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The Agglomeration of American R&D Labs*

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We employ a unique data set to examine the spatial clustering of about 1700 private R&D labs in California and in the U.S. Northeast Corridor. Using these data, which contain the R&D labs' complete addresses, we are able to more precisely locate innovative activity than with patent data, which only contain zip codes for inventors' residential addresses. We avoid the problems of scale and borders associated with using fixed spatial boundaries, such as zip codes, by developing a new point-pattern procedure. Our multiscale core-cluster approach identifies the location and size of significant R&D clusters at various scales, such as a half mile, 1 mile, 5 miles, and more. Our analysis identifies four major clusters in the Northeast Corridor (one each in Boston, New York-Northern New Jersey, Philadelphia–Wilmington, and Washington, D.C.,) and three major clusters in California (one each in the Bay Area, Los Angeles, and San Diego).

Keywords: spatial clustering, geographic concentration, R&D labs, innovation

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