Simulation Results Graphs and Cluster Analyses for:
"The Influence of Realism on Congestion in Network Simulations"
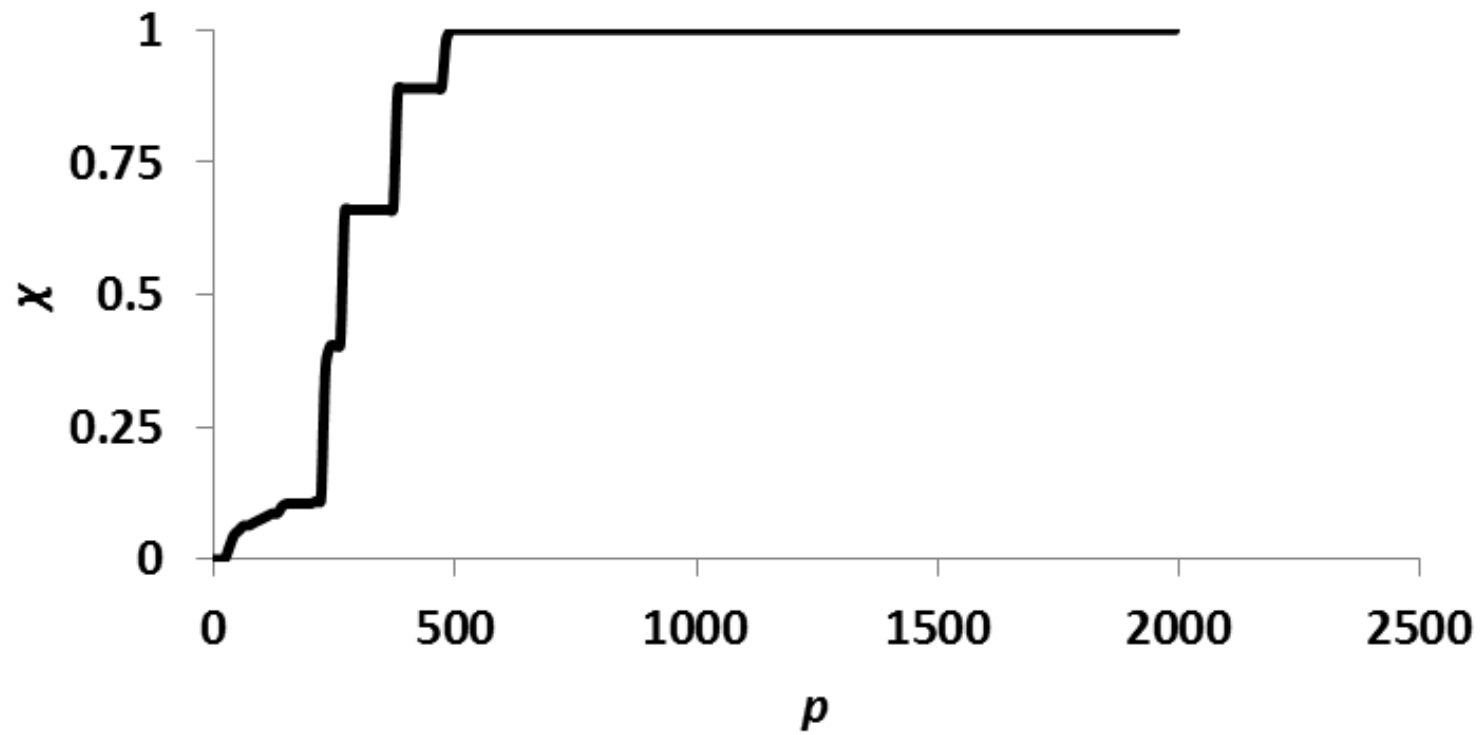
NIST Technical Note

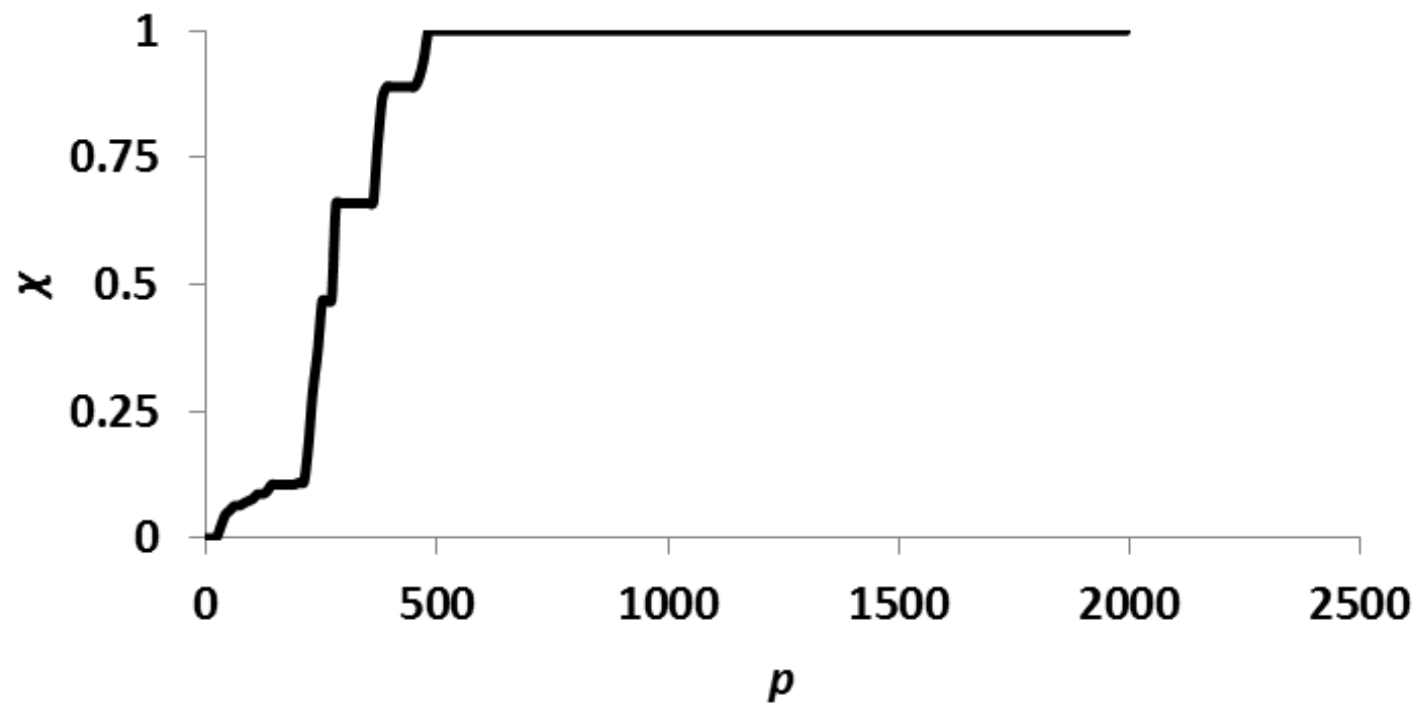C. Dabrowski & K. Mills

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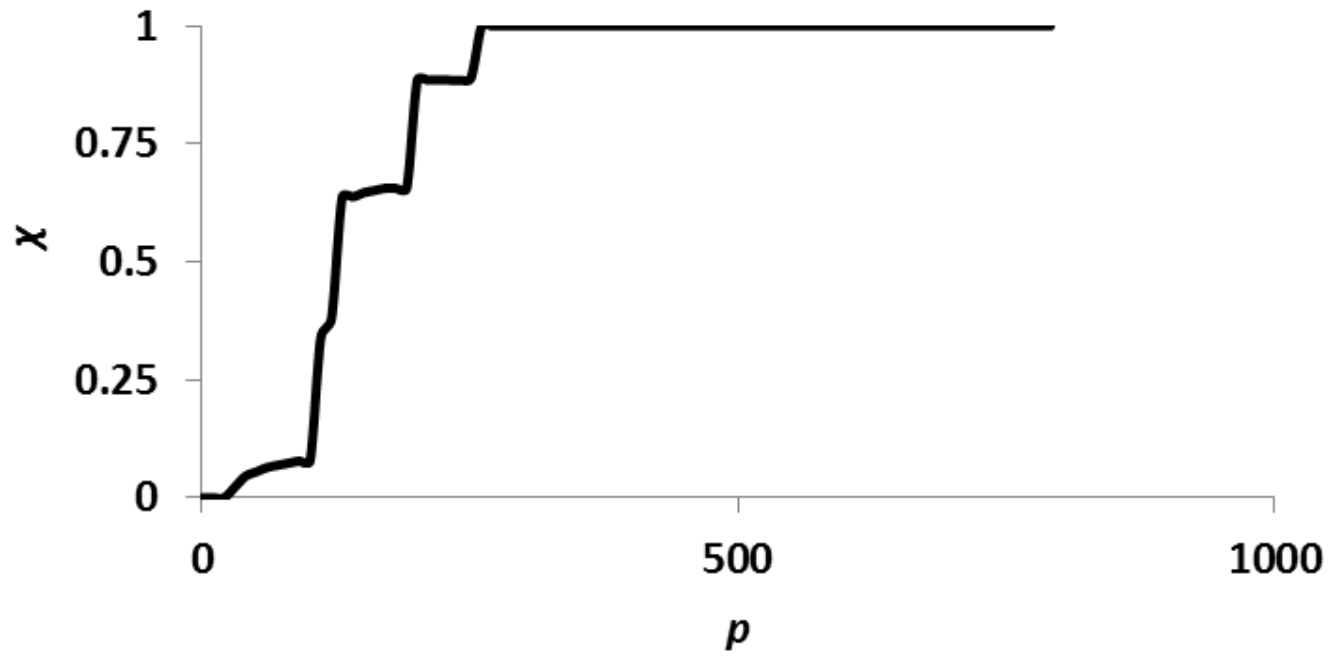# Graphs for Congestion Spread (χ)
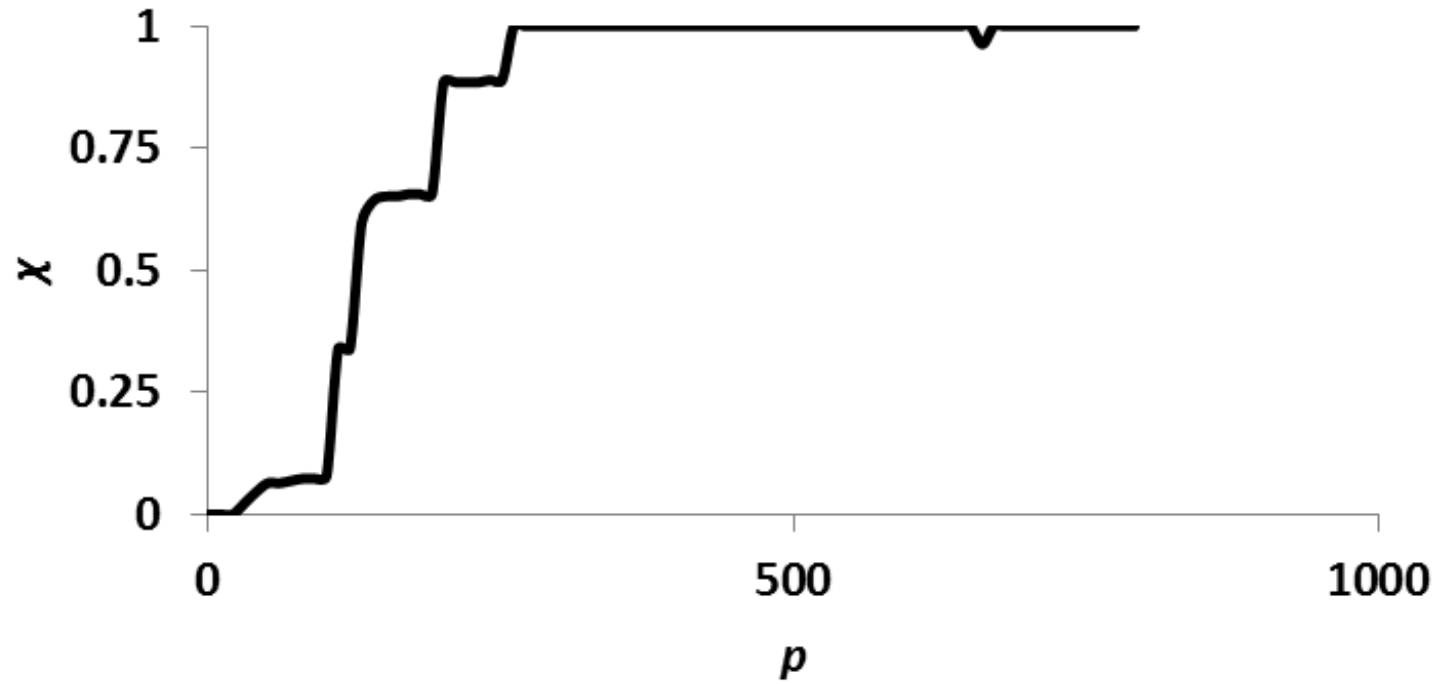## (Dabrowski & Mills NIST)
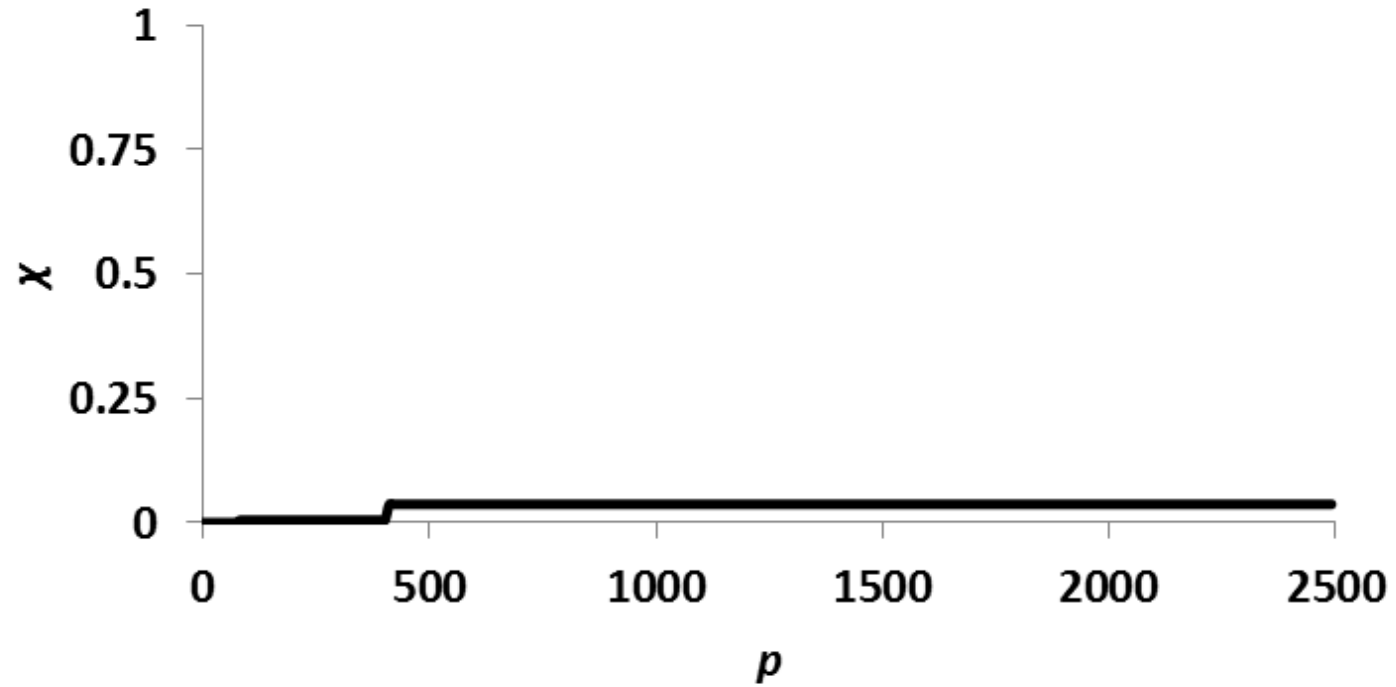
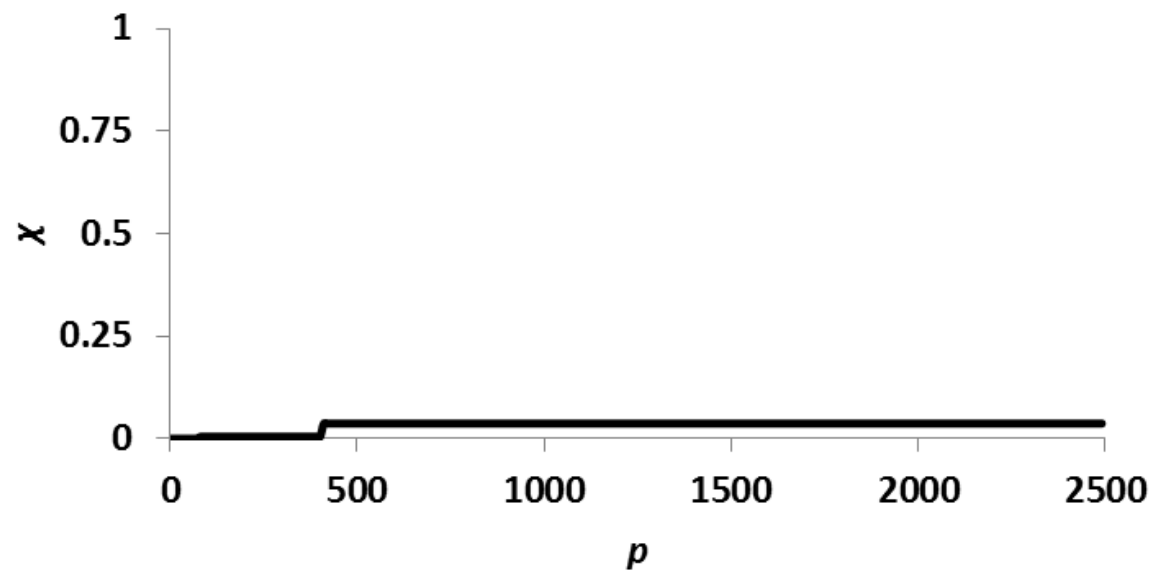**C0: GCC Isolated Nodes**

C1: GCC Isolated Nodes
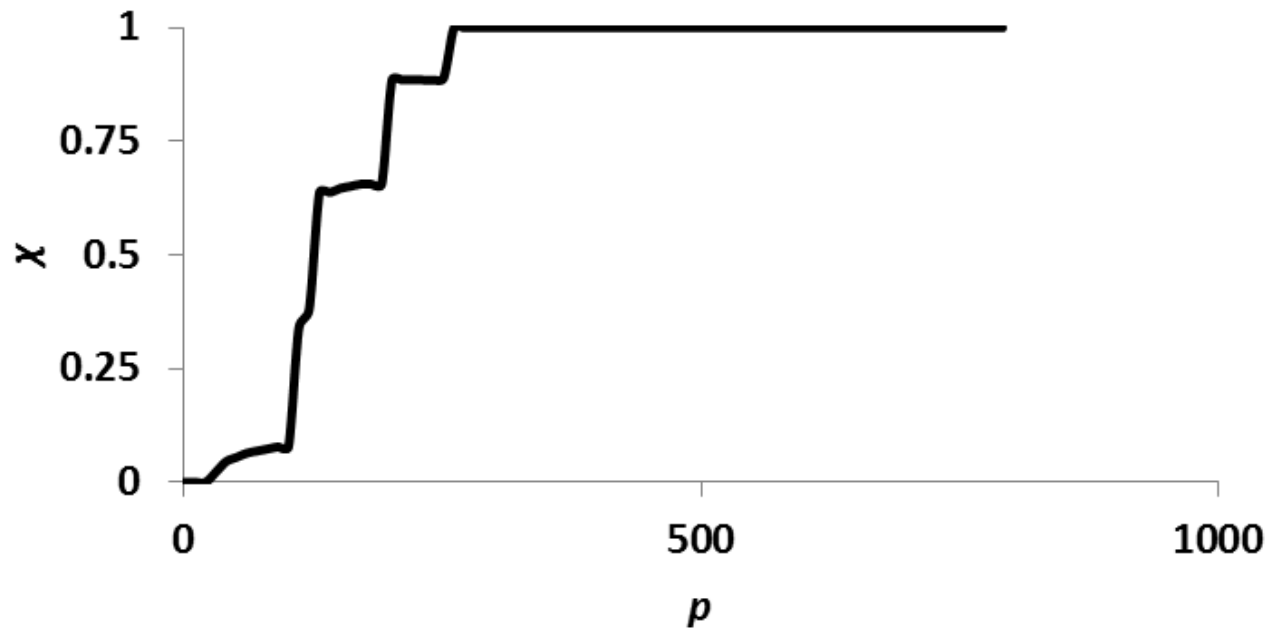
C2: GCC Isolated Nodes
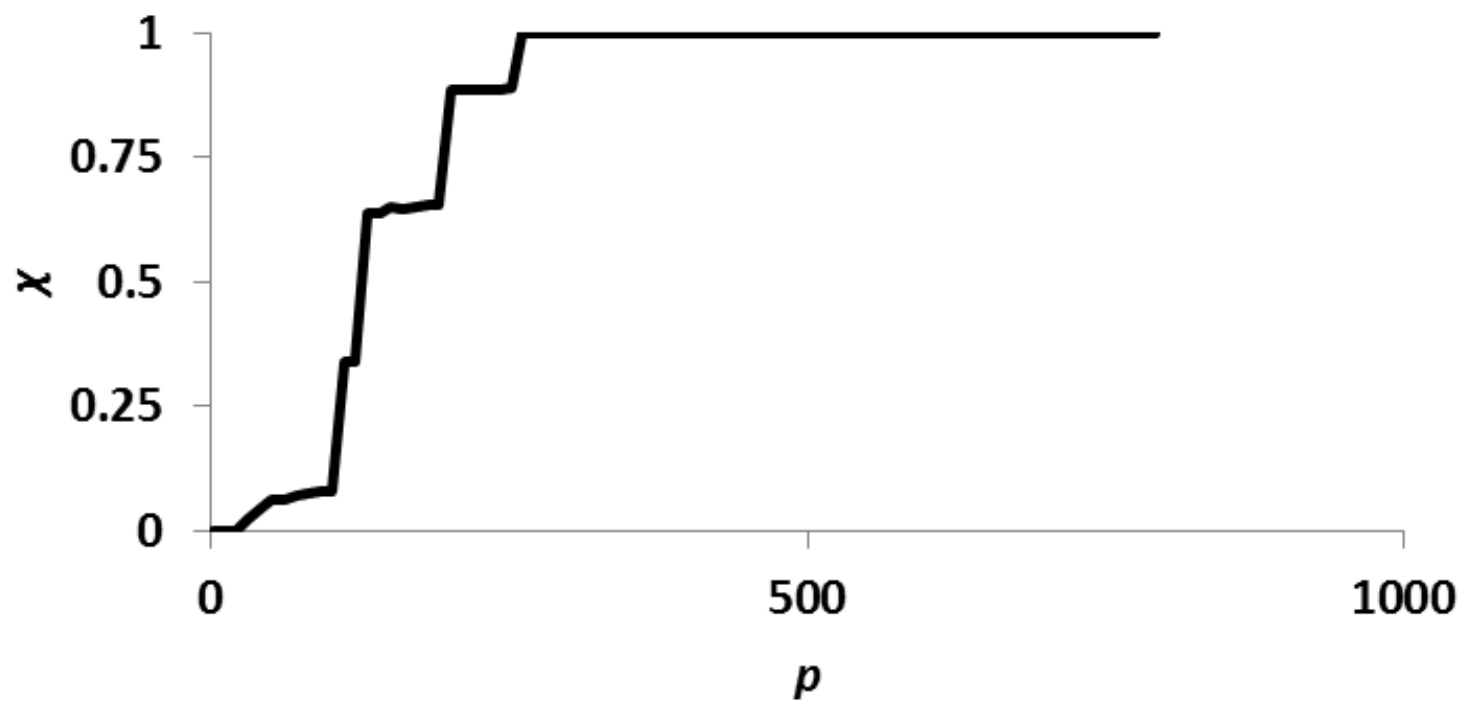
C3: GCC Isolated Nodes
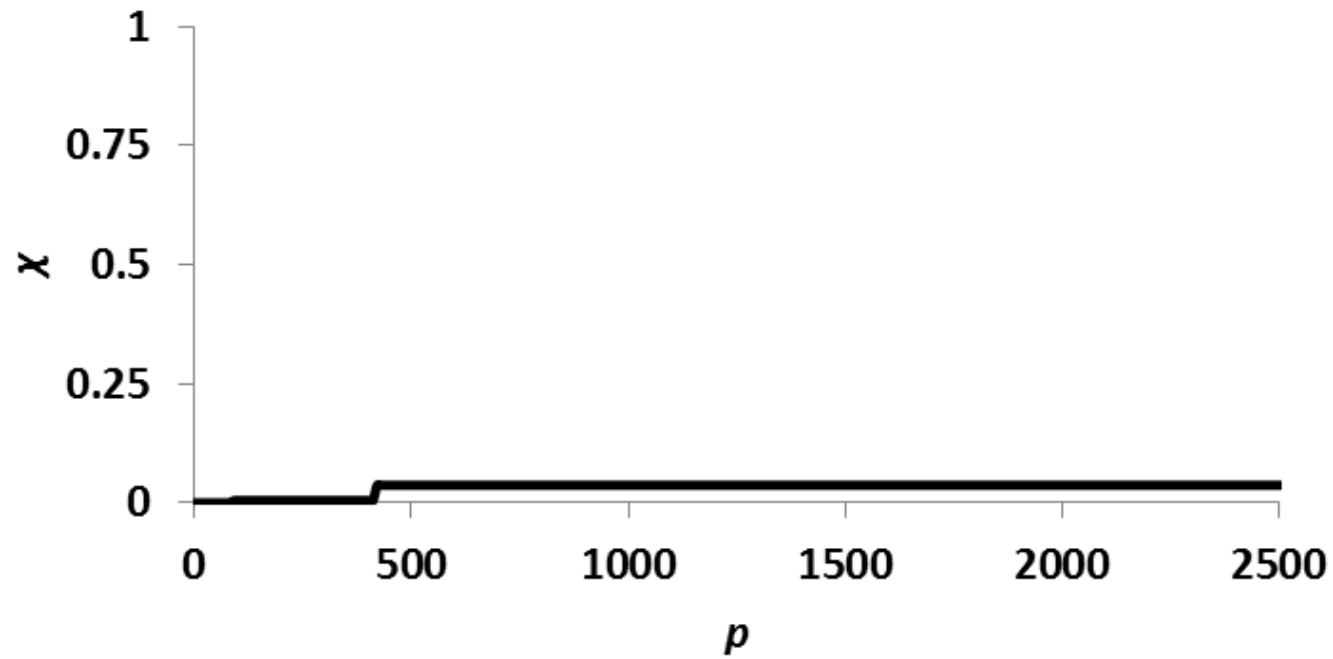
C6: GCC Isolated Nodes

C7: GCC Isolated Nodes
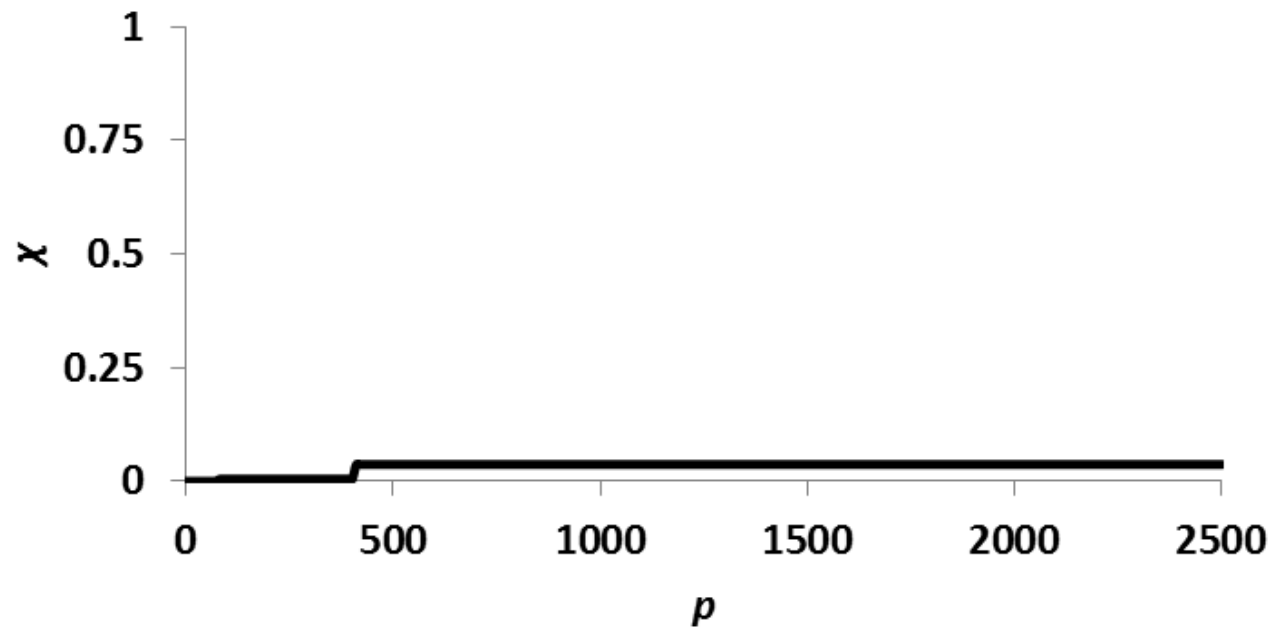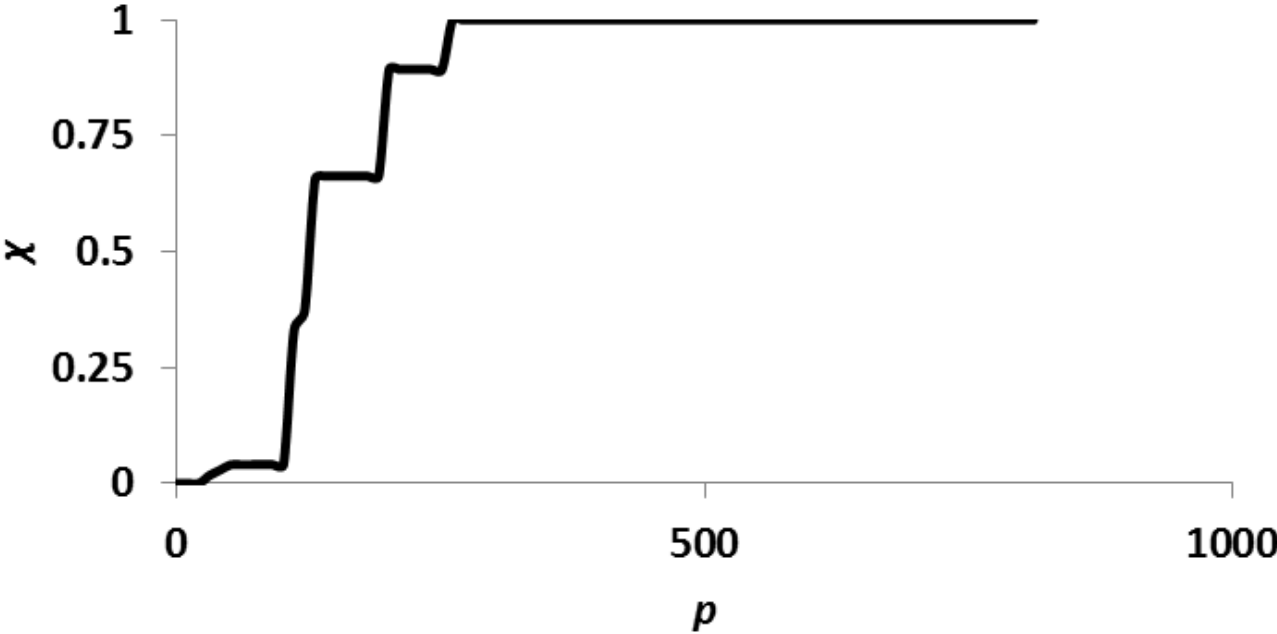
C10: GCC Isolated Nodes
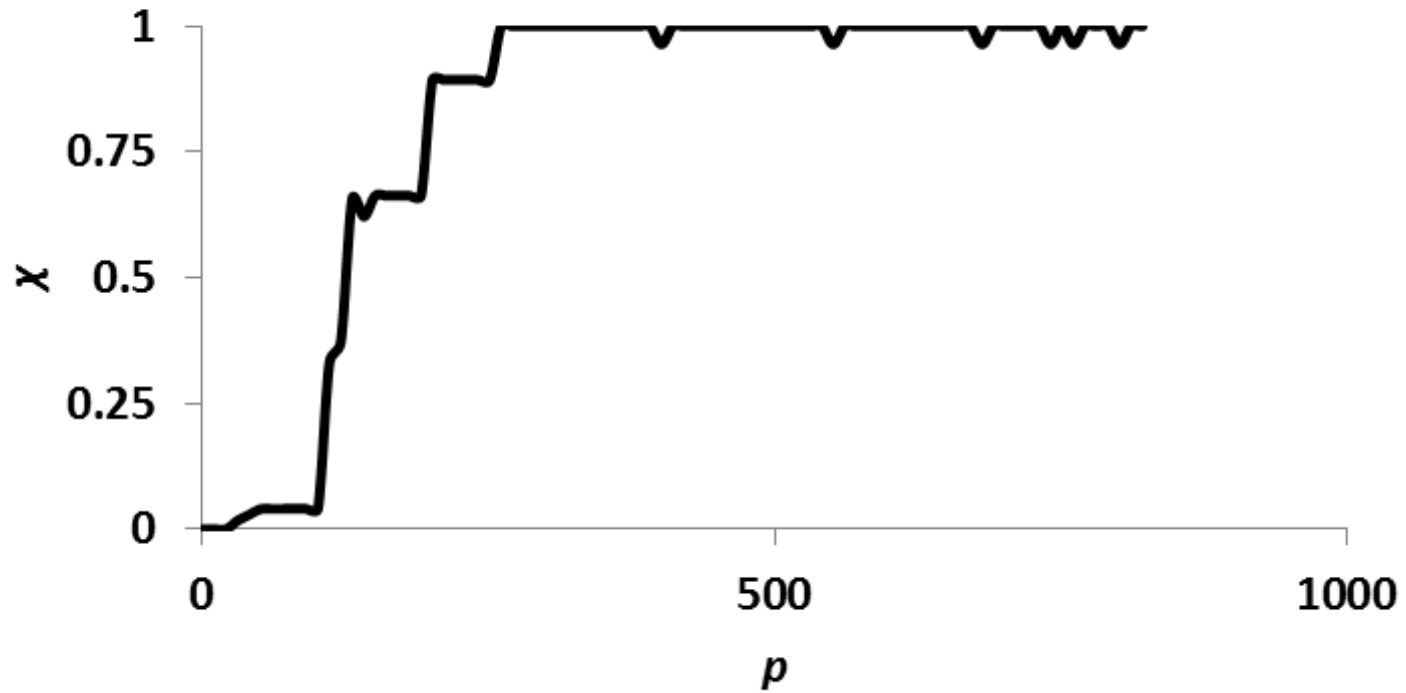
C11: GCC Isolated Nodes

C14: GCC Isolated Nodes
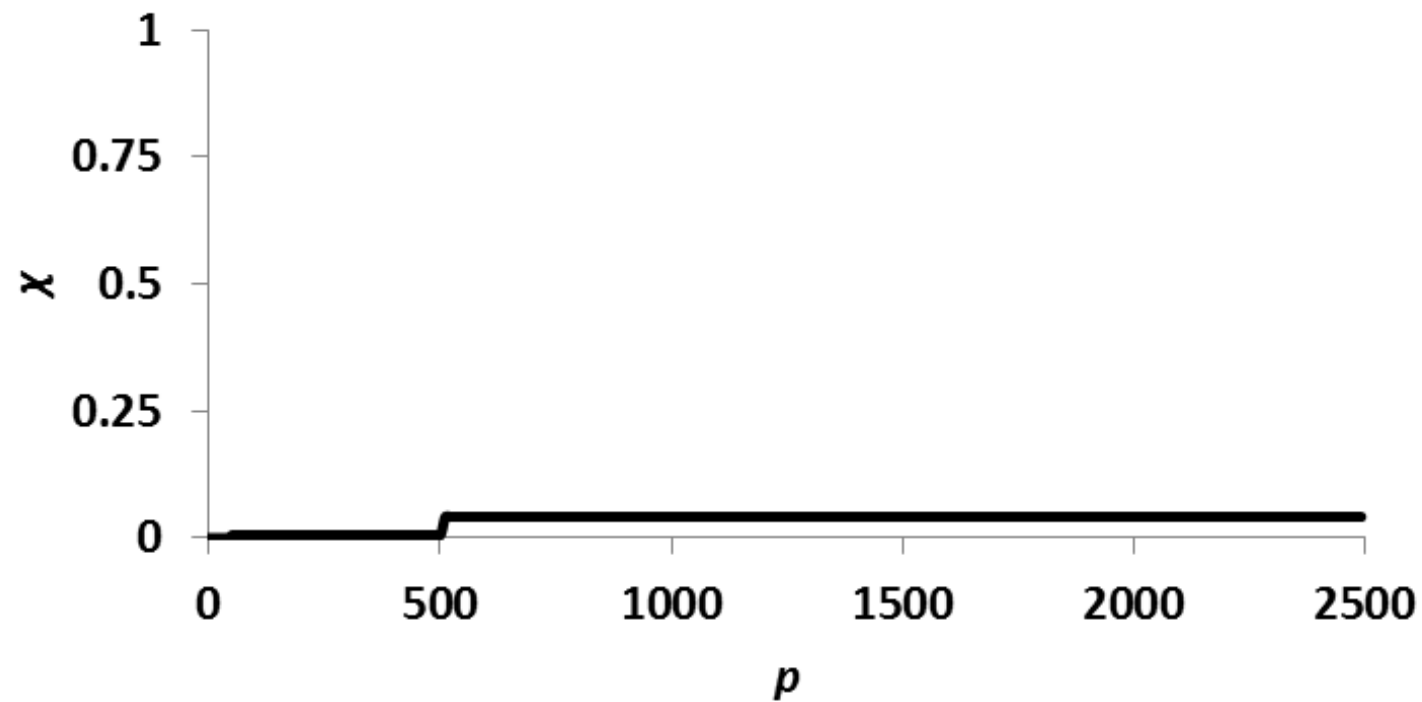
C15: GCC Isolated Nodes
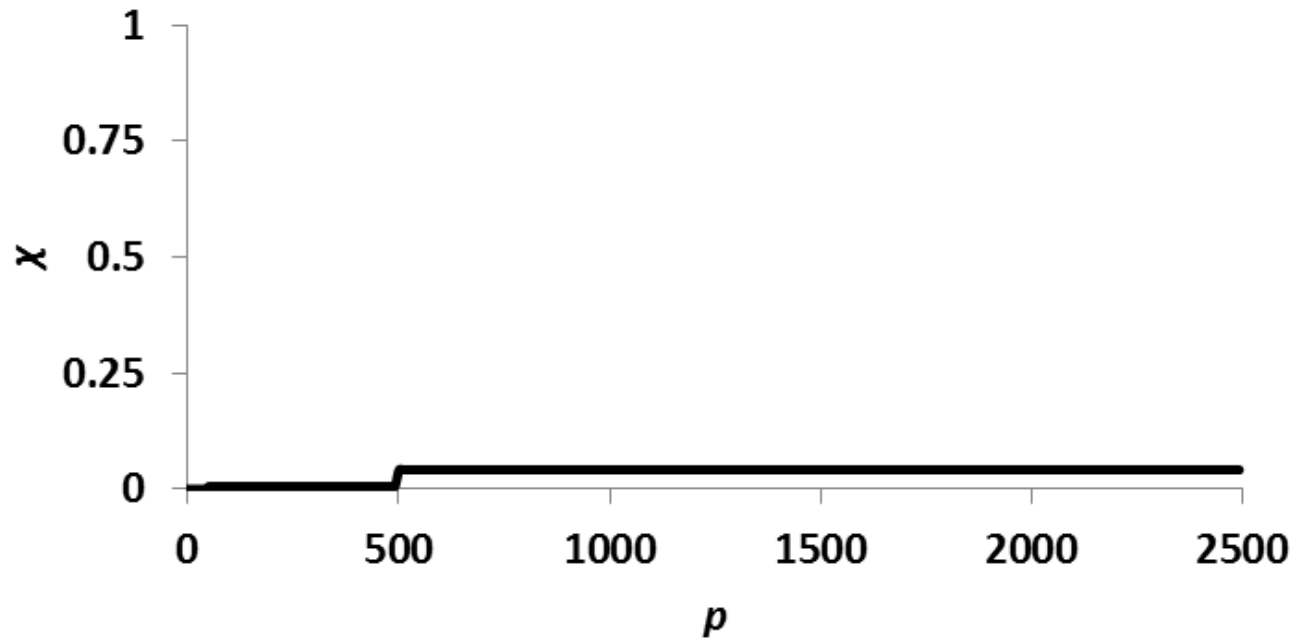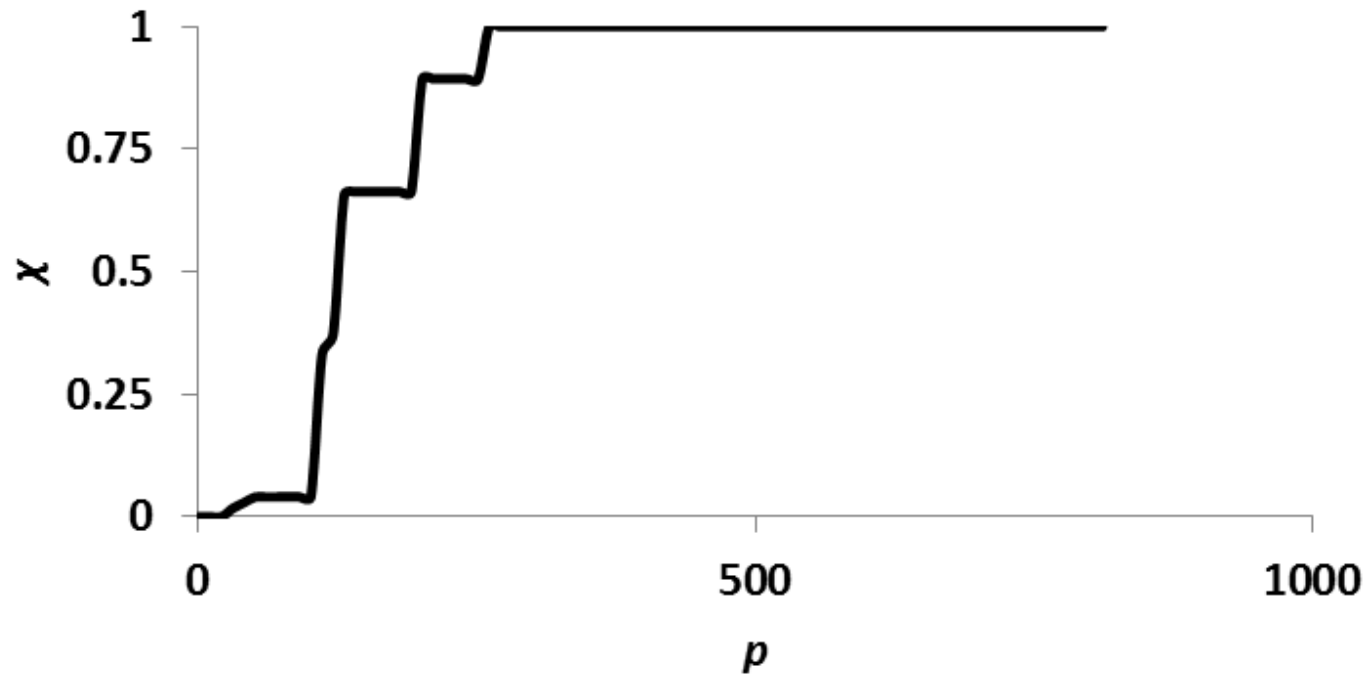
C18: GCC Isolated Nodes

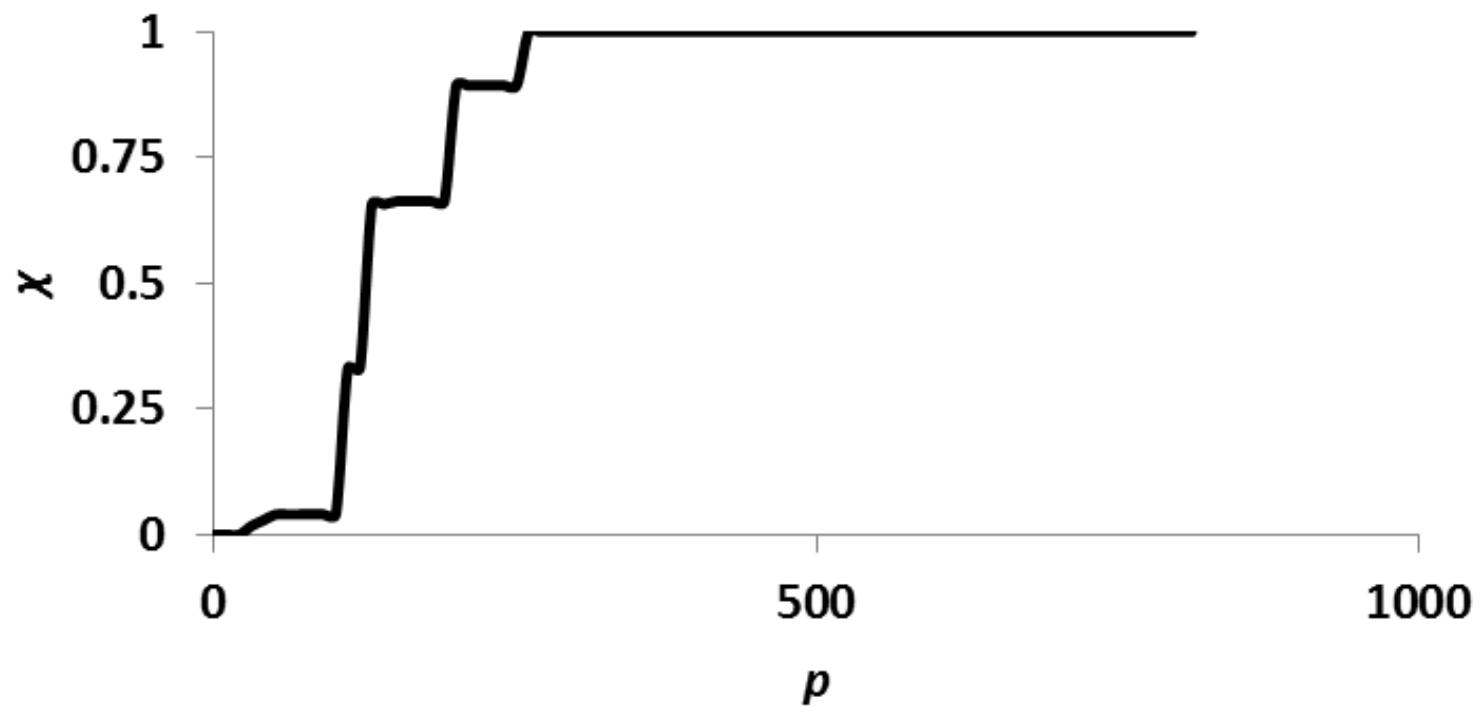# C19: GCC Isolated Nodes

C22: GCC Isolated Nodes
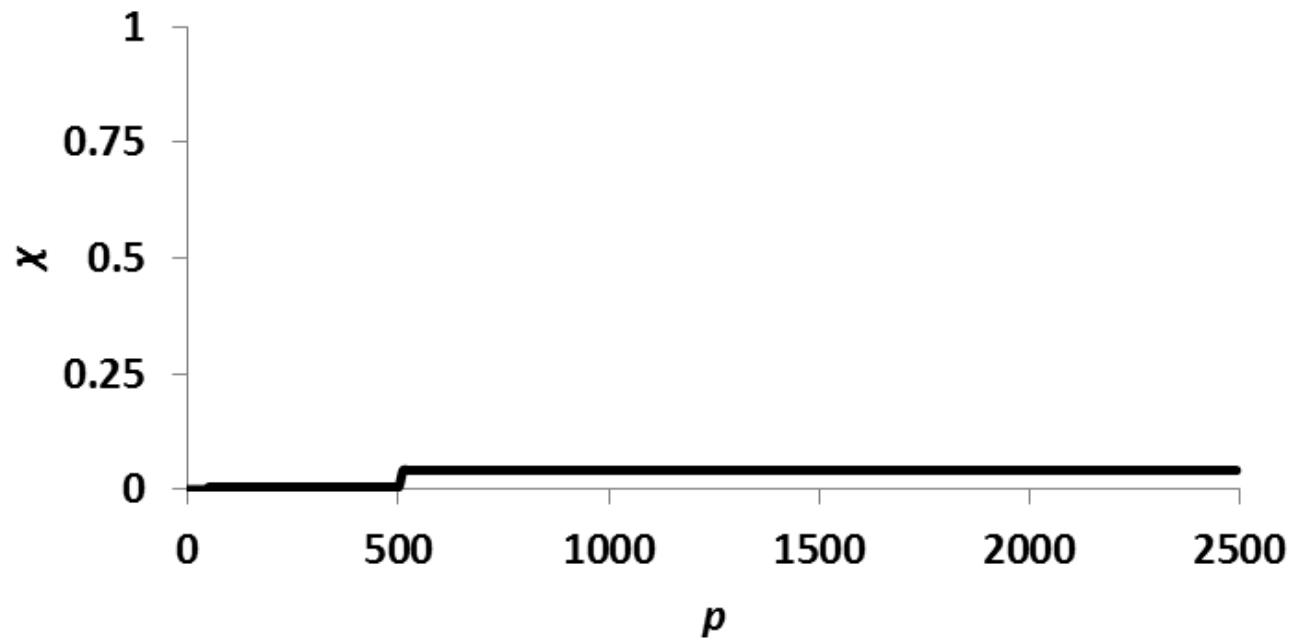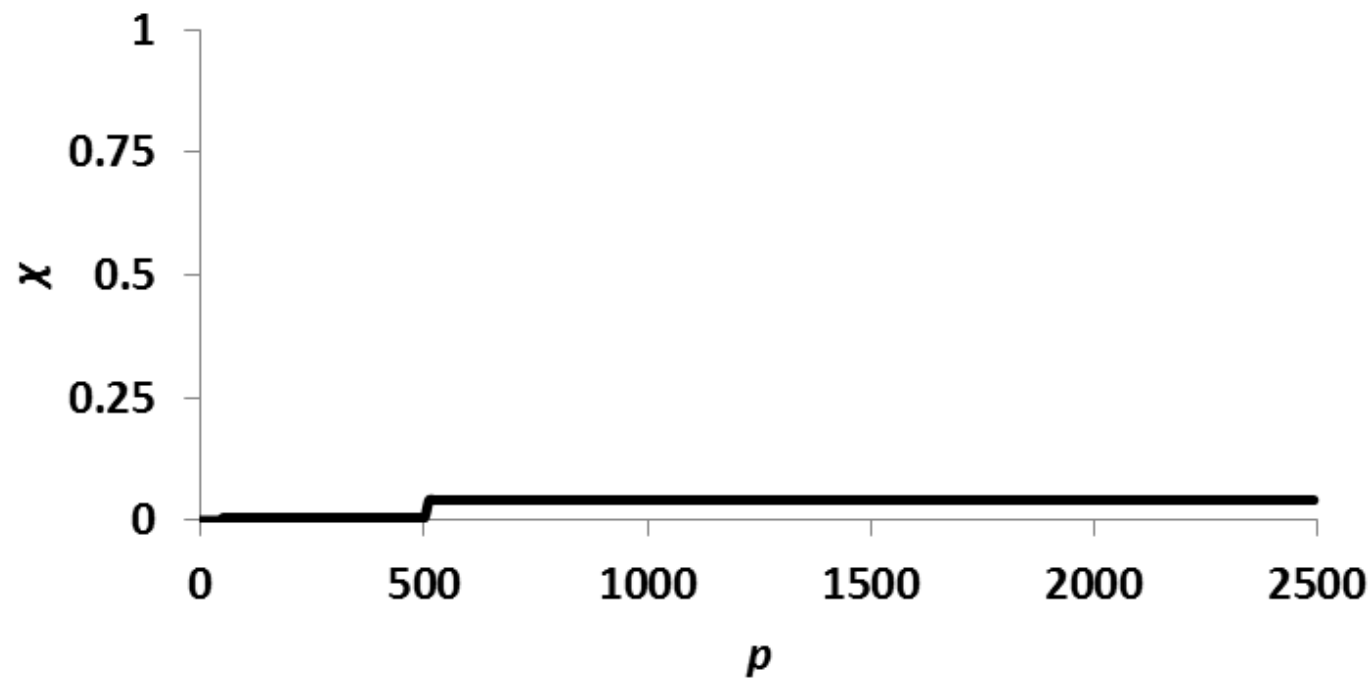
C23: GCC Isolated Nodes

