

sDiv working group meeting report "sCom II"

1. Focal areas of discussion + main results/conclusions + open questions

In this second meeting, we continued our discussion and work on the analysis of "novel community data", in particular on their analysis with joint species distribution models, but also their general statistical properties and ecological questions that could be answered with them. We revisited the projects started at meeting I, summarized progress, and identified several new projects that the group want to follow.

2. Content of presentations

No separate presentations were held (outside group discussions and presentation of project results)

3. General research ideas, questions & directions discussed (incl. potential data to be used etc.)

sCom currently concentrates on 5 projects around the question of novel community data:

- a) a general review paper that summarizes the project's vision
- b) a technical review of eDNA data and their statistical analysis
- c) a simulation study to explore what information temporal data adds for inferring species interactions, compare to static spatial abundances only
- d) a review of jSDMs
- e) an empirical analysis of shifts in species associations over time

4. General structure of the week (break out groups, presentations, sessions with remote participants etc.)

The meeting was held in hybrid form, with about as many participants being in-person in Leipzig as in the Zoom. We structured the meeting around the projects, with brain-storming sessions to identify new projects, break-out groups to advance on those projects, and general discussions on interim results. Remote participants were normally integrated in all group work.

5. Next steps & upcoming deliverables

The group consensus was that the focus of the group should be to finalize the projects that were started, rather than to start new projects. It is now up to group leaders to proceed with these projects, and the hope is to have drafts by the end of the year or early next year. The group will decide after the summer break if a new general meeting is necessary.

6. General working atmosphere and feedback on sDiv support (What kind of support? How helpful was it?)

Meeting participants were in general very satisfied with the organization, working atmosphere and the local support by iDiv. The IT for the remote stream worked better than last meeting. Of course, a hybrid meeting is still inherently more challenging than an in-person meeting. In this second meeting, there seemed to be a tendency that early-career participants chose to participate remotely at a higher rate than more senior persons, but due to the small sample size, it is unclear if this is a systematic pattern.