

RAINFALL AT Rochdale Town Whitworth

Lat.

Lon.

County of LancashireInwell 3

Rain Gauge, by

Observer J. R. Ashworth Esq

Diameter							8				
Height							16				
Altitude							816				
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January							8.18	2.39	2.58	2.39	
February							1.17	1.55	1.27	4.20	
March							4.20	2.92	3.36	3.49	
April							4.49	2.18	3.07	3.56	
May							5.68	3.01	1.86	2.34	
June							2.80	.76	2.76	1.19	
July							5.08	2.21	8.12	4.86	
August							2.68	1.56	5.81	8.37	
September....							5.10	7.73	1.73	4.13	
October							6.62	3.01	2.72	5.23	
November							4.16	3.43	9.29	2.96	
December							8.77	4.34	2.91	4.91	
TOTALS							58.93	35.09	44.98	47.63	

RAINFALL AT *Rochdale Cwm Whitworth*

Lat. $53^{\circ} 39' 48''$

Lon. $2^{\circ} 10' 47''$

County of *Lancashire*

Rain Gauge, by

Observer

J. R. Ashworth Esq
W. Tomlinson Esq

Messrs. Inwell & Co

Diameter	8				8							
Height	1.6				1.7							
Altitude	814				760							
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	7.53	3.97	5.17	1.47	4.74	4.26	3.21	2.38	4.86	8.93	4.652	
February ....	.77	.43	3.32	7.03	7.33	.32	1.88	3.85	4.70	2.03	3.166	
March	5.24	2.50	1.40	2.05	5.56	5.04	8.43	6.20	3.27	3.09	4.278	
April	1.82	2.23	1.80	.78	2.27	3.03	2.35	3.81	2.54	4.99	2.562	
May	3.76	4.85	5.12	2.97	4.12	1.01	.65	2.20	3.60	3.41	3.167	
June	3.96	1.65	4.56	3.64	3.85	3.04	3.44	4.68	3.44	.93	3.317	
July	4.67	4.54	4.27	4.64	4.81	6.58	3.20	2.18	1.06	2.80	3.875	
August	6.70	9.88	6.38	3.84	5.91	6.23	3.34	7.18	7.87	1.57	5.890	
September....	1.92	4.89	6.13	6.21	.50	2.35	9.30	5.22	1.29	8.81	4.662	
October	5.51	7.38	7.44	5.40	5.74	5.46	6.19	3.23	5.46	4.26	5.607	
November....	9.02	5.31	3.92	4.61	4.73	4.67	1.79	5.09	4.18	2.27	4.559	
December ....	.82	11.41	3.75	5.81	5.91	4.84	6.87	8.62	6.28	3.38	5.770	
TOTALS ...	51.72	59.04	53.26	48.45	55.47	46.83	50.65	54.65	48.55	46.47	51.509	

RAINFALL AT Rochdale Cwm Whitworth

Lat. 53° 39' 48" Lon. 2° 10' 47" County of Lancashire East

Rain Gauge, by W. Jamlinson Esq Observer

Gwell 3

Diameter ..	8										
Height	1 7										
Altitude ..	760										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	7.85	3.41	4.10	5.03	5.07	2.79	7.31	2.84	5.36	3.85	4.761
February ..	3.85	1.71	1.56	5.00	5.20	3.26	4.76	3.12	4.15	3.55	3.616
March ....	.80	4.45	2.87	6.46	2.81	4.65	4.92	4.77	3.83	4.11	3.967
April	3.59	3.81	2.76	2.40	3.81	3.49	2.35	2.43	2.32	4.93	3.189
May	1.86	1.29	3.48	4.57	2.64	1.27	3.82	4.01	4.65	3.31	3.090
June	4.92	2.51	1.38	2.25	2.15	3.17	2.30	10.02	2.26	3.23	3.419
July	3.16	2.41	3.06	5.14	2.13	3.37	2.61	3.31	6.11	8.67	3.997
August	6.13	3.19	4.25	7.22	5.77	5.40	5.34	5.60	4.47	4.05	5.142
September ..	2.09	1.41	1.92	5.86	1.29	3.35	1.70	1.42	5.01	4.28	2.833
October	7.76	4.26	5.40	10.85	3.67	4.39	8.34	5.80	2.26	9.41	6.214
November ..	5.19	7.61	3.37	4.18	4.92	4.64	5.53	4.46	3.75	2.53	4.618
December ..	7.09	7.18	4.79	3.31	3.88	1.90	5.17	5.80	4.28	10.61	5.401
TOTALS ..	54.29	43.24	38.94	62.27	43.34	41.68	54.15	53.58	48.45	62.53	50.24

