

Cartmel

Hall

586618

40

Rainfall at

Holker Gardens

W. Wilson

Mss. Rec.

Diameter of Gauge, in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

YEAR - -										1849	MEANS
January - -											
February - -											
March - - -										#	
April - - -										.57	
May - - -										1.38	
June - - -										2.40	
July - - -										1.36	
August - - -										4.46	
September -										4.49	
October - -										4.63	
November -										6.51	
December -										5.10	
TOTALS -										2.45	

C

MET. CO. RAINMASTER
RETROSP. VER. SIZE REVIEW

586618

NGR: 50(34) 759 778

BASE 155 ft = 47 metres. Date of review 12.1.1979

Cartmel

586618

50

Rainfall at Holker Gardens

Wm Wilson

His return

Diameter of Gauge, in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

YEAR - -	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	MEANS
January - -	4.26	6.52	7.69	5.22	3.61	.60	3.29	3.55	2.21	5.19	4.211
February - -	4.72	2.78	5.05	1.56	2.32	1.65	4.43	2.93	.09	3.35	2.888
March - - -	.96	3.94	.29	2.09	2.04	2.43	.45	2.68	2.52	5.22	2.262
April - - -	4.22	1.77	1.61	2.45	.69	1.31	2.12	1.73	2.69	4.94	2.353
May - - - -	2.31	1.01	3.07	1.10	1.78	1.61	1.82	2.17	2.10	.24	1.721
June - - - -	3.96	4.06	3.75	2.96	3.08	3.47	4.93	3.99	1.90	2.35	3.445
July - - - -	4.70	5.50	2.64	6.08	2.54	3.50	2.52	3.07	4.34	1.96	3.685
August - - -	5.23	3.63	6.28	2.74	4.51	4.09	4.54	2.67	2.43	5.05	4.117
September -	2.42	2.17	3.49	2.94	2.28	1.76	3.62	2.88	4.91	6.36	3.283
October - -	4.97	4.30	3.17	5.28	4.06	6.71	2.08	2.29	4.99	2.83	4.068
November -	5.38	1.49	7.05	3.06	3.45	2.13	2.03	1.97	2.85	3.67	3.308
December -	2.89	1.41	11.01	.46	6.68	2.08	4.29	2.03	3.88	3.50	3.822
TOTALS -	46.02	38.58	55.10	35.94	37.04	31.34	36.12	31.96	34.91	44.66	39.167

MET. O.S. RAINMASTER
RETROSPECTIVE SITE REVIEW

586618

NGR: 50(24) 365718

155 ft. 47 metres. Date of review 12-1-1979

1854- Total given as 37.306 in ppt by S. Marshall (probably 37.036) 244

5

6

7

8

9- Total agrees with ppt. by S. Marshall, Kendal

Cartmel, Holker Hall Gardens

Mr. W. Wilson

NGR: 50(34) 759778

ALT: 155 ft or 47 metres. Date of review: 12-1-89

586618

8 in + Ground 4 ft 8 in + Sea level 155

YEAR - -	1860	1061	1062	1063	1864	1865	1866	1867	1868	1869	MEANS.
January - -	5.97	2.01	4.38	5.07	3.18	3.06	5.69	5.21	2.91	5.06	4.414
February - -	3.29	5.29	.44	1.69	3.75	3.59	4.26	2.85	3.65	6.13	3.494
March - -	5.03	5.65	4.87	1.30	4.35	2.05	2.96	1.71	5.11	1.22	3.425
April - -	1.45	.06	3.85	2.15	2.18	99	1.38	4.23	2.74	2.64	2.247
May - -	2.53	1.29	4.42	3.22	2.92	5.34	1.38	2.05	2.17	3.40	2.872
June - -	5.24	2.78	3.39	4.10	4.01	.70	2.75	1.60	.67	2.01	2.725
July - -	1.11	5.50	3.99	.93	3.16	2.29	2.73	4.89	.53	1.31	2.644
August - -	6.19	7.41	3.50	4.09	3.29	5.56	5.78	3.29	6.03	2.38	4.752
September -	1.09	5.35	2.26	6.20	4.15	1.50	0.74	4.36	2.94	0.06	4.633
October - -	7.17	3.33	9.11	5.84	3.45	6.34	2.64	4.94	5.04	3.57	5.143
November -	2.64	7.01	2.02	5.09	4.24	3.69	7.07	1.00	3.51	6.25	4.340
December -	4.56	2.83	5.35	3.52	4.88	2.36	6.12	4.06	10.28	5.40	4.936
TOTALS -	47.07	50.11	47.58	43.20	43.56	38.35	51.50	41.07	45.58	40.23	45.625

