

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Leppa, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level _____ feet, above Ground 20 feet. During the MONTH of January 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.	
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.									
		Barometer.	Attached Thermometer	Barometer.	Attached Thermometer	Max. No.	Min. No.	Max. in Sun-rays No.	Min. on Grass. No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer. No. —	No. of hours in which it fell.	Amount in inches.	Velocity (0—6), and Direction.	Amount (0—10), and Species.	Velocity (0—6), and Direction.	Amount (0—10), and Species.	No. 1. inches.	No. 2. inches.					No. 3. inches.
		* No.	°	No.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	9 h. A.M.							°					°
		inches.	°	inches.	°	°	°	°	°	°	°	°																			
	1	30.450	48	30.328	54	40.0	35.0			38.0	34.0	40.0	34.0	E	lt	E	lt			1.6	6	10	38.5	40.0	41.0			1			
	2	30.150	47	30.040	50	37.0	36.0			36.0	35.0	36.0	30.5	Z		Z					10	4	39.5	40.5	41.5			2			
	3	29.960	43	30.084	48	40.5	28.0			34.0	32.0	38.0	34.0	E	lt	Z					10	10	35.0	38.0	41.0	42		3			
	4	30.124	46	30.110	57	50.0	34.0			40.0	38.0	42.5	42.0	E		Z			1.9		10	10	38.0	38.5	40.0	42½		4			
	5	29.750	57	29.440	57	52.0	32.0			51.0	48.0	50.0	47.0	SW	lt	W	lt		2.3		10	7	41.0	39.5	40.0			5			
	6	29.348	50	29.574	59	49.0	44.0			48.0	46.0	46.0	42.0	W		W				8	4	43.0	41.0	40.0			6				
	7	29.750	49	29.950	53	45.0	41.0			42.0	40.0	42.0	34.0	SW		W				9	6	41.0	42.0	41.0			7				
	8	29.720	49	29.916	57	53.0	34.0			46.0	44.0	49.0	47.0	SE		SE				5	7	41.5	40.0	41.0			8				
	9	29.800	53	30.028	57	57.0	44.0			53.0	50.0	48.0	45.0	SE		SW				4	3	45.0	42.0	41.0			9				
	10	29.940	52	29.928	60	48.5	47.0			47.0	45.0	45.0	43.0	SW		SW			2.8		10	10	44.0	43.5	42.0			10			
	11	29.646	49	30.090	55	49.0	33.0			47.0	35.0	38.0	35.0	SW		SW				2.8		—	40.0	42.5	42.0			11			
	12	30.314	47	30.350	56	45.5	32.0			39.0	36.0	44.0	42.0	W		W						6	37.0	40.0	41.0			12			
	13	30.324	48	30.308	58	49.0	38.0			45.0	43.0	45.0	43.0	W		W				4	0	40.5	40.0	41.0			13				
	14	30.198	52	30.410	58	50.5	44.0			43.0	46.0	48.0	45.0	SW		SW				8	8	43.0	41.0	41.0	43½			14			
	15	30.500	52	30.588	60	50.0	46.0			46.0	44.0	48.0	44.0	W		SW							42.5	42.0	42.0	43½		15			
	16	30.584	53	30.580	60	49.0	46.0			46.0	44.0	43.0	42.0	W		W				4	10	44.0	43.0	42.0	43½			16			
	17	30.494	52	30.480	58	48.5	43.0			44.0	42.0	47.0	45.0	W		SW				6	9	43.0	43.0	42.0			17				
	18	30.460	53	30.352	58	50.0	44.0			47.0	45.0	45.0	42.0	SE		SW				8	0	43.5	43.0	42.5	44			18			
	19	30.346	52	30.310	60	57.5	45.0			49.0	47.0	49.0	47.0	SW		SW				5	10	43.0	43.0	43.0			19				
	20	30.086	53	29.942	58	48.5	47.0			47.0	43.0	47.0	44.0	W		SW							44.5	44.0	43.0			20			
	21	30.206	52	29.960	58	52.5	42.0			43.0	40.0	52.0	46.0	W		SW			2.9		8		41.0	43.0	43.0	43½		21			
	22	29.750	53	29.576	55	47.0	46.0			47.0	45.0	42.0	40.0	SW		W				10	10	45.0	43.0	43.0							
	23	29.392	52	28.934	54	45.5	39.0			40.0	38.0	43.0	38.0	SE		W			3.4		10	8	40.5	42.5	42.5	43½					
	24	29.560	47	29.440	53	41.5	33.0			35.0	32.0	38.0	36.0	SW		SW			3.6		5	4	37.5	41.0	42.0	42½			24		
	25	29.116	47	29.140	52	38.5	34.0			38.0	35.0	33.0	32.0	W		SW			3.8		8	2	34.5	38.5	41.0	42			25		
	26	28.866	44	27.540	50	41.0	31.0			32.0	—	38.0	36.0	W		SW				8	10	34.5	38.0	40.0				26			
	27	28.830	43	28.690	52	38.0	—			37.0	—	33.0	32.0	W		SW			4.½		6	8	35.0	38.5	39.0				27		
	28	29.146	42	29.596	52	39.0	32.0			36.0	33.0	37.0	34.0	W		SW				5	2	34.0	35.5	38.5				28			
	29	29.524	43	29.440	52	49.0	34.0			37.0	36.0	45.0	42.0	SE		SW			4.4		10	10	34.5	36.5	38.5	40½			29		
	30	29.350	47	29.620	54	45.0	34.0			45.0	42.0	40.0	34.0	SW		SW				4	8		34.0	38.0	38.0			30			
	31	29.650	46	29.406	53	46.5	38.0			43.0	38.0	40.0	34.0	SW		Z			4.6		7	10	37.5	37.0	38.0			31			
	Sums.	265 24	281	25 270	168	20	2690			7 7	20 8	75 35												13 5	00 23		310				
	Means.	29.856	491	29.815	554	465	387			42.5	40.6	42.8	40.4						3.00					40.1	40.6	41.0	42.8				
	+ Total Corrections for Instrumental Errors.																														
	+ Corrections for Diurnal Range.																														
	+ "Corrected Means."																														
	No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction++ = 29.801
for Temp. (Col. 2), = 29.856 — .55.....
Corrected Mean" of Barometer at 9 P.M., minus the Correction++ = 29.744
for Temp. (Col. 4), = 29.815 — .071.....
Mean at Station, corrected, and at 32°, = 29.773
Correction for height, feet above Mean Sea-level, = 22
Mean, reduced to 32°, and Sea-level, = 29.795
Highest Reading, corrected for Index error, on the 15th, = 30.588
Lowest Do. Do., on the 26th, = 27.540
Difference, or Monthly Range, = 3.048

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 1st, = 54.0
Lowest in Month, corrected for Index errors, on the 3rd, = 28.0
Difference, or Monthly Range, = 26.0
"Corrected Mean" of all the Highest, (Col. 5), = 46.5
"Corrected Mean" of all the Lowest, (Col. 6), = 38.7
Difference, or Mean Daily Range, = 07.8
** Calculated Mean Temperature of Month, = 42.6

S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the 1st, = —
"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, = —
Lowest at Night, Black Bulb, (corrected for Index errors), on the 1st, = —
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, = —
Difference of above Means or Range ("exposed"), = —

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 42.6
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 40.5
Computed Temperature of Dew-Point, = —
Do. Elastic Force of Vapour, = —
Do. Weight of Vapour in a Cubic Foot of Air, = —
Relative Humidity, (Saturation = 100), = —
RAIN fell on Days; Amount in Inches, = 3.00 Inches.

WIND.		SUMMARY.									
Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day.
A.M.			3	5	8	11	3	1			
P.M.			1	1	10	10	3	5			
Mean.			0	0	2	3	0	9	11	3	3

(Signed)

Robert Muirhead

Observations made and
Return verified by

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Edinburgh, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level _____ feet, above Ground 20 feet. During the MONTH of February 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				WIND.				RAIN.				CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.											
		Barometer. * No.	Atmospheric Thermometer	Barometer. No.	Atmospheric Thermometer	Max. No.	Min. No.	Max. in Sun's rays No.	Min. on Grass. No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	Readings of the H.Cup Anemometer. No.	No. of hours in which it fell.	Amount in inches.	Velocity (0-6), and Direction.	Amount (0-10), and Species.	Velocity (0-6), and Direction.	Amount (0-10), and Species.	No. 3 inches.	No. 42 inches.	No. 22 inches.						
		inches.	°	inches.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°				
	1	29.370	46	29.430	50	41.0	38.1			32.0	31.0	—	—	E 1/4 N	16	16			4.6						39.0	38.5	38.5			1			
	2	30.162	42	30.290	48	43.0	30.0			33.0	31.0	32	30	N 1/2 W	16	16									35.0	38.0	38.5			2			
	3	30.040	43	30.066	52	50.0	31.0			46.0	43.0	52	50	SW 1/4	16	16			3.3						36.0	36.5	38.5			3			
	4	30.164	50	30.128	54		34.5			50.0	44.0	48	46	SW	16	16									43.5	39.5	39.0	41.5		4			
	5	30.134	50	30.100	50	51.0	48.0			50.0	47	49.5	47.5	SW	16	16									45.0	42.0	40.			5			
	6	30.032	50	29.930	52	50.0	44.0			48.0	46.0	45.0	42.0	—	—										45.0	43.0	41			6			
	7	30.042	50	30.132	52	44.0	39.0			40.0	37.0	34.0	32	1/2 N	16	16									41.5	42.5	41	42.5		7			
	8	29.886	46	29.588	56	48.5	31.0			38.0	36.0	43.0	41.0	SE 1/4 E	16	16									36.5	40.0	41.5	42.0		8			
	9	29.146	50	28.842	58	48.5	37.0			45.0	43.0	43	41.0	SE 1/4	16	16			4.9 1/2								42.5		9				
	10	28.942	48	29.068	54	41.5	41.0			41	38	38.0	35.0	SE 1/4	16	16									40.0	41.0	41.5			10			
	11	29.270	46	29.502	49	50.0	35.0			38.0	35	38.0	36	SE 1/4	16	16									36.0	39.0	40.5	41.2		11			
	12	29.438	50	29.474	52	57.0	37.0			49	45	49	46	SE 1/4	16	16									44.5	38.5	39.5			12			
	13	29.616	51	29.924	53	52.5	44			48.0	46	46	44	SE 1/4	16	16			5.0 1/2						42.0	40.5	40.0	42.5		13			
	14	30.018	52	30.280	52	50.0	44			44	42	37	36	W 1/4	16	16			5.2						42.5	42.0	41	42.5		14			
	15	30.278	50	30.310	52	41.5	35.0			42	38	38	35	E 1/4	16	16									40.0	41.0	41.0	42.2		15			
	16	30.296	52	30.172	55	41.0	38.0			38.0	35.0	37.0	34	E	16	16									38.0	39.5	40.5	41.5		16			
	17	30.064	46	29.948	50	42.0	37.0			39.0	34	40.0	37	E 1/4	16	16									37.5	39.0	40.0			17			
	18	29.910	45	29.860	48	43.5	38.0			38.0	37	38.0	36	E	16	16									38.0	39.0	40.0	41.5		18			
	19	29.488	45	29.630	52	44.0	33.0			38.0	36.0	43.0	41	SE 1/4	16	16									35.0	38.5	40.5	41.0		19			
	20	29.530	47	29.374	54	57.0	37.0			47.0	43.0	49.0	47	SE 1/4	16	16									39.0	39.0	39.5	41.5		20			
	21	29.454	50	29.460	53	45.5	39.0			42.0	38.0	40.0	38	SE 1/4	16	16			5.3						39.5	40.5	39.5	41.5		21			
	22	29.396	49	29.470	53	44.0	34.0			38.0	37.0	38.0	37.0	E	16	16									37.5	40.0	39.5	41.5		22			
	23	29.380	47	29.288	52	44.0	34			38.0	37.0	40.0	39.0	E	16	16			5.4 1/4						36.5	39.5	39.5	40.5		23			
	24	29.560	46	29.416	54	46.5	34.0			38.0	37	40.0	37	E	16	16									37.0	38.5	40.0			24			
	25	29.450	49	28.876	57	46.0	37			41.0	38	40	38	W	16	16									38.0	38.5	39.5			25			
	26	29.490	46	30.050	53	42.5	38			40	37	40	37	E	16	16									38.0	38.5	39.5	40.5		26			
	27	30.050	48	30.010	55	42.0	36			39.0	36.5	40	37	SE	16	16									38.0	34.5	40.0	40.5		27			
	28	30.100	45	30.050	50	38.0	35			38.0	35.0	32	30	E	16	16									36.0	38.0	39			28			
	29	29.480	42	30.024	48	40.0	26			32.0	31.0	—	—	W	16	16									34.0	39.0	40			29			
	30													SE	16	16			5.5											30			
	31	11.6	8	12.4	8					15		12														16	85	85			31		
Sums.		22	866	22	866	23	392	73	5	2035									0.9						16	85	85						
Means.		29.788	47.8	29.806	52.5	45.6	35.0			41.5	38.9	41.1	38.8												387	396	399	41.5					
† Total Corrections for Instrumental Errors.																																	
† Corrections for Diurnal Range.																																	
"Corrected Means."																																	
No. of Column.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction†† for Temp. (Col. 2), = 29.737
Corrected Mean" of Barometer at 9 P.M., minus the Correction†† for Temp. (Col. 4), = 29.742
Mean at Station, corrected, and at 32°, = 29.740
Correction for height, feet above Mean Sea-level, = 27
Mean, reduced to 32°, and Sea-level, = 29.767
Highest Reading, corrected for Index error, on the 15th, = 30.310
Lowest Do. Do. on the 9th, = 28.872
Difference, or Monthly Range, = 1.438

