

RAINFALL AT

Penrith, Newton Riggay 80

Lat. Lon. County of
 Rain Gauge, by Observer J. G. Bevan Esq.

M. Even + Solway - !

Diameter										8	
Height										1'0	
Altitude										580	
Year.....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January						2.66	5.68	2.95	1.81	1.96	
February						4.20	1.07	1.82	1.38	2.14	
March						2.23	2.54	1.56	2.41	1.42	
April						2.26	3.27	1.70	1.59	2.23	
May						2.50	5.08	1.84	2.60	3.24	
June						1.46	1.69	.23	1.25	.93	
July						1.52	5.89	2.07	5.62	1.84	
August						2.24	1.22	2.72	2.93	3.65	
September						4.35	4.06	3.90	.80	1.91	
October						4.20	5.30	2.25	2.90	5.23	
November						2.24	3.06	3.07	6.52	1.44	
December						1.77	5.09	3.70	3.24	2.83	
TOTALS						31.62	44.15	27.81	33.05	28.82	

RAINFALL AT Penrith (Newton Reigny)

Lat. Lon. County of Cumberland

Rain Gauge, by Observer T. G. Penn-Eley

Eden & Solway - 1

Diameter											
Height											
Altitude											
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	(2.60)	4.85	7.25	2.67	5.70	3.02	1.84	1.94			
February	(5.80)	4.96	3.85	4.22	1.09	1.83	1.37	2.14			
March	(5.50)	2.18	3.38	2.26	2.83	1.53	2.38	1.41			
April	(5.05)	1.83	1.47	2.26	3.21	1.75	1.55	2.25			
May	(3.85)	.69	2.29	2.52	5.04	1.81	2.57	3.20			
June	(6.80)	3.20	.94	1.31	1.67	.27	1.23	.92			
July	(9.40)	3.91	4.87	1.53	5.87	2.07	5.70	1.84			
August	(8.70)	2.75	1.13	2.19	1.15	2.69	2.84	3.66			
September	(6.00)	4.80	3.20	4.31	4.11	3.86	.76	1.90			
October	(5.45)	5.49	2.14	4.11	5.47	2.17	2.84	5.25			
November	(11.70)	4.62	2.36	2.78	3.01	3.07	6.41	1.44			
December	(7.55)	3.29	4.74	1.75	4.99	3.65	3.26	2.81			
TOTALS	(78.40)	42.57	37.62	31.57	44.44	27.66	32.75	28.76			

1883. St John's Ch. 100 yds. E.

Wall 5' high 20 yds surrounding.

81-82 ~ Penrith Feb. Month X $\frac{112}{100}$

RAINFALL AT Penrith Newton Riggay

Lat. Eden & Solway - 1. Lon. County of Cumberland
Rain Gauge, by Observer T. G. Bevan Esq.
Monthly Met. Comptal

Diameter	8										
Height	10										
Altitude	580 ft										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	5.77	2.73	2.23	1.47							
February74	.22	1.98	4.56							
March	2.55	1.87	.84	1.63							
April	1.10	1.63	1.07	.41							
May	2.45	1.36	3.32	1.54							
June	2.98	1.82	3.63	2.09							
July	1.71	5.74	1.91	3.16							
August	3.60	6.45	6.69	4.04							
September	3.32	5.54	5.30	3.06							
October	2.79	5.31	5.07	3.82							3.11
November	5.58	4.53	2.40	2.56							5.78
December45	7.72	1.21	4.59							2.46
TOTALS	33.04	44.92	35.65	32.93							

RAINFALL AT Pennith Newton Reigny

Lat.

Lon.

County of Cumberland

Rain Gauge, by

Observer

J. G. Benn EsqEden & Solway - 1.

Met Council

Diameter	8									
Height	10									
Altitude	580									
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
										MEANS.
January	5.78	2.72	2.25	1.44			(19.70)			31.89
February74	.24	1.99	4.55			(17.60)			25.12
March	2.55	1.86	.82	1.67			(20.50)			27.40
April	1.06	1.61	1.08	.43			(14.30)			18.48
May	2.45	1.36	3.36	1.57			(11.60)			20.34
June	2.92	1.78	3.65	2.11			(15.40)			25.86
July	1.82	5.70	1.90	3.17			(20.90)			33.49
August	3.63	6.46	6.63	3.98			(22.90)			42.60
September	3.30	5.55	5.33	3.07			(18.30)			35.55
October	2.81	5.28	5.01	3.81			(21.20)		3.11	38.11
November	5.54	4.57	2.36	2.52			(22.00)		5.78	36.99
December46	7.69	1.23	4.61	#		(24.20)		2.46	38.19
TOTALS	33.06	44.82	35.61	32.93			(228.60)			275.02

$$94-99 = \text{Pennith for Bank} \times \frac{112}{100}$$

RAINFALL AT Penrith Newton Reigny + Newton Rigg

Lat.

