

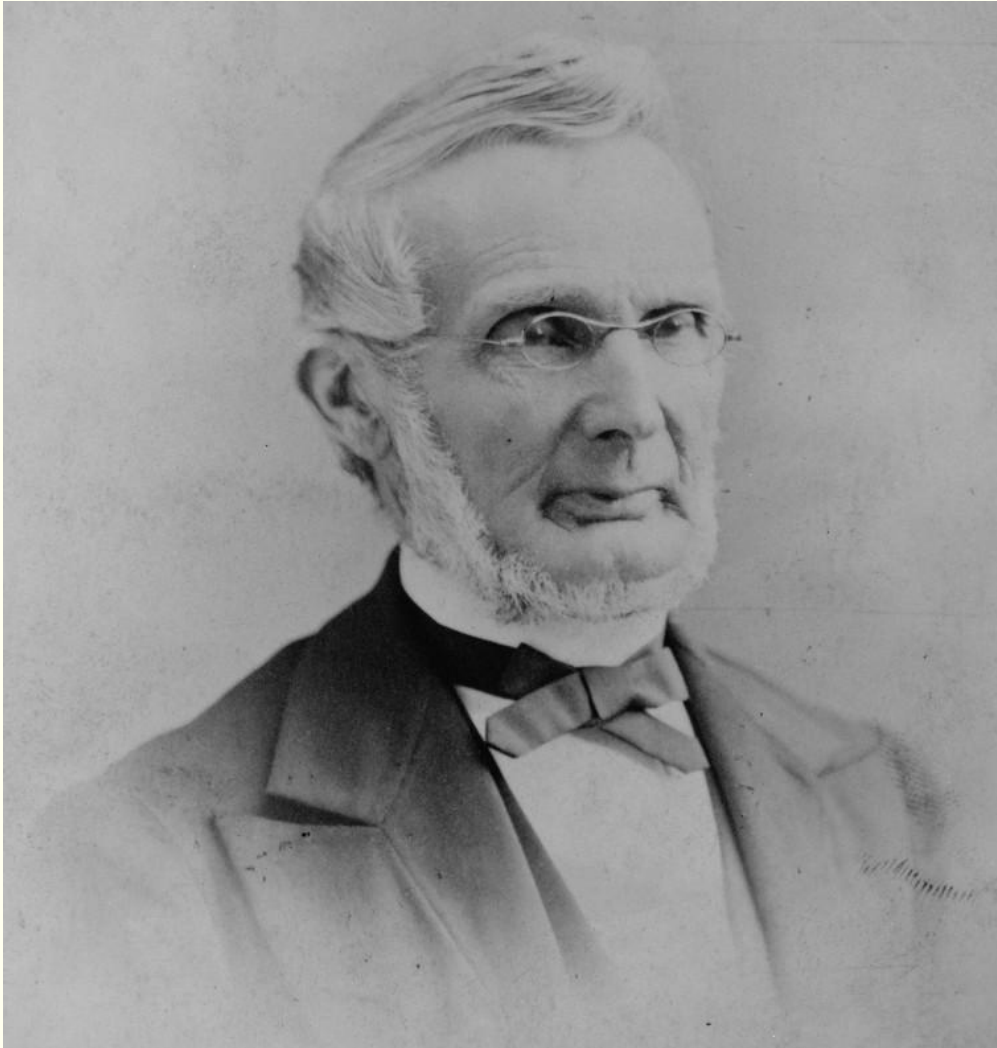
Arnold Henry Guyot (1807-1884) A Man who Mapped Mountains and Loved the Lord's Creation

Presentation to the Jackson County Genealogical Society

Don Casada 2013

Arnold Henry Guyot (1807-1884)

“A devout student of nature who loved to trace the wisdom and goodness of God in the works of Creation” – Guyot Memorial Tablet (Princeton)

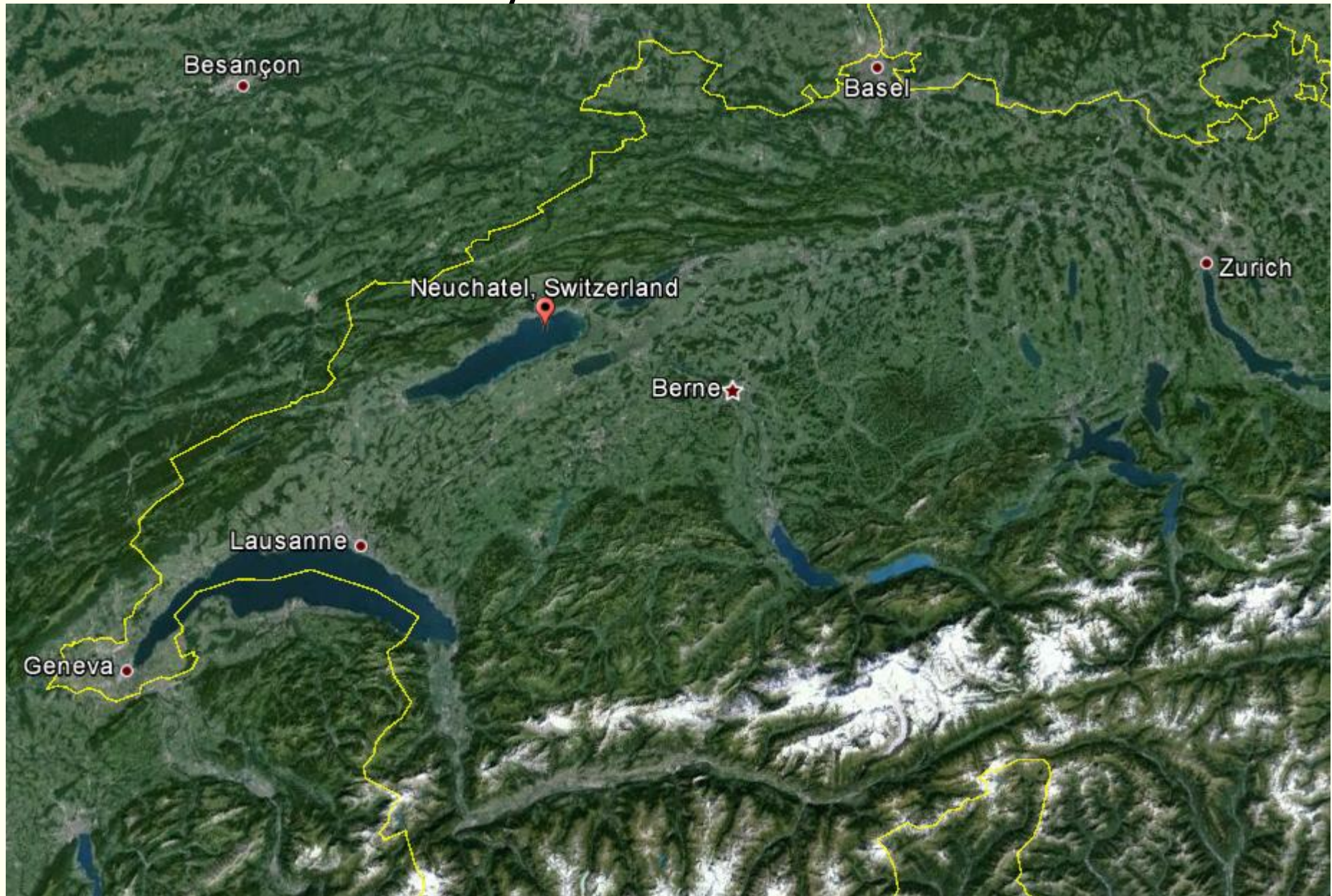


[Wikipedia.com](https://en.wikipedia.org/wiki/Arnold_Henry_Guyot)

