

# RAINFALL AT *Arbroath Water Works*

Lat. ....

Lon. ....

County of

*Forfar*

Rain Gauge, by

Observer

*J. D. Watson Esq. C.E.*
*S. 84-3.*

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	
March . . . . .								.72	3.32	.78	
April . . . . .								1.41	1.30	2.88	
May . . . . .								.87	1.35	1.26	
June . . . . .								.60	1.88	1.06	
July . . . . .								1.59	4.63	3.11	
August . . . . .								2.66	1.33	4.98	
September. . . .								2.51	.33	.35	
October . . . .								.66	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. D. Watson Esq. L.E.*
*S. 642-3. 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	
March .....								.87	3.29	.99	
April .....								1.42	1.33	3.20	
May .....								.84	1.34	1.32	
June .....								.61	1.93	1.06	
July .....								1.61	4.65	3.38	
August .....								2.64	1.31	5.22	
September....								2.78	.34	.41	
October .....								.72	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 Water Works Tower*

Lat. ....

Lon. ....

County of *Forfar*

Rain Gauge, by .....

Observer *J. D. Watson Esq. C.E.*

*S. Ink - 3.*

Diameter ....									5		
Height .....									48.0		
Altitude ....									157		
Year .....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January ....									1.73	.74	
February ....									.38	.75	
March .....									1.60	.49	
April .....									.92	1.52	
May .....									.95	1.04	
June .....									1.36	.91	
July .....									3.35	1.74	
August .....									.95	3.70	
September....									.24	.32	
October ....									.84	2.31	
November....									2.58	.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.*
*S. 66-3.*
*Monthly*

Diameter ....										5		
Height .....										48.0		
Altitude ....										157		
Year.....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.	
January ....									1.73	.80		
February ....									.40	.59		
March .....									1.58	.54		
April .....									.95	1.82		
May .....									.95	1.08		
June .....									1.41	.90		
July .....									3.30	1.87		
August .....									.94	3.80		
September....									.24	.34		
October ....									.84	2.44		
November ....									2.74	.64		
December ....									1.73	.82		
TOTALS ....									16.81	15.64		

# RAINFALL AT *Arbroath Waterworks*

Lat. *56° 33' 32"*

Lon. *2° 36' 45"*

County of *Forfar*

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

Observer *W Stewart Esq. C.E.*

*S. 6472 - 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
February ....	.96	.09	1.07	2.57	3.53	1.28	.72	.90	.53	2.23	1.388
March .....	1.75	1.91	.60	.91	.44	3.21	1.18	2.91	.52	1.50	1.493
April .....	.36	.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	4.23	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	2.518
TOTALS ....	25.37	23.50	22.71	20.96	25.36	25.29	24.30	23.60	20.45	26.21	23.445

1890 House 22 ft high 39 ft SW

# RAINFALL AT Arbroath Waterworks

Lat. \_\_\_\_\_

Lon. \_\_\_\_\_

County of Forfar

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

Observer W. Stewart Esq C.E.

S. No. - 3. M

Diameter ....				5							
Height .....				10							
Altitude ....				57							
Year .....	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January ....				1.40	2.37	2.71	.48	.89	1.12	2.67	
February ....				2.56	3.57	.92	.75	.92	.68	2.23	
March .....				1.13	.49	3.09	1.28	2.96	.53	1.52	
April .....				1.10	.71	.99	.92	1.37	3.61	2.83	
May .....				1.24	3.55	.67	1.01	1.41	1.94	3.47	
June .....				2.29	1.81	1.24	2.33	3.79	.87	1.98	
July .....				1.72	2.92	4.01	3.33	1.45	.39	1.34	
August .....				2.39	4.62	3.55	2.21	3.16	2.27	.36	
September....				1.87	.31	.81	2.95	1.57	1.37	3.03	
October .....				2.71	2.89	1.71	2.81	1.98	3.27	.76	
November....				1.30	1.51	2.62	.95	1.38	3.39	1.81	
December ....				1.33	1.73	2.82	5.12	3.15	1.95	4.18	
TOTALS ...				21.04	26.48	25.14	24.14	24.03	21.39	26.18	

1893 St Margaret's Church 500 yards NE  
Tree 25ft high 30ft N + NE



# RAINFALL AT

Arbroath Waterworks Tower

Lat.  $56^{\circ} 33' 22''$

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

County of Forfar

Rain Gauge, by

Observer W. Stewart Esq. C.E.

S. No. 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	
February ....	.51	.02			2.39	.19	.63	.59	.39	1.75	
March .....	.78	.51			.35	1.30	1.00	1.72	.16	.98	
April .....	.22	.26			.37	.77	.77	1.04	2.13	1.90	
May .....	1.73	1.00			2.54	.58	.86	1.11	1.32	2.50	
June .....	1.85	.26			1.53	.93	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.

S. St - 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	
February ....						.16	.60	.54	.36	1.75	
March .....						1.19	.96	1.69	.13	.90	
April .....						.67	.72	1.03	2.09	1.93	
May .....						.52	.86	1.01	1.24	2.06	
June .....						.88	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	
September...						.71	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 Forfar

Rain Gauge, by Casella

Observer W. Stewart Esq. Ch.

Garden S. 24 ft - 3.

P. C. Smith Esq. Ch.

Diameter ..	5										
Height ....	1 0										
Altitude ..	58 ft										
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
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	1.73	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		

1902 St. Margaret's Church 500 yards N  
 Trees 25 ft high 36 ft N & NE  
 1903 Arbroath Station 700 yards NE  
 1909. Corrected for wrong day.

# RAINFALL AT *Arbroath Water Works*

Lat. ....

Lon. ....

County of *Forfar*

Rain Gauge, by *Cassella*

Observer *W. Stewart Esq. C.E.*

*N S. 82 - 3.*

*P.C. Smith Esq. C.E.*

Diameter ..	5										
Height ....	1 0										
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	.73	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	1.43	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 <sup>750</sup> yards NE

# RAINFALL AT *Airbrash Water Works Tower*

Lat. ....

Lon. ....

County of *Forfar*

Rain Gauge, by .....

Observer *W Stewart Esq Ch.*  
*P C Smith Esq Ch.*

*S. Sk - 3.*

Diameter ..	5										
Height ....	48.0										
Altitude ..	157 ft										
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
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 Airbrash Station 500 yards NE*



# RAINFALL AT Arbroath Waterworks Tower N.

Lat. ....

Lon. ....

County of Forfar

Rain Gauge, by .....

Observer W. Stewart Esq. C.E.

M

S. Rte - 3.

P. C. Smith Esq. C.E.

Diameter ..	5											
Height ....	48.0											
Altitude ..	157 <del>N</del>											
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.	
January ..												
February ..	1.70	.70	.43	2.17								
March ....	.77	1.06	.76	1.80								
April .....	.23	.81	.68	1.37								
May .....	1.03	1.71	1.03	.32								
June .....	.67	1.17	1.47	.66								
July .....	1.40	1.04	1.54	1.50								
August ....	3.09	.54	1.96	3.01								
September ..	2.03	2.61	1.45	3.12								
October ....	1.61	.75	.96	1.41								
November ..	1.28	1.34	.91	3.12								
December ..	1.30	1.34	.92	.62								
TOTALS ..	2.15	1.44	1.11	1.39								
	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 N E