Middle Miocene tectonic reconstruction model of the eastern San Gabriel Mountains prior to dike emplacement. Block translations are inferred from Nourse 2002a, Figure 9. Fracture patterns from dike orientation data are superimposed onto each of my defined structural domains. An additional 15° of counterclockwise rotation that occurred for the San Gabriel Block is restored, MC and VC represent Mint Canyon and Vasquez Formations paleomagnetic measurement locations from Terres (1984). Below the reconstruction map are map-view stress diagrams which suggest how the fractures were generated. Primary, secondary and tertiary stress directions are indicated on the diagram (σ1, σ2, and σ3 respectively).

### Faults
- Late Miocene "Future" Right-Lateral Fault
- Pre-Miocene "Ancestral" Left-Lateral Fault
- Pliocene-Quaternary "Future" Left-Lateral Fault
- Cretaceous-Paleocene Vincent Thrust Fault

### Structural Boundaries
- Andesite Dike Structural Block Boundary (dashed lines indicate non-fault boundaries)
- Structural Block Boundary without Andesite Dikes

### Miscellaneous
- Fracture Orientations (bold is the primary trend)
- Unresolved, empty regions of the reconstruction; artifacts of later compression and rotation
- 15° of late Miocene to present counter-clockwise rotation restored

### Plate 3: 18 Ma San Gabriel Mountains Tectonic Reconstruction Model

23-18 Ma
- Conjugate strike-slip faults open due to oblique subduction

18-12 Ma
- Extensional Fractures (rotating Western Transverse Ranges facilitates N 60 E extension)