

Analyses de Robustesse: Graphe non valué

Casser des Graphes

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Complex Networks - LIP6

Outline

Quelques scores et distributions

Ordre eBC

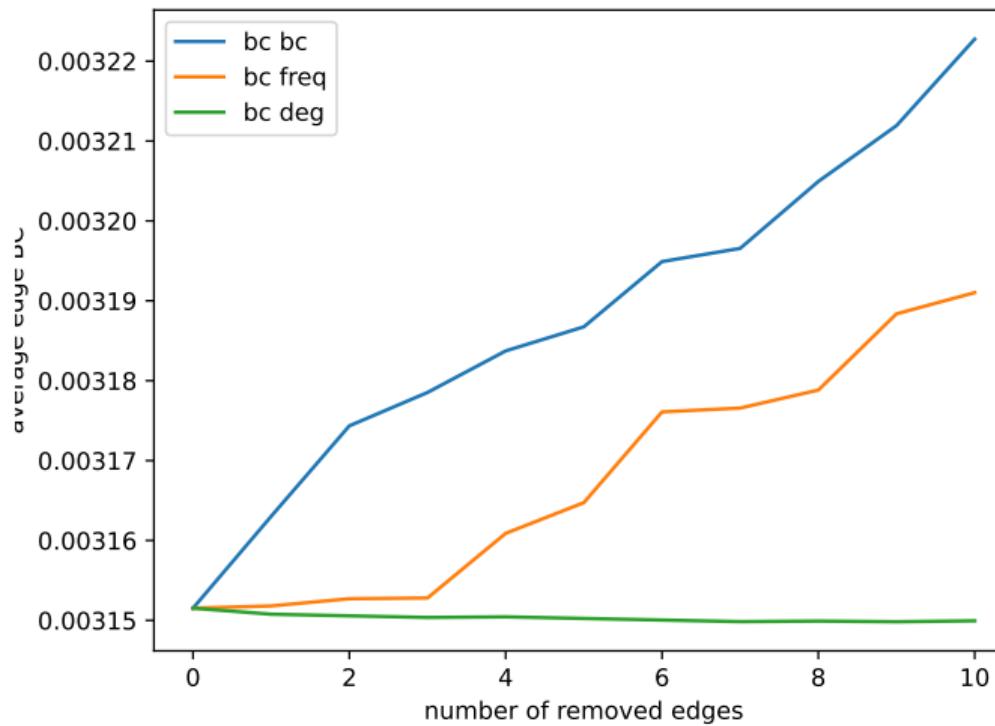
Ordre freq

Ordre eBC dans une coupe

Quelques scores et distributions

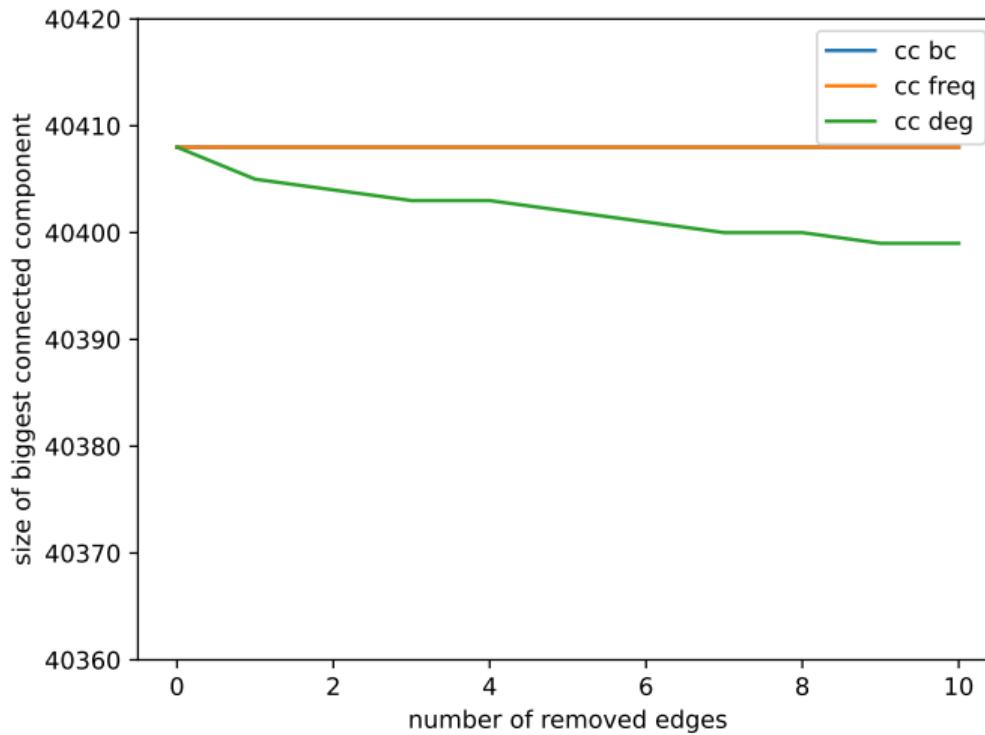
Score: moyenne egde Betweenness Centrality

