The Record 3 Million Visitors and the NINS PR Center in the NAOJ Nobeyama Campus

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Nobeyama has made the campus accessible to the public at all times since the inauguration of the Nobeyama Radio Observatory (NRO) in 1982. Since the opening to the general public, the cumulative total of visitors reached 3 million on October 2013. Now, the campus has about 60 thousands visitors for a year. The cool highland climate, beautiful starry sky attract the visitors, but, our unique outreach activities as an advanced research institute such as Open House Day, Thanks Day for the locals, are also the main factor, which brings such a lot of visitors to Nobeyama. For many visitors, we have an improvement plan of the building of the Nobeyama Millimeter Array to install the exhibition area of the NINS (National Institutes of Natural Sciences), in order to establish a PR center not only for astronomy but also for the natural science. We summarized the PR activities of NRO mainly for visitors.

1. Introduction

The Nobeyama campus of the National Astronomical Observatory of Japan (NAOJ) is in the Nobeyama highland in Nagano Prefecture, which is at an altitude of 1350 m near Yatsugatake Mountains (Fig. 1). It is one of the coldest places in the main land of Japan. Nobeyama is an ideal site for radio observations because of the cool climate and relative high altitude.

The campus started at the inauguration of Nobeyama Solar Radio Observatory in 1969. The Nobeyama Radio Observatory (NRO) was founded with the 45-m radio telescope and Nobeyama Millimeter Array (NMA) in 1982. These powerful telescopes and facilities pushed up the Japanese radio astronomy to world-class levels. Especially, the 45-m radio telescope as the world's largest single-dish telescope for millimeter wavelength observations, continues to be active at the forefront of research more than 30 years.

The open to the public started at the inauguration of NRO almost without precedent of research institutes. Prof. Kaifu, a former NAOJ Director and one of the founder members of NRO, wrote "It is a duty of the scientist to tell general public about the scientific results" [1]. NRO is a pioneer of PR activity in research institutes. We succeed to their spirit in NRO.

2. PR Activities for Visitors

2.1. The Record of 3 Million Visitors

Since the opening to the general public, the cumulative total of visitors reached 3 million on October 17th, 2013. This record was archived in the 32nd year since the opening. We held a small ceremony of the record with the memorial visitor. Fig. 2 shows the road to the record, the annual and cumulative totals of visitors



 ${f Fig.\,1}$ Aerial photograph of Nobeyama Campus. We can see the Yatsugatake Mountains over there.

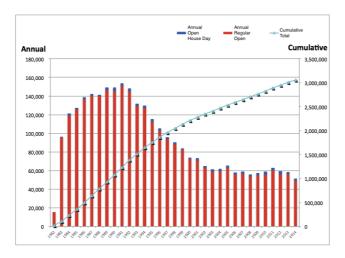


Fig. 2 The annual and cumulative totals of the visitors in the Nobeyama Campus. (fiscal year 1982–2014).

(fiscal year 1982-2014). In the last ten years, we have about 60,000 visitors for a year.

2.2. Regular Open

The regular open time for the Nobeyama campus is 8:30–17:00 every day except around New Year Days, especially, open until 18:00 during the summer days. Due to the climate of Nobeyama, we have many visitors in summer, but few in winter. Fig. 3 shows the campus map illustrative of visitor course and facilities. There are some radio telescopes, which are just viewed by visitors. It takes about 1 hour for self-guide to the campus. We distribute the NRO brochure [2] to all the visitors.

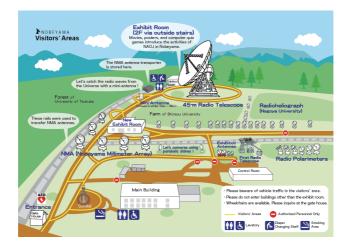


Fig. 3 The Nobeyama campus map. It illustrates the visitor course and facilities.



 ${f Fig.\,4}$ A scene of Nobeyama Open House Day, a event, touch of a reflector of 45-m radio telescope.

2.3. Special Guide Tour

Usually, we ask the visitors to guide the campus by themselves. However, we, the NRO staff, sometimes guide the visitors specially. By 2010 April, the special guide tours were done just for educational and research institutions from April to October. After that, the guide tours are done for the limited groups such as the local governments, the local educational institutions, the directed high schools (SSH/SPP) and the related groups. And we provided the work-experience opportunities for local junior high schools. In addition, we hold the Campus Tour Week, a summer week for any educational institutions. For these special guide tours, we receive about 20-30 groups for a year.



Fig. 5 A scene of "Star-gazing Party for Sora-Girls", special guide tour of NRO.

