

Roanoke Castle
Kainfall at Darlington

South End Gardens

E-9-150

YEAR - -	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	MEANS.
January - -										0.69	
February - -										0.99	
March - - -										2.40	
April - - -										1.98	
May - - - -										3.0	
June - - - -										2.85	
July - - - -										4.44	
August - - -										1.91	
September -										2.25	
October - -										2.50	
November -										4.73	
December -										2.61	
TOTALS -										27.65	

Obs bad till 1859

Darlington
South End Gardens

John Richardson

Barilla

40 645

5 in + ground 4 ft + Sea Level 140 ft

YEAR - -	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS.
January - -	2.55	1.39	2.01	2.41	1.17	1.03	3.47	5.50	4.58	2.46	2.657
February - -	1.99	6.28	.79	.57	1.20	.96	1.59	1.86	1.33	.78	1.735
March - - -	2.39	3.94	3.48	1.54	2.50	1.64	3.78	4.60	1.44	1.71	2.702
April - - - -	.77	1.43	.90	.55	1.24	1.60	2.69	3.92	2.19	1.16	1.645 -
May - - - - -	4.25	.65	1.02	1.29	1.81	3.59	1.20	3.72	1.62	3.28	2.323
June - - - - -	2.82	4.12	2.22	2.29	2.24	.74	2.87	2.63	.46	1.32	2.171
July - - - - -	3.76	2.68	1.99	.65	.65	1.92	5.94	4.11	2.00	1.01	2.471
August - - -	3.61	2.24	2.27	2.22	1.92	5.19	3.62	4.51	3.13	1.43	3.016
September -	1.19	2.91	1.04	1.61	1.61	.28	7.24	2.60	5.47	3.76	2.771
October - - -	2.00	1.28	2.50	3.03	2.32	5.56	2.69	1.85	2.61	2.45	2.629
November -	2.08	3.66	1.27	1.95	2.89	2.69	1.92	1.19	2.11	2.26	2.202
December -	4.50	2.25	.96	1.15	2.56	1.85	1.70	4.30	10.31	2.41	3.199 *
TOTALS -	31.91	32.83	21.25	19.26	22.11	27.05	38.71	40.79	37.25	24.03	29.519

2 2 2 2 2 2 2 2 2 2 2 2

On lawn 150 yds from the house & quite clear of any obstruction.

1869 Oct 16th - G. lowered from 4 ft to 3 ft -

1867 - Agrees with ppt by S. Marshall

Extract from letter dated Feb 8th 1869 "Mr. Flaisher has been here, and says, that it is "not in nature to give the quantity of Rain I have got, he has not been able to point me out the fault, (if there is one) and the gauge is the same, and in the same position, in which he left it three years ago he then measured it to 4.931 inches. — I have ordered from Mr. Flaisher, one of his own gauges by which to test my present one, and if you would kindly advise me regarding the position best for it, I will go by your directions as near as I can."

RAINFALL AT *Cardington Southend**Durham*

Observer.....

Rain { By.....

Gauge { *Clair's gauge*Diameter.....*8*.....in.

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

Above Mean Sea Level.....ft.

YEAR.....	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS.
January.....											
February.....											
March.....											
April.....										<i>#1.72</i>	
May.....										<i>1.20</i>	
June.....										<i>3.35</i>	
July.....										<i>1.33</i>	
August.....										<i>1.03</i>	
September.....										<i>1.48</i>	
October.....										<i>4.11</i>	
November.....											
December.....											
TOTALS.....											

Gauge started in accordance with note on preceding sheet.

RAINFALL AT *(Darlington South End)*

Lat..... Lon..... County of *Durham*
 Rain Gauge, by..... Observer *Mr. Jas. Richardson*
1875 W. N. Black

Diameter.....	<i>8</i>	<i>8</i>									
Height.....	<i>10</i>	<i>10</i>	<i>10</i>								
Altitude.....	<i>130</i>		<i>140</i>								
YEAR.....	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January.....	<i>1.80</i>	<i>1.00</i>	<i>2.36</i>			<i>2.29</i>	<i>.52</i>	<i>3.98</i>	<i>2.17</i>	<i>1.19</i>	
February.....	<i>1.75</i>	<i>1.66</i>	<i>2.57</i>			<i>.46</i>	<i>1.84</i>	<i>1.51</i>	<i>1.09</i>	<i>2.76</i>	
March.....	<i>1.56</i>	<i>.81</i>	<i>2.96</i>			<i>.50</i>	<i>2.58</i>	<i>1.88</i>	<i>.72</i>	<i>.94</i>	
April.....	<i>.45</i>	<i>2.48</i>	<i>2.54</i>			<i>.80</i>	<i>2.50</i>	<i>4.13</i>	<i>2.25</i>	<i>1.91</i>	
May.....	<i>.76</i>	<i>1.51</i>	<i>2.01</i>			<i>.94</i>	<i>1.20</i>	<i>2.18</i>	<i>3.57</i>	<i>1.32</i>	
June.....	<i>1.73</i>	<i>3.60</i>	<i>2.47</i>			<i>2.71</i>	<i>2.13</i>	<i>1.34</i>	<i>2.13</i>	<i>3.74</i>	
July.....	<i>.41</i>	<i>3.53</i>	<i>2.89</i>			<i>5.16</i>	<i>2.45</i>	<i>3.46</i>	<i>1.01</i>	<i>3.05</i>	
August.....	<i>2.18</i>	<i>1.14</i>	<i>4.47</i>			<i>1.91</i>	<i>1.92</i>	<i>5.50</i>	<i>4.58</i>	<i>2.83</i>	
September.....	<i>.47</i>	<i>3.66</i>	<i>5.03</i>			<i>2.97</i>	<i>3.34</i>	<i>1.95</i>	<i>1.43</i>	<i>1.03</i>	
October.....	<i>4.94</i>	<i>2.10</i>	<i>5.90</i>			<i>4.32</i>	<i>1.66</i>	<i>2.90</i>	<i>1.70</i>	<i>.65</i>	
November.....	<i>1.94</i>	<i>1.37</i>	<i>4.62</i>			<i>5.49</i>	<i>2.95</i>	<i>2.47</i>	<i>5.16</i>	<i>1.97</i>	
December.....	<i>3.13</i>	<i>1.41</i>	<i>2.68</i>			<i>1.63</i>	<i>5.58</i>	<i>1.67</i>	<i>2.47</i>	<i>.79</i>	
TOTALS.....	<i>21.15</i>	<i>24.27</i>	<i>56.56</i>	<i>(17.50)</i>	<i>(20.00)</i>	<i>29.18</i>	<i>28.67</i>	<i>32.97</i>	<i>28.28</i>	<i>22.18</i>	<i>(16.07)</i>

