

U3A GEOLOGY REPORT

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Meeting on Sept 22nd

After the break in August, our first meeting of the autumn took place at the Witham on Sept 22nd. The meeting was led by Trevor Morse and was in a tutorial style, encouraging members to raise questions.

In the first half Trevor returned to his interesting 'Barnian hypothesis' which looks at the unique geological conditions for life on Earth and whether these are likely to be found on other planets. It was a useful opportunity to revise some key principles of geology such as uniformitarianism, plate tectonics and the Milankovitch cycles. The ability of DNA to mutate and drive evolution is also another of the key conditions essential for life. It was explained that there is, so far, no evidence of plate tectonics on any of our three nearest rocky planets. This topic stimulated considerable discussion leading to questions as to whether man's exploitation of the planet (the Anthropocene epoch) runs contrary to the overall balance and compensatory cycles of the Earth (the Gaia hypothesis) and whether this will eventually lead to our extinction.

In the second half, Trevor showed some of the high quality geology learning resources from the OUGS that are available on the internet and social media. As an example, the meeting looked at some excellent slides illustrating mechanisms of mass movement such as avalanches and mudflows on land and the formation of turbidites in water.

Our next meeting will be at The Witham on Monday morning October 27th at 10 am. All are welcome to join us. Please contact the convenor for details.