

RAINFALL AT Arborthwaite Reservoir

Lat. _____

Lon. _____

County of FyldeRain Gauge, by Castilla

Observer

P. C. Smith Esq. Q.C.

Weekly S. Shk - 3.

Diameter ...										5	
Height										1.0	
Altitude ...										251	
Year ...	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ...										1.76	1.48
February84	.38
March										3.51	3.26
April57	3.02
May										1.89	2.88
June.....										1.21	1.25
July										2.38	2.60
August.....										1.93	2.23
September73	5.63 .59
October ...										4.87	2.35 3.69
November ...										1.54	2.43 .33
December...										3.63	1.54 2.31
TOTALS ...										25.54	24.02

-10 in. D.

3 miles from Armathwaite

9. on top of Reservoir Bank (07)

1904 Collister Church 1.00 yards NW

" Station 2.000 N E

RAINFALL at Abroath, Muirheads Reservoir

County of Forfar

Observer P. C. Smith Esq. B.R.

River Basin South Esk H. 3.

J. L. Brown, Esq., B.C.

Rain Gauge, by Casella

Weekly.

Diameter	5	Height	10	Altitude	251T						
Year	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	SUMS MEANS 1916-1919
January	2.15	.80	2.89	2.90	1.23	2.38	2.95	1.63	1.89	2.90	9.37
February	1.57	1.19	2.55	.65	2.47	4.19	2.27	1.14	2.37	2.48	8.26
March	1.09	.81	2.12	3.46	3.61	1.41	2.70	1.37	1.31	1.64	7.02
April	2.44	1.28	.01	2.98	.70	.51	2.20	1.23	.52	1.88	5.83
May	1.79	1.52	1.54	2.92	1.59	1.07	2.97	1.77	3.60	.99	9.31
June	.41	.62	2.06	1.96	.69	.93	3.45	1.20	.66	1.16	6.47
July	2.55	1.44	2.69	.50	2.09	2.72	6.37	1.65	4.55	.65	13.22
August	7.36	7.3	3.87	1.67	2.69	2.47	1.73	4.70	2.36	1.91	10.70
September	.80	.87	2.81	2.01	.50	1.27	1.35	2.32	3.42	1.12	8.21
October	1.96	2.34	4.32	1.92	3.11	3.11	4.13	2.89	2.15	2.04	11.21
November	2.87	3.06	1.64	1.74	3.16	.97	3.72	2.70	1.62	4.17	12.21
December	2.49	4.94	2.13	.88	4.36	6.62	4.22	2.03	1.82	5.12	13.19
TOTALS	27.48	19.60	28.63	23.89	26.20	27.65	38.06	24.63	26.27	36.04	115.00
					imp. D	min. D				exp. D	

imp D imp D imp D

imp. D imp. D

1910
1911

Taken at 12 noon - not read on 1st. of month
corrected to "

10

1913 Nanking, China, Aug. 20, 1913

1919. stone 15 ft high 15 ft. N.

Date.	Lat. N.	Long. W.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
1911.	56.33	2.35	Colliston	2000 yds.	NE.	Colliston	1000 yds.	NW.

RAINFALL at Arbroath, Muirheads Reservoir

County of Fairfax

Observer Y. L. Brown Esq. G.E.

River Basin South Esk & C. 3

D. J. Shaw Eq. (192)

L. O. pattern Rain Gauge, by Casella
(^{'25})

Y. A. HOGGE (1924)

Y. A. HOGGE (1924)

Boro' Eng' Orbcoach.

