

# AURA/NOIRLab Visits Summit Safety Form

In traveling to one of our summit facilities, you will be visiting a working AURA/NOIRLab research observatory; an important national scientific facility, located in a high and remote location. We ask that you follow these rules so that you are able to visit without disrupting research activities, while keeping you and your group safe. Being prepared and informed is crucial to a safe and enjoyable visit.

The safety of NOIRLab staff, visitors and equipment is a top priority. Please take a moment to thoroughly read and understand the potentially hazardous conditions you may encounter. These possibly dangerous situations may arise from regular operations of the observatories, construction activities, and/or environmental factors. NOIRLab's observatories are in use 365 days a year, 24 hours a day.

While at any of the NOIRLab sites, all visitors will be under the authority of the NOIRLab Director. They must comply with all rules applicable to the site, in particular regarding Safety and the use of NOIRLab Information Technologies, facilities, and/or services, and follow the instructions of the Director or his/her delegate (i.e. your AURA/NOIRLab host).

## Recommendations

Please note:

1. Ascent to the altitude of AURA's Sites may expose visitors to a reduction in atmospheric pressure, which can result in a variety of medical conditions, and in certain cases, severe illness or even death can result. Symptoms you may experience include:
  - a. headaches,
  - b. dizziness or lightheadedness,
  - c. tiredness,
  - d. irritability,
  - e. insomnia,
  - f. reduced intellectual capacity,
  - g. impaired exercise/exertion tolerance,
  - h. nausea or vomiting.

Mild symptoms are to be expected, but if they go from being an annoyance to incapacitating (ie from slight nausea to feeling like you are about to throw up) inform your tour guide immediately.

2. It is also possible, although rare below 3000 meters (9,840 feet), to develop one or more of the more severe mountain sicknesses: pulmonary or cerebral edema, both of which can be fatal (usually in conjunction with a pre-existing condition).
3. Please consider personal health issues that could arise from being at altitude or walking at this elevation, such as: decreased lung capacity, cardiac issues, or other altitude related issues. Time spent at altitude may also aggravate pre-existing illness, particularly cardiovascular and respiratory diseases. If you have health concerns, please consult your doctor before visiting us.

If you have a pre-existing condition which could be affected by altitude (and your doctor has given you clearance to be at altitude), please bring this to the attention of your

AURA/NOIRLab host so that s/he is better able to assist you in case you experience a medical emergency.

4. Be sure to stay hydrated by drinking plenty of water or juice. Bring enough to supply your group for the duration of your travels. This will help compensate for the low humidity and avoid dehydration at the summit (which can mimic high altitude symptoms).
5. Eat a bit of food or snacks to help avoid the effects of the altitude, there aren't opportunities to make purchases at the summit facilities, and you will process calories more quickly while in the summit area.
6. Take your time, walk slowly, and be cautious when getting up from sitting while you are at the summit.
7. The sunlight can be very intense, especially in the summer. Avoid unprotected eye exposure to glare and bright sunlight at the summit and on the drive up by wearing sunglasses, preferably with UV-coated lenses.
8. Use sunblock and lip balm. We recommend the use of sunscreen with a factor over 30. In addition, we suggest the use of long-sleeved shirts, long pants, hats and covered shoes (required inside summit facilities), to avoid exposure to UV radiation.
9. Temperatures will be much cooler at the summit, especially in the winter months. Please bring winter clothes (layers recommended).
10. You should stay rested and ideally avoid heavy meals, excess caffeine, and alcohol or other drugs (excluding medically necessary medications) within 24 hours of your trip to the mountain.
11. The observatory reserves the right to deny future access to the sites to people with bad behavior during visits.

