

15 September, 2026

Call for McDonald Observing Proposals (HET and Mt. Locke Telescopes) – Trimester 27-1.

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Change Log

v1.0 September 15 Original version.

Call for McDonald Observing Proposals (HET and Mt. Locke Telescopes)

– Trimester 27-1

1. Trimester 2027-1 - Overview

Trimester 27-1 covers the December 1, 2026, through March 31, 2027, observing period for HET and Mt. Locke telescopes.

The proposal ingest opens on 15 September 2026.

Mt Locke telescope proposals are due: 5pm CDT, 30 September 2026.

HET proposals are due: 5pm CDT, 7 October 2026.

These deadlines are **firm**. The proposal submission web sites will close shortly after the stated deadlines. *You may update a submitted proposal any number of times up until the deadline. The last submission will be the one which is reviewed.*

Therefore, do not wait for the last minute to submit your proposal!

Please use new cover sheets for all telescopes. Do not resubmit an old proposal without updating the cover sheets.

1.1 HET (UT PIs only)

Available instruments: [LRS2](#), [HPF](#), and [VIRUS](#).

Anticipated Pr 0 - Pr 3 time is not yet completely certain (including that the Board still needs to decide on engineering time) but UT's total time for Pr 0 - Pr 3 should be ~556 hours (Pr0=46.3, Pr 1=139, Pr2=Pr3=185.3). Again, these are approximate numbers, only.

An important upgrade to the Center of Curvature Alignment System (CCAS) is expected for early in UT26-2, which will require a significant telescope down time.

1.2 Mt. Locke Telescopes

Proposals are invited for the 2.7 m and 2.1 m telescopes. The 0.8 m (and 0.9 m) telescope is out of service for the foreseeable future.

The McDonald Observatory station of **The Monitoring Network Telescopes (MONET)** of the University of Göttingen is expected to be operational by T27-1, with an imaging system. Until the MONET Star and Exoplanet Spectrograph (MOSES) is delivered the telescope and camera will be available for shared risk imaging observation (restricted to UT Austin PIs). See Sec. 4.2.1.

For the 2.7m Harlan J. Smith Telescope, all currently active instruments are available: [DIAFI](#), [George and Cynthia Mitchell Spectrograph \(GCMS\)](#), [VIRUS-W](#), the [Cross-Dispersed Echelle Spectrograph \(TS2; both foci\)](#), and [IGRINS](#).

For the 2.1m Otto Struve Telescope, [ProEM](#), [SQUEAN](#), and eyepieces are available.

Please note that we are planning to retire SQUEAN after the UT27-1 trimester.

The Texas A&M, [Exoplanet Transmission Spectroscopy Imager \(ETSI\)](#); PI: D. DePoy) is also available in collaboration with the instrument PI team.

Note that proposals for IGRINS and ETSI must include an instrument team member as co-I.

For contact information and details about proposing for IGRINS time, see:

<https://sites.google.com/view/igrinsatmcdonald/home>

If you are interested in proposing for ETSI observations, please contact [Prof. DePoy](#).

The HJST optics were re-aluminized in May 2026, but persistent imaging quality issues have been present since. We are planning to address these in T27-1 (most likely, early January), which will take the telescope off-line for approximately a week.

For questions about instruments, policies, etc., send to [me](#) and I will find the person who can answer them.

2. Updates and Highlights

- Observing time on the MONET telescope, in imaging mode, will be available in shared risk mode. This is available for UT Austin PIs only.
- The HETDEX team is requesting permission to use the part of any VIRUS observations that are not the focus of approved UT HET observations. While this request nominally is only needed for VIRUS observations (for other instruments this is assumed), the proposal form requests that you select “yes” or “no” to this request (on page 2 of the HET proposal form) for whichever instrument you propose for.
- The camera for the coudé wavefront sensor was replaced in December 2025. The new camera allows focusing on stars at least as faint as V=12.
- The coudé mirror #5 (M5) system has been replaced. The TS GUI now operates the cover for M5, and selects between the mirrors that feed the TS from either the telescope or the solar port
- The cover for TS echelle grating E2 is now opened and closed from the TS GUI. The cover for E1 is still operated manually.
- The cover for the Pupil Mirror (the 36-inch mirror in the spectrograph) is now opened and closed from the TS GUI.
- Three hardware upgrades are being worked for the Tull Spectrograph will be installed over the next 3-9 months. They are a computerized detector mount at ts21, new calibration system, and a computerized atmospheric dispersion compensator.
- The McDonald Observatory TS23 (“*TSDRP*”) and GCMS/VIRUS-W (“*ANIGEN*”) **data reduction pipelines** are available in β -test format. Please contact Greg Zeimann for details.