Diameter ...	5"	5"									
Height	1 0	1 0									
Altitude ...	251	253	251	251							
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930. MEAN
January ...	2.55	2.99	3.02	2.20	2.26	1.82	3.73	1.88	5.24	1.86	1.33
February ...	2.07	1.61	2.31	4.37	1.12	3.16	5.98	1.98	1.18	1.76	1.81
March	1.95	2.41	1.75	1.72	1.83	1.70	1.14	2.60	4.26	1.60	1.49
April	2.38	1.25	2.12	1.61	1.81	3.37	1.95	1.94	1.06	1.33	2.70
May	3.39	2.46	1.14	1.09	3.75	3.67	2.17	2.51	1.44	2.92	1.42
June	1.98	1.21	1.34	1.62	1.64	1.77	3.09	2.57	4.14	1.49	1.88
July	2.90	1.00	3.98	1.22	4.44	2.03	2.27	1.88	1.64	3.32	2.84
August	3.37	3.51	2.11	4.54	2.39	2.56	2.99	4.03	4.16	4.68	3.36
September...	1.60	1.46	1.82	3.52	3.92	3.97	3.62	6.61	3.02	1.64	8.78
October....	2.84	1.71	4.65	2.48	4.37	2.65	5.43	6.10	4.04	3.01	5.54
November...	2.72	2.58	1.16	2.32	2.23	1.96	5.29	1.84	3.17	3.90	3.44
December...	4.12	1.78	1.04	2.79	3.35	1.25	2.27	2.64	2.97	4.55	2.82
TOTALS...	30.87	21.97	25.44	28.48	32.09	27.91	37.93	34.58	36.32	29.56	34.41
					W		b				339.56

1921 farm 25 ft. high 30 yds. E.
Plantation 15 ft. " 30 yds. S.

1923. Corrected for sun

1929. adjusted for date of reading

Position of Station on reduced Ordnance Survey Map, 2 miles to 1 inch Series				No. of Map	Reference No.			
Date.	Lat. N.	Long. W.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
1920	56° 38'	2° 35'	Colliston	1 1/2 mi	N.E.	Colliston	3/4 mi	N.W.
1954			Alloa	3	SE			

RAINFALL at *Arbroath (Muirheads Reservoir.)*

County of Angus (Forfar.)

Observer J.A. Hogg, et. Eq.,

River Basin. 3 - South Est &c.

W.A. Turner, Esq., C.E.

Type of Gauge M. O.

Annual Average 28.1 in. based on 20 years obs. un-weighted. Period of average 1881-1900 Ref. S

Diameter	5										
Height	10										
Altitude	251										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	3.48	2.22	1.71	2.25	1.07	4.95	3.95	3.52	3.17	2.62	28.94
February	1.32	.17	3.01	.08	1.92	3.09	3.64	1.23	2.90	2.47	19.82
March	1.48	(2.18)	1.86	2.07	1.81	2.61	3.10	.44	2.10	(2.81)	21.36
April	2.21	(2.42)	.79	5.29	3.84	.60	1.85	.22	.71	1.31	19.24
May	4.08	3.04	1.02	2.42	.90	1.23	1.85	3.75	1.68	1.16	21.05
June	4.29	1.30	1.90	.57	3.80	.41	2.20	3.79	.90	(.21)	19.37
July	4.29	5.40	2.16	3.11	1.25	4.13	3.73	4.50	6.20	5.16	39.93
August	4.07	.62	83	2.26	.92	.68	2.12	1.53	1.68	.74	15.45
September	1.35	1.99	2.05	2.87	5.49	4.03	2.94	2.37	1.62	2.57	27.33
October	.87	7.06	3.38	4.75	4.36	.64	2.40	3.50	3.67	4.12	34.65
November	6.39	.71	2.30	1.04	4.85	2.03	1.87	3.94	3.25	4.32	30.70
December	1.15	3.18	1.92	5.02	2.13	1.11	3.12	3.87	1.88	1.32	24.73
TOTALS	34.93	30.59	22.93	32.33	32.34	25.51	32.82	32.66	29.66	(28.81)	302.58

1932. March or April adjusted for accumulation

1940. ? low. March. June past std.

Position of Station on reduced Ordnance Survey Map. } No. of Map.....
1 mile to 1 inch Series }

References No.

1 mile to 1 inch Series							
Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge
1931.			Colliston	2m	N.	Colliston	3.4m W.

Station No.

5599

RAINFALL at Arbroath (Muirheads Res.)

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County of Angus (Forfar) Observer W. A. Turner, Esq. C.E.

River Basin 3 - South Esk & C. G. Ruthven Esq.

Type of Gauge 5"

Burgh Engineers

Annual Average 28.1 in. based on 20 years obs. un-weighted. Period of average 1881-1915 Ref. S.

File No.

