

RAINFALL AT Todmorden Waterworks Reservoir

Lat. *Lon.*

County of Lancashire Yorks 8.

Aire & Calder 8. Rain Gauge, by
~~Brassey & Gaudron~~

Observer J. Radcliffe

RAINFALL AT Todmorden W.W. Ramsden Rec.
Lancaster ^{Up Yorks}

 Lat. _____ Len. _____
 Aire & Calder 8.
 No 1

Rain Gauge, by _____

County of _____

 Observer J Radcliffe Esq

Diameter	8											
Height	10											
Altitude	980											
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	7.78	4.01	4.07	1.83	5.29	2.56	2.94	2.18	4.62	10.17	4.545	
February63	.47	2.99	6.94	7.82	.23	2.31	3.53	4.35	2.68	3.195	
March	4.64	2.84	1.12	2.06	6.24	5.32	10.13	7.00	3.27	3.06	4.568	
April.....	1.57	2.27	1.77	.81	2.63	3.35	2.66	4.34	3.45	5.44	2.829	
May	3.97	5.12	5.21	3.12	3.93	1.12	.68	2.31	3.71	3.52	3.269	
June.....	3.98	1.91	4.77	3.32	3.93	1.96	4.03	4.56	4.08	1.72	3.426	
July	4.65	4.55	4.78	4.07	4.61	6.00	3.20	2.42	1.21	3.79	3.958	
August	6.61	9.68	6.19	3.84	4.65	7.07	3.42	6.13	7.97	1.46	5.702	
September....	1.78	5.30	5.86	5.82	.64	3.19	11.48	5.97	1.38	9.91	5.183	
October.....	5.18	7.25	8.34	4.84	5.96	6.29	5.98	3.30	6.25	4.61	5.800	
November....	9.94	5.15	4.40	4.32	3.53	5.24	1.92	4.70	4.59	2.36	4.615	
December....	1.05	11.67	2.87	6.10	5.74	5.79	7.84	8.51	6.90	3.44	5.991	
TOTALS	51.78	60.22	52.37	47.37	54.97	48.12	56.59	54.95	51.78	52.16	53.031	

RAINFALL AT Todmorden W.W. Ramsden Res.
 Lat. Lon. County of Lancashire South
 Rain Gauge, by Observer W. T. Tomlinson Esq.

Aire & Calder 8

Diameter ..	8										
Height ..	10										
Altitude ..	980 ft										
Year ..	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	8.12	3.33	3.69	5.78	5.37	2.61	7.05	2.26	5.04	3.48	4.673
February ..	6.31	1.63	2.10	4.97	4.48	2.69	5.32	2.88	4.72	2.75	3.785
March ..	.76	4.66	2.99	7.99	4.42	5.44	4.33	4.31	3.99	3.47	4.236
April ..	4.08	3.62	2.59	1.89	4.59	2.81	2.63	1.84	2.43	5.10	3.158
May ..	1.59	1.60	3.72	4.65	3.06	1.40	4.86	3.59	4.32	2.67	3.146
June ..	5.24	2.44	1.76	1.47	2.82	2.87	1.96	9.94	2.31	2.99	3.330
July ..	3.48	2.05	3.49	4.36	1.85	3.08	2.74	3.39	6.09	6.06	5.659
August ..	6.60	3.26	3.86	6.26	6.26	5.70	4.85	5.12	4.96	4.98	5.185
September ..	2.22	1.64	2.75	6.66	1.50	3.27	1.62	1.24	5.33	3.82	3.005
October ..	7.37	4.70	6.03	11.60	3.58	4.48	9.00	5.92	2.52	8.00	6.320
November ..	5.42	7.99	3.14	3.87	4.97	4.66	5.68	4.41	3.50	2.27	4.591
December ..	7.30	6.54	4.95	4.14	4.16	5.71	5.45	6.35	3.88	8.83	5.731
TOTALS ..	58.49	43.46	41.07	62.64	46.56	44.72	55.49	51.25	49.09	54.42	50.810

