

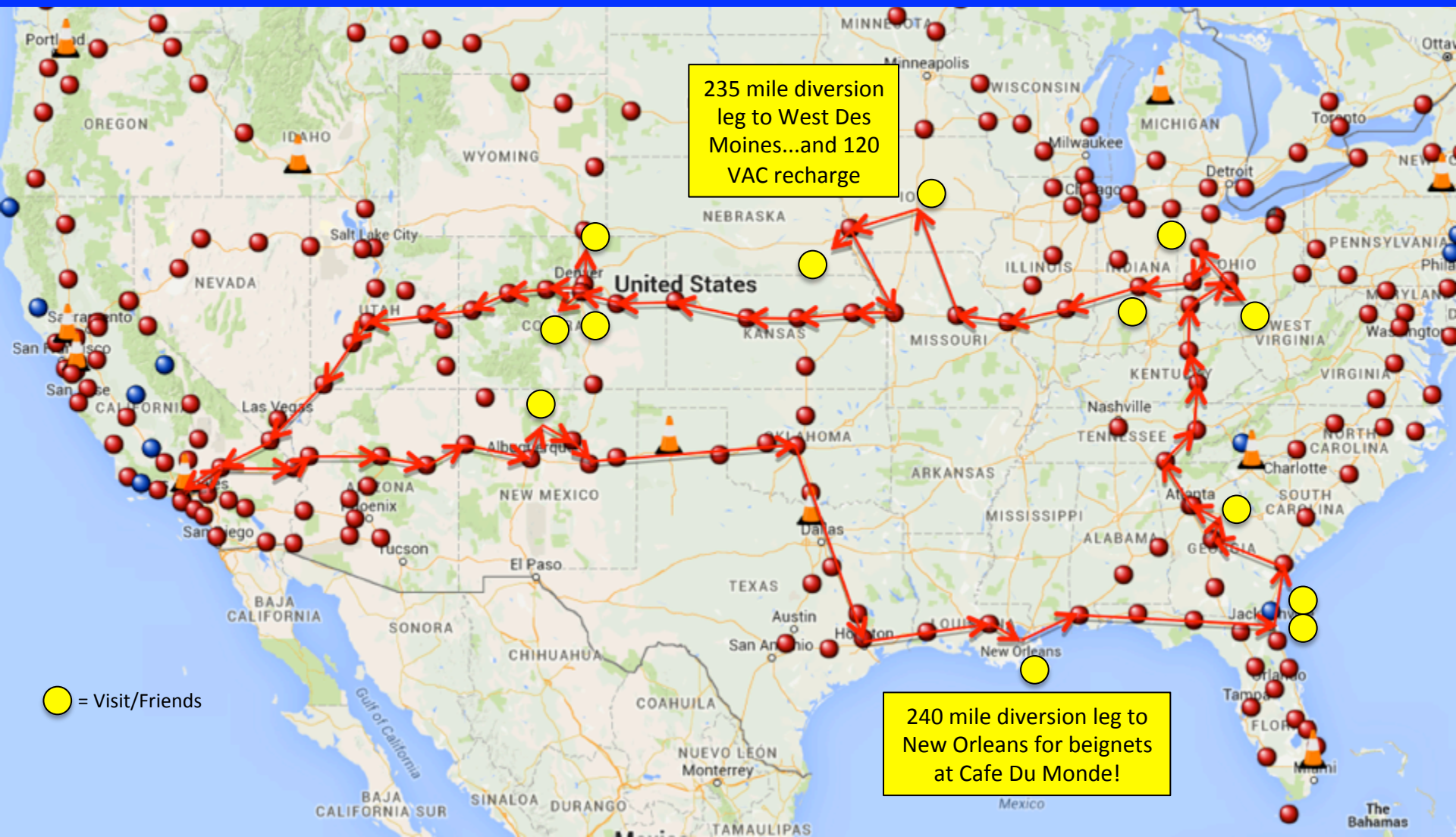
# Ann and Eddie's Excellent Cross-Country Autosteer Electric Adventure

Objective: Attend wedding in Florida and Reunion in Ohio one week apart by car, rather than fly

Departed Yorba Linda, CA 25SEP15 in 2014 Tesla Model S, license plate: BLUE ZAP

Arrived Ponte Vedra Beach, FL 1OCT15 – 2,650 miles, believe this to be first cross-country trip on Autosteer

Returned Yorba Linda, CA 23OCT15 – Total 7,855 miles, over 95% Autosteer usage on entire trip.



