

RAINFALL AT Oakworth Oldfield

Lat.

Lon.

County of

York W.R.

Rain Gauge, by

Observer

J.W. Hopkinson Esq. Cl.Date. Aug 9

Diameter								5		
Height								10		
Altitude								1008		
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
										MEANS.
January							2.47	1.29	3.90	7.37
February							1.62	3.38	3.77	2.48
March							6.72	5.27	1.94	2.08
April							2.57	2.90	3.10	2.77
May78	1.53	2.79	3.31
June							3.28	9.26	3.02	1.52
July							2.37	2.51	.77	2.42
August							2.53	3.49	4.21	1.52
September							2.02	7.53	4.10	1.22
October							4.82	5.45	1.79	5.38
November							4.62	2.47	4.25	4.13
December							4.43	5.08	5.82	5.64
TOTALS							42.87	45.59	39.87	38.57

Haworth Ch 13/4 miles E by S
 House 40 ft high 200 ft N
 Gauge on Reservoir Bank

Not used Keighley Water 1912. (small owing
 to wrong funnel being used)

RAINFALL AT Oakworth Oldfield

Lat.

Lon.

County of York W.R. Central

Symon Sonesson Rain Gauge, by Karl Hjelstrom Observer W.W. Hopkinson Eng Cl
W. Fowlds Eng Cl

June - Dec 9

Diameter ..	5										
Height ..	1.0										
Altitude ..	1008 ft										
Year ..	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	M.R.A.N.E.
January ..	4.95	2.77		4.64	4.12	1.85	6.74	2.23	3.69	2.27	
February ..	4.15	1.46		5.47	4.45	2.81	3.25	3.26	3.17	3.22	
March ..	.80	3.77		6.42	2.35	4.20	3.59	4.10	3.99	2.98	
April ..	2.72	2.90		2.15	3.66	3.20	1.90	2.61	2.97	3.86	
May ..	2.44	1.16		3.84	2.84	1.20	3.69	3.79	2.80	2.95	
June ..	3.21	1.29		1.70	2.27	3.11	2.09	7.26	2.40	2.66	
July ..	3.57	1.74	3.84	4.66	2.76	2.00	1.98	3.01	4.81	5.80	
August ..	5.39	2.20	3.32	6.18	4.76	5.31	4.43	4.43	3.83	3.47	
September ..	1.42	.93	1.76	5.65	.87	2.56	1.23	1.04	3.70	3.34	
October ..	5.56	3.02	4.96	12.88	2.00	3.69	6.57	4.84	2.23	4.45	
November ..	4.41	5.64	3.07	2.71	3.88	5.15	5.30	2.93	3.58	2.02	
December ..	5.19	4.76	4.44	2.81	3.95	1.58	3.48	5.29	3.04	5.39	
TOTALS ..	43.81	31.64		59.11	37.91	36.66	44.25	44.78	40.21	42.41	

- m p d m p d m p d = s

1900 Haworth Church 1 3/4 miles E by S

House 40 ft high 200 ft N

1902 During the first six months an incorrect funnel was
in use

1906 Haworth Station

1909 Oakworth Station 2 1/2 miles E

Height of Water 1912 Not used previous to 1902. ? small
arrest to use of wrong funnel

RAINFALL at Oakworth Oldfield Filter.

County of W Yorkshrie

Observer W. Fawcett Esq. Cl

Mr. Barrett Esq. Ct. 1914

River Basin Onse-Ari 9

Ground Rain Gauge, by Kent & Wilson
No. 3 1915

Diameter ...	5										
Height	10										
Altitude ...	1008 ft										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	5.26	2.00	5.26	4.41	4.03	7.75	5.14	2.64	3.14	5.40	
February ...	5.25	5.91	2.29	2.19	3.83	5.59	5.60	.65	7.32	1.64	
March	1.05	2.21	5.59	6.16	5.93	1.16	3.09	2.95	1.60	4.99	
April	4.10	2.53	1.08	4.59	2.08	2.12	3.73	1.76	1.23	2.50	
May	3.52	1.56	3.24	3.26	2.00	2.22	3.04	2.28	2.69	2.58	
June	3.29	4.84	7.44	2.09	2.06	.90	2.73	2.37	2.22	1.59	
July	4.18	.39	5.28	1.30	3.82	4.64	3.61	1.61	5.05	2.61	
August	5.59	2.48	7.12	1.55	2.06	5.21	3.31	6.59	2.96	3.57	
September ..	.37	3.82	2.53	1.52	3.16	1.11	2.84	2.12	11.17	2.03	
October ...	4.43	4.08	4.61	2.32	2.43	1.54	9.76	8.11	3.39	3.66	
November ...	4.88	4.80	3.49	5.20	7.19	2.20	4.10	5.30	2.77	5.98	
December ...	6.46	7.36	5.62	3.34	7.80	8.16	4.19	2.04	8.00	7.85	
TOTALS ...	48.38	41.98	53.55	37.93	46.39	42.60	51.14	38.42	51.54	41.00	