C26: GCC Isolated Nodes
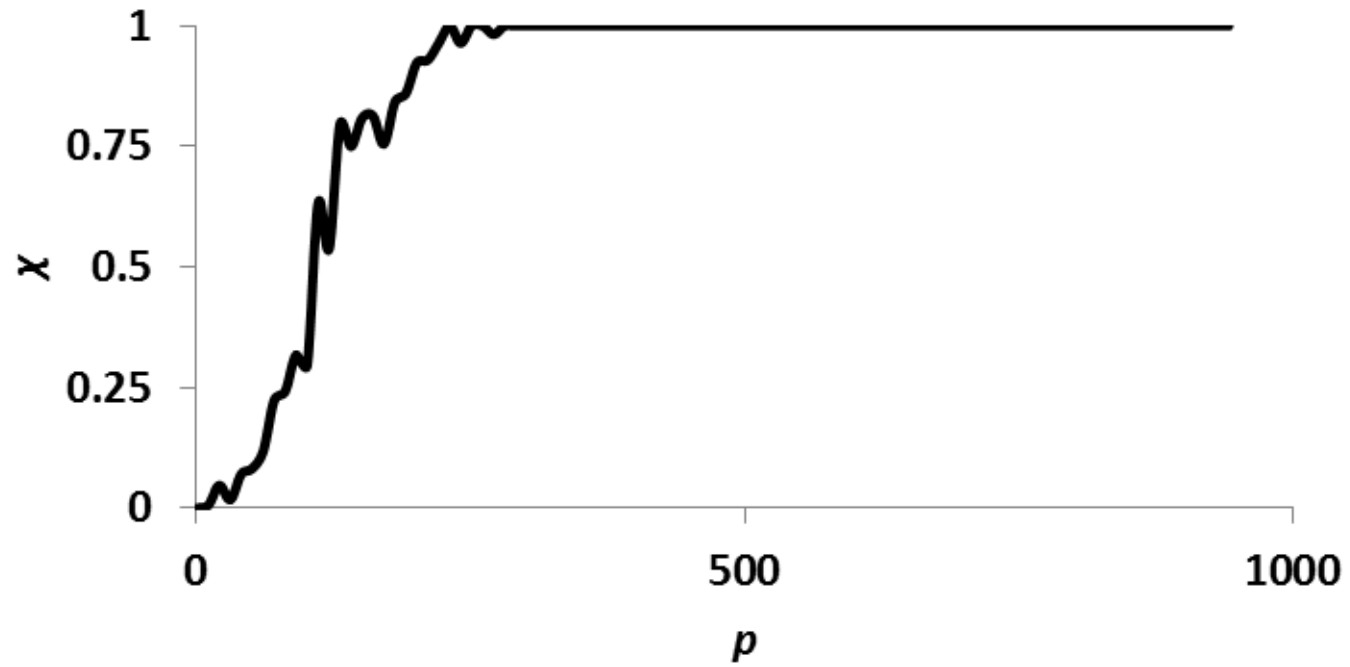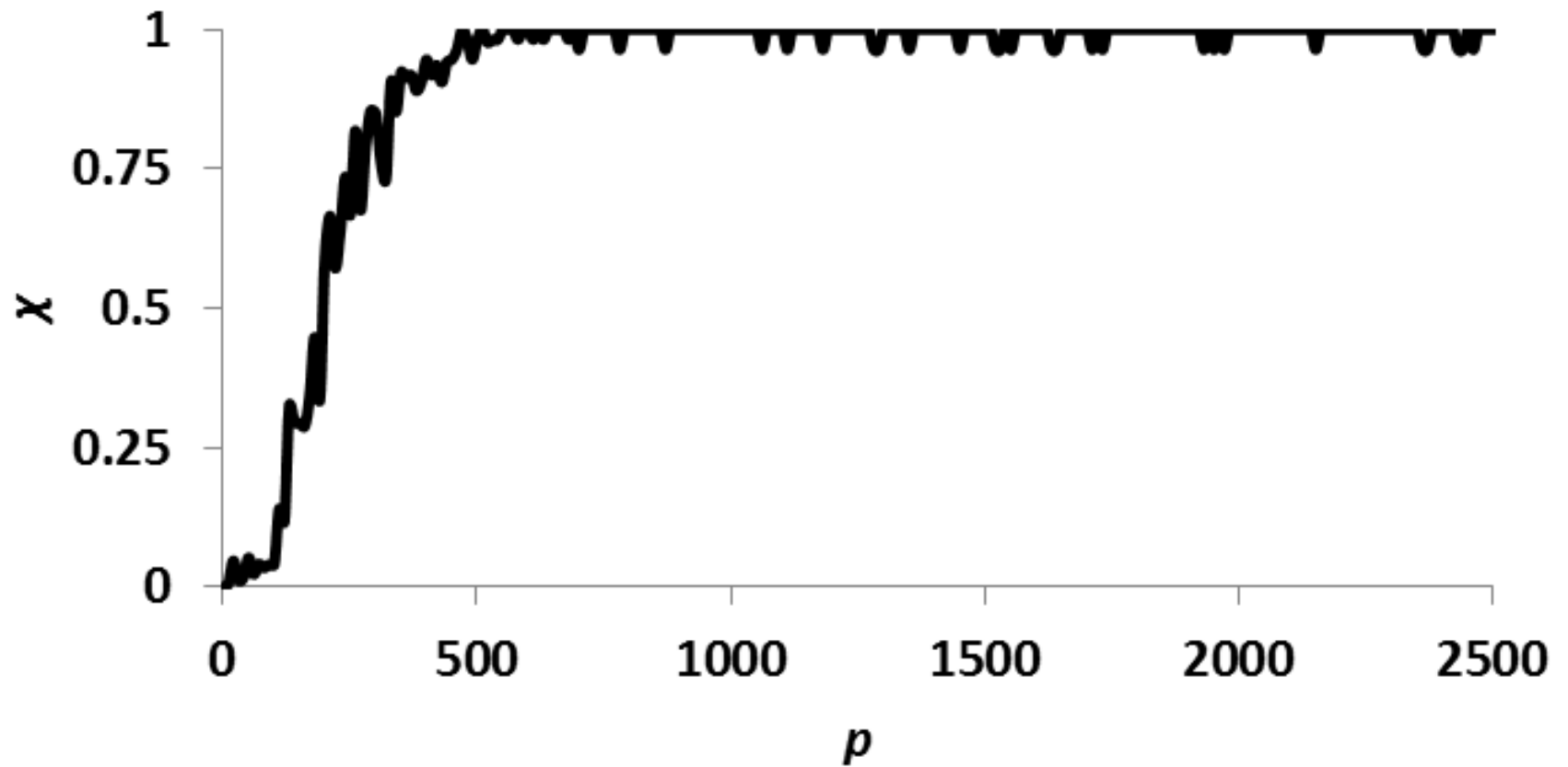
C27: GCC Isolated Nodes
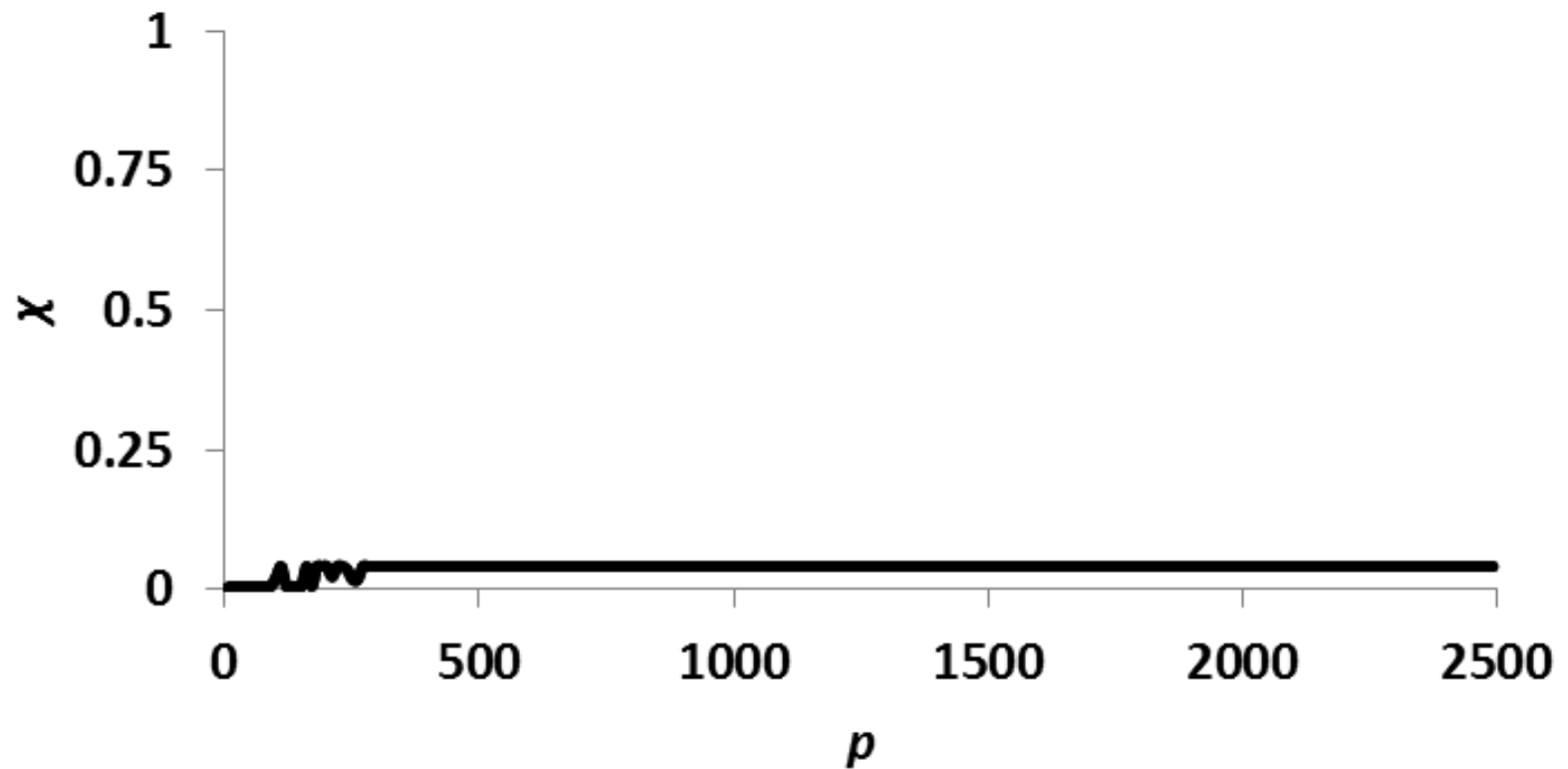
C30: GCC Isolated Nodes

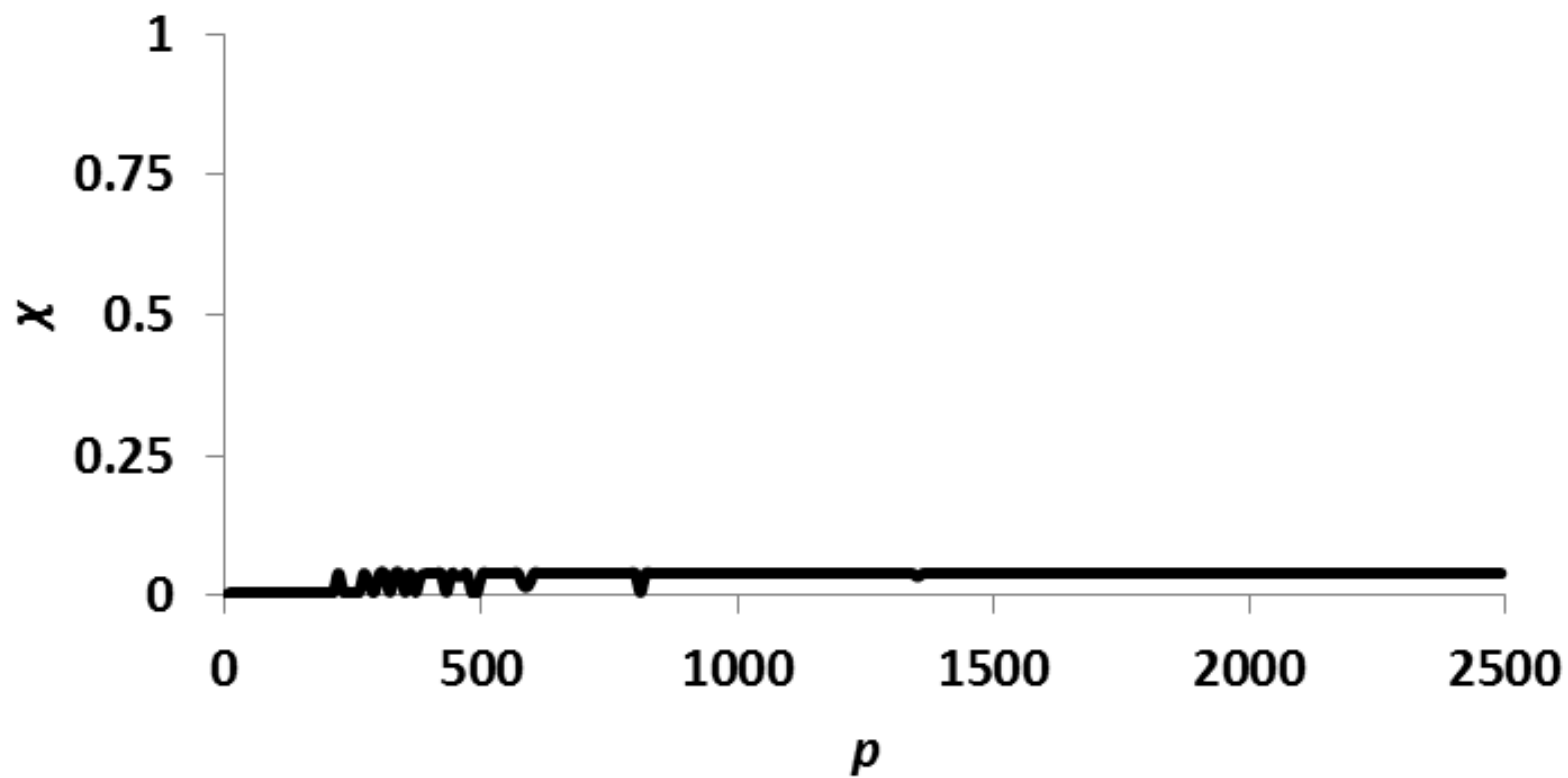**C31: GCC Isolated Nodes**
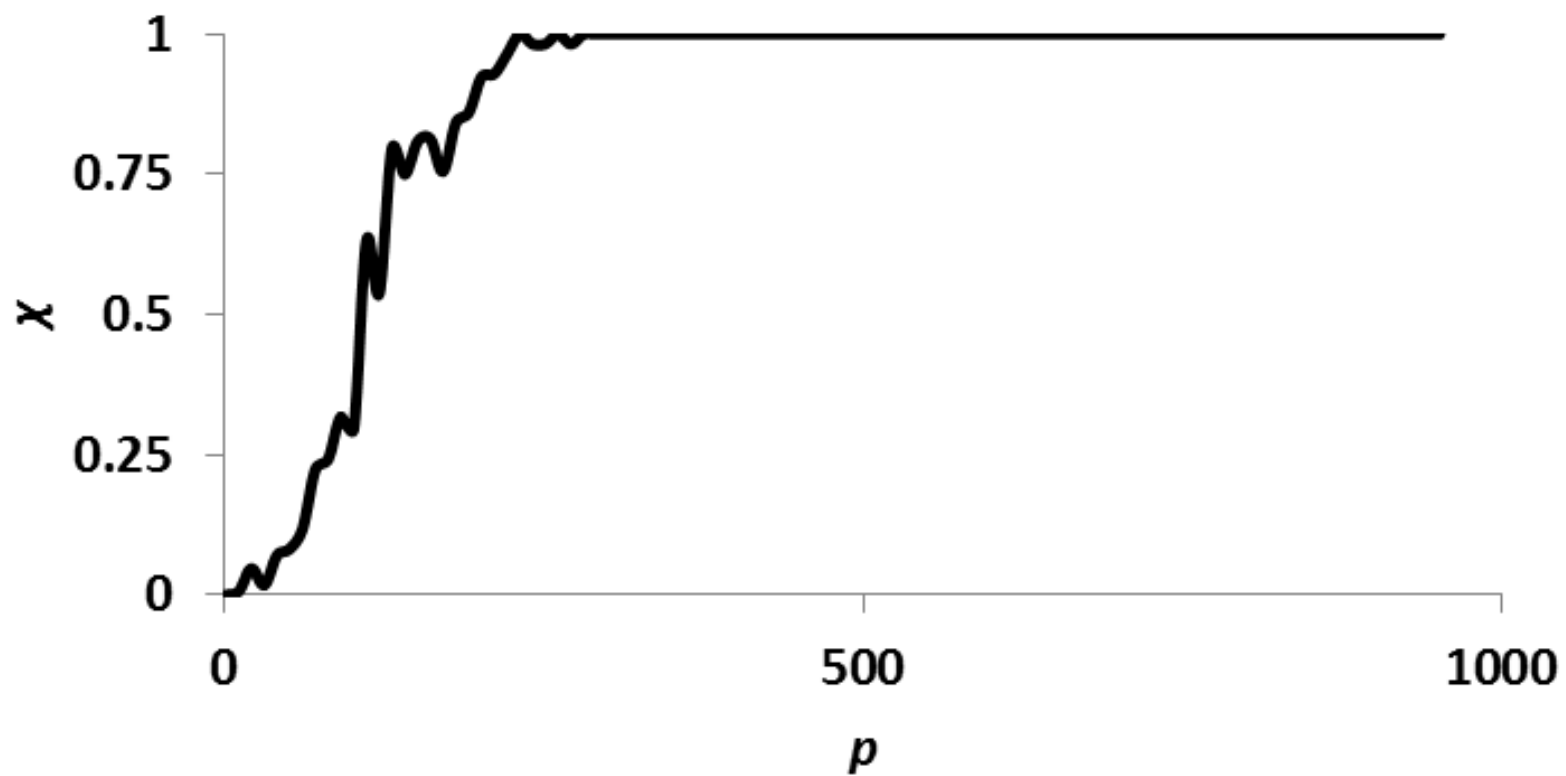
C50: GCC Isolated Nodes
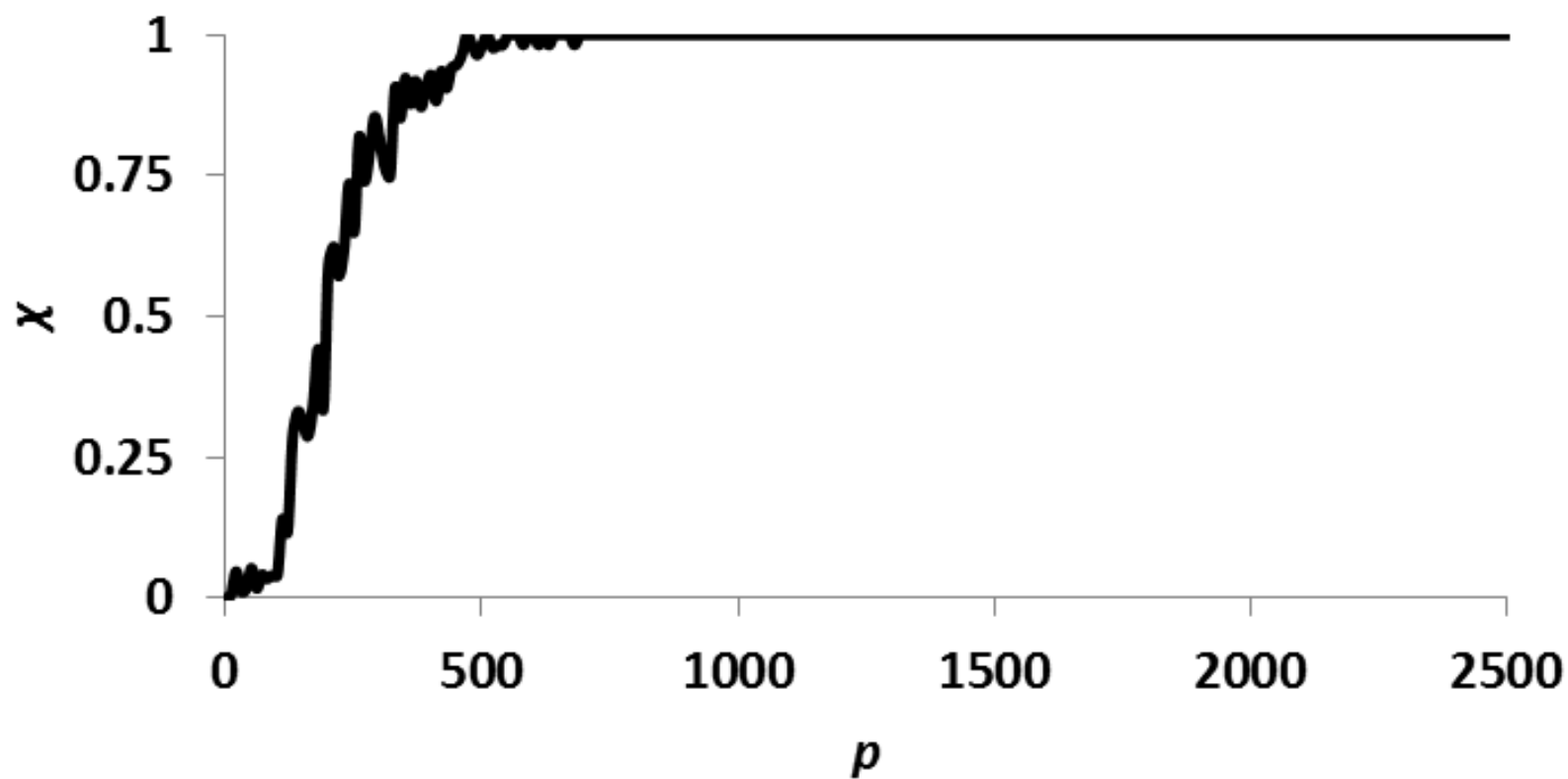
C51: GCC Isolated Nodes

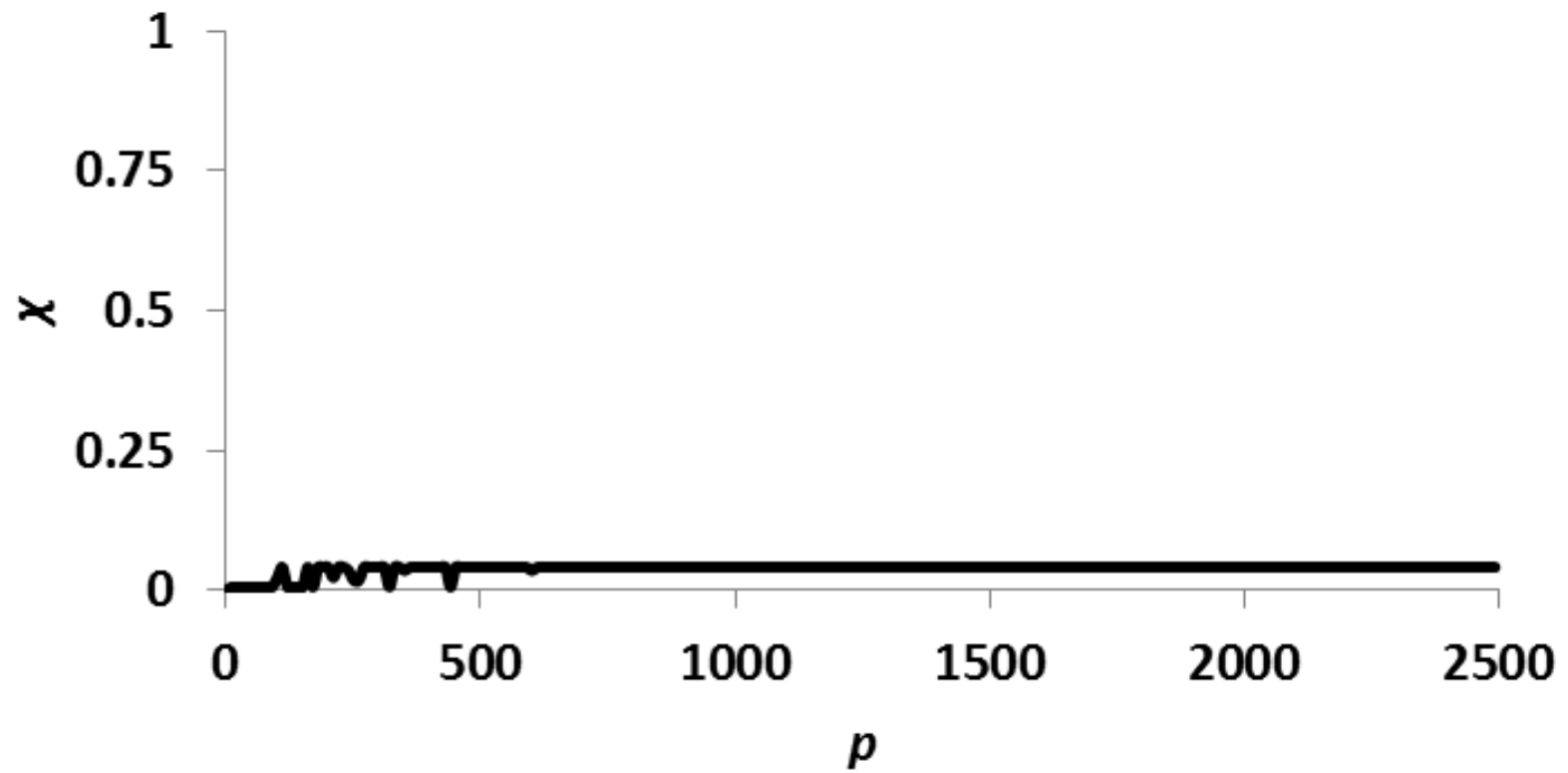# C54: GCC Isolated Nodes

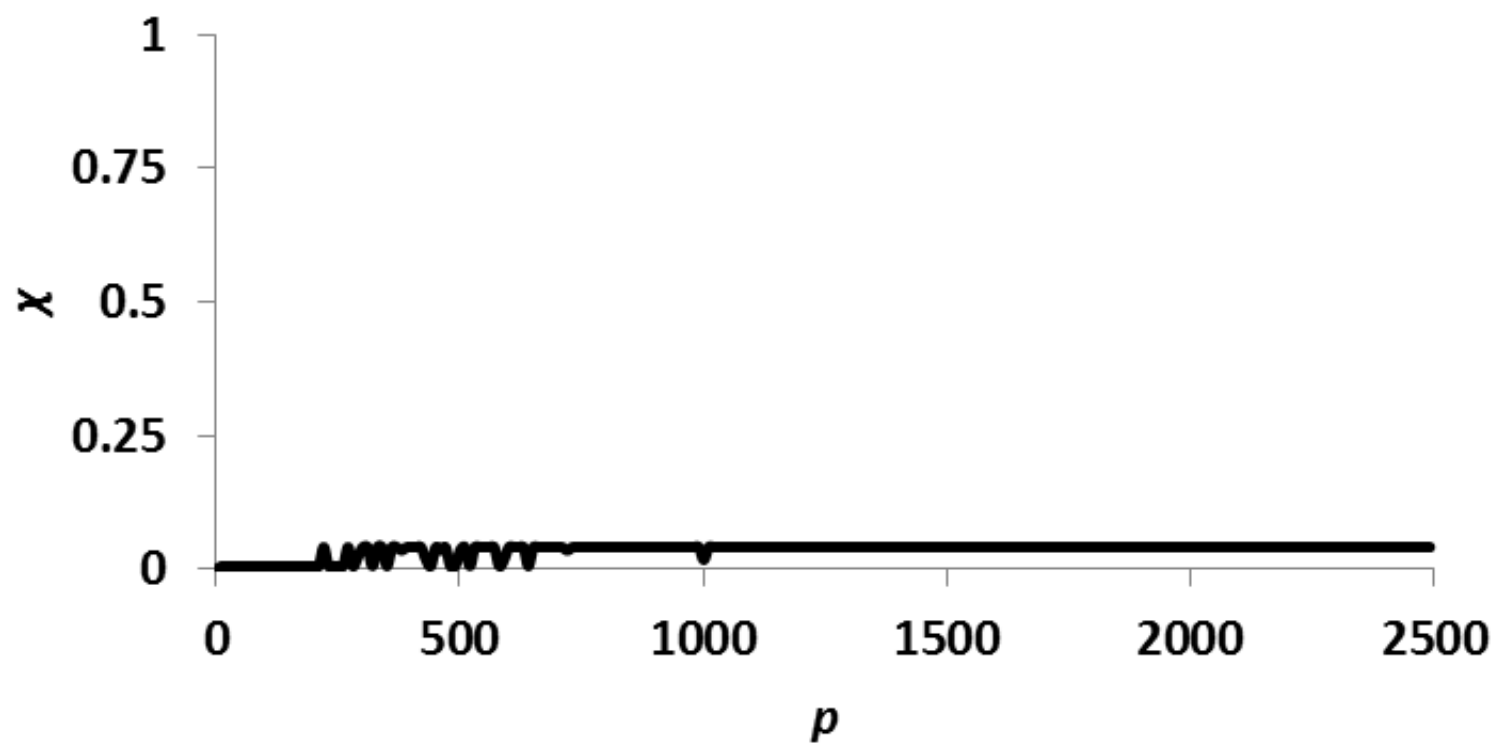# C55: GCC Isolated Nodes

C58: GCC Isolated Nodes
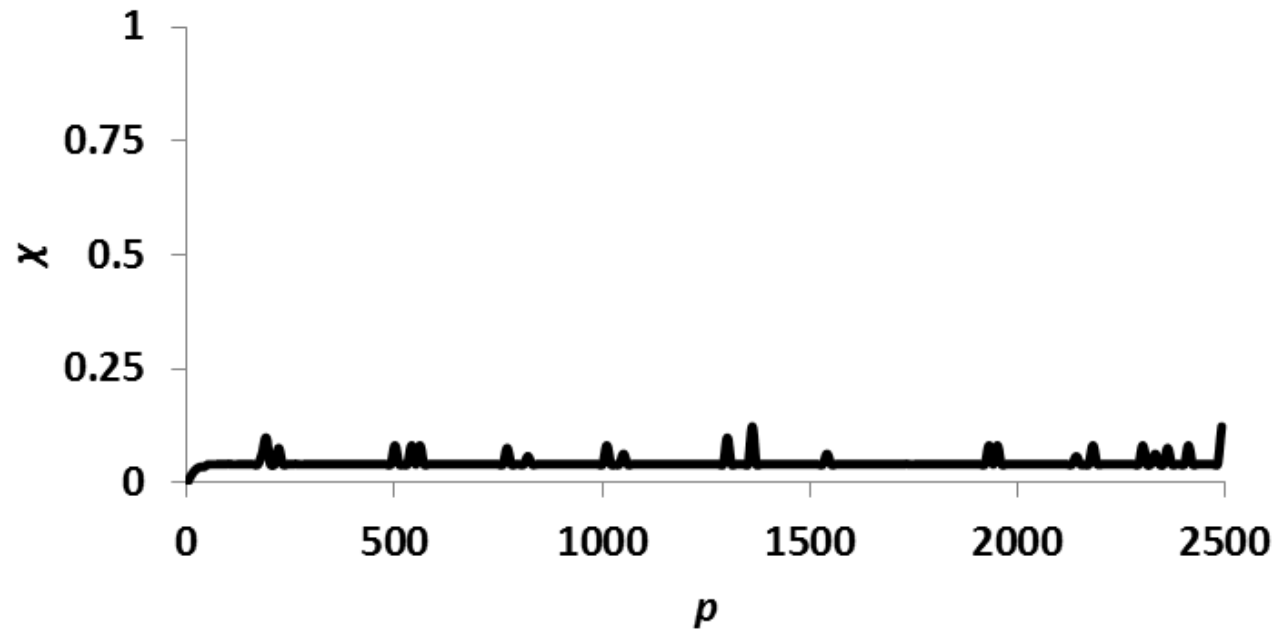
C59: GCC Isolated Nodes
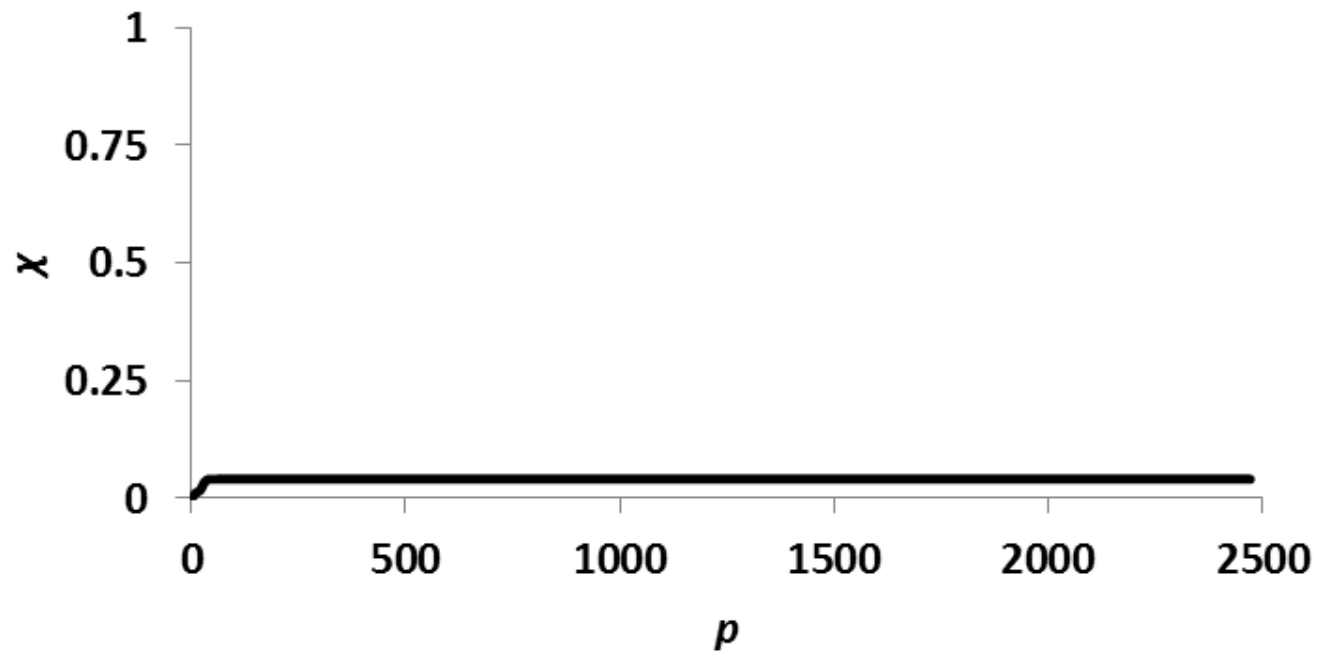
C62: GCC Isolated Nodes
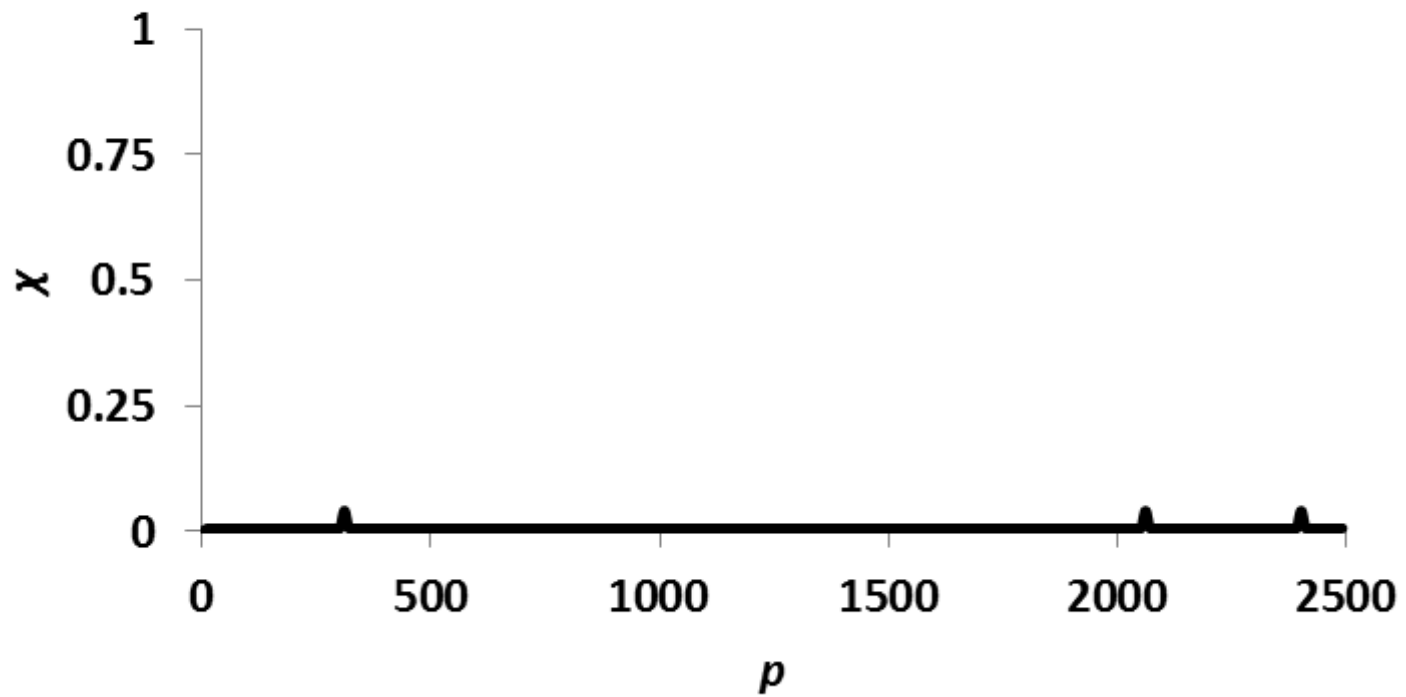
C63: GCC Isolated Nodes
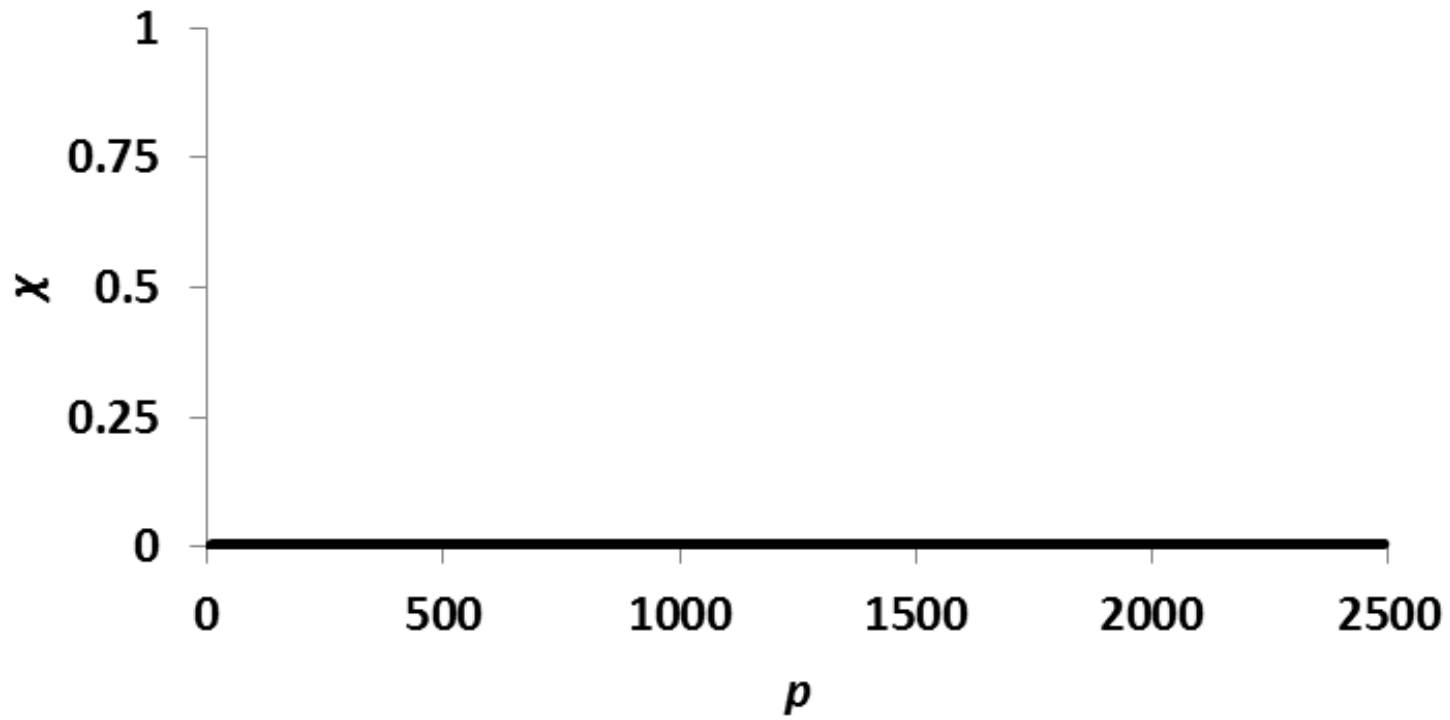
C114: GCC Isolated Nodes
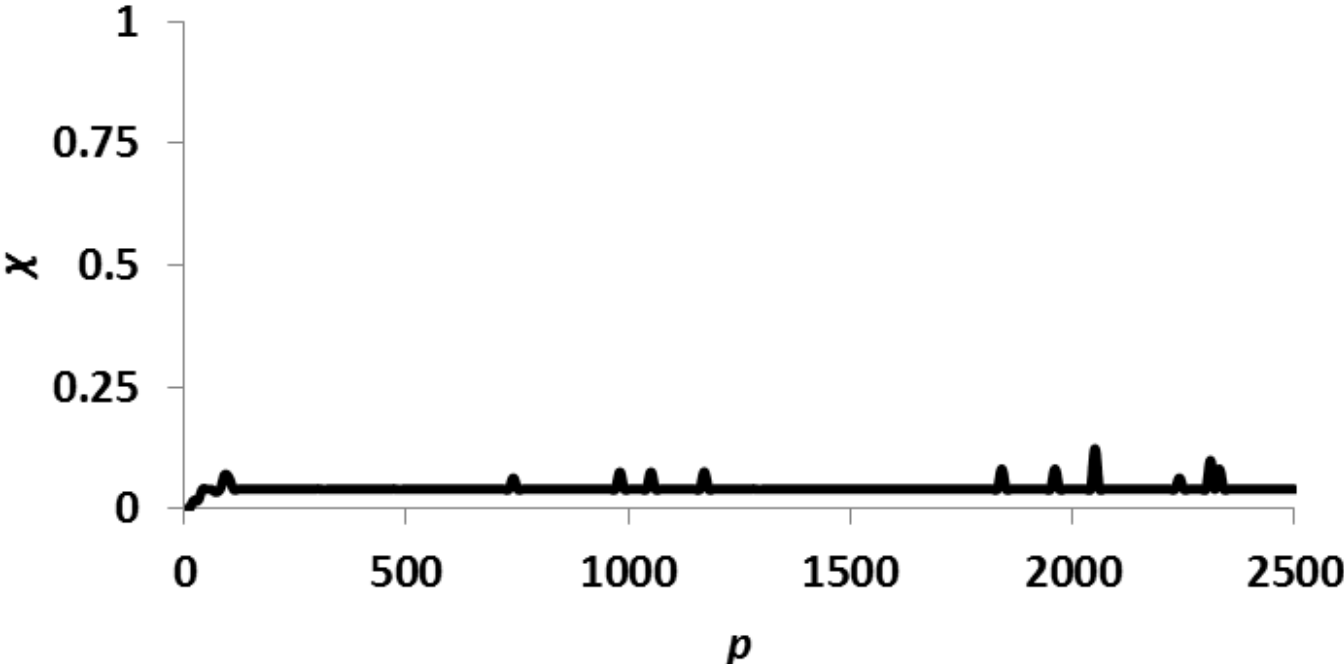
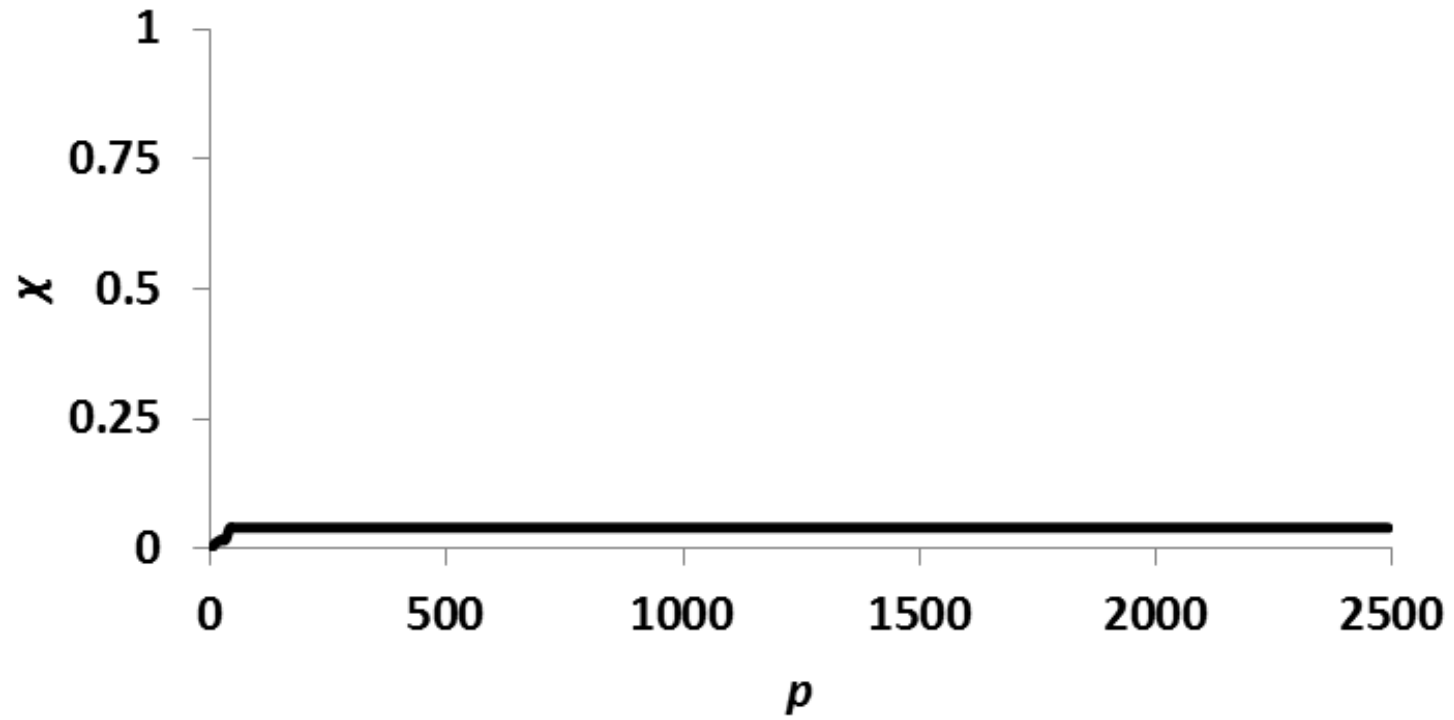C115: GCC Isolated Nodes

