

**Q&A QGIS essentials for water modelling**

Question	Answer(s)
I am using GRASS tool. How does that differ with SAGA. If you show some tips for GRASS tool. That would be great.	These are both open source GIS software. The processing functionality of both can be accessed via QGIS. As Hans mentioned other processing tools such as PCRaster and Whitebox Tools can also be accessed.
Thanks	
where we can find previously done seminars on QGIS.	where we can find previously done seminars on QGIS. The previous seminars on hydrogeography are available at the address provided at the beginning: <a href="https://hydroschool.org/qgis/">https://hydroschool.org/qgis/</a>
	You can also look at the QGIS YouTube channel to see events and talks on other subjects
	Hi Mohit, past QGIS webinars with AWS can be found here: <a href="https://www.youtube.com/playlist?list=PL4FxiK-WWfH2Hs5WjA4WRfUJKiUtDfdKc">https://www.youtube.com/playlist?list=PL4FxiK-WWfH2Hs5WjA4WRfUJKiUtDfdKc</a>
what is the basic difference between Gis and Qgis	You mean ArcGIS and QGIS, or GIS in general? If the former, then ArcGIS is a paid-app developed by ESRI while QGIS is a free-to-use opensource app...If the latter, then GIS is an acronym for Geographic Information System: is a computer system to display and manipulate geographically-referenced data. QGIS is one of a number of GIS (Geographic Information System) applications. Others include ESRI ArcGIS and Mapinfo. QGIS is free, open source and cross platform.
Can the layer styles for flow direction mesh being saved and used later on?	Yes. Right click on the layer, -> Properties -> Symbology. At the bottom there is a 'Style' -> 'Save style'. Save the style as a .qml file. Then this can be loaded in for another layer/project
Can the layer styles for flow direction mesh being saved and used later on?	Hi Parshin, Johan's answer is spot on! You can save out a .qml for symbology.
Is Whitebox plugin a subscription?	There is a free 'Open core' version with limited but useful tools. Go to this site and select the \$0 option and the link becomes available: <a href="https://www.whiteboxgeo.com/download-whiteboxtools/">https://www.whiteboxgeo.com/download-whiteboxtools/</a> I believe it has both an open component and a paid toolbox: <a href="https://www.whiteboxgeo.com/">https://www.whiteboxgeo.com/</a>
What's other plugin tools can be used except for pcrast?	In the processing tools, there are a range of tools you will have access to with a standard install. Other providers can be added. For the QGIS documentation please refer: <a href="https://docs.qgis.org/3.28/en/docs/user_manual/processing/toolbox.html">https://docs.qgis.org/3.28/en/docs/user_manual/processing/toolbox.html</a>
Will QGIS be effective in a highly urbanised catchment.	yes, I wonder too if this is effective/working in a highly urbanised area It's possible, but you need to take care of limitations and have a good DEM.
The grid lines on the flow accumulation can cause issues. They normally generate from a projected DEM that has not been clipped to straight edges in the projected crs. Tip, reproject DEM then clip by 'extent' and draw a rectangle just smaller than the DEM	Thanks for the tip Johan
thanks	
Can this plug-in assist with catchment delineation?	Can this plug-in assist with catchment delineation? Hi Ross, hopefully Hans just showed this. He did :) Thanks Phil.
Will there be a web-API for QGIS to use these functions and tools remotely (on-the-fly) without downloading the QGIS app?	
I have still problem with the PC raster instalaltion. I have followed the instruaction on the book, but it is still does not work.	There are some troubleshooting videos on my YouTube channel. If it still doesn't work, contact me.
I have still problem with the PC raster instalaltion. I have followed the instruaction on the book, but it is still does not work.	Thank you Hans, I have also followed your Youtube Channel.
Thanks Hans. How can we create subcatchment based on multiple gages?	You can use a CSV of coordinates for the locations of the gauges and convert them to an outlet raster (column file to PCRaster tool) and then use the subcatchment tool.
Thanks Hans. How can we create subcatchment based on multiple gages?	Hi Hans, I'll also give this a go as I previously attempted to use the IHE Delft Hydrology tool 'Calculate catchments from pour points' but didn't have success, I think potentially due to the folder it was writing to (I never did quite resolve). Is there any difference between the output of these two tools?
can you pls show example of the flow direction arrows at a much coarser scale? Can the same grid be used and then the pixel dimensions changed or does a coarse grid need to be generated from the start? I thought i saw pixel dimension option. Am interested in using regional surface flow direction to represent regional groundwater flow direction, hence coarse resolution would be better to convey this. thank you	You can play with the size values and grid settings in the mesh styling panel. The result also depends on the zoom level.
It is indeed a very good product. Is it an addition	
Do you have volunteering opportunities for the development of tools for QGIS? I am a MERN stack web developer (part-time), and would love to aid in, and be part of, developing such awesome tools!	Sure. You can connect to the QGIS community easily. If it's for hydrology feel free to contact me to discuss.
Is there any prospect of a PCRaster installer that can be used with standalone Windows QGIS? Currently it can be used if you install QGIS via OSGeo4W (or conda), but these are problematic in some corporate environments (targetted by stupid antivirus software).	my pcraster is not working it says algorithm not found
Is there any prospect of a PCRaster installer that can be used with standalone Windows QGIS? Currently it can be used if you install QGIS via OSGeo4W (or conda), but these are problematic in some corporate environments (targetted by stupid antivirus software).	It also works with the standalone installer, which comes with OSGeo4W. Simply run Setup and look for PCRaster.
Is there any prospect of a PCRaster installer that can be used with standalone Windows QGIS? Currently it can be used if you install QGIS via OSGeo4W (or conda), but these are problematic in some corporate environments (targetted by stupid antivirus software).	OK, I think that "Setup" might have the same problem as the OSGeo4W installer.
how to adjut the number of sub-catchments?	Change the threshold for strahler order.
How can I purchase the book : QGIS hydrological applications. I mean to say the publisher. Please give the details.	Hi Pushpendra - please see here: <a href="https://locatepress.com/book/hyd2">https://locatepress.com/book/hyd2</a>
Is it possible to integrate data for HEC-HMS and QGIS during modelling?	Hi Pushpendra,
My librarian was not able to order this book for my institute library.	I provided the link to Locate press in the answer to the previous question, there is link on that page to Amazon also.
I cant install plugins PCRaster : it says algorithms will not be available	Check the documentation of the plugin to correctly install PCRaster before installing the plugin. Could you share the link, thanks
Kurt, How did you identify/draw that catchment and streams?with a plugin/python script?	We use catchment and stream delineation tools of QGIS (PCRaster Tools) and convert them from raster to vector. The workflow is in our book and courses. You can also find resources on my YouTube channel.
	Legend patches from where?
Is there anyway without exporting to shp to display raster contours as labels?	
Could this Webinar session posted in the AWS for us to re-visit.	Hi Angie, past AWS can be found on our YouTube channel <a href="https://www.youtube.com/c/AustralianWaterSchool">https://www.youtube.com/c/AustralianWaterSchool</a> and AWS website: <a href="https://awschool.com.au/resources/">https://awschool.com.au/resources/</a> Thanks
Good afternoon gentlemen! What would be the best plugin/steps to follow to generate subcatchments for hydrological analysis?	My current preference is the PCRaster Tools plugin. Have a look at my YouTube channel for workflows.
	thank you so much Hans.. I used to use Taudem before, but in the new versions i understand it is replaced. I'll definitely have a look at PCRaster. Thanks
Is the style manager is QGIS version limited or is it in th older versions also?	Hi Pushpendra, I believe it has been in for at least a few years, although there have probably been improvements in that time!
Is there any difference between using PCRaster and the given QGIS tools in the processing toolbox to get the flow direction, accumulation and catchment? Thanks	There are no core tools in QGIS that do that. So it's SAGA or GRASS that you're referring too. There are differences in algorithms used and parameters you can set. The nice thing is that you can compare results and use the best for your research area.
Thanks Hans.	
How Can I add Symbols like Boundary? Can you explain in brief	
When using Atlas with QGIS versions newer than 3.16 "band 1" appears in symbology above the scale in legends. This has to be removed manually in current version, are there any plans to fix this in future releases or is there a work around that I'm not aware of?	
can QGIS make a 3D view?	yes in View Menu >New 3D Map View
@Ethiopia !	@Ethiopia !
Thanks Menke, I got the publisher. best regards	Thanks for the response - closing question
How much different is the first edition from the second? ON the hydrology reference?	The 2nd edition is a substantial update where the workflow is done via PC Raster tools vs SAGA. The book also is updated to QGIS v 3.22+
	mine was QGIS 3.22 but not working pcraster
This is an eye opening for me, love it.	Agree - great presentation from Hans and Kurt!

