

## RAINFALL AT Warrington Horley

Lat.

Long.

County of Lancashire

Rain Gauge, by

Observer

J Longdin Esq

Mersey - lower 2

Diameter .....	10										
Height .....	0	10									
Altitude .....	19	ft									
Year .....	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January .....	2.81	1.66	3.55	1.27	1.85	3.12	1.26	1.48	1.74	3.61	2.225
February .....	0.64	0.14	2.15	3.04	3.75	0.24	1.58	2.82	1.88	1.10	1.734
March .....	2.18	1.40	1.14	0.36	2.14	2.56	3.44	2.46	0.64	1.85	1.817
April .....	1.44	2.01	1.36	0.46	1.43	1.88	1.44	2.22	1.71	2.70	1.665
May .....	1.85	2.34	3.58	1.55	2.88	0.52	0.31	2.29	3.82	2.35	2.149
June .....	3.01	2.43	3.61	2.12	2.13	1.24	2.55	3.15	2.24	2.03	2.451
July .....	2.04	2.92	3.09	2.69	2.46	3.50	1.71	1.16	0.50	2.00	2.207
August .....	3.51	5.28	3.79	1.99	3.78	2.87	3.00	3.66	4.50	1.26	3.364
September .....	1.27	3.09	3.94	3.00	.98	2.29	4.80	4.72	0.76	4.35	2.920
October .....	1.83	3.93	5.18	2.86	3.15	3.83	4.18	2.23	3.90	3.70	3.479
November .....	5.54	2.94	2.23	1.57	1.90	2.61	1.26	3.87	2.13	1.26	2.531
December .....	0.67	4.94	1.84	3.49	2.78	2.71	4.16	3.33	2.53	2.87	2.922
TOTALS .....	26.79	33.08	35.46	24.40	29.23	27.37	29.69	33.39	26.35	29.08	29.484

1890 St Elphinstone 733 yards NE

## RAINFALL AT Warrington Howley

Lat.

Lon.

County of

Lancashire South

Rain Gauge, by

Observer. T Longden Esq

Mersey - Lower 2

Diameter ..	10										
Height ..	0 10										
Altitude ..	197										
Year ..	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	4.77	2.25	2.43	2.47		1.45	4.15	1.29	1.90	1.58	
February ..	3.78	1.46	1.46	1.92		1.56	2.73	1.47	2.85	0.91	
March ..	0.97	2.22	1.54	3.45		2.88	2.47	2.31	2.33	2.20	
April ..	1.61	1.94	2.26	1.67		2.29	1.81	1.17	3.09	2.69	
May ..	1.73	1.07	3.86	3.58		0.65	2.43	2.94	2.85	1.45	
June ..	2.97	1.91	1.70	1.94		2.64	2.13	4.72	1.96	2.54	
July ..	2.31	2.02	2.05	3.46		1.80	1.41	2.48	3.73	3.83	
August ..	5.99	2.78	3.17	3.43		3.39	2.46	3.56	2.71	3.77	
September ..	0.92	0.88	1.25	4.58		2.01	2.20	0.79	3.33	2.63	
October ..	3.93	3.75	3.50	5.82		3.24	4.41	3.05	1.87	4.33	
November ..	2.29	3.33	1.53	3.38		3.09	1.97	2.64	2.95	1.26	
December ..	3.58	3.56	2.68	1.66		0.45	3.92	2.47	2.30	6.53	
TOTALS ..	34.85	27.17	27.43	37.36	26.50	25.45	31.59	28.89	31.87	33.62	(30.47) 555

roughly  
2 1/2 miles

1900 St Stephens Church 733 yards NE

1907 Arpley Station (L.N.W.R.) 550 yards SW.

## RAINFALL at Warrington Hawley Yard

County of South Lancashire

Observer J Longdine Esq a.m. Keely

River Basin Lower Mersey 2

Rain Gauge, by

Diameter ...	10										
Height .....	0.10										
Altitude ...	19 ft						26				
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	3.20	1.13	4.13	3.60	1.62	3.92	1.92	2.03	1.92	3.22	
February ...	2.01	2.82	0.74	1.31	1.45	2.69	3.83	1.19	3.16	0.76	
March .....	0.68	0.95	4.41	2.83	2.93	1.56	1.64	1.96	1.15	5.98	
April .....	2.60	1.98	0.37	3.67	1.34	1.39	2.31	1.50	1.39	1.58	
May .....	1.94	0.59	2.03	2.21	1.50	1.43	2.09	3.13	3.21	1.40	
June .....	3.39	2.26	3.27	1.96	1.88	1.22	3.06	2.73	1.48	1.56	
July .....	4.83	0.45	3.48	0.84	3.84	3.66	2.59	1.20	5.47	0.96	
August .....	4.37	2.69	6.33	2.02	2.69	3.68	2.10	6.24	2.28	3.60	
September ..	0.23	4.33	1.40	1.30	2.29	0.32	3.00	1.44	7.29	2.20	
October ...	3.16	2.87	2.85	2.59	1.59	1.61	4.23	6.09	2.69	2.14	
November ..	5.02	2.47	2.29	2.46	3.05	2.26	2.58	3.70	1.82	2.42	
December ...	2.78	5.19	2.77	2.20	4.93	4.77	2.61	1.74	6.38	6.32	
TOTALS ...	34.21	27.23	34.07	26.99	29.11	28.51	31.86	32.95	38.23	32.14	

