



Colorful Faults of Xinjiang China

Just south of the Tien Shan mountains, in northwestern Xinjiang province, a remarkable series of ridges dominates the landscape. The hills are decorated with distinctive red, green, and cream-colored sedimentary rock layers. The colors reflect rocks that formed at different times and in different environments. The red layers near the top of the sequence are Devonian sandstones formed by ancient rivers. The green layers are Silurian sandstones formed in a moderately deep ocean. The cream-colored layers are Cambrian-Ordovician limestone formed in a shallow ocean.

Landsat 8 captured this image of the Keping Shan thrust belt in July 2013. When land masses collide, the pressure can create what geologists call “fold and thrust belts.” Slabs of sedimentary rock that were laid down horizontally can be squeezed into wavy anticlines and synclines. Sometimes the rock layers break completely, and older layers of rock pile up on top of younger layers.