TEMPERATURE—Continued.

	1861.	Average of 22 years.	Extremes in 22 years.	
Mean of deviations of monthly means, from their respective averages of 22 years, signs of deviation being disregarded..	2°.24	2°.44	3°.55 (in 1843 and 1857)	1°.35 (in 1853.)
Month of greatest deviation, without regard to sign......	Decem'r.	January.	Jan. 1857	
when the monthly mean differed from the 22 years' average of the same month by	5°.0	3°.9	10°.7	
Warmest day......	Aug. 3	July 20	July 12 (1845.)	July 31* (1844.)
when the mean of the day was.	74°.20	77°.28	82°32 Feb.6,'55	72°.75 Dec. 22
Coldest day	Feb. 7	Jan. 24	Jan 22'57	1842.)
when the mean of the day was.	—7°.7	—0°.87	—14°.38 99°.2	+9°.57 82°.4
Highest temperature	87°.8	90°.4	Aug. 24 (1854.)	Aug. 19 (1840.)
which occurred on	June 9	July 22	—26°.5	+1°.9
Lowest temperature	—20°.8	—12°.3	Jan. 26 (1859.)	Jan. 2 (1842.)
which occurred on	Feb. 8	Jan. 25	118°.2 (in 1855.)	87°.0 (in 1847.)
Range of the year	108°.6	102°.7		

There were twenty-seven days when the mean temperature of the day differed 12° and upwards from the normal mean of the day. Their distribution among the several months may be seen in the following table :

DISTRIBUTION OF TEMPERATURES.

Mo'ths.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Excess	0	2	2	0	0	2	0	0	0	2	0	6	14
Defect.	6	2	3	0	0	0	0	0	0	0	0	2	13
Total	6	4	5	0	0	2	0	0	0	2	0	8	27

BAROMETER.

	1861.	Average of 18 years.	Extremes in 18 years.	
Mean pressure of the year	29.6008	29.6133	29.6679 (in 1849)	29.5880 (in 1852.)
Month of highest pressure	December	September	June, 1849	Sept. 1860
when the mean pressure of month was	29.7461	29.6629	29.8030	29.6733
Month of lowest pressure	November	June	March,1859	Nov. 1849
when the mean pressure of month was	29.5371	29.5624	29.4215	29.5868

	1861.	Average of 9 years.	Extremes in 9 years.	
Maximum pressure of year	30.330	30.372	30.552	30.245
which occurred......	{ Jan. 22, 7 p.m. }	—	Jan. 1855	Dec. 1854
Minimum pressure of year	28.644	28.592	28.286	28.849
which occurred......	{ May 6, 10 p.m. }	—	March,1859	March,1858
Range of the year......	1.686	1.780	2.106 (in 1859.)	1.429 (in 1860.)

There were one hundred and three days when the mean pressure of the day differed 0.200 of an inch and upwards, from the adopted normal mean of the day. Their distribution through the year may be seen from the following table :

* The mean temperature of the warmest day in the foregoing table, refers to the twenty-two years average of the warmest days in each year, irrespective of their dates, the average date being simply the arithmetic mean of the several dates measured from any fixed epoch. The same remark applies to the coldest day, and to the maxima and minima of the year. As regards the low temperatures, the averages are derived from the coldest days and lowest temperatures in successive *winters*,—December being considered to belong to the following year.

DISTRIBUTION OF MEAN PRESSURE.

M'ths.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Excess	5	4	5	4	5	1	0	3	2	5	3	9	46
Defect	6	9	7	6	5	1	3	0	4	6	7	3	75
Total	11	13	12	10	10	2	3	3	6	11	10	12	103

HUMIDITY.

	1861.	Average of 20 years.	Extremes in 20 years.	
Mean humidity of the year	78	78	82, in 1851	73, in 1858
M'th of greatest humidity	January	January	Jan. 1857	Dec. 1858
when mean humidity of month was....	88	83	89	81
Month of least humidity.	May	May	Feb. 1843	April 1849
when the mean of the month was......	69	72	58	76

CLOUDS.

	1861.	Average of 9 years.	Extremes in 9 years.	
Mean cloudiness of year.	62	60	62, in 1861	57,in '53 '56
Most cloudy month.....	February	December	{ Dec '58, Dec. '60, Feb. '61 }	Dec. 1857
when the mean of the month was......	83	75	83	73
Least cloudy month	June	July & Aug.	July, 1853	June, 1861
when the mean of the month was......	45	45*	34	45*

WIND.

	1861.	Result of 14 years.	Extremes in 14 years.	
Resultant direction.....	N. 56° W.	N. 60° W.		
Mean result veloc. in miles	2.11	1.82	{ 8.55 in 1860 }	{ 5.10 in 1853 }
Mean velocity, without regard to direction .	7.47	6.78		
Month of g'test mean vel when m'n velocity was	February 10.58	March 8.60	March,1860 12.41	Jan. 1848 5.82
Month of least mean vel when m'n velocity was	August 4.21	July 4.91	Aug. 1852 3.30	Sept. 1860 5.79

RAIN.

	1861.	Average of 21 years.	Extremes in 21 years.	
Depth in year in inches .	26.995	30.324	{ 43.555 in 1843 }	{ 21.505 in 1856 }
No. of days when rain fell	136	106	136 in 1861	80 in 1841
Greatest depth in one month fell in	November	September	Sept.,1843	Sept 1848
when it amounted to..	4.294	3.973	9.760	3.115
Rainy days most frequent when their number was	September 17	June 12	June, 1857 21	May, 1841 11
Greatest depth on one day which fell on........	3.132 Nov. 2nd	2.138 ..	3.360 Oct. 6, 1849	.. ..
Greatest depth in 1 hour which fell between .	0.41 { 1 & 2 A. M. Aug. 21st }	..	..	..

The distribution of rain through the day, both as regards depth and frequency, is given in the following table derived from an hourly rain gauge in operation from April to November inclusive :

* The average minimum of cloudiness in the second column, is the minimum of the twelve monthly means of nine years, and does not always include the lowest months of each year, as these fall differently in different years. This explains why the *highest* minimum in the fourth column should be numerically equal to the minimum on the average of nine years.