

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: 19,729

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

[Regular Star Gazing Party]

Dates: Friday before second Saturday; fourth Saturday

Visitors: 4,717 (23 events)

Open Facility: 50-cm Telescope for Public Outreach

[4D2U Theater Showings]

Dates: Friday before second Saturday; third and fourth Saturdays

Visitors: 4,446 (35 events)

Open facility: 4D2U Theater

[Special Open-House Event] Mitaka Open House Day

Dates: October 23 (Fri), 2015, 14:00–19:00

October 24 (Sat), 2015, 10:00–19:00

Topic: The Challenges Awaiting Astrobiology

Visitors: 5,036

This event is jointly sponsored by NAOJ, the University of Tokyo School of Science Institute of Astronomy, the SOKENDAI Department of Astronomical Science, and the newly established 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 Long Road: 13.8 Billion Years from the Start of the Universe to Us" Masuo Tanaka, Associate Professor, University of Tokyo) and NAOJ ("Astrobiology, Opening 'New Worlds' in the Universe" Motohide Tamura, Professor, University of Tokyo, NAOJ, Astrobiology Center; and "Astrobiology, Approaching the Origins of Life" Akihiko Yamagishi, Professor, Tokyo University of Pharmacy and Life Science).

* Guided tours corresponding to group tours (Dantai Kengaku) were also held. In addition the "Information Space of Science and Astronomy" 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: 17,415

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

The campus is opened to the public in cooperation with the Oshu Space & Astronomy Museum (OSAM: Yugakukan) located in the campus.

[Special Open Day] Held as part of Iwate Galaxy Festival 2015 (Festival Hours: 10:00–21:00)

Date: August 22 (Sat.), 2015, 10:00–16:30

Visitors: Approximately 660

Same as last year, the Open Day was co-hosted with Ihatov Space Action Center / the Oshu Space & Astronomy Museum (OSAM: Yugakukan) and the city of Oshu.

Although a performance by a marching band from a local elementary school and tours of the 20-m parabolic antenna were canceled due to rain, NAOJ offered a chance to experience operating the 20-m parabolic antenna; a commemorative photo booth; plastic bottle rocket launching; a quiz game; tours of the supercomputer "Aterui"; a science cafe; and exhibitions of the research highlights of the VERA, RISE, and CfCA projects.

As a new event for this year, a special guided tour of the Kimura Hisashi Memorial Museum, the Array Operations Center (AOC), and the VLBI correlator was carried out, and was well received.

A special lecture was given by Tomoaki Ishiyama, Associate Professor at Chiba University, entitled "Approaching the dark side of the Universe with the power of a supercomputer — dark matter structure formation—". He covered studies on the formation and evolution of the structure of the Universe using supercomputers. His talk was easy to understand for the audience.

OSAM (Yugakukan) offered various experiments in the science stalls, workshops, etc., which were carried out by the students on internships. The Special Open Day was a great success, strengthening ties with the local people.

Iriki: VERA Iriki Station

[Open year-round]

Dates: April to March (except for the New Year's season)

Visitors: Approximately 1,551

[Special Open Day]

Date: August 8 (Sun.), 2015, 12:00–20:00

Since a typhoon hit the VERA Iriki station and the public

open event was canceled last year, in 2015 the event was held for the first time in two years. This special open event was held in conjunction with “Yaeyama Highland Star Festival 2015” 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 telescopes and observation building were held dozens of times. An astronomical 3D movie was presented by the 4D2U project team for the first time at Iriki station. As the special lecture for the year, Dr. Yoshiaki Tamura from Mizusawa VLBI Observatory gave a talk about “the Great Eastern Japan Earthquake” from the perspective of a geophysicist. At night, a public stellar observation was held under the starlit sky. All visitors had fun and were satisfied with many 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: 8,540

[Special Open Day]

Date: February 14 (Sun.), 2016, 10:00–16:30

Visitors: 222

A special open house event was held this year again under the name “Star Island 15.” Same as last year, the free shuttle buses were appreciated by the visitors. The number of visitors was 222, which was more than last year. Because the number of the residents on the island is about 2,000, more than 10 % of the islanders visited this event.

NAOJ offered such attractions as exhibits about the research results of VERA, RISE, and TMT; science experiments; quiz games; and short lectures.

On February 13, a stargazing party was held by the local Ogasawara astronomy club, and NAOJ members also participated. Thanks to good weather, the number of visitors reached about 50.

