

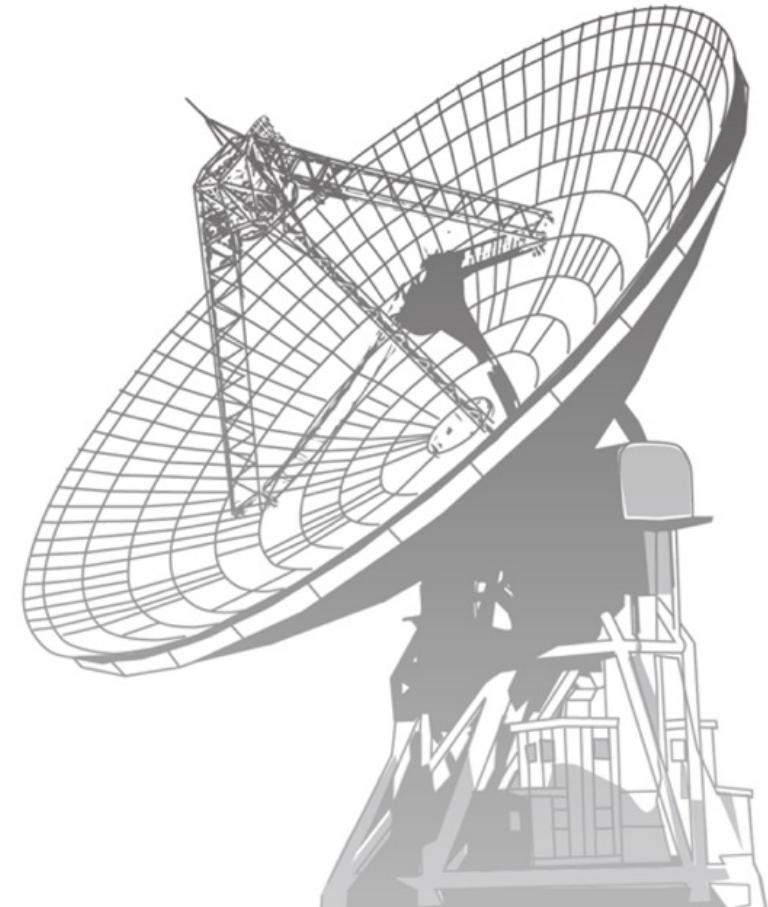
Nobeyama plan for 2026



Nishimura, Atsushi
(Nobeyama Radio Observatory)

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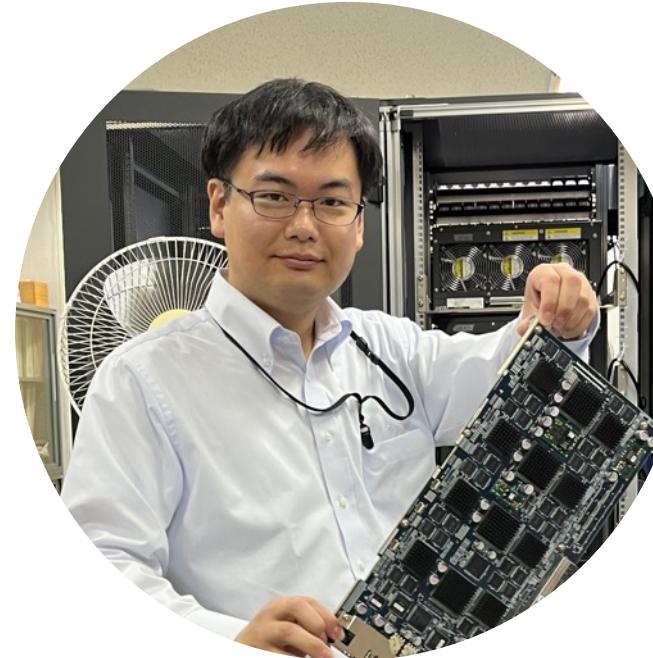
1.1. New members



