

RAINFALL at Chadwell SpringCounty of HertfordshireObserver Ironside M.W.B.River Basin Thames Lea 3Copper Snowden Rain Gauge, by ?

funnel 500 above

glass $\left\{ \begin{array}{l} .56 - .49 \\ .40 - .33 \\ .30 - .26 \\ .10 - .06 \\ .01 - .01 \end{array} \right\}$ recommended new glass.

| Diameter ... | | | | 5 | | | | | | | | |
|--------------|------|------|------|------|-------|-------|-------|-------|-------|-------|--------|---------------|
| Height | | | | 10 | | | | | | | | |
| Altitude ... | | | | | | | | | | | | |
| Year ... | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | MEANS. | Totals. |
| January ... | | | | | .75 | 3.31 | 1.35 | 1.40 | 2.48 | 3.45 | | 16-19 8.68 |
| February ... | | | | | 2.27 | 3.18 | 3.37 | .74 | .81 | 3.14 | | 8.06 |
| March | | | | | 3.90 | 1.00 | 4.32 | 1.63 | .94 | 2.68 | | 9.57 |
| April | | | | | .94 | .93 | 1.01 | 1.87 | 3.44 | 3.52 | | 9.84 |
| May | | | | | 1.52 | 2.46 | 1.76 | 2.54 | 2.59 | .38 | | 7.27 |
| June | | | | | 2.09 | .95 | 2.11 | .97 | .77 | 1.55 | | 5.40 |
| July | | | | | 2.07 | 3.84 | 1.10 | 3.28 | 3.32 | 2.12 | | 9.82 |
| August | | | | | 1.26 | 2.84 | 3.39 | 4.52 | .82 | 2.56 | | 11.29 |
| September .. | | | | | 1.21 | 2.01 | 1.25 | 1.92 | 4.72 | 1.43 | | 9.32 |
| October ... | | | | 3.43 | 1.66 | 1.79 | 3.11 | 3.42 | 1.33 | .48 | | 8.34 |
| November .. | | | | 2.31 | 2.80 | 2.12 | 4.29 | 1.47 | 2.28 | 2.16 | | 10.20 |
| December... | | | | .70 | 6.26 | 4.62 | 3.08 | .83 | 2.59 | 3.62 | | 10.12 |
| TOTALS ... | | | | | 26.73 | 29.05 | 30.14 | 24.59 | 26.09 | 27.09 | | 107.91 288 |

Inspected { New copper Snowden, rather cheap looking, set in cement on little ridge 2ft high, 8ft E. of New River & close by the spring. Two plum trees on S & E @ about 45° are to be removed and a new glass supplied.

| Date. | Lat. N. | Long. | Railway Station. | Distance. | Direction. | Church. | Distance. | Direction. |
|-------|---------|-------|------------------|-----------|------------|---------|-----------|------------|
| | | | Ware | | | | | |

957
20

RAINFALL ^{Wave} at Chadwell Spring ~~[Wave]~~

County of Hertfordshire

Observer Met. Water Board
J. M. Wood.

River Basin Thames - Lea 3.

(Northern 101st)

