

RAINFALL AT Winterburn Brown HillLat. 51° 3' 9"Lon. 2° 5' 59"County of YorkCauseway 9
Old Gauge

Rain Gauge, by

Observer Leeds Liverpool Canal Co
R. H. W. G.

Diameter							8				
Height							1.0				
Altitude							961				
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January								2.29	2.16	2.24	
February								1.63	.41	1.92	
March								1.47	1.95	3.40	
April							# 2.81	1.66	2.07	2.30	
May							4.27	2.46	1.32	2.28	
June							2.00	22	2.54	.54	
July							4.50	1.82	5.63	3.96	
August							2.08	2.17	4.86	7.40	
September....							4.27	6.72	1.68	2.19	
October							5.64	2.78	1.49	4.95	
November....							4.51	2.91	6.67	1.80	
December							4.47	2.44	2.66	3.05	
TOTALS ...								28.57	33.44	36.03	

Lat. 51° 3' 9"Long. 2° 5' 59"

RAINFALL AT Winterburn Brown Hill

 Lat. 54° 3' 9"

 Lon. 2° 5' 59"

 County of York

 Course Aire G
Old Gauge

Rain Gauge, by _____

 Observer Leeds Liverpool Canal Co
R. White

Diameter	8										
Height	1 0										
Altitude	961										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	6.16	3.11	3.01	1.40	5.08	1.84	2.22	1.10	4.07	7.74	3.673
February ....	.60	.56	1.91	5.69	7.37	.64	2.30	3.89	4.01	2.79	2.976
March	3.71	2.16	.49	1.17	4.72	4.69	6.27	5.76	2.03	2.60	3.260
April	1.45	1.81	2.10	.71	1.96	2.66	2.42	2.48	2.97	4.52	2.208
May	2.66	2.01	4.71	2.42	2.12	.77	.45	2.59	2.51	3.56	2.280
June	4.02	1.31	4.23	2.46	2.83	2.37	2.70	4.09	3.99	1.49	2.949
July	3.93	5.29	2.57	3.88	4.13	6.12	3.48	1.88	1.16	2.36	3.480
August	6.87	9.52	8.29	4.82	4.39	5.15	1.90	8.44	6.46	1.73	5.757
September....	3.30	3.68	4.05	4.62	.31	2.23	7.25	5.16	1.29	6.48	3.825
October	3.26	4.24	6.03	5.50	4.97	5.99	3.93	2.41	4.67	3.07	4.407
November....	6.10	5.02	2.97	2.72	3.49	3.67	1.29	3.98	2.83	3.74	3.581
December ....	.61	7.75	2.04	4.27	4.64	4.74	5.25	5.86	5.36	3.39	4.291
TOTALS	42.67	46.44	42.40	39.66	46.01	40.87	40.46	47.64	41.35	43.47	40.077

RAINFALL AT Winteshorn Brown HillLat. N 54° 3' 9"Lon. W 2° 5' 59"County of York W.R. Central

Rain Gauge, by

Observer Leeds & Liverpool Canal CoR.H. White EsqCuse-Aire 9

Diameter ..	8										
Height	1.0										
Altitude ..	961										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	5.13	1.81	2.44	5.12	4.12	2.55	5.62	2.12	4.37	2.14	3542
February ..	2.48	1.90	1.42	5.16	2.79	2.58	3.46	2.72	3.33	2.28	2812
March ....	.39	2.80	2.67	7.40	2.49	3.60	3.52	4.11	3.77	2.63	3333
April	2.75	2.45	1.82	2.69	3.64	3.70	1.25	2.61	2.74	4.05	2770
May	1.81	1.22	2.50	2.73	3.45	.57	5.19	4.09	3.25	2.68	2749
June	3.87	1.65	1.17	1.92	1.59	2.82	2.29	6.99	1.67	3.06	2703
July	3.08	1.31	3.82	4.56	2.44	1.61	1.87	2.98	5.88	6.05	3360
August	5.91	3.57	2.68	5.17	4.16	3.89	4.74	4.54	3.79	3.94	4235
September ..	1.62	1.85	1.81	5.08	1.09	3.53	1.45	.92	4.81	3.39	2555
October	7.02	2.71	3.90	10.46	1.84	3.37	8.23	4.78	3.07	5.06	5044
November ..	5.36	5.03	2.45	3.23	3.45	4.40	5.24	3.78	3.43	2.35	3872
December ..	5.50	4.84	3.58	2.74	3.45	1.48	3.42	6.20	3.25	5.88	4034
TOTALS ..	44.92	31.14	30.23	56.26	34.50	34.10	46.28	45.84	43.36	43.51	41.04

