

Rainfall at Liverpool Observatory

E-x-67 40

Ms. Rec. No. 94

Gauge 1 ft 10 $\frac{1}{2}$ in diam.: 30 ft + Ground 52 ft + Sea Level.

YEAR - -					1846	1847	1848	1849	MEANS.
January - -					2.42	1.76	1.41	2.44	
February - -					.62	1.78	3.86	.87	
March - - -					.98	1.27	2.59	.56	
April - - -					4.43	1.78	1.73	2.06	
May - - -					.98	2.35	1.66	2.15	
June - - -					1.20	2.54	3.58	1.19	
July - - -					2.47	1.67	2.49	4.32	
August - -					4.45	3.00	4.09	2.90	
September -					1.65	4.57	2.31	3.57	
October - -					4.10	3.90	3.40	3.56	
November -					2.29	1.99	2.11	3.25	
December -					1.60	4.80	1.50	2.62	
TOTALS -					27.19	31.41	30.73	29.49	

✓ ✓ ✓ ✓

6-9 Prof. Lloyd's Lab. & Phil. Soc. 53

Rainfall at Liverpool Observatory

E-3-121

Ms Rec N° 94

Gauge 1 ft 10 in diam. 30 ft + Ground 52 ft + Sea Level

YEAR	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	MEANS.
January	1.36	3.02	2.80	2.26	1.71	.49	2.50	1.82	.84	.51	1.731
February	1.11	1.60	2.70	.60	1.54	1.10	1.39	.67	.08	1.39	1.218
March	.64	2.91	.43	.82	.65	1.86	.64	2.01	1.57	2.31	1.304
April	1.98	.90	.21	1.24	.95	.41	2.05	2.19	2.18	2.78	1.489
May	1.49	2.11	1.43	1.38	.94	1.36	1.52	2.21	1.73	.63	1.480
June	.74	3.19	2.62	3.10	2.12	3.03	2.02	3.56	2.08	2.07	2.453
July	3.07	1.41	3.11	4.15	2.76	5.24	3.58	2.34	1.60	1.37	2.863
August	3.14	2.74	4.52	2.44	2.42	2.66	2.05	3.07	1.62	3.92	2.856
September	1.56	1.54	2.65	1.57	1.00	.67	3.52	2.89	3.06	3.28	2.254
October	2.67	3.58	3.67	2.94	2.80	3.92	1.51	1.93	2.71	2.79	2.802
November	2.61	3.90	4.65	1.67	3.18	.48	2.05	1.39	1.48	1.24	2.158
December	1.09	.88	3.43	.50	2.46	1.08	1.92	1.23	2.48	1.94	1.657
TOTALS	21.46	26.28	32.20	22.67	22.78	22.30	24.73	25.31	21.43	24.23	24.339

c c c c c c c c c c

Liverpool ObservatoryJohn Hartnup Esq. F.R.A.S. Infra-red N^o. 9430 66
25 61Gauge 1 ft 10 $\frac{1}{2}$ in diam: soft + ground; 65° 52 ft + Sea Level

YEAR -	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS.
January - -	1.70	.27	1.68	3.34	1.26	1.79	2.27				
February - -	.50	1.88	.26	.32	1.78	1.73	2.41				
March - - -	1.86	3.08	2.63	.60	2.32	1.25	1.30				
April - - -	.77	1.40	1.61	1.32	1.19	1.07	.84				
May - - - -	1.88	.92	4.68	1.53	2.42	3.12	1.05				
June - - - -	3.13	2.17	1.10	3.70	2.78	.69	3.05				
July - - - -	1.54	2.95	3.01	1.53	1.53	2.55	2.80				
August - -	6.03	1.96	2.16	3.18	1.77	3.32	3.08				
September -	1.77	2.76	3.07	5.01	2.49	.46	4.49				
October - -	2.44	1.53	3.66	5.06	1.86	2.53	1.34				
November -	1.18	2.75	1.54	2.97	2.74	2.46	3.62				
December -	1.73	1.48	2.26	1.65	1.49	.83	2.13*				
TOTALS -	24.53	23.15	27.66	30.21	23.63	21.82	28.38				

cc c cc c c c

RAINFALL AT Liverpool Obs.

John Hartnup

Bedstone) Birkenhead

Cheshire.