Hulse

Todmorden W.W.,
RAINFALL at Ramsden Reservoir No. 2

10

County of W. Yorkshire

Observer Frank H. Brunelby

River Basin Ouse, Aire Calder

8

Rain Gauge, by

Diameter ...	5									
Height	10									
Altitude ...	1326									
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	MEANS.
January ...		1.31		(4.00)						
February ...		5.52		1.93						
March		2.54		3.74						
April		1.43		4.38						
May		1.58		3.26						
June		2.46		2.40						
July90		.74						
August		3.48		1.30						
September ..		1.61		1.50						
October ...		2.73		1.66						
November ..		4.84		5.39						
December ...		5.11		(3.23)						
TOTALS ...		33.51		(33.53)						

1911 Low - not printed
1913 "

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.

RAINFALL at Todmorden (W.W. Ramsden Resⁿ No. 1)

County of W.R. Yorkshire

Observer W. J. Robinson Esq. F.H. Brunt Esq.

River Basin Ouse-Aire-Calder &

Rain Gauge, by

Diameter ...	8	1916-19 MEANS. TOTALS
Height	1.0												
Altitude ...	980 ft			993									
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919			
January ...	8.29	2.54	5.02	5.45	4.68	8.15	4.79	3.36	4.04	7.49	19.68		
February ...	5.62	6.53	2.82	2.67	4.36	6.94	6.24	1.31	8.58	1.41	17.54		
March	1.16	3.11	6.85	6.57	6.62	1.88	2.93	2.70	2.84	6.07	14.54		
April	4.58	3.09	1.28	5.95	2.23	2.46	4.36	1.88	1.72	2.82	10.28		
May	3.57	1.88	3.71	4.41	3.21	3.92	2.98	2.19	2.37	2.18	9.67		
June	3.63	3.58	7.10	3.40	2.75	1.12	3.62	2.88	1.88	2.15	10.53		
July	4.95	1.15	5.14	.98	4.39	6.13	2.87	2.77	5.68	2.77	14.09		
August	7.40	3.15	8.76	2.12	4.40	5.59	4.13	6.98	4.20	4.84	20.15		
September ..	.42	4.52	2.71	2.11	4.35	.82	3.04	3.19	15.77	2.74	24.74		
October ...	4.29	4.61	6.20	2.22	3.12	2.16	10.05	10.63	4.42	3.16	28.26		
November ..	6.33	6.31	4.77	6.64	7.30	2.49	4.31	6.29	3.19	4.93	18.52		
December ...	5.49	7.46	7.10	3.90	8.47	10.00	3.76	2.41	11.24	9.37	26.78		
TOTALS ...	55.71	47.93	61.46	46.42	55.88	51.66	53.08	46.59	65.93	49.18	214.78		

1910 Corrected for wrong long-

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
			Walsden	1½ m	N E SW	Walsden	1½ m	N E

RAINFALL at Walsden Ramsden Reservoir No. 1.

County of N. R. Yorkshire Observer H. A. Braddock Esq. C.E.

