



The Sentiment in the News Community on Bluesky

Research question and motivation

Research question:

- Are the sentiments distributed homogeneously or diversely in the news community on Bluesky?

Motivation:

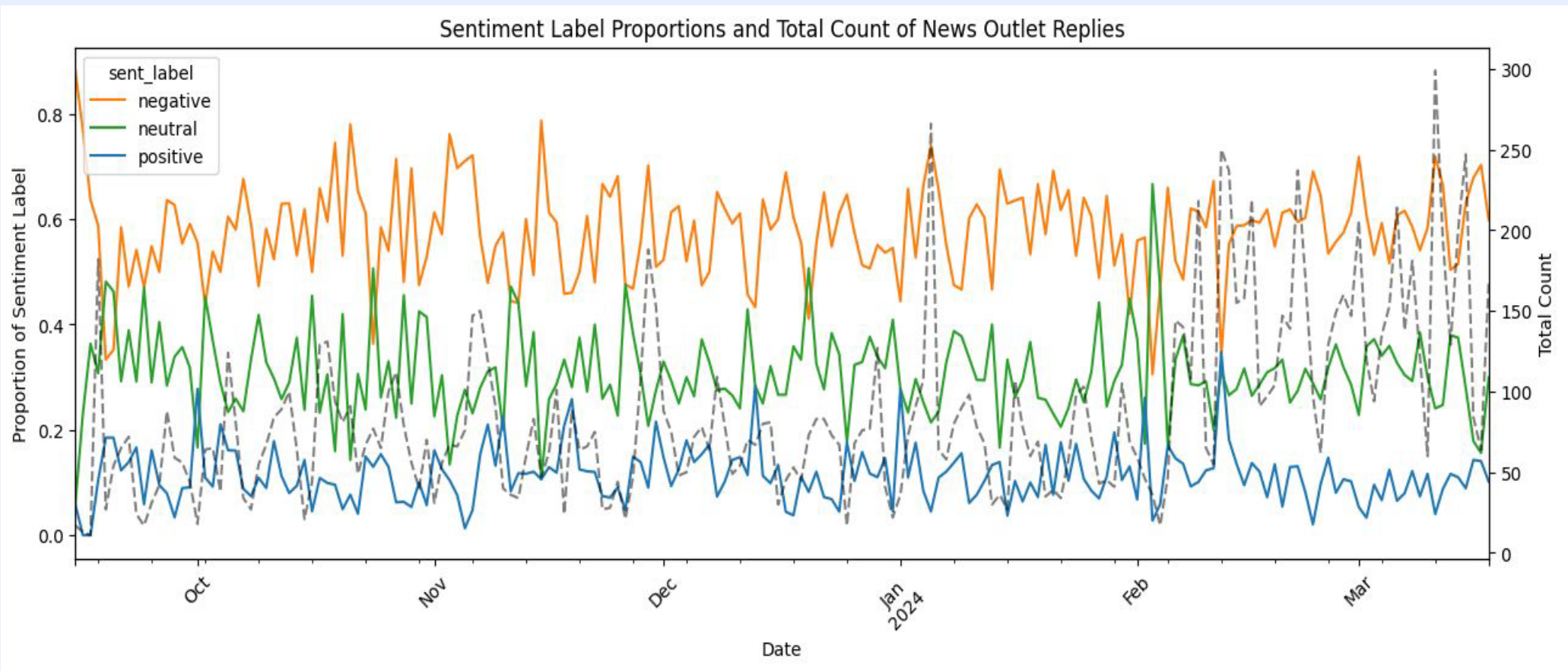
- Due to recent developments surrounding X (formerly known as Twitter) many users are migrating to alternative social media platforms, particularly Bluesky.
- Some argue that comparing to X, Bluesky is prone to be considered as a “Bubble” consisting mostly of left-oriented, pro-democratic users.
- We want to understand whether this like-mindedness has an influence on how people interact on Bluesky.

Theory:

- Echo Chamber Theory (Cass R. Sunstein)

Hypotheses:

- H1: The sentiment of replies to posts in the news feed is more negative than the overall sentiment on Bluesky.
- H2: The sentiment in the news community is homogeneous.



