

Met 0 8b 10-YEAR SUMMARY SHEETS

Governed by Public Records Acts

I M P O R T A N T

1. These sheets are a VITAL part of the permanent data archives of the Office, and are stored in Met08 for all decades for practical and historical reasons, including ready access, rather than be stored in Technical Archives.
2. For many old stations these sheets are the ONLY record of available data.

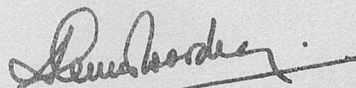
ENTRIES

3. All entries must invariably be made in permanent ink (nowadays normally in black waterproof ink), be perfectly legible and comments sufficiently intelligible to those reading them decades after the event.
4. Every attempt should be made to ensure that any follow-up action is adequately cross-referenced to a previous entry.
5. Retrospectively effective comments MUST be entered on the station's 10-year sheets for all relevant previous decades, not just on the latest decade's sheet.

BORROWING OF 10-YEAR SHEETS PROHIBITED

6. On no account whatsoever are the original sheets to be lent to other branches, and care is to be exercised if sheets are wanted by sections other than Met08b within Met08.
7. These sheets may only be extracted from their binders for the very short periods required during any manuscript updating, or whilst actually being photocopied. It is important that temporarily extracted sheets are returned to their correct numerical position by station number; and if more than one decade's sheets for a station are extracted at the same time, very special care needs to be taken to ensure that each decadal sheet is returned to the correct decadal binder.

The discovery of any station's sheet missing from the binder must be reported personally to HSO-in-charge RAINMASTER.



Head of Hydrometeorological
Data Systems

KEEP as top enclosure of each binder

Coombs Mop

40
C x 134

serby.

gin Funnel

+ Sea Level 1670 ft

upper mercury - 1.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								2.60			
February - -								1.78			
March - - -								.79			
April - - -								2.45			
May - - - -								4.50			
June - - - -								3.44			
July - - - -								1.53			
August - - -								2.96			
September -								4.17			
October - - -								4.48			
November -								2.52			
December -								4.63			
TOTALS -								35.85			

Bateman dont like g

Man Meru 7-60

Coxs Reservoir

at Whaley Bridge, 6 S E of Marple
Compt Gauge

Ex 40
Derby.

Gauge on House top
upper menry - 1.

850 ft + L level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	3.18				2.47	1.68	3.23	1.50			
February - -	1.99				1.48	.79	1.20	2.28			
March - - -	.33				3.07	2.00	1.91	1.14			
April - - -	.68				.58	1.68	4.10	2.35			
May - - - -	1.88				.10	1.85	1.49	4.15			
June - - - -	3.81				1.57	3.57	2.62	2.88			
July - - - -	5.18				3.67	3.97	2.48	.93			
August - - -	5.22				3.83	7.52	4.45	3.48			
September -	3.71				2.26	4.00	1.02	5.74			
October - -	2.18				2.82	2.75	4.36	3.62			
November -	4.87				2.50	2.36	1.89	3.18			
December -	3.5				.12	4.73	1.18	4.24			
TOTALS -	33.38				24.47	36.90	29.93	35.57			

0 - March 7 - 32856

Coventry Reservoir
Society's Gauge

Ex 40
135
Derby

Flood B.A.I.
giving Funnel + Ground 1 ft
upper mercury - 1.
+ Sea Level 850 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					3.6	3.7	5.5	2.6			
February - -					2.9	1.8	2.0	3.5			
March - - -					5.0	3.6	2.6	1.6			
April - - -					1.5	3.0	4.6	4.0			
May - - - -					.5	2.7	2.2	5.3			
June - - - -					3.2	5.0	2.7	3.9			
July - - - -					5.4	5.1	2.3	1.0			
August - - -					4.5	9.1	5.3	3.4			
September -					3.7	5.0	1.2	0.2			
October - -					5.1	4.1	5.1	5.4			
November -					4.9	4.0	2.5	4.5			
December -					.4	8.0	2.1	7.9			
TOTALS -					42.70	55.10	38.10	51.30			

c c c c

Man Mern 7-56

Chapel-on-le Frith

Box 40 120

Near the top of the incline on the Peak Forest Railway
on Ashton P.B. branch

Derby.

Gauge on the ground

1121 ft + 1 level

Upper men - 1.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	4.80				3.6	2.6	4.4	2.8			
February - -	2.00				2.9	2.0	1.6	3.9			
March - - -	1.50				4.5	2.2	2.6	1.3			
April - - -	1.10				1.1	2.8	5.3	3.9			
May - - - -	2.00				.3	2.3	1.9	4.5			
June - - - -	4.09				1.9	4.0	4.0	3.2			
July - - - -	7.20				4.4	3.9	2.9	1.5			
August - - -	8.02				4.3	7.6	5.0	2.9			
September -	5.01				2.7	3.6	1.3	6.4			
October - - -	3.01				3.4	3.1	5.4	4.3			
November -	8.07				3.7	3.1	2.4	3.6			
December -	1.60				.2	6.0	2.0	5.7			
TOTALS -	48.48				33.00	43.20	38.00	44.00			

0 from Mem 7-32 & 46

1 mile SE of Gentle Fr.

40

The Flank of Kinder Scout, Hayfield Co. ^{Derby} 1410
at the head of Ashop Dale

Gauge
upper men - 1.

1 ft + ground

+ Sea Level 1600 ft.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	9.4	2.4									
February - -	5.3	2.6									
March - - -	1.6	4.0									
April - - -	1.6	5.6									
May - - - -	5.2	5.4									
June - - - -	7.3	5.2									
July - - - -	13.4	10.3									
August - - -	7.0	9.5									
September -	9.3	5.4									
October - -	5.7	11.2									
November -	8.0	6.4									
December -	2.0	12.1									
TOTALS -	74.00	84.10									

1839 October 3.5; Nov. 6.9; Dec. 6.1.

Mean Mean 7-40

on Man to Sheff road via Glossop

Head of Hurst Brook Valley Glossop

40
Ex 139
Derby.

+ Sea Level 1500 ft

upper messy - 1.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	2.6	3.0	1.3								
February - -	6.6	3.3	2.7								
March - - -	1.5	3.3	5.9								
April - - -	1.6	6.4	4.0								
May - - - -	7.7	4.6	2.3								
June - - - -	6.5	5.9	2.2								
July - - - -	6.3	7.2	3.5								
August - - -	9.5	7.3	5.2								
September -	6.7	6.0	12.4								
October - -	6.5	10.5									
November -	7.0	9.0									
December -	1.5	6.1	3.3								
TOTALS -	63.00	72.60	47.10								

c c c

Neglected in 1844

1-3 Main Menu 7-38

Rainfall at Glossop (Foot of the Hills)

40

Derby.

Mr. Fenol 1843 - 1844

Diameter of Gauge, in. Height above Ground, ft. in. Above Mean Sea Level, 500.0 ft.

Upper Mersey - 1.

YEAR - -	1840	1842								MEANS.
January - -	21.20									
February - -										
March - - -										
April - - -										
May - - - -										
June - - - -										
July - - - -	24.00	3.50								
August - - -		1.70								
September -		4.50								
October - - -		2.90								
November -		6.60								
December -		3.30								
TOTALS -	45.20		47.22	36.20						

c c c c c

40-2 Main Mem

1843 = 15/12/42 - 14/12/43

1844 = 14/12/43 - 31/12/44

1840 is said elsewhere to be only 10 1/2 months

Black Clough Woodhead

40 1/31
Derby.

+ Sea Level 1700 ft

Upper Mersey - 1 -

YEAR - -										1849	MEANS.
January - -										6.0	
February - -										2.0	
March - - -										2.0	
April - - -										3.0	
May - - - -										2.5	
June - - - -										3.0	
July - - - -										6.1	
August - - -										4.0	
September -										6.3	
October - - -										8.7	
November -										4.0	
December -										4.6	
TOTALS -										52.20	

Mon Mon 7-70

Woodhead Station

C. 4051

Derby.

+ Sea Level 1000 ft

Upper Mersey - 1.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								2.20			
February - -								2.64			
March - - -								1.84			
April - - -								3.21			
May - - - -								3.16			
June - - - -								2.62			
July - - - -								1.29			
August - - -								1.57			
September -								2.98			
October - -								4.72			
November -								2.45			
December -								4.44			
TOTALS -								33.72			

Bateman's Font like gauge

Mar Khan 7-60

1845 July 5 = 1.41

1846 April 5 = 1.06

June 23 = 1.09

August 2 = 2.29

May 9 = 1.43

Sept 7 = 1.17

1847

1849 Dec 3 = 1.27

In the River Mersey Derby - a permanent mark showing height of a flood on April 10 1841

Rainfall at Derby

Lat: 52.55.32 N Lon: 1.20.16 W

E. x-15 **40**
Derby.

Observer John Davis

Authority Mps: from Mr. Davis No. 124

Instrument

Howard's (Bottle?) gauge 5 in in diam: 5 ft above ground - 170 above Sea Level

YEAR - -	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -		2.36	1.56	3.07	2.62	1.05	3.10	
February - -		2.24	1.03	.79	1.03	4.24	.74	
March - - -		3.60	2.14	1.58	1.18	6.46	.52	
April - - -		.53	1.28	4.97	1.03	3.52	2.50	
May - - - -		.23	2.03	1.48	4.05	.63	2.92	
June - - - -		1.34	4.21	2.18	2.51	4.40	2.30	
July - - - -		2.71	4.35	3.02	1.10	3.05	2.74	
August - - -		2.48	3.50	4.73	1.35	4.99	.92	
September -		.61	2.46	1.03	1.24	2.31	3.73	3.56
October - -		5.08	1.92	1.09	4.53	3.25	4.15	3.25
November -		2.89	3.42	1.66	1.26	2.25	1.06	1.40
December -		.33	.46	3.93	.96	2.94	2.79	4.63
TOTALS -		23.75	30.21	29.81	28.02	40.07	28.58	

Rainfalls of 1 inch or upwards in 24 hours

1844

1845 July 3 = 1.01

1846 April 5 = 1.06

June 23 = 1.09

August 2 = 2.29

1847 May 9 = 1.43

Oct 7 = 1.17

1848

1849 Dec 3 = 1.27

In the Corn Market Derby is a permanent mark showing the height of a flood on April 1st 1841

RAINFALL AT MinsterDerbyObserver... G. G. Harvey.....

Rain { By.....

Gauge { Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level.....ft.

serpent - b.

YEAR.....						1845					MEANS.
January.....											
February											
March											
April.....											
May											
June.....											
July											
August.....											
September.....						2.73					
October						3.51					
November.....						3.48					
December.....											
TOTALS											

December imperfect 3.46 from 1st to 26th4.52 " 26th Dec^r to 31st of Jan

Bamford w. Hathorsage
in the valley of the Derwent.

40
Case 130
Derby.

gauge
Derwent - 6.

1 ft + ground

+ Sea level 3.00 ft

YEAR - -	1840	1841									MEANS.
January - -	5.05	2.6									
February - -	3.60	1.4									
March - - -	.65	2.7									
April - - -	1.30	1.3									
May - - - -	3.20	4.1									
June - - - -	3.00	3.1									
July - - - -	4.30	4.1									
August - - -	4.60	3.6									
September -	2.95	3.15									
October - -	2.15	6.95									
November -	7.10	4.40									
December -	.90	5.50									
TOTALS -	38.80	42.90									

1839^c # October 3.20; Nov^r 5.45; Dec^r 2.95

Man Morn 7-40

Man to theff road via Glossop

Whaley Tods Brook Reservoir

40
Ex 140

Cheshire

+ Sea Level 620 ft

Upper meneg - 1.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								1.78			
February - -								2.33			
March - - -								00			
April - - -								3.08			
May - - - -								4.17			
June - - - -								3.70			
July - - - -								97			
August - - -								2.95			
September -								6.17			
October - -								3.71			
November -								3.05			
December -								5.60			
TOTALS -								38.39			

Gauge of a new pattern which Mr. Bateman don't like.

Man Men 7 60

Marple 9 m S of Fairfield Top
(A. & P. Forth Canal)
on W side of the Derbyshire Hills

40
C. X 124
Cheshire.

Gauge on House top
upper reservoir - 1.

+ 531 ft. Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	1.26				1.56	1.04	2.81	1.20			
February - -	.53				.90	.48	.54	2.18			
March - - -	.19				1.60	1.01	1.16	.75			
April - - -	.42				.71	1.36	3.46	2.30			
May - - - -	2.02				.11	.71	.60	1.23			
June - - - -	2.26				1.15	2.82	1.80	2.57			
July - - - -	4.24				2.80	3.50	2.37	1.33			
August - - -	3.61				1.97	5.31	2.52	2.50			
September -	3.09				4.21	1.92	.94	4.22			
October - - -	1.54				1.62	1.94	5.11	2.71			
November -	2.54				1.79	1.20	1.23	2.22			
December -	.40				.22	2.28	1.03	3.16			
TOTALS -	22.10				18.64	23.57	23.57	26.37			

0 Mean Mean 7-32 & 46

4-7 - 7-56

Marple Top
Society Gauge

Ex 40
142
Cheshire.

Float B.A.I 1ft 6 + ground + Sea Level 531 ft
Upper mercury - 1.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					2.70	2.2	4.15	1.65			
February - -					2.5	2.5	.80	3.00			
March - - -					3.1	1.7	1.60	1.05			
April - - -					1.1	3.0	5.00	3.00			
May - - - -					.2	1.45	.85	2.80			
June - - - -					1.8	4.25	2.45	4.10			
July - - - -					4.1	4.75	3.25	1.80			
August - - -					3.2	8.25	3.35	3.80			
September -					5.2	2.75	1.45	7.90			
October - - -					2.5	2.70	6.35	5.50			
November - -					2.8	1.75	1.70	4.10			
December - -					.20	3.50	1.40	7.00			
TOTALS -					29.40	38.80	32.35	45.70			

Man River 7-46
4-7 7-55

Bosley Reservoir
Macclesfield Canal

40/32

Cheshire.

weaver - 2.

500 94

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								—			
February - -								—			
March - - -								1.05			
April - - -								2.58			
May - - - -								3.91			
June - - - -								3.18			
July - - - -								1.43			
August - - -								4.77			
September -								6.35			
October - -								2.97			
November -								2.84			
December -								3.95			
TOTALS -											

Bateman sent like this gauge
c

Mar Merum 7-60

RAINFALL AT Kirby

From J. Ford

? Cheshire

Observer.....

Rain { By.....
Gauge {
Diameter.....in.

From Total book

Height above Ground,ft.....in. Above Mean Sea Level.....ft.

? Dec - 4.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....											
February.....											
March.....											
April.....											
May.....											
June.....											
July.....											
August.....											
September.....											
October.....											
November.....											
December.....											
TOTALS		30.69	24.18	31.51	23.36	38.14			36.56		

Rainfall at Liverpool Observatory

E-x-67 **40**

Mps. Pct: No 94

Gauge 1ft 10½ in diam: 30 ft + Ground 52 ft + Sea Level.

YEAR - -							1846	1847	1848	1849	MEANS.
January - -							# 2.42	1.76	1.41	2.44	
February - -							.62	1.78	3.86	.87	
March - - -							.98	1.27	2.59	.56	
April - - -							4.43	1.78	1.73	2.06	
May - - - -							.98	2.35	1.66	2.15	
June - - - -							1.20	2.54	3.58	1.19	
July - - - -							2.47	1.67	2.49	4.32	
August - - -							4.45	3.00	4.09	2.90	
September -							1.65	4.57	2.31	3.57	
October - -							4.10	3.90	3.40	3.56	
November -							2.29	1.99	2.11	3.25	
December -							1.60	4.80	1.50	2.62	
TOTALS -							27.19	31.41	30.73	29.49	

✓ ✓ ✓ ✓

6-9 Prof. & I. Fred. Litch. & Phil. W. 5-37

Hyde, Cheshire

Ex 40 123

8 m E of Manchester
Obs^d by Tho^s Ashton Esq^r

Gauge in the garden

? 320 ft + Sea Level

YEAR - -	1840										MEANS.
January - -	4.0										
February - -	1.5										
March - - -	.6										
April - - -	6										
May - - - -	3.5										
June - - - -	3.5										
July - - - -	6.4										
August - - -	5.0										
September -	3.9										
October - -	2.1										
November -	4.9										
December -	.3										
TOTALS -	35.7										

0 - Mean Mem 7-36

40

Sandy Vale Print Works Co 140
Suckersfield at Staley Bridge

+ Sea Level 320 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					3.14						
February - -					3.44						
March - - -					3.91						
April - - -					1.34						
May - - - -					.18						
June - - - -					1.04						
July - - - -					4.13						
August - - -					4.31						
September -					4.83						
October - - -					3.02						
November -					2.81						
December -					.18						
TOTALS -					32.33						

c

Man Man 7-46

Windyate Edge
(Longdendale District)

1700 ft + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						3.1	6.0	1.8	1.7	6.3	
February - -						1.8	2.2	3.9	9.2	2.4	
March - - -						5.5	2.2	1.4	4.4	1.0	
April - - -						-	4.0	5.1	2.1	2.5	
May - - - -						-	-	0.0	1.8	3.4	
June - - - -						-	5.0	3.7	6.1	2.1	
July - - - -						4.7	-	1.5	4.2	0.8	
August - - -						14.0	-	3.3	7.5	4.5	
September -						4.1	-	6.0	5.4	6.4	
October - -						5.9	5.6	4.9	0.3	6.3	
November -						4.0	2.4	5.0	3.2	5.8	
December -						11.0	2.7	7.5	3.8	4.7	
TOTALS -								52.1	57.7	54.2	

5.7 Mean Mean 7-61

RAINFALL AT *Bower Flats* *3 Breshwa*
(in Longendale District?)

Rain { By
Guage {
 { Diameter.....in. Height above Ground, ft. in. Above Mean Sea Level, ft.

