

Status of Remote Observation / Service Observation

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Subaru Users Meeting, Mitaka

Outline

- How many service observation has been done
- Issues on service observation
- How many remote observation has been done
- Issues on remote observation

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In the S06A Call for Proposal

- **Service Programs** For Semester S06A, HDS, Suprime-Cam, and only imaging mode with CISCO, IRCS, and COMICS will be available. AO system will also be available for Service Observation. Please see [the web page](#). Submission of Service Program proposals should be made electronically as well as normal and intensive programs.
 - Each program must be completed within 4 hours in a single night including all overheads and open-dome calibrations.
 - There is no guarantee that an accepted service program will ever be executed.
- **Remote Observation** Remote observations will be conducted from the Hilo Base Facility, and will be performed for IRCS, HDS, CISCO, Suprime-Cam, CIAO, and AO. If you wish to perform your observations remotely, please check the box in Entry 10 (Scheduling Requirements) of the Application Form. Note that your request may not be granted, depending on the instrument status and/or scheduling limitations.

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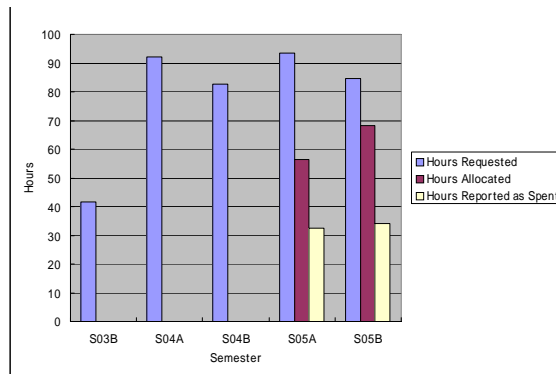
Service Observation

- Nights for service observation are allocated in the observation schedule which Subaru Open Use Management creates and publishes before starting the semester.
- After the first publication of the observation schedule, the observatory may reschedule nights/time for service observation because of TOO, lack of other programs to fill in and uncontrolled circumstances such as instrument troubles or bad weather.
- Opecenter has received programs and has been maintaining statistics since S05A.
- 9 nights and 8 nights have been allocated for service observation for S05A and for S05B, respectively.

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Hours Requested, Allocated and Reported for Service Observations

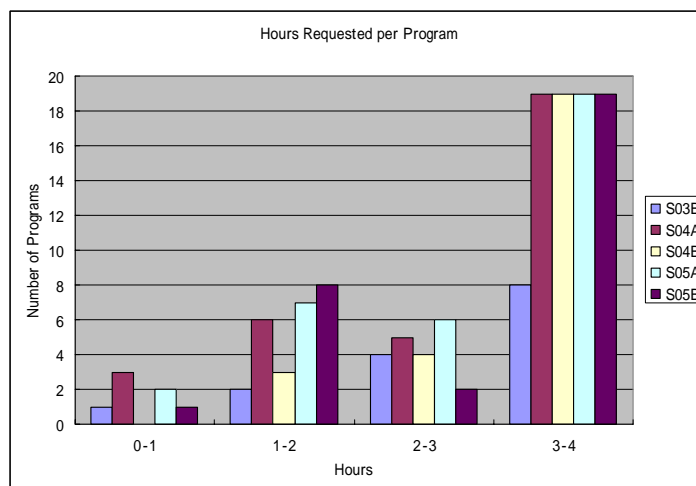


- Total amount of hours requested is constant.
- 60 to 80 % of total requested hours have been allocated.
- Only about half the allocated time is reported by the support scientists as spent for observation.

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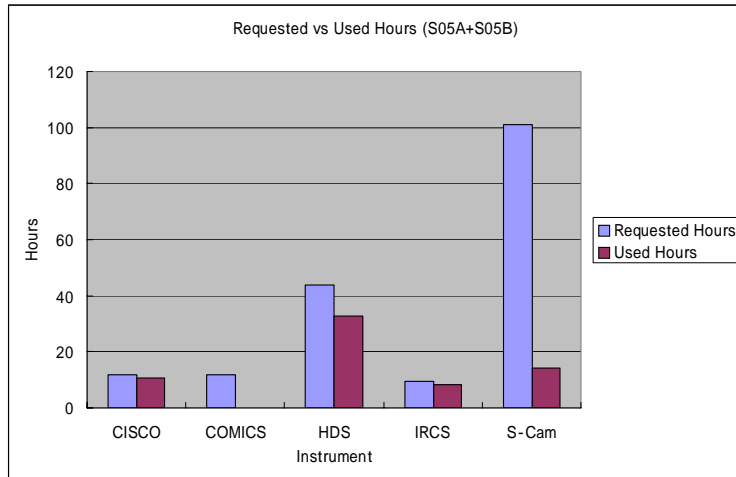
More than half the programs requests three to four hour telescope time.



