(Form H.)

To be filled up and sent on the first of each month, in an envelope addressed to "The Chief Signal Officer, U. S. Army, Washington, D. C."

WAR DEPARTMENT, SIGNAL SERVICE, U. S. ARMY,

DIVISION OF TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

FACT O.C.S.O. Inf. Bul's RECEIVED AUG [illegible] 1881 2287

VOLUNTARY OBSERVER'S METEOROLOGICAL RECORD for the month of July, 1881. Va 294

Place of Observation: Snowville Va, *County of* ...., *State of* ....

Latitude ....; *Longitude* ....; *Height of ground above the Sea,* .... *feet.*

Name and Post-Office address of Observer: ....

Day of Month	Thermometer in the open air: 7 A.M.	2 P.M.	9 P.M.	Mean	Rain and Snow: Time of beginning of rain or snow	Time of ending of rain or snow	Total amount of rain and melted snow, in inches	Average depth of snow-fall, in inches	Clouds 7 A.M. Upper Clouds: Kind and amount	Direction moving from	7 A.M. Lower Clouds: Kind and amount	Direction moving from	2 P.M. Upper Clouds: Kind and amount	Direction moving from	2 P.M. Lower Clouds: Kind and amount	Direction moving from	9 P.M. Upper Clouds: Kind and amount	Direction moving from	9 P.M. Lower Clouds: Kind and amount	Direction moving from	Auroras	Winds 7 A.M. Direction	Force	2 P.M. Direction	Force	9 P.M. Direction	Force	Day of Month
1	60	80	70						3	5	8																	1
2	50	81	60																									2
3	50	86	70																									3
4	61	89	80																									4
5	62	84	78																									5
6	65	84	78																									6
7	70	100	79							6	5																	7
8	72	100	80								10																	8
9	71	96	79				7/10		5	8	8																	9
10	72	100	80						5	5	8																	10
11	75	102	80				7/10																					11
12	70	100	80																									12
13	71	98	71																									13
14	72	92	71																									14
15	71	86	70																									15
16	71	88	72																									16
17	73	86	70																									17
18	65	75	68																									18
19	58	84	78																									19
20	69	86	72																									20
21	70	91	75				9/10																					21
22	70	88	67																									22
23	58	87	68																									23
24	62	86	70																									24
25	65	66	70																									25
26	62	85	70																									26
27	64	84	65																									27
28	55	84	64			sprinkle																						28
29	65	82	65																									29
30	65	75	68		sprinkle																							30
31	64	80	72																									31
Sums.	2028	2728	2240				2.30																					Sums.
Means.	65.4	88.0	72.3	74.5																								Means.

Kept no record of Clouds the last ½ of the month but it has probably been ⅔ cloudy; but very dry all the month. Rain less than in 30 years. Things are recovering some from the long drouth last month & fore part of this but vegetation is greatly injured ×

THE OBJECT of these observations is to enable the Chief Signal Officer, U. S. Army, to prepare a series of maps to illustrate the face of the sky, &c., over the United States for each day in the year, and thus to study the rise, progress, and course of American storms. Observers will be supplied with full directions for using all the instruments, on application to the Chief Signal Officer, Washington, D. C.

EXPLANATION OF THE ABOVE COLUMNS.

THERMOMETER IN THE OPEN AIR.

This is intended for the register of the thermometer and temperature of the air. The daily mean is to be found by the formula ¼ (7+2+9+9). Fractions of degrees should be recorded in tenths, thus 72°.1, &c.

RAIN AND SNOW.

Under this head are entered the time of beginning and ending of the fall of rain or snow, and the true depth, in inches and hundredths, of the fall of rain or melted snow; also the depth of the snow. Rain to be indicated by R and snow by S. When there in no rain or snow, mark 0. Amount of rain or melted snow should be recorded in inches, tenths, and hundredths, thus: 1.25, 6.03, 0.01, &c. If the measuring tube or stick gives figures 2, 5, or 10 times larger than the true depth, then these figures should be properly reduced before entering in the above columns.

CLOUDS.

Under this general head are entered three daily observations on the aspect of the sky, &c.: 1st. The "Amount of cloudiness," designated by figures, 10 being entire cloudiness; 5 half cloudiness; 0 entire clearness; and intermediate numbers in proportion. 2d. The direction *from* which the clouds move, distinguishing between the upper and lower strata of clouds. This observation is important, as the course of the *clouds* is generally different from that of the *surface wind,* which is given in another column. 3d. The "Velocity," or rate of motion, 10 being the highest, and 0 apparent rest. 4th. The description or "Kind of clouds," to be entered by means of the following abbreviations: *S.* = Stratus; *Cu.* = Cumulus; *C.* = Cirrus; *N.* = Nimbus; *C. s.* = Cirro-stratus; *Cu. s.* = Cumulo-stratus; *C. cu.* = Cirro-cumulus.

AURORAS.

Auroras should be looked for every night, and if possible several times. The detailed description should be given on the next page, but in this column should be entered the words *Aurora* when one is visible; *None* when clear enough to see that no aurora is present; *Obscured* when the sky is covered so as to hide aurora; *Blank* when no observation was made and nothing is positively known.

WINDS.

This is for the record of the direction *from* which the wind is blowing, and its force. The direction is to be entered in eight points of the compass: N., N.E., E., S.E., S., S.W., W., N.W., and if practicable the intermediate half points. The force is to be estimated and registered by figures from 1 to 10, as in the first column of the following table. The figures in the last column, expressing the number of miles per hour, are *not to be used* in the register. A little practice will enable Observers to make use of the figures in the first column, corresponding to light, gentle, fresh, strong, &c., with accuracy, and it is very important that such should be the case to make the record reliable. Observers having anemometers should, in addition to these estimates, also record the velocities given by the instrumental record; they should also add the total daily and monthly movement given by the anemometer dials.

0. Calm.				
1. Very light breeze,	varies between	1 and	2	miles per hour.
2. Gentle breeze,	" "	3 "	5	" " "
3. Fresh breeze,	" "	6 "	14	" " "
4. Strong wind,	" "	15 "	29	" " "
5. High wind,	" "	30 "	39	" " "
6. Gale,	" "	40 "	59	" " "
7. Strong gale,	" "	60 "	69	" " "
8. Violent gale,	" "	70 "	79	" " "
9. Hurricane,	" "	80 "	99	" " "
10. Most violent hurricane,	" from	100 upward.		

[illegible]