

# ASTROTOURISM IN CHILE

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## "THE WORLD'S EYES TO THE UNIVERSE"

#### **Experience** a journey to the stars in Chile!

Observe constellations, planets, shooting stars and all manner of celestial bodies in the spectacular Chilean skies – the clearest in the entire southern hemisphere.

Chile enjoys more than 300 clear days per year and with little or no light pollution in the north, conditions are ideal for stargazing under open skies. For a truly close encounter with the planets, visit one of the many astronomical observatories open to visitors.

There are dozens of observatories currently in the country with varying degrees of precision and depth that allow guests to gaze at the wonders of the universe in greater detail. With over 70% of the world's astronomical infrastructure, Chile is the astronomical capital of the world.



Chile's main scientific astronomical observatories are located in the north of the country, particularly in the Atacama Desert.

Visit some of the many observatories that hold night tours to admire the universe through sophisticated instruments only found there and start getting deeper into the culture of the heavens. Discover firsthand the secrets of the universe that can only be seen at night!

#### **International Recognition**

Chile and the astrotourism of the Coquimbo Region has gained recognition at the International Tourism Fair FITUR 2017 - that took place in Madrid, Spain - for winning the XIII edition of the Best Active Tourism Product in the International Nature category. FITUR is the global meeting point for tourism professionals and the leading trade fair for inbound and outbound markets in Latin America.





### ANTOFAGASTA & ATACAMA



In the Antofagasta region, there are some of the most important scientific observatories, including **ALMA** and the **Paranal** observatory.

We also find here the <u>UCN (former Sirius) observatory</u> from the Catholic University of the North, and <u>Ckoirama</u> as well as <u>Nayra</u> from the Antofagasta University. The <u>Las Campanas</u> Scientific Observatory is located in the Atacama region.

**Tourism-oriented observatories** in the Antofagasta region are:

- Ahlarkapin Observatory
- Paniri Caur Observatory
- SPACE Observatory

(San Pedro de Atacama) (Calama) (San Pedro de Atacama)



Did you know that Cerro Paranal, in the Atacama desert in Chile, home of the ESO Very Large Telescope, has been chosen as one of the <u>settings</u> for the James Bond movie, **Quantum of Solace** (2008)?

**Cerro Paranal** 







### **ALMA observatory**

Built in 2004 as an international astronomical facility in the Atacama Desert, ALMA became home to the largest telescope in the world.

Its 66 antennas with a diameter of approximately 12 m each are distributed over a distance of up to 16 km and provide astronomical data and images of the highest quality. Here the invisible is made visible; the formation of stars and planets is explored, and the astronomers' knowledge of celestial objects and phenomena is made available to humanity.

During the day, ALMA opens its doors to visitors to give them an understanding of astronomy. In the Operations Centre (OSF) located 2900 m above sea level, visitors can immerse themselves in the world of ALMA's staff and follow the work of an astronomer in the control room. The facility on the Chajnantor plateau (at an altitude of 5000 m) is not accessible to tourists.



The small oasis town of San Pedro de Atacama in the middle of the Atacama desert is situated in the Antofagasta region. From here you can go on an expedition to the stars ....

#### COSMO TOUR (Night tour)

This interesting tour, "The Big Bang Experience", starts at 9 pm and lasts about two hours. In small groups and with English audiovisual material, you can learn in a very intimate setting about the vastness of our universe and gain insight into cosmic and physical processes. Exciting topics such as time travel, parallel universes and extraterrestrial life stimulate interesting conversations. First, view the sky with the naked eye and then through modern telescopic equipment. End the night with a group photo in front of the starry sky, and capture the unique experience forever. The event is complemented by amusing background music, and hot drinks (tea and coffee) and warm ponchos are provided. After the end of the tour, guests are taken back to the hotel.

#### ASTRO-PHOTOGRAPHY (Night tour)

On our astro-photography tour, you can freely enjoy taking your own night shots. Our team of photographers will help you to achieve your best shots and give you a basic lesson on photography in one of the cleanest skies of the planet.

#### SEE INTO ANOTHER WORLD – STAR OBSERVATION IN SAN PEDRO

#### (Night tour)

There are few places in the world where the sky is as clear and the view of the stars is as good as in northern Chile. It is no surprise that this area is home to several of the world's most important international observatories. Astronomers from all over the world are regularly drawn here for research. There are several options for star observation, catering different interests and requirements. During your visit, an expert explains the basics of astronomy and highlights special features of the Southern Hemisphere. There are also tours that explain the Atacameños' world view. You will get an unforgettable glimpse of the distant stars and galaxies by looking through a telescope.

**NOTE:** All tours take place outside; warm clothing is recommended.



#### THE SMALL NORTH



Situated on the route of the stars, the Coquimbo region has the largest astrotourism offer of Chile and is the location with the most observatories in the country. Here you can find **17 places for tourists to gaze at the sky**, along with three where the focus is on the scientific work of astronomers: <u>Cerro Tololo</u>, <u>La Silla</u> and <u>Gemini-Sur</u>.

