GIS - Documentation #8321

How Inverse Distance Weighting (IDW) interpolation works

16/05/2019 17:35 - Debojyoti Mallick

Status:	Closed		**Start date:**	16/05/2019
Priority:	Normal		**Due date:**	
Assignee:	Philippe May		**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
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Description

Hello everyone:

You can read through the following links to learn more about how IDW works and if it can be of any use with regards to Basin Analysis.

How inverse distance weighted interpolation works :
https://pro.arcgis.com/en/pro-app/help/analysis/geostatistical-analyst/how-inverse-distance-weighted-interpolation-works.htm

The IDW tool in ArcGIS for the Parameters : https://pro.arcgis.com/en/pro-app/tool-reference/geostatistical-analyst/idw.htm

Another simpler explanation : https://gisgeography.com/inverse-distance-weighting-idw-interpolation/

Nevertheless you can always check Wiki description : https://en.wikipedia.org/wiki/Inverse_distance_weighting

To have some clarity of using this in QGIS (Disclaimer : very basic results just for understanding and also limited to a raster format):

https://www.geodose.com/2019/03/spatial-interpolation-inverse-distance-weighting-idw.html

FYI: ArcGIS gives you the option of providing the output as a GeoStatistical Layer which can be eventually converted to a Raster Layer. We would have to run it to eventually realize if the vector layer generated would give us the same problems previously encountered with lines and directions (dosen't seem so judging from examples)

History

#1 - 24/05/2019 16:53 - Philippe May

- Status changed from New to Closed

Interesting. I don't think it's very useful in the discussed scope (basin), but it's good information for further reference.