



SAC REPORT FY2021

Naoki Yasuda (SAC Chair; Kavli IPMU)



Committee Members

Term: 1st Sep 2020 - 31st Aug 2022

Aikawa, Yuri (Univ. of Tokyo)

Honda, Mitsuhiko (Okayama Univ. of Science)

Ikoma, Masahiro (NAOJ)

Itoh, Yoichi (Univ. of Hyogo)

Inami, Hanae (Hiroshima Univ.)

Kodama, Tadayuki (Tohoku Univ.)

Kotani, Takayuki (ABC)

Kurita, Mikito (Kyoto Univ.)

Miyazaki, Satoshi (ATC)

Moriya, Takashi (NAOJ)

Nishiyama, Shogo (Miyagi U. of Education)

Tosaki, Tomoka (Joetsu U. of Education)

Yasuda, Naoki (Kavli IPMU)

Inoue, Akio (Waseda Univ.) from August

Motohara, Kentaro (ATC) until July

Chair

Ex-officio (TAC Chair)

Ex-officio (TAC Chair)

Observers

Yoshida, Michitoshi (Director)

Kambe, Eiji (Subaru)

Takami, Hideki (Subaru)

Yamashita, Takuya (TMT)

Aoki, Wako (TMT)

Sekiguchi, Kaz (NAOJ)

Hayano, Yutaka (Subaru)

Sanders, David (UH)



Recent major discussion items

- New TAC members
- Subaru Strategic Program (SSP)
 - Hyper Suprime-Cam (HSC)
 - Infrared Doppler (IRD)
 - Prime Focus Spectrograph (PFS)
- Roman-Subaru synergistic observation
- Data right of LSST using Subaru night as an in-kind contribution
- Limit of Gemini time availability
- International Partnership




New TAC members

- 12th TAC members including 5 new members has been selected based on the recommendation from the community through gopira and previous TAC
- Various TAC related issues have been discussed
 - Low completion rate of HSC queue observation
 - No carry-over for intensive queue observation
 - Too many intensive programs
 - Possibility of referee meeting for better evaluation
 - Mid-term review of intensive program

DAY 1 | January 11 (Tue)
10:35–10:50 [o07] TAC report

Day 3 | January 13 (Thu)
09:30–10:00 [d04] TAC related discussions



HSC-SSP

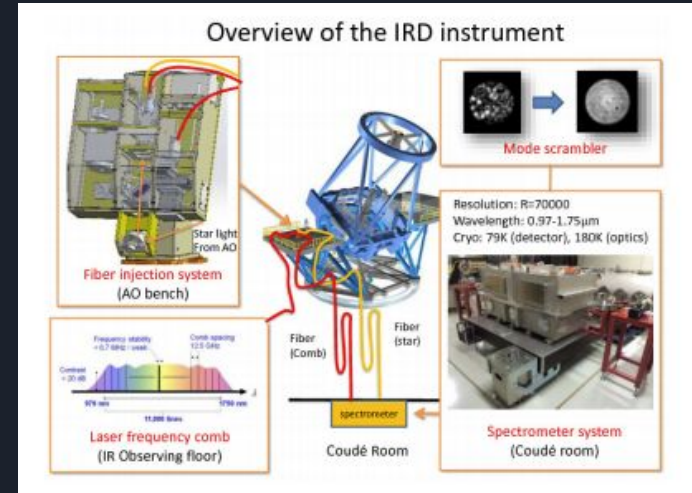
- All observation has completed
 - 328.5 nights has been used
 - 93% of Wide area has been covered ($\sim 1086 \text{ deg}^2$)
- The final report by HSC-SSP team will be scheduled
 - Previous SSPs have done final report 0.5-1 year after the final observation
 - HSC-SSP needs more time for data processing and science results base on them

DAY 1 | January 11 (Tue)

14:00-14:15 [o15] Progress of HSC-SSP Project

IRD-SSP

- Mid-term review will be conducted on the week of April 4th.
- The presentation will be public.
- SAC members will be reviewers.
- 3 years data (S19A - S21B) are taken at the time of review.

