Chilean Telescope Time Allocation Committee

Semester 2021A Call for Proposals[1]

The Chilean Telescope Time Allocation Committee (CNTAC) invites the Chilean community to submit proposals for observations during the 2021A semester at the following facilities that have signed agreements with Universidad de Chile:

•**CTIO:**
BLANCO, SOAR, SMARTS 0.9m, PROMPT, SARA, LCOGTN, KASI, and ASAS-SN.

•**LCO:**
Baade, Clay, Swope, Warsaw and Dupont.

In addition, and following a petition of the ESO-Chile Committee, the CNTAC also invites the community to submit proposals for the following **ESO National Telescopes**:

• REM, Danish, and TAROT.

The submission deadline is:

Friday October 9, 2020 at 12:00 p.m. (noon, Chilean continental time)

We would like to remind the community that different facilities finish their respective telescope schedules at different times and only when these become available, we are able to communicate the CNTAC outcomes since scheduling constraints can impact program feasibility. Also, please, be aware that observing semesters vary from observatory to observatory. For more information, please look at each facility web page or contact the scientists in charge.

[1] Highlighted regions in sections 1, 2, and 3 represent text that has been modified from the previous call for proposal. Assume section 4 has been completely modified.

1. Policies

The CNTAC has established specific rules regarding eligibility, duration of the projects, and telescope assignment.

1.1. Eligibility:
Starting with the 2017B Call, the CNTAC has chosen to follow the eligibility rules approved by SOCHIAS during his 2017 meeting. According to these, eligible principal investigators (PIs) are the following individuals:

Faculty: Researcher hired by a Chilean Institution (CI) in a full-time, permanent position (equivalent to tenure-track) in any of the usual contract variations: *honorarios, contrata, planta*, etc.

Graduate Student: with a support letter from a faculty satisfying the point above and from the same institution.

Postdocs: Postdoctoral researcher with a fixed-term contract (including "contrato a honorarios") in a CI, hired at least half-time and for a minimum of six months. They can apply from the moment they accept the position. After that, to be eligible for a given cycle, they must hold their postdoctoral position at least until the beginning of the cycle when their observations would be carried out.

Visitor Professor: Like postdocs plus the participation of a Co-I who satisfies the first point.

Adjunct Researchers: To be eligible as an Adjunct Faculty (or equivalent position) the researcher must have at least a half-time position (must spend half of her/his time at the CI). If the primary institution of the Adjunct is not a CI, and it grants access to telescope time in Chile, then the Adjunct cannot apply to those telescopes. Retired or Emeritus Professors qualify automatically in this category.

The original eligibility rules can be found at:
http://sochias.cl/tiempo-de-observacion/acceso-a-tiempo-de-observacion

SOCHIAS will maintain a "white-list" of eligible PIs. This white-list is created with the help of all department Chairs, so we encourage you to verify that you have been included. The current list can be found at: http://sochias.cl/lista-blanca/

1.2. Extension of projects: Proposals are reviewed by the CNTAC on a semester by semester basis (except, whenever appropriate, for the du Pont, Swope, ASAS-SN and Warsaw telescopes which are assigned on a yearly basis).

A proposal can request the following special status of long-term program and/or large program. If the proposed project fulfills the criteria for both it must comply with the requirements for both status.

1.2a. Long-term programs. The CNTAC will give special attention to proposals specifying their long-term nature (more than one semester). The maximum duration of a long-term program is currently 4 semesters.

Requirements: (1) specify this status request in the application form. (2) include an additional page justifying the need for long-term status and total duration. (3) When filling out the online form, in the 'requested time' field, please enter the time requested EACH semester, and not the total time requested. (4) In case long-term status is granted, a status report must be submitted each subsequent semester to inform the CNTAC of the progress being made. **Reports from long-term programs are due with the regular CNTAC deadline each semester, and must be submitted using the online form, as a regular proposal.** The CNTAC reserves the right to terminate long-term status if progress is deemed insufficient or if the PI fails to send a report.