# Background/Highlights

1. This was a vacation, not a cross-country sprint for Guinness.

1. Normally, we would have flown these kind of distances...
2. ...but the logistics favored a drive...
3. ...and taking the Tesla offered a challenge we could not resist.

2. When we started planning the trip six months earlier, we questioned whether the fast-developing Superchargers network would be ready – it was!

1. We had only a few tense moments...otherwise very easy.
2. We drove more slowly on a last-minute diversion into New Orleans for fabulous Cafe Du Monde beignets: 240 miles, but no sweat. Yum!

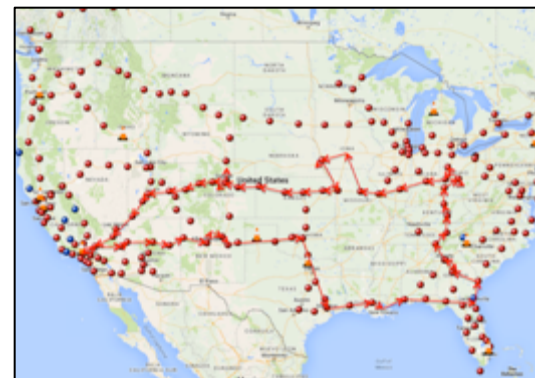
3. We used only Superchargers and a few 120VAC charges from friends – Sorry if your power bills expanded!

4. We hauled about 300 pounds of luggage, golf clubs, gifts and stuff, all out of sight in the trunk and frunk.

5. After 7,855 miles, we concluded that the Tesla is:

1. Comfortable for very long trips for two adults: roomy and relaxing.
2. Limited in 2015 as to how much “side-tripping” can be done; awaiting more Superchargers and destination charging...  
...and a single “go to” map of all charging options (PLEASE!)
3. Easy to drive and made much easier with Autosteer

6. Wife now ready to order her Model X!

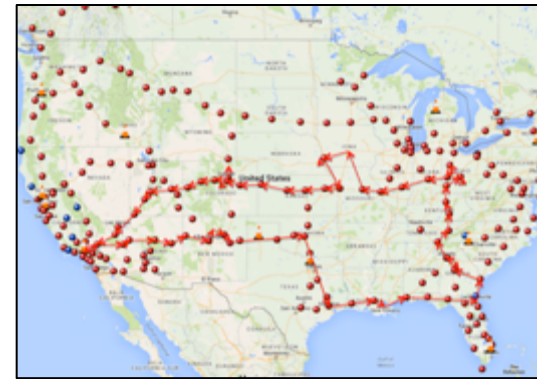


Note: This story is about the car, not the many wonderful social events along the journey



