

# Rainfall-Runoff Unit Hydrograph

Hydrology Research Group

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## **Abstract**

Watershed response to precipitation.

## **1 Introduction**

This report presents computational analysis of rainfall runoff.

## 2 Mathematical Framework

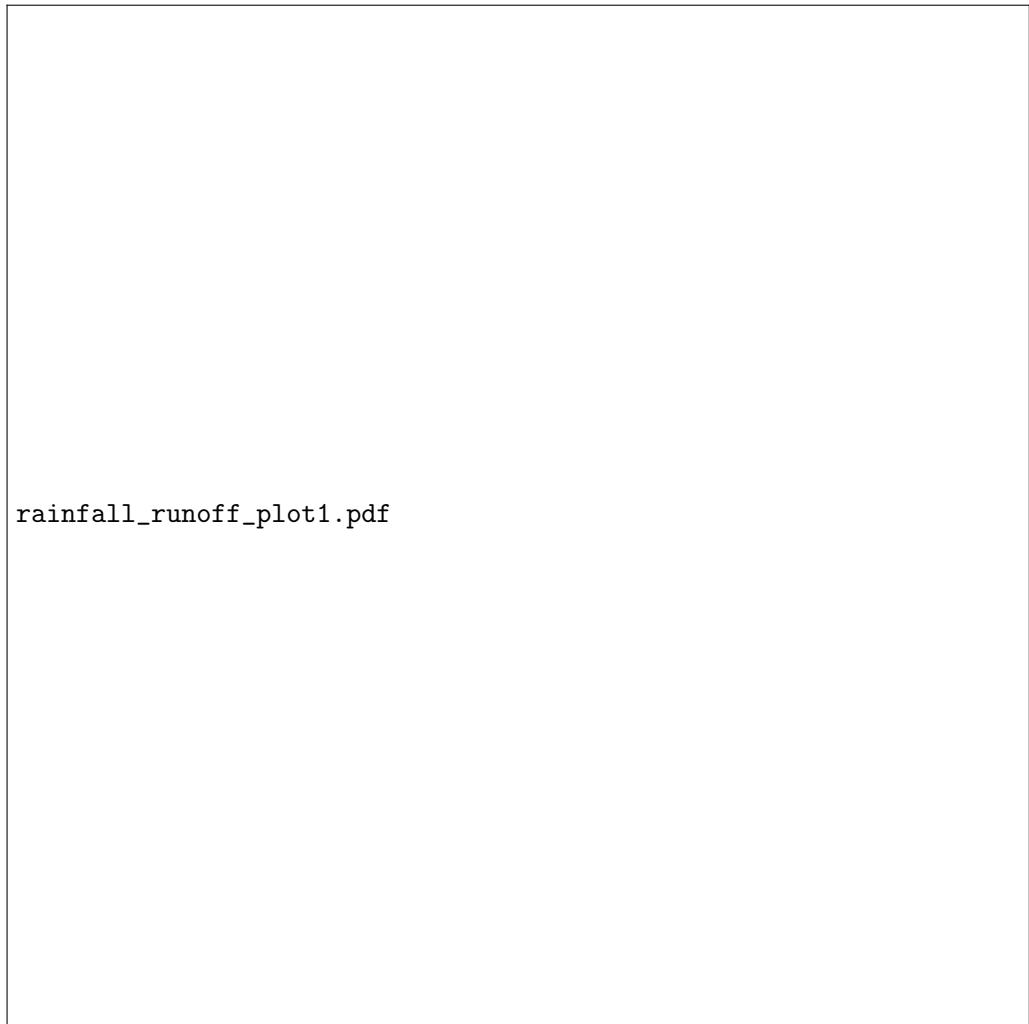


Figure 1: Primary analysis results.

### 3 Secondary Analysis



rainfall\_runoff\_plot2.pdf

Figure 2: Secondary analysis comparison.

