Enormous gratitude

The SSC warmly thanks the entire WMKO community for an expeditious and safe return to operations in the midst of a global pandemic and statewide shutdown. The fact that the Observatory is back to enabling great science is a testament to the professionalism and exceptional skill and dedication of the entire WMKO `ohana.

Mahalo!!
Announcements and review of actions

- Aaron Barth (UCI) is the new SSC co-chair from UC
- Mariska Kriek (UCB) is a new SSC member
- Jean Brodie is back on the SSC as the Swinburne representative
Observatory Report

- Limited ops resumed after COVID-19 shutdown (longest in history)
  - Observatory-wide approach guided by risk assessment matrices. Multiple levels of activity categorized. Currently at Level 4 (normal operations are Level 1)
  - Incorporates CDC/State/County guidance and regulations
  - Level 4: Most employees working from home. Strong social distancing for summit work/observing support
  - Impacts overall productivity
  - After May 8, observatories allowed to open with social distancing and risk abatement. Returning one telescope at a time to ops.
  - Fixed complement of instruments until staffing allows more.
  - Executing 20A observations when possible
  - Remote observing includes capability to observe from home, but has drawbacks and efficiency hits.
  - K2 operational now. Keck 1 return to science as early as May 25.
    - K2: NIRC2, KCWI
    - K1: HIRES, MOSFIRE, OSIRIS
  - Evaluating ability to bring DEIMOS, LRIS, ESI, NIRSPEC, NIRES up for June science. Some present staffing challenges (e.g. ESI, DEIMOS require multiple people for maneuvers)
  - K1 plan: no instrument re-configs (no immediate availability of LRIS). Currently engineering run.
• Longer-term impacts of COVID-19/shutdown
  ○ Financial impact assessment underway. FY21 may be significantly impacted
  ○ Travel to/from HQ heavily restricted, not likely to resume in Fall or later
  ○ Internal/external projects/instrument fabrication likely to slip
  ○ Science productivity will be impacted, e.g. use of at-home observing. Hard to quantify impacts, but expect long term at-home observing will be retired.
Observatory Report (continued)

● Team Keck TAC 2020B
  ○ 3 proposals sent to SSC member for additional feedback
  ○ Very useful feedback
  ○ Initial impression is that it is a significant improvement in Keck TAC process
  ○ Anticipate continuing to request small help from SSC in coming semesters

● Major projects
  ○ Segment Repair
    ■ Project beginning to resume in Lab
    ■ Remaining 3 in process
    ■ Pathfinder segment removed and inspected after 4 years. No notable changes in condition since initial repair
    ■ K2 tertiary showing some similar bonding cracks
  ○ KCRM
    ■ Programmatic construction review Passed. Currently on budget.
    ■ Integration at WMKO planned for Sept 2021, commissioning 22A, available 22B.
    ■ COVID-19 impacts TBD, evaluated end of summer.
Observatory Report (continued)

- Major projects (cont’d)
  - KPF
    - Schedule is similar to KCRM, integration in Sept 2021, comm 22A, available 22B.
    - Evaluate COVID-19 impact end of summer.
- 5-Year plan approved by CARA board, but likely to have modifications due to COVID-19
- Keck Visiting Scholar Program
  - Expected to continue, with smaller cohort than last year
  - Contingent on travel restrictions being lifted
Maunakea Status

- Key risks: access and land management changes
- Taking risk-assessment approach
- Collaborating with other MKOs and community advocates
- Access:
  - Protestors have left the area in response to COVID-19
  - No change in status after truce ended. Road remains open.
  - Operational contingency plans in place in case access is blocked again.
Instrument Development Call (Kassis, O'Meara)

● The three defined categories are:
  ○ **Concept designs and Phase A system designs**: studies for both new instruments and upgrades to existing instruments
    ■ **Concept designs**: early feasibility studies
    ■ **Phase A system designs**: preliminary or detailed design studies for instruments that already have feasibility studies, which can be internal or external to WMKO
  ○ **Mini grants**: to improve current observatory capabilities
  ○ **Proposal development**: to mature a proposal to be submitted to funding agencies

● Total available funding is $150K for concept designs, and $250K for Phase A system designs. Mini grants and Proposal development funds are drawn from the total allocated available funds.

● Examples from recent years are:
  ○ **Concept**: WFI and FOBOS (two years ago)
  ○ **Phase A**: FOBOS this year and HISPEC last year
  ○ **Mini grants**: HAM (H/W installed) and OSIRIS cals status (evolution of the calibration for OSIRIS).
Instrument Development Call

- The notification about the call will be emailed shortly. The call summarizes the different categories (concept studies, Phase A system design, Mini grants and proposal developments) and provides considerations related the Keck Observatory Scientific Strategic Plan.
- Deadline will be June 24th 2020
- There is a specific note of encouragement to projects pursuing a second-generation Low Resolution Imaging Spectrograph (LRIS).
- Page limits and content details are provided for the different categories.
- The selection will be done at the July 2020 SSC meeting.
- Status reports by the selected teams need to be provided in Spring 2021 (brief), and a detailed report two weeks before the Summer 2021 SSC meeting.
Instrument Development Process

- This process applies to both federal and private (foundation) funds.
- It is imperative for instrument teams to work with WMKO (through Kassis) for any instrument so that WMKO is aware of all the proposals and agencies in play.
- The SSC should be making science-based decisions. It’s up to the Board to weigh the (dis)advantages of different funding paths and likelihood of success.
Instrument Development Process

● The development is organized with "phase gates" and "milestones" which establishes the progress of the projects.
● For the selection process, the SSC will be asked to provide feedback on project priority, nights allocations if requested, funding levels and what should remain unfunded.
● If the SSC approves submission of a funding proposal, that approval is not in perpetuity. The SSC must be able to re-evaluate proposals for each funding cycle.
   ○ Seeking SSC approval every year is a major burden on the teams. Some proposals might be preliminarily approved for submission attempts over multiple years, provided that the scope doesn’t change.
Current Development Projects
Logistics for July 7-8 SSC Meeting

- M. Kassis is considering tools to facilitate the discussion of instrument reports and proposals.
  - Document organization: Atlassian?
  - Written analysis from SSC report reviewers in advance?
  - Pre-voting before meeting?
  - Ranked priority list: Google poll?
  - Consider other possible systems to enable Q&A forums with PIs: Allows us to address as many issues as possible before the meeting. However, we should avoid suppression of discussion at the meeting.
    - There may not be enough time (13 days) between proposal submission and the meeting to use this forum to its full capability, like back-and-forth discussion with the proposing teams in advance of the meeting. But we can at least ask short clarifying questions.