River Basin Ouse-Aire-Calder S

Ramsdale 1931

Rain Gauge, by

Diameter ...	6													
Height	10													
Altitude ...	993													
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	Average	1920-30	Total 1931
January ...	5.94	10.06	4.78	5.52	4.51	5.45	7.24	5.07	14.07	1.99	8.25		72.88	
February ...	4.75	5.9	6.33	7.43	1.66	8.91	5.09	1.89	6.95	1.02	.73		45.35	
March	4.99	5.23	4.68	2.24	2.00	1.71	3.21	5.20	3.54	1.69	3.16		37.67	
April	7.49	2.09	3.51	4.36	2.44	3.48	2.21	4.74	1.19	1.59	3.28		36.38	
May	6.37	3.12	1.97	4.84	6.58	4.92	5.28	1.98	1.68	4.10	2.44		43.28	
June	2.81	3.9	3.20	1.53	2.65	.02	3.88	4.95	9.12	1.74	2.01		32.36	
July	11.28	2.37	6.20	4.08	5.56	2.15	3.12	4.45	2.31	2.94	6.94		51.90	
August	3.66	7.43	6.74	7.58	8.11	5.37	5.60	9.35	7.85	5.58	8.67		75.94	
September...	3.09	2.01	4.35	5.84	6.22	4.86	4.28	6.83	.67	2.31	5.34		45.80	
October.....	2.20	3.72	1.18	7.60	7.26	7.53	5.26	6.25	6.71	7.02	8.07		62.80	
November...	3.67	2.53	4.32	8.60	3.12	3.33	4.65	6.68	8.60	10.68	7.37		66.85	
December...	5.30	7.30	6.00	5.29	6.68	11.78	2.47	1.56	3.43	11.08	4.61		58.50	
TOTALS...	61.55	47.14	53.26	65.69	56.79	52.51	55.29	58.95	66.12	51.74	60.87		629.71	

Inspected 12.8.'31 by Dr. Glasspoole — see green file.

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

Date.	Lat. N.	Long. W.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge
1920	53° 42'	2° 7'	Walsden			St. Peters	

RAINFALL at Walsden (Ramsden Reservoir)

County of West Riding, Observer Rochdale Corp.

River Basin Ouse - Aire - Calder - 8

Type of Gauge

Annual Average 52.7 in. based on 41 years obs. un-weighted. Period of average 1881-1915 Ref. S

Ref. S

666987/26

Diameter	S.										
Height		1.0.									
Altitude		993.									
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1931-40 Means Totals
January	7.01	6.86	3.59	4.62	2.52	3.55	4.56	7.32	4.78	2.14	48.89
February	7.14	.22	4.65	.48	7.45	2.97	6.70	2.81	5.25	2.86	40.82
March	.63	3.32	3.16	3.18	1.72	3.01	2.59	1.37	3.48	3.49	25.95
April	3.81	4.94	2.19	3.02	3.97	1.67	3.74	.74	2.20	3.02	29.30
May	2.62	4.92	2.70	3.99	.95	1.20	2.67	3.69	1.28	2.20	26.22
June	7.76	1.04	2.57	3.31	4.15	4.30	2.88	4.32	3.96	.92	35.21
July	5.29	4.86	3.98	3.76	2.83	5.37	2.96	3.93	6.33	5.40	44.71
August	5.48	1.50	2.24	4.29	2.63	3.51	3.75	7.30	4.37	2.79	37.96
September	3.40	6.57	1.70	5.03	9.64	5.58	2.35	1.88	1.71	5.50	43.36
October	3.36	9.17	6.27	7.15	12.01	7.69	2.16	10.45	1.98	5.98	66.22
November	11.94	4.59	2.30	2.48	6.15	6.90	2.03	6.42	7.80	9.95	60.56
December	2.93	3.55	0.59	6.80	4.64	6.13	2.47	5.12	3.96	5.87	42.06
TOTALS	61.37	51.54	35.88	48.11	58.66	53.88	38.86	55.35	47.10	50.12	500.87

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

Station No. 3238

41

RAINFALL at Wabden (Reservoir)

County of West Riding

Observer Randal Colvin ~~W.H.~~

River Basin Ouse - Aire - Calder - 8

Type of Gauge.