Copper Snowden Rain Gauge, by 6304

R. E. Morris

5.02 } (12) 2. in cement foundation
5.00
5.01
5.00

Leurostichus (13) BR0196

| Diameter ... | 5" | 5" | | | | | | | | | | | |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------|
| Height | 1 | 0 | 1.0 | | | | | | | | | | |
| Altitude ... | 140 | - | | | | | | | | | | | |
| Year | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | | 1930 | |
| January ... | 2.00 | 2.16 | 3.20 | 1.16 | 2.73 | 2.01 | 2.81 | 1.58 | 2.95 | 1.59 | 2.15 | | Totals |
| February ... | .33 | .09 | 1.93 | 3.27 | .77 | 3.06 | 2.83 | 3.77 | 1.47 | .66 | .53 | | |
| March | 1.47 | 1.19 | 1.86 | 1.74 | .90 | .74 | .11 | 2.23 | 2.60 | .02 | 1.77 | | |
| April | 3.42 | 1.35 | 2.27 | 1.23 | 3.22 | 1.21 | 2.66 | 1.74 | 1.12 | 1.46 | 2.48 | | |
| May | .83 | .91 | .81 | 1.34 | 3.57 | 1.66 | 1.70 | .92 | 1.35 | 1.51 | 2.77 | | |
| June | 1.61 | .34 | 1.21 | .62 | 2.24 | .20 | 3.15 | 3.81 | 2.20 | .74 | 2.08 | | |
| July | 4.17 | .23 | 2.93 | 1.77 | 4.32 | 4.28 | 2.42 | 2.22 | 2.21 | 2.01 | 2.19 | | |
| August | 1.12 | 1.20 | 1.85 | 2.22 | 1.74 | 2.97 | .88 | 2.99 | 2.35 | .90 | 2.25 | | |
| September... | 2.26 | 1.97 | 2.91 | 1.47 | 2.92 | 3.15 | 2.90 | 4.71 | .72 | .30 | 3.01 | | |
| October | 1.07 | .86 | .84 | 4.31 | 3.82 | 2.91 | 2.17 | 2.44 | 3.50 | 3.26 | .93 | | |
| November... | 1.04 | 2.11 | 1.12 | 1.44 | 2.84 | 1.52 | 4.13 | 2.37 | 2.38 | 5.74 | 3.42 | | |
| December... | 2.36 | 1.25 | 2.55 | 2.60 | 2.97 | 1.89 | .27 | 3.31 | 2.48 | 5.09 | 2.86 | | |
| TOTALS... | 21.68 | 14.02 | 23.48 | 23.17 | 32.04 | 25.60 | 26.03 | 32.09 | 25.33 | 23.28 | 25.94 | | |

1920. Gauge inspected E.S. 1913. see last sheet

Inspected C.B. 6.2.22. Is on little bank on east side of river.
apple tree 12 ft. high 15 ft. E, will be removed (as useless).

Inspected 7 Nov 6. xi. 23. Satisfactory

Inspected $\frac{1}{2}$ 28-K. 25 " "
do 22/K/47 see green file

1929 Tree 10' high 27" NE.

1930. G. read 10 am. in winter

" " 9 " " Phommer

*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 | Farish Church. | Distance from gauge | Direction |
|-------|---------|-------|------------------|---------------------|-----------|----------------|---------------------|-----------|
| 1929 | | | | | | St Mary's | 2 mi | NE |

RAINFALL at Ware (Chadwell Spring)

County of HertfordshireObserver Mel. Water BoardRiver Basin Thames-Lea-3

Type of Gauge

Annual Average 21.2 in. based on 19 years obs. un-weighted. Period of average 1881-1915Ref. S
983894 128

| Diameter | 5. | | | | | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------|
| Height | 1.0. | | | | | | | | | | |
| Altitude | 140. | | | | | | | | | | |
| Year | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | Totals. Means |
| January | 1.51 | 1.45 | 1.70 | 1.55 | 1.12 | 3.73 | 4.07 | 2.76 | 5.33 | 1.92 | 25.14 |
| February | 1.44 | 1.4 | 1.30 | .11 | 2.88 | 1.86 | 3.63 | .52 | .75 | 1.41 | 14.04 |
| March | .00 | 1.75 | 2.33 | 2.33 | .45 | .90 | 2.49 | .29 | 1.62 | 2.59 | 14.65 |
| April | 3.78 | 1.90 | 1.21 | 1.04 | 3.37 | 1.11 | 2.82 | .12 | 2.87 | 1.52 | 19.74 |
| May | 2.72 | 3.73 | 2.00 | .51 | 2.24 | .43 | 2.65 | 1.98 | 1.18 | 1.31 | 18.75 |
| June | 1.35 | .78 | 2.28 | .85 | 3.02 | 4.24 | 1.63 | .48 | 1.65 | .46 | 16.74 |
| July | 2.99 | 2.04 | 1.15 | .90 | .75 | 4.59 | 1.97 | 1.31 | 2.04 | 2.45 | 20.19 |
| August | 4.51 | 3.49 | .39 | 2.07 | 1.46 | .31 | 1.58 | 2.25 | 3.13 | .01 | 19.20 |
| September | 2.76 | 1.33 | 2.75 | 1.57 | 3.18 | 3.19 | 1.71 | 2.79 | 1.92 | 1.07 | 22.27 |
| October | .46 | 4.11 | 1.53 | 1.19 | 3.38 | 1.79 | 2.24 | 2.72 | 5.05 | 3.14 | 25.61 |
| November | 2.68 | 1.27 | 1.10 | 1.70 | 3.34 | 3.17 | 1.46 | 2.97 | 3.73 | 5.87 | 27.09 |
| December | .72 | .48 | .45 | 4.34 | 2.62 | 1.62 | 3.29 | 3.36 | .95 | 1.27 | 19.10 |
| TOTALS | 24.92 | 22.47 | 18.19 | 18.16 | 27.81 | 26.94 | 29.54 | 21.55 | 30.12 | 22.82 | 242.52 |

