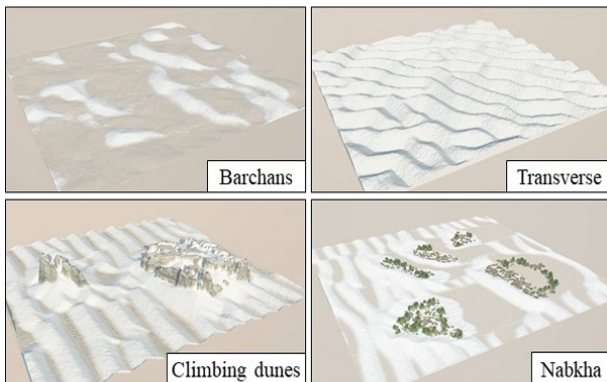


Desertscape simulation

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We present an interactive aeolian simulation to author hot desert scenery. Wind is an important erosion agent in deserts which, despite its importance, has been neglected in computer graphics. Our framework overcomes this and allows generating a variety of sand dunes, including barchans, longitudinal and anchored dunes, and simulates abrasion which erodes bedrock and sculpts complex landforms. Given an input time varying high altitude wind field, we compute the wind field at the surface of the terrain according to the relief, and simulate the transport of sand blown by the wind.

The user can interactively model complex desert landscapes, and

control their evolution throughout time either by using a variety of interactive brushes or by prescribing events along a user-defined time-line.