1912 Home 40 fathm 200 ft N

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	53°50'15" N 159°0' W	200.0 W	Haworth	1 3/4 mi 10760 ft	E 6 S E 14 N	Oakworth	2 1/2 mi 9760 ft	E 10 S

RAINFALL at Oakworth Oldfield Filters

County of W. R. Yorkshire

Observer Mr. R. Barnett Esq. C.E.

River Basin Ouse - Aire &

Keighley Valley Water Bd.

Snowdon Rain Gauge, by M. E. G.
J. O. (27)

(1929) Alan Atkinson, Esq., C.E.

Diameter ...	5"											
Height	100											
Altitude ...	1008											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930, MEANS.	
January ...	6.22	8.89	4.61	4.71	3.41	4.54	5.41	4.97	10.73	2.58	7.35	
February ...	3.82	7.0	5.59	7.32	1.69	8.07	4.89	2.46	7.00	7.7	1.11	
March	4.33	4.15	3.30	2.59	1.48	1.80	2.40	4.38	4.01	.90	2.69	
April.....	5.70	2.01	4.14	3.87	2.49	3.54	2.44	3.72	1.58	1.26	4.07	
May	5.47	2.46	2.02	4.88	6.17	4.81	3.94	1.67	1.53	2.90	2.34	
June	2.41	2.7	2.94	1.41	2.84	.02	2.89	4.11	6.54	1.73	2.18	
July	6.63	2.21	5.66	4.47	4.57	1.98	3.42	3.88	1.75	2.39	7.98	
August	1.80	6.25	6.39	5.52	5.21	5.18	3.84	7.24	5.49	2.95	6.71	
September...	1.89	1.80	5.36	5.91	4.46	3.50	3.96	6.22	0.90	1.54	5.03	
October.....	2.90	3.02	1.09	6.03	4.26	5.36	4.28	4.53	6.32	6.42	6.48	
November...	3.18	2.54	2.35	6.49	3.52	3.04	4.28	5.54	7.35	8.07	6.92	
December...	3.99	7.92	4.53	4.32	4.96	5.98	1.85	3.04	2.96	10.41	4.21	
TOTALS...	48.34	42.22	47.98	57.52	45.06	47.82	46.61	51.76	55.76	41.87	57.07	
	1.0	0	0	0	2	0	0	0	0	0	0	

No object near gauge.

Position of Station on reduced Ordnance Survey } 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
1920	53° 5' 18" N	1° 5' 24" E	Haworth	1000 yds	E 45° S	Haworth	9100	E 16° S

RAINFALL at Oakworth (Oldfield Filters)

County of West Riding

Observer A. Atkinson, Esq., C.E.

River Basin. Ouse-Aire - 9.

T. Noel Wood, Esq., M.C.E.

Type of Gauge Snowdon.

A. Boothman, Esq., C.E.

Annual Average 44.6 in. based on 29 years obs. un-weighted. Period of average 1881-1915 Ref S