1.2b. Large programs. Proposals requesting 50% or more of the time allocated to the CNTAC in any semester on the Clay, Baade, Blanco, SOAR, and MPG2.2m and Euler telescopes, will be considered large-programs.

Requirements: (1) specify this status request on the application form. (2) submit a work plan (1-page limit) specifying the contributions of all Co-Is and a data management plan. (3) include in the proposal a commitment to make the data public after one year.

1.3. "Fast track" CfP: Occasionally, some telescopes have been undersubscribed. In the event that time cannot be fully allocated, and in order to optimize Chilean resources and avoid late-time requests, a second "fast track" call will be issued soon after the CNTAC process, including all telescopes with remaining time. Fast-track proposals will be handled directly by the CNTAC Chair.

1.4. Acknowledgments: The CNTAC asks its PIs to include the identification number of the program in any publication that makes use of data obtained through a CNTAC proposal.

1.5. PI commitment: Through her/his application the PI is fully committed to carry out such observations. The PI or one of the Co-investigators listed on the proposal is expected to be present at the telescopes on the assigned nights (unless service or remote mode was assigned). In the event that the PI cannot make use of allocated time for the scientific program approved, she/he must immediately communicate the problem to the CNTAC, so that the time can be reassigned to another proposal.

1.6. COVID-19 Considerations:

- At the time of the release of this Call, most sites are still closed to operations or under minimal operations. Please consider that there is a possibility that observations will be carried out under remote or service mode even at facilities that only offered visitor mode before the shutdown.
- Proposals that were allocated time during 2020A through the regular call but were not executed due to closures will be carried over to this semester. PIs of affected proposals should expect an email notification during the week of September 14 with further details. Proposals that were allocated time through the Fast track call, or long-term proposals allocated beyond 2021A will not be carried over.

- Ongoing long term proposals MUST submit a progress report using the online CNTAC system, regardless if shutdown affected or not observations on 2020A. There is no template for long term reports to allow for flexibility

2. Proposal submission

Submission is through a web form found at http://www.cntac.cl. **The system will be open to receive submissions starting on Wednesday, September 16, 2020.**

IMPORTANT: Both PIs and Co-Is will need to be registered in the web system. In addition, PIs need a confirmation of eligibility before being able to create proposals. Review of eligibility according to rules specified in §1.1 is done manually and **might take up to 48 hours** for new enrollments. If your status has changed from previous semesters, you need to contact cntac@das.uchile.cl at least one week prior to the deadline.

****PLEASE REGISTER NOW RATHER THAN WAITING TO THE LAST MINUTE****

As part of the web system, PIs need to enter directly into the web form information such as Abstract, Co-Is, Telescope, Instrument, Time requested, Preferred Dates, Moon requirements, etc. In addition, the PI will be asked to upload a pdf file that includes:

– Scientific aim and rationale (3 page limit*).
– A description of the current status of the project including publications; identification number(s) of previous allocated proposal(s), if any; and expected involvement of the Chilean community (1 page limit*).
– Technical description including explanation of 'minimum time' selected (1 page limit*).
– Justification of long-term status if applicable (1 page limit*).
– Work plan for large programs, if applicable (1 page limit*).

***All the above page limits include figures, tables and references of each section.**

This CfP is being distributed together with a template latex file to write your proposal, which is also available at http://www.das.uchile.cl/das_cntac.html. Use of this template is **MANDATORY**. Tampering with the template is not allowed and will result in the rejection of the proposal. Tampering includes, but is not limited to: changing font sizes, adjusting margins, etc. It is allowed to remove the comments that the template has, as they are only meant as placeholders.

A complete proposal will consist of no more than five pages of text (including figures, tables and references) using the template described above (seven pages for large programs that are also long-term). While the website will accept longer pdf files, proposals that do not adhere to the maximum length per section **will be rejected by the panel.**

Students leading a proposal must also upload a letter from his/her supervisor (holding the status of Chilean astronomer). Without this letter the system will not allow submission of the proposal. If the proposal is related to a thesis project, it must include basic information on the thesis (status, how the proposed observations impact the thesis, role of the student, etc.)