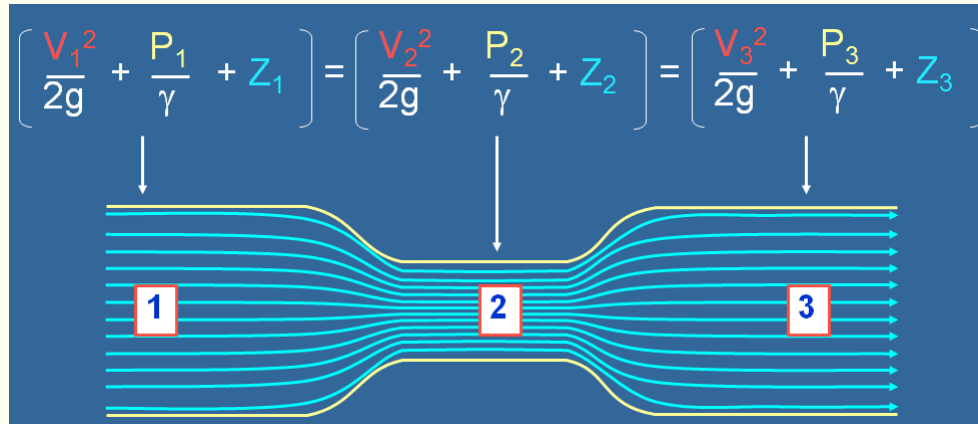


[findagrave.com](https://www.findagrave.com/memorial/115000000/Arnold-Henry-Guyot)

Guyot was born in Neuchâtel, Switzerland in 1807,
about halfway between Basel and Geneva

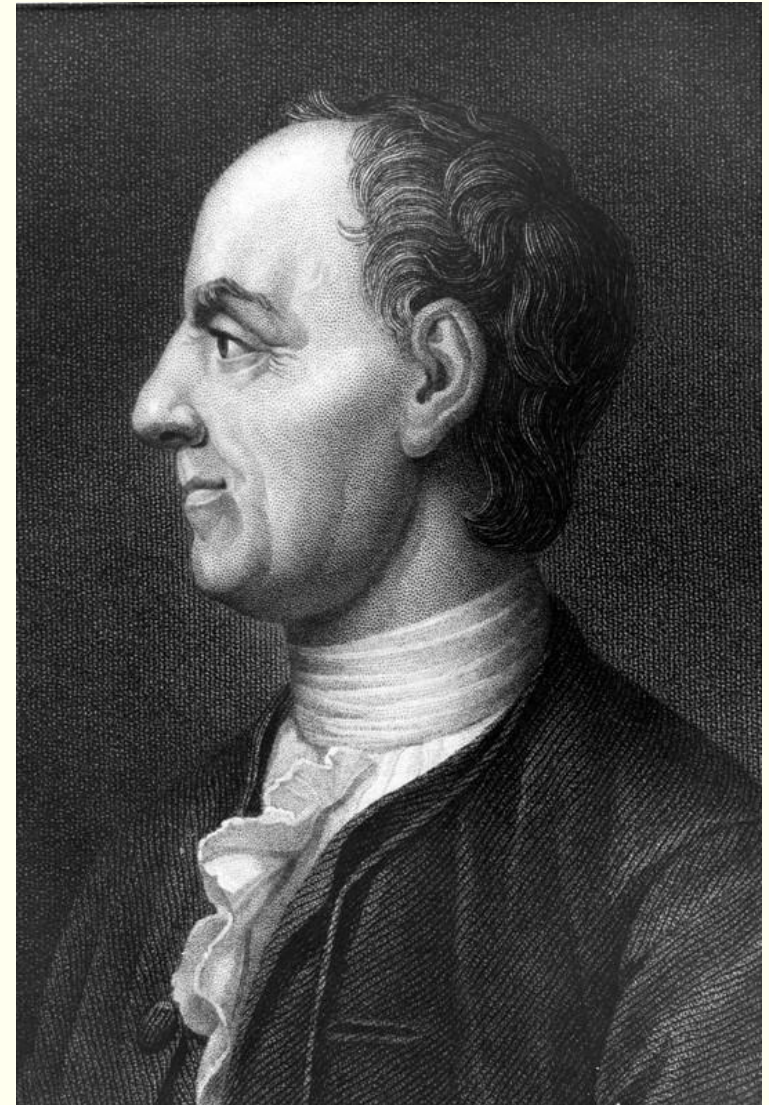


Leonhard Euler, son of a minister, and incredibly accomplished mathematician and physicist, was born in Basel a century before Guyot. He studied at the University of Basel, a home to great things in science and engineering



