

RAINFALL at Ormskirk Bickerstaffe Pumping Station

County of South Lancashire

Observer S.R. Rappety Eng
G.H. Abbott Eng

River Basin Alt + C 1

Sunderon Rain Gauge, by N+3

Diameter ...	5										
Height	1 2										
Altitude ...	128 ft										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1916-19 MEAN 1900-15
January ...	3.57	.72	3.46	3.01	1.98	3.94	1.81	1.69	2.02	3.16	8.68
February ...	3.29	2.41	1.42	.94	1.72	2.62	2.82	1.19	2.83	1.10	7.94
March76	.98	4.92	3.17	3.37	1.03	1.51	2.34	1.20	5.53	10.58
April	2.13	2.61	.37	3.35	.74	1.95	2.18	1.93	.77	1.48	6.36
May	2.75	.81	2.17	2.55	1.96	1.29	2.26	2.74	2.62	1.00	8.62
June	3.57	3.55	4.05	2.21	1.63	1.58	2.16	1.82	1.88	1.95	7.81
July	4.82	.54	4.28	1.83	4.87	3.51	2.28	1.64	3.88	1.84	9.64
August	4.17	3.66	5.91	2.22	2.35	4.12	4.19	6.33	2.28	4.09	16.89
September ..	.49	4.43	1.86	1.81	3.87	.81	2.88	1.83	8.45	2.19	15.35
October ...	2.88	2.38	3.93	2.50	3.10	1.71	5.96	7.06	2.67	2.77	18.46
November ...	4.82	2.67	2.59	4.24	3.36	2.40	2.57	3.52	2.20	2.05	10.34
December ...	2.76	4.42	2.71	2.30	5.64	5.71	2.26	1.74	6.62	5.06	15.68
TOTALS ...	36.01	29.18	37.20	30.13	34.59	30.67	32.88	33.83	37.42	32.22	136.35

9/60

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
			Town Green	2 1/4	NW	Bickerstaff	2 1/2 m	NE

RAINFALL at Grimsdike Bickerstafke Pumping Station

County of S. Lancashire

Observer G.H. Abbott Esq.

River Basin Alt. + C 1

C. Burton Ede, Esq., C.E.
Engineer & Manager

Snowdon Rain Gauge, by Neg.

Av 1881-1915 33.2

Diameter ...	5									1930. MEANS.	1920-30 1910-15
Height	1	2									
Altitude ...	128										
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	
January ...	3.53	3.77	3.48	2.47	2.51	1.67	3.32	4.01	5.87	1.97	5.55
February ...	2.40	2.23	3.18	4.23	1.78	4.85	2.78	1.17	3.11	.85	.35
March	3.47	2.15	1.40	1.66	1.14	1.10	.87	3.91	1.99	1.15	3.04
April.....	4.42	1.31	1.80	3.16	1.83	1.69	.93	1.38	1.27	.87	2.45
May	4.71	2.07	1.44	3.16	5.52	4.16	2.69	1.47	1.46	2.40	1.33
June	3.02	2.24	2.38	1.70	3.87	.03	1.88	3.96	4.84	1.39	1.48
July	6.39	1.52	4.55	3.11	4.36	4.16	4.09	3.59	1.95	2.74	5.11
August	2.77	5.37	3.77	3.81	7.08	3.86	3.80	5.03	4.27	4.07	5.86
September...	3.35	1.44	3.21	3.29	4.73	4.16	4.85	5.24	1.19	2.51	2.06
October.....	1.19	2.83	3.4	4.24	5.27	4.08	4.05	3.25	3.94	5.42	5.16
November...	1.45	2.72	2.63	4.46	2.13	2.96	5.05	5.27	5.30	6.38	6.00
December...	2.39	4.25	4.91	5.32	4.34	2.62	1.49	1.96	2.67	6.09	4.30
TOTALS...	39.09	27.90	33.09	39.61	43.56	35.34	35.80	40.24	37.89	36.14	43.19
	d	d	d	d	d	d	d	d	d	d	d

47166

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
			Lawn Green	2 1/4 mi NW		Bickerstafke	2 1/2 mi NE.

RAINFALL at Ormskirk (Bickersliffe P. Sln.)

County of South Lancashire

Observer C. Burton Ede, Esq., M.A.

River Basin Alt 9 c - 1.

Type of Gauge.

Annual Average 33.2 in. based on 26 years obs. un-weighted. Period of average 1881 - 1915. Ref. *Burke*

Diameter	5.											1931 Means 25.10
Height	1.2											
Altitude	128											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940		
January	3.53	3.38	2.09	2.38	1.54	3.83	2.40	3.40	5.15	(2.53)	30.23	
February	2.90	.06	3.27	2.0	3.31	2.38	4.47	1.08	2.94	2.09	22.70	
March	.40	2.43	2.25	1.71	1.04	1.83	1.56	1.03	1.70	2.74	16.69	
April	8.80	2.99	1.54	1.97	2.45	1.27	3.33	.23	1.75	1.87	20.26	
May	2.41	4.64	1.84	2.58	1.75	1.28	2.00	3.44	1.55	3.29	24.78	
June	3.31	.60	1.87	2.12	2.91	3.38	1.69	3.74	2.99	.79	25.40	
July	3.19	4.51	1.71	.78	1.72	3.37	1.82	3.45	5.94	4.78	31.27	
August	7.65	1.69	2.01	4.41	2.11	1.87	2.54	4.40	2.45	1.59	30.72	
September	3.66	3.52	1.01	2.98	6.52	3.17	1.79	2.11	1.33	3.81	29.90	
October	2.34	7.65	3.80	4.89	5.51	2.50	2.20	7.37	2.08	4.81	42.85	
November	6.31	3.02	1.62	2.36	4.46	4.28	1.89	4.30	5.27	6.17	39.68	
December	1.80	1.54	.60	4.91	3.25	3.26	1.78	4.30	4.65	2.64	28.83	
TOTALS	42.30	36.03	23.61	30.99	36.57	32.52	27.47	38.85	37.80	37.11	343.24	
	a	a	c.	d.	d.	d	d	d	d	d		

1940 Jan 25-31 estd from nearby stations

gauge surrounded by low wall 18" high & 8 ft internal diameter.