3. General Information

The use of the '**minimum time**' field in all proposals is **strongly** recommended, if omitted the minimum time will be the full time. The panels will interpret that if less than 'minimum time' is allocated, the proposal will not provide any scientific output. The 'minimum time' could be used by the CNTAC in several situations such as: when a proposal is close to the cut line and the full requested time cannot be assigned; the CNTAC might find a project too risky and decide that a shorter pilot program would be better suited; etc. Proposals will not be assigned time below this 'minimum time'.

Questions regarding the submission process should be sent to **cntac@das.uchile.cl**. Please include the keywords **"CNTAC 2021A"** in the subject of the message.

Rafael Brahm, Andrés Jordán and Nestor Espinoza developed at PUC a suite of pipelines for echelle spectrographs called CERES which are publicly available and documented in Brahm et al 2017, PASP, 129, 034002. CERES can reduce echelle spectra in a fully automated way for the following spectrographs offered regularly by the CNTAC: Euler1.2m/Coralie, DuPont2.5m/Echelle, MPG2.2m/FEROS, Magellan6.5m/MIKE, Magellan6.5m/PFS. CERES includes routines for the computation of precise radial velocities and bisector spans via the cross-correlation method, and an automated algorithm to obtain an estimate of the atmospheric parameters of the observed star.

4. Facilities available in the semester 2021A

A description of the instrumentation available this semester can be found through the following web pages or contact person:

- CTIO (Blanco, SOAR and Smarts): Telescopes on Cerro Tololo & Cerro Pachon
- CTIO/PROMPT: https://skynet.unc.edu/sites/view?id=2
- CTIO/SARA Contact person: William Keel (wkeel@bama.ua.edu)
- CTIO/Las Cumbres Observatory: http://lco.global
- CTIO/KASI: http://kmtnet.kasi.re.kr/kmtnet-monitor/
- CTIO/ASAS-SN Contact person: José Luis Prieto (jose.prieto@mail.udp.cl)
- LCO (Baade, Clay, Swope, du Pont): http://www.lco.cl
- LCO/Warsaw: http://ogle.astrouw.edu.pl/main/tel.html
- REM: http://www.rem.inaf.it. Emilio Molinari (emilio.molinari@inaf.it)
- Danish Contact person(s): Uffe Gråe Jørgensen and Petr Pravec (uffegj@nbi.dk and petr.pravec@asu.cas.cz respectively)
- TAROT Contact person(s): Michel Boer (Michel.Boer@unice.fr) and Loic Eymar (loic.eymar@oca.eu)

4.1 CTIO Facilities

Blanco 4m

The 2021A cycle begins on February 1, 2021 and ends on July 31, 2021.
Nights/Hours allocated to CNTAC:16 nights
Nights/Hours offered in this Call: 11.5 nights
Website:http://www.ctio.noao.edu/noao/content/Victor-Blanco-4-m-Telescope

General information:
http://www.ctio.noao.edu/noao/content/Victor-Blanco-4-m-Telescope

Instruments available:
Dark Energy Camera (DECam)
http://www.ctio.noao.edu/noao/content/dark-energy-camera-decam
Cerro Tololo Ohio-State Multi-Object Spectrograph (COSMOS)
http://www.ctio.noao.edu/noao/content/COSMOS

It is possible that observations will only be possible in remote observing mode during at least the first part of 2021A due to restrictions related to COVID19. Information on remote observing with DECam and cosmos is available from
http://www.ctio.noao.edu/noao/content/Remote-Observing-Blanco

SOAR

The 2021A cycle begins on February 1, 2021, and ends on July 31, 2021.
Nights/Hours allocated to CNTAC:14-15 nights
Nights/Hours offered in this call: 3-4 nights.
Website: http://www.ctio.noao.edu/soar/

SOAR supports allocations in half-nights, but these are subject to each partner finding within their own community a suitable program to share the nights. Hence, the CNTAC does not encourage this type of application.