Rain { By
 Gauge } Diameter. 8 in.

Height above Ground, ft. 6 in.

Above Mean Sea Level, 182 n.

Lower Mersey - 3.

YEAR		1867	1868	1869	MEANS.
January		2.13	1.46	2.12	
February		1.46	1.82	2.41	
March		1.07	2.25	1.24	
April		2.72	1.46	1.03	
May		1.68	2.10	4.36	
June73	.15	1.26	
July		3.27	.24	.37	
August85	2.57	2.66	
September ...		2.55	1.34	4.84	
October		3.96	3.61	2.74	
November98	1.98	3.32	
December		3.69	6.06	2.66	
TOTALS.....		26.09	25.04	29.81	

e e e

Rainfall at Liverpool Observatory

J.W. Hartup

Diameter of Gange, in. Height above Ground, ft. 6 in. Above Mean Sea Level, 22 1/2 n.

YEAR - -	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS.
January - -						X 1.51					
February - -						1.85					
March - - -						3.00					
April - - -						1.63					
May - - -						2.69					
June - - -						2.95					
July - - -						1.02					
August - - -						2.65					
September - -						2.91					
October - -						2.28					
November - -						2.97					
December - -						2.34 *					
TOTALS - -						27.80					

C

RAINFALL AT Birkenhead Bidston Observatory

Lat..... Lon..... County of... Cheshire.....

Rain Gauge, by..... Observer John Hartup Esq.

L. Mercury - 3.

Diameter	8										
Height.....	6	-									
Altitude	182	-									
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January.....	2.07	1.33	3.48	2.19	2.26	3.00	.80	4.61	2.82	1.60	2.416
February.....	1.07	1.58	2.28	.49	1.22	1.16	2.50	3.15	1.06	2.64	1.715
March.....	1.44	.02	2.27	2.70	1.55	.64	1.98	2.34	1.24	1.08	1.606
April.....	1.32	1.99	2.60	.47	.87	.59	2.45	2.23	1.18	2.31	1.601
May.....	.93	1.45	1.51	1.17	1.73	1.93	.40	1.98	3.99	2.26	1.735
June.....	1.22	2.37	4.32	1.49	.46	2.18	1.66	1.14	2.96	3.51	2.131
July.....	.41	3.77	7.51	2.93	2.76	4.08	2.40	4.53	1.07	2.92	3.238
August.....	2.21	1.18	2.17	2.75	2.76	2.60	3.03	4.92	4.25	6.21	3.208
September.....	2.79	3.95	6.57	3.75	2.41	4.38	3.67	2.99	4.15	3.08	3.774
October.....	5.46	5.22	6.53	3.18	3.45	4.88	2.55	3.05	2.37	1.16	3.780
November.....	3.12	1.94	2.86	1.76	3.53	3.01	4.38	5.05	1.61	1.41	2.864
December.....	2.40	1.72	3.56	.82	2.42	.97	4.41	3.24	1.85	1.61	2.300
TOTALS	24.44	27.32	45.66	23.70	25.42	29.37	30.23	39.23	28.55	29.79	30.371

C C C

RAINFALL AT Birkenhead Bidston Hill.

Lat.

Lon.

County of Cheshire

Rain Gauge, by

Observer J. Hartaup, Jun., Esq.

L. mercury - 3.

Diameter	8										
Height	6								1.0		
Altitude	1827							1897			
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	7.4	1.09	2.22	2.78	2.91	1.46	3.62	2.42	1.27	.71	1.922
February	1.25	3.29	1.51	1.46	2.13	2.35	1.08	.49	1.08	2.10	1.674
March	1.79	2.86	2.08	1.03	2.23	1.74	2.11	1.34	2.06	2.05	1.929
April	1.06	1.54	3.14	.85	1.04	1.83	1.39	.92	1.10	3.04	1.591
May	2.13	2.72	1.05	.77	1.13	1.32	4.72	1.80	.55	2.45	1.864
June	2.42	2.35	4.25	2.21	.78	2.02	.95	1.42	2.03	.84	1.927
July	4.69	2.60	4.55	2.99	3.76	2.29	3.72	1.10	4.99	2.11	3.280
August	1.57	4.34	2.19	2.27	2.38	1.94	1.70	1.95	2.81	3.95	2.504
September	2.91	1.61	2.56	5.30	2.83	4.72	3.41	4.03	.68	1.97	2.942
October	4.66	3.06	2.46	5.00	1.48	6.21	4.94	2.27	1.66	3.02	3.476
November	3.12	2.47	4.61	2.75	1.88	2.76	3.17	1.20	4.48	2.44	2.888
December	5.06	2.74	3.85	1.52	2.73	1.49	3.81	1.88	1.38	2.69	2.715
TOTALS	31.84	30.67	34.47	28.93	25.28	29.53	34.62	20.82	24.09	27.37	28.712

