

TWENTY YEARS OF THE MOON STATION: TOWARD THE NEXT 20 YEARS. J. Terazono¹, S. Sakamoto², M. Yoshikawa³, N. Wakabayashi⁴, J. Watanabe² and The Moon Station Operation Team, ¹The University of Aizu (Tsuruga, Ikki-Machi, Aizu-Wakamatsu, Fukushima 965-8580, Japan: terazono@u-aizu.ac.jp), ²National Astronomical Observatory of Japan (2-21-1, Osawa, Mitaka, Tokyo 181-8588, Japan: sakamoto.seiichi@nao.ac.jp, jun.watanabe@nao.ac.jp), ³Institute of Space and Astronautical Science, JAXA (3-1-1, Yoshino-dai, Chuo-ku, Sagami-hara, Kanagawa 252-5210, Japan: Yoshikawa.Makoto@jaxa.jp), ⁴School of Design, Sapporo City University (Geijutsu-no-mori 1, Minami-ku, Sapporo, Hokkaido 005-0864, Japan: n.wakabayashi@scu.ac.jp).

Introduction: The importance of public outreach in lunar and planetary exploration area is more than justified. Nevertheless, it has been deprecated for a long duration of time in Japan mainly due to lack of dedicated budget. In November 1998, we started the website “The Moon Station” [1], initially for the promotion of a coming Japanese lunar exploration project, later nicknamed as “Kaguya”. We successfully commemorated the 20th anniversary in November 2018 with 4709 pages covering virtually all worldwide and domestic lunar and planetary explorations. In this demonstration, we will address 20 years’ change and advancement of our web-based public outreach activity in lunar and planetary exploration, and address our future vision and challenges.

Brief Introduction of The Moon Station: As we already presented the progress and summary of The Moon Station at the time several times [2] [3] [4], we now briefly summarize recent progress and main characteristics of the website.

The major renewal of the website was carried for the first time in 13 years in March 2016. The site was completely re-planned and re-engineered to utilize WordPress as a Contents Management System. It brought us mobile-friendly environment and easy page management system. Also, the graphics were totally renewed intended for softer impression based on round-shaped design.

The characteristics of the website can be summarized as the following three points: “quick update”, “intelligible article” and “scientifically correct content”.

Also, there are advantages in our website:

- All-out introduction of domestic and worldwide lunar and planetary explorations of past, present and future.
- Delivering information of worldwide exploration in plain Japanese, moving out language barrier.
- Detailed and comprehensive expositions including the background of exploration.

These tips are particularly taken by the Japanese media and editor-in-chief (Terazono) is frequently taken from them for news gatherings and commentaries.

Current Status and Problems: According to Google Analytics, the monthly statistics of December

2018 was 40,156 users and 63,441 pageviews, more than six times higher than the ones (5,972 users and 10,540 pageviews) in the same month of 2016. During the busiest month, September 2018, in which month the Japanese enjoy viewing of harvest moon, the website recorded 87,398 users and 127,580 pageviews.

The access rate is steadily increasing since the 2016 full renewal, possibly due to the increased access from mobile devices. Actually, 70.8% of access in December 2018 were from iOS and Android.

Possible concern is that the bounce rate is really high, approximately 80%, and the average session duration is mainly below one minute. These facts mean that most of the users satisfy with watching one or two pages to grasp the information they immediately require and then leaves the site without learning further. The longer visiting time of users is one of our challenges.

Toward the next: We believe keeping the core value of the website to the next two decades are the first priority. To that end, establishment of more stable functioning and funding scheme is important. Presently, we rely a lot on funding from various companies, and there is little source of self-sustaining funding resources such as ad revenue and ancillary business.

Also, re-establishment of English website may be one solution. There is only a few information about Japanese lunar and planetary exploration with clear and simple commentary in English, and we believe our means of outreach acquired through 20 years in Japan will also benefit the English readers.

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References: [1] <https://moonstation.jp> [2] Terazono J., et al. (2009) *LPS XL* Abstract #1231 [3] Terazono J. et al. (2016) *Journal of The Japanese Soc. for Planetary Sciences*, 23, No.4 (in Japanese) [4] Terazono J. et al. (2018) *Proc. Communication with Astronomy With Public 2018*.