Lon.

County of Cumberland

Rain Gauge, by

Observer The Meteorological Council

Eden &c - 1.

Diameter									8	
Height									10	
Altitude									559	
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	3.09	2.57	2.37	5.59	4.06	1.24	5.45	1.06	2.69	3.39	3.151
February ..	5.03	.93	1.29	8.17	3.37	2.28	2.36	2.43	3.27	2.59	3.172
March ..	.63	2.81	2.38	7.66	2.16	3.21	2.38	3.28	3.89	2.92	3.132
April ..	2.70	2.41	2.45	1.67	2.66	3.41	.91	1.85	1.76	2.36	2.218
May ..	2.18	1.23	2.68	(2.83)	2.49	.48	5.31	4.22	2.14	1.67	2.525
June ..	3.61	1.82	1.44	1.44	1.49	1.44	1.06	4.10	1.67	2.65	2.072
July ..	1.49	1.65	3.43	3.69	1.45	.98	1.70	1.61	2.81	3.90	2.271
August ..	6.17	2.91	1.48	4.65	3.92	3.34	3.49	2.99	4.08	2.88	3.591
September ..	2.33	1.41	1.73	4.23	.89	2.63	1.26	.37	2.85	2.80	2.000
October ..	6.33	3.24	2.97	9.48	1.22	2.47	5.90	5.31	1.69	5.45	4.406
November ..	2.93	4.10	2.97	2.51	3.48	3.45	3.33	2.76	2.69	1.59	2.980
December ..	5.93	5.51	5.37	2.82	3.22	1.27	2.49	5.47	2.37	5.01	3.946
TOTALS ..	42.42	30.59	30.56	(54.76)	30.41	26.20	35.64	35.44	31.91	36.71	35.461 2.53

1903 Moved to Newton Rigg about 1 mile distant. Exact date not stated

in May 1903 (now 24th July)

RAINFALL at Penrith Newton Rigg

County of Cumberland

Observer W. T. Lawrence Esq

River Basin Eden & Solway

1

per MO (1916)

Rain Gauge, by

Diameter ...	8												
Height	1	0											
Altitude ...	559												
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.		
January	4.15	1.12	3.57	3.28	2.86	3.98	4.93	2.26	4.13	3.68		89.8	16.9
February	6.21	3.56	2.19	2.35	5.62	5.60	4.46	1.10	4.33	.74		106.3	
March	2.09	1.62	3.67	5.46	3.82	1.22	2.45	2.51	1.10	3.05		71.1	
April	2.29	2.24	.60	4.69	1.32	2.11	2.66	3.00	.79	1.75		82.0	
May	2.28	3.22	1.64	1.43	1.88	1.29	3.13	2.25	2.21	1.46		90.5	
June	1.37	3.86	5.19	2.18	1.60	.48	2.32	2.76	1.02	1.82		88.9	
July	4.72	.40	3.48	1.08	3.43	3.72	3.09	1.80	3.82	.77		94.8	
August	6.01	2.83	5.01	1.61	1.57	2.83	1.42	5.12	4.02	2.78		136.1	
September ..	.39	3.01	1.57	2.02	2.75	1.03	2.30	3.35	8.93	1.85		16.43	
October ...	2.65	3.44	3.37	3.28	1.23	.57	7.30	5.72	3.82	1.93		87.7	
November ..	3.43	4.35	3.16	3.34	6.07	1.20	5.61	4.17	3.11	1.92		42.1	
December ..	4.13	8.22	5.33	3.71	8.99	6.31	3.41	1.61	4.10	5.24		116.3	
TOTALS ...	39.72	37.87	38.78	34.43	41.14	29.94	43.18	35.65	41.38	36.99			

1912 7 years 30 ft high 30 yds N

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	54°40'24"	248°42'W	Penrith	SE 2 m	N 45°	Newton Rigg	1 m	WNW WNW

RAINFALL at Penwith Newton Piggott

County of Cumberland

Observer J. Proctor, Esq.

River Basin Eden - Solway I

P. W. Turnbull, Esq. ('26)

Glaister Rain Gauge, by

Principal ~~Newton~~ Farm School.
Berkeley & Petaluma Farm Schol.

