

RAINFALL AT *Waltham Abbey Pumping Station.*

Lat. _____

Lon. _____

County of _____

Essex

Rain Gauge, by _____

Observer _____

W.B. Bryan Esq C.E.
Sea - 1.

Diameter	8											
Height	10											
Altitude	62			T								
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	2.27	2.06	.69	1.66	2.71	1.98	.61	1.89	.72	2.25	1.684	
February	1.03	.04	1.54	3.05	1.85	.12	.42	2.33	.98	1.93	1.329	
March	1.93	1.85	1.30	.26	1.16	1.60	3.11	3.61	1.25	.58	1.665	
April	1.23	.89	.82	.12	2.06	1.31	.98	1.40	1.45	2.62	1.278	
May	1.71	3.89	1.48	.97	1.74	.35	.27	1.44	2.37	1.50	1.572	
June	2.99	1.30	2.54	.87	1.95	.48	2.22	2.17	1.50	1.78	1.780	
July	4.10	3.02	1.83	2.17	3.54	3.36	1.02	.75	.79	1.42	2.200	"
August	3.52	2.87	3.40	2.37	2.76	2.37	2.70	3.59	1.53	.49	2.560	
September....	.59	.87	2.77	.67	1.02	.91	6.35	2.44	.36	2.93	1.891	
October	1.61	5.01	3.87	3.13	3.59	2.67	3.74	.58	3.28	2.00	2.943	
November....	2.39	1.60	2.41	2.40	3.18	3.42	1.35	1.00	1.89	3.70	2.334	
December ....	.49	3.79	1.47	1.98	2.07	2.21	3.58	2.45	2.24	1.40	2.168	
TOTALS . . .	23.86	27.19	24.12	19.65	27.63	20.78	26.25	23.65	18.31	22.60	23.404	

1890 This gauge is 200 yards S of Waltham Lock on the Lee Navigation

RAINFALL AT Walkham Abbey Pumping Station

Lat.

Lon.

County of Essex

Rain Gauge, by

Observer W.B. Bayan Esq. C.E.

W. Blackburn Esq. C.E.

Sea - 1.

Diameter ..	8											Met Water Board
Height	10	5.0										
Altitude ..	62	7			66	7						
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.	
January ..	2.74	.61	.83	1.71	2.33	1.41	3.62	.75	1.27	.71	1.598	
February ..	3.52	1.11	1.23	.62	2.81	1.02	1.98	1.12	1.48	.53	1.542	
March ....	.62	2.21	1.49	2.07	1.48	2.81	1.12	.82	2.60	3.08	1.830	
April	1.03	1.97	.58	1.40	.82	1.83	.43	2.77	2.73	1.70	1.5216	
May	1.07	1.47	2.89	2.13	1.85	1.96	1.21	1.81	1.84	1.27	1.750	
June	2.34	.60	3.61	6.11	.94	3.42	2.83	1.54	1.49	3.20	2.608	
July	1.21	2.47	1.24	5.41	2.83	1.49	1.25	2.19	3.85	3.14	2.508	
August	2.33	1.57	4.96	4.39	1.69	2.63	.54	1.79	3.05	1.77	2.472	
September..	.83	1.58	.81	2.82	1.20	1.85	1.52	.74	2.16	2.25	1.576	
October	2.02	2.00	1.03	5.69	1.49	1.47	3.65	2.65	1.70	3.91	2.561	
November ..	1.86	.67	1.63	1.82	1.46	2.70	3.97	2.32	.59	.80	1.782	
December ..	2.98	3.25	1.18	1.53	1.62	.80	2.56	3.21	2.00	2.71	2.184	
TOTALS ..	22.55	19.51	21.48	35.70	20.52	23.39	24.68	21.71	24.76	25.07	23.937	