Queue scheduling: For semester 2021A, SOAR will continue to offer queue time through the AEON network (http://www.ctio.noao.edu/soar/content/soar-aeon-home-page). Because we have a stable operation, we can now confidently support proposals that require the flexibility the AEON queue offers, in particular programs requiring small amounts of time spread over the semester, or where targets are not entirely predictable. AEON remains the recommended choice for programs

with a large number of targets distributed over the sky, as well as those where monthly or bi-weekly cadences are required. We cannot generally support higher cadences (e.g., weekly) unless demand increases sufficiently; exceptions may be possible where the higher cadence is only required for a portion of the semester. Note that we can and do support observations of solar system objects using non-sidereal tracking.

Time is allocated based on TAC priority and the AEON queue is currently filled at 100%, so the expected fraction of clear time is the same as for classical observing. Investigators receiving time through all SOAR partners are eligible to participate; time continues to be allocated by the individual partners.

Please consult the AEON pages for further details and for contact information if you have questions the website doesn't answer.

Targets of Opportunity: SOAR support target of opportunity programs; for specifics of the policy see http://www.ctio.noao.edu/soar/content/targets-opportunity-overview. To make life easier for all involved, please include "ToO Proposal" in your proposal title.

Instruments available
Goodman: Goodman Spectrograph
http://www.ctio.noao.edu/soar/content/goodman-high-throughput-spectrograph

SOI: SOAR Optical Imager
http://www.ctio.noao.edu/soar/content/soar-optical-imager-soi

TripleSpec4.1 (ex-ARCOIRIS): Cross-dispersed, single-object, longslit, IR imaging spectrograph
http://www.ctio.noao.edu/noao/content/Arcoiris

Spartan: Spartan IR Imager
http://www.ctio.noao.edu/soar/content/spartan-near-ir-camera

SAM: SOAR Adaptive Module
http://www.ctio.noao.edu/soar/content/soar-adaptive-optics-module-sam

HRCAM: High-Resolution Camera
http://www.ctio.noao.edu/~atokovin/speckle/index.html

SAMHR: SAM + HRCAM
http://www.ctio.noao.edu/soar/content/soar-adaptive-optics-module-sam
http://www.ctio.noao.edu/~atokovin/speckle/index.html

SIFS: SOAR Integral Field Spectrograph
http://www.ctio.noao.edu/soar/content/soar-integral-field-spectrograph-sifs

SMARTS

Cycle 2021A begins on July 31, 2021 and ends on February 1, 2021.
Nights/Hours allocated to CNTAC: 11 nights on 0.9m, 60 hours on 1.5m
Nights/Hours offered in this call: 7 nights on 0.9m, 0 nights on 1.5m.
Website: http://www.astro.gsu.edu/~thenry/SMARTS/

The 0.9m telescope at CTIO is operated by the SMARTS Consortium, and time will be available to CNTAC users in 2021A via the usual proposal process.

0.9m --- CFCCD imaging camera
The 0.9m + CFCCD is available in user mode only. For more information on the 0.9m, please contact Dr. Todd Henry at thenry@astro.gsu.edu.

PROMPT

Cycle 2021A runs from February to July, 2021.
Nights/Hours allocated to CNTAC: 10% of Skynet's observing time.
Nights/Hours offered in this call: 117 hours.
Website: https://skynet.unc.edu/sites/view?id=2

For information on the status and use of PROMPT, please visit the listed website. The contact person is Dan Reichart, dan.reichart@gmail.com

SARA

Cycle 2021A begins in January 2021 and ends in June 2021.
Nights/Hours allocated to CNTAC: 18 nights.
Nights/Hours offered in this call: 18 nights.
Website: http://www.saraobservatory.org

SARA-South is a remotely-operated 0.6m telescope sited at Cerro Tololo. Its imager uses a temporary FLI 1024^2 CCD with 0.608" pixels; the new Andor camera (installed in 2018 but returned for repairs) has been tested and should be installed as soon as travel is possible (the Andor camera has 2048^2 pixels with 0.342"/pixel scale). In the best case scenario, it should be operational in 2021A.

