Quick Guide to ArcNLET-Py Postprocessing in the Transport Module

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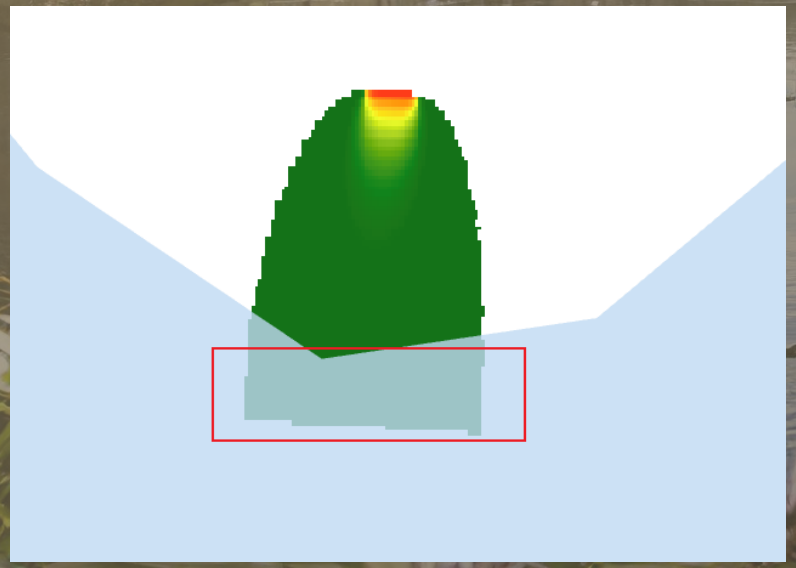
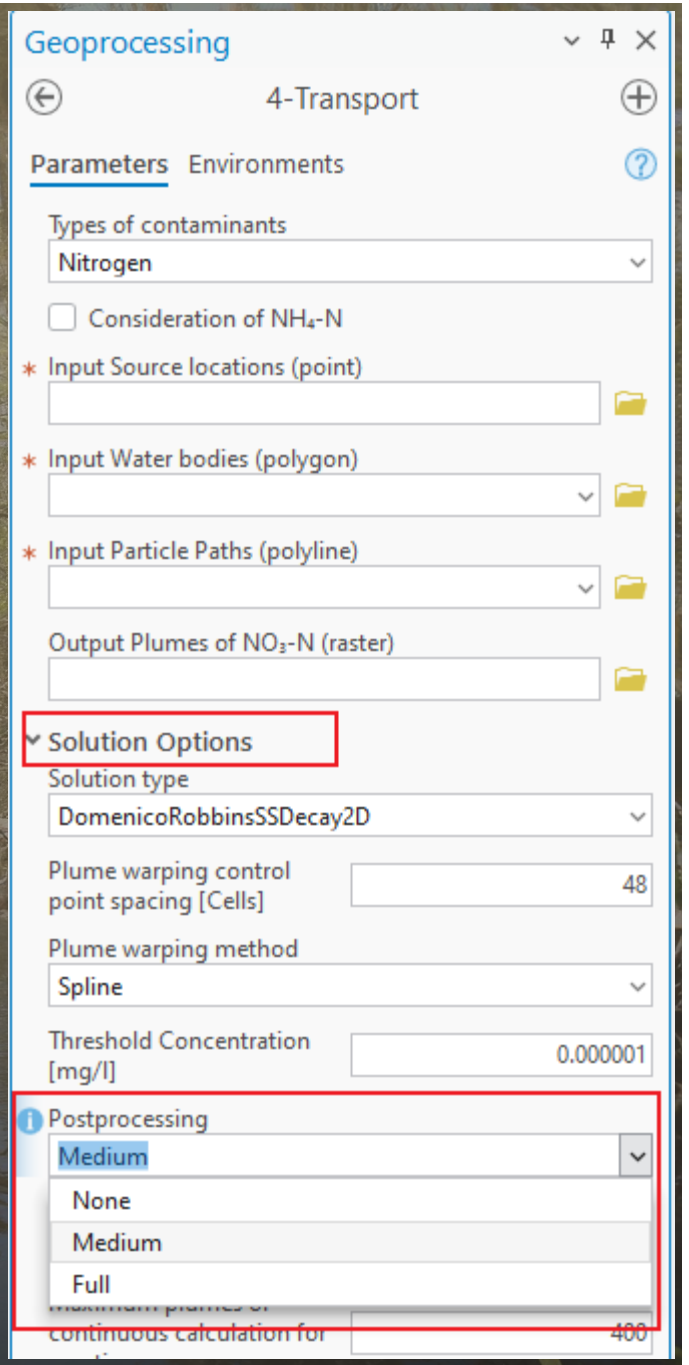
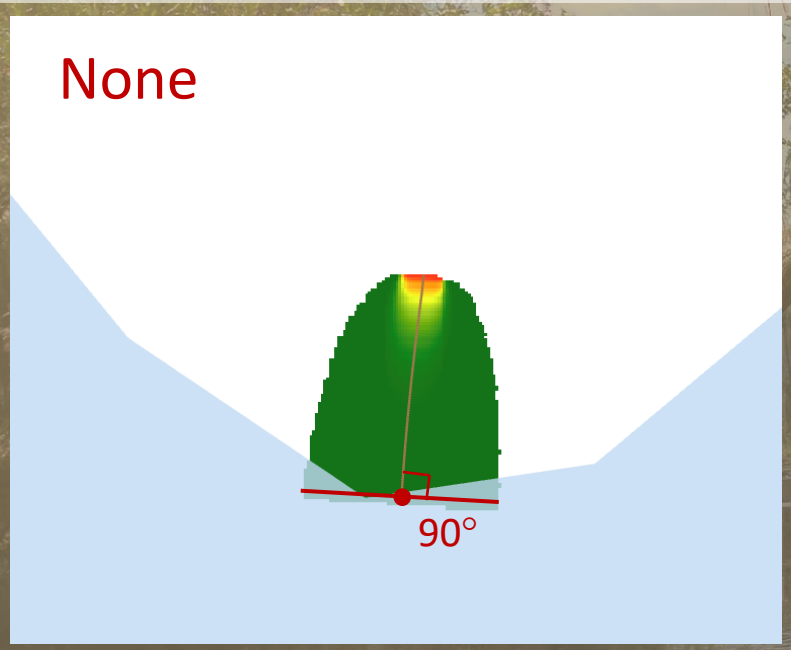
Postprocessing in the Transport