+ Imputed

Hals

RAINFALL at Waltham Abbey, Pumping Station.County of EssexObserver Mel Water Board
to Blackburn C.E.
J. M. WoodRiver Basin Thames. Lea 1Copper
Shallow funnel Rain Gauge, byDiam {
200
800
798
798glass {
15 = 15
30 = 297
45 = 446
50 = 496

XII-13

Diameter ...	8											
Height	50				10		1.3					
Altitude ...	66 ft											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	Total
January ...	1.43	1.52	3.69	3.16	.68	3.41	1.53	1.07	2.57	3.87		16.19 9.04
February ...	2.74	1.63	1.71	.84	2.34	3.47	3.38	.66	1.00	3.35		23.39
March	1.06	2.22	3.27	1.96	4.40	.86	4.06	1.67	.88	3.16		9.77
April	2.01	1.38	.10	2.70	.71	.93	1.30	2.20	4.09	3.47		11.06
May	2.40	1.74	1.21	1.47	1.58	2.98	2.06	2.78	2.01	.23		7.08
June	3.15	3.06	2.96	.44	1.64	1.01	2.29	1.05	.85	1.54		5.73
July	2.42	1.59	1.73	2.12	1.45	4.42	1.92	5.19	4.51	2.54		14.16
August	2.35	.53	5.50	1.54	1.12	2.64	5.16	4.21	1.49	2.36		13.22
September ...	.77	1.47	2.93	1.36	1.05	1.81	1.60	1.71	5.65	1.17		10.13
October ...	1.87	3.17	2.31	3.74	1.20	1.76	3.50	3.72	1.13	.52		8.87
November ...	3.44	3.63	2.04	2.46	2.83	2.42	4.38	1.73	2.55	2.29		10.95
December ...	3.84	4.80	2.64	.68	6.78	5.21	3.20	.95	2.05	3.66		9.86
TOTALS ...	27.48	26.74	30.09	22.46	25.75	30.92	34.38	26.94	28.78	28.16		118.26
	D	D	D	D	D	D	D	D	D	D		24



+ Inspected C.S. 3. XII-13. Old shallow funnel g. set up on upright drainpipes in wooden box, not very level. Small fruit trees 20 feet high Soft C.P.W. & wooden garden fence behind them. Rather sheltered position on the whole. g. will be placed at 9 ft.

Date.	Lat. N.	Long. W.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	51.41.3	0.6.33	Waltham Cross					

RAINFALL at *Waltham Abbey, Pumping Station*County of *Essex*Observer *Met. Water Board*
*1921 J. M. Wood*River Basin *Essex**Waltham District* *1921 J. M. Wood*dent, 7-8 b
wice 8-00
be 8-00
required 7-9 821 { *Copper* Rain Gauge, by
Shallow funnel - good condition
*glass certified (21)*K.25 Cu-Smarden Insulated (Cables) 2716
S.20 4805 Camden

Diameter ...	8												
Height	1	3										2	0
Altitude ...	66					62							
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 1930		
January ...	2.24	1.99	2.90	1.17	2.64	1.81	2.74	1.46	3.01	1.30	2.03	23.29	Totals
February ...	.44	.32	1.89	3.09	.53	2.99	2.64	3.50	1.61	.48	.67	18.21	
March	1.53	1.00	1.54	1.90	1.26	.65	.26	2.23	1.71	.00	1.52	13.60	
April	3.77	1.55	2.44	1.23	3.64	1.77	3.01	1.71	.78	1.24	1.86	23.00	
May	1.79	.83	.73	1.91	3.15	1.68	1.32	1.02	1.90	1.41	2.72	18.46	
June	1.66	.34	1.18	.71	2.71	.11	3.26	2.86	2.33	.90	1.71	17.80	
July	4.54	.18	2.90	2.41	3.88	2.94	2.34	2.70	1.50	1.70	1.98	27.07	
August	1.33	1.35	2.17	1.88	2.35	2.45	1.86	3.89	1.82	1.30	2.22	22.62	
September...	2.72	2.29	2.10	1.46	2.75	2.45	1.93	4.43	.59	.29	2.85	23.86	
October	1.04	.77	.87	4.38	3.22	2.57	2.72	1.97	3.33	3.23	1.14	25.24	
November...	.81	1.83	1.48	1.85	2.37	1.37	4.18	2.31	2.14	5.64	3.74	27.72	
December...	2.31	1.13	2.71	2.29	2.90	2.12	.28	3.00	2.47	4.62	2.36	26.19	
TOTALS...	24.18	13.58	22.91	24.28	31.45	22.91	26.54	31.08	23.19	22.14	24.80	267.06	486
	D	D	D	D	D	D	D	D	D	D	D	D	

