

RAINFALL at

Helenburgh (Blairnaun) No 1^B

County of Dumbarton

Observer Mr. Stirling, C.E.

River Basin 3. Clyde. Section

Type of Gauge Glaisher

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

Ref.

Impression check to No 1 g. 5326/4

Diameter											
Height											
Altitude											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January											
February											
March											
April											
May											
June											
July											
August											
September				C 5.03							
October											
November				4.98							
December				2.22	#						
TOTALS				in							

1934 Accidental g. in Jan. File 182183/35 min 7319.

Station terminated 10/38 (see enc. 45A p. 727947/38)

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
1933			Helenburgh	3.4 m	S	Rhu	3.6 m	SW.

RAINFALL at Helensburgh (Blairnairn No 1)County of Dumbarton Observer J.N. Stirling, C.E.River Basin 3 - Clyde - SevenType of Gauge Glasslee

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

Diameter											
Height	8"										
Altitude	575'										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January			7.40	10.55	5.27	5.89	9.43	9.94	6.47	(2.90)	
February			7.20	1.20	8.26	4.68	6.48	6.04	7.84	(3.60)	
March			4.66	4.23	3.03	4.40	4.51	7.38	5.74	(4.80)	
April			4.17	4.74	6.24	2.46	3.43	1.02	3.74	(4.50)	
May			4.96	5.74	1.08	2.78	2.01	5.74	1.93	1.65	
June			3.44	4.45	5.32	3.68	4.78	7.41	3.98	.85	
July			8.40	2.90	4.00	6.76	4.82	7.83	7.85	3.65	
August			6.73	5.82	3.61	5.68	5.28	3.98	3.68	4.93	
September			1.80	7.93	8.97	6.06	4.97	7.32	4.78	4.73	
October			5.22	12.10	12.46	7.14	5.09	12.24	4.78	7.63	
November			4.61	3.32	6.40	5.68	1.45	11.91	10.73	8.87	
December			2.18	11.63	7.14	9.78	5.45	9.94	5.63	7.83	
TOTALS			60.27	74.61	71.77	62.99	57.70	90.75	67.15	(55.94)	

1940 Jan - April estd. from nearby stations.

1940 New measure supplied.

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
			Helensburgh	3½ m.	S	Rhu	3½ m.	S.W.

RAINFALL at

Hawick (Blairmuir) No. 2.

County of Dumfriesshire

Observer J. H. Stirling, B.E.

River Basin 2. Clyde-Leven

Type of Gauge Glashie Snowdon (190-1936)

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

Diameter												
Height				5'								
Altitude				1' 0"								
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January			6.40	9.05	5.10	6.26	9.93	9.70	6.30	(3.00)		
February			5.33	1.28	8.10	4.60	6.40	6.30	7.30	(3.70)		
March			3.73	3.52	2.90	4.60	4.30	7.60	6.10	(4.90)		
April			3.77	4.32	4.90	2.40	4.00	1.10	4.10	(4.70)		
May			4.43	5.20	.98	2.90	3.10	6.10	1.90	1.80		
June			3.90	4.90	6.22	3.50	5.00	7.80	4.00	.90		
July			7.30	3.30	3.60	7.20	5.20	8.20	8.10	3.80		
August			6.20	6.30	4.05	6.20	6.10	4.20	3.80	4.80		
September			1.10	8.40	9.55	5.90	5.70	7.60	4.90	5.00		
October			4.34	11.20	12.30	6.59	5.70	11.20	4.70	8.00		
November			4.56	3.10	6.28	5.78	1.60	12.30	11.10	9.20		
December			2.05	11.70	6.76	9.40	6.10	9.98	6.10	8.20		
TOTALS			58.11	72.27	70.74	65.53	63.13	92.08	68.40	(58.00)		

1940 Jan - April total from nearby stations.

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		Parish Church.	Distance from gauge	
				S.E.	S.		S.E.	S.W.
1933			Hawick	4 m	S.	Rhu	4 m	S.W.

