

Cross Section Activity 4

Projecting strata cut by a fault

The schematic geologic map below contains four units of sedimentary rock (Db, Dmc, Kk, and Ka), a variety of strikes & dips, a **fault that dips southwest at 55°**, and line of section A-A'. To save time, the geologic elements on the map are already transferred to the topographic profile at bottom. **(1)** First, plot your dip domains and begin your contact projections, but stop short of extending those projections into the area occupied by the fault. **(2)** Next, plot your fault using the dip provided – don't forget to stylistically shallow the dip of the fault slightly at depth. **(3)** Consider what type of fault you think this is and extend your contact projections into the fault. Be mindful of the need for some consistency among the cutoff angles in strata on either side of the fault. Remember these areas are not controlled by dip domains or surface contacts, so the interpretations are up to you!

