

	Global Moran's I	Local Moran's I
Definition	Indicator which reveals the spatial autocorrelation at the global level.	Indicator which reveals the spatial autocorrelation at the local level.
Usage in this study	To reveal the overall agglomerating level of the incidence of viral hepatitis across the space.	To identify the spatial clusters of the incidence of viral hepatitis across the space.
Formula	$\text{Global Moran's I} = \frac{n \sum_{i=1}^n \sum_{j=1}^n W_{ij} (x_i - \bar{x})(x_j - \bar{x})}{(\sum_{i=1}^n \sum_{j=1}^n W_{ij}) \sum_{i=1}^n (x_i - \bar{x})^2}$	$\text{Local Moran's I} = \frac{(x_i - \bar{x})}{m_0} \sum_j W_{ij} (x_j - \bar{x})$ $m_0 = \sum_i (x_i - \bar{x})^2 / n.$
Explanations	<p>x_i—the incidence of viral hepatitis in provincial unit i.</p> <p>x_j—the incidence of viral hepatitis in provincial unit j.</p> <p>\bar{x}—the mean value of the incidence of viral hepatitis at the provincial level.</p> <p>W_{ij}—row-standardized 31×31 spatial weight matrix, which contains the geographical information of research target observation units. It is defined as follows:</p> $W_{ij} = \begin{bmatrix} W_{11} & W_{12} & \dots & W_{1,30} & W_{1,31} \\ W_{21} & W_{22} & & W_{2,30} & W_{2,31} \\ & \vdots & & & \vdots \\ W_{30,1} & W_{30,2} & \dots & W_{30,30} & W_{30,29} \\ W_{31,1} & W_{31,2} & & W_{31,30} & W_{31,31} \end{bmatrix} \quad W_{ij} = \begin{cases} 1 & \text{adjacent} \\ 0 & \text{otherwise} \end{cases}$	<p>x_i—the incidence of viral hepatitis in provincial unit i.</p> <p>x_j—the incidence of viral hepatitis in provincial unit j.</p> <p>j—the number of adjacent units of unit i, which indicates that the sum of j will be limited to the adjacent units of i.</p> <p>W_{ij} shares the same meaning with Global Moran's I.</p>