Average eBC evolution after edge removals



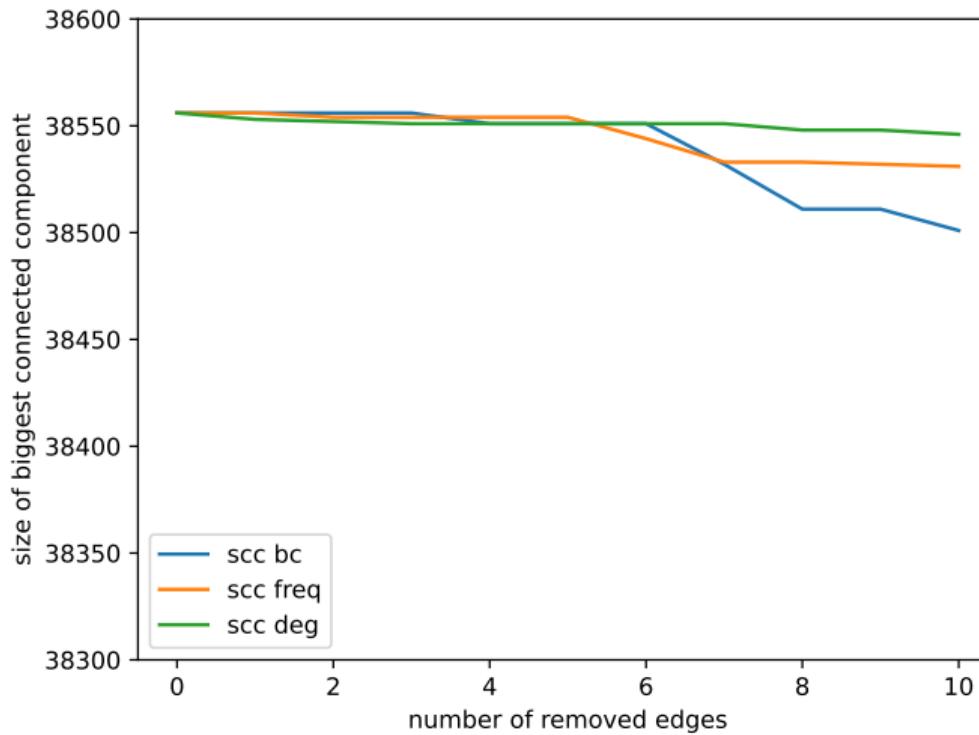
Score: plus grande composante connexe

Size of biggest connected component evolution after edge removals

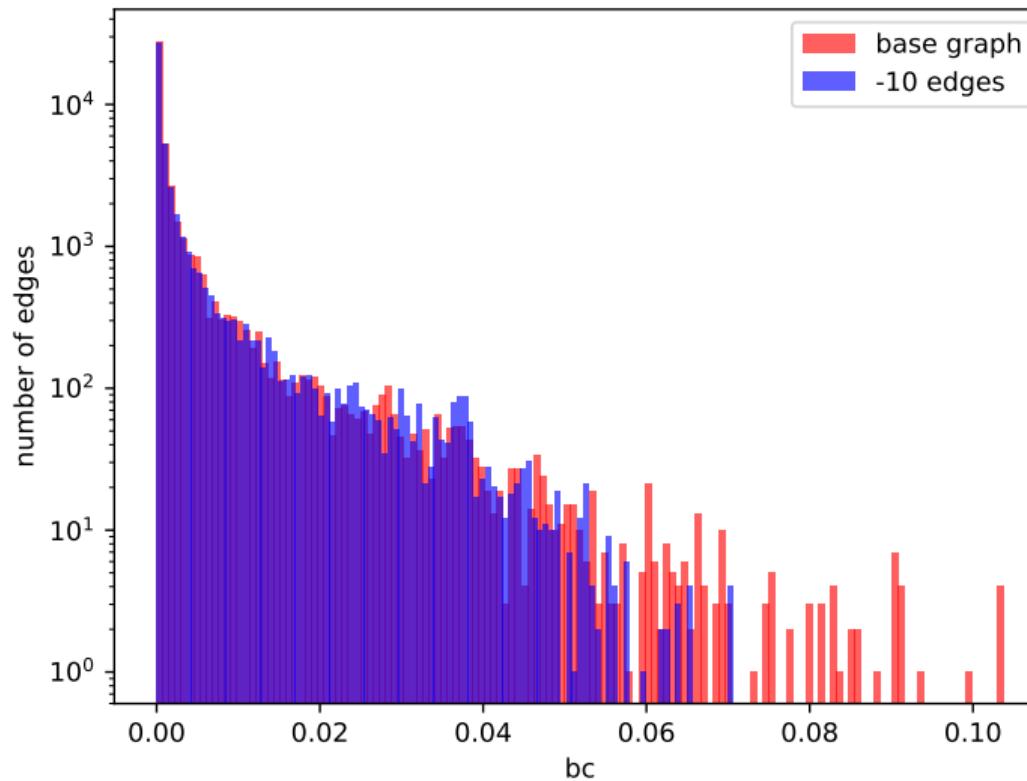


Score: plus grande composante fortement connexe

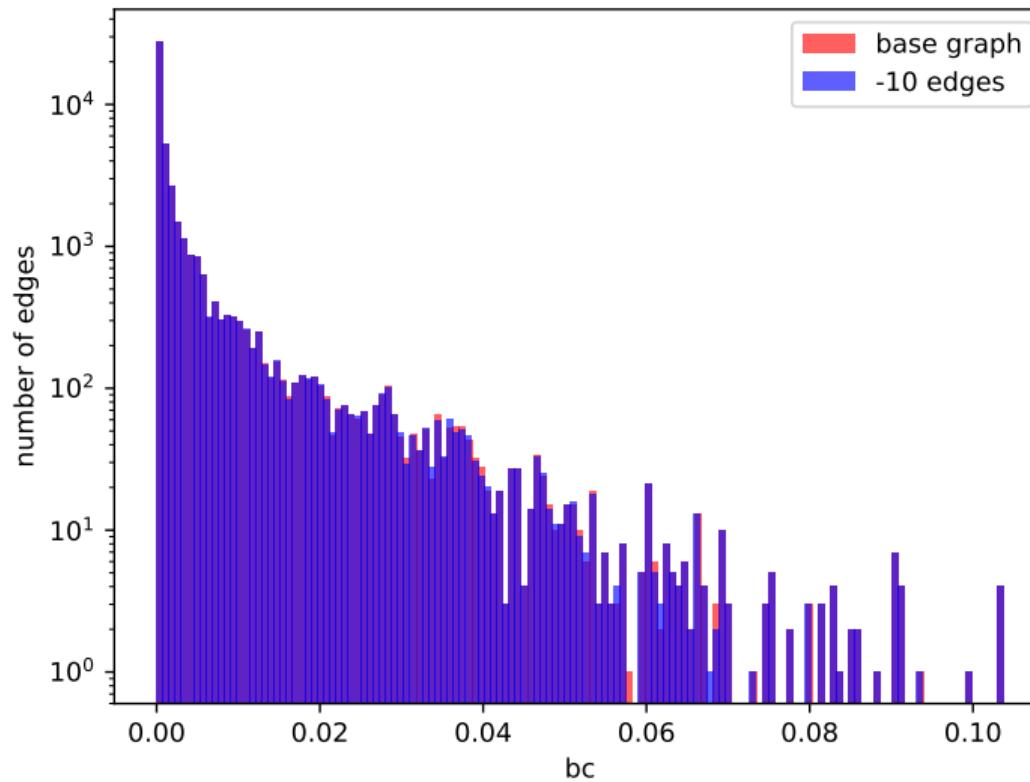
Biggest strongly connected component size at each attack step



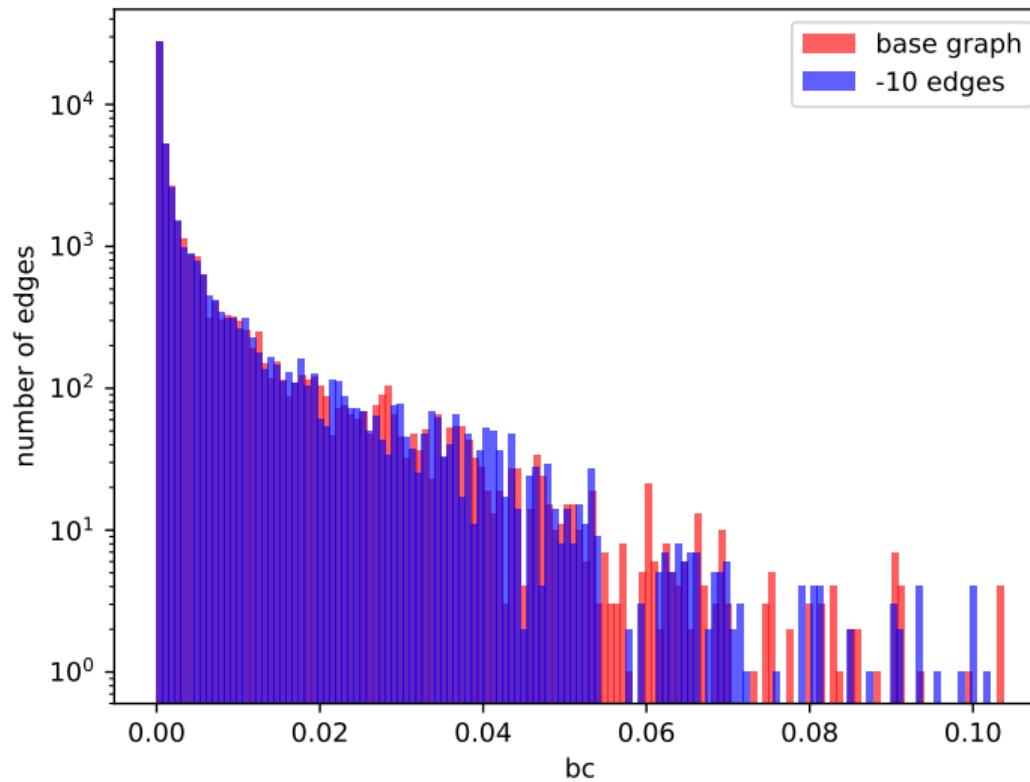
Ordre eBC: changements de distributions après 10 arêtes enlevées



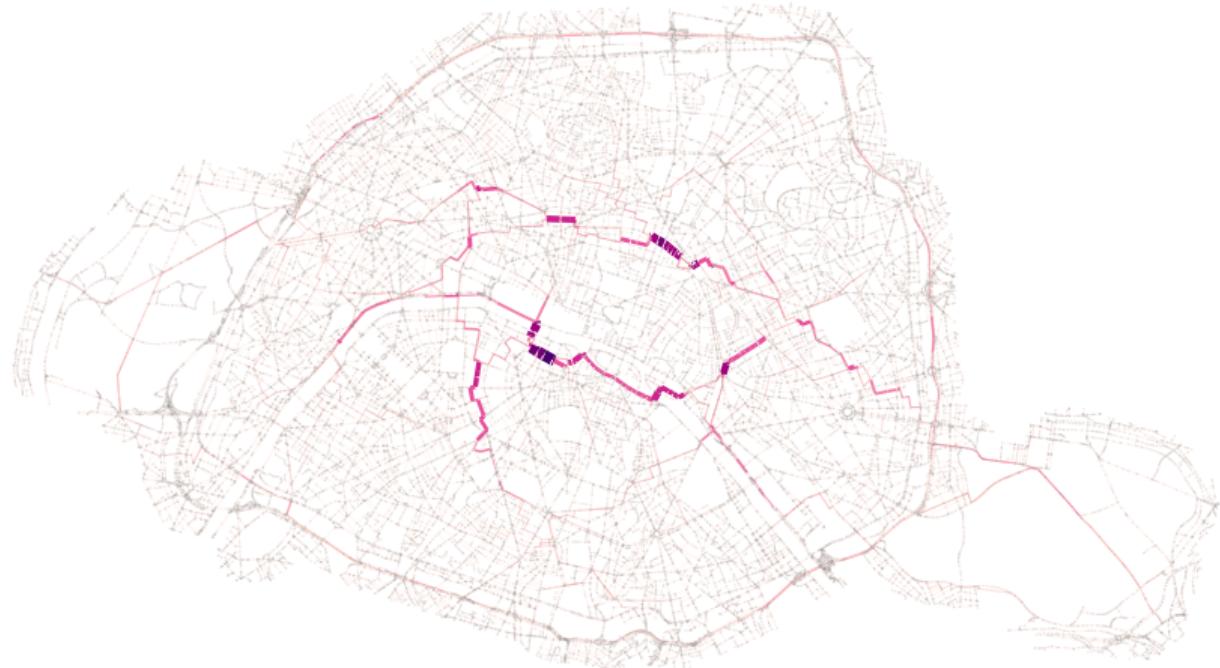
Ordre deg: changements de distributions après 10 arêtes enlevées



