

RAINFALL AT Northwich, Macclesfield

Lat.

Lon.

County of...

Cheshire

Rain Gauge, by *Reginald Hambro* Observer *H. Newman Esq*

locater - 2.

Diameter			8										
Height		2				1	6	2	1	3		1	6
Altitude		46		56					120				
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.		
January.....	1.87	1.19	4.02	2.21	2.27	3.44	1.53	4.56	2.94	1.85	2.588		
February .....	.71	2.35	2.50	.62	1.29	1.01	3.31	3.33	1.40	2.72	1.924		
March	1.51	1.10	3.10	3.32	1.55	.49	2.99	1.87	1.67	1.11	1.871		
April.....	1.17	2.41	2.60	.55	1.10	.44	2.67	2.31	1.64	2.74	1.763		
May .....	.93	1.58	2.61	1.62	1.69	1.93	.98	2.76	3.85	2.48	2.043		
June.....	1.36	2.66	5.95	2.65	.73	2.20	3.24	1.10	3.26	3.98	2.713		
July .....	.94	4.20	5.30	2.88	2.17	4.73	1.84	5.67	.84	4.28	3.285		
August.....	1.50	1.68	2.45	3.13	3.27	3.14	3.04	4.13	4.85	4.69	3.178		
September.....	2.24	4.28	5.19	2.12	2.69	4.43	4.45	2.82	3.59	3.09	3.490		
October.....	5.42	3.40	5.16	3.26	3.01	5.15	2.19	2.75	2.77	1.81	3.492		
November.....	2.06	1.71	3.32	2.09	4.18	3.95	3.71	4.28	1.86	1.13	2.829		
December.....	2.95	1.95	3.58	.81	2.82	1.11	4.13	3.26	2.32	2.30	2.523		
TOTALS	22.66	28.41	15.78	25.26	26.77	32.02	34.08	38.84	30.99	32.18	31.699		

1876 Gauge sheltered house 157d S.

Wotton church 1 mile E.

80

RAINFALL AT *Northwich, Macclesfield*

Lat. _____

Lon. _____

 County of *Cheshire*

Rain Gauge, by _____

 Observer *H. Neumann, Esq.*
Went - 2.

Diameter	8										
Height	1.6			1.3				2.0	1.6	2.0	
Altitude	120 T									110	
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	35	52	2.21	3.29	3.05	1.61	4.30	3.22	1.62	1.00	
February	1.60	3.70	2.32	2.10	1.68	2.07	54	42	86	2.03	
March	1.42	2.94	1.73	1.22	2.22	1.69	1.77	1.49	(1.02)	2.77	
April	1.11	1.13	3.36	1.51	1.11	1.79	1.42	1.22	1.06	2.42	
May	2.71	3.16	1.65	.95	1.81	2.10	6.29	1.96	.50	2.46	
June	4.01	2.09	5.01	3.31	.74	2.82	1.70	1.21	2.40	.87	
July	4.76	2.73	4.79	3.91	4.44	1.29	2.57	.92	6.73	4.75	
August	2.33	4.14	3.21	2.86	1.47	2.38	1.31	1.25	3.26	5.37	
September....	3.80	2.63	2.34	5.12	2.35	4.41	3.66	3.27	1.24	3.94	
October	4.28	2.70	2.98	5.24	1.40	6.01	4.43	2.21	1.21	2.42	
November....	3.69	2.89	4.60	2.81	2.28	2.66	2.40	1.46	3.88	2.22	
December	4.91	2.79	4.92	1.49	2.61	1.67	4.23	2.37	1.99	2.15	
TOTALS	34.92	31.42	39.12	33.81	24.86	30.50	34.42	21.00	25.77	32.40	

1880. *Nilton Church* 1 mile ^ESE

1888 March 14th Gauge moved to *Mincham* 2 1/2 miles S.

Lostock Church 1/2 mile S.

RAINFALL AT *Northwich, Winington*

80

Lat. Lon. County of *Cheshire*
Rain Gauge, by Observer *Near Brimmer, Nord & Co.*

weaver - 2.