Inspected 25. 2. VI. 21. 3. in same site as previously - good site although a cable enclosed
 " 3. VI. 23. Funnel is not of good pattern & is still out of track.
 " 25. 28. K.25 3. in good exposure although a cable enclosed.
 " 23. 27. See green file

1930. House 25' high 40' N.

Trees 15' " 26' E

" 12' " 25' W

Position 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 from gauge	Parish Church.	Distance from gauge	Direction from gauge
	51.41.3	0.040	Waltham X.			Waltham Abbey	1/2 mi	NE.

RAINFALL at Waltham Abbey (Pumping Stn)County of EssexObserver Met. Water BoardRiver Basin Thames-Lee-1

Type of Gauge.....

Annual Average 23.3 in. based on 17 years obs. ~~un~~-weighted. Period of average 1881-1915 Ref. Obs. Inst.

883894/28

Diameter	5.										
Height	2.0.	1.0.		1' 8"				1	0	1	8
Altitude	66.								62		
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	1.35	1.66	1.56	1.41	1.25	3.63	3.51	2.68	4.90	2.18	2413
February	1.96	1.3	1.16	.18	2.30	1.57	3.60	.70	.78	1.41	1379
March	.06	1.23	2.05	1.92	.50	1.04	2.28	.38	1.42	2.86	1374
April	3.27	2.14	.92	1.82	3.13	1.16	2.56	.15	2.11	1.40	1971
May	2.62	2.63	1.79	.41	1.41	.92	2.67	1.79	1.53	2.37	1814
June	1.32	.69	1.88	1.30	2.82	4.64	1.78	.35	1.30	.38	1646
July	2.51	1.77	.75	1.16	.54	2.51	2.33	1.24	2.03	2.59	1743
August	4.00	1.52	.87	2.11	1.45	.35	3.08	1.25	3.43	.13	1789
September	2.46	1.70	2.78	1.32	3.33	2.54	1.25	3.07	2.02	.78	2130
October	.51	4.56	1.20	1.16	2.95	1.86	2.09	2.65	5.26	2.91	2515
November	2.18	1.22	1.04	1.79	3.56	3.07	1.36	3.21	2.97	6.65	2805
December	.65	.48	.38	4.59	2.65	1.37	3.41	3.20	.94	1.19	1886
TOTALS	22.89	19.78	16.08	19.17	25.94	24.66	29.92	20.67	30.69	24.85	23465

1931. House 25' high 40' N. Inspected 5/3/34. Concrete round gauge should be removed and latter
 Trees 15' " 26' E set up with rim 1ft above ground. Gauge should be
 " 12' " 25' N surrounded on all sides except that of the path with turf.
 † Inspected 16/2/36 by Mr Bennell. Gauge sound & correct ht.

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
1921						Waltham Abbey	1/2 mile	NE.

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

Station No. 1237

RAINFALL at Waltham Abbey (Pumping Stn)

41

County of EssexObserver Met. Water BoardRiver Basin Thames - Lea - 1

Type of Gauge.....