1931 June 10 ft. high 27 ft. N.E.

Inspected 5/9/34. Gauge should be moved off bank and set up in grass with rim 1ft above ground. Concrete now round gauge should be removed.

† Inspected 15/2/38 by Mr. Pennell. Gauge old but sound. Grass about 6" high to top of gauge but it is impractical to shift move to new site.

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 | | | | | | St. Marys | 1/2 mi. | N.E. |

Station No. 957.

RAINFALL at Ware (Chadwell Spring) ✓

41

County of Hertfordshire. Observer Met. Water Board.

River Basin Thames Lea 3.

Type of Gauge.

Annual Average 21.2 in. based on 19 years obs. un-weighted. Period of average 1881-1915. Ref S.

File No. 883394/22

| Diameter | 5" | | | 242 | 523 | | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| Height | 1' 0" | | | | 1 | | | | | | | |
| Altitude | 140' | | | | 41 | | | | | | | |
| Year | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | Means | |
| January | 2.39 | 2.05 | 4.06 | 1.42 | 1.78 | 1.29 | 1.61 | 3.80 | 1.25 | 1.25 | | Totals 20.90 |
| February | 2.25 | .89 | 1.04 | 1.14 | 1.40 | 1.74 | 1.40 | 1.04 | 1.17 | 3.41 | | 15.48 |
| March | 2.60 | 1.35 | .52 | .14 | .49 | 1.21 | 4.17 | .74 | .93 | .63 | | 12.78 |
| April | 1.14 | 1.16 | 1.25 | 1.44 | 1.18 | 1.29 | 1.18 | 1.29 | 1.66 | 1.72 | | 13.31 |
| May | 1.49 | 2.42 | 1.92 | 1.03 | 1.67 | 2.08 | .69 | 2.19 | 1.86 | 1.76 | | 17.11 |
| June | 1.25 | .15 | 1.20 | 1.53 | 1.50 | 1.89 | 2.23 | 2.30 | .58 | 1.29 | | 13.92 |
| July | 2.59 | 1.81 | 1.09 | 1.54 | 2.57 | 2.53 | 1.88 | 1.45 | 2.94 | 3.37 | | 21.77 |
| August | 3.83 | 1.55 | 1.38 | 2.07 | .88 | 3.51 | .11 | 2.77 | 1.41 | 2.27 | | 19.78 |
| September | .68 | .98 | 1.60 | 2.30 | 2.22 | 3.78 | 1.05 | 1.59 | .30 | 2.88 | | 17.33 |
| October | .74 | 3.52 | 2.22 | 3.07 | 2.42 | .77 | .06 | 1.88 | 5.02 | .35 | | 20.05 |
| November | 2.24 | 1.67 | 1.32 | 2.88 | .12 | 3.96 | .86 | 1.71 | 2.21 | 4.67 | | 21.64 |
| December | 1.33 | 2.27 | 1.30 | 1.32 | 2.60 | 1.64 | 2.67 | 2.80 | 1.39 | 1.33 | | 18.65 |
| TOTALS | 22.53 | 19.92 | 18.90 | 19.88 | 18.83 | 25.69 | 17.91 | 23.56 | 20.72 | 24.88 | | 212.72 |
| | D | D | D | D | D | D | D | D | D | D | | 264 |

1945 n.p.w. and 1946 n.p. low.

