JPL

PALOMAR 200-INCH TELESCOPE

DATE: **March 5, 2026**
TO: **JPL and IPAC Staff**
FROM: **Jason Rhodes & Eric Mamajek, on behalf of JPL Palomar Advisory Committee (JPAC)**
SUBJECT: **JPL/IPAC Palomar 200-inch Observing Time Proposals for semester 2026B, covering the period 1 August 2026 – 31 January 2027 inclusive.**

Proposals for 200-inch observing time in the second semester of 2026 should be submitted to the JPL Palomar Advisory Committee (JPAC) by **4:00 PM PDT, Monday, April 6th, 2026**

This solicitation includes instructions for filling out the on-line cover sheet and submitting your Palomar proposal, as well as guidelines for proposal preparation and advice about time requests.

Two important **NEW** changes this semester are the Target-of-Opportunity (TOO) option and a new proposal submission website.

For one-stop shopping and easy access to all the documents cited below, see our JPAC web site:
http://palomar.ipac.caltech.edu

All proposals for JPL Palomar time must be submitted via the NEW proposal web site:
https://cosmos.ipac.caltech.edu/jpac/proposal.php

To submit a proposal, you **must** fill in basic information on the **Caltech coversheet** and attach it to your **scientific justification** PDF format. The Caltech P200 coversheet for 2026B can be found at:
https://sites.astro.caltech.edu/observatories/coo/solicit/2026B/C200.html

Date-specific projects must also submit a completed **date-specific supplement worksheet** found at:
https://sites.astro.caltech.edu/observatories/coo/solicit/2026B/DS.html

A list of available instruments and links to performance and operational information is available on the Palomar observers website:
http://sites.astro.caltech.edu/palomar/observer/P200observers.html#instruments

Please review the procedures for the use of private and semi-private instruments on this site, if you are requesting to use such an instrument.

NGPS: The Next Generation Palomar Spectrograph (NGPS) is operating in provisional four-channel status for 2026A. Pending facility review around April 2026 we expect NGPS to be in full facility status for 2026B.

Several instruments, including **PHARO** and **PARVI**, are intended for or limited to use in tandem with the high-performance **Palomar Adaptive Optics** system, sometimes called **P3K**.

Table 1. Key PARVI Parameters	
Wavelength Range	1.1-1.8 μm
Spectral Resolution	R~90,100 (1.65 μm/λ)
Angular Resolution (1.2λ/D)	~0.82 × (λ/1.65 μm) arcsec
Entrance Solid Angle (for extended sources)	~0.022× (λ/1.65 μm)^2 arcsec^2
Fibers	Star, Sky, LFC, spare
Point Source Sensitivity (SNR/pixel)	>25 in 600 sec H=8 mag depending on seeing
Contact info: Gautam Vasisht (gautam.vasisht@jpl.nasa.gov), Chas Beichman (chas@ipac.caltech.edu), Dimitri Mawet (dmawet@astro.caltech.edu) and Rebecca Oppenheimer (bro@amnh.org)	

PARVI is a high spectral resolving power (R~90,000), near infrared (1.1-1.8 um) spectrometer. More information about PARVI is available from https://ui.adsabs.harvard.edu/abs/2023JATIS...9c8006C/abstract Please contact Gautam Vasisht (gautam.vasisht@jpl.nasa.gov) or Chas Beichman (chas@ipac.caltech.edu) if you would like to use PARVI.

Further Instructions:

Eligibility for JPL 200-inch time. All staff members of JPL and IPAC are eligible to be PIs on proposals submitted in response to this solicitation. The PI is expected to be present at the telescope - or remotely - for the full duration of any time allocated. Postdocs may apply as PI, but the proposal must be accompanied by a letter from the JPL advisor describing the qualifications of the postdoc as a Palomar PI. For semester 2026B proposals, please send this letter to Eric Mamajek (eric.mamajek@jpl.nasa.gov) and Jason Rhodes (jason.d.rhodes@jpl.nasa.gov) and it must arrive by the proposal deadline. JPL observing time does not come with funding for any aspect of the program.

