

RAINFALL AT EntwistleObserver Bryls

Rain { By

Gauge Diameter in. Height above Ground, 0 ft. 0 in. Above Mean Sea Level, 700 ft.

YEAR.....						1868	1869	MEANS.
January						2.90	4.30	
February						4.20	8.30	
March						6.30	2.00	
April						2.00	3.40	
May						1.00	3.20	
June						10	2.10	
July						30	1.60	
August						5.40	4.20	
September						2.40	10.10	
October						9.30	5.80	
November						4.40	7.80	
December						11.60	5.60	
TOTALS						49.90	58.40	

C C

1869 Correction sent by R. H. Swindellhurst 286.80

RAINFALL AT Entwistle.

Lat.....

Lat.....

County of Lancashire.

Long.....

Long.....

Observer H. Baylis Esq.

Rain Gauge, by.....

Diameter					6			7		6	
Height	0 .0				1						
Altitude	700.				700						
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January	5.50	1.60	7.60	6.60	6.30	6.50	3.10	8.00	5.40	1.80	5.240
February	7.90	5.00	4.30	4.80	2.40	1.20	6.00	7.50	2.10	3.80	3.500
March	4.00	1.00	6.10	4.00	6.30	1.30	5.00	4.00	2.50	2.80	3.780
April	2.50	3.80	3.50	3.30	2.00	1.30	3.00	2.60	2.40	2.40	2.380
May	2.40	2.00	3.50	3.30	2.20	2.70	7.0	7.0	3.90	6.00	2.20
June	2.10	3.30	5.70	3.20	1.00	4.90	4.70	2.80	3.60	6.70	3.800
July	2.00	6.70	5.70	7.50	4.60	5.80	4.30	7.20	1.70	8.80	5.420
August	3.50	2.20	5.20	6.50	8.50	3.30	6.90	6.10	7.40	9.90	5.950
September	4.30	4.70	9.80	3.50	5.70	6.40	4.80	4.50	7.30	4.60	5.560
October	[†] 17.10	7.00	7.10	7.60	8.30	7.10	3.90	6.90	6.20	4.60	7.580
November	4.70	1.80	6.10	6.00	7.30	5.70	4.30	8.60	2.90	1.50	4.890
December	4.00	4.10	4.50	2.20	3.70	2.50	8.50	5.60	2.80	2.50	4.040
TOTALS	54.00	4400	69.10	51.30	5830	48.70	55.20	67.70	50.30	51.60	53.040

C C C

1870 Correction sent by R.H. Swindlemurst 28.6.80

RAINFALL AT Culwistle**80**

Lat.

Lon.

County of Lancashire

Rain Gauge, by

Observer R. H. Grindelhurst, Esq.
C.E.Inwell 3

Diameter	7										
Height	1.0										
Altitude	700										
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	2.90	1.10	5.00	7.50	5.70	3.50	7.00	2.20	2.90	2.50	4.030
February	4.10	7.60	3.40	3.70	4.00	4.90	7.0	1.70	1.30	3.60	3.520
March	3.10	6.10	5.60	1.40	3.20	2.90	4.10	2.40	3.90	2.60	3.530
April	3.40	1.80	6.50	2.50	1.50	2.70	2.80	2.10	2.50	2.70	2.850
May	2.80	6.80	2.90	1.30	2.60	2.20	4.70	3.00	.80	4.40	3.150
June	4.20	2.80	7.80	4.60	1.20	4.70	3.20	.80	2.60	1.10	3.300
July	6.20	7.20	8.00	4.30	5.90	2.40	5.60	1.60	8.70	4.70	5.460
August	2.50	7.80	6.30	4.50	2.10	2.50	3.70	1.80	5.30	8.50	4.500
September	5.50	3.20	3.00	9.40	4.00	7.90	5.10	6.90	2.10	5.80	5.290
October	3.10	3.90	4.50	6.50	3.50	8.40	6.00	2.90	2.90	4.30	4.600
November	7.20	6.00	9.60	5.40	1.80	5.20	4.20	2.30	8.10	2.80	5.260
December	8.50	7.50	4.70	5.60	7.00	3.00	7.40	3.60	3.60	5.70	5.660
TOTALS	53.50	61.80	57.30	56.70	42.50	50.30	54.70	31.30	44.70	48.70	51.150

RAINFALL AT Entwistle

Lat.