Diameter					5						
Height					3' 10	3' 8					
Altitude					90	110	↑				
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January						1.39	3.88	3.07	1.26	.82	
February						1.76	77	.48	.59	1.64	
March						2.16	1.69	1.45	1.81	2.15	
April						1.84	1.43	1.10	.96	2.45	
May						2.06	6.44	1.69	.80	2.39	
June						2.65	1.67	1.31	2.03	.77	
July						1.17	2.43	1.04	6.63	4.02	
August						2.33	1.25	1.17	3.01	4.63	
September...					2.30	4.16	3.45	3.06	1.20	3.76	
October					1.18	5.40	4.32	2.06	1.01	2.35	
November...					2.09	2.65	2.36	.93	3.72	2.04	
December...					2.36	1.31	3.60	2.09	1.77	1.97	
TOTALS						28.88	33.31	19.45	24.79	28.99	

*Witten Church 1 1/2 mile ^E W.
Houses 30 ft high 100 ft N
Eln Tree 30 ft " 78 ft N.N.W.*

N.B. Values rejected from Survey, 1928

RAINFALL AT *Northwich Winnington*

Lat. _____

Lon. _____

County of *Cheshire*

Rain Gauge, by _____

Observer *Prof Brunner Mond & Co**Wenner 2.*

Diameter	5						5				
Height	3 8						3 8				
Altitude	110 π						80 π				
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	2.47	1.50	2.85	1.39	1.44	3.03	1.12	1.42	1.83	3.21	2.026
February ....	.65	.21	1.68	2.37	2.75	.21	1.64	2.99	2.02	1.20	1.512
March	1.77	1.33	1.03	.36	1.31	2.07	3.14	2.05	.86	1.63	1.565
April	1.17	2.03	1.25	.71	1.48	2.20	1.48	2.12	1.63	2.83	1.690
May	1.89	2.65	2.55	1.97	2.35	.44	.43	1.88	4.09	2.07	2.032
June	2.44	3.52	3.53	1.59	2.74	1.78	2.86	3.20	2.12	2.24	2.602
July	2.13	2.22	3.37	1.65	2.40	3.77	1.66	.84	.69	1.94	2.067
August	3.44	3.96	3.29	2.25	3.84	2.73	2.82	4.17	5.01	1.61	3.312
September ....	.91	2.77	2.68	1.95	.93	1.80	4.54	3.96	.73	3.89	2.416
October	1.82	3.71	4.47	2.16	2.61	3.32	4.09	1.91	3.50	3.34	3.093
November	5.01	2.41	2.11	1.09	1.59	2.86	1.35	3.59	1.43	1.25	2.264
December ....	.68	3.92	1.82	3.17	2.25	2.34	3.70	3.35	2.18	2.53	2.594
TOTALS	24.38	30.23	30.63	20.66	25.69	26.55	(28.83)	31.48	26.09	27.74	(27.228)

1890 *Witton Church* 1 1/2 miles E

Tence 5 ft high 8 ft all round

1896 June 5th. Gauge moved 105 yards NW. Comparison of the readings in the two positions for a short time showed exact agreement

Pump house 15 ft 6 in. distant 8 ft 6 in. high. N E

N. B. annual values, 1890-96, rejected from Survey, 1928

RAINFALL AT Northwich Winnington

Lat. Lon. County of Cheshire

Snyder Rain Gauge, by Cassella Observer W. B. Brunner Mond. 11.
Weaver - 2. Roscoe Brunner
Manager

Diameter ..	5										
Height	3.8								1.0		
Altitude ..	80 R								64 R		
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	3.26	1.73	1.70	2.51	1.99	1.25	4.15	1.10	2.02	1.41	2.112
February ..	3.20	1.52	1.53	1.58	3.00	1.38	2.52	1.69	2.25	.85	1.952
March	1.23	1.54	1.83	3.58	1.32	2.94	2.58	2.15	2.51	2.46	2.214
April	1.33	1.81	2.18	1.64	1.55	2.10	1.70	1.28	2.82	1.93	1.837
May	1.64	.95	3.97	3.14	2.06	.71	2.47	3.00	2.73	1.11	2.178
June	3.33	1.85	1.51	1.83	1.15	2.29	1.71	4.26	1.59	3.25	2.277
July	2.47	3.19	1.75	2.85	2.40	2.20	1.16	4.26	3.46	3.60	2.734
August	5.74	2.91	3.34	3.72	4.18	3.71	3.48	3.66	2.81	3.60	3.715
September ..	.97	1.01	1.09	4.29	2.05	1.80	2.46	.60	3.28	2.47	2.002
October	3.74	2.74	3.27	5.79	1.35	2.46	4.65	3.83	1.75	4.84	3.442
November ..	2.33	2.95	1.45	3.26	2.01	3.07	2.02	2.19	2.13	1.09	2.250
December ..	3.80	3.50	2.25	1.07	2.20	.36	3.85	2.22	2.40	6.08	2.773
TOTALS ..	33.04	25.70	25.87	35.26	25.26	24.30	32.75	30.24	29.75	32.69	29.486

1900 Wotton Church 1 1/2 mile E
 Pump House 8' 5" high 15' 5" NE
 1903 Greenbank Station 1/4 miles S
 1907 Jan 1st gauge moved 773 ft. + comparative readings
 at two sites for 70 days gave Old site 2.96 - New 3.00 -
 The new gauge is 1 ft above ground

Hutch

RAINFALL at Northwich WinningtonCounty of CheshireObserver Messrs Brunner Mond & Co.River: Basin Mersey - Weaver 21921 G. Johnson
1920 N.T. DickinsonSnowdon Rain Gauge, by Basella

M.O. 1928.

