XVIII. *An abridged State of the Weather at* London *for One Year, commencing with the Month of March* 1775, *collected from the Meteorological Journal of the* Royal Society. *By* S. Horsley, *LL. D. Sec. R. S.*

R. June 27, 1776.

TABLE I.

An abridged view of the WINDS at LONDON, for one year, beginning with March 1775.

	N	S	E	W	NW	SE	NE	SW		Rain.		Quarterly Rain.	Half-yearly Rain.
Mar.	1	1½	0	3	6½	1	1	17	31	1,854			
Apr.	1½	3½	0½	1½	3½	3	6½	10	30	1,068		3,474	
May	6	0	0	2½	6½	2	6½	7½	31	0,552			11,298
June	1	1	0½	1½	1	4½	14	6½	30	1,389			
July	1	2½	0	2	7½	2	2	14	31	4,232		7,824	
Aug.	0½	3	0½	2	3½	3½	1½	16½	31	2,203			
Sept.	0½	3½	0½	1½	1½	2½	5	15	30	5,192			
Oct.	1½	1½	0½	4	3½	0	2½	17½	31	2,919		10,560	
Nov.	4	0½	2	0	3	5½	9½	5½	30	2,449			
Dec.	2½	2½	1	0½	1	3	6	14	30½	0,576	Half day missed in the Journ.		15,813
Jan.	2½	1	4½	0	1½	3½	15½	2½	31	1,167		5,253	
Feb.	0½	1	1	0	0½	2	2	22	29	3,510			
	22½	21½	11	18½	39½	32½	72	148		27,111			

It

It appears, that the winds from the S.W. were again the moſt frequent of any, and next to theſe the winds from the N.E. Of the winds from the four cardinal points, the North was the moſt frequent, and the Eaſt the moſt rare. The autumn was the wetteſt quarter, and the ſpring the drieſt. The rain of the three ſummer months was almoſt half as much again as that of the three winter months; but the rain of the winter half-year exceeded that of the ſummer half-year by about one-ſixth of the rain of the whole year. September gave the greateſt quantity of rain, and May the leaſt of any ſingle month in the whole year.

TABLE II.

Sub-diviſion of the S.W.

	WSW	SW	SSW	
March	5	5	7	17
April	3	4	3	10
May	3½	0½	3½	7½
June	3	3	0½	6½
July	4	7	3	14
Auguſt	3	2½	11	16½
September	6	3½	5½	15
October	5	7½	5	17½
November	0½	2½	2½	5½
December	3	6	5	14
January	1	0½	1	2½
February	8	6½	7½	22
	45	48½	54½	148

TABLE III.

Sub-diviſion of the N.E.

	ENE	NE	NNE	
March	0	1	0	1
April	1	3	2½	6½
May	2	1½	3	6½
June	6	4	4	14
July	0½	1	0½	2
Auguſt	0½	0½	0½	1½
September	1½	1	2½	5
October	1	1	0½	2½
November	4	3½	2	9½
December	1½	2	2½	6
January	6½	6½	2½	15½
February	0½	1½	0	2
	25	26½	20½	72

TABLE IV.

Sub-diviſion of the S.E.

	ESE	SE	SSE	
March	0	0½	0½	1
April	1	1	1	3
May	0	1½	0½	2
June	1½	1½	1½	4½
July	0	0½	1½	2
Auguſt	0½	1½	1½	3½
September	1	1	0½	2½
October	0	0	0	0
November	1½	2½	1½	5½
December	0½	1	1½	3
January	0½	2	1	3½
February	0½	0	1½	2
	7	13	12½	32½

TABLE V.

Sub-diviſion of the N.W.

	WNW	NW	NNW	
March	0½	3½	2½	6½
April	1½	1	1	3½
May	1½	4	1	6½
June	0	1	0	1
July	1½	5	1	7½
Auguſt	0	2½	1	3½
September	0½	1	0	1½
October	0½	2	1	3½
November	1	1½	0½	3
December	0	0	1	1
January	0	0½	1	1½
February	0	0½	0	0½
	7	22½	10	39½

Of the winds between the S. and W. thoſe from the S.S.W. were this year the moſt frequent.

Here follows a general ſtate of the winds, according to the degrees in which they prevailed reſpectively, collected from the five preceding tables.