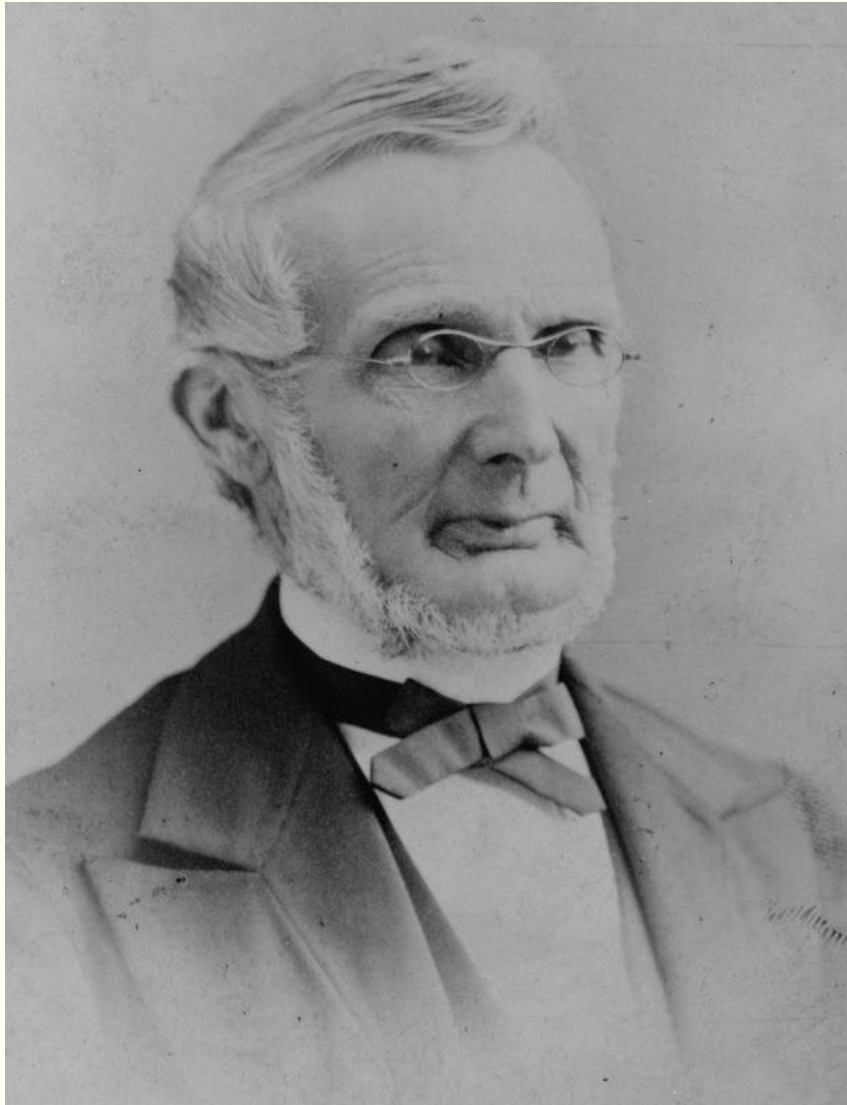
The Bernoulli equation shown above has been called one of the “Five Equations that Changed the World” (Guillen), and it is a fundamental guiding principle in my own professional work. Bernoulli and Euler collaborated in their study of fluid mechanics, both spending time at the University of Basel and in St. Petersburg, Russia in the century preceding Guyot’s birth.

So at least in a sense of geographical proximity, Arnold Guyot’s affinity for science – as well as mountains - is one that he “came by honest.”

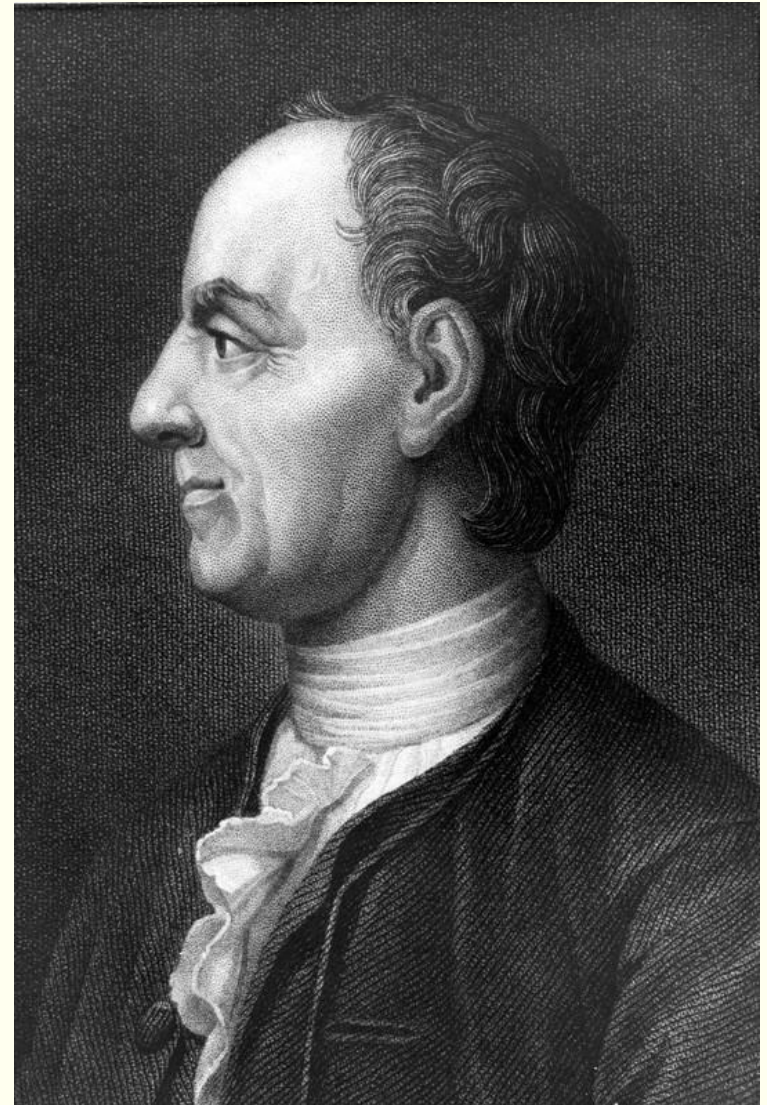


Leonhard Euler (1707-1783)

My buddy Ken Wise claims Guyot had a bad haircut.
Au contraire, mon ami – C'est très chic