Inspected 11/9/47 - Gauge leaning badly at seams. Will be repaired & reset on a rather better site (less risk of interference) 6 ft. to the south. J.S.S.

1947 n.p. low.

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

RAINFALL at WARK (CHADWELL SPRING)

51

County of HERTFORDSHIRE Observer MET. WATER BOARDRiver Basin AMES - LEE - 3Type of Gauge (Mk II inspection)Annual Average 24.2 in. based on 19 years obs. un-weighted. Period of average 1881-1915 Ref S
" " 23.82 " " 8 " " 1949-56 " " " " 1964-50 23.89 / 25 E 3460/46
File No. E 3460/46

| Diameter ... | 5" | | | 242 | 523 | | | | | | |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Height ... | 1' 0" | | | | | | | | | | |
| Altitude ... | 140' | | | | | | | | | | |
| Year ... | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | Means |
| January ... | 2.47 | 1.78 | 1.03 | .92 | 2.22 | 3.37 | .77 | 2.12 | 2.05 | 2.07 | 18.80 |
| February ... | 4.66 | .46 | 1.80 | 2.17 | 1.51 | .45 | 2.57 | 2.67 | .07 | 1.59 | 17.95 |
| March ... | 2.96 | 2.37 | .35 | 2.15 | 1.09 | .75 | 1.23 | 1.02 | 2.03 | .99 | 14.94 |
| April ... | 2.79 | 1.48 | 2.35 | .21 | .34 | 1.09 | .22 | 1.18 | 2.38 | .42 | 12.46 |
| May ... | 2.38 | 1.01 | 1.26 | 1.79 | 4.27 | .37 | .61 | 2.53 | .82 | 1.15 | 16.19 |
| June ... | 1.06 | 1.47 | 1.54 | 3.33 | 2.33 | 2.86 | 1.83 | 5.16 | 1.22 | 1.58 | 22.38 |
| July ... | .69 | .57 | 2.71 | 1.95 | .10 | 3.44 | 3.33 | 3.06 | 2.22 | 2.66 | 20.73 |
| August ... | 4.14 | 4.91 | 1.57 | 2.75 | 1.47 | 4.79 | 1.46 | 3.03 | 1.22 | 2.54 | 27.87 |
| September ... | 3.26 | 2.26 | 1.84 | 1.32 | 1.59 | 1.71 | 2.59 | 3.20 | .07 | 4.40 | 22.24 |
| October ... | .66 | 2.25 | 2.97 | 1.21 | 3.59 | 1.79 | 1.83 | 2.86 | 1.81 | 5.79 | 25.36 |
| November ... | 4.19 | 3.67 | 1.19 | 3.91 | .81 | .62 | 1.98 | 1.74 | 2.52 | 3.17 | 23.80 |
| December ... | 1.85 | 2.35 | .48 | 1.37 | 1.87 | 3.05 | 1.96 | 2.54 | 3.96 | 2.63 | 22.06 |
| TOTALS ... | 31.11 | 24.58 | 19.09 | 23.68 | 21.19 | 24.29 | 20.37 | 31.11 | 20.37 | 28.99 | 244.78 |
| | D | D | D | D | D | D | D | D | D | D | |

In 17.11.53. Gauge found. Site slight by approx to NW.

Inspected Sept. 1966. Gauge sound, measure certified. Site reasonable.

Mk II 1957 J.B.O.K. Satisfactory

Inspected 11.10.60 by Hollister of NE→W otherwise satisfactory.

Position of Station on Ordnance One-Inch map: No. of Map 161 National Grid Reference (52) 350 137

| 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 |
|----------------|----------|---------|---------------|---------|---------|
| | c imp 13 | ✓ | ✓ | ✓ | ✓ |
| | ✓ | ✓ | ✓ but d 31-32 | ✓ | ✓ |