1863 May 11.th 1.59 June 10.th 1.12. 1860 agrees with ppt by March1864 Max Dec: 19.th = 1.47

1867 " " " "

1865 4 in an open space in kitchen garden of 2 or 3 here
 not a tree within 100 yards, and they to the N quite
 open to the S. S.W. & W to the sea. 29.th May 1.78

1868 Max temp 92° on Wednesday 15.th July
 Min " 20° Saturday 2.nd Jan'y
 T & L on 28.th Dec.

1869 Max temp 90° on Saturday the 28.th Aug.
 Min " 13 on Tuesday 28.th Dec.

6 inches of snow fell on 26.th Dec. & 2 inches on
 the 29.th of Dec.

586618

RAINFALL AT *Stall* Carmel Flower Gardens

Lat.....

Lon.....

County of.....

San Carlos Mire

.....Rain Gauge, by.....

Observer *M. Wilson**Gardener to Duke of Devonshire*

Diameter	8	.										
Height	4	8	.									
Altitude	π							150	155	.		
155-0												
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.	
January.....	4.34	2.13	5.19	5.71	4.61	6.67	2.63	7.87	4.18	2.21	4.854	
February.....	2.16	4.37	4.68	1.06	2.34	1.37	4.52	3.59	2.59	3.45	3.013	
March.....	2.28	2.23	4.21	3.83	3.08	1.08	3.42	3.56	1.94	2.08	2.771	
April.....	1.60	3.79	1.83	.62	.98	1.35	2.85	2.63	2.25	1.90	1.980	
May.....	2.79	1.01	1.68	2.47	1.23	2.50	.33	3.14	3.87	1.50	2.132	
June.....	1.88	2.25	4.95	2.45	1.62	3.98	4.35	2.28	3.67	5.02	3.245	
July.....	1.56	4.93	5.95	4.46	2.15	2.52	3.75	4.50	.48	6.40	3.670	
August.....	1.97	3.19	4.86	5.81	7.16	3.54	3.57	5.66	6.28	4.16	4.620	
September.....	3.65	3.78	9.16	2.81	5.01	6.06	4.49	3.43	4.62	4.42	4.743	
October.....	11.30	8.36	6.53	6.52	8.59	5.29	3.76	7.95	4.23	2.60	6.313	
November.....	3.07	2.36	5.04	2.98	4.61	6.35	3.18	7.57	2.78	1.20	3.914	
December.....	2.64	5.21	4.79	1.94	3.71	2.46	6.99	6.05	2.42	2.49	3.870	
TOTALS	39.24	42.41	61.87	40.66	45.09	43.17	43.84	58.23	39.31	37.43	45.125	

1878 Bushes 2ft high 12ft distant

Carmel church 1 1/2 mile E.

METEOROLOGICAL
RETROSPECTIVE

586618

SERIAL 50(34) 355718

DATE 155 1 = 47 matrix. Date of rev. 12-1-1973

RAINFALL AT *Cartmel, Holker Hall Gardens*

80

Lat.

Lon.

County of *Lancashire*

Rain Gauge, by

Observer *W. W. Fox**Seven + 6 2.*

Diameter	8											
Height	4 8											
Altitude	1557											
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.	
January	4.9	6.4	3.74	6.87	7.21	2.27	4.58	2.97	2.07	2.94	3.378	
February	3.32	4.79	3.54	2.80	2.66	4.10	1.91	2.11	.86	2.64	2.873	
March	2.72	5.15	3.54	1.10	3.42	4.97	4.89	2.07	2.87	2.67	3.340	
April	1.59	2.29	4.78	3.20	1.18	1.96	2.95	2.07	1.26	2.56	2.384	
May	2.11	3.85	2.66	1.20	2.82	1.86	5.98	1.53	1.28	2.99	2.628	
June	3.50	4.34	4.08	3.22	1.58	1.65	2.27	.31	1.51	1.11	2.357	
July	5.10	6.83	6.63	1.98	6.41	3.30	7.04	1.69	7.38	3.43	4.979	
August	1.34	6.71	5.07	4.23	1.48	2.05	2.91	2.62	3.67	5.64	3.572	
September	5.07	2.74	2.66	4.82	4.99	5.62	5.40	4.31	1.32	2.99	3.992	
October	1.61	2.77	3.98	4.39	3.40	4.97	7.73	2.58	4.14	5.24	4.081	
November	5.53	6.00	6.63	5.65	1.84	3.97	5.22	2.82	5.57	2.22	4.545	
December	7.09	4.25	3.65	3.52	4.93	1.91	4.98	3.20	3.62	4.02	4.117	
TOTALS	39.47	50.36	50.96	42.98	41.92	38.63	55.86	28.28	35.55	38.45	42.246	