- McDonald Observatory now has three “**Remote Observing Assistants**” (ROAs). For trimester 27-1, only the 2.7m telescope is available for remote observing. This mode is limited to UT Austin observing programs only.
- To alleviate formatting issues between BiBTeX and proposal formatting, we have changed the page limits for the proposals to 1 page each for Science Justification and Figures & Tables with “additional pages” for references. Fonts must still be at minimum 11 pt.

3. Proposal writing reminders – especially for new proposers:

- Write your proposal such that it is understandable to non-experts. The TAC members may work in different areas of astronomy than you do.
- Clearly justify your requirements (dark/bright time, Signal-to-noise ratio, spectral resolution, scheduling/timing requirements and accuracy, etc.). Don’t just state requirements without explanation and justification.
- If you are requesting non-standard observing modes, explain why and how these modes are required to reach your science goals, and how you will reduce the data.

Further tips and advice for writing successful proposals can be found at:

[Hints for Writing Successful Observing Proposals](#)

4. Observing Time Requests

The proposal ingest system has a size-limit for the uploaded .pdf files (page 4 of the proposal form) of ~8MB. If the software “kicks you back” to page 1 when you try to upload the science justification (.pdf file) you have likely tried uploading a file that exceeds this size. In most cases this is due to figures with too high resolution (or otherwise too big files)

4.1 HET - University of Texas' share

Proposals for The University of Texas' share on the HET are due on October 7 at 5pm Central Time. **The PI for the proposal MUST be at UT Austin.** We have an electronic submission form, which you MUST use.

There is a question on the current form of whether you can use priority 4 time. If you do not see this question, you are probably editing an old form and MUST start with a new proposal to get this question (and Pr 4 time). We will assume you cannot use Pr 4 time if this is not answered.

As noted above, we have added a question as to whether you allow the HETDEX team to analyze your VIRUS data for observations not targeting the deep field. I.e., for instance, targeted observations of near-by galaxies, where the wider VIRUS field is not a focus of the primary science, or for parallel VIRUS observations taken when using other instruments for the nominal observation. This is nominally already true for non-VIRUS observations, but the question is being asked of all proposers.

The site is password controlled. You can create an account for yourself the first time you use it. If you have forgotten your password, the system can send you a new one. If you encounter problems, send them to [me](#).

The proposal website may be found at:

[HET Proposals start page](#)

You must submit your science justification as pdf. A LaTeX [template](#) and [style](#) files are available at the proposal website (under the “Phase I” pages) or you may use a word processor of your choice. Details of the needed format are given at the web site (p. 4). **If using a different word processor, please put a section heading on each section.**

PAGE LIMITS: You may include 1 page of science justification, and 1 page for figures and tables and additional pages for references.

For HET proposals continuing, or extending, approved Long-Term Programs, or programs that have been awarded more than 100 h total, **one extra page** – for description of the scientific progress of the program – is allowed. **This should not be used for additional justification for the current proposal.**

Use minimum 11pt. fonts, and 1" margins on all sides. The references and figure captions must obey the same minimum font size as the text. You will need to include an Object Table and an Exposure Table but NO setup table because there are no user-definable options. Put into the text or a note in the exposure table whether you want LRS2-B or LRS2-R if asking for LRS2.

You must check the availability of tracks using the feasibility tool at <https://hydra.as.utexas.edu/hetweb/ProgramPrep/hetdexcalendar.html>. Be sure to choose "No_HETDEX" when you run this tool. You are required to put in the text something more informative than "I have enough tracks". If you have a large number of objects scattered over RA, you may include a statement to that effect. In such cases, for the benefit of the TAC and review process, please include an *example target* discussing track availability. If you have few objects, you must run the tool with your required conditions and indicate the number of available tracks for each target in your proposal. Note that the number you want is the number in the ****(GREEN)**** line, after all conditions have been applied, not the total possibly available in any condition. Be sure to use the availability tool listed above and not any other you might find. If you need 10 tracks and there are 10 available, the TAC may deem that insufficient as there are other users who may require the same time of night. Simply wanting to complete your observations in “this trimester” is usually not a very strong argument for requesting all, or almost all, available tracks.

Note that there is no such thing as “gray time” on the HET. Since observations are scheduled individually, the Moon is either up or not.

Note that a bug has been reported in the Track Calculator, such that for some coordinates the track-length is incorrectly shortened. If the reported track length seems unreasonably short, change your coordinates by a few arcmin to see if the results change. A list of nominal track

lengths, as a function of Declination, is available at <https://hydra.as.utexas.edu/?a=help&h=20>.
If you encounter this issue, please contact us for further assistance.

Note that HET Phase II inputs will be due one week before the start of the trimester.

4.2 Mt. Locke Telescopes

All proposals, except for MONET observing time, are to be submitted using the on-line web submission form, located at:

[Mt. Locke Proposals start page](#)

(The same place as for the HET proposals; it is similar to but not the same as the HET form).
Proposals are due September 31 at 5pm (CDT).