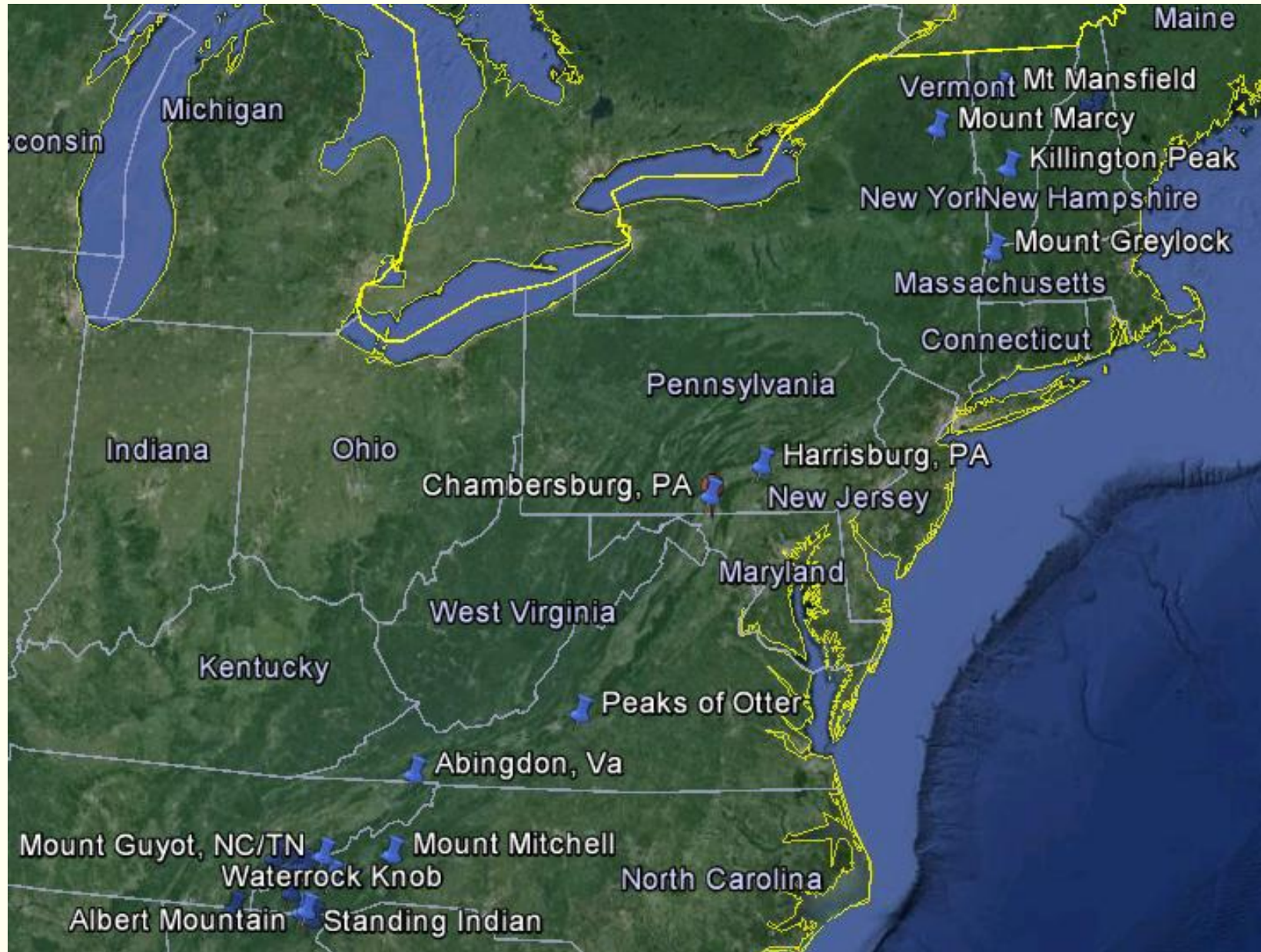


Arnold Guyot

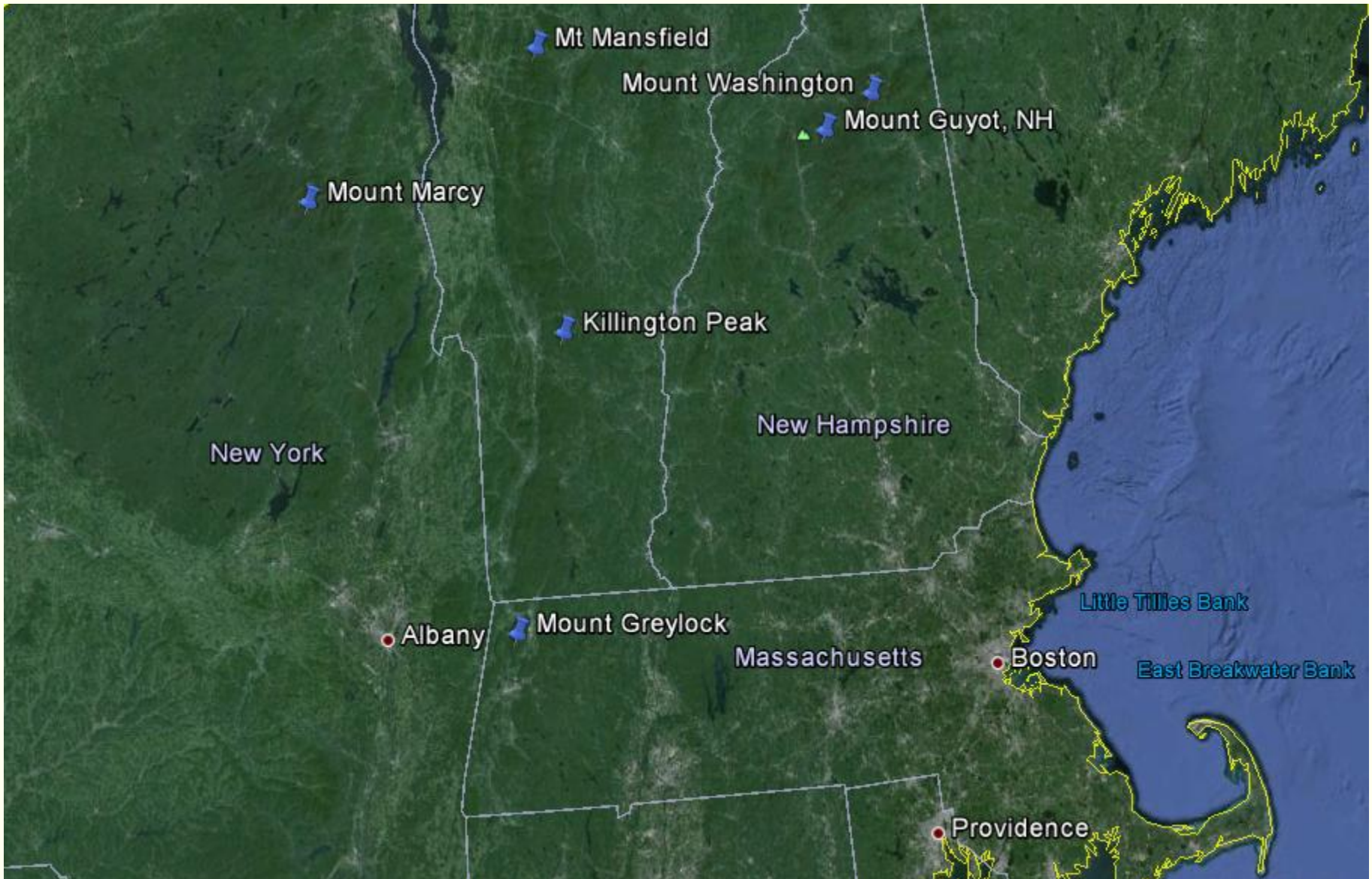


Leonhard Euler

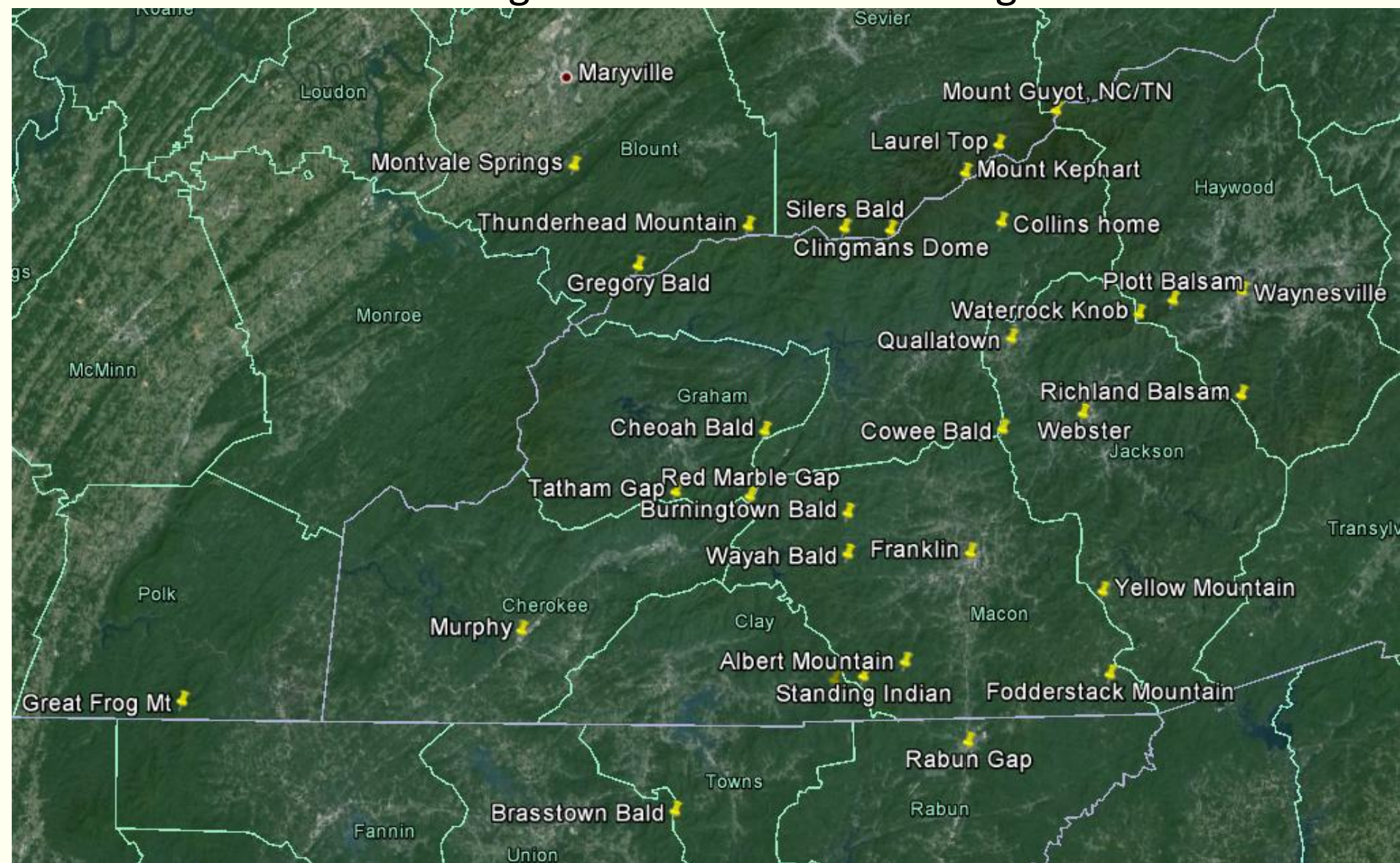
Guyot covered an incredible amount of territory along the Appalachian chain



From the White, Green, and Adirondack Mountains....