Filters are currently SDSS ugriz, Bessel UBVRI, "white-light", zero-redshift [O III] and H-alpha, and an old set of stepped H-alpha filters about 70 A wide with 6600, 6675, 6825, 6900, 6975 A center wavelengths (replacement of old, deteriorating filters from these is in progress). Operation uses the RAdmin remote-management software or VNC protocol (RAdmin for Windows; for Mac users, the VPN client built into the OS for recent versions (10.10) will work properly with the CTIO VPN without an additional client) via the NOAO VPN (which needs a Cisco client that can be downloaded from NOAO; access from within Chile might have a more direct path into the CTIO local network). Our

remote operation rules require new observers to eavesdrop for parts of three nights to become familiar with the system. The telescope has its own weather station and all-sky camera. A single-fiber echelle spectrograph with R ~25,000 is on site, but the fiber-pickup head was found to be broken during the last engineering visit, was returned to Arizona for repair and awaits a site visit to replace parts.

New observers: Once time is allocated, you must contact facility director Todd Hillwig (todd.hillwig@valpo.edu) well in advance to arrange for training on the operating software.

More detail on the SARA facilities is available in the paper
https://iopscience.iop.org/article/10.1088/1538-3873/129/971/015002

Las Cumbres Observatory

Cycle 2021A begins on February 1, 2020 and ends on June 30, 2021
Nights/Hours allocated to CNTAC: 300 hours on the 1m network and 200 hours on the 0.4m network.
Night/Hours to be offered in this call: 170 hours on the 1m network and 150 hours on the 0.4m network.
Website: https://lco.global/
Las Cumbres Observatory (LCOGT) operates robotically. Requested observations are scheduled by a single scheduling program that dynamically optimizes queues for each telescope. To benefit time-domain science, specialized scheduling modes are supported, including the ability to request cadence-driven observation sequences, a "rapid-response" (RR) mode that triggers observations to begin a few minutes after a request is submitted, and a "time-critical" (TC) scheduling mode for observations that must be made at relatively tightly constrained times that rarely occur.

The special scheduling modes are described at https://lco.global/documentation/special-scheduling-modes/. We expect that nearly all observations will be made in standard queue-scheduled mode. Proposals that seek RR or TC observations must explicitly justify those requests.

Requested observations may be scheduled on any of the telescopes of a given aperture in the global network. Time on the 2m telescopes, instrumented with optical imagers and low-dispersion spectrographs, is available through trades with LCOGT. Proposals may request time on those telescopes if required. We allocate observing time by instrument and telescope class. All of our 1m telescopes are equipped with (Sinistro) imagers, but three of them are also equipped with (NRES) spectrographs. Proposals should indicate how much time they need on each instrument. The 0.4m telescopes are only equipped with (SBIG) imagers. Information on LCOGT's instruments is available at https://lco.global/observatory/instruments/.

*Please note that at the time of this CfP there is no operational 1m telescope equipped with NRES (either because the host facility is closed or because of malfunction), so please take this into consideration when writing your proposal. Visit the website listed above for updated information.

KASI

KMTNet/Chile (http://kmtnet.kasi.re.kr/kmtnet-monitor/) is a 1.6m telescope with an 18Kx18K CCD Mosaic camera with a 2x2 square degree field of view. The available filters are B, V, Rc, Ic. The camera overhead time between exposures is 60 seconds. A simple scripted observational mode is available now, so multi target observation with multi filters can be conducted. It also helps to minimize the overhead time by combining tasks such as moving the telescope while downloading images etc. The essential information for scripting observation is object name, RA, DEC, Filter name, exposure time. Therefore, at least the five columns should be included in the observation method.

At KASI we use the MSCRED package in IRAF to handle the MEF images. We can provide a X-talk correction code and a preprocessing script. The observed data can be stored on the disk at CTIO for a while, then Chilean researchers can download the images via the internet. Please Note that the time shown in the table is universal time.

As usual, nights available to CNTAC are expected to follow previous year's dates. However, the current situation may affect this. The expected dates are:

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============================
    DATE (UT)       Semester
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FEB 10 - FEB 19 2021   2021A
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ASAS-SN

Contacts: José L. Prieto: jose.prietok@mail.udp.cl & Kris Stanek: stanek.32@osu.edu

We are pleased to announce the availability of data from the ASAS-SN Project for members of the Chilean community in fulfillment of the agreement to provide 10% access to the system.