1880. Flookburgh Church. 1 mile S.

1882 Gooseberry bushes 3ft high 12 ft E + W

1887 Cartmel Ch 2 miles E

METEOROLOGICAL

STATIONARY SITE REVIEW

NO. 586618

586618

NO. SD(24) 359718

AGE 155

FEET 47

metres. Date of review 12-1-1979

RAINFALL AT

Cartmel Holker Hall Gardens

Lat. _____

Lon. _____

County of Lancashire

Rain Gauge, by _____

Observer

Mr W. Fox

Leven 9 6 2.

Diameter	8										
Height	4 8										
Altitude	155 M										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	6.21	2.63	4.31	1.24	3.54	2.65	3.09	1.38	4.23	5.19	3.447
February ....	.74	.31	1.74	5.92	7.34	.44	2.84	2.65	3.60	3.15	2.873
March	4.14	1.73	1.18	2.01	2.92	4.25	6.55	4.93	1.29	2.24	3.124
April	1.78	2.25	1.78	.77	1.35	2.85	1.46	2.67	3.33	3.98	2.222
May	3.14	1.77	5.08	2.80	2.93	.63	.53	1.84	3.13	3.52	2.537
June	3.87	1.26	2.60	1.49	4.12	2.19	2.95	4.24	4.48	1.87	2.907
July	3.58	3.09	1.92	4.45	3.10	6.80	4.45	1.53	.30	3.04	3.226
August	5.26	8.63	8.06	4.90	4.25	4.12	2.75	4.78	7.82	.99	5.156
September....	5.29	6.42	6.82	5.26	.36	1.30	6.28	4.78	2.18	5.28	4.397
October	3.07	4.01	4.89	6.12	4.53	5.83	4.03	2.94	6.00	3.61	4.503
November....	7.66	5.18	4.03	2.62	5.76	4.33	1.79	7.02	3.78	3.25	4.542
December ....	.70	7.47	3.35	4.07	5.17	5.37	6.32	6.75	5.15	3.23	4.758
TOTALS ...	45.44	44.75	45.76	41.65	45.37	40.76	43.04	45.51	45.29	39.35	43.692

1890 Cartmel Church 2 Miles E

Grosvenor Bushes 3 ft high 12 ft E+W

M.E.O.S. BAINCASTER
RETROSPECTIVE SITE REVIEW

586618

NGR SD(24) 359778

ALT: 155 ft = 47 metres. Date of review 12-1-1979

586618 & 586620

RAINFALL AT Cartmel Holker

Lat.

Lon.

County of Lancashire NorthWest of Duke of Devonshire

Rain Gauge, by

Observer, R. H. CascardLeven 2Ind Richard Cascard

Diameter ..	8							5			
Height	4.8						0.9				
Altitude ..	155*						85		*		
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	5.71	2.63	2.85	4.35	(5.90)	2.44	5.68	2.60	4.73	2.69	3.758
February ..	4.15	1.03	1.95	3.55	(4.08)	2.26	3.01	2.78	3.04	2.82	2.867
March ....	.26	3.14	2.96	3.76	(4.14)	3.22	3.57	5.11	3.83	4.37	3.436
April	2.98	2.56	1.49	1.66	3.95	4.61	1.48	2.50	3.37	3.91	2.851
May	2.32	1.68	3.07	5.50	2.71	1.58	5.77	5.92	4.33	2.35	3.523
June	4.04	2.06	1.31	4.78	1.45	2.66	3.14	7.92	2.54	2.88	3.278
July	3.04	1.12	3.54	4.32	4.08	2.10	2.94	3.19	3.91	6.57	3.481
August	6.76	4.30	4.09	6.68	3.99	5.81	4.72	4.67	4.59	3.43	4.904
September ..	3.04	1.57	2.40	7.87	2.61	3.58	1.53	.80	5.35	3.32	3.207
October	8.12	4.27	4.05	9.42	3.52	3.44	5.81	6.75	2.84	7.57	5.579
November ..	4.66	6.03	4.49	5.19	5.80	5.57	4.14	4.67	4.11	2.06	4.672
December ..	6.88	4.85	4.78	6.10	4.04	1.82	4.39	6.67	3.77	8.40	5.170
TOTALS ..	51.96	35.24	36.98	63.18	46.27	39.09	46.18	53.58	46.41	50.37	46.926

1907. New gauge, as old one was too near trees.

Trees 50 feet high

150 feet E.

