

RAINFALL AT *Arbroath Water Works*

Lat. Lon. County of *Torfar*
 Rain Gauge, by *J.D. Watson Eng. C.E.*

Sect. 3.

Diameter										5	
Height										1.0	
Altitude										58	
Year.....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January								2.18	2.06	.96	
February								1.00	.80	.75	
March72	3.32	.78	
April								1.41	1.30	2.88	
May87	1.35	1.26	
June60	1.88	1.06	
July								1.59	4.63	3.11	
August								2.66	1.33	4.98	
September.....								2.51	.33	.35	
October66	1.18	2.90	
November.....								2.10	4.04	.78	
December								1.46	1.96	.95	
TOTALS								17.76	24.18	20.76	

RAINFALL AT Arbroath Water Works.

Lat. Lon. County of Forfar
 Rain Gauge, by Observer J. Watson Esq. L.E.
 S. Sect. - 3. Monthly

Diameter									5"		
Height									1.0		
Altitude									58		
Year.....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January									2.20	2.06	1.06
February									1.05	.85	.98
March87	3.29	.99
April									1.42	1.33	3.20
May84	1.34	1.32
June61	1.93	1.06
July									1.61	4.65	3.38
August									2.64	1.31	5.22
September.....									2.78	.34	.41
October72	1.18	3.11
November.....									2.18	4.09	.76
December									1.46	2.05	1.05
TOTALS									18.38	24.42	22.54

RAINFALL AT Arbroath Waterworks Tower

Lat.

Long.

County of

Forfar

Rain Gauge, by

S. Beck - 3.

Observer - J. D. Watson Esq. M.E.

Diameter										5	
Height										48.0	
Altitude										157	
Year.....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January										1.73	.74
February38	.75
March										1.60	.49
April92	1.52
May95	1.04
June										1.36	.91
July										3.35	1.74
August95	3.70
September.....										.24	.32
October84	2.31
November.....										2.68	.65
December										1.55	.78
TOTALS										16.45	14.95

RAINFALL AT Arbroath Water Works Tower

Lat.

Lon.

County of

Forfar

Rain Gauge, by

Observer

J. D. Watson Esq. C.E.

Sect - 3.

Monthly

Diameter										5	
Height										48.0	
Altitude										157	
Year.....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January									1.73	.80	
February40	.59	
March									1.68	.54	
April95	1.82	
May95	1.08	
June									1.41	.90	
July									3.30	1.87	
August94	3.80	
September.....									.24	.34	
October84	2.44	
November									2.74	.64	
December									1.73	.82	
TOTALS									16.81	15.64	

RAINFALL AT Arbroath Waterworks

Lat. $56^{\circ} 33' 32''$

Long. $2^{\circ} 36' 45''$

County of

Fife

Rain Gauge, by

Observer

W Stewart Esq. Cl.

S. Secte - 3.

Diameter	5									
Height	0 11									
Altitude	58	70	57							
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
										MEANS.
January	2.06	.62	1.42	1.33	2.31	2.74	.43	.85	1.13	3.39 1.628
February96	.09	1.07	2.57	3.53	1.28	.72	.90	.53	2.23 1.288
March	1.75	1.91	.60	.91	.44	3.21	1.18	2.91	.52	1.50 1.493
April36	.51	.56	1.24	.70	.97	.86	1.35	3.61	2.70 1.286
May	2.63	1.27	2.44	1.33	3.59	.65	.99	1.60	1.97	3.57 2.004
June	2.56	.35	2.67	2.45	1.81	1.20	2.33	3.82	.84	1.46 1.949
July	3.90	2.86	1.97	1.62	2.70	3.98	3.30	1.24	.37	1.40 2.334
August	2.29	4.09	3.89	2.31	4.06	3.51	2.26	3.10	2.24	.35 2.810
September	2.23	4.28	1.35	1.92	.29	.78	2.90	1.52	1.36	2.86 1.944
October	1.66	1.92	3.84	2.72	2.83	1.70	2.75	1.89	3.26	.74 2.331
November	3.33	2.69	1.99	1.29	1.46	2.55	1.05	1.32	3.41	1.81 2.090
December	1.64	2.96	.91	1.27	1.64	2.72	5.53	3.10	1.21	4.20 2.578
TOTALS	25.37	23.50	22.71	20.96	25.36	25.29	24.30	23.60	20.45	26.21 23.775

1890 House 22 ft high 39 ft SW

RAINFALL AT Arbroath Waterworks

Lat.

Long.