Ordre freq: changements de distributions après 10 arêtes enlevées



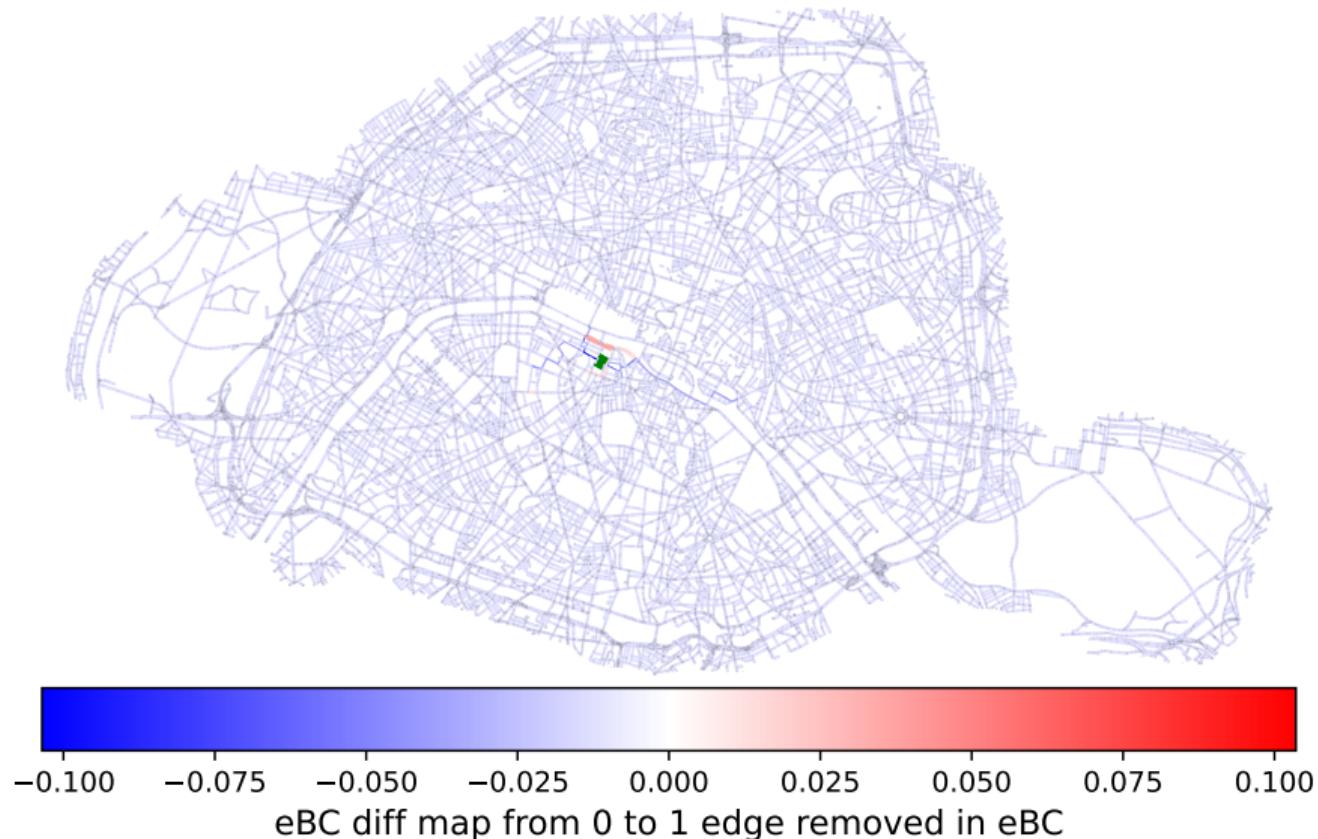
Visuel des eBC de base



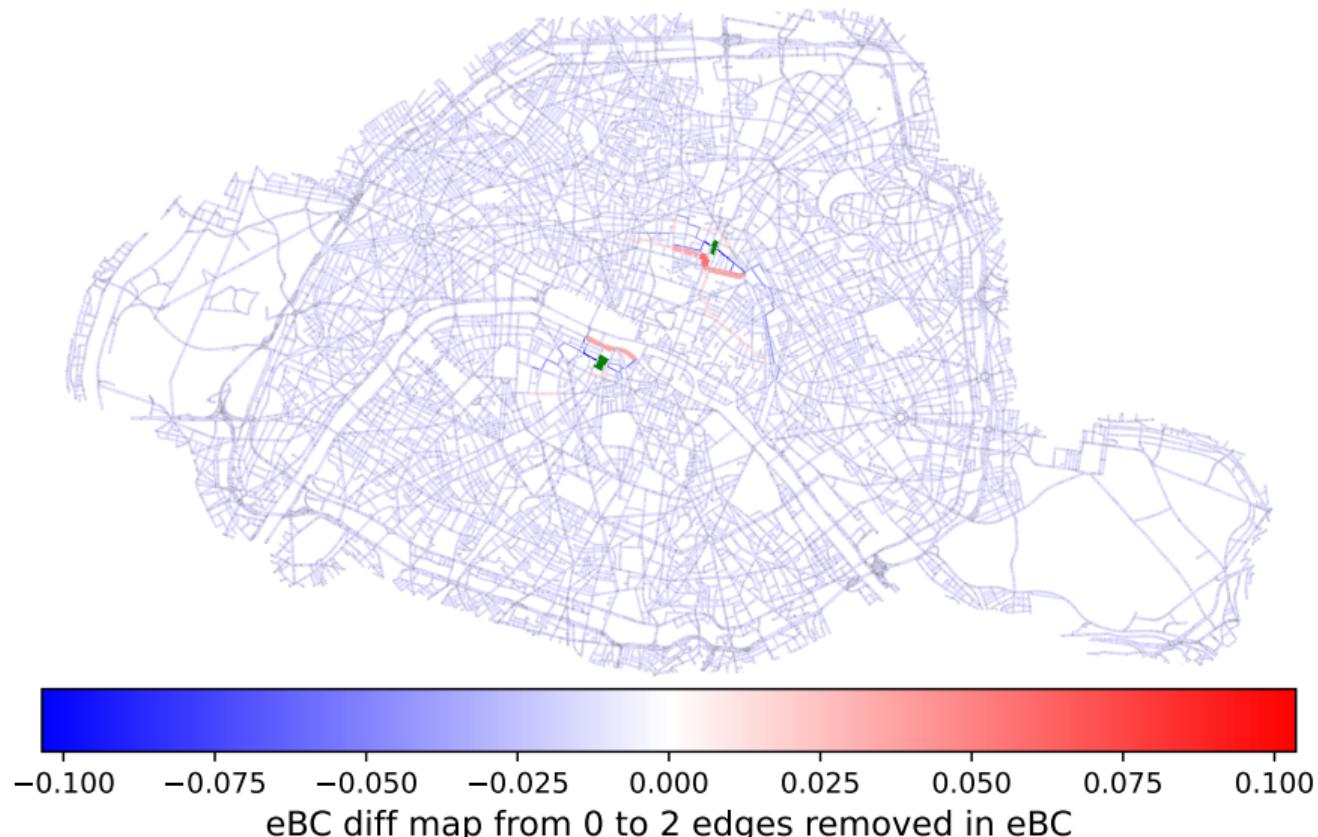
eBC map after removing 0 edges in the eBC order

