Analog model of basement structure below the Nobi Plain

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It is commonly discussed the difficulties on promoting the geologic results for the students as well as citizens. To solve this problem, I made three-dimensional analog model of basement structure below the Nobi Plain. The horizontal scale of model is 1/200,000 but vertical scale is emphasized as 400\%. Because the model was painted by gradations in color from yellow (Shallow) to dark blue (deep), it can be easily recognized the contrast between subsurface steep precipice and gentle slope of basement structure. Among them, some active faults are characterized by sharp drop of basement depth below the Nobi Plain. Thus the analog model of basement structure below sedimentary basin would be helpful to understand why long-period ground motion is amplified in the sedimentary plain.

Keywords: outreach, earth science, geology, educational promotion
Fieldwork training for Environmental Literacy using Geo-tours at the right bank of Arakawa River

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The right bank of Arakawa River remains exuberant natural environment. We regard the right bank of Arakawa River around Kumagaya campus of Rissho University as a natural experimental laboratory. For purpose of fieldwork training Environmental Literacy, we prepared five Geo-tour courses on area of the right bank of Arakawa River.

As a result, we obtained affirmative educational effect from student questionnaire survey about five Geo-tour courses.

Keywords: Familiar Natural Environment, Environmental Literacy, Geo-tour, Fieldwork
Report of the 15-th children’s summer school on earthquakes and volcanoes

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The children’s summer school on earthquakes and volcanoes (http://www.kodomoss.jp/) started in 1999. It is managed by the Seismological Society of Japan (SSJ), the Volcanological Society of Japan (SSJ) and the Geological Society of Japan (GSJ) as one of the important outreach activities. All of the past activities of the children’s summer school are reported on ”Naifuru”, which is the public relations magazine of SSJ (http://www.zisin.jp/modules/pico/index.php?content_id=2666). The detailed purpose of the school is written in Sato et al. (2014).

The 15-th children’s summer school on earthquakes and volcanoes was held in the Unzen volcanic area global geopark in Nagasaki Prefecture from August 2nd to August 3rd in 2014. Unfortunately, the weather was not good at that time because a typhoon came close to the area. But 21 children, who are from elementary schools, junior high schools and high schools, joined the school and tried to solve ”the secret of Kyushu hidden in the Shimabara Peninsula”, which was a theme of the 15-th children’s summer school. We will report this activity in the presentation.

Keywords: earthquake, volcano, child, summer school, outreach activity
Outreach programs using several groups of meteorites

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We introduce outreach programs using several groups of meteorites at Okayama university.

Keywords: meteorites, outreach
Development of simple seismometer made with materials of 100 Yen Shop

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We developed simple seismometer made with materials of "100 Yen hop" for outreach. Recently, neodymium magnets can be purchased from the 100 Yen shop. It is difficult to purchase nichrome or copper wires to make a coil, but one option could be to use the coil in an alarm clock. We used PC or smartphone for monitoring the wave signal. With an application for oscilloscope (e.g., "Sound Oscilloscope"), we can see the wave signal to the microphone input of the smartphone. We report the details of procedure for making the simple seismometer.

Keywords: seismometer, educational material, 100 Yen Shop, smartphone, outreach
Investigation of damage trace of the 2005 Fukuoka Earthquake -Part 3-

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After the disaster of 2011, the existence such as the monuments which ticked away the teaching of the ancestor who conveyed a disaster was performed a close-up of in each place. The history of the past valuable teaching and disasters such as monuments might be forgotten with time. Therefore, it is an opportunity to raise disaster prevention awareness to convey history of disaster and a disaster sign.

We investigated the damage trace of the earthquake of the Fukuoka northwest offing in 2005. In this study, we surveyed in twenty-one sites, we was able to confirm the damage trace of the earthquake concerned in ten sites. And we made the map which could take a walk through these damage traces.

Keywords: the 2005 Fukuoka Earthquake, damage trace
Difference between "recognition" and "discussion-promotive" type science cafes for the earth science and its significance

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Earth and planetary science cover various fields of science and technology so that it is clear that earth and planetary science is one of the most important fields of academic area for the our society. However, public have few opportunities to be consciously exposed to the field. Therefore, it is important that we make the chance can make the public feel interested in the field. Some outreach activities and science events have been performed and held to solve this problem in this decade. As a result, interactive communication of this field between scientists and the public has been considered to be important way. Of course, it certainly doesn’t apply only to the field, and interactive communication events about various science area is increasing from its interest. The communication which is mediated with scientific knowledge and perspectives is called as "science communication".

The science event using science communication facilitates participation and communication of participants by lowering the entry levels and talking about technical terms as familiar information for public. We established "Universal Earth" as science communication group in the earth and planetary sciences field and have performed science events so far. As a result, the issues which have the aspects of scientific and social topics have come to light through. And also we have considered that the science communication is consisted of three phases at least and the necessity of capturing the communication for each stage. The first is "recognition of the topic", the second is "discussion in the topic", and the third is "combination of the scientists and the public mediated by the two-way communications”. We have focused and practiced for the second and the third ones noted above with holding science cafes and symposiums, but not for the first one.

In this presentation, we will report the results of two "discussion-promotive type" science cafes held in 2014. In addition, we consider and infer about the suitable way(s) of the science cafes and science communication for the earth and planetary sciences.

Keywords: science cafe, interactive communication, earth and planetary science, outreach, discussion