

RAINFALL AT Ryhope Pumping Station

Lat. _____

Lon. _____

County of _____

Durham

Rain Gauge, by _____

Observer Alfred. O. E. Blackburn Esq

Wear 2

Diameter										8	
Height										1. 1	
Altitude										2287	
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January									1. 11	2. 82	
February ....									. 85	. 76	
March									1. 54	3. 30	
April									2. 59	2. 27	
May									2. 23	3. 76	
June									2. 19	2. 53	
July .....									. 96	2. 81	
August									1. 92	. 90	
September....									. 50	2. 25	
October									3. 43	3. 14	
November....									3. 44	1. 42	
December									1. 22	3. 18	
TOTALS . . .									22. 01	29. 24	

S. Paul's Ryhope $\frac{3}{4}$ mile N. E.

Sunderland
RAINFALL AT *Ryhope Pumping Station*
 Lat. Lon. County of *Durham*
 Rain Gauge, by Observer *A. B. L. Blackburn Esq*

mean - 2.

Diameter ..	8										
Height	1	1									
Altitude ..	228							↑			
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	2.63	1.48	.70	2.42	1.76	.21	2.17	.33	1.02	.58	1.330
February ..	5.23	2.02	1.42	1.04	2.19	.52	1.05	1.02	1.01	1.46	1.696
March	2.35	2.14	.69	1.16	1.85	1.23	1.02	.88	2.48	4.25	1.805
April .....	.69	.93	1.56	1.71	.83	2.75	1.64	2.21	2.61	2.40	1.733
May	1.44	2.05	2.29	2.59	2.81	.66	5.21	4.37	1.31	1.65	2.438
June	3.13	1.48	2.21	2.88	1.40	.82	1.00	2.53	.75	2.39	1.859
July	2.06	2.07	2.33	4.03	1.67	.90	1.01	1.24	2.55	2.55	2.041
August	5.31	2.32	1.60	2.33	3.30	2.63	2.24	1.69	1.36	3.38	2.616
September..	.62	.96	.80	2.64	.72	1.93	.42	.32	1.74	2.01	1.216
October....	6.75	1.61	1.99	3.11	.57	2.90	4.60	3.40	1.04	1.94	3.291
November..	2.72	5.21	1.27	2.41	2.30	4.70	2.90	1.38	1.38	1.07	2.534
December ..	2.11	2.91	2.51	1.71	1.96	.39	1.70	2.79	.99	3.63	2.070
TOTALS ..	35.04	25.18	19.37	33.03	21.36	19.64	24.96	22.16	18.24	27.31	24.620 5.316

1900 St. Pauls Church $\frac{3}{4}$ mile NE
 Iron Railings 3' 6" high $\frac{3}{4}$ mile NE
 1905 Ryhope Station 1 mile E

W. L.

RAINFALL at

Pyhope Pumping Station

County of

Durham

Observer

A. B. E. Blackburn Esq

River Basin

Wear

2

Rain Gauge, by

Diameter ...	8										
Height	1.0								1.1		
Altitude ...	225 ft										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	2.11	1.30	2.63	3.99	1.70	2.52	.70	2.73	2.04	2.54	803
February ...	2.18	1.07	1.88	.49	.94	2.75	2.21	.69	.98	1.86	574
March .....	.60	2.18	1.98	2.46	1.77	1.87	3.06	2.22	1.04	2.39	871
April	2.24	1.27	.14	3.16	.53	.60	1.30	1.89	1.25	1.58	602
May	2.60	.77	2.64	2.57	1.50	1.93	2.08	2.35	1.71	.92	706
June	2.07	4.83	4.51	1.24	3.66	.47	2.63	.39	.32	1.01	435
July	2.31	.69	3.93	.82	3.78	2.37	2.58	.76	3.37	1.35	806
August	3.25	2.48	4.42	.92	1.99	1.97	2.50	6.43	.89	2.09	1191
September ..	.61	2.02	1.83	2.62	1.50	2.04	1.79	1.34	4.51	.71	835
October ...	2.50	2.20	3.50	1.98	1.92	1.43	2.47	1.96	2.11	4.79	1133
November ..	2.60	3.75	2.11	1.16	3.21	1.62	2.84	1.26	.83	3.35	828
December ...	2.04	3.02	1.42	1.34	2.91	5.81	2.48	2.27	2.94	2.47	1016
TOTALS ...	25.11	25.58	30.99	22.76	25.41	25.38	26.64	24.29	21.99	25.08	9800

1912 Insurance 3'6" high 34 ft NE

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
1911			Pyhope	1 mi	E	St Pauls	2 1/2 mi	NE
1918	54.51.54	1.22.11 W						

