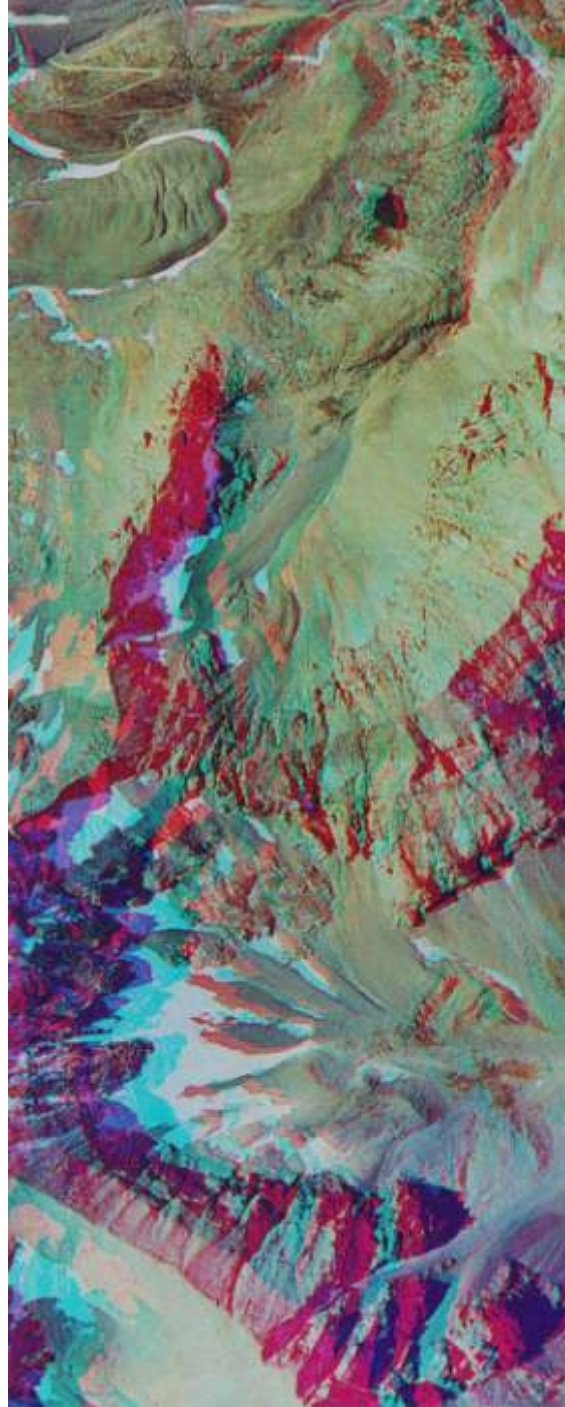


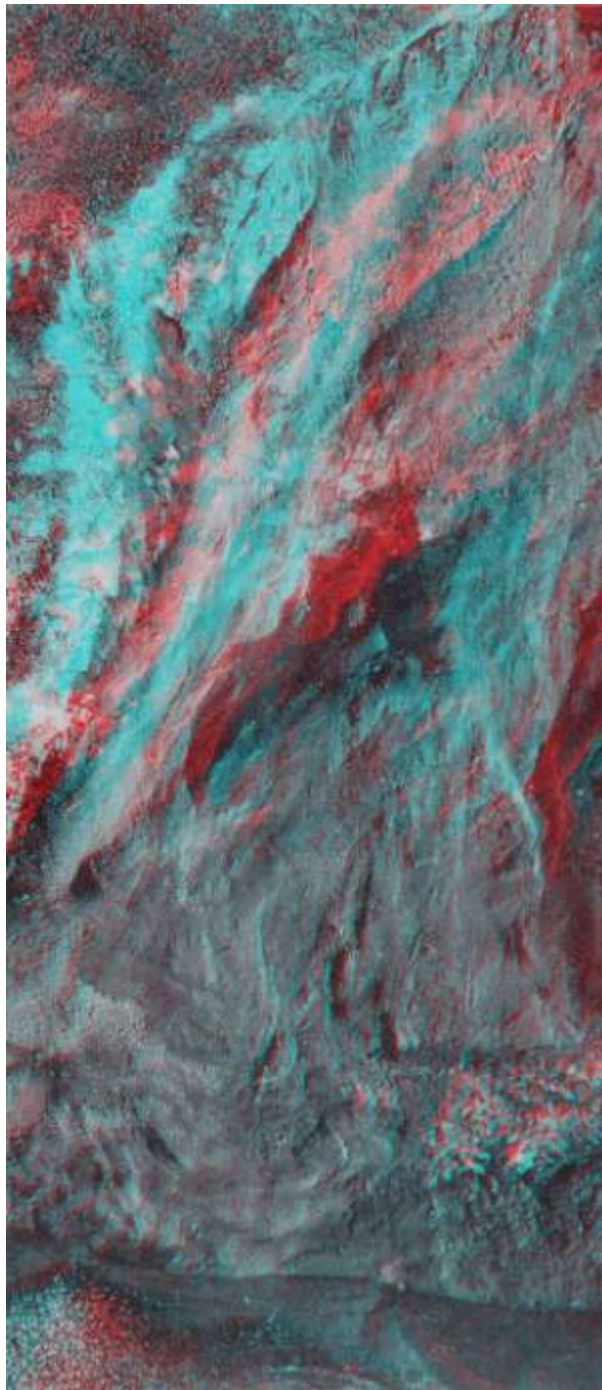
Rio Grande Canyon



