

# RAINFALL AT Knareborough Water Tower

Lat. ....

Lon. ....

County of W. York North

Smith Rain Gauge, by .....

Observer F. J. Dorman C.E.

and W. H. H.

F. Bapsham C.E.

Diameter ..								8			
Height ....								10			
Altitude ..								240 ft			
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..								1.18	1.18	1.00	
February ..								1.82	1.63	.60	
March ....								1.76	3.58	4.39	
April .....								1.28	2.70	2.61	
May .....								4.01	2.34	1.68	
June .....								2.78	1.13	3.42	
July .....								1.70	2.48	3.22	
August ....								1.84	1.49	3.24	
September..								.90	2.33	1.45	
October....								6.59	1.49	2.22	
November..								2.94	1.42	.72	
December ..								2.90	1.38	4.59	
TOTALS ..								29.60	23.15	29.14	

1907 Knareborough Church <sup>500 ft</sup> 500 yards <sup>SE</sup> NE  
Station <sup>1100 ft</sup> 400 <sup>NE</sup> NE

1907 Water Tower 50 ft high 50 ft NE surrounded by  
Building near 12 ft x 12 ft

RAINFALL at Knaresborough Water TowerCounty of W.R. YorkshireObserver F. Bagshaw Esq C.E. A. West Esq C.E.River Basin Cruse. Nidd 11Raisher Rain Gauge, by \_\_\_\_\_

Diameter ...	8										
Height .....	10										
Altitude ...	240 $\pi$										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	3.76	1.28	4.40	4.03	1.16	3.76	1.05	2.35	2.78	2.90	
February ...	2.65	1.67	2.11	.83	1.52	3.27	3.25	.72	2.71	1.57	
March .....	.59	1.29	3.32	3.23	2.43	1.14	3.94	2.72	1.14	3.68	
April .....	2.73	1.34	.15	2.91	.80	1.31	1.08	2.26	1.19	1.48	
May .....	2.81	1.06	3.32	1.65	1.11	1.59	2.47	1.57	3.85	1.56	
June .....	1.84	2.99	5.86	1.13	1.99	1.06	1.92	1.77	.86	.81	
July .....	2.82	.30	4.53	.87	3.86	3.86	1.56	1.01	2.88	2.44	
August .....	3.93	2.93	5.77	1.03	1.55	1.74	1.78	6.68	2.69	1.71	
September ..	.17	2.71	1.59	1.03	1.22	1.33	1.62	.48	6.43	1.11	
October ...	2.71	2.87	2.85	2.87	1.69	1.23	4.54	3.81	1.27	3.51	
November ..	2.97	3.23	2.02	2.06	3.71	1.71	2.68	1.84	1.49	(2.26)	
December ...	2.37	4.17	2.28	1.99	5.56	6.53	1.18	1.36	4.32	3.05	
TOTALS ...	29.35	25.84	38.20	23.63	26.60	28.53	27.27	26.57	31.61	(25.88)	

1912  $\frac{1}{2}$  surrounded by buildings nearest 12 ft  
 1919. November partly estd.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
			Knaresboro	1100 yds	N	Holy Trinity	560 ft	S.E.

RAINFALL at Knarborough Water TowerCounty of N. YorksObserver: A. L. West Esq. G.C.River Basin Guse Nidd 11Water Eng. HavergateFlisher