MET. O.S. RAINMASTER
RETROSPECTIVE SITE REVIEW

586618

MET. O.S. RAINMASTER
RETROSPECTIVE SITE REVIEW

586620

NCR: 50(34) 359778

NCR: 50(34) 359774

ALT: 155 ft = 47

ALT: 85 ft = 26

Date of review: 12.1.1979

Date of review: 12.1.1979

RAINFALL at Carlton HoltonCounty of North LancashireObserver Lord Richard Cavendish
22 Jan 1979River Basin Leven + C 2Rain Gauge, by N+3

Av 47.80 based 31 years 1916-1946 Period 1916-1950

734
P.B. ~~722~~

Diameter ...	5										
Height	0 9										
Altitude ...	85 ft										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	5.58	2.03	3.84	4.88	3.92	5.12	4.41	2.54	5.53	6.65	
February ...	5.81	5.33	2.98	2.58	4.59	5.43	3.99	1.63	4.83	2.45	
March	1.91	1.49	5.83	4.52	4.78	2.24	1.93	2.45	2.15	5.88	
April	2.54	3.00	1.14	5.33	.78	2.39	3.00	1.65	1.27	2.16	
May	1.93	1.80	2.47	3.32	2.35	1.41	4.33	3.38	2.66	2.09	
June	2.51	2.95	5.58	2.48	1.17	.92	3.01	3.11	2.88	2.25	
July	3.16	.70	6.46	.95	5.43	5.47	2.46	2.02	4.41	1.01	
August	6.55	3.33	6.31	1.89	4.14	3.03	2.28	10.04	5.43	4.48	
September ..	.61	4.67	2.65	2.50	3.62	.87	3.73	3.90	11.82	4.26	
October ...	2.19	5.40	6.96	3.51	2.42	1.74	7.81	8.54	5.41	2.45	
November ...	6.36	5.77	5.58	4.19	6.21	2.87	5.07	5.41	3.06	3.29	
December ...	4.34	7.84	5.60	3.40	6.86	8.20	4.31	2.57	8.67	7.25	
TOTALS ...	43.49	44.61	55.44	39.55	46.27	39.69	46.33	47.24	58.12	44.22	46.496
	7	3	3	2	3	3	2	2	2	3	

MET. O.S. RAINMASTER
RETROSPECTIVE SITE REVIEW

586620

NGR: SD(34) 359774MT: 85 it = 26 metres Date of review: 12-1-1979

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
			<u>Carlton</u>	<u>1 m</u>	<u>S</u>	<u>Holton</u>	<u>1 m</u>	<u>S</u>

RAINFALL at Cartmel Holker HallCounty of N. LancashireObserver Lord Richard CavendishRiver Basin Leven & C 2per F.A. Farmer (H. 9 Jan)Shroton Rain Gauge, by N.S.G.

AV 4780

Based on 31 yrs

1916-46

Period 1916-1950

P13 ⁷³⁴ ~~724~~

Diameter ...	5"											
Height	0.9											
Altitude ...	85											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEAN 1930	
January ...	5.50	6.54	4.52	4.76	5.22	3.89	5.25	5.00	11.78	2.61	7.16	
February ...	3.89	2.29	5.60	6.18	1.09	5.09	7.07	4.01	5.00	1.64	.55	
March	5.74	4.50	2.53	1.64	3.58	1.47	1.75	3.60	4.31	1.05	3.17	
April	6.19	1.50	2.19	4.01	3.42	3.24	1.71	2.63	2.45	2.02	2.28	
May	5.26	3.01	3.55	3.30	5.64	6.97	3.26	2.48	1.65	2.51	2.10	
June	2.45	2.29	2.78	1.01	3.09	.51	3.12	3.23	6.00	2.03	1.52	
July	6.78	2.48	5.31	4.65	4.63	2.76	4.57	4.00	3.75	4.01	3.40	
August	2.45	8.20	5.02	8.24	4.92	5.31	4.08	6.30	6.01	6.41	7.00	
September...	3.34	2.75	5.03	6.03	6.00	3.95	5.19	7.46	3.12	2.35	2.43	
October	2.03	3.14	1.26	8.71	4.52	6.25	4.40	4.43	7.63	5.65	8.62	
November...	2.47	3.00	2.71	7.06	3.14	2.74	6.71	5.84	9.01	10.34	5.80	
December...	4.51	6.19	6.00	5.62	7.37	4.06	1.44	1.32	4.62	7.32	5.02	
TOTALS...	50.61	43.89	46.10	61.21	52.26	46.24	48.55	50.35	67.33	47.94	49.05	
	D	D	D	D	D	D	D	D	D	D	D	