ESE	WNW	NNW	E	SSE	SE	W	NNE	S	NW	N	ENE	NE	WSW	SW	SSW	
7	7	10	11	12½	13	18½	20½	21½	22½	22½	25	26½	45	48½	54½	365½
Miſſed in the journal,						–	–	–	–	–						½
																366

TABLE

TABLE VI.

Shewing the number of fair and froſty days in each half-month and in the whole year.

	Fair		Fair days in whole month.	Froſty days		Froſty days in whole months.
	1ſt half.	Latter half.		1ſt half.	Latter half.	
March	6	7	13		4	4
April	15	9	24			
May	13	13	26			
June	12	11	23			
July	1	9	10			
Auguſt	5	7	12			
September	1	11	12			
October	11	6	17		1	1
November	8	5	13	1	1	2
December	15	9	24	2	6	8
January	5	11	16	10	15	25
February	7	2	9	1		1
Total fair days,			199	Total froſty days,		41

There were eleven ſnowy days in this year, all in January, with the wind between the N. and E. The firſt ſnow fell on the 7th, and introduced the great froſt, which ſet in in the day-time: for on the 7th, at $8\frac{1}{2}$ in the morning, it rained with the thermometer at 33°, wind E.N.E.; but, at 2 in the afternoon of the ſame day, the rain was turned into ſnow, and the thermometer was ſunk to 31°. There was a ſhort remiſſion of the froſt on the 18th, the thermometer at 8 in the morning of that day being at 33°; but it was ſunk again to 30° at 2 in the afternoon. On the 31ſt, at 8 in the morning, it was at 13,5, and only one degree higher the next morning, February 1ſt. The froſt broke in the night between

between the 1ſt and 2d of February, the wind yet continuing N.E., from which quarter it had ſet almoſt all the time the froſt laſted. It changed to the S.E. on the 2d, and on the 3d got into the S.W. where it remained almoſt all the reſt of the month.

The following table ſhews the quantity of rain that fell with each wind in each month and in the whole year. It appears, that the S.W. gave more than two-thirds of the rain of the whole year, which ſeems not to have been altogether owing to the wet quality of that wind, but in great meaſure to the greater length of time it blew than any other. The numbers at the bottom of the table ſhew the proportional wetneſs of each wind upon the whole. They are made from the numbers in the laſt horizontal row but one of this table compared with the numbers in the laſt horizontal row of TAB. I. For the wetneſs of each wind is in proportion as the quantity of rain it gave in the whole year directly, and the number of days it blew inverſely. The former is ſhewn by the numbers in the laſt row but one of TAB. VII.; and the latter by thoſe in the laſt row of TAB. I. It appears, that the South wind was the drieſt of all, the S.W. the wetteſt, and the W. the next wetteſt.

TABLE VII.

Shewing the quantities of rain which fell ſeverally with each wind in every month and in the whole year.

	N	S	E	W	NW	SE	NE	SW	
Mar.	0	0		0,132	0,114	0,074	0,095	1,439	1,854
Apr.	0	0,016	0	0,386	0,143	0	0	0,523	1,068
May	0			0,058	0	0	0,052	0,442	0,552
June	0	0		0,768	0	0,495	0,098	0,028	1,389
July	0	0		0,155	0,528	0	0,214	3,335	4,232
Aug.	0	0,039	0,038	0	0	0,043	0	2,083	2,203
Sept.	0	0,107	0	0,378	0,184	0	0,542	3,981	5,192
Oct.	0,037	0	0,039	0	0,378	0	0	2,465	2,919
Nov.	0,211	0	0		0,969	0,208	0,409	0,652	2,449
Dec.	0	0	0	0,030	0	0	0	0,546	0,576
Jan.	0,079	0	0,091		0,075	0,031	0,447	0,444	1,167
Feb.	0	0,089	0		0	0,093	0,291	3,037	3,510
	0,327	0,251	0,168	1,907	2,391	0,944	2,148	18,975	27,111
	11+	9+	12—	82+	48	22—	23—	100	

TABLE VIII.

For Trial of the MOON's Influence.

