

from 20 yr form

# RAINFALL AT *Birstwith, Swathcliffe*

Lat. ....

Lon. ....

County of *Yorkshire*

Rain Gauge, by .....

Observer *Capt. C. S. Greenwood*

*Use - No. 11*

Diameter ....							5				
Height .....							1.0				
Altitude ....							510				
Year .....	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January ....							1.48	2.14	2.43	5.25	
February ....							.92	3.45	2.46	2.06	
March .....							4.67	4.45	1.40	1.47	
April .....							2.03	2.19	3.02	2.92	
May .....							.62	.92	3.00	4.09	
June .....							5.32	4.46	2.15	1.67	
July .....							2.18	1.43	1.56	4.21	
August .....							2.08	4.12	3.47	1.72	
September....							4.93	3.35	1.08	4.27	
October .....							4.01	2.02	5.27	3.27	
November....							1.99	2.59	2.43	1.89	
December ....							5.32	3.91	3.90	4.11	
TOTALS . . .							35.55	35.03	32.17	36.93	

*Gauge on bare place in a garden sloping gradually to the East.*

1900-1904 from 20 yr form

RAINFALL AT Birstwith Swarcliffe

Lat. ....

Lon. ....

County of W. Riding of YorkSituation Rain Gauge, byObserver Capt. S. Greenwood

Read -11.

Diameter ..	5										
Height ....	1 0										
Altitude ..	510										
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	4.72	1.33	1.61	3.29	3.03	1.12	5.10	1.60	2.45	1.64	2.589
February ..	3.84	1.38	1.30	4.10	3.43	2.27	2.15	2.23	2.27	.73	2.370
March ....	.94	2.56	1.23	5.26	2.45	3.14	2.37	2.81	4.30	4.78	2.984
April .....	2.10	2.85	2.08	1.84	2.47	2.53	.61	2.01	2.73	2.82	2.204
May .....	1.73	1.60	3.47	4.73	3.28	.63	2.39	4.38	2.79	1.72	2.672
June .....	4.02	1.62	3.00	2.21	2.02	1.21	1.00	5.49	.97	2.89	2.443
July .....	2.34	2.09	2.91	3.68	3.31	1.03	1.84	2.12	3.27	4.40	2.699
August ....	7.32	1.82	2.85	4.38	3.70	4.26	2.76	1.96	2.25	3.62	3.492
September ..	1.38	1.01	1.32	5.02	1.20	2.29	.69	.82	3.26	2.09	1.908
October ....	4.49	2.26	3.66	9.29	1.08	1.83	5.40	7.58	2.16	2.78	4.053
November ..	4.43	4.45	2.63	1.77	2.10	5.53	4.33	2.50	2.02	1.11	3.087
December ..	3.82	4.59	3.23	2.02	1.47	.70	2.47	4.74	1.55	5.28	2.987
TOTALS ..	41.13	27.56	29.29	47.59	29.54	26.54	31.11	38.24	30.02	33.86	33.488

Not printed in British Rainfall previous to 1904 - received late  
 gauge in open position in garden sloping gradually to the E

1905 Birstwith Church  $\frac{1}{2}$  mile NE

" Station  $\frac{3}{4}$  " NE

1905 Field Dress 6 ft high 20 ft N + S

# RAINFALL at Birstwith Swarcliffe

County of W Yorkshre

Observer Capt C. S. Greenwood

River Basin Ouse Nidd 11

Smarden Rain Gauge, by

Diameter ...	5										
Height .....	10										
Altitude ...	510 T										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	5.70	1.62	4.84	4.73	2.12	5.11	2.64	3.54	3.45	4.82	
February ...	3.89	3.64	2.18	1.37	2.36	4.28	4.95	.77	4.54	2.24	
March .....	.67	2.11	4.37	5.06	2.82	1.18	5.13	2.81	1.61	4.60	
April .....	3.05	1.47	.51	3.49	1.24	1.55	1.86	2.49	.81	1.94	
May .....	2.37	1.30	2.70	2.67	1.55	2.22	2.99	1.81	3.78	1.79	
June .....	2.67	2.71	6.60	1.59	2.53	.55	2.20	2.32	.81	1.23	
July .....	2.65	.57	5.16	.82	4.63	4.34	1.88	1.48	6.25	2.78	
August .....	4.94	2.89	5.62	1.27	1.51	2.48	1.80	6.62	3.40	2.56	
September ..	.22	2.87	2.01	1.70	1.42	.65	2.03	1.09	7.05	1.49	
October ...	4.27	3.55	3.18	2.47	2.28	1.49	6.68	4.41	2.13	3.36	
November ..	3.72	4.46	2.31	3.14	5.97	2.41	3.61	3.05	1.89	2.87	
December ...	3.68	5.90	4.07	2.69	7.39	7.47	2.29	1.97	7.01	5.73	
TOTALS ...	37.83	33.09	43.55	31.00	35.82	33.73	38.06	32.39	42.73	35.24	
	2	2	2	2	2	2	2	2	2	2	