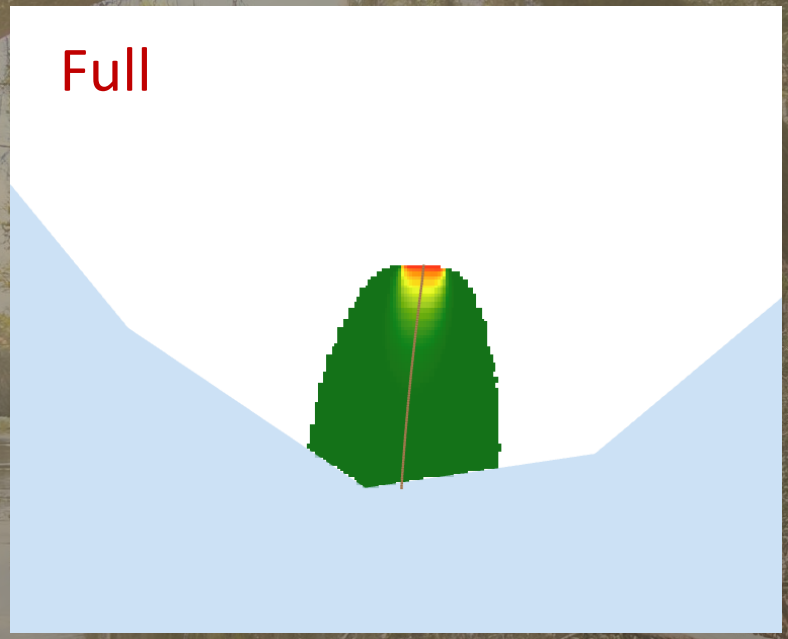
- This option sets whether to apply a None, Medium or Full processing to accurately calculate the boundaries of plumes entering a water body.





