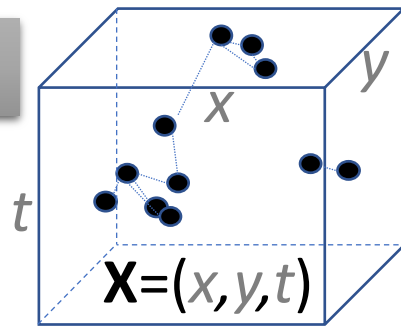


Existing and improved application of the tau statistic τ to spatiotemporal data \mathbf{X} (case geolocation (x,y) , disease onset t)

Data (\mathbf{X})



(t -permuted \mathbf{X})
simulations τ & $\tau(\mathbf{X})$

B.1) Graphical hypothesis testing

assess statistical evidence
against no clustering, H_0

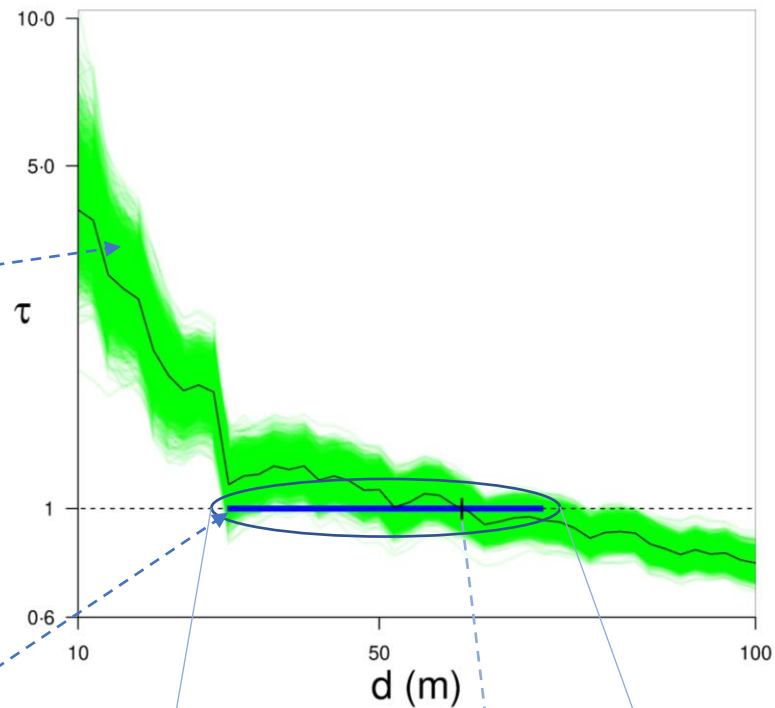
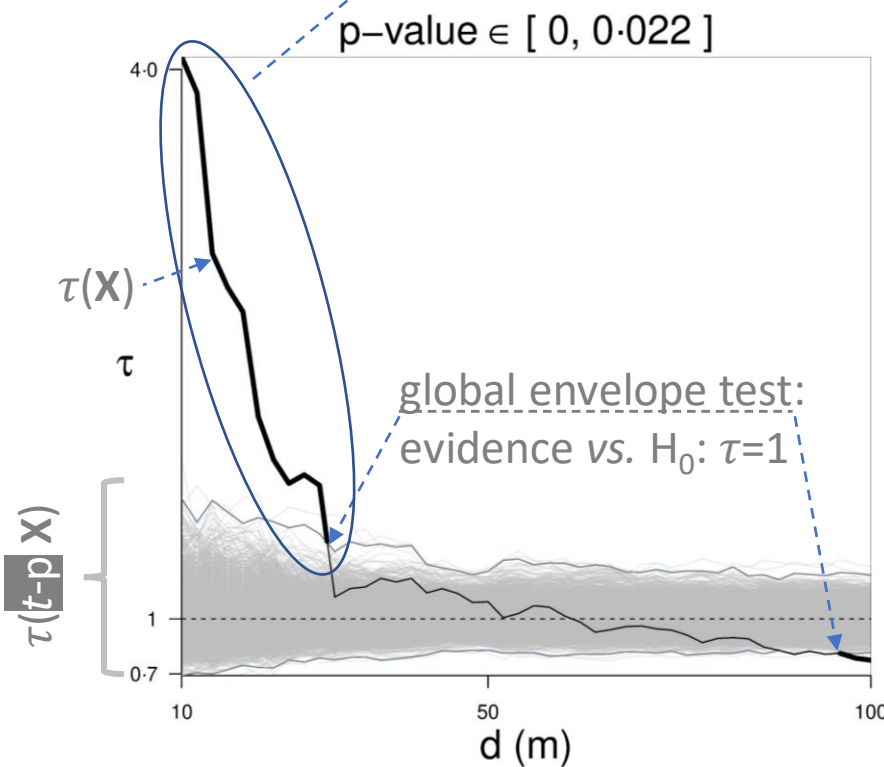
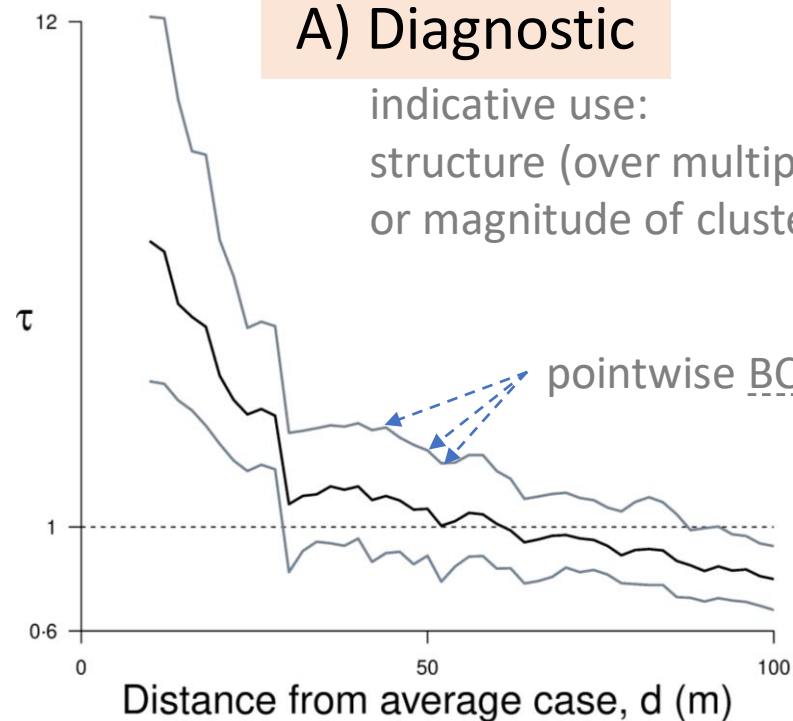
B.2) Point estimation & CI

clustering range D

if clustering visible,
use spatial bootstraphing
to simulate

A) Diagnostic

indicative use:
structure (over multiple scales)
or magnitude of clustering



D distribution:
where τ simulations
intercept $\tau=1$,
obtain point estimate & CI

