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“The Skin of the Earth – Where Life meets Rocks” – A Science Movie

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What forms the landscapes of the Earth with their mountains, rivers, soils - the places we live in? Earth's surface is shaped when rocks are uplifted by geologic forces, and are then destroyed by rain, ice, and wind that carve landscapes by erosion and weathering. But there is the green layer of life between rocks below and climate above. Do plants with their roots, animals that dig into soil, and the vast number of microorganisms shape the landscapes? Or do minerals, soil, and water provide the environment for life? Or are they both interdependent? Can they together resist the massive climate change imposed by humans today?

Showcasing these complex interactions in an audiovisual format provides a fantastic opportunity for science dissemination, but making a movie is a formidable challenge that scientists are not experienced in. Based on the the German National Science Foundation (DFG)- funded research network “EarthShape – Earth Surface Shaping by Biota”, we produced a movie intended as public outreach for scientists as well as classrooms and a general public audience.

Watch the scientists of the German-Chilean “EarthShape” project study the shaping of the Earth along a climate gradient in Chile, in the National Parks Pan de Azúcar, La Campana, and Nahuelbuta. Take a tour through fascinating landscapes and see the young scientists study the interactions between geology and biology, from the dry Atacama desert to dense forests, and in their sophisticated home laboratories. See how feedbacks control Earths' climate. The movie is available online in Youtube, including separate process animations, and as Open-Access MP4 resource.

Playlist on Youtube: <https://go.daf.li/EarthShape>; DOI of the English movie version: <https://doi.org/10.2312/gfz.3.3.2019.005>