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 13th, = 52.5
Lowest in Month, corrected for Index errors, on the 29th, = 26
Difference, or Monthly Range, = 26.5
"Corrected Mean" of all the Highest, (Col. 5), = 45.6
"Corrected Mean" of all the Lowest, (Col. 6), = 35.0
Difference, or Mean Daily Range, = 10.6
** Calculated Mean Temperature of Month, = 40.3
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =
"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, =
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, =
Difference of above Means or Range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 41.3
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 38.8
†† Computed Temperature of Dew-Point, =
†† Do. Elastic Force of Vapour, =
†† Do. Weight of Vapour in a Cubic Foot of Air, ... =
†† Relative Humidity, (Saturation = 100), =
RAIN fell on Days; Amount in Inches, = 5.50

WIND.		SUMMARY.					
Direction.	N	NE	E	SE	S	SW	W
A.M.		1	5	5	1	7	4
P.M.		2	4	3	2	7	3
Mean.	0	1	5	4	1	7	4

(Signed)

Robert Muirhead

Observations made and
Return verified by

INSTRUCTIONS FOR TAKING METEOROLOGICAL

WITH REMARKS ON THE USE OF INSTRUMENTS.

Of the chief objects that the Scottish Meteorological Society proposed to itself when the Society was established in 1855, was to secure perfect uniformity in the system of observation pursued at all its Stations. Uniformity in the observations is absolutely necessary to justify the publication of Monthly Results from different observations, it being found that differences between the Returns from two Stations, so very considerable as to render them quite incompatible, may arise from dissimilarity as to position or shelter of instruments, different hours of observation, or even from the use of differently constructed instruments. It therefore appeared that those who kindly furnish Reports to the Society will do their scrupulous attention to the following two columns, sent to them by the Society, and put in making them; and, for the Tables published by the Society, will take care to compare among the several Returns, without which the Society's Reports must inevitably fall in adhering one of the main objects of Meteorological Observation.

The Council recommend that Observations be made precisely at the hour of 9 a.m. and 9 p.m. (Greenwich or Railway Time only), as specified in the following remarks, or at the top of the nearest punctuality in the course of the Schedule. It is hoped that the utmost punctuality in the time of reading the instruments will be observed. Observers, in some few cases, may find this impossible; in such instances, they are specially requested to mark opposite every reading the time at which it was taken, if not at 9 a.m. or 9 p.m. Weather-Glasses and Aneroids, though well-suited to indicate roughly variations of atmospheric pressure, are not fitted for scientific purposes. No Barometer should be used for Meteorological Observation that is not supplied with some means of adjustment or compensation which will secure that the height of the mercury in the tube is accurately measured from the fluctuating surface of the mercury in the cistern.

The Barometer in which the error arising from the fluctuating surface of the mercury in the cistern is entirely got rid of is Fortin's Barometer, the arrangement consisting in applying pressure by means of a screw to the bottom of the cistern, which is made of flexible leather, thus raising or depressing the surface till it just meets the ivory point which forms the zero point of the fixed scale.

The Barometer originally constructed by Mr. Adie of London, and usually called the Board of Trade Barometer, has the great convenience of requiring no adjustment of the cistern. Its scale-inches are not true inches, but so much shorter as to compensate the error that would otherwise arise from the fluctuations of the surface of mercury in the cistern. This is an excellent Barometer for ordinary Observers, inasmuch as it entirely eliminates the error of observation likely to arise in not a few cases in setting the instrument to the zero point of the fixed scale when the light is not good. To show the accuracy with which these Barometers are made, it may be stated, that one was compared, during a whole year, with the Society's Standard Barometer, particular care being given to make the comparison when atmospheric pressure was rising or falling very rapidly, with the result that none of the readings differed from those of the Standard more than 0.003 inch.

A modification of Fortin's Barometer is used at a number of the Society's Stations, by which the coincidence of the zero point with the surface of the mercury is indicated by a little ivory float, which then passes freely through the lid and ease of the cistern. When the index-line on this little piston-rod is brought, by the adjusting screw, to form one straight line with those on its ivory float, the surface of the mercury is then at the exact height of the ivory float; the scale is graduated. In taking an observation, this preliminary setting must be made with scrupulous accuracy; as a slight error here will vitiate the readings from that Barometer which is to be used, and is absolutely necessary that the Barometer which is to be used, shall have been previously adjusted to a Standard Barometer.

Some Barometers should be suspended in as good a light as can be secured, and to facilitate the reading a piece of white paper may be put behind the tube. It must be hung truly perpendicular, and not tilted to either the sun's direct rays nor the heat of a fire, and must not be hung against a wall heated by a fire. The object being to secure that the whole instrument, including the brass fittings, the contained mercury, and the attached Thermometer, shall be, when read, at one uniform temperature, it is evident that the best position is that which is least liable to sudden changes of temperature.

In taking an Observation, the Attached Thermometer is first noted: the tube must then be gently tapped, and the cistern-adjustment carefully made. The eye, by raising and lowering it, must be brought into the plane of the back and front of the index—usually the lower edge of the vernier, which must be carefully adjusted so as to form exactly a tangent to the convex surface of the mercury in the tube. Observations must be taken quickly, so as to prevent heat from the Observer's hands and person from affecting the mercury. The use of a lens will facilitate an accurate adjustment and reading of the Barometer. A mistake not infrequently made by the beginner to observe, consisting in setting the edge of the vernier to the level of the clear surface of the mercury which is in direct contact with the glass tube, must be carefully avoided.

The errors most frequently made in reading the Barometer are errors of 1-1000 inch, 0.500 inch, and 0.050 inch; that is to say, instead of 29.365 inches, either of the following is sometimes set down—viz., as 30.365 inches, 29.865 inches, or 29.815 inches. Experience having shown that even the very best Observers make these mistakes, particular attention is directed to the manner.

When a Barometer having adjustable surfaces has to be removed from its fastenings, the ivory peg must first be screwed so as to form a tight plug to the cistern, thus preventing the escape of the mercury. Then screw up the mercury not quite to the top of the tube, but to within a quarter of an inch of it, and take down the instrument; it should then be carried with the cistern uppermost. Before suspending the Barometer for use, it must be ascertained whether the space above the mercury in the tube is a complete vacuum; this is the case if, on inclining the instrument, a sharp tap is produced when the mercury strikes the top of the tube. If a dull tap is heard, there is air in the tube, which must be got rid of.

As Barometers are liable to be damaged by the introduction of air into their tubes, on removal from places to place, or in being roughly handled, it may be useful in Observers to know how the ivory Peg might be expelled. First, fix up the cistern by screwing the ivory Peg tight, so as to fit and seal the neck of the mercury; then screw up the mercury to about the top of the tube; then, having the ivory Peg firmly in the neck of the instrument, place the top of it on a yielding surface, invert the barometer, gently tap the top of it on the cistern with the palm of the hand, so as to induce the air to ascend through the narrow neck of the cistern, whence it may escape. Since there is the weight of two atmospheres—pressure of any air that may be in the Barometer, and the air outside—pressing on any air that may be inside the tube, it is usually a tedious operation to get it wholly expelled. After repeated trials, however, it is generally accomplished; and the clear metallic sound of the mercury, when gently struck against the top of the glass tube, will show when the whole of the air has been expelled. On hanging up the Barometer, care must be taken to screw down the mercury in the tube before unfastening the float of the cistern, for, if this be not attended to, the mercury will flow out, and the instrument be seriously damaged.

OBSERVATIONS,

water, in cases where the observations cannot be taken daily, the observation may be made on the 15th, and 25th of each month. When convenient, extra Sea Observations might be taken for other purposes, as, for example, for the purpose of determining the Hour of Observation. It is also very desirable that observations on the daily Maxima and Minima by Thermometers continuously immersed, be instituted at points along the coast, by the method proposed by Mr. T. Stevenson, and already commenced at Peterhead and Liverpool. The temperature of the water at the bottom of Wells ought, when practicable, to be taken, both the depth of the Well, and of the water being noted.

Mention what Test-Papers are used, Schönbein's or Mollat's, etc. The Paper is affixed by a pin to a board in the Thermometer Box, and the indications registered at 9 a.m. and 9 p.m. It is desired that these indications be given in connection with the force and direction of the wind at the time of observation, in the following manner:—thus 37°, as an Ozone entry in the schedule will indicate that the Ozone paper is tinted as 3 on the scale, that the wind is from the N.W., and that its force on the scale 0—5 is 4, or blowing fresh.

Too much importance cannot be attached to the electric condition of the atmosphere in connection with terrestrial magnetism, barometrical, thermometrical, and meteorological phenomena generally. A proper Electrometer is, in truth, necessary to every complete meteorological observatory. The Remarks column is unavoidably too narrow. Some of the most valuable Observations that can be taken are those assigned. The use of contractions, ought, therefore, to be taken every advantage of, and a list of such as are in general use are given at the foot of the column. Besides special and extraordinary Observations, great prominence ought to be given in this column to Prevalent Diseases, differences in character, colour, velocity, and direction between the Lower and Upper Strata of Clouds, the Colour of the Sky, etc. Remarks ought to be made on the occurrence of Meteors, Aurora Borealis, remarkable depressions, elevations, and fluctuations of the Barometer, Thunderstorms, and remarkable falls of Snow, Hail, or Rain, the Hour of Storms of Wind commencing, abating, their maximum, and ending as well as such notes on Storms as have been limited to above. When forty hills are in the vicinity of a Station, the Height of Clouds and of the Snow-line in winter should be recorded. By the use of barometrical, the state of the weather at 9 a.m. and 9 p.m. should be registered either in two columns, or in one column, as cuplet, or mixed, for the purpose of the column of 'Remarks.'

Observations in an answer to the Periodic Return of the Society, possess not only great scientific value, but are of considerable importance in connection with the connection with the Agricultural, Horticultural, and Natural History. The Periodic Return of the Council would direct the special attention of Observers to the registration of such phenomena, so that the published Summaries may fairly represent the whole of Scotland. Observations ought to be confined to individual trees and shrubs; to particular species of birds, and, in the case of crops, to specified sorts reared from year to year on a selected piece of ground or farm. The Annual Table, published yearly in the Society's Journal, will indicate the species of plants and animals to which special attention is more particularly directed.

The Council recommend Observers, before purchasing new instruments, and in repairing old ones, to communicate with the Meteorological Secretary, in order that every instrument may be examined and improved before being used; and they consider it necessary that he should have full power to reject any instrument which, on being presented for comparison, does not afford him satisfaction. (By Order)

EDINBURGH.

Secretary of the Meteorological Society of Scotland,

Mr ALEXANDER BUCHAN.

To

February 1884

BOOK POST.

Have the goodness also to state any information you may be able to collect relative to the Crops of Grain, Hay, Potatoes, Turnips, Fruits, etc., in perfection; whether any have suffered from Blight, disease, etc. Whether

Epizootic disease prevails among cattle; and the Agricultural condition generally.

Observations in connection with the Periodical Return of the Seasons.

FOREST TREES.

Alder, Birch, Elm, Larch, Lime, Oak, Sycamore or Plane.

In Flower.

First in Blossom.

Barberry, Broom, Hazel, Hawthorn, Holly, Laburnum, Lilac, Meecorn, Mountain Ash or Rowan, Red Flowering Currant, Rhododendron Ponticum, Whin.

Apple, Black Currant, Cherry, Gean, Gooseberry, Pear, Peach, Plum, Strawberry.

First in Blossom.