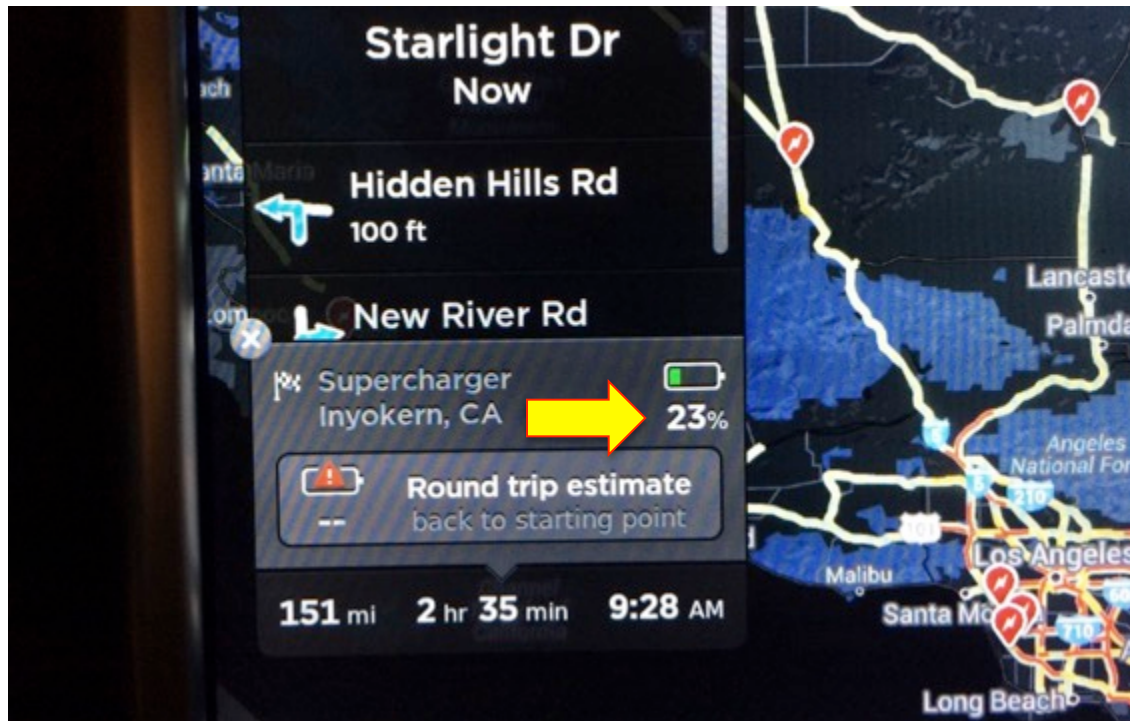
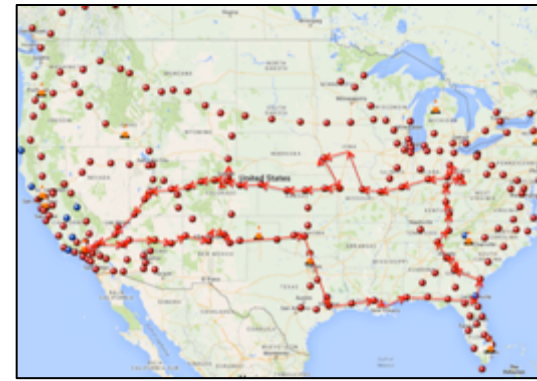
# Observations & Comments

- The Tesla Model S is a superb daily driver, and the underlying concept of a long-range commuting car works:
  - Awake every morning with a “full tank”
  - Confidently make your daily commute with no worry about charge.
  - Plug in again at home and repeat
- Unlike with any other electric vehicle, the combination of long range and the Supercharging network makes cross-country travel practical – and it will get much even better.
- As Californians, we no longer give a Tesla a second glance...but after passing Arizona, we saw only a few Teslas.
- Our car did its job, but about a 1000 miles into the trip the dreaded “Rear Motor Whine” began. The Atlanta Service Center said, “Drive on; fix it when you get home.” (We did, and it is now fixed. It was noisy, but not a threat to safety.)
- Our confidence in using the car for long trips is now very high as a result of an excellent overall experience.
- Autosteer is a great feature...but please use it wisely.
- To others thinking of their own Electric Adventure, I say, “Plan. Go Forth. Relax. Enjoy” You will meet some interesting folks along the way