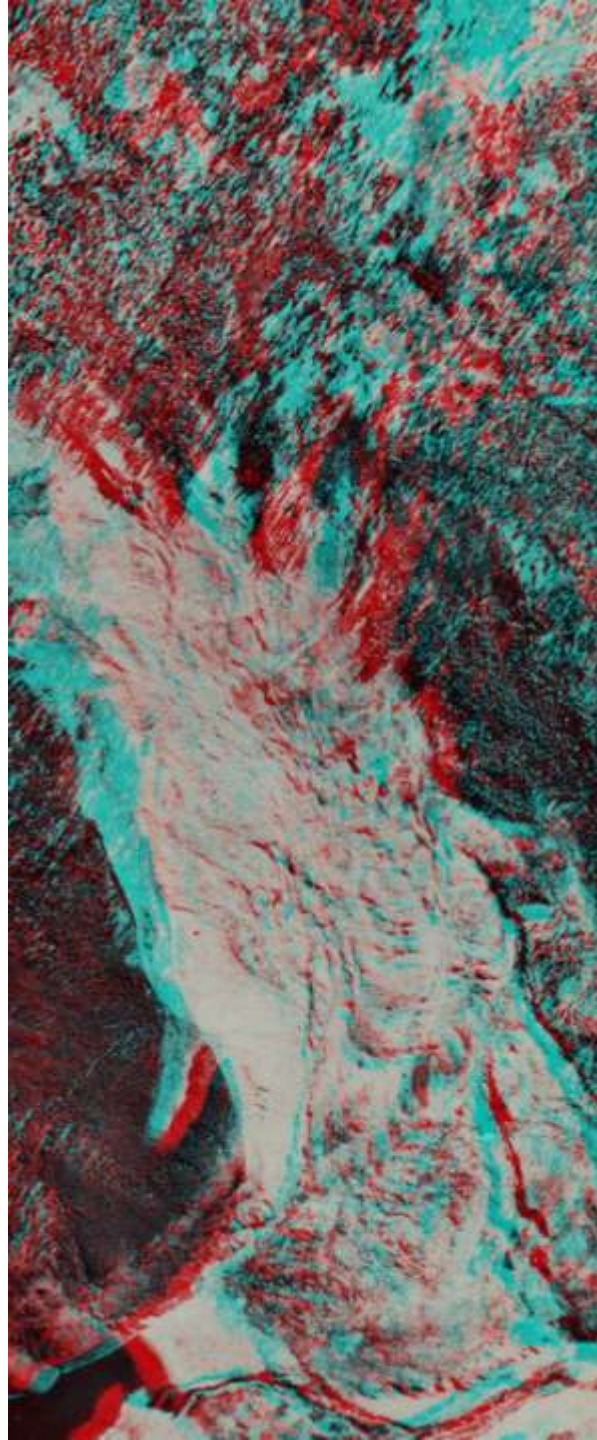
San
Juan
Mts.
Colora
do



British Columbia

