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## Scenario 3 uncertainty data

1 message

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Wed, Jun 7, 2023 at 11:20 AM

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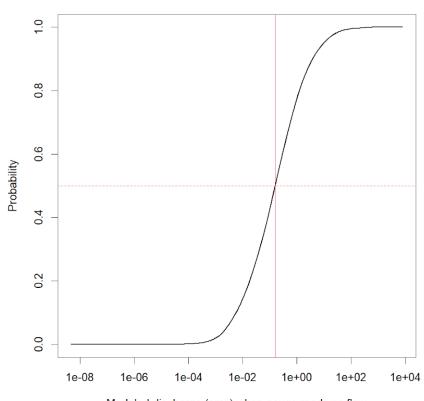
Hi Vinay,

I've uploaded the wet/dry uncertainty estimates for the Texas study area in the shared drive under Scenario 3: https://drive.google.com/ drive/u/0/folders/1YRtH1geA13aLkftvki0Kw1CQRs5QnjA-

The data are in the same format as the width data that I previously generated. I estimated uncertainty using two approaches, like we discussed yesterday:

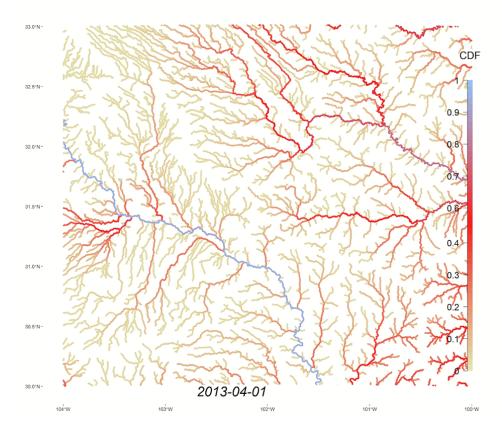
(1) A CDF of uncertainty with the median (0.5) corresponding to equal likelihood that the stream is wet or dry:





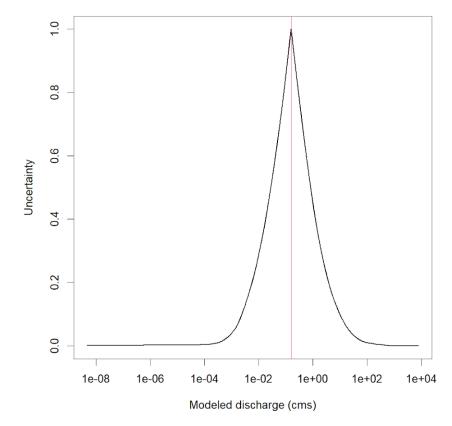
Modeled discharge (cms) when gauge reads no flow

I also made a little animation to visualize the data (color corresponds to probability in the CDF above):

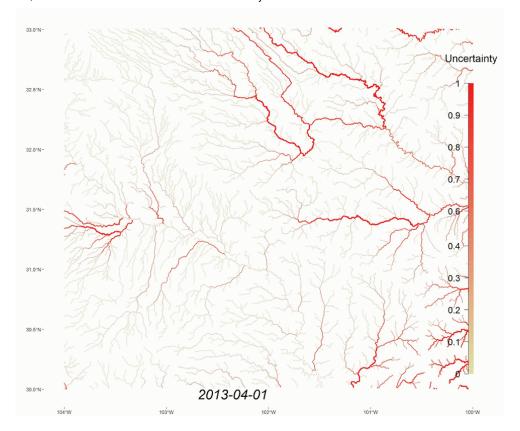


(2) A metric of uncertainty, scaled from 0 to 1 (where 1 is most uncertain):

## Discharge vs Uncertainty



Here's the corresponding visualization:



Let me know if you have any questions.

George

George Allen Assistant Professor Virginia Tech Geosciences https://geos.vt.edu/people/Everyone/allen--george.html