Ordre eBC

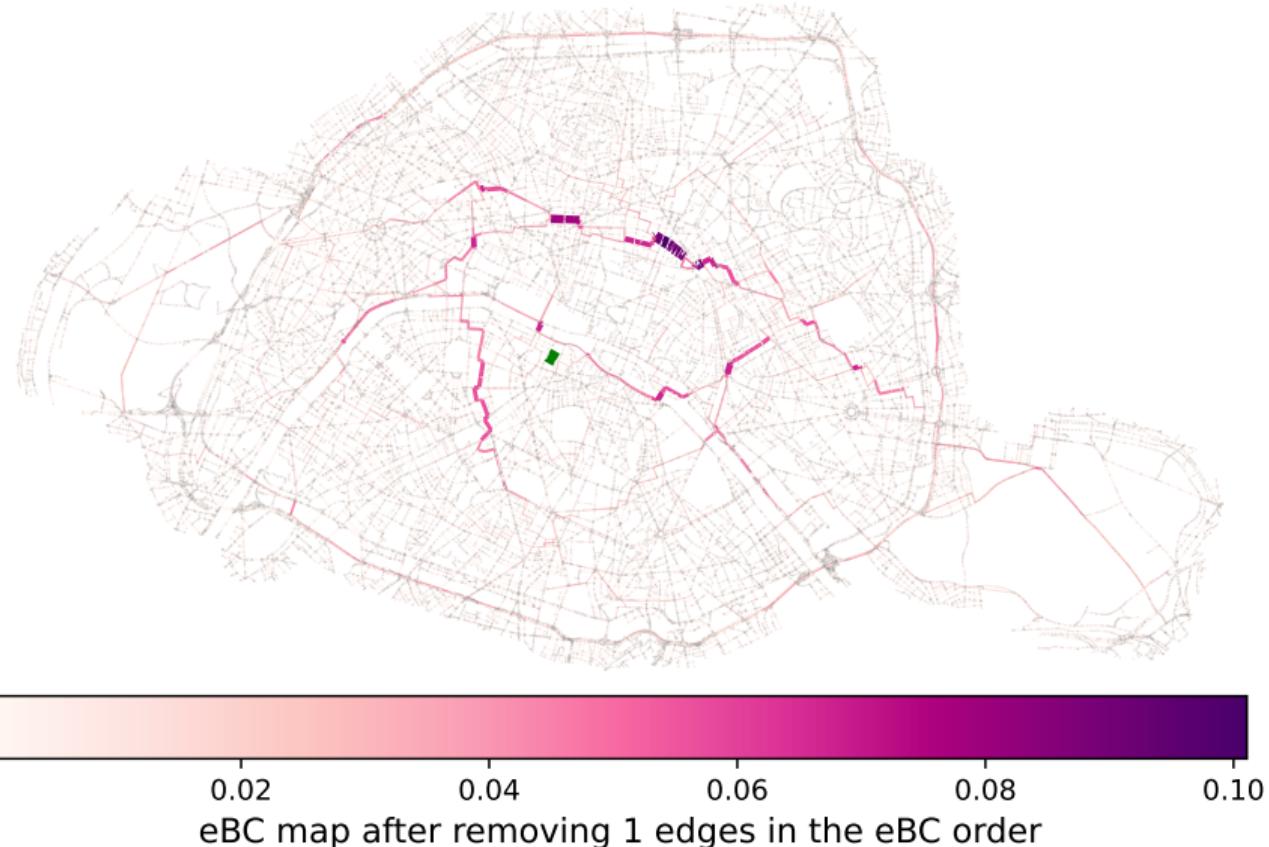
Des influences locales (1)



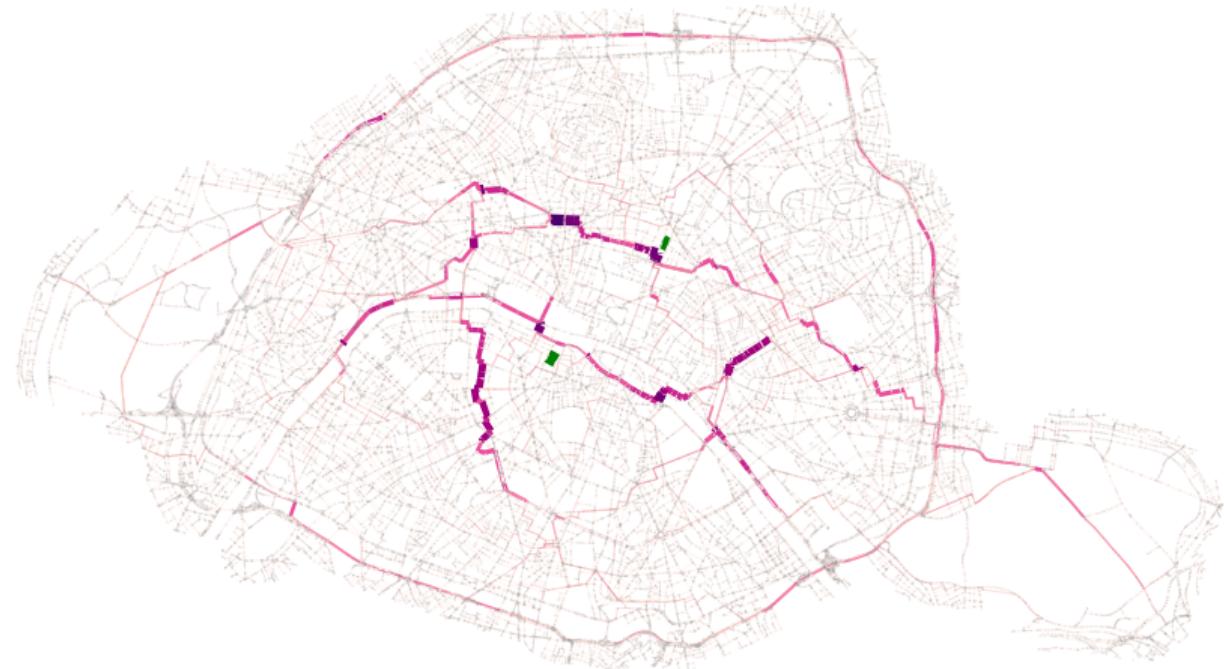
Des influences locales (2)



intérêt de la eBC itérative: chaque attaque influence les prochaines (1)



intérêt de la eBC itérative: chaque attaque influence les prochaines (2)



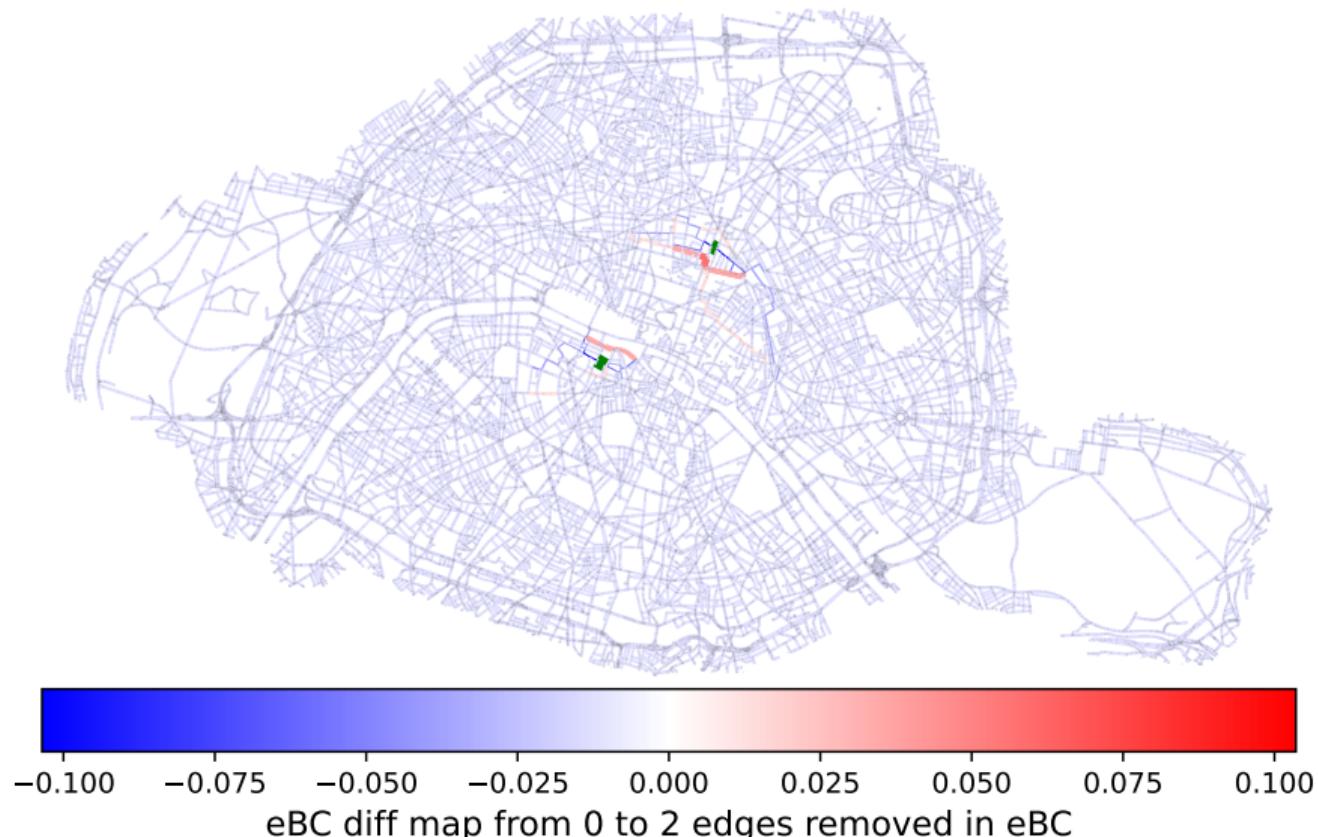
0.01 0.02 0.03 0.04 0.05 0.06 0.07
eBC map after removing 2 edges in the eBC order

intérêt de la eBC itérative: chaque attaque influence les prochaines (3)

