

# RAINFALL AT *Bushhope, Grassmere*

Lat. ....

Lon. ....

County of *Durham*

Rain Gauge, by .....

Observer *H. Lowery Wallis Esq.*

*near 2.*

*Durham County Bd. Board  
per Kenneth P. Hawthley*

Diameter ..											
Height ....	<i>1 3</i>										
Altitude ..	<i>1850</i>										
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..		<i>3.77</i>									
February ..		<i>1.75</i>									
March ....		<i>4.13</i>									
April .....		<i>3.00</i>									
May .....		<i>1.27</i>									
June .....		<i>3.30</i>									
July .....		<i>1.95</i>									
August ....		<i>3.98</i>									
September ..		<i>3.45</i>									
October ....		<i>4.45</i>									
November ..	<i>6.23</i>	<i>8.57</i>									
December ..	<i>9.90</i>	<i>4.88</i>									
TOTALS ..		<i>44.50</i>	<i>49.75</i>	<i>93.20</i>	<i>51.40</i>	<i>43.75</i>	<i>59.30</i>	<i>60.05</i>	<i>58.20</i>	<i>55.25</i>	

*Annual totals, 1902-1921 recd. 1922-23 (file No. 408255/23). End. III '23.*

RAINFALL at Burnhope, GrassmereCounty of DurhamObserver Durham County Water Board  
per Kenneth P. HankleyRiver Basin Wear 2

Rain Gauge, by \_\_\_\_\_

Diameter ...												
Height .....	1	3										
Altitude.....	1850											
Year .....	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	
January.....												
February ...												
March .....												
April .....												
May .....												
June .....												
July .....												
August .....												
September...												
October.....												
November...												
December ...												
TOTALS ...	61.00	65.68	62.40	59.20	67.35	49.55	82.60	73.75	61.85	44.80		

Annual totals, 1902-1921, read 19.2.23 (file No. 408254/23) Entry VI. 23

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

RAINFALL at Burnhope, GrassmereCounty of DurhamObserver Durham County Water Board,River Basin Wear 2per Kenneth P. Haakelly.per H. Robinson (Eng).Cu Bradford Rain Gauge, by Casella 8337  
sand cleared but no tube 18.26

Diameter ...	5										
Height .....	1	3									
Altitude ...	1850										
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930. MEANS.
January ...				5.65	5.25	8.00	6.15	5.85	10.80	1.25	7.70
February ...				8.70	1.50	7.30	5.40	2.70	4.60	.98	1.25
March .....				2.95	1.50	2.30	2.60	4.35	(6.10)	.57	3.10
April .....				3.15	2.70	8.65	2.80	4.45	1.00	1.75	2.90
May .....				3.20	7.35	5.35	3.15	2.85	1.70	2.20	2.20
June .....				1.65	2.20	.00	3.75	4.65	7.10	2.10	2.45
July .....				3.60	6.70	1.20	5.60	5.15	3.25	4.95	5.35
August .....				9.60	4.10	4.30	4.55	8.20	9.10	5.00	9.05
September...				5.00	7.55	4.80	5.50	8.90	2.20	1.90	4.90
October .....				9.85	5.39	7.55	4.40	6.20	8.85	6.70	7.85
November...				7.00	5.15	1.90	8.65	5.95	9.30	9.30	6.80
December...				4.40	9.65	6.90	1.55	3.70	(3.70)	9.75	4.65
TOTALS...	61.20	55.38	49.20	64.75	59.55	55.25	54.10	63.45	67.60	46.45	58.20.
						M	M	M	M	M	M.

Annual totals, 1901-1921 read. 19.2.20 (file No. 408250/23). Entry VI. 23 /  
 Inspected p. 10.18.26. 3. on woodland in valley running W + E  
 ground slopes down, gently at first to Burnhope Burn & then up again.  
 + also down very slightly to W. + up slightly to E. Gauge more  
 exposed than the others + long rough fence essential.  
 all three gauges read by same rod + glass measure - the measure holds  
 2 inches + was correct.

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 Burnhope (Grass Meres)County of DurhamObserver H. Robinson, Esq., C.E.River Basin Wear - 2.J. P. Redmell Esq., C.E. (1938)

Type of Gauge.....

Annual Average 59.1 in. based on 26 years obs. un-weighted. Period of average 1881-1915 Ref. S.

660612/26.

Diameter	5.											
Height	1.3.											
Altitude	1950.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January	5.50	12.05	5.80	6.80	2.90	8.40	7.40	10.10	10.25	2.90	7210	
February	5.80	1.00	4.90	4.40	10.80	3.30	5.90	3.10	7.30	2.70	4520	
March	2.00	5.10	2.50	5.10	2.70	8.40	4.30	3.50	4.90	6.80	4530	
April	4.30	6.30	3.40	4.80	5.80	3.20	3.10	2.10	2.80	3.80	3960	
May	3.50	2.90	2.90	4.50	1.10	2.20	4.10	3.40	1.25	1.80	2765	
June	6.45	3.55	3.10	2.40	4.20	3.90	2.50	6.60	5.00	1.00	3260	
July	5.00	5.00	4.60	4.20	3.20	5.80	2.50	5.75	7.10	6.30	4945	
August	4.70	4.00	1.80	4.20	2.90	2.80	3.10	4.10	3.00	3.40	3370	
September	2.70	6.50	2.50	4.60	7.50	3.80	4.20	2.60	2.50	5.00	4390	
October	3.60	9.70	5.90	9.80	10.60	7.80	2.90	14.70	4.80	7.20	7700	
November	7.85	4.60	3.50	3.20	7.60	6.10	1.40	8.90	9.40	6.80	5935	
December	4.60	6.10	1.40	8.20	5.20	8.30	6.04	6.10	2.50	5.80	5424	
TOTALS	56.00	66.80	42.30	58.20	64.50	65.90	44.44	70.95	60.80	53.20	58609	ms.
	M.	M.	M.	M.	M.	M.	M.	M.	M.	M.		