Data and methods

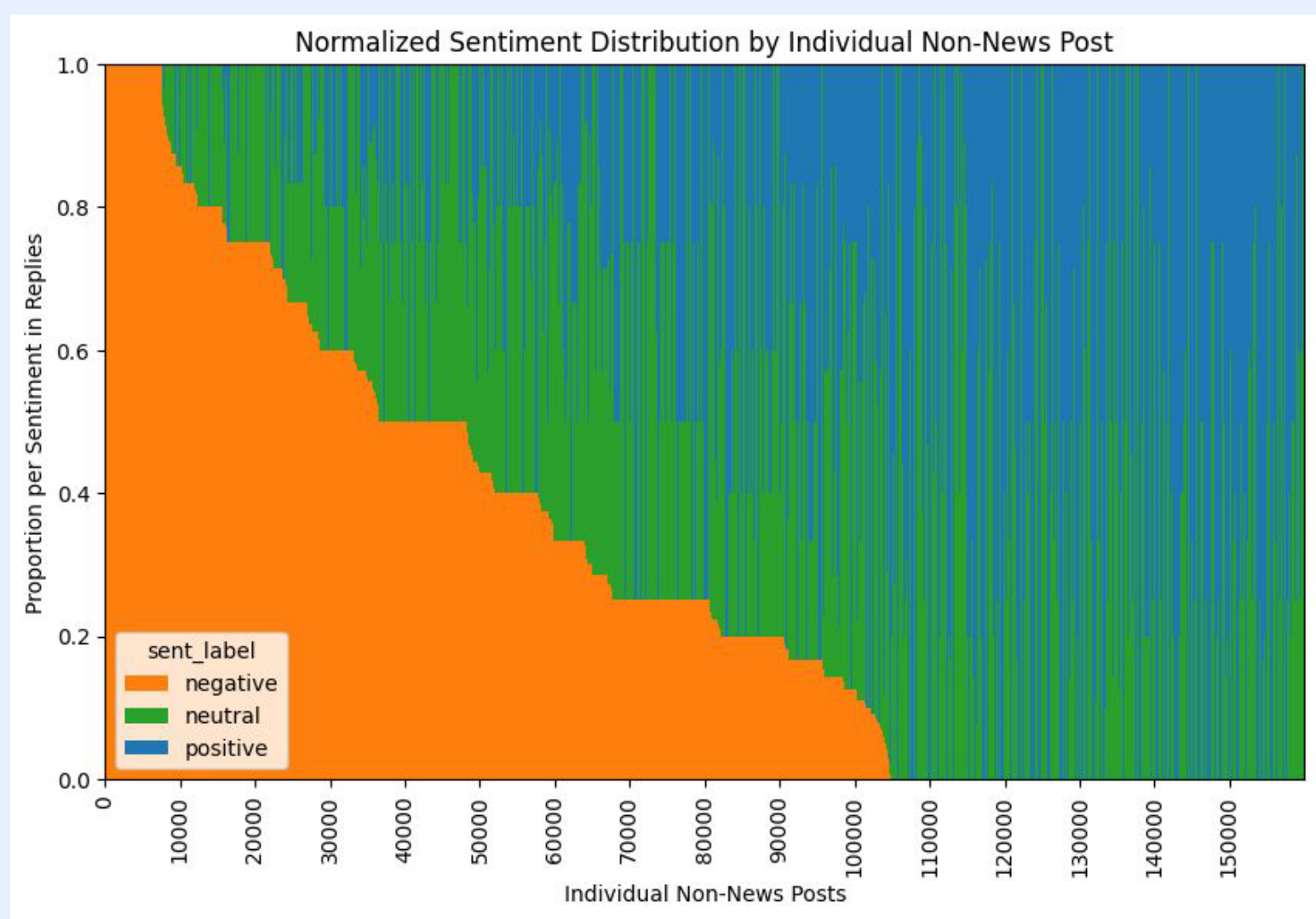
Data:

- Data from ~4 million users, representing ~81% of all registered accounts, includes 235 million posts with metadata.
- Data was collected from Bluesky using its official Developer API.