As for HET you may create your own account if it does not already exist (it is a different program than for HET, so needs its own account, though they may be the same).

Note that IGRINS proposals must include a member of the instrument team, or an experienced observer listed on the IGRINS webpage. (<https://sites.google.com/view/igrinsatmcdonald/home>)
Similarly, ETSI proposals must include an instrument team member. Please contact Prof. D. DePoy (depoy@tamu.edu) for suggestions.

The Mt. Locke cover sheets asks whether your time can be split to more than 1 run. ***The default is that you CAN accept a split run for any telescope time.*** Please provide clear information about any observing cadence needed for your observations (such as “Two nights every two weeks, or one long run”).

In the web form, some of the routine items are menu selectable. The long text portions (e.g. Scientific Justification) should be uploaded in PDF format. You may prepare them in any text processor you wish, as long as you upload a pdf. A very simple [LaTeX template](#) (different than the HET one) is available. It does not require a .sty file to compile. You may upload the text sections either as a single document or as a separate document for each section. **Please put a section heading on each section.**

PAGE LIMITS AND FONTS: As for HET proposals, your scientific justification can be 1 page of text with 1 page for figures/tables. Additional pages are allowed for references. Use minimum 11pt. fonts, and 1" margins on all sides. The references and figure captions must obey the same minimum font size as the text. Note that the TAC takes a dim view of people who ignore the margins and font rules.

CONSTRAINTS: Please be clear and as flexible as possible with your dates and moon constraints. The more flexible you are, the more likely I will be able to schedule you for some time! **Please do not bury your constraints in the text** - make sure there is something to flag them on the cover page. Use the preferred months field, for example.

FOR REQUESTING PARTIAL NIGHTS: If you are requesting partial nights, put the actual sum of partial nights in the "nights requested" box (e.g. for 3 half nights the sum is 1.5 nights - do NOT put 3x0.5). Do put something like "3x0.5 nights" in the "Preferred Months" box. If you ask for 1/2 nights, the form will request which half is needed. Be creative with this, e.g. "second half in April, May or first half in June, July."

4.2.1. Imaging Observations with the MONET-N Telescope

The McDonald Observatory unit of the "Monitoring Network Telescopes" of the University of Göttingen is expected to be operational during UT27-1. Until the "MONET Star and Exoplanet Spectrograph" (MOSES) is delivered the telescope and camera will be available for shared risk imaging observation (restricted to UT Austin PIs).

The Instrument specifics are as follows:

- Camera: FLI Kepler KL4040 BI. Back-illuminated CMOS, GPixel GSense4040BSI
- 4096×4096, 9µm pixels. Plate scale 0.221"/pixel
- FOV 15.1×15.1 arcmin
- Full well: 39,000 e⁻, peak QE ~90%
- Read noise: 2.3 e⁻. Dark current: 0.4 e⁻/pixel/s @ -10°C
- Filters: Sloan g', r', i', and clear (single wheel).

Observations will be executed robotically via the MONET queue observing software (to which successful PIs will be given access).

Because this is a temporary option, and the operational details have not been fully established, the MONET time is not included in the general proposal system. To request such observation, please provide a brief science justification and target description/list, as well as the requested observation characteristics (S/N, filter requirements, etc.), number of observations, cadence and other pertinent information. Send these to bgandersson@austin.utexas.edu with a subject line "MONET time request".

4.2.2. Engineering Time Requests (Mt. Locke)

Engineering time requests for the upcoming trimester should be sent to [me](#), by the proposal deadline (If discussed earlier than one month before the deadline, please send me a reminder).

4.2.3. Remote and Service Observing (Mt. Locke)

Remote observing is restricted to proposals with UT PIs, and currently only for the 2.7m telescope. Requests for remote observing must be made on the cover sheets. Approval is not guaranteed and will depend on availability of remote observing assistants. **New users of all telescopes are required to observe in person at McDonald, including going out for at least 2 nights of apprenticeship with an experienced observer.**

4.2.4. Data Reduction Pipelines

Pipeline software for the HJST spectrographs are in final development and available in β -test versions (see: <https://mcdonald.utexas.edu/observing/pipelines>)

Proposers are encouraged to take advantage of these developments. To ensure compatibility of the acquired observations with the requirements of the pipelines, please discuss your set-up and observing methods/procedures with Greg Z.

These pipelines are provided as a service to users. Use of these pipelines is **not** required.

These beta releases are a crucial step in refining the pipelines to meet the community's requirements. We invite you to explore TSDRP & ANTIGEN, test their capabilities, and provide feedback. Your insights will be invaluable as we work towards the full releases. Please address questions, and communicate any issue to Greg Zeimann (gregz@astro.as.utexas.edu)

Information about all McDonald Observatory data reduction pipelines can be found at <https://mcdonald.utexas.edu/observing/pipelines>.

