

RAINFALL AT

Lebelleyn Whiteside

70

Lat.

Lon.

County of

Cumberland

Rain Gauge, by

Observer

J. E. Bateman, Esq F.R.S.

Diameter.									7		
Height.									1. -		
Altitude.									2100		
Year.	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January.									5.60	1.80	
February.									5.40	4.20	
March.								^{#18 1/2} 2.40	2.30	4.50	
April.								5.00	2.80	4.00	
May.								7.30	9.00	1.90	
June.								6.00	4.90	9.60	
July.								10.30	1.30	8.80	
August.								10.10	8.10	8.10	
September.								5.40	7.80	9.40	
October.								15.10	10.20	2.80	
November.								22.20	3.00	1.60	
December.								7.30	3.40	5.90	
TOTALS.									63.80	62.60	

RAINFALL AT *Helbrell, Whiteside* 80

Lat. _____

Lon. _____

County of _____

Cumberland

Rain Gauge, by _____

Observer *J. Bateman, Esq., F.R.S.*

Derwent 2

Diameter	<i>7</i>										
Height	<i>1.0</i>										
Altitude	<i>2100 T</i>										
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	<i>2.40</i>	<i>.80</i>	<i>5.10</i>	<i>11.50</i>	<i>11.90</i>	<i>4.70</i>	<i>2.10</i>	<i>5.50</i>	<i>4.10</i>	<i>4.00</i>	<i>5.210</i>
February	<i>11.70</i>	<i>5.10</i>	<i>7.50</i>	<i>10.50</i>	<i>6.50</i>	<i>15.60</i>	<i>2.50</i>	<i>2.40</i>	<i>.90</i>	<i>1.90</i>	<i>6.460</i>
March	<i>3.40</i>	<i>5.30</i>	<i>4.80</i>	<i>4.50</i>	<i>6.20</i>	<i>5.20</i>	<i>4.80</i>	<i>1.10</i>	<i>3.30</i>	<i>3.50</i>	<i>4.210</i>
April	<i>5.80</i>	<i>2.00</i>	<i>7.20</i>	<i>4.50</i>	<i>3.50</i>	<i>7.30</i>	<i>3.60</i>	<i>3.00</i>	<i>4.50</i>	<i>4.40</i>	<i>4.580</i>
May	<i>2.70</i>	<i>5.90</i>	<i>5.70</i>	<i>3.60</i>	<i>4.10</i>	<i>4.20</i>	<i>5.70</i>	<i>2.20</i>	<i>5.00</i>	<i>5.80</i>	<i>4.490</i>
June	<i>4.30</i>	<i>7.60</i>	<i>6.70</i>	<i>5.80</i>	<i>1.00</i>	<i>2.00</i>	<i>2.00</i>	<i>.70</i>	<i>2.50</i>	<i>1.10</i>	<i>3.370</i>
July	<i>7.60</i>	<i>5.70</i>	<i>11.90</i>	<i>5.60</i>	<i>8.60</i>	<i>3.10</i>	<i>7.70</i>	<i>5.30</i>	<i>10.50</i>	<i>4.70</i>	<i>7.070</i>
August	<i>2.00</i>	<i>7.90</i>	<i>5.20</i>	<i>5.30</i>	<i>2.00</i>	<i>4.70</i>	<i>2.60</i>	<i>5.30</i>	<i>6.50</i>	<i>8.00</i>	<i>4.950</i>
September....	<i>8.30</i>	<i>3.40</i>	<i>4.70</i>	<i>8.50</i>	<i>7.20</i>	<i>8.80</i>	<i>8.30</i>	<i>8.00</i>	<i>2.00</i>	<i>2.60</i>	<i>6.180</i>
October	<i>2.50</i>	<i>3.60</i>	<i>5.90</i>	<i>9.40</i>	<i>2.80</i>	<i>7.30</i>	<i>9.20</i>	<i>4.30</i>	<i>10.50</i>	<i>12.00</i>	<i>6.750</i>
November....	<i>8.80</i>	<i>13.50</i>	<i>9.60</i>	<i>10.60</i>	<i>4.10</i>	<i>5.30</i>	<i>8.60</i>	<i>7.20</i>	<i>12.00</i>	<i>3.20</i>	<i>8.290</i>
December	<i>4.40</i>	<i>6.90</i>	<i>4.90</i>	<i>4.80</i>	<i>7.10</i>	<i>1.80</i>	<i>5.40</i>	<i>6.50</i>	<i>11.50</i>	<i>5.60</i>	<i>5.890</i>
TOTALS	<i>60.90</i>	<i>67.70</i>	<i>79.20</i>	<i>84.50</i>	<i>65.00</i>	<i>70.00</i>	<i>62.50</i>	<i>57.50</i>	<i>73.30</i>	<i>56.80</i>	<i>67.450?</i>

