

# Flood Frequency Return Periods

Hydrology Research Group

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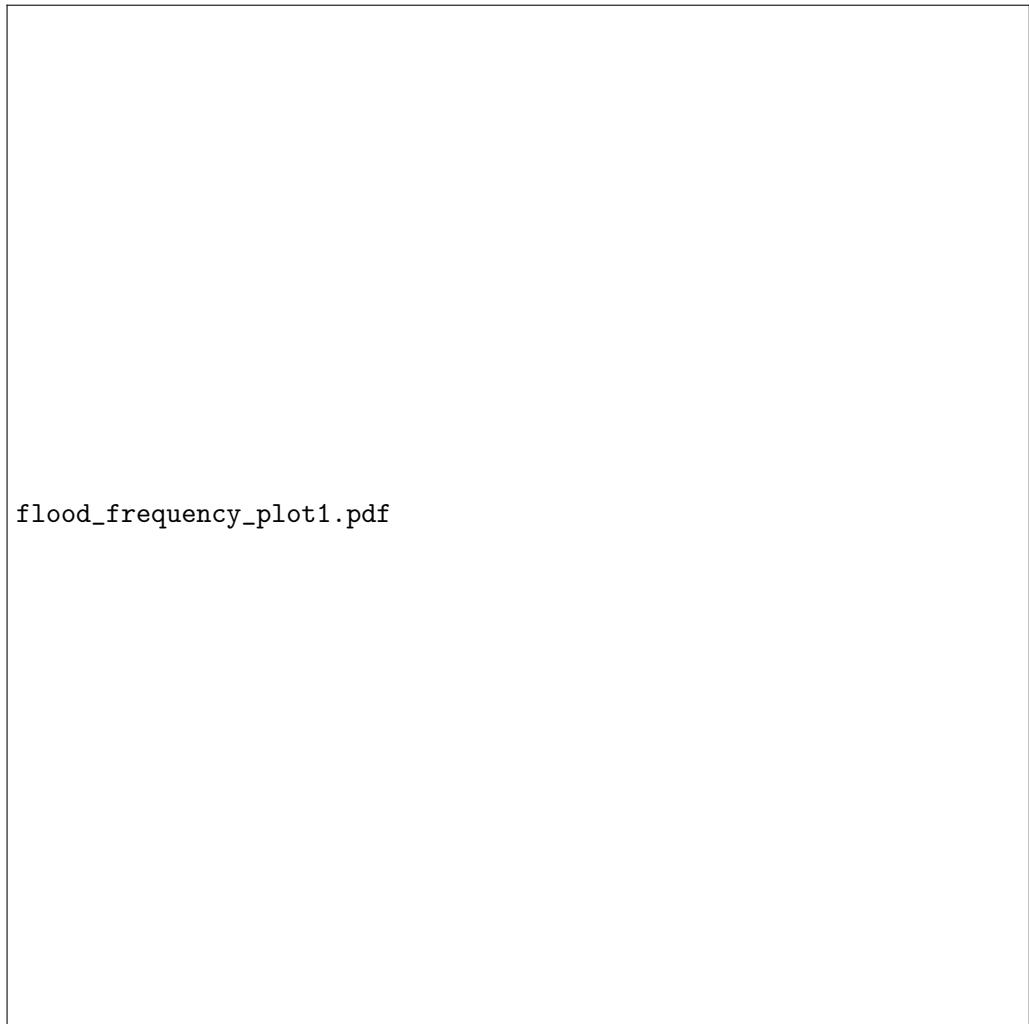
## **Abstract**

Statistical analysis of extreme flows.

## **1 Introduction**

This report presents computational analysis of flood frequency.