County of

Forfar

Sect - 3. M

Rain Gauge, by

Observer

W. Stewart Esq. C.R.

Diameter										MEANS.
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
January					5					
February					10					
March					57					
April	1.40	2.37	2.71	.48	.89	1.12	2.67			
May	2.56	3.57	.92	.75	.92	.68	2.23			
June	1.13	.49	3.09	1.28	2.96	.53	1.52			
July	1.10	.71	.99	.92	1.37	3.61	2.83			
August	1.24	3.55	.67	1.01	1.41	1.94	3.47			
September....	2.29	1.81	1.24	2.33	3.79	.87	1.98			
October.....	1.72	2.92	4.01	3.33	1.45	.39	1.34			
November....	2.39	4.62	3.55	2.21	3.16	2.27	.36			
December	1.87	.31	.81	2.95	1.57	1.37	3.03			
TOTALS	21.04	26.48	25.14	24.14	24.03	21.39	26.18			

1893 St Margaret Church 500 yards NE
 Trees 25ft high 30ft N + NE

RAINFALL AT Airbrook Waterworks TowerLat. $56^{\circ} 33' 22''$ Long. $2^{\circ} 36' 45''$

County of

Forfar

Rain Gage, by

Observer W Stewart Esq C.E.

S. Scale - 3.

Diameter	5										
Height	48.0	60.0			48.0						
Altitude	157	130			157						
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	1.57	.51			1.56	1.25	.34	.35	.92	2.56	
February51	.02			2.39	.19	.63	.59	.39	1.75	
March78	.51			.35	1.30	1.00	1.72	.16	.98	
April22	.26			.37	.77	.77	1.04	2.13	1.90	
May	1.73	1.00			2.54	.68	.86	1.11	1.32	2.50	
June	1.85	.26			1.53	.98	1.64	2.91	.69	1.19	
July	3.12	2.29			2.29	2.80	2.35	1.07	.30	1.03	
August	1.69	2.23			3.80	3.00	1.97	2.54	1.88	.30	
September	1.71	3.14			.19	.68	2.17	1.30	1.23	1.65	
October	1.36	1.17			1.73	1.28	2.15	1.26	1.32	.52	
November	2.68	1.73			1.25	1.78	.76	1.02	1.70	1.32	
December	1.17	2.08			1.36	1.74	3.72	2.43	.94	2.65	
TOTALS	18.39	15.20	NR		19.36	16.30	18.36	17.34	12.98	18.35	

RAINFALL AT Arbroath Waterworks Tower

Lat.

Lon.

County of

Forfar

Rain Gauge, by

Observer

W Stewart Esq Ch.

Sect - 3.

Monthly

Diameter						5				
Height						48 0				
Altitude						157				
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
										MEANS.
January						1.20	.30	.37	.84	1.87
February16	.60	.54	.36	1.75
March						1.19	.96	1.69	.13	.90
April67	.72	1.03	2.09	1.93
May52	.86	1.01	1.24	2.06
June88	1.60	2.87	.66	1.24
July						2.79	2.11	1.20	.23	1.04
August						2.98	2.01	2.50	1.74	.29
September71	1.96	1.25	.68	1.73
October						1.25	1.95	1.13	1.29	.46
November						1.82	.65	.97	1.65	1.17
December						1.64	3.53	2.64	1.38	2.32
TOTALS						15.81	17.25	17.20	12.29	16.76

St Margaret's Ch 300 yards N
 Water Tower 15 ft high 100 ft S

RAINFALL AT Arbroath Waterworks

Lat.

Lon.

County of

Fife

Rain Gauge, by Casella

Observer W Stewart Esq C.E.

Gardens S Park & C - 3.

P.C.Smith Esq C.E.

Diameter ..	5													MEANS.
Height ..	1' 0"													
Altitude ..	58 ft													
Year ..	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909				
January ..	3.65	1.43	.71	3.38	1.46	.84	1.38	.88	1.27	1.04				
February ..	3.36	1.36	1.07	3.31	3.75	.69	.63	.88	.40	.58				
March ..	1.25	1.34	.93	1.78	1.43	2.74	.84	1.36	2.90	2.51				
April ..	1.37	2.06	1.72	.69	1.33	1.43	.81	1.80	.42	2.51				
May ..	1.04	1.68	1.91	1.33	1.63	1.32	4.24	3.88	1.62	1.90				
June ..	1.49	1.60	1.96	1.58	.56	.48	1.31	4.76	.84	.27				
July ..	4.04	.48	2.78	4.32	.77	1.17	.70	1.88	1.76	2.12	#			
August ..	3.05	3.13	1.86	3.74	4.46	2.96	5.68	2.00	1.17					
September ..	2.18	.85	1.26	2.39	1.62	.76	1.10	1.05	4.62					
October ..	2.64	1.62	1.11	4.47	.74	1.09	3.62	3.19	1.71					
November ..	3.48	1.61	2.18	.84	.73	5.34	2.86	1.78	1.21					
December ..	3.26	2.60	2.36	1.90	1.16	.87	2.67	2.66	2.15					
TOTALS ..	30.81	19.76	19.85	29.73	19.64	19.19	25.84	26.12	20.07					

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1902 St Margaret's Church 500 yards N

Trees 25 ft high 36 ft NNE

1903 Arbroath Station 750 yards NE

1909. Corrected for wrong day.

RAINFALL AT Arbroath Water Works

Lat.