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Hude

Whitworth Station 20 minutes N
1909 Corrected for windy day

RAINFALL at Rochdale Crown WhitworthCounty of South LancashireObserver W. Tomlinson Esq., F.H. Brunt Esq.River Basin Messy Inwell 3Mo. Rain Gauge, by

.01 inch = .037
 .03 = .037
 .15 = .156
 .60 = .606
 Glass tested by C.S. 6.7.22

Diameter ...	8											
Height	17											
Altitude ...	760											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	
January	7.98	2.79	4.60	4.26	4.00	3.42	4.45	3.65				
February	7.15	9.80	2.45	2.09	3.70	6.38	6.25	1.54				
March	1.51	3.96	6.93	6.28	5.86	1.69	2.72	3.00				
April	4.77	3.89	1.40	4.88	1.89	2.47	4.25	2.13				
May	4.06	2.64	3.15	4.01	3.23	2.14	3.34	2.52				
June	4.54	4.78	6.64	3.35	2.81	1.09	3.37	2.25				
July	6.20	.62	4.94	1.09	5.10	6.12	3.97	3.00				
August	9.37	3.47	5.41	2.03	4.09	5.77	3.81	7.07				
September	.45	5.91	2.02	1.98	4.13	.69	3.17	3.29				
October	4.67	5.19	6.45	2.28	2.03	2.07	9.51	11.08				
November	8.12	7.67	4.08	6.33	6.53	3.16	4.47	6.00				
December	6.94	8.18	6.64	3.55	7.43	9.54	3.98	3.03				
TOTALS	65.76	58.90	57.76	42.26	51.80	49.54	53.29	49.48				

1910 Corrected for wrong day

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
			Whitworth Faith	1 m 1 m	N NE	Whitworth	1 1/4 m	SE

RAINFALL at Rochdale Comm Res WhitworthCounty of LancashireObserver F H Brunt EsqRiver Basin Messy Rwell 3Rain Gauge, by Casella

Diameter ...							5					
Height							1.5					
Altitude ...							70					
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	Totals
January ...								3.65	4.43	6.55		16.18
February ...								1.54	8.70	1.42		19.08
March								3.00	2.84	6.78		15.34
April								2.13	1.45	2.65		10.68
May							3.23	2.52	2.70	2.19		10.80
June							3.35	2.25	1.97	2.14		9.73
July							4.03	3.00	4.38	2.70		14.05
August							3.93	7.97	4.05	4.58		20.41
September...							3.13	3.29	15.70	2.52		24.68
October ...							10.02	11.08	4.99	3.14		28.72
November ..							4.31	6.00	3.21	4.72		18.40
December...							3.86	3.05	11.56	10.02		28.61
TOTALS ...								49.48	66.03	49.61		218.41

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
			Facil	1	NE	Whitworth	1 1/4	SE

RAINFALL at Rochdale Crown Reservoir WhitworthCounty of LancashireObserver H. D. Braddock Esq (Eng.)River Basin Mersey-Trawell 3Rochdale 15WIn Shroton Rain Gauge, by Casella
4.95 } 12 Insulated
5.02 }
5.00 }

