# METEOROLOGICAL JOURNAL,

KEPT BY THE ASSISTANT SECRETARY,

AT THE APARTMENTS OF THE

## ROYAL SOCIETY,

BY ORDER OF

### THE PRESIDENT AND COUNCIL.

#### OBSERVANDA.

Height of the Cistern of the Barometer above the plinth at Waterloo Bridge....83 feet 2 inches.

Height of the receiver of the Rain Gauge above the court of Somerset House ... 79 feet.

The External Thermometer is 2 feet higher than the Barometer Cistern.

The Thermometers are graduated to Fahrenheit's scale.

The Barometer is divided into inches and tenths.

The Hours of Observation are of Mean Time, the day beginning at Midnight.

The daily observations of the Barometer are not corrected.

The monthly means are corrected for capillarity and temperature by the Table contained in Mr. Baily's paper in Phil. Trans. for 1837.

### METEOROLOGICAL JOURNAL FOR JANUARY AND FEBRUARY, 1839.

	9 o'clock, A.M.		ſ.	3 o'clock, P.M.				tand lb	External Thermometers.				inches. off at	ofthe	
1839.	839. Barometer uncorrected.		1	Baro	arometer corrected.		Point at 9	f We	Fahrenheit. Se			elf-registering		tion o	REMARKS.
	Flint Glass.	Crown Glass.	Att. Ther.	Flint Glass.	Crown Glass.	Att. Ther.	Dew A.M.,	Diff. of Wet and Dry Bulb Thermometer.	9 <b>A.M</b> .	з Р.М.	Lowest	Highest	Rain in Read 9 A	Direction of the Wind at 9 A.M.	
T 1					30.186		35			45.3	36.2			S	A.M. Overcast-brisk wind-remainder of the day cloudy-it, wind. [A.M. Cloudy-light brisk wind. P.M. Fine-light clouds and wind,
W 2 T 3		$\begin{vmatrix} 30.044 \\ 29.938 \end{vmatrix}$	$\begin{array}{ c c } 43.7 \\ 44.7 \end{array}$	$\begin{vmatrix} 30.058 \\ 29.828 \end{vmatrix}$	$\begin{vmatrix} 30.052 \\ 29.822 \end{vmatrix}$	44.6  45.6	$\begin{array}{ c c } 38 \\ 40 \end{array}$	$\begin{bmatrix} 03.6 \\ 02.1 \end{bmatrix}$		46.7  47.8	$\frac{40.8}{44.2}$	$\frac{49.3}{46.2}$		sw	Evening, Cloudy.  A.M. Fine—nearly cloudless. P.M. Cloudy—light wind. Even-
F 4			46.2	29.576	29.568	46.8	41	01.7	42.0	1	41.9	47.2	.050	S	ing, Overcast—very high wind. A.M. Ovet.—very it, rain. P.M. Fine & cloudless. Ev. Fine & clear.
	29.682			29.568		42.7	36	01.9		41.3	35.6	44.5	0.07	S S	Fine-lt. clouds & wind throughout the day. Ev. Fine and starlight. [A.M. Overcast-light wind-rain early. P.M. Overcast-snow and
○ 6 M 7	$\begin{vmatrix} 29.718 \\ 29.072 \end{vmatrix}$	$\begin{vmatrix} 29.712 \\ 29.066 \end{vmatrix}$	$\begin{vmatrix} 39.7 \\ 43.2 \end{vmatrix}$	$\begin{vmatrix} 29.518 \\ 29.092 \end{vmatrix}$		39.9 43.9	$\begin{vmatrix} 31 \\ 37 \end{vmatrix}$	$\begin{vmatrix} 02.4 \\ 03.4 \end{vmatrix}$	$\begin{vmatrix} 35.7 \\ 44.4 \end{vmatrix}$	$\frac{34.2}{42.8}$	$34.2 \\ 35.0$	$\frac{39.0}{50.3}$	$.027 \\ .227$	S	
T 8		29.530	40.5	29.546		40.6		03.0		38.8	34.8	46.3	.047	w	A.M. Fine—light clouds—very high wind, as also throughout the night. P.M. Hail & rain—light wind. Ev. Fine & starlight. A.M. Fine and clouddess—light wind. P.M. Dark heavy clouds—brisk wind. Evening, Light snow.
W 9		29.712	38.8	29.916		38.6	31	02.2	_	34.8	33.6	39.8		NW	A.M. Fine—It. clouds & wind—snow early. P.M. Fine—It. clds. Ev. Fine—light clouds and wind, with sharp frost throughout the day.
[4 F 11	$30.274 \\ 30.150$	$30.268 \\ 30.142$	$\begin{array}{c} 35.0 \\ 40.0 \end{array}$	$30.210 \\ 30.066$	$\begin{vmatrix} 30.202 \\ 30.058 \end{vmatrix}$	$\begin{vmatrix} 36.7 \\ 41.2 \end{vmatrix}$	$\begin{vmatrix} 30 \\ 35 \end{vmatrix}$	00.2Jz	$\frac{32.8}{42.4}$	45.8	$\frac{29.3}{32.6}$	$35.8 \\ 43.2$	027ھ	S	Evening, Overcast—thaw.  Overcast—light wind throughout the day, with occasional rain, as
۱ ا	) 1	30.172	44.3	l .	30.230	46.2	41	02.2		46.7	42.0	50.0	.044	NNW	A.M. Overcast—It, fog—deposition. P.M. Fine—It. clds. Ev. Cloudy.
	30.020		45.8		29.956	47.0	41	1 1	49.8		42.7	50.3		SW var. SW	(A.M. Cloudy-brisk wind, P.M. Overcast-very fine rain. Ev. Fine starlight night.