Down the Appalachian spine, along the Shenandoah Valley, to eastern TN and northern Georgia – with detailed coverage of western NC



Many places not shown here were measured.

Preliminary Sketch of a Map
of the
MOUNTAINS OF WESTERN NTH CAROLINA

*from the observations
of*

Prof. A Guyot

drawn under his direction by E Sandoz.

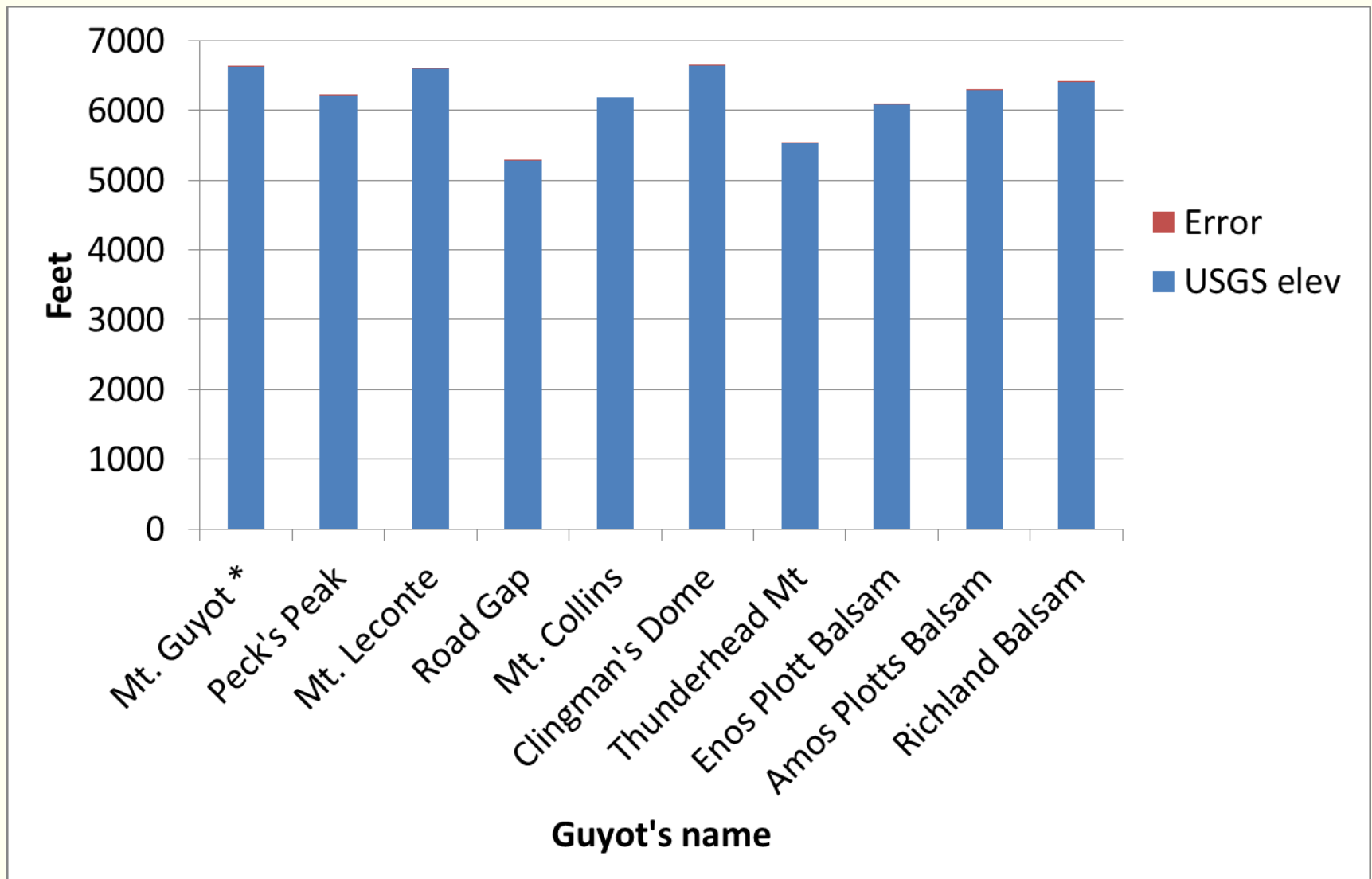
JUNE 1861.