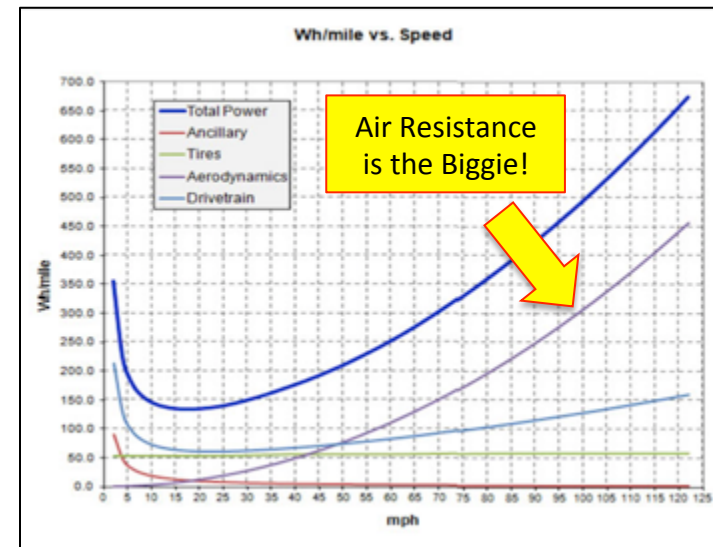
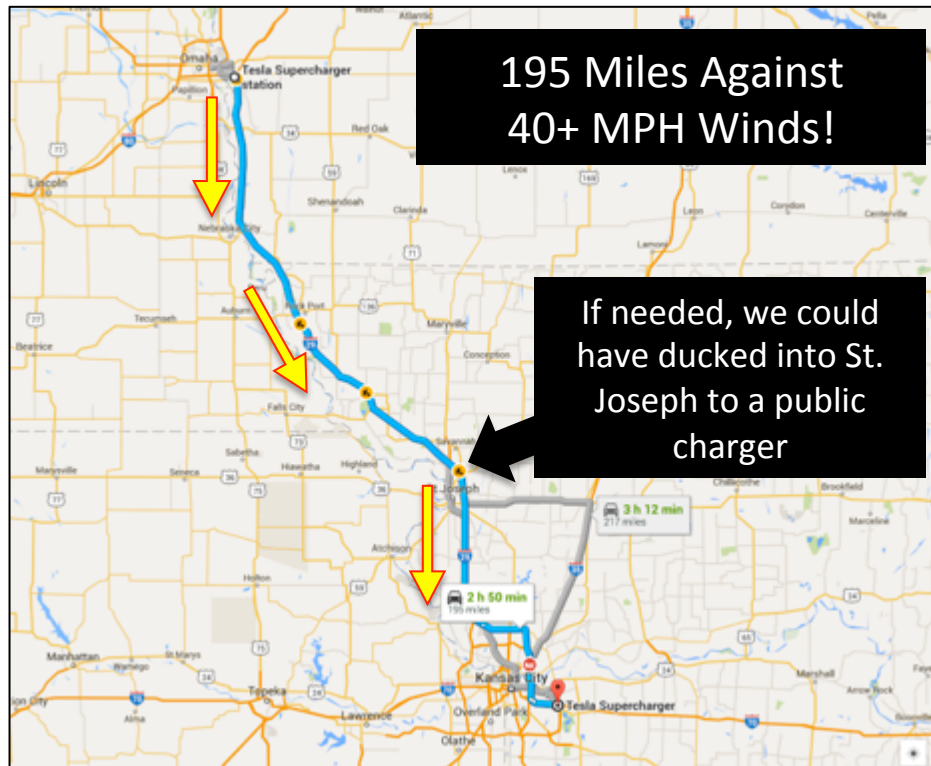
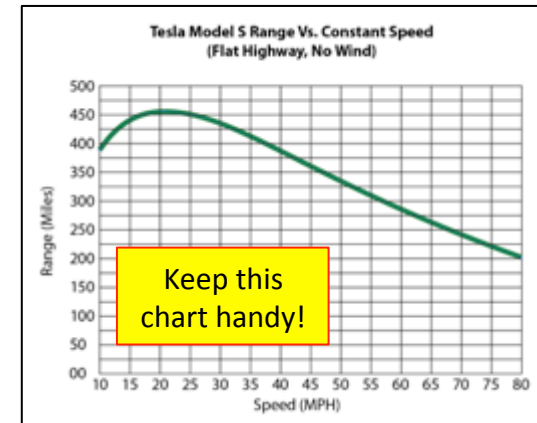
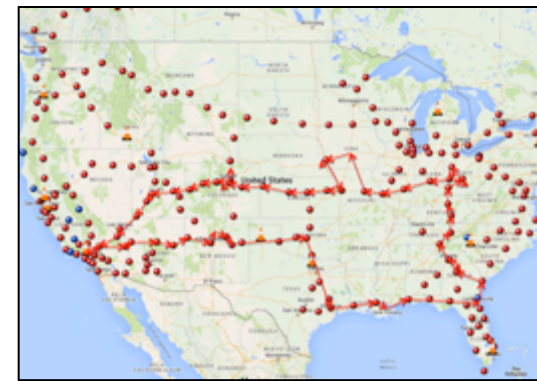
# Learnings