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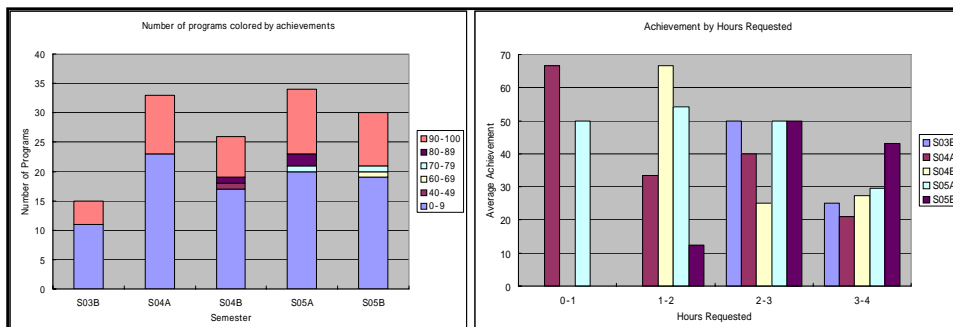
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*Over half the requested time is for Suprime-Cam,
but HDS has been much more used.*



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- About one third of programs have gotten telescope time.
- Achievement of each program has no strong correlation with its hours requested.

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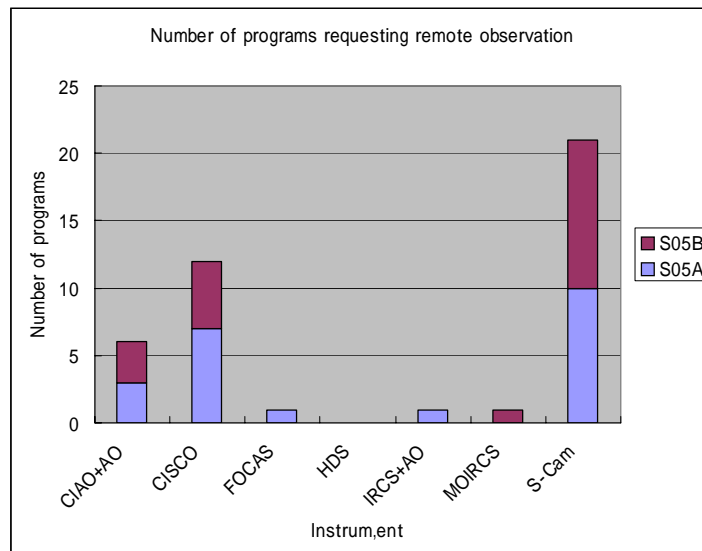
Service Observation - Summary

- Approximately 60 hours have been allocated for service observation per semester.
- Out of all the proposals, about one third are given telescope time (~ open use rate of competition).
- Allocated time is about double the reported time (Better deal than open use).
- Nasmyth instruments are highly used because they are almost always ready and can be used during observation at a Cassegrain instrument if changing the secondary mirror is not required.
- Regardless high demands, Suprime-Cam is not used so often because of difficulty to extend nights from the original schedule – Switching the telescope focus to/from the prime focus takes hours and extra manpower.
- Operation Center will be happy to have a list of more service programs for various instruments because it gives more flexibility for scheduling.
- Increasing nights for service observation may be nasty for support scientists because preparation of each observation takes considerable amount of their effort.
- Observation Tool or P2PP may ease the hard work by support scientists (cf. Mark Weber).

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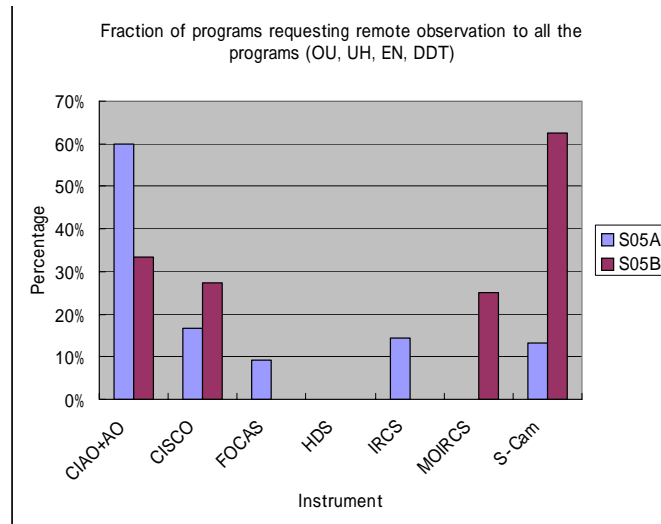
Demand for remote observation