Diameter ...	5"											
Height	10											
Altitude ...	64											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS.	
January ...	4.18	3.36	3.76	2.09	2.71	2.16	2.49	3.56	6.00	2.04	4.15	Total 36.50
February ...	2.65	.31	3.20	4.21	.85	4.41	3.27	1.44	2.50	1.00	.20	24.06
March	3.56	1.64	1.93	1.59	1.06	1.01	1.33	3.09	1.51	.64	2.53	17.87
April	4.46	1.20	2.39	2.68	2.05	1.21	.82	2.80	0.91	.76	2.62	21.92
May	3.83	1.08	.70	3.50	5.12	3.76	2.94	1.67	1.28	1.94	1.81	27.63
June	3.56	.38	1.67	.66	1.87	.04	1.40	4.65	4.58	1.64	1.71	22.16
July	5.46	.45	3.69	3.43	4.19	2.33	4.01	2.95	1.85	2.05	4.97	35.38
August	2.37	4.03	3.28	4.14	3.94	3.73	3.16	4.00	2.35	3.37	3.39	37.76
September...	3.22	.76	2.91	3.24	3.43	3.93	4.04	5.32	1.06	2.02	2.84	32.77
October	1.26	2.65	.24	4.04	4.08	4.42	3.35	2.41	3.64	5.22	4.24	35.55
November...	.73	2.02	1.59	2.32	1.19	2.13	5.16	2.68	4.11	5.46	3.61	30.80
December...	2.00	2.99	4.52	4.43	3.22	2.13	.99	1.52	1.78	4.99	3.27	31.84
TOTALS...	37.30	(20.8)	29.68	36.33	33.71	31.26	32.96	36.09	31.57	31.13	35.34	358.24
	D	D	D	D	D	D	D	D	D	D	D	D

1920 Shed 20' 7" high 47' N.

1921 Gauge moved 2 v. 21. 700 ft. S.W.

Tree 100 ft. high 22 ft. E.

1927 Gauge moved to new position on 1st March

Fence 7' 3" high 28' E. Fence 7' 3" high 24' N. Building 40' high 90' W.

1929 Elm 50' high 75' N.

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
1920	53° 15' 53"	2° 31' 50"	Hartford & Greenbank	1 1/4 mi	S	Winnington	1 1/4 mi	S

RAINFALL at Northwich (Winnington)

I.C.I. (Alkali) Ltd.

County of CheshireObserver Messrs Brannner Mond & Co.River Basin Mersey - Weaver - 2Type of Gauge M.O. Smeaton (see inspection)Annual Average 29.2 in. based on 29 years obs. un-weighted. Period of average 1881-1910 Ref S

7/2/28/26.

Diameter	5.											
Height	1.0.											
Altitude	64.					65			64			
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	Totals
January	2.79	2.82	1.47	1.91	1.60	3.68	2.79	3.64	4.45	2.29		27.44
February	2.65	.10	2.65	2.24	2.49	1.86	4.62	.74	2.22	1.75		19.32
March	.46	1.50	1.99	1.74	.99	1.11	1.18	.84	1.61	2.33		13.75
April	2.60	2.93	0.98	1.39	2.27	1.55	2.85	.30	1.53	2.74		19.14
May	2.88	4.81	1.13	1.41	1.08	1.15	2.21	2.84	1.26	.39		19.76
June	5.19	.68	2.34	1.77	4.14	2.75	1.29	2.29	2.72	1.25		24.42
July	2.48	3.40	1.75	1.65	.67	3.74	1.77	2.96	5.22	4.24		27.88
August	7.13	1.49	0.81	2.75	1.37	1.59	2.63	3.43	1.85	.65		23.70
September	4.02	2.69	0.84	1.84	4.66	5.05	1.18	.91	.80	3.10		25.09
October	1.48	6.02	3.80	3.36	4.27	1.85	1.95	3.85	2.17	3.98		32.85
November	4.63	2.36	1.08	1.76	4.23	2.83	2.03	3.53	4.13	5.96		32.54
December	1.40	.97	0.36	4.39	3.46	3.13	2.30	3.21	1.77	2.87		23.86
TOTALS	37.71	29.77	19.20	24.21	31.35	30.29	26.80	28.54	29.73	32.15		284.15
	D.	D.	D.	D.	D.	D.	D.	D.	D.	D.		1886

1934. Blm Sec 50' high 75' H.

1936 Gauge moved 45 yds N 8/8/36

1937 Tree 20' high 91' W.

† Inspected 22/9/38 by Dr Glasspool. Site slightly open to N. but otherwise excellent.