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

RAINFALL at Helensburgh (Blairnainy) No. 3County of Dumbarton Observer J. H. Stirling, C.E.River Basin 3 - Clyde. SeconType of Gauge Susydon. M.O. (1030)

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

Diameter	5"										
Height	1' 0"										
Altitude	1580'										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January			5.80	8.45	4.90	6.26	9.83	9.60	6.20	(3.00)	
February			5.20	1.57	7.90	4.70	6.40	6.30	7.20	(3.80)	
March			3.53	4.23	2.80	4.80	4.40	7.60	6.10	(5.00)	
April			3.87	4.53	5.10	2.20	4.00	1.10	4.10	(4.80)	
May			4.85	5.10	1.08	3.10	3.30	6.30	1.90	1.80	
June			3.90	5.10	6.42	3.50	6.10	7.80	4.00	.90	
July			7.80	3.50	3.90	7.30	5.30	8.30	8.00	3.80	
August			6.50	6.40	4.15	6.50	6.30	4.20	3.90	4.80	
September			1.20	7.80	9.45	5.90	5.80	7.50	4.90	5.10	
October			4.64	11.30	12.20	6.59	5.80	11.70	4.70	8.00	
November			4.86	3.00	6.08	5.78	1.70	12.30	11.20	9.20	
December			2.05	11.50	6.66	9.50	6.30	9.98	6.20	8.10	
TOTALS			53.20	72.48	70.44	66.33	64.23	92.68	68.40	(58.30)	

1940 Jan - April estd. from nearby stations.

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
1933			Helensburgh	4½ m	S	Luss	4 m	NE.

Station No. 5326/4

RAINFALL at Helensburgh (Blairmairn) N°1

41

County of Dumbarton

Observer J. N. Stirkung, Esq., C.E.

River Basin 3 - Clyde - Lenox

A.D. Rossmith (Baptist Engineer) 1945.

Type of Gauge Planchet

Planchet Engineer 1948

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

File No.

Diameter	8"			6603	182						
Height	1' 0"				1						
Altitude	575'				41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	2.57	(7.50)	7.48	7.94	6.42	8.45	8.43	14.60	13.20	7.05	
February	7.53	(2.75)	7.93	8.68	10.59	4.73	(1.00)	7.27	6.90	4.40	
March	3.62	(4.23)	4.53	2.95	5.23	4.19	(5.50)	7.30	6.80	5.30	
April	2.62	3.24	4.74	4.23	2.75	2.63	12.20	4.30	7.40	5.30	
May	4.93	4.83	4.65	4.33	6.63	2.50	7.44	3.37	3.60	2.30	
June	1.79	2.77	5.73	6.30	6.43	6.34	5.25	7.90	1.79	3.25	
July	4.08	3.83	4.07	5.63	6.39	4.95	7.30	6.46	3.48	4.25	
August	6.78	8.54	9.81	5.35	2.84	(5.54)	0.00	11.90	7.40	7.90	
September	3.53	8.58	5.53	6.13	8.13	(13.10)	8.07	13.00	4.50	13.46	
October	7.25	9.74	11.03	7.71	8.43	0.80	5.01	14.24	10.00	8.55	
November	6.56	1.87	4.06	8.62	1.00	12.36	11.50	7.80	8.40	5.00	
December	4.47	8.17	4.03	8.24	7.34	11.40	3.00	11.60	15.08	2.78	
TOTALS	5603	(6605)	73.59	71.11	72.18	76.99	(74.70)	109.74	88.55	75.54	

1941 Nothing near gauge.

1942 Nothing near gauge.

1942 Jan - Mar water gauge unapproachable

1946 Aug & Sept apply 1936. 687

00300 30004

1947 Feb. & Mar. lit. for snow

1949 Authority unwilling to provide transport for inspection

1950 Inspection requested this year when climatological station at Helensburgh is being done

1951 Land 19.83 g. m. deep July, NE & SW about 10° each; in fair condition but rain irregular, 8.3° - 7.2°, flat bottom the common

7000 ft

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
1941			Helensburgh	3 $\frac{3}{4}$ mi	S	Rhee	3 $\frac{1}{2}$ mi	S.W.

Station No. 5326/5

41

RAINFALL at Helensburgh (Blairnair) N° 2

County of Dumbarton

Observer J M Stirling Esq C.E.

River Basin 3/2 - Clyde - Leven

A D Remond (Burgh Engineer) 1905.

Type of Gauge

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

Ref.

File No.

