

"Mitaka TAIYOUKEI walk", an excursion program in the scaled solar system in these 8 years

Toshihiro Handa¹; Hidehiko Agata²; Asako Ohasa³; Kenji Karasaki⁴; Suguru Yoshida⁴

¹*Kagoshima University*; ²*National Astronomical Observatory of Japan*; ³*Mitaka city municipal*; ⁴*Mitaka Network University Organization*

As an introduction to astronomy, an actual scale of the solar system is one of the best key stories. Many people know the solar system but only few people recognize the actual scale; especially the relative spacing against the planet sizes; it may make a big impact or surprise to the public. Therefore, we have shown a scale model of the solar system with 1:1,300,000,000 over Mitaka city, Tokyo since 2009. This scale gives 1 cm for Earth's diameter and 115 m for 1 au. We mapped the scaled solar system on the city map of Mitaka. We show the size of each planet in the same scale at several spots in the corresponding areas. Through this model, people can "physically" understand the actual extension of the solar system and size of planets simultaneously; although the planet size is hands-on, planet spacing is walking distances. To motivate the program we put a few prizes for people who complete the assigned spots all over the city where they find a short tips on each planet. We gave a name to this program as "Mitaka TAIYOUKEI walk", which means an excursion in the scaled solar system in Mitaka city. This program is unique, because it is done by collaboration of Mitaka city municipal, shop master union, and professional astronomers. In these days more than 100 shops and facilities in and around Mitaka join this program. Through this program citizens understand the solar system, local community, and fun of discovery. During the program several science-cafe talks on astronomy are also held, which cultivate an astronomical interest. The program can become a tourist attraction and is a wider entrance to the public. In our talk we will show its history, current status, and future plan.