

### **3D bedrock geological modelling of an area in south-eastern Värmland, south-central Sweden**

The bedrock in south-western Sweden belongs to the Sveconorwegian orogen, which is a result of the collision between two continental plates c. 1 billion years ago. The collision between the continents is inferred to be an analogue to the collision between the Indian and Eurasian plates which has resulted in the formation of the Himalayas. The 1 billion years old mountain belt, to which the bedrock in south-western Sweden belongs, is nowadays deeply eroded, and the bedrock in the Sveconorwegian orogen is inferred to correspond to a deep section of the Himalayas.

The movie shows a 3D modelling of the bedrock in the easternmost, frontal part of the eroded Sveconorwegian mountain belt in the area between Kristinehamn and Karlskoga in south-eastern Värmland.

The modelling is mainly based on SGU's bedrock and geophysical information in the map areas Karlskoga NV, SV, NO and SO.