

RAINFALL AT *Grassholme Reservoir [Middletown]*

Lat. Lon. County of *York N.R.*

Copied from Rain Gauge, by Observer. *D.D. Wilson Esq.*
Year 6.

Diameter ..			8							5	
Height			10								
Altitude ..			936 ft								
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..			+								
February ..			2.76	6.63	4.39	1.77	5.31	2.40	2.65	3.24	
March			1.15	5.88	3.14	2.20	2.22	3.01	4.59	3.51	
April			2.55	5.78	2.68	2.98	3.03	3.76	5.74	5.45	
May			2.02	1.88	2.76	3.59	1.44	1.76	2.70	3.05	
June			2.73	2.91	3.47	.52	4.25	4.54	3.22	1.71	
July			1.22	1.51	1.80	1.08	1.06	4.97	1.73	3.04	
August			3.82	4.07	2.44	.93	2.01	2.83	2.63	3.34	
September ..			3.08	5.02	3.09	5.48	4.01	3.14	3.31	3.03	
October			1.93	4.04	1.11	3.07	.83	.56	4.15	2.37	
November ..			3.69	10.61	1.47	2.16	5.42	6.17	3.47	4.11	
December ..			3.17	2.74	4.67	5.08	4.94	2.78	2.59	1.50	
			4.91	3.10	3.00	1.77	3.64	6.41	1.84	5.82	
TOTALS ..			33.03	54.17	34.02	30.63	38.16	42.33	38.62	40.17	

1902 Middletown in Teesdale Church 3 1/2 miles NE
 1905 Muckleton Station 2 miles E

+ Inspector

RAINFALL at Lunedale Grassholme ReservoirCounty of N.R. YorkshireObserver Hugh Wilson EsqRiver Basin Tees 6Copper Smelter Rain Gauge, by _____

Diameter ...	5											
Height	10											
Altitude ...	936 ft											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS. 1910-19 Totals	
January ...	6.00	1.90	3.67	5.14	3.94	4.99	4.95	4.40	4.78	4.54	18.49	
February ...	5.31	5.49	2.71	2.50	5.21	4.82	6.00	1.22	5.41	1.92	14.55	
March	1.61	2.34	3.95	6.84	3.80	1.17	5.02	2.97	1.46	5.24	14.69	
April	3.21	2.77	.66	4.23	1.72	1.88	2.13	2.40	1.17	1.78	7.48	
May	2.53	1.79	2.60	3.20	1.94	1.50	3.53	1.90	2.21	1.57	9.21	
June	1.10	2.74	6.90	2.15	3.31	.42	2.35	1.75	1.23	1.15	6.48	
July	2.67	.91	4.24	1.26	1.83	2.93	2.96	1.11	5.36	2.24	11.67	
August	6.43	3.14	5.48	1.11	2.48	3.48	2.59	7.58	3.85	2.85	16.87	
September ..	.42	2.52	2.75	3.49	2.27	1.00	2.14	2.25	8.82	2.38	15.59	
October ...	3.68	4.00	4.13	3.20	2.15	1.03	7.20	5.51	3.29	4.38	20.38	
November ...	3.44	5.45	3.38	3.90	7.35	2.33	5.07	3.59	2.65	4.69	16.00	
December ...	4.14	6.33	6.26	3.16	7.95	7.28	4.09	2.51	4.93	5.36	16.89	
TOTALS ...	41.54	39.38	46.83	40.18	43.95	32.83	48.03	37.10	45.16	37.92	168.30	

† Inspected

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
1911			Thickleton ^{ch}	3 1/2 mi	NE	Huddleton ^{Station} Teesdale	3 1/2 mi	NE

RAINFALL at Lunedale Grassholme ReservoirCounty of N. Yorks Observer Hugh Wilson EsqRiver Basin Tees 6 J. S. CalvertGauge Snowdon Rain Gauge, by S. R. Collinson (1924)
Tees Valley Water Bd
Elms, Camden 1780 1726