1888 April to Dec: "Amounts unsatisfactory & adjusted by reference to the other gauges."

Rejected from Survey, 28th Dec.

RAINFALL AT *Helvellyn Whiteside*

Lat. *Derwent - 2* Lon. _____ County of *Cumberland*
 Rain Gauge, by _____ Observer *J. H. Hill Esq. C.E.*

Diameter	7											
Height	10											
Altitude	2100 T											
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	11.40	5.90	3.50	3.50	10.00	1.40	4.30	1.60	6.00	12.70	4.030	
February	1.80	.50	1.80	3.00	11.30	.40	5.10	7.00	4.00	7.30	4.220	
March	4.00	2.30	2.10	2.10	3.20	6.20	7.70	12.30	1.30	3.90	4.510	
April	2.00	4.60	1.20	.90	6.50	5.50	2.30	3.80	6.90	7.00	4.070	
May	4.90	5.00	5.10	3.60	7.10	.70	.70	3.70	4.70	7.00	4.250	
June	7.00	3.20	6.30	4.90	4.30	1.90	6.20	4.90	5.00	1.90	4.560	
July	7.20	6.20	5.10	6.60	5.50	8.60	7.00	2.60	1.50	4.80	5.510	
August	8.20	17.10	11.20	8.80	7.20	10.40	4.50	15.80	8.40	2.40	9.400	
September....	8.00	10.90	11.80	5.60	.70	3.20	11.90	7.60	4.60	7.80	7.210	
October.....	4.20	16.60	9.50	7.60	12.00	7.00	9.50	8.00	8.20	8.30	9.090	
November....	14.80	11.70	8.30	5.80	14.60	14.80	3.90	8.50	7.70	14.50	10.460	
December70	14.20	2.50	11.70	8.20	5.20	10.00	17.20	12.70	3.90	8.620	
TOTALS	74.20	98.20	68.40	64.10	90.60	65.30	73.10	93.00	71.00	81.50	77.940	

1880 -

RAINFALL AT Helvellyn Whiteside

Lat.

Lon.

County of Cumberland

Rain Gauge, by

Observer G. H. Hill Esq. CR.

Serwent - 2.

Diameter ..	7											
Height	1 6											
Altitude ..	2100 T											
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.	
January ..	6.20	4.40	4.60	11.50	7.00	3.00	10.00	1.80	9.20	6.00	6.370	
February ..	6.00	3.60	3.50	13.20	5.00	2.20	3.40	2.60	4.00	3.80	4.730	
March20	3.30	3.50	17.80	5.60	8.30	4.00	5.50	6.10	5.30	5.960	
April	3.50	5.70	5.30	1.60	7.60	8.30	2.00	6.30	3.40	5.50	4.920	
May	7.30	3.10	3.50	6.70	4.70	3.10	10.00	8.10	5.30	4.20	5.600	
June	7.70	3.90	1.30	3.10	4.20	3.90	2.70	10.10	3.20	5.70	4.580	
July	3.40	1.90	4.90	6.20	4.90	2.40	4.80	3.10	6.30	9.00	4.690	
August	10.70	8.20	3.80	11.80	7.10	8.20	8.20	8.00	11.20	4.70	8.190	
September ..	6.00	7.30	4.20	9.10	5.40	6.10	2.80	1.20	9.40	3.70	5.520	
October	9.00	7.60	7.00	20.40	3.50	7.20	13.00	15.00	5.20	17.70	10.560	
November ..	8.70	6.80	8.30	5.20	4.20	10.90	8.20	8.40	6.40	4.10	7.120	
December ..	16.80	5.50	10.00	7.40	6.10	5.70	3.50	11.20	6.80	8.80	8.180	
TOTALS ..	85.50	61.30	59.90	114.00	65.20	69.30	72.60	81.30	76.50	78.50	76.420	