1. We learned to trust the Tesla's navigation system to give very accurate remaining charge estimates.
  1. At each Supercharger stop, we would try to charge to about 25% end-of-leg battery reserve before departing the charger
  2. If our driving was depleting this number too quickly, we would slow.
  3. If the number was growing, we would speed up.
2. This guided speed and drafting decisions on a windy run from Council Bluff, Iowa to Independence, Missouri  
(More on next page)



# Wind in Your Face is Not Your Friend!

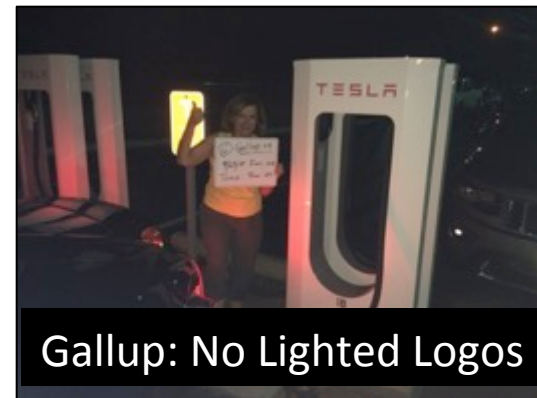
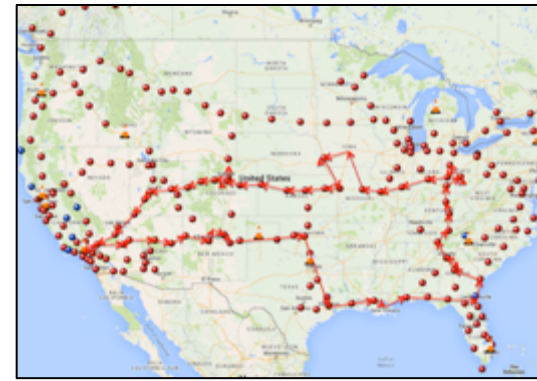
1. Between Superchargers in Council Bluffs, IO and Independence, MO, we encountered high headwinds
  1. As the chart shows, the speed the car is moving through the air becomes the dominate source of drag beyond 50 mph. (Yellow arrow)
  2. Air speeds around the car were over 100 mph. The “Drive Slowly To Your Destination” warning appeared almost immediately. We slowed, watched the remaining charge indicator and even drafted trucks.
2. We made it with a bit of charge to spare, but we stared at the remaining charge indicator all the way!





# More Learnings and Suggestions

1. For long range travel, always PLAN:
  1. There is not yet an electric charging station on every corner
  2. Charge while sleeping, eating, shopping or visiting
2. Use the Tesla navigation map or iPad to learn about destination chargers along your route.
3. Accident rates are higher when driving into sunrise and sunset
  1. If you must drive in these conditions, make sure your windshield is clean
  2. Better yet, stay off or get off the road for breakfast or dinner!
4. Carry window cleaner and paper towels at all times
  1. You will not be stopping at gas pumps to squeegee your windshield!
  2. We cleaned windshield every morning before departing
5. 120 VAC charging at the home of friends can make visits possible...especially in states where the Tesla network is not yet built out, like Texas and Iowa.
6. Suggestion to Tesla: Keep the Superchargers' red logo lights ON at night.
  1. Often hard to find them without those "beacons" (Word from Tesla is that earliest Superchargers did not have lights, and these are being updated.)
  2. Scary a couple of times on this trip when we thought the Supercharger might not be working!