Clim. Canada 1900-1929													
Diameter ...	5"												
Height	10												
Altitude ...	936												
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS:	1920-30 Totals	
January ...	6.42	5.76	5.00	3.32	3.26	4.43	4.88	3.30	3.30	1.48	7.14	56.29	
February ...	3.40	2.7	4.63	6.53	1.24	6.03	3.56	1.36	4.92	.95	1.22	34.11	
March	4.19	3.06	3.08	1.89	1.47	1.96	2.79	3.17	3.73	.39	2.24	27.97	
April	4.46	1.01	3.49	2.96	2.24	4.48	1.85	2.65	.92	1.59	2.79	28.44	
May	4.67	1.96	1.44	2.95	6.44	4.21	1.94	2.36	1.86	1.81	1.68	31.32	
June	2.42	.59	1.52	.94	1.79	.03	2.72	2.79	5.95	1.52	1.98	22.24	
July	4.84	2.44	4.14	2.92	4.76	2.56	3.99	4.99	2.32	3.80	5.32	42.08	
August	1.41	5.54	2.92	5.57	2.32	2.85	3.16	8.55	6.23	3.19	5.36	47.11	
September...	1.77	1.54	5.15	3.57	4.11	3.00	5.27	6.30	.89	2.09	3.52	37.21	
October	2.80	2.68	1.67	5.96	4.20	4.07	4.61	3.54	4.20	3.92	4.42	42.07	
November...	1.76	2.41	1.05	6.51	2.82	2.13	6.22	5.59	6.04	5.59	4.71	45.13	
December...	4.53	7.43	6.53	2.88	6.24	6.80	1.69	2.63	2.15	8.55	3.25	52.68	
TOTALS...	42.67	37.69	40.62	46.30	40.88	42.55	42.68	47.23	47.51	34.88	43.63	466.64	

Inspected & found correct
 Detd. of. 7.10.23. *S. in garden between office & reservoir. Satisfactory exposure.*

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	54° 36'	2° 0'	Mickleton	2 mi	E	Mickleton in Teesdale	3 1/2 mi	N E

RAINFALL at Lunedale (Grassholme Res.)County of North RidingObserver G. R. Collinson, Esq. C.E.River Basin Tees - 6.T. S. R. Wint, Esq. Cl. (1941)

Type of Gauge

386Annual Average 32.7 in. based on 37 years obs. un-weighted. Period of average 1881-1915 Ref. S

670379/26

Diameter	5.										
Height	1.0.										
Altitude	936.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1931-40 Means Totals
January	4.03	4.22	2.69	4.34	1.92	4.85	5.01	5.83	6.79	1.90	44.58
February	3.43	.75	6.75	.18	7.06	3.21	5.47	1.68	4.20	2.60	35.73
March	1.21	2.71	2.72	4.22	1.80	2.70	3.07	2.43	3.98	4.56	29.39
April	3.47	4.21	2.37	3.61	4.07	1.31	2.71	.51	1.80	2.14	26.20
May	3.19	3.59	2.35	2.39	.48	2.04	3.07	3.63	.77	1.32	22.83
June	5.04	1.08	1.43	2.28	2.93	3.58	1.64	3.47	2.75	.74	24.94
July	3.45	4.05	1.88	2.84	1.13	3.62	1.83	4.11	5.15	4.45	32.51
August	4.05	1.51	1.76	3.62	1.30	2.07	1.15	3.15	2.64	1.31	22.56
September	1.92	4.13	1.96	2.43	7.61	6.21	3.06	1.89	1.52	3.64	34.37
October	2.07	5.78	4.48	6.86	6.41	3.51	2.47	8.93	5.93	4.76	51.25
November	4.32	3.12	2.69	2.23	5.75	4.57	1.36	5.84	5.83	5.33	41.04
December	2.22	2.85	.93	5.64	2.26	4.98	2.87	4.88	1.57	3.39	31.59
TOTALS	38.40	38.00	32.01	40.64	42.72	42.65	33.71	46.40	42.93	36.13	393.59
	D	D	D	D	D	D	D	D	D	D	

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

Station No. T.F. 3498

RAINFALL at Linsdale (Grassholme Res.) ✓

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County of North Riding Observer T.S.R. Winkler Esq CERiver Basin Tees - 6

Type of Gauge

Annual Average 32.7 in. based on 27 years obs. un-weighted. Period of average 1881-1915 Ref. S.P.B. 447 (19)

