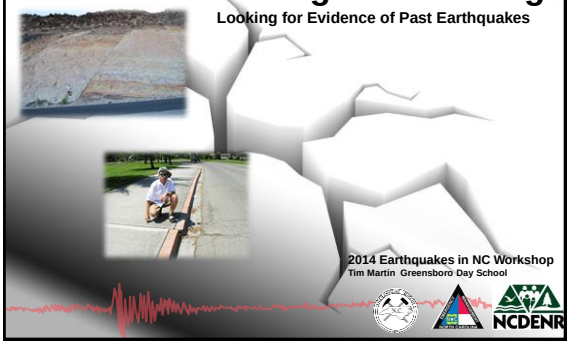
Folding and Faulting

Looking for Evidence of Past Earthquakes

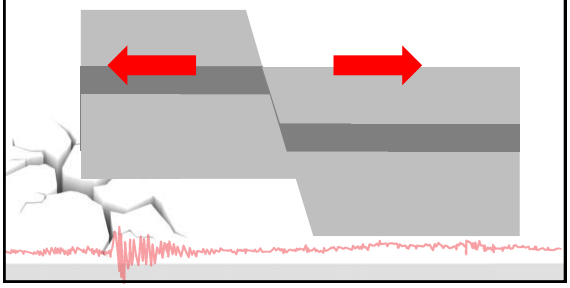


2014 Earthquakes in NC Workshop
Tim Martin Greensboro Day School

NCDENR

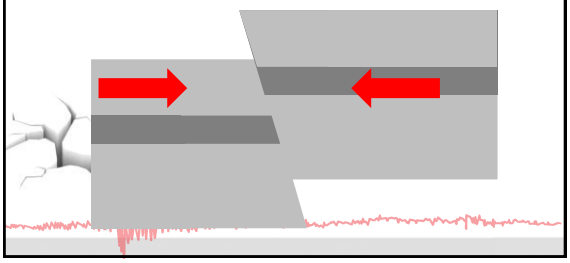
Normal Fault

Tension or divergent movement



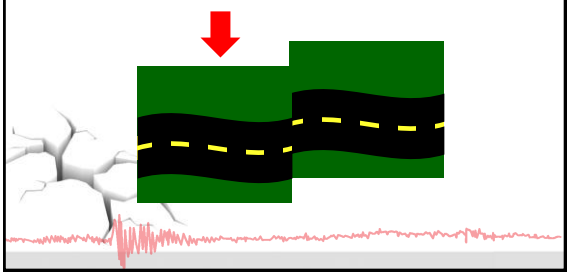
Thrust or Reverse Fault

Compression or convergent motion



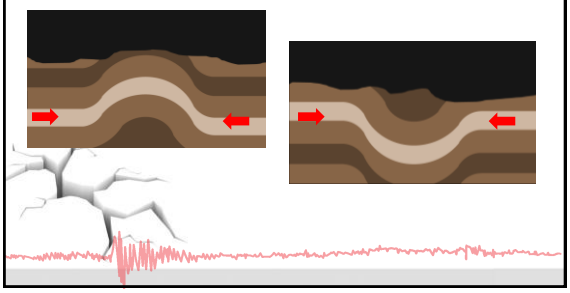
Transform or Strike Slip Fault

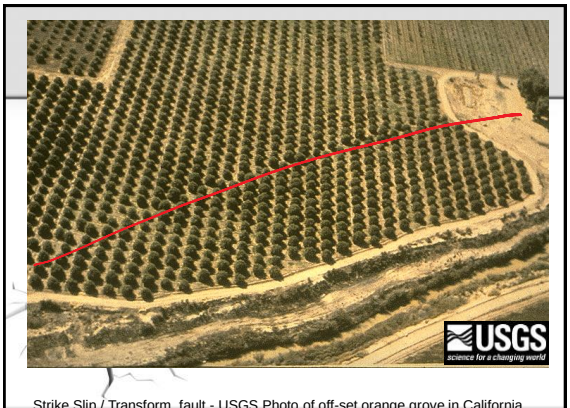
Transform or lateral movement



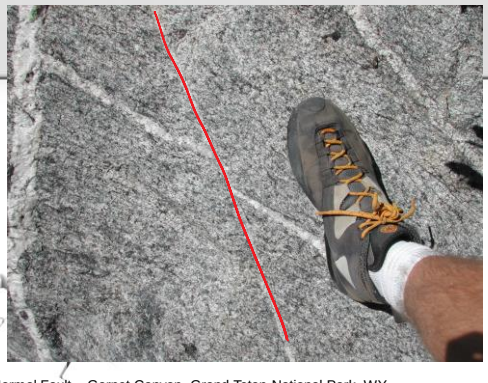
Anticline and Syncline

Compression or convergent motion





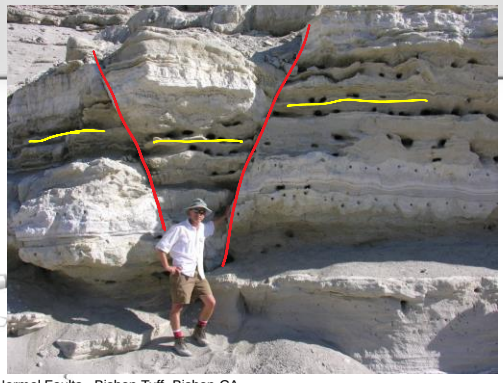
Strike Slip / Transform fault - USGS Photo of off-set orange grove in California



