

Rainfall at *Montrose (Royal Asylum)*

2 1/2 m. fr. Sea.

For far.

Jas. Howden M.D.

Diameter of Gauge, *5* in.

Height above Ground, *2* ft. *3* in.

Above Mean Sea Level, *200* ft.

N. 44 - 4.

YEAR - -	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS
January - -					1.99	5.83	1.62	1.50	2.46	7.15	
February - -					3.55	2.54	1.90	1.66	1.97	1.31	
March - - -					1.69	.76	2.24	2.33	2.27	.83	
April - - -					1.19	1.09	1.19	2.69	3.78	2.30	
May - - - -					2.87	6.09	1.47	3.36	2.24	1.67	
June - - - -					.76	.38	1.32	1.69	.58	2.28	
July - - - -					1.72	4.44	2.37	4.69	.21	1.56	
August - - -					.84	3.96	2.05	2.89	5.89	2.58	
September -					3.89	.42	3.01	2.17	6.50	5.52	
October - -					5.50	3.50	2.91	2.80	3.35	5.07	
November -					2.99	3.79	2.24	.38	.49	2.11	
December -					2.95	1.46	2.41	1.41	7.85	2.49	
TOTALS -					29.94	34.26	24.79	27.65	37.79	34.87	

Subsoil Boulder Clay.

RAINFALL AT *Montrose Summerside Asylum*Lat..... Lon..... County of..... *Forfar*Rain Gauge, by..... Observer *A. Buchanan Esq.*N. ~~22~~ - 4.

Diameter	—		5			5					
Height	—		10			5					
Altitude	<i>200</i>		<i>200</i>								
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January.....	<i>1.50</i>	<i>1.00</i>	<i>3.45</i>	<i>2.44</i>	<i>2.34</i>	<i>4.10</i>	<i>.53</i>	<i>3.89</i>	<i>1.38</i>	<i>1.47</i>	
February	<i>2.40</i>	<i>4.35</i>	<i>5.76</i>	<i>1.94</i>	<i>1.01</i>	<i>1.42</i>	<i>4.16</i>	<i>4.16</i>	<i>1.74</i>	<i>2.52</i>	
March	<i>.47</i>	<i>.56</i>	<i>2.78</i>	<i>2.37</i>	<i>1.17</i>	<i>2.39</i>	<i>1.87</i>	<i>1.80</i>	<i>.18</i>	<i>1.55</i>	
April	<i>.65</i>	<i>5.11</i>	<i>2.33</i>	<i>.84</i>	<i>.95</i>	<i>1.30</i>	<i>3.96</i>	<i>2.72</i>	<i>1.09</i>	<i>2.97</i>	
May	<i>1.47</i>	<i>2.12</i>	<i>2.71</i>	<i>2.31</i>	<i>2.02</i>	<i>.47</i>	<i>2.4</i>	<i>2.40</i>	<i>1.70</i>	<i>2.00</i>	
June	<i>2.98</i>	<i>1.62</i>	<i>5.78</i>	<i>1.19</i>	<i>3.76</i>	<i>2.50</i>	<i>1.30</i>	<i>3.13</i>	<i>4.83</i>	<i>3.65</i>	
July	<i>4.34</i>	<i>4.34</i>	<i>2.75</i>	<i>4.11</i>	<i>2.69</i>	<i>(3.14)</i>	<i>1.00</i>	<i>4.77</i>	<i>.75</i>	<i>8.15</i>	
August	<i>.72</i>	<i>2.36</i>	<i>3.14</i>	<i>2.99</i>	<i>7.84</i>	<i>(1.88)</i>	<i>1.50</i>	<i>9.05</i>	<i>4.65</i>	<i>4.94</i>	
September.....	<i>2.54</i>	<i>3.10</i>	<i>4.39</i>	<i>5.39</i>	<i>4.87</i>	<i>(5.07)</i>	<i>3.15</i>	<i>2.12</i>	<i>3.35</i>	<i>3.18</i>	
October.....	<i>4.92</i>	<i>3.52</i>	<i>3.78</i>	<i>3.19</i>	<i>2.78</i>	<i>(5.07)</i>	<i>3.54</i>	<i>3.18</i>	<i>2.37</i>	<i>.70</i>	
November.....	<i>3.28</i>	<i>4.17</i>	<i>5.53</i>	<i>3.21</i>	<i>3.55</i>	<i>(5.15)</i>	<i>2.88</i>	<i>3.75</i>	<i>2.47</i>	<i>2.04</i>	
December.....	<i>5.74</i>	<i>1.49</i>	<i>4.04</i>	<i>2.02</i>	<i>1.38</i>	<i>(2.64)</i>	<i>8.60</i>	<i>3.03</i>	<i>2.55</i>	<i>1.48</i>	
TOTALS	<i>31.01</i>	<i>33.74</i>	<i>46.44</i>	<i>31.40</i>	<i>31.36</i>	<i>35.18</i>	<i>32.73</i>	<i>44.00</i>	<i>27.06</i>	<i>34.65</i>	<i>34.757</i>

