DOI: 10.1214/14-SS105

Errata: A survey of Bayesian predictive methods for model assessment, selection and comparison

Aki Vehtari and Janne Ojanen

Aalto University

Department of Biomedical Engineering and Computational Science (BECS)

e-mail: Aki.Vehtari@aalto.fi; Janne.Ojanen@aalto.fi

Abstract: Errata for "A survey of Bayesian predictive methods for model assessment, selection and comparison" by A. Vehtari and J. Ojanen, *Statistics Surveys*, 6 (2012), 142–228. doi:10.1214/12-SS102.

AMS 2000 subject classifications: Primary 62-02; secondary 62C10. Keywords and phrases: Bayesian, predictive, model assessment, model selection, decision theory, expected utility, cross-validation, information criteria.

Received January 2014.

- Page 190 "In the general case, an efficiency estimate of the importance sampling can be computed from the obtained weights (see Newton and Raftery, 1994; Gelman et al., 1995, ch. 10; Peruggia, 1997; Vehtari and Lampinen, 2002), but this approach can not prove convergence." should be "It is customary to examine the distribution of weights with various plots (see Newton and Raftery, 1994; Gelman et al., 1995, ch. 10; Peruggia, 1997; Vehtari and Lampinen, 2002), and an efficiency estimate of the importance sampling can be computed from the obtained weights (Kong, Liu and Wong, 1994; Liu, 2001, Ch. 2.5.3), but these can not prove convergence."
- Page 208, Equation (145) should be (thanks to Andrew Gelman)

$$p_{\text{eff}} \approx 2 \operatorname{Var}_{\theta_k|D,M_k} [\log p(\dot{y}_i|\theta_k, M_k)].$$
 (145)

References

Kong, A., Liu, J. S. and Wong, W. H. (1994). Sequential Imputations and Bayesian Missing Data Problems. *Journal of the American Statistical Association* **89** 278–288.

Liu, J. S. (2001). Monte Carlo Strategies in Scientific Computing. Springer-Verlag. MR1842342