Lon.

County of

Lancashire

Rain Gauge, by

Observer

R. H. Middlehurst Esq. C.I.

Irwell 3

Diameter	7										
Height	10										
Altitude	700										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	7.80	3.50	5.20	1.70	4.00	3.60	2.70	1.80	4.80	8.23	
February40	.50	3.70	7.30	7.30	.40	2.00	3.70	4.20	2.12	
March	5.40	2.40	.80	1.80	5.60	5.70	9.70	5.70	3.10	3.20	
April	1.50	2.40	1.50	.50	2.10	2.50	2.20	3.90	2.10	5.78	
May	3.20	4.10	5.00	2.30	3.90	1.20	.50	2.40	3.60	3.65	
June	4.30	2.50	4.30	3.00	3.90	2.30	3.50	5.60	3.80	4.19	
July	4.60	4.90	3.80	3.90	5.20	6.40	3.80	2.20	1.00	3.71	
August	6.10	12.20	6.40	4.00	6.80	5.90	3.60	6.00	7.80	7.85	
September	2.30	4.70	5.90	7.30	.50	2.00	11.40	6.60	1.60	8.04	
October	6.00	6.00	5.90	5.80	5.20	5.70	6.60	3.20	4.90	6.42	
November	13.90	5.40	3.90	5.40	5.60	4.30	2.00	4.80	4.00	2.97	
December50	12.00	3.80	5.90	5.90	5.50	7.80	7.70	6.50	6.01	
TOTALS	56.00	60.60	50.20	48.90	56.00	45.50	55.80	53.60	47.40	49.17	52.31 ¹⁷

new 3

1890 discontinued See New Range

new gauge used

RAINFALL AT Entwistle

Lat.

Long.

County of

Lancashire

Inwell 3

Rain Gauge, by

Observer

R. H. Swindlesham Esq C.E.

New Gauge

Diameter				5							
Height				10							
Altitude				700							
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January					1.99	4.48	3.83	2.40	1.75	4.28	8.23
February					6.52	6.43	.36	1.84	3.62	4.44	2.12
March					1.63	4.96	5.25	8.57	5.39	3.34	3.20
April68	2.44	2.44	2.37	3.74	2.25	5.78
May					2.40	4.05	1.41	.69	2.54	3.74	3.65
June					3.08	3.84	2.46	3.46	5.58	4.06	1.19
July					3.94	5.20	6.38	3.77	2.32	1.12	3.71
August					4.27	6.01	5.83	3.49	6.05	7.66	1.85
September....					6.64	.56	2.05	10.85	6.40	1.70	8.04
October.....					5.88	5.04	6.24	6.42	3.19	4.98	4.42
November....					4.55	5.54	4.11	2.00	4.61	4.17	2.97
December....					5.57	5.40	5.36	7.30	7.49	6.52	4.01
TOTALS . . .					47.16	53.95	45.72	53.16	52.68	48.26	49.17

RAINFALL AT Entwistle Res.

Lat.

Lon.

County of Lancashire South

Sondior Rain Gauge, by Parcella

Observer R. H. Windlehurst Esq C.E.

Gravel 3 ft sq

Lewis Mitchell Esq C.E.

