Science has various interesting fields, especially Earth and planetary sciences which cover Geology, Seismology, Climatology, Astrobiology and so on. Therefore, Earth and planetary sciences are one of the most important and famous academic discipline, however, it is difficult to say that the attractions, essences and familiar examples of Earth and planetary sciences have become widespread in the public eye. One of the reasons for this is that the scientists study the phenomenon on an unfamiliar timescale of tens of thousands of years in Earth and planetary sciences. In addition, there are only a few opportunities for general public to meet and talk with the scientists directly. In order to settle this problem, academic communities need to understand the science mindset is not public mindset and we need better science communication to the general public.

We have proposed that science communication is the one of the best way to become interested in and understand about Earth and planetary sciences for general, and also the way to promote communications between academic communities and the general public. On the other hand, much science communication is performed nowadays. But in the current situation, almost all of the activities aim to enlighten people who are usually not interested in science about the interest of science. The aim is very important, but not enough because the interest for sciences or scientific knowledge is different from understanding science and being able to contribute to society. Hence, it is hoped that the current status will improve.

We established the concept of science communication in Earth and planetary science presented in JpGU 2011 (Chiba et al., 2011) and reported the results of "Chikyu wakusei kagaku bar (and cafe)" in JpGU 2012 (Chiba et al., 2012). "Chikyu wakusei kagaku bar (and cafe)" is the science cafe focused on earth and planetary sciences held by our science communication group, "Universal Earth". In this presentation, we report the characteristics and problems with the comparison of the last three science cafes whose themes were as follows; the risk of sector collapse, deep geological depository, and global paleo-environmental change indicated with Antarctic geology. Also, we suggest how an outreach activity for Earth and planetary sciences can be promoted from the viewpoint of the science cafe by Universal earth.

Keywords: Earth and Planetary Science, Science Cafe, Science communication, Discussion