Chilean Telescope Time Allocation Committee

Semester 2017B Call for Proposals

The Chilean Telescope Time Allocation Committee (CNTAC) invites the Chilean community to submit proposals for observations during the 2017B semester at the following facilities that have signed agreements with Universidad de Chile:

- CTIO: BLANCO, SOAR, SMARTS, PROMPT, SARA, LCOGTN, URAT Astrograph and KASI.
- LCO: Baade, Clay and duPont (only APOGEE).

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:

• EULER, Danish, MPG 2.2m, REM, TAROT and TRAPPIST.

The submission deadline is:

Friday APRIL 14, 2017 (noon, Chilean continental time)

We would like to remind the community that different facilities finish their respective telescope schedules at different times. For example, LCO will have their schedule ready by early June. CTIO (Blanco, SOAR) finalizes their B semester calendar typically by mid-June. The MPG2.2m will probably finish their schedule at some point in August (their term runs from Oct. through March), etc. The CNTAC will make its best effort to communicate the final results as soon as they become available.

1. Policies

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

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.

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 with your respective one if you have been included. The current list can be found at: http://www.sochias.cl/tiempo-de-observacion/lista-blanca 2. **Duration of projects:** The proposals are reviewed by the CNTAC on a semester by semester basis (except for the du Pont, Swope, and Warsaw telescopes which are assigned on a yearly basis).

The CNTAC can give special attention to proposals specifying their longterm nature (more than one semester). In the case of long-term programs it is **required** that the applicants indicate the long-term nature of the program and the total duration. A summary of the need for long-term status is also required (1-page limit). In case long-term status is granted, a status report must be submitted each subsequent semester to inform the TAC of the progress being made. The CNTAC reserves the right to terminate long-term status if progress is deemed insufficient or if the PI fails to send a report.

In addition, special attention will be given to proposals requesting 50% or more of the available time in any semester on the following telescopes: Clay, Baade, Blanco, SOAR and MPG2.2m. These proposals will be considered large-programs. Approved programs will need to submit a work plan (1-page limit) specifying the contributions of all Co-Is and a data management plan and will commit to make their data public after one year (through ChiVO).

A proposal can be both long-term and large. If the proposed project fulfills the criteria for both it must include the additional page justifying the need for long term status and the page describing the Co-I's responsibility and data management plan, as well as the commitment to make the data public after one year.

- 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.
- 4. **Acknowledgments**: Since 2011B the CNTAC is asking PIs to include the identification number of the program in any publication that makes use of data obtained through a CNTAC proposal.
- 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 such nights for the scientific program approved, she/he must immediately communicate the problem to the Chairman of the CNTAC who will reassign such time to another applicant based on the ranking previously established by the CNTAC.

2. Proposal submission

1. **CNTAC form:** Starting in the 2016B semester, the CNTAC has moved to a new web form.

IMPORTANT: Both PIs and Co-Is will need to be registered in the new web system. PIs will need to wait for confirmation of eligibility before being able to submit proposals. You will receive an e-mail with the confirmation.

PLEASE REGISTER NOW RATHER THAN WAITING TO THE LAST MINUTE

As part of this new system, PIs will 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 free-format pdf file that includes:

- Scientific aim and rationale (3 page limit including figures/tables and references).
- A description of the current status of the project including publications (1 page limit).
- Technical description (1 page limit).
- Justification of long-term status if applicable (1 page limit).
- Work plan for large programs, if applicable (1 page limit).

While the format is free, we ask that arial or verdana fonts are used, with font size between 10 and 12 pt. In addition, regular page margins should be used. A complete proposal will then consist of no more than five pages of text (including figures, tables and references), seven for large programs that are also long-term. While the website will accept longer pdf files, the Telescope Assignment Committee will not be under any obligation to read additional text.

Students 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.

The website will be accessible through the CNTAC webpage at: <u>http://www.das.uchile.cl/das_cntac.html</u> or directly though: <u>http://www.cntac.cl</u>

3. General Information

• Questions: Questions regarding the submission process should be sent to rmunoz@das.uchile.cl. Please include the keyword "CNTAC" in the subject of the message.