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SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Goffra, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level 20 feet, above Ground 29 feet. During the MONTH of March 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Road Daily, at 9 P.M.				HYGROMETER. No.				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Barometer. No.	Attach- ed Ther- mometer	Barometer. No.	Attach- ed Ther- mometer	Max. No.	Min. No.	Max. in Sun's rays No.	Min. on Grass. No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer. No.	No. of hours in which it fell.	Amount in inches.	Velocity (0-6), and Direction.	Amount (0-10), and Species.	Velocity (0-6), and Direction.	Amount (0-10), and Species.	No.	No.	No.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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BAROMETER, "corrected Mean" at 9 A.M., minus the Correction† = 29.798
for Temp. (Col. 2), = 29.852 — 54 = 29.798
Corrected Mean" of Barometer at 9 P.M., minus the Correction† = 29.796
for Temp. (Col. 4), = 29.863 — 67 = 29.796
Mean at Station, corrected, and at 32°, = 29.797
Correction for height, feet above Mean Sea-level, = 22
Mean, reduced to 32°, and Sea-level, = 29.819
Highest Reading, corrected for Index error, on the 27th, = 30.330
Lowest Do. Do., on the 16th, = 29.108
Difference, or Monthly Range, = 1.222

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 16th, = 66.5
Lowest in Month, corrected for Index errors, on the 3th, = 29.5
Difference, or Monthly Range, = 37.0
"Corrected Mean" of all the Highest, (Col. 5), = 48.3
"Corrected Mean" of all the Lowest, (Col. 6), = 37.3
Difference, or Mean Daily Range, = 11.0
** Calculated Mean Temperature of Month, = 42.8

S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =
"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, =
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, =
Difference of above Means or Range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 42.9

Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 38.4

† Computed Temperature of Dew-Point, =

† Do. Elastic Force of Vapour, =

† Do. Weight of Vapour in a Cubic Foot of Air, =

† Relative Humidity, (Saturation = 100), =

RAIN fell on 9 Days; Amount in Inches, = 1.42

WIND.		SUMMARY.									
Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day.
A.M.		1	3	6	2	4	4	1	10		
P.M.			5	3	2	4	2	2	13		
Mean.	0	0	4	5	2	4	3	2	11		

(Signed)

Robert Muirhead

Observations made and
Return verified by

epizootic disease prevails among cattle; and the Agricultural condition of the district generally.

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Glasgow, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level 20 feet, above Ground _____ feet. During the MONTH of April 188 4.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.	
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.									
		Barometer. * No.	Attach- ed Ther- mometer	Barometer. No.	Attach- ed Ther- mometer	Max. No.	Min. No.	Max. in sun's rays No.	Min. on Grass. No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dirac- tion.	Force	Dirac- tion.	Force	Readings of the H. Cup Anemometer. No. —	No. of hours in which it fell.	Amount in inches. No. —	Velocity (0—10), and Direction.	Amount, (0—10), and Species.	Velocity (0—10), and Direction.	Amount, (0—10), and Species.	No. 3 inches.	No. 12 inches.					No. 22 inches.
		inches.	°	inches.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°					°
	1	29.452	52	29.542	58	56.0	32.0			47.0	43.0	47.0	44.0	SE	16	2			6.9 1/2		4	10	40.0	40.5	41.0			42.5		1	
	2	29.630	52	29.680	60	60.0	43.0			45.0	43.0	48.0	47.0	SE	16	2					10	10	43.0	42.0	41.0					2	
	3	29.620	54	29.530	56	56.5	44.0			48.0	47.0	44.0	—	SE	16	8					4	6	45.5	44.0	43.0			44.5		3	
	4	29.478	58	29.500	55	52.0	40.0			48.0	47.0	42.0	45.0	SE	16	8						0	44.5	46.0	43.5			44.5		4	
	5	29.252	55	29.312	56	52.5	45.0			50.0	47.0	47.0	45.0	SE	16	2						8	45.0	46.5	43.5			44.5		5	
	6	29.340	53	29.680	60	58.0	44.0			51.0	47.0	44.0	41.0	SE	2						8		46.0	46.5	44.0					6	
	7	29.666	56	29.712	58	51.0	37.0			43.0	42.0	47.0	45.0	SE	2						8		43.0	45.0	44.0					7	
	8	29.920	53	30.050	58	57.0	48.0			57.0	44.0	45.0	44.0	2	2						0		45.5	45.5	44			45.0		8	
	9	30.100	54	30.122	58	54.0	43.0			45.0	—	42.0	38.0	2	2						10	6	46.5	46.0	45.0			46.5		9	
	10	30.150	52	30.104	53	49.0	35.0			44.0	41.0	44.0	42.0	2	2						0	0	43.5	45.0	45.0			46.5		10	
	11	30.102	51	30.152	57	46.0	34.0			43.0	41.0	43.0	42.0	SE	16						10	8	41.5	44.5	44.5			46.5		11	
	12	30.168	52	30.172	52	47.5	38.0			44.0	41.0	44.0	42.0	SE	16						6	10	41.5	43.5	44			46.5		12	
	13	30.258	48	30.300	55	45.5	42.0			44.0	41.0	43.0	40.0	SE	16						8	10	42.5	43.5	43.5					13	
	14	30.306	52	30.280	58	48.0	42.0			45.0	42.0	45.0	43.0	SE	16						8	10	43.0	43.5	43.5			45.0		14	
	15	30.146	52	30.002	52	48.0	44.0			47.0	44.0	43.0	41.0	2	2						8		44.0	44.0	43.5			45.5		15	
	16	29.946	52	30.090	54	46.0	40.0			46.0	42.0	43.0	40.0	SE	16						2	10	43.5	44.5	44.0			46.0		16	
	17	30.246	52	30.270	55	48.5	40.0			42.0	39.0	42.0	38.0	SE	16						6	10	43.0	44.0	44.0			46.5		17	
	18	30.160	50	29.990	55	47.5	38.0			43.0	38.0	42.0	39.0	SE	16						8	10	42.5	44.0	44.			47		18	
	19	29.940	52	29.988	55	50.5	42			46.0	42.0	45.0	43	SE	16						6	8	45.0	44.5	44			47		19	
	20	30.040	52	30.090	55	46.0	41.0			45.0	41.0	42.0	38.0	SE	16						8	4	45.0	46.0	44.5					20	
	21	30.100	52	30.100	55	48.5	32.0	Real	32.0	43.0	41.0	42.0	39	SE	16						5	10	43.0	45.0	45.0					21	
	22	30.100	49	30.070	55	49.0	32.0			45.0	44.0	42.0	39.0	SE	16						3	10	43.0	44.5	45.0					22	
	23	30.020	50	29.980	53	44.0	38.0			39.0	38.0	38.0	38.0	SE	16						10	10	44.5	44.0	44.0			46		23	
	24	29.946	50	29.980	53	46.5	32.0			44.0	39.0	37.0	35.0	SE	16						4	3	44.5	43.0	43			46		24	
	25	29.992	50	29.936	52	49.0	31.0			43.0	40.0	42.0	39.0	2	2						8	10	40.0	42.5	43.0			45.5		25	
	26	29.830	52	29.770	51	48.0	38.0			46.0	42.0	41.0	38.0	SE	16						5	10	43.0	43.5	43			45.5		26	
	27	29.824	48	29.770	54	48.0	31.0			43.0	40.0	40.0	35.0	SE	16						8	0	42.0	43.5	43.5					27	
	28	30.036	50	30.012	54	46.0	30.0			45.0	41.0	43.0	42.0	SE	16						4	10	42.0	43.0	43.5			46.0		28	
	29	29.870	52	29.700	53	52.0	41.0			42.0	41.0	46.0	44	SE	2						10	8	43.0	43.5	43.5			46.0		29	
	30	29.570	55	29.710	52	52.0	42.0			50.0	45.0	43.0	—	SE	16						5	6	45.0	44.5	44.0			46.5		30	
	31	13 13 7	9	13 13 3	12	17 4	10			13	10	12	13																	31	
Sums.		21 27	62	89 4	9	65	00			16	6	10	20																		
Means.		29.907	52.1	29.936	55.7	50.2	38.7			45.4	42.0	43.4	41.0																		
† Total Corrections for Instrumental Errors.																															
‡ Corrections for Diurnal Range.																															
“Corrected Means.”																															
No. of Column		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

NOTATION USED IN GENERAL REMARKS.					
a.	denotes aurora.	m.	denotes meteor.		
ci.	" cirrus.	ms.	" meteors.		
ci-cu.	" cirro-cumulus.	n.	" nimbus.		
ci-s.	" cirro-stratus.	r.	" rain.		
cu.	" cumulus.	h. r.	" heavy rain.		
cu-s.	" cumulo-stratus.	c. h. r.	" continued heavy rain.		
d.	" dew.	s.	" stratus.		
f.	" fog.	sc.	" scud.		
fr.	" frost.	s.	" sleet.		
h-fr.	" hoar-frost.	s.	" snow.		
h.	" haze.	sol. h.	" solar halo.		
h. d.	" heavy dew.	sq.	" squall.		
hl.	" hail.	sg.	" squalls.		
l.	" lightning.	t.	" thunder.		
li. cl.	" light clouds.	t. s.	" thunder storm.		
li. sh.	" light showers.	w.	" wind.		
lu. co.	" lunar corona.	g.	" gale of wind.		
lu. h.	" lunar halo.				

TABLE FOR ESTIMATING FORCE OF WIND.					
Estimated Force, 0—6.	Common Designation.	Estimated Force, 0—6.	Common Designation.	Estimated Force, 0—6.	Common Designation.
0	Calm	1.5	Light breeze	4	Blowing hard
0.5	Very light air	2	Fresh breeze	5	Blowing a gale
1	Light air	3	Very fresh	6	Violent gale

BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† for Temp. (Col. 2), = 29.844
Corrected Mean” of Barometer at 9 P.M., minus the Correction†† for Temp. (Col. 4), = 29.859
Mean at Station, corrected, and at 32°, = 29.852
Correction for height, feet above Mean Sea-level, = 22
Mean, reduced to 32°, and Sea-level, = 29.874
Highest Reading, corrected for Index error, on the 14 th, = 30.306
Lowest Do. Do. on the 5 th, = 29.252
Difference, or Monthly Range, = 1.054

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 2 th, = 60.0
Lowest in Month, corrected for Index errors, on the 28 th, = 30.0
Difference, or Monthly Range, = 30.0
“Corrected Mean” of all the Highest, (Col. 5), = 50.2
“Corrected Mean” of all the Lowest, (Col. 6), = 38.7
Difference, or Mean Daily Range, = 11.5
** Calculated Mean Temperature of Month, = 44.4

S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun, =
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass, =
Difference of above Means or Range (“exposed”), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 44.4
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 41.6
†† Computed Temperature of Dew-Point, =
†† Do. Elastic Force of Vapour, =
†† Do. Weight of Vapour in a Cubic Foot of Air, =
†† Relative Humidity, (Saturation = 100), =
RAIN fell on Days; Amount in Inches, = 0.82

WIND.		SUMMARY.									
Direction.		N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.
A.M.		2	5	9	6		1	1	1	5	
P.M.		1	6	9			1		13		
Mean.		1.6	9	3	0	0	1	1	9		

(Signed)