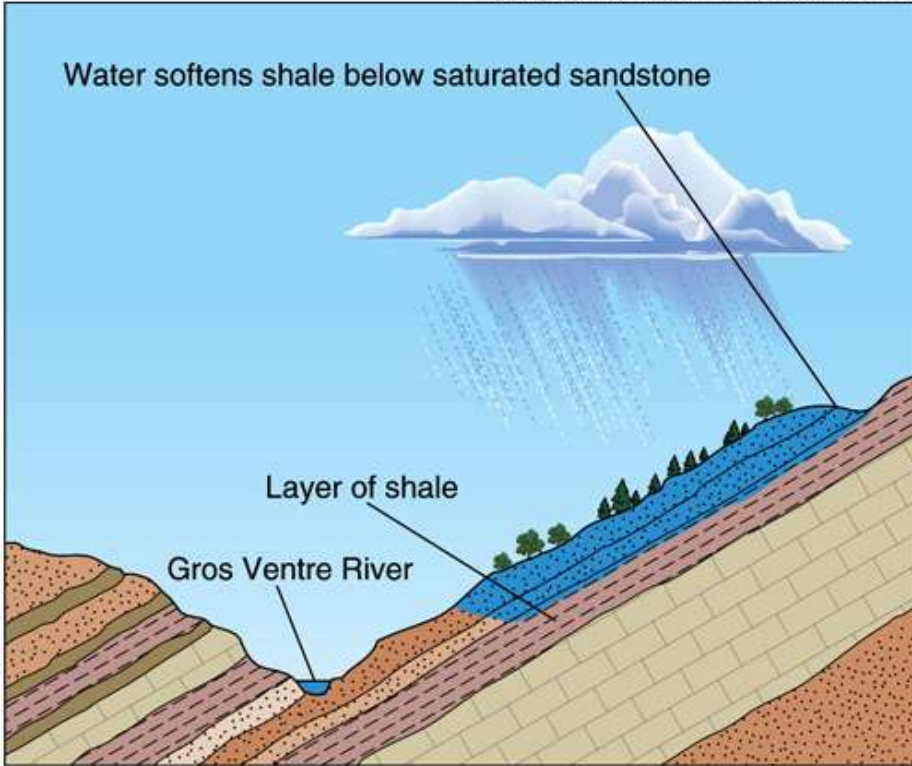


Gros Ventre slide

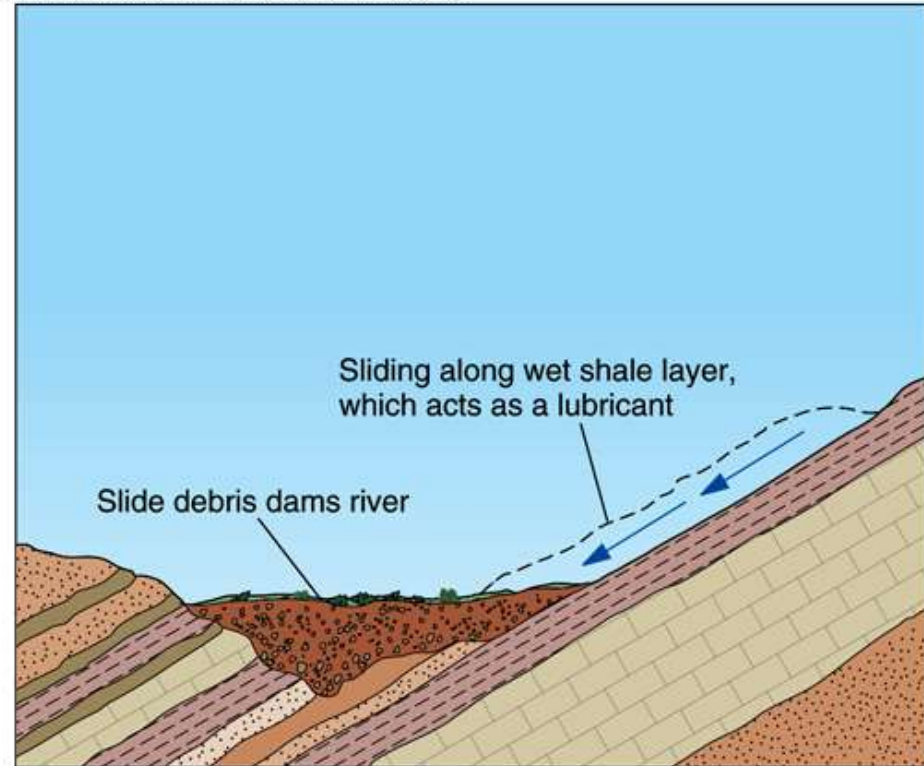


Gros Ventre WY landslide