	$29.968 \\ 29.818$	29.960 29.812		29.712  $ 29.788 $	$29.704 \\ 29.782$	47.2  $ 43.8 $	42 35	$\begin{array}{c} 02.1 \\ 02.6 \end{array}$	44.9 36.6	$44.4 \\ 42.8$	$\frac{43.2}{36.0}$	$51.8 \\ 47.7$	.127	W	Ovrct.—It. wind, with occasional rain during the day. Ev. Hail & rain. Fine—It. clds. & wind throughout the day. Ev. Fine—starlight night.
	29.944				29.894	40.3	32	01.3			33.0	43.2		W	Fine-light clouds and wind throughout the day-snow early.   Evening, Fine-starlight night.
	30.012	30.004			30.004	37.7	28	02.1	30.7		30.6	40.0		WNW	Fine—It. clds. & wind throughout the day. Ev. Fine—starlight night. [A.M. Light fog & wind—white frost. P.M. Fine—light clouds and
	$30.172 \\ 29.572$	$30.164 \\ 29.566$			$30.128 \\ 29.482$	$\begin{vmatrix} 37.7 \\ 40.8 \end{vmatrix}$	29 35	$\begin{array}{c} 01.9 \\ 01.9 \end{array}$	$\frac{29.7}{42.9}$	$\begin{array}{c} 36.7 \\ 43.6 \end{array}$	$\begin{array}{c} 29.5 \\ 29.7 \end{array}$	$38.0 \\ 44.0$		SE	\{\text{wind. Evening, Fine—starlight night.} \} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	30.008			29.986	1	41.2	33		38.6		35.0	47.8	.177	sw	A.M. Fine—starlight night.  A.M. Fine—light clouds and wind. P.M. Overcast. Ev. Light rain.
		29.652	42.7	29.704		44.0	38	01.4	48.7	43.3	38.2	49.4	.175	sw	A.M. Overcast-lt. fog & rain. P.M. Heavy rain. Ev. Continued rain.
		$30.084 \\ 30.524$		$30.204 \\ 30.530$		$\frac{41.5}{39.9}$	33		$34.7 \\ 36.2$		$33.7 \\ 34.6$	$\frac{49.2}{37.4}$	.333	N NW	Fine—It. clouds & wind throughout the day. Ev. Fine—starlight nt. (Cloudy, with brisk wind throughout the day. Evening, Overcast—
	30.532	30.526		30.456		40.2	32	01.9	36.2	43.4	33.7	40.4		sw	\(\) light wind.  A.M. Overcast—It. fog. P.M. Fine—It. clds. & wind. Ev. Cloudy.
	30.088			29.972		42.9	37	02.1		45.4	36.2	43.8		W var.	A.M. Overcast—light fog—brisk wind. P.M. Light rain and wind. Evening, The like.
	$30.156 \\ 30.340$	$30.150 \\ 30.332$	$\begin{array}{c} 40.8 \\ 36.9 \end{array}$	$30.204 \\ 30.262$		$ 40.9  \\ 37.3$	$\begin{array}{c c} 32 \\ 28 \end{array}$	$\begin{array}{c} 01.8 \\ 02.4 \end{array}$		$\begin{vmatrix} 37.2 \\ 34.7 \end{vmatrix}$	$\frac{34.4}{31.2}$	$\frac{47.3}{37.5}$		N NE	(A.M. Overcast-light snow-brisk wind, P.M. Fine-light clouds
		30.000	35.9		29.836	37.2	29	1			31.6	35.6		NW	and wind. Evening, Cloudy-brisk wind. Ovct,-it, wind throughout the day. Ev. Snow. [with high wind.
T 29	1	29.542	36.3		29.360	37.6	28	1 3		1	31.6	37.3	704	W	A.M. Fine—It. clds. & wind. P.M. Cldy.—It. wind. Ev. Snow & rain, (A.M. Fine and cloudless—sharp frost. P.M. Cloudy—snow—sharp
	$29.226 \\ 29.150$	29.220 $29.144$	$\frac{33.7}{32.3}$	29.112 $29.284$	29.106	$\begin{vmatrix} 35.2 \\ 33.7 \end{vmatrix}$	$\begin{array}{c c} 23 \\ 23 \end{array}$	1 1	$\frac{27.7}{30.5}$	$\begin{array}{c} 31.3 \\ 33.4 \end{array}$	$23.7 \\ 25.5$	$\frac{36.0}{32.3}$	.194	sw w	A.M. Fine—light clouds—brisk wind—high wind throughout the
								02.0		40.9			Sum.		1 night. P.M. Overcast—light snow. Ev. Heavy fall of snow.
-	29.904	29.898	40.1	1900 Anna particular de la con-	29.855		-	02.0			34.7	43.3	1.428	Mear	1 Barometer corrected
8		- 1	1	30.014 30.064	1	$34.7 \\ 35.2$	$\frac{25}{26}$	frozen 01.9	$\frac{29.7}{32.5}$	$\begin{vmatrix} 35.9 \\ 37.2 \end{vmatrix}$	$\frac{26.8}{30.0}$	33.8 35.3	.050	NW NW	Fine—It. clouds—brisk wind—thaw throughout the day. Ev. Cloudy, Fine—It. clouds and wind throughout the day. Ev. Overcast—thaw.
	1	1		29.860		37.2	30		37.4	40.7	32.7	38.3	.038	s	Overcast-light rain and wind nearly the whole of the day.
š	1	i		29.808		39.6	32		38.7	42.8	36.6	39.3	000	SE	A.M. Fine-light clouds and wind. P.M. Overcast-light wind. Evening, Light rain.
