

70

RAINFALL AT *Bradford, Nans Sean Grianhope*

Lat. _____ Lon. _____ County of *York W.R.*
 Rain Gauge, by _____ Observer *A. R. Binnie Esq. C.E.*

11

Diameter...											
Height							5	.	.	.	
Altitude ...							1	.	.	.	
							1101	.	.	.	
Year	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January							# 1.72	3.21	6.08	1.74	
February...							6.16	2.92	2.22	2.81	
March.....							6.00	2.95	3.48	2.46	
April							3.39	2.46	2.19	3.05	
May							1.02	2.51	5.46	1.22	
June							3.11	—	3.30	5.19	
July.....							3.16	5.34	.88	5.76	
August							3.48	5.51	1.62	6.21	
September ..							4.22	4.28	5.94	2.71	
October							2.53	7.28	5.22	3.60	
November ..							3.28	7.46	3.20	1.63	
December ..							6.01	5.68	2.13	3.14	
TOTALS ..							44.08	—	41.70	39.52	

1877 Observations for June imp:

RAINFALL AT *Bradford, Nan's Scar* 80

Lat. _____

Lon. _____

County of *York*

Moddy Rain Gauge, by _____

Observer. *A. R. Bunnie, Esq., C.E.*

Case. Air 9 No. 11

Diameter	5										
Height	1.0										
Altitude	1017										
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January ....	.61	.46	4.88	4.75	4.65	3.75	6.22	2.11	1.97	2.90	3.230
February	4.92	4.86	3.55	3.32	2.30	4.24	2.10	1.02	.54	3.10	3.005
March	3.68	6.80	5.14	.76	2.18	2.98	4.18	2.42	3.90	3.25	3.529
April	2.21	1.92	5.20	2.44	1.30	2.71	3.76	1.39	3.76	4.51	2.920
May	2.90	2.60	1.92	.90	1.62	3.35	5.12	2.14	1.72	2.34	2.461
June	4.90	2.40	4.00	2.90	.79	3.45	2.54	.26	3.66	.87	2.577
July	3.80	5.37	4.10	2.53	3.35	2.00	6.09	2.56	6.65	3.03	3.948
August	2.03	4.64	1.82	1.53	.80	2.13	1.97	2.12	4.81	6.06	2.791
September....	4.06	2.80	9.6	4.10	1.35	6.57	3.91	5.36	1.73	2.96	3.374
October	4.20	4.15	3.10	3.45	1.55	7.64	6.45	3.26	2.53	6.25	4.258
November....	6.35	4.45	5.15	2.65	.80	4.37	4.56	3.95	11.59	1.55	4.642
December	6.90	3.90	4.50	2.71	2.45	2.32	7.17	4.17	3.81	3.98	4.201
TOTALS	46.56	44.35	45.52	37.04	23.14	45.45	54.07	30.76	46.67	40.80	40.986

RAINFALL AT Bradford Nan Sen

Lat. _____

Lon. _____

County of York W.T.

Rain Gauge, by _____

Observer J. Watson Esq. C.E.

Base. Ans. Bromley Hill

J. Watson Esq. C.E.

Diameter	5										
Height	10										
Altitude	1101 T										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	7.35	3.78	5.50	1.60	6.62	3.79	2.75	2.15	5.50	9.75	
February ....	.85	1.00	3.54	6.13	10.26	.68	2.24	4.35	5.91	2.66	
March	4.66	2.80	1.09	1.45	4.79	4.29	7.30	7.09	1.80	3.35	
April	1.82	2.81	2.00	.91	2.50	3.28	3.05	3.78	4.03	4.15	
May	3.86	1.00	4.98	2.49	2.89	.68	.91	2.68	3.63	3.30	
June	4.51	1.94	4.06	2.96	4.08	2.36	4.75	4.25	3.82	2.28	
July	3.95	3.19	3.69	4.50	4.23	8.15	2.05	2.15	1.62	2.25	
August	7.05	8.71	4.72	4.10	5.59	6.35	2.75	5.20	6.20	1.80	
September....	2.99	4.25	2.35	5.05	.52	2.23	8.50	5.45	1.42	7.50	
October	3.85	5.90	8.43	5.44	6.56	5.09	6.13	2.10	7.08	3.50	
November	8.04	5.46	3.10	4.55	3.95	5.90	1.43	5.00	4.40	3.10	
December ....	.75	11.00	2.97	6.23	5.32	6.70	6.55	7.55	7.00	3.50	
TOTALS	49.68	51.81	46.43	45.41	57.31	49.50	48.41	51.75	52.41	47.17	50.201

1891 May Gauge tampered with. — estimated

RAINFALL AT

Bradford Nan Seav. Oxenhope

Lat.

