



GEMINI BOARD MEETING
9 NOVEMBER, 11-13, 2020 VIA ZOOM
RESOLUTIONS

Resolutions Arising from the 09 November and 11-13 November 2020 Gemini Board Meeting

Introduction

The Board met via videoconference on 09 November and 11-13 November 2020. The Observatory staff is commended for the flawless organization and running of the meeting; the Board felt that it could effectively and efficiently carry out its tasks and enjoyed the stimulating discussions with the Observatory staff, despite the difficult circumstances.

The Board acknowledges the continued high level of performance and professionalism of the Gemini staff during the ongoing difficult situations in both Hawai'i and Chile. The Board thanks the Gemini leadership for their responsible decision-making and attention to the safety of staff and the security of each facility during the COVID-19 pandemic, appreciates the Observatory's effective internal and external communications, and applauds the staff for working together as an organization.

The Board would like to take this opportunity to thank Dr. Marcin Sawicki for his service to the Board. The Board welcomes Dr. Sarah Gallagher as a new member representing Canada.

The Board Resolutions below are for public release. In addition, the Board approved a number of Actions directed to Gemini's Executive Agency, the Board, and its subcommittees.

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2020.B.4. The Board welcomes the continued operations at Gemini North and the start of operations at Gemini South. The Board commends the Observatory leadership for ensuring that all safety protocols are in place, and the Observatory staff for their commitment and resilience.

2020.B.5. STAC Membership. The Board welcomes new STAC member Dr. Ashley Villar representing the US. The Board thanks Dr. Henri Plana for agreeing to serve as the STAC's Deputy Chair.

2020.B.6. STAC Report and Recommendations. The Board thanks the STAC for providing a detailed report from its 09-10 November 2020 meeting. The Board endorses the recommendations contained in that report, with one revision as noted in 2020.B.6a.

2020.B.6a. The Board endorses the following development priorities, in decreasing order: GNAO+GIRMOS, SCORPIO, GHOST, IGRINS-2, GPI2, GLAO/ASM Feasibility, GNIRS Controller, GeMS Improvements, IUP. The Board notes that these priorities differ from those endorsed by the STAC in that GIRMOS is treated as an integral part of GNAO and given top priority. This follows the recommendation (see Resolution 2020.B.9) that GNAO development proceed as a GLAO correction for GIRMOS.

2020.B.6b. The Board approves the STAC recommended science time goals for semester 2021B of 85% on Gemini South and of 84% on Gemini North, and the adjustment of science time for semester 2021A to 89% for Gemini South and 96% for Gemini North.



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2020.B.7. Progress towards Gemini's Strategic Plan. The Board heard a report from the Gemini Director detailing progress made in the period 2016-2020 towards fulfilling the goals of Gemini's Strategic Plan. The Board commends the Observatory for the impressive number of initiatives undertaken in the past four years, and is fully satisfied that the Observatory has made significant and critical progress towards meeting the goals highlighted in the plan.

2020.B.8. NOIRLab Strategic Vision and Plan. The Board wishes to thank the NOIRLab Director for including two Board members in the discussion and drafting of NOIRLab's Strategic Vision, and complements NOIRLab on a beautifully presented and inspiring document. Following this very constructive partnership, the Board wishes to extend an offer to help NOIRLab in the development of the Strategic Plan that will enable its Vision to come to life.

2020.B.9. GNAO. The Board endorses the proposed rescope of GNAO into a ground-layer correction for GIRMOS ("Path 2"). The Board is open to a future transfer of a portion of the unallocated O&M carryover to the Instrument Development Fund (IDF) to support the development of GNAO, and to the additional use of a portion of the unallocated IDF funds for the same purpose. The exact amounts to be allocated (from both O&M and IDF) will be decided by future Board resolutions that will take into account funding needs in other critical areas, including Obsolescence and current/future instrumentation. At present, the Board is working with the budget as presented during its November meeting, although the exact allocation will be contingent on further revisions following GNAO Conceptual Design Review and Preliminary Design Review. The Board notes that in accordance with Board Resolution 2012.A.3, the amount of O&M carryover cannot decrease below what is needed to sustain operations for a 45-day period.