YEAR.....						1845					MEANS.
January											
February						1.5					
March						4.0					
April						2.7					
May						3.6					
June.....						4.1					
July						5.0					
August.....						9.6					
September						3.2					
October.....											
November.....											
December.....											
TOTALS											

Morn Mem - 7-62

Crowder Hall

3 Check

40
Ex 136

+ Sea Level 700 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								2.2	1.1	8.2	
February - -								4.3	8.2	2.4	
March - - -								1.7	5.5	1.5	
April - - -								4.7	2.6	3.0	
May - - - -								4.9	1.0	2.8	
June - - - -								3.1	6.8	1.7	
July - - - -								1.4	4.6	7.8	
August - - -								3.5	7.0	5.4	
September -								7.5	4.3	4.7	
October - -								5.1	8.0	7.0	
November -							2.0	6.0	3.1	5.1	
December -							2.8	6.1	3.7	5.1	
TOTALS -								50.50	55.90	54.70	

Mean Mem 7-62870

Rakes Mops

+ Sea Level 1620 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								2.4			
February - -								4.6			
March - - -								2.3			
April - - -								3.3			
May - - - -								7.9	2.1		
June - - - -								3.3	7.0		
July - - - -								2.0	4.4		
August - - -								5.1	7.0		
September -								0.7	5.1		
October - -								4.4	6.0		
November -							2.4	4.3	4.0		
December -							3.1	8.2	2.0		
TOTALS -								56.50			

c c c

Mon Mem 7-62

Woodhead Brinks Edge

E x 40 103

+ Sea Level 1500 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								1.14			
February - -								1.60			
March - - -								77			
April - - -								1.93			
May - - - -								3.95			
June - - - -								1.05			
July - - - -								.95			
August - - -								2.40			
September -								4.40			
October - -								2.77			
November -								3.35			
December -								5.05			
TOTALS -								29.44			

Batemann don't like gauge

Man Mem 7.60

Butterby Mops

Ex 40
118

1750 ft + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								3.7	1 6		
February - -								4.3	10 1		
March - - -								1.4	4 9		
April - - -								9.0	2 9		
May - - - -								4.8	1 0		
June - - - -								3.4	6 2		
July - - - -								1.1	2 4		
August - - -								6.5	5 8		
September -								8.2	3 4		
October - -								5.4	7 5		
November -							3.0	8.3	2 3		
December -							3.0	6.0	3 7		
TOTALS -								62.1	51.8		

c c c

7-Mom Mem 7-62

Brushes
(in Longdendale District)

E 40
117

480 ft + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						-	3.8	1.7	2.0	5.3	
February - -						-	2.0	4.4	8.0	1.5	
March - - -						-	2.1	1.7	4.7	.6	
April - - -						2.5	5.9	4.0	1.5	1.4	
May - - - -						2.8	1.4	6.8	1.2	3.0	
June - - - -						4.3	4.0	3.5	5.3	1.8	
July - - - -						4.2	10.0	1.6	4.2	7.5	
August - - -						8.3		3.2	5.8	4.2	
September -						3.3		6.5	4.2	4.8	
October - -						4.9	5.3	3.5	5.8	4.1	
November -						3.4	2.4	3.8	2.6	4.7	
December -						10.3	2.1	5.9	3.6	3.8	
TOTALS -							39.0	46.6	48.9	42.7	

c c c c c

5-7 Mean Mean 7-61

RAINFALL AT Warrington

Observer P. J. Belandier Esq.

By

Rain

Gauge Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....										1849	MEANS.
January.....											
February											
March											
April.....											
May											
June.....											
July											
August.....									#		
September.....										4.37	
October										3.62	
November.....										4.00	
December.....										2.64	
TOTALS											

C

RAINFALL AT Liverpool

40

W. Lapell

Starfield

Lat 53° 25.7 N Lon 11° 47.1 W

Rain { By

Gauge { Diameter.....6.....in.

Height above Ground, 3... ft. in.

Above Mean Sea Level, 130⁸ ft.

YEAR	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January			# 1.34	2.37	3.07	1.04	2.01	1.24	1.66	2.86	
February .....			.74	.79	1.75	.96	.60	1.87	4.73	2.00	
March			2.60	1.11	1.89	1.39	1.34	1.59	3.59	1.03	
April .....			.50	4.38	.93	.99	3.75	1.88	3.20	2.64	
May			3.41	3.02	.98	1.63	1.04	3.31	2.00	2.52	
June			2.86	1.88	1.90	2.42	1.37	2.84	4.15	1.54	
July			4.61	3.97	2.90	1.79	2.82	2.17	2.96	5.39	
August			1.72	1.84	2.14	5.26	4.28	3.93	5.71	3.81	
September ...			2.34	.59	3.06	1.96	1.48	7.59	2.55	4.55	
October			1.74	9.05	1.98	3.05	4.56	5.00	4.34	4.51	
November ...			3.47	3.22	1.54	2.05	2.59	2.48	2.95	3.85	
December			1.31	.25	.22	3.27	1.51	5.09	2.56	3.83	#
TOTALS			26.64	32.47	21.46	25.81	27.35	38.99	40.40	38.53	

c c c c c c c c

RAINFALL AT Liverpool (Starfield)

Observer...W. Lassell Esq....

Rain { By.....

Gauge { Diameter.....11.....in. Height above Ground,18ft.....in. Above Mean Sea Level.....ft.

YEAR.....			1842							MEANS.
January.....			1.27							
February .....			.74							
March			2.51							
April .....			.50							
May			2.91							
June.....			2.64							
July			4.60							
August.....			1.72							
September.....			2.44							
October			1.80							
November.....			3.46							
December.....			1.31							
TOTALS			25.98							

C

Gauge on summit of Observatory Dome, rain carried down
by a pipe inside -
1842 Md. Met Soc

RAINFALL AT Liverpool

Observer

Rain { By.....
Gauge {
Diameter.....in.

From Total book

Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....											
February.....											
March.....											
April.....											
May.....											
June.....											
July.....											
August.....											
September.....											
October.....											
November.....											
December.....											
TOTALS				36.		34.06	38.17				

RAINFALL AT Liverpool Lord Street

40

Observer W. A. Abraham

Rain { By.....
 Gauge {
 Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....		2.17									
February.....		2.45									
March.....		2.60									
April.....		} 7.06									
May.....											
June.....		2.80									
July.....		5.30									
August.....		5.28									
September.....		4.31									
October.....		8.36									
November.....		4.55									
December.....		4.67									
TOTALS	37.68	49.55									

From M.S. Met. Soc.

RAINFALL AT Liverpool

Observer.....W. Saffell Esq......

Rain { By.....

Gauge {

Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level.....ft.

YEAR.....				1843	1844				1848	1849	MEANS.
January.....									1.40		
February.....									3.96		
March.....									2.62		
April.....									1.76		
May.....				x 4.92	x .81				1.71		
June.....									3.62		
July.....									2.53		
August.....									4.10		
September.....									2.74		
October.....									4.40		
November.....									2.10		
December.....									1.53		
TOTALS.....									32.47		

x not known from what register

1848 from Johnson's Almanac

Liverpool West Derby

RAINFALL AT Oans Kirk Aughton Springs
Lancashire

Observer

Rain { By

Gauge {

Diameter.....5.....in.

Height above Ground,.....ft. 6?.....in.

Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....	2.29	2.61	2.35	3.18	3.11	2.20	2.59	1.68	1.99	3.11	2.511
February.....	2.07	1.28	.94	.71	4.03	1.60	.69	1.01	4.63	1.22	1.818
March.....	.35	1.72	3.97	1.15	1.93	1.85	1.37	3.68	2.99	.73	1.974
April.....	1.25	.80	.12	5.20	1.09	1.28	4.57	1.59	2.66	2.15	2.071
May.....	3.78	3.48	2.45	3.58	.15	2.14	1.27	3.25	1.92	2.63	2.465
June.....	2.97	2.17	2.10	1.72	1.62	2.41	1.99	2.61	4.12	1.22	2.293
July.....	2.82	5.63	4.38	3.20	3.21	1.84	3.46	1.99	3.13	3.81	3.347
August.....	4.07	5.44	1.44	3.74	2.35	6.19	4.27	3.43	5.07	3.39	3.939
September.....	2.90	3.96	2.26	.66	3.66	2.20	1.72	5.34	2.69	3.89	2.928
October.....	3.78	6.06	2.11	7.07	2.27	3.49	4.94	4.92	4.08	3.85	4.257
November.....	4.85	2.73	4.58	3.56	1.58	2.78	2.52	2.67	2.64	3.94	3.185
December.....	.62	3.91	1.28	.57	.21	4.28	2.07	4.92	2.21	3.29	2.330
TOTALS.....	31.75	39.79	27.98	34.28	25.21	32.26	31.46	37.09	38.13	33.23	33.118

Gauge at 3 different houses in W. Derby all within about
1 mile of each other between 1825 and 1862

Manchester

E-x-6040

Market Street

YEAR - -		1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -		2.67	2.55	4.94	2.57	2.35	3.57	2.07	2.06	4.67	
February - -		1.19	1.80	1.02	3.55	1.59	1.62	2.90	6.56	1.95	
March - - -		2.54	5.14	1.28	3.76	2.60	2.61	1.17	3.16	1.58	
April - - -		1.36	1.16	3.48	1.19	2.15	3.20	3.05	1.44	1.25	
May - - - -		2.95	2.62	3.40	1.09	1.28	1.29	5.26	1.28	3.15	
June - - - -		2.98	2.60	1.99	1.56	3.47	2.51	3.13	5.96	1.64	
July - - - -		5.54	3.40	5.17	3.51	3.79	7.72	1.15	3.55	4.88	
August - - -		3.48	1.89	2.95	2.35	7.17	5.03	4.54	6.20	2.62	
September -		4.67	2.69	1.41	4.14	3.55	1.78	5.89	3.43	4.75	
October - -		5.05	2.36	7.00	2.18	4.15	4.99	5.66	5.58	3.59	
November -		3.50	4.56	5.23	1.78	2.94	2.45	3.56	2.61	4.07	
December -		5.26	2.78	1.49	6.07	6.38	1.58	4.98	3.40	2.92	
TOTALS -	(3400)	41.19	31.55	38.16	26.75	41.42	37.35	43.36	45.23	36.07	

The above figures are incorrect see next sheet
 See next page but one

RAINFALL AT Fairfield, 4 miles east of Manassas

From Memoirs of the Literary & Philosophical Society of Manchester

Vol. VI, 2nd Series, p. 583.

Rain

Rain { By.....
Gauge {
Diameter.....in. H

Diameter.....in.

Height above Ground,ft.....in.

Above Mean Sea Level.....ft.

[illegible]

Fairfield
4 m. E of Manchester
Society's gauge

E x 40 130

Float B.A.I

+ ground 1 ft.

+ Sea Level 320 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						1.8	3.3	1.5			
February - -						1.7	1.3	3.0			
March - - -						3.0	1.7	.8			
April - - -						2.2	3.0	3.3			
May - - - -						1.1	9	5.1			
June - - - -						3.7	2.4	3.3			
July - - - -						3.4	3.9	.95			
August - - -						6.7	3.6	3.7			
September -						2.8	.8	5.5			
October - - -						3.7	4.7	4.8			
November -						2.8	3.1	3.5			
December -						6.0	1.5	5.3			
TOTALS -						38.90	30.20	40.75			

C C C

Mar Mer 7.58

*J. Casartelli**Ms. Return*Diameter of Gauge, ...*5*..... in.Height above Ground, *20* ft. in.

Above Mean Sea Level, ft.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	4.08	2.67	2.55	4.94	2.57	2.34	3.57	2.07	2.06	4.67	3.152
February - -	1.22	1.19	.80	1.02	3.35	1.59	1.61	2.90	6.56	1.95	2.219
March - - -	.38	2.54	5.14	1.28	3.76	2.60	2.60	1.17	3.16	.58	2.321
April - - -	1.21	1.36	.16	5.47	1.19	2.14	3.20	3.05	1.44	1.25	2.047
May - - - -	3.64	2.99	2.62	3.40	.09	1.28	1.29	5.25	1.28	3.15	2.499
June - - - -	5.18	2.98	2.60	1.99	1.56	3.47	2.51	3.13	5.96	1.64	3.102
July - - - -	5.78	5.54	3.40	5.17	3.51	3.79	3.72	1.45	4.04	4.88	4.128
August - - -	4.45	3.48	1.89	2.94	2.34	7.16	5.02	4.54	5.19	2.62	3.963
September -	4.07	4.67	2.69	.40	4.14	3.55	.78	5.89	3.43	4.75	3.437
October - - -	2.00	5.05	2.36	7.79	2.18	4.15	4.99	5.66	5.58	3.58	4.334
November -	6.15	3.50	4.56	5.23	1.78	2.94	2.45	3.55	2.61	4.07	3.684
December -	.28	5.26	2.78	.48	.17	6.38	1.58	4.98	3.04	2.92	2.787
TOTALS -	38.44	41.23	31.55	40.11	26.64	41.39	33.32	43.64	44.35	36.06	37.673
	C	C	C	C	C	C	C	C	C	C	

The above figures are stated by Mr. Casartelli to be correct although several different sets of figures have been published

Manchester, Charlton

E-x-59 40

D. Dalton

10 in diameter 2 ft above ground

YEAR - -	1840										MEANS.
January - -	3.54										
February - -	1.24										
March - - -	1.24										
April - - -	1.79										
May - - - -	3.92										
June - - - -	3.79										
July - - - -	6.04										
August - - -	4.07										
September -	3.60										
October - - -	2.40										
November -	4.48										
December -	1.18										
TOTALS -	34.29										

In garden on S.E. side of town 60 ft from any elevated object

Hyd Sta. no. 36 - 563329

NGR: (33) 846967

Alt. 38m

a copy of this is filed in earlier book (containing 1695-1840 records)

Fairfield 4 m E of Manchester
(Ashton & Park Forest Canal)

C 40 122

Gauge a few feet above ground

+ Sea Level 320 ft.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	2.06					2.2	3.6	1.5			
February - -	.75					1.6	1.3	2.9			
March - - -	.25					3.6	1.7	.8			
April - - -	.38					1.9	3.0	2.2			
May - - - -	2.97					1.3	.9	4.95			
June - - - -	2.55					4.2	2.9	3.2			
July - - - -	4.07					3.6	3.9	1.0			
August - - -	4.55					7.3	3.6	4.0			
September -	2.99					3.0	.8	5.5			
October - -	1.80					3.7	5.3	4.9			
November -	3.29					3.0	3.7	3.5			
December -	.42					7.10	2.1	5.2			
TOTALS -	26.08					42.50	32.00	39.65			

0 Mon Mon 7 32

" " 7 58

Rainfall at *Royton* near *Oldham**John Heap*Table in *Manchester Mercury* corrected
by *Mr. Heap*Diameter of Gauge, *1.2* in.Height above Ground, *24* ft. in.Above Mean Sea Level, *500* ft.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	2.50	1.64	1.88	3.58	1.34	1.97	4.00	1.83	3.01	2.61	2.436
February - -	1.43	1.20	1.96	.52	1.05	1.24	1.08	1.45	3.99	3.25	1.717
March - - -	.32	.26	3.16	.89	2.22	2.82	1.24	3.42	3.41	1.62	1.936
April - - -	.58	1.23	.98	3.60	1.00	1.89	4.93	2.83	3.14	3.61	2.379
May - - - -	4.40	3.64	2.84	2.65	.00	1.88	1.38	1.28	3.25	2.16	2.348
June - - - -	3.31	4.03	2.07	2.00	1.63	3.00	3.62	2.65	3.75	4.18	3.024
July - - - -	6.39	6.69	3.66	1.05	.85	5.97	6.49	4.31	3.00	2.45	4.086
August - - -	3.66	3.47	1.45	3.92	2.12	5.52	2.78	3.62	4.86	3.43	3.483
September -	5.32	5.27	1.93	.59	3.01	3.88	1.07	3.00	3.14	2.82	3.003
October - - -	1.73	.71	2.14	4.96	1.92	4.11	5.24	3.26	3.31	3.19	3.057
November - -	1.31	5.93	3.49	5.67	3.09	2.77	2.56	3.84	3.01	3.69	3.527
December - -	1.56	.58	2.55	1.70	.51	6.62	1.86	2.64	2.14	2.61	2.277
TOTALS -	32.51	34.65	28.11	31.13	18.65	41.67	36.25	34.13	40.01	35.62	33.273

Slattocks or Laneside "Society's Gauge"

Ex 147 **40**

1 ft + ground

2 Level 450 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	4.20				2.0	1.47	3.15	1.10			
February - -	1.50				3.0	1.27	.45	1.50			
March - - -	.30				3.4	2.10	1.50	.90			
April - - -	.42				1.0	1.02	2.00	1.53			
May - - - -	2.90				" "	1.50	1.00	2.30			
June - - - -	2.90				2.0	1.70	2.00	2.50			
July - - - -	4.90				3.7	4.50	3.30	3.20			
August - - -	2.70				3.8	4.00	2.90	1.45			
September -	3.50				4.8	5.00	2.20	3.80			
October - -	1.50				1.8	2.25	3.70	4.00			
November -	3.50				2.7	2.20	1.70	3.20			
December -	.25				5	1.25	.30	4.70			
TOTALS -	28.5				28.7	28.2	28.7	29.3			

28.0
(

Mean Mean

7.43

Slattocks ^{near Middleton}
"Company's Gauge"

E-x-105

40

Gauge

on roof 3.20 ft + ground + Sea Level 450 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	4.20					1.47	3.15	1.00			
February - -	1.50					1.27	.95	2.50			
March - - -	.30					2.10	1.50	.90			
April - - -	.42					1.85	2.88	1.63			
May - - - -	2.90					1.30	1.00	2.30			
June - - - -	2.90					2.75	2.00	2.90			
July - - - -	4.90					3.25	3.30	1.30			
August - - -	2.70					4.75	3.97	1.65			
September -	3.50					3.17	1.20	3.80			
October - -	1.50					3.85	3.91	4.00			
November -	3.50					2.20	1.70	3.20			
December -	.25					4.25	.20	4.20			
TOTALS -	28.57				18.14	32.21	25.76	29.38			

Man Mem 7-49 In 1844 M. of 8 yrs is given as 30.83, therefore
7-46 '41-3 were probably missing then