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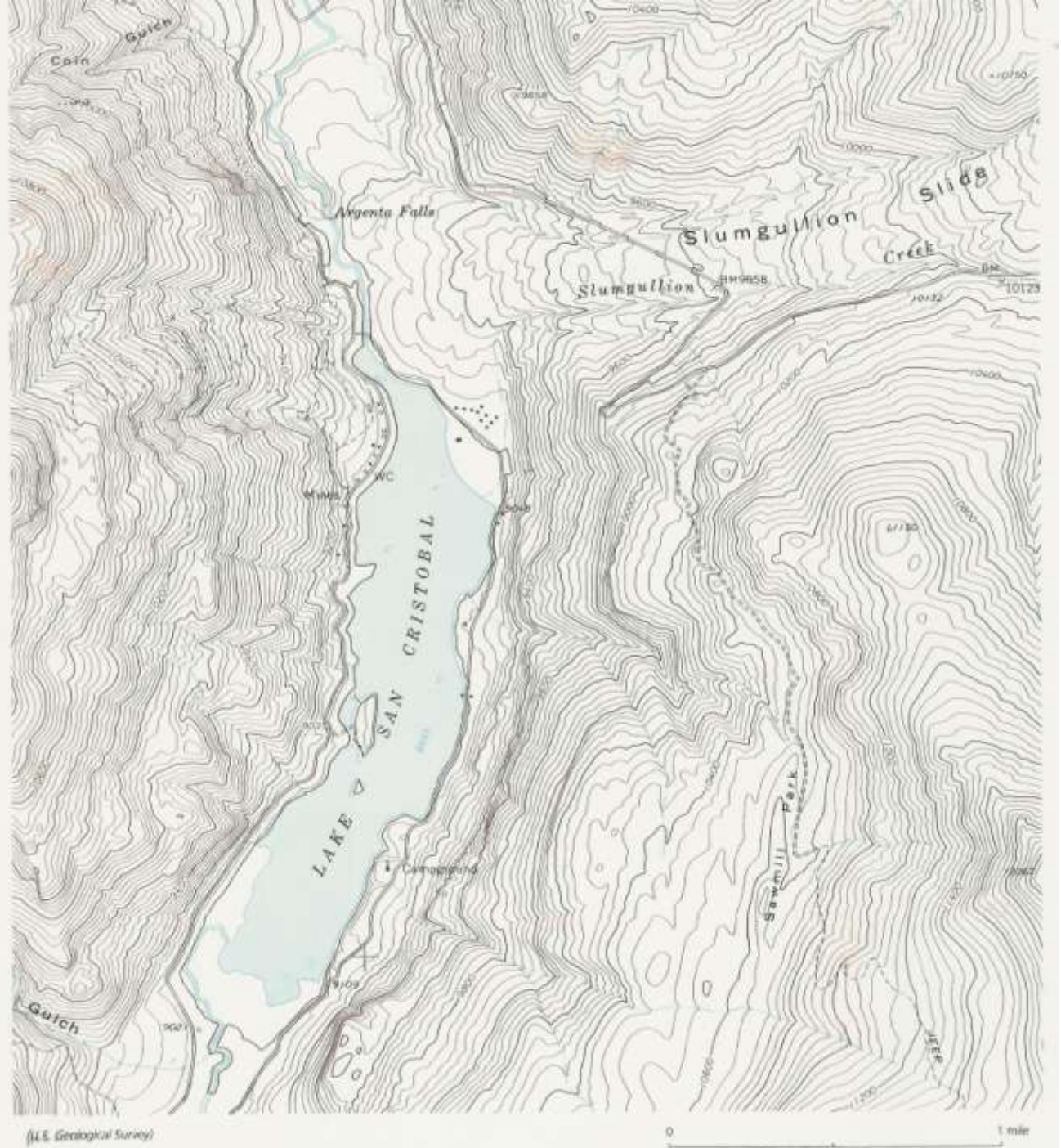