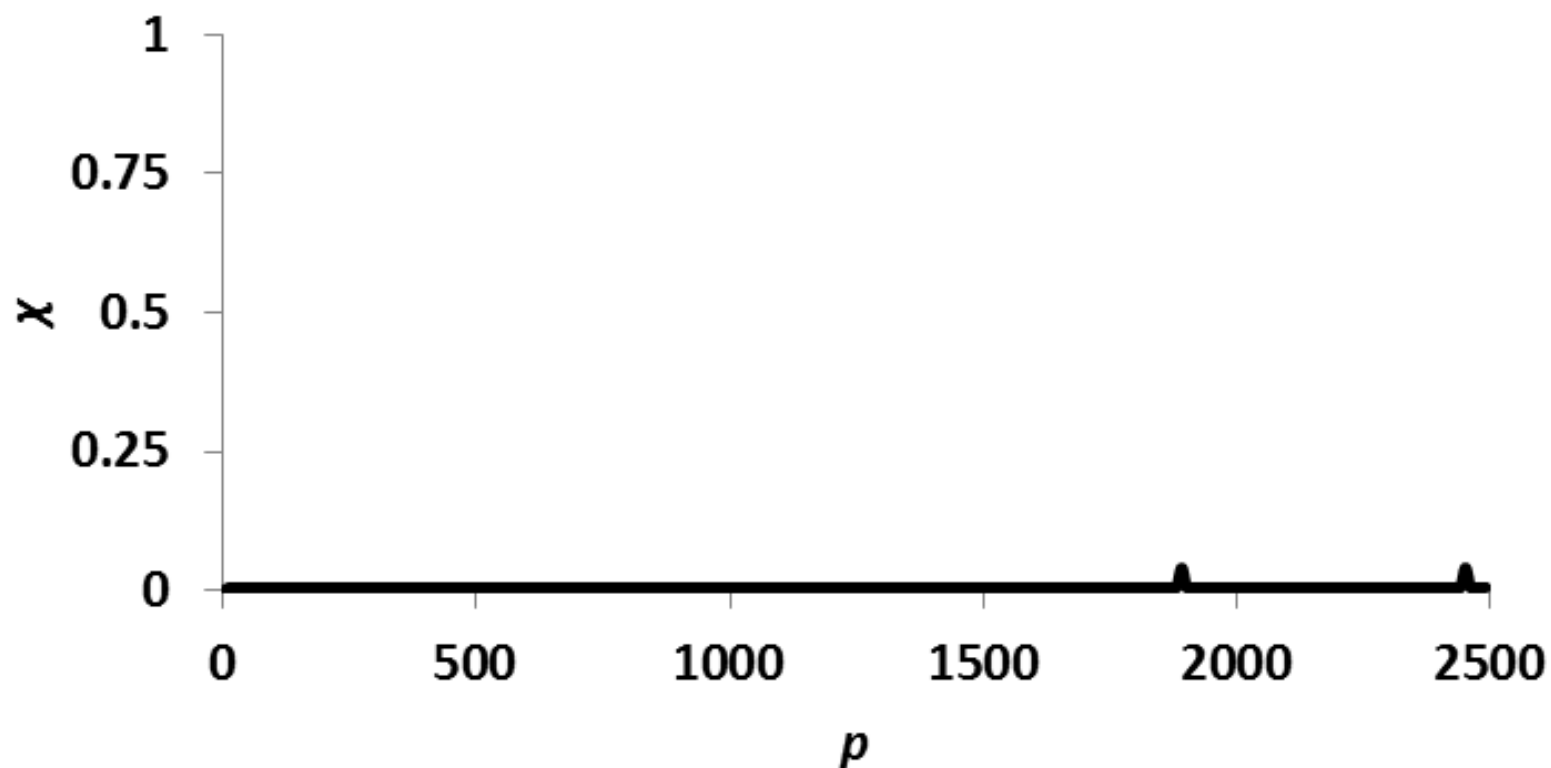# C118: GCC Isolated Nodes

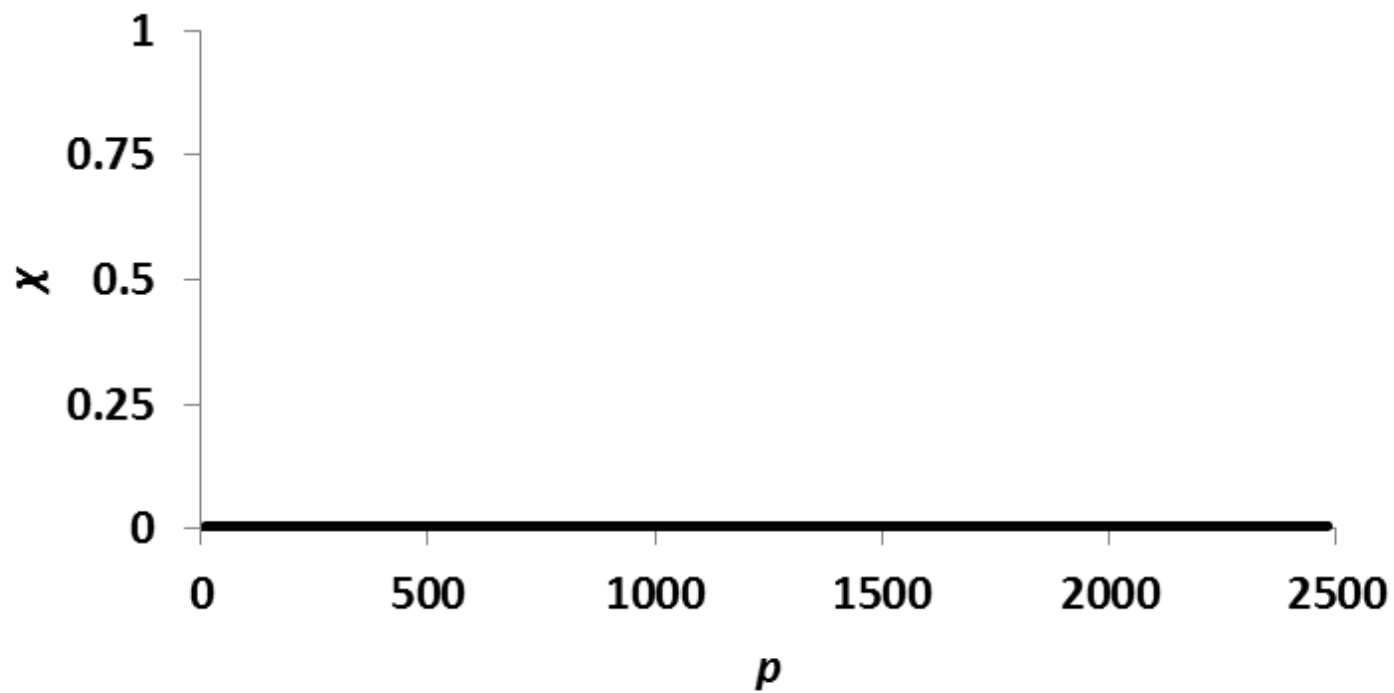# C119: GCC Isolated Nodes

C122: GCC Isolated Nodes

C123: GCC Isolated Nodes
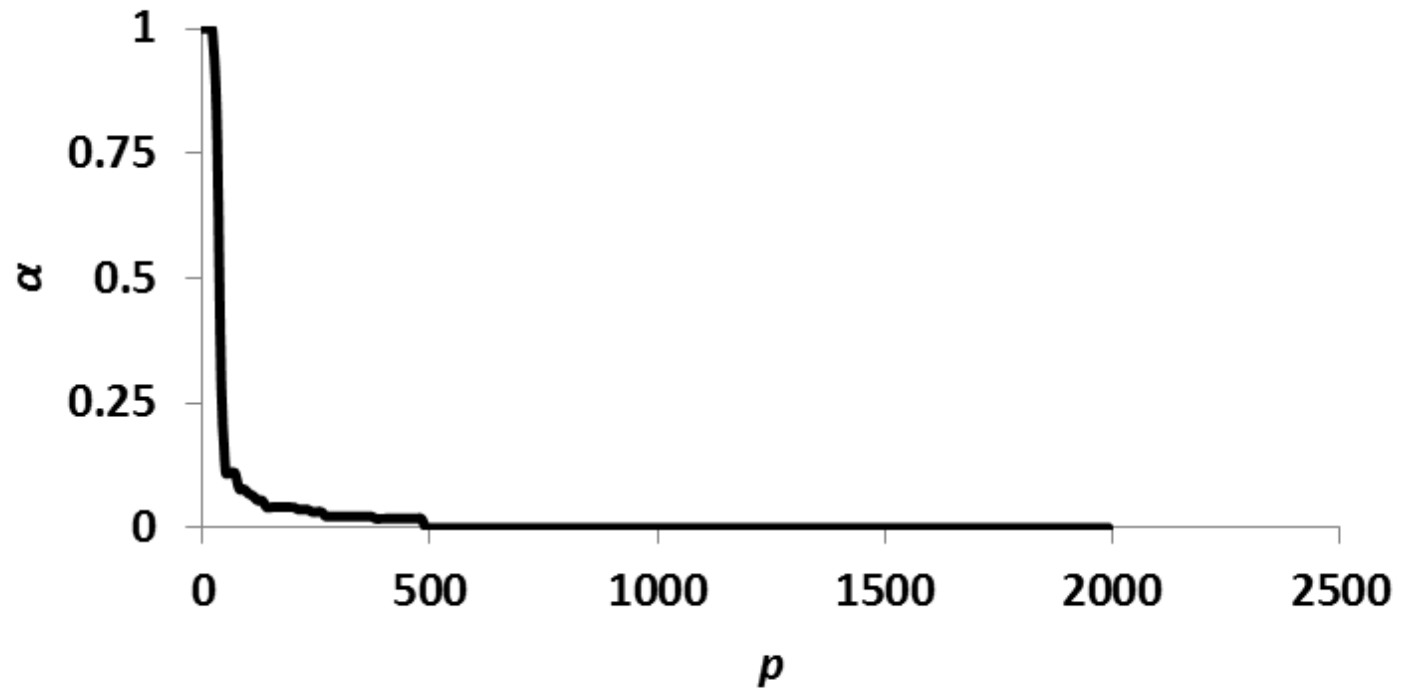
C126: GCC Isolated Nodes
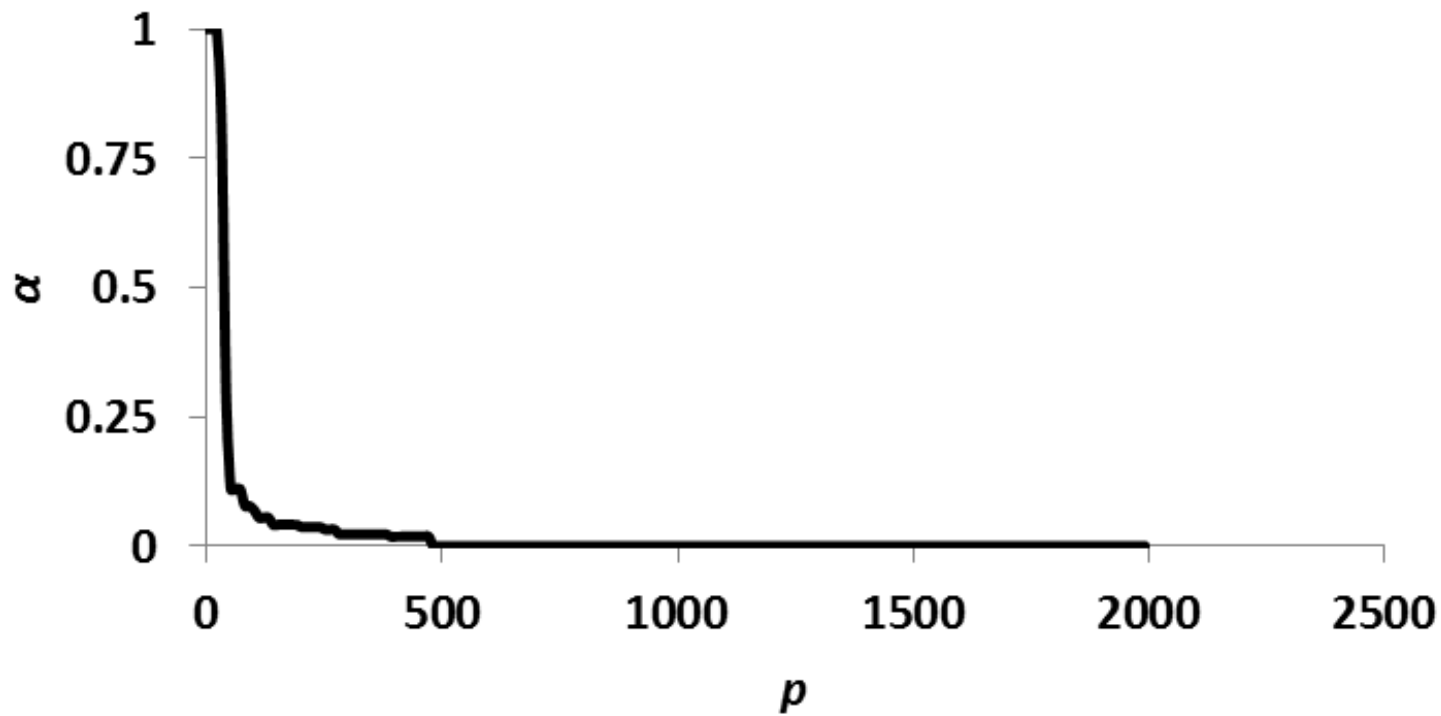
C127: GCC Isolated Nodes

Graphs for Network Connectivity (α)
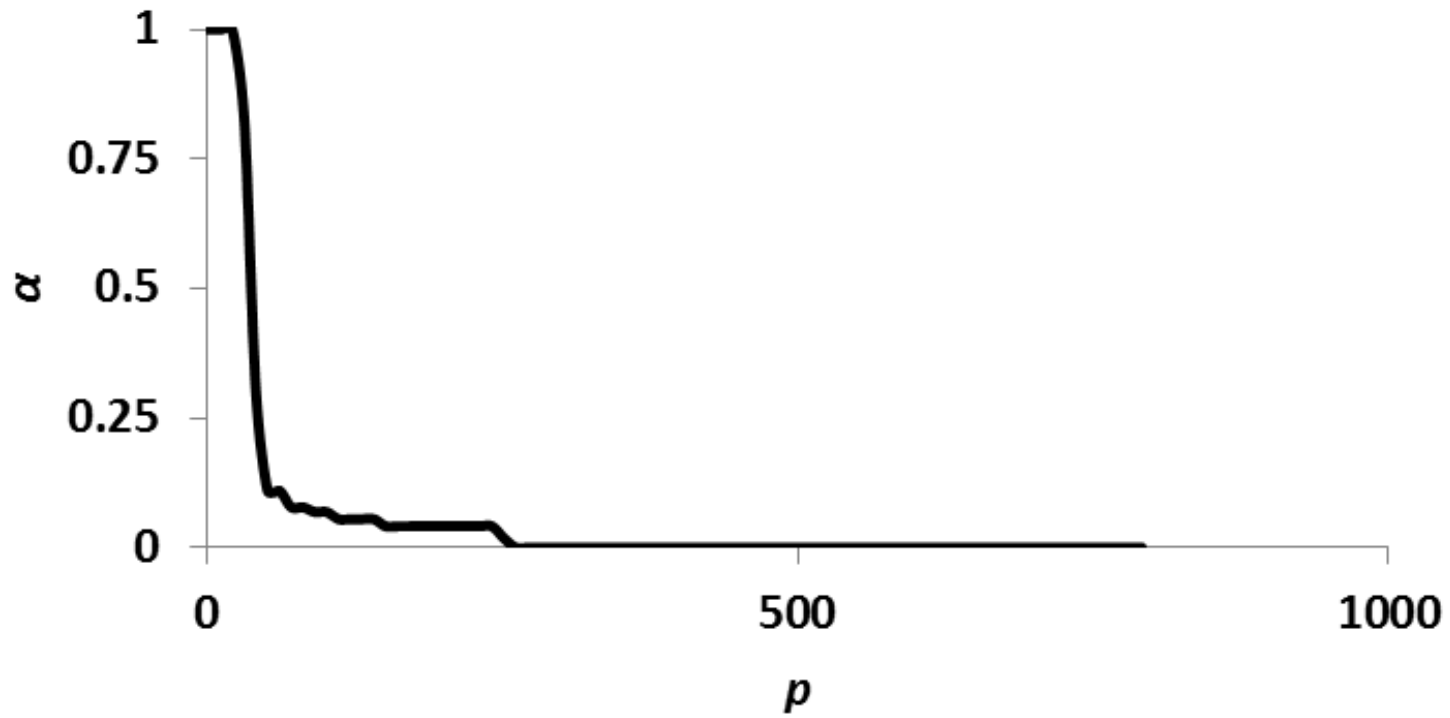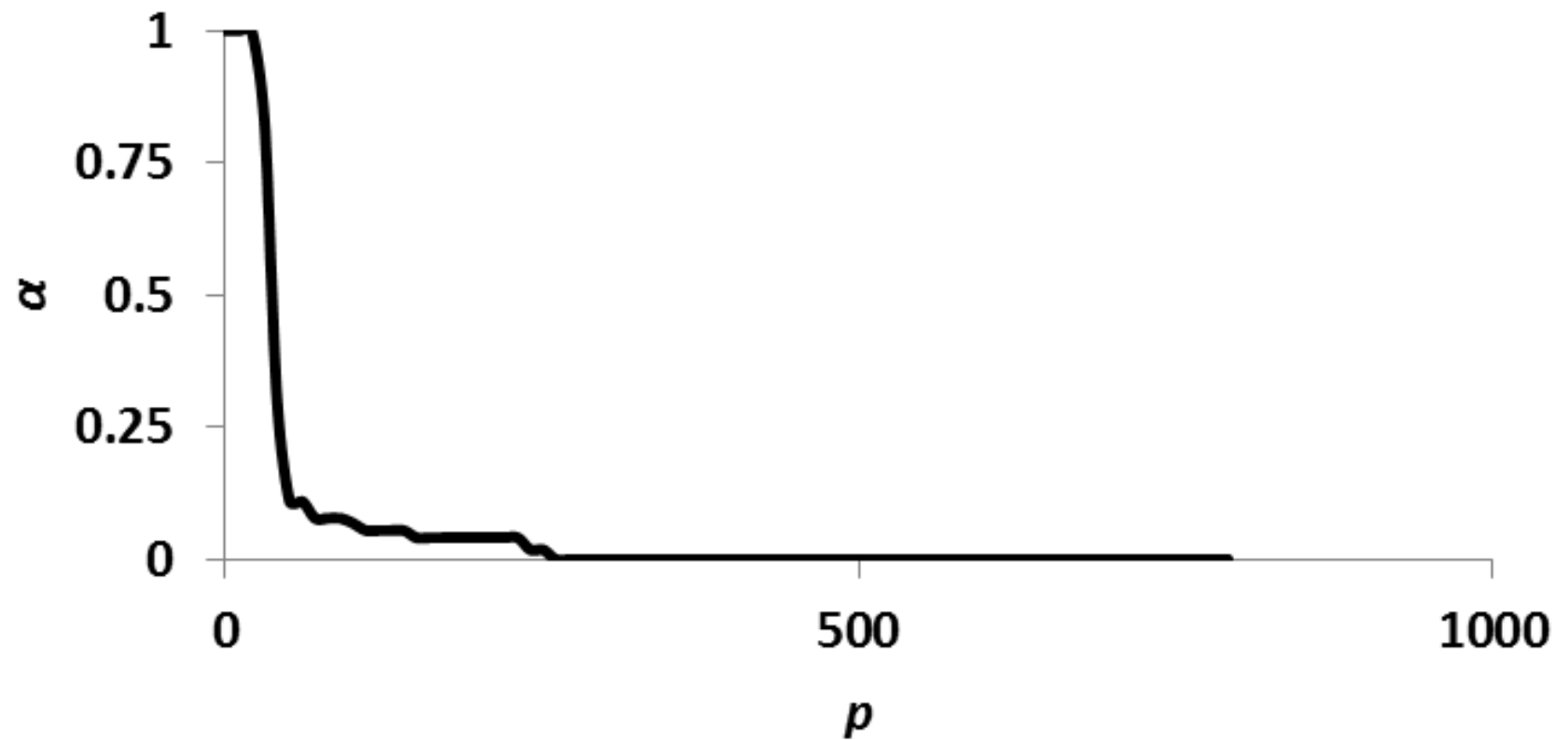(Dabrowski & Mills NIST)
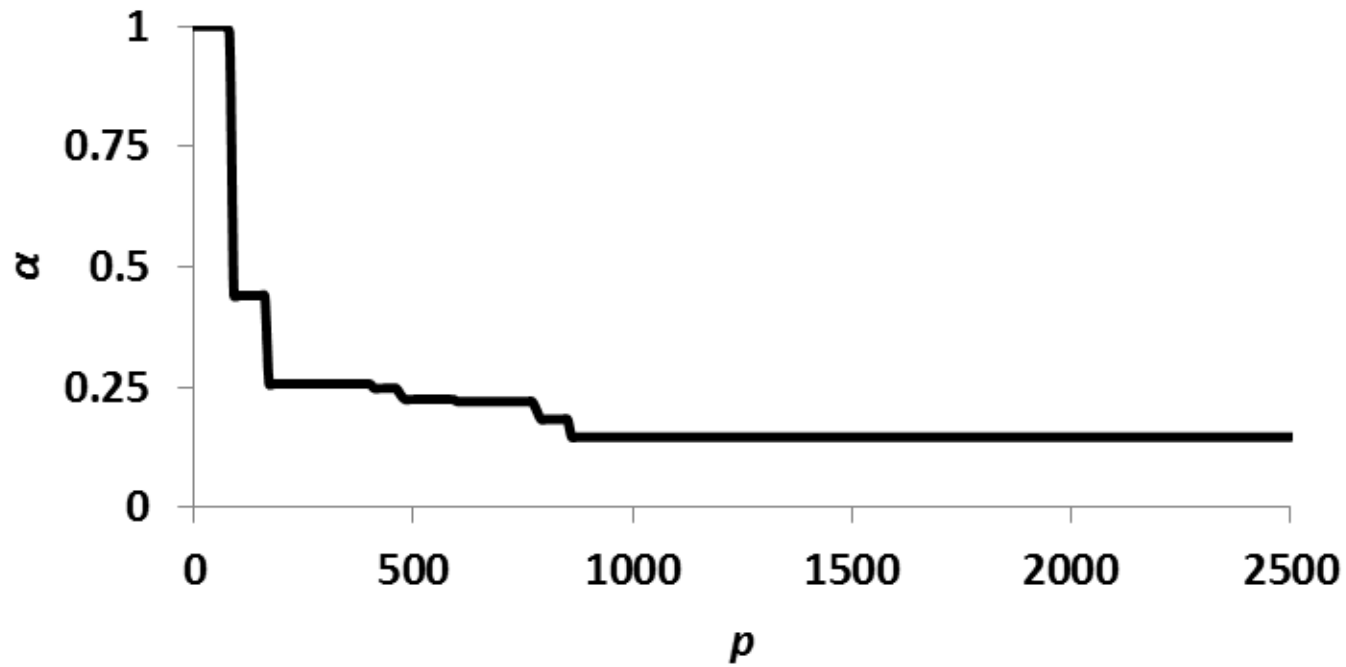
C0: GCC Reachable Nodes
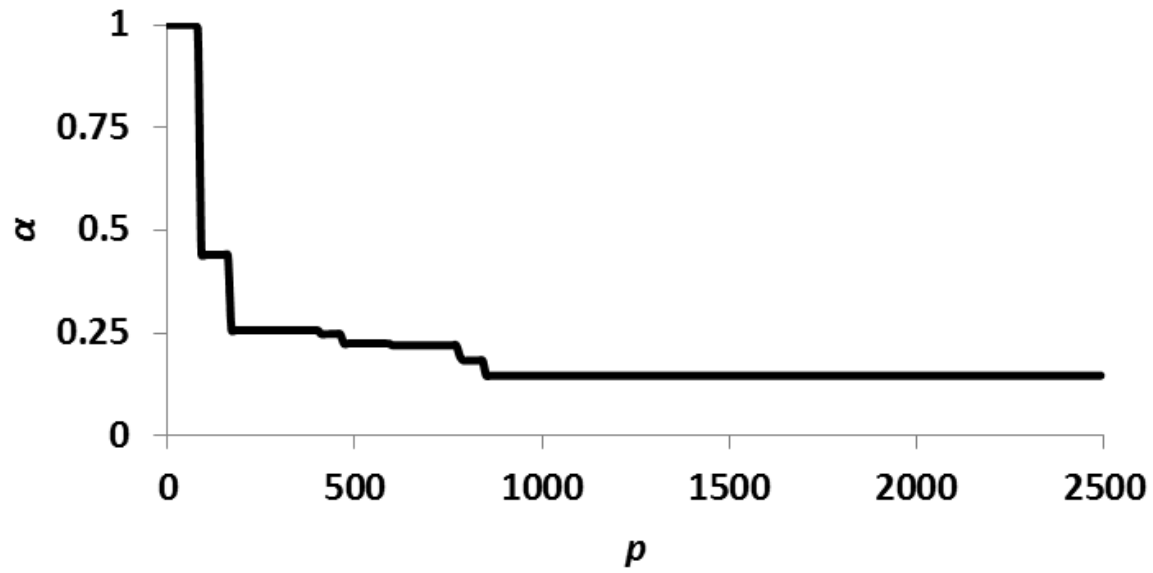
C1: GCC Reachable Nodes
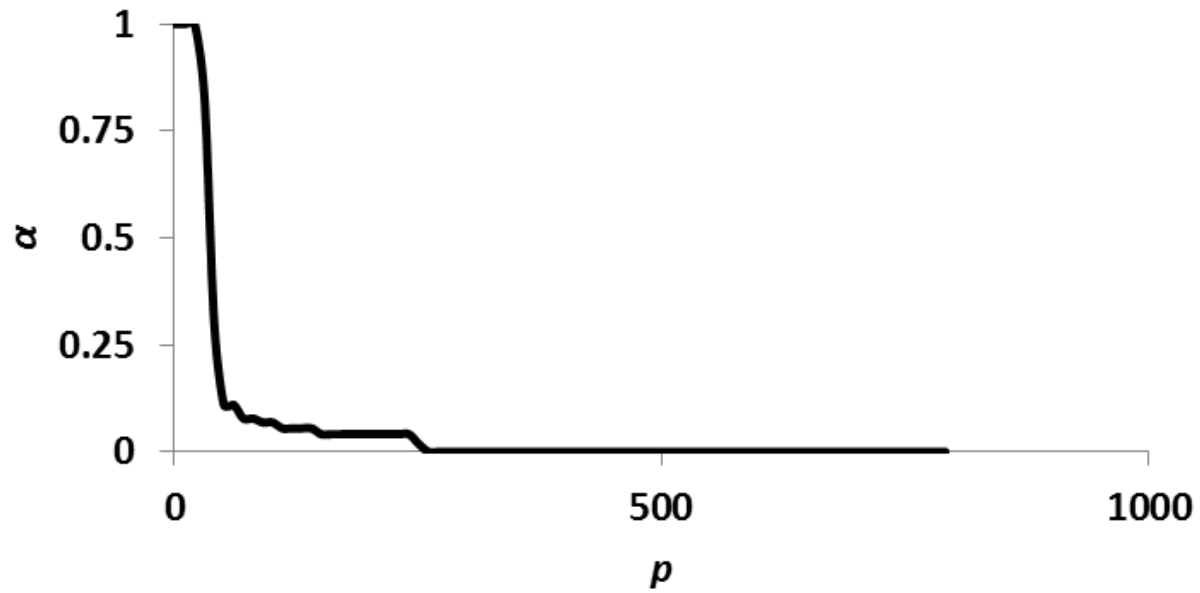
C2: GCC Reachable Nodes

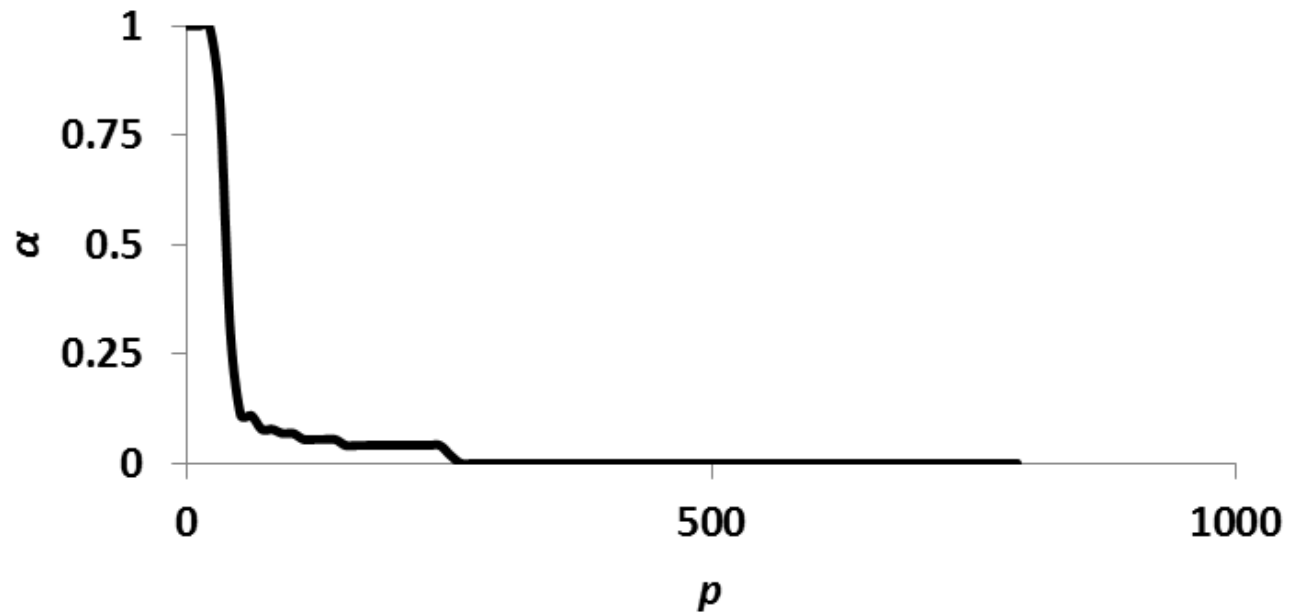# C3: GCC Reachable Sites
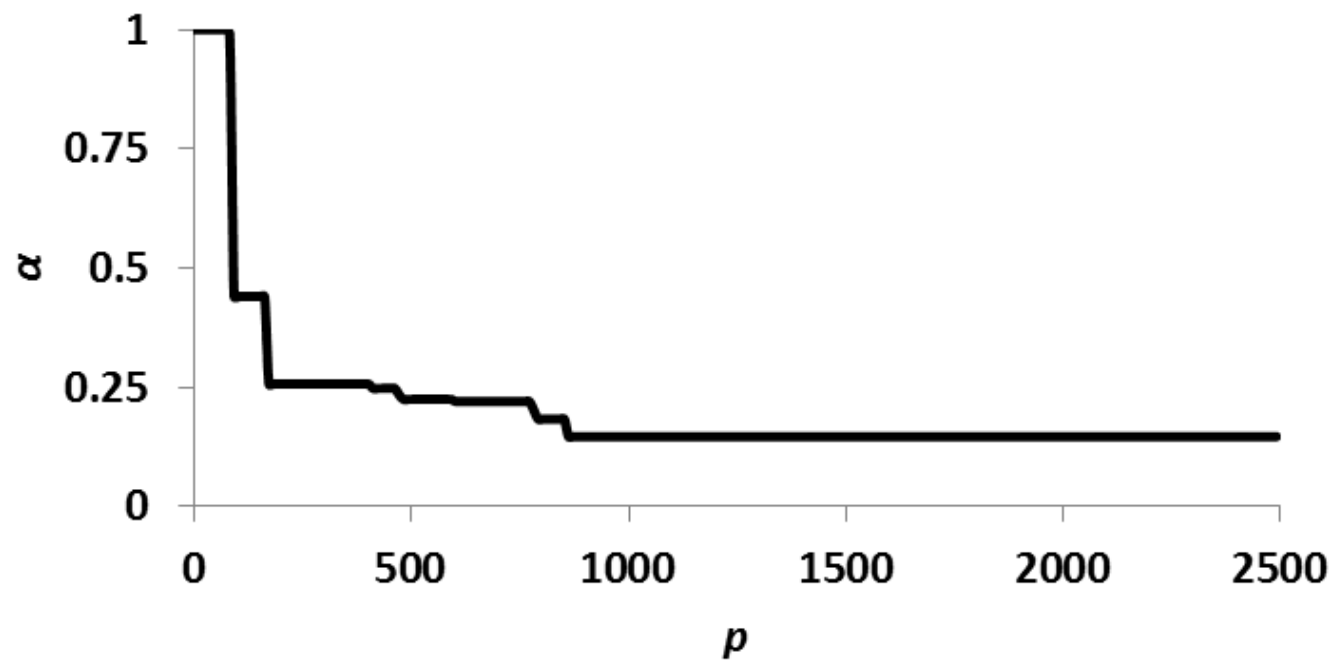
C6: GCC Reachable Nodes

C7: GCC Reachable Nodes
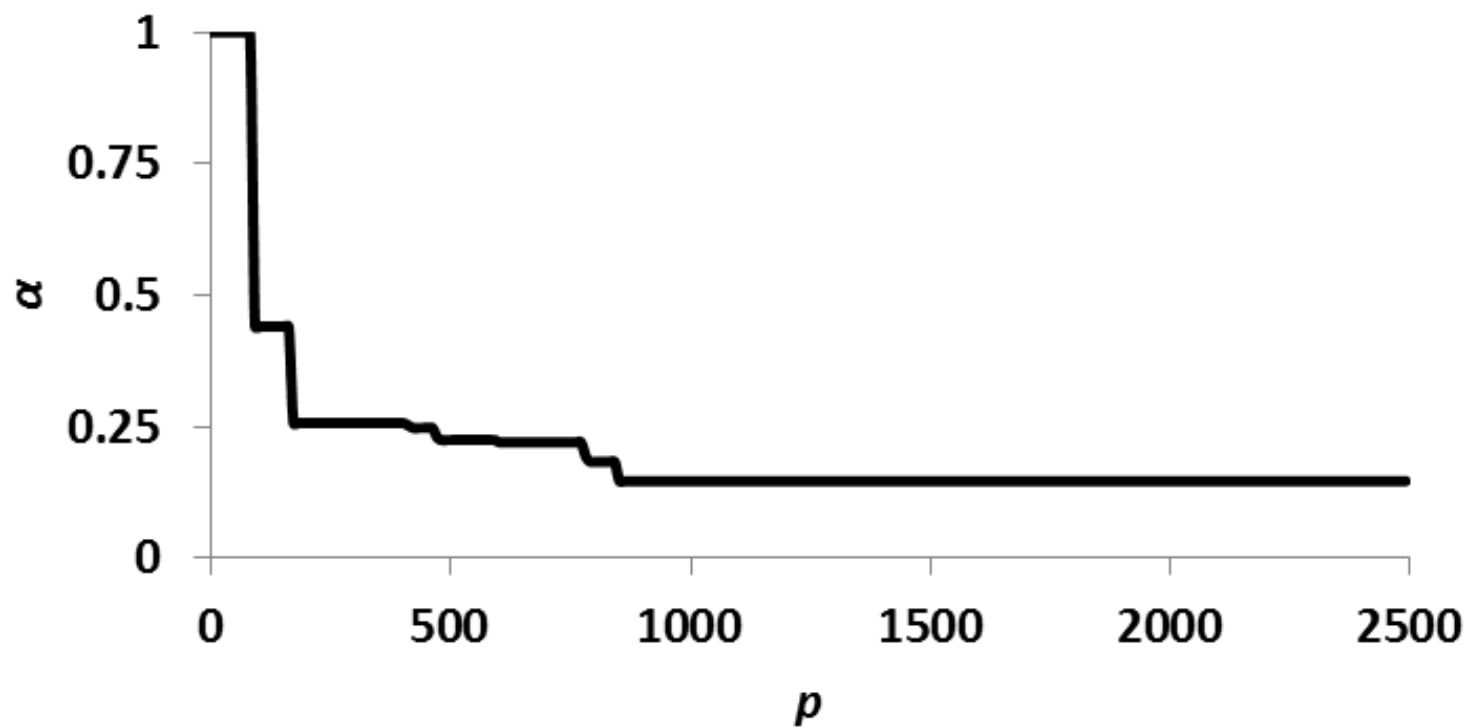
C10: GCC Reachable Nodes
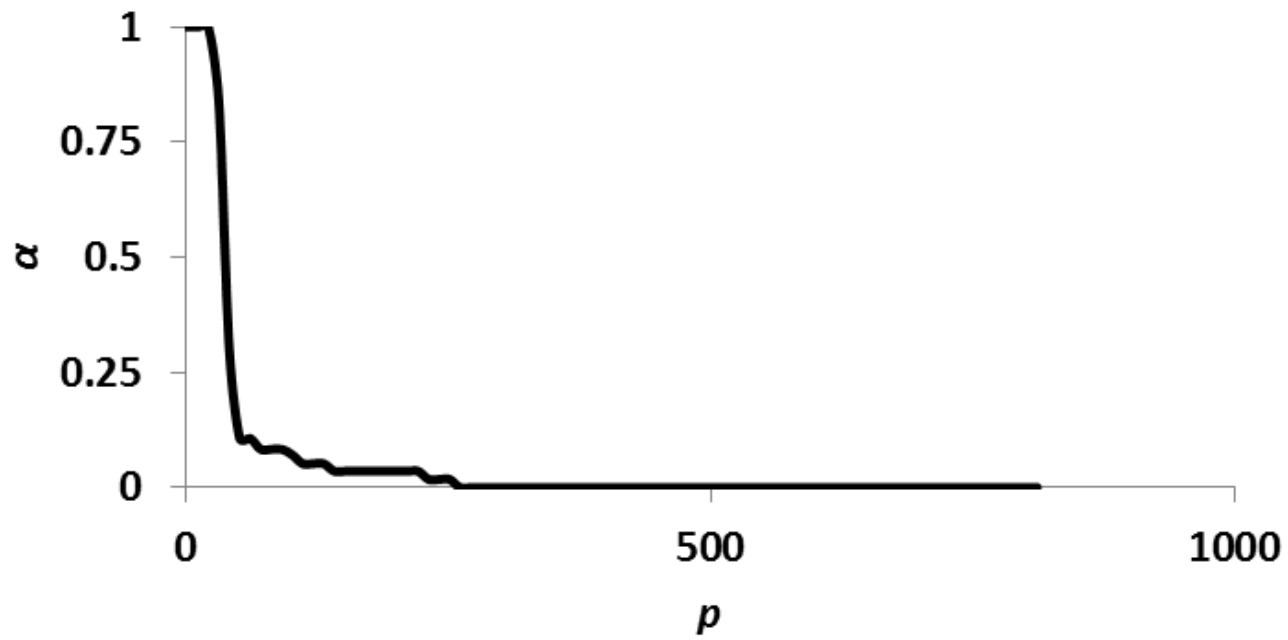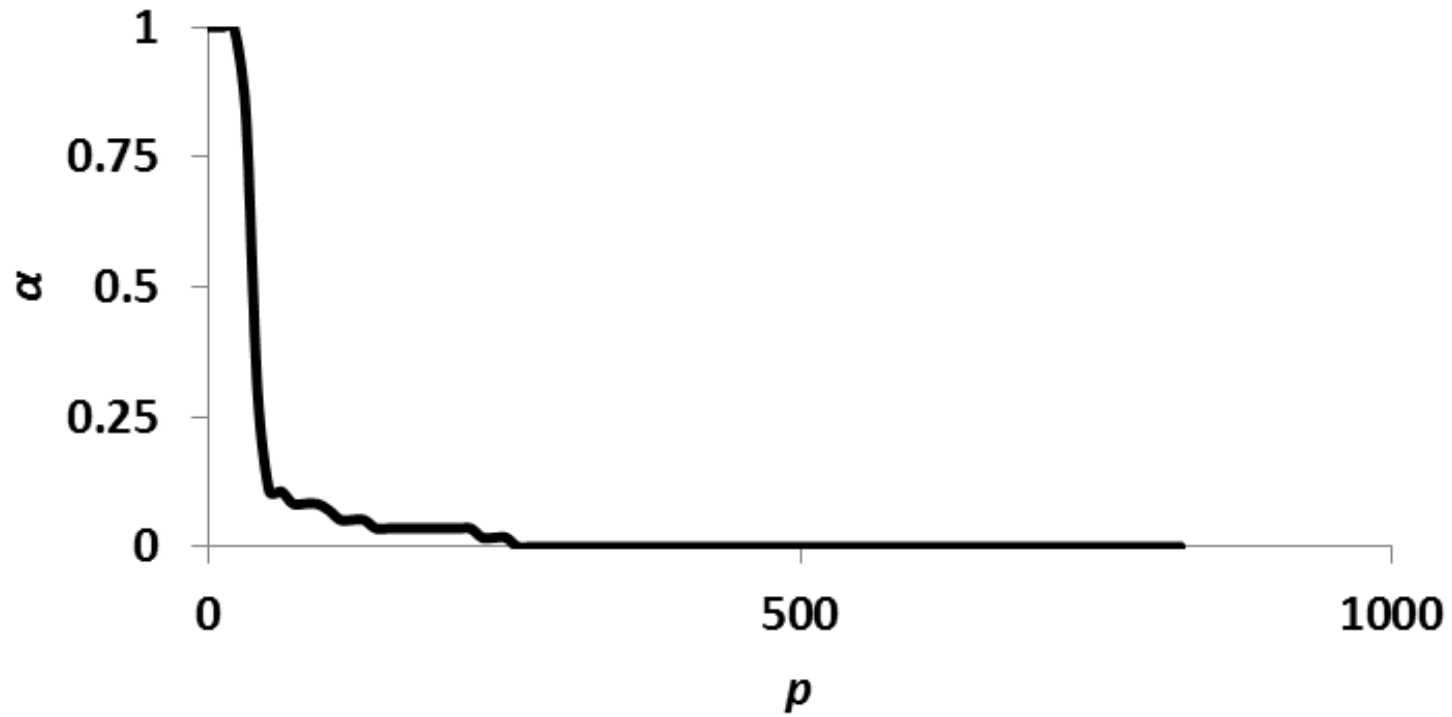
C11: GCC Reachable Nodes

C14: GCC Reachable Nodes

C15: GCC Reachable Nodes

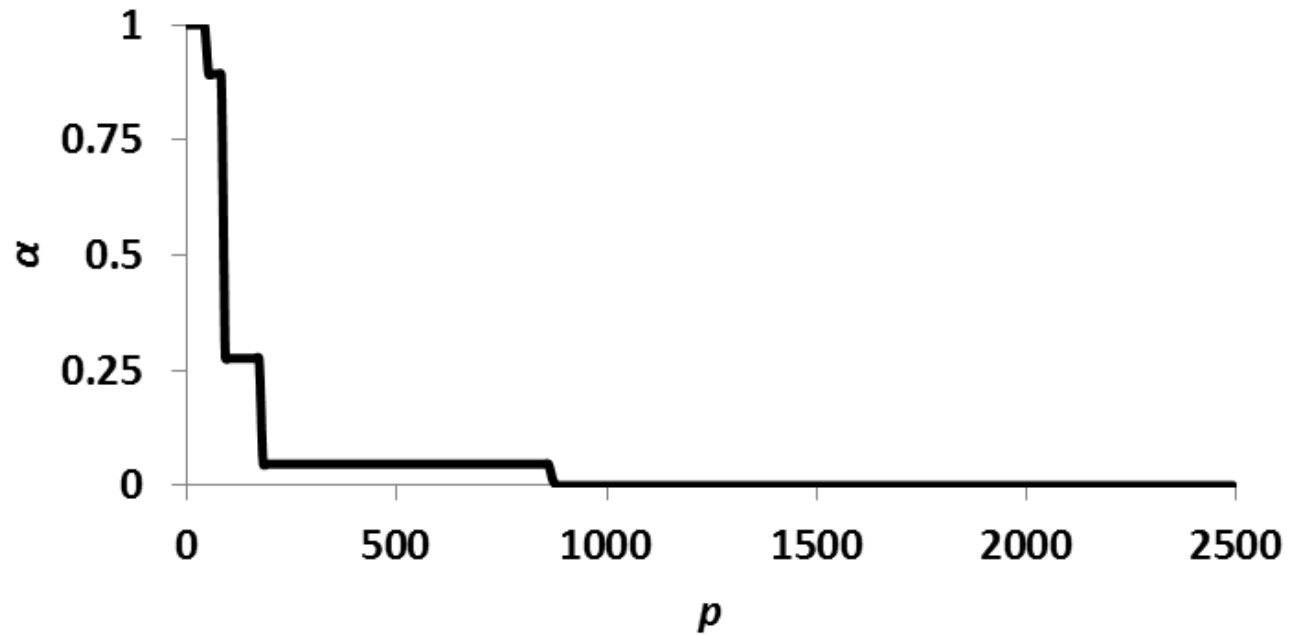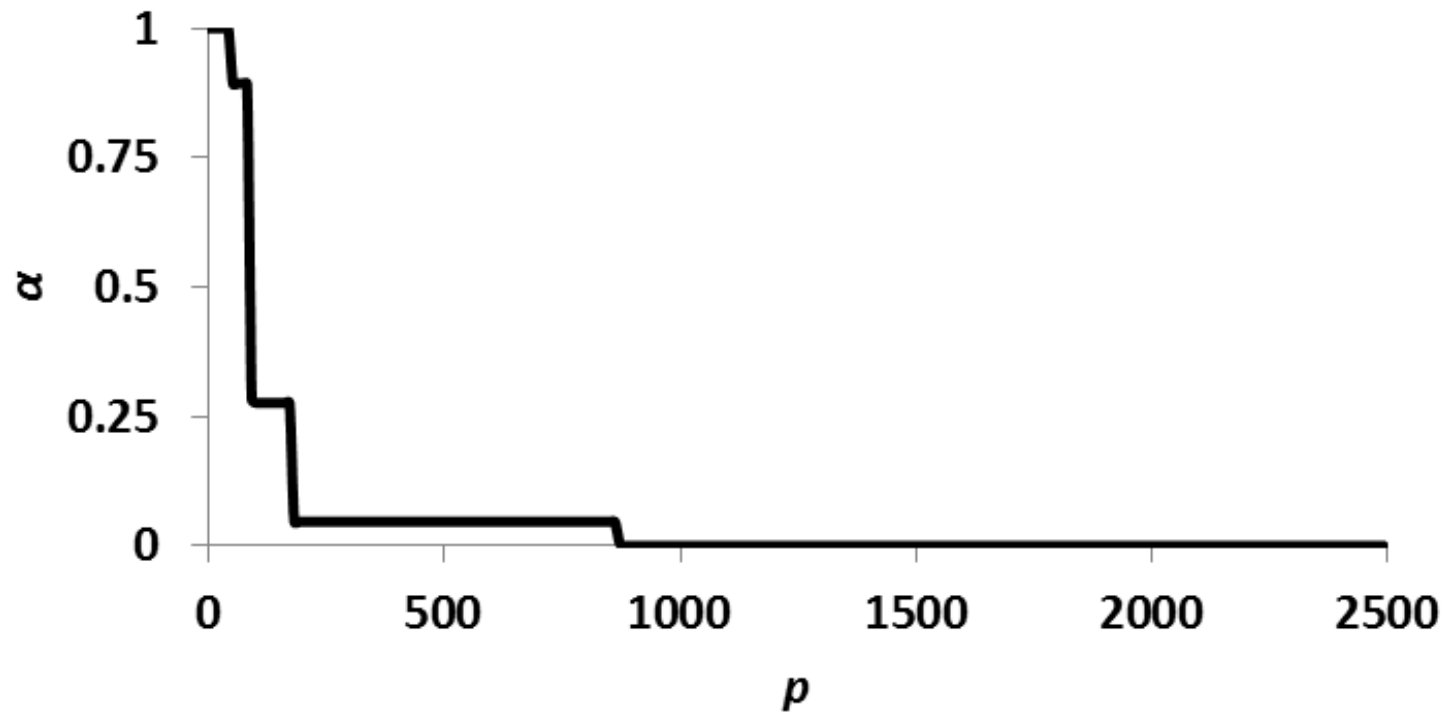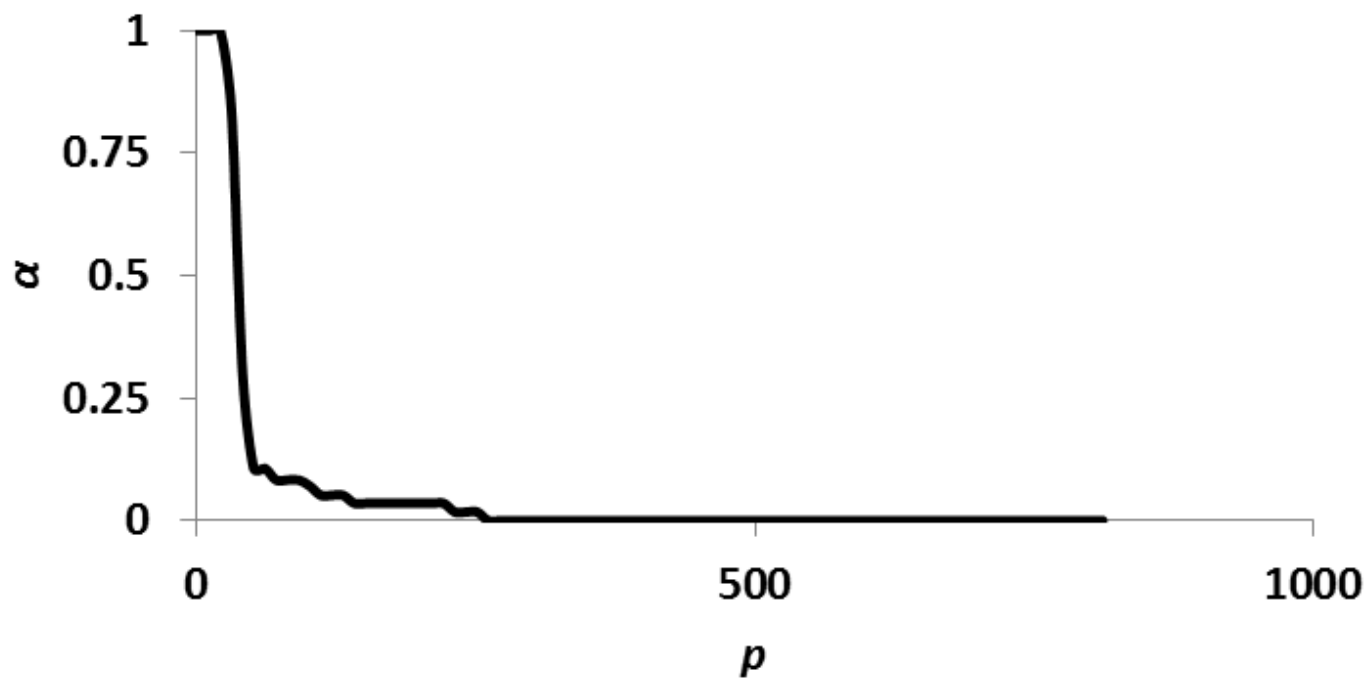C18: GCC Reachable Nodes