Rain Gauge, by

8.00 corrct. Gauge somewhatbroken 11.23Glass inverted

Diameter ...	9											
Height .....	1	0										
Altitude ...	240											
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS.	
January ...	2.26	3.02	3.02	1.26	2.30	1.77	2.68	1.91	6.35	1.74	4.96	
February ...	1.63	1.1	2.75	4.45	.67	4.18	1.87	1.14	2.68	1.01	1.02	
March .....	1.92	1.09	1.97	1.78	1.10	.64	1.24	1.71	2.69	.58	2.91	
April .....	4.64	1.02	3.07	1.70	1.93	3.71	.65	1.63	.63	1.05	3.31	
May .....	2.43	1.43	.83	2.83	5.06	4.46	2.43	2.06	2.95	1.47	1.85	
June .....	1.30	.21	1.58	.93	1.68	.02	2.54	2.79	4.85	1.51	1.84	
July .....	5.63	1.36	4.89	3.27	3.30	1.53	1.48	4.74	.60	2.64	5.64	
August .....	1.41	3.14	6.62	3.22	2.87	1.99	2.63	7.44	4.17	2.43	3.16	
September...	.97	1.19	3.22	2.22	2.43	2.87	1.41	4.52	.39	.50	4.46	
October .....	3.53	1.60	.68	2.83	2.90	3.36	3.44	3.09	5.36	3.16	2.41	
November...	1.35	2.62	1.34	3.02	2.69	2.00	5.94	2.70	5.27	3.90	5.34	
December...	2.58	2.67	3.88	2.77	3.00	3.49	.86	3.10	1.19	6.05	3.02	
TOTALS...	29.64	19.46	33.75	30.28	29.93	30.02	27.17	36.83	35.15	26.04	39.92	

1920 Surrounded by Buildings nearest 12 ft.

Inspected 2.11.23. Is in good position but rather near wall & boys  
have apparently thrown stones from wall. no better positionPosition 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	Direction	Parish Church.	Distance from gauge	Direction
			Knarborough	1100 ft	N	Holy Trinity	560 ft	SE



RAINFALL at Knarborough (Water Tower)County of West RidingObserver A.S. West, Esq., C.E.River Basin Ouse - Nidd - 11

Type of Gauge

Annual Average 27.1 in. based on 24 years obs. un-weighted. Period of average 1881-1915 Ref S

660560/26

Diameter	8.					5			8	8	
Height	1.0.										
Altitude	240.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	2.00	(1.86)	1.96	2.32	2.28	(3.70)	3.22	3.84	4.81	1.46	
February	2.30	(.41)	4.53	.55	3.59	(2.80)	4.26	1.77	2.15	1.81	
March	.80	(1.94)	1.84	2.82	.77	(2.40)	2.85	.13	1.83	1.78	
April	3.25	(2.70)	1.89	3.62	2.22	1.63	3.28	.07	1.04	2.14	
May	3.30	(5.90)	3.55	1.69	1.21	2.32	3.18	3.10	1.12	1.06	
June	4.75	.50	1.39	2.45	3.44	4.74	1.07	2.77	1.88	.35	
July	4.75	5.23	2.14	1.64	.56	3.51	2.11	2.91	5.72	5.59	
August	3.50	1.52	0.88	1.75	1.67	1.94	.91	3.17	1.84	.51	
September	5.50	2.35	2.49	2.51	6.03	1.94	1.24	2.55	1.55	2.23	
October	1.80	4.03	3.93	2.70	5.02	1.50	2.34	4.55	2.58	3.19	
November	6.50	2.57	3.53	2.52	5.96	2.97	1.64	3.35	3.37	3.95	
December	1.10	1.23	0.94	6.35	2.89	1.86	2.77	4.08	1.85	2.67	
TOTALS	(36.75)	(30.24)	28.47	30.92	35.64	(31.01)	28.87	32.29	29.74	26.74	

1931 np. big. Observer says "delete 5" from total, gauge old + worn.  
Gauge repaired 6/5/32.

1902. leak repaired early May. Earlier months amended accordingly.

1935. h.p. leaking.

1936. Jan-Mar. adjusted by running station.

1940. Jan part std.

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 from gauge	Parish Church.	Distance from gauge	Direction from gauge
1931			Knarborough	1/4 m	NW	Trinity	150 yds	SE.

Station No. 3263

RAINFALL at Knarborough (Water Tower)

41

County of West RidingObserver A. S. West Esq. CERiver Basin Great OuseThe Water Engineer

Type of Gauge.....

