



SDI Review Form 1.6

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2013_BJMCS_7930
Title of the Manuscript:	Bayesian Inference Based on the Interval Grouped Data from the Weibull Model with Application
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1. Better motivation should be presented. For example, why should one be interested in inference based on grouped data ? 2. Delete lines 37-39. Start out with Eq. (1). The two given expressions represent a Weibull PDF . In fact, there is a third, given by $f(t) = \alpha \beta t^{\beta-1} \exp(-\alpha t^\beta), \text{ also Weibull !}$ 3. In modern reliability studies, asymmetric loss functions are preferred to be used over the squared error loss. For example, one can use linear exponential (LINEX) loss function, Varian (1975) or squared -exponential loss (SQUAREX) function, Thompson and Basu (1996). 4. A good handbook by Rinne (2009) on the Weibull distribution should be added and, if possible, used. 5. Nothing is mentioned about θ being the only unknown parameter. Is this practical ?. Suppose, in the practical case, that both parameters θ and β are unknown ?. How would the problem be handled ?. 6. Suppose that the hyper-parameters are unknown, what should be done in this case ?. 7. The section on prediction, (and hence that on	,



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	applications) needs more careful consideration by using books and articles on prediction. REFERENCES [1] Rinne, H. (2009). The Weibull Distribution: A Handbook. Chapman and Hall, USA. [2] Varian, H. (1975). A Bayesian approach to real estate assessment. In Fienberg, S.E. and Zellner, A. (Eds.): <i>Studies in Bayesian econometrics and statistics</i>. In honour of Leonard J. Savage. North Holland, Amsterdam. [3] Thompson, R.D. and Basu, A.P. (1996). Asymmetric loss function for estimating reliability. In Berry, D.A., Chalenor, K.M. and Geweke, J.K. (Eds.): <i>Bayesian analysis in statistics and econometrics</i>. Wiley, New York.	
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Minor REVISION comments	1. The mathematical expressions are not well-typed. Better typing is a must. 2. 66: "Other referees ... (2010)" needs rephrasing. 3. 87: Check the signs in the exponent of the last term. 4. 104: Is $\pi(\theta, \beta G)$ o.k. ? . Notice that β is assumed to be known. 5. 185: "prediction is mainly concerned with" should replace "prediction mainly concern with". 2. Delete lines 37-39. Start out with Eq. (1). The two given expressions represent a Weibull PDF . In fact, there is a third, given by $f(t) = \alpha \beta t^{\beta-1} \exp(-\alpha t^\beta)$, also Weibull ! 3. In modern reliability studies, asymmetric loss functions are preferred to be used over the squared error loss. For example, one can use linear exponential (LINEX) loss function, Varian (1975) or squared –exponential loss (SQUAREX) function, Thompson and Basu (1996). 4. A good handbook by Rinne (2009) on the Weibull distribution should be added and, if possible, used. 5. Nothing is mentioned about θ being the only unknown parameter. Is this practical ?. Suppose, in the practical case, that both parameters θ and β are unknown ?. How would the problem be handled ?. 6. Suppose that the hyper-parameters are	
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	unknown, what should be done in this case ?. 7. The section on prediction, (and hence that on applications) needs more careful consideration by using books and articles on prediction. REFERENCES [1] Rinne, H. (2009). The Weibull Distribution: A Handbook. Chapman and Hall, USA. [2] Varian, H. (1975). A Bayesian approach to real estate assessment. In Fienberg, S.E. and Zellner, A. (Eds.): <i>Studies in Bayesian econometrics and statistics</i>. In honour of Leonard J. Savage. North Holland, Amestrdam. [3] Thompson, R.D. and Basu, A.P. (1996). Asymmetric loss function for estimating reliability. In Berry, D.A., Chalenor, K.M. and Geweke, J.K. (Eds.): <i>Bayesian analysis in statistics and econometrics</i>. Wiley, New York.	
<u>Optional/General</u> comments		

Note: Anonymous Reviewer