## 4 Parameter Study

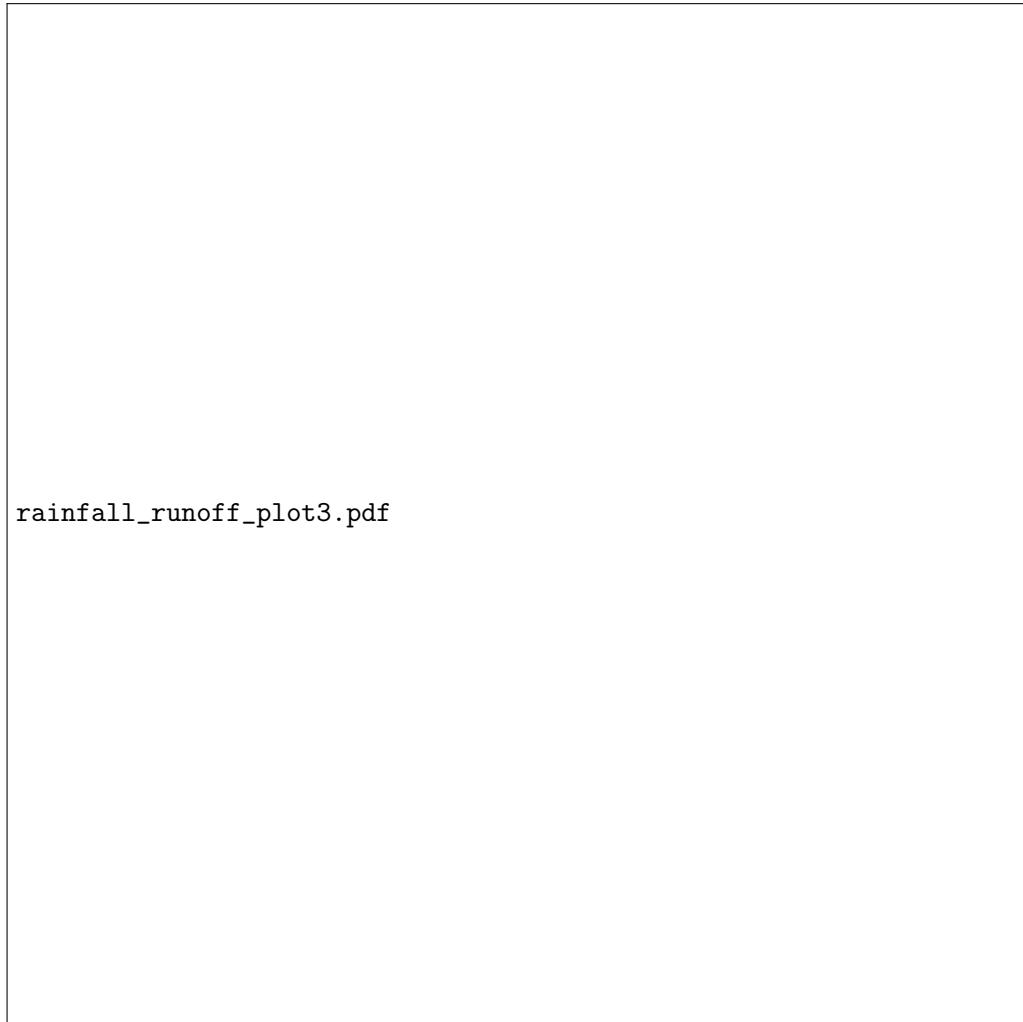
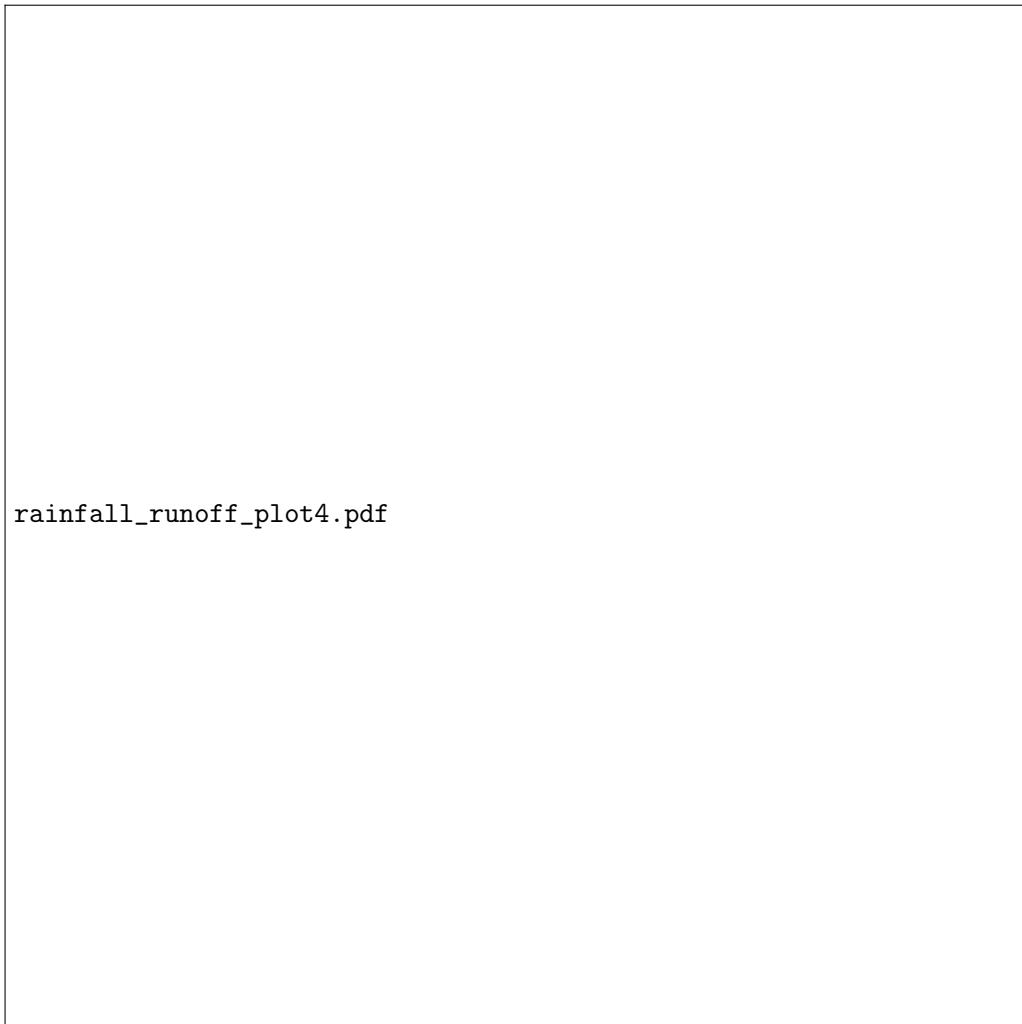


Figure 3: Parameter sensitivity analysis.

## 5 2D Visualization



rainfall\_runoff\_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 rainfall runoff.