## Grand Canyon Stratigraphy

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### Field Geology

- A view of the Hopi Point section of the southern rim of the Unkar delta (Unkar delta)

### Geologic Time

- **Surficial Deposits, undivided (Qsu)**  
  - Fluvial deposits to Beach
  - Beachwidth, gravity-related transverse of body, wedges, sedimentary features, and sandstone

### Lithologies

- **Basaltic Volcanics (Qtb)**  
  - Basaltic lava flows, pillow lava, and pillow lava rocks producing the modern Grand Canyon (Pungo Point, Moki Point, Moki Point)
  - Basaltic lavas and pillow lavas forming the Unkar delta (Unkar delta)
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### Tertiary Sedimentary & Volcanic Rocks (Tsv)

- **Chinle Formation (Tc)**  
  - Late Triassic - Early Jurassic (252 - 201 Ma)
  - Conglomerates, sandstones, siltstones, and mudstones, locally containing redeposited gravel and ash and jasper
  - Red clastics, arkoses, mudstones, and sandstones

### Moenkopi Formation (Tm)

- **Middle Triassic - Early Jurassic (243 - 204 Ma)**
  - Conglomerates, sandstones, siltstones, and mudstones

### Kaibab Formation (Pk)

- **Late Triassic - Early Jurassic (236 - 215 Ma)**
  - Conglomerates, sandstones, siltstones, and mudstones

### Toroweap Formation (Pt)

- **Early Triassic - Early Jurassic (251 - 236 Ma)**
  - Conglomerates, sandstones, siltstones, and mudstones

### Coconino Sandstone (Pc)

- **Early Triassic - Early Jurassic (251 - 236 Ma)**
  - Conglomerates, sandstones, siltstones, and mudstones

### Hermit Formation (Ph)

- **Middle Triassic - Late Triassic (251 - 215 Ma)**
  - Conglomerates, sandstones, siltstones, and mudstones

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**Footnotes:**
- "T" = Tertiary
- "Q" = Quaternary
- "M" = Mesozoic
- "P" = Paleozoic

**Symbols:**
- A = Aridisols (Arid)  
- C = Cretaceous  
- D = Devonian  
- E = Ediacaran  
- F = Frasnian  
- G = Givetian  
- H = Hettangian  
- K = Kungurian  
- L = Lopingian  
- M = Mid-Paleozoic  
- O = Ordovician  
- P = Proterozoic  
- Q = Quaternary  
- S = Silurian  
- T = Triassic  
- U = Upper Triassic  
- Y = Triassic-Jurassic boundary  
- Z = Zechstein  

**Sedimentary Structures & Fossils**

- B = Bulges  
- C = Creep  
- D = Dendrites  
- F = Fossils  
- G = Grains  
- H = Holes  
- I = Inclusions  
- J = Joints  
- K = Knots  
- L = Layers  
- M = Molds  
- N = Nodules  
- O = Objects  
- P = Paraboles  
- Q = Quadrat  
- R = Roots  
- S = Spheres  
- T = Tubules  
- U = U-turns  
- V = Veins  
- W = Water  
- X = Xylitoids  
- Y = Y-shaped  

**Technic Structures**

- A = Arches  
- B = Bulges  
- C = Creep  
- D = Dendrites  
- E = Eroded  
- F = Fossils  
- G = Grains  
- H = Holes  
- I = Inclusions  
- J = Joints  
- K = Knots  
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**Portion of Grand Canyon stratigraphy poster.**