

RAINFALL at West Hartlepool Water Works

County of Durham

Observer

J. Bowring cl.

River Basin

Tees & C 1

and Bransby cl.

Square Rain Gauge, by Casella

Diameter ...	10		□									
Height	10											
Altitude ...	351											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS. Total	1916-19
January ...	2.06	1.07	2.19	2.63	1.37	2.29	.89	3.72	1.06	3.36	9.03	
February ...	1.72	1.14	1.84	.50	.96	2.02	2.59	.92	1.48	2.04	7.08	
March41	2.71	1.52	1.43	1.62	1.24	3.52	2.18	.79	2.69	9.18		
April 1.83	1.11	.13	2.18	.28	.79	1.00	1.47	1.31	1.43	5.21		
May 2.00	.53	1.77	1.52	1.58	1.68	2.42	1.64	1.80	1.05	6.91		
June 1.65	3.67	4.28	1.36	3.27	.52	1.80	2.09	.29	.85	5.03		
July 2.20	1.04	2.81	.48	4.15	2.35	2.62	1.08	3.49	1.48	8.67		
August..... 3.10	3.01	2.95	1.18	.84	2.98	4.69	3.70	1.23	8.80	11.82		
September .. .46	1.19	1.32	1.38	2.11	1.88	2.35	.84	5.32	1.26	9.77		
October ... 2.69	2.04	2.48	2.95	1.89	1.18	2.47	1.95	1.74	6.30	12.46		
November .. 2.23	3.10	2.38	1.40	3.02	2.25	2.95	1.86	.90	3.22	8.93		
December ... 1.48	2.06	1.00	1.43	3.47	5.62	2.75	2.10	3.70	2.69	11.24		
TOTALS ...	21.73	32.67	24.27	18.44	24.56	24.80	30.05	23.55	23.11	28.62	105.33	

1912 Not read on Sunday

1910 Corrected for wrong day

1911
et seq.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
1911	54°41'30"N	1°12'45"W	W. Hartlepool	½ mi	SSE	St Oswalds	230 yds.	N.N.W.

RAINFALL at West Hartlepool Water Works

County of Durham Observer A. R. Bradshaw Esq. C.E.
 River Basin Tees & C.I. J.R. Bradshaw
 Square Rain Gauge, by Basella

Diameter ...	10	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEANS.
Height	1.0											1920-30 Total 62
Altitude ...	357											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929		
January ...	3.22	3.57	1.30	1.14	1.29	1.17	1.99	1.34	2.71	2.65	.298	23.36
February27	.23	1.92	2.18	1.22	2.21	1.50	0.75	1.22	.70	1.13	13.46
March	2.78	.74	1.26	1.17	1.02	1.49	.57	1.25	1.65	.15	.277	14.85
April	2.67	1.02	1.44	1.52	1.59	2.12	.99	1.42	.85	1.11	1.80	16.45
May	2.64	1.49	.87	2.56	4.60	2.12	2.30	1.46	1.10	1.10	1.30	21.54
June63	.41	1.45	.78	1.60	.12	2.66	3.05	5.25	1.93	1.51	19.39
July	5.35	1.36	3.80	2.48	4.00	1.64	2.33	3.69	1.97	2.12	.559	33.33
August	1.30	4.28	2.23	2.48	2.86	3.63	2.17	5.81	2.56	1.72	.295	31.99
September...	1.16	.44	3.24	1.49	2.13	2.43	1.56	3.00	0.71	1.07	.289	20.12
October....	2.56	1.69	1.37	1.63	3.43	1.82	2.74	1.14	2.77	1.95	1.78	22.58
November...	.63	2.47	.76	3.91	.75	2.72	3.17	5.04	1.64	2.61	3.39	27.09
December...	3.55	1.31	3.58	2.34	2.29	2.91	.70	2.35	1.19	2.26	1.71	24.19
TOTALS...	26.76	19.01	23.22	23.78	26.78	24.08	22.60	30.30	22.62	19.40	29.80	268.35

1926 Rainfall entered to day of reading up to 30th Sept., after that date credited to previous day.

1927. Nov 10th amended w/ nearly records 4/8 Nov 1926.

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	Parish Church.	Distance from gauge
1920	54° 41' 30"	1° 12' 45"	West Hartlepool	1/2 mi S.31E	St Oswalds	230yds N N W

RAINFALL at West Hartlepool (Waterworks)

County of Durham..... Observer J. R. Bradshaw, Esq.,

River Basin Tees & c. - 1.

Type of Gauge (Casella 10) M.O.

Annual Average 24.7 in. based on 22 years obs. un-weighted. Period of average 1881-1915 Ref. 5

917819/29.

Diameter	105											
Height	1.0.											
Altitude	35.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Mean 1931-40 Total 15	
January	1.59	.87	2.11	84	2.10	3.42	1.46	2.05	3.54	1.95	2023	
February	1.31	1.07	2.41	84	2.41	2.49	2.69	1.20	1.64	1.84	1690	
March	1.23	2.24	1.26	1.69	1.72	1.26	2.75	.09	1.92	1.84	1500	
April	2.53	.95	.70	2.25	2.68	1.13	2.33	.23	1.35	1.38	1583	
May	2.29	5.18	1.51	.96	.67	1.84	2.62	2.65	1.24	.84	1926	
June	3.38	1.09	1.27	2.24	2.08	3.29	1.10	2.26	1.81	.80	1930	
July	3.35	2.55	1.15	2.28	.40	3.50	1.15	2.27	2.04	5.58	2427	
August	2.87	2.11	.26	2.85	1.56	1.91	1.38	2.03	1.88	1.84	1819	
September	3.45	1.75	1.76	1.20	4.38	2.17	1.53	1.45	1.62	1.24	2058	
October	1.18	2.41	3.79	2.39	3.61	1.39	1.34	2.87	3.92	2.59	2549	
November	1.70	.94	3.53	1.95	3.54	2.27	2.13	1.93	2.19	2.74	2291	
December	.93	.90	1.52	3.42	2.67	1.55	3.89	3.15	.99	2.46	2148	
TOTALS	26.11	22.06	21.27	22.91	26.82	26.20	24.66	22.18	23.17	24.66	24004	V.21
M.	2	2	2	2	2	2	2	2	2	2		

1935. Engine house 36' high 30 yds. E. Water tower 160' high 100 yds. W.

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
1931.			West Hartlepool	½ m	S.S.E.	St. Oswalds.	230 yds. N.N.W.