JPL Engineering time: A limited number of JPL engineering nights will be available to JPL scientists and technologists. No more than 2 engineering nights will be awarded to any PI (or team). This time can be used to test new instruments or observing techniques on the Hale Telescope but requires the agreement of the Observatory Director. If you wish to apply for this time, please contact Eric Mamajek (eric.mamajek@jpl.nasa.gov), Jason Rhodes (jason.d.rhodes@jpl.nasa.gov) one week before the deadline. A full proposal for this time must also be submitted on or before the deadline. In this proposal, the PI must make it clear that the request is for JPL engineering time, indicate what support might be required from the Palomar staff, and whether or not the engineering nights need to be scheduled contiguously with night(s) for which a science proposal is also submitted. You should also briefly describe the science which will be enabled by the engineering activities.

Target-of-Opportunity (TOO) Programs (*NEW for 2026B*): This is a new type of proposal now available to JPL and IPAC proposers starting 2026B. The observatory is now operating with a cross-constituency Target-of-Opportunity (TOO) program between Caltech and JPL. At the time of this writing (Feb 2026) other constituencies are not participating in this program.

Multi-Semester Projects: We have two options which facilitate continuity and access to the telescope for large, multi-semester projects:

JPAC Call for Palomar Proposals for 2026B. Proposals due April 6, 2026.

- **Large Projects** will use the 200-inch telescope to attack problems that would be difficult to engage within the constraints of semi-annual allocations. Large Projects should require four or more nights of observing time per semester, or 10 or more nights of observing time per year. Accepted Large Projects will be allocated time for two semesters, with the possibility of renewal.

- **Strategic Projects** could receive an award of observing time for three or four semesters. Criteria that define a strategic project are included as Appendix A to this Call. There is no a priori upper or lower limits to the nights/semester which could be proposed for a Strategic Project.

A completed ***cover sheet*** and a ***comprehensive 1-page status report*** must be submitted during the open call for proposals for the second semester of an approved Large Project, and for the second and subsequent semesters of a Strategic Project. Proposers of Large and Strategic Projects must follow the same application process as other proposers, with the exception that an additional page of scientific justification (a total of up to 3 pages, maximum) may be used, and the request for Large or Strategic project status must be justified. In addition, the Scientific Justification for the original Large or Strategic Project must be appended to any renewal proposals. Please include "**Large**" or "**Strategic**" in the title of your proposal. Large and Strategic Project proposals will be evaluated by the JPAC simultaneously with standard proposals. There is *no* a priori allocation of time to Large or Strategic Projects.

Access to the Mountain: All JPL-designated observers are eligible to make their observations from the Palomar site or by remote participation. For additional information, see **P200 Observer Information**. Cognizant Hale Telescope Observers must now define their observing location(s) through the reservation/green sheet system. Please see **this announcement** for more information.

Palomar Newsletter. Under the editorship of Lin Yan, COO has initiated an electronic newsletter to be made available containing information of interest to users of the 200-inch telescope. The issues published to date can be found at **http://sites.astro.caltech.edu/palomar/observer/newsletter.html** and presents interesting information relevant to the 200-inch.

User Support: Within the JPL/IPAC community we have colleagues who are intimately familiar with the instruments available at Palomar. They will be able to help you with your proposal and/or data analysis if necessary. Please feel free to contact Eric Mamajek (eric.mamajek@jpl.nasa.gov) who can refer you to the relevant user[s].

PROPOSAL INSTRUCTIONS

The Cover Sheet: All observers must fill out the Caltech on-line cover sheet [see page 1]. Fill out the form, save it in PDF format, and then upload this file, together with your science justification, via the JPL on-line proposal submission website. The target list should be part of your scientific justification.

When filling out the Caltech coversheet, please take care to:

- List the relative priority in case you submit more than one proposal.
- Enter the number of nights requested in the appropriate column. Indicate your preferred run or runs with a "**P"**, and acceptable runs with an "**A"**, regardless of type (light or dark). For maximum flexibility in scheduling, it is important to know all the times you can observe.[1]
- Fill in the instrument you wish to use. An up to date listing of all 200-inch instrumentation is available at **http://sites.astro.caltech.edu/palomar/observer/P200observers.html#instruments**. Private and semi-private instruments may be requested only with the prior approval of the instrument builder.