9003

Gauss -01.01
+13.128
+30.297
+50.500 } 32

Diameter ...	5									55			
Height	1	7							1	0	1	0	
Altitude ...	760								762				
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS.		
January ...	5.91	9.25	4.75	5.34	4.55	5.98	6.24	5.82	15.57	2.63	8.65	74.69	Totals.
February ...	5.40	6.8	6.68	7.24	1.68	9.15	5.00	2.24	7.61	1.22	.78	47.68	
March	4.83	5.05	4.40	2.77	2.03	2.37	3.06	6.75	3.88	1.95	3.61	40.70	
April	7.33	2.51	4.45	4.90	2.31	4.42	2.38	5.01	1.55	1.99	3.42	40.27	
May	6.62	3.50	2.08	5.66	1.76	6.22	5.23	2.18	1.81	1.19	2.63	46.85	
June	2.55	4.7	3.46	1.52	3.02	0.4	3.46	5.86	10.03	2.20	2.55	35.16	
July	10.81	2.42	6.42	5.28	5.76	2.39	3.20	4.97	3.51	3.41	7.36	55.53	
August	4.05	7.40	5.88	7.35	8.99	5.16	5.74	7.87	8.92	7.11	9.49	77.96	
September...	3.04	1.92	5.15	5.85	5.55	4.74	5.24	7.04	1.82	3.02	5.53	47.90	
October	1.72	4.37	.98	8.16	6.35	6.91	5.48	5.97	6.94	7.67	8.41	63.49	
November...	3.04	3.52	4.93	9.86	3.66	2.98	7.93	6.17	9.89	11.16	8.38	71.52	
December...	5.14	8.87	6.79	5.48	6.13	4.56	2.64	1.52	4.11	11.15	4.74	61.18	
TOTALS...	60.44	49.96	55.94	69.41	57.34	54.92	55.60	61.40	74.67	57.70	65.55	662.93	
	D	D	D	D	D	D	D	D	D	D	D	D	

Inspected 25. 5 in level field by field beds below reservoir. Drop of 3 ft. 8 yds S and 12 yds W; hills all round except on south; line 10 ft. high 10 yds. S.W. 9 in rim pipe end and to be packed to prevent freezing. A very good exposure to an excellent gauge. 6.7.22.

1927. Dec. 27. G. lowered 7 in.

VIII/31 Inspected by Dr. Glasspool - see green file.

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	53° 38'	2° 12'	Whitworth	1/2 mi		Whitworth	1 mi	

RAINFALL at Rochdale (Cwm, Whitworth)County of South LancashireObserver Rochdale Corp'n W.W.River Basin Mersay Inwell-3

Type of Gauge.....

Annual Average 51.5 in. based on 4 years obs. un-weighted. Period of average 1881-1915. Ref. P. 3 355

666987/26.

Diameter	5.											
Height	1.0											
Altitude	762											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	Totals
January	8.22	7.52	3.58	5.48	2.88	6.11	5.22	7.48	7.03	2.71		56.23
February	7.92	2.5	4.82	6.8	8.47	3.28	7.35	3.00	6.75	2.90		45.52
March	5.5	3.53	3.87	4.09	2.42	3.66	2.66	1.83	4.47	3.85		30.93
April	4.86	5.43	2.66	3.89	4.69	1.71	4.44	9.9	2.98	3.65		36.80
May	3.36	5.82	2.47	4.89	1.65	1.77	2.89	3.11	1.52	1.02		30.50
June	7.83	1.00	2.84	4.33	4.58	4.61	3.07	6.26	4.48	1.00		40.00
July	6.10	5.35	4.63	3.26	2.97	5.92	3.27	5.80	8.30	6.14		51.76
August	6.46	1.51	2.57	4.94	2.37	4.76	4.63	5.80	3.52	2.80		39.36
September	3.83	7.18	2.02	5.28	9.90	6.27	2.37	1.98	2.05	6.40		47.28
October	3.66	9.94	6.06	7.97	12.91	7.32	2.42	14.47	2.46	5.76		72.97
November	12.00	5.06	2.78	2.67	6.78	8.43	2.07	8.72	9.36	10.42		68.29
December	3.23	3.48	.83	7.81	4.69	5.77	3.33	7.00	4.87	6.74		47.75
TOTALS	68.02	56.07	39.13	54.79	64.31	59.71	43.72	68.44	57.79	53.39		565.37
	2.	3	2	2.	2.	2	2	2	2	2		406

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

Station No. 2914RAINFALL at Rochdale (Crown Whistworth)

41

County of South Lancashire Observer Rochdale Corp. 1424River Basin Mersey, Irwell - 3

Type of Gauge.....