Annual Average 23.2 in. based on 17 years obs. un-weighted. Period of average 1881-1915 Ref. AWSFile No. 283893/28

Diameter	5'											
Height	1' 8"							1' 0"	1' 0"			
Altitude	62'											
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	
January	2.34	2.03	4.32	1.39	1.80	1.84	1.71	3.79	1.07	1.15		Totals 21.44
February	2.24	.84	1.07	.94	1.40	2.66	2.08	1.28	1.12	3.19		16.82
March	3.26	1.82	.34	.11	.68	1.24	5.29	.66	.78	.75		14.93
April	1.38	1.17	.97	1.37	1.14	1.50	1.49	1.77	1.15	1.57		13.51
May	1.90	2.44	1.90	.61	2.88	2.23	.76	1.94	1.83	1.38		17.27
June	.96	.14	1.44	1.85	1.91	2.44	2.61	2.20	.52	1.64		15.71
July	4.15	1.65	1.66	2.17	3.29	3.37	2.40	.78	1.52	3.60		24.59
August	4.47	1.36	1.13	3.18	1.08	3.68	.09	2.90	1.59	2.05		21.53
September	.70	1.13	1.76	2.86	1.67	3.54	1.29	1.49	.30	2.42		17.16
October	.82	4.11	2.14	3.15	2.60	1.42	.12	2.35	4.92	.30		21.93
November	2.15	2.13	1.35	3.57	.25	3.81	.70	2.05	2.24	4.77		23.02
December	1.61	2.52	1.41	1.18	3.05	1.89	2.23	2.15	1.37	1.58		17.99
TOTALS	25.08	21.34	19.49	22.38	21.75	29.62	20.77	23.36	18.41	24.40		227.50
	D	D	D	D	D	D	D	D	D	D		2266

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.

BRITISH RAINFALL ORGANIZATION

Station No. 1237 TF 86RAINFALL at Waltham Abbey (Pumping Sta.)

51

County of Essex Observer Met. Water BoardRiver Basin Thames-Lea-1Type of Gauge no. StandardAnnual Average 23.3 in. based on 17 years obs. un-weighted. Period of average 1881-1915 Ref. A.W.S." " 23.88 " " 37 " " within 1920-57 " " 1916-50 File No. 855095/18 F.346/46

Diameter ...	5"			244	309						
Height ...	1' 0"										
Altitude ...	62'										
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	2.42	1.82	.93	.94	2.33	3.46	1.10	2.21		1.64	
February ...	5.38	.63	1.43	2.36	1.59	.33	2.99	2.55		1.87	
March ...	2.94	2.68	.56	2.13	1.21	.79	.97	.93		1.14	
April ...	2.85	1.14	2.53	.20	.35	1.01	.10	1.16		0.48	
May ...	2.32	1.61	1.19	1.70	4.20	.70	.92			1.71	
June ...	.51	1.18	1.55	2.88	2.34	2.43	1.03			1.07	
July ...	.76	.63	3.04	2.95	.14	3.44	3.09			3.41	
August ...	5.15	2.92	1.65	3.38	1.37	3.61	1.77			2.46	
September ...	3.09	2.96	1.67	1.51	1.93	2.15	2.34			3.78	
October ...	.73	2.33	2.87	2.31	3.47	2.51	1.89			5.63	
November ...	4.78	3.65	.77	3.74	.67	.46	2.28			3.28	
December ...	1.57	2.32	.52	2.05	1.58	2.71	2.00		3.06	2.33	
TOTALS ...	32.50	23.87	18.71	26.15	21.18	23.60	20.48	inc	inc	28.80	
	D	D	D	D	D	D	D	np	nb	D	

Ins 17.11.53. R. battered but sound. Tree 20' high 26' E. 16' high 30' high 50' NNE

Impulse of Cape 1955 M. Decks. Gauge sound means certified. Site o/s cables, lines etc.

Recomm. move to Cam in front of P.S.

Inspected 10.10.60 by J.H.H. Satisfactory

1959 no line

Position of Station on Ordnance One-Inch map :

No. of Map. 161National Grid Reference 57/1750003

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.

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
	✓	✓	✓	✓	
	✓ 4.1-18	✓	✓	✓	