Please include in the discussion a confirmation that appropriate arrangements have been made. If you list "Own Equipment," identify the instrument in the proposal abstract.

Important Notes:

If you wish to use more than one instrument in the course of the project, use a separate line for each instrument. At the 200-inch telescope, you may request instruments to be installed simultaneously at the prime focus and the Cassegrain focus but you must fully justify the request in your proposal. Secondary instruments should be requested only if they are integral to the program and if there is a very high probability that they will be used during the observing run.

The system of P's and A's to designate preferred and acceptable runs (respectively), intended to take the guess-work out of scheduling, rests on two conditions: First, observers need to be as generous as possible in designating acceptable runs, since overly-constrictive selections make scheduling difficult and, in extreme cases, may even preclude the assignment of observing time to the project. A good approach would be to tag any observing run as Acceptable if the data can be obtained during that period. **Second, the scheduler will NOT assign observing time in a run that has not been tagged by the observer with a P or an A**. Should circumstances obtain that such assignment might be needed, the scheduler will discuss the situation with the observer before any exception to the rule is applied. *Putting all the P's and A's on a single line means you want the time scheduled in a single block, if possible*. *If you want the time distributed into two or more blocks, use a separate line for each block*.

Check the box provided on the cover sheet if scheduling constraints apply to the request. Give the specifics in the proposal abstract and in the body of the proposal. **Following this instruction is particularly important now that more and more programs are requesting specific nights in order to study exoplanet transits and eclipses. You should be filling out a separate form detailing your timing requirements [see below].**

Observers may request **full** or **half nights** for Hale/P200. Observers should be advised that it may not always be possible to schedule partial night allocations.

Remote Observing: CWI, WASP, WIRC, CHIMERA, P3K/PHARO and TripleSpec may be operated by remote observing, eliminating the need for and cost of travel to Palomar. For CWI observations, the observatory recommends that teams using CWI have at least one person present at the observatory during their nights. **For more information about remote observing see:**
https://sites.astro.caltech.edu/observatories/coo/rof/asObserving.html#palomar

COO requires a one-month in advance request for remote observing at the 200" , which can be done from home or from remote observing facilities in Cahill. The information about submitting a request is found at the above URL. We encourage JPL/IPAC usage of this capability because it compensates for lack of travel funding.

Scientific Justification, Target List and Summary of Previous Allocations

The scientific justification should include:

A short description of the project (2 pages maximum, 3 pages maximum for Large or Strategic Projects), including your science goals, methodology, and the appropriateness of the Palomar 200-inch telescope. If this is an ongoing project, describe what has been done. If the project will require time beyond the current semester, describe how much observing time will be needed to complete the work, or request strategic project status if appropriate. Remember to **give the big picture (e.g., the total scope of the project, what will be done at Palomar vs. what will be done with other facilities, who will do the work, etc.)**. Remember, not all members of the TAC will be experts in your field, so make sure you explain the significance of your research to a broader audience.

- A detailed **estimate of the time required** for the observations. No standard format can be specified for this, as it will vary from program to program. Obvious factors to take into account are the brightness of your objects, the signal-to-noise ratio required, instrumental characteristics, potential systematic errors and how you will deal with them, and assumptions about sky brightness (i.e., phase of the moon). Be as specific as you can.

- Up to **two pages** of figures, tables, and references supplementary to the written discussion. We strongly prefer *legible* figures which can be read by the JPAC and used to publicize the results of our work at Palomar.

- Up to an **additional half page** responding to the JPAC comments from previous proposals, if appropriate. Be sure to summarize the comment when giving your response.

- **A list of objects to be observed**, including name, coordinates, and approximate magnitude (specify band). In case objects will be selected from large samples, it is not necessary to list all the objects; however, make sure that in the text discussion the sample and its size are well-defined, and the selection criteria and the number of objects to be observed are specified clearly. The list is outside of the page requirements given above.

