

Observation of the Annular eclipse of the ☉ Sep. 17. 1811. at Monticello.

I had a perfect observation of the passage of the sun over the meridian, & the eclipse commencing but a few minutes after, left little room for error in the time. This little was corrected by the known rate of going of the clock, but we as good as lost the first appulse by a want of sufficiently early attention to be at our places & composed. I have no confidence therefore by several seconds in the time noted for the 1st external contact. The last was better observed, yet even in that there was a certain term of uncertainty as to the precise moment at which the indentation on the limb of the sun, exactly vanished. It is therefore the forming of the annulus, & it's breaking which alone possess my entire & complete confidence. I am certain there was not an error of an instant of time in the observation of either of them. Their result therefore should not be supposed to be affected by either of the others.

the 1 st appulse	0 - 13 - 54	} by the calculations of M ^r Lambert, a calculator of the first order in point of accuracy the outer contacts give the long. of Mont ^o . 78° 35' 10.95 the inner (West from Greenwich) - 78° 50' 18.877 which last is to be considered as the true Longitude.
annulus formed	1 - 53 - 0	
annulus broken	1 - 59 - 25	
Last osculation	3 - 29 - 2	

1814. July 5. The dip of the summit of Willis's mountain is 9 - 30 as seen from Monticello.
of the horizon at it's apparent base 15 - 30
of the horizon due E. from Monticello 19 - 30
at 12° W. from Meridian 15. 0 to wit at intersection with Monticello

Climate of Monticello.

extreme of cold in ordinary winters 16°. in extraordinary 5°.

maximum of heat 92°.

10. or 12. days in July and August the mercury rises to 86°.

but ordinarily in those months to about 83. falling in the night to 70°.

White frosts commence about the middle of October, & end middle of April.
ice begins a month later and ceases a month earlier.

50 freezing nights in the year, and 10. freezing days throughout.

The thermom. is below 55° thro the day 132. days, & of evenings & mornings 68. days more.

Observations of 7. years at Washington gave 15.9. of snow a year, covering the ground 16. days.

24. fall of water in the year.

Albemarle county is of about 750. sq. miles, populatⁿ in 1810. 20260, about half blacks