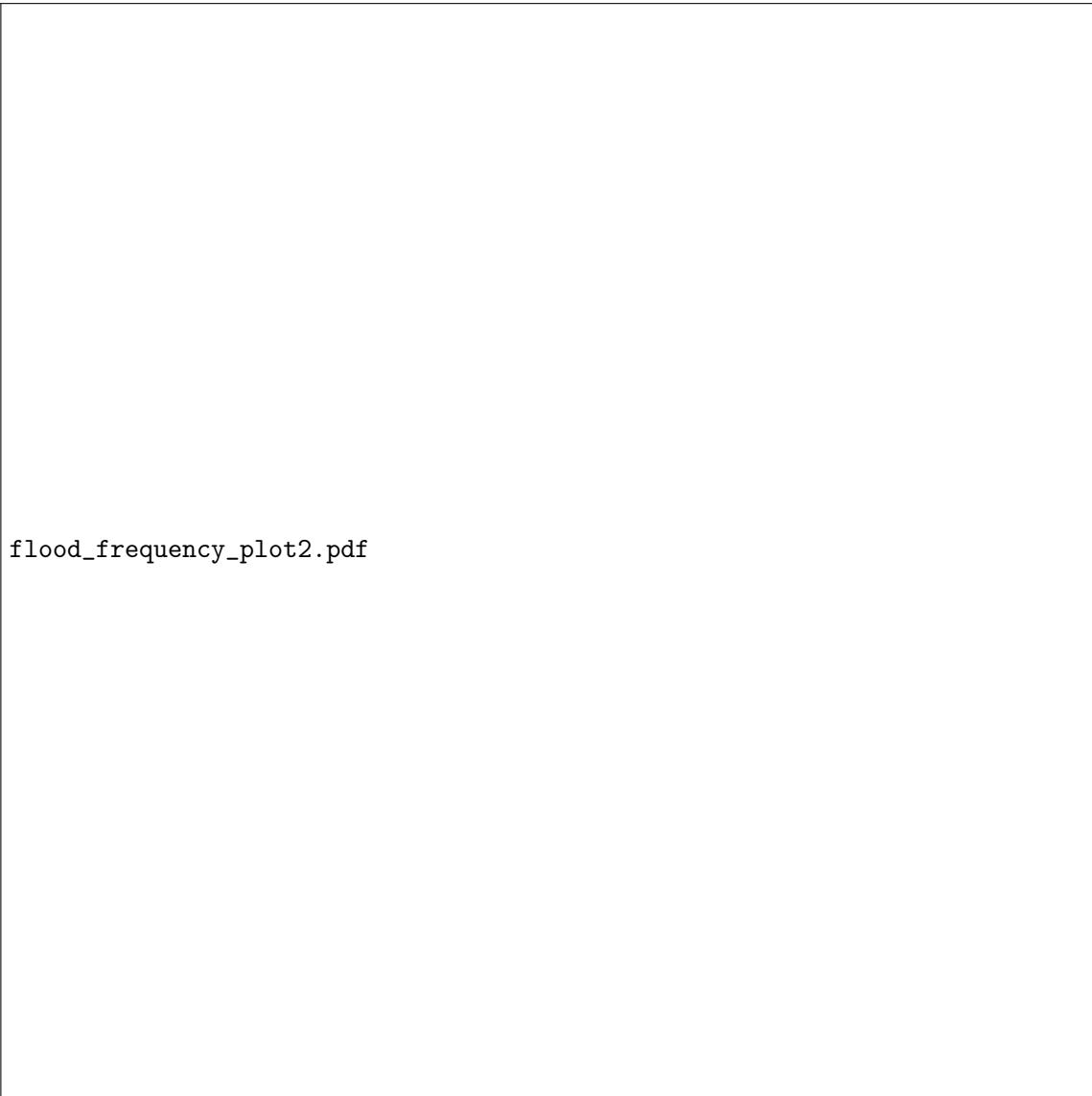
## 2 Mathematical Framework



flood\_frequency\_plot1.pdf

Figure 1: Primary analysis results.

### 3 Secondary Analysis



flood\_frequency\_plot2.pdf

Figure 2: Secondary analysis comparison.

