Preliminary report of TMT Science Operations User Survey

TMT-J SAC Science Operation working group

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Working period: 2024/12 - 2026/8

Activities:

(1) Responses for the science operations part of the TMT-J SAC's consultation matters

(2) Consolidate the community's opinions and demands, and devise strategies for incorporating them in TMT's science operations plan.

User Survey

Purpose: Understand the demands and needs for **science operations** within the Japanese TMT community, and incorporate them into the science operation plan formulated by the NAOJ TMT Project as well as the reports (答申) of the TMT-J SAC

Organizer: NAOJ TMT Project、TMT-J SAC (Science Operation working group)

Target: Japanese TMT community (distributed through tennet/gopira/oml/student ML)

Language: Japanese and English

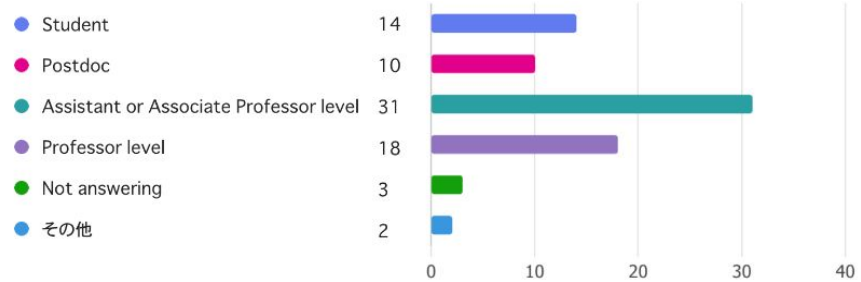
Survey period: May 25, 2026 to June 5, 2026

Number of responses: **78** Thank you!

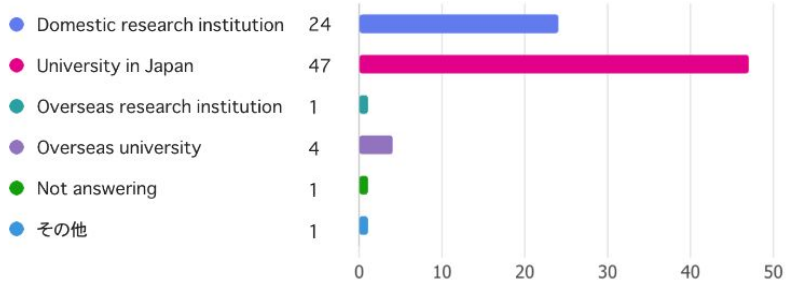
Science Operations = CfP・Review・Observation・data delivery・user support

Respondents

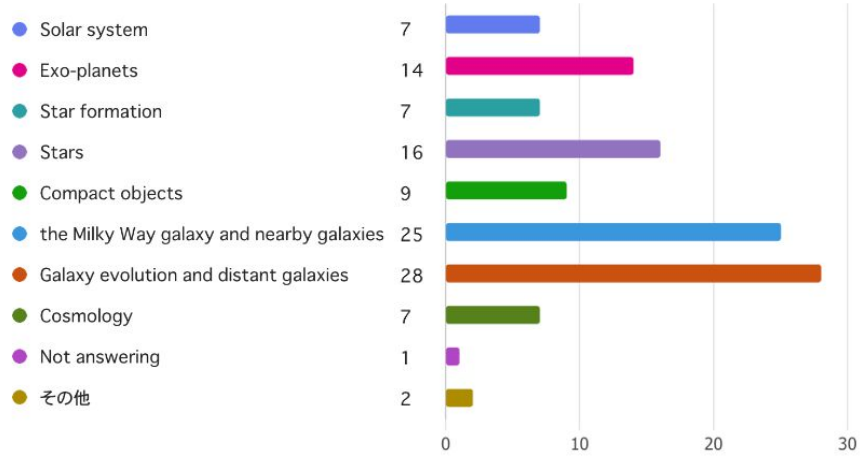
Q1. Position:



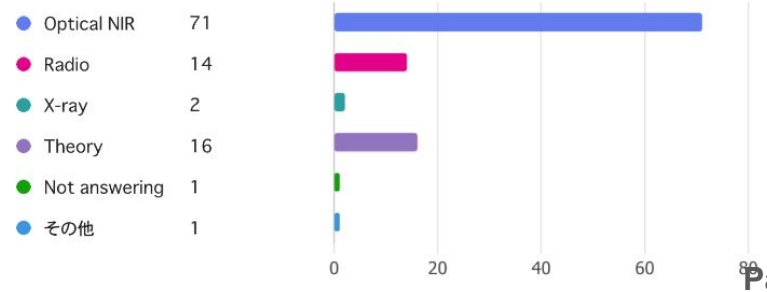
Q2. Affiliation:



Q3. Research field:



Q4. Main research approaches:

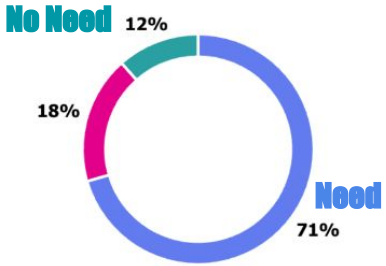


TMT's observing program

Q5. Large program needs

5. Do you think large/long-term TMT programs (similar to the Subaru Strategic Program (SSP), Subaru Intensive Programs, or ALMA Large Programs) are necessary?

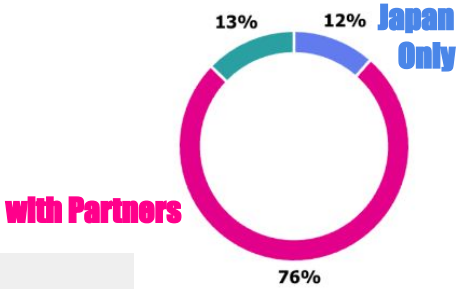
Necessary	55
Either is fine	14
Not necessary	9



Q8. large program framework

8. If large TMT programs are to be implemented, several possible frameworks can be considered, such as using primarily Japanese telescope time as in the Subaru SSP or Intensive Programs, or combining observing time fr om Japan and other partners as in the ALMA Large Program. What type of framework do you think would be

Primarily using Japanese telescope time, as in the Subaru SSP or Intensive Programs	9
Combining observing time from Japan and other partners, as in the ALMA Large Program	59
その他	10



[Q6. Comments on Large program needs]

41 responses

(necessary) scientific impact and strategic advantages of concentrated observing time.

- scientific impact
- statistical sample
- international competitiveness
- legacy data set
- operational efficiency

(not-necessary) allocation balance

- limited Japanese observing time
- prioritizing diversity and young researchers
- impact on PI-based proposals

(suggestions)

- focusing small programs in the early stage

[Q10. Joint program needs (excl Subaru)]

11 responses

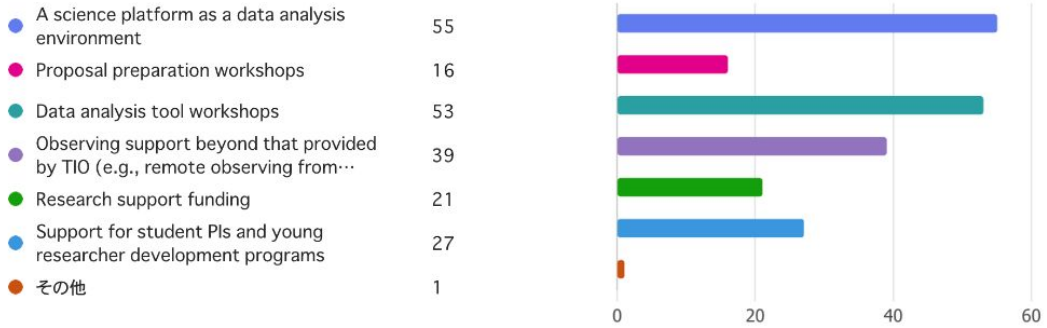
Keck, VLT, ALMA, Roman, JWST, E-ELT, GMT