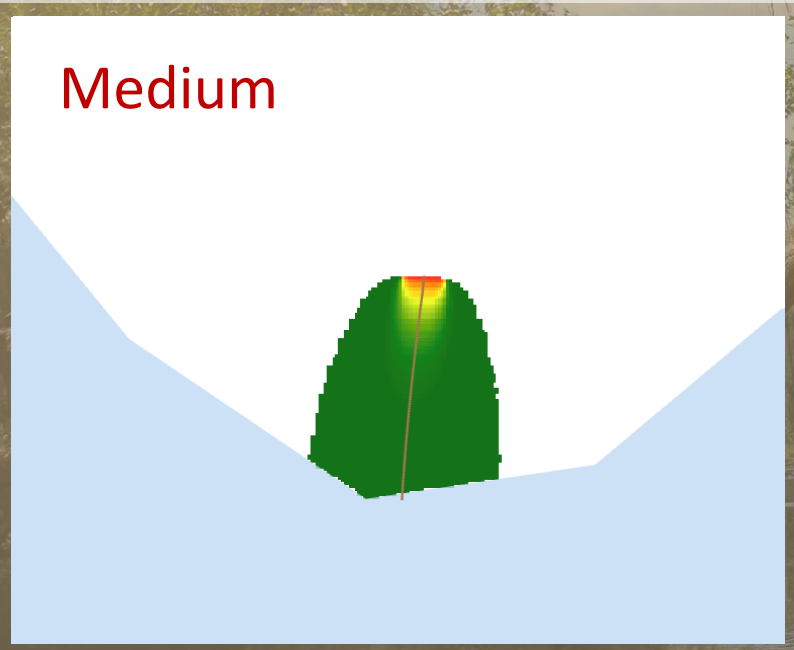
Postprocessing in the Transport Module

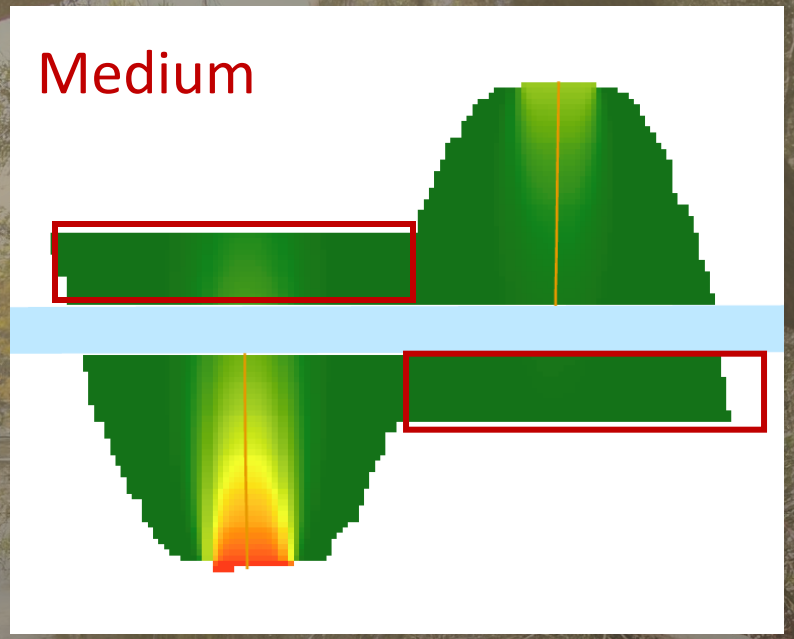




- At the intersection of the particle path and the surface water body, the plume is truncated along a line perpendicular to the particle path.
- With the "full" option, the results are highly precise, as the plume is strictly truncated based on its exact position relative to the water body. However, this approach is more time consuming.

Postprocessing in the Transport Module





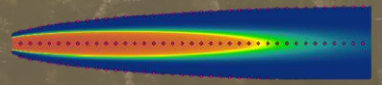
- The "medium" option first calculates all plumes completely, merges them, and then removes the portion that falls within the water body. For simple cases, the option produces results as good as the "full" option.
- But, when the spatial relationship between plumes and the water body becomes complex, the "medium" option may fail to provide accurate results.

