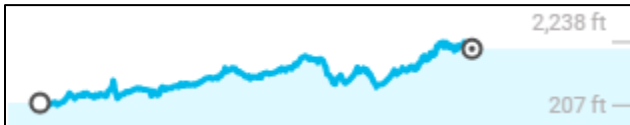


# Roper 2017 Chevrolet Bolt EV Long Trips

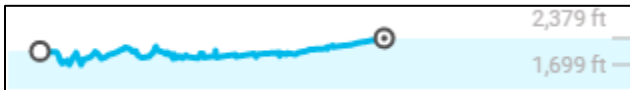
L. David Roper roperld@vt.edu

Starting with “To” means from 1001 Auburn Drive, Blacksburg VA. Also, “home” and “back” means 1001 Auburn Drive, Blacksburg VA. The elevation graphs are bicycle routes, which are somewhat different than car routes; e.g., parallel state routes instead of interstates. I do not include many trips of ~80-100 miles to places in Virginia, including Roanoke VA and Floyd VA.

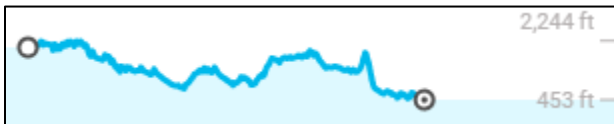
1. 11 April 2017, **278 miles**: First Trip from [Ted Britt Chevrolet](#), Sterling VA to Blacksburg Va. (<http://www.roperld.com/Science/cbevoperfirsttrip.pdf>) Needed to charge once, but charged 3 times ~30-minutes each at Front Royal, Harrisonburg and Staunton VA to test out the CCS fast-charging stations.



2. 29 April 2017, **150 miles**: To Galax VA for Twin Counties Climate Event at [Diversity Center](#) at 101 East Stuart Drive and back. Displayed CBEV and gave 15-minutes talk on BEVs for Climate March Event.

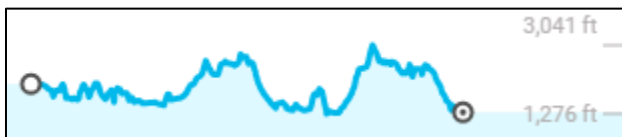


3. 30 April 2017, **310 miles**: To 1915 Beechcrest Court, Charlottesville VA to visit granddaughter’s family and back. Charged at CCS station at 115 Greenville Avenue in Staunton VA for 21 minutes each going and returning.



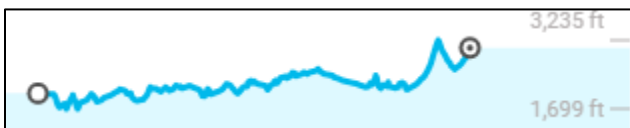
4. 25 May 2017, **84 miles**: To [Pipestem Resort State Park](#) WV and on to [Days Inn Motel in Princeton WV](#). Charged 3 hours level-2 at PRSP. Does not include a few miles driving around the park.

- a. 26 May 2017, **181 miles**: From [Days Inn Motel in Princeton WV](#) to [Hawks Nest Resort State Park](#) WV to home. Charged 2 hours level-2 at HNRSP. Total trip = **265 miles**.

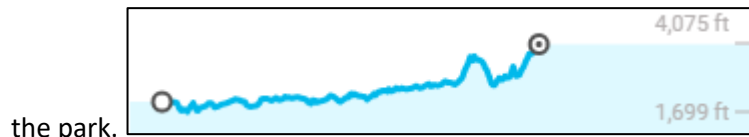


PRSP is at the first peak.

5. 30 May 2017, **179 miles**: To [Marion Automotive GM dealer](#) to charge car for about an hour; to [Hungry Mother State Park VA](#); to [Mount Rogers National Recreational Area](#), To [KOA Campground](#) south of Wytheville VA to charge about an hour using NEMA-14-50 outlet and back. Does not include a few miles driving around the park.

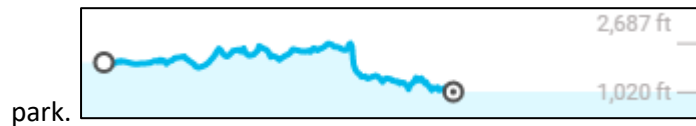


6. 31 May 2017, **218 miles**: To [Grayson Highlands State Park](#) VA (~4950’ elevation) and back (~2050’ elevation). Had ~25% charge left, which corresponds to a **range of ~291 miles**. Does not include a few miles driving around



the park.

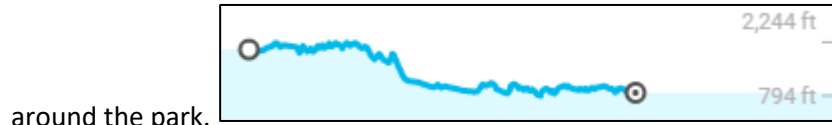
7. 19 June 2017, **122 miles**: To [Fairy Stone State Park VA](#) and back. Does not include a few miles driving around the



park.