Diameter ..	5										
Height	10										
Altitude ..	700										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	8.25	3.90	5.28	5.10	5.31	2.70	7.50	2.54	4.56	3.00	4.814
February ..	4.40	2.04	2.24	5.16	4.60	3.00	4.53	4.88	4.90	3.06	3.881
March76	4.95	3.50	6.27	2.96	4.56	4.62	2.86	4.00	3.98	3.846
April	3.51	3.54	3.46	2.57	3.41	4.33	2.61	2.49	2.83	4.34	3.309
May	2.32	1.60	4.02	5.23	3.18	.80	4.73	5.39	3.89	3.14	3.430
June	4.29	2.77	1.75	2.42	1.80	2.98	2.07	10.17	2.06	3.69	3.430
July	3.06	3.17	5.07	4.75	2.10	2.87	2.54	3.96	6.33	7.58	4.143
August	6.08	3.50	4.34	7.32	5.21	6.31	4.83	5.74	4.31	3.66	5.130
September ..	3.24	1.43	2.74	6.62	2.07	3.25	2.04	1.58	5.38	3.99	3.234
October	8.22	5.35	6.37	11.89	3.60	4.77	7.92	4.23	2.60	8.07	6.302
November ..	6.10	7.34	3.91	4.76	4.87	5.21	5.16	3.94	4.16	2.33	4.878
December ..	7.67	6.17	4.58	3.71	3.99	1.38	5.80	5.48	4.02	8.40	5.118
TOTALS ..	57.90	45.76	47.26	65.80	43.08	43.16	54.35	53.26	49.34	55.24	51.515

1907 St Anne Ch Tiverton 2 Miles

Hub

+ Inspected

RAINFALL at Entwistle Reservoir

County of South Lancashire

Observer Lewis Mitchell Esq C.R.

River Basin Merson Tricell 3

Snowdon Rain Gauge, by

+ Impacted

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
53°39' 3"	22°54' 4"	Estevanette		1/4 mi	N.E.	St. Anne's Burton	1 1/2 mi	S.S.E.

2880
20
(2881)

RAINFALL at Entwistle Reservoir

County of S. Lancashire) Observer J. H. Swales Esq. G.E.

River Basin Mersey-Trevel 3 *unwsp. Below*

Snowdon Rain Gauge, by Casella
S.E. patt. ('20) 1930. J.P. Ainsworth, C.E.

Diameter ...	5"						Sig. No. 10.	36-562096			
Height	1	0					N.G.R.	SD (34)	725173		
Altitude ...	700						alt.	213m			
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEANS.
January ...	5.61	8.58	5.31	5.95	4.69	4.06	7.03	6.20	14.59	2.71	7.83
February ...	4.53	6.24	6.53	8.27	1.62	8.06	5.89	2.89	6.17	1.70	.54
March	4.75	4.21	3.86	2.32	2.16	2.46	3.01	7.18	14.07	2.06	3.15
April	6.69	2.63	2.79	4.15	2.99	3.80	2.12	4.65	1.62	1.71	2.89
May	7.60	3.75	2.57	4.91	6.56	5.43	4.84	2.17	1.39	4.03	4.18
June	3.31	5.54	3.86	1.47	3.75	1.16	3.86	6.41	8.18	2.19	2.80
July	8.01	2.34	5.49	5.45	6.01	2.66	3.92	5.29	2.91	14.48	6.06
August	3.59	6.60	6.56	7.05	10.13	5.50	6.08	8.33	8.19	6.74	8.91
September...	3.66	1.94	5.84	6.46	6.10	5.90	5.35	8.06	1.25	3.01	4.44
October.....	1.72	3.48	.88	8.35	6.49	6.62	5.00	5.99	7.23	9.38	8.67
November...	2.87	3.73	4.99	7.98	3.42	4.29	8.80	6.60	8.84	10.91	8.99
December...	4.23	7.53	6.43	6.95	7.12	4.17	2.45	1.68	4.31	10.14	6.50
TOTALS...	56.57	45.97	55.11	69.41	61.04	53.41	58.35	65.45	68.78	59.06	63.36
	3	4	2	5	3	2	3	2	1	2	4

IX | 28 Inspected by Mr Colless. 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.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
1920	53°39'3"	2°25'4"	Entwistle	1/4 mi	N E	St. Annes Turton	1 1/2 mi	SSE.

RAINFALL at Bolton N.W. Lancashire No. 2

County of Lancashire

Observer Mr. J. K. Stokes Esq. C.E.