Postprocessing in the Transport Module

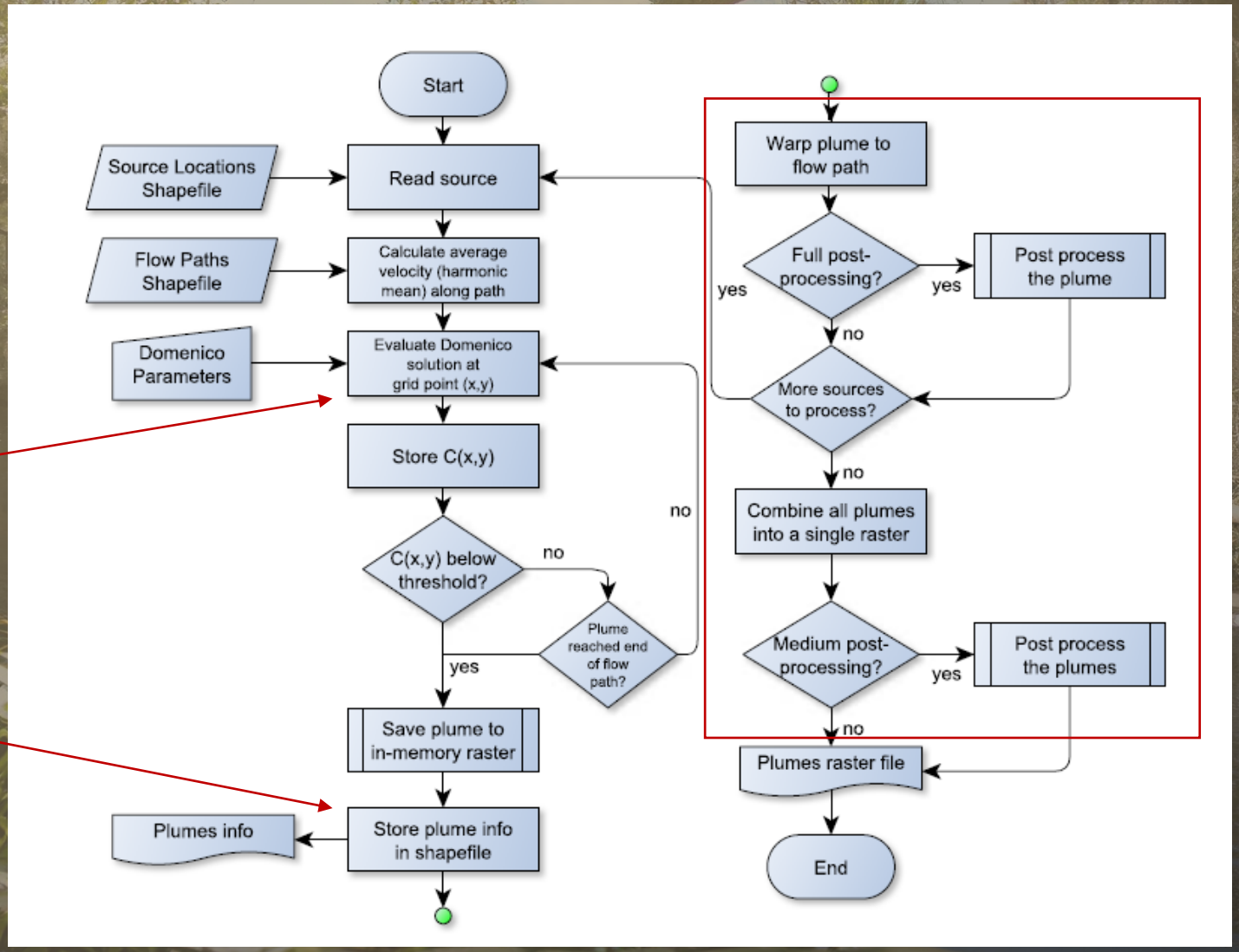
	None	Medium	Full
Effect of this option	Direct truncation, not good.	When the situation is simple, it works well. Otherwise, it does not.	Always perfect.
Computation time	Low	Medium	High
Does it affect load results calculated by Load Estimation Module?	No	No	No

Postprocessing in the Transport Module

Standard plume



Mass balance calculation about the plume



Warp and postprocessing