712 f m open Wall 10.6" high 111.6" x 63

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	53.30 N	2.36 W	Asphly	800 fm 550 yds 533 ft	N E SW W 12 S	St John's	550 yds 800 yds 793 yds	SW NE N E 4 N

## RAINFALL at Harrington Howley Yard

County of St. Lancashire

Observer. A. M. Her. Esq.

River Basin Lower Mersey 2

Borough Engr &amp; Surveyor. (Harrington)

(1925) Glasser Rain Gauge, by

Diameter ...	10										10"
Height .....	9										5' 1"
Altitude ...	26										26'
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEAN:
January ...	5.41	2.95	2.61	2.02	2.46	1.85	3.16	3.03	6.27	2.14	4.08
February ...	2.14	2.20	2.22	4.68	0.80	4.64	2.42	1.28	3.11	0.97	.19
March .....	2.68	1.54	1.60	1.43	0.81	0.92	1.11	2.62	1.71	0.73	2.80
April.....	3.85	94	1.85	2.73	1.76	1.15	2.63	2.21	0.68	0.79	2.19
May .....	4.06	1.75	1.92	2.82	5.26	2.99	4.18	1.12	1.18	1.57	1.16
June .....	2.68	27	1.46	0.60	2.09	0.05	1.52	4.10	4.58	1.29	1.75
July .....	5.15	71	2.97	2.25	4.06	2.58	3.41	2.36	1.73	2.29	5.27
August .....	1.63	3.35	2.20	3.63	6.37	2.73	3.25	4.50	3.62	2.97	3.93
September...	1.09	73	2.36	3.31	3.32	3.76	2.93	5.29	1.13	1.53	2.92
October.....	1.30	1.79	0.17	3.56	3.50	3.52	4.45	2.35	3.46	5.34	4.89
November...	60	1.53	1.35	3.81	1.19	2.42	4.78	3.09	4.39	5.63	3.77
December...	1.73	2.94	3.40	4.24	2.78	2.08	0.84	1.38	1.86	5.15	3.81
TOTALS...	38.06	23.83		35.10	34.40	28.69	32.68	33.33	33.72	30.40	36.46
	30.92	18.70		D	D	D	D	D	D	D	D

X 1920 : From June 1st, measure used was intended for 10 in square gauge - consequently all readings subsequent to this must be increased in the ratio  $\frac{100}{78.54}$ . See file 404055/23. 4/1/31

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

Reference No. \_\_\_\_\_

Date.	Lat. N.	Long. W.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge
1920	53° 23' 7½"	2° 35' 6"	Ampley	5107ds	W 64 S	Parish Ch	8207ds N.E.

## RAINFALL at Warrington (Howley Yard).

County of South Lancashire

Observer A. M. Kerr Esq.  
the Borough Surveyor  
(94, Howley Lane, Warrington, Lancs.) (1924)

River Basin Mersey-Lower-2

Type of Gauge Glass

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

Diameter	10.							8	10	8	
Height	5.1.										
Altitude	26.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means-Totals
January	3.78	3.08	1.87	2.24	1.84	4.12	2.69	3.43	5.28	2.06	29.89
February	2.84	0.00	2.82	0.24	2.61	1.74	5.15	0.93	3.16	2.68	22.22
March	0.13	1.83	2.04	1.73	0.96	1.62	1.26	0.83	1.74	2.91	14.85
April	2.21	2.55	0.87	1.85	2.07	1.08	2.60	0.32	1.75	1.97	17.17
May	2.24	4.77	1.49	2.00	1.13	0.47	2.00	3.41	1.14	1.21	19.86
June	4.94	0.47	2.68	1.31	4.36	2.85	1.32	2.63	2.57	1.06	24.19
July	2.41	2.65	2.22	1.91	0.98	2.80	1.67	3.59	6.62	4.06	28.91
August	4.44	1.61	1.66	2.85	1.38	1.38	5.03	3.62	2.08	1.31	28.25
September	2.68	2.77	0.82	2.15	5.49	4.00	1.94	1.83	0.54	3.44	24.66
October	1.60	6.49	4.49	4.70	4.24	2.68	2.08	5.24	2.39	3.52	37.43
November	4.75	2.53	0.94	1.64	4.68	2.98	2.00	4.07	5.27	6.67	35.56
December	1.27	1.05	0.37	4.73	3.66	3.04	1.37	3.47	2.64	2.96	24.56
TOTALS	36.29	29.70	21.76	27.43	33.40	28.56	28.01	33.37	35.18	33.85	307.55
	D	D	D	D	D	D	D	D	D	D	

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
1931			Warrington	510 yds	WSW.	St. Edmund	520 yds NE.

