



Marzolf et al. 1994; Cole and Caraco 1998; Young and Huryn 1998) or floating chambers (Marino and Howarth 1993; Kremer et al. 2003; Borges et al. 2004).

Solving Eq. 1 analytically is usually infeasible with the typi-

Specifically, we calculated the O

The Euler and accurate methods yielded much smaller magnitude of discrepancies in parameter (Fig. 3) and daily GPP and ER estimates (Fig. 4). However, the Euler method and the accurate method with piecewise constant

Mulholland et al. 2001; Wilson and Dodds 2009; Bernot et al. 2010; Murdock et al. 2010; Riley and Dodds 2012). The

changes prescribed by Eq. 1 and observed DO changes between successive measurements. The assumption of observation error postulates that the model reflects the true

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