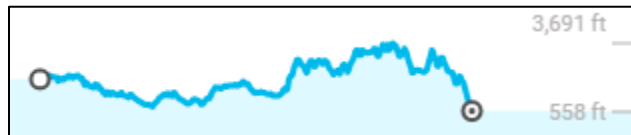
8. 25 June 2017, **106 miles**: To [Falls of Dismal](#), James Bogle's house in Bland County VA and [Claytor Lake State Park](#) and back. Does not include a few miles driving around the park and getting lost in Bland County.

9. 3 August 2017, **148 miles**: To [Smith Mountain Lake State Park VA](#) and back. Does not include a few miles driving

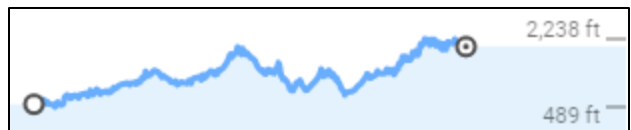


around the park.

10. 5 August 2017, **441 miles**: To [Shenandoah National Park](#) in Augusta County VA, Skyland Drive to Front Royal VA and back by I-64 and I-81. Charged at CCS station at 115 Greenville Avenue in Staunton VA for 1 hour 27 minutes going and 57 minutes returning and at 414 E. Main Street in Front Royal VA for 21 minutes.

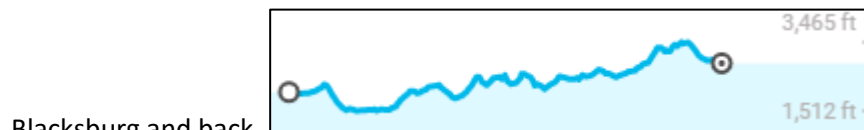


This shows elevation changes from Home to Front Royal.



This shows elevation changes from Front Royal to home.

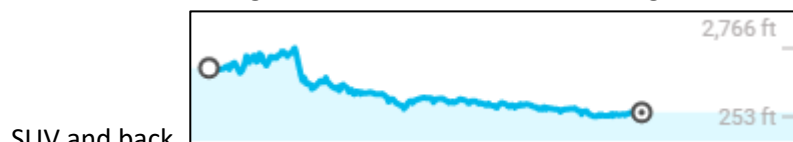
11. 7 August 2017, **118 miles**: To 870 Catawba Rd in Blacksburg, to [Mabry Mill](#) on the Blue Ridge Parkway, to [Chateau Morrisette Winery](#), to home, to [Hahn Horticultural Garden](#) in Blacksburg, to [Smithfield Plantation](#) in



Blacksburg and back. Mabry Mill.

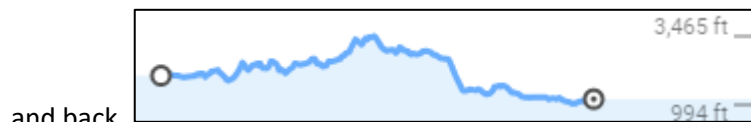
This shows elevation changes to Mabry Mill.

12. 16 August 2017, **427 miles**: To 321 S Greene St in Greensboro NC to charge 1 hour 7 minutes going and 1 hour 19 minutes returning and to Tesla store at 8831 Westgate Park Dr in Raleigh NC to test drive the Tesla Model X



SUV and back.

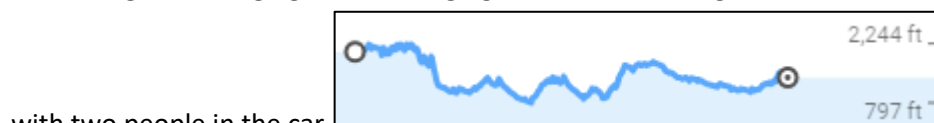
13. 25 September 2017, **197 miles**: To Mabry Mill on the Blue Ridge Parkway, on to Pilot Mountain State Park NC



and back.

This shows elevation changes to PMSP. Had ~33% charge left, which corresponds to a **range of ~317 miles**; much of the driving was on the Blue Ridge Parkway and state roads.

14. 14 October 2017, **287 miles**: To James Madison University in Harrisonburg VA to attend the 2<sup>nd</sup> Annual Virginia Solar Congress, charging at fast-charging station at 108 Burgess Rd there for 55.5 minutes. This the first long trip



with two people in the car.

15. 28 October 2017, **134 miles**: To Grandin Village in Roanoke VA and on to Bedford Library in Bedford VA to attend Virginia Frankin-families annual meeting and back. Trip with my younger daughter, Truda Gaye Roper.