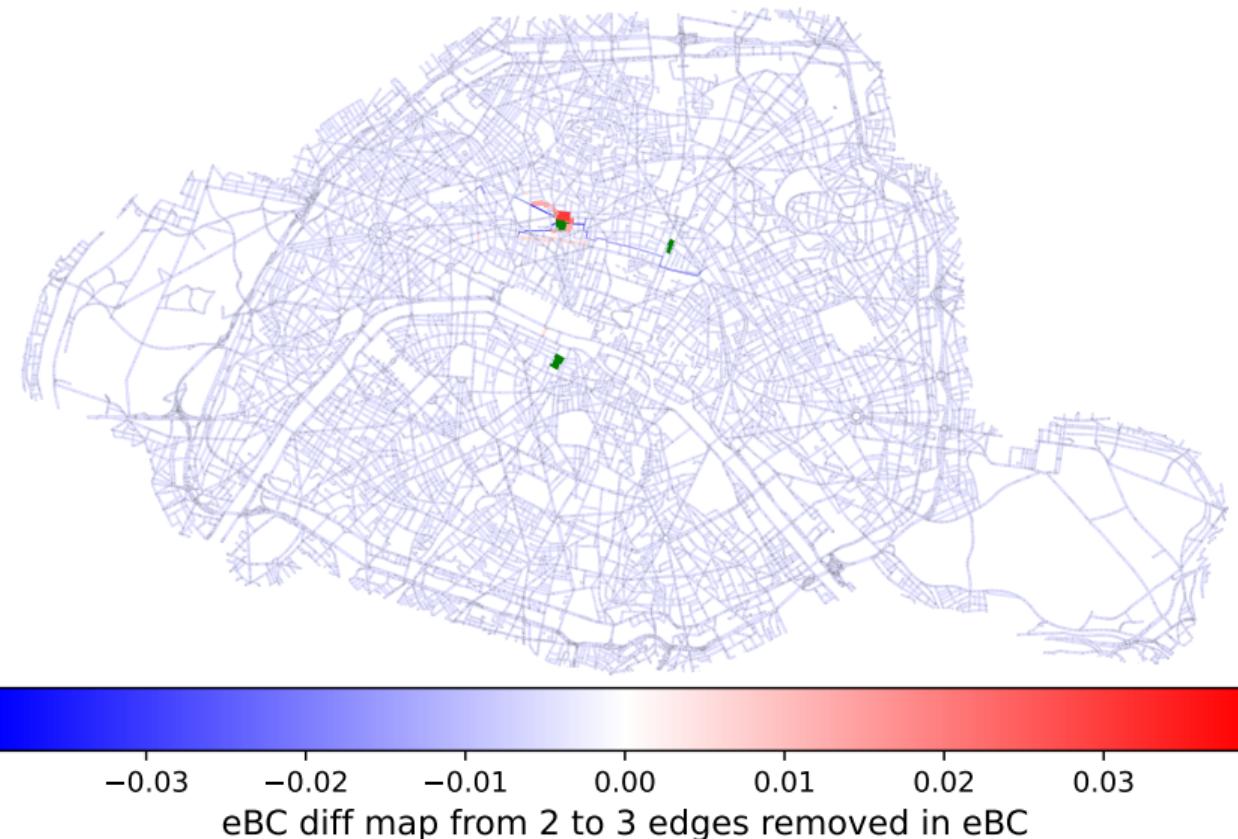


0.01 0.02 0.03 0.04 0.05 0.06 0.07
eBC map after removing 3 edges in the eBC order

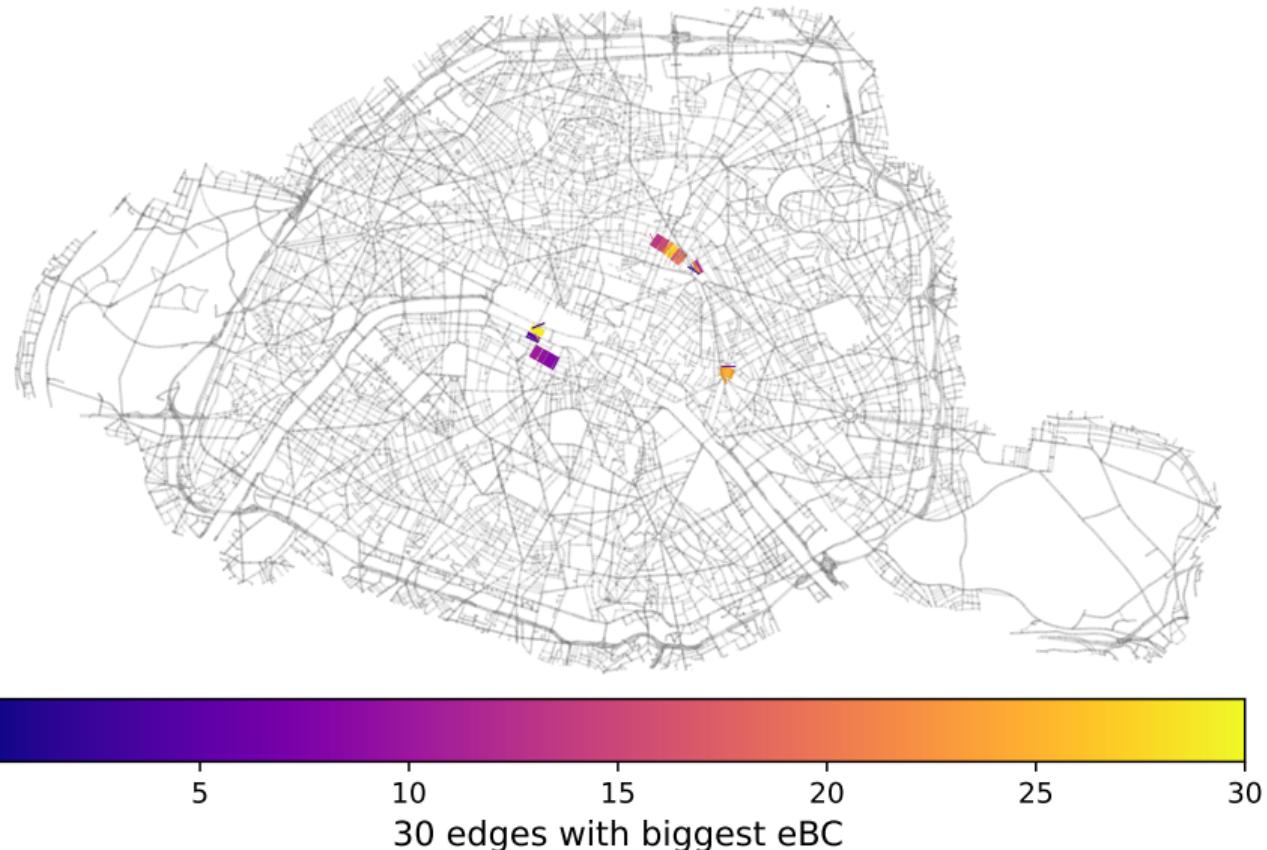
intérêt de la eBC itérative: chaque attaque influence les prochaines (1)