## 4 Parameter Study

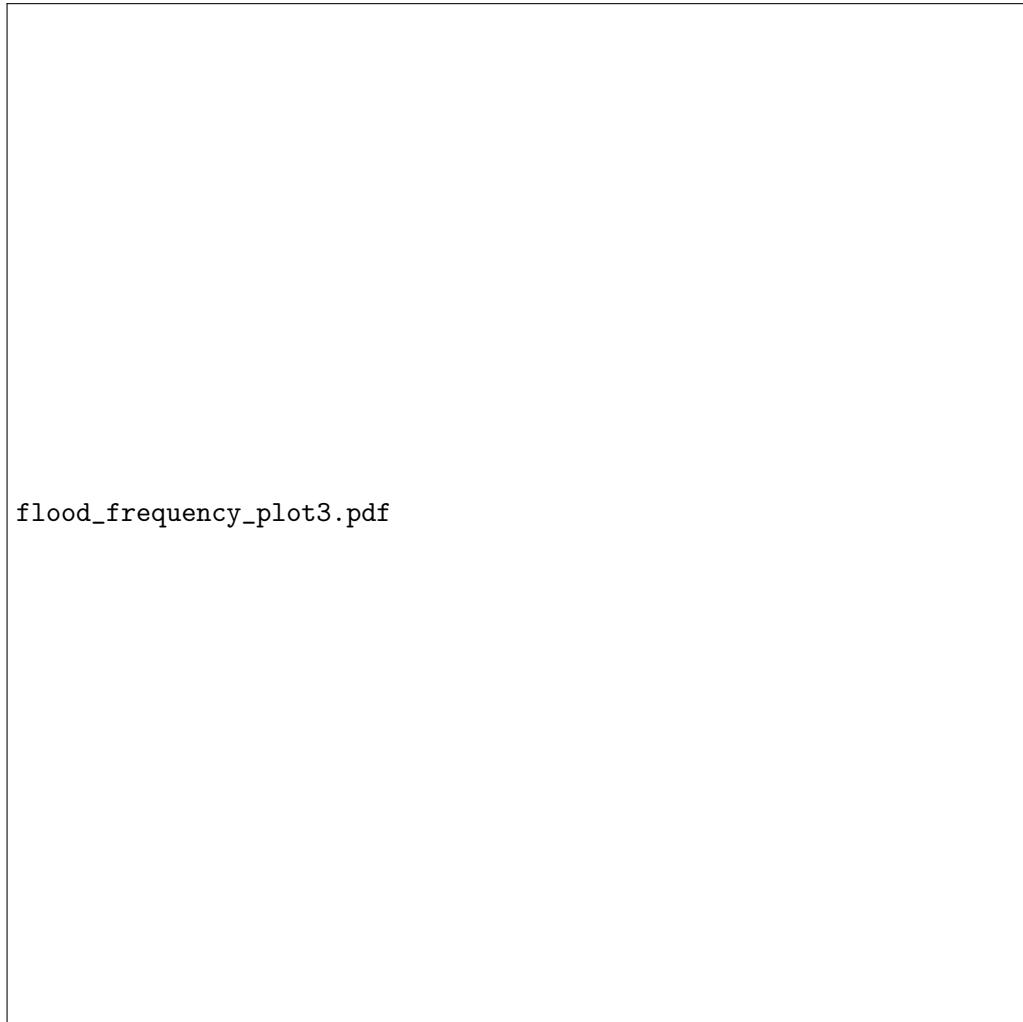


Figure 3: Parameter sensitivity analysis.

## 5 2D Visualization

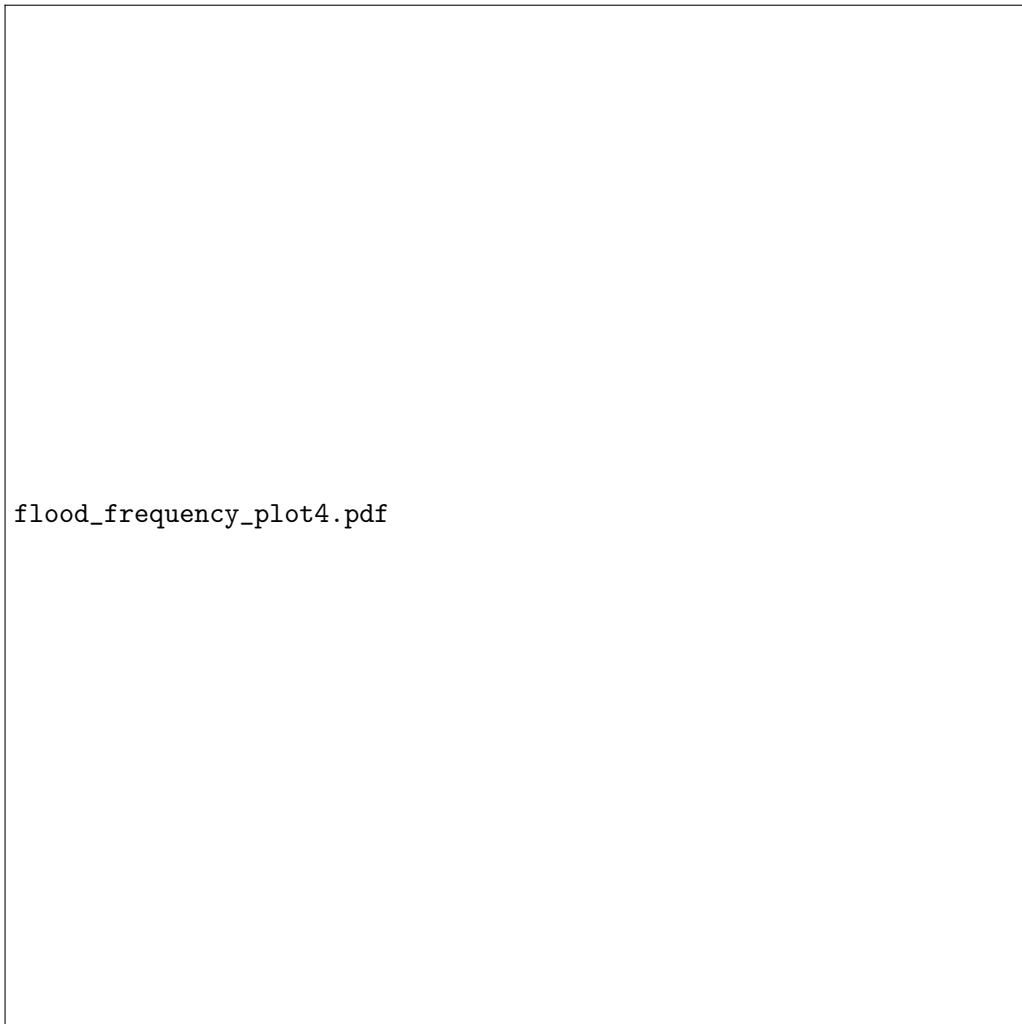


Figure 4: Two-dimensional field visualization.