Bolton le Moors Ex 9 3 40

Henry Hough Watson

Met. Rec. No 53

Drain 10 in + ground ? 2 feet

+ S level 320 ft
? 290

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	6.04	4.98	3.60	5.20	3.76	4.07	4.85	2.86	2.53	6.67	4.464
February - -	2.10	2.22	1.34	1.47	5.20	2.65	1.55	3.31	0.50	2.34	3.068
March - - -	.73	3.42	6.51	2.31	4.23	2.27	2.33	1.36	4.02	.61	2.779
April - - -	1.36	1.12	0.00	7.50	1.24	2.37	3.67	2.01	2.26	1.00	2.341
May - - - -	4.50	3.71	2.89	3.51	.20	1.24	1.57	5.46	2.00	3.16	2.824
June - - - -	4.35	2.94	2.40	2.81	2.13	4.89	3.60	4.37	5.91	1.19	3.467
July - - - -	6.65	6.30	4.83	5.17	3.68	3.83	5.83	1.60	3.74	7.73	4.936
August - - -	5.37	5.42	1.54	4.19	4.80	7.45	4.01	3.82	7.48	4.13	4.821
September -	4.72	5.17	2.48	1.05	4.70	4.07	2.06	7.69	3.10	4.88	4.000
October - -	3.22	6.65	3.32	0.50	1.89	4.76	5.47	6.76	7.25	4.72	5.254
November -	5.57	4.10	6.00	6.36	2.38	3.17	2.96	5.41	3.25	6.85	4.625
December -	.42	7.04	3.64	1.17	.22	7.34	2.92	6.87	3.93	4.49	3.884
TOTALS -	45.03	53.87	38.63	49.40	34.63	48.11	40.82	52.32	54.05	47.77	46.463

re re re re re re re re re re

Heywood Waterworks w. Manchester

40

C. C. Cowley Esq.

+ Ground

+ Sea Level 900 ft

YEAR - -	1848	1849	MEANS.
January - -	4.60	8.55	
February - -	9.40	2.62	
March - - -	4.80	.90	
April - - -	2.35	2.16	
May - - - -	1.45	2.75	
June - - - -	7.90	3.27	
July - - - -	5.15	5.00	
August - - -	7.60	4.47	
September -	4.15	5.52	
October - -	8.40	6.85	
November -	3.10	5.33	
December -	4.55	4.48	
TOTALS -	63.45	51.90	

Bury Lancashire C. x 40

mp Ket No 60

Drain 12 + Ground 36 in + Sea Level 313 ft

YEAR - -	1840	1841	1842	1843	1844	1845					MEANS.
January - -	5.26	3.99	5.90	4.50	4.00	3.10					
February - -	1.84	1.88	1.18	1.30	3.98	1.88					
March - - -	.38	2.92	5.20	1.72	3.00	3.07					
April - - -	.28	.90	.12	5.77	.90	2.75					
May - - - -	5.70	4.25	2.90	3.11	.82	1.68					
June - - - -	4.63	3.20	2.43	2.45	1.90	3.88					
July - - - -	6.20	5.38	4.08	4.38	1.65	4.05					
August - - -	4.85	5.00	2.02	3.37	2.80	5.90					
September -	4.92	3.90	1.84	.50	3.74						
October - -	2.37	5.76	2.60	7.07	2.10						
November -	5.00	3.75	5.72	5.40	2.52						
December -	.40	6.44	3.50	.90	.24						
TOTALS -	41.83	47.37	37.49	40.47	27.65						
	✓	✓	✓	✓	✓						
	C	C	C	C	C	C					

561534

Moss Lock
Comf. gauge

Loc 40

gauge

on roof 320 ft + ground; + sea level 500 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	3.17					1.80	4.50	1.10			
February - -	.85					1.05	.65	1.41			
March - - -	.15					1.60	1.35	.84			
April - - -	.35					1.40	2.40	1.29			
May - - - -	2.53					1.08	.80	3.25			
June - - - -	2.20					2.55	1.70	2.55			
July - - - -	3.85					2.85	2.75	.80			
August - - -	3.48					5.00	2.45	1.35			
September -	3.28					2.55	.85	3.41			
October - - -	1.30					3.45	2.50	4.00			
November - -	3.18					2.15	1.76	3.15			
December - -	.05					3.95	1.05	3.80			
TOTALS -	24.39				20.50	29.43	22.76	26.95			

18

C C C C

In '44 M. of 16 yrs is given as 29.10; M. 1825-40
 Mean Mean 7.23 & 50 = 29.07 therefore probably '41-3 were inaccessible
 4 - 7-43

MET. O. B. RAINMASTER
RETROSPECTIVE SITE REVIEW

561534

NGR: SD(34)914127

ALT: 470 ft = 143 metres. Date of review: 24-7-78

Moss Lock nr Rochdale

40
Ex 144

"Lock Gauge" 5 mi from foot of Blackstone Edge

Gauge float B.A.I

1 ft + ground

+ Sea Level 500 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					2.4		4.5	1 4			
February - -					3.7		1.0	1 9			
March - - -					4.1		2.1	} Damaged			
April - - -					1.0		3.8				
May - - - -					.2		1.1		3.5		
June - - - -					1.9		3.0	3 1			
July - - - -					4.2		3.0	1 6			
August - - -					3.8		3.0	2.0			
September -					3.3		1.4	4 5			
October - -					2.4		4.2	4 3			
November -					2.7		2.1	3 8			
December -					.60		1.70	5.20			
TOTALS -					30.30		31.70	0			

C

C

C

Man Man 77.44

RAINFALL AT

Rochdale

40

Wm. C. May

Large bottle gauge^G

G. Haworth

Rev. C. A. A. Lloyd, M.A.

Rain { By
Gauge { Diameter.....in.

Height above Ground, ft. in.

Above Mean Sea Level, *4.80* ft.

YEAR	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January				5.06	3.61	3.04	5.27	2.62	2.55	7.37	
February				1.42	4.32	1.92	2.21	3.66	9.03	2.26	
March				1.93	4.40	3.46	3.10	1.57	5.56	0.96	
April				6.36	1.14	2.73	4.86	3.49	2.12	1.59	
May				3.75	.24	1.67	1.52	5.58	1.50	2.68	
June				3.05	1.41	4.19	3.35	3.64	5.67	1.93	
July				5.81	4.20	4.65	5.40	2.14	4.13	6.48	
August				3.90	4.29	6.86	4.10	1.87	7.20	3.28	
September ...				.68	3.28	4.50	1.84	5.92	3.36	4.58	
October				8.35	2.89	5.33	5.70	7.73	7.34		
November ...				4.47	2.56	3.00	2.77	5.21	2.71		
December				1.15	.69	0.16	2.71	7.60	4.25		
TOTALS				45.93	33.03	49.51	42.83	51.03	55.42		

June 30th 1848 gauge moved.

RAINFALL at Rockdale (Moss Cottage) Small bottle gauge

County of Lancashire Observer Rev C.A.A. Lloyds


River Basin

Type of Gauge Howard ?

Annual Average.....in. based on.....years obs. un-weighted. Period of average.....Ref.....

Diameter											
Height											
Altitude					480						
Year	1841	1842	1843	1844	1845	1846	1847	1848	1849	1850	Means
January						4.92	2.21	2.55	6.99		
February						1.93	3.70	8.60	2.21		
March						2.83	1.45	4.99	0.95		
April						4.80	2.91	1.95	1.57		
May						1.58	5.43	1.42	2.64		
June						3.35	3.44	5.38	1.94		
July						5.51	2.08	4.17	6.42		
August						4.20	1.74	7.04	3.21		
September						1.92	3.40	3.26	4.52		
October						5.77	6.96	7.18			
November						2.88	4.72	2.52			
December						2.60	6.97	3.95			
TOTALS						41.99	47.01	53.01			

June 30th 1848 position of gauge altered



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	Parish Church.	Distance from gauge.	Direction

Waterhouse Lock
P. H. Canal

408

360 ft + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -				5.06		1.9	3.9	1.2			
February - -				1.42		2.0	1.4	2.0			
March - - -				1.93		3.2	1.0	1.2			
April - - -				6.36		2.4	3.5	2.0			
May - - - -				3.75		1.5	.8	5.3			
June - - - -				3.05		3.9	2.8	3.1			
July - - - -				3.81		3.8	4.2	.8			
August - - -				2.90		6.4	3.8	3.3			
September -				1.49		2.7	.7	5.5			
October - - -				0.35		4.0	4.9	4.7			
November - -				4.47		3.0	2.4	3.8			
December - -				1.15		8.0	1.6	4.6			
TOTALS - -				45.94		42.8	31.8	38.3			

C C C

5-7 Man Mem 7-58

Rainfall Book date

E-x-69 40

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -				5.06							
February - -				1.42							
March - - -				1.93							
April - - -				4.36							
May - - - -				3.75							
June - - - -				3.05							
July - - - -				5.81							
August - - -				3.90							
September -				.69							
October - - -				8.35							
November -				4.47							
December -				1.15							
TOTALS -				45.94			42.53				

3 - Proj. Aug for four 6-54

See
Shurt
Note

Rochdale

(Castle Hill $\frac{1}{2}$ m S.W of R.)

Obs^r. Erozd

Ex 40
120

Gauge exposed in a garden 4 ft + ground

500 ft + sea level

YEAR -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January -	5.70	2.43	4.06	5.65	5.02	3.50	5.53	2.62			
February -	2.11	2.14	1.50	1.32	2.20	1.87	1.95	3.75			
March -	.34	3.12	3.81	2.01	7.21	3.81	2.97	1.43			
April -	.90	1.34	.05	7.64	1.43	3.18	4.49	3.71			
May -	4.45	3.89	3.25	3.88	.21	1.84	1.73	6.42			
June -	5.29	2.01	2.84	2.84	1.93	3.88	2.63	3.70			
July -	5.93	6.48	4.42	5.17	4.23	4.12	5.05	1.34			
August -	5.59	4.98	1.94	3.94	3.41	7.17	4.32	2.15			
September	5.59	3.28	2.77	.69	3.07	4.09	2.01	4.94			
October -	2.54	6.67	3.21	9.01	22.7	5.17	5.68	6.43			
November	4.78	2.69	5.90	6.82	2.84	3.35	3.01	6.83			
December	.70	9.52	3.33	1.62	.59	9.66	2.67	8.40			
TOTALS	44.00	48.53	37.08	50.59	34.41	51.64	42.04	51.72			

C C C C C C C C

0-7 Mean Mem 7-67

Rufford
Lancashire

David Boosie

Diam 7 in + ground 8 in + Sea level 38 ft

YEAR - -	1847	1848	1849	MEANS.
January - -	2.00	2.05	4.00	
February - -	2.50	6.05	1.65	
March - - -	1.27	3.00	.70	
April - - - -	1.72	2.20	1.58	
May - - - -	4.00	1.95	1.90	
June - - - -	2.95	5.52	1.77	
July - - - -	1.33	3.50	5.05	
August - - -	2.75	7.44	3.50	
September -	5.60	3.00	4.00	
October - -	4.37	4.70	4.90	
November -	4.60	3.20	3.96	
December -	5.25	2.50	2.40	
TOTALS -	38.34	45.11	35.41	

C C C

Belmont

40

Bolton le Moors x

Henry Baylis

+ Ground 0.0 ^{1 ft above}+ Sea 850 ⁸⁵⁰ feet

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -				3.00 [*]	6.30	4.10	7.00	1.90	3.10	9.30	
February - -				1.90	5.90	1.90	2.10	3.30	11.40	3.20	
March - - -				2.70	4.50	4.00	3.30	1.80	5.20	1.50	
April - - - -				12.00	1.80	2.90	4.40	2.80	2.80	1.70	
May - - - - -				4.40	1.90	1.70	1.90	6.30	2.40	3.10	
June - - - - -				5.00	3.30	5.20	2.40	6.30	7.00	1.90	
July - - - - -				8.00	3.70	3.90	6.60	1.60	5.70	7.20	
August - - -				4.50	10.00	10.20	5.00	3.70	8.50	6.10	
September -				1.00	6.40	4.10	2.40	9.70	3.70	4.30	
October - - -				11.10	3.50	5.00	7.10	7.50	7.80	6.40	
November -				7.40	2.40	4.00	3.70	8.50	4.10	7.20	
December -				2.40	.30	8.00	3.90	8.00	5.00	4.60	
TOTALS -	(64.00)	(77.30)	(55.00)	63.40	50.00	55.00	49.80	61.40	66.70	56.50	(59.912)

* 13th to 31st

x On land near Spring Water Lodge Reservoir. Hampson Pastures

RAINFALL AT Belmont (Old Lyons)
3 m. N of Belmont WWg.

Rain { By.....
 Gauge {
 Diameter.....in. Height above Ground,ft. in. Above Mean Sea Level, 1200 ft.

YEAR.....					1844						MEANS.
January					} 16.00						
February											
March											
April					1.30						
May .....					.40						
June.....					3.20						
July					2.80						
August.....					9.70						
September ...					} ^x 14.70						
October.....											
November.....											
December.....											
TOTALS											

C

x to 8th of Nov^r.

Mon Mon:

Horwick

E. x

40

St. Preston in Lancashire

Thos Morris

Sept. Oct. Nov. 60

Diam 12 in + ground bis

+ Sea Level 72 ft

YEAR - -						1845	1846	1847	1848	1849	MEANS.
January - -							4.45	2.60	1.94	4.30	
February - -							.94	2.59	5.78	1.94	
March - - -							2.65	1.26	3.13	.56	
April - - -							2.80	1.74	1.86	1.18	
May - - - -							1.25	4.62	1.57	1.55	
June - - - -							3.28	4.23	4.85	1.10	
July - - - -							4.00	.80	3.16	5.00	
August - - -							5.28	2.66	7.08	3.85	
September -						3.11	1.36	4.64	1.55	3.14	
October - -						3.85	4.76	4.02	4.37	4.40	
November -						3.54	3.04	4.53	2.87	4.15	
December -						5.38	2.45	5.70	2.92	2.09	
TOTALS -							36.26	39.39	41.08	33.26	

✓ ✓ ✓ ✓ ✓

House of Correction Preston Ex 40

Jas Hesketh

Map. Net. No 37

Drain 8 in + ground 53-6

+ Sea Level 107 feet

YEAR - -									1848	1849	MEANS.
January - -										3.49	
February - -										1.33	
March - - -										.52	
April - - -										1.12	
May - - - -										1.76	
June - - - -										1.05	
July - - - -										3.96	
August - - -										3.54	
September -									# 2.50	3.55	
October - -									3.83	3.94	
November -									2.63	3.54	
December -									2.48	1.84	
TOTALS -										29.64	

✓ ✓

House of Correction Preston Ex 157 **40**

Jas Hesketh

Map Ref No 36

DRAIN 8 in + ground ^{feet in} 1.1.

+ Sea Level 140 feet

YEAR - -									1849	MEANS.
January - -									# 4.54	
February - -									2.00	
March - - -									.66	
April - - -									1.30	
May - - - -									1.84	
June - - - -									1.25	
July - - - -									4.62	
August - - -									4.03	
September -									3.11	
October - - -									4.38	
November -									4.37	
December -									1.93	
TOTALS -									34.03	

C ✓

YEAR - -								1848	1849	MEANS.
January - -								1.90	7.39	
February - -								9.35	3.94	
March - - -								3.67	1.23	
April - - - -								2.30	1.43	
May - - - -								1.80	2.00	
June - - - -								7.50	2.37	
July - - - -									7.50	
August - - -									6.72	
September -								3.62	4.49	
October - -								5.19	4.53	
November -								4.80	5.76	
December -								4.05	3.30	
TOTALS -							30.69	38.28	42.24	50.66

Pencil - Grosley's

C C C C

RAINFALL AT *Stonyhurst College* *Lancashire*

Observer *Rev S. J. Perry*

Rain { By.....

Gauge {

Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....									1.80	7.02	
February.....									8.68	3.75	
March.....									3.50	1.17	
April.....									2.19	1.36	
May.....									1.71	1.90	
June... ..									7.12	2.25	
July.....									4.04	7.12	
August.....									6.65	6.39	
September.....									3.44	4.26	
October.....									4.93	4.30	
November.....									4.56	5.47	
December.....									3.85	3.14	
TOTALS									52.67	48.13	

From the corrected table given in the "Results" for 1878

RAINFALL AT *Stonyhurst*

Observer.....

Rain { By.....
Gauge {

Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....									1848	1849	MEANS.
January.....									1.80	7.00	
February									8.90	3.70	
March									3.50	1.10	
April.....									2.20	1.30	
May									1.70	1.90	
June.....									7.10	2.30	
July									3.80	7.10	
August.....									6.60	6.00	
September.....									3.40	4.00	
October									4.90	5.00	
November.....									4.60	5.20	
December.....									3.90	3.00	
TOTALS									52.40	47.60	

Rainfall at West Bank Lancaster

C-X-40

54.4.25 N-2.40.33 W

Observer Olive Simms

Gauge

Above Sea Level 58 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -									2.10	5.45	
February - -									4.75	2.07	
March - - -									3.67	1.55	
April - - -									1.56	1.87	
May - - - -									1.90	1.40	
June - - - -									4.28	1.90	
July - - - -									3.95	4.67	
August - - -									4.22	2.73	
September -									2.72	3.54	
October - - -									4.92	4.95	
November -									2.97	4.02	
December -									4.60	1.43	
TOTALS -									43.64	32.58	

8-9 Lancaster Guardian 7

METEOROLOGICAL OFFICE,
RAINFALL 1961-1970

1840 - 1849

Station *FOULRIDGE CANAL OFFICE* No.
County *LANCASHIRE* (Old No.)
Authority Grid Ref.
..... Altitude ft.
..... River Basin
File TF...../ MWR / m / a Tributary

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	Means
									<i>1848</i>	<i>1849</i>	
January ...									<i>1.60</i>	<i>5.50</i>	
February									<i>6.50</i>	<i>1.75</i>	
March ...									<i>3.13</i>	<i>1.00</i>	
April ...									<i>3.13</i>	<i>1.87</i>	
May ...									<i>1.50</i>	<i>1.50</i>	
June ...									<i>5.00</i>	<i>1.63</i>	
July ...									<i>3.63</i>	<i>N/A</i>	
August ...									<i>4.50</i>	<i>5.50</i>	
September									<i>3.00</i>	<i>2.75</i>	
October									<i>4.75</i>	<i>3.87</i>	
November									<i>4.50</i>	<i>N/A</i>	
December									<i>2.63</i>	<i>4.25</i>	
TOTAL									<i>43.77</i>	<i>N/A</i>	
Percentage											

AVERAGE ANNUAL RAINFALL

	Actual	Estimated from data for:-
1881-1915 .....in.
1916-1950 .....in.
.....in.

Type and capacity of gauge

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

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

*NOTES on years with incomplete or unsatisfactory data:-

Data extracted from "Reservoir Book" loaned by British Waterways Board to Met. Office in October 1970

*Each note to be dated. Continue notes overleaf if necessary.

Rainfall at Lancaster

40

Dr. Christopherson.

Diameter of Gauge, $4\frac{1}{2} + 8$ in.

Height above Ground, 2 ft. in.

Above Mean Sea Level, 30..... ft.

YEAR - -									1848	1849	MEANS.
January - -									2.37	5.82	
February - -									6.95	2.48	
March - - -									4.09	.80	
April - - -									1.57	1.16	
May - - - -									2.15	1.82	
June - - - -									5.28	1.11	
July - - - -									3.63	5.13	
August - - -									5.33	3.99	
September -									2.74	3.75	
October - - -									5.17	4.92	
November -									3.30	4.21	
December -									4.94	1.74	
TOTALS -									47.52	36.93	

Returns taken in 1848 but gauge in bad position

RAINFALL AT *Wolverton, Rampside,* *Lancashire*

40

Observer.....

