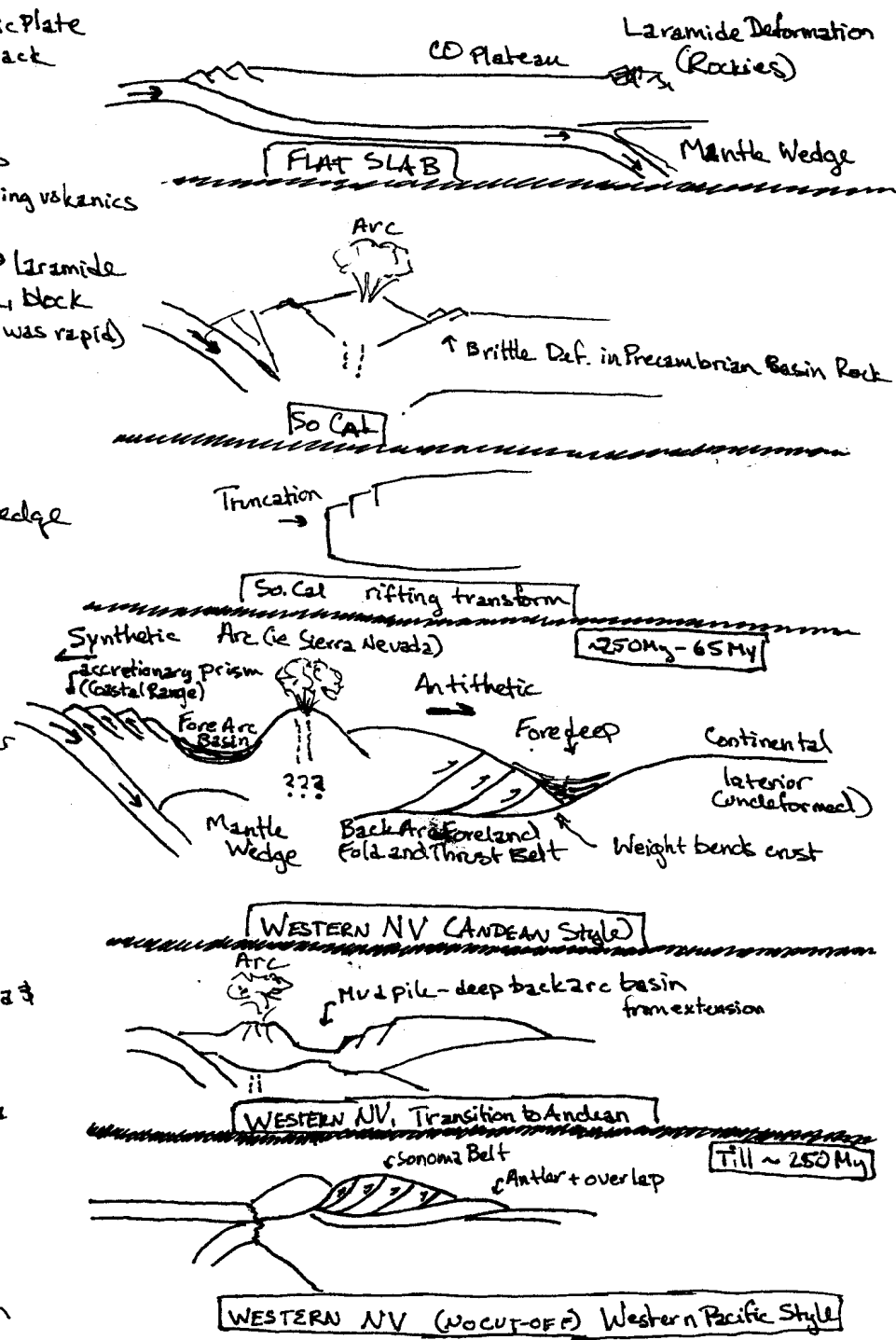


EVENTS

- Yellowstone Hotspot / Cascade Volcanism
- Farallon Plate Split by Pacific Plate
Subduction of spreading ridge develops S-S boundary leads to N-S propagation of S-S between NA. Pacific Plate Wrenching + removal of Eastward compression + slab roll back causes extension ⇒ Basin and Range
- Roll Back of Flat Slab
Creates Metamorphic Core Complexes as slab returns to normal dip. Evidence of timing left in westward moving volcanics
- Flat Slab
Deformation jumps east (Mantle Wedge has moved) ⇒ Laramide (Modern Rockies). In Crustal Basement rocks ⇒ Brittle block deformation, left CO plateau undeformed (change was rapid)
- Oblique Convergence ⇒ N-S displacement of Arc Sequence blocks
- Granite Intrusions
- Development of Long lasting accretionary wedge
- Western crust ⇒ "Mud Pile" Basin in NV
- Establish Arc Volcanics / Intrusions
- Western Pacific ⇒ Andean Style
Ocean crust subducts rather than being thrust over NA. no more island arcs accreting end of passive margin (West Pacific) Now Andean style
- Sonoma Arc Collision
Adds 1/2 remaining material to west coast. Like Havella & Antler, but with a very complete arc sequence
- Truncation
Removed sediments from Antler, Havella & Sonoma & caused the difference in deformation styles and intrusion through basement + vs. sediment.
(KEY) in Evolution of Western US.
- Western Pacific Style
Island arcs accreted and thrust over passive margin

CROSS-SECTIONS



Wednesday, November 16, 2005 max