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

Station No. T.F. 3525

RAINFALL at West Hartlepool (Waterworks)

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County of Durham Observer J.R. Bradshaw, Esq.
 River Basin Tees & C. - 1 F.T. WALTER, Esq. (1941)
 Type of Gauge Casella 10" square M.O. (1950) Adam Hope, Esq. (1951)

Annual Average 24.7 in. based on 22 years obs. unweighted. Period of average 1881-1915 Ref. 8

File No. 917819/29

Diameter	10"		026	323						58"	
Height	1' 0"			1							
Altitude	357'			61							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50 Means Totals
January	2.81	2.73	2.44	1.01	4.06	1.12	1.37	5.79	1.51	1.53	23.37
February	5.99	1.49	.36	1.86	1.50	.51	1.91	.99	.29	2.58	17.48
March	1.65	.59	.52	.49	.26	1.03	2.91	.76	1.07	.59	9.87
April	.70	.64	.69	2.03	1.61	2.17	3.27	1.22	1.47	2.04	15.84
May	1.14	1.22	1.99	1.25	2.59	1.83	1.95	1.07	.73	2.01	15.78
June	.37	1.03	1.13	2.03	1.98	2.54	1.85	3.47	.52	1.13	16.05
July	1.01	3.82	1.38	3.27	1.88	3.24	2.51	.99	1.40	2.73	22.23
August	2.33	1.92	4.46	2.36	3.03	3.17	.32	4.49	2.07	4.95	29.10
September	.85	2.64	3.54	4.47	1.18	3.45	1.52	1.68	.48	2.37	22.18
October	3.38	1.98	1.23	2.34	3.71	1.00	.43	1.48	2.41	1.14	19.10
November	2.20	1.37	3.16	4.24	.97	3.87	2.11	1.21	2.23	6.18	27.54
December	.32	2.08	1.01	1.04	.86	2.14	1.56	1.18	2.10	2.84	15.13
TOTALS	22.75	21.51	21.91	26.39	23.63	26.07	21.71	24.33	15.28	30.09	233.67

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
1941			W. Hartlepool	1/2 mile	S.S.E.	St. Oswald's	230 yds N.N.W.

Station No.

3525 T.F. Q

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RAINFALL at West Hartlepool (Waterworks)

County of Durham

Observer C. Adam Hope Bayes

River Basin Tees & L. E.

T. Charnock Bayes B.E. (2.1.2)

Type of Gauge M.G.

Annual Average 24.7 in. based on 22 years obs. un-weighted. Period of average 1916-1950 Ref. S
 " 23.99 " -36 within 1920-56. " " " 1916-1950 S.
 File No. 917819/29

Diameter ...	8"	5"	026	323			8"				
Height ...	1' 0"			1	36						
Altitude ...	35'			51	34		35'				
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	1.45	1.78	.79	2.41	1.81	3.44	1.39	1.77	3.12	4.44	22.40
February	1.59	.59	1.76	1.18	1.79	1.50	1.76	3.29	.57	2.06	16.09
March	3.26	1.37	.11	1.26	1.03	.75	.99	3.21	.53	1.33	13.84
April	.99	1.66	1.86	.20	.77	1.23	.36	1.53	1.58	0.44	10.62
May	4.16	1.23	1.69	1.73	1.27	.44	1.53	3.01	.35	1.11	16.52
June	1.34	1.13	1.78	1.90	2.48	2.96	2.14	2.63	1.84	0.36	18.56
July	1.53	.97	2.18	1.40	1.24	2.54	3.30	2.31	2.69	3.94	22.10
August	4.52	1.39	2.77	4.08	.89	6.92	2.74	2.05	.25	2.05	27.66
September	1.19	4.82	1.07	1.60	1.41	2.00	3.08	1.84	.93	1.88	19.82
October	1.51	2.19	1.13	3.66	1.39	1.16	1.81	1.00	1.24	5.99	21.08
November	3.69	3.60	1.23	2.42	2.01	1.21	1.43	.91	3.47	2.95	22.92
December	3.11	2.18	.92	1.82	2.27	1.61	.73	2.45	3.13	2.89	21.21
TOTALS ...	28.34	22.91	17.29	23.60	18.46	25.76	21.26	26.00	19.70	29.44	232.82
	D	D	D	D	D	D	D	D	D	D	

Bearing 1954 gauge Kinked - Sout. Report that is g. to usual (6 secound) of 0.5m + in ceiling galss would be unpractical.

* 1.5.55 Gauge moved to new site. No obstructions. "Flat open space."

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Position of Station on Ordnance One-Inch map : No. of Map National Grid Reference NZ(45) 509334

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge.
1952			West Hartlepool	1 mi	SSE	St Oswalds	230x	NNW.
* 1955			"	"	"	"	118 yd.	"

Summary of Earlier Records from 10-year Sheets :

1916-1950, P - Rejected

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

✓ bwt - 12.15 V bwt D 26.30 ✓ bwt M 31.132-32 ✓ bwt - 49