2.4. Nobeyama Open House Day

We have the Nobeyama Open House Day once a year since 1983. In these years, we held on Saturday late in August. We have many events such as some lectures, touch of a reflector of 45-m radio telescope, handicrafts of the antenna and/or detectors, poster display on scientific results, and open of the control rooms for the telescopes (Fig. 4). On the average, we have about 2,500 visitors on the day. The Day is a cooperative opportunity with local governments and communities. The local Chamber of Commerce sells vegetables, light meals, and some goods. And, the PR character of Nagano Prefecture is invited.

3. Regional Cooperation

Regional cooperative activities of NRO with the local governments and/or communities were not successive until recently. However, we put effort into the cooperative activities primary for the local. While, the local governments review community resources for regional activation. They notice a starry sky and astronomical observatory as tourist resources. The NRO and the local governments share a mutual interest of astronomy and starry sky, and establish a "win-win" relationship. In fact, we have an agreement for astronomy popularization and starry sky tourism with the local tourist association this February.

Recently, we have many opportunities of the cooperation with the local governments. The list of the activities is as follows:

- Nobeyama Open House Day
- Thanks Day for the locals held by 3 Nobeyama research institutions (NRO, the University of Tsukuba and Shinshu University)

- Star-gazing Party for Sora-Girls held by the local tourist association
- Starry Sky Summit by 3 local governments of Japan Major Scene Location of Star Gazing
- Shinshu Saku Star Sommeliers by the Union of Local Governments in the Saku Area
- "Artist in Residence" in NAOJ Nobeyama held by Siga Kogen Roman Art Museum (Yamanouchi, Nagano) [3] etc.

We introduced "Star-gazing Party for Sora-Girls (Tebura de Hoshizora Kanshokai)" as an example. The event held by the local tourism association. They gathered many booths by the local shops and so on. We offer the events such as some posters exhibition, special guide tours, and lectures (Fig. 5). We also give a star guide at night. We have several hundreds visitors mainly from the metropolitan area.

4. NINS PR Center

National Institutes of Natural Sciences (NINS) is the upper organization of NAOJ. NINS consists of 5 institutions for natural sciences such as Fusion Science (NIFS), Basic Biology (NIBB), Physiological Science (NIPS), Molecular Science (IMS) and Astronomy (NAOJ).

However, the NINS did not have a PR site so far. So, we have a plan of the NINS PR Center. It will be the first PR site of NINS. It is an improvement plan of the building of NMA at the almost center of the Nobeyama Campus (Fig. 6, "New Exhibit Room" in Fig. 3). It will have an exhibition area (about 400 m² shown in Fig. 7) not only for astronomy but also natural sciences. So, it is so challenging because of covering wide field of science. We have done a preliminary survey and design of construction work. The work was started in October, and is now in progress.

The concept of the PR center is "Relation of Nobeyama and Natural Sciences". The First objective is introduction of NAOJ and NRO. We will have exhibitions of historical devices of NRO and dynamically preserved 10-m antenna of NMA. As the second, we have an introduction of NINS and other institutes. We will exhibit posters and some experimental devices from each institute. The third is a



Fig. 6 External view of former NMA control building. It will be the NINS PR Center after the construction work.



Fig. 7 Layout plan of exhibition area in the NINS PR Center.

4D theater [4]. It is developed in NAOJ for the general public to present the latest research results in a way that is scientifically accurate, but also fun and easy to understand. We will provide the introduction contents of NINS at the theater, if possible. In addition, we have an exhibition area for the local, Nobeyama.

5. Summary

The NAOJ Nobyama campus is open for the general public since the inauguration of the Nobeyama Radio Observatory (NRO) in 1982. NRO is a pioneer of PR activity in research institutes. The cumulative total of visitors reached 3 million on October 2013. Now, the campus has about 60 thousands visitors for a year. Our unique outreach activities such as Open House Day, Thanks Day for the locals, are also the large factor to bring such a lot of visitors to Nobeyama.

We put effort into regional cooperation. We shared a mutual interest and established a "win-win" relationship. Now, we have many opportunities of the cooperation with the local governments and/or communities such as "Star-gazing Party for Sora-Girls (Tebura de Hoshizora Kanshokai)" by the local tourist association.

We also progress the NINS PR Center Plan, the improvement plan of the building of NMA. It will be the first PR site of NINS, which introduce to NINS as well as NAOJ. 4D theater will be installed in the PR Center, which presents the latest research results of astronomy and natural sciences.

References

- NRO Editorial Committee of 30th Memorial Book, 2013, "The 30th Memorial Book of NRO"
- [2] Nishioka, M., et al. 2015, in this volume
- [3] Ide, H., et al. 2015, in this volume
- [4] http://4d2u.nao.ac.jp/