Annual Average 51.5 in. based on 44 years obs. un-weighted. Period of average 1881-1915. Ref. SFile No. 666.987/26

Diameter	5"			56 1	6 12							
Height	1' 0"				1							
Altitude	762'				41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	1.63	8.33	7.41	7.65	4.91	6.31	4.45	12.76	3.36	4.16		Totals: 50.97
February	6.01	2.20	5.06	3.05	7.16	8.11	2.90	4.39	4.13	6.70		49.71
March	5.39	3.77	1.82	.73	1.88	1.60	9.05	2.10	2.27	3.79		32.38
April	2.92	3.00	3.48	3.77	3.28	1.66	5.39	2.82	5.21	5.44		36.97
May	3.21	4.68	3.72	4.13	5.54	1.38	2.98	1.93	4.44	2.62		34.63
June	.99	.99	4.83	4.13	6.54	4.58	3.76	6.81	.73	3.40		36.54
July	3.65	6.64	4.09	4.76	3.35	5.19	4.74	3.26	2.66	6.49		44.86
August	9.42	6.94	8.75	4.44	5.78	8.99	.36	6.99	4.51	9.12		65.30
September	1.09	3.27	5.76	7.12	3.84	9.27	4.02	4.22	1.68	10.70		50.95
October	6.39	8.26	3.94	6.30	7.99	1.10	1.22	3.97	6.62	3.75		49.54
November	3.54	1.76	5.20	10.02	.67	9.18	8.79	2.89	8.19	7.62		57.86
December	3.33	5.46	3.02	6.35	3.88	4.49	5.25	4.90	9.86	4.30		50.84
TOTALS	47.34 D	65.30 D	57.08 D	62.45 D	54.82 D	61.86 D	52.91 D	57.04 D	53.66 D	68.09 D		570.53 26.2

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.

BRITISH RAINFALL ORGANIZATION

Station No. 2914

RAINFALL at Rochdale (Gowm. Whitworth)

51

County of Lancashire

Observer

Rochdale Garden

River Basin Mersey & Irwell - 3

Type of Gauge

Annual Average 51.5 in. based on 44 years obs. un-weighted. Period of average 1881-1915 Ref. S
" " 58.00 " " 39 " " within 1917-51. " " " 116.50 File No. 666987/24

Diameter ...	5"			56	61	2						
Height ...	1' 0"				1							
Altitude ...	762'				51							
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means Total	
January ...	7.16	6.30	2.73	5.33	3.53	8.33	6.26	5.79	4.74	7.29	57.46	
February ...	4.04	1.92	4.12	5.60	2.44	2.01	4.98	8.20	.88	4.27	38.46	
March ...	5.87	3.38	3.02	3.57	3.27	4.11	6.66	3.20	2.83	1.59	37.50	
April ...	4.17	4.14	4.03	.85	2.90	4.00	.65	1.89	4.26	3.80	30.69	
May ...	2.45	2.30	2.78	3.41	5.35	2.58	1.84	5.85	1.88	2.18	30.62	
June ...	1.92	5.50	3.29	4.41	4.19	5.28	2.42	5.85	3.63	2.11	38.60	
July ...	3.92	2.65	9.63	7.32	4.55	8.92	6.68	3.26	5.03	10.12	64.08	
August ...	5.77	6.10	8.81	11.04	1.35	15.49	8.34	5.48	.50	6.02	68.90	
September ...	4.32	5.03	5.22	6.76	3.87	5.70	7.55	6.83	.49	4.06	49.83	
October ...	1.40	8.72	2.44	11.34	3.26	5.20	9.42	7.14	6.91	6.11	61.94	
November ...	10.62	3.16	7.74	8.95	3.01	2.66	3.28	2.56	5.63	11.22	58.83	
December ...	10.58	5.27	2.27	8.71	8.63	6.39	6.32	5.49	10.00	7.17	70.83	
TOTALS ...	62.22	54.47	56.08	77.29	46.35	70.67	64.40	63.54	40.78	65.94	607.74	

Inspected 20.8.55 Mr. Deeks. Gauge stem missing. Funnel collects catch, minor can leaks. Rim at 17".
 Means certified tapes. S.E. appears o/s. Recommended gauge repairs. No change of site recommended.
 Gauge repaired & reset 3" (inch) 1956. Engineer confirms previous possibility of excess catch when ground was water logged (T. 1.5T). 1956. n.p. high.

1957 n.p. high.
 1958 first
 1960 n.p. high

Position of Station on Ordnance One-Inch map :

No. of Map 95

National Grid Reference 34/881185

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 - Rejected

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	Camp 1916	✓	✓	✓	
	✓	✓	✓	✓	