Robert Muirhead

Observations made and
Return verified by

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Edinburgh, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level 2.0 feet, above Ground _____ feet. During the MONTH of May 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. THERMOMETERS, Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.	
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.									
		Barometer. * No. —	Attach- ed Ther- mometer	Barometer. No. —	Attach- ed Ther- mometer	Max. No. —	Min. No. —	Max. in Sun's rays No. —	Min. on Grass. No. —	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	No. of hours in which it fell.	Amount in inches.	Velocity (0—6) and Direction.	Amount, (0—10), and Species.	Velocity (0—6), and Direction.	Amount, (0—10), and Species.	No. 3 inches.	No. 12 inches.	No. 22 inches.					
		inches.	°	inches.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°					°
	1	29.500	53	29.380	53	49.0	41.0	43.0	42.0	41.0	37.0	41.0	37.0	SE	4	SE	4	7.8		10		5		43.5	44.5	44.0			1		
	2	29.414	51	29.350	54	52.0	34.0	46.0	43.0	43.0	40.0	43.0	40.0	SE	4	SE	4			5		6		42.0	43.5	44	46		2		
	3	29.100	54	28.940	53	48.0	38.0	42.0	40.0	41.0	39.0	41.0	39.0	SE	4	SE	4	8.1		8		10		43.0	44.0	44	46.5		3		
	4	29.020	50	29.250	55	57.0	39.0	43.0	41.0	42.0	42.0	42.0	42.0	SE	4	SE	4			6		10		43.5	44.0	44.0			4		
	5	29.346	51	29.530	50	52.0	38.0	41.0	41.0	43.0	41.0	43.0	41.0	SE	4	SE	4	8.3 1/2		8		10		42.5	44.5	43.0			5		
	6	29.420	52	29.408	55	52.5	38.0	42.0	42.0	42.0	42.0	42.0	42.0	SE	4	SE	4			6		8		44.5	44.5	44.0	46.5		6		
	7	29.552	52	29.582	55	52.0	36.0	42.0	42.0	48.0	42.0	48.0	42.0	SE	4	SE	4	8.3 1/2		8		10		44.5	45.0	44.5	47		7		
	8	29.584	54	29.586	56	58.0	44.0	45.0	46.8	52.0	40.0	52.0	40.0	SE	4	SE	4			5		10		44.0	45.5	45.0			8		
	9	29.836	53	30.024	56	63.0	45.0	47.0	41.0	43.0	41.0	43.0	41.0	SE	4	SE	4	9.1 1/2		10		8		45.0	47.0	45.0	48		9		
	10	30.116	58	30.112	58	60.0	45.0	58.0	53.0	53.0	50.0	53.0	50.0	SE	4	SE	4	9.2		8		10		52.0	48.5	46	48		10		
	11	30.052	58	29.890	60	70.0	46.0	54.0	57.0	56.0	54.0	56.0	54.0	SE	4	SE	4			4		4		52.0	48.5	48.5			11		
	12	29.988	60	30.012	58	68.5	44.0	58.0	52.0	50.0	47.0	50.0	47.0	SE	4	SE	4			6		10		54.0	51.5	48.5	48.5		12		
	13	30.006	60	29.774	60	64.0	43.0	56.0	51.0	50.0	47.0	50.0	47.0	SE	4	SE	4			4		9		52.5	52.0	49.0	49.0		13		
	14	29.636	60	29.426	56	62.0	38.0	53.0	48.0	48.0	44.0	48.0	44.0	SE	4	SE	4			6				52.0	52.0	49.5	48.5		14		
	15	29.750	50	29.788	58	64.0	45.0	54.0	50.0	52.0	48.0	52.0	48.0	SE	4	SE	4			8		8		50.0	51.0	50.0	49		15		
	16	29.766	58	29.640	60	62.5	50.0	53.0	—	50.0	47.0	50.0	47.0	SE	4	SE	4			8		9		52.0	51.5	50	49.5		16		
	17	29.596	58	29.458	60	58.0	50.0	54.0	52.0	50.0	46.0	50.0	46.0	SE	4	SE	4	9.3		6		8		53.0	52.0	50	50		17		
	18	29.652	56	29.832	53	55.0	44.0	57.0	45.0	45.0	42	45.0	42	SE	4	SE	4			2		2		50.0	51.5	50			18		
	19	29.426	54	29.950	53	54.0	36	50.0	46.0	44.0	43	44.0	43	SE	4	SE	4			2		10		50.0	50.5	50			19		
	20	30.050	52	30.200	57	56.0	38	50.0	45	45.0	42.0	45.0	42.0	SE	4	SE	4	9.4		9		6		49.0	50.5	50			20		
	21	30.300	53	30.320	54	60.0	37.0	55.0	49.0	52.0	48	52.0	48	SE	4	SE	4			6		8		49.0	50.0	50			21		
	22	30.386	58	30.396	60	70.5	57.0	60.0	53.0	58.0	53	58.0	53	SE	4	SE	4			8		8		52.0	50.5	49.5	48.5		22		
	23	30.374	60	30.360	58	70.0	40.0	53.0	50.0	51.0	49	51.0	49	SE	4	SE	4			4		9		52.0	52.5	50.5	50		23		
	24	30.280	58	30.290	58	54.0	43.0	53.0	47.0	49.0	46	49.0	46	SE	4	SE	4			2		9		52.0	53.5	57.0	50		24		
	25	30.306	56	30.346	55	53.0	45	50.0	47	47	44	47	44	SE	4	SE	4			8		4		52.0	52.5	57.5			25		
	26	30.104	56	30.438	55	62.0	42	57	47	48	46	47	46	SE	4	SE	4			5		2		51.0	52	57.5			26		
	27	30.438	55	30.392	55	62.0	38	50	47	47	45	47	45	SE	4	SE	4			2		8		51.0	57.5	57.0	52		27		
	28	30.400	56	30.404	56	54.5	41	49	45	48	45	48	45	SE	4	SE	4			4		10		57.5	57.5	57.0	52		28		
	29	30.394	54	30.324	53	52.0	46	47	44	47	44	47	44	SE	4	SE	4			8		—		50.0	52.0	51.0	51		29		
	30	30.260	54	30.204	53	53.0	46	48.0	45.0	48	46	48	46	SE	4	SE	4			6		2		50.5	51.5	50.5	51		30		
	31	30.224	55	30.144	54	62.0	42	52.0	48	—	—	—	—	SE	4	SE	4	9.5		8				51.0	57.5	50.5	51		31		
	Sums.	10.486	9	886	0	65	20	20	13	90	20	23	16											49.4	49.4	48.3	49.0				
	Means.	29.919	55.12	29.930	56.07	57.6	43.0	50.7	46.8	48.0	45.2																				
	† Total Corrections for Instrumental Errors.																														
	† Corrections for Diurnal Range.																														
	“Corrected Means.”																														
	No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† for Temp. (Col. 2), = 29.848
Corrected Mean” of Barometer at 9 P.M., minus the Correction†† for Temp. (Col. 4), = 29.856
Mean at Station, corrected, and at 32°, = 29.852
Correction for height, feet above Mean Sea-level, = 2.2
Mean, reduced to 32°, and Sea-level, = 29.874
Highest Reading, corrected for Index error, on the 26 th, = 30.438
Lowest Do. Do., on the 3 th, = 28.970
Difference, or Monthly Range, = 1.468

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 22 th, = 70.5
Lowest in Month, corrected for Index errors, on the 14 th, = 36.0
Difference, or Monthly Range, = 34.5
“Corrected Mean” of all the Highest, (Col. 5), = 55.6
“Corrected Mean” of all the Lowest, (Col. 6), = 43.0
Difference, or Mean Daily Range, = 12.6
“Calculated Mean Temperature of Month, = 50.6
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun, =
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass, =
Difference of above Means or Range (“exposed”), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 49.4
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 46.0
†† Computed Temperature of Dew-Point, =
†† Do. Elastic Force of Vapour, =
†† Do. Weight of Vapour in a Cubic Foot of Air, =
†† Relative Humidity, (Saturation = 100), =
RAIN fell on Days; Amount in Inches, = 1.7

WIND.		SUMMARY.									
Direction.		N	NE	E	SE	S	SW	W	NW	Mean Force.	Mean Velocity in miles per day.
A.M.			2	5	4		8	7	5		
P.M.			1	5	1		7	5	12		
Mean.		0	2.5	2.0	8	6	0	8			

* Each instrument tested at the Office in Edinburgh bears the stamp “S.M.S.” and a number to be entered in the Heading; or the Number and Initials of the Maker may be here given.
† Enlarging corrections for both capillarity and Index Errors.
†† The Diurnal Range for Scotland is as yet unknown.
††† These “Hygrometrical Deductions” are calculated from Glaisher’s Hygrometrical Tables, Second Edition only.
†††† While the Diurnal Range is unknown, the Arithmetic Mean of Cols. 9 and 11 will be entered as the “Calculated Mean Temperature.”
Any Observations not taken under the conditions specified in the Directions on the other side, or noted at the Top of each column, must be marked as such by the observer, in each Schedule. See over.

Observations made and
Return verified by

(Signed)

Robert Muirhead

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Poppa, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level _____ feet, above Ground _____ feet. During the MONTH of June 1884.
The Hours of Observation are of Greenwich Time.

ELEVATION.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.				SUNSHINE. Hours.	SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, begin and ended.	Days of Month.				
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H. Cup Anemometer No. —		No. of hours in which it fell.		9 A.M.		P.M.		9 h. A.M.							Temperature of Well at depth of feet, No. —	Temperature at 1 fathom, and Density.	9 A.M. 9 P.M.	
		Barometer.	Atmospheric Thermometer.	Barometer.	Atmospheric Thermometer.	Max.	Min.	Max. in Sunways.	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	9 h. A.M.	No. —	Amount in inches.	Velocity (0—10) and Direction.	Amount, (0—10), and Species.	Velocity (0—10), and Direction.	Amount, (0—10), and Species.	No. 3 inches.	No. 12 inches.	No. 22 inches.									
		No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —	No. —									No. —
		inches.	°	inches.	°																															
	1	29.800	54	29.806	60	64.5	46.0			61.0	53.	55.0	49.0	E	16					9.5		2		6		53.5	53.	52.			1					
	2	29.620	60	29.450	61	64.0	45.0			63.0	52.	56.	52.	SE	16							4		5		56.	53.5	52.			2					
	3	29.838	60	29.830	58	56.0	44.0			53.0	52.	51.	49.	SE	16							6		3		54.	53.	53.			3					
	4	29.833	56	29.830	56	54.0	46.0			42.0	46.5	51.	49.	E	8							10		8		53.	54.5	53.			4					
	5	29.830	54	29.450	56	52.0	46.0			42.0	48.0	50.	49.	E	2							7		10		52.	53.5	53.			5					
	6	29.410	55	29.450	56	52.0	46.5			50.0	47.0	48.	47.	E	2							10		10		51.	53.	52.			6					
	7	29.480	55	29.830	56	56.0	43.0			42.0	48.0	51.	50.	E	2							7				51.	52.	52.			7					
	8	29.830	50	29.900	52	53.0	48.5			57.0	46.5											9				52.0	52.5	52.0			8					
	9	30.000	54	30.052	54	53.0	47.	(53. 47.)		57.0	46.0	48.0	46.	E	8							6		8		44.5	52.0	51.0			9					
	10	30.086	56	30.080	58	65.5	48.0			54.0	57.0	52.0	53.	E	16							3		8		52.0	51.0	52.0			10					
	11	29.980	60	30.150	58	64.0	53.0			60.0	53.0			E	16							6		4		53.5	53.0	51.0	52		11					
	12	30.310	60	30.314	63	68.5	48.0			54.0	50.0	60.0	55.	E	16							4				54.0	53.	52.	54		12					
	13	30.190	53	30.324	61	43.0	54.0			68.0	61.0	53.	48.	SE	16							2		0		59.	55.5	52.5	54 1/2		13					
	14	30.342	58	30.380	60	60.5	44.0			56.	49.0	52.0		SE	16							2				54.0	55.0	53.0			14					
	15	30.340	58	30.390	60	62.5	48.0			56.0	54.	53.	52.0	SE	16							14				53.0	54.0	53.0			15					
	16	30.310	58	30.280	60	58.0	44.			53.	48.	53.	52.	E	16							6				54.0	54.5	53.			16					
	17	30.252	60			63.0	53.			54.	54.	53.	52.	SE	16							8				56.0	54.5	53.5			17					
	18	30.260	58	30.280	58	56.5	53.			54.	51.	54.	52.	E	16							8		6		56.0	56.0	54.	54 1/2		18					
	19	30.286	60			61.0	51.			56.0	52.	53.	51.	E	16							8				56.0	55.0	54.	54 1/2		19					
	20			30.306	58	61.0	52			53.0	52.	53.	51.	E	16							6		1					53 1/2		20					
	21	30.284	60			62.0	48.			54.	54.	53.	51.	E	16							4		8		56.0	56.0	54.	58		21					
	22	30.220	61	30.136	60	64.0	53.			58.0	54.	54.	53.	SE	16										4		54.0	56.	54.			22				
	23	30.150	60			62.0	50.			55.	51.	53.	50.	E	16							6		10		56.	56.5	54.5	53		23					
	24	29.846	62			66.	53.			61.	56.	58.	53.	SE	16										6					54 1/2		24				
	25	29.980	61	30.080	60	64.	48.			54.	51.	55.	50.	E	16							6		8		53.5	56.0	55.	54 1/2		25					
	26	30.046	64	30.126	65	69.0	53.			63.	58.	63.	58.	SE	16							8		9		59.0	56.0	55.	53		26					
	27	30.224	64	30.250	64	64.0	52.			58.	56.	58.	56.	E	16							4		10		59.0	57.5	53.	56		27					
	28	30.296	64	30.300	66	42.0	51.			63.	58.	64.	62.	E	16							0.		0		60.	58.	53.5			28					
	29	30.152	65	30.080	65	45.5	54.			62.	53.	60	54	SE	16							8		5		60.5	54.0	56.			29					
	30	30.120	64	30.150	63	68.0	53			54	55	56	55	E	16							8		9		60.	58.5	54	56 1/2		30					
	31	13148	10	4113	10	123	111			13	12	11														122	135	92			31					
Sums.		092	26	131	864	110	05	50		80	70	70	30													25	40	30								
Means.		0	26	1	24	8	28			19	8	13	5													12	13	9								
		30.072	59.0	30.074	59.6	62.7	49.5			56.6	52.2	54.9	52.0													55.3	54.7	53.3	54.5							
† Total Corrections for Instru- mental Errors.																																				
‡ Corre- ctions for Diurnal Range.																																				
“Cor- rected Means.”																																				
No. of Column.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					

