

RAINFALL at Cairdale House GravCounty of Westmorland

Observer

G. H. Hill & Sons.River Basin I. EdenSnowdon Rain Gauge, by M+Z
copper Bradford

Diameter ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
Height											5"
Altitude ...											1,038
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	
January ...											6.14
February ...											1.36
March											4.49
April											2.52
May											1.45
June											2.89
July											1.58
August											4.77
September...											4.63
October ...										#	11.89 2.63
November..											6.72 5.00
December...											7.30 10.67
TOTALS ...											47.13

Reported from Survey: 50° less Saz.

+ 16.iii.19 in raised in enclosure, 50 yds. N of stream, land slopes slightly to S.E. Second-rate exposure owing to sweep of wind. Recommended moving 50 yds SW to side of stream, nearly level ground all well sheltered all round.

H. G. Evans (xi.2) all recommendations have been carried out

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.

RAINFALL at Cawdale Beck House GrainsCounty of WestmorlandObserver Messrs G.H. Hill & Sons Ltd.River Basin Eden 1.L. Holme Lewis CE (1921)Snowdon Rain Gauge, by N.W.G.
Copper Bradford.Manchester Cpt. W.W.

Diameter ...	5"											
Height	1	0										
Altitude ...	1638						1642					
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929		MEAN.
January ...	9.06	7.29	4.12	5.14	5.61	5.53	7.72	5.58	8.62	1.45		18.28
February ...	7.64	2.4	5.19	7.28	3.82	3.45	4.92	2.57	3.55	1.10		.56
March	11.40	7.57	3.80	3.46	1.37	1.97	1.32	5.00	6.75	.46		4.72
April	6.72	1.09	4.13	3.45	2.78	4.98	3.04	2.48	1.40	1.87		2.52
May	8.93	3.91	1.51	3.24	5.89	6.66	2.61	2.02	1.55	4.75		5.67
June	1.95	3.30	2.58	1.78	1.93	.20	5.11	4.03	5.05	1.90		2.98
July	7.92	2.54	6.40	2.86	5.45	1.74	3.65	4.90	3.60	6.35		4.78
August	3.95	6.94	3.81	11.46	3.88	4.48	5.01	8.98	7.05	6.06		11.89
September...	3.10	1.70	4.67	6.84	7.57	4.07	4.85	6.53	2.68	2.60		4.30
October.....	2.91	2.15	2.29	12.06	5.53	6.06	3.96	8.00	14.78	8.24		12.24
November...	7.10	2.20	3.18	6.23	3.65	1.92	7.47	4.15	10.97	14.60		6.43
December...	6.99	5.64	11.88	5.76	14.20	5.37	.83	1.60	4.82	14.80		7.20
TOTALS...	77.67	41.63	53.62	69.56	58.43	50.42	50.40	55.84	70.62	63.88		76.17

1920. Gauge Inspected 14-11-19. see last sheet.

Rejected from Survey : 30° too low

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 from gauge	Parish Church.	Distance from gauge

RAINFALL at Cawdale Beck (Howe Grain)

County of Westmorland,

Observer Manchester Corp. W.W.

River Basin Eden - 1

Type of Gauge

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

660 604/26.

Diameter	S.											
Height	1.0.	*										
Altitude	1642.	1630"										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January	4.45	16.81	14.10	11.76	3.20	10.50	11.27	11.80	14.95	2.82	104.66	
February	3.97	.16	6.94	4.43	10.48	3.93	4.80	3.55	9.64	2.91	49.81	
March	.92	4.80	6.26	4.30	2.53	4.11	2.62	5.10	6.50	8.40	45.54	
April	2.82	7.53	2.67	5.19	6.68	1.69	4.40	.70	2.80	2.97	37.45	
May	4.36	4.45	3.49	5.93	.87	2.20	3.41	5.25	1.14	1.96	33.06	
June	6.54	3.80	2.40	6.75	6.15	3.86	1.80	8.60	4.95	1.19	45.54	
July	5.98	7.30	5.45	1.72	2.27	8.92	2.64	8.95	9.12	6.68	59.03	
August	5.56	1.50	3.41	6.41	2.85	2.46	3.60	3.81	3.93	2.35	35.88	
September	2.65	6.60	2.73	9.25	12.43	7.17	5.09	2.90	2.43	6.58	57.83	
October	4.26	12.25	6.15	13.28	11.95	7.58	4.72	17.19	4.18	11.00	92.56	
November	15.27	5.60	2.51	1.30	6.30	7.90	1.47	14.30	13.55	9.46	77.66	
December	4.10	13.48	.59	13.70	3.85	13.16	3.32	7.40	4.10	6.43	70.13	
TOTALS	60.88	83.78	56.70	80.02	69.56	73.48	52.14	89.55	80.29	62.75	709.15	

Gauge moved in January 1932. Inc 89.2

Record prior to 1932 rejected as "far too small" due to overexposure.

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.

Station No. TF 43683

RAINFALL at Caudale Beck (House Grain)

41

County of Westmorland

Observer Transchaster Corps (W.A.)