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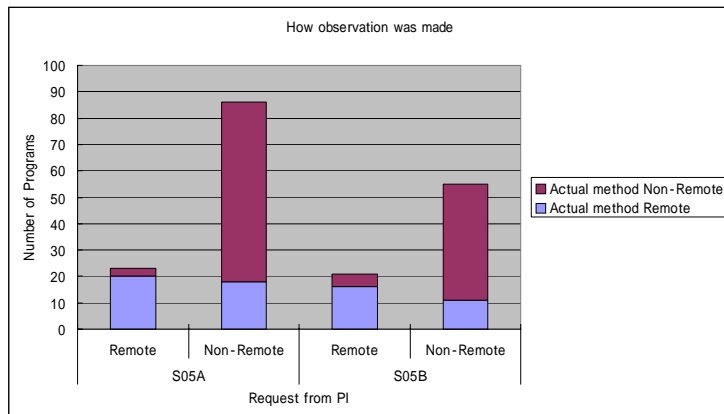
Demand for remote observation



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Request vs. Reality

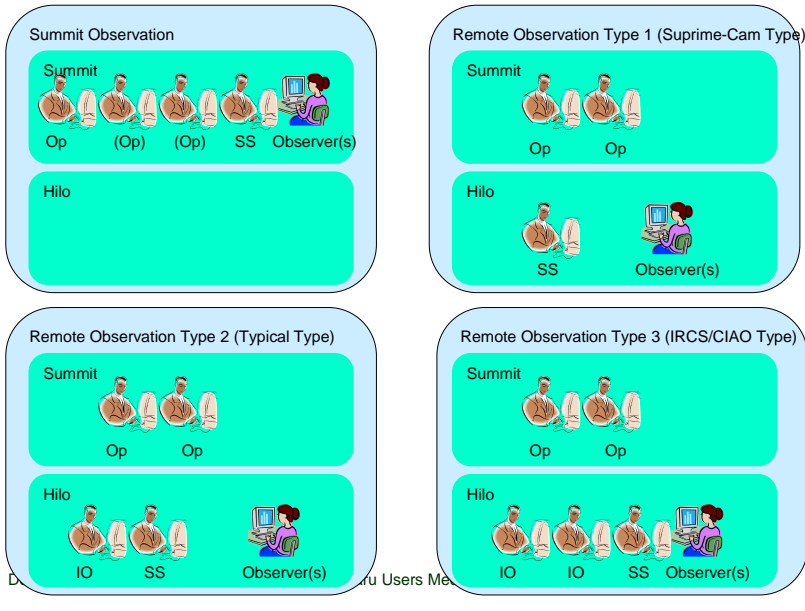


- Most programs were made according to the PI's request.
- Fraction of programs for which remote observation was not requested were made as remote observation.
- This is due to the operation needs (SS needed support for many nights).

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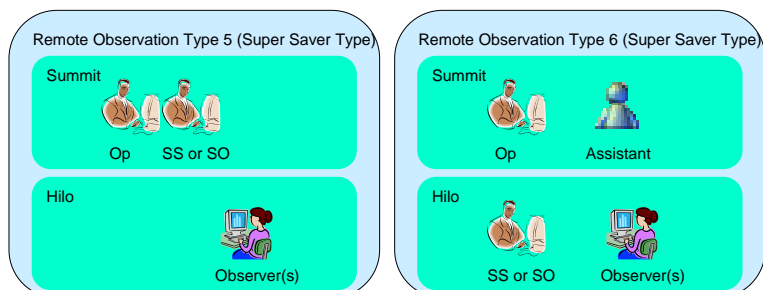
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Staff Configurations during Observation



Remote Observation takes more staff than summit observation

- Current number of operators will be maximum (8).
- Operators who left will be replaced with support scientists or "super operator".



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Other issues

- How we realize remote observation/monitor from Mitaka as one of the regular operation has not been discussed yet.
 - We have an infrastructure there.
 - We need to decide who will support observation/monitor from Mitaka and how.
- Clear definition of roles of operation staff (SS, SO, Op) and observers during observation and implementation of software based on a single user model.
- Certain kind of observation needs close communication among locations. Current videoconference may not be a best solution for audio/visual communication.
- Current videoconference system is so complicated that three-point communication or communication to outside NAOJ normally needs support from the videoconf/network experts.



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