H. H. H.

RAINFALL at

Winterton Brown Hill

County of W Yorkshre

Observer Leeds & Liverpool Canal Co

River Basin Ouse Aire 9

Rain Gauge, by

Diameter ...	8										
Height	10										
Altitude ...	961										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	6.36	1.56	3.99	4.32	4.29	6.87	5.93	2.41	4.18	4.54	
February ...	5.06	6.09	2.30	2.43	3.42	5.04	5.29	1.07	7.00	1.57	
March .....	.85	2.26	5.75	5.63	5.76	2.00	2.30	2.19	1.62	4.11	
April	2.92	2.44	1.40	4.00	1.26	2.20	3.17	2.04	.91	2.38	
May	1.93	2.38	2.05	3.01	2.44	1.25	2.67	1.92	2.12	1.55	
June	3.86	3.11	6.78	2.71	2.17	1.49	2.62	3.40	1.49	1.41	
July	3.78	.89	5.49	1.29	4.03	4.66	4.40	1.95	7.25	2.62	
August	5.88	3.55	5.55	1.96	3.55	3.85	5.03	8.83	5.03	3.58	
September ..	.46	4.25	2.65	1.84	2.41	.94	2.96	3.20	11.31	2.40	
October ...	4.38	3.95	4.59	1.94	2.01	1.15	11.68	5.88	4.10	2.57	
November ..	3.73	5.26	4.12	5.65	6.28	1.83	3.90	4.82	2.31	3.77	
December ...	4.49	5.79	6.12	3.16	7.40	5.93	3.31	2.54	7.23	6.82	
TOTALS ...	43.70	41.52	50.79	37.95	45.42	37.21	53.16	40.25	54.55	57.25	

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	54.29 N	2.59 W						

RAINFALL at Winteburn Brown HillCounty of W. R. YorkshireObserver Leeds & Liverpool Canal CoRiver Basin Ouse-Aire &R. Davidson Eng.Glaisher Rain Gauge, by (127)

Diameter ...	8											
Height	1 0											
Altitude ...	961											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
January ...	5.16	8.85	4.01	4.83	3.69	4.82	5.56	5.44	9.96	2.60	7.28	
February ...	4.10	4.4	4.98	6.21	1.06	6.02	5.53	2.14	5.81	.88	.56	
March	3.89	4.23	3.41	2.52	1.52	1.05	1.85	3.89	3.44	.67	2.80	
April	5.02	1.38	2.48	3.69	1.68	3.53	1.50	4.74	1.07	1.72	3.02	
May	5.63	2.05	1.18	3.98	6.97	4.88	3.98	2.55	1.27	2.40	1.95	
June	2.11	.58	2.96	1.06	2.23	.13	2.19	3.88	6.06	1.87	2.10	
July	8.41	3.14	6.06	5.25	5.44	2.23	3.99	7.44	2.53	3.85	4.72	
August	3.42	6.34	4.48	6.90	6.75	5.78	4.85	7.41	8.83	6.22	5.44	
September...	2.53	2.95	5.13	5.39	5.18	3.68	3.74	6.44	1.10	1.89	3.00	
October	2.62	3.08	.94	8.40	4.84	5.93	4.27	5.23	6.29	6.34	6.90	
November...	3.62	2.97	2.61	6.40	3.87	2.17	7.43	5.29	6.93	7.01	5.46	
December...	4.53	7.94	4.02	3.78	5.86	4.03	2.18	1.50	3.43	3.74	3.70	
TOTALS...	51.04	43.95	42.26	58.41	49.09	44.25	47.07	55.95	56.72	44.19	46.93	