C C C

1875 July - Dec estimated from Bridge St.

RAINFALL AT *Montrose Sunnyside Asylum*

Lat. _____ Lon. _____ County of *Forfar*
 Rain Gauge, by _____ Observer *A. Buchan, Esq.*
N. 64 - 44

Diameter	5										
Height	0.5								10		
Altitude	200										
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January ....	.86	.21	.24	3.66	2.95	1.41	2.50	1.89	2.07	1.10	1.689
February	2.91	.44	.42	5.45	1.38	1.83	1.26	1.07	1.02	1.50	1.828
March	2.90	2.15	1.74	1.80	2.74	1.45	3.47	.96	3.36	1.88	2.245
April	2.27	.56	3.80	2.49	1.58	1.94	1.42	1.73	1.84	3.71	2.134
May .....	.31	1.67	1.65	.81	1.47	3.29	3.18	.60	1.44	.95	1.537
June	1.51	2.10	4.01	1.63	1.17	.68	.87	.65	1.96	.38	1.496
July	5.06	3.07	3.30	5.11	5.75	.43	4.40	1.15	4.96	1.83	3.506
August .....	.09	3.20	2.82	3.54	.89	1.88	1.78	2.79	1.60	3.34	2.193
September	2.91	2.34	2.92	3.15	1.23	2.44	1.65	2.39	1.00	.49	2.052
October	1.60	3.13	4.13	1.92	2.01	1.98	3.74	.88	1.60	3.08	2.407
November	2.89	3.28	4.63	1.60	1.46	2.10	2.20	2.89	4.51	.58	2.614
December	1.94	2.31	5.02	.66	1.66	1.02	2.04	2.07	2.41	1.27	2.040
TOTALS	25.25	24.46	35.68	31.82	24.29	20.45	28.51	19.07	27.77	20.11	25.741

1888 Hillside Church $\frac{1}{4}$ mile S
 Hedge 5 feet high 24 feet S

RAINFALL AT *Montrose Sunnyside Asylum*

Lat. _____

Lon. _____

County of *Forfar*

Rain Gauge, by _____

Observer *D. J. C. Gordon*

N. 524-14.

Diameter	5										
Height	0 10										
Altitude	200										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January	2.75	.76	2.72	1.70	2.82	2.99	.47	.99	.78	3.54	1.952
February	1.01	.12	2.74	2.51	4.55	.32	.58	.88	.90	2.57	1.618
March	2.27	1.64	1.00	.92	.48	3.62	1.13	3.32	1.21	1.59	1.718
April .....	.72	.69	.99	1.11	.54	.80	.84	1.42	6.99	2.65	1.675
May	2.84	.83	2.20	1.31	4.12	.63	.82	1.54	2.31	3.46	2.006
June	2.29	.37	2.26	2.80	2.06	1.91	2.79	3.65	1.06	1.69	2.088
July	3.10	2.19	2.00	2.15	2.32	3.76	3.59	1.40	.77	2.65	2.393
August	2.86	4.53	3.46	2.16	4.52	3.36	1.80	2.92	2.08	1.24	2.893
September	2.01	7.62	1.49	2.31	.33	1.01	3.56	1.48	1.06	3.00	2.387
October	2.19	2.81	5.20	2.02	3.76	1.78	3.80	2.39	3.77	.53	2.825
November	4.15	3.77	2.53	2.63	1.28	2.90	.81	1.63	4.17	2.20	2.607
December	1.72	2.38	.98	1.89	1.68	2.98	6.65	3.40	1.81	4.70	2.819
TOTALS	27.91	27.71	27.57	23.51	28.46	26.06	26.84	25.02	26.91	29.82	26.981