**Atsushi
Nishimura**
Associate Prof.

Director
Manager of science operation
Manager of computers
Manager of PR

**+5 engineers
+5 admin staffs**



Rin Yamada
Proj. Assistant Prof. 10/1-

Manager of CSV
Science promotion



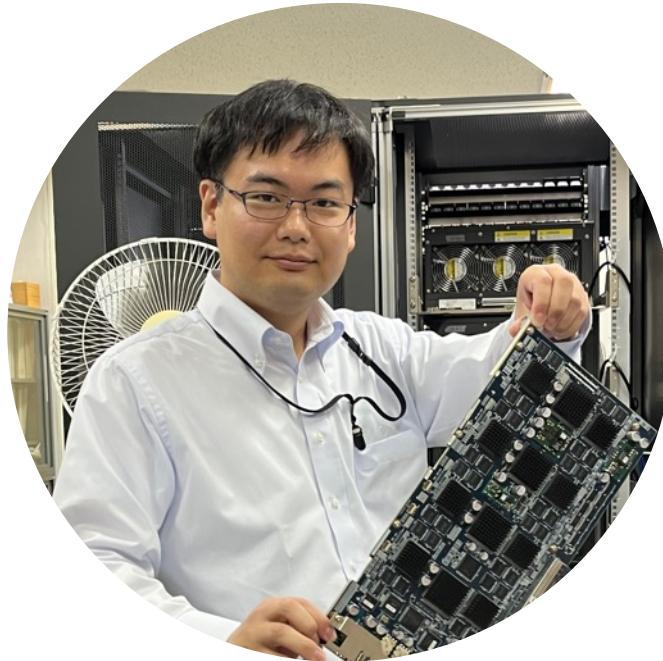
**Madoka
Hoshimi**

Research Affiliate
(特別客員研究員)

4/1-



Announcement (1)