4. Instrumentation available in the semester 2017B

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

- CTIO (incl. SOAR): http://www.ctio.noao.edu/telescopes/telescopes.html
- CTIO/PROMPT: http://www.physics.unc.edu/~reichart/prompt.html
- CTIO/SARA: Contact person: William Keel (wkeel@bama.ua.edu)
- CTIO/LCOGTN: http://lcogt.net
- LCO : http://www.lco.cl
- Danish Contact person: Uffe Gråe Jørgensen (uffegj@nbi.dk)
- EULER: Contact person: Maxime Marmier (Maxime.Marmier@unige.ch)
- TAROT Contact person: Michel Boer (Michel.Boer@unice.fr)
- REM: http://www.rem.inaf.it. Emilio Molinari
 - (emilio.molinari@inaf.it)
- MPG 2.2m: <u>http://www.eso.org/sci/facilities/lasilla/telescopes/2p2/index.html</u>

Specific guidelines for CNTAC proposals are described in what follows.

4.1 CTIO Facilities

CTIO

The observing period covered at the CTIO telescopes is from August 1, 2017, through Jan 31, 2018

Blanco 4-m Telescope

The Dark Energy Survey (DES) has been granted 102 nights, and the DECam Legacy Survey (DECals) survey 15 nights during 2017B. Between them, these surveys will use the majority of the dark and grey time in the months of September through mid-December, along with the dark and grey second-half nights in August and first-half nights from mid-December through January. As a result the equivalent of 11 nights will be available for allocation by the CNTAC, but these are confined to: (a) first half nights in August of all lunar phases; (b) a total of at most three dark/grey nights during the September to mid-December period; (c) full nights within +/-3 nights of full moon in September October and November; and (c) second half nights of all lunar phases in December and January.

It is anticipated that the majority of nights in 2017B will be scheduled with DECam at prime focus. The f/8 instruments COSMOS and ARCoIRIS will be scheduled during two or three relatively short blocks during bright time. When scheduling these f/8 blocks we will try to satisfy the optimum date range requested in proposals but proposals should be as flexible as possible when specifying these, and equally be sure to clearly and explicitly indicate if scheduling your proposal is time critical.

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

ARCoIRIS Infrared Spectrograph http://www.ctio.noao.edu/noao/content/Arcoiris/

SOAR 4.1-m Telescope

Approximately 16 nights will be available for allocation by the CNTAC. Starting in 2017A there will be a change in the way half nights are scheduled at SOAR. Half nights can still be requested, but nights will not be split between partners. So if the CNTAC allocates a half night to a proposal the other half of the night must be used by another CNTAC proposal.

General information: <u>http://www.ctio.noao.edu/soar/</u>

SOAR is on track to perform aluminization of its primary mirror during semester 2017B. This is a process that takes approximately 6 weeks and would nominally run from late October through early December. A final decision on readiness and on the precise dates will be made prior to completion of the 2017B schedule.

OSIRIS has been retired. For near IR spectroscopy, users should consider ARCoIRIS on Blanco, which offers similar capabilities with better performance. For near IR imaging consider SPARTAN on SOAR.

A second camera for the Goodman spectrograph is now available, which incorporates a deep-depletion e2v CCD with better red performance (but somewhat inferior UV performance). Please see the Goodman page at SOAR, or the SOAR home page, for further details. It is now considered the preferred configuration for anyone who does not worry about UV response. Users are restricted to one camera on a given night, but do not need to commit to a specific camera when writing the proposal. Observers should note that the Goodman red camera may be preferred to SOI for many imaging programs, especially those that rely on observations in the red/near-infrared, where the Goodman detector has much better fringing properties than SOI (or Goodman blue).

The restricted use speckle camera, HRCam, can be proposed for. If the AOassisted mode is desired, please request SAMHR on the proposal form.

Both SIFS and STELES are undergoing commissioning at present so it is not possible to propose for either one. We do anticipate scheduling science verification time for both during 2017B (in addition to possible SV time in 2017A). We will announce any such time on the SOAR home page and by announcements to the community; interested parties can also contact SOAR staff or the instrument teams.

It is likely that another block of SAM Fabry-Perot time will be scheduled in campaign mode, although a final decision will probably not be made until May or early June. This would be handled in a similar way to the time in 2016B and 2017A.