1880-

RAINFALL AT *Montrose Sunnyside Asylum*

Lat. Lon. County of *Fajoa*

Rain Gauge, by Observer *J. Mason Esq*

N. 64 - 4.

St. John's, Navelock

Diameter ..	5										
Height	0 10										
Altitude ..	200										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	4.16	1.62	.85	4.40	2.19	.72	2.02	1.09	1.81	1.22	2.008
February ..	2.90	1.92	1.69	2.93	3.18	.99	1.12	2.21	1.02	.78	1.874
March	1.91	1.45	.76	3.19	2.11	3.64	.30	1.21	3.30	4.67	2.267
April	1.64	3.07	2.38	1.38	1.32	3.09	1.14	1.57	1.23	3.43	2.025
May	1.75	1.75	2.20	1.61	2.58	1.37	5.17	5.73	1.54	2.47	2.617
June	1.82	1.57	2.25	2.14	.53	.56	.77	4.55	1.04	1.13	1.637
July	3.49	.72	2.79	5.46	1.09	1.30	1.76	2.02	1.65	4.25	2.453
August	3.13	2.53	3.01	4.46	4.19	3.32	3.91	2.41	3.33	2.24	3.253
September..	1.94	1.20	1.83	2.89	1.79	1.51	1.12	1.05	3.84	1.08	1.825
October	3.24	2.24	1.61	4.79	.78	1.77	4.03	4.99	4.04	2.88	3.037
November..	4.35	1.87	3.27	1.57	.77	7.61	3.87	2.10	1.66	.91	2.798
December ..	3.48	2.95	2.78	3.20	2.01	1.45	2.04	3.47	2.58	3.31	2.727
TOTALS ..	33.81	22.89	25.42	38.02	22.54	27.33	27.28	32.51	27.04	28.37	28.521

3 M 3 M 3 M 3 M 3 M 3 M 3 M 3 M 3 M 3 M

1903 Hillside Church 1/2 mile S
Station 1/2 SE

Hill

RAINFALL at Montrose, Sunnyside Asylum 5609County of ForfarObserver Dr. J. G. Havelock
per John MassonRiver Basin North Esk Hb. 4

Rain Gauge, by _____

Diameter ...	5				72					5	
Height	0	10		4.6		10				1	0
Altitude ...	200										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	<small>1910-19</small>
January ...	1.54	1.31	2.96	4.20	1.47	2.63	(1.20) 4.20	1.82	2.02	3.23	8.27
February ...	2.62	.79	2.95	.84	2.48	4.52	2.21	1.02	1.75	2.15	7.13
March	1.35	1.22	2.16	3.31	3.65	1.22	2.82	1.52	1.15	1.54	7.03
April	2.22	1.50	.00	2.88	.50	.62	1.67	.97	.40	3.15	6.19
May	2.37	.67	.64	3.52	1.98	.89	2.83	1.72	3.73	.70	8.98
June	1.07	1.25	1.31	2.07	.95	.69	3.66	.99	1.51	.91	7.07
July	2.23	1.11	1.82	1.27	2.50	4.81	6.73	1.37	4.32	.58	13.00
August	4.56	.91	3.70	1.40	1.51	2.44	3.64	3.96	2.32	2.59	12.51
September ..	1.15	1.00	2.40	3.18	.81	1.36	1.08	1.43	2.72	1.29	6.50
October ...	1.45	2.26	4.32	1.61	2.78	3.13	4.08	2.83	2.20	2.18	11.29
November ..	3.04	3.66	2.37	1.27	3.28	1.85	3.39	2.65	1.85	4.08	11.97
December ...	2.99	5.19	1.65	1.41	5.26	6.72	3.27	.76	1.70	4.75	10.48
TOTALS ...	26.59	20.87	26.28	27.06	27.17	30.88	36.50 (36.58)	21.04	25.67	27.13	110.42

imp D. imp D. imp D.