Annual Average 52.7 in. based on 41 years obs. un-weighted. Period of average 1881-1915 Ref. S

File No. 666987/26

Diameter	5"	077	009								
Height	1' 0"			1							
Altitude	993'			41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50 Means T90.5
January	1.29	6.34	7.16	7.43	4.21	6.37	3.66	11.51	3.03	4.19	55.19
February	5.09	2.07	4.21	2.42	6.97	6.65	2.92	4.22	4.07	6.57	45.19
March	4.85	3.67	2.63	7.0	1.46	1.54	7.01	2.20	8.05	3.54	29.65
April	3.01	2.83	3.16	4.94	3.18	1.66	5.11	2.62	5.00	4.64	35.55
May	2.88	4.08	3.60	3.69	5.53	1.45	2.03	1.76	3.95	2.08	31.55
June	8.8	1.08	5.03	4.88	5.63	4.73	3.60	7.02	.65	8.00	36.50
July	2.06	5.79	3.57	4.97	2.92	4.26	3.72	2.66	2.31	6.95	38.21
August	8.58	5.89	7.96	4.45	4.55	8.36	4.45	5.94	4.38	7.81	57.87
September	1.02	2.92	5.86	8.29	2.89	9.12	4.05	3.84	1.45	9.06	49.00
October	5.76	7.04	3.70	6.28	7.39	1.23	1.16	3.19	6.11	3.28	45.14
November	3.51	1.45	4.55	3.46	.50	9.70	7.94	2.63	8.06	7.06	54.86
December	3.25	4.53	3.09	5.95	3.26	5.11	5.40	5.19	7.03	3.29	48.10
TOTALS	42.18	47.69	54.50	62.86	48.49	60.18	47.05	52.78	50.09	60.97	526.81

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

Station No. 3238

51

RAINFALL at Walsden (Ramsden Reservoir)

County of West Riding - Yorks. Observer Rochdale Corp.

River Basin. Ouse - Nore - Calder - 8

Type of Gauge Mk 1A in operation

Annual Average 22.7 in. based on 41 years obs. un-weighted. Period of average 1881-1915 Ref. S
 53.49 " " 35 " " 1916-1950 1916-1950 File No. 666987/26 P

Diameter ...	5"										
Height ...	1'0"										
Altitude ...	993'										
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	5.39	5.62	1.90	4.68	3.26	7.29	6.61	6.55	4.74	7.34	
February	3.95	1.48	3.23	4.38	1.77	1.84	4.18	9.49	.89	5.66	
March	5.43	3.51	3.24	3.85	2.32	2.09	5.73	2.90	2.87	1.77	
April	3.75	4.24	4.04	.64	2.85	2.80	.65	2.05	4.57	3.91	
May	2.55	2.10	3.10	3.14	5.16	2.48	2.34	5.82	2.24	2.43	
June	1.91	4.35	2.96	3.36	3.60	4.12	2.42	5.82	3.22	2.04	
July	4.19	3.08	6.55	6.60	1.86	8.93	7.94	4.82	4.75	9.69	
August	7.08	5.85	6.41	8.38	1.03	12.31	7.92	5.58	.70	5.72	
September	4.34	4.39	4.33	6.88	3.85	5.67	7.53	6.26	.62	3.94	
October	1.37	6.95	2.81	10.62	3.02	4.52	9.42	6.38	7.29	6.07	
November	10.93	3.31	6.89	7.44	3.08	2.48	3.60	2.28	6.16	10.17	
December	11.00	5.02	2.33	8.29	7.95	6.19	6.72	5.49	11.59	6.24	
TOTALS ...	61.89	49.90	47.29	68.21	39.55	60.72	65.06	63.44	49.64	64.98	
	n.p.	D	D	n.p.	D	D	D	D	D	D	

1951. n.p. low.

1954. n.p. low.

Inspected 19.4.55 by Neeles, Gauge sound. Tilted NNE about 15° in concrete block. Gage off SW. Re-aligning did not level rim at 12° remove concrete, move 300' SW to protected site. Gauge moved to protected site, cellar (9.1.56 - 20/10/55).

Position of Station on Ordnance One-Inch map : No. of Map. 95 National Grid Reference 56/9.15214

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance 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
	✓ ✓ but - 11.17	✓	✓	✓	✓