Keck SSC Meeting April 16, 2014 UCLA

Co-Chairs, Crystal Martin & Judy Cohen

Observatory Report: Instrument Development-1

- Pending federal proposals include: NIRSPEC upgrade (ATI), KCWI-R (MRI), NGAO (MSIP)
 - NSF currently soliciting more info on all MSIP proposals. For NGAO:
 - Add ToO observations on G2
 - · Emphasize importance of student training
- Segment repair review assess programmatics: requirements, risks, cost schedule
 - Overall supportive of current observatory plan.
 - One reviewer felt process was too conservative, taking too long to get going/execute.
 - SSC also endorses current plan.
 - Goal to have repair completed for pathfinder segment by Oct 2015
- KCWI-B
 - New PM (Kokorowski) leaving JPL for industry. Option to either get new JPL PM or appoint someone from within project part-time.
 - Reducing some system testing allows earlier first light July 2015 (TBD)
 - Good progress on coating, delivery of collimator
 - Schedule holding

Instrument Development-2

NIRES

- Work remains to be done, but could achieve Sept 2014 first light.
- Slit viewing camera has only 2 good quadrants.
- Recommend repurposing H1RG array from interferometer camera.
- Discussion of DRP: Tom Barlow could modify *makee* to work on TSPEC (Palomar) and then NIRES. Mike Cushing pipeline could be adapted. Judy Cohen to investigate and report to SSC.
- TRICK near-IR Tip Tilt
 - Progress slow due to bad weather/seeing during engineering, but OK so far
 - Handover planned for mid July after next run in May
- TOPTICA laser delivery 9/2014 for testing. On-line for K2 early 2016
- K2 Center launch system had first on-sky test. Again poor weather. Good performance so far. Shared risk 2014B.
- Solar power photovoltaic project at HQ resulting in significant savings (\$8k/mo)

Five Year Plan

- Does not assume success of any of the various pending NSF proposals but preserves key staff
- Top priorities
 - Nightly operations 57% of annual budget
 - Segment repair
 - TCS
 - KCWI-B
 - K2 laser
 - NIRES
- Implement cost savings

Thanks to Taft

- The SSC expressed its great appreciation for Taft's 8 years of service to Keck Observatory which has thrived scientifically and technically under his leadership.
- We wish him well in his new endeavors.

Keck Science Meeting Planning

- Logistics
 - Oct 2-3, 2014 @ Caltech
- Scientific Organizing Committee
 - Martin (Chair, Caltech), Steidel (Caltech), Brodie (UC), Beichman (NASA), Lu (UH), P. Dokkum (Yale), Medling (ANU)



- Format
 - 1.5 days scientific talks
 - 0.5 day town hall meeting will report on strategic planning process
- SSC Discussion of Strategic Plan
 - Request community input at Keck Science Meeting



Instrument White Papers

- Goals & outcomes of the process:
 - SSC approval of white paper required for WMKO to endorse NSF proposal for instrument.
 - Up to \$40K available in FY14 to support white paper concepts
 - Eight white papers were received
 - Extensive discussion of all white papers occurred
 - Feedback will be sent to all proposers
 - Request to selected PIs for more info by July SSC meeting and September strategic planning retreat.
 - Rejection of some white paper concept
 - 3 concepts selected for further study

Instrument White Papers

- WMKO considerations:
 - Must use K1 visitor port, as K2 port will be occupied by NIRES.
 - Taking instruments on and off is burdensome and risky.
 - Many studies lack enough information for funding or endorsement.