

RAINFALL at Harrogate Colliery (Gt. Harrogate)County of W. YorkshireObserver A. J. West. Esq. C.E.River Basin Gus. Nidd IIBradford Rain Gauge, by

| | | | | | | | | | | | |
|--------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------------------------------|
| Diameter ... | | | | 5 | | | | | | | |
| Height | | | | 10 | | | | | | | |
| Altitude ... | | | | 730 | | | | | | | |
| Year ... | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1910-1919 MEANS Totals |
| January ... | | | | 3.00 | 1.67 | 4.10 | 1.70 | 2.35 | 2.58 | 3.59 | 10.22 |
| February ... | | | | 1.16 | 1.78 | 3.70 | 3.50 | .83 | 3.40 | 2.25 | 9.98 |
| March | | | | 3.76 | 3.00 | .81 | 3.40 | 2.40 | 1.19 | 3.20 | 10.19 |
| April | | | | 2.97 | .90 | 1.24 | 2.00 | 1.15 | .93 | 1.58 | 5.66 |
| May | | | | 2.82 | 1.37 | 1.54 | 3.15 | 2.09 | 4.03 | 1.48 | 10.75 |
| June | | | | 1.90 | 2.76 | .58 | 1.83 | 2.36 | .85 | 1.50 | 6.34 |
| July | | | | .92 | 4.40 | 2.20 | 2.40 | 1.66 | 5.30 | 2.20 | 11.56 |
| August | | | | 1.60 | 1.52 | 2.58 | 2.20 | 6.92 | 3.09 | 2.20 | 14.41 |
| September .. | | | | 1.50 | 2.10 | .63 | 1.78 | 1.08 | 7.30 | 1.30 | 11.46 |
| October ... | | | | 3.00 | 2.80 | 1.35 | 5.78 | 3.90 | 2.16 | 8.60 | 15.44 |
| November .. | | | | 2.74 | 4.30 | 1.88 | 3.10 | 3.30 | 1.70 | 2.06 | 10.16 |
| December... | | | | 1.80 | 6.05 | 6.50 | 2.33 | 1.50 | 5.30 | 5.05 | 14.38 |
| TOTALS ... | | | | 27.17 | 32.65 | 27.11 | 33.17 | 29.54 | 38.03 | 29.81 | 130.55 |

| Date. | Lat. N. | Long. | Railway Station. | Distance. | Direction. | Church. | Distance. | Direction. |
|-------|---------|-------|---------------------|--------------|------------|--------------------------|----------------|------------|
| | | | <u>Bickwithshaw</u> | <u>1 3/4</u> | <u>E</u> | <u>Harrogate Station</u> | <u>4 1/4 m</u> | <u>ENE</u> |

RAINFALL at Harrogate W. W. Goldhens CottageCounty of N. B. Yorkshire Observer A. E. West Esq. C.E.River Basin Guse - Nidd 11 Water Eng. HarrogateBradford Rain Gauge, by
Capt. H. D. Snowden, F.R.S.
M. 1.01
8.00
7.98 11.23.