Diameter	5"				603	181					X
Height	1'0"						1				
Altitude	1250'						64				
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	-100	1	(8.00)	7.57	8.10	6.62	8.50	8.00	15.00	9.75	Y.00
February	-100	1	(3.00)	8.00	3.74	10.80	4.90	(1.00)	8.03	4.40	Y.00
March	-100	1	(5.00)	4.60	2.85	5.30	4.00	(6.00)	8.00	3.50	4.40
April	-100	1	3.60	4.80	4.80	2.80	2.70	12.00	5.00	6.30	6.00
May	5.00	4.90	4.80	4.40	6.40	2.10	8.25	2.08	3.80	2.00	
June	1.80	2.90	5.90	6.40	6.50	6.20	6.38	7.50	1.50	3.10	
July	4.20	4.00	4.10	5.70	6.50	4.40	7.70	5.25	4.08	4.00	
August	7.10	8.80	9.88	5.50	3.00	5.60	0.00	12.00	5.80	4.60	
September	3.90	9.00	5.72	6.20	8.20	11.38	7.00	14.00	4.00	12.78	
October	7.40	9.90	11.00	7.80	8.60	1.20	5.05	15.00	9.30	8.16	
November	7.10	2.00	4.20	8.70	1.10	9.60	9.90	6.90	7.46	4.40	
December	4.90	8.90	4.10	8.30	7.40	8.10	2.80	8.90	11.05	3.10	
TOTALS	-100	--	(60.00)	74.67	71.99	73.22	68.68	74.08	107.66	70.94	72.54 a.s.l.m.
	mp.	mp.	mp.	mp.	mp.	mp.	mp.	mp.	mp.	mp.	a.s.l.m.

941. Jan-april gauge unapproachable. 1942 nothing near gauge

1942 Jan-Mar 1943 G. unapproachable during these months.

1945 n.p., readings identical to those of 5326/6. Obs. added to best records independently.

1946 n.p. low. (1954 requires new walls) 1951 Depth 19.1x, from date on 10.74

1947 Feb + Mar est for snow - up to now

1948 n.p. low pending resumption 1951 March ground G. in excellent condition,

1949 Authority not willing to supply transport for resumption no more flat bottom.

1950 Resumption requested this year when Helensburgh cleant etc. to being done.

Position of Station on reduced Ordnance Survey Map, No. of Map Reference No.

1 mile to 1 inch Series

Reference No.

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
1941			Helensburgh	4 mi	S.	Rhu	4 mi	SW.

Station No. 5326/6

RAINFALL at Helensburgh (Blairnair) N° 3

41

County of Dumbarton

Observer

J. N. Stirling, Esq., C.E.

River Basin 3 - Clyde - Haven

A.D. Remond Eng (Borough Engineer) 1945

Type of Gauge M.O.

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

Ref.

X

File No.

Diameter	5"			663	180						
Height	1'0"				1						
Altitude	1580'				41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	-100	*	(800)	7.69	8.10	6.63	8.50	6.60	14.50	6.00	8.00
February	-100	*	(300)	8.10	3.74	10.85	4.80	(1.00)	9.00	5.10	6.30
March	-100	*	(500)	4.60	2.95	5.30	4.00	5.60	9.30	4.10	5.00
April	-100	*	3.60	4.90	4.30	3.00	2.80	6.00	3.40	7.00	6.00
May	5.10	6.00	4.80	4.40	6.40	2.00	4.50	1.09	2.70	2.40	
June	1.80	2.90	5.90	6.40	6.50	6.00	4.50	8.00	1.76	2.80	
July	4.20	4.00	4.10	5.70	6.50	4.10	5.50	6.00	5.00	7.10	
August	7.20	8.90	9.88	6.50	3.00	5.00	0.00	11.00	6.30	7.40	
September	3.90	9.00	5.72	6.20	8.20	9.70	6.00	12.50	3.80	12.45	
October	7.50	9.90	11.00	7.80	8.60	0.59	4.80	14.00	9.40	7.92	
November	7.20	2.00	4.20	8.70	1.10	4.40	9.20	5.50	8.00	4.80	
December	5.00	9.00	4.10	8.30	7.40	4.20	3.00	10.00	10.06	3.09	
TOTALS	-100	(10.30)	74.99	72.09	73.48	56.09	56.70	104.29	69.22	73.26	
	mp.			"P.	"P.	mp.	mp.	mp.	mp.	mp.	Mean

1941 up imp Jun-April snow rendered gauge unapproachable.