## Rules

1. Close toed shoes are required inside of summit facilities.
2. Before the tour, please inform your tour Guide if you have any concerns or questions about the tour, or if someone needs assistance during the visit.
3. NOIRLab does not offer transportation to the observatories. Visitors are required to have their own transportation.
4. There are no gas stations, restaurants, or hotels at the observatories. Be sure to have a full tank of gas before starting your trip.
5. Ensure that the transportation vehicle is adequate for such a journey. Check tires and air pressure, including a spare, and ensure the vehicle is in good mechanical condition (brakes, clutch, gearbox, water level and cooling system, as well as tools).
6. If you are driving a 4 Wheel Drive (4WD - required at some locations) vehicle, be sure you understand how to operate your vehicle's 4WD function before departing for your trip.
7. Please follow posted speed limits
8. While traveling to and from the summit, only stop in clearly marked areas (some roads do not allow for picture taking); it is dangerous to stop on the road where other vehicles may not see you.
9. All occupied seats must have a seat belt. Seatbelts must be worn at all times while traveling to and from summit locations.
10. Do not enter areas that are not clearly marked as a trail as these are highly sensitive environmental areas.
11. Avoid rolling car windows down, especially on dirt roads.
12. While at the summit facility, stay with your tour Guide, there are areas of restricted access. This is for your safety as well as the safety of our staff and equipment..
13. You must not depart the facility without informing your tour guide.

14. In case of an emergency such as earthquakes or fire, follow your guide's instructions.
15. At the observatory sites you can find native flora and fauna. Wildlife and natural landscape are protected. Do not disturb or feed animals, and take care not to run them over.
16. Please do not litter. Take out what you bring in. This includes vegetation.
17. The locations of the observatories depend on dark skies. Any light will spoil the quality of observations. Unless specifically authorized you must leave the summit no later than directly after sunset as there are no lights on the road, and headlights are harmful to optical astronomy. If you must travel after twilight is complete, use your low beams or parking lights until at a distance from the summit.
18. Drones are not allowed.
19. The use of wireless communications such as cellular telephones and other electronic devices which transmit a radio signal are prohibited on the summits including radio remote controlled devices (put cell phones in airplane mode)
20. Camping or overnight stays are not allowed
21. Do not drive if you are exhausted, drowsy or under the influence of a medication that prevents it, or under the influence of alcohol.
22. For media visits there is a 14-hour rule for work at the summit. No one may be at the summit for longer than 14 hours at a stretch.
23. Each site has specific rules and recommendations which must be read, acknowledged and followed (see below)
24. Smoking for visitors is prohibited while visiting our observatories, both indoors and outdoors. Please report any indications of smoke or fire to any personnel you see so they can take appropriate action.
25. Pets are not allowed.

**“Leave only footprints, take only photographs”**

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Date

Name

Signature

# Specific Safety regulations: Cerro Tololo, Cerro Pachón, La Serena, Chile

## Altitude

- Cerro Tololo is located at 2,200 meters (7,200 feet) above sea level
- Cerro Pachón is located at 2,700 meters (8,850 feet) above sea level
- Age limit: 6 years old. Minors (persons under the age of 18) need to be accompanied by a parent, guardian or teacher (10 minors per adult).

## Weather & Earthquakes

Southern Hemisphere: Between the months of April and September a Winter Plan is activated in the Observatory, which considers the evaluation of access to mountain facilities in bad weather events such as rain and snow. It will be the Operations Manager of Cerro Tololo, the person responsible for issuing the alert and closing access. Find out before embarking on the trip.

Chile is one of the most seismic countries in the world, which is why we must be prepared to face earthquakes:

- In case of an earthquake, always stay calm, you can help those who are nervous.
- Move away from objects that may fall, tip over or fall off, such as walls in poor condition, bookshelves or hanging lamps.
- Look for a place away from non-structural walls, glass, power lines or gas.
- Evacuate to a safe place. Determine the nearest emergency exit and go to the specified safety area. The Guide will indicate the measures to adopt.
- If you are on the road, stone slides can be generated by earthquakes. Stay calm, stop the vehicle and take distance from the hillside and steep slopes. If it is not possible to continue the trip due to road conditions, wait on the spot. Operations personnel will go to the place where you are.

After an earthquake:

- Stay in the safety area, after an earthquake or earthquake of great intensity, aftershocks will always happen.
- Do not enter places that have structural damage to walls, avoid walking over glass.
- Do not light a fire, gas leaks may have occurred.
- Wait for the Guides' instructions to start or continue

## Driving

- Drivers must have a valid driver's license in accordance with the requirements of the Chilean Traffic Law.
- The visitors to Cerro Tololo and Cerro Pachón, park their cars and go up in a bus, both for the ride up and ride down from the Observatory.

## Hazards inside the telescope domes

- Telescopes are working facilities — be mindful of staff, uneven or wet floors with no railings — follow guides instructions
- All visitors will wear a hardhat while daycrew are at the facility, and return them at the end of the visit.

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Date

Name

Signature