VIII Public Access to Facilities

1. Mitaka Campus

[Open year-round]

Dates: April to March, 10:00-17:00

Every day except for New Year's season (December 28–January 4)

Visitors: 21,310

Open Facilities: Observatory History Museum (65-cm Telescope Dome), 20-cm Telescope Dome, Solar Tower Telescope, Exhibit Room, Repsold Transit Instrument Building (Transit Instrument Museum), Astronomical Instruments Museum, Gautier Meridian Circle Building, Old Library

[Regular Star Gazing Party]

Dates: Friday before second Saturday; fourth Saturday Visitors: 4,772 (23 events) Open Facility: 50-cm Telescope for Public Outreach

[4D2U Theater Showings]
Dates: Friday before second Saturday; first, second, and third Saturdays
Visitors: 5,097 (45 events)
Open Facility: 4D2U Dome Theater

[Special Open-House Event] Mitaka Open House Day Dates: October 13 (Fri), 2017, 14:00–19:00 October 14 (Sat), 2017, 10:00–19:00 Topic: The Universe, Hot and Cold Visitors: 3,269

This event is jointly sponsored by NAOJ, the University of Tokyo Graduate School of Science Institute of Astronomy, the SOKENDAI Department of Astronomical Science, and the NINS Astrobiology Center. It has been held for 2 days each year, starting from 2010.

The perennially popular lectures related to this year's theme were hosted by the Institute of Astronomy, University of Tokyo ("The WARM Universe Observed from Atacama, Chile" Takashi Miyata, Professor) and NAOJ ("ALMA Gazing at the Cold Universe" Tetsuo Hasegawa, NAOJ Specially Appointed Professor; and "Hot Solar Corona as Seen from Space" Ryohei Kano, NAOJ Associate Professor).

* Guided tours corresponding to group tours (Dantai Kengaku) and cultural property tours were also held. In addition, the "Information Space of Astronomy and Science" was opened in 2015 near the south entrance of Mitaka Station to distribute information.

2. Mizusawa Campus

[Open year-round]

Dates: April to March (except for the New Year's season), 9:00–17:00 daily

Visitors: 19,389

Open Facilities: Kimura Hisashi Memorial Museum, VERA 20-m antenna, 10-m VLBI antenna

The open house event is held at the campus with the cooperation of the Oshu Space and Astronomy Museum (OSAM: Yugakukan) located in the campus.

[Special Open Day] Held as part of Iwate Galaxy Festival 2017 (Hours: 10:00-20:30)

Date: August 19 (Sat.), 2017, 10:00–20:30 Visitors: Approximately 1,165 (Until 16:30)

Same as last year, the Open Day was co-hosted with Ihatov Space Action Center / the Oshu Space and Astronomy Museum (OSAM: Yugakukan) and the city of Oshu. The event was opened with a performance by a marching band from a local elementary school. NAOJ offered such attractions as exhibits about the research results of VERA, RISE, and CfCA; tours of the 20-m parabolic antenna; a commemorative photo booth; plastic bottle rocket launching; quiz game; tours of the supercomputer "ATERUI;" and a special guided tour of the Array Operations Center (AOC) and the VLBI correlator.

Special lectures about black holes were given by Motohide Tamura, Professor of University of Tokyo, Mareki Honma, Director of the Mizusawa VLBI Observatory, and Noriyuki Namiki, Professor of the RISE Project, and were enormously well received.

OSAM (Yugakukan) offered various experiments in the science stalls, workshops, etc., which were carried out by student interns. The Open Day was a great success to strengthen ties with the local people.

Iriki: VERA Iriki Station

[Open year-round] Dates: April to March (except for the New Year's season) Visitors: 1,602

[Special Open Day] Date: August 12 (Sat.), 2017, 12:00–21:00 Visitors: 3,800

This special open event was held in conjunction with "Yaeyama Highland Star Festival 2017" hosted by the executive committee primarily formed by members of Satsuma-Sendai city hall and Kagoshima University.

At the NAOJ VERA 20-m radio telescope and the Kagoshima University 1-m optical/infrared telescope facilities,

guided tours of the telescopes and observation building were held. NAOJ offered such attractions as parent-child science experiments, plastic bottle rocket launching, 4D2U (4-Dimentional Digital Universe) screening, and a stargazing party at night. This time samples of space foods were offered by JAXA, and were well received.