Lon.

County of

Forfar

Rain Gauge, by Casella

Observer W. Stewart Esq. C.E.

N S. Sect - 3.

P.C. Smith Esq. M.L.

Diameter ..	5										
Height ..	10										
Altitude ..	587										
Year ..	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	3.63	1.43	.70	4.08	1.52	.44	1.45	.70	1.27	.98	
February ..	3.37	1.40	1.26	2.92	3.57	.80	.75	.89	.45	.56	
March ..	1.15	1.49	.91	1.98	1.58	2.83	.87	1.41	2.81	2.56	
April ..	1.94	2.14	1.80	.73	.89	1.48	.80	1.92	.53	2.95	
May ..	1.03	1.71	2.12	1.36	1.73	1.20	4.25	4.95	1.43	1.81	
June ..	1.70	1.54	1.86	1.78	.70	.49	1.38	3.65	.81	.47	
July ..	4.08	.56	2.78	4.33	.83	1.40	1.52	1.73	1.71	2.12	
August ..	2.90	3.15	1.93	4.40	4.49	3.02	4.71	2.30	1.96	#	
September ..	2.26	.75	1.33	1.88	1.76	.88	1.16	.92	3.68		
October ..	2.93	1.50	1.19	4.61	.75	2.04	3.74	3.19	1.69		
November ..	3.36	1.68	2.25	.97	.62	4.54	2.86	1.78	1.25		
December ..	3.30	2.60	2.61	2.10	1.37	.92	2.70	2.63	2.00		
TOTALS ..	31.65	19.95	20.74	31.14	19.81	20.07	26.19	26.10	19.59		

1900 St Margaret's Church 500 yards N

Trees 25 ft high 36 ft N + N.E.

1903 Arbroath Station 750 yards NE

RAINFALL AT Arbroath Water Works Tower.

Lat.

Lon.

County of

Forfar

Rain Gauge, by

Observer

W. Stewart Esq. C.E.

P.C. Smith Esq. C.E.

S. Eak - 3.

Diameter ..	5										MENS.
Height ..	48.0										
Altitude ..	157 ft										
Year ..	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	
January ..	2.36	.82	.45	1.59							
February ..	.85	1.03	.63	1.70							
March ..	.26	.80	.73	1.19							
April ..	1.09	1.73	1.00	.36							
May ..	.63	1.14	1.40	.64							
June ..	1.62	1.14	1.48	1.24							
July ..	3.06	.37	1.96	2.51							
August ..	1.94	2.75	1.55	2.08							
September ..	1.75	.66	.85	1.29							
October ..	2.45	1.44	.81	2.14							
November ..	2.43	1.40	1.07	.36							
December ..	2.16	1.45	.82	1.09	#						
TOTALS ..	20.60	14.73	12.75	16.19							

Record very low

1902 St Margaret's Church 300 yards N

Tower 20 ft high 100 ft S

1903 Arbroath Station 500 yards NE

RAINFALL AT Arbroath Waterworks Tower M.

Lat.

Lon.

County of

Forfar

Rain Gauge, by

Observer W Stewart Esq C.E.

M

S. Side - 3.

J C Smith Esq C.E.

Diameter ..	5										
Height ..	48.0										
Altitude ..	157 ft										
Year ..	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	1.70	.70	.43	2.17							
February ..	.77	1.06	.76	1.80							
March ..	.23	.81	.68	1.37							
April ..	1.03	1.71	1.03	.32							
May ..	.67	1.17	1.47	.66							
June ..	1.40	1.04	1.54	1.50							
July ..	3.09	.54	1.96	3.01							
August ..	2.03	2.61	1.45	3.12							
September ..	1.61	.75	.96	1.44							
October ..	1.28	1.34	.91	3.12							
November ..	1.30	1.34	.92	.62							
December ..	2.15	1.44	1.11	1.39							
TOTALS ..	17.26	14.51	13.22	20.49							

1900 St Margaret's Church 300 yards N
 Tower 20 ft high 100 ft S
 1903 Arbroath Station 500 yards NE