Hub

Reputed from survey, 23' low.

RAINFALL at Helvellyn Whiteside (east side of Lake)County of CumberlandObserver G. H. Hill Esq. C.E.River Basin Derwent 2

Rain Gauge, by _____

Diameter ...	7										
Height	1 6										
Altitude ...	2100 T										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	7.40	3.10	7.00	11.80	7.00	6.50	7.10	1.40	8.30	10.00	
February ...	14.00	9.00	11.10	6.40	12.60	13.00	8.40	.90	7.60	1.50	
March	3.20	1.90	9.70	6.20	8.00	2.00	1.80	2.20	2.50	4.60	
April	6.10	8.10	1.10	11.40	3.10	3.90	5.20	2.20	1.40	3.00	
May	3.80	5.30	4.20	5.80	4.20	1.80	6.50	5.00	2.80	3.40	
June	2.00	6.70	9.50	6.00	4.10	.60	4.00	3.40	2.30	3.00	
July	8.20	2.20	9.00	1.00	5.80	6.90	4.70	1.90	6.10	2.20	
August	14.20	6.70	8.80	6.40	5.50	5.30	4.80	14.30	7.20	7.50	
September ..	1.40	5.50	3.80	4.30	3.90	1.90	4.60	6.30	14.40	5.80	
October ...	4.80	9.50	9.50	8.50	2.10	2.70	17.70	12.30	11.20	1.70	
November ..	5.50	10.50	5.70	7.00	9.60	2.00	10.70	6.00	8.20	5.60	
December ...	15.70	22.10	12.90	5.50	18.00	14.90	4.50	1.80	7.50	11.90	
TOTALS ...	86.20	90.60	92.20	80.30	83.90	61.40	80.00	57.70	79.50	62.20	

Rejected from survey. 23" low.

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

RAINFALL at Helvellyn WhitesideCounty of CumberlandObserver Messrs G. H. Hill G.E.
L. Holmes Lewis (1921)River Basin Derwent 2

Rain Gauge, by _____

Diameter ...	7	10									
Height	1	6	1-5								
Altitude ...	2100										
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEANS.
January ...	9.20	12.40	7.70	4.40	8.30	8.90					
February ...	6.70	4.0	6.10	14.60	1.20	7.10					
March	12.40	12.50	4.50	4.50	1.10	1.90					
April	8.40	1.40	4.30	6.00	5.00	8.60					
May	8.30	4.70	3.60	4.50	8.10	10.00					
June	3.50	.60	3.50	2.70	4.30	.30					
July	8.30	5.10	10.10	4.30	10.20	2.10					
August	5.30	9.90	6.40	14.20	7.30	7.80					
September...	4.00	3.00	6.50	11.60	13.70	6.60					
October	5.10	3.50	2.70	17.50	7.40	12.60					
November...	7.30	4.40	4.30	5.90	7.80	2.60					
December...	9.00	10.10	10.50	7.20	22.50	6.20					
TOTALS...	87.50	68.00	70.50	97.40	96.90	74.40					

For
new gauge
see previous
sheet
value

1924. On hills E. side of Lake.

1925 N.F. low.

Revised from survey. 25.2.21

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	Direction from gauge

RAINFALL at HELVELLYN WHITESIDE NEW G.County of CumberlandObserver J. HOLME LEWISRiver Basin Derwent 2Manchester Corp. W.W.