River Basin Eden - 1

Type of Gauge

Annual Average ... in. based on ... years obs. un-weighted. Period of average ...
 67.6 computed by Mr Cowlish (1946)
 FA200487/40

Ref. File No. 600324/26

Diameter	5"			601	352						
Height	10"				1						
Altitude	1130'				41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	1.57	7.25	14.12	9.10	6.40	10.40	11.06	16.55	4.83	4.49	85.77
February	7.15	2.27	6.05	3.32	7.55	(5.50)	(2.20)	6.40	6.46	9.76	56.66
March	3.08	5.20	2.95	1.32	5.32	4.38	(8.00)	7.05	1.78	5.68	44.96
April	2.12	6.22	5.10	3.73	3.53	2.06	15.43	4.23	8.10	4.64	55.26
May	3.87	7.21	6.90	2.47	5.19	1.97	4.07	2.68	3.97	3.15	41.48
June	.18	1.12	5.25	4.40	4.80	5.21	4.78	8.78	8.7	2.03	34.52
July	1.82	3.97	3.80	3.94	3.65	5.78	3.71	2.90	3.41	5.20	38.18
August	9.48	7.75	9.77	4.80	2.05	8.62	2.20	10.83	3.63	8.78	65.91
September	1.86	8.25	7.90	7.95	7.10	11.40	6.15	7.93	1.15	(12.43)	42.12
October	7.10	6.95	11.80	7.63	9.45	1.28	1.52	5.82	10.14	(5.47)	66.86
November	5.76	1.80	5.38	14.32	.52	16.30	10.08	5.22	12.15	6.58	78.11
December	5.32	13.35	6.20	8.24	5.05	8.70	3.30	12.20	12.75	3.00	78.31
TOTALS	49.31	71.34	85.32	71.22	60.61	81.60	70.50	90.29	69.24	71.21	720.64
	M	M	M	M	M	M	M	M	M	M	

1946 Feb. amended - gauge tamperless with

30004

00144

1947 Feb. March est. same.

1950 Sept - Oct apportioned. Slightly low year's total.

20004

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

Station No. 3683 T.F. 39

RAINFALL at Cawdale Beck (Hawthorn) *

51

County of Westmorland

Observer Manchester Corp. W.W.

River Basin Eden - 1

Type of Gauge Bradford (inspiration)

Annual Average 68.3 in. based on 20 years obs. un-weighted. Period of average 1881-1965
 " 71.04 " 35 " 1919-57 " 1916-56
 " 74.00 " 24 " 1932-57 " 1916-50 File No. 14678163
 Revised 7/63

Diameter ...	5"			601	352						
Height ...	1' 0"					1					
Altitude ...	1130'					51					
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	6.32	(6.50)	2.60	6.40	7.15	5.10	15.40	9.20	6.88	11.95	77.50
February ...	(8.00)	1.55	2.54	(6.50)	3.15	1.35	8.84	8.40	1.50	11.15	52.98
March ...	(6.00)	4.05	1.06	(6.20)	2.00	3.10	6.15	1.72	5.45	2.38	38.11
April ...	(6.90)	5.12	5.63	7.98	1.75	1.52	.88	2.25	7.45	6.38	38.86
May ...	2.30	(3.30)	3.70	5.50	6.95	4.00	3.20	6.64	1.35	2.73	39.67
June ...	2.00	3.84	3.10	4.15	3.65	4.80	1.50	5.99	6.10	4.55	39.58
July ...	3.80	2.98	6.70	4.42	2.20	5.75	4.35	5.70	5.05	5.90	46.85
August ...	6.40	6.88	6.20	6.68	2.50	9.15	7.38	5.00	1.22	3.77	55.18
September ...	11.58	6.40	9.00	12.20	3.65	6.50	6.75	9.95	1.17	(5.00)	92.20
October ...	1.20	10.30	4.20	15.65	5.25	4.95	8.15	6.70	8.77	5.55	70.72
November ...	17.25	3.90	10.70	18.00	4.05	3.10	2.73	8.7	11.70	17.75	90.05
December ...	16.75	6.50	5.00	9.80	11.35	11.50	9.15	6.85	16.20	10.00	103.10
TOTALS ...	88.50	(61.32)	60.43	96.40	53.55	66.82	74.48	69.27	72.84	87.11	724.80
	M	M	M	M	M	M	M	M	M	M	

1954 elevation app. 42004 30004 00104

Expected July 1956 Mr. Dales. Gauge sound. Site of clay pit w 4 E

1960 Sept 1st M03 gauge tampered with

34004

* Note This gauge is near Cawdale Beck but not on Hawt Grav.

Position of Station on Ordnance One-Inch map : No. of Map 83 National Grid Reference 35478176

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

Summary of Earlier Records from 10-year Sheets :

Record D. or d		1910-19	1920-30	1931-40	1941-50	1951-60
		Camp 1918	✓	✓	✓	
(62) Wt. 13072-389 10M 6/30 T.S. 841		-	-	-		