

RAINFALL at Derwent Dale Howden (lough) N°64

County of W.R. Yorkshire

Observer

S.B. Winsor Esq C.E.

River Basin Kent Derwent 5

Rain Gauge, by

Diameter ...						5					
Height						10					
Altitude ...						1030					
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...						6.32	3.24	3.35	3.75	5.11	
February ...						6.41	7.32	1.22	4.78	3.45	
March						1.41	3.04	3.04	2.10	6.38	
April						1.54	3.07	2.20	1.31	2.31	
May						1.36	2.03	1.92	3.95	1.68	
June.....						1.28	3.84	2.10	2.29	1.36	
July						6.15	2.56	1.88	3.45	3.42	
August.....						2.93	1.94	8.26	2.03	3.46	
September ..						.57	1.79	1.81	10.63	2.53	
October ...						3.27	6.93	6.57	3.40	4.29	
November..						3.78	6.29	6.29	2.21	3.75	
December...						9.95	3.83	2.90	7.85	7.02	
TOTALS ...						44.97	44.88	40.54	47.75	44.96	

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

RAINFALL at Derwent Dale Howden Clough N-64

County of W.R. Yorkshire Observer S.B. Winsor Esq C.E.

River Basin Trent-Derwent 5

Derwent Valley Water Bd.

4.97 } Cu. Smndm Rain Gauge, by Casella
 5.03 } 8250
 5.00 }
 5.01 } Monthly, good condition

Diameter ...	5"											
Height	1	0										
Altitude ...	1030											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	Maxima
January ...	5.53	6.45	6.05	5.07	3.34	4.18	5.66	3.97	12.00	2.60	7.09	
February ...	4.11	3.31	5.42	7.09	1.67	6.15	3.40	2.23	6.94	.71	1.52	
March	3.05	3.09	2.94	2.36	1.18	2.32	2.79	5.57	3.78	.78	3.56	
April	6.59	2.21	4.69	3.03	2.62	3.80	2.46	5.11	1.84	1.31	4.11	
May	6.57	2.13	1.00	4.53	3.78	4.68	3.80	1.48	1.67	3.33	2.48	
June	4.09	2.21	2.14	0.69	1.62	.05	3.42	5.59	4.51	1.42	4.57	
July	6.55	1.16	4.75	2.60	4.59	2.07	2.97	3.07	1.50	4.04	7.50	
August	1.95	6.92	6.84	4.48	3.85	4.96	4.10	1.41	5.77	3.90	5.08	
September..	1.69	2.91	3.96	4.72	4.66	3.95	2.63	6.53	0.51	1.55	6.24	
October.....	3.80	2.54	1.68	3.71	6.60	5.44	6.23	5.20	6.93	6.36	6.93	
November...	1.63	2.60	2.59	6.94	3.29	4.44	5.98	6.95	8.83	9.74	6.22	
December...	4.86	6.78	4.11	4.52	4.31	5.91	2.54	2.23	3.80	13.04	4.47	
TOTALS...	50.42	35.31	46.17	50.74	43.51	47.95	45.98	54.04	58.08	48.78	59.77	

Inspectors 3.18.7.22 sat bottom of valley running E-W. Good position
with sufficient shelter by tall trees.

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	Parish Church.	Distance from gauge

RAINFALL at Derwent Dale (Howden Clifg.) 644

County of West Riding

Observer S. B. Winser, Esq., etc.

River Basin Trent-Derwent-S.

Derwent Valley Water Board (1933)

Type of Gauge.....

Annual Average 44.4 in. based on 15 years obs. un-weighted. Period of average 1881-1913 Ref. 5
660619/26