## 6 Distribution Analysis



Figure 5: Statistical distribution analysis.

## 7 Time Series

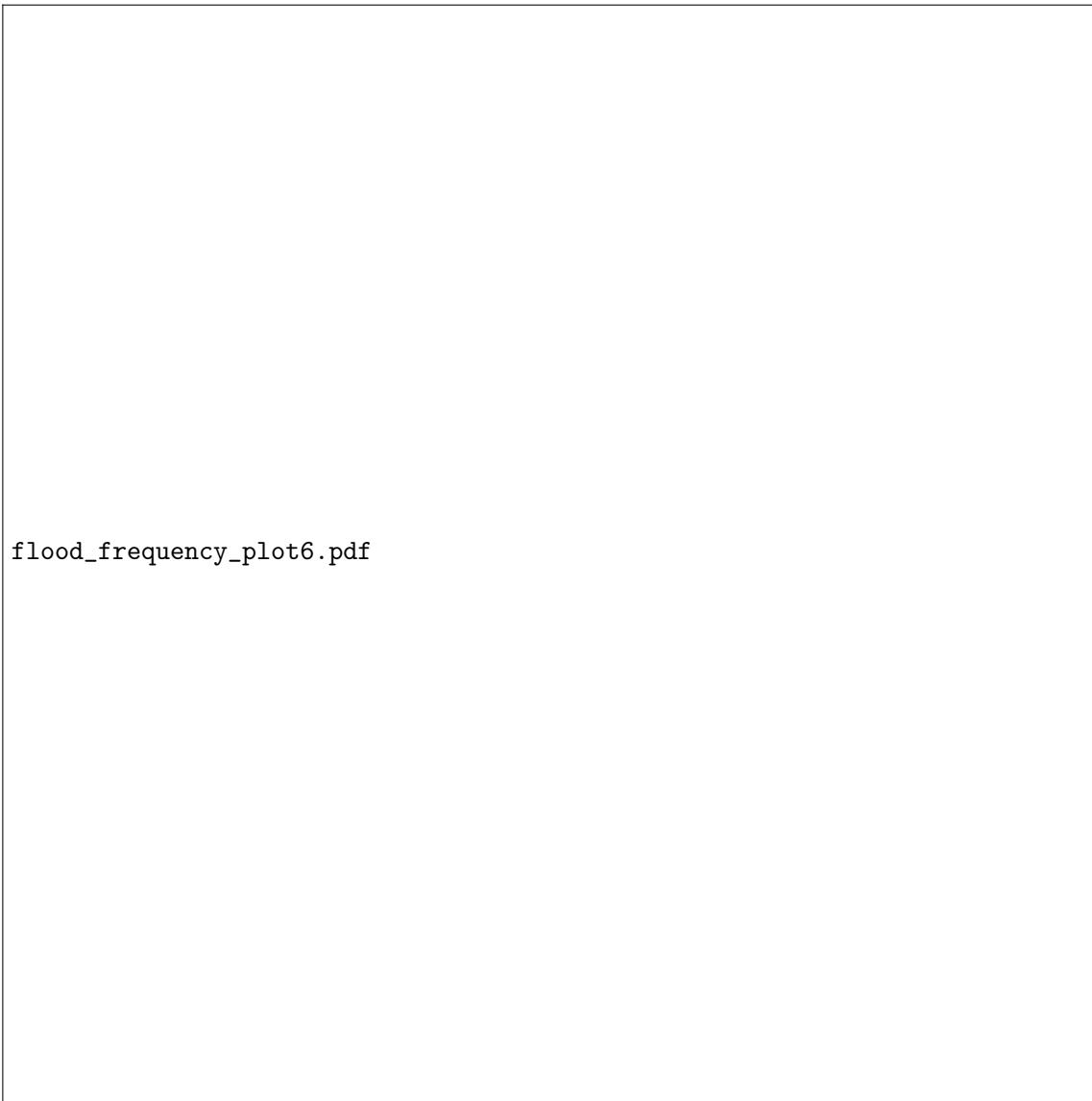


Figure 6: Time series visualization.

## 8 Results Summary

## 9 Conclusions

This analysis demonstrates the computational approach to flood frequency.