The All-Sky Automated Survey for SuperNovae (ASAS-SN) is an all-sky, V/g-band only variability survey that uses 4x14-cm telescopes in LCOGTN nodes in Haleakala (Hawaii), CTIO, McDonald Observatory, and SAAO. The survey depth in single exposures is 17 V/g (mag) > 10 and the cadence is ~1 night. The images obtained by the survey have a pixel scale of 7.5"/pixel and the FWHM of the PSF is ~15". The real-time transient survey has been working since May 2013 from Haleakala and since May 2014 from CTIO.

For more details of the survey, see

http://www.astronomy.ohio-state.edu/~assassin/index.shtml

Sky coverage maps with the number of times that each field has been observed since the survey started and in the last year are available at:

http://www.astro.udp.cl/~jlprieto/ASASSN_fields.html

In this call, successful Chilean proposals will have access to reduced (up to flat-fielding and astrometric calibration) V/g-band images of up to 5% of the fields observed in 2018 from ASAS-SN sites or access to V/g-band light curves, including all the historical data, of up to 1000 sources all-sky per proposal. The light curves are obtained using an aperture photometry pipeline. We expect that up to four proposals will be selected for this 2019 call (depending on the data volumes requested). We anticipate continued annual calls as long as ASAS-SN is operating on Cerro Tololo.

Publications resulting from ASAS-SN images provided under this process should include an acknowledgement as indicated by the ASAS-SN team. Given that the light curves are higher-level data products, publications resulting from successful proposals that use light curves must include a small core ASAS-SN team (builders) as co-authors.

Proposals requesting more than 5% of the fields or >1000 sources can be considered but they would require a collaborative agreement with the ASAS-SN team. In the case of accepted proposals that requested more than 5% of the fields or more than 1000 sources, a number of ASAS-SN team (builders) should be included as co-authors as agreed upon with the ASAS-SN team."

Proposals should include

1) the scientific objectives of the proposed project; importantly, these may be aligned with the core objectives of ASAS-SN, or alternatively they may extend the objectives, within the current targets and data products of the project. We strongly suggest that interested scientists contact the Prof. Jose L. Prieto (UDP), jose.prietok@mail.udp.cl, with any questions about the science objectives of ASAS-SN and the data products of the project.

2) a description of the data products desired, either g/V-band images or g/V-band light curves, and the selection criteria for those data products. Specifically: which g/V-band images, amounting to <=5% of fields observed, or which g/V-band light curves, amounting to <=1000 sources.

Please note that the reduced data and light curves will be the as-produced data product. Please see Kochanek et al. (2017, http://adsabs.harvard.edu/abs/2017PASP..129j4502K) for some details on the light curves. In some cases the automated reductions do not produce optimal results (for example, the astrometry.net astronomic solution fails). Given the volume of data continuously coming in, the team cannot resolve problems with individual data products.

Evaluation of proposals will be carried out annually by the regular CNTAC, with previous consultation to the ASAS-SN team regarding technical feasibility. For additional questions about this opportunity, please contact Prof. Jose L. Prieto (UDP) at jose.prietok@mail.udp.cl.

4.2. Las Campanas Observatory (LCO) Facilities

General guidelines

A description of the instrumentation available for use on the Magellan , Swope, and du Pont telescopes can be found at http://www.lco.cl .

Please note that all observers at Las Campanas are expected to be experienced and self-sufficient. All observers should read the Magellan Telescopes Observer Guidelines found at http://www.lco.cl/lco/observer-information/visiting-observer.

Please also note that papers published with data from Las Campanas telescopes should contain an appropriate acknowledgement of the source of the data, either in a front page footnote or by using the /facilities{} feature in LaTex.

Magellan Telescopes

For the Magellan telescopes, this CfP will cover the first semester of 2021, which will run from January 21, 2021, through June, 2021.
Nights/Hours allocated to CNTAC: 16 nights on Baade, 16 nights on Clay.
Nights/Hours offered in this call: 3 nights on Baade, 9 nights on Clay.