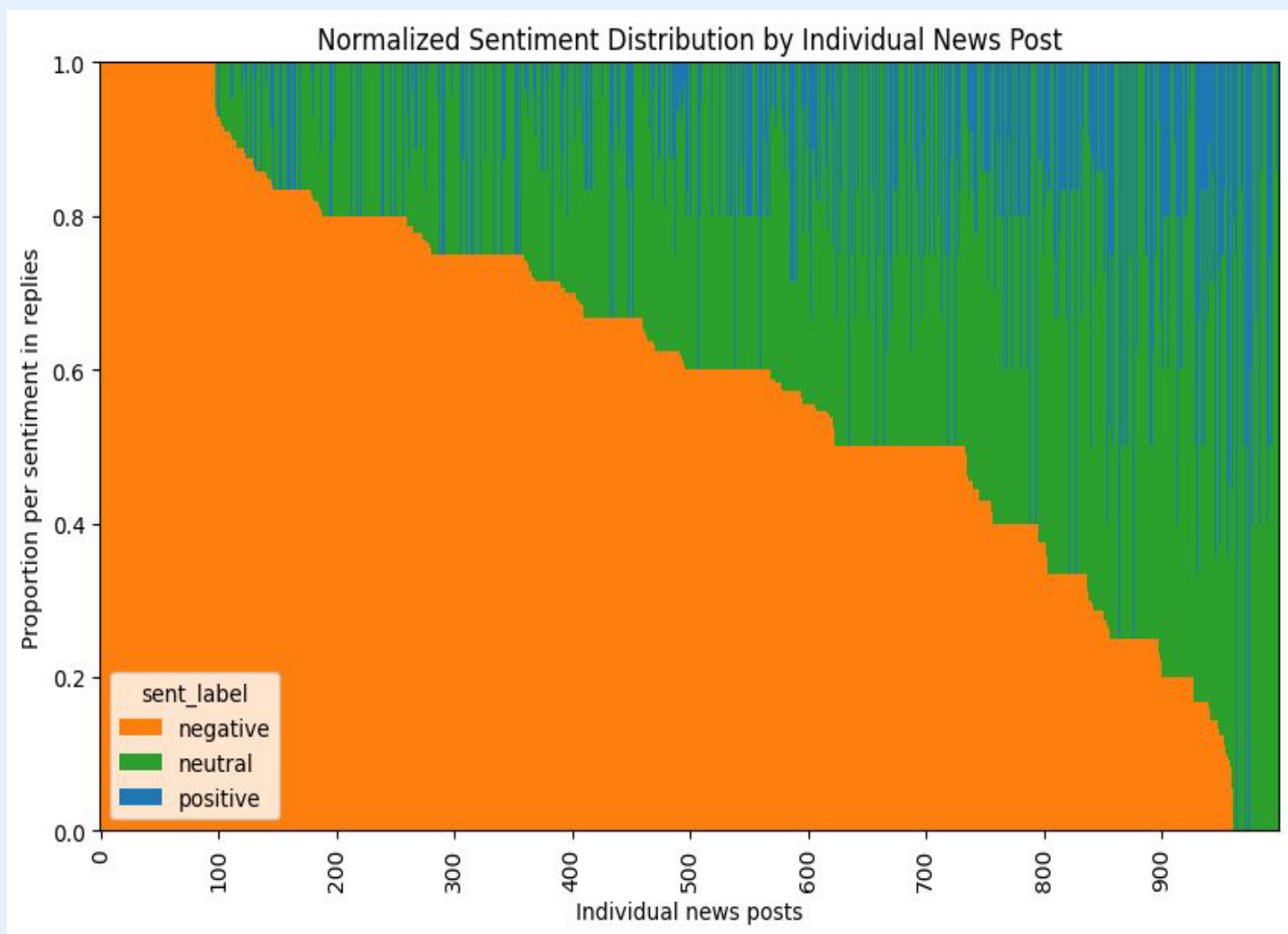
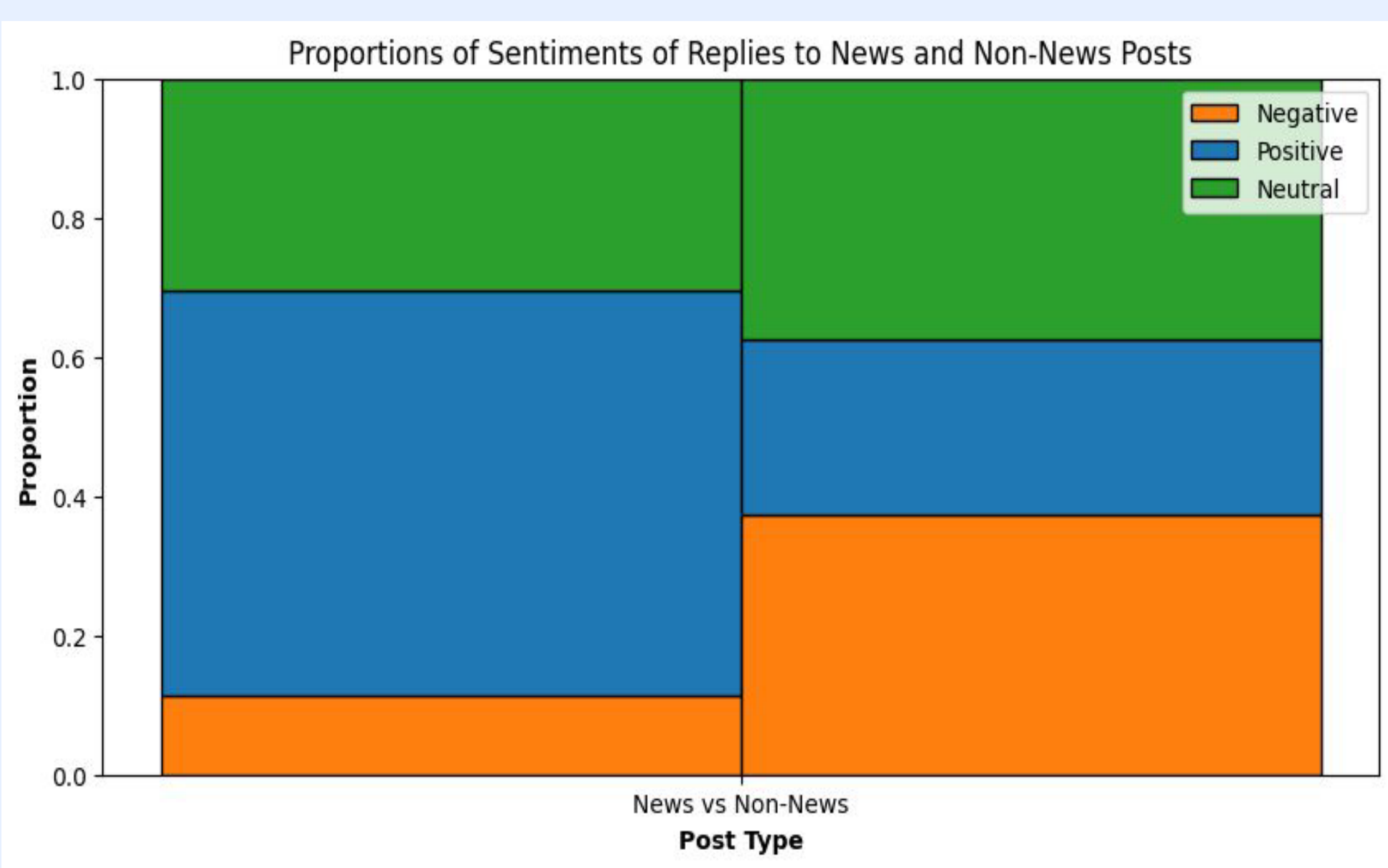
Methods:

- Sentiment analysis was conducted with RoBERTa, a model based on Google’s BERT architecture.
- Our analysis uses only the sentiment label and doesn’t take into account the confidence score associated with each label.
- Chi-Square Test for Independence to test H1.

Results



160000 posts, 1258409 comments



1000 posts, 9502 comments

Conclusion

- Overall sentiment on Bluesky appears to be quite balanced comparing to the sentiment scores found in replies to the news feed, which tend to be more negative. This finding is statistically significant (p-value = 0.0) as we are able to show with the Chi²-Test. Therefore we can prove H1.
- To proof the homogeneity of the sentiment in the news community (H2), further testing and research is going to be necessary. However our findings show a trend of homogeneity in the news community.

[1] Dataset: Failla, A., & Rossetti, G. (2024). Bluesky Social Dataset [Data set]. In Plos One. Zenodo. <https://doi.org/10.5281/zenodo.14258401>

[2] Documentation on Bluesky Feeds: <https://docs.bsky.app/docs/starter-templates/custom-feeds>