

A Report on Star Gazing in the Chilean Sierra 2024

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This past February, work took me to Latin America (Mexico, Peru and Chile). A wonderful (and productive) trip workwise! Most people I met and/or worked with had some rudimentary English, but in the small towns I visited my command of Spanish was put to the test. However, everyone I encountered was generous and patient, so I did okay.

This trip gave me an opportunity (and the privilege) to sneak off and do a week of star-gazing high in the Chilean Sierra. Some of what I learned might be useful to others thinking of making a similar trip and so I have provided some of the details here.

This was an initial “investigative” trip for me done relatively cheaply and a bit on the fly. Hopefully, I can plan an even more enjoyable trip down south in the future.

Vicuna

I stayed in the small and pleasant town of Vicuña (pop 23,000) in the Elqui Valley (elevation 709 m). Rather like B.C.’s Okanagan Valley, this is a dry agricultural region famous for its extensive grape orchards.



Vicuna and Vicinity

Vicuna is a great launching pad for tours of the many of the high-altitude scientific telescopes in Chile. The town is an easy 90-minute drive (by rental car, taxi or bus) up

the Elqui Valley east of La Serena, which is a small seaside and picturesque city with an interesting history.

Given the fact that there are regular flights to La Serena from Santiago de Chile, it is a bit easier to get to the astronomical sites near Vicuna than it is to the towns in northern Chile, which are in the Atacama proper.



A Hillside View of Vicuna

The Elqui Valley doesn't get too high, so *seroche* (altitude sickness) isn't a significant problem in Vicuna. However, some of the astronomical sites are at much higher altitudes, so it is probably best to have supply of coca leaves or tea at hand when you venture to them (the tea is legal and sold almost everywhere: sorry, I have found them to have little in the way of "recreational" value).

Tololo Observatory

One of the most famous of the Chilean scientific sites is the Tololo Observatory, which consists of nine major telescopes about an hour drive out of Vicuna. The site sits at 2200 meters above sea level and is operated by the Association of Universities for Research in Astronomy.

<https://www.aura-astronomy.org/>

As you will see if you click on the link below, the Tololo Observatory offers group tours. They look extremely worthwhile. However, I was travelling solo this time around and didn't plan far enough in advance to take in one of them. Next time!

<https://noirlab.edu/public/visits/cerro-tololo-chile/>

But there are also a number of local observatories that offer regular tours and are easy to access. These are not the big scientific sites, but very well worthwhile taking in anyway. I went on two of these.

Observatoria Mamalluca

The first of these tours was that of the Observatoria Mamalluca, a municipally-owned site just out of town. It hosts a fair number of small regular bus tours from as far away as La Serena and school groups, so it can get a bit crowded. The site features a 16-inch Starfinder, a 12-inch Starquest and a 12-inch Mead LX200 that are used for demonstrations by knowledgeable guides. I'm afraid no one but the guides were allowed to operate these scopes on the tour I was on. There is also a small planetarium on site. My fellow tourists were pleasant company.



Observatoria Mamalluca

The “tours of the sky” provided by the guides were good, although pretty basic. As you can see from the website, there are possibilities for special tours and access to the telescopes, but honestly, I think it would be far more worthwhile to get to a much darker site further out of town, such as the second observatory I describe below. In short, the Mamalluca Observatory is a good introduction to the southern night sky, but obviously geared more towards more casual “astrotourists”.

<https://www.observatoriomamalluca.com/>

The Pangué Observatory

The second tour I took was of the Pangué Observatory, which is 17km from Vicuña and much higher in the Sierra (1478m). After a 90-minute small bus ride (14 people maximum allowed) up a rough dirt road through beautiful semi-desert, I arrived at a rather rustic site. At an adjacent mountaintop sat the SOAR and Gemini South scientific observatories, which on this occasion were stunningly clear against a gorgeous sunset, setting crescent moon and Jupiter.

This observatory features a 20-inch Ritchey-Chrétien, a 16-inch Schmidt Cassegrain, a 25-inch Dobsonian, and a 28-inch Reginato reflector. The two guides (one of which possessed an astrophysics doctorate) used the 28-inch to provide an extremely comprehensive and in-depth tour of the night sky.

As you can see by clicking on the link below, the observatory has a variety of tour options, from those designed for the casual tourists to those who are serious observers. Again, a lack of prior planning on my part only permitted joining a last-minute a “casual” group tour. Some tours even originate from La Serena.

<https://observatoriodelpangue.blogspot.com/>

Nonetheless, this was an extremely memorable tour. The high altitude and dry air helped strengthen naked-eye star colours. The zodiacal light was obvious and bright, even casting a faint shadow. The 28-inch scope was perfect for the small group. AND, I took in all of the southern hemisphere wonders that we can't see from Ottawa, including the Magellanic Clouds, the Southern Cross, the Coal Sac, Eta Carinae, The Jewel Box, Omega Centauri, Canopus and Alpha Centauri.



Logistics



Vicuña has a pleasant central square, friendly inhabitants, good restaurants/bars and accommodations. It is not overly 'touristy' and has little poverty or crime. Walking the streets at night is fairly safe and getting around by taxi is easy. There is a pleasant local library and an interesting natural history/insectarium just off the main square. ATM access is simple, and nothing is expensive from a North American standpoint.

https://en.wikipedia.org/wiki/Vicu%C3%B1a,_Chile

I stayed at a VERY relaxed and informal small hotel that was a half-hour walk from the main square. It is NOT for everyone. You must like dogs and not be too worried about niceties. However, I loved it because it featured a very friendly host family, a swimming pool, light meals, clean rooms, little huts off of the main building and (more importantly) a backyard on which I could set up my camera and modest tripod. The attentive, friendly and knowledgeable host gave a great introduction to the southern hemisphere's night sky with an 8-inch Dobsonian (that I was able to borrow on-site later). Mind you, the hotel was still in the suburbs of Vicuña and suffered from some light pollution.

Contact me if you want the name of the place or need other information.

However, there are other forms of accommodations in the Equi Vally, from rougher hostels to astronomically-focused resorts. Many are far from light pollution. Some are just off the main town square. Some are cheap. Some are expensive. Some allow one to prepare one's own meals. Some are close to restaurants or have them "embedded" within.

Getting around is easy. Taxis are cheap. The easiest (although not the cheapest) option would be to rent a car at the airport in La Serena and drive to a light-pollution-free “astro” resort at a moderate distance from Vicuna. A taxi from the airport to Vicuna cost me \$30 Cdn (Including a generous tip). A comfortable public bus ride cost me \$5 the same distance.

The most important thing: plan your tours and observing. Carefully use the website links I have included here and book WELL IN ADVANCE. Some (such as the one for the Pangué Observatory) are not easy to find or navigate or fill all the tours seat early. And, of course, take the moon phases into consideration.

Make sure you figure out where the tours start (the map above shows the pickup place for Observatoria Mamalluca, which is just off Vicuna’s main square: the pickup place for the Pangué Observatory is right beside it). Be careful: are you being picked up in Vicuna or La Serena?

If you decide to bring your own equipment, be careful in what you choose. I brought some of my favorite lens, a small “traveling” tripod and a DSLR. My goal was to do some Milky Way shots (which I’m still processing; more later)! Most of the accessories I brought (such as a star tracker) weren’t really needed. And, it goes without saying: do some homework about the southern skies. You don’t want to waste time!

However, to be honest, most of the time I just sat back in lounge chairs, soaking in the southern skies without equipment and enjoying some wonderful food, drink and new-found friends.

Looking forward to going again!

Clear Skies,
Doug