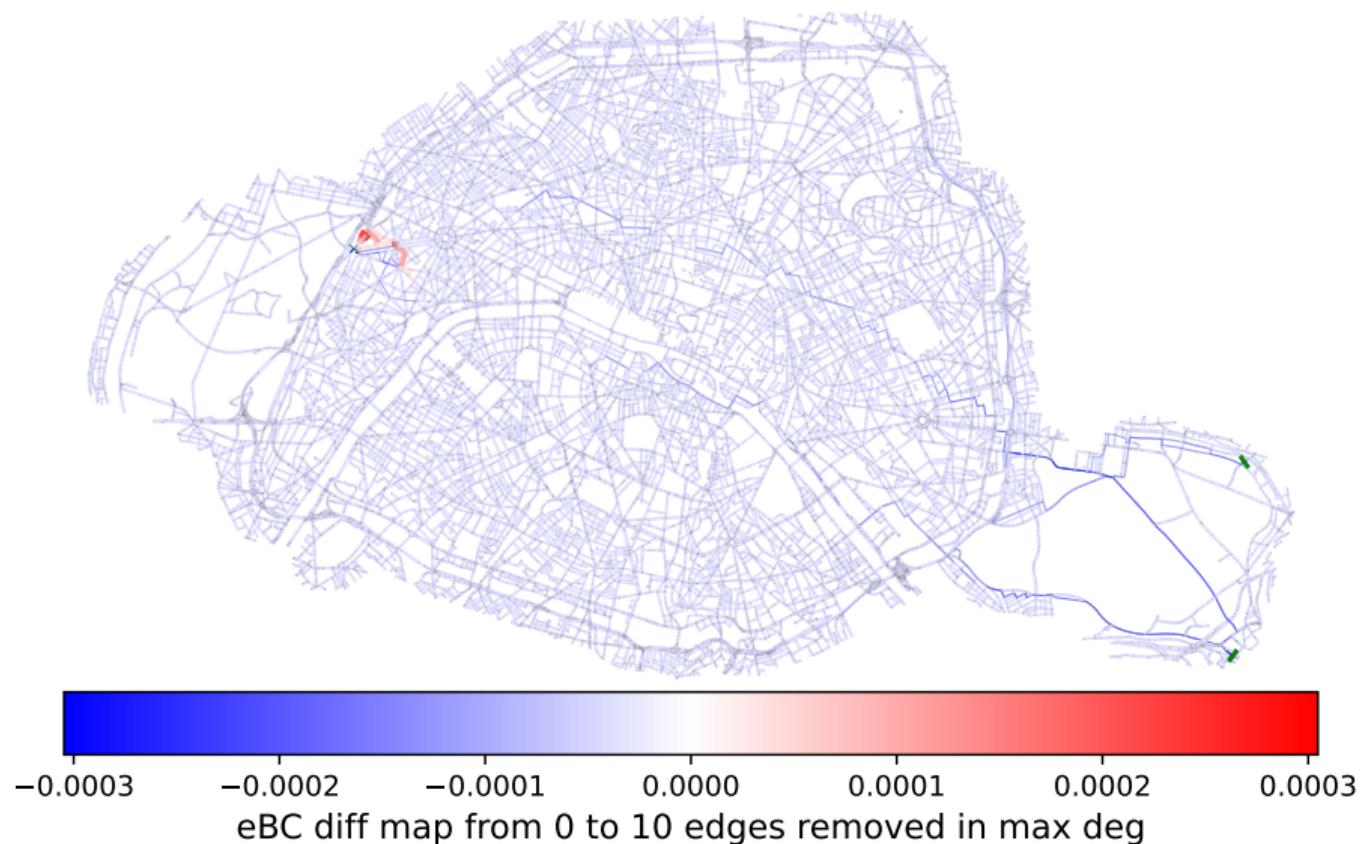
intérêt de la eBC itérative: chaque attaque influence les prochaines (2)



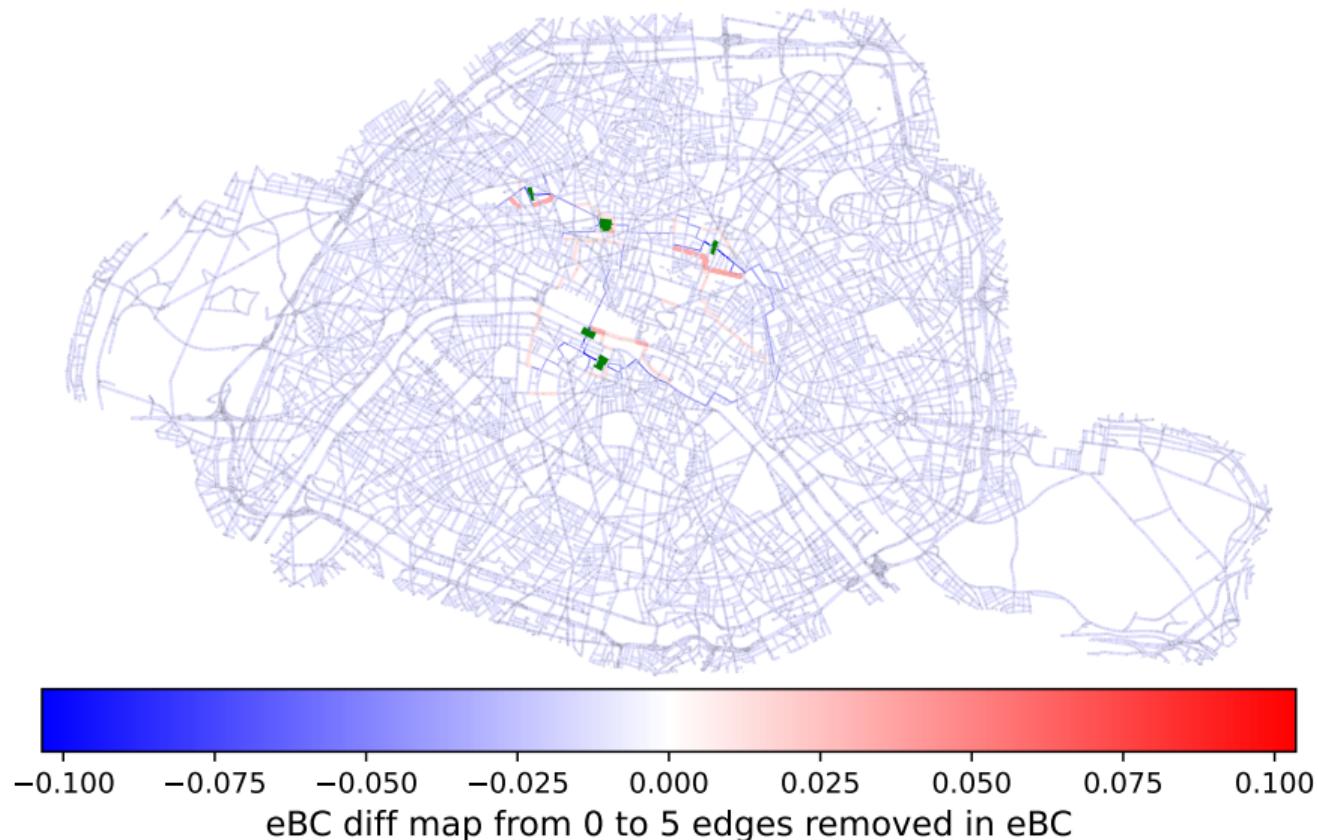
Contrairement à une attaque qui ne s'adapterai pas