RAINFALL AT Birkenhead Bidston Observatory

Lat.

Lon.

County of

Cheshire

Locality - 3.

Rain Gauge, by

Observer

J Hartnup Esq
W.E. Plummer Esq

Diameter	8										
Height	10										
Altitude	189 ft										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	2.92	1.15	2.83	1.47	1.69	2.90	1.22	1.23	1.58	2.93	1.992
February56	.11	1.74	2.87	3.18	.31	1.06	2.07	1.81	1.46	1.017
March	1.61	.78	1.46	.53	1.56	2.80	3.19	2.35	.75	1.11	1.614
April	1.15	1.90	1.53	.50	1.60	1.78	1.14	2.26	1.91	2.26	1.603
May	1.65	1.85	2.62	1.66	2.47	.42	.39	1.05	4.51	2.21	1.883
June	2.89	4.32	3.32	1.54	1.96	.99	2.08	2.67	2.33	2.99	2.509
July	2.15	3.10	2.30	3.14	3.28	3.81	2.55	.69	.47	2.22	2.371
August	4.52	4.62	3.57	2.34	3.06	1.85	2.50	3.58	3.84	2.20	3.208
September	1.48	4.15	3.10	3.40	.92	1.09	4.46	4.19	1.39	3.49	2.769
October	2.01	2.58	6.39	2.64	3.99	5.44	3.57	1.71	3.50	2.92	3.476
November	5.03	3.32	1.93	1.42	1.99	2.44	1.07	3.70	1.67	1.09	2.366
December85	3.76	2.24	3.03	2.21	2.44	3.40	3.08	1.96	2.93	2.590
TOTALS	26.82	31.64	33.03	24.54	27.91	26.27	26.63	28.58	25.72	27.81	27.895

1870

RAINFALL AT Birkenhead, Bidston Observatory

Lat. Lon. County of Cheshire

Rain Gauge, by Observer W E Plummer Esq

L. Murray - 3.

Diameter ..	8										
Height	1	0									
Altitude ..	189	7									
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MENS.
January ..	4.51	1.84	2.08	1.99	2.09	1.07	4.38	.99	1.52	1.42	2118.5
February ..	3.23	1.25	2.20	1.60	3.60	1.14	1.84	1.38	1.86	.61	1861
March ..	1.12	1.69	1.51	2.99	1.79	3.38	1.99	1.54	2.92	2.40	2113.3
April	1.22	1.59	1.94	1.69	1.08	2.10	.85	1.44	3.87	2.10	1738
May	1.79	.96	3.24	2.51	2.11	.42	2.69	2.64	2.91	1.24	2051
June	2.71	1.91	1.96	1.91	1.33	2.17	1.38	4.71	1.98	2.54	2360
July	1.54	2.49	2.75	2.34	1.34	3.17	1.02	1.71	3.69	3.12	2337
August	5.47	2.83	2.31	3.37	3.53	3.22	3.21	2.94	2.40	2.45	3173
September ..	.59	1.18	.87	4.02	2.78	1.40	1.63	.56	2.73	2.43	1849
October	4.21	3.01	3.03	7.37	1.48	1.98	4.80	4.19	1.82	3.37	35216
November ..	3.04	3.04	1.57	2.77	1.54	3.45	1.48	2.09	1.87	.88	2173
December ..	2.62	3.40	2.16	1.56	2.51	.51	2.81	2.18	1.82	5.99	2556
TOTALS ..	32.05	25.19	25.57	34.42	25.18	24.01	28.08	26.57	28.90	28.45	27.812 535

Gauge read at 9 hrs.