BAROMETER, "corrected Mean" at 9 A.M., <i>minus</i> the Correction +†)	=	29.950
for Temp. (Col. 2), = 30.072	=	29.950
Corrected Mean of Barometer at 9 P.M., <i>minus</i> the Correction +†)	=	29.981
for Temp. (Col. 4), = 30.074	=	29.981
Mean at Station, corrected, and at 32°,	=	29.981
Correction for height, feet above Mean Sea-level,	=	22
Mean, reduced to 32°, and Sea-level,	=	30.013
Highest Reading, corrected for Index error, on the 15th,	=	30.390
Lowest Do. Do. on the 1th,	=	29.506
Difference, or Monthly Range,	=	0.884

S.-R. THERMOMETER , (in shade, etc.), Highest in Month , (corrected for Index Errors), on the <u>29</u> th,	=	<u>75.5</u>
Lowest in Month , corrected for Index errors, on the <u>4</u> th,	=	<u>43.0</u>
Difference, or Monthly Range ,	=	<u>32.5</u>
"Corrected Mean " of all the Highest , (Col. 5),	=	<u>62.5</u>
"Corrected Mean " of all the Lowest , (Col. 6),	=	<u>49.5</u>
Difference, or Mean Daily Range ,	=	<u>13.0</u>
** Calculated Mean Temperature of Month,	=	<u>56.1</u>
<hr/>		
S.-R. THERMOMETER, Black Bulb in Sun, Highest , (corrected for Index Errors), on the th,	=	
"Corrected Mean ," (Col. 7), of Black Bulb, Max. in Sun ,	=	
Lowest at Night , Black Bulb, (corrected for Index errors), on the th, ...	=	
"Corrected Mean ," (Col. 8), of Black Bulb, Min. on grass,	=	
Difference of above Means or Range ("exposed"),	=	

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb , (Cols. 9 and 11),		=	55-8
Mean (corrected) A.M. and P.M. Reading of Wet Bulb , (Cols. 10 and 12),		=	52-1
†† Computed	Temperature of Dew-Point ,	=	
†† Do.	Elastic Force of Vapour ,	=	
†† Do.	Weight of Vapour in a Cubic Foot of Air , ...	=	
††	Relative Humidity , (Saturation = 100),	=	
RAIN fell on	Days; Amount in Inches ,	=	2.75 Inches

WIND.		SUMMARY.									
Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day
A.M.		2	9	1	3	4	2		9		
P.M.		1	2	3		3	3		18		
Mean.	0	1	6	2	1	4	3	0	13		

(Signed)

Observations made and
Return verified by

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Glasgow, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level _____ feet, above Ground _____ feet. During the MONTH of July 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.									
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		No. of hours in which it fell.		9 A.M.		P.M.		9 h. A.M.		Temperature of WELL at depth of feet No.	Temperature at station, and direction of wind.					9 A.M. 9 P.M.								
		Barometer. * No.	Attach- ed Ther- mometer	Barometer. No.	Attach- ed Ther- mometer	Max. No.	Min. No.	Max. in Sun-rays No.	Min. on Grass. No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer. No. —	No. of hours in which it fell.	No.	Velocity (0—6), and Direction.	Amount (0—10), and Species.	Velocity (0—6), and Direction.	Amount (0—10), and Species.	No. inches.								No. inches.	No. inches.						
		inches.	°	inches.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°								°	°	°	°	°	°	°	°
		No.	°	No.	°	No.	°	No.	°	No.	°	No.	°	No.	°	No.	°	No.	°	No.	°	No.	°	No.	°								No.	°	No.	°	No.	°	No.	°
1	30.250	64	30.260	64	64.0	53.0			54.	53.	54.	56	2	E					9 4 3					4	60.0	57.5	57.							1						
2	30.248	62	30.150	63	61.0	53.			54.	—	53.	55.	2	hazy.											58.5	57.5	57.			56 1/2				2						
3	30.136	62	30.060	63	64.	52.			57.	53			2												58.5	59.0	57.			58 1/2				3						
4	30.060	62	29.942	64	54.5	54.			53.	55.			E	E					10.0 1/2						57.5	59.0	57.			59				4						
5	29.978	60	29.970	63	60.0	54.			55.	53.	55.		E	E					10.1 1/2						57.0	58.0	57.			54 1/2				5						
6	29.930	63	29.928	62	64.0	53.			58.	57.	58.	57.	2	2					11.8 1/2	10		9			58.5	58.0	56.5							6						
7	29.900	64	29.950	65	66.5	55.			58.	57.	59.	58.	2	3					12	9		10			57.0	58.0	57.			57 1/2				7						
8	29.960	67	29.944		64.5	58.			66.	61.	60.	59	E	3					12 1/2	8		10			61.0	58.5	56.5			58				8						
9	29.980	65	29.970	64	64.5	57.			58.	58.5	58.	57.	2	2					12 3/4	8		10			61.5	60.0	57.5			59 1/2				9						
10	29.932	65	29.952	64	64.0	58.0			66.	63.	58.	58.	16th	2					13	6		10			61.5	54.5	57.5			59				10						
11	29.960	65	29.918	65	64.0	55.			57.	56.	58.	57.	2	2					13 1/2	10					59.0	60.	58.			58				11						
12	29.976	64	29.860	66	50.0	54.			59.0	54.	59.	56.	16th	2					13 1/2	2		6			60.0	54.5	57.5			58				12						
13	29.936	62	29.960	67	52.1	52.5			63	61.	62.	58	2	2											61.0	59.5	58.0							13						
14	29.730		29.740	63	67.5	56.			63.	54	54	56	16th	2					14.0	6					60.	59.5	58.							14						
15	29.812	66	29.852	67	70.0	53.			63.	58	58	57.	16th	2					0.9	3					58.5	58.0	57.5							15						
16	29.486	66	29.440	63	66.5	59			63.	56.			16th	2					1.0	4					60.5	59.5	58			57 1/2				16						
17	29.524	65	29.464	62	65.0	53.			60.	56.	54.	50.	16th	2						6		2			58.	58.5	58.			57 1/2				17						
18	29.840	63	29.942	62	62.0	52.			57.	53.			16th	2						2					56.5	59.0	58.			58				18						
19	30.140	62	30.184	62	62.0	45.			53.0	48.	52.	48	16th	2						2		6			57.5	57.	57.			57 1/2				19						
20	30.210	60	30.108	60	61.0	48.			55.	51.	53.	57.	2	2											53.5	56.5	56							20						
21	29.912	62	29.960	60	58.0	50.			55.	52.	53.	50	E	2						8		10			53.5	56.5	53.5			56 1/2				21						
22	29.940	60	29.884	62	64.0	52.			54.	53			2	2					1.1 1/2	6					53.5	56.0	53.5							22						
23	29.736	60	29.640	63	57.				58.	57.			16th	2					1.1 3/4	8					56.5	56.0	53.5			55 1/2				23						
24	29.610		29.814	60	67.0				57.	52.			16th	2						6					54.5	53.5	55.5			56 1/2				24						
25	30.006	58	30.015		63.	48.			57.	48.			16th	2					1.3 1/2	6					54.5	53.5	55.5			56 1/2				25						
26	30.044	60	29.910		58.	44.			53.				16th	2						8					53.5	53.	53.							26						
27	29.980	58	30.154	60	58.5	50					53.	50.	16th	2						6					53.5	53.	54.5							27						
28	30.138	60	30.048	62	68.0	48					58.0	55.	2	2						5		6				55	54.5							28						
29	30.136	61	30.200	62	56.0	49.					55.5	54.	16th	2						9		10			55	56.	56							29						
30	30.190		30.180	62	62.0	53.5			56.	55.	58.	58.	2	2						10					55	56.	56.5							30						
31	30.186	63	30.200	64	68.5	56.1			62.0	59.	57.5	56.1	16th	2					1.5 1/2	10		2			56.0	57.0	59.5							31						
Sums.		666	126	174	472	80	50		11	105	53	8													110	50	35													
Means.		29.950	62.8	29.943	62.9	62.9	52.8		58.0	55.6	56.8	55.8													57.6	57.8	56.8			57.5										
† Total Corrections for Instrumental Errors.																																								
‡ Corrections for Diurnal Range.																																								
“Corrected Means.”																																								
No. of Column.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30									

NOTATION USED IN GENERAL REMARKS.					
a.	denotes aurora.			m.	denotes meteor.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.	ci.	ci.	ci.	ms.	ms.
ci.					

BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† = 29.847
for Temp. (Col. 2), = 29.940 — 93 = 29.847
Corrected Mean” of Barometer at 9 P.M., minus the Correction†† = 29.850
for Temp. (Col. 4), = 29.943 — 93 = 29.850
Mean at Station, corrected, and at 32°, = 29.849
Correction for height, feet above Mean Sea-level, = 22
Mean, reduced to 32°, and Sea-level, = 29.871
Highest Reading, corrected for Index error, on the 1 th, = 30.260
Lowest Do. Do. on the 16 th, = 29.486
Difference, or Monthly Range, = 0.774

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 8 th, = 44.5
Lowest in Month, corrected for Index errors, on the 26 th, = 44
Difference, or Monthly Range, = 30.5
“Corrected Mean” of all the Highest, (Col. 5), = 64.3
“Corrected Mean” of all the Lowest, (Col. 6), = 52.8
Difference, or Mean Daily Range, = 11.5
** Calculated Mean Temperature of Month, = 58.5
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, = —
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun, = —
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, = —
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass, = —
Difference of above Means or Range (“exposed”), = —

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 57.4
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 55.7
†† Computed Temperature of Dew-Point, = —
†† Do. Elastic Force of Vapour, = —
†† Do. Weight of Vapour in a Cubic Foot of Air, = —
†† Relative Humidity, (Saturation = 100), = —
RAIN fell on Days; Amount in Inches, = 5.53

WIND.		SUMMARY.				
Direction.	N	NE	E	SE	S	SW
A.M.		2	3	3	1	18
P.M.		5	1		1	22
Mean.	0	1	4	2	2	19

* Each instrument tested at the Office in Edinburgh bears the stamp “S.M.S.” and a number to be entered in the Heading; or the Number and Initials of the Maker may be given.
† Embracing corrections for both capillarity and Index Errors.
‡ The Journal Range for Scotland is as yet unknown.
†† These “Hygrometrical Deductions” are calculated from Glaisher’s Hygrometrical Tables, Second Edition only.
‡‡ While the External Range is unknown, the Arithmetic Mean of Cols. 5 and 6 will be entered as the “Calculated Mean Temperature.”
Any Observations not taken under the conditions specified in the Directions on the other side, or noted at the Top of each column, must be marked as such by the observer, in each Schedule. See over.