The special lecture of the year was given by Osamu Kameya, Assistant Professor, from Mizusawa VLBI Observatory. All visitors had fun and were satisfied with scientific programs offered in this festival.

Ogasawara: VERA Ogasawara Station

[Open year-round]

Dates: April to March (except for the New Year's season) Visitors: 8,340

[Special Open Day]

Date: January 20 (Sat.), 2018, 10:00–16:00 Visitors: 167

A special open house event was held this year again under the name "Star Island 17." Same as last year, the free shuttle buses were appreciated by the visitors. The number of visitors was 167. (Because the number of residents in the island is about 2,000, approximately 10% of the islanders visited this event.)

NAOJ offered such attractions as exhibits about the research results of VERA and RISE, driving experience of the 20-m parabolic antenna, quiz games, a commemorative photo booth, and short lectures.

On the night before the special open house, a Space Lecture was given by Saeko Hayashi, Associate Professor, at the Ogasawara Visitor Center, and was attended by 30 people.

A stargazing party was held by the local Ogasawara astronomy club on the day following the special open house, and NAOJ members also joined.

Ishigakijima: VERA Ishigakijima Station

[Open year-round]

Dates: April to March (except for the New Year's season); premises are open to the public 24 hours/day, and the observation rooms are open during the hours of 10:00–16:30

Visitors: 2,577

[Special Open day]

Date: August 13 (Sun.), 2017, 10:00-17:00 Visitors: 273

The Special Open Day was held as a part of the Southern Island Star Festival.

Same as previous years, attractions like antenna tours, a commemorative photo booth, merchandise, commemorative lectures, and exhibits were offered.

Ishigakijima: Ishigakijima Astronomical Observatory

[Open year-round]

Dates: April to March

- Open Hours: Wednesdays through Sundays (Except for the New Year's season; when Monday is a national holiday, it is opened and closed on the following Tuesday/Wednesday), 10:00–17:00
- Stargazing Sessions: Evenings on Saturdays, Sundays, Holidays, (20:00–22:00), two 30-minute sessions per evening
- 4D2U Screenings: from 15:00 to 15:30 every day when the Observatory is open
- Visitors: 14,192 (1,043 during the Southern Island Star Festival)
- Open Facilities: Murikabushi 105-cm optical/infrared telescope, Hoshizora Manabi no Heya (Starry Sky Study Room) (featuring the 4D2U "four dimensional digital universe"), interior of observation dome (including exhibits of astronomical images)

The "Hoshizora Manabi no Heya" (Starry Sky Study Room), constructed adjacent to the observatory in 2013 by the city of Ishigaki, was very popular, welcoming 4,478 guests.

[Southern Island Star Festival 2017] Dates: August 12 (Sat.) to August 20 (Sun.), 2017 Visitors: 11.337

This year is the 16th anniversary of both the completion of VERA Ishigakijima Station and the Southern Island Star Festival. Approximately 9,000 visitors attended the dimmedlight stargazing event blessed with finer weather than ever before. The annual planetarium screening was attended by 581.

The activities at Ishigakijima Astronomical Observatory boost regional programs like school education, lifelong learning, and sightseeing. The cooperation agreement between NAOJ and the Tourism Association of the city of Ishigaki has been finalized. And it is widely recognized that the starry sky can be used as a tourism resource. Considering this situation, we will continue to strengthen our ties with other associations.

3. Nobeyama Campus

[Regular Open]

Open Time: 8:30–17:00 (every day except around New Year's Day (Dec. 29 to Jan. 3), open until 18:00 during the summer (Jul. 20 to Aug. 31))

Visitors: 42,760

Open Facilities: 45-m Radio Telescope, Nobeyama Millimeter Array, Nobeyama Radioheliograph, etc. (just viewing) and NINS Nobeyama Exhibition Room

[Open House Day]

Date: August 26 (Sat.), 2017, 9:30–16:00 Visitors: 2,093

The theme of the 2017 Open House Day was "Nagano Prefecture is the Astro-Prefecture ~Starry sky in Shinshu is a promenade to the Universe." We had two lectures on the theme, which attract large audiences every year. One was "Nagano Prefecture, which can be felt to be close to the Universe" by Prof. Ohnishi, Kouji (National Institute of Technology, Nagano Collage). The other was "The radio luminous Milky Way – the Galactic plane survey by the Nobeyama 45-m Radio Telescope" by Dr. Umemoto, Tomofumi (NAOJ).