Rin Yamada

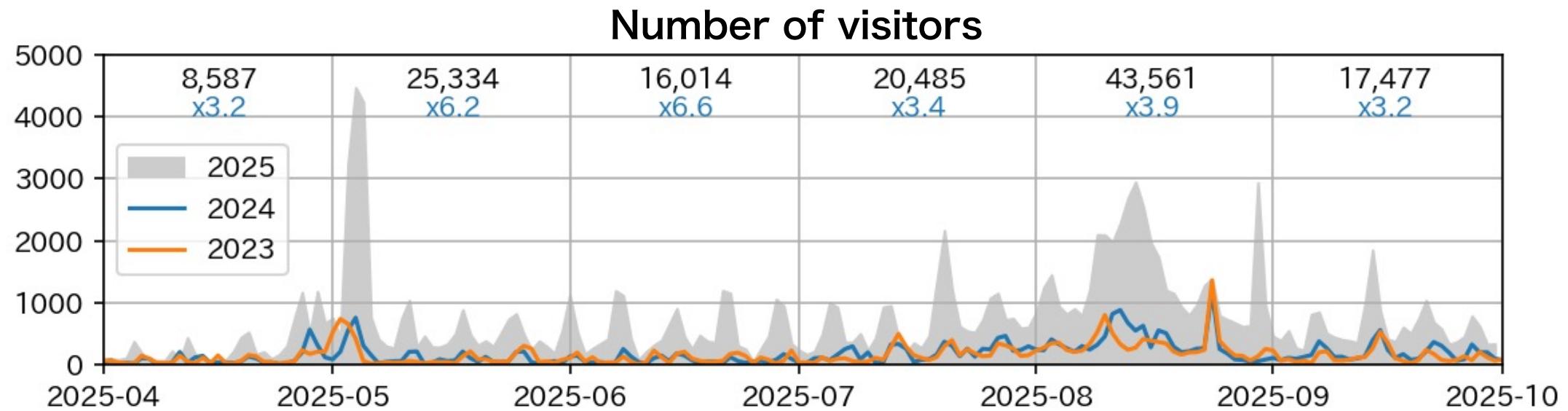
Proj. Assistant Prof. 10/1-

Manager of CSV
Science promotion

Colloquium and/or Tutorial

- Aim: widen NRO45 users
- Target: anywhere
 - (Done) ASIAA
 - (Under coordination) UTokyo IoA, South Africa, India
- Please let us know:
 - If you want us to hold (onsite/online)
 - If you have good examples of science demonstration
- Tutorial details:
 - Radio astronomy basics
 - How to plan proposals
 - How to prepare observations
 - How to analyze raw data
 - etc.

1.2. Animation movie effect