Diameter	5"				857	788					
Height	1' 0"						1				
Altitude	251'						41				
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	SURG. Means
January	(2.37)	3.73	4.02	1.26	3.12	1.74	3.46	2.84	1.03	1.16	24.73
February	(4.24)	3.17	0.83	0.75	2.09	1.07	2.30	2.45	1.19	1.85	19.94
March	(1.93)	1.43	0.56	0.37	0.82	2.02	2.56	0.84	1.42	2.67	14.62
April	(1.96)	1.75	1.48	2.89	1.23	0.32	2.27	0.92	2.13	1.48	16.43
May	1.90	3.22	3.29	1.87	4.91	1.86	4.41	3.67	1.50	1.52	28.15
June	1.84	0.96	1.54	2.79	2.59	3.97	2.36	2.93	1.27	1.07	20.82
July	2.86	2.67	2.71	(2.65)	2.63	4.13	1.31	2.27	1.83	2.89	25.95
August	3.29	2.67	4.80	2.04	3.69	3.43	1.15	7.24	2.58	3.14	33.03
September	0.55	2.57	2.46	2.44	3.29	3.80	1.83	2.21	1.53	5.28	25.96
October	4.19	2.20	2.64	3.86	4.65	6.64	1.55	3.28	3.27	1.58	27.86
November	3.97	0.48	1.11	3.26	1.19	6.68	1.96	1.17	4.52	2.99	27.43
December	1.11	2.45	1.09	(2.85)	4.12	3.33	1.66	3.30	1.98	1.10	22.99
TOTALS	(29.71)	27.30	26.53	(24.13)	34.33	32.99	25.82	33.12	24.25	26.73	287.91

1941 Tree 20' high 30° E. 1941 up. Figures for Jan - April copied from 5598.

1941 May, June, July & December adj. by ref. to 5598.

16/11/46. Position changed to nearly site at the same level clear of all obstructions following correspondence in Aug 1945

1950 July 17th reading lost. And recorded at Springfield Park substituted.

75004

00444

accept

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
1941			Colliston	2 m	N	Colliston	2 m	W

Station No. 5599

RAINFALL at Arbroath (Muirheads Res.)

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County of Angus (Forfar) Observer Burgh Engineer,
River Basin South Esk, No. 3Type of Gauge M.0.Annual Average 28.1 in. based on 20 years obs. un-weighted. Period of average 1881-1915 Ref. S
29.86 .. 35 .. 1916-1950 1916-1950 P
File No.

Diameter	5"				857	788					
Height	1' 10"						1				
Altitude	251'						51				
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	4.50	1.17	0.47	1.12	1.13	2.85	3.31	2.45	1.11	3.66	
February	2.14	0.41	0.68	2.08	1.53	1.09	3.58	2.06	0.05	1.71	
March	2.18	3.30	0.19	1.97	1.36	0.86	1.66	4.26	0.95	2.06	
April	2.35	1.02	2.37	1.46	0.55	0.95	1.55	1.21	2.46	1.86	
May	1.57	2.08	2.62	2.87	1.82	0.62	1.51	2.58	1.02	1.05	
June	2.01	2.15	1.41	2.32	0.63	2.93	0.37	1.37	2.52	1.73	
July	3.79	1.56	4.44	1.64	0.90	4.04	4.57	5.09	2.25	1.61	
August	3.95	2.48	2.19	3.04	0.17	4.65	4.13	3.19	0.59	3.51	
September	1.76	1.01	2.61	2.32	1.18	4.77	1.77	2.58	0.42	1.96	
October	0.62	2.17	1.37	4.55	1.80	1.54	1.41	1.96	2.38	5.64	
November	1.52	1.70	2.23	5.27	2.38	0.67	1.24	0.82	3.86	3.26	
December	1.69	1.06	3.31	2.54	4.80	2.65	3.72	4.08	5.21	1.32	
TOTALS	34.08	20.11	23.89	30.18	18.25	21.68	28.82	31.68	22.82	29.37	
	W	W	W	W	W	W	W	W	W	W	W.P.

1960 R.P. on map. left.

Position of Station on Ordnance One-Inch map :			No. of Map	National Grid Reference No. (32) 607443		
Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge.
1951			Colliston	2nd N.	Colliston	3rd N.

Summary of Earlier Records from 10-year Sheets :

1916-1950, P- accepted

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