D imp D

Attached with ref. nearby ites.

1919. Ther. stand 5 ft. high 5 ft. N.
 Calicheim 24/4/14. "Shallow 5' 8", total depth only 10". outflow 15' high. 8 yds. N.W.

Date.	Lat. N.	Long. W.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
1912	56.44	230	Hillside	2 m	SE	Hillside	1/2 m	SE

RAINFALL at Montrose, Sunnyside AsylumCounty of FoyarObserver D. G. J. ShawC. K. Alexander 1920-1922 gardenRiver Basin North Esk & C. H.

Rain Gauge, by _____

Diameter ...	5"			5"									
Height	1 0	10		1 0									
Altitude ...	200			200									
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930. MEANS.		SVHS
January ...	1.79	1.70	3.94	1.65	2.49	1.45	3.91	1.81	4.32	1.26	1.74	26.36	
February ...	1.27	4.5	2.12	4.94	1.08	3.22	4.21	1.56	1.24	2.05	1.02	23.16	
March	1.76	2.29	1.91	1.53	.63	1.10	.65	2.03	3.99	.17	1.32	17.40	
April	2.22	1.31	2.37	2.31	1.56	2.85	1.73	1.47	1.26	1.33	2.49	20.90	
May	2.86	1.66	.56	2.20	3.77	2.94	1.92	2.56	1.29	1.95	1.66	23.37	
June .....	.70	1.00	1.21	.74	1.40	.74	2.34	2.88	2.98	1.73	1.60	14.82	
July	2.96	1.83	2.80	2.11	4.53	2.05	2.43	1.75	2.16	3.17	1.89	27.58	
August	2.96	1.85	1.85	5.24	3.76	2.18	2.37	3.19	3.67	4.66	5.81	37.81	
September...	1.25	1.24	2.89	2.40	4.48	3.24	4.39	5.87	2.67	.57	4.76	33.76	
October	2.47	1.43	1.42	2.50	4.52	2.22	5.52	5.10	3.48	2.73	2.69	34.08	
November...	2.49	2.52	1.51	3.19	1.95	1.19	4.38	2.14	2.69	3.79	3.57	29.42	
December...	3.25	1.17	1.75	3.39	3.45	1.60	.29	2.79	2.56	4.60	3.65	28.50	
TOTALS...	25.88	18.45	24.33	32.22	33.92	24.78	34.14	33.15	32.31	28.01	32.20	319.39	

1920. Ther. stand 5 ft high 5 ft N.

1921. Skedge 8 ft high

Wood 50 "

Grass 8 "

Skedge 7 "

Skedge wood 40 "

10 yds. N.E.

20 " "

15 " N.W.

16 " S.

40 " S.W.

Position of Station on reduced Ordnance Survey } No. of Map _____

Map, 2 miles to 1 inch Series

Reference No. _____

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
1920	56° 45'	2° 30'	Hillside	1/2 mi	S.E.	Hillside	1/2 mi	S.E.

RAINFALL at Greenhouse (Downside Asylum) M.W.R.County of Angus (Zoufal)Observer C.K. AlexanderRiver Basin H. North East & C.The Medical Superintendent