		$30.096 \mid 30.114 \mid$		30.110	. 1	$\frac{41.9}{42.6}$	$\frac{34}{35}$	$\begin{array}{c} 01.7 \\ 01.0 \end{array}$	41.8 39.3	$\begin{array}{ c c }\hline 44.7\\ 42.5\end{array}$	$\frac{38.3}{40.0}$	$\begin{array}{c} 48.8 \\ 45.3 \end{array}$	.088 $.377$	W N	{Overcast-deposition-light wind throughout the day. Evening,   Heavy rain.   Overcast-light wind throughout the day. Evening, The same.
š		3		1	30.268	46.2	38	01.8	47.8	51.0	39.9	48.7	.011	SSE	A.M. Overcast—very fine rain. P.M. Lightly overcast. Evening, Overcast—light wind.
	1		48.3	30.308		49.7	46	01.9	48.6	50.4		49.4		S	Overcast—light wind throughout the day. Evening, The same, with high wind.
		$30.334 \mid 30.468 \mid$		$30.304 \\ 30.482$	$30.296 \mid 30.478 \mid$	$\begin{array}{c} 51.3 \\ 50.0 \end{array}$	44	$01.9 \\ 01.9$	50.7 43.8	$\begin{array}{ c c c } 52.3 \\ 46.4 \end{array}$	47.9 43.9	$\frac{51.8}{44.0}$	.091	SW NW	Overcast—brisk wind throughout the day.  [A.M. Fine—light clouds and wind—rain early. P.M. Lightly over-
₩11	30.462	30.454	45.6	30.376	30.370	46.9	40	01.3	41.4	48.3		42.0		s	cast. Evening, Fine—starlight night. Overcast—very light wind and rain nearly the whole of the day. Evening Fine-starlight night.
g T 12	30.300	30.296	47.0	30.230	30.222	47.5	41	02.5	45.9	47.7  46.7	41.2	48.8	0.01	S	Evening, Fine—starlight night. Overcast—brisk wind throughout the day. Evening, Light rain.   fine—light clouds and wind throughout the day. Evening, Over-
OT 14	29.910	29.904	45.9	29.946	$30.436 \\ 29.940$	46.9	40 40			50.7	38.2 40.6	48.8 48.7	.061	sw s	cast-light wind. [and starlight.]
					30.028		37			48.8		52.3		SW var.	[A.M. Fine-nearly cloudless-light wind. P.M. Cloudy-light
					29.534		41			44.2		49.2	.055	NW	( wind. Evening, Light rain—ligh wind. P.M. Fine—light clouds [ A.M. Overcast—steady rain—ligh wind. P.M. Fine—light clouds [ and wind. Evening, Fine and starlight—sharp frost. [ A.M. Fine—nearly cloudless. P.M. Overcast—snow and hail—brisk wind. Evening, The same. [ sharp frost. [ Chemical State of the Company of the C
	29.494				$29.420 \\ 29.532$	$\frac{44.2}{41.4}$	$\frac{32}{35}$			$ 40.0  \\ 36.7$		$\begin{array}{c} 45.0 \\ 37.8 \end{array}$	.055	S	brisk wind. Evening, The same. [sharp frost, Overcast—light wind throughout the day. Ev. Fine and starlight—
	29.590					40.0	29	02.0	32.8	39.3	30.5	38.3	.033	NW	A.M. Overcast-lt. fog & wind. P.M. Cloudy-lt. wind. Ev. Overcast.
					29.492		33			39.4		39.6		NE	Overcast—light brisk wind throughout the day, as also the evening. {Cloudy—light brisk wind throughout the day. Evening, Overcast
	$30.238 \mid 29.836 \mid$				$30.244 \\ 29.788$	$39.8 \\ 41.7$	$\frac{23}{36}$	$04.4 \\ 02.2$		$\begin{vmatrix} 38.7 \\ 47.8 \end{vmatrix}$		$\begin{array}{c} 39.8 \\ 43.3 \end{array}$	.116	NE S	(A.M. Overcast-light wind (rain early), P.M. Overcast-light
	29.544					47.6	40	01.7		48.7		50.9	.283	S var.	(A.M. Overcast—light rain and wind, P.M. Fine—light clouds,
	29.810					45.0	35	02.1		45.6		51.3		W	Evening, Fine and clear. Fine-light clouds and wind throughout the day. Ev. The same. [A.M. Fine-light clouds-brisk wind. P.M. Overcast-light rain.
2	$29.672 \ 30.028$		1	29.764 29.992	$29.760 \\ 29.984$	$43.8 \\ 41.6$	$\frac{35}{32}$	$02.8 \\ 02.0$		$\begin{vmatrix} 38.8 \\ 42.3 \end{vmatrix}$		$\begin{array}{ c c } 47.6 \\ 44.8 \end{array}$	.052	W W	Evening, Fine and clear.  A.M. Lt. fog & wind. P.M. Lightly overcast—It. wind. Ev. Cloudy.
W27	29.866	29.858	40.7	29.810	29.804	41.8	33	02.5	41.2	47.3	35.2	42.4	.002	S	[A.M. Cloudy-brisk wind. P.M. Overcast-hail and rain. Even- ing, Fine and clear.
					30.150		32	02.6	39.3	48.4	35.7	46.5		sw	Fine-light clouds and wind throughout the day. Ev. Fine and clear.
MEAN.	29.977	29.970	42.3	29.968	29.961	43.6	35.0	02.0	40.5	44.4	37.1	44.7	1.337	Mear	$\begin{array}{llllllllllllllllllllllllllllllllllll$