C19: GCC Reachable Nodes
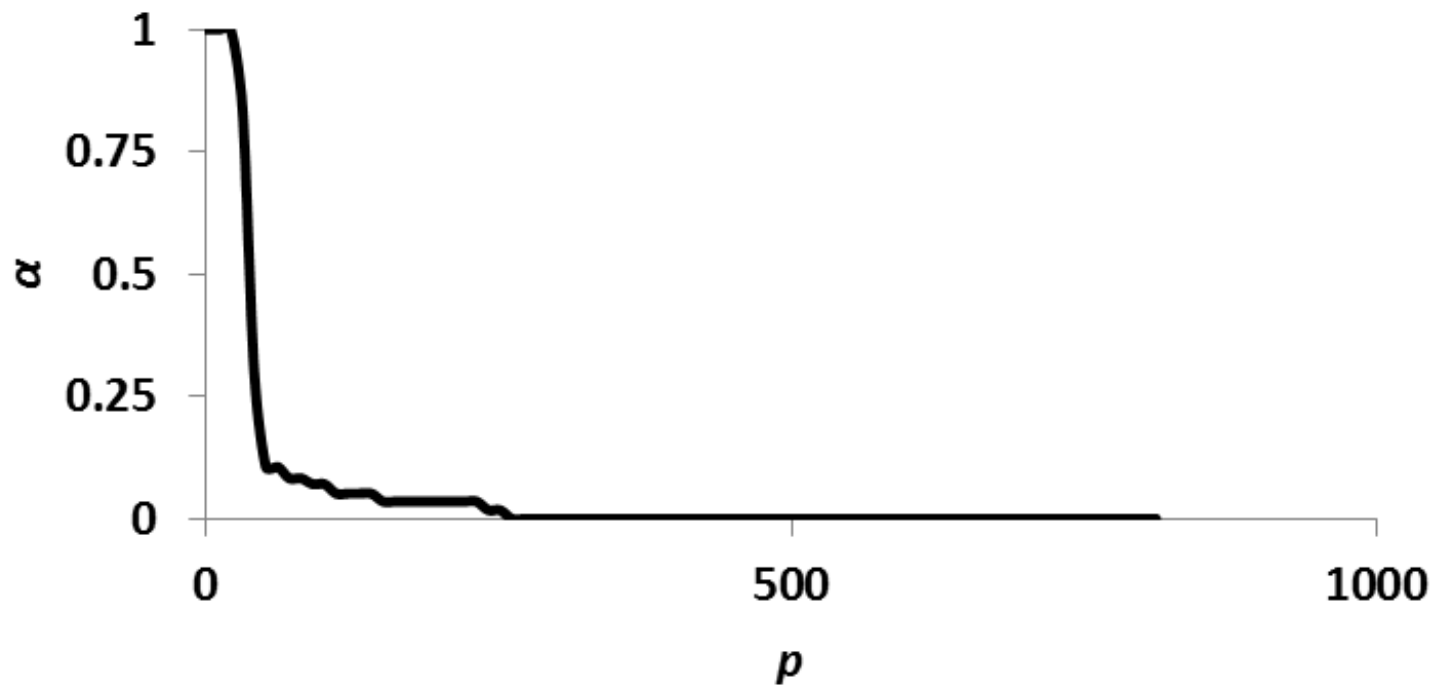
C22: GCC Reachable Nodes
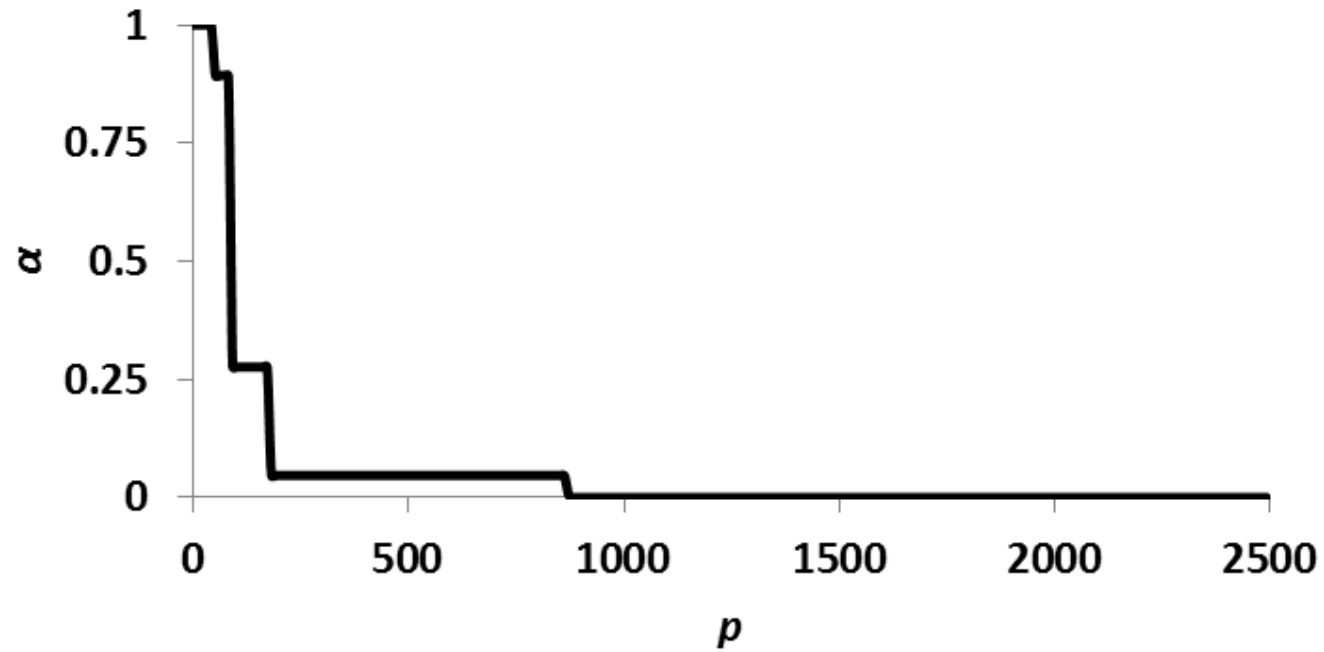
C23: GCC Reachable Nodes
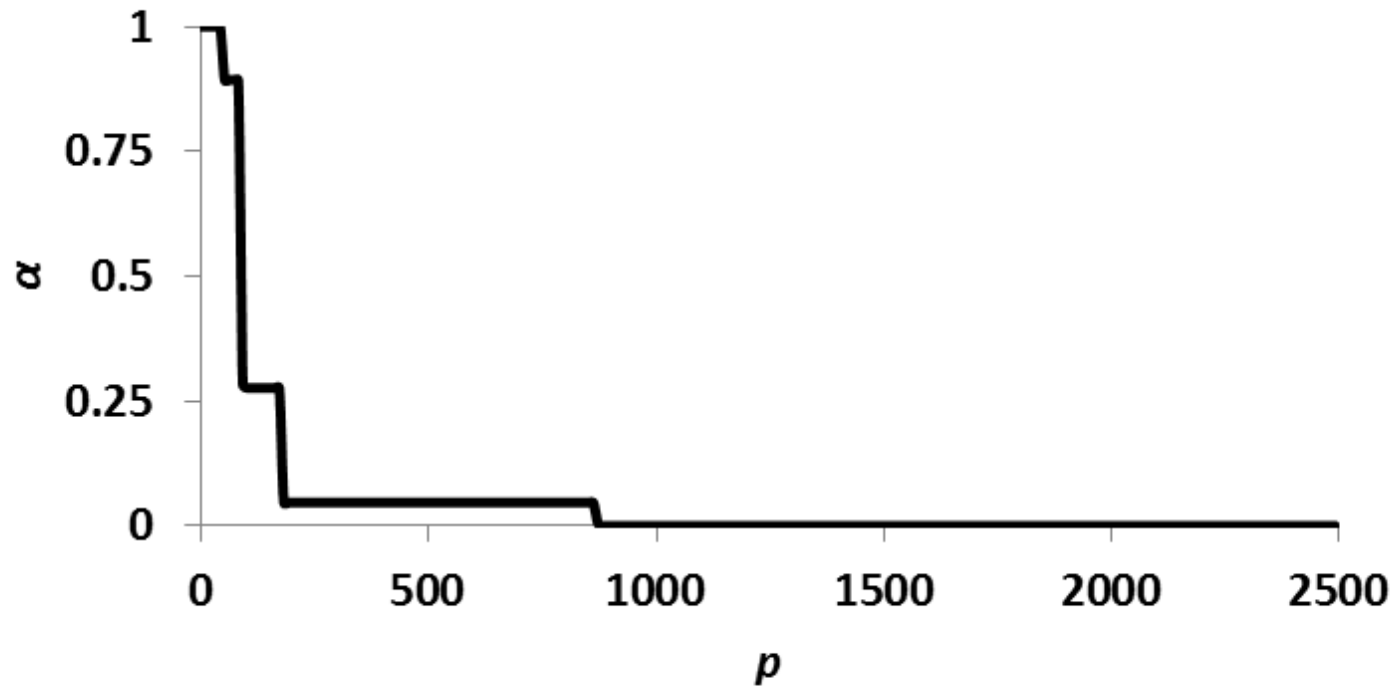
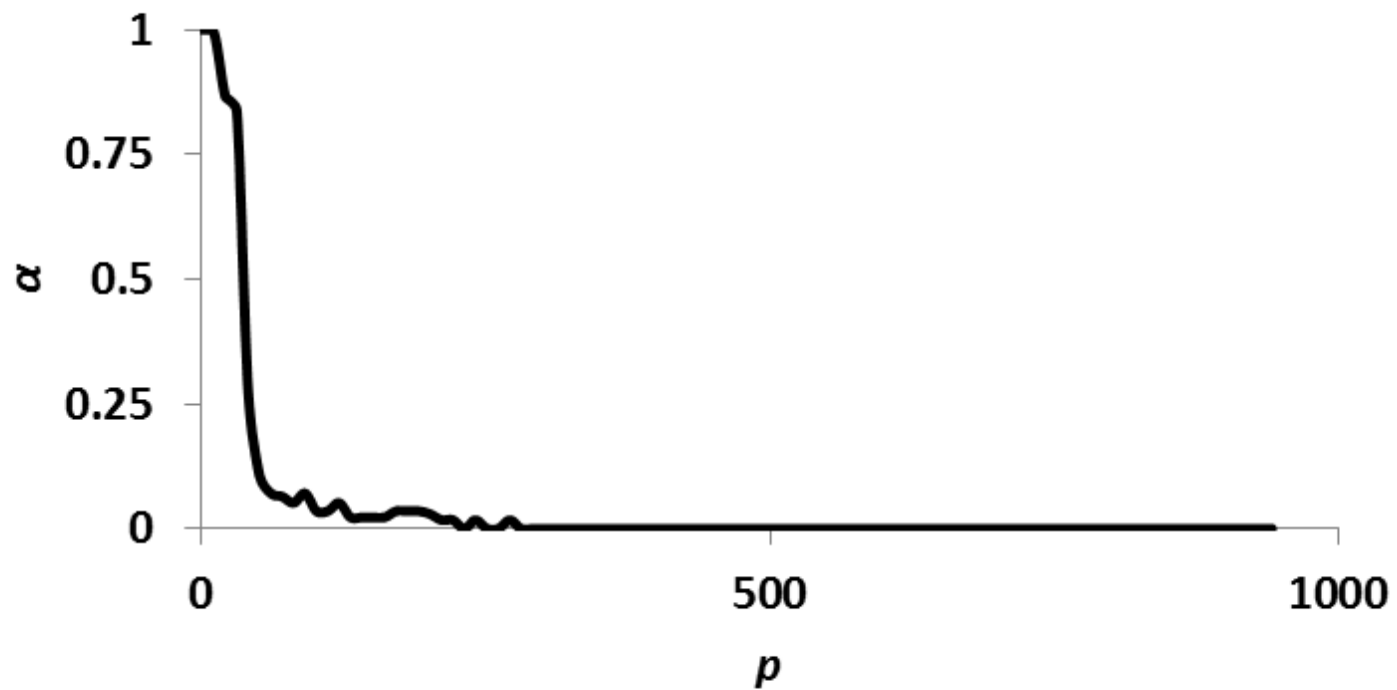# C26: GCC Reachable Nodes

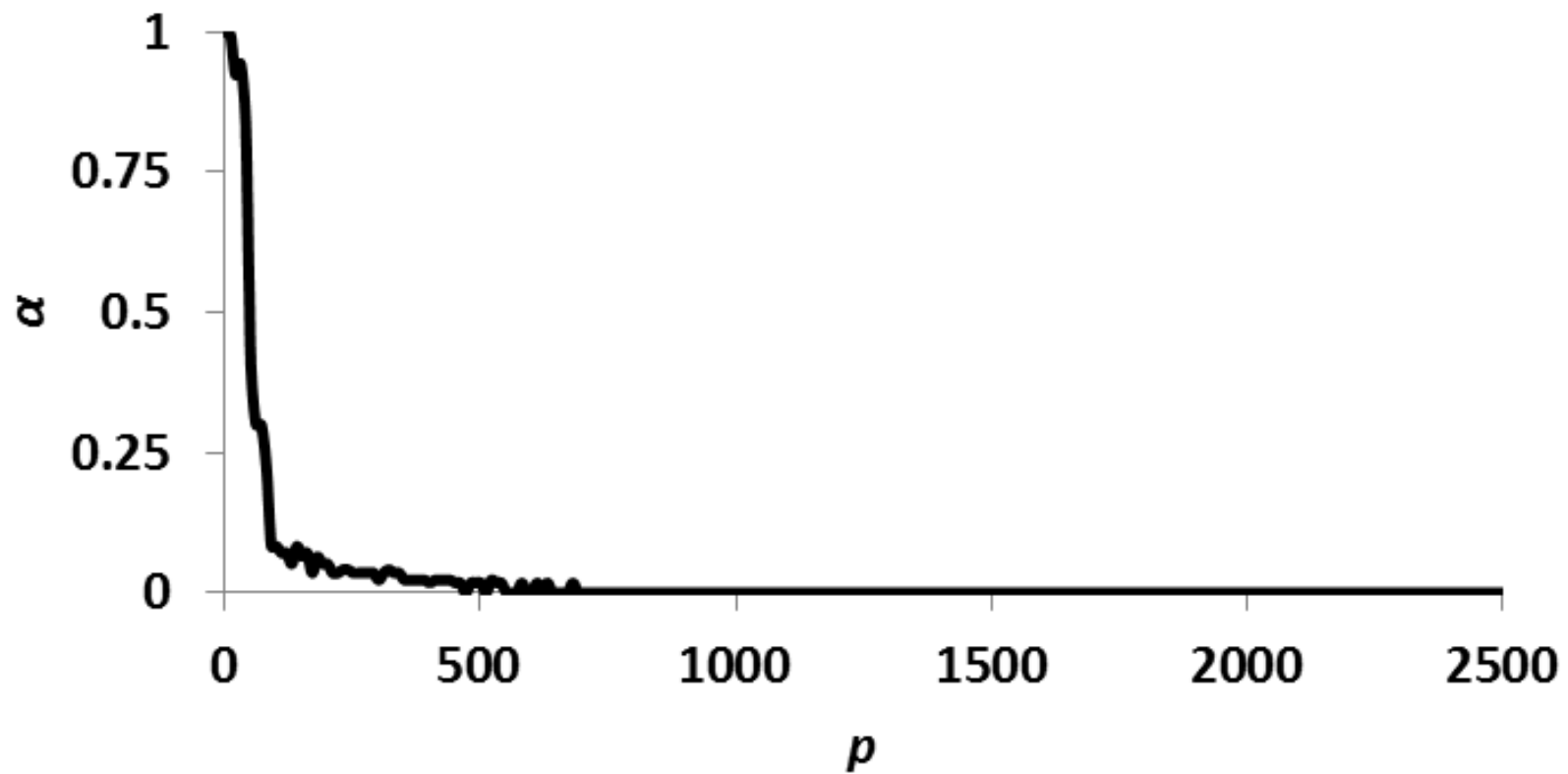# C27: GCC Reachable Nodes

C30: GCC Reachable Nodes
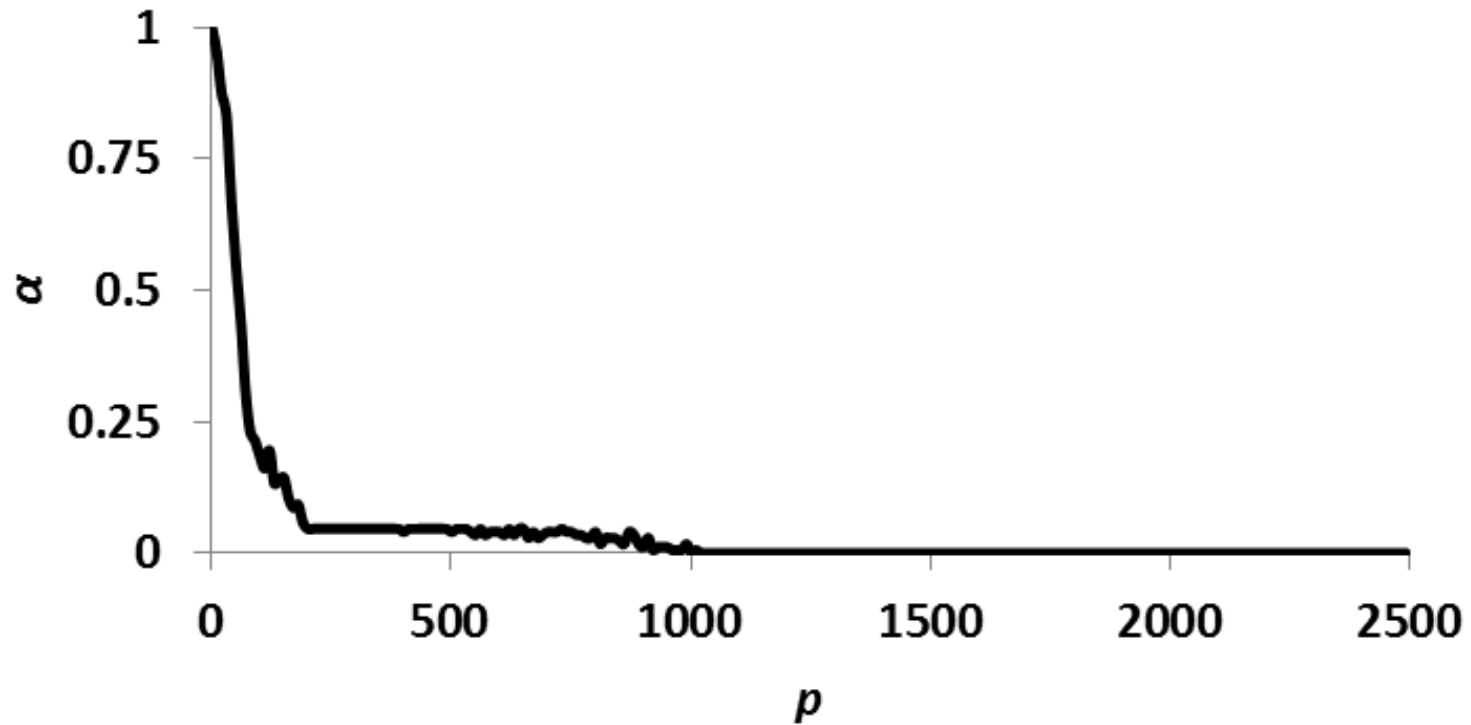
C31: GCC Reachable Nodes
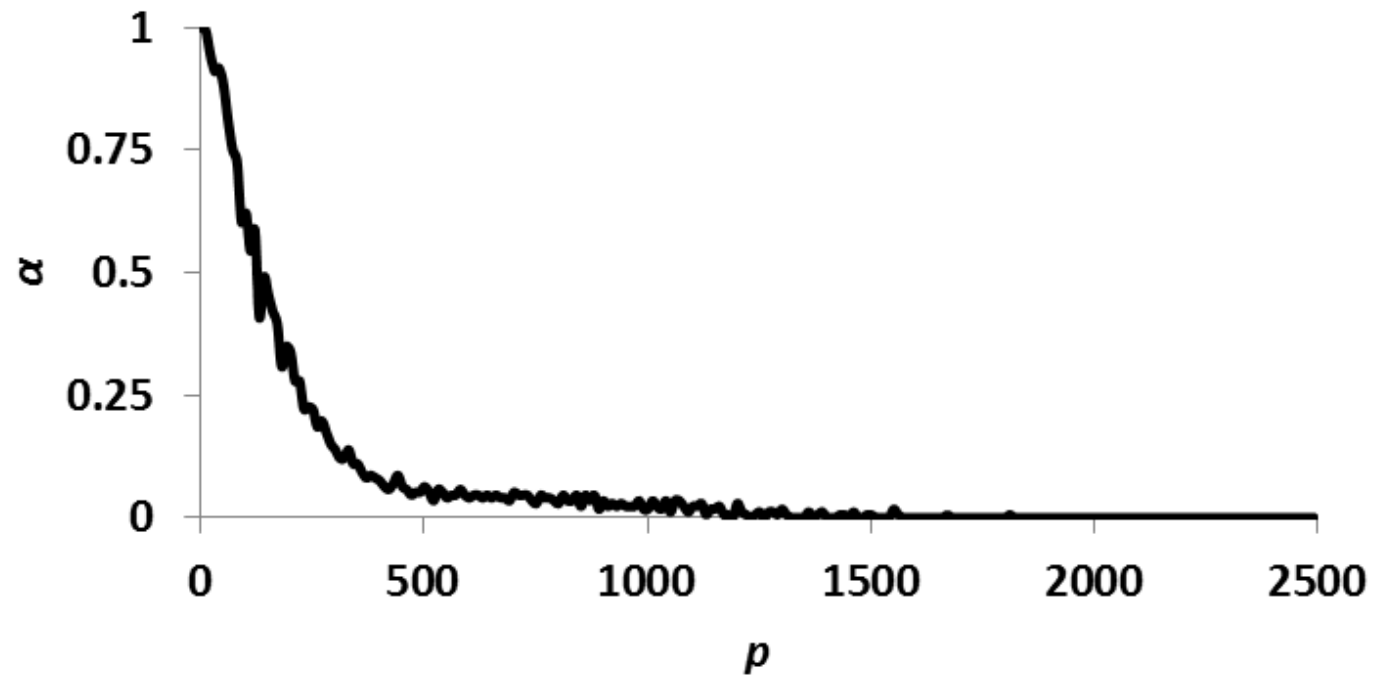
C50: GCC Reachable Nodes
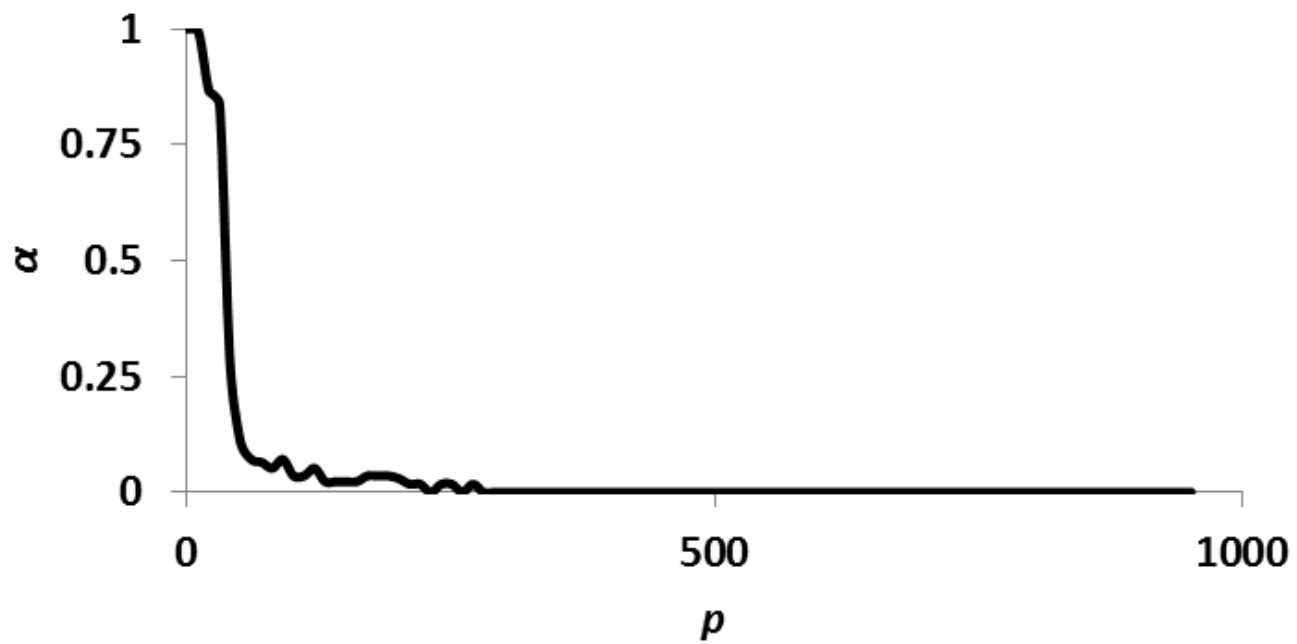
C51: GCC Reachable Nodes
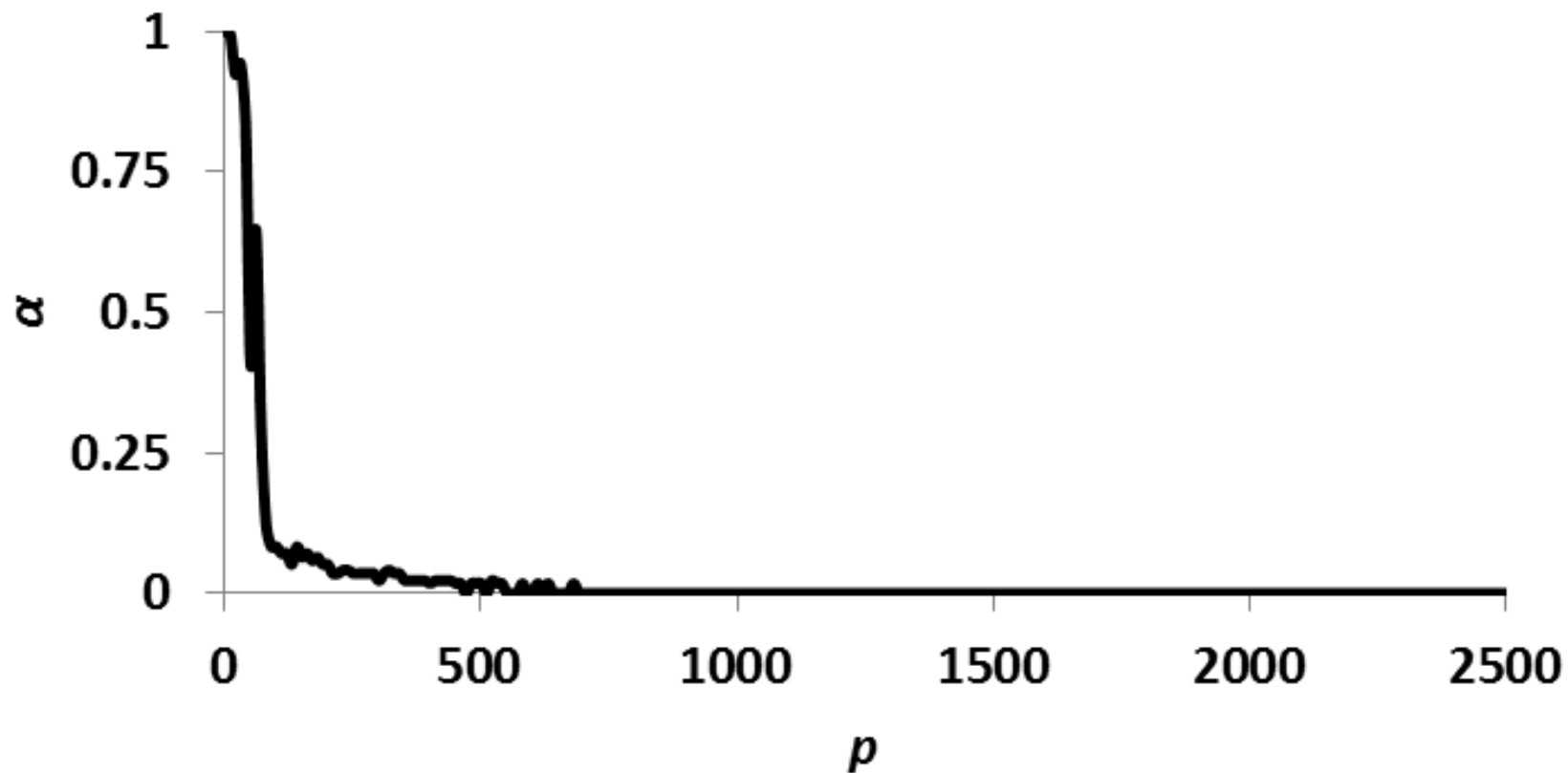
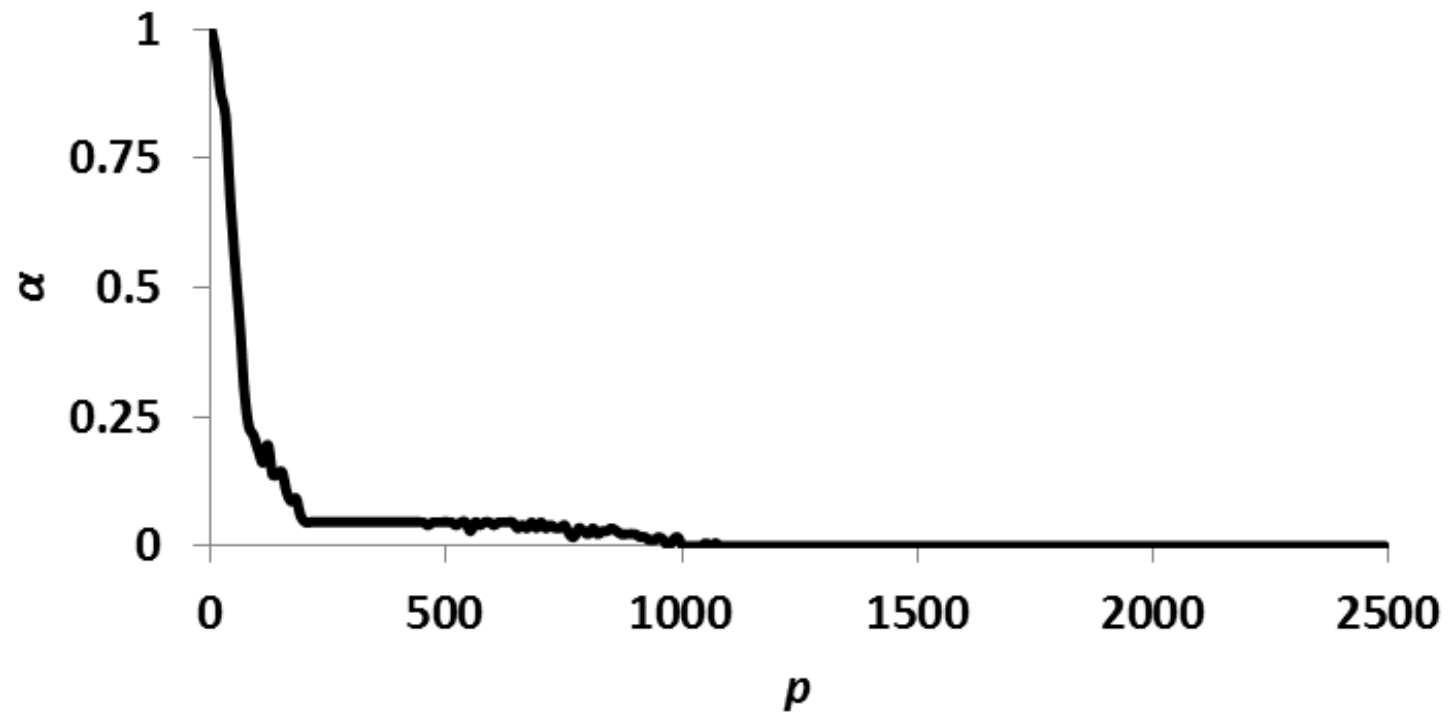# C54: GCC Reachable Nodes

C55: GCC Reachable Nodes

C58: GCC Reachable Nodes

C59: GCC Reachable Nodes

C62: GCC Reachable Nodes

C63: GCC Reachable Nodes

C114: GCC Reachable Nodes

C115: GCC Reachable Nodes

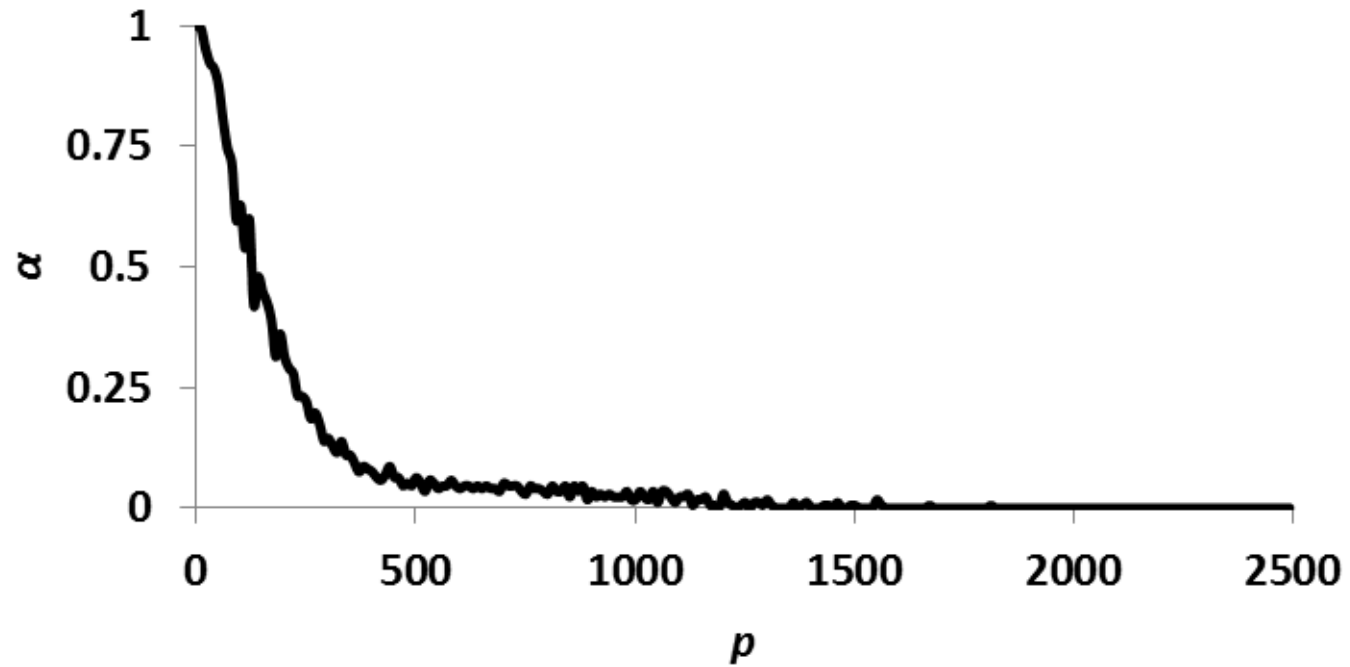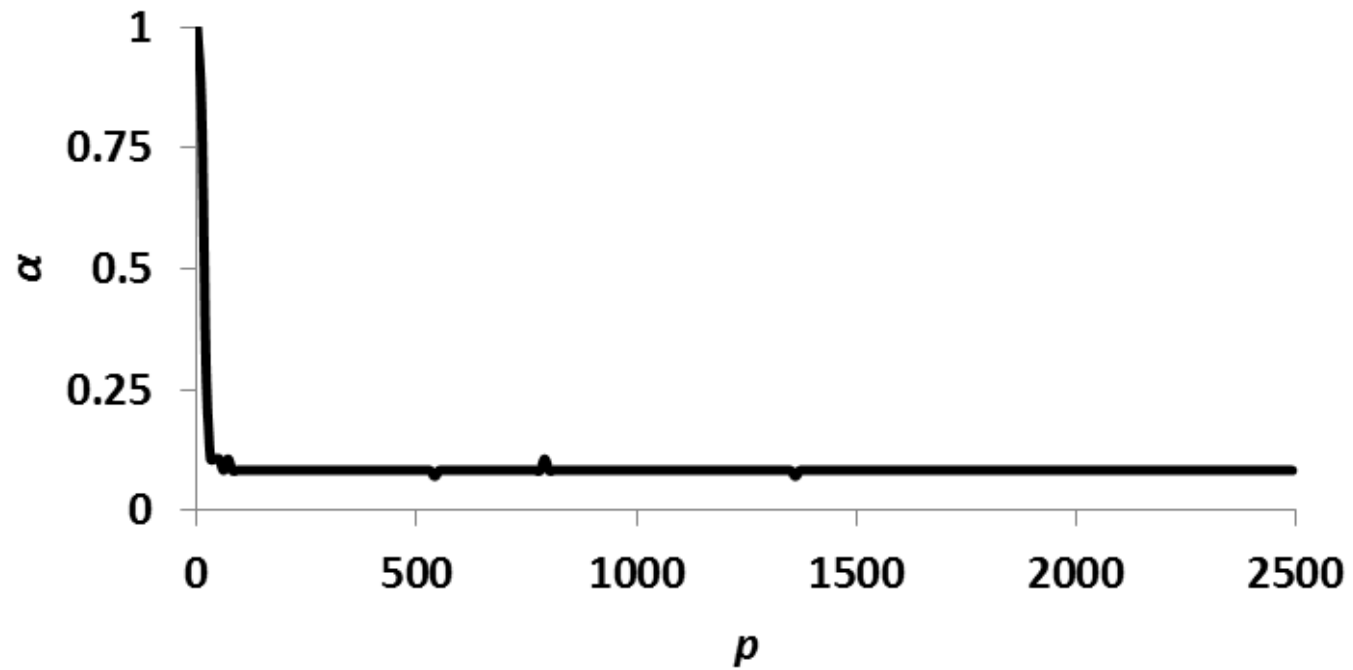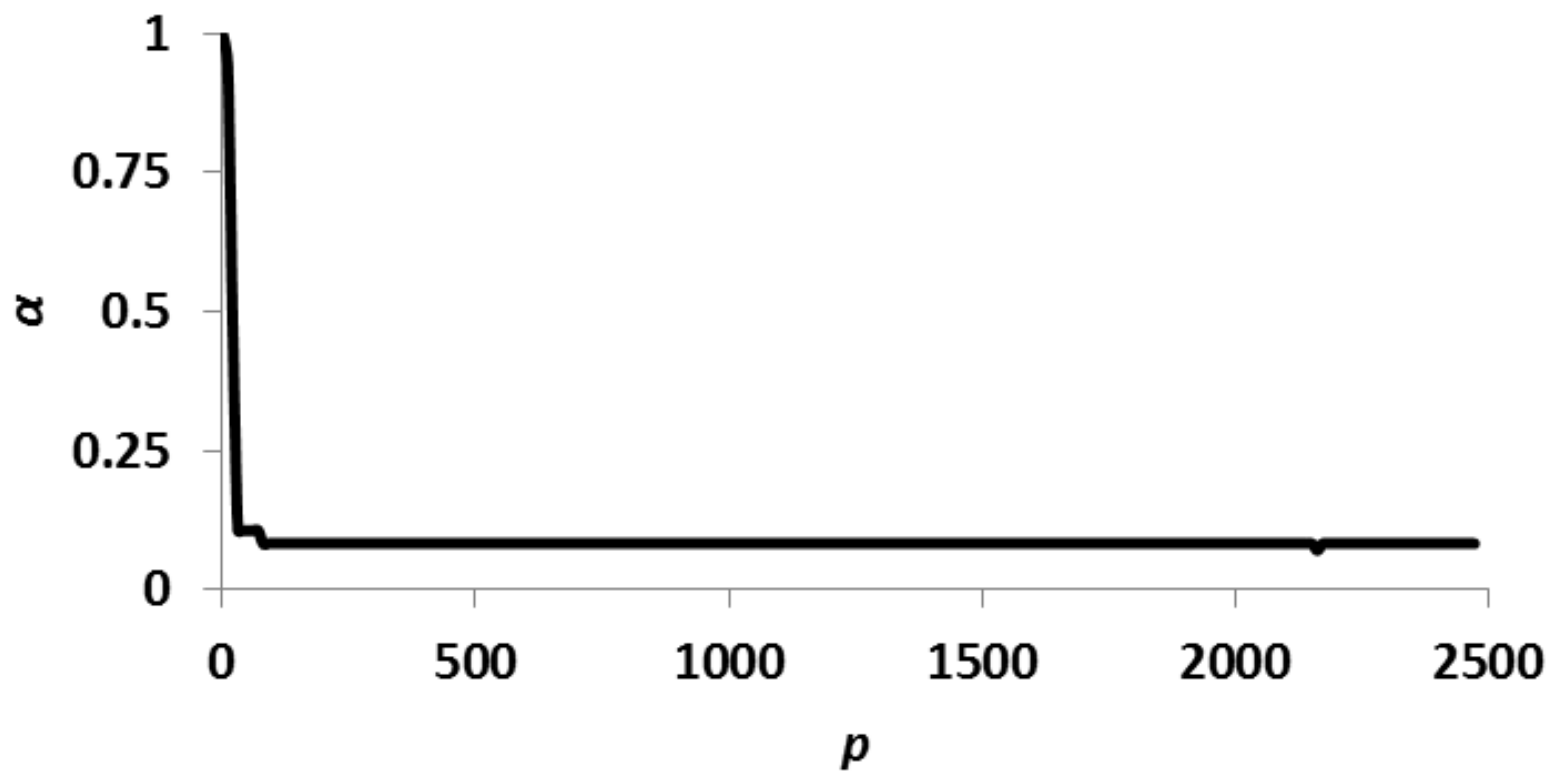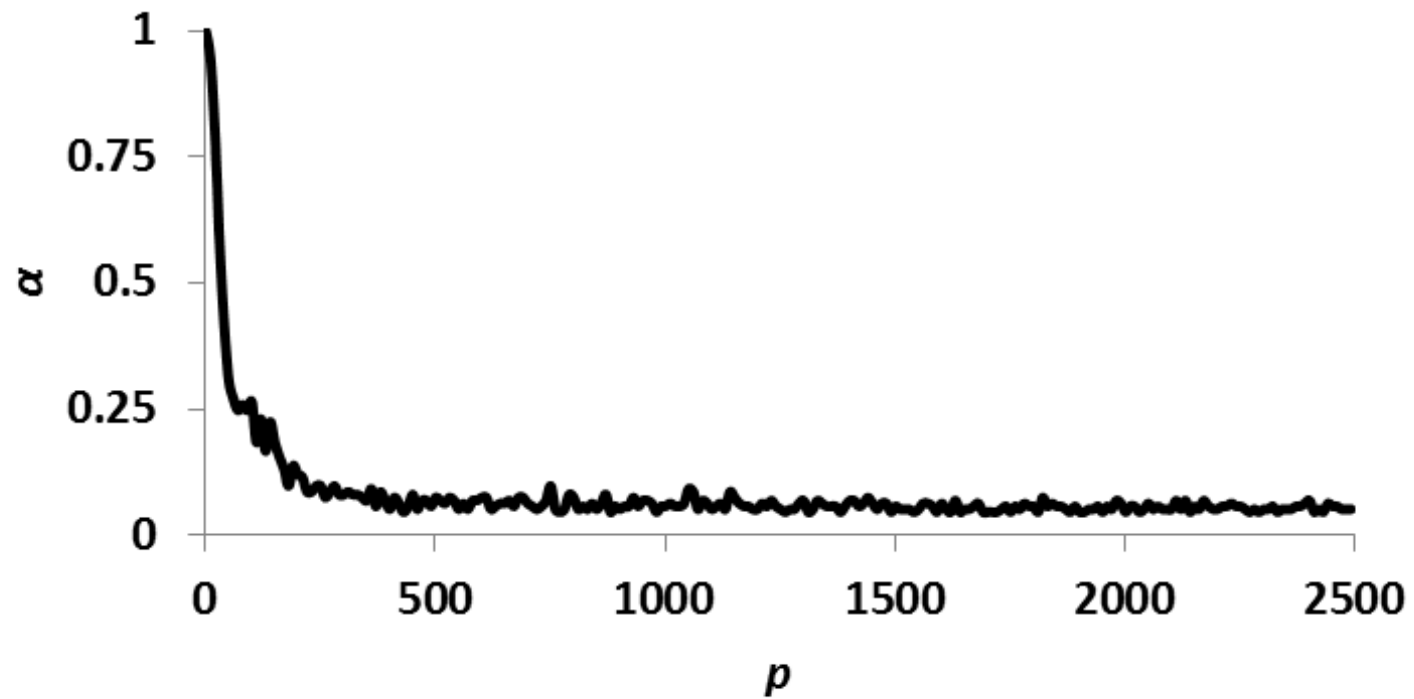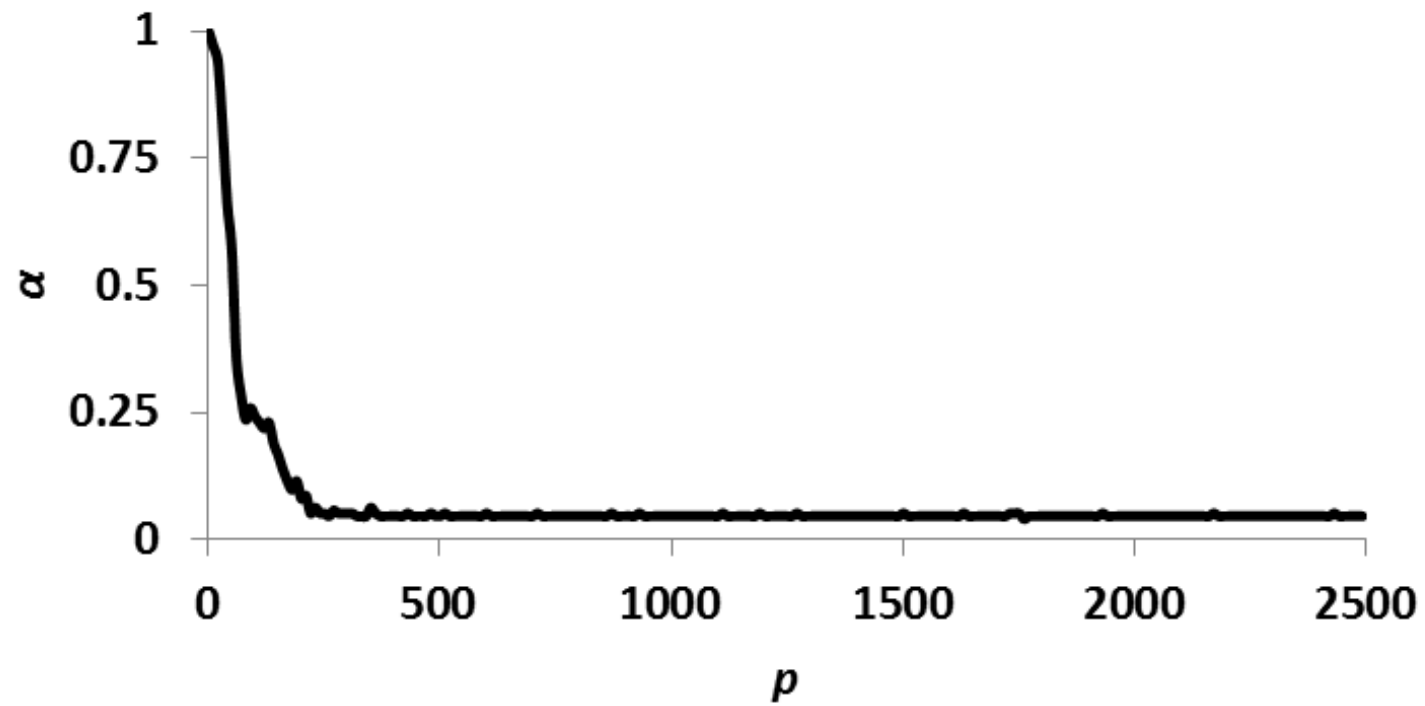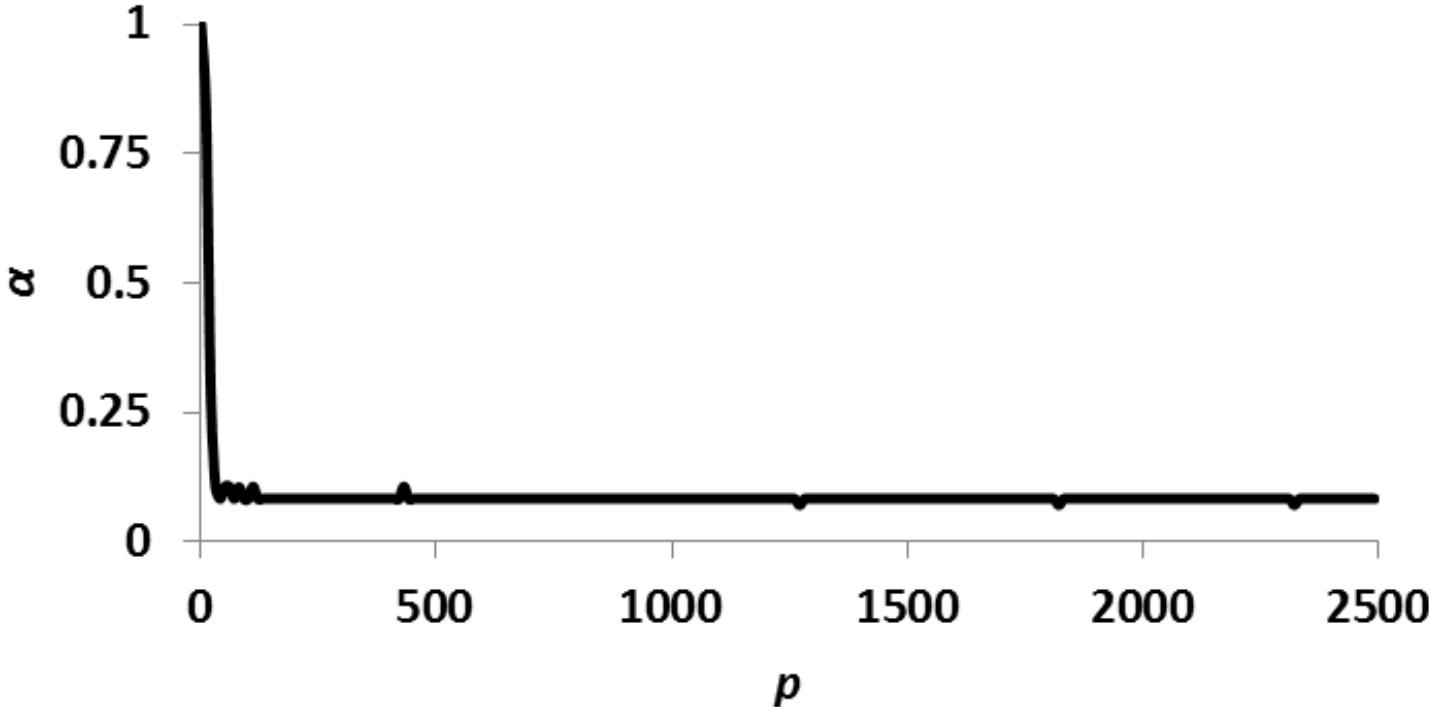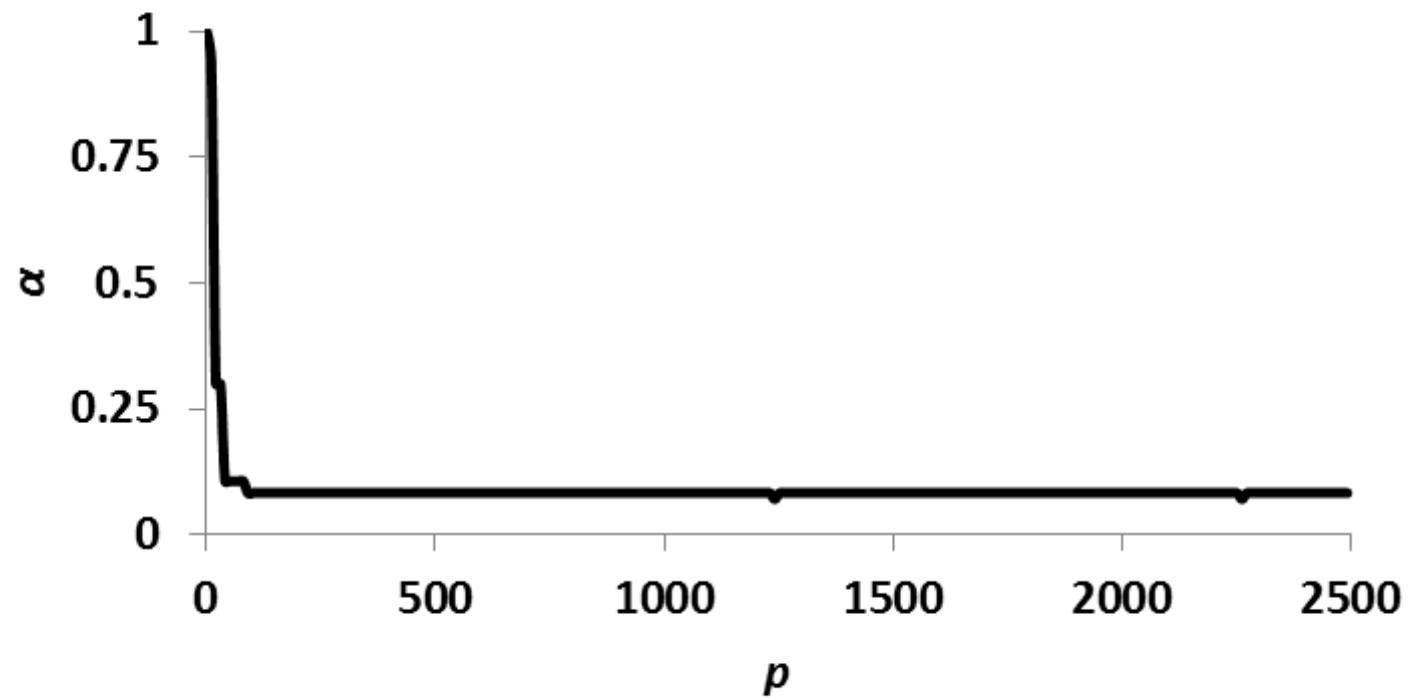# C118: GCC Reachable Nodes
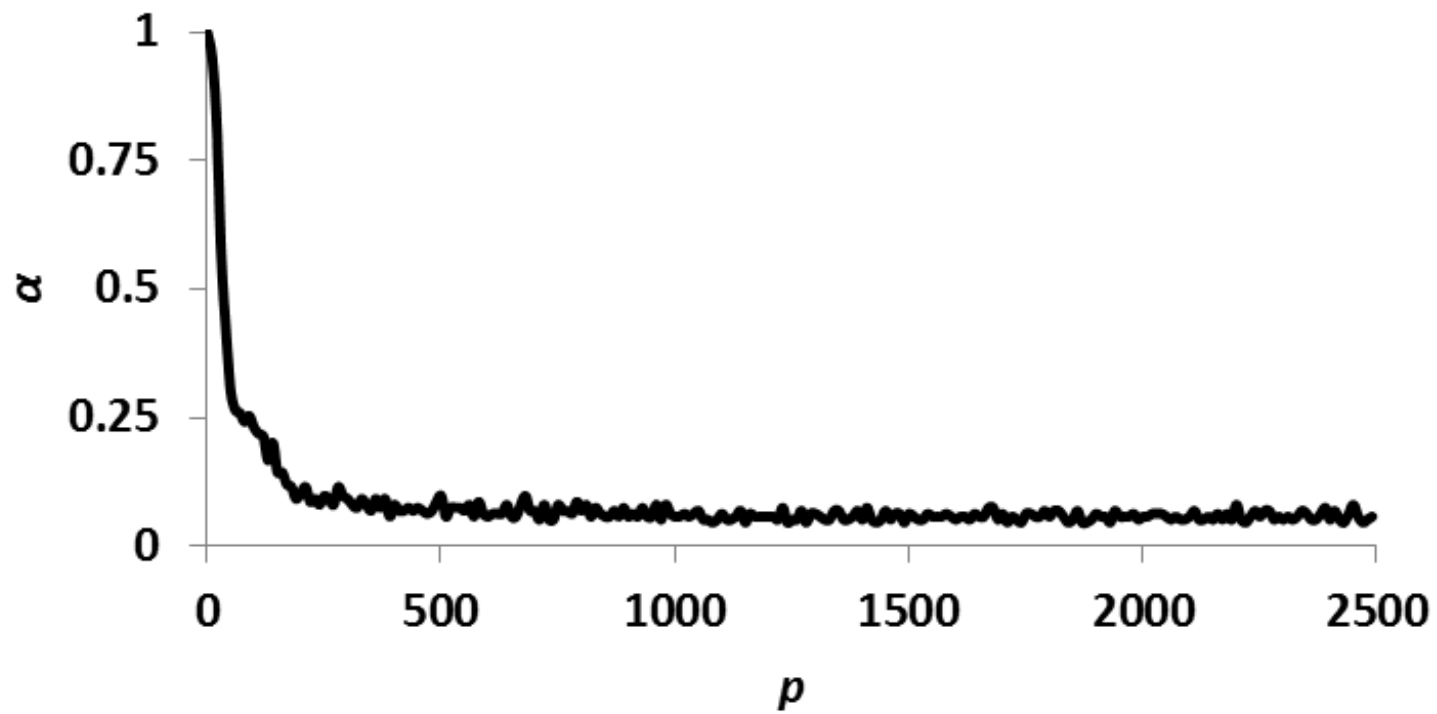
C119: GCC Reachable Nodes
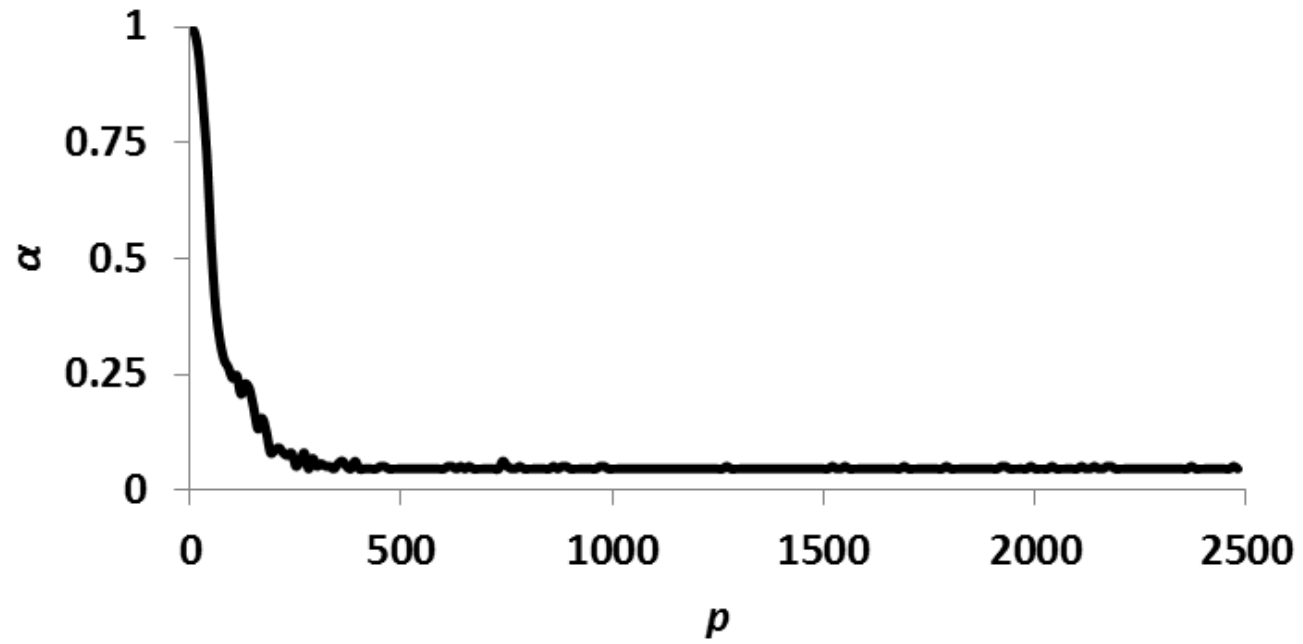
C122: GCC Reachable Nodes