A



B

San Cristobal Lake -- Slum- gullion slide



Setting of Slumgullion Landslide

San Juan Mountains, CO



3D model from detailed mapping

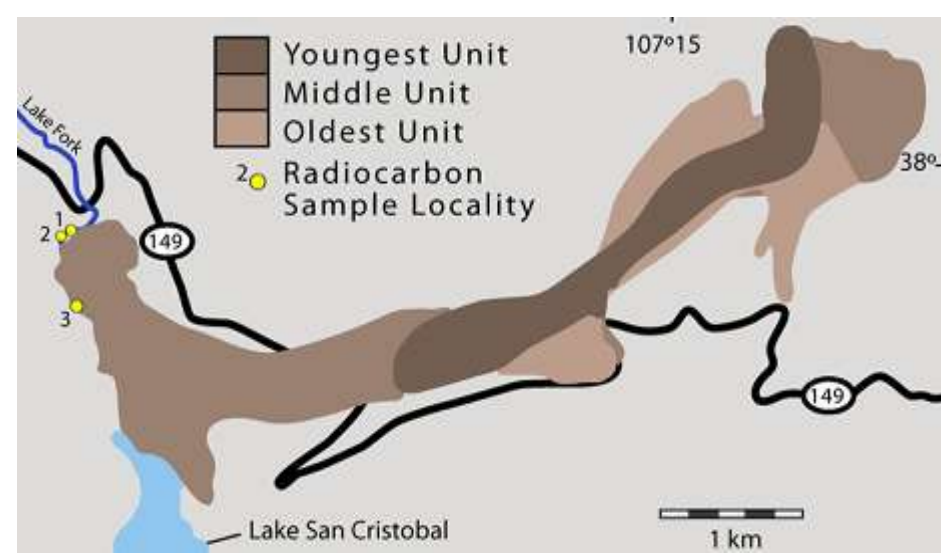
15.13.b

Still moving

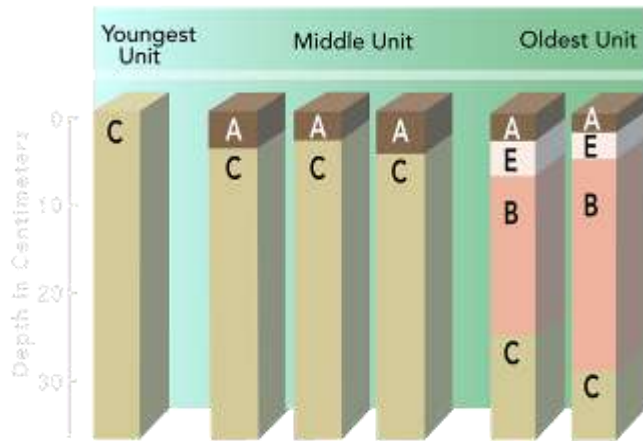
Weak materials moving down a gentle slope (7-10°) due to abundant water