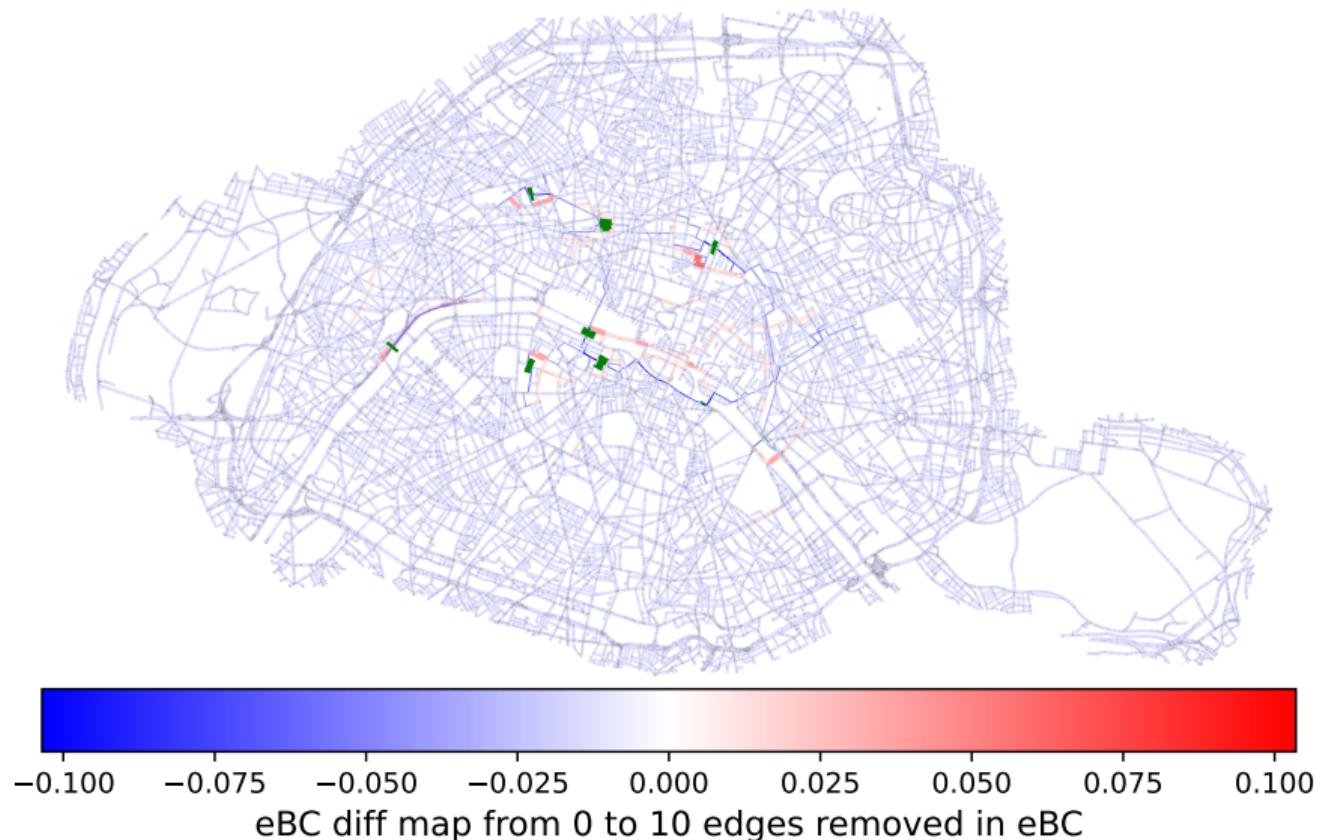
eBC: un ordre efficace... quand on mesure en eBC



Des perturbations qui s'aggrave ? (1)

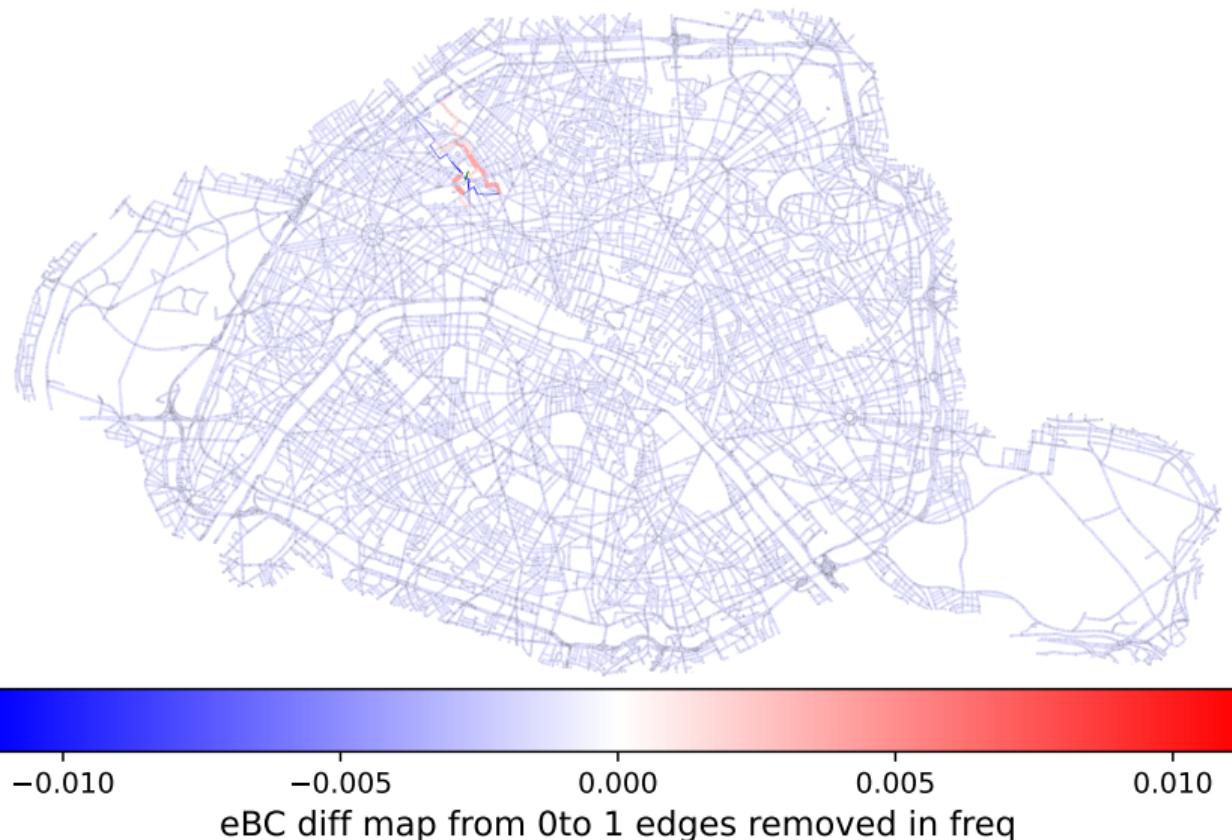


Des perturbations qui s'aggrave ? (2)

