

## ***Interactive comment on “Consistency assessment of rating curve data in various locations using Bidirectional Reach (BReach)” by Katrien Van Eerdenbrugh et al.***

### **Anonymous Referee #1**

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Rating curve fitting is basically a nonlinear regression problem. Traditionally, post-modelling analysis in regression is based on residual investigations. Auto-correlated residuals (non-stationarity) are, basically, what one is dealing with in cases of channel change. Hence, classical residual analysis is the common tool available for assessing stationarity in the stage – discharge relationship. A novel approach such as the BReach method should therefore be compared with such a common, simple and, more important, independent method in order to illustrate the strength and appropriateness of the new technique proposed. It is possible that other known objective methods exist in hydrometry for detecting stable and instable rating periods. If the authors believe that there are no comparable methods that are worth using for comparison, they should

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at least give some explanation and evidences for this in the paper. This in itself is an argument for the importance of their method.

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