**Meta-analysis in environmental sciences**

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| **Monday, November 30th:** | Classes from 11:00 till 17:00 (GMT, London, UK) (3am to 9am) |
| 11:00 – 11:15 | Introductions |
| 11:15 – 12:00 | Introduction to meta-analysis, question formulation and intro to group exercises |
| 12:00 – 13:00 | Effect size measures and their calculation |
| 13:00 – 13:30 | BREAK |
| 13:30 – 15:00 | Combining effect sizes across studies, fixed vs random effects models |
| 15:00 – 17:00 | Practical 1: using metafor to combine effect sizes across studies using fixed and random effects models |
| **Tuesday, December 1st:** | Classes from 11:00 till 18:00 (GMT, London, UK) (3am to 10am) |
| 11:30 – 13:00 | Exploring causes of heterogeneity with meta-regression |
| 13:00 – 13:15 | BREAK |
| 13:15 – 15:00 | Practical 2: meta-regression in metafor |
| 15:00 – 15:15 | BREAK |
| 15:15 – 18.00 | Group exercise: question formulation, spreadsheet design, data extraction |
| **Wednesday, December 2nd:** | Classes from 11:00 till 17:00 (GMT, London, UK) |
| 11:00 – 12:30 | Statistical methods for bias detection |
| 12:30 – 13.00 | BREAK |
| 13:00 – 14:00 | Practical 3: exploring publication and other biases in metafor |
| 14:00 – 14:15 | BREAK |
| 14:15 – 15:00 | Dealing with non-independence, including phylogenetic non-independence |
| 15:00 – 15:15 | BREAK |
| 15:15 – 17:00 | Group exercise: completion of data extraction, start of analyses |
| **Thursday, December 3rd:** | Classes from 12:00 till 17:00 (GMT, London, UK) |
| 12:00 – 12:30 | Dealing with missing data and variable research quality |
| 12:30 – 13:00 | Format of meta-analytic report |
| 13:00 –14:00 | Criticism of meta-analysis, alternatives to meta-analysis, how not to do a meta-analysis and when not to do a meta-analysis |
| 14:00 – 14:30 | BREAK |
| 14:30 – 17:00 | Group exercise: completion of meta-analysis and preparation of presentations |
| **Friday, December 4th:** | Classes from 11:00 (GMT, London, UK) |
| 11:00 – 13:00 | Group presentations |
| 13:00 – 13:30 | BREAK |
| 13:30 – 17:00 | Individual consultations |