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	52° 3' 9"	2° 5' 59"						

RAINFALL at Winterburn (Brown Hill)County of West Riding Observer Leeds & L'pool Canal Co.River Basin Ouse Aire - 9.Type of Gauge GlaisherAnnual Average 42.8 in. based on 44 years obs. un-weighted. Period of average 1881-1915 Ref 5

749124/27

Diameter	9.										
Height	1.0.										
Altitude	961.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	4.34	6.03	3.48	4.81	1.63	3.50	3.30	6.68	5.37	.85	
February	5.29	.25	4.15	.34	5.54	2.10	6.06	1.83	4.10	2.35	
March	.66	3.68	2.65	3.20	1.33	2.12	2.10	1.46	2.28	3.43	
April	3.86	4.64	2.68	3.22	3.50	1.10	2.92	.83	1.78	2.19	
May	3.40	4.06	2.65	3.64	.87	.92	2.90	2.85	.80	1.10	
June	8.51	2.74	2.78	2.97	3.25	3.85	2.18	4.73	3.12	.74	
July	4.38	7.81	4.60	3.28	1.67	4.59	2.96	4.48	7.35	5.00	
August	4.35	1.63	1.85	4.15	1.86	3.60	1.70	4.40	2.62	2.14	
September	2.81	5.90	2.01	3.03	7.36	5.27	2.38	1.55	1.40	5.90	
October	2.66	7.65	4.34	5.63	7.24	3.95	3.95	11.58	2.07	3.92	
November	8.45	4.35	2.35	1.40	3.80	2.99	.80	5.21	5.96	6.60	
December	3.05	2.74	0.98	6.25	2.20	4.04	1.86	4.05	3.36	5.42	
TOTALS	52.26	51.48	34.52	41.92	40.25	40.03	33.11	49.65	40.51	39.64	
						n.p.	n.p.	n.p.	n.p.	n.p.	

1937 n.p. low

1939 n.p. low.

1940 Reasonable.

Record will not be printed till after inspection 25.11.39 (9 min 39)

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	Parish Church.	Distance from gauge	Direction

Station No. 3311

RAINFALL at Winterburn (B. Raven Hill)

41

County of West Riding Observer Heald & Tipol Canal Co.River Basin Cuse Aire - 9 Dares & Inland WatershedsType of Gauge Colaisken Snowdon ✓ 1949Annual Average 42.2 in. based on 44 years obs. un-weighted. Period of average 1881-1915 Ref. 5File No. 7491124/27

Diameter	8"			0.73	812							
Height	1' 0"				1							
Altitude	961'				41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	(1.23)	3.71	5.96	5.26	2.88	3.72	(5.00)	8.48	2.00	2.87		
February	3.50	1.60	3.15	1.62	5.43	4.21	(4.00)	3.47	3.61	6.44		
March	3.15	2.51	1.49	.55	1.55	1.27	(8.00)	1.55	1.76	2.07		
April	1.60	1.86	2.53	3.00	3.49	1.45	4.05	2.49	4.64	3.18		
May	1.92	3.11	3.02	2.15	4.38	1.50	3.41	2.04	2.23	2.02		
June	.65	.95	4.32	2.89	3.81	3.05	3.30	5.05	.98	3.06		
July	1.60	4.27	2.63	4.11	2.52	4.54	3.38	1.02	4.00	4.19		
August	6.06	4.35	5.97	1.73	3.40	6.50	.26	4.42	2.87	7.00		
September	.56	2.86	4.41	7.15	3.35	6.85	3.13	4.26	1.00	6.10		
October	6.06	4.56	2.78	4.36	6.27	1.70	1.31	1.99	5.80	3.24		
November	3.08	1.62	2.97	6.80	.46	5.88	6.30	2.69	6.36	5.28		
December	2.73	4.06	2.59	3.74	2.93	3.15	2.79	3.10	7.75	1.73		
TOTALS	32.14 n.p.	35.46 n.p.	41.82 n.p.	42.86 n.p.	40.47 n.p.	43.82 n.p.	(44.93) n.p.	40.56 n.p.	43.00 n.p.	47.17 n.p.		