35.6

39

File No. 2259233 E 1007/49
670.247/20

Diameter	5"												
Height	1' 0"												
Altitude	936'												
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means Totals		
January	3.68	3.90	5.48	4.76	5.35	3.43	4.10	10.41	1.82	2.57	45.20		
February	4.29	2.30	3.17	2.68	5.00	3.55	4.08	3.73	4.08	6.67	39.55		
March	4.21	2.61	2.04	3.4	2.03	1.80	(5.84)	2.41	1.30	1.89	24.49		
April	1.97	2.24	2.74	2.20	3.54	1.28	1.06	3.30	3.54	2.64	29.51		
May	1.70	1.37	4.57	1.87	4.17	1.79	1.74	1.57	1.43	2.11	22.92		
June	.24	.94	3.26	2.82	3.44	2.10	3.93	4.43	.67	1.98	23.81		
July	1.82	2.82	2.39	4.51	1.43	4.23	3.84	1.47	2.81	3.46	28.78		
August	4.21	3.25	6.43	1.39	4.37	4.67	2.4	4.37	1.83	5.77	37.13		
September	.29	2.80	4.07	6.68	2.53	5.79	3.82	4.25	2.20	5.76	38.19		
October	5.24	3.40	3.94	3.28	5.82	.91	1.02	2.60	5.10	2.68	34.69		
November	3.65	1.22	2.97	8.50	1.00	6.79	5.85	2.42	5.98	5.96	44.34		
December	1.96	4.36	2.46	4.22	2.39	4.33	3.74	3.77	7.21	2.35	36.79		
TOTALS	33.26	31.81	43.52	44.55	41.07	40.67	44.28	44.43	37.97	43.84	405.40		

1947 max. part deleted for wind

10004

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.

Station No. 3498 T.F. 42RAINFALL at Lunedale (Grassholme Res.)

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County of North Riding - Yorks.Observer J. L. R. Winter, Esq. C.E.River Basin Tees - 6Ure Valley & Cleveland Water Board.Type of Gauge Snowdon.Annual Average 38.6 in. based on 39 years obs. on weighted.Period of average 1881-1915 Ref. P.B. 44740-97 " " " 35 " " 1916-1950File No. 1916-1950 510079/19 P

Diameter ...	5"		027	684								
Height ...	1'0"			1								
Altitude ...	936'			51								
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	Total
January ...	3.15	3.84	1.15	3.82	2.75	4.13	5.66	3.16	2.50	5.90	36.06	
February ...	4.46	.89	2.07	2.78	2.32	1.73	3.52	6.52	.70	3.67	28.66	
March ...	3.64	2.34	.62	2.05	1.67	2.21	2.20	2.53	1.69	2.01	20.96	
April ...	3.31	2.05	3.26	.84	1.12	.99	.35	1.57	3.11	2.54	19.14	
May ...	3.00	2.42	2.20	5.28	3.14	1.29	2.13	4.92	.47	2.45	27.30	
June ...	.97	1.45	1.88	2.88	2.30	2.47	1.48	3.65	1.61	1.18	19.87	
July ...	1.32	1.51	3.55	2.18	1.53	3.48	4.32	3.27	2.15	5.29	28.63	
August ...	3.04	4.21	5.19	5.39	1.57	7.88	6.07	3.83	.69	2.46	40.33	
September ...	2.73	3.42	3.70	5.81	1.85	4.20	4.06	4.09	1.13	2.38	33.37	
October ...	.88	3.91	1.77	8.66	1.90	2.98	4.22	3.04	3.32	6.21	36.89	
November ...	9.18	2.61	3.97	7.10	1.99	1.34	1.86	.81	5.30	5.87	40.03	
December ...	8.17	3.08	1.62	4.86	6.84	5.53	4.82	4.48	7.41	5.43	52.24	
TOTALS ...	43.85	31.73	31.01	51.65	28.98	38.23	40.69	41.87	30.08	45.39	383.48	
	D	D	D	D	D	D	D	D	D	D		

Incl. the 1959 6.0% of snow. True 20', 20' NNE otherwise reference is satisfactory

Position of Station on Ordnance One-Inch map :

No. of Map 84National Grid Reference NY(35) 948227

946224

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
C 1902	✓	✓	✓	✓	
	✓ band - 16-17	✓ band - 24	✓	✓	