In addition, Space Lectures were also given by Nobuyuki Sakai of the Mizusawa VLBI Observatory and Hiroki Harakawa of TMT-Japan at the Ogasawara Visitor Center on the night of February 14.

Ishigaki-jima: VERA Ishigaki-jima 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: 2,713

[Special Open day]

Date: August 16 (Sun.), 2015, 10:00-17:00

Visitors: 238

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

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

Ishigaki-jima: Ishigaki-jima Astronomical Observatory

[Open year-round]

Dates: April to March

Open Hours: Wednesdays through Sundays (Except for the New Year’s season; when Monday/Tuesday is a national holiday, it is opened and closed on the next day.), 10:00–17:00

Stargazing sessions: Evenings on Saturdays, Sundays, Holidays, and Star Festival week days (19:00–22:00), two 30-minute sessions per evening (four in August)

4D2U screenings: from 15:00 to 15:30 every day when the Observatory is open

Visitors: 13,906 (1,032 during the Southern Island Star Festival)

Open facilities: Murikabushi 105-cm optical/infrared telescope, Hoshizora Manabi no Heya (Room of Learning the Starlit Sky) (featuring the 4D2U “Four Dimensional Digital Universe”), interior of the observation dome (including exhibits of astronomical images)

The “Hoshizora Manabi no Heya” (Room of Learning the Starlit Sky), constructed adjacent to the Observatory in 2013 by the city of Ishigaki, was very popular, welcoming 3,925 guests.

[Southern Island Star Festival 2015]

Dates: August 15 (Sat.) to August 23 (Sun.), 2015

Visitors: 10,930

This year is the 14th anniversary of both the completion of VERA Ishigaki-jima Station and the Southern Island Star Festival. Approximately 9,000 visitors attended the light-down stargazing event blessed with better weather than ever before.

In addition, because this was the 70th anniversary of the end of World War II, a film named “Vega shining over the battlefield” produced by the Yamanashi Prefectural Science Museum was screened every day during the period, and these became memorial screenings. The annual planetarium screening was attended by 435.

The activities at Ishigaki-jima Astronomical Observatory help regional development through 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

[Open year-round]

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

Visitors: 50,185

Open facilities: Nobeyama 45-m Radio Telescope, Nobeyama Millimeter Array, Nobeyama Radioheliograph, etc. (viewing only)

[Open House Day]

Date: August 22 (Sat.), 2015, 9:30–16:00

Visitors: 2,429

The Nobeyama branch was crowded with 2,429 visitors on the 2015 Open House Day. The theme of the Open House Day was “Searching for the Origin of Life in the Universe.” We had two lectures on the theme, which attract large audiences every year. One was “The Search for Life in the Universe” by the former Director, Prof. Miyama, Shoken. The other was “Biotic Species in the Universe 2 –Life is linked with the Universe” by Dr. Ohishi, Masatoshi (NAOJ). We had some established hands-on events such as touch the main reflector panel of the Nobeyama 45-m Radio Telescope, the antenna handicrafts, solar radio wave detector handicrafts, and the antenna origami. In addition, some short lectures and the Q&A corner were carried out. These events were held by 119 staff members, including NRO alumni, other project staff members, and volunteers. Also with NRO character, Dr. Nobeyama and Nagano Pref. PR character, ARUKUMA. NRO was more festive on that day.

[Jimoto Kansha Day (Thanks Day for the locals)]

Date: October 10 (Sat.), 2015, 13:30–19:00

Visitors: 76

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 Tsukuba University, Agricultural and Forestry Research Center, Yatsugatake Forest and Shinshu University, Faculty of Agriculture, Education and Research Center of Alpine Field Science. As an event, we had the forest and trees rally for walking around 4 points in Tsukuba University Meguminomori (the Mercy Forest), which had its opening ceremony on the same day. It was very popular among the visitors. We also had an introduction from each institute about its research activities.

4. Okayama Campus

Okayama Astrophysical Observatory

[Open year-round]

Dates: 9:00–16:30 daily

Visitors: 11,126

Open Facilities: Window view of Okayama 188-cm Reflector Telescope

[Special Open House]

Date: August 29 (Sat.), 2015, 9:30–16:30

Visitors: 366

We had two Exoplanet Naming commemorative lectures at the 188-cm reflector telescope in the dome.