Instruments available:

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

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

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

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

SMARTS

In semester 2017B, approximately 146 hours will be available through the CNTAC on the 1.3-m telescope, which is operated in queue/service mode, and approximately 18 nights will be available on the 0.9-m telescope which is only offered in user mode. Due to funding constraints, the 1.5-m and 1.0-m telescopes will not operate in 2017B. The SMARTS consortium is actively seeking funding to allow resumption of 1.5-m operation.

The 1.3-m telescope is primarily used for monitoring projects, thus programs are scheduled in non-contiguous segments of an hour or less with a limit of three hours total within any given night. The conversion from nights to hours might thus lead to inaccuracies in time requests.

Instruments available: 1.3m - ANDICAM (dual channel optical / IR imager) http://www.ctio.noao.edu/noao/content/andicam

0.9m – CFCCD http://www.ctio.noao.edu/noao/content/SMARTS-09-m-Telescope SOAR Adaptive Module (SAM) http://www.ctio.noao.edu/soar/content/soar-adaptive-optics-module-sam

PROMPT

Please see details at: <u>http://www.physics.unc.edu/~reichart/prompt2.html</u>

The contact person is Dan Reichart, dan.reichart@gmail.com

SARA

Contact: William Keel, wkeel@bama.ua.edu

SARA-South is a remotely-operated 0.6m telescope sited at Cerro Tololo. Its imager uses a Kodak 230-42 chip, giving 0.37" pixels over a 12.5-arcminute field. Thermoelectrically cooled to -110 C, the device has dark current which is negligible for most purposes. Filters are currently SDSS ugriz, Bessel UBVRI, "white-light", and an old set of stepped H-alpha filters about 70 A wide with 6563, 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; so far security requires that Macs use Chicken of the VNC) 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 remoteoperation 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 camera cooling system was defective and awaits a site visit to replace parts. The SARA 2017B will run from July through December.

Note that, as of now, the telescope team is still using a temporary FLI CCD for imaging pending coolant repairs (0.606" pixels, 1024^2).

LCOGTN: The 2017A semester extends until November of this year. On December 1st the telescope will start its 2018A semester, therefore there will not be a 2017B Call for LCOGTN.

KASI:

KMTNet/Chile is a 1.6m telescope with an 18Kx18K CCD Mosaic camera with a 2x2 square degree field of view.

KMTNet/Chile has now been commissioned, and is entering full operations as of Oct 1, 2015. As such, 10% of the observing time will be made available to the Chilean astronomical community. Although the telescope and camera are now working reasonably reliably, the control interface is still under development and not user or multi-program friendly.

The telescope time for 2017B (from 1st Aug 2017 to 31st Jan 2018) is:

OCT 22 - OCT 31 NOV 29 - DEC 08 JAN 05 - JAN 14

URAT Astrograph

Contact: Norbert Zacahrias, norbert.zacharias@usno.navy.mil Charlie Finch, charlie.finch@usno.navy.mil

Now that the URAT Astrograph is operational on Cerro Tololo, we are offering 10% of the time to the Chilean community for astrometric observations. The time will be scheduled in regular blocks of 2-3 nights per month for the 2017B semester, but the exact scheduling will be flexible depending on the proposals and the current astrometric survey parameters.

The URAT telescope is a 5-element astrograph with 200 mm aperture and about 9 degree diameter field of view. The focal plane consists of 4 big CCDs (STA1600 with 10,560 by 10,560 pixels, 9 micron square). The CCDs are arranged in a 2 by 2 pattern with about 1200 arcsec gaps. The scale is 0.905 arcsec/pixel, providing 2.65 by 2.65 deg field of view per CCD, thus a total of 28 sq.deg per exposure. Guiding is done automatically using 3 smaller CCDs mounted at the edge of the focal plane inside the dewar. Guiding is performed only for exposures longer than 30 sec. Focus is followed automatically utilizing the guider image data. Typical FWHM is 1.8 to 2.5 pixel, limited by the combination of diffraction limit of the optics, guiding and seeing.

The bandpass (680 to 760 nm, i.e. between R and I) is fixed due to a filter serving as dewar window. The main purpose of this instrument is astrometry, no photometric capability has been explored yet. On top of the lens a diffraction grating is permanently mounted which will produce grating images of every bright star in the field of view. The 1st order diffraction images are almost round and about 5 mag fainter than the central image. Higher order diffraction images are a bit fainter and getting more elongated with order, overlapping other stars in the field of view.