Rain { By.....

Gauge { Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....										4.46	
February.....										2.06	
March.....										1.09	
April.....										1.41	
May.....										1.89	
June.....										.85	
July.....										4.12	
August.....										3.94	
September.....										4.09	
October.....										4.79	
November.....										4.16	
December.....										2.13	
TOTALS.....					30.14	40.29	38.76			34.99	

Cartmel

Hall

586618

40

Rainfall at

Holker Gardens

Wm Wilson

Mrs. R. K.

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	

MET. O.S. RAINMASTER
RETROSPECTIVE SITS REVIEW

YD. SIN. 586618

NGR: 50(34) 359 778

ALT 155 ft = 47 metres. Date of review 12.1.1979

RAINFALL AT *Cartmel*

40

Rain } By
 Gauge }
 Diameter.....in. Height above Ground, ft. in. Above Mean Sea Level, ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January											
February											
March											
April											
May											
June.....				3.45							
July											
August.....											
September ...				42 ¹ / ₄							
October.....				*							
November.....				7 in							
December				5 in							
TOTALS			42.22	53.54	42.09	53.67	55.47				

* from M.S. notes of C.P. Hooker Esq Cirencester, 1905

Rainfall at *Esthwaite Lodge* *Lancashire*

40

Diameter of Gauge, in.

Height above Ground, ft. in.

Above Mean Sea Level, *215* ft.

YEAR - -	1840	1841	1842	1843	1844	1845					MEANS.
January - -	10.14	5.24	4.82	9.09	6.89	7.41					
February - -	5.67	4.61	4.17	2.21	5.94	3.24					
March - - -	.58	6.93	8.47	3.15	8.18	7.01					
April - - -	2.25	3.10	.45	9.06	3.64	5.66					
May - - -	3.76	6.51	3.74	3.82	.12	1.62					
June - - -	5.43	3.24	5.35	6.14	4.79	4.96					
July - - -	9.83	4.10	7.14	7.33	3.46	4.50					
August - -	7.35	8.44	4.74	5.28	5.82	6.35					
September -	8.54	6.20	2.21	.76	7.37	5.75					
October - -	3.80	8.86	4.86	11.39	6.79	9.67					
November -	7.15	6.36	9.89	11.41	4.58	8.77					
December -	1.86	10.67	10.38	3.61	1.01	14.53					
TOTALS -	66.36	74.26	66.22	73.25	58.59	79.47					

41 All Daily values supplied by Major Alcock-Becke

Scrap

RAINFALL AT *Hawkehead Strickland Ease* *Lancashire*

Observer *W Alcock Beck Esq*

Rain { By.....
Gauge {
Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845					MEANS.
January.....	10.84	4.47	4.19	7.81	6.91	8.21					
February.....	6.11	3.87	3.22	1.73	5.32	1.03					
March.....	.43	5.62	6.75	2.64	7.21	6.93					
April.....	1.83	5.47	.35	7.96	3.98	7.48					
May.....	3.02	2.47	3.11	3.23	.05	1.20					
June.....	4.38	2.78	4.45	5.05	4.26	2.41					
July.....	7.97	3.45	6.07	6.21	2.87	5.56					
August.....	6.10	7.09	3.91	4.58	4.12	6.34					
September.....	7.40	5.33	1.83	.62	6.67	8.12					
October.....	3.05	6.92	4.03	10.61	8.37	14.05					
November.....	6.27	5.12	8.59	11.26	4.55	10.82					
December.....	1.53	8.56	8.50	2.24	.76	15.71					
TOTALS	58.93	61.15	55.00	63.94	55.17	87.86					

RAINFALL AT

Monk Coniston Park
St Marshall Exp

40

Ms. return verified

Rain { By *Marshall Exp*

Gauge { Diameter.....*1.0*.....in.

Height above Ground, *4* ft. *11* in.

Above Mean Sea Level, *150* ft.

YEAR	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January	10.50	6.00	6.00	10.10	7.30	7.00	9.70	3.70	5.30	13.50	79.10
February	6.20	5.40	4.60	1.80	6.90	2.60	5.00	5.00	14.50	4.70	56.70
March .....	.20	6.80	8.40	3.40	8.10	7.00	9.90	2.10	6.40	2.50	54.80
April	2.60	3.50	.00	8.90	3.10	6.30	4.00	4.30	2.30	1.90	36.90
May	3.60	6.70	3.30	4.20	0.00	2.00	2.40	5.90	2.20	4.10	34.40
June	6.50	3.30	4.40	4.80	4.50	5.10	5.30	4.10	7.00	1.80	46.80
July	8.40	4.00	6.70	8.20	4.30	3.60	10.70	1.90	7.10	7.90	62.80
August	8.30	8.40	4.70	4.40	5.00	6.50	6.50	6.30	6.90	6.90	63.90
September ...	8.50	6.00	1.40	.90	8.90	5.90	2.90	6.80	3.60	4.30	49.20
October	4.40	8.60	5.60	13.10	6.70	9.70	14.00	11.60	9.60	12.00	95.30
November ...	8.80	6.00	9.90	12.00	4.50	9.80	6.10	13.20	8.70	10.10	89.10
December	1.60	11.50	10.20	4.10	.90	13.60	3.50	9.70	12.00	6.00	73.10
TOTALS	69.60	76.20	65.20	75.90	60.20	79.10	80.00	74.60	85.60	75.70	742.10

M. S. return apparently from obs. gives 1842 May 5.30 total 65.20 in and stated that months were right + total wrong

August 45 - 9.9 means

Mr. Atkinson of Haraby had a copy of '41 all shunted by Jan'y = 9.00, Feb: 6.00 March 5.40 Dec 6.00 total 73.70.

Hyd. Sta. No. 38-587958

N.G.R. SD (34) 315980

Alt. 150 ft. 46 m

Adopted for Rainmaster

October 1915.

RAINFALL AT Keswick

W. in R. S. Library (1797-1802)

Observer Arden

Rain { By.....

Gauge { Diameter.....in. Height above Ground.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1800	1801	1802								MEANS.
January.....	4.80	6.90	8.57								
February.....	1.62	7.20	5.58								
March.....	2.45	4.77	3.02								
April.....	9.23	2.18	5.12								
May.....	6.32	3.27	.41								
June... ..	1.38	.50	5.83								
July.....	1.63	4.42	7.07								
August.....	1.40	4.6	5.52								
September.....	5.23	5.90	3.56								
October.....	9.83	9.19	9.04								
November.....	8.27	3.33	.53								
December.....	5.04	5.38	6.59								
TOTALS	57.20	53.50	60.78								

RAINFALL AT Felphish

Rev J B Graham 5 m. from Barnaby

Rain { By

Gauge {

Diameter.....in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

YEAR.....	1841									MEANS.
January										
February	1.25									
March	1.00									
April										
May	167-2.40									
June.....	3.50									
July										
August.....										
September ...	14233.38									
October.....	4.75									
November.....										
December.....										
TOTALS										

14th Bus. of the Soc.

Black House Rippenden
Compt Gauge

E-x-98

Gauge on roof 320ft + ground + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	6.15					1.00	4.15	1.80			
February - -	2.40					.57	2.0	2.70			
March - - -	.14					3.00	2.6	1.20			
April - - -	.15					2.00	4.2	2.20			
May - - - -	3.68					1.80	1.2	3.90			
June - - - -	2.31					3.60	2.68	2.57			
July - - - -	4.50					3.91	3.4	.60			
August - - -	4.45					4.80	4.0	1.90			
September -	4.90					3.40	.9	3.40			
October - - -	2.00					4.20	5.0	4.30			
November -	4.80					2.70	3.6	3.90			
December -	.40					7.70	1.07	6.50			
TOTALS -	35.88				24.89	39.42	34.80	34.97			

Ordnance 7-31
Main Mem 7-53
4- 7-44

Black Horse Whippenden

1 mi beyond the Toll Bar. Society's Gauge
on higher ground

Float B.A.I

1 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					2.1	2.5	5.0	3.0			
February - -					3.2	1.1	4.5	3.0			
March - - -					0.8	4.9	3.5	X			
April - - -					1.0	3.0	5.2	2.5			
May - - - -					.0	2.7	1.8	3.5			
June - - - -					2.4	3.7	4.0	3.4			
July - - - -					4.0	4.7	5.2	1.3			
August - - -					5.2	8.0	2.8	2.3			
September -					2.9	6.3	1.0	3.5			
October - -					3.3	7.0	5.5	5.5			
November -					2.5	5.1	3.0	4.5			
December -					.5	12.8	1.0	13.8			
TOTALS -					35.90	61.80	42.50				

X No Return

5-7 from Mem 7-53

White Holme
Comp? Gauge

E-x-116

Gauge on roof 30 ft + ground; 1200 ft + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	1.40				1.0	2.05	5.00	1.9			
February - -	2.60				2.2	.90	1.80	2.9			
March - - -	.20				0.2	2.09	2.70	1.4			
April - - -	.15				.7	2.30	4.10	2.4			
May - - - -	3.40				0.0	1.90	1.00	3.6			
June - - - -	2.40				2.2	3.80	2.60	2.6			
July - - - -	4.70				0.0	3.80	3.20	.55			
August - - -	4.60				0.7	5.00	5.50	1.70			
September -	5.00				0.0	3.60	1.06	3.6			
October - -	2.08				3.0	4.36	5.20	4.5			
November -	5.02					2.90	3.70	4.3			
December -	.35					7.15	1.20	6.3			
TOTALS -	36.90				22.64	39.85	37.14	35.75			

0 — Mean Mean 7-25 to 51
4 " " 7-44

On Summit of Blackstone Edge
In '44 M. of 21 years is given at 34.27; M 1820-40 = 34.64; therefore
41-5 were probably inaccessible

White Holme Reservoir
Soz Gauge

Ex 150

Gauge float B.A.I 1ft + ground + S Level 1200 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					1.0	3.8	5.7	3.2			
February - -					2.1	1.2	2.0	3.8			
March - - -					0.2	5.0	4.0	2.3			
April - - -					.7	3.0	5.4	3.8			
May - - - -					0.0	3.8	.9	3.4			
June - - - -					2.2	5.0	3.1	2.5			
July - - - -					4.2	4.3	4.1	1.1			
August - - -					5.2	8.3	3.4	2.3			
September -					5.0	4.7	2.6	4.4			
October - -					3.0	8.9	5.7	5.5			
November -						4.3	4.3	4.5			
December -							2.00	11.00			
TOTALS -					X		43.20	47.80			

estimated = 35.1

Mean Mean 7.43

Toll Bar, Blackstone Edge
boom gauge

E-x-110

gauge

on roof 7.20ft + ground; 3 1000 ft + 82

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	5.70					2.09	4.05	1.70			
February - -	2.62					.00	1.74	2.63			
March - - -	.27					2.30	2.08	1.00			
April - - -	.25					1.99	4.55	2.30			
May - - - -	3.30					1.86	1.15	3.72			
June - - - -	2.36					3.36	2.72	2.47			
July - - - -	4.30					3.70	2.80	.75			
August - - -	4.15					4.60	5.20	1.00			
September -	4.30					3.30	1.00	3.90			
October - -	1.70					4.20	4.50	4.30			
November -	5.20					2.12	3.50	3.80			
December -	.25					6.70	1.00	6.20			
TOTALS -	34.40				23.45	37.02	35.09	34.57			

O Man Mem 7-29

4 " " 7-44

In '44 M. of 10 yrs is given as 36.35; M 1831-40 = 36.36; therefore
41-3 were probably missing.

Toll Bar

Blackstone Edge

Loep Gauge

Gauge float BAI

1 ft + ground

+ P. level

900 or 1000 ft.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					2.3	4.0	6.1	3.1			
February - -					2.4	1.3	2.0	3.4			
March - - -					8.0	5.1	3.9	2.5			
April - - -					1.1	3.0	5.1	4.0			
May - - - -					.2	4.0	1.0	3.5			
June - - - -					2.0	5.0	3.5	2.5			
July - - - -					4.2	4.5	4.0	1.3			
August - - -					5.2	8.2	3.8	2.3			
September -					3.0	4.6	2.5	4.5			
October - -					3.6	8.8	5.6	5.5			
November -					2.0	4.2	4.4	4.5			
December -					.2	12.0	2.0	11.0			
TOTALS -					34.20	64.70	43.90	48.10			

Man Mem 7-52

RAINFALL AT Doucaster

Probably Parkin's record in Market Place (Magdalen)
es. x 1113

Observer J. Ford

Rain { By.....
Gauge {
Diameter.....in.

From Total book

Height above Ground,.....ft.....in. Above Mean Sea Levelft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....											
February.....											
March.....											
April.....											
May.....											
June... ..											
July.....											
August.....											
September.....											
October.....											
November.....											
December.....											
TOTALS	2554	3233	2720		1818	2900	2506	2319	3385		

29.20 27.68

RAINFALL AT *Ackworth School* *York W.R.*

Observer.....

Rain { By.....

Gauge {

Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....	1.92	1.92	1.83	1.28	1.52	.76	2.08	1.45	1.05	1.57	
February.....	1.89	1.03	.55	2.91	2.04	.72	.51	1.10	1.89	.59	
March.....	.11	.89	3.20	.91	1.77	1.80	.71	1.16	2.95	1.13	
April.....	1.51	.98	.20	1.82	.24	1.46	6.06	1.82	2.01	1.54	
May.....	3.67	3.22	1.92	2.50	.40	2.68	.90	2.93	1.03	1.78	
June.....	1.99	3.45	1.70	2.03	1.63	2.76	2.08	1.87	6.31	1.09	
July.....	2.71	4.19	3.82	3.90	2.65	3.79	2.59	.95	2.13	2.44	
August.....	2.04	2.62	1.64	3.59	2.12	4.41	3.95	2.57	3.42	1.88	
September.....	2.87	4.11	2.65	1.05	1.99	1.60	.88	.69	4.41	3.55	
October.....	.92	4.24	1.16	3.86	1.55	3.32	3.81	1.49	4.20	3.39	
November.....	4.61	2.85	3.22	2.21	2.43	1.08	1.55	1.40	.78	1.55	
December.....	.51	1.33	.74	.20	.48	2.70	.77	3.07	1.90	2.82	
TOTALS.....	24.75	30.83	22.63	26.26	18.82	27.08	25.89	20.50	32.08	23.33	25.217

Compared with "Howard's "Cycle of the Seasons" 1842 and annotations therein, lent by G. P. Hooker 1905. No differences of more than a few hundredths.

RAINFALL AT Ackworth Villa

From M.S.S. received from

Yorkshire.

Observer W. Dilworth Howard Esq.

Rain { By.....

Gauge { Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....			2.10	1.28	1.32	.58	2.20	1.20	1.18	1.80	
February.....			.57	3.72	2.31	.65	.51	1.10	2.44	.61	
March.....			3.13	1.03	2.41	1.85	.75	1.02	3.17	1.15	
April.....			.25	1.11	.22	1.36	5.83	1.90	2.18	1.76	
May.....			1.99	2.66	.22	2.00	.78	3.00	1.44	1.75	
June.....			1.46	2.12	1.70	3.09	1.92	1.90	6.39	1.25	
July.....			3.26	3.81	2.48	3.95	2.41	.93	2.10	2.44	
August.....			1.40	2.87	2.00	4.36	4.19	2.43	3.43	1.77	
September.....			3.09	1.01	1.92	1.54	.92	.87	4.68	3.67	
October.....			1.37	3.95	1.31	3.19	3.97	1.50	4.13	3.48	
November.....			3.70	2.23	2.27	1.01	1.60	1.49	.96	1.00	
December.....			.81	.27	.51	2.82	1.17	3.13	1.64	2.79	
TOTALS			23.13	26.06	18.67	26.40	26.25	20.47	33.74	23.47	

1843, 1845, 1846, 1847. W.D.H. says 'I have always supposed these to be records at the Villa[†] but do not remember seeing the original register.'

1844. 'I believe must be at the Villa[†]' W.D.H. } ^{† i.e. not Schöve. es.}

1848, 1849, 1850 are certainly at the Villa[†].

Rainfall at *Wakefield Prison*

W. R. Milner

Mis return

Diameter of Gauge, in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

YEAR - -									1848	1849	MEANS.
January - -									1.46	1.78	
February - -									2.61	.66	
March - - -									3.16	1.22	
April - - -									2.53	1.71	
May - - - -									1.16	1.63	
June - - - -									5.67	.97	
July - - - -									2.54	2.08	
August - - -									3.53	1.03	
September -									3.48	4.14	
October - - -									4.47	3.53	
November -									.95	2.45	
December -									2.08	2.74	
TOTALS -									33.64	23.94	

RAINFALL AT Braithwaite, Keighley ~~Museum~~

Lat.

Lon.