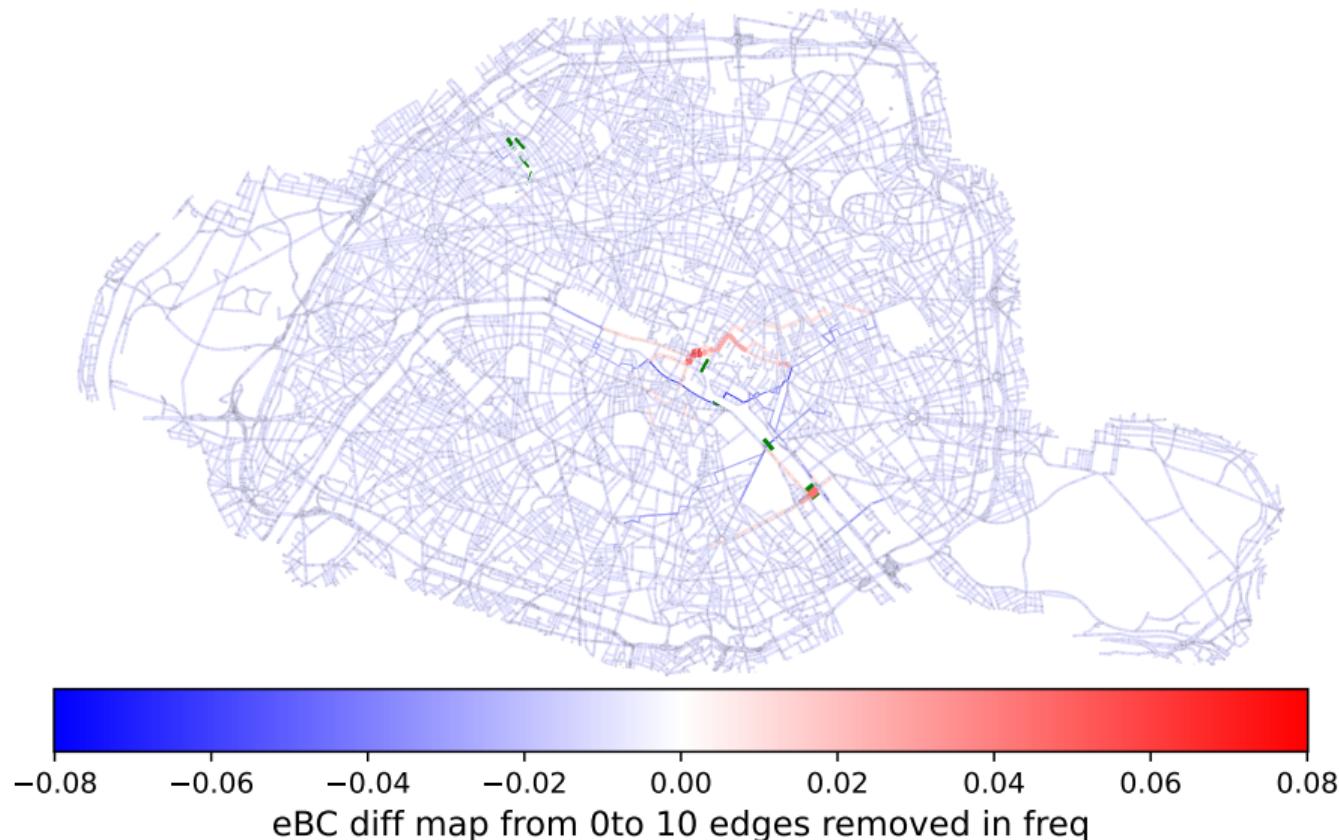


Ordre freq

La fréquence: des perturbations locales assez faibles

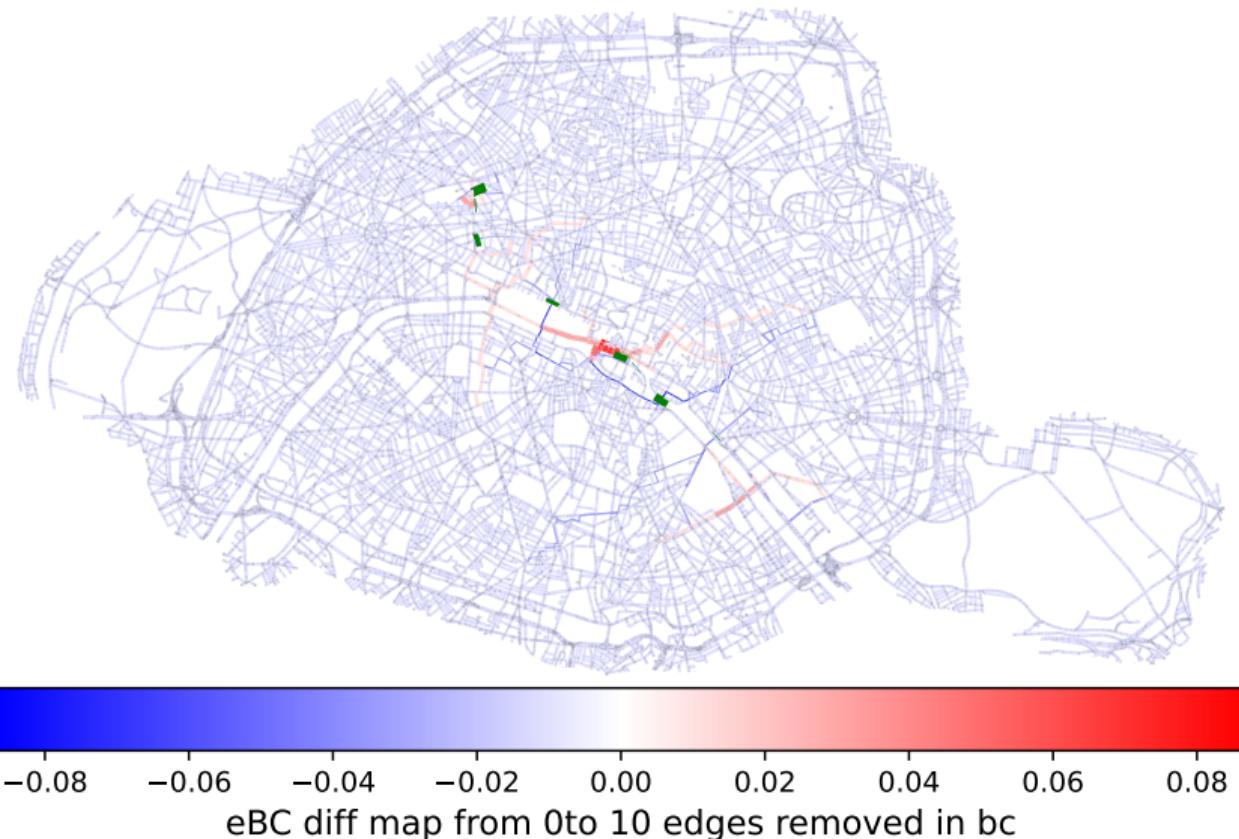


La fréquence: un indicateur biaisé mais apparition d'une stratégie de coupe

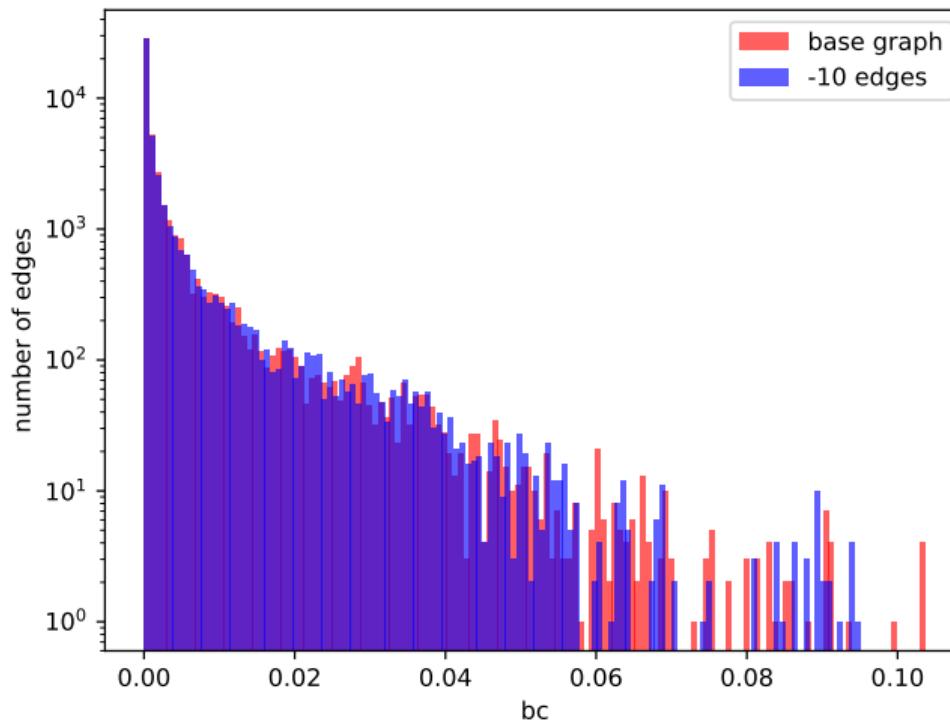


Ordre eBC dans une coupe

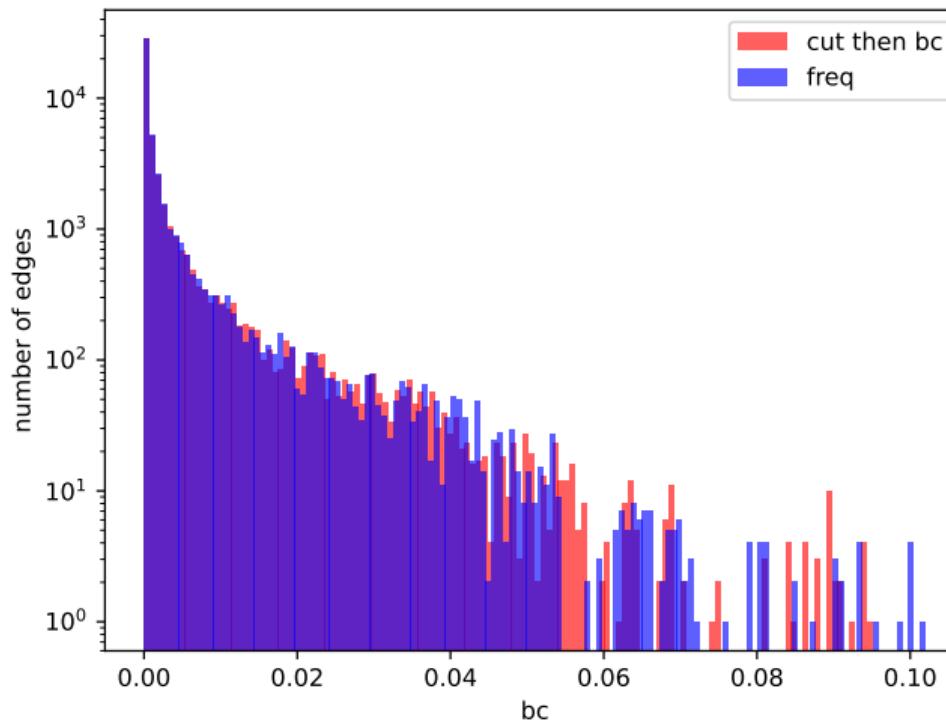
Type de coupe majoritaire



Evolutions des distributions des eBC



Comparaison des distributions: cut (eBC) vs freq



Comparaison des scores: average eBC

Average eBC evolution for 3 different attacks