Hus

RAINFALL at Birkenhead Bidston Observatory

County of Cheshire

Observer W. E. Plummer Esq

River Basin Lower Mersey & C

3

Rain Gauge, by

Diameter ...	8												
Height	1.0												
Altitude ...	189 ft												
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	SUMS 16.19	
January ...	2.17	.64	3.70	2.71	1.02	3.10	1.35	1.54	1.68	2.48		7.05	
February ...	2.37	1.84	1.09	.58	1.30	2.48	3.06	1.72	1.93	1.06		7.77	
March64	1.13	3.61	2.57	2.62	1.01	1.67	2.89	.92	4.91		10.39	
April	2.34	1.80	.20	2.58	.55	1.34	1.44	2.26	1.29	1.08		5.99	
May	2.07	.59	1.59	2. ⁴⁰ 27	1.48	1.31	2.77	3.45	2.36	.96		9.49	
June	2.60	2.34	2.35	2.10	2.14	.80	1.94	1.71	1.60	1.40		6.66	
July	3.03	.47	2.51	1.63	4.16	2.73	1.18	1.24	4.18	1.76		8.30	
August	3.49	3.11	5.86	1.83	1.32	4.78	1.90	5.72	1.98	3.74		13.34	
September ..	.46	5.11	1.17	2.33	2.62	.44	2.35	1.13	6.39	2.90		12.77	
October ...	2.54	2.47	2.92	2.56	1.71	2.25	3.38	5.30	2.69	2.67		13.45	
November ...	4.19	2.19	2.15	2.69	2.76	2.10	2.17	2.29	1.54	1.32		7.32	
December ...	2.69	3.58	2.02	1.91	4.34	4.49	1.66	1.35	6.14	4.84		13.99	
TOTALS ...	28.59	25.27	30.17	25. ⁸⁹ 89	26.02	26.53	24.97	30.59	31.93	29.12		116.51	

Gauge read at 9 hrs.

Date.	Lat. N.	Long. W.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	53°24'.5	3°4'.20	Bidston	1.2 m	W by N	Bidston	3/4 m	W by S

RAINFALL at Birkenhead Bidston Observatory

County of Cheshire

Observer W. E. Plummer Esq., M.A.

River Basin Lower Mersey & C. 3

The Director

(1925) N.D.O. Rain Gauge, by

1929 General Data?

Telegraphic gauge. Read at 7 h.

Diameter ...	9											
Height	1	0										
Altitude ...	169										200 ²	198 ¹
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 ¹⁹³⁰	MEANS
January ...	2.66	2.94	3.45	1.27	1.83	1.34	2.06	2.98	4.54	1.54	4.07	
February ...	2.22	1.9	2.75	3.05	1.52	4.10	3.23	1.13	1.91	.78	20	
March	3.54	1.39	1.46	1.15	.83	.50	.93	2.50	1.17	.28	291	
April.....	3.97	.92	1.66	2.25	1.76	1.67	1.66	.81	1.16	.87	291	
May	2.71	1.80	1.47	2.79	5.20	2.41	3.36	1.29	1.48	1.36	.90	
June	3.68	.10	1.55	.30	2.10	.06	1.04	3.73	4.12	1.12	1.71	
July	5.37	.82	3.54	2.91	4.07	2.11	3.67	4.02	1.65	3.03	4.67	
August	1.63	4.91	3.03	2.92	4.98	3.37	3.01	5.83	3.24	2.64	5.09	
September...	2.58	1.43	2.27	3.13	3.31	3.83	3.24	5.21	1.22	1.54	258	
October.....	2.07	2.96	2.8	3.98	3.35	3.85	2.88	2.35	3.35	3.76	3.96	
November...	65	2.01	1.64	3.49	1.77	3.04	4.07	3.74	3.24	4.35	3.69	
December...	2.26	3.00	2.87	3.78	3.10	2.22	.70	1.22	1.97	3.88	3.81	
TOTALS...	33.34	22.47	25.97	30.92	32.87	28.00	28.95	34.81	29.11	25.15	36.50	
	D	D	D	D	D	D	D	D	D	D	D	

1927. House 35' high 20' N.E.
 Hedge 5' 6" " 20' 6" N.
 Wall 4" " 33° W.

Q. Gauge automated 9

read at 7 h.