Rain Gauge, by _____

Diameter ...						5					
Height						1.0					
Altitude ...						2100					
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930. MEANS.
January ...						9.80	13.40	7.60	15.10	3.50	14.50
February ...						9.10	9.70	6.10	7.70	1.80	2.00
March						2.30	2.00	9.20	12.10	1.00	6.20
April						8.80	5.20	4.00	6.00	2.40	4.10
May						9.50	4.70	4.30	2.30	6.30	3.30
June						20	7.00	5.60	10.80	3.50	2.90
July						2.00	7.30	9.90	4.90	7.50	8.00
August						8.20	7.30	10.80	14.60	8.90	12.20
September...						7.20	6.60	9.70	5.00	2.80	7.50
October						13.80	6.30	11.10	20.30	10.80	15.50
November...						2.70	10.60	9.20	14.30	2.40	9.80
December...						6.70	1.20	5.20	6.10	2.80	8.80
TOTALS...						80.30	87.80	92.70	119.20	9.70	94.80

1925 New gauge fixed 19 Jan. Total for Jan computed from old g.

*Revised from survey 18.4.30.*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

RAINFALL at Helvellyn (Whiteside)*County of CumberlandObserver Manchester Corp. W.W.River Basin Derwent-2

Type of Gauge

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

660604/26

Diameter	5.											
Height	1.0.											
Altitude	2100.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January	6.3	18.70	13.89	15.48	3.77	14.68	18.40	13.84	14.24	1.76	121.06	114.76
February	5.3	.50	6.78	4.7	12.52	6.48	10.55	4.83	15.81	3.65	66.89	65.9
March	1.7	6.17	6.28	6.14	1.92	8.58	8.25	5.71	7.56	9.16	61.47	
April	4.6	7.25	3.45	9.07	6.76	2.58	5.43	.97	3.29	3.92	47.32	
May	6.4	6.19	5.15	7.55	1.13	2.27	3.73	7.17	1.94	2.20	43.73	
June	9.6	5.92	3.13	3.45	9.27	6.58	4.00	11.89	7.63	.95	62.42	52.82
July	9.2	9.44	8.38	2.38	3.74	9.57	6.42	12.65	10.92	9.59	82.54	73.3
August	6.9	2.19	5.26	10.05	4.15	3.72	4.64	5.10	4.30	3.37	49.68	42.78
September	4.5	8.50	3.46	13.28	15.49	10.25	7.20	5.87	2.78	6.31	77.64	
October	5.3	13.76	7.37	13.86	13.07	7.60	7.00	19.23	6.52	9.12	102.83	
November	22.4	5.51	5.32	3.76	9.75	10.96	2.24	16.95	13.30	11.03	101.22	
December	7.1	17.71	1.23	20.56	6.71	20.37	7.36	10.05	4.55	8.84	104.48	97.38
TOTALS	89.3	102.09	69.70	106.05	88.28	103.64	85.22	114.24	92.84	69.90 M.	921.28	1015

* Gauge over exposed on moor (B.R.)

(1931) Luff wall set up December 1931.

Printed in B.R. with foot note "Luff wall road gauge"

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. I.F. 3635RAINFALL at 5 Huddellon (Whitlaide)

41

County of DumfriesshireObserver Manchester Corp'n W.W.River Basin Garvent - 2

Type of Gauge.....

