	1.33	3.00	2.45		27.00
March	3.38	2.55	2.72	2.87	1.26	2.64	1.86	1.28	1.59	2.64		19.79
April	2.62	2.57	1.79	2.39	2.77	1.19	3.34	3.6	2.65	2.69		22.27
May	2.09	4.43	1.82	3.19	1.40	1.15	2.62	4.28	1.11	1.40		23.69
June	5.51	1.84	3.15	2.25	3.67	4.60	1.97	4.17	3.02	1.03		30.21
July	3.13	4.82	2.52	2.01	1.68	4.75	2.32	4.13	6.30	6.20		37.86
August	4.88	1.43	2.12	3.91	1.91	2.56	2.54	3.21	1.59	2.21		26.46
September	4.44	4.89	1.70	3.36	6.68	4.01	1.54	2.70	1.86	3.69		32.87
October	2.70	6.57	4.09	5.70	7.13	3.79	2.01	3.32	2.35	4.33		46.99
November	7.97	2.91	2.33	2.23	4.87	5.32	1.86	5.10	4.77	6.78		44.13
December	1.70	1.69	1.66	5.52	3.58	4.43	2.57	5.00	2.28	3.97		31.40
TOTALS	43.42	36.70	27.46	36.85	41.37	41.54	30.89	44.15	34.79	40.10		377.2
	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.		46.

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

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

Station No. T.F. 2996RAINFALL at Horwich (Lower Rivington)

41

County of Central Lancashire Observer L. Cole, J. H. Grant, E. E.River Basin Ribble-Douglas? Liverpool Catchment

Type of Gauge.....

Annual Average 38.7 in. based on 30 years obs. un-weighted. Period of average 1881-1915 Ref. SFile No. 660652/26 F3285/45

Diameter	5"			569	708							
Height	1'0"				1							
Altitude	440'				41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	1.91	4.28	4.82	4.61	2.94	4.47	(4.02)	8.16	2.33	3.04		Totals 40.58
February	4.18	(1.91)	2.16	1.72	4.48	5.08	1.42	2.12	2.03	5.26		30.36
March	2.75	2.99	1.15	.65	1.32	.83	(7.04)	1.49	2.38	2.13		22.73
April	1.74	1.58	1.88	2.28	2.26	1.07	3.22	1.68	3.31	2.93		21.95
May	2.11	3.99	2.95	2.89	3.66	1.63	3.03	2.45	3.55	2.07		28.33
June	.36	.73	3.51	2.63	4.14	3.26	2.21	5.54	1.04	2.83		26.27
July	2.69	4.06	3.58	4.13	3.26	4.00	2.76	2.83	3.08	4.54		34.93
August	5.41	5.41	6.73	3.33	2.54	7.07	.27	4.73	3.50	6.93		46.22
September	1.04	2.49	4.86	5.75	2.18	6.72	3.28	2.94	1.87	7.79		38.72
October	4.25	5.88	3.89	5.42	5.22	1.50	.74	2.90	4.24	3.48		37.52
November	2.53	.93	3.51	6.64	.83	5.59	3.99	2.36	5.64	6.58		38.10
December	1.99	4.31	2.25	3.54	2.88	3.88	3.03	3.89	5.36	3.65		34.78
TOTALS	31.38 D	38.56 D	41.29 D	43.59 D	35.21 D	45.10 D	(35.01) D	41.09 D	38.33 D	51.23 D		400.69 400.69

1942. Feb. part sold.

1947. New H.O. gauge installed April 19th.

1947. Jan. 2 min. com. for apparent leak.

1948. Corrected by F. 1090, 28/4/56. RSB

20004

50004

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.

BRITISH RAINFALL ORGANIZATION

Station No. ^{T.F.} 2996/1RAINFALL at Horwich (Lower Rivington) new gauge

41

County of Central LancashireObserver Lt Col F Hillier ^{diar 12.11.51} CERiver Basin Ribble - Douglas - 2Liverpool Corporation W.W.

