

Subaru Advisory Committee Report

Main goals of SAC in 2006-2008

To recommend future plans for Subaru Telescope

To make a guideline for international collaborations with Subaru

To interface between users and Subaru Telescope

SAC has meeting once every month

~~sub-committee of the Advisory Committee for Optical and Near Infrared Research,~~

After 6 years open use operation, Subaru should contemplate taking further step into new era of next generation telescopes.

“classical observing” to “strategic observing” with Subaru

Subaru will be only a burden on young generations in near future?

Subaru is a stepping-stone for great and bright future?

It strongly depends on the decision of you, young generation

2006-2008

SAC members

Nobuo Arimoto (Chairperson)

T. Ichikawa, Y. Itoh, F. Iwamuro, H. Kataza, N. Kobayashi, K. Sadakane

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Organized by people from various fields in
optical and infrared

SAC report 2006 is due on 2007

An answer to the questionnaire

The recommendation of SAC is

1. a paper plan?
2. a practical plan even if not ideal?

We should notice the importance astronomical instrumentation, fair treatment of people involved in the development of common use instruments.

1. 机上の理想論に基づく提言
2. 予算、人員などの縛りがあることを踏まえた上で、理想ではないけれども、現実的に悪い点を少しでも改善するための提言

のどちらであるかを、はっきり示して欲しいと思います。

現状では、すばる観測所の現実的縛りを積極的に理解しようとする姿勢が見受けられない感じで、1.を言っているだけの項目が多くあるように思います。
また、装置開発を促進するためには、何らかの方法で**装置開発者を優遇する流れを作る必要がある**と思います。このままだと、**装置開発者が皆すばるから離れていき、そして誰もいなくなったという状況になり得ること、実際そうなりつつあるように個人的に感じられる**ことを、強く危惧します。提言だけして、後の予算獲得、体制作りなどは他人におまかせという姿勢では、装置開発者側にとっては、トップダウンにあたります。よく言われるボトムアップが科学の進歩に本質的に重要だという流れと相反するもので、もっと装置開発者を深く巻き込んで進めるべきだと思います。

SAC Report 2005

Short Term Recommendations

- ★ Time Allocation

Mid Term Recommendations

- ★ Queue and Service Observing
- ★ Contributions to University Education
- ★ Use of Archive Data
- ★ Outreach

Long Term Recommendations

- ★ Future Instrumentation



(May 30, 2006)

Visit the Subaru web for more details

http://subarutelescope.org/Science/SACM/j_index.html

Subaru Telescope is now discussing the issues. Some review and proposals are presented by the Director in this symposium.

SAC report 2005

Short Term Recommendations

★Time Allocation

MOIRCS GT Time: The Advisory Committee for Optical and Near Infrared Research allocated 20 nights of Guaranteed Observing Time (GT) to the MOIRCS team in September 2005 following extensive discussion involving the SAC, Time Allocation Committee (TAC), the Subaru user community, and the MOIRCS team. Discussion was triggered by the MOIRCS team's initial request for 50 nights of GT, 30 nights in excess of the twenty nights previously allocated to first generation instruments.

Evaluation of Future GT Programs: Discussion about the MOIRCS GT time allocation centered on how to maximizing scientific output by finding an appropriate balance between protected use of a new instrument through GT and open use competition. Although this time the MOIRCS team rejected the hybrid strategy the SAC proposed, guidelines for future evaluation of GT programs should be established based on these discussions. We strongly recommend that strategic use of new instruments involve the entire Japanese research community. **The SAC will continue to encourage discussion on how to operate new instruments, including the role the SAC itself can play in the process.**



The proposal of Strategic Observations

SAC report 2005

Service and Queue Observing

In the past year, the SAC sponsored discussion on the following topics:

1. the need for service and queue observing
2. detailed plans for experimental queue observing
3. detailed plans for a full implementation of queue observing

The desire for classical observing is strong in the user community, and many called for the continuation of classical observing along side service and queue observing, possibly allowing the observer to choose the observing mode. However, in light of the value of completing priority observations and the efficient observation of programs that require specific weather conditions, there was an acknowledgment for the need of queue observing. University based researchers wanted an expansion of service observing. The SAC presented a detailed plan for a limited an experimental queue observing mode and simulations of its impact on observatory operations based on example from earlier semesters. The simulation exercise suggests that a limited implementation is not effective for reaping the benefits of queue observing. This is primarily due to the fact that the large number of instruments on Subaru means that there are not many observing programs per instrument. Users also expressed reluctance to implementing a limited and experimental queue observing mode. Proposals for a more comprehensive implementation of queue observing require further development. **Subaru's current observing mode, a combination of classical and service observing (which started in S03A for short programs) and "buffer" nights remains a viable option.**