(Q7. your detail plan/needs for large program)
(Q9. comments on large program framework)

User support and data archive

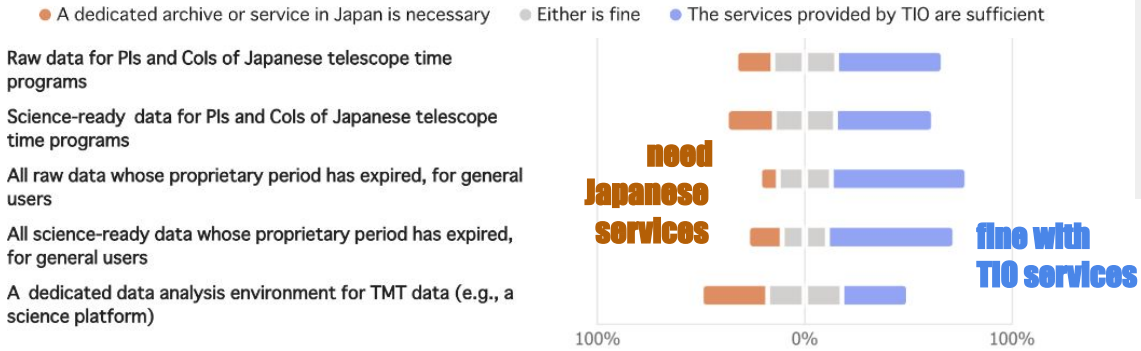
Q11. User support needs

11. Please select up to three types of TMT user support from NAOJ that you consider particularly important for the Japanese community.



Q13. Domestic data storage and service needs

13. Please comment on whether data storage and distribution by NAOJ are necessary in addition to the observing data services provided by TIO.



[Comment Summary]

Q12. User support needs: 11 responses

- standard analysis systems
- a dedicated help desk for data analysis
- remote observation from within Japan
- documentations

Q14,15. Data archive needs: 12,10 responses

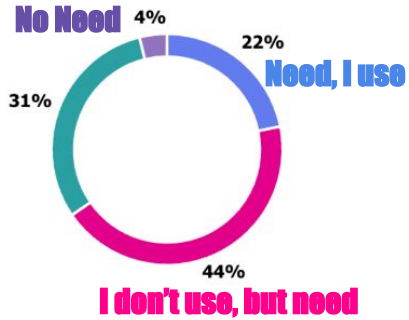
- short-term to mid-term data store period (permanent term (ideally) is also requested)
- user accessibility & local support and support in Japanese
- redundancy and efficiency
- Connection with analysis environments with Japanese resources (Subaru/ALMA/etc dataset)

TMT and Subaru

Q16. Joint Program needs

16. Please select on the necessity of joint TMT–Subaru programs. Here, a “joint TMT–Subaru program” refers t o an observing program that uses instruments on both Subaru and the TMT for the same scientific objectiv e, either simultaneously, within the same semester, or over consecutive long-term semesters.

Necessary, as I would be interested in applying for such programs.	17
Necessary, even though I would not apply myself.	34
Either is fine.	24
Not necessary.	3



Q19. NPP usage for Subaru: 18 responses

(supports)
- ideal for the long-term
- increased convenience
- operational efficiency

(concerns)
- NPP's system uncertainty
- user impact

(suggestions)
- sufficient preparation
- strategic timing
- community involvement

[Comment Summary]

Q17. Joint program: 18 responses

(supports)
- complementarity
- discovery and follow-up
- unique Japanese strength

(concerns)
- Not necessary in the early stage of for increasing the user/science diversity

Q18. Joint TAC: 28 responses

(supports)
- necessary for evaluating joint programs
- efficiency and convenience

(concerns)
- excessive workload for TAC

(suggestions)
- only for Joint Program slot
- increased personnel

TMT-J Science Advisory Committee is grateful for receiving as many as 78 responses to the survey.

We will make the utmost use of your valuable opinions and feedback as references for the activities of NAOJ TMT Project and TMT-J SAC.