Even though it rained in the early morning, the weather was getting better at the opening time, and we were blessed with good weather as a whole. However, we had 2,093 visitors, which was less than in a normal year because the weather forecast was not so good. We had some established hands-on events such as touch the main reflector panel of the 45-m Radio Telescope, antenna handicrafts, radio detector handicrafts, and antenna origami. At the NINS Exhibition Room, the presentation of the 4D theater and exhibitions of other institutes were carried out. In addition, the ALMA team presented the ALMA VR system and some short lectures. Moreover, we had a welcome greeting by the NRO character, Dr. Nobeyama and "Nagano Prefecture is the Astro-Prefecture" stamp-rally event. The Open House day was filled with events because we were supported by many people from the local people and Shinshu University, Faculty of Agriculture as well as NAOJ and other institutes of NINS.

[Jimoto Kansha Day (Thanks Day for the locals)] Date: December 9 (Sat.), 2017, 13:00–18:30 Visitors: 55

The local people have difficulty participating in the Open House Day during the farming season. They have said that they do not know much about what we, not only NRO but also Tsukuba and Shinshu Universities, study in Nobeyama.

In order to respond to these comments, we established this event in cooperation with Shinshu University, Faculty of Agriculture, Education and Research Center of Alpine Field Science and Tsukuba University, Agricultural and Forestry Research Center, Yatsugatake Forest. This year, the Jimoto Kansha Day was hosted by NRO at the NINS Nobeyama Exhibition Room, which opened to the public in April 2017. We had many events such as a tour of NRO facilities, the lectures from each institute, 4D theater, and star gazing party. The lectures were "On the biological research of the Japanese dormouse" from Tsukuba University, "Will you take notice of the available nitrogen for sustainable agriculture?" from Shinshu University, and "The Milky Way observed by the Nobeyama 45-m Radio Telescope" from NRO. There was another event the same day in Minamimaki Villiage, so the number of participants was somewhat less than when NRO had hosted it before in 2014. The festival had a friendly atmosphere with the parents and children braving the cold to stay until the star gazing party.

4. Okayama Campus

Okayama Astrophysical Observatory

[Open year-round] Dates: 9:00–16:30 daily Visitors: 5,980 (Period: April 1–October 4) Open Facilities: Window view of Okayama 188-cm Reflector Telescope

[Special Stargazing Party] Date: August 11 (Fri.), 2017, 18:30–22:25 Visitors: 81

198 applications for 548 applicants were received. M13 and Saturn were viewed.

5. Subaru Telescope

[Summit Facility Tour]

Dates open for public tour: 41 (these dates are listed in the public tour program page at the Subaru Telescope's web site. Among the 41 days, 10 tour days were cancelled due to the windscreen incident. No tours scheduled during the winter months of October to March)

Public Tour Visitors: 307

Special Tour Visitors: 67 groups, 370 visitors

[Base Facility Tour]

Special Tour Visitors: 23 groups, 252 visitors

[Public information]

- Primary means of public information is posting at the official website https://subarutelescope.org
 - Science results from the Subaru Telescope 6 Japanese and 6 English article
 - Depicting special activities or making announcements on Calls for Proposals, recruitment, etc. – 24 Japanese and 19 English articles.
- Web postings are supplemented by social media via official accounts

• Twitter accounts – SubaruTelescope (for Japanese), SubaruTel_Eng (for English)

- Facebook pages 国立天文台(for Japanese), National Astronomical Observatory of Japan, and Subaru Telescope Hawaii Outreach (for English)
- YouTube channels SubaruTelescopeNAOJ (for Japanese), SubaruTelescopeNAOJe (for English)

[Outreach]

1. Lectures at the Subaru Telescope's base facility in Hilo: 18 cases, reached 579 people

2. Remote presentations, mainly to Japan: 10 cases, reached 546 people

3. Lectures, demonstrations, workshops, etc. in the vicinity: 66 cases, reached 1,578 people

4. Lectures in Japan: 31 cases, reached 1,978 people

5. Others - Exhibits etc.: 13 cases, reached approximately 6,065 people

6. Media coverage: 22 Japanese media. 10 English media.