x4.2 visitors for pilgrimage (聖地巡礼)



1.2. Animation movie effect

Tourism business

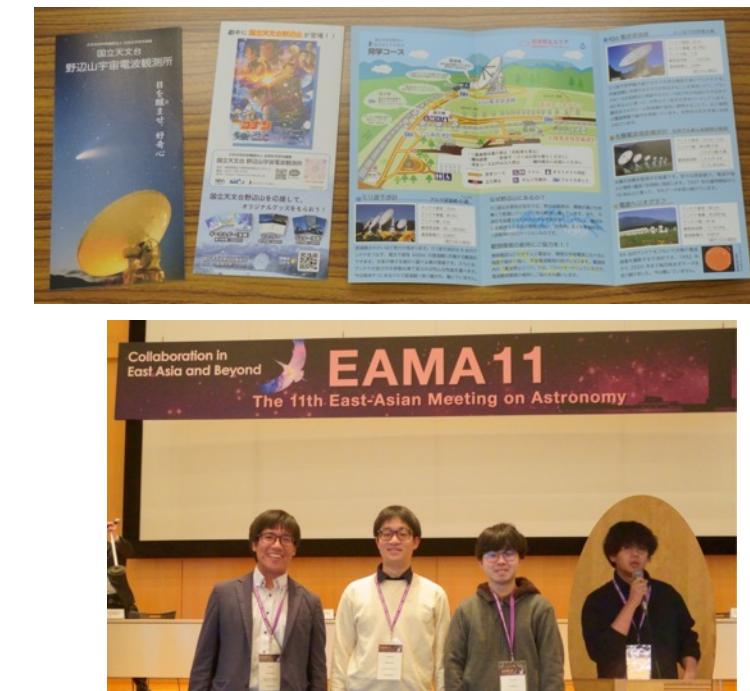
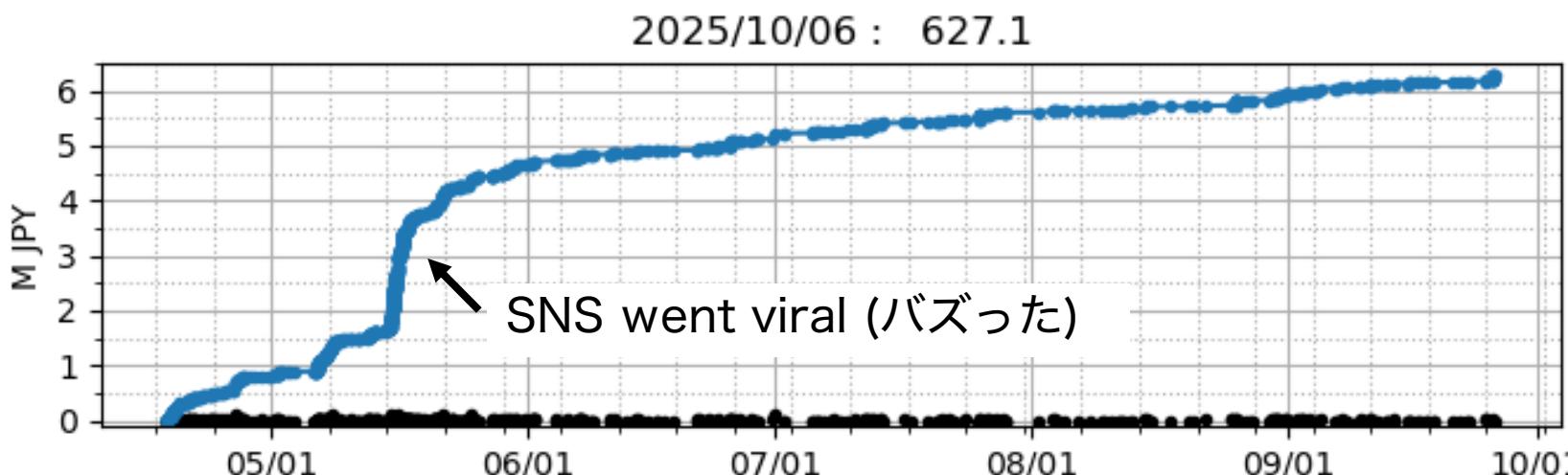
- Tours, merchandise sales
 - Under the cooperation between local government, new company named INTO-ARCS (CEO: Hiroyuki Kaneko) was founded. Part of their profit is paid to NRO.
 - #Participants (FY2025)
 - Daytime tours: (short) 8536, (full) 2273
 - Mini-lectures: 2090
 - Night tours: ~250
 - Good opportunity of science communication for staffs and also graduate/undergraduate students!