Lon.

County of *York W.R. Central*

Rain Gauge, by

Observer *J. Watson Esq. C.E.*

Over Air 9 M

Diameter ..	5											
Height	10											
Altitude ..	1101 π											
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.	
January ..	6.00	3.50	3.10	5.42	5.45	2.90	8.30	2.43	4.88	3.62	4.56	0
February ..	4.50	1.60	2.25	7.30	4.55	3.40	3.64	3.24	3.74	3.80	3.80	20
March ....	.91	4.70	3.00	7.60	2.90	4.64	3.62	4.50	4.79	3.60	4.02	6
April	2.75	3.75	2.30	3.35	3.30	3.65	2.20	3.42	3.00	4.50	3.22	2
May	2.17	1.45	3.75	3.80	3.27	.93	4.23	3.89	2.81	3.10	2.94	0
June	4.65	1.85	1.95	1.69	1.96	3.40	1.39	7.11	2.56	2.74	2.93	0
July	1.50	2.10	4.05	5.63	2.10	2.40	3.17	3.69	5.29	5.90	3.58	3
August	5.25	3.35	4.10	5.70	5.20	7.00	4.98	4.26	3.38	3.61	4.68	3
September ..	1.70	1.45	2.60	6.55	1.40	2.80	1.42	1.00	3.68	4.00	2.66	0
October	6.70	3.45	5.80	14.18	2.25	4.20	7.94	6.35	2.26	5.10	5.82	3
November ..	5.40	7.60	3.50	3.62	4.60	5.70	6.32	3.50	2.74	.82	4.38	1
December ..	6.55	8.20	7.00	3.75	3.90	1.70	4.73	5.85	3.70	6.32	5.17	0
TOTALS ..	48.08	43.00	43.40	68.59	40.88	42.72	51.94	49.24	42.83	47.12	47.78	0

H. B.

RAINFALL at

Bradford Nanke Greenhope

No. H.

County of W. Yorkshire

Observer W. J. Watson Esq. C.E.

River Basin Ouse - Aire 9

L. Mitchell Esq. C.E.

Rain Gauge, by

M

Diameter ...	5											
Height	1	0										
Altitude ...	1101	7										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1910-19 MEANS. Totals	
January ...	6.61	2.66	5.67	5.16	5.20	7.61	5.91	2.24	3.56	5.98	17.69	
February ...	6.54	7.10	2.88	2.46	4.27	5.64	6.05	.90	8.06	1.63	16.64	
March	1.08	2.72	6.30	6.92	6.63	1.54	3.31	3.17	2.19	5.20	13.87	
April	4.25	2.26	1.38	4.72	2.39	2.32	3.98	2.55	1.11	2.59	10.03	
May	3.13	1.64	3.58	4.07	2.17	2.12	2.95	2.37	3.43	2.55	11.30	
June	3.18	4.92	imp	2.69	2.40	.75	3.02	2.54	2.22	1.53	9.31	
July	4.70	.84	6.15	1.57	3.29	5.72	3.05	2.61	5.31	3.02	13.99	
August	6.15	2.60	7.23	1.62	3.16	6.29	2.62	6.96	3.06	3.91	16.55	
September ..	.45	3.72	2.49	2.16	3.13	.65	2.88	2.39	7.72	2.13	15.12	
October ...	4.56	4.82	5.41	2.65	3.08	2.08	10.50	9.16	3.72	2.62	26.00	
November ..	5.66	5.64	4.24	6.42	7.90	2.03	4.80	6.57	2.26	4.58	18.21	
December ...	7.23	7.47	6.36	3.74	9.24	8.81	4.13	2.15	7.12	8.73	22.13	
TOTALS ...	53.54	46.29		44.18	52.86	45.56	53.20	43.61	49.76	44.27	190.84	

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

RAINFALL at Bradford - Near Greenhope N=11County of N. YorksObserver S. Mitchell - Esq. C.E.River Basin Guse - AireEng: Bradford

Snowdon
Bradford Rain Gauge, by
 { 4.95
 5.05
 5.00 } M
Each beginning in snow + in rain.

