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Visiting Astronomer's Guide

Rev. Oct 31, 2020

UPDATE - SOAR resumed science operations on Oct 7, 2020, after the COVID-19 pandemic, that forced us to shut down in March 2020.
However, until further notice NO VISITING ASTRONOMERS ARE ALLOWED AT SOAR. ALL OBSERVATIONS WILL BE CARRIED OUT REMOTELY OR IN AEON QUEUE MODE. We will provide sufficient training for first-time observers to work remotely. We strongly encourage observers to read carefully the **SOAR Remote Observing Guide page.** [1] If you have any questions, please contact your support astronomer or the Director's office.

With sufficient advance notice, it may be possible to convert scheduled nights into AEON queue nights, which could facilitate acquiring the data needed. Consult the **AEON home page** [2] and listed contacts to see whether this option is appropriate.

The scientific staff continues to work remotely, so if you have questions about a future observing run, instrument capabilities, or anything else related to SOAR, please contact them through the links posted on the staff page [3].

Introduction
This guide describes logistical arrangements for Visiting Astronomers scheduled to observe at the SOAR Telescope. Any questions and booking requests should be addressed to your Visit Coordinator:

NOIRLab & Chilean Visitors: Ximena Herreros (xherreros AT ctio.noao.edu)
Phone: +56-51-2205215

All Others: Marcela Urquieta (murquieta AT ctio.noao.edu)
Phone: +56-51-2205323

Please note: Visiting astronomers are normally limited to a maximum of **two** people, both of whom must be on the original proposal. Additional people or a Co-I not on the original proposal require the

approval of the SOAR Director. This policy reflects the standard NOIRLab policy (linked below), and applies to all SOAR partners. The number of observers may be limited by available hotel space. (Note that because of the above COVID-19 restrictions, ALL OBSERVATIONS WILL BE CARRIED OUT REMOTELY, UNTIL FURTHER NOTICE. No astronomers/visitors will be allowed at the telescope.)

The SOAR Telescope is located on Cerro Pachón at an altitude of 2,738 m, some 400 m from the Gemini South telescope, and 12 km from Cerro Tololo. The map in this link [4] shows the locations of SOAR, Gemini-South, and the dining and dormitory facilities on Cerro Pachón. Should you need information regarding: Visa requirements to enter Chile, Currency, Customs Procedures, Travelling to La Serena, Taxis and Buses in Santiago and Arrival in La Serena, please see the CTIO Visiting Astronomers Travel Guide [5].

Before your observing run

1. Read through the CTIO Visiting Astronomer's Travel Guide [5]
2. Please plan ahead and **contact your Scientific Staff support [3] a least 3 weeks before your observing run**, so you can discuss your particular instrumentation needs, and requirements for supporting your observations.
   i. If your time was allocated through NOIRLab or the Chilean TAC, your contacts are the following:
      - **Goodman:** [6]Sean Points, Regis Cartier or Alfredo Zenteno
      - **SOI [7]:** Sean Points
      - **SAM [8]:** Andrei Tokovinin or Cesar Briceño
      - **Spartan** [9]: Jay Elias
      - **SIFS** [9]: Jay Elias (you will be referred to a Brazilian support scientist)
      - **TripleSpec** [10]: Sean Points
      - **HRCam** [11]**:** Andrei Tokovinin
      - **OSIRIS** [12](no longer offered)
   ii. If your time was allocated through the Brazilian TAC, then your support for any of the SOAR instruments is provided remotely through LNA (e-mail soar.suporte AT lna.br)
   iii. If you are observing through time allocated to the University of Carolina at Chapel Hill (UNC) or to Michigan State University (MSU), the person in charge of SOAR at your department will provide you with the appropriate support.
3. Submit your Instrument Setup Form [13] at least 2 weeks before your observing run
4. Depending on the instrument and type of observations you will also need to submit special, critical information well in advance:
   i. If you will be observing ***with SAM you need to submit your target list at least 2 weeks before your scheduled observations***, so that we can submit to the US Laser Clearing House the request for authorized time windows in which each object can be observed with the SOAR Laser Guided Adaptive Optics System
   ii. If you will be observing ***with the Goodman Multi-Slit Object (MOS) mode, you need to submit your mask configurations at least 1 month ahead*** of your scheduled observations.
5. Contact the CTIO Computer Support staff for setting up your laptop and any other device you plan in connecting to the SOAR and Pachón wireless network (see the CTIO Visitor's Computer Guidelines [14])

New SOAR WiFi Policy . We have nearly used up the available addresses on the SOAR primary network,

and therefore a new WiFi network has been installed. In order to keep the primary network open for critical applications, we request that people follow the guidelines listed below:

- Visiting astronomers and others should continue to submit their devices' MAC addresses. Your computer will be enabled to work on all SOAR networks as well as those at the Pachón hotel, on Tololo, and downtown.
- When at the telescope, please connect to the "NOIRLab_Guest" network underline a direct connection to machines on the primary network is required. That is, the guest network is what should be used for checking e-mail, Skype with collaborators while observing, as well as more personal activities. The password should be available in the control room; if not, just ask. There are enough addresses on the guest network to accommodate any reasonable number of devices; please remember that the [AURA conditions of use](#) [15] apply on all AURA networks (Spanish [here](#) [16]). Note that from the guest network you **cannot** (at present) make a VPN connection to computers on the NOIRLab and SOAR internal networks, so if you need to work on your data or copy it to your laptop, you need to be on the restricted network (see below).
- The primary network is now called "SOAR_Restricted". The password is available from your support scientist, day crew staff, or telescope operators.
- If you are engaged in more demanding tasks, it is OK to connect to the primary ("Restricted") network. In particular, visiting astronomers who are transferring data to take home may want to make a direct connection from a laptop. We only ask that you use reasonable judgment in doing so.
- There are both US-style 110V and Chilean-style 220V outlets in the control room; bring an adapter if your laptop has a plug different from either of these.

During your observing run
On your first day, make sure to contact your Support Scientist and the Telescope Operator early on, so you can arrange with them the appropriate time to start your afternoon calibrations, and whether you need twilight observations.
Afternoon calibrations usually start at 4 pm. In special cases, e.g. if very long calibrations are required, an earlier start may be arranged, but this requires special arrangements. Ask your Support Scientist.

Remember to fill in your **[End-of-Night report](#)** [17]before going to bed. **This is very important**, not only because it allows us to keep statistics on telescope use, downtime due to weather or technical issues, but mostly because only if we receive an early report on a technical problem, we can act promptly the next day to try and fix it and have you or the next observer ready for the next science night. Please note that if you have left the mountain and are no longer inside the CTIO network, you will need to connect through the VPN in order to access the Night Reports.

Transportation from La Serena to Pachón and back
SOAR Visiting Astronomers are welcome to use the available carryall services to get to/from Cerro Tololo or Cerro Pachón; however, these **must** be requested in advance through the Visit Coordinator. The carry-all trip from the La Serena offices to Cerro Pachón is about 1h45m. Please note that the carryall passes to Cerro Tololo to drop off/pick up passengers on the way to/back from Pachon.
For carry-all schedule **[click here](#)** [18]

There is a sign up sheet for the carry-all in the AURA Reception and in the Pachón main dormitory unit entrance hall. Again, it would be wise to check your outgoing reservations.

Arrival

at Cerro Pachón and accommodations

Observers arriving Pachón from La Serena will be dropped off by the carry-all minibus at the main dormitory unit (picture on right). If your room was assigned there, head directly to the TV room located in the middle of the main dormitories hallway (go up the staircase upon entering the building). There the key hanger is located. The keys to your room (with your name on it) should be hanging there. If not, go and ask the kitchen staff.

If you were assigned a room in the "20-unidades" dormitory extension (picture on right), then most likely your room keys will be in the main key board at the entrance of the dormitory unit.

Wireless and Ethernet wire connections are available in all dormitories, cables are supplied.
Prior to your arrival you should have registered the mac addresses of any wireless devices you plan on using on the mountain, and should by now have the wifi name and password. Remember to carefully read and follow the [CTIO Visitor's Computer Guidelines.](#) [14]

There are 110V US-style and 220V Chilean-style electricity sockets, an air humidifying system and heating/cooling. A hair dryer is available in the bathroom and there is a security box in the closet for valuable items.

Room service
The dormitories and houses are cleaned on a daily basis. Every fourth day a thorough cleaning is carried out and bed and bath linen are changed. Should you need further services, please contact Mountain Assistant at 440.

Getting from the dormitory to the SOAR Telescope and back

Your Visit Coordinator will assign you a car to drive between the dormitories and the telescope (there is a 3-km distance between both places). Pick up the keys to your rental car from the Pachon Dining Facility

at the start of your run, the car will be parked just outside that building. The vehicle should be returned to the same location at the end of your run, where the duty Cook will verify that the car and other items have been returned in good condition. *Please only use this car to transport yourself within the mountaintop grounds. Taking the vehicle down the mountain is strictly forbidden.* Never exceed the speed limits indicated along the road, and drive extra carefully, more so if there is snow on the ground. Be aware of other vehicles on the road, and note that often there are heavy machinery performing maintenance work. If in doubt, ask for and follow the advice and recommendations of the Telescope Operators; they have years of experience and training driving in this mountain under a variety of conditions. Any problems or mishaps with the vehicle should be promptly reported to your Visit Coordinator.

Visitors are strongly discouraged from hiking on the road, due to traffic. If you cannot drive a car, please make coordinate transportation with the telescope operators and SOAR day crew.

Dining on Cerro Pachón
The dining hall is located in the main dormitory unit, and has a full cafeteria service, with self-serve, buffet style meals every day, soft drink machine, coffee, desserts. Should you require vegetarian meals or a special diet, please notify your Visit Coordinator in advance so that the kitchen can make the appropriate arrangements.

The new Meal Registration System uses tablets on which you can register for a meal either by entering your visitor ID number or your last name. The tables are located at the near self-service bar; it is important that you register your meal before serving yourself.