County of

Yorkshire

Rain Gauge, by

Observer

W. Shackleton Esq.

Diameter.											
Height.											
Altitude.											
Year.	18 ⁴ 7 0	18 ⁴ 7 1	18 ⁴ 7 2	18 ⁴ 7 3	18 ⁴ 7 4	18 ⁴ 7 5	18 ⁴ 7 6	18 ⁴ 7 7	18 ⁴ 7 8	18 ⁴ 7 9	MEANS.
January.	4.87	1.79	.92	2.79	1.84	1.37	4.0 ⁸ 5	1.72	1.56	3.2 ⁸⁶ 9	
February.	1.81	1.69	.83	2.84	1.23	.90	1.20	1.82	5.15	1.22	
March. ....	.37	1.18	3.48	1.45	2.32	2.84	1.91	1.62	3.27	1.11	
April. ....	.71	1.58	.86	4.2 ¹ 4	.57	1.97	4.92	1.74	1.9 ¹ 3	2.24	
May.	3.32	3.38	2.94	4.19	.15	1.50	1.33	4.43	1.65	1.71	
June.	2.65	3.39	1.88	3.17	2.96	3.16	3.87	2.43	5.86	1.41	
July.	4.20	2.39	4.26	3.27	2.28	4.42	2.81	.84	2.14	3.36	
August.	2.59	3.99	1.50	2.25	3.00	5.99	2.49	2.22	5.54	2.50	
September.	4.45	4.04	2.56	.52	2.43	3.07	1.53	2.54	3.6 ⁰ 4	3.42	
October.	1.15	6.20	2.00	7.07	1.91	4.93	5.38	4.04	6.04	4.80	
November.	5.04	3.07	4.70	3.96	2.21	2.19	2.19	2.97	2.55	3.44	
December. ....	.60	3.51	2.09	.15	.27	4.89	.76	5.90	3.1 ⁰ 5	3.06	
TOTALS.	31.76	36.21	28.02	35.9 ⁸ 0	21.17	37.23	32.4 ⁷ 4	32.27	2.42 ² 48.38	2.13 ² 31.66	

Copied from original register 20.12.33

Sent by Keighley Museum. See file 272699/33

Lowerby Bridge.
compt' gauge

Gauge on roof? 20 ft + ground; + S level 300 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	3.71					1.26	2.79	1.55			
February - -	1.10					0.00	.61	1.32			
March - - -	2.10					1.91	1.95	.95			
April - - -	.50					1.17	5.19	1.25			
May - - -	2.05					1.81	0.00	2.87			
June - - -	1.80					2.41	1.84	1.20			
July - - -	2.50					3.17	1.31	.25			
August - -	1.80					4.93	1.25	.87			
September -	3.25					2.91	.79	1.10			
October - -	1.13					3.02	3.95	2.77			
November -	3.70					1.81	1.62	1.55			
December -	.15					4.03	.18	4.63			
TOTALS	21.79				16.77	28.03	21.48	20.31			

Mean Mem 7-54
4 " " 7-44

In '44 Mo of 13 yrs is given as 27.61; Mean 1828-40 = 27.63; therefore probably 41-3 were then inaccessible

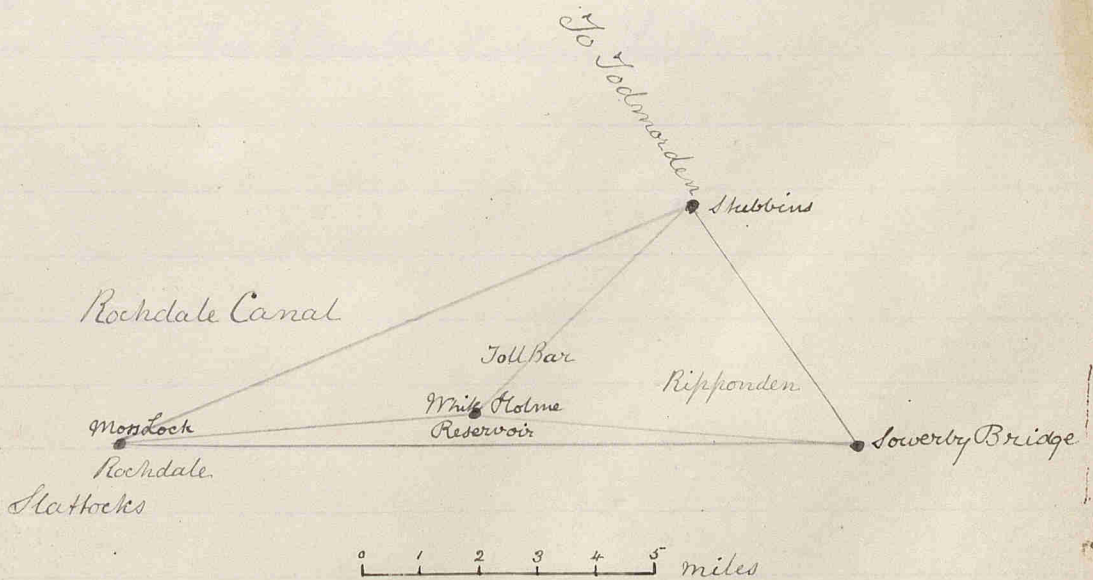
Sowerby Bridge
in the valley of the Calder. Society's Gauge

Gauge float B.A. I 1ft + ground

300 ft + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					1.6	1.9	3.4	1.6			
February - -					2.8	5	1.2	2.2			
March - - -					4.4	2.5	2.5	.9			
April - - -					.3	1.9	5.4	2.2			
May - - - -					0.0	2.1	0.0	3.5			
June - - - -					2.0	2.5	2.6	1.9			
July - - - -					1.7	4.0	2.9	.8			
August - - -					4.3	5.5	2.1	1.6			
September -					1.3	2.3	.9	3.0			
October - -					2.4	3.5	4.4	3.8			
November -					3.0	2.2	2.0	2.4			
December -					0.0	5.4	.5	3.0			
TOTALS -					23.80	34.30	27.90	26.90			

5-7 Mon Mem 7-54



Ferry Bridge (Holmefield House)
 Lat: $53^{\circ}40' N.$; Lon: $1^{\circ}15' W.$

C. Charnock Esq

30 ft + S.L.

YEAR - -	1840	1841	1842	1843	1844	1845	1846				MEANS.
January - -	2.01	2.21	2.70	1.48	1.31	1.74	2.18				
February - -	1.80	1.28	.76	3.25	2.22	.73	.47				
March - - -	1.8	.77	3.48	.95	2.27	1.88	.93				
April - - -	1.46	.94	1.51	2.19	.27	1.54	5.97				
May - - - -	3.71	2.98	2.98	2.81	.42	2.24	.82				
June - - - -	1.94	3.65	1.94	2.31	1.24	3.18	1.65				
July - - - -	2.81	4.43	3.74	2.70	2.76	3.49	2.90				
August - - -	2.15	2.69	1.49	3.99	2.85	4.61	2.65				
September -	2.76	3.99	2.44	1.07	1.92	1.36	1.07				
October - -	.90	4.50	1.12	1.10	1.41	3.36	4.09				
November -	4.48	2.84	3.19	2.36	1.98	1.01	1.15				
December -	53	1.34	.76	.28	.35	3.04	1.36				
TOTALS -	24.73	31.62	26.11	24.49	19.00	28.18	25.24				

1840-1 Ind. Ret:

1842-6 four: R. Agric. Soc:

? Tin 1846 See Shourton Lodge, Leeds -

Well Head

w. Halifax

John Waterhouse

Pounded Net

+ Ground 1 ft + Sea Level 540 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	5.70	3.50	2.20	4.30	1.80	1.60	3.25	2.10	1.40	5.12	3.097
February - -	1.85	1.10	.90	2.80	3.20	.65	.90	2.12	5.35	1.25	2.012
March - - -	.35	1.70	4.10	1.20	3.75	2.55	2.00	1.50	4.12	1.30	2.257
April - - -	1.05	.82	.40	3.55	.30	1.60	5.50	2.50	1.80	2.12	1.964
May - - - -	4.10	3.35	2.25	3.35	.13	2.95	.85	3.90	1.10	1.60	2.358
June - - - -	2.66	3.70	1.60	2.60	2.30	2.50	2.15	2.10	4.00	1.40	2.509
July - - - -	3.80	2.68	3.05	3.10	2.02	4.00	1.90	.80	1.91	3.90	2.796
August - - -	3.05	3.52	1.05	2.50	3.15	5.60	2.10	1.97	4.60	3.80	3.134
September -	4.60	3.12	2.30	.65	2.25	1.90	.90	2.10	3.82	4.10	2.574
October - -	1.30	5.95	2.25	7.30	2.40	4.30	4.50	3.20	4.60	3.40	3.920
November -	4.50	3.80	3.85	4.00	2.50	1.85	2.30	2.75	1.95	2.40	2.990
December -	.42	3.30	1.90	.35	.20	5.80	1.10	4.40	2.35	2.90	2.272
TOTALS -	33.38	36.54	26.73	35.70	24.00	35.30	27.45	29.44	37.00	33.29	31.883

Slubbins

E-x-108

See '30 sheet

YEAR - -	1840										MEANS.
January - -	5.85										
February - -	1.88										
March - - -	.00										
April - - -	.44										
May - - - -	2.68										
June - - - -	2.23										
July - - - -	4.95										
August - - -	3.00										
September -	4.68										
October - - -	1.27										
November -	3.46										
December -	.04										
TOTALS -	30.48										

From Mem

Seeds Rainfall at Holbeck

40

Marshall

Diameter of Gauge, in. Height above Ground, ft. in. Above Mean Sea Level, ft.

YEAR - -	40	41	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -			1.60	2.00	1.10	.60	2.50	1.30	1.20	2.50	
February - -			.60	2.30	2.70	1.00	.40	.50	.00	.70	
March - - -			2.75	1.10	2.10	1.70	.70	1.10	3.80	.90	
April - - -			.00	2.10	.10	1.10	4.60	1.80	1.60	1.40	
May - - - -			1.70	3.10	.20	2.10	.60	2.90	.90	1.20	
June - - - -			.75	1.80	.60	2.90	2.10	1.80	5.00	1.05	
July - - - -			3.20	2.60	2.50	2.00	2.20	.40	1.40	2.45	
August - - -			1.00	2.20	1.80	5.20	2.50	1.80	2.40	1.60	
September -			2.20	.25	1.60	1.00	1.10	.70	4.00	3.50	
October - -			1.00	4.25	1.00	2.75	4.60	1.75	4.00	3.00	
November -			2.60	2.10	2.30	1.00	1.90	1.10	.90	2.10	
December -			.45	.10	.30	3.40	.70	3.70	1.90	2.80	
TOTALS -	(23.60)	(25.00)	17.85	23.90	16.30	24.75	23.90	18.85	27.10	23.20	(22.445)

RAINFALL AT Leeds

Observer

S. Marshall of KendalW. R. Lynds

Rain

By.....

From Total book

Gauge

Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....											
February.....											
March.....											
April.....											
May.....											
June... ..											
July.....											
August.....											
September.....											
October.....											
November.....											
December.....											
TOTALS		27.49		25.61		25.59	25.62				

Pattington
w- Hull Yorks

W B Pugh

Map Ref. 163
+ High Water 22 ft
+ Sea Level

Decim 10 in + ground ^{4 1/2} in 4.8.

YEAR - -	1846	1847	1848	1849	MEANS.
January - -		2.37	.53	1.65	
February - -		2.20	3.00	.65	
March - - -		1.14	2.58	.07	
April - - - -	# 4.80	1.20	1.70	1.56	
May - - - -	1.26	4.84	.80	2.00	
June - - - -	2.45	2.60	3.50	2.50	
July - - - -		.20	3.92	2.32	
August - - -	2.17	.20	2.62	1.25	
September -	30	2.30	3.68	2.43	
October - -	3.70		3.83	2.32	
November -		2.38	1.49	1.78	
December -	2.36	3.32	1.95	3.10	
TOTALS -		22.75	29.60	21.63	

C C C C

Patrington, Hull

50

W. B. Rugh Esq

Mp Dist. No. 95

YEAR - -	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	MEANS.
January - -	2.46	1.60	2.42	1.54	1.84	1.20	1.76	2.96	.40	.62	1.680
February - -	.52	.52	1.32	3.12	.75	1.70	.75	.83	.18	1.02	1.071
March - - -	1.60	2.16	.48	1.82	.44	.51	.32	1.74	1.36	.98	1.141
April - - -	.88	1.43	.00	1.22	.44	.30	2.42	2.56	.46	3.08	1.281
May - - - -	1.02	.71	.85	2.96	1.96	.75	4.26	.56	2.20	.68	1.595
June - - - -	1.40	2.76	2.90	1.88	.94	1.19	1.62	.60	.54	1.90	1.573
July - - - -	3.16	3.12	.56	2.28	1.12	3.38	1.76	2.24	3.02	1.10	2.174
August - - -	1.24	1.96	1.90	1.01	1.50	2.56	3.00	4.47	1.78	2.54	2.196
September -	2.52	1.54	5.90	1.27	.34	.22	2.81	1.88	1.70	2.20	2.038
October - -	2.40	1.30	2.40	2.25	2.90	5.50	2.14	.73	2.26	1.90	2.376
November -	1.62	3.00	4.30	1.16	2.80	1.78	1.27	1.18	1.86	1.30	2.027
December -	.46	.95	1.40	2.20	2.40	2.24	1.96	.12	1.40	1.84	1.497
TOTALS -	19.28	21.05	24.43	22.71	17.43	21.33	24.07	19.87	17.16	19.16	20.649

10 10 10 10 10 10 10 10 10 10 10

Leeds

40
Ex 141

Philosophical Hall

Henry Denny Esqr A.L.S.

Mps Ret: No 20^a; 20^b; 20

10w³

40ft + ground

+ Sea Level 137 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	1.73	2.76	1.50	.91	1.00	.91	1.63	1.73	2.20	1.40	1.601
February - -	1.58	1.12	1.30	3.07	.96	2.16	36	1.50	4.27	1.82	1.814
March - - -	.30	1.01	2.65	.80	1.03	.88	1.13	2.25	3.16	1.06	1.435
April - - -	1.02	2.00	.30	3.49	.91	.92	4.20	2.42	.83	2.50	1.867
May - - - -	3.61	2.08	1.24	3.75	.99	2.02	1.46	2.70	1.22	.26	1.933
June - - - -	1.82	2.53	.70	2.83	.81	2.56	2.06	2.33	4.95	1.90	2.249
July - - - -	3.25	2.60	3.99	2.80	1.15	3.10	1.85	1.06	2.14	2.50	2.460
August - - -	2.10	2.96	1.00	3.57	2.90	2.66	2.46	1.98	3.97	1.70	2.530
September -	2.88	.50	2.20	1.77	.82	2.12	.71	.16	4.03	3.48	1.867
October - -	1.05	3.63	1.25	2.44	1.17	1.90	3.73	2.08	2.30	3.12	2.275
November -	2.69	2.54	2.90	2.63	2.37	.78	.65	.49	1.79	2.19	1.903
December -	1.66	1.29	.70	1.07	.32	4.07	1.36	2.38	1.08	2.59	1.652
TOTALS -	23.69	25.02	19.73	29.29	14.57	24.16	21.60	21.08	32.02	24.76	23.586

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

RAINFALL AT Leds Newton Lodge

53° 45' 48" N 1° 29' 30" W

Observer C. Charnock Esq

Rain { By

Gauge {

Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level 145 ft.

YEAR.....								1847	1848	1849	MEANS.
January.....								1.40	1.46	3.32	
February								85	3.98	1.54	
March								1.53	3.96		
April.....								2.50	2.93		
May								3.47	1.09		
June.....								2.66	5.35		
July								62	1.75		
August.....								2.59	3.50		
September.....								1.29	5.10		
October.....								2.49	4.76		
November.....								1.55	1.46		
December.....								4.49	2.52		
TOTALS								25.44	37.86		

47-8 Ins Ret

? c in 1847 See Ferrybridge

Redmire
Sheffield W.W.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	4.81	3.31	1.81	4.23	2.31	2.86	4.35	2.47	1.99	4.93	3.307
February - -	3.54	1.68	.57	3.22	1.58	1.72	1.94	2.59	5.30	1.79	2.393
March - - -	.46	2.27	4.66	1.94	3.72	2.82	2.24	1.76	4.93	.81	2.561
April - - -	2.08	2.17	1.26	5.16	.64	2.47	7.01	3.29	2.33	2.96	3.017
May - - - -	4.35	4.80	2.50	5.54	.59	3.44	1.95	5.08	1.58	2.31	3.214
June - - - -	3.60	4.80	2.51	4.60	2.42	3.72	2.36	2.52	5.19	1.44	3.324
July - - - -	4.68	4.95	4.94	4.51	3.53	4.79	4.15	1.30	3.48	4.08	4.041
August - - -	3.87	4.25	1.99	2.51	3.82	5.42	4.72	3.72	5.73	2.32	3.835
September -	3.35	3.81	3.36	.71	4.64	3.45	1.48	3.65	4.81	4.76	3.402
October - - -	2.43	6.57	1.98	6.43	3.48	5.34	5.08	3.79	6.47	5.21	4.678
November - -	6.90	3.47	5.07	4.12	3.19	2.03	2.36	3.28	1.92	2.33	3.547
December - -	.80	4.26	3.13	.60	.23	6.49	1.27	6.16	4.45	6.91	3.430
TOTALS -	40.87	46.34	33.78	43.65	30.15	45.35	39.71	39.61	48.18	39.85	40.749

Seeds

Lat. 53° 52' 7" Lon. 1° 32' 44" W
 Coln. ^d Filler

Occur Reservoir

Miss Rut Cur

Square 10 in + ground 0.0

+ Sea Level 340 feet

YEAR - -					1844	1845	1846	1847	1848	1849	MEANS.
January - -						.65	2.37	1.28	.87	3.63	
February - -						.71	.74	1.20	3.40	.85	
March - - -						2.13	1.39	2.21	3.35	1.58	
April - - -						1.05	5.64	1.45	2.24	2.62	
May - - - -						3.24	1.08	2.61	.75	2.12	
June - - - -						2.55	1.88	2.33	4.62	1.44	
July - - - -						3.35	2.91	1.52	1.80	3.68	
August - - -						5.02	3.25	1.79	4.33	3.13	
September -						1.82	1.31	1.20	4.47	3.98	
October - -						4.30	4.87	2.26	5.89	4.15	
November -						1.37	2.13	1.97	1.26	2.49	
December -						.62	3.49	1.74	3.55	2.63	3.00
TOTALS -						23.22	29.68	29.31	23.37	35.61	32.67

1844-8 - Gauge 380ft + S.L., and about 200 yds W of present position - Then, as now, level with ground.

Rainfall at Little

E-5C-70

40

John Fatham

Wm. H. H.

Diam 12 + Ground 35 feet

+ Sea Level 498 feet

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	7.57	4.21	3.31	5.04	3.24	2.88	4.78	1.06	2.78	7.71	4.338
February - -	2.81	2.63	1.68	1.21	3.52	1.64	1.59	2.40	8.57	2.19	3.024
March - - -	.35	3.39	4.43	1.39	4.52	5.05	3.16	1.87	7.20	.72	3.008
April - - -	.37	1.22	0.00	6.68	1.15	5.54	4.53	2.80	7.12	1.76	3.117
May - - - -	3.05	4.09	3.68	4.73	.00	2.05	1.29	4.56	1.87	1.54	2.686
June - - - -	2.64	4.32	4.42	1.63	2.32	3.24	3.95	3.22	5.34	.77	3.185
July - - - -	5.64	3.96	4.96	4.75	3.76	4.07	3.00	1.43	4.60	4.51	4.068
August - - -	6.28	5.03	3.26	2.82	2.88	4.58	3.49	1.52	4.10	3.62	3.758
September -	6.15	5.18	2.91	.52	2.32	4.23	1.30	3.59	2.94	3.54	3.268
October - - -	1.56	8.72	3.52	10.38	1.97	4.76	6.47	5.57	4.97	2.58	5.050
November - -	6.38	5.40	6.00	5.73	1.38	3.62	2.64	3.62	3.48	5.50	4.375
December - -	1.05	6.16	3.21	1.04	.38	8.04	1.68	6.76	4.52	2.44	3.528
TOTALS -	43.85	54.31	41.38	45.92	27.44	49.70	37.88	39.20	57.49	36.88	43.405

3-4 1/2 inches of rain

Scarborough

from the Scarborough Phil^s Soc.^y Reports

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	2.23	2.00	2.92	Gauge out of order, rain not measured	1.47	.40	2.23	No observations in consequence of financial difficulties		2.42	
February - -	1.75	1.63	.89		1.74	1.35	.91			.56	
March - - -	.80	.96	1.89		2.18	2.53	1.99			1.97	
April - - -	.67	.46	.14		.50	1.59	7.30			3.51	
May - - -	3.07	2.25	2.22		.27	3.38	1.35			3.49	
June - - -	2.03	2.49	.60		5.34	2.64	.90			1.29	
July - - -	3.26	2.65	3.08		2.65	2.91	4.96			2.81	
August - -	2.92	1.90	1.04		1.33	6.46	1.42			.81	
September -	2.79	3.75	1.40		1.86	2.62	.36			2.82	
October - -	1.52	3.16	2.50		1.51	3.31	5.41			2.74	
November -	4.09	2.18			1.64	1.74	1.57			3.43	
December -	.98	2.58			1.01	3.00	2.76		2.78	6.34	
TOTALS -	26.11	26.01			21.50	31.93	31.16			32.19	
					21.57						

1832 to the end of 1841 observations were made by W. Handridge the
 g being in Dr. Murray's garden (Belle Vue) about 170 + S.L.
 from 1841 to 1852 by W. Williamson at the Museum which
 is 91 ft + S.L the g being then 12 ft above ground.