Station No. M. 2819

RAINFALL at Warrington (Hawley Yard)

41

County of South Lancashire Observer The Borough SurveyorRiver Basin Mersey - Lower - 2Type of Gauge Glaisher

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

File No. 252486/32

Diameter	8"			565	897							
Height	5' 1"					1						
Altitude	26'					41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	Total
January	2.56	3.55	4.85	4.25	2.13	3.88	2.45	7.48	2.51	1.03	34.69	
February	3.42	1.72	2.08	1.45	2.91	5.71	6.68	1.81	1.66	4.54	35.98	
March	2.52	2.80	.61	0.74	1.88	.89	4.95	1.00	2.34	1.31	19.04	
April	1.10	1.52	1.19	2.50	1.20	1.09	2.40	1.32	2.67	2.73	17.72	
May	2.06	3.66	2.63	2.04	4.54	1.59	1.98	1.48	4.47	1.16	25.61	
June	.52	0.33	2.59	1.94	3.09	2.96	2.11	3.65	0.63	2.77	20.59	
July	2.81	4.02	1.90	2.86	2.16	3.44	1.91	1.70	1.59	3.15	35.54	
August	4.74	3.30	3.88	3.07	3.09	4.26	3.30	4.20	1.74	4.00	32.58	
September	.92	1.93	3.91	5.31	1.55	4.57	2.81	1.58	0.71	4.26	27.45	
October	4.16	4.25	2.95	4.10	4.91	.67	.78	2.18	3.40	2.69	30.09	
November	2.75	0.53	2.32	5.87	.42	4.60	2.92	1.90	4.79	4.26	30.36	
December	.90	4.09	1.69	2.66	3.09	3.05	3.33	3.15	4.39	3.11	29.46	
TOTALS	28.36	31.70	30.60	36.79	30.97	36.71	26.62	31.45	30.90	35.01	319.11	

Position of Station on reduced Ordnance Survey Map, No. of Map..... Reference No.....  
1 mile to 1 inch Series

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

Station No. 2819 m.

51

RAINFALL at Warrington (Hawley Yard) (Highways Yard).  
 County of Cheshire  
 River Basin Mersey Lower - 2  
 Type of Gauge Glaisher

Annual Average in. based on years obs. un-weighted. Period of average Ref.  
 " 33.75 " " 5 " " 1955-59. " " 1916-50  
 File No. 252486/3

Diameter	8"		565	897							
Height	5' 1"	A 42'		1							
Altitude	261	43'		51							
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	2.77	3.37	1.24	2.76	2.50	4.52	2.00	2.50	2.56	4.23	28.45
February	1.85	1.92	1.27	3.21	2.58	4.47	1.90	5.04	2.24	1.48	18.96
March	4.25	1.81	1.57	2.01	1.45	9.8	2.53	1.42	1.42	1.27	18.81
April	2.11	2.69	2.86	.69	1.73	2.77	1.42	1.63	2.93	1.73	18.56
May	3.15	2.22	1.62	2.46	2.96	9.4	1.21	3.71	2.10	2.18	22.55
June	1.69	1.92	1.65	3.51	3.56	2.23	1.88	4.52	2.49	1.99	24.44
July	2.82	1.66	5.96	4.25	.68	5.57	3.69	4.93	3.04	3.29	35.89
August	3.86	1.44	3.29	4.20	.82	10.01	5.19	2.32	.39	4.51	36.03
September	2.67	3.09	2.93	3.21	2.71	3.17	5.60	3.27	.17	2.70	29.52
October	1.98	3.78	1.59	5.14	1.98	2.23	3.18	2.85	2.71	3.74	28.19
November	7.70	2.44	3.07	4.84	1.57	1.29	1.37	1.39	4.54	4.61	32.82
December	5.13	2.80	1.10	3.95	4.32	2.84	2.93	3.65	5.10	(3.79)	35.61
TOTALS	38.08	28.14	28.15	40.23	26.86	37.02	31.85	36.23	27.69	35.52	329.77
	D	D	D	D	D	D	D	D	a	d	

\* 1954. Reply to query form. G. moved 830yds. (May 1951 according to monthly PC). Nearest object A2' 16" NE. 00014

Position of Station on Ordnance One-Inch map : No. of Map ..... National Grid Reference 51/31603381

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

Summary of Earlier Records from 10-year Sheets :

	1910-19	1920-30	1931-40	1941-50	1951-60
Record D, or d	✓	20.21, 23-30 A 20.21 imp. 22	✓	✓	✓