| | | | | | | | | | | | | |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|-------------------|
| Diameter ... | 5 | 8 | 8 | | 5 | | | | | | | |
| Height | 1 | 0 | | | | | | | | | | |
| Altitude ... | 730 | | | | | | | | | | | |
| Year | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 MEANS. | 1920-30 TOTALS |
| January ... | 4.10 | 4.24 | 3.05 | 1.85 | 2.30 | 2.80 | 3.10 | 2.25 | 5.78 | 2.10 | 5.90 | 37.47 |
| February ... | 2.10 | 2.5 | 3.30 | 5.00 | 1.00 | 4.96 | 2.90 | 1.53 | 3.10 | .61 | 1.32 | 26.12 |
| March | 2.40 | 1.60 | 1.90 | 1.36 | 1.60 | 1.15 | 2.08 | 2.11 | 2.70 | .70 | 2.97 | 20.57 |
| April | 4.55 | 1.06 | 3.30 | 2.80 | 1.90 | 3.50 | 1.56 | 2.11 | .92 | 1.29 | 3.15 | 26.14 |
| May | 4.05 | 1.70 | 1.07 | 3.30 | 3.95 | 5.10 | 2.50 | 1.72 | 2.50 | 1.43 | 1.40 | 28.77 |
| June | 3.04 | .11 | 1.55 | .96 | 3.40 | .06 | 3.50 | 3.25 | 6.00 | 1.12 | 2.01 | 25.00 |
| July | 6.30 | 1.73 | 5.00 | 3.40 | 4.70 | .94 | 2.55 | 4.85 | .83 | 3.33 | 5.00 | 38.63 |
| August | 1.45 | 3.90 | 5.55 | 4.03 | 3.35 | 3.10 | 3.56 | 7.50 | 3.80 | 2.40 | 3.90 | 42.59 |
| September... | 1.10 | 1.10 | 3.75 | 3.13 | 3.32 | 2.40 | 1.18 | 3.35 | .99 | .52 | 3.80 | 25.14 |
| October..... | 3.20 | 1.92 | 1.20 | 3.70 | 3.50 | 3.75 | 3.24 | 2.86 | 5.50 | 3.33 | 2.50 | 34.70 |
| November... | 1.74 | 2.65 | 1.23 | 3.60 | 2.76 | 2.36 | 5.80 | 2.95 | 8.08 | 4.35 | 5.20 | 40.72 |
| December... | 3.24 | 4.30 | 3.36 | 3.76 | 3.40 | 4.30 | 1.20 | 3.50 | 1.89 | 6.70 | 3.09 | 38.74 |
| TOTALS... | 37.27 | 24.56 | 34.26 | 36.94 | 35.18 | 34.42 | 33.17 | 38.53 | 42.09 | 27.93 | 40.24 | 384.59 |

Inspected 7/3/34-23. S. situated in open field in fence - good shelter to W. + S.
but little open to N. fairly good exposure, fence wires requiring mending.

Position of Station on reduced Ordnance Survey } No. of Map _____
Map, 2 miles to 1 inch Series } Reference No. _____

| Date. | Lat. N. | Long. | Railway Station. | Distance from gauge | Direction from gauge | Parish Church. | Distance from gauge | Direction from gauge |
|-------|---------|-------|------------------|---------------------|----------------------|----------------|---------------------|----------------------|
| 1920 | | | Harrogate | 4 1/4 mi | E N E | Beckwithshaw | 1 1/4 mi | E |

RAINFALL at Harrogate W.W. (Cobblers Cott.)County of West RidingObserver A.S. West, Esq. C.E.River Basin Ouse - Nidd - Il

Type of Gauge.....

Annual Average 30.9 in. based on 14 years obs. un-weighted. Period of average 1881-1915 Ref. 1 W.S.
(1939) 33.6 14 660560/26

| | | | | | | | | | | | |
|-----------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------|
| Diameter | 5. | | | | | | | | | | |
| Height | 1.0. | | | | | | | | | | |
| Altitude | 730. | | | | | | | | | | |
| Year | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1931-40 Means 190.5 |
| January | 2.96 | 2.00 | 2.00 | 2.16 | 1.45 | 3.60 | 4.25 | 4.90 | 4.20 | 1.91 | 29.43 |
| February | (2.60) | .41 | 4.40 | .21 | 3.42 | 3.15 | 3.63 | 1.60 | 3.48 | 2.00 | 24.90 |
| March | .60 | 2.12 | 1.46 | 2.53 | .90 | 2.57 | 2.33 | .45 | 2.80 | 2.50 | 18.26 |
| April | 3.16 | 2.70 | 2.66 | 3.60 | 1.80 | 1.25 | 3.10 | .22 | 1.93 | 1.98 | 22.59 |
| May | 3.10 | 4.60 | 4.38 | 1.50 | .98 | 2.45 | 2.99 | 2.90 | 1.23 | .95 | 25.08 |
| June | 5.75 | .65 | 1.98 | 2.00 | 3.55 | 3.62 | 2.82 | 3.83 | 2.50 | .59 | 29.30 |
| July | 3.98 | 3.94 | 1.92 | 1.43 | .81 | 4.71 | 2.00 | 3.20 | 5.97 | 3.65 | 31.61 |
| August | 3.47 | 1.39 | 0.47 | 1.52 | 2.68 | 2.79 | 1.35 | 4.00 | 3.12 | .72 | 21.51 |
| September | 4.76 | 2.94 | 1.98 | 2.60 | 6.00 | 2.65 | 1.45 | 3.33 | .98 | 2.65 | 29.34 |
| October | 1.23 | 4.30 | 3.48 | 2.78 | 5.02 | 2.31 | 2.87 | 5.60 | 2.80 | 2.80 | 33.19 |
| November | 4.80 | 2.40 | 3.39 | 2.51 | 6.75 | 4.34 | 1.70 | 3.35 | 6.57 | 5.10 | 40.91 |
| December | 1.36 | 1.82 | 0.94 | 6.25 | 2.45 | 2.51 | 2.20 | 5.45 | 2.46 | 3.62 | 28.56 |
| TOTALS | (37.77) | 28.77 | 29.25 | 29.09 | 35.81 | 37.96 | 30.69 | 38.83 | 38.04 | 28.47 | 334.68 |