Observations made and
Return verified by

(Signed)

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Glasgow, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level _____ feet, above Ground _____ feet. During the MONTH of August 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.									
		Barometer.	Attached Thermometer.	Barometer.	Attached Thermometer.	Max.	Min.	Max. in Sun/rays	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	No. of hours in which it fell.	No. of hours in which it fell.	Velocity (0-10), and Direction.	Amount (0-10), and Species.	Velocity (0-10), and Direction.	Amount (0-10), and Species.	No. 3 inches.	No. 12 inches.	No. 22 inches.					
		* No.	°	No.	°	No.	No.	No.	No.	°	°	°	°																		
	1	30.180	63	30.000	65	69.0	52.0			60.0	58.0	59.0	58.	2	2			1.3-4		8		4		56.0	57.0	58.			1		
	2	29.570	65	29.780	65	64.0	54.0			65.	59.	59.	55.	SW	SW					3		4		56.0	58.	60.5			2		
	3	29.928	63	30.030		63.	52.			60.	54.			SW	2					4		6		57.	58.	59.			3		
	4	30.150	62	30.244	62	63.0	52.			58.	54.	53.	53.	SW	2			14				8		57.	56.	56.			4		
	5	30.254	62	30.210	64	69.0	50.			60.	55.	52.		SW	3							6		59.	56	53.5			5		
	6	30.192	65	30.150	66	76.5	48.			60.0	62.	61.	58.	2	2									57.5	56.5	56.	54		6		
	7	30.190	65	30.200	65	41.5	54.			60.	-	58.		SW	3					0		8		59.5	58.0	56.5			7		
	8	30.242	64	30.134	64	60.0	54.			55.				2	2									58.0	58.0	57.			8		
	9	30.120	63	30.040	63	63.5	55.0			57.	56	58.		SW	2					6		10		58.	58.	57.	58.2		9		
	10	30.034	64	29.974	64	65.0	53.			63.0	60.	57.		2	2					4		10		60.	58.	57			10		
	11	29.992		29.980	64	68.5	53.			59.0	58.	58.		2	2			1.4-4		6		10		59.5	58.5	57.			11		
	12	29.950	63	29.950	65	66.0	54.			57.5	56.5	58.		SW	SW					10				57.	59.0	58			12		
	13	29.924	66	29.930	66	73.0	57.			66.0	64.0	57.		SW	SW			3.4		8		8		60.	58.	57.5	58.2		13		
	14	29.960	66	30.040	65	67.0	53.			63.0	57.	55.	52.	SW	SW					2		8		60.	58.	58.	57		14		
	15	30.104	66	30.072	66	68.0	50.			62.0	58.	62.		SW	SW					6		10		57.5	58.5	57.5	57.2		15		
	16	30.050	68	30.035	66	68.0	59.			66.0	61.0	60.	54.	SW	2					2		10		60.5	58.5	57.5	57.2		16		
	17	30.104	66	30.010	66	71.0	56.			66.0	61.0	58.										6		59.0	59.0	57.5			17		
	18	29.980	65	29.980	66	68.0	57.0			62.		62.								2		10		57.5	59.	58.			18		
	19	29.980	66	29.950	65	67.0	52.			63	58	53	51	2	2					6		4		58.	59.	58			19		
	20	30.050	63	30.080	64	69.0	44.			58.5	54.	58.	53	2	2					4		2		57.5	58.0	57.			20		
	21	30.244	63	30.280	64	65.5	54.			62.0	53.	54.	52	SW	SW					2		6		58.5	58.0	57.			21		
	22	30.220	65	30.160	66	68.5	54			65.	60.	62.	56.	2	2					5		8		58.5	58.5	57.			22		
	23	30.125	65	30.090	68	78.5	55.			62	58.	63.	58.	2	2					4		8		59.0	58.5	57.5	60.		23		
	24	30.036	68	30.016	68	76.0	57.			75.0	66.	53.	52	SW	SW							0		57.	58.5	57.5			24		
	25	30.152	60	30.200	65	63.0	52.			56.0	50.	52.	48	SW	SW									57.	58.5	57.5	58		25		
	26	30.170		30.110		60.0	46			52	44	54	51.5	SW	SW					10		10		53.	56.5	57.	56.2		26		
	27	30.010	60	29.990	60	53.	49.			54.	50.	50.	47.	2	SW					8		10		54.	56.	58	57		27		
	28	29.596	57	29.528	58	59.	44.			52	50	48	46	SW	SW			35.2		9				52.5	53	56	56		28		
	29	29.630	57	29.422	60	61.0	43			53	51	50	47	SW	2					4		2		51.5	52.	53.	55.2		29		
	30	29.484	58	29.402	60	54.5	47.			58.	53	53	52	SW	2					4		10		53.	53.	52.	55.2		30		
	31	29.752	60	29.400	62	61.5	57.3			58.	53.	52.	51.	SW	2			3.6		4		10		54.	53.5	52.4			31		
Sums.		256	8	450	13	205	8			60	55	59	55										7	5	5						
Means.		0.816	9	28.722	13	66.6	52.2			60.6	56.4	56.2	52.4										57.3	57.5	57.0	57.2					
† Total Corrections for Instrumental Errors.																															
‡ Corrections for Diurnal Range.																															
“Corrected Means.”																															
No. of Column.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

NOTATION USED IN GENERAL REMARKS.					
a.	denotes	aurora.	m.	denotes	meteor.
ci.	cirrus.	ms.	meteors.		
ci-cu.	cirro-cumulus.	n.	nimbus.		
ci-s.	cirro-stratus.	r.	rain.		
cu.	cumulus.	h. r.	heavy rain.		
cu-s.	cumulo-stratus.	c. h. r.	continued heavy rain.		
d.	dew.	s.	stratus.		
f.	fog.	sc.	squall.		
fr.	frost.	s.	sleet.		
h. fr.	hoar-frost.	s.	snow.		
h. d.	heavy dew.	so. h.	solar halo.		
h. l.	hail.	sq.	squall.		
l.	lightning.	sq.	squalls.		
li. cl.	light clouds.	t. s.	thunder storm.		
li. sh.	light showers.	w.	wind.		
lu. co.	lunar corona.	g.	gale of wind.		
lu. ha.	lunar halo.				

TABLE FOR ESTIMATING FORCE OF WIND.					
Estimated Force, 0-6.	Common Designation.	Estimated Force 0-6.	Common Designation.	Estimated Force, 0-6.	Common Designation.
0	Calm	1-5	Light breeze	4	Blowing hard
0.5	Very light air	2	Fresh breeze	5	Blowing a gale
1	Light air	3	Very fresh	6	Violent gale

BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† = 29.920
for Temp. (Col. 2), = 30.014 - 94..
Corrected Mean” of Barometer at 9 P.M., minus the Correction†† = 29.917
for Temp. (Col. 4), = 30.014 - 97..
Mean at Station, corrected, and at 32°..... = 29.918
Correction for height, feet above Mean Sea-level,..... = 22
Mean, reduced to 32°, and Sea-level,..... = 29.940
Highest Reading, corrected for Index error, on the 21 th,..... = 30.280
Lowest Do. Do., on the 2 th,..... = 29.500
Difference, or Monthly Range,..... = 0.780

* Each instrument tested at the Office in Edinburgh bears the stamp “S.M.S.” and a number to be entered in the Heading; or the Number and Initials of the Maker may be here given.
† Embracing corrections for both capillarity and Index Errors.
‡ The Diurnal Range for Scotland is as yet unknown.
†† Practically, though not absolutely a minus correction.
‡‡ These “Hygrometrical Deductions” are calculated from Glaisher’s Hygrometrical Tables, Second Edition only.
§ While the Diurnal Range is unknown, the Arithmetic Mean of Cols. 5 and 6 will be entered as the “Calculated Mean Temperature.”
Any Observations not taken under the conditions specified in the Directions on the other side, or noted at the Top of each column, must be marked as such by the observer, in each Schedule. See over.

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 23 th,..... = 78.5
Lowest in Month, corrected for Index errors, on the 29 th,..... = 43.0
Difference, or Monthly Range,..... = 35.5
“Corrected Mean” of all the Highest, (Col. 5),..... = 66.8
“Corrected Mean” of all the Lowest, (Col. 6),..... = 52.2
Difference, or Mean Daily Range,..... = 14.3
** Calculated Mean Temperature of Month,..... = 59.4

S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th,..... =
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun,..... =
Lowest at Night, Black Bulb, (corrected for Index errors), on the th,..... =
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass,..... =
Difference of above Means or Range (“exposed”),..... =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11),..... = 58.9
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12),..... = 54.4
†† Computed Temperature of Dew-Point,..... =
†† Do. Elastic Force of Vapour,..... =
†† Do. Weight of Vapour in a Cubic Foot of Air, ... =
†† Relative Humidity, (Saturation = 100),..... =
RAIN fell on Days; Amount in Inches,..... = 2.24

WIND.		SUMMARY.									
Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day.
A.M.			4	1	2	8	4		12		
P.M.			3	3		3	2		20		
Mean.	0	0	4	2	1	3	3	0	16		

Observations made and
Return verified by

(Signed)

Robert Munro

To
Aug 1884
B

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Gifford, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level _____ feet, above Ground 2.0 feet. During the MONTH of September 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.	
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.									
		Barometer.	Attach- ed Ther- mometer.	Barometer.	Attach- ed Ther- mometer.	Max. No.	Min. No.	Max. in Sun's rays	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	No. of hours in which it fell.	Amount in inches.	Velocity (0—6), and Direc- tion.	Amount (0—10), and Species.	Velocity (0—6), and Direc- tion.	Amount (0—10), and Species.	No. 3 inches.	No. 12 inches.	No. 22 inches.					
		* No.	°	No.	°	No.	No.	No.	No.	°	°	°	°					9 h. A.M.	No.												
	1	29.628	58	29.530	57	62.0	45.0			54.0	52.0	52.0	50											54.0	53.5	54.0				1	
	2	29.592	58	29.640	60	62.0	—			60.0	54.5	57.0	49	SW	16			3.6						53.0	54.0	54.0		53.5		2	
	3	29.690	60	29.724	60	65.5	45.0			56.0	52.0			W	2			3.6		2	2			53.0	54.0	54.0		53.5		3	
	4	29.680	58	29.702	58	62.5	41.0			52.0	48.0	52.0	48.0	SW	16									53.0	54.0	54.0		53		4	
	5	29.530	58	29.590	60	62.0	48.0			57.0	57.0	50.0	47.0	SW	16									51.0	53.0	53.5				5	
	6	29.618	60	29.400	60	60.0	44.0			53.0	48.0	53.0	52.0	SW	16									51.0	52.5	53.5		53.5		6	
	7	29.488	54	29.830	56	62.0	48.0			50.0	49.5	53.0	50	W	16			4.3						52.0	52.0	52.5				7	
	8	30.036	54	30.040	60	63.0	48.0			54.0	53.0	56.0	54.0	W	2									52.0	52.5	53.0		53		8	
	9	30.136	60	30.210		64.0	53.0			54.0	56.0							4.3						53.0	53.0	53.5				9	
	10	30.250		30.280	64	63.0	58.0			61.0	60.0	57.0	56.0	W	2			4.4						54.5	53.5	53.5				10	
	11	30.380	62	30.440	62	64.0	54.0			61.0	60.0	54.0	53.0	W	2									53.0	56.0	54.0				11	
	12	30.580	59	30.530	61	55.0	48.0			53.0	53.0	53.0	53.0	W	2									53.0	56.0	53.0				12	
	13	30.800	58	30.805	60	57.0	48.0			50.0	50.0			SW	16									55.0	56.0	55.0				13	
	14	30.450	54	30.350	56	54.0	48.0			52.0	52.0	54.0	53.0	SW	16									53.0	55.0	54.0				14	
	15	30.300	54	30.250	57	53.5	52.0			54.0	53.0	55.0	54.0	SW	16									54.5	54.5	54.0				15	
	16	30.230	54	30.250	57	54.0	54.0			53.0	53.0	54.0	54.0	SW	2									54.0	54.0	53.0				16	
	17	30.350	58	30.804	62	60.5	52.0			53.0	53.0	54.0	54.0	W	2									54.0	53.0	53.5				17	
	18	30.490	60	30.454	61	68.0	52.0			61.0	57.5	55.0	54.0	W	2									54.5	53.0	53.0				18	
	19	30.344	60	30.230	62	62.0	51.0			53.0	53.0	54.0	—	W	16									53.0	53.0	53.0				19	
	20	30.040	60	29.860		64.0	53.0			62.0	57.0	62.0	60.0	SW	16									56.0	53.0	52.5		56		20	
	21	29.640	63	29.550	65	66.0	54.0			63.0	57.0	52.5	50.0	SW	16			4.5						57.0	56.0	54.5				21	
	22	29.630	60	29.790	59	60.0	47.0			53.0	57.0	48.0	46.0	W	16			4.5						53.0	56.0	55.0		53		22	
	23	29.994	56	30.030	60	58.0	46.0			52.0	44.0	53.0	50.0	W	16									57.0	53.5	54.0		53		23	
	24	29.840	58	29.840	60	62.0	52.0			58.0	53.0	53.0	51.0	SW	16			4.6						52.0	53.5	53.5		54		24	
	25	30.046	58	29.826	54	60.5	48.0			55.0	55.0	56.0	52.0	SW	16									57.0	53.0	57.0				25	
	26	29.720	58	29.780	56	60.0	52.0			54.0	51.0	48.0	46.0	SW	16									53.0	53.0	53.0				26	
	27	29.380	54	29.400	60	60.5	46.0			60.0	53.0	54.0	50.0	W	16									53.0	53.0	53.0				27	
	28	29.430	60	29.630	65	61.0	52.0			58.0	54.0	60.0	56.0	SW	16			4.6						53.0	52.5	52.0		54		28	
	29	29.920	58	30.100	57	56.0	44.0			57.0	47.0	49.0	46.0	W	16									50.5	52.5	52.5				29	
	30	30.026	58	29.730	60	60.5	43.0			56.0	57.0	55.0	52.0	SW	16			4.8						48.5	57.0	52.5		53.5		30	
	31	30.155	54	30.110	59	60.5	43.0			56.0	57.0	55.0	52.0	SW	16									48.5	57.0	52.5		53.5		31	
	Sums.	29.848	24	29.550	27	325	25			50	48	55	40											05	9.5	15					
	Means.	29.980	58.6	29.978	59.9	61.1	49.6			55.8	55.9	53.5	51.6											53.4	54.0	53.7		54.9			
	† Total Corrections for Instrumental Errors.																														
	‡ Corrections for Diurnal Range.																														
	“Corrected Means.”																														
	No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† = 29.898
for Temp. (Col. 2), = 29.929... = 29.929...
Corrected Mean” of Barometer at 9 P.M., minus the Correction†† = 29.893
for Temp. (Col. 4), = 29.978... = 29.978...
Mean at Station, corrected, and at 32°, = 29.896
Correction for height, feet above Mean Sea-level, = 2.2
Mean, reduced to 32°, and Sea-level, = 29.918
Highest Reading, corrected for Index error, on the 12th, = 30.580
Lowest Do. Do., on the 27th, = 29.380
Difference, or Monthly Range, = 1.200

