

Magnetic measurement of basalt dikes in the Sara river of Tsuyama

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According to previous studies, there was a warm archipelago, like that of the subtropical zone, in Tsuyama city about 16~7million years ago. In this study, we call the archipelago "the Tsuyama Sea". However, no one has precisely examined factors and dates of the disappearance of the Tsuyama Sea. We measured paleomagnetism of the basalt dikes which are stretching north and south in the Tsuyama Sara River with our own astatic magnetometer. By this measurement, the paleomagnetism showed that magnetic north was shifted 2.4° north-west from the current magnetic north when the dikes had been formed. Therefore, we think that an increase of the north and south compression caused the rising of the backbone range, and after that, the disappearance of the Tsuyama Sea.