

Keck Proposal Technical Feasibility Assessment

This Document assesses the Technical Feasibility of programs for Swinburne Keck proposals for Semester 2023B

Instrument Justification:

Is the chosen instrument the best for their science?

Has the instrument configuration been fully described?

Will the relevant resolution/wavelength coverage/field of view/adaptive optics/... be sufficient to meet their science goals?

Time Justification:

Does the time justification include overheads?

Have all instrument configurations been justified?

Will the total exposure times allow them to reach their science goals?

[Note: Use of exposure time calculators and/or references to previous observations in a similar configuration and their resulting S/N is highly encouraged in justifying total exposure times.]

Lunar and Constraints Justification:

Can this science be done using brighter lunations?

If mentioned, have the other constraints for their science been fully described? Are they reasonable in relation to their science goals?

Are the chosen targets visible for the full length of their proposed observations (I.e., at >2 airmasses and consistent with Nasmyth platform limits)?

[Note: this can be checked using the RA/Dec provided in the target list and need not be explained in the text.]

ToO Justification:

Has the need for ToO observations been justified?

Will Keck reasonably be able to respond in time for their science?

Flexibility and Minimum Time:

Does the program recognise what aspects it is flexible to (e.g., lunation/dates/instrumental configurations/lessened time allocations)?

How will the science goals of the program be affected by changes in the allocated Keck time? Are the described effects of changes reasonable?

What is the minimum time allocatable to this program?

Backup Program:

Does the proposed program recognise what adverse events (e.g., poor seeing/cloud/technical problems/instrument availability/...) may affect their science goals?

Has a back-up program been provided with sufficient detail to feasibly conduct publishable science in the event of these adverse events?