1. Run the following model, report the estimated coefficients, the associated p-values as well as the adjusted R squared in a table

|  |  |
| --- | --- |
|  | (1) |

1. Interpret the significant coefficients (at 5% level).
2. Use a Chow test (of overall structural instability) to know if one could split the sample by altitude (high- vs low-elevated counties) at the 5% confidence level. Report the Chow test results and interpret them.
3. Would your conclusions change at the 10% confidence level?
4. Run a test of local structural instability through model (2) below. Report what variable(s) display a significantly different marginal effect in the group of low-elevated counties vs. the group of high-elevated counties (use the latter as the benchmark).

|  |  |
| --- | --- |
|  | (2) |

1. Use an ANOVA test to find out if model (2) outperforms model (1). Present your results and conclude.