Astrobiology Classes at Elementary Schools in Japan

T. Toyota^{1, 2}, S. Kasahara³, N. Narita⁴, T. Hirasawa¹, M. Murayama-Watanabe₅, N. Homma¹, C. Kodera¹, H. Fujimori-Sakuma⁶, D. Shichi⁷, Y. Katsu-Kimura⁸

¹The University of Tokyo, Japan

²Earthquake Research Institute, Japan

³Institute of Space and Astronautical Science, Japan

⁴National Astronomical Observatory of Japan, Japan

⁵Rikkyo University, Japan

⁶National Cancer Center Research Institute, Japan

⁷Tokyo Medical and Dental University, Japan

⁸Ochanomizu University, Japan

We report an educational activity of the Astrobiology Classes at elementary schools in Japan, performed twice, i.e. at Yahata elementary school from November 2007 to February 2008, and at Takasato elementary school from November 2008 to January 2009. Astrobiology is an interdisciplinary field involving astronomy, planetary science, biology, and so on. Accordingly, we can efficiently combine many pieces of scientific topics into a spectacular scenario. Our outreach activity at the elementary schools was organized by young scientists in various research areas in cooperation, and represented by following significant properties: (1) that the series were prepared for 5th and 6th year students, (2) that the lesson plans were prepared along with the private policy of the school, (3) that graduate students made the lesson plans and indeed gave lessons (our lessons included laboratory exercises of DNA extraction, the experiment of magnetic field and the observation on fossils), (4) that elementary school teachers were in collaboration with graduate students to make the lesson plans, and (5) that we gave the lessons for every classroom. In this talk, we introduce our activity and discuss future possibilities.

Keywords: Astrobiology; elementary school; graduate school students