### METEOROLOGICAL JOURNAL FOR MARCH AND APRIL, 1839.

	9 o'clock, A.M.		Ι.	3 o'clock, P.M.			at 9 ahr.	and her.	External Thermo			neters.	inches, off at .M.	Direction of the Wind at 9 A.M.	
1839.	Baro	meter rected.			meter rected.		Point	of Wet Bulb T	Fahre	nheit.	Self-re	gistering	n inc A.M.	ion o	REMARKS.
	Flint	Crown	Att. Ther.	Flint	Crown	Att. Ther.	Dew P A.M.,d	1	9 A.M.	3 P.M.	Lowest	Highest	Rain in i Read 9 A.	recti ind a	
	Glass.	Glass.		Glass.	Glass.	<u> </u>	ΔĀ	ÄÄ					🛱	≌≽	
F 1	30.030	30.022	1	29.944	29.938	45.9	39	03.1	46.3		39.7	47.7	.041	SSE	A.M. Lightly overcast—rain during the night. P.M. Cloudy—brisk wind. Evening, The same.
$\begin{array}{ c c c c }\hline S & 2 \\ \hline \odot & 3 \\ \hline \end{array}$	$29.868 \\ 30.068$	$\begin{vmatrix} 29.862 \\ 30.060 \end{vmatrix}$	44.7  45.9	$29.910 \\ 30.054$	$\begin{vmatrix} 29.904 \\ 30.050 \end{vmatrix}$	$\begin{vmatrix} 41.9 \\ 48.0 \end{vmatrix}$	39	03.4  01.8	$\begin{array}{ c c } 45.7 \\ 43.7 \end{array}$	$\begin{vmatrix} 52.8 \\ 50.7 \end{vmatrix}$	42.8  41.6	$  46.3 \\ 53.3  $		N	Fine-light clouds and wind throughout the day.   A.M. Cloudy-light fog and wind.   P.M. Fine-light clouds.   Even-
M 4	30.052	30.044	43.7	30.044	30.036	44.9	36	02.4	40.3			50.3		NE	ing, The same. Fine—light clouds—high wind throughout the day. Ev. Sharp frost.
T 5	30.108	30.100	40.2	30.068	30.060	39.8	32	03.1	35.2	1	33.8	37.0		NE	Overcast-It. brisk wind throughout the day. Ev. Cloudy-sharp frost. JA.M. Fine-light clouds-brisk wind. P.M. Overcast-snow and
W 6	$29.854 \\ 29.526$	29.846 $29.518$	$\begin{vmatrix} 38.2 \\ 34.6 \end{vmatrix}$	$29.744 \\ 29.496$	$\begin{vmatrix} 29.738 \\ 29.488 \end{vmatrix}$	$\begin{vmatrix} 38.9 \\ 36.3 \end{vmatrix}$	$\begin{vmatrix} 29 \\ 26 \end{vmatrix}$	i i	$\begin{vmatrix} 32.5 \\ 30.7 \end{vmatrix}$	1	$\begin{vmatrix} 31.6 \\ 27.4 \end{vmatrix}$	$\begin{vmatrix} 32.8 \\ 31.7 \end{vmatrix}$		NE NW	wind. Evening, Cloudy—light snow.  [A.M. Dark beavy clouds—brisk wind. P.M. Snow—brisk wind.
F 8	29.748	29.742		29.842	29.836	36.6	28	frozen	32.2	1	l	34.7		NW	Evening, Overcast—snow—high wind.  [A M. Cloudy—snow—brisk wind. P.M. Fine—lt. clouds & wind. Ev.]  [Fine—starlight night.  [—starlight night.—sharp frost.
S 9	29.948	29.942		29.976	29.970	36.6	25		29.8	1	26.0	30.2		NNW	A.M. Cloudy—brisk wind. P.M. Fine—light clouds & wind. Ev. Fine
EM 11	$30.172 \\ 30.182$	$30.166 \\ 30.176$	1	$30.180 \\ 30.136$	$\begin{vmatrix} 30.174 \\ 30.128 \end{vmatrix}$	$\begin{vmatrix} 35.0 \\ 38.2 \end{vmatrix}$	$\begin{vmatrix} 23 \\ 28 \end{vmatrix}$	Water	$\begin{vmatrix} 30.5 \\ 36.5 \end{vmatrix}$		$\begin{vmatrix} 26.5 \\ 29.9 \end{vmatrix}$	$\begin{vmatrix} 35.8 \\ 37.8 \end{vmatrix}$		E	Overcast—brisk wind throughout the day. Ev. Overcast—sharp frost. [A.M. Fine—nearly cloudless—light wind. P.M. Cloudy—brisk
T 12	30.074	30.066	37.7	30.050	30.044	39.7	29	02.9	35.4		1	36.3		NE var.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
≥ W13		30.042			30.004	41.4	34	02.3	40.7	1		43.5	.022	NE	A.M. Overcast. It rain and wind. P.M. Cloudy—light wind. Ev.
T 14	30.014 $29.806$	$\begin{vmatrix} 30.006 \\ 29.800 \end{vmatrix}$	1	$\begin{vmatrix} 30.024 \\ 29.522 \end{vmatrix}$	$\begin{vmatrix} 30.016 \\ 29.514 \end{vmatrix}$	45.0  $ 48.5 $	$\begin{vmatrix} 36 \\ 42 \end{vmatrix}$	$ 00.8  \\ 01.3 $	$\begin{array}{ c c } 45.7 \\ 46.7 \end{array}$	1	40.7  45.6	50.2  $ 47.5 $	.216 .327	SE S	A.M. Overcast-light rain and wind. P.M. Fine-light clouds and wind. Evening, Overcast-light rain.
S 16	29.260	1		29.238	29.232	50.2	43	03.5	46.8	1	1	50.8	.250	sw	Overcast—It. rain & wind nearly the whole day. Ev. Dark heavy clds. Fine—It. clouds & wind throughout the day. Ev. Overcast—It. rain.
⊙17	29.464	29.456	46.5	29.588	29.582	46.4	36	02.1	39.8			51.2	.044	NE	Lightly overcast-lt. wind the whole of the day, as also the evening.