The Heights are expressed in English Feet above Tidewater.

The final value may differ by a few feet.

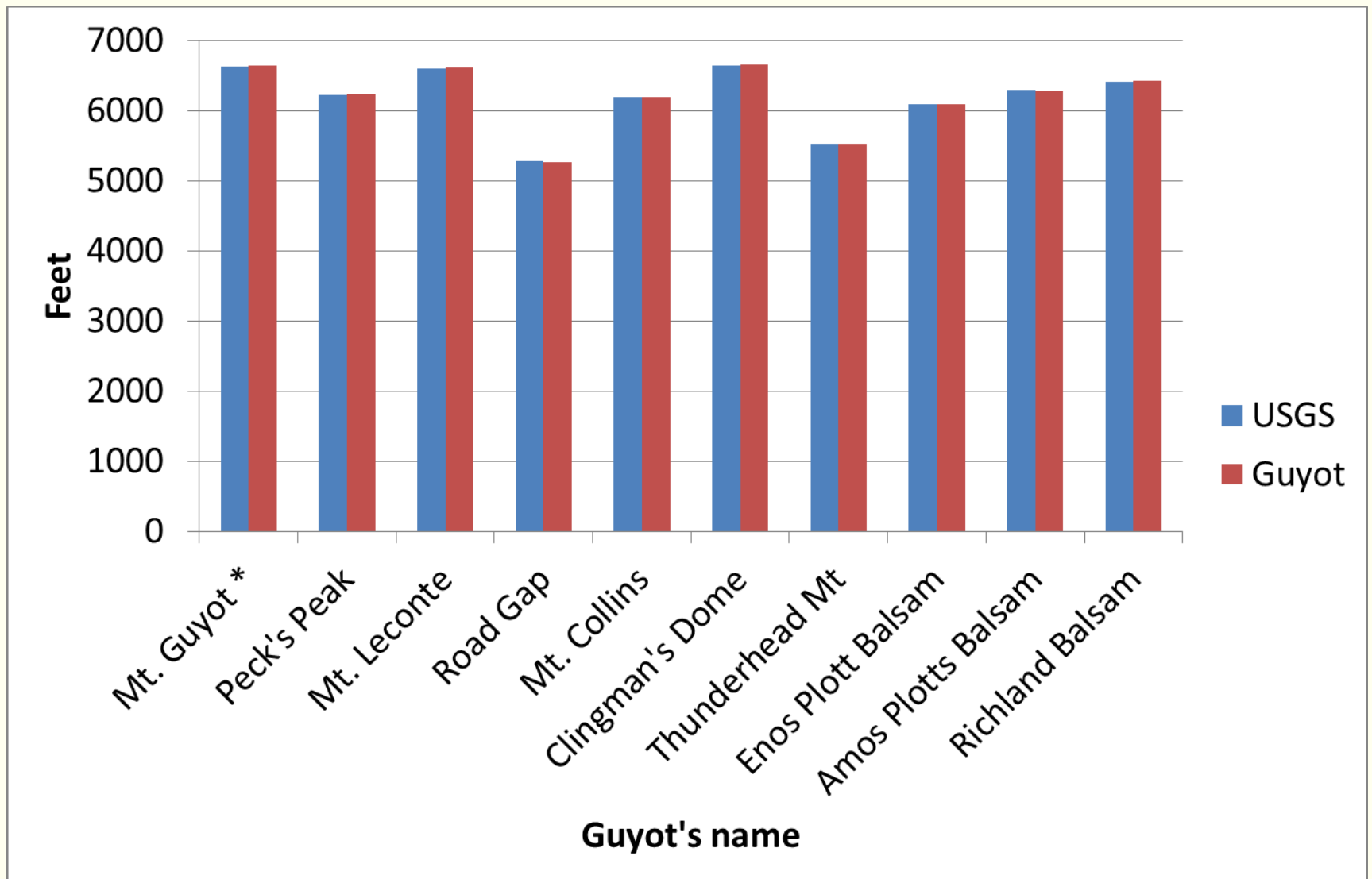
The final value may differ by a few feet

You do see the difference, don't you?



* The modest Guyot noted that it was Buckley who named the peak for him.

A side-by-side comparison



Excellent results suggest excellent methods

- Mercury column-based barometric pressure
- Dual barometers, cross-calibrated and recorded concurrently
- Temperature adjusted (cooler air = denser air)
- Gravitational constant adjusted for latitude and elevation

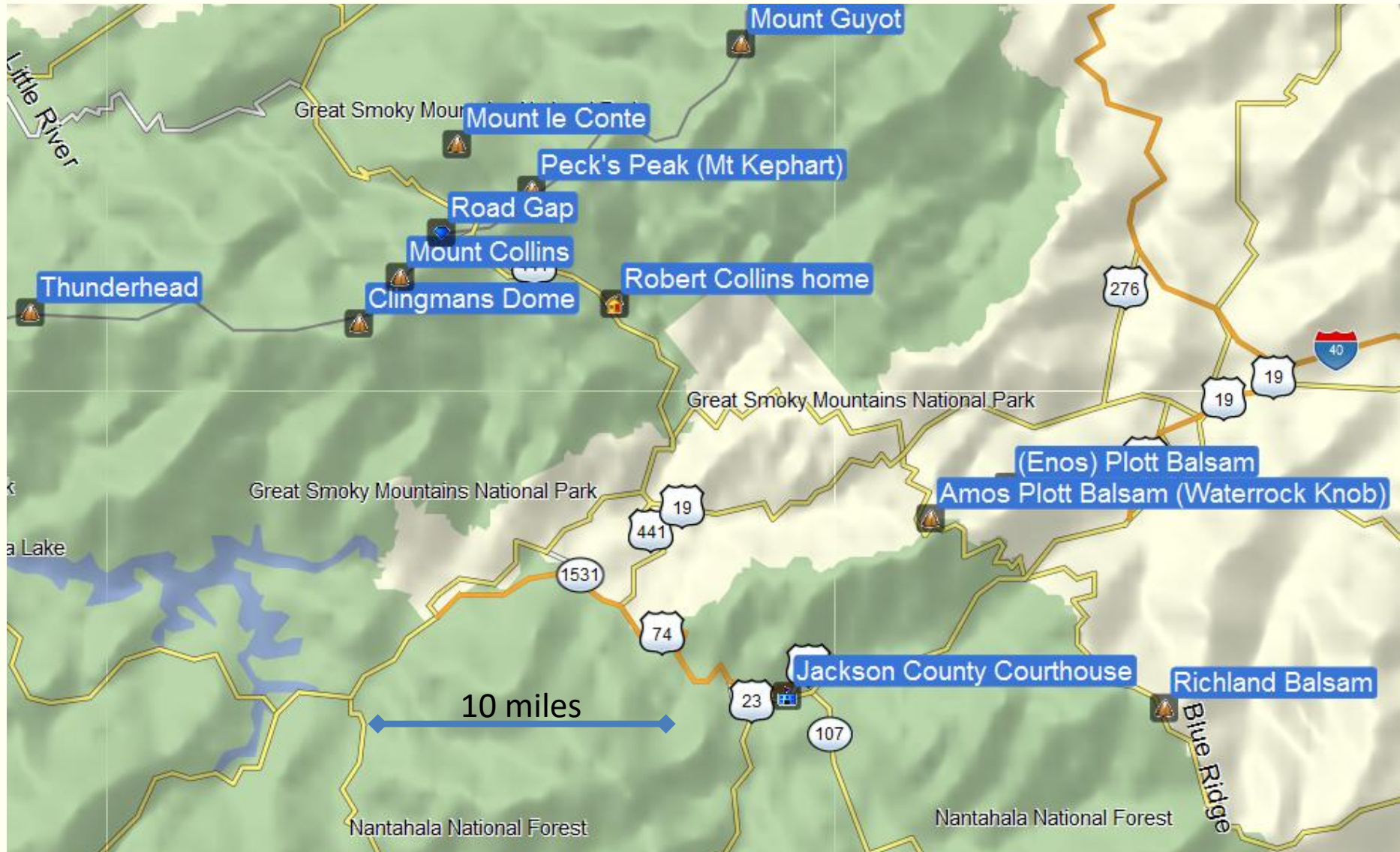
Challenges and known sources of error which were not accounted for

