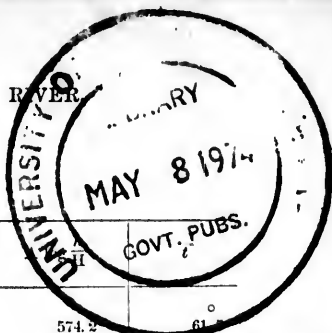


ALTITUDE OF FORT YUKON.

Computation of  $A \log \frac{h}{H}$ . Set A.



No.	Date, 1869.	Hour.	A log h	A log H	A	h	H
1	August 3	9 a. m.	28414.3		27840.1	574.2	61
2	August 3	3 p. m.	28433.8		27796.5	637.3	57.0
3	August 5	12 m.	28338.9		27953.3	443.6	55.0
4	August 5	3 p. m.	28335.2		27981.1	437.1	55.0
5	August 6	9 a. m.	28429.4		27977.6	451.8	61.8
6	August 7	9 a. m.	28309.4		27154.7	154.7	57.8
7	August 7	12 m.	28350.3		27136.7	213.6	58.5
8	August 7	3 p. m.	28407.2		27094.6	312.6	56.3
9	August 8	9 a. m.	28500.2		27233.5	266.7	45.0
10	August 9	3 p. m.	28642.3		27261.2	381.1	70.0
11	August 12	12 m.	28597.4		27377.9	259.5	63.0
12	August 12	3 p. m.	28587.7		27329.8	257.9	66.5
13	August 13	9 a. m.	28571.8		27333.4	238.4	59.5
14	August 13	12 m.	28582.0		27324.5	257.5	63.2
15	August 13	3 p. m.	28587.7		27304.0	283.7	65.0
16	August 14	12 m.	28657.2		27304.0	353.2	72.0
17	August 14	3 p. m.	28681.0		27303.1	377.9	65.5
18	August 14	9 p. m.	28677.5		27311.4	391.4	74.0
19	August 15	3 p. m.	28752.9		27311.4	411.5	73.0
20	August 16	9 a. m.	28759.0		27426.8	332.2	62.0
21	August 16	12 m.	28756.4		27320.1	436.3	75.5
22	August 16	3 p. m.	28742.4		27324.5	417.9	76.5
Means.....			28530.6		28192.0	358.6	62.4

Computation of  $A \log \frac{h}{H}$ . Set B.

No.	Date, 1869.	Hour.	A log h	A log H.	A log $\frac{h}{H}$	t	t'	t+t'	a	a'	a+a'
1	August 17	12 m.	28640.5	28318.3	322.2	73.3	71.6	144.9	0.667	0.563	1.230
2	August 17	3 p. m.	28641.9	28295.3	346.6	76.0	81.5	157.5	.627	.343	0.970
3	August 18	9 a. m.	28620.7	28330.7	360.0	57.0	62.5	119.5	.704	.582	1.286
4	August 18	12 m.	28695.1	28339.6	355.5	58.0	76.5	134.5	.658	.402	1.060
5	August 18	3 p. m.	28692.4	28317.4	375.0	58.0	82.0	140.0	.658	.321	0.981
6	August 18	9 p. m.	28499.3	28313.8	185.5	57.0	61.7	118.7	.729	.837	1.566
7	August 19	9 a. m.	28282.7	28143.0	139.7	55.5	61.0	116.5	.672	.577	1.249
8	August 19	12 m.	28312.1	28134.0	178.1	54.3	70.6	124.9	.645	.617	1.262
9	August 19	3 p. m.	28371.7	28122.5	249.2	56.3	69.0	125.3	.686	.650	1.336
10	August 20	9 a. m.	28591.2	28207.5	383.7	53.5	56.2	109.7	.777	.707	1.484
11	August 20	12 m.	28639.6	28201.3	438.3	54.3	62.0	116.3	.763	.521	1.284
12	August 20	3 p. m.	28644.9	28197.7	447.2	55.0	61.0	116.0	.723	.541	1.264
13	August 21	9 a. m.	28570.0	28205.7	364.3	53.0	56.5	109.5	.797	.776	1.573
14	August 21	12 m.	28611.4	28276.3	335.1	55.0	59.7	114.7	.767	.653	1.420
15	August 21	3 p. m.	28652.8	28263.9	388.9	56.3	67.0	123.3	.738	.735	1.473
16	August 22	12 m.	28329.2	28435.6	496.6	54.3	58.2	112.5	.732	.671	1.403
17	August 22	3 p. m.	28335.3	28392.0	343.3	58.5	65.5	124.0	.684	.544	1.228
18	August 23	9 a. m.	28872.7	28523.3	349.4	54.3	55.2	109.5	.694	.652	1.346
19	August 23	12 m.	28825.4	28510.0	315.4	57.5	65.2	122.7	.656	.520	1.176
20	August 23	3 p. m.	28760.6	28471.9	297.7	53.0	75.0	131.0	.661	.370	1.031
21	August 24	9 a. m.	28524.2	28236.2	288.0	57.5	55.0	112.5	.644	.750	1.394
22	August 24	12 m.	28524.2	28233.9	290.3	58.5	68.4	126.9	.550	.433	0.982
23	August 25	3 p. m.	28634.3	28131.8	502.5	54.8	60.7	115.5	.761	.738	1.499
Means.....			28633.8	28289.8	344.0	57.7	65.3	123.0	0.700	0.587	1.287

Mean by weight of the values of  $A \log \frac{h}{H}$ , from Sets A and B..... Feet.  
 350.4 ± 4.9  
 For temperature..... + 20.7  
 For latitude..... - 00.6  
 For decrease of gravity on a vertical acting on the mercurial column..... + 00.12  
 For decrease of gravity on a vertical acting on the density of the air..... 00.0  
 For atmospheric humidity..... + 1.4  
 Height of Fort Yukon above Redoubt St. Michael's..... 372.0 ± 4.9  
 Estimated height of Redoubt St. Michael's above the level of the sea..... 40.0  
 Approximate height of Fort Yukon above the level of the sea..... 412.0