Given the current scenario, we do not expect the Magellan block schedule to be available before the close of this Call for Proposals. PIs are encouraged to *CLEARLY* include in the 'Technical description' section their preferred date of observation and their acceptable range to achieve the science goals. An updated version of this Call will be issued should the schedule become available.

Observers should consider that depending on the date of reopening of Las Campanas then, for at least the first weeks after reopening, data are likely to be taken in remote observing or service mode. Also, availability of PI instruments is highly dependent on each PI or team traveling to the observatory, which is very uncertain. This call offers these instruments, but proposers should be aware that there is no guarantee that these instruments will be available, even if the observatory opens. Information included here is based on previous semesters, and the most updated information. Questions about each instrument should be addressed to the PI.

A description of the instrumentation available for use on the Baade and Clay telescopes can be found at http://www.lco.cl .

Note that there is an Exposure Time Calculator for the optical slit spectrographs on Magellan (LDSS, MIKE, IMACS, and MagE). The ETC can be found at http://alyth.lco.cl/gblanc_www/lcoetc/lcoetc_sspec.html .

+ Baade: IMACS (including GISMO and MMTF modules), FIRE, FourStar and MagE.

+ Clay f/11: LDSS3 and MIKE.

+ Clay f/11 PFS: PFS is a high resolution echelle spectrograph optimized for precision radial velocity measurements. PFS is a **PI instrument** and will only be available via collaborative arrangement with the instrument team. If you are interested in applying for time on PFS in the 2021A semester contact Steve Shectman (shec@obs.carnegiescience.edu) at least two weeks before submitting a proposal. Upgrades have been made to the PFS CCD camera and spectrograph optics. Please contact Steve for updates on the progress of the upgrade.

+ Clay f/11 M2FS: M2FS is a multifiber spectrograph with both high (20K < R < 34K) and low (1.5K < R < 2.7K) resolution modes. M2FS is a **PI instrument** and will only be available via collaborative arrangement with the instrument team. If you are interested in using M2FS, please contact Mario Mateo (mmateo@umich.edu) for further details before submitting proposal.

+ Clay f/5: MegaCam. It can be expected that there will be one f/5 run on Clay in 2021A. During the f/5 run none of the other Clay instruments will be available.

+ Clay AO: There will not be a MagAO run in the 2021A semester. It is expected that there will be one (short, probably nine night) MagAO-X (**PI instrument**) run in the 2021A semester operated on a shared risk basis. Proposals are invited for shared-risk science verification observations in collaboration with the MagAO-X team during that run. Contact the MagAO-X PI, Jared Males (jrmales@email.arizona.edu), to discuss proposals and for additional information about expected capabilities and performance.

Du Pont

The APOGEE-S program on the du Pont telescope was originally scheduled to have ended before 2021A period. At this time it is not clear when the transition to the SDSS-V program will occur, and there is a still a possibility of available time on Du Pont with other instruments. If such information becomes available after the close of this Call, it will be offered in Fast track mode.

Swope

This Call for Proposals covers the 2021 observing year, which will run from January 21, 2021 through January 20, 2022.
Nights/Hours allocated to CNTAC: Approximately 30 nights.
Nights/Hours offered in this Call: 10 nights.
The sole instrument on Swope is a camera with a 4K x 4K x 15 micron pixel CCD from E2V.

Warsaw Telescope

This Call for Proposals covers the 2021 observing cycle.
Nights/Hours allocated to CNTAC: 33 nights
Nights/Hours offered in this Call: 15 nights
Website: http://ogle.astrouw.edu.pl/main/tel.html
http://ogle.astrouw.edu.pl/main/OGLEIV/mosaic.html

The only instrument available is the 32-chip mosaic CCD camera (1.4 square degrees). Only V and I-band filters are available (i.e., no "white" light). The telescope will be available only in service mode operated by experienced OGLE observers. The Chilean observer would send the telescope team details on the program (targets, type of observations and other important info) a week in advance so we have time to make some corrections etc. Contact person: Andrzej Udalski (udalski@astrouw.edu.pl).