1912 apple trees 10 ft high 12 ft N+S

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	54.1.50	1.38	Birstwith	1 m	E	Birstwith	1/2 m	E



RAINFALL at Birstwith, SwarcliffeCounty of N. YorkshiresObserver Capt. C. S. GreenwoodRiver Basin Cure - Ridd - 11~~Snowdon~~ Rain Gauge, by  
M.O. (126)

Diameter ...	5										
Height .....	1	0									
Altitude ...	510										
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 Males.
January ...	5.46	5.21	4.57	2.50	2.46	3.03	4.19	2.79	7.58	1.76	6.41
February ...	2.81	2.5	3.78	6.41	1.24	5.19	2.94	1.45	5.94	.96	1.19
March .....	3.26	2.32	2.43	1.62	1.57	.92	1.26	2.42	5.79	.34	2.38
April .....	4.71	1.43	3.15	2.62	2.02	4.36	1.01	2.27	.82	1.15	3.13
May .....	4.42	2.42	1.27	3.58	5.03	4.85	2.28	1.76	2.64	1.63	1.31
June .....	1.68	1.0	1.07	1.16	2.39	.03	3.60	2.62	4.23	1.23	1.71
July .....	6.55	1.57	4.89	3.37	4.44	.92	2.69	4.24	.64	2.53	4.55
August .....	1.87	4.72	5.86	4.43	3.99	2.38	3.09	8.26	4.06	2.50	3.62
September...	1.16	1.65	5.28	2.97	4.43	2.78	1.91	3.79	.53	.59	3.95
October.....	2.87	2.02	1.14	3.95	4.18	3.81	3.76	3.92	5.56	3.49	2.80
November...	2.71	2.75	1.27	4.07	2.76	2.14	6.08	3.46	4.56	4.80	4.72
December...	3.80	4.64	4.73	4.01	3.97	4.56	1.09	2.82	2.44	7.67	3.31
TOTALS...	41.30	29.08	39.44	40.69	38.48	34.97	33.90	39.80	40.39	28.65	39.08

1920 Apple Trees kept high 12 ft N.W.

1922. g. in the open.

1929. Gauge moved July 10 ft. N.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
1920	54°15'	1°33'	Birstwith	1 mi	E	Birstwith	1/2 mi	E

RAINFALL at Birstwith (Swardcliffe)County of West RidingObserver Capt. C. S. GreenwoodRiver Basin Ouse - Nidd - Il.

Type of Gauge.....

Annual Average 33.9 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. S

896542/29

Diameter	5.											
Height	1.0.											
Altitude	510.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Mean	
January	2.27	2.92	2.22	2.32	1.99	4.78	3.90	5.25	5.70	2.48	33.88	
February	3.02	.42	4.81	.25	4.31	2.86	5.38	1.76	3.00	2.23	28.04	
March	.61	2.44	1.89	2.86	1.15	2.66	3.74	.31	2.40	2.33	20.89	
April	3.82	2.55	1.56	3.83	2.35	1.77	3.20	.27	1.54	2.51	23.40	
May	3.93	4.86	3.23	1.97	1.56	2.10	2.93	2.72	1.11	2.36	26.77	
June	5.19	.68	1.16	2.22	3.13	4.78	2.01	3.51	2.07	0.44	25.09	
July	5.06	3.88	1.91	1.22	.62	4.15	2.29	3.71	4.58	4.59	32.01	
August	4.52	1.67	0.63	1.79	1.76	2.66	1.33	3.37	2.69	0.59	21.11	
September	5.42	2.35	2.32	2.85	6.17	2.96	1.50	2.38	1.23	2.42	29.60	
October	1.11	3.90	3.72	3.32	6.03	2.26	2.44	7.70	3.10	3.38	36.96	
November	4.84	2.75	5.22	2.28	6.09	3.45	1.66	4.09	4.55	4.91	37.84	
December	1.62	1.61	0.70	6.11	2.56	3.31	3.31	5.51	2.46	2.95	30.14	
TOTALS	41.41	29.93	27.27	31.02	37.72	37.74	33.69	40.58	34.63	34.19	34.518	
	D	D	D	D	D	D	D	D	D	D	NR	#

1931. Young fruit trees 4' 6" high 25' away.

1934 Two fruit trees 8-9' high 4 yds E.

1940 Stn terminated.

\* Back records. Silb re-opened Sep. 1963.

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			Birstwith	1ml	E	Birstwith	1/2 ml	E ✓

## RAINFALL 1961-1970

Opened 13/9/63  
back records from 1940.