Diameter	8										
Height	1.0										
Altitude	559										
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	
										M 1930 MEANS.	
January	4.61	7.00	3.70	2.49		4.72	4.04	3.83	5.94	.66	6.46
February	3.63	20	3.29	5.24	71	6.55	2.79	1.39	3.28	.61	.48
March	5.87	5.02	2.37	1.59		1.49	1.93	2.96	3.78	.18	2.24
April	3.24	1.02	2.50	3.04	1.85	5.33	1.82	1.84	0.81	1.30	1.77
May	4.66	1.74	1.27	3.28	3.78	5.12	2.21	2.18	1.50	1.96	1.77
June	1.27	4.60	2.22	71	1.44	.15	2.90	2.68	5.40	1.57	3.74
July	4.36	2.60	4.08	2.67		1.61	3.17	4.89	3.24	4.90	5.25
August	(2.00)	5.30	2.29	7.47	2.21	3.11	3.86	6.91	5.93	4.11	8.33
September	2.06	1.39	4.48	4.35		3.50	4.17	7.67	2.03	1.79	3.34
October	3.00	2.42	1.05	6.26	3.46	4.64	2.53	3.48	6.48	4.88	5.36
November	2.92	1.99	1.45	4.85	3.12	1.34	5.67	3.08	5.58	6.82	4.87
December	2.75	5.35	7.34	3.53		3.96	.93	1.11	2.67	9.52	3.98
TOTALS...	(40.3)	34.44	36.04	45.48	imp	41.52	36.02	42.02	46.58	38.30	47.59

1920 Aug. party estimated

1929 Prospected 26/4/29. Lenses very old and tops badly distorted
Grit in side seam also. File #18404/28
Mledge 6' high 18° NE.

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	Parish Church.	Distance from gauge
1890	54° 40' 24" N	2° 48' 42" W	Penrith	2 mi NW	Newton Rigg	1 mi NNW

RAINFALL at Penrith (Newton Rigg)

M.W.R.

County of Cumberland,

Observer Cumberland County Council.

River Basin Eden & Solway...

Type of Gauge

Annual Average 36.4 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. Box N.

Diameter	8.									5	
Height	1.0.										
Altitude	560.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	3.79	5.91	3.57	3.58	1.89	3.50	4.69	4.55	4.18	1.89	3745
February	3.07	1.12	3.65	2.22	4.49	2.20	4.54	1.20	2.91	.78	2318
March	.92	3.12	2.27	2.19	1.03	1.54	1.82	1.50	3.04	3.74	2117
April	2.59	2.92	1.22	3.24	3.17	.84	2.24	.39	1.17	1.69	1950
May	3.10	2.68	2.79	3.01	.88	1.23	2.00	2.23	.61	1.65	2018
June	5.60	.76	1.62	2.32	3.28	2.63	1.53	4.04	2.74	.54	2506
July	4.33	5.20	2.34	1.72	1.33	4.64	1.75	3.95	4.96	4.82	3507
August	3.30	1.16	1.81	2.66	1.79	1.41	2.24	2.68	2.54	1.68	2127
September	1.83	4.84	1.41	3.35	5.68	4.06	2.44	1.87	1.55	3.79	3055
October	2.11	5.93	3.41	5.04	5.98	4.22	2.74	8.77	2.73	4.19	4512
November	6.07	2.29	1.76	.58	3.75	3.77	.69	5.95	5.29	3.29	3344
December	2.38	3.81	1.46	6.13	2.29	4.55	2.78	3.99	1.33	2.98	3020
TOTALS	39.09	37.64	26.31	34.04	35.56	34.62	29.52	41.12	33.05	31.04	34199
	D	D	D	D	D	D	D	D	D	D	N

Inspected 24/10/32. Glaisher gauge leaking badly, thick grass round gauge.

New gauge sent 31/12

Inspected 6/7/37. Gauge is over-exposed to S.W. winds, in which direction there is open grassland for some distance with a slight downward slope. A turf wall would be advisable.

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

Station No. 3607

RAINFALL at Penrith (Newton Rigg) M.W.R.

41

County of Cumberland

Observer Cumberland County Council

River Basin Eden & Solway

Type of Gauge

Annual Average 36.4 in. based on 25 years obs. un-weighted. Period of average 1881-1915 Ref. Bd N

File No.