1.2. Animation movie effect

Donation

- Nobeyama kikin started on 18 Apr.
 - Wide range of return gifts
 - After the 6 month, >6M JPY had been raised
 - (will be) used for PR, students support etc.



1.2. Animation movie effect

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Road show (巡回展) 野辺山天文台展

- Started on 16 July
 - Supported by Nobeyama-kikin
 - NRO send following items:
 - Radio astronomy panels
 - Photospots, etc.
- 51 institutes, 252k participants
 - 2 more institutes are planned next year
 - 15 science museums,
 - 4 open observatories,
 - 4 planetariums,
 - 17 schools, etc.

Report

- Animation effects will be reported in next ASJ meeting by Hoshimi-san



巡回企画展

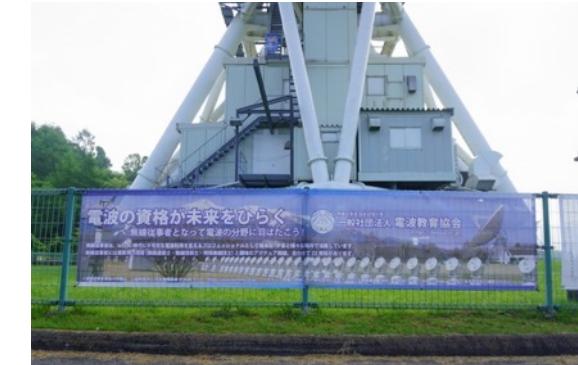
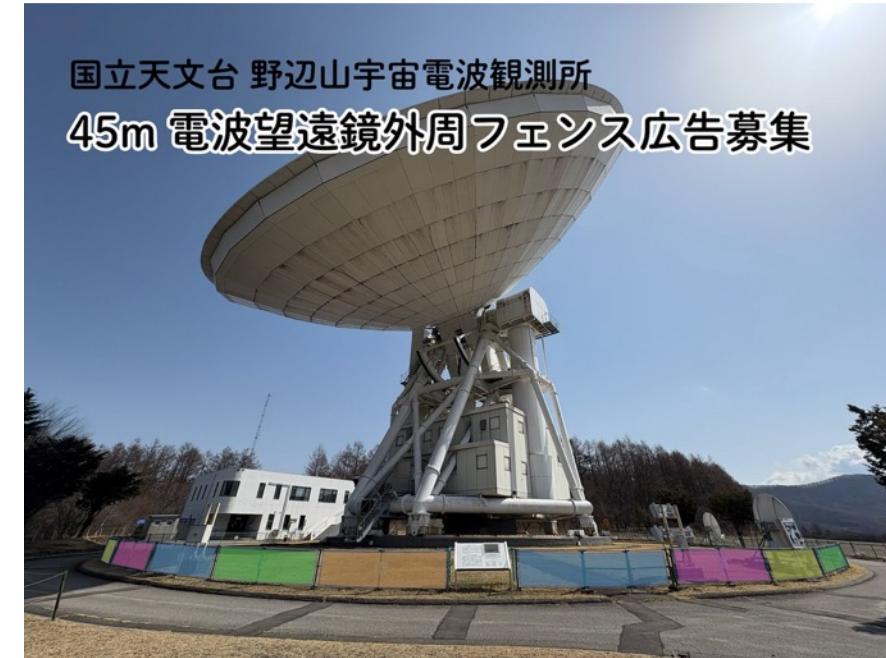
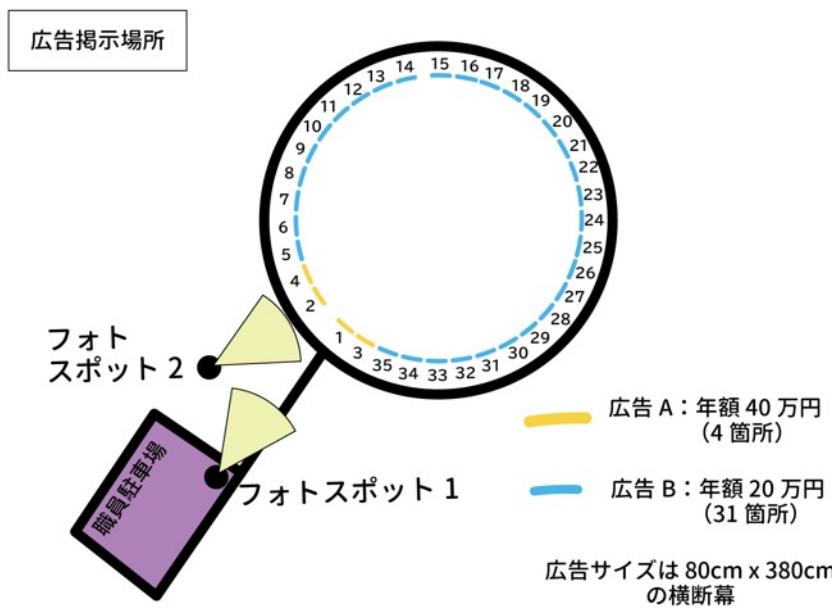


1.3. Others

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Advertisements in campus

- Started on 11 April
 - Place ads around the antenna
 - 400k or 200k JPY/year
 - If all places are sold, income will be 7.8M JPY
 - This year, 2 places were sold

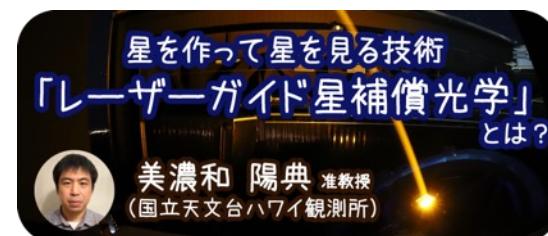


1.3. Others: Open day

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Online

- 26 July, 2025
 - 6 lectures, 8 mini-lectures, 6 posters
 - 19 university lab posters
 - #visitors
 - Youtube: 14k, Niconico: 10k
 - Gather: ~300-400



Onsite

- 30 Aug., 2025
 - 11 mini-lectures, 10 posters
 - 15 booths
 - #visitors: 2935



2. Monetary situation

Necessary cost		Income (FY2025)
Total: 140M JPY		
Maintenance ~53M JPY	Antenna	30M
	Cooler	5M
	Receiver	2.5M
	Computer	10M
Electricity	~30M JPY	
Others	Cleaning, Facility management	7M
	Legal inspection (法定点検)	5M
	Facility maintenance	5M
	Weeding (除草), snow removal	3.3M
	Heating	3M
	Open day	1M
Repair of unexpected broken	10M	
Ad	~0.4M	
	Potential to grow up to ~8M	

