EBASE manuscript

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## Abstract

*Key words*:

## 1 Introduction

* Overview of metabolism - importance
* Existing methods: Odum/WtRegDO, BASEmetab, references in Grace et al. (2015), applications to lakes and streams
* Applications to estuaries - challenges
* Goals and objectives

## 2 Materials and Procedures

* EBASE theory
* EBASE R package

## 3 Assessment

* Comparison with Odum and BASEmetab: Fwoxy Appalachicola
* Comparison with Odum and BASemetab: Apalachicola
* Sensitivity analyses:
  + optimization length
  + priors
* Application to representative NERR sites

## 4 Discussion

## 5 Comments and Recommendations

## Acknowledgments

## Figures

Figure 1: Fwoxy comparisons

Figure 2: Apalachicola comparisons

Figure 3: Sensitivity analyses

Figure 4: NERRS application

## Tables

Table 1: EBASE parameters and outputs

Table 2: Summary stats of Fwoxy comparison

Table 3: Summary stats of Apalachicola comparison

Table 4: Key parameters form NERRS application

## References

Grace, M. R., D. P. Giling, S. Hladyz, V. Caron, R. M. Thompson, and R. Mac Nally. 2015. Fast processing of diel oxygen curves: Estimating stream metabolism with BASe (BAyesian Single-station Estimation). Limnology and Oceanography: Methods **13**: 103–114. doi:[10.1002/lom3.10011](https://doi.org/10.1002/lom3.10011)