

Why was the view that faulting causes earthquakes rejected in Japan

TOMARI, Jiro^{1*}

¹ERI

Nowadays most earth scientists believe that most earthquakes are the result of faulting. But until the early nineteen-sixties, a controversy lasted over the question whether faulting was the cause of earthquake or faulting was the result of the earthquake in Japan. Although the theory that a double couple force causes a fault had been presented in the early nineteen-thirties and the theory could explain observation data satisfactorily, the view that earth block movements or subterranean magma movements causes earthquakes were more popular.

The reason why the view that faulting causes earthquakes had not been accepted would be thought that a double couple theory did not explain the origin of a double couple force bringing about faulting. The advent of the seafloor spreading hypothesis changed the situation, because the hypothesis could explain the origin of a double couple force. It owes to the seafloor spreading hypothesis that the double couple theory had been accepted in Japan.

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