

Life in the Atacama Field Journal

August 25, 2005

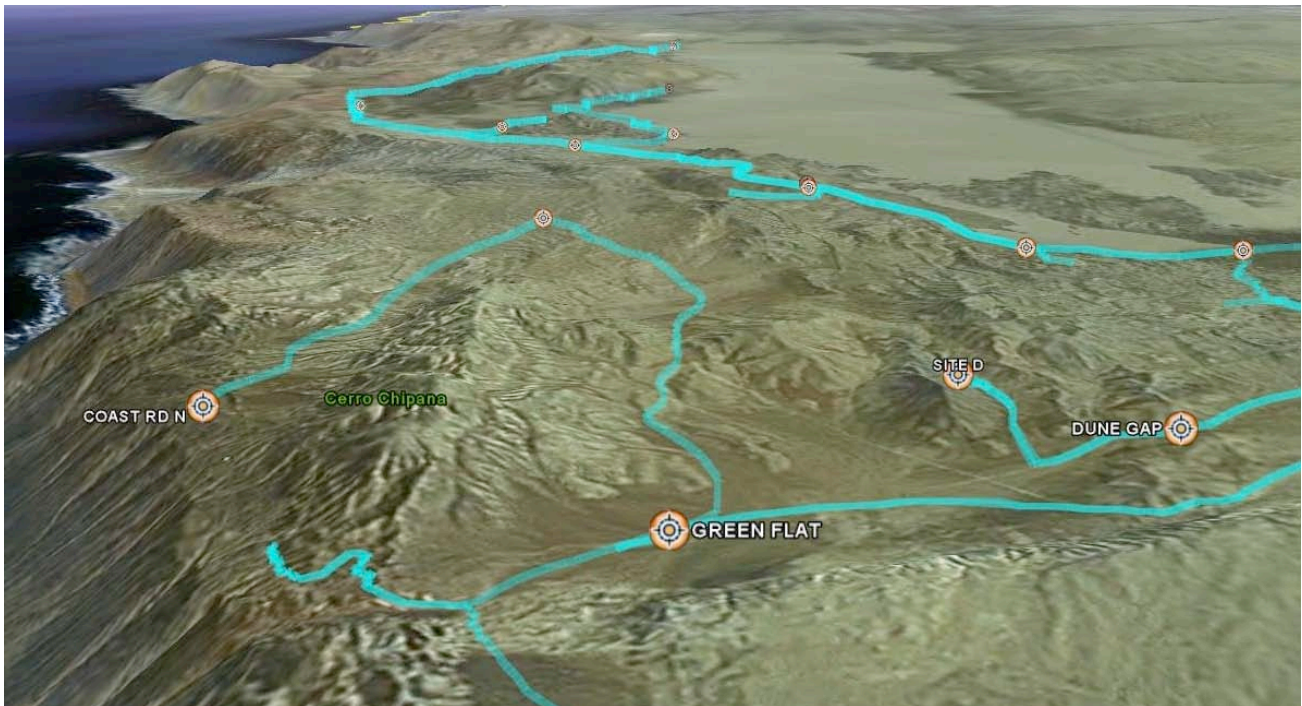
Salar Grande, Chile

Agenda

- Finalize landing site D
- Run autonomous traverse

Status and Progress

• Finalized landing site. Google Earth (<http://earth.google.com>) is amazing! After driving all around the region south of Salar Grande trying to decide which valley we were in and whether it was possible to get out of the current drainage, we downloaded our handheld GPS tracks into Google Earth and it all made sense. The view from 3000m above the surface is perfectly registered and the relief is totally believable. The static image is great but the fly-through is incredible.



The landing site choice has to balance many factors including access, traversable terrain, and geologic and biologic interest. We located the Site D “landing site” a few kilometers up the valley from “Dune Gap”. It will require more careful goal selection than a more flat, open terrain but there is much diversity to be examined in the region.

- Debugged camera issues. We didn’t accomplish much autonomous driving today as we were having problems with our firewire bus. This bus lets all of the cameras communicate with the computers and it seems we may have a hub that is beginning to fail or some problem in the low-level

software. By the end of the day we had determined that all the cameras and cables are working, and the hubs seemed to be working but inexplicably cameras keep disappearing from the bus. We called it a day, let the electrons drain from the system, and will try again tomorrow to sort it out.

- Downloaded weather data. We downloaded weather data from the onboard environmental monitoring system for the first time. It logs temperature, humidity, wind speed (but not direction) and the amount of moisture on a “leaf” sensor. This leaf sensor is typically used in agricultural applications to measure the amount of condensing moisture on the leaves of plants. We’ll use it to estimate how much moisture is condensing on rocks in the desert.

Weather

Morning: Clear, 13C, light breezes 5 KPH, 40% RH

Afternoon: Clear, light breeze, 5-10 KPH, 26C, 25% RH

Night: Clear, still, cold 9C, 70% RH

Quote of the Day

“That’s it, we can throw away the topos.” “Yeah, I’m never getting lost again.”