River Basin Mersey Gravel 3

1920-1929 Rainworth Esq. C.E.

Rain Gauge, by

Diameter										5"	
Height										1'	
Altitude										692.	
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
January										2.73	7.29
February										1.70	.56
March										2.05	3.19
April										1.75	3.00
May										14.06	4.16
June										2.18	2.81
July										4.52	6.10
August										6.72	8.99
September										3.06	4.49
October										9.42	8.56
November										10.95	8.92
December										10.14	5.56
TOTALS										69.46	59.31
											63.63

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

3880

RAINFALL at Bolton W.W. (Enkinstle).

County of South Lancashire.

Observer Bolton Corp. W.W.

River Basin Mersey - Irwell - 3.

Type of Gauge.

Annual Average 51.9 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. Bost.

Diameter	5.										
Height	1.0.										
Altitude	700.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January											
February											
March											
April											
May											
June											
July											
August											
September											
October											
November											
December											
TOTALS											
	X	Terminated									

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

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

RAINFALL at Bolton W.W. (Entwistle) No. 2

County of South Lancashire

Observer Bolton Corp. W.W.

River Basin Mersey - Irwell - 3

Type of Gauge Snowdon

Annual Average 53.8 in. based on 10 years obs un-weighted. Period of average 1931-1945 Ref. F I.W.S.
(1939) 53.8 10 7419827.

Diameter	5'											
Height	1.0											
Altitude	692	700	692				700					692
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January	8.08	6.66	3.51	4.99	3.04	6.57	4.73	7.07	6.77	3.86		Total 562
February	6.85	.15	4.91	1.49	7.96	3.81	7.73	2.70	6.19	3.45		642
March	1.66	4.13	3.47	3.70	1.96	4.25	2.20	1.99	2.94	3.59		28.8
April	4.88	4.94	2.44	3.38	4.42	1.41	5.06	.97	3.62	3.42		34.0
May	3.40	5.81	2.35	5.32	1.80	1.31	2.20	5.19	2.25	.84		30.4
June	6.67	1.14	3.21	3.36	5.03	5.29	2.38	5.96	4.31	1.15		32.9
July	6.12	4.64	4.18	2.51	2.47	5.50	3.06	6.03	9.99	5.83		50.3
August	6.60	1.89	2.87	5.78	2.21	3.97	3.23	3.59	3.38	2.96		36.4
September	5.68	7.36	1.09	4.88	9.98	6.58	2.37	3.25	1.63	6.09		68.9
October	3.34	10.37	6.15	7.88	11.20	7.09	2.76	13.06	3.13	5.97		70.9
November	10.44	4.63	2.93	2.65	6.10	7.99	2.19	7.94	9.22	10.01		64.1
December	3.07	3.10	.86	8.61	5.39	6.21	3.72	6.22	4.03	7.00		43.2
TOTALS	65.29	54.82	37.97	53.55	61.56	59.98	41.63	62.97	57.46	54.17		550
	D	D	D	D	D	D	D	D	D	D		

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
1931			Entwistle	1/4 m.	NE	Junction	1/4 m	SSE.

Station No. T.F. 2881

RAINFALL at Bolton W.W. (Boltonwicke)

41

County of South Lancashire Observer Bolton Gauge W.W.

River Basin Mersey-Dovell-3

Type of Gauge Standard

Annual Average 53.8 in. based on 10 years obs. un-weighted. Period of average 1881-1915 Ref. 1-W.S.

