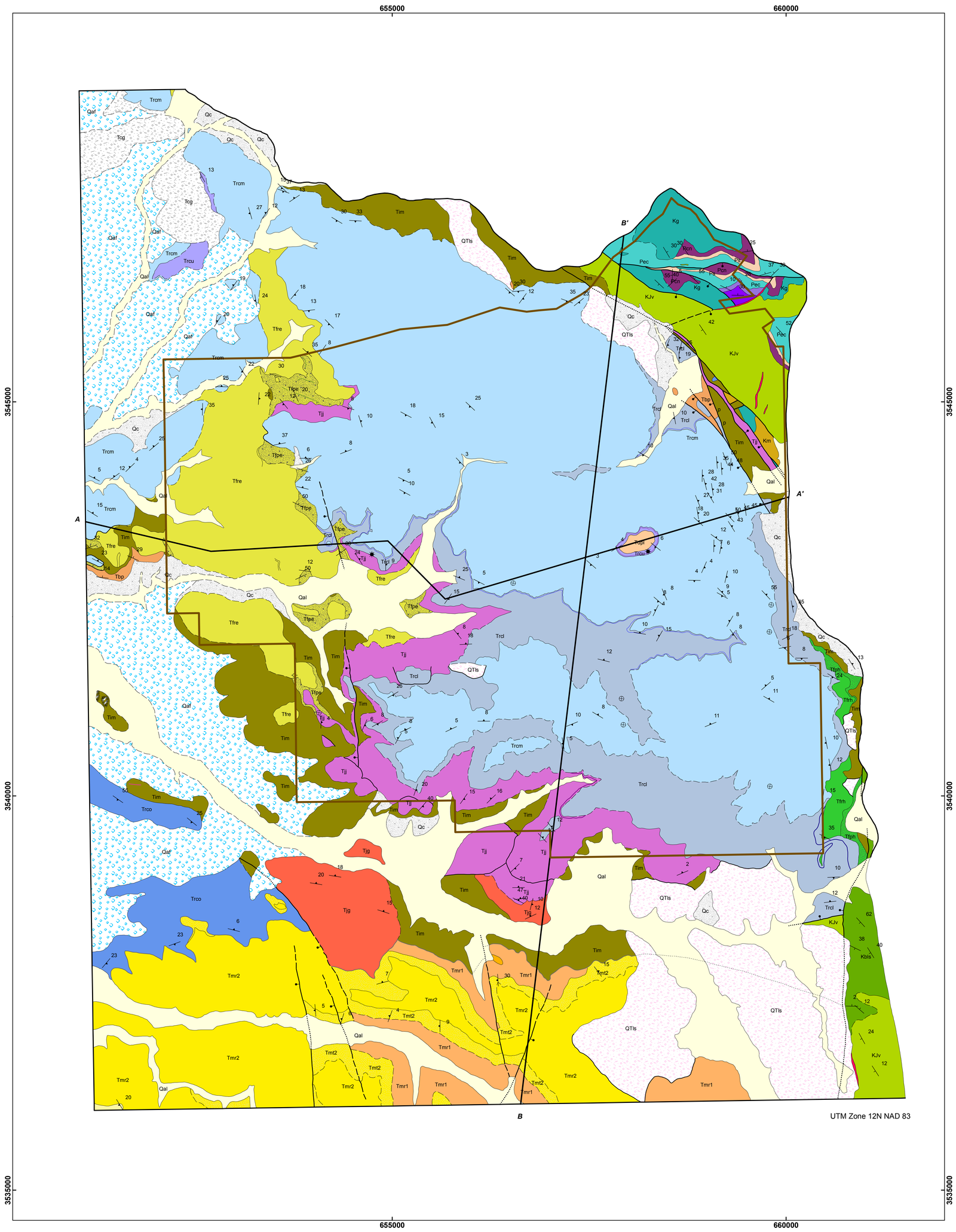
Geologic Map of Chiricahua National Monument



