LABORATORY EARTHQUAKE ANALYSIS

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[2] **Add Los Alamos, USGS and or Kaggle here?**

Abstract. Earthquakes cause deaths and damage.
Given improved data collection and processing technologies; predict the time remaining for imminent laboratory earthquakes more precisely than *r2 .89 90 % Confidence and other statistical facts* which was previously accomplished by Los Alamos National Laboratory [1] We analyze the data for patterns using geological subject matter expertise, statistical methods and natural intuition. We design a statistical algorithm to model the patterns and predict the time remaining until a laboratory earthquake will occur for given test data. We compare predicted versus actual time remaining to determine our accuracy.
The evidence of this experiment suggests *null hypothesis, statistical results with pvalue or confidence interval and releven t scores* we can predict impending laboratory earthquakes *"Be careful not to accidentally plagurize. DO NOT use figures from other publications. Even if you cite it; you are getting into areas where copyright issues arise."*

1 INTRODUCTION

1 Paragraph Motivtion (Sets Genreral problem domain)
1 Paragraph Problem Statement (Specific Problem solved by the work)
2-3 paragraphs on solution
1 Paragraph on main results (plural)
1 Paragraph on main conclusions (plural)
1 Paragraph on paper organization

Data was attained from a Kaggle Competition sponsored by the Los Alamos National Laboratory: www.kaggle.com/c/LANL-Earthquake-Prediction. The data in this competition is the result of a laboratory simulation.

This is another section. We assume that H is (A_∞, B_∞)-subquadratic at infinity, for some constant ...

Notes and Comments. The first results on subharmonics were ...

2 TUTORIAL MATERIAL

Paper should be tutorial in nature Audience is data scientists of varying levels of knowledge. Keep newer students in mind

3 DATA

Must have section that defines data Use tables and figures to illustrate data attributes

4 METHODS AND EXPERIMENTS

Define algorithms, methods and eperiments DO NOT give play by play of everything we did Dont put code in paper; if anything put in appendix. Put versions of software but nop one cares about how to use technology; just state what we did.

5 RESULTS

Results of experiments Use tables and graphs Use tables and graphs Use tables and graphs Don't forget explanations

6 ANALYSIS

Analyze results. These are NOT conclusions.

7 ETHICS

Discuss ethics of your problem You MUST have ethics section.

8 CONCLUSION

Draw conclusionS (plural, more than one conclusion- minimum of 3) This is NOT a summary section.

References

1. Bertrand Rouet-Leduc, Claudia Hulbert, N.L.K.B.C.J.H.P.A.J.: Machine learning predicts laboratory earthquakes