RAINFALL at Pyhope Pumping StationCounty of DurhamObserver A. B. E. Blackburn Esq. C.E.River Basin Wear 2Sunderland & S. Shields W. Coy.Snowdon Rain Gauge, by
gauge found & correct } 1X.26.
measure correct

Diameter ...	8											
Height	1.1											
Altitude ...	228											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930. MEANS	
January ...	2.69	3.34	2.19	1.01	1.21	1.20	1.99	1.08	2.28	2.80	3.22	2401
February ...	.98	.12	1.81	3.43	1.27	2.31	1.99	0.75	.98	.77	1.34	1595
March	3.20	.73	1.26	1.40	.89	1.65	.66	1.86	2.33	.18	2.15	1631
April	2.76	1.16	1.51	1.82	1.71	2.71	1.00	1.56	1.04	1.23	1.74	1824
May	3.13	1.74	.69	2.69	6.79	2.58	1.63	1.74	1.11	1.04	1.18	2432
June .....	.53	1.23	1.50	.95	2.87	1.0	2.51	3.95	4.64	1.31	1.43	2152
July	4.83	1.80	4.66	1.49	5.53	2.73	2.70	3.71	1.59	2.53	6.02	2759
August	1.36	4.92	2.31	3.49	2.52	2.83	2.15	6.14	3.12	2.54	4.00	3538
September...	1.10	.71	4.37	1.41	2.09	2.93	2.03	3.63	.97	1.04	2.97	2325
October	2.27	1.70	1.60	2.25	3.80	2.08	2.98	2.14	2.87	2.22	1.71	2562
November...	.74	2.38	.75	4.20	1.02	2.39	3.92	3.07	2.27	2.74	3.23	2671
December...	2.99	1.48	2.63	2.16	1.79	3.20	.63	3.23	1.31	2.90	2.37	2569
TOTALS...	26.58	21.31	26.28	26.30	32.09	27.21	24.19	32.86	24.51	21.80	31.46	2945.9

1920 Snow Railing 3'6" High 34 ft N.E.
 Inspected g.b. 8.1X.26. 6. on large flat open space near cooling tanks
 lies at distance all round 40 yds from pumping station.
 Excellent exposure.

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
1920	54° 51' 04"	1° 22' 11"	Pyhope	1 mi	E	St. Pauls	3/4 mi	N.E.

RAINFALL at Ryhope Pumping Stn.County DurhamObserver A. B. F. Blackburn, Esq., C.E.River Basin Wear - 2Type of Gauge StandardAnnual Average 25.4 in. based on 22 years obs. un-weighted. Period of average 1881-1902 Ref. S

686271/26.

Diameter	8.										
Height	1.1.										
Altitude	228.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means Totals
January	2.58	.72	2.01	1.33	2.28	3.71	2.33	1.85	3.32	1.88	2201
February	1.18	.77	2.43	.48	2.58	2.46	3.06	.85	.51	2.26	1658
March	.83	2.78	1.15	2.23	.66	1.34	3.27	.21	1.99	1.84	1680
April	2.76	1.17	.94	3.56	2.65	1.38	2.41	.12	.71	1.42	1712
May	2.38	4.30	1.44	1.06	.92	1.87	2.99	2.78	1.20	1.05	1999
June	2.89	1.24	1.52	2.18	2.40	2.07	1.76	2.46	2.35	1.24	2071
July	3.88	2.64	2.30	1.67	.57	2.56	3.30	2.47	2.78	6.79	2886
August	2.95	2.58	1.02	3.18	1.70	2.56	1.64	1.44	1.87	1.42	2036
September	3.52	1.84	1.57	1.73	5.53	2.51	1.50	2.06	1.30	1.46	2302
October	1.38	3.56	4.32	2.57	3.88	1.27	1.83	3.06	4.74	2.78	2949
November	1.81	.85	4.26	2.07	3.47	2.59	1.96	2.45	2.45	3.36	2526
December	1.19	.70	1.77	3.53	2.16	1.71	4.98	2.93	1.11	2.21	2229
TOTALS	27.35	28.06	24.73	25.59	28.80	27.23	31.03	22.68	24.33	27.70	26249
	D.	D.	D.	D.	D.	D.	D.	D.	D.	D.	

1931. 2 on railing 3'6" high 34' N.E.

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.			Ryhope	1m	E.	St. Paul.	3/4m	N.E.

Station No. T.F. 3547RAINFALL at Ryhope Pumping Stn.