C123: GCC Reachable Nodes
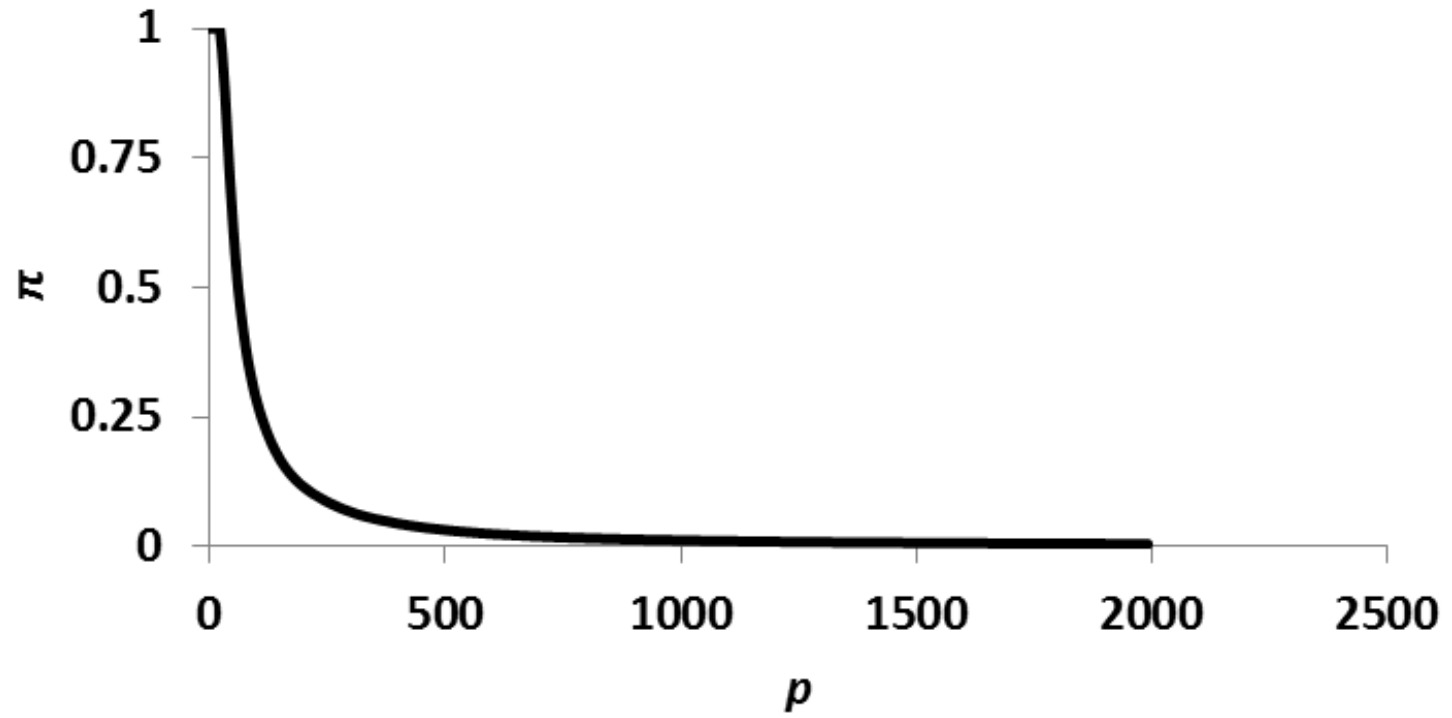
C126: GCC Reachable Nodes
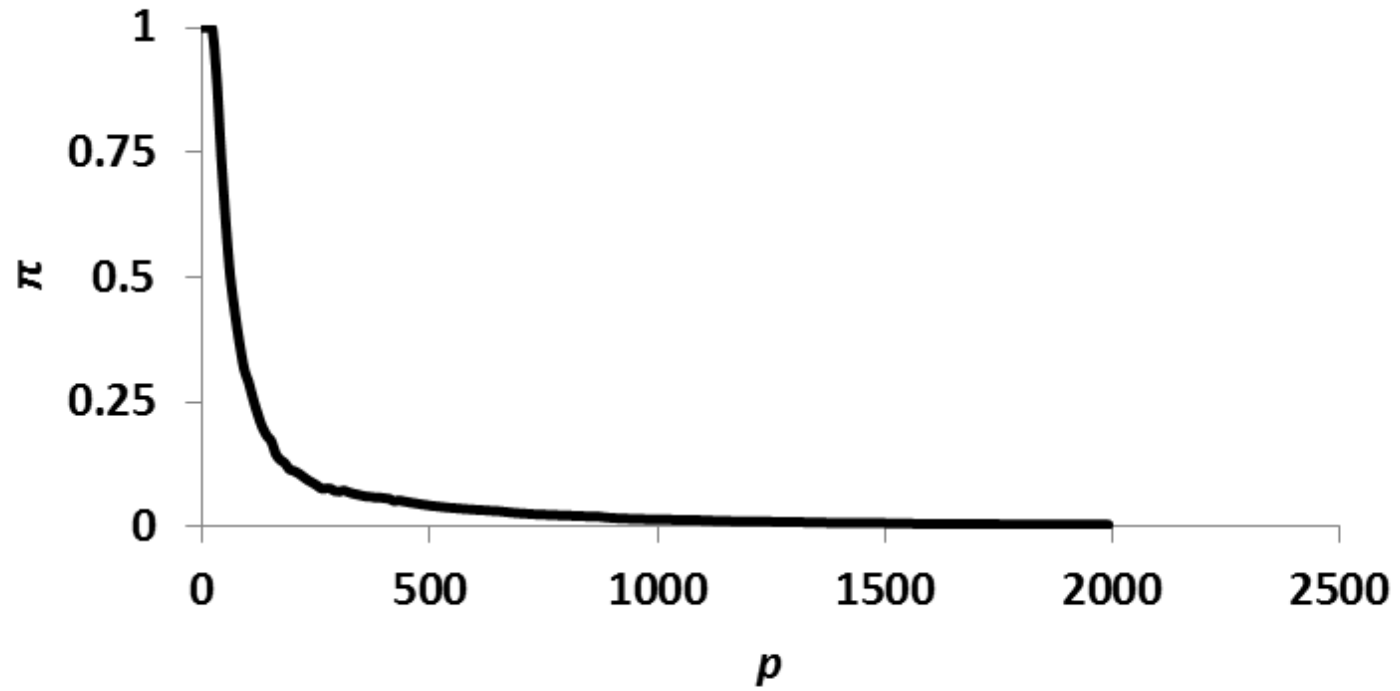
C127: GCC Reachable Nodes

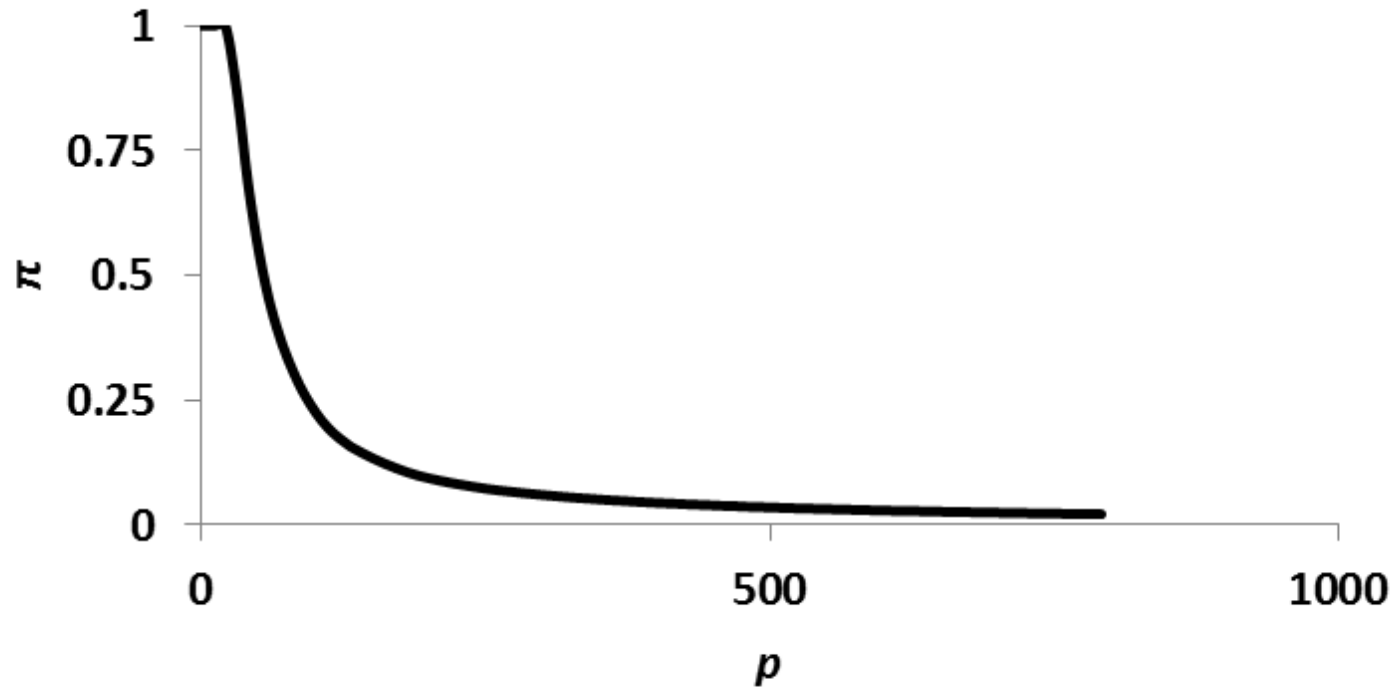Graphs for Packet Delivery Effectiveness (π)
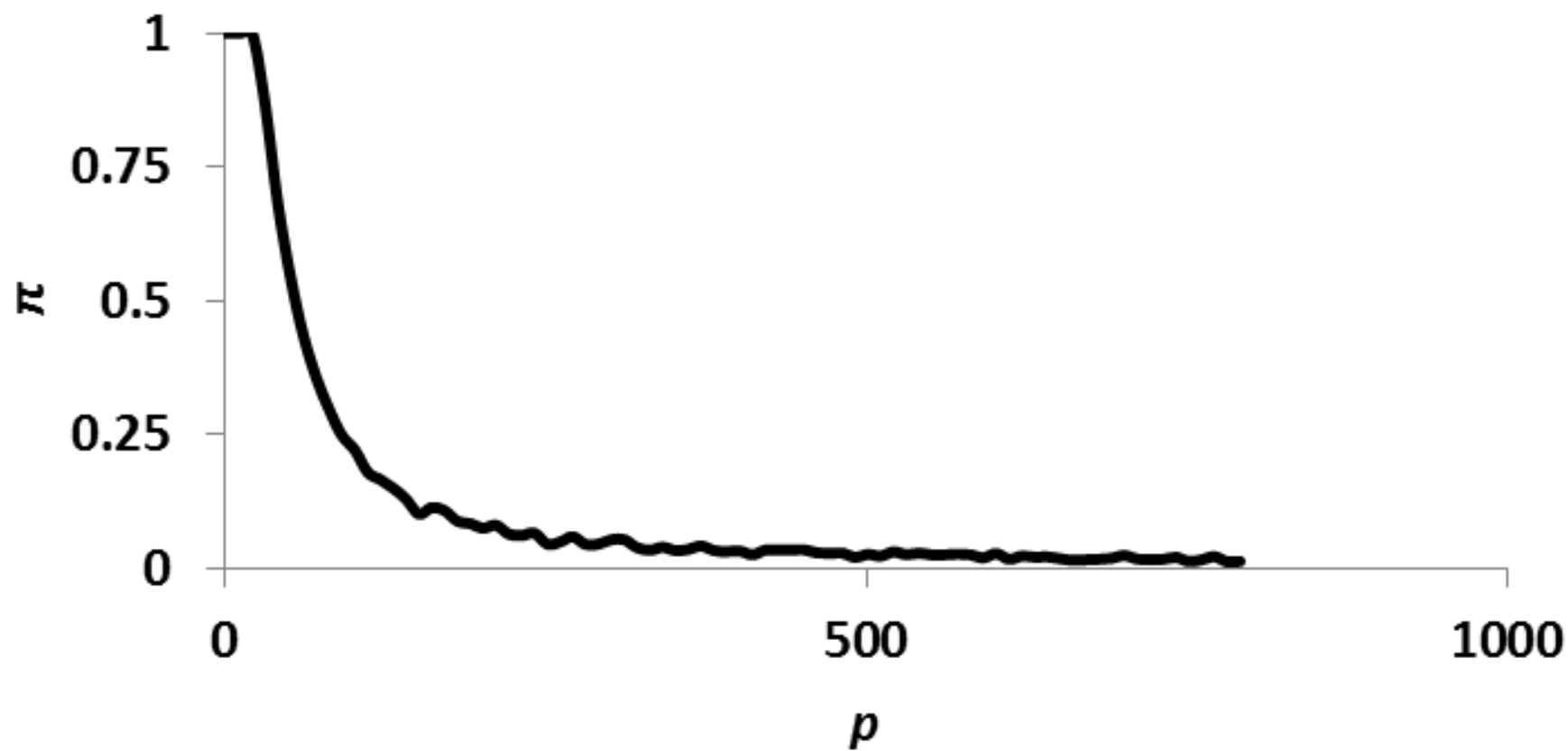(Dabrowski & Mills NIST)
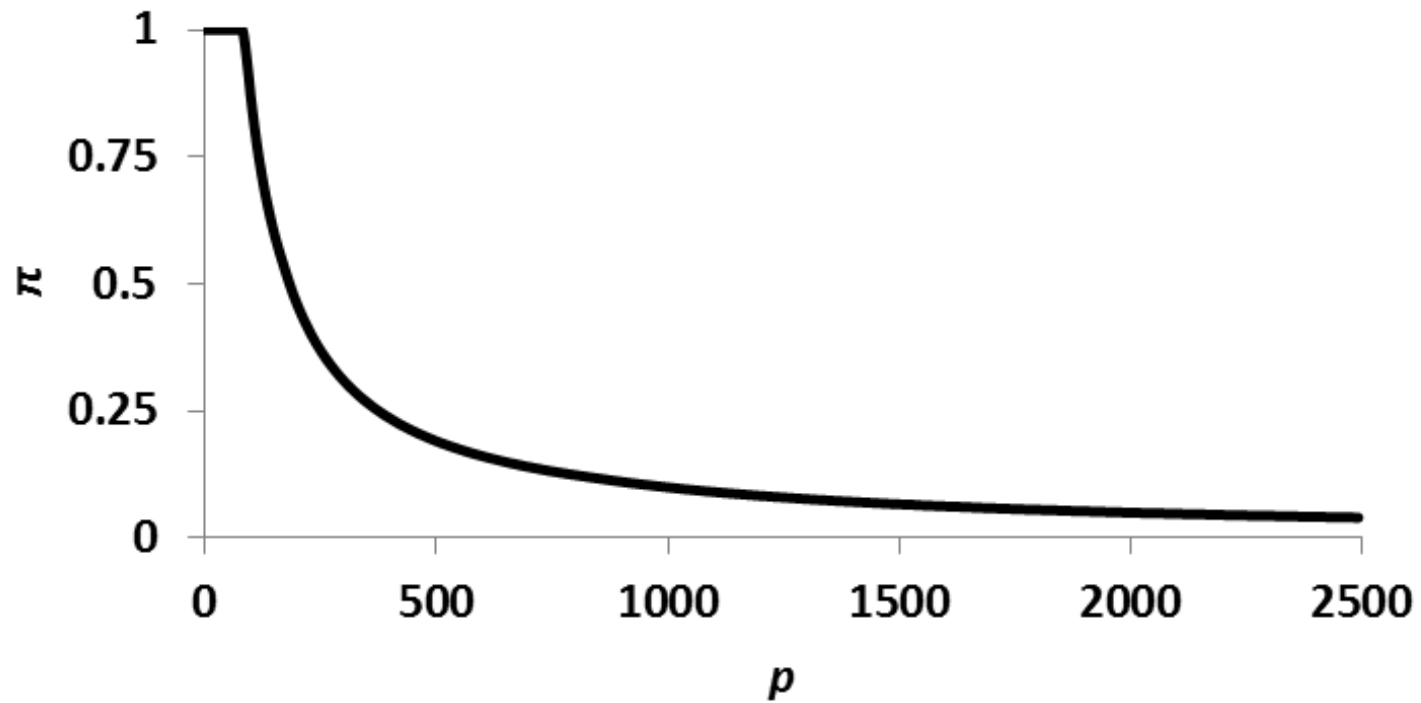
C0: Packets Delivered

C1: Packets Delivered

C2: Packets Delivered

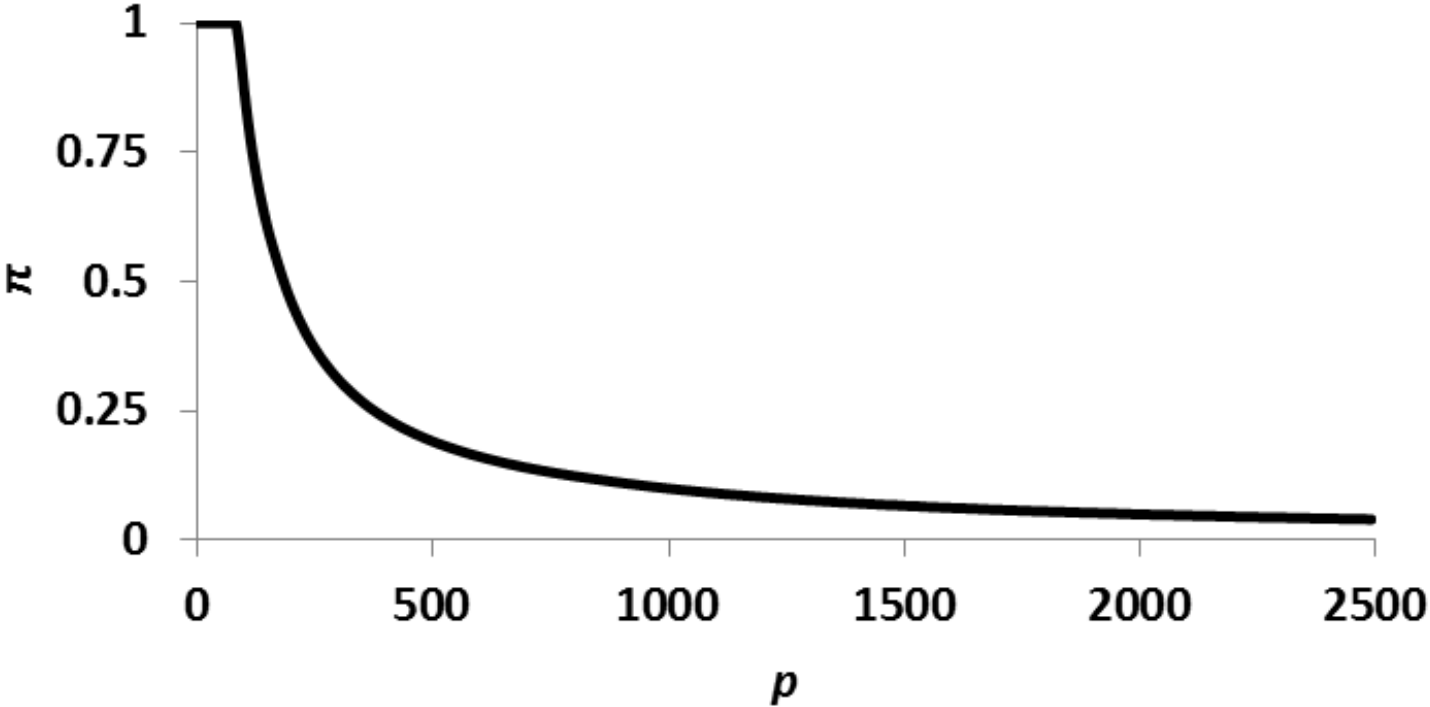# C3: Packets Delivered

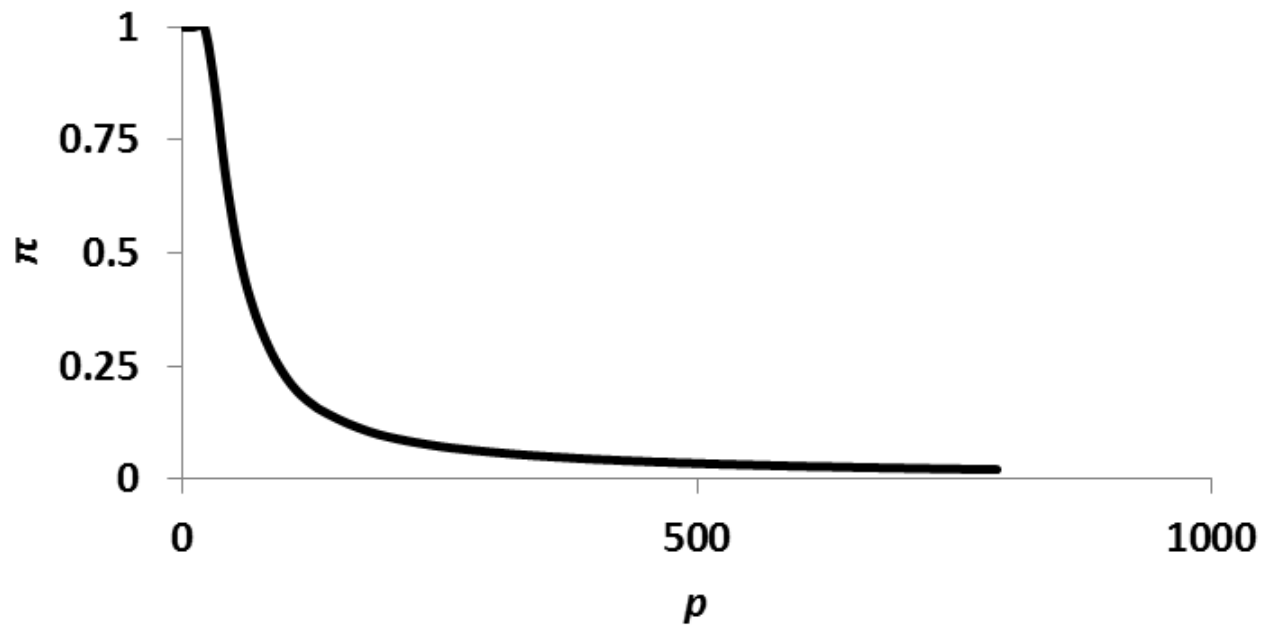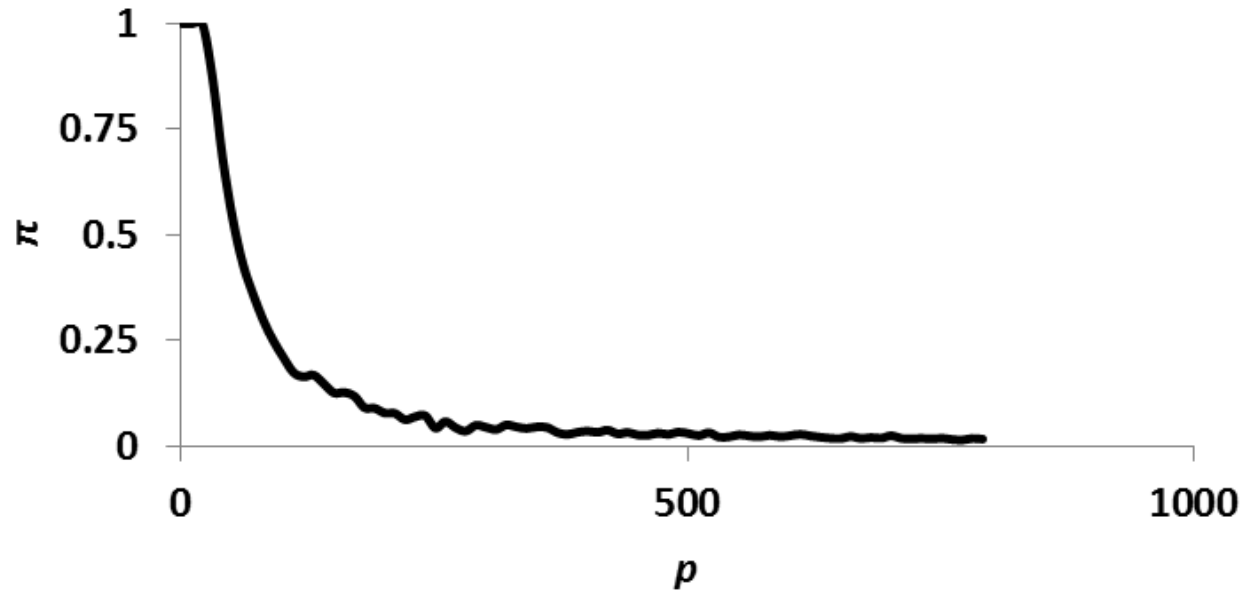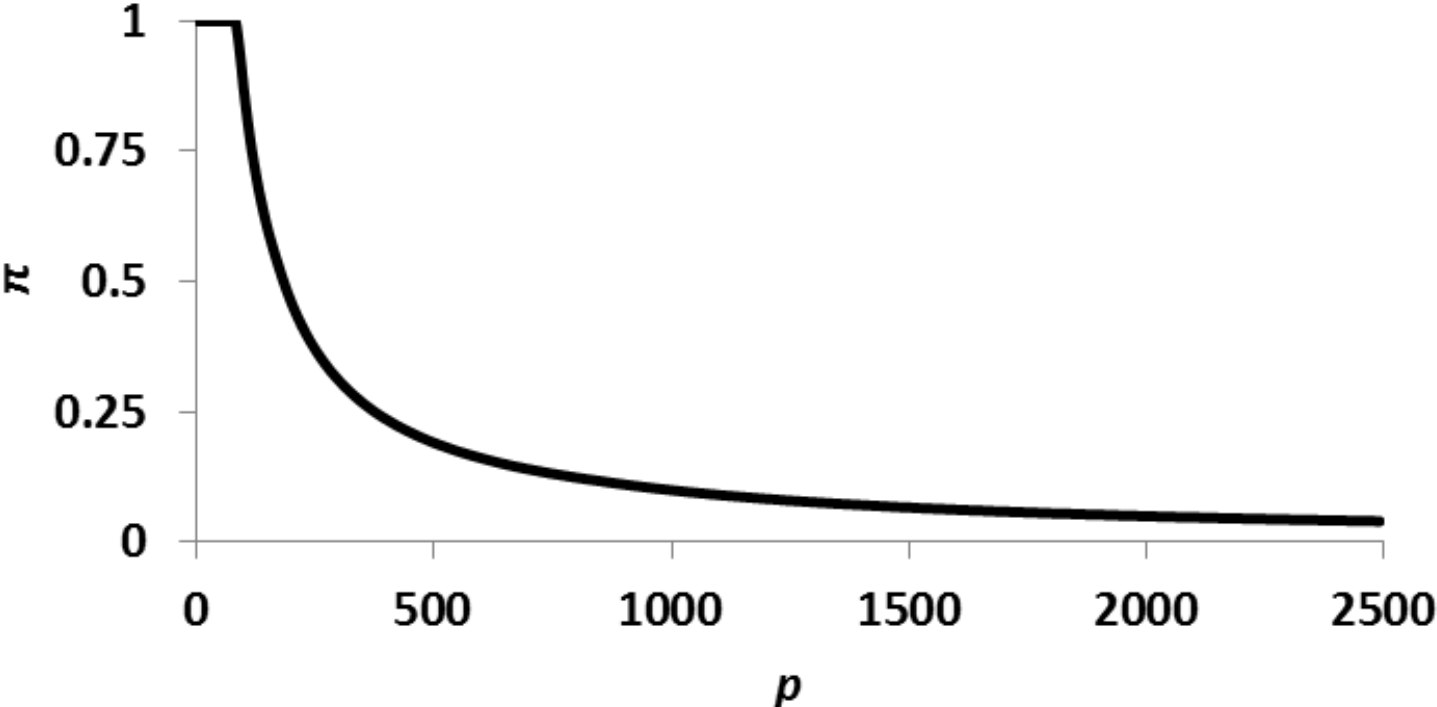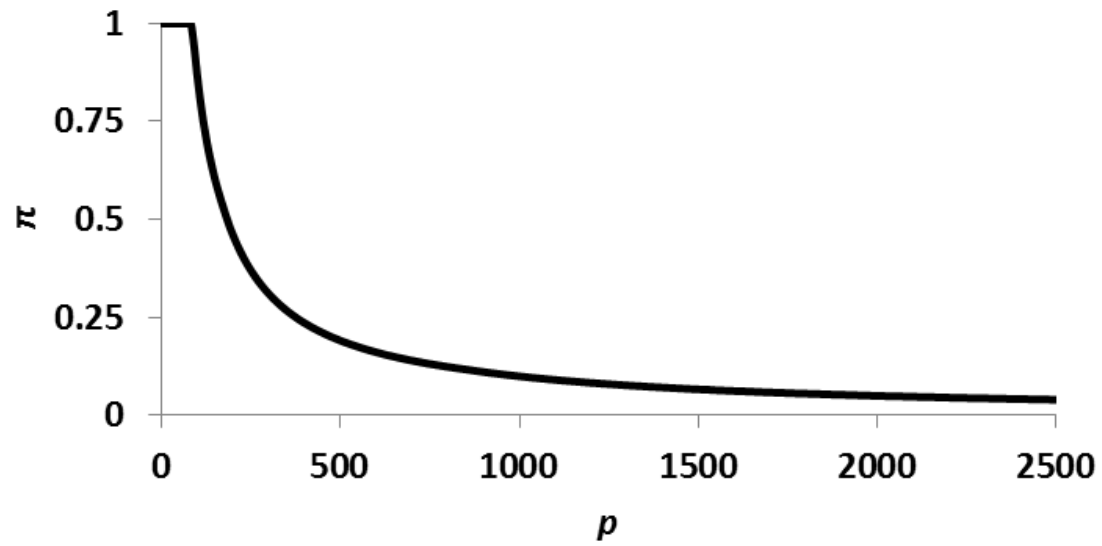# C6: Packets Delivered

C7: Packets Delivered
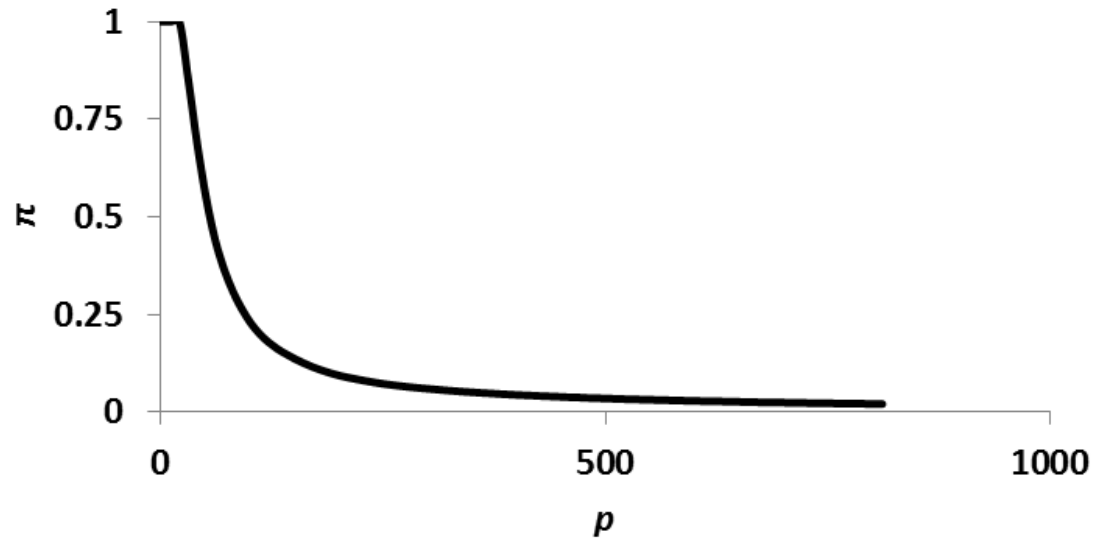
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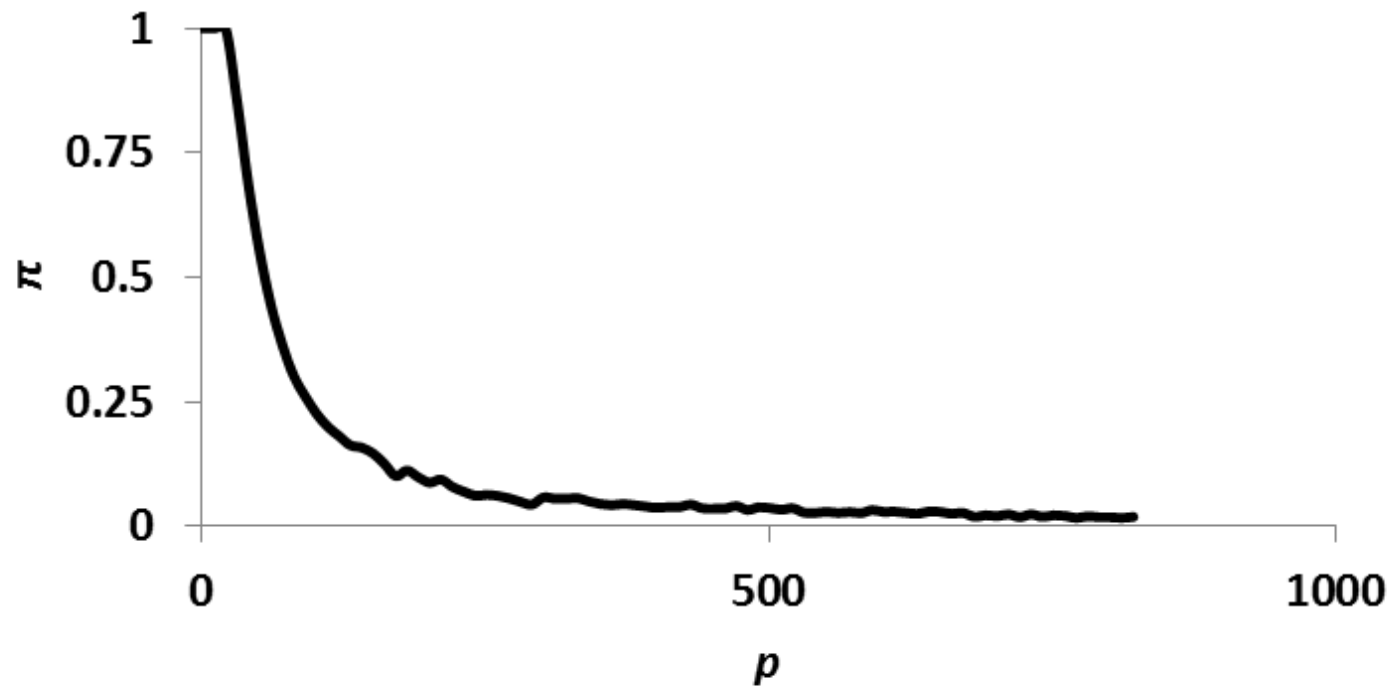
C11: Packets Delivered
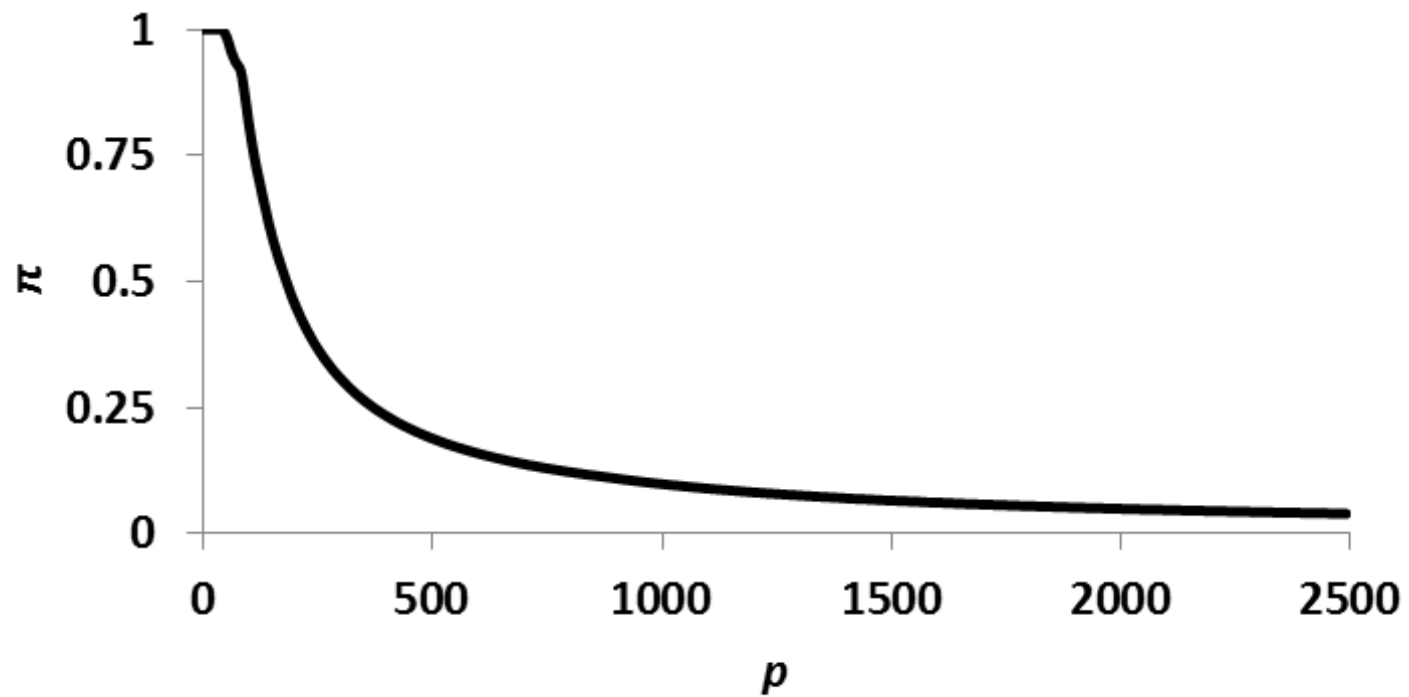
C14: Packets Delivered
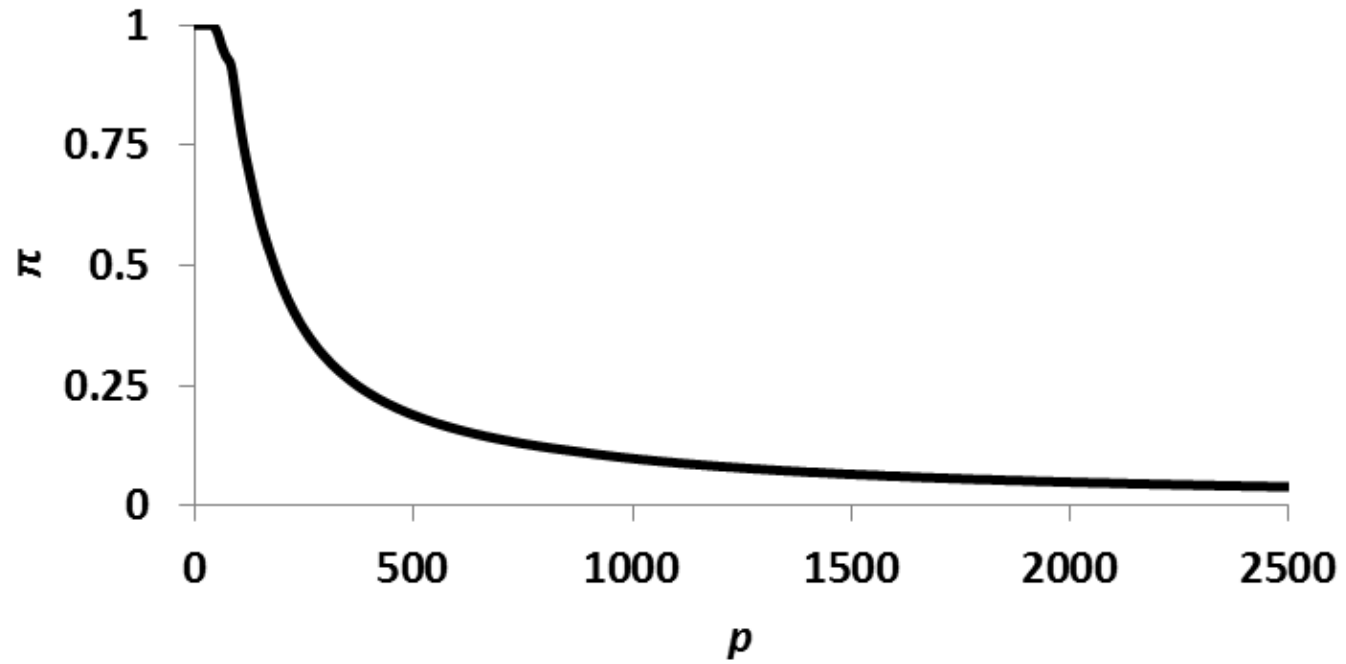
C15: Packets Delivered
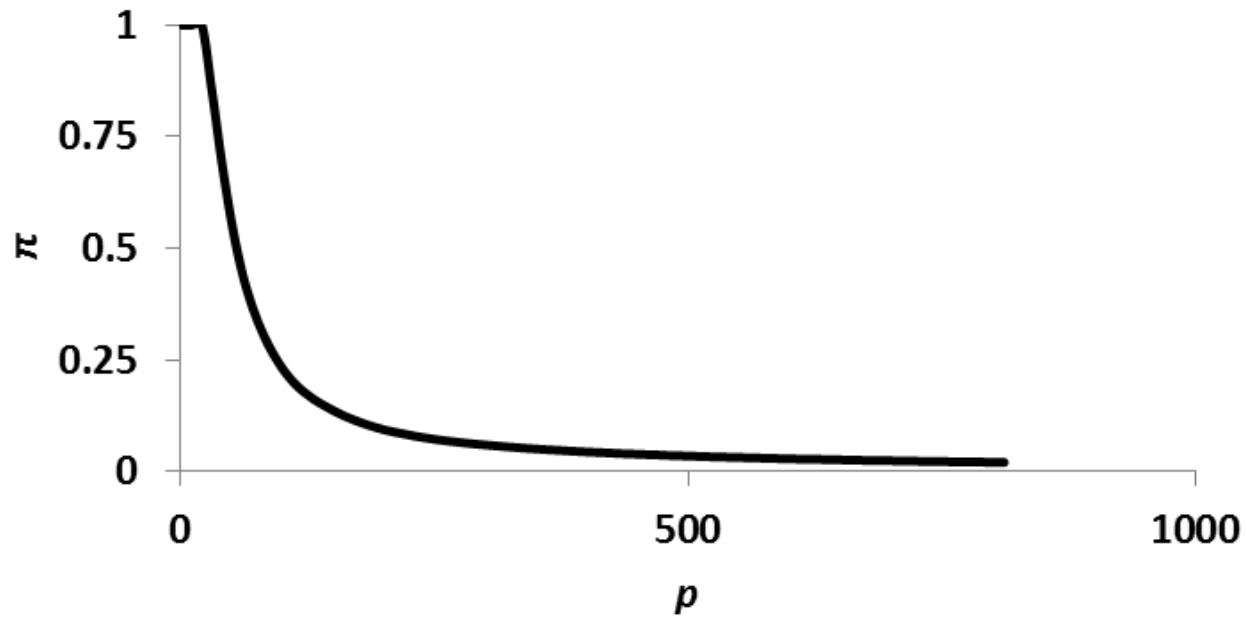
C18: Packets Delivered
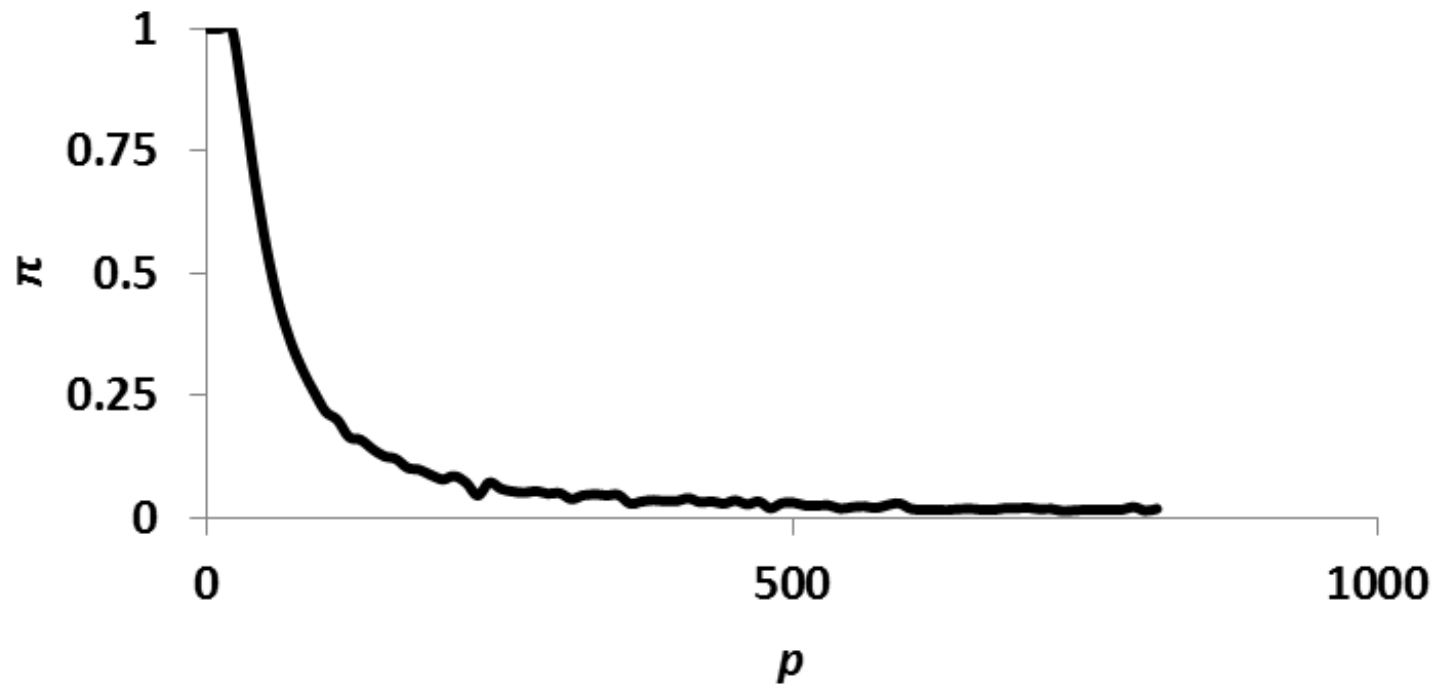
C19: Packets Delivered
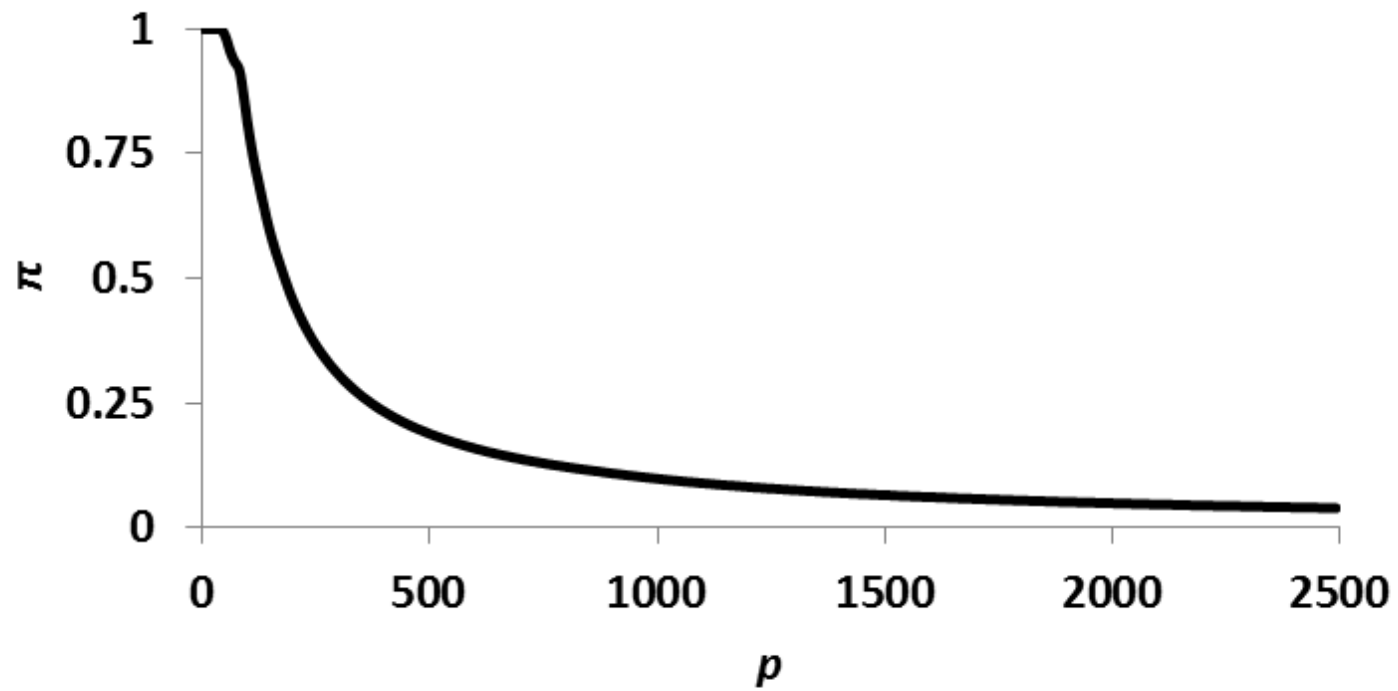
C22: Packets Delivered
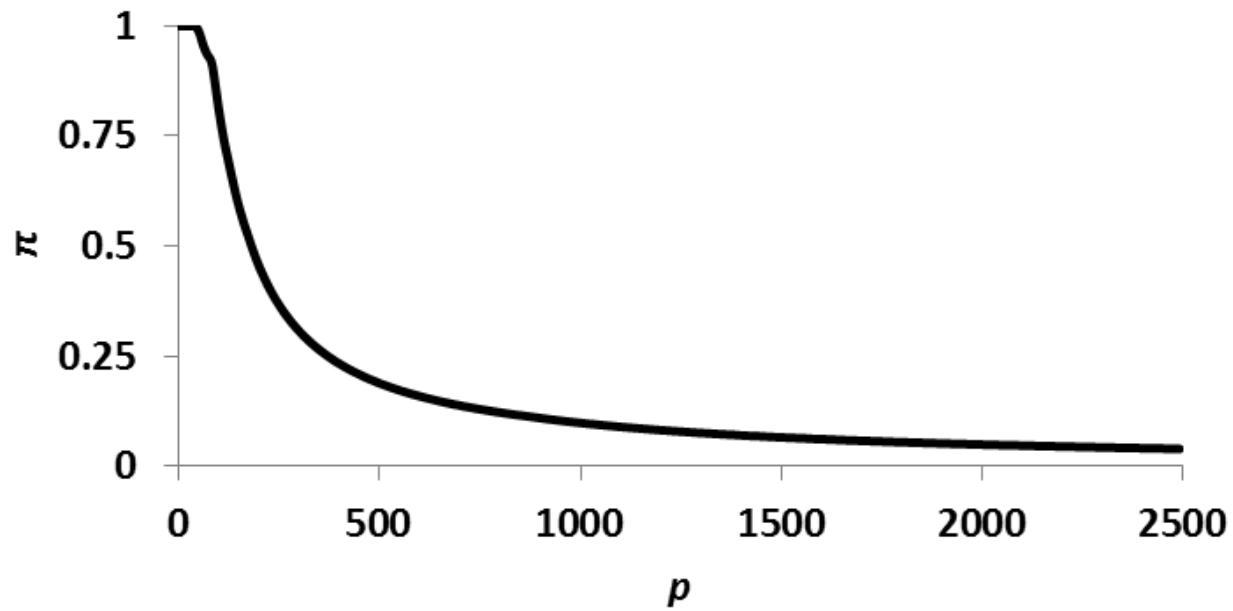
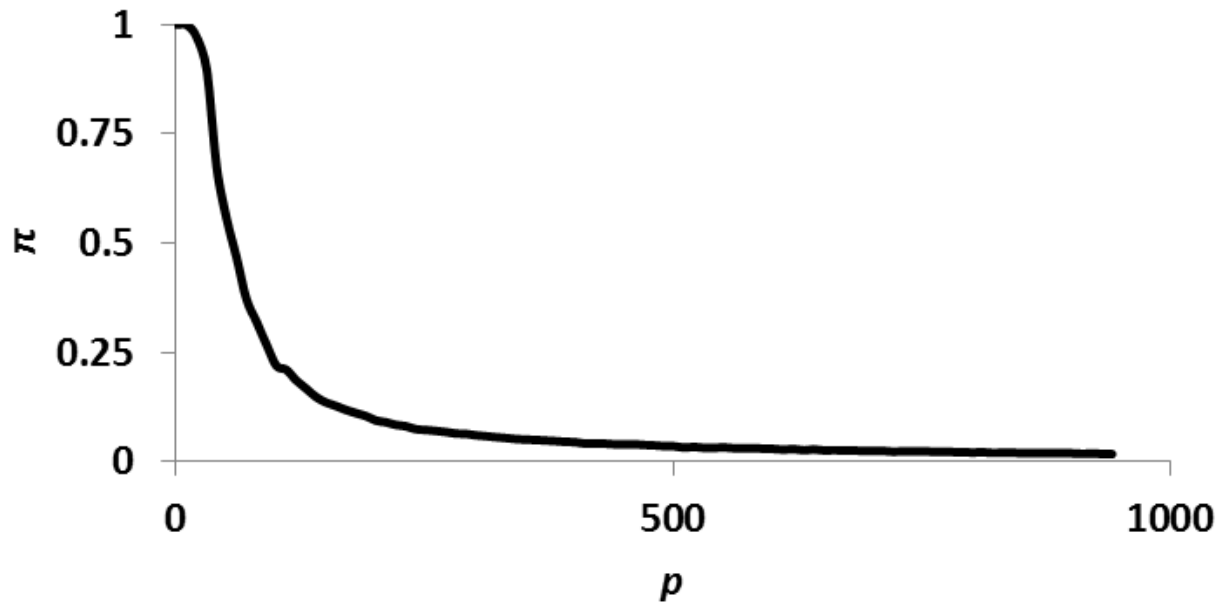# C23: Packets Delivered