M 18 T 19	$29.880 \\ 30.022$	$\begin{vmatrix} 29.872 \\ 30.014 \end{vmatrix}$	$\begin{array}{c} 41.3 \\ 40.3 \end{array}$	$29.916 \\ 30.006$	$29.908 \\ 30.000$	41.3  $ 41.9 $	$\begin{vmatrix} 33 \\ 32 \end{vmatrix}$	$\begin{bmatrix} 02.5 \\ 02.2 \end{bmatrix}$	$\begin{vmatrix} 35.8 \\ 37.0 \end{vmatrix}$	$\begin{vmatrix} 37.7 \\ 44.3 \end{vmatrix}$	34.8 33.3	$\begin{vmatrix} 41.0 \\ 38.0 \end{vmatrix}$		N W W	Overcast—brisk wind throughout the day. Ev. Very light rain. [A.M. Overcast—light wind. P.M. Fine—light clouds and wind.
W20		29.962	41.3	29.848	29.842	44.0	35	$02.2 \\ 02.7$	41.2		1	41.7		W	Evening, Fine and clear. Overcast—light brisk wind throughout the day. Evening, Light rain—brisk wind.
T 21	29.616		45.2	29.630	29.624	47.6	40	02.3	46.7			48.2	.077	w	Overcast—light brisk wind throughout the day, with occasional showers. Evening, Overcast.
F 22 S 23	29.700	l .	51.9	$29.700 \\ 29.660$	29.694	50.0	44	$\begin{bmatrix} 04.3 \\ 03.7 \end{bmatrix}$	47.2	$50.3 \\ 54.5$		48.8  51.2	.016	sw	A.M. Fine-light clouds-brisk wind. P.M. Cloudy. Ev. The same.
$\bigcirc 24$	29.700  $ 29.682 $	29.696 $29.674$	48.3	29.666	$\begin{vmatrix} 29.654 \\ 29.662 \end{vmatrix}$	$50.0 \\ 53.0$	43	03.0	47.4			48.3	.088	S S	Cloudy—It. brisk wind throughout the day. Ev. Overcast—It. rain. [A.M. Cloudy—light wind—rain early. P.M. Fine—light clouds
M 25	29.648	29.644	52.2	29.636	29.628	51.2	43	04.2	47.7	48.8	41.8	49.3		s	A.M. Fine—It. clouds & wind. P.M. Cloudy—brisk wind. Ev. Ditto.
T 26		29.806		29.912	29.904	49.3	39	03.6	44.2	1 .		45.2	044	NE	[A.M. Cloudy—light brisk wind. P.M. Fine—nearly cloudless. Evening, Cloudy—light wind. [A.M. Obygosta brisk state with control of the Clouds brisk wind.
W27 T 28	$29.670 \\ 29.386$	$\begin{vmatrix} 29.662 \\ 29.380 \end{vmatrix}$	$\begin{array}{c} 47.3 \\ 53.3 \end{array}$	$\begin{vmatrix} 29.524 \\ 29.296 \end{vmatrix}$	29.518 $29.292$	49.4  $ 51.0 $	42 44	$\begin{bmatrix} 02.6 \\ 04.2 \end{bmatrix}$	$ 48.0 \\ 48.8$		$\begin{vmatrix} 42.2 \\ 42.7 \end{vmatrix}$	$\frac{48.8}{51.5}$	.044 $.133$	S	A.M. Overcast—brisk wind—rain early. P.M. Cloudy—light rain. Evening, Cloudy.  A.M. Fine—light clouds—brisk wind. P.M. Cloudy, with showers.
F 29	29.454	29.448	48.2	29.516	29.508	48.7	42	03.0	43.7	1		53.2	.291	NNW	Evening, Overcast—light rain. Overcast—brisk wind throughout the day. Ev. Cloudy—brisk wind.
S 30	29.762	29.756	45.7	29.784	29.778	45.8	35	04.1	41.2	1 .	35.0	45.7		ENE	A.M. Fine-light clouds-brisk wind. P.M. Cloudy-brisk wind. Evening, Overcast.
$-\frac{\odot 31}{}$	$\frac{29.612}{}$	$\frac{29.604}{}$	42.7	29.544	$\frac{29.540}{}$	44.8	37	$\frac{02.5}{}$	41.0	$\frac{45.7}{}$	31.2	43.0	Sum.	E	Overcast—light wind throughout the day. Evening, Heavy rain.  9 A.M. 3 P.M.
MEAN.	29.811	29.804	43.5	W-2000000000000000000000000000000000000	29.783	44.6	36.1	02.9	41.3	45.0	37.4	44.2	1.549	Mean	Barometer corrected
M 1 T 2		29.560			29.564	45.4	38	02.8		42.8		46.3	.116	NE	Overcast—brisk wind, with occasional rain throughout the day.  Evening, Light rain.  Overcast brisk wind, with occasional rain throughout the day.
$ \mathbf{w} _{3}^{2}$	29.766 $29.896$	29.758 $29.888$	$\frac{42.8}{40.3}$	$29.836 \\ 29.886$	29.878	$\begin{vmatrix} 42.7 \\ 40.0 \end{vmatrix}$	36 33	$\begin{array}{c} 01.6 \\ 02.6 \end{array}$		$\begin{array}{c} 38.3 \\ 35.6 \end{array}$	35.6	$\frac{41.0}{36.6}$	.088	NE	Overcast—brisk wind, with occasional rain throughout the day.   Evening, The like.   Overcast—brisk wind throughout the day. Evening, The like.
T 4	29.986	29.978	38.3	29.980	29.972	39.2	30	02,9	35.5	37.2	33.9	36.0		NNE	Overcast—light brisk wind throughout the day. Evening, The like, A.M. Overcast—heavy snow—light wind. P.M. Light rain—high
F 5	29.802	29.796			29.832	1	31 33	01.1	33.5	36.7	34.0	34.3	.061	NE	\ \text{wind. Evening, Overcast—brisk wind. P.M. Light rain—nigh \ \text{wind. Evening, Overcast—brisk wind. P.M. Cloudy—brisk wind. \ \}\text{A.M. Fine—light clouds—brisk wind. P.M. Cloudy—brisk wind. \}\text{A.M. Fine—light clouds—brisk wind. \}\text{A.M. Fine—light clouds—brisk wind. \}\text{A.M. Fine—light clouds—brisk wind. \}\text{A.M. Cloudy—brisk wind. \}A.M. Cloudy—brisk wind