NPS Boundary

Geologic Cross Section Lines

Geologic Attitude Observation Localities
- strike and dip of bedding
- strike and dip of foliation
- horizontal foliation
- downthrown side of fault

Geologic Age-Date Localities
- 40Ar/39Ar radiometric sample locality
- K/Ar radiometric sample locality

Linear Geologic Hazard Features
- landslide

High-Angle Fault
- known
- approximate
- concealed

Linear Volcanic Features
- prominent flow layering in Tfre
- trend of bedding in Tfpe
- base of ash cloud deposit in Trcl
- top of surge beds in Trcu

Unconformities
- unconformity, known
- unconformity, concealed

Geologic Point Units
- Timp - possible pillow basalt

Linear Geologic Units
- Trcv - Rhyolite Canyon Tuff, virtophyre
- Trca - Rhyolite Canyon Tuff, basal ash
- Tjjf - Jesse James Canyon Tuff, lithic-rich pyroclastic flow
- q - quartz vein

Geologic Contacts
- contact, known
- contact, approximate
- contact, gradational
- map extent

Geologic Units
- Qal - alluvium
- Qaf - alluvial fan deposits
- Qc - colluvium
- QTls - landslide deposits
- Tcg - conglomerate
- Tmt3 - moat deposits, Unit 3 (rhyolite tuff)
- Tmr2 - moat deposits, Unit 2 (rhyolite lava)
- Tmt2 - moat deposits, Unit 2 (tuff)
- Tmr1 - moat deposits, Unit 1 (rhyolite lava)
- Tmt1 - moat deposits, Unit 1 (tuff)
- Tdpl - dacite porphyry lava
- Trco - Outflow facies Rhyolite Canyon Tuff, undivided
- Trcu - Outflow facies Rhyolite Canyon Tuff, upper member
- Trcm - Outflow facies Rhyolite Canyon Tuff, middle member
- Trcl - Outflow facies Rhyolite Canyon Tuff, lower member
- Tjj - Jesse James Canyon Tuff
- Tfre - Rhyolite of Erickson Ridge
- Tfpe - Pyroclastic flow deposits of Erickson Ridge
- Tfrh - Rhyolite of Hands Pass
- Tfph - Pyroclastic flow deposits of Hands Pass
- Tbp - Sedimentary rocks of Bonita Park
- Tjg - Welded tuff of Joe Glen Ranch
- Tim - intermediate and mafic lava flows
- Tims - areas of silicification
- Tr - rhyolite dikes
- Kbls - Bisbee Group, Mural Limestone
- Km - Bisbee Group, Morita Formation
- Kg - Glance Conglomerate
- KJv - volcaniclastic and volcanic rocks
- Pcn - Concha Limestone
- Ps - Scherrer Formation
- Pec - Epitaph Dolomite and Colina Limestone
- Pea - Earp Formation
- Phu - Horquilla Limestone, upper member