Approximate Dates* for 2021 Chilean nights are:

5/6 - 7/8 March
13/14 - 15/16 September
10/11 - 12/13 October
5/6 - 7/8 November
3/4 - 5/6 December

*Dates might be subject to change given the current circumstances related to the Observatory shutdown and possible travel restrictions of the team in charge of restoring Warsaw to working conditions.

4.3. ESO National telescopes

REM

Cycle 2021A begins on April 1, 2021, and ends on September 30, 2021.
Nights/Hours allocated to CNTAC: 112 hours
Night/Hours offered on this Call: 92 hours
Website: http://www.rem.inaf.it

REM is a 60 cm robotic telescope that can observe simultaneously with a visible and an infrared camera. The observation will be carried out in unmanned, service mode.

Time for REM should be expressed in terms of hours. Also, different hours must be given for the two instruments (REMIR and ROS2, which can be used simultaneously, and this is in fact encouraged to not waste time) and the greater of the two counts as the requested time. Note that at the time of this Call for Proposals REMIR is still not operative from a failure back in April. For the latest update on this please visit www.rem.inaf.it.

Information on the filter pass-bands and the limiting magnitude for both instruments can be found at the REM website under ->Instruments ->REMIR ->ROS2. The ROS2 visible camera is equipped with set of filters Sloan/SDSS g', r', i', z' and is capable of obtaining the 4 images in the 4 different filters at the same time, using dichroic.

Danish Telescope

Cycle 2021A begins on January 1 and ends on June 30
Nights/Hours allocated to CNTAC: 18 nights

Observing time with the Danish 1.54m telescope is offered in 2021A in visitor mode only. Proposal PIs must be aware that there is no technical assistance and no staff to introduce the telescope for new observers during the specified Chilean time slots. Observations can therefore be run only by observers having previous experience with using the telescope.
The observer(s) will need to be approved by the telescope team before going up the mountain. For this purpose, contact Petr Pravec (petr.pravec@asu.cas.cz) and Uffe Jorgensen (uffegj@nbi.dk) well in advance.

The following time slots are offered:
2021 February 22/23 to 2021 March 2/3 (9 nights)
2021 April 5/6 to 2021 April 13/14 (9 nights)

The only instrument available at the Danish telescope during 2021A is a direct imaging 2k x 2k CCD camera with its main sensitivity in the red end of the spectrum and a 13.7' FOV with a pixel size of 0.39", equipped with Johnson-Cousins UBVRI, Stromgren uvby, and g2 filters. H-alpha, OII and OIII filters will be probably available too, but it is not guaranteed.

TAROT

TAROT (Rapid Action Telescope for Transient Objects) is a set of three, very fast moving (1 second), optical robotic telescopes able to observe from the beginning a Gamma Ray Burst (GRB). One is located in Chile (TCH), another in France (TCA) and another (TRE) in La Reunion Island (France Overseas). Satellites detecting GRBs send timely signals to the TAROT network, which in turn is able to give a sub-arc second position to the community. The data from the TAROT telescopes are useful to study the evolution of GRBs, the physics of the fireball and of the surrounding material. The TAROTs are also used for the multimessenger follow-up of the Advanced Virgo and LIGO gravitational observatories, as well as the ANTARES high energy neutrino deep-sea facility. The TAROT network observes also other sources like SNs, RR Lyrae, occultation of solar system bodies, and more generally is adapted to the study of variable/rapid phenomena.

There is the possibility of asking for time on the 3 TAROTs through the CADOR server. Chilean users can use 5% of the total system, an amount larger than 10% on a single system. There is no need to balance the observations between telescopes, the total quota can be spent on TCH only (in that case with a limit of 10%), but if the user wishes, then they can use any of the 3 telescopes.

The scheduling system of TAROT scan requests are in the form of several "scenes", each requiring a set of actual telescope configurations (exposure time, filter, coordinates, eventually time constraints). An interface on CADOR allows the user to build the requests. The TAROT web pages are at http://www.taronet.org.

When a program is approved by the Chilean TAC, a user/password will be sent to the PI, to access the VPN and wiki pages of TAROT. Note that we are planning several changes in the TAROT system.