METEOROLOGICAL

RECORDS, 1916-1950

586620

NGR: SD(24) 359714

ALT: 85 11.26

Index Date of review 12-1-1979

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			Cartmel	1 mi	S	Hookbrow	1 mi	S

RAINFALL at Cartmel (Holker Hall)County of North LancashireObserver Lord Richard CavendishRiver Basin Leven & C. - 2Type of Gauge SwindonAnnual Average 44.5 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. B. 1
47.80 31 1916-1950 753476/83 PG 734

Diameter	5										
Height	0.9										
Altitude	85										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	5.02	5.90	3.30	5.78	2.16	5.32	3.96	5.48	5.35	3.34	
February	4.89	1.02	4.45	2.26	6.04	2.33	7.31	1.85	4.19	1.86	
March	5.53	4.16	3.60	2.74	1.50	2.89	2.14	1.88	2.35	4.64	
April	2.53	3.78	2.52	3.71	3.57	83	3.69	1.66	2.74	3.56	
May	3.01	6.60	2.65	4.42	7.2	1.38	2.24	4.36	1.07	1.41	
June	7.70	2.34	3.72	2.83	4.30	4.63	2.88	5.02	3.38	7.2	
July	5.96	5.39	3.50	2.00	1.42	3.04	3.40	5.84	4.65	5.00	
August	3.76	2.34	3.31	5.60	3.67	3.69	2.23	3.02	2.70	1.67	
September	1.86	5.90	8.4	5.74	9.09	6.10	4.14	2.64	2.27	4.91	
October	3.73	7.24	4.37	6.64	7.56	4.22	3.02	11.34	1.80	5.38	
November	9.85	3.68	2.37	1.81	5.13	5.16	2.05	7.37	6.91	5.86	
December	5.74	4.69	1.31	7.29	4.63	6.45	4.37	5.46	2.92	5.53	
TOTALS	54.08	51.44	35.94	48.92	49.79	47.84	41.43	54.92	42.73	43.89	

MET. O.B. RAINMASTER
RETROSPECTIVE AND REVIEWNGR: 50(34)353774ALT: 85 ft = 26 metres. Date of review: 12.1.1979Position 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
1932.			<u>Cartmel</u>	<u>1 m.</u>	<u>S.</u>	<u>Hookbrough</u>	<u>1 m.</u>	<u>S.</u>

Station No. 3953RAINFALL at Carlton (Holker Hall)

41

County of North Lancashire Observer Lord Richard Cavendish ^{DIED JAN. 1946.}River Basin Levens & L. - 2RICHARD CAVENDISH, Esq.Type of Gauge SnowdonAnnual Average 14.5 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. B of N.Began 1842File No. 753474 ^{1916-1920 P13-134 (P.A. Nov 50)}

Diameter	5"		586	620							
Height	0' 9"			1		0' 7"					
Altitude	85'			41		130'					
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	1.50	5.50 ⁹	6.82	4.60	3.24	4.71	4.63				
February	4.24	2.14	2.59	1.98	4.76	3.20					
March	3.31	3.35	1.51	.53	3.35	1.80					
April	1.24	1.94	3.06	3.89	2.38	1.21					
May	3.95	3.48	4.65	3.38	4.25	1.41					
June	.51	1.50	2.84	3.29	4.05	4.26					
July	1.89	4.60	4.04	3.50	3.68	4.68					
August	4.42	4.72	8.15	3.76	87	5.18					
September	1.82	4.71	6.04	6.71	4.29	6.76					
October	7.04	6.04	5.66	5.47	5.41	.77					
November	2.40	1.13	3.17	8.21	30	7.03					
December	2.53	5.79	2.42	4.18	2.41	4.35					
TOTALS	34.91 _D	45.30 _D	50.95 _D	49.50 _D	38.94 _D	45.36 _D	imp _D				

62.46 Station terminated, gardens now commercial not private, also shortage of staff

1947. n.p. imp

Encl. 27A, dated 13 Oct. 1950, basis termination action

Only temporarily as obs will be resumed when conditions improve
see 21A in file

Position of Station on reduced Ordnance Survey Map, 1 mile to 1 inch Series

No. of Map.....

Reference No. SD 959774

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge.	Direction
1943			Canal	1 m.	S.	Flookburgh	1 m.	S.

BRITISH RAINFALL ORGANIZATION

✓ ✓ ✓ ✓

41.46