

Plain and Mt. Pleasant; fires still burning vigorously in Cape May, Cumberland and Atlantic Cos. Norfolk, Va., 15th, extensive fires in Dismal Swamp; enveloped Lake Drummond, preventing steamers from passing through the canal. Petersburg, Va., 15th, fires uncontrolable; in Prince George county very destructive. Dinwiddie, Chesterfield and Sussex Cos., 18th, reported beyond all control; losses very great; three persons burned to death. Port Jefferson, L. I., 21st, terrible forest fire swept away nearly the whole north portion of the town of Brookhaven, burning over 1,000 acres in the adjacent country.

*Sun Spots.*—The following record of observations, made by Mr. D. P. Todd, Assistant, has been forwarded by Prof. S. Newcomb, U. S. Navy, Superintendent, Nautical Almanac Office, Washington, D. C.:

DATE— April, 1880.	No. of new—		Disappeared by solar rotation.		Reappeared by solar rotation.		Total number visible.		REMARKS.
	Groups	Spots.	Groups	Spots.	Groups	Spots.	Groups	Spots.	
1st, 8 a. m...	0	0	0	0	0	0	3	10	Faculae.
2nd, 8 a. m...	0	7	1	5	0	0	2	12	
4th, 2 p. m...	0	14†	0	0	0	0	2	28†	Faculae. Many of the spots small.
5th, 8 a. m...	0	0	0	0	0	0	2	16†	
7th, 9 a. m...	0	0	0	0	0	0	1	3	Faculae. Spots probably disappeared by solar rotation.
8th, 9 a. m...	0	0	0	0	0	0	1	3	
9th, 8 a. m...	1	2	0	0	0	0	2	5	Faculae.
10th, 8 a. m...	1	5	0	0	0	0	3	10	Faculae.
11th, 9 a. m...	0	0	1	3	0	0	1	10	
12th, 7 a. m...	0	0	0	0	0	0	1	10	
13th, 8 a. m...	0	0	0	0	0	0	1	10	
14th, 8 a. m...	1	3	0	0	1	3	2	13	Faculae.
15th, 8 a. m...	0	0	0	0	0	0	2	13	Faculae.
17th, 7 a. m...	0	0	1	10	0	0	1	3	Spots small.
18th, 8 a. m...	0	0	0	0	0	0	1	3	Broad areas of faculae.
20th, 3 p. m...	1	1	0	0	0	0	2	4	Faculae.
21st, 6 p. m...	0	2	0	0	0	0	2	6	
22nd, 4 p. m...	0	0	0	0	0	0	0	0	
23rd, 3 p. m...	0	0	0	0	0	0	0	0	
26th, 3 p. m...	1	8	0	0	0	0	1	8	
27th, 8 a. m...	0	10	0	0	0	0	1	18†	Faculae.
28th, 7 a. m...	0	7	0	0	0	0	1	23†	Faculae. Many of the spots small.
30th, 8 a. m...	0	0	0	0	0	0	1	23†	Many of the spots small.

†Approximated.

## NOTES AND EXTRACTS.

Referring to the United States Signal Service Meteorological Charts, showing the mean pressure and temperature for July, 1878, *Nature*, of April 15th, says: "Thus then the meteorology of the globe for July, 1878, stands out as a singular phenomenon, characterized by these broad features, viz:—(1) a greatly reduced pressure over a large portion of the Southern Hemisphere as compared with what usually obtains there in the winter month of July; (2) a much greater diminution of the pressure than usually takes place in the summer month of July over the land of the Northern Hemisphere, over North America, over Central and Eastern Europe, Western and Central Siberia; and (3) a much larger increase of pressure than usually occurs in the Northern Hemisphere over the great oceans in July, the area of unusually high pressure being extended, as regards the Atlantic to the northeast as far as Christiansund, and as regards the Pacific to westward over Central and Southern Asia, as far as the Arabian Sea. It may be worth remarking that this increased pressure over the oceans and diminished pressure over the land of the Northern Hemisphere is in accordance with what might be expected to result from an increased solar radiation; whilst on the other hand the increased pressure over Southern and Central Asia, and diminished pressure in the Southern Hemisphere, is not in direct accordance with this supposition. The point here referred to will however receive an illustration from subsequent numbers of the Weather Maps, by which it is probable that different results as regards the states of the atmosphere will appear, with the varying states of the sun from year to year. The future maps of this international series will be eagerly scanned in connection with many of the larger questions of atmospheric physics, as well as those directly practical questions of climate with which we have been almost exclusively concerned in this article. It is plain that we need not hope to succeed in dealing with most of the larger problems proposed by meteorology without the help of the data laid before us in so full and convenient a form by the International Weather Maps of General Myer. It is only thus that we can trace to their proximate causes such climatal phenomena as the recurring droughts of India and the cold, sunless summer of the British Isles in 1879, and show their true relations to the great movements of the atmosphere."

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