



Ecosystems: modelling the Earth

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How can numerical models help us to understand our planet? How do we make sure they represent reality? This album introduces ongoing work to model the entire planet's ecosystems, simulating the complex physical, chemical and biological interactions taking place between every living organism and climatic activity. Since everything is interconnected, Earth systems modelling can help our understanding of how the Earth's processes affect each other. For example, by increasing the rate of decay of leaf litter in North American forests, scientists can investigate the effect on global temperatures. The acid test is to see how well the model reflects reality, by comparing the model's predictions against real-world data. This material forms part of the Open University course S396 Ecosystems