

Life in the Atacama Field Journal

September 1-2, 2005

Salar Grande, Chile

Agenda

- Recalibrate pan/tilt unit
- Run a daily command generated by EventScope
- Demonstrate more long-distance driving
- Test FI
- Test sun tracker

Status and Progress

The pan/tilt unit received a new belt on its pan mechanism. This will help minimize the slippage seen in the previous days. The mechanism was recalibrated and seems to work fine, although a permanent repair must wait until we get to Site F.

We carried out two mission specs generated by EventScope. The plans included driving as well as science actions including a panorama of SPI images and spectra, fluorescence imaging and workspace imaging. These tests were instructional in several ways. Most importantly, they were our first attempts at running EventScope commands from Chile. It resulted in a few more bug fixes. Zoë drove about 2 km of the first plan easily before debugging ensued. The second plan was executed through Friday afternoon. Zoë successfully completed the entire plan autonomously with the exception of a brief debugging session halfway through. Data and telemetry have been uploaded to our server where EventScope is loading and processing it.

A problem during shipment dented slightly the fluorescence imager's housing. The instrument still works fine but there is now some increased resistance in some of its motions. This then called for some tweaking of the motion control parameters.

On Thursday Zoë carried out a 4.6 km uninterrupted traverse from only one single command. This breaks the previous record of 3.5 km set on Wednesday.

The power issues on the compact PCI chassis continue. Friday morning, once again the computers received no power. After much debugging everything suddenly worked again, even though the power system was back in its original (possibly faulty) configuration. Fortunately today we received the spare compact PCI power supply, which could come in handy if/when the problem appears again.

Debugging continues on the sun tracker. Progress is being made but we are still not there. Hopefully some good news tomorrow.

Thursday was Stu's birthday. The kind chefs at the salt mine baked him a fine cake. Happy birthday to Stu and many thanks to all the guys at the "casino" (cafeteria).

Weather

Thursday:

Morning: clear sky with only a few clouds. Little to no wind, somewhat cool.

Afternoon: clear and warmer than previous days. Occasional gusts of wind but less than yesterday.

Evening: completely clear sky. Great view of the stars. Slight wind, cold.

Friday:

Morning: initially clear but fog moved in from about 8 am to 10 am. Little wind, not too cold.

Afternoon: clear and moderately warm.

Evening: some wind, still clear...a beautiful view of the Venus / Jupiter conjunction.

Quote of the Day

“Rocket number 9 take off for the planet Venus, Venus!”