Rainfall at York

E-x-73 **40**

John Ford

Wm. H. H. No. 68. A. L.

Howards Gauge. Dia. 3.5 in + Ground 3.5 in + Sea Level 50 feet

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	2.74	1.70	2.20	1.02	1.34	.87	2.55	1.48	1.77	1.61	1.728
February - -	1.53	1.36	.64	2.65	2.37	1.04	.28	1.39	4.22	.50	1.598
March - - -	.38	1.45	2.15	.89	2.03	1.44	1.01	1.35	3.34	1.14	1.518
April - - -	.98	1.02	.39	2.23	.56	1.68	4.24	1.82	1.42	1.95	1.629
May - - - -	2.36	2.88	2.39	2.81	.39	1.88	1.16	2.09	1.12	1.99	1.907
June - - - -	1.73	1.20	1.91	1.86	2.21	3.79	1.64	2.47	7.35	1.06	2.522
July - - - -	3.63	3.47	3.32	2.67	2.86	3.84	3.56	.77	1.72	3.29	2.913
August - - -	2.11	2.72	1.86	4.09	2.03	6.21	1.75	1.14	3.20	2.25	2.736
September -	3.32	2.81	2.73	.42	1.88	1.51	.79	1.14	4.11	2.68	2.139
October - - -	1.46	3.56	.93	4.59	1.22	3.51	4.59	1.95	4.62	2.43	2.886
November - -	3.74	2.59	2.83	2.21	2.37	1.17	2.29	1.90	1.13	1.95	2.218
December - -	.74	1.60	.42	.22	.39	2.73	1.79	3.54	2.02	2.78	1.623
TOTALS -	24.72	26.36	21.77	25.66	19.65	29.67	25.65	21.04	36.02	23.63	25.417

W. H. H. No. 68. A. L.

RAINFALL AT Keyingham Marsh
York & R.

Observer Harrison

Rain { By.....
Gauge {
Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....					1.43	1.18	2.15	1.27	1.18	2.00	
February.....					3.00	.85	.48	1.10	3.00	.70	
March.....					1.95	2.85	1.77	1.63	3.85	1.12	
April.....					.25	1.20	5.48	1.92	1.30	1.70	
May.....					.96	2.47	1.13	4.76	.50	2.22	
June.....					1.19	4.10	1.01	2.69	3.84	2.10	
July.....				# 2.60	3.88	2.36	3.56	.51	3.94	3.70	
August.....				2.30	2.68	6.74	2.85	1.60	1.92	1.18	
September.....				.60	1.96	2.54	.66	.87	3.81	3.10	
October.....				3.93	1.67	2.46	4.29	2.62	4.17	3.03	
November.....				2.23	2.71	1.41	2.00	2.45	1.75	2.44	
December.....				.16	.63	3.80	3.40	3.65	2.61	3.44	#
TOTALS					22.31	31.96	28.78	25.07	31.87	26.73	

Observations for 1850 lost

Rainfall at Newland Near Full

40

Observer J. St.

Diameter of Gauge, in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

YEAR - -											MEANS.
						1845	1846	1847	1848	1849	
January - -						# .98	2.58	1.29	1.13	2.06	
February - -						.76	.38	1.21	3.09	.88	
March - - -						1.58	1.57	1.39	3.88	.70	
April - - - -						1.44	5.54	1.82	1.47	2.19	
May - - - - -						2.21	1.07	4.89	.47	1.55	
June - - - - -						3.49	.72	2.29	5.67	1.54	
July - - - - -						2.18	3.20	.47	3.24	4.48	
August - - -						6.53	2.81	1.13	4.62	3.34	
September -						2.37	.85	1.38	4.37	1.96	
October - -						2.47	4.03	2.20	5.39	4.38	
November -						.96	1.89	2.35	1.32	1.55	
December -						3.90	2.78	3.94	2.43	3.96	
TOTALS -						28.87	27.42	24.36	37.08	28.59	

C C C C C

Max

1845. Aug.. 2.02

1846. Apr.. 1.74

1847. Dec.. 1.06

1848. Sep.. 1.86

1849. Aug.. 1.11

Whuldrake

Lat. 53.54 N Long. 57 W

Robt Bryson Cooke

. Drum 7 in + Ground 7.4^{ft} + Sea Level 40 ft?

YEAR - -	1844	1845	1846	1847	1848	1849	MEANS.
January - -	.74	2.49	1.26	1.65	1.57		
February - -	1.62	.41	1.22	3.13	.60		
March - - -	1.42	1.15	.68	3.33	.67		
April - - -	1.77	3.98	2.80	1.31	2.17		
May - - - -	1.39	1.51	3.48	.91	2.53		
June - - - -	4.00	2.02	2.01	5.42	1.11		
July - - - -	2.68	3.19	5.82	1.87	1.84		
August - - -	7.90	2.31	1.87	3.42	2.51		
September -	[#] 1.32	1.54	.83	7.17	3.49	1.75	
October - -	1.06	3.06	4.73	1.83	5.03	3.40	
November -	1.99	1.05	1.65	1.66	1.37	1.68	
December -	59	2.94	2.05	3.29	1.91	3.18	
TOTALS -		30.11	26.32	21.09	32.84	23.01	

Huggate E.R. Yorks

Thos Nankin

Map Ref No 113

Diam 10 in + ground 3 in + Sea Level 6.50 feet?

YEAR - -	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	3.37	1.00	2.02	.50	3.12	2.25	1.87	2.37	
February - -	.50	2.00	.75	.25	.75	1.00	4.12	.72	
March - - -	1.75	.91	.25	.50	2.25	1.50	4.87	1.00	
April - - -	0.00	2.75	.50	2.37	7.50	2.00	2.00	3.12	
May - - - -	3.25	3.50	.75	3.87	1.50	5.37	1.12	3.00	
June - - - -	1.75	3.50	1.75	4.00	2.00	3.00	6.87	1.05	
July - - - -	3.50	3.75	2.50	3.00	5.00	1.37	2.50	4.75	
August - - -	1.50	2.25	2.00	7.37	1.00	1.50	4.50	1.57	
September -	2.50	.50	2.25	3.87	5.62	1.75	3.50	2.50	
October - -	2.00	5.02	2.00	3.25	5.25	2.37	6.50	2.75	
November -	3.50	3.00	2.25	1.75	2.25	2.85	2.00	2.50	
December -	1.00	.12	.12	4.00	2.37	5.25	2.75	4.50	
TOTALS -	24.63	28.30	17.14	34.73	33.61	30.21	42.60	29.77	

C C C C 35.87 C " E S
? 1.62

1846 (33.61) ER map.

Rainfall at Middlesbrough on Tees

40
E-x-36

Observer George Turnbull Esq. ERAS. Authority
54° 35' N.

Gauge

Above Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -		1.10	1.92								
February - -		.62	.35								
March - - -		.84	.70								
April - - -		.51	.26								
May - - - -		1.43	.88								
June - - - -		2.35	.67								
July - - - -		2.66	1.54								
August - - -		2.51	1.39								
September -		2.02	1.08								
October - -		3.82	2.03								
November -		3.22	1.45								
December -		1.46	.56								
TOTALS -		22.53	12.91								

Imp. returns of Met Soc

1841 - The above values are from Met. Soc., but Fallows reports total = 22.01

1841 The June entry of "2.35" is not rain at all, it is the mean pressure of the wind - the amount of rain was not sent to the Met. Soc. that month -

1842 Met. of Met Soc.

Rainfall at *Aske Gardens, Richmond, Yorks.**Jn^r Miller.*Diameter of Gauge, *12* in.Height above Ground, *3* ft. *2* in.Above Mean Sea Level, *550* ft.

YEAR - -			1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -				2.00	1.80	1.80	2.55	1.95	.75	2.50	
February - -				3.10	2.15	1.30	1.15	1.25	5.05	.65	
March - - -				.75	2.55	1.75	1.95	1.45	4.00	1.15	
April - - -		#	.25	3.30	.40	1.95	5.70	2.00	2.45	3.80	
May - - - -			2.50	4.30	.30	3.25	2.00	5.35	1.25	1.75	
June - - - -			1.35	3.50	1.55	3.40	3.25	2.40	6.90	1.10	
July - - - -			4.20	2.60	2.85	3.10	3.25	1.00	1.90	2.90	
August - - -			1.75	3.30	2.10	4.10	3.25	1.00	3.75	2.80	
September -			3.25	.58	2.35	1.90	1.60	1.10	2.70	3.75	
October - - -			1.30	4.50	1.80	4.75	5.15	3.25	5.50	4.10	
November -			3.80	2.85	3.05	2.25	2.65	2.55	2.40	1.55	
December -			.45	.30	.60	3.00	1.60	5.60	1.40	3.40	
TOTALS -	1			31.08	21.50	32.55	34.10	28.90	38.05	29.45	

RAINFALL AT Richmond Aske

Yorks NR

Observer

Rain { By.....
Gauge {
Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

From Total book

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....											
February.....											
March.....											
April.....											
May.....											
June.....											
July.....											
August.....											
September.....											
October.....											
November.....											
December.....											
TOTALS			25.20	31.70	19.85	33.35	33.10	34.05	32.55	30.40	30.615

RAINFALL AT Darlington

Observer.....

Rain { By.....
Gauge {

Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....										1849	MEANS.
January.....											
February.....											
March.....											
April.....										3.40	
May										1.75	
June... ..										.90	
July										2.40	
August										1.90	
September.....											
October											
November.....											
December.....											
TOTALS											

From Report to Board of Health by W. Ranger 1849

Bishopwearmouth
Sunderland

Cx

152

40

Henry Ogden

May Ret No 49

Diam 8 in + Ground ? 30 feet + Sea Level ? 130 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	1.68	1.57	2.30	.43	1.67	.72	1.65	.67	1.10	1.39	1.318
February - -	.85	.87	.46	2.58	1.01	.44	.20	.67	2.15	3.3	.956
March - - -	.60	.78	.80	.73	1.04	.90	.99	.65	2.73	1.01	1.023
April - - -	.22	.46	.39	2.27	.71	1.12	3.28	.80	1.05	2.86	1.316
May - - - -	2.54	1.46	.89	3.56	.28	1.35	1.11	6.14	1.81	1.81	2.095
June - - - -	1.43	1.05	.96	1.82	1.32	2.83	1.36	1.38	3.07	.77	1.799
July - - - -	2.57	1.80	1.70	2.24	1.80	2.66	2.61	.37	1.24	2.39	1.938
August - - -	1.84	2.46	1.13	.62	1.64	4.21	1.49	1.69	2.93	1.82	1.983
September -	3.65	1.43	1.61	.80	1.91	1.12	1.85	1.00	2.50	3.04	1.891
October - -	1.34	3.86	1.51	2.46	.93	3.48	3.26	4.04	4.52	1.74	2.714
November -	2.79	2.09	1.86	1.91	.86	.69	1.79	1.67	.95	.94	1.555
December -	1.25	1.72	.16	.15	.37	1.16	1.43	4.49	.97	1.86	1.356
TOTALS -	20.76	19.55	13.77	19.57	13.54	20.68	21.02	23.57	27.02	19.96	19.944

c c c c c c c c c c c

RAINFALL AT *Allenheads* [*Aston*]*Northumberland*Observer *Rev^d N. Walton*Rain { By *Cohen*
Gauge { *Newcastle*Diameter *12* in.Height above Ground, *2* ft. in.

Above Mean Sea Level ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....		5.55									
February.....		3.38									
March.....		3.90									
April.....		3.86									
May.....		2.73									
June.....		1.83									
July.....		4.04									
August.....		4.76									
September.....		4.63									
October.....		13.74									
November.....		4.44									
December.....		5.54									
TOTALS	54.67	58.40	41.75	45.83		56.41	54.62				

41 Ins. Met. Soc:

West Denton
4 m W. of Newcastle on Tyne

E. c. - 112

40

Observer G. C. Atkinson Esq.

Mss. Det. No. 5

Gauge 10 in²

4 in + Ground

250 ft + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -		.				1.15	2.16	1.43	1.05	2.68	
February - -						1.22	1.01	1.71	4.86	1.50	
March - - -						3.33	4.06	1.27	5.83	2.08	
April - - -						2.32	3.97	2.08	2.54	5.96	
May - - - -						4.33	2.43	6.22	1.52	2.81	
June - - - -						2.14	3.16	2.09	5.37	1.10	
July - - - -						3.19	3.56	1.72	2.74	3.36	
August - - -						7.60	2.96	1.65	3.13	5.80	
September -						1.66	2.18	1.34	2.94	4.08	
October - -						5.85	6.33	3.62	6.31	3.67	
November -						1.60	2.77	2.91	2.68	1.26	
December -						2.99	5.67	3.81	1.39	2.92	
TOTALS -						37.88	40.26	29.85	40.36	36.22	

✓ C. C. C. C. C.

Rainfall at North Shields

C. x. 20

40

Observer W. Brown

Authority - Mr. Atkinson's Rep.

Gauge

Above Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	1.80	1.88	2.98								
February - -	.94	1.25	.48								
March - - -	.45	.89	.45								
April - - -	.16	.84	.40								
May - - - -	3.78	1.64	.97								
June - - - -	1.48	1.11	1.02								
July - - - -	2.78	2.46	2.30								
August - - -	1.99	3.28	1.56								
September -	2.97	2.17	2.13								
October - -	1.56	4.56	1.65								
November -	2.72	2.20	2.29								
December -	1.16	1.89	.57								
TOTALS -	21.79	24.18	16.80	21.733			26.20				

0-41 Atkinson

42 Map of Met Soc & Atkinson's Rep

Parkend

Midley Esp.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -							2.50	.54	.91	5.19	
February - -							1.21	1.65	7.30	1.10	
March - - -							2.72	.84	2.99	1.99	
April - - - -							3.26	1.89	.84	3.46	
May - - - -							1.93	4.01	.59	2.07	
June - - - -							2.01	2.06	3.71	1.15	
July - - - -							4.19	1.23	3.38	2.63	
August - - -							3.61	1.32	2.01	2.56	
September -							2.13	1.23	1.44	2.11	
October - -							4.92	2.61	3.28	4.00	
November -							1.39	3.48	3.13	2.83	
December -							3.96	3.46	1.41	2.82	
TOTALS -							33.83	24.32	30.99	31.91	

6-9 Misses Park

Rainfall at Cheswick

Lat: 55° 41' N; Lon: 2° 3' W - 5 m S of Berwick

CXC 40
94

95 ft + Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								3.07	1.21	1.99	
February - -								1.14	3.84	.83	
March - - -								.46	3.26	1.42	
April - - -								1.11	1.52	2.23	
May - - - -								3.73	.77	2.00	
June - - - -								2.16	5.98	1.79	
July - - - -								1.86	1.87	2.26	
August - - -								1.78	2.46	2.25	
September -								1.24	.72	1.49	
October - -								2.33	4.37	2.61	
November -								1.48	.96	1.60	
December -								3.84	.97	2.95	
TOTALS -			17.8			32.39	36.56	24.20	27.93	23.42	

C

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3-9 Proc: Berwick Stat: club 5-22

Rainfall at Eskdale Head

E-x-81 40

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								# 3.84	6.35	9.89	
February - -								3.96	14.22	5.57	
March - - -								1.70	6.70	3.34	
April - - -								4.32	2.82	3.03	
May - - - -								5.46	1.83	4.56	
June - - - -								5.95	6.34	1.72	
July - - - -								3.21	7.21	8.83	
August - - -								5.02	8.42	5.04	
September -								8.14	3.99	4.47	
October - -								10.27	9.90	9.56	
November -								13.25	7.97	9.51	
December -								8.93	11.03	4.90	
TOTALS -								74.93	86.78	71.22	

7-9 Phil Tr 8-40

Rainfall at Eskdale Foot
= Centre of Dale

E-x-80

40

Unknown

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								3.66	4.92	8.97	
February - -								2.89	11.70	3.72	
March - - -								1.16	5.56	2.07	
April - - -							# 4.38	2.12	1.87	2.48	
May - - - -							3.15	3.99	1.01	3.85	
June - - - -							3.91	4.23	6.43	1.58	
July - - - -							9.12	1.67	5.98	7.21	
August - - -							6.82	5.33	7.45	5.55	
September -							3.83	6.68	3.72	3.42	
October - -							10.62	8.30	7.87	8.13	
November -							6.36	10.59	6.13	8.54	
December -							3.92	8.04	7.74	3.86	
TOTALS -								58.66	70.38	59.38	

c c c c

7-9 Phil Tr 80-36

may, Dec. of Gauge book
not April

Rainfall at Sea Foll Pike.

E-x-99

40

3166 + LL

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -									—		
February - -									—		
March - - -							# 6.51		—		
April - - -							4.39		—	1.48	
May - - - -							2.40	6.16	# 4.42	4.42	
June - - - -							5.00	5.05	8.58	2.75	
July - - - -							14.38	3.25	10.65	11.99	
August - - -							7.05	8.39	9.74	8.98	
September -							3.22	8.75	5.11	4.54	
October - -							13.40	12.38	10.96	14.00	
November -											
December -											
TOTALS -										76.71	

c c c c

Phil Tr. 8-48

1847 Dec. } Gauge burst.
1848 April }

40
Lays

1778

С. С. С. С. С.