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 18th, = 68.0
Lowest in Month, corrected for Index errors, on the 4th, = 41.0
Difference, or Monthly Range, = 27.0
“Corrected Mean” of all the Highest, (Col. 5), = 61.1
“Corrected Mean” of all the Lowest, (Col. 6), = 49.6
Difference, or Mean Daily Range, = 11.5
* Calculated Mean Temperature of Month, = 55.4

S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun, =
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass, =
Difference of above Means or Range (“exposed”), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 54.7
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 52.3
†† Computed Temperature of Dew-Point, = 50.0
†† Do. Elastic Force of Vapour, = 358
†† Do. Weight of Vapour in a Cubic Foot of Air, = 84
RAIN fell on 10 Days; Amount in Inches, = 1.22

WIND.												SUMMARY.		
Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day.			
A.M.	0	1	3	1	1	7	2	8						
P.M.	0	3	7	5	15									
Mean.	0	0	3	1	7	6	1	11						

(Signed)

Robert Minthead

Observations made and
Return verified by

Epizootic disease prevails among cattle; and the Agricultural condition of the district generally.

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Glasgow, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level _____ feet, above Ground _____ feet. During the MONTH of October 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. <i>Mention the hour at which Storms, including Thunder and Lightning, began and ended.</i>	Days of Month.	
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.									
		Barometer. * No. —	Attach- ed Ther- mometer	Barometer. No. —	Attach- ed Ther- mometer	Max. No. —	Min. No. —	Max. in Sun's rays No. —	Min. on Grass. No. —	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force	Direction.	Force	No. of hours in which it fell.	Amount in inches. No. —	Velocity (0—5), and Direction.	Amount, (0—10), and Species.	Velocity (0—5), and Direction.	Amount, (0—10), and Species.	No. 3 inches.	No. 12 inches.	No. 22 inches.					
		inches.	°	inches.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°					°
	1	29.812	56	30.070	58	56.5	45.0			49.	47.	47.	44.	10 ft.	10 ft.			4.9 1/2	2	5		48.5	57.	57.5		52 1/2			1		
	2	29.950	56	29.648	58	61.0	43.0			54.	50.	56.	55	2	5 ft.				5	10		47.5	57.	57.5		52 1/2			2		
	3	29.870	56	30.196	60	57.0	47.0			50.0	46.	46.	43	10 ft.	10 ft.				2	2		48.5	50.5	57.		52			3		
	4	30.570	56	30.664	54	56.5	43.			49.0	45	51	48	10 ft.	10 ft.				8	10		46.0	49.	57.		51 1/2			4		
	5	30.470	56	30.786	62	60.5	48.			53.	50.	44.		2	18 ft.				2	0		49.0	49.0	50.					5		
	6	30.710	56	30.560	58	53.0	41.0			47.	46.	43.		2	18 ft.				0	4		47.	49.	50.		52			6		
	7	30.110		30.420		42.				57.	49.			10 ft.					10			48.	49.	50.		51 3/4			7		
	8	29.720		29.520																									8		
	9	29.540		29.620																									9		
	10	29.640		29.710																									10		
	11	29.680		29.802	54							47.	43.	10 ft.	10 ft.					10						48 1/2			11		
	12	29.970		30.000		48.0	41.0			44.	40.	43.	40.	10 ft.	10 ft.														12		
	13	30.072	52	29.980	56	57.0	38.					47.	45.	10 ft.	10 ft.			5.7	4	10		47.2	45.	47.		48 1/2			13		
	14	30.036	52	30.140	58	56.	44.			52.0	48.	45.	43.	10 ft.	2				6	10		46.5	44.5	46.5					14		
	15	30.020	54	30.150	61	50.	45.			57.	54.	49.0	46.	10 ft.	10 ft.				7	8		44.5	45.5	46.5					15		
	16	30.150	54	30.200	62	54.5	43.			53.	57.	57.	54.	10 ft.	10 ft.				7	9		44.5	46.	46.					16		
	17	30.150	54	30.100	61	57.0	51.			55.	53.	56.	53	10 ft.	10 ft.				7	8		46.5	46.	46.					17		
	18	30.280	54	30.230	54	57.	51.			55.	52.	55.	53.	10 ft.	10 ft.				6	4		50.5	50.	49.					18		
	19	30.200	58	30.240	53	46.0				57.0	46.	48.0	46.	10 ft.	10 ft.				3	2		49.0	50.	50.					19		
	20	30.300	50	30.320	56	55.	45.			49.	47.	52.	50.	10 ft.	10 ft.				8	6		46.	49.	49.					20		
	21	30.250	55	30.200	54	59.	48.			53.	57.	57.	48.	10 ft.	10 ft.				6	3		49.	49.	49.					21		
	22	30.170	56	30.112	60	55.5	50.			53.	57.	44.	42.	10 ft.	2				9	4		47.5	50.	50.					22		
	23	29.946	56	29.924	60	54.	40.			49.0	46.	48.	45	10 ft.	10 ft.				9			46.0	49.	49.					23		
	24	29.940	56	30.052	53	53.0	45.			50.	47.	49.	48.	10 ft.	10 ft.				8	10		47.	48.	48.					24		
	25	29.670	53	29.328	60	58.0	49.			48.	45.	58.	53	10 ft.	10 ft.				6	8		46.	48.	49.	50			29.230-60	25		
	26	29.252	55	29.372	58	57.	42.			46.	42.	40.	37.	10 ft.	10 ft.				9	10		46.	48.5	48.					26		
	27	29.432	50	29.250	50	53.	36.			41.	37.	45.	38.	10 ft.	2				3	2		40.	46.	48.					27		
	28	29.520	50	29.670	50	48.	38.			47.	41.	36.	34.	10 ft.	10 ft.				6	8		45.	45.	47.					28		
	29	29.502	48	29.884	55	48.	33.			41.	39.	43.	41	10 ft.	10 ft.				8			39.	44.	46.					29		
	30	29.842	53	29.880	58	59.5	41.			48.	46.	58.	53	10 ft.	5 ft.				4	-		42.5	43.5	45.	48 1/2				30		
	31	29.802	54	29.880	60	59.0	48.			58.	54.	56.	52	10 ft.	5 ft.			6.0				42.5	46.0	46.	48 1/2				31		
	Sums.	13102	11	11124	10	143	11			170	11	14	10									155	142	132	44						
	Means.	29.684	9	29.736	197	56.0	30			5.5	6.8	4.6	3.4									4.8	4.7	4.8	5.07						
	+ Total Corrections for Instrumental Errors.	986		29.969																											
	+ Corrections for Diurnal Range.																														
	"Corrected Means."																														
	No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction ++ for Temp. (Col. 2), = 29.984 - .0675 = 29.915
Corrected Mean" of Barometer at 9 P.M., minus the Correction ++ for Temp. (Col. 4), = 29.989 - .0675 = 29.921
Mean at Station, corrected, and at 32°, = 29.913
Correction for height, feet above Mean Sea-level, = 22
Mean, reduced to 32°, and Sea-level, = 29.935
Highest Reading, corrected for Index error, on the 5th, = 30.786
Lowest Do. Do. on the 28th, = 29.000
Difference, or Monthly Range, = 1.786

* Each instrument tested at the Office in Edinburgh bears the stamp "S.M.S.," and a number to be entered in the Heading; or the Number and Initials of the Maker may be here given.
† Embracing corrections for both capillarity and Index Errors.
‡ The Diurnal Range for Scotland is as yet unknown.
§ These "Hygrometrical Deductions" are calculated from Glaisher's Hygrometrical Tables, Second Edition only.
|| While the Diurnal Range is unknown, the Arithmetical Mean of Cols. 9 and 10 will be entered as the "Calculated Mean Temperature."
Any Observations not taken under the conditions specified in the Directions on the other side, or noted at the Top of each column, must be marked as such by the observer, in each Schedule. See over.

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 2th, = 61.0
Lowest in Month, corrected for Index errors, on the 29th, = 38.0
Difference, or Monthly Range, = 23.0
"Corrected Mean" of all the Highest, (Col. 5), = 55.4
"Corrected Mean" of all the Lowest, (Col. 6), = 43.8
Difference, or Mean Daily Range, = 11.6
* Calculated Mean Temperature of Month, = 49.6
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =
"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, =
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, =
Difference of above Means or Range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 49.5
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 46.6
* Computed Temperature of Dew-Point, = 43.5
* Do. Elastic Force of Vapour, = .284
* Do. Weight of Vapour in a Cubic Foot of Air, =
* Relative Humidity, (Saturation = 100), = 80
RAIN fell on Days; Amount in Inches, = 1.67

WIND.		SUMMARY.									
Direction.		N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.
A.M.	81					32	11.5	6			
P.M.	11					42	9.4	10			
Mean.	2100					42	10.5	8			

Observations made and
Return verified by

(Signed)