744053/27

Diameter	5.											
Height	1.0.											
Altitude	1008.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January	4.84	5.59	3.30	4.78	2.84	6.47	6.22	6.53	7.05	2.58		
February	5.58	2.27	6.47	3.39	9.16	3.10	7.90	2.94	5.70	2.10		
March	4.49	2.89	2.42	3.40	2.30	3.49	3.59	2.06	3.89	3.55		
April	4.19	3.88	1.83	2.87	3.56	2.03	3.84	.90	2.44	4.27		
May	2.81	4.68	2.94	3.45	1.21	2.25	3.84	4.96	1.49	1.79		
June	6.73	1.50	2.60	2.70	4.33	4.02	2.44	5.14	3.51	.96		
July	4.71	4.51	3.00	2.57	2.20	4.20	3.01	4.93	7.57	4.90		
August	4.63	1.72	1.85	4.08	1.99	3.35	2.44	6.03	3.17	2.43		
September	4.41	6.50	2.14	2.61	8.26	4.71	1.87	2.11	2.07	5.10		
October	2.57	8.00	5.82	6.15	11.79	6.03	2.45	11.53	3.00	4.95		
November	7.98	3.81	3.26	2.25	8.25	6.79	2.36	7.07	8.90	7.25		
December	2.67	1.99	0.59	7.08	4.71	6.53	3.07	5.65	5.11	5.07		
TOTALS	51.61	44.24	35.72	42.33	60.60	52.97	42.83	59.85	51.90	44.95		
	D	D	D	D	D	D	D	D	D	D		

1933. Gauge inspected on Aug. 23rd site found to be not ideal - third site selected and marked. So of old, recommended that check gauge be set up here, and comparative readings taken for some months.
See file 744053/27.

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
1931			Haworth	10,600 ft	E 7° S	Haworth	9,100 ft E 7° S

RAINFALL at Haworth (Oldfield Tunnels) No. 2

County of Yorkshire, W.R.

Observer A. Atkinson, Esq., B.E.

River Basin Dose - Area - 9

J. Noel Woody Esq., M.C.C.E.

Type of Gauge Snowdon.

A. Boothman, Esq., R.E.

Annual Average..... in. based on..... years obs. un-weighted. Period of average..... Ref.....

1933																
Diameter	5	Height	10	Altitude	978	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January					5.04	2.80	3.75	5.71	7.10	7.48	2.38					
February					4.46	8.91	3.01	7.48	2.74	5.73	2.27					
March					3.39	2.24	3.26	3.16	1.85	2.86	3.60					
April					2.81	3.47	1.94	3.66	2.82	2.38	4.10					
May					3.24	1.15	2.25	3.29	4.91	1.53	1.75					
June					2.64	4.27	4.00	2.67	5.04	3.41	.95					
July					2.50	2.05	4.08	2.89	4.85	7.46	4.88					
August					3.98	1.95	3.24	2.38	5.91	3.18	2.21					
September					2.60	8.02	4.51	1.85	2.10	2.02	4.64					
October			C. imp.		6.16	11.71	5.74	2.36	11.05	2.99	4.74					
November					3.21	2.18	7.93	6.57	2.28	7.03	9.01	7.75				
December					1.63	6.68	4.58	5.45	2.70	5.73	3.64	5.31				
TOTALS			inch		41.68	59.08	50.30	40.43	59.13	52.69	44.58					

1933 f. in position selected by Dr. Glazebrook in August 1933

1934 Dry stone wall 4'6" high 22'7"

Turf wall erected 28.3.38.

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	Direction from gauge
1933			Haworth	1060ft	E 7° S	Haworth	9100ft	E 75° S

BRITISH RAINFALL ORGANIZATION, EXHIBITION ROAD, LONDON, S.W.7.

Station No. 3289

RAINFALL at Haworth (refined filters)

41

County of West Riding

Observer

A. Boothroyd Esq., C.E. (July 1946)

River Basin River - 9

G. E. T. Boldry Esq.

Type of Gauge Standard

(W & W. Eng. March 1947)

Annual Average Rain. based on 34 years obs. un-weighted. Period of average 1881-1915. Ref. S.

File No. 744052/27

Diameter	5"	074	893								
Height	1' 0"		1								
Altitude	1008'		41								
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	3.10	5.60	6.52	8.56	4.47	5.09	3.85	10.68	3.33	3.75	
February	6.85	1.60	4.89	3.35	5.02	6.03	1.82	4.22	4.14	7.88	
March	4.70	3.92	1.80	1.80	1.56	1.44	1.59	2.85	2.10	2.57	
April	2.56	2.43	3.36	3.67	2.99	1.27	3.88	3.55	5.44	4.80	
May	2.79	3.53	3.02	4.05	5.65	1.60	2.32	1.11	2.19	2.60	
June	.54	1.43	3.74	3.30	4.09	2.14	2.00	5.93	.71	1.61	
July	2.76	4.48	3.53	3.14	2.61	3.62	2.45	2.63	2.93	3.70	
August	7.10	5.09	6.90	3.63	4.57	6.37	.33	4.88	2.60	6.86	
September	.70	3.89	5.40	7.42	2.87	6.90	2.71	3.33	1.09	6.90	
October	6.55	3.40	2.93	5.57	6.40	.83	1.61	2.79	5.56	3.31	
November	3.74	2.05	4.27	6.94	.89	5.86	7.81	2.44	6.48	6.89	
December	3.24	4.83	3.05	5.08	2.43	3.25	5.69	5.45	8.91	3.01	
TOTALS	44.66	48.25	49.41	55.57	43.55	44.40	42.06	49.84	45.48	52.13	
	D	D	D	D	D	n.p.	n.p.	n.p.	N.P.	D = P	