Studies of Slumgullion Landslide

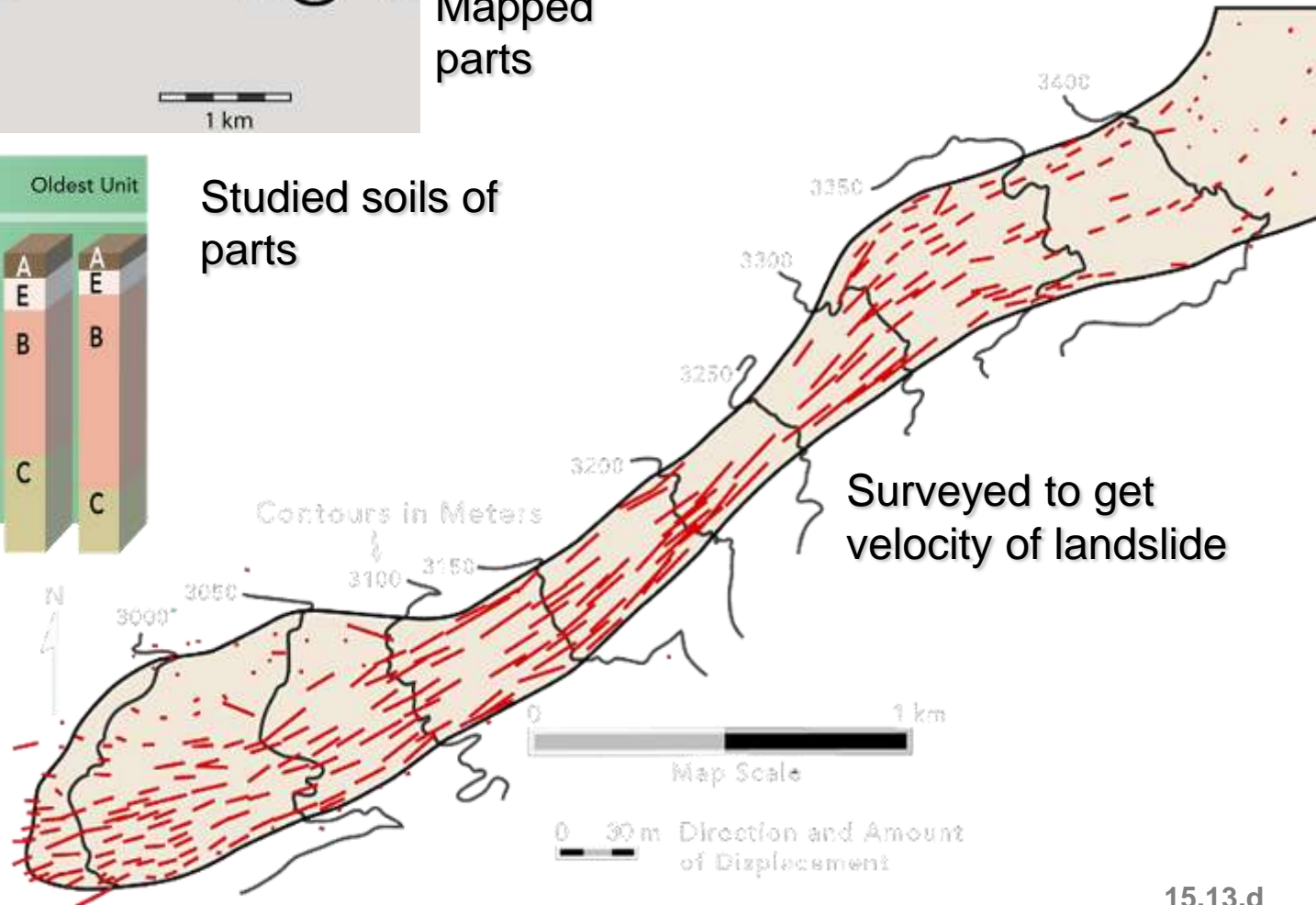


Mapped parts



Studied soils of parts

Compared results to factors (seasons)