Standard exposure times are used (with mean dark frames on file) for 5 to 240 sec, reaching about magnitude 18. The typical hour angle for observations is +-0.5 hours. The system currently has a strict hour angle limit of +/-1.5 hours.

Succesful proposals will need to prepare a list of targets (with relatively narrow RA range, and within Dec = -88 to +20 deg) in a fixed text file format. There can be several lists per night and those lists will be summarized on another file for the night. Automatic processing is performed including bias, dark and flat corrections. Output image (per CCD) can be provided of these corrected images in simple FITS format plus observing log data like exposure number, time, RA, Dec pointing, temperatures. Object detection and centroiding is performed with magnitudes derived from Gaussian image profile fits. Those x,y data files and the processed and raw images is all what can be provided. The user will have to reduce the data further, no RA,Dec results or calibrated magnitudes are provided. Sorting out the various diffraction images may be another challenge.

4.2. LCO Facilities

General guidelines:

All observers at Las Campanas are expected to be experienced and selfsufficient.

All observers on LCO telescopes should follow the Observer guidelines described at:

http://www.lco.cl/observer-information/visiting-observer/visiting-observer-guide http://www.lco.cl/observer-information/visiting-observer/guidelines-for-observers

All Magellan observers should read the Magellan Telescopes Observer Guidelines found at:

http://www.lco.cl/lco/observer-information/visiting-observer.

All observers at the Swope and du Pont telescopes should read the Small Telescopes Guidelines found at: <u>http://www.lco.cl/lco/observer-information/visiting-observer</u>.

This proposal round will cover the second semester of 2017 running from July 16 through January 8, 2018 for the Baade and Clay telescopes. This proposal round will also cover external programs on APOGEE on the du Pont telescope in the 2018A semester.

Instrumentation

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

- + Baade: IMACS (including GISMO and MMTF modules), FIRE, FourStar and MagE.
- + Clay f/11: LDSS3 and MIKE. The new CCD for LDSS3 has been commissioned. The new CCD has an extended red response, the performance is described in the paper to be found at

The new CCD has become the default detector for LDSS3. If you are interested in using the old CCD please note this in your proposal.

+ Clay f/11 PFS: PFS will not be available during the 2017B semester to allow for upgrades to the CCD camera and spectrograph optics.

- + Clay f/11 M2FS: M2FS is a multifiber spectrograph with both high (20K < R < 34K) and low (1.5K < R < 2.7K) resolution modes. M2FSS 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 a proposal. M2FS will be scheduled in two blocks, one in September and one in November.</p>
- + Clay f/5: MegaCam. There will be one f/5 run on Clay in 2017B. During the f/5 run none of the other Clay instruments will be available.
- + Clay AO: There will be a single 9-night science run in September, 2017.
- + Clay PISCO: PISCO is a simultaneous griz-band imager, covering a 7.3 by 5.4 arcmin field with 0.11 arcsec/pixel sampling. PISCO is a PI instrument, those interested in using it should contact Tony Stark (aas@cfa.harvard.edu) before submitting a proposal.
- + du Pont APOGEE: The APOGEE survey is scheduled to begin early in 2017. A limited number of nights are planned to be available for external programs beyond the survey. A draft summary of the procedures and technical aspects involved in conducting external APOGEE-2S observing programs is attached to this CfP.

Because of the lead time in preparing the plug plates used in the observations, this proposal round will also cover external program observations for the first semester of 2018 running from July 9, 2018 through July 15, 2018. For technical questions not addressed in this document please contact Kevin Covey at kevin.covey@wwu.edu.

4.3. ESO National telescopes

1. EULER: The instruments on EULER are still the same: the CORALIE highresolution spectrograph in the visible (R=50,000) and a CCD camera. To comply with the operational and safety requirements of the EULER operation (the telescope and instrumentation is operated by the observer himself, without telescope operator, and the documentation is mostly in French), a minimum number of training nights are required for new observers (2-3). Even trained observers are required to arrive on the mountain at least 1 night before the start of her/his observing run. Dr. Andres Jordan (PUC) has developed an automated pipeline for CORALIE (when used in the simultaneous ThAr mode, OBTH) and is offering to reduce the data taken on Chilean time using this pipeline as a service to the community.

Interested researchers please contact him at <u>ajordan@astro.puc.cl</u>. The time allocation for 2017B will be 18 nights.

