Latitude by Carter & Carter

Write a 2-3 page essay in which you

- Summarize the book and your reaction to it
- Address one of the following 3 questions/issues
    - In data adjustment we attempt to (a) discover and account for systematic errors in our observations so only random errors remain, (b) define models so they accurately represent the underlying physical system being modeled, and (c) obtain observation data at a precision level which is commensurate with the effects being estimated. Discuss these issues with respect to Chandler's study of the latitude variation.
    - From the descriptions of Chandler's Almucantar, it seems like it might be possible to build a portable, self-leveling theodolite or total station. Has anyone ever done this or attempted it? Why or why not? Discuss any successes or failures. Is instrument leveling a problem we should worry about?
    - If you determine latitude from polaris or other star observation, at which point in the calculations is the Chandler wobble accounted for, and from where do you obtain this information?
- In your chosen career path, speculate on (a) how a similar situation could arise, and (b) how you, as a professional, should react to such apparent but unexplained systematic error.

The Measure of All Things by Ken Alder

Write a 2-3 page essay in which you

- Summarize the book and your reaction to it
- Determine if your can, from the descriptions in the book (written by a history professor!), whether these guys were doing any data adjustment. If so, where, and if not, why not? Would it have helped?
- Address a scenario in your chosen career path in which you might have data that appears to be inconsistent, but you are prevented by circumstances from reobserving. What would you do? With the benefit of hindsight how should Mechain have reacted with his inconsistent data?