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

Ref

File No. 196138/32
66004 126

Diameter	5"				592	866					
Height	1' 0"					1					
Altitude	2100'					41					
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	4.00	7.55	15.56	(5.66)	(7.00)	9.90	13.02	15.21	7.24	8.72	
February	10.05	3.22	5.67	(4.53)	(13.00)	4.46	(2.50)	8.90	8.77	12.20	
March	5.66	7.75	1.55	1.10	3.99	3.68	(9.50)	7.62	1.76	8.50	
April	4.46	6.05	4.15	(5.57)	3.28	1.86	11.88	3.20	8.00	4.54	
May	5.54	8.68	7.61	(4.41)	5.90	2.08	5.31	3.03	4.38	2.82	
June	.62	1.99	5.80	(6.87)	5.93	6.25	5.17	10.60	1.62	3.61	
July	2.27	5.80	4.17	4.73	6.22	5.45	4.78	5.03	2.78	6.49	
August	10.73	10.56	11.90	(6.05)	2.54	11.08	.06	9.23	5.27	12.22	
September	2.41	9.88	9.61	9.43	8.49	13.41	5.43	8.17	3.54	18.06	
October	7.92	9.44	11.19	9.60	9.91	1.24	1.90	5.78	11.85	5.61	
November	8.02	2.37	3.88	15.59	.63	17.42	11.37	6.06	13.78	7.42	
December	5.26	17.05	4.37	10.43	8.57	10.24	3.46	12.48	11.17	3.06	
TOTALS	66.84 M	90.84 n.p.	85.46 n.p.	74.02 n.p.	75.46 n.p.	87.07 n.p.	74.38 M n.p.	85.31 M n.p.	77.16 M n.p.	87.25 M n.p.	10

5 1/2 inch well round gauge.

1942 too much est. for low m. totals.

1943 n.p. low.

1944 6 m. past est. n.p. too much est.

1945 n.p. low - warm Feb past est. 1946 n.p. low.

1947 n.p. low. Feb & March est. mini.

1948 " " Feb 15

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 from gauge	Parish Church.	Distance from gauge.	Direction from gauge.

Station No. 2635 T.P. 39RAINFALL at 5 Helvellyn (Whiteside)

51

County of CumbriaObserver Manchester before M.W.River Basin Derwent - 2

Type of Gauge.....

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

File No. 196755/52E29134/58

Diameter ...	5"				592	868						
Height ...	1' 0"	592868										
Altitude ...	2100'	N.Y. (35) 330170										
		alt. 640m				51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	
January ...	9.61	(7.50)	4.56	7.60	6.36	(5.52)	13.70	8.51	5.68	8.53		
February ...	9.20	2.88	3.34	7.95	(3.22)	1.74	8.90	8.56	1.99	10.53		
March ...	6.90	6.00	.70	7.69	(3.48)	3.50	6.15	1.92	6.62	2.82		
April ...	5.95	5.49	5.68	1.54	2.60	1.84	1.64	2.78	7.16	7.44		
May ...	4.89	(5.00)	4.11	7.50	6.01	3.18	3.87	7.92	2.00	3.60		
June ...	1.56	(3.90)	4.32	6.03	5.17	4.58	1.85	5.72	5.39	3.50		
July ...	4.60	4.60	9.49	6.21	3.73	7.41	5.47	4.47	6.11	7.68		
August ...	9.11	9.99	7.23	8.71	4.31	13.97	8.78	6.61	1.28	4.67		
September ...	11.59	7.50	10.81	10.96	4.26	6.01	7.65	10.13	1.12	5.47		
October ...	1.36	9.23	5.95	15.72	6.03	5.68	8.92	7.82	9.82	6.17		
November ...	20.93	3.70	11.65	20.59	4.60	2.94	4.10	1.44	12.81	(20.96)		
December ...	12.50	5.09	4.80	9.54	(11.18)	13.86	10.86	7.68	18.02	8.26		
TOTALS ...	98.20	70.88	72.64	110.04	60.95	70.23	81.89	73.56	78.00	89.63		
	NP	n.p.	n.p.	n.p.	n.p.	NP	np	np	np	np		

1951 NP low
 1952 n.p. low
 1953 n.p. low
 1954 n.p. low
 1955 Whiteside consistently low. Dec. part etc. H.O.3. N.P. low.
 1956 NP. low. Jan. etc. H.O.3. Insh. 1956 Weeks. See over.
 1957 n.p. low
 1958 n.p. low

43004
 30014
 40004

1959 NP low.
 1960 n.p. low
 00024

10
 An. av. 92.27 in. based on 18 yrs. obs.
 with 1926-45. 5" low. Period of av. 1916-50. 5" - Registered!

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference 35/330170

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

Summary of Earlier Records from 10-year Sheets :

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	✓	✓	✓	✓ np 42.50	