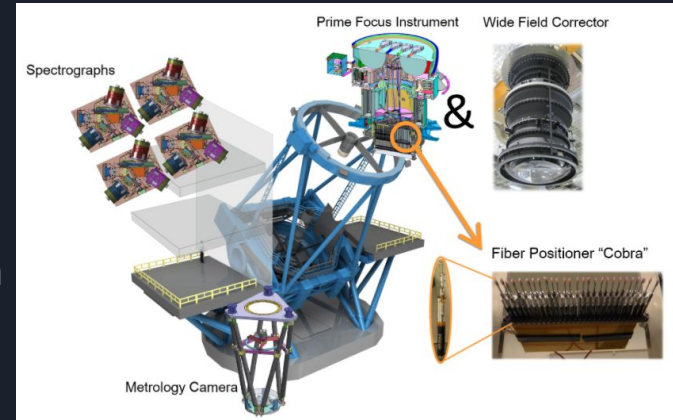


DAY 1 | January 11 (Tue)

13:45-14:00 [o14] Status report of IRD-SSP

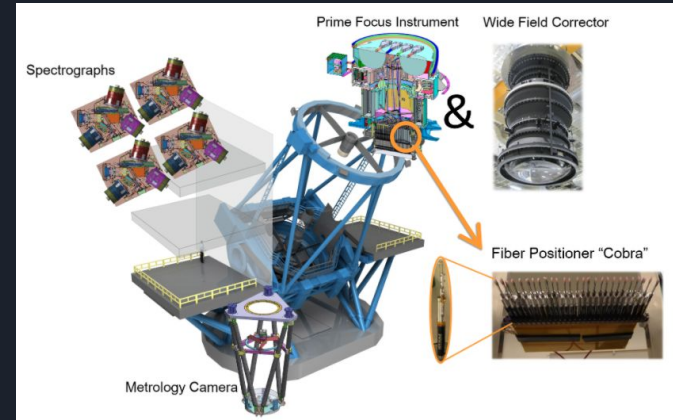
PFS-SSP

- Continued discussion with PFS collaboration
- Still under discussion
 - Duplication and block of targets
 - PFS collaboration is encouraging all interested persons to join
 - SAC needs to reserve some flexibility for various science cases. The object based blocking is requested.
 - Fiber share with open-use program
 - The programs which request a small # of fibers can be executed
 - PFS collaboration needs optimized scheduling to maximize observing efficiency



PFS-SSP (cont'd)

- On-site commissioning is going well.
- PFS-SSP will start from S23B (1 semester delay from the last year)
 - Proposal review schedule
 - October 2022 : Call for SSP
 - December 2022: Deadline
 - April 2023: Acceptance of SSP, S23B TAC
 - August 2023: Start of PFS-SSP



DAY 1 | January 11 (Tue)
13:15-13:30 [o12] PFS

DAY2 | January 12 (Wed)
13:45 - 14:45 [d01] PFS Operation

Roman-Subaru Synergistic Observation

- Subaru community has agreed to use 100 Subaru nights for synergistic observation for Roman Space Telescope
- In addition, Subaru community has agreed for immediate data release according to NASA's open-sky policy
- SAC has agreed the followings
 - Accept dark night heavy request keeping 15 dark nights / semester and 40% of all available nights for general open-use
 - Proposal review will be done by Roman steering group and SAC and the observatory will check their validity
 - Front loading observation is recommended to avoid conflict with SSPs

Day 3 | January 13 (Thu)

10:35-11:15 [d06] Subaru and Roman Space Telescope

Rubin Observatory and LSST

- NAOJ and Kavli IPMU has jointly submitted in-kind contribution proposal for LSST data right
- We are still waiting for the final review result
- One major component is 50 Subaru nights over 10 years
- Certain number (~30) of PI (data right holder) are expected
- Fair selection process of PI will be discussed
 - Possibly every 3-4 years PIs will be renewed
- Submitted the request to support LSST activity at NAOJ to director general

DAY2 | January 12 (Wed)
14:45 – 15:15 [d02] Rubin Data Right



Limit of Gemini time availability

- Subaru has ~10 nights debt to Gemini
- Observatory wants to pay back before S23B
- The following limitations on Gemini time are agreed for S22B/S23A/S23B
 - Save open-use 2 nights and DDT 2 nights for pay back
 - Time-exchange proposal is available up to 3.0 nights
 - Fast Turnaround is available up 4 hours for every two months (only for the odd numbered months)





International Partnership

- International partner may have access to the next SSP (after PFS-SSP)
- There will be two paths to access SSP as an international partner or as a collaborator of instrument group.
- What is an appropriate way to evaluate their contribution to Subaru?
 - Limit the number of data right based on contribution?
 - How about Japanese?
 - Ask international partner to provide their guaranteed night to SSP?
 - ...
- Discussion has just started

Day 3 | January 13 (Thu)

09:00–09:30 [d03] International cooperation and partnership in the ULTIMATE–Subaru era and beyond



Summary

- We are discussing Subaru telescope's scientific operations to maximize scientific outputs of Subaru telescope.
- Discussion items include
 - framework for night allocation from general open-use program to large SSP program
 - collaboration / synergy with other facilities
 - international partnership
- All discussion details are made public as minutes (only in Japanese) at https://subarutelescope.org/Science/SACM/j_index.html
- Please feel free to contact any committee members if you need the discussion at SAC