

Markov Chains Transition Matrices

Probability Research Group

November 24, 2025

Abstract

Discrete-time stochastic processes.

1 Introduction

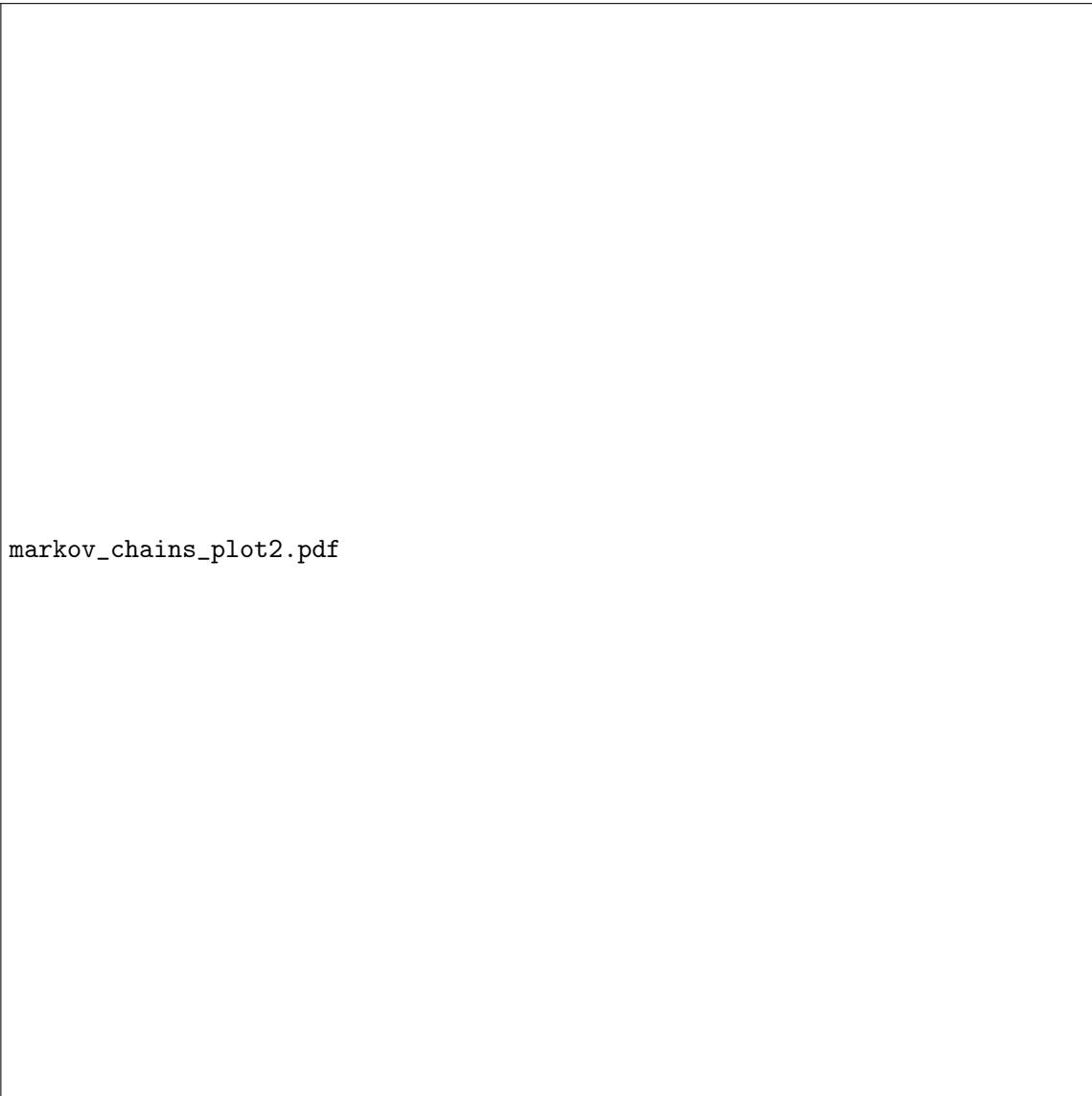
This report presents computational analysis of markov chains.