File No. 741918/27

Diameter	5"	567	095								
Height	10"		1								
Altitude	692'		41700		700						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	1.64	6.85	7.24	7.62	4.84	6.11	4.77	11.91	3.69	4.73	Total 59.40
February	6.14	2.11	3.53	3.00	7.03	8.00	.95	3.93	3.74	6.10	44.53
March	4.07	4.67	1.60	.90	1.94	1.15	7.90	2.45	2.55	3.24	30.47
April	1.88	2.77	3.25	3.54	3.00	1.50	4.63	2.68	5.22	4.28	32.80
May	3.48	4.23	4.04	4.53	4.69	1.99	3.24	2.38	4.08	2.34	34.98
June	.61	.79	5.46	3.74	5.95	4.25	3.56	8.13	1.08	3.01	36.58
July	2.94	6.85	4.06	4.62	3.89	4.38	3.61	2.99	2.38	5.74	41.49
August	4.84	6.53	8.93	4.26	3.79	8.77	.24	6.10	3.79	8.33	58.61
September	1.48	3.38	5.48	7.58	4.11	8.88	4.17	4.04	2.54	10.53	52.79
October	5.80	9.20	4.37	7.25	7.26	1.40	1.27	4.01	5.57	3.97	50.10
November	3.60	1.69	5.39	9.19	.81	9.40	7.08	3.89	7.85	8.30	56.20
December	3.20	6.01	3.48	5.65	4.23	4.95	4.32	5.26	8.58	4.13	49.81
TOTALS	42.72	55.68	56.83	61.88	5.54	60.78	45.79	56.77	51.07	64.70	547.76
	D	D	D	D	D	D	D	D	D	D	92

7.2.44 Improved static gauge round & capillary connected.
Dec. 1941. Improved static gauge connected.

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
1941			Boltonwicke	1/4 m.	N.E.	Turton	1/4 m.	S.E.

Station No. 2881

Tr. 36

RAINFALL at Bolton 11.10 (Entwistle)

County of Lancashire

Observer Bolton 11.10

River Basin Mersey - Irwell - 3

Capacitive Watermark

Type of Gauge Clawson

Annual Average 53.8 in. based on 10 years obs. un-weighted. Period of average 1881-1915 Ref. I.W.S.
 52.4 20 1916-1950 File No. 741918/27 P
 56.41 35 -

Diameter	5"			562	095							
Height	1' 0"		1' 2"			1' 1"	1' 0"					
Altitude	700'				51							
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	Total
January	5.70	5.57	2.42	5.44	3.35	6.54	4.51	5.11	3.87	7.81	50.32	
February	3.71	2.29	1.83	4.19	2.85	1.28	3.99	9.01	.86	4.45	34.46	
March	5.70	3.10	3.08	3.53	2.52	1.93	4.75	2.65	2.48	1.59	31.33	
April	3.11	4.70	3.80	1.09	3.65	3.49	.96	2.00	3.88	3.06	30.34	
May	2.33	2.98	2.74	3.39	5.46	2.32	2.25	5.72	1.46	2.81	31.46	
June	1.68	4.76	3.28	4.15	4.20	3.23	2.54	4.88	3.09	1.62	33.38	
July	4.07	2.85	7.38	8.59	1.46	7.24	7.71	4.38	5.49	10.20	59.37	
August	5.97	6.27	5.57	7.32	1.88	13.50	7.95	4.95	.56	6.52	60.49	
September	4.30	5.75	6.00	6.65	5.21	4.35	9.35	5.34	.46	4.08	51.49	
October	.81	6.06	2.39	10.55	3.26	3.98	8.26	5.83	6.19	5.55	52.88	
November	9.91	3.35	6.88	3.92	2.97	2.22	2.58	2.46	6.06	9.05	54.40	
December	11.63	5.30	2.33	8.33	4.22	5.26	6.57	5.43	11.23	6.38	69.68	
TOTALS	58.92	52.98	47.65	72.15	44.03	55.34	61.42	57.76	45.63	63.72	559.60	
	D	D	D	D	D	D	D	D	D	D		

Int. 7.10.53. G. sound. 40' to E ground drops into 15' culvert. Culvert plantations other side of culvert 100 yards from g. Ground drops slightly to fence 90' west then rises to Turber heights. 12' pole 15° SE.

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference SD724173

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge.
1951			Entwistle	1/4 m. NE.	Linton	1 1/4 m. N.E.

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
			C1928 A28	✓	✓	✓