

Review of: "Spatio-temporal clusters and patterns of spread of dengue, chikungunya, and Zika in Colombia"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Overall, this is a very short and nice paper. I do have some questions

- I am not sure on Front wave approach (not very commonly used in public health, so a stronger motivation may be necessary).
- Satscan
 - Is it weekly support? or daily?
 - Can you report the start and end date of the clusters?
 - Did you use a retrospective approach? Or prospective? A couple of papers below (Desjardins, Hohl discuss prospective versus retrospective) - it really depends on your research question, but generally for infectious diseases, a prospective approach is preferred.
 - Can you report on the running time?
 - Some sensitivity of the scan parameters would be interesting. How would it affect the results?
- I wonder if you may want to smooth out your data before you run Satscan? At the very least, if the data that is used in satscan is daily, then I recommend taking a 7-days average since we know that reports of cases can vary dramatically during the week and weekends.
- Can you elaborate a little more on the public health implications

Desjardins, M. et al. "Rapid surveillance of COVID-19 in the United States using a prospective space-time scan statistic: Detecting and evaluating emerging clusters." *Applied geography* 118 (2020): 102202.

Hohl, Alexander, et al. "Daily surveillance of COVID-19 using the prospective space-time scan statistic in the United States." *Spatial and spatio-temporal epidemiology* 34 (2020): 100354.