273
28Moor
Beaching
29 m.

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 from gauge	Parish Church.	Distance from gauge	Direction from gauge
	53° 24' 5"	3° 4' 20"	Bidston	1/2 mi	W by N	Bidston	3/4 mi	W by N

RAINFALL at

Burkenhead (Bidston Woods) 9 read at
gms

County of Cheshire

Observer The Director

River Basin Mersey Lower etc.

S. Rain Gauge, by.....

9 read at 9 hrs.

Diameter	8"													Total 30-30
Height	1' 0"													
Altitude	189'													
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930			
January	2.66	2.94	3.58	1.12	1.86	1.47	2.52	3.30	4.73	1.55	4.17	30.20		
February	2.22	.19	2.93	3.09	.50	4.26	3.53	4.20	2.02	.81	.19	20.94		
March	3.54	1.39	1.51	1.14	.91	.71	1.03	2.61	1.18	.28	2.95	7.25		
April	3.97	.92	1.88	2.12	1.68	1.77	.75	1.09	1.17	.93	2.99	19.87		
May	2.71	1.80	1.39	2.75	5.22	2.34	3.148	1.29	1.18	1.47	.91	24.84		
June	3.68	.10	1.55	.29	1.86	.06	1.07	3.80	4.19	1.16	4.74	19.50		
July	5.37	.82	3.57	2.83	3.80	2.36	3.77	4.14	1.74	3.16	.77	36.33		
August	1.63	4.91	3.11	2.79	4.94	3.30	3.14	6.13	3.34	2.74	5.20	41.23		
September	2.58	1.43	2.30	3.17	3.87	3.88	2.68	5.30	1.24	1.57	2.61	30.98		
October	2.07	2.96	.31	3.95	3.36	3.29	3.01	2.40	3.42	3.94	4.22	32.92		
November	.65	2.01	1.63	3.40	1.88	2.79	4.32	3.79	3.14	4.53	3.86	32.30		
December	2.36	3.00	2.93	3.89	3.15	2.17	.81	1.13	2.04	4.09	3.89	29.36		
TOTALS	33.34	22.47	26.70	30.84	32.52	28.40	30.96	36.18	29.99	26.23	37.50	335.12		
	D	D												

1922-29 Early sp. missed 23/9/34.

1922. Corrected for arithmetic, 21/4/56. 4000

Position of Station on reduced Ordnance Survey } No. of Map..... Reference No.....
Map, 2 miles to 1 inch Series }

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

RAINFALL at Birkenhead, Bidston Observatory

County of Cheshire Observer W. S. Ellamer, Esq.

River Busin Lower Mersey & C. 3

Snowdon Rain Gauge, by (27)

Diameter ...									8			
Height									10			
Altitude ...									189			195 ¹
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929		MEANS.
January ...									3.26	153	4.11	
February ...									1.18	80	.19	
March									2.56	28	2.90	
April.....									1.06	92	2.94	
May									1.28	444	.90	
June									3.74	114	1.71	
July									4.07	283	4.69	
August									6.02	270	5.11	
September...									5.21	455	2.57	
October.....									2.37	369	4.16	
November...									3.72	445	3.80	
December...									1.10	403	3.83	
TOTALS...									35.57	NR	2536	36.91

1927. Check N. E.
House 35' high, 24' S.E.
Hedge 5' 6" " 18' N.
wall 4" " 30' W.

1929 Check N.P.

1930 — —

These readings do not agree with either
the g. read at 99' or
prov. Cassella Sph. Sph.

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

31

RAINFALL at Birkenhead (Bidston Obs'y.) read at Two.

County of Cheshire

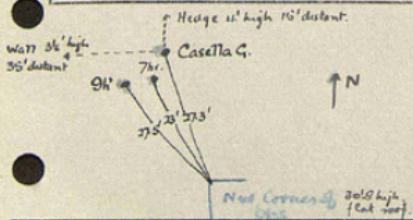
Observer The Director.

River Basin Mersey Lower & C. - 3

Type of Gauge..... (+A)

Annual Average 27.9 in. based on 25 years obs. un-weighted. Period of average 1881-1915 Ref. Bogn.