2. Monetary situation: unexpected repair

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Building heater replace ~50M JPY

- NRO uses boilers(ボイラー). Due to aging, we have to replace it. Considering current situation of short staffing, boiler engineer required by law is difficult to secure. Therefore, replacing heating system to air conditioners are only solution. However, by replacing it, we also have to replace ventilation and humidification system (換気加湿システム) which originally included in the boiler system. This is why it becomes expensive.

45m air conditioner replace ~6.6M JPY

- Due to aging, air conditioner in NRO45 is starting to fail more often. At this moment, it doesn't affect observation accuracy, while we have to replace it in near future.

Leaking roof of Exhibition Bldg. (IB) ~7M JPY

- Interferometer Bldg. (IB) is now used as an exhibition room. Leaking of rain has been found and some rooms are unusable. We have to repair waterproof sheet on the roof.

3. Plan for 2026

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Main concerns

- Need more money

How to realize...

- Increase sales of telescope time
 - Extend community
 - Improve user support
- Increase donation
 - Encourage community to increase their visibility for public

3. Plan for 2026

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Increase sales

- Keep instruments competitive → development proposals working very well
- Stimulate and extend community
- NRO Colloquium and/or Tutorial
 - Please contact us!
- NRO support astronomers (SA)
 - We will start recruitment of researchers as cross appointment staff (effort ~5%)
 - Duty: user support of proposal preparation and observations, NRO promotion, etc.
 - SA will get research funding from NRO
- Refer-a-Friend (友達紹介) program (draft)  **Announcement (2)**
 - Target: Researcher who has never purchased NRO45 time. (including students)
 - Bonus: User who invite a friend will get 20% of telescope time of new user's purchase (up to 50 hours per 1 invitation). Bonus time can be carried over next seasons.

3. Plan for 2026

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Increase donation

- Visibility of NRO → improved very much in FY2025
- Visibility of individual astronomers

Announcement (3)

- Cloud-funding-like donation for NRO observation projects (draft)
 - Idea:
 - NRO prepares donation platform (platform fee 15%; Keep-it-All style)
 - NRO calls for project creators (PCs) from the community
 - NRO calls for donation toward citizens through SNS and media
 - PCs prepare observation plan. The science merit should be understood by citizens. Back up plan when donation isn't fully raised as planned should be included.
 - PCs prepare rewards for donor (e.g., original goods, insert names to acknowledgement of the paper, join and look actual observations)
 - PCs can use funds raised for NRO45 observations, travel fee, and purchasing goods
 - Schedule (2026):
 - Call for PCs (15 June)
 - Deadline of call for PCs (1 July)
 - Online event (25 July)
 - Deadline of donation (28 July)

3. Plan for 2026

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Maser survey to renew the pointing catalog



Announcement (4)

- Pointing catalog NRO provides to observers are old (observed 10 years ago)
- NRO is now planning renew it, but there is no manpower
- So, NRO would like to ask the community to help us
- Idea:
 - NRO call for contributors and organize a project team
 - NRO allocates internal telescope time for this project
 - Contributors conduct observations
 - Results (peak intensity of masers) will be summarized by NRO and shared to NRO users
 - Contributors have priority rights to use results to conduct their science research
 - If science conflict happen, team member should handle it with discussion

Please let us know your voice !

- Discord Nobeyama45 server
 - Invitation code: <https://discord.gg/HtkrmpK5Sw>
- User's Voice form
 - <https://forms.office.com/r/ivRXg1JZ7N>
- Mail to us
 - nro-45m-scoope@ml.nao.ac.jp

