

The accretionary prism experiment for geoparks using powdered sugar, cocoa, and a cooking paper

HAYASHI, Shintaro^{1*}

¹Fac. of Edu.and Human Studies, Akita Univ.

The analog experiment for understanding an accretionary prism was developed. The experiment is developed for children, students, and the tourists of geoparks. The experiment is simple and is using only familiar materials, such as powdered sugar, cocoa, and a kitchen paper.

Accretionary prism is usual in the Japanese geoparks. But, it is difficult to explain the mechanism of accretion to a child and a student, and the tourist of a geopark.

The accretionary prism experiment proposed until now had a thing adapting a sand box experiment (2004 besides Yamada, 2006, and Kaneda), and flour fault experiment (Okamoto, 1999, 2000).

<The method of an experiment>

Ingredients: powdered sugar, raw cocoa, creep, a cooking paper, a tea strainer, a spoon, a paper cup, the lap for kitchens, papier-mache.

Directions:

1. Papier-mache is wrapped in a lap to make continents.
2. Cut cooking paper into about 40 cm.
3. Build the layer of cocoa (the thickness is around 2mm) on an cooking paper using a tea strainer.
4. Sprinkle powdered sugar with a tea strainer on the layer of cocoa. The thickness is around 2 mm.
5. Wrapped papier-mache "continent" is set at the end of a cooking paper.
6. Sprinkle milk over the continent and continent side of the layer of cocoa and powdered sugar.
7. A cooking paper is pulled.
8. Cocoa and powdered sugar are added to a continent and duplex structure is formed.
9. Put cocoa, powdered sugar, and milk into a paper cup collectively, and pour out and process hot water to make cocoa drink.

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