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County of DurhamObserver A.B.E. Blackburn Esq. C.E.River Basin Wear-2H.G. McLean Esq. C.E.Type of Gauge StandardAnnual Average 25.4 in. based on 2 years obs. un-weighted. Period of average 1881-1915 Ref SFile No. 686271/26

Diameter	8"		025	767								
Height	1' 1'			1								
Altitude	228'			41								
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
											<u>Totals</u>	
January	3.27	2.92	2.84	7.79	4.00	1.07	1.39	7.74	1.59	1.70	2731	
February	5.97	1.98	5.54	1.56	1.15	3.32	1.48	1.03	4.44	2.97	1644	
March	2.42	5.51	5.51	7.74	3.38	9.94	3.80	6.64	1.13	5.59	1211	
April	7.73	7.76	8.81	1.96	1.57	1.48	2.58	1.43	1.31	1.86	1449	49
May	1.49	1.03	2.31	1.98	3.24	1.73	2.81	1.41	5.58	2.10	1868	
June	4.40	1.18	1.02	2.41	1.74	2.77	1.89	3.62	8.85	1.03	1691	
July	6.64	2.52	2.04	2.26	1.76	3.45	2.74	1.18	1.64	3.71	2194	
August	2.35	1.50	4.16	1.73	3.80	3.03	3.39	4.87	2.12	5.60	2955	
September	5.54	3.36	3.30	4.84	1.78	3.48	1.61	1.62	4.45	3.25	2423	
October	4.08	2.46	1.60	2.45	3.04	9.95	4.47	1.17	2.28	1.09	1958	
November	2.88	7.78	2.80	4.30	9.90	3.64	1.99	1.60	2.66	5.76	2733	
December	2.23	2.13	1.25	1.36	1.08	2.72	1.88	2.17	2.26	3.24	1832	
TOTALS	25.00	21.12	23.58	26.38	24.44	25.63	23.03	28.48	16.33	32.90	24689	10
	D	D	D	D	D	D	D	D	D	D		

1941: - Iron tailing 3'6" high, 34°0" N.E.

Feb. cond. for snow.

28.48
28.48
71.73Position 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			Ryhope	1 mile	E	St. Paul	3 miles	N.E.

BRITISH RAINFALL ORGANIZATION

Station No. 3547

No. 496

RAINFALL at Ryhope (Pumping Stn.)

51

County of Durham

Observer

A. L. McAllan Esq. C.F.

River Basin Wear 2

Sunderland & S. Shields W. Co.

Type of Gauge Snowden

Annual Average 25.4 in. based on 2 years obs. un-weighted. Period of average 1881-1915 Ref. S.

25.93 - 35 - within 1920-56

1916-1950 68.627/36 S.

File No.

Diameter ...	8"	0.25	7.67	5 1/4"								
Height ...	1' 1"		1									
Altitude ...	228'		51									
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means- Totals	
January ...	1.47	2.12	.90	2.78	1.58	3.04	1.27	1.48	2.89	4.46	21.99	
February ...	2.18	.53	1.71	2.20	2.41	1.93	1.80	3.89	.61	1.82	18.48	
March ...	3.57	1.28	.05	1.31	1.37	.99	1.08	3.55	.50	1.64	15.34	
April ...	1.27	1.52	2.38	.41	.81	1.00	.38	1.48	1.49	.78	11.52	
May ...	4.90	1.78	2.02	2.30	1.59	.47	1.26	2.65	.40	1.90	19.27	
June ...	1.49	.95	2.10	1.91	2.43	3.04	1.87	2.44	1.83	.17	18.23	
July ...	1.48	.81	3.14	1.57	1.01	2.82	2.45	2.79	.74	3.62	20.43	
August ...	4.32	1.76	3.79	4.58	.72	8.02	3.38	2.37	.21	2.09	31.24	
September ...	.80	4.31	1.24	1.96	.88	1.77	3.41	1.64	.51	1.77	18.29	
October ...	1.08	2.45	1.40	3.73	1.33	1.52	1.59	1.12	.99	6.28	21.49	
November ...	5.15	3.17	1.21	3.25	1.79	.98	1.18	.63	3.22	2.50	23.08	
December ...	2.55	2.47	.93	1.76	2.72	2.22	1.29	3.30	2.78	1.80	21.82	
TOTALS ...	30.26	23.15	20.87	27.76	18.64	27.20	20.96	27.34	16.17	28.83	241.18	10
	D	D	D	D	D	D	D	D	D	D		

1951 1-20 Rainfall 35.1, 34.1 NE;
1956

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference NZ(23)404624

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1951 1958			Ryhope "	1 1/2 .647 mi. ENE.	St Pauls (Ryhope)	3/4 mi NE .512 mi NE.

Summary of Earlier Records from 10-year Sheets :

1916-1950 P - Rejected

Record D, or d	1910-19 30	1920-30 33	1931-40 38	1941-50 33	1951-60
C 1958	✓	✓	✓	✓	
✓ band - 10-16	✓	✓	✓	✓	