1946 n.p. Raw. - Suggest record be continued until 1950 for purpose of comparison.

1947 n.p. check + low

1948 n.p. check.

1950 n.p. check

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
1941			Haworth	10600ft	E 7° S.	Haworth	9100ft	E 7° S.

Station No. 3289/1

RAINFALL at S. Col. H. (Colfheld Tiers) No. 2

41

County of Yorkshire W.R.

Observer A. Boothman

1559 CE

River Basin Ouse - Aire - 9

G. E. C. Boldy Esq. (May 1946)

Type of Gauge Standard

(W.G. 12) Eng. March 1947)

Annual Average in. based on years obs. un-weighted. Period of average Ref.

File No. 144053/27

Diameter	5"	074	894								
Height	1' 0"			1							
Altitude	978'			41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	2.62	4.98	6.41	8.19	4.78	5.39	4.69	10.08	3.23	4.11	
February	7.36	1.59	4.61	2.98	4.97	7.36	2.39	3.32	3.69	7.42	
March	4.71	3.73	1.69	6.8	1.53	1.63	10.28	2.26	1.83	2.46	
April	2.82	2.27	2.98	3.51	2.80	1.48	4.45	3.17	5.27	4.82	
May	2.63	3.98	3.08	3.87	5.37	1.98	2.91	1.03	2.50	2.02	
June	.86	1.56	3.59	3.04	3.76	2.76	3.01	5.66	.72	1.77	
July	2.64	4.28	3.26	3.00	2.50	4.21	3.16	2.50	2.97	4.10	
August	6.89	5.09	6.59	3.57	4.51	8.15	.31	4.68	2.64	6.88	
September	1.64	3.67	4.84	7.45	2.62	8.22	3.00	3.07	1.14	7.18	
October	6.33	8.21	2.71	5.35	6.63	1.14	1.55	2.54	5.42	3.63	
November	3.80	1.99	3.85	6.92	.82	7.89	7.31	2.14	6.58	5.85	
December	2.96	4.42	2.71	5.10	2.77	4.45	4.80	4.78	8.97	2.96	
TOTALS	44.28	45.77	46.32	53.67	43.06	54.66	47.86	45.23	44.96	58.69	

1946 dry stone wall 4 ft 6 in, 33 ft 7 in.

1946 reg. turf well in reasonable repair.

O/H/1

S. Turf wall rain gauge

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

Date	Lat. N.	Long.	Railway Station	Distance from gauge	Direction from gauge	Parish Church	Distance from gauge	Direction from gauge
1941			Haworth	10600ft	E 7° S.	Haworth	9100ft	E 7° S.

Station No. 3289

51

RAINFALL at Oakworth (Platfield Filter)

County of West Riding Yorks.

Observer G. E. & B. Balding Esq.

River Basin Ure - Aire - 9

Craven Water Board (1/4/60)

Type of Gauge Snowdon

Annual Average 446.6 in. based on 34 years obs. un-weighted. Period of average 1881-1915
 " " 48.89 " 29 " within 1916-50 " " " 1916-50 " " " Ref. S
 File No. 744023/27.