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	Parish Church.	Distance from gauge	Direction

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

Station No. T.F. 3535

RAINFALL at Burnhope (Grass House)

41

County of Durham

Observer J. A. Rodwell Eng. C.E.

River Basin Wear 2

Type of Gauge

Annual Average 59.1 in. based on 26 years obs., un-weighted. Period of average 1881-1915 Ref. S

File No. 660612/26

Diameter	5"			0.21	2.04							
Height	1' 3"				1							
Altitude	1855				41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	Total
January	3.57	(5.30)	10.30	6.80	7.70	6.80	(5.50)	10.60	3.70	4.20	64.47	
February	(8.05)	2.50	5.90	2.60	6.30	4.80	(5.50)	5.30	5.80	7.90	54.65	
March	5.50	4.50	3.00	1.30	5.00	3.00	(3.50)	3.70	(1.70)	2.86	39.06	
April	2.80	3.30	4.50	2.50	3.00	2.50	10.00	4.30	6.70	4.40	44.00	
May	2.90	3.90	5.00	2.70	4.90	3.00	2.00	2.70	2.40	3.80	39.30	
June	1.00	1.50	2.90	5.30	5.50	3.50	5.20	7.60	7.0	3.80	37.00	
July	.90	4.70	3.20	3.10	2.70	5.10	2.90	2.00	3.60	5.50	33.70	
August	6.40	5.40	7.90	4.30	4.90	6.40	.00	8.20	(2.40)	8.40	54.30	
September	1.00	6.10	5.70	8.30	4.90	8.10	5.00	6.80	(2.80)	8.90	57.60	
October	7.20	6.50	5.50	6.80	8.10	1.90	(1.50)	3.80	7.60	5.50	54.40	
November	4.10	2.10	4.60	12.00	1.50	10.80	7.50	3.70	12.80	7.40	66.50	
December	4.60	7.90	3.70	5.20	3.50	6.00	4.60	5.10	9.70	(3.50)	53.80	
TOTALS	48.02	53.70	62.20	60.90	58.00	61.90	(58.20)	63.80	59.90	66.16	592.78	10
	M.	M.	M.	M.	M.	M.	M.	M.	M.	M.		

1941 Feb cond. for snow

1942 Jan est'd. for snow.

1947 Jan, Feb, March Oct. est.

20004 40004

70004

10304 00014

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

BRITISH RAINFALL ORGANIZATION

Station No. 3535RAINFALL at Burnhope (Grass Mires)

51

County of DurhamObserver J. D. Rothwell, Esq. C.E.,River Basin Near - 2

1/1/54

A. C. WILDSMITH, Esq. C.E.,Type of Gauge OctafontAnnual Average 59.1 in. based on 26 years obs. in-weighted. Period of average 1881-1915 Ref. 5" " 59.71 " " 40 " Within 1916-56.File No. 6685/226E2355/52

Diameter ...	5"			021 204								
Height ...	1' 3"			1			1' 0"	1' 0"				
Altitude ...	1850'			51								
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	
January ...	(4.20)	(8.75)	1.90	5.50	4.90	5.70	8.40	6.50	6.00	9.25	61.10	
February ...	(6.60)	(2.10)	1.90	4.00	4.00	(4.60)	5.00	8.50	1.50	8.35	46.55	
March ...	(5.50)	3.00	1.30	4.20	3.00	(4.25)	4.50	3.60	3.00	4.00	36.25	
April ...	(4.80)	3.90	4.50	1.00	3.00	1.75	.50	2.60	6.00	5.50	33.45	
May ...	3.20	2.10	3.80	5.50	5.00	1.75	2.50	5.00	1.00	2.50	32.35	
June ...	2.10	2.70	3.50	4.20	3.25	3.00	1.75	4.50	3.50	2.54	31.04	
July ...	3.30	4.00	5.10	2.90	2.80	5.00	6.25	4.75	4.70	6.50	45.30	
August ...	5.70	7.50	6.00	8.20	2.00	10.00	8.50	4.50	1.08	3.50	56.98	
September ...	6.10	4.60	6.70	6.30	3.00	5.70	6.00	5.50	1.65	3.75	49.30	
October ...	1.20	6.50	3.60	11.00	3.30	3.50	5.50	5.25	6.10	11.00	56.95	
November ...	13.40	3.90	7.20	11.20	3.00	2.00	3.75	1.50	9.25	9.50	64.70	
December ...	10.30	(5.70)	2.60	9.40	9.00	8.00	6.50	7.25	12.00	(6.50)	77.25	
TOTALS ...	(66.40)	54.75	48.10	73.40	46.25	55.25	59.15	59.25	55.78	72.89	591.22	10
	M	.11							M	M		

1952 Jan Feb Dec est MO 3b

1954 Dec Gauge replaced by new Octafont 47" - 50"

1955 Jan - Mar part est. M O 3b: New Oct. gauge installed 2.5.55:

1957 Nov Turf walls rebuilt and fences repaired.

1958 Eng says gauge at 1'0" always.

Ink. III 1957, b. O.K. 1/2 sound. Site on - surface SW-N-NE has good turf-wall

1960. Dec. MO 3b est

Turf-wall 72004 60014

Position of Station on Ordnance One-Inch map :

No. of Map 84National Grid Reference 35/825372

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
C1901	✓	✓	✓	✓	
A		A20-22, 23-24			