

Geological history of the Earth's crust: the Malaysian perspective

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As solid and unchangeable as it may seem, the Earth is in reality a dynamic construction of layers that constantly shift, drift apart, or collide into one another.

Professor Hamzah Mohamad from Universiti Kebangsaan Malaysia's Geology Department, said today that scientists have been finding more and more evidence to support this theory and it has now become an accepted geological belief.

"Hundreds of millions of years ago, the continents were much closer together than they are now and have only attained their present conditions through the process of continental drift," he said at a seminar entitled *Geological history of the Earth's crust: the Malaysian Perspective* at the National Planetarium here.

He was speaking to 200-strong crowd comprising students and members of both the Malaysian Geological Society and the Persatuan Pencinta Alam Malaysia. *"There is a lot of evidence that points to the idea that the continents have drifted apart."*

"Geological mapping and dating, which breaks down areas by rock type and age, have shown for example that eastern South America and the southern region of Africa might have once been joined up."

"Also, the configuration of the continents suggest that they may have once been together, like a jigsaw puzzle," he said.

A phenomenon called "sea floor spreading" was another indication of the activities of the Earth's crust.

"Dating samples from the ocean floor show areas of new crust surrounded by older parts, suggesting that there are ridges on the floor that expand when magma from the Earth's core comes to the surface."

"There is no need to worry about such movements however, at least not in our lifetime. There is usually only between one centimetre and 17 cm of movement a year." The seminar was organised by the Space Science Studies Division of the Science, Technology and Environment Ministry and the Malaysian Geological Society.

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