|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Time | Actual data | Forecast | 95% CI | |
| 2017-01 | 55.55 | 59.2274 | 48.993 | 69.4617 |
| 2017-02 | 52.77431 | 52.2003 | 40.387 | 64.0136 |
| 2017-03 | 56.12181 | 59.8545 | 46.6497 | 73.0593 |
| 2017-04 | 53.10116 | 55.6036 | 41.1406 | 70.0667 |
| 2017-05 | 55.25359 | 54.9492 | 39.3289 | 70.5695 |
| 2017-06 | 52.24164 | 51.6317 | 34.9343 | 68.3292 |
| 2017-07 | 50.66754 | 50.1129 | 32.4037 | 67.8222 |
| 2017-08 | 51.08064 | 50.2320 | 31.5657 | 68.8983 |
| 2017-09 | 45.82495 | 46.2891 | 26.7124 | 65.8657 |
| 2017-10 | 45.77132 | 46.8417 | 26.3953 | 67.2882 |
| 2017-11 | 44.10445 | 43.1599 | 21.8792 | 64.4406 |
| 2017-12 | 42.79198 | 41.0710 | 18.9875 | 63.1545 |

Table 1 Actual and forecast data base on the SARIMA model of 2017 in China

Table 2. The global spatial autocorrelation of TB in China from 2004 to 2017

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Moran’s Index | Moran’s Z-score | P-value |
| 2004 | 0.33 | 5.09 | <0.001 |
| 2005 | 0.35 | 5.45 | <0.001 |
| 2006 | 0.33 | 5.21 | <0.001 |
| 2007 | 0.34 | 5.36 | <0.001 |
| 2008 | 0.29 | 4.64 | <0.001 |
| 2009 | 0.31 | 4.99 | <0.001 |
| 2010 | 0.34 | 5.36 | <0.001 |
| 2011 | 0.36 | 5.51 | <0.001 |
| 2012 | 0.32 | 5.06 | <0.001 |
| 2013 | 0.32 | 5.11 | <0.001 |
| 2014 | 0.32 | 5.07 | <0.001 |
| 2015 | 0.30 | 4.79 | <0.001 |
| 2016 | 0.28 | 4.51 | <0.001 |
| 2017 | 0.28 | 4.54 | <0.001 |

Table 3. The local spatial autocorrelation of TB in China from 2004 to 2017

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Area | LMi Index | LMi  Z-score | P-value | Correlation type | Incidence  (/100,000) |
| 2004 | Guangxi | 0.00001 | 2.82 | 0.005 | High-High Cluster | 119.62 |
| 2004 | Hainan | 0.000007 | 2.69 | 0.007 | High-High Cluster | 123.21 |
| 2004 | Guizhou | 0.00001 | 3.08 | 0.002 | High-High Cluster | 122.23 |
| 2004 | Chongqing | 0.000009 | 2.54 | 0.01 | High-High Cluster | 127.49 |
| 2005 | Guangxi | 0.00001 | 2.77 | 0.006 | High-High Cluster | 145.67 |
| 2005 | Guizhou | 0.00001 | 3.19 | 0.001 | High-High Cluster | 157.35 |
| 2005 | Chongqing | 0.000009 | 2.57 | 0.01 | High-High Cluster | 151.51 |
| 2006 | Guangxi | 0.000009 | 2.53 | 0.01 | High-High Cluster | 127.23 |
| 2006 | Hainan | 0.000006 | 2.40 | 0.02 | High-High Cluster | 140.54 |
| 2006 | Guizhou | 0.00001 | 2.86 | 0.004 | High-High Cluster | 146.21 |
| 2007 | Guangxi | 0.00001 | 2.72 | 0.007 | High-High Cluster | 129.84 |
| 2007 | Hainan | 0.000007 | 2.54 | 0.01 | High-High Cluster | 143.63 |
| 2007 | Guizhou | 0.00001 | 3.42 | 0.001 | High-High Cluster | 169.92 |
| 2008 | Guangxi | 0.00001 | 2.79 | 0.005 | High-High Cluster | 131.41 |
| 2008 | Hainan | 0.000006 | 2.47 | 0.01 | High-High Cluster | 139.16 |
| 2008 | Guizhou | 0.00001 | 3.47 | 0.0005 | High-High Cluster | 183.0 |
| 2008 | Chongqing | 0.000007 | 2.01 | 0.04 | High-High Cluster | 127.61 |
| 2008 | Xinjiang | -0.000001 | -2.02 | 0.04 | High-Low Cluster | 202.93 |
| 2009 | Xinjiang | 0.000002 | 2.40 | 0.0007 | High-High Cluster | 183.35 |
| 2009 | Tibet | 0.000002 | 2.28 | 0.02 | High-High Cluster | 118.3 |
| 2010 | Xinjiang | 0.000003 | 4.56 | 0.0001 | High-High Cluster | 164.46 |
| 2010 | Tibet | 0.000004 | 3.16 | 0.002 | High-High Cluster | 118.34 |
| 2011 | Xinjiang | 0.000003 | 4.87 | 0.00001 | High-High Cluster | 157.83 |
| 2011 | Tibet | 0.000004 | 3.79 | 0.0002 | High-High Cluster | 123.03 |
| 2012 | Xinjiang | 0.000004 | 6.18 | <0.00001 | High-High Cluster | 181.17 |
| 2012 | Tibet | 0.000006 | 5.45 | <0.00001 | High-High Cluster | 135.18 |
| 2013 | Xinjiang | 0.000004 | 6.61 | <0.00001 | High-High Cluster | 172.73 |
| 2013 | Tibet | 0.000006 | 5.79 | <0.00001 | High-High Cluster | 138.12 |
| 2014 | Xinjiang | 0.000005 | 7.54 | <0.00001 | High-High Cluster | 176.0 |
| 2014 | Tibet | 0.000007 | 6.32 | <0.00001 | High-High Cluster | 147.99 |
| 2015 | Xinjiang | 0.000004 | 6.66 | <0.00001 | High-High Cluster | 184.53 |
| 2015 | Tibet | 0.000007 | 6.56 | <0.00001 | High-High Cluster | 140.20 |
| 2016 | Xinjiang | 0.000005 | 7.95 | <0.00001 | High-High Cluster | 185.66 |
| 2016 | Tibet | 0.000009 | 8.14 | <0.00001 | High-High Cluster | 154.37 |
| 2017 | Xinjiang | 0.000005 | 8.41 | <0.00001 | High-High Cluster | 202.59 |
| 2017 | Tibet | 0.000009 | 8.43 | <0.00001 | High-High Cluster | 154.77 |