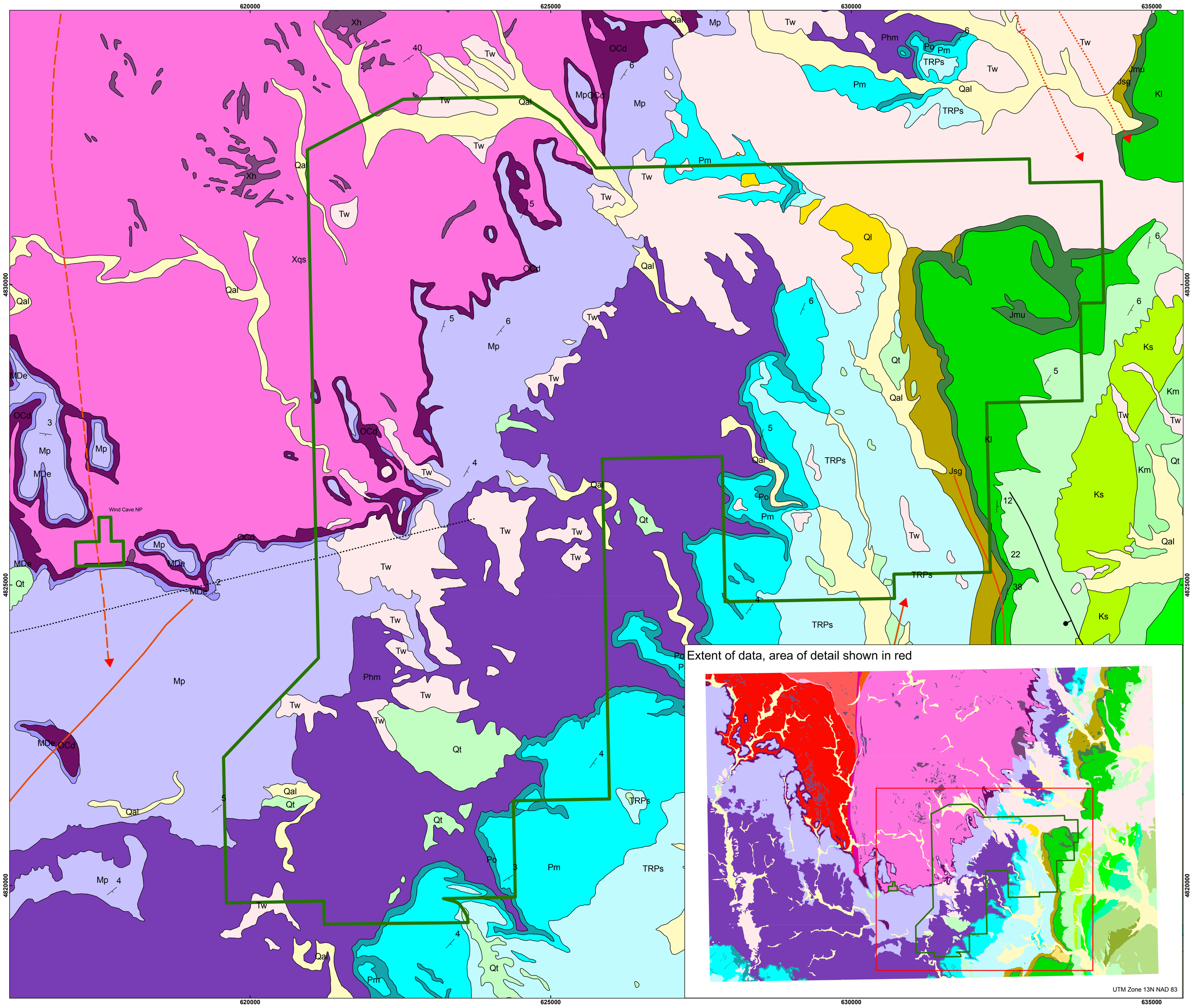
Wind Cave National Park
South Dakota

National Park Service
U.S. Department of the Interior

Geologic Map of Wind Cave National Park



NPS Boundary

Geologic Attitude and Observation Localities
- strike and dip of beds
- strike of vertical beds
- strike and dip of foliation
- fold plunge arrow head
- fault down-thrown block indicator
- anticline
- syncline
- monocline, anticlinal bend
- monocline, synclinal bend
- right-lateral fault block movement arrow
- plunge of fold axis

Folds
- known or certain
- approximate
- concealed
- cleavage trough, inferred

Faults
- thrust fault, known or certain
- thrust fault, approximate
- thrust fault, concealed
- known or certain
- approximate
- concealed

Unique Geologic Features
- breccia pipe

Isograd Lines
- metamorphic isograd, known or certain

Linear Geologic Units
- Xgb - Metagabbro
- Xif - Metamorphosed carbonate-facies iron formation

Geologic Contacts
- known or certain
- approximate
- concealed
- quadrangle/map boundary

Geologic Units
- Qal - Alluvial deposits
- Ql - Landslide deposits
- Qc - Colluvium or talus
- Qt - Terrace gravel and alluvial-fan deposits
- Tw - White River Group
- Kp - Pierre Shale
- Kn - Niobrara Formation
- Kc - Carlile Shale
- Kg - Greenhorn Limestone
- Kb - Belle Fourche Shale
- Km - Mowry Shale
- Ks - Skull Creek Shale
- Kf - Fall River Formation
- Kl - Lakota Formation
- Jmu - Morrison Formation and Unkpapa Sandstone, undivided
- Jsg - Sundance and Gypsum Spring Formations, undivided
- TRPs - Spearfish Formation
- Pm - Minnekahta Limestone
- Po - Opeche Shale
- Phm - Minnelusa Formation
- Mp - Pahasapa Limestone
- MDe - Englewood Limestone
- Oed - Deadwood Formation
- Xh - Harney Peak Granite
- Xgb - Metagabbro
- Xgwd - Distal metagraywacke
- Xgwp - Proximal metagraywacke
- Xgw2 - Metagraywacke unit 2
- Xby - Metamorphosed younger alkalic basalt, tuff, and volcaniclastic rocks
- Xqc - Metamorphosed quartzite, debris flow conglomerate, pelite, and graywacke
- Xqs - Metamorphosed quartzite and pelite
- Xbs2 - Metamorphosed black shale
- Xif - Metamorphosed carbonate-facies iron-formation

N

0 1 2 Kilometers

0 1 2 Miles

Display scale is greater than the source scale.

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:

DeWitt, E. 2004. Geologic map of the Mount Rushmore and Rapid City 60' x 60' Quadrangle, South Dakota. Scale 1:100,000. USGS unpublished mylar maps

Digital geologic data and cross sections for Wind Cave National Park 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/

Produced by the Geologic Resources Inventory

January 2009