thank you for the presentor, much appreciated.	
could send e your email I want to have material that helps me	
Seems it takes a long time to do styling. Can wa have a templete so next time we just drag it.	live answered
Thank you. Love QGIS.	
Can you guys make fees less for Less Developed Countries	Can you guys make fees less for Less Developed Countries
Any tool you suggest in QGIS for interpolating elevation from contour shape file to point file?	
Is there a book with process about Principal Component analysis or monte Carlo modeling using gis?	
Could you please help to smoothen the contours?	You can use the input downscaling setting of the contour renderer.
	Thanks Hans
what is the difference between hydroschool and AWS	Hydroschool is Krey's training organisation, Krey supports the some of the training of the Australian Water School. Thanks!
I highly reccomend to subscribe to the channel @HansvanderKwast as you will find your answers and a lot more useful videos. I also reccomend following Hans on other social media platforms like twitter and LinkedIn to know what is going on and timely updates!	
Thanks Hans, Kurt ,Philip and Krey. Amazing Session. Will definately go through and take advantage of handy tools PCRaster.	
Appreciate so much your shared knowledge! Could you please answer the previous question? "When using Atlas with QGIS versions newer than 3.16 "band 1" appears in symbology above the scale in legends. This has to be removed manually in current version, are there any plans to fix this in future releases or is there a work around that I'm not aware of?"	