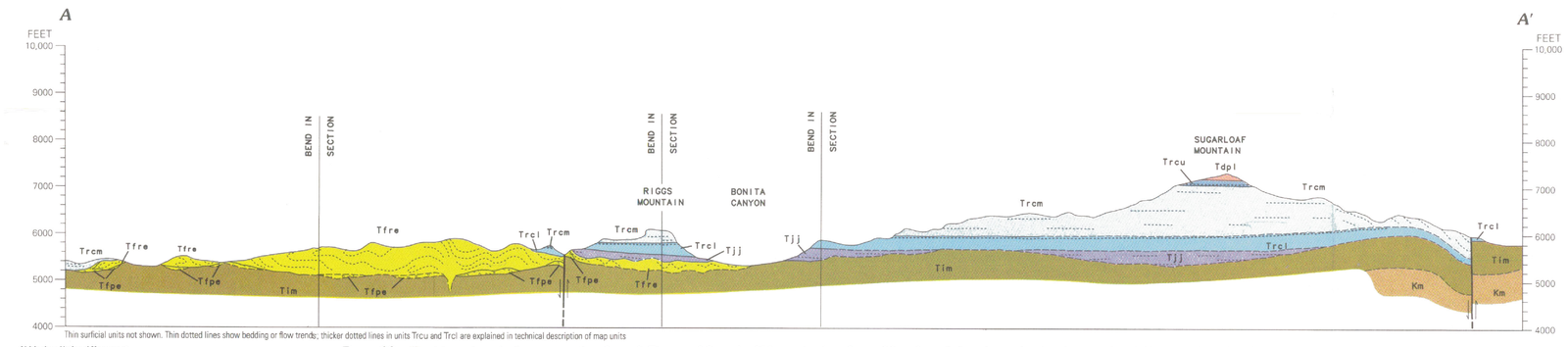
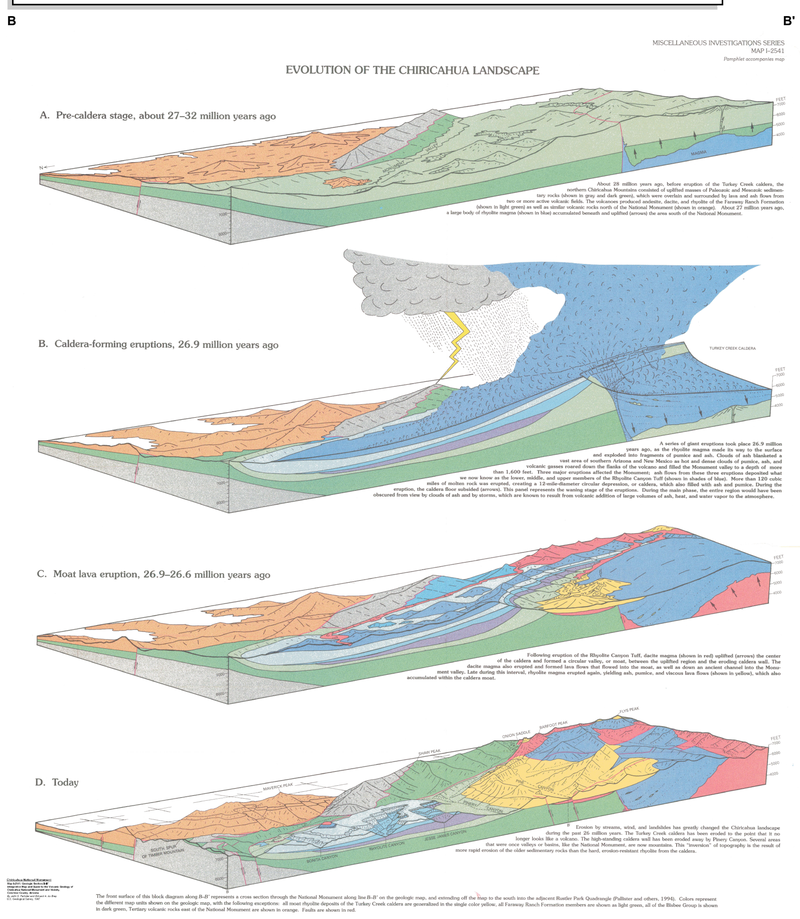


Figure 12. West to east geologic cross section through Riggs and Sugarloaf Mountains (see figure 11 and map) that shows the distribution of rock layers in the subsurface.



N

0 1 2 Kilometers

0 1 2 Miles

This map graphically presents digital geologic data prepared as part of the NPS Geologic Resources Division's Geologic Resources Inventory. The source map used in creation of the digital geologic data product was:

Pallister, J.S., E. A. Du Bray. 1997. Interpretive Map and Guide to the Volcanic Geology of Chiricahua National Monument and Vicinity, Conchise County, Arizona. Scale 1:24,000. Miscellaneous Investigations Series Map I-2541. U.S. Geological Survey.

Digital geologic data and cross sections for Chiricahua National Monument and all other digital geologic data prepared as part of the Geologic Resources Inventory, are available online at the NPS Data Store: http://science.nature.nps.gov/nrdata/