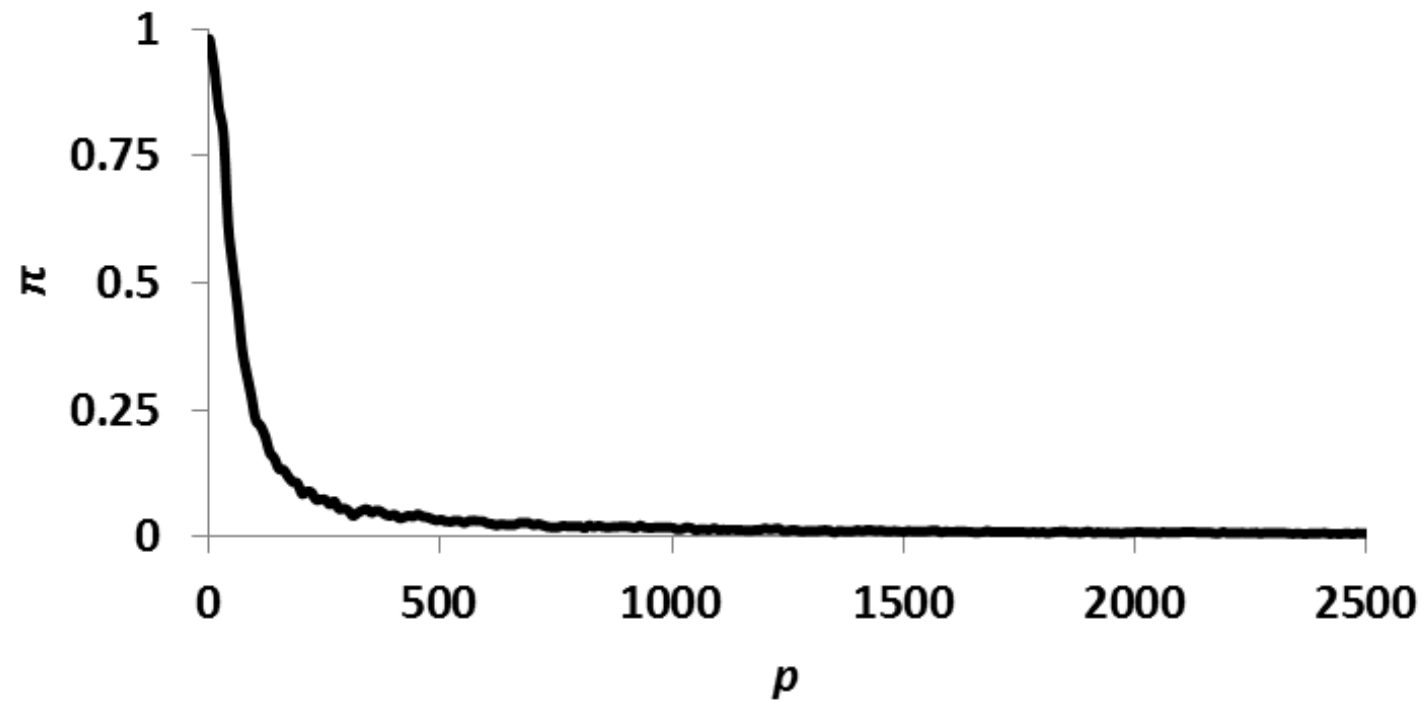C26: Packets Delivered

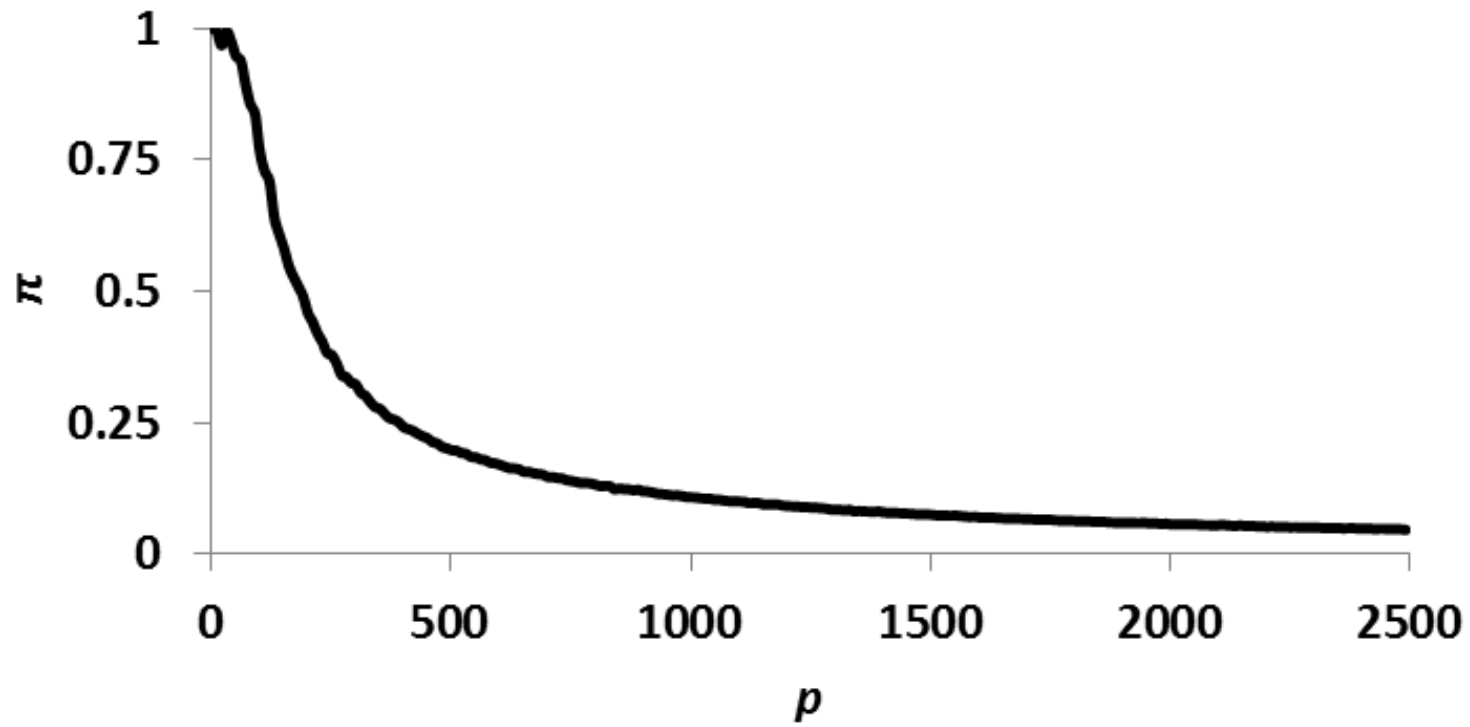# C27: Packets Delivered

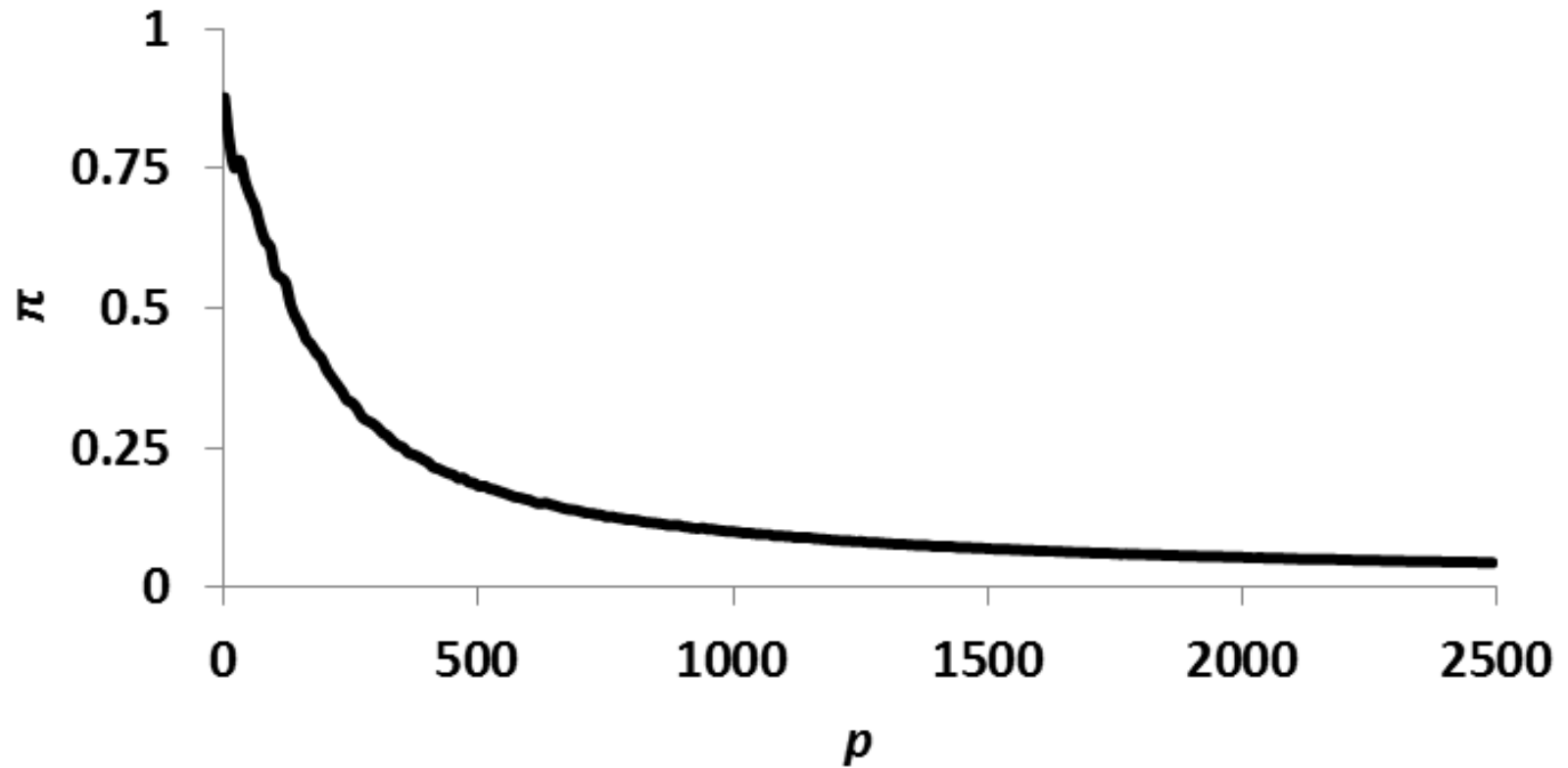C30: Packets Delivered

C31: Packets Delivered
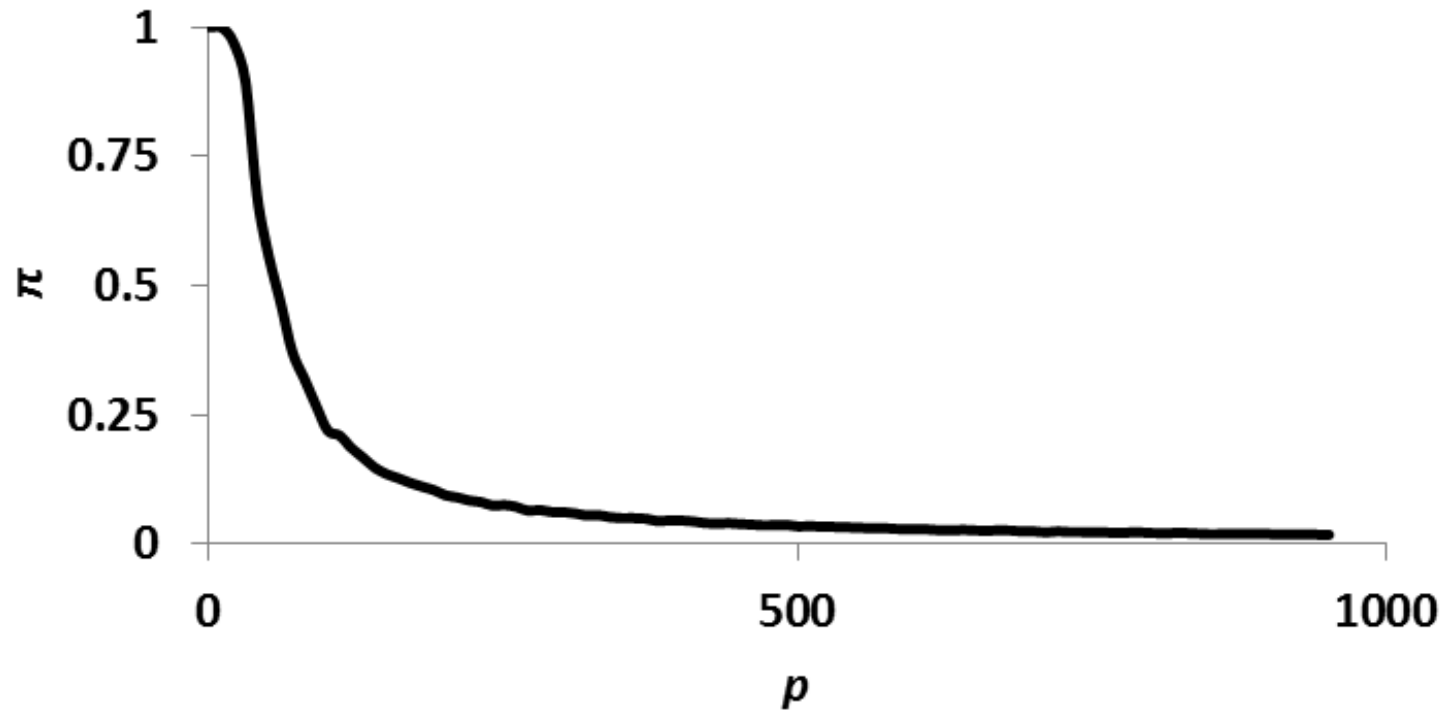
C50: Packets Delivered
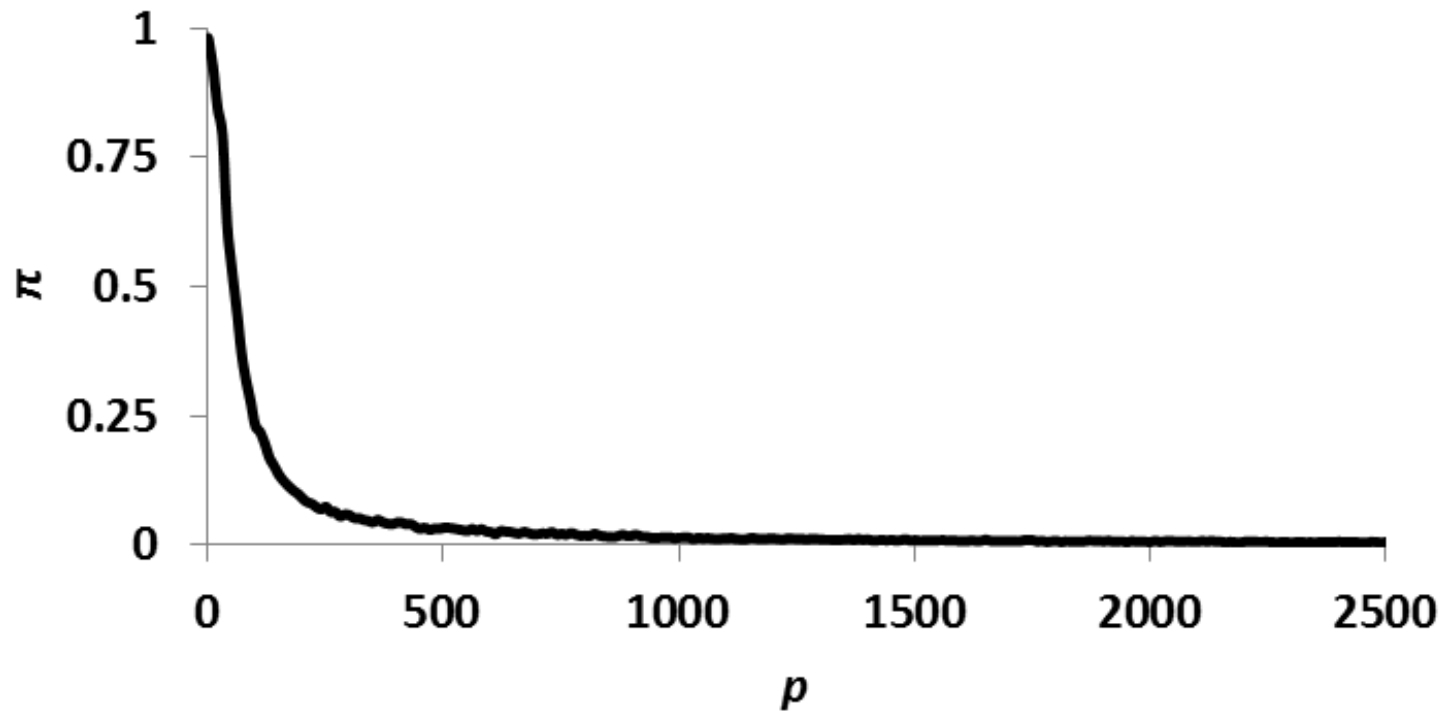
C51: Packets Delivered
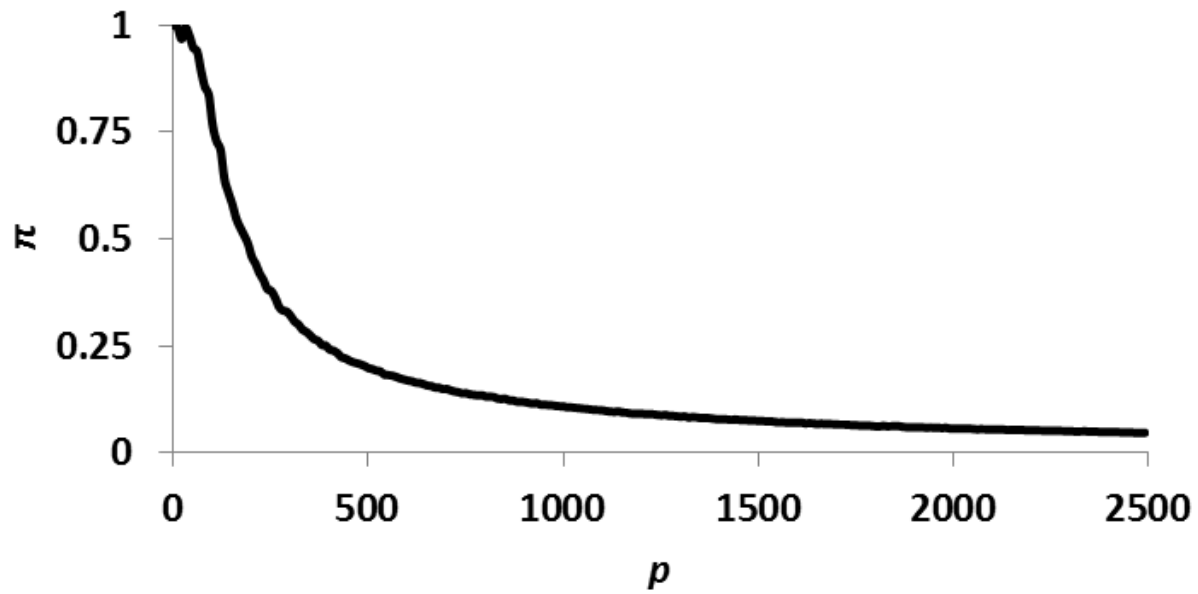
C54: Packets Delivered
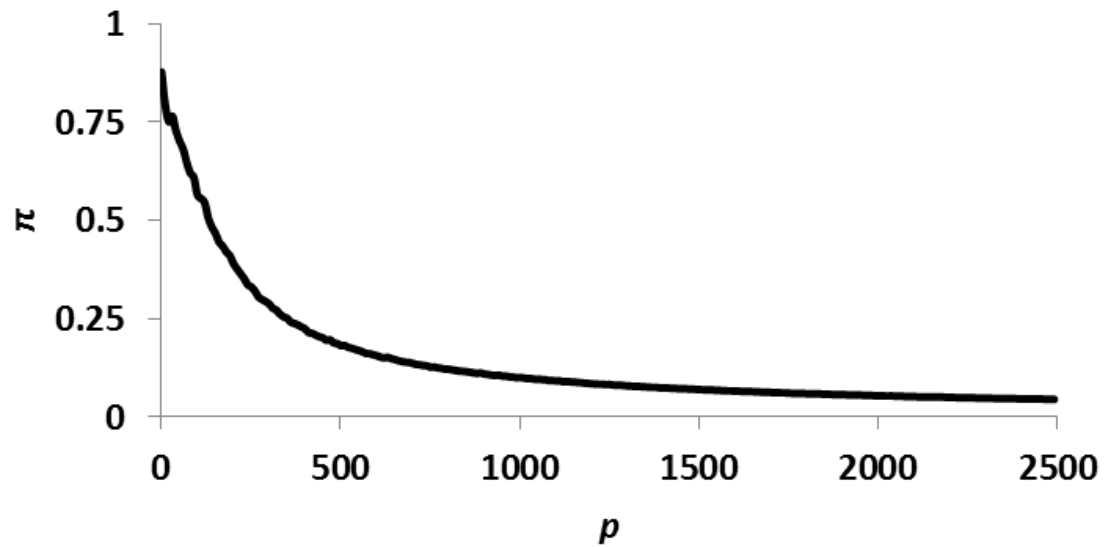
C55: Packets Delivered
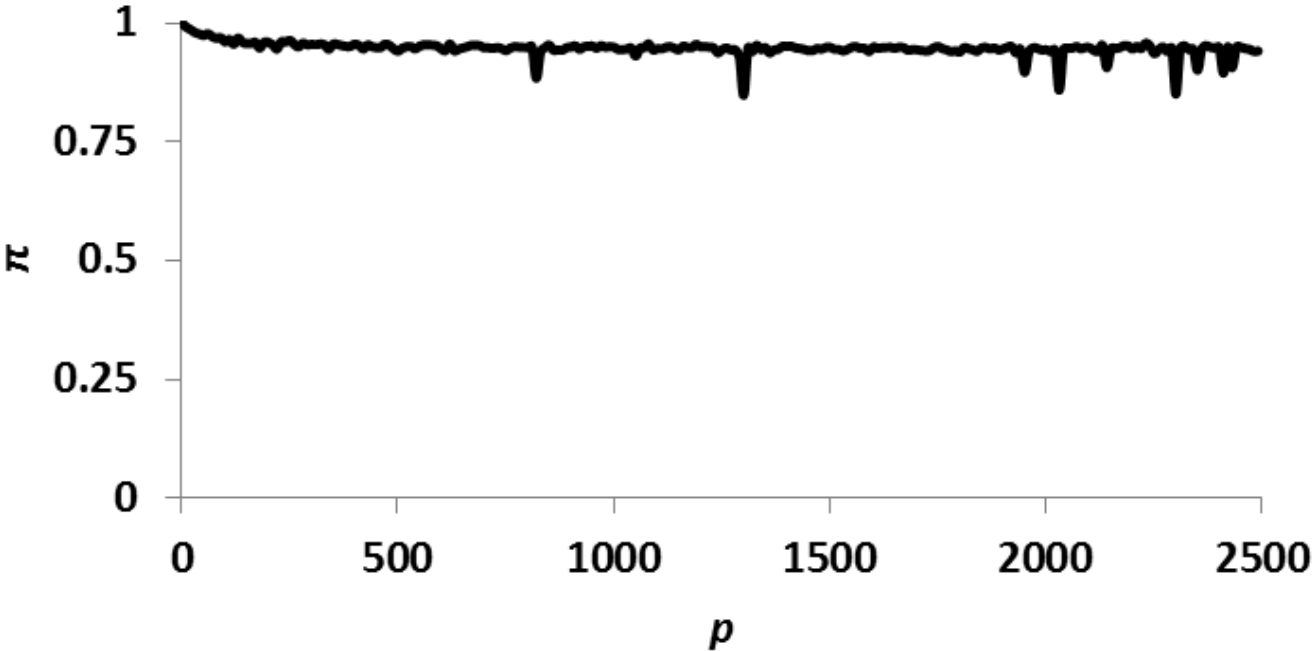
C58: Packets Delivered
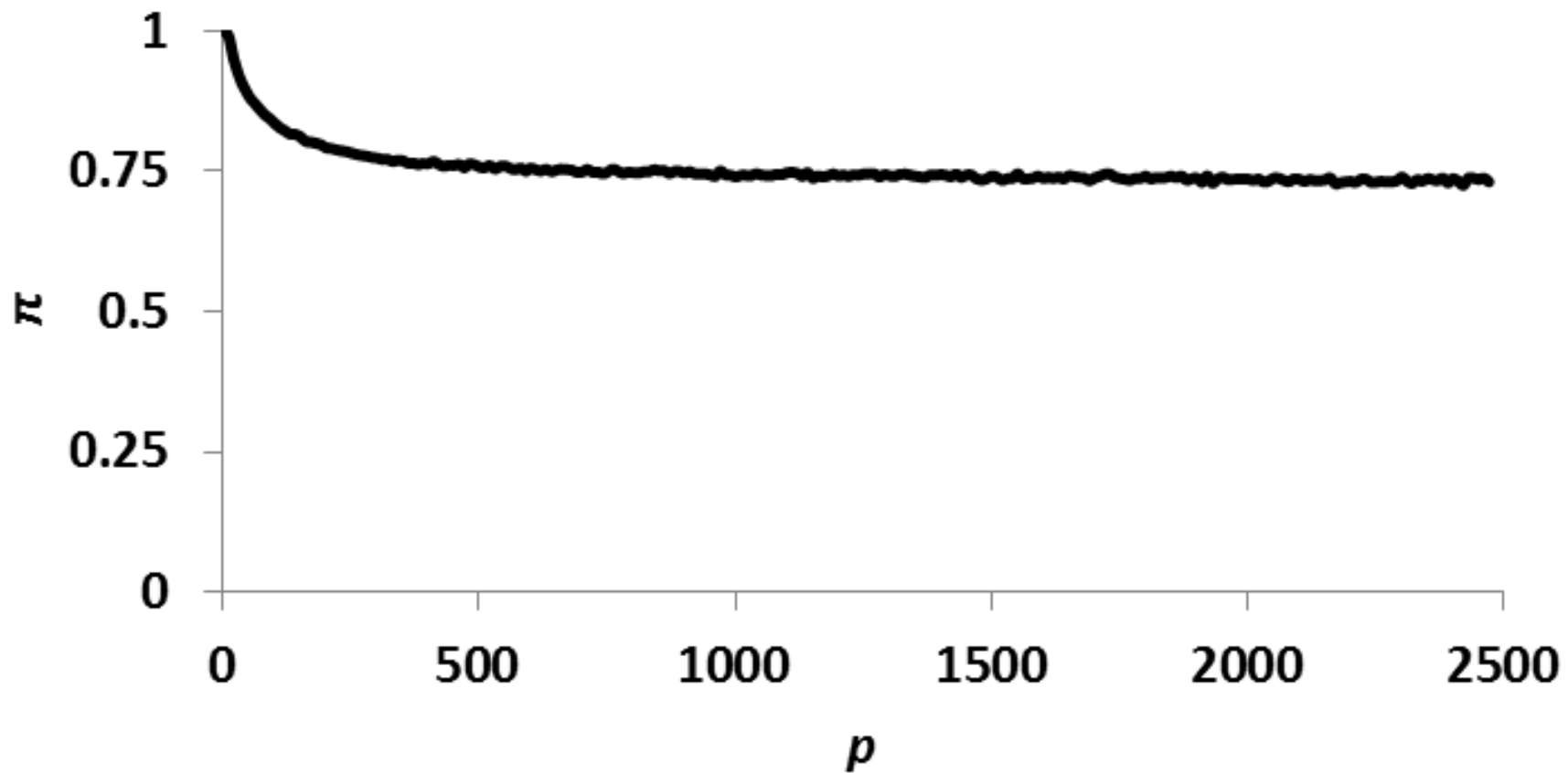
C59: Packets Delivered
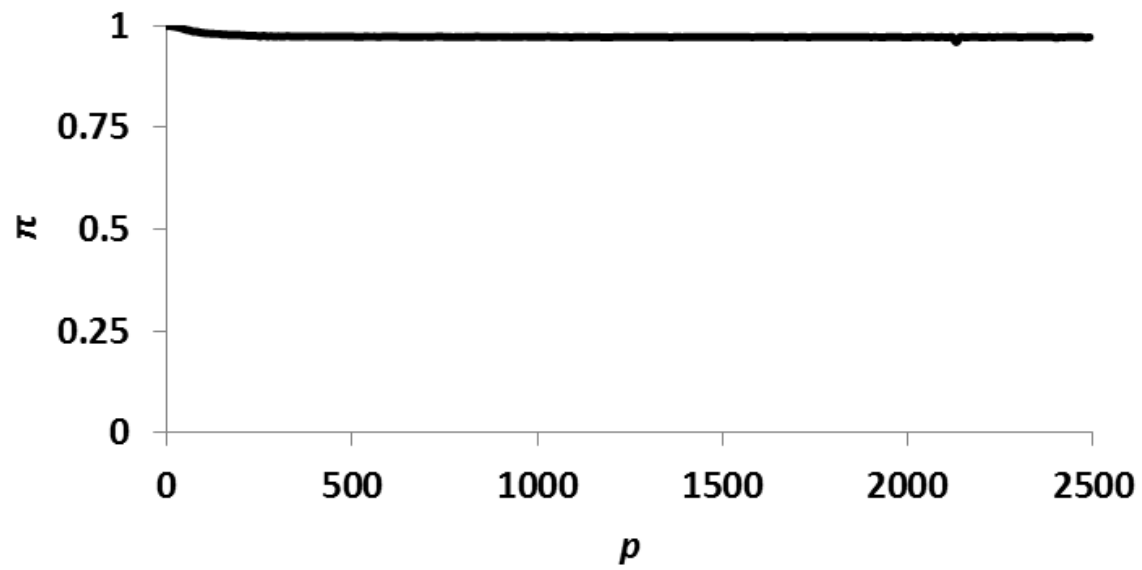
C62: Packets Delivered
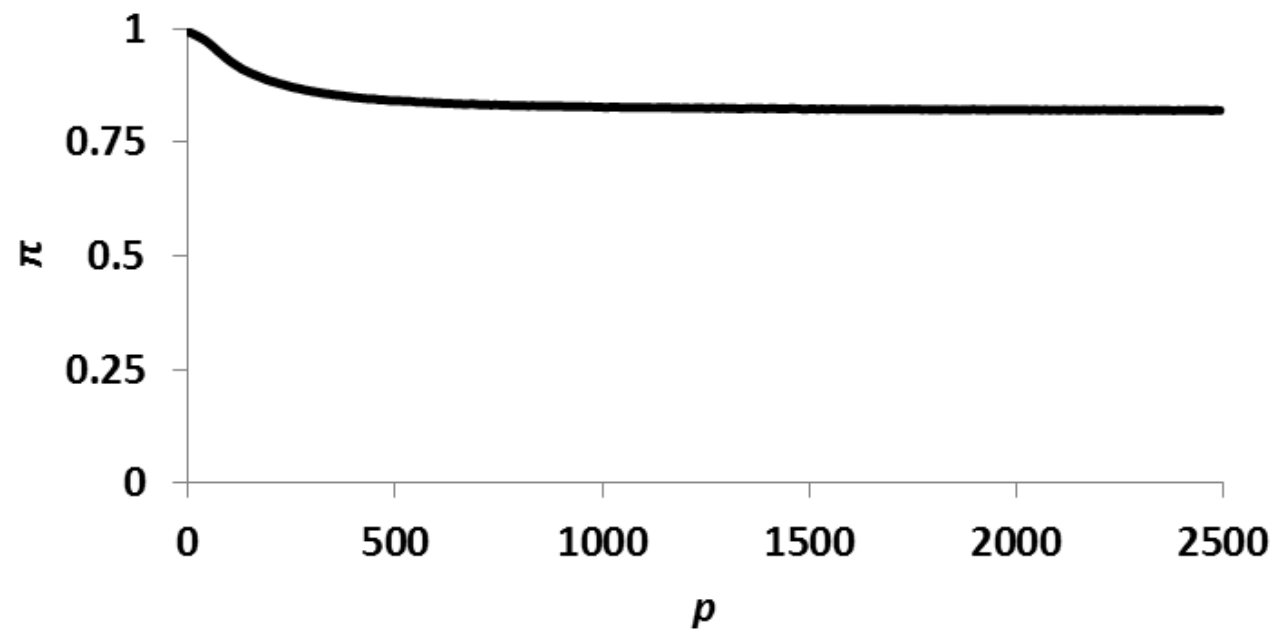
C63: Packets Delivered
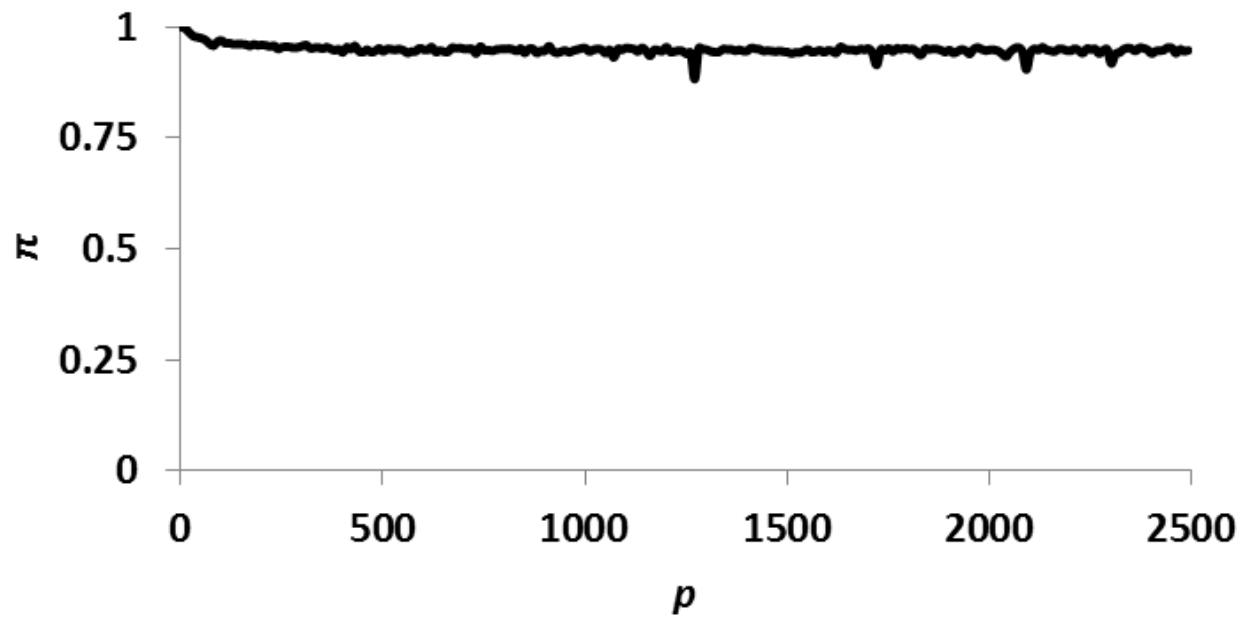
C114: Packets Delivered
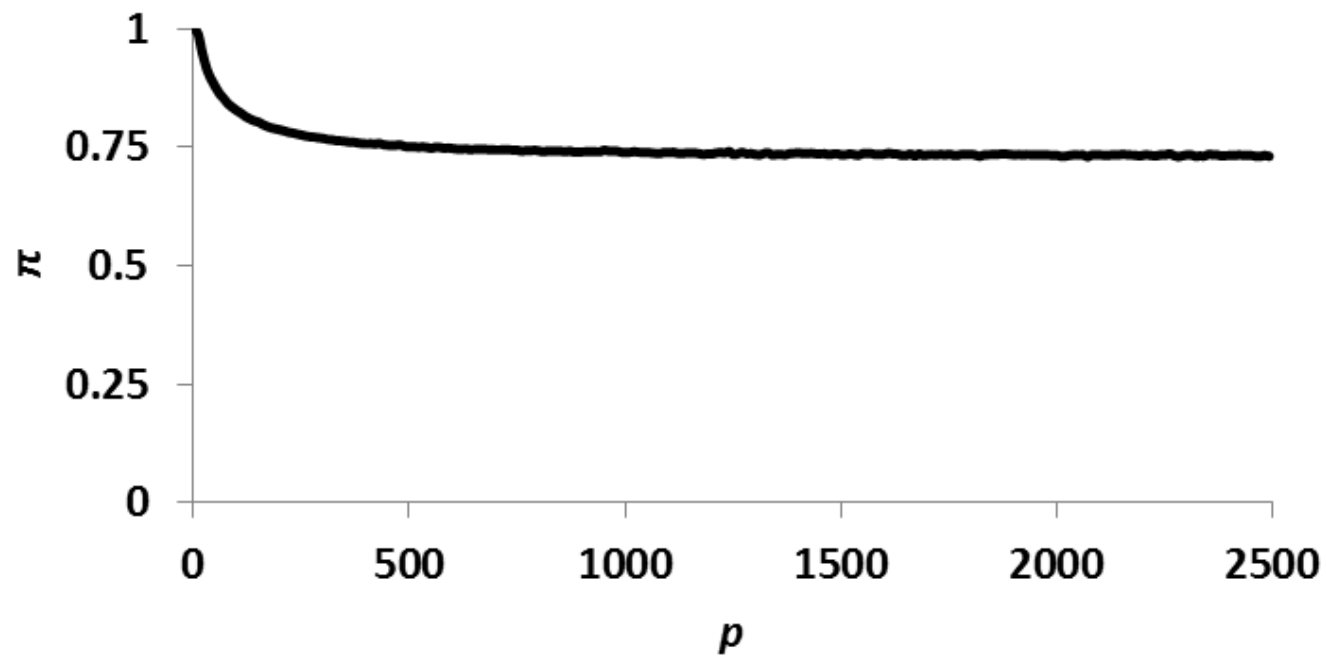
C115: Packets Delivered
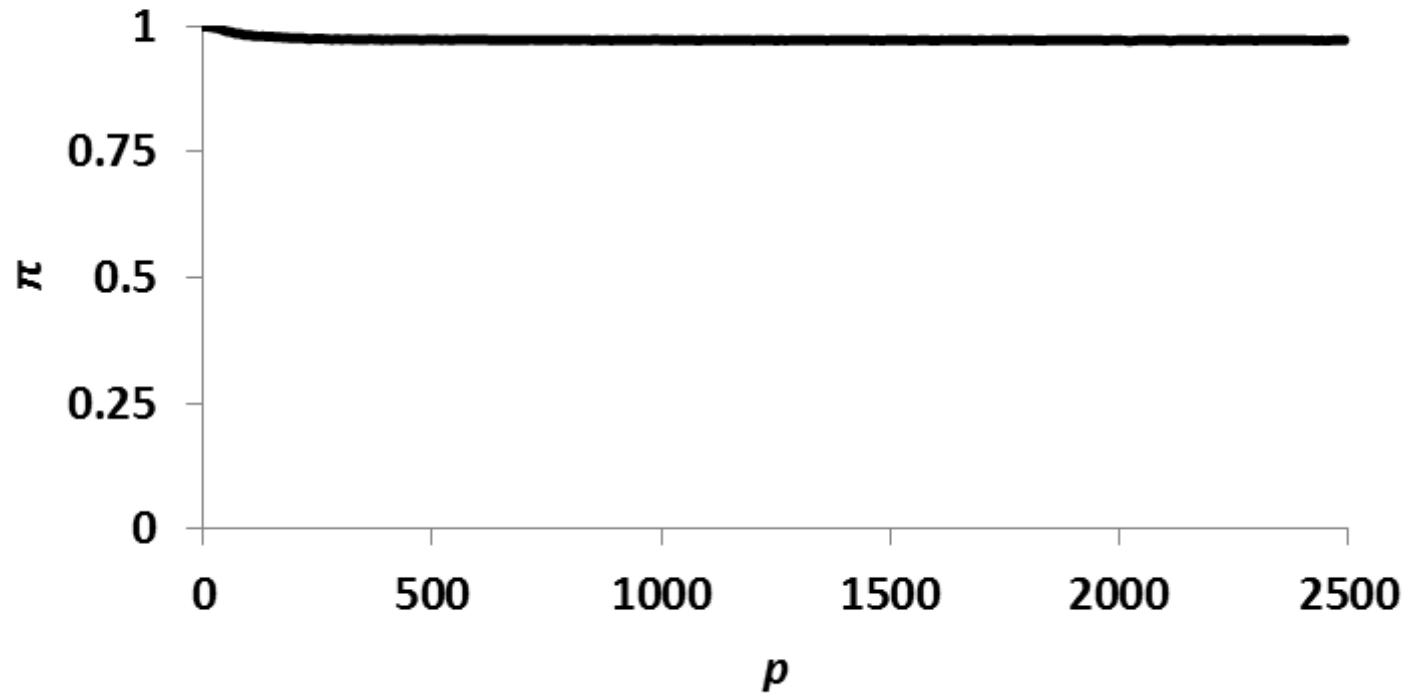
C118: Packets Delivered
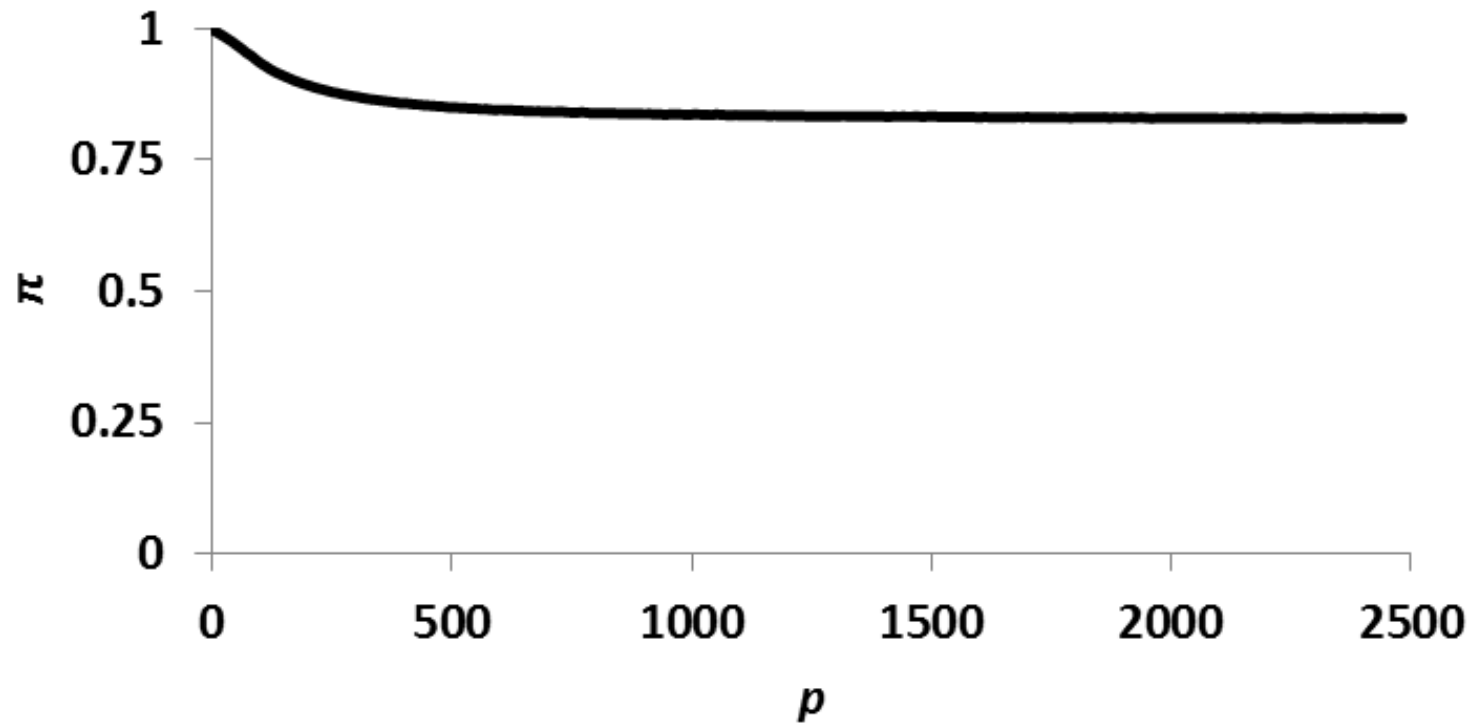
C119: Packets Delivered