Diameter	5.										Mean Total
Height	1.0.										
Altitude	1030.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Mean Total
January	7.88	5.18	3.71	4.71	3.09	4.85	7.05	6.05	7.71	(3.95)	54.18
February	6.95	5.7	5.08	4.48	6.80	4.86	7.96	2.82	3.90	3.25	42.67
March	1.19	3.60	3.29	5.15	1.94	4.20	4.10	1.54	4.52	(3.80)	32.33
April	5.90	6.76	1.77	3.72	3.92	2.78	3.26	3.35	3.23	4.29	36.00
May	2.39	5.21	1.93	2.25	1.82	2.51	3.98	3.78	(3.00)	(1.35)	27.22
June	5.92	.95	2.67	1.41	3.56	4.29	1.41	4.00	3.42	1.01	28.64
July	4.97	4.88	3.39	3.43	1.75	4.53	3.50	4.88	(8.40)	3.94	43.67
August	8.02	1.70	0.71	2.95	1.83	2.42	1.74	2.84	3.53	1.70	27.44
September	5.70	4.14	1.62	3.50	6.27	7.16	1.83	3.71	2.28	(4.45)	41.36
October	1.88	8.20	6.31	5.50	10.00	4.98	4.20	(10.00)	5.74	5.37	62.18
November	7.08	4.66	3.39	4.31	8.55	6.81	2.85	6.90	(9.10)	(11.60)	65.35
December	2.54	2.14	0.74	6.19	5.28	4.92	5.15	5.72	(4.30)	6.01	43.29
TOTALS	59.42	48.31	34.61	1.36	60.53	81	54.31	47.03	52.59	(59.83)	(50.72)
										M	504.23

N.B. Imputed X/20. Moved to site selected on other side of pond & set up in "surf area".

1934. F. moved according to instructions and renormalised 644

1938. Cut off by Obs. file major.

Jan. Mar. May Sept. Nov. estd.

* Surf with netting * 11.33

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	Direction

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

Station No. 3108/1

RAINFALL at Dacewark Dale Hawarden Mang' Check gauge 64 B

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County of Cheshire W.R. Observer Peacock Valley Water Bd.

River Basin Trent, Dee, Mersey - 5

Type of Gauge.

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

Ref.

File No. 370241/34

Diameter				106	232	5"					
Height					1	1 0"					
Altitude					41	1090					
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January				8.00 (6.00)	5.81	(4.10)	10.48	2.47	4.24		
February				2.60 (6.20)	6.25	(4.30)	3.87	2.09	7.21		
March				1.40	1.40	2.75	(3.70)	1.73	1.77	2.27	
April				3.50	2.60	2.00	3.95	2.31	4.77	5.07	
May		#	3.33	4.25	3.50	2.98	3.95	2.43	2.99	2.80	
June			2.56	2.59	5.00	4.50	2.87	4.57	.54	1.25	
July			1.96	3.91	1.25	3.71	2.11	1.57	3.79	2.80	
August			4.61	4.20	3.00	4.51	.48	5.10	2.33	3.81	
September			4.87	5.05	2.35	5.94	1.87	2.09	1.85	5.79	
October			2.50	5.00	6.25	8.69	1.38	2.66	4.75	1.41	
November			4.83	8.10	7.5	10.61	4.97	2.11	8.45	7.83	
December			2.91	3.70	3.75	4.85	5.74	3.81	8.00	(3.81)	
TOTALS			imp.	52.30	(42.05)	56.60	(44.42)	62.73	43.80	47.49	
				—	—	—	—	—	N.Plate	—	
				60004			70004			00014	

1944 n.p. check.

1945 n.p. check. Jan & Feb. est'd.

1946 n.p. check.

1947 n.p. check. Jan, Feb & Mar. except for snow.

1948 (part) impeded - gauge in a sort of hollow grass kept carefully cut.

1950 n.p. check and low. See part est.

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

Station No. 3108 TE 26

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RAINFALL at § Derwent Dale (Howden Cl 2b) 64 n

County of West Riding - Yorks. Observer Derwent Valley Water Bd.

River Basin Trent-Derwent-5

Type of Gauge Septant

Annual Average 44.4 in. based on 15 years obs. un-weighted. Period of average 1881-1915 Ref. S
 " 49.91 " 34 " 1924-57 " 1916-50