The Board further acknowledges the exciting scientific potential and broad applicability of an Adaptive Secondary Mirror (ASM). The Board is fully supportive of the ASM Feasibility Study being carried out by the Observatory and, contingent to availability of resources (both personnel and funds), of a future Conceptual Design study either to be carried out in-house or contracted to an outside source. Assuming successful Feasibility and Conceptual Design studies, addressing the budget shortfall for GIRMOS, SCORPIO, and GNAO is a necessary (but not sufficient) condition to proceed with ASM procurement (for an estimated \$6.9M starting no sooner than 2023). If the efforts can be spared, the Observatory is encouraged to explore extramural sources of funding that could (directly or indirectly) enable accelerating ASM development.

Finally, the Board is fully supportive of the Observatory's plan to hire/appoint an AO lead to oversee and lead a coordinated development of all AO-related activities at Gemini, including GNAO and ASM.

2020.B.10. Gemini's commitment to GIRMOS. Recognizing GIRMOS' scientific potential as well as the instrument's critical importance for the success of the GNAO project, the Board approves a total allocation of \$5.1M of IDF funds for GIRMOS development/construction. Of the allocation, \$4.8M is to be used to cover the funding gap to construct the proposed new baseline instrument (descoped from the original design to include two IFUs and an engineering grade imaging camera with a smaller set of filters), and \$0.3M is to be used to populate two additional IFUs with optics. The Board supports the STAC prioritization to restore the original scope for GIRMOS. If alternative sources of funds cannot be secured, and pending review of the IDF budget (see Action B.3) the Board is open to a request to allocate additional



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IDF funds (currently estimated to be of order \$1.1M) to restore GIRMOS' original four IFU design. As a second priority, and pending review of the impact on science of using the existing engineering detector (see Action B.1), the Board will consider a further allocation (currently estimated to be of order \$1.4M) to purchase and install a science-grade imaging detector and full set of filters.

2020.B.11. IGRINS-2 Detectors. It is the Board's understanding that NSF will reimburse the Observatory for the cost of the IGRINS-2 detectors. The funds will be deposited into the IDF, are in addition to NSF's annual IDF contributions, and will not impact the Participants' shares.

2020.B.12. GPI-2 Compensatory Time. The Board endorses the Observatory's request to defer to a later date any provisions about compensatory time for the GPI-2 team. Any compensatory time will be granted separately from the GPI-2 upgrade MoU, following a future Board resolution. The Board acknowledges the constructive discussions that have already taken place between the Board, the STAC, and the Observatory, as well as between the Observatory and the GPI-2 team.

2020.B.13. Publication Impact. The Board notes that there are several reasons why observing programs might not lead to publications, including incompleteness of datasets, lack of complementary datasets for joint proposals (double jeopardy), null results from exploratory programs, and difficulties in reducing data. The Board recommends reducing barriers to the use of archival data as a possible way to increase the number of publications arising from Gemini observations. To that end, the Board supports the following activities:

- Continued development of DRAGONS to streamline the data reduction process, with the eventual goal of including fully reduced, calibrated, and usable data in the archive.
- Provide a mechanism and platform for PIs to contribute (on a voluntary basis) to the Gemini Archive reduced and derived data products (or a link to them if hosted externally in another viable archive). The Board notes that LLPs are already required to provide reduced data products: <https://www.gemini.edu/observing/phase-i/llp#Requirements>. This would leverage the existing work of the research community in creating value-added data products, and provide a way for researchers to obtain recognition for research activity that did not necessarily lend itself to publication.

In exploring the above, the Board expects that the Observatory will benefit by cooperation with NOIRLab. We also encourage the Observatory to work towards ensuring efforts to increase publication numbers and impact do not amplify inequities in publication statistics, or create new ones.

2020.B.14. 2021 Gemini Science Meeting. The Board is not supportive of delaying the next Gemini science meeting past summer 2021. The Board shares the STAC's hope that the meeting can be held as planned in Seoul, Korea, in August 2021 either as fully in-person, or in a hybrid form.