**Table 1** Software packages that implement selected statistics presented in *Spatial Statistical Methods for Geography*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Statistic** | **R package** | **ArcGIS toolbox** | **QGIS plug-in** | **Other software** |
|  |  |  |  |  |
| ***C3 – Descriptive Statistics*** |  |  |  |  |
| Mean Center | aspace | Spatial Statistics | Mean Coordinates | --- |
| Median Center | aspace | Spatial Statistics | --- | --- |
| Standard Distance | aspace | Spatial Statistics | Standard Distance | --- |
| Standard Ellipse | aspace | Spatial Statistics | Standard Ellipse | --- |
| Gini Coefficient | reat | --- | --- | PySal (<https://pysal.org/>) |
| Surface Metrology | --- | --- | --- | SPIP (<https://www.imagemet.com/products/spip/>) |
|  |  |  |  |  |
| ***C5 – Global Statistics*** |  |  |  |  |
| Global Moran's I | spdep, ape | Spatial Statistics | Hotspot Analysis | PySal, GeoDa (<https://geodacenter.github.io/index.html>) |
| Geary's C | spdep, DCluster | --- | --- | PySal |
| Tango's Statistic | smerc, DCluster | --- | --- | --- |
| Cuzick-Edwards | smacpod | --- | --- | --- |
| Global Quadrat Test | spatstat | --- | --- | --- |
|  |  |  |  |  |
| ***C6 – Local Statistics*** |  |  |  |  |
| Local Moran's *I* | spdep | Spatial Statistics | Hotspot Analysis | GeoDa, PySal |
| Getis–Ord Gi\* | spdep | Spatial Statistics | Hotspot Analysis | GeoDa, PySal |
| Stone's Test | DCluster | --- | --- | --- |
| Local Quadrat's Test | spatstat | --- | --- | --- |
| Modified Score Statistic | mdscore | --- | --- | GeoSurveillance (<https://www.acsu.buffalo.edu/~rogerson/geosurv>) |
| Tango's Statistic | smerc, DCluster | --- | --- | --- |
|  |  |  |  |  |
| ***C7 – Scan Statistics*** |  |  |  |  |
| Kulldorff's Spatial Scan | rsatscan | --- | VetEpiGISstat | SaTScan ([www.satscan.org](http://www.satscan.org)) |
|  |  |  |  |  |
| ***C8 – Spatial Regression*** |  |  |  |  |
| Spatial Error Model | rspatial | --- | --- | GeoDa, PySal |
|  |  |  |  |  |

Note: Many of these statistics are available in multiple R packages and through other software.