P5. Revise your project using the feedback from reviewers. Prepare a 500 word narrative summarizing the revisions for suggested improvements from reviewers. Place the revised presentation and report on your web-site and ensure that the course web-site has a link to your material.

The first set of revisions we made were based on the feedback from Project 4. Group 1 suggested that we give more context about the tools we used including a discussion of their popularity. This has now been added to the report where we introduce these tools. In addition, Group 1 suggested that we discuss the demographics of twitter and of those who geotag their tweets. In our presentation, we have addressed this issue in depth, including cartograms of tweets by county and population by county.

Group 6 suggested adding a positive or negative expected value based on whether the tweet appears to be in support of or in opposition to a candidate, because of the fact that we could be counting anti-Obama tweets as an indication of support. We had been thinking about this very issue ourselves and designed an improved solution (albeit not necessarily optimal; it is more of a heuristic than a comprehensive approach). We came up with a list of words that had negative connotation and those which have positive connotation. then for each tweet we compute the overall sum of positive and negative connoted words and then assigned a +1 to the tweet for the relevant candidate if the sum was positive and -1 if the sum was negative. This new approach is discussed in the presentation and detailed in the report.

Another set of revisions were made based on the feedback from the final presentation. A majority of these suggestions pertained to data collection, which is not something we could do retroactively with a time-sensitive topic such as the election. However, many of these are great suggestions, and as a result, we appended them to our discussion of future directions for this work.

Group 3 suggested sampling methodology with data collected continuously. They agree with the advantages of using the milestone events such as debates and election day for our predictions (e.g. reducing meaningless and redundant data), but also point out that this could have caused us to miss some possibly important data that could have generated good predictions. After all, not everyone makes political comments during/around debates and election day. People are tweeting about politics, especially the U.S. Presidential election, all the time. We were constrained in the amount of data we could collect and did not collect this data retroactively, but this is definitely something that we would do if we were to undergo a similar project in the future with sufficient storage resources. In addition, group 3 suggested we use intensity maps in our presentation. Our presentation does contain intensity maps, but they may have been rushed and or somewhat unclear during our presentation. To rectify this, we added legends to many of the maps to clearly indicate what the different colors mean.

Group 7 suggested using a variety of social data including Facebook to supplement the Twitter data. It was obviously too late by the time of the presentation to conduct such data collection, but this is a great suggestion, as Facebook data is also geocoded and our intuition is that facebook would have a much better representation of the general voting population, and it has many more users (1.01 billion as of September 2012) than Twitter (500 million users as of April 2012).
Finally, we made a multitude of changes in addition to those detailed above, most significantly a more in depth and detailed validation, at the nation, state, and country level. In addition, we added further emphasis to certain points in the report such as novelty, contributions, difficulty of the problem, and constraints.