The Coquimbo Region has **42 different astronomical tourism services**, including night tours to observatories; stargazing, open-air excursions; scientic observatories tours; lodgings as part of the astro tourism offer; rental of specialized equipment; solar observation and audiovisual services.

#### Elqui Valley has the first dark sky sanctuary of the world

#### **Tourism-oriented observatories** in the Coquimbo region are:

- Mamalluca (Vicuña) Collowara (Ancadollo) (La Serena) Cerro Mavu Cruz del Sur (Combarbalá) (Vicuña) Cancana (Vicuña) **El Panque Cielo Sur** (Paihuano) Alfa Aldea (Vicuña) Astro Elqui (Vicuña) Chakana (Paihuano) Elqui Domos (Paihuano) Hacienda Los Andes (Río Hurtado) Valle del Sol **Ovalle Casino** (Ovalle) **Casa Bagua** Galileo (Paihuano)
- <u>Solaris</u>

(Paihuano) (Paihuano)





**Cruz del Sur** is a touristic observatory located in Cerro El Peralito, 3.5 kilometres away from Combarbalá.

Its aim is to spread the passion for astronomy and promote in the region the value of the sky as a natural heritage.

There are different programs destined to the observation of the sky, outdoors and with telescopes and the "Hijos del sol" (Sons of the sun) program aimed at solar observation. Tours are conducted in Spanish and English; in an amphitheater with capacity for 200 people.







The **Pangue Observatory** is located at the top of a hill in the surroundings of the Elqui Valley, 17 km south of the town of Vicuña, and 80 km east of the city of La Serena.

The Pangue Observatory, located in the mountains under a sky free of all light pollution, offers a wide range of services, from traditional guided astronomical tours, to leasing telescopes for astrophotography, or observation time in remote use over the internet from any part of the world.

*Local astronomic tour*: astronomic observation made from the site of the Great Solar Observatory of Chile, located just 800 meters from the main square (It lasts 2 hours).

*Astro Tour*: To preserve the quality of the service, a tour in El Pangue is made with a minimum of 5 people, and a max. of 10. Each group is attended by 2 astronomers.





**Alfa Aldea** astronomical centre is a family run business, dedicated to providing an unforgettable starry experience.

This observatory is located in the centre of the Elqui Valley.

First, there is a talk and a 3D audiovisual projection; then you'll watch the sky with telescopes accompanied by expert guides. All of it along with a glass of wine and gastronomic products from the Elqui Valley and the Coquimbo Region.





Cerro **Mamalluca** was one of the first tourism-oriented astronomical observatories and is still one of the most visited in Chile.

Built in 1995, Mamalluca became the pioneer astronomical observatory in Chile in developing the concept of astrotourism, opening its doors to the thousands of visitors who visit the Elqui Valley.

The different alternatives for astronomic observation combine dynamics and lectures about the sun, the universe and the Andean cosmovision, along with a simulation through an astronomic software and naked-eye observation in the astronomical observation terraces.





"At night, the blue heavens shine brightly all year long; there is hardly any other place in the world where it is possible to observe more stars and planets

- just breathtaking."

#### ASTRONOMICAL TOUR IN THE NATURAL PLANETARIUM ALFA ALDEA

(Night excursion)

The natural planetarium Alfa Aldea offers small groups the possibility to discover the sparkling night skies of the Valle del Elqui with an astronomy expert. The visit starts with a presentation that is supported by impressive 3D pictures. Then, have a look through the telescope, and, with the instructions of your guide, discover planets, galaxies and star constellations while sipping a glass of wine and enjoying a snack. The activities take place outside in the open air; blankets are available.

NOTE: The visit is subject to weather conditions.

#### VISIT THE MAMALLUCA OBSERVATORY (Night excursion)

This half-day evening excursion to the observatory will take you through the Elqui Valley, a narrow, fertile strip of land in the middle of a semi-desert region. In the village of Vicuña, birthplace of Nobel Prize winner Gabriela Mistral, make a quick stop at the Plaza de Armas before going over unpaved roads to the observatory. At the observatory, you will take part in expertly guided observations of the starry sky, cloudless and clear over 300 days of the year. Return late in the evening to La Serena.



#### **CENTRAL REGION**

#### **Metropolitan Region**

There are three scientific observatories here:

- **<u>UMCE</u>** Observatory
- **<u>Parque Metropolitano Manuel Foster</u>** (observatory museum)
- Cerro Calán National Astronomical Observatory.

Five observatories for tourists are also located here:

- <u>Astronómico Andino Observatory</u>
- Pailalén Observatory
- <u>Cielos Chilenos Observatory of Chicureo</u>
- <u>Cerro El Pochoco Observatory</u>
- <u>Roan Jasé</u>

(Lo Barnechea) (San José de Maipo) (Colina) (Lo Barnechea) (San José de Maipo)

#### Valparaíso

This port city has one facilitiy for visitors to gaze at the sky:

#### **Pocuro Observatory** (Calle Larga)

#### O'Higgins

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This region has two observation centres for visitors: <u>Cerro Chamán (Santa Cruz)</u> <u>Tagua Tagua Observatory</u> (San Vicente de Tagua-Tagua)

### We will be happy to plan your star adventure ...

You Tube