Type of Gauge.....

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

File No. E3285/45

Diameter											
Height											
Altitude											
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January										3.12	
February										5.29	
March										2.15	
April										2.97	
May										2.07	
June										2.85	
July										4.55	
August										6.98	
September										7.84	
October										3.49	
November									#	6.61	
December									6.50	2.68	
TOTALS										51.60	

IN RING 4 p.m.

210 yards North of Station 2996 in position having slight shelter.

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

BRITISH RAINFALL ORGANIZATION

Station No. 2996 TF 38

RAINFALL at Horwich (Lower Rivington)

51

County of Central Lancashire

Observer Liverpool College W.W.

River Basin Little-Danby-2

Type of Gauge M.O.

Annual Average 38.7 in. based on 30 years obs. in-accepted. Period of average 1881-1915 Ref. S
41.29 " " 35 " " 1916-1950 1916-1950 E 3261/55 P

File No. E 3261/55

Diameter ...	5"			5.69	7.08							
Height ...	1' 0"				1				9"			
Altitude ...	440'				51							
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	Total
January ...	4.18	4.04	2.24	3.82	2.86	5.89	2.92	3.57	3.16	6.48	39.16	
February ...	3.39	1.38	1.52	3.68	2.40	.72	3.01	6.37	.56	3.17	26.70	
March ...	5.03	2.37	1.84	2.91	1.48	1.76	3.53	1.89	2.04	1.86	24.71	
April ...	2.25	3.98	3.58	1.13	2.54	3.65	.82	1.47	2.91	2.56	24.89	
May ...	3.03	2.39	2.61	2.97	3.74	1.42	2.31	4.41	2.29	2.65	27.82	
June ...	1.76	4.03	2.75	4.29	3.53	2.50	1.97	4.71	2.45	1.31	29.30	
July ...	3.20	2.84	5.35	6.32	1.04	5.77	6.46	4.07	4.69	8.69	48.43	
August ...	5.12	4.38	5.03	6.55	1.45	12.00	6.30	4.84	.61	5.97	52.25	
September ...	3.47	4.48	4.73	5.20	4.92	3.77	6.87	5.55	.36	4.03	43.38	
October ...	.76	4.94	2.11	3.46	2.15	3.52	5.54	4.14	4.59	4.41	40.62	
November ...	8.95	3.01	5.29	6.96	2.66	1.55	1.99	2.00	5.55	7.03	44.99	
December ...	8.33	4.27	1.77	5.95	5.09	4.04	4.48	4.21	7.87	4.70	50.71	
TOTALS ...	49.47	42.11	38.82	58.24	33.86	46.59	46.20	47.73	37.08	52.86	452.96	
	D	D	D	D	D	D	D	D	D	D	D	

Incl. 1951/5.0% of 1900. Site over-exposed N.W.S. Turf-well rec

Position of Station on Ordnance One-Inch map :

No. of Map 101

National Grid Reference 50(34) 631.126

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

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
	✓	✓	✓	✓	

Station No. 2996/1 T.F.

RAINFALL at Horwud (Lower Rivington) new gauge

51

County of Central Lancashire

Observer Liverpool Leeds M. M.

River Basin Ribble-Douglas-2

Type of Gauge

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

File No. 52285/45

Diameter ...											
Height ...											
Altitude ...											
Year ...	1951 ✓	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	4.22										
February ...	3.42										
March ...	5.05										
April ...	2.25										
May ...	3.03										
June ...	1.78										
July ...	3.22										
August ...	5.14										
September ...	3.48										
October ...	.76										
November ...	9.00										
December ...	8.35										
TOTALS ...	49.70 #										
	n.p.										

As Gauge removed at end of year n.p. check.

Position of Station on Ordnance One-Inch map :

No. of Map

National Grid Reference

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
				Comp: 949 n.p. 50 d 50	