Diameter	5"			604	740						
Height	1' 0"					1					
Altitude	560'					41					
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	49	5.13	5.66	3.17	3.53	3.25	4.52	7.12	2.07	2.40	34.94 ✓
February	4.52	2.21	2.61	1.38	3.37	2.83	.90	2.82	2.60	1.00	23.24 ✓
March	2.38	1.91	1.03	.51	1.48	1.26	5.59	2.64	1.19	-1.00	17.99 ✓
April	.60	2.28	2.08	1.43	1.51	1.06	6.13	2.46	3.60	2.76	21.15 ✓
May	2.26	2.45	3.53	1.59	3.29	1.03	3.17	1.19	2.39	-1.00	20.90 ✓
June	.23	.80	3.10	2.56	3.45	2.15	2.69	4.66	.60	1.51	20.24 ✓
July	1.21	2.62	2.60	2.61	2.35	3.53	3.00	1.11	2.33	3.36	21.36 ✓
August	4.70	3.26	5.86	2.30	1.68	6.49	.08	4.00	1.92	-1.00	29.99 ✓
September	1.12	3.63	4.23	4.80	3.60	5.18	3.02	3.04	.91	7.25	29.02 ✓
October	4.78	3.65	5.25	3.89	5.58	.80	1.09	2.19	5.45	3.44	32.68 ✓
November	2.59	.88	2.25	6.22	.18	5.01	4.26	2.43	6.15	4.34	29.97 ✓
December	1.62	4.28	2.08	3.93	1.91	3.39	(.80)	4.87	6.66	-1.00	29.94 ✓
TOTALS	✓ 26.50	33.00	39.98	34.39	31.93	35.98	✓ 36.25	✓ 37.93	✓ 35.87	✓ 1.00 N.P.m.	✓ 31.83

1917 Dec 28. 1936.

1950 Inspected by F.K. Lumb 23/9/50 gauge shifted from E - to be moved a few feet.

00014

Total 1941-49 = 311.83

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

BRITISH RAINFALL ORGANIZATION

Station No. 3607

RAINFALL at Penrith (Newton Rigg) M.W.R. (232) 51
 County of Cumberland Observer Cumberland County Council,
 River Basin... Eden + Solway - 1
 Type of Gauge.

Annual Average 36.5 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. Prof N.
 34.93 - - 24 " " 1931-1950 (not 1950) 1916-1950 P
 File No.

Diameter ...	5'				604	740					
Height ...	10"					1					
Altitude ...	560'					51					
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	3.23	3.28	1.00	3.16	1.98	2.55	4.08	1.99	2.55	1.89	28.71 729.24
February	3.72	.54	.87	2.47	1.24	.76	2.93	4.19	.35	3.14	20.21 513.36
March	3.18	1.16	.38	2.60	.86	1.35	2.95	.80	2.02	1.03	16.39 416.306
April	1.73	1.95	2.31	.84	.44	.70	.35	.82	3.21	2.05	15.00 381.00
May	1.65	1.78	2.99	3.67	2.78	1.29	1.71	3.80	1.34	2.14	23.15 528.010
June	.51	1.67	2.80	3.01	1.97	2.49	1.05	3.52	3.77	0.96	21.75 582.450
July	2.37	2.12	3.16	3.12	.99	(3.58) unc.	3.52	2.90	3.53	3.10	28.39 721.106
August	4.71	4.54	3.77	4.38	2.78	7.05	4.60	3.30	.60	3.56	39.29 977.966
September	3.27	2.59	3.92	5.70	2.14	2.99	4.51	4.30	1.02	2.36	32.80 833.120
October	.79	4.84	1.75	8.32	2.43	2.23	3.33	3.59	4.07	3.45	34.80 883.920
November	8.92	2.07	1.50	8.56	2.04	1.52	.97	.73	4.94	6.69	37.74 958.96
December	5.77	3.50	1.73	3.98	5.06	4.54	3.67	3.05	5.43	4.71	41.44 1022.576
TOTALS ...	39.85	30.04	26.18	49.61	24.71	N.P. unc.	33.67	33.05	32.83	38.68	33.967 8027.618
	D	D	D	D	D	D	D	D	D	D	

1956: N.P. Unc.

Insp. 2.11.58 R.W. Gluyne - Satisfactory.

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference 351442310

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

Summary of Earlier Records from 10-year Sheets :

1916-1950, P - accepted

Record D, or d	1910-19 138	1920-30 138	1931-40 138	1941-50 138	1951-60
	✓ ✓ B.M. - 10-18	✓ np 24 ✓	✓	✓ ✓ np 50 ✓	