The first lecture, by Associate Professor Bun-ei Sato of Tokyo Institute of Technology, was “Exoplanets found on Okayama.” The second lecture, by Professor Norio Narita of the AstroBiology Center/NINS, was “Exploring exoplanets with the new observation instrument MuSCAT on the 188-cm telescope.” The both 90 minute lectures attracted nearly 110 audience members. The special open house event was co-hosted with Asakuchi City and the Asakuchi City Board of Education, with support from the Yakage Town Board of Education. In particular, the Observatory would like to thank the members of Asakuchi City and the Asakuchi City Board of Education for their considerable assistance in arranging complimentary shuttle bus service between the Observatory and temporary parking at Kamogata Station on the JR San’yo Main Line.

[Special Stargazing Party]

Date: April 11 (Sat.), 2015, 18:30–22:45

Visitors: 112

186 applications for 544 applicants were received. Castor of Gemini and Jupiter were viewed.

Date: November 3 (Tue., Culture Day), 2015, 17:00–21:15

Visitors: 103

76 applications for 192 applicants were received. Vega of Lyra and globular cluster M15 were viewed.

Special stargazing parties co-hosted with the Okayama Astronomical Museum were held twice over the course of the year, in spring and fall. Maximum participation for each special session was 100. As applications exceeded capacity for both sessions, participants were selected by lottery, with 120 winners being selected to allow for cancellations.

5. Subaru Telescope

[Summit Facility Tour]

Dates open for public tour: 77 (these dates are listed in the public tour program page at the Subaru Telescope's web site; the tour was cancelled during the summer due to the road closure, 16 days were affected; no tours scheduled during the winter months of December to March)

Public tour visitors: 421 (due to the road closure, etc., more than 100 people were not able to visit)

Special tour visitors: 131 visits, 538 visitors

As some special tours were conducted during public tour programs, the total number of actual visitors was 923.

*Special note: During the summer from late June to mid-August, the tours were cancelled due to the closure of the Maunakea access road and Visitor Information Station. The period corresponds to summer vacation in Japan, the U.S.A., and many other places, so it had a large impact on the tour program.

[Base Facility Tour]

Special tour visitors: 67 visits, 393 visitors

[Public information]

Primary means of public information announcement is posting it on the official website <http://subarutelescope.org>

- Science results from the Subaru Telescope – 14 Japanese and 17 English articles
- Depictions of special activities, or announcements about Calls for Proposals and recruitment – 14 Japanese and 24 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 (for English, started February 2015)
- YouTube channels – SubaruTelescopeNAOJ (for Japanese), SubaruTelescopeNAOJe (for English)

[Outreach]

1. Lectures at Subaru Telescope's Hilo Base Facility

2015

July 13: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility to the Upward Bound Summer Workshop for local high school students.

July 24: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility to the PAES (Pacific Astronomy & Engineering Summer Summit) for high school students from 5 countries.

August 5: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the junior high School students from Nago City in Okinawa.

August 18: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Fukushima Kenjin Kai members.

August 19: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Kanto Gakuin High School students from Kanagawa.

August 19: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the junior high school students from Fukushima.

August 20: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Waseda Koto Gakuin High School students from Tokyo.

August 24: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Kawagoe High School students from Saitama.

August 26: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Hibiya High School students from Tokyo.

September 23: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Japanese Group (astronomy supporters from Japan).

September 28: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the University of the Ryukyus students.

October 15: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Namiki Secondary School students from Ibaraki.

November 18: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Osaka Kokusai Science Club members.

November 20: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the selected high school students from Okinawa.

December 7: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Ryugasaki Daiichi High School students from Ibaraki.

December 8: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Senri High School students from Osaka.

2016

January 8: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Seisho High School students from Nara.

January 26: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Sanbonmatsu High School students from Kagawa.

March 2: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Nagaoka High School students from Niigata.

March 15: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Ritsumeikan Uji High School students from Kyoto.

March 17: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Masuda High School students from Shimane.

March 23: Subaru Telescope staff gave a lecture at Subaru Telescope's Hilo Base Facility for the Kanagawa University High School students.

2. Remote Presentation

2015

April 25: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Science Museum in Tokyo.

June 6: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Science Museum in Tokyo.

June 8: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Izumo High School in Shimane.

July 2: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Masuda City in Shimane for its Science Town event.

July 14: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to the University of the Ryukyus in Okinawa.

July 17: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Tokyo Mirai University in Tokyo.

October 31: Subaru Telescope staff gave a presentation via remote

conferencing system from Subaru Telescope's Hilo Base Facility to Science Museum in Tokyo.