W. Newlands, Esq. L.F. (1930)

13.00														VI	
Diameter ...	5														
Height	1.0														
Altitude ...	1101														
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 1930	1920-30 Totals			
January ...	5.69	9.86	4.85	5.44	5.85	6.94	6.45	5.05	15.94	2.10	7.72	71.91			
February ...	4.85	5.1	5.75	7.35	1.46	8.94	4.96	2.32	7.17	.96	1.24	45.51			
March	3.97	4.14	3.92	2.78	1.77	1.68	3.13	5.38	5.46	.98	3.28	34.49			
April	5.47	1.67	4.04	3.71	2.67	3.50	2.11	3.98	1.22	1.43	3.26	33.06			
May	5.69	2.45	1.47	5.12	5.56	5.64	4.20	1.67	2.23 6.85	2.83	1.93	38.79			
June	2.75	2.1	2.66	1.07	2.77	.06	3.11	4.34	1.45	1.60	1.97	27.79			
July	3.08	2.51	5.40	4.84	4.78	1.54	2.88	3.16	5.46	2.73	6.56	44.23			
August	2.17	7.12	7.39	5.50	5.29	4.44	(3.40)	7.68	6.6	4.21	6.57	59.23			
September...	2.02	1.99	5.32	5.78	5.02	3.58	3.33	5.73	7.08	1.68	5.55	40.66			
October	2.62	3.16	1.21	6.10	5.36	6.43	4.32	6.08	8.21	5.60	6.49	54.45			
November...	3.13	2.90	2.93	8.56	3.78	2.71	8.70	5.77	3.12	9.08	6.93	62.70			
December...	4.74	9.11	5.11	4.63	7.03	5.53	2.07	2.05		11.61	4.61	59.63			
TOTALS...	51.18	45.93	50.05	60.92	49.34	50.99	(48.66)	53.21	60.85	44.81	56.11	572.05			

Inspected by S. Mitchell on 12th Oct. 1930. Open moor to leeward side with the heavy ground on W & E
& slope down on N. Good position.

Position of Station on reduced Ordnance Survey
 Map, 2 miles to 1 inch Series

No. of Map

Reference No.

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

RAINFALL at Bradford (Nan Scar, Oxenhope)County of West RidingObserver Bradford Corp. W.W.River Basin Ouse-Aire-9.W. Newlands Esq C.E.Type of Gauge SnowdonThe Waterworks Engineer.Annual Average 47.6 in. based on 42 years obs., un-weighted. Period of average 1881-1915 Ref 3

66055426

Diameter	5.										
Height	1.0.										
Altitude	(101.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1931-40 Means
January	5.43	6.08	2.95	3.98	2.22	5.47	5.46	6.58	7.25	(264)	48.06
February	6.41	.22	3.23	.43	7.33	2.55	6.37	2.22	5.96	2.94	37.66
March	.39	2.92	2.90	3.27	2.50	2.79	2.35	1.41	3.46	3.65	25.64
April	4.25	4.34	2.20	2.98	4.71	1.65	2.85	.70	1.84	3.76	29.28
May	3.78	4.77	2.54	2.63	.73	1.65	(3.10)	(4.40)	1.22	1.33	26.15
June	6.48	.89	2.29	2.69	3.70	4.53	2.55	5.24	3.29	.63	32.29
July	5.27	(5.00)	2.69	2.72	2.12	4.11	3.14	4.79	6.54	3.78	40.16
August	5.26	1.64	1.20	3.65	1.82	3.05	2.19	6.03	4.41	1.83	31.08
September	4.74	5.34	2.27	3.13	7.59	5.02	1.87	2.64	1.96	4.33	38.89
October	3.20	7.94	5.23	5.42	10.37	5.22	2.92	11.32	3.26	4.87	59.76
November	10.39	3.69	2.77	2.77	7.78	6.48	2.23	7.69	8.95	7.58	60.33
December	2.97	1.88	0.52	6.85	4.32	5.48	2.97	5.20	2.90	4.57	37.66
TOTALS	58.57	(44.71)	30.79	40.52	55.19	43.01	38.00	58.22	51.04	41.91	466.96

1932. July estimated from maps.

1937. May total estimated from nearby stations

1940. Jan. corrected for snow.

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

RAINFALL at Bradford (Name Scam, Ouse, etc.)Station No. TF 3269

41

County of West Riding Observer The Waterworks EngineerRiver Basin Ouse Aire - 2Type of Gauge Snodden 9Annual Average ~~4.7~~ in. based on 49 years obs. un-weighted. Period of average 1881-1915 Ref. 5File No. 660554/26