C122: Packets Delivered

C123: Packets Delivered
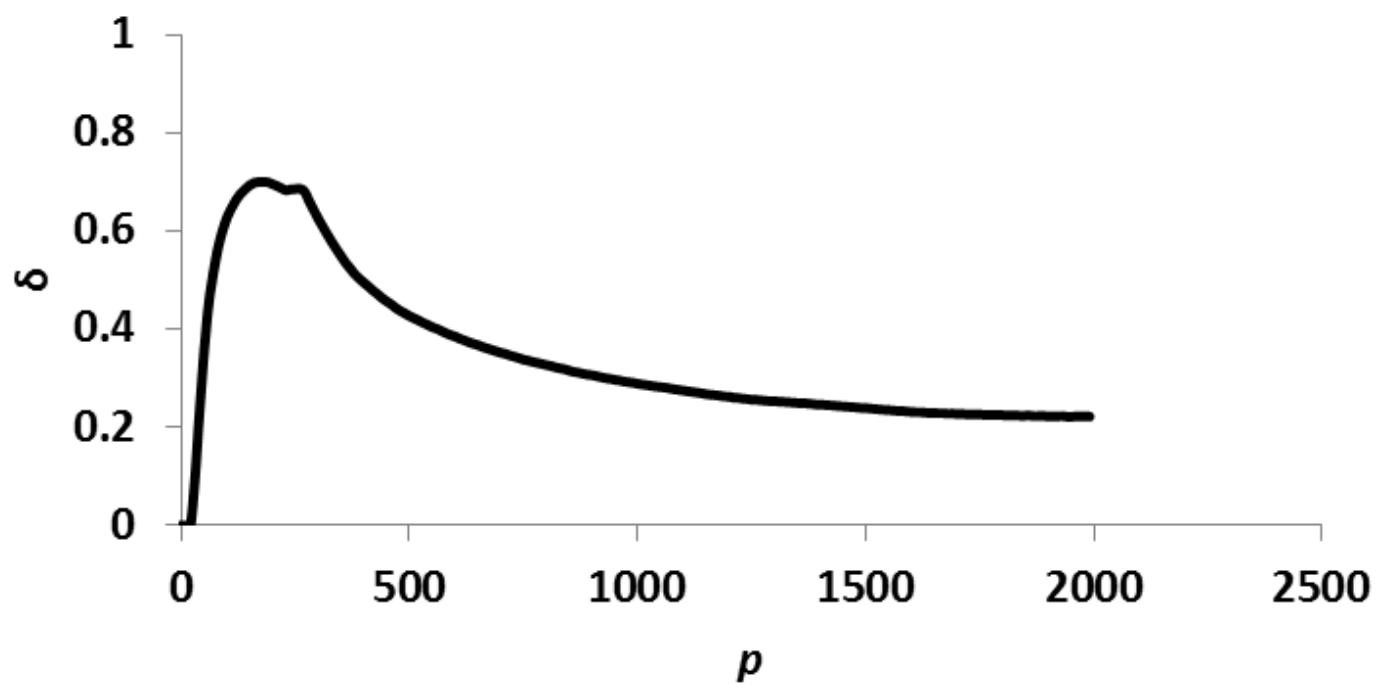
C126: Packets Delivered
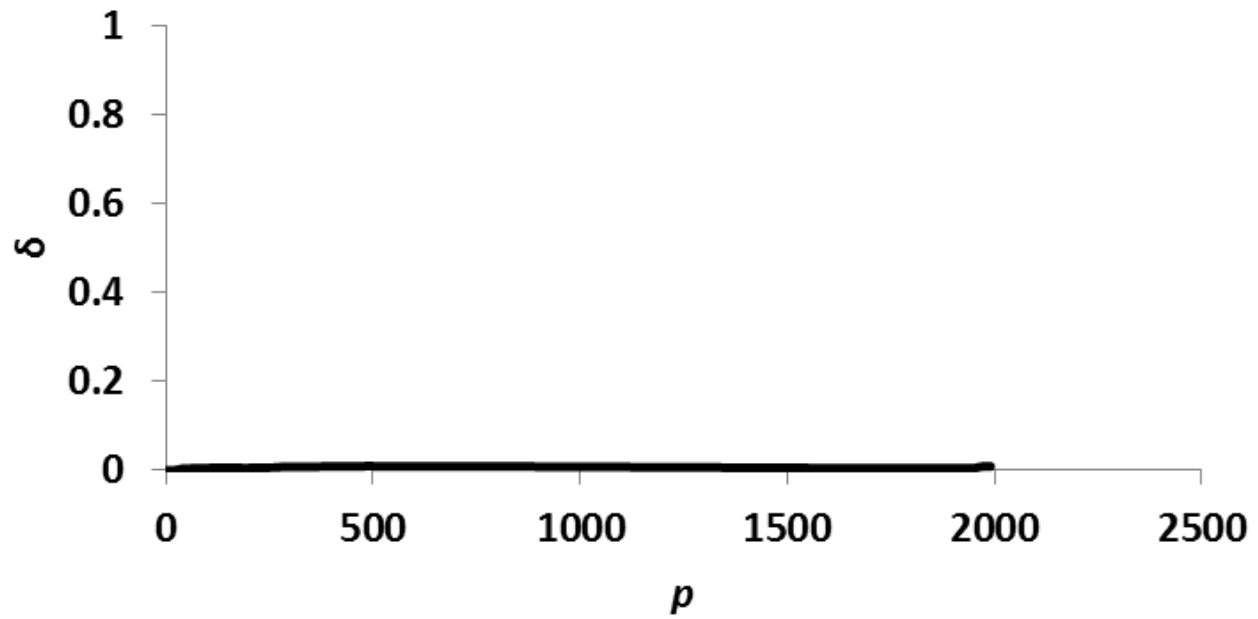
C127: Packets Delivered

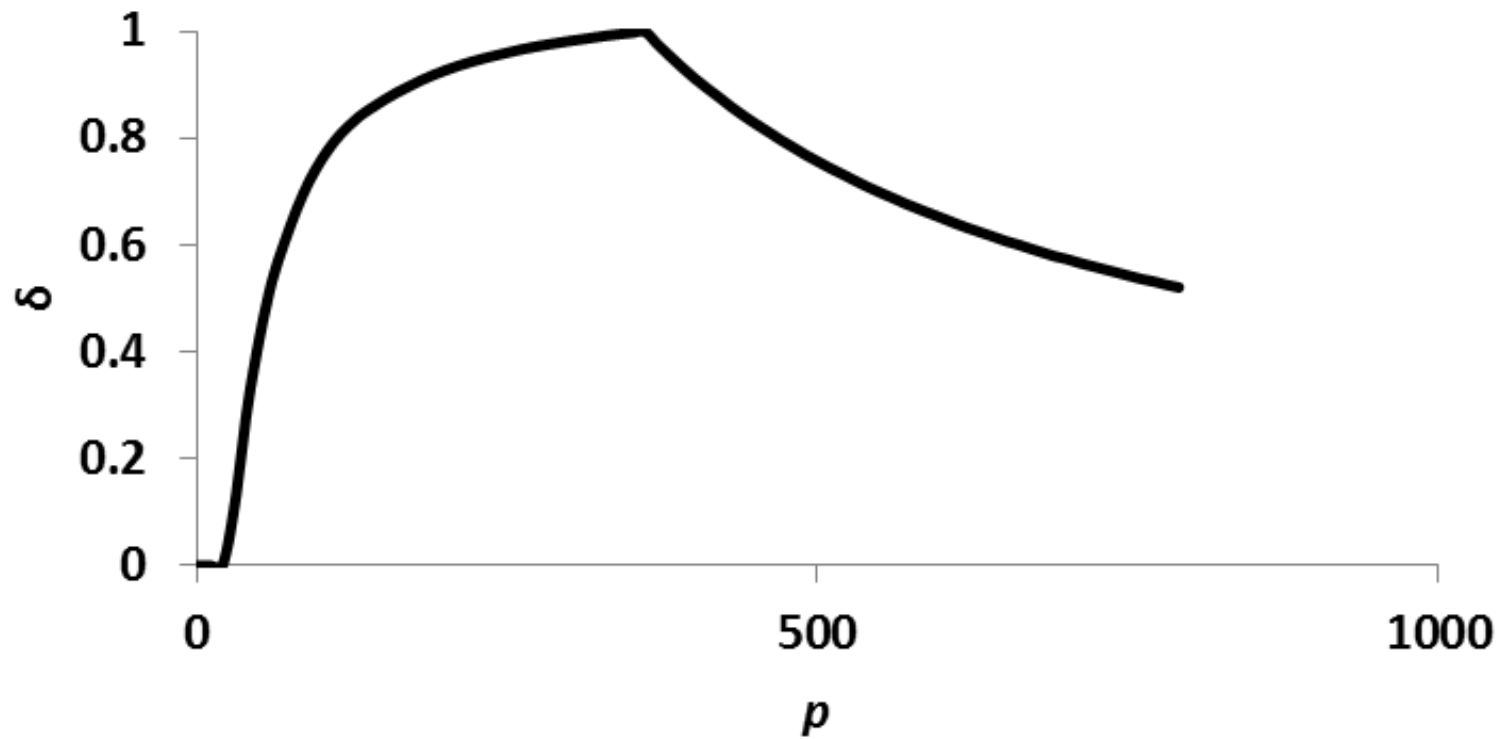# Graphs for Packet Delivery Efficiency (δ)
(Dabrowski & Mills NIST)
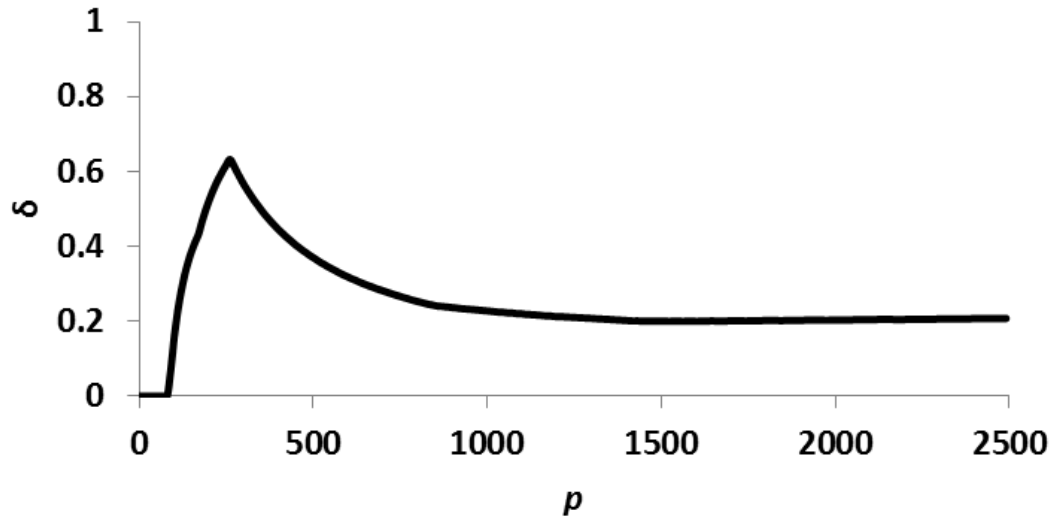
C0: Packet Delay
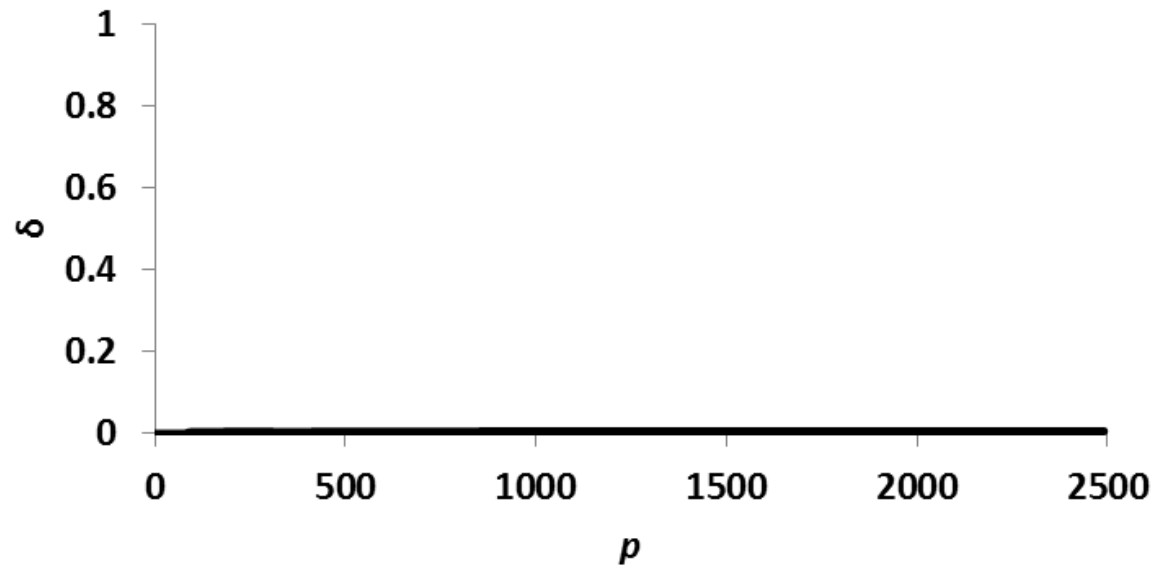
C1: Packet Delay

C2: Packet Delay

C3: Packet Delay
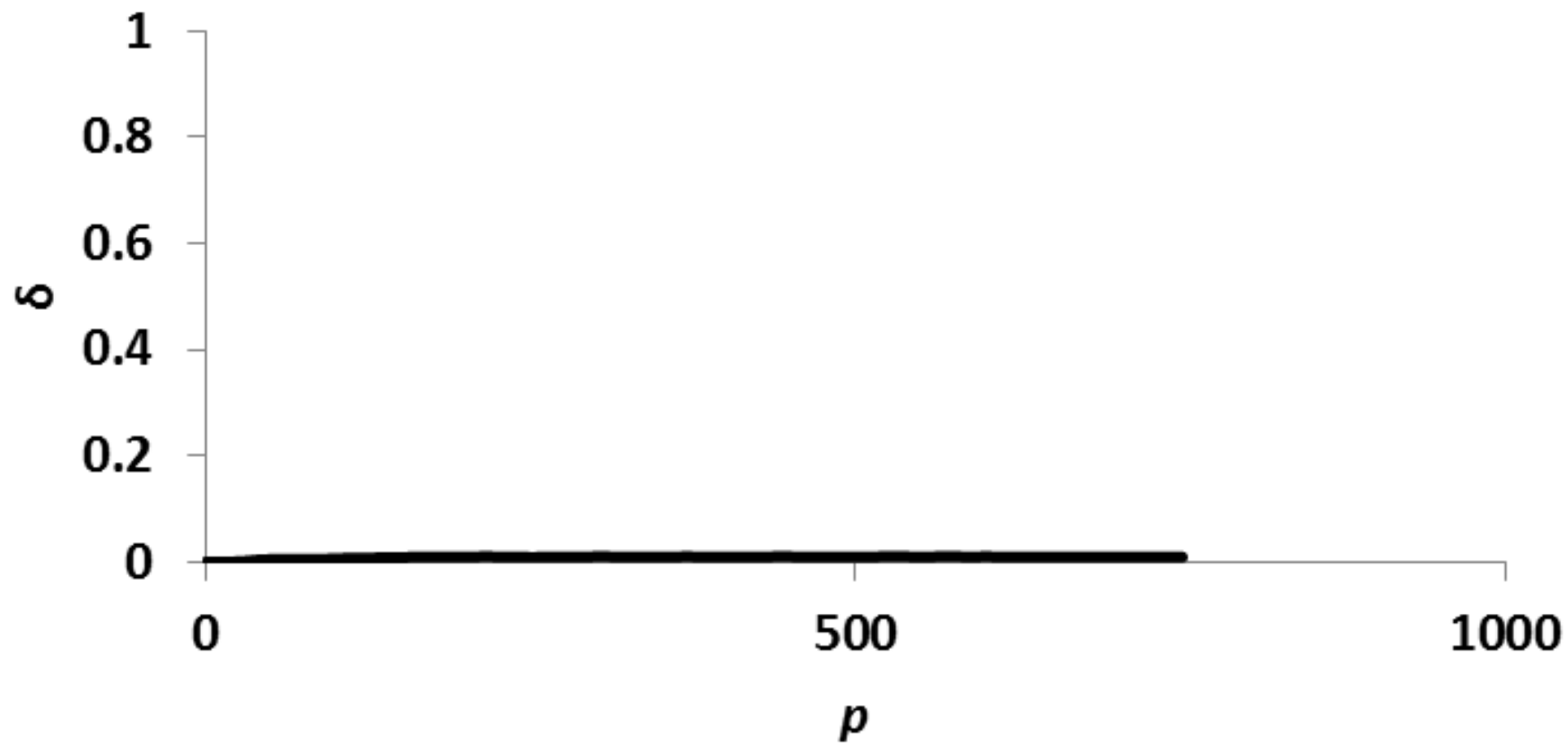
C6: Packet Delay

C7: Packet Delay

C10: Packet Delay

C11: Packet Delay

C14: Packet Delay

C15: Packet Delay

C18: Packet Delay
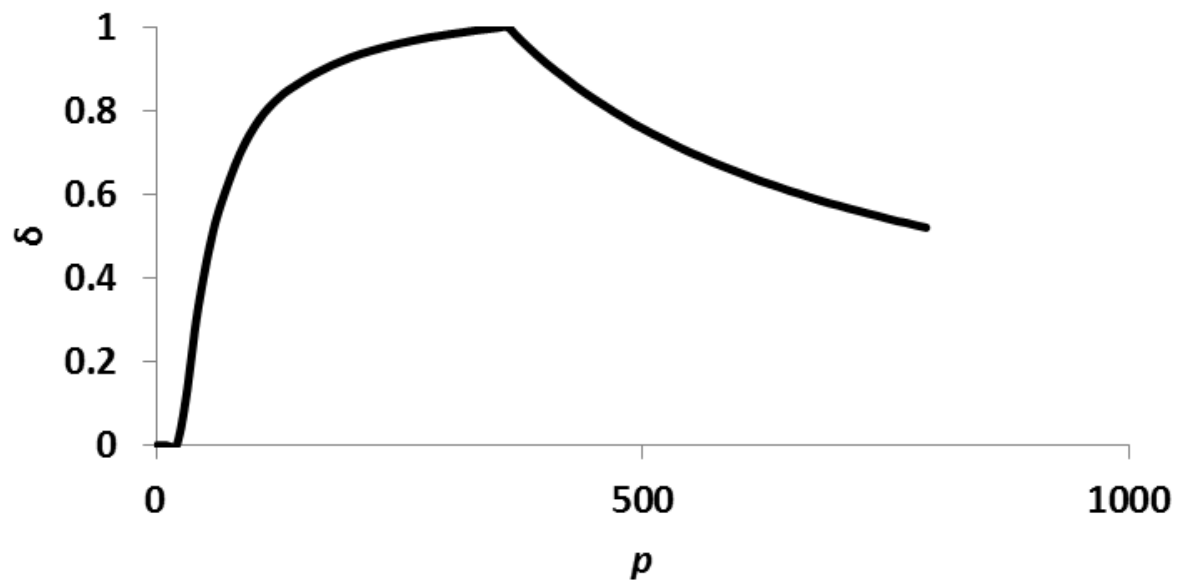
C19: Packet Delay

C22: Packet Delay

C23: Packet Delay
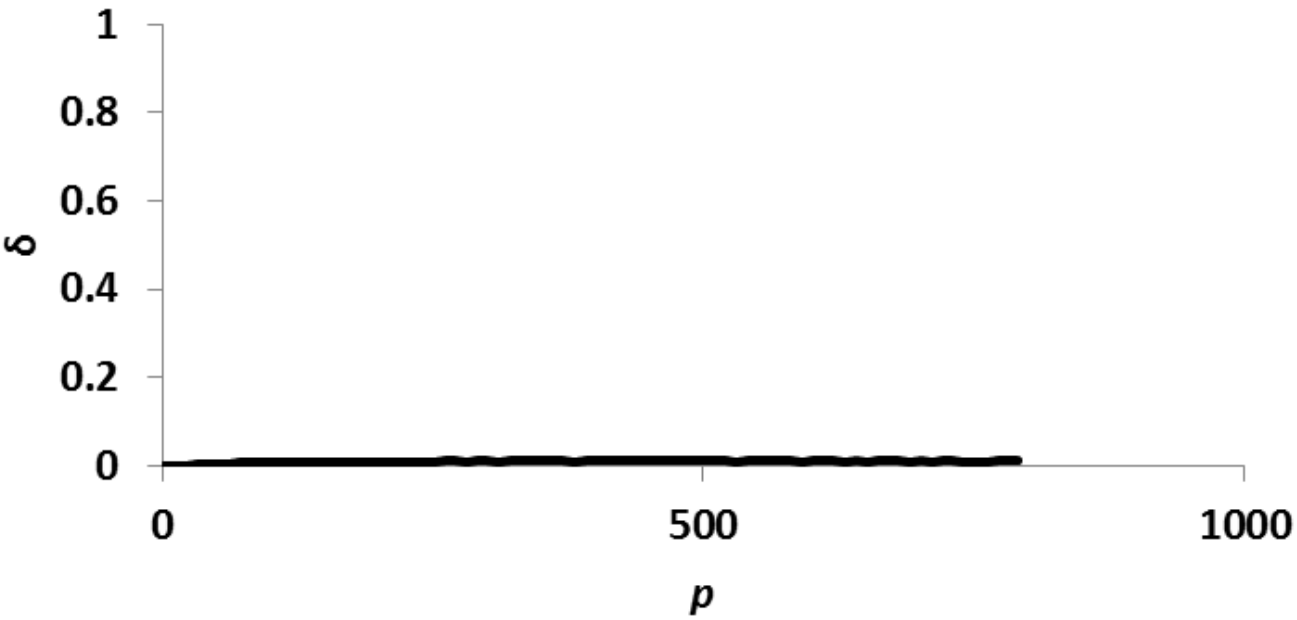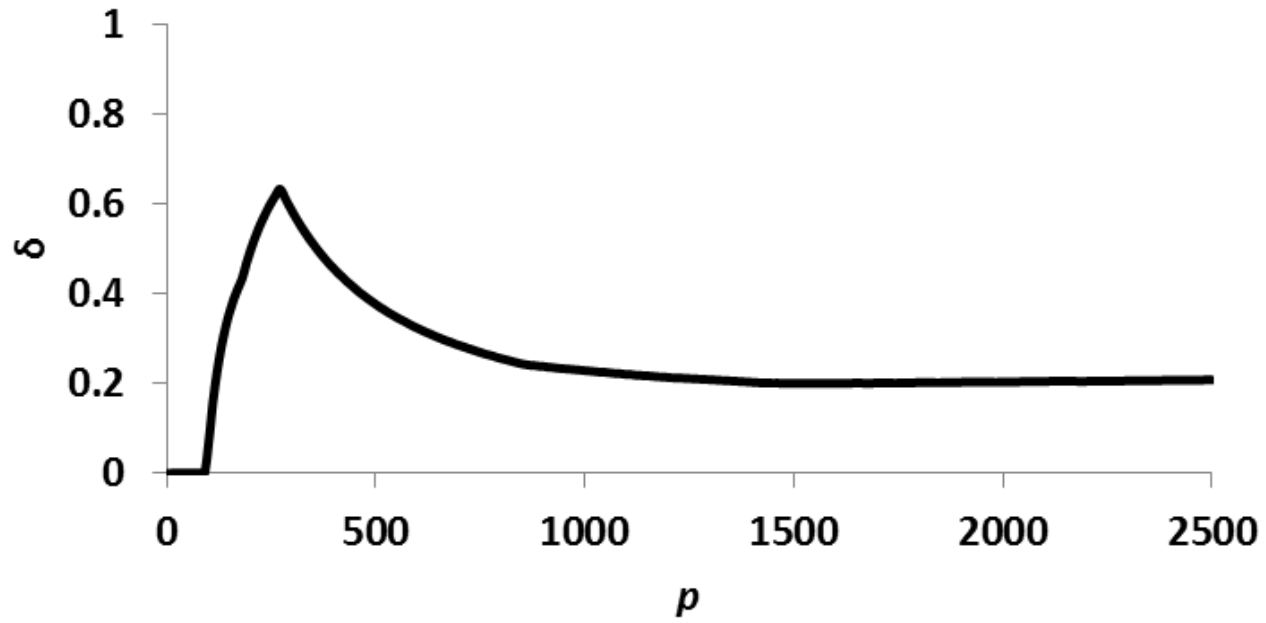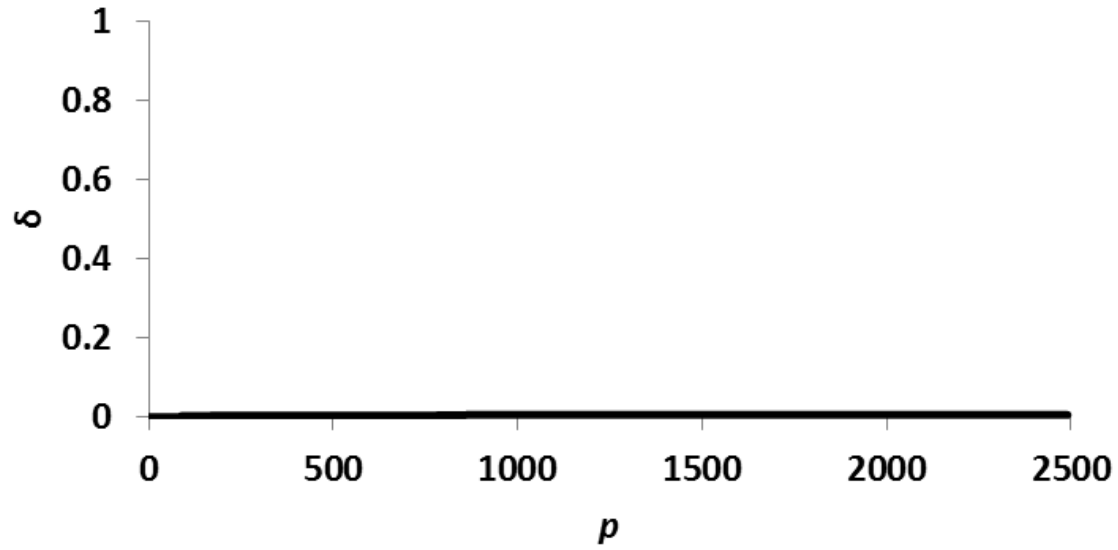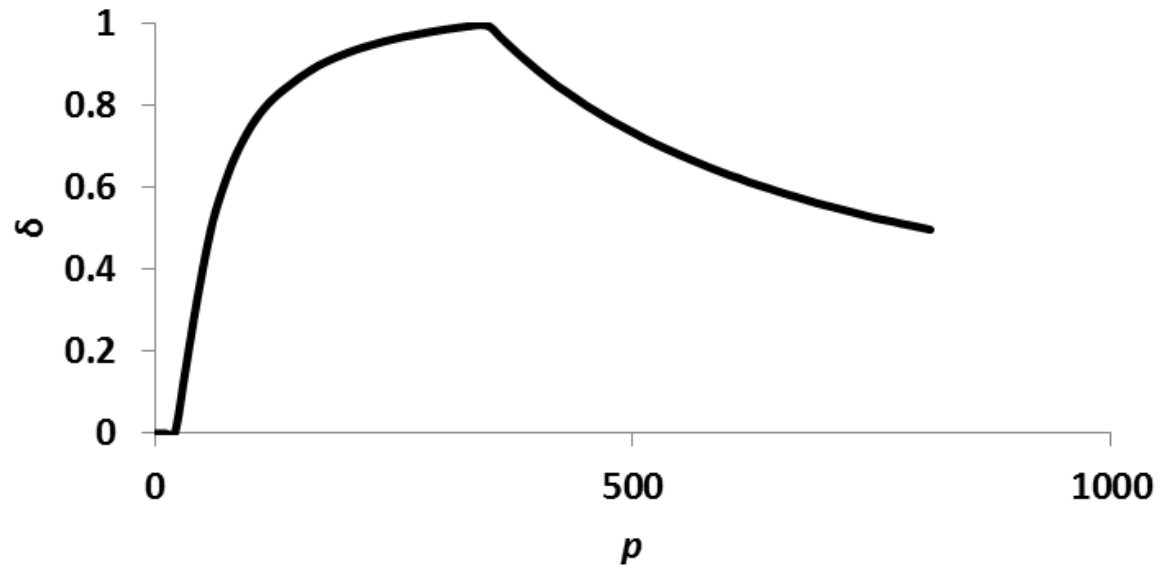
C26: Packet Delay

C27: Packet Delay

C30: Packet Delay

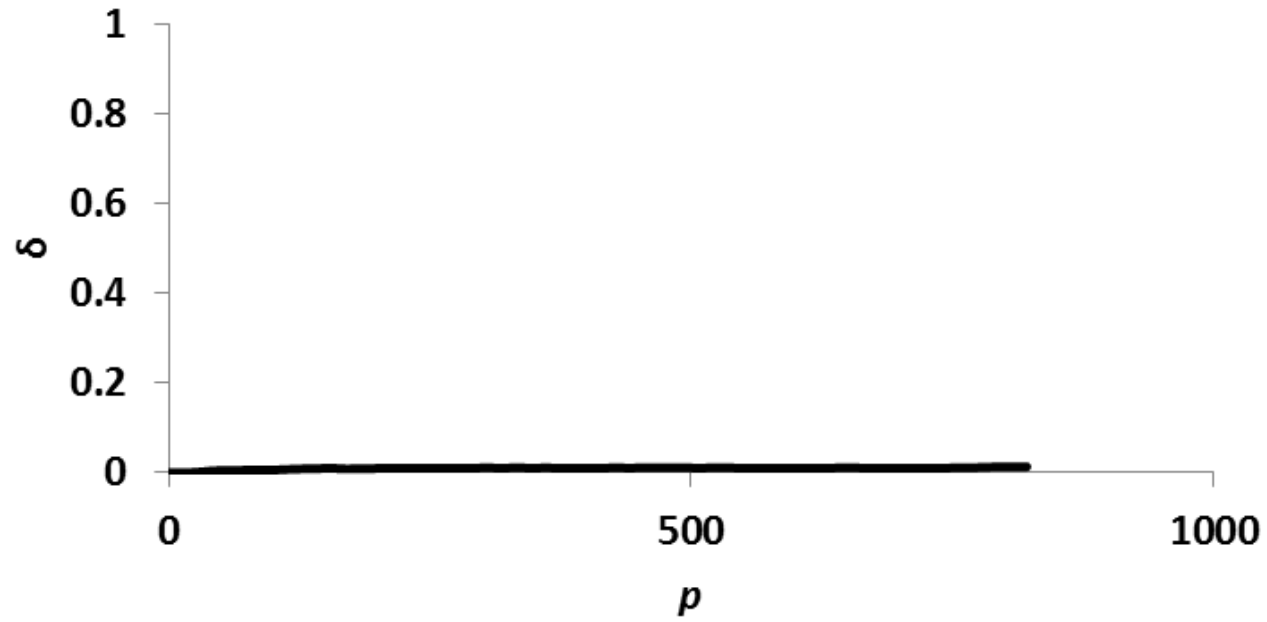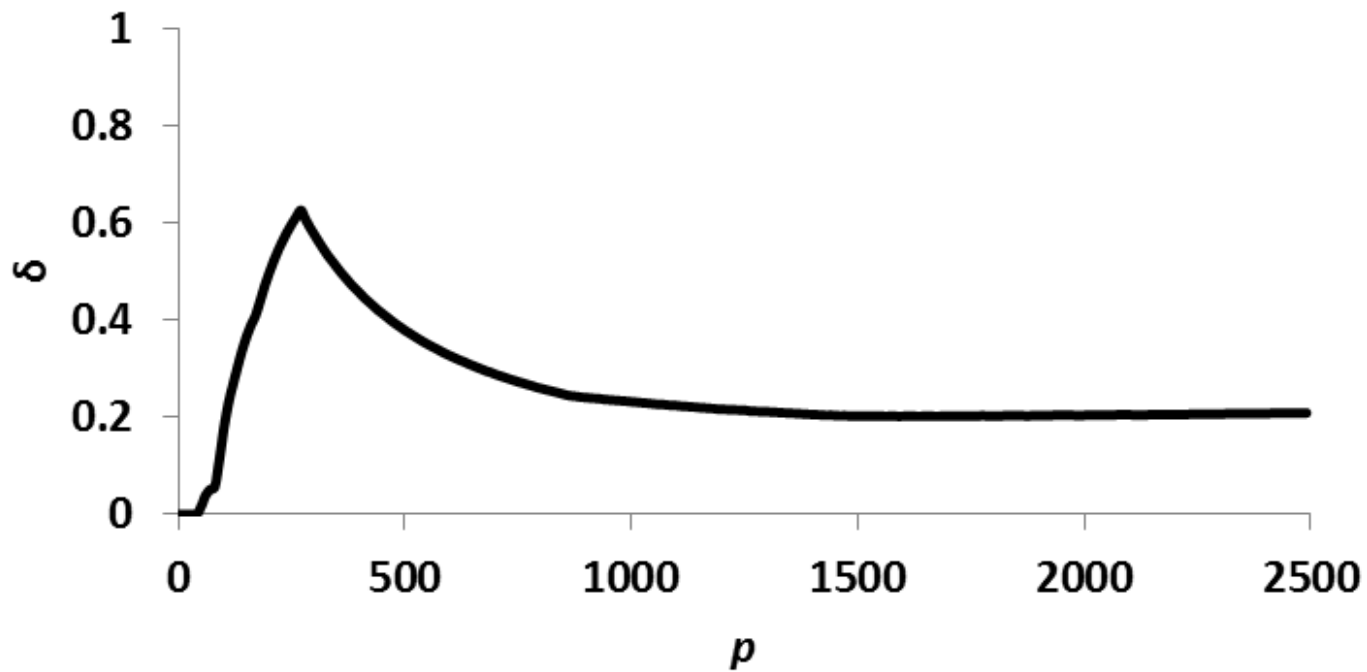**C31: Packet Delay**