4.2.4.1. TSDRP (Tull Spectrograph)

The β -testing release of the **Tull Spectrograph Data Reduction Pipeline (“TSDRP”)**, is now available on GitHub: <https://github.com/grzeimann/TSDRP>.

TSDRP is specifically designed to process spectral data from the Tull Coudé Echelle Spectrograph (specifically in the TS23 setup). It offers a single script (one line command) to streamline and automate data reduction for the instrument.

Key Features:

- **Flat-Field Correction:** Corrects for pixel-to-pixel sensitivity variations.
- **Wavelength Calibration:** Provides precise calibration (air)
- **Cosmic Ray Rejection:** Identifies and removes cosmic ray artifacts.
- **Spectral Extraction:** Extracts spectral orders from the 2D frame.
- **Full Aperture Extraction:** Allows for comprehensive data analysis across the entire aperture.

The pipeline processes one night of data at a time, organizing both the reduction products and the associated calibration files.

4.2.4.2. Antigen (GCMS and VIRUS-W)

The pipeline for the GCMS & VIRUS-W instruments (“*ANTIGEN*”) is also available in β -test form in collaboration with Greg Zeimann and Maya Debski.

4.3. LONG-TERM STATUS:

Long-term status can be conferred on projects for periods of 1 year for Mt. Locke and HET. Only UTled proposals are eligible for long-term status. Only a fraction of the telescope time will be

allocated for long-term projects (probably no more than 25% of the time). Simply needing a large allocation is not generally a justification. The TAC is looking for a reason such as the science requiring multiple epochs, or direct comparison of targets only available in consecutive trimesters. **With such reasons and justifications, Long-term status requests are strongly encouraged.**

Generally, the TAC does not approve long-term status on the first trimester of a new program - they would like some proof-of-concept. The web forms have a place to upload the request for long-term status and it must be submitted as part of your normal proposal. Note that this extra page is ONLY FOR JUSTIFICATION OF THE NEED FOR LONG-TERM STATUS. The request must indicate why your project needs long-term status, what milestones you expect to achieve by the end of the 1 year period and details of the numbers of nights/hours you need in the current and following two trimesters. Only 1 page is allowed.

ON THE COVER PAGE, for number of nights/hours requested, put the request for the CURRENT trimester. For Mt. Locke it will ask your needs for the rest of the year, once long term is checked. For HET, put your requirements, by priority, in the extra 1 page of text (instructions in the upload information).

5. Las Cumbres Observatory Global Telescope, University of Texas at Austin, Time

This section is included in this Call for Proposals for visibility. You cannot propose for LCO time through the McDonald 27-1 call. A separate CfP will be issued later this summer for LCO time.

McDonald observatory hosts one of the nodes of the [Las Cumbres Observatory Global Telescope](#) (LCOGT), and therefore receives telescope time on the global network (currently 400 hours for 1m and 450 hours for 0.4m per 6-month semester).

The PI for proposals for this time MUST be at UT Austin. UT researchers can also participate in the LCOGT key projects.

UT scientists are also entitled to join [existing or proposed key projects](#) to which they are able to contribute. UT scientists are also eligible to propose to form or to lead new LCOGT key projects (solicited directly by the LCOGT).

LCOGT nodes exist at McDonald (two 1-m and one 0.4m telescopes currently), Cerro Tololo, South African Astronomical Observatory, Siding Springs, Tiede (Teneriffe), Haleakala, and two sites in Israel (see <https://lco.global/observatory/sites/>). Time is allocated globally, and you cannot request a specific telescope.

The main instrumentation available is:

- The [QHY 600 CMOS](#) cameras on the 0.4m telescopes, and
- The [Sinistro](#) camera on the 1m telescopes, both with a wide range of available filters.

Proposals for the McDonald Observatory share of LCOGT time are solicited through a separate Call for Proposals twice a year – because of the semester cadence of LCOGT observing. The LCOGT semesters span February 1 – July 31 and August 1 – January 31. Proposals for the McDonald Observatory LCOGT time are due Mid-January and Mid-July.

6. SUMMARY

The upcoming Mt. Locke and HET trimester will cover the 1 December, 2026 through 31 March, 2027 period. Proposal deadlines are

Mt Locke proposals:

Web submission by 5pm central time on 30 September, 2026.

HET proposals:

Web submission by 5pm central time on 7 October, 2026.

These deadlines are FIRM and the proposal ingest will close shortly after the stated deadline.

HET and Mt. Locke proposals will not be accepted via e-mail, and you do not need to submit any hard copies.

If you have problems with the web submission system, send email to:

bgandersson@austin.utexas.edu

Updated Mt. Locke Operations Schedules are available at: <https://mcdonald.utexas.edu/for-researchers/observer-tools/observing-schedules>