Station SWARCLIFFE HALL No. 39-058216  
 County Yorks. W. R. (Old No. (3366))  
 Authority Yorkshire Ouse R.B. Grid Ref. SE(46) 235593  
 Altitude 520 ft.  
 River Basin Ouse  
 Tributary Nidd  
 File E 20346/57 TF 75 / MWR 41 m / a

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	Means Total
January ...	3.67	3.45	4.12	1.84	4.28	2.72	3.13	7.85	1.43	2.24	34.76
February ...	4.40	1.75	1.71	1.49	3.79	4.05	3.50	2.40	1.84	5.88	32.81
March ...	3.48	2.90	0.72	0.45	1.07	1.63	6.11	1.81	6.95	1.15	20.27
April ...	2.07	1.32	1.28	3.04	1.63	1.64	4.28	2.69	2.98	2.42	23.35
May ...	1.56	3.18	2.08	0.97	2.54	2.95	3.32	0.98	1.78	2.13	21.49
June ...	0.18	1.22	2.06	3.50	3.44	2.73	3.63	3.37	0.97	0.61	21.71
July ...	2.48	2.15	1.66	3.17	1.90	4.17	2.34	1.40	2.31	2.97	24.55
August ...	3.22	2.49	2.94	2.93	3.38	5.49	0.99	4.20	2.25	4.66	32.55
September ...	0.49	1.91	3.71	5.62	1.60	6.63	1.92	2.68	1.09	3.86	29.51
October ...	4.04	2.52	1.65	3.06	3.02	1.82	1.14	1.09	3.11	1.85	23.30
November ...	2.99	1.20	2.34	7.49	0.50	6.92	3.70	1.41	5.21	3.82	35.58
December ...	0.99	2.54	1.83	3.44	2.47	2.90	2.97	2.80	4.14	1.81	25.89
TOTAL ...	29.57	26.63	26.10	37.00	29.62	43.65	37.03	32.68	28.06	33.40	323.74
Percentage ...											

## AVERAGE ANNUAL RAINFALL

Actual

Estimated from data for:-

1881-1915 in. \_\_\_\_\_

1916-1950 in. \_\_\_\_\_

Type and capacity of gauge No. 2. Snowden. 5"

\*NOTES on unorthodox equipment or exposure, inspections, changes of equipment, site or altitude:-

1963. opened.\* Back records.

Earliest year with complete data (D : W : M) \_\_\_\_\_

\*NOTES on years with incomplete or unsatisfactory data:-



## RAINFALL 1961-1970

Opened 13/9/63  
with back records from 1940.

Station SWARCLIFFE HALL.No. 39-058216County Yorks. W.R. R.D. 11(Old No. (3366))Authority YORKSHIRE OUSE RIVER BOARD.Grid Ref. SE(44) 23593Altitude 520 ft.River Basin OUSE.Tributary NIDD.File E.20346/57.TF 75

MWR

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	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	Means
	*	*	*	*	*	*	*	*	*	*	Total
January ...	2.35	2.56	0.51	1.69	2.26	4.74	3.24	3.95	3.54	5.02	29.26
February ...	3.09	0.47	1.80	2.85	1.62	2.57	3.07	5.30	0.20	2.32	23.89
March ...	3.32	1.35	0.27	2.37	2.47	1.63	2.82	2.33	1.74	2.70	21.22
April ...	1.25	1.03	1.66	0.46	0.86	2.78	0.32	1.19	4.04	2.01	15.65
May ...	4.71	1.62	1.23	4.13	3.06	1.05	1.61	4.75	1.16	1.01	24.83
June ...	1.17	1.18	1.38	1.69	2.24	3.95	1.95	4.26	1.70	0.69	20.41
July ...	1.54	0.85	1.87	1.52	1.16	5.44	2.90	4.15	2.08	4.34	25.25
August ...	5.12	3.11	2.94	5.36	1.26	6.92	5.42	2.95	1.03	2.96	27.07
September ...	2.17	3.07	1.66	2.23	1.42	4.39	4.42	4.15	0.29	3.13	26.93
October ...	0.61	1.99	1.14	5.17	2.53	1.64	4.32	3.01	2.77	6.00	29.32
November ...	7.62	1.37	2.03	5.85	2.50	1.14	2.56	1.17	4.65	6.77	35.66
December ...	3.35	1.31	0.77	3.77	6.02	3.98	3.76	5.43	6.98	4.40	39.77
TOTAL ...	36.50	19.91	17.26	37.29	27.40	40.23	36.39	42.64	30.18	41.35	329.15
Percentage ...											

## AVERAGE ANNUAL RAINFALL

Actual

Estimated from data for:-

1881-1915 in.

1916-1950

36.29

in.

12 yrs 1955-66

in.

Type and capacity of gauge

No. 2. Swoosden 5"

\*NOTES on unorthodox equipment or exposure, inspections, changes of equipment, site or altitude:-

Opened 1963. Insp. 19/7/63 by R. Bruley. Gauge good. Rim at 10".  
Set in earth with stone edge to path 5' W.S. Tree 60-110' N.  
Sit. d/s to E. 0/s from N. Recen. moving slightly from edge of path.  
\* Back records.

Earliest year with complete data (D : W : M)

\*NOTES on years with incomplete or unsatisfactory data:-