ecoevolity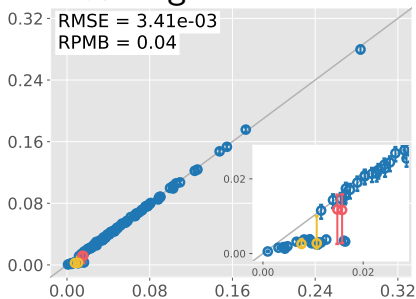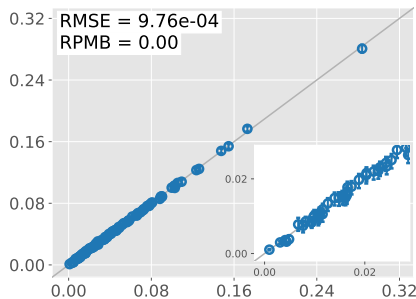 results with unlinked characters