

Questions:

1. Contouring Questions:

- a). Related to the sea level pressure contouring exercise, the feature on the map is a low pressure system. It is believed to have precipitation occurring at this area. The low pressure system is covering the Vancouver Island area. The lowest pressure point is observed at the Tofino location with a 980.9kPa.
- b). The total range of pressure contours that I plotted on the map is 28hPa. There are 7 different pressure zones across the map and it changes by 4 hPa in every zone, from 1016 to 988kPa

2. Emagram Questions:

- a). Judging from the thermodynamic plot and the hint that says this is a late spring dataset, I expect this data to come from Saskatuwan prairie area because it is somewhere hot and dry for most of the year.
- b). From the zone of 850hPa to 500hPa it seems like it has an unstable characteristic because the temperature is high and it is rising at a rate greater than the dry adiabatic rate. Another explanation is that because the dew point is less than the temperature and dew point follows the dry adiabatic, but temperature diverges and increases very rapidly. Perfect condition for thunderstorm to occur.