- Carrying themselves, let alone scientific equipment
- Vagaries of microclimates (both temperature and humidity)

“In a great portion of the Appalachian chain, especially toward the south, lofty forests crown nearly all of the summits. The thick underbrush, literally impenetrable, of rhododendrons and other evergreens, in which the faint track of the bear is often the only assistance of the traveler, are not less serious obstacles.”



Guyot's base station for his 1859 trip to the Smokies was at the Robert Collins home; a few noted Smokies and Balsam places are marked.



Note: the Collins home was most likely *not* the reference point for the Balsam measurements.

Guyot had a scientist's heart

“He cared little for renown, but much for the study of nature and the education of man.” (student of Guyot)

Guyot's field notes from 1850 (my poor paraphrasing of his French):

“I want the strength of truth on my side. God knows that I desire it above all and I pray that by His grace I will perceive it.”

*Open my eyes that I may see
Glimpses of truth Thou hast for me....*

What brought Guyot to our mountains?

“To investigate the wild and extensive mountain tract of North Carolina is a long and arduous task, and I may be permitted to add an expensive one. For assuming it spontaneously and unaided, I was prompted by no other motive than the desire of adding something to the knowledge of the scientific world, and my own on the most interesting and most unknown portion of the great Alleghany range.”

Guyot letter to the editor, Asheville News, July 18, 1860

Answer: His own dime and science...but more

“The valley of the Tuckaseegee...is full of high mountain spurs, leaving no flat ground except below Webster at the Stekoah fields, at the foot of the Smoky Mts and Cowee range...”



Don Casada

“A morning view from one of the high summits of the Nantahala presents the wonderful spectacle of a broad sheet of vapor covering all the low grounds up to a well defined line, above which the hills and mountains rise like islands, and the high shores of a continent from the level surface of a vast ocean.”



* *Notes on the Geography of the Mountain District of Western North Carolina*, by Arnold Guyot, North Carolina Historical Review, July 1938, Avery and Boardman

Michael Frome, in *Strangers in High Places* uses Guyot and Collins as a bit of an odd couple foil for humor.

“They made a curious combination that summer, barely able to understand each other. Collins speaking the mountain dialect of English, and Guyot, the Swiss, fracturing the language that was not his own....”

“But both, the outlandish professor and the sure-footed mountaineer guide, are immortalized in place names of the Smokies, and with valid reason.”

From the Guyot letter to the Asheville News:

“He (Thomas L. Clingman) caused Mr. Collins to cut a path of six miles to the top, which enabled me to carry there the first horse, kindly loaned by Colonel Robert G.A. Love, which was ever seen on these heights.”

In his letter, he expressed his gratitude to many from WNC, but he saved Robert Collins for the last and applied the most – in fact the only – personal comments:

“...and quite particularly that of my excellent friend, Robt. Collins Esq., of Oconaluftee Valley, for the Smoky Mountains. Mr. Collins placed himself and his sons at my disposal for more than a month and without his intelligent aid I scarcely could have succeeded, as I did, in exploring to my satisfaction that most wild and difficult portion of the mountains of North Carolina.”

About Robert Collins

- The Robert Collins home was the most remote on the Oconaluftee – even though he also owned land down along the Tuckaseegee
- When the Ocona Lufty Baptist Church was formed in 1836, Robert Collins was one of two elected Deacon (the other was Ephraim Mingus)

About Arnold Guyot

- “It was at once accepted from him (Guyot) that the starting point in geographical education should be nature and not books; that teachers should take their pupils to the hills and show them the valleys and streams and mountains, and aid them in tracing out the general features, so that they might make themselves geographers of the region about them and lay a foundation for broader geographical study;” *
- In addition to teaching at Princeton (College of New Jersey), Guyot also lectured at Union and Princeton Theological Seminaries

* *Memoir of Arnold Guyot*, by James Dana, before the National Academy, 1886

Eyes lifted unto the hills



Perhaps the two fellows even looked a bit alike???



(Mattie Franks and D.K. Collins)
Source: dcarlton39, Ancestry.com



Who made the trip, and who recorded the data at the Collins home?

Collins household, 1859 (ages estimated)