1931. Feb. adjusted by surrounding stations.

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 from gauge | Parish Church. | Distance from gauge | Direction from gauge |
|-------|---------|-------|------------------|---------------------|----------------------|----------------|---------------------|----------------------|
| 1931 | | | Harrogate | 4½ | ENE | Beckwithshaw | 2m | E |

Station No. 3350

RAINFALL at Harrogate W.W. (Colliery Cott.)

41

County of West Riding Observer A.S. West Esq. CE Revised 1945

River Basin Ouse - Nidd - 11. The Water Engineers

Type of Gauge

Annual Average 33.5 in. based on 14 years obs. un-weighted. Period of average 1881-1915 Ref. I.W.S.

File No. 660560/26.

| | | | | | | | | | | | |
|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------|
| Diameter | 5" | | 058 | 483 | | 87 | 8" | | | | |
| Height | 1' 0" | | | 1 | | | | | | | |
| Altitude | 730' | | | 41 | | | | | | | |
| Year | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | Means |
| January | 4.67 | (4.17) | 4.47 | 4.55 | 3.79 | 3.71 | 4.85 | 7.10 | 1.40 | 1.50 | 40.21 |
| February | 4.38 | 2.13 | 2.09 | 1.64 | 4.62 | 2.84 | 3.00 | 2.36 | 1.75 | 2.59 | 30.40 |
| March | 4.05 | 2.60 | 1.02 | .42 | (1.01) | 1.30 | 4.85 | 1.54 | 1.12 | 1.33 | 19.24 |
| April | (2.50) | 1.33 | 1.50 | 3.06 | (2.08) | 1.61 | 3.28 | 2.45 | 2.02 | 2.76 | 22.65 |
| May | 2.62 | 2.80 | 2.50 | 1.08 | 2.73 | 2.98 | 3.37 | 1.00 | 2.04 | 2.26 | 23.38 |
| June | .10 | .90 | 2.26 | 2.13 | 3.37 | 2.62 | 3.25 | 3.50 | .86 | .90 | 19.89 |
| July | 3.00 | 1.98 | 1.92 | 3.63 | 2.41 | 5.21 | 1.80 | 1.50 | 2.35 | 2.12 | 26.98 |
| August | 3.70 | 2.79 | 3.53 | 3.30 | 3.44 | 4.62 | .68 | 4.70 | 2.45 | 6.08 | 35.29 |
| September | .52 | 1.70 | 3.60 | 5.28 | 2.06 | 6.59 | 1.97 | 2.70 | 1.02 | 2.06 | 30.43 |
| October | 4.15 | 2.75 | 2.10 | 3.12 | 5.16 | 1.84 | 1.44 | 1.60 | 3.72 | 1.37 | 27.25 |
| November | 3.38 | 1.47 | 2.91 | 6.74 | .63 | 6.33 | 3.28 | 1.34 | 4.50 | 4.38 | 34.96 |
| December | 1.19 | 3.16 | 2.40 | 4.15 | 2.18 | 2.44 | 3.22 | 3.11 | 4.26 | 1.70 | 27.83 |
| TOTALS | 34.26 M | 27.84 M | 30.30 M | 33.16 M | 33.48 M | 42.02 M | 34.99 M | 32.90 M | 27.51 M | 36.05 M | 338.51 |