Robert Minthead

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Gifford, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level _____ feet, above Ground 20 feet. During the MONTH of November 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND. Readings of the H.Cup Anemometer. No. —				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.		Days of Month.				
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Temperature of Wells at depth of feet. No. —	Temperature at 1 fathom, and Density.	9 A.M. 9 P.M.											
		Barometer. * No.	Attach- ed Ther- mometer	Barometer. No. —	Attach- ed Ther- mometer	Max. No.	Min. No.	Max. in Sun's rays	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	No. of hours in which it fell.	Amount in inches.	Velocity (0—10), and Direction.	Amount, (0—10), and Species.				Velocity (0—10), and Direction.	Amount, (0—10), and Species.						No. 8 inches.	No. 12 inches.	No. 22 inches.	
		Inches.	°	Inches.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°				°	°						°	°	°	°
1	29.844	58	29.890	60	59.0	55			57.4	53	51	50	SE	2	236	40	6.00	8	10			57.0	48.5	47.0									1		
2	29.732	54	29.926	60	46.5	44			44	42	42	39	W mod.	SE	10	278	10	6.1	10	2		49.0	49.0	48.5									2		
3	29.936	53	30.040	58	46.0	34			41	39	42	40	W	16	W	16	30000	6.0	6	8		41.5	46.5	48.0	48.2								3		
4	29.952	52	29.976	54	53.0	40			42	39	49	44	SE	16	W	16	364	6.0	10	10		42.0	45	47	48								4		
5	29.390	55	29.634	60	53.5	42			52	48	45	43	SW strong	W	mod.	44.5	6.2	8	8			45	45	46	48.2								5		
6	29.846	53	29.960	62	56.0	44			45	42.5	43	41	W mod.	Z		52	6.4	2	10			43.5	45.5	46.5	48								6		
7	29.486	54	29.460	54	58.5	43			56	53	42	38	SE	16	W	16	582	6.4	8	2		45.5	45	46	48.4								7		
8	29.980	52	29.832	56	58.0	40			44	43	53	49	W	16	W	16	602	6.4	6	10		42	45	46	48								8		
9	29.902	54	30.220	66	52.5	46			52.0	48.0	44	44	SE	16	W	16	4576	6.8	2	0		44.5	45.5	46									9		
10	30.442	54	30.460	54	50.5	46.0			45	43	39	38	W	16	Z		4900	6.8	4	8		42.5	45.5	46	48								10		
11	30.354	53	30.300	58	53.0	38.0			49	44	45	44	Z	Z		814		2	4		42	44	46	48									11		
12	30.144	53	30.212	58	50.0	40.0			46	45	48	44	Z	Z		839		9	10		42.5	44	45.5	48									12		
13	30.460	52	30.600	50	45	35			36	35.5	35	34	Z	Z		832		2	10		41	44	45										13		
14	30.640	40	30.560	52	40.0	29.5			33	32	39	38	Z	Z		864		10	10		36	42	44										14		
15	30.532	50	30.490	52	41.0	31			33	32	36	34	SE	16	Z	593		6	10		35	40	43	46									15		
16	30.408	46	30.374	53	46.0	33			38	34	34	33	Z	Z		4113		8	10		34	39	42	44									16		
17	30.404	47	30.486	58	44.5	32			33	32	44	42	Z	Z		4153		4	10		35.5	39	41.5	44									17		
18	30.560	48	30.668	54	43.0	33			42	38	42	38	SE	16	N	402		6	10		39.5	39.5	41.0	45									18		
19	30.650	47	30.530	50	46.0	34			41	34.5	42	39	SE	16	N	402		8	9		38.0	40.0	42										19		
20	30.130	44	30.050	44	47.0	35			45	44	42	39	Z	N		4625		6	5		39.0	40.0	42										20		
21	30.180	45	30.250	44	42.5	40			42	41	40	36	N	N		3212		6	8		40.0	40.5	41										21		
22	30.142	45	30.200	54	44.0	34			38	35	43	39	N	N		3831	4	9	8		34.0	40	41										22		
23	30.200	45	30.150	45	38.0	31			33	31	34	33	Z			4492		0			35	39	41										23		
24	30.186	43	30.230	55	41.0	30			36	34	38	36				4584		8	10		34	38	41										24		
25	30.200	44	30.262	54	44.0	34			41.0	40	34	36	W	W		5408		8			36	34	40										25		
26	30.200	50	30.120	54	48.0	36			42	38	44	44	W	W		6120			10		36.5	38.0	40	43									26		
27	29.440	50	29.640	50	50	40			48	45	43	40	W	W		6200			0		42.0	39.0	40	43.2									27		
28	29.680	53	29.800	53	42	39			41	38	38	34	Z	N				10	2		39.0	41.0	41	43.2									28		
29	29.836	45	30.012	51	34	36			33	31	29	—	W	W		7801		0			35.0	38.5	41	42.2									29		
30	29.902	41	29.944	52	34.5	24.0			26.0	25.0	22.0	30	Z	SE	16	8600	7.0	4	6		33.0	38.0	40.0	41.2									30		
31	16146	12	13124	12	124	12			70	48	41	45							14	189		42.5	42.0	43.0										31	
Sums.	046	3	876	3	50	8			419	396	414	392							6	4		408	421	435											
Means.	30.102	49.8	30.129	54.8	46.8	35.8			41.9	39.6	41.4	39.2																							
† Total Corrections for Instrumental Errors.																																			
† Corrections for Diurnal Range.																																			
“Corrected Means.”																																			
No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					

BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† for Temp. (Col. 2), = 30.102 — 57 = 30.045
Corrected Mean” of Barometer at 9 P.M., minus the Correction†† for Temp. (Col. 4), = 30.129 — 70 = 30.059
Mean at Station, corrected, and at 32°, = 30.052
Correction for height, feet above Mean Sea-level, = 23
Mean, reduced to 32°, and Sea-level, = 30.075
Highest Reading, corrected for Index error, on the 18th, = 30.668
Lowest Do. Do., on the 11th, = 29.276
Difference, or Monthly Range, = 1.392

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 1th, = 59.0
Lowest in Month, corrected for Index errors, on the 30th, = 24.0
Difference, or Monthly Range, = 35.0
“Corrected Mean” of all the Highest, (Col. 5), = 46.8
“Corrected Mean” of all the Lowest, (Col. 6), = 35.8
Difference, or Mean Daily Range, = 11.0
* Calculated Mean Temperature of Month, = 41.3

S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the 1th, = —
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun, = —
Lowest at Night, Black Bulb, (corrected for Index errors), on the 1th, = —
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass, = —
Difference of above Means or Range (“exposed”), = —

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 41.6
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 39.4
† Computed Temperature of Dew-Point, = 36.7
† Do. Elastic Force of Vapour, = .218
† Do. Weight of Vapour in a Cubic Foot of Air, = —
† Relative Humidity, (Saturation = 100), = 84
RAIN fell on 9 Days; Amount in Inches, = 5.93

WIND.	SUMMARY.										Mean Force.	Mean Velocity in miles per day.
	Direction.	N	NE	E	SE	S	SW	W	NW	Variable.		
A.M.	1	2	2	2	3	8	1	1	1			
P.M.	3	2	2	2	1	13						
Mean.	2	1.0	2	1	2	9	1	12				

(Signed) Robert Muirhead

Observations made and
Return verified by

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Loppa, County of Edinburgh, in Lat. _____, Long. _____, Distance from Sea _____ miles.
Height of Cistern of the Barometer above Mean Sea-level 20 feet, above Ground 7 feet. During the MONTH of December 1884.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No.				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.								
		Barometer. * No.	Attach- ed Ther- mometer	Barometer. No.	Attach- ed Ther- mometer	Max. No.	Min. No.	Max. in Sun's rays No.	Min. on Grass. No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	No. of hours in which it fell.	Amount in inches.	Velocity (0-10), and Direction.	Amount, (0-10), and Species.	Velocity (0-10), and Direction.	Amount, (0-10), and Species.	No. 1 inches.	No. 2 inches.	No. 3 inches.				
		inches.	°	inches.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°				
	1	29.462	45	29.864	48	39.025				31.		35.		2	SE	16		7.0		2		4		33.	36.	39.	(Norm)	4.4		1
	2	29.488	45	29.652	53	44.030				39.	34.	34.	34.	SE	16	SE	16	8.0		8		6		33.	36.	38.5		4.3		2
	3	28.946	48	29.140	53	44.538.0				46.	43.	41.	38.	SE	16	SE	16	8.0		8		0		36.5	36.	38.5		4.4		3
	4	29.040	48	29.286	52	41.036.0				38.	37.5	38.	36.	SE	16	SE	16	7.5		10		2		37.	38.	39.0		4.3	Not stormy	4
	5	29.406	47	29.380	48	57.034.				40.	38.	41.	38.	2	2	2	2	8.0		8		10		36.	38.	39.				5
	6	29.310	50	29.322	48	48.037.				47.	43.	45.	42.	SE	16	SE	16	15.0		6		4		40.	38.	39.		42.5		6
	7	29.430	50	29.302	58	48.041.				45.	42.	39.	38.	SE	16	SE	16	7.4		8		10		40.	39.5	40.			Very rainy	7
	8	29.380	50	29.580	52	43.038.				41.	38.	39.	37.	SE	16	SE	16	8.2		2		6		39.	40.	40.		4.3		8
	9	29.680	48	29.506	54	44.036.				37.	35.	39.	36.	SE	16	SE	16	8.3		0		2		36.	39.	40.		4.2		9
	10	29.640	50	29.230	55	50.037.				44.	42.	47.	45.	SE	16	SE	16	8.3		10		10		38.5	38.	39.5		4.2		10
	11	29.220	52	29.624	57	42.044.				46.	42.	47.	43.	SE	16	SE	16	8.4		4		0		42.0	40.	40.		4.3		11
	12	29.124	52	29.440	58	53.38.				43.	40.	50.	47.	2	2	SE	16	8.4		9		10		39.0	41.	41.		4.3		12
	13	29.510	57	29.860	60	53.542.				48.	47.	47.	46.	SE	16	SE	16	8.5		6		10		43.5	42.	41.		4.4		13
	14	29.362	56	29.488	56	63.46.				33.	30.	33.	34.	SE	16	SE	16	8.5		10		10		46.5	43.	42.				14
	15	29.470	52	29.534	50	40.35.				38.	36.	35.	34.	SE	16	SE	16	8.5		2		10		38.	41.5	42.		4.3		15
	16	29.620	48	29.520	47	40.34.				37.	37.	35.5	35.	SE	16	SE	16	8.5		4				36.	39.	41.				16
	17	29.444	48	29.684	50	39.32.				33.	31.	36.	34.	SE	16	SE	16	8.5		10		2		34.	38.	40.		4.2		17
	18	29.286	45	29.184	48	42.32.				29.	27.	38.	36.	SE	16	SE	16	9.4		8		10		34.	36.	39.		4.1		18
	19	29.046	47	29.042	52	42.36.				30.	28.	38.	37.	SE	16	SE	16	9.4		4		2		36.	37.	38.5		4.1		19
	20	29.180	45	29.820	52	42.35.				32.	36.	39.	36.	SE	16	SE	16	9.8		4		0		35.	37.5	38.5		4.1		20
	21	30.180	43	30.404	52	39.34.				32.	34.	35.	32.	SE	16	2	2	8.0		5		0		34.5	37.0	38.5				21
	22	30.430	44	30.350	49	35.26.				27.	26.	26.		2	2	2	2	3.6		0		0		33.5	36.	38.				22
	23	30.220	45	30.200	48	38.26.				34.	32.	32.		2	2	2	2	3.6		0		0		33.	35.	37.				23
	24	30.150	42	30.180	57	41.28.				37.	35.	41.	34.	SE	16	SE	16	4.5		9		6		33.	35.	37.				24
	25	30.180	44	30.230	44	39.531.				40.	37.	32.		SE	16	SE	16	5.2		8		6		33.	35.	37.				25
	26	30.150	41	30.142	48	39.526.				35.	—	36.		2	2	2	2	5.1		4		8		33.	35.	37.				26
	27	30.130	43	30.200	57	41.532.				40.	39.	40.	39.	SE	16	SE	16	6.0		9		10		33.	35.	37.				27
	28	30.100	44	30.036	52	38.38.				35.	34.	30.	29.	SE	16	2	2	6.0		9		0		33.	35.	36.5				28
	29	29.846	46	29.904	52	39.28.				38.	36.	36.	36.	SE	16	SE	16	6.5		6		8		33.	35.	36.5				29
	30	29.460	46	30.000	52	36.31.				33.	31.	34.	32.	2	2	SE	16	6.4		8		6		33.	35.	36.5		4.1		30
	31	30.040	46	30.164	52	40.31.14				35.14	33.13	36.13	34.14	SE	16	SE	16	6.5		8		8		33.5	35.5	36.5		4.1		31
Sums.		1314.5	2182	2278	2278	2278				1217	1086.5	1184.5	469					450		196		160		128.5	116.5	128.5		472.5		
Means.		29.683	47.3	29.655	51.7	43.2				39.3	36.5	38.2	37.2							4		6		36.4	37.7	38.8		43.0		
† Total Corrections for Instrumental Errors.																														
† Corrections for Diurnal Range.																														
“Corrected Means.”																														
No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† = 29.633
for Temp. (Col. 2), = 29.683 — 30.
Corrected Mean” of Barometer at 9 P.M., minus the Correction†† = 29.670
for Temp. (Col. 4), = 29.732 — 62
Mean at Station, corrected, and at 32°, = 29.652
Correction for height, feet above Mean Sea-level, = 22
Mean, reduced to 32°, and Sea-level, = 29.674
Highest Reading, corrected for Index error, on the 22 th, = 30.430
Lowest Do. Do., on the 3 th, = 28.946
Difference, or Monthly Range, = 1.484

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 13 th, = 53.5
Lowest in Month, corrected for Index errors, on the 1 th, = 25.
Difference, or Monthly Range, = 28.5
“Corrected Mean” of all the Highest, (Col. 5), = 43.2
“Corrected Mean” of all the Lowest, (Col. 6), = 33.9
Difference, or Mean Daily Range, = 9.3
** Calculated Mean Temperature of Month, = 38.6
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun, =
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass, =
Difference of above Means or Range (“exposed”), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 38.8
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 36.8
†† Computed Temperature of Dew-Point, = 34.1
†† Do. Elastic Force of Vapour, = .197
†† Do. Weight of Vapour in a Cubic Foot of Air, =
†† Relative Humidity, (Saturation = 100), = 84
RAIN fell on 13 Days; Amount in Inches, = 3. ?

WIND.	SUMMARY.										
	Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.
A.M.		1			4	3	7	7	3	6	
P.M.					4	5	11	3	8		
Mean.		0	1	0	4	7	6	9	3	7	

(Signed)

Robert Minthead

Observations made and
Return verified by