File No. 660619/26

Diameter	5"			106	233						
Height	1' 0"				1						11"
Altitude	1010'				51						
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means Total
January	5.43	(6.96)	2.03	4.52	4.31	7.55	3.49	5.19	4.55	8.86	52.89
February	5.75	(3.00)	(3.40)	3.62	4.24	2.35	4.26	9.65	.38	(3.45)	40.10
March	6.90	2.89	3.00	3.10	4.75	2.25	3.49	4.07	2.48	3.19	36.12
April	2.79	3.14	3.75	7.8	1.35	3.28	.47	1.58	4.64	2.63	24.41
May	4.07	3.35	2.94	4.36	5.63	1.28	1.64	4.16	2.20	2.15	31.78
June	1.19	2.12	3.60	2.92	3.97	4.91	1.50	5.19	1.94	1.58	28.32
July	2.95	2.45	5.07	4.81	1.35	8.83	4.32	6.10	3.71	6.85	46.44
August	5.71	2.67	4.86	7.85	1.08	8.60	6.83	3.27	1.28	4.45	46.60
September	(2.75)	6.55	2.05	5.02	1.79	4.96	7.57	4.63	.13	5.56	41.01
October	.90	8.80	2.45	6.65	3.71	3.15	4.15	3.89	4.04	9.60	47.34
November	11.89	4.37	3.04	8.17	3.05	2.40	3.98	1.34	7.40	6.15	51.19
December	6.90	4.39	2.11	7.59	6.04	6.20	6.61	6.23	8.10	(5.45)	60.12
TOTALS	56.63	50.69	38.30	59.39	41.27	55.16	48.31	55.30	40.85	(60.42)	506.32
	M	M	M	M	M	M	M	M	M	M	20004

1952 Jan Feb and Mar 26
1955 Feb. Mar. part esp. M.O. 3b.

High. III 1958 Trees 30°, 35° N, 30°, 35° NE. Hillside on shelter SW-SE. Turf wall low - not really necessary. Long grass.

1960 7mm since 26th. Grounds kept short. Cut三次 to N and NE have not been cut down.

00104 60004 20004

§ Turf Wall.

(43)

Position of Station on Ordnance One-Inch map : No. of Map 102 National Grid Reference 3K177936

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	1910-19 181	1920-30 181	1931-40 181	1941-50 181	1951-60
	C 1915	✓	✓	✓	✓ np +3

Station No. 31081

TF2b

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RAINFALL at Derwent Dale (Howden Clough)County of West Riding Yorks ^{High gauge 64.8} Observer Derwent Valley Water Pd.River Basin Trent Derwent 5Type of Gauge Octapent

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

Ref.

File No. 370241/34

Diameter ...	5"			106	232						
Height ...	1' 0"				1						
Altitude ...	1090'				51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	5.46	(6.86)	1.79	4.15	4.25	(7.65)	3.64	5.29	4.87	9.10	
February ...	5.93	(3.00)	3.37	4.15	4.15	(2.40)	3.80	7.05	.23	(3.62)	
March ...	6.47	2.75	2.95	3.41	4.75	2.00	3.41	4.11	(2.35)	3.04	
April ...	(2.75)	3.00	3.27	.55	1.82	3.20	.35	1.59	4.76	2.45	
May ...	4.45	3.00	2.97	4.10	5.40	1.45	1.40	4.21	1.79	1.98	
June ...	1.20	2.50	2.90	2.60	3.65	3.89	1.20	5.27	1.70	1.36	
July ...	3.59	2.42	5.10	4.40	1.00	7.94	3.40	5.80	3.42	6.66	
August ...	4.91	2.95	4.65	6.75	.90	9.61	6.60	3.27	1.05	4.30	
September ...	3.95	6.76	2.15	4.97	1.75	3.50	7.25	5.20	TRACE	5.45	
October90	7.65	2.11	7.40	3.61	2.81	4.15	3.80	4.03	8.74	
November ...	10.83	3.75	3.17	7.90	2.80	2.07	3.68	1.34	6.84	7.03	
December ...	6.50	4.35	2.08	7.25	6.95	5.60	5.86	5.94	7.86	5.24	
TOTALS ...	54.94	48.99	36.51		57.63	41.03	52.12	44.74	52.87	38.90	58.97
	n.p.	M.p.	n.p.	M.p.	n.p.	M.p.	M.p.	M.p.	M.p.	n.p.	n.p.

1951. n.p. check 60004
1952. Jan. cat 1103b. np check 1956 np check v low. Jan Feb part Est m.o.s. Eng agrees.1953 n.p. check 1959:- np check
1954 n.p. check 1960 np check.

1955 n.p. check gauge. 1958 J.B.O.K. 0'shelter of trees on hillside NW-Northwest satisfactory. 1.9. Some low min distorted.

1957 np check 5 low 1940.7mm and 26A. Nothing has been done about the distorted rain.
1958 np check An av. 4.7-7.6 in. based on 13 yrs. obs. 1944-57.
2" low. Period of obs. 1916-50-S - Rejected.

Position of Station on Ordnance One-Inch map : No. of Map 102 National Grid Reference SK1102936

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge.
00004						

Summary of Earlier Records from 10-year Sheets :

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
				np. 43-50 C 1943	