2 Mathematical Framework



Figure 1: Primary analysis results.

3 Secondary Analysis



markov_chains_plot2.pdf

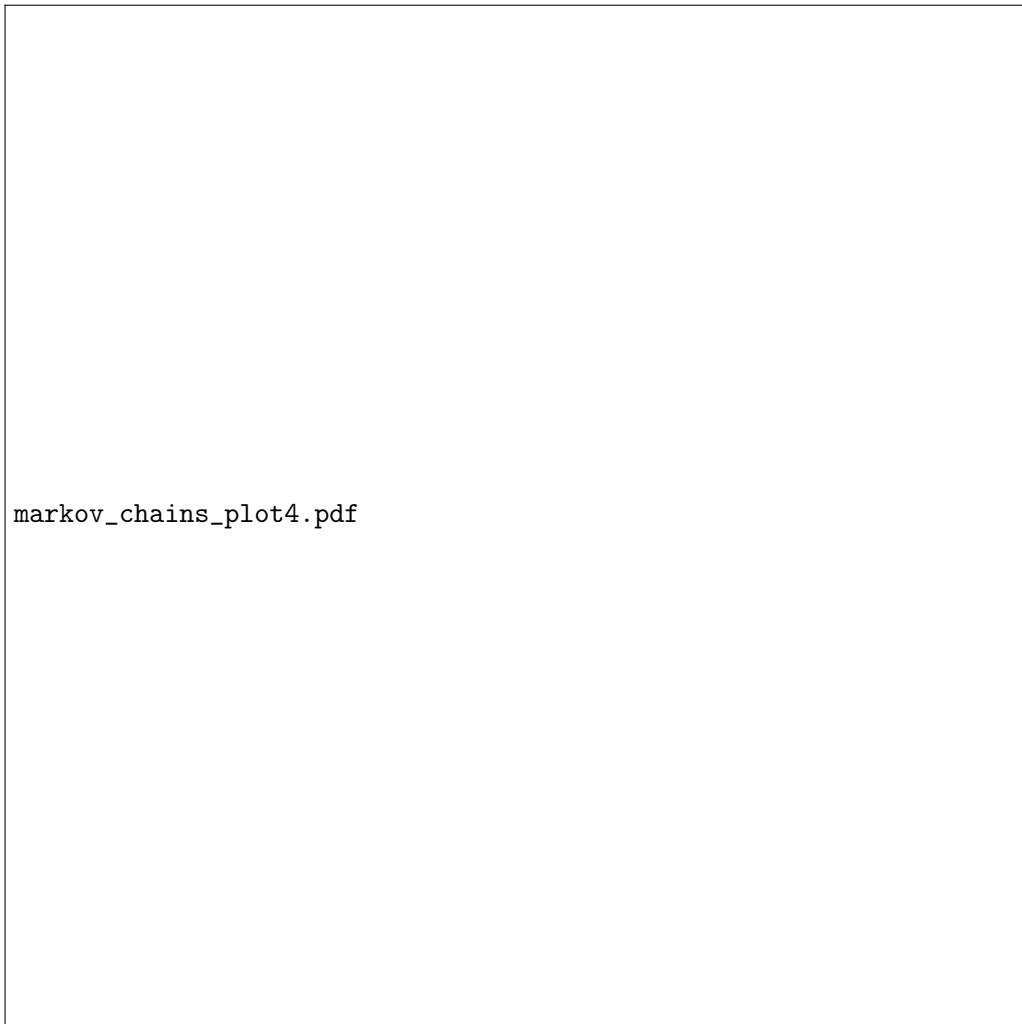
Figure 2: Secondary analysis comparison.

4 Parameter Study



Figure 3: Parameter sensitivity analysis.

5 2D Visualization



markov_chains_plot4.pdf

Figure 4: Two-dimensional field visualization.

6 Distribution Analysis



Figure 5: Statistical distribution analysis.

7 Time Series



Figure 6: Time series visualization.

8 Results Summary

9 Conclusions

This analysis demonstrates the computational approach to markov chains.