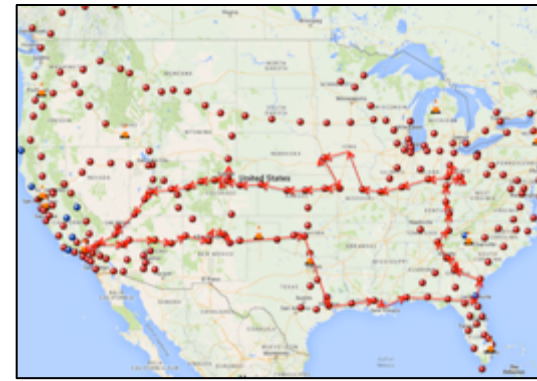


Gallup: No Lighted Logos

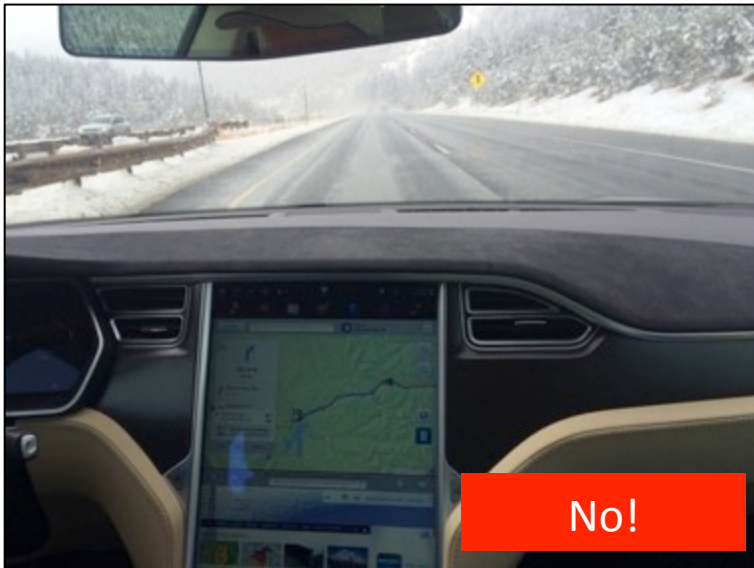
# Autosteer Findings and Suggestions

## 1. It works, but please remember these caveats

1. Always have a hand on the wheel. Photo at right shows my style.
2. Road marking must be visible to the front camera (behind mirror)
3. Bad markings lead to lane wandering and sudden jinks. Turn off Autosteer in such situations
4. Do not use in snow and ice conditions: bad things can happen when traction is poor, even if the camera can see lane markers. (left photo)
5. In areas that use dashed line markers across exit ramps (right photo), Autosteer works quite well because the camera and software can divine a continuous lane.
6. In areas without those dashed lines, keep a very firm grip on the wheel and expect to disengage Autosteer by force.



## 2. Autosteer lets you more comfortably use the touchscreen







25SEP15: Let the Journey Begin!



A Very Comfy Road Car



Arriving at Ponte Vedra Beach Wedding



Guests at Stunning Home in Madison, GA



Stop at Atlanta Service Center



Blowing Through Colorado



Owner of Depot Inn and Museum in LaPlata, MO offers HPWCs. Many, Many Thanks!!