1871 - Diam: returned as 9 in, should be 8 in.

1873 + 1874 estimated from Eaglescliffe [Yarm]

Ganiford + Brinkburn

RAINFALL AT *Darlington South End*

Lat.....

Lon.....

County of.....

Durham

Rain Gauge, by.....

Observer.....

W. J. Richardson

Diameter.....	.5										
Height.....	3	1	0	10							
Altitude.....	140	140.0									
YEAR.....	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January.....	1.38	.67	1.90								
February.....	1.09	1.29	1.66								
March.....	1.20	.76	1.26								
April.....	.47	2.02	2.11								
May.....	.70	1.32	1.87								
June.....	1.60	3.21	2.19								
July.....	.44	2.09	2.61								
August.....	1.79	1.00	3.84								
September.....	.55	3.30	2.92								
October.....	4.54	1.95	3.58								
November.....	1.67	1.64	3.69								
December.....	2.54	.97	2.23								
TOTALS.....	17.97	21.10	29.86								

1870 The best recorded since the commencement of my record in 1858 The almost total absence of Thunder showers and rather dry Summer I think are sufficient to account for it

RAINFALL AT Darlington, South End

Lat.

Lon.

County of Durham

Rain Gauge, by

Observer W. N. BlackYear 1

Diameter	8											
Height	0.10											
Altitude	140											
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.	
January .....	.37	.90	1.06	2.65	3.53	2.03	3.32	1.69	.66	.92	1.713	
February	1.62	3.39	.71	2.02	.98	1.16	.71	.76	1.37	1.10	1.382	
March	1.10	2.94	1.84	1.26	2.49	1.86	2.48	2.24	3.63	2.77	2.261	
April	2.26	1.18	4.50	1.99	1.89	1.61	1.98	.79	2.47	2.32	2.099	
May	1.46	.96	1.93	1.62	.44	3.18	4.23	1.83	.60	2.33	1.858	
June	1.45	1.84	4.98	2.49	.65	2.02	.95	.56	2.34	.22	1.750	
July	5.11	3.79	4.14	3.44	3.85	.56	4.52	1.16	3.68	2.31	3.256	
August	1.75	6.27	2.56	1.35	1.02	1.84	1.46	1.90	1.77	3.27	2.319	
September	4.66	2.97	2.50	3.00	1.11	2.01	1.91	2.49	1.18	.54	2.237	
October	5.08	2.84	3.73	1.98	1.31	3.85	4.10	1.68	.41	4.37	2.985	
November	2.43	2.39	3.06	1.22	1.59	1.70	3.09	3.19	3.66	1.11	2.344	
December	3.63	2.90	4.70	1.17	1.63	.73	3.87	1.93	.96	1.46	2.298	
TOTALS	30.92	32.37	35.71	24.19	20.49	22.55	32.62	20.22	22.73	22.72	26.452	

RAINFALL AT *Darlington South End*

Lat. _____

Lon. _____

County of *Durham*

Rain Gauge, by _____

Observer *Mr N. Black*

Feet 1.

Diameter	8										
Height	0 10										
Altitude	140										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	2.21	1.00	1.57	1.92	1.58	4.30	1.01	1.84			
February	1.13	.05	2.28	2.29	2.88	.98	.49	1.70			
March	1.70	1.52	.97	.42	.76	2.15	1.88	2.54			
April .....	.95	2.66	1.26	.49	1.68	1.87	.77	1.91			
May	2.08	2.16	3.08	2.24	2.75	.91	.55	1.80			
June	2.32	.53	3.55	.78	3.74	1.74	2.98	2.34			
July	2.01	4.40	1.36	2.47	1.89	5.50	2.17	.97			
August	4.41	3.67	4.05	1.81	2.26	2.03	1.37	2.66			
September....	2.09	1.94	2.12	1.53	.69	.73	3.18	1.87			
October.....	1.39	2.96	4.52	.99	4.89	3.79	4.08	1.86			
November....	3.61	2.25	1.16	2.36	1.01	3.04	1.23	1.88			
December	1.40	2.79	1.01	2.06	1.60	1.94	3.72	2.43			
TOTALS . .	25.30	25.93	26.93	19.36	25.73	28.98	23.43	23.80	21.00	26.50	24.696

1898 & 1899 estimated