November 9: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Masuda High School in Shimane.

November 16: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Masuda High School in Shimane.

November 27: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to the Galaxy in Adachi Ward of Tokyo.

December 2: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Matsubara Junior High School in Shiga.

December 11: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Arakawa 3rd Junior High School in Tokyo.

December 18: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Inagawa Town in Hyogo.

2016

February 12: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Wakayama Shin-Ai High School.

March 5: Subaru Telescope staff gave a presentation via remote conferencing system from Subaru Telescope's Hilo Base Facility to Science Museum in Tokyo.

3. Lectures, Demonstrations, Workshops, etc. in the Vicinity

2015

April 17: Subaru Telescope staff gave a lecture and panel discussion for the Journey master educators workshop, career panel discussion at the 'Imiloa Astronomy Center in Hilo.

May 3: Subaru Telescope staff gave a lecture at the Honpa Hongwanji Betsuin in Hilo.

July 13: Subaru Telescope staff gave a lecture at the Lyman Museum in Hilo.

July 21: Subaru Telescope staff gave a lecture for the PAES (Pacific Astronomy & Engineering Summer Summit) program at the University of Hawai'i at Hilo.

August 18: Subaru Telescope staff gave a lecture for the high school students from China at the University of Hawai'i at Hilo.

August 21: Subaru Telescope staff gave a lecture for the high school students from Sumoto City, Hyogo and the local high school students at the Kilauea Military Camp.

September 10–13: Subaru Telescope staff gave three lectures at HawaiiCon.

October 16: Subaru Telescope staff gave a lecture at the 'Imiloa Astronomy Center in Hilo.

November 17: Subaru Telescope staff gave a lecture for the Chiba Meitoku High School students at the University of Hawai'i at Hilo.

2016

January 2: Subaru Telescope staff gave a lecture at the Visitor Information Station, Maunakea.

January 10: Subaru Telescope staff gave a lecture for the Seisa Junior High School students from Kanagawa at the Kilauea Military Camp.

January 30: Subaru Telescope staff provided four astronomy workshops during Onizuka Science Day at the University of Hawai'i at Hilo.

March 7–11: For the Journey through the Universe program, Subaru Telescope staff went to 55 classes in local public schools and delivered presentations, hands-on experiences, and other demonstrations.

4. Lectures in Japan

2015

April 5: Subaru Telescope staff gave a lecture at Science Museum in Tokyo.

October 5 & 7: Subaru Telescope staff gave a lecture at the Nanbu Medical Center and Nanbu Child Medical Center in Okinawa.

October 6: Subaru Telescope staff gave a lecture for Okinawa Shogaku High School and Junior High School students in Okinawa.

October 8: Subaru Telescope staff gave a lecture at the Ishigaki City Hall in Okinawa.

November 2: Subaru Telescope staff gave a lecture at the International Science Fair at Ritsumeikan High School in Kyoto.

November 4: Subaru Telescope staff gave two lectures for Ritsumeikan High School students in Kyoto.

November 6: Subaru Telescope staff gave a lecture at Niwakubo Junior High School in Osaka (as part of the Fureai "Friendly" Astronomy Program).

5. Others

2015

May 2: Subaru Telescope staff provided a booth with many hands-on activities about the Subaru Telescope at the AstroDay event in Hilo and interacted with hundreds of families in the local community.

August 2: Subaru Telescope staff provided a booth at the Aloha Art Festival in 'Imiloa Astronomy Center, Hilo.

August 3–14: Subaru Telescope staff provided a booth and gave demonstrations at the IAU General Assembly in Honolulu.

2016

January 27: Subaru Telescope staff provided a booth and gave demonstrations at a special event at 'Imiloa Astronomy Center in Hilo.

January 30: Subaru Telescope staff made presentations about the Subaru Telescope at the Onizuka Science Day event at the University of Hawai'i at Hilo and interacted with hundreds of families in the local community.

February 18: Subaru Telescope staff provided a booth at the Career Expo and gave demonstrations for local Junior High School and High School students in Hilo.

February 21: Subaru Telescope staff provided an exhibition with many hands-on activities about the Subaru Telescope at the 'Imiloa Astronomy Center's open house and interacted with a wide range of age groups in the local community.

March 26: Subaru Telescope staff provided an exhibition with other observatories and interacted with the local community.

6. Media Coverage

Japanese 14, English 8