Diameter ...	5"		074	893							
Height ...	1'0"				1						
Altitude ...	1008'				51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	4.84	5.67	1.51	3.43	2.46	5.41	3.90	3.77	3.27	6.20	
February ...	4.31	1.39	2.80	3.54	2.09	1.96	3.76	7.21	7.72	3.58	
March ...	5.63	2.38	1.77	2.97	2.30	1.71	3.54	2.19	2.03	2.25	
April ...	2.62	2.40	3.19	4.48	1.67	3.37	4.40	1.35	3.80	2.29	
May ...	3.66	2.43	2.26	3.53	3.09	1.50	1.01	4.94	1.24	1.78	
June ...	1.34	2.50	3.81	1.95	2.23	2.77	2.68	4.89	2.83	1.13	
July ...	2.73	2.91	3.71	4.17	1.72	4.71	4.25	3.57	2.24	6.10	
August ...	4.12	5.40	4.64	6.58	1.24	7.80	4.65	3.72	1.28	4.19	
September ...	2.86	3.19	4.33	4.51	1.94	4.34	4.19	4.07	2.26	2.93	
October ...	1.46	4.04	1.99	6.87	2.57	2.20	5.10	3.66	4.91	5.47	
November ...	9.77	1.94	5.33	6.16	2.82	1.75	1.95	1.31	4.10	7.48	
December ...	8.71	4.75	2.16	4.53	5.57	4.69	5.83	4.91	8.15	4.57	
TOTALS ...	52.05	39.00	37.50	51.67	28.70	42.21	41.26	45.59	34.83	47.97	
	n.p.										

1951. n.p. check. 1953. n.p. check. 1954. n.p. check.

1952. n.p. check.
1954. n.p. check. Rain barrel set in depression ground 1.17 deep approx 8'.
1955. overspread all directions. Gauge old bushy end. V-shaped on level earth platform built out end of road on slope facing N.E. (faller side). Correspond in all directions except N.W. 1956. n.p. over spread, check.1957. n.p. check.
1958. n.p. check.
1959. n.p. check.

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference 44600533797

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge.
1951			Haworth	10600'	E 7°5'	Haworth	9100' E 7 1/4° S

Summary of Earlier Records from 10-year Sheets :

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

Station No. 3289/1

51

RAINFALL at ⁸ Haworth (Oldfield Tunnels) No. 2.

County of West Riding - Yorks.

Observer

G. E. V. Balding Esq.

River Basin. Ouse - Aire - 9

Craven Water Board (1/4/60)

Type of Gauge. Snowdon Chalka K.O. 1637/33

Annual Average..... in. based on..... years obs. un-weighted. Period of average..... Ref.....
 " " 48.68 " " 22 " W.I.T.C. 1934-57 " " 1916-50 " " S
 File No. 744.053/27.

Diameter	5"	074	894									
Height	1'0"			1								
Altitude	978'			51								
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	
January	4.70	5.28	1.63	4.04	2.31	5.38	3.98	4.14	4.02	6.57		
February	4.19	1.58	2.78	3.24	2.03	1.99	3.57	7.14	.81	3.88		
March	5.14	2.34	2.21	3.07	2.35	2.12	3.61	2.27	2.21	2.18		
April	2.78	2.90	3.58	.64	1.57	3.23	.41	1.90	4.18	2.99		
May	3.90	2.68	2.40	3.90	3.59	1.68	1.23	5.92	1.52	1.86		
June	1.54	3.02	4.08	2.31	2.72	3.56	2.97	5.38	3.47	1.32		
July	3.02	2.86	4.30	4.97	.82	5.10	4.99	3.95	2.61	6.57		
August	4.36	5.78	4.30	8.12	1.28	9.96	5.61	3.77	1.51	4.69		
September	3.99	4.12	4.05	4.78	2.39	4.35	5.37	4.52	.30	3.05		
October	1.44	4.77	2.15	7.72	3.30	2.52	5.75	4.19	5.56	5.70		
November	10.05	2.20	5.61	7.20	2.98	1.75	2.49	1.76	5.19	8.17		
December	9.74	4.67	2.35	6.48	6.19	5.17	6.03	5.38	9.35	5.98		
TOTALS	53.85	42.20	39.44	56.42	31.53	46.81	46.01	50.32	40.73	52.96		
	D	D	D	D	D	D	D	D	D	D		

Site: In open field 500' on concave slope. Buttercup grass at ground level with bramble base. Stone wall.

About 60' lower than original site in natural hill side below peak of 3329'. Some shelter S-W-S-E by stone walls & turf wall back buttercup grass slope is to S-W.

Aspect NNE.

Stone wall

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference ..440.233.79

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge.
1951			Haworth	10000' E 7°S	Haworth	9100' E 7½°S

Summary of Earlier Records from 10-year Sheets :

Record D. or d	1910-19	1920-30	1931-40 (1)	1941-50 (2)	1951-60
			Camp 1923 ✓ ✓	✓	