Record will not be printed until after inspection. 25.11.39
(min 29)

1941 n.p. low. Jan con'd for snow.

1942 n.p. low.

1943 n.p. low

1944 n.p. low

1945 n.p. low.

1946 n.p. low. 1947 n.p. low. Jan. Feb. Mar. ext'd for snow

1947 Eng. unable to account for low readings, but record will not be printed in B.R. 1947

1948 n.p. low.

1950 n.p. 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	Parish Church.	Distance from gauge.	Direction
June 1947.			Rylstone	4 1/2 mi.	S.E.	Kirkby Malham	4 mi.	S.

BRITISH RAINFALL ORGANIZATION

Station No. 3311RAINFALL at Winterburn (Brown Hill)

51

County of West Riding - Yorks.Observer Locks Inland WaterwaysRiver Basin Cuse - Wic - 9Type of Gauge SnowdonAnnual Average 42.8 in. based on 44 years obs. un-weighted. Period of average 1881-1915 Ref. 15File No. 670000/26 E 16 427/53
749/124/27

Diameter ...	8"		073	812							
Height ...	1'0"			1				10"			
Altitude ...	961'			51							
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	4.22	3.34	1.13	3.52	2.24	3.60	4.54	4.50	3.85	5.33	
February ...	2.82	1.15	1.70	4.30	1.69	1.40	3.60	^{NO} 2.60	1.60	2.32	
March ...	3.58	3.24	.85	2.61	2.06	(2.00)	3.90	2.17	1.72	1.64	
April ...	3.53	2.57	2.30	1.07	2.09	2.20	.54	1.73	3.30	2.33	
May ...	2.23	2.10	2.16	3.39	3.85	2.25	1.94	6.62	.64	1.80	
June ...	1.58	2.86	2.98	3.71	2.93	3.08	2.30	6.34	2.16	1.86	
July ...	2.98	2.09	5.78	5.25	.89	5.33	3.92	3.82	2.81	8.13	
August ...	4.23	5.93	6.32	6.57	1.26	(10.44)	6.11	5.74	.54	5.03	
September ...	3.50	3.69	3.53	6.06	2.50	4.27	6.00	5.15	.32	2.88	
October ...	1.84	3.97	1.95	10.15	2.82	2.50	6.20	4.87	4.77	4.96	
November ...	8.68	2.25	4.87	6.07	2.28	1.38	2.39	2.47	5.20	9.74	
December ...	7.54	3.45	2.06	5.28	5.78	(4.57)	3.91	5.82	5.61	5.64	
TOTALS ...	46.73	36.64	35.63	57.98	30.39	(43.02)	45.35	we	31.52	51.66	
	W	W	W	W	W	W	W	W	W	W	

1951. print

Farm house 20' high 1 1/4 NW.

1956 Farm house 20' at 1 1/2 miles W. Aug. March. Dec. print est. Eng. agrees.

1957. 1958. 1959. 1960. Over-arched site. Top water requires measurement.

1957 np low

1958 np inc

1959:- np low & unreliable.

1960 print.

An. av. 44.75 in. based on 34 yrs. obs. within 1916-57. 4 in. low period of W. 1916-50.5 - Rejected.

Position of Station on Ordnance One-Inch map:

No. of Map 90National Grid Reference SD 934 618

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1951.			Ryestone	4 1/2 m SE.	Kilby malham	S

Summary of Earlier Records from 10-year Sheets:

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	✓	✓	✓ np 37-40	Unp +1-48, 50	