1941 April approximated from nearby obs.

1942 Jan. estd. by observer.

1945 March & April approximated

04004 40004

14004

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 | | | Harrogate | 1 1/2 ml. | E.N. & | Bickenwithshaw | 2 ml. | E. |

BRITISH RAINFALL ORGANIZATION

Station No. 3350RAINFALL at Harrogate W.W. (Coffins Cottage)

51

County of West Riding - YorksObserver The Water EngineerRiver Basin Dale - Rike - HSalway Water Board.Type of Gauge M.O.Annual Average 33.5 in. based on 14 years obs. un-weighted.Period of average 1881-1915Ref. 1.00.533.95 " " 35 " " 1916-1950File No. 66056/26.5 16.133

| Diameter ... | 8" | | 058 | 483 | | | | | 5" | | |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| Height ... | 1'0" | | | 1 | | | | | 1'3" | | |
| Altitude ... | 730' | | | 51 | | | | | | | |
| Year ... | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | Means Totals |
| January ... | 2.50 | 2.86 | .95 | 2.06 | 2.18 | 4.86 | 2.33 | 2.85 | 3.73 | 6.01 | 30.27 |
| February ... | 3.46 | .66 | 2.32 | 2.54 | 2.82 | 2.55 | 3.05 | 5.51 | .29 | 3.13 | 26.38 |
| March ... | 3.95 | 2.08 | .80 | 1.90 | 2.21 | 1.26 | 2.71 | 2.43 | 1.41 | 2.43 | 21.18 |
| April ... | .90 | 1.22 | 2.52 | .43 | 1.02 | 3.05 | .42 | .92 | 3.68 | 1.78 | 15.94 |
| May ... | 5.80 | 2.05 | 1.70 | 4.20 | 3.17 | .91 | 1.32 | 4.24 | 1.09 | 2.95 | 25.43 |
| June ... | .96 | 1.67 | 1.65 | 2.11 | 2.40 | 2.95 | 2.21 | 4.22 | 1.49 | 1.09 | 20.75 |
| July ... | 2.27 | 1.23 | 3.25 | 1.82 | .85 | 5.17 | 2.92 | 3.32 | 2.37 | 4.93 | 28.13 |
| August ... | 5.38 | 3.13 | 5.08 | 6.78 | 1.94 | 7.10 | 6.02 | 2.14 | .84 | 2.75 | 41.16 |
| September ... | 2.85 | 4.55 | 3.32 | 3.21 | 1.46 | 4.71 | 4.58 | 3.50 | .22 | 3.59 | 31.99 |
| October ... | 1.01 | 3.36 | 1.96 | 4.58 | 2.46 | 1.58 | 3.65 | 2.57 | 3.36 | 6.10 | 30.62 |
| November ... | 7.58 | 1.97 | 3.77 | 5.94 | 2.67 | 1.08 | 2.25 | 1.09 | 4.87 | 6.12 | 37.34 |
| December ... | 3.59 | 2.26 | 1.70 | 4.20 | 4.86 | 3.79 | 3.54 | 5.50 | 6.68 | 4.36 | 40.98 |
| TOTALS ... | 40.25 | 27.04 | 29.02 | 34.82 | 28.04 | 38.95 | 35.00 | 38.29 | 30.02 | 43.74 | 350.17 |
| | M | M | M | M | M | M | M | M | M | M | |

Inch. 1959 J.B.D.K. Drg. expd max direction. Bottle only for monthly readings more.
Cap. 3 1/2". Taf. wall fan

8 Turf wallPosition of Station on Ordnance One-Inch map : No. of Map 96 National Grid Reference 44/23526

| Date. | Lat. N. | Long. | Railway Station. | Distance from gauge | Direction from gauge | Parish Church. | Distance from gauge. | Direction from gauge. |
|-------|---------|-------|------------------|---------------------|----------------------|----------------|----------------------|-----------------------|
| 1951 | | | Harrogate | 4 1/2 m | ENE | Reckwithshaw | 2 m. | E |

Summary of Earlier Records from 10-year Sheets :

1916-1950, P - accepted

| Record D, or d | 1910-19 | 1920-30 | 1931-40 | 1941-50 | 1951-60 |
|----------------|---------|---------|---------|---------|---------|
| | C1913 | ✓ | ✓ | ✓ | |