1942 Jan-Mar wet. Gauge unapproachable during these months.

1945 n.p. Most readings identical to those of 5326/5 See note on 5326/5.

1946 n.p. low. To be replaced by (1934 imp. gauge type well).

1947 Feb est for snow - n.p. low.

1948 n.p. low reading incomplete.

1949 Authority unwilling to provide inspector with transport.

1949 Imp. P. pending re-inspection.

1950 Inspection this year (1951)

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
1941			Helensburgh	4 1/2 m	S.	Kings	4 ml	N.E.

Station No. 5326/14

w/t thms

RAINFALL at Helensburgh (Blairnarrow) No. 1

County of Dumbarton Observer Burgh Engineer

River Basin Clyde-Leven - 3

Type of Gauge Glass

Annual Average 69.7 in. based on 21 years obs. un-weighted. Period of average 1881-1915 Ref. P.B. 625

File No.

51

Diameter ...	<u>8"</u>			663	182						
Height ...	<u>1'0"</u>					1					
Altitude ...	<u>575'</u>					51					
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	7.26	14.50	3.30	8.25	(4.60) 9.30	3.39	8.23	6.76	2.11	6.45	
February	5.02	3.50	3.05	7.83	7.11	2.36	5.25	3.80	3.14	5.12	
March	5.17	5.16	2.43	4.93	4.55	3.72	7.00	2.10	5.89	4.44	
April	3.54	3.44	3.84	4.17	3.51	2.10	3.25	2.40	4.46	6.00	
May	3.16	2.02	4.85	5.40	4.48	4.20	3.31	5.00	3.00	4.00	
June	2.57	4.03	1.75	4.70	4.38	3.15	2.96	3.60	8.16	4.35	
July	3.96	4.47	6.33	5.19	4.51	6.15	7.02	6.00	9.10	6.12	
August	6.78	5.73	5.29	6.60	2.16	6.60	5.00	9.00	1.94	4.63	
September	5.12	4.15	6.25	10.72	1.13	6.23	3.35	7.25	2.10	3.66	
October	2.25	6.25	4.73	12.42	5.73	5.66	5.89	11.12	4.12	4.08	
November	9.23	4.08	10.63	9.50	6.12	3.26	2.31	7.75	7.43	7.30	
December	12.45	8.26	7.36	9.80 (4.00)	8.52	9.26	8.22	11.60	9.25	7.31	
TOTALS ...	66.51	65.59	59.81	(93.71) 89.01	(56.80) 61.50	56.06	61.19	76.38	61.36	63.46	
	M	M	M	M	M	M	M	M	M	M	

1958 - n.p. record high. 1957. Imp. selected gauge sufficient to reach value in column 5.
1959 n.p. record wrong year.

1960 Print

No. 1 gauge stands on shingle in a dry gully which extends from the sloping down to the road about 50 feet wide. Shallow to N.W. Sides exposed to S.E. Gauge in fair condition but very irregular (say 8.3 to 7.7 ft off of 422 level. Flat bottom measure.

Aug - December in particular

Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference NS(26) 302882

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge.
1951			Helensburgh	3½ mi S	Rhu	3½ mi SW

Summary of Earlier Records from 10-year Sheets :

Sub

Record D. or d		1910-19	1920-30	1931-40	1941-50	1951-60
				C 1933	✓	

not this

RAINFALL at Helensburgh (Blairnairn) No. 2.

Station No. 5326/5

51

County of Dumbarton

Observer O. D. D. Hornisch Esq.
(Burgh Engineer)

River Basin Clyde - Lagan

Type of Gauge.

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

File No.