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$30.158 \\ 30.398$	$30.152 \mid 30.392 \mid$		$30.230 \\ 30.368$		$\begin{array}{c c} 41.5 \\ 41.2 \end{array}$	29	$\begin{array}{c} 04.2 \\ 04.2 \end{array}$	$\frac{40.2}{38.6}$	40.3  42.8		$\frac{40.7}{39.3}$	.340	NNE NNE	Evening, Fine and starlight, [A.M. Cloudy—It, wind. P.M. Fine—It. clouds & wind. Ev. Fine &
M 8	30.320	30.312	45.3	30.298	30.290	41.3	32	05.4			34.8	41.4		NNE	\ \text{starlight.} \
T 9	30.352	30.346		30.348		41.2	$\frac{32}{22}$	03.2	38.8		35.0	39.7	0.07	NNE	[A.M. Overcast—light snow and wind. P.M. Cloudy—brisk wind. Evening, Overcast—brisk wind. [A.M. Cloudy—light wind—rain early. P.M. Fine—light clouds &
W10 T11	30.444	30.438 30.510	7	$30.430 \\ 30.444$		43.3 43.6	33	$03.4 \\ 04.1$	!	$\begin{array}{c} 47.8 \\ 50.4 \end{array}$	$\begin{array}{c} 37.3 \\ 33.2 \end{array}$	$\frac{43.2}{42.7}$	.027	NE NNE	\ wind. Evening, Fine & starlight.     Fine—nearly cloudless—light wind throughout the day. Evening,
F12	30.282	30.274	42.8	30.236	30.230	45.3	37	03.2	42.6	47.2	37.2	43.3		N	Fine and starlight.  A.M. Overcast—brisk wind. P.M. Cloudy—brisk wind. Ev. Overcast.
	1	30.264		30.250	1	46.9	38	04.6				45.3		N	Lightly overcast-brisk wind throughout the day. Ev. The like.
EM15	30.232 30.138	30.224 30.138	45.7 47.5	30.056	$30.196 \\ 30.050$	49.6	$\frac{39}{39}$	$03.8 \\ 04.9$				$\frac{46.4}{49.3}$		S W	Overcast-light wind throughout the day. Evening, The like.
T 16	29.792	29.786	48.8	29.658	29.650	51.3		06.7		55.9		50.8		S	A.M. Overcast—It. brisk wind. P.M. Cidy.—brisk wind. Ev. Overcast.—(A.M. Overcast—light wind, P.M. Fine—light clouds and wind, Evening, Fine and starlight.
W17	29.436	29.430	53.3	29.492	29.486	52.2	42	05.8	48.4	48.5	45.5	49.4	0.00	W var.	A.M. Fine—light clouds—high wind, with occasional hail and rain. P.M. Overcast—light rain. Evening, The like. A.M. Overcast—light rain—high wind. P.M. Cloudy—brisk wind.
	$29.450 \\ 29.662$			$29.572 \\ 29.794$	$29.564 \\ 29.786$	51.9 54.6	$\begin{array}{c c} 42 \\ 45 \end{array}$	1	$47.2 \\ 51.4$		$\frac{40.9}{40.7}$	$\begin{array}{c c} 47.6 \\ 52.0 \end{array}$	$.205 \\ .180$	S W	t tvening, Overcast—nght rain—nigh wind,
	30.082				30.074	53.2	42		49.8		40.8	50.7	.100	w	Fine—It. clouds—brisk wind throughout the day. Ev. Fine & clear. Fine—light clouds and wind throughout the day. Ev. Fine & clear.
$\bigcirc 21$	30.260	30.252	53.5	30.226	30.222	53.0	40	05.9	48.7	54.5	41.3	49.5	.033	WNW	Fine—light clouds and wind nearly the whole day. Ev. Light fog.
M22 T 23	$30.268 \\ 29.984$					53.2	$\frac{43}{46}$		52.3			53.5	155	S	Cloudy-light wind throughout the day. Evening, Overcast.
	30.078							$02.9 \\ 04.7$		51.3		$\frac{51.8}{46.4}$	.155 $.172$	S NW	Overcast-light rain and wind throughout the day. Ev. The like. Fine-light clouds and wind throughout the day. Ev. Fine & clear.
T 25	30.074	30.068	58.3	30.012	30.004	51.5	38	05.3	44.6	52.2	36.9	46.0		NW	Fine-light clouds and wind throughout the day. Ev. Fine & clear.
	$30.148 \\ 30.238$				30.136		37		44.3		39.2	50.4		NNE	A.M. Overcast—light wind. P.M. Cloudy—light wind. Evening. Fine—light clouds.
	30.340			$30.210 \\ 30.296$		51.8 53.0	$\begin{vmatrix} 43 \\ 42 \end{vmatrix}$	$\begin{array}{c c} 04.6 \\ 05.2 \end{array}$	48.7		$\frac{43.6}{42.0}$	49.3   49.4		SE NNW	A.M. Overcast—light fog and wind. P.M. Thick haze. Evening,   Fine—light clouds.   A.M. Fine—light haze and wind. P.M. Fine—light clouds. Even-
M 29	30.250	30.242	52.2	30.162	30.154	53.9	43	04.5	48.8	62.8	42.6	49.9		E	ing, Fine and clear. A.M. Light fog. P.M. Fine—light clouds. Evening, Cloudy.
T 30	30.148	$\frac{30.142}{}$	61.4	30.076	30.068	56.2	45	$\frac{06.5}{}$	57.3	63.2	46.7	58.7	G.	Е	Fine-light haze throughout the day. Evening, Fine and clear.
MEAN.	30.078	30.071	48.1	30.064	30.056	48.0	37.9	04.3	44.8	49.2	39.7	46.0	Sum. 1.377	Mean	Barometer corrected
			 	1								1		1	C. 30.022 30.007