9- Phil Tr 8-44

Rainfall at Wastdale Head

E-x-111 **40**

247

166 ft + S.L.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						11.00	12.97	3.99	6.06	21.35	
February - -						3.40	6.60	6.40	19.92	6.27	
March - - -						10.37	10.35	1.91	9.15	4.94	
April - - -						7.40	6.59	5.37	3.24	3.55	
May - - - -						4.13	3.65	5.30	1.54	5.60	
June - - - -						6.15	5.33	6.62	9.07	3.29	
July - - - -					6.36	5.42	16.82	3.80	10.66	14.29	
August - - -					10.74	12.31	8.96	7.79	10.74	7.65	
September -					9.23	7.53	3.79	11.94	5.47	4.22	
October - - -					9.45	12.35	15.75	13.53	11.88	14.84	
November -					5.26	12.31	8.59	17.54	11.10	14.39	
December -					.47	16.18	6.53	12.15	15.69	6.83	
TOTALS -					80.01	100.55	105.93	96.34	115.32	107.22	

c c c c c c c

5-9 Phil Tr 8-22

? is not the pencil value belonging to Gates girth 1844
No. 3

From Oct: 1846 to the close of Sep: 1847 two gauges were stationed at Wastdale Head, within 150 or 200 yards of each other; the gauge nearest to the head of the Valley & also to Sca Fell & Great Gable, received 3.59 in more than the other.

1846 - Frequently printed (incorrectly) as 106.93

1845 - Total misprinted as 109.55 in Mr S. Marshall's summary.
and as 100.55 in Britannia

Rainfall at Brant Pigg

E-x-76

by S of Middle Head
 400 ft above Sea Level
 1200 ft higher in an S.W. direction are 1924 1925
 500 ft above Sea Level

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								#	21.77		
February - -								1632	?	10.13	
March - - -								9.36			
April - - -								5.84	4.00		
May - - - -								5.96	1.98	4.72	
June - - - -								5.84	7.80	2.11	
July - - - -								2.65	0.12	10.03	
August - - -								7.48	9.16	9.14	
September -								9.03	4.76	3.70	
October - - -								12.97	11.36	10.93	
November - -								12.50	9.36	46.36	
December - -								10.80	8.80	?	
TOTALS -								83.63	98.31	79.12	

c c c

Phil Tr 0-56

Rainfall at Sparkling Tarn = Sprinkling Tarn E-SC-105
E by S of Wastdale Head

600 ft. above Strye Head Pass in a S direction and
1260 ft. higher in a S W direction are Sea Fell Pikes
1900 + S.L.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -									26.30	27.17	
February - -											
March - - -							# 14.94	15.92	8.04		
April - - -							5.38		2.31	4.14	
May - - - -							4.11	7.59	3.72	6.20	
June - - - -							6.55	8.13	11.52	3.71	
July - - - -							22.73	4.15	17.40	13.04	
August - - -							12.03	12.00	13.09	11.70	
September -							5.06	12.43	8.16	4.40	
October - -							20.35	18.00	17.06	19.48	
November -							9.40	22.64	11.44	20.84	
December -							6.50	13.15	16.40		
TOTALS -								114.01	135.44	110.68	

C C C C

Phil Tr B-32

RAINFALL AT Stye Head Tarn

*On the shoulder of Great Gable at the eastern extremity
of the Vale*

Observer.....

Rain { By.....

Gauge {

Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level.....ft.

1290

1447

YEAR.....							1846	1847	1848	1849	MEANS.
January.....											
February.....									27.54		
March.....								10.07			
April.....						x			9.17		
May.....							21.62		3.22	3.40	
June.....								7.56	3.10	6.00	
July.....							6.26	7.12	9.40	3.49	
August.....							17.76	3.66	13.18	14.50	
September.....							11.03	10.22	12.31	10.20	
October.....							4.22	10.92	7.51	4.87	
November.....							15.35	17.50	14.85	15.23	
December.....							7.32	20.00	11.34	15.88	
TOTALS.....							7.13	13.77	13.33		
								108.82	124.95	97.21	

x This gauge was not put up till May but to avoid confusion it was estimated up to the time the others were put up.

RAINFALL AT Great Gable

Observer.....

Rain { By.....
Gauge {

Diameter.....in.

Height above Ground,.....ft.....in.

Above Mean Sea Level 2925 ft.

YEAR.....							1846	1847	1848	1849	MEANS.
January.....											
February											
March							[#] 7.47	14.23	21.00	17.24	
April.....							4.83		2.29	1.86	
May							3.13	5.56	2.60	4.37	
June.....							7.60	6.57	9.00	3.30	
July							16.87	3.10	10.32	11.60	
August.....							8.65	7.90	9.79	8.10	
September.....							3.32	9.22	5.39	4.10	
October.....							12.82	10.95	9.71	15.00	
November.....								10.86	6.17		
December.....							3.90	7.00	8.05		
TOTALS								75.39	84.32	78.41	

c c c c

Rainfall at Leethwaite Borrowdale

40
E-x-100

Original Mps
6 in + Sea Level 368 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						16.01	17.07	6.29	9.67	24.96	
February - -						3.48	11.51	8.27	30.55	7.55	
March - - -						13.21	17.85	2.53	11.36	5.51	
April - - -						10.57	7.70	6.81	4.19	3.88	
May - - - -						4.57	4.40	8.08	3.05	6.52	
June - - - -						8.25	6.41	7.27	11.30	3.97	
July - - - -						8.65	20.80	3.32	17.76	16.64	
August - - -						15.61	10.58	10.48	13.91	9.92	
September -						9.77	4.60	13.28	7.00	4.08	
October - - -						15.17	25.43	20.52	17.32	16.14	
November - -						20.84	10.46	21.85	14.07	18.75	
December - -						24.94	6.70	20.54	20.71	7.55	
TOTALS -						151.07	143.57	129.24	160.89	125.47	

c c c c c

5-9 Phil Tr 8.30

The greatest fall in any one day was in Nov. 1845 being
6.62. 5.98 fell on Sunday in 1846. being Oct. 1847 Oct. 5.33
1848 Dec. 4.60, 1849 Oct. 3.78, 1850 Oct. 3.71, 1851 Jan. 4.24,
1852 Dec. 4.57. 1853 July 4.28

Rainfall at Leathercote Field

Ex - 101 **40**

Original Mss

¹⁸
22 in above ground

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								6.16	9.63	23.96	
February - -								8.03	29.98	7.25	
March - - -								2.65	11.18	5.32	
April - - -								6.78	4.12	3.78	
May - - - -								8.04	2.97	6.07	
June - - - -							# 6.46	7.18	11.19	3.93	
July - - - -							21.63	3.17	17.53	16.60	
August - - -							10.87	10.31	13.54	9.27	
September -							4.78	12.80	6.92	3.98	
October - -							26.22	20.09	16.81	15.88	
November -							10.89	21.26	13.54	18.46	
December -							6.94	20.33	19.81	7.07	
TOTALS -								126.80	157.22	121.57	

c c c c

7-9 Phil Tr 8-38

Rainfall at Stouthwaite Valley

Gummer

Original Mps

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -							*	5.67	7.86	20.02	
February - -								5.40	22.90	5.47	
March - - -								2.35	8.86	3.41	
April - - -								5.43	3.49	3.01	
May - - - -								7.67	3.03	4.24	
June - - - -								5.21	9.82	2.64	
July - - - -								2.35	14.34	11.18	
August - - -								7.78	10.36	7.65	
September -								10.00	4.88	3.63	
October - -								17.57	14.27	12.54	
November -								20.83	11.38	14.20	
December -								15.35	19.05	6.28	
TOTALS -								106.21	130.24	94.27	

7-9 Phil Tr 0-46

RAINFALL AT Wastdale Head

no 2

Observer.....Jⁿ Miller.....

Rain { By.....
Gauge {

Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....						1845	1846				MEANS.
January.....							12.47				
February							6.58				
March							10.07				
April.....							6.16				
May							3.44				
June.....							4.88				
July							16.59				
August.....							0.97				
September.....							3.64				
October						11.89					
November.....						11.90					
December.....						15.78					
TOTALS											

c c

RAINFALL AT Seatoller Common = Seathwaite Moor

Observer.....

Original Mass

Rain { By.....

Gauge { Diameter.....5.....in.

Height above Ground;.....ft.....in.

Above Mean Sea Level 133.7.ft.

YEAR.....							1846	1847	1848	1849	MEANS.
January.....											
February											
March											
April											
May											
June.....											
July											
August.....											
September.....											
October											
November.....											
December.....											
TOTALS											

1846 1847 1848 1849
 { 8.73 } 34.10 } 19.00
 { 14.20 } 7.10 } 7.40
 7.53 5.15 2.07 2.18
 2.75 7.13 2.80 3.84
 5.70 5.71 10.00 2.74
 18.35 2.50 15.00 12.58
 8.15 10.38 11.55 8.60
 3.75 12.06 5.42 3.98
 17.42 19.02 13.20 18.30
 { 13.63 } 18.07 12.63 12.73
 { 12.53 } 13.00 8.81
 101.28 126.95 100.16
 C C C C

Rainfall at Gillerthwaite, Ennerdale E-x-84

40

2 m. above the head of Ennerdale Lake,
and near the foot of Red Pike, & the Pillar Mountain.

286.326.396

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								3.50	7.20	14.20	
February - -								4.91	16.93	3.25	
March - - -								2.54	7.30	3.00	
April - - -							IV	4.30	3.00	1.80	
May - - - -							3.48	4.92	3.40	4.68	
June - - - -							5.76	4.83	6.16	2.80	
July - - - -							15.20	1.98	9.58	10.07	
August - - -							9.01	6.12	9.26	7.08	
September -							2.75	9.34	4.86	4.00	
October - -							15.78	10.50	9.70	11.60	
November -							7.90	17.10	9.60	9.60	
December -							3.94	10.09	10.74	4.33	
TOTALS -								80.13	97.73	76.41	

c c c c

See Ennerdale

7-9 Phil Tr 8-2 634

During 8 Months of '46 I at Bowness & Gillerthwaite
I stood $\frac{1}{2}$ at the higher station 8-2

Rainfall Ennerdale Lake (Bowness)

E-x-79

40

Phil. Trans.

+ Sea Level 246 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						7.56	8 08				
February - -						2.16	4 12				
March - - -						6.71	8 94				
April - - -						5.50	5 19				
May - - - -						3 20	3 13				
June - - - -						5.55	5 02				
July - - - -					5.55	5 05	13.48				
August - - -					X 4 86	10 01	7.32				
September -					6 33	5 48	3 25				
October - -					6 24	8 75	14 24				
November -				# 8.77	3 70	6 74	7 10				
December -				3.71	7 9	10 17	4 10	#			
TOTALS -					54.62	76.88	83.97				

c c c c c

5-6 Phil Tr. 8-14

The first of Miller's gauges.

See Gillerthwaite for cont.

X 4.16 in a Mps return

Rainfall at Stonywash
2 mi W of Emmerdale

40
E-x-107

Phil Trans

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -											
February - -											
March - - -											
April - - -											
May - - - -											
June - - - -											
July - - - -					4.15						
August - - -					4.16						
September -					5.42						
October - - -					4.49						
November - -					2.15						
December - -					.17						
TOTALS -											

Phil Tr g-1

Rainfall at The Fork 2½ m S of Whitehorn E-X-82

= elevation NW. T. Ainsworth

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						4.88	5.44	2.09	4.34	6.82	
February - -						2.76	2.17	2.01	9.82	2.63	
March - - -						4.24	4.80	1.23	5.38	1.12	
April - - -						2.67	3.60	3.27	.87	1.60	
May - - - -						1.74	2.64	3.04	2.23	3.17	
June - - - -						3.86	2.38	3.54	5.24	1.51	
July - - - -						3.52	8.88	1.20	4.60	6.34	
August - - -						7.22	5.31	4.98	8.07	4.27	
September -						4.11	2.86	4.21	2.72	2.89	
October - -						7.35	9.54	6.56	8.36	6.19	
November -						4.40	4.90	8.70	4.07	5.90	
December -						6.25	2.64	6.97	5.12	2.69	
TOTALS -				48.37	39.31	53.00	55.16	47.80	60.82	45.13	

c c c c c c c

5-9 Phil Tr 8-8

1843 from pamphlet by Dr Miller, lent by J. Sherwen 1x11

Rainfall Whitehaven (High St.) E-Jc-113

Dr
By John Fletcher Miller.

Gange Din

6 ft + G.L. 90 ft + S.L.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -	4.59	3.67	3.43	4.08	4.12	4.54	4.60	1.87	3.74	5.68	4.112
February- -	4.38	1.54	2.66	.86	3.50	2.83	2.01	1.03	7.82	2.05	2.948
March - - -	.40	3.80	4.91	1.93	3.74	3.75	4.46	1.37	4.59	.84	2.9779
April - - -	.58	3.80	.55	6.05	2.66	2.59	2.85	2.56	.49	1.49	2.362
May - - - -	3.78	2.95	2.29	2.02	.26	1.48	2.32	3.43	1.80	3.04	2.337
June- - - -	5.89	4.57	1.86	4.50	3.88	4.10	2.31	2.91	3.87	1.22	3.505
July - - - -	8.14	4.57	3.78	6.10	4.18	2.90	9.06	.77	3.63	5.48	4.861
August- - -	6.17	7.88	1.81	4.87	2.00	6.99	4.06	4.49	5.05	3.77	4.709
September -	5.75	5.67	2.87	.39	5.81	3.65	2.86	3.74	2.27	2.81	3.582
October - -	2.45	8.34	2.39	6.75	4.33	6.74	7.98	5.41	5.77	5.25	5.541
November -	4.42	3.96	3.70	5.57	1.93	4.02	4.67	7.94	3.51	4.97	4.469
December -	.89	5.28	4.44	2.30	.31	5.62	1.95	6.60	4.80	2.40	3.459
TOTALS -	47.44	55.97	34.69	46.22	36.72	49.21	49.13	42.92	47.34	39.00	44.864

[illegible]

1843 Given by Atkinson of Flarraby as 47.236 in.

Rainfall St. James Church Whitehorn E-x-115

Gauge

70 ft + G.L. 90 ft + S.L

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						2.77	3.29	1.36	3.30	3.52	
February - -						2.03	.96	1.37	6.40	1.42	
March - - -						2.85	2.15	1.10	3.50	4.4	
April - - -						1.77	2.13	1.88	.29	1.10	
May - - - -						.99	1.62	2.97	1.45	2.34	
June - - - -						3.17	1.68	2.41	3.04	.76	
July - - - -						1.98	6.99	.82	2.44	3.62	
August - - -						1.41	5.10	3.32	2.81	4.19	4.04
September -						2.41	2.16	2.37	1.72	2.04	
October - -						4.85	6.12	3.84	4.63	3.94	
November -						2.35	3.76	5.39	2.19	3.46	
December -						3.22	12.24	4.39	3.19	1.54	
TOTALS -						27.86	33.49	35.42	30.71	36.34	28.22

July
Dec
= 14.55

c c c c c c c

5-9 Phil Tr 8-6

* From Dr Miller's pamphlets 1x11

RAINFALL AT Whitehaven

Observer.....

Rain { By.....
 Gauge { Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....									1848	MEANS.
January.....									2.42	
February									5.64	
March									4.13	
April.....									3.83	
May									1.53	
June.....									4.12	
July									5.47	
August.....									4.16	
September.....									3.76	
October									5.80	
November.....									3.51	
December.....									4.83	
TOTALS									49.20	

8- Johnson's Gardeners Almanac

Rainfall at Round Cove Whitehaven

E-50-114

500
+ Sea Level 400 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								1.53	3.74		
February - -								1.41	7.99		
March - - -								1.19	3.93		
April - - -							# 2.71	2.71	.34		
May - - - -							2.44	3.57	1.61		
June - - - -							2.10	3.30	4.04		
July - - - -							8.63	.77	3.86		
August - - -							3.46	4.49	5.50		
September -							2.57	3.48	2.12		
October - -							7.80	5.10	5.68		
November -							4.59	8.23	3.41		
December -							1.89	6.24	4.48	#	
TOTALS -								42.02	46.70		

c c c

7-8 Phil Tr 8+32

Rainfall at Gatesgarth, Buttermere E-2c-83

290

326 ft + S.L.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						13.78	12.81	4.34	8.25	17.54	
February - -						2.61	9.88	5.07	24.78	4.65	
March - - -						9.07	15.07	2.65	8.57	3.53	
April - - -						10.60	7.11	5.47	3.54	2.69	
May - - - -						4.90	3.69	5.32	3.17	5.42	
June - - - -						8.02	5.85	5.86	8.31	2.24	
July - - - -					# 5.70	8.72	19.51	1.99	13.66	13.94	
August - - -					9.08	15.75	10.68	9.14	11.37	6.19	
September -					7.92	8.49	3.33	10.13	5.43	3.89	
October - -					10.78	10.88	18.78	16.83	15.72	18.25	
November -					5.49	13.48	10.15	22.86	12.40	13.02	
December -					.47	17.83	5.94	16.59	18.35	5.73	
TOTALS -						124.13	121.90	106.25	133.55	97.09	

c c c c c c c

5-9 Phil Tr 8-10
 44 6-35

I want 1000 the first date fall

Rainfall Crummock Lake
= Buttormore

E-x-78

40

283

260 ✓

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -						9.53	8.98	3.75	7.30	12.17	
February - -						1.70	6.57	3.20	14.48	3.38	
March - - -						7.06	11.94	2.19	6.77	2.48	
April - - -						7.31	5.52	4.05	2.83	2.91	
May - - - -						3.62	3.62	4.91	1.52	4.21	
June - - - -						5.97	5.70	5.48	7.17	2.13	
July - - - -					4.59	6.39	15.21	1.65	10.41	9.53	
August - - -					7.55	11.17	6.92	7.57	9.73	5.38	
September -					6.33	6.54	3.19	6.99	4.63	3.30	
October - - -					8.22	8.20	16.22	11.96	11.11	11.64	
November -					3.69	8.50	8.70	17.71	7.62	8.84	
December -					.33	11.49	3.90	12.86	14.50	4.24	
TOTALS -					61.46	87.48	96.47	82.32	98.07	70.21	

c c c c c c

5-9 Phil Tr 18-10
4 - 6-35

Rainfall Louiswater Lake

E-c-89

40

Phil: Trans.

336 ft + L.L.