Normal Fault – Garnet Canyon Grand Teton National Park WY

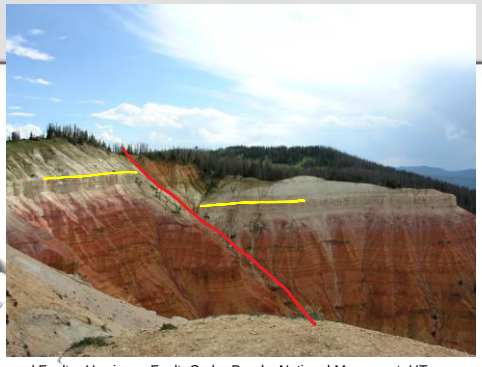
Reverse Fault – Mosaic Canyon, Death Valley National Park CA

Anticline and Reverse Fault – Waucobi/Devils Gate, Big Pine CA

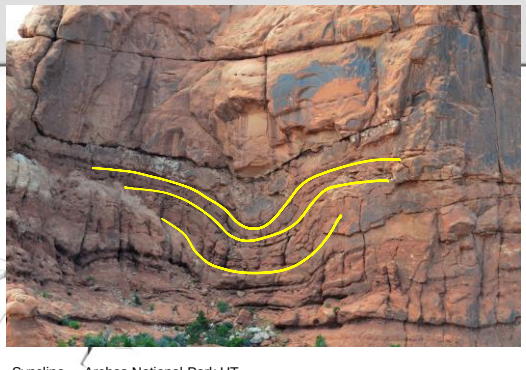


Normal Faults– Bishop Tuff, Bishop CA

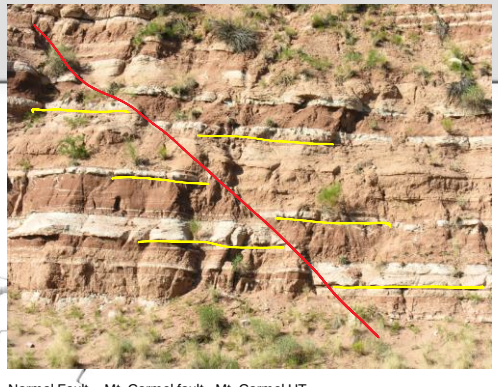
Syncline and Thrust Fault – Gold Hill Shear zone, Gold Hill NC



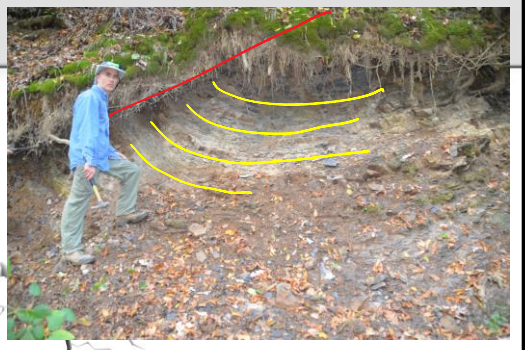
Normal Fault – Hurricane Fault Cedar Breaks National Monument UT



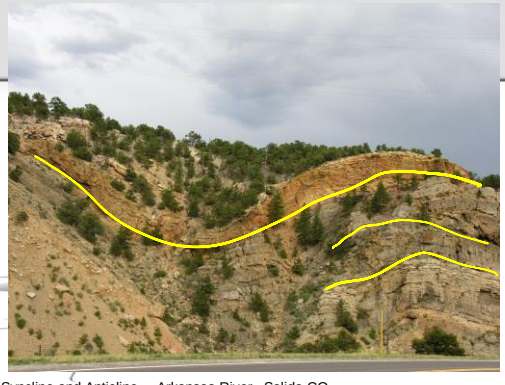
Syncline – Arches National Park UT



Normal Fault – Mt. Carmel fault , Mt. Carmel UT



Syncline drag fold – Black Diamond Coal Mine Chatham Co NC



Syncline and Anticline – Arkansas River , Salida CO

Normal Fault – Moab Fault, Arches National Park UT

Syncline – Arches National Park UT

Normal Fault – Shoshone Fault , Shoshone CA

Strike Slip Fault – Hayward Fault, Freemont Ca

- This presentation was constructed for the 2014 Earthquakes in NC workshop and may be freely be used by teachers for educational purposes.
- Unless indicated otherwise, images in this presentation are taken by Tim Martin (one USGS image)