

Webinar Q&A: What's new in RMC-BestFit?

#	Question	Answer
1	In Indonesia, we generally use four types of distributions: normal, log-normal, Gumbel, and log-Pearson type III distributions for flood frequency analysis. While the fit test uses the chi-square and Smirnov Kolmogorov tests. Can RMC-BestFit cover all of these?	Best Fit includes log-normal,LP3 and gumbel. the goodness of fit includes Akaike information fit,bayesian information criteria and RMSE
2	Why sometimes RMC-BestFIT results are different from BoM FFA?	live answered The BoM FFA results are simple method of moment results and should not be used. The have not been recomened practice for over 20 years
4	When do we need to use Enable Priors on Quantiles option?	Only when you have another reliable line of evidence on what the quantile should be.
5	What's the best method to treat higher outliers in BestFit? Where we have good confidence that a data point is rarer than the length of record? Thanks!	
6	Could you please repeat which BestFit output we should be using for FFA - posterior predictive or mode?	live answered It depends on the purpose of the FFA results. There is guidance on this in ARR. Book 3, Chapter 2. Also see a paper in HWRS next week Wednesday 11:20 by Jo Szemis. We go through the reasons why you would choose a particular quantile estimate.
7	Can you please provide the ARR reference for incorporating climate change into the flood freq analysis Haden mentioned in his presentation.	there is no reference. the New Climate change chapter just says it should be consistent with the CC ifd and loss advice. Here is a link to Example three <a href="http://book.arr.org.au.s3-website-ap-southeast-2.amazonaws.com/figures/3054.png">http://book.arr.org.au.s3-website-ap-southeast-2.amazonaws.com/figures/3054.png</a>
8	Can applying the RMC Model for any river, and is required daily, or monthly or max annually streamflow time series	You need estimates of a "block maxima". Usually this is the annual maximum peak flow.
9	Is there a technical reference available which provides details of the equations used in this application?	live answered
10	What is AIC and BIC?	live answered They are ways of helping select a model.The are measures of how well a particular model fits the data. BIC = Bayesian Information Criteria. AIC = Akieki (?sp) Information criteria. You can look these up on Wikipedia.
11	Haden can you elaborate on the stochastic analysis to inform the QPs for future climate change?	<a href="https://github.com/USArmy-Corps-of-Engineers-RMC/RMC-BestFit/files/12751843/RMC-TR-2020-02-.Verification.of.the.Bayesian.Estimation.and.Fitting.Software.pdf">https://github.com/USArmy-Corps-of-Engineers-RMC/RMC-BestFit/files/12751843/RMC-TR-2020-02-.Verification.of.the.Bayesian.Estimation.and.Fitting.Software.pdf</a>
12	What are AIC, BIC, RMSE parameters? Which of them is the most important?	See previous answer
13	Are varying all the 3 parameters (location, scale and shape) in nonstationary FFA or you are keeping the shape parameter constant as most models do?	See previous answer
14	Can FLIKE also perform non-stationary FFA? Or is this just exclusive to BestFit at the moment?	FLIKE doesn't currently undertake non-stationarity.