Type of Gauge

Annual Average 27.0 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. Bogin

Diameter	5											
Height	1.0			10"								
Altitude	200'											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Sums	Means
January	3.36	1.32	2.01	1.33	1.17	4.30	4.15	2.88	2.94	1.49	24.95	
February	1.86	.16	2.06	.16	1.98	2.72	2.57	.84	2.29	1.49	16.13	
March	1.21	2.78	1.59	2.03	1.94	1.89	2.58	.33	2.42	2.70	19.47	
April	2.22	2.78	1.37	6.32	3.94	.34	1.93	.34	.61	1.21	21.06	
May	2.86	2.85	1.22	1.88	1.12	1.04	2.11	2.79	1.24	1.32	18.43	
June	4.17	.99	1.01	.71	4.05	1.31	1.95	2.15	1.33	.23	18.90	
July	4.44	2.57	3.16	2.43	1.65	4.12	3.90	3.54	4.46	5.53	37.00	
August	2.04	.69	.93	3.02	1.82	.89	5.44	.65	1.88	.73	18.09	
September	1.74	2.28	1.13	3.03	4.12	3.12	1.31	3.51	2.22	1.97	24.43	
October	.83	6.83	3.52	3.16	3.83	.88	3.19	3.54	3.02	4.65	33.45	
November	5.98	1.33	2.82	1.23	4.53	1.19	.67	3.68	3.80	5.91	31.14	
December	1.03	2.09	1.54	4.27	2.41	1.97	4.12	3.25	1.14	1.75	23.57	
TOTALS	31.44	27.67	22.36	29.57	32.56	23.77	33.92	28.50	27.55	28.98	286.62	
	D.	D.	D.	D.	D.	D.	D.	D.	D.	D.		

1931. Greenhouse 8' high 14 yds. N.W. Wood & hedge 50' x 4' high 20 yds. + 14 yds. N.E.
 Hedge 7' high 16 yds. S.E.
 1940. Jan part cold.

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

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
1931.			Dublin L.M.S.	1m	S.W.	Hillside	1/2m	S.

Station No.

5609

RAINFALL at Montrose (Sunrise Asylum) M.W.R. 41County of Angus (Forfar) Observer The Medical SuperintendentRiver Basin 4 - North Esk &c.

Type of Gauge.....

Annual Average 27.0 in. based on 35 years obs. un-weighted. Period of average 1881 - 1915 Ref. Boj N.

File No.

Diameter	5"				856	975					
Height	10"					1					
Altitude	200'					41					
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	2.65	4.07	3.35	1.14	4.07	1.33	3.83	3.85	1.28	1.54	27.11
February	4.03	2.04	1.16	0.90	2.02	0.96	2.40	2.16	1.21	2.21	19.09
March	1.49	1.53	0.47	0.75	.84	1.65	5.07	0.59	1.25	2.09	13.73
April	2.59	1.46	1.45	2.62	1.09	0.24	2.94	1.00	1.95	1.27	16.61
May	1.59	3.00	4.88	2.75	4.26	1.33	4.66	3.21	1.51	1.31	28.44
June	1.35	0.88	1.10	2.41	2.14	3.34	2.67	3.79	1.35	1.21	20.24
July	2.56	2.17	1.61	1.99	2.76	4.05	1.51	2.50	1.96	3.83	24.94
August	3.28	3.02	3.94	1.33	4.03	2.67	.07	5.50	3.08	3.13	30.05
September	0.44	3.21	2.25	2.03	3.81	3.25	1.77	1.93	1.87	5.96	26.52
October	4.83	2.90	2.67	4.57	4.71	0.49	1.55	2.83	3.67	1.34	29.56
November	4.17	0.38	1.21	2.95	1.36	6.46	1.98	1.03	3.57	3.15	26.26
December	0.40	2.31	0.97	2.97	4.42	3.63	1.90	3.89	1.84	1.42	23.75
TOTALS	29.38 D	26.97 D	25.06 D	26.41 D	35.51 D	29.40 D	28.29 D	32.28 D	24.54 D	28.46 D	286.30

257.86 ✓

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

No. of Map.....

Reference No.....

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge.	Direction from gauge.

BRITISH RAINFALL ORGANIZATION

RAINFALL at Montrose (Longmont station) m r. b. 5609
 County of Angus (Tovar) Observer The Medical Superintendent
 River Basin North Esk & b. 4
 Type of Gauge 10. (K.G. (down 45))

51

Annual Average 27.8 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref B/N
28.65 " " " " " 1916-1950 File No. 1916-1950 P

29.121
 Prop 11 - Thomson 11.5.54. Site re-sampled in 1950 & adapted + new N11, N12, installed
 good all round. Whether of this but not overhauled, 8' from water trough but no fear of spray
 Insects 1957. 14/9/57. Site good, ground sound.

(Sunnyside Avenue)
National Grid Reference No. [37] 707.617

Summary of Earlier Records from 10-year Sheets :

1916-1950, P. accepted

(6a) Wt. 13072-389 10M 6/50 T.S. 841