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.			Hasford	5600'	S.	Winnington	1700'	S.E.
1937			Hasford & Newbank	2028 yds	S.	Winnington	662 yds	S.E.

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

Station No.

2777

(M.W.R. 249/2)

41

RAINFALL at Northwich (Winnington)County of ChesterObserver J.B. J. (Alkali) Ltd.River Basin Mersey-Trenter-2Type of Gauge Snowdon M.O.Annual Average 20.2 in. based on 19 years obs. un-weighted. Period of average 1881-195 Ref. S

File No.

7/2128/26

Diameter	5"		556	720								
Height	1' 0"			1								
Altitude	64'			41	65							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	2.24	2.82	4.23	3.63	2.65	2.94	1.80	6.26	2.70	.97		Total 30.24
February	3.03	1.46	1.50	1.38	2.38	4.36	.67	1.43	1.64	4.38		22.23
March	2.72	1.63	1.19	.70	.73	.64	4.86	.63	2.32	1.25		16.73
April	1.12	1.44	1.27	1.60	1.57	1.17	2.26	1.38	2.60	2.70		17.11
May	1.97	3.20	2.01	1.97	3.51	1.37	2.18	1.14	2.96	1.08		21.36
June	.97	.30	2.82	1.79	2.96	2.79	2.29	4.06	.78	1.68		20.44
July	1.87	3.21	2.67	2.78	1.44	2.85	1.60	2.23	1.84	3.29		23.78
August	4.07	2.14	4.33	2.36	3.00	4.11	.23	5.64	2.05	4.24		32.17
September	.95	2.45	4.07	3.98	1.62	3.21	1.71	1.86	.59	4.44		24.88
October	4.01	3.40	3.40	3.92	4.77	1.01	.51	1.91	3.15	2.05		28.13
November	2.26	.59	2.32	4.84	.48	4.47	2.95	1.83	4.67	4.24		28.67
December	1.24	3.61	1.29	2.24	2.36	3.34	2.06	2.60	3.70	3.01		25.45
TOTALS	26.47	26.31	31.10	31.19	27.47	32.24	23.12	30.97	29.00	33.30		271.17
	D	D	D	D	D	D	D	D	D	D		46

1941 June 26' high 9' W.

Inspected R.F. Biddle 29.10.47 gauge note satisfactory. Inp. measure recorded.

Further enquiry into the type measure has yet been obtained.

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			Northwich Green Bank	202 y.	S.	Winnington	662 y.	S.E.

BRITISH RAINFALL ORGANIZATION

Station No. 2777 (M.R. 249/2)

RAINFALL at Northwich (Winington)

51

County of Cheshire

Observer

L. G. L. (Aldali) L.H.

River Basin Mersey - Weaver - 2

Type of Gauge M.O.

Annual Average 29.2 in. based on 19 years obs. un-weighted. Period of average 1881-1915 Ref. S

30.32 " " 35 " " 1916-1950

File No. 712128/26 P

Diameter ...	5"			556	720						
Height ...	1' 0"				1						
Altitude ...	65'				51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	2.18	3.14	.90	2.24	2.44	4.40	1.38	2.63	2.84	4.80	2695
February ...	2.14	1.38	1.15	2.48	2.12	.47	2.10	4.51	.27	2.31	1893
March ...	4.64	1.64	1.66	2.18	1.97	1.16	2.50	1.40	1.14	1.17	1946
April ...	2.40	2.43	2.64	.60	1.70	3.01	.55	.80	3.07	1.36	1856
May ...	2.81	2.29	1.97	2.08	2.67	1.12	1.14	2.27	3.22	2.00	2157
June ...	1.22	2.12	1.53	3.44	3.02	2.23	1.28	4.18	2.68	2.19	2389
July ...	2.51	1.88	2.94	3.31	.48	5.82	4.57	3.72	2.55	4.27	3205
August ...	3.42	1.50	3.22	3.07	1.05	10.43	3.65	2.48	.57	5.00	3439
September ...	2.21	2.65	2.65	3.62	1.77	2.24	6.80	4.56	.17	3.27	2994
October ...	.86	3.79	1.60	5.17	1.85	2.63	2.74	2.72	2.68	3.65	2769
November ...	6.76	2.27	2.06	5.57	1.49	1.43	1.60	1.66	3.30	4.62	3076
December ...	3.91	2.81	1.13	4.41	3.26	2.72	2.65	3.34	4.72	2.95	3190
TOTALS ...	35.06	27.90	23.45	38.17	23.82	37.66	30.46	34.27	27.21	37.59	316.09
	D	D	D	D	D	D	D	D	D	D	

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference 93(32)643747

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
	✓	✓	✓	✓	