2. 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. Allocation for the 2017A semester is 112 hours.

- 2.1 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.
- 2.2 Applicants can have a look at the REM web site (<u>www.rem.inaf.it</u>) and follow the ->Instruments ->REMIR ->ROS2 links to have data on the filter pass-bands and the limiting magnitude for both instruments.
- 2.3 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 dichroics.

4. TRAPPIST: TRAPPIST-South is a 60 cm telescope installed in la Silla by Liège University and Geneva Observatory and operated remotely from Belgium. It is exclusively devoted to photometry of exoplanets, comets and other solar system minor bodies. TRAPPIST is equipped with a 2Kx2K CCD camera with pixels of 0.65" and two filter wheels. One is loaded with B,V,R,exoBB,z,I+z filters and a clear slot and the other one with special NASA narrow band cometary filters (Jehin et al.. The ESO Messenger, 145. 2. 2011). Three full nights per month are offered and will be allocated depending on the TRAPPIST observing schedule. If the CNTAC approves a time-critical proposal that needs observation during specific nights, the TRAPPIST team will do its best to accommodate it. Note that due to the time critical and ToO nature of many TRAPPIST programs (that cannot be known 6 months in advance) the allocated nights might be shifted by one or more nights (PI will be informed). Targets brighter than V mag 9 are not allowed as they saturate the detector and minimum exposure time is 10 seconds until a better shutter is installed. With a defocus (of +300 steps or a 5" psf) the mag limits are (exptime of 5 s): B (9.5 mag), V (9.5mag), R (10 mag), ExoBB (11), z (8.5), I+Z (10), Clear (11.5). To avoid mechanical failure the filter wheel cannot be moved at a frequency higher than 1x per 4 minutes for long series. The PI will prepare a sequence of observations by filling in a template that the TRAPPIST team will provide and execute.

More information can be found at:

http://www.trappist.ulg.ac.be/

5. Danish telescope:

Observing time with the Danish 1.54m telescope is offered in 2017B in visitor mode for the September-October nights and in visitor (or possibly service) mode for the October-November and November-December nights. Proposal PIs must be aware that there is no technical assistance and no staff to introduce the telescope for new observers during specified Chilean the time slots. Observations in visitor mode can therefore be run only by observers having previous experience with using the telescope. In the Czech season at the telescope Chilean researchers unfamiliar with the new telescope system, can in exceptional cases get their observations run in service mode remotely. Chilean observers familiar with the new telescope system will have to run their observations themselves in visitor mode onsite. During the Danish season only observations in visitor mode are possible, and only by observers with previous experience with the telescope. The observer(s) will need to be approved by the telescope team before going up the mountain. For this purpose please contact Petr Pravec and Uffe Jorgensen well in advance. It might in some cases be possible to arrange for Chilean observers to attend the last Danish-time observer before the Chilean period, in order to gain or refresh experience with operating the telescope.

During the Danish season the slot offered is: September 25/26 to October 3/4 (9 nights)

During the Czech season in 2017B the following 9 nights are offered to the Chilean community: October 30/31 to October 31/November 1 (2 nights) November 29/30 to December 5/6 (7 nights)

The only instrument available at the Danish telescope during 2017B 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, Gunn z, g2, Hbeta and Halpha-r filters.

6. Max-Planck-Gesellshaft 2.2m telescope: The MPI 2.2m telescope hosts the following instruments: WFI: Wide Field Imager, a focal reducer-type camera at the Cassegrain focus and with a field of view of 34'x33'; FEROS: A state-of-the-art bench-mounted, high-resolution, environmentally controlled, astronomical echelle spectrograph. GROND: An imaging instrument especially built to investigate Gamma-Ray Burst Afterglows and other transients simultaneously in seven filter bands. Several dichroic beam splitters feed light into three NIR channels and four visual channels, each equipped with its own detector. There is no service observing. Proposal PIs must be aware that there is only rudimentary support at the telescope.

7. TAROT: The status of TAROT for 2017B is unclear at the moment.

8. MiniTAO: MiniTAO will not be operational during 2017B.

4.4 Radio Telescopes

1. NANTEN2: The status of NANTEN 2 for 2017B is still unclear.

2. ASTE: ASTE will not be available during 2017B due to instrument commissioning.

Ricardo R. Muñoz on behalf of the CNTAC, March 2017.