Meal Schedule

Breakfast   08:00 to 08:30
Lunch   13:00 to 14:00
Dinner   17:00 to 18:30

Night Lunch: At lunchtime, please fill out an order form to get your night lunch at Pachón and hand it to the kitchen staff. Your pack will be ready at dinner time. You must also register the night lunch on the tablet.

Special dietary concerns and precautions
Should you require vegetarian meals or a special diet at Cerro Pachon, please notify your Visit Coordinator in advance so that the itchen can make the appropriate arrangements. While in Chile it is recommended that you eat only peeled or cooked fruits and vegetables. Seafood should only be consumed cooked.

Drinking water
Tap water is currently not fully certified in the AURA-O facilities (La Serena, Tololo and Pachón), so you probably should fill glasses from the dispensers in the dining rooms. Elsewhere in Chile it is recommended that you drink bottled water.

Laundry
There are laundry facilities at the Pachón hotel. Please contact one of the kitchen staff or the janitor for

access and for detergent.

Charges & Payment Procedure
Prior to the start of your observing run you will be given a Credit Card Authorization Form. This should be completed and sent by e-mail or delivered personally to your Visit Coordinator.

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Phone: +56-51-2205215

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Phone: +56-51-2205323

The completion and return of this Credit Card Authorization form grants AURA-O Accounting the right to charge the card indicated by the visitor for services. This invoice will be subject to an e-mail confirmation from the visitor approving the charges.

Current fees for services

Lodging at Hotel or 20 Units Dorm   CLP$ 46,467/night
Motel Room in La Serena   CLP$ 43,099/night
Meals   CLP$ 14,172/per meal
Carryall Service to/from Pachon   CLP$ 35,525/one-way ride
Rental Car on Pachon   CLP$ 6,000/day

Emergency services at Cerro Pachón
A Paramedic staffs the first aid clinic, which is in the small white building below the Gemini dome (on the road). Please dial # 577 for daytime assistance in case of illness or an accident, and for nighttime emergencies. If you suffer from a medical condition or are taking medicine regularly, be sure to communicate this to the Paramedic upon arrival.

Alcohol/Drugs
Carrying and/or consuming alcohol or any kind of illegal drugs on the mountain is expressly forbidden under any condition or circumstance.

After your observing run.
Please fill in the End-of-Run report which can be found on our web site, at **this link.** [21]   The End-of-Run is our way to know your assessment of the entire observing run experience, so it is very important you submit it. Feel free to add any comments you think appropriate. Also, please note that if you have left the mountain and are no longer inside the CTIO network, you will need to connect through the VPN in order to access the End-of-Run Reports.

For telephone numbers for SOAR/CTIO Staff click here [22]

Source URL: https://www.ctio.noirlab.edu/soar/content/visiting-astronomers-guide

Links

[1] https://www.ctio.noirlab.edu/soar/content/soar-remote-observers-guide

[2] https://www.ctio.noirlab.edu/soar/content/soar-aeon-home-page

[3] https://www.ctio.noirlab.edu/soar/content/soar-staff

[4] https://www.ctio.noirlab.edu/soar/sites/default/files/images/SOAR_map_Hotel.jpg

[5] http://www.ctio.noao.edu/noao/content/Visiting-Astronomers-Travel-Guide

[6] https://www.ctio.noirlab.edu/soar/content/goodman-high-throughput-spectrograph

[7] https://www.ctio.noirlab.edu/soar/content/soar-optical-imager-soi

[8] https://www.ctio.noirlab.edu/soar/content/soar-adaptive-optics-module-sam

[9] https://www.ctio.noirlab.edu/soar/content/spartan-near-ir-camera

[10] https://www.ctio.noirlab.edu/soar/content/triplespec-41

[11] https://www.ctio.noirlab.edu/soar/content/access-visitor-instruments

[12] https://www.ctio.noirlab.edu/soar/content/ohio-state-infrared-imagerspectrograph-osiris

[13] http://www.ctio.noao.edu/SOAR/Forms/INST/setup.php

[14] http://www.ctio.noao.edu/noao/content/Visitors-Computer-Guidelines

[15] http://www.noao.edu/cis/secbasics/cybersec/cybersecurity_and_acceptableuse.html

[16] http://cissweb.ctio.noao.edu/cissweb/sites/default/files/NOAO_CyberSecurity_policy_Spanish2013.pdf

[17] http://www.ctio.noao.edu/SOAR/Forms/EON/Form.php?telescope=SOAR

[18] https://www.ctio.noirlab.edu/soar/sites/default/files/documents/03_2019_Carryall%20Schedule.pdf

[19] https://mail.google.com/mail/?view=cm&fs=1&tf=1&to=xherreros@ctio.noao.edu

[20] https://mail.google.com/mail/?view=cm&fs=1&tf=1&to=murquieta@ctio.noao.edu

[21] https://www.ctio.noirlab.edu/soar/content/instrument-setup-forms-and-observing-reports

[22]
https://www.ctio.noirlab.edu/soar/sites/default/files/documents/Marcela/April%202021%2C_Key%20Telephone%20numbers.pdf