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -			2.11	1.70	1.85	7.10	7.06	3.13	5.18	10.55	
February - -			4.26	4.22	2.73	1.90	4.52	3.40	12.97	2.74	
March - - -			5.92	1.83	4.98	5.01	8.67	1.46	5.71	2.13	
April - - -			6.2	2.56	2.14	4.86	4.40	4.18	1.63	2.21	
May - - - -			1.24	3.31	2.3	2.63	2.51	4.10	1.78	3.21	
June - - - -			1.45	4.29	2.95	4.95	5.01	4.23	6.24	1.72	
July - - - -			1.98	1.92	3.42	5.27	13.43	1.11	7.43	8.15	
August - - -			2.80	5.23	5.56	8.86	5.42	6.57	7.79	4.90	
September -			2.72	3.6	6.19	4.58	2.91	6.59	3.76	3.22	
October - -			3.26	7.32	7.12	7.45	13.49	8.84	8.13	7.06	
November -			4.26	4.78	3.05	6.96	7.74	14.23	6.55	6.27	
December -			4.46	1.95	3.1	9.17	4.09	8.46	10.10	3.12	
TOTALS -					49.83	69.54	79.25	66.30	76.67	55.28	

c c c c c c

5-9 Phil Tr of 16 1844-6-35

Rainfall Keswick

E-x: 96

J. Otley

J. Otley's Map.

250

+ Sea Level 258 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -			2.11	6.70	4.85	6.43	5.11	3.08	4.11	11.03	
February - -			4.06	4.12	2.73	1.00	4.84	2.07	10.28	2.26	
March - - -			5.93	1.82	4.98	3.98	8.54	1.27	4.74	1.69	
April - - -			.62	7.56	2.14	4.89	4.55	3.32	1.72	2.36	
May - - - -			3.24	2.51	.20	2.27	1.72	5.07	1.06	2.36	
June - - - -			3.65	4.39	3.95	4.03	4.71	3.62	5.04	1.03	
July - - - -			5.98	6.92	3.05	4.11	9.32	1.41	6.25	5.10	
August - - -			2.80	5.23	5.73	8.80	4.68	4.07	6.28	6.13	
September -			2.72	.36	4.78	5.00	2.90	5.32	2.10	2.99	
October - -			3.26	9.32	5.27	5.95	12.25	8.81	7.16	5.85	
November -		4.26	4.78	8.15	2.84	7.14	6.47	11.42	6.70	5.62	
December -		8.16	6.95	2.58	.11	8.60	2.59	8.82	10.97	2.38	
TOTALS -	(57.20)	(69.00)	46.10	59.66	40.63	62.20	67.68	58.28	66.41	48.80	57.596

c c c c c c c c c c

5-9 Phil Tr. 8-12

Verified throughout by J. O's Maps

RAINFALL AT

Pennith Greystoke Castle
Cumberland

40

Observer.....

Rain { By.....
Gauge { *Crossley*.....
Diameter *10* \square in.

Height above Ground,.....ft.....in.

Above Mean Sea Level *700* ft. *9*

YEAR.....						1845	1846	1847	1848	1849	MEANS.
January.....							3.64	2.18	1.89	7.82	
February.....							2.54	2.10	9.72	2.25	
March.....							5.30	1.21	1.79	1.40	
April.....							3.05	3.23	2.81	2.07	
May.....							1.79	4.03	1.12	.62	
June.....							5.08	3.00	4.90	.72	
July.....							* 16.95	.10	2.75	3.81	
August.....							3.57	2.22	3.75	5.06	
September.....							1.65	3.50	2.63	3.03	
October.....						2.42	7.19	7.17	3.96	3.26	
November.....						6.24	4.54	6.34	3.94	4.33	
December.....						5.54	1.44	2.68	4.74	2.01	
TOTALS							56.74	37.76	44.00	36.38	

Copied from the original register by T. G. Benn who states. "The observer in years gone by has had a very limited knowledge of decimals." The amounts are entered in inches tenths hundredths and there are numerous cases of $\frac{1}{200}$ which have muddled the computer"
1846 July 5 9.53 inches from $\frac{1}{2}$ past 3 to $\frac{1}{2}$ past 5. (Quotation from original register.

1845 - From MS. book of S. A. Marshall - His record agrees with this except occasionally by .01

RAINFALL AT Crewgarth, Penrith Ousby

40

Rain { By
Gauge { Diameter.....in. Height above Ground, ft. in. Above Mean Sea Level, ft.

YEAR	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January	3.12	1.87	1.36	1.97	1.82	.99	1.75	1.41	1.39	3.45	1.913
February	1.38	1.11	1.62	.63	1.09	.73	.88	.66	4.67	1.13	1.390
March .....	.57	1.88	2.09	.96	3.21	1.77	1.95	.58	2.71	.71	1.643
April .....	.15	1.38	.14	3.56	1.13	1.74	2.94	1.48	.78	1.68	1.498
May	2.92	1.51	1.23	2.32	.23	.85	1.70	4.41	.97	1.09	1.723
June	1.62	1.68	1.49	1.67	1.62	2.43	5.13	1.84	4.35	.57	2.240
July	3.99	3.52	2.89	3.33	3.66	2.11	4.21	1.51	2.25	3.24	3.071
August	2.58	3.78	2.18	1.31	3.18	6.40	2.82	1.93	2.76	3.05	2.999
September ...	3.37	2.61	1.52	.49	2.76	2.36	1.62	2.18	1.78	3.38	2.207
October	1.08	4.46	2.82	2.99	1.54	3.79	4.71	2.47	2.65	2.92	2.943
November ...	3.10	2.74	1.77	3.16	1.83	2.39	2.99	3.53	1.66	2.31	2.548
December .....	.62	2.30	1.25	.83	.16	2.92	1.08	3.35	2.48	1.76	1.675
TOTALS.....	24.50	28.84	20.36	23.22	22.23	28.48	31.78	25.35	28.45	25.29	25.850

c c c c c c c c c c c

RAINFALL AT HallsteadsCumberlandper Stephen A Marshall Esq

Rain { By.....
 Gauge {
 Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....	9.70	3.20	3.50	7.80	3.50						
February.....	5.40	3.70	5.80	1.90	2.40						
March.....	.60	7.60	6.40	1.80	5.00						
April.....	.40	3.80	.70	7.10	1.70						
May.....	2.50	4.80	3.80	3.40	.00						
June.....	4.50	2.70	5.60	5.80	3.00						
July.....	5.50	3.30	5.60	6.10	4.10						
August.....	5.00	5.60	3.20	3.20	4.00						
September.....	6.80	5.70	2.40	.40	4.20						
October.....	1.10	8.40	2.60	8.50	4.30						
November.....	6.30	4.70	8.10	8.80	1.90						
December.....	.90	7.40	6.40	2.60	1.00						
TOTALS.....	48.70	60.90	54.10	57.40	35.10						

(?) For continuation of this record see previous sheet

Copied from original registers

Sent by Mr S.A. Marshall, xii. 98 Ent'd 1. xii. 08

RAINFALL AT Hallstead
Uxwater

Rain { By
Gauge {
Diameter.....in. Height above Ground, ft. in. Above Mean Sea Level, ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January	9.90	3.10	3.60	8.00	3.70	5.50	3.50	4.30	3.80	6.20	5.160
February	5.60	3.70	6.00	1.80	2.60	.60	4.60	2.30	10.50	2.60	3.980
March .....	.60	7.80	6.60	1.90	4.90	2.50	7.80	1.90	3.90	1.70	3.960
April .....	.40	3.70	.80	7.20	1.70	4.10	3.20	3.20	2.70	1.80	2.880
May	2.40	4.90	3.90	3.60	0.00	2.20	1.90	5.20	1.50	2.20	2.780
June.....	4.60	2.80	5.70	6.00	2.90	4.50	4.80	2.40	6.20	.30	4.020
July	5.50	3.30	5.70	6.30	4.30	3.80	7.00	1.70	4.70	4.10	4.640
August	5.00	5.70	3.30	3.40	4.20	6.20	3.90	3.10	3.80	5.00	4.360
September ...	7.00	5.80	2.50	.30	4.30	4.50	3.00	4.40	3.90	5.30	4.100
October.....	1.20	8.50	2.70	8.60	4.30	5.80	10.80	8.90	5.40	8.30	6.450
November.....	6.10	5.00	8.00	8.70	2.00	6.20	5.30	10.30	4.00	8.30	6.390
December.....	1.00	7.60	6.60	2.70	1.00	6.70	1.30	9.20	10.80	2.00	4.890
TOTALS	49.30	61.90	55.40	58.50	35.90	52.60	57.10	56.90	61.20	47.80	53.610

c c c c c c c c c c c

1841 Cor^{re} sent by Stephen Marshall 12. xii 98 Ent^d 1. xii 08.
* Mr Marshall says these obs. were at Oldchurch (in Hallstead Park) 1835-44. The remainder probably should be on the next sheet (Hallstead)

RAINFALL AT Hallstead "The Knotts" SW.

Cumberland

~~per~~ Stephen A Marshall Esq

Rain { By.....
Gauge {
Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....											
February.....											
March.....											
April.....											
May.....											
June... ..											
July.....											
August.....											
September.....											
October.....											
November.....											
December.....											
TOTALS	33.20	38.90	28.10	36.10	25.00						

From originals per S.A.M. xii - 98. Ent? 1. xii. 08.

Apparently worthless. cs.

RAINFALL AT Hallsteads, "The Knotts", "old top"
Cumberland

~~per~~ Stephen A Marshall Esq

Rain { By.....
Gauge {
Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....											
February.....											
March											
April.....											
May											
June											
July											
August											
September.....											
October											
November.....											
December.....											
TOTALS	30.20	37.30	24.60	32.40	22.60						

From originals by S.A.M. xii 98. Ent^d 1. xii 08.

Apparently worthless CS.

RAINFALL AT Hallsteads, "The Knolls" top Cumberland

~~per~~ Stephen A. Marshall Esq

Rain { By.....
Gauge {
Diameter.....in. Height above Ground,.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1848	MEANS.
January.....											
February.....											
March.....											
April.....											
May.....											
June.....											
July.....											
August.....											
September.....											
October.....											
November.....											
December.....											
TOTALS.....	51.00	54.10	44.80	52.20	35.10						

from originals by S. A. M. - XII. 98

Ent? I. XII. 08

RAINFALL AT Hallsteads "The Knolls" NE.

Cumberland

~~Record~~ *Stephen A Marshall Esq*

Rain { By.....
Gauge {
Diameter.....in. Height above Ground.....ft.....in. Above Mean Sea Level.....ft.

YEAR.....	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January.....											
February.....											
March.....											
April.....											
May.....											
June.....											
July.....											
August.....											
September.....											
October.....											
November.....											
December.....											
TOTALS.....	51.80	54.40	47.60	51.00	32.20						

From originals, by S.A.M. xii 98. Enr? 1. xii .08.

Rainfall at Bapentworth Hall
Base of Shiddaro

E-se-75

214 or 210 ✓

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -								# 2.31	3.42	7.36	
February - -								1.73	0.11	2.10	
March - - -								1.10	3.00	1.94	
April - - -								2.06	2.23	2.74	
May - - - -								3.95	.53	2.08	
June - - - -								3.59	3.53	1.52	
July - - - -								1.13	3.45	4.04	
August - - -								3.76	4.72	4.71	
September -								4.40	2.21	2.04	
October - -								5.13	5.12	4.66	
November -								8.70	4.77	4.80	
December -								6.59	5.97	2.01	
TOTALS -								44.45	47.06	40.00	

c c c

7-9 Phil Tr p-42

Rainfall at Cockermouth

E-40

+ Sea level 127 ft

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -					#	3.19	4.15	1.49	3.80	7.18	
February - -						10.05	2.45	1.62	9.73	1.85	
March - - -						3.89	5.11	5.3	3.80	1.47	
April - - -						2.33	2.63	1.94	1.00	1.91	
May - - - -						1.97	1.68	3.50	.71	2.34	
June - - - -						3.09	3.84	3.12	4.36	1.41	
July - - - -						2.60	10.19	1.17	4.10	3.91	
August - - -						8.72	4.65	4.76	7.31	3.85	
September -						3.83	2.10	4.57	2.51	2.33	
October - -						6.59	8.94	5.47	4.44	5.43	
November -						3.10	4.08	8.10	4.80	4.83	
December -						6.57	2.59	6.28	5.81	1.88	
TOTALS -						46.93	52.41	42.56	52.37	38.39	

c c c c c

5-9 Phil Tr 8-10

Rouinfall at Wyton Hall

E-50-71 **40**

Norman Inglis for Rev^d R. Matthews

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January - -				2.96		2.15	3.01	1.77	1.71	5.23	
February - -				1.42		.93	1.45	1.00	9.32	1.35	
March - - -				.99		2.72	3.50	1.05	2.75	.71	
April - - -				4.89		1.65	3.30	1.62	1.51	1.81	
May - - - -				3.31		1.07	1.48	4.11	.60	2.09	
June - - - -				2.16		3.07	3.91	3.07	4.81	.69	
July - - - -				5.97		2.26	8.15	.00	2.73	2.55	
August - - -				4.17		4.21	4.96	2.81	2.89	4.01	
September -				.55		3.65	1.08	3.08	1.26	1.72	
October - -				5.03		6.45	5.24	4.99	3.37	4.15	
November -				4.21		3.33	3.40	5.27	2.83	3.47	
December -				2.05		4.93	1.58	3.56	3.23	1.56	
TOTALS -	35.19	37.02	25.73	37.71	31.90	36.42	41.06	32.33	37.01	29.34	34.371

c c c 37.85 c c c c c c c
3 - four of R. Apr to 6-54

Nyct. Sta. No. 44 - 596959

alt 38m

NGR: NY (35) 277483

RAINFALL AT *Harroby (Crosley's G.)* 40

1 mile SE of Carlisle

Rain Gauge { By Grosvenor
Diameter.....in.

Gauge { Diameter.....in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

[illegible]

RAINFALL AT

D^r Elliot

Carlisle

40

*Copied from D^r Elliot's Register
returned to Rev. F Bedford*

Rain { By
Gauge { Diameter.....in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

YEAR	1840	1841	1842							MEANS.
January	2.95	3.68	1.95							
February	2.81	1.23	1.60							
March .....	.58	2.21	3.35							
April .....	.38	2.74	.17							
May	2.43	2.04	1.65							
June	3.79	2.77	1.58							
July	6.46	4.66	2.77							
August	2.74	4.92	1.63							
September ...	3.70	3.73	1.52							
October	1.58	5.55	1.70							
November ...	2.84	2.67	1.94							
December .....	.58	3.12	1.54							
TOTALS.....	30.84	39.32	21.40							

*35.70 39.34 21.40 30.07 Totals as sub up by Rev Bedford of Carlisle
D^r Elliot died July 9 1844 aged 34*

RAINFALL AT Carlisle, Parhambeck Church.

By Rees.

Hyd. Sta. No. 606281

NGR: (35) 392558

Alt. 15m.

Rain { By
Gauge { Diameter.....12.5 in.

Height above Ground, 0 ft. in.

Above Mean Sea Level, ft.

YEAR	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	MEANS.
January						1.00	2.56	.94	1.29	3.30	
February						1.37	.98	.79	5.84	1.20	
March						1.51	1.78	.45	2.58	.40	
April .....						.80	2.69	1.05	.87	2.35	
May .....						.83	1.28	4.85	.49	2.20	
June						2.66	3.81	1.50	6.16	.90	
July						2.31	7.00	.69	2.40	1.75	
August						4.38	2.84	1.78	3.10	4.00	
September ...						2.68	1.01	1.68	1.44	2.62	
October						5.02	4.64	3.53	3.21	4.31	
November ...						1.74	2.80	3.51	2.50	2.07	
December						3.03	1.52	3.10	2.30	1.76	
TOTALS						27.33	32.91	25.87	32.28	26.86	

c c c c c

4 on top of wall house facing S.W. of bay to NE
10 or 15 ft from the wall of the house

Rainfall at Harroby w: barbide

E. X-10

Observer Jos: Atkinson Esq.

Authority - Mr. A's Mps.

Gauge 12 in diam: 6 ft above ground Above Sea Level
Clear of trees &c

YEAR - -	1840	1841	1842	1843	1844	1845	1846	1847			MEANS.
January - -	3.31	2.36	2.33	2.58	2.23	1.42	2.79	1.09			
February - -	2.27	1.25	1.32	1.33	1.42	.98	1.50	1.00			
March - - -	.72	2.41	2.96	1.15	3.15	1.88	2.28	#			
April - - -	.30	2.43	1.42	5.20	1.66	1.04	3.12				
May - - - -	2.43	2.17	1.67	3.02	.37	1.07	1.59				
June - - - -	4.05	3.24	1.85	3.27	2.71	2.98	4.73				
July - - - -	7.27	3.17	2.53	4.51	4.18	2.19	5.17				
August - - -	2.04	6.21	1.67	1.69	3.65	4.26	3.12				
September -	4.06	3.86	1.81	.62	4.69	3.18	.87				
October - -	1.77	5.36	1.80	3.59	2.58	5.69	4.49				
November -	2.71	3.23	1.93	2.16	1.36	2.60	2.89				
December -	.37	3.39	1.54	1.18	.23	3.99	1.58				
TOTALS -	32.10	39.08	21.83	30.30	28.23	31.28	34.13				

c c c c c c c c c

J. Atkinson died 24 March 1847

1840 Pres. of Met Soc agrees

1841 " " "

1842 " " "

[Faint handwritten text]

RAINFALL AT

Carlisle Athenaeum
Mech. Inst.

40

W. Fisher

W. Atkinson's Map

Rain (By
Gauge)

Diameter.....in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

YEAR	1841	1842	1843	1845	1846	1847	1848	MEANS.
January	2.36	2.12	1.91	1.18	2.56	.89	1.47	
February	.99	1.36	1.29	1.17	1.64	.91	6.49	
March	2.44	2.83	.93	1.91	2.16	.59	2.93	
April	2.44	.26	4.28	.92	2.86	1.26	1.14	
May	1.91	1.63	2.94	1.79	1.55	4.81	.82	
June	2.90	1.85	2.87	2.78	4.23	2.52	6.36	
July	2.94	2.72	4.48	2.26	6.55	.99	2.83	
August	5.06	1.64	2.60	4.74	3.01	2.10	3.39	
September	3.65	1.72	.39	3.05	.90	2.07	1.50	
October	5.35	1.69	3.74	4.73	4.74	4.18	2.99	
November	2.55	2.06	3.61	2.41	3.01	3.90	3.08	
December	3.39	1.43	1.53	3.26	1.37	3.22	2.46	
TOTALS	35.98	21.31	30.57	28.68	30.15	34.58	27.44	35.46

C C 30.37 C C C C C

Decr 1845 2.50 in one of Mr A's Map.

45-48 from pp table