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Contributions to University Education

Subaru's contribution to the training of the next generation of Japanese astronomers:

Observation and Data Reduction:

1. Create web based virtual experiences that convey the observatory's work flow and work environment.
2. Expand the scope of past data reduction workshops by scheduling them regularly, drawing on the expertise of university-based researchers, and investing in computer infrastructure so that more people can attend.
3. Increase observing opportunities for graduate students, possibly by providing instrument handbooks, and providing funds for graduate student travel.
4. Create tools that would make it easier to find useful data from the archive, and provide resources for bringing people up to speed on data reduction such as practice data and reduction tools with examples of well reduced data.
5. Facilitate the sharing of data that is not yet available on the archive, but for one reason or another will not be analyzed immediately by the PIs.
6. Continue to ensure access on UH88 and UKIRT
7. Make technical documentation for the design stage of an instrument publicly available
8. Encourage the development and use of PI instruments
9. Continue to provide resources such as Messia5 and Mfront2 for detector development
10. Coordinate collaboration between universities and NAOJ for the joint development of future instruments.

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Use of Archive Data

To improve the use of archive data we suggest:

1. Providing pre-reduced data of fields of high interest including multi-band photometric catalogs, and data quality information, starting with Suprime-Cam data. Employ a full time post-doc to carry out the work.
2. Providing resources such as sample data sets, reduction software, documentation such as simply data reduction handbooks and instruments handbooks to promote effective use by graduate students, university-based researchers, and other researchers.
3. Providing quality controlled data.
4. Accepting proposals based on archive data and provide support including computer resources, support personnel, and travel funds.



Subaru Winter School for Subaru
data analysis (Dec 2006)

Outreach

Subaru should increase its outreach efforts to the physics community including researchers, engineers, science reporters to promote an accurate understanding of Subaru's contribution to science. We suggest:

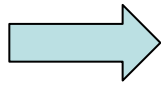


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SAC report 2005

Future Instrumentation



Main subject for SAC 2006

SAC report 2006 will comprise

Proposal of strategic observations
Discussion on our participation to next large telescopes
Proposal of Subaru next generation instruments
Guidelines for International collaboration

In particular,
it is the time for us, optical-Infrared community, SAC, and
GOPIRA to discuss and give proposals on what is the
next future plan after ALMA and Subaru.

The most important thing to settle the important issues is
your constructive and future-looking discussion and making
specific plans after Subaru.

The most painful decision is the order of priority.

Important issues (1)

Strategic observations, which will be discussed in this symposium

The unique and powerful (new) Subaru instruments should be used strategically to take strong leadership in astronomy. Such observation strategy is eagerly demanded under the circumstance that many 8-10m telescopes are being operated and TMT and ELT are planned. Otherwise, we would fall behind in the international competition on optical and infrared astronomy.

Proposal for HiCIAO
 FMOS

Think over the MOIRCS case.

VLT will operate new wide field near-infrared camera VLT (7'x7'), two times of MOIRCS, in Spring, 2007. If VLT strategically operate as done for GOODS-S in last 5 years, Subaru would fall surely behind in this field.

Multi-object spectrograph in near infrared FLAMINGOS-2 will be in operation in 2008(?) at GEMINI-S

Important issues (2)

Proposal of international collaboration from foreign institutes with Subaru and new instruments

Princeton University (HiCIAO, Hyper SuprimeCAM > 250 nights)
WFMOS+Subaru Telescope
TMT
VLT
Taiwan

Before accepting the offers, we should discuss and set the guideline on

- what is our main contribution of the collaboration,
- how we take the initiative,
- what are the reasonable observation plans,
- how to compromise with the ordinary common use of Subaru under still high competition of Subaru time.

Important issues (3)

Proposal and recommendation of new Subaru instruments after SuprimeCAM, (WFMOS) along with decommission plan

In parallel, SAC will promote exchanging programs for the observing time with unique instruments of Subaru, KECK, GEMINI not to build similar instruments on other telescopes