On passing through Smithfield on Friday evening, the 26th of April last, between the hours of six and seven o'clock, my attention was arrested by a black spot, of the size of a crown piece, nearly in the centre of the sun, and which I watched with the naked eye for upwards of twenty minutes. There being a great quantity of vapour in the atmosphere at the time, permitted the eye to look at it with impunity.—J.D.R.

## METEOROLOGICAL JOURNAL FOR MAY AND JUNE, 1839.

	9 o'clock, A.M.				clock, P.M		at 9	and b ter.	External Thermometers.				at	the	
1839.	839. Barometer uncorrected.		Att.	Baror		Att.	oint leg. F	Wet y Bul nome	Fahrenheit. Self-registering			n inche d off at A.M.	ion of ind a A.M.	REMARKS.	
	Flint Glass	Crown Glass.	Ther.	Flint Glass.	Crown Glass.	Ther.	Dew Point at 9 A.M., deg. Fahr.	Diff. of Wet and Dry Bulb Thermometer.	A.M.	3 P.M.	owest	Highest	Rain in Read o	Direction of th Wind at 9 A.M.	
		29.978		1	29.904		48	05.0		65.3		61.2		SW	A.M. Thick fog. P.M. Fine—light clouds. Evening, Cloudy. 5 A.M. Cloudy—light wind. P.M. Fine—light clouds and wind.
T 2 F 3	. 1	29.944	1		$29.910 \\ 29.916$		49 51	$\begin{array}{c} 07.0 \\ 05.6 \end{array}$		66.3 63.5	45.8	64.2   66.3		NW NNW	Evening, Fine and clear.  A.M. Lightly cloudy—light wind. P.M. Fine—light clouds and
S 4	29.832			. 1	29.720		50	06.9		66.8	1	61.6		E	wind. Evening, Overcast.  A.M. Fine—lt. haze & wind. P.M. Fine—lt. clouds. Ev. Overcast.
<b>⊙</b> 5		I	1		29.686		52	08.0	57.4		51.9	66.7		S	Fine—light clouds and wind throughout the day. Ev. Fine & clear.
M 6	29.946		1	E	29.950	. 1	51 47	$\begin{array}{c c} 07.5 \\ 07.2 \end{array}$		1	$46.0 \mid 43.2 \mid$	$66.7 \\ 63.2$		NE ONE	Ditto ditto. Ev. Overcast—light wind. fine—nearly cloudless—light wind throughout the day. Evening,
T 7 W 8	$30.066 \\ 29.894$	. 1		$30.002 \mid 29.846 \mid$		59.9   60.2	48	06.8		1	43.7	61.3		NE NE	Fine and clear.  Fine and cloudless—light brisk wind throughout the day. Even-
T 9	29.872		60.4	29.836	29.830		47	03.2			46.3	67.4	.338	NNE	ing, Overcast—thunder and lightning, with heavy rain. Overcast—occasional showers—brisk wind throughout the day.
3 -				29.904		53.7	43	04.4	. 1	51.6		51.9	.422	N	Evening, Heavy rain—high wind. A.M. Ovet.—brisk wind. P.M. Cloudy—brisk wind. Ev. The same.
8 -		30.152			$30.114 \\ 30.022$	$\frac{53.3}{52.0}$	$\frac{42}{42}$	06.6	1	53.2   47.5	$\frac{42.2}{41.3}$	51.4   51.3	.033	N NW	Fine—light clouds—brisk wind throughout the day. Ev. Overcast. (A.M. Cloudy—brisk wind. P.M. Overcast—light rain—brisk wind. Evening, The same.
$\bigcirc 12$ $\bigcirc M13$		$30.036 \\ 29.914$		$30.028 \\ 29.736$	29.730		42	06.6		59.5	1	58.8	.068	NW	A.M. Fine—fight clouds and wind. P.M. Cloudy—brisk wind.
T.14	29.548	29.540		29.478	29.472		39	03.0	39.2	47.4		50.7	.172	NW	Evening, Overcast—light rain.  A.M. Overcast—light rain—brisk wind. P.M. Fine—light clouds— brisk wind. Evening, Hall and light rain. [Fine & clear.]
		29.382		29.338	29.332		38	05.9	45.2		35.4	56.8	.016	SE	A.M. Cloudy-brisk wind. P.M. Show, hall, & rain-brisk wind. Ev.
	1	29.550		29.526	$29.518 \\ 30.026$		$\frac{35}{37}$	$\begin{array}{c} 06.7 \\ 08.0 \end{array}$	$\frac{46.4}{50.2}$	53.0 56.8	1	63.4 $59.8$	.166	S S	Fine—light clouds—brisk wind throughout the day. Ev. Fine & clear. Fine—light clouds and wind throughout the day. Ev. Fine & clear.
F 17 S 18	$30.020 \\ 30.124$			$30.034 \\ 30.068$	30.020	55.2	42	$08.0 \\ 08.2$	53.7	58.8		69.6		S	A.M. Fine—light clouds—brisk wind. P.M. Fine—nearly cloudless  —brisk wind. Evening, Overcast.
<b>⊙</b> 19	30,066	30.058	53.9	30.100	30.096	57.0	48	03.7	53.7	62.0	52.2	54.3	.038	S	Overcast—deposition—light wind throughout the day. Ev. The same.
¥				30.236	30.228	58.7	47	05.7	60.3		52.3	61.2		S	Overcast-light wind throughout the day. Evening, The same.
T21				$\begin{vmatrix} 30.102 \\ 30.046 \end{vmatrix}$	$30.096 \\ 30.040$	61.3 58.6	$\frac{49}{45}$	$07.7 \\ 07.0$	$58.2 \\ 50.5$	$63.3 \\ 49.8$		66.5 65.3		NW NW	Cloudy—light wind throughout the day. Ev. Fine—lt. clouds & wind.  [A.M. Dark heavy clouds, with occasional rain. P.M. Cloudy— [B. B. B
	30.156				30.016	1	43	08.4		59.0		58.0	.022	NW	{ hight wind. Evening, Fine-light clouds. { Fine-light clouds-brisk wind throughout the day. Evening, { Cloudy-very light rain.
	29.946				29.992	1 1	43	07.0	50.3	49.8		51.7		NW	Cloudy-brisk wind throughout the day. Evening, The same.
	30.120				30.132	1	42	07.2	47.7	50.8	41.7	52.0		N	A.M. Fine—light clouds—brisk wind. P.M. Lightly overcast—brisk wind. Evening, Fine and clear.
	$30.216 \\ 30.230$				$30.180 \\ 30.190$	1 . !	$\begin{array}{c} 41 \\ 43 \end{array}$	$05.7 \\ 08.1$	48.3 56.3	58.5 63.8	$\begin{array}{c} 40.7 \\ 45.0 \end{array}$	$60.3 \\ 72.2$		NE S	Fine—light clouds and wind throughout the day. Ev. Fine & clear.    Fine—nearly cloudless—light wind throughout the day. Evening,
				30.232	30.130	1	50	06.8	55.5	58.4	47.2	66.0		E	\{\bar{E}\text{ Fine\text{-light clouds.}} \\ \text{Fine\text{-light clouds and wind throughout the day. Ev. Overcast.} \} \text{A.M. Cloudy\text{-light wind.}} \\ \text{P.M. Fine and cloudless\text{-light wind.}} \\ \text{light wind.} \\ \text{P.M. Fine and cloudless\text{-light wind.}} \\ \text{light wind.} \\ light wind
	30.212				30.136	57.9	45	04.6	49.4	66.0	41.6	50.3		NW	
8	1	30.082		1	30.024		50	03.3	53.8	68.9	48.0	54.5		N	A.M. Overcast-brisk wind. P.M. Fine-light clouds and wind.  Evening, Cloudy-light wind.
1	$\frac{30.008}{29.986}$	$\frac{30.000}{29.979}$			29.958 $29.911$		$\frac{54}{45.3}$	$\begin{array}{ c c }\hline 03.7\\\hline 06.2\\ \end{array}$	$\begin{array}{ c c c }\hline 56.3\\ \hline 52.3\\ \hline \end{array}$	65.3 58.9	$\frac{52.2}{45.0}$	$\frac{70.2}{60.5}$	Sum. 1.275	N W Mea	A.M. Overcast—brisk wind. P.M. Fine—nearly cloudless.  n Barometer corrected
MEAN.	1	1	1	-	1			1				<u> </u>		N	(C. 29,901 29.838  Fine-light clouds and wind throughout the day. Evening, Cloudy.
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	29.964	29.956 $29.900$	1 .		$\begin{vmatrix} 29.902 \\ 29.828 \end{vmatrix}$	1	52 48	$05.3 \\ 06.7$	55.2 $53.7$	$ 68.0  \\ 56.9$	$\begin{array}{c} 48.2 \\ 45.6 \end{array}$	55.7 68.0		NE	A.M. Fine-tight clouds and wind. F.M. Overcast-light winds
$M_3$		29.686	1	1			48	01.4	50.8	62.3	47.0	51.3	.227	ENE	A.M. Overcast—heavy rain during the hight. P.M. Fine, with occasional showers. Evening, Overcast—light rain.
T 4	1	1		29.668			51	03.9	54.6	1 .	50.3	54.7	.069	E	Overcast—light wind throughout the day. Evening, The like. [A.M. Overcast—light breeze. P.M. Fine—light clouds. Evening,
W 5	1	1	1	1		1	52	06.0	59.3	67.2	53.3	61.7 57.9	.227	N	Cloudy—light rain. Fine—light clouds and wind throughout the day. Ev. Cloudy.
T 6							55	$\begin{bmatrix} 08.6 \\ 05.2 \end{bmatrix}$	63.9  $ 60.3 $	1 .	$\begin{array}{ c c c } 54.2 \\ 56.3 \end{array}$	69.3	.033	E	CA.M. Overcast—light steady rain. P.M. Overcast—light wind.
S 8	1	1	1				56	07.0	63.2	68.8	1	63.7	.091	SE var.	
<b>⊙</b> 9	1	1	1	1		1	57	09.5	63.8	69.0	56.0	85.0		S	Fine—It. clouds—brisk wind throughout the day. Ev. Fine & clear.    Fine—light clouds and wind throughout the day. Evening, Cloudy
M10		1					56	$\begin{vmatrix} 09.3 \\ 08.4 \end{vmatrix}$	63.9  $ 64.7 $	69.6  $ 70.3 $	55.5  $ 59.4 $	$ 71.2 \\ 70.0$		sw w	Fine-light clouds-brisk wind throughout the day. Ev. The like.
				$races 30.288 \ 30.132$			1	08.7	67.3		57.8	80.7		S	Fine-light clouds, with light brisk wind throughout the day.
Т13	29.944	29.938	83.3	29.910	29.902	72.7	65	09.9	72.0	71.8	62.2	78.3		NE	A.M. Fine and cloudless—light wind. P.M. Cloudless—brisk wind.
Z F 14	29.866	29.858	65.6	29.876	29.870	65.9	57	02.9	58.2		55.3			NE	Overcast-brisk wind throughout the day. Evening, Cloudy.
3 S 15		29.940		$\begin{vmatrix} 30.046 \\ 30.264 \end{vmatrix}$	30.038			$\begin{vmatrix} 02.8 \\ 08.0 \end{vmatrix}$	58.4 61.3	1	55.7  $ 49.0 $	64.4 65.0	1	NNW	Lightly overcast-light breeze throughout the day. Ev. Cloudy.  Fine & cloudless-li, breeze throughout the day. Ev. Fine & clear.
	$7 30.268 \\ 30.200$			30.264				06.8	64.2		52.5	70.3	1	ENE	Fine—nearly cloudless—light breeze throughout the day. Evening, Lightning, with rain.
	30.054		75.2	29.962	29.954	71.3	65	07.7	70.6	77.6	61.6	83.6		E	A.M. Fine—light clouds and wind. P.M. Fine—light clouds—at \(\frac{1}{2}\) p. \(\frac{1}{2}\) 40\(\frac{1}{2}\) clock, thunder with beavy rain. E. Cloudy—much lightning.
W19	9 29.998	29.992	74.4	30.060	30.054	71.3	62	07.2	66.6	1	62.0			S	A.M. Fine—light clouds and wind. P.M. Fine—light clouds—a g by 4 o'clock, thunder with heavy rain. Ev. Cloudy—much lightning, A.M. Cloudy—II, wind—thunder early. P.M. Fine—II, clouds—brisk wind. Ev. Fine & clear, [—very II, rain, A.M. Cloudy—light breeze. P.M. Fine—light clouds. Ev. Cloudy—A.M. Cloudy—light breeze. P.M. Fine—light clouds. Ev. Cloudy—III and the control work light wind again. P.M.
	0   30.158	1	1 .	30.038	$\begin{vmatrix} 30.036 \\ 29.816 \end{vmatrix}$	71.8	$\begin{vmatrix} 62 \\ 62 \end{vmatrix}$	08.0	67.8  68.3		58.5  $ 61.0 $		1	S	(A.M. Fine-light clouds and wind-very high wind early. P.M.
	$oxed{1} egin{array}{c} 29.818 \ 29.644 \end{array}$				29.810			07.1	63.9		59.9		1	S	Clondy—brisk wind. Evening, Fine and clear.  A.M. Clondy—high wind—very light rain early. P.M. Overcast—high wind—light rain. Evening, Fine—light clouds.  High wind—light rain. Evening, Fine—light clouds.  M.M. Cloudy—very high wind. P.M. Clondy—light rain—high wind Ev. Dark heavy clonds—high wind, with light showers.  A.M. Cloudy—light wind. P.M. Fine—light clouds. Ev. The like.  Gene—light clouds and wind throughout the day. Evening, Over-
	3 29.456			9 29.572	29.566	67.3	57	08.0	62.8	62.6	56.8	70.0	.111	SE var	A.M. Cloudy—very high wind. P.M. Cloudy—light rain—high wind Ev. Dark heavy clouds—high wind, with light showers.
M24	4 29.842	29.836	71.9	9 29.870	29.862			08.1	63.4	1	55.6		i	S	
	$\begin{bmatrix} 29.968 \\ 29.552 \end{bmatrix}$			$\frac{3}{3}$ 29.918	$egin{array}{c c} 29.912 \ \hline 29.476 \end{array}$	2 67.3		07.9	64.3  $ 63.4 $		$ 57.4 \\ 56.0$	1	1	S E	cast—light wind.
	7   29.552			29.846	$\begin{vmatrix} 29.470 \\ 29.840 \end{vmatrix}$	66.8	57	08.5		1		ł	1		Evening, Overcast-light rain.
F 2	8 29.684	29.680	70.3	3 29.706	29.70	2   64.6	5 57	07.5	61.3	58.3	54.7			S	A.M. Fine—light clouds, and with occasional faint 1 the overcast
S 2	9 29.956	29.950	59.9	9   30.038	3   30.03	2 61.7	52	1 .	53.7	1	50.3	1		WNW	Covercast-light wind throughout the day. Evening, The like.  Cloudy—light wind throughout the day. Evening, The like.
$\odot_3$	0 30.158	30.150	60.9	30.204	30.200	99.5	46	06.7	53.3	- 34,0	45.8	- 55.0		_	9 A.M. 3 P.M.
MEAN	. 29.936	29.930	68.	7 29.919	29.91	66.1	56.	4 06.9	61.9	66.	54.9	70.2	2 1.52		an Barometer corrected