Surveyed to get velocity of landslide

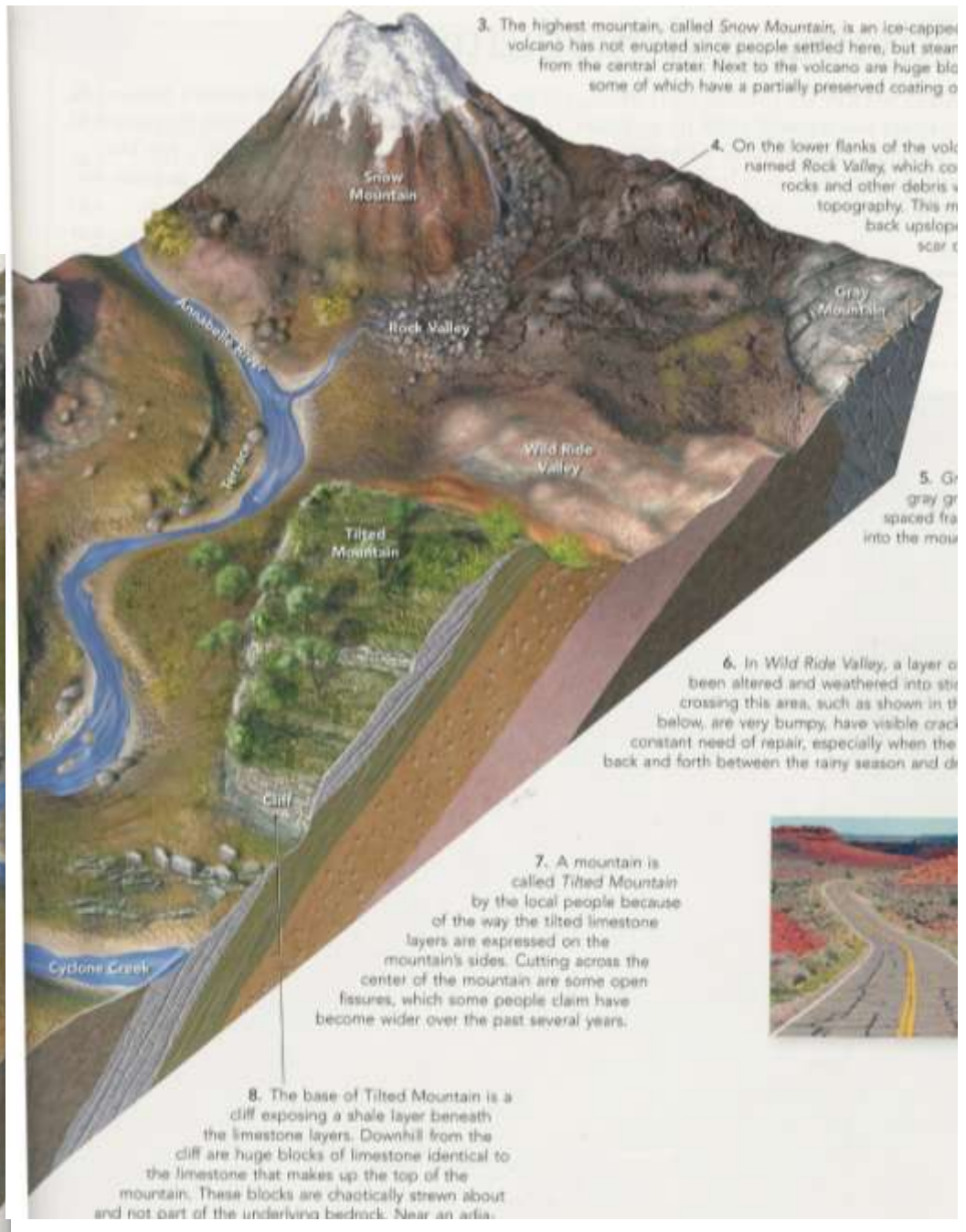
The Bent Fence Hills, tall trees that are tipped at odd angles. Local farmers complain that they are too crooked to keep straightening or crooked fences on the hillslopes. For some reason, no one has ever built a house here.

The hills are underlain by a resistant layer of basalt. The basalt is underlain by a weak layer of clay. Below the cliff are a series of large, angular blocks of basalt. A large spoon-shaped scar scoops into part of the cliff.



The Annabelle River cuts through the landscape, flowing from right to left. Along the river on both sides are low terraces that are only a few meters higher than river level. On these low terraces are large angular blocks of andesite, some as big as a house. They are not present on higher areas away from the river. No one has ever seen the river with enough water to move such large blocks.

13.14.07



3. The highest mountain, called Snow Mountain, is an ice-capped volcano that has not erupted since people settled here, but steam still rises from the central crater. Next to the volcano are huge boulders, some of which have a partially preserved coating of volcanic ash.

4. On the lower flanks of the volcano are the remains of a valley named Rock Valley, which contains volcanic rocks and other debris. The topography is very rugged. This mountain has a back-sloping scarp.

5. Gray Mountain is a gray granite intrusion that has been spaced from the mountain range.

6. In Wild Ride Valley, a layer of sediment has been altered and weathered into strata. Crossing this area, such as shown in the photo below, are very bumpy roads that have a constant need of repair, especially when the roads are driven back and forth between the rainy season and the dry season.

7. A mountain is called Tilted Mountain by the local people because of the way the tilted limestone layers are expressed on the mountain's sides. Cutting across the center of the mountain are some open fissures, which some people claim have become wider over the past several years.

8. The base of Tilted Mountain is a cliff exposing a shale layer beneath the limestone layers. Downhill from the cliff are huge blocks of limestone identical to the limestone that makes up the top of the mountain. These blocks are chaotically strewn about and are not part of the underlying bedrock. Near an artificial...

