

### El calafate — San Rafael

## The powerful and reliable Hilux

After spending a day off enjoying the beauty of Argentino Lake, the team returned to the road. Each day after getting in the vehicles, the team members test the CB radios to make sure they're in working order. The cars are driving in a single-file column for this part of the Drive Project, and the CB radios are key to keeping them safe. The members communicate by CB radio to warn the others of passing vehicles, animals crossing the road, and slowdowns due to police checkpoints and construction. After the radios in all nine cars are checked, they start the day's drive.

"Turn your low beams on," radio the TASA team members on each day's drive. It's the law to use your low beams at all times in Argentina, and infractions are punishable by a fine. Some members question whether low beams are really necessary in the daytime, but the shining light coming

from oncoming cars certainly makes it feel safer on dirt roads, in rain and other bad weather, and on the sprawling national highways.

The team drove on a lot of long national highways over the week. Some highways formed an endless straight ribbon, where you might not need to adjust the steering wheel for a good two hours. Alternatively, you might suddenly find that the highway has turned into a dirt road.

On Monday, the team drove a total of 695 km.

There are a lot of Hiluxes in Patagonia. An intersection was flooded in a small town the team stopped at. It was sunny out, but then it suddenly hailed. Wind speeds reached 15 m/sec. It was very cold outside, but the sunshine made it hot inside the cars. These sorts of challenging driving conditions made it clear that the area had a lot of driving needs.

Yamazaki, who worked in the Unit Parts Procurement Division and used to develop engines, said, "I thought diesel engine vehicles like the Hilux would be the right fit for Argentina." He was riding in a RAV4 and could feel its lack of power each time other cars passed it. The next day, the team visited a plant along the way operated by the energy company CAPSA. Almost all the roads on the expansive plant grounds were dirt. There were also some hilly roads with stomach-churning ups and downs. CAPSA and its affiliates use a fleet of almost 300 Hiluxes. They introduced them 13 years ago and say they're the best vehicle in terms of cost performance.

# Realizations sparked by the Argentine team members

On Wednesday, half way through the week's drive, the team had its longest leg in Argentina and Uruguay, totaling 709 km. Pre-trip research suggested that they might encounter wind speeds of more than 20 m/sec. Federico is the assistant to the TASA







president and helped with the preparations for the trip.

"Side winds, high elevations, dust—cars need to be able to handle these three challenges in Argentina. I want the TMC members to get a real sense of this on the drive."

For example, when the Hilux is driving at 120 km/h with wind speeds of more than 20 m/sec, sometimes the windows make a loud noise like a trumpet. Even if the problem is reported to TMC, it's hard to create a shared understanding. TMC had come once before to do a test drive, but Federico was pleased that the team, composed of people from many different divisions, was able to have this experience out in the actual location.

Frederico was riding in a Prius on this day. When team members asked him about demand for hybrid cars in Argentina, he replied that awareness of fuel economy and exhaust emissions was not yet widespread in the country. There was also the issue of tariffs—a single Prius ran upwards of ¥6 million. Average income is low in Argentina, putting the Prius out of reach for most people. He gave the team a list of the local prices of various Toyotas, which is shared below.

(For convenience, the exchange rate

used is US\$ 1=¥100)
Corolla: ¥3 million
SW4: ¥6.8 million
Hilux: ¥5.45 million
Hilux (S/C): ¥3.3 million
Etios (Sedan): ¥1.86 million

Etios (Crossover Hatchback): ¥1.96

million

RAV4: ¥6.5 million LC200: ¥17.3 million Prius: ¥6 million

Incidentally, the wind that the team had feared was only a gentle breeze

on the drive.

The temperature started climbing the next day as the team drove from El Solito to Zapala. The daytime high reached 27°c. They used to see a lot of pickups and trucks coming and going on the roads, but now there were a lot of passenger cars too. Sebastian, who worked in the Customer Quality Division at TASA, said, "Toyota's market share in the south is high. From here out you'll see a lot of other car makes too. Do you see them in a different light now?"

#### The journey continues.

Driving through Malargüe to San Rafael, the team could see the majestic Andes Mountains in front of them.

The second week was coming to a close and the team members would be changing. Okumura, who was heading home, is involved in B platform development in the Vehicle Testing Division. "You have to experience dirt roads out in the location. This was a great opportunity to learn about the world's roads," he commented.

While evidence-based principles are rigorously enforced in development, some situations call for developers to hold an image in their mind's eye. He says the Drive Project gave him a sense of what can't be output with numbers. "Being able to get to know the members from TMC and TASA is also an asset. I can get ahold of them right away if something comes up. After all, we've become good friends after spending this concentrated time together."

Reporter Rui Shimamoto



Distance: 3,163km Duration: November.14-

November.19, 2016

Days: 6days

Vehicles: LC200.Hilux Wcab.

SW4/Fortuner, Corolla(Prestage),

Etios Cross HB, Etios SD,

RAV4 4X4,Prius, Hilux Scab w/canopy