

## DensityToVector

**Title** DensityToVector

### Description

*This script is intended to help aid a density based network/vector analysis process by computing KDEs, associating them with a target vector file, and computing percentile scores of non-zero/null density scores. This helps with cartography and analysis on networks and other vector data.*

### Usage

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### Syntax

DensityToVector (Input\_Density\_FC, Weight\_Fields, Input\_Target\_Vector, {Add\_Percentiles}, {Prepended\_Field\_Name\_Edit}, Cell\_Size, Search\_Radius, Areal\_Unit\_Factor, Sample\_Percentage, Group\_By\_Statistic)

Parameter	Explanation	Data Type
Input_Density_FC	Dialog Reference Feature class of point values that will be used to compute kernel densities. There is no python reference for this parameter.	Feature Class
Weight_Fields	Dialog Reference Density feature class fields that are used to both weight and filter kernel density estimates. Each kernel density is computed on non-null values, but a weight of 0 will still be treated as non-existent data. There is no python reference for this parameter.	Multiple Value
Input_Target_Vector	Dialog Reference This is the target network/vector that the kernel densities will be associated with. Zero values will be turned into nulls. There is no python reference for this parameter.	Feature Class
Add_Percentiles (Optional)	Dialog Reference If true, this will add a percentile calculation for every weight field. There is no python reference for this parameter.	Boolean
Prepended_Field_Name_Edit (Optional)	Dialog Reference This will edit the added field names to add what ever characters/text is added here. For a regional kernel	String

density, you could add "REG" and it will be added to the new fields.

There is no python reference for this parameter.

Cell_Size	Dialog Reference Cell Size of output KDE rasters to be associated with network.  There is no python reference for this parameter.	Long
Search_Radius	Dialog Reference Search Radius of KDE estimation function of ArcGIS.  There is no python reference for this parameter.	Double
Areal_Unit_Factor	Dialog Reference Determines output units of KDE estimation.  There is no python reference for this parameter.	String
Sample_Percentage	Dialog Reference For polyline files, this determines the number of points to place along the line. A Sample Percentage of 10 will place 1 point every 10 percentage points of the line (plus start and end points).  There is no python reference for this parameter.	Double
Group_By_Statistic	Dialog Reference For polyline files, this is the aggregation statistics determined by Pandas Aggregate function to aggregate the sample points based on. Defaults to the mean.  There is no python reference for this parameter.	String

## Code Samples

There are no code samples for this tool.

## Tags

Density, network

## Credits

David Wasserman

## Use limitations

There are no access and use limitations for this item.

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