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

Station No. 2807

RAINFALL at Darnharts (Bishopton) P. Stn.)

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County of South Lancashire Observer C. Burton Esq. C.E.River Basin Alt. 6 - 1 M.O. N.B. Bennett Esq. C.E. (192)Type of Gauge Hydrograph M.O.Annual Average 33.2 in. based on 20 years obs. unweighted. Period of average 1881-1915. Ref. 263 sheet.File No. 166441/32

Diameter	<u>5"</u>	<u>568</u>	<u>391</u>								
Height	<u>9"</u>			<u>1</u>	<u>8"</u>				<u>8$\frac{1}{4}$"</u>		
Altitude	<u>128'</u>			<u>41</u>					<u>6725'</u>		
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means 1941-50 1941-15
January	2.21	3.89	4.15	4.46	2.08	4.35	3.10	7.01	2.79	1.76	35.80
February	3.33	1.42	2.37	1.44	3.08	5.08	6.4	1.80	1.59	4.19	24.94
March	2.80	2.39	1.55	1.90	1.09	1.88	3.28	1.08	2.54	1.29	16.80
April	1.66	1.65	1.85	2.39	2.04	1.95	3.02	1.67	2.92	2.72	20.86
May	1.73	3.09	2.61	2.14	4.23	1.76	3.83	1.85	2.95	1.12	25.31
June	4.9	4.5	2.73	2.89	2.95	3.26	2.32	4.32	1.63	2.09	22.13
July	1.48	3.54	4.41	2.49	2.77	4.52	3.00	2.91	2.78	2.89	30.79
August	4.30	4.53	4.28	3.99	2.20	5.88	2.28	5.36	2.22	7.86	40.90
September	1.40	3.07	3.85	5.43	2.33	6.30	3.08	2.16	1.13	5.85	34.60
October	4.30	4.46	4.67	4.25	5.02	1.81	1.74	2.60	4.42	3.29	34.56
November	2.39	1.08	2.24	5.81	3.5	4.96	3.78	2.34	4.87	5.46	33.28
December	1.18	2.71	2.06	2.68	3.17	3.83	2.55	3.22	5.20	3.65	30.25
TOTALS	27.48	32.28	35.77	38.87	31.31	42.58	29.62	36.32	34.04	42.17	350.22

1942 Filter house 27' high 23° E. Gauge surrounded by enclosure of iron fencing 53'6" (NE to SW) x 25'3" (SE to NW) by 5' high with 1/2" bars at 5" centres. Gauge is 14'3" from S end & 12'6" from E end.

1944 As above also - g. revetment drywall (within enclosure) 8 ft. made drain.

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	Direction
1942			Town Green	1 3/4 m	NW	Bishopton	1 3/4 m	ENE

Station No. 2807

RAINFALL at Ormskirk (Bickerstaffe P. Ht.)

County of Lancashire

Observer N.B. Bennett Esq., C.E.

River Basin Alt. 261

Type of Gauge M.O.

Annual Average 33.2 in. based on 20 years obs. un-weighted. Period of average 1881-1915 Ref. A.M. Sheet
 35.47 " " 35 " 1916-1950 1916-1950 File No. 166444/22 P

Diameter ...	5"		568	391							
Height ...	0' - 8"				1						
Altitude ...	127'				51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	3.04	3.72	1.70	2.53	2.46	4.42	1.98	3.01	2.77	5.71	31.34
February	2.79	1.40	1.18	3.42	2.48	3.2	2.21	5.51	.35	2.36	22.02
March	4.38	1.84	1.19	2.27	1.83	1.04	2.42	2.13	1.51	1.95	20.56
April	1.62	2.57	3.11	1.05	2.04	2.60	1.43	.74	2.83	1.60	18.59
May	3.23	2.20	2.00	2.55	3.02	1.18	1.84	3.61	1.92	2.71	24.26
June	1.06	2.38	1.83	2.76	3.81	1.79	2.20	3.64	3.32	1.24	24.03
July	1.69	1.79	3.82	5.20	.92	4.69	4.95	4.37	4.31	4.85	36.59
August	4.40	2.71	4.22	3.94	1.49	10.59	4.62	3.75	.33	5.19	41.24
September	2.84	4.28	4.48	4.43	3.19	2.70	6.01	4.25	.44	3.46	36.08
October	1.38	4.34	1.56	7.50	2.15	2.44	4.20	3.38	3.32	4.47	34.74
November	8.28	2.45	3.84	6.56	1.69	2.01	1.52	1.87	5.58	6.68	40.42
December	6.33	3.27	1.41	4.01	4.30	2.66	3.30	3.77	6.20	3.84	39.09
TOTALS ...	41.04	32.95	30.34	46.16	29.38	36.44	35.68	40.03	32.88	44.06	368.96
	d	d	d	d	a	d	d	a	d	d	

1951 gauge situated at centre of dwarf wall 8' in diam

1952 Above in iron fence, 53.6" x 25.5" x 5" high. Building 27' 230° E + gauge.

1956 as above and 2' dia bars at 5' centres (Gauge 12" from E side & 14.3" from S end.)

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference 24419036

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge.
1951			Gown Green	1 1/4 m. N.W.	Bickerstaffe	1 1/4 m. E.N.E.

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
	✓	✓	✓	✓	✓