Annual Average 27.1 in. based on 24 years obs. ~~un~~-weighted. Period of average 1881-1915 Ref. SFile No. 660560/24

Diameter	8"		058	611							
Height	1' 0"			1							
Altitude	240'			41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	3.71	3.40	3.99	3.04	3.46	2.81	2.32	5.90	1.02	1.15	
February	3.93	1.40	1.05	1.23	3.02	2.63	2.51	1.54	1.35	4.92	
March	2.71	2.21	.75	.29	.74	.97	4.81	1.25	1.06	1.12	
April	1.59	1.41	1.22	2.97	1.68	2.03	3.08	2.46	2.41	2.77	
May	1.52	2.46	2.16	.60	1.96	2.64	3.64	.89	1.92	2.05	
June	.23	.75	1.83	3.72	2.93	2.00	3.12	3.51	.71	.41	
July	2.04	2.35	1.12	2.48	1.68	4.23	1.73	.76	2.00	2.83	
August	3.19	2.15	2.19	3.01	3.53	4.01	.85	4.49	1.93	3.89	
September	.50	1.55	3.33	4.63	1.45	4.83	1.38	1.48	.91	3.08	
October	2.32	2.19	1.59	2.48	3.67	.98	.75	1.17	2.69	1.48	
November	2.83	1.38	2.32	5.02	.36	5.48	2.25	1.03	3.63	4.22	
December	.69	1.98	1.41	2.76	1.79	2.41	1.87	2.73	2.96	1.83	
TOTALS	26.26	23.23	22.96	32.35	26.27	35.02	28.31	27.21	22.59	29.77	

1947 n.p. ~~low~~ Engineer states not satisfactory but no other available in restricted space.  
 1948. n.p. ~~low~~ 2.9.49

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 from gauge	Parish Church.	Distance from gauge.	Direction from gauge.
1941			Knarborough	1/4 mile	N.W.	Holy Trinity	150 yds.	S.E.

BRITISH RAINFALL ORGANIZATION

Station No. 3363

RAINFALL at Knaresborough (Water Tower)

51

County of West Riding - Yorks.Observer The Water Engineer,River Basin Ouse - Foss - H.Local Water Board.Type of Gauge M.D.

A.W.S. 142

Annual Average 27.1 in. based on 24 years obs. un-weighted. Period of average 1881-1915 Ref. 8  
" " 23.65 " " 36 " " with 1936-57 " " 1916-50 File No. 660580/26  
FIN 26 153

Diameter ...	8"			052	611							
Height ...	1'0"				1					11"		
Altitude ...	240'				51							
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	
January ...	2.18	2.45	.43	1.91	1.56	3.98	1.61	2.49	2.66	4.98		
February ...	2.56	.34	1.16	2.22	1.69	1.53	2.62	4.20	.10	1.80		
March ...	3.32	2.01	.49	1.96	1.98	1.15	1.70	1.78	1.26	2.21		
April ...	1.07	1.26	2.01	.26	.91	2.08	.23	1.01	3.61	1.33		
May ...	5.95	1.35	1.40	3.96	2.48	.58	.88	2.95	.60	0.79		
June ...	.88	1.94	1.37	1.82	1.55	2.98	1.24	2.65	1.08	1.06		
July ...	2.03	.93	2.24	1.04	1.15	5.24	2.98	3.15	1.59	4.01		
August ...	5.61	2.72	3.14	6.24	1.24	6.08	6.33	4.69	.65	2.41		
September ...	2.15	3.47	1.46	2.16	1.40	3.21	3.52	2.69	.09	2.97		
October ...	.69	3.08	2.03	4.00	1.91	1.07	2.74	1.86	2.07	6.37		
November ...	6.57	1.52	2.61	5.34	2.15	.63	1.87	.68	4.06	5.05		
December ...	2.41	1.88	1.28	3.19	3.79	2.40	2.85	3.79	4.77	3.08		
TOTALS ...	35.42	22.95	19.62	34.10	21.81	30.93	28.57	31.94	22.54	36.06		
	D	d	d	d	D	d	d	d	d	D		

help. B. 1957/60K. Sealed junction of A. tube and funnel. Satisfactory response.

190 85 72

Position of Station on Ordnance One-Inch map: No. of Map 96 National Grid Reference 44/348567

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1951			Knaresborough	4 1/2 m NW.	Holy Trinity	150 m SE

Summary of Earlier Records from 10-year Sheets:

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	✓	✓	✓ A.M. 1931-40 p 35.	✓ p 47-48	✓ p 49-50
	-	D 28.70	✓ but d 32	✓ but d 49.50	