EMERGING SCIENCE FOR ENVIRONMENTAL HEALTH DECISIONS

Leveraging Advances in Remote Geospatial Technologies to Inform Precision Environmental Health Decisions

Background Reading List

(Listed in Alphabetical Order)

Blangiardo, M. and Cameletti, M., 2015. Spatial and spatio-temporal Bayesian models with R-INLA. John Wiley & Sons.

Carter, A. W., Zaitchik, B. F., Gohlke, J. M., Wang, S., & Richardson, M. B. (2020). Methods for estimating wet bulb globe temperature from remote and low-cost data: A comparative study in Central Alabama. GeoHealth, 4(5), e2019GH000231.

Chen, J. and Clarke, K.C., 2020. Indoor cartography. Cartography and Geographic Information Science, 47(2), pp.95-109.

Colston, J. M., Zaitchik, B., Kang, G., Yori, P. P., Ahmed, T., Lima, A., ... & Kosek, M. N. (2019). Use of earth observation-derived hydrometeorological variables to model and predict rotavirus infection (MAL-ED): a multisite cohort study. The Lancet Planetary Health, 3(6), e248-e258.

Diggle, P.J., Tawn, J.A. and Moyeed, R.A., 1998. Model-based geostatistics. Journal of the Royal Statistical Society: Series C (Applied Statistics), 47(3), pp.299-350.

Fotheringham, A.S., Brunsdon, C. and Charlton, M., 2003. Geographically weighted regression: the analysis of spatially varying relationships. John Wiley & Sons.

Haining, R. and Maheswaran, R., Geographic Information Systems in Spatial Epidemiology and Public Health, Lawson, A.B., Banerjee, S., Haining, R.P. and Ugarte, M.D. eds., 2016. Handbook of spatial epidemiology. CRC Press.

Hallisey, E., Tai, E., Berens, A., Wilt, G., Peipins, L., Lewis, B., Graham, S., Flanagan, B. and Lunsford, N.B., 2017. Transforming geographic scale: a comparison of combined population and areal weighting to other interpolation methods. International journal of health geographics, 16(1), pp.1-16

K. C. Elliott *et al.*, "Drone Use for Environmental Research [Perspectives]," in *IEEE Geoscience and Remote Sensing Magazine*, vol. 7, no. 1, pp. 106-111, March 2019, doi: 10.1109/MGRS.2018.2876451.

Pu, Q. and Yoo, E.H., 2020. Spatio-temporal modeling of PM2. 5 concentrations with missing data problem: a case study in Beijing, China. International Journal of Geographical Information Science, 34(3), pp.423-447.

Resnik, D.B., Elliott, K.C. Using Drones to Study Human Beings: Ethical and Regulatory Issues. *Sci Eng Ethics* **25,** 707–718 (2019). https://doi.org/10.1007/s11948-018-0032-6

Verbeek, T., 2019. Unequal residential exposure to air pollution and noise: a geospatial environmental justice analysis for Ghent, Belgium. SSM-population health, 7, p.100340.

Yoo, E.H., Pu, Q., Eum, Y. and Jiang, X., 2021. The Impact of Individual Mobility on Long-Term Exposure to Ambient PM2. 5: Assessing Effect Modification by Travel Patterns and Spatial Variability of PM2. 5. International Journal of Environmental Research and Public Health, 18(4), p.2194.