CRYOPLANATION TERRACES IN THE APPALACHIANS SOUTH OF THE GLACIAL BORDER

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The presence of relatively level Appalachian summit elevations has long been known. The highest relatively flat areas were related to remnants of peneplain surfaces by early Appalachian geomorphologists.

This research unveils the additional existence of related and wide-spread step-like terrace forms at relatively high elevations in the Appalachian Plateaus, Ridge and Valley, Blue Ridge, and Piedmont physiographic provinces south of the glacial border.

In general order of descending elevations are: tors, summit plateaus, and one to several terrace scarps (risers) with subjacent treads of "flats" which slope gently valleyward. Terrace scarps may be rubble-covered, mantled by shattered but essentially in place rock, or exposed bedrock cliffs. Treads may be mantled by jumbled block rubble (block slopes), block streams, or stony soils that in some localities exhibit well-developed sorted stripes.

It is here suggested that larger summit levels and bordering smaller step-like areas are relict incipient cryoplanation terraces involve a rigorous periglacial environment, current research is directed to subsurface investigations to shed light on structural/lithologic factors, elevation/slope aspects, origin and ages of development, and subsequent environmental modification.

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