- Any **scheduling constraints** that may apply. *If you are proposing observations which must be scheduled at specific times* [e.g., occultations, transits, critical phase coverage of a binary, etc.], *check the Date-Specific box on the proposal cover sheet* and justify the date specified. For the 200-inch, download the Date-Specific supplement to the proposal **https://sites.astro.caltech.edu/research/coo/solicit/2026B/DS.html ,** fill in the required information, and include it in your proposal as an addendum to the cover sheet.
  Date-specific projects require completed date-specific worksheets, and will not be reviewed without them.

- If there are dates when you cannot observe, or if the observation must be made within a window of a couple of days, again check the Date-Specific box and explain and justify the need for the specificity in the proposal text.

- **Target of Opportunity Interrupt Protection Justification (*NEW for 2026B*):** as part of the new TOO agreement with Caltech, there will be limited protection from TOO trigger interruptions for awarded proposals. Proposers that seek "uninterruptable" status for some or all of their proposed observations should make and justify that request in this section. There will be a very high bar set for TOO interrupt protection.

On a separate page, if needed, please describe the results from 200-inch observing time allocated to you over the past two years, a brief summary of the state of analysis of those data, and provide an updated list of publications – including conference proceedings, abstracts, and submitted papers – from 2022 to date based solely or in part on your Palomar observations. We expect that P200 observers will publish their results in a timely fashion, as data in a desk drawer is no use to anybody. **It is particularly important that you provide this publication information, not only in support of your proposal, but in support of JPL's current and future investment in the 200-inch.**

Target of Opportunity (TOO) Programs

Besides the previously stated items In the scientific justification for TOO proposals, it should also include:
1) TOO Trigger Criteria,
2) the estimated number of events in the proposal semester (with basis for estimate), and
3) justification for exposure time(s).

Shared-Risk Observing

Shared Risk Observing is a transitional phase between the final engineering tests of a new instrument and its use for general observing. This scheduling plan has the twofold goals of (a) allowing researchers to use the instrument to acquire scientific data for their programs and (b) allowing the instrument builders to check its performance in an operational environment. Observers using an instrument on a Shared Risk basis do so with the understanding that the builders may be present during the run and may need to:

- interrupt the science observing to adjust or modify the instrument,
- perform on-sky test measurements,
- obtain copies of the observer's data to evaluate its performance.

Publications and Acknowledgement

Again, we strongly encourage Palomar users to publish their results in a timely fashion and expect a report on publication status as part of the proposal submission [above]. **Please send copies or arXiv/ADS links and bibliographic information to Eric Mamajek [mamajek@jpl.nasa.gov] for any such publications.** Publications based wholly or in part on data obtained at the 200" telescope **must** include an acknowledgment in the following form:

"*Based on observations obtained at the Hale Telescope, Palomar Observatory, as part of a collaborative agreement between the Caltech Optical Observatories and the Jet Propulsion Laboratory [operated by Caltech for NASA]*."

APPENDIX A: Characteristics of Strategic Projects:

For present purposes, a strategic program is one that furthers the programmatic and strategic objectives of JPL/IPAC and has larger goals that go beyond the science of the program. A strategic program need not be one that utilizes a large amount of observing time. Examples of strategic programs include [but are not limited to]: Exoplanet observations supporting our utilization of JWST and/or Roman Coronagraph Instrument and other exoplanet missions; checkout/demonstration of a particularly promising technology or a new instrument (which need not have been developed under the Palomar instrumentation fund); feasibility demonstrations through trial observations of a concept for a space mission; observations that support a planned, operating, or past JPL mission by observations of a solar system target, by following up on new results, or by selecting targets for study. The intent of this program is to assure access to the 200" for up to two years, so that the program can be planned and executed efficiently and with some guarantee of success. If in doubt, discuss your plans for a Strategic Project with Eric and/or Jason well in advance of the submission deadline.

Thank you very much, and good luck with your proposal! Feel free to contact Eric Mamajek (eric.mamajek@jpl.nasa.gov) and Jason Rhodes (jason.d.rhodes@jpl.nasa.gov) if you have questions about this solicitation.