Diameter ...	5"				463	181					
Height ...	1' 0"						1				
Altitude ...	1250'						51				
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	7.55	14.00	3.18	8.05	8.86	3.52	8.20	7.28	2.75	5.26	
February	5.20	3.70	3.25	7.65	6.40	2.50	5.40	4.00	4.00	4.75	
March	6.10	6.42	2.50	6.21	4.70	3.91	7.20	2.42	6.00	4.00	
April	4.23	3.62	3.52	4.51	3.76	2.23	3.40	2.81	4.78	5.50	
May	3.20	2.86	4.62	5.61	4.50	4.68	3.50	5.43	2.50	3.64	
June	2.72	4.30	1.58	5.00	4.40	3.55	3.10	4.52	9.12	3.60	
July	4.13	5.37	6.20	6.00	4.62	6.30	7.34	6.44	10.00	5.43	
August	7.53	5.80	5.00	7.00	2.25	6.95	5.12	7.36	2.50	4.12	
September	5.07	4.27	6.75	11.50	1.26	6.37	3.47	6.41	2.39	4.50	
October	2.31	6.50	4.52	12.25	5.88	6.21	6.00	6.00	4.40	3.70	
November	9.40	4.37	10.25	9.77	6.25	3.61	2.52	5.00	8.00	6.50	
December	11.89	7.90	7.10	(13.3)	8.86	8.80	9.37	8.47	8.12	9.75	6.80
TOTALS ...	69.33	69.11	58.47	(95.97)	(57.22)	61.68	59.20	63.12	65.79	66.19	57.80
	M	M	M				M	M	M	M	M

1959 NP record irregular 00014

1959雨量计安装在离地面约半米处，以便于测量夏天的降雨量。该处地势较低，排水不良，经常有积水。

1960 NP on inspection report

site in marshy ground within a small enclosure of fence palings & rather overgrown with weeds. It is used to keep the weeds clear & also to keep a check on soil as the soft nature of the ground makes it easier

Position of Station on Ordnance One-Inch map :

No. of Map

National Grid Reference NS(26)302888

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge
1951			Helensburgh 40004	4 mi	S	Rhu	4 mi SW

Summary of Earlier Records from 10-year Sheets :

See

Record D, or d		1910-19	1920-30	1931-40	1941-50	1951-60
				C 1933 —	Imp. imp. 41 + 47 — 42 - 44 2nd imp. 46-50	

Station No. 5326/6

51

RAINFALL at Helensburgh (Blairnairn) No. 3

County of Dunbarton Observer D. D. Hornish Esq.

River Basin Clyde - Leven - 3 (Borough Engineer)

Type of Gauge M.O.

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

File No.

Diameter ...	5"				663	180					
Height ...	1' 0"					1					
Altitude ...	1580'					51					
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	7.81	14.70	3.02	8.30	(6.50)	3.59	8.45	7.13	2.90	5.67	
February	5.28	3.75	3.00	7.16	5.80	2.76	6.45	3.93	3.62	4.60	
March	6.18	6.48	2.62	5.48	4.90	4.00	7.40	2.61	6.14	3.92	
April	4.78	3.25	3.22	4.66	4.01	2.31	3.45	3.00	4.70	5.62	
May	3.62	2.09	4.00	5.75	4.75	5.01	3.56	5.60	2.40	5.50	
June	2.86	4.94	1.32	5.10	4.65	4.00	3.20	4.50	8.60	4.06	
July	4.05	5.90	6.05	6.11	4.73	6.50	7.38	6.73	9.63	5.22	
August	7.15	6.00	5.10	7.31	2.27	7.14	8.20	7.56	2.00	3.90	
September	5.38	4.39	6.78	11.75	1.37	6.39	3.50	6.00	2.20	4.40	
October	2.40	6.60	4.92	12.56	5.96	6.87	6.12	6.34	4.65	3.65	
November	9.45	4.65	9.87	9.85	6.49	3.68	2.56	5.10	7.86	6.17	
December	11.93	7.75	7.00	(3.00)	8.70	9.00	9.20	8.40	9.93	9.55.	6.89
TOTALS ...	10.89	70.50	56.90	(97.03)	58.33	61.45	64.67	66.43	64.28	59.60	
	M	M		92.73	62.63	M	M	M	np.	np.	

1959 np low and record irregular

1960 np on unspec. report

1951 inspection. This is a further half-hourly climb from N° 2! No time to inspect but assumed site is similar to N° 2. Observer neglected to take action as N° 2.

40004
00014

Position of Station on Ordnance One-Inch map :			No. of Map	National Grid Reference NS(28) 308594		
Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge
1951			Helensburgh	4 ¹ / ₂ mi S	Wmrs	4 mi NE

Summary of Earlier Records from 10-year Sheets :

Sud

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
			C 1933	✓ but imp 41.57 —	- 42.49 but 2.9 P. - 42.49 but 2.9 P. - 42.49 but 2.9 P.