Near 11,000 Ft in Colorado Snow



Autosteer at 11,000 Ft in Eisenhower Tunnel



332 Amps Coursing into the Tesla!

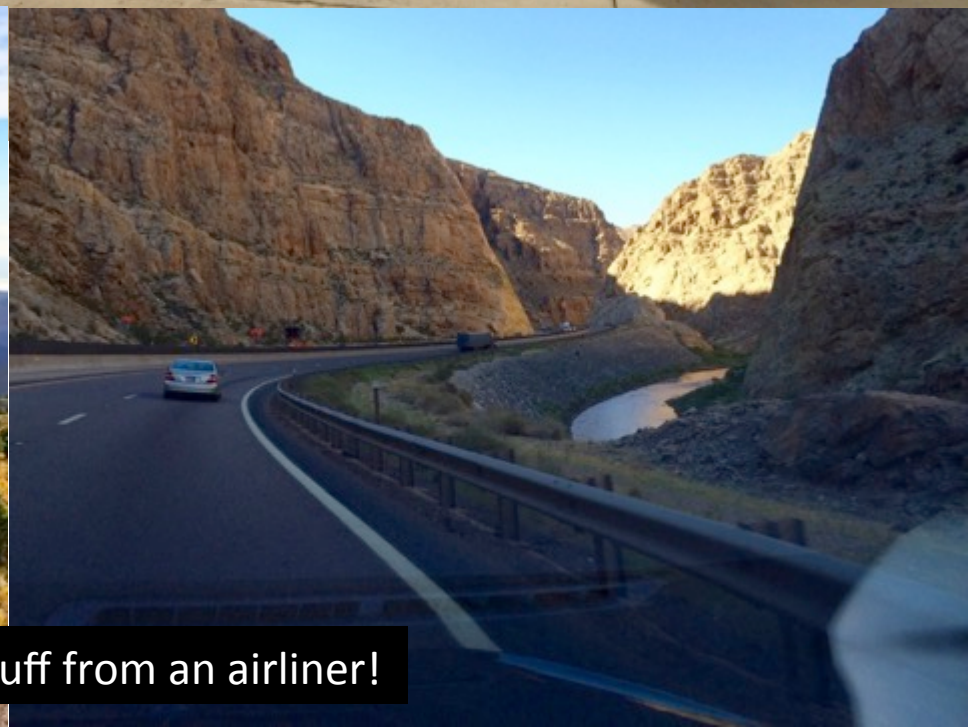
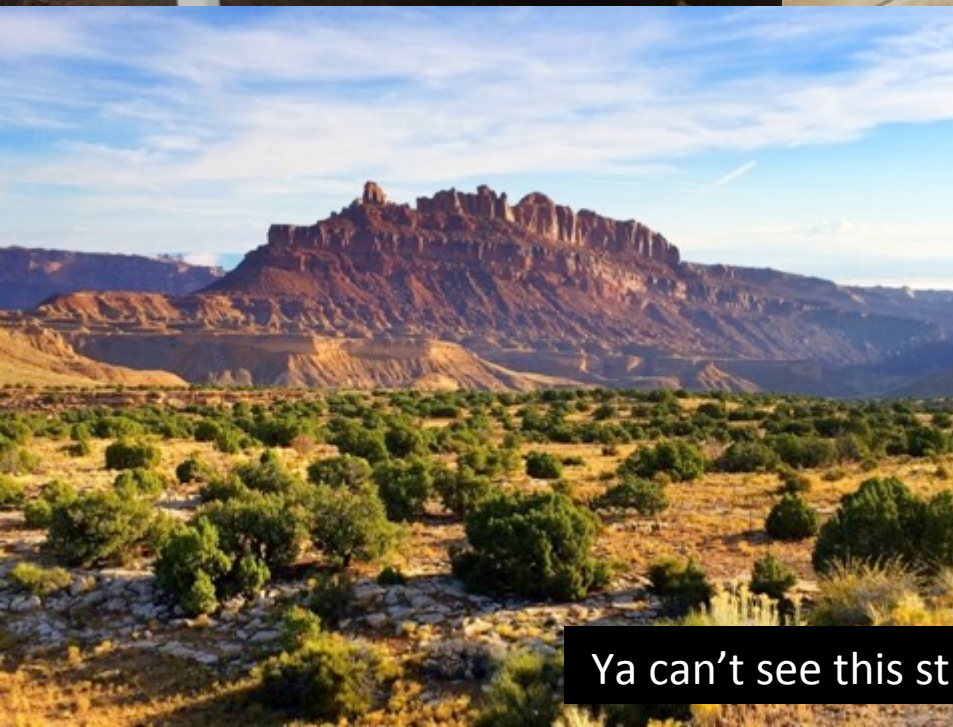




A great plate!



Some things cannot be explained



Ya can't see this stuff from an airliner!





Shadows at Primm, NV



7,855 miles, 304wh/mile



Blue Zap at Barstow: Last Charge at Sunset



23OCT15: After 29 days...Home!