Diameter	5"			074	937						
Height	1' 0"			1							
Altitude	1101'			111							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50 Means
January	3.40	4.50	6.02	8.38	4.42	5.85	4.53	12.13	2.95	3.45	56.23
February	5.67	1.87	3.09	2.40	6.45	7.40	3.15	4.98	4.75	7.45	47.21
March	4.34	3.12	1.35	.45	1.85	1.63	7.95	2.58	1.83	2.99	28.09
April	2.62	2.49	2.51	4.30	3.30	2.03	5.06	3.51	5.40	4.78	36.00
May	2.90	5.03	3.36	3.30	4.15	2.08	4.40	1.49	3.51	2.75	32.97
June	.56	1.47	4.45	3.50	4.77	3.59	3.15	5.75	.61	2.11	29.96
July	1.54	4.22	2.88	4.67	2.74	4.36	2.75	1.68	3.92	4.45	33.21
August	6.53	5.08	6.25	3.91	4.95	7.60	.51	5.15	3.37	6.89	50.29
September	.55	2.35	5.70	8.10	3.60	8.40	3.25	3.53	1.30	7.88	45.26
October	5.44	6.30	3.08	5.60	7.30	1.10	1.57	2.45	5.62	3.21	42.57
November	3.54	1.96	4.30	8.75	.80	8.54	8.40	2.47	8.06	5.75	52.60
December	2.90	3.83	3.28	5.80	3.55	4.12	6.05	5.60	7.85	2.25	47.29
TOTALS	40.37 M.	43.48 M	46.27 M	53.76 M	47.88 M	56.70 M	50.77 M	51.32 M	51.17 M	53.96 M	501.68

Average of 47.6 should not be used (111A file up). Good good 1945. 1948
1950 Dec. looks slightly low.

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.

3269

15.46

RAINFALL at Bradford (Man Lear Greenfield)

51

County of West Riding - Yorks.Observer X Waterworks EngineerRiver Basin Cuse - Aire - 9Type of Gauge Snowdon Bradford 78/2

Annual Average in. based on years obs. un-weighted.

Period of average

Ref.

49.47 " " 35 " " 1916-1950

1916-1950

File No. 66.0584/2 P.E. 22802/58

Diameter ...	5'		074	937								
Height ...	1'0"			1								
Altitude ...	1101'			51								
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	Totals
January ...	5.35	5.86	1.93	4.13	2.89	7.24	5.18	4.94	4.15	6.14	47.81	
February ...	4.36	1.63	2.24	4.81	2.74	2.20	3.89	8.45	6.68	4.75	35.75	
March ...	5.69	3.10	2.34	3.18	2.67	2.51	4.09	3.21	2.15	2.19	31.13	
April ...	2.63	3.29	3.55	.86	(1.60)	3.71	.43	1.65	4.75	3.24	25.71	
May ...	4.87	2.87	2.40	3.26	3.82	2.13	1.58	6.47	1.78	2.13	31.31	
June ...	1.32	3.53	3.90	2.63	3.16	5.05	2.70	5.51	4.55	1.44	33.79	
July ...	3.47	2.12	5.60	4.68	.70	6.62	5.32	4.52	3.57	7.17	43.77	
August ...	5.16	6.45	5.77	9.45	1.31	9.45	6.45	4.99	1.46	4.82	55.31	
September ...	3.26	5.10	4.80	6.20	2.30	5.75	6.10	4.52	.38	3.09	41.50	
October ...	1.78	5.76	2.70	9.25	3.29	2.53	6.89	4.57	6.52	6.19	49.48	
November ...	10.14	2.42	6.52	7.91	3.12	2.10	3.10	1.52	5.40	8.41	50.64	
December ...	10.24	5.10	2.74	8.31	7.96	6.40	6.40	5.98	9.87	6.60	69.60	
TOTALS ...	58.27	47.23	44.49	64.67	35.56	55.69	52.13	56.33	45.26	56.17	515.80	
	M	M	X						M	M		

Inst. Mr. O'Kane 23.9.58 new fencing required to protect from cattle. If some side slightly over-exposed NW-N-E. Turf used would help.

04004

Position of Station on Ordnance One-Inch map :

No. of Map.....96.....

National Grid Reference SE(44)03Y3344

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. accepted

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