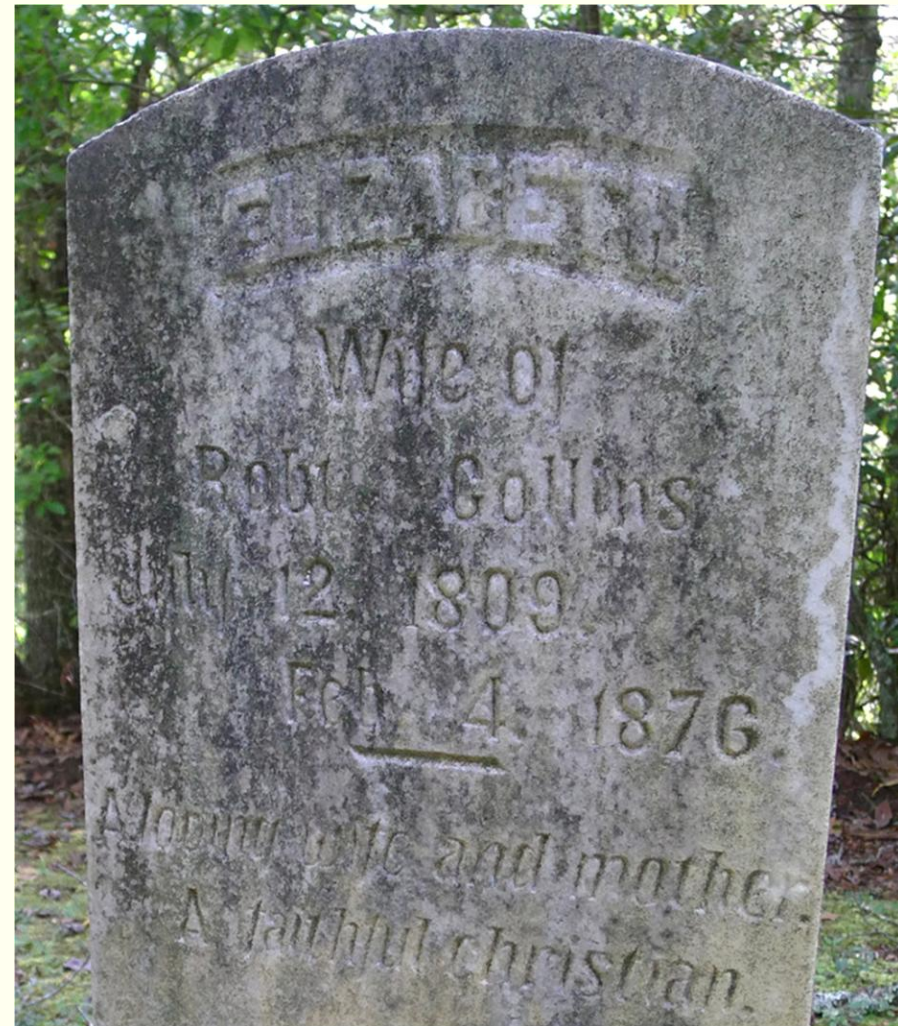
Robert	M	53
Elizabeth (Beck)	F	50
Pamelia Rosannah	F	27
John Tatham	M	24
Elizabeth	F	21
Nancy Elvina	F	19
Robert Harrison	M	18
Joseph	M	16
David Kimsey	M	15
Lucinda Minerva	F	13
Jason	M	12
Andrew Thomas	M	10
Samuel S	M	6



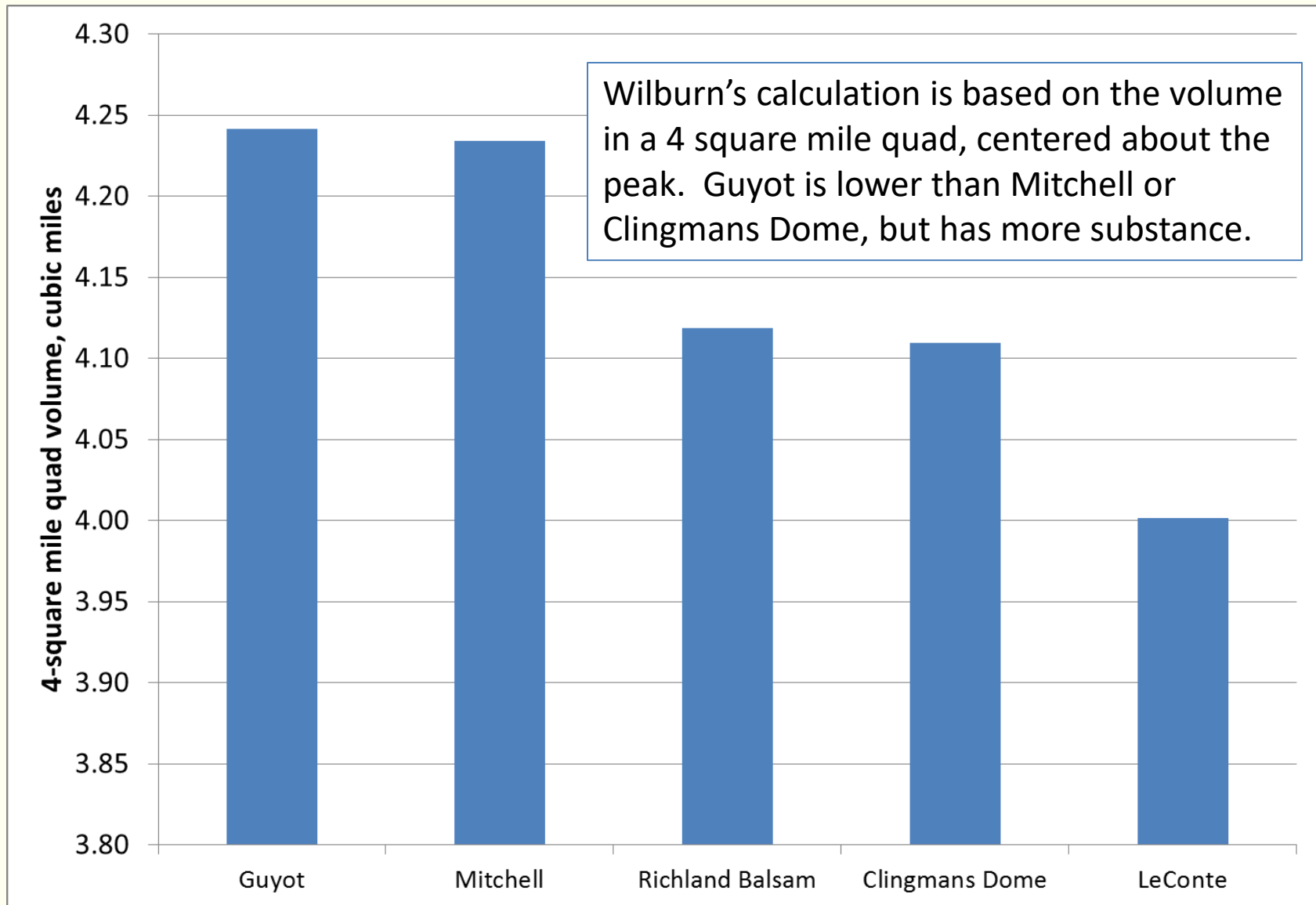
Joseph, Samuel, DK, Andrew T.
dcarlton39, Ancestry.com

Whichever of the children read and recorded the data, they clearly did their job well. Later lives of the Collins children suggest they were well educated. Note: daughters Catherine Jane (b1833) and Sarah Elizabeth (b1838) were married before 1859. Robert Jasper (b1837) died as an infant.

“I well remember Bobby Collins.
Collins was a wonderfully good man.”
Aden Carver, 1844-1945



A final note – substance as a figure of merit



Calculations by Hiram Coleman Wilburn, a man who would have fit right in with Guyot and Collins, and who fought the good, but losing, fight against ignorance within the Park Service bureaucracy with respect to the value of cultural and human history matters.

THANK YOU FROM THE EAST!!



Mt Guyot and upper Big Creek, from Mt Sterling fire tower

THANK YOU FROM THE WEST!!



Don Casada

Mt Guyot and more from the Jumpoff

You'uns from up in Jackson are amongst the very best!