C50: Packet Delay

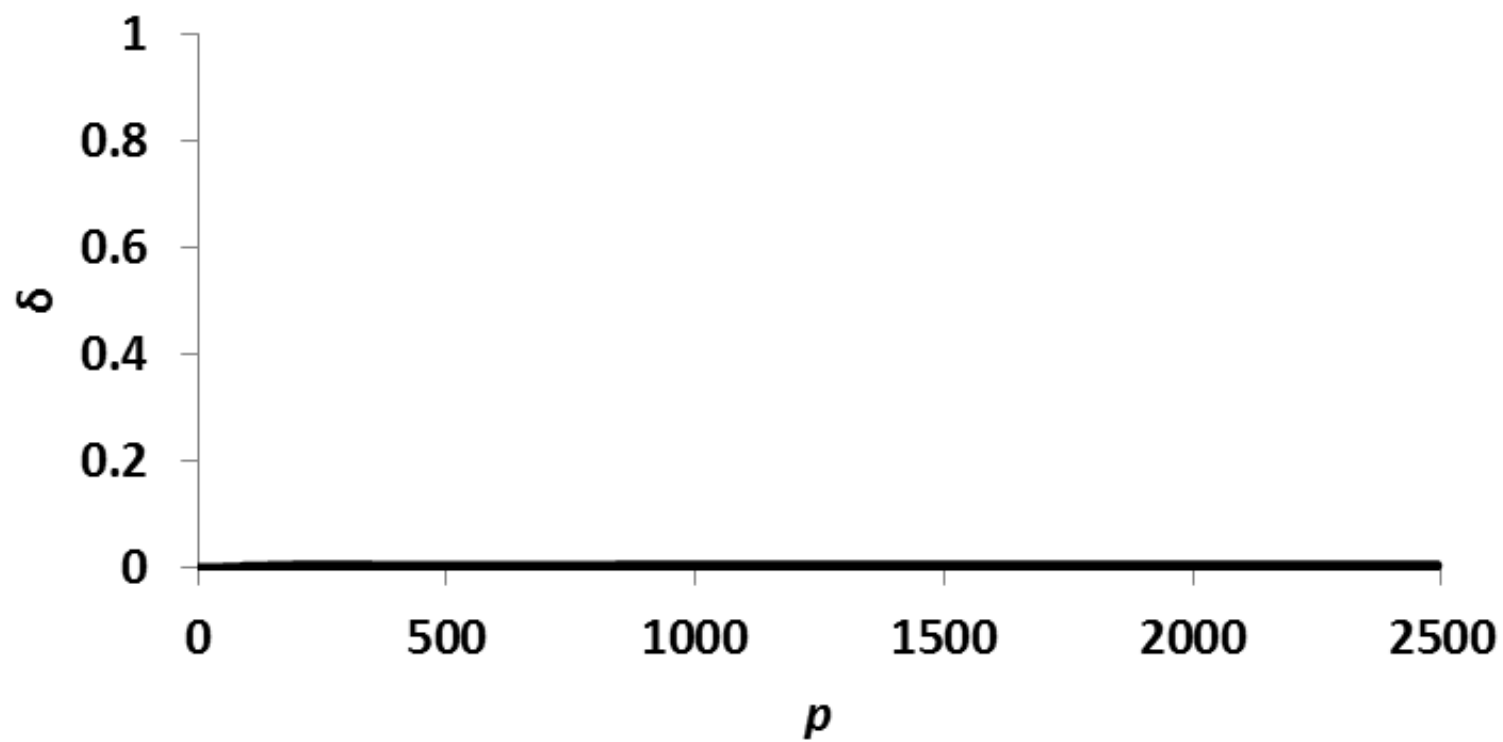# C51: Packet Delay

C54: Packet Delay

C55: Packet Delay

C58: Packet Delay

C59: Packet Delay

C62: Packet Delay

C63: Packet Delay

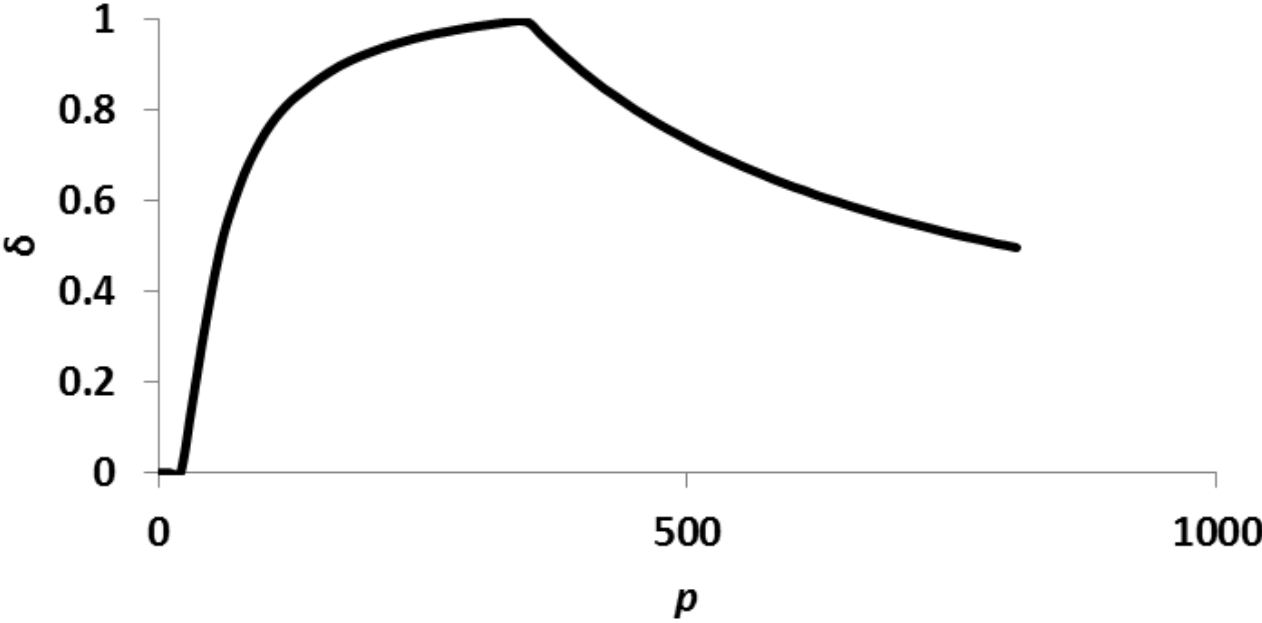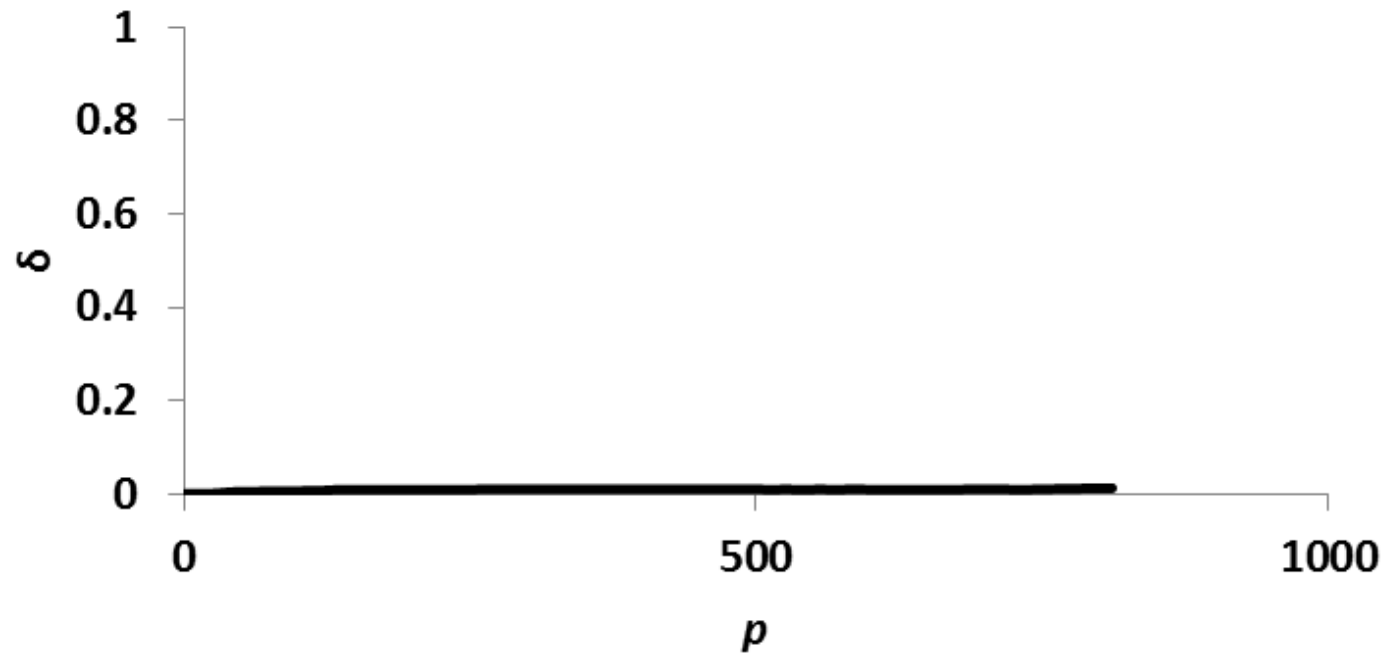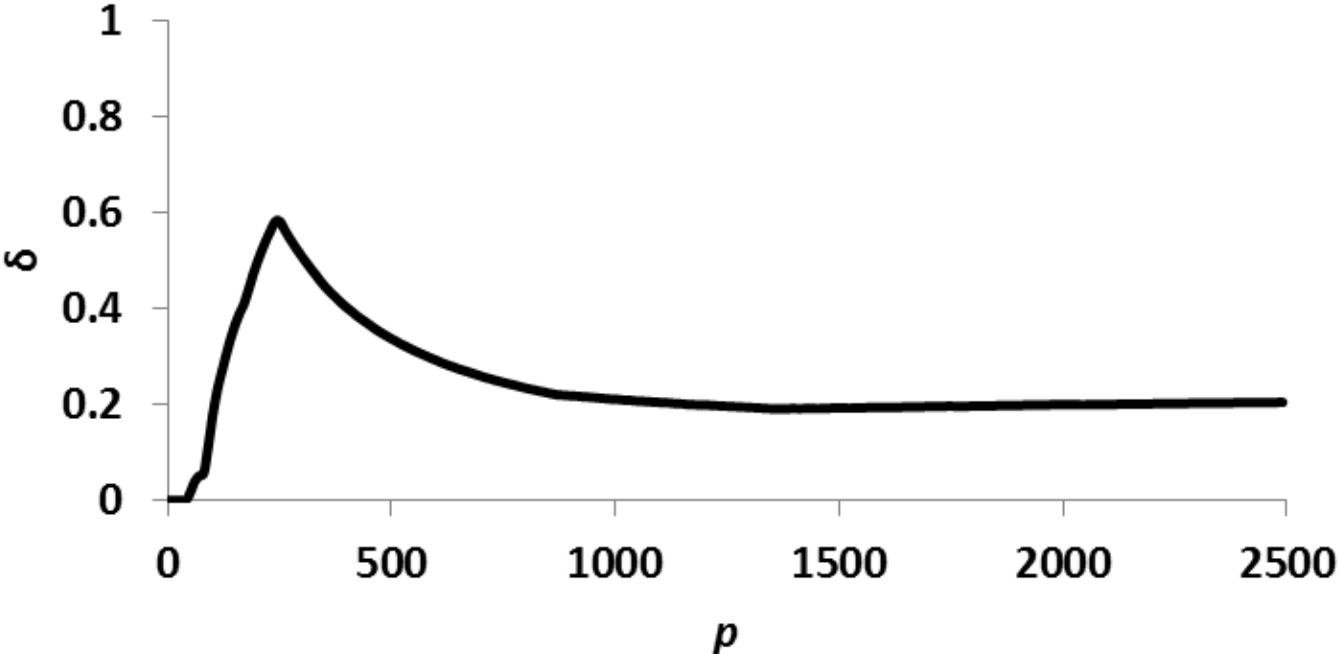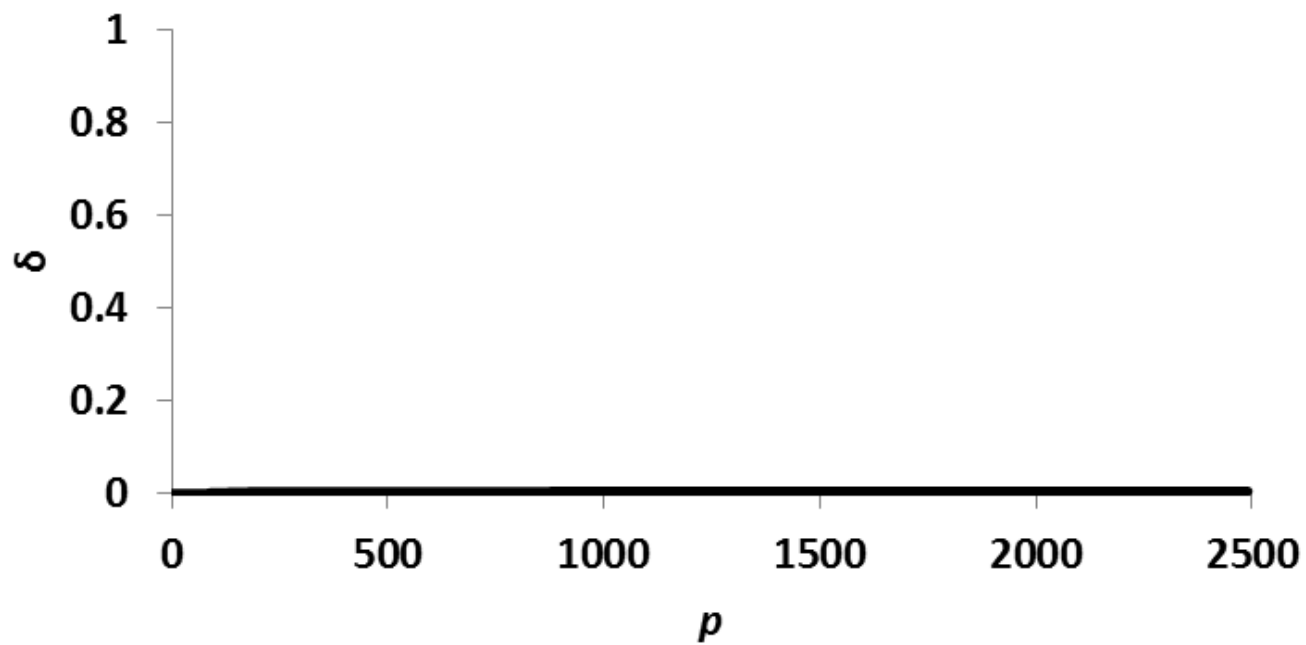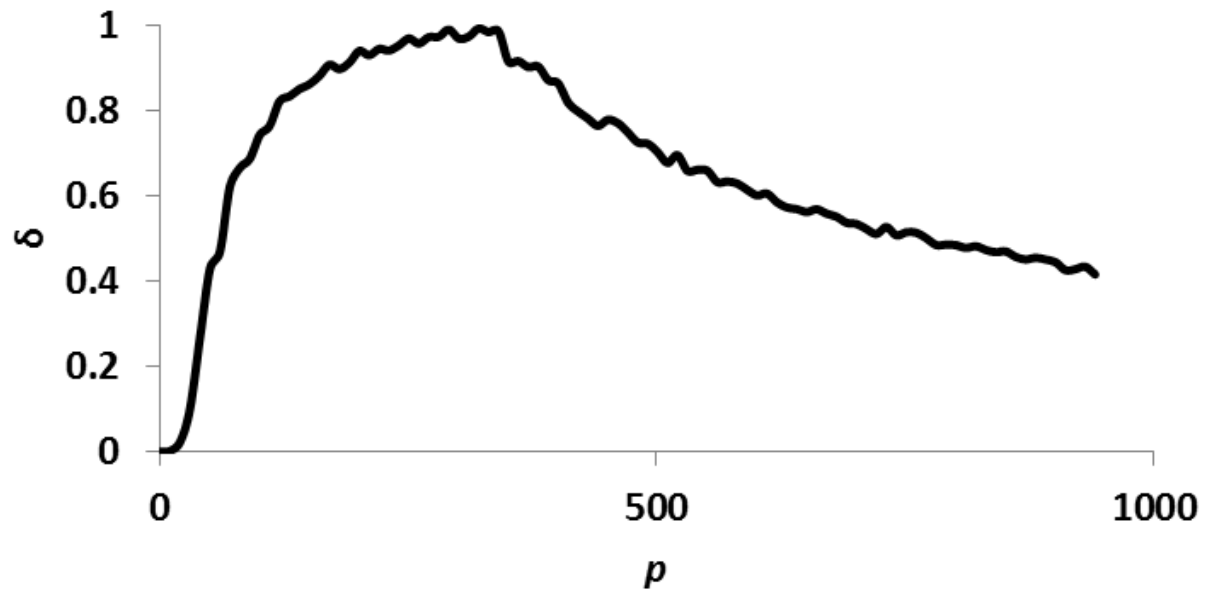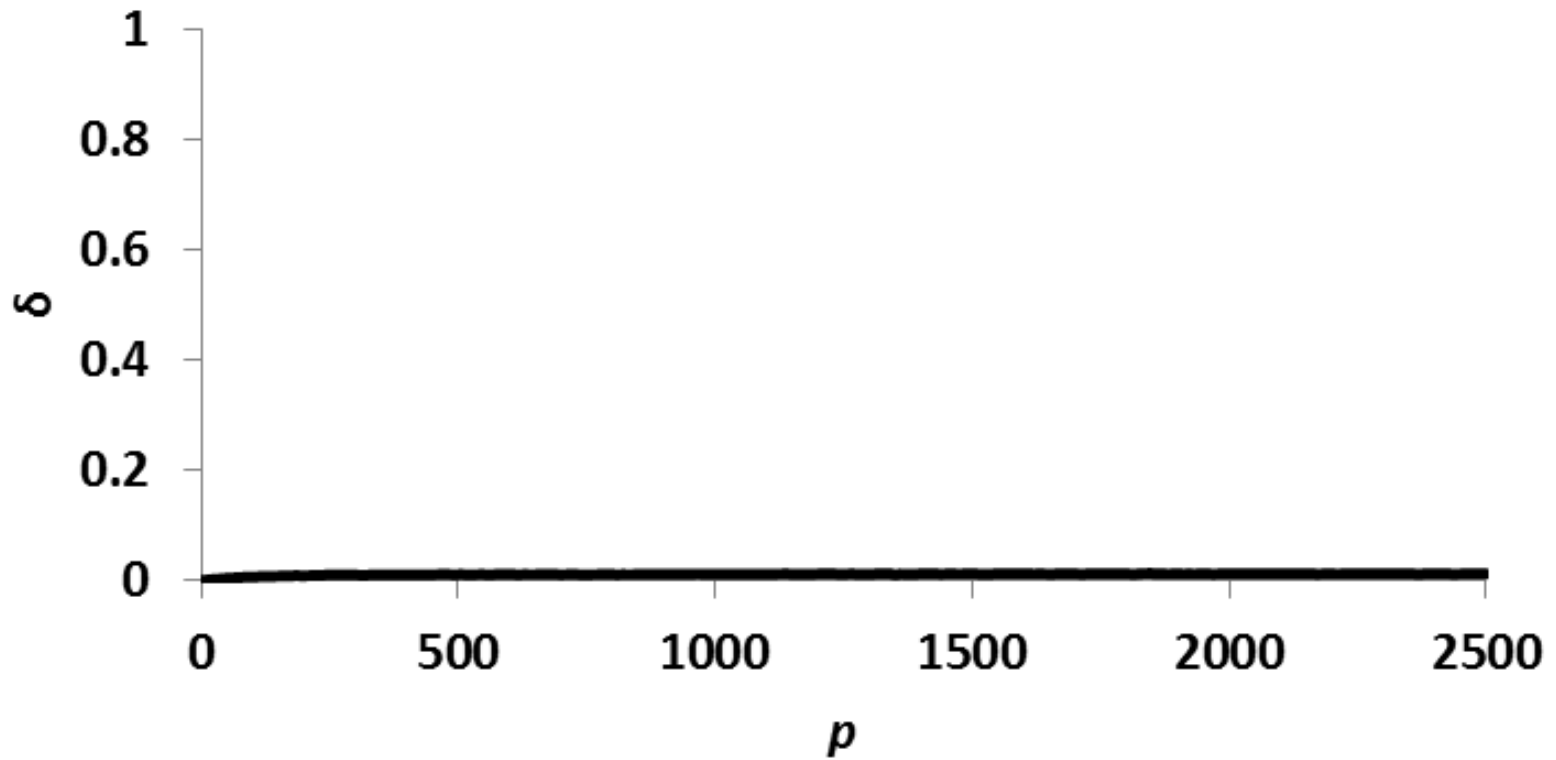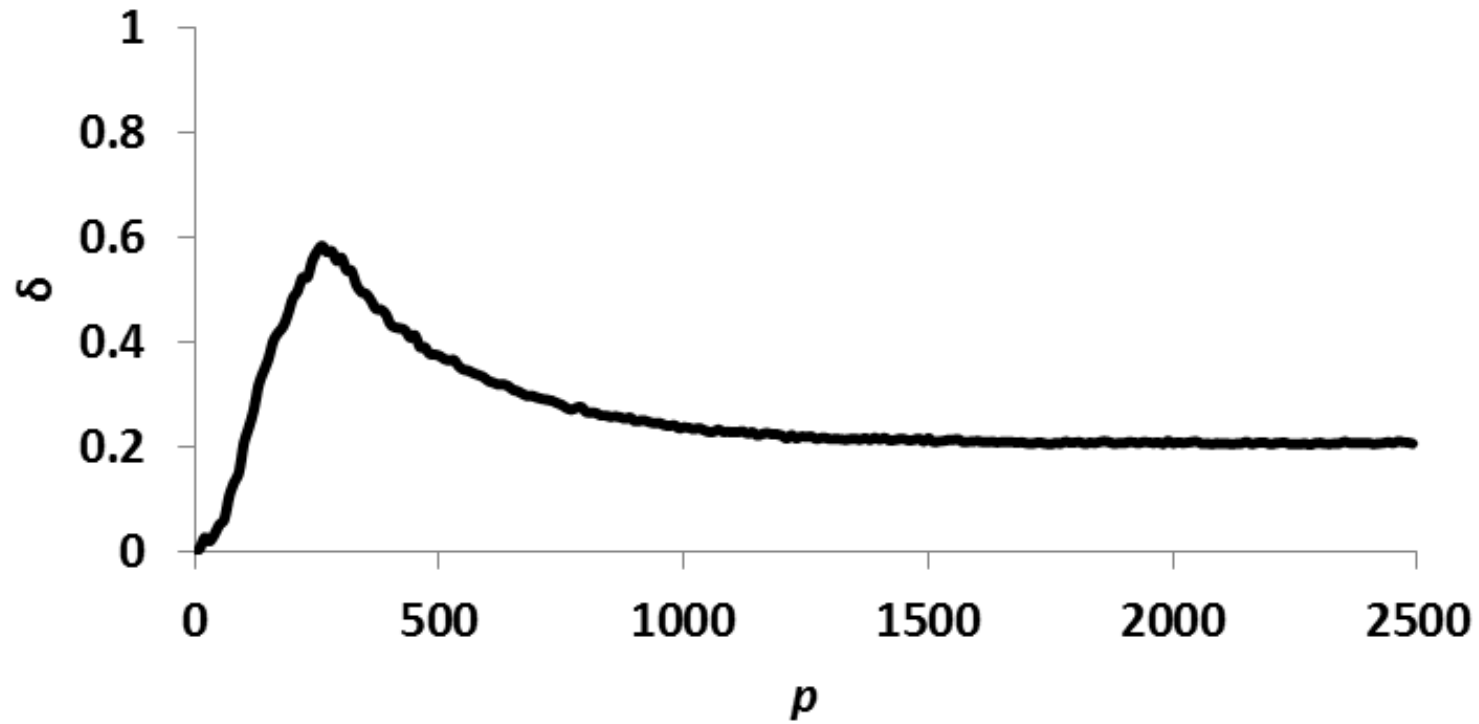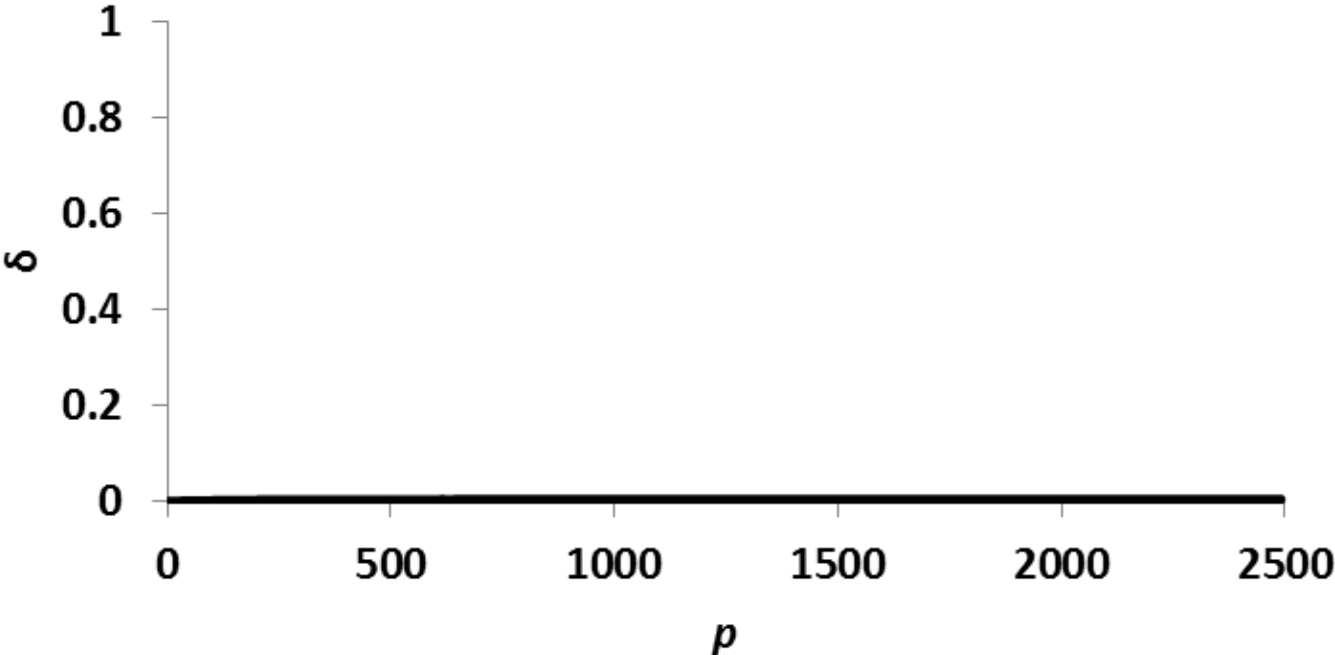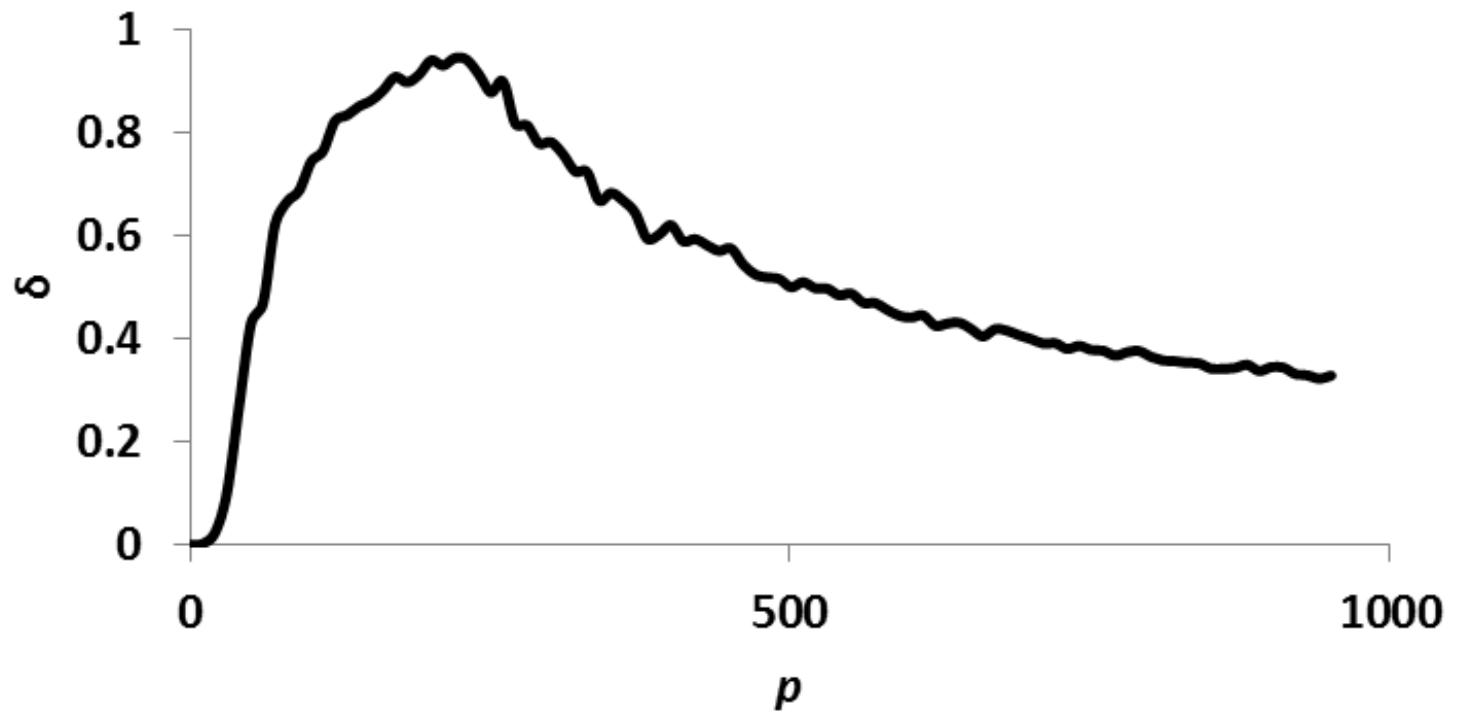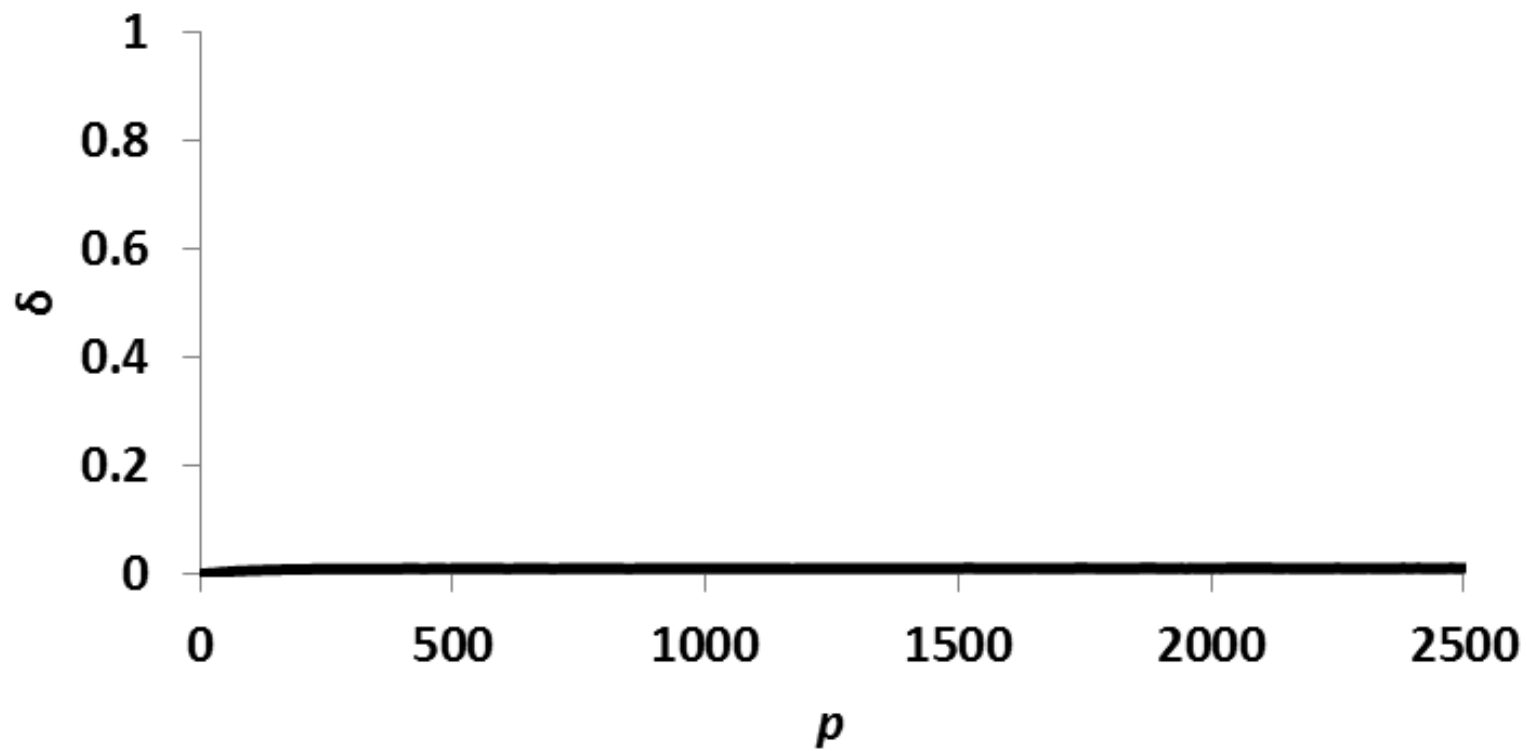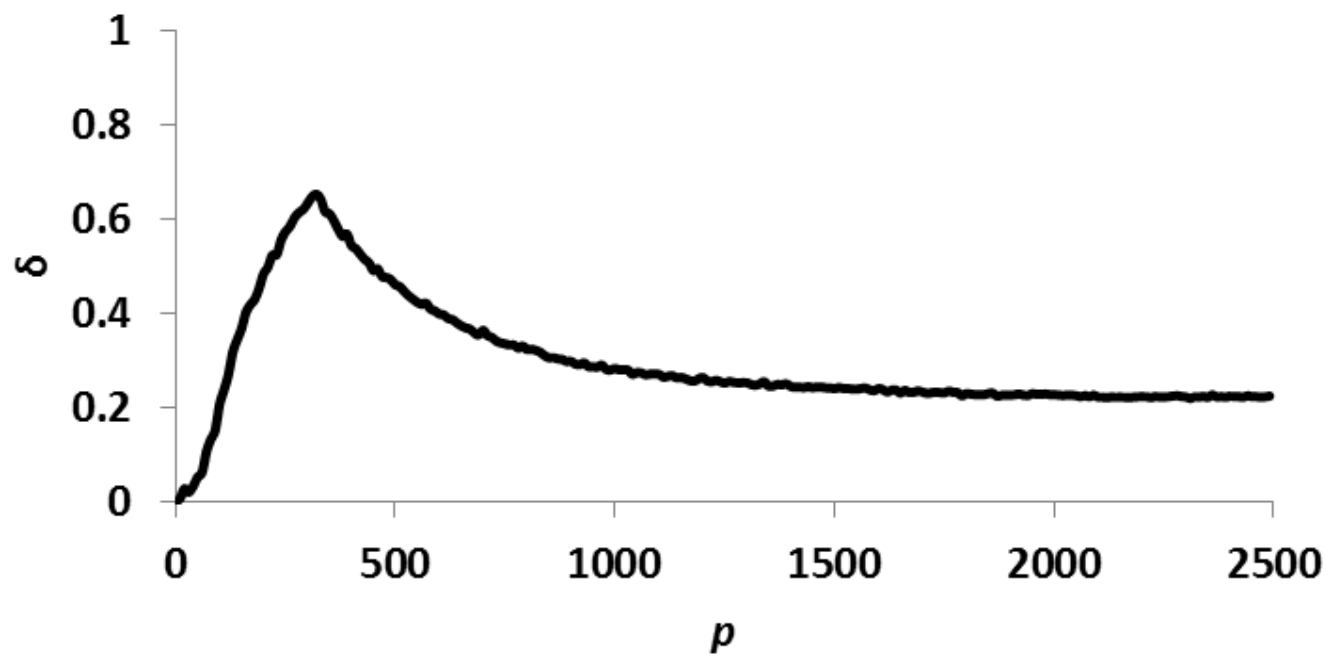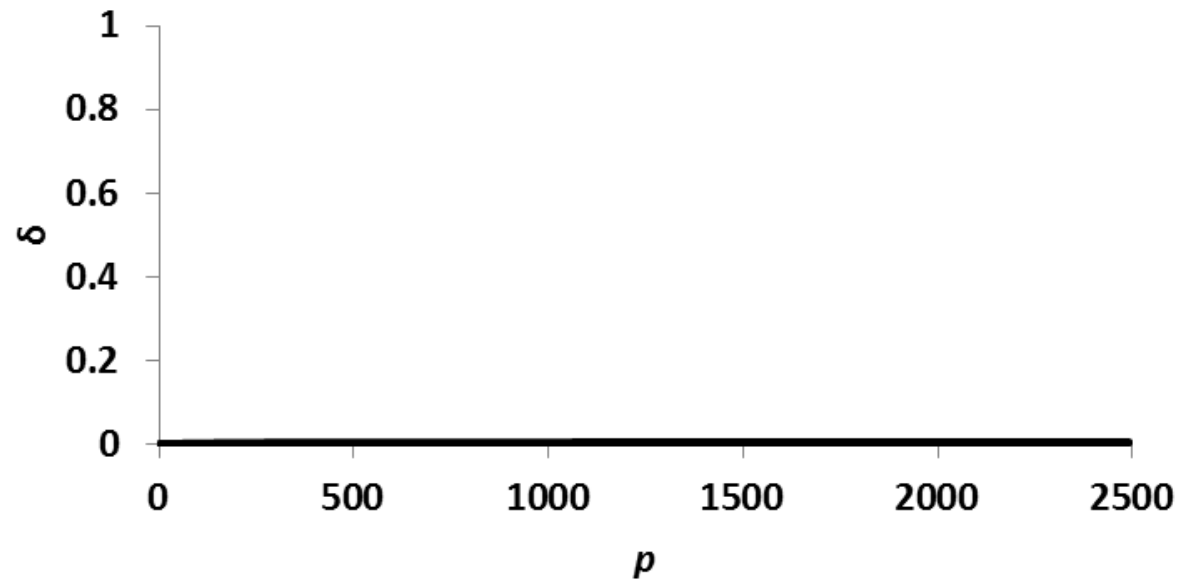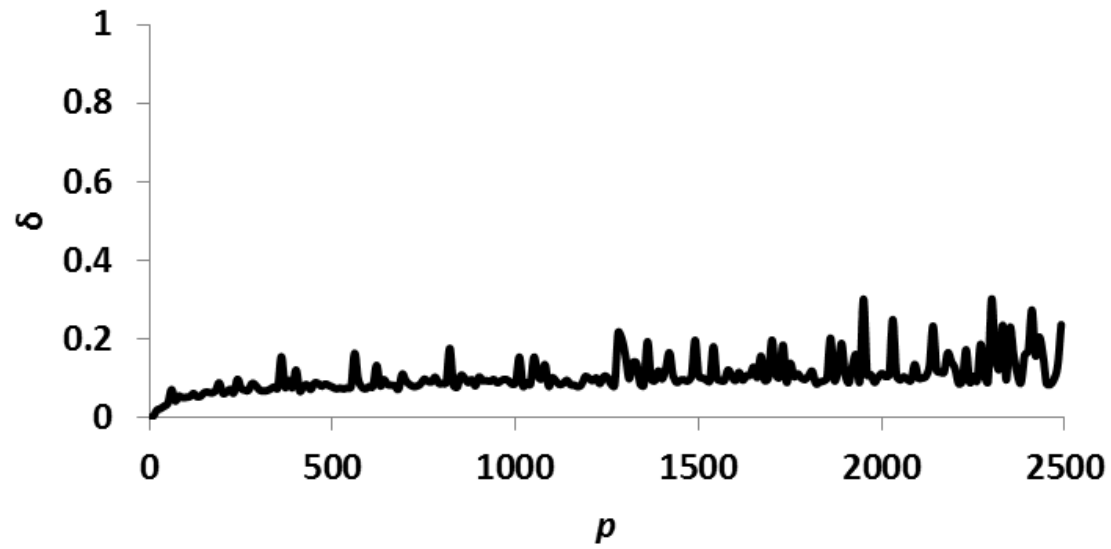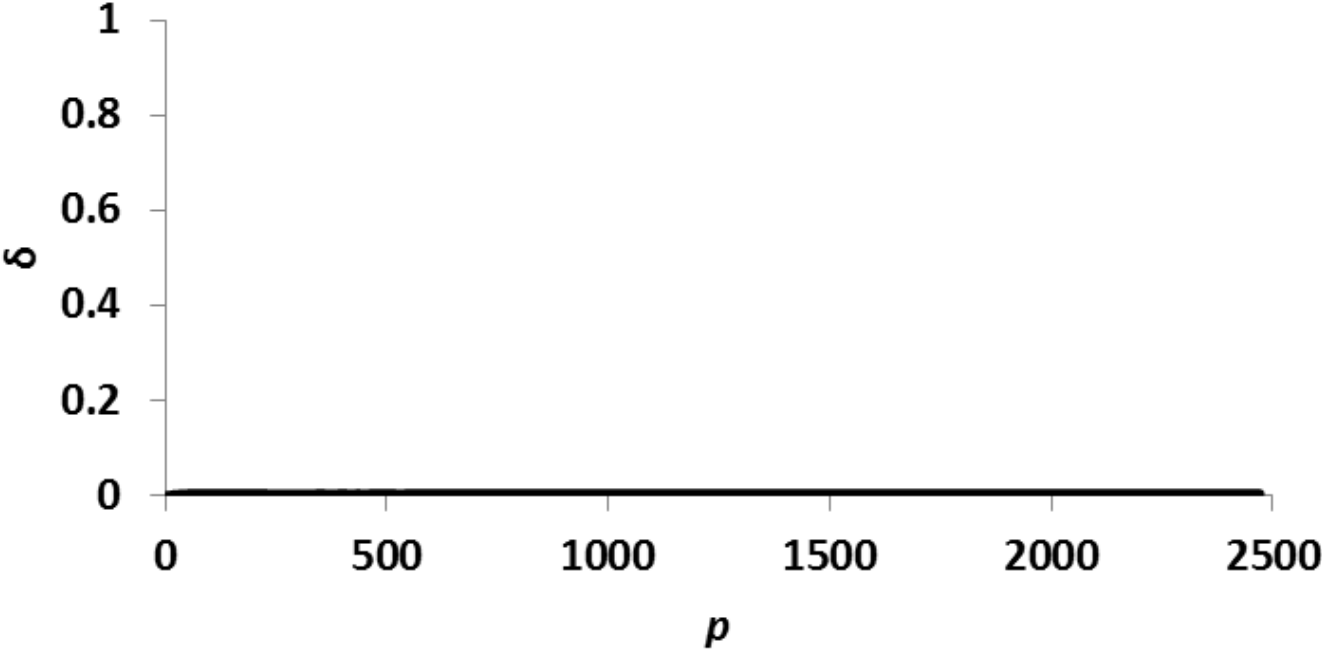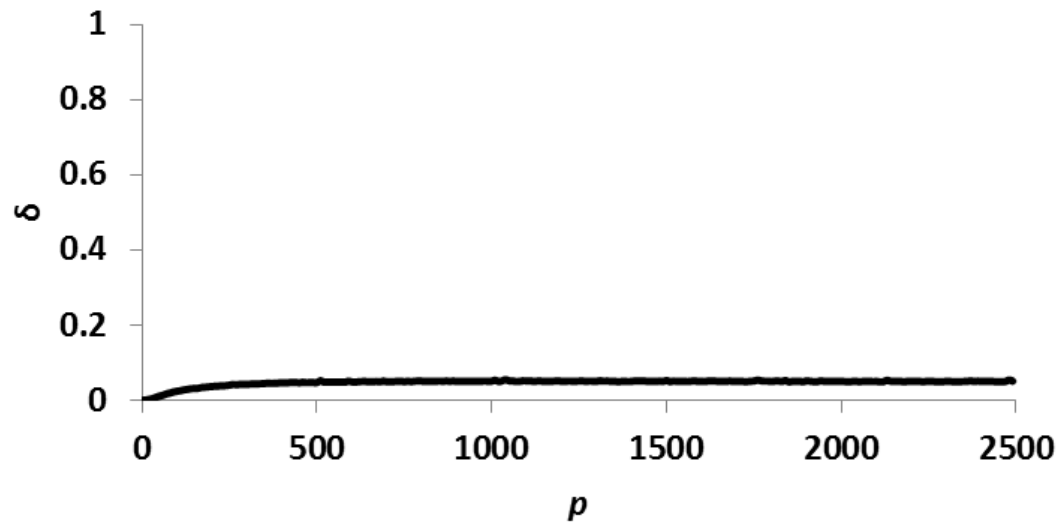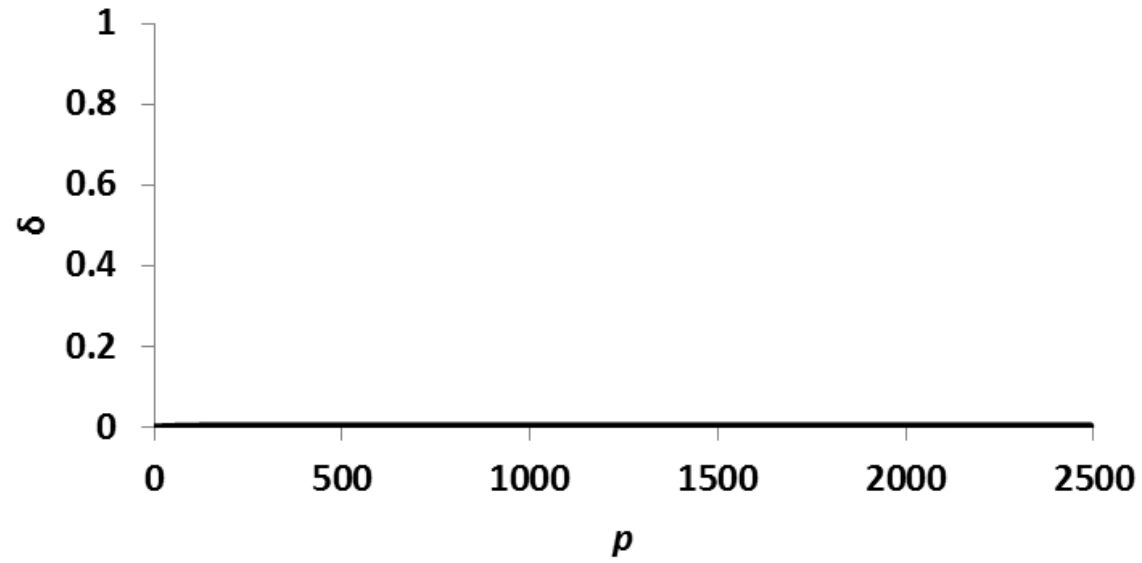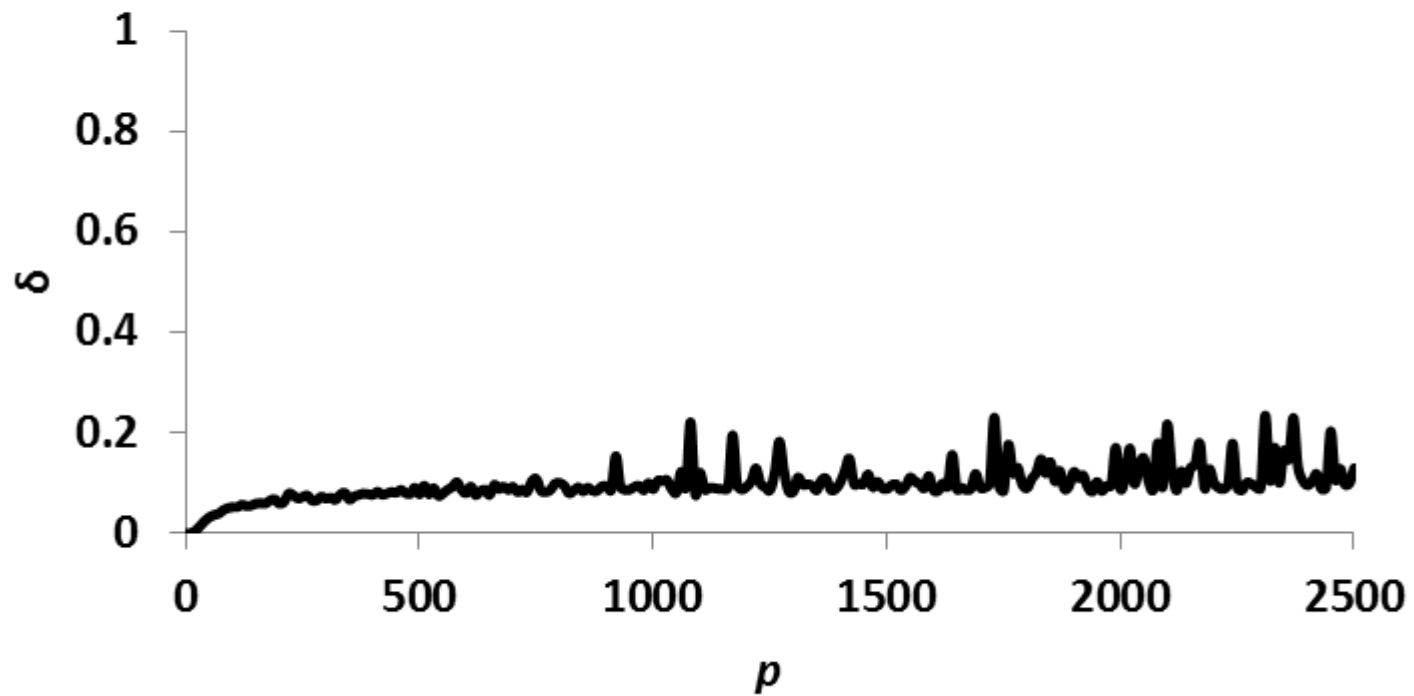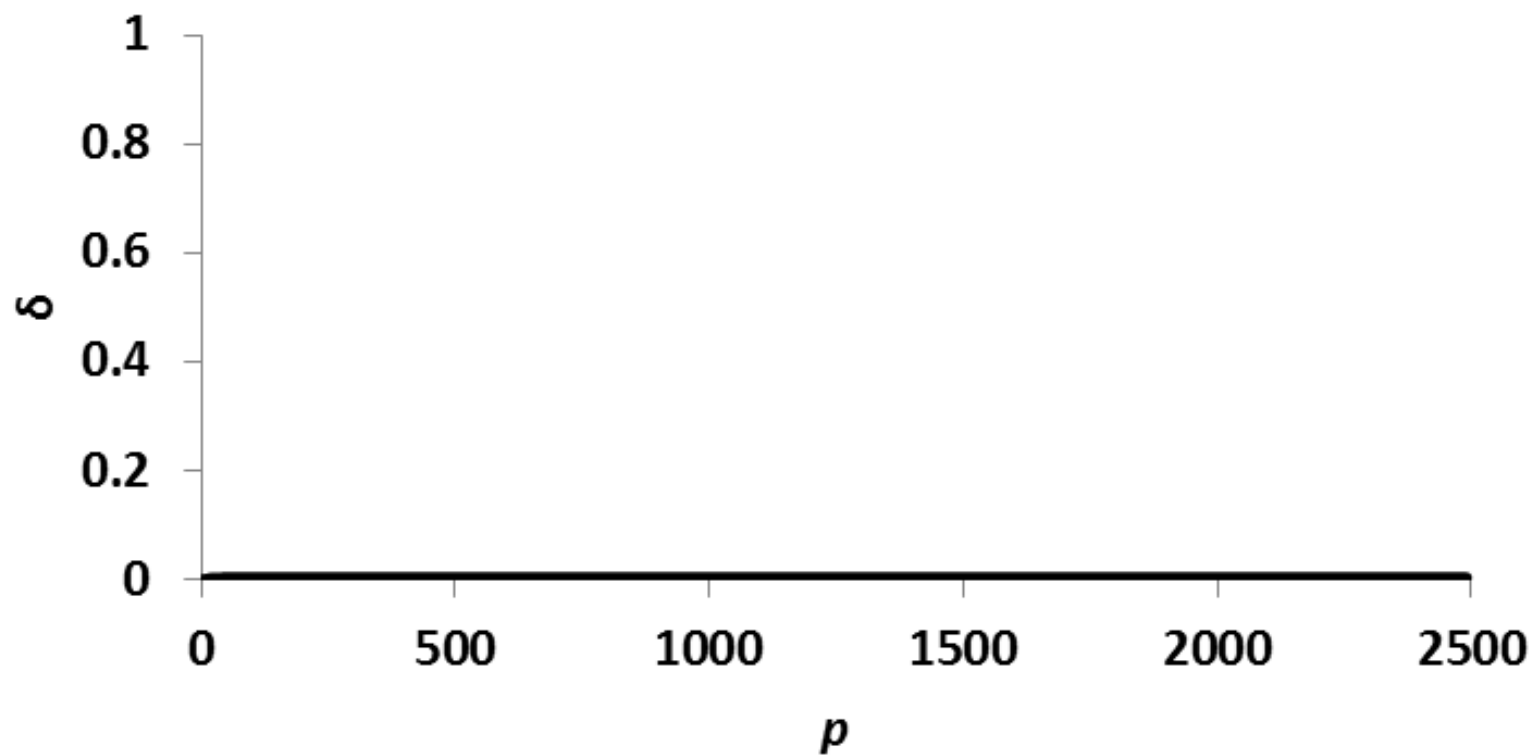**C114: Packet Delay**

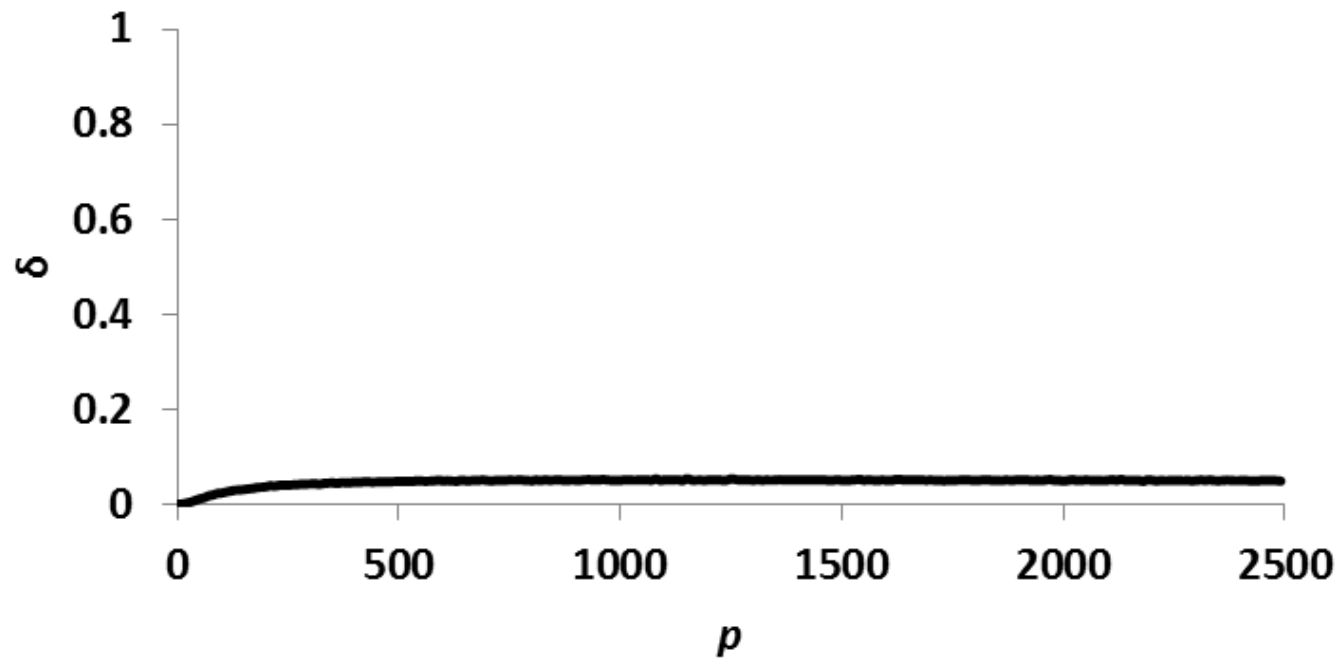# C115: Packet Delay

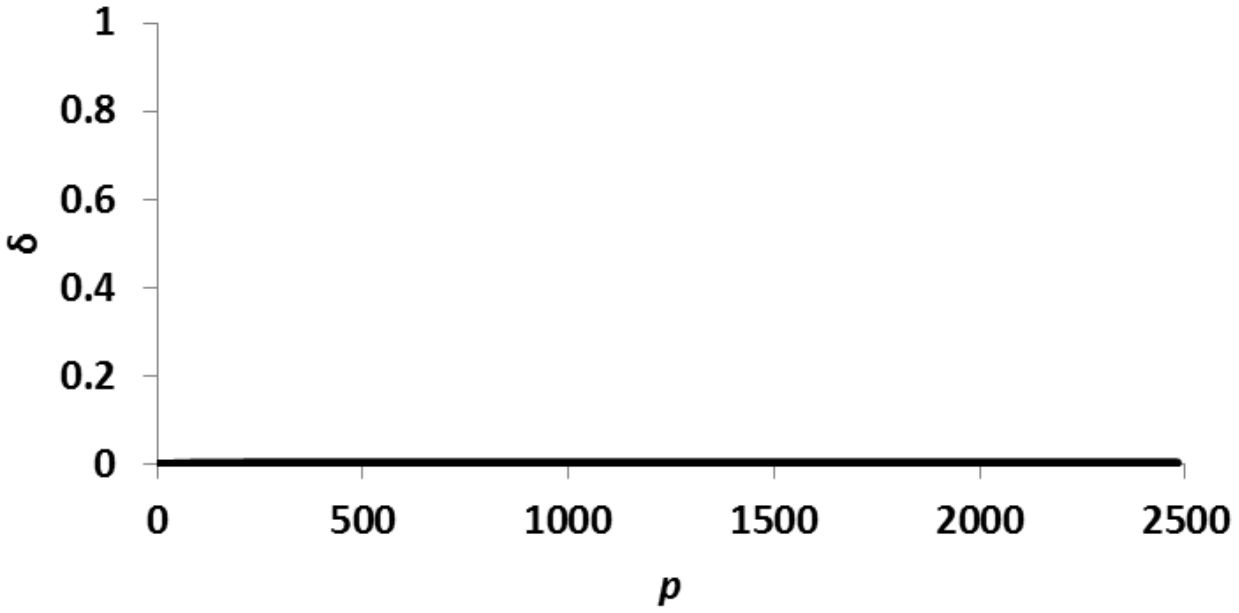# C118: Packet Delay

C119: Packet Delay

C122: Packet Delay

C123: Packet Delay

C126: Packet Delay

C127: Packet Delay

Clustering for Each Response (χ, α, π and δ)
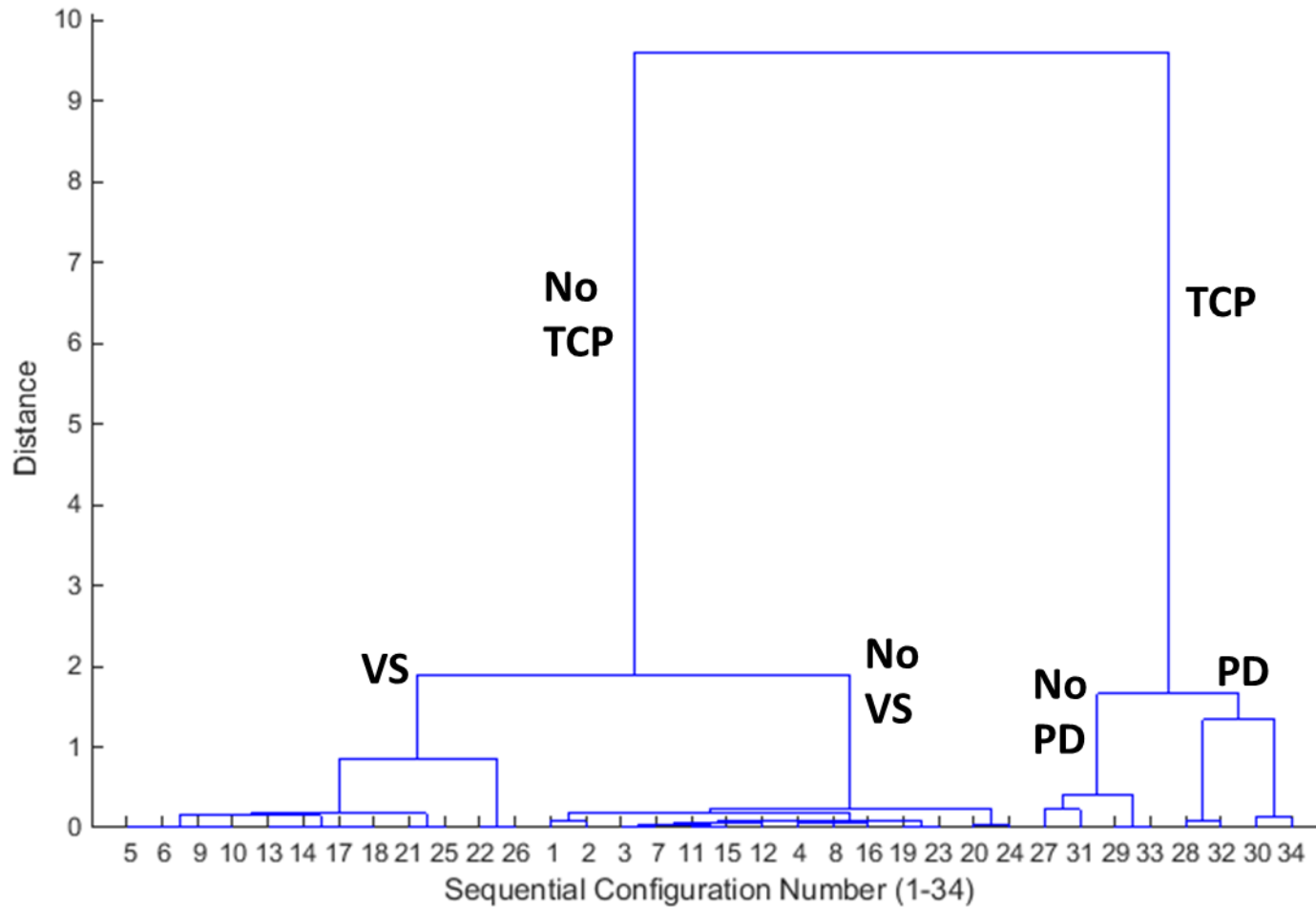(Dabrowski & Mills NIST)

Hierarchical Clustering 2500 Series GCC Isolated Nodes (χ)
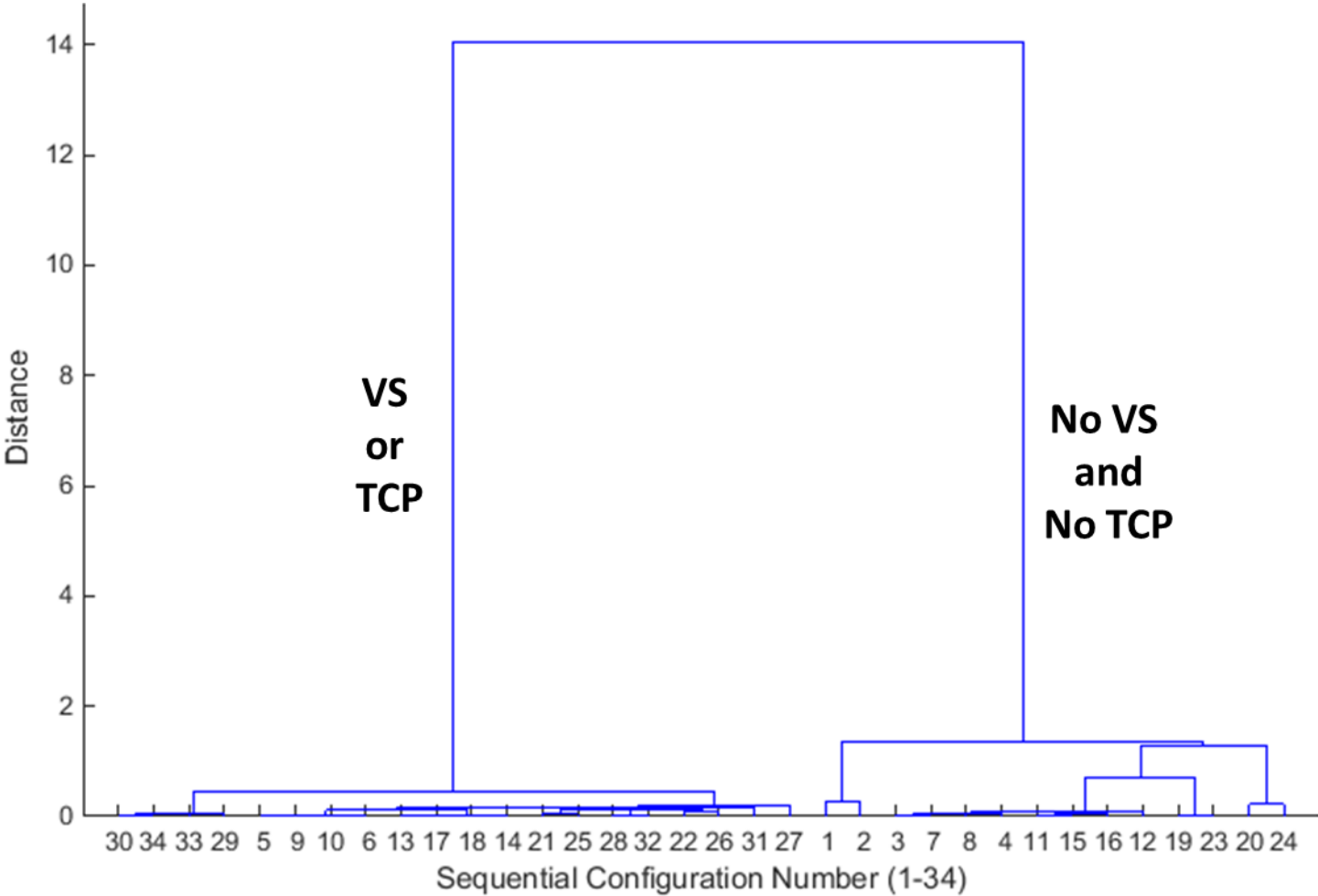
Hierarchical Clustering 2500 Series GCC Reachable Nodes (α)
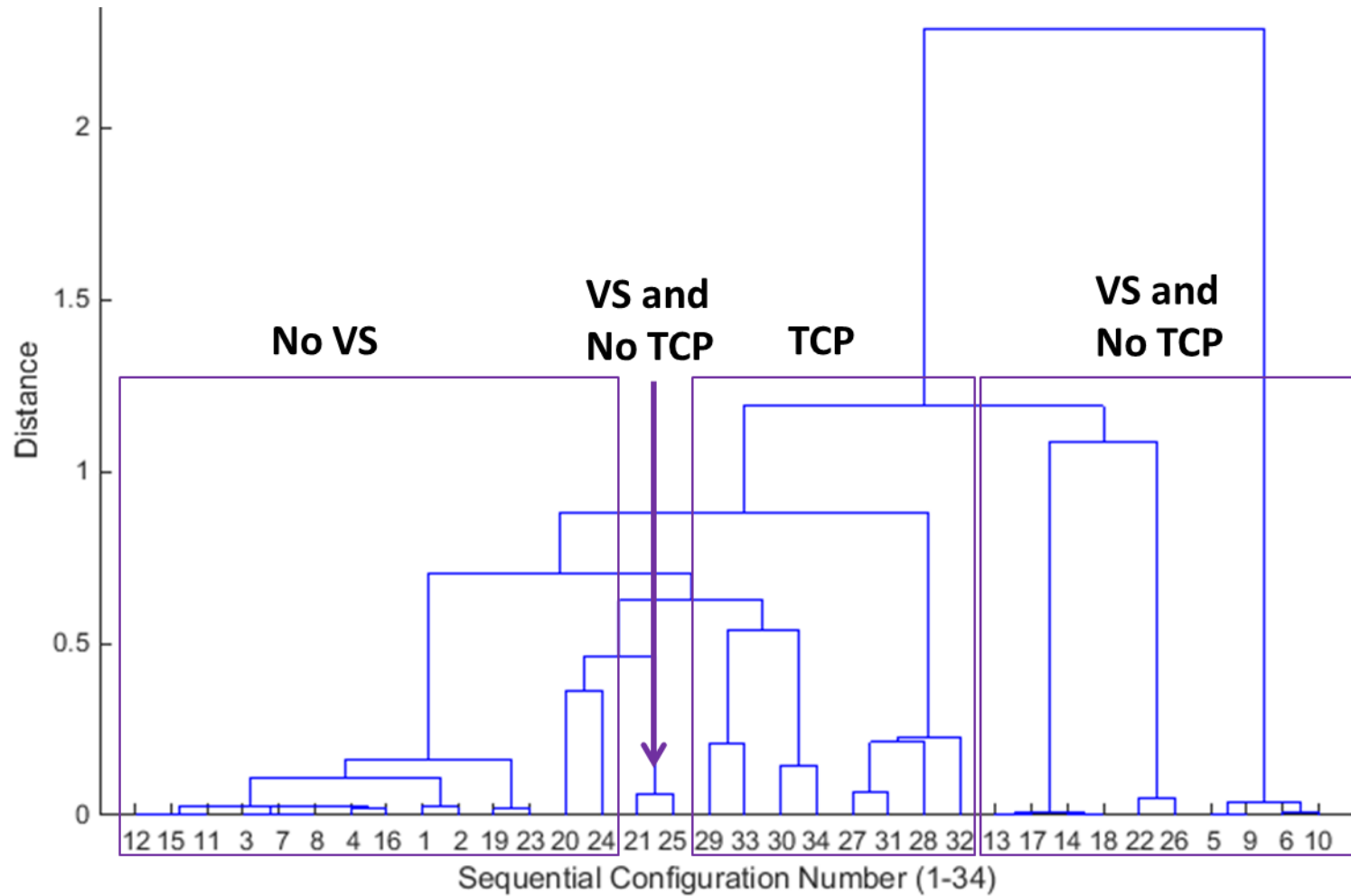
Hierarchical Clustering 2500 Series Proportion of Packets Delivered (π)

Hierarchical Clustering 2500 Series Scaled Packet Delays (δ)