Diameter	8.									
Height	1.0									
Altitude	198.									
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940 Means
January	2.54	2.22	1.14	1.41	1.28					
February	2.11	1.03	2.55	1.12	2.22					
March	1.26	1.64	1.89	1.21	1.76					
April	2.12	2.77	.79	1.69	1.70					
May	2.50	3.42	1.77	1.58	1.70					
June	4.82	1.04	2.10	1.44	3.41					
July	2.14	3.50	1.26	.67	2.27					
August	5.58	1.48	1.76	3.75	1.47					
September	3.11	2.65	.83	2.18	4.83					
October	1.78	5.14	3.48	4.63	3.81					
November	4.47	2.02	1.27	1.79	3.36					
December	1.20	1.31	.54	4.09	3.48					
						*				
TOTALS	32.33	27.22	19.38	24.56	30.35					
	D.	D.	D.	D.	D.					



1957. Record caused on station terminating its telegraphic readings (074).

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	Parish Church.	Distance from gauge

RAINFALL at Birkenhead (Bidston (600'y)) Gauge read at 9 hrs. M.W.R.County of CheshireObserver The DirectorRiver Basin Mersey - Lower & C. - B.Type of Gauge Straight筒形 (+1)Annual Average 27.9 in. based on years obs. un-weighted. Period of average Ref.

Diameter	8"										Totals	Means
Height	1' 0"											
Altitude	198'											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940		
January	2.54	2.35	1.19	1.48	1.27	3.92	1.86	2.70	4.25	2.46	2402	
February	2.15	.03	2.69	1.13	2.22	2.12	4.46	2.43	2.15	2.16	1854	
March	1.26	1.71	1.91	1.26	1.78	1.31	1.31	1.02	1.56	2.25	1336	
April	2.17	2.87	.88	1.70	1.81	.89	2.82	.22	2.02	1.73	1711	
May	2.51	3.38	1.72	1.65	1.69	1.01	3.44	2.66	1.30	2.18	2154	
June	4.55	1.03	2.15	1.47	3.46	4.26	1.81	2.65	2.54	1.69	2501	
July	2.18	3.52	1.83	.70	2.27	2.95	1.56	2.71	6.12	3.05	2639	
August	5.61	1.50	1.78	3.80	1.47	1.60	1.63	4.33	2.19	.76	2457	
September	3.08	2.65	.63	2.26	4.83	2.93	2.09	1.68	.75	1.99	2309	
October	1.79	5.26	3.63	4.75	3.82	1.49	2.30	4.01	2.59	3.76	3339	
November	4.57	3.08	1.80	1.78	3.36	2.76	1.48	3.18	4.41	5.25	3017	
December	1.28	1.34	.58	4.13	3.48	3.48	2.89	3.31	2.31	1.87	2467	
TOTALS	82.67	27.72	19.99	25.11	30.46	28.62	27.65	28.90	32.19	28.55	28186	

934) It was decided that ① duration for months ending at 9 hrs std. be published & rainfall record for the 9 hrs is used.

② Both records to be printed in BR. for a number of years.

③ Necessary forms to be supplied.

In April 1937, it was decided to use average of Telegraphic lists for 9h data in future (see No. 2790).

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
			Bidston			Bidston		

Station No. 2790/1

RAINFALL at Birstallwood (Birstall, Derby) [M.W.R.(3)] 741

County of Cheshire Observer The Director

River Basin Mersey lower 16-3

Type of Gauge Standard (+A)

5" in R.J. gauge & Seat 11.8.49

Annual Average 27.9 in. based on years obs. un-weighted. Period of average Ref.

File No. E 6879/47

Diameter	8"			550	239					5"	
Height	1' 0"					3					
Altitude	198'					41					
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	2.16	3.85	3.45	3.52	1.66	3.31	1.93	5.73	2.14	1.73	Totals, 28.48
February	2.65	1.09	1.56	3.99	2.44	4.00	.81	1.48	1.10	3.99	20.11
March	2.80	2.26	.54	.82	77	.80	4.33	.77	2.09	1.30	16.48
April	1.81	1.29	1.18	1.57	1.54	.94	2.42	1.11	2.50	2.80	16.86
May	1.86	3.36	2.11	1.74	3.28	2.19	3.92	1.14	2.86	1.72	23.17
June	.44	.19	2.25	1.67	2.58	3.37	2.29	3.06	.89	1.36	18.10
July	1.60	2.94	2.06	2.29	2.73	3.55	4.52	2.58	1.86	1.94	26.07
August	3.46	2.90	3.02	2.75	3.13	5.11	.29	2.36	1.72	5.57	30.31
September	.72	1.81	3.69	4.77	1.36	3.37	2.23	1.62	.85	4.82	25.24
October	2.93	2.67	3.44	3.71	4.11	.59	1.09	1.69	3.32	2.00	25.55
November	2.32	.78	1.97	5.34	.19	3.83	3.25	1.67	3.80	4.41	27.56
December	.84	2.95	1.44	2.23	2.12	2.66	1.98	2.95	3.73	3.08	24.01
TOTALS	23.31	26.09	26.71	31.40	25.91	33.72	29.06	26.16	26.86	32.72	281.96
	D	D	D	D	D	D	D	D	D	D	400

Inspected Mr. E. Turnbull 25.2.49. 5" Gauge very old and in poor condition. New gauge recommended. Observatory 90-25' high 25° to SE. Gauge over-sheltered to SE, but no alternative site available. (Has been at present site since 1867). New 5" Gauge ordered 1.9.49.

5 Oct. 1949: New 5-inch gauge in use (Encl. 39A File E 15282/52)
N.B. 2.10.2.53.

24 9 2
4 4 4
9 2 3

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.

Station No. 2790/1

RAINFALL at Birkenhead (Bidston Hill)

m.y.R. (248)

51

County of Cheshire

Observer

Director

River Basin Mersey Lower 6.3

Type of Gauge Rowdon (+2)

685/43

Annual Average 27.9 in. based on years obs. un-weighted. Period of average

29.01. - 35 " 1916-1950

Ref. B 6 N

1916-1950

File No. E 6879/47 P

Diameter	5	5	5	5	5	5	5	5	5	5	5
Height	1' 0"				3					1' 0"	
Altitude	148'				51					198'	
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means Total
January	1.80	2.64	.81	2.48	1.66	2.94	1.09	2.45	3.14	6.36	23.36
February	2.00	.97	.98	2.46	1.84	.19	1.74	3.99	.19	1.39	15.95
March	4.28	1.63	.89	2.00	1.78	1.25	1.74	1.34	1.15	1.43	14.49
April	1.00	1.54	1.82	.65	1.52	2.76	.35	.49	2.41	1.14	13.68
May	2.85	1.84	2.02	2.46	2.58	.74	1.39	2.30	1.97	2.45	20.60
June	.61	1.80	1.56	3.32	3.09	1.56	1.11	4.69	2.93	0.83	21.50
July	1.16	1.13	2.42	2.61	.67	4.71	4.47	3.35	3.16	3.10	26.68
August	5.04	2.21	2.99	5.32	1.63	8.71	2.99	4.47	2.22	3.61	39.09
September	2.29	3.70	3.01	2.22	1.82	2.94	5.60	4.93	.28	3.25	30.04
October	.75	3.20	1.18	4.38	2.01	1.76	2.63	2.93	2.80	3.34	24.98
November	6.34	2.44	2.89	5.11	1.29	1.39	1.22	1.71	3.96	5.74	32.09
December	3.47	2.84	1.26	2.74	3.00	1.89	2.29	3.62	4.25	2.36	27.72
TOTALS	31.79	25.94	21.83	35.75	22.68	30.84	26.62	36.27	28.46	33.00	293.18
	P	D	D	D	D	D	D	D	D	D	

Prop. Mr. Windle S. S. C. Old gauge situated to S.E. but no alternative site.

1953. Letter from Observatory - Old gauge with changed for 5-in. many years ago.

Prop. Mr. James S. S. C. Report ideal but not available. Old gauge in good condition.

Inst. by E.S. Tinsfall 9.5.56 remarks as for 1954.

Ins. 17.6.58 R. Stewart. Q. sound. 30° times observation - 15° E SE. 0/5.55.

Inst. 14.7.60 A.K.S. Hamilton 9/5 by building a 6' stone wall & gauge in good condition. best site available.

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference 33/287897

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1956			Bidston	1/4 mi N		

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
	✓ 319.	✓ ✓	✓✓ 333-40	✓	✓

all 9. missing copies from old 5s