	New.	1ſt Qr.	Full.	Laſt Qr.			Corrected by excluſion.	
	D. H.	D. H.	D. H.	D. H.	☉			
Mar.	1 10	8 16	16 20	24 2 New. 30 21	2 4 8 10 13 19 20 26 31	9	5	6 3
	1ſt Qr.	Full.	Laſt Qr.	New.				
Apr.	7 11½	15 10	22 8	29 8	16 17 19 22 24 30	6	4	0 0
May	7 6½	14 20½	21 14	28 21	1 6 8 13 20 27	6	1	2 0
June	6 0	13 5	19 20	27 10	7 8 11 12 25 29	6	0	2 0
July	5 14	12 12	19 4	27 1	4 6 16 23 27 28 30	7	4	7 4
Aug.	4 2	10 19	17 14	25 17	1 5 9 14 16 18 22 27	8	5	7 4
Sept.	2 12	9 3	16 4	24 9	5 7 16 19 20 22	6	3	3 2
Oct.	1 20	8 13	15 22	24 0½ Firſt Qr. 31 4	3 6 9 13 17 20 22 23 25 29 31	11	4	6 2
	Full.	Laſt Qr.	New.	Firſt Qr.				
Nov.	7 0½	14 19	22 14	29 11½	1 5 7 12 14 15 19 21 23 24 26 28 30	13	7	6 3
Dec.	6 15	14 17	22 3	28 20	14 22 25 29 31	5	4	3 2
Jan.	5 7	13 13	20 14½	27 6	2 5 7	3	2	3 2
Feb.	4 2	12 6	19 1	25 19	2 3 5 6 8 11 14 16 20 22 25 27	12	7	8 5
						92	46	53 27

In this table, the changes of weather, which, having not been reverſed within 24 hours, fell on the days of octagonal aſpect, are diſtinguiſhed by a line drawn underneath the number.

From this table it appears, that, of 92 changes of weather in the whole year, 46 fell on the days of the Moon's pretended influence. And rejecting of theſe changes, all that were reverſed within 24 hours, of 53 that remain in all, 27 fell on the days of lunar influence. And if from theſe again we reject the octantal days, confining the Moon's influence to the days of ſyzygie and quadrature, there ſtill remain 14 of the 53 for theſe days.

Of the new Moons four only were attended with a change of weather, and of the full Moons three; namely, the new Moons of the months of March, July, December, and February; and the full Moons of October, November, January. Both the ſetting-in and the breaking of the great froſt happened on days exempt from Lunar influence.

Upon the whole, the trial turns out more in favour of the Moon this year than it did the laſt. But ſtill the changes were many more on the days confeſſedly exempt from her influence, than on thoſe which have been ſuppoſed to be the moſt ſubject to it.

The greateſt monthly height of the barometer was only four times in this year accompanied with a N.E. wind, namely, in the months of April, June, November, and February. It was five times attended with a S.W. namely, in March, May, Auguſt, September, and December; and the greateſt height obſerved in the whole year was one of theſe, namely, in the month of March.

Once it was accompanied with the Eaſt wind, namely, in January; and twice with a N.W. namely, in July and October.

The leaſt monthly height was once accompanied with a N.E. namely, in January; ſix times with a S.W. namely, in April, May, Auguſt, October, December, and February; twice with the South wind, namely, in March and September; once with the North, namely, in July; once with a S.E. in June; and once with a N.W. in November.

The

I ſubjoin a general view of the winds and rain in the two months of January and February 1775, which are not included in the preceding tables.

1775	N	S	E	W	NW	SE	NE	SW	Rain.	
Jan.	0	0	2	2	10	3½	4	4½	1,724	5 days miſſed in the journal.
Feb.	0½	1½	0	1	4	1½	1½	17	1,928	1 day miſſed.
	0½	1½	2	3	14	5	5½	21½		

Comparing this with the table p. 168. of the laſt volume, I find the general ſtate of the winds and rain for the twelve months, beginning with March 1775, as follows:

N	S	E	W	NW	SE	NE	SW
23	21	16½	22½	51½	32½	72	119

R A I N.

Quarterly rain		Half-yearly rain.		Year's rain.
Spring,	4,435	Summer,	12,486	24,662
Summer,	8,051			
Autumn,